

TRAIN\_START\_DATE = '2019-11-15'  
TRAIN\_END\_DATE = '2021-12-31'

TEST\_START\_DATE = '2021-11-15'  
TEST\_END\_DATE = '2022-04-01'

ERL\_PARAMS = {  
 "learning\_rate": 1e-7 \*2000,  
 "batch\_size": 128,  
 "gamma": 0.9,  
 "seed": 0,  
 "net\_dimension": 128,  
 "target\_step": 501,  
 "eval\_gap": 30}

Q\_level = 1 / 100

Modified\_value = (0.5 \* torch.mm(torch.mm(mu3.T, Convariance\_matrix\_inv), mu3)) / (Expected\_return)  
Weights\_vector = torch.mm(Tau\_Convariance\_matrix\_inv, mu3) \* Lamda \* Modified\_value

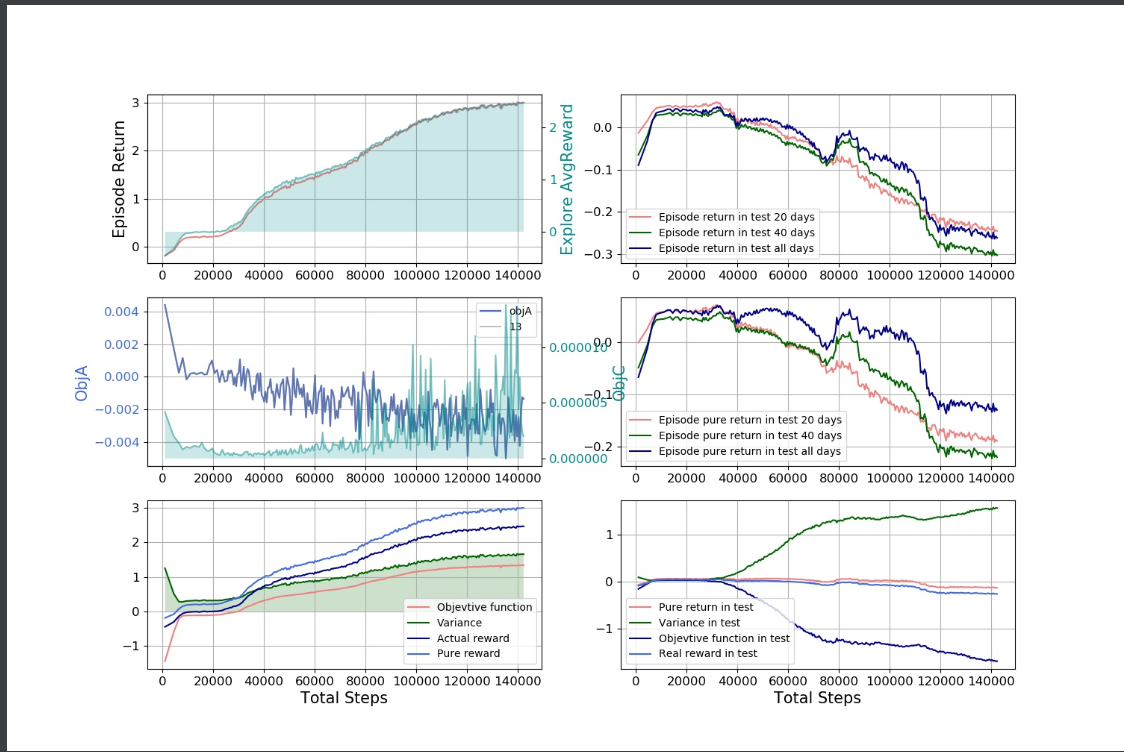
out\_transofromer = self.Q\_predict\_via\_transformer(torch.log2(state\_2))  
Q\_predict = self.fc1\_1(out\_transofromer).tanh() \* 3

modifed\_variance = 100 \* variance

后期修改点：

Q\_level = 1/10

（当前代码训练结果 9.18）



TRAIN\_START\_DATE = '2019-11-15'  
TRAIN\_END\_DATE = '2021-12-31'

TEST\_START\_DATE = '2021-11-15'  
TEST\_END\_DATE = '2022-04-01'

ERL\_PARAMS = {  
 "learning\_rate": 1e-7 \*2000,  
 "batch\_size": 128,  
 "gamma": 0.9,  
 "seed": 0,  
 "net\_dimension": 128,  
 "target\_step": 501,  
 "eval\_gap": 30}

Q\_level = 1 / 10

Modified\_value = (0.5 \* torch.mm(torch.mm(mu3.T, Convariance\_matrix\_inv), mu3)) / (Expected\_return)  
Weights\_vector = torch.mm(Tau\_Convariance\_matrix\_inv, mu3) \* Lamda \* Modified\_value

out\_transofromer = self.Q\_predict\_via\_transformer(torch.log2(state\_2))  
Q\_predict = self.fc1\_1(out\_transofromer).tanh() \* 3

modifed\_variance = 100 \* variance

ID Step maxR | avgR ex\_stdR Return\_risk PureR avgS real\_stdR | avgRt PavgRt Variancet| expR objC etc.

0 1.00e+03 -0.447 |

0 1.00e+03 -0.447 | -0.447 1.255 -1.702 -0.189 501 0.000077 | -0.090 -0.067 0.000072 | -0.460 0.0000 0.0044

0 4.51e+03 -0.304 |

0 4.51e+03 -0.304 | -0.304 0.511 -0.815 -0.077 501 0.000033 | -0.032 -0.012 0.000035 | -0.329 0.0000 0.0017

0 6.51e+03 -0.137 |

0 6.51e+03 -0.137 | -0.137 0.281 -0.418 0.076 501 0.000022 | 0.015 0.035 0.000028 | -0.171 0.0000 0.0002

0 8.02e+03 -0.059 |

0 8.02e+03 -0.059 | -0.059 0.279 -0.337 0.152 501 0.000023 | 0.034 0.054 0.000030 | -0.071 0.0000 0.0012

0 9.52e+03 -0.023 |

0 9.52e+03 -0.023 | -0.023 0.304 -0.327 0.188 501 0.000024 | 0.037 0.057 0.000029 | -0.026 0.0000 -0.0002

0 1.10e+04 -0.017 |

0 1.10e+04 -0.017 | -0.017 0.308 -0.325 0.195 501 0.000025 | 0.039 0.058 0.000029 | -0.028 0.0000 0.0002

0 1.25e+04 -0.009 |

0 1.25e+04 -0.009 | -0.009 0.316 -0.325 0.203 501 0.000025 | 0.043 0.062 0.000031 | -0.007 0.0000 0.0002

0 1.35e+04 -0.004 |

0 1.35e+04 -0.004 | -0.004 0.321 -0.325 0.207 501 0.000025 | 0.043 0.063 0.000029 | -0.004 0.0000 0.0002

0 1.45e+04 -0.004 | -0.018 0.305 -0.323 0.192 501 0.000024 | 0.037 0.057 0.000029 | -0.012 0.0000 0.0002

0 1.55e+04 -0.004 | -0.004 0.318 -0.322 0.206 501 0.000025 | 0.044 0.063 0.000030 | -0.002 0.0000 0.0003

0 1.65e+04 0.008 |

0 1.65e+04 0.008 | 0.008 0.333 -0.326 0.219 501 0.000026 | 0.043 0.063 0.000030 | 0.000 0.0000 0.0001

0 1.75e+04 0.008 | -0.010 0.311 -0.321 0.200 501 0.000025 | 0.037 0.057 0.000030 | -0.004 0.0000 0.0002

0 1.85e+04 0.008 | -0.000 0.318 -0.318 0.210 501 0.000025 | 0.043 0.062 0.000030 | -0.009 0.0000 0.0007

0 1.95e+04 0.008 | -0.002 0.314 -0.317 0.207 501 0.000025 | 0.042 0.061 0.000030 | -0.002 0.0000 0.0010

0 2.05e+04 0.008 | 0.005 0.319 -0.314 0.216 501 0.000025 | 0.039 0.059 0.000029 | -0.011 0.0000 0.0002

0 2.15e+04 0.008 | 0.006 0.315 -0.309 0.216 501 0.000025 | 0.041 0.061 0.000030 | 0.014 0.0000 0.0004

0 2.25e+04 0.017 |

0 2.25e+04 0.017 | 0.017 0.322 -0.305 0.228 501 0.000026 | 0.036 0.055 0.000029 | -0.001 0.0000 -0.0003

0 2.35e+04 0.031 |

0 2.35e+04 0.031 | 0.031 0.323 -0.292 0.241 501 0.000026 | 0.041 0.061 0.000030 | 0.013 0.0000 0.0004

0 2.45e+04 0.063 |

0 2.45e+04 0.063 | 0.063 0.344 -0.282 0.273 501 0.000027 | 0.037 0.056 0.000031 | 0.020 0.0000 -0.0003

0 2.56e+04 0.084 |

0 2.56e+04 0.084 | 0.084 0.352 -0.268 0.297 501 0.000028 | 0.036 0.056 0.000032 | 0.043 0.0000 -0.0002

0 2.61e+04 0.090 |

0 2.61e+04 0.090 | 0.090 0.350 -0.260 0.302 501 0.000028 | 0.032 0.052 0.000036 | 0.076 0.0000 0.0004

0 2.66e+04 0.115 |

0 2.66e+04 0.115 | 0.115 0.371 -0.255 0.328 501 0.000029 | 0.041 0.061 0.000038 | 0.090 0.0000 0.0002

0 2.71e+04 0.115 | 0.109 0.360 -0.251 0.323 501 0.000028 | 0.036 0.056 0.000042 | 0.112 0.0000 0.0004

0 2.76e+04 0.126 |

0 2.76e+04 0.126 | 0.126 0.371 -0.245 0.340 501 0.000029 | 0.041 0.062 0.000043 | 0.102 0.0000 0.0002

0 2.81e+04 0.153 |

0 2.81e+04 0.153 | 0.153 0.398 -0.245 0.369 501 0.000032 | 0.036 0.057 0.000042 | 0.117 0.0000 -0.0005

0 2.86e+04 0.153 | 0.147 0.379 -0.232 0.362 501 0.000030 | 0.032 0.053 0.000050 | 0.152 0.0000 -0.0000

0 2.91e+04 0.156 |

0 2.91e+04 0.156 | 0.156 0.382 -0.226 0.372 501 0.000030 | 0.039 0.060 0.000057 | 0.145 0.0000 -0.0006

0 2.96e+04 0.177 |

0 2.96e+04 0.177 | 0.177 0.393 -0.217 0.393 501 0.000030 | 0.037 0.059 0.000065 | 0.160 0.0000 0.0001

0 3.01e+04 0.189 |

0 3.01e+04 0.189 | 0.189 0.396 -0.207 0.406 501 0.000031 | 0.041 0.062 0.000070 | 0.188 0.0000 0.0003

0 3.06e+04 0.210 |

0 3.06e+04 0.210 | 0.210 0.403 -0.193 0.429 501 0.000031 | 0.045 0.067 0.000072 | 0.181 0.0000 0.0011

0 3.11e+04 0.246 |

0 3.11e+04 0.246 | 0.246 0.424 -0.178 0.466 501 0.000033 | 0.045 0.067 0.000070 | 0.207 0.0000 -0.0006

0 3.16e+04 0.262 |

0 3.16e+04 0.262 | 0.262 0.424 -0.162 0.485 501 0.000033 | 0.045 0.067 0.000083 | 0.239 0.0000 -0.0001

0 3.21e+04 0.320 |

0 3.21e+04 0.320 | 0.320 0.459 -0.139 0.545 501 0.000035 | 0.049 0.071 0.000085 | 0.264 0.0000 0.0006

0 3.26e+04 0.352 |

0 3.26e+04 0.352 | 0.352 0.474 -0.122 0.582 501 0.000035 | 0.045 0.068 0.000091 | 0.322 0.0000 -0.0008

0 3.31e+04 0.390 |

0 3.31e+04 0.390 | 0.390 0.498 -0.108 0.623 501 0.000037 | 0.048 0.071 0.000088 | 0.357 0.0000 0.0001

0 3.36e+04 0.437 |

0 3.36e+04 0.437 | 0.437 0.534 -0.097 0.672 501 0.000039 | 0.044 0.067 0.000084 | 0.393 0.0000 0.0005

0 3.41e+04 0.461 |

0 3.41e+04 0.461 | 0.461 0.548 -0.087 0.698 501 0.000039 | 0.039 0.064 0.000099 | 0.432 0.0000 0.0003

0 3.46e+04 0.489 |

0 3.46e+04 0.489 | 0.489 0.563 -0.073 0.729 501 0.000039 | 0.033 0.057 0.000094 | 0.459 0.0000 -0.0003

0 3.51e+04 0.502 |

0 3.51e+04 0.502 | 0.502 0.565 -0.063 0.743 501 0.000038 | 0.029 0.055 0.000120 | 0.487 0.0000 -0.0010

0 3.56e+04 0.542 |

0 3.56e+04 0.542 | 0.542 0.588 -0.045 0.787 501 0.000039 | 0.029 0.056 0.000120 | 0.500 0.0000 -0.0014

0 3.61e+04 0.567 |

0 3.61e+04 0.567 | 0.567 0.597 -0.030 0.813 501 0.000040 | 0.030 0.057 0.000125 | 0.540 0.0000 -0.0005

0 3.66e+04 0.591 |

0 3.66e+04 0.591 | 0.591 0.612 -0.021 0.840 501 0.000040 | 0.027 0.056 0.000138 | 0.563 0.0000 -0.0010

0 3.71e+04 0.615 |

0 3.71e+04 0.615 | 0.615 0.631 -0.015 0.869 501 0.000043 | 0.033 0.062 0.000136 | 0.587 0.0000 0.0001

0 3.76e+04 0.641 |

0 3.76e+04 0.641 | 0.641 0.637 0.004 0.896 501 0.000043 | 0.026 0.056 0.000141 | 0.619 0.0000 0.0002

0 3.81e+04 0.668 |

0 3.81e+04 0.668 | 0.668 0.653 0.015 0.925 501 0.000045 | 0.024 0.054 0.000143 | 0.635 0.0000 -0.0009

0 3.86e+04 0.668 |

0 3.86e+04 0.668 | 0.668 0.645 0.024 0.927 501 0.000044 | 0.028 0.059 0.000148 | 0.665 0.0000 0.0002

0 3.91e+04 0.690 |

0 3.91e+04 0.690 | 0.690 0.654 0.036 0.950 501 0.000046 | 0.016 0.047 0.000151 | 0.666 0.0000 -0.0011

0 3.96e+04 0.719 |

0 3.96e+04 0.719 | 0.719 0.681 0.038 0.983 501 0.000048 | 0.004 0.036 0.000164 | 0.689 0.0000 -0.0013

0 4.01e+04 0.726 |

0 4.01e+04 0.726 | 0.726 0.674 0.052 0.991 501 0.000047 | 0.012 0.045 0.000176 | 0.722 0.0000 -0.0015

0 4.06e+04 0.760 |

0 4.06e+04 0.760 | 0.760 0.702 0.057 1.029 501 0.000050 | 0.004 0.038 0.000176 | 0.723 0.0000 -0.0009

0 4.11e+04 0.765 |

0 4.11e+04 0.765 | 0.765 0.695 0.071 1.034 501 0.000049 | 0.010 0.044 0.000183 | 0.759 0.0000 -0.0016

0 4.16e+04 0.765 | 0.757 0.676 0.081 1.022 501 0.000049 | 0.019 0.053 0.000192 | 0.767 0.0000 -0.0007

0 4.21e+04 0.769 |

0 4.21e+04 0.769 | 0.769 0.683 0.086 1.038 501 0.000051 | 0.014 0.049 0.000194 | 0.754 0.0000 -0.0006

0 4.26e+04 0.779 |

0 4.26e+04 0.779 | 0.779 0.683 0.096 1.049 501 0.000051 | 0.015 0.050 0.000210 | 0.769 0.0000 -0.0001

0 4.31e+04 0.791 |

0 4.31e+04 0.791 | 0.791 0.687 0.104 1.061 501 0.000052 | 0.022 0.057 0.000226 | 0.786 0.0000 -0.0010

0 4.36e+04 0.835 |

0 4.36e+04 0.835 | 0.835 0.723 0.112 1.111 501 0.000054 | 0.018 0.055 0.000249 | 0.791 0.0000 -0.0009

0 4.41e+04 0.865 |

0 4.41e+04 0.865 | 0.865 0.744 0.120 1.143 501 0.000056 | 0.014 0.052 0.000265 | 0.835 0.0000 -0.0019

0 4.46e+04 0.865 | 0.859 0.729 0.130 1.136 501 0.000055 | 0.020 0.058 0.000280 | 0.858 0.0000 -0.0011

0 4.51e+04 0.874 |

0 4.51e+04 0.874 | 0.874 0.740 0.134 1.153 501 0.000056 | 0.018 0.056 0.000278 | 0.852 0.0000 -0.0004

0 4.56e+04 0.892 |

0 4.56e+04 0.892 | 0.892 0.750 0.142 1.172 501 0.000057 | 0.014 0.053 0.000291 | 0.874 0.0000 -0.0010

0 4.61e+04 0.907 |

0 4.61e+04 0.907 | 0.907 0.763 0.143 1.190 501 0.000058 | 0.015 0.054 0.000291 | 0.890 0.0000 -0.0013

0 4.66e+04 0.919 |

0 4.66e+04 0.919 | 0.919 0.768 0.151 1.203 501 0.000059 | 0.020 0.061 0.000318 | 0.890 0.0000 -0.0005

0 4.71e+04 0.947 |

0 4.71e+04 0.947 | 0.947 0.795 0.152 1.234 501 0.000061 | 0.015 0.056 0.000329 | 0.921 0.0000 -0.0004

0 4.76e+04 0.947 | 0.933 0.777 0.156 1.219 501 0.000060 | 0.022 0.063 0.000325 | 0.950 0.0000 -0.0001

0 4.81e+04 0.961 |

0 4.81e+04 0.961 | 0.961 0.806 0.155 1.253 501 0.000063 | 0.015 0.057 0.000341 | 0.935 0.0000 -0.0020

0 4.86e+04 0.971 |

0 4.86e+04 0.971 | 0.971 0.814 0.158 1.265 501 0.000063 | 0.015 0.058 0.000359 | 0.962 0.0000 -0.0010

0 4.91e+04 0.971 | 0.927 0.757 0.170 1.214 501 0.000059 | 0.021 0.063 0.000351 | 0.969 0.0000 -0.0000

0 4.96e+04 0.971 | 0.953 0.782 0.172 1.244 501 0.000062 | 0.018 0.061 0.000373 | 0.928 0.0000 -0.0004

0 5.01e+04 0.971 | 0.937 0.762 0.175 1.226 501 0.000060 | 0.022 0.065 0.000367 | 0.958 0.0000 -0.0007

0 5.06e+04 0.998 |

0 5.06e+04 0.998 | 0.998 0.827 0.171 1.298 501 0.000065 | 0.017 0.062 0.000403 | 0.932 0.0000 -0.0023

0 5.11e+04 0.998 | 0.986 0.811 0.175 1.286 501 0.000064 | 0.020 0.065 0.000405 | 0.989 0.0000 -0.0013

0 5.16e+04 0.998 | 0.985 0.805 0.180 1.282 501 0.000063 | 0.020 0.066 0.000406 | 0.989 0.0000 0.0005

0 5.21e+04 1.031 |

0 5.21e+04 1.031 | 1.031 0.857 0.174 1.337 501 0.000067 | 0.018 0.064 0.000417 | 0.956 0.0000 -0.0009

0 5.26e+04 1.031 | 1.021 0.839 0.182 1.327 501 0.000066 | 0.014 0.061 0.000433 | 1.037 0.0000 -0.0013

0 5.31e+04 1.031 | 1.014 0.824 0.190 1.316 501 0.000065 | 0.018 0.066 0.000440 | 1.016 0.0000 -0.0001

0 5.36e+04 1.033 |

0 5.36e+04 1.033 | 1.033 0.846 0.187 1.340 501 0.000067 | 0.012 0.060 0.000435 | 1.009 0.0000 -0.0005

0 5.41e+04 1.033 | 1.025 0.835 0.190 1.333 501 0.000066 | 0.013 0.062 0.000456 | 1.030 0.0000 -0.0011

0 5.46e+04 1.033 | 1.030 0.836 0.195 1.340 501 0.000067 | 0.016 0.065 0.000459 | 1.027 0.0000 -0.0007

0 5.51e+04 1.046 |

0 5.51e+04 1.046 | 1.046 0.851 0.195 1.358 501 0.000067 | 0.012 0.062 0.000480 | 1.033 0.0000 -0.0012

0 5.56e+04 1.059 |

0 5.56e+04 1.059 | 1.059 0.860 0.199 1.372 501 0.000068 | 0.015 0.065 0.000461 | 1.042 0.0000 -0.0005

0 5.61e+04 1.059 | 1.051 0.848 0.203 1.366 501 0.000068 | 0.009 0.059 0.000474 | 1.063 0.0000 -0.0014

0 5.66e+04 1.081 |

0 5.66e+04 1.081 | 1.081 0.871 0.210 1.399 501 0.000070 | 0.011 0.062 0.000488 | 1.049 0.0000 -0.0025

0 5.71e+04 1.081 | 1.080 0.866 0.215 1.398 501 0.000070 | 0.008 0.060 0.000494 | 1.078 0.0000 -0.0010

0 5.76e+04 1.097 |

0 5.76e+04 1.097 | 1.097 0.880 0.217 1.419 501 0.000072 | 0.001 0.054 0.000509 | 1.081 0.0000 -0.0018

0 5.81e+04 1.102 |

0 5.81e+04 1.102 | 1.102 0.881 0.221 1.424 501 0.000072 | 0.001 0.055 0.000507 | 1.097 0.0000 -0.0015

0 5.86e+04 1.102 | 1.098 0.872 0.226 1.421 501 0.000072 | 0.003 0.057 0.000528 | 1.101 0.0000 -0.0021

0 5.91e+04 1.108 |

0 5.91e+04 1.108 | 1.108 0.882 0.226 1.434 501 0.000073 | -0.004 0.050 0.000537 | 1.101 0.0000 -0.0023

0 5.96e+04 1.108 | 1.085 0.852 0.233 1.405 501 0.000071 | 0.006 0.060 0.000536 | 1.099 0.0000 -0.0011

0 6.01e+04 1.135 |

0 6.01e+04 1.135 | 1.135 0.902 0.232 1.465 501 0.000077 | -0.003 0.053 0.000542 | 1.079 0.0000 0.0001

0 6.06e+04 1.135 | 1.114 0.875 0.239 1.442 501 0.000076 | 0.004 0.060 0.000570 | 1.134 0.0000 -0.0022

0 6.11e+04 1.140 |

0 6.11e+04 1.140 | 1.140 0.893 0.247 1.472 501 0.000080 | -0.003 0.053 0.000565 | 1.111 0.0000 -0.0018

0 6.16e+04 1.140 | 1.130 0.873 0.256 1.456 501 0.000079 | 0.001 0.057 0.000557 | 1.147 0.0000 -0.0009

0 6.21e+04 1.156 |

0 6.21e+04 1.156 | 1.156 0.897 0.259 1.486 501 0.000081 | -0.007 0.050 0.000574 | 1.118 0.0000 -0.0008

0 6.26e+04 1.158 |

0 6.26e+04 1.158 | 1.158 0.898 0.260 1.491 501 0.000082 | -0.004 0.053 0.000582 | 1.157 0.0000 -0.0005

0 6.31e+04 1.176 |

0 6.31e+04 1.176 | 1.176 0.911 0.265 1.510 501 0.000084 | -0.007 0.051 0.000590 | 1.152 0.0000 -0.0029

0 6.36e+04 1.188 |

0 6.36e+04 1.188 | 1.188 0.920 0.268 1.523 501 0.000085 | -0.014 0.044 0.000608 | 1.174 0.0000 -0.0007

0 6.41e+04 1.188 |

0 6.41e+04 1.188 | 1.188 0.918 0.270 1.524 501 0.000087 | -0.014 0.045 0.000597 | 1.186 0.0000 -0.0022

0 6.46e+04 1.197 |

0 6.46e+04 1.197 | 1.197 0.926 0.271 1.536 501 0.000087 | -0.010 0.049 0.000603 | 1.187 0.0000 -0.0015

0 6.51e+04 1.207 |

0 6.51e+04 1.207 | 1.207 0.934 0.273 1.548 501 0.000088 | -0.018 0.042 0.000609 | 1.200 0.0000 -0.0012

0 6.56e+04 1.207 | 1.192 0.909 0.283 1.528 501 0.000087 | -0.014 0.045 0.000616 | 1.204 0.0000 -0.0015

0 6.61e+04 1.208 |

0 6.61e+04 1.208 | 1.208 0.922 0.286 1.546 501 0.000088 | -0.022 0.038 0.000631 | 1.186 0.0000 -0.0030

0 6.66e+04 1.241 |

0 6.66e+04 1.241 | 1.241 0.957 0.284 1.583 501 0.000091 | -0.021 0.040 0.000632 | 1.209 0.0000 -0.0008

0 6.71e+04 1.241 | 1.232 0.943 0.289 1.575 501 0.000091 | -0.028 0.033 0.000642 | 1.243 0.0000 -0.0009

0 6.76e+04 1.254 |

0 6.76e+04 1.254 | 1.254 0.964 0.290 1.599 501 0.000093 | -0.027 0.035 0.000641 | 1.230 0.0000 -0.0013

0 6.81e+04 1.254 | 1.252 0.956 0.296 1.598 501 0.000093 | -0.028 0.033 0.000647 | 1.262 0.0000 -0.0026

0 6.86e+04 1.263 |

0 6.86e+04 1.263 | 1.263 0.969 0.293 1.611 501 0.000094 | -0.039 0.024 0.000642 | 1.248 0.0000 -0.0021

0 6.91e+04 1.263 | 1.259 0.955 0.305 1.605 501 0.000093 | -0.034 0.029 0.000637 | 1.265 0.0000 -0.0025

0 6.96e+04 1.281 |

0 6.96e+04 1.281 | 1.281 0.976 0.305 1.632 501 0.000095 | -0.045 0.019 0.000655 | 1.255 0.0000 -0.0015

0 7.01e+04 1.281 | 1.278 0.969 0.310 1.626 501 0.000096 | -0.037 0.027 0.000644 | 1.288 0.0000 -0.0019

0 7.06e+04 1.308 |

0 7.06e+04 1.308 | 1.308 0.992 0.317 1.662 501 0.000098 | -0.050 0.015 0.000665 | 1.272 0.0000 -0.0006

0 7.11e+04 1.308 | 1.287 0.967 0.320 1.640 501 0.000096 | -0.051 0.014 0.000663 | 1.283 0.0000 -0.0012

0 7.16e+04 1.309 |

0 7.16e+04 1.309 | 1.309 0.980 0.329 1.663 501 0.000098 | -0.053 0.013 0.000656 | 1.283 0.0000 -0.0012

0 7.21e+04 1.309 | 1.294 0.960 0.334 1.644 501 0.000097 | -0.052 0.014 0.000638 | 1.310 0.0000 -0.0010

0 7.26e+04 1.341 |

0 7.26e+04 1.341 | 1.341 1.006 0.335 1.699 501 0.000101 | -0.062 0.005 0.000654 | 1.294 0.0000 -0.0008

0 7.31e+04 1.353 |

0 7.31e+04 1.353 | 1.353 1.014 0.340 1.713 501 0.000103 | -0.073 -0.005 0.000658 | 1.341 0.0000 -0.0006

0 7.36e+04 1.367 |

0 7.36e+04 1.367 | 1.367 1.022 0.345 1.729 501 0.000104 | -0.076 -0.008 0.000673 | 1.353 0.0000 -0.0013

0 7.41e+04 1.375 |

0 7.41e+04 1.375 | 1.375 1.022 0.353 1.737 501 0.000104 | -0.074 -0.006 0.000677 | 1.369 0.0000 -0.0013

0 7.46e+04 1.376 |

0 7.46e+04 1.376 | 1.376 1.019 0.357 1.740 501 0.000105 | -0.069 -0.000 0.000666 | 1.374 0.0000 -0.0017

0 7.52e+04 1.414 |

0 7.52e+04 1.414 | 1.414 1.060 0.354 1.784 501 0.000108 | -0.082 -0.014 0.000679 | 1.377 0.0000 -0.0005

0 7.57e+04 1.416 |

0 7.57e+04 1.416 | 1.416 1.048 0.369 1.785 501 0.000110 | -0.078 -0.009 0.000675 | 1.414 0.0000 -0.0008

0 7.62e+04 1.422 |

0 7.62e+04 1.422 | 1.422 1.050 0.371 1.792 501 0.000111 | -0.074 -0.005 0.000672 | 1.417 0.0000 -0.0033

0 7.67e+04 1.422 | 1.408 1.025 0.383 1.776 501 0.000110 | -0.067 0.001 0.000665 | 1.418 0.0000 -0.0024

0 7.72e+04 1.455 |

0 7.72e+04 1.455 | 1.455 1.062 0.393 1.829 501 0.000117 | -0.065 0.004 0.000669 | 1.407 0.0000 -0.0010

0 7.77e+04 1.507 |

0 7.77e+04 1.507 | 1.507 1.108 0.399 1.887 501 0.000121 | -0.069 0.000 0.000665 | 1.454 0.0000 -0.0038

0 7.82e+04 1.508 |

0 7.82e+04 1.508 | 1.508 1.099 0.410 1.888 501 0.000122 | -0.058 0.012 0.000658 | 1.511 0.0000 -0.0029

0 7.87e+04 1.552 |

0 7.87e+04 1.552 | 1.552 1.132 0.420 1.936 501 0.000126 | -0.049 0.021 0.000654 | 1.508 0.0000 -0.0012

0 7.92e+04 1.552 | 1.518 1.097 0.422 1.898 501 0.000124 | -0.021 0.048 0.000622 | 1.536 0.0000 0.0003

0 7.97e+04 1.554 |

0 7.97e+04 1.554 | 1.554 1.118 0.437 1.940 501 0.000127 | -0.036 0.034 0.000634 | 1.519 0.0000 -0.0006

0 8.02e+04 1.586 |

0 8.02e+04 1.586 | 1.586 1.141 0.444 1.974 501 0.000131 | -0.026 0.044 0.000621 | 1.560 0.0000 -0.0008

0 8.07e+04 1.586 | 1.568 1.118 0.450 1.955 501 0.000129 | -0.024 0.046 0.000621 | 1.588 0.0000 -0.0012

0 8.12e+04 1.605 |

0 8.12e+04 1.605 | 1.605 1.157 0.448 1.998 501 0.000136 | -0.017 0.054 0.000614 | 1.561 0.0000 -0.0030

0 8.17e+04 1.619 |

0 8.17e+04 1.619 | 1.619 1.155 0.465 2.012 501 0.000136 | -0.014 0.058 0.000609 | 1.609 0.0000 -0.0008

0 8.22e+04 1.665 |

0 8.22e+04 1.665 | 1.665 1.200 0.465 2.068 501 0.000140 | -0.020 0.051 0.000617 | 1.623 0.0000 -0.0025

0 8.27e+04 1.665 | 1.652 1.175 0.477 2.052 501 0.000138 | -0.018 0.053 0.000611 | 1.663 0.0000 -0.0026

0 8.32e+04 1.665 | 1.663 1.179 0.485 2.064 501 0.000139 | -0.017 0.054 0.000608 | 1.654 0.0000 0.0003

0 8.37e+04 1.690 |

0 8.37e+04 1.690 | 1.690 1.204 0.486 2.094 501 0.000142 | -0.018 0.053 0.000606 | 1.660 0.0000 -0.0011

0 8.42e+04 1.690 |

0 8.42e+04 1.690 | 1.690 1.202 0.489 2.095 501 0.000143 | -0.008 0.064 0.000601 | 1.697 0.0000 -0.0016

0 8.47e+04 1.690 | 1.686 1.183 0.503 2.091 501 0.000140 | -0.020 0.052 0.000595 | 1.688 0.0000 -0.0013

0 8.52e+04 1.712 |

0 8.52e+04 1.712 | 1.712 1.204 0.507 2.120 501 0.000142 | -0.028 0.045 0.000592 | 1.696 0.0000 -0.0008

0 8.57e+04 1.712 |

0 8.57e+04 1.712 | 1.712 1.203 0.509 2.123 501 0.000142 | -0.028 0.045 0.000585 | 1.714 0.0000 -0.0009

0 8.62e+04 1.712 | 1.709 1.190 0.519 2.116 501 0.000142 | -0.028 0.045 0.000563 | 1.675 0.0000 -0.0016

0 8.67e+04 1.730 |

0 8.67e+04 1.730 | 1.730 1.210 0.519 2.143 501 0.000144 | -0.028 0.046 0.000560 | 1.714 0.0000 -0.0029

0 8.72e+04 1.756 |

0 8.72e+04 1.756 | 1.756 1.238 0.518 2.175 501 0.000146 | -0.024 0.049 0.000562 | 1.718 0.0000 -0.0020

0 8.77e+04 1.796 |

0 8.77e+04 1.796 | 1.796 1.277 0.519 2.215 501 0.000149 | -0.044 0.031 0.000564 | 1.750 0.0000 -0.0016

0 8.82e+04 1.796 | 1.786 1.241 0.545 2.205 501 0.000148 | -0.057 0.017 0.000528 | 1.798 0.0000 -0.0026

0 8.87e+04 1.803 |

0 8.87e+04 1.803 | 1.803 1.248 0.555 2.224 501 0.000149 | -0.052 0.023 0.000532 | 1.786 0.0000 -0.0025

0 8.92e+04 1.803 | 1.797 1.231 0.566 2.218 501 0.000151 | -0.051 0.025 0.000529 | 1.810 0.0000 -0.0027

0 8.97e+04 1.821 |

0 8.97e+04 1.821 | 1.821 1.253 0.568 2.247 501 0.000151 | -0.047 0.030 0.000544 | 1.796 0.0000 -0.0021

0 9.02e+04 1.861 |

0 9.02e+04 1.861 | 1.861 1.294 0.567 2.293 501 0.000155 | -0.055 0.024 0.000548 | 1.822 0.0000 -0.0012

0 9.07e+04 1.861 | 1.841 1.268 0.573 2.273 501 0.000153 | -0.050 0.029 0.000540 | 1.853 0.0000 -0.0021

0 9.12e+04 1.886 |

0 9.12e+04 1.886 | 1.886 1.301 0.585 2.322 501 0.000156 | -0.056 0.024 0.000553 | 1.841 0.0000 -0.0011

0 9.17e+04 1.919 |

0 9.17e+04 1.919 | 1.919 1.337 0.581 2.362 501 0.000159 | -0.060 0.023 0.000553 | 1.889 0.0000 -0.0022

0 9.22e+04 1.919 | 1.889 1.295 0.594 2.322 501 0.000154 | -0.076 0.007 0.000561 | 1.918 0.0000 -0.0023

0 9.27e+04 1.919 | 1.873 1.264 0.608 2.308 501 0.000152 | -0.071 0.013 0.000550 | 1.883 0.0000 -0.0017

0 9.32e+04 1.951 |

0 9.32e+04 1.951 | 1.951 1.349 0.603 2.398 501 0.000159 | -0.071 0.014 0.000565 | 1.869 0.0000 -0.0031

0 9.37e+04 1.951 | 1.915 1.310 0.605 2.363 501 0.000153 | -0.077 0.008 0.000558 | 1.948 0.0000 -0.0019

0 9.42e+04 1.951 | 1.939 1.326 0.613 2.392 501 0.000157 | -0.063 0.025 0.000552 | 1.913 0.0000 -0.0015

0 9.47e+04 1.951 | 1.936 1.329 0.607 2.392 501 0.000154 | -0.067 0.022 0.000553 | 1.937 0.0000 -0.0033

0 9.52e+04 1.960 |

0 9.52e+04 1.960 | 1.960 1.330 0.630 2.415 501 0.000155 | -0.068 0.023 0.000556 | 1.934 0.0000 -0.0020

0 9.57e+04 1.961 |

0 9.57e+04 1.961 | 1.961 1.323 0.638 2.415 501 0.000156 | -0.068 0.024 0.000559 | 1.959 0.0000 -0.0024

0 9.62e+04 1.961 | 1.957 1.315 0.643 2.411 501 0.000154 | -0.076 0.018 0.000558 | 1.962 0.0000 -0.0013

0 9.67e+04 1.984 |

0 9.67e+04 1.984 | 1.984 1.331 0.653 2.442 501 0.000153 | -0.080 0.014 0.000568 | 1.958 0.0000 -0.0021

0 9.72e+04 2.042 |

0 9.72e+04 2.042 | 2.042 1.395 0.648 2.506 501 0.000161 | -0.075 0.020 0.000560 | 1.985 0.0000 -0.0025

0 9.77e+04 2.042 | 2.013 1.350 0.663 2.476 501 0.000157 | -0.066 0.029 0.000565 | 2.046 0.0000 -0.0038

0 9.82e+04 2.054 |

0 9.82e+04 2.054 | 2.054 1.385 0.668 2.520 501 0.000159 | -0.076 0.021 0.000562 | 2.011 0.0000 -0.0020

0 9.87e+04 2.056 |

0 9.87e+04 2.056 | 2.056 1.382 0.673 2.524 501 0.000160 | -0.066 0.032 0.000574 | 2.057 0.0000 -0.0034

0 9.92e+04 2.085 |

0 9.92e+04 2.085 | 2.085 1.418 0.667 2.554 501 0.000163 | -0.079 0.020 0.000561 | 2.055 0.0000 -0.0023

0 9.97e+04 2.085 | 2.060 1.376 0.684 2.528 501 0.000158 | -0.078 0.022 0.000574 | 2.086 0.0000 -0.0033

0 1.00e+05 2.085 | 2.071 1.396 0.675 2.547 501 0.000160 | -0.073 0.028 0.000573 | 2.054 0.0000 -0.0034

0 1.01e+05 2.135 |

0 1.01e+05 2.135 | 2.135 1.457 0.678 2.614 501 0.000165 | -0.082 0.019 0.000574 | 2.070 0.0000 -0.0025

0 1.01e+05 2.135 | 2.123 1.429 0.695 2.598 501 0.000163 | -0.084 0.018 0.000569 | 2.129 0.0000 -0.0017

0 1.02e+05 2.135 | 2.111 1.423 0.688 2.587 501 0.000162 | -0.083 0.020 0.000567 | 2.092 0.0000 -0.0030

0 1.02e+05 2.157 |

0 1.02e+05 2.157 | 2.157 1.467 0.690 2.640 501 0.000165 | -0.097 0.007 0.000570 | 2.106 0.0000 -0.0029

0 1.03e+05 2.157 | 2.135 1.435 0.700 2.617 501 0.000163 | -0.087 0.016 0.000569 | 2.153 0.0000 -0.0031

0 1.03e+05 2.162 |

0 1.03e+05 2.162 | 2.162 1.466 0.696 2.642 501 0.000168 | -0.090 0.014 0.000565 | 2.131 0.0000 -0.0021

0 1.04e+05 2.168 |

0 1.04e+05 2.168 | 2.168 1.471 0.697 2.653 501 0.000166 | -0.100 0.005 0.000580 | 2.163 0.0000 -0.0024

0 1.04e+05 2.168 | 2.164 1.457 0.707 2.644 501 0.000167 | -0.093 0.012 0.000570 | 2.122 0.0000 -0.0040

0 1.05e+05 2.175 |

0 1.05e+05 2.175 | 2.175 1.473 0.703 2.666 501 0.000167 | -0.082 0.024 0.000573 | 2.095 0.0000 -0.0009

0 1.05e+05 2.175 | 2.153 1.442 0.711 2.635 501 0.000164 | -0.085 0.020 0.000577 | 2.175 0.0000 -0.0027

0 1.06e+05 2.175 | 2.155 1.443 0.712 2.638 501 0.000164 | -0.101 0.006 0.000568 | 2.150 0.0000 -0.0032

0 1.06e+05 2.183 |

0 1.06e+05 2.183 | 2.183 1.474 0.709 2.675 501 0.000165 | -0.087 0.019 0.000568 | 2.155 0.0000 -0.0045

0 1.07e+05 2.214 |

0 1.07e+05 2.214 | 2.214 1.495 0.718 2.703 501 0.000169 | -0.090 0.018 0.000561 | 2.182 0.0000 -0.0019

0 1.07e+05 2.226 |

0 1.07e+05 2.226 | 2.226 1.504 0.722 2.718 501 0.000169 | -0.107 0.001 0.000560 | 2.216 0.0000 -0.0016

0 1.08e+05 2.226 | 2.195 1.483 0.712 2.686 501 0.000164 | -0.099 0.008 0.000554 | 2.227 0.0000 -0.0019

0 1.08e+05 2.226 | 2.206 1.475 0.731 2.689 501 0.000166 | -0.100 0.009 0.000552 | 2.194 0.0000 -0.0014

0 1.09e+05 2.228 |

0 1.09e+05 2.228 | 2.228 1.495 0.733 2.722 501 0.000169 | -0.105 0.004 0.000545 | 2.206 0.0000 -0.0018

0 1.09e+05 2.229 |

0 1.09e+05 2.229 | 2.229 1.502 0.727 2.726 501 0.000167 | -0.106 0.003 0.000553 | 2.221 0.0000 -0.0030

0 1.10e+05 2.260 |

0 1.10e+05 2.260 | 2.260 1.527 0.733 2.759 501 0.000169 | -0.112 -0.002 0.000542 | 2.233 0.0000 -0.0026

0 1.10e+05 2.280 |

0 1.10e+05 2.280 | 2.280 1.552 0.728 2.786 501 0.000172 | -0.120 -0.011 0.000536 | 2.261 0.0000 -0.0017

0 1.11e+05 2.280 | 2.242 1.498 0.743 2.735 501 0.000167 | -0.133 -0.022 0.000513 | 2.283 0.0000 -0.0017

0 1.11e+05 2.280 | 2.273 1.534 0.740 2.773 501 0.000171 | -0.126 -0.016 0.000515 | 2.244 0.0000 -0.0029

0 1.12e+05 2.293 |

0 1.12e+05 2.293 | 2.293 1.562 0.731 2.801 501 0.000172 | -0.136 -0.025 0.000517 | 2.273 0.0000 -0.0019

0 1.12e+05 2.293 | 2.285 1.537 0.748 2.784 501 0.000169 | -0.170 -0.058 0.000502 | 2.294 0.0000 -0.0045

0 1.13e+05 2.293 | 2.281 1.524 0.757 2.780 501 0.000169 | -0.168 -0.055 0.000496 | 2.293 0.0000 -0.0025

0 1.13e+05 2.293 | 2.291 1.534 0.757 2.793 501 0.000170 | -0.173 -0.061 0.000494 | 2.278 0.0000 -0.0013

0 1.14e+05 2.293 | 2.278 1.517 0.761 2.777 501 0.000168 | -0.165 -0.051 0.000501 | 2.287 0.0000 -0.0036

0 1.14e+05 2.318 |

0 1.14e+05 2.318 | 2.318 1.565 0.752 2.825 501 0.000175 | -0.171 -0.058 0.000491 | 2.280 0.0000 -0.0028

0 1.15e+05 2.336 |

0 1.15e+05 2.336 | 2.336 1.584 0.752 2.843 501 0.000174 | -0.205 -0.089 0.000486 | 2.300 0.0000 -0.0024

0 1.15e+05 2.337 |

0 1.15e+05 2.337 | 2.337 1.579 0.758 2.844 501 0.000175 | -0.202 -0.086 0.000491 | 2.327 0.0000 -0.0022

0 1.16e+05 2.337 | 2.292 1.529 0.763 2.795 501 0.000169 | -0.218 -0.102 0.000496 | 2.337 0.0000 -0.0012

0 1.16e+05 2.340 |

0 1.16e+05 2.340 | 2.340 1.589 0.752 2.851 501 0.000172 | -0.215 -0.098 0.000500 | 2.277 0.0000 -0.0040

0 1.17e+05 2.352 |

0 1.17e+05 2.352 | 2.352 1.601 0.751 2.866 501 0.000176 | -0.214 -0.097 0.000498 | 2.330 0.0000 -0.0022

0 1.17e+05 2.352 | 2.348 1.596 0.752 2.859 501 0.000176 | -0.222 -0.104 0.000501 | 2.354 0.0000 -0.0028

0 1.18e+05 2.352 | 2.338 1.581 0.757 2.851 501 0.000176 | -0.222 -0.105 0.000510 | 2.332 0.0000 -0.0035

0 1.18e+05 2.352 | 2.329 1.560 0.769 2.836 501 0.000172 | -0.230 -0.111 0.000509 | 2.343 0.0000 -0.0029

0 1.19e+05 2.369 |

0 1.19e+05 2.369 | 2.369 1.624 0.745 2.891 501 0.000176 | -0.237 -0.118 0.000518 | 2.333 0.0000 -0.0011

0 1.19e+05 2.369 | 2.361 1.612 0.750 2.879 501 0.000177 | -0.248 -0.129 0.000516 | 2.368 0.0000 -0.0026

0 1.20e+05 2.369 | 2.360 1.591 0.769 2.876 501 0.000176 | -0.232 -0.113 0.000517 | 2.363 0.0000 -0.0019

0 1.20e+05 2.369 | 2.321 1.547 0.774 2.828 501 0.000173 | -0.243 -0.123 0.000511 | 2.357 0.0000 -0.0049

0 1.21e+05 2.369 | 2.358 1.581 0.777 2.872 501 0.000176 | -0.240 -0.120 0.000515 | 2.322 0.0000 -0.0029

0 1.21e+05 2.371 |

0 1.21e+05 2.371 | 2.371 1.598 0.774 2.886 501 0.000180 | -0.238 -0.117 0.000518 | 2.355 0.0000 -0.0032

0 1.22e+05 2.371 | 2.349 1.582 0.767 2.866 501 0.000177 | -0.249 -0.129 0.000522 | 2.369 0.0000 -0.0026

0 1.22e+05 2.376 |

0 1.22e+05 2.376 | 2.376 1.602 0.774 2.894 501 0.000176 | -0.258 -0.136 0.000522 | 2.344 0.0000 -0.0027

0 1.23e+05 2.376 | 2.373 1.592 0.781 2.889 501 0.000176 | -0.240 -0.119 0.000524 | 2.376 0.0000 -0.0026

0 1.23e+05 2.377 |

0 1.23e+05 2.377 | 2.377 1.593 0.784 2.891 501 0.000177 | -0.252 -0.131 0.000526 | 2.374 0.0000 -0.0035

0 1.24e+05 2.377 | 2.345 1.563 0.781 2.857 501 0.000174 | -0.236 -0.115 0.000527 | 2.371 0.0000 -0.0017

0 1.24e+05 2.380 |

0 1.24e+05 2.380 | 2.380 1.616 0.764 2.905 501 0.000181 | -0.231 -0.110 0.000543 | 2.344 0.0000 -0.0035

0 1.25e+05 2.380 | 2.355 1.574 0.781 2.871 501 0.000175 | -0.243 -0.121 0.000535 | 2.377 0.0000 -0.0035

0 1.25e+05 2.420 |

0 1.25e+05 2.420 | 2.420 1.647 0.773 2.944 501 0.000184 | -0.235 -0.113 0.000542 | 2.359 0.0000 -0.0008

0 1.26e+05 2.420 | 2.404 1.626 0.779 2.924 501 0.000179 | -0.246 -0.122 0.000553 | 2.420 0.0000 -0.0020

0 1.26e+05 2.423 |

0 1.26e+05 2.423 | 2.423 1.647 0.776 2.950 501 0.000183 | -0.239 -0.117 0.000546 | 2.400 0.0000 -0.0027

0 1.27e+05 2.423 | 2.384 1.599 0.785 2.902 501 0.000177 | -0.238 -0.115 0.000561 | 2.425 0.0000 -0.0032

0 1.27e+05 2.423 | 2.362 1.588 0.773 2.885 501 0.000177 | -0.245 -0.122 0.000555 | 2.384 0.0000 -0.0034

0 1.28e+05 2.423 | 2.380 1.596 0.784 2.902 501 0.000179 | -0.238 -0.115 0.000557 | 2.362 0.0000 -0.0030

0 1.28e+05 2.423 | 2.408 1.623 0.785 2.934 501 0.000181 | -0.235 -0.113 0.000561 | 2.378 0.0000 -0.0020

0 1.29e+05 2.423 | 2.404 1.622 0.781 2.929 501 0.000178 | -0.244 -0.120 0.000564 | 2.406 0.0000 -0.0025

0 1.29e+05 2.426 |

0 1.29e+05 2.426 | 2.426 1.637 0.789 2.954 501 0.000182 | -0.240 -0.117 0.000560 | 2.409 0.0000 -0.0008

0 1.30e+05 2.426 | 2.405 1.613 0.792 2.928 501 0.000180 | -0.247 -0.123 0.000569 | 2.424 0.0000 -0.0022

0 1.30e+05 2.426 | 2.383 1.593 0.790 2.902 501 0.000174 | -0.244 -0.119 0.000564 | 2.407 0.0000 -0.0016

0 1.31e+05 2.426 | 2.400 1.615 0.785 2.927 501 0.000182 | -0.242 -0.117 0.000594 | 2.381 0.0000 -0.0042

0 1.31e+05 2.426 | 2.409 1.618 0.791 2.933 501 0.000181 | -0.239 -0.115 0.000570 | 2.402 0.0000 -0.0048

0 1.32e+05 2.426 | 2.416 1.622 0.794 2.939 501 0.000178 | -0.248 -0.122 0.000599 | 2.409 0.0000 -0.0048

0 1.32e+05 2.450 |

0 1.32e+05 2.450 | 2.450 1.655 0.794 2.975 501 0.000183 | -0.258 -0.131 0.000592 | 2.416 0.0000 -0.0025

0 1.33e+05 2.450 | 2.430 1.631 0.799 2.954 501 0.000182 | -0.246 -0.120 0.000604 | 2.449 0.0000 -0.0023

0 1.33e+05 2.450 | 2.358 1.600 0.758 2.868 501 0.000173 | -0.246 -0.118 0.000593 | 2.433 0.0000 -0.0035

0 1.34e+05 2.450 | 2.427 1.623 0.803 2.951 501 0.000184 | -0.241 -0.114 0.000606 | 2.359 0.0000 -0.0025

0 1.34e+05 2.450 | 2.432 1.636 0.796 2.959 501 0.000184 | -0.243 -0.116 0.000620 | 2.425 0.0000 -0.0026

0 1.35e+05 2.450 | 2.430 1.634 0.797 2.959 501 0.000183 | -0.251 -0.125 0.000602 | 2.427 0.0000 -0.0030

0 1.35e+05 2.450 | 2.418 1.615 0.804 2.942 501 0.000178 | -0.249 -0.120 0.000612 | 2.437 0.0000 -0.0050

0 1.36e+05 2.450 | 2.429 1.626 0.803 2.952 501 0.000179 | -0.254 -0.123 0.000607 | 2.417 0.0000 -0.0036

0 1.36e+05 2.450 | 2.440 1.654 0.786 2.975 501 0.000186 | -0.248 -0.121 0.000613 | 2.428 0.0000 -0.0013

0 1.37e+05 2.450 | 2.438 1.633 0.805 2.963 501 0.000181 | -0.256 -0.126 0.000610 | 2.440 0.0000 -0.0023

0 1.37e+05 2.450 | 2.424 1.619 0.805 2.951 501 0.000180 | -0.255 -0.125 0.000614 | 2.441 0.0000 -0.0034

0 1.38e+05 2.450 | 2.435 1.631 0.803 2.963 501 0.000180 | -0.261 -0.131 0.000618 | 2.427 0.0000 -0.0029

0 1.38e+05 2.459 |

0 1.38e+05 2.459 | 2.459 1.660 0.799 2.991 501 0.000188 | -0.254 -0.124 0.000613 | 2.434 0.0000 -0.0020

0 1.39e+05 2.459 | 2.435 1.632 0.803 2.964 501 0.000185 | -0.248 -0.118 0.000620 | 2.451 0.0000 -0.0040

0 1.39e+05 2.459 | 2.418 1.610 0.807 2.936 501 0.000180 | -0.259 -0.129 0.000605 | 2.434 0.0000 -0.0023

0 1.40e+05 2.474 |

0 1.40e+05 2.474 | 2.474 1.672 0.802 3.007 501 0.000187 | -0.257 -0.126 0.000606 | 2.419 0.0000 -0.0037

0 1.40e+05 2.474 | 2.453 1.646 0.807 2.983 501 0.000186 | -0.264 -0.134 0.000606 | 2.474 0.0000 -0.0025

0 1.41e+05 2.474 | 2.461 1.657 0.804 2.995 501 0.000187 | -0.249 -0.117 0.000620 | 2.454 0.0000 -0.0042

0 1.41e+05 2.474 | 2.456 1.657 0.799 2.988 501 0.000185 | -0.264 -0.132 0.000607 | 2.454 0.0000 -0.0021

0 1.42e+05 2.474 | 2.472 1.662 0.810 3.004 501 0.000187 | -0.258 -0.126 0.000616 | 2.456 0.0000 -0.0012

0 1.42e+05 2.474 | 2.466 1.658 0.808 2.999 501 0.000185 | -0.262 -0.130 0.000609 | 2.461 0.0000 -0.0014