# Final Report

December 11, 2018

Bayesian Data Analysis Project (BDA) - 2018

# 1 Analysis of House Prices Prediction through Supervised Bayesian Approach of Linear & Polynomial Regression

#### 1.1 Introduction

The main theme of the project is to explore data about house prices from King County, the USA that includes *features* of the house, such as the number of bedrooms, total area, and number floors etc. and subsequently form a Bayesian model capable of predicting house prices based on the prior information.

In this notebook, we aim to sequentially address the input data via a thorough analysis and observation of critical statistical indicators. Next, we aim to trim down the dataset to hold only the relevant data and divides it into the ideal ratio of training and testing data used to train and model and make predictions on respectively.

Furthermore, we try to shortlist the relevant choices of Bayesian models equipped with the ideal priors based on the problem at hand and consequently run them in Stan.

After acquiring all the diagnostic values regarding convergence and divergence from Stan, we carry out the model assessment of the results via visual analysis, Root Mean Squared (RMS) errors and Pareto smoothed importance sampling leave-one-out cross-validation (PSIS LOO-CV) estimates to decide on which model performed the best among the chosen ones.

Finally, we conclude our work by identifying the ideal model for the task at hand in addition to what we could not achieve along with improvements for the future.

NOTE: The report comprises of a total of 14 pages excluding the *Appendices* section.

For more details regarding the code, refer to the GitHub repository comprising of the relevant files: https://github.com/abdullahkhan93/BDAP-2018

## 1.2 Data Analysis

This section of the report will briefly highlight some of the characteristics of the dataset chosen from Kaggle [1]. In addition to this, some figures and illustrations will be provided to support how the distribution of features and labels in the training data will affect the Stan modeling.

We start this section with importing all the necessary packages and importing the dataset to better visualize it and see all the features and labels in it.

```
In [1]: # Dependencies
    import numpy as np
```

```
import matplotlib.pyplot as plt
        import pandas as pd
        import psis
        from IPython.display import display, HTML
        from sklearn.model selection import train test split
        from sklearn.preprocessing import StandardScaler
        from sklearn.metrics import mean squared error
        from math import sqrt
        from scipy.special import logsumexp
        # Import from Stan utilities
        import stan_utility
In [2]: # Import dataset and view a part of it
        df = pd.read_csv("kc_house_data.csv")
        display(df.head())
           id
                           date
                                    price
                                           bedrooms
                                                     bathrooms
                                                                 sqft_living
 7129300520 20141013T000000 221900.0
                                                  3
                                                           1.00
                                                                        1180
1 6414100192 20141209T000000 538000.0
                                                           2.25
                                                  3
                                                                        2570
2 5631500400 20150225T000000 180000.0
                                                  2
                                                           1.00
                                                                         770
                                                  4
3 2487200875 20141209T000000
                                604000.0
                                                           3.00
                                                                        1960
4 1954400510 20150218T000000 510000.0
                                                           2.00
                                                                        1680
   sqft_lot floors
                     waterfront
                                                           sqft_above
                                                    grade
0
       5650
                1.0
                                                        7
                                                                  1180
                2.0
                               0
                                                         7
1
       7242
                                     0
                                                                  2170
                                           . . .
2
      10000
                1.0
                               0
                                     0
                                                         6
                                                                   770
3
       5000
                1.0
                               0
                                     0
                                                         7
                                                                  1050
4
       8080
                               0
                1.0
                                     0
                                                         8
                                                                  1680
   sqft_basement yr_built yr_renovated
                                          zipcode
                                                         lat
                                                                 long
0
               0
                      1955
                                        0
                                             98178 47.5112 -122.257
             400
                      1951
                                     1991
                                             98125 47.7210 -122.319
1
2
               0
                      1933
                                        0
                                             98028 47.7379 -122.233
3
             910
                      1965
                                        0
                                             98136 47.5208 -122.393
4
               0
                      1987
                                        0
                                             98074 47.6168 -122.045
   sqft_living15
                  sqft_lot15
0
            1340
                        5650
1
            1690
                        7639
2
            2720
                        8062
3
            1360
                        5000
4
            1800
                        7503
[5 rows x 21 columns]
```

As apparent from a portion of the dataset provided above, there are a total of 19 features of the

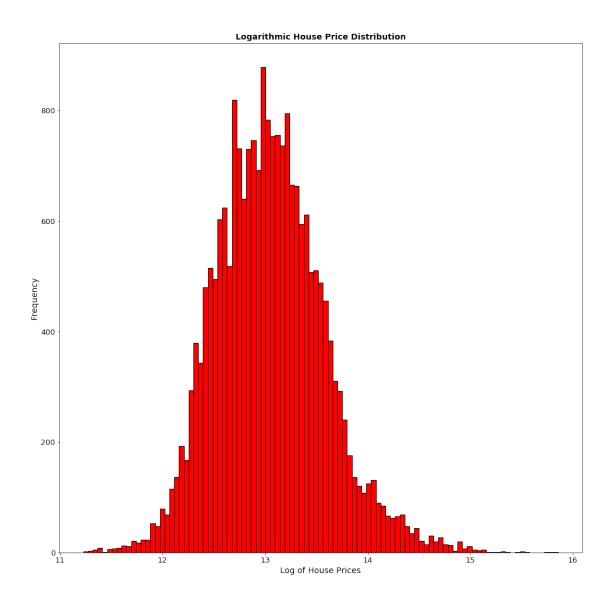
house excluding the **price** which is the quantity we intended to infer from our model and the **id**. A total of 21613 observations exist in the dataset.

The objective of our analysis is to find the relationships of all the features with the **price** of the house. To achieve this feat, it is necessary to understand the distribution, nature, and correlation of each feature with the **price** of the house [2]. A good first step is the visualization of the house prices in all the observations. Some statistical indicators for the house prices are provided below:

```
In [3]: # Statistical Metrics for House Prices
       minPrice = df.loc[:,'price'].min()
       maxPrice = df.loc[:,'price'].max()
        priceMean = df.loc[:,'price'].mean()
       priceMode = df.loc[:,'price'].mode()
        priceStats = df.loc[:,'price'].describe()
        print("Minimum House price: ", minPrice, "$")
        print("Maximum House price: ", maxPrice, "$")
        print("Mean of House prices: ", priceMean)
        print("\nMode of House prices: ")
        display(priceMode)
        print("Statistics about House Price: ")
        display(priceStats)
        # Histogram of log of House Prices
        fig = plt.figure(figsize = (16, 16))
        plt.hist(np.log(df['price']), bins = 99, edgecolor = 'black', color = 'red')
       plt.xlabel('Log of House Prices', fontsize = 14)
       plt.ylabel('Frequency', fontsize = 14)
       plt.tick_params(labelsize = 13)
       plt.title('Logarithmic House Price Distribution', fontsize = 14, fontweight = 'bold')
       plt.savefig(f"figures/logHist.jpg")
Minimum House price: 75000.0 $
Maximum House price: 7700000.0 $
Mean of House prices: 540088.1417665294
Mode of House prices:
0
     350000.0
     450000.0
dtype: float64
Statistics about House Price:
        2.161300e+04
count
```

mean	5.400881e+05
std	3.671272e+05
min	7.500000e+04
25%	3.219500e+05
50%	4.500000e+05
75%	6.450000e+05
max	7.700000e+06

Name: price, dtype: float64



The statistical values along with the histogram clearly show that the prices are normally distributed with minimal skewness and most of the houses with prices 350k and 450k dollars. This provides reassurance that there will be no bias in the model as far as the house prices are concerned. The next step is to find the correlation between each feature with the price to understand

the proportionalities between the two quantities which would provide useful information for *Feature Selection*. Before this, the feature **date** and **id** will be discarded from the dataset as they do not significantly (or at all) affect the price of the houses.

```
In [4]: # Drop unnecessary columns are display the updated dataset
        df = df.drop(['id', 'date'], axis = 1)
        display(df.head())
      price
             bedrooms
                       bathrooms sqft_living sqft_lot floors
                                                                  waterfront
0
  221900.0
                    3
                             1.00
                                          1180
                                                    5650
                                                              1.0
                                                                            0
  538000.0
                    3
                             2.25
                                          2570
                                                    7242
1
                                                              2.0
                                                                            0
2 180000.0
                    2
                             1.00
                                           770
                                                   10000
                                                              1.0
                                                                            0
3 604000.0
                    4
                            3.00
                                                              1.0
                                                                            0
                                          1960
                                                    5000
4 510000.0
                    3
                            2.00
                                          1680
                                                    8080
                                                              1.0
                                                                            0
         condition
                    grade
                           sqft_above
                                       sqft_basement yr_built yr_renovated
   view
0
                 3
                        7
                                  1180
                                                    0
                                                            1955
      0
                                                                             0
                        7
1
      0
                 3
                                  2170
                                                  400
                                                            1951
                                                                          1991
2
                 3
      0
                        6
                                  770
                                                    0
                                                            1933
                                                                             0
3
      0
                 5
                        7
                                  1050
                                                  910
                                                                             0
                                                            1965
4
                 3
                                  1680
                                                                             0
      0
                        8
                                                    0
                                                            1987
  zipcode
                lat
                        long sqft_living15 sqft_lot15
0
     98178 47.5112 -122.257
                                        1340
                                                    5650
     98125 47.7210 -122.319
                                        1690
                                                    7639
1
2
     98028 47.7379 -122.233
                                        2720
                                                    8062
3
     98136 47.5208 -122.393
                                        1360
                                                    5000
4
     98074 47.6168 -122.045
                                        1800
                                                    7503
In [5]: # Correlation of all the features with the price of the house
        most_corr = df.corr()['price'].abs().sort_values(ascending = False)
        # Feature count
        F = 4
        # Retain the top 4 most correlated features with the price
        most_corr = most_corr[1:F + 1]
        Preparation of the data for the
        Stan Model (samples for convergence and predictions)
        totalSamples = 2000
        df = df.sample(n = totalSamples)
        # Store the prices in the label set
        labels = df['price']
```

```
# Trim down the dataframe to the desired number of features
and without the labels ('price')
'''
df = df.loc[:, most_corr.index]
```

As per the scope of the project and the size of the dataset, we have decided to shortlist a total of four features from the dataset with the highest magnitude of correlation values for creating our Bayesian model. As can be seen from the correlation values, the three selected features are **sqft\_living**, **grade**, **sqft\_above**, and **sqft\_living15**. The detailed descriptions of each of these features are as follows:

- 1. **sqft\_living:** Square Footage of each home.
- 2. **grade:** Overall grade given to the housing unit based on King County grading system.
- 3. **sqft\_above:** Square Footage of house apart from the basement.
- 4. **sqft\_living15:** Living room area in 2015 (implies -- some renovations) This might or might not have affected the lot size area.

After selecting the best features, the dataset has been divided into a separate *training set* (all selected features) and a *test set* (list of all labels, i.e., **price**). Moreover, a subsample of the dataset roughly 10% of the original one has been extracted randomly for creating the Bayesian Model. The split ratio for train and test sets has been set to 90:10. In addition to this, the feature dataset has been scaled using the **Standard Scaler** to ensure that the mean and variance of the feature distribution stays close to 0 and 1 respectively.

```
In [6]: # Create train and test splits for the features and labels
        x_train, x_test, y_train, y_test = train_test_split(df, labels,
                                                             test_size = 0.1,
                                                             random state = 42)
        # Type conversion of splits
        x_train = x_train.values
        x_{test} = x_{test.values}
        y_train = y_train.values
        y_test = y_test.values
        XTrain = x_train.astype(str).astype(float)
        YTrain = y_train.ravel().astype(str).astype(float)
        XTest = x_test.astype(str).astype(float)
        YTest = y_test.ravel().astype(str).astype(float)
        # Scaling of the train and test data for the model
        scaler = StandardScaler()
        scaler_new = StandardScaler()
        XTrain_Scaled = scaler.fit_transform(XTrain)
        XTest_Scaled = scaler.transform(XTest)
```

```
YTrain_Scaled = scaler_new.fit_transform(YTrain.reshape(-1, 1)).ravel()
YTest_Scaled = scaler_new.transform(YTest.reshape(-1, 1)).ravel()
# Input data for Stan model (Linear Regression)
data linear = dict(
    tN = len(XTest_Scaled),
   N = len(XTrain Scaled),
   F = F,
    y = YTrain_Scaled,
    x = XTrain_Scaled,
    x_test = XTest_Scaled
)
# Input data for Stan model (Polynomial Regression)
data_poly = dict(
    tN = len(XTest_Scaled),
    N = len(XTrain_Scaled),
    F = F,
    y = YTrain_Scaled,
    x = XTrain Scaled,
    x_2 = np.square(XTrain_Scaled),
    x_test = XTest_Scaled,
    x_test_2 = np.square(XTest_Scaled)
)
```

## 1.3 Bayesian Modeling

A regression model provides an equation where the *coefficients* represent the relationship between the independent variable(s), i.e., **features** and the dependent variable, i.e., the **price**. The *intercept* is the expected mean value of price if all features are equal to zero. Based upon our dataset having multiple features and a positive numbered label which is *non-categorical* and *non-ordinal*, the **linear** and **polynomial** regression models are best-suited for predicting the house prices. Our goal is to carry out a comparative analysis of the *Linear Regression* model and the *Polynomial Regression* model of **degree** 2 to find out which model is relatively appropriate for our dataset. The equation for a **linear regression model** is provided below:

$$y = \beta_0 + \beta_1 x + \varepsilon$$

Similarly, the equation for a polynomial regression model is provided below:

$$y = \beta_0 + \beta_1 x + \beta_2 x^2 + \varepsilon$$

As apparent from the trimmed dataset and the correlation values, there is no *hierarchy* in the data to enable us to explore **separate** and **hierarchal** models for Stan. Hence, both Stan models for *linear* and *polynomial* regression are **pooled** models [3].

For our problem, we have chosen weakly informative priors as defined in Gelman 2008. To get the best result out of Stan, dataset instability has to be prevented, which can typically arise from bad geometry in the posterior that can cause Stan to adapt poorly and have heavy tails. Looking at the logarithmic plot of the **price**, the ideal choice is to proceed with the **weakly informative prior**.

The reason behind this is the fact that the prior rules out unreasonable parameter values but is not so strong as to rule out values that might make sense. Furthermore, the loss in precision by making the prior a bit too weak is less serious than the gain in robustness by including parts of parameter space that might be relevant. As a result, the Cauchy distribution, i.e.,  $\mathcal{N} \sim Cauchy(\mu, \gamma)$  with mean 0 and a long tail is perceived to be the best choice for the problem at hand [4]. The Cauchy prior incorporated for the *coefficients* is as follows:

$$\mathcal{N} \sim Cauchy(0, 2.5)$$

Similarly, the prior incorporated for the *intercept* is as follows:

$$\mathcal{N} \sim Cauchy(0, 10)$$

In our Stan model, we first construct the data block, which includes the *features* and *prices* of the **training set** along with their *count* and lastly, the *features* of the **test set** along with their *count*. We then initialize our parameters which in our case are the *intercept*, *slope values*, and the *variance*. The intercept and slope parameters are transformed into another parameter which can be considered as the **expected mean** of the price distribution.

We subsequently model the house prices as a normal sample with a mean that is the transformed parameter computed earlier.

Once the model is fitted, the parameters are then used to predict the house prices of the test set and also the log-likelihood values are generated in order to calculate the PSIS-LOO values (for performance analysis later on).

```
In [7]: # Stan models compilation (for both Linear and Polynomial Regression)
        model_linear = stan_utility.compile_model(filename = 'model_trial.stan',
                                                  model_name = 'linear')
        model_poly = stan_utility.compile_model(filename = 'model_trial_2.stan',
                                                model_name = 'polynomial')
Using cached StanModel
Using cached StanModel
In [8]: # Linear Regression model
        Model fitting with default parameters
        and displaying the results (random seed to reproduce results)
        fit_linear = model_linear.sampling(data = data_linear,
                                           seed = 194838, n_jobs = -1)
        111
        # Extraction of Posterior Predictive samples
        from the model (Linear Regression)
        samples_linear = fit_linear.extract(permuted = True)
```

```
# Ensuring that parameters to the Stan model are fine tuned
stan_utility.check_treedepth(fit_linear)

0 of 4000 iterations saturated the maximum tree depth of 10 (0.0%)

In [9]: # Polynomial Regression model

'''

# Model fitting with default parameters
and displaying the results (random seed to reproduce results)

'''

fit_poly = model_poly.sampling(data = data_poly,
seed = 194838, n_jobs = -1)

'''

# Extraction of Posterior Predictive samples
from the model (Polynomial Regression)

'''

samples_poly = fit_poly.extract(permuted = True)

# Ensuring that parameters to the Stan model are fine tuned
stan_utility.check_treedepth(fit_poly)

0 of 4000 iterations saturated the maximum tree depth of 10 (0.0%)
```

After observing the  $\hat{R}$  of both the models, it is safe to state that both models have converged with the default *iteration* and *chain* settings of Stan. Since the house **prices** had been scaled before being fitted in the models, therefore we would have to *unscale* them to their original values for future comparative analysis. The results of  $\hat{R}$  and  $n_{eff}$  clearly signify that the choice of models was appropriate for the given problem.

Please refer to the **Appendices** section for the Stan model *code* and *results* of the *Linear* and *Polynomial* regression models.

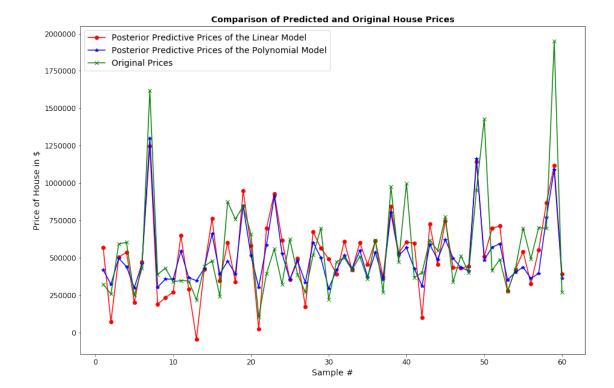
# 1.4 Comparative Analysis of the Models

For this problem, the efficiency of the models that we chose to fit the *training set* and utilize it to make predictions for the *test set* can be analyzed by the following means:

- 1. Visual Depiction of the Original vs. the Predicted House Prices
- 2. Root Mean Squared (RMS) error
- 3. PSIS-LOO CV (leave-one-out cross-validation) values along with Pareto k-value estimates for the models.

Firstly, we *unscaled* the predicted prices retrieved from the **linear** and **polynomial** regression models in Stan and generated a visual illustration to enable a 3-way comparison between these two sets of values and the original house **prices** as shown below:

```
In [10]: '''
         Extract the predictive posterior values from the model
         and the original 'Price' value from the dataset
         y ax linear = samples linear['y predicted'].mean(axis = 0)
         y_ax_poly = samples_poly['y_predicted'].mean(axis = 0)
         # Scale back prediction to original values
         y_linear_unscaled = scaler_new.inverse_transform(y_ax_linear)
         y_poly_unscaled = scaler_new.inverse_transform(y_ax_poly)
         YTest_Unscaled = scaler_new.inverse_transform(YTest_Scaled)
         111
         # Extract a fraction (30%) of the Predictive Posterior
         values from the test samples and original samples
         111
         predictionSamples = int(len(YTest_Scaled) * 0.3)
         x_ax = np.arange(1, predictionSamples + 1, 1)
         # Plot the predictions from both models vs. original values
         fig = plt.figure(figsize = (15, 10))
         plt.xlabel('Sample #', fontsize = 14)
         plt.ylabel('Price of House in $', fontsize = 14)
         plt.plot(x_ax, y_linear_unscaled[:predictionSamples],
                  label = "Posterior Predictive Prices of the Linear Model",
                  marker = 'o', c = 'red')
         plt.plot(x_ax, y_poly_unscaled[:predictionSamples],
                  label = "Posterior Predictive Prices of the Polynomial Model",
                  marker = '*', c = 'blue')
         plt.plot(x_ax, YTest_Unscaled[:predictionSamples],
                  label = "Original Prices", marker = 'x', c = 'green')
         plt.legend(fontsize = 14)
         plt.tick_params(labelsize = 12)
         plt.title('Comparison of Predicted and Original House Prices',
                   fontsize = 14, fontweight = 'bold')
         plt.savefig(f"figures/priceCompare.jpg")
```



From the figure above, it can be observed that **polynomial** model made *price* predictions much closer to the original than the **linear** model. Although both models were able to adapt quite well to the sensitivity of the dataset, there were certain samples where both the models would seem to go wayward (between samples 30-35 and 50-55) and loose precision.

Next, we calculated the Root Mean Squared (RMS) error for both the models. The RMS of the pairwise differences of the *training* and *test* sets can serve as a measure how far on average the error is from 0. Thus, the RMS of the differences is a meaningful measure of the error.

```
In [11]: # Root Mean Squared (RMS) error for both models
    rms_linear = 0
    rms_poly = 0

for i in range(0, np.size(YTest_Scaled)):
        rms_linear = rms_linear + np.sqrt(np.abs(YTest_Scaled[i] - y_ax_linear[i]))
        rms_poly = rms_poly + np.sqrt(np.abs(YTest_Scaled[i] - y_ax_poly[i]))

rms_linear = rms_linear / predictionSamples
    rms_poly = rms_poly / predictionSamples

print("RMS error of the Linear model: ", rms_linear)
    print("RMS error of the Polynomial model: ", rms_poly)

RMS error of the Linear model: 2.0367331131261714

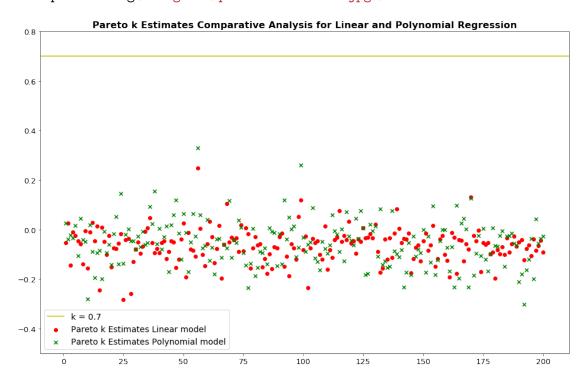
RMS error of the Polynomial model: 1.892379837584831
```

As signified by the visual illustration, the RMS error also agrees with the fact that the **polynomial** model provides relatively accurate house *price predictions* as compared to the **linear** model.

Lastly, we proceed to the final means of model evaluation and comparison, i.e., the PSIS-LOO values. The **log-likelihood** calculation is necessary for obtaining the desired values, hence the code provided below utilizes these values from the Stan models to extract the **sum of the expected log predictive densities**, the **estimated an effective number of parameters** and lastly the **Pareto k-estimates** for the models [5]. The extraction process is provided as follows:

```
In [12]: # PSIS-LOO values for Linear model
         log_lik_linear = samples_linear["loglik_pred"]
         loo_linear, loos_linear, ks_linear = psis.psisloo(log_lik_linear)
         print("Linear Model: ")
         print("PSIS-LOO value:", loo_linear)
         lppd_linear = np.sum(logsumexp(log_lik_linear, axis = 0,
                                        b = 1. / log lik linear.shape[0]))
         p_loo_linear = lppd_linear - loo_linear
         print("Estimated effective number of parameters in the model: ",
               p_loo_linear)
         ksn1 = (ks_linear >= 0.7).sum()
         print("Number of k values greater than 0.7: ", ksn1)
Linear Model:
PSIS-LOO value: -182.19221440541173
Estimated effective number of parameters in the model: 1.4639912814650984
Number of k values greater than 0.7: 0
In [13]: # PSIS-LOO values for Polynomial model
         log_lik_poly = samples_poly["loglik_pred"]
         loo_poly, loos_poly, ks_poly = psis.psisloo(log_lik_poly)
         print("Polynomial Model: ")
         print("PSIS-LOO value:", loo_poly)
         lppd_poly = np.sum(logsumexp(log_lik_poly,axis = 0, b = 1. / log_lik_poly.shape[0]))
         p_loo_poly = lppd_poly - loo_poly
         print("Estimated effective number of parameters in the model: ", p_loo_poly)
         ksn2 = (ks_poly >= 0.7).sum()
         print("Number of k values greater than 0.7 : ", ksn2)
Polynomial Model:
PSIS-LOO value: -163.05427469903623
Estimated effective number of parameters in the model: 2.6930163794455666
```

```
In [14]: '''
         Scatter plots for Pareto k-values for
         Linear and Polynomial Regresion models
         x_linear = np.arange(1, np.size(ks_linear) + 1, 1)
         x_poly = np.arange(1, np.size(ks_poly) + 1, 1)
         fig = plt.figure(figsize = (16, 10))
         plt.axhline(y = 0.7, color = 'y', linestyle = '-',
                     label = 'k = 0.7')
         plt.scatter(x_linear, ks_linear,
                     label = "Pareto k Estimates Linear model",
                     marker = 'o', c = 'red')
         plt.scatter(x_poly, ks_poly,
                     label = "Pareto k Estimates Polynomial model",
                     marker = 'x', c = 'green')
         plt.tick_params(labelsize = 13)
         plt.ylim((-0.5, 0.8))
         plt.title("Pareto k Estimates Comparative Analysis for Linear and Polynomial Regression
                   fontsize = 16, fontweight = 'bold')
         plt.legend(fontsize = 14)
         plt.savefig(f"figures/paretoKEstimates.jpg")
```



Results obtained from the PSIS-LOO CV (leave-one-out cross-validation) highlight two things:

- The larger LOO value of the polynomial model as compared to that of the linear model signifies that the **polynomial** model is relatively more reliable as compared to the **linear** one.
- 2. Furthermore, the Pareto k estimates for both the models are < 0.7 which signifies that the estimates for both the models are reliable.

After our careful analysis and model assessment through the visualization of the house **prices**, the **RMS errors** and the **PSIS-LOO CV values**, we have identified the polynomial regression model as the better-suited model for our problem.

#### 1.5 Conclusion

As a reflection of our entire progress, we were able to study, dissect and analyze the original dataset of house **prices** and get a better idea of how well they were distributed with the means of some statistical indicators and a logarithmic plot.

Next, we were able to identify the right balance of the *training* and *test* from the original data to create Bayesian predictive models, i.e., the **Linear Regression Model** and the **Polynomial Regression Model** respectively.

Subsequently, we justified the choice of these models along with the choice for the *prior* based upon the nature of the data, i.e., the **features** and **labels**.

Lastly, we performed the model assessment of the chosen models through visualization of the *predicted prices* and the analysis of the RMS and PSIS-LOO CV values and indicators. Side-by-side comparison and plot depictions helped us in identifying the **polynomial** model better suited for predicting the house prices as compared to the **linear** model.

Due to limited time, we rushed through the model selection process although the prior selection was appropriate. We could have explored other possible models for this problem and carried out an extensive assessment to find out the best choice. Also, some additional plots for analyzing the individual correlations between the features and the price would also have been advantageous.

Some future improvements for this work could be analyzing more choices of models for Stan in addition to extensive fiddling with the iterations and number of chains for each model. In addition to this, Area Under the Curve (AUC) and Receiver Operating Curve (ROC) could be employed in future analysis to provide more insight into the model assessment phase.

#### 1.6 References

- [1] House Sales in King County, USA https://www.kaggle.com/harlfoxem/housesalesprediction/version/1
- [2] Bayesian Linear Regression in Python: Using Machine Learning to Predict Student Grades Part 1 https://towardsdatascience.com/bayesian-linear-regression-in-python-using-machine-learning-to-predict-student-grades-part-1-7d0ad817fca5
- [3] A Primer on Bayesian Multilevel Modeling using PyStan http://mc-stan.org/users/documentation/case-studies/radon.html
- [4] Prior Choice Recommendations https://github.com/stan-dev/stan/wiki/Prior-Choice-Recommendations
- [5] Pareto smoothed importance sampling (PSIS) http://mc-stan.org/loo/reference/psis.html

# 1.7 Appendices

#### 1.7.1 Stan Code

# **Linear Regression**

```
data {
    int <lower=0> N; // Number of data points
    int <lower=0> tN; // Number of data to test
    int <lower=0> F; // Number of features
    real y[N]; // Price
    matrix[N, F] x; // Feature values
    matrix[tN, F] x_test; // Test feautures
}
parameters {
    real intercept;
    vector[F] theta;
    real sigma;
}
transformed parameters{
    vector[N] y_mean;
    y_mean = intercept + x * theta;
}
model {
    intercept ~ cauchy(0,10); //prior for the intercept following Gelman 2008
    for(i in 1:F)
       theta[i] ~ cauchy(0,2.5);//prior for the slopes following Gelman 2008
    y ~ normal(y_mean, sigma);
}
generated quantities {
    real ypred[tN];
    vector[tN] y_predicted;
    vector[tN] loglik_pred;
    for (i in 1:tN){
        y_predicted[i] = intercept + x_test[i] * theta;
        ypred[i] = normal_rng(y_predicted[i], sigma);
        loglik_pred[i] = normal_lpdf(y[i] | y_mean[i],sigma);
}
Polynomial Regression
data {
    int <lower=0> N; // Number of data points
    int <lower=0> tN; // Number of data to test
    int <lower=0> F; // Number of features
    real y[N]; // Price
    matrix[N, F] x; // Feature values
    matrix[N, F] x_2;
```

```
matrix[tN, F] x_test; // Test feautures
    matrix[tN, F] x_test_2;
}
parameters {
    real intercept;
    vector[F*2] theta;
    real sigma;
transformed parameters{
    vector[N] y_mean;
    y_mean = intercept + x * theta[1:F] + x_2 * theta[F+1:F*2];
}
model {
    intercept ~ cauchy(0,10); //prior for the intercept following Gelman 2008
       theta[i] ~ cauchy(0,2.5);//prior for the slopes following Gelman 2008
    y ~ normal(y_mean, sigma);
}
generated quantities {
    real ypred[tN];
    vector[tN] y_predicted;
    vector[tN] loglik pred;
    for (i in 1:tN){
        y_predicted[i] = intercept + x_test[i] * theta[1:F] + x_test_2[i] * theta[F+1:F*2];
        ypred[i] = normal_rng(y_predicted[i], sigma);
        loglik_pred[i] = normal_lpdf(y[i] | y_mean[i],sigma);
    }
}
1.7.2 Linear Regression Model Results
In [15]: # Display results of Linear Stan Model
         print(fit_linear)
Inference for Stan model: anon_model_23307f82cce8b5150747ec40c2ddb2a2.
4 chains, each with iter=2000; warmup=1000; thin=1;
post-warmup draws per chain=1000, total post-warmup draws=4000.
                                                                75% 97.5% n_eff
                                         2.5%
                                                  25%
                                                                                    Rhat
                                    sd
                                                         50%
                   mean se_mean
intercept
                 3.6e-5 2.2e-4
                                  0.02 -0.03 -0.01 8.6e-7
                                                               0.01
                                                                      0.03
                                                                             5106
                                                                                     1.0
                   0.72 5.8e-4
theta[1]
                                  0.04
                                         0.65
                                                 0.69
                                                        0.72
                                                               0.74
                                                                      0.79
                                                                                     1.0
                                                                             3732
theta[2]
                    0.3 \quad 3.9e-4
                                  0.03
                                         0.25
                                                0.29
                                                         0.3
                                                               0.32
                                                                      0.36
                                                                             4547
                                                                                     1.0
theta[3]
                  -0.24 5.8e-4
                                  0.03 -0.31 -0.26 -0.24 -0.22 -0.18
                                                                             3538
                                                                                     1.0
theta[4]
                  -0.01 3.8e-4
                                  0.03 -0.06 -0.03 -0.01 4.4e-3
                                                                      0.04
                                                                             4653
                                                                                     1.0
sigma
                   0.66 1.5e-4
                                  0.01
                                         0.64
                                                0.65
                                                       0.66
                                                               0.67
                                                                      0.68
                                                                             5416
                                                                                     1.0
y_mean[1]
                   -1.0 4.3e-4
                                  0.03 -1.06 -1.02
                                                       -1.0 -0.98 -0.95
                                                                             4585
                                                                                     1.0
```

0.35

0.33

0.39

0.4

0.41

0.43

0.43

0.46

0.46

0.53

4720

4912

1.0

1.0

0.03

0.05

0.41 4.2e-4

0.43 7.2e-4

y\_mean[2]

 $y_mean[3]$ 

$y_{mean}[4]$	0.83	4.3e-4	0.03	0.77	0.81	0.83	0.85	0.88	4676	1.0
y_mean[5]	-0.59	3.0e-4	0.02	-0.63	-0.61	-0.59	-0.58	-0.55	4515	1.0
y_mean[6]	0.5	5.8e-4	0.04	0.43	0.48	0.5	0.52	0.57	3751	1.0
y_mean[7]	-0.54	3.5e-4	0.02	-0.59	-0.56	-0.54	-0.53	-0.5	4455	1.0
y_mean[8]	-1.08	4.2e-4	0.03	-1.13	-1.1	-1.08	-1.06	-1.03	4430	1.0
y_mean[9]	0.59	6.6e-4	0.04	0.5	0.56	0.58	0.62	0.67	4498	1.0
y_mean[10]	0.74	4.9e-4	0.03	0.68	0.72	0.75	0.77	0.81	4297	1.0
y_mean[11]	0.82	5.5e-4	0.04	0.75	0.79	0.81	0.84	0.88	4155	1.0
y_mean[12]	0.8	6.1e-4	0.04	0.73	0.78	0.8	0.83	0.88	4010	1.0
y_mean[13]	-0.54	3.8e-4	0.03	-0.59	-0.56	-0.54	-0.53	-0.49	4446	1.0
y_mean[14]	-0.21	5.8e-4	0.04	-0.28	-0.23	-0.21	-0.18	-0.13	4274	1.0
y_mean[15]	-1.03	4.2e-4	0.03	-1.08	-1.04	-1.03	-1.01	-0.97	4502	1.0
y_mean[16]	-0.34	4.7e-4	0.03	-0.4	-0.36	-0.34	-0.32	-0.28	4678	1.0
y_mean[17]	0.09	3.8e-4	0.03	0.04	0.07	0.09	0.32	0.13	4327	1.0
y_mean[17] y_mean[18]	-0.33	5.5e-4	0.03	-0.4	-0.36	-0.33	-0.31	-0.26	4661	1.0
y_mean[10] y_mean[19]	0.04	3.9e-4		4.1e-3	0.03	0.04	0.06	0.20	4579	1.0
	-0.75	3.9e-4 4.0e-4	0.03	-0.81	-0.77	-0.75	-0.73	-0.7	4855	1.0
y_mean[20]										
y_mean[21]	0.24	3.5e-4	0.02	0.19	0.22	0.24	0.25	0.28	4342	1.0
y_mean[22]	1.16	6.9e-4	0.05	1.07	1.13	1.16	1.19	1.25	4323	1.0
y_mean[23]	-0.1	4.0e-4	0.03	-0.15	-0.11	-0.1	-0.08	-0.04	4483	1.0
y_mean[24]	-0.49	3.6e-4	0.02	-0.54	-0.51	-0.49	-0.48	-0.45	4389	1.0
y_mean[25]	-1.05	4.3e-4	0.03	-1.1	-1.07	-1.05	-1.03	-0.99	4520	1.0
y_mean[26]	0.15	3.4e-4	0.02	0.1	0.13	0.15	0.16	0.19	4421	1.0
y_mean[27]	-0.84	4.4e-4	0.03	-0.9	-0.86	-0.84	-0.82	-0.78	4658	1.0
y_mean[28]	-1.01	4.3e-4	0.03	-1.06	-1.03	-1.01	-0.99	-0.95	4598	1.0
y_mean[29]	0.16	5.1e-4	0.03	0.1	0.14	0.16	0.19	0.23	4528	1.0
y_mean[30]	5.4e-3	4.3e-4	0.03	-0.05	-0.01	5.5e-3	0.02	0.06	4538	1.0
y_mean[31]	-1.01	4.1e-4	0.03	-1.07	-1.03	-1.01	-0.99	-0.96	4443	1.0
y_mean[32]	-0.39	3.2e-4	0.02	-0.43	-0.4	-0.39	-0.37	-0.35	4509	1.0
y_mean[33]	1.72	8.1e-4	0.05	1.61	1.68	1.72	1.75	1.82	4260	1.0
y_mean[34]	-0.57	3.0e-4	0.02	-0.61	-0.58	-0.57	-0.55	-0.53	4507	1.0
y_mean[35]	-0.58	3.2e-4	0.02	-0.63	-0.6	-0.58	-0.57	-0.54	4526	1.0
y_mean[36]	0.81	9.0e-4	0.06	0.7	0.77	0.81	0.85	0.92	4050	1.0
y_mean[37]	2.45	1.2e-3	0.08	2.29	2.4	2.45	2.5	2.61	4294	1.0
y_mean[38]	1.33	7.0e-4	0.05	1.24	1.3	1.33	1.36	1.42	4312	1.0
y_mean[39]	0.61	4.1e-4	0.03	0.55	0.59	0.61	0.63	0.67	5038	1.0
y_mean[40]	-0.51	6.7e-4	0.05	-0.6	-0.54	-0.51	-0.48	-0.42	4565	1.0
y_mean[41]	-0.07	4.4e-4	0.03	-0.13	-0.09	-0.07	-0.05	-0.02	3971	1.0
y_mean[42]	0.83	3.8e-4	0.03	0.78	0.81	0.83	0.85	0.88	4465	1.0
y_mean[43]	-0.44	3.7e-4	0.02	-0.49	-0.46	-0.44	-0.43	-0.4	4516	1.0
y_mean[44]	0.06	3.2e-4	0.02	0.01	0.04	0.06	0.07	0.1	4465	1.0
y_mean[45]	0.09	3.1e-4	0.02	0.05	0.08	0.1	0.11	0.14	4372	1.0
y_mean[46]	-0.04	3.8e-4	0.02	-0.09	-0.06	-0.04		8.1e-3	4240	1.0
y_mean[47]	-1.16	4.9e-4	0.03	-1.23	-1.18	-1.16	-1.14	-1.1	4460	1.0
y_mean[48]	-1.03	4.2e-4	0.03	-1.08	-1.05	-1.03	-1.01	-0.98	4490	1.0
y_mean[49]	-0.68	4.6e-4	0.03	-0.74	-0.7	-0.68	-0.65	-0.62	4491	1.0
y_mean[50]	-0.51	4.5e-4	0.03	-0.57	-0.53	-0.51	-0.49	-0.45	4442	1.0
y_mean[50] y_mean[51]	-0.83	4.1e-4	0.03	-0.89	-0.85	-0.83	-0.81	-0.78	4810	1.0
2 _mcan [O1]	0.00	1.16 4	0.00	0.00	0.00	0.00	0.01	0.10	1010	1.0

y_mean[52]	-0.25	4.1e-4	0.03	-0.31	-0.27	-0.25	-0.24	-0.2	4619	1.0
y_mean[53]	0.33	7.0e-4	0.05	0.24	0.3	0.33	0.36	0.42	4275	1.0
y_mean[54]	-0.16	4.5e-4	0.03	-0.22	-0.18	-0.16	-0.14	-0.1	4734	1.0
y_mean[55]	0.16	5.6e-4	0.04	0.08	0.13	0.16	0.18	0.23	4747	1.0
y_mean[56]	2.25	9.0e-4	0.06	2.13	2.2	2.25	2.28	2.36	4345	1.0
y_mean[57]	0.9	6.0e-4	0.04	0.82	0.87	0.9	0.93	0.98	4421	1.0
y_mean[58]	1.01	6.8e-4	0.04	0.93	0.98	1.01	1.04	1.1	4154	1.0
y_mean[59]	-0.14	5.5e-4	0.04	-0.21	-0.16	-0.14	-0.11	-0.06	4685	1.0
y_mean[60]	1.63	8.1e-4	0.05	1.53	1.6	1.63	1.67	1.74	4269	1.0
y_mean[61]	-0.24	5.3e-4	0.04	-0.31	-0.27	-0.24	-0.22	-0.17	4463	1.0
y_mean[62]	-0.79	4.1e-4	0.03	-0.84	-0.81	-0.79	-0.77	-0.73	4599	1.0
y_mean[63]	-0.23	6.1e-4	0.04	-0.31	-0.26	-0.23	-0.2	-0.14	4328	1.0
y_mean[64]	0.9	5.7e-4	0.04	0.82	0.87	0.9	0.93	0.98	4618	1.0
y_mean[65]	-0.03	4.6e-4	0.03	-0.08	-0.05	-0.03-	-6.8e-3	0.03	3953	1.0
y_mean[66]	-0.6	4.1e-4	0.03	-0.65	-0.62	-0.6	-0.58	-0.54	5012	1.0
y_mean[67]	-0.1	3.1e-4	0.02	-0.14	-0.12	-0.1	-0.09	-0.06	4739	1.0
y_mean[68]	-0.13	3.5e-4	0.02	-0.18	-0.15	-0.13	-0.12	-0.09	4546	1.0
y_mean[69]	1.04	5.9e-4	0.04	0.97	1.02	1.04	1.07	1.12	4312	1.0
y_mean[70]	0.72	8.9e-4	0.06	0.62	0.68	0.72	0.76	0.83	3916	1.0
y_mean[71]	-0.74	4.4e-4	0.03	-0.8	-0.76	-0.74	-0.72	-0.68	4868	1.0
y_mean[72]	-0.49	3.4e-4	0.02	-0.54	-0.51	-0.49	-0.48	-0.45	4662	1.0
y_mean[73]	0.98	6.8e-4	0.05	0.89	0.95	0.98	1.02	1.08	4626	1.0
y_mean[74]	-1.53	9.6e-4	0.06	-1.66	-1.58	-1.53	-1.49	-1.41	4513	1.0
y_mean[75]	1.57	1.0e-3	0.07	1.43	1.53	1.57	1.62	1.71	4554	1.0
y_mean[76]	-0.32	5.4e-4	0.04	-0.39	-0.35	-0.32	-0.3	-0.25	4280	1.0
y_mean[77]	-0.63	3.6e-4	0.02	-0.68	-0.64	-0.63	-0.61	-0.58	4534	1.0
y_mean[78]	-0.13	3.4e-4	0.02	-0.17	-0.14	-0.13	-0.11	-0.08	4581	1.0
y_mean[79]	1.78	8.2e-4	0.05	1.68	1.75	1.78	1.82	1.89	4224	1.0
y_mean[80]	-0.28	2.8e-4	0.02	-0.32	-0.3	-0.28	-0.27	-0.25	4651	1.0
y_mean[81]	-0.88	4.7e-4	0.03	-0.95	-0.9	-0.88	-0.86	-0.82	4643	1.0
y_mean[82]	1.41	5.8e-4	0.04	1.33	1.38	1.41	1.43	1.48	4341	1.0
y_mean[83]	1.47	7.5e-4	0.05	1.38	1.44	1.47	1.5	1.56	3805	1.0
y_mean[84]	-0.26	3.1e-4	0.02	-0.3	-0.27	-0.26	-0.24	-0.21	4414	1.0
y_mean[85]	-0.46	3.1e-4	0.02	-0.5	-0.48	-0.46	-0.45	-0.42	4398	1.0
y_mean[86]	-0.98	4.5e-4	0.03	-1.04	-1.0	-0.98	-0.96	-0.92	4351	1.0
y_mean[87]	0.26	4.1e-4	0.03	0.21	0.24	0.26	0.28	0.32	4488	1.0
y_mean[88]	1.01	6.5e-4	0.04	0.93	0.98	1.01	1.04	1.09	4016	1.0
y_mean[89]	-0.62	3.1e-4	0.02	-0.66	-0.63	-0.62	-0.6	-0.58	4531	1.0
y_mean[90]	-0.91	4.2e-4	0.03	-0.97	-0.93	-0.91	-0.89	-0.86	4472	1.0
y_mean[91]	-0.6	3.4e-4	0.02	-0.65	-0.62	-0.6	-0.59	-0.56	4529	1.0
y_mean[92]	1.72	1.0e-3	0.07	1.59	1.67	1.72	1.77	1.85	4425	1.0
y_mean[93]	-0.62	4.3e-4	0.03	-0.68	-0.64	-0.62	-0.6	-0.56	4629	1.0
y_mean[94]	-1.0	4.3e-4	0.03	-1.06	-1.02	-1.0	-0.98	-0.95	4596	1.0
y_mean[95]	0.61	4.5e-4	0.03	0.55	0.59	0.61	0.63	0.66	4304	1.0
y_mean[96]	0.11	3.2e-4	0.02	0.07	0.1	0.11	0.13	0.15	4325	1.0
y_mean[97]	-0.57	3.0e-4	0.02	-0.61	-0.59	-0.57	-0.56	-0.53	4502	1.0
y_mean[98]	0.88	7.6e-4	0.05	0.8	0.85	0.88	0.91	0.98	3646	1.0
y_mean[99]	4.21	1.7e-3	0.11	4.0	4.14	4.21	4.28	4.43	4167	1.0

y_mean[100]	-1.0	7.1e-4	0.05	-1.1	-1.04	-1.0	-0.97	-0.91	4380	1.0
y_mean[101]	-0.74	3.7e-4	0.02	-0.79	-0.75	-0.74	-0.72	-0.69	4617	1.0
y_mean[102]	-0.51	3.4e-4	0.02	-0.55	-0.52	-0.51	-0.49	-0.46	4404	1.0
y_mean[103]	0.18	4.6e-4	0.03	0.12	0.16	0.18	0.21	0.25	4748	1.0
y_mean[104]	1.18	6.2e-4	0.04	1.1	1.15	1.18	1.21	1.26	4257	1.0
y_mean[105]	0.06	5.5e-4	0.03-	2.5e-3	0.04	0.06	0.09	0.13	3809	1.0
y_mean[106]	0.16	5.4e-4	0.03	0.1	0.14	0.16	0.19	0.23	3997	1.0
y_mean[107]	0.13	3.3e-4	0.02	0.09	0.11	0.13	0.14	0.17	4414	1.0
y_mean[108]	-0.23	4.1e-4	0.03	-0.29	-0.25	-0.23	-0.22	-0.18	4113	1.0
y_mean[109]	-0.63	3.3e-4	0.02	-0.68	-0.65	-0.63	-0.62	-0.59	4522	1.0
y_mean[110]	-0.44	3.0e-4	0.02	-0.48	-0.45	-0.44	-0.43	-0.4	4488	1.0
y_mean[111]	0.81	5.8e-4	0.04	0.73	0.79	0.81	0.84	0.89	4730	1.0
y_mean[112]	0.14	3.0e-4	0.02	0.1	0.12	0.14	0.15	0.18	4688	1.0
y_mean[113]	-0.27	3.9e-4	0.03	-0.32	-0.29	-0.27	-0.25	-0.22	4195	1.0
y_mean[114]	-0.77	4.8e-4	0.03	-0.83	-0.79	-0.77	-0.75	-0.7	4431	1.0
y_mean[115]	-0.03	2.9e-4	0.02	-0.07	-0.05	-0.03		4.9e-3	4493	1.0
y_mean[116]	0.8	6.5e-4	0.04	0.72	0.77	0.8	0.82	0.88	3711	1.0
y_mean[117]	1.41	8.9e-4	0.05	1.31	1.37	1.41	1.45	1.52	3671	1.0
y_mean[118]	0.28	6.2e-4	0.04	0.2	0.25	0.28	0.3	0.36	4200	1.0
y_mean[119]	1.13	7.2e-4	0.05	1.04	1.1	1.13	1.16	1.22	4245	1.0
y_mean[120]	0.09	5.3e-4	0.03	0.03	0.07	0.09	0.11	0.16	3870	1.0
y_mean[121]	-0.9	4.9e-4	0.03	-0.97	-0.93	-0.9	-0.88	-0.84	4336	1.0
y_mean[122]	1.41	7.5e-4	0.05	1.32	1.38	1.41	1.45	1.51	4514	1.0
y_mean[123]	-0.11	3.0e-4	0.02	-0.15	-0.12	-0.11	-0.09	-0.07	4688	1.0
y_mean[124]	-0.18	4.7e-4	0.03	-0.24	-0.2	-0.18	-0.16	-0.12	4120	1.0
y_mean[125]	0.51	5.9e-4	0.04	0.43	0.48	0.51	0.54	0.59	4604	1.0
y_mean[126]	-0.79	4.3e-4	0.03	-0.84	-0.8	-0.78	-0.77	-0.73	4543	1.0
y_mean[127]	-0.64	3.5e-4	0.02	-0.69	-0.66	-0.64	-0.62	-0.59	4518	1.0
y_mean[128]	0.2	5.5e-4	0.04	0.13	0.18	0.2	0.23	0.28	4578	1.0
y_mean[129]	-1.07	5.3e-4	0.03	-1.14	-1.1	-1.07	-1.05	-1.0	4376	1.0
y_mean[130]	-0.32	4.2e-4	0.03	-0.37	-0.34	-0.32	-0.3	-0.27	4281	1.0
y_mean[131]	1.42	7.1e-4	0.05	1.33	1.38	1.42	1.45	1.51	4477	1.0
y_mean[132]	1.55	8.0e-4	0.05	1.44	1.51	1.55	1.58	1.65	4291	1.0
y_mean[133]	-0.2	6.0e-4	0.04	-0.29	-0.23	-0.2	-0.17	-0.12	4972	1.0
y_mean[134]	-0.05	4.4e-4	0.03	-0.1	-0.07	-0.05	-0.03	7.0e-3	3979	1.0
y_mean[135]	0.1	3.2e-4	0.02	0.06	0.09	0.1	0.11	0.14	4380	1.0
y_mean[136]	0.42	4.5e-4	0.03	0.36	0.4	0.42	0.44	0.48	4739	1.0
y_mean[137]	-0.3	5.7e-4	0.04	-0.38	-0.33	-0.3	-0.27	-0.22	5181	1.0
y_mean[138]	-0.4	3.2e-4	0.02	-0.45	-0.42	-0.41	-0.39	-0.36	4445	1.0
y_mean[139]	-0.63	8.0e-4	0.05	-0.73	-0.67	-0.63	-0.59	-0.52	4651	1.0
y_mean[140]	-0.05	4.1e-4	0.03	-0.11	-0.07	-0.05	-0.04-	-1.5e-3	4489	1.0
y_mean[141]	-0.87	8.6e-4	0.06	-0.99	-0.91	-0.87	-0.83	-0.77	4366	1.0
y_mean[142]	-0.08	3.0e-4	0.02	-0.12	-0.09	-0.08	-0.07	-0.04	4564	1.0
y_mean[143]	0.43	4.4e-4	0.03	0.38	0.41	0.43	0.45	0.48	3929	1.0
y_mean[144]	0.09	3.7e-4	0.02	0.05	0.08	0.09	0.11	0.14	4311	1.0
y_mean[145]	1.43	6.4e-4	0.04	1.35	1.41	1.43	1.46	1.51	4000	1.0
y_mean[146]	-0.34	4.2e-4	0.03	-0.4	-0.36	-0.34	-0.33	-0.29	4296	1.0
y_mean[147]	-0.36	4.2e-4	0.03	-0.42	-0.38	-0.36	-0.34	-0.3	5158	1.0

```
-0.21
                                                    -0.19
                                                                                     4785
y_mean[148]
                    -0.17
                           2.9e-4
                                      0.02
                                                            -0.17
                                                                    -0.16
                                                                           -0.13
                                                                                              1.0
                    -0.83
                           4.5e-4
                                      0.03
                                            -0.89
                                                    -0.85
                                                            -0.83
                                                                    -0.81
                                                                            -0.77
                                                                                     4455
y_mean[149]
                                                                                              1.0
y_mean[150]
                           5.0e-4
                                      0.03
                                             0.61
                                                             0.67
                                                                      0.7
                                                                                     4249
                     0.67
                                                     0.65
                                                                             0.74
                                                                                              1.0
                    -0.05
                           3.5e-4
                                      0.02
                                            -0.09
                                                    -0.06
                                                            -0.05
                                                                   -0.03 1.1e-3
                                                                                     4625
                                                                                              1.0
y_mean[151]
                                            -0.72
                                                            -0.68
y_mean[152]
                    -0.68
                           3.3e-4
                                      0.02
                                                    -0.69
                                                                    -0.66
                                                                           -0.63
                                                                                     4579
                                                                                              1.0
                                                              0.3
                      0.3
                           4.3e-4
                                      0.03
                                             0.24
                                                     0.28
                                                                     0.32
                                                                             0.36
                                                                                     4949
                                                                                              1.0
y_mean[153]
                                            -0.32
                                                            -0.24
                                                                    -0.22
                                                                           -0.17
y_mean[154]
                    -0.24
                           5.9e-4
                                      0.04
                                                    -0.27
                                                                                     4267
                                                                                              1.0
y_mean[155]
                                            -0.52
                    -0.48
                           3.0e-4
                                      0.02
                                                    -0.49
                                                            -0.48
                                                                    -0.46
                                                                            -0.44
                                                                                     4560
                                                                                              1.0
                    -0.47
                           3.7e-4
                                      0.03
                                            -0.52
                                                    -0.48
                                                            -0.47
                                                                    -0.45
                                                                            -0.42
                                                                                     4731
                                                                                              1.0
y_mean[156]
                           7.9e-4
                                      0.05
                                               0.5
                                                     0.56
                                                              0.6
                                                                     0.63
                                                                              0.7
                                                                                     3914
y_mean[157]
                      0.6
                                                                                              1.0
                    -0.35
                           3.5e-4
                                      0.02
                                            -0.39
                                                    -0.36
                                                            -0.35
                                                                    -0.33
                                                                             -0.3
                                                                                     4471
                                                                                              1.0
y_mean[158]
                    -0.38
                           3.4e-4
                                      0.02
                                            -0.43
                                                     -0.4
                                                            -0.38
                                                                    -0.37
                                                                            -0.34
                                                                                     4389
                                                                                              1.0
y_mean[159]
y_mean[160]
                     0.36
                           7.7e-4
                                      0.05
                                             0.26
                                                     0.33
                                                             0.36
                                                                      0.4
                                                                             0.46
                                                                                     4410
                                                                                              1.0
                           3.8e-4
                                      0.03
                                            -0.76
                                                    -0.73
                                                            -0.71
                                                                            -0.66
                    -0.71
                                                                    -0.69
                                                                                     4778
y_mean[161]
                                                                                              1.0
                    -0.56
                           3.4e-4
                                      0.02
                                            -0.61
                                                    -0.58
                                                            -0.56
                                                                    -0.55
                                                                            -0.52
                                                                                     4561
y_mean[162]
                                                                                              1.0
                                            -0.23
                           3.9e-4
                                      0.03
                    -0.18
                                                     -0.2
                                                            -0.18
                                                                    -0.16
                                                                            -0.13
                                                                                     4160
                                                                                              1.0
y_mean[163]
y_mean[164]
                    -0.98
                           5.1e-4
                                      0.03
                                            -1.05
                                                     -1.0
                                                            -0.98
                                                                    -0.95
                                                                            -0.91
                                                                                     4761
                                                                                              1.0
                    -0.41
                                      0.02
                                            -0.45
                                                    -0.42
                                                            -0.41
                                                                           -0.36
                                                                                     4414
                           3.2e-4
                                                                    -0.39
                                                                                              1.0
y_mean[165]
y_mean[166]
                    -0.58
                           5.7e-4
                                      0.04
                                            -0.65
                                                     -0.6
                                                            -0.58
                                                                    -0.55
                                                                             -0.5
                                                                                     4680
                                                                                              1.0
y_mean[167]
                     0.75
                           5.4e-4
                                      0.04
                                             0.68
                                                     0.73
                                                             0.75
                                                                     0.77
                                                                             0.82
                                                                                     4214
                                                                                              1.0
                    -0.98
                           4.2e-4
                                      0.03
                                            -1.04
                                                     -1.0
                                                            -0.98
                                                                    -0.96
                                                                            -0.93
y_mean[168]
                                                                                     4591
                                                                                              1.0
                    -0.39
                           4.9e-4
                                      0.03
                                            -0.46
                                                    -0.41
                                                            -0.39
                                                                    -0.37
                                                                            -0.33
                                                                                     4732
y_mean[169]
                                                                                              1.0
                           6.9e-4
                                      0.05
                                                                                     4453
y_mean[170]
                     1.78
                                               1.7
                                                     1.75
                                                             1.78
                                                                     1.82
                                                                             1.87
                                                                                              1.0
                    -1.13
                           5.2e-4
                                      0.03
                                             -1.2
                                                    -1.16
                                                            -1.13
                                                                    -1.11
                                                                            -1.06
                                                                                     4421
                                                                                              1.0
y_mean[171]
y_mean[172]
                    -0.78
                           4.0e-4
                                      0.03
                                            -0.83
                                                     -0.8
                                                            -0.78
                                                                   -0.76
                                                                           -0.73
                                                                                     4606
                                                                                              1.0
                     0.36
                           5.0e-4
                                      0.03
                                               0.3
                                                     0.34
                                                             0.36
                                                                     0.38
                                                                             0.42
                                                                                     3944
y_mean[173]
                                                                                              1.0
                                      0.03
                                               1.1
                                                                             1.23
                     1.16
                           5.0e-4
                                                     1.14
                                                             1.16
                                                                     1.18
                                                                                     4094
y_mean[174]
                                                                                              1.0
                    -0.64
                           5.1e-4
                                      0.03
                                             -0.7
                                                    -0.66
                                                            -0.64
                                                                    -0.62
                                                                           -0.58
                                                                                     4179
y_mean[175]
                                                                                              1.0
                    -0.53
                                      0.02
                                            -0.56
                                                    -0.54
                                                            -0.53
                                                                    -0.51
                                                                            -0.49
                           3.0e-4
                                                                                     4469
                                                                                              1.0
y_mean[176]
y_mean[177]
                    -0.57
                           3.5e-4
                                      0.02
                                            -0.61
                                                    -0.58
                                                            -0.56
                                                                    -0.55
                                                                            -0.52
                                                                                     4531
                                                                                              1.0
                                            -0.51
                    -0.47
                           3.0e-4
                                      0.02
                                                    -0.49
                                                            -0.47
                                                                    -0.46
                                                                            -0.43
                                                                                     4560
                                                                                              1.0
y_mean[178]
y_mean[179]
                     0.21
                           5.8e-4
                                      0.04
                                             0.14
                                                     0.19
                                                             0.21
                                                                     0.23
                                                                             0.28
                                                                                     3864
                                                                                              1.0
                     0.77
                           5.3e-4
                                      0.03
                                             0.71
                                                     0.75
                                                             0.77
                                                                             0.84
y_mean[180]
                                                                      0.8
                                                                                     4207
                                                                                              1.0
                     0.38
                           5.9e-4
                                      0.04
                                              0.3
                                                     0.35
                                                             0.38
                                                                     0.41
                                                                             0.46
                                                                                     4830
                                                                                              1.0
y_mean[181]
                    -0.14
                           3.5e-4
                                      0.02
                                            -0.19
                                                    -0.16
                                                           -0.14
                                                                    -0.13
                                                                             -0.1
                                                                                     4529
y mean[182]
                                                                                              1.0
                 -1.6e-4
                           5.8e-4
                                            -0.07
                                                    -0.02 2.7e-4
                                                                     0.02
                                                                             0.07
y_mean[183]
                                      0.04
                                                                                     3986
                                                                                              1.0
                      0.1
                           5.7e-4
                                      0.04
                                             0.03
                                                     0.07
                                                             0.09
                                                                     0.12
                                                                             0.17
                                                                                     3791
y_mean[184]
                                                                                              1.0
y_mean[185]
                     -0.2
                           4.4e-4
                                      0.03
                                            -0.25
                                                    -0.22
                                                             -0.2
                                                                   -0.18
                                                                           -0.14
                                                                                     4181
                                                                                              1.0
                     1.27
                           7.6e-4
                                      0.05
                                             1.17
                                                     1.24
                                                             1.27
                                                                     1.31
                                                                             1.37
                                                                                     4707
                                                                                              1.0
y_mean[186]
                     -0.3
                           3.8e-4
                                      0.02
                                            -0.35
                                                    -0.32
                                                             -0.3
                                                                   -0.28
                                                                           -0.25
                                                                                     4123
y_mean[187]
                                                                                              1.0
                                      0.02
                                            -0.74
                     -0.7
                           3.6e-4
                                                    -0.71
                                                             -0.7
                                                                    -0.68
                                                                           -0.65
                                                                                     4541
                                                                                              1.0
y_mean[188]
y_mean[189]
                    -0.13
                           3.9e-4
                                            -0.18
                                                                           -0.07
                                      0.03
                                                    -0.15
                                                            -0.13
                                                                    -0.11
                                                                                     5305
                                                                                              1.0
                                                                    -0.13
y_mean[190]
                    -0.15
                           3.4e-4
                                      0.02
                                            -0.19
                                                    -0.16
                                                            -0.15
                                                                             -0.1
                                                                                     4585
                                                                                              1.0
                     0.58
                           4.3e-4
                                      0.03
                                             0.53
                                                             0.58
                                                                      0.6
                                                                             0.64
                                                     0.56
                                                                                     4222
y_mean[191]
                                                                                              1.0
                    -0.91
                           4.2e-4
                                      0.03
                                            -0.96
                                                    -0.93
                                                            -0.91
                                                                            -0.86
                                                                                     4449
y_mean[192]
                                                                    -0.89
                                                                                              1.0
y_mean[193]
                    -0.17
                           6.8e-4
                                      0.05
                                            -0.26
                                                     -0.2
                                                            -0.17
                                                                    -0.13
                                                                            -0.07
                                                                                     5021
                                                                                              1.0
y_mean[194]
                    -0.39
                           3.3e-4
                                      0.02
                                            -0.44
                                                    -0.41
                                                            -0.39
                                                                    -0.38
                                                                            -0.35
                                                                                     4594
                                                                                              1.0
y_mean[195]
                     0.61
                           6.1e-4
                                      0.04
                                             0.53
                                                     0.58
                                                             0.61
                                                                     0.64
                                                                             0.69
                                                                                     4933
                                                                                              1.0
```

```
-0.18
                                            -0.22
                                                    -0.19
                                                            -0.18
                                                                    -0.16
                                                                            -0.13
y_mean[196]
                           3.5e-4
                                      0.02
                                                                                     4615
                                                                                              1.0
                    -0.34
                           9.9e-4
                                      0.07
                                            -0.47
                                                    -0.38
                                                            -0.34
                                                                    -0.29
                                                                             -0.2
                                                                                     4990
y_mean[197]
                                                                                              1.0
                    -0.02
                           3.9e-4
                                      0.03
                                            -0.07
                                                    -0.03
                                                            -0.02 2.5e-3
                                                                             0.04
                                                                                     4907
y_mean[198]
                                                                                              1.0
y_mean[199]
                    -0.57
                           3.8e-4
                                      0.03
                                            -0.63
                                                    -0.59
                                                           -0.57
                                                                    -0.56
                                                                           -0.52
                                                                                     4571
                                                                                              1.0
                                      0.06
                                             0.93
                                                             1.05
                     1.05
                           8.3e-4
                                                     1.01
                                                                     1.09
                                                                             1.17
                                                                                     5021
y mean [200]
                                                                                              1.0
                     -0.2
                           5.0e-4
                                      0.03
                                            -0.27
                                                    -0.22
                                                             -0.2
                                                                    -0.18
                                                                           -0.13
                                                                                     4597
                                                                                              1.0
y_mean[201]
                    -0.55
                                                            -0.55
                                                                             -0.5
y_mean[202]
                            3.5e-4
                                      0.02
                                             -0.6
                                                    -0.57
                                                                    -0.53
                                                                                     4982
                                                                                              1.0
                     1.15
                           6.0e-4
                                              1.08
                                                     1.12
                                                             1.15
                                                                     1.18
                                                                             1.23
y_mean[203]
                                      0.04
                                                                                     4487
                                                                                              1.0
                    -0.07
                           6.0e-4
                                      0.04
                                            -0.14
                                                     -0.1
                                                            -0.07
                                                                    -0.04 3.9e-3
                                                                                     4130
                                                                                              1.0
y_mean[204]
                     1.02
                           5.7e-4
                                      0.04
                                             0.95
                                                     0.99
                                                             1.02
                                                                     1.05
                                                                             1.09
                                                                                     4395
y_mean[205]
                                                                                              1.0
                     0.44
                           4.6e-4
                                      0.03
                                             0.37
                                                     0.41
                                                             0.44
                                                                     0.46
                                                                              0.5
                                                                                     4711
                                                                                              1.0
y_mean[206]
                    -0.66
                           3.8e-4
                                      0.03
                                            -0.72
                                                    -0.68
                                                            -0.66
                                                                    -0.65
                                                                            -0.61
                                                                                     4698
                                                                                              1.0
y_mean[207]
                    -0.62
                           3.2e-4
                                      0.02
                                            -0.66
                                                    -0.64
                                                            -0.62
                                                                            -0.58
                                                                                     4525
y_mean[208]
                                                                    -0.61
                                                                                              1.0
                     0.68
                           6.1e-4
                                                             0.68
                                      0.04
                                               0.6
                                                     0.66
                                                                     0.71
                                                                             0.76
                                                                                     4326
y_mean[209]
                                                                                              1.0
                    -0.13
                           3.2e-4
                                      0.02
                                            -0.17
                                                    -0.14
                                                            -0.13
                                                                    -0.11
                                                                            -0.09
                                                                                     4595
y_mean[210]
                                                                                              1.0
                                             0.08
                                                             0.12
y_mean[211]
                     0.12
                           3.4e-4
                                      0.02
                                                      0.1
                                                                     0.14
                                                                             0.16
                                                                                     4294
                                                                                              1.0
y_mean[212]
                     1.78
                           6.8e-4
                                      0.04
                                              1.69
                                                     1.75
                                                             1.78
                                                                     1.81
                                                                             1.86
                                                                                     4163
                                                                                              1.0
                     0.47
                                      0.03
                                                     0.44
                                                             0.47
y_mean[213]
                           5.1e-4
                                              0.4
                                                                     0.49
                                                                             0.53
                                                                                     4666
                                                                                              1.0
y_mean[214]
                     0.39
                            4.0e-4
                                      0.03
                                             0.34
                                                     0.38
                                                             0.39
                                                                     0.41
                                                                             0.44
                                                                                     4217
                                                                                              1.0
                                                                                     4293
y_mean[215]
                     0.71
                           6.1e-4
                                      0.04
                                             0.63
                                                     0.68
                                                             0.71
                                                                     0.74
                                                                             0.79
                                                                                              1.0
                     0.04
                           8.2e-4
                                      0.05
                                            -0.06 4.1e-3
                                                             0.04
                                                                     0.08
                                                                             0.14
                                                                                     4243
y_mean[216]
                                                                                              1.0
                    -0.56
                           3.2e-4
                                      0.02
                                            -0.61
                                                    -0.58
                                                            -0.56
                                                                    -0.55
                                                                            -0.52
                                                                                     4542
                                                                                              1.0
y_mean[217]
                     0.38
                           3.7e-4
                                      0.02
                                             0.33
                                                     0.36
                                                             0.38
y_mean[218]
                                                                      0.4
                                                                             0.43
                                                                                     4064
                                                                                              1.0
                           7.7e-4
                    -1.13
                                      0.05
                                            -1.24
                                                    -1.17
                                                            -1.14
                                                                     -1.1
                                                                           -1.03
                                                                                     4506
                                                                                              1.0
y_mean[219]
y_mean[220]
                     0.49
                           8.1e-4
                                      0.05
                                             0.39
                                                     0.45
                                                             0.49
                                                                     0.52
                                                                             0.59
                                                                                     4091
                                                                                              1.0
                    -0.32
                           4.2e-4
                                      0.03
                                            -0.38
                                                    -0.34
                                                            -0.32
                                                                     -0.3
                                                                           -0.26
                                                                                     4605
y_mean[221]
                                                                                              1.0
                                      0.04
                                               0.4
                                                                             0.56
y_mean[222]
                     0.48
                           6.0e-4
                                                     0.45
                                                             0.48
                                                                      0.5
                                                                                     4686
                                                                                              1.0
                                            -0.08
y_mean[223]
                 -3.5e-3
                           6.4e-4
                                      0.04
                                                    -0.03-3.2e-3
                                                                     0.03
                                                                             0.08
                                                                                     4123
                                                                                              1.0
                    -0.24
                           3.3e-4
                                            -0.28
                                                    -0.26
                                                           -0.24
                                                                    -0.22
                                                                            -0.19
                                      0.02
                                                                                     4456
                                                                                              1.0
y_{mean}[224]
y_mean[225]
                     -1.0
                           4.2e-4
                                      0.03
                                            -1.05
                                                    -1.01
                                                             -1.0
                                                                    -0.98
                                                                            -0.94
                                                                                     4425
                                                                                              1.0
                    -0.45
                                            -0.51
                                                            -0.45
y_mean[226]
                           4.1e-4
                                      0.03
                                                    -0.47
                                                                    -0.43
                                                                           -0.39
                                                                                     4783
                                                                                              1.0
y_mean[227]
                     0.12
                           4.8e-4
                                      0.03
                                             0.06
                                                      0.1
                                                             0.12
                                                                     0.14
                                                                             0.18
                                                                                     4058
                                                                                              1.0
                    -0.66
                           3.4e-4
                                      0.02
                                              -0.7
                                                    -0.68
                                                            -0.66
y_mean[228]
                                                                    -0.64
                                                                           -0.62
                                                                                     4528
                                                                                              1.0
y_mean[229]
                    -0.66
                           3.8e-4
                                      0.03
                                            -0.71
                                                    -0.68
                                                           -0.66
                                                                    -0.64
                                                                           -0.61
                                                                                     4506
                                                                                              1.0
                     -0.6
                           3.8e-4
                                      0.03
                                            -0.65
                                                    -0.62
                                                             -0.6
                                                                    -0.58
                                                                           -0.55
                                                                                     4503
                                                                                              1.0
y mean [230]
y_mean[231]
                     0.01
                           3.7e-4
                                      0.03
                                            -0.04-3.0e-3
                                                             0.01
                                                                             0.07
                                                                     0.03
                                                                                     4903
                                                                                              1.0
                           9.8e-4
                                              1.55
                                                                             1.79
                     1.66
                                      0.06
                                                     1.62
                                                             1.66
                                                                     1.71
                                                                                     3993
y mean [232]
                                                                                              1.0
y_mean[233]
                    -0.47
                           5.6e-4
                                      0.04
                                            -0.55
                                                     -0.5
                                                            -0.47
                                                                    -0.45
                                                                             -0.4
                                                                                     4738
                                                                                              1.0
                                            -0.81
                                                           -0.76
                    -0.76
                           3.7e-4
                                      0.03
                                                    -0.78
                                                                    -0.74
                                                                           -0.71
                                                                                     4720
                                                                                              1.0
y_mean[234]
                     0.15
                           3.6e-4
                                      0.02
                                             0.11
                                                     0.14
                                                             0.15
                                                                     0.17
                                                                              0.2
                                                                                     4259
y_mean[235]
                                                                                              1.0
                                      0.02
                                            -0.03-6.3e-3 7.7e-3
                   7.3e-3
                           3.0e-4
                                                                     0.02
                                                                             0.05
                                                                                     4431
                                                                                              1.0
y_mean[236]
                    -0.07
                           5.5e-4
                                      0.04
                                            -0.13
                                                    -0.09
                                                           -0.07
                                                                    -0.04 2.3e-3
y_mean[237]
                                                                                     4117
                                                                                              1.0
y_mean[238]
                     0.46
                           4.1e-4
                                      0.03
                                             0.41
                                                     0.44
                                                             0.46
                                                                     0.47
                                                                             0.51
                                                                                     3972
                                                                                              1.0
                     0.38
                           6.6e-4
                                      0.05
                                             0.29
                                                     0.35
                                                             0.38
                                                                             0.47
                                                                     0.41
                                                                                     4883
                                                                                              1.0
y_mean[239]
                    -0.08
                           2.9e-4
                                      0.02
                                            -0.12
                                                    -0.09
                                                            -0.08
                                                                    -0.06
                                                                            -0.04
y_mean[240]
                                                                                     4591
                                                                                              1.0
                    -0.79
                                            -0.85
                                                            -0.79
                                                                            -0.72
y_mean[241]
                           4.8e-4
                                      0.03
                                                    -0.81
                                                                    -0.76
                                                                                     4477
                                                                                              1.0
y_mean[242]
                     0.28
                           5.8e-4
                                      0.04
                                             0.21
                                                     0.26
                                                             0.28
                                                                     0.31
                                                                             0.35
                                                                                     3859
                                                                                              1.0
y_mean[243]
                    -1.01
                           4.1e-4
                                      0.03
                                            -1.06
                                                    -1.03
                                                            -1.01
                                                                    -0.99
                                                                            -0.96
                                                                                     4465
                                                                                              1.0
```

y_mean[244]	1.69	9.4e-4	0.06	1.57	1.65	1.69	1.73	1.82	4260	1.0
y_mean[245]	-0.71	5.3e-4	0.04	-0.78	-0.74	-0.71	-0.69	-0.65	4514	1.0
y_mean[246]	1.14	7.2e-4	0.05	1.04	1.1	1.14	1.17	1.24	4977	1.0
y_mean[247]	-0.94	4.2e-4	0.03	-1.0	-0.96	-0.94	-0.92	-0.89	4665	1.0
y_mean[248]	3.6	1.4e-3	0.09	3.42	3.54	3.6	3.65	3.77	4018	1.0
y_mean[249]	0.45	5.8e-4	0.04	0.37	0.42	0.45	0.47	0.52	4367	1.0
y_mean[250]	-0.37	4.0e-4	0.03	-0.43	-0.39	-0.37	-0.35	-0.32	4637	1.0
y_mean[251]	-0.1	3.6e-4	0.03	-0.15	-0.12	-0.1	-0.09	-0.05	4999	1.0
y_mean[252]	0.62	4.5e-4	0.03	0.56	0.6	0.62	0.64	0.68	4277	1.0
y_mean[253]	0.71	5.1e-4	0.03	0.65	0.69	0.71	0.73	0.77	3955	1.0
y_mean[254]	0.21	5.5e-4	0.04	0.14	0.18	0.21	0.23	0.28	4002	1.0
y_mean[255]	-1.11	4.4e-4	0.03	-1.16	-1.13	-1.11	-1.09	-1.05	4379	1.0
y_mean[256] y_mean[256]	-0.37	5.2e-4	0.03	-0.44	-0.39	-0.37	-0.35	-0.3	4611	1.0
y_mean[257] y_mean[257]	-0.66	4.3e-4	0.04	-0.72	-0.68	-0.66	-0.64	-0.6	4502	1.0
y_mean[257] y_mean[258]	0.14	3.3e-4	0.03	0.1	0.12	0.14	0.15	0.18	4348	1.0
y_mean[258] y_mean[259]	-0.26	4.4e-4	0.02	-0.32	-0.28	-0.26	-0.24	-0.2	4568	1.0
v <b>–</b>									4600	
y_mean[260]	-0.53	3.4e-4	0.02	-0.58	-0.54	-0.53	-0.51	-0.49		1.0
y_mean[261]	0.28	8.7e-4	0.06	0.17	0.24	0.28	0.31	0.39	4041	1.0
y_mean[262]	1.43	9.5e-4	0.07	1.3	1.38	1.43	1.47	1.56	4749	1.0
y_mean[263]	2.76	1.1e-3	0.07	2.62	2.71	2.76	2.8	2.89	4030	1.0
y_mean[264]	-0.34	4.8e-4	0.03	-0.41	-0.37	-0.34	-0.32	-0.28	4642	1.0
y_mean[265]	0.13	3.3e-4	0.02	0.09	0.11	0.13	0.14	0.17	4349	1.0
y_mean[266]	-0.89	4.3e-4	0.03	-0.94	-0.91	-0.89	-0.87	-0.83	4703	1.0
y_mean[267]	0.39	4.0e-4	0.03	0.34	0.37	0.39	0.41	0.44	4007	1.0
y_mean[268]	0.79	5.8e-4	0.04	0.71	0.76	0.78	0.81	0.86	4211	1.0
y_mean[269]	-0.05	3.5e-4	0.02	-0.09	-0.06	-0.05		1.2e-3	4628	1.0
y_mean[270]	0.35	4.2e-4	0.03	0.3	0.33	0.35	0.37	0.41	4638	1.0
y_mean[271]	-1.02	7.6e-4	0.05	-1.11	-1.05	-1.02	-0.98	-0.92	4454	1.0
y_mean[272]	-0.49	3.1e-4	0.02	-0.53	-0.51	-0.49	-0.48	-0.45	4412	1.0
y_mean[273]	0.26	6.2e-4	0.04	0.17	0.23	0.26	0.29	0.34	4827	1.0
y_mean[274]	-0.95	4.7e-4	0.03	-1.01	-0.97	-0.95	-0.93	-0.89	4341	1.0
y_mean[275]	-0.27	2.8e-4	0.02	-0.3	-0.28	-0.27	-0.25	-0.23	4861	1.0
y_mean[276]	0.95	5.7e-4	0.04	0.88	0.93	0.95	0.98	1.03	4465	1.0
y_mean[277]	-0.38	3.3e-4	0.02	-0.42	-0.39	-0.38	-0.36	-0.33	4277	1.0
y_mean[278]	-0.04	6.1e-4	0.04	-0.11	-0.06	-0.04-	-8.8e-3	0.04	4113	1.0
y_mean[279]	0.05	3.0e-4	0.02	0.01	0.04	0.05	0.07	0.09	4362	1.0
y_mean[280]	-0.57	3.1e-4	0.02	-0.61	-0.59	-0.57	-0.56	-0.54	4498	1.0
y_mean[281]	-0.61	6.9e-4	0.05	-0.7	-0.64	-0.61	-0.58	-0.52	4281	1.0
y_mean[282]	-1.15	4.4e-4	0.03	-1.21	-1.17	-1.15	-1.13	-1.1	4415	1.0
y_mean[283]	-0.68	3.3e-4	0.02	-0.73	-0.7	-0.68	-0.67	-0.64	4608	1.0
y_mean[284]	0.59	4.4e-4	0.03	0.54	0.57	0.59	0.61	0.65	4305	1.0
y_mean[285]	-0.29	4.3e-4	0.03	-0.34	-0.3	-0.29	-0.27	-0.23	4366	1.0
y_mean[286]	0.97	1.0e-3	0.07	0.84	0.92	0.96	1.01	1.1	4357	1.0
y_mean[287]	0.19	4.2e-4	0.03	0.13	0.17	0.19	0.2	0.24	4240	1.0
y_mean[288]	0.13	6.9e-4	0.03	0.13	0.17	0.13	0.34	0.4	3817	1.0
y_mean[289]	-0.57	3.2e-4	0.04	-0.61	-0.58	-0.57	-0.56	-0.53	4531	1.0
y_mean[209] y_mean[290]	0.11	4.9e-4	0.02	0.06	0.09	0.37	0.13	0.33	4020	1.0
y_mean[290] y_mean[291]	-0.69	4.0e-4	0.03	-0.74	-0.71	-0.69	-0.67	-0.64	4496	1.0
y_mean[∠31]	-0.09	4.06-4	0.03	-0.74	-0.71	-0.09	-0.07	0.04	4430	1.0

y_mean[292]	0.84	6.3e-4	0.04 0.7	0.81	0.83	0.86	0.91	3777	1.0
y_mean[293]	-0.54	3.9e-4	0.03 -0.5	-0.56	-0.54	-0.53	-0.49	4469	1.0
y_mean[294]	-0.07	7.8e-4	0.05 -0.1	7 -0.1	-0.07	-0.03	0.04	4407	1.0
y_mean[295]	0.04	3.2e-4	0.02 2.8e-	0.03	0.04	0.06	0.08	4372	1.0
y_mean[296]	0.09	6.0e-4	0.04 0.0		0.09	0.11	0.16	3808	1.0
y_mean[297]	-0.64	3.2e-4	0.02 -0.68		-0.64	-0.63	-0.6	4581	1.0
y_mean[298]	0.17	7.3e-4	0.05 0.08		0.17	0.2	0.26	3865	1.0
y_mean[299]	-0.26	4.2e-4	0.03 -0.3		-0.26	-0.24	-0.2	4114	1.0
y_mean[300]	1.2	1.0e-3	0.06 1.08		1.2	1.24	1.33	3738	1.0
y_mean[301]	-0.77	4.7e-4	0.03 -0.8		-0.77	-0.75	-0.71	4475	1.0
y_mean[302]	-0.9	4.0e-4	0.03 -0.9		-0.9	-0.88	-0.85	4505	1.0
y_mean[303]	1.12	8.9e-4	0.06 1.0		1.12	1.16	1.24	4419	1.0
y_mean[304]	1.0	4.3e-4	0.03 0.9		1.0	1.02	1.06	4366	1.0
y_mean[305]	-0.75	4.6e-4	0.03 -0.8		-0.75	-0.73	-0.69	4478	1.0
y_mean[306] y_mean[306]	-0.82	4.8e-4	0.03 -0.8		-0.82	-0.8	-0.76	4998	1.0
y_mean[300] y_mean[307]	2.13	9.5e-4	0.06 2.0		2.13	2.17	2.24	3844	1.0
y_mean[307] y_mean[308]	-0.31	3.0e-4	0.00 2.0		-0.31	-0.29	-0.27	4739	1.0
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y_mean[309]	0.31	9.0e-4	0.06 0.5		0.31	0.35	0.43	4310	1.0
y_mean[310]	-0.04	3.9e-4	0.03 -0.09		-0.04	-0.02	0.01	4607	1.0
y_mean[311]	-0.48	3.1e-4	0.02 -0.5		-0.48	-0.47	-0.44	4604	1.0
y_mean[312]	-0.34	3.7e-4	0.02 -0.3		-0.34	-0.32	-0.29	4226	1.0
y_mean[313]	0.2	4.7e-4	0.03 0.14		0.2	0.22	0.26	4246	1.0
y_mean[314]	0.03	3.0e-4	0.02-6.7e-		0.03	0.05	0.07	4392	1.0
y_mean[315]	-0.66	3.9e-4	0.03 -0.7		-0.66	-0.64	-0.61	4707	1.0
y_mean[316]	1.16	9.9e-4	0.07 1.09		1.16	1.2	1.29	4603	1.0
y_mean[317]	2.37	7.8e-4	0.05 2.20	3 2.33	2.36	2.4	2.47	4343	1.0
y_mean[318]	-0.36	3.0e-4	0.02 -0.4		-0.36	-0.35	-0.32	4548	1.0
y_mean[319]	1.82	9.1e-4	0.06 1.7	1.78	1.82	1.86	1.94	4257	1.0
y_mean[320]	-0.39	4.4e-4	0.03 -0.4	5 -0.41	-0.39	-0.37	-0.33	4803	1.0
y_mean[321]	-0.39	4.3e-4	0.03 -0.4	5 -0.41	-0.39	-0.36	-0.32	5240	1.0
y_mean[322]	-0.91	4.3e-4	0.03 -0.9	7 -0.93	-0.91	-0.89	-0.86	4474	1.0
y_mean[323]	-0.85	4.4e-4	0.03 -0.9	1 -0.87	-0.85	-0.83	-0.79	4700	1.0
y_mean[324]	0.01	6.2e-4	0.04 -0.0	6 -0.02	0.01	0.04	0.09	3942	1.0
y_mean[325]	0.67	6.0e-4	0.04 0.5	0.64	0.67	0.69	0.74	4158	1.0
y_mean[326]	1.64	1.1e-3	0.07 1.	1.59	1.64	1.69	1.78	4422	1.0
y_mean[327]	-0.11	3.6e-4	0.02 -0.1	6 -0.13	-0.11	-0.09	-0.06	4706	1.0
y_mean[328]	0.55	7.8e-4	0.05 0.4	0.51	0.55	0.58	0.65	4064	1.0
y_mean[329]	-0.11	4.1e-4	0.03 -0.1	6 -0.13	-0.11	-0.09	-0.06	4481	1.0
y_mean[330]	-0.77	4.8e-4	0.03 -0.8	1 -0.8	-0.77	-0.75	-0.71	4547	1.0
y_mean[331]	-0.51	5.6e-4	0.04 -0.5	3 -0.53	-0.51	-0.48	-0.44	4200	1.0
y_mean[332]	-0.44	3.1e-4	0.02 -0.48		-0.44	-0.43	-0.4	4643	1.0
y_mean[333]	-0.22	3.5e-4	0.02 -0.2		-0.22	-0.2	-0.17	4754	1.0
y_mean[334]	0.11	8.3e-4	0.05 6.3e-		0.11	0.15	0.22	4268	1.0
y_mean[335]	0.01	5.8e-4	0.04 -0.0		0.01	0.04	0.1	5316	1.0
y_mean[336]	-0.05	4.1e-4	0.03 -0.		-0.05		·1.6e-3	4137	1.0
y_mean[337]	-0.62	5.5e-4	0.04 -0.69		-0.62		-0.55	4222	1.0
y_mean[338]	-0.34	3.2e-4	0.02 -0.3		-0.34	-0.32	-0.3	4563	1.0
y_mean[339]	-0.39	3.7e-4	0.02 -0.4		-0.39	-0.37	-0.34	4325	1.0
3 _mcan [000]	0.03	0.16 4	0.02 0.4	. 0.41	0.09	0.07	0.04	1020	1.0

y_mean[340]	-0.53	4.1e-4	0.03	-0.58	-0.54	-0.53	-0.51	-0.47	4652	1.0
y_mean[341]	-0.28	4.9e-4	0.03	-0.35	-0.3	-0.28	-0.25	-0.21	4786	1.0
y_mean[342]	-0.05	3.0e-4	0.02	-0.09	-0.06	-0.05	-0.04	-0.01	4510	1.0
y_mean[343]	0.5	4.1e-4	0.03	0.45	0.48	0.5	0.52	0.55	4436	1.0
y_mean[344]	0.36	5.2e-4	0.03	0.29	0.34	0.36	0.38	0.42	3866	1.0
y_mean[345]	0.14	3.5e-4	0.02	0.1	0.13	0.14	0.16	0.19	4269	1.0
y_mean[346]	0.2	7.9e-4	0.05	0.1	0.16	0.2	0.23	0.3	4174	1.0
y_mean[347]	-1.05	4.2e-4	0.03	-1.1	-1.07	-1.05	-1.03	-1.0	4388	1.0
y_mean[348]	-0.42	3.1e-4	0.02	-0.46	-0.43	-0.42	-0.41	-0.38	4554	1.0
y_mean[349]	-0.4	3.0e-4	0.02	-0.44	-0.41	-0.4	-0.38	-0.36	4612	1.0
y_mean[350]	-0.54	3.5e-4	0.02	-0.59	-0.56	-0.54	-0.53	-0.5	4591	1.0
y_mean[351]	-0.47	3.0e-4	0.02	-0.51	-0.49	-0.47	-0.46	-0.43	4560	1.0
y_mean[352]	-0.42	3.3e-4	0.02	-0.46	-0.43	-0.42	-0.4	-0.37	4381	1.0
y_mean[353]	-0.6	3.1e-4	0.02	-0.65	-0.62	-0.6	-0.59	-0.56	4521	1.0
y_mean[354]	0.2	4.1e-4	0.03	0.15	0.18	0.2	0.22	0.25	4227	1.0
y_mean[355]	1.38	7.5e-4	0.05	1.28	1.35	1.38	1.42	1.48	4567	1.0
y_mean[356]	-0.72	3.7e-4	0.03	-0.77	-0.74	-0.72	-0.7	-0.67	4781	1.0
y_mean[357]	-0.61	3.8e-4	0.03	-0.66	-0.63	-0.61	-0.59	-0.56	4552	1.0
y_mean[358]	0.06	3.1e-4	0.02	0.02	0.05	0.06	0.07	0.1	4355	1.0
y_mean[359]	-0.62	4.6e-4	0.03	-0.68	-0.64	-0.62	-0.6	-0.56	4405	1.0
y_mean[360]	0.72	4.7e-4	0.03	0.66	0.7	0.72	0.75	0.79	4262	1.0
y_mean[361]	0.35	4.2e-4	0.03	0.3	0.33	0.35	0.37	0.41	4661	1.0
y_mean[362]	-0.26	3.5e-4	0.02	-0.3	-0.27	-0.26	-0.24	-0.21	4331	1.0
y_mean[363]	-0.43	3.0e-4	0.02	-0.47	-0.44	-0.43	-0.42	-0.39	4556	1.0
y_mean[364]	-0.5	6.9e-4	0.05	-0.59	-0.53	-0.5	-0.47	-0.41	4408	1.0
y_mean[365]	-0.25	3.7e-4	0.03	-0.3	-0.27	-0.25	-0.23	-0.19	5187	1.0
y_mean[366]	-0.51	3.4e-4	0.02	-0.55	-0.52	-0.51	-0.49	-0.46	4628	1.0
y_mean[367]	-0.48	3.1e-4	0.02	-0.52	-0.49	-0.48	-0.46	-0.43	4601	1.0
y_mean[368]	-0.29	4.5e-4	0.03	-0.35	-0.31	-0.29	-0.27	-0.23	4614	1.0
y_mean[369]	-0.18	3.5e-4	0.02	-0.22	-0.19	-0.17	-0.16	-0.13	4331	1.0
y_mean[370]	-0.23	4.7e-4	0.03	-0.29	-0.25	-0.23	-0.21	-0.17	4173	1.0
y_mean[371]	-1.15	4.5e-4	0.03	-1.21	-1.17	-1.15	-1.13	-1.09	4400	1.0
y_mean[372]	-0.57	3.2e-4	0.02	-0.62	-0.59	-0.57	-0.56	-0.53	4531	1.0
y_mean[373]	0.89	7.2e-4	0.04	0.8	0.86	0.89	0.92	0.98	3880	1.0
y_mean[374]	-0.47	3.1e-4	0.02	-0.51	-0.48	-0.47	-0.45	-0.43	4550	1.0
y_mean[375]	-0.47	3.0e-4	0.02	-0.51	-0.48	-0.47	-0.45	-0.43	4575	1.0
y_mean[376]	0.56	6.3e-4	0.04	0.48	0.53	0.56	0.59	0.64	4523	1.0
y_mean[377]	0.84	7.8e-4	0.05	0.75	0.81	0.84	0.87	0.94	3844	1.0
y_mean[378]	-0.07	4.5e-4	0.03	-0.13	-0.09	-0.07	-0.05	-0.01	4499	1.0
y_mean[379]	0.16	4.9e-4	0.03	0.09	0.14	0.16	0.18	0.22	4731	1.0
y_mean[380]	0.12	5.9e-4	0.04	0.04	0.09	0.12	0.14	0.19	3795	1.0
y_mean[381]	0.15	3.3e-4	0.02	0.1	0.13	0.15	0.17	0.2	4849	1.0
y_mean[382]	1.69	8.1e-4	0.05	1.58	1.65	1.69	1.72	1.79	4294	1.0
y_mean[383]	0.04	3.4e-4		3.1e-3	0.03	0.04	0.06	0.09	4547	1.0
y_mean[384]	-0.12	3.2e-4	0.02	-0.16	-0.13	-0.12	-0.11	-0.08	4589	1.0
y_mean[385]	-0.23	3.3e-4	0.02	-0.27	-0.25	-0.23	-0.22	-0.19	4425	1.0
y_mean[386]	-0.68	3.3e-4	0.02	-0.72	-0.69	-0.68	-0.66	-0.63	4623	1.0
y_mean[387]	0.09	3.5e-4	0.02	0.04	0.07	0.09	0.1	0.13	4527	1.0

y_mean[388]	-0.6	3.4e-4	0.02	-0.65	-0.62	-0.6	-0.59	-0.56	4528	1.0
y_mean[389]	0.39	4.2e-4	0.03	0.34	0.37	0.39	0.4	0.44	4065	1.0
y_mean[390]	-0.62	3.3e-4	0.02	-0.66	-0.63	-0.62	-0.6	-0.58	4578	1.0
y_mean[391]	-1.33	5.9e-4	0.04	-1.41	-1.36	-1.33	-1.3	-1.25	4728	1.0
y_mean[392]	-0.67	3.8e-4	0.03	-0.73	-0.69	-0.67	-0.66	-0.62	4719	1.0
y_mean[393]	0.06	4.7e-4		6.8e-3	0.04	0.06	0.08	0.12	4084	1.0
y_mean[394]	-0.04	6.5e-4	0.04	-0.12	-0.07	-0.04	-0.01	0.04	4152	1.0
y_mean[395]	-0.07	2.9e-4	0.02	-0.11	-0.08	-0.07	-0.05	-0.03	4589	1.0
y_mean[396]	0.1	7.5e-4		5.4e-3	0.06	0.1	0.13	0.2	4815	1.0
y_mean[397]	-0.1	3.1e-4	0.02	-0.14	-0.11	-0.1	-0.08	-0.06	4569	1.0
y_mean[398]	-0.21	5.1e-4	0.03	-0.27	-0.23	-0.21	-0.18	-0.14	4662	1.0
y_mean[399]	0.04	2.6e-4		-1.7e-3	0.23	0.04	0.15	0.14	5195	1.0
y_mean[400]	0.66	7.7e-4	0.02	0.56	0.62	0.66	0.69	0.76	4288	1.0
y_mean[400] y_mean[401]	-0.45	3.1e-4	0.03	-0.49	-0.46	-0.45	-0.43	-0.41	4445	1.0
•			0.02							1.0
y_mean[402]	1.15	6.1e-4		1.07	1.12	1.15	1.17	1.22	4280	
y_mean[403]	0.5	4.5e-4	0.03	0.44	0.48	0.5	0.52	0.56	4529	1.0
y_mean[404]	-0.46	2.8e-4	0.02	-0.5	-0.47	-0.46	-0.45	-0.42	4778	1.0
y_mean[405]	0.64	4.7e-4	0.03	0.58	0.62	0.64	0.66	0.7	4275	1.0
y_mean[406]	-0.13	6.3e-4	0.04	-0.2	-0.15	-0.13	-0.1	-0.05	4216	1.0
y_mean[407]	5.1e-3	6.0e-4	0.04	-0.07		4.6e-3	0.03	0.08	4221	1.0
y_mean[408]	-0.31	5.4e-4	0.04	-0.38	-0.34	-0.31	-0.29	-0.24	4625	1.0
y_mean[409]	-0.62	3.3e-4	0.02	-0.66	-0.63	-0.62	-0.6	-0.57	4521	1.0
y_mean[410]	-0.27	3.7e-4	0.03	-0.32	-0.29	-0.27	-0.25	-0.22	5186	1.0
y_mean[411]	0.87	6.0e-4	0.04	0.79	0.84	0.87	0.89	0.95	4550	1.0
y_mean[412]	0.83	6.5e-4	0.04	0.75	0.8	0.83	0.85	0.91	3824	1.0
y_mean[413]	-0.33	3.6e-4	0.02	-0.37	-0.34	-0.33	-0.31	-0.28	4129	1.0
y_mean[414]	-0.12	3.7e-4	0.03	-0.17	-0.13	-0.12	-0.1	-0.07	4852	1.0
y_mean[415]	-0.75	3.9e-4	0.03	-0.8	-0.77	-0.75	-0.73	-0.7	4552	1.0
y_mean[416]	-0.8	4.1e-4	0.03	-0.85	-0.82	-0.8	-0.78	-0.74	4584	1.0
y_mean[417]	-0.66	3.7e-4	0.03	-0.71	-0.68	-0.66	-0.64	-0.61	4508	1.0
y_mean[418]	-0.03	5.3e-4	0.03	-0.09	-0.05	-0.03-	8.0e-3	0.03	3820	1.0
y_mean[419]	-1.15	4.4e-4	0.03	-1.21	-1.17	-1.15	-1.13	-1.1	4418	1.0
y_mean[420]	-0.42	2.7e-4	0.02	-0.45	-0.43	-0.42	-0.4	-0.38	4756	1.0
y_mean[421]	-1.05	7.4e-4	0.05	-1.14	-1.08	-1.05	-1.01	-0.95	4451	1.0
y_mean[422]	-0.27	3.4e-4	0.02	-0.31	-0.28	-0.27	-0.25	-0.22	4422	1.0
y_mean[423]	0.2	5.2e-4	0.03	0.14	0.18	0.2	0.23	0.27	4052	1.0
y_mean[424]	-0.86	4.8e-4	0.03	-0.93	-0.88	-0.86	-0.84	-0.79	5034	1.0
y_mean[425]	-0.09	3.0e-4	0.02	-0.13	-0.1	-0.09	-0.07	-0.05	4623	1.0
y_mean[426]	-0.43	3.6e-4	0.02	-0.48	-0.45	-0.43	-0.41	-0.38	4352	1.0
y_mean[427]	0.06	7.2e-4	0.05	-0.04	0.03	0.06	0.09	0.16	4666	1.0
y_mean[428]	-0.5	3.0e-4	0.02	-0.55	-0.52	-0.5	-0.49	-0.46	4552	1.0
y_mean[429]	-0.98	5.2e-4	0.03	-1.05	-1.0	-0.98	-0.96	-0.91	4324	1.0
y_mean[429] y_mean[430]	-0.43	9.8e-4	0.03	-0.56	-0.48	-0.44	-0.39	-0.3	4469	1.0
y_mean[430] y_mean[431]		5.1e-4	0.07	-0.23	-0.46	-0.44	-0.39	-0.3	3936	1.0
• =	-0.17									
y_mean[432]	-0.17	3.2e-4	0.02	-0.22	-0.19	-0.17	-0.16	-0.13	4842	1.0
y_mean[433]	1.36	7.7e-4	0.05	1.26	1.33	1.36	1.39	1.46	4213	1.0
y_mean[434]	-0.49	4.4e-4	0.03	-0.55	-0.51	-0.49	-0.47	-0.43	4452	1.0
y_mean[435]	-0.48	3.1e-4	0.02	-0.52	-0.49	-0.48	-0.46	-0.44	4414	1.0

```
-1.15
                                                                            -1.02
                                                                                     4466
y_mean[436]
                    -1.11
                            7.6e-4
                                      0.05
                                             -1.21
                                                            -1.11
                                                                    -1.08
                                                                                              1.0
                    -0.73
                            3.8e-4
                                      0.03
                                             -0.78
                                                    -0.75
                                                            -0.73
                                                                    -0.71
                                                                            -0.68
                                                                                     4548
y_mean[437]
                                                                                              1.0
                    -0.31
                            3.4e-4
                                      0.02
                                             -0.35
                                                    -0.32
                                                            -0.31
                                                                    -0.29
                                                                            -0.26
                                                                                     4377
y_mean[438]
                                                                                              1.0
y_mean[439]
                     0.36
                            4.3e-4
                                      0.03
                                               0.3
                                                      0.34
                                                             0.36
                                                                     0.38
                                                                             0.42
                                                                                     4564
                                                                                              1.0
                            3.5e-4
                                             -0.37
                    -0.32
                                      0.02
                                                    -0.34
                                                            -0.32
                                                                    -0.31
                                                                            -0.27
                                                                                     4360
y mean [440]
                                                                                              1.0
                    -0.32
                            3.6e-4
                                      0.02
                                             -0.37
                                                    -0.34
                                                            -0.32
                                                                    -0.31
                                                                            -0.28
                                                                                     4247
                                                                                              1.0
y_mean[441]
                                                            -0.33
y mean [442]
                    -0.33
                            4.3e-4
                                      0.03
                                              -0.4
                                                    -0.35
                                                                    -0.31
                                                                            -0.27
                                                                                     5345
                                                                                              1.0
                            7.9e-4
                                              1.35
                                                                             1.56
y_mean[443]
                     1.46
                                      0.05
                                                      1.42
                                                              1.46
                                                                      1.49
                                                                                     4432
                                                                                              1.0
                      1.9
                            7.5e-4
                                      0.05
                                               1.8
                                                      1.86
                                                               1.9
                                                                     1.93
                                                                              2.0
                                                                                     4685
                                                                                              1.0
y_{mean}[444]
                     0.17
                            4.8e-4
                                      0.03
                                              0.11
                                                             0.17
                                                                             0.24
                                                                                     4745
y_mean[445]
                                                      0.15
                                                                     0.19
                                                                                              1.0
                    -0.15
                            3.4e-4
                                      0.02
                                             -0.19
                                                    -0.17
                                                            -0.15
                                                                    -0.14
                                                                             -0.1
                                                                                     4379
                                                                                              1.0
y_mean[446]
y_mean[447]
                     0.36
                            4.1e-4
                                      0.03
                                               0.3
                                                      0.34
                                                             0.36
                                                                     0.38
                                                                             0.41
                                                                                     4762
                                                                                              1.0
                     0.06
                            4.3e-4
                                      0.03 3.9e-4
                                                      0.04
                                                             0.06
                                                                     0.08
                                                                             0.11
                                                                                     4413
y_mean[448]
                                                                                              1.0
                    -0.61
                                            -0.65
                                                            -0.61
                                                                            -0.57
                            3.1e-4
                                      0.02
                                                    -0.63
                                                                     -0.6
                                                                                     4535
y_{mean}[449]
                                                                                              1.0
                    -0.56
                            3.3e-4
                                      0.02
                                             -0.61
                                                     -0.58
                                                            -0.56
                                                                    -0.55
                                                                            -0.52
                                                                                     4546
y_mean[450]
                                                                                              1.0
                            4.8e-4
y_mean[451]
                    -0.45
                                      0.03
                                             -0.51
                                                     -0.48
                                                            -0.45
                                                                    -0.43
                                                                            -0.39
                                                                                     4368
                                                                                              1.0
y_mean[452]
                    -0.68
                            5.4e-4
                                      0.04
                                             -0.75
                                                      -0.7
                                                            -0.68
                                                                    -0.66
                                                                            -0.61
                                                                                     4312
                                                                                              1.0
                     0.35
                                      0.04
                                              0.28
                                                                                     4010
y_mean[453]
                            6.1e-4
                                                      0.32
                                                             0.35
                                                                     0.38
                                                                             0.43
                                                                                              1.0
y_mean[454]
                    -0.27
                            4.3e-4
                                      0.03
                                             -0.33
                                                    -0.29
                                                            -0.27
                                                                    -0.25
                                                                            -0.22
                                                                                     4502
                                                                                              1.0
y mean [455]
                    -0.39
                            5.4e-4
                                      0.03
                                             -0.46
                                                    -0.41
                                                            -0.39
                                                                    -0.37
                                                                            -0.33
                                                                                     4028
                                                                                              1.0
y_mean[456]
                    -0.05
                            3.0e-4
                                      0.02
                                             -0.08
                                                    -0.06
                                                            -0.05
                                                                    -0.03-7.8e-3
                                                                                     4508
                                                                                              1.0
                    -0.83
                            4.1e-4
                                      0.03
                                             -0.89
                                                    -0.85
                                                            -0.83
                                                                    -0.81
                                                                            -0.77
                                                                                     4881
y mean [457]
                                                                                              1.0
                     0.32
                            4.6e-4
                                      0.03
                                              0.26
                                                             0.32
                                                                             0.38
y_mean[458]
                                                       0.3
                                                                     0.34
                                                                                     4251
                                                                                              1.0
                     0.44
                            3.8e-4
                                      0.03
                                              0.39
                                                      0.42
                                                             0.44
                                                                     0.46
                                                                             0.49
                                                                                     5101
                                                                                              1.0
y_mean[459]
y_mean[460]
                     0.41
                            3.8e-4
                                      0.03
                                              0.36
                                                      0.39
                                                             0.41
                                                                     0.43
                                                                             0.46
                                                                                     4371
                                                                                              1.0
y_mean[461]
                     0.72
                            4.3e-4
                                      0.03
                                              0.66
                                                       0.7
                                                             0.72
                                                                     0.74
                                                                             0.77
                                                                                     4461
                                                                                              1.0
                    -0.49
                                      0.02
                                                            -0.49
                            3.0e-4
                                             -0.53
                                                      -0.5
                                                                    -0.47
                                                                            -0.45
                                                                                     4464
                                                                                              1.0
y_mean[462]
                     0.57
                            4.9e-4
                                      0.03
                                              0.51
                                                      0.55
                                                             0.57
                                                                             0.64
                                                                                     4403
y_mean[463]
                                                                      0.6
                                                                                              1.0
                     0.17
                            5.7e-4
                                      0.04
                                                      0.15
                                                             0.17
                                                                             0.24
                                               0.1
                                                                      0.2
                                                                                     3845
                                                                                              1.0
y_{mean}[464]
y_mean[465]
                     0.85
                            6.1e-4
                                      0.04
                                              0.77
                                                      0.82
                                                             0.85
                                                                     0.88
                                                                             0.94
                                                                                     4813
                                                                                              1.0
y_mean[466]
                    -0.54
                            3.2e-4
                                      0.02
                                             -0.58
                                                     -0.55
                                                            -0.54
                                                                    -0.53
                                                                             -0.5
                                                                                     4563
                                                                                              1.0
                            3.4e-4
y_mean[467]
                    -0.19
                                      0.02
                                             -0.23
                                                      -0.2
                                                            -0.19
                                                                    -0.17
                                                                            -0.14
                                                                                     4725
                                                                                              1.0
                     0.27
                            6.7e-4
                                      0.04
                                              0.19
                                                             0.27
                                                                     0.29
                                                                             0.35
y_mean[468]
                                                      0.24
                                                                                     3814
                                                                                              1.0
y_mean[469]
                     0.77
                            6.1e-4
                                      0.04
                                               0.7
                                                      0.75
                                                             0.77
                                                                      0.8
                                                                             0.85
                                                                                     3725
                                                                                              1.0
                    -0.58
                            3.0e-4
                                      0.02
                                            -0.62
                                                      -0.6
                                                            -0.58
                                                                    -0.57
                                                                            -0.54
                                                                                     4508
                                                                                              1.0
y mean [470]
y_mean[471]
                    -0.47
                            3.7e-4
                                      0.03
                                             -0.52
                                                    -0.49
                                                            -0.47
                                                                    -0.45
                                                                            -0.42
                                                                                     4718
                                                                                              1.0
                            9.3e-4
                                              -0.6
                                                                            -0.35
                    -0.48
                                      0.06
                                                    -0.52
                                                            -0.48
                                                                    -0.43
                                                                                     4497
                                                                                              1.0
y mean [472]
y_mean[473]
                    -0.27
                            4.0e-4
                                      0.03
                                             -0.32
                                                    -0.28
                                                            -0.27
                                                                    -0.25
                                                                            -0.22
                                                                                     4099
                                                                                              1.0
                     0.07
                            2.8e-4
                                      0.02
                                              0.03
                                                      0.05
                                                             0.07
                                                                     0.08
                                                                              0.1
                                                                                     4867
                                                                                              1.0
y_{mean}[474]
                      0.7
                            6.1e-4
                                      0.04
                                              0.61
                                                      0.67
                                                               0.7
                                                                     0.73
                                                                             0.78
                                                                                     4930
y_{mean}[475]
                                                                                              1.0
                                      0.02
                                               0.4
                                                             0.44
y_mean[476]
                     0.44
                            2.9e-4
                                                      0.43
                                                                     0.46
                                                                             0.48
                                                                                     4858
                                                                                              1.0
                            5.8e-4
                                      0.04
                                             -0.08
                                                    -0.03-6.5e-3
                                                                             0.07
y_mean[477]
                  -6.3e-3
                                                                     0.02
                                                                                     3867
                                                                                              1.0
y_mean[478]
                    -0.29
                            3.9e-4
                                      0.03
                                             -0.34
                                                    -0.31
                                                            -0.29
                                                                    -0.27
                                                                            -0.24
                                                                                     4361
                                                                                              1.0
                            4.6e-4
                                      0.03
                                             -0.06
                                                    -0.02 1.5e-3
                                                                             0.06
                   1.4e-3
                                                                     0.02
                                                                                     4336
y_{mean}[479]
                                                                                              1.0
                    -0.18
                            5.5e-4
                                      0.03
                                             -0.25
                                                    -0.21
                                                            -0.18
                                                                    -0.16
                                                                            -0.12
                                                                                     3853
y_mean[480]
                                                                                              1.0
                     0.02
                                             -0.03 1.2e-3
                                                             0.02
                                                                             0.08
y_mean[481]
                            4.4e-4
                                      0.03
                                                                     0.04
                                                                                     4104
                                                                                              1.0
y_mean[482]
                     0.09
                            3.6e-4
                                      0.02
                                              0.04
                                                      0.07
                                                             0.09
                                                                      0.1
                                                                             0.13
                                                                                     4538
                                                                                              1.0
y_mean[483]
                    -0.76
                            4.3e-4
                                      0.03
                                             -0.82
                                                    -0.78
                                                            -0.76
                                                                    -0.74
                                                                            -0.71
                                                                                     4653
                                                                                              1.0
```

```
0.75
                           7.3e-4
                                      0.04
                                              0.66
                                                      0.72
                                                             0.75
                                                                     0.78
y_mean[484]
                                                                             0.84
                                                                                     3628
                                                                                              1.0
                    -0.41
                           2.9e-4
                                      0.02
                                            -0.45
                                                    -0.43
                                                            -0.41
                                                                     -0.4
                                                                            -0.37
                                                                                     4850
y_mean[485]
                                                                                              1.0
y_mean[486]
                    -0.02
                           3.0e-4
                                      0.02
                                            -0.06
                                                    -0.03
                                                            -0.02-3.2e-3
                                                                             0.02
                                                                                     4464
                                                                                              1.0
                     0.76
                           5.1e-4
                                      0.03
                                               0.7
                                                      0.74
                                                             0.76
                                                                     0.79
                                                                             0.83
                                                                                     4390
                                                                                              1.0
y_mean[487]
                    -0.59
                                            -0.63
                                                            -0.59
y_mean[488]
                           3.1e-4
                                      0.02
                                                    -0.61
                                                                    -0.58
                                                                            -0.55
                                                                                     4522
                                                                                              1.0
                     -0.6
                           3.1e-4
                                      0.02
                                            -0.64
                                                    -0.61
                                                             -0.6
                                                                    -0.58
                                                                            -0.56
                                                                                     4517
                                                                                              1.0
y_mean[489]
                           5.3e-4
                                              0.05
y_mean[490]
                     0.13
                                      0.04
                                                       0.1
                                                             0.13
                                                                     0.15
                                                                              0.2
                                                                                     4706
                                                                                              1.0
                    -0.89
                           4.5e-4
                                      0.03
                                            -0.95
                                                    -0.91
                                                            -0.89
                                                                    -0.87
                                                                            -0.83
y_mean[491]
                                                                                     4847
                                                                                              1.0
                                                             -0.4
                     -0.4
                           3.1e-4
                                      0.02
                                            -0.44
                                                    -0.42
                                                                    -0.39
                                                                            -0.36
                                                                                     4474
                                                                                              1.0
y_mean[492]
                     0.57
                           6.8e-4
                                      0.04
                                              0.49
                                                      0.54
                                                             0.57
                                                                             0.65
                                                                                     3797
y_mean[493]
                                                                      0.6
                                                                                              1.0
                    -0.59
                           3.5e-4
                                      0.02
                                            -0.63
                                                      -0.6
                                                            -0.59
                                                                    -0.57
                                                                            -0.54
                                                                                     4541
                                                                                              1.0
y_mean[494]
y_mean[495]
                     0.14
                           4.4e-4
                                      0.03
                                              0.09
                                                      0.12
                                                             0.14
                                                                     0.16
                                                                              0.2
                                                                                     4282
                                                                                              1.0
                     0.74
                           6.1e-4
                                      0.04
                                              0.66
                                                      0.71
                                                             0.74
                                                                     0.76
                                                                             0.82
                                                                                     4535
y_mean[496]
                                                                                              1.0
                     -0.9
                           4.4e-4
                                      0.03
                                            -0.96
                                                    -0.92
                                                             -0.9
                                                                    -0.88
                                                                            -0.84
                                                                                     4428
y_{mean}[497]
                                                                                              1.0
                     0.07
                           4.5e-4
                                      0.03
                                              0.01
                                                      0.05
                                                             0.07
                                                                     0.09
                                                                             0.13
                                                                                     4397
y_mean[498]
                                                                                              1.0
                           4.2e-4
y_mean[499]
                    -0.51
                                      0.03
                                            -0.56
                                                    -0.53
                                                            -0.51
                                                                    -0.49
                                                                            -0.45
                                                                                     4421
                                                                                              1.0
y_mean[500]
                    -0.68
                           4.0e-4
                                      0.03
                                            -0.74
                                                      -0.7
                                                            -0.68
                                                                    -0.67
                                                                            -0.63
                                                                                     4498
                                                                                              1.0
                     0.01
                                      0.02
                                            -0.04-5.3e-3
                                                                                     4473
                           3.6e-4
                                                             0.01
                                                                     0.03
                                                                             0.06
                                                                                              1.0
y_{mean}[501]
y_mean[502]
                    -0.39
                            3.4e-4
                                      0.02
                                            -0.43
                                                      -0.4
                                                            -0.39
                                                                    -0.37
                                                                            -0.34
                                                                                     4612
                                                                                              1.0
                                      0.02
                                                                                     4437
y_mean[503]
                    -0.47
                           3.0e-4
                                              -0.5
                                                    -0.48
                                                            -0.47
                                                                    -0.45
                                                                            -0.43
                                                                                              1.0
                     0.27
                            2.9e-4
                                      0.02
                                              0.23
                                                      0.26
                                                             0.27
                                                                     0.28
                                                                             0.31
                                                                                     4656
y_mean[504]
                                                                                              1.0
                     0.39
                           7.2e-4
                                      0.04
                                              0.31
                                                      0.37
                                                             0.39
                                                                     0.43
                                                                             0.48
                                                                                     3851
                                                                                              1.0
y_{mean}[505]
                    -0.37
                            3.4e-4
                                      0.02
                                            -0.41
                                                            -0.37
                                                                            -0.33
y_mean[506]
                                                    -0.39
                                                                    -0.35
                                                                                     4211
                                                                                              1.0
                      1.5
                           9.5e-4
                                      0.06
                                              1.39
                                                      1.46
                                                               1.5
                                                                     1.54
                                                                             1.62
                                                                                     3655
                                                                                              1.0
y_{mean}[507]
y_mean[508]
                     1.11
                           5.9e-4
                                      0.04
                                              1.03
                                                      1.08
                                                             1.11
                                                                     1.13
                                                                             1.18
                                                                                     4305
                                                                                              1.0
                    -0.27
                            4.1e-4
                                      0.03
                                            -0.33
                                                    -0.29
                                                            -0.27
                                                                    -0.25
                                                                            -0.21
                                                                                     5261
y_mean[509]
                                                                                              1.0
                                      0.05
                                              0.97
                                                                             1.16
                     1.07
                           7.8e-4
                                                      1.03
                                                             1.07
                                                                      1.1
                                                                                     4181
y_mean [510]
                                                                                              1.0
                     -0.1
                           5.7e-4
                                      0.04
                                            -0.17
                                                    -0.12
                                                             -0.1
                                                                    -0.07
                                                                            -0.03
y_mean[511]
                                                                                     4118
                                                                                              1.0
                    -0.09
                           6.4e-4
                                      0.05
                                            -0.19
                                                    -0.13
                                                            -0.09
                                                                    -0.06-5.8e-3
                                                                                     4930
                                                                                              1.0
y_mean [512]
y_mean[513]
                    -0.59
                            3.4e-4
                                      0.02
                                            -0.63
                                                      -0.6
                                                            -0.59
                                                                    -0.57
                                                                            -0.54
                                                                                     4530
                                                                                              1.0
                                      0.03-7.0e-3
                     0.06
                           5.6e-4
                                                      0.04
                                                             0.06
                                                                     0.08
                                                                             0.13
                                                                                     3803
                                                                                              1.0
y_mean[514]
                                                                    -0.39
                                                                                              1.0
y_mean[515]
                    -0.41
                           3.1e-4
                                      0.02
                                           -0.45
                                                    -0.42
                                                            -0.41
                                                                            -0.37
                                                                                     4518
y_mean[516]
                     0.32
                           4.3e-4
                                      0.03
                                              0.27
                                                       0.3
                                                             0.32
                                                                     0.34
                                                                             0.38
                                                                                     4689
                                                                                              1.0
                     -0.7
                           4.2e-4
                                      0.03
                                            -0.76
                                                    -0.72
                                                             -0.7
                                                                    -0.67
                                                                            -0.64
                                                                                     5117
                                                                                              1.0
y_mean[517]
                    -0.09
                           3.6e-4
                                      0.02
                                            -0.14
                                                      -0.1
                                                            -0.09
                                                                    -0.07
                                                                            -0.04
                                                                                     4854
                                                                                              1.0
y mean [518]
y_mean[519]
                    -0.63
                           4.4e-4
                                      0.03
                                            -0.69
                                                    -0.65
                                                            -0.63
                                                                    -0.61
                                                                            -0.58
                                                                                     4521
                                                                                              1.0
                           6.8e-4
                                              0.69
                                                             0.78
                                                                             0.88
                     0.78
                                      0.05
                                                      0.75
                                                                     0.81
                                                                                     4978
y_mean[520]
                                                                                              1.0
y_mean[521]
                    -0.28
                           4.1e-4
                                      0.03
                                            -0.33
                                                    -0.29
                                                            -0.28
                                                                    -0.26
                                                                            -0.22
                                                                                     4116
                                                                                              1.0
                     1.17
                            5.1e-4
                                      0.04
                                               1.1
                                                      1.15
                                                             1.17
                                                                      1.2
                                                                             1.24
                                                                                     4858
                                                                                              1.0
y_mean[522]
                    -0.47
                           6.2e-4
                                      0.04
                                            -0.55
                                                      -0.5
                                                            -0.47
                                                                    -0.44
                                                                            -0.39
                                                                                     4592
y_mean[523]
                                                                                              1.0
                                            -0.15
                                                             -0.1
                     -0.1
                           3.5e-4
                                      0.02
                                                    -0.11
                                                                    -0.08
                                                                            -0.05
                                                                                     4866
                                                                                              1.0
y_mean[524]
                           3.5e-4
                                      0.02
                                              0.07
                                                                                     4284
y_mean[525]
                     0.11
                                                       0.1
                                                             0.11
                                                                     0.13
                                                                             0.16
                                                                                              1.0
y_mean[526]
                    -1.11
                           4.2e-4
                                      0.03
                                            -1.16
                                                    -1.13
                                                            -1.11
                                                                    -1.09
                                                                            -1.05
                                                                                     4413
                                                                                              1.0
                     -0.6
                           3.1e-4
                                      0.02
                                            -0.64
                                                    -0.61
                                                             -0.6
                                                                            -0.56
                                                                    -0.58
                                                                                     4517
                                                                                              1.0
y_{mean}[527]
                     0.11
                           2.6e-4
                                      0.02
                                              0.07
                                                      0.09
                                                             0.11
                                                                     0.12
                                                                             0.14
                                                                                     4748
y_mean[528]
                                                                                              1.0
                     0.66
                                              0.61
                                                             0.67
                                                                             0.72
y_mean[529]
                           4.5e-4
                                      0.03
                                                      0.64
                                                                     0.68
                                                                                     4239
                                                                                              1.0
y_mean[530]
                     0.45
                           6.9e-4
                                      0.04
                                              0.37
                                                      0.42
                                                             0.45
                                                                     0.48
                                                                             0.54
                                                                                     4043
                                                                                              1.0
y_mean[531]
                    -0.33
                           3.7e-4
                                      0.02
                                            -0.38
                                                    -0.35
                                                            -0.33
                                                                    -0.31
                                                                            -0.28
                                                                                     4393
                                                                                              1.0
```

y_mean[532]	-0.45	3.6e-4	0.02	-0.49	-0.46	-0.45	-0.43	-0.4	4342	1.0
y_mean[533]	0.26	4.5e-4	0.03	0.2	0.24	0.26	0.28	0.32	5078	1.0
y_mean[534]	0.33	5.2e-4	0.03	0.27	0.31	0.33	0.35	0.4	4219	1.0
y_mean[535]	1.65	7.7e-4	0.05	1.54	1.61	1.65	1.68	1.75	4613	1.0
y_mean[536]	-0.44	3.6e-4	0.02	-0.49	-0.45	-0.44	-0.42	-0.39	4765	1.0
y_mean[537]	0.44	4.7e-4	0.03	0.38	0.42	0.44	0.45	0.49	4081	1.0
y_mean[538]	-1.18	6.7e-4	0.04	-1.26	-1.21	-1.18	-1.15	-1.09	4522	1.0
y_mean[539]	-0.34	3.3e-4	0.02	-0.39	-0.36	-0.34	-0.33	-0.3	4373	1.0
y_mean[540]	-0.23	2.9e-4	0.02	-0.27	-0.25	-0.23	-0.22	-0.19	4657	1.0
y_mean[541]	-0.79	3.9e-4	0.03	-0.84	-0.81	-0.79	-0.77	-0.74	4725	1.0
y_mean[542]	-0.48	3.0e-4	0.02	-0.52	-0.49	-0.48	-0.46	-0.44	4517	1.0
y_mean[543]	0.2	4.0e-4	0.02	0.15	0.18	0.2	0.10	0.11	4597	1.0
y_mean[544]	1.3	6.9e-4	0.03	1.21	1.27	1.3	1.33	1.39	4212	1.0
y_mean[544] y_mean[545]	0.14	3.5e-4	0.04	0.1	0.13	0.14	0.16	0.19	4269	1.0
• =	-0.33	3.5e-4 3.5e-4	0.02	-0.38	-0.35	-0.33	-0.32	-0.29	4319	1.0
y_mean[546]										
y_mean[547]	-0.11	3.0e-4	0.02	-0.15	-0.13	-0.11	-0.1	-0.07	4742	1.0
y_mean[548]	-0.98	4.1e-4	0.03	-1.04	-1.0	-0.98	-0.96	-0.93	4453	1.0
y_mean[549]	0.57	1.0e-3	0.07	0.43	0.52	0.57	0.62	0.71	4831	1.0
y_mean[550]	0.66	4.6e-4	0.03	0.61	0.64	0.66	0.68	0.72	3989	1.0
y_mean[551]	-0.5	3.1e-4	0.02	-0.54	-0.52	-0.5	-0.49	-0.46	4614	1.0
y_mean[552]	-0.42	2.9e-4	0.02	-0.46	-0.44	-0.42	-0.41	-0.38	4617	1.0
y_mean[553]	-0.41	4.0e-4	0.03	-0.46	-0.43	-0.41	-0.4	-0.36	4279	1.0
y_mean[554]	-0.35	5.1e-4	0.03	-0.42	-0.38	-0.35	-0.33	-0.28	4601	1.0
y_mean[555]	-0.8	4.6e-4	0.03	-0.86	-0.82	-0.8	-0.78	-0.74	4510	1.0
y_mean[556]	0.39	4.2e-4	0.03	0.34	0.37	0.39	0.41	0.45	4760	1.0
y_mean[557]	-0.42	5.8e-4	0.04	-0.49	-0.44	-0.42	-0.39	-0.34	4157	1.0
y_mean[558]	0.06	3.3e-4	0.02	0.01	0.04	0.06	0.07	0.1	4483	1.0
y_mean[559]	-0.32	4.2e-4	0.03	-0.38	-0.34	-0.32	-0.3	-0.26	5329	1.0
y_mean[560]	-0.59	4.0e-4	0.03	-0.65	-0.61	-0.59	-0.58	-0.54	4493	1.0
y_mean[561]	0.82	6.2e-4	0.04	0.74	0.8	0.82	0.85	0.9	4208	1.0
y_mean[562]	0.44	5.9e-4	0.04	0.37	0.42	0.44	0.47	0.52	4770	1.0
y_mean[563]	-0.62	3.8e-4	0.03	-0.67	-0.64	-0.62	-0.6	-0.57	4609	1.0
y_mean[564]	-0.14	3.2e-4	0.02	-0.18	-0.15	-0.14	-0.12	-0.09	5370	1.0
y_mean[565]	0.59	4.2e-4	0.03	0.53	0.57	0.59	0.61	0.64	4293	1.0
y_mean[566]	-0.33	4.3e-4	0.03	-0.38	-0.35	-0.33	-0.31	-0.27	4122	1.0
y_mean[567]	-0.62	3.1e-4	0.02	-0.66	-0.63	-0.62	-0.61	-0.58	4538	1.0
y_mean[568]	0.17	5.1e-4	0.04	0.1	0.15	0.17	0.2	0.24	4750	1.0
y_mean[569]	-0.62	3.4e-4	0.02	-0.66	-0.63	-0.62	-0.6	-0.57	4521	1.0
y_mean[570]	0.13	3.4e-4	0.02	0.08	0.11	0.13	0.14	0.17	4502	1.0
y_mean[571]	-0.33	3.4e-4	0.02	-0.37	-0.34	-0.32	-0.31	-0.28	4354	1.0
y_mean[572]	-0.04	5.8e-4	0.04	-0.11	-0.06	-0.04	-0.01	0.04	4123	1.0
y_mean[573]	-0.66	3.3e-4	0.01	-0.7	-0.67	-0.66	-0.64	-0.61	4539	1.0
y_mean[573] y_mean[574]	0.00	4.0e-4	0.02	0.21	0.24	0.26	0.04	0.31	4348	1.0
y_mean[574] y_mean[575]	-0.73	3.7e-4	0.03	-0.79	-0.75	-0.73	-0.72	-0.68	4786	1.0
y_mean[575] y_mean[576]	1.15	3.7e-4 4.7e-4	0.03	1.09	1.13	1.15	1.17	1.21	4322	1.0
y_mean[576] y_mean[577]	-0.74	4.7e-4 4.5e-4	0.03	-0.8	-0.76	-0.74	-0.72	-0.68	4322 4481	1.0
y_mean[577] y_mean[578]					0.1	0.11	0.13			
• –	0.11	3.2e-4	0.02	0.07				0.15	4333	1.0
y_mean[579]	-0.09	5.9e-4	0.04	-0.17	-0.12	-0.09	-0.07	-0.02	3819	1.0

y_mean[580]	-0.16	3.5e-4	0.02	-0.21	-0.18	-0.16	-0.15	-0.12	4502	1.0
y_mean[581]	0.04	5.5e-4	0.03	-0.03	0.01	0.03	0.06	0.1	3805	1.0
y_mean[582]	-1.15	4.4e-4	0.03	-1.2	-1.17	-1.15	-1.13	-1.09	4396	1.0
y_mean[583]	-0.95	4.4e-4	0.03	-1.01	-0.97	-0.95	-0.93	-0.9	4391	1.0
y_mean[584]	0.35	7.2e-4	0.05	0.25	0.32	0.35	0.39	0.45	4895	1.0
y_mean[585]	0.51	5.5e-4	0.04	0.43	0.48	0.51	0.53	0.58	4354	1.0
y_mean[586]	0.7	4.9e-4	0.03	0.63	0.67	0.7	0.72	0.76	4226	1.0
y_mean[587]	-0.46	3.4e-4	0.02	-0.51	-0.48	-0.46	-0.45	-0.42	4692	1.0
y_mean[588]	-0.04	6.3e-4	0.04	-0.12	-0.07		-9.9e-3	0.04	4133	1.0
y_mean[589]	0.31	5.0e-4	0.03	0.25	0.29	0.31	0.34	0.38	4218	1.0
y_mean[590]	-0.33	4.3e-4	0.03	-0.39	-0.35	-0.33	-0.31	-0.27	5341	1.0
y_mean[591]	-0.7	3.9e-4	0.03	-0.75	-0.72	-0.7	-0.68	-0.65	4506	1.0
y_mean[592]	0.52	8.1e-4	0.05	0.42	0.48	0.52	0.56	0.63	4629	1.0
y_mean[593]	0.29	5.1e-4	0.03	0.23	0.27	0.29	0.32	0.36	4546	1.0
y_mean[594]	-0.87	4.3e-4	0.03	-0.93	-0.89	-0.87	-0.85	-0.81	4558	1.0
y_mean[595]	-0.28	4.8e-4	0.03	-0.34	-0.3	-0.28	-0.26	-0.22	3987	1.0
y_mean[596]	0.35	3.9e-4	0.03	0.3	0.33	0.35	0.20	0.4	4519	1.0
y_mean[590] y_mean[597]	-0.32	3.3e-4	0.03	-0.36	-0.33	-0.32	-0.3	-0.28	4423	1.0
y_mean[598]	-0.09	5.3e-4	0.02	-0.15	-0.11	-0.09	-0.07	-0.02	4224	1.0
y_mean[598] y_mean[599]	-0.09	3.0e-4	0.03	-0.13	-0.11	-0.43	-0.42	-0.39	4510	1.0
y_mean[600]	-0.43	3.4e-4	0.02	0.07	0.1	0.11	0.13	0.16	4505	1.0
• =	-0.7	3.4e-4 3.9e-4	0.02	-0.75	-0.72	-0.7	-0.68		5061	1.0
y_mean[601]								-0.64		
y_mean[602]	-0.04	2.9e-4	0.02	-0.08	-0.06	-0.04		6.0e-3	4538	1.0
y_mean[603]	0.37	5.5e-4	0.04	0.3	0.35	0.37	0.39	0.44	4185	1.0
y_mean[604]	-0.44	5.0e-4	0.03	-0.51	-0.46	-0.44	-0.42	-0.37	4852	1.0
y_mean[605]	0.25	5.1e-4	0.03	0.18	0.23	0.25	0.27	0.32	4528	1.0
y_mean[606]	-0.66	4.2e-4	0.03	-0.71	-0.68	-0.66	-0.64	-0.6	4701	1.0
y_mean[607]	-0.87	4.4e-4	0.03	-0.93	-0.89	-0.87	-0.85	-0.81	4822	1.0
y_mean[608]	-0.76	4.0e-4	0.03	-0.82	-0.78	-0.76	-0.75	-0.71	4692	1.0
y_mean[609]	1.19	7.1e-4	0.05	1.1	1.16	1.19	1.22	1.28	4332	1.0
y_mean[610]	-0.4	3.3e-4	0.02	-0.44	-0.41	-0.4	-0.38	-0.35	4626	1.0
y_mean[611]	-0.38	3.3e-4	0.02	-0.42	-0.4	-0.38	-0.37	-0.34	4310	1.0
y_mean[612]	-0.58	3.6e-4	0.02	-0.63	-0.6	-0.58	-0.56	-0.54	4550	1.0
y_mean[613]	-0.37		0.03	-0.43	-0.39	-0.37		-0.32	4731	1.0
y_mean[614]	-0.27	3.9e-4	0.03	-0.32	-0.29	-0.27	-0.25	-0.22	4173	1.0
y_mean[615]	-0.3	4.6e-4	0.03	-0.36	-0.32	-0.3	-0.28	-0.24	4612	1.0
y_mean[616]	2.15	1.1e-3	0.07	2.01	2.1	2.15	2.19	2.28	3672	1.0
y_mean[617]	0.89	4.8e-4	0.03	0.83	0.87	0.89	0.91	0.95	4095	1.0
y_mean[618]	-0.25	4.9e-4	0.03	-0.31	-0.27	-0.25	-0.23	-0.19	4494	1.0
y_mean[619]	0.26	6.0e-4	0.04	0.19	0.24	0.26	0.29	0.33	3871	1.0
y_mean[620]	-0.47	3.2e-4	0.02	-0.52	-0.49	-0.47	-0.46	-0.43	4876	1.0
y_mean[621]	0.1	7.3e-4	0.05	1.6e-3	0.07	0.1	0.13	0.2	4714	1.0
y_mean[622]	0.54	6.5e-4	0.04	0.46	0.51	0.54	0.57	0.62	3970	1.0
y_mean[623]	1.75	1.2e-3	0.08	1.6	1.7	1.75	1.81	1.9	4420	1.0
y_mean[624]	-0.5	3.6e-4	0.02	-0.55	-0.52	-0.5	-0.49	-0.46	4720	1.0
y_mean[625]	-0.41	3.3e-4	0.02	-0.46	-0.43	-0.41	-0.4	-0.37	4677	1.0
y_mean[626]	-0.02	3.8e-4	0.03	-0.08	-0.04	-0.02-	-6.2e-3	0.03	4509	1.0
y_mean[627]	0.75	5.5e-4	0.04	0.68	0.72	0.75	0.77	0.82	4219	1.0

y_mean[628]	0.24	4.9e-4	0.03	0.18	0.22	0.24	0.26	0.3	4231	1.0
y_mean[629]	-0.28	5.6e-4	0.04	-0.35	-0.31	-0.28	-0.25	-0.2	4749	1.0
y_mean[630]	-0.78	3.9e-4	0.03	-0.84	-0.8	-0.78	-0.77	-0.73	4814	1.0
y_mean[631]	-0.58	3.1e-4	0.02	-0.62	-0.59	-0.58	-0.57	-0.54	4517	1.0
y_mean[632]	-0.43	2.9e-4	0.02	-0.47	-0.45	-0.43	-0.42	-0.4	4671	1.0
y_mean[633]	-0.33	4.4e-4	0.03	-0.39	-0.35	-0.33	-0.31	-0.27	5341	1.0
y_mean[634]	-0.81	4.1e-4	0.03	-0.87	-0.83	-0.81	-0.79	-0.76	4672	1.0
y_mean[635]	0.21	6.5e-4	0.05	0.12	0.18	0.21	0.25	0.31	5142	1.0
y_mean[636]	-0.48	5.7e-4	0.04	-0.56	-0.51	-0.48	-0.46	-0.41	4734	1.0
y_mean[637]	-0.27	3.9e-4	0.03	-0.33	-0.29	-0.27	-0.25	-0.22	5245	1.0
y_mean[638]	-0.06	3.7e-4	0.03	-0.11	-0.08	-0.06	-0.05	-0.02	4692	1.0
y_mean[639]	-0.29	3.9e-4	0.03	-0.33	-0.3	-0.29	-0.27	-0.24	4118	1.0
y_mean[640]	-0.64	3.4e-4	0.02	-0.69	-0.66	-0.64	-0.62	-0.6	4520	1.0
y_mean[641]	-0.06	3.4e 4 3.6e-4	0.02	-0.11	-0.08	-0.06	-0.05	-0.02	4488	1.0
y_mean[642]	-0.1	5.0e 4 5.2e-4	0.02	-0.17	-0.12	-0.1	-0.08	-0.04	4244	1.0
y_mean[643]	-6.4e-3	4.4e-4	0.03	-0.06		7.1e-3	0.00	0.05	4025	1.0
y_mean[644]	0.46-3	1.0e-3	0.03	0.68	0.77	0.81	0.86	0.03	4363	1.0
y_mean[645]	0.31	3.7e-4	0.07	0.00	0.17	0.01	0.30	0.34	4246	1.0
• =					-1.15				4503	
y_mean[646]	-1.12	4.9e-4	0.03	-1.19		-1.12	-1.1	-1.06		1.0
y_mean[647]	-0.53	2.9e-4	0.02	-0.57	-0.54	-0.53	-0.52	-0.49	4643	1.0
y_mean[648]	0.77	6.4e-4	0.04	0.69	0.74	0.77	0.8	0.85	4751	1.0
y_mean[649]	0.71	5.7e-4	0.04	0.64	0.68	0.71	0.73	0.78	3778	1.0
y_mean[650]	0.3	3.3e-4	0.02	0.26	0.29	0.3	0.32	0.35	4587	1.0
y_mean[651]	1.0	6.6e-4	0.04	0.92	0.97	1.0	1.03	1.08	4010	1.0
y_mean[652]	-1.03	4.1e-4	0.03	-1.09	-1.05	-1.03	-1.01	-0.98	4448	1.0
y_mean[653]	-0.79	4.7e-4	0.03	-0.85	-0.81	-0.79	-0.77	-0.73	4374	1.0
y_mean[654]	-0.2	3.4e-4	0.02	-0.24	-0.22	-0.2	-0.19	-0.16	4346	1.0
y_mean[655]	0.38	4.1e-4	0.03	0.32	0.36	0.38	0.4	0.44	4607	1.0
y_mean[656]	-0.35	3.1e-4	0.02	-0.39	-0.36	-0.35	-0.33	-0.31	4455	1.0
y_mean[657]	-0.55	3.6e-4	0.02	-0.6	-0.57	-0.55	-0.54	-0.5	4477	1.0
y_mean[658]	-0.51	3.0e-4	0.02	-0.55	-0.52	-0.51	-0.49	-0.47	4476	1.0
y_mean[659]	0.93	7.3e-4	0.05	0.84	0.9	0.93	0.96	1.03	4210	1.0
y_mean[660]	0.76	8.3e-4	0.06	0.65	0.72	0.75	0.79	0.87	4627	1.0
y_mean[661]	-0.31	3.8e-4	0.02	-0.36	-0.33	-0.31	-0.29	-0.26	4147	1.0
y_mean[662]	-0.25	3.7e-4	0.02	-0.29	-0.26	-0.25	-0.23	-0.2	4256	1.0
y_mean[663]	0.3	4.4e-4	0.03	0.24	0.28	0.3	0.32	0.35	4251	1.0
y_mean[664]	2.74	1.1e-3	0.07	2.61	2.69	2.74	2.79	2.88	4084	1.0
y_mean[665]	0.17	3.7e-4	0.02	0.12	0.15	0.17	0.19	0.22	4245	1.0
y_mean[666]	0.85	5.8e-4	0.04	0.78	0.83	0.85	0.88	0.92	4033	1.0
y_mean[667]	2.51	1.2e-3	0.07	2.37	2.46	2.51	2.56	2.66	4129	1.0
y_mean[668]	1.33	6.8e-4	0.04	1.24	1.3	1.33	1.36	1.42	4215	1.0
y_mean[669]	0.26	3.8e-4	0.03	0.21	0.24	0.26	0.28	0.31	4726	1.0
y_mean[670]	-0.24	6.7e-4	0.04	-0.32	-0.27	-0.24	-0.21	-0.15	4327	1.0
y_mean[671]	-0.6	3.1e-4	0.02	-0.64	-0.62	-0.6	-0.59	-0.56	4524	1.0
y_mean[672]	0.13	3.4e-4	0.02	0.09	0.12	0.13	0.15	0.18	4278	1.0
y_mean[673]	-0.73	4.5e-4	0.03	-0.78	-0.75	-0.73	-0.71	-0.67	4340	1.0
y_mean[674]	-1.41	5.8e-4	0.04	-1.48	-1.43	-1.41	-1.38	-1.33	4551	1.0
y_mean[675]	0.44	4.0e-4	0.03	0.39	0.42	0.44	0.46	0.49	4540	1.0

y_mean[676]	-0.51	3.1e-4	0.02	-0.55	-0.52	-0.51	-0.49	-0.47	4557	1.0
y_mean[677]	1.62	6.3e-4	0.04	1.53	1.59	1.62	1.64	1.7	4311	1.0
y_mean[678]	0.45	7.2e-4	0.04	0.37	0.42	0.45	0.48	0.54	3856	1.0
y_mean[679]	-0.26	4.8e-4	0.03	-0.31	-0.28	-0.26	-0.23	-0.19	4231	1.0
y_mean[680]	-0.06	4.5e-4	0.03	-0.12	-0.08	-0.06	-0.04	3.1e-3	4374	1.0
y_mean[681]	0.17	3.9e-4	0.03	0.12	0.15	0.17	0.19	0.22	4590	1.0
y_mean[682]	-0.59	3.1e-4	0.02	-0.63	-0.6	-0.59	-0.58	-0.55	4516	1.0
y_mean[683]	0.58	4.3e-4	0.03	0.52	0.56	0.58	0.6	0.63	4327	1.0
y_mean[684]	-0.87	4.3e-4	0.03	-0.93	-0.89	-0.87	-0.85	-0.81	4541	1.0
y_mean[685]	1.37	9.3e-4	0.06	1.24	1.32	1.37	1.41	1.49	4830	1.0
y_mean[686]	-0.56	4.3e-4	0.03	-0.61	-0.58	-0.55	-0.54	-0.5	4502	1.0
y_mean[687]	0.53	4.1e-4	0.03	0.47	0.51	0.53	0.55	0.58	4386	1.0
y_mean[688]	-0.59	3.0e-4	0.02	-0.63	-0.61	-0.59	-0.58	-0.55	4515	1.0
y_mean[689]	0.33	6.5e-4	0.02	0.09	0.14	0.33	0.19	0.24	3791	1.0
y_mean[690]	-0.29	3.8e-4	0.04	-0.34	-0.31	-0.29	-0.27	-0.24	4169	1.0
y_mean[691]	-0.35	4.0e-4	0.02	-0.4	-0.37	-0.35	-0.33	-0.3	4409	1.0
• =	0.27	4.0e-4 4.3e-4	0.03	0.22	0.26	0.27	0.29	0.33	4409	1.0
y_mean[692]							0.29 2.2e-3			
y_mean[693]	-0.02	2.9e-4	0.02	-0.05	-0.03			0.02	4475	1.0
y_mean[694]	-0.03	4.0e-4	0.03	-0.09	-0.05	-0.03	-0.01	0.02	4613	1.0
y_mean[695]	-1.3	6.2e-4	0.04	-1.38	-1.33	-1.3	-1.27	-1.22	4529	1.0
y_mean[696]	-0.34	5.0e-4	0.03	-0.41	-0.37	-0.34	-0.32	-0.28	4603	1.0
y_mean[697]	-0.72	4.8e-4	0.03	-0.78	-0.74	-0.72	-0.7	-0.66	4471	1.0
y_mean[698]	-0.81	4.5e-4	0.03	-0.87	-0.83	-0.81	-0.79	-0.75	4535	1.0
y_mean[699]	0.75	7.4e-4	0.04	0.66	0.72	0.75	0.78	0.84	3660	1.0
y_mean[700]	-0.67	3.3e-4	0.02	-0.71	-0.68	-0.67	-0.65	-0.62	4639	1.0
y_mean[701]	0.95	6.9e-4	0.05	0.86	0.92	0.95	0.98	1.04	4668	1.0
y_mean[702]	-0.78	4.1e-4	0.03	-0.84	-0.8	-0.78	-0.76	-0.73	4893	1.0
y_mean[703]	-0.16	3.1e-4	0.02	-0.2	-0.18	-0.16	-0.15	-0.12	4550	1.0
y_mean[704]	-0.91	6.7e-4	0.05	-1.0	-0.94	-0.91	-0.88	-0.82	4558	1.0
y_mean[705]	-0.3	3.9e-4	0.03	-0.35	-0.32	-0.3	-0.29	-0.25	4453	1.0
y_mean[706]	-0.51	3.1e-4	0.02	-0.55	-0.52	-0.51	-0.49	-0.47	4557	1.0
y_mean[707]	-0.14	3.2e-4	0.02	-0.18	-0.15	-0.14	-0.12	-0.09	4641	1.0
y_mean[708]	-1.18	5.1e-4	0.03	-1.24	-1.2	-1.18	-1.16	-1.11	4454	1.0
y_mean[709]	-0.19	4.7e-4	0.03	-0.25	-0.21	-0.19	-0.17	-0.13	3984	1.0
y_mean[710]	0.52	5.1e-4	0.03	0.45	0.5	0.52	0.54	0.58	3810	1.0
y_mean[711]	0.53	6.0e-4	0.04	0.45	0.5	0.53	0.56	0.61	4805	1.0
y_mean[712]	0.07	3.1e-4	0.02	0.03	0.06	0.07	0.09	0.11	4338	1.0
y_mean[713]	-0.34	4.2e-4	0.03	-0.4	-0.36	-0.34	-0.32	-0.29	4920	1.0
y_mean[714]	-0.56	3.7e-4	0.02	-0.61	-0.58	-0.56	-0.54	-0.51	4490	1.0
y_mean[715]	-0.87	4.3e-4	0.03	-0.93	-0.89	-0.87	-0.85	-0.81	4736	1.0
y_mean[716]	-0.56	3.2e-4	0.02	-0.61	-0.58	-0.56	-0.55	-0.52	4542	1.0
y_mean[717]	-1.28	6.1e-4	0.04	-1.36	-1.31	-1.28	-1.25	-1.2	4695	1.0
y_mean[718]	-0.33	4.0e-4	0.03	-0.38	-0.34	-0.33	-0.31	-0.27	5020	1.0
y_mean[719]	-0.39	3.4e-4	0.02	-0.43	-0.4	-0.39	-0.37	-0.35	4401	1.0
y_mean[720]	0.49	4.1e-4	0.03	0.44	0.47	0.49	0.51	0.54	3963	1.0
y_mean[721]	0.55	4.7e-4	0.03	0.49	0.53	0.55	0.57	0.61	3828	1.0
y_mean[722]	0.11	5.5e-4	0.03	0.04	0.09	0.11	0.13	0.18	3987	1.0
y_mean[723]	0.12	4.0e-4	0.03	0.06	0.1	0.12	0.13	0.17	4205	1.0
J CALL [ 1 20]	V.12	1.00 1	0.00	0.00	٠. ـ	V.12	0.10	J • ± 1	1200	1.0

y_mean[724]	-0.29	4.7e-4	0.03	-0.35	-0.31	-0.29	-0.27	-0.23	4003	1.0
y_mean[725]	0.92	7.1e-4	0.05	0.83	0.89	0.92	0.96	1.02	4595	1.0
y_mean[726]	-0.82	5.0e-4	0.03	-0.89	-0.85	-0.82	-0.8	-0.76	4742	1.0
y_mean[727]	0.18	5.4e-4	0.03	0.11	0.15	0.18	0.2	0.25	4088	1.0
y_mean[728]	-0.43	5.1e-4	0.04	-0.51	-0.46	-0.43	-0.41	-0.36	5104	1.0
y_mean[729]	-0.96	4.3e-4	0.03	-1.02	-0.98	-0.96	-0.94	-0.9	4681	1.0
y_mean[730]	0.24	4.5e-4	0.03	0.19	0.23	0.24	0.26	0.3	4028	1.0
y_mean[731]	-0.28	7.0e-4	0.05	-0.37	-0.32	-0.28	-0.26	-0.2	4295	1.0
y_mean[732]	-0.33	4.2e-4	0.03	-0.39	-0.35	-0.33	-0.32	-0.28	4304	1.0
y_mean[733]	-0.76	5.3e-4	0.04	-0.83	-0.79	-0.76	-0.74	-0.69	4653	1.0
y_mean[734]	0.57	5.0e-4	0.03	0.5	0.55	0.57	0.59	0.63	4380	1.0
y_mean[735]	0.75	5.7e-4	0.04	0.68	0.72	0.75	0.77	0.82	4226	1.0
y_mean[736]	-0.54	3.7e-4	0.02	-0.59	-0.56	-0.54	-0.52	-0.49	4455	1.0
y_mean[737]	1.92	1.1e-3	0.07	1.79	1.88	1.92	1.97	2.06	4182	1.0
y_mean[738]	1.73	1.0e-3	0.06	1.61	1.68	1.73	1.77	1.85	3712	1.0
y_mean[739]	-0.42	3.4e-4	0.02	-0.46	-0.43	-0.42	-0.4	-0.37	4450	1.0
y_mean[740]	-0.8	4.3e-4	0.03	-0.86	-0.82	-0.8	-0.78	-0.74	4933	1.0
y_mean[741]	0.92	5.8e-4	0.04	0.85	0.9	0.92	0.95	1.0	4441	1.0
y_mean[742]	0.78	5.2e-4	0.03	0.71	0.75	0.78	0.8	0.84	4390	1.0
y_mean[743]	-0.28	6.0e-4	0.04	-0.36	-0.31	-0.28	-0.25	-0.2	4810	1.0
y_mean[744]	-6.6e-3	4.3e-4	0.03	-0.06	-0.03-	6.9e-3	0.01	0.05	4300	1.0
y_mean[745]	0.45	4.1e-4	0.03	0.4	0.43	0.45	0.47	0.51	4564	1.0
y_mean[746]	0.12	3.2e-4	0.02	0.08	0.1	0.12	0.13	0.16	4347	1.0
y_mean[747]	-0.45	4.1e-4	0.03	-0.51	-0.47	-0.45	-0.44	-0.4	4348	1.0
y_mean[748]	-0.92	4.2e-4	0.03	-0.97	-0.94	-0.92	-0.9	-0.86	4686	1.0
y_mean[749]	-0.56	3.3e-4	0.02	-0.61	-0.58	-0.56	-0.55	-0.52	4551	1.0
y_mean[750]	-1.13	6.1e-4	0.04	-1.21	-1.16	-1.13	-1.1	-1.05	4711	1.0
y_mean[751]	-0.76	3.7e-4	0.03	-0.81	-0.78	-0.76	-0.74	-0.71	4745	1.0
y_mean[752]	-0.13	3.2e-4	0.02	-0.17	-0.14	-0.13	-0.11	-0.09	4595	1.0
y_mean[753]	3.86	1.8e-3	0.12	3.63	3.78	3.85	3.94	4.08	4076	1.0
y_mean[754]	0.23	5.6e-4	0.04	0.16	0.21	0.23	0.26	0.3	3950	1.0
y_mean[755]	-0.53	3.7e-4	0.02	-0.58	-0.55	-0.53	-0.52	-0.49	4445	1.0
y_mean[756]	-0.59	3.5e-4	0.02	-0.63	-0.6	-0.59	-0.57	-0.54	4542	1.0
y_mean[757]	-0.45	4.2e-4	0.03	-0.51	-0.47	-0.45	-0.43	-0.4	4731	1.0
y_mean[758]	-0.53	4.4e-4	0.03	-0.59	-0.55	-0.53	-0.51	-0.47	4655	1.0
y_mean[759]	0.3	4.3e-4	0.03	0.25	0.28	0.3	0.32	0.36	4355	1.0
y_mean[760]	-1.23	8.7e-4	0.06	-1.34	-1.26	-1.23	-1.19	-1.12	4309	1.0
y_mean[761]	-0.61	3.3e-4	0.02	-0.65	-0.62	-0.61	-0.59	-0.56	4523	1.0
y_mean[762]	-0.3	3.8e-4	0.03	-0.36	-0.32	-0.3	-0.28	-0.25	5166	1.0
y_mean[763]	1.23	5.6e-4	0.04	1.16	1.21	1.23	1.26	1.31	4381	1.0
y_mean[764]	-0.74	4.5e-4	0.03	-0.8	-0.76	-0.74	-0.72	-0.69	4480	1.0
y_mean[765]	2.0	7.0e-4	0.05	1.91	1.97	2.0	2.03	2.1	4501	1.0
y_mean[766]	0.75	5.1e-4	0.03	0.69	0.73	0.75	0.78	0.82	4015	1.0
y_mean[767]	-0.68	3.9e-4	0.03	-0.73	-0.69	-0.68	-0.66	-0.62	4751	1.0
y_mean[768]	-0.73	3.8e-4	0.03	-0.78	-0.75	-0.73	-0.71	-0.68	4808	1.0
y_mean[769]	-0.31	3.7e-4	0.02	-0.35	-0.33	-0.31	-0.29	-0.26	4077	1.0
y_mean[770]	-0.27	3.7e-4	0.03	-0.32	-0.29	-0.27	-0.25	-0.22	5199	1.0
y_mean[771]	-0.57	3.3e-4	0.02	-0.62	-0.59	-0.57	-0.56	-0.53	4536	1.0

y_mean[772]	-0.42	3.1e-4	0.02	-0.46	-0.43	-0.42	-0.4	-0.38	4575	1.0
y_mean[773]	-0.93	8.8e-4	0.06	-1.04	-0.97	-0.93	-0.89	-0.82	4357	1.0
y_mean[774]	0.03	5.6e-4	0.03	-0.04	5.3e-3	0.03	0.05	0.1	3815	1.0
y_mean[775]	-0.57	4.2e-4	0.03	-0.62	-0.59	-0.57	-0.55	-0.51	4591	1.0
y_mean[776]	0.43	6.3e-4	0.04	0.36	0.4	0.43	0.46	0.51	3780	1.0
y_mean[777]	-0.06	4.4e-4	0.03	-0.12	-0.08	-0.06	-0.04-	5.2e-3	4448	1.0
y_mean[778]	-0.68	3.8e-4	0.03	-0.73	-0.7	-0.68	-0.66	-0.63	4506	1.0
y_mean[779]	1.12	9.1e-4	0.06	1.01	1.08	1.12	1.16	1.23	3712	1.0
y_mean[780]	0.17	3.8e-4	0.03	0.12	0.15	0.17	0.19	0.22	4559	1.0
y_mean[781]	-0.67	6.1e-4	0.04	-0.75	-0.7	-0.67	-0.64	-0.58	4944	1.0
y_mean[782]	0.68	4.7e-4	0.03	0.62	0.66	0.68	0.7	0.74	4232	1.0
y_mean[783]	-0.42	3.7e-4	0.03	-0.48	-0.44	-0.42	-0.41	-0.37	4804	1.0
y_mean[784]	-0.82	4.9e-4	0.03	-0.89	-0.84	-0.82	-0.8	-0.76	4480	1.0
y_mean[785]	-0.64	3.2e-4	0.03	-0.69	-0.66	-0.64	-0.63	-0.6	4555	1.0
y_mean[786]	-0.44	3.3e-4	0.02	-0.48	-0.45	-0.44	-0.42	-0.4	4371	1.0
y_mean[787]	0.44	5.8e-4	0.02	0.57	0.62	0.44	0.42	0.72	4342	1.0
y_mean[787] y_mean[788]	0.52	4.4e-4	0.04	0.37	0.62	0.52	0.54	0.72	4469	1.0
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y_mean[789]	0.85	7.3e-4	0.05	0.76	0.82	0.85	0.88	0.94	3882	1.0
y_mean[790]	0.63	8.2e-4	0.05	0.53	0.59	0.63	0.66	0.73	3897	1.0
y_mean[791]	-0.56	3.3e-4	0.02	-0.61	-0.58	-0.56	-0.55	-0.52	4487	1.0
y_mean[792]	0.25	4.6e-4	0.03	0.18	0.22	0.25	0.27	0.31	5118	1.0
y_mean[793]	-0.89	4.1e-4	0.03	-0.94	-0.9	-0.89	-0.87	-0.83	4642	1.0
y_mean[794]	-0.75	3.7e-4	0.03	-0.8	-0.77	-0.75	-0.73	-0.7	4783	1.0
y_mean[795]	-0.19	4.3e-4	0.03	-0.25	-0.21	-0.19	-0.17	-0.14	4809	1.0
y_mean[796]	-0.71	4.2e-4	0.03	-0.77	-0.73	-0.71	-0.69	-0.66	4490	1.0
y_mean[797]	-0.24	4.1e-4	0.03	-0.3	-0.26	-0.24	-0.23	-0.19	4620	1.0
y_mean[798]	-0.56	3.7e-4	0.02	-0.61	-0.58	-0.56	-0.54	-0.51	4476	1.0
y_mean[799]	-0.43	3.0e-4	0.02	-0.48	-0.45	-0.44	-0.42	-0.4	4557	1.0
y_mean[800]	1.19	6.2e-4	0.04	1.11	1.16	1.19	1.22	1.27	4239	1.0
y_mean[801]	2.14	1.0e-3	0.07	2.01	2.09	2.14	2.18	2.27	4439	1.0
y_mean[802]	-0.52	4.3e-4	0.03	-0.57	-0.54	-0.52	-0.5	-0.46	4845	1.0
y_mean[803]	-0.29	3.4e-4	0.02	-0.34	-0.31	-0.29	-0.28	-0.25	4292	1.0
y_mean[804]	-0.69	3.7e-4	0.02	-0.74	-0.71	-0.69	-0.67	-0.64	4522	1.0
y_mean[805]	0.87	5.8e-4	0.04	0.79	0.84	0.87	0.9	0.95	4987	1.0
y_mean[806]	-0.43	3.4e-4	0.02	-0.47	-0.44	-0.43	-0.41	-0.38	4354	1.0
y_mean[807]	0.37	5.5e-4	0.03	0.3	0.35	0.37	0.39	0.44	3949	1.0
y_mean[808]	-1.14	4.6e-4	0.03	-1.2	-1.16	-1.14	-1.12	-1.08	4396	1.0
y_mean[809]	-0.29	6.2e-4	0.04	-0.37	-0.32	-0.29	-0.26	-0.2	4402	1.0
y_mean[810]	-1.05	5.6e-4	0.04	-1.13	-1.08	-1.05	-1.03	-0.98	4375	1.0
y_mean[811]	-0.46	5.1e-4	0.04	-0.53	-0.48	-0.46	-0.43	-0.38	5407	1.0
y_mean[812]	-0.11	4.3e-4	0.03	-0.16	-0.13	-0.11	-0.09	-0.05	4155	1.0
y_mean[813]	0.97	6.7e-4	0.04	0.89	0.94	0.97	1.0	1.06	4250	1.0
y_mean[814]	-0.63	5.5e-4	0.04	-0.7	-0.65	-0.63	-0.6	-0.55	4919	1.0
y_mean[815]	-0.67	3.3e-4	0.02	-0.71	-0.68	-0.67	-0.65	-0.63	4619	1.0
y_mean[816]	-0.61	3.5e-4	0.02	-0.66	-0.63	-0.62	-0.6	-0.57	4523	1.0
y_mean[817]	5.55	2.3e-3	0.15	5.26	5.45	5.55	5.65	5.84	4225	1.0
y_mean[818]	-0.66	3.8e-4	0.03	-0.71	-0.68	-0.66	-0.64	-0.61	4506	1.0
y_mean[819]	-0.64	3.4e-4	0.02	-0.69	-0.66	-0.64	-0.62	-0.6	4520	1.0
J _modif [010]	0.01	J. 10 1	0.02	0.00	0.00	0.01	0.02	0.0	1020	1.0

y_mean[820]	1.39	5.6e-4	0.04	1.32	1.37	1.39	1.42	1.46	4464	1.0
y_mean[821]	-0.57	3.6e-4	0.02	-0.62	-0.59	-0.57	-0.55	-0.52	4564	1.0
y_mean[822]	0.7	4.3e-4	0.03	0.64	0.68	0.7	0.72	0.76	4696	1.0
y_mean[823]	0.42	3.8e-4	0.03	0.37	0.4	0.42	0.43	0.47	4521	1.0
y_mean[824]	-0.02	2.9e-4	0.02	-0.06	-0.03	-0.02-	-7.3e-3	0.02	4489	1.0
y_mean[825]	-0.39	3.3e-4	0.02	-0.43	-0.4	-0.39	-0.37	-0.34	4604	1.0
y_mean[826]	-0.25	4.2e-4	0.03	-0.3	-0.27	-0.25	-0.23	-0.19	4343	1.0
y_mean[827]	0.6	4.3e-4	0.03	0.55	0.58	0.6	0.62	0.65	4281	1.0
y_mean[828]	0.02	3.2e-4	0.02		9.7e-3	0.02	0.04	0.06	4409	1.0
y_mean[829]	-0.01	3.7e-4	0.03	-0.06	-0.03		4.7e-3	0.04	4535	1.0
y_mean[830]	0.9	7.7e-4	0.05	0.81	0.87	0.9	0.93	1.0	3895	1.0
y_mean[831]	1.63	8.9e-4	0.06	1.53	1.59	1.63	1.67	1.75	3999	1.0
y_mean[832]	-0.86	5.3e-4	0.04	-0.93	-0.88	-0.86	-0.84	-0.79	4838	1.0
y_mean[833]	-0.61	3.1e-4	0.02	-0.65	-0.62	-0.61	-0.59	-0.57	4526	1.0
y_mean[834]	-0.53	3.1e 4 3.2e-4	0.02	-0.57	-0.54	-0.53	-0.51	-0.48	4429	1.0
y_mean[835]	-0.54	4.0e-4	0.02	-0.6	-0.56	-0.54	-0.53	-0.49	4474	1.0
y_mean[836]	0.22	6.0e-4	0.03	0.14	0.19	0.22	0.24	0.49	4484	1.0
y_mean[837]	1.92	7.4e-4	0.04	1.82	1.88	1.92	1.95	2.01	4341	1.0
• –			0.03	0.15						
y_mean[838]	0.22	5.4e-4			0.19	0.22	0.24	0.29	4330	1.0
y_mean[839]	0.17	4.1e-4	0.03	0.11	0.15	0.17	0.18	0.22	4233	1.0
y_mean[840]	-0.66	3.9e-4	0.03	-0.71	-0.68	-0.66	-0.64	-0.61	4505	1.0
y_mean[841]	0.31	2.9e-4	0.02	0.28	0.3	0.31	0.33	0.35	4700	1.0
y_mean[842]	0.38	7.9e-4	0.05	0.29	0.34	0.38	0.41	0.47	3679	1.0
y_mean[843]	-0.96	6.1e-4	0.04	-1.04	-0.99	-0.96	-0.93	-0.88	4327	1.0
y_mean[844]	0.12	3.4e-4	0.02	0.08	0.11	0.12	0.14	0.17	4289	1.0
y_mean[845]	0.04	3.2e-4		1.5e-3	0.02	0.04	0.05	0.08	4379	1.0
y_mean[846]	1.06	6.5e-4	0.04	0.98	1.03	1.06	1.09	1.14	4470	1.0
y_mean[847]	0.23	3.8e-4	0.03	0.18	0.21	0.23	0.25	0.28	4339	1.0
y_mean[848]	1.24	6.7e-4	0.04	1.16	1.21	1.24	1.27	1.33	4419	1.0
y_mean[849]	1.09	7.5e-4	0.05	0.99	1.05	1.09	1.12	1.19	4665	1.0
y_mean[850]	-0.24	3.1e-4	0.02	-0.29	-0.26	-0.24	-0.23	-0.2	4511	1.0
y_mean[851]	1.3	7.1e-4	0.05	1.2	1.26	1.3	1.33	1.39	4258	1.0
y_mean[852]	-0.72	3.8e-4	0.03	-0.77	-0.73	-0.72	-0.7	-0.66	4782	1.0
y_mean[853]	-0.72	4.4e-4	0.03	-0.79	-0.75	-0.72	-0.7	-0.66	4833	1.0
y_mean[854]	-0.27	3.7e-4	0.02	-0.32	-0.29	-0.27	-0.26	-0.23	4185	1.0
y_mean[855]	-0.23	4.7e-4	0.03	-0.29	-0.25	-0.23	-0.21	-0.17	4581	1.0
y_mean[856]	-0.7	4.7e-4	0.03	-0.76	-0.72	-0.7	-0.67	-0.63	4443	1.0
y_mean[857]	0.14	5.9e-4	0.04	0.08	0.12	0.14	0.17	0.22	3797	1.0
y_mean[858]	0.05	3.1e-4	0.02	0.01	0.04	0.05	0.07	0.09	4437	1.0
y_mean[859]	-0.04	6.1e-4	0.04	-0.11	-0.07	-0.04	-0.02	0.03	3761	1.0
y_mean[860]	0.24	3.9e-4	0.03	0.19	0.22	0.24	0.26	0.29	4278	1.0
y_mean[861]	0.35	5.2e-4	0.04	0.28	0.33	0.35	0.37	0.42	4745	1.0
y_mean[862]	0.27	4.5e-4	0.03	0.21	0.25	0.27	0.29	0.33	4217	1.0
y_mean[863]	-0.68	3.9e-4	0.03	-0.74	-0.7	-0.68	-0.67	-0.63	4502	1.0
y_mean[864]	-0.16	4.5e-4	0.03	-0.21	-0.18	-0.16	-0.14	-0.1	3976	1.0
y_mean[865]	-0.11	7.0e-4	0.05	-0.19	-0.14	-0.11	-0.07	-0.01	4531	1.0
y_mean[866]	0.1	5.5e-4	0.04	0.02		0.1	0.12	0.17	4672	1.0
y_mean[867]	-0.14	3.5e-4	0.02	-0.19	-0.16	-0.14	-0.13	-0.1	4926	1.0
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y_mean[868]	0.78	7.7e-4	0.05	0.69	0.75	0.78	0.81	0.88	3799	1.0
y_mean[869]	-0.76	5.0e-4	0.03	-0.82	-0.78	-0.76	-0.73	-0.69	4330	1.0
y_mean[870]	0.59	4.3e-4	0.03	0.54	0.57	0.59	0.61	0.65	4298	1.0
y_mean[871]	0.54	7.3e-4	0.05	0.45	0.51	0.54	0.57	0.64	4260	1.0
y_mean[872]	0.02	3.1e-4	0.02	-0.02	1.7e-3	0.02	0.03	0.05	4421	1.0
y_mean[873]	1.17	6.9e-4	0.05	1.09	1.14	1.17	1.2	1.26	4334	1.0
y_mean[874]	-0.1	3.0e-4	0.02	-0.14	-0.11	-0.1	-0.08	-0.06	4658	1.0
y_mean[875]	-0.4	2.9e-4	0.02	-0.44	-0.42	-0.4	-0.39	-0.37	4591	1.0
y_mean[876]	-0.16	3.4e-4	0.02	-0.21	-0.18	-0.16	-0.15	-0.12	4611	1.0
y_mean[877]	-0.18	4.6e-4	0.03	-0.24	-0.2	-0.18	-0.16	-0.12	4696	1.0
y_mean[878]	-0.73	5.0e-4	0.03	-0.8	-0.76	-0.73	-0.71	-0.67	4429	1.0
y_mean[879]	-0.06	6.9e-4	0.05	-0.16	-0.09	-0.06	-0.03	0.04	4984	1.0
y_mean[880]	-1.03	7.9e-4	0.05	-1.13	-1.06	-1.03	-0.99	-0.93	4402	1.0
y_mean[881]	-0.42	3.6e-4	0.03	-0.47	-0.44	-0.42	-0.41	-0.37	4796	1.0
y_mean[882]	-0.45	3.3e-4	0.02	-0.49	-0.47	-0.45	-0.43	-0.41	4362	1.0
y_mean[883]	-0.46	3.7e-4	0.02	-0.5	-0.47	-0.46	-0.44	-0.41	4348	1.0
y_mean[884]	-0.82	4.1e-4	0.02	-0.88	-0.84	-0.82	-0.8	-0.76	4725	1.0
y_mean[885]	0.55	4.1e 4 4.8e-4	0.03	0.49	0.52	0.55	0.56	0.76	3803	1.0
y_mean[886]	1.24	5.5e-4	0.03	1.17	1.22	1.24	1.27	1.32	4577	1.0
• =	1.73	8.4e-4	0.04	1.62	1.69	1.73	1.76	1.83	4126	1.0
y_mean[887]				2.07				2.39		
y_mean[888]	2.23	1.3e-3	0.08		2.18	2.23	2.29		4055	1.0
y_mean[889]	-0.52	3.0e-4	0.02	-0.56	-0.53	-0.52	-0.5	-0.48	4443	1.0
y_mean[890]	-0.31	4.6e-4	0.03	-0.36	-0.32	-0.31	-0.29	-0.25	4066	1.0
y_mean[891]	-0.04	5.2e-4	0.03	-0.1	-0.06	-0.04	-0.01	0.03	3853	1.0
y_mean[892]	0.54	6.1e-4	0.04	0.46	0.51	0.54	0.57	0.62	4383	1.0
y_mean[893]	-0.6	5.9e-4	0.04	-0.67	-0.62	-0.6	-0.57	-0.52	4293	1.0
y_mean[894]	0.66	6.8e-4	0.04	0.57	0.63	0.66	0.69	0.75	4257	1.0
y_mean[895]	0.6	5.5e-4	0.03	0.53	0.57	0.6	0.62	0.66	3822	1.0
y_mean[896]	3.31	1.3e-3	0.08	3.15	3.25	3.31	3.36	3.47	4106	1.0
y_mean[897]	-0.01	4.3e-4	0.03	-0.07	-0.03		4.9e-3	0.04	4030	1.0
y_mean[898]	-0.74	3.6e-4	0.03	-0.79	-0.76	-0.74	-0.72	-0.69	4748	1.0
y_mean[899]	0.53	4.4e-4	0.03	0.47	0.51	0.53	0.55	0.59	4442	1.0
y_mean[900]	0.37	6.1e-4	0.04	0.3	0.34	0.37	0.4	0.45	4135	1.0
y_mean[901]	-0.78	4.1e-4	0.03	-0.83	-0.8	-0.78	-0.76	-0.72	4565	1.0
y_mean[902]	0.05	4.0e-4	0.03-	7.8e-3	0.03	0.05	0.06	0.1	4569	1.0
y_mean[903]	-0.52	3.4e-4	0.02	-0.57	-0.54	-0.52	-0.5	-0.48	4615	1.0
y_mean[904]	-0.28	3.9e-4	0.02	-0.33	-0.3	-0.28	-0.26	-0.23	4161	1.0
y_mean[905]	0.43	5.3e-4	0.04	0.36	0.41	0.43	0.46	0.5	4492	1.0
y_mean[906]	-1.08	4.6e-4	0.03	-1.14	-1.1	-1.08	-1.06	-1.02	4530	1.0
y_mean[907]	0.4	6.0e-4	0.04	0.32	0.37	0.4	0.42	0.48	4400	1.0
y_mean[908]	-0.12	3.0e-4	0.02	-0.16	-0.13	-0.12	-0.1	-0.08	4697	1.0
y_mean[909]	0.34	6.5e-4	0.04	0.26	0.31	0.34	0.37	0.42	4081	1.0
y_mean[910]	-1.16	4.4e-4	0.03	-1.21	-1.17	-1.16	-1.14	-1.1	4402	1.0
y_mean[911]	-0.38		0.04	-0.45	-0.41	-0.38	-0.36	-0.31	4593	1.0
y_mean[912]	0.83	5.8e-4	0.04	0.75	0.8	0.82	0.85	0.9	4751	1.0
y_mean[913]	-0.29	3.6e-4	0.02	-0.34	-0.31	-0.29	-0.27	-0.24	4361	1.0
y_mean[914]	0.3	8.5e-4	0.05	0.19	0.26	0.3	0.33	0.41	4199	1.0
y_mean[915]	1.15	5.2e-4	0.03	1.08	1.12	1.15	1.17	1.21	4299	1.0
÷ =										

y_mean[916]	0.33	4.4e-4	0.03	0.27	0.31	0.33	0.35	0.39	4959	1.0
y_mean[917]	-0.84	5.2e-4	0.03	-0.91	-0.87	-0.84	-0.82	-0.78	4485	1.0
y_mean[918]	-0.53	3.1e-4	0.02	-0.57	-0.55	-0.53	-0.52	-0.49	4552	1.0
y_mean[919]	-0.26	3.7e-4	0.03	-0.32	-0.28	-0.26	-0.25	-0.21	5175	1.0
y_mean[920]	-0.93	4.3e-4	0.03	-0.99	-0.95	-0.93	-0.91	-0.88	4708	1.0
y_mean[921]	0.68	5.7e-4	0.04	0.61	0.66	0.68	0.71	0.76	4290	1.0
y_mean[922]	1.41	7.5e-4	0.05	1.33	1.38	1.42	1.44	1.51	3714	1.0
y_mean[923]	-0.52	3.1e-4	0.02	-0.56	-0.53	-0.52	-0.5	-0.48	4574	1.0
y_mean[924]	0.07	3.1e-4	0.02	0.03	0.06	0.07	0.08	0.11	4350	1.0
y_mean[925]	-0.25	4.2e-4	0.03	-0.3	-0.27	-0.25	-0.23	-0.19	4107	1.0
y_mean[926]	0.54	6.8e-4	0.04	0.46	0.51	0.54	0.58	0.63	4291	1.0
y_mean[927]	0.11	3.3e-4	0.02	0.07	0.1	0.11	0.13	0.15	4300	1.0
y_mean[928]	1.42	7.2e-4	0.05	1.33	1.39	1.42	1.46	1.52	4318	1.0
y_mean[929]	-0.78	5.1e-4	0.04	-0.85	-0.81	-0.78	-0.76	-0.71	4936	1.0
y_mean[930]	0.21	4.2e-4	0.03	0.15	0.19	0.21	0.23	0.27	4632	1.0
y_mean[931]	-1.01	4.7e-4	0.03	-1.07	-1.03	-1.01	-0.99	-0.95	4337	1.0
y_mean[932]	-0.56	3.1e-4	0.03	-0.6	-0.57	-0.56	-0.54	-0.52	4533	1.0
y_mean[933]	0.9	8.5e-4	0.02	0.8	0.86	0.9	0.94	1.01	4249	1.0
y_mean[934]	1.14	6.7e-4	0.05	1.05	1.11	1.14	1.18	1.24	4877	1.0
y_mean[934] y_mean[935]	0.21	5.5e-4	0.03	0.14	0.19	0.21	0.24	0.29	4783	1.0
y_mean[936]	-0.15	3.2e-4	0.04	-0.2	-0.17	-0.15	-0.14	-0.11	4874	1.0
y_mean[937]	-0.15	3.2e-4 3.6e-4	0.02	-0.55	-0.17	-0.15	-0.14	-0.11	4510	1.0
• =										
y_mean[938]	-0.33	3.5e-4	0.02	-0.37	-0.34	-0.33	-0.31	-0.29	4328	1.0
y_mean[939]	-0.72	4.3e-4	0.03	-0.78	-0.74	-0.72	-0.7	-0.67	4488	1.0
y_mean[940]	-0.4	3.2e-4	0.02	-0.44	-0.41	-0.4	-0.38	-0.35	4545	1.0
y_mean[941]	-0.31	3.7e-4	0.02	-0.36	-0.33	-0.32	-0.3	-0.27	4124	1.0
y_mean[942]	0.4	4.2e-4	0.03	0.35	0.38	0.4	0.42	0.45	4097	1.0
y_mean[943]	-0.04	5.1e-4	0.03	-0.11	-0.07	-0.04	-0.02	0.02	4655	1.0
y_mean[944]	-0.73	4.4e-4	0.03	-0.79	-0.75	-0.73	-0.71	-0.67	4483	1.0
y_mean[945]	-0.46	3.0e-4	0.02	-0.5	-0.47	-0.46	-0.45	-0.42	4467	1.0
y_mean[946]	0.11	4.9e-4	0.03	0.05	0.09	0.11	0.13	0.17	4133	1.0
y_mean[947]	-0.12	4.8e-4	0.03	-0.18	-0.14	-0.12	-0.1	-0.06	4283	1.0
y_mean[948]	-0.72	5.2e-4	0.03	-0.79	-0.75	-0.72	-0.7		4311	1.0
y_mean[949]	0.37	4.3e-4	0.03	0.32	0.35	0.37	0.39	0.42	3983	1.0
y_mean[950]	1.02	8.0e-4	0.06	0.92	0.99	1.02	1.06	1.13	4765	1.0
y_mean[951]	0.55	5.0e-4	0.03	0.48	0.52	0.55	0.57	0.61	4078	1.0
y_mean[952]	-1.02	4.2e-4	0.03	-1.07	-1.04	-1.02	-1.0	-0.97	4510	1.0
y_mean[953]	0.35	5.0e-4	0.03	0.29	0.33	0.35	0.38	0.42	4585	1.0
y_mean[954]	-0.66	3.3e-4	0.02	-0.7	-0.68	-0.66	-0.65	-0.62	4546	1.0
y_mean[955]	-1.13	4.3e-4	0.03	-1.19	-1.15	-1.13	-1.11	-1.08	4411	1.0
y_mean[956]	0.34	5.7e-4	0.04	0.26	0.31	0.34	0.36	0.41	4143	1.0
y_mean[957]	-0.75	3.7e-4	0.02	-0.8	-0.76	-0.75	-0.73	-0.7	4676	1.0
y_mean[958]	-0.95	4.2e-4	0.03	-1.01	-0.97	-0.95	-0.93	-0.9	4637	1.0
y_mean[959]	0.55	5.1e-4	0.03	0.48	0.52	0.55	0.57	0.61	4482	1.0
y_mean[960]	0.63	6.2e-4	0.04	0.55	0.6	0.63	0.65	0.7	3912	1.0
y_mean[961]	-0.54	4.6e-4	0.03	-0.6	-0.56	-0.54	-0.52	-0.48	4490	1.0
y_mean[962]	-1.12	4.5e-4	0.03	-1.18	-1.14	-1.12	-1.1	-1.06	4469	1.0
y_mean[963]	-0.05	4.3e-4	0.03	-0.1	-0.07	-0.05	-0.03	6.0e-3	4047	1.0

y_mean[964]	-0.22	4.0e-4	0.03	-0.27	-0.24	-0.22	-0.21	-0.17	4124	1.0
y_mean[965]	-0.48	4.1e-4	0.03	-0.53	-0.5	-0.48	-0.46	-0.42	4731	1.0
y_mean[966]	2.54	8.5e-4	0.06	2.44	2.51	2.54	2.58	2.65	4386	1.0
y_mean[967]	0.38	4.2e-4	0.03	0.32	0.36	0.38	0.4	0.43	4572	1.0
y_mean[968]	0.6	1.1e-3	0.08	0.45	0.55	0.6	0.65	0.75	4361	1.0
y_mean[969]	-1.0	5.9e-4	0.04	-1.08	-1.03	-1.0	-0.97	-0.92	4549	1.0
y_mean[970]	0.46	6.6e-4	0.05	0.37	0.42	0.46	0.49	0.55	4752	1.0
y_mean[971]	-0.05	3.0e-4	0.02	-0.09	-0.06	-0.05	-0.04	-0.01	4518	1.0
y_mean[972]	-0.97	5.0e-4	0.03	-1.04	-0.99	-0.97	-0.95	-0.91	4453	1.0
y_mean[973]	0.44	4.2e-4	0.03	0.38	0.42	0.44	0.46	0.5	4617	1.0
y_mean[974]	-0.23	4.9e-4	0.03	-0.3	-0.26	-0.23	-0.21	-0.17	4519	1.0
y_mean[974] y_mean[975]	-0.33	3.6e-4	0.02	-0.38	-0.35	-0.33	-0.32	-0.29	4404	1.0
y_mean[976]	0.73	4.9e-4	0.02	0.66	0.71	0.73	0.75	0.79	4325	1.0
y_mean[970] y_mean[977]	0.73	4.2e-4	0.03	0.46	0.71	0.73	0.73	0.73	4416	1.0
y_mean[977] y_mean[978]	-0.2	3.7e-4	0.03	-0.25	-0.22	-0.2	-0.18	-0.15	4620	1.0
• =			0.03							1.0
y_mean[979]	-0.31	4.8e-4		-0.37	-0.33	-0.31	-0.29	-0.25	4043	
y_mean[980]	-0.34	4.3e-4	0.03	-0.4	-0.36	-0.34	-0.32	-0.28	4803	1.0
y_mean[981]	0.37	4.5e-4	0.03	0.31	0.35	0.37	0.38	0.42	3901	1.0
y_mean[982]	0.16	6.2e-4	0.04	0.09	0.14	0.16	0.19	0.24	3800	1.0
y_mean[983]	1.28	6.5e-4	0.04	1.2	1.25	1.28	1.31	1.36	4232	1.0
y_mean[984]	0.25	7.1e-4	0.04	0.16	0.22	0.25	0.28	0.33	3870	1.0
y_mean[985]	0.46	5.7e-4	0.03	0.39	0.44	0.46	0.49	0.53	3757	1.0
y_mean[986]	-0.01	2.9e-4	0.02	-0.05	-0.03		3.2e-4	0.02	4459	1.0
y_mean[987]	-0.84	4.2e-4	0.03	-0.9	-0.86	-0.84	-0.82	-0.78	4731	1.0
y_mean[988]	-0.63	3.7e-4	0.03	-0.68	-0.65	-0.63	-0.62	-0.58	4516	1.0
y_mean[989]	-0.74	3.8e-4	0.03	-0.79	-0.76	-0.74	-0.72	-0.69	4562	1.0
y_mean[990]	0.3	3.8e-4	0.02	0.25	0.28	0.3	0.32	0.35	4170	1.0
y_mean[991]	0.08	3.9e-4	0.03	0.03	0.06	0.08	0.1	0.14	4948	1.0
y_mean[992]	-0.52	5.5e-4	0.04	-0.58	-0.54	-0.52	-0.49	-0.45	4147	1.0
y_mean[993]	-0.61	6.2e-4	0.04	-0.69	-0.64	-0.61	-0.59	-0.54	4276	1.0
y_mean[994]	-0.23	3.9e-4	0.03	-0.28	-0.24	-0.23	-0.21	-0.17	4621	1.0
y_mean[995]	0.23	4.0e-4	0.03	0.18	0.21	0.23	0.25	0.28	4233	1.0
y_mean[996]	0.43	8.0e-4	0.06	0.31	0.39	0.43	0.46	0.54	4834	1.0
y_mean[997]	-1.12	4.3e-4	0.03	-1.18	-1.14	-1.12	-1.1	-1.07	4411	1.0
y_mean[998]	-0.06	3.9e-4	0.03	-0.11	-0.08	-0.06	-0.04-	8.4e-3	4412	1.0
y_mean[999]	0.81	6.2e-4	0.04	0.73	0.78	0.81	0.83	0.88	3765	1.0
y_mean[1000]	-0.22	3.4e-4	0.02	-0.27	-0.24	-0.22	-0.21	-0.18	4956	1.0
y_mean[1001]	-0.55	3.2e-4	0.02	-0.59	-0.56	-0.55	-0.53	-0.51	4548	1.0
y_mean[1002]	-0.06	3.0e-4	0.02	-0.1	-0.07	-0.06	-0.05	-0.02	4513	1.0
y_mean[1003]	-0.31	2.9e-4	0.02	-0.35	-0.32	-0.31	-0.3	-0.27	4570	1.0
y_mean[1004]	0.1	2.9e-4	0.02	0.06	0.09	0.1	0.11	0.14	4842	1.0
y_mean[1005]	-0.38	3.9e-4	0.03	-0.44	-0.4	-0.38	-0.36	-0.33	4659	1.0
y_mean[1006] y_mean[1006]	-0.08	5.8e-4	0.03	-0.15	-0.11	-0.08		-3.6e-3	4273	1.0
y_mean[1007]	0.14	3.3e-4	0.04	0.13	0.11	0.14	0.16	0.18	4311	1.0
y_mean[1007] y_mean[1008]	0.14	4.2e-4	0.02	0.51	0.13	0.14	0.10	0.10	4312	1.0
y_mean[1000] y_mean[1009]	0.30	3.2e-4	0.03	0.05	0.08	0.30	0.33	0.02	4512	1.0
y_mean[1010] y_mean[1010]	1.46	6.8e-4	0.02	1.38	1.43	1.46	1.49	1.55	4099	1.0
• –										
y_mean[1011]	0.34	4.2e-4	0.03	0.29	0.33	0.34	0.36	0.4	4333	1.0

y_mean[1012]	-0.4	3.1e-4	0.02	-0.44	-0.42	-0.4	-0.39	-0.36	4531	1.0
y_mean[1013]	-1.07	4.2e-4	0.03	-1.12	-1.09	-1.07	-1.05	-1.02	4431	1.0
y_mean[1014]	-0.5	3.6e-4	0.02	-0.55	-0.52	-0.5	-0.48	-0.45	4668	1.0
y_mean[1015]	-0.75	3.9e-4	0.03	-0.8	-0.77	-0.75	-0.73	-0.7	4831	1.0
y_mean[1016]	1.32	6.1e-4	0.04	1.24	1.29	1.32	1.35	1.4	4091	1.0
y_mean[1017]	0.72	5.4e-4	0.03	0.66	0.7	0.72	0.74	0.79	3825	1.0
y_mean[1018]	0.09	5.6e-4	0.04	0.02	0.06	0.09	0.11	0.16	4125	1.0
y_mean[1019]	-0.12	5.0e-4	0.03	-0.18	-0.14	-0.12	-0.1	-0.06	4084	1.0
y_mean[1020]	-0.09	3.6e-4	0.02	-0.14	-0.11	-0.09	-0.08	-0.05	4499	1.0
y_mean[1021]	-0.61	3.7e-4	0.02	-0.66	-0.63	-0.61	-0.6	-0.57	4526	1.0
y_mean[1022]	0.12	3.3e-4	0.02	0.08	0.1	0.12	0.13	0.16	4515	1.0
y_mean[1023]	-0.01	3.5e-4	0.02	-0.06	-0.03		4.3e-3	0.03	4529	1.0
y_mean[1024]	-0.19	5.0e-4	0.03	-0.25	-0.21	-0.19	-0.16	-0.12	4534	1.0
y_mean[1024] y_mean[1025]	-0.67	6.1e-4	0.03	-0.75	-0.7	-0.67	-0.64	-0.59	4591	1.0
y_mean[1026]	-0.26	3.5e-4	0.04	-0.3	-0.27	-0.26	-0.24	-0.21	4221	1.0
y_mean[1027]	-0.39	3.2e-4	0.02	-0.43	-0.4	-0.39	-0.37	-0.35	4352	1.0
y_mean[1027] y_mean[1028]	1.91	1.1e-3	0.02	$\frac{-0.43}{1.77}$	1.86	1.91	1.96	2.05	4352	1.0
• –			0.07					-0.97		
y_mean[1029]	-1.03	4.7e-4		-1.09	-1.06	-1.03	-1.01		4464	1.0
y_mean[1030]	-0.75	3.7e-4	0.03	-0.8	-0.77	-0.75	-0.73	-0.7	4631	1.0
y_mean[1031]	-0.28	2.9e-4	0.02	-0.31	-0.29	-0.28	-0.26	-0.24	4703	1.0
y_mean[1032]	0.23	6.0e-4	0.04	0.16	0.21	0.23	0.26	0.31	3977	1.0
y_mean[1033]	0.6	6.1e-4	0.04	0.52	0.57	0.6	0.62	0.68	4464	1.0
y_mean[1034]	0.5	4.2e-4	0.03	0.45	0.49	0.5	0.52	0.56	4365	1.0
y_mean[1035]	-0.15	4.1e-4	0.03	-0.21	-0.17	-0.15	-0.13	-0.1	4954	1.0
y_mean[1036]	0.19	3.8e-4	0.02	0.14	0.17	0.19	0.2	0.23	4213	1.0
y_mean[1037]	0.03	3.3e-4	0.02	-0.02	0.01	0.03	0.04	0.07	4483	1.0
y_mean[1038]	2.25	1.0e-3	0.07	2.12	2.21	2.25	2.29	2.38	4313	1.0
y_mean[1039]	-0.11	3.1e-4	0.02	-0.15	-0.12	-0.11	-0.09	-0.07	4583	1.0
y_mean[1040]	-0.5	3.0e-4	0.02	-0.54	-0.51	-0.5	-0.49	-0.46	4558	1.0
y_mean[1041]	-0.36	3.4e-4	0.02	-0.4	-0.38	-0.36	-0.35	-0.32	4178	1.0
y_mean[1042]	0.53	4.5e-4	0.03	0.47	0.51	0.53	0.55	0.59	4442	1.0
y_mean[1043]	-0.41	3.1e-4	0.02	-0.45	-0.42	-0.41	-0.39	-0.37	4492	1.0
y_mean[1044]	0.41	5.7e-4	0.04	0.33	0.38	0.41	0.43	0.48	4824	1.0
y_mean[1045]	0.05	3.5e-4	0.02	1.7e-3	0.03	0.05	0.06	0.09	4509	1.0
y_mean[1046]	0.88	7.7e-4	0.05	0.79	0.85	0.88	0.91	0.97	3748	1.0
y_mean[1047]	0.37	4.1e-4	0.03	0.32	0.35	0.37	0.39	0.42	3961	1.0
y_mean[1048]	-1.01	4.3e-4	0.03	-1.07	-1.03	-1.01	-0.99	-0.96	4567	1.0
y_mean[1049]	0.82	6.3e-4	0.04	0.74	0.79	0.82	0.85	0.9	4211	1.0
y_mean[1050]	1.1	7.7e-4	0.05	1.0	1.07	1.1	1.13	1.2	4288	1.0
y_mean[1051]	-0.19	3.7e-4	0.03	-0.24	-0.2	-0.19	-0.17	-0.14	5055	1.0
y_mean[1052]	-0.76	4.1e-4	0.03	-0.82	-0.78	-0.76	-0.74	-0.71	4551	1.0
y_mean[1053]	-0.55	3.3e-4	0.02	-0.59	-0.56	-0.55	-0.53	-0.51	4464	1.0
y_mean[1054]	0.32	6.4e-4	0.04	0.23	0.29	0.32	0.34	0.4	4259	1.0
y_mean[1055]	-0.22	3.4e-4	0.02	-0.27	-0.24	-0.22	-0.21	-0.18	4286	1.0
y_mean[1056]	-0.38	3.4e-4	0.02	-0.42	-0.4	-0.38	-0.36	-0.34	4552	1.0
y_mean[1057]	0.76	4.7e-4	0.03	0.7	0.74	0.76	0.78	0.82	4146	1.0
y_mean[1058]	0.42	6.9e-4	0.04	0.34	0.39	0.42	0.45	0.5	3899	1.0
y_mean[1059]	0.62	4.6e-4	0.03	0.57	0.6	0.62	0.65	0.68	4278	1.0
J	0.02	1.00 1	0.00	0.01	3.5	0.02	0.00	0.00	12.0	1.0

y_mean[1060]	0.03	4.7e-4	0.03	-0.02	0.01	0.03	0.05	0.09	3958	1.0
y_mean[1061]	0.37	6.7e-4	0.04	0.28	0.34	0.37	0.4	0.45	4378	1.0
y_mean[1062]	-0.56	3.0e-4	0.02	-0.6	-0.57	-0.56	-0.54	-0.52	4504	1.0
y_mean[1063]	1.18	6.7e-4	0.04	1.1	1.15	1.18	1.21	1.27	4303	1.0
y_mean[1064]	-0.03	5.1e-4	0.03	-0.09	-0.05	-0.03-	-8.6e-3	0.03	3849	1.0
y_mean[1065]	-1.01	4.2e-4	0.03	-1.06	-1.03	-1.01	-0.99	-0.96	4406	1.0
y_mean[1066]	0.88	7.8e-4	0.05	0.78	0.85	0.88	0.91	0.98	4012	1.0
y_mean[1067]	-0.11	4.5e-4	0.03	-0.17	-0.13	-0.11	-0.09	-0.05	4601	1.0
y_mean[1068]	-0.28	4.3e-4	0.03	-0.33	-0.3	-0.28	-0.26	-0.22	4616	1.0
y_mean[1069]	0.42	3.8e-4	0.02	0.37	0.4	0.42	0.43	0.47	4103	1.0
y_mean[1070]	0.15	5.1e-4	0.03	0.09	0.13	0.15	0.18	0.22	4305	1.0
y_mean[1071]	-0.46	3.1e-4	0.02	-0.5	-0.48	-0.46	-0.45	-0.42	4628	1.0
y_mean[1071] y_mean[1072]	-0.22	4.3e-4	0.02	-0.28	-0.24	-0.22	-0.21	-0.17	4112	1.0
y_mean[1072] y_mean[1073]	-0.63	3.2e-4	0.03	-0.68	-0.65	-0.63	-0.62	-0.59	4560	1.0
y_mean[1073] y_mean[1074]	0.05	3.0e-4		8.0e-3	0.03	0.05	0.02	0.09	4378	1.0
y_mean[1074] y_mean[1075]	-0.18	4.2e-4	0.02	-0.23	-0.2	-0.18	-0.16	-0.13	4075	1.0
v <b>–</b>			0.03		0.11		0.14			
y_mean[1076]	0.12	3.2e-4		0.08		0.12		0.16	4344	1.0
y_mean[1077]	-0.23	3.6e-4	0.02	-0.28	-0.25	-0.23	-0.22	-0.19	4182	1.0
y_mean[1078]	0.04	5.7e-4	0.04	-0.03	0.01	0.04	0.06	0.11	3874	1.0
y_mean[1079]	-0.6	3.9e-4	0.03	-0.65	-0.62	-0.6	-0.58	-0.55	4505	1.0
y_mean[1080]	-0.35	4.9e-4	0.03	-0.42	-0.37	-0.35	-0.33	-0.28	4986	1.0
y_mean[1081]	-0.24	4.1e-4	0.03	-0.29	-0.26	-0.24	-0.22	-0.19	4118	1.0
y_mean[1082]	-0.38	4.3e-4	0.03	-0.43	-0.4	-0.38	-0.36	-0.32	4298	1.0
y_mean[1083]	-0.72	3.6e-4	0.02	-0.77	-0.74	-0.72	-0.71	-0.67	4592	1.0
y_mean[1084]	-1.06	5.9e-4	0.04	-1.14	-1.09	-1.06	-1.03	-0.98	4389	1.0
y_mean[1085]	-0.03	4.8e-4	0.03	-0.09	-0.05	-0.03-	-7.1e-3	0.03	3894	1.0
y_mean[1086]	-0.89	4.3e-4	0.03	-0.94	-0.91	-0.89	-0.87	-0.83	4703	1.0
y_mean[1087]	-0.2	2.9e-4	0.02	-0.23	-0.21	-0.2	-0.18	-0.15	4761	1.0
y_mean[1088]	-0.24	3.6e-4	0.03	-0.29	-0.26	-0.24	-0.22	-0.19	5149	1.0
y_mean[1089]	-0.1	3.0e-4	0.02	-0.14	-0.11	-0.1	-0.08	-0.06	4670	1.0
y_mean[1090]	-0.03	2.9e-4	0.02	-0.07	-0.05	-0.03	-0.02	4.8e-3	4490	1.0
y_mean[1091]	-0.93	4.2e-4	0.03	-0.98	-0.95	-0.93	-0.91	-0.87	4501	1.0
y_mean[1092]	1.22	5.7e-4	0.04	1.15	1.19	1.22	1.24	1.29	4130	1.0
y_mean[1093]	-0.01	5.5e-4	0.03	-0.08	-0.04	-0.01	9.8e-3	0.05	3792	1.0
y_mean[1094]	-0.2	5.2e-4	0.03	-0.26	-0.22	-0.2	-0.17	-0.13	4007	1.0
y_mean[1095]	-0.84	4.2e-4	0.03	-0.9	-0.86	-0.84	-0.82	-0.79	4848	1.0
y_mean[1096]	0.83	5.7e-4	0.04	0.75	0.8	0.83	0.86	0.91	4857	1.0
y_mean[1097]	0.21	6.0e-4	0.04	0.14	0.18	0.21	0.23	0.28	3824	1.0
y_mean[1098]	-1.04	4.1e-4	0.03	-1.1	-1.06	-1.04	-1.02	-0.99	4435	1.0
y_mean[1099]	1.59	5.5e-4	0.04	1.52	1.57	1.59	1.62	1.67	4494	1.0
y_mean[1100]	-0.09	4.7e-4	0.03	-0.15	-0.12	-0.09	-0.08	-0.04	4034	1.0
y_mean[1101]	-0.82	4.5e-4	0.03	-0.88	-0.84	-0.82	-0.8	-0.76	4544	1.0
y_mean[1102]	-0.12	4.2e-4	0.03	-0.17	-0.14	-0.12	-0.1	-0.06	4479	1.0
y_mean[1102] y_mean[1103]	-0.61	3.5e-4	0.02	-0.66	-0.63	-0.62	-0.6	-0.57	4523	1.0
y_mean[1103] y_mean[1104]	-0.6	3.1e-4	0.02	-0.64	-0.62	-0.6	-0.59	-0.56	4526	1.0
y_mean[1104] y_mean[1105]	0.93	7.8e-4	0.02	0.83	0.89	0.93	0.96	1.02	4021	1.0
y_mean[1105] y_mean[1106]	-0.91	8.3e-4	0.06	-1.02	-0.95	-0.91	-0.87	-0.81	4385	1.0
y_mean[1100] y_mean[1107]	-0.91	3.4e-4	0.00	-0.25	-0.22	-0.21	-0.19	-0.31	4850	1.0
λ-meam[1101]	-0.21	5.48-4	0.02	0.20	0.22	0.21	0.19	0.10	+000	1.0

y_mean[1108]	-0.99	4.3e-4	0.03	-1.05	-1.01	-0.99	-0.97	-0.94	4621	1.0
y_mean[1109]	0.1	2.4e-4	0.02	0.06	0.08	0.1	0.11	0.13	5075	1.0
y_mean[1110]	0.85	5.8e-4	0.04	0.78	0.83	0.85	0.88	0.93	4551	1.0
y_mean[1111]	0.51	5.9e-4	0.04	0.43	0.48	0.51	0.54	0.59	4379	1.0
y_mean[1112]	-0.07	4.8e-4	0.03	-0.12	-0.09	-0.07	-0.05-	-6.3e-3	3949	1.0
y_mean[1113]	0.63	4.3e-4	0.03	0.58	0.61	0.63	0.65	0.69	4306	1.0
y_mean[1114]	-0.28	3.4e-4	0.02	-0.32	-0.29	-0.28	-0.26	-0.23	4376	1.0
y_mean[1115]	-0.08	3.2e-4	0.02	-0.12	-0.09	-0.08	-0.06	-0.04	4518	1.0
y_mean[1116]	0.55	5.7e-4	0.04	0.48	0.52	0.55	0.57	0.62	3938	1.0
y_mean[1117]	1.92	6.7e-4	0.04	1.84	1.89	1.92	1.95	2.01	4371	1.0
y_mean[1118]	-0.03	4.8e-4	0.03	-0.09	-0.05	-0.03	-0.01	0.03	3912	1.0
y_mean[1119]	0.66	6.0e-4	0.04	0.59	0.64	0.66	0.68	0.73	3687	1.0
y_mean[1120]	0.69	4.0e-4	0.03	0.64	0.67	0.69	0.71	0.74	4497	1.0
y_mean[1121]	-0.75	3.7e-4	0.03	-0.8	-0.77	-0.75	-0.74	-0.71	4724	1.0
y_mean[1122]	0.69	6.5e-4	0.05	0.59	0.65	0.69	0.72	0.78	5198	1.0
y_mean[1123]	-0.3	2.7e-4	0.02	-0.34	-0.32	-0.3	-0.29	-0.26	4822	1.0
y_mean[1124]	-1.06	4.3e-4	0.03	-1.11	-1.07	-1.06	-1.04	-1.0	4366	1.0
y_mean[1125]	-0.86	4.3e-4	0.03	-0.92	-0.88	-0.86	-0.84	-0.8	4710	1.0
y_mean[1126]	-0.24	3.6e-4	0.02	-0.29	-0.26	-0.24	-0.22	-0.19	4858	1.0
y_mean[1127]	-0.06	5.3e-4	0.03	-0.13	-0.08	-0.06	-0.04	9.4e-3	4221	1.0
y_mean[1128]	0.24	7.4e-4	0.05	0.16	0.21	0.24	0.28	0.34	3860	1.0
y_mean[1129]	-0.39	3.2e-4	0.02	-0.43	-0.4	-0.39	-0.37	-0.35	4352	1.0
y_mean[1130]	-0.33	3.4e-4	0.02	-0.38	-0.35	-0.33	-0.32	-0.29	4347	1.0
y_mean[1131]	0.89	4.3e-4	0.03	0.83	0.87	0.89	0.91	0.94	4258	1.0
y_mean[1132]	0.5	6.5e-4	0.04	0.42	0.47	0.5	0.53	0.59	4266	1.0
y_mean[1133]	0.55	4.4e-4	0.03	0.49	0.53	0.55	0.57	0.61	4335	1.0
y_mean[1134]	-0.45	3.1e-4	0.02	-0.49	-0.46	-0.45	-0.43	-0.41	4593	1.0
y_mean[1135]	-0.65	3.6e-4	0.02	-0.7	-0.67	-0.65	-0.64	-0.61	4513	1.0
y_mean[1136]	0.72	7.6e-4	0.05	0.63	0.69	0.72	0.76	0.82	4352	1.0
y_mean[1137]	-0.48	3.5e-4	0.02	-0.53	-0.5	-0.48	-0.47	-0.44	4377	1.0
y_mean[1138]	0.18	3.5e-4	0.02	0.13	0.16	0.18	0.2	0.23	4782	1.0
y_mean[1139]	-1.1	4.2e-4	0.03	-1.15	-1.12	-1.1	-1.08	-1.04	4416	1.0
y_mean[1140]	2.02	9.5e-4	0.06	1.9	1.98	2.02	2.07	2.15	4203	1.0
y_mean[1141]	-0.04	3.3e-4	0.02	-0.08	-0.05	-0.04	-0.02	7.9e-3	4852	1.0
y_mean[1142]	0.63	8.1e-4	0.05	0.53	0.59	0.63	0.66	0.73	3906	1.0
y_mean[1143]	0.12	3.2e-4	0.02	0.08	0.11	0.12	0.14	0.16	4379	1.0
y_mean[1144]	-0.98	4.3e-4	0.03	-1.04	-1.0	-0.98	-0.96	-0.92	4376	1.0
y_mean[1145]	0.89	5.4e-4	0.03	0.82	0.87	0.89	0.91	0.96	4009	1.0
y_mean[1146]	-0.18	5.0e-4	0.03	-0.24	-0.2	-0.18	-0.16	-0.12	3930	1.0
y_mean[1147]	-0.91	4.4e-4	0.03	-0.97	-0.93	-0.91	-0.89	-0.85	4790	1.0
y_mean[1148]	0.2	5.8e-4	0.04	0.13	0.17	0.2	0.22	0.27	3959	1.0
y_mean[1149]	0.36	6.4e-4	0.04	0.28	0.33	0.36	0.39	0.44	4171	1.0
y_mean[1150]	-1.08	4.2e-4	0.03	-1.14	-1.1	-1.08	-1.06	-1.03	4397	1.0
y_mean[1151]	-0.46	3.0e-4	0.02	-0.5	-0.48	-0.46	-0.45	-0.42	4560	1.0
y_mean[1152]	-0.59	5.0e-4	0.03	-0.66	-0.61	-0.59	-0.57	-0.52	4584	1.0
y_mean[1153]	-0.6	3.4e-4	0.02	-0.65	-0.62	-0.6	-0.59	-0.56	4528	1.0
y_mean[1154]	0.56	4.2e-4	0.03	0.5	0.54	0.56	0.57	0.61	4319	1.0
y_mean[1155]	2.3	1.1e-3	0.07	2.17	2.25	2.29	2.34	2.43	3849	1.0

```
-0.59
                                            -0.64
                                                   -0.61
                                                           -0.59
                                                                   -0.58
y_mean[1156]
                           3.1e-4
                                     0.02
                                                                          -0.55
                                                                                   4520
                                                                                            1.0
                    0.21
                           4.9e-4
                                     0.03
                                             0.15
                                                    0.19
                                                            0.21
                                                                    0.24
                                                                            0.28
                                                                                   4743
y_mean[1157]
                                                                                            1.0
y_mean[1158]
                   -0.58
                           3.8e-4
                                     0.03
                                            -0.63
                                                   -0.59
                                                           -0.58
                                                                   -0.56
                                                                          -0.53
                                                                                   4526
                                                                                            1.0
                   -0.19
                           2.9e-4
                                     0.02
                                           -0.23
                                                   -0.21
                                                           -0.19
                                                                  -0.18
                                                                          -0.15
                                                                                   4688
                                                                                            1.0
y_mean[1159]
                     2.22
                                     0.08
                                             2.07
                                                            2.22
                                                                            2.39
y_mean[1160]
                           1.3e-3
                                                    2.17
                                                                    2.28
                                                                                   4043
                                                                                            1.0
                   -0.08
                           6.7e-4
                                     0.05
                                            -0.17
                                                   -0.11
                                                           -0.08
                                                                  -0.05
                                                                            0.01
                                                                                   4967
                                                                                            1.0
y_mean[1161]
y_mean[1162]
                     1.81
                           7.6e-4
                                     0.05
                                              1.7
                                                    1.77
                                                            1.81
                                                                    1.84
                                                                            1.91
                                                                                   4766
                                                                                            1.0
                   -0.34
                           3.5e-4
                                     0.02
                                            -0.39
                                                   -0.36
                                                           -0.34
                                                                  -0.33
                                                                            -0.3
y_mean[1163]
                                                                                   4144
                                                                                            1.0
                    0.49
                           6.1e-4
                                     0.04
                                             0.41
                                                    0.46
                                                            0.49
                                                                    0.52
                                                                            0.58
                                                                                    4866
                                                                                            1.0
y_mean[1164]
                    -1.0
                           4.3e-4
                                     0.03
                                            -1.06
                                                   -1.02
                                                            -1.0
                                                                  -0.98
                                                                          -0.95
                                                                                   4612
y_mean[1165]
                                                                                            1.0
                    0.02
                           3.2e-4
                                     0.02
                                            -0.02 8.0e-3
                                                            0.02
                                                                    0.04
                                                                            0.06
                                                                                   4461
y_mean[1166]
                                                                                            1.0
                   -0.58
                           3.0e-4
                                     0.02
                                            -0.62
                                                    -0.6
                                                           -0.58
                                                                  -0.57
                                                                          -0.54
                                                                                   4508
                                                                                            1.0
y_mean[1167]
y_mean[1168]
                   -0.65
                           3.7e-4
                                     0.03
                                             -0.7
                                                           -0.65
                                                                            -0.6
                                                                                   4655
                                                   -0.67
                                                                   -0.64
                                                                                            1.0
                           4.4e-4
                                     0.03
                                           -1.21
                                                   -1.17
                   -1.15
                                                           -1.15
                                                                   -1.13
                                                                            -1.1
                                                                                   4418
y_mean[1169]
                                                                                            1.0
                     -1.1
                           4.3e-4
                                     0.03
                                            -1.16
                                                   -1.12
                                                            -1.1
                                                                   -1.08
                                                                          -1.05
                                                                                   4448
y_mean[1170]
                                                                                            1.0
                           5.9e-4
                                     0.04
                    0.88
                                              0.8
                                                    0.85
                                                            0.88
                                                                    0.91
                                                                            0.96
                                                                                   4232
                                                                                            1.0
y_mean[1171]
y_mean[1172]
                     -0.2
                           4.0e-4
                                     0.03
                                           -0.26
                                                   -0.22
                                                            -0.2
                                                                   -0.18
                                                                          -0.15
                                                                                   5100
                                                                                            1.0
                   -0.63
                                     0.02
                                            -0.67
                                                           -0.63
                                                                                   4574
y_mean[1173]
                           3.2e-4
                                                   -0.65
                                                                  -0.62
                                                                          -0.59
                                                                                            1.0
y_mean[1174]
                      0.3
                           3.5e-4
                                     0.02
                                             0.25
                                                    0.28
                                                             0.3
                                                                    0.31
                                                                            0.34
                                                                                   4189
                                                                                            1.0
                                     0.03
y_mean[1175]
                   -0.39
                           4.4e-4
                                            -0.45
                                                   -0.41
                                                           -0.39
                                                                   -0.37
                                                                          -0.33
                                                                                   5052
                                                                                            1.0
                   -0.13
                           3.1e-4
                                     0.02
                                            -0.17
                                                   -0.15
                                                           -0.13
                                                                          -0.09
y_mean[1176]
                                                                   -0.12
                                                                                   4832
                                                                                            1.0
                     0.7
                           1.1e-3
                                     0.07
                                             0.55
                                                    0.65
                                                             0.7
                                                                    0.75
                                                                            0.84
                                                                                   4122
y_mean[1177]
                                                                                            1.0
                   -0.83
                           4.9e-4
                                     0.03
                                            -0.89
                                                           -0.82
                                                                    -0.8
                                                                          -0.76
y_mean[1178]
                                                   -0.85
                                                                                   4502
                                                                                            1.0
                   -0.43
                           3.1e-4
                                     0.02
                                            -0.47
                                                   -0.44
                                                           -0.43
                                                                   -0.41
                                                                          -0.39
                                                                                   4565
                                                                                            1.0
y_mean[1179]
y_mean[1180]
                   -0.76
                           4.1e-4
                                     0.03
                                            -0.82
                                                   -0.78
                                                           -0.76
                                                                   -0.74
                                                                          -0.71
                                                                                   4876
                                                                                            1.0
                   -1.12
                           4.5e-4
                                     0.03
                                            -1.17
                                                   -1.14
                                                           -1.12
                                                                    -1.1
                                                                          -1.06
                                                                                   4383
y_mean[1181]
                                                                                            1.0
                   -0.32
                           3.7e-4
                                     0.02
                                            -0.36
                                                   -0.33
                                                           -0.32
                                                                          -0.27
                                                                    -0.3
                                                                                   4103
y_mean[1182]
                                                                                            1.0
y_mean[1183]
                   -0.48
                           3.4e-4
                                     0.02
                                            -0.53
                                                    -0.5
                                                           -0.48
                                                                   -0.47
                                                                          -0.44
                                                                                   4377
                                                                                            1.0
                   -0.42
                           4.5e-4
                                     0.03
                                            -0.49
                                                           -0.42
                                                                    -0.4
                                                                          -0.36
                                                   -0.44
                                                                                   4838
                                                                                            1.0
y_mean[1184]
y_mean[1185]
                   -0.45
                           3.0e-4
                                     0.02
                                            -0.49
                                                   -0.46
                                                           -0.45
                                                                   -0.43
                                                                          -0.41
                                                                                   4559
                                                                                            1.0
                    0.87
                           5.4e-4
                                     0.03
                                             0.81
                                                    0.85
                                                            0.87
                                                                     0.9
                                                                            0.94
                                                                                   4113
                                                                                            1.0
y_mean[1186]
                   -0.72
                                                           -0.72
y_mean[1187]
                           3.5e-4
                                     0.02
                                            -0.77
                                                   -0.74
                                                                    -0.7
                                                                          -0.67
                                                                                   4706
                                                                                            1.0
y_mean[1188]
                   -0.78
                           3.9e-4
                                     0.03
                                            -0.84
                                                    -0.8
                                                           -0.78
                                                                   -0.77
                                                                           -0.73
                                                                                   4845
                                                                                            1.0
                           6.1e-4
                    0.41
                                     0.04
                                             0.34
                                                    0.39
                                                            0.41
                                                                    0.44
                                                                            0.49
                                                                                   4232
                                                                                            1.0
y_mean[1189]
                   -0.34
                           3.8e-4
                                     0.03
                                            -0.39
                                                   -0.36
                                                           -0.34
                                                                   -0.33
                                                                          -0.29
                                                                                   4400
                                                                                            1.0
y mean[1190]
                    0.17
                           3.8e-4
                                     0.02
                                             0.13
                                                    0.16
                                                            0.17
                                                                    0.19
                                                                            0.22
                                                                                   4242
y_mean[1191]
                                                                                            1.0
                   -0.25
                                            -0.29
                                                           -0.25
                                                                            -0.2
                           3.1e-4
                                     0.02
                                                   -0.26
                                                                  -0.23
                                                                                   4562
y_mean[1192]
                                                                                            1.0
y_mean[1193]
                   -0.54
                           3.4e-4
                                     0.02
                                            -0.59
                                                   -0.55
                                                           -0.54
                                                                   -0.52
                                                                          -0.49
                                                                                   4589
                                                                                            1.0
                    0.01
                           5.6e-4
                                     0.03
                                           -0.06
                                                   -0.01 9.9e-3
                                                                    0.03
                                                                            0.08
                                                                                   3826
                                                                                            1.0
y_mean[1194]
                   -0.47
                           3.0e-4
                                     0.02
                                            -0.51
                                                   -0.48
                                                           -0.47
                                                                   -0.45
                                                                          -0.43
                                                                                   4593
y_mean[1195]
                                                                                            1.0
                                     0.03
                                             0.15
                                                                            0.25
                     0.2
                           4.0e-4
                                                    0.18
                                                             0.2
                                                                    0.22
                                                                                   4185
                                                                                            1.0
y_mean[1196]
y_mean[1197]
                           7.2e-4
                                     0.04
                                             1.41
                                                    1.47
                                                             1.5
                                                                    1.53
                                                                            1.59
                      1.5
                                                                                   3856
                                                                                            1.0
y_mean[1198]
                   -0.13
                           3.0e-4
                                     0.02
                                            -0.17
                                                   -0.14
                                                           -0.13
                                                                   -0.12
                                                                          -0.09
                                                                                   4957
                                                                                            1.0
                   -0.58
                           4.0e-4
                                     0.03
                                            -0.63
                                                    -0.6
                                                           -0.58
                                                                          -0.53
                                                                   -0.56
                                                                                   4545
y_mean[1199]
                                                                                            1.0
                   -0.42
                           3.3e-4
                                     0.02
                                            -0.47
                                                           -0.42
                                                                   -0.41
                                                                          -0.38
                                                                                   4715
y_mean[1200]
                                                   -0.44
                                                                                            1.0
                   -0.05
                                            -0.11
                                                           -0.05
                                                                   -0.04-3.2e-3
y_mean[1201]
                           3.9e-4
                                     0.03
                                                   -0.07
                                                                                   4490
                                                                                            1.0
y_mean[1202]
                   -0.35
                           3.5e-4
                                     0.02
                                             -0.4
                                                   -0.37
                                                           -0.35
                                                                   -0.34
                                                                          -0.31
                                                                                   4279
                                                                                            1.0
y_mean[1203]
                   -0.62
                           3.3e-4
                                     0.02
                                            -0.66
                                                   -0.64
                                                           -0.62
                                                                   -0.61
                                                                          -0.58
                                                                                   4522
                                                                                            1.0
```

y_mean[1204]	0.1	5.0e-4	0.03	0.04	0.07	0.1	0.12	0.16	4042	1.0
y_mean[1205]	-0.69	4.0e-4	0.03	-0.75	-0.71	-0.69	-0.68	-0.64	4765	1.0
y_mean[1206]	0.03	5.5e-4	0.03	-0.04	4.6e-3	0.03	0.05	0.09	3831	1.0
y_mean[1207]	-0.2	4.7e-4	0.03	-0.26	-0.22	-0.2	-0.18	-0.14	4115	1.0
y_mean[1208]	1.06	6.1e-4	0.04	0.98	1.04	1.06	1.09	1.14	4405	1.0
y_mean[1209]	-0.34	5.6e-4	0.04	-0.41	-0.36	-0.34	-0.31	-0.27	4323	1.0
y_mean[1210]	0.68	4.7e-4	0.03	0.62	0.66	0.68	0.7	0.74	4231	1.0
y_mean[1211]	0.87	6.7e-4	0.04	0.78	0.84	0.87	0.9	0.95	4207	1.0
y_mean[1212]	-0.8	4.3e-4	0.03	-0.86	-0.82	-0.8	-0.78	-0.75	4575	1.0
y_mean[1213]	-0.69	4.0e-4	0.03	-0.74	-0.71	-0.69	-0.67	-0.64	4496	1.0
y_mean[1214]	-0.41	3.2e-4	0.02	-0.45	-0.42	-0.41	-0.39	-0.37	4640	1.0
y_mean[1215]	-0.69	3.4e-4	0.02	-0.74	-0.7	-0.69	-0.67	-0.64	4567	1.0
y_mean[1216]	-0.42	5.1e-4	0.03	-0.48	-0.44	-0.41	-0.39	-0.35	4770	1.0
y_mean[1217]	-0.2	3.4e-4	0.02	-0.25	-0.22	-0.2	-0.19	-0.16	4761	1.0
y_mean[1218]	1.25	6.5e-4	0.04	1.17	1.22	1.25	1.28	1.33	4218	1.0
y_mean[1219]	0.66	7.5e-4	0.05	0.57	0.63	0.66	0.7	0.76	4420	1.0
y_mean[1220]	0.14	4.3e-4	0.03	0.08	0.12	0.14	0.16	0.19	4187	1.0
y_mean[1221]	-0.64	3.2e-4	0.02	-0.69	-0.66	-0.64	-0.63	-0.6	4558	1.0
y_mean[1222]	-0.54	3.6e-4	0.02	-0.58	-0.55	-0.54	-0.52	-0.49	4486	1.0
y_mean[1223]	0.25	4.9e-4	0.03	0.19	0.23	0.25	0.27	0.31	3978	1.0
y_mean[1224]	0.42	7.7e-4	0.05	0.32	0.39	0.42	0.45	0.52	4118	1.0
y_mean[1225]	-0.62	3.1e-4	0.02	-0.66	-0.63	-0.62	-0.61	-0.58	4536	1.0
y_mean[1226]	0.77	4.9e-4	0.03	0.71	0.75	0.77	0.79	0.83	4207	1.0
y_mean[1227]	-0.79	4.7e-4	0.03	-0.85	-0.81	-0.79	-0.77	-0.73	4570	1.0
y_mean[1228]	0.12	4.2e-4	0.03	0.07	0.1	0.12	0.14	0.18	4295	1.0
y_mean[1229]	-0.55	3.0e-4	0.02	-0.59	-0.57	-0.55	-0.54	-0.51	4505	1.0
y_mean[1230]	-0.62	3.2e-4	0.02	-0.66	-0.63	-0.62	-0.6	-0.58	4526	1.0
y_mean[1231]	-0.55	3.9e-4	0.03	-0.6	-0.56	-0.55	-0.53	-0.5	4611	1.0
y_mean[1232]	0.77	5.7e-4	0.04	0.71	0.75	0.77	0.8	0.84	3802	1.0
y_mean[1233]	-0.4	5.7e-4	0.04	-0.47	-0.42	-0.39	-0.37	-0.32	4872	1.0
y_mean[1234]	0.67	7.5e-4	0.05	0.57	0.63	0.67	0.7	0.77	4358	1.0
y_mean[1235]	1.75	8.1e-4	0.05	1.65	1.72	1.75	1.79	1.86	4231	1.0
y_mean[1236]	-0.85	4.5e-4	0.03	-0.91	-0.87	-0.85	-0.83	-0.79	4442	1.0
y_mean[1237]	0.68	4.6e-4	0.03	0.62	0.66	0.68	0.71	0.75	4811	1.0
y_mean[1238]	0.29	3.2e-4	0.02	0.25	0.27	0.29	0.3	0.33	4503	1.0
y_mean[1239]	-1.1	4.3e-4	0.03	-1.16	-1.12	-1.1	-1.08	-1.05	4385	1.0
y_mean[1240]	-0.09	4.0e-4	0.03	-0.14	-0.11	-0.09	-0.07	-0.04	4601	1.0
y_mean[1241]	-0.99	4.2e-4	0.03	-1.04	-1.01	-0.99	-0.97	-0.94	4430	1.0
y_mean[1242]	-0.37	5.2e-4	0.04	-0.43	-0.39	-0.36	-0.34	-0.3	4598	1.0
y_mean[1243]	-0.62	3.5e-4	0.02	-0.67	-0.64	-0.63	-0.61	-0.58	4519	1.0
y_mean[1244]	-0.41	2.9e-4	0.02	-0.45	-0.42	-0.41	-0.39	-0.37	4603	1.0
y_mean[1245]	-0.99	4.9e-4	0.03	-1.05	-1.01	-0.99	-0.97	-0.92	4328	1.0
y_mean[1246]	-0.64	4.0e-4	0.03	-0.69	-0.65	-0.64	-0.62	-0.58	4515	1.0
y_mean[1247]	0.59	4.5e-4	0.03	0.54	0.57	0.59	0.61	0.65	3932	1.0
y_mean[1248]	-0.11	4.8e-4	0.03	-0.17	-0.13	-0.11	-0.08	-0.04	4687	1.0
y_mean[1249]	-0.08	3.9e-4	0.03	-0.13	-0.1	-0.08	-0.06	-0.03	4486	1.0
y_mean[1250]	-0.18	4.4e-4	0.03	-0.23	-0.2	-0.18	-0.16	-0.12	3976	1.0
y_mean[1251]	-0.69	3.4e-4	0.02	-0.74	-0.71	-0.69	-0.67	-0.64	4682	1.0

y_mean[1252]	-0.29	2.6e-4	0.02	-0.32	-0.3	-0.29	-0.27	-0.25	4892	1.0
y_mean[1253]	-0.62	3.3e-4	0.02	-0.67	-0.64	-0.62	-0.61	-0.58	4659	1.0
y_mean[1254]	1.25	6.4e-4	0.04	1.17	1.22	1.25	1.28	1.33	4222	1.0
y_mean[1255]	0.08	3.2e-4	0.02	0.04	0.07	0.08	0.1	0.12	4328	1.0
y_mean[1256]	-0.93	4.3e-4	0.03	-0.99	-0.95	-0.93	-0.91	-0.87	4725	1.0
y_mean[1257]	-1.08	4.7e-4	0.03	-1.14	-1.1	-1.08	-1.06	-1.02	4540	1.0
y_mean[1258]	-0.92	4.2e-4	0.03	-0.97	-0.94	-0.92	-0.9	-0.86	4686	1.0
y_mean[1259]	0.03	3.0e-4		4.5e-3	0.02	0.03	0.05	0.07	4389	1.0
y_mean[1260]	-0.92	4.9e-4	0.03	-0.98	-0.94	-0.92	-0.89	-0.85	4709	1.0
y_mean[1261]	2.73	1.3e-3	0.09	2.56	2.67	2.73	2.79	2.9	4554	1.0
y_mean[1262]	0.1	6.8e-4	0.05	0.02	0.07	0.1	0.13	0.19	4440	1.0
y_mean[1263]	-0.83	4.5e-4	0.03	-0.89	-0.85	-0.83	-0.81	-0.77	4564	1.0
y_mean[1264]	1.19	6.5e-4	0.04	1.11	1.17	1.2	1.22	1.28	4281	1.0
y_mean[1265]	2.18	1.1e-3	0.08	2.03	2.13	2.18	2.23	2.33	4945	1.0
y_mean[1266]	0.58	4.2e-4	0.03	0.52	0.56	0.58	0.6	0.63	4300	1.0
y_mean[1267]	0.44	6.4e-4	0.04	0.36	0.41	0.44	0.47	0.52	3802	1.0
y_mean[1267] y_mean[1268]	-0.06	4.1e-4	0.04	-0.11	-0.08	-0.06		3.1e-3	4684	1.0
y_mean[1269]	0.77	5.2e-4	0.03	0.11	0.75	0.77	0.79	0.84	4210	1.0
y_mean[1270]	-0.18	4.9e-4	0.03	-0.24	-0.2	-0.18	-0.15	-0.12	4117	1.0
y_mean[1270] y_mean[1271]	-0.18	5.7e-4	0.03	-0.24	-0.06	-0.18	-0.13	0.12	4117	1.0
y_mean[1271] y_mean[1272]	-0.04	4.9e-4	0.04	-0.11	-0.34	-0.31	-0.29	-0.25	4643	1.0
y_mean[1272] y_mean[1273]	-0.59	3.4e-4	0.03	-0.64	-0.61	-0.51	-0.29	-0.25 -0.55	4535	1.0
y_mean[1274]	-0.59	3.4e-4 4.4e-4	0.02	-0.62	-0.51	-0.59 -0.56	-0.54	-0.55	4605	1.0
• –										
y_mean[1275]	-0.46	3.8e-4	0.03	-0.51	-0.47	-0.46	-0.44	-0.4	4839	1.0
y_mean[1276]	-0.48	4.9e-4	0.03	-0.55	-0.5	-0.48	-0.46	-0.42	4743	1.0
y_mean[1277]	0.21	5.6e-4	0.04	0.14	0.18	0.21	0.23	0.28	3973	1.0
y_mean[1278]	-0.25	4.2e-4	0.03	-0.3	-0.27	-0.25	-0.23	-0.19	4113	1.0
y_mean[1279]	0.74	6.3e-4	0.04	0.67	0.72	0.74	0.77	0.82	3886	1.0
y_mean[1280]	0.28	4.1e-4	0.03	0.22	0.26	0.28	0.3	0.33	4304	1.0
y_mean[1281]	-0.54	3.0e-4	0.02	-0.58	-0.55	-0.54	-0.53	-0.5	4498	1.0
y_mean[1282]	-0.41	3.0e-4	0.02	-0.45	-0.42	-0.41	-0.39	-0.37	4758	1.0
y_mean[1283]	0.78	5.8e-4	0.04	0.7	0.75	0.78	0.81	0.86	4769	1.0
y_mean[1284]	0.05	3.2e-4		3.7e-3	0.03	0.05	0.06	0.09	4463	1.0
y_mean[1285]	-0.59	3.3e-4	0.02	-0.64	-0.61	-0.59	-0.58	-0.55	4529	1.0
y_mean[1286]	-1.11	4.3e-4	0.03	-1.16	-1.13	-1.11	-1.09	-1.05	4421	1.0
y_mean[1287]	-0.06	7.1e-4	0.05	-0.16	-0.09	-0.06	-0.03	0.04	4769	1.0
y_mean[1288]	-0.22	3.9e-4	0.03	-0.27	-0.24	-0.22	-0.2	-0.17	4621	1.0
y_mean[1289]	-0.71	5.4e-4	0.04	-0.78	-0.74	-0.71	-0.69	-0.64	4333	1.0
y_mean[1290]	1.0	5.7e-4	0.04	0.92	0.97	1.0	1.02	1.07	4383	1.0
y_mean[1291]	-0.5	2.9e-4	0.02	-0.54	-0.51	-0.5	-0.48	-0.46	4638	1.0
y_mean[1292]	0.78	5.4e-4	0.04	0.71	0.76	0.78	0.81	0.85	4206	1.0
y_mean[1293]	0.12	3.2e-4	0.02	0.07	0.1	0.12	0.13	0.16	4526	1.0
y_mean[1294]	0.98	5.2e-4	0.03	0.91	0.96	0.98	1.0	1.04	3995	1.0
y_mean[1295]	-0.06	7.0e-4	0.05	-0.15	-0.09	-0.06	-0.03	0.04	4771	1.0
y_mean[1296]	1.84	8.2e-4	0.06	1.73	1.81	1.84	1.88	1.95	4628	1.0
y_mean[1297]	-0.73	5.0e-4	0.03	-0.79	-0.75	-0.73	-0.71	-0.67	4183	1.0
y_mean[1298]	2.44	1.2e-3	0.08	2.29	2.39	2.44	2.5	2.6	4478	1.0
y_mean[1299]	1.42	7.7e-4	0.05	1.32	1.39	1.42	1.46	1.52	4602	1.0

y_mean[1300]	-0.24	3.1e-4	0.02	-0.28	-0.25	-0.24	-0.22	-0.19	4516	1.0
y_mean[1301]	-0.11	4.2e-4	0.03	-0.17	-0.13	-0.11	-0.09	-0.06	4784	1.0
y_mean[1302]	0.2	5.8e-4	0.04	0.12	0.17	0.2	0.22	0.27	4255	1.0
y_mean[1303]	-0.45	3.3e-4	0.02	-0.5	-0.47	-0.45	-0.43	-0.4	4700	1.0
y_mean[1304]	-1.01	4.3e-4	0.03	-1.06	-1.03	-1.01	-0.99	-0.95	4598	1.0
y_mean[1305]	-0.83	4.2e-4	0.03	-0.88	-0.85	-0.83	-0.81	-0.77	4670	1.0
y_mean[1306]	-0.36	3.4e-4	0.02	-0.4	-0.38	-0.36	-0.34	-0.32	4175	1.0
y_mean[1307]	-0.4	3.3e-4	0.02	-0.45	-0.42	-0.4	-0.39	-0.36	4650	1.0
y_mean[1308]	-0.57	3.1e-4	0.02	-0.61	-0.58	-0.57	-0.55	-0.53	4530	1.0
y_mean[1309]	1.93	8.4e-4	0.05	1.82	1.89	1.92	1.96	2.03	3850	1.0
y_mean[1310]	0.54	4.5e-4	0.03	0.48	0.52	0.54	0.56	0.6	4445	1.0
y_mean[1311]	-0.67	3.7e-4	0.02	-0.72	-0.68	-0.67	-0.65	-0.62	4511	1.0
y_mean[1312]	0.64	5.3e-4	0.04	0.56	0.61	0.64	0.66	0.7	4424	1.0
y_mean[1313]	-0.61	3.6e-4	0.02	-0.66	-0.62	-0.61	-0.59	-0.56	4580	1.0
y_mean[1314]	-0.36	3.4e-4	0.02	-0.4	-0.38	-0.36	-0.34	-0.32	4175	1.0
y_mean[1315]	0.09	5.8e-4	0.04	0.02	0.06	0.09	0.11	0.16	3834	1.0
y_mean[1316]	0.57	4.4e-4	0.03	0.52	0.55	0.57	0.59	0.63	4322	1.0
y_mean[1317]	1.12	7.5e-4	0.05	1.02	1.09	1.12	1.15	1.22	4586	1.0
y_mean[1318]	-0.12	6.0e-4	0.04	-0.2	-0.15	-0.12	-0.1	-0.05	3814	1.0
y_mean[1319]	-0.24	3.6e-4	0.02	-0.29	-0.26	-0.24	-0.23	-0.19	4594	1.0
y_mean[1320]	0.28	4.6e-4	0.03	0.22	0.26	0.28	0.3	0.35	5071	1.0
y_mean[1321]	0.59	6.9e-4	0.04	0.51	0.56	0.59	0.62	0.67	3660	1.0
y_mean[1322]	-0.17	4.5e-4	0.03	-0.23	-0.19	-0.17	-0.15	-0.11	4709	1.0
y_mean[1323]	-0.13	5.1e-4	0.03	-0.19	-0.15	-0.13	-0.11	-0.07	3867	1.0
y_mean[1324]	0.55	4.3e-4	0.03	0.5	0.53	0.55	0.57	0.61	4326	1.0
y_mean[1325]	0.76	6.0e-4	0.04	0.68	0.73	0.76	0.79	0.84	4939	1.0
y_mean[1326]	0.33	4.2e-4	0.03	0.27	0.31	0.33	0.35	0.39	4869	1.0
y_mean[1327]	-0.49	7.0e-4	0.05	-0.58	-0.52	-0.49	-0.46	-0.39	4412	1.0
y_mean[1328]	-0.31	2.7e-4	0.02	-0.35	-0.32	-0.31	-0.3	-0.27	4701	1.0
y_mean[1329]	0.78	5.9e-4	0.04	0.7	0.75	0.78	0.8	0.86	4726	1.0
y_mean[1330]	-0.83	4.2e-4	0.03	-0.89	-0.85	-0.83	-0.81	-0.78	4534	1.0
y_mean[1331]	-1.19	4.5e-4	0.03	-1.25	-1.21	-1.19	-1.17	-1.14	4410	1.0
y_mean[1332]	-0.33	5.3e-4	0.04	-0.4	-0.35	-0.33	-0.3	-0.26	4655	1.0
y_mean[1333]	-0.81	4.0e-4	0.03	-0.86	-0.82	-0.81	-0.79	-0.75	4779	1.0
y_mean[1334]	-0.57		0.03	-0.63	-0.59	-0.57	-0.55	-0.52	4427	1.0
y_mean[1335]	-1.09	4.2e-4	0.03	-1.15	-1.11	-1.09	-1.07	-1.04	4416	1.0
y_mean[1336]	1.7	9.2e-4	0.06	1.58	1.65	1.7	1.74	1.82	4521	1.0
y_mean[1337]	0.37	6.3e-4	0.04	0.28	0.34	0.37	0.4	0.45	4865	1.0
y_mean[1338]	-0.09	5.6e-4	0.03	-0.16	-0.12	-0.09	-0.07	-0.03	3819	1.0
y_mean[1339]	0.35	6.4e-4	0.04	0.27	0.32	0.35	0.37	0.43	3957	1.0
y_mean[1340]	-0.21	4.0e-4	0.03	-0.26	-0.22	-0.21	-0.19	-0.16	4071	1.0
y_mean[1341]	-0.29	3.9e-4	0.03	-0.35	-0.31	-0.29	-0.28	-0.24	4420	1.0
y_mean[1342]	0.52	4.1e-4	0.03	0.47	0.5	0.52	0.54	0.57	4383	1.0
y_mean[1343]	-0.33	3.3e-4	0.02	-0.38	-0.35	-0.33	-0.32	-0.29	4439	1.0
y_mean[1344]	-0.58	4.7e-4	0.03	-0.64	-0.6	-0.58	-0.55	-0.52	4451	1.0
y_mean[1345]	0.85	5.8e-4	0.04	0.77	0.83	0.85	0.88	0.93	4727	1.0
y_mean[1346]	-0.22	5.0e-4	0.03	-0.29	-0.24	-0.22	-0.2	-0.16	4591	1.0
y_mean[1347]	0.65	7.1e-4	0.05	0.56	0.62	0.65	0.69	0.75	4605	1.0
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y_mean[1348]	0.4	4.1e-4	0.03	0.35	0.39	0.4	0.42	0.46	4580	1.0
y_mean[1349]	-0.65	5.7e-4	0.04	-0.73	-0.68	-0.65	-0.63	-0.58	4472	1.0
y_mean[1350]	-0.9	6.1e-4	0.04	-0.98	-0.93	-0.9	-0.87	-0.82	4453	1.0
y_mean[1351]	-0.48	3.0e-4	0.02	-0.52	-0.5	-0.48	-0.47	-0.44	4560	1.0
y_mean[1352]	-0.09	6.8e-4	0.05	-0.18	-0.12	-0.09	-0.06	1.7e-3	4389	1.0
y_mean[1353]	1.02	9.3e-4	0.06	0.91	0.98	1.02	1.06	1.14	4048	1.0
y_mean[1354]	-0.24	2.9e-4	0.02	-0.27	-0.25	-0.24	-0.22	-0.2	4684	1.0
y_mean[1355]	-0.4	2.8e-4	0.02	-0.44	-0.42	-0.4	-0.39	-0.37	4629	1.0
y_mean[1356]	1.69	7.4e-4	0.05	1.59	1.65	1.69	1.72	1.79	4703	1.0
y_mean[1357]	-0.25	4.8e-4	0.03	-0.31	-0.27	-0.25	-0.22	-0.18	4498	1.0
y_mean[1358]	0.89	5.5e-4	0.04	0.81	0.86	0.89	0.91	0.96	4685	1.0
y_mean[1359]	2.3	1.3e-3	0.08	2.13	2.25	2.3	2.36	2.47	4256	1.0
y_mean[1360]	0.71	3.9e-4	0.03	0.65	0.69	0.71	0.73	0.76	4874	1.0
y_mean[1361]	-0.18	6.2e-4	0.04	-0.27	-0.21	-0.18	-0.15	-0.09	4993	1.0
y_mean[1362]	-0.36	3.6e-4	0.02	-0.41	-0.38	-0.36	-0.34	-0.32	4331	1.0
y_mean[1363]	0.81	5.0e-4	0.03	0.74	0.78	0.81	0.83	0.87	4185	1.0
y_mean[1364]	-1.06	4.5e-4	0.03	-1.12	-1.08	-1.06	-1.04	-1.01	4553	1.0
y_mean[1365]	5.25	2.6e-3	0.18	4.9	5.13	5.25	5.37	5.6	4882	1.0
y_mean[1366]	-0.76	3.7e-4	0.03	-0.81	-0.78	-0.76	-0.74	-0.71	4672	1.0
y_mean[1367]	-0.5	5.6e-4	0.04	-0.57	-0.53	-0.5	-0.48	-0.43	4147	1.0
y_mean[1368]	0.25	4.4e-4	0.03	0.19	0.23	0.25	0.27	0.3	4218	1.0
y_mean[1369]	-0.64	3.2e-4	0.02	-0.68	-0.65	-0.64	-0.62	-0.6	4539	1.0
y_mean[1370]	-0.61	3.1e-4	0.02	-0.65	-0.62	-0.61	-0.6	-0.57	4527	1.0
y_mean[1371]	-0.02	4.1e-4	0.03	-0.08	-0.04		4.5e-3	0.03	4407	1.0
y_mean[1372]	1.1	7.1e-4	0.04	1.01	1.07	1.1	1.12	1.18	3763	1.0
y_mean[1373]	-0.4	3.2e-4	0.02	-0.44	-0.42	-0.4	-0.39	-0.36	4469	1.0
y_mean[1374]	-1.22	4.8e-4	0.03	-1.28	-1.24	-1.22	-1.2	-1.15	4453	1.0
y_mean[1375]	1.47	8.9e-4	0.06	1.36	1.43	1.46	1.51	1.58	4296	1.0
y_mean[1376]	-0.07	3.5e-4	0.02	-0.12	-0.09	-0.07	-0.06	-0.03	4714	1.0
y_mean[1377]	-0.24	2.9e-4	0.02	-0.28	-0.26	-0.24	-0.23	-0.2	4992	1.0
y_mean[1378]	-0.35	3.2e-4	0.02	-0.39	-0.37	-0.35	-0.34	-0.31	4437	1.0
y_mean[1379]	-0.35	3.7e-4	0.02	-0.4	-0.37	-0.35	-0.34	-0.31	4561	1.0
y_mean[1380]	-0.51	3.1e-4	0.02	-0.55	-0.52	-0.51	-0.49	-0.47	4572	1.0
y_mean[1381]		4.5e-4	0.03	-0.19	-0.16	-0.14	-0.12	-0.08	4084	1.0
y_mean[1382]	0.7	4.3e-4	0.03	0.64	0.68	0.7	0.72	0.76	4954	1.0
y_mean[1383]	0.39	4.2e-4	0.03	0.33	0.37	0.39	0.41	0.45	4747	1.0
y_mean[1384]	0.09	5.8e-4	0.04	0.02	0.06	0.09	0.11	0.16	3778	1.0
y_mean[1385]	-0.07	3.3e-4	0.02	-0.11	-0.08	-0.07	-0.05	-0.02	4679	1.0
y_mean[1386]	-0.15	4.8e-4	0.03	-0.21	-0.17	-0.15	-0.13	-0.1	3929	1.0
y_mean[1387]	1.51	5.9e-4	0.04	1.44	1.49	1.51	1.54	1.59	4290	1.0
y_mean[1388]	-0.38	4.0e-4	0.03	-0.43	-0.4	-0.38	-0.36	-0.33	4306	1.0
y_mean[1389]	-0.68	4.1e-4	0.03	-0.73	-0.7	-0.68	-0.66	-0.63	4495	1.0
y_mean[1390]	0.05	3.0e-4	0.03	0.73	0.04	0.05	0.07	0.09	4370	1.0
y_mean[1391]	-0.07	3.0e-4	0.02	-0.11	-0.09	-0.07	-0.06	-0.04	4545	1.0
y_mean[1391] y_mean[1392]	-0.72	4.3e-4	0.02	-0.11	-0.74	-0.72	-0.7	-0.67	4488	1.0
y_mean[1393]	-0.72	4.5e-4	0.03	-0.78	-0.17	-0.12	-0.13	-0.09	4532	1.0
y_mean[1394]	-0.12	3.1e-4	0.03	-0.16	-0.13	-0.12	-0.1	-0.08	4759	1.0
y_mean[1394] y_mean[1395]	1.24	8.4e-4	0.02	1.14	1.2	1.24	1.28	1.34	4009	1.0
3 _mcan[1000]	1.47	0.46 4	0.00	T. T.	1.2	1.44	1.20	1.04	1003	1.0

y_mean[1396]	0.03	3.0e-4	0.02-	7.8e-3	0.02	0.03	0.05	0.07	4389	1.0
y_mean[1397]	-0.02	7.7e-4	0.05	-0.12	-0.06	-0.02	0.01	0.08	4217	1.0
y_mean[1398]	-0.29	4.5e-4	0.03	-0.35	-0.31	-0.29	-0.27	-0.23	4355	1.0
y_mean[1399]	-0.3	3.9e-4	0.03	-0.36	-0.32	-0.3	-0.28	-0.25	4881	1.0
y_mean[1400]	-0.16	4.2e-4	0.03	-0.21	-0.18	-0.16	-0.14	-0.1	4067	1.0
y_mean[1401]	0.6	4.5e-4	0.03	0.54	0.58	0.6	0.62	0.65	4314	1.0
y_mean[1402]	-0.44	3.0e-4	0.02	-0.48	-0.45	-0.44	-0.43	-0.4	4558	1.0
y_mean[1403]	0.32	3.1e-4	0.02	0.28	0.31	0.32	0.34	0.37	4325	1.0
y_mean[1404]	-0.76	4.0e-4	0.03	-0.82	-0.78	-0.76	-0.74	-0.71	4561	1.0
y_mean[1405]	0.53	4.1e-4	0.03	0.48	0.51	0.53	0.55	0.58	4353	1.0
y_mean[1406]	-0.33	5.5e-4	0.04	-0.41	-0.36	-0.33	-0.31	-0.26	4898	1.0
y_mean[1407]	-0.1	3.2e-4	0.02	-0.14	-0.11	-0.1	-0.08	-0.06	4772	1.0
y_mean[1408]	-0.7	5.2e-4	0.03	-0.77	-0.73	-0.7	-0.68	-0.64	4383	1.0
y_mean[1409]	-0.32	3.5e-4	0.02	-0.36	-0.34	-0.32	-0.3	-0.27	4389	1.0
y_mean[1410]	-1.06	7.1e-4	0.05	-1.15	-1.09	-1.06	-1.03	-0.97	4425	1.0
y_mean[1411]	-0.25	5.2e-4	0.04	-0.32	-0.28	-0.25	-0.23	-0.18	5128	1.0
y_mean[1412]	2.28	1.1e-3	0.07	2.13	2.23	2.28	2.32	2.42	4266	1.0
y_mean[1413]	0.28	4.6e-4	0.03	0.22	0.26	0.28	0.3	0.34	4216	1.0
y_mean[1414]	0.23	3.1e-4	0.02	0.03	0.06	0.07	0.08	0.11	4362	1.0
y_mean[1414] y_mean[1415]	-0.22	4.9e-4	0.02	-0.28	-0.24	-0.22	-0.2	-0.16	3978	1.0
y_mean[1416] y_mean[1416]	0.22	7.0e-4	0.05	0.20	0.24	0.11	0.14	0.10	4735	1.0
y_mean[1417]	2.66	1.4e-3	0.09	2.48	2.6	2.66	2.72	2.84	4468	1.0
y_mean[1417] y_mean[1418]	-0.27	3.9e-4	0.03	-0.32	-0.29	-0.27	-0.26	-0.22	4269	1.0
y_mean[1419]	0.76	4.9e-4	0.03	0.69	0.74	0.76	0.78	0.22	4268	1.0
y_mean[1419] y_mean[1420]	-0.13	5.0e-4	0.03	-0.19	-0.15	-0.13	-0.1	-0.06	4265	1.0
y_mean[1421]		3.0e-4	0.03	-0.19	-0.13		-0.57		4508	1.0
v <b>–</b>	-0.58	3.4e-4	0.02			-0.58		-0.54 0.04	5012	
y_mean[1422]	-3.8e-3			-0.05		-3.6e-3	0.01			1.0
y_mean[1423]	0.27	3.1e-4	0.02	0.23	0.26	0.27	0.29	0.32	4614	1.0
y_mean[1424]	0.73	1.3e-3	0.09	0.56	0.67	0.73	0.79	0.9	4274	1.0
y_mean[1425]	1.19	9.1e-4	0.06	1.07	1.15	1.19	1.23	1.31	4819	1.0
y_mean[1426]	-0.53	3.0e-4	0.02	-0.57	-0.55	-0.53	-0.52	-0.49	4835	1.0
y_mean[1427]	-0.1	4.4e-4	0.03	-0.16	-0.12	-0.1	-0.09	-0.05	3993	1.0
y_mean[1428]	-1.67	9.5e-4	0.06	-1.8	-1.72		-1.63	-1.55	4386	1.0
y_mean[1429]		8.1e-4	0.05	1.61	1.68	1.72	1.75	1.82	4264	1.0
y_mean[1430]	1.54	7.7e-4	0.05	1.44	1.51	1.54	1.58	1.64	4151	1.0
y_mean[1431]	-1.14	4.5e-4	0.03	-1.2	-1.16	-1.14	-1.12	-1.08	4394	1.0
y_mean[1432]	-0.74	4.5e-4	0.03	-0.8	-0.76	-0.74	-0.72	-0.69	4480	1.0
y_mean[1433]	-0.78	4.0e-4	0.03	-0.83	-0.8	-0.78	-0.76	-0.72	4582	1.0
y_mean[1434]	0.24	6.6e-4	0.04	0.16	0.21	0.24	0.27	0.33	4427	1.0
y_mean[1435]	-0.53	3.4e-4	0.02	-0.58	-0.55	-0.53	-0.52	-0.49	4437	1.0
y_mean[1436]	0.11	3.3e-4	0.02	0.07	0.1	0.11	0.13	0.15	4302	1.0
y_mean[1437]	0.6	6.0e-4	0.04	0.53	0.58	0.6	0.63	0.68	3660	1.0
y_mean[1438]	0.68	4.7e-4	0.03	0.62	0.66	0.68	0.7	0.74	4196	1.0
y_mean[1439]	0.63	7.6e-4	0.05	0.54	0.6	0.63	0.67	0.73	4460	1.0
y_mean[1440]	-0.15	5.9e-4	0.04	-0.23	-0.17	-0.15	-0.12	-0.07	4865	1.0
y_mean[1441]	-0.6	4.6e-4	0.03	-0.66	-0.63	-0.6	-0.58	-0.54	4601	1.0
y_mean[1442]	-0.17	5.2e-4	0.03	-0.24	-0.2	-0.17	-0.15	-0.11	3869	1.0
y_mean[1443]	-0.81	4.1e-4	0.03	-0.87	-0.83	-0.81	-0.79	-0.75	4894	1.0

y_mean[1444]	-0.75	4.0e-4	0.03	-0.81	-0.77	-0.75	-0.73	-0.7	4547	1.0
y_mean[1445]	0.09	5.7e-4	0.03	0.03	0.07	0.09	0.12	0.16	3798	1.0
y_mean[1446]	-0.48	3.1e-4	0.02	-0.52	-0.49	-0.48	-0.47	-0.44	4593	1.0
y_mean[1447]	0.04	4.1e-4	0.03	-0.02	0.02	0.04	0.06	0.09	4558	1.0
y_mean[1448]	1.39	7.7e-4	0.05	1.29	1.35	1.39	1.42	1.49	4653	1.0
y_mean[1449]	-0.27	5.4e-4	0.04	-0.34	-0.3	-0.27	-0.25	-0.2	4627	1.0
y_mean[1450]	-0.24	3.5e-4	0.03	-0.29	-0.26	-0.24	-0.23	-0.2	5070	1.0
y_mean[1451]	0.84	5.9e-4	0.04	0.76	0.81	0.84	0.86	0.91	4167	1.0
y_mean[1452]	-0.85	4.5e-4	0.03	-0.91	-0.87	-0.85	-0.83	-0.79	4721	1.0
y_mean[1453]	0.45	4.0e-4	0.03	0.4	0.44	0.45	0.47	0.51	4484	1.0
y_mean[1454]	-0.38	4.4e-4	0.03	-0.44	-0.4	-0.38	-0.36	-0.32	4215	1.0
y_mean[1455]	-0.57	3.0e-4	0.02	-0.61	-0.59	-0.57	-0.56	-0.53	4503	1.0
y_mean[1456]	-0.41	3.3e-4	0.02	-0.46	-0.43	-0.41	-0.4	-0.37	4699	1.0
y_mean[1457]	-0.32	3.1e-4	0.02	-0.37	-0.34	-0.33	-0.31	-0.28	4505	1.0
y_mean[1458]	-0.08	3.0e-4	0.02	-0.12	-0.09	-0.08	-0.07	-0.04	4564	1.0
y_mean[1459]	0.62	5.9e-4	0.02	0.12	0.6	0.63	0.65	0.04	4468	1.0
y_mean[1460]	0.55	5.6e-4	0.04	0.33	0.52	0.55	0.57	0.62	3732	1.0
y_mean[1461]	-0.26	4.0e-4	0.03	-0.32	-0.28	-0.26	-0.24	-0.21	5400	1.0
y_mean[1461] y_mean[1462]	-0.20	3.3e-4	0.03	-0.32	-0.69	-0.68	-0.24	-0.21	4632	1.0
• –										
y_mean[1463]	0.44	1.1e-3	0.07	0.29	0.39	0.44	0.49	0.58	4890	1.0
y_mean[1464]	0.31	4.1e-4	0.03	0.26	0.3	0.31	0.33	0.37	4119	1.0
y_mean[1465]	1.63	1.1e-3	0.07	1.49	1.58	1.63	1.67	1.76	4269	1.0
y_mean[1466]	0.2	4.9e-4	0.03	0.13	0.17	0.2	0.22	0.26	4037	1.0
y_mean[1467]	-0.13	3.2e-4	0.02	-0.17	-0.14	-0.13	-0.11	-0.09	4595	1.0
y_mean[1468]	0.89	7.5e-4	0.05	0.8	0.86	0.89	0.92	0.98	3666	1.0
y_mean[1469]	-0.05	3.5e-4	0.02	-0.1	-0.07	-0.05		9.8e-3	4487	1.0
y_mean[1470]	0.43	6.1e-4	0.04	0.36	0.41	0.43	0.46	0.51	4240	1.0
y_mean[1471]	-0.36	3.4e-4	0.02	-0.4	-0.37	-0.36	-0.34	-0.31	4440	1.0
y_mean[1472]	0.65	5.8e-4	0.04	0.58	0.63	0.65	0.68	0.73	4113	1.0
y_mean[1473]	-1.01	4.1e-4	0.03	-1.06	-1.03	-1.01	-0.99	-0.96	4434	1.0
y_mean[1474]	-0.66	3.7e-4	0.03	-0.71	-0.68	-0.66	-0.64	-0.61	4508	1.0
y_mean[1475]	0.51	5.5e-4	0.04	0.44	0.49	0.51	0.53	0.58	4238	1.0
y_mean[1476]	-0.89	4.2e-4	0.03	-0.95	-0.91	-0.89	-0.87	-0.84	4700	1.0
y_mean[1477]	-0.02	7.3e-4	0.05	-0.12	-0.06	-0.02	0.01	0.08	4882	1.0
y_mean[1478]	1.19	10.0e-4	0.07	1.06	1.14	1.19	1.23	1.32	4240	1.0
y_mean[1479]	0.35	3.5e-4	0.02	0.31	0.34	0.35	0.37	0.4	4149	1.0
y_mean[1480]	-0.1	3.8e-4	0.03	-0.15	-0.12	-0.1	-0.08	-0.05	4798	1.0
y_mean[1481]	-0.2	4.8e-4	0.03	-0.27	-0.22	-0.2	-0.18	-0.14	4605	1.0
y_mean[1482]	-0.58	3.0e-4	0.02	-0.62	-0.6	-0.58	-0.57	-0.54	4508	1.0
y_mean[1483]	-0.41	3.9e-4	0.03	-0.46	-0.42	-0.41	-0.39	-0.35	4472	1.0
y_mean[1484]	0.35	4.4e-4	0.03	0.29	0.33	0.35	0.37	0.41	4909	1.0
y_mean[1485]	0.87	6.0e-4	0.04	0.79	0.84	0.87	0.9	0.95	4772	1.0
y_mean[1486]	1.46	8.0e-4	0.05	1.36	1.43	1.46	1.5	1.56	4339	1.0
y_mean[1487]	0.23	4.2e-4	0.03	0.18	0.21	0.23	0.25	0.28	4221	1.0
y_mean[1488]	2.63	1.4e-3	0.09	2.45	2.57	2.63	2.69	2.81	4333	1.0
y_mean[1489]	-0.03	4.4e-4	0.03	-0.09	-0.05	-0.03	-0.02	0.02	4085	1.0
y_mean[1490]	0.18	3.6e-4	0.02	0.13	0.16	0.18	0.2	0.23	4324	1.0
y_mean[1491]	0.91	7.0e-4	0.05	0.81	0.87	0.91	0.94	1.0	4627	1.0
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y_mean[1492]	-0.36	3.4e-4	0.02	-0.4	-0.37	-0.36	-0.34	-0.31	4253	1.0
y_mean[1493]	0.05	5.0e-4	0.03	-0.01	0.03	0.05	0.07	0.11	3901	1.0
y_mean[1494]	0.53	1.1e-3	0.07	0.39	0.49	0.53	0.59	0.68	4638	1.0
y_mean[1495]	0.25	5.0e-4	0.03	0.19	0.23	0.25	0.27	0.31	3983	1.0
y_mean[1496]	-1.28	1.2e-3	0.08	-1.43	-1.33	-1.28	-1.23	-1.14	4314	1.0
y_mean[1497]	-0.03	4.0e-4	0.03	-0.07	-0.04	-0.03-	8.1e-3	0.03	4164	1.0
y_mean[1498]	1.18	6.4e-4	0.04	1.1	1.15	1.18	1.21	1.26	4269	1.0
y_mean[1499]	0.97	9.1e-4	0.06	0.85	0.92	0.97	1.01	1.08	4380	1.0
y_mean[1500]	-0.83	4.1e-4	0.03	-0.89	-0.85	-0.83	-0.81	-0.78	4803	1.0
y_mean[1501]	0.25	3.5e-4	0.02	0.21	0.24	0.25	0.27	0.3	4326	1.0
y_mean[1502]	-0.81	8.0e-4	0.05	-0.91	-0.85	-0.81	-0.78	-0.71	4300	1.0
y_mean[1503]	0.06	3.0e-4	0.02	0.02	0.04	0.06	0.07	0.1	4402	1.0
y_mean[1504]	-0.07	4.0e-4	0.03	-0.12	-0.09	-0.07	-0.05	-0.02	4198	1.0
y_mean[1504] y_mean[1505]	0.64	4.4e-4	0.03	0.12	0.62	0.64	0.66	0.02	4253	1.0
y_mean[1505] y_mean[1506]	-0.58	3.3e-4	0.03	-0.63	-0.6	-0.58	-0.57	-0.54	4535	1.0
y_mean[1500] y_mean[1507]	0.39	2.8e-4	0.02	0.35	0.38	0.39	0.37	0.43	4929	1.0
y_mean[1507] y_mean[1508]	1.45	7.6e-4	0.02	1.35	1.41	1.45	1.48	1.55	4535	1.0
• –			0.03		0.4			0.47	4044	
y_mean[1509]	0.42	4.1e-4		0.37		0.42	0.44			1.0
y_mean[1510]	-0.38	5.1e-4	0.03	-0.44	-0.4	-0.37	-0.35	-0.31	4640	1.0
y_mean[1511]	-0.76	5.4e-4	0.04	-0.84	-0.79	-0.76	-0.74	-0.69	4891	1.0
y_mean[1512]	-0.63	3.2e-4	0.02	-0.68	-0.65	-0.63	-0.62	-0.59	4552	1.0
y_mean[1513]	-0.64	3.7e-4	0.02	-0.69	-0.65	-0.64	-0.62	-0.59	4514	1.0
y_mean[1514]	-0.08	3.0e-4	0.02	-0.12	-0.09	-0.08	-0.06	-0.04	4550	1.0
y_mean[1515]	1.15	6.0e-4	0.04	1.07	1.12	1.15	1.17	1.22	4266	1.0
y_mean[1516]	-0.71	3.9e-4	0.03	-0.76	-0.73	-0.71	-0.7	-0.66	4522	1.0
y_mean[1517]	-0.63	3.1e-4	0.02	-0.67	-0.64	-0.63	-0.61	-0.59	4542	1.0
y_mean[1518]	-0.11	3.1e-4	0.02	-0.15	-0.12	-0.11	-0.09	-0.07	4578	1.0
y_mean[1519]	0.22	4.4e-4	0.03	0.17	0.2	0.22	0.24	0.28	4221	1.0
y_mean[1520]	-0.48	3.0e-4	0.02	-0.52	-0.49	-0.48	-0.47	-0.44	4608	1.0
y_mean[1521]	-0.46	2.9e-4	0.02	-0.5	-0.48	-0.46	-0.45	-0.43	4707	1.0
y_mean[1522]	0.58	6.7e-4	0.05	0.49	0.55	0.58	0.61	0.67	4612	1.0
y_mean[1523]	0.79	6.2e-4	0.04	0.72	0.76	0.79	0.82	0.88	4663	1.0
y_mean[1524]	-1.09	4.2e-4	0.03	-1.15	-1.11	-1.09	-1.07	-1.04	4422	1.0
y_mean[1525]	-0.77	3.8e-4	0.03	-0.82	-0.78	-0.77	-0.75	-0.71	4798	1.0
y_mean[1526]	-0.17	3.4e-4	0.02	-0.22	-0.19	-0.17	-0.16	-0.13	4354	1.0
y_mean[1527]	0.15	3.1e-4	0.02	0.1	0.13	0.15	0.16	0.19	4724	1.0
y_mean[1528]	0.54	6.8e-4	0.04	0.46	0.51	0.54	0.58	0.63	4291	1.0
y_mean[1529]	0.53	6.0e-4	0.04	0.45	0.5	0.53	0.55	0.6	4412	1.0
y_mean[1530]	-0.58	3.1e-4	0.02	-0.62	-0.6	-0.58	-0.57	-0.54	4511	1.0
y_mean[1531]	-1.06	4.2e-4	0.03	-1.11	-1.08	-1.06	-1.04	-1.01	4457	1.0
y_mean[1532]	-0.74	4.1e-4	0.03	-0.79	-0.76	-0.74	-0.72	-0.68	4842	1.0
y_mean[1533]	-0.46	3.5e-4	0.02	-0.5	-0.47	-0.46	-0.44	-0.41	4355	1.0
y_mean[1534]	-0.57	3.1e-4	0.02	-0.62	-0.59	-0.57	-0.56	-0.53	4525	1.0
y_mean[1535]	0.75	5.5e-4	0.04	0.68	0.72	0.75	0.77	0.82	4219	1.0
y_mean[1536] y_mean[1536]	0.75	4.3e-4	0.03	0.29	0.72	0.75	0.77	0.4	4871	1.0
y_mean[1537]	-0.45	3.9e-4	0.03	-0.5	-0.47	-0.45	-0.43	-0.4	4340	1.0
y_mean[1538]	0.43	6.9e-4	0.05	0.55	0.61	0.43	0.43	0.73	4526	1.0
y_mean[1539]	0.81	6.5e-4	0.03	0.72	0.78	0.81	0.84	0.73	4606	1.0
λ Tmean[1999]	0.01	0.06-4	0.04	0.12	0.10	0.01	0.04	0.09	±000	1.0

```
y_mean[1540]
                     0.79
                                     0.05
                                              0.7
                                                     0.76
                                                              0.8
                                                                    0.83
                                                                                    4402
                           7.3e-4
                                                                            0.89
                                                                                             1.0
                     -0.9
                           4.9e-4
                                     0.03
                                            -0.97
                                                    -0.92
                                                             -0.9
                                                                   -0.88
                                                                           -0.83
                                                                                    4617
y_mean[1541]
                                                                                             1.0
y_mean[1542]
                    -0.12
                                     0.03
                                            -0.17
                                                    -0.14
                           4.7e-4
                                                           -0.12
                                                                    -0.1
                                                                           -0.06
                                                                                    3959
                                                                                             1.0
y_mean[1543]
                    -0.25
                           4.7e-4
                                     0.03
                                            -0.31
                                                    -0.27
                                                           -0.25
                                                                   -0.23
                                                                           -0.19
                                                                                    4001
                                                                                             1.0
                                                             -1.0
                                                                                    4446
y_mean[1544]
                     -1.0
                           4.1e-4
                                     0.03
                                            -1.05
                                                    -1.01
                                                                   -0.98
                                                                           -0.94
                                                                                             1.0
                    -0.83
                           5.8e-4
                                     0.04
                                            -0.91
                                                    -0.86
                                                           -0.83
                                                                   -0.81
                                                                           -0.76
                                                                                    4306
y_mean[1545]
                                                                                             1.0
                     0.09
                                             0.04
y_mean[1546]
                           4.0e-4
                                     0.03
                                                     0.07
                                                            0.09
                                                                    0.11
                                                                            0.14
                                                                                    4387
                                                                                             1.0
y_mean[1547]
                    -0.46
                                             -0.5
                                                                           -0.41
                           3.4e-4
                                     0.02
                                                    -0.47
                                                           -0.46
                                                                   -0.44
                                                                                    4696
                                                                                             1.0
                    -0.57
                           3.8e-4
                                     0.03
                                            -0.62
                                                    -0.58
                                                           -0.57
                                                                   -0.55
                                                                           -0.52
                                                                                    4467
                                                                                             1.0
y_mean[1548]
y_mean[1549]
                     0.38
                                     0.03
                                             0.32
                                                     0.36
                                                            0.38
                                                                                    4843
                           4.4e-4
                                                                     0.4
                                                                            0.44
                                                                                             1.0
                    -0.81
                           5.1e-4
                                     0.03
                                            -0.88
                                                    -0.83
                                                           -0.81
                                                                   -0.79
                                                                           -0.74
                                                                                    4465
y_mean[1550]
                                                                                             1.0
                    -0.12
                           3.5e-4
                                     0.02
                                            -0.16
                                                    -0.13
                                                           -0.12
                                                                    -0.1
                                                                           -0.07
                                                                                    4845
                                                                                             1.0
y_mean[1551]
y_mean[1552]
                    -0.79
                           4.5e-4
                                     0.03
                                            -0.85
                                                    -0.81
                                                           -0.79
                                                                   -0.77
                                                                           -0.73
                                                                                    4504
                                                                                             1.0
                     0.13
                           5.5e-4
                                     0.03
                                             0.06
                                                     0.11
                                                            0.13
                                                                    0.15
                                                                             0.2
                                                                                    3844
y_mean[1553]
                                                                                             1.0
                   -0.41
                           3.1e-4
                                     0.02
                                            -0.45
                                                    -0.43
                                                           -0.41
                                                                    -0.4
                                                                           -0.37
                                                                                    4467
y_mean[1554]
                                                                                             1.0
                     0.76
                           5.2e-4
                                     0.03
                                             0.69
                                                     0.73
                                                            0.76
                                                                    0.78
                                                                            0.82
                                                                                    4210
                                                                                             1.0
y_{mean}[1555]
y_mean[1556]
                    -0.77
                           9.3e-4
                                     0.06
                                            -0.89
                                                    -0.82
                                                           -0.77
                                                                   -0.73
                                                                           -0.66
                                                                                    4308
                                                                                             1.0
y_mean[1557]
                     0.41
                           5.7e-4
                                     0.04
                                             0.34
                                                     0.39
                                                            0.41
                                                                    0.44
                                                                            0.49
                                                                                    4519
                                                                                             1.0
y_mean[1558]
                     0.83
                           6.8e-4
                                     0.05
                                             0.74
                                                      0.8
                                                            0.83
                                                                    0.86
                                                                            0.92
                                                                                    4400
                                                                                             1.0
y_mean[1559]
                    -0.35
                           2.8e-4
                                     0.02
                                            -0.39
                                                    -0.37
                                                           -0.35
                                                                   -0.34
                                                                           -0.32
                                                                                    4847
                                                                                             1.0
                   -0.12
                                     0.03
                                            -0.17
                                                    -0.14
                                                           -0.12
                                                                    -0.1
                                                                           -0.07
y_mean[1560]
                           4.4e-4
                                                                                    3954
                                                                                             1.0
                    -0.28
                           2.8e-4
                                     0.02
                                            -0.31
                                                    -0.29
                                                           -0.28
                                                                   -0.26
                                                                           -0.24
                                                                                    4794
y_mean[1561]
                                                                                             1.0
                   -0.22
                           3.5e-4
                                     0.02
                                            -0.27
                                                   -0.24
                                                           -0.22
y_mean[1562]
                                                                   -0.21
                                                                           -0.18
                                                                                    4536
                                                                                             1.0
                    0.04
                           7.2e-4
                                     0.05
                                            -0.05 8.1e-3
                                                            0.04
                                                                    0.07
                                                                            0.13
                                                                                    4161
y_mean[1563]
                                                                                             1.0
y_mean[1564]
                     2.24
                           8.4e-4
                                     0.05
                                             2.13
                                                      2.2
                                                             2.24
                                                                    2.28
                                                                            2.35
                                                                                    4154
                                                                                             1.0
                   -1.07
                           4.7e-4
                                     0.03
                                            -1.13
                                                   -1.09
                                                           -1.07
                                                                   -1.04
                                                                           -1.01
                                                                                    4571
y_mean[1565]
                                                                                             1.0
                     1.05
                                     0.04
                                             0.98
                                                     1.02
                                                                            1.12
                           5.8e-4
                                                             1.05
                                                                    1.08
                                                                                    4345
y_mean[1566]
                                                                                             1.0
y_mean[1567]
                     0.53
                           4.3e-4
                                     0.03
                                             0.48
                                                     0.51
                                                            0.53
                                                                    0.55
                                                                            0.58
                                                                                    3929
                                                                                             1.0
                    -0.42
                                            -0.47
                                                    -0.44
                                                           -0.42
                                                                           -0.36
                           4.4e-4
                                     0.03
                                                                    -0.4
                                                                                    4209
                                                                                             1.0
y_mean[1568]
y_mean[1569]
                    -0.36
                           3.9e-4
                                     0.03
                                            -0.41
                                                    -0.38
                                                           -0.36
                                                                   -0.34
                                                                           -0.31
                                                                                    4319
                                                                                             1.0
                                            -0.55
y_mean[1570]
                    -0.51
                           3.5e-4
                                     0.02
                                                    -0.52
                                                            -0.5
                                                                   -0.49
                                                                           -0.46
                                                                                    4643
                                                                                             1.0
y_mean[1571]
                     0.75
                           5.2e-4
                                     0.03
                                             0.68
                                                     0.73
                                                            0.75
                                                                    0.77
                                                                            0.82
                                                                                    4209
                                                                                             1.0
y_mean[1572]
                     -0.7
                                     0.02
                                            -0.75
                                                             -0.7
                           3.6e-4
                                                    -0.72
                                                                   -0.69
                                                                           -0.65
                                                                                    4544
                                                                                             1.0
y_mean[1573]
                    -0.68
                           3.6e-4
                                     0.02
                                            -0.73
                                                     -0.7
                                                           -0.68
                                                                   -0.67
                                                                           -0.63
                                                                                    4711
                                                                                             1.0
y_mean[1574]
                     -0.5
                           2.8e-4
                                     0.02
                                            -0.54
                                                    -0.51
                                                            -0.5
                                                                   -0.49
                                                                           -0.46
                                                                                    4775
                                                                                             1.0
                     0.58
                                     0.03
                                             0.52
                                                     0.56
                                                                    0.61
                                                                            0.65
                                                                                    3737
y_mean[1575]
                           5.4e-4
                                                            0.58
                                                                                             1.0
                                                           -0.12
                    -0.12
                           5.0e-4
                                     0.03
                                            -0.19
                                                    -0.14
                                                                    -0.1
                                                                           -0.06
                                                                                    4142
y_mean[1576]
                                                                                             1.0
y_mean[1577]
                     0.71
                           8.1e-4
                                     0.05
                                             0.61
                                                     0.67
                                                             0.7
                                                                    0.74
                                                                            0.81
                                                                                    4149
                                                                                             1.0
                     0.67
                           7.1e-4
                                     0.05
                                             0.58
                                                     0.64
                                                            0.67
                                                                     0.7
                                                                            0.77
                                                                                    4379
                                                                                             1.0
y_mean[1578]
                 -8.9e-3
                           7.4e-4
                                     0.05
                                             -0.1
                                                    -0.04-8.8e-3
                                                                    0.02
                                                                            0.09
                                                                                    4145
y_mean[1579]
                                                                                             1.0
                     2.72
                           1.1e-3
                                     0.07
                                             2.58
                                                     2.67
                                                            2.72
                                                                    2.77
                                                                            2.86
                                                                                    4601
                                                                                             1.0
y_mean[1580]
                    -0.01
                                     0.02
                                            -0.05
                                                    -0.03
                                                           -0.01 3.1e-3
y_mean[1581]
                           3.1e-4
                                                                            0.03
                                                                                    4465
                                                                                             1.0
y_mean[1582]
                     0.34
                           6.9e-4
                                     0.05
                                             0.24
                                                     0.31
                                                            0.34
                                                                    0.37
                                                                            0.43
                                                                                    4879
                                                                                             1.0
                     -0.7
                                            -0.76
                                                    -0.72
                                                             -0.7
                                                                           -0.64
                           4.6e-4
                                     0.03
                                                                   -0.68
                                                                                    4411
y_mean[1583]
                                                                                             1.0
                     0.09
                                     0.04
                                             0.02
                                                     0.07
                                                            0.09
                                                                    0.12
                                                                            0.17
                                                                                    5080
y_mean[1584]
                           5.3e-4
                                                                                             1.0
y_mean[1585]
                    -0.57
                           3.7e-4
                                     0.02
                                            -0.62
                                                    -0.59
                                                           -0.57
                                                                   -0.55
                                                                           -0.52
                                                                                    4512
                                                                                             1.0
                                     0.03 4.2e-3
y_mean[1586]
                     0.07
                           5.6e-4
                                                     0.05
                                                            0.07
                                                                    0.09
                                                                            0.14
                                                                                    3801
                                                                                             1.0
y_mean[1587]
                    -0.61
                           6.0e-4
                                     0.04
                                            -0.68
                                                    -0.63
                                                           -0.61
                                                                   -0.58
                                                                           -0.53
                                                                                    4414
                                                                                             1.0
```

```
-0.36
y_mean[1588]
                    -0.38
                           5.2e-4
                                     0.04
                                            -0.45
                                                     -0.4
                                                            -0.38
                                                                           -0.31
                                                                                    4631
                                                                                             1.0
                     -1.1
                           4.6e-4
                                     0.03
                                            -1.16
                                                    -1.12
                                                             -1.1
                                                                   -1.08
                                                                           -1.04
                                                                                    4499
y_mean[1589]
                                                                                             1.0
y_mean[1590]
                    -1.14
                                     0.03
                                                    -1.16
                           5.0e-4
                                             -1.2
                                                            -1.14
                                                                   -1.11
                                                                           -1.07
                                                                                    4415
                                                                                             1.0
                   -0.31
                           3.8e-4
                                     0.02
                                            -0.35
                                                    -0.32
                                                           -0.31
                                                                   -0.29
                                                                           -0.26
                                                                                    4123
                                                                                             1.0
y_mean[1591]
                                             1.28
y_mean[1592]
                     1.36
                           5.8e-4
                                     0.04
                                                     1.33
                                                             1.36
                                                                     1.38
                                                                            1.43
                                                                                    4035
                                                                                             1.0
                    -0.75
                           4.9e-4
                                     0.03
                                            -0.81
                                                    -0.77
                                                            -0.75
                                                                   -0.72
                                                                           -0.68
                                                                                    4490
y_mean[1593]
                                                                                             1.0
                                            -0.52
y_mean[1594]
                   -0.48
                           3.1e-4
                                     0.02
                                                    -0.49
                                                           -0.48
                                                                   -0.46
                                                                           -0.44
                                                                                    4416
                                                                                             1.0
y_mean[1595]
                           8.0e-4
                     0.13
                                             0.02
                                                     0.09
                                                             0.13
                                                                     0.17
                                                                            0.24
                                     0.06
                                                                                    4901
                                                                                             1.0
                     0.06
                           3.3e-4
                                     0.02
                                             0.02
                                                     0.05
                                                             0.06
                                                                    0.08
                                                                             0.1
                                                                                    4473
                                                                                             1.0
y_mean[1596]
y_mean[1597]
                    -0.75
                                     0.03
                                            -0.81
                                                    -0.77
                                                            -0.75
                                                                   -0.73
                                                                           -0.69
                                                                                    4477
                           4.6e-4
                                                                                             1.0
                     0.31
                           5.4e-4
                                     0.04
                                             0.24
                                                     0.28
                                                             0.31
                                                                    0.33
                                                                            0.38
                                                                                    4563
y_mean[1598]
                                                                                             1.0
                    -0.06
                           5.7e-4
                                     0.04
                                            -0.14
                                                    -0.09
                                                            -0.06
                                                                   -0.03
                                                                            0.02
                                                                                    4512
                                                                                             1.0
y_mean[1599]
                           3.6e-4
y_mean[1600]
                     0.41
                                     0.02
                                             0.36
                                                     0.39
                                                             0.41
                                                                    0.43
                                                                            0.46
                                                                                    4589
                                                                                             1.0
                     -0.2
                                            -0.25
                                                                           -0.15
                           3.8e-4
                                     0.03
                                                    -0.22
                                                             -0.2
                                                                   -0.18
                                                                                    5096
y_mean[1601]
                                                                                             1.0
                     -0.2
                           3.8e-4
                                     0.03
                                            -0.25
                                                    -0.22
                                                             -0.2
                                                                   -0.19
                                                                           -0.15
                                                                                    4612
y_mean[1602]
                                                                                             1.0
                     0.74
                           5.5e-4
                                     0.04
                                             0.67
                                                     0.72
                                                             0.74
                                                                     0.76
                                                                            0.81
                                                                                    4221
                                                                                             1.0
y_mean[1603]
y_mean[1604]
                    -0.68
                           3.4e-4
                                     0.02
                                            -0.73
                                                     -0.7
                                                            -0.68
                                                                   -0.66
                                                                           -0.64
                                                                                    4565
                                                                                             1.0
                                                    -0.04
y_mean[1605]
                    -0.02
                                                            -0.02-9.0e-3
                           2.9e-4
                                     0.02
                                            -0.06
                                                                            0.02
                                                                                    4472
                                                                                             1.0
y_mean[1606]
                     1.16
                           6.8e-4
                                     0.04
                                             1.07
                                                     1.13
                                                             1.16
                                                                     1.19
                                                                            1.24
                                                                                    4347
                                                                                             1.0
y_mean[1607]
                    -0.51
                           5.1e-4
                                     0.03
                                            -0.58
                                                    -0.54
                                                           -0.51
                                                                   -0.49
                                                                           -0.44
                                                                                    4395
                                                                                             1.0
                           5.7e-4
                     0.12
                                             0.04
                                                             0.11
                                                                            0.19
                                                                                    4739
y_mean[1608]
                                     0.04
                                                     0.09
                                                                     0.14
                                                                                             1.0
                     0.39
                           5.3e-4
                                     0.03
                                             0.33
                                                     0.37
                                                             0.39
                                                                    0.42
                                                                            0.46
                                                                                    3898
y_mean[1609]
                                                                                             1.0
y_mean[1610]
                     1.18
                           6.1e-4
                                     0.04
                                              1.1
                                                     1.15
                                                             1.18
                                                                     1.21
                                                                            1.26
                                                                                    4242
                                                                                             1.0
                      1.2
                           6.1e-4
                                     0.04
                                             1.12
                                                     1.17
                                                              1.2
                                                                     1.22
                                                                            1.27
                                                                                    4043
y_mean[1611]
                                                                                             1.0
y_mean[1612]
                     -0.1
                           4.5e-4
                                     0.03
                                            -0.16
                                                    -0.12
                                                             -0.1
                                                                   -0.08
                                                                           -0.04
                                                                                    4220
                                                                                             1.0
                  3.8e-3
                           6.7e-4
                                     0.04
                                            -0.08
                                                    -0.03 4.6e-3
                                                                     0.03
                                                                            0.09
                                                                                    4142
y_mean[1613]
                                                                                             1.0
                     1.38
                                     0.05
                                             1.28
                           7.6e-4
                                                     1.34
                                                             1.38
                                                                     1.41
                                                                            1.48
                                                                                    4614
y_mean[1614]
                                                                                             1.0
                           3.2e-4
y_mean[1615]
                    -0.64
                                     0.02
                                            -0.68
                                                    -0.65
                                                            -0.64
                                                                            -0.6
                                                                                    4561
                                                                   -0.62
                                                                                             1.0
                    -0.16
                                            -0.22
                                                    -0.18
                                                            -0.16
                                                                   -0.14
                           4.6e-4
                                     0.03
                                                                            -0.1
                                                                                    3934
                                                                                             1.0
y_mean[1616]
y_mean[1617]
                     0.69
                           4.6e-4
                                     0.03
                                             0.63
                                                     0.67
                                                             0.69
                                                                    0.71
                                                                            0.75
                                                                                    4265
                                                                                             1.0
                    -0.31
                           4.4e-4
                                     0.03
                                            -0.36
                                                    -0.33
                                                            -0.31
                                                                   -0.29
                                                                           -0.25
                                                                                    4688
                                                                                             1.0
y_mean[1618]
                                                                   -0.63
y_mean[1619]
                    -0.65
                           3.6e-4
                                     0.02
                                             -0.7
                                                    -0.66
                                                            -0.65
                                                                            -0.6
                                                                                    4512
                                                                                             1.0
y_mean[1620]
                                     0.03
                                            -0.93
                                                            -0.86
                                                                            -0.8
                    -0.86
                           5.1e-4
                                                    -0.89
                                                                   -0.84
                                                                                    4508
                                                                                             1.0
y_mean[1621]
                   -0.16
                           4.4e-4
                                     0.03
                                            -0.22
                                                    -0.18
                                                           -0.16
                                                                   -0.14
                                                                            -0.1
                                                                                    4768
                                                                                             1.0
y_mean[1622]
                   -0.46
                           3.0e-4
                                     0.02
                                             -0.5
                                                    -0.47
                                                            -0.46
                                                                   -0.44
                                                                           -0.42
                                                                                    4437
                                                                                             1.0
                     0.06
                                     0.03 7.5e-3
                                                     0.04
                                                             0.05
                                                                     0.07
                                                                            0.11
y_mean[1623]
                           3.9e-4
                                                                                    4552
                                                                                             1.0
                     0.21
                           5.0e-4
                                     0.03
                                             0.14
                                                     0.19
                                                             0.21
                                                                     0.23
                                                                            0.28
                                                                                    4716
y_mean[1624]
                                                                                             1.0
y_mean[1625]
                     -0.6
                           4.1e-4
                                     0.03
                                            -0.65
                                                    -0.62
                                                             -0.6
                                                                   -0.58
                                                                           -0.55
                                                                                    4444
                                                                                             1.0
                    -0.25
                           3.6e-4
                                     0.02
                                            -0.29
                                                    -0.26
                                                            -0.25
                                                                   -0.23
                                                                            -0.2
                                                                                    4270
                                                                                             1.0
y_mean[1626]
                     0.54
                           4.3e-4
                                     0.03
                                             0.48
                                                     0.52
                                                             0.54
                                                                     0.56
                                                                             0.6
                                                                                    4402
y_mean[1627]
                                                                                             1.0
                     0.84
                           5.4e-4
                                     0.04
                                             0.77
                                                     0.82
                                                             0.84
                                                                    0.86
                                                                            0.91
                                                                                    4263
                                                                                             1.0
y_mean[1628]
                     0.14
                                     0.03
                                             0.08
                                                                             0.2
                                                                                    4698
y_mean[1629]
                           4.6e-4
                                                     0.12
                                                             0.14
                                                                    0.17
                                                                                             1.0
y_mean[1630]
                     0.57
                           4.7e-4
                                     0.03
                                             0.51
                                                     0.55
                                                             0.57
                                                                    0.59
                                                                            0.63
                                                                                    4393
                                                                                             1.0
                           4.0e-4
                                     0.03
                                             0.38
                     0.43
                                                     0.41
                                                             0.43
                                                                     0.45
                                                                            0.48
                                                                                    4544
y_mean[1631]
                                                                                             1.0
                     -0.6
                                     0.02
                                            -0.64
                                                             -0.6
                                                                   -0.58
                                                                           -0.55
                                                                                    4530
y_mean[1632]
                           3.4e-4
                                                    -0.61
                                                                                             1.0
y_mean[1633]
                     0.02
                           3.0e-4
                                     0.02
                                            -0.02 5.0e-3
                                                             0.02
                                                                     0.03
                                                                            0.06
                                                                                    4412
                                                                                             1.0
y_mean[1634]
                    -1.04
                           4.3e-4
                                     0.03
                                            -1.09
                                                    -1.06
                                                           -1.04
                                                                   -1.02
                                                                           -0.98
                                                                                    4375
                                                                                             1.0
y_mean[1635]
                   4.2e-3
                           3.2e-4
                                     0.02
                                            -0.04
                                                    -0.01 4.5e-3
                                                                     0.02
                                                                            0.04
                                                                                    4469
                                                                                             1.0
```

y_mean[1636]	0.04	6.4e-4	0.04	-0.04	8.2e-3	0.04	0.06	0.12	4126	1.0
y_mean[1637]	-0.43	4.1e-4	0.03	-0.48	-0.45	-0.43	-0.41	-0.38	4326	1.0
y_mean[1638]	0.44	3.2e-4	0.02	0.4	0.42	0.44	0.46	0.48	4991	1.0
y_mean[1639]	0.78	8.1e-4	0.05	0.68	0.75	0.78	0.81	0.88	3770	1.0
y_mean[1640]	-0.15	3.1e-4	0.02	-0.2	-0.17	-0.15	-0.14	-0.11	4810	1.0
y_mean[1641]	-0.7	3.4e-4	0.02	-0.74	-0.71	-0.7	-0.68	-0.65	4620	1.0
y_mean[1642]	1.21	9.5e-4	0.06	1.09	1.17	1.21	1.26	1.34	4475	1.0
y_mean[1643]	-0.18	3.4e-4	0.02	-0.22	-0.19	-0.18	-0.16	-0.13	5008	1.0
y_mean[1644]	-0.15	3.1e-4	0.02	-0.19	-0.16	-0.15	-0.13	-0.11	4760	1.0
y_mean[1645]	0.86	7.3e-4	0.04	0.78	0.83	0.86	0.89	0.95	3632	1.0
y_mean[1646]	-0.56	3.0e-4	0.02	-0.6	-0.57	-0.56	-0.54	-0.52	4477	1.0
y_mean[1647]	-0.51	3.5e-4	0.02	-0.55	-0.52	-0.51	-0.49	-0.46	4652	1.0
y_mean[1648]	-0.25	3.5e-4	0.02	-0.3	-0.27	-0.25	-0.23	-0.2	4954	1.0
y_mean[1649]	1.89	8.9e-4	0.06	1.78	1.85	1.89	1.93	2.01	4267	1.0
y_mean[1650]	-0.11	7.2e-4	0.05	-0.22	-0.15	-0.11		-6.9e-3	5439	1.0
y_mean[1651]	-0.54	3.1e-4	0.02	-0.58	-0.55	-0.54	-0.52	-0.5	4449	1.0
y_mean[1652]	0.34	4.5e-4	0.02	0.31	0.34	0.34	0.38	0.42	3935	1.0
y_mean[1653]	-0.64	5.6e-4	0.03	-0.71	-0.67	-0.64	-0.62	-0.57	4317	1.0
y_mean[1654]	-0.55	3.0e-4	0.04	-0.58	-0.56	-0.55	-0.53	-0.51	4471	1.0
y_mean[1654] y_mean[1655]	-0.33	3.6e-4	0.02	-0.75	-0.72	-0.55	-0.68	-0.65	4861	1.0
y_mean[1656]	0.34	4.5e-4	0.03	0.73	0.72	0.34	0.37	0.4	4938	1.0
y_mean[1657]	-0.57	3.5e-4	0.03	-0.61	-0.58	-0.57	-0.55	-0.52	4560	1.0
-			0.02							
y_mean[1658]	0.26	4.0e-4		0.21	0.24	0.26	0.28	0.31	4311	1.0
y_mean[1659]	-0.69	3.5e-4	0.02	-0.74	-0.7	-0.69	-0.67	-0.64	4559	1.0
y_mean[1660]	0.04	3.1e-4		5.1e-4	0.03	0.04	0.05	0.08	4376	1.0
y_mean[1661]	-0.58	3.1e-4	0.02	-0.62	-0.59	-0.58	-0.57	-0.54	4523	1.0
y_mean[1662]	-0.74	3.6e-4	0.02	-0.79	-0.76	-0.74	-0.73	-0.69	4661	1.0
y_mean[1663]	-0.24	5.4e-4	0.03	-0.3	-0.26	-0.24	-0.21	-0.17	3991	1.0
y_mean[1664]	-1.0	4.5e-4	0.03	-1.06	-1.02	-1.0	-0.98	-0.94	4352	1.0
y_mean[1665]	-0.21	3.4e-4	0.02	-0.25	-0.22	-0.21	-0.19	-0.16	4806	1.0
y_mean[1666]	-0.71	3.5e-4	0.02	-0.76	-0.72	-0.71	-0.69	-0.66	4595	1.0
y_mean[1667]	0.45	3.9e-4	0.02	0.41	0.44	0.45	0.47	0.5	4002	1.0
y_mean[1668]	-1.15	7.8e-4	0.05	-1.25			-1.11	-1.05	4416	1.0
y_mean[1669]	-0.25	2.8e-4	0.02	-0.29	-0.26	-0.25	-0.23	-0.21	4746	1.0
y_mean[1670]	-0.45	3.0e-4	0.02	-0.49	-0.47	-0.45	-0.44	-0.41	4543	1.0
y_mean[1671]	-0.75	3.8e-4	0.03	-0.8	-0.76	-0.74	-0.73	-0.7	4594	1.0
y_mean[1672]	0.15	3.6e-4	0.02	0.1	0.13	0.15	0.16	0.19	4262	1.0
y_mean[1673]	1.42	7.8e-4	0.05	1.32	1.38	1.42	1.45	1.51	3963	1.0
y_mean[1674]	-0.4	5.0e-4	0.03	-0.46	-0.42	-0.4	-0.37	-0.33	4711	1.0
y_mean[1675]	-0.05	2.9e-4	0.02	-0.09	-0.06	-0.05	-0.03	-0.01	4530	1.0
y_mean[1676]	-0.22	4.5e-4	0.03	-0.27	-0.24	-0.22	-0.2	-0.16	4110	1.0
y_mean[1677]	-0.77	4.0e-4	0.03	-0.82	-0.79	-0.77	-0.75	-0.72	4582	1.0
y_mean[1678]	-0.38	5.4e-4	0.04	-0.46	-0.41	-0.38	-0.36	-0.31	4884	1.0
y_mean[1679]	-0.22	4.0e-4	0.03	-0.27	-0.23	-0.22	-0.2	-0.16	4570	1.0
y_mean[1680]	1.58	7.9e-4	0.05	1.48	1.54	1.58	1.61	1.68	4290	1.0
y_mean[1681]	-1.06	7.4e-4	0.05	-1.15	-1.09	-1.06	-1.03	-0.97	4439	1.0
y_mean[1682]	-0.12	5.0e-4	0.03	-0.19	-0.14	-0.12	-0.1	-0.06	4197	1.0
y_mean[1683]	0.09	5.1e-4	0.03	0.03	0.07	0.09	0.11	0.15	3970	1.0

y_mean[1684]	-0.61	3.2e-4	0.02	-0.65	-0.62	-0.61	-0.59	-0.57	4522	1.0
y_mean[1685]	-1.15	4.5e-4	0.03	-1.21	-1.17	-1.15	-1.13	-1.09	4398	1.0
y_mean[1686]	0.25	4.0e-4	0.03	0.2	0.23	0.25	0.27	0.3	4285	1.0
y_mean[1687]	-0.99	4.4e-4	0.03	-1.05	-1.01	-0.99	-0.97	-0.93	4361	1.0
y_mean[1688]	-0.23	4.2e-4	0.03	-0.29	-0.25	-0.23	-0.21	-0.18	4323	1.0
y_mean[1689]	0.04	3.8e-4		7.0e-3	0.03	0.05	0.06	0.09	4342	1.0
y_mean[1690]	0.32	2.8e-4	0.02	0.28	0.31	0.32	0.34	0.36	4843	1.0
y_mean[1691]	0.79	5.9e-4	0.04	0.72	0.76	0.79	0.82	0.87	4211	1.0
y_mean[1692]	2.27	9.6e-4	0.06	2.15	2.23	2.27	2.31	2.39	4027	1.0
y_mean[1693]	0.1	3.2e-4	0.02	0.06	0.09	0.1	0.12	0.14	4397	1.0
y_mean[1694]	-0.45	3.2e-4	0.02	-0.49	-0.47	-0.45	-0.44	-0.41	4668	1.0
y_mean[1695]	1.08	6.0e-4	0.04	1.0	1.05	1.08	1.1	1.15	3917	1.0
y_mean[1696]	-0.85	4.4e-4	0.03	-0.91	-0.87	-0.85	-0.83	-0.8	4697	1.0
y_mean[1697]	-0.63	3.2e-4	0.03	-0.67	-0.65	-0.63	-0.62	-0.59	4529	1.0
y_mean[1698]	0.65	7.0e-4	0.02	0.57	0.62	0.65	0.68	0.74	3910	1.0
y_mean[1699]	1.17	8.7e-4	0.04	1.05	1.12	1.16	1.21	1.28	4784	1.0
y_mean[1700]			0.03	0.09		0.15		0.2		
• –	0.15	4.1e-4			0.13		0.16		4162	1.0
y_mean[1701]	1.29	9.1e-4	0.06	1.17	1.25	1.29	1.33	1.4	4258	1.0
y_mean[1702]	-0.29	4.5e-4	0.03	-0.35	-0.31	-0.29	-0.27	-0.23	4984	1.0
y_mean[1703]	0.03	3.1e-4		9.2e-3	0.02	0.03	0.04	0.07	4392	1.0
y_mean[1704]	-0.5	6.7e-4	0.05	-0.59	-0.53	-0.5	-0.47	-0.41	4556	1.0
y_mean[1705]	-0.06	3.4e-4	0.02	-0.11	-0.08	-0.06	-0.05	-0.02	4672	1.0
y_mean[1706]	0.4	5.8e-4	0.04	0.33	0.37	0.4	0.42	0.47	3800	1.0
y_mean[1707]	0.38	5.3e-4	0.03	0.32	0.36	0.38	0.41	0.45	4411	1.0
y_mean[1708]	-0.38	3.3e-4	0.02	-0.42	-0.39	-0.38	-0.36	-0.33	4501	1.0
y_mean[1709]	0.51	6.6e-4	0.04	0.44	0.49	0.51	0.54	0.59	3743	1.0
y_mean[1710]	1.01	5.7e-4	0.04	0.93	0.98	1.01	1.03	1.08	4393	1.0
y_mean[1711]	-0.8	4.1e-4	0.03	-0.85	-0.82	-0.8	-0.78	-0.74	4902	1.0
y_mean[1712]	0.08	2.6e-4	0.02	0.04	0.07	0.08	0.09	0.11	5025	1.0
y_mean[1713]	0.24	7.2e-4	0.05	0.14	0.2	0.24	0.27	0.33	4451	1.0
y_mean[1714]	-0.19	3.4e-4	0.02	-0.23	-0.2	-0.19	-0.17	-0.14	4725	1.0
y_mean[1715]	1.24	6.5e-4	0.04	1.16	1.22	1.24	1.27	1.33	4221	1.0
y_mean[1716]	0.06	6.2e-4	0.04	-0.02	0.03	0.06	0.09	0.14	4727	1.0
y_mean[1717]	-0.13	5.2e-4	0.04	-0.2	-0.15	-0.13	-0.11	-0.06	4522	1.0
y_mean[1718]	-0.35	2.7e-4	0.02	-0.39	-0.36	-0.35	-0.34	-0.32	4816	1.0
y_mean[1719]	-0.4	3.9e-4	0.03	-0.46	-0.42	-0.4	-0.39	-0.35	4387	1.0
y_mean[1720]	0.02	4.6e-4	0.03	-0.04-	-1.5e-3	0.02	0.04	0.08	3973	1.0
y_mean[1721]	-0.43	3.5e-4	0.02	-0.47	-0.44	-0.43	-0.41	-0.38	4389	1.0
y_mean[1722]	-0.38	3.3e-4	0.02	-0.42	-0.4	-0.38	-0.36	-0.34	4381	1.0
y_mean[1723]	1.73	8.3e-4	0.05	1.63	1.7	1.73	1.77	1.83	3852	1.0
y_mean[1724]	0.1	4.9e-4	0.03	0.04	0.08	0.1	0.12	0.16	3992	1.0
y_mean[1725]	0.26	4.4e-4	0.03	0.2	0.24	0.26	0.28	0.33	4995	1.0
y_mean[1726]	0.11	4.8e-4	0.03	0.05	0.08	0.11	0.13	0.17	4056	1.0
y_mean[1727]	0.38	4.5e-4	0.03	0.31	0.36	0.38	0.4	0.44	4855	1.0
y_mean[1728]	-0.33	2.9e-4	0.02	-0.37	-0.34	-0.33	-0.31	-0.29	4589	1.0
y_mean[1729]	-0.18	3.9e-4	0.03	-0.24	-0.2	-0.18	-0.16	-0.13	5025	1.0
y_mean[1729] y_mean[1730]	0.10	7.3e-4	0.05	0.29	0.35	0.18	0.10	0.13	3839	1.0
y_mean[1731]	-0.29	5.8e-4	0.03	-0.37	-0.32	-0.29	-0.26	-0.21	4608	1.0
\" \" \" \" \" \" \" \" \" \" \" \" \" \	0.23	J.UE 4	0.04	0.57	0.02	0.23	0.20	0.21	±000	1.0

y_mean[1732]	-0.21	4.6e-4	0.03	-0.26	-0.23	-0.21	-0.19	-0.15	4112	1.0
y_mean[1733]	0.87	6.1e-4	0.04	0.79	0.84	0.87	0.9	0.95	4380	1.0
y_mean[1734]	0.35	4.9e-4	0.03	0.29	0.33	0.35	0.37	0.42	4657	1.0
y_mean[1735]	-0.72	4.3e-4	0.03	-0.78	-0.74	-0.72	-0.7	-0.67	4488	1.0
y_mean[1736]	0.66	4.9e-4	0.03	0.6	0.64	0.66	0.68	0.72	4258	1.0
y_mean[1737]	0.06	3.4e-4	0.02	0.01	0.04	0.06	0.07	0.1	4362	1.0
y_mean[1738]	-0.55	3.7e-4	0.02	-0.6	-0.57	-0.55	-0.53	-0.5	4592	1.0
y_mean[1739]	-0.42	3.7e-4	0.03	-0.48	-0.44	-0.42	-0.41	-0.37	4804	1.0
y_mean[1740]	1.09	6.2e-4	0.04	1.01	1.06	1.09	1.11	1.17	4390	1.0
y_mean[1741]	-0.34	4.2e-4	0.03	-0.4	-0.36	-0.34	-0.32	-0.28	4664	1.0
y_mean[1742]	-0.23	4.6e-4	0.03	-0.29	-0.25	-0.23	-0.21	-0.17	4503	1.0
y_mean[1743]	0.49	4.1e-4	0.03	0.44	0.47	0.49	0.51	0.54	4404	1.0
y_mean[1744]	0.64	4.4e-4	0.03	0.58	0.62	0.64	0.66	0.7	4252	1.0
y_mean[1745]	-1.19	5.9e-4	0.04	-1.27	-1.22	-1.19	-1.16	-1.11	4691	1.0
y_mean[1746]	-0.22	3.6e-4	0.02	-0.27	-0.24	-0.22	-0.2	-0.17	4743	1.0
y_mean[1747]	-0.66	4.4e-4	0.03	-0.72	-0.68	-0.66	-0.64	-0.61	4714	1.0
y_mean[1747] y_mean[1748]	1.23	7.7e-4	0.05	1.13	1.2	1.23	1.27	1.33	4819	1.0
y_mean[1749]	-0.18	3.5e-4	0.03	-0.22	-0.19	-0.18	-0.16	-0.13	4615	1.0
y_mean[1749] y_mean[1750]	0.13	4.3e-4	0.02	0.25	0.19	0.13	0.10	0.13	4064	1.0
y_mean[1750] y_mean[1751]	0.06	5.9e-4		7.0e-3	0.29	0.06	0.09	0.30	3772	1.0
y_mean[1751] y_mean[1752]	-0.62	3.4e-4	0.04	-0.66	-0.63	-0.62	-0.6	-0.57	4521	1.0
y_mean[1752] y_mean[1753]	-0.62	3.4e-4 3.0e-4	0.02	-0.14	-0.03	-0.62	-0.09	-0.06	4673	1.0
• =			0.02							
y_mean[1754]	-0.25	4.5e-4		-0.3	-0.27	-0.25	-0.23	-0.19	4086	1.0
y_mean[1755]	-0.14	4.3e-4	0.03	-0.2	-0.16	-0.14	-0.13	-0.09	4057	1.0
y_mean[1756]	-0.86	4.3e-4	0.03	-0.92	-0.88	-0.86	-0.84	-0.8	4878	1.0
y_mean[1757]	-0.69	3.5e-4	0.02	-0.73	-0.7	-0.69	-0.67	-0.64	4547	1.0
y_mean[1758]	-0.45	3.3e-4	0.02	-0.49	-0.46	-0.45	-0.43	-0.41	4485	1.0
y_mean[1759]	-0.47	3.2e-4	0.02	-0.51	-0.49	-0.47	-0.46	-0.43	4394	1.0
y_mean[1760]	-0.04	5.8e-4	0.04	-0.11	-0.06	-0.04	-0.01	0.04	4111	1.0
y_mean[1761]	-0.31	3.5e-4	0.02	-0.35	-0.32	-0.31	-0.29	-0.26	4269	1.0
y_mean[1762]	-0.07	4.0e-4	0.03	-0.12	-0.09	-0.07	-0.05	-0.02	4576	1.0
y_mean[1763]	-0.43	3.8e-4	0.02	-0.47	-0.44	-0.43	-0.41	-0.38	4309	1.0
y_mean[1764]	0.16	4.2e-4	0.03	0.1	0.14	0.16	0.18	0.21	4259	1.0
y_mean[1765]	0.01	5.4e-4	0.04	-0.06	-0.01	0.01	0.04	0.09	4768	1.0
y_mean[1766]	1.16	6.5e-4	0.04	1.08	1.13	1.16	1.19	1.24	4309	1.0
y_mean[1767]	0.35	1.1e-3	0.07	0.21	0.31	0.35	0.4	0.5	4594	1.0
y_mean[1768]	-0.44	5.2e-4	0.04	-0.51	-0.46	-0.43	-0.41	-0.37	4817	1.0
y_mean[1769]	-0.64	3.2e-4	0.02	-0.68	-0.65	-0.64	-0.62	-0.6	4545	1.0
y_mean[1770]	1.06	7.1e-4	0.04	0.98	1.03	1.06	1.09	1.15	3982	1.0
y_mean[1771]	0.11	4.2e-4	0.03	0.05	0.09	0.11	0.13	0.16	4633	1.0
y_mean[1772]	-0.31	5.8e-4	0.04	-0.38	-0.34	-0.31	-0.28	-0.23	4541	1.0
y_mean[1773]	-0.18	3.0e-4	0.02	-0.22	-0.2	-0.18	-0.17	-0.14	4656	1.0
y_mean[1774]	-0.88	4.3e-4	0.03	-0.94	-0.9	-0.88	-0.86	-0.82	4756	1.0
y_mean[1775]	-0.76	3.8e-4	0.03	-0.81	-0.77	-0.76	-0.74	-0.71	4631	1.0
y_mean[1776]	0.47	4.4e-4	0.03	0.41	0.45	0.47	0.49	0.53	4580	1.0
y_mean[1777]	1.66	7.1e-4	0.05	1.56	1.63	1.66	1.69	1.75	4599	1.0
y_mean[1778]	-0.54	3.0e-4	0.02	-0.58	-0.56	-0.54	-0.53	-0.51	4501	1.0
y_mean[1779]	0.89	7.8e-4	0.05	0.79	0.86	0.89	0.93	1.0	4826	1.0

y_mean[1780]	0.11	3.9e-4	0.03	0.06	0.09	0.11	0.13	0.16	4603	1.0
y_mean[1781]	-0.84	4.5e-4	0.03	-0.9	-0.86	-0.84	-0.81	-0.77	4990	1.0
y_mean[1782]	0.52	6.7e-4	0.05	0.43	0.49	0.52	0.55	0.61	4831	1.0
y_mean[1783]	1.42	8.3e-4	0.05	1.31	1.38	1.42	1.45	1.52	3995	1.0
y_mean[1784]	-0.73	3.7e-4	0.03	-0.78	-0.75	-0.73	-0.71	-0.68	4572	1.0
y_mean[1785]	0.72	8.2e-4	0.06	0.61	0.68	0.72	0.76	0.83	4769	1.0
y_mean[1786]	1.12	7.8e-4	0.05	1.03	1.09	1.12	1.16	1.22	3827	1.0
y_mean[1787]	0.39	5.7e-4	0.04	0.32	0.37	0.39	0.41	0.46	3846	1.0
y_mean[1788]	-3.8e-3	4.3e-4	0.03	-0.06	-0.02-	3.7e-3	0.02	0.05	4532	1.0
y_mean[1789]	0.46	5.8e-4	0.04	0.39	0.44	0.46	0.49	0.54	4309	1.0
y_mean[1790]	0.45	5.5e-4	0.04	0.38	0.43	0.45	0.48	0.52	4351	1.0
y_mean[1791]	1.07	5.9e-4	0.04	0.99	1.04	1.07	1.09	1.14	4354	1.0
y_mean[1792]	0.3	4.3e-4	0.03	0.24	0.28	0.3	0.31	0.35	4041	1.0
y_mean[1793]	-0.65	3.7e-4	0.03	-0.7	-0.66	-0.65	-0.63	-0.6	4511	1.0
y_mean[1794]	1.72	7.6e-4	0.05	1.63	1.69	1.72	1.76	1.82	4387	1.0
y_mean[1795]	1.32	5.3e-4	0.04	1.25	1.3	1.32	1.34	1.39	4379	1.0
y_mean[1796]	-0.37	2.8e-4	0.02	-0.41	-0.38	-0.37	-0.36	-0.33	4656	1.0
y_mean[1797]	-0.24	4.1e-4	0.03	-0.29	-0.26	-0.24	-0.22	-0.18	4597	1.0
y_mean[1798]	-0.42	8.9e-4	0.06	-0.53	-0.46	-0.42	-0.38	-0.3	4440	1.0
y_mean[1799]	0.17	6.0e-4	0.04	0.1	0.14	0.17	0.19	0.24	3796	1.0
y_mean[1800]	1.01	6.8e-4	0.04	0.92	0.98	1.01	1.04	1.09	4304	1.0
ypred[1]	0.06	0.01	0.66	-1.22	-0.39	0.05	0.49	1.42	3943	1.0
ypred[2]	-1.2	0.01	0.67	-2.52	-1.66	-1.21	-0.74	0.1	3915	1.0
ypred[3]	-0.1	0.01	0.65	-1.39	-0.54	-0.1	0.34	1.17	3928	1.0
ypred[4]	-0.03	0.01	0.65	-1.28	-0.47	-0.03	0.42	1.27	3758	1.0
ypred[5]	-0.87	0.01	0.65	-2.14	-1.31	-0.87	-0.43	0.43	4079	1.0
ypred[6]	-0.18	0.01	0.66	-1.46	-0.65	-0.19	0.27	1.09	3881	1.0
ypred[7]	1.76	0.01	0.67	0.46	1.32	1.76	2.21	3.04	4267	1.0
ypred[8]	-0.89	0.01	0.65	-2.18	-1.33	-0.89	-0.45	0.37	3907	1.0
ypred[9]	-0.77	0.01	0.66	-2.07	-1.22	-0.77	-0.32	0.53	3904	1.0
ypred[10]	-0.66	0.01	0.65	-1.96	-1.11	-0.66	-0.22	0.65	3941	1.0
ypred[11]	0.26	0.01	0.66	-1.04	-0.2	0.25	0.7	1.56	3769	1.0
ypred[12]	-0.65	0.01	0.66	-1.98	-1.09	-0.65	-0.19	0.6	3915	1.0
ypred[13]	-1.48	0.01	0.67	-2.78	-1.94	-1.49	-1.03	-0.17	3785	1.0
ypred[14]	-0.3	0.01	0.67	-1.63	-0.74	-0.28	0.14	1.01	3904	1.0
ypred[15]	0.55	0.01	0.66	-0.78	0.11	0.55	1.01	1.84	4095	1.0
ypred[16]	-0.5	0.01	0.66	-1.8	-0.93	-0.52	-0.04	0.78	3750	1.0
ypred[17]	0.12	0.01	0.65	-1.17	-0.31	0.12	0.57	1.4	3660	1.0
ypred[18]	-0.5	0.01	0.66	-1.8	-0.96	-0.52	-0.05	0.79	3791	1.0
ypred[19]	1.01	0.01	0.67	-0.29	0.56	1.01	1.46	2.35	3995	1.0
ypred[20]	0.09	0.01	0.66	-1.18	-0.36	0.09	0.53	1.4	4091	1.0
ypred[21]	-1.3	0.01	0.66	-2.58	-1.76	-1.31	-0.83	-0.01	4020	1.0
ypred[22]	0.38	0.01	0.65	-0.88	-0.07	0.39	0.82	1.65	3992	1.0
ypred[23]	0.98	0.01	0.66	-0.29	0.52	0.99	1.43	2.27	3957	1.0
ypred[24]	0.19	0.01	0.66	-1.12	-0.26	0.2	0.64	1.48	3935	1.0
ypred[25]	-0.47	0.01	0.65	-1.77	-0.9	-0.47	-0.04	0.8	3928	1.0
ypred[26]	-0.12	0.01	0.65	-1.4	-0.57	-0.13	0.3	1.13	3783	1.0
ypred[27]	-0.91	0.01	0.66	-2.2	-1.37	-0.92	-0.48	0.38	4109	1.0

ypred[28]	0.32	0.01	0.66	-0.98	-0.12	0.32	0.77	1.61	3659	1.0
ypred[29]	0.04	0.01	0.66	-1.21	-0.41	0.04	0.48	1.36	3991	1.0
ypred[30]	-0.13	0.01	0.64	-1.38	-0.57	-0.13	0.29	1.14	4018	1.0
ypred[31]	-0.38	0.01	0.67	-1.74	-0.81	-0.37	0.08	0.9	3937	1.0
ypred[32]	0.17	0.01	0.66	-1.11	-0.26	0.17	0.62	1.46	3823	1.0
ypred[33]	-0.31	0.01	0.66	-1.6	-0.76	-0.31	0.13	0.98	3561	1.0
ypred[34]	0.14	0.01	0.66	-1.18	-0.29	0.14	0.58	1.43	4059	1.0
ypred[35]	-0.22	0.01	0.65	-1.49	-0.66	-0.22	0.21	1.04	4045	1.0
ypred[36]	0.18	0.01	0.66	-1.11	-0.28	0.18	0.62	1.44	3839	1.0
ypred[37]	-0.43	0.01	0.66	-1.67	-0.88	-0.44	0.02	0.85	4057	1.0
ypred[38]	0.78	0.01	0.66	-0.53	0.35	0.79	1.24	2.07	4252	1.0
ypred[39]	-0.03	0.01	0.65	-1.36	-0.47	-0.02	0.42	1.22	3930	1.0
ypred[40]	0.15	0.01	0.65	-1.12	-0.29	0.14	0.59	1.41	3825	1.0
ypred[41]	0.13	0.01	0.67	-1.15	-0.32	0.12	0.59	1.44	4111	1.0
ypred[41] ypred[42]	-1.13	0.01	0.67	-2.48	-1.57	-1.12	-0.68	0.16	3876	1.0
ypred[42] ypred[43]	0.46	0.01	0.66	-0.84	0.02	0.45	0.89	1.76	3956	1.0
ypred[43] ypred[44]	-0.22	0.01	0.66	-1.5	-0.66	-0.22	0.03	1.11	3867	1.0
ypred[44] ypred[45]	0.53	0.01	0.65	-0.7	0.08	0.52	0.24	1.83	4124	1.0
ypred[45] ypred[46]	-0.26	0.01	0.66	-1.57	-0.73	-0.27	0.38	1.04	3579	1.0
V 1	-0.28	0.01		-1.57		-0.27 -0.28				
ypred[47]			0.66		-0.75		0.18	0.97	3987	1.0
ypred[48]	-0.26	0.01	0.66	-1.56	-0.71	-0.26	0.19	1.03	3807	1.0
ypred[49]	1.5	0.01	0.66	0.21	1.05	1.51	1.93	2.79	3264	1.0
ypred[50]	-0.09	0.01	0.66	-1.39	-0.53	-0.09	0.35	1.18	3946	1.0
ypred[51]	0.41	0.01	0.65	-0.88	-0.02	0.42	0.85	1.66	4188	1.0
ypred[52]	0.42	0.01	0.67	-0.87	-0.01	0.42	0.87	1.73	4013	1.0
ypred[53]	-0.67	0.01	0.66	-1.93	-1.13	-0.67	-0.21	0.63	3900	1.0
ypred[54]	-0.31	0.01	0.65	-1.57	-0.75	-0.32	0.12	0.97	3987	1.0
ypred[55]	-0.01	0.01	0.67	-1.32	-0.47	-0.01	0.44	1.32	4159	1.0
ypred[56]	-0.56	0.01	0.68	-1.85	-1.02	-0.55	-0.1	0.83	3865	1.0
ypred[57]	0.03	0.01	0.67	-1.28	-0.42	0.02	0.48	1.33	4094	1.0
ypred[58]	0.8	0.01	0.66	-0.48	0.36	0.8	1.24	2.1	4170	1.0
ypred[59]	1.44	0.01	0.67	0.11	0.99	1.44	1.89	2.73	3878	1.0
ypred[60]	-0.4	0.01	0.66	-1.66	-0.85	-0.4	0.05	0.93	4215	1.0
ypred[61]	-0.64	0.01	0.65	-1.89	-1.07	-0.65	-0.21	0.65	4002	1.0
ypred[62]	-1.1	0.01	0.65	-2.34	-1.54	-1.1	-0.66	0.15	4024	1.0
ypred[63]	-0.48	0.01	0.65	-1.78	-0.92	-0.48	-0.05	0.82	3576	1.0
ypred[64]	0.2	0.01	0.65	-1.1	-0.24	0.2	0.64	1.47	3992	1.0
ypred[65]	-0.14	0.01	0.67	-1.46	-0.58	-0.15	0.3	1.17	3661	1.0
ypred[66]	-0.08	0.01	0.66	-1.38	-0.54	-0.07	0.35	1.21	4045	1.0
ypred[67]	0.03	0.01	0.67	-1.29	-0.41	0.02	0.48	1.34	3948	1.0
ypred[68]	0.23	0.01	0.66	-1.05	-0.2	0.23	0.68	1.5	4162	1.0
ypred[69]	-0.32	0.01	0.65	-1.62	-0.75	-0.32	0.1	1.0	3857	1.0
ypred[70]	-0.41	0.01	0.66	-1.71	-0.86	-0.41	0.04	0.91	4145	1.0
ypred[71]	-0.16	9.9e-3	0.64	-1.41	-0.59	-0.16	0.27	1.1	4183	1.0
ypred[72]	-0.03	0.01	0.66	-1.32	-0.47	-0.05	0.42	1.24	4052	1.0
ypred[73]	0.65	0.01	0.67	-0.71	0.19	0.68	1.09	1.94	3909	1.0
ypred[74]	-0.06	0.01	0.65	-1.31	-0.5	-0.06	0.38	1.2	4037	1.0
ypred[75]	0.2	0.01	0.65	-1.02	-0.26	0.2	0.64	1.51	4120	1.0

ypred[76]	0.64	0.01	0.65	-0.62	0.2	0.64	1.09	1.91	3772	1.0
ypred[77]	1.45	0.01	0.66	0.16	1.0	1.46	1.88	2.77	3774	1.0
ypred[78]	-0.56	0.01	0.67	-1.88	-1.01	-0.56	-0.11	0.76	3868	1.0
ypred[79]	0.33	0.01	0.66	-0.97	-0.11	0.32	0.78	1.6	4188	1.0
ypred[80]	-0.78	0.01	0.67	-2.09	-1.22	-0.77	-0.32	0.51	3929	1.0
ypred[81]	-0.37	0.01	0.65	-1.62	-0.8	-0.36	0.07	0.94	3977	1.0
ypred[82]	0.18	0.01	0.65	-1.08	-0.25	0.17	0.61	1.44	3871	1.0
ypred[83]	0.23	0.01	0.66	-1.04	-0.23	0.22	0.68	1.5	4161	1.0
ypred[84]	0.32	0.01	0.68	-1.04	-0.14	0.32	0.78	1.66	4151	1.0
ypred[85]	0.76	0.01	0.66	-0.57	0.33	0.76	1.19	2.06	3912	1.0
ypred[86]	-0.45	0.01	0.65	-1.74	-0.9	-0.44	-0.01	0.82	4037	1.0
ypred[87]	3.81	0.01	0.68	2.45	3.36	3.82	4.27	5.13	3842	1.0
ypred[88]	-0.39	0.01	0.66	-1.68	-0.82	-0.39	0.04	0.89	3913	1.0
ypred[89]	0.63	0.01	0.67	-0.68	0.17	0.64	1.07	1.93	4049	1.0
ypred[90]	-0.18	0.01	0.67	-1.48	-0.62	-0.17	0.26	1.11	3969	1.0
ypred[91]	1.22	0.01	0.66	-0.07	0.77	1.22	1.65	2.57	3700	1.0
ypred[92]	-0.19	9.9e-3	0.65	-1.47	-0.63	-0.18	0.23	1.07	4242	1.0
ypred[93]	0.44	0.01	0.66	-0.81	-0.01	0.44	0.88	1.77	4057	1.0
ypred[94]	-0.56	0.01	0.68	-1.87	-1.02	-0.56	-0.12	0.77	3747	1.0
ypred[95]	-0.59	0.01	0.65	-1.91	-1.02	-0.58	-0.15	0.69	3909	1.0
ypred[96]	0.29	0.01	0.66	-1.0	-0.15	0.28	0.74	1.57	3874	1.0
ypred[97]	-1.07	0.01	0.66	-2.36	-1.53	-1.08	-0.62	0.21	4066	1.0
ypred[98]	0.84	0.01	0.67	-0.48	0.4	0.85	1.3	2.15	3970	1.0
ypred[99]	0.25	0.01	0.67	-1.09	-0.19	0.26	0.7	1.57	3829	1.0
ypred[100]	-0.7	0.01	0.66	-2.01	-1.14	-0.69	-0.26	0.58	3764	1.0
ypred[101]	-0.53	0.01	0.66	-1.85	-0.97	-0.52	-0.09	0.78	4037	1.0
ypred[101] ypred[102]	-0.49	0.01	0.65	-1.78	-0.93	-0.48	-0.04	0.77	3860	1.0
ypred[102]	-1.11	0.01	0.65	-2.37	-1.57	-1.1	-0.66	0.17	4039	1.0
ypred[104]	-0.78	0.01	0.65	-2.05	-1.22	-0.78	-0.35	0.5	3812	1.0
ypred[104] ypred[105]	0.78	0.01	0.66	-1.22	-0.4	0.03	0.51	1.33	3592	1.0
ypred[106]	-0.1	0.01	0.66	-1.38	-0.55	-0.1	0.34	1.19	4071	1.0
ypred[100] ypred[107]	0.23	0.01	0.66	-1.08	-0.33	0.24	0.68	1.19	3688	1.0
ypred[107] ypred[108]	-0.07	0.01	0.65	-1.37	-0.52	-0.07	0.36	1.32	3928	1.0
ypred[108] ypred[109]	-0.16	0.01	0.67	-1.48	-0.52	-0.07	0.30	1.16	3730	1.0
ypred[110]	-0.10	0.01	0.66	-1.96	-1.11	-0.13	-0.22	0.62	3730	1.0
ypred[110] ypred[111]	0.09	0.01	0.66	-1.2	-0.36	0.09	0.53	1.36	3686	1.0
ypred[111] ypred[112]	0.03	0.01	0.65	-0.94	-0.30	0.38	0.81	1.64	4052	1.0
ypred[112] ypred[113]	0.44	0.01	0.65		-0.07 -6.9e-3	0.44	0.81	1.78	3973	1.0
ypred[113] ypred[114]	0.44	0.01	0.67	-1.15	-0.32	0.44	0.59	1.78	4156	1.0
ypred[114] ypred[115]	-0.22		0.67		-0.32 -0.66	-0.21				
v -		0.01		-1.56			0.21	1.09	3898	1.0
ypred[116]	-0.04	0.01	0.66	-1.35	-0.47	-0.04	0.4	1.25	3735	1.0
ypred[117]	0.89	0.01	0.67	-0.43	0.44	0.89	1.33	2.2	3955	1.0
ypred[118]	0.28	0.01	0.67	-1.0	-0.16	0.28	0.71	1.62	3993	1.0
ypred[119]	0.43	0.01	0.66		1.6e-3	0.44	0.88	1.69	4148	1.0
ypred[120]	-1.24	0.01	0.66	-2.53	-1.68	-1.25	-0.79	0.08	3977	1.0
ypred[121]	-0.82	0.01	0.66	-2.11	-1.29	-0.82	-0.36	0.47	3796	1.0
ypred[122]	2.06	0.01	0.66	0.73	1.62	2.06	2.5	3.38	3923	1.0
ypred[123]	-0.81	0.01	0.65	-2.07	-1.24	-0.82	-0.38	0.45	3995	1.0

ypred[124]	-0.49	0.01	0.66	-1.78	-0.95	-0.48	-0.04	0.82	4224	1.0
ypred[125]	-0.71	0.01	0.65	-2.0	-1.14	-0.71	-0.27	0.54	4058	1.0
ypred[126]	-0.32	0.01	0.66	-1.61	-0.76	-0.31	0.12	0.97	3851	1.0
ypred[127]	0.26	0.01	0.65	-1.0	-0.18	0.24	0.68	1.54	4002	1.0
ypred[128]	0.11	0.01	0.65	-1.15	-0.32	0.11	0.55	1.42	4073	1.0
ypred[129]	0.23	0.01	0.65	-1.07	-0.2	0.23	0.67	1.48	3934	1.0
ypred[130]	1.34	0.01	0.67	0.04	0.89	1.33	1.78	2.65	3600	1.0
ypred[131]	-0.08	0.01	0.65	-1.36	-0.52	-0.1	0.36	1.23	4022	1.0
ypred[132]	-0.64	9.9e-3	0.66	-1.94	-1.08	-0.64	-0.19	0.63	4393	1.0
ypred[133]	-0.31	0.01	0.65	-1.63	-0.74	-0.3	0.13	0.98	3709	1.0
ypred[134]	-0.21	0.01	0.65	-1.49	-0.65	-0.2	0.23	1.06	3976	1.0
ypred[135]	0.78	0.01	0.66	-0.54	0.33	0.8	1.23	2.02	4147	1.0
ypred[136]	-0.25	0.01	0.66	-1.56	-0.69	-0.26	0.17	1.08	4131	1.0
ypred[137]	-0.12	0.01	0.66	-1.44	-0.55	-0.13	0.33	1.15	3851	1.0
ypred[138]	-0.49		0.66	-1.77	-0.93	-0.48	-0.04	0.81	4066	1.0
ypred[139]	-1.04		0.67	-2.35	-1.49	-1.04	-0.58	0.26	3812	1.0
ypred[140]	-0.34		0.66	-1.65	-0.77	-0.34	0.12	0.92	4017	1.0
ypred[141]	-0.72	0.01	0.67	-2.04	-1.17	-0.72	-0.27	0.58	4162	1.0
ypred[142]	0.81	0.01	0.66	-0.47	0.36	0.82	1.26	2.08	3635	1.0
ypred[143]	-0.4		0.67	-1.69	-0.86	-0.41	0.06	0.9	3590	1.0
ypred[144]	0.22	0.01	0.64	-1.05	-0.21	0.2	0.66	1.48	3948	1.0
ypred[145]	1.77	0.01	0.66	0.46	1.32	1.76	2.22	3.09	3906	1.0
ypred[146]	-0.91	0.01	0.67	-2.26	-1.36	-0.91	-0.46	0.36	3835	1.0
ypred[147]	0.18	0.01	0.66	-1.11	-0.26	0.19	0.63	1.46	3847	1.0
ypred[148]		10.0e-3	0.65	-1.9	-1.07	-0.63	-0.19	0.62	4215	1.0
ypred[149]	-0.83	0.01	0.67	-2.15	-1.29	-0.82	-0.38	0.46	3611	1.0
ypred[150]	-0.02	0.01	0.66	-1.29	-0.47	-0.03	0.42	1.27	4043	1.0
ypred[151]	-0.14		0.66	-1.44	-0.58	-0.15	0.31	1.17	3634	1.0
ypred[152]	0.21	0.01	0.66	-1.12	-0.22	0.21	0.66	1.49	3968	1.0
ypred[153]	-0.26	0.01	0.67	-1.6	-0.7	-0.26	0.18	1.06	3964	1.0
ypred[154]	0.37	0.01	0.67	-0.95	-0.09	0.36	0.82	1.68	3880	1.0
ypred[155]	0.91	0.01	0.67	-0.4	0.47	0.91	1.34	2.24	3939	1.0
ypred[156]	0.68	0.01	0.66	-0.62	0.25	0.68	1.12	1.95	3931	1.0
ypred[157]	0.41	0.01	0.65	-0.91	-0.02	0.42	0.85	1.66	3933	1.0
ypred[158]	0.28	0.01	0.67	-1.03	-0.17	0.12	0.72	1.57	4106	1.0
ypred[159]	0.3	0.01	0.66	-0.99	-0.14	0.32	0.75	1.6	3882	1.0
ypred[160]	0.8	0.01	0.65	-0.47	0.36	0.81	1.24	2.07	4005	1.0
ypred[161]	-0.15	0.01	0.67	-1.48	-0.59	-0.15	0.3	1.13	3959	1.0
ypred[162]	-0.3	0.01	0.65	-1.58	-0.74	-0.29	0.14	0.94	4022	1.0
ypred[163]	-0.75	0.01	0.66	-2.04	-1.18	-0.75	-0.3	0.56	3792	1.0
ypred[164]	0.25	0.01	0.66	-1.07	-0.17	0.75	0.69	1.54	3703	1.0
ypred[165]	-0.94		0.65	-2.2	-1.4	-0.93	-0.5	0.35	3868	1.0
ypred[166]	-0.94		0.66	-1.39	-0.57	-0.93	0.34	1.21	3675	1.0
ypred[160]	0.7	0.01	0.65		0.26	0.12	1.13	1.99	3838	1.0
ypred[167]	-0.16	0.01	0.66	-0.57 -1.46	-0.62	-0.16	0.29	1.13	3902	1.0
ypred[166]	0.75	0.01	0.65	-0.53	0.32	0.75	1.19	2.01	3699	1.0
ypred[170]	8.5e-3		0.66	-1.28	-0.44	0.75	0.45	1.32	3762	1.0
ypred[170] ypred[171]	-0.04	0.01	0.66	-1.31	-0.44	-0.03	0.43	1.24	3918	1.0
\hrea[11]	-0.04	0.01	0.00	1.01	0.40	0.03	0.42	1.24	2910	1.0

ypred[172]	-0.36	0.01	0.67	-1.66	-0.81	-0.35	0.1	0.88	4220	1.0
ypred[173]	0.06	0.01	0.66	-1.22	-0.39	0.05	0.49	1.4	4219	1.0
ypred[174]	1.56	0.01	0.66	0.26	1.11	1.57	2.01	2.87	3652	1.0
ypred[175]	1.4	0.01	0.67	0.06	0.96	1.42	1.87	2.67	4225	1.0
ypred[176]	-0.17	0.01	0.65	-1.45	-0.61	-0.17	0.27	1.12	4134	1.0
ypred[177]	0.69	0.01	0.65	-0.61	0.26	0.69	1.13	1.94	4026	1.0
ypred[178]	0.72	0.01	0.66	-0.61	0.28	0.71	1.15	2.01	3963	1.0
ypred[179]	-0.39	0.01	0.67	-1.69	-0.84	-0.39	0.05	0.92	4058	1.0
ypred[180]	-0.52	0.01	0.67	-1.84	-0.97	-0.51	-0.08	0.81	3835	1.0
ypred[181]	0.34	0.01	0.66	-0.95	-0.12	0.34	0.81	1.62	3669	1.0
ypred[182]	-0.73	0.01	0.67	-2.0	-1.2	-0.72	-0.28	0.57	3944	1.0
ypred[183]	-0.29	0.01	0.66	-1.55	-0.74	-0.3	0.16	1.01	4048	1.0
ypred[184]	-0.77	0.01	0.67	-2.08	-1.22	-0.78	-0.33	0.54	3819	1.0
ypred[185]	0.15	0.01	0.67	-1.16	-0.3	0.16	0.6	1.45	3931	1.0
ypred[186]	0.79	0.01	0.66	-0.48	0.36	0.79	1.24	2.09	4130	1.0
ypred[187]	-0.34	0.01	0.66	-1.63	-0.79	-0.35	0.09	0.99	3924	1.0
ypred[188]	-1.06	0.01	0.66	-2.3	-1.53	-1.06	-0.61	0.23	4004	1.0
ypred[189]	-0.71	0.01	0.66	-2.02	-1.17	-0.7	-0.26	0.59	4068	1.0
ypred[190]	-0.22	0.01	0.66	-1.51	-0.63	-0.23	0.21	1.08	3790	1.0
ypred[191]	0.23	0.01	0.67	-1.06	-0.23	0.22	0.7	1.54	4065	1.0
ypred[192]	1.15	0.01	0.67	-0.14	0.71	1.14	1.6	2.46	3998	1.0
ypred[193]	-0.62	0.01	0.66	-1.88	-1.06	-0.61	-0.16	0.65	3831	1.0
ypred[194]	-0.34	0.01	0.65	-1.65	-0.78	-0.34	0.11	0.91	3611	1.0
ypred[195]	0.23	0.01	0.66	-1.05	-0.2	0.23	0.67	1.51	3811	1.0
ypred[196]	-0.37	0.01	0.65	-1.58	-0.81	-0.36	0.07	0.91	3823	1.0
ypred[197]	0.92	0.01	0.66	-0.39	0.47	0.91	1.38	2.2	3939	1.0
ypred[198]	-0.34	0.01	0.66	-1.64	-0.79	-0.33	0.11	0.98	3672	1.0
ypred[199]	-0.52	0.01	0.65	-1.78	-0.97	-0.52	-0.07	0.74	4215	1.0
ypred[200]	-0.76	0.01	0.67	-2.04	-1.2	-0.78	-0.32	0.57	4114	1.0
y_predicted[1]	0.06	6.1e-4	0.04	-0.01	0.03	0.06	0.09	0.14	3831	1.0
y_predicted[2]	-1.18	8.6e-4	0.06	-1.29	-1.22	-1.18	-1.14	-1.07	4325	1.0
y_predicted[3]	-0.1	3.1e-4	0.02	-0.14	-0.12	-0.1	-0.09	-0.06	4749	1.0
y_predicted[4]	-0.01	4.2e-4	0.03	-0.06	-0.03		5.4e-3	0.04	4108	1.0
y_predicted[5]	-0.86	4.4e-4	0.03	-0.92	-0.88	-0.86	-0.84	-0.8	4500	1.0
y_predicted[6]	-0.18	3.6e-4	0.02	-0.23	-0.2	-0.18	-0.16	-0.13	4616	1.0
y_predicted[7]	1.76	8.0e-4	0.05	1.67	1.73	1.76	1.8	1.86	3974	1.0
y_predicted[8]	-0.89	4.4e-4	0.03	-0.95	-0.91	-0.89	-0.87	-0.83	4448	1.0
y_predicted[9]	-0.78	4.0e-4	0.03	-0.83	-0.8	-0.78	-0.76	-0.73	4612	1.0
y_predicted[10]	-0.68	5.5e-4	0.04	-0.75	-0.71	-0.68	-0.66	-0.61	4270	1.0
y_predicted[11]	0.27	4.1e-4	0.03	0.22	0.25	0.27	0.29	0.32	4333	1.0
y_predicted[12]	-0.63	4.2e-4	0.03	-0.69	-0.65	-0.63	-0.61	-0.58	4556	1.0
y_predicted[13]	-1.48	7.3e-4	0.05	-1.57	-1.51	-1.48	-1.44	-1.39	4304	1.0
y_predicted[14]	-0.3	4.9e-4	0.03	-0.36	-0.32	-0.3	-0.28	-0.23	4535	1.0
y_predicted[15]	0.55	6.5e-4	0.04	0.48	0.53	0.55	0.58	0.63	3669	1.0
y_predicted[16]	-0.49	3.7e-4	0.03	-0.54	-0.51	-0.49	-0.47	-0.44	4619	1.0
y_predicted[17]	0.14	5.4e-4	0.03	0.08	0.12	0.14	0.17	0.21	3906	1.0
y_predicted[18]	-0.51	3.5e-4	0.02	-0.56	-0.53	-0.51	-0.5	-0.47	4412	1.0
y_predicted[19]	1.02	6.7e-4	0.04	0.93	0.99	1.02	1.05	1.11	4346	1.0
/ _r = - = = = = = = = = = = = = = = = = =			J . J .	3.50	,					

```
y_predicted[20]
                     0.1
                           3.2e-4
                                     0.02
                                             0.06
                                                     0.08
                                                             0.1
                                                                    0.11
                                                                            0.14
                                                                                   4314
                                                                                            1.0
                   -1.31
                           6.9e-4
                                     0.05
                                                   -1.34
                                                           -1.31
                                                                   -1.28
                                                                          -1.22
                                                                                   4368
y_predicted[21]
                                             -1.4
                                                                                            1.0
y_predicted[22]
                    0.39
                           5.3e-4
                                     0.03
                                             0.32
                                                     0.36
                                                            0.39
                                                                    0.41
                                                                            0.45
                                                                                   4255
                                                                                            1.0
y_predicted[23]
                    0.97
                           5.9e-4
                                     0.04
                                             0.89
                                                     0.94
                                                            0.97
                                                                     1.0
                                                                            1.05
                                                                                   4559
                                                                                            1.0
                           3.6e-4
y_predicted[24]
                    0.19
                                     0.02
                                             0.14
                                                     0.17
                                                            0.19
                                                                     0.2
                                                                            0.23
                                                                                   4309
                                                                                            1.0
                   -0.48
                           3.0e-4
                                     0.02
                                            -0.52
                                                   -0.49
                                                           -0.48
                                                                   -0.46
                                                                          -0.44
                                                                                   4574
y_predicted[25]
                                                                                            1.0
y_predicted[26]
                   -0.12
                           3.1e-4
                                     0.02
                                            -0.16
                                                   -0.14
                                                           -0.12
                                                                   -0.11
                                                                           -0.08
                                                                                   4643
                                                                                            1.0
                                            -1.03
                                                                          -0.83
                                                   -0.96
                                                           -0.93
y_predicted[27]
                   -0.93
                           7.9e-4
                                     0.05
                                                                   -0.89
                                                                                   4405
                                                                                            1.0
                    0.33
                           3.7e-4
                                     0.02
                                             0.28
                                                     0.31
                                                            0.33
                                                                    0.34
                                                                            0.37
                                                                                   4265
y_predicted[28]
                                                                                            1.0
y_predicted[29]
                                     0.02
                                             0.01
                                                     0.04
                                                            0.05
                                                                                   4392
                    0.05
                           3.0e-4
                                                                    0.07
                                                                            0.09
                                                                                            1.0
                   -0.13
                           7.2e-4
                                     0.05
                                            -0.23
                                                   -0.16
                                                           -0.13
                                                                   -0.09
                                                                          -0.03
                                                                                   5039
y_predicted[30]
                                                                                            1.0
y_predicted[31]
                   -0.39
                           3.4e-4
                                     0.02
                                            -0.43
                                                     -0.4
                                                           -0.39
                                                                   -0.37
                                                                           -0.34
                                                                                   4687
                                                                                            1.0
                                     0.02
                                             0.12
                                                     0.15
                                                                            0.21
                                                                                   4385
y_predicted[32]
                    0.17
                           3.5e-4
                                                            0.17
                                                                    0.18
                                                                                            1.0
                   -0.31
                                     0.03
                                            -0.38
                                                   -0.34
                                                           -0.31
                                                                   -0.29
                                                                          -0.24
                                                                                   4528
y_predicted[33]
                           5.1e-4
                                                                                            1.0
y_predicted[34]
                    0.14
                                     0.03
                                                     0.12
                                                            0.14
                                                                            0.19
                                                                                   4246
                           3.9e-4
                                             0.09
                                                                    0.16
                                                                                            1.0
                   -0.22
                           4.4e-4
                                     0.03
                                            -0.28
                                                   -0.24
                                                           -0.22
                                                                    -0.2
                                                                           -0.16
                                                                                   4298
y_predicted[35]
                                                                                            1.0
y_predicted[36]
                    0.17
                           3.8e-4
                                     0.02
                                             0.13
                                                     0.16
                                                            0.17
                                                                    0.19
                                                                            0.22
                                                                                   4240
                                                                                            1.0
                   -0.44
                           3.1e-4
                                     0.02
                                            -0.48
                                                   -0.45
                                                           -0.44
                                                                   -0.42
                                                                            -0.4
                                                                                   4645
                                                                                            1.0
y_predicted[37]
y_predicted[38]
                    0.75
                           8.4e-4
                                     0.06
                                             0.64
                                                     0.71
                                                            0.75
                                                                    0.79
                                                                            0.86
                                                                                   4623
                                                                                            1.0
y_predicted[39]
                   -0.03
                           3.8e-4
                                     0.03
                                            -0.08
                                                   -0.05
                                                           -0.03-10.0e-3
                                                                             0.02
                                                                                    4592
                                                                                             1.0
                                                                             0.2
y_predicted[40]
                    0.15
                           3.4e-4
                                     0.02
                                             0.11
                                                     0.14
                                                            0.15
                                                                    0.17
                                                                                   4882
                                                                                            1.0
                    0.14
                                     0.04
                                             0.06
                                                     0.11
                                                            0.14
                                                                    0.16
                                                                            0.22
                                                                                   3835
y_predicted[41]
                           6.6e-4
                                                                                            1.0
                                                                          -1.06
y_predicted[42]
                   -1.11
                           4.3e-4
                                     0.03
                                            -1.17
                                                   -1.13
                                                           -1.11
                                                                   -1.09
                                                                                   4386
                                                                                            1.0
                    0.46
                                     0.04
                                             0.37
                                                     0.43
                                                            0.46
                                                                    0.49
                                                                            0.55
                                                                                   3871
y_predicted[43]
                           7.2e-4
                                                                                            1.0
                   -0.22
                           3.4e-4
                                     0.02
                                            -0.27
                                                   -0.24
                                                           -0.22
                                                                    -0.2
                                                                          -0.17
                                                                                   5049
                                                                                            1.0
y_predicted[44]
                    0.51
                           6.4e-4
                                     0.04
                                             0.43
                                                     0.48
                                                            0.51
                                                                    0.54
                                                                             0.6
                                                                                   4434
y_predicted[45]
                                                                                            1.0
                                     0.03
                                                           -0.27
                   -0.27
                                            -0.33
                                                   -0.29
                                                                   -0.26
                                                                          -0.22
                                                                                   5226
y_predicted[46]
                           3.8e-4
                                                                                            1.0
                   -0.28
                                     0.04
                                                           -0.28
                                                                            -0.2
y_predicted[47]
                           5.8e-4
                                            -0.35
                                                   -0.31
                                                                   -0.25
                                                                                   4511
                                                                                            1.0
                   -0.25
                                            -0.29
                                                                          -0.21
                           2.9e-4
                                     0.02
                                                   -0.27
                                                           -0.25
                                                                   -0.24
                                                                                   4600
y_predicted[48]
                                                                                            1.0
y_predicted[49]
                      1.5
                           7.9e-4
                                     0.05
                                             1.41
                                                     1.47
                                                             1.5
                                                                    1.54
                                                                            1.61
                                                                                   4168
                                                                                            1.0
                   -0.09
                           3.0e-4
                                     0.02
                                            -0.13
                                                     -0.1
                                                           -0.09
                                                                   -0.08
                                                                          -0.05
                                                                                   4620
y_predicted[50]
                                                                                            1.0
y_predicted[51]
                    0.38
                           4.8e-4
                                     0.03
                                             0.32
                                                     0.36
                                                            0.38
                                                                    0.41
                                                                            0.45
                                                                                   4433
                                                                                            1.0
y_predicted[52]
                    0.43
                           5.4e-4
                                     0.04
                                             0.36
                                                      0.4
                                                            0.43
                                                                    0.45
                                                                            0.49
                                                                                   4296
                                                                                            1.0
                   -0.67
                           3.4e-4
                                     0.02
                                            -0.71
                                                   -0.69
                                                           -0.67
                                                                   -0.65
                                                                          -0.63
                                                                                   4542
                                                                                            1.0
y_predicted[53]
                   -0.31
                                     0.02
                                            -0.35
                                                   -0.32
                                                          -0.31
                                                                   -0.29
                                                                          -0.26
                                                                                   4388
y_predicted[54]
                           3.4e-4
                                                                                            1.0
y_predicted[55] -4.8e-3
                                     0.03
                                                   -0.02-5.4e-3
                                                                            0.05
                           4.4e-4
                                            -0.06
                                                                    0.01
                                                                                   4028
                                                                                            1.0
                   -0.54
                                     0.02
                                            -0.58
                                                   -0.56
                                                           -0.54
                                                                   -0.53
                                                                          -0.51
                                                                                   4495
y_predicted[56]
                           3.0e-4
                                                                                            1.0
y_predicted[57]
                    0.02
                           4.9e-4
                                     0.04
                                            -0.05-2.8e-3
                                                            0.02
                                                                    0.04
                                                                            0.09
                                                                                   5112
                                                                                            1.0
                    0.81
                           5.8e-4
                                     0.04
                                             0.73
                                                     0.78
                                                            0.81
                                                                    0.84
                                                                            0.89
                                                                                   4204
y_predicted[58]
                                                                                            1.0
                                     0.05
                                             1.35
                                                                                   4305
y_predicted[59]
                     1.44
                           7.4e-4
                                                     1.41
                                                            1.44
                                                                    1.48
                                                                            1.54
                                                                                            1.0
                           3.3e-4
                   -0.38
                                     0.02
                                            -0.42
                                                     -0.4
                                                           -0.38
                                                                   -0.37
                                                                          -0.34
                                                                                   4513
                                                                                            1.0
y_predicted[60]
                   -0.64
                           3.2e-4
                                     0.02
                                            -0.69
                                                   -0.66
                                                           -0.64
                                                                   -0.63
                                                                            -0.6
                                                                                   4558
y_predicted[61]
                                                                                            1.0
y_predicted[62]
                     -1.1
                           5.5e-4
                                     0.04
                                            -1.17
                                                   -1.13
                                                            -1.1
                                                                   -1.08
                                                                          -1.03
                                                                                   4408
                                                                                            1.0
                                            -0.49
                                                                          -0.41
                   -0.45
                           3.0e-4
                                     0.02
                                                   -0.47
                                                           -0.45
                                                                   -0.44
                                                                                   4576
y_predicted[63]
                                                                                            1.0
y_predicted[64]
                     0.2
                           6.0e-4
                                     0.04
                                             0.13
                                                     0.18
                                                             0.2
                                                                    0.23
                                                                           0.28
                                                                                   3820
                                                                                            1.0
y_predicted[65]
                   -0.16
                           4.2e-4
                                     0.03
                                           -0.21
                                                   -0.18
                                                           -0.16
                                                                   -0.14
                                                                           -0.11
                                                                                   4082
                                                                                            1.0
                                                                          -0.04
y_predicted[66]
                   -0.09
                           3.8e-4
                                     0.03
                                           -0.14
                                                     -0.1
                                                           -0.09
                                                                   -0.07
                                                                                   4487
                                                                                            1.0
                     0.03
                           3.2e-4
                                     0.02-9.7e-3
                                                     0.02
                                                            0.03
                                                                    0.05
                                                                            0.07
                                                                                   4454
                                                                                            1.0
y_predicted[67]
```

```
y_predicted[68]
                                                                    0.24
                    0.21
                           6.1e-4
                                     0.04
                                             0.14
                                                    0.19
                                                            0.21
                                                                            0.29
                                                                                   3808
                                                                                            1.0
                   -0.33
                                     0.04
                                            -0.41
                                                   -0.36
                                                           -0.33
                                                                  -0.31
                                                                          -0.26
                                                                                   4232
y_predicted[69]
                           6.0e-4
                                                                                            1.0
                   -0.41
                           3.8e-4
                                     0.03
                                            -0.45
                                                   -0.42
                                                            -0.4
                                                                   -0.39
                                                                          -0.36
                                                                                   4316
                                                                                            1.0
y_predicted[70]
                   -0.16
                           3.5e-4
                                     0.03
                                            -0.21
                                                   -0.18
                                                           -0.16
                                                                   -0.14
                                                                          -0.11
                                                                                   5204
                                                                                            1.0
y_predicted[71]
y_predicted[72]
                   -0.03
                                     0.03
                                            -0.08
                                                   -0.05
                                                           -0.03
                                                                   -0.01
                                                                            0.02
                                                                                   4309
                           3.9e-4
                                                                                            1.0
                    0.65
                           6.3e-4
                                     0.04
                                             0.58
                                                    0.62
                                                            0.65
                                                                    0.67
                                                                            0.72
                                                                                   3666
y_predicted[73]
                                                                                            1.0
y_predicted[74]
                   -0.06
                           4.2e-4
                                     0.03
                                            -0.12
                                                   -0.08
                                                           -0.06
                                                                   -0.04-2.6e-3
                                                                                   4686
                                                                                            1.0
y_predicted[75]
                                                    0.17
                                                                            0.23
                    0.19
                           3.2e-4
                                     0.02
                                             0.15
                                                            0.19
                                                                    0.21
                                                                                   4836
                                                                                            1.0
                    0.65
                                     0.04
                                             0.57
                                                    0.62
                                                            0.65
                                                                    0.67
                                                                            0.72
                                                                                   4866
y_predicted[76]
                           5.5e-4
                                                                                            1.0
y_predicted[77]
                                     0.06
                                                                                   4352
                     1.46
                           9.5e-4
                                             1.34
                                                    1.41
                                                            1.46
                                                                     1.5
                                                                            1.58
                                                                                            1.0
                   -0.54
                                     0.02
                                            -0.59
                                                   -0.56
                                                           -0.54
                                                                   -0.53
                                                                            -0.5
                                                                                   4461
y_predicted[78]
                           3.6e-4
                                                                                            1.0
y_predicted[79]
                    0.34
                           2.8e-4
                                     0.02
                                              0.3
                                                    0.32
                                                            0.34
                                                                    0.35
                                                                            0.37
                                                                                   4568
                                                                                            1.0
                   -0.78
                                     0.03
                                            -0.84
                                                           -0.78
                                                                   -0.76
                                                                           -0.72
                                                                                   4394
y_predicted[80]
                           4.8e-4
                                                    -0.8
                                                                                            1.0
                   -0.36
                                     0.04
                                            -0.43
                                                   -0.39
                                                           -0.36
                                                                   -0.33
                                                                          -0.29
                                                                                   4451
y_predicted[81]
                           5.7e-4
                                                                                            1.0
y_predicted[82]
                    0.19
                                             0.12
                                                    0.17
                                                            0.19
                                                                    0.21
                                                                            0.26
                                                                                   4878
                           4.8e-4
                                     0.03
                                                                                            1.0
                    0.24
                           5.7e-4
                                     0.04
                                             0.17
                                                    0.21
                                                            0.23
                                                                    0.26
                                                                            0.31
                                                                                   4037
y_predicted[83]
                                                                                            1.0
y_predicted[84]
                    0.34
                           5.4e-4
                                     0.03
                                             0.27
                                                    0.31
                                                            0.34
                                                                    0.36
                                                                             0.4
                                                                                   4219
                                                                                            1.0
                           6.0e-4
                    0.75
                                     0.04
                                             0.67
                                                    0.72
                                                            0.75
                                                                    0.78
                                                                            0.83
                                                                                   4944
                                                                                            1.0
y_predicted[85]
y_predicted[86]
                   -0.46
                           3.3e-4
                                     0.02
                                             -0.5
                                                   -0.48
                                                           -0.46
                                                                   -0.44
                                                                           -0.42
                                                                                   4489
                                                                                            1.0
y_predicted[87]
                    3.81
                           1.8e-3
                                     0.11
                                             3.59
                                                    3.73
                                                            3.81
                                                                    3.88
                                                                            4.03
                                                                                   3744
                                                                                            1.0
                                     0.02
                                            -0.43
                                                   -0.41
                                                           -0.39
y_predicted[88]
                   -0.39
                           3.3e-4
                                                                   -0.38
                                                                          -0.35
                                                                                   4393
                                                                                            1.0
                    0.63
                                     0.03
                                             0.58
                                                    0.61
                                                            0.63
                                                                    0.65
                                                                                   3935
y_predicted[89]
                           4.6e-4
                                                                            0.69
                                                                                            1.0
y_predicted[90]
                   -0.17
                           7.0e-4
                                     0.05
                                            -0.26
                                                   -0.21
                                                           -0.18
                                                                  -0.14
                                                                          -0.08
                                                                                   4261
                                                                                            1.0
                     1.22
                           6.8e-4
                                     0.04
                                                    1.19
                                                            1.22
                                                                    1.25
                                                                                   4313
y_predicted[91]
                                             1.13
                                                                             1.3
                                                                                            1.0
                   -0.17
                           3.8e-4
                                     0.03
                                            -0.23
                                                   -0.19
                                                           -0.17
                                                                   -0.15
                                                                          -0.12
                                                                                   5074
                                                                                            1.0
y_predicted[92]
                    0.46
                           5.3e-4
                                     0.03
                                              0.4
                                                    0.44
                                                            0.46
                                                                    0.49
                                                                            0.53
                                                                                   4098
y_predicted[93]
                                                                                            1.0
                                     0.02
                   -0.58
                           3.2e-4
                                            -0.62
                                                   -0.59
                                                           -0.58
                                                                   -0.56
                                                                          -0.53
                                                                                   4504
y_predicted[94]
                                                                                            1.0
                   -0.58
                                     0.02
                                            -0.62
                                                           -0.58
                                                                          -0.54
                                                                                   4526
y_predicted[95]
                           3.2e-4
                                                   -0.59
                                                                   -0.56
                                                                                            1.0
                                             0.22
                    0.29
                           5.2e-4
                                     0.04
                                                    0.27
                                                            0.29
                                                                    0.32
                                                                            0.36
                                                                                   4722
y_predicted[96]
                                                                                            1.0
y_predicted[97]
                   -1.06
                           4.3e-4
                                     0.03
                                            -1.11
                                                   -1.08
                                                           -1.06
                                                                   -1.04
                                                                            -1.0
                                                                                   4496
                                                                                            1.0
                    0.84
                           6.0e-4
                                     0.04
                                             0.76
                                                    0.81
                                                            0.84
                                                                    0.86
                                                                            0.92
                                                                                   4203
y_predicted[98]
                                                                                            1.0
y_predicted[99]
                    0.26
                           6.3e-4
                                     0.04
                                             0.18
                                                    0.23
                                                            0.25
                                                                    0.28
                                                                            0.33
                                                                                   3822
                                                                                            1.0
y_predicted[100]
                   -0.71
                           4.3e-4
                                     0.03
                                            -0.77
                                                   -0.73
                                                           -0.71
                                                                   -0.69
                                                                          -0.66
                                                                                   4487
                                                                                            1.0
y_predicted[101]
                   -0.55
                           3.2e-4
                                     0.02
                                            -0.59
                                                   -0.56
                                                           -0.55
                                                                   -0.53
                                                                          -0.51
                                                                                   4461
                                                                                            1.0
                    -0.5
                                     0.02
                                            -0.54
                                                   -0.51
                                                            -0.5
                                                                          -0.46
                                                                                   4418
y_predicted[102]
                           3.1e-4
                                                                   -0.49
                                                                                            1.0
                   -1.12
                                            -1.19
                                                   -1.14
                                                           -1.12
                                                                   -1.09
y_predicted[103]
                           5.8e-4
                                     0.04
                                                                          -1.04
                                                                                   4435
                                                                                            1.0
                   -0.77
                                     0.03
                                           -0.82
                                                   -0.79
                                                           -0.77
                                                                          -0.72
                                                                                   4694
y_predicted[104]
                           3.8e-4
                                                                   -0.75
                                                                                            1.0
y_predicted[105]
                    0.05
                           4.1e-4
                                     0.03-6.6e-5
                                                    0.03
                                                            0.05
                                                                    0.07
                                                                             0.1
                                                                                   4277
                                                                                            1.0
                   -0.11
                           3.3e-4
                                     0.02
                                           -0.16
                                                   -0.13
                                                           -0.11
                                                                    -0.1
                                                                          -0.07
                                                                                   4553
y_predicted[106]
                                                                                            1.0
                                     0.04
                                                                    0.25
                                                                                   3880
y_predicted[107]
                    0.23
                           5.9e-4
                                             0.16
                                                      0.2
                                                            0.23
                                                                             0.3
                                                                                            1.0
                   -0.07
                           5.8e-4
                                     0.04
                                            -0.14
                                                   -0.09
                                                           -0.07
                                                                   -0.04 3.0e-3
                                                                                   4110
                                                                                            1.0
y_predicted[108]
                           4.6e-4
                   -0.15
                                     0.03
                                            -0.22
                                                   -0.18
                                                           -0.15
                                                                   -0.13
                                                                          -0.09
                                                                                   4940
y_predicted[109]
                                                                                            1.0
                   -0.66
                           5.2e-4
                                     0.03
                                            -0.72
                                                   -0.68
                                                           -0.66
                                                                   -0.63
                                                                          -0.59
                                                                                   4242
                                                                                            1.0
y_predicted[110]
                     0.1
                           4.8e-4
                                     0.03
                                             0.04
                                                    0.08
                                                             0.1
                                                                    0.12
                                                                            0.16
                                                                                   4126
y_predicted[111]
                                                                                            1.0
y_predicted[112]
                                             0.29
                                                    0.34
                    0.37
                           6.7e-4
                                     0.04
                                                            0.37
                                                                    0.39
                                                                            0.45
                                                                                   3958
                                                                                            1.0
y_predicted[113]
                    0.44
                           9.1e-4
                                     0.06
                                             0.33
                                                      0.4
                                                            0.44
                                                                    0.48
                                                                            0.55
                                                                                   4106
                                                                                            1.0
                                             0.08
                                                    0.11
y_predicted[114]
                    0.13
                           4.6e-4
                                     0.03
                                                            0.13
                                                                    0.16
                                                                            0.19
                                                                                   4513
                                                                                            1.0
y_predicted[115]
                   -0.23
                           4.2e-4
                                     0.03
                                            -0.28
                                                   -0.25
                                                           -0.23
                                                                   -0.21
                                                                           -0.17
                                                                                   4083
                                                                                            1.0
```

```
y_predicted[116]
                   -0.04
                           4.2e-4
                                     0.03
                                           -0.09
                                                   -0.06
                                                           -0.04
                                                                   -0.02
                                                                            0.01
                                                                                   4149
                                                                                            1.0
                    0.89
                                     0.04
                                              0.8
                                                    0.86
                                                                    0.92
                                                                            0.98
                                                                                   3750
y_predicted[117]
                           7.3e-4
                                                            0.89
                                                                                            1.0
y_predicted[118]
                    0.27
                           4.6e-4
                                     0.03
                                             0.21
                                                    0.25
                                                            0.27
                                                                    0.29
                                                                            0.33
                                                                                   4216
                                                                                            1.0
y_predicted[119]
                    0.43
                           4.6e-4
                                     0.03
                                             0.37
                                                    0.41
                                                            0.43
                                                                    0.45
                                                                           0.49
                                                                                   4724
                                                                                            1.0
y_predicted[120]
                   -1.23
                                     0.05
                                           -1.33
                                                   -1.27
                                                           -1.24
                                                                    -1.2
                                                                          -1.14
                                                                                   4587
                           6.9e-4
                                                                                            1.0
                   -0.82
                           4.2e-4
                                     0.03
                                           -0.88
                                                   -0.84
                                                           -0.82
                                                                    -0.8
                                                                          -0.76
                                                                                   4635
y_predicted[121]
                                                                                            1.0
y_predicted[122]
                    2.06
                           7.6e-4
                                     0.05
                                             1.96
                                                    2.02
                                                            2.06
                                                                    2.09
                                                                           2.16
                                                                                   4372
                                                                                            1.0
y_predicted[123]
                   -0.81
                           4.6e-4
                                     0.03
                                           -0.87
                                                   -0.83
                                                           -0.81
                                                                   -0.79
                                                                          -0.75
                                                                                   4970
                                                                                            1.0
                   -0.49
                                     0.03
                                           -0.55
                                                   -0.51
                                                           -0.49
                                                                   -0.47
                                                                          -0.44
                                                                                   4704
y_predicted[124]
                           4.0e-4
                                                                                            1.0
y_predicted[125]
                                     0.02
                                                                                   4541
                    -0.7
                           3.6e-4
                                           -0.74
                                                   -0.71
                                                            -0.7
                                                                   -0.68
                                                                          -0.65
                                                                                            1.0
                     -0.3
                                     0.02
                                           -0.34
                                                   -0.31
                                                            -0.3
                                                                   -0.29
                                                                          -0.26
                                                                                   4533
y_predicted[126]
                           3.0e-4
                                                                                            1.0
                    0.26
                           3.7e-4
                                     0.02
                                             0.22
                                                    0.25
                                                            0.26
                                                                    0.28
                                                                           0.31
                                                                                   4201
y_predicted[127]
                                                                                            1.0
                                     0.03
                                             0.05
                                                    0.09
                                                            0.11
                                                                           0.17
                                                                                   4005
y_predicted[128]
                    0.11
                           4.9e-4
                                                                    0.13
                                                                                            1.0
                    0.21
                                     0.05
                                             0.12
                                                    0.18
                                                            0.21
                                                                    0.25
                                                                           0.31
                                                                                   5128
y_predicted[129]
                           6.8e-4
                                                                                            1.0
y_predicted[130]
                     1.33
                                             1.26
                                                    1.31
                                                            1.33
                                                                    1.36
                           5.4e-4
                                     0.04
                                                                             1.4
                                                                                   4423
                                                                                            1.0
                   -0.09
                           4.5e-4
                                     0.03
                                           -0.14
                                                   -0.11
                                                           -0.09
                                                                   -0.07
                                                                          -0.03
                                                                                   3959
y_predicted[131]
                                                                                            1.0
y_predicted[132]
                   -0.63
                           3.3e-4
                                     0.02
                                           -0.67
                                                   -0.64
                                                           -0.63
                                                                   -0.61
                                                                          -0.58
                                                                                   4589
                                                                                            1.0
                   -0.29
                           3.9e-4
                                     0.03
                                           -0.34
                                                   -0.31
                                                           -0.29
                                                                   -0.27
                                                                          -0.24
                                                                                   4354
                                                                                            1.0
y_predicted[133]
y_predicted[134]
                   -0.22
                           4.7e-4
                                     0.03
                                           -0.28
                                                   -0.24
                                                           -0.22
                                                                    -0.2
                                                                          -0.16
                                                                                   4566
                                                                                            1.0
y_predicted[135]
                    0.77
                           5.6e-4
                                     0.04
                                              0.7
                                                    0.75
                                                            0.77
                                                                     0.8
                                                                           0.85
                                                                                   4494
                                                                                            1.0
                                     0.03
                                           -0.29
                                                           -0.23
y_predicted[136]
                   -0.23
                           4.3e-4
                                                   -0.25
                                                                  -0.21
                                                                          -0.18
                                                                                   4330
                                                                                            1.0
                   -0.13
                           3.1e-4
                                     0.02
                                           -0.17
                                                   -0.15
                                                           -0.13
                                                                   -0.12
                                                                          -0.09
                                                                                   4708
y_predicted[137]
                                                                                            1.0
                                                            -0.5
y_predicted[138]
                    -0.5
                           3.0e-4
                                     0.02
                                           -0.54
                                                   -0.51
                                                                   -0.48
                                                                          -0.46
                                                                                   4687
                                                                                            1.0
                   -1.04
                           4.3e-4
                                     0.03
                                           -1.09
                                                   -1.06
                                                           -1.04
                                                                   -1.02
                                                                          -0.98
                                                                                   4545
y_predicted[139]
                                                                                            1.0
y_predicted[140]
                   -0.34
                           4.9e-4
                                     0.03
                                           -0.41
                                                   -0.37
                                                           -0.34
                                                                   -0.32
                                                                          -0.28
                                                                                   4610
                                                                                            1.0
                   -0.72
                           3.7e-4
                                     0.03
                                           -0.78
                                                   -0.74
                                                           -0.72
                                                                   -0.71
                                                                          -0.67
                                                                                   4780
y_predicted[141]
                                                                                            1.0
                                     0.04
                     0.8
                           7.3e-4
                                             0.71
                                                    0.77
                                                             0.8
                                                                    0.83
                                                                           0.89
                                                                                   3640
y_predicted[142]
                                                                                            1.0
                   -0.38
                                     0.02
                                                           -0.38
y_predicted[143]
                           3.3e-4
                                           -0.43
                                                    -0.4
                                                                   -0.37
                                                                          -0.34
                                                                                   4339
                                                                                            1.0
                                             0.14
                                                                           0.26
                     0.2
                           4.6e-4
                                     0.03
                                                    0.18
                                                             0.2
                                                                    0.22
                                                                                   4281
y_predicted[144]
                                                                                            1.0
y_predicted[145]
                    1.76
                           9.8e-4
                                     0.06
                                             1.64
                                                    1.72
                                                            1.76
                                                                    1.79
                                                                           1.87
                                                                                   3681
                                                                                            1.0
                   -0.92
                           4.2e-4
                                     0.03
                                           -0.97
                                                   -0.94
                                                           -0.92
                                                                    -0.9
                                                                          -0.86
                                                                                   4646
y_predicted[146]
                                                                                            1.0
                                                                     0.2
y_predicted[147]
                    0.18
                           3.8e-4
                                     0.02
                                             0.14
                                                    0.17
                                                            0.18
                                                                            0.23
                                                                                   4238
                                                                                            1.0
y_predicted[148]
                   -0.65
                           3.6e-4
                                     0.02
                                           -0.69
                                                   -0.66
                                                           -0.64
                                                                   -0.63
                                                                            -0.6
                                                                                   4652
                                                                                            1.0
y_predicted[149]
                   -0.84
                           4.3e-4
                                     0.03
                                             -0.9
                                                   -0.86
                                                           -0.84
                                                                   -0.82
                                                                          -0.78
                                                                                   4940
                                                                                            1.0
                                     0.02
                                           -0.07
                                                   -0.04
                                                           -0.03
                                                                   -0.02 7.7e-3
                                                                                   4478
y_predicted[150]
                   -0.03
                           3.0e-4
                                                                                            1.0
                                             -0.2
                                                   -0.17
                                                                   -0.13
                                                                          -0.09
y_predicted[151]
                   -0.15
                           4.0e-4
                                     0.03
                                                           -0.15
                                                                                   4839
                                                                                            1.0
                     0.2
                                     0.02
                                                    0.18
                                                             0.2
                                                                    0.21
                                                                            0.24
                                                                                   4308
y_predicted[152]
                           3.6e-4
                                             0.15
                                                                                            1.0
y_predicted[153]
                   -0.28
                           4.4e-4
                                     0.03
                                           -0.34
                                                    -0.3
                                                           -0.28
                                                                   -0.26
                                                                          -0.22
                                                                                   4623
                                                                                            1.0
                    0.37
                           4.8e-4
                                     0.03
                                             0.31
                                                    0.35
                                                            0.37
                                                                    0.39
                                                                           0.43
                                                                                   4391
y_predicted[154]
                                                                                            1.0
                                     0.05
                                             0.82
                                                    0.88
                                                            0.91
                                                                    0.95
                                                                                   4210
y_predicted[155]
                    0.91
                           7.2e-4
                                                                            1.01
                                                                                            1.0
                           4.6e-4
                    0.67
                                     0.03
                                             0.62
                                                    0.65
                                                            0.68
                                                                    0.69
                                                                           0.73
                                                                                   4236
                                                                                            1.0
y_predicted[156]
y_predicted[157]
                    0.41
                           4.1e-4
                                     0.03
                                             0.36
                                                    0.39
                                                            0.41
                                                                    0.43
                                                                            0.47
                                                                                   4583
                                                                                            1.0
                    0.27
                           5.2e-4
                                     0.04
                                              0.2
                                                    0.25
                                                            0.27
                                                                    0.29
                                                                            0.34
                                                                                   4523
                                                                                            1.0
y_predicted[158]
                    0.31
                           6.7e-4
                                     0.04
                                             0.23
                                                    0.28
                                                            0.31
                                                                    0.33
                                                                            0.39
                                                                                   3881
y_predicted[159]
                                                                                            1.0
                                     0.03
                                             0.74
                                                    0.77
                                                                                   4634
y_predicted[160]
                    0.79
                           4.3e-4
                                                            0.79
                                                                    0.81
                                                                           0.85
                                                                                            1.0
y_predicted[161]
                   -0.16
                           3.6e-4
                                     0.02
                                           -0.21
                                                   -0.18
                                                           -0.16
                                                                   -0.15
                                                                          -0.12
                                                                                   4333
                                                                                            1.0
y_predicted[162]
                    -0.3
                           3.7e-4
                                     0.02
                                           -0.35
                                                   -0.32
                                                            -0.3
                                                                   -0.29
                                                                          -0.25
                                                                                   4282
                                                                                            1.0
y_predicted[163]
                           4.0e-4
                                     0.03
                                           -0.81
                                                   -0.77
                                                           -0.75
                                                                   -0.73
                                                                            -0.7
                                                                                   4542
                                                                                            1.0
                   -0.75
```

```
y_predicted[164]
                    0.23
                                     0.04
                                             0.16
                                                      0.2
                                                            0.23
                                                                    0.26
                                                                                   3797
                           6.2e-4
                                                                            0.31
                                                                                            1.0
                   -0.94
                           4.5e-4
                                     0.03
                                             -1.0
                                                   -0.96
                                                           -0.94
                                                                   -0.92
                                                                          -0.88
                                                                                   4377
y_predicted[165]
                                                                                            1.0
                   -0.12
                           3.9e-4
                                     0.03
                                                   -0.14
                                                           -0.12
                                                                    -0.1
y_predicted[166]
                                            -0.17
                                                                          -0.07
                                                                                   4492
                                                                                            1.0
                     0.7
                           4.7e-4
                                     0.03
                                             0.64
                                                    0.68
                                                             0.7
                                                                    0.72
                                                                            0.76
                                                                                   4227
                                                                                            1.0
y_predicted[167]
                   -0.17
                           3.3e-4
                                     0.02
                                            -0.21
                                                   -0.18
                                                           -0.17
                                                                   -0.15
                                                                          -0.12
                                                                                   4661
y predicted[168]
                                                                                            1.0
y_predicted[169]
                    0.76
                           6.1e-4
                                     0.04
                                             0.69
                                                    0.73
                                                            0.76
                                                                    0.78
                                                                            0.83
                                                                                   3704
                                                                                            1.0
y_predicted[170] 6.2e-3
                           3.1e-4
                                     0.02
                                            -0.03-7.6e-3 6.7e-3
                                                                    0.02
                                                                            0.05
                                                                                   4441
                                                                                            1.0
                   -0.06
                           4.1e-4
                                            -0.11
                                                   -0.08
                                                           -0.06
                                                                   -0.04-3.9e-3
                                                                                    4519
y_predicted[171]
                                     0.03
                                                                                            1.0
                   -0.36
                           3.4e-4
                                     0.02
                                            -0.41
                                                   -0.38
                                                           -0.36
                                                                   -0.35
                                                                          -0.32
                                                                                   4456
                                                                                            1.0
y_predicted[172]
                           3.1e-4
                                     0.02
                                             0.02
                                                    0.05
                                                            0.06
                                                                    0.08
                                                                             0.1
                                                                                   4349
y_predicted[173]
                    0.06
                                                                                            1.0
                     1.55
                           9.4e-4
                                     0.06
                                             1.43
                                                    1.51
                                                            1.55
                                                                            1.68
                                                                                   4303
y_predicted[174]
                                                                     1.6
                                                                                            1.0
                      1.4
                           8.0e-4
                                     0.05
                                             1.31
                                                    1.37
                                                             1.4
                                                                    1.43
                                                                             1.5
                                                                                   3675
y_predicted[175]
                                                                                            1.0
                           3.2e-4
                                     0.02
                                             -0.2
                                                                          -0.11
                                                                                   4907
y_predicted[176]
                   -0.16
                                                   -0.17
                                                           -0.15
                                                                   -0.14
                                                                                            1.0
                                             0.64
                                                            0.71
                    0.71
                           5.2e-4
                                     0.03
                                                    0.68
                                                                    0.73
                                                                            0.77
                                                                                   4230
y_predicted[177]
                                                                                            1.0
                    0.72
                           8.7e-4
                                     0.05
                                             0.62
                                                    0.69
                                                            0.72
                                                                    0.76
                                                                            0.83
                                                                                   3974
y_predicted[178]
                                                                                            1.0
                   -0.39
                           5.4e-4
                                     0.04
                                            -0.46
                                                   -0.41
                                                           -0.39
                                                                   -0.36
                                                                          -0.32
                                                                                   4592
                                                                                            1.0
y_predicted[179]
y_predicted[180]
                    -0.5
                           3.6e-4
                                     0.02
                                            -0.55
                                                   -0.52
                                                            -0.5
                                                                   -0.49
                                                                          -0.46
                                                                                   4454
                                                                                            1.0
                     0.34
                           4.8e-4
                                     0.03
                                             0.28
                                                    0.32
                                                            0.34
                                                                    0.37
                                                                            0.41
                                                                                   4643
                                                                                            1.0
y_predicted[181]
y_predicted[182]
                   -0.73
                           5.4e-4
                                     0.04
                                             -0.8
                                                   -0.75
                                                           -0.73
                                                                    -0.7
                                                                          -0.65
                                                                                   4593
                                                                                            1.0
y_predicted[183]
                   -0.29
                           4.1e-4
                                     0.03
                                            -0.35
                                                   -0.31
                                                           -0.29
                                                                   -0.27
                                                                           -0.24
                                                                                   4491
                                                                                            1.0
                   -0.76
                                            -0.83
                                                   -0.79
                                                           -0.76
                                                                   -0.74
                                                                          -0.69
y_predicted[184]
                           5.3e-4
                                     0.04
                                                                                   4657
                                                                                            1.0
                    0.17
                           4.6e-4
                                     0.03
                                             0.12
                                                    0.15
                                                            0.17
                                                                     0.2
                                                                            0.24
                                                                                   4527
y_predicted[185]
                                                                                            1.0
                           5.1e-4
                                     0.03
                                             0.72
                                                            0.79
                                                                            0.85
y_predicted[186]
                    0.79
                                                    0.76
                                                                    0.81
                                                                                   4235
                                                                                            1.0
                   -0.35
                           5.0e-4
                                     0.03
                                            -0.41
                                                   -0.37
                                                           -0.35
                                                                   -0.32
                                                                          -0.28
                                                                                   4602
                                                                                            1.0
y_predicted[187]
y_predicted[188]
                   -1.05
                           4.3e-4
                                     0.03
                                            -1.11
                                                   -1.07
                                                           -1.05
                                                                   -1.03
                                                                            -1.0
                                                                                   4376
                                                                                            1.0
                    -0.7
                           3.4e-4
                                     0.02
                                            -0.75
                                                   -0.72
                                                            -0.7
                                                                   -0.69
                                                                          -0.66
                                                                                   4619
y_predicted[189]
                                                                                            1.0
                                     0.02
                                            -0.26
                                                   -0.22
                                                                          -0.16
y_predicted[190]
                   -0.21
                           3.3e-4
                                                           -0.21
                                                                   -0.19
                                                                                   4926
                                                                                            1.0
y_predicted[191]
                    0.23
                           6.2e-4
                                     0.04
                                             0.16
                                                      0.2
                                                            0.23
                                                                    0.26
                                                                            0.31
                                                                                   3793
                                                                                            1.0
                     1.16
                           7.1e-4
                                             1.08
                                                            1.16
                                                                    1.19
                                                                            1.25
y_predicted[192]
                                     0.04
                                                    1.13
                                                                                   3704
                                                                                            1.0
y_predicted[193]
                   -0.64
                           3.3e-4
                                     0.02
                                            -0.68
                                                   -0.65
                                                           -0.64
                                                                   -0.62
                                                                          -0.59
                                                                                   4611
                                                                                            1.0
                                            -0.41
                   -0.35
                           4.3e-4
                                     0.03
                                                   -0.37
                                                           -0.35
                                                                   -0.33
                                                                          -0.29
                                                                                   4697
                                                                                            1.0
y_predicted[194]
                           3.9e-4
y_predicted[195]
                    0.24
                                     0.03
                                             0.19
                                                    0.22
                                                            0.24
                                                                    0.26
                                                                            0.29
                                                                                   4271
                                                                                            1.0
                           3.4e-4
                                     0.02
                                             -0.4
                                                   -0.37
                                                           -0.36
                                                                          -0.31
y_predicted[196]
                   -0.36
                                                                  -0.34
                                                                                   4187
                                                                                            1.0
y_predicted[197]
                     0.9
                           6.3e-4
                                     0.04
                                             0.83
                                                    0.88
                                                             0.9
                                                                    0.93
                                                                            0.98
                                                                                   4007
                                                                                            1.0
                   -0.35
                           4.8e-4
                                     0.03
                                            -0.41
                                                   -0.37
                                                           -0.35
                                                                   -0.33
                                                                          -0.29
                                                                                   4286
y predicted[198]
                                                                                            1.0
                                                           -0.53
                   -0.53
                                     0.02
                                            -0.57
                                                   -0.54
                                                                   -0.52
                                                                          -0.49
                                                                                   4726
y_predicted[199]
                           3.0e-4
                                                                                            1.0
                   -0.76
                           3.7e-4
                                     0.03
                                            -0.81
                                                   -0.78
                                                           -0.76
                                                                   -0.74
                                                                          -0.71
                                                                                   4720
y_predicted[200]
                                                                                            1.0
loglik_pred[1]
                   -0.51
                           2.4e-4
                                     0.02
                                            -0.55
                                                   -0.52
                                                           -0.51
                                                                    -0.5
                                                                          -0.48
                                                                                   5284
                                                                                            1.0
                   -0.53
                           2.8e-4
                                     0.02
                                           -0.57
                                                   -0.55
                                                           -0.53
                                                                   -0.52
                                                                            -0.5
                                                                                   4937
                                                                                            1.0
loglik_pred[2]
                     -0.6
                           5.2e-4
                                     0.04
                                            -0.68
                                                   -0.63
                                                            -0.6
                                                                   -0.58
                                                                          -0.54
                                                                                   4929
loglik_pred[3]
                                                                                            1.0
                                     0.02
                   -0.55
                           2.8e-4
                                            -0.58
                                                   -0.56
                                                           -0.54
                                                                   -0.53
                                                                          -0.51
                                                                                   5051
                                                                                            1.0
loglik_pred[4]
                   -0.56
                                     0.02
                                            -0.59
                                                   -0.57
                                                           -0.56
                                                                   -0.54
                                                                          -0.52
loglik_pred[5]
                           2.5e-4
                                                                                   5237
                                                                                            1.0
loglik_pred[6]
                   -0.59
                           3.9e-4
                                     0.03
                                            -0.64
                                                    -0.6
                                                           -0.59
                                                                   -0.57
                                                                          -0.54
                                                                                   4342
                                                                                            1.0
                           2.5e-4
                                            -0.58
                                                           -0.54
                                                                          -0.51
                   -0.54
                                     0.02
                                                   -0.56
                                                                   -0.53
                                                                                   5257
loglik_pred[7]
                                                                                            1.0
                           3.1e-4
                                            -0.62
                                                   -0.59
                                                           -0.58
                                                                   -0.56
                                                                          -0.54
                                                                                   4809
loglik_pred[8]
                   -0.58
                                     0.02
                                                                                            1.0
                                            -0.98
                                                                          -0.76
loglik_pred[9]
                   -0.86
                           8.5e-4
                                     0.06
                                                    -0.9
                                                           -0.86
                                                                   -0.83
                                                                                   4525
                                                                                            1.0
loglik_pred[10]
                   -0.59
                           3.6e-4
                                     0.02
                                            -0.64
                                                   -0.61
                                                           -0.59
                                                                   -0.58
                                                                          -0.55
                                                                                   4538
                                                                                            1.0
loglik_pred[11]
                   -0.94
                           7.7e-4
                                     0.05
                                            -1.04
                                                   -0.97
                                                           -0.93
                                                                    -0.9
                                                                          -0.84
                                                                                   4141
                                                                                            1.0
```

```
loglik_pred[12]
                   -0.91
                          8.4e-4
                                    0.05
                                           -1.01
                                                  -0.94
                                                           -0.9
                                                                 -0.87
                                                                         -0.81
                                                                                  3987
                                                                                          1.0
loglik_pred[13]
                   -0.51
                           2.3e-4
                                    0.02
                                           -0.54
                                                  -0.52
                                                          -0.51
                                                                   -0.5
                                                                         -0.48
                                                                                  5449
                                                                                          1.0
                          5.7e-4
                                           -0.77
loglik_pred[14]
                   -0.69
                                    0.04
                                                  -0.72
                                                          -0.69
                                                                 -0.67
                                                                         -0.62
                                                                                  4302
                                                                                          1.0
loglik_pred[15]
                   -0.73
                          4.5e-4
                                    0.03
                                            -0.8
                                                  -0.76
                                                          -0.73
                                                                 -0.71
                                                                         -0.68
                                                                                  4548
                                                                                          1.0
loglik pred[16]
                   -0.51
                          2.4e-4
                                    0.02
                                           -0.54
                                                  -0.52
                                                          -0.51
                                                                 -0.49
                                                                         -0.47
                                                                                  5292
                                                                                          1.0
loglik_pred[17]
                   -1.02
                          5.9e-4
                                    0.04
                                            -1.1
                                                  -1.05
                                                          -1.02
                                                                 -0.99
                                                                         -0.95
                                                                                  4332
                                                                                          1.0
loglik_pred[18]
                   -0.52
                          2.8e-4
                                    0.02
                                           -0.56
                                                  -0.53
                                                          -0.52
                                                                 -0.51
                                                                         -0.48
                                                                                  5103
                                                                                          1.0
                                           -1.39
                                                  -1.32
                                                          -1.29
                                                                 -1.25
                                                                         -1.19
loglik_pred[19]
                   -1.29
                          7.5e-4
                                    0.05
                                                                                  4585
                                                                                          1.0
loglik_pred[20]
                   -0.67
                          3.9e-4
                                    0.03
                                           -0.73
                                                  -0.69
                                                          -0.67
                                                                 -0.65
                                                                         -0.62
                                                                                  4898
                                                                                          1.0
loglik_pred[21]
                   -3.56
                           1.8e-3
                                    0.12
                                           -3.81
                                                  -3.64
                                                          -3.56
                                                                 -3.48
                                                                         -3.33
                                                                                  4732
                                                                                          1.0
loglik_pred[22]
                   -1.27
                                    0.09
                                           -1.45
                                                  -1.33
                                                          -1.27
                                                                 -1.21
                                                                         -1.11
                                                                                  4303
                           1.3e-3
                                                                                          1.0
loglik_pred[23]
                   -0.61
                          3.4e-4
                                    0.02
                                           -0.65
                                                  -0.62
                                                          -0.61
                                                                 -0.59
                                                                         -0.56
                                                                                  4769
                                                                                          1.0
loglik_pred[24]
                                    0.02
                                           -0.54
                                                  -0.52
                                                                         -0.47
                   -0.51
                          2.3e-4
                                                          -0.51
                                                                   -0.5
                                                                                  5398
                                                                                          1.0
loglik_pred[25]
                   -0.66
                          4.0e-4
                                    0.03
                                           -0.72
                                                  -0.68
                                                          -0.66
                                                                 -0.64
                                                                         -0.61
                                                                                  4622
                                                                                          1.0
                   -0.51
                                           -0.54
                                                  -0.52
                                                          -0.51
                                                                   -0.5
                                                                         -0.47
loglik_pred[26]
                           2.3e-4
                                    0.02
                                                                                  5330
                                                                                          1.0
loglik_pred[27]
                    -0.5
                          2.3e-4
                                    0.02
                                           -0.54
                                                  -0.52
                                                           -0.5
                                                                 -0.49
                                                                         -0.47
                                                                                  5359
                                                                                          1.0
loglik_pred[28]
                   -0.57
                          3.1e-4
                                    0.02
                                           -0.62
                                                  -0.59
                                                          -0.57
                                                                 -0.56
                                                                         -0.53
                                                                                  4918
                                                                                          1.0
loglik_pred[29]
                   -0.52
                          2.6e-4
                                    0.02
                                           -0.55
                                                  -0.53
                                                          -0.51
                                                                   -0.5
                                                                         -0.48
                                                                                  4988
                                                                                          1.0
loglik_pred[30]
                    -0.5
                          2.3e-4
                                    0.02
                                           -0.54
                                                  -0.52
                                                           -0.5
                                                                 -0.49
                                                                         -0.47
                                                                                  5396
                                                                                          1.0
                                                          -0.54
loglik pred[31]
                   -0.54
                          2.7e-4
                                    0.02
                                           -0.58
                                                  -0.55
                                                                 -0.53
                                                                          -0.5
                                                                                  5115
                                                                                          1.0
loglik_pred[32]
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                          2.6e-4
                                    0.02
                                           -0.61
                                                  -0.58
                                                          -0.57
                                                                 -0.56
                                                                         -0.53
                                                                                  5094
                                                                                          1.0
loglik pred[33]
                   -0.69
                          7.6e-4
                                    0.05
                                           -0.79
                                                  -0.72
                                                          -0.69
                                                                 -0.65
                                                                          -0.6
                                                                                  4253
                                                                                          1.0
loglik_pred[34]
                   -0.55
                          2.4e-4
                                    0.02
                                           -0.58
                                                  -0.56
                                                          -0.55
                                                                 -0.54
                                                                         -0.51
                                                                                  5248
                                                                                          1.0
loglik_pred[35]
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                          2.5e-4
                                    0.02
                                           -0.57
                                                  -0.54
                                                          -0.53
                                                                 -0.52
                                                                          -0.5
                                                                                  5278
                                                                                          1.0
loglik_pred[36]
                   -2.82
                          3.0e-3
                                    0.19
                                           -3.21
                                                  -2.95
                                                          -2.81
                                                                 -2.69
                                                                         -2.46
                                                                                  4162
                                                                                          1.0
loglik_pred[37]
                   -0.96
                           1.8e-3
                                    0.12
                                           -1.21
                                                  -1.04
                                                          -0.96
                                                                 -0.88
                                                                         -0.76
                                                                                  4278
                                                                                          1.0
loglik_pred[38]
                   -0.62
                          5.3e-4
                                    0.04
                                           -0.69
                                                  -0.64
                                                          -0.62
                                                                 -0.59
                                                                         -0.55
                                                                                  4386
                                                                                          1.0
loglik_pred[39]
                    -1.9
                                    0.08
                                           -2.06
                                                  -1.95
                                                           -1.9
                                                                         -1.75
                          1.1e-3
                                                                 -1.84
                                                                                  5223
                                                                                          1.0
loglik_pred[40]
                   -0.51
                           2.4e-4
                                    0.02
                                           -0.54
                                                  -0.52
                                                          -0.51
                                                                 -0.49
                                                                         -0.47
                                                                                  4982
                                                                                          1.0
loglik_pred[41]
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                          4.8e-4
                                    0.03
                                           -0.81
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                                                          -0.75
                                                                 -0.73
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                                                                                  4061
                                                                                          1.0
loglik_pred[42]
                   -0.87
                          5.0e-4
                                    0.03
                                           -0.94
                                                  -0.89
                                                          -0.87
                                                                 -0.85
                                                                         -0.81
                                                                                  4491
                                                                                          1.0
loglik_pred[43]
                   -0.65
                          3.4e-4
                                    0.02
                                            -0.7
                                                  -0.67
                                                          -0.65
                                                                 -0.63
                                                                         -0.61
                                                                                  4841
                                                                                          1.0
loglik_pred[44]
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                          3.8e-4
                                    0.03
                                           -0.84
                                                  -0.81
                                                          -0.79
                                                                 -0.77
                                                                         -0.74
                                                                                  4536
                                                                                          1.0
loglik_pred[45]
                   -0.51
                          2.3e-4
                                    0.02
                                           -0.54
                                                  -0.52
                                                          -0.51
                                                                 -0.49
                                                                         -0.47
                                                                                  5442
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loglik pred[46]
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                          3.0e-4
                                    0.02
                                           -0.63
                                                  -0.61
                                                          -0.59
                                                                 -0.58
                                                                         -0.55
                                                                                  4800
                                                                                          1.0
                   -0.79
                          5.7e-4
                                                          -0.78
                                                                 -0.76
                                                                         -0.72
loglik pred[47]
                                    0.04
                                           -0.86
                                                  -0.81
                                                                                  4445
                                                                                          1.0
loglik pred[48]
                   -0.56
                          3.0e-4
                                    0.02
                                           -0.61
                                                  -0.58
                                                          -0.56
                                                                 -0.55
                                                                         -0.52
                                                                                  4935
                                                                                          1.0
loglik_pred[49]
                   -0.51
                          2.4e-4
                                    0.02
                                           -0.55
                                                  -0.52
                                                          -0.51
                                                                   -0.5
                                                                         -0.48
                                                                                  5338
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loglik_pred[50]
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                          2.3e-4
                                    0.02
                                          -0.54
                                                  -0.52
                                                          -0.51
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                                                                                  5376
                                                                                          1.0
loglik_pred[51]
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                                    0.05
                                           -1.15
                                                  -1.09
                                                          -1.06
                                                                 -1.03
                                                                         -0.97
                   -1.06
                                                                                  4826
                                                                                          1.0
loglik_pred[52]
                   -0.58
                          3.2e-4
                                    0.02
                                           -0.63
                                                   -0.6
                                                          -0.58
                                                                 -0.56
                                                                         -0.54
                                                                                  4894
                                                                                          1.0
                                                  -0.98
loglik_pred[53]
                   -0.94
                          9.9e-4
                                    0.06
                                           -1.07
                                                          -0.94
                                                                 -0.89
                                                                         -0.82
                                                                                  4259
                                                                                          1.0
loglik_pred[54]
                   -0.98
                          6.6e-4
                                    0.05
                                           -1.07
                                                  -1.01
                                                          -0.97
                                                                 -0.94
                                                                         -0.89
                                                                                  4824
                                                                                          1.0
loglik_pred[55]
                   -0.51
                           2.4e-4
                                    0.02
                                           -0.54
                                                  -0.52
                                                          -0.51
                                                                   -0.5
                                                                         -0.47
                                                                                  5307
                                                                                          1.0
                                    0.71 -17.41 -16.49 -16.01 -15.52 -14.66
loglik_pred[56]
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                             0.01
                                                                                  4751
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loglik_pred[57]
                   -2.53
                          1.9e-3
                                    0.13
                                           -2.78
                                                  -2.61
                                                          -2.53
                                                                 -2.44
                                                                         -2.28
                                                                                  4548
                                                                                          1.0
loglik_pred[58]
                    -0.6
                           5.0e-4
                                    0.03
                                           -0.67
                                                  -0.62
                                                           -0.6
                                                                 -0.58
                                                                         -0.54
                                                                                  4219
                                                                                          1.0
loglik_pred[59]
                   -0.52
                           2.6e-4
                                    0.02
                                           -0.55
                                                  -0.53
                                                         -0.52
                                                                   -0.5
                                                                         -0.48
                                                                                  5294
                                                                                          1.0
```

loglik_pred[60]	-2.02	2.2e-3	0.14	-2.31	-2.11	-2.01	-1.92	-1.75	4279	1.0
loglik_pred[61]	-0.52	2.6e-4	0.02	-0.56	-0.53	-0.52	-0.5	-0.48	5164	1.0
loglik_pred[62]	-0.5	2.3e-4	0.02	-0.54	-0.51	-0.5	-0.49	-0.47	5351	1.0
loglik_pred[63]	-0.57	4.1e-4	0.03	-0.63	-0.59	-0.57	-0.56	-0.52	4524	1.0
loglik_pred[64]	-0.76	6.3e-4	0.04	-0.85	-0.79	-0.76	-0.73	-0.68	4620	1.0
loglik_pred[65]	-0.7	4.7e-4	0.03	-0.76	-0.72	-0.7	-0.68	-0.64	3948	1.0
loglik_pred[66]	-0.64	3.8e-4	0.03	-0.69	-0.65	-0.64	-0.62	-0.59	4788	1.0
loglik_pred[67]	-0.8	3.7e-4	0.03	-0.86	-0.82	-0.8	-0.79	-0.76	4801	1.0
loglik_pred[68]	-0.52	2.5e-4	0.02	-0.56	-0.53	-0.52	-0.51	-0.49	5249	1.0
loglik_pred[69]	-0.83	7.3e-4	0.05	-0.93	-0.86	-0.83	-0.8	-0.74	4315	1.0
loglik_pred[70]	-0.51	2.6e-4	0.02	-0.54	-0.52	-0.51	-0.5	-0.47	4646	1.0
loglik_pred[71]	-0.5	2.3e-4	0.02	-0.54	-0.52	-0.5	-0.49	-0.47	5378	1.0
loglik_pred[72]	-0.57	2.7e-4	0.02	-0.61	-0.58	-0.57	-0.56	-0.53	5089	1.0
loglik_pred[73]	-0.52	3.0e-4	0.02	-0.56	-0.53	-0.52	-0.51	-0.48	4907	1.0
loglik_pred[74]	-0.76	1.0e-3	0.07	-0.9	-0.8	-0.75	-0.71	-0.64	4445	1.0
loglik_pred[75]	-0.65	8.8e-4	0.06	-0.78	-0.69	-0.65	-0.61	-0.55	4507	1.0
loglik_pred[76]	-0.62	4.4e-4	0.03	-0.68	-0.64	-0.62	-0.6	-0.57	4420	1.0
loglik_pred[77]	-0.51	2.3e-4	0.02	-0.54	-0.52	-0.51	-0.5	-0.48	5399	1.0
loglik_pred[78]	-0.65	3.3e-4	0.02	-0.7	-0.67	-0.65	-0.64	-0.61	4746	1.0
loglik_pred[79]	-0.98	1.2e-3	0.08	-1.14	-1.03	-0.97	-0.92	-0.83	4229	1.0
loglik_pred[80]	-0.5	2.3e-4	0.02	-0.54	-0.51	-0.5	-0.49	-0.47	5434	1.0
loglik_pred[81]	-0.59	3.7e-4	0.03	-0.64	-0.61	-0.59	-0.58	-0.55	4758	1.0
loglik_pred[82]	-0.61	4.5e-4	0.03	-0.67	-0.63	-0.61	-0.59	-0.55	4409	1.0
loglik_pred[83]	-1.12	1.3e-3	0.08	-1.28	-1.17	-1.12	-1.07	-0.98	3789	1.0
loglik_pred[84]	-0.59	2.8e-4	0.02	-0.63	-0.6	-0.59	-0.57	-0.55	4720	1.0
loglik_pred[85]	-0.6	2.9e-4	0.02	-0.64	-0.61	-0.6	-0.58	-0.56	4552	1.0
loglik_pred[86]	-0.54	2.8e-4	0.02	-0.58	-0.55	-0.54	-0.53	-0.5	4821	1.0
loglik_pred[87]	-0.54	2.7e-4	0.02	-0.58	-0.56	-0.54	-0.53	-0.51	5112	1.0
loglik_pred[88]	-0.78	7.5e-4	0.05	-0.88	-0.81	-0.78	-0.75	-0.69	3976	1.0
loglik_pred[89]	-0.8	3.8e-4	0.03	-0.86	-0.82	-0.8	-0.79	-0.76	4563	1.0
loglik_pred[90]	-0.51	2.4e-4	0.02	-0.55	-0.53	-0.51	-0.5	-0.48	5241	1.0
loglik_pred[91]	-0.52	2.4e-4	0.02	-0.55	-0.53	-0.52	-0.5	-0.48	5349	1.0
loglik_pred[92]	-0.54	5.0e-4	0.03	-0.62	-0.56	-0.54	-0.52	-0.49	4399	1.0
loglik_pred[93]	-0.64	3.8e-4	0.03	-0.7	-0.66	-0.64	-0.62	-0.59	4818	1.0
loglik_pred[94]	-0.92	6.0e-4	0.04	-1.0	-0.95	-0.92	-0.89	-0.85	4588	1.0
loglik_pred[95]	-0.51	2.4e-4	0.02	-0.55	-0.52	-0.51	-0.5	-0.48	5350	1.0
loglik_pred[96]	-0.53	2.5e-4	0.02	-0.57	-0.55	-0.53	-0.52	-0.5	4986	1.0
loglik_pred[97]	-2.31	1.0e-3	0.07	-2.45	-2.35	-2.31	-2.26	-2.17	4947	1.0
loglik_pred[98]	-1.38	1.5e-3	0.09	-1.57	-1.44	-1.37	-1.31	-1.21	3651	1.0
loglik_pred[99]	-7.46	9.9e-3	0.65	-8.77	-7.89	-7.44	-7.02	-6.22	4257	1.0
loglik_pred[100]	-0.51	2.4e-4	0.02	-0.54	-0.52	-0.51	-0.49	-0.47	4982	1.0
loglik_pred[101]	-0.51	2.3e-4	0.02	-0.54	-0.52	-0.51	-0.5	-0.47	5363	1.0
loglik_pred[102]	-0.71	3.5e-4	0.02	-0.75	-0.72	-0.71	-0.69	-0.66	4598	1.0
loglik_pred[103]	-0.53	2.6e-4	0.02	-0.57	-0.54	-0.53	-0.51	-0.49	5420	1.0
loglik_pred[104]	-1.56	1.4e-3	0.09	-1.74	-1.62	-1.56	-1.5	-1.39	4241	1.0
loglik_pred[105]	-1.07	9.0e-4	0.06	-1.19	-1.11	-1.07	-1.03	-0.97	3813	1.0
loglik_pred[106]	-0.58	4.0e-4	0.03	-0.64	-0.6	-0.58	-0.57	-0.54	4161	1.0
loglik_pred[107]	-0.56	2.6e-4	0.02	-0.6	-0.58	-0.56	-0.55	-0.53	5052	1.0
<u> </u>										

```
loglik_pred[108]
                   -0.64
                           3.6e-4
                                     0.02
                                           -0.69
                                                   -0.65
                                                           -0.64
                                                                  -0.62
                                                                          -0.59
                                                                                   4445
                                                                                            1.0
loglik_pred[109]
                   -0.52
                           2.4e-4
                                     0.02
                                           -0.55
                                                   -0.53
                                                           -0.52
                                                                  -0.51
                                                                          -0.49
                                                                                   5304
                                                                                            1.0
                           3.7e-4
                                                            -0.8
                                                                  -0.78
loglik_pred[110]
                    -0.8
                                     0.02
                                           -0.85
                                                   -0.82
                                                                          -0.75
                                                                                   4582
                                                                                            1.0
loglik_pred[111]
                   -1.31
                           1.1e-3
                                     0.08
                                           -1.47
                                                   -1.36
                                                          -1.31
                                                                  -1.26
                                                                          -1.16
                                                                                   4758
                                                                                            1.0
                                                           -1.13
loglik pred[112]
                   -1.13
                           5.1e-4
                                     0.03
                                            -1.2
                                                   -1.15
                                                                   -1.1
                                                                          -1.06
                                                                                   4760
                                                                                            1.0
loglik pred[113]
                   -0.58
                           3.0e-4
                                     0.02
                                           -0.62
                                                   -0.59
                                                           -0.58
                                                                  -0.57
                                                                          -0.54
                                                                                   4712
                                                                                            1.0
loglik_pred[114]
                    -0.5
                           2.3e-4
                                     0.02
                                           -0.54
                                                   -0.52
                                                            -0.5
                                                                  -0.49
                                                                          -0.47
                                                                                   5316
                                                                                            1.0
                           2.7e-4
                                           -0.62
                                                    -0.6
                                                                  -0.58
                                                                          -0.55
loglik_pred[115]
                   -0.59
                                     0.02
                                                          -0.59
                                                                                   4898
                                                                                            1.0
loglik pred[116]
                   -0.86
                           8.4e-4
                                     0.05
                                           -0.97
                                                   -0.89
                                                           -0.86
                                                                  -0.83
                                                                          -0.77
                                                                                   3690
                                                                                            1.0
loglik_pred[117]
                           1.2e-3
                                     0.07
                   -0.88
                                           -1.03
                                                   -0.92
                                                           -0.88
                                                                  -0.83
                                                                          -0.75
                                                                                   3607
                                                                                            1.0
loglik_pred[118]
                   -1.57
                           1.4e-3
                                     0.09
                                           -1.75
                                                   -1.63
                                                           -1.56
                                                                   -1.5
                                                                           -1.4
                                                                                   4235
                                                                                            1.0
loglik_pred[119]
                   -0.83
                           8.9e-4
                                     0.06
                                           -0.95
                                                   -0.86
                                                           -0.82
                                                                  -0.79
                                                                          -0.72
                                                                                   4076
                                                                                            1.0
loglik_pred[120]
                           2.7e-4
                                     0.02
                                           -0.55
                                                   -0.53
                                                                          -0.48
                                                                                   4706
                   -0.52
                                                           -0.52
                                                                   -0.5
                                                                                            1.0
loglik_pred[121]
                   -0.52
                           2.6e-4
                                     0.02
                                           -0.55
                                                   -0.53
                                                           -0.52
                                                                   -0.5
                                                                          -0.48
                                                                                   4792
                                                                                            1.0
loglik_pred[122]
                   -0.89
                           9.9e-4
                                           -1.03
                                                   -0.93
                                                           -0.88
                                                                  -0.84
                                                                          -0.77
                                                                                   4507
                                     0.07
                                                                                            1.0
loglik_pred[123]
                   -0.57
                           2.4e-4
                                     0.02
                                             -0.6
                                                   -0.58
                                                           -0.57
                                                                  -0.55
                                                                          -0.53
                                                                                   5321
                                                                                            1.0
loglik_pred[124]
                   -0.54
                           2.7e-4
                                     0.02
                                           -0.57
                                                   -0.55
                                                           -0.53
                                                                  -0.52
                                                                           -0.5
                                                                                   5030
                                                                                            1.0
                                                                           -1.4
loglik_pred[125]
                   -1.57
                           1.3e-3
                                     0.09
                                           -1.75
                                                   -1.63
                                                           -1.56
                                                                   -1.5
                                                                                   4601
                                                                                            1.0
loglik_pred[126]
                   -0.51
                           2.3e-4
                                     0.02
                                           -0.54
                                                   -0.52
                                                           -0.51
                                                                   -0.5
                                                                          -0.48
                                                                                   5275
                                                                                            1.0
loglik pred[127]
                    -0.5
                           2.3e-4
                                     0.02
                                           -0.54
                                                   -0.51
                                                            -0.5
                                                                  -0.49
                                                                          -0.47
                                                                                   5385
                                                                                            1.0
loglik_pred[128]
                           9.1e-4
                                           -1.22
                                                   -1.13
                                                                  -1.05
                   -1.09
                                     0.06
                                                           -1.09
                                                                          -0.98
                                                                                   4564
                                                                                            1.0
loglik pred[129]
                   -0.75
                           5.7e-4
                                     0.04
                                           -0.83
                                                   -0.77
                                                           -0.75
                                                                  -0.72
                                                                          -0.68
                                                                                   4406
                                                                                            1.0
                                                   -0.54
                                                           -0.53
                                                                  -0.51
loglik_pred[130]
                   -0.53
                           2.6e-4
                                     0.02
                                           -0.56
                                                                          -0.49
                                                                                   5147
                                                                                            1.0
loglik pred[131]
                   -0.53
                           3.3e-4
                                     0.02
                                           -0.58
                                                   -0.54
                                                           -0.53
                                                                  -0.51
                                                                          -0.49
                                                                                   4654
                                                                                            1.0
loglik_pred[132]
                   -1.49
                           1.7e-3
                                     0.11
                                           -1.72
                                                   -1.56
                                                           -1.49
                                                                  -1.41
                                                                          -1.28
                                                                                   4369
                                                                                            1.0
loglik_pred[133]
                   -0.51
                           2.5e-4
                                     0.02
                                           -0.55
                                                   -0.52
                                                           -0.51
                                                                   -0.5
                                                                          -0.48
                                                                                   5261
                                                                                            1.0
                                     0.03
                                           -0.74
                                                    -0.7
loglik_pred[134]
                   -0.69
                           4.4e-4
                                                           -0.68
                                                                  -0.67
                                                                          -0.63
                                                                                   4082
                                                                                            1.0
                                                            -0.9
loglik_pred[135]
                    -0.9
                           4.3e-4
                                     0.03
                                           -0.96
                                                   -0.92
                                                                  -0.88
                                                                          -0.85
                                                                                   4392
                                                                                            1.0
                           5.1e-4
                                                   -0.78
                                                           -0.76
                                                                  -0.73
loglik_pred[136]
                   -0.76
                                     0.04
                                           -0.83
                                                                          -0.69
                                                                                   4713
                                                                                            1.0
loglik_pred[137]
                   -2.13
                           1.6e-3
                                     0.12
                                           -2.36
                                                   -2.21
                                                           -2.13
                                                                  -2.05
                                                                          -1.91
                                                                                   5287
                                                                                            1.0
loglik_pred[138]
                   -0.76
                           3.6e-4
                                     0.02
                                           -0.81
                                                   -0.78
                                                           -0.76
                                                                  -0.75
                                                                          -0.72
                                                                                   4521
                                                                                            1.0
loglik_pred[139]
                   -0.52
                           3.0e-4
                                     0.02
                                           -0.56
                                                   -0.53
                                                           -0.51
                                                                   -0.5
                                                                          -0.48
                                                                                   4538
                                                                                            1.0
                                     0.04
                                                   -0.99
                                                                          -0.89
                                                                                   4494
loglik_pred[140]
                   -0.96
                           6.0e-4
                                           -1.05
                                                           -0.96
                                                                  -0.94
                                                                                            1.0
loglik_pred[141]
                   -0.51
                           2.7e-4
                                     0.02
                                           -0.55
                                                   -0.52
                                                          -0.51
                                                                   -0.5
                                                                          -0.47
                                                                                   4593
                                                                                            1.0
loglik pred[142]
                   -0.51
                           2.3e-4
                                     0.02
                                           -0.54
                                                   -0.52
                                                           -0.51
                                                                  -0.49
                                                                          -0.47
                                                                                   5436
                                                                                            1.0
loglik pred[143]
                           3.4e-4
                                     0.02
                                           -0.63
                                                    -0.6
                                                           -0.58
                                                                          -0.54
                                                                                   4222
                   -0.58
                                                                  -0.57
                                                                                            1.0
loglik pred[144]
                   -0.93
                           5.1e-4
                                     0.03
                                           -0.99
                                                   -0.95
                                                           -0.93
                                                                   -0.9
                                                                          -0.86
                                                                                   4304
                                                                                            1.0
                                                   -1.14
loglik_pred[145]
                   -1.09
                           1.0e-3
                                     0.07
                                           -1.23
                                                          -1.09
                                                                  -1.05
                                                                          -0.97
                                                                                   4010
                                                                                            1.0
loglik_pred[146]
                   -0.62
                           3.7e-4
                                     0.02
                                           -0.67
                                                   -0.64
                                                          -0.62
                                                                  -0.61
                                                                          -0.58
                                                                                   4253
                                                                                            1.0
loglik_pred[147]
                   -0.52
                           2.4e-4
                                     0.02
                                           -0.55
                                                   -0.53
                                                           -0.52
                                                                   -0.5
                                                                          -0.48
                                                                                   5414
                                                                                            1.0
loglik_pred[148]
                   -0.85
                           3.8e-4
                                     0.03
                                           -0.91
                                                   -0.87
                                                           -0.85
                                                                  -0.83
                                                                           -0.8
                                                                                   4759
                                                                                            1.0
loglik_pred[149]
                           4.9e-4
                                                           -0.74
                   -0.74
                                     0.03
                                           -0.81
                                                   -0.77
                                                                  -0.72
                                                                          -0.68
                                                                                   4502
                                                                                            1.0
loglik_pred[150]
                   -0.52
                           2.5e-4
                                     0.02
                                           -0.55
                                                   -0.53
                                                           -0.52
                                                                   -0.5
                                                                          -0.48
                                                                                   5185
                                                                                            1.0
loglik_pred[151]
                   -0.52
                           2.5e-4
                                     0.02
                                           -0.55
                                                   -0.53
                                                           -0.52
                                                                  -0.51
                                                                          -0.48
                                                                                   5110
                                                                                            1.0
                           3.7e-4
                                     0.03
                                           -0.79
                                                   -0.75
                                                          -0.74
                                                                  -0.72
loglik_pred[152]
                   -0.74
                                                                          -0.69
                                                                                   4633
                                                                                            1.0
                                           -0.54
loglik_pred[153]
                    -0.5
                           2.3e-4
                                     0.02
                                                   -0.51
                                                            -0.5
                                                                  -0.49
                                                                          -0.47
                                                                                   5337
                                                                                            1.0
loglik_pred[154]
                   -1.56
                           1.3e-3
                                     0.09
                                           -1.74
                                                   -1.62
                                                           -1.56
                                                                   -1.5
                                                                           -1.4
                                                                                   4266
                                                                                            1.0
loglik_pred[155]
                   -0.64
                           2.9e-4
                                     0.02
                                           -0.68
                                                   -0.65
                                                           -0.64
                                                                  -0.63
                                                                           -0.6
                                                                                   4900
                                                                                            1.0
```

```
loglik_pred[156]
                   -1.04
                           5.8e-4
                                     0.04
                                           -1.12
                                                   -1.06
                                                           -1.04
                                                                  -1.01
                                                                          -0.96
                                                                                   4724
                                                                                            1.0
loglik_pred[157]
                           2.4e-4
                                     0.02
                                           -0.54
                                                   -0.52
                                                                    -0.5
                   -0.51
                                                           -0.51
                                                                          -0.47
                                                                                   5178
                                                                                            1.0
loglik_pred[158]
                   -0.52
                           2.4e-4
                                     0.02
                                           -0.56
                                                   -0.53
                                                           -0.52
                                                                  -0.51
                                                                          -0.49
                                                                                   5278
                                                                                            1.0
loglik_pred[159]
                   -0.57
                           2.7e-4
                                     0.02
                                           -0.61
                                                   -0.58
                                                           -0.57
                                                                   -0.56
                                                                          -0.53
                                                                                   4955
                                                                                            1.0
loglik pred[160]
                           5.9e-4
                                     0.04
                                                           -0.61
                                                                   -0.59
                   -0.62
                                             -0.7
                                                   -0.64
                                                                          -0.55
                                                                                   4458
                                                                                            1.0
loglik_pred[161]
                   -0.74
                           4.2e-4
                                     0.03
                                                   -0.76
                                                           -0.74
                                                                  -0.72
                                             -0.8
                                                                          -0.69
                                                                                   4803
                                                                                            1.0
loglik_pred[162]
                   -0.51
                           2.4e-4
                                     0.02
                                           -0.55
                                                   -0.52
                                                           -0.51
                                                                    -0.5
                                                                          -0.48
                                                                                   5374
                                                                                            1.0
loglik_pred[163]
                   -0.52
                           2.5e-4
                                     0.02
                                           -0.55
                                                   -0.53
                                                           -0.52
                                                                    -0.5
                                                                          -0.48
                                                                                   5014
                                                                                            1.0
loglik pred[164]
                           2.9e-4
                                     0.02
                                           -0.58
                                                   -0.55
                                                           -0.53
                                                                  -0.52
                                                                           -0.5
                                                                                   5096
                   -0.53
                                                                                            1.0
loglik_pred[165]
                    -0.5
                           2.3e-4
                                     0.02
                                           -0.54
                                                   -0.51
                                                            -0.5
                                                                  -0.49
                                                                          -0.47
                                                                                   5377
                                                                                            1.0
loglik_pred[166]
                                     0.02
                                           -0.54
                                                   -0.52
                                                                          -0.47
                     -0.5
                           2.3e-4
                                                            -0.5
                                                                   -0.49
                                                                                   5250
                                                                                            1.0
loglik_pred[167]
                   -1.49
                           1.2e-3
                                     0.08
                                           -1.64
                                                   -1.54
                                                           -1.48
                                                                  -1.43
                                                                          -1.34
                                                                                   4268
                                                                                            1.0
loglik_pred[168]
                    -0.52
                           2.5e-4
                                     0.02
                                           -0.56
                                                   -0.53
                                                           -0.52
                                                                  -0.51
                                                                          -0.49
                                                                                   5233
                                                                                            1.0
loglik_pred[169]
                   -0.52
                           2.6e-4
                                     0.02
                                           -0.56
                                                   -0.53
                                                           -0.52
                                                                  -0.51
                                                                          -0.49
                                                                                   5130
                                                                                            1.0
                                                   -7.15
                                                                  -6.71
loglik_pred[170]
                   -6.93
                           4.6e-3
                                     0.32
                                           -7.56
                                                           -6.93
                                                                           -6.3
                                                                                   4774
                                                                                            1.0
loglik_pred[171]
                           9.0e-4
                                     0.06
                                           -1.28
                                                    -1.2
                                                           -1.16
                                                                  -1.12
                                                                          -1.05
                                                                                   4430
                   -1.16
                                                                                            1.0
loglik_pred[172]
                   -0.51
                           2.3e-4
                                     0.02
                                           -0.54
                                                   -0.52
                                                           -0.51
                                                                  -0.49
                                                                          -0.47
                                                                                   5335
                                                                                            1.0
loglik_pred[173]
                   -0.53
                           2.7e-4
                                     0.02
                                           -0.57
                                                   -0.54
                                                           -0.53
                                                                  -0.52
                                                                          -0.49
                                                                                   5031
                                                                                            1.0
loglik_pred[174]
                    -1.8
                           1.3e-3
                                     0.08
                                           -1.97
                                                   -1.86
                                                            -1.8
                                                                  -1.74
                                                                          -1.64
                                                                                   4252
                                                                                            1.0
loglik pred[175]
                   -0.51
                           2.5e-4
                                     0.02
                                           -0.55
                                                   -0.52
                                                           -0.51
                                                                    -0.5
                                                                          -0.48
                                                                                   4976
                                                                                            1.0
loglik_pred[176]
                   -0.54
                           2.5e-4
                                     0.02
                                           -0.57
                                                   -0.55
                                                           -0.54
                                                                  -0.53
                                                                          -0.51
                                                                                   5136
                                                                                            1.0
loglik pred[177]
                                     0.02
                                           -0.56
                                                           -0.52
                                                                          -0.49
                   -0.52
                           2.4e-4
                                                   -0.53
                                                                   -0.51
                                                                                   5320
                                                                                            1.0
loglik_pred[178]
                   -0.57
                           2.6e-4
                                     0.02
                                             -0.6
                                                   -0.58
                                                           -0.57
                                                                  -0.55
                                                                          -0.53
                                                                                   4991
                                                                                            1.0
loglik_pred[179]
                           3.8e-4
                                     0.03
                                           -0.63
                                                    -0.6
                                                           -0.58
                                                                  -0.56
                                                                                   4293
                   -0.58
                                                                          -0.53
                                                                                            1.0
loglik_pred[180]
                   -0.65
                           4.6e-4
                                     0.03
                                           -0.71
                                                   -0.67
                                                           -0.65
                                                                  -0.63
                                                                          -0.59
                                                                                   4278
                                                                                            1.0
loglik_pred[181]
                   -0.54
                           3.2e-4
                                     0.02
                                           -0.58
                                                   -0.55
                                                           -0.53
                                                                  -0.52
                                                                          -0.49
                                                                                   4978
                                                                                            1.0
                                                           -0.56
loglik_pred[182]
                           2.7e-4
                                     0.02
                                                   -0.58
                                                                  -0.55
                                                                          -0.53
                   -0.56
                                             -0.6
                                                                                   5120
                                                                                            1.0
loglik_pred[183]
                   -0.54
                           3.0e-4
                                     0.02
                                           -0.58
                                                   -0.55
                                                           -0.53
                                                                  -0.52
                                                                           -0.5
                                                                                   4706
                                                                                            1.0
loglik_pred[184]
                     -0.9
                           7.8e-4
                                     0.05
                                             -1.0
                                                   -0.93
                                                           -0.89
                                                                   -0.86
                                                                          -0.81
                                                                                   3775
                                                                                            1.0
loglik_pred[185]
                    -0.6
                           3.4e-4
                                     0.02
                                           -0.65
                                                   -0.62
                                                            -0.6
                                                                  -0.59
                                                                          -0.56
                                                                                   4684
                                                                                            1.0
loglik_pred[186]
                   -0.64
                           6.2e-4
                                     0.04
                                           -0.73
                                                   -0.67
                                                           -0.64
                                                                  -0.61
                                                                          -0.57
                                                                                   4711
                                                                                            1.0
                                             -0.6
loglik_pred[187]
                    -0.56
                           2.8e-4
                                     0.02
                                                   -0.57
                                                           -0.56
                                                                  -0.55
                                                                          -0.52
                                                                                   4995
                                                                                            1.0
loglik_pred[188]
                   -0.51
                           2.3e-4
                                     0.02
                                           -0.54
                                                   -0.52
                                                           -0.51
                                                                    -0.5
                                                                          -0.48
                                                                                   5333
                                                                                            1.0
loglik_pred[189]
                   -0.51
                           2.3e-4
                                     0.02
                                           -0.54
                                                   -0.52
                                                           -0.51
                                                                    -0.5
                                                                          -0.47
                                                                                   5410
                                                                                            1.0
loglik pred[190]
                                     0.02
                                           -0.75
                                                   -0.72
                                                            -0.7
                    -0.7
                           3.4e-4
                                                                  -0.69
                                                                          -0.66
                                                                                   4789
                                                                                            1.0
loglik pred[191]
                   -0.71
                           4.4e-4
                                     0.03
                                           -0.77
                                                   -0.73
                                                           -0.71
                                                                   -0.69
                                                                          -0.66
                                                                                   4322
                                                                                            1.0
loglik pred[192]
                                     0.02
                   -0.62
                           3.5e-4
                                           -0.67
                                                   -0.64
                                                           -0.62
                                                                  -0.61
                                                                          -0.58
                                                                                   4670
                                                                                            1.0
loglik_pred[193]
                   -0.55
                           3.7e-4
                                     0.03
                                           -0.61
                                                   -0.57
                                                           -0.55
                                                                  -0.53
                                                                           -0.5
                                                                                   5147
                                                                                            1.0
loglik_pred[194]
                    -0.5
                           2.3e-4
                                     0.02
                                           -0.54
                                                   -0.52
                                                            -0.5
                                                                  -0.49
                                                                          -0.47
                                                                                   5404
                                                                                            1.0
                                           -0.59
                                                   -0.55
loglik_pred[195]
                   -0.54
                           3.2e-4
                                     0.02
                                                           -0.54
                                                                  -0.52
                                                                           -0.5
                                                                                   5105
                                                                                            1.0
                                                                                   5387
loglik_pred[196]
                    -0.5
                                     0.02
                                           -0.54
                                                   -0.51
                                                            -0.5
                                                                  -0.49
                                                                          -0.47
                           2.3e-4
                                                                                            1.0
loglik_pred[197]
                   -3.36
                           3.7e-3
                                     0.26
                                           -3.89
                                                   -3.54
                                                           -3.36
                                                                          -2.86
                                                                  -3.17
                                                                                   5056
                                                                                            1.0
loglik_pred[198]
                    -0.85
                           5.0e-4
                                     0.03
                                           -0.92
                                                   -0.87
                                                           -0.85
                                                                   -0.83
                                                                          -0.79
                                                                                   4907
                                                                                            1.0
                   -0.53
                           2.6e-4
                                     0.02
                                           -0.57
                                                   -0.55
                                                           -0.53
                                                                  -0.52
                                                                           -0.5
loglik_pred[199]
                                                                                   5201
                                                                                            1.0
loglik_pred[200]
                   -0.57
                           4.8e-4
                                     0.03
                                           -0.64
                                                   -0.59
                                                           -0.56
                                                                  -0.54
                                                                          -0.51
                                                                                   4946
                                                                                            1.0
                  -150.6
                             0.04
                                     1.68 -154.6 -151.5 -150.2 -149.3 -148.2
                                                                                   1920
                                                                                            1.0
lp__
```

Samples were drawn using NUTS at Tue Dec 11 12:44:10 2018.

For each parameter,  $n_{eff}$  is a crude measure of effective sample size, and Rhat is the potential scale reduction factor on split chains (at convergence, Rhat=1).

## 1.7.3 Polynomial Regression Model Results

Inference for Stan model: anon\_model\_fdf10200661fa3c5ef96589091fabb87.
4 chains, each with iter=2000; warmup=1000; thin=1;
post-warmup draws per chain=1000, total post-warmup draws=4000.

			_	0/						
		se_mean	sd	2.5%	25%	50%	75%	97.5%	n_eff	Rhat
intercept	-0.15	3.0e-4	0.02	-0.18	-0.16	-0.15	-0.14	-0.11	3390	1.0
theta[1]	0.35	6.7e-4	0.03	0.28	0.33	0.35	0.37	0.41	2454	1.0
theta[2]	0.31	3.9e-4	0.02	0.27	0.29	0.31	0.33	0.36	3516	1.0
theta[3]	-0.22	6.3e-4	0.03	-0.28	-0.24	-0.22	-0.2	-0.15	2615	1.0
theta[4]	0.12	4.5e-4	0.02	0.07	0.1	0.12	0.14	0.17	3032	1.0
theta[5]	0.17	2.1e-41		0.15	0.16	0.17	0.17	0.19	2322	1.0
theta[6]	0.06	1.7e-4	0.01	0.04	0.05	0.06	0.07	0.08	3649	1.0
theta[7]	-0.04	2.7e-4	0.01	-0.07	-0.05	-0.04	-0.04	-0.02	2522	1.0
theta[8]	-0.04	1.7e-4	0.01	-0.06	-0.04	-0.04	-0.03	-0.02	3479	1.0
sigma	0.55	1.4e-4	9.1e-3	0.53	0.54	0.55	0.56	0.57	4228	1.0
y_mean[1]	-0.71	5.1e-4	0.03	-0.77	-0.73	-0.71	-0.68	-0.64	4331	1.0
y_mean[2]	0.32	4.8e-4	0.03	0.27	0.3	0.32	0.34	0.37	3077	1.0
y_mean[3]	-0.08	7.8e-4	0.05	-0.17	-0.11	-0.08	-0.05	0.01	3671	1.0
$y_{mean}[4]$	0.68	3.9e-4	0.03	0.63	0.66	0.68	0.7	0.73	4501	1.0
$y_{mean}[5]$	-0.46	3.4e-4	0.02	-0.49	-0.47	-0.45	-0.44	-0.42	3033	1.0
y_mean[6]	0.26	5.9e-4	0.03	0.2	0.24	0.26	0.29	0.33	3329	1.0
$y_{mean}[7]$	-0.38	4.7e-4	0.02	-0.43	-0.4	-0.38	-0.37	-0.33	2415	1.0
y_mean[8]	-0.64	4.6e-4	0.03	-0.7	-0.66	-0.64	-0.62	-0.58	4557	1.0
$y_{mean}[9]$	0.21	6.7e-4	0.04	0.12	0.18	0.21	0.24	0.3	4315	1.0
y_mean[10]	0.49	4.8e-4	0.03	0.43	0.47	0.49	0.51	0.55	4079	1.0
y_mean[11]	0.48	5.4e-4	0.03	0.41	0.45	0.48	0.5	0.54	4067	1.0
y_mean[12]	0.54	5.7e-4	0.04	0.47	0.52	0.54	0.57	0.61	3860	1.0
y_mean[13]	-0.49	4.5e-4	0.03	-0.54	-0.51	-0.49	-0.47	-0.44	3201	1.0
y_mean[14]	-0.29	6.2e-4	0.03	-0.35	-0.31	-0.29	-0.27	-0.22	3111	1.0
y_mean[15]	-0.67	4.7e-4	0.03	-0.73	-0.69	-0.67	-0.65	-0.61	4488	1.0
y_mean[16]	-0.24	5.3e-4	0.03	-0.3	-0.26	-0.24	-0.22	-0.19	3122	1.0
y_mean[17]	-0.04	4.8e-4	0.03	-0.09	-0.06	-0.04	-0.02	8.7e-3	2804	1.0
y_mean[18]	-0.24	6.2e-4	0.04	-0.31	-0.26	-0.24	-0.22	-0.17	3331	1.0
y_mean[19]	-0.16	4.0e-4	0.02	-0.21	-0.17	-0.16	-0.14	-0.11	3725	1.0
y_mean[20]	-0.36	5.1e-4	0.03	-0.41	-0.38	-0.36	-0.34	-0.3	3174	1.0
y_mean[21]	0.08	3.7e-4	0.02	0.04	0.07	0.08	0.1	0.13	3632	1.0
y_mean[22]	1.02	7.4e-4	0.05	0.92	0.98	1.02	1.05	1.11	4139	1.0
y_mean[23]	-0.24	4.9e-4	0.03	-0.3	-0.26	-0.24	-0.23	-0.19	2970	1.0

y_mean[24]	-0.37	4.9e-4	0.02	-0.42	-0.39	-0.37	-0.36	-0.33	2408	1.0
y_mean[25]	-0.69	5.1e-4	0.03	-0.76	-0.72	-0.69	-0.67	-0.63	4390	1.0
y_mean[26]	-0.08	4.3e-4	0.02	-0.13	-0.1	-0.08	-0.07	-0.03	3258	1.0
y_mean[27]	-0.68	5.0e-4	0.03	-0.75	-0.7	-0.68	-0.66	-0.62	4140	1.0
y_mean[28]	-0.72	5.3e-4	0.03	-0.78	-0.74	-0.72	-0.69	-0.65	4262	1.0
y_mean[29]	-0.22	5.6e-4	0.03	-0.28	-0.24	-0.22	-0.19	-0.15	3418	1.0
y_mean[30]	-0.23	5.2e-4	0.03	-0.29	-0.25	-0.23	-0.21	-0.18	3097	1.0
y_mean[31]	-0.63	4.5e-4	0.03	-0.69	-0.65	-0.63	-0.61	-0.57	4371	1.0
y_mean[32]	-0.45	3.7e-4	0.02	-0.49	-0.46	-0.45	-0.44	-0.41	3147	1.0
y_mean[33]	1.9	1.2e-3	0.07	1.76	1.85	1.9	1.94	2.03	3424	1.0
y_mean[34]	-0.46	3.3e-4	0.02	-0.5	-0.48	-0.46	-0.45	-0.43	3013	1.0
y_mean[35]	-0.49	3.5e-4	0.02	-0.53	-0.51	-0.49	-0.48	-0.45	3266	1.0
y_mean[36]	0.45	8.1e-4	0.05	0.35	0.42	0.45	0.49	0.55	3831	1.0
y_mean[37]	3.28	1.8e-3	0.11	3.06	3.21	3.28	3.35	3.5	3830	1.0
y_mean[38]	1.23	8.2e-4	0.05	1.13	1.2	1.23	1.26	1.33	3797	1.0
y_mean[39]	0.5	4.1e-4	0.03	0.45	0.49	0.5	0.52	0.56	3950	1.0
y_mean[40]	-0.32	8.5e-4	0.05	-0.42	-0.35	-0.32	-0.29	-0.23	3164	1.0
y_mean[41]	-0.28	5.2e-4	0.03	-0.34	-0.3	-0.28	-0.27	-0.23	2662	1.0
y_mean[42]	0.64	4.0e-4	0.03	0.58	0.62	0.64	0.65	0.69	4221	1.0
y_mean[43]	-0.35	4.6e-4	0.03	-0.4	-0.36	-0.35	-0.33	-0.29	3273	1.0
y_mean[44]	-0.14	4.2e-4	0.03	-0.18	-0.15	-0.14	-0.12	-0.09	3021	1.0
y_mean[44] y_mean[45]	-0.09	4.2e-4	0.02	-0.14	-0.11	-0.09	-0.08	-0.05	2957	1.0
y_mean[46] y_mean[46]	-0.22	4.0e-4	0.02	-0.27	-0.24	-0.22	-0.21	-0.18	3316	1.0
y_mean[47]	-0.73	7.3e-4	0.02	-0.82	-0.76	-0.73	-0.7	-0.64	3874	1.0
y_mean[47] y_mean[48]	-0.66	4.6e-4	0.03	-0.73	-0.68	-0.66	-0.64	-0.6	4501	1.0
y_mean[40] y_mean[49]	-0.6	6.6e-4	0.03	-0.73	-0.63	-0.6	-0.58	-0.53	3227	1.0
y_mean[49] y_mean[50]	-0.34	5.8e-4	0.04	-0.08	-0.03	-0.34	-0.32	-0.33	2533	1.0
•			0.03							1.0
y_mean[51]	-0.4	4.8e-4		-0.45	-0.42 -0.25	-0.4	-0.38	-0.34	3843	
y_mean[52]	-0.24	4.8e-4	0.03	-0.29		-0.24	-0.22	-0.19	2970	1.0
y_mean[53]	-0.17	8.5e-4	0.05	-0.26	-0.2	-0.17	-0.14	-0.08	2906	1.0
y_mean[54]	-0.06	5.3e-4	0.03	-0.12	-0.08	-0.06		2.7e-3	3493	1.0
y_mean[55]	-0.24	6.9e-4	0.04	-0.32	-0.27	-0.24	-0.21	-0.16	3238	1.0
y_mean[56]		1.4e-3	0.08	2.59	2.69	2.74	2.8		3178	1.0
y_mean[57]		6.5e-4	0.04	0.75	0.81	0.84	0.86	0.92	4275	1.0
y_mean[58]	0.87	5.2e-4	0.04	0.8	0.85	0.87	0.9	0.95	5409	1.0
y_mean[59]	-0.47	6.0e-4	0.04	-0.54	-0.5	-0.47	-0.45	-0.4	3687	1.0
y_mean[60]	1.8	1.2e-3	0.07	1.65	1.75	1.8	1.85	1.94	3547	1.0
y_mean[61]	-0.32	6.5e-4	0.04	-0.39	-0.35	-0.32	-0.3	-0.25	3016	1.0
y_mean[62]	-0.47	4.6e-4	0.03	-0.53	-0.49	-0.47	-0.45	-0.42	3760	1.0
y_mean[63]	-0.18	7.3e-4	0.04	-0.26	-0.21	-0.18	-0.15	-0.1	3194	1.0
y_mean[64]	0.87	5.8e-4	0.04	0.8	0.85	0.87	0.9	0.95	4219	1.0
y_mean[65]	-0.21	5.4e-4	0.03	-0.26	-0.23	-0.21	-0.19	-0.15	2837	1.0
y_mean[66]	-0.31	5.2e-4	0.03	-0.37	-0.33	-0.31	-0.29	-0.25	3437	1.0
y_mean[67]	-0.12	4.6e-4	0.02	-0.17	-0.14	-0.12	-0.1	-0.08	2453	1.0
y_mean[68]	-0.21	4.4e-4	0.02	-0.25	-0.22	-0.2	-0.19	-0.16	2766	1.0
y_mean[69]	0.96	6.2e-4	0.04	0.88	0.93	0.96	0.99	1.03	4084	1.0
y_mean[70]	0.46	7.9e-4	0.05	0.36	0.42	0.45	0.49	0.55	3769	1.0
y_mean[71]	-0.67	5.1e-4	0.03	-0.74	-0.69	-0.67	-0.65	-0.61	4153	1.0

y_mean[72]	-0.53	4.1e-4	0.02	-0.57	-0.54	-0.53	-0.51	-0.48	3283	1.0
y_mean[73]	0.67	7.2e-4	0.05	0.57	0.64	0.67	0.7	0.76	4411	1.0
y_mean[74]	-0.61	2.0e-3	0.12	-0.85	-0.69	-0.61	-0.54	-0.39	3408	1.0
y_mean[75]	1.4	9.5e-4	0.06	1.28	1.36	1.4	1.44	1.52	4218	1.0
y_mean[76]	-0.31	6.1e-4	0.03	-0.38	-0.33	-0.31	-0.29	-0.25	2865	1.0
y_mean[77]	-0.52	4.1e-4	0.02	-0.56	-0.53	-0.52	-0.5	-0.47	3538	1.0
y_mean[78]	-0.25	3.6e-4	0.02	-0.29	-0.26	-0.25	-0.23	-0.2	3570	1.0
y_mean[79]	1.99	1.3e-3	0.07	1.85	1.94	1.99	2.04	2.13	3199	1.0
y_mean[80]	-0.34	2.7e-4	0.02	-0.37	-0.35	-0.34	-0.33	-0.31	3877	1.0
y_mean[81]	-0.46	5.7e-4	0.04	-0.53	-0.48	-0.46	-0.44	-0.39	3796	1.0
y_mean[82]	1.34	6.0e-4	0.04	1.27	1.32	1.34	1.37	1.42	4033	1.0
y_mean[83]	1.34	6.8e-4	0.04	1.25	1.31	1.34	1.37	1.43	4339	1.0
y_mean[84]	-0.34	3.2e-4	0.02	-0.38	-0.36	-0.34	-0.33	-0.31	3447	1.0
y_mean[85]	-0.41	3.9e-4	0.02	-0.45	-0.42	-0.41	-0.4	-0.37	2658	1.0
y_mean[86]	-0.57	5.3e-4	0.03	-0.63	-0.59	-0.56	-0.54	-0.5	3645	1.0
y_mean[87]	-0.03	4.7e-4	0.03	-0.09	-0.05	-0.03	-0.01	0.02	3658	1.0
y_mean[88]	0.03	6.1e-4	0.03	0.69	0.74	0.77	0.01	0.85	4172	1.0
y_mean[89]	-0.46	3.4e-4	0.04	-0.5	-0.48	-0.46	-0.45	-0.43	3212	1.0
y_mean[90]	-0.40	4.9e-4	0.02	-0.63	-0.48	-0.57	-0.45	-0.43	3878	1.0
• =		3.9e-4	0.03	-0.56	-0.59 -0.54	-0.57	-0.55	-0.31	3336	1.0
y_mean[91]	-0.52							1.98		
y_mean[92]	1.76	1.7e-3	0.11	1.55	1.69	1.76	1.83		4441	1.0
y_mean[93]	-0.34	5.7e-4	0.03	-0.4	-0.36	-0.34	-0.32	-0.28	2592	1.0
y_mean[94]	-0.71	5.2e-4	0.03	-0.78	-0.73	-0.71	-0.69	-0.64	4294	1.0
y_mean[95]	0.42	4.3e-4	0.03	0.37	0.41	0.42	0.44	0.47	3620	1.0
y_mean[96]	-0.07	4.3e-4	0.02	-0.12	-0.09	-0.07	-0.05	-0.02	2930	1.0
y_mean[97]	-0.45	3.4e-4	0.02	-0.49	-0.46	-0.45	-0.44	-0.41	2920	1.0
y_mean[98]	0.54	6.9e-4	0.04	0.46	0.52	0.54	0.57	0.62	3555	1.0
y_mean[99]	7.7	2.7e-3	0.18	7.35	7.58	7.7	7.81	8.05	4271	1.0
y_mean[100]	-0.43	8.8e-4	0.05	-0.53	-0.47	-0.43	-0.4	-0.34	3066	1.0
y_mean[101]	-0.46	3.9e-4	0.02	-0.5	-0.47	-0.46	-0.44	-0.41	3698	1.0
y_mean[102]	-0.39	4.5e-4	0.02	-0.43	-0.4	-0.39	-0.37	-0.35	2413	1.0
y_mean[103]	-0.15	4.8e-4	0.03	-0.21	-0.17	-0.15	-0.13	-0.09	3805	1.0
y_mean[104]	1.09	5.9e-4	0.04	1.02	1.07	1.09	1.12	1.16	4125	1.0
y_mean[105]	-0.19	7.0e-4	0.04	-0.26	-0.22	-0.19	-0.17	-0.12	2537	1.0
y_mean[106]	-0.05	5.6e-4	0.03	-0.11	-0.07	-0.05	-0.03	0.01	3277	1.0
y_mean[107]	-0.09	4.2e-4	0.02	-0.14	-0.1	-0.09	-0.07	-0.04	3169	1.0
y_mean[108]	-0.31	5.4e-4	0.03	-0.37	-0.33	-0.31	-0.29	-0.26	2719	1.0
y_mean[109]	-0.5	3.6e-4	0.02	-0.54	-0.51	-0.5	-0.48	-0.45	3399	1.0
y_mean[110]	-0.44	3.6e-4	0.02	-0.47	-0.45	-0.44	-0.42	-0.4	2874	1.0
y_mean[111]	0.81	6.2e-4	0.04	0.74	0.79	0.81	0.84	0.9	4170	1.0
y_mean[112]	0.01	3.4e-4	0.02	-0.03-	2.3e-3	0.01	0.03	0.05	3656	1.0
y_mean[113]	-0.33	5.1e-4	0.03	-0.39	-0.35	-0.33	-0.32	-0.28	2731	1.0
y_mean[114]	-0.66	5.4e-4	0.03	-0.72	-0.68	-0.66	-0.63	-0.59	3936	1.0
y_mean[115]	-0.13	4.2e-4	0.02	-0.18	-0.15	-0.13	-0.12	-0.09	2612	1.0
y_mean[116]	0.46	5.9e-4	0.04	0.39	0.44	0.46	0.48	0.53	3737	1.0
y_mean[117]	1.3	7.0e-4	0.05	1.21	1.27	1.3	1.33	1.39	4607	1.0
y_mean[118]	-0.16	7.0e-4	0.04	-0.23	-0.18	-0.16	-0.13	-0.08	3036	1.0
y_mean[119]	1.1	7.3e-4	0.05	1.0	1.06	1.1	1.13	1.19	4562	1.0
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y_mean[120]	-0.15	6.1e-4	0.03	-0.21	-0.17	-0.15	-0.13	-0.09	2784	1.0
y_mean[121]	-0.55	6.1e-4	0.04	-0.62	-0.57	-0.55	-0.53	-0.48	3306	1.0
y_mean[122]	1.58	1.0e-3	0.06	1.45	1.54	1.58	1.63	1.71	4033	1.0
y_mean[123]	-0.14	4.4e-4	0.02	-0.18	-0.15	-0.14	-0.12	-0.09	2491	1.0
y_mean[124]	-0.23	5.9e-4	0.03	-0.3	-0.25	-0.23	-0.21	-0.17	2953	1.0
y_mean[125]	0.38	5.3e-4	0.04	0.31	0.36	0.38	0.41	0.45	4395	1.0
y_mean[126]	-0.5	5.1e-4	0.03	-0.56	-0.53	-0.5	-0.48	-0.45	3613	1.0
y_mean[127]	-0.51	3.8e-4	0.02	-0.55	-0.52	-0.51	-0.49	-0.47	3419	1.0
y_mean[128]	0.14	5.5e-4	0.03	0.08	0.12	0.14	0.17	0.21	3695	1.0
y_mean[129]	-0.48	6.8e-4	0.04	-0.56	-0.51	-0.48	-0.46	-0.41	3348	1.0
y_mean[130]	-0.35	5.1e-4	0.03	-0.4	-0.37	-0.35	-0.33	-0.3	2819	1.0
y_mean[131]	1.44	6.3e-4	0.05	1.35	1.41	1.44	1.48	1.54	5952	1.0
y_mean[132]	1.51	1.0e-3	0.06	1.39	1.46	1.51	1.55	1.63	3650	1.0
y_mean[133]	-0.59	8.1e-4	0.05	-0.68	-0.63	-0.59	-0.56	-0.51	3278	1.0
y_mean[134]	-0.28	5.1e-4	0.03	-0.33	-0.3	-0.28	-0.26	-0.23	2715	1.0
y_mean[135]	-0.09	4.2e-4	0.02	-0.14	-0.11	-0.09	-0.08	-0.05	2989	1.0
y_mean[136]	0.34	4.8e-4	0.03	0.11	0.32	0.34	0.36	0.39	3191	1.0
y_mean[137]	-0.05	7.2e-4	0.03	-0.12	-0.08	-0.05	-0.03	0.03	2822	1.0
y_mean[137] y_mean[138]	-0.41	3.9e-4	0.04	-0.46	-0.43	-0.42	-0.4	-0.37	2830	1.0
y_mean[139] y_mean[139]	-0.27	8.4e-4	0.02	-0.36	-0.3	-0.27	-0.24	-0.17	3322	1.0
y_mean[139] y_mean[140]	-0.27	4.7e-4	0.03	-0.27	-0.23	-0.22	-0.24	-0.17	3236	1.0
y_mean[140] y_mean[141]	-0.22	1.2e-3	0.03	-0.27	-0.23	-0.72	-0.67	-0.17	3670	1.0
y_mean[141] y_mean[142]	-0.72	4.2e-4	0.07	-0.2	-0.17	-0.72	-0.14	-0.33	2597	1.0
y_mean[143]		4.2e-4 4.4e-4	0.02	0.15	0.19	0.21	0.23		3627	1.0
• –	0.21							0.26		
y_mean[144]	-0.04	4.7e-4	0.02	-0.09	-0.06	-0.04		4.4e-3	2794	1.0
y_mean[145]	1.35	6.2e-4	0.04	1.27	1.33	1.35	1.38	1.43	4240	1.0
y_mean[146]	-0.35	5.2e-4	0.03	-0.4	-0.37	-0.35	-0.33	-0.3	2736	1.0
y_mean[147]	-0.15	5.4e-4	0.03	-0.21	-0.17	-0.15	-0.13	-0.09	2922	1.0
y_mean[148]	-0.29	3.1e-4	0.02	-0.33	-0.3	-0.29	-0.28	-0.25	3801	1.0
y_mean[149]	-0.53	6.2e-4	0.04	-0.6	-0.55	-0.53	-0.5	-0.46	3234	1.0
y_mean[150]	0.47	4.5e-4	0.03	0.42	0.45	0.47	0.49	0.53	3912	1.0
y_mean[151]	-0.08	5.0e-4	0.02	-0.13	-0.1	-0.08	-0.06	-0.03	2471	1.0
y_mean[152]	-0.46	3.5e-4	0.02	-0.5	-0.47	-0.46	-0.44	-0.42	3440	1.0
y_mean[153]	0.27	5.2e-4	0.03	0.22	0.25	0.27	0.29	0.33	3021	1.0
y_mean[154]	-0.29	6.2e-4	0.03	-0.36	-0.32	-0.29	-0.27	-0.22	3096	1.0
y_mean[155]	-0.47	3.4e-4	0.02	-0.51	-0.48	-0.47	-0.46	-0.43	3059	1.0
y_mean[156]	-0.55	4.6e-4	0.03	-0.6	-0.57	-0.55	-0.53	-0.5	3291	1.0
y_mean[157]	0.29	7.4e-4	0.04	0.2	0.26	0.29	0.32	0.37	3498	1.0
y_mean[158]	-0.47	3.9e-4	0.02	-0.51	-0.48	-0.47	-0.45	-0.42	3370	1.0
y_mean[159]	-0.39	4.2e-4	0.02	-0.44	-0.41	-0.39	-0.38	-0.35	2783	1.0
y_mean[160]	0.03	8.5e-4	0.05	-0.07-	·2.4e-3	0.03	0.06	0.13	3416	1.0
y_mean[161]	-0.37	4.9e-4	0.03	-0.42	-0.39	-0.37	-0.35	-0.32	2988	1.0
y_mean[162]	-0.53	3.9e-4	0.02	-0.57	-0.54	-0.52	-0.51	-0.48	3280	1.0
y_mean[163]	-0.28	4.6e-4	0.02	-0.33	-0.29	-0.28	-0.26	-0.23	2994	1.0
y_mean[164]	-0.82	8.2e-4	0.05	-0.92	-0.86	-0.82	-0.79	-0.73	3615	1.0
y_mean[165]	-0.41	4.0e-4	0.02	-0.45	-0.42	-0.41	-0.39	-0.37	2783	1.0
y_mean[166]	-0.7	6.7e-4	0.04	-0.78	-0.73	-0.7	-0.67	-0.62	3930	1.0
y_mean[167]	0.53	4.8e-4	0.03	0.47	0.5	0.53	0.55	0.59	4174	1.0

y_mean[168]	-0.69	4.8e-4	0.03	-0.76	-0.71	-0.69	-0.67	-0.63	4380	1.0
y_mean[169]	-0.24	5.6e-4	0.03	-0.3	-0.26	-0.24	-0.22	-0.17	3213	1.0
y_mean[170]	1.93	7.5e-4	0.05	1.83	1.9	1.93	1.97	2.03	4643	1.0
y_mean[171]	-0.47	6.8e-4	0.04	-0.55	-0.5	-0.47	-0.45	-0.4	3501	1.0
y_mean[172]	-0.47	4.4e-4	0.03	-0.52	-0.49	-0.47	-0.45	-0.42	3769	1.0
y_mean[173]	0.18	5.2e-4	0.03	0.12	0.16	0.18	0.2	0.24	3394	1.0
y_mean[174]	0.98	4.9e-4	0.03	0.92	0.96	0.98	1.0	1.05	4187	1.0
y_mean[175]	-0.56	8.3e-4	0.04	-0.64	-0.59	-0.56	-0.53	-0.48	2526	1.0
y_mean[176]	-0.44	3.5e-4	0.02	-0.48	-0.45	-0.44	-0.43	-0.4	2793	1.0
y_mean[177]	-0.49	3.8e-4	0.02	-0.53	-0.5	-0.49	-0.47	-0.44	3579	1.0
y_mean[178]	-0.47	3.4e-4	0.02	-0.51	-0.48	-0.47	-0.45	-0.43	3052	1.0
y_mean[179]	-0.11	6.4e-4	0.03	-0.17	-0.13	-0.11	-0.09	-0.04	2816	1.0
y_mean[179] y_mean[180]	0.54	4.9e-4	0.03	0.48	0.13	0.54	0.56	0.6	4097	1.0
y_mean[181]	-0.05	6.2e-4	0.03	-0.13	-0.08	-0.05	-0.03	0.02	3964	1.0
y_mean[181] y_mean[182]	-0.36	3.6e-4	0.04	-0.13	-0.38	-0.36	-0.35	-0.32	3507	1.0
y_mean[182] y_mean[183]	-0.12	6.7e-4	0.02	-0.4	-0.15	-0.12	-0.33	-0.32	2988	1.0
• –			0.04							
y_mean[184]	-0.2	7.3e-4		-0.27	-0.23	-0.2	-0.18	-0.13	2369	1.0
y_mean[185]	-0.39	4.7e-4	0.03	-0.44	-0.41	-0.39	-0.37	-0.33	3458	1.0
y_mean[186]	1.46	1.0e-3	0.07	1.33	1.42	1.46	1.51	1.6	4230	1.0
y_mean[187]	-0.39	4.4e-4	0.02	-0.44	-0.41	-0.39	-0.37	-0.34	3047	1.0
y_mean[188]	-0.49	3.9e-4	0.02	-0.54	-0.51	-0.49	-0.47	-0.44	3578	1.0
y_mean[189]	-0.04	4.7e-4	0.03	-0.1	-0.06	-0.04	-0.02	0.01	3427	1.0
y_mean[190]	-0.2	4.3e-4	0.02	-0.24	-0.21	-0.2	-0.18	-0.15	2721	1.0
y_mean[191]	0.24	4.5e-4	0.03	0.18	0.22	0.24	0.26	0.29	3965	1.0
y_mean[192]	-0.59	5.3e-4	0.03	-0.65	-0.61	-0.59	-0.57	-0.53	3603	1.0
y_mean[193]	-0.63	9.8e-4	0.06	-0.74	-0.67	-0.63	-0.59	-0.53	3188	1.0
y_mean[194]	-0.47	3.7e-4	0.02	-0.52	-0.49	-0.47	-0.46	-0.43	3272	1.0
y_mean[195]	0.53	5.1e-4	0.04	0.46	0.51	0.53	0.56	0.61	5265	1.0
y_mean[196]	-0.2	4.4e-4	0.02	-0.25	-0.22	-0.2	-0.19	-0.16	2747	1.0
y_mean[197]	-0.04	9.7e-4	0.06	-0.17	-0.09	-0.04-	6.2e-5	0.09	4499	1.0
y_mean[198]	-0.31	4.3e-4	0.03	-0.36	-0.33	-0.31	-0.3	-0.26	3740	1.0
y_mean[199]	-0.56	4.9e-4	0.03	-0.62	-0.58	-0.56	-0.54	-0.51	3260	1.0
y_mean[200]	1.33	1.1e-3	0.07	1.18	1.28	1.32	1.37	1.48	4415	1.0
y_mean[201]	-0.13	5.6e-4	0.03	-0.19	-0.15	-0.13	-0.11	-0.06	3447	1.0
y_mean[202]	-0.34	4.2e-4	0.02	-0.39	-0.36	-0.34	-0.32	-0.29	3458	1.0
y_mean[203]	1.0	6.2e-4	0.04	0.93	0.98	1.0	1.03	1.09	4591	1.0
y_mean[204]	-0.26	6.1e-4	0.04	-0.33	-0.28	-0.26	-0.24	-0.19	3315	1.0
y_mean[205]	0.96	5.6e-4	0.04	0.88	0.93	0.96	0.98	1.02	4159	1.0
y_mean[206]	0.34	4.8e-4	0.03	0.29	0.33	0.34	0.36	0.4	3257	1.0
y_mean[207]	-0.37	5.0e-4	0.03	-0.42	-0.38	-0.37	-0.35	-0.31	2749	1.0
y_mean[208]	-0.48	3.4e-4	0.02	-0.52	-0.5	-0.48	-0.47	-0.44	3336	1.0
y_mean[209]	0.59	5.2e-4	0.03	0.53	0.57	0.59	0.62	0.66	4387	1.0
y_mean[210]	-0.18	4.3e-4	0.02	-0.23	-0.2	-0.18	-0.17	-0.14	2666	1.0
y_mean[210] y_mean[211]	-0.06		0.02	-0.1	-0.07	-0.06		8.4e-3	2888	1.0
y_mean[211] y_mean[212]	1.9	6.4e-4	0.02	1.82	1.87	1.9	1.93	1.98	4412	1.0
y_mean[212] y_mean[213]	0.36	4.9e-4	0.04	0.31	0.34	0.36	0.38	0.42	3618	1.0
y_mean[213] y_mean[214]	0.30	4.9e-4 4.0e-4	0.03	0.31	0.19	0.30	0.38	0.42	3862	1.0
y_mean[214] y_mean[215]								0.25		
y_mean[215]	0.39	6.0e-4	0.04	0.31	0.36	0.39	0.41	0.40	3825	1.0

y_mean[216]	-0.18	7.5e-4	0.05	-0.27	-0.21	-0.18	-0.15	-0.09	3834	1.0
y_mean[217]	-0.5	3.6e-4	0.02	-0.54	-0.52	-0.5	-0.49	-0.46	3254	1.0
y_mean[218]	0.12	3.8e-4	0.02	0.07	0.1	0.12	0.13	0.16	3709	1.0
y_mean[219]	-0.37	9.9e-4	0.06	-0.48	-0.41	-0.37	-0.33	-0.26	3170	1.0
y_mean[220]	0.27	7.1e-4	0.04	0.18	0.24	0.27	0.3	0.36	3990	1.0
y_mean[221]	-0.52	4.9e-4	0.03	-0.58	-0.54	-0.52	-0.5	-0.46	3454	1.0
y_mean[222]	0.15	6.1e-4	0.04	0.07	0.12	0.15	0.18	0.22	3921	1.0
y_mean[223]	-0.23	6.4e-4	0.04	-0.3	-0.26	-0.23	-0.21	-0.16	3464	1.0
y_mean[224]	-0.28	3.6e-4	0.02	-0.32	-0.3	-0.28	-0.27	-0.24	3437	1.0
y_mean[225]	-0.62	4.6e-4	0.03	-0.67	-0.64	-0.62	-0.6	-0.56	4192	1.0
y_mean[226]	-0.58	5.5e-4	0.03	-0.64	-0.6	-0.58	-0.56	-0.52	3255	1.0
y_mean[227]	-0.16	5.0e-4	0.03	-0.21	-0.18	-0.16	-0.14	-0.1	3142	1.0
y_mean[228]	-0.49	3.7e-4	0.02	-0.54	-0.51	-0.49	-0.48	-0.45	3479	1.0
y_mean[229]	-0.54	4.5e-4	0.02	-0.59	-0.56	-0.54	-0.52	-0.49	3378	1.0
y_mean[229] y_mean[230]	-0.48	4.5e-4	0.03	-0.54	-0.5	-0.48	-0.47	-0.43	3385	1.0
y_mean[231]	-3.2e-3	4.2e-4	0.03	-0.05		3.1e-3	0.47	0.45	3533	1.0
V —		1.1e-3	0.03	1.54	1.64	1.69	1.74	1.84	4545	1.0
y_mean[232]	1.69									
y_mean[233]	-0.24	6.4e-4	0.04	-0.32	-0.27	-0.24	-0.22	-0.17	3323	1.0
y_mean[234]	-0.42	4.1e-4	0.03	-0.47	-0.44	-0.42	-0.4	-0.37	3670	1.0
y_mean[235]	-0.04	4.6e-4	0.02	-0.08	-0.05	-0.04	-0.02	0.01	2950	1.0
y_mean[236]	-0.1	4.3e-4	0.02	-0.15	-0.12	-0.1	-0.09	-0.06	2602	1.0
y_mean[237]	-0.3	5.6e-4	0.03	-0.37	-0.32	-0.3	-0.28	-0.24	3519	1.0
y_mean[238]	0.23	4.1e-4	0.03	0.18	0.21	0.23	0.25	0.28	3766	1.0
y_mean[239]	-0.1	7.3e-4	0.04	-0.19	-0.13	-0.1	-0.07	-0.02	3662	1.0
y_mean[240]	-0.14	4.3e-4	0.02	-0.18	-0.15	-0.14	-0.13	-0.1	2536	1.0
y_mean[241]	-0.56	6.6e-4	0.04	-0.64	-0.59	-0.56	-0.54	-0.49	3355	1.0
y_mean[242]	0.09	7.1e-4	0.04	0.02	0.07	0.09	0.12	0.17	2871	1.0
y_mean[243]	-0.64	4.5e-4	0.03	-0.7	-0.66	-0.64	-0.62	-0.58	4415	1.0
y_mean[244]	1.69	1.4e-3	0.08	1.53	1.63	1.69	1.74	1.86	3736	1.0
y_mean[245]	-0.72	6.1e-4	0.04	-0.79	-0.74	-0.72	-0.69	-0.64	3986	1.0
y_mean[246]	0.9	7.5e-4	0.05	0.81	0.87	0.9	0.93	1.0	4124	1.0
y_mean[247]	-0.7	5.0e-4	0.03	-0.77	-0.73	-0.7	-0.68	-0.64	4301	1.0
y_mean[248]	5.86	1.9e-3	0.13	5.6	5.77	5.85	5.94	6.1	4304	1.0
y_mean[249]	0.2	5.7e-4	0.04	0.13	0.17	0.2	0.22	0.27	3947	1.0
y_mean[250]	-0.3	4.6e-4	0.03	-0.35	-0.32	-0.3	-0.28	-0.25	3093	1.0
y_mean[251]	-0.36	4.0e-4	0.02	-0.41	-0.38	-0.36	-0.35	-0.32	3796	1.0
y_mean[252]	0.43	4.3e-4	0.03	0.38	0.41	0.43	0.45	0.48	3640	1.0
y_mean[253]	0.37	4.9e-4	0.03	0.31	0.35	0.37	0.39	0.43	3974	1.0
y_mean[254]	-0.14	5.9e-4	0.03	-0.21	-0.17	-0.14	-0.12	-0.08	3024	1.0
y_mean[255]	-0.56	5.1e-4	0.03	-0.62	-0.58	-0.56	-0.54	-0.5	4105	1.0
y_mean[256]	-0.27	5.9e-4	0.03	-0.34	-0.3	-0.27	-0.25	-0.21	3161	1.0
y_mean[257]	-0.58	5.7e-4	0.03	-0.64	-0.6	-0.58	-0.56	-0.52	3263	1.0
y_mean[258]	-0.07	4.3e-4	0.02	-0.12	-0.09	-0.07	-0.06	-0.02	3084	1.0
y_mean[259]	-0.26	5.1e-4	0.03	-0.31	-0.28	-0.26	-0.24	-0.2	3025	1.0
y_mean[260]	-0.53	4.0e-4	0.02	-0.57	-0.54	-0.53	-0.51	-0.48	3270	1.0
y_mean[261]	0.1	8.0e-4		3.2e-3	0.06	0.1	0.13	0.19	3628	1.0
y_mean[261] y_mean[262]	1.5	1.3e-3	0.09	1.33	1.44	1.5	1.56	1.68	5122	1.0
y_mean[262] y_mean[263]	3.79	1.2e-3	0.08	3.63	3.73	3.79	3.84	3.94	4496	1.0
J _mcan [200]	0.13	1.25 0	0.00	0.00	0.75	0.13	0.04	0.54	1100	1.0

y_mean[264]	-0.26	5.5e-4	0.03	-0.32	-0.28	-0.26	-0.24	-0.2	3133	1.0
y_mean[265]	-0.07	4.3e-4	0.02	-0.12	-0.09	-0.07	-0.06	-0.03	3048	1.0
y_mean[266]	-0.69	4.9e-4	0.03	-0.75	-0.71	-0.69	-0.66	-0.62	4235	1.0
y_mean[267]	0.17	4.1e-4	0.02	0.12	0.16	0.17	0.19	0.22	3657	1.0
y_mean[268]	0.55	5.2e-4	0.03	0.49	0.53	0.55	0.58	0.62	4410	1.0
y_mean[269]	-0.08	5.0e-4	0.02	-0.13	-0.1	-0.08	-0.06	-0.03	2471	1.0
y_mean[270]	0.26	4.8e-4	0.03	0.21	0.24	0.26	0.28	0.31	3270	1.0
y_mean[271]	-0.79	1.1e-3	0.07	-0.93	-0.83	-0.79	-0.74	-0.65	3831	1.0
y_mean[272]	-0.41	3.9e-4	0.02	-0.45	-0.43	-0.41	-0.4	-0.37	2600	1.0
y_mean[273]	-0.2	7.3e-4	0.04	-0.28	-0.23	-0.2	-0.17	-0.12	3365	1.0
y_mean[274]	-0.56	5.7e-4	0.03	-0.62	-0.58	-0.56	-0.53	-0.49	3470	1.0
y_mean[274] y_mean[275]	-0.39	2.6e-4	0.03	-0.42	-0.3	-0.39	-0.38	-0.36	4187	1.0
• =			0.02		0.87	0.9	0.92	0.97		
y_mean[276]	0.9	5.9e-4		0.83					4166	1.0
y_mean[277]	-0.42	3.9e-4	0.02	-0.46	-0.43	-0.42	-0.4	-0.38	2955	1.0
y_mean[278]	-0.25	6.1e-4	0.04	-0.32	-0.28	-0.25	-0.23	-0.19	3416	1.0
y_mean[279]	-0.09	4.3e-4	0.02	-0.14	-0.11	-0.09	-0.08	-0.05	2744	1.0
y_mean[280]	-0.43	3.7e-4	0.02	-0.46	-0.44	-0.42	-0.41	-0.39	2689	1.0
y_mean[281]	-0.39	9.7e-4	0.05	-0.49	-0.42	-0.39	-0.35	-0.28	2906	1.0
y_mean[282]	-0.64	5.2e-4	0.04	-0.71	-0.66	-0.64	-0.61	-0.57	4503	1.0
y_mean[283]	-0.44	3.6e-4	0.02	-0.48	-0.46	-0.44	-0.43	-0.4	3379	1.0
y_mean[284]	0.41	4.3e-4	0.03	0.36	0.39	0.41	0.43	0.46	3564	1.0
y_mean[285]	-0.26	5.1e-4	0.03	-0.31	-0.28	-0.26	-0.24	-0.2	3209	1.0
y_mean[286]	0.81	8.4e-4	0.07	0.69	0.77	0.81	0.86	0.94	6066	1.0
y_mean[287]	-1.2e-3	4.9e-4	0.03	-0.05	-0.02-	1.3e-3	0.02	0.05	3063	1.0
y_mean[288]	0.06	7.2e-4	0.04	-0.02	0.03	0.06	0.08	0.13	3050	1.0
y_mean[289]	-0.49	3.5e-4	0.02	-0.53	-0.51	-0.49	-0.48	-0.46	3234	1.0
y_mean[290]	-0.14	5.2e-4	0.03	-0.19	-0.16	-0.14	-0.12	-0.08	3077	1.0
y_mean[291]	-0.55	5.0e-4	0.03	-0.6	-0.57	-0.55	-0.53	-0.49	3367	1.0
y_mean[292]	0.5	5.7e-4	0.04	0.43	0.48	0.5	0.53	0.57	3930	1.0
y_mean[293]	-0.36	5.2e-4	0.03	-0.41	-0.38	-0.36	-0.35	-0.31	2454	1.0
y_mean[294]	-0.1	6.9e-4	0.04	-0.19	-0.13	-0.1	-0.07	-0.01	4106	1.0
y_mean[295]	-0.08	4.5e-4	0.02	-0.12	-0.09	-0.08	-0.06	-0.03	2651	1.0
y_mean[296]	-0.28	7.9e-4	0.04	-0.35	-0.3	-0.28	-0.25	-0.2	2266	1.0
y_mean[297]	-0.43	3.6e-4	0.02		-0.44	-0.43	-0.42	-0.39	3049	1.0
y_mean[298]	-0.31	1.0e-3	0.05	-0.41	-0.34	-0.31	-0.28	-0.22	2254	1.0
y_mean[299]	-0.33	5.7e-4	0.03	-0.38	-0.34	-0.33	-0.31	-0.27	2637	1.0
y_mean[300]	1.02	8.9e-4	0.05	0.91	0.98	1.02	1.06	1.13	3802	1.0
y_mean[301]	-0.57	6.4e-4	0.03	-0.64	-0.59	-0.57	-0.54	-0.49	3343	1.0
y_mean[301] y_mean[302]	-0.61	4.6e-4	0.04	-0.67	-0.63	-0.61	-0.59	-0.55	4026	1.0
y_mean[302] y_mean[303]	0.87	8.6e-4	0.06	0.76	0.84	0.87	0.33	0.98	4382	1.0
V =			0.03							
y_mean[304]	0.85	4.1e-4		0.79	0.83	0.84	0.86	0.9	4354	1.0
y_mean[305]	-0.56	6.1e-4	0.04	-0.63	-0.59	-0.56	-0.54	-0.49	3343	1.0
y_mean[306]	-0.3	6.5e-4	0.04	-0.37	-0.33	-0.3	-0.28	-0.23	3240	1.0
y_mean[307]	2.47	9.9e-4	0.07	2.34	2.42	2.47	2.51	2.6	4623	1.0
y_mean[308]	-0.44	3.1e-4	0.02	-0.48	-0.45	-0.44	-0.42	-0.4	3710	1.0
y_mean[309]	0.06	9.0e-4	0.06	-0.07	0.02	0.06	0.1	0.18	4907	1.0
y_mean[310]	-0.09	4.1e-4	0.02	-0.14	-0.11	-0.09	-0.07	-0.04	3533	1.0
y_mean[311]	-0.49	3.5e-4	0.02	-0.53	-0.5	-0.49	-0.48	-0.45	3185	1.0

```
-0.43
                                                            -0.39
                                                                    -0.37
                                                                            -0.34
y_mean[312]
                    -0.39
                           4.4e-4
                                      0.02
                                                     -0.4
                                                                                     2906
                                                                                             1.0
                     0.01
                           5.2e-4
                                      0.03
                                            -0.04-6.9e-3
                                                             0.01
                                                                     0.03
                                                                             0.07
                                                                                     3207
y_mean[313]
                                                                                             1.0
                     -0.1
                           4.3e-4
                                      0.02
                                            -0.15
                                                             -0.1
                                                                    -0.09
y_mean[314]
                                                    -0.12
                                                                           -0.06
                                                                                     2702
                                                                                             1.0
                    -0.43
                           4.5e-4
                                      0.03
                                            -0.48
                                                    -0.45
                                                            -0.43
                                                                    -0.41
                                                                           -0.37
                                                                                     3729
                                                                                             1.0
y_mean[315]
                                             0.55
y_mean[316]
                     0.67
                           1.1e-3
                                      0.06
                                                     0.63
                                                             0.67
                                                                     0.71
                                                                              0.8
                                                                                     3254
                                                                                             1.0
                     3.02
                           8.6e-4
                                      0.06
                                             2.91
                                                     2.98
                                                             3.02
                                                                     3.06
                                                                             3.13
                                                                                     4288
                                                                                             1.0
y_mean[317]
                                                                           -0.35
y_mean[318]
                    -0.39
                           2.9e-4
                                      0.02
                                            -0.42
                                                     -0.4
                                                            -0.39
                                                                    -0.37
                                                                                     3632
                                                                                             1.0
                           1.4e-3
                                      0.08
                                             1.82
                                                     1.93
                                                             1.99
                                                                     2.04
                                                                             2.15
y_mean[319]
                     1.99
                                                                                     3701
                                                                                             1.0
                    -0.58
                           5.9e-4
                                      0.03
                                            -0.65
                                                    -0.61
                                                            -0.58
                                                                    -0.56
                                                                           -0.52
                                                                                     3269
                                                                                             1.0
y_mean[320]
                    -0.14
                           5.7e-4
                                      0.03
                                            -0.19
                                                    -0.16
                                                            -0.14
                                                                           -0.07
y_mean[321]
                                                                    -0.12
                                                                                     2958
                                                                                             1.0
                    -0.62
                           4.9e-4
                                      0.03
                                            -0.68
                                                    -0.64
                                                            -0.62
                                                                     -0.6
                                                                           -0.56
                                                                                     3920
                                                                                             1.0
y_mean[322]
                     -0.7
                           5.1e-4
                                      0.03
                                            -0.77
                                                    -0.72
                                                             -0.7
                                                                    -0.68
                                                                           -0.64
                                                                                     4165
                                                                                             1.0
y_mean[323]
                                            -0.19
y_mean[324]
                    -0.12
                           7.5e-4
                                      0.04
                                                    -0.14
                                                           -0.12
                                                                           -0.04
                                                                                     2887
                                                                    -0.09
                                                                                             1.0
                     0.41
                           5.6e-4
                                             0.34
                                                             0.41
                                      0.03
                                                     0.39
                                                                     0.44
                                                                             0.48
                                                                                     3845
y_{mean}[325]
                                                                                             1.0
                      1.6
                           1.7e-3
                                      0.11
                                             1.38
                                                     1.53
                                                              1.6
                                                                     1.68
                                                                             1.83
                                                                                     4252
y_mean[326]
                                                                                             1.0
                           3.8e-4
                    -0.18
                                      0.02
                                            -0.22
                                                    -0.19
                                                            -0.18
                                                                    -0.16
                                                                           -0.13
                                                                                     3407
                                                                                             1.0
y_{mean}[327]
y_mean[328]
                     0.36
                           6.7e-4
                                      0.04
                                             0.28
                                                     0.33
                                                             0.36
                                                                     0.39
                                                                             0.44
                                                                                     4131
                                                                                             1.0
                    -0.25
                           5.0e-4
                                      0.03
                                            -0.31
                                                            -0.25
                                                                             -0.2
                                                                                     2978
y_mean[329]
                                                    -0.27
                                                                    -0.23
                                                                                             1.0
y_mean[330]
                    -0.69
                           5.5e-4
                                      0.03
                                            -0.76
                                                    -0.72
                                                            -0.69
                                                                    -0.67
                                                                           -0.63
                                                                                     4051
                                                                                             1.0
y_mean[331]
                    -0.49
                           8.5e-4
                                      0.04
                                            -0.57
                                                    -0.51
                                                            -0.49
                                                                    -0.46
                                                                             -0.4
                                                                                     2592
                                                                                             1.0
y_mean[332]
                    -0.48
                           3.6e-4
                                      0.02
                                            -0.52
                                                    -0.49
                                                            -0.48
                                                                           -0.44
                                                                    -0.47
                                                                                     3189
                                                                                             1.0
                    -0.19
                           4.5e-4
                                      0.02
                                            -0.24
                                                    -0.21
                                                            -0.19
                                                                    -0.17
                                                                           -0.14
                                                                                     2712
                                                                                             1.0
y_mean[333]
                    -0.25
                           9.9e-4
                                      0.05
                                            -0.35
                                                    -0.28
                                                            -0.25
                                                                           -0.14
y_mean[334]
                                                                    -0.21
                                                                                     2928
                                                                                             1.0
                     0.24
                           6.9e-4
                                      0.04
                                             0.17
                                                     0.21
                                                             0.24
                                                                     0.27
                                                                             0.32
                                                                                     3127
                                                                                             1.0
y_mean[335]
y_mean[336]
                    -0.21
                           4.4e-4
                                      0.02
                                            -0.26
                                                    -0.23
                                                            -0.21
                                                                    -0.19
                                                                           -0.16
                                                                                     3186
                                                                                             1.0
                    -0.48
                           8.7e-4
                                      0.05
                                            -0.57
                                                    -0.51
                                                            -0.48
                                                                    -0.44
                                                                           -0.39
                                                                                     2694
y_mean[337]
                                                                                             1.0
                                      0.02
                                            -0.37
                                                                           -0.29
                    -0.33
                           3.4e-4
                                                    -0.34
                                                            -0.33
                                                                    -0.32
                                                                                     3499
y_mean[338]
                                                                                             1.0
                    -0.37
                           4.7e-4
                                      0.02
                                            -0.42
                                                    -0.39
                                                            -0.37
                                                                    -0.36
                                                                           -0.33
                                                                                     2674
y_mean[339]
                                                                                             1.0
                    -0.59
                           5.5e-4
                                      0.03
                                            -0.65
                                                                           -0.53
                                                    -0.61
                                                            -0.59
                                                                    -0.56
                                                                                     3223
                                                                                             1.0
y_mean[340]
y_mean[341]
                    -0.56
                           6.2e-4
                                      0.04
                                            -0.63
                                                    -0.58
                                                            -0.56
                                                                    -0.53
                                                                           -0.49
                                                                                     3380
                                                                                             1.0
                                            -0.19
                                                                           -0.11
                    -0.15
                           4.2e-4
                                      0.02
                                                    -0.16
                                                            -0.15
                                                                    -0.14
                                                                                     2644
                                                                                             1.0
y_{mean}[342]
y_mean[343]
                     0.35
                           4.4e-4
                                      0.03
                                              0.3
                                                     0.33
                                                             0.35
                                                                     0.37
                                                                              0.4
                                                                                     3297
                                                                                             1.0
                           5.7e-4
                                      0.03
                                             0.09
                                                             0.15
                                                                             0.22
y_mean[344]
                     0.15
                                                     0.13
                                                                     0.17
                                                                                     3187
                                                                                             1.0
                    -0.04
                           4.5e-4
                                      0.02
                                            -0.09
                                                    -0.06
                                                           -0.04
                                                                   -0.03 6.0e-3
                                                                                     2934
                                                                                             1.0
y_mean[345]
                    -0.12
                           7.4e-4
                                      0.05
                                            -0.21
                                                    -0.15
                                                           -0.12
                                                                    -0.09
                                                                           -0.03
                                                                                     3901
                                                                                             1.0
y mean [346]
y_mean[347]
                     -0.6
                           4.7e-4
                                            -0.65
                                                    -0.62
                                                             -0.6
                                                                    -0.58
                                                                           -0.54
                                      0.03
                                                                                     4215
                                                                                             1.0
                           3.6e-4
                                            -0.48
                                                                           -0.41
                    -0.45
                                      0.02
                                                    -0.46
                                                           -0.45
                                                                    -0.43
                                                                                     3003
y_mean[348]
                                                                                             1.0
y_mean[349]
                    -0.38
                           2.9e-4
                                      0.02
                                            -0.42
                                                     -0.4
                                                            -0.38
                                                                    -0.37
                                                                           -0.35
                                                                                     3724
                                                                                             1.0
                                            -0.58
                    -0.53
                           4.1e-4
                                      0.02
                                                    -0.55
                                                            -0.53
                                                                    -0.52
                                                                           -0.49
                                                                                     3275
                                                                                             1.0
y_mean[350]
                    -0.47
                           3.4e-4
                                      0.02
                                            -0.51
                                                    -0.48
                                                            -0.47
                                                                    -0.45
                                                                           -0.43
                                                                                     3052
y_mean[351]
                                                                                             1.0
                                      0.02
                                            -0.44
                     -0.4
                           4.1e-4
                                                    -0.41
                                                             -0.4
                                                                    -0.38
                                                                           -0.36
                                                                                     2718
                                                                                             1.0
y_mean[352]
                           3.3e-4
                                            -0.51
                                                           -0.47
y_mean[353]
                    -0.47
                                      0.02
                                                    -0.48
                                                                    -0.46
                                                                           -0.43
                                                                                     3194
                                                                                             1.0
y_mean[354]
                 -4.3e-4
                           4.8e-4
                                      0.03
                                            -0.05
                                                    -0.02-6.8e-4
                                                                     0.02
                                                                             0.05
                                                                                     3086
                                                                                             1.0
                     1.55
                           1.0e-3
                                      0.07
                                             1.43
                                                     1.51
                                                             1.55
                                                                             1.68
                                                                      1.6
                                                                                     4103
y_{mean}[355]
                                                                                             1.0
                    -0.38
                           4.7e-4
                                      0.03
                                            -0.43
                                                    -0.39
                                                            -0.38
                                                                           -0.32
y_mean[356]
                                                                    -0.36
                                                                                     3084
                                                                                             1.0
                                            -0.52
y_{mean}[357]
                    -0.47
                           4.2e-4
                                      0.03
                                                    -0.48
                                                            -0.47
                                                                    -0.45
                                                                           -0.42
                                                                                     3524
                                                                                             1.0
y_mean[358]
                    -0.09
                           4.3e-4
                                      0.02
                                            -0.13
                                                     -0.1
                                                            -0.09
                                                                    -0.07
                                                                            -0.04
                                                                                     2756
                                                                                             1.0
y_mean[359]
                    -0.49
                           6.4e-4
                                      0.03
                                            -0.56
                                                    -0.51
                                                            -0.49
                                                                    -0.46
                                                                           -0.42
                                                                                     2897
                                                                                             1.0
```

y_mean[360]	0.48	4.7e-4	0.03	0.43	0.46	0.48	0.5	0.54	3980	1.0
y_mean[361]	0.26	4.9e-4	0.03	0.21	0.25	0.26	0.28	0.32	3234	1.0
y_mean[362]	-0.31	4.1e-4	0.02	-0.35	-0.32	-0.31	-0.29	-0.26	3172	1.0
y_mean[363]	-0.45	3.6e-4	0.02	-0.49	-0.46	-0.45	-0.44	-0.41	3008	1.0
y_mean[364]	-0.68		0.05	-0.78	-0.72	-0.68	-0.65	-0.59	3887	1.0
y_mean[365]	-0.11		0.03	-0.17	-0.13	-0.11	-0.09	-0.06	2552	1.0
y_mean[366]	-0.52		0.02	-0.57	-0.54	-0.52	-0.51	-0.48	3270	1.0
y_mean[367]	-0.48		0.02	-0.52	-0.5	-0.48	-0.47	-0.45	3160	1.0
y_mean[368]	-0.25		0.03	-0.31	-0.27	-0.25	-0.23	-0.2	3052	1.0
y_mean[369]	-0.27		0.02	-0.31	-0.29	-0.27	-0.26	-0.23	3323	1.0
y_mean[370]	-0.33		0.03	-0.39	-0.35	-0.33	-0.31	-0.27	2991	1.0
y_mean[371]	-0.54		0.03	-0.61	-0.56	-0.54	-0.52	-0.47	4097	1.0
y_mean[371] y_mean[372]	-0.5		0.03	-0.54	-0.51	-0.5	-0.48	-0.46	3250	1.0
y_mean[372] y_mean[373]	0.59		0.02	0.54	0.56	0.59	0.40	0.40	3649	1.0
y_mean[374]	-0.44		0.04	-0.48	-0.45	-0.44	-0.43	-0.4	3690	1.0
y_mean[374] y_mean[375]	-0.44		0.02	-0.48	-0.48	-0.44	-0.46	-0.43	3082	1.0
• –			0.02							
y_mean[376]	0.4			0.33	0.38	0.4	0.43	0.48	4850	1.0
y_mean[377]	0.61	6.5e-4	0.04	0.52	0.58	0.61	0.64	0.69	4333	1.0
y_mean[378]	-0.16		0.03	-0.22	-0.18	-0.16	-0.14	-0.11	3264	1.0
y_mean[379]	-0.2		0.03	-0.26	-0.22	-0.2	-0.17	-0.13	3372	1.0
y_mean[380]	-0.1	7.1e-4	0.04	-0.18	-0.13	-0.1	-0.08	-0.03	2751	1.0
y_mean[381]	0.05		0.02	0.01	0.04	0.05	0.07	0.1	3650	1.0
y_mean[382]	1.85		0.07	1.72	1.81	1.85	1.9	1.98	3607	1.0
y_mean[383]	-0.11		0.02	-0.16	-0.13	-0.11	-0.1	-0.07	3659	1.0
y_mean[384]	-0.18		0.02	-0.22	-0.19	-0.18	-0.16	-0.14	2656	1.0
y_mean[385]	-0.31	3.5e-4	0.02	-0.35	-0.32	-0.31	-0.29	-0.27	3357	1.0
y_mean[386]	-0.43	3.7e-4	0.02	-0.47	-0.45	-0.43	-0.42	-0.39	3277	1.0
y_mean[387]	-0.15	4.3e-4	0.02	-0.19	-0.16	-0.15	-0.13	-0.1	3201	1.0
y_mean[388]	-0.52	3.8e-4	0.02	-0.56	-0.53	-0.52	-0.5	-0.47	3338	1.0
y_mean[389]	0.19	4.2e-4	0.03	0.14	0.17	0.19	0.21	0.24	3697	1.0
y_mean[390]	-0.4	4.2e-4	0.02	-0.44	-0.42	-0.4	-0.39	-0.36	2632	1.0
y_mean[391]	-0.8	10.0e-4	0.06	-0.92	-0.84	-0.8	-0.75	-0.67	3971	1.0
y_mean[392]	-0.36	5.0e-4	0.03	-0.42	-0.38	-0.36	-0.35	-0.31	2780	1.0
y_mean[393]	-0.12	4.9e-4	0.03	-0.18	-0.14	-0.12	-0.1	-0.07	3302	1.0
y_mean[394]	-0.24	6.5e-4	0.04	-0.31	-0.26	-0.24	-0.21	-0.16	3390	1.0
y_mean[395]	-0.13	4.3e-4	0.02	-0.17	-0.14	-0.13	-0.12	-0.09	2516	1.0
y_mean[396]	-0.37	7.6e-4	0.05	-0.47	-0.4	-0.37	-0.34	-0.28	3894	1.0
y_mean[397]	-0.17		0.02	-0.21	-0.18	-0.17	-0.15	-0.13	2636	1.0
y_mean[398]	-0.06	6.0e-4	0.04	-0.13	-0.08	-0.06	-0.03	0.01	3467	1.0
y_mean[399]	-0.07		0.02	-0.1	-0.08	-0.07	-0.05	-0.03	3453	1.0
y_mean[400]	0.33		0.05	0.23	0.29	0.33	0.36	0.42	4285	1.0
y_mean[401]	-0.43		0.02	-0.46	-0.44	-0.43	-0.41	-0.39	2785	1.0
y_mean[402]	1.06		0.04	0.99	1.04	1.06	1.09	1.13	4152	1.0
y_mean[403]	0.37		0.03	0.32	0.35	0.37	0.39	0.42	3347	1.0
y_mean[404]	-0.39		0.03	-0.43	-0.41	-0.39	-0.38	-0.36	4124	1.0
y_mean[404] y_mean[405]	0.39		0.02	0.43	0.41	0.45	0.46	0.5	3746	1.0
y_mean[406] y_mean[406]	-0.26		0.03	-0.33	-0.29	-0.26	-0.24	-0.19	3258	1.0
y_mean[400] y_mean[407]	-0.20		0.04	-0.36	-0.31	-0.29	-0.24	-0.19	3789	1.0
λ-mean [401]	-0.29	J.38-4	0.04	0.30	0.31	0.23	0.21	0.22	3109	1.0

y_mean[408]	-0.25	6.1e-4	0.04	-0.32	-0.27	-0.25	-0.22	-0.18	3295	1.0
y_mean[409]	-0.5	3.6e-4	0.02	-0.54	-0.51	-0.5	-0.48	-0.46	3361	1.0
y_mean[410]	-0.13	5.3e-4	0.03	-0.18	-0.14	-0.13	-0.11	-0.07	2607	1.0
y_mean[411]	0.55	6.0e-4	0.04	0.47	0.53	0.55	0.58	0.63	4433	1.0
y_mean[412]	0.59	5.7e-4	0.04	0.51	0.56	0.59	0.61	0.66	4162	1.0
y_mean[413]	-0.4	4.2e-4	0.02	-0.45	-0.42	-0.4	-0.39	-0.36	3032	1.0
y_mean[414]	-0.09	5.3e-4	0.03	-0.14	-0.11	-0.09	-0.07	-0.04	2418	1.0
y_mean[415]	-0.49	4.4e-4	0.03	-0.55	-0.51	-0.49	-0.48	-0.44	3651	1.0
y_mean[416]	-0.63	4.9e-4	0.03	-0.69	-0.65	-0.63	-0.61	-0.57	3797	1.0
y_mean[417]	-0.53	4.3e-4	0.03	-0.58	-0.55	-0.53	-0.51	-0.48	3410	1.0
y_mean[418]	-0.23	7.0e-4	0.04	-0.3	-0.25	-0.23	-0.2	-0.16	2518	1.0
y_mean[419]	-0.64	5.3e-4	0.04	-0.71	-0.67	-0.64	-0.62	-0.58	4470	1.0
y_mean[410] y_mean[420]	-0.39	2.4e-4	0.04	-0.42	-0.41	-0.39	-0.38	-0.36	4236	1.0
y_mean[420] y_mean[421]	-0.76	1.1e-3	0.02	-0.9	-0.81	-0.76	-0.71	-0.63	3781	1.0
y_mean[421] y_mean[422]	-0.70	3.7e-4	0.07	-0.34	-0.31	-0.76	-0.71	-0.03	3386	1.0
• –		5.7e-4 5.3e-4	0.02	-0.34	-0.31	-0.06			3307	1.0
y_mean[423]	-0.06							1.2e-3		
y_mean[424]	-0.3	6.5e-4	0.04	-0.38	-0.33	-0.3	-0.28	-0.23	3443	1.0
y_mean[425]	-0.14	4.3e-4	0.02	-0.18	-0.15	-0.14	-0.12	-0.1	2516	1.0
y_mean[426]	-0.45	4.3e-4	0.02	-0.5	-0.47	-0.45	-0.44	-0.41	2930	1.0
y_mean[427]	0.19	7.1e-4	0.04	0.1	0.16	0.19	0.22	0.28	3715	1.0
y_mean[428]	-0.48	3.4e-4	0.02	-0.52	-0.49	-0.48	-0.47	-0.44	3092	1.0
y_mean[429]	-0.51	6.7e-4	0.04	-0.59	-0.54	-0.51	-0.49	-0.44	3228	1.0
y_mean[430]	-0.3	8.8e-4	0.06	-0.41	-0.34	-0.3	-0.26	-0.18	4498	1.0
y_mean[431]	-0.26	7.1e-4	0.04	-0.33	-0.28	-0.26	-0.24	-0.19	2614	1.0
y_mean[432]	-0.15	4.5e-4	0.02	-0.2	-0.17	-0.15	-0.14	-0.11	2516	1.0
y_mean[433]	1.26	8.3e-4	0.05	1.15	1.22	1.26	1.3	1.37	4294	1.0
y_mean[434]	-0.33	6.2e-4	0.03	-0.4	-0.35	-0.33	-0.31	-0.26	3079	1.0
y_mean[435]	-0.42	3.8e-4	0.02	-0.46	-0.43	-0.42	-0.4	-0.38	2679	1.0
y_mean[436]	-0.63	1.2e-3	0.07	-0.77	-0.68	-0.63	-0.58	-0.5	3363	1.0
y_mean[437]	-0.49	4.2e-4	0.03	-0.54	-0.51	-0.49	-0.48	-0.44	3633	1.0
y_mean[438]	-0.35	3.8e-4	0.02	-0.39	-0.37	-0.35	-0.34	-0.31	3082	1.0
y_mean[439]	0.25	4.8e-4	0.03	0.19	0.23	0.25	0.27	0.3	3394	1.0
$y_{mean}[440]$	-0.34	4.2e-4	0.02	-0.39	-0.36	-0.34	-0.33	-0.3	3030	1.0
$y_{mean}[441]$	-0.43	4.0e-4	0.02	-0.47	-0.44	-0.43	-0.41	-0.38	3246	1.0
y_mean[442]	-0.1	6.0e-4	0.03	-0.16	-0.12	-0.1	-0.08	-0.04	2730	1.0
y_mean[443]	1.37	1.0e-3	0.06	1.25	1.33	1.37	1.41	1.49	3741	1.0
y_mean[444]	2.21	9.3e-4	0.07	2.09	2.17	2.21	2.25	2.34	4984	1.0
y_mean[445]	0.1	4.6e-4	0.03	0.05	0.08	0.1	0.12	0.16	4041	1.0
y_mean[446]	-0.28	3.5e-4	0.02	-0.32	-0.29	-0.28	-0.27	-0.24	3393	1.0
y_mean[447]	0.29	4.9e-4	0.03	0.23	0.27	0.29	0.3	0.34	3083	1.0
y_mean[448]	-0.04	5.2e-4	0.03	-0.09	-0.06	-0.04	-0.02	0.02	2788	1.0
y_mean[449]	-0.44	3.5e-4	0.02	-0.48	-0.45	-0.44	-0.43	-0.4	3000	1.0
y_mean[450]	-0.51	3.7e-4	0.02	-0.55	-0.52	-0.51	-0.49	-0.47	3267	1.0
y_mean[451]	-0.33		0.03	-0.39	-0.35	-0.33	-0.31	-0.27	2602	1.0
y_mean[452]	-0.62	6.1e-4	0.04	-0.69	-0.64	-0.62	-0.59	-0.55	3702	1.0
y_mean[453]	0.06	6.0e-4		7.8e-3	0.04	0.06	0.08	0.13	3398	1.0
y_mean[454]	-0.49	4.7e-4		-0.54	-0.51	-0.49	-0.47	-0.43	3564	1.0
y_mean[454] y_mean[455]	-0.46	8.9e-4	0.03	-0.55	-0.49	-0.46	-0.43	-0.38	2306	1.0
7 _mcan [-100]	0.40	J.J6 4	0.04	0.00	0.40	0.40	0.40	0.00	2000	1.0

y_mean[456]	-0.14	4.2e-4	0.02	-0.19	-0.16	-0.14	-0.13	-0.1	2625	1.0
y_mean[457]	-0.37	5.0e-4	0.03	-0.43	-0.39	-0.37	-0.35	-0.31	3683	1.0
y_mean[458]	0.05	5.1e-4	0.03-	5.1e-3	0.03	0.05	0.07	0.11	3470	1.0
y_mean[459]	0.35	4.4e-4	0.03	0.3	0.34	0.35	0.37	0.41	3649	1.0
y_mean[460]	0.22	3.9e-4	0.02	0.17	0.2	0.22	0.23	0.26	3940	1.0
y_mean[461]	0.47	4.3e-4	0.03	0.41	0.45	0.47	0.49	0.53	4272	1.0
y_mean[462]	-0.44	3.5e-4	0.02	-0.48	-0.45	-0.44	-0.43	-0.4	2804	1.0
y_mean[463]	0.41	4.5e-4	0.03	0.36	0.39	0.41	0.43	0.47	3767	1.0
y_mean[464]	-0.09	6.3e-4	0.03	-0.15	-0.11	-0.09	-0.06	-0.02	2872	1.0
y_mean[465]	0.85	5.8e-4	0.04	0.77	0.82	0.85	0.88	0.93	4496	1.0
y_mean[466]	-0.51	3.6e-4	0.02	-0.55	-0.52	-0.5	-0.49	-0.47	3229	1.0
y_mean[467]	-0.18	4.4e-4	0.02	-0.23	-0.2	-0.18	-0.17	-0.14	2639	1.0
y_mean[468]	-0.14	8.0e-4	0.02	-0.22	-0.17	-0.14	-0.12	-0.07	2476	1.0
y_mean[469]	0.14	5.5e-4	0.04	0.22	0.17	0.14	0.12	0.54	3835	1.0
y_mean[470] y_mean[470]	-0.43	3.6e-4	0.03	-0.47	-0.44	-0.43	-0.42	-0.39	2810	1.0
y_mean[470] y_mean[471]	-0.43	4.5e-4	0.02	-0.59	-0.56	-0.54	-0.53	-0.39	3291	1.0
•			0.03					-0.49		
y_mean[472]	-0.29	8.6e-4		-0.4	-0.33	-0.29	-0.26		4122	1.0
y_mean[473]	-0.4	4.4e-4	0.02	-0.44	-0.41	-0.4	-0.38	-0.35	3231	1.0
y_mean[474]	-0.04	3.2e-4	0.02	-0.08	-0.05	-0.04		3.8e-3	3686	1.0
y_mean[475]	0.76	6.8e-4	0.04	0.68	0.73	0.76	0.79	0.85	4128	1.0
y_mean[476]	0.16	3.8e-4	0.02	0.12	0.15	0.16	0.18	0.21	3753	1.0
y_mean[477]	-0.35	8.0e-4	0.04	-0.43	-0.38	-0.35	-0.33	-0.28	2252	1.0
y_mean[478]	-0.45	4.2e-4	0.02	-0.5	-0.47	-0.45	-0.43	-0.4	3483	1.0
y_mean[479]	-0.16	5.0e-4	0.03	-0.22	-0.18	-0.16	-0.14	-0.11	3137	1.0
y_mean[480]	-0.41	8.4e-4	0.04	-0.49	-0.44	-0.41	-0.38	-0.34	2174	1.0
y_mean[481]	-0.16	4.6e-4	0.03	-0.21	-0.18	-0.16	-0.14	-0.11	3251	1.0
y_mean[482]	-0.15	4.4e-4	0.02	-0.2	-0.17	-0.15	-0.13	-0.1	3216	1.0
y_mean[483]	-0.46	5.0e-4	0.03	-0.52	-0.48	-0.46	-0.44	-0.4	3777	1.0
y_mean[484]	0.36	7.2e-4	0.04	0.28	0.34	0.36	0.39	0.44	3111	1.0
y_mean[485]	-0.35	3.0e-4	0.02	-0.39	-0.37	-0.35	-0.34	-0.32	3692	1.0
y_mean[486]	-0.15	4.2e-4	0.02	-0.19	-0.16	-0.15	-0.13	-0.1	2733	1.0
y_mean[487]	0.49	5.1e-4	0.03	0.42	0.46	0.49	0.51	0.55	4274	1.0
y_mean[488]	-0.43	3.7e-4	0.02	-0.46	-0.44	-0.43	-0.41	-0.39	2757	1.0
y_mean[489]	-0.46	3.3e-4	0.02	-0.5	-0.47	-0.46	-0.45	-0.42	3082	1.0
y_mean[490]	-0.29	6.5e-4	0.04	-0.36	-0.31	-0.29	-0.26	-0.22	3251	1.0
y_mean[491]	-0.75	5.9e-4	0.04	-0.82	-0.78	-0.75	-0.73	-0.68	4033	1.0
y_mean[492]	-0.44	3.7e-4	0.02	-0.48	-0.45	-0.44	-0.42	-0.4	2998	1.0
y_mean[493]	0.35	6.5e-4	0.04	0.27	0.32	0.34	0.37	0.42	3476	1.0
y_mean[494]	-0.53	4.0e-4	0.02	-0.57	-0.54	-0.53	-0.51	-0.48	3309	1.0
y_mean[495]	-0.01	5.1e-4	0.03	-0.07	-0.03		7.2e-3	0.04	3023	1.0
y_mean[496]	0.4	5.8e-4	0.04	0.32	0.37	0.4	0.42	0.47	4273	1.0
y_mean[497]	-0.6	5.2e-4	0.03	-0.66	-0.62	-0.6	-0.58	-0.54	3708	1.0
y_mean[498]	-0.03	5.3e-4	0.03	-0.09	-0.05	-0.03	-0.01	0.03	2891	1.0
y_mean[499]	-0.35	5.5e-4	0.03	-0.4	-0.37	-0.35	-0.33	-0.3	2478	1.0
y_mean[500]	-0.54	4.9e-4	0.03	-0.6	-0.56	-0.54	-0.52	-0.49	3370	1.0
y_mean[500] y_mean[501]	-0.06	4.9e-4	0.03	-0.11	-0.08	-0.07	-0.05	-0.02	2586	1.0
y_mean[501] y_mean[502]	-0.49	3.9e-4	0.02	-0.53	-0.5	-0.49	-0.47	-0.44	3339	1.0
y_mean[502] y_mean[503]	-0.43	3.7e-4	0.02	-0.33	-0.44	-0.43	-0.41	-0.39	2752	1.0
y_mean[503]	-0.43	5.76-4	0.02	-0.40	0.44	-0.43	-0.41	-0.39	2132	1.0

y_mean[504]	0.1	3.4e-4	0.02	0.06	0.09	0.1	0.11	0.14	3727	1.0
y_mean[505]	-0.03	7.7e-4	0.04	-0.11	-0.05	-0.03	6.6e-4	0.05	2823	1.0
y_mean[506]	-0.42	3.9e-4	0.02	-0.46	-0.44	-0.42	-0.41	-0.38	3003	1.0
y_mean[507]	1.29	8.0e-4	0.05	1.18	1.26	1.29	1.32	1.39	4189	1.0
y_mean[508]	1.03	5.7e-4	0.04	0.95	1.0	1.03	1.05	1.09	4119	1.0
y_mean[509]	-0.1	5.9e-4	0.03	-0.15	-0.12	-0.1	-0.08	-0.04	2589	1.0
y_mean[510]	0.7	7.7e-4	0.05	0.6	0.67	0.7	0.73	0.79	3926	1.0
y_mean[511]	-0.28	5.9e-4	0.03	-0.34	-0.3	-0.28	-0.26	-0.21	3269	1.0
y_mean[512]	-0.53	7.8e-4	0.05	-0.62	-0.56	-0.53	-0.49	-0.44	3453	1.0
y_mean[513]	-0.39	4.5e-4	0.02	-0.43	-0.41	-0.39	-0.38	-0.35	2488	1.0
y_mean[514]	-0.21	7.2e-4	0.04	-0.28	-0.24	-0.21	-0.19	-0.14	2384	1.0
y_mean[515]	-0.44	3.7e-4	0.02	-0.48	-0.45	-0.44	-0.43	-0.4	2999	1.0
y_mean[516]	0.25	4.9e-4	0.03	0.19	0.23	0.25	0.27	0.3	3259	1.0
y_mean[517]	-0.32	5.6e-4	0.03	-0.39	-0.34	-0.32	-0.3	-0.25	3590	1.0
y_mean[518]	-0.13	3.7e-4	0.02	-0.18	-0.15	-0.13	-0.12	-0.09	3640	1.0
y_mean[519]	-0.6	6.1e-4	0.03	-0.66	-0.62	-0.6	-0.57	-0.53	3224	1.0
y_mean[520]	0.81	6.2e-4	0.04	0.72	0.78	0.81	0.84	0.9	4984	1.0
y_mean[521]	-0.36	5.5e-4	0.03	-0.42	-0.38	-0.36	-0.34	-0.31	2553	1.0
y_mean[522]	1.17	5.1e-4	0.03	1.1	1.14	1.17	1.19	1.24	4677	1.0
y_mean[523]	-0.3	7.4e-4	0.04	-0.38	-0.33	-0.3	-0.27	-0.22	3196	1.0
y_mean[524]	-0.14	3.7e-4	0.02	-0.18	-0.16	-0.14	-0.13	-0.1	3645	1.0
y_mean[525]	-0.04	4.6e-4	0.02	-0.09	-0.06	-0.04	-0.03	3.1e-3	2836	1.0
y_mean[526]	-0.63	4.7e-4	0.03	-0.69	-0.65	-0.63	-0.6	-0.57	4571	1.0
y_mean[527]	-0.47	3.3e-4	0.02	-0.5	-0.48	-0.47	-0.45	-0.43	3139	1.0
y_mean[528]	-0.09	3.6e-4	0.02	-0.13	-0.1	-0.09	-0.07	-0.05	3195	1.0
y_mean[529]	0.45	4.4e-4	0.03	0.4	0.43	0.45	0.47	0.5	3758	1.0
y_mean[530]	0.19	6.4e-4	0.04	0.11	0.17	0.19	0.22	0.27	3682	1.0
y_mean[531]	-0.3	4.4e-4	0.03	-0.35	-0.32	-0.3	-0.29	-0.26	3252	1.0
y_mean[532]	-0.38	4.7e-4	0.02	-0.42	-0.39	-0.38	-0.36	-0.33	2477	1.0
y_mean[533]	0.27	5.4e-4	0.03	0.21	0.25	0.27	0.29	0.33	2989	1.0
y_mean[534]	0.08	5.4e-4	0.03	0.02	0.06	0.08	0.1	0.14	3563	1.0
y_mean[535]	1.83	9.7e-4	0.06	1.7	1.79	1.83	1.87	1.95	4396	1.0
y_mean[536]	-0.53	4.3e-4	0.02	-0.58	-0.55	-0.53	-0.51	-0.48	3322	1.0
y_mean[537]	0.07	5.1e-4	0.03	9.3e-3	0.05	0.07	0.09	0.12	3430	1.0
y_mean[538]	-0.72	1.1e-3	0.06	-0.85	-0.76	-0.72	-0.67	-0.6	3720	1.0
y_mean[539]	-0.4	3.6e-4	0.02	-0.44	-0.41	-0.4	-0.38	-0.36	3087	1.0
y_mean[540]	-0.32	2.9e-4	0.02	-0.35	-0.33	-0.32	-0.3	-0.28	3793	1.0
y_mean[541]	-0.42	4.3e-4	0.03	-0.47	-0.44	-0.42	-0.41	-0.37	3795	1.0
y_mean[542]	-0.46	3.4e-4	0.02	-0.49	-0.47	-0.45	-0.44	-0.42	2948	1.0
y_mean[543]	-0.1	4.6e-4	0.03	-0.15	-0.12	-0.1	-0.08	-0.04	3620	1.0
y_mean[544]	1.21	7.0e-4	0.04	1.12	1.18	1.21	1.24	1.29	4100	1.0
y_mean[545]	-0.04	4.5e-4	0.02	-0.09	-0.06	-0.04	-0.03	6.0e-3	2934	1.0
y_mean[546]	-0.37	4.3e-4	0.02	-0.41	-0.38	-0.37	-0.35	-0.32	2880	1.0
y_mean[547]	-0.13	4.5e-4	0.02	-0.17	-0.14	-0.13	-0.11	-0.08	2462	1.0
y_mean[548]	-0.63	4.5e-4	0.03	-0.69	-0.65	-0.63	-0.61	-0.57	4233	1.0
y_mean[549]	0.43	1.1e-3	0.07	0.3	0.39	0.43	0.48	0.56	3739	1.0
y_mean[550]	0.4	4.5e-4	0.03	0.34	0.38	0.4	0.42	0.46	4003	1.0
y_mean[551]	-0.44	2.9e-4	0.02	-0.48	-0.45	-0.44	-0.43	-0.41	3984	1.0

```
-0.46
y_mean[552]
                    -0.43
                            2.6e-4
                                      0.02
                                                    -0.44
                                                            -0.43
                                                                    -0.42
                                                                             -0.4
                                                                                     4000
                                                                                              1.0
                    -0.41
                           5.4e-4
                                      0.03
                                            -0.47
                                                     -0.43
                                                            -0.41
                                                                    -0.39
                                                                            -0.36
                                                                                     2664
y_mean[553]
                                                                                              1.0
y_mean[554]
                    -0.27
                                      0.03
                                            -0.34
                                                      -0.3
                                                            -0.27
                                                                    -0.25
                           5.8e-4
                                                                            -0.21
                                                                                     3138
                                                                                              1.0
                    -0.53
                           5.8e-4
                                      0.03
                                              -0.6
                                                    -0.55
                                                            -0.53
                                                                    -0.51
                                                                            -0.46
                                                                                     3476
                                                                                              1.0
y_{mean}[555]
                                              0.26
                                                             0.31
                     0.31
                            4.8e-4
                                      0.03
                                                       0.3
                                                                     0.33
                                                                             0.37
                                                                                     3058
y_mean[556]
                                                                                              1.0
                     -0.5
                           8.6e-4
                                      0.04
                                            -0.58
                                                    -0.53
                                                             -0.5
                                                                    -0.47
                                                                            -0.42
                                                                                     2518
                                                                                              1.0
y_{mean}[557]
y_mean[558]
                    -0.15
                           4.2e-4
                                      0.02
                                            -0.19
                                                    -0.16
                                                            -0.15
                                                                    -0.13
                                                                             -0.1
                                                                                     3064
                                                                                              1.0
                           5.9e-4
                                            -0.16
y_{mean}[559]
                     -0.1
                                                    -0.12
                                                             -0.1
                                                                    -0.08
                                                                            -0.04
                                      0.03
                                                                                     2707
                                                                                              1.0
                    -0.47
                            4.8e-4
                                      0.03
                                            -0.52
                                                    -0.49
                                                            -0.47
                                                                    -0.45
                                                                            -0.41
                                                                                     3226
                                                                                              1.0
y_mean[560]
                     0.58
                           5.5e-4
                                      0.04
                                              0.51
                                                      0.56
                                                             0.58
                                                                             0.65
y_mean[561]
                                                                     0.61
                                                                                     4533
                                                                                              1.0
                     0.03
                           6.0e-4
                                      0.04
                                            -0.05 5.5e-3
                                                             0.03
                                                                     0.06
                                                                             0.11
                                                                                     4231
                                                                                              1.0
y_mean[562]
                    -0.36
                           5.1e-4
                                      0.03
                                            -0.41
                                                    -0.38
                                                            -0.36
                                                                    -0.35
                                                                            -0.31
                                                                                     2586
                                                                                              1.0
y_{mean}[563]
                    -0.09
                           4.4e-4
                                      0.02
                                            -0.14
                                                    -0.11
                                                            -0.09
                                                                            -0.05
                                                                                     2826
y_{mean}[564]
                                                                    -0.08
                                                                                              1.0
                     0.39
                                              0.34
                           4.3e-4
                                      0.03
                                                      0.37
                                                             0.39
                                                                     0.41
                                                                             0.44
                                                                                     3617
y_{mean}[565]
                                                                                              1.0
                    -0.39
                           6.0e-4
                                      0.03
                                            -0.45
                                                    -0.41
                                                            -0.39
                                                                    -0.37
                                                                            -0.33
y_mean[566]
                                                                                     2484
                                                                                              1.0
                                            -0.49
                    -0.45
                           3.4e-4
                                      0.02
                                                    -0.46
                                                            -0.45
                                                                    -0.44
                                                                            -0.41
                                                                                     3120
                                                                                              1.0
y_{mean}[567]
                                                                            -0.13
y_mean[568]
                     -0.2
                           6.0e-4
                                      0.04
                                            -0.27
                                                    -0.22
                                                             -0.2
                                                                    -0.17
                                                                                     3373
                                                                                              1.0
                                            -0.55
                     -0.5
                                      0.02
                                                             -0.5
                           3.7e-4
                                                    -0.52
                                                                    -0.49
                                                                            -0.46
                                                                                     3369
                                                                                              1.0
y_mean[569]
y_mean[570]
                    -0.11
                           4.3e-4
                                      0.02
                                            -0.16
                                                    -0.13
                                                            -0.11
                                                                    -0.09
                                                                            -0.06
                                                                                     3275
                                                                                              1.0
y_mean[571]
                    -0.36
                           4.0e-4
                                      0.02
                                            -0.41
                                                    -0.38
                                                            -0.36
                                                                    -0.35
                                                                            -0.32
                                                                                     2975
                                                                                              1.0
                    -0.29
                           5.8e-4
                                      0.03
                                            -0.36
                                                    -0.31
                                                            -0.29
                                                                            -0.22
y_mean[572]
                                                                    -0.26
                                                                                     3577
                                                                                              1.0
                    -0.48
                           3.5e-4
                                      0.02
                                            -0.52
                                                    -0.49
                                                            -0.48
                                                                    -0.46
                                                                            -0.44
                                                                                     3445
y_mean[573]
                                                                                              1.0
                                            -0.06
                                                    -0.03-6.9e-3
y_{mean}[574]
                 -7.3e-3
                           4.7e-4
                                      0.03
                                                                     0.01
                                                                             0.05
                                                                                     3446
                                                                                              1.0
                    -0.38
                           4.5e-4
                                      0.03
                                            -0.43
                                                      -0.4
                                                            -0.38
                                                                    -0.37
                                                                            -0.33
                                                                                     3231
                                                                                              1.0
y_mean[575]
                                                             1.01
y_mean[576]
                     1.01
                           4.6e-4
                                      0.03
                                              0.95
                                                      0.99
                                                                     1.03
                                                                             1.07
                                                                                     4179
                                                                                              1.0
                    -0.56
                            5.9e-4
                                      0.03
                                            -0.63
                                                    -0.58
                                                            -0.56
                                                                    -0.54
                                                                            -0.49
                                                                                     3345
y_mean[577]
                                                                                              1.0
                    -0.07
                                      0.02
                                            -0.12
                           4.3e-4
                                                    -0.09
                                                            -0.07
                                                                    -0.06
                                                                            -0.03
                                                                                     2950
y_mean [578]
                                                                                              1.0
                     -0.4
                           8.8e-4
                                      0.04
                                            -0.48
                                                    -0.42
                                                             -0.4
                                                                    -0.37
                                                                            -0.32
y_mean[579]
                                                                                     2145
                                                                                              1.0
                    -0.38
                                            -0.42
                                                    -0.39
                                                            -0.38
                                                                            -0.34
                           3.8e-4
                                      0.02
                                                                    -0.36
                                                                                     3371
                                                                                              1.0
y_mean [580]
y_mean[581]
                    -0.23
                           7.3e-4
                                      0.04
                                              -0.3
                                                    -0.25
                                                            -0.23
                                                                    -0.21
                                                                            -0.16
                                                                                     2355
                                                                                              1.0
                    -0.58
                           5.0e-4
                                      0.03
                                            -0.65
                                                      -0.6
                                                            -0.58
                                                                    -0.56
                                                                            -0.52
                                                                                     4447
                                                                                              1.0
y_mean[582]
                           5.0e-4
y_mean[583]
                    -0.59
                                      0.03
                                            -0.65
                                                    -0.61
                                                            -0.59
                                                                    -0.57
                                                                            -0.53
                                                                                     3780
                                                                                              1.0
                           6.8e-4
                                              0.23
                                                      0.29
                                                                             0.41
y_mean[584]
                     0.32
                                      0.05
                                                             0.32
                                                                     0.35
                                                                                     4650
                                                                                              1.0
                     0.45
                           5.3e-4
                                      0.03
                                              0.38
                                                      0.42
                                                             0.45
                                                                     0.47
                                                                             0.51
                                                                                     3923
                                                                                              1.0
y_mean[585]
                     0.48
                           4.5e-4
                                      0.03
                                              0.43
                                                      0.46
                                                             0.48
                                                                      0.5
                                                                             0.53
                                                                                     3870
y mean [586]
                                                                                              1.0
                    -0.52
                           3.9e-4
                                      0.02
                                            -0.56
                                                    -0.53
                                                            -0.51
                                                                     -0.5
                                                                            -0.47
y_mean[587]
                                                                                     3290
                                                                                              1.0
                                            -0.31
                                                    -0.27
                                                            -0.24
                                                                            -0.17
                    -0.24
                           6.3e-4
                                      0.04
                                                                    -0.22
                                                                                     3384
y_mean[588]
                                                                                              1.0
y_mean[589]
                     0.07
                           5.3e-4
                                      0.03 4.0e-3
                                                      0.04
                                                             0.06
                                                                     0.09
                                                                             0.13
                                                                                     3482
                                                                                              1.0
                     -0.1
                           6.1e-4
                                      0.03
                                            -0.16
                                                    -0.12
                                                              -0.1
                                                                    -0.08
                                                                            -0.04
                                                                                     2718
                                                                                              1.0
y_mean[590]
                    -0.53
                           4.6e-4
                                      0.03
                                            -0.58
                                                    -0.55
                                                            -0.53
                                                                    -0.51
                                                                            -0.47
                                                                                     3456
y_mean[591]
                                                                                              1.0
                     0.36
                           7.9e-4
                                      0.06
                                              0.25
                                                      0.32
                                                             0.36
                                                                      0.4
                                                                             0.48
                                                                                     5498
                                                                                              1.0
y_mean[592]
                    -0.04
                           5.2e-4
                                            -0.11
                                                            -0.04
                                      0.03
                                                    -0.07
                                                                    -0.02
                                                                             0.02
                                                                                     3803
                                                                                              1.0
y_{mean}[593]
y_{mean}[594]
                    -0.63
                           4.9e-4
                                      0.03
                                            -0.69
                                                    -0.65
                                                            -0.63
                                                                    -0.61
                                                                            -0.57
                                                                                     3956
                                                                                              1.0
                     -0.4
                           7.0e-4
                                            -0.47
                                                              -0.4
                                                                            -0.34
                                      0.03
                                                    -0.43
                                                                    -0.38
                                                                                     2322
y_mean [595]
                                                                                              1.0
                           4.0e-4
                                      0.03
                                              0.13
                                                      0.16
                                                             0.18
                                                                             0.23
                                                                                     3918
y_mean[596]
                     0.18
                                                                      0.2
                                                                                              1.0
                                            -0.39
                                                            -0.35
                                                                            -0.31
y_mean[597]
                    -0.35
                           3.8e-4
                                      0.02
                                                    -0.36
                                                                    -0.34
                                                                                     3128
                                                                                              1.0
y_mean[598]
                    -0.35
                           5.3e-4
                                      0.03
                                            -0.41
                                                    -0.37
                                                            -0.35
                                                                    -0.33
                                                                            -0.29
                                                                                     3697
                                                                                              1.0
y_mean[599]
                    -0.44
                           3.6e-4
                                      0.02
                                            -0.48
                                                    -0.45
                                                            -0.44
                                                                    -0.43
                                                                             -0.4
                                                                                     2920
                                                                                              1.0
```

y_mean[600]	-0.12	4.3e-4	0.02	-0.17	-0.14	-0.12	-0.1	-0.07	3230	1.0
y_mean[601]	-0.35	4.9e-4	0.03	-0.4	-0.37	-0.35	-0.33	-0.29	3708	1.0
y_mean[602]	-0.12	4.3e-4	0.02	-0.16	-0.14	-0.12	-0.11	-0.08	2531	1.0
y_mean[603]	0.22	5.1e-4	0.03	0.16	0.2	0.22	0.24	0.28	3859	1.0
y_mean[604]	-0.55	6.1e-4	0.04	-0.62	-0.57	-0.55	-0.52	-0.48	3573	1.0
y_mean[605]	0.15	4.8e-4	0.03	0.09	0.13	0.15	0.17	0.21	4047	1.0
y_mean[606]	-0.34	5.6e-4	0.03	-0.4	-0.36	-0.34	-0.32	-0.28	2673	1.0
y_mean[607]	-0.39	5.2e-4	0.03	-0.45	-0.42	-0.4	-0.37	-0.33	3924	1.0
y_mean[608]	-0.45	4.4e-4	0.03	-0.5	-0.47	-0.45	-0.43	-0.39	3963	1.0
y_mean[609]	1.09	6.7e-4	0.05	1.0	1.05	1.08	1.12	1.18	4922	1.0
y_mean[610]	-0.48	3.8e-4	0.02	-0.52	-0.49	-0.48	-0.47	-0.44	3295	1.0
y_mean[610] y_mean[611]	-0.43	3.8e-4	0.02	-0.47	-0.44	-0.43	-0.41	-0.39	2986	1.0
y_mean[611] y_mean[612]	-0.43	4.2e-4	0.02	-0.58	-0.44	-0.43	-0.52	-0.49	3292	1.0
• =	-0.54	5.1e-4	0.02	-0.56	-0.55	-0.54	-0.52		3352	1.0
y_mean[613]								-0.49		
y_mean[614]	-0.41	4.3e-4	0.02	-0.46	-0.43	-0.41	-0.39	-0.36	3323	1.0
y_mean[615]	-0.25	5.2e-4	0.03	-0.31	-0.27	-0.25	-0.24	-0.2	3069	1.0
y_mean[616]	2.43	1.0e-3	0.07	2.29	2.39	2.43	2.48	2.58	4987	1.0
y_mean[617]	0.7	4.5e-4	0.03	0.65	0.68	0.7	0.72	0.76	4215	1.0
y_mean[618]	-0.3	5.8e-4	0.03	-0.36	-0.32	-0.29	-0.27	-0.23	3033	1.0
y_mean[619]	0.09	7.4e-4	0.04	0.01	0.06	0.09	0.12	0.17	2861	1.0
y_mean[620]	-0.35	3.6e-4	0.02	-0.39	-0.36	-0.35	-0.33	-0.31	3584	1.0
y_mean[621]	-0.34	7.2e-4	0.05	-0.43	-0.37	-0.34	-0.31	-0.25	4017	1.0
y_mean[622]	0.08	7.6e-4		1.5e-3	0.05	0.08	0.11	0.16	2941	1.0
y_mean[623]	1.82	1.5e-3	0.09	1.64	1.76	1.82	1.88	2.0	3637	1.0
y_mean[624]	-0.37	4.4e-4	0.03	-0.42	-0.38	-0.37	-0.35	-0.32	3416	1.0
y_mean[625]	-0.49	3.7e-4	0.02	-0.53	-0.5	-0.48	-0.47	-0.44	3282	1.0
y_mean[626]	-0.07	4.1e-4	0.02	-0.12	-0.09	-0.07	-0.06	-0.03	3536	1.0
y_mean[627]	0.53	4.9e-4	0.03	0.47	0.5	0.53	0.55	0.59	4258	1.0
y_mean[628]	0.03	5.2e-4	0.03	-0.03	0.01	0.03	0.05	0.09	3333	1.0
y_mean[629]	-0.44	6.8e-4	0.04	-0.52	-0.47	-0.44	-0.41	-0.36	3447	1.0
y_mean[630]	-0.39	4.6e-4	0.03	-0.44	-0.41	-0.39	-0.37	-0.34	3583	1.0
y_mean[631]	-0.48	3.3e-4	0.02	-0.51	-0.49	-0.48	-0.46	-0.44	3165	1.0
y_mean[632]	-0.4	2.7e-4	0.02	-0.43	-0.41	-0.4	-0.39	-0.37	4030	1.0
y_mean[633]	-0.09	6.1e-4	0.03	-0.16	-0.12	-0.1	-0.07	-0.03	2717	1.0
y_mean[634]	-0.45	4.6e-4	0.03	-0.5	-0.47	-0.45	-0.43	-0.39	3860	1.0
y_mean[635]	0.29	6.6e-4	0.04	0.22	0.27	0.29	0.32	0.37	3638	1.0
y_mean[636]	-0.25	6.6e-4	0.04	-0.32	-0.27	-0.25	-0.22	-0.17	3334	1.0
y_mean[637]	-0.11	5.6e-4	0.03	-0.16	-0.13	-0.11	-0.09	-0.05	2590	1.0
y_mean[638]	-0.08	5.2e-4	0.03	-0.13	-0.1	-0.08	-0.06	-0.03	2449	1.0
y_mean[639]	-0.38	4.5e-4	0.02	-0.43	-0.4	-0.38	-0.37	-0.33	3051	1.0
y_mean[640]	-0.5	3.7e-4	0.02	-0.54	-0.52	-0.5	-0.49	-0.46	3426	1.0
y_mean[641]	-0.21	4.5e-4	0.02	-0.26	-0.23	-0.21	-0.19	-0.16	2902	1.0
y_mean[642]	-0.36	5.2e-4	0.03	-0.42	-0.38	-0.36	-0.34	-0.3	3705	1.0
y_mean[642] y_mean[643]	-0.30	5.2e-4 5.0e-4	0.03	-0.42	-0.24	-0.22	-0.34	-0.16	2897	1.0
y_mean[644]	0.48	1.4e-3	0.03	0.3	0.24	0.48	0.54	0.67	4963	1.0
y_mean[644] y_mean[645]	-0.03	4.6e-4	0.03	-0.08	-0.04		8.4e-3	0.07	3000	1.0
y_mean[646] y_mean[646]		7.3e-4	0.05	-0.84	-0.78	-0.03- -0.75	-0.72	-0.66		
• –	-0.75 -0.46								3823	1.0
y_mean[647]	-0.46	2.7e-4	0.02	-0.49	-0.47	-0.46	-0.45	-0.42	3880	1.0

y_mean[648]	0.63	5.8e-4	0.04	0.55	0.6	0.63	0.66	0.71	5553	1.0
y_mean[649]	0.45	5.2e-4	0.03	0.38	0.43	0.45	0.47	0.51	3916	1.0
y_mean[650]	0.14	3.7e-4	0.02	0.09	0.12	0.14	0.15	0.18	3754	1.0
y_mean[651]	0.86	5.2e-4	0.04	0.79	0.83	0.86	0.88	0.93	4904	1.0
y_mean[652]	-0.62	4.8e-4	0.03	-0.69	-0.64	-0.62	-0.6	-0.56	4267	1.0
y_mean[653]	-0.64	5.3e-4	0.03	-0.7	-0.66	-0.64	-0.61	-0.57	3841	1.0
y_mean[654]	-0.3	3.7e-4	0.02	-0.34	-0.31	-0.3	-0.28	-0.25	3267	1.0
y_mean[655]	0.28	4.8e-4	0.03	0.22	0.26	0.28	0.29	0.33	3251	1.0
y_mean[656]	-0.42	3.2e-4	0.02	-0.45	-0.43	-0.42	-0.4	-0.38	3348	1.0
y_mean[657]	-0.37	4.9e-4	0.02	-0.42	-0.39	-0.37	-0.36	-0.32	2441	1.0
y_mean[658]	-0.45	3.4e-4	0.02	-0.48	-0.46	-0.44	-0.43	-0.41	2835	1.0
y_mean[659]	0.43	7.0e-4	0.02	0.58	0.40	0.44	0.43	0.41	4711	1.0
• =		8.3e-4	0.05	0.38	0.04	0.37		0.77		
y_mean[660]	0.37						0.41		3874	1.0
y_mean[661]	-0.39	4.3e-4	0.02	-0.44	-0.41	-0.39	-0.37	-0.34	3019	1.0
y_mean[662]	-0.32	4.4e-4	0.02	-0.37	-0.33	-0.32	-0.3	-0.27	2960	1.0
y_mean[663]	0.04	5.0e-4	0.03	-0.02	0.02	0.04	0.06	0.1	3410	1.0
y_mean[664]	3.64	1.8e-3	0.12	3.41	3.56	3.64	3.72	3.88	4424	1.0
y_mean[665]	-0.02	4.6e-4	0.03	-0.07	-0.04		7.4e-3	0.03	2996	1.0
y_mean[666]	0.61	5.5e-4	0.04	0.54	0.59	0.61	0.64	0.68	4139	1.0
y_mean[667]	3.36	1.8e-3	0.12	3.13	3.28	3.37	3.45	3.6	4363	1.0
y_mean[668]	1.25	7.4e-4	0.05	1.16	1.22	1.25	1.28	1.34	3799	1.0
y_mean[669]	-0.07	4.6e-4	0.03	-0.12	-0.08	-0.06	-0.05	-0.01	3490	1.0
y_mean[670]	-0.17	8.3e-4	0.05	-0.27	-0.2	-0.17	-0.14	-0.08	3149	1.0
y_mean[671]	-0.45	3.4e-4	0.02	-0.48	-0.46	-0.45	-0.43	-0.41	2995	1.0
y_mean[672]	-0.05	4.5e-4	0.02	-0.1	-0.06	-0.05	-0.03	2.9e-4	2915	1.0
y_mean[673]	-0.62	6.7e-4	0.04	-0.69	-0.64	-0.62	-0.59	-0.55	2855	1.0
y_mean[674]	-0.73	9.7e-4	0.06	-0.85	-0.78	-0.73	-0.69	-0.62	3949	1.0
y_mean[675]	0.32	4.6e-4	0.03	0.26	0.3	0.32	0.33	0.37	3214	1.0
y_mean[676]	-0.48	3.4e-4	0.02	-0.52	-0.49	-0.48	-0.47	-0.44	3118	1.0
y_mean[677]	1.66	5.9e-4	0.04	1.58	1.63	1.66	1.69	1.74	4365	1.0
y_mean[678]	0.13	7.2e-4	0.04	0.05	0.1	0.13	0.16	0.21	3153	1.0
y_mean[679]	-0.32	5.5e-4	0.03	-0.38	-0.34	-0.32	-0.3	-0.27	2934	1.0
y_mean[680]	-0.16	4.6e-4	0.03	-0.21	-0.18	-0.16	-0.14	-0.11	3501	1.0
y_mean[681]		4.5e-4	0.03	-0.17	-0.13	-0.12	-0.1	-0.06	3500	1.0
y_mean[682]	-0.42	3.7e-4	0.02	-0.46	-0.44	-0.42	-0.41	-0.39	2721	1.0
y_mean[683]	0.4	4.3e-4	0.03	0.35	0.38	0.4	0.42	0.45	3527	1.0
y_mean[684]	-0.63	5.0e-4	0.03	-0.69	-0.65	-0.63	-0.61	-0.57	3896	1.0
y_mean[685]	1.46	1.2e-3	0.09	1.29	1.4	1.46	1.52	1.63	5231	1.0
y_mean[686]	-0.35	5.6e-4	0.03	-0.4	-0.36	-0.35	-0.33	-0.29	2522	1.0
y_mean[687]	0.37	4.4e-4	0.03	0.32	0.35	0.37	0.38	0.42	3372	1.0
y_mean[688]	-0.46	3.4e-4	0.03	-0.49	-0.47	-0.45	-0.44	-0.42	3033	1.0
• =		8.4e-4								
y_mean[689]	-0.23 -0.41		0.04	-0.31 -0.46	-0.26	-0.23	-0.21	-0.16	2278	1.0
y_mean[690]	-0.41	4.2e-4	0.02	-0.46	-0.43	-0.41	-0.4	-0.37	3282	1.0
y_mean[691]	-0.5	5.2e-4	0.03	-0.56	-0.52	-0.5	-0.48	-0.45	2907	1.0
y_mean[692]	0.11	4.6e-4	0.03	0.06	0.09	0.11	0.13	0.16	3415	1.0
y_mean[693]	-0.11	4.3e-4	0.02	-0.16	-0.13	-0.11	-0.1	-0.07	2573	1.0
y_mean[694]	-0.06	5.4e-4	0.03	-0.12	-0.08	-0.06		9.1e-3	2518	1.0
y_mean[695]	-0.69	1.0e-3	0.06	-0.82	-0.73	-0.69	-0.65	-0.57	3736	1.0

y_mean[696]	-0.27	5.7e-4	0.03	-0.33	-0.29	-0.27	-0.25	-0.21	3129	1.0
y_mean[697]	-0.6	7.0e-4	0.04	-0.68	-0.63	-0.6	-0.58	-0.53	3239	1.0
y_mean[698]	-0.66	5.1e-4	0.03	-0.73	-0.69	-0.66	-0.64	-0.6	4034	1.0
y_mean[699]	0.48	6.7e-4	0.04	0.41	0.46	0.48	0.51	0.56	3574	1.0
y_mean[700]	-0.41	3.9e-4	0.02	-0.45	-0.43	-0.41	-0.4	-0.37	3034	1.0
y_mean[701]	0.57		0.04	0.48	0.54	0.57	0.6	0.65	3873	1.0
y_mean[702]	-0.35		0.03	-0.41	-0.37	-0.36	-0.33	-0.3	3325	1.0
y_mean[703]	-0.29		0.02	-0.33	-0.31	-0.29	-0.28	-0.26	3727	1.0
y_mean[704]	-0.4		0.05	-0.5	-0.43	-0.4	-0.36	-0.29	3152	1.0
y_mean[705]	-0.47		0.03	-0.52	-0.49	-0.47	-0.46	-0.42	3511	1.0
y_mean[706]	-0.48		0.02	-0.52	-0.49	-0.48	-0.47	-0.44	3118	1.0
y_mean[700] y_mean[707]	-0.48		0.02	-0.32	-0.19	-0.43	-0.47	-0.44	2611	1.0
• =			0.02	-0.22 -0.55						
y_mean[708]	-0.47				-0.5	-0.47	-0.44	-0.39	3664	1.0
y_mean[709]	-0.28		0.03	-0.35	-0.3	-0.28	-0.26	-0.22	2625	1.0
y_mean[710]	0.17		0.03	0.12	0.15	0.17	0.19	0.23	3454	1.0
y_mean[711]	0.5		0.04	0.43	0.48	0.5	0.52	0.57	4546	1.0
y_mean[712]	-0.08		0.02	-0.13	-0.1	-0.08	-0.07	-0.04	2787	1.0
y_mean[713]	-0.19		0.03	-0.24	-0.21	-0.19	-0.17	-0.13	3011	1.0
y_mean[714]	-0.48		0.02	-0.52	-0.49	-0.48	-0.46	-0.43	3354	1.0
y_mean[715]	-0.69		0.03	-0.76	-0.72	-0.69	-0.67	-0.63	4201	1.0
y_mean[716]	-0.5	3.6e-4	0.02	-0.54	-0.52	-0.5	-0.49	-0.46	3254	1.0
y_mean[717]	-0.77	10.0e-4	0.06	-0.9	-0.81	-0.77	-0.73	-0.65	3926	1.0
y_mean[718]	-0.17	5.0e-4	0.03	-0.22	-0.19	-0.17	-0.15	-0.12	2883	1.0
y_mean[719]	-0.39	4.0e-4	0.02	-0.44	-0.41	-0.39	-0.38	-0.35	2990	1.0
y_mean[720]	0.24	4.1e-4	0.03	0.19	0.23	0.24	0.26	0.29	3814	1.0
y_mean[721]	0.29	4.5e-4	0.03	0.23	0.27	0.29	0.31	0.35	3741	1.0
y_mean[722]	-0.04	6.7e-4	0.04	-0.11	-0.06	-0.04	-0.02	0.03	2748	1.0
y_mean[723]	-3.3e-3	4.3e-4	0.03	-0.05	-0.02-	-3.1e-3	0.01	0.05	3402	1.0
y_mean[724]	-0.41	6.8e-4	0.03	-0.48	-0.43	-0.41	-0.39	-0.35	2341	1.0
y_mean[725]	0.77	6.7e-4	0.05	0.67	0.73	0.77	0.8	0.87	5729	1.0
y_mean[726]	-0.78	6.7e-4	0.04	-0.86	-0.81	-0.78	-0.75	-0.7	3877	1.0
y_mean[727]	0.08	6.3e-4	0.04	9.5e-3	0.05	0.08	0.1	0.15	3191	1.0
y_mean[728]	-0.12			-0.19		-0.12	-0.1	-0.05	3587	1.0
y_mean[729]		5.4e-4	0.03	-0.79	-0.75	-0.73	-0.7	-0.66	4211	1.0
y_mean[730]	0.07		0.03	0.01	0.05	0.07	0.08	0.12	3280	1.0
y_mean[731]	-0.29		0.04	-0.36	-0.31	-0.29	-0.26	-0.21	3266	1.0
y_mean[732]	-0.35		0.03	-0.4	-0.37	-0.35	-0.33	-0.3	2785	1.0
y_mean[733]	-0.78		0.04	-0.86	-0.81	-0.78	-0.75	-0.69	3871	1.0
y_mean[734]	0.31		0.03	0.25	0.29	0.31	0.33	0.37	4045	1.0
y_mean[735]	0.53		0.03	0.46	0.5	0.53	0.55	0.59	4354	1.0
y_mean[736] y_mean[736]	-0.37		0.02	-0.42	-0.39	-0.37	-0.35	-0.32	2431	1.0
• =			0.02	2.07		2.24	2.3	$\frac{-0.32}{2.41}$	5603	1.0
y_mean[737]	2.24				2.18					
y_mean[738]	1.79		0.06	1.68	1.75	1.79	1.83	1.9	4785	1.0
y_mean[739]	-0.4		0.02	-0.44	-0.41	-0.4	-0.38	-0.36	3099	1.0
y_mean[740]	-0.34		0.03	-0.4	-0.36	-0.34	-0.32	-0.28	3354	1.0
y_mean[741]	0.87		0.04	0.79	0.84	0.86	0.89	0.94	4210	1.0
y_mean[742]	0.5		0.03	0.43	0.48	0.5	0.52	0.57	4268	1.0
y_mean[743]	-0.54	7.7e-4	0.04	-0.62	-0.56	-0.53	-0.51	-0.45	3302	1.0

y_mean[744]	-0.3	4.7e-4	0.03	-0.35	-0.32	-0.3	-0.28	-0.25	3161	1.0
y_mean[745]	0.33	4.6e-4	0.03	0.28	0.32	0.33	0.35	0.38	3166	1.0
y_mean[746]	-0.08	4.3e-4	0.02	-0.12	-0.09	-0.08	-0.06	-0.03	3003	1.0
y_mean[747]	-0.36	5.3e-4	0.03	-0.41	-0.37	-0.36	-0.34	-0.3	2471	1.0
y_mean[748]	-0.69	4.9e-4	0.03	-0.76	-0.72	-0.7	-0.67	-0.63	4284	1.0
y_mean[749]	-0.51	3.7e-4	0.02	-0.56	-0.53	-0.51	-0.5	-0.47	3275	1.0
y_mean[750]	-0.74	1.0e-3	0.06	-0.86	-0.78	-0.74	-0.69	-0.61	3591	1.0
y_mean[751]	-0.41	4.2e-4	0.03	-0.46	-0.43	-0.41	-0.39	-0.36	3587	1.0
y_mean[752]	-0.18	4.3e-4	0.02	-0.23	-0.2	-0.18	-0.17	-0.14	2666	1.0
y_mean[753]	6.62	2.7e-3	0.17	6.29	6.51	6.62	6.73	6.96	3969	1.0
y_mean[754]	-0.09	5.9e-4	0.03	-0.15	-0.11	-0.09	-0.06	-0.02	3041	1.0
y_mean[755]	-0.37	4.9e-4	0.02	-0.42	-0.39	-0.37	-0.36	-0.32	2421	1.0
y_mean[756]	-0.53	4.0e-4	0.02	-0.57	-0.54	-0.53	-0.51	-0.48	3306	1.0
y_mean[757]	-0.29	5.2e-4	0.02	-0.35	-0.31	-0.29	-0.27	-0.23	3337	1.0
y_mean[758]	-0.61	6.3e-4	0.03	-0.68	-0.64	-0.61	-0.59	-0.54	3187	1.0
y_mean[759]	0.01	4.2e-4	0.04	0.00	0.14	0.16	0.18	0.34	3826	1.0
•	-0.54	1.3e-3	0.03	-0.69	-0.59	-0.54	-0.49	-0.39	3159	1.0
y_mean[760]				-0.69	-0.59					
y_mean[761]	-0.5	3.6e-4	0.02			-0.5	-0.49	-0.46	3346	1.0
y_mean[762]	-0.14	5.2e-4	0.03	-0.19	-0.16	-0.14	-0.12	-0.09	2694	1.0
y_mean[763]	1.11	5.6e-4	0.04	1.04	1.09	1.11	1.14	1.19	4335	1.0
y_mean[764]	-0.56	6.0e-4	0.03	-0.63	-0.59	-0.56	-0.54	-0.49	3344	1.0
y_mean[765]	2.4	8.7e-4	0.06	2.29	2.36	2.4	2.44	2.51	4417	1.0
y_mean[766]	0.43	5.0e-4	0.03	0.37	0.41	0.43	0.45	0.49	4045	1.0
y_mean[767]	-0.42	4.6e-4	0.03	-0.47	-0.44	-0.42	-0.4	-0.36	3749	1.0
y_mean[768]	-0.37	4.9e-4	0.03	-0.42	-0.39	-0.37	-0.35	-0.31	3091	1.0
y_mean[769]	-0.4	4.2e-4	0.02	-0.45	-0.42	-0.4	-0.39	-0.36	3100	1.0
y_mean[770]	-0.12	5.3e-4	0.03	-0.18	-0.14	-0.12	-0.1	-0.07	2606	1.0
y_mean[771]	-0.5	3.6e-4	0.02	-0.54	-0.52	-0.5	-0.49	-0.46	3274	1.0
y_mean[772]	-0.39	3.3e-4	0.02	-0.43	-0.4	-0.39	-0.37	-0.35	3490	1.0
y_mean[773]	-0.63	1.3e-3	0.08	-0.78	-0.68	-0.63	-0.58	-0.48	3382	1.0
y_mean[774]	-0.16	7.1e-4	0.04	-0.23	-0.18	-0.16	-0.13	-0.08	2692	1.0
y_mean[775]	-0.59	5.7e-4	0.03	-0.65	-0.61	-0.59	-0.57	-0.53	3217	1.0
y_mean[776]	0.04	7.2e-4	0.04	-0.03	0.02	0.04	0.07	0.12	2655	1.0
y_mean[777]	-0.19	4.7e-4	0.03	-0.25	-0.21	-0.19	-0.17	-0.14	3278	1.0
y_mean[778]	-0.53	4.5e-4	0.03	-0.58	-0.55	-0.53	-0.51	-0.48	3434	1.0
y_mean[779]	0.75	8.0e-4	0.05	0.65	0.72	0.75	0.78	0.84	3861	1.0
y_mean[780]	-0.1	4.5e-4	0.03	-0.16	-0.12	-0.1	-0.09	-0.05	3495	1.0
y_mean[781]	-0.25	7.3e-4	0.04	-0.33	-0.28	-0.25	-0.22	-0.17	3346	1.0
y_mean[782]	0.47	4.4e-4	0.03	0.41	0.45	0.47	0.48	0.52	3789	1.0
y_mean[783]	-0.54	4.5e-4	0.03	-0.59	-0.56	-0.54	-0.52	-0.49	3331	1.0
y_mean[784]	-0.5	6.4e-4	0.04	-0.57	-0.52	-0.49	-0.47	-0.42	3313	1.0
y_mean[785]	-0.45	3.4e-4	0.02	-0.49	-0.47	-0.45	-0.44	-0.42	3260	1.0
y_mean[786]	-0.4		0.02	-0.44	-0.41	-0.4	-0.38	-0.36	2642	1.0
y_mean[787]	0.56	5.1e-4	0.03	0.49	0.53	0.56	0.58	0.62	4192	1.0
y_mean[788]	0.38	4.5e-4	0.03	0.33	0.36	0.38	0.39	0.43	3368	1.0
y_mean[789]	0.71	6.6e-4	0.04	0.63	0.68	0.71	0.74	0.79	3768	1.0
y_mean[790]	0.32	7.5e-4	0.04	0.24	0.29	0.32	0.36	0.41	3535	1.0
y_mean[791]	-0.39	4.4e-4	0.02	-0.44	-0.41	-0.39	-0.38	-0.35	2437	1.0
J 011	0.00	1.10 1	0.02	V	V • 11	0.00	0.00	0.00	2 10 1	1.0

y_mean[792]	0.27	5.6e-4	0.03	0.21	0.25	0.27	0.29	0.33	2984	1.0
y_mean[793]	-0.67	4.7e-4	0.03	-0.73	-0.69	-0.67	-0.65	-0.61	4258	1.0
y_mean[794]	-0.39	4.4e-4	0.03	-0.44	-0.41	-0.39	-0.38	-0.34	3419	1.0
y_mean[795]	-0.17	4.4e-4	0.03	-0.23	-0.19	-0.17	-0.16	-0.12	3588	1.0
y_mean[796]	-0.55	5.3e-4	0.03	-0.61	-0.57	-0.55	-0.53	-0.49	3364	1.0
y_mean[797]	-0.23	4.7e-4	0.03	-0.28	-0.25	-0.23	-0.22	-0.18	2947	1.0
y_mean[798]	-0.48	4.3e-4	0.02	-0.53	-0.5	-0.48	-0.46	-0.43	3303	1.0
y_mean[799]	-0.45	3.5e-4	0.02	-0.49	-0.46	-0.45	-0.44	-0.41	3011	1.0
y_mean[800]	1.1	6.4e-4	0.04	1.02	1.07	1.1	1.12	1.17	3898	1.0
y_mean[801]	2.79	1.7e-3	0.11	2.57	2.71	2.79	2.87	3.01	4616	1.0
y_mean[802]	-0.3	5.2e-4	0.03	-0.36	-0.32	-0.3	-0.29	-0.25	3114	1.0
y_mean[803]	-0.4	3.8e-4	0.02	-0.44	-0.41	-0.4	-0.38	-0.36	2967	1.0
y_mean[804]	-0.51	4.1e-4	0.02	-0.55	-0.52	-0.51	-0.49	-0.46	3525	1.0
y_mean[805]	0.52	6.3e-4	0.02	0.45	0.5	0.53	0.55	0.6	4015	1.0
y_mean[806]	-0.39	4.3e-4	0.04	-0.43	-0.41	-0.39	-0.38	-0.35	2633	1.0
y_mean[807]	0.39	5.7e-4	0.02	0.43	0.41	0.33	0.22	0.33	3381	1.0
y_mean[808]	-0.53	5.7e-4 5.6e-4	0.03	-0.6	-0.55	-0.53	-0.51	-0.46	3938	1.0
V —	-0.53	8.7e-4								
y_mean[809]			0.05	-0.63	-0.57	-0.54	-0.51	-0.45	2750	1.0
y_mean[810]	-0.47	7.4e-4	0.04	-0.55	-0.5	-0.47	-0.44	-0.39	3221	1.0
y_mean[811]	-0.08	7.0e-4	0.04	-0.15	-0.1	-0.08		9.6e-4	3040	1.0
y_mean[812]	-0.21	4.9e-4	0.03	-0.26	-0.23	-0.21	-0.19	-0.15	3164	1.0
y_mean[813]	0.72	6.6e-4	0.04	0.63	0.69	0.72	0.75	0.8	4328	1.0
y_mean[814]	-0.27	6.7e-4	0.04	-0.35	-0.3	-0.27	-0.25	-0.2	3230	1.0
y_mean[815]	-0.43	3.7e-4	0.02	-0.47	-0.44	-0.43	-0.41	-0.39	3193	1.0
y_mean[816]	-0.52	4.0e-4	0.02	-0.57	-0.54	-0.52	-0.51	-0.48	3357	1.0
y_mean[817]	12.7	4.7e-3	0.3	12.1	12.49	12.69	12.9	13.28	4100	1.0
y_mean[818]	-0.53	4.5e-4	0.03	-0.58	-0.55	-0.53	-0.52	-0.48	3389	1.0
y_mean[819]	-0.5	3.7e-4	0.02	-0.54	-0.52	-0.5	-0.49	-0.46	3426	1.0
y_mean[820]	1.32	5.7e-4	0.04	1.25	1.29	1.32	1.34	1.39	3960	1.0
y_mean[821]	-0.54	4.4e-4	0.02	-0.59	-0.56	-0.54	-0.53	-0.49	3279	1.0
y_mean[822]	0.44	5.0e-4	0.03	0.38	0.42	0.44	0.46	0.5	3707	1.0
y_mean[823]	0.07	4.4e-4	0.03	0.02	0.06	0.07	0.09	0.12	3772	1.0
y_mean[824]	-0.11	4.3e-4	0.02	-0.16	-0.13	-0.11	-0.1	-0.07	2556	1.0
y_mean[825]	-0.34	3.6e-4	0.02	-0.38	-0.35	-0.34	-0.32	-0.3	3484	1.0
y_mean[826]	-0.45	4.5e-4	0.03	-0.5	-0.46	-0.45	-0.43	-0.39	3597	1.0
y_mean[827]	0.4	4.3e-4	0.03	0.35	0.38	0.4	0.42	0.45	3660	1.0
y_mean[828]	-0.08	4.5e-4	0.02	-0.13	-0.1	-0.08	-0.07	-0.04	2605	1.0
y_mean[829]	-0.18	3.9e-4	0.02	-0.23	-0.2	-0.19	-0.17	-0.14	3672	1.0
y_mean[830]	0.46	7.6e-4	0.05	0.37	0.43	0.46	0.49	0.55	3546	1.0
y_mean[831]	1.71	7.4e-4	0.06	1.6	1.67	1.71	1.75	1.82	5860	1.0
y_mean[832]	-0.83	8.1e-4	0.05	-0.93	-0.87	-0.83	-0.8	-0.74	3632	1.0
y_mean[833]	-0.45	3.4e-4	0.02	-0.49	-0.46		-0.44	-0.41	3045	1.0
y_mean[834]	-0.4	4.2e-4	0.02	-0.44	-0.41	-0.4	-0.39	-0.36	2449	1.0
y_mean[835]	-0.36	5.3e-4	0.03	-0.41	-0.38		-0.34	-0.3	2468	1.0
y_mean[836]	0.11	5.9e-4	0.04	0.04	0.08	0.11	0.13	0.18	3752	1.0
y_mean[837]	2.27	9.0e-4	0.06	2.15	2.23	2.27	2.31	2.39	4783	1.0
y_mean[838]	9.2e-3	5.3e-4	0.03	-0.05		8.8e-3	0.03	0.07	3703	1.0
y_mean[839]	0.04	4.5e-4		8.0e-3	0.03		0.06	0.09	3407	1.0
J _modif [000]	0.01	1.00 1	0.00	2.00	0.00	0.01	0.00	0.00	0101	1.0

y_mean[840]	-0.54	4.6e-4	0.03	-0.59	-0.56	-0.54	-0.52	-0.49	3367	1.0
y_mean[841]	0.13	3.5e-4	0.02	0.08	0.11	0.13	0.14	0.17	3618	1.0
y_mean[842]	0.07	9.1e-4	0.05	-0.02	0.04	0.07	0.1	0.16	2698	1.0
y_mean[843]	-0.48	7.7e-4	0.04	-0.56	-0.51	-0.48	-0.45	-0.39	3061	1.0
y_mean[844]	-0.05	4.5e-4	0.02	-0.1	-0.07	-0.05	-0.04-	5.4e-3	2896	1.0
y_mean[845]	-0.08	4.5e-4	0.02	-0.13	-0.1	-0.08	-0.06	-0.03	2642	1.0
y_mean[846]	0.98	5.6e-4	0.04	0.91	0.96	0.98	1.01	1.06	5001	1.0
y_mean[847]	-0.02	4.6e-4	0.03	-0.08	-0.04		5.3e-3	0.03	3357	1.0
y_mean[848]	1.12	7.3e-4	0.05	1.02	1.08	1.12	1.15	1.22	4617	1.0
y_mean[849]	0.79	8.4e-4	0.06	0.68	0.75	0.79	0.82	0.9	4345	1.0
y_mean[850]	-0.3	3.3e-4	0.02	-0.34	-0.31	-0.3	-0.29	-0.26	3540	1.0
y_mean[851]	1.32	6.1e-4	0.02	1.24	1.29	1.32	1.35	1.41	5378	1.0
y_mean[852]	-0.37	4.8e-4	0.03	-0.42	-0.39	-0.37	-0.35	-0.32	3028	1.0
y_mean[853]	-0.33	6.0e-4	0.03	-0.39	-0.35	-0.33	-0.31	-0.26	2883	1.0
y_mean[854]	-0.33	4.4e-4	0.03	-0.42	-0.39	-0.37	-0.31	-0.33	2739	1.0
y_mean[855]	-0.49	5.2e-4	0.02	-0.42	-0.51	-0.49	-0.47	-0.33	3607	1.0
• =			0.03							
y_mean[856]	-0.54	6.5e-4		-0.61	-0.56	-0.54	-0.51	-0.46	3137	1.0
y_mean[857]	-0.13	7.0e-4	0.04	-0.2	-0.16	-0.13	-0.11	-0.06	2640	1.0
y_mean[858]	-0.13	4.2e-4	0.02	-0.17	-0.14	-0.13	-0.11	-0.08	2953	1.0
y_mean[859]	-0.35	9.1e-4	0.04	-0.43	-0.38	-0.35	-0.32	-0.27	2097	1.0
y_mean[860]	-6.0e-3	4.7e-4	0.03	-0.06		6.1e-3	0.01	0.05	3280	1.0
y_mean[861]	-0.03	5.5e-4	0.03	-0.1	-0.06	-0.03	-0.01	0.03	4052	1.0
y_mean[862]	0.03	5.0e-4	0.03	-0.02	0.01	0.03	0.05	0.09	3303	1.0
y_mean[863]	-0.54	4.7e-4	0.03	-0.59	-0.55	-0.53	-0.52	-0.48	3408	1.0
y_mean[864]	-0.28	6.0e-4	0.03	-0.34	-0.31	-0.28	-0.26	-0.22	2608	1.0
y_mean[865]	-0.43	8.8e-4	0.05	-0.52	-0.46	-0.43	-0.4	-0.33	3045	1.0
y_mean[866]	-0.27	7.0e-4	0.04	-0.35	-0.3	-0.27	-0.25	-0.2	3146	1.0
y_mean[867]	-0.1	5.1e-4	0.03	-0.15	-0.12	-0.1	-0.08	-0.05	2421	1.0
y_mean[868]	0.55	6.5e-4	0.04	0.46	0.52	0.55	0.58	0.63	4062	1.0
y_mean[869]	-0.6	5.9e-4	0.04	-0.67	-0.62	-0.6	-0.57	-0.53	3525	1.0
y_mean[870]	0.38	4.4e-4	0.03	0.33	0.36	0.38	0.4	0.43	3801	1.0
y_mean[871]	0.23	7.0e-4	0.05	0.14	0.2	0.23	0.26	0.32	4328	1.0
y_mean[872]	-0.09	4.4e-4	0.02	-0.14	-0.11	-0.09	-0.08	-0.05	2595	1.0
y_mean[873]	1.08	6.3e-4	0.04	0.99	1.05	1.08	1.11	1.16	4861	1.0
y_mean[874]	-0.14	4.4e-4	0.02	-0.18	-0.15	-0.14	-0.12	-0.09	2499	1.0
y_mean[875]	-0.41	2.7e-4	0.02	-0.44	-0.42	-0.41	-0.4	-0.38	3862	1.0
y_mean[876]	-0.2	4.4e-4	0.02	-0.24	-0.21	-0.2	-0.18	-0.15	2711	1.0
y_mean[877]	-0.18	4.9e-4	0.03	-0.24	-0.2	-0.18	-0.16	-0.12	3456	1.0
y_mean[878]	-0.66	5.6e-4	0.04	-0.73	-0.68	-0.66	-0.64	-0.59	3924	1.0
y_mean[879]	-0.53	8.5e-4	0.05	-0.63	-0.56	-0.53	-0.49	-0.43	3415	1.0
y_mean[880]	-0.66	1.2e-3	0.07	-0.8	-0.71	-0.66	-0.61	-0.52	3450	1.0
y_mean[881]	-0.53	4.4e-4	0.03	-0.58	-0.55	-0.53	-0.51	-0.48	3335	1.0
y_mean[882]	-0.39	4.3e-4	0.02	-0.44	-0.41	-0.39	-0.38	-0.35	2560	1.0
y_mean[883]	-0.37	4.8e-4	0.02	-0.42	-0.39	-0.37	-0.36	-0.33	2443	1.0
y_mean[884]	-0.43	4.6e-4	0.03	-0.48	-0.45	-0.43	-0.41	-0.37	3874	1.0
y_mean[885]	0.29	4.7e-4	0.03	0.23	0.27	0.29	0.31	0.35	3689	1.0
y_mean[886]	1.23	5.9e-4	0.04	1.15	1.2	1.23	1.25	1.31	4741	1.0
y_mean[887]	1.84	8.2e-4	0.06	1.72	1.8	1.84	1.88	1.96	5452	1.0
J _modif [001]	1.01	0.20 1	0.00		1.0	1.01	1.00	1.00	0102	1.0

y_mean[888]	2.55	1.3e-3	0.09	2.38	2.5	2.55	2.61	2.73	4503	1.0
y_mean[889]	-0.42	3.7e-4	0.02	-0.46	-0.44	-0.42	-0.41	-0.39	2663	1.0
y_mean[890]	-0.38	6.7e-4	0.03	-0.45	-0.4	-0.38	-0.36	-0.32	2411	1.0
y_mean[891]	-0.21	6.6e-4	0.03	-0.27	-0.23	-0.21	-0.18	-0.14	2665	1.0
y_mean[892]	0.19	6.3e-4	0.04	0.11	0.17	0.19	0.22	0.27	4146	1.0
y_mean[893]	-0.61	6.6e-4	0.04	-0.69	-0.64	-0.61	-0.58	-0.53	3696	1.0
y_mean[894]	0.58	6.0e-4	0.04	0.51	0.56	0.58	0.61	0.66	4078	1.0
y_mean[895]	0.36	5.1e-4	0.03	0.3	0.34	0.36	0.38	0.42	3803	1.0
y_mean[896]	5.08	2.0e-3	0.13	4.83	4.99	5.08	5.16	5.33	3987	1.0
y_mean[897]	-0.24	4.8e-4	0.03	-0.29	-0.26	-0.24	-0.22	-0.19	2917	1.0
y_mean[898]	-0.4	4.2e-4	0.02	-0.45	-0.42	-0.4	-0.39	-0.36	3439	1.0
y_mean[899]	0.38	4.4e-4	0.03	0.33	0.36	0.38	0.4	0.43	3388	1.0
y_mean[900]	0.1	5.8e-4	0.03	0.03	0.08	0.1	0.13	0.17	3668	1.0
y_mean[901]	-0.49	4.7e-4	0.03	-0.55	-0.51	-0.49	-0.47	-0.44	3684	1.0
y_mean[901] y_mean[902]	2.3e-3	4.5e-4	0.03	-0.05		2.3e-3	0.02	0.05	3463	1.0
y_mean[903]	-0.53	4.0e-4	0.02	-0.57	-0.54	-0.53	-0.51	-0.48	3272	1.0
y_mean[904]	-0.41	4.2e-4	0.02	-0.46	-0.43	-0.41	-0.4	-0.36	3294	1.0
y_mean[904] y_mean[905]	0.41	5.5e-4	0.02	0.40	0.06	0.09	0.11	0.16	4066	1.0
y_mean[906]	-0.73	6.3e-4	0.04	-0.81	-0.76	-0.73	-0.7	-0.65	4019	1.0
y_mean[900] y_mean[907]	0.15	5.9e-4	0.04	0.08	0.13	0.15	0.18	0.22	3876	1.0
• =	-0.15	3.9e-4 4.4e-4	0.04	-0.19	-0.16	-0.15	-0.13	-0.1	2511	1.0
y_mean[908]		4.4e-4 6.6e-4	0.02	0.13		0.15				1.0
y_mean[909]	0.21				0.18		0.23	0.28	3484	
y_mean[910]	-0.6	5.0e-4	0.03	-0.67	-0.62	-0.6	-0.58	-0.54	4552	1.0
y_mean[911]	-0.28	6.2e-4	0.04	-0.35	-0.31	-0.28	-0.26	-0.21	3162	1.0
y_mean[912]	0.83	6.1e-4	0.04	0.75	0.8	0.83	0.85	0.91	4185	1.0
y_mean[913]	-0.44	4.2e-4	0.02	-0.48	-0.45	-0.44	-0.42	-0.4	2968	1.0
y_mean[914]	0.12	7.1e-4	0.05	0.02	0.09	0.12	0.15	0.21	4275	1.0
y_mean[915]	1.01	4.9e-4	0.03	0.95	0.99	1.01	1.04	1.08	4468	1.0
y_mean[916]	0.3	5.2e-4	0.03	0.24	0.28	0.3	0.32	0.35	3006	1.0
y_mean[917]	-0.56	7.2e-4	0.04	-0.64	-0.58	-0.56	-0.53	-0.47	3384	1.0
y_mean[918]	-0.49	3.4e-4	0.02	-0.53	-0.5	-0.49	-0.48	-0.45	3166	1.0
y_mean[919]	-0.13	5.2e-4	0.03	-0.18	-0.15	-0.13	-0.11	-0.07	2598	1.0
y_mean[920]	-0.72	5.2e-4	0.03	-0.78	-0.74	-0.72	-0.69	-0.65	4241	1.0
y_mean[921]	0.48	4.9e-4	0.03	0.42	0.46	0.48	0.5	0.54	4435	1.0
y_mean[922]	1.3	6.4e-4	0.04	1.22	1.28	1.31	1.33	1.39	4445	1.0
y_mean[923]	-0.5	3.5e-4	0.02	-0.54	-0.51	-0.5	-0.48	-0.46	3192	1.0
y_mean[924]	-0.09	4.3e-4	0.02	-0.13	-0.1	-0.09	-0.07	-0.04	2800	1.0
y_mean[925]	-0.36	4.8e-4	0.03	-0.41	-0.38	-0.36	-0.34	-0.31	3076	1.0
y_mean[926]	0.23	6.6e-4	0.04	0.14	0.2	0.23	0.26	0.31	4155	1.0
y_mean[927]	-0.06	4.4e-4	0.02	-0.11	-0.07	-0.06	-0.04	-0.01	2865	1.0
y_mean[928]	1.46	6.2e-4	0.05	1.37	1.43	1.46	1.49	1.55	5865	1.0
y_mean[929]	-0.29	6.9e-4	0.04	-0.37	-0.32	-0.29	-0.27	-0.22	3029	1.0
y_mean[930]	-0.1	4.7e-4	0.03	-0.16	-0.12	-0.1	-0.08	-0.05	3663	1.0
y_mean[931]	-0.54	5.8e-4	0.03	-0.6	-0.56	-0.54	-0.51	-0.47	3497	1.0
y_mean[932]	-0.49	3.4e-4	0.02	-0.53	-0.5	-0.49	-0.48	-0.45	3180	1.0
y_mean[933]	0.62	9.2e-4	0.06	0.49	0.57	0.62	0.66	0.74	4936	1.0
y_mean[934]	1.16	6.0e-4	0.05	1.07	1.12	1.16	1.19	1.25	5899	1.0
y_mean[935]	-0.19	6.4e-4	0.04	-0.26	-0.22	-0.19	-0.17	-0.12	3404	1.0
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y_mean[936]	-0.13	4.7e-4	0.02	-0.18	-0.15	-0.13	-0.12	-0.09	2468	1.0
y_mean[937]	-0.42	4.4e-4	0.02	-0.47	-0.43	-0.42	-0.4	-0.37	3135	1.0
y_mean[938]	-0.37	4.1e-4	0.02	-0.41	-0.39	-0.37	-0.36	-0.33	2919	1.0
y_mean[939]	-0.55	5.5e-4	0.03	-0.61	-0.57	-0.55	-0.53	-0.49	3358	1.0
y_mean[940]	-0.45	3.7e-4	0.02	-0.5	-0.47	-0.45	-0.44	-0.41	3152	1.0
y_mean[941]	-0.4	4.3e-4	0.02	-0.44	-0.41	-0.4	-0.38	-0.35	3044	1.0
y_mean[942]	0.2	4.2e-4	0.03	0.15	0.18	0.2	0.22	0.25	3761	1.0
y_mean[943]	-0.05	6.0e-4	0.03	-0.11	-0.07	-0.05	-0.03	0.02	2846	1.0
y_mean[944]	-0.56	5.7e-4	0.03	-0.62	-0.58	-0.56	-0.54	-0.49	3348	1.0
y_mean[945]	-0.43	3.6e-4	0.02	-0.47	-0.45	-0.43	-0.42	-0.4	2822	1.0
y_mean[946]	0.02	5.6e-4	0.03		-1.8e-3	0.02	0.04	0.08	3210	1.0
y_mean[947]	-0.26	5.3e-4	0.03	-0.31	-0.28	-0.26	-0.24	-0.2	3172	1.0
y_mean[948]	-0.61	5.9e-4	0.03	-0.68	-0.63	-0.61	-0.59	-0.54	3623	1.0
y_mean[948] y_mean[949]	0.16	4.4e-4	0.04	0.11	0.05	0.01	0.18	0.34	3544	1.0
y_mean[949] y_mean[950]	0.10	8.4e-4	0.03	0.11	0.13	0.10	0.18	0.76	4323	1.0
• =	0.03	4.6e-4	0.03	0.28	0.82	0.83	0.09	0.76	4323	1.0
y_mean[951]										
y_mean[952]	-0.67	4.7e-4	0.03	-0.73	-0.69	-0.67	-0.65	-0.61	4480	1.0
y_mean[953]	0.23	4.9e-4	0.03	0.17	0.21	0.23	0.25	0.29	4061	1.0
y_mean[954]	-0.47	3.5e-4	0.02	-0.51	-0.49	-0.47	-0.46	-0.43	3451	1.0
y_mean[955]	-0.63	4.9e-4	0.03	-0.69	-0.65	-0.63	-0.6	-0.56	4580	1.0
y_mean[956]	0.2	5.6e-4	0.03	0.13	0.17	0.2	0.22	0.26	3648	1.0
y_mean[957]	-0.44	4.0e-4	0.02	-0.48	-0.45	-0.44	-0.42	-0.39	3672	1.0
y_mean[958]	-0.7	4.9e-4	0.03	-0.76	-0.72	-0.7	-0.68	-0.63	4334	1.0
y_mean[959]	0.4	4.7e-4	0.03	0.34	0.38	0.4	0.42	0.46	3905	1.0
y_mean[960]	0.2	6.5e-4	0.04	0.12	0.17	0.2	0.22	0.27	3252	1.0
y_mean[961]	-0.34	5.9e-4	0.03	-0.39	-0.36	-0.34	-0.32	-0.28	2541	1.0
y_mean[962]	-0.7	5.9e-4	0.04	-0.77	-0.72	-0.7	-0.67	-0.62	4203	1.0
y_mean[963]	-0.24	4.8e-4	0.03	-0.29	-0.25	-0.24	-0.22	-0.18	2904	1.0
y_mean[964]	-0.41	5.0e-4	0.03	-0.46	-0.42	-0.41	-0.39	-0.36	2614	1.0
y_mean[965]	-0.58	5.4e-4	0.03	-0.64	-0.6	-0.58	-0.56	-0.52	3240	1.0
y_mean[966]	3.35	1.0e-3	0.07	3.23	3.31	3.35	3.4	3.49	4262	1.0
y_mean[967]	0.27	4.8e-4	0.03	0.21	0.25	0.27	0.28	0.32	3329	1.0
y_mean[968]	0.25	1.1e-3	0.07	0.11	0.2	0.25	0.3	0.4	4264	1.0
y_mean[969]	-0.43	8.0e-4	0.05	-0.52	-0.46	-0.43	-0.4	-0.34	3268	1.0
y_mean[970]	0.03	7.0e-4	0.04	-0.05	2.0e-3	0.03	0.06	0.11	3695	1.0
y_mean[971]	-0.14	4.2e-4	0.02	-0.19	-0.16	-0.14	-0.13	-0.1	2614	1.0
y_mean[972]	-0.49	6.5e-4	0.04	-0.57	-0.52	-0.49	-0.47	-0.42	3379	1.0
y_mean[973]	0.33	4.6e-4	0.03	0.28	0.32	0.33	0.35	0.38	3132	1.0
y_mean[974]	-0.28	5.6e-4	0.03	-0.34	-0.3	-0.28	-0.26	-0.21	3145	1.0
y_mean[975]	-0.45	3.9e-4	0.02	-0.5	-0.47	-0.45	-0.44	-0.41	3341	1.0
y_mean[976]	0.47	4.8e-4	0.03	0.41	0.45	0.47	0.49	0.53	4138	1.0
y_mean[977]	0.36	4.4e-4	0.03	0.31	0.35	0.36	0.38	0.41	3327	1.0
y_mean[978]	-0.21	4.5e-4	0.02	-0.26	-0.23	-0.21	-0.2	-0.17	2816	1.0
y_mean[979]	-0.38	7.5e-4	0.04	-0.45	-0.41	-0.38	-0.36	-0.31	2365	1.0
y_mean[980]	-0.21	5.0e-4	0.03	-0.27	-0.23	-0.21	-0.19	-0.16	3063	1.0
y_mean[981]	0.13	4.6e-4	0.03	0.08	0.11	0.13	0.15	0.19	3385	1.0
y_mean[982]	-0.06	7.1e-4	0.04	-0.14	-0.09	-0.06	-0.04	0.13	2827	1.0
y_mean[983]	1.19	7.1e <del>1</del> 7.1e-4	0.04	1.1	1.16	1.19	1.22	1.27	3806	1.0
3 _mcan [200]	1.13	1.16 4	0.04	1.1	1.10	1.13	1.22	1.41	5500	1.0

y_mean[984]	0.03	7.4e-4	0.04	-0.05	5.8e-3	0.03	0.06	0.11	3091	1.0
y_mean[985]	0.13	6.1e-4	0.03	0.07	0.11	0.13	0.15	0.2	2914	1.0
y_mean[986]	-0.13	4.2e-4	0.02	-0.18	-0.15	-0.13	-0.12	-0.09	2682	1.0
y_mean[987]	-0.43	4.8e-4	0.03	-0.48	-0.45	-0.43	-0.41	-0.37	3904	1.0
y_mean[988]	-0.54	4.4e-4	0.03	-0.59	-0.56	-0.54	-0.52	-0.49	3339	1.0
y_mean[989]	-0.49	4.2e-4	0.03	-0.54	-0.5	-0.49	-0.47	-0.44	3670	1.0
y_mean[990]	0.12	4.0e-4	0.02	0.07	0.11	0.12	0.14	0.17	3603	1.0
y_mean[991]	0.04	4.3e-4		7.7e-3	0.03	0.04	0.06	0.09	3661	1.0
y_mean[992]	-0.56	8.5e-4	0.04	-0.64	-0.58	-0.56	-0.53	-0.47	2459	1.0
y_mean[993]	-0.55	7.3e-4	0.04	-0.63	-0.58	-0.55	-0.52	-0.46	3309	1.0
y_mean[994]	-0.23	4.6e-4	0.02	-0.27	-0.24	-0.23	-0.21	-0.18	2896	1.0
y_mean[995]	2.1e-3	4.8e-4	0.03	-0.05		1.6e-3	0.02	0.06	3176	1.0
y_mean[996]	0.69	8.7e-4	0.06	0.59	0.65	0.69	0.73	0.81	4145	1.0
y_mean[997]	-0.62	4.8e-4	0.03	-0.69	-0.65	-0.63	-0.6	-0.56	4578	1.0
y_mean[998]	-0.32	4.1e-4	0.03	-0.37	-0.34	-0.32	-0.3	-0.28	3376	1.0
y_mean[999] y_mean[999]	0.32	5.6e-4	0.02	0.41	0.45	0.32	0.5	0.55	3889	1.0
y_mean[1000]	-0.15	4.7e-4	0.03	-0.2	-0.17	-0.15	-0.14	-0.11	2574	1.0
y_mean[1000] y_mean[1001]	-0.15	3.5e-4	0.02	-0.54	-0.17	-0.15	-0.14	-0.11	3197	1.0
y_mean[1001] y_mean[1002]	-0.16	4.2e-4	0.02	-0.34	-0.31	-0.5	-0.46	-0.40	2676	1.0
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y_mean[1003]	-0.4	2.8e-4	0.02	-0.44	-0.41	-0.4	-0.39	-0.37	3737	1.0
y_mean[1004]	-0.04	3.2e-4	0.02	-0.08	-0.05	-0.04		7.7e-4	3730	1.0
y_mean[1005]	-0.29	4.5e-4	0.03	-0.34	-0.31	-0.29	-0.27	-0.24	3340	1.0
y_mean[1006]	-0.14	5.9e-4	0.03	-0.2	-0.16	-0.14	-0.11	-0.07	3402	1.0
y_mean[1007]	-0.06	4.4e-4	0.02	-0.11	-0.08	-0.06	-0.04	-0.01	3021	1.0
y_mean[1008]	0.37	4.4e-4	0.03	0.32	0.36	0.37	0.39	0.42	3597	1.0
y_mean[1009]	-0.02	3.5e-4	0.02	-0.06	-0.03		2.7e-3	0.02	3620	1.0
y_mean[1010]	1.45	6.8e-4	0.05	1.36	1.42	1.45	1.48	1.54	4636	1.0
y_mean[1011]	0.18	4.2e-4	0.03	0.13	0.16	0.18	0.2	0.23	3899	1.0
y_mean[1012]	-0.4	3.1e-4	0.02	-0.44	-0.42	-0.4	-0.39	-0.37	3556	1.0
y_mean[1013]	-0.64	4.6e-4	0.03	-0.7	-0.66	-0.64	-0.62	-0.58	4542	1.0
y_mean[1014]	-0.55	4.5e-4	0.03	-0.6	-0.56	-0.55	-0.53	-0.5	3277	1.0
y_mean[1015]	-0.37	4.9e-4	0.03	-0.42	-0.39	-0.37	-0.35	-0.31	3214	1.0
y_mean[1016]	1.22	5.9e-4	0.04	1.15	1.2	1.22	1.25	1.3	4410	1.0
y_mean[1017]	0.45	5.0e-4	0.03	0.39	0.43	0.45	0.47	0.51	3968	1.0
y_mean[1018]	-0.18	6.8e-4	0.04	-0.25	-0.2	-0.18	-0.15	-0.11	2738	1.0
y_mean[1019]	-0.2	6.0e-4	0.03	-0.26	-0.22	-0.2	-0.17	-0.13	2991	1.0
y_mean[1020]	-0.21	4.4e-4	0.02	-0.26	-0.23	-0.21	-0.19	-0.16	2849	1.0
y_mean[1021]	-0.54	4.4e-4	0.03	-0.59	-0.56	-0.54	-0.52	-0.49	3321	1.0
y_mean[1022]	-0.05	3.4e-4	0.02	-0.09	-0.07	-0.05	-0.04	-0.01	3667	1.0
y_mean[1023]	-0.07	4.9e-4	0.02	-0.12	-0.09	-0.07	-0.06	-0.02	2531	1.0
y_mean[1024]	-0.22	5.5e-4	0.03	-0.29	-0.25	-0.22	-0.2	-0.16	3241	1.0
y_mean[1025]	-0.79	7.8e-4	0.05	-0.88	-0.82	-0.79	-0.76	-0.7	3768	1.0
y_mean[1026]	-0.36	4.1e-4	0.02	-0.4	-0.37	-0.36	-0.34	-0.31	2870	1.0
y_mean[1027]	-0.43	3.8e-4	0.02	-0.47	-0.44	-0.43	-0.42	-0.39	2998	1.0
y_mean[1028]	2.02	1.8e-3	0.12	1.8	1.94	2.02	2.1	2.25	3997	1.0
y_mean[1029]	-0.51	6.0e-4	0.04	-0.58	-0.54	-0.51	-0.49	-0.44	3621	1.0
y_mean[1030]	-0.45	4.0e-4	0.02	-0.5	-0.47	-0.45	-0.44	-0.41	3737	1.0
y_mean[1031]	-0.32	3.0e-4	0.02	-0.35	-0.33	-0.32	-0.31	-0.29	3694	1.0
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y_mean[1032]	0.01	6.0e-4	0.03	-0.06	-0.01	0.01	0.04	0.08	3345	1.0
y_mean[1033]	0.27	5.8e-4	0.04	0.19	0.24	0.27	0.29	0.34	4063	1.0
y_mean[1034]	0.32	4.5e-4	0.03	0.27	0.31	0.32	0.34	0.38	3590	1.0
y_mean[1035]	-0.08	5.7e-4	0.03	-0.14	-0.1	-0.08	-0.06	-0.02	2456	1.0
y_mean[1036]	0.02	4.0e-4	0.02		1.4e-3	0.02	0.03	0.06	3466	1.0
y_mean[1037]	-0.16	4.3e-4	0.02	-0.21	-0.18	-0.16	-0.15	-0.12	3010	1.0
y_mean[1038]	2.73	1.1e-3	0.07	2.59	2.68	2.74	2.78	2.88	4343	1.0
y_mean[1039]	-0.17	4.2e-4	0.02	-0.21	-0.19	-0.17	-0.16	-0.13	2632	1.0
y_mean[1040]	-0.48	3.4e-4	0.02	-0.52	-0.49	-0.48	-0.47	-0.44	3100	1.0
y_mean[1041]	-0.42	3.9e-4	0.02	-0.46	-0.43	-0.42	-0.4	-0.38	3007	1.0
y_mean[1042]	0.38	4.4e-4	0.03	0.33	0.37	0.39	0.4	0.44	3424	1.0
y_mean[1043]	-0.43	3.8e-4	0.02	-0.47	-0.44	-0.43	-0.41	-0.39	2900	1.0
y_mean[1044]	0.34	5.5e-4	0.03	0.28	0.32	0.34	0.36	0.41	3841	1.0
y_mean[1044] y_mean[1045]	-0.16	4.3e-4	0.03	-0.21	-0.18	-0.16	-0.15	-0.12	3103	1.0
y_mean[1046]	0.16	7.3e-4	0.02	0.21	0.43	0.46	0.13	0.12	3502	1.0
y_mean[1047]	0.40	4.2e-4	0.04	0.09	0.12	0.14	0.46	0.19	3529	1.0
y_mean[1047] y_mean[1048]	-0.7	5.1e-4	0.03	-0.77	-0.72	-0.7	-0.68	-0.63	4354	1.0
y_mean[1049]	0.58	5.1e-4 5.6e-4	0.03	0.51	0.72	0.58	0.61	0.66	4604	1.0
y_mean[1049] y_mean[1050]	0.85	8.4e-4	0.04	0.31	0.81	0.85	0.89	0.00	4325	1.0
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y_mean[1051]	-0.1	5.4e-4	0.03	-0.15	-0.12	-0.1	-0.08	-0.05	2449	1.0
y_mean[1052]	-0.5	4.6e-4	0.03	-0.55	-0.52	-0.5	-0.48	-0.44	3647	1.0
y_mean[1053]	-0.39	4.4e-4	0.02	-0.44	-0.41	-0.39	-0.38	-0.35	2417	1.0
y_mean[1054]	-0.15	8.7e-4	0.05	-0.24	-0.18	-0.15	-0.12	-0.06	2855	1.0
y_mean[1055]	-0.34	3.6e-4	0.02	-0.38	-0.35	-0.34	-0.32	-0.3	3158	1.0
y_mean[1056]	-0.47	3.8e-4	0.02	-0.51	-0.49	-0.47	-0.46	-0.43	3299	1.0
y_mean[1057]	0.47	4.8e-4	0.03	0.41	0.45	0.47	0.49	0.53	4063	1.0
y_mean[1058]	0.09	6.9e-4	0.04	0.01	0.06	0.09	0.11	0.16	3142	1.0
y_mean[1059]	0.43	4.4e-4	0.03	0.38	0.42	0.43	0.45	0.48	3665	1.0
y_mean[1060]	-0.19	5.4e-4	0.03	-0.24	-0.21	-0.19	-0.17	-0.13	2872	1.0
y_mean[1061]	0.18	6.6e-4	0.04	0.1	0.15	0.18	0.21	0.26	3646	1.0
y_mean[1062]	-0.46	3.3e-4	0.02	-0.5	-0.47	-0.46	-0.45	-0.43	2982	1.0
y_mean[1063]	1.09	6.1e-4	0.04	1.01	1.06	1.09	1.12	1.17	4617	1.0
y_mean[1064]	-0.22	6.5e-4	0.03	-0.29	-0.24	-0.22	-0.2	-0.16	2603	1.0
y_mean[1065]	-0.61	4.6e-4	0.03	-0.67	-0.63	-0.61	-0.59	-0.55	4169	1.0
y_mean[1066]	0.75	6.4e-4	0.04	0.67	0.72	0.75	0.78	0.83	4322	1.0
y_mean[1067]	-0.16	4.8e-4	0.03	-0.22	-0.18	-0.16	-0.14	-0.11	3373	1.0
y_mean[1068]	-0.25	5.0e-4	0.03	-0.3	-0.26	-0.25	-0.23	-0.19	3024	1.0
y_mean[1069]	0.11	4.0e-4	0.02	0.06	0.09	0.11	0.12	0.15	3827	1.0
y_mean[1070]	2.5e-3	5.4e-4	0.03	-0.06	-0.02	2.3e-3	0.02	0.06	3298	1.0
y_mean[1071]	-0.48	3.5e-4	0.02	-0.53	-0.5	-0.48	-0.47	-0.45	3189	1.0
y_mean[1072]	-0.38	4.6e-4	0.03	-0.43	-0.4	-0.38	-0.36	-0.33	3304	1.0
y_mean[1073]	-0.44	3.5e-4	0.02	-0.48	-0.46	-0.44	-0.43	-0.4	3123	1.0
y_mean[1074]	-0.1	4.2e-4	0.02	-0.14	-0.12	-0.1	-0.09	-0.06	2752	1.0
y_mean[1075]	-0.28	5.2e-4	0.03	-0.33	-0.29		-0.26	-0.22	2839	1.0
y_mean[1076]	-0.07	4.3e-4	0.02	-0.12	-0.09	-0.07	-0.06	-0.03	3018	1.0
y_mean[1077]	-0.35	4.2e-4	0.02	-0.4	-0.37		-0.34	-0.31	2838	1.0
y_mean[1078]	-0.13	6.8e-4	0.04	-0.2	-0.15	-0.13	-0.1	-0.06	2838	1.0
y_mean[1079]	-0.47	4.7e-4	0.03	-0.52	-0.49		-0.45	-0.42	3301	1.0
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y_mean[1080]	-0.14	5.5e-4	0.03	-0.2	-0.16	-0.14	-0.12	-0.07	3640	1.0
y_mean[1081]	-0.39	4.5e-4	0.03	-0.44	-0.41	-0.39	-0.37	-0.34	3289	1.0
y_mean[1082]	-0.52	6.1e-4	0.03	-0.58	-0.54	-0.52	-0.5	-0.46	2740	1.0
y_mean[1083]	-0.47	3.8e-4	0.02	-0.51	-0.48	-0.47	-0.45	-0.42	3660	1.0
y_mean[1084]	-0.46	7.8e-4	0.04	-0.54	-0.48	-0.46	-0.43	-0.37	3182	1.0
y_mean[1085]	-0.28	5.9e-4	0.03	-0.34	-0.3	-0.28	-0.26	-0.22	2487	1.0
y_mean[1086]	-0.69	4.9e-4	0.03	-0.75	-0.71	-0.69	-0.66	-0.62	4235	1.0
y_mean[1087]	-0.3	3.0e-4	0.02	-0.33	-0.31	-0.3	-0.28	-0.26	3785	1.0
y_mean[1088]	-0.12	5.2e-4	0.03	-0.17	-0.14	-0.12	-0.1	-0.07	2557	1.0
y_mean[1089]	-0.13	4.4e-4	0.02	-0.18	-0.15	-0.13	-0.12	-0.09	2488	1.0
y_mean[1090]	-0.14	4.2e-4	0.02	-0.18	-0.15	-0.14	-0.12	-0.1	2630	1.0
y_mean[1091]	-0.63	4.7e-4	0.03	-0.69	-0.65	-0.63	-0.61	-0.57	4099	1.0
y_mean[1092]	1.1	5.2e-4	0.04	1.02	1.07	1.1	1.12	1.16	4499	1.0
y_mean[1093]	-0.28	7.6e-4	0.04	-0.35	-0.31	-0.28	-0.26	-0.21	2225	1.0
y_mean[1094]	-0.25	7.3e-4	0.04	-0.32	-0.27	-0.25	-0.22	-0.17	2728	1.0
y_mean[1095]	-0.39	5.0e-4	0.03	-0.44	-0.41	-0.39	-0.37	-0.32	3824	1.0
y_mean[1096]	0.47	6.1e-4	0.04	0.39	0.44	0.47	0.49	0.54	3967	1.0
y_mean[1090] y_mean[1097]	-0.09	6.8e-4	0.04	-0.16	-0.11	-0.09	-0.06	-0.02	2763	1.0
y_mean[1097]	-0.63	4.5e-4	0.03	-0.69	-0.65	-0.63	-0.61	-0.57	4468	1.0
y_mean[1099] y_mean[1099]	1.67	5.1e-4	0.03	1.6	1.65	1.67	1.69	1.74	4637	1.0
y_mean[1009] y_mean[1100]	-0.21	5.5e-4	0.03	-0.26	-0.23	-0.21	-0.19	-0.15	2959	1.0
y_mean[1100] y_mean[1101]	-0.66	5.1e-4	0.03	-0.73	-0.68	-0.66	-0.64	-0.6	4042	1.0
y_mean[1101] y_mean[1102]	-0.26	5.1e-4	0.03	-0.32	-0.28	-0.26	-0.24	-0.21	2988	1.0
y_mean[1102] y_mean[1103]	-0.52	4.0e-4	0.03	-0.57	-0.54	-0.52	-0.51	-0.48	3357	1.0
y_mean[1104]	-0.44	3.5e-4	0.02	-0.48	-0.45	-0.44	-0.43	-0.4	2958	1.0
y_mean[1104] y_mean[1105]	0.48	7.9e-4	0.02	0.38	0.45	0.44	0.51	0.57	3573	1.0
y_mean[1106] y_mean[1106]	-0.74	1.2e-3	0.03	-0.89	-0.79	-0.74	-0.69	-0.6	3710	1.0
y_mean[1100] y_mean[1107]	-0.14	4.5e-4	0.07	-0.89	-0.18	-0.17	-0.15	-0.12	2593	1.0
y_mean[1107] y_mean[1108]	-0.17	5.3e-4	0.02	-0.79	-0.18	-0.72	-0.13	-0.12	4251	1.0
y_mean[1108] y_mean[1109]	-0.72	3.6e-4	0.03	-0.79	-0.74	-0.72		-0.65 3.5e-3	2987	1.0
y_mean[1109] y_mean[1110]	0.82	6.3e-4	0.02	0.74	0.8	0.82	0.85	0.9	4233	1.0
V =	0.62	6.0e-4	0.04	0.74	0.0	0.62	0.05	0.9	4233	1.0
y_mean[1111]	-0.2						-0.18		2832	
y_mean[1112]		5.9e-4	0.03	-0.27	-0.22	-0.2		-0.14		1.0
y_mean[1113]	0.29	4.6e-4	0.03	0.24	0.28	0.29	0.31	0.35	4019	1.0
y_mean[1114]	-0.32	3.9e-4	0.02	-0.36	-0.33 -0.19	-0.32	-0.3	-0.27	3233	1.0
y_mean[1115]	-0.18	4.2e-4	0.02	-0.22		-0.18	-0.16 0.16	-0.14	2725	1.0
y_mean[1116]	0.14	6.1e-4	0.03	0.07	0.12	0.14		0.2	3246	1.0
y_mean[1117]	2.17	6.7e-4	0.04	2.09	2.14	2.17	2.2	2.26	4248	1.0
y_mean[1118]	-0.24	6.0e-4	0.03	-0.3	-0.26	-0.24	-0.22	-0.18	2599	1.0
y_mean[1119]	0.39	5.6e-4	0.03	0.32	0.37	0.39	0.41	0.45	3620	1.0
y_mean[1120]	0.54	4.0e-4	0.03	0.49	0.53	0.54	0.56	0.59	4248	1.0
y_mean[1121]	-0.42	4.1e-4	0.02	-0.46	-0.43	-0.42	-0.4	-0.37	3605	1.0
y_mean[1122]	0.8	6.8e-4	0.04	0.71	0.76	0.79	0.82	0.89	4301	1.0
y_mean[1123]	-0.34	2.8e-4	0.02	-0.37	-0.35	-0.34	-0.33	-0.31	3731	1.0
y_mean[1124]	-0.57	5.0e-4	0.03	-0.63	-0.59	-0.57	-0.55	-0.51	3975	1.0
y_mean[1125]	-0.69	5.0e-4	0.03	-0.75	-0.71	-0.69	-0.67	-0.63	4183	1.0
y_mean[1126]	-0.18	4.6e-4	0.02	-0.23	-0.19	-0.18	-0.16	-0.13	2684	1.0
y_mean[1127]	-0.42	7.3e-4	0.04	-0.5	-0.45	-0.42	-0.39	-0.35	2626	1.0

y_mean[1128]	-0.24	9.8e-4	0.05	-0.33	-0.27	-0.24	-0.21	-0.15	2309	1.0
y_mean[1129]	-0.43	3.8e-4	0.02	-0.47	-0.44	-0.43	-0.42	-0.39	2998	1.0
y_mean[1130]	-0.38	3.8e-4	0.02	-0.42	-0.39	-0.38	-0.37	-0.34	3000	1.0
y_mean[1131]	0.71	4.2e-4	0.03	0.65	0.69	0.71	0.73	0.76	4271	1.0
y_mean[1132]	0.18	6.1e-4	0.04	0.1	0.15	0.18	0.2	0.25	3822	1.0
y_mean[1133]	0.34	4.6e-4	0.03	0.28	0.32	0.34	0.35	0.39	3813	1.0
y_mean[1134]	-0.47	3.5e-4	0.02	-0.51	-0.48	-0.47	-0.45	-0.43	3095	1.0
y_mean[1135]	-0.52	4.1e-4	0.02	-0.57	-0.54	-0.52	-0.5	-0.47	3424	1.0
y_mean[1136]	0.49	7.3e-4	0.05	0.38	0.45	0.49	0.52	0.59	5301	1.0
y_mean[1137]	-0.38	4.6e-4	0.02	-0.43	-0.4	-0.38	-0.37	-0.34	2421	1.0
y_mean[1138]	0.07	3.8e-4	0.02	0.03	0.06	0.07	0.09	0.12	3697	1.0
y_mean[1139]	-0.63	4.7e-4	0.03	-0.69	-0.65	-0.63	-0.61	-0.57	4565	1.0
y_mean[1140]	2.3	1.7e-3	0.09	2.12	2.24	2.3	2.36	2.49	3117	1.0
y_mean[1141]	-0.07	3.6e-4	0.02	-0.11	-0.08	-0.07	-0.05	-0.03	3597	1.0
y_mean[1142]	0.32	7.5e-4	0.04	0.23	0.29	0.32	0.35	0.4	3517	1.0
y_mean[1143]	-0.08	4.2e-4	0.02	-0.13	-0.1	-0.08	-0.07	-0.04	3090	1.0
y_mean[1144]	-0.58	5.0e-4	0.02	-0.65	-0.61	-0.58	-0.56	-0.53	3820	1.0
y_mean[1145]	0.64	5.1e-4	0.03	0.58	0.62	0.64	0.67	0.71	4096	1.0
y_mean[1146]	-0.33	7.3e-4	0.03	-0.39	-0.35	-0.32	-0.3	-0.25	2353	1.0
y_mean[1147]	-0.74	5.5e-4	0.04	-0.8	-0.76	-0.74	-0.71	-0.67	4127	1.0
y_mean[1147] y_mean[1148]	-0.02	5.9e-4	0.04	-0.09	-0.04		2.9e-3	0.05	3255	1.0
y_mean[1149]	0.13	6.0e-4	0.03	0.06	0.11	0.13	0.16	0.03	3765	1.0
y_mean[1149] y_mean[1150]	-0.61	4.6e-4	0.04	-0.67	-0.63	-0.61	-0.58	-0.55	4419	1.0
y_mean[1151]	-0.46	3.4e-4	0.03	-0.67	-0.48	-0.46	-0.35	-0.33	3039	1.0
• =	-0.40	6.4e-4	0.02	-0.38	-0.46	-0.40	-0.45		2604	1.0
y_mean[1152]								-0.25		
y_mean[1153]	-0.52	3.8e-4	0.02	-0.56	-0.53	-0.52	-0.5	-0.47	3338	1.0
y_mean[1154]	0.36	4.4e-4	0.03	0.31	0.34	0.36	0.38	0.41	3664	1.0
y_mean[1155]	2.81	1.2e-3	0.08	2.65	2.76	2.81	2.87	2.98	5210	1.0
y_mean[1156]	-0.48	3.4e-4	0.02	-0.52	-0.49	-0.48	-0.47	-0.44	3236	1.0
y_mean[1157]	0.19	5.3e-4	0.03	0.13	0.17	0.19	0.21	0.25	3420	1.0
y_mean[1158]	-0.36	5.1e-4	0.03	-0.41	-0.38	-0.36	-0.35	-0.31	2495	1.0
y_mean[1159]	-0.31	2.9e-4	0.02	-0.34	-0.32	-0.31	-0.3	-0.27	3900	1.0
y_mean[1160]	2.51	1.9e-3	0.13	2.26	2.42	2.51	2.6	2.77	4581	1.0
y_mean[1161]		6.9e-4	0.04	0.08	0.13	0.16	0.18	0.24	3579	1.0
y_mean[1162]	2.07	9.6e-4	0.07	1.94	2.03	2.07	2.12	2.21	5049	1.0
y_mean[1163]	-0.41	4.1e-4	0.02	-0.45	-0.42	-0.41	-0.39	-0.37	3020	1.0
y_mean[1164]	0.2	6.4e-4	0.04	0.13	0.18	0.2	0.23	0.28	3833	1.0
y_mean[1165]	-0.72	5.4e-4	0.04	-0.79	-0.74	-0.72	-0.7	-0.65	4227	1.0
y_mean[1166]	-0.15	4.2e-4	0.02	-0.2	-0.17	-0.15	-0.14	-0.11	2929	1.0
y_mean[1167]	-0.45	3.4e-4	0.02	-0.49	-0.47	-0.45	-0.44	-0.42	2975	1.0
y_mean[1168]	-0.45	4.0e-4	0.02	-0.5	-0.47	-0.45	-0.43	-0.4	3831	1.0
y_mean[1169]	-0.64	5.3e-4	0.04	-0.71	-0.67	-0.64	-0.62	-0.58	4470	1.0
y_mean[1170]	-0.66	5.0e-4	0.03	-0.73	-0.69	-0.66	-0.64	-0.6	4492	1.0
y_mean[1171]	0.63	5.6e-4	0.04	0.56	0.61	0.63	0.65	0.7	4219	1.0
y_mean[1172]	-0.09	5.7e-4	0.03	-0.15	-0.11	-0.09	-0.07	-0.03	2468	1.0
y_mean[1173]	-0.42	3.7e-4	0.02	-0.46	-0.44	-0.42	-0.41	-0.39	2965	1.0
y_mean[1174]	0.09	3.7e-4	0.02	0.04	0.07	0.09	0.1	0.13	3650	1.0
y_mean[1175]	-0.17	5.3e-4	0.03	-0.23	-0.19	-0.17	-0.15	-0.11	3080	1.0

```
-0.12
                           4.7e-4
                                     0.02
                                            -0.17
                                                   -0.14
                                                           -0.12
                                                                   -0.11
y_mean[1176]
                                                                           -0.08
                                                                                   2451
                                                                                            1.0
                   -0.11
                           1.8e-3
                                      0.1
                                             -0.3
                                                   -0.17
                                                           -0.11
                                                                   -0.04
                                                                            0.07
                                                                                   2677
y_mean[1177]
                                                                                            1.0
y_mean[1178]
                   -0.54
                           6.5e-4
                                     0.04
                                            -0.61
                                                   -0.56
                                                           -0.54
                                                                   -0.51
                                                                                   3433
                                                                          -0.46
                                                                                            1.0
y_mean[1179]
                   -0.45
                           3.6e-4
                                     0.02
                                            -0.49
                                                   -0.46
                                                           -0.45
                                                                   -0.44
                                                                          -0.41
                                                                                   3023
                                                                                            1.0
                   -0.35
                                     0.03
                                            -0.41
                                                           -0.35
                                                                          -0.29
y_mean[1180]
                           5.3e-4
                                                   -0.37
                                                                   -0.33
                                                                                   3193
                                                                                            1.0
                   -0.55
                           5.3e-4
                                     0.03
                                            -0.61
                                                   -0.57
                                                           -0.55
                                                                   -0.52
                                                                          -0.48
                                                                                   4021
                                                                                            1.0
y_mean[1181]
                                            -0.46
y_mean[1182]
                   -0.41
                           4.1e-4
                                     0.02
                                                   -0.43
                                                           -0.41
                                                                    -0.4
                                                                          -0.37
                                                                                   3141
                                                                                            1.0
                           4.6e-4
                                            -0.43
                                     0.02
                                                     -0.4
                                                           -0.39
                                                                   -0.37
                                                                           -0.34
y_mean[1183]
                   -0.38
                                                                                   2429
                                                                                            1.0
                    -0.6
                           6.2e-4
                                     0.04
                                            -0.67
                                                   -0.63
                                                            -0.6
                                                                   -0.58
                                                                          -0.53
                                                                                   3224
                                                                                            1.0
y_mean[1184]
y_mean[1185]
                   -0.46
                           3.5e-4
                                     0.02
                                             -0.5
                                                   -0.47
                                                           -0.46
                                                                   -0.44
                                                                          -0.42
                                                                                   3023
                                                                                            1.0
                    0.73
                           4.5e-4
                                     0.03
                                             0.67
                                                     0.71
                                                            0.73
                                                                    0.75
                                                                            0.79
                                                                                   4533
                                                                                            1.0
y_mean[1186]
                   -0.41
                           4.0e-4
                                     0.02
                                            -0.46
                                                   -0.43
                                                           -0.41
                                                                    -0.4
                                                                          -0.37
                                                                                   3398
                                                                                            1.0
y_mean[1187]
y_mean[1188]
                   -0.38
                           4.7e-4
                                     0.03
                                            -0.43
                                                     -0.4
                                                           -0.38
                                                                   -0.36
                                                                          -0.32
                                                                                   3507
                                                                                            1.0
                    0.14
                           5.9e-4
                                             0.06
                                                            0.14
                                     0.04
                                                     0.11
                                                                    0.16
                                                                            0.21
                                                                                   3933
y_mean[1189]
                                                                                            1.0
                     -0.3
                           4.6e-4
                                     0.03
                                            -0.36
                                                   -0.32
                                                            -0.3
                                                                   -0.29
                                                                          -0.25
                                                                                    3239
y_mean[1190]
                                                                                            1.0
                                           -0.07
                   -0.02
                           4.7e-4
                                     0.03
                                                    -0.04
                                                           -0.02-4.3e-3
                                                                            0.03
                                                                                   3000
                                                                                            1.0
y_mean[1191]
y_mean[1192]
                   -0.29
                           3.3e-4
                                     0.02
                                            -0.33
                                                   -0.31
                                                           -0.29
                                                                   -0.28
                                                                          -0.26
                                                                                   3556
                                                                                            1.0
                                           -0.57
y_mean[1193]
                   -0.53
                                     0.02
                                                           -0.53
                                                                          -0.48
                           4.0e-4
                                                   -0.54
                                                                   -0.51
                                                                                   3271
                                                                                            1.0
y_mean[1194]
                   -0.31
                           7.5e-4
                                     0.04
                                            -0.38
                                                   -0.34
                                                           -0.31
                                                                   -0.29
                                                                          -0.24
                                                                                   2258
                                                                                            1.0
y_mean[1195]
                   -0.44
                           2.8e-4
                                     0.02
                                           -0.48
                                                   -0.45
                                                           -0.44
                                                                   -0.43
                                                                          -0.41
                                                                                   3904
                                                                                            1.0
                    0.06
                           4.3e-4
                                     0.03 5.3e-3
                                                     0.04
                                                            0.06
                                                                    0.07
                                                                            0.11
y_mean[1196]
                                                                                   3427
                                                                                            1.0
                     1.41
                           6.7e-4
                                     0.04
                                             1.32
                                                     1.38
                                                            1.41
                                                                    1.44
                                                                             1.5
                                                                                   4320
y_mean[1197]
                                                                                            1.0
                    -0.3
                           3.2e-4
                                     0.02
                                           -0.34
                                                            -0.3
                                                                          -0.26
y_mean[1198]
                                                   -0.31
                                                                   -0.29
                                                                                   3923
                                                                                            1.0
                   -0.35
                           5.4e-4
                                     0.03
                                            -0.41
                                                   -0.37
                                                           -0.35
                                                                   -0.34
                                                                            -0.3
                                                                                   2531
                                                                                            1.0
y_mean[1199]
y_mean[1200]
                   -0.49
                           3.7e-4
                                     0.02
                                            -0.53
                                                     -0.5
                                                           -0.49
                                                                   -0.48
                                                                          -0.45
                                                                                   3282
                                                                                            1.0
                   -0.23
                           4.7e-4
                                     0.03
                                            -0.28
                                                   -0.24
                                                           -0.23
                                                                   -0.21
                                                                          -0.18
                                                                                   2977
y_mean[1201]
                                                                                            1.0
                     -0.4
                           4.2e-4
                                     0.02
                                            -0.44
                                                            -0.4
                                                                          -0.35
                                                   -0.41
                                                                   -0.38
                                                                                   2883
y_mean[1202]
                                                                                            1.0
y_mean[1203]
                   -0.49
                           3.5e-4
                                     0.02
                                            -0.53
                                                     -0.5
                                                           -0.49
                                                                   -0.48
                                                                          -0.45
                                                                                   3361
                                                                                            1.0
                     -0.1
                           5.2e-4
                                     0.03
                                            -0.15
                                                   -0.12
                                                            -0.1
                                                                          -0.04
                                                                                   3279
                                                                   -0.08
                                                                                            1.0
y_mean[1204]
y_mean[1205]
                   -0.35
                           5.3e-4
                                     0.03
                                            -0.41
                                                   -0.37
                                                           -0.35
                                                                   -0.33
                                                                            -0.3
                                                                                   2826
                                                                                            1.0
y_mean[1206]
                   -0.16
                                            -0.23
                           6.8e-4
                                     0.04
                                                   -0.18
                                                           -0.16
                                                                   -0.13
                                                                          -0.09
                                                                                   2723
                                                                                            1.0
y_mean[1207]
                   -0.34
                           5.2e-4
                                     0.03
                                            -0.39
                                                   -0.36
                                                           -0.34
                                                                   -0.32
                                                                          -0.28
                                                                                   3122
                                                                                            1.0
y_mean[1208]
                           5.4e-4
                                     0.04
                                             0.92
                                                            0.99
                    0.99
                                                     0.97
                                                                    1.02
                                                                            1.06
                                                                                   4457
                                                                                            1.0
y_mean[1209]
                    -0.6
                           9.2e-4
                                     0.05
                                             -0.7
                                                   -0.64
                                                            -0.6
                                                                   -0.57
                                                                          -0.51
                                                                                   2708
                                                                                            1.0
y_mean[1210]
                    0.47
                           4.5e-4
                                     0.03
                                             0.42
                                                     0.45
                                                            0.47
                                                                    0.49
                                                                            0.52
                                                                                   3816
                                                                                            1.0
                    0.62
                           6.1e-4
                                     0.04
                                             0.54
                                                     0.59
                                                            0.62
                                                                    0.65
                                                                             0.7
y_mean[1211]
                                                                                   4656
                                                                                            1.0
                   -0.49
                           5.0e-4
                                            -0.55
                                     0.03
                                                   -0.51
                                                           -0.49
                                                                   -0.47
                                                                          -0.43
                                                                                   3700
y_mean[1212]
                                                                                            1.0
y_mean[1213]
                   -0.55
                           5.0e-4
                                     0.03
                                             -0.6
                                                   -0.57
                                                           -0.55
                                                                   -0.53
                                                                          -0.49
                                                                                   3367
                                                                                            1.0
                                           -0.52
                   -0.48
                           3.7e-4
                                     0.02
                                                   -0.49
                                                           -0.48
                                                                   -0.46
                                                                          -0.43
                                                                                   3246
                                                                                            1.0
y_mean[1214]
                   -0.47
                           3.6e-4
                                     0.02
                                            -0.51
                                                   -0.48
                                                           -0.47
                                                                   -0.45
                                                                          -0.43
y_mean[1215]
                                                                                   3551
                                                                                            1.0
                   -0.23
                                     0.03
                                            -0.29
                                                   -0.25
                           5.7e-4
                                                           -0.23
                                                                   -0.21
                                                                          -0.17
                                                                                   3257
                                                                                            1.0
y_mean[1216]
                           4.5e-4
                                     0.02
                                           -0.23
                                                     -0.2
                                                           -0.18
                                                                          -0.14
y_mean[1217]
                   -0.18
                                                                   -0.17
                                                                                   2642
                                                                                            1.0
y_mean[1218]
                     1.16
                           6.4e-4
                                     0.04
                                             1.08
                                                     1.13
                                                            1.16
                                                                    1.19
                                                                            1.24
                                                                                   3994
                                                                                            1.0
                    0.45
                                     0.05
                                             0.35
                                                            0.45
                                                                            0.55
                           7.1e-4
                                                     0.41
                                                                    0.48
                                                                                   5378
y_mean[1219]
                                                                                            1.0
                   -0.09
                                     0.03
                                            -0.15
                                                   -0.11
                                                           -0.09
                                                                   -0.08
                                                                          -0.04
                                                                                   3207
y_mean[1220]
                           4.6e-4
                                                                                            1.0
y_mean[1221]
                    -0.45
                           3.4e-4
                                     0.02
                                            -0.49
                                                    -0.46
                                                           -0.45
                                                                   -0.44
                                                                           -0.41
                                                                                   3243
                                                                                            1.0
                           4.0e-4
y_mean[1222]
                   -0.49
                                     0.02
                                            -0.53
                                                     -0.5
                                                           -0.49
                                                                   -0.47
                                                                           -0.44
                                                                                   3369
                                                                                            1.0
y_mean[1223]
                     0.09
                           5.5e-4
                                     0.03
                                             0.03
                                                     0.07
                                                            0.09
                                                                    0.11
                                                                            0.15
                                                                                   3215
                                                                                            1.0
```

```
0.05
                                             -0.2
                                                   -0.13
y_mean[1224]
                     -0.1
                           9.2e-4
                                                            -0.1
                                                                   -0.06-4.4e-3
                                                                                   2816
                                                                                            1.0
                   -0.45
                           3.4e-4
                                     0.02
                                            -0.49
                                                   -0.47
                                                           -0.45
                                                                   -0.44
                                                                          -0.42
                                                                                   3139
y_mean[1225]
                                                                                            1.0
y_mean[1226]
                    0.53
                                     0.03
                                             0.46
                                                    0.51
                                                            0.53
                                                                            0.59
                           4.7e-4
                                                                    0.55
                                                                                   4152
                                                                                            1.0
y_mean[1227]
                   -0.69
                           5.4e-4
                                     0.03
                                            -0.76
                                                   -0.72
                                                           -0.69
                                                                  -0.67
                                                                          -0.63
                                                                                   4070
                                                                                            1.0
                   -0.02
                                            -0.07
                                                           -0.02-2.8e-3
y_mean[1228]
                           5.0e-4
                                     0.03
                                                   -0.04
                                                                            0.03
                                                                                   2943
                                                                                            1.0
                   -0.46
                           3.3e-4
                                     0.02
                                             -0.5
                                                   -0.48
                                                           -0.46
                                                                   -0.45
                                                                          -0.43
                                                                                   2982
y_mean[1229]
                                                                                            1.0
                                            -0.51
y_mean[1230]
                   -0.47
                           3.4e-4
                                     0.02
                                                   -0.49
                                                           -0.47
                                                                   -0.46
                                                                          -0.44
                                                                                   3275
                                                                                            1.0
y_mean[1231]
                           5.0e-4
                                            -0.62
                                     0.03
                                                   -0.59
                                                           -0.57
                                                                   -0.55
                                                                          -0.51
                   -0.57
                                                                                   3249
                                                                                            1.0
                     0.5
                           5.2e-4
                                     0.03
                                             0.43
                                                    0.47
                                                             0.5
                                                                    0.52
                                                                            0.56
                                                                                   3978
                                                                                            1.0
y_mean[1232]
y_mean[1233]
                                     0.05
                                            -0.78
                                                   -0.72
                                                           -0.68
                                                                   -0.65
                                                                          -0.59
                   -0.68
                           9.1e-4
                                                                                   3110
                                                                                            1.0
                    0.43
                           7.2e-4
                                     0.05
                                             0.34
                                                      0.4
                                                            0.43
                                                                    0.46
                                                                            0.51
                                                                                   3950
y_mean[1234]
                                                                                            1.0
                     1.95
                           1.2e-3
                                     0.07
                                             1.81
                                                      1.9
                                                            1.95
                                                                     2.0
                                                                            2.08
                                                                                   3260
                                                                                            1.0
y_mean[1235]
y_mean[1236]
                   -0.54
                           6.3e-4
                                     0.04
                                            -0.61
                                                   -0.56
                                                           -0.54
                                                                   -0.51
                                                                          -0.47
                                                                                   3212
                                                                                            1.0
                    0.41
                           5.3e-4
                                     0.03
                                             0.35
                                                    0.39
                                                            0.41
                                                                    0.43
                                                                            0.47
                                                                                   3672
y_mean[1237]
                                                                                            1.0
                    0.12
                           3.5e-4
                                     0.02
                                             0.07
                                                      0.1
                                                            0.12
                                                                    0.13
                                                                            0.16
                                                                                   3763
y_mean[1238]
                                                                                            1.0
                   -0.58
                           4.8e-4
                                     0.03
                                            -0.65
                                                   -0.61
                                                           -0.58
                                                                   -0.56
                                                                          -0.52
                                                                                   4316
                                                                                            1.0
y_mean[1239]
y_mean[1240]
                   -0.17
                           4.1e-4
                                     0.02
                                            -0.22
                                                   -0.19
                                                           -0.17
                                                                   -0.15
                                                                          -0.12
                                                                                   3498
                                                                                            1.0
                                            -0.68
y_mean[1241]
                   -0.62
                                     0.03
                           4.6e-4
                                                   -0.64
                                                           -0.62
                                                                    -0.6
                                                                          -0.56
                                                                                   4191
                                                                                            1.0
y_mean[1242]
                   -0.28
                           6.0e-4
                                     0.03
                                            -0.34
                                                    -0.3
                                                           -0.28
                                                                   -0.25
                                                                          -0.21
                                                                                   3150
                                                                                            1.0
y_mean[1243]
                   -0.51
                           3.8e-4
                                     0.02
                                            -0.56
                                                   -0.53
                                                           -0.51
                                                                    -0.5
                                                                          -0.47
                                                                                   3385
                                                                                            1.0
                                                   -0.42
                   -0.41
                                     0.02
                                            -0.44
                                                                    -0.4
                                                                          -0.38
y_mean[1244]
                           2.7e-4
                                                           -0.41
                                                                                   3924
                                                                                            1.0
                   -0.53
                           6.2e-4
                                     0.04
                                             -0.6
                                                   -0.55
                                                           -0.53
                                                                    -0.5
                                                                          -0.46
                                                                                   3356
y_mean[1245]
                                                                                            1.0
                   -0.57
                                     0.03
                                            -0.62
                                                   -0.59
                                                           -0.57
                                                                          -0.51
y_mean[1246]
                           5.1e-4
                                                                   -0.54
                                                                                   3280
                                                                                            1.0
                      0.3
                           4.4e-4
                                     0.03
                                             0.24
                                                    0.28
                                                             0.3
                                                                    0.31
                                                                            0.35
                                                                                   3874
y_mean[1247]
                                                                                            1.0
y_mean[1248]
                   -0.45
                           6.6e-4
                                     0.04
                                            -0.52
                                                   -0.48
                                                           -0.45
                                                                   -0.43
                                                                          -0.39
                                                                                   3031
                                                                                            1.0
                   -0.23
                           4.7e-4
                                     0.03
                                            -0.28
                                                   -0.25
                                                           -0.23
                                                                   -0.21
                                                                          -0.18
                                                                                   2944
y_mean[1249]
                                                                                            1.0
                                     0.03
                                            -0.42
                   -0.37
                           5.7e-4
                                                   -0.39
                                                           -0.37
                                                                   -0.35
                                                                          -0.31
                                                                                   2436
y_mean[1250]
                                                                                            1.0
y_mean[1251]
                   -0.41
                           4.0e-4
                                     0.02
                                            -0.45
                                                   -0.42
                                                           -0.41
                                                                   -0.39
                                                                          -0.36
                                                                                   3157
                                                                                            1.0
                   -0.37
                           2.7e-4
                                     0.02
                                                   -0.38
                                                           -0.37
                                                                          -0.34
                                             -0.4
                                                                   -0.36
                                                                                   3888
                                                                                            1.0
y_mean[1252]
y_mean[1253]
                   -0.45
                           3.2e-4
                                     0.02
                                            -0.49
                                                   -0.47
                                                           -0.45
                                                                   -0.44
                                                                          -0.41
                                                                                   4071
                                                                                            1.0
                     1.16
                           6.7e-4
                                     0.04
                                             1.08
                                                    1.13
                                                            1.16
                                                                    1.19
                                                                            1.24
                                                                                   3851
                                                                                            1.0
y_mean[1254]
                                                           -0.08
y_mean[1255]
                   -0.08
                           4.3e-4
                                     0.02
                                            -0.12
                                                   -0.09
                                                                   -0.06
                                                                          -0.03
                                                                                   2810
                                                                                            1.0
y_mean[1256]
                   -0.72
                           5.2e-4
                                     0.03
                                            -0.79
                                                           -0.72
                                                   -0.74
                                                                    -0.7
                                                                           -0.65
                                                                                   4216
                                                                                            1.0
y_mean[1257]
                   -0.74
                           6.6e-4
                                     0.04
                                           -0.82
                                                   -0.77
                                                           -0.74
                                                                   -0.71
                                                                          -0.66
                                                                                   3944
                                                                                            1.0
                   -0.69
                           4.9e-4
                                     0.03
                                           -0.76
                                                   -0.72
                                                            -0.7
                                                                   -0.67
                                                                          -0.63
                                                                                   4284
y mean [1258]
                                                                                            1.0
                           4.3e-4
                     -0.1
                                     0.02
                                            -0.15
                                                   -0.12
                                                            -0.1
                                                                   -0.09
                                                                          -0.06
y_mean[1259]
                                                                                   2706
                                                                                            1.0
                                             -0.5
                   -0.43
                           6.0e-4
                                     0.04
                                                   -0.46
                                                           -0.43
                                                                   -0.41
                                                                          -0.36
                                                                                   3881
y_mean[1260]
                                                                                            1.0
y_mean[1261]
                     3.71
                           1.4e-3
                                     0.09
                                             3.53
                                                    3.65
                                                            3.71
                                                                    3.78
                                                                             3.9
                                                                                   4436
                                                                                            1.0
                 -8.3e-3
                           6.6e-4
                                     0.04
                                           -0.09
                                                   -0.04-9.2e-3
                                                                    0.02
                                                                            0.07
                                                                                   4054
                                                                                            1.0
y_mean[1262]
                    -0.66
                           5.0e-4
                                     0.03
                                            -0.73
                                                   -0.69
                                                           -0.66
                                                                   -0.64
                                                                            -0.6
                                                                                   4057
y_mean[1263]
                                                                                            1.0
                     1.08
                           7.1e-4
                                     0.04
                                             0.99
                                                    1.05
                                                            1.08
                                                                    1.11
                                                                            1.16
                                                                                   3959
                                                                                            1.0
y_mean[1264]
y_mean[1265]
                    2.76
                                     0.08
                                                      2.7
                                                            2.76
                                                                    2.82
                                                                            2.92
                           1.2e-3
                                              2.6
                                                                                   4909
                                                                                            1.0
y_mean[1266]
                    0.38
                           4.4e-4
                                     0.03
                                             0.33
                                                    0.36
                                                            0.38
                                                                     0.4
                                                                            0.43
                                                                                   3654
                                                                                            1.0
                                                                            0.31
                    0.23
                           7.1e-4
                                     0.04
                                             0.15
                                                      0.2
                                                            0.23
                                                                    0.26
                                                                                   3079
y_mean[1267]
                                                                                            1.0
                   -0.06
                                     0.03
                                            -0.12
                                                   -0.08
                                                           -0.06
                                                                   -0.05-8.4e-3
y_mean[1268]
                           5.5e-4
                                                                                   2507
                                                                                            1.0
y_mean[1269]
                     0.54
                           4.8e-4
                                     0.03
                                             0.48
                                                    0.52
                                                            0.54
                                                                    0.56
                                                                             0.6
                                                                                   4050
                                                                                            1.0
                           5.3e-4
                                                                          -0.27
y_mean[1270]
                   -0.32
                                     0.03
                                            -0.38
                                                   -0.34
                                                           -0.32
                                                                    -0.3
                                                                                   3150
                                                                                            1.0
y_mean[1271]
                    -0.31
                           5.6e-4
                                     0.03
                                            -0.38
                                                   -0.33
                                                           -0.31
                                                                   -0.28
                                                                          -0.24
                                                                                   3687
                                                                                            1.0
```

```
-0.25
                                            -0.31
                                                    -0.27
                                                           -0.25
                                                                   -0.23
                                                                           -0.19
y_mean[1272]
                           5.4e-4
                                     0.03
                                                                                    3268
                                                                                             1.0
                    -0.52
                           3.9e-4
                                     0.02
                                            -0.57
                                                    -0.54
                                                           -0.52
                                                                   -0.51
                                                                           -0.48
                                                                                    3319
y_mean[1273]
                                                                                             1.0
y_mean[1274]
                    -0.61
                           6.2e-4
                                     0.03
                                            -0.68
                                                    -0.63
                                                           -0.61
                                                                   -0.58
                                                                           -0.54
                                                                                    3192
                                                                                             1.0
y_mean[1275]
                    -0.31
                           4.4e-4
                                     0.03
                                            -0.36
                                                    -0.32
                                                           -0.31
                                                                   -0.29
                                                                           -0.26
                                                                                    3340
                                                                                             1.0
y_mean[1276]
                   -0.64
                           7.4e-4
                                     0.04
                                            -0.73
                                                    -0.67
                                                           -0.64
                                                                   -0.62
                                                                           -0.56
                                                                                    3147
                                                                                             1.0
                           5.7e-4
                    -0.03
                                     0.03
                                            -0.09
                                                    -0.05
                                                           -0.03
                                                                   -0.01
                                                                            0.03
                                                                                    3254
y_mean[1277]
                                                                                             1.0
y_mean[1278]
                    -0.32
                           5.6e-4
                                     0.03
                                            -0.38
                                                   -0.34
                                                           -0.32
                                                                    -0.3
                                                                           -0.26
                                                                                    2668
                                                                                             1.0
y_mean[1279]
                     0.59
                           5.9e-4
                                             0.51
                                                            0.58
                                                                    0.61
                                                                            0.66
                                     0.04
                                                     0.56
                                                                                    3714
                                                                                             1.0
                     0.01
                           4.8e-4
                                     0.03
                                            -0.04-5.4e-3
                                                            0.01
                                                                    0.03
                                                                            0.07
                                                                                    3425
                                                                                             1.0
y_mean[1280]
                    -0.46
                           3.3e-4
                                     0.02
                                            -0.49
                                                   -0.47
y_mean[1281]
                                                           -0.46
                                                                   -0.45
                                                                           -0.42
                                                                                    2937
                                                                                             1.0
                    -0.47
                           3.1e-4
                                     0.02
                                            -0.51
                                                    -0.49
                                                           -0.47
                                                                   -0.46
                                                                           -0.44
                                                                                    3663
y_mean[1282]
                                                                                             1.0
                     0.79
                           6.4e-4
                                     0.04
                                             0.72
                                                     0.77
                                                            0.79
                                                                    0.82
                                                                            0.88
                                                                                    4165
y_mean[1283]
                                                                                             1.0
y_mean[1284]
                    -0.14
                           4.2e-4
                                     0.02
                                            -0.19
                                                    -0.16
                                                           -0.14
                                                                   -0.13
                                                                            -0.1
                                                                                    2995
                                                                                             1.0
                    -0.51
                                            -0.55
                                                           -0.51
                           3.7e-4
                                     0.02
                                                    -0.52
                                                                   -0.49
                                                                           -0.47
                                                                                    3318
y_mean[1285]
                                                                                             1.0
                    -0.64
                           4.8e-4
                                     0.03
                                             -0.7
                                                    -0.66
                                                           -0.64
                                                                   -0.61
                                                                           -0.57
y_mean[1286]
                                                                                    4575
                                                                                             1.0
                           7.0e-4
                                     0.04
                                             0.02
                      0.1
                                                     0.07
                                                              0.1
                                                                    0.13
                                                                            0.18
                                                                                    3669
                                                                                             1.0
y_mean[1287]
y_mean[1288]
                    -0.22
                           4.6e-4
                                     0.02
                                            -0.27
                                                    -0.24
                                                           -0.22
                                                                   -0.21
                                                                           -0.18
                                                                                    2883
                                                                                             1.0
y_mean[1289]
                    -0.57
                                            -0.65
                                                           -0.57
                           6.5e-4
                                     0.04
                                                     -0.6
                                                                   -0.55
                                                                            -0.5
                                                                                    3353
                                                                                             1.0
y_mean[1290]
                     0.93
                           5.9e-4
                                     0.04
                                             0.86
                                                     0.91
                                                            0.93
                                                                    0.96
                                                                             1.0
                                                                                    4137
                                                                                             1.0
y_mean[1291]
                    -0.47
                           3.0e-4
                                     0.02
                                            -0.51
                                                    -0.49
                                                           -0.48
                                                                   -0.46
                                                                           -0.44
                                                                                    3527
                                                                                             1.0
                     0.55
                           4.9e-4
                                     0.03
                                             0.49
                                                     0.53
                                                            0.55
                                                                    0.57
                                                                            0.61
y_mean[1292]
                                                                                    4138
                                                                                             1.0
                 -5.3e-3
                           3.5e-4
                                     0.02
                                            -0.05
                                                    -0.02-5.0e-3 9.0e-3
                                                                            0.04
                                                                                    3617
y_mean[1293]
                                                                                             1.0
                           4.8e-4
                                     0.03
                                             0.72
                                                            0.79
                                                                            0.85
y_mean[1294]
                     0.79
                                                     0.77
                                                                    0.81
                                                                                    4226
                                                                                             1.0
                      0.1
                           6.9e-4
                                     0.04
                                             0.02
                                                     0.07
                                                             0.1
                                                                    0.13
                                                                            0.18
                                                                                    3669
                                                                                             1.0
y_mean[1295]
y_mean[1296]
                     1.99
                           8.4e-4
                                     0.05
                                             1.88
                                                     1.95
                                                             1.99
                                                                    2.03
                                                                             2.1
                                                                                    4236
                                                                                             1.0
                     -0.6
                           8.3e-4
                                     0.04
                                            -0.68
                                                    -0.62
                                                             -0.6
                                                                   -0.57
                                                                           -0.52
                                                                                    2537
y_mean[1297]
                                                                                             1.0
                     2.91
                                             2.58
                                                     2.79
                                                                            3.24
                           2.6e-3
                                     0.17
                                                            2.91
                                                                    3.02
                                                                                    4397
y_mean[1298]
                                                                                             1.0
y_mean[1299]
                     1.58
                           9.8e-4
                                     0.06
                                             1.45
                                                     1.54
                                                             1.58
                                                                    1.62
                                                                             1.7
                                                                                    4267
                                                                                             1.0
                     -0.3
                                     0.02
                                            -0.33
                                                    -0.31
                                                             -0.3
                                                                   -0.28
                                                                           -0.26
                           3.3e-4
                                                                                    3553
                                                                                             1.0
y_mean[1300]
y_mean[1301]
                    -0.13
                           4.5e-4
                                     0.03
                                            -0.19
                                                    -0.15
                                                           -0.13
                                                                   -0.12
                                                                           -0.08
                                                                                    3522
                                                                                             1.0
                  7.4e-3
                           5.5e-4
                                     0.03
                                            -0.06
                                                    -0.02 6.8e-3
                                                                    0.03
                                                                            0.07
                                                                                    3704
                                                                                             1.0
y_mean[1302]
y_mean[1303]
                    -0.51
                           3.8e-4
                                     0.02
                                            -0.55
                                                    -0.52
                                                           -0.51
                                                                   -0.49
                                                                           -0.46
                                                                                    3287
                                                                                             1.0
                                                           -0.72
                    -0.72
                           5.3e-4
                                     0.03
                                            -0.78
                                                    -0.74
                                                                           -0.65
y_mean[1304]
                                                                   -0.69
                                                                                    4262
                                                                                             1.0
y_mean[1305]
                   -0.45
                           4.8e-4
                                     0.03
                                             -0.5
                                                    -0.47
                                                           -0.45
                                                                   -0.43
                                                                           -0.39
                                                                                    3867
                                                                                             1.0
                   -0.42
                           3.9e-4
                                     0.02
                                            -0.46
                                                    -0.43
                                                           -0.42
                                                                    -0.4
                                                                           -0.38
                                                                                    3008
y mean[1306]
                                                                                             1.0
                    -0.49
                           3.8e-4
                                     0.02
                                            -0.53
                                                     -0.5
                                                           -0.49
                                                                           -0.44
y_mean[1307]
                                                                   -0.47
                                                                                    3304
                                                                                             1.0
                    -0.49
                                            -0.53
                                                           -0.49
                                                                           -0.45
                           3.4e-4
                                     0.02
                                                     -0.5
                                                                   -0.48
                                                                                    3204
y_mean[1308]
                                                                                             1.0
y_mean[1309]
                     2.12
                           8.0e-4
                                     0.05
                                             2.01
                                                     2.08
                                                            2.12
                                                                    2.15
                                                                            2.22
                                                                                    4636
                                                                                             1.0
                     0.39
                           4.5e-4
                                     0.03
                                             0.34
                                                     0.37
                                                            0.39
                                                                    0.41
                                                                            0.44
                                                                                    3477
                                                                                             1.0
y_mean[1310]
                   -0.52
                           4.2e-4
                                     0.02
                                            -0.57
                                                    -0.54
                                                           -0.52
                                                                    -0.5
                                                                           -0.47
                                                                                    3442
y_mean[1311]
                                                                                             1.0
                                     0.03
                     0.34
                           5.2e-4
                                             0.28
                                                     0.32
                                                            0.34
                                                                    0.37
                                                                            0.41
                                                                                    4171
                                                                                             1.0
y_mean[1312]
y_mean[1313]
                    -0.37
                                     0.02
                                            -0.42
                                                    -0.39
                                                           -0.37
                                                                           -0.33
                           4.8e-4
                                                                   -0.36
                                                                                    2550
                                                                                             1.0
y_mean[1314]
                    -0.42
                           3.9e-4
                                     0.02
                                            -0.46
                                                    -0.43
                                                           -0.42
                                                                    -0.4
                                                                           -0.38
                                                                                    3008
                                                                                             1.0
                    -0.11
                           6.8e-4
                                            -0.18
                                                    -0.14
                                                           -0.11
                                                                           -0.04
                                     0.04
                                                                   -0.09
                                                                                    2813
y_mean[1315]
                                                                                             1.0
                    0.35
                           4.5e-4
                                     0.03
                                              0.3
                                                     0.34
                                                            0.35
                                                                    0.37
                                                                            0.41
                                                                                    3839
y_mean[1316]
                                                                                             1.0
                                             0.74
                                                            0.85
                                                                            0.96
y_mean[1317]
                     0.85
                           8.7e-4
                                     0.06
                                                     0.81
                                                                    0.89
                                                                                    4255
                                                                                             1.0
                           9.2e-4
y_mean[1318]
                    -0.41
                                     0.04
                                             -0.5
                                                    -0.44
                                                           -0.41
                                                                   -0.38
                                                                           -0.33
                                                                                    2124
                                                                                             1.0
y_mean[1319]
                    -0.45
                           4.3e-4
                                     0.02
                                             -0.5
                                                    -0.47
                                                           -0.45
                                                                   -0.43
                                                                            -0.4
                                                                                    3202
                                                                                             1.0
```

y_mean[1320]	0.29	5.4e-4	0.03	0.23	0.27	0.29	0.31	0.35	2997	1.0
y_mean[1321]	0.2	7.5e-4	0.04	0.13	0.18	0.2	0.23	0.28	2742	1.0
y_mean[1322]	-0.13	4.9e-4	0.03	-0.19	-0.15	-0.13	-0.11	-0.07	3521	1.0
y_mean[1323]	-0.32	7.3e-4	0.03	-0.39	-0.35	-0.32	-0.3	-0.25	2275	1.0
y_mean[1324]	0.35	4.5e-4	0.03	0.29	0.33	0.35	0.37	0.4	3745	1.0
y_mean[1325]	0.8	6.3e-4	0.04	0.72	0.77	0.8	0.83	0.88	4217	1.0
y_mean[1326]	0.28	5.0e-4	0.03	0.23	0.26	0.28	0.3	0.34	3037	1.0
y_mean[1327]	-0.69	7.6e-4	0.05	-0.78	-0.72	-0.69	-0.65	-0.59	3882	1.0
y_mean[1328]	-0.39	2.5e-4	0.02	-0.42	-0.4	-0.39	-0.38	-0.36	4159	1.0
y_mean[1329]	0.79	6.5e-4	0.04	0.71	0.76	0.79	0.82	0.87	4189	1.0
y_mean[1330]	-0.66	5.4e-4	0.03	-0.73	-0.68	-0.66	-0.64	-0.6	3579	1.0
y_mean[1331]	-0.58	5.3e-4	0.04	-0.65	-0.6	-0.58	-0.55	-0.51	4509	1.0
y_mean[1332]	-0.25	5.8e-4	0.03	-0.31	-0.27	-0.25	-0.22	-0.18	3340	1.0
y_mean[1333]	-0.41	4.5e-4	0.03	-0.46	-0.43	-0.41	-0.39	-0.35	3781	1.0
y_mean[1334]	-0.53	5.3e-4	0.03	-0.59	-0.55	-0.53	-0.51	-0.47	3100	1.0
y_mean[1335]	-0.63	4.7e-4	0.03	-0.69	-0.65	-0.63	-0.61	-0.57	4558	1.0
y_mean[1336]	1.72	1.4e-3	0.08	1.56	1.66	1.71	1.77	1.88	3631	1.0
y_mean[1337]	-0.1	6.9e-4	0.04	-0.18	-0.13	-0.1	-0.07	-0.02	3716	1.0
y_mean[1338]	-0.37	8.2e-4	0.04	-0.15	-0.13	-0.37	-0.35	-0.02	2166	1.0
y_mean[1339]	0.08	6.2e-4	0.04	0.43	0.06	0.08	0.11	0.16	3399	1.0
• –										
y_mean[1340]	-0.34	5.0e-4	0.03	-0.39	-0.36	-0.34	-0.33	-0.29	2614	1.0
y_mean[1341]	-0.47	4.3e-4	0.03	-0.52	-0.48	-0.47	-0.45	-0.41	3520	1.0
y_mean[1342]	0.36	4.4e-4	0.03	0.31	0.34	0.36	0.37	0.41	3389	1.0
y_mean[1343]	-0.36	3.7e-4	0.02	-0.4	-0.37	-0.36	-0.35	-0.32	3152	1.0
y_mean[1344]	-0.38	7.3e-4	0.04	-0.46	-0.41	-0.38	-0.36	-0.3	2879	1.0
y_mean[1345]	0.84	5.9e-4	0.04	0.77	0.82	0.84	0.87	0.92	4227	1.0
y_mean[1346]	-0.22	5.5e-4	0.03	-0.28	-0.24	-0.22	-0.2	-0.16	3298	1.0
y_mean[1347]	0.59	5.6e-4	0.04	0.51	0.56	0.59	0.62	0.67	5297	1.0
y_mean[1348]	0.29	4.7e-4	0.03	0.24	0.27	0.29	0.31	0.34	3233	1.0
y_mean[1349]	-0.72	6.5e-4	0.04	-0.8	-0.75	-0.72	-0.69	-0.64	3936	1.0
y_mean[1350]	-0.6	9.5e-4	0.05	-0.71	-0.63	-0.6	-0.56	-0.49	3288	1.0
y_mean[1351]	-0.47	3.4e-4	0.02	-0.51	-0.48	-0.47	-0.46	-0.44	3071	1.0
y_mean[1352]	-0.29	8.2e-4	0.05	-0.38	-0.32	-0.29	-0.26	-0.2	3086	1.0
y_mean[1353]	0.82	8.4e-4	0.06	0.71	0.78	0.82	0.86	0.94	4841	1.0
y_mean[1354]	-0.31	2.9e-4	0.02	-0.35	-0.33	-0.31	-0.3	-0.28	3776	1.0
y_mean[1355]	-0.42	2.6e-4	0.02	-0.45	-0.43	-0.42	-0.4	-0.38	4045	1.0
y_mean[1356]	1.77	7.4e-4	0.05	1.68	1.74	1.78	1.81	1.87	4273	1.0
y_mean[1357]	-0.29	5.7e-4	0.03	-0.35	-0.31	-0.29	-0.27	-0.23	3031	1.0
y_mean[1358]	0.65	6.0e-4	0.04	0.58	0.63	0.65	0.68	0.73	3799	1.0
y_mean[1359]	2.7	1.3e-3	0.08	2.53	2.64	2.7	2.75	2.86	4453	1.0
y_mean[1360]	0.56	3.9e-4	0.02	0.51	0.55	0.56	0.58	0.61	3915	1.0
y_mean[1361]	-0.59	8.4e-4	0.05	-0.69	-0.63	-0.59	-0.56	-0.5	3279	1.0
y_mean[1362]	-0.38	4.4e-4	0.02	-0.43	-0.4	-0.38	-0.37	-0.34	2854	1.0
y_mean[1363]	0.5	5.1e-4	0.03	0.44	0.48	0.5	0.52	0.57	4091	1.0
y_mean[1364]	-0.73	6.2e-4	0.04	-0.81	-0.76	-0.73	-0.71	-0.66	4038	1.0
y_mean[1365]	12.77	5.3e-3	0.38	12.03	12.51	12.76	13.03	13.53	5240	1.0
y_mean[1366]	-0.44	4.1e-4	0.02	-0.49	-0.46	-0.44	-0.42	-0.39	3742	1.0
y_mean[1367]	-0.59	8.9e-4	0.04	-0.68	-0.62	-0.59	-0.56	-0.51	2412	1.0
/ [ - 0 0 1 ]	5.00		, . <b>.</b> .	,	,			J . J I		

```
-0.03 3.7e-3
                                                            0.02
                                                                    0.04
y_mean[1368]
                     0.02
                           4.9e-4
                                     0.03
                                                                            0.08
                                                                                    3238
                                                                                             1.0
                    -0.47
                           3.4e-4
                                     0.02
                                            -0.51
                                                    -0.48
                                                           -0.47
                                                                   -0.45
                                                                           -0.43
                                                                                    3326
y_mean[1369]
                                                                                             1.0
y_mean[1370]
                    -0.46
                                     0.02
                                            -0.49
                                                           -0.46
                           3.4e-4
                                                    -0.47
                                                                   -0.45
                                                                           -0.42
                                                                                    3133
                                                                                             1.0
y_mean[1371]
                   -0.05
                           4.5e-4
                                     0.03
                                             -0.1
                                                    -0.07
                                                           -0.05
                                                                   -0.03-4.1e-4
                                                                                    3467
                                                                                             1.0
y_mean[1372]
                     0.83
                           6.3e-4
                                     0.04
                                             0.75
                                                     0.81
                                                            0.83
                                                                    0.86
                                                                            0.91
                                                                                    3943
                                                                                             1.0
y_mean[1373]
                    -0.44
                           3.7e-4
                                     0.02
                                            -0.48
                                                    -0.46
                                                           -0.44
                                                                   -0.43
                                                                            -0.4
                                                                                    3032
                                                                                             1.0
                   -0.51
y_mean[1374]
                           6.0e-4
                                     0.04
                                            -0.58
                                                    -0.53
                                                           -0.51
                                                                   -0.48
                                                                           -0.43
                                                                                    4102
                                                                                             1.0
y_mean[1375]
                           7.9e-4
                                             1.37
                                                                    1.53
                                                                            1.62
                     1.49
                                     0.06
                                                     1.45
                                                             1.49
                                                                                    6141
                                                                                             1.0
                    -0.08
                           5.1e-4
                                     0.03
                                            -0.13
                                                     -0.1
                                                           -0.08
                                                                   -0.07
                                                                           -0.03
                                                                                    2437
                                                                                             1.0
y_mean[1376]
                    -0.38
                           3.1e-4
                                     0.02
                                            -0.41
                                                    -0.39
                                                           -0.38
                                                                           -0.34
y_mean[1377]
                                                                   -0.36
                                                                                    3777
                                                                                             1.0
                    -0.38
                           3.6e-4
                                     0.02
                                            -0.42
                                                    -0.39
                                                           -0.38
                                                                   -0.36
                                                                           -0.34
                                                                                    3170
y_mean[1378]
                                                                                             1.0
                    -0.49
                           4.1e-4
                                     0.02
                                            -0.54
                                                    -0.51
                                                           -0.49
                                                                   -0.47
                                                                           -0.44
                                                                                    3421
                                                                                             1.0
y_mean[1379]
y_mean[1380]
                    -0.49
                           3.5e-4
                                     0.02
                                            -0.53
                                                     -0.5
                                                           -0.49
                                                                           -0.45
                                                                   -0.48
                                                                                    3164
                                                                                             1.0
                                            -0.45
                                                             -0.4
                     -0.4
                           5.8e-4
                                     0.03
                                                    -0.42
                                                                   -0.38
                                                                           -0.34
                                                                                    2547
y_mean[1381]
                                                                                             1.0
                     0.39
                           5.1e-4
                                     0.03
                                             0.32
                                                     0.36
                                                            0.39
                                                                            0.45
y_mean[1382]
                                                                    0.41
                                                                                    3869
                                                                                             1.0
                                     0.03
                                             0.26
                     0.31
                           4.8e-4
                                                     0.29
                                                            0.31
                                                                    0.33
                                                                            0.36
                                                                                    3059
                                                                                             1.0
y_mean[1383]
y_mean[1384]
                    -0.22
                           7.5e-4
                                     0.04
                                            -0.29
                                                    -0.25
                                                           -0.22
                                                                    -0.2
                                                                           -0.15
                                                                                    2303
                                                                                             1.0
y_mean[1385]
                    -0.09
                                     0.02
                           4.9e-4
                                            -0.14
                                                    -0.11
                                                           -0.09
                                                                   -0.08
                                                                           -0.05
                                                                                    2449
                                                                                             1.0
y_mean[1386]
                   -0.28
                           6.6e-4
                                     0.03
                                            -0.35
                                                     -0.3
                                                           -0.28
                                                                   -0.26
                                                                           -0.22
                                                                                    2533
                                                                                             1.0
y_mean[1387]
                     1.52
                           5.8e-4
                                     0.04
                                             1.45
                                                      1.5
                                                             1.52
                                                                    1.55
                                                                             1.6
                                                                                    4417
                                                                                             1.0
                    -0.36
                           5.0e-4
                                     0.03
                                            -0.41
                                                    -0.38
                                                           -0.36
                                                                           -0.31
                                                                                    2630
y_mean[1388]
                                                                   -0.34
                                                                                             1.0
                    -0.56
                           5.2e-4
                                     0.03
                                            -0.61
                                                    -0.58
                                                           -0.55
                                                                   -0.53
                                                                            -0.5
                                                                                    3325
y_mean[1389]
                                                                                             1.0
                     -0.1
                                     0.02
                                            -0.14
                                                    -0.11
                                                            -0.1
                                                                           -0.05
y_mean[1390]
                           4.3e-4
                                                                   -0.08
                                                                                    2752
                                                                                             1.0
                    -0.16
                           4.2e-4
                                     0.02
                                             -0.2
                                                    -0.17
                                                           -0.16
                                                                   -0.14
                                                                           -0.12
                                                                                    2625
y_mean[1391]
                                                                                             1.0
y_mean[1392]
                    -0.55
                           5.5e-4
                                     0.03
                                            -0.61
                                                    -0.57
                                                           -0.55
                                                                   -0.53
                                                                           -0.49
                                                                                    3358
                                                                                             1.0
                    -0.22
                           4.9e-4
                                     0.03
                                            -0.28
                                                    -0.24
                                                           -0.22
                                                                    -0.2
                                                                           -0.17
                                                                                    3299
y_mean[1393]
                                                                                             1.0
                    -0.13
                                     0.02
                                            -0.17
                                                    -0.14
                                                           -0.13
                                                                           -0.08
                           4.5e-4
                                                                   -0.11
                                                                                    2461
y_mean[1394]
                                                                                             1.0
y_mean[1395]
                     0.99
                           7.8e-4
                                     0.05
                                             0.89
                                                     0.96
                                                            0.99
                                                                    1.02
                                                                            1.09
                                                                                    4251
                                                                                             1.0
                           4.3e-4
                                     0.02
                                            -0.14
                                                    -0.11
                                                             -0.1
                                                                   -0.08
                                                                           -0.05
                     -0.1
                                                                                    2665
                                                                                             1.0
y_mean[1396]
y_mean[1397]
                    -0.19
                           9.2e-4
                                     0.05
                                            -0.29
                                                    -0.22
                                                           -0.19
                                                                   -0.16
                                                                           -0.09
                                                                                    2991
                                                                                             1.0
y_mean[1398]
                    -0.25
                           5.4e-4
                                     0.03
                                            -0.31
                                                    -0.27
                                                           -0.25
                                                                   -0.23
                                                                           -0.19
                                                                                    3186
                                                                                             1.0
                                                    -0.21
y_mean[1399]
                    -0.19
                           4.8e-4
                                     0.03
                                            -0.24
                                                           -0.19
                                                                   -0.17
                                                                           -0.14
                                                                                    2891
                                                                                             1.0
y_mean[1400]
                    -0.26
                           5.1e-4
                                     0.03
                                            -0.32
                                                    -0.28
                                                           -0.26
                                                                           -0.21
                                                                   -0.24
                                                                                    2874
                                                                                             1.0
y_mean[1401]
                    0.42
                           4.3e-4
                                     0.03
                                             0.37
                                                      0.4
                                                            0.42
                                                                    0.43
                                                                            0.47
                                                                                    3589
                                                                                             1.0
                   -0.45
                           3.5e-4
                                     0.02
                                            -0.49
                                                   -0.47
                                                           -0.45
                                                                   -0.44
                                                                           -0.42
                                                                                    3015
y mean [1402]
                                                                                             1.0
                     0.11
                           3.4e-4
                                     0.02
                                             0.07
                                                      0.1
                                                            0.11
                                                                    0.12
                                                                            0.15
y_mean[1403]
                                                                                    3803
                                                                                             1.0
                                            -0.54
                   -0.49
                           4.5e-4
                                     0.03
                                                    -0.51
                                                           -0.49
                                                                   -0.47
                                                                           -0.44
                                                                                    3675
y_mean[1404]
                                                                                             1.0
y_mean[1405]
                     0.36
                           4.4e-4
                                     0.03
                                              0.3
                                                     0.34
                                                            0.36
                                                                    0.37
                                                                            0.41
                                                                                    3481
                                                                                             1.0
                                            -0.62
                    -0.54
                           7.0e-4
                                     0.04
                                                    -0.57
                                                           -0.54
                                                                   -0.51
                                                                           -0.46
                                                                                    3469
                                                                                             1.0
y_mean[1406]
                     -0.1
                           4.8e-4
                                     0.02
                                            -0.15
                                                    -0.12
                                                             -0.1
                                                                   -0.09
                                                                           -0.06
y_mean[1407]
                                                                                    2436
                                                                                             1.0
                                            -0.72
                    -0.65
                           5.8e-4
                                     0.04
                                                    -0.67
                                                           -0.65
                                                                   -0.63
                                                                           -0.58
                                                                                    3865
                                                                                             1.0
y_mean[1408]
y_mean[1409]
                    -0.32
                                     0.02
                                            -0.37
                                                    -0.34
                                                           -0.32
                                                                           -0.28
                           4.1e-4
                                                                    -0.3
                                                                                    3243
                                                                                             1.0
y_mean[1410]
                    -0.41
                           9.0e-4
                                     0.05
                                            -0.52
                                                    -0.45
                                                           -0.41
                                                                   -0.38
                                                                           -0.31
                                                                                    3108
                                                                                             1.0
                           6.8e-4
                                            -0.13
                                                           -0.06
                                                                   -0.04 9.7e-3
                    -0.06
                                     0.04
                                                    -0.09
                                                                                    2727
y_mean[1411]
                                                                                             1.0
                     2.73
                           2.2e-3
                                             2.48
                                                     2.64
                                                            2.72
                                                                            2.97
                                                                                    3082
y_mean[1412]
                                     0.12
                                                                    2.81
                                                                                             1.0
                                     0.03
                                            -0.02
                                                            0.04
y_mean[1413]
                     0.04
                           5.1e-4
                                                     0.02
                                                                    0.06
                                                                             0.1
                                                                                    3339
                                                                                             1.0
y_mean[1414]
                    -0.09
                           4.2e-4
                                     0.02
                                            -0.14
                                                    -0.11
                                                           -0.09
                                                                   -0.08
                                                                           -0.05
                                                                                    2835
                                                                                             1.0
y_mean[1415]
                    -0.44
                           7.0e-4
                                     0.03
                                             -0.5
                                                    -0.46
                                                           -0.44
                                                                   -0.41
                                                                           -0.37
                                                                                    2339
                                                                                             1.0
```

y_mean[1416]	0.17	6.8e-4	0.04	0.09	0.14	0.17	0.2	0.25	3738	1.0
y_mean[1417]	3.53	3.4e-3	0.19	3.17	3.4	3.53	3.66	3.91	3186	1.0
y_mean[1418]	-0.42	4.2e-4	0.02	-0.47	-0.44	-0.42	-0.41	-0.37	3400	1.0
y_mean[1419]	0.51	4.8e-4	0.03	0.45	0.49	0.51	0.53	0.57	4030	1.0
y_mean[1420]	-0.38	5.1e-4	0.03	-0.44	-0.4	-0.38	-0.36	-0.32	3701	1.0
y_mean[1421]	-0.45	3.4e-4	0.02	-0.49	-0.46	-0.45	-0.44	-0.41	2956	1.0
y_mean[1422]	-0.02	3.9e-4	0.02	-0.07	-0.04		9.1e-3	0.02	3537	1.0
y_mean[1423]	0.06	4.2e-4	0.02	0.02	0.05	0.06	0.08	0.11	3118	1.0
y_mean[1424]	0.44	1.3e-3	0.09	0.26	0.38	0.44	0.5	0.61	4289	1.0
y_mean[1425]	0.86	1.0e-3	0.07	0.72	0.81	0.86	0.9	0.99	4311	1.0
y_mean[1426]	-0.38	3.2e-4	0.02	-0.42	-0.39	-0.38	-0.37	-0.34	3548	1.0
y_mean[1427]	-0.26	5.3e-4	0.03	-0.31	-0.28	-0.26	-0.24	-0.2	2760	1.0
y_mean[1428]	-0.54	2.0e-3	0.12	-0.76	-0.61	-0.53	-0.46	-0.31	3328	1.0
y_mean[1429] y_mean[1429]	1.89	1.2e-3	0.12	1.76	1.85	1.89	1.94	2.02	3447	1.0
y_mean[1429] y_mean[1430]	1.49	7.3e-4	0.07	1.4	1.46	1.49	1.53	1.59	4486	1.0
y_mean[1430] y_mean[1431]	-0.54	5.3e-4	0.03	-0.61	-0.57	-0.54	-0.52	-0.48	4105	1.0
y_mean[1431] y_mean[1432]	-0.54	6.0e-4	0.03	-0.63	-0.57	-0.54	-0.52	-0.49	3344	1.0
• =			0.03				-0.54			1.0
y_mean[1433]	-0.48	4.5e-4		-0.54	-0.5	-0.48		-0.43	3725	
y_mean[1434]	0.08	6.5e-4		2.4e-3	0.05	0.08	0.1	0.15	3683	1.0
y_mean[1435]	-0.39	4.6e-4	0.02	-0.43	-0.4	-0.39	-0.37	-0.34	2400	1.0
y_mean[1436]	-0.06	4.4e-4	0.02	-0.11	-0.08	-0.06	-0.04	-0.01	2872	1.0
y_mean[1437]	0.3	6.0e-4	0.03	0.23	0.28	0.3	0.32	0.37	3284	1.0
y_mean[1438]	0.51	4.5e-4	0.03	0.46	0.49	0.51	0.53	0.57	4124	1.0
y_mean[1439]	0.43	7.2e-4	0.05	0.33	0.39	0.43	0.46	0.53	5408	1.0
y_mean[1440]	-0.05	6.8e-4	0.04	-0.12	-0.07	-0.05	-0.03	0.03	3003	1.0
y_mean[1441]	-0.33	6.1e-4	0.03	-0.39	-0.35	-0.33	-0.31	-0.27	2586	1.0
y_mean[1442]	-0.36	7.7e-4	0.04	-0.43	-0.39	-0.36	-0.34	-0.29	2229	1.0
y_mean[1443]	-0.38	4.8e-4	0.03	-0.44	-0.4	-0.38	-0.36	-0.32	3932	1.0
y_mean[1444]	-0.5	4.5e-4	0.03	-0.55	-0.52	-0.5	-0.48	-0.44	3636	1.0
y_mean[1445]	-0.14	6.8e-4	0.04	-0.21	-0.16	-0.14	-0.12	-0.07	2688	1.0
y_mean[1446]	-0.48	3.5e-4	0.02	-0.52	-0.5	-0.48	-0.47	-0.45	3151	1.0
y_mean[1447]	-0.21	5.0e-4	0.03	-0.27	-0.23	-0.21	-0.19	-0.16	3155	1.0
y_mean[1448]	1.55	9.8e-4	0.06	1.42	1.51	1.55	1.59	1.67	4333	1.0
y_mean[1449]	-0.22	6.1e-4	0.03	-0.29	-0.25	-0.22	-0.2	-0.15	3262	1.0
y_mean[1450]	-0.14	4.9e-4	0.03	-0.19	-0.16	-0.14	-0.12	-0.09	2578	1.0
y_mean[1451]	0.71	4.8e-4	0.03	0.64	0.69	0.71	0.73	0.77	4700	1.0
y_mean[1452]	-0.71	5.2e-4	0.03	-0.78	-0.73	-0.71	-0.69	-0.65	4157	1.0
y_mean[1453]	0.32	4.6e-4	0.03	0.27	0.3	0.32	0.33	0.37	3291	1.0
y_mean[1454]	-0.39	6.5e-4	0.03	-0.45	-0.41	-0.39	-0.37	-0.32	2540	1.0
y_mean[1455]	-0.45	3.4e-4	0.02	-0.49	-0.46	-0.45	-0.44	-0.42	2940	1.0
y_mean[1456]	-0.49	3.8e-4	0.02	-0.54	-0.51	-0.49	-0.48	-0.45	3318	1.0
y_mean[1457]	-0.41	3.5e-4	0.02	-0.45	-0.42	-0.41	-0.4	-0.37	3302	1.0
y_mean[1458]	-0.15	4.2e-4	0.02	-0.2	-0.17	-0.15	-0.14	-0.11	2597	1.0
y_mean[1459]	0.3	5.7e-4	0.04	0.23	0.28	0.3	0.32	0.37	4135	1.0
y_mean[1460]	0.3	5.7e 4 5.5e-4	0.03	0.23	0.28	0.3	0.32	0.36	3469	1.0
y_mean[1460] y_mean[1461]	-0.09	5.3e-4	0.03	-0.15	-0.11	-0.09	-0.07	-0.04	2902	1.0
y_mean[1461] y_mean[1462]	-0.43	3.7e-4	0.03	-0.47	-0.44	-0.43	-0.41	-0.39	3242	1.0
y_mean[1463]	-0.43	1.0e-3	0.02	-0.47	-0.15	-0.43	-0.41	0.02	4137	1.0
λ-mean[1409]	-0.11	1.0e-3	0.07	0.24	-0.13	-0.11	-0.00	0.02	4131	1.0

y_mean[1464]	0.14	4.3e-4	0.03	0.09	0.12	0.14	0.16	0.19	3578	1.0
y_mean[1465]	1.6	1.5e-3	0.1	1.4	1.53	1.6	1.67	1.81	4406	1.0
y_mean[1466]	0.06	5.5e-4	0.03-	3.7e-3	0.04	0.06	0.08	0.12	3190	1.0
y_mean[1467]	-0.18	4.3e-4	0.02	-0.23	-0.2	-0.18	-0.17	-0.14	2666	1.0
y_mean[1468]	0.62	6.5e-4	0.04	0.54	0.6	0.62	0.65	0.7	3903	1.0
y_mean[1469]	-0.2	4.4e-4	0.02	-0.25	-0.21	-0.2	-0.18	-0.15	2885	1.0
y_mean[1470]	0.15	6.0e-4	0.04	0.07	0.12	0.15	0.17	0.22	3939	1.0
y_mean[1471]	-0.45	3.8e-4	0.02	-0.49	-0.46	-0.45	-0.44	-0.41	3248	1.0
y_mean[1472]	0.44	5.1e-4	0.03	0.37	0.41	0.43	0.46	0.5	4388	1.0
y_mean[1473]	-0.62	4.5e-4	0.03	-0.68	-0.64	-0.62	-0.6	-0.57	4310	1.0
y_mean[1474]	-0.53	4.3e-4	0.03	-0.58	-0.55	-0.53	-0.51	-0.48	3410	1.0
y_mean[1475]	0.08	6.2e-4	0.04	0.01	0.06	0.08	0.11	0.15	3302	1.0
y_mean[1476]	-0.69	4.8e-4	0.03	-0.75	-0.71	-0.69	-0.67	-0.63	4245	1.0
y_mean[1477]	0.03	7.1e-4		-8.8e-3	0.05	0.03	0.11	0.03	4127	1.0
y_mean[1478]	0.00	1.3e-3	0.08	0.74	0.85	0.9	0.11	1.07	4509	1.0
y_mean[1479]	0.3	3.7e-4	0.02	0.06	0.09	0.3	0.30	0.15	3740	1.0
y_mean[1479] y_mean[1480]	-0.08	5.4e-4	0.02	-0.13	-0.1	-0.08	-0.06	-0.03	2432	1.0
y_mean[1481]	-0.03	5.4e-4 5.2e-4	0.03	-0.13	-0.23	-0.03	-0.19	-0.03	3345	1.0
<b>v</b> –	-0.21	3.4e-4	0.03	-0.49	-0.23	-0.21	-0.19	-0.15	2975	1.0
y_mean[1482]							-0.44			
y_mean[1483]	-0.31	5.0e-4	0.03	-0.37	-0.33 0.29	-0.31		-0.26	3259	1.0
y_mean[1484]	0.31	5.1e-4	0.03	0.25		0.31	0.33	0.36	3034	1.0
y_mean[1485]	0.86	5.7e-4	0.04	0.79	0.83	0.86	0.89	0.94	4512	1.0
y_mean[1486]	1.61	1.1e-3	0.07	1.46	1.56	1.61	1.66	1.75	3959	1.0
y_mean[1487]	0.01	4.9e-4	0.03		7.2e-3	0.01	0.03	0.07	3176	1.0
y_mean[1488]	3.37	3.4e-3	0.19	2.99	3.24	3.37	3.5	3.76	3287	1.0
y_mean[1489]	-0.18	4.8e-4	0.03	-0.24	-0.2	-0.18	-0.17	-0.13	3157	1.0
y_mean[1490]	0.04	3.9e-4		5.5e-3	0.03	0.04	0.06	0.09	3529	1.0
y_mean[1491]	0.74	6.9e-4	0.05	0.64	0.7	0.74	0.77	0.84	5560	1.0
y_mean[1492]	-0.41	4.1e-4	0.02	-0.45	-0.42	-0.41	-0.39	-0.37	2953	1.0
y_mean[1493]	-0.18	5.8e-4	0.03	-0.24	-0.2	-0.18	-0.16	-0.12	2762	1.0
y_mean[1494]	0.09	1.1e-3	0.07	-0.04	0.05	0.09	0.14	0.23	4360	1.0
y_mean[1495]	0.1	5.5e-4	0.03	0.03	0.07	0.1	0.12	0.16	3225	1.0
y_mean[1496]	-0.46	1.5e-3	0.08	-0.62	-0.51	-0.45	-0.4	-0.29	3204	1.0
y_mean[1497]	-0.24	4.2e-4	0.02	-0.29	-0.26	-0.24	-0.22	-0.19	3183	1.0
y_mean[1498]	1.09	5.9e-4	0.04	1.02	1.07	1.09	1.12	1.17	4272	1.0
y_mean[1499]	0.71	8.7e-4	0.06	0.6	0.68	0.71	0.75	0.82	4343	1.0
y_mean[1500]	-0.4	4.8e-4	0.03	-0.46	-0.42	-0.4	-0.38	-0.34	3852	1.0
y_mean[1501]	0.09	3.8e-4	0.02	0.05	0.08	0.09	0.11	0.14	3642	1.0
y_mean[1502]	-0.46	9.0e-4	0.05	-0.56	-0.49	-0.46	-0.43	-0.36	3074	1.0
y_mean[1503]	-0.11	4.2e-4	0.02	-0.16	-0.13	-0.11	-0.1	-0.07	2880	1.0
y_mean[1504]	-0.21	4.2e-4	0.02	-0.26	-0.23	-0.21	-0.2	-0.16	3288	1.0
y_mean[1505]	0.43	4.4e-4	0.03	0.38	0.41	0.43	0.45	0.48	3716	1.0
y_mean[1506]	-0.51	3.7e-4	0.02	-0.55	-0.52	-0.51	-0.5	-0.47	3302	1.0
y_mean[1507]	0.11	3.8e-4	0.02	0.07	0.09	0.11	0.13	0.16	3699	1.0
y_mean[1508]	1.61	9.9e-4	0.06	1.48	1.56	1.61	1.65	1.73	4111	1.0
y_mean[1509]	0.1	4.2e-4	0.03	0.05	0.09	0.1	0.12	0.15	3745	1.0
y_mean[1510]	-0.26	5.8e-4	0.03	-0.33	-0.29	-0.26	-0.24	-0.2	3177	1.0
y_mean[1511]	-0.28	7.3e-4	0.04	-0.36	-0.31	-0.28	-0.26	-0.2	2947	1.0
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y_mean[1512]	-0.45	3.4e-4	0.02	-0.49	-0.46	-0.45	-0.44	-0.41	3179	1.0
y_mean[1513]	-0.53	4.2e-4	0.02	-0.58	-0.55	-0.53	-0.51	-0.48	3375	1.0
y_mean[1514]	-0.16	4.2e-4	0.02	-0.2	-0.17	-0.16	-0.15	-0.12	2627	1.0
y_mean[1515]	1.06	5.9e-4	0.04	0.99	1.04	1.06	1.09	1.13	4056	1.0
y_mean[1516]	-0.51	4.4e-4	0.03	-0.56	-0.53	-0.51	-0.49	-0.46	3546	1.0
y_mean[1517]	-0.46	3.4e-4	0.02	-0.49	-0.47	-0.46	-0.44	-0.42	3202	1.0
y_mean[1518]	-0.17	4.2e-4	0.02	-0.22	-0.19	-0.17	-0.16	-0.13	2643	1.0
y_mean[1519]	0.02	5.0e-4	0.03	-0.04-	-3.8e-3	0.02	0.03	0.07	3176	1.0
y_mean[1520]	-0.45	2.8e-4	0.02	-0.48	-0.46	-0.45	-0.44	-0.42	3966	1.0
y_mean[1521]	-0.4	2.8e-4	0.02	-0.43	-0.41	-0.4	-0.39	-0.37	4074	1.0
y_mean[1522]	0.18	6.7e-4	0.04	0.09	0.15	0.18	0.21	0.27	4379	1.0
y_mean[1523]	0.62	5.8e-4	0.04	0.54	0.59	0.62	0.65	0.71	5326	1.0
y_mean[1524]	-0.63	4.7e-4	0.03	-0.7	-0.66	-0.63	-0.61	-0.57	4567	1.0
y_mean[1525]	-0.39	4.5e-4	0.03	-0.44	-0.41	-0.39	-0.37	-0.34	3489	1.0
y_mean[1526]	-0.29	3.6e-4	0.02	-0.33	-0.3	-0.29	-0.28	-0.25	3303	1.0
y_mean[1527]	0.03	3.5e-4	0.02	-0.01	0.01	0.03	0.04	0.07	3636	1.0
y_mean[1528]	0.23	6.6e-4	0.04	0.14	0.2	0.23	0.26	0.31	4155	1.0
y_mean[1529]	0.17	6.2e-4	0.04	0.1	0.15	0.17	0.2	0.25	4157	1.0
y_mean[1530]	-0.42	3.8e-4	0.02	-0.46	-0.43	-0.42	-0.41	-0.38	2662	1.0
y_mean[1531]	-0.65	4.6e-4	0.03	-0.72	-0.67	-0.65	-0.63	-0.59	4540	1.0
y_mean[1532]	-0.35	5.4e-4	0.03	-0.4	-0.37	-0.35	-0.33	-0.29	3012	1.0
y_mean[1533]	-0.38	4.6e-4	0.02	-0.43	-0.4	-0.38	-0.37	-0.34	2483	1.0
y_mean[1534]	-0.49	3.4e-4	0.02	-0.53	-0.5	-0.49	-0.47	-0.45	3217	1.0
y_mean[1535]	0.53	4.9e-4	0.03	0.47	0.5	0.53	0.55	0.59	4258	1.0
y_mean[1536]	0.29	5.0e-4	0.03	0.24	0.28	0.29	0.31	0.35	3018	1.0
y_mean[1537]	-0.36	5.1e-4	0.03	-0.41	-0.38	-0.36	-0.35	-0.31	2458	1.0
y_mean[1538]	0.26	6.7e-4	0.04	0.18	0.23	0.26	0.29	0.34	3903	1.0
y_mean[1539]	0.45	6.3e-4	0.04	0.37	0.42	0.45	0.48	0.53	4306	1.0
y_mean[1540]	0.7	7.3e-4	0.05	0.61	0.67	0.7	0.73	0.8	4641	1.0
y_mean[1541]	-0.47	6.2e-4	0.04	-0.54	-0.5	-0.47	-0.44	-0.39	3715	1.0
y_mean[1542]	-0.24	6.0e-4	0.03	-0.3	-0.26	-0.24	-0.22	-0.18	2759	1.0
y_mean[1543]	-0.43	6.6e-4	0.03	-0.5	-0.46	-0.43	-0.41	-0.37	2364	1.0
y_mean[1544]	-0.63	4.5e-4	0.03	-0.69	-0.65	-0.63	-0.61	-0.57	4283	1.0
y_mean[1545]	-0.52	7.3e-4	0.04	-0.6	-0.54	-0.51	-0.49	-0.43	3054	1.0
y_mean[1546]	-0.06	4.3e-4	0.03	-0.11	-0.07	-0.06	-0.04-	6.7e-3	3374	1.0
y_mean[1547]	-0.51	3.9e-4	0.02	-0.56	-0.53	-0.51	-0.5	-0.47	3291	1.0
y_mean[1548]	-0.49	4.5e-4	0.03	-0.54	-0.5	-0.49	-0.47	-0.44	3262	1.0
y_mean[1549]	0.32	5.0e-4	0.03	0.26	0.3	0.32	0.33	0.37	3060	1.0
y_mean[1550]	-0.58	7.4e-4	0.04	-0.66	-0.61	-0.58	-0.55	-0.5	3319	1.0
y_mean[1551]	-0.09	5.2e-4	0.03	-0.14	-0.11	-0.09	-0.08	-0.04	2415	1.0
y_mean[1552]	-0.53	5.8e-4	0.03	-0.6	-0.56	-0.53	-0.51	-0.47	3454	1.0
y_mean[1553]	-0.13	6.3e-4	0.03	-0.19	-0.15	-0.12	-0.1	-0.06	2780	1.0
y_mean[1554]	-0.42	3.8e-4	0.02	-0.46	-0.44	-0.42	-0.41	-0.38	2855	1.0
y_mean[1555]	0.53	4.7e-4	0.03	0.47	0.51	0.53	0.55	0.59	4028	1.0
y_mean[1556]	-0.45	9.7e-4	0.06	-0.56	-0.49	-0.45	-0.41	-0.34	3260	1.0
y_mean[1557]	0.31	5.5e-4	0.03	0.25	0.29	0.31	0.33	0.38	3856	1.0
y_mean[1558]	0.71	5.1e-4	0.04	0.64	0.69	0.71	0.74	0.79	5705	1.0
y_mean[1559]	-0.43	2.9e-4	0.02	-0.46	-0.44	-0.43	-0.42	-0.39	3693	1.0

y_mean[1560]	-0.32	5.6e-4	0.03	-0.37	-0.34	-0.32	-0.3	-0.26	2517	1.0
y_mean[1561]	-0.32	3.0e-4	0.02	-0.35	-0.33	-0.32	-0.31	-0.28	3652	1.0
y_mean[1562]	-0.27	3.7e-4	0.02	-0.31	-0.28	-0.27	-0.25	-0.22	3432	1.0
y_mean[1563]	-0.19	6.9e-4	0.04	-0.27	-0.22	-0.19	-0.16	-0.11	3575	1.0
y_mean[1564]	2.74	8.6e-4	0.06	2.63	2.71	2.74	2.78	2.86	4202	1.0
y_mean[1565]	-0.76	6.8e-4	0.04	-0.84	-0.79	-0.76	-0.73	-0.67	3875	1.0
y_mean[1566]	0.98	5.7e-4	0.04	0.9	0.95	0.98	1.0	1.05	4113	1.0
y_mean[1567]	0.22	4.3e-4	0.03	0.17	0.21	0.22	0.24	0.27	3824	1.0
y_mean[1568]	-0.42	6.4e-4	0.03	-0.48	-0.44	-0.42	-0.4	-0.36	2531	1.0
y_mean[1569]	-0.36	4.8e-4	0.03	-0.41	-0.38	-0.36	-0.35	-0.31	2750	1.0
y_mean[1570]	-0.53	4.1e-4	0.02	-0.58	-0.55	-0.53	-0.52	-0.49	3279	1.0
y_mean[1571]	0.52	4.7e-4	0.03	0.46	0.5	0.52	0.54	0.58	4046	1.0
y_mean[1572]	-0.49	3.9e-4	0.02	-0.54	-0.51	-0.49	-0.47	-0.44	3592	1.0
y_mean[1573]	-0.38	4.5e-4	0.02	-0.43	-0.4	-0.38	-0.37	-0.33	2909	1.0
y_mean[1574]	-0.41	2.6e-4	0.02	-0.44	-0.42	-0.41	-0.39	-0.37	4174	1.0
y_mean[1575]	0.28	5.2e-4	0.03	0.22	0.26	0.28	0.3	0.34	3508	1.0
y_mean[1576]	-0.35	5.1e-4	0.03	-0.41	-0.37	-0.35	-0.33	-0.29	3525	1.0
y_mean[1577]	0.35	7.5e-4	0.05	0.25	0.31	0.35	0.38	0.43	3834	1.0
y_mean[1578]	0.6	5.9e-4	0.04	0.52	0.57	0.6	0.63	0.68	4580	1.0
y_mean[1579]	-0.08	8.1e-4	0.05	-0.17	-0.11	-0.08	-0.05	8.6e-3	3210	1.0
y_mean[1580]	3.6	2.2e-3	0.15	3.32	3.5	3.6	3.7	3.89	4461	1.0
y_mean[1581]	-0.16	4.2e-4	0.02	-0.2	-0.17	-0.16	-0.14	-0.11	2817	1.0
y_mean[1582]	-0.17	8.0e-4	0.05	-0.26	-0.2	-0.17	-0.13	-0.08	3414	1.0
y_mean[1583]	-0.65	6.7e-4	0.04	-0.72	-0.67	-0.65	-0.63	-0.58	2918	1.0
y_mean[1584]	-0.33	6.7e-4	0.04	-0.4	-0.35	-0.33	-0.3	-0.25	3411	1.0
y_mean[1585]	-0.37	4.9e-4	0.02	-0.42	-0.39	-0.37	-0.35	-0.32	2474	1.0
y_mean[1586]	-0.18	7.0e-4	0.04	-0.25	-0.21	-0.18	-0.16	-0.11	2553	1.0
y_mean[1587]	-0.69	6.6e-4	0.04	-0.78	-0.72	-0.69	-0.66	-0.61	3920	1.0
y_mean[1588]	-0.27	5.9e-4	0.03	-0.33	-0.29	-0.27	-0.25	-0.2	3178	1.0
y_mean[1589]	-0.72	6.2e-4	0.04	-0.8	-0.74	-0.72	-0.69	-0.64	4076	1.0
y_mean[1590]	-0.49	6.5e-4	0.04	-0.56	-0.51	-0.49	-0.46	-0.41	3596	1.0
y_mean[1591]	-0.39	4.3e-4	0.02	-0.44	-0.41	-0.39	-0.38	-0.35	3045	1.0
y_mean[1592]	1.24	5.7e-4	0.04	1.17	1.22	1.24	1.27	1.31	4199	1.0
y_mean[1593]	-0.68	5.6e-4	0.04	-0.75	-0.7	-0.68	-0.66	-0.61	3998	1.0
y_mean[1594]	-0.42	3.8e-4	0.02	-0.46	-0.43	-0.42	-0.4	-0.38	2692	1.0
y_mean[1595]	-0.38	8.4e-4	0.05	-0.48	-0.41	-0.38	-0.34	-0.28	3788	1.0
y_mean[1596]	-0.14	4.2e-4	0.02	-0.19	-0.15	-0.14	-0.12	-0.09	3051	1.0
y_mean[1597]	-0.56	6.2e-4	0.04	-0.63	-0.59	-0.56	-0.54	-0.49	3341	1.0
y_mean[1598]	-0.06	5.5e-4	0.03	-0.12	-0.08	-0.06	-0.03	8.8e-3	3741	1.0
y_mean[1599]	-0.39	5.7e-4	0.04	-0.46	-0.42	-0.39	-0.37	-0.32	3892	1.0
y_mean[1600]	0.2	4.2e-4	0.03	0.15	0.19	0.2	0.22	0.25	3605	1.0
y_mean[1601]	-0.1	5.5e-4	0.03	-0.15	-0.12	-0.1	-0.08	-0.05	2464	1.0
y_mean[1602]	-0.22	4.5e-4	0.02	-0.27	-0.23	-0.22	-0.2	-0.17	2841	1.0
y_mean[1603]	0.52	4.8e-4	0.03	0.46	0.5	0.52	0.54	0.58	4217	1.0
y_mean[1604]	-0.47	3.6e-4	0.02	-0.51	-0.48	-0.47	-0.45	-0.43	3509	1.0
y_mean[1605]	-0.14	4.2e-4	0.02	-0.18	-0.15	-0.14	-0.12	-0.1	2665	1.0
y_mean[1606]	1.06	6.1e-4	0.04	0.98	1.03	1.06	1.09	1.15	4863	1.0
y_mean[1607]	-0.48	6.9e-4	0.04	-0.55	-0.51	-0.48	-0.46	-0.41	2976	1.0

y_mean[1608]	0.14	5.8e-4	0.03	0.08	0.12	0.14	0.17	0.21	3600	1.0
y_mean[1609]	0.2	5.5e-4	0.03	0.14	0.18	0.2	0.22	0.26	3357	1.0
y_mean[1610]	1.09	6.3e-4	0.04	1.01	1.06	1.09	1.12	1.16	3910	1.0
y_mean[1611]	1.07	5.3e-4	0.04	1.0	1.05	1.07	1.1	1.14	4739	1.0
y_mean[1612]	-0.39	5.7e-4	0.03	-0.45	-0.41	-0.39	-0.37	-0.34	2724	1.0
y_mean[1613]	-0.22	6.6e-4	0.04	-0.29	-0.24	-0.22	-0.19	-0.14	3475	1.0
y_mean[1614]	1.55	10.0e-4	0.06	1.42	1.5	1.55	1.59	1.67	4186	1.0
y_mean[1615]	-0.45	3.5e-4	0.02	-0.48	-0.46	-0.45	-0.43	-0.41	3174	1.0
y_mean[1616]	-0.33	6.3e-4	0.03	-0.39	-0.35	-0.33	-0.31	-0.27	2395	1.0
y_mean[1617]	0.45	4.5e-4	0.03	0.4	0.43	0.45	0.47	0.51	3933	1.0
y_mean[1618]	-0.23	5.0e-4	0.03	-0.29	-0.25	-0.23	-0.21	-0.18	3047	1.0
y_mean[1619]	-0.52	4.2e-4	0.02	-0.57	-0.54	-0.52	-0.51	-0.48	3405	1.0
y_mean[1620]	-0.54	7.0e-4	0.04	-0.62	-0.56	-0.53	-0.51	-0.46	3441	1.0
y_mean[1621]	-0.16	4.7e-4	0.03	-0.21	-0.18	-0.16	-0.14	-0.1	3519	1.0
y_mean[1622]	-0.42	3.7e-4	0.02	-0.46	-0.44	-0.42	-0.41	-0.39	2761	1.0
y_mean[1623]	-0.2	3.9e-4	0.02	-0.25	-0.22	-0.2	-0.19	-0.16	3783	1.0
y_mean[1624]	0.18	5.4e-4	0.03	0.12	0.16	0.18	0.2	0.25	3475	1.0
y_mean[1625]	-0.5	5.2e-4	0.03	-0.56	-0.52	-0.5	-0.48	-0.44	3147	1.0
y_mean[1626]	-0.4	4.1e-4	0.02	-0.45	-0.42	-0.4	-0.39	-0.36	2905	1.0
y_mean[1627]	0.38	4.4e-4	0.03	0.33	0.37	0.38	0.4	0.43	3395	1.0
y_mean[1628]	0.59	5.3e-4	0.03	0.52	0.57	0.59	0.61	0.65	4114	1.0
y_mean[1629]	-0.19	5.4e-4	0.03	-0.25	-0.21	-0.19	-0.16	-0.12	3382	1.0
y_mean[1630]	0.41	4.4e-4	0.03	0.36	0.39	0.41	0.43	0.46	3653	1.0
y_mean[1631]	0.31	4.6e-4	0.03	0.26	0.29	0.31	0.33	0.36	3230	1.0
y_mean[1632]	-0.51	3.8e-4	0.02	-0.56	-0.53	-0.51	-0.5	-0.47	3330	1.0
y_mean[1633]	-0.11	4.2e-4	0.02	-0.16	-0.13	-0.11	-0.1	-0.07	2680	1.0
y_mean[1634]	-0.58	4.8e-4	0.03	-0.64	-0.6	-0.58	-0.56	-0.53	4034	1.0
y_mean[1635]	-0.16	4.2e-4	0.02	-0.21	-0.18	-0.16	-0.15	-0.12	2909	1.0
y_mean[1636]	-0.07	6.5e-4	0.04	-0.15	-0.1	-0.07	-0.05-	4.0e-4	3353	1.0
y_mean[1637]	-0.36	5.2e-4	0.03	-0.41	-0.37	-0.36	-0.34	-0.3	2497	1.0
y_mean[1638]	0.14	4.1e-4	0.03	0.09	0.12	0.14	0.15	0.19	3728	1.0
y_mean[1639]	0.29	8.6e-4	0.05	0.2	0.26	0.29	0.32	0.38	2921	1.0
y_mean[1640]	-0.15	4.5e-4	0.02	-0.19	-0.16	-0.15	-0.13	-0.1	2497	1.0
y_mean[1641]	-0.44	3.7e-4	0.02	-0.48	-0.46	-0.44	-0.43	-0.4	3456	1.0
y_mean[1642]	0.95	9.4e-4	0.06	0.83	0.91	0.95	0.99	1.07	4131	1.0
y_mean[1643]	-0.11	5.1e-4	0.03	-0.16	-0.13	-0.11	-0.09	-0.06	2452	1.0
y_mean[1644]	-0.15	4.4e-4	0.02	-0.2	-0.17	-0.15	-0.14	-0.11	2519	1.0
y_mean[1645]	0.58	6.4e-4	0.04	0.5	0.55	0.58	0.6	0.66	3759	1.0
y_mean[1646]	-0.43	3.7e-4	0.02	-0.46	-0.44	-0.43	-0.41	-0.39	2682	1.0
y_mean[1647]	-0.39	4.1e-4	0.02	-0.44	-0.41	-0.39	-0.38	-0.35	3400	1.0
y_mean[1648]	-0.16	4.7e-4	0.02	-0.21	-0.18	-0.16	-0.15	-0.12	2645	1.0
y_mean[1649]	2.14	1.5e-3	0.08	1.98	2.08	2.14	2.2	2.3	3130	1.0
y_mean[1650]	0.29	8.5e-4	0.05	0.2	0.26	0.29	0.32	0.39	3218	1.0
y_mean[1651]	-0.41	4.1e-4	0.02	-0.45	-0.42	-0.41	-0.39	-0.37	2492	1.0
y_mean[1652]	0.15	4.6e-4	0.03	0.1	0.13	0.15	0.17	0.21	3431	1.0
y_mean[1653]	-0.62	6.3e-4	0.04	-0.69	-0.64	-0.62	-0.59	-0.54	3708	1.0
y_mean[1654]	-0.43	3.6e-4	0.02	-0.47	-0.45	-0.43	-0.42	-0.4	2752	1.0
y_mean[1655]	-0.4	3.9e-4	0.02	-0.45	-0.42	-0.4	-0.38	-0.35	4031	1.0

```
y_mean[1656]
                                             0.25
                                                     0.29
                                                             0.3
                                                                    0.32
                      0.3
                           5.1e-4
                                     0.03
                                                                            0.36
                                                                                    3028
                                                                                            1.0
                   -0.53
                           4.0e-4
                                     0.02
                                            -0.58
                                                   -0.55
                                                           -0.53
                                                                   -0.51
                                                                           -0.48
                                                                                    3283
y_mean[1657]
                                                                                            1.0
y_mean[1658]
                                            -0.05
                 -5.2e-4
                           4.7e-4
                                     0.03
                                                   -0.02-3.4e-4
                                                                    0.02
                                                                            0.05
                                                                                    3387
                                                                                            1.0
                   -0.48
                           3.7e-4
                                     0.02
                                            -0.52
                                                   -0.49
                                                           -0.48
                                                                   -0.46
                                                                           -0.43
                                                                                    3560
                                                                                            1.0
y_mean[1659]
y_mean[1660]
                   -0.08
                           4.4e-4
                                     0.02
                                            -0.13
                                                     -0.1
                                                           -0.08
                                                                   -0.07
                                                                           -0.04
                                                                                    2652
                                                                                            1.0
                   -0.49
                           3.4e-4
                                     0.02
                                            -0.53
                                                     -0.5
                                                           -0.49
                                                                   -0.47
                                                                           -0.45
                                                                                    3224
y_mean[1661]
                                                                                            1.0
y_mean[1662]
                   -0.44
                           3.9e-4
                                     0.02
                                            -0.48
                                                    -0.46
                                                           -0.44
                                                                   -0.42
                                                                           -0.39
                                                                                    3670
                                                                                            1.0
                   -0.48
                                            -0.56
                                                   -0.51
                                                           -0.48
y_mean[1663]
                           8.2e-4
                                     0.04
                                                                   -0.45
                                                                           -0.41
                                                                                    2336
                                                                                            1.0
                   -0.57
                           5.3e-4
                                     0.03
                                            -0.63
                                                   -0.59
                                                           -0.56
                                                                   -0.54
                                                                            -0.5
                                                                                    3703
                                                                                            1.0
y_mean[1664]
                   -0.18
                           4.5e-4
                                     0.02
                                            -0.22
                                                                           -0.13
y_mean[1665]
                                                   -0.19
                                                           -0.18
                                                                   -0.16
                                                                                    2621
                                                                                            1.0
                   -0.46
                           3.7e-4
                                     0.02
                                             -0.5
                                                   -0.48
                                                           -0.46
                                                                   -0.44
                                                                           -0.42
                                                                                    3602
y_mean[1666]
                                                                                            1.0
                     0.17
                           4.0e-4
                                     0.02
                                             0.13
                                                     0.16
                                                            0.17
                                                                    0.19
                                                                            0.22
                                                                                    3776
                                                                                            1.0
y_mean[1667]
y_mean[1668]
                           1.2e-3
                                     0.07
                                            -0.75
                                                   -0.66
                                                           -0.61
                                                                   -0.56
                                                                           -0.47
                                                                                    3303
                   -0.61
                                                                                            1.0
                                                           -0.32
                   -0.32
                           2.8e-4
                                     0.02
                                            -0.36
                                                   -0.33
                                                                   -0.31
                                                                           -0.29
                                                                                    3856
y_mean[1669]
                                                                                            1.0
                   -0.45
                           3.5e-4
                                     0.02
                                            -0.49
                                                   -0.47
                                                           -0.45
                                                                           -0.42
y_mean[1670]
                                                                   -0.44
                                                                                    2991
                                                                                            1.0
                   -0.47
                           4.1e-4
                                     0.02
                                            -0.52
                                                   -0.49
                                                           -0.47
                                                                   -0.45
                                                                           -0.42
                                                                                    3719
                                                                                            1.0
y_mean[1671]
y_mean[1672]
                   -0.04
                           4.6e-4
                                     0.02
                                            -0.09
                                                   -0.05
                                                           -0.04
                                                                   -0.02
                                                                            0.01
                                                                                    2935
                                                                                            1.0
y_mean[1673]
                     1.35
                           7.3e-4
                                     0.05
                                             1.24
                                                     1.31
                                                            1.35
                                                                    1.38
                                                                            1.45
                                                                                    4749
                                                                                            1.0
y_mean[1674]
                   -0.24
                           5.7e-4
                                     0.03
                                            -0.31
                                                   -0.27
                                                           -0.24
                                                                   -0.22
                                                                           -0.18
                                                                                    3219
                                                                                            1.0
y_mean[1675]
                   -0.13
                           4.3e-4
                                     0.02
                                            -0.17
                                                   -0.15
                                                           -0.13
                                                                   -0.12
                                                                           -0.09
                                                                                    2563
                                                                                            1.0
                   -0.35
                                     0.03
                                             -0.4
                                                           -0.35
                                                                           -0.29
y_mean[1676]
                           5.0e-4
                                                   -0.37
                                                                   -0.33
                                                                                    3102
                                                                                            1.0
                   -0.48
                           4.4e-4
                                     0.03
                                            -0.53
                                                     -0.5
                                                           -0.48
                                                                   -0.46
                                                                           -0.43
                                                                                    3725
y_mean[1677]
                                                                                            1.0
                   -0.65
                                                           -0.65
y_mean[1678]
                           8.2e-4
                                     0.05
                                            -0.74
                                                   -0.69
                                                                   -0.62
                                                                           -0.57
                                                                                    3149
                                                                                            1.0
                   -0.24
                           4.7e-4
                                     0.03
                                            -0.29
                                                   -0.26
                                                           -0.24
                                                                   -0.22
                                                                           -0.19
                                                                                    2934
y_mean[1679]
                                                                                            1.0
y_mean[1680]
                     1.74
                           1.1e-3
                                     0.07
                                              1.6
                                                     1.69
                                                            1.74
                                                                    1.79
                                                                            1.87
                                                                                    3642
                                                                                            1.0
                   -0.73
                           1.1e-3
                                     0.07
                                            -0.86
                                                   -0.77
                                                           -0.73
                                                                   -0.68
                                                                            -0.6
                                                                                    3682
y_mean[1681]
                                                                                            1.0
                   -0.36
                           5.1e-4
                                     0.03
                                            -0.42
                                                   -0.38
                                                           -0.36
                                                                   -0.34
                                                                            -0.3
                                                                                    3625
y_mean[1682]
                                                                                            1.0
y_mean[1683]
                   -0.11
                           5.5e-4
                                     0.03
                                            -0.17
                                                   -0.13
                                                           -0.11
                                                                           -0.05
                                                                   -0.09
                                                                                    3119
                                                                                            1.0
                   -0.49
                                            -0.53
                           3.5e-4
                                     0.02
                                                   -0.51
                                                           -0.49
                                                                   -0.48
                                                                           -0.45
                                                                                    3321
                                                                                            1.0
y_mean[1684]
y_mean[1685]
                   -0.55
                           5.3e-4
                                     0.03
                                            -0.62
                                                   -0.57
                                                           -0.55
                                                                   -0.53
                                                                           -0.48
                                                                                    4178
                                                                                            1.0
                 -1.3e-3
                           4.7e-4
                                     0.03
                                            -0.06
                                                   -0.02-1.3e-3
                                                                    0.02
                                                                            0.05
                                                                                    3320
                                                                                            1.0
y_mean[1686]
y_mean[1687]
                   -0.57
                           5.1e-4
                                     0.03
                                            -0.64
                                                   -0.59
                                                           -0.57
                                                                   -0.55
                                                                           -0.51
                                                                                    3749
                                                                                            1.0
                                     0.03
y_mean[1688]
                   -0.24
                           4.8e-4
                                             -0.3
                                                   -0.26
                                                           -0.24
                                                                   -0.23
                                                                           -0.19
                                                                                    3229
                                                                                            1.0
                   -0.05
                           4.0e-4
                                     0.02
                                            -0.09
                                                   -0.06
                                                           -0.05
                                                                   -0.03 1.3e-3
                                                                                    3494
                                                                                            1.0
y_mean[1689]
y_mean[1690]
                     0.09
                           4.0e-4
                                     0.02
                                             0.05
                                                     0.07
                                                            0.09
                                                                            0.14
                                                                                    3272
                                                                     0.1
                                                                                            1.0
                           5.2e-4
                                     0.03
                                             0.49
y_mean[1691]
                     0.56
                                                     0.53
                                                            0.56
                                                                    0.58
                                                                            0.62
                                                                                    4427
                                                                                            1.0
                     2.78
                           1.1e-3
                                     0.07
                                             2.63
                                                     2.74
                                                            2.78
                                                                    2.84
                                                                            2.93
                                                                                    4560
y_mean[1692]
                                                                                            1.0
y_mean[1693]
                     -0.1
                           4.2e-4
                                     0.02
                                            -0.14
                                                   -0.11
                                                            -0.1
                                                                   -0.08
                                                                           -0.05
                                                                                    3022
                                                                                            1.0
                   -0.49
                           3.7e-4
                                     0.02
                                            -0.54
                                                   -0.51
                                                           -0.49
                                                                   -0.48
                                                                           -0.45
                                                                                    3245
                                                                                            1.0
y_mean[1694]
                     0.82
                                     0.04
                                             0.75
                                                     0.79
                                                            0.82
                                                                    0.84
                                                                            0.89
                                                                                    4139
y_mean[1695]
                           5.6e-4
                                                                                            1.0
                   -0.69
                           5.0e-4
                                     0.03
                                            -0.75
                                                   -0.71
                                                           -0.69
                                                                   -0.67
                                                                           -0.63
                                                                                    4173
                                                                                            1.0
y_mean[1696]
                   -0.48
                                            -0.52
                                                           -0.48
y_mean[1697]
                           3.4e-4
                                     0.02
                                                   -0.49
                                                                   -0.47
                                                                           -0.44
                                                                                    3361
                                                                                            1.0
y_mean[1698]
                     0.43
                           6.0e-4
                                     0.04
                                             0.36
                                                     0.41
                                                            0.43
                                                                    0.46
                                                                            0.51
                                                                                    4078
                                                                                            1.0
                                                                            0.97
                     0.84
                           9.9e-4
                                     0.07
                                             0.71
                                                      0.8
                                                            0.84
                                                                    0.88
                                                                                    4341
y_mean[1699]
                                                                                            1.0
                 -5.6e-3
                                     0.03
                                            -0.06
                                                   -0.02-5.1e-3
                                                                    0.01
                                                                                    3374
y_mean[1700]
                           4.3e-4
                                                                            0.04
                                                                                            1.0
y_mean[1701]
                     0.92
                           9.1e-4
                                     0.05
                                             0.81
                                                     0.89
                                                            0.92
                                                                    0.96
                                                                            1.03
                                                                                    3639
                                                                                            1.0
y_mean[1702]
                   -0.14
                           5.0e-4
                                     0.03
                                            -0.19
                                                   -0.16
                                                           -0.14
                                                                   -0.12
                                                                           -0.08
                                                                                    3625
                                                                                            1.0
y_mean[1703]
                    -0.09
                           4.4e-4
                                     0.02
                                            -0.13
                                                     -0.1
                                                           -0.09
                                                                   -0.07
                                                                           -0.04
                                                                                    2633
                                                                                            1.0
```

y_mean[1704]	-0.33	8.5e-4	0.05	-0.42	-0.36	-0.33	-0.29	-0.23	3151	1.0
y_mean[1705]	-0.09	4.9e-4	0.02	-0.14	-0.11	-0.09	-0.07	-0.04	2450	1.0
y_mean[1706]	0.1	6.7e-4	0.03	0.03	0.07	0.1	0.12	0.17	2727	1.0
y_mean[1707]	0.19	5.2e-4	0.03	0.13	0.17	0.19	0.21	0.25	3883	1.0
y_mean[1708]	-0.46	3.7e-4	0.02	-0.5	-0.47	-0.46	-0.44	-0.41	3230	1.0
y_mean[1709]	0.28	7.0e-4	0.04	0.21	0.26	0.28	0.31	0.36	3153	1.0
y_mean[1710]	0.94	5.8e-4	0.04	0.87	0.92	0.94	0.97	1.01	4140	1.0
y_mean[1711]	-0.36	5.2e-4	0.03	-0.41	-0.38	-0.36	-0.34	-0.3	3421	1.0
y_mean[1712]	-0.03	3.9e-4	0.02	-0.07	-0.05	-0.03		7.4e-3	2864	1.0
y_mean[1713]	0.23	7.2e-4	0.04	0.14	0.2	0.23	0.26	0.31	3549	1.0
y_mean[1714]	-0.18	4.4e-4	0.02	-0.23	-0.2	-0.18	-0.17	-0.14	2639	1.0
y_mean[1715]	1.16	6.4e-4	0.04	1.08	1.13	1.16	1.18	1.23	4028	1.0
y_mean[1716]	0.12	6.1e-4	0.04	0.05	0.1	0.12	0.14	0.19	3658	1.0
y_mean[1717] y_mean[1717]	-0.43	5.4e-4	0.03	-0.5	-0.46	-0.43	-0.41	-0.37	3793	1.0
y_mean[1717] y_mean[1718]	-0.36	2.7e-4	0.03	-0.39	-0.37	-0.36	-0.35	-0.32	3829	1.0
y_mean[1719] y_mean[1719]	-0.33	5.1e-4	0.02	-0.39	-0.35	-0.33	-0.32	-0.28	3057	1.0
y_mean[1719] y_mean[1720]	-0.33	5.1e-4 5.2e-4	0.03	-0.39	-0.24	-0.33	-0.32	-0.28	2832	1.0
y_mean[1721]	-0.22	4.2e-4	0.03	-0.26	-0.43	-0.22	-0.2	-0.17	2963	1.0
y_mean[1721] y_mean[1722]	-0.42	4.2e-4 4.0e-4	0.02	-0.45	-0.43	-0.42	-0.4		2896	1.0
v <b>–</b>					1.77			-0.37		
y_mean[1723]	1.81	7.6e-4	0.05	1.71		1.81	1.85	1.91	4729	1.0
y_mean[1724]	-0.16	5.3e-4	0.03	-0.22	-0.18	-0.16	-0.14	-0.11	2976	1.0
y_mean[1725]	0.26	5.3e-4	0.03	0.2	0.24	0.26	0.28	0.32	3047	1.0
y_mean[1726]	-0.12	5.0e-4	0.03	-0.17	-0.14	-0.12	-0.1	-0.06	3236	1.0
y_mean[1727]	0.32	5.0e-4	0.03	0.26	0.3	0.32	0.34	0.37	3076	1.0
y_mean[1728]	-0.36	2.9e-4	0.02	-0.39	-0.37	-0.36	-0.34	-0.32	3685	1.0
y_mean[1729]	-0.14	4.2e-4	0.03	-0.18	-0.15	-0.14	-0.12	-0.08	3623	1.0
y_mean[1730]	0.12	7.3e-4	0.04	0.04	0.09	0.12	0.15	0.2	3197	1.0
y_mean[1731]	-0.06	7.2e-4	0.04	-0.15	-0.09	-0.06	-0.03	0.02	3447	1.0
y_mean[1732]	-0.34	5.1e-4	0.03	-0.4	-0.36	-0.34	-0.32	-0.29	3111	1.0
y_mean[1733]	0.5	6.2e-4	0.04	0.42	0.47	0.5	0.53	0.57	3950	1.0
y_mean[1734]	-6.1e-3	5.2e-4	0.03	-0.07		-5.7e-3	0.02	0.06	4025	1.0
y_mean[1735]	-0.55	5.5e-4	0.03	-0.61	-0.57	-0.55	-0.53	-0.49	3358	1.0
y_mean[1736]	0.46	4.4e-4	0.03	0.41	0.44	0.46	0.48	0.51	3848	1.0
y_mean[1737]	-0.06	4.7e-4	0.02	-0.11	-0.08	-0.06	-0.04	-0.01	2684	1.0
y_mean[1738]	-0.55	4.5e-4	0.03	-0.6	-0.57	-0.55	-0.53	-0.5	3270	1.0
y_mean[1739]	-0.54	4.5e-4	0.03	-0.59	-0.56	-0.54	-0.52	-0.49	3331	1.0
y_mean[1740]	1.01	5.5e-4	0.04	0.94	0.98	1.01	1.03	1.08	4577	1.0
y_mean[1741]	-0.54	5.1e-4	0.03	-0.59	-0.56	-0.54	-0.52	-0.48	3402	1.0
y_mean[1742]	-0.28	5.4e-4	0.03	-0.34	-0.3	-0.28	-0.26	-0.22	3017	1.0
y_mean[1743]	0.33	4.5e-4	0.03	0.28	0.31	0.33	0.35	0.38	3426	1.0
y_mean[1744]	0.44	4.4e-4	0.03	0.38	0.42	0.44	0.45	0.49	3701	1.0
y_mean[1745]	-0.76	1.0e-3	0.06	-0.89	-0.8	-0.76	-0.72	-0.64	3608	1.0
y_mean[1746]	-0.19	4.5e-4	0.02	-0.24	-0.21	-0.19	-0.18	-0.15	2723	1.0
y_mean[1747]	-0.33		0.03	-0.39	-0.35	-0.34	-0.32	-0.27	2684	1.0
y_mean[1748]	1.43	1.0e-3	0.07	1.3	1.39	1.43	1.48	1.57	4335	1.0
y_mean[1749]	-0.2	4.4e-4	0.02	-0.25	-0.22	-0.2	-0.19	-0.16	2747	1.0
y_mean[1750]	0.13	4.5e-4	0.03	0.08	0.11	0.13	0.15	0.19	3482	1.0
y_mean[1751]	-0.26	7.9e-4	0.04	-0.34	-0.29	-0.26	-0.24	-0.19	2232	1.0
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y_mean[1752]	-0.5	3.7e-4	0.02	-0.55	-0.52	-0.5	-0.49	-0.46	3369	1.0
y_mean[1753]	-0.14	4.4e-4	0.02	-0.18	-0.15	-0.14	-0.12	-0.09	2495	1.0
y_mean[1754]	-0.29	6.3e-4	0.03	-0.35	-0.31	-0.29	-0.27	-0.22	2738	1.0
y_mean[1755]	-0.25	5.2e-4	0.03	-0.31	-0.27	-0.25	-0.24	-0.2	2883	1.0
y_mean[1756]	-0.38	5.2e-4	0.03	-0.44	-0.4	-0.38	-0.35	-0.31	3829	1.0
y_mean[1757]	-0.48	3.7e-4	0.02	-0.53	-0.5	-0.48	-0.47	-0.44	3563	1.0
y_mean[1758]	-0.43	3.5e-4	0.02	-0.47	-0.44	-0.43	-0.42	-0.39	3360	1.0
y_mean[1759]	-0.41	4.0e-4	0.02	-0.45	-0.42	-0.41	-0.39	-0.37	2601	1.0
y_mean[1760]	-0.28	5.9e-4	0.03	-0.34	-0.3	-0.28	-0.25	-0.21	3506	1.0
y_mean[1761]	-0.37	4.2e-4	0.02	-0.42	-0.39	-0.37	-0.36	-0.33	2846	1.0
y_mean[1762]	-0.07	4.3e-4	0.03	-0.12	-0.08	-0.07	-0.05	-0.02	3525	1.0
y_mean[1763]	-0.44	4.7e-4	0.02	-0.49	-0.46	-0.44	-0.42	-0.39	2785	1.0
y_mean[1764]	-0.01	4.9e-4	0.03	-0.06	-0.03		7.3e-3	0.04	3001	1.0
y_mean[1765]	0.05	5.9e-4	0.04	-0.02	0.03	0.05	0.08	0.12	3588	1.0
y_mean[1766]	1.07	5.8e-4	0.04	1.0	1.05	1.07	1.1	1.15	4521	1.0
y_mean[1767]	0.58	1.1e-3	0.07	0.45	0.54	0.58	0.62	0.71	3986	1.0
y_mean[1768]	-0.66	8.0e-4	0.05	-0.75	-0.69	-0.66	-0.63	-0.57	3135	1.0
y_mean[1769]	-0.46	3.4e-4	0.02	-0.5	-0.47	-0.46	-0.45	-0.42	3280	1.0
y_mean[1770]	0.92	5.5e-4	0.04	0.85	0.9	0.92	0.95	1.0	5037	1.0
y_mean[1771]	-0.18	5.0e-4	0.03	-0.24	-0.2	-0.18	-0.16	-0.13	3325	1.0
y_mean[1772]	-0.28	6.8e-4	0.04	-0.35	-0.3	-0.28	-0.25	-0.2	3162	1.0
y_mean[1773]	-0.29	3.1e-4	0.02	-0.32	-0.3	-0.29	-0.27	-0.25	3737	1.0
y_mean[1774]	-0.7	5.0e-4	0.03	-0.76	-0.72	-0.7	-0.68	-0.64	4218	1.0
y_mean[1775]	-0.46	4.1e-4	0.02	-0.5	-0.47	-0.46	-0.44	-0.41	3751	1.0
y_mean[1776]	0.35	4.6e-4	0.03	0.3	0.34	0.35	0.37	0.41	3228	1.0
y_mean[1777]	1.72	7.1e-4	0.05	1.63	1.69	1.72	1.75	1.81	4149	1.0
y_mean[1778]	-0.46	3.3e-4	0.02	-0.5	-0.47	-0.46	-0.45	-0.43	2951	1.0
y_mean[1779]	0.84	7.1e-4	0.06	0.74	0.81	0.85	0.88	0.96	5938	1.0
y_mean[1780]	-0.16	4.6e-4	0.03	-0.21	-0.18	-0.16	-0.14	-0.11	3333	1.0
y_mean[1781]	-0.32	6.0e-4	0.03	-0.39	-0.35	-0.32	-0.3	-0.26	3431	1.0
y_mean[1782]	0.07	6.7e-4	0.04	-0.02	0.04	0.07	0.1	0.16	4301	1.0
y_mean[1783]	1.33	7.9e-4	0.05	1.22	1.3	1.33	1.37	1.43	4490	1.0
y_mean[1784]	-0.48	4.0e-4	0.02	-0.53	-0.5	-0.48	-0.46	-0.43	3675	1.0
y_mean[1785]	0.28	8.4e-4	0.06	0.17	0.24	0.28	0.32	0.39	4464	1.0
y_mean[1786]	0.98	6.1e-4	0.04	0.89	0.95	0.97	1.0	1.06	4583	1.0
y_mean[1787]	0.19	6.2e-4	0.04	0.12	0.17	0.19	0.21	0.26	3172	1.0
y_mean[1788]	-0.24	5.3e-4	0.03	-0.3	-0.26	-0.24	-0.22	-0.18	3083	1.0
y_mean[1789]	0.16	5.8e-4	0.04	0.08	0.13	0.15	0.18	0.23	3903	1.0
y_mean[1790]	0.14	5.7e-4	0.04	0.07	0.11	0.14	0.16	0.21	3897	1.0
y_mean[1791]	0.99	5.6e-4	0.04	0.92	0.97	0.99	1.02	1.06	4184	1.0
y_mean[1792]	0.11	4.5e-4	0.03	0.06	0.1	0.11	0.13	0.17	3433	1.0
y_mean[1793]	-0.53	4.4e-4	0.03	-0.58	-0.55	-0.53	-0.51	-0.48	3378	1.0
y_mean[1794]	1.83	8.5e-4	0.06	1.72	1.79	1.83	1.87	1.95	5044	1.0
y_mean[1795]	1.22	5.4e-4	0.03	1.16	1.2	1.22	1.25	1.29	4027	1.0
y_mean[1796]	-0.39	2.5e-4	0.02	-0.42	-0.4	-0.39	-0.38	-0.35	4044	1.0
y_mean[1797]	-0.24	4.8e-4	0.03	-0.29	-0.26	-0.24	-0.22	-0.19	2957	1.0
y_mean[1798]	-0.29	8.3e-4	0.05	-0.39	-0.33	-0.29	-0.26	-0.19	3988	1.0
y_mean[1799]	-0.08	6.9e-4	0.04	-0.16	-0.11	-0.08	-0.06	-0.01	2778	1.0

y_mean[1800]	1.04	6.7e-4	0.05	0.96	1.01	1.04	1.07	1.14	4693	1.0
ypred[1]	-0.31	8.9e-3	0.56	-1.42	-0.68	-0.31	0.07	0.77	3938	1.0
ypred[2]	-0.56	8.8e-3	0.55	-1.64	-0.93	-0.55	-0.18	0.5	3919	1.0
ypred[3]	-0.1	8.5e-3	0.55	-1.15	-0.48	-0.1	0.26	0.98	4120	1.0
ypred[4]	-0.26	9.0e-3	0.55	-1.35	-0.63	-0.25	0.11	0.86	3772	1.0
ypred[5]	-0.62	8.7e-3	0.55	-1.67	-1.01	-0.63	-0.25	0.44	4030	1.0
ypred[6]	-0.21	8.7e-3	0.55	-1.27	-0.59	-0.21	0.16	0.86	4019	1.0
ypred[7]	1.9	9.1e-3	0.56	0.78	1.53	1.9	2.29	2.96	3696	1.0
ypred[8]	-0.6	9.2e-3	0.55	-1.68	-0.97	-0.59	-0.24	0.45	3609	1.0
ypred[9]	-0.46	8.4e-3	0.55	-1.53	-0.84	-0.47	-0.08	0.62	4372	1.0
ypred[10]	-0.46	8.6e-3	0.56	-1.55	-0.84	-0.46	-0.08	0.67	4160	1.0
ypred[11]	0.02	8.8e-3	0.55	-1.08	-0.36	0.02	0.39	1.06	3891	1.0
ypred[11] ypred[12]	-0.44	8.8e-3	0.55	-1.5	-0.82	-0.43	-0.05	0.59	3813	1.0
ypred[12] ypred[13]	-0.51	8.7e-3	0.55	-1.61	-0.88	-0.5	-0.14	0.55	4019	1.0
ypred[13] ypred[14]	-0.31	8.9e-3	0.55	-1.39	-0.67	-0.29	0.09	0.78	3895	1.0
ypred[14] ypred[15]	0.29	8.9e-3	0.55	-0.76	-0.08	0.23	0.67	1.36	3822	1.0
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ypred[16]	-0.37	9.1e-3	0.55	-1.48	-0.74		7.4e-3	0.68	3731	1.0
ypred[17]	-0.15	8.9e-3	0.54	-1.22	-0.51	-0.16	0.2	0.96	3670	1.0
ypred[18]	-0.35	9.4e-3	0.55	-1.43	-0.72	-0.36	0.02	0.73	3462	1.0
ypred[19]	0.76	8.6e-3	0.55	-0.34	0.4	0.78	1.13	1.85	4103	1.0
ypred[20]	-0.06	9.1e-3	0.55	-1.16	-0.44	-0.06	0.31	1.0	3585	1.0
ypred[21]	-0.6	8.8e-3	0.55	-1.71	-0.95	-0.6	-0.23	0.47	3855	1.0
ypred[22]	0.11	8.8e-3	0.54	-0.94	-0.25	0.1	0.46	1.16	3734	1.0
ypred[23]	0.91	8.6e-3	0.55	-0.15	0.54	0.91	1.29	1.97	4012	1.0
ypred[24]	-0.04	8.6e-3	0.55	-1.09	-0.4	-0.04	0.33	1.02	4042	1.0
ypred[25]	-0.48	9.0e-3	0.55	-1.55	-0.85	-0.48	-0.1	0.59	3770	1.0
ypred[26]	-0.18	8.2e-3	0.54	-1.24	-0.56	-0.19	0.19	0.87	4324	1.0
ypred[27]	-0.51	8.8e-3	0.56	-1.59	-0.88	-0.5	-0.12	0.57	3987	1.0
ypred[28]	0.16	8.7e-3	0.55	-0.93	-0.2	0.16	0.54	1.23	4095	1.0
ypred[29]	-0.1	8.8e-3	0.55	-1.15	-0.47	-0.1	0.28	1.01	3889	1.0
ypred[30]	-0.63	8.8e-3	0.55	-1.71	-0.99	-0.64	-0.27	0.46	3893	1.0
ypred[31]	-0.31	9.0e-3	0.55	-1.38	-0.69	-0.31	0.06	0.78	3758	1.0
ypred[32]	-0.08	8.6e-3	0.54	-1.12	-0.44	-0.09	0.28	0.97	3912	1.0
ypred[33]	-0.29	8.7e-3	0.55	-1.39	-0.65	-0.29	0.08	0.77	4037	1.0
ypred[34]	7.0e-3	8.5e-3	0.54	-1.06	-0.35	0.01	0.37	1.06	4051	1.0
ypred[35]	-0.43	9.2e-3	0.57	-1.55	-0.82	-0.43	-0.05	0.67	3789	1.0
ypred[36]	-0.03	8.7e-3	0.55	-1.13	-0.4	-0.03	0.35	1.04	3988	1.0
ypred[37]	-0.48	8.9e-3	0.55	-1.55	-0.85	-0.48	-0.11	0.6	3820	1.0
ypred[38]	0.63	8.6e-3	0.54	-0.45	0.26	0.63	0.99	1.7	4004	1.0
ypred[39]	-0.07	8.8e-3	0.55	-1.14	-0.45	-0.07	0.29	1.02	3891	1.0
ypred[40]	0.05	8.8e-3	0.56	-1.03	-0.33	0.04	0.42	1.15	4009	1.0
ypred[41]	-0.31	8.8e-3	0.55	-1.4	-0.68	-0.32	0.07	0.76	3982	1.0
ypred[42]	-0.57	8.9e-3	0.55	-1.64	-0.95	-0.58	-0.21	0.51	3875	1.0
ypred[43]	0.1	9.2e-3	0.54	-0.99	-0.27	0.1	0.47	1.16	3475	1.0
ypred[44]	-0.13	8.8e-3	0.55	-1.22	-0.5	-0.13	0.22	0.95	3861	1.0
ypred[45]	0.2	9.0e-3	0.56	-0.93	-0.17	0.2	0.58	1.3	3918	1.0
ypred[46]	-0.13	8.7e-3	0.55	-1.21	-0.5	-0.12	0.25	0.92	3938	1.0
ypred[47]	-0.27	8.8e-3	0.56	-1.35	-0.64	-0.27	0.23	0.83	3993	1.0
3 Program	0.21	5.06 0	0.00	1.00	0.04	0.21	0.1	0.00	0000	1.0

ypred[48]	-0.33	8.6e-3	0.55	-1.44	-0.69	-0.33	0.04	0.72	4034	1.0
ypred[49]	1.55	8.9e-3	0.56	0.46	1.19	1.56	1.92	2.65	3893	1.0
ypred[50]	-0.13	8.9e-3	0.56	-1.21	-0.51	-0.14	0.25	0.95	3920	1.0
ypred[51]	0.07	9.3e-3	0.56	-1.02	-0.3	0.08	0.45	1.17	3699	1.0
ypred[52]	0.14	9.1e-3	0.55	-0.94	-0.25	0.13	0.51	1.24	3714	1.0
ypred[53]	-0.5	8.7e-3	0.55	-1.58	-0.87	-0.51	-0.13	0.59	3983	1.0
ypred[54]	-0.36	9.0e-3	0.55	-1.42	-0.74	-0.36	0.02	0.71	3777	1.0
ypred[55]	-0.26	8.5e-3	0.56	-1.32	-0.63	-0.26	0.12	0.87	4255	1.0
ypred[56]	-0.45	8.5e-3	0.55	-1.53	-0.83	-0.45	-0.07	0.61	4229	1.0
ypred[57]	-0.37	8.6e-3	0.55	-1.46	-0.74	-0.37	0.01	0.7	3986	1.0
ypred[58]	0.58	8.6e-3	0.55	-0.5	0.21	0.58	0.95	1.67	4042	1.0
ypred[59]	1.36	8.8e-3	0.55	0.26	1.0	1.36	1.73	2.43	3955	1.0
ypred[60]	-0.46	8.9e-3	0.55	-1.53	-0.84	-0.46	-0.09	0.62	3834	1.0
ypred[61]	-0.45	9.3e-3	0.55	-1.54	-0.81	-0.45	-0.09	0.64	3443	1.0
ypred[62]	-0.46	9.0e-3	0.54	-1.53	-0.83	-0.46	-0.09	0.61	3676	1.0
ypred[63]	-0.48	8.5e-3	0.55	-1.56	-0.85	-0.47	-0.1	0.58	4155	1.0
ypred[64]	-0.06	9.0e-3	0.56	-1.11	-0.44	-0.06	0.3	1.06	3867	1.0
ypred[65]	-0.26	8.7e-3	0.55	-1.32	-0.63	-0.27	0.11	0.79	4002	1.0
ypred[66]	-0.22	8.9e-3	0.55	-1.3	-0.58	-0.21	0.16	0.86	3796	1.0
ypred[67]	-0.14	9.0e-3	0.56	-1.26	-0.52	-0.14	0.23	0.94	3790	1.0
ypred[68]	-0.11	8.8e-3	0.55	-1.18	-0.49	-0.12	0.24	1.0	3892	1.0
ypred[69]	-0.42	9.3e-3	0.56	-1.52	-0.79	-0.43	-0.04	0.67	3673	1.0
ypred[70]	-0.37	8.7e-3	0.55	-1.46	-0.74	-0.38-	8.4e-3	0.71	3942	1.0
ypred[71]	-0.39	8.6e-3	0.56	-1.48	-0.78	-0.39	-0.02	0.71	4144	1.0
ypred[72]	-0.19	9.1e-3	0.55	-1.25	-0.57	-0.19	0.17	0.9	3632	1.0
ypred[73]	0.37	8.4e-3	0.55	-0.66-	5.7e-4	0.37	0.75	1.46	4209	1.0
ypred[74]	-0.06	8.6e-3	0.55	-1.11	-0.44	-0.06	0.32	1.01	4106	1.0
ypred[75]	0.05	8.6e-3	0.54	-1.02	-0.32	0.06	0.43	1.12	3990	1.0
ypred[76]	0.56	8.4e-3	0.54	-0.5	0.2	0.57	0.93	1.6	4060	1.0
ypred[77]	1.58	9.0e-3	0.55	0.5	1.2	1.58	1.96	2.65	3769	1.0
ypred[78]	-0.37	8.8e-3	0.55	-1.46	-0.73	-0.37-	4.8e-3	0.69	3880	1.0
ypred[79]	0.07	8.8e-3	0.54	-0.97	-0.3	0.07	0.44	1.15	3777	1.0
ypred[80]	-0.64	9.2e-3	0.56	-1.75	-1.02	-0.64	-0.25	0.47	3672	1.0
ypred[81]	-0.41	9.2e-3	0.56	-1.54	-0.79	-0.41	-0.03	0.66	3721	1.0
ypred[82]	0.2	8.5e-3	0.55	-0.89	-0.17	0.21	0.56	1.28	4159	1.0
ypred[83]	-0.13	8.7e-3	0.55	-1.21	-0.5	-0.14	0.25	0.93	3890	1.0
ypred[84]	0.09	9.1e-3	0.55	-1.0	-0.28	0.1	0.46	1.17	3709	1.0
ypred[85]	0.79	8.6e-3	0.54	-0.27	0.42	0.8	1.15	1.86	3984	1.0
ypred[86]	-0.45	8.5e-3	0.54	-1.5	-0.81	-0.45	-0.09	0.58	3987	1.0
ypred[87]	6.15	9.4e-3	0.58	4.99	5.75	6.15	6.55	7.24	3901	1.0
ypred[88]	-0.39	8.9e-3	0.56	-1.49	-0.78	-0.39	-0.02	0.73	4020	1.0
ypred[89]	0.31	8.5e-3	0.55	-0.77	-0.06	0.31	0.68	1.36	4164	1.0
ypred[90]	-0.48	8.8e-3	0.55	-1.56	-0.85	-0.49	-0.12	0.6	3889	1.0
ypred[91]	1.09	8.6e-3	0.56	-0.05	0.73	1.09	1.47	2.21	4295	1.0
ypred[92]	-0.09	8.5e-3	0.55	-1.17	-0.46	-0.08	0.27	0.97	4161	1.0
ypred[93]	0.26	8.8e-3	0.55	-0.8	-0.12	0.27	0.64	1.33	3987	1.0
ypred[94]	-0.4	9.3e-3	0.55	-1.49	-0.78	-0.41	-0.04	0.69	3520	1.0
ypred[95]	-0.48	8.8e-3	0.56	-1.54	-0.86	-0.47	-0.11	0.59	3971	1.0

ypred[96]	0.31	8.9e-3	0.55	-0.77	-0.06	0.31	0.68	1.4	3815	1.0
ypred[97]	-0.68	8.9e-3	0.55	-1.75	-1.05	-0.69	-0.32	0.38	3781	1.0
ypred[98]	0.59	8.5e-3	0.55	-0.49	0.22	0.59	0.96	1.65	4194	1.0
ypred[99]	-0.07	8.6e-3	0.56	-1.14	-0.44	-0.08	0.3	1.02	4189	1.0
ypred[100]	-0.58	9.4e-3	0.56	-1.68	-0.95	-0.58	-0.2	0.5	3524	1.0
ypred[101]	-0.41	8.6e-3	0.55	-1.47	-0.79	-0.42	-0.05	0.66	4030	1.0
ypred[102]	-0.43	9.3e-3	0.55	-1.52	-0.79	-0.42	-0.06	0.67	3571	1.0
ypred[103]	-0.43	8.7e-3	0.55	-1.49	-0.8	-0.44	-0.06	0.66	4055	1.0
ypred[104]	-0.45	8.9e-3	0.55	-1.55	-0.83	-0.44	-0.09	0.67	3875	1.0
ypred[105]	-0.18	8.8e-3	0.55	-1.28	-0.53	-0.18	0.19	0.87	3930	1.0
ypred[106]	-0.2	8.7e-3	0.55	-1.31	-0.56	-0.19	0.17	0.84	3972	1.0
ypred[107]	-0.06	9.3e-3	0.56	-1.14	-0.43	-0.05	0.31	1.03	3590	1.0
ypred[108]	-0.27	8.9e-3	0.56	-1.34	-0.64	-0.27	0.11	0.83	3899	1.0
ypred[109]	-0.07	8.7e-3	0.54	-1.12	-0.43	-0.07	0.28	1.02	3877	1.0
ypred[110]	-0.51	8.6e-3	0.55	-1.61	-0.88	-0.5	-0.14	0.54	4054	1.0
ypred[111]	-0.05	8.8e-3	0.55	-1.15	-0.42	-0.04	0.32	1.02	3999	1.0
ypred[112]	0.13	8.9e-3	0.57	-0.98	-0.24	0.13	0.5	1.22	4050	1.0
ypred[113]	0.23	9.1e-3	0.56	-0.86	-0.14	0.23	0.61	1.35	3807	1.0
ypred[114]	-0.07	8.7e-3	0.55	-1.13	-0.44	-0.08	0.3	1.0	3927	1.0
ypred[115]	-0.3	8.6e-3	0.55	-1.37	-0.66	-0.3	0.06	0.79	4008	1.0
ypred[116]	-0.2	9.4e-3	0.55	-1.28	-0.57	-0.2	0.19	0.85	3487	1.0
ypred[117]	0.5	8.7e-3	0.56	-0.6	0.13	0.51	0.87	1.56	4042	1.0
ypred[118]	0.03	8.3e-3	0.55	-1.02	-0.34	0.02	0.4	1.12	4278	1.0
ypred[119]	0.34	8.8e-3	0.54	-0.69	-0.02	0.34	0.71	1.41	3753	1.0
ypred[120]	-0.35	8.8e-3	0.56	-1.46	-0.72	-0.34	0.02	0.76	4028	1.0
ypred[121]	-0.46	8.8e-3	0.54	-1.53	-0.82	-0.46	-0.09	0.61	3807	1.0
ypred[122]	2.4	8.8e-3	0.54	1.36	2.03	2.39	2.78	3.46	3791	1.0
ypred[123]	-0.3	9.0e-3	0.56	-1.38	-0.68	-0.3	0.07	0.79	3877	1.0
ypred[124]	-0.57	8.8e-3	0.55	-1.64	-0.95	-0.58	-0.2	0.51	3969	1.0
ypred[125]	-0.48	9.1e-3	0.55	-1.6	-0.84	-0.48	-0.11	0.6	3731	1.0
ypred[126]	-0.33	8.9e-3	0.56	-1.41	-0.7	-0.32	0.05	0.75	3873	1.0
ypred[127]	0.08	8.8e-3	0.55	-0.97	-0.3	0.08	0.45	1.16	3863	1.0
ypred[128]	-0.16	9.0e-3	0.56	-1.25	-0.54	-0.17	0.23	0.96	3877	1.0
ypred[129]	0.29	8.9e-3	0.55	-0.77	-0.08	0.29	0.67	1.38	3774	1.0
ypred[130]	1.28	9.3e-3	0.56	0.18	0.9	1.28	1.67	2.39	3684	1.0
ypred[131]	-0.25	8.7e-3	0.56	-1.37	-0.62	-0.25	0.12	0.83	4047	1.0
ypred[132]	-0.41	8.6e-3	0.55	-1.5	-0.8	-0.41	-0.03	0.66	4144	1.0
ypred[133]	-0.46	8.6e-3	0.55	-1.54	-0.83	-0.46	-0.07	0.59	4020	1.0
ypred[134]	-0.47	8.7e-3	0.56	-1.57	-0.84	-0.47	-0.1	0.63	4050	1.0
ypred[135]	0.45	8.5e-3	0.54	-0.61	0.08	0.44	0.82	1.49	4079	1.0
ypred[136]	-0.44	8.8e-3	0.55	-1.53	-0.81	-0.43	-0.06	0.61	3838	1.0
ypred[137]	-0.15	8.7e-3	0.54	-1.22	-0.53	-0.14	0.22	0.9	3924	1.0
ypred[138]	-0.43	8.9e-3	0.55	-1.5	-0.8	-0.42	-0.06	0.67	3823	1.0
ypred[139]	-0.69	9.0e-3	0.55	-1.75	-1.06	-0.69	-0.32	0.41	3749	1.0
ypred[140]	-0.26	8.6e-3	0.55	-1.31	-0.64	-0.27	0.12	0.8	4064	1.0
ypred[141]	-0.38	8.8e-3	0.55	-1.5	-0.75	-0.37	-0.01	0.68	3875	1.0
ypred[142]	0.43	9.0e-3	0.54	-0.64	0.07	0.44	0.8	1.49	3642	1.0
ypred[143]	-0.43	8.9e-3	0.56	-1.54	-0.83	-0.43	-0.06	0.67	3986	1.0
7 F =	3.20						- , • •			

ypred[144]	0.08	8.7e-3	0.54	-0.98	-0.27	0.07	0.45	1.13	3841	1.0
ypred[145]	1.78	8.9e-3	0.56	0.68	1.4	1.77	2.15	2.87	3946	1.0
ypred[146]	-0.68	9.1e-3	0.55	-1.75	-1.06	-0.69	-0.31	0.41	3690	1.0
ypred[147]	-8.4e-3	8.8e-3	0.54	-1.09	-0.37-	-3.2e-3	0.36	1.06	3743	1.0
ypred[148]	-0.37	8.7e-3	0.55	-1.42	-0.73	-0.37	8.4e-4	0.76	3929	1.0
ypred[149]	-0.35	8.9e-3	0.54	-1.41	-0.71	-0.36	0.01	0.71	3703	1.0
ypred[150]	-0.15	8.6e-3	0.55	-1.23	-0.52	-0.15	0.22	0.9	4141	1.0
ypred[151]	-0.39	8.7e-3	0.55	-1.46	-0.77	-0.39	-0.03	0.73	4021	1.0
ypred[152]	-0.02	9.3e-3	0.55	-1.13	-0.39	-0.02	0.34	1.06	3546	1.0
ypred[153]	-0.26	9.0e-3	0.54	-1.3	-0.61	-0.25	0.1	0.83	3610	1.0
ypred[154]	0.07	8.9e-3	0.55	-0.99	-0.29	0.07	0.44	1.15	3736	1.0
ypred[155]	0.68	8.7e-3	0.56	-0.42	0.3	0.69	1.06	1.75	4126	1.0
ypred[156]	0.46	8.6e-3	0.54	-0.63	0.08	0.45	0.83	1.53	4036	1.0
ypred[157]	0.31	8.8e-3	0.56	-0.75	-0.07	0.31	0.69	1.41	4028	1.0
ypred[158]	0.17	8.7e-3	0.55	-0.88	-0.21	0.18	0.54	1.28	3974	1.0
ypred[159]	-0.12	8.8e-3	0.55	-1.21	-0.48	-0.12	0.25	0.98	3892	1.0
ypred[160]	0.66	9.4e-3	0.56	-0.45	0.3	0.67	1.04	1.76	3557	1.0
ypred[161]	-0.25	8.9e-3	0.55	-1.34	-0.63	-0.25	0.12	0.83	3903	1.0
ypred[162]	-0.45	9.0e-3	0.56	-1.54	-0.82	-0.45	-0.06	0.66	3870	1.0
ypred[163]	-0.5	9.2e-3	0.56	-1.57	-0.88	-0.51	-0.12	0.61	3651	1.0
ypred[164]	-0.06	8.5e-3	0.55	-1.13	-0.44	-0.06	0.31	1.05	4180	1.0
ypred[165]	-0.58	8.6e-3	0.54	-1.62	-0.95	-0.58	-0.21	0.48	4025	1.0
ypred[166]	-0.24	9.0e-3	0.55	-1.31	-0.62	-0.24	0.13	0.84	3772	1.0
ypred[167]	0.47	8.6e-3	0.55	-0.64	0.1	0.47	0.83	1.58	4121	1.0
ypred[168]	-0.18	9.0e-3	0.55	-1.25	-0.57	-0.19	0.19	0.91	3760	1.0
ypred[169]	0.48	8.7e-3	0.54	-0.61	0.12	0.48	0.85	1.54	3918	1.0
ypred[170]	-0.1	9.0e-3	0.56	-1.18	-0.48	-0.09	0.29	0.97	3907	1.0
ypred[171]	-0.34	9.2e-3	0.56	-1.46	-0.7	-0.35	0.03	0.79	3764	1.0
ypred[172]	-0.45	8.8e-3	0.54	-1.51	-0.8	-0.45	-0.09	0.64	3803	1.0
ypred[173]	-0.07	9.0e-3	0.55	-1.16	-0.44	-0.08	0.3	0.99	3707	1.0
ypred[174]	1.59	9.0e-3	0.56	0.5	1.22	1.59	1.96	2.72	3887	1.0
ypred[175]	1.24	8.5e-3	0.55	0.21	0.87	1.23	1.62	2.32	4123	1.0
ypred[176]	-0.12	8.6e-3	0.54	-1.18	-0.48	-0.13	0.24	0.92	3907	1.0
ypred[177]	0.5	8.6e-3	0.54	-0.55	0.14	0.5	0.88	1.58	4019	1.0
ypred[178]	0.34	9.0e-3	0.55	-0.7	-0.06	0.34	0.72	1.44	3743	1.0
ypred[179]	-0.29	8.7e-3	0.55	-1.33	-0.66	-0.3	0.09	0.79	4003	1.0
ypred[180]	-0.47	8.7e-3	0.55	-1.53	-0.83	-0.48	-0.1	0.62	3966	1.0
ypred[181]	-3.3e-3	8.7e-3	0.54	-1.08	-0.35	-0.01	0.36	1.08	3922	1.0
ypred[182]	-0.75	8.5e-3	0.54	-1.82	-1.11	-0.76	-0.38	0.32	4093	1.0
ypred[183]	-0.49	8.7e-3	0.55	-1.54	-0.85	-0.48	-0.12	0.57	3960	1.0
ypred[184]	-0.79	8.6e-3	0.55	-1.88	-1.16	-0.81	-0.42	0.3	4153	1.0
ypred[185]	-0.06	8.9e-3	0.55	-1.14	-0.43	-0.06	0.31	1.0	3808	1.0
ypred[186]	0.56	8.5e-3	0.54	-0.49	0.2	0.55	0.92	1.65	3989	1.0
ypred[187]	-0.26	8.6e-3	0.55	-1.32	-0.64	-0.27	0.12	0.78	4035	1.0
ypred[188]	-0.59	8.7e-3	0.55	-1.67	-0.97	-0.58	-0.22	0.51	4013	1.0
ypred[189]	-0.46	9.1e-3	0.56	-1.56	-0.83	-0.47	-0.09	0.64	3753	1.0
ypred[190]	-0.16	8.9e-3	0.56	-1.25	-0.54	-0.15	0.22	0.93	3898	1.0
ypred[191]	-0.05	8.9e-3	0.55	-1.14	-0.42	-0.06	0.32	1.03	3781	1.0
71 - 3				<del>-</del>	<del>-</del>				- '	-

```
ypred[192]
                     0.97
                           8.8e-3
                                     0.55
                                            -0.12
                                                      0.6
                                                            0.97
                                                                    1.36
                                                                            2.06
                                                                                    3928
                                                                                            1.0
                   -0.41
                           8.7e-3
                                     0.55
                                            -1.49
                                                   -0.79
                                                           -0.41
                                                                   -0.04
                                                                            0.67
                                                                                    4095
ypred[193]
                                                                                            1.0
                                                           -0.55
ypred[194]
                   -0.55
                           8.8e-3
                                     0.56
                                            -1.65
                                                   -0.92
                                                                   -0.17
                                                                            0.56
                                                                                    4055
                                                                                            1.0
                 -5.0e-3
                           8.9e-3
                                     0.56
                                            -1.14
                                                   -0.38
                                                            0.01
                                                                    0.37
                                                                            1.07
                                                                                    3985
                                                                                            1.0
ypred[195]
                   -0.43
                           8.9e-3
                                     0.54
                                            -1.49
                                                   -0.78
                                                           -0.44
                                                                   -0.07
                                                                            0.63
                                                                                    3635
ypred[196]
                                                                                            1.0
                    0.76
                           8.6e-3
                                     0.55
                                            -0.35
                                                     0.39
                                                            0.76
                                                                    1.14
                                                                            1.83
                                                                                    4104
ypred[197]
                                                                                            1.0
ypred[198]
                   -0.32
                           9.4e-3
                                     0.56
                                            -1.42
                                                    -0.69
                                                           -0.33
                                                                    0.06
                                                                            0.78
                                                                                    3554
                                                                                            1.0
ypred[199]
                   -0.41
                                            -1.46
                                                   -0.78
                                                           -0.42
                           8.9e-3
                                     0.55
                                                                   -0.04
                                                                            0.68
                                                                                    3811
                                                                                            1.0
                   -0.41
                           9.0e-3
                                     0.56
                                            -1.47
                                                    -0.79
                                                           -0.41
                                                                   -0.05
                                                                             0.7
                                                                                    3839
ypred[200]
                                                                                            1.0
y_predicted[1]
                   -0.31
                                     0.04
                                            -0.39
                                                           -0.31
                                                                                    2242
                           8.3e-4
                                                   -0.34
                                                                   -0.29
                                                                           -0.24
                                                                                            1.0
                   -0.55
                                     0.07
                                             -0.7
                                                   -0.61
                                                           -0.55
                                                                    -0.5
                                                                           -0.41
                                                                                    3175
y_predicted[2]
                           1.3e-3
                                                                                            1.0
y_predicted[3]
                   -0.12
                           4.6e-4
                                     0.02
                                            -0.16
                                                   -0.13
                                                           -0.12
                                                                    -0.1
                                                                           -0.07
                                                                                    2449
                                                                                            1.0
                   -0.26
                                     0.02
                                            -0.31
                                                   -0.27
                                                           -0.26
                                                                   -0.24
                                                                           -0.21
                                                                                    3072
                           4.4e-4
                                                                                            1.0
y_predicted[4]
                   -0.61
                           5.2e-4
                                     0.03
                                            -0.68
                                                   -0.63
                                                           -0.61
                                                                   -0.59
                                                                           -0.55
                                                                                    3759
y_predicted[5]
                                                                                            1.0
                                     0.02
                                            -0.25
                                                   -0.22
                                                           -0.21
                                                                   -0.19
                                                                           -0.16
                                                                                    2760
y_predicted[6]
                   -0.21
                           4.4e-4
                                                                                            1.0
                      1.9
                           7.2e-4
                                     0.05
                                              1.8
                                                     1.87
                                                             1.9
                                                                    1.94
                                                                            2.01
                                                                                    5226
                                                                                            1.0
y_predicted[7]
y_predicted[8]
                     -0.6
                           5.1e-4
                                     0.03
                                            -0.66
                                                   -0.62
                                                            -0.6
                                                                   -0.58
                                                                          -0.54
                                                                                    3731
                                                                                            1.0
y_predicted[9]
                   -0.47
                           4.4e-4
                                     0.03
                                            -0.52
                                                   -0.49
                                                           -0.47
                                                                   -0.45
                                                                           -0.41
                                                                                    3778
                                                                                            1.0
y_predicted[10]
                   -0.47
                           8.3e-4
                                     0.04
                                            -0.56
                                                     -0.5
                                                           -0.47
                                                                   -0.44
                                                                           -0.38
                                                                                    2842
                                                                                            1.0
y_predicted[11]
                  1.5e-3
                           4.7e-4
                                     0.03
                                            -0.05
                                                   -0.02 1.8e-3
                                                                    0.02
                                                                            0.06
                                                                                    3446
                                                                                            1.0
                                                           -0.44
                                                                           -0.38
y_predicted[12]
                   -0.44
                           5.6e-4
                                     0.03
                                            -0.51
                                                   -0.47
                                                                   -0.42
                                                                                    3182
                                                                                            1.0
                   -0.49
                           1.2e-3
                                     0.07
                                            -0.63
                                                   -0.54
                                                           -0.49
                                                                   -0.45
                                                                           -0.36
                                                                                    3286
y_predicted[13]
                                                                                            1.0
                                            -0.35
                                                           -0.29
y_predicted[14]
                   -0.29
                           5.8e-4
                                     0.03
                                                   -0.31
                                                                   -0.27
                                                                           -0.22
                                                                                    3072
                                                                                            1.0
                    0.29
                           6.8e-4
                                     0.04
                                             0.22
                                                     0.27
                                                            0.29
                                                                    0.32
                                                                            0.37
                                                                                    3115
y_predicted[15]
                                                                                            1.0
                                            -0.43
                   -0.38
                           4.8e-4
                                     0.03
                                                     -0.4
                                                           -0.38
                                                                   -0.36
                                                                          -0.33
                                                                                    3150
                                                                                            1.0
y_predicted[16]
                                                                   -0.15
                   -0.17
                           5.9e-4
                                     0.03
                                            -0.23
                                                   -0.19
                                                           -0.17
                                                                           -0.11
y_predicted[17]
                                                                                    2828
                                                                                            1.0
                                     0.02
                                            -0.42
y_predicted[18]
                   -0.38
                           4.7e-4
                                                   -0.39
                                                           -0.38
                                                                   -0.36
                                                                          -0.33
                                                                                    2400
                                                                                            1.0
                                     0.05
                                             0.67
                                                     0.73
                                                            0.76
                                                                    0.79
                                                                            0.85
                                                                                    4204
y_predicted[19]
                    0.76
                           7.0e-4
                                                                                            1.0
                                            -0.11
                   -0.07
                           4.4e-4
                                     0.02
                                                   -0.08
                                                           -0.07
                                                                   -0.05
                                                                           -0.02
                                                                                    2847
y_predicted[20]
                                                                                            1.0
y_predicted[21]
                     -0.6
                           1.1e-3
                                     0.07
                                            -0.74
                                                   -0.65
                                                            -0.6
                                                                   -0.56
                                                                           -0.48
                                                                                    3390
                                                                                            1.0
                     0.1
                           5.5e-4
                                     0.03
                                             0.04
                                                     0.08
                                                             0.1
                                                                    0.13
                                                                            0.17
                                                                                    3689
y_predicted[22]
                                                                                            1.0
y_predicted[23]
                    0.92
                           5.4e-4
                                     0.04
                                             0.85
                                                      0.9
                                                            0.92
                                                                    0.95
                                                                            0.99
                                                                                    4464
                                                                                            1.0
                                                                   -0.02 9.3e-3
y_predicted[24]
                   -0.04
                           4.5e-4
                                     0.03
                                            -0.09
                                                   -0.06
                                                           -0.04
                                                                                    3183
                                                                                            1.0
                   -0.47
                           3.4e-4
                                     0.02
                                            -0.51
                                                   -0.49
                                                           -0.47
                                                                   -0.46
                                                                          -0.44
                                                                                    3095
                                                                                            1.0
y_predicted[25]
y_predicted[26]
                   -0.16
                           4.3e-4
                                     0.02
                                            -0.21
                                                   -0.18
                                                           -0.16
                                                                   -0.15
                                                                          -0.12
                                                                                    2577
                                                                                            1.0
                                           -0.67
                   -0.52
                                                   -0.57
                                                           -0.52
                                                                   -0.47
                                                                           -0.38
                                                                                    2939
y_predicted[27]
                           1.4e-3
                                     0.08
                                                                                            1.0
                    0.15
                           3.9e-4
                                     0.02
                                              0.1
                                                     0.13
                                                            0.15
                                                                    0.16
                                                                             0.2
                                                                                    3740
y_predicted[28]
                                                                                            1.0
y_predicted[29]
                   -0.11
                           4.2e-4
                                     0.02
                                            -0.15
                                                   -0.12
                                                           -0.11
                                                                   -0.09
                                                                          -0.07
                                                                                    2829
                                                                                            1.0
                   -0.63
                           1.0e-3
                                     0.06
                                            -0.74
                                                   -0.67
                                                           -0.63
                                                                   -0.59
                                                                          -0.52
                                                                                    3184
                                                                                            1.0
y_predicted[30]
                   -0.31
                                     0.02
                                            -0.36
                                                   -0.33
                                                           -0.31
                                                                    -0.3
                                                                           -0.27
y_predicted[31]
                           3.8e-4
                                                                                    3421
                                                                                            1.0
                   -0.07
                           4.3e-4
                                     0.02
                                            -0.12
                                                   -0.08
                                                           -0.07
                                                                   -0.05
                                                                          -0.02
                                                                                    3251
                                                                                            1.0
y_predicted[32]
                                                            -0.3
                                                                           -0.23
y_predicted[33]
                    -0.3
                           6.0e-4
                                     0.03
                                            -0.36
                                                   -0.32
                                                                   -0.27
                                                                                    3079
                                                                                            1.0
                    0.01
                           4.2e-4
                                     0.02
                                            -0.03-2.3e-3
                                                            0.01
                                                                    0.03
                                                                            0.06
                                                                                    3430
                                                                                            1.0
y_predicted[34]
                                            -0.48
                   -0.43
                           4.6e-4
                                     0.03
                                                   -0.45
                                                           -0.43
                                                                           -0.38
                                                                                    3613
y_predicted[35]
                                                                  -0.41
                                                                                            1.0
y_predicted[36]
                                     0.03
                                            -0.07
                                                           -0.02-1.4e-3
                   -0.02
                           4.7e-4
                                                   -0.04
                                                                            0.03
                                                                                    3001
                                                                                            1.0
y_predicted[37]
                   -0.48
                           3.6e-4
                                     0.02
                                            -0.52
                                                   -0.49
                                                           -0.48
                                                                  -0.46
                                                                           -0.44
                                                                                    3186
                                                                                            1.0
y_predicted[38]
                    0.65
                           6.5e-4
                                     0.05
                                             0.55
                                                     0.61
                                                            0.65
                                                                    0.68
                                                                            0.75
                                                                                    6343
                                                                                            1.0
                   -0.07
                           5.2e-4
                                     0.03
                                            -0.12
                                                   -0.08
                                                           -0.07
                                                                   -0.05
                                                                           -0.01
                                                                                    2512
                                                                                            1.0
y_predicted[39]
```

y_predicted[40]	0.06	3.8e-4	0.02	0.01	0.04	0.06	0.07	0.1	3603	1.0
y_predicted[41]	-0.29	9.0e-4	0.04	-0.37	-0.32	-0.29	-0.26	-0.21	2253	1.0
y_predicted[42]	-0.58	4.8e-4	0.03	-0.64	-0.6	-0.58	-0.56	-0.52	4333	1.0
y_predicted[43]	0.11	7.2e-4	0.04	0.04	0.09	0.11	0.14	0.19	3113	1.0
y_predicted[44]	-0.14	4.9e-4	0.02	-0.18	-0.15	-0.14	-0.12	-0.09	2534	1.0
y_predicted[45]	0.2	6.2e-4	0.04	0.12	0.17	0.2	0.22	0.27	3918	1.0
y_predicted[46]	-0.12	5.4e-4	0.03	-0.17	-0.14	-0.12	-0.1	-0.06	2615	1.0
y_predicted[47]	-0.27	6.8e-4	0.04	-0.35	-0.3	-0.27	-0.25	-0.2	3116	1.0
y_predicted[48]	-0.33	2.9e-4	0.02	-0.36	-0.34	-0.33	-0.32	-0.29	3753	1.0
y_predicted[49]	1.55	6.6e-4	0.05	1.46	1.52	1.55	1.59	1.65	5907	1.0
y_predicted[50]	-0.14	4.3e-4	0.02	-0.19	-0.16	-0.14	-0.13	-0.1	2531	1.0
y_predicted[51]	0.07	5.2e-4	0.03	3.4e-3	0.05	0.07	0.09	0.13	3838	1.0
y_predicted[52]	0.13	5.6e-4	0.03	0.06	0.1	0.13	0.15	0.19	3802	1.0
y_predicted[53]	-0.48	3.6e-4	0.02	-0.52	-0.5	-0.48	-0.47	-0.44	3503	1.0
y_predicted[54]	-0.35	3.8e-4	0.02	-0.39	-0.37	-0.35	-0.34	-0.31	3098	1.0
y_predicted[55]	-0.27	4.9e-4	0.03	-0.32	-0.29	-0.27	-0.25	-0.22	2859	1.0
y_predicted[56]	-0.46	3.4e-4	0.02	-0.49	-0.47	-0.45	-0.44	-0.42	2914	1.0
y_predicted[57]	-0.37	6.2e-4	0.04	-0.44	-0.39	-0.37	-0.34	-0.3	3431	1.0
y_predicted[58]	0.57	5.2e-4	0.03	0.51	0.55	0.57	0.6	0.64	4353	1.0
y_predicted[59]	1.37	9.1e-4	0.06	1.27	1.34	1.37	1.41	1.48	3685	1.0
y_predicted[60]	-0.46	3.7e-4	0.02	-0.5	-0.47	-0.46	-0.44	-0.42	3215	1.0
y_predicted[61]	-0.45	3.4e-4	0.02	-0.49	-0.46	-0.45	-0.44	-0.41	3243	1.0
y_predicted[62]	-0.46	7.3e-4	0.04	-0.55	-0.49	-0.46	-0.43	-0.38	3329	1.0
y_predicted[63]	-0.46	3.5e-4	0.02	-0.5	-0.48	-0.46	-0.45	-0.43	3065	1.0
y_predicted[64]	-0.06	6.6e-4	0.04	-0.13	-0.08	-0.06	-0.04	0.01	2865	1.0
y_predicted[65]	-0.26	5.0e-4	0.03	-0.32	-0.28	-0.26	-0.25	-0.21	2895	1.0
y_predicted[66]	-0.23	4.7e-4	0.03	-0.28	-0.25	-0.23	-0.21	-0.18	2929	1.0
y_predicted[67]	-0.14	4.2e-4	0.02	-0.19	-0.16	-0.14	-0.13	-0.1	2929	1.0
y_predicted[68]	-0.12	7.0e-4	0.04	-0.19	-0.14	-0.11	-0.09	-0.04	2679	1.0
y_predicted[69]	-0.42	8.4e-4	0.04	-0.5	-0.45	-0.42	-0.39	-0.33	2728	1.0
y_predicted[70]	-0.37	4.9e-4	0.02	-0.41	-0.38	-0.37	-0.35	-0.32	2569	1.0
y_predicted[71]	-0.39	3.9e-4	0.02	-0.44	-0.41	-0.39	-0.38	-0.35	3852	1.0
y_predicted[72]	-0.19	4.0e-4	0.02	-0.23	-0.2	-0.19	-0.17	-0.14	3508	1.0
y_predicted[73]	0.38	5.9e-4	0.04	0.31	0.36	0.38	0.4	0.45	3496	1.0
y_predicted[74]	-0.06	5.6e-4	0.03	-0.12	-0.08	-0.06		5.9e-3	2527	1.0
y_predicted[75]	0.06	4.0e-4	0.02	0.01	0.04	0.05	0.07	0.1	3196	1.0
y_predicted[76]	0.56	4.6e-4	0.03	0.5	0.54	0.56	0.58	0.63	4982	1.0
y_predicted[77]	1.59	1.2e-3	0.08	1.42	1.53	1.59	1.64	1.75	4545	1.0
y_predicted[78]	-0.37	4.9e-4	0.02	-0.42	-0.39	-0.37	-0.36	-0.32	2430	1.0
y_predicted[79]	0.08	3.3e-4	0.02	0.04	0.07	0.08	0.09	0.12	3933	1.0
y_predicted[80]	-0.65	5.4e-4	0.03	-0.71	-0.67	-0.65	-0.62	-0.58	3886	1.0
y_predicted[81]	-0.41	7.2e-4	0.04	-0.49	-0.43	-0.41	-0.38	-0.33	3126	1.0
y_predicted[82]	0.2	5.5e-4	0.03	0.15	0.18	0.2	0.22	0.27	3287	1.0
y_predicted[83]	-0.13	6.0e-4	0.03	-0.2	-0.16	-0.13	-0.11	-0.07	3072	1.0
y_predicted[84]	0.08	5.5e-4	0.03	0.02	0.06	0.08	0.11	0.15	3612	1.0
y_predicted[85]	0.79	6.3e-4	0.04	0.72	0.77	0.79	0.82	0.88	4193	1.0
y_predicted[86]	-0.45	3.4e-4	0.02	-0.49	-0.46	-0.45	-0.44	-0.41	3424	1.0
y_predicted[87]	6.15	3.3e-3	0.2	5.74	6.01	6.15	6.28	6.55	3800	1.0
/ _r = - = = = = = = = = = = = = = = = = =	0.10		٠. ـ		J . V ±	2.10	2.20	2.00	2000	

y_predicted[88]	-0.4	4.2e-4	0.02	-0.44	-0.41	-0.4	-0.38	-0.36	2774	1.0
y_predicted[89]	0.31	4.5e-4	0.03	0.26	0.29	0.31	0.33	0.37	3934	1.0
y_predicted[90]	-0.49	9.9e-4	0.05	-0.59	-0.52	-0.49	-0.45	-0.39	2527	1.0
y_predicted[91]	1.09	7.5e-4	0.05	1.0	1.06	1.09	1.12	1.18	3977	1.0
y_predicted[92]	-0.09	4.4e-4	0.03	-0.14	-0.11	-0.09	-0.07	-0.04	3543	1.0
y_predicted[93]	0.28	4.8e-4	0.03	0.22	0.26	0.28	0.3	0.34	3982	1.0
y_predicted[94]	-0.41	4.1e-4	0.02	-0.45	-0.42	-0.41	-0.39	-0.37	2513	1.0
<pre>y_predicted[95]</pre>	-0.49	3.4e-4	0.02	-0.53	-0.51	-0.49	-0.48	-0.45	3248	1.0
<pre>y_predicted[96]</pre>	0.29	5.1e-4	0.03	0.22	0.27	0.29	0.31	0.35	3973	1.0
<pre>y_predicted[97]</pre>	-0.68	5.0e-4	0.03	-0.75	-0.7	-0.68	-0.66	-0.62	4448	1.0
<pre>y_predicted[98]</pre>	0.6	5.5e-4	0.04	0.53	0.57	0.6	0.62	0.67	4405	1.0
<pre>y_predicted[99]</pre>	-0.07	7.0e-4	0.04	-0.14	-0.1	-0.07	-0.05	9.2e-4	2756	1.0
<pre>y_predicted[100]</pre>	-0.56	5.5e-4	0.03	-0.62	-0.58	-0.56	-0.53	-0.49	3342	1.0
$y_predicted[101]$	-0.41	4.1e-4	0.02	-0.45	-0.42	-0.41	-0.39	-0.37	2482	1.0
<pre>y_predicted[102]</pre>	-0.41	3.9e-4	0.02	-0.45	-0.43	-0.41	-0.4	-0.38	2591	1.0
<pre>y_predicted[103]</pre>	-0.44	7.8e-4	0.04	-0.53	-0.47	-0.44	-0.41	-0.35	3286	1.0
$y_predicted[104]$	-0.43	4.2e-4	0.03	-0.48	-0.45	-0.43	-0.42	-0.38	3756	1.0
<pre>y_predicted[105]</pre>	-0.17	4.2e-4	0.02	-0.22	-0.19	-0.17	-0.15	-0.12	3463	1.0
<pre>y_predicted[106]</pre>	-0.19	4.3e-4	0.02	-0.23	-0.2	-0.19	-0.17	-0.15	2715	1.0
<pre>y_predicted[107]</pre>	-0.08	6.4e-4	0.03	-0.15	-0.1	-0.08	-0.06	-0.01	2872	1.0
y_predicted[108]	-0.27	6.0e-4	0.03	-0.34	-0.29	-0.27	-0.25	-0.2	3347	1.0
y_predicted[109]	-0.07	6.1e-4	0.03	-0.13	-0.09	-0.07	-0.05	-5.8e-3	2581	1.0
y_predicted[110]	-0.52	8.4e-4	0.04	-0.6	-0.55	-0.52	-0.49	-0.44	2625	1.0
<pre>y_predicted[111]</pre>	-0.05	5.5e-4	0.03	-0.11	-0.07	-0.05	-0.03	4.4e-3	2979	1.0
<pre>y_predicted[112]</pre>	0.12	6.4e-4	0.04	0.04	0.09	0.12	0.14	0.19	3466	1.0
y_predicted[113]	0.23	7.6e-4	0.05	0.13	0.2	0.23	0.27	0.33	4228	1.0
y_predicted[114]	-0.07	4.8e-4	0.03	-0.13	-0.09	-0.07	-0.05	-0.02	3674	1.0
<pre>y_predicted[115]</pre>	-0.31	5.6e-4	0.03	-0.37	-0.33	-0.31	-0.29	-0.25	2681	1.0
<pre>y_predicted[116]</pre>	-0.19	4.4e-4	0.03	-0.24	-0.21	-0.19	-0.18	-0.14	3254	1.0
y_predicted[117]	0.49	6.7e-4	0.04	0.41	0.47	0.49	0.52	0.57	3715	1.0
<pre>y_predicted[118]</pre>	0.04	5.1e-4	0.03	-0.02	0.02	0.04	0.06	0.1	3322	1.0
<pre>y_predicted[119]</pre>	0.34	4.8e-4	0.03	0.29	0.32	0.34	0.36	0.4	3250	1.0
<pre>y_predicted[120]</pre>	-0.35	9.6e-4	0.06	-0.46	-0.39	-0.35	-0.32	-0.25	3343	1.0
<pre>y_predicted[121]</pre>	-0.46	4.8e-4	0.03	-0.52	-0.48	-0.46	-0.44	-0.4	3821	1.0
<pre>y_predicted[122]</pre>	2.4	6.8e-4	0.05	2.31	2.37	2.4	2.43	2.49	4418	1.0
<pre>y_predicted[123]</pre>	-0.32	6.2e-4	0.04	-0.38	-0.34	-0.32	-0.29	-0.25	3232	1.0
$y_predicted[124]$	-0.58	5.4e-4	0.03	-0.64	-0.6	-0.58	-0.56	-0.52	3239	1.0
<pre>y_predicted[125]</pre>	-0.49	3.9e-4	0.02	-0.54	-0.51	-0.49	-0.47	-0.44	3578	1.0
<pre>y_predicted[126]</pre>	-0.35	3.0e-4	0.02	-0.39	-0.36	-0.35	-0.34	-0.32	3618	1.0
<pre>y_predicted[127]</pre>	0.09	3.9e-4	0.02	0.04	0.07	0.09	0.1	0.13	3566	1.0
<pre>y_predicted[128]</pre>	-0.15	5.2e-4	0.03	-0.21	-0.17	-0.16	-0.14	-0.1	3017	1.0
<pre>y_predicted[129]</pre>	0.29	6.8e-4	0.04	0.21	0.27	0.29	0.32	0.38	3802	1.0
<pre>y_predicted[130]</pre>	1.29	5.4e-4	0.04	1.22	1.27	1.3	1.32	1.36	4346	1.0
<pre>y_predicted[131]</pre>	-0.25	5.6e-4	0.03	-0.31	-0.27	-0.25	-0.23	-0.19	2724	1.0
<pre>y_predicted[132]</pre>	-0.41	4.1e-4	0.02	-0.45	-0.42	-0.41	-0.39	-0.36	2701	1.0
<pre>y_predicted[133]</pre>	-0.45	4.2e-4	0.02	-0.5	-0.46	-0.45	-0.43	-0.4	3473	1.0
<pre>y_predicted[134]</pre>	-0.48	5.2e-4	0.03	-0.54	-0.5	-0.48	-0.46	-0.42	3632	1.0
<pre>y_predicted[135]</pre>	0.46	5.5e-4	0.04	0.39	0.44	0.46	0.49	0.53	4411	1.0

```
y_predicted[136]
                   -0.44
                           4.5e-4
                                     0.03
                                           -0.49
                                                   -0.46
                                                           -0.44
                                                                  -0.42
                                                                          -0.39
                                                                                   3617
                                                                                            1.0
                                     0.02
                                             -0.2
                                                   -0.17
                                                                  -0.14
                                                                                   2530
y_predicted[137]
                   -0.15
                           4.4e-4
                                                           -0.15
                                                                          -0.11
                                                                                            1.0
y_predicted[138]
                   -0.42
                           2.7e-4
                                     0.02
                                           -0.46
                                                   -0.43
                                                          -0.42
                                                                  -0.41
                                                                          -0.39
                                                                                   4188
                                                                                            1.0
                    -0.7
                           5.2e-4
                                     0.03
                                           -0.77
                                                   -0.73
                                                            -0.7
                                                                  -0.68
                                                                          -0.64
                                                                                   4323
                                                                                            1.0
y_predicted[139]
y_predicted[140]
                   -0.27
                                     0.03
                                           -0.33
                                                   -0.29
                                                          -0.27
                                                                  -0.25
                                                                          -0.21
                                                                                   3130
                           5.6e-4
                                                                                            1.0
                   -0.38
                           4.6e-4
                                     0.03
                                           -0.43
                                                    -0.4
                                                          -0.38
                                                                  -0.36
                                                                          -0.33
                                                                                   3147
y_predicted[141]
                                                                                            1.0
y_predicted[142]
                    0.44
                           7.0e-4
                                     0.04
                                            0.36
                                                    0.41
                                                            0.43
                                                                   0.46
                                                                           0.51
                                                                                   3307
                                                                                            1.0
y_predicted[143]
                   -0.44
                           3.8e-4
                                     0.02
                                           -0.48
                                                   -0.45
                                                          -0.44
                                                                  -0.42
                                                                           -0.4
                                                                                   3066
                                                                                            1.0
                    0.09
                                     0.03
                                             0.04
                                                    0.07
                                                            0.09
                                                                   0.11
                                                                           0.15
                                                                                   3479
y_predicted[144]
                           4.9e-4
                                                                                            1.0
                                     0.06
                                                    1.74
y_predicted[145]
                    1.78
                           8.6e-4
                                            1.66
                                                            1.78
                                                                    1.82
                                                                            1.9
                                                                                   4508
                                                                                            1.0
                   -0.68
                                     0.03
                                           -0.74
                                                    -0.7
                                                           -0.68
                                                                  -0.66
                                                                          -0.62
                                                                                   4290
y_predicted[146]
                           4.7e-4
                                                                                            1.0
y_predicted[147]
                   -0.02
                           4.7e-4
                                     0.03
                                           -0.07
                                                   -0.03
                                                           -0.02 3.6e-4
                                                                           0.03
                                                                                   3036
                                                                                            1.0
                                     0.02
                                                           -0.38
                                                                          -0.33
                   -0.38
                           4.7e-4
                                           -0.42
                                                   -0.39
                                                                  -0.36
                                                                                   2701
y_predicted[148]
                                                                                            1.0
                   -0.35
                                     0.03
                                           -0.41
                                                   -0.37
                                                           -0.35
                                                                          -0.29
                                                                                   3626
y_predicted[149]
                           5.4e-4
                                                                  -0.33
                                                                                            1.0
                   -0.15
                                             -0.2
                                                   -0.17
                                                                          -0.11
y_predicted[150]
                           4.2e-4
                                     0.02
                                                           -0.15
                                                                  -0.14
                                                                                   2726
                                                                                            1.0
                   -0.39
                           4.4e-4
                                     0.03
                                           -0.45
                                                   -0.41
                                                           -0.39
                                                                  -0.38
                                                                          -0.34
                                                                                   3782
y_predicted[151]
                                                                                            1.0
y_predicted[152]
                   -0.04
                           4.5e-4
                                     0.03
                                           -0.09
                                                   -0.05
                                                           -0.04
                                                                  -0.02
                                                                           0.01
                                                                                   3210
                                                                                            1.0
                           5.0e-4
                   -0.24
                                     0.03
                                            -0.3
                                                   -0.26
                                                           -0.24
                                                                  -0.23
                                                                          -0.19
                                                                                   3029
                                                                                            1.0
y_predicted[153]
y_predicted[154]
                    0.06
                           5.2e-4
                                     0.03 1.9e-3
                                                    0.04
                                                            0.06
                                                                    0.08
                                                                           0.13
                                                                                   3760
                                                                                            1.0
y_predicted[155]
                    0.66
                           6.9e-4
                                     0.05
                                            0.56
                                                    0.62
                                                            0.65
                                                                   0.69
                                                                           0.75
                                                                                   4752
                                                                                            1.0
y_predicted[156]
                    0.46
                           4.4e-4
                                     0.03
                                              0.4
                                                    0.44
                                                            0.46
                                                                   0.48
                                                                           0.51
                                                                                   3792
                                                                                            1.0
                     0.3
                                     0.03
                                            0.25
                                                    0.28
                                                             0.3
                                                                   0.32
                                                                           0.35
                                                                                   3208
y_predicted[157]
                           4.7e-4
                                                                                            1.0
                           5.3e-4
y_predicted[158]
                    0.17
                                     0.03
                                             0.1
                                                    0.14
                                                            0.17
                                                                   0.19
                                                                           0.23
                                                                                   3715
                                                                                            1.0
                   -0.11
                                     0.04
                                           -0.19
                                                   -0.14
                                                           -0.11
                                                                  -0.08
                                                                          -0.04
                                                                                   2686
y_predicted[159]
                           7.6e-4
                                                                                            1.0
y_predicted[160]
                    0.65
                           3.9e-4
                                     0.03
                                              0.6
                                                    0.64
                                                            0.65
                                                                   0.67
                                                                           0.71
                                                                                   4511
                                                                                            1.0
                   -0.26
                                     0.02
                                            -0.3
                                                   -0.27
                                                           -0.26
                                                                  -0.24
                                                                          -0.21
y_predicted[161]
                           3.8e-4
                                                                                   3366
                                                                                            1.0
                           4.1e-4
                   -0.43
                                     0.02
                                           -0.48
                                                   -0.44
                                                           -0.43
                                                                  -0.41
                                                                          -0.38
                                                                                   3330
y_predicted[162]
                                                                                            1.0
                                           -0.55
                                                            -0.5
y_predicted[163]
                    -0.5
                           4.6e-4
                                     0.03
                                                   -0.52
                                                                  -0.48
                                                                          -0.45
                                                                                   3622
                                                                                            1.0
                   -0.06
                           7.0e-4
                                     0.04
                                           -0.13
                                                   -0.09
                                                          -0.06
                                                                  -0.04
                                                                           0.01
                                                                                   2772
y_predicted[164]
                                                                                            1.0
y_predicted[165]
                   -0.58
                           5.3e-4
                                     0.03
                                           -0.64
                                                    -0.6
                                                           -0.58
                                                                  -0.56
                                                                          -0.52
                                                                                   3656
                                                                                            1.0
                   -0.24
                           4.7e-4
                                     0.03
                                           -0.29
                                                   -0.26
                                                           -0.24
                                                                  -0.22
                                                                          -0.19
                                                                                   2927
y_predicted[166]
                                                                                            1.0
y_predicted[167]
                    0.48
                           4.5e-4
                                     0.03
                                            0.42
                                                    0.46
                                                            0.48
                                                                     0.5
                                                                           0.53
                                                                                   3839
                                                                                            1.0
y_predicted[168]
                   -0.19
                           4.4e-4
                                     0.02
                                           -0.23
                                                    -0.2
                                                           -0.19
                                                                  -0.17
                                                                          -0.14
                                                                                   2659
                                                                                            1.0
y_predicted[169]
                    0.48
                           5.5e-4
                                     0.03
                                            0.41
                                                    0.45
                                                            0.48
                                                                     0.5
                                                                           0.55
                                                                                   3821
                                                                                            1.0
y_predicted[170]
                   -0.09
                                     0.02
                                           -0.14
                                                   -0.11
                                                           -0.09
                                                                  -0.08
                                                                          -0.05
                                                                                   2575
                           4.4e-4
                                                                                            1.0
                                                   -0.37
y_predicted[171]
                   -0.35
                           4.6e-4
                                     0.03
                                            -0.4
                                                           -0.35
                                                                  -0.33
                                                                           -0.3
                                                                                   3285
                                                                                            1.0
                                     0.02
                                            -0.5
                                                           -0.45
                                                                          -0.41
                                                                                   3247
y_predicted[172]
                   -0.45
                           3.8e-4
                                                   -0.47
                                                                  -0.44
                                                                                            1.0
y_predicted[173]
                   -0.09
                           4.3e-4
                                     0.02
                                           -0.13
                                                    -0.1
                                                          -0.09
                                                                  -0.07
                                                                          -0.04
                                                                                   2766
                                                                                            1.0
                                     0.07
                                             1.48
                                                    1.56
                                                            1.61
                                                                    1.65
                                                                           1.73
                                                                                   3999
y_predicted[174]
                    1.61
                           1.0e-3
                                                                                            1.0
                                     0.04
                                                                                   4339
y_predicted[175]
                    1.25
                           6.7e-4
                                             1.16
                                                    1.22
                                                            1.25
                                                                    1.28
                                                                           1.34
                                                                                            1.0
                   -0.12
                                     0.02
                                           -0.17
                                                   -0.14
                                                          -0.12
                                                                  -0.11
                                                                          -0.08
                                                                                   2460
y_predicted[176]
                           4.8e-4
                                                                                            1.0
                           4.6e-4
y_predicted[177]
                    0.49
                                     0.03
                                            0.44
                                                    0.47
                                                             0.5
                                                                   0.51
                                                                           0.55
                                                                                   4035
                                                                                            1.0
                    0.34
                           8.0e-4
                                     0.05
                                            0.24
                                                    0.31
                                                            0.34
                                                                   0.37
                                                                           0.43
                                                                                   3592
                                                                                            1.0
y_predicted[178]
                   -0.29
                                     0.04
                                           -0.36
                                                   -0.31
                                                          -0.29
                                                                  -0.26
                                                                          -0.22
                                                                                   3165
y_predicted[179]
                           6.3e-4
                                                                                            1.0
y_predicted[180]
                   -0.46
                           4.1e-4
                                     0.02
                                            -0.5
                                                   -0.48
                                                          -0.46
                                                                  -0.44
                                                                          -0.41
                                                                                   3219
                                                                                            1.0
y_predicted[181]-6.9e-3
                           5.1e-4
                                     0.03
                                           -0.07
                                                   -0.03-6.6e-3
                                                                   0.01
                                                                           0.06
                                                                                   4004
                                                                                            1.0
y_predicted[182]
                   -0.76
                           6.7e-4
                                     0.04
                                           -0.84
                                                   -0.79
                                                          -0.76
                                                                  -0.73
                                                                          -0.68
                                                                                   3896
                                                                                            1.0
                   -0.49
                           4.6e-4
                                     0.03
                                           -0.54
                                                   -0.51
                                                          -0.49
                                                                  -0.47
                                                                          -0.43
                                                                                   3536
                                                                                            1.0
y_predicted[183]
```

```
-0.75
y_predicted[184]
                   -0.78
                           6.9e-4
                                     0.04
                                           -0.86
                                                   -0.81
                                                           -0.78
                                                                           -0.7
                                                                                   3859
                                                                                            1.0
                   -0.05
                           4.8e-4
                                     0.03
                                           -0.11
                                                   -0.07
                                                           -0.05
                                                                  -0.03 3.0e-3
                                                                                   3723
y_predicted[185]
                                                                                            1.0
                                            0.48
                           4.9e-4
                                                    0.52
y_predicted[186]
                    0.54
                                     0.03
                                                            0.55
                                                                   0.57
                                                                           0.61
                                                                                   4036
                                                                                            1.0
y_predicted[187]
                   -0.27
                           5.7e-4
                                     0.03
                                           -0.33
                                                   -0.29
                                                          -0.27
                                                                  -0.25
                                                                          -0.21
                                                                                   3134
                                                                                            1.0
y predicted[188]
                   -0.58
                           4.8e-4
                                     0.03
                                           -0.64
                                                    -0.6
                                                           -0.58
                                                                  -0.56
                                                                          -0.52
                                                                                   4107
                                                                                            1.0
y_predicted[189]
                   -0.45
                           3.7e-4
                                     0.02
                                           -0.49
                                                   -0.46
                                                           -0.45
                                                                  -0.43
                                                                           -0.4
                                                                                   3528
                                                                                            1.0
y predicted[190]
                   -0.15
                           4.7e-4
                                     0.02
                                            -0.2
                                                   -0.17
                                                           -0.15
                                                                  -0.14
                                                                          -0.11
                                                                                   2555
                                                                                            1.0
                           7.0e-4
                                           -0.13
                                                                           0.02
y_predicted[191]
                   -0.06
                                     0.04
                                                   -0.08
                                                          -0.06
                                                                  -0.03
                                                                                   2787
                                                                                            1.0
y_predicted[192]
                    0.97
                           6.1e-4
                                     0.04
                                            0.89
                                                    0.95
                                                            0.97
                                                                     1.0
                                                                           1.05
                                                                                   4112
                                                                                            1.0
                           4.2e-4
                                     0.02
                                           -0.44
                                                   -0.42
                                                                          -0.36
y_predicted[193]
                    -0.4
                                                            -0.4
                                                                  -0.39
                                                                                   2741
                                                                                            1.0
                   -0.55
                           5.3e-4
                                     0.03
                                           -0.61
                                                   -0.57
                                                           -0.55
                                                                  -0.53
                                                                          -0.49
y_predicted[194]
                                                                                   3369
                                                                                            1.0
y_predicted[195]-4.5e-3
                           4.7e-4
                                     0.03
                                           -0.06
                                                   -0.02-4.6e-3
                                                                    0.01
                                                                           0.05
                                                                                   3268
                                                                                            1.0
                                                                   -0.4
                           4.0e-4
                                     0.02
                                           -0.46
                                                   -0.43
                                                          -0.41
                                                                          -0.37
y_predicted[196]
                   -0.41
                                                                                   2996
                                                                                            1.0
                    0.76
                           5.1e-4
                                     0.03
                                              0.7
                                                    0.74
                                                            0.76
                                                                    0.79
                                                                           0.83
                                                                                   4501
y_predicted[197]
                                                                                            1.0
                   -0.33
                           5.7e-4
                                           -0.39
                                                   -0.35
                                                           -0.33
                                                                  -0.31
                                                                          -0.27
y_predicted[198]
                                     0.03
                                                                                   2717
                                                                                            1.0
y_predicted[199]
                   -0.42
                           2.9e-4
                                     0.02
                                           -0.45
                                                   -0.43
                                                           -0.42
                                                                    -0.4
                                                                          -0.38
                                                                                   4176
                                                                                            1.0
y_predicted[200]
                   -0.42
                           4.1e-4
                                     0.03
                                           -0.47
                                                   -0.44
                                                           -0.42
                                                                    -0.4
                                                                          -0.37
                                                                                   3670
                                                                                            1.0
                                                   -0.42
                                                                  -0.38
loglik_pred[1]
                    -0.4
                           4.3e-4
                                     0.03
                                           -0.45
                                                            -0.4
                                                                          -0.35
                                                                                   3977
                                                                                            1.0
loglik_pred[2]
                   -0.43
                           4.4e-4
                                     0.03
                                           -0.48
                                                   -0.44
                                                          -0.42
                                                                  -0.41
                                                                          -0.38
                                                                                   3355
                                                                                            1.0
loglik pred[3]
                    -0.4
                           6.2e-4
                                     0.04
                                           -0.49
                                                   -0.43
                                                            -0.4
                                                                  -0.38
                                                                          -0.34
                                                                                   3639
                                                                                            1.0
                   -0.51
                                                   -0.53
                                                           -0.51
loglik_pred[4]
                           4.7e-4
                                     0.03
                                           -0.57
                                                                  -0.49
                                                                          -0.45
                                                                                   4385
                                                                                            1.0
loglik pred[5]
                   -0.53
                           4.2e-4
                                     0.02
                                           -0.57
                                                   -0.54
                                                           -0.53
                                                                  -0.51
                                                                          -0.48
                                                                                   3237
                                                                                            1.0
loglik_pred[6]
                   -0.74
                           9.8e-4
                                     0.06
                                           -0.86
                                                   -0.78
                                                           -0.74
                                                                    -0.7
                                                                          -0.63
                                                                                   3289
                                                                                            1.0
loglik_pred[7]
                   -0.52
                           5.5e-4
                                     0.03
                                           -0.58
                                                   -0.54
                                                           -0.52
                                                                   -0.5
                                                                          -0.47
                                                                                   2718
                                                                                            1.0
                                                           -0.38
loglik_pred[8]
                   -0.38
                           3.8e-4
                                     0.02
                                           -0.43
                                                    -0.4
                                                                  -0.37
                                                                          -0.34
                                                                                   4132
                                                                                            1.0
loglik_pred[9]
                   -0.38
                           4.7e-4
                                     0.03
                                           -0.45
                                                    -0.4
                                                           -0.38
                                                                  -0.36
                                                                          -0.33
                                                                                   4229
                                                                                            1.0
                                     0.02
                                                                          -0.29
loglik_pred[10]
                   -0.32
                           2.6e-4
                                           -0.36
                                                   -0.34
                                                           -0.32
                                                                  -0.31
                                                                                   4062
                                                                                            1.0
loglik_pred[11]
                   -0.45
                           5.2e-4
                                     0.03
                                           -0.52
                                                   -0.47
                                                           -0.45
                                                                  -0.43
                                                                          -0.39
                                                                                   4149
                                                                                            1.0
                           6.2e-4
                                                   -0.53
                                                                          -0.43
loglik_pred[12]
                    -0.5
                                     0.04
                                           -0.58
                                                            -0.5
                                                                  -0.47
                                                                                   4001
                                                                                            1.0
loglik_pred[13]
                   -0.32
                           2.6e-4
                                     0.02
                                           -0.36
                                                   -0.34
                                                          -0.32
                                                                  -0.31
                                                                          -0.29
                                                                                   4027
                                                                                            1.0
loglik_pred[14]
                    -0.5
                           7.0e-4
                                     0.04
                                           -0.58
                                                   -0.52
                                                            -0.5
                                                                  -0.47
                                                                          -0.43
                                                                                   3157
                                                                                            1.0
                   -0.34
loglik_pred[15]
                           2.8e-4
                                     0.02
                                           -0.38
                                                   -0.35
                                                           -0.34
                                                                  -0.32
                                                                           -0.3
                                                                                   4503
                                                                                            1.0
                           2.7e-4
                                                   -0.34
                                                           -0.33
loglik_pred[16]
                   -0.33
                                     0.02
                                           -0.36
                                                                  -0.32
                                                                          -0.29
                                                                                   4128
                                                                                            1.0
loglik_pred[17]
                   -0.81
                           8.6e-4
                                     0.05
                                            -0.9
                                                   -0.84
                                                          -0.81
                                                                  -0.78
                                                                          -0.72
                                                                                   2822
                                                                                            1.0
loglik pred[18]
                   -0.33
                           2.7e-4
                                     0.02
                                           -0.36
                                                   -0.34
                                                          -0.32
                                                                  -0.31
                                                                          -0.29
                                                                                   3817
                                                                                            1.0
                                           -2.26
                                                   -2.12
                                                           -2.06
                                                                    -2.0
                                                                          -1.88
loglik pred[19]
                   -2.06
                           1.5e-3
                                     0.09
                                                                                   3799
                                                                                            1.0
loglik pred[20]
                   -0.32
                           2.6e-4
                                     0.02
                                           -0.36
                                                   -0.33
                                                           -0.32
                                                                  -0.31
                                                                          -0.29
                                                                                   4200
                                                                                            1.0
loglik_pred[21]
                    -5.6
                           3.2e-3
                                     0.21
                                           -6.01
                                                   -5.74
                                                            -5.6
                                                                  -5.46
                                                                          -5.19
                                                                                   4286
                                                                                            1.0
loglik_pred[22]
                   -1.83
                           2.4e-3
                                     0.15
                                           -2.14
                                                   -1.94
                                                           -1.83
                                                                  -1.73
                                                                          -1.55
                                                                                   4169
                                                                                            1.0
                           7.3e-4
                                     0.04
                                           -0.73
                                                   -0.68
                                                           -0.65
                                                                  -0.62
                                                                          -0.58
loglik_pred[23]
                   -0.65
                                                                                   2981
                                                                                            1.0
loglik_pred[24]
                   -0.38
                           3.6e-4
                                     0.02
                                           -0.42
                                                   -0.39
                                                           -0.37
                                                                  -0.36
                                                                          -0.34
                                                                                   3274
                                                                                            1.0
                                           -0.36
                                                                          -0.29
loglik_pred[25]
                   -0.32
                           2.6e-4
                                     0.02
                                                   -0.34
                                                           -0.32
                                                                  -0.31
                                                                                   4159
                                                                                            1.0
loglik_pred[26]
                   -0.46
                           4.5e-4
                                     0.03
                                           -0.51
                                                   -0.47
                                                           -0.46
                                                                  -0.44
                                                                          -0.41
                                                                                   3410
                                                                                            1.0
loglik_pred[27]
                   -0.35
                           3.4e-4
                                     0.02
                                           -0.39
                                                   -0.36
                                                           -0.35
                                                                  -0.34
                                                                          -0.31
                                                                                   3797
                                                                                            1.0
loglik_pred[28]
                           2.8e-4
                                           -0.36
                                                   -0.34
                                                                  -0.32
                                                                          -0.29
                   -0.33
                                     0.02
                                                           -0.33
                                                                                   3945
                                                                                            1.0
loglik_pred[29]
                   -0.45
                           5.6e-4
                                     0.03
                                           -0.52
                                                   -0.47
                                                           -0.45
                                                                  -0.43
                                                                          -0.39
                                                                                   3479
                                                                                            1.0
loglik_pred[30]
                    -0.4
                           4.3e-4
                                     0.02
                                           -0.45
                                                   -0.41
                                                            -0.4
                                                                  -0.38
                                                                          -0.35
                                                                                   3374
                                                                                            1.0
loglik_pred[31]
                   -0.39
                           3.9e-4
                                     0.02
                                           -0.44
                                                   -0.41
                                                           -0.39
                                                                  -0.37
                                                                          -0.35
                                                                                   4035
                                                                                            1.0
```

loglik_pred[32]	-0.37	3.2e-4	0.02	-0.41	-0.39	-0.37	-0.36	-0.34	3664	1.0
loglik_pred[33]	-0.88	2.2e-3	0.13	-1.15	-0.96	-0.87	-0.79	-0.65	3507	1.0
loglik_pred[34]	-0.47	3.7e-4	0.02	-0.52	-0.49	-0.47	-0.46	-0.43	3368	1.0
loglik_pred[35]	-0.33	2.7e-4	0.02	-0.36	-0.34	-0.33	-0.32	-0.3	4079	1.0
loglik_pred[36]	-2.19	2.9e-3	0.18	-2.55	-2.31	-2.18	-2.06	-1.84	3807	1.0
loglik_pred[37]	-3.85	8.7e-3	0.53	-4.97	-4.18	-3.83	-3.48	-2.88	3759	1.0
loglik_pred[38]	-0.4	6.1e-4	0.04	-0.48	-0.42	-0.4	-0.37	-0.34	3923	1.0
loglik_pred[39]	-2.72	1.9e-3	0.12	-2.97	-2.8	-2.72	-2.64	-2.48	4081	1.0
loglik_pred[40]	-0.41	6.5e-4	0.04	-0.49	-0.43	-0.4	-0.38	-0.34	3334	1.0
loglik_pred[41]	-1.07	1.2e-3	0.06	-1.2	-1.11	-1.07	-1.03	-0.96	2736	1.0
loglik_pred[42]	-1.27	1.0e-3	0.07	-1.41	-1.32	-1.27	-1.23	-1.15	4314	1.0
loglik_pred[43]	-0.43	4.6e-4	0.03	-0.48	-0.45	-0.43	-0.42	-0.38	3169	1.0
loglik_pred[44]	-0.48	4.6e-4	0.03	-0.53	-0.49	-0.48	-0.46	-0.43	3204	1.0
loglik_pred[45]	-0.36	3.1e-4	0.03	-0.39	-0.37	-0.36	-0.34	-0.32	3662	1.0
loglik_pred[46]	-0.67	6.2e-4	0.02	-0.74	-0.69	-0.67	-0.65	-0.6	3301	1.0
loglik_pred[47]	-0.33	3.1e-4	0.04	-0.37	-0.34	-0.33	-0.32	-0.3	3911	1.0
loglik_pred[48]	-0.36	3.1e-4 3.3e-4	0.02	-0.37	-0.34	-0.35	-0.34	-0.32	3998	1.0
-	-0.30		0.02	-0.4	-0.37	-0.33	-0.34	-0.32	4073	
loglik_pred[49]		2.6e-4								1.0
loglik_pred[50]	-0.41	4.8e-4	0.03	-0.46	-0.42	-0.41	-0.39	-0.36	2939	1.0
loglik_pred[51]	-0.43	4.7e-4	0.03	-0.49	-0.45	-0.43	-0.41	-0.38	3753	1.0
loglik_pred[52]	-0.42	4.4e-4	0.02	-0.47	-0.43	-0.42	-0.4	-0.37	3169	1.0
loglik_pred[53]	-0.35	4.1e-4	0.02	-0.4	-0.36	-0.35	-0.33	-0.31	3460	1.0
loglik_pred[54]	-0.8	9.4e-4	0.06	-0.92	-0.84	-0.8	-0.76	-0.7	3463	1.0
loglik_pred[55]	-0.53	8.3e-4	0.05	-0.63	-0.56	-0.53	-0.5	-0.45	3245	1.0
loglik_pred[56]	-16.97	0.02	0.99			-16.94		-15.07	3498	1.0
loglik_pred[57]	-3.51	3.2e-3	0.21	-3.94	-3.65	-3.51	-3.37	-3.11	4284	1.0
loglik_pred[58]	-0.36	3.6e-4	0.03	-0.42	-0.38	-0.36	-0.35	-0.32	5143	1.0
loglik_pred[59]	-0.42	5.1e-4	0.03	-0.48	-0.44	-0.41	-0.39	-0.36	3872	1.0
loglik_pred[60]	-1.91	3.9e-3	0.24	-2.4	-2.07	-1.9	-1.75	-1.49	3559	1.0
loglik_pred[61]	-0.38	4.8e-4	0.03	-0.44	-0.4	-0.38	-0.37	-0.33	3259	1.0
<pre>loglik_pred[62]</pre>	-0.49	5.1e-4	0.03	-0.55	-0.51	-0.49	-0.47	-0.43	3844	1.0
<pre>loglik_pred[63]</pre>	-0.46	7.2e-4	0.04	-0.55	-0.49	-0.46	-0.44	-0.39	3302	1.0
<pre>loglik_pred[64]</pre>	-0.65	8.6e-4	0.06	-0.77	-0.68	-0.65	-0.61	-0.55	4185	1.0
<pre>loglik_pred[65]</pre>	-0.41	4.5e-4	0.03	-0.46	-0.43	-0.41	-0.39	-0.36	3229	1.0
loglik_pred[66]	-0.33	2.8e-4	0.02	-0.36	-0.34	-0.33	-0.32	-0.29	3869	1.0
<pre>loglik_pred[67]</pre>	-0.73	7.4e-4	0.04	-0.8	-0.75	-0.73	-0.7	-0.65	2491	1.0
loglik_pred[68]	-0.39	3.7e-4	0.02	-0.43	-0.4	-0.39	-0.37	-0.35	3230	1.0
loglik_pred[69]	-0.65	9.1e-4	0.06	-0.77	-0.69	-0.65	-0.61	-0.55	4170	1.0
loglik_pred[70]	-0.42	6.6e-4	0.04	-0.51	-0.44	-0.42	-0.39	-0.35	3691	1.0
loglik_pred[71]	-0.33	2.8e-4	0.02	-0.36	-0.34	-0.33	-0.32	-0.29	3923	1.0
loglik_pred[72]	-0.39	3.5e-4	0.02	-0.43	-0.4	-0.39	-0.38	-0.35	3652	1.0
loglik_pred[73]	-0.63	1.0e-3	0.07	-0.78	-0.67	-0.63	-0.58	-0.51	4353	1.0
loglik_pred[74]	-0.68	3.0e-3	0.18	-1.07	-0.79	-0.67	-0.55	-0.4	3306	1.0
loglik_pred[75]	-0.79	1.7e-3	0.11	-1.02	-0.85	-0.78	-0.71	-0.59	4107	1.0
loglik_pred[76]	-0.5	6.9e-4	0.04	-0.58	-0.52	-0.5	-0.47	-0.43	2919	1.0
loglik_pred[77]	-0.32	2.6e-4	0.02	-0.36	-0.34	-0.32	-0.31	-0.29	4175	1.0
loglik_pred[78]	-0.41	3.5e-4	0.02	-0.46	-0.43	-0.41	-0.4	-0.37	3810	1.0
loglik_pred[79]	-1.51	3.5e-3	0.2	-1.93	-1.65	-1.51	-1.37	-1.14	3245	1.0
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loglik_pred[80]	-0.33	2.6e-4	0.02	-0.36	-0.34	-0.33	-0.32	-0.3	4074	1.0
loglik_pred[81]	-0.36	3.6e-4	0.02	-0.41	-0.37	-0.36	-0.34	-0.31	4073	1.0
loglik_pred[82]	-0.42	5.1e-4	0.03	-0.49	-0.44	-0.41	-0.39	-0.36	4124	1.0
loglik_pred[83]	-0.93	1.4e-3	0.09	-1.12	-0.99	-0.93	-0.87	-0.76	4351	1.0
loglik_pred[84]	-0.38	2.9e-4	0.02	-0.41	-0.39	-0.38	-0.37	-0.34	4092	1.0
loglik_pred[85]	-0.41	3.7e-4	0.02	-0.46	-0.43	-0.41	-0.4	-0.38	3168	1.0
<pre>loglik_pred[86]</pre>	-0.42	4.8e-4	0.03	-0.48	-0.44	-0.42	-0.4	-0.36	3589	1.0
loglik_pred[87]	-0.34	3.0e-4	0.02	-0.38	-0.36	-0.34	-0.33	-0.31	4001	1.0
loglik_pred[88]	-0.43	5.5e-4	0.04	-0.51	-0.45	-0.43	-0.41	-0.36	4226	1.0
loglik_pred[89]	-0.53	4.2e-4	0.02	-0.58	-0.55	-0.53	-0.51	-0.48	3324	1.0
loglik_pred[90]	-0.42	4.5e-4	0.03	-0.48	-0.44	-0.42	-0.4	-0.37	3779	1.0
loglik_pred[91]	-0.32	2.6e-4	0.02	-0.36	-0.34	-0.32	-0.31	-0.29	4195	1.0
loglik_pred[92]	-0.37	9.3e-4	0.06	-0.53	-0.4	-0.36	-0.33	-0.3	3947	1.0
loglik_pred[93]	-0.97	1.2e-3	0.06	-1.1	-1.01	-0.97	-0.93	-0.86	2611	1.0
loglik_pred[94]	-0.48	5.6e-4	0.04	-0.56	-0.51	-0.48	-0.46	-0.41	4466	1.0
loglik_pred[95]	-0.34	2.8e-4	0.02	-0.37	-0.35	-0.34	-0.33	-0.3	4048	1.0
loglik_pred[96]	-0.52	5.2e-4	0.03	-0.58	-0.54	-0.52	-0.5	-0.47	3029	1.0
loglik_pred[97]	-2.43	1.5e-3	0.09	-2.6	-2.48	-2.43	-2.37	-2.26	3421	1.0
loglik_pred[98]	-0.79	1.2e-3	0.07	-0.93	-0.83	-0.78	-0.74	-0.65	3575	1.0
loglik_pred[99]	-2.12	9.4e-3	0.61	-3.48	-2.49	-2.06	-1.68	-1.09	4197	1.0
loglik_pred[100]	-0.83	1.6e-3	0.09	-1.02	-0.89	-0.83	-0.77	-0.67	3065	1.0
loglik_pred[101]	-0.51	4.6e-4	0.03	-0.56	-0.52	-0.5	-0.49	-0.45	3775	1.0
loglik_pred[102]	-0.47	4.7e-4	0.02	-0.52	-0.49	-0.47	-0.46	-0.43	2702	1.0
loglik_pred[103]	-0.7	7.7e-4	0.05	-0.8	-0.73	-0.7	-0.67	-0.61	3817	1.0
loglik_pred[104]	-2.12	2.2e-3	0.14	-2.4	-2.22	-2.12	-2.03	-1.87	4083	1.0
loglik_pred[105]	-0.66	1.0e-3	0.05	-0.77	-0.69	-0.65	-0.62	-0.56	2556	1.0
loglik_pred[106]	-0.33	2.7e-4	0.02	-0.36	-0.34	-0.33	-0.32	-0.29	4232	1.0
loglik_pred[107]	-0.32	2.6e-4	0.02	-0.36	-0.33	-0.32	-0.31	-0.29	4139	1.0
loglik_pred[108]	-0.61	7.7e-4	0.04	-0.69	-0.64	-0.61	-0.59	-0.54	2689	1.0
loglik_pred[109]	-0.43	3.6e-4	0.02	-0.47	-0.44	-0.43	-0.41	-0.39	3737	1.0
loglik_pred[110]	-0.74	6.0e-4	0.03	-0.81	-0.76	-0.74	-0.72	-0.68	2899	1.0
loglik_pred[111]	-1.49	1.8e-3	0.11	-1.72	-1.56	-1.48	-1.41	-1.28	4186	1.0
loglik_pred[112]	-0.94	6.9e-4	0.04	-1.02	-0.96	-0.94	-0.91	-0.86	3641	1.0
loglik_pred[113]	-0.49	5.9e-4	0.03	-0.56	-0.51	-0.49	-0.47	-0.43	2729	1.0
loglik_pred[114]	-0.35	3.4e-4	0.02	-0.39	-0.36	-0.35	-0.33	-0.31	3710	1.0
loglik_pred[115]	-0.55	5.4e-4	0.03	-0.61	-0.57	-0.55	-0.53	-0.5	2713	1.0
loglik_pred[116]	-0.4	4.7e-4	0.03	-0.47	-0.42	-0.4	-0.38	-0.35	3937	1.0
loglik_pred[117]	-0.67	1.1e-3	0.07	-0.82	-0.72	-0.67	-0.62	-0.54	4626	1.0
loglik_pred[118]	-0.79	1.2e-3	0.07	-0.92	-0.83	-0.78	-0.74	-0.66	3099	1.0
loglik_pred[119]	-0.73	1.2e-3	0.08	-0.9	-0.79	-0.73	-0.68	-0.58	4576	1.0
loglik_pred[120]	-0.36	3.8e-4	0.02	-0.4	-0.37	-0.35	-0.34	-0.32	3274	1.0
loglik_pred[121]	-0.43	5.6e-4	0.03	-0.5	-0.45	-0.43	-0.41	-0.37	3295	1.0
loglik_pred[122]	-1.24	2.5e-3	0.16	-1.57	-1.35	-1.23	-1.13	-0.95	4115	1.0
loglik_pred[123]	-0.39	3.6e-4	0.02	-0.43	-0.4	-0.39	-0.38	-0.35	3188	1.0
loglik_pred[124]	-0.4	4.8e-4	0.03	-0.45	-0.42	-0.4	-0.38	-0.35	3080	1.0
loglik_pred[125]	-2.28	2.1e-3	0.14	-2.55	-2.37	-2.27	-2.18	-2.02	4337	1.0
loglik_pred[126]	-0.52	6.0e-4	0.04	-0.6	-0.55	-0.52	-0.5	-0.46	3693	1.0
loglik_pred[127]	-0.36	3.0e-4	0.02	-0.4	-0.37	-0.36	-0.35	-0.32	3956	1.0

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loglik_pred[128]
                   -1.03
                           1.2e-3
                                     0.07
                                           -1.18
                                                   -1.08
                                                           -1.02
                                                                  -0.98
                                                                          -0.89
                                                                                   3700
                                                                                            1.0
loglik_pred[129]
                   -0.35
                           3.8e-4
                                     0.02
                                             -0.4
                                                   -0.37
                                                           -0.35
                                                                  -0.33
                                                                          -0.31
                                                                                   3570
                                                                                            1.0
                           3.2e-4
                                           -0.38
                                                   -0.36
loglik_pred[130]
                   -0.34
                                     0.02
                                                           -0.34
                                                                  -0.33
                                                                          -0.31
                                                                                   3572
                                                                                            1.0
loglik_pred[131]
                   -0.38
                           4.7e-4
                                     0.03
                                           -0.45
                                                    -0.4
                                                           -0.37
                                                                  -0.35
                                                                          -0.32
                                                                                   5053
                                                                                            1.0
                                                   -1.75
loglik pred[132]
                   -1.62
                           3.1e-3
                                     0.19
                                           -2.02
                                                           -1.62
                                                                  -1.49
                                                                          -1.28
                                                                                   3626
                                                                                            1.0
loglik pred[133]
                    -0.5
                           8.9e-4
                                     0.05
                                           -0.61
                                                   -0.53
                                                            -0.5
                                                                  -0.46
                                                                          -0.41
                                                                                   3318
                                                                                            1.0
loglik_pred[134]
                   -0.37
                           3.5e-4
                                     0.02
                                           -0.41
                                                   -0.38
                                                           -0.37
                                                                   -0.35
                                                                          -0.33
                                                                                   3467
                                                                                            1.0
                           5.7e-4
                                           -0.65
loglik_pred[135]
                   -0.58
                                     0.03
                                                    -0.6
                                                           -0.58
                                                                  -0.56
                                                                          -0.52
                                                                                   3059
                                                                                            1.0
loglik pred[136]
                   -0.83
                           8.8e-4
                                     0.05
                                           -0.93
                                                   -0.86
                                                           -0.83
                                                                    -0.8
                                                                          -0.74
                                                                                   3238
                                                                                            1.0
loglik_pred[137]
                           2.3e-3
                   -1.79
                                     0.12
                                           -2.03
                                                   -1.87
                                                           -1.79
                                                                    -1.7
                                                                          -1.55
                                                                                   2989
                                                                                            1.0
loglik_pred[138]
                   -0.68
                           6.0e-4
                                     0.03
                                           -0.75
                                                    -0.7
                                                           -0.68
                                                                   -0.66
                                                                          -0.62
                                                                                   2864
                                                                                            1.0
loglik_pred[139]
                   -0.45
                           8.0e-4
                                     0.05
                                           -0.55
                                                   -0.47
                                                           -0.44
                                                                   -0.41
                                                                          -0.37
                                                                                   3335
                                                                                            1.0
loglik_pred[140]
                                     0.07
                                           -1.52
                                                   -1.42
                                                           -1.36
                                                                  -1.32
                                                                          -1.23
                   -1.37
                           1.3e-3
                                                                                   3304
                                                                                            1.0
                                                           -0.35
loglik_pred[141]
                   -0.35
                           6.1e-4
                                     0.03
                                           -0.44
                                                   -0.37
                                                                  -0.33
                                                                           -0.3
                                                                                   3095
                                                                                            1.0
loglik_pred[142]
                   -0.32
                           2.6e-4
                                           -0.36
                                                   -0.34
                                                           -0.32
                                                                   -0.31
                                                                          -0.29
                                     0.02
                                                                                   4072
                                                                                            1.0
loglik_pred[143]
                   -0.33
                           2.6e-4
                                     0.02
                                           -0.36
                                                   -0.34
                                                           -0.33
                                                                  -0.31
                                                                          -0.29
                                                                                   4340
                                                                                            1.0
loglik_pred[144]
                   -0.69
                           7.3e-4
                                     0.04
                                           -0.77
                                                   -0.71
                                                           -0.69
                                                                  -0.66
                                                                          -0.61
                                                                                   2837
                                                                                            1.0
loglik_pred[145]
                   -1.37
                           1.6e-3
                                     0.11
                                             -1.6
                                                   -1.44
                                                           -1.37
                                                                    -1.3
                                                                          -1.17
                                                                                   4274
                                                                                            1.0
loglik_pred[146]
                    -0.5
                           5.7e-4
                                     0.03
                                           -0.56
                                                   -0.52
                                                            -0.5
                                                                  -0.48
                                                                          -0.44
                                                                                   2927
                                                                                            1.0
loglik pred[147]
                   -0.48
                           5.7e-4
                                     0.03
                                           -0.55
                                                    -0.5
                                                           -0.48
                                                                  -0.46
                                                                          -0.42
                                                                                   3108
                                                                                            1.0
                                                                          -0.58
loglik_pred[148]
                   -0.63
                           4.5e-4
                                     0.03
                                           -0.69
                                                   -0.65
                                                           -0.63
                                                                  -0.61
                                                                                   3816
                                                                                            1.0
loglik pred[149]
                   -0.36
                           4.0e-4
                                     0.02
                                           -0.41
                                                   -0.38
                                                           -0.36
                                                                   -0.35
                                                                          -0.32
                                                                                   3556
                                                                                            1.0
loglik_pred[150]
                   -0.34
                           2.9e-4
                                     0.02
                                           -0.38
                                                   -0.35
                                                           -0.34
                                                                  -0.33
                                                                           -0.3
                                                                                   4128
                                                                                            1.0
loglik pred[151]
                   -0.36
                           3.3e-4
                                     0.02
                                             -0.4
                                                   -0.37
                                                           -0.36
                                                                  -0.34
                                                                          -0.32
                                                                                   3322
                                                                                            1.0
                                           -0.45
loglik_pred[152]
                   -0.41
                           3.5e-4
                                     0.02
                                                   -0.42
                                                           -0.41
                                                                    -0.4
                                                                          -0.37
                                                                                   3641
                                                                                            1.0
loglik_pred[153]
                   -0.32
                           2.7e-4
                                     0.02
                                           -0.36
                                                   -0.34
                                                           -0.32
                                                                  -0.31
                                                                          -0.29
                                                                                   4019
                                                                                            1.0
                                                                          -1.77
loglik_pred[154]
                   -2.01
                           2.2e-3
                                     0.12
                                           -2.25
                                                   -2.09
                                                           -2.01
                                                                  -1.92
                                                                                   3176
                                                                                            1.0
loglik_pred[155]
                                     0.02
                                           -0.56
                                                   -0.53
                                                           -0.51
                                                                    -0.5
                                                                          -0.47
                   -0.51
                           4.1e-4
                                                                                   3239
                                                                                            1.0
                                                                   -1.23
                                                                          -1.16
loglik_pred[156]
                   -1.28
                           1.2e-3
                                     0.07
                                           -1.42
                                                   -1.33
                                                           -1.28
                                                                                   3318
                                                                                            1.0
                                                           -0.53
loglik_pred[157]
                   -0.53
                           8.8e-4
                                     0.05
                                           -0.64
                                                   -0.57
                                                                    -0.5
                                                                          -0.44
                                                                                   3484
                                                                                            1.0
loglik_pred[158]
                   -0.42
                           3.7e-4
                                     0.02
                                           -0.46
                                                   -0.43
                                                           -0.42
                                                                    -0.4
                                                                          -0.38
                                                                                   3742
                                                                                            1.0
loglik_pred[159]
                   -0.41
                           3.9e-4
                                     0.02
                                           -0.46
                                                   -0.43
                                                           -0.41
                                                                    -0.4
                                                                          -0.37
                                                                                   3177
                                                                                            1.0
                                                   -1.07
                                                            -1.0
                                                                  -0.93
loglik_pred[160]
                    -1.0
                           1.8e-3
                                     0.11
                                           -1.23
                                                                          -0.81
                                                                                   3393
                                                                                            1.0
loglik_pred[161]
                   -0.34
                           3.1e-4
                                     0.02
                                           -0.38
                                                   -0.36
                                                          -0.34
                                                                  -0.33
                                                                          -0.31
                                                                                   3588
                                                                                            1.0
loglik pred[162]
                   -0.33
                           2.6e-4
                                     0.02
                                           -0.36
                                                   -0.34
                                                           -0.33
                                                                  -0.32
                                                                          -0.29
                                                                                   4158
                                                                                            1.0
loglik pred[163]
                                                           -0.32
                                                                   -0.31
                                                                          -0.29
                   -0.32
                           2.5e-4
                                     0.02
                                           -0.36
                                                   -0.33
                                                                                   4232
                                                                                            1.0
loglik pred[164]
                   -0.33
                           2.8e-4
                                     0.02
                                           -0.36
                                                   -0.34
                                                           -0.33
                                                                  -0.31
                                                                          -0.29
                                                                                   3948
                                                                                            1.0
loglik_pred[165]
                   -0.32
                           2.6e-4
                                     0.02
                                           -0.36
                                                   -0.33
                                                           -0.32
                                                                  -0.31
                                                                          -0.29
                                                                                   4205
                                                                                            1.0
loglik_pred[166]
                   -0.35
                           3.6e-4
                                     0.02
                                             -0.4
                                                   -0.36
                                                           -0.35
                                                                  -0.33
                                                                          -0.31
                                                                                   4380
                                                                                            1.0
loglik_pred[167]
                           1.1e-3
                                     0.07
                                           -1.28
                                                   -1.18
                                                           -1.13
                                                                  -1.08
                                                                           -1.0
                   -1.13
                                                                                   4198
                                                                                            1.0
loglik_pred[168]
                   -0.37
                           3.7e-4
                                     0.02
                                           -0.42
                                                   -0.38
                                                           -0.37
                                                                  -0.35
                                                                          -0.33
                                                                                   3946
                                                                                            1.0
loglik_pred[169]
                                           -0.51
                                                           -0.45
                   -0.45
                           5.4e-4
                                     0.03
                                                   -0.47
                                                                  -0.43
                                                                          -0.39
                                                                                   3352
                                                                                            1.0
loglik_pred[170]
                   -8.43
                           6.8e-3
                                     0.46
                                           -9.34
                                                   -8.73
                                                           -8.43
                                                                   -8.11
                                                                          -7.54
                                                                                   4557
                                                                                            1.0
loglik_pred[171]
                   -0.34
                           3.4e-4
                                     0.02
                                           -0.39
                                                   -0.35
                                                           -0.34
                                                                  -0.33
                                                                           -0.3
                                                                                   3830
                                                                                            1.0
                           5.4e-4
                                     0.03
                                                   -0.56
                                                                          -0.47
loglik_pred[172]
                   -0.53
                                             -0.6
                                                           -0.53
                                                                  -0.51
                                                                                   3809
                                                                                            1.0
loglik_pred[173]
                   -0.51
                           6.2e-4
                                     0.04
                                           -0.59
                                                   -0.54
                                                           -0.51
                                                                   -0.49
                                                                          -0.45
                                                                                   3303
                                                                                            1.0
loglik_pred[174]
                   -1.61
                           1.5e-3
                                      0.1
                                             -1.8
                                                   -1.67
                                                            -1.6
                                                                  -1.54
                                                                          -1.43
                                                                                   4158
                                                                                            1.0
loglik_pred[175]
                   -0.37
                           5.2e-4
                                     0.03
                                           -0.43
                                                   -0.39
                                                           -0.37
                                                                  -0.35
                                                                          -0.32
                                                                                   2846
                                                                                            1.0
```

```
loglik_pred[176]
                   -0.34
                          2.7e-4
                                    0.02
                                          -0.37
                                                 -0.35
                                                         -0.34
                                                                -0.32
                                                                         -0.3
                                                                                 3969
                                                                                         1.0
loglik_pred[177]
                          2.7e-4
                                    0.02
                                          -0.36
                                                         -0.33
                   -0.33
                                                 -0.34
                                                                -0.32
                                                                        -0.29
                                                                                 3987
                                                                                         1.0
loglik_pred[178]
                   -0.41
                          3.3e-4
                                    0.02
                                          -0.45
                                                 -0.42
                                                         -0.41
                                                                 -0.4
                                                                        -0.37
                                                                                 3531
                                                                                         1.0
loglik_pred[179]
                   -0.87
                          1.2e-3
                                    0.06
                                           -1.0
                                                 -0.91
                                                         -0.87
                                                                -0.82
                                                                        -0.75
                                                                                         1.0
                                                                                 2847
loglik pred[180]
                          3.2e-4
                                    0.02
                                                  -0.36
                                                         -0.35
                                                                -0.33
                   -0.35
                                          -0.39
                                                                        -0.31
                                                                                 4113
                                                                                         1.0
loglik_pred[181]
                          1.2e-3
                                    0.08
                                          -1.07
                                                  -0.96
                                                         -0.91
                                                                -0.86
                                                                        -0.77
                                                                                 3934
                   -0.91
                                                                                         1.0
loglik pred[182]
                   -0.66
                          5.5e-4
                                    0.03
                                          -0.73
                                                  -0.68
                                                         -0.66
                                                                -0.64
                                                                         -0.6
                                                                                 3502
                                                                                         1.0
loglik_pred[183]
                   -0.46
                          6.7e-4
                                    0.04
                                          -0.54
                                                 -0.49
                                                         -0.46
                                                                -0.44
                                                                         -0.4
                                                                                 3002
                                                                                         1.0
loglik pred[184]
                          6.9e-4
                                    0.04
                                          -0.53
                                                  -0.48
                                                         -0.46
                                                                -0.43
                                                                        -0.39
                                                                                 2627
                   -0.46
                                                                                         1.0
loglik_pred[185]
                   -0.34
                          3.0e-4
                                    0.02
                                          -0.38
                                                 -0.35
                                                         -0.34
                                                                -0.33
                                                                         -0.3
                                                                                 3855
                                                                                         1.0
loglik_pred[186]
                                          -1.06
                                                         -0.79
                                                                -0.72
                                                                        -0.59
                    -0.8
                          1.9e-3
                                    0.12
                                                  -0.88
                                                                                 4244
                                                                                         1.0
loglik_pred[187]
                   -0.35
                          3.2e-4
                                    0.02
                                          -0.39
                                                  -0.37
                                                         -0.35
                                                                -0.34
                                                                        -0.32
                                                                                 3636
                                                                                         1.0
loglik_pred[188]
                                                                        -0.41
                   -0.45
                          4.1e-4
                                    0.02
                                           -0.5
                                                  -0.47
                                                         -0.45
                                                                -0.44
                                                                                 3777
                                                                                         1.0
loglik_pred[189]
                   -0.36
                          3.2e-4
                                    0.02
                                           -0.4
                                                  -0.37
                                                         -0.36
                                                                -0.34
                                                                        -0.32
                                                                                 4123
                                                                                         1.0
                                                                        -0.49
loglik_pred[190]
                   -0.54
                          5.4e-4
                                    0.03
                                           -0.6
                                                  -0.56
                                                         -0.54
                                                                -0.52
                                                                                 2869
                                                                                         1.0
loglik_pred[191]
                   -0.33
                          2.7e-4
                                    0.02
                                          -0.37
                                                  -0.35
                                                         -0.33
                                                                -0.32
                                                                         -0.3
                                                                                 4380
                                                                                         1.0
loglik_pred[192]
                   -0.32
                          2.6e-4
                                    0.02
                                          -0.36
                                                 -0.33
                                                         -0.32
                                                                -0.31
                                                                        -0.29
                                                                                 4126
                                                                                         1.0
loglik_pred[193]
                   -0.45
                          9.0e-4
                                    0.05
                                          -0.56
                                                  -0.48
                                                         -0.44
                                                                -0.41
                                                                        -0.36
                                                                                 3221
                                                                                         1.0
loglik_pred[194]
                   -0.33
                          2.6e-4
                                    0.02
                                          -0.36
                                                 -0.34
                                                         -0.33
                                                                -0.31
                                                                        -0.29
                                                                                 4248
                                                                                         1.0
                                          -0.38
loglik pred[195]
                   -0.34
                          3.1e-4
                                    0.02
                                                 -0.35
                                                         -0.34
                                                                -0.32
                                                                         -0.3
                                                                                 4505
                                                                                         1.0
                                                 -0.33
                                                                -0.31
loglik_pred[196]
                   -0.32
                          2.6e-4
                                    0.02
                                          -0.36
                                                         -0.32
                                                                        -0.29
                                                                                 4093
                                                                                         1.0
loglik pred[197]
                          4.3e-3
                                    0.29
                                          -3.62
                                                  -3.24
                                                         -3.04
                                                                -2.85
                                                                        -2.49
                   -3.05
                                                                                 4530
                                                                                         1.0
loglik_pred[198]
                   -0.43
                          4.1e-4
                                    0.03
                                          -0.48
                                                 -0.44
                                                         -0.43
                                                                -0.41
                                                                        -0.38
                                                                                 3867
                                                                                         1.0
loglik_pred[199]
                   -0.36
                          3.4e-4
                                    0.02
                                           -0.4
                                                 -0.37
                                                         -0.36
                                                                -0.35
                                                                        -0.32
                                                                                 3760
                                                                                         1.0
loglik_pred[200]
                   -0.74
                          1.9e-3
                                    0.12 -1.02 -0.82 -0.73 -0.66
                                                                       -0.54
                                                                                 4343
                                                                                         1.0
                  174.96
                            0.05
                                    2.22 169.76 173.71 175.34 176.56 178.26
                                                                                 1738
                                                                                         1.0
lp__
```

Samples were drawn using NUTS at Tue Dec 11 12:44:50 2018. For each parameter, n\_eff is a crude measure of effective sample size, and Rhat is the potential scale reduction factor on split chains (at convergence, Rhat=1).