Final Report

December 8, 2018

Bayesian Data Analysis Project (BDA) - 2018

1 Analysis of House Prices through Supervised Bayesian Linear Modeling

1.1 1. Data Analysis

This section of the report will briefly highlight some of the characteristics of the dataset chosen from Kaggle. 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")
        df.head()
Out [2]:
                                           price bedrooms bathrooms sqft_living \
                   id
                                 date
        0 7129300520 20141013T000000 221900.0
                                                        3
                                                                 1.00
                                                                              1180
        1 6414100192 20141209T000000 538000.0
                                                                 2.25
                                                                              2570
        2 5631500400 20150225T000000 180000.0
                                                                 1.00
                                                                               770
```

```
2487200875
                20141209T000000
                                    604000.0
                                                       4
                                                                3.00
                                                                               1960
                20150218T000000
                                    510000.0
                                                       3
                                                                2.00
   1954400510
                                                                               1680
   sqft_lot
              floors
                       waterfront
                                     view
                                                                 sqft_above
                                                         grade
0
       5650
                  1.0
                                 0
                                        0
                                                              7
                                                                        1180
1
       7242
                  2.0
                                 0
                                        0
                                                              7
                                                                        2170
2
      10000
                  1.0
                                 0
                                        0
                                                              6
                                                                         770
                                               . . .
3
       5000
                  1.0
                                 0
                                        0
                                                              7
                                                                        1050
4
       8080
                                 0
                                                              8
                                                                        1680
                  1.0
                                        0
                                               zipcode
   sqft_basement
                    yr_built
                               yr_renovated
                                                              lat
                                                                       long
0
                0
                         1955
                                            0
                                                 98178
                                                         47.5112 -122.257
1
              400
                         1951
                                        1991
                                                 98125
                                                         47.7210 -122.319
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
             1800
                           7503
```

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. 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:

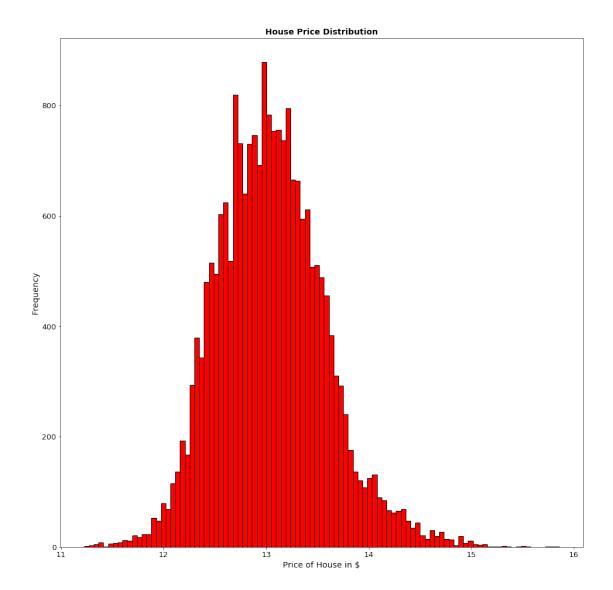
```
In [3]: # Statistical Metrics for House Prices
    minPrice = df.loc[:,'price'].min()
    maxPrice = df.loc[:,'price'].max()
    priceMean = df.loc[:,'price'].mean()
    priceMode = df.loc[:,'price'].mode()
    priceStats = df.loc[:,'price'].describe()

    print("Minimum House price: ", minPrice, "$")
    print("Maximum House price: ", maxPrice, "$")

    print("Mean of House prices: ", priceMean)
    print("\nMode of House prices: ")
    display(priceMode)
```

[5 rows x 21 columns]

```
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('Price of House in $', fontsize = 14)
        plt.ylabel('Frequency', fontsize = 14)
        plt.tick_params(labelsize = 13)
        plt.title('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
1
    450000.0
dtype: float64
Statistics about House Price:
count
        2.161300e+04
       5.400881e+05
mean
        3.671272e+05
std
min
       7.500000e+04
25%
       3.219500e+05
50%
        4.500000e+05
75%
        6.450000e+05
        7.700000e+06
max
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)
        df.head()
Out [4]:
                    bedrooms
                                bathrooms
                                           sqft_living
                                                         sqft_lot
                                                                   floors
                                                                           waterfront
              price
           221900.0
                             3
                                     1.00
                                                   1180
                                                             5650
                                                                      1.0
                                                                                     0
          538000.0
                            3
                                     2.25
                                                   2570
                                                             7242
                                                                      2.0
                                                                                     0
```

```
view
                  condition
                             grade
                                     sqft_above
                                                 sqft_basement
                                                                 yr_built
                                                                            yr_renovated
        0
              0
                          3
                                  7
                                           1180
                                                                      1955
                          3
        1
              0
                                  7
                                           2170
                                                            400
                                                                      1951
                                                                                     1991
              0
                          3
                                  6
                                            770
                                                              0
                                                                      1933
        3
              0
                          5
                                  7
                                                            910
                                                                      1965
                                                                                        0
                                           1050
                          3
        4
              0
                                           1680
                                                              0
                                                                      1987
                                                                                        0
           zipcode
                         lat
                                  long
                                        sqft_living15
                                                        sqft_lot15
        0
             98178
                    47.5112 -122.257
                                                              5650
                                                  1340
                                                              7639
        1
             98125 47.7210 -122.319
                                                 1690
        2
             98028 47.7379 -122.233
                                                 2720
                                                              8062
        3
             98136 47.5208 -122.393
                                                              5000
                                                 1360
             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)
```

Trim down the dataframe to the desired number of features and without the labels ('p

770

1960

1680

10000

5000

8080

1.0

1.0

1.0

0

0

0

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.

Store the prices in the label set

df = df.loc[:, most_corr.index]

labels = df['price']

180000.0

510000.0

3 604000.0

2

4

3

1.00

3.00

2.00

- 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 70:30. 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, randometric rand
                      # 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)
)
```

1.2 2. 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.

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 with mean 0 and a long tail is perceived to be the best choice for the problem at hand.

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 =
    model_poly = stan_utility.compile_model(filename = 'model_trial_2.stan', model_name =
```

INFO:pystan:COMPILING THE C++ CODE FOR MODEL anon_model_23307f82cce8b5150747ec40c2ddb2a2 NOW. INFO:pystan:COMPILING THE C++ CODE FOR MODEL anon_model_fdf10200661fa3c5ef96589091fabb87 NOW.

In [8]: # Linear Regression model

```
# Model fitting with default parameters and displaying the results (random seed to rep
fit_linear = model_linear.sampling(data = data_linear, seed = 194838, n_jobs = -1)
print(fit_linear)
```

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)

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.

	mean	se_mean	sd	2.5%	25%	50%	75%	97.5%	n_eff	Rhat
intercept	1.0e-4	2.0e-4	0.01	-0.03	-0.01	2.3e-4	0.01	0.03	5413	1.0
theta[1]	0.55	5.6e-4	0.03	0.48	0.52	0.55	0.57	0.61	3869	1.0
theta[2]	0.42	3.9e-4	0.03	0.37	0.4	0.42	0.44	0.47	4376	1.0
theta[3]	-0.24	5.2e-4	0.03	-0.31	-0.27	-0.24	-0.22	-0.18	4029	1.0
theta[4]	0.07	3.7e-4	0.02	0.02	0.05	0.07	0.08	0.11	4208	1.0
sigma	0.65	1.4e-4	0.01	0.63	0.64	0.65	0.66	0.67	6473	1.0
y_mean[1]	0.01	4.4e-4	0.03	-0.05-	6.6e-3	0.01	0.03	0.07	4670	1.0
y_mean[2]	-0.05	4.3e-4	0.03	-0.11	-0.07	-0.05	-0.03	2.8e-3	4473	1.0
y_mean[3]	0.27	7.8e-4	0.05	0.16	0.23	0.27	0.3	0.37	4575	1.0
$y_{mean}[4]$	-0.78	4.3e-4	0.03	-0.84	-0.8	-0.78	-0.76	-0.72	4699	1.0
y_mean[5]	0.21	4.5e-4	0.03	0.16	0.19	0.21	0.23	0.27	4028	1.0
y_mean[6]	-0.99	4.4e-4	0.03	-1.04	-1.01	-0.99	-0.97	-0.93	4400	1.0
y_mean[7]	-0.42	2.7e-4	0.02	-0.46	-0.44	-0.42	-0.41	-0.39	5053	1.0
y_mean[8]	0.99	4.4e-4	0.03	0.93	0.97	0.99	1.01	1.05	4793	1.0
y_mean[9]	-0.32	4.0e-4	0.03	-0.37	-0.33	-0.32	-0.3	-0.26	4218	1.0
y_mean[10]	0.14	6.1e-4	0.04	0.06	0.11	0.14	0.17	0.22	4242	1.0
y_mean[11]	-0.41	3.5e-4	0.02	-0.46	-0.43	-0.41	-0.4	-0.36	4438	1.0
y_mean[12]	1.22	6.2e-4	0.04	1.14	1.19	1.21	1.24	1.29	4057	1.0
y_mean[13]	-0.9	4.8e-4	0.03	-0.97	-0.93	-0.91	-0.88	-0.84	4484	1.0
y_mean[14]	0.39	4.0e-4	0.03	0.33	0.37	0.39	0.41	0.44	4893	1.0
y_mean[15]	-0.37	4.0e-4	0.03	-0.42	-0.38	-0.37	-0.35	-0.31	4164	1.0
y_mean[16]	0.24	5.2e-4	0.03	0.17	0.21	0.24	0.26	0.3	4023	1.0
y_mean[17]	-0.38	3.5e-4	0.02	-0.42	-0.39	-0.38	-0.36	-0.33	4440	1.0
y_mean[18]	1.15	6.2e-4	0.04	1.07	1.12	1.15	1.17	1.23	4106	1.0
y_mean[19]	2.3	1.1e-3	0.07	2.16	2.25	2.3	2.35	2.44	4068	1.0
y_mean[20]	-1.53	6.1e-4	0.04	-1.6	-1.55	-1.53	-1.5	-1.45	4384	1.0
y_mean[21]	-0.2	4.6e-4	0.03	-0.26	-0.22	-0.2	-0.18	-0.14	4548	1.0

y_mean[22]	1.14	1.0e-3	0.07	0.99	1.09	1.14	1.18	1.27	4870	1.0
y_mean[23]	-0.64	3.2e-4	0.02	-0.69	-0.66	-0.65	-0.63	-0.6	4756	1.0
y_mean[24]	0.14	3.7e-4	0.02	0.09	0.13	0.14	0.16	0.19	4160	1.0
y_mean[25]	-0.59	3.6e-4	0.02	-0.64	-0.61	-0.59	-0.58	-0.54	4747	1.0
y_mean[26]	-0.34	3.3e-4	0.02	-0.39	-0.36	-0.34	-0.33	-0.3	4719	1.0
y_mean[27]	-0.03	5.6e-4	0.04	-0.1	-0.06	-0.03-	-8.3e-3	0.04	3939	1.0
y_mean[28]	-1.16	4.3e-4	0.03	-1.22	-1.18	-1.16	-1.14	-1.1	4444	1.0
y_mean[29]	0.55	4.3e-4	0.03	0.5	0.53	0.55	0.57	0.61	4337	1.0
y_mean[30]	0.68	6.2e-4	0.04	0.6	0.65	0.68	0.7	0.75	3938	1.0
y_mean[31]	0.25	4.3e-4	0.03	0.19	0.23	0.25	0.27	0.31	4677	1.0
y_mean[32]	0.22	2.4e-4	0.02	0.18	0.21	0.22	0.23	0.25	5116	1.0
y_mean[33]	0.32	5.7e-4	0.04	0.25	0.3	0.32	0.34	0.39	3951	1.0
y_mean[34]	0.23	3.1e-4	0.02	0.19	0.22	0.23	0.25	0.28	5263	1.0
y_mean[35]	1.45	8.4e-4	0.05	1.34	1.41	1.45	1.48	1.55	3944	1.0
y_mean[36]	0.09	2.9e-4	0.02	0.05	0.07	0.09	0.1	0.13	4560	1.0
y_mean[37]	0.03	7.5e-4	0.02	0.89	0.95	0.03	1.02	1.08	4087	1.0
y_mean[37] y_mean[38]	-0.35	3.9e-4	0.03	-0.4	-0.37	-0.35	-0.33	-0.3	4726	1.0
y_mean[39]	0.33	3.9e 4 3.2e-4	0.03	0.09	0.12	0.13	0.14	0.17	4336	1.0
y_mean[39] y_mean[40]	0.13	3.7e-4	0.02	0.09	0.12	0.13	0.14	0.17	4186	1.0
v =		7.5e-4	0.02	0.13	0.16	0.19	0.21		3983	1.0
y_mean[41]	0.9				-1.11			0.99		
y_mean[42]	-1.09	4.4e-4	0.03	-1.15		-1.09	-1.07	-1.03	4531	1.0
y_mean[43]	1.89	7.3e-4	0.05	1.8	1.86	1.89	1.92	1.98	4080	1.0
y_mean[44]	0.41	4.7e-4	0.03	0.35	0.39	0.41	0.43	0.48	4631	1.0
y_mean[45]	0.61	4.8e-4	0.03	0.54	0.58	0.61	0.63	0.67	4592	1.0
y_mean[46]	0.31	7.2e-4	0.05	0.22	0.28	0.31	0.35	0.41	4233	1.0
y_mean[47]	-0.01	3.5e-4	0.03	-0.07	-0.03		3.6e-3	0.04	5516	1.0
y_mean[48]	-0.69	3.6e-4	0.02	-0.73	-0.7	-0.69	-0.67	-0.64	4650	1.0
y_mean[49]	-1.05	4.3e-4	0.03	-1.11	-1.07	-1.05	-1.03	-1.0	4603	1.0
y_mean[50]	-0.04	4.1e-4	0.03	-0.1	-0.06	-0.04	-0.02	0.01	4492	1.0
y_mean[51]	0.33	3.3e-4	0.02	0.28	0.31	0.33	0.34	0.37	4737	1.0
y_mean[52]	0.12	3.5e-4	0.02	0.08	0.11	0.12	0.14	0.17	4218	1.0
y_mean[53]	-0.58	3.1e-4	0.02	-0.62	-0.6	-0.58	-0.57	-0.54	4879	1.0
y_mean[54]	-0.88	5.3e-4	0.04	-0.95	-0.9	-0.88	-0.85	-0.81	4754	1.0
y_mean[55]	-1.57	6.0e-4	0.04	-1.64	-1.6	-1.57	-1.54	-1.49	4309	1.0
y_mean[56]	-1.13	4.3e-4	0.03	-1.18	-1.15	-1.12	-1.11	-1.07	4433	1.0
y_mean[57]	0.19	4.0e-4	0.03	0.14	0.17	0.19	0.2	0.24	4070	1.0
y_mean[58]	2.9	1.5e-3	0.09	2.72	2.84	2.9	2.96	3.08	3991	1.0
y_mean[59]	-0.24	4.9e-4	0.03	-0.3	-0.26	-0.24	-0.22	-0.17	4581	1.0
y_mean[60]	-0.68	3.8e-4	0.03	-0.73	-0.7	-0.68	-0.67	-0.63	4647	1.0
y_mean[61]	-0.22	5.0e-4	0.03	-0.29	-0.25	-0.22	-0.2	-0.16	4315	1.0
y_mean[62]	-0.28	5.0e-4	0.03	-0.34	-0.3	-0.28	-0.26	-0.21	4055	1.0
y_mean[63]	0.72	5.2e-4	0.03	0.65	0.7	0.72	0.74	0.78	4419	1.0
y_mean[64]	-0.41	3.7e-4	0.03	-0.46	-0.43	-0.41	-0.39	-0.36	4948	1.0
y_mean[65]	0.37	3.5e-4	0.02	0.32	0.35	0.37	0.38	0.41	4433	1.0
y_mean[66]	-0.08	5.0e-4	0.03	-0.15	-0.11	-0.08	-0.06	-0.02	4740	1.0
y_mean[67]	-0.68	4.4e-4	0.03	-0.74	-0.7	-0.68	-0.65	-0.62	4917	1.0
y_mean[68]	-0.11	3.4e-4	0.02	-0.15	-0.12	-0.11	-0.09	-0.06	4726	1.0
y_mean[69]	0.33	2.8e-4	0.02	0.29	0.32	0.33	0.34	0.37	5243	1.0

y_mean[70]	0.46	4.8e-4	0.03	0.4	0.44	0.46	0.48	0.52	4668	1.0
y_mean[71]	0.51	5.0e-4	0.03	0.44	0.49	0.51	0.53	0.58	4753	1.0
y_mean[72]	0.43	7.8e-4	0.05	0.33	0.39	0.43	0.46	0.53	4481	1.0
y_mean[73]	-1.02	4.3e-4	0.03	-1.08	-1.04	-1.02	-1.0	-0.96	4609	1.0
y_mean[74]	-0.54	3.0e-4	0.02	-0.58	-0.56	-0.54	-0.53	-0.5	4836	1.0
y_mean[75]	-0.06	5.5e-4	0.03	-0.12	-0.08	-0.06	-0.03	0.01	3943	1.0
y_mean[76]	-0.11	3.4e-4	0.02	-0.16	-0.13	-0.11	-0.1	-0.07	4729	1.0
y_mean[77]	-0.26	4.9e-4	0.03	-0.32	-0.28	-0.26	-0.24	-0.19	4599	1.0
y_mean[78]	-0.36	2.7e-4	0.02	-0.39	-0.37	-0.36	-0.35	-0.32	5041	1.0
y_mean[79]	-1.09	4.3e-4	0.03	-1.14	-1.11	-1.09	-1.07	-1.03	4525	1.0
y_mean[80]	-0.02	4.8e-4	0.03	-0.08	-0.04		9.3e-4	0.04	4195	1.0
y_mean[81]	-0.01	2.9e-4	0.02	-0.05	-0.03		1.3e-3	0.03	4759	1.0
y_mean[82]	1.36	6.4e-4	0.04	1.28	1.33	1.36	1.39	1.44	4196	1.0
y_mean[83]	-0.19	4.5e-4	0.03	-0.24	-0.21	-0.19	-0.17	-0.13	4053	1.0
y_mean[84]	-1.11	4.3e-4	0.03	-1.17	-1.13	-1.11	-1.09	-1.06	4454	1.0
y_mean[85]	-0.27	3.0e-4	0.03	-0.31	-0.29	-0.27	-0.26	-0.23	4611	1.0
y_mean[86]	-0.32	2.9e-4	0.02	-0.36	-0.33	-0.32	-0.3	-0.28	4630	1.0
y_mean[87]	-0.24	3.2e-4	0.02	-0.28	-0.25	-0.24	-0.22	-0.2	4678	1.0
y_mean[88]	0.85	5.5e-4	0.02	0.78	0.82	0.24	0.22	0.92	4341	1.0
y_mean[89]	-0.53	3.9e-4	0.04	-0.59	-0.55	-0.53	-0.52			1.0
v –								-0.48	4554	
y_mean[90]	-0.05	3.1e-4	0.02	-0.09	-0.06	-0.05		-6.8e-3	4743	1.0
y_mean[91]	0.09	5.8e-4		0.02	0.07	0.09	0.12	0.17	4053	1.0
y_mean[92]	-0.43	3.4e-4	0.02	-0.47	-0.45	-0.43	-0.42	-0.39	4334	1.0
y_mean[93]	0.67	8.1e-4	0.06	0.56	0.63	0.67	0.7	0.78	4930	1.0
y_mean[94]	0.68	6.6e-4	0.04	0.6	0.65	0.68	0.71	0.76	3902	1.0
y_mean[95]	0.22	4.0e-4	0.03	0.17	0.2	0.22	0.24	0.27	4103	1.0
y_mean[96]	0.07	2.6e-4	0.02	0.03	0.06	0.07	0.08	0.11	5632	1.0
y_mean[97]	-0.63	3.1e-4	0.02	-0.67	-0.65	-0.63	-0.62	-0.59	4773	1.0
y_mean[98]	-1.2	4.4e-4	0.03	-1.26	-1.22	-1.2	-1.18	-1.14	4473	1.0
y_mean[99]	0.95	1.0e-3	0.07	0.81	0.9	0.95	1.0	1.08	4981	1.0
y_mean[100]	0.46	4.8e-4	0.03	0.4	0.44	0.46	0.48	0.52	4567	1.0
y_mean[101]	-0.35	3.7e-4	0.03	-0.4	-0.37	-0.35	-0.34	-0.3	4604	1.0
y_mean[102]	-0.09	3.4e-4	0.02	-0.13	-0.11	-0.09	-0.07	-0.04	4704	1.0
y_mean[103]	-1.14	4.4e-4	0.03	-1.2	-1.16	-1.14	-1.12	-1.08	4470	1.0
y_mean[104]	-0.72	3.9e-4	0.03	-0.77	-0.74	-0.72	-0.7	-0.67	4599	1.0
y_mean[105]	0.85	5.4e-4	0.03	0.78	0.82	0.85	0.87	0.92	4094	1.0
y_mean[106]	5.1e-3	6.0e-4	0.04	-0.07	-0.02	4.9e-3	0.03	0.08	3933	1.0
y_mean[107]	0.08	5.6e-4	0.04	1.6e-3	0.05	0.08	0.1	0.15	4431	1.0
y_mean[108]	1.47	7.9e-4	0.05	1.37	1.44	1.47	1.5	1.57	3956	1.0
y_mean[109]	0.39	4.5e-4	0.03	0.34	0.37	0.39	0.41	0.45	4424	1.0
y_mean[110]	1.64	8.1e-4	0.05	1.54	1.61	1.64	1.68	1.75	4141	1.0
y_mean[111]	1.81	8.3e-4	0.05	1.71	1.78	1.81	1.85	1.92	3988	1.0
y_mean[112]	0.52	4.4e-4	0.03	0.46	0.5			0.57	4289	1.0
y_mean[113]	-1.14	4.2e-4	0.03	-1.19	-1.16	-1.14		-1.09	4415	1.0
y_mean[114]	-0.09	3.4e-4	0.02	-0.13	-0.1			-0.04	4891	1.0
y_mean[115]	-0.51	3.9e-4	0.03	-0.56	-0.53				4473	1.0
y_mean[116]	-0.01	4.6e-4	0.03	-0.07	-0.03		6.3e-3	0.05	4558	1.0
y_mean[117]	-0.05	4.2e-4	0.03	-0.11	-0.07			1.2e-3	4370	1.0
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y_mean[118]	0.9	7.0e-4	0.04	0.82	0.87	0.9	0.93	0.99	3982	1.0
y_mean[119]	0.37	5.3e-4	0.04	0.3	0.34	0.37	0.4	0.44	5249	1.0
y_mean[120]	-0.13	4.8e-4	0.03	-0.2	-0.15	-0.13	-0.11	-0.07	4741	1.0
y_mean[121]	-0.03	4.5e-4	0.03	-0.09	-0.05	-0.03	-0.01	0.03	4540	1.0
y_mean[122]	-1.12	4.8e-4	0.03	-1.18	-1.14	-1.12	-1.1	-1.06	4449	1.0
y_mean[123]	-0.63	3.2e-4	0.02	-0.67	-0.64	-0.63	-0.61	-0.58	4777	1.0
y_mean[124]	-0.72	3.9e-4	0.03	-0.77	-0.74	-0.72	-0.71	-0.67	4602	1.0
y_mean[125]	0.13	3.1e-4	0.02	0.08	0.11	0.13	0.14	0.17	4431	1.0
y_mean[126]	0.45	4.1e-4	0.03	0.4	0.43	0.45	0.47	0.5	4195	1.0
y_mean[127]	-0.42	3.2e-4	0.02	-0.47	-0.44	-0.42	-0.41	-0.38	4708	1.0
y_mean[128]	0.49	4.5e-4	0.03	0.43	0.47	0.49	0.51	0.55	4441	1.0
y_mean[129]	-0.37	3.7e-4	0.02	-0.42	-0.39	-0.37	-0.36	-0.33	4268	1.0
y_mean[130]	-0.09	4.9e-4	0.03	-0.15	-0.11	-0.09	-0.07	-0.03	4224	1.0
y_mean[131]	1.54	9.6e-4	0.06	1.42	1.5	1.53	1.58	1.65	3913	1.0
y_mean[132]	-0.43	3.4e-4	0.02	-0.48	-0.45	-0.43	-0.42	-0.39	4530	1.0
y_mean[133]	0.13	5.7e-4	0.04	0.06	0.11	0.13	0.16	0.21	4415	1.0
y_mean[134]	1.49	6.7e-4	0.04	1.41	1.47	1.49	1.52	1.58	4030	1.0
y_mean[135]	-0.43	3.3e-4	0.02	-0.47	-0.45	-0.43	-0.41	-0.38	4813	1.0
y_mean[136]	-0.22	4.5e-4	0.03	-0.28	-0.24	-0.22	-0.2	-0.16	4573	1.0
y_mean[137]	0.17	3.6e-4	0.02	0.12	0.15	0.17	0.18	0.22	4143	1.0
y_mean[138]	1.52	7.7e-4	0.05	1.42	1.48	1.52	1.55	1.61	4193	1.0
y_mean[139]	0.62	4.5e-4	0.03	0.56	0.6	0.62	0.64	0.68	4251	1.0
y_mean[140]	-1.21	4.5e-4	0.03	-1.27	-1.23	-1.21	-1.19	-1.15	4482	1.0
y_mean[141]	0.47	4.8e-4	0.03	0.4	0.45	0.47	0.49	0.53	4551	1.0
y_mean[142]	-0.3	5.6e-4	0.04	-0.38	-0.33	-0.3	-0.27	-0.22	4868	1.0
y_mean[143]	-0.58	3.0e-4	0.02	-0.62	-0.6	-0.58	-0.57	-0.54	4868	1.0
y_mean[144]	0.02	3.2e-4	0.02	-0.02	9.0e-3	0.02	0.04	0.07	4598	1.0
y_mean[145]	-0.58	3.2e-4	0.02	-0.62	-0.59	-0.58	-0.56	-0.53	4924	1.0
y_mean[146]	-0.82	4.8e-4	0.03	-0.88	-0.84	-0.82	-0.8	-0.75	4497	1.0
y_mean[147]	0.2	3.7e-4	0.02	0.15	0.18	0.2	0.21	0.24	4453	1.0
y_mean[148]	-0.21	4.3e-4	0.03	-0.26	-0.22	-0.21	-0.19	-0.15	4636	1.0
y_mean[149]	-0.33	4.3e-4	0.03	-0.38	-0.35	-0.33	-0.31	-0.27	4864	1.0
y_mean[150]	0.08	2.9e-4	0.02	0.04	0.06	0.08	0.09	0.12	4544	1.0
y_mean[151]	-0.71	3.7e-4	0.03	-0.76	-0.72	-0.71	-0.69	-0.65	4870	1.0
y_mean[152]	-0.68	3.4e-4	0.02	-0.73	-0.7	-0.68	-0.67	-0.64	4708	1.0
y_mean[153]	0.08	2.9e-4	0.02	0.04	0.06	0.08	0.09	0.12	4510	1.0
y_mean[154]	0.09	3.1e-4	0.02	0.05	0.07	0.09	0.1	0.13	4734	1.0
y_mean[155]	-0.46	3.3e-4	0.02	-0.5	-0.47	-0.46	-0.44	-0.41	4514	1.0
y_mean[156]	-0.7	3.6e-4	0.02	-0.74	-0.71	-0.7	-0.68	-0.65	4667	1.0
y_mean[157]	-0.48	2.9e-4	0.02	-0.52	-0.5	-0.48	-0.47	-0.44	4787	1.0
y_mean[158]	0.88	5.3e-4	0.04	0.81	0.86	0.88	0.91	0.95	4735	1.0
y_mean[159]	0.09	5.1e-4	0.03	0.03	0.07	0.09	0.12	0.16	4217	1.0
y_mean[160]	-0.57	2.9e-4	0.02	-0.61	-0.58	-0.57	-0.56	-0.53	4862	1.0
y_mean[161]	-0.63	3.1e-4	0.02	-0.68	-0.65	-0.63	-0.62	-0.59	4848	1.0
y_mean[162]	-0.2	5.7e-4	0.04	-0.28	-0.23	-0.21	-0.18	-0.13	4049	1.0
y_mean[163]	-0.42	3.4e-4	0.02	-0.47	-0.44	-0.42	-0.41	-0.37	4821	1.0
y_mean[164]	1.27	6.1e-4	0.04	1.19	1.24	1.27	1.29	1.34	4126	1.0
y_mean[165]	0.22	3.9e-4	0.03	0.17	0.2	0.22	0.23	0.27	4138	1.0

y_mean[166]	-0.05	3.2e-4	0.02	-0.09	-0.07	-0.05	-0.04-	9.1e-3	4810	1.0
y_mean[167]	0.16	4.0e-4	0.03	0.11	0.14	0.16	0.18	0.22	4887	1.0
y_mean[168]	-1.5	8.3e-4	0.05	-1.6	-1.54	-1.5	-1.46	-1.39	4251	1.0
y_mean[169]	-0.51	2.9e-4	0.02	-0.55	-0.53	-0.51	-0.5	-0.47	4651	1.0
y_mean[170]	-0.44	3.1e-4	0.02	-0.48	-0.45	-0.44	-0.43	-0.4	4652	1.0
y_mean[171]	-1.18	4.7e-4	0.03	-1.24	-1.2	-1.18	-1.16	-1.12	4489	1.0
y_mean[172]	1.22	6.3e-4	0.04	1.14	1.19	1.22	1.25	1.31	4678	1.0
y_mean[173]	0.02	8.2e-4	0.05	-0.08	-0.02	0.02	0.06	0.12	4094	1.0
y_mean[174]	-0.92	4.2e-4	0.03	-0.97	-0.94	-0.92	-0.9	-0.86	4506	1.0
y_mean[175]	0.09	5.0e-4	0.03	0.02	0.07	0.09	0.11	0.16	4392	1.0
y_mean[176]	-0.63	3.3e-4	0.02	-0.67	-0.64	-0.63	-0.61	-0.58	4778	1.0
y_mean[177]	-0.56	2.8e-4	0.02	-0.59	-0.57	-0.56	-0.54	-0.52	4837	1.0
y_mean[178]	-0.17	3.4e-4	0.02	-0.21	-0.18	-0.17	-0.15	-0.12	4474	1.0
y_mean[179]	-0.38	3.4e-4	0.02	-0.43	-0.4	-0.38	-0.37	-0.34	4430	1.0
y_mean[179] y_mean[180]	-0.18	5.4e 4 5.9e-4	0.02	-0.26	-0.21	-0.18	-0.16	-0.1	4865	1.0
y_mean[180] y_mean[181]	-0.22	4.8e-4	0.04	-0.28	-0.24	-0.22	-0.2	-0.16	4527	1.0
y_mean[181] y_mean[182]	-0.22	4.7e-4	0.03	-0.28	-0.24	-0.22	-0.72	-0.10	4441	1.0
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y_mean[183]	0.22	4.6e-4	0.03	0.17	0.2	0.22	0.24	0.28	4013	1.0
y_mean[184]	0.27	4.3e-4	0.03	0.21	0.25	0.27	0.28	0.32	4252	1.0
y_mean[185]	-0.24	3.0e-4	0.02	-0.28	-0.25	-0.24	-0.23	-0.2	4834	1.0
y_mean[186]	0.51	5.1e-4	0.03	0.44	0.49	0.51	0.53	0.58	4317	1.0
y_mean[187]	-1.0	4.3e-4	0.03	-1.06	-1.02	-1.0	-0.98	-0.94	4568	1.0
y_mean[188]	0.13	5.4e-4	0.03	0.06	0.1	0.13	0.15	0.19	4188	1.0
y_mean[189]	-0.15	5.1e-4	0.03	-0.22	-0.18	-0.15	-0.13	-0.08	4503	1.0
y_mean[190]	-0.55	3.4e-4	0.02	-0.59	-0.56	-0.55	-0.53	-0.5	4819	1.0
y_mean[191]	-0.32	8.5e-4	0.06	-0.43	-0.36	-0.32	-0.27	-0.2	4927	1.0
y_mean[192]	0.96	6.3e-4	0.04	0.87	0.93	0.96	0.98	1.04	4464	1.0
y_mean[193]	-0.64	3.3e-4	0.02	-0.68	-0.65	-0.64	-0.62	-0.59	4748	1.0
y_mean[194]	-0.2	3.4e-4	0.02	-0.24	-0.21	-0.2	-0.18	-0.15	4474	1.0
y_mean[195]	0.3	3.1e-4	0.02	0.26	0.28	0.3	0.31	0.34	5110	1.0
y_mean[196]	1.63	8.4e-4	0.05	1.52	1.59	1.63	1.66	1.74	4166	1.0
y_mean[197]	0.75	5.1e-4	0.03	0.68	0.72	0.75	0.77	0.81	4048	1.0
y_mean[198]	-0.55	3.3e-4	0.02	-0.59	-0.57	-0.55	-0.54	-0.51	4638	1.0
y_mean[199]	0.15	4.4e-4	0.03	0.09	0.12	0.15	0.17	0.21	4989	1.0
y_mean[200]	0.36	5.4e-4	0.03	0.29	0.33	0.36	0.38	0.43	4042	1.0
y_mean[201]	-0.58	3.4e-4	0.02	-0.62	-0.6	-0.58	-0.56	-0.53	4722	1.0
y_mean[202]	-0.39	3.2e-4	0.02	-0.43	-0.4	-0.39	-0.37	-0.34	4521	1.0
y_mean[203]	0.32	5.4e-4	0.04	0.24	0.29	0.32	0.34	0.39	5206	1.0
y_mean[204]	-0.04	4.8e-4	0.03	-0.1	-0.06	-0.04	-0.02	0.02	4121	1.0
y_mean[205]	-0.25	2.8e-4	0.02	-0.29	-0.27	-0.25	-0.24	-0.21	4882	1.0
y_mean[206]	0.5	8.5e-4	0.06	0.39	0.46	0.5	0.54	0.61	4424	1.0
y_mean[207]	-0.4	2.8e-4	0.02	-0.44	-0.41	-0.4	-0.39	-0.36	4741	1.0
y_mean[208]	-1.8	1.4e-3	0.09	-1.98	-1.86	-1.8	-1.73	-1.62	4209	1.0
y_mean[200] y_mean[209]	0.71	4.8e-4	0.03	0.64	0.69	0.71	0.73	0.77	4113	1.0
y_mean[200] y_mean[210]	0.71	7.2e-4	0.05	0.18	0.05	0.71	0.73	0.77	4617	1.0
y_mean[210] y_mean[211]	-0.49	4.3e-4	0.03	-0.55	-0.51	-0.49	-0.47	-0.43	5064	1.0
y_mean[211] y_mean[212]	0.49	5.8e-4	0.03	0.21	0.27	0.49	0.32	0.43	4885	1.0
y_mean[212] y_mean[213]	0.29	6.1e-4	0.04	0.21	0.13	0.29	0.32	0.24	4447	1.0
λ-mean[ς10]	0.10	0.16-4	0.04	0.00	0.13	0.10	0.19	0.24	7771	1.0

```
5.2e-4
                                      0.03
                                             0.76
                                                             0.83
                                                                     0.85
                                                                                     4061
y_mean[214]
                     0.83
                                                      0.8
                                                                             0.89
                                                                                              1.0
                    -0.62
                           3.1e-4
                                      0.02
                                            -0.66
                                                    -0.63
                                                           -0.62
                                                                     -0.6
                                                                           -0.57
                                                                                     4796
                                                                                              1.0
y_mean[215]
y_mean[216]
                     0.11
                           3.1e-4
                                      0.02
                                             0.07
                                                                                     4382
                                                      0.1
                                                             0.11
                                                                     0.13
                                                                             0.16
                                                                                              1.0
y_mean[217]
                    -0.13
                           4.9e-4
                                      0.03
                                            -0.19
                                                    -0.15
                                                            -0.13
                                                                    -0.11
                                                                            -0.07
                                                                                     4013
                                                                                              1.0
                                            -1.56
                                                            -1.49
                                                                             -1.4
y_mean[218]
                    -1.49
                           6.3e-4
                                      0.04
                                                    -1.51
                                                                    -1.46
                                                                                     4362
                                                                                              1.0
y_mean[219]
                     1.02
                           4.9e-4
                                      0.03
                                             0.96
                                                      1.0
                                                             1.02
                                                                     1.04
                                                                             1.08
                                                                                     4278
                                                                                              1.0
                     0.29
                                      0.03
                                             0.22
                                                     0.27
                                                             0.29
y_mean[220]
                           5.3e-4
                                                                     0.31
                                                                             0.36
                                                                                     3964
                                                                                              1.0
                    -0.26
                           5.5e-4
                                      0.04
                                            -0.34
                                                    -0.29
                                                            -0.26
                                                                    -0.24
                                                                           -0.19
                                                                                     4633
y_mean[221]
                                                                                              1.0
                     0.27
                           4.5e-4
                                      0.03
                                             0.21
                                                     0.25
                                                             0.27
                                                                     0.29
                                                                             0.32
                                                                                     4048
                                                                                              1.0
y_mean[222]
                    -0.47
                           3.2e-4
                                      0.02
                                            -0.51
                                                    -0.49
                                                            -0.47
                                                                    -0.45
                                                                            -0.42
                                                                                     4944
y_mean[223]
                                                                                              1.0
                 -9.1e-3
                           5.9e-4
                                      0.04
                                            -0.08
                                                    -0.03-9.2e-3
                                                                     0.02
                                                                             0.06
                                                                                     3944
                                                                                              1.0
y_mean[224]
                     0.02
                           3.9e-4
                                      0.03
                                            -0.03 3.4e-3
                                                             0.02
                                                                     0.04
                                                                             0.08
                                                                                     4924
                                                                                              1.0
y_mean[225]
y_mean[226]
                     -0.6
                           3.0e-4
                                      0.02
                                            -0.64
                                                    -0.62
                                                            -0.61
                                                                    -0.59
                                                                            -0.56
                                                                                     4842
                                                                                              1.0
                    -0.36
                                      0.03
                                            -0.41
                                                            -0.36
                                                                            -0.31
                           4.1e-4
                                                    -0.38
                                                                    -0.34
                                                                                     4142
                                                                                              1.0
y_mean[227]
                    -0.25
                           4.6e-4
                                      0.03
                                            -0.31
                                                    -0.27
                                                            -0.25
                                                                    -0.23
                                                                            -0.19
                                                                                     4070
y_mean[228]
                                                                                              1.0
y_mean[229]
                           3.5e-4
                                      0.02
                                            -0.46
                                                            -0.41
                                                                     -0.4
                                                                           -0.37
                    -0.41
                                                    -0.43
                                                                                     4869
                                                                                              1.0
y_mean[230]
                     0.71
                           4.4e-4
                                      0.03
                                             0.65
                                                     0.69
                                                             0.71
                                                                     0.73
                                                                             0.76
                                                                                     4168
                                                                                              1.0
                     -0.7
                           3.8e-4
                                      0.03
                                            -0.75
                                                    -0.71
                                                             -0.7
                                                                    -0.68
                                                                           -0.64
                                                                                     4619
y_mean[231]
                                                                                              1.0
y_mean[232]
                    -0.59
                           3.1e-4
                                      0.02
                                            -0.63
                                                    -0.61
                                                            -0.59
                                                                    -0.58
                                                                            -0.55
                                                                                     4862
                                                                                              1.0
                                      0.04
y_mean[233]
                     0.65
                           5.8e-4
                                             0.57
                                                     0.62
                                                             0.65
                                                                     0.67
                                                                             0.72
                                                                                     4336
                                                                                              1.0
                     0.91
                           6.0e-4
                                      0.04
                                             0.83
                                                     0.88
                                                             0.91
                                                                     0.94
                                                                             0.98
y_mean[234]
                                                                                     4040
                                                                                              1.0
                    -0.04
                           3.3e-4
                                      0.02
                                            -0.08
                                                    -0.05
                                                            -0.04
                                                                    -0.02 9.5e-3
                                                                                     4767
                                                                                              1.0
y_mean[235]
                    -0.06
                           3.1e-4
                                      0.02
                                              -0.1
                                                    -0.07
                                                            -0.06
                                                                    -0.04
                                                                           -0.02
                                                                                     4758
y_mean[236]
                                                                                              1.0
                    -0.89
                           4.3e-4
                                      0.03
                                            -0.94
                                                    -0.91
                                                            -0.89
                                                                    -0.87
                                                                            -0.83
                                                                                     4594
                                                                                              1.0
y_mean[237]
y_mean[238]
                     1.56
                           8.7e-4
                                      0.06
                                              1.45
                                                     1.52
                                                             1.56
                                                                      1.6
                                                                             1.67
                                                                                     4274
                                                                                              1.0
                     0.16
                           2.2e-4
                                      0.02
                                             0.13
                                                     0.15
                                                             0.16
                                                                     0.17
                                                                             0.19
                                                                                     5517
y_mean[239]
                                                                                              1.0
                     -0.6
                                      0.02
                                            -0.64
                                                             -0.6
                                                                                     4820
                           3.3e-4
                                                    -0.61
                                                                    -0.58
                                                                            -0.55
                                                                                              1.0
y_{mean}[240]
                    -0.23
                           4.9e-4
                                      0.03
                                             -0.3
                                                    -0.26
                                                            -0.23
                                                                    -0.21
                                                                            -0.17
                                                                                     4348
y_mean[241]
                                                                                              1.0
                   9.0e-3
                           3.3e-4
                                      0.02
                                            -0.04-6.9e-3 9.1e-3
                                                                     0.02
                                                                             0.06
                                                                                     5139
                                                                                              1.0
y_mean[242]
y_mean[243]
                     0.06
                           3.5e-4
                                      0.02
                                             0.01
                                                     0.04
                                                             0.06
                                                                     0.08
                                                                             0.11
                                                                                     4434
                                                                                              1.0
y_mean[244]
                           3.6e-4
                                            -0.33
                    -0.29
                                      0.02
                                                     -0.3
                                                            -0.29
                                                                    -0.27
                                                                            -0.24
                                                                                     4365
                                                                                              1.0
                                            -0.33
                                                                    -0.25
y_mean[245]
                    -0.27
                           5.0e-4
                                      0.03
                                                    -0.29
                                                            -0.27
                                                                             -0.2
                                                                                     4064
                                                                                              1.0
                    -0.55
                           3.4e-4
                                      0.02
                                              -0.6
                                                    -0.57
                                                            -0.55
                                                                    -0.54
                                                                            -0.51
                                                                                     4627
y_mean[246]
                                                                                              1.0
y_mean[247]
                    -0.57
                           3.0e-4
                                      0.02
                                            -0.61
                                                    -0.59
                                                            -0.57
                                                                    -0.56
                                                                           -0.53
                                                                                     4743
                                                                                              1.0
                     0.27
                           4.5e-4
                                      0.03
                                             0.22
                                                     0.25
                                                             0.27
                                                                     0.29
                                                                             0.33
                                                                                     4038
                                                                                              1.0
y mean [248]
                                            -0.75
y_mean[249]
                     -0.7
                           3.8e-4
                                      0.03
                                                    -0.71
                                                             -0.7
                                                                    -0.68
                                                                           -0.64
                                                                                     4929
                                                                                              1.0
                     0.79
                           5.5e-4
                                      0.03
                                             0.72
                                                             0.79
                                                                             0.86
                                                     0.77
                                                                     0.81
                                                                                     3999
y_mean[250]
                                                                                              1.0
y_mean[251]
                     -0.2
                           4.4e-4
                                      0.03
                                            -0.26
                                                    -0.22
                                                             -0.2
                                                                    -0.18
                                                                           -0.14
                                                                                     4586
                                                                                              1.0
                     0.82
                           6.7e-4
                                      0.04
                                             0.73
                                                     0.79
                                                             0.82
                                                                     0.85
                                                                             0.91
                                                                                     4326
                                                                                              1.0
y_mean[252]
                    -0.55
                           3.0e-4
                                      0.02
                                            -0.59
                                                    -0.57
                                                            -0.55
                                                                    -0.54
                                                                           -0.51
                                                                                     4684
y_mean[253]
                                                                                              1.0
                                      0.03
                                             0.08
                     0.14
                           4.5e-4
                                                     0.12
                                                             0.14
                                                                     0.16
                                                                              0.2
                                                                                     4598
                                                                                              1.0
y_mean[254]
                           5.5e-4
                                      0.04
                                            -0.08
                                                    -0.03-5.3e-3
                                                                             0.07
                                                                                     4723
y_mean[255]
                 -5.1e-3
                                                                     0.02
                                                                                              1.0
y_mean[256]
                     1.34
                           6.5e-4
                                      0.04
                                              1.26
                                                     1.31
                                                             1.34
                                                                     1.37
                                                                             1.42
                                                                                     4050
                                                                                              1.0
                 -6.9e-3
                           3.2e-4
                                      0.02
                                            -0.05
                                                    -0.02-7.1e-3 8.1e-3
                                                                             0.04
                                                                                     4717
                                                                                              1.0
y_{mean}[257]
                      0.1
                           3.3e-4
                                      0.02
                                             0.05
                                                     0.08
                                                              0.1
                                                                             0.14
                                                                                     4598
y_mean[258]
                                                                     0.11
                                                                                              1.0
                                      0.03
                                            -0.18
                                                            -0.12
                                                                            -0.06
y_mean[259]
                    -0.12
                           4.4e-4
                                                    -0.14
                                                                     -0.1
                                                                                     4642
                                                                                              1.0
y_mean[260]
                      0.7
                           3.7e-4
                                      0.02
                                              0.65
                                                     0.68
                                                              0.7
                                                                     0.72
                                                                             0.75
                                                                                     4596
                                                                                              1.0
y_mean[261]
                    -0.75
                           4.0e-4
                                      0.03
                                              -0.8
                                                    -0.77
                                                            -0.75
                                                                    -0.73
                                                                            -0.69
                                                                                     4807
                                                                                              1.0
```

```
-0.17
                                                    -0.14
                                                            -0.12
                                                                    -0.11
                                                                            -0.07
                                                                                     4676
y_mean[262]
                    -0.12
                           3.6e-4
                                      0.02
                                                                                              1.0
                     0.31
                           2.4e-4
                                      0.02
                                             0.27
                                                     0.29
                                                             0.31
                                                                     0.32
                                                                             0.34
                                                                                     5155
y_mean[263]
                                                                                              1.0
                    -0.41
                           3.4e-4
                                      0.02
                                            -0.45
                                                    -0.42
                                                            -0.41
                                                                    -0.39
                                                                            -0.36
                                                                                     4804
y_mean[264]
                                                                                              1.0
                    -2.28
                            1.2e-3
                                      0.08
                                            -2.43
                                                    -2.34
                                                            -2.29
                                                                    -2.23
                                                                            -2.13
                                                                                     4282
                                                                                              1.0
y_mean[265]
                                      0.03
                                              -0.4
                                                                             -0.3
y_mean[266]
                    -0.35
                           3.9e-4
                                                    -0.37
                                                            -0.35
                                                                    -0.34
                                                                                     4322
                                                                                              1.0
                    -0.31
                           4.5e-4
                                      0.03
                                            -0.38
                                                    -0.34
                                                            -0.31
                                                                    -0.29
                                                                            -0.25
                                                                                     5190
                                                                                              1.0
y_mean[267]
                    -0.11
                           5.0e-4
                                            -0.17
                                                    -0.13
                                                            -0.11
                                                                            -0.04
y_mean[268]
                                      0.03
                                                                    -0.08
                                                                                     4212
                                                                                              1.0
                     0.25
                           4.1e-4
                                             0.19
                                                     0.23
                                                             0.25
                                                                     0.26
                                                                              0.3
y_mean[269]
                                      0.03
                                                                                     4289
                                                                                              1.0
                     0.16
                           5.2e-4
                                      0.03
                                             0.09
                                                     0.14
                                                             0.16
                                                                     0.18
                                                                             0.23
                                                                                     4201
                                                                                              1.0
y_mean[270]
                    -0.49
                           3.1e-4
                                      0.02
                                            -0.53
                                                     -0.5
                                                            -0.49
                                                                            -0.45
                                                                                     4707
y_mean[271]
                                                                    -0.47
                                                                                              1.0
                    -0.32
                           3.6e-4
                                      0.02
                                            -0.37
                                                    -0.34
                                                            -0.32
                                                                    -0.31
                                                                            -0.28
                                                                                     4387
                                                                                              1.0
y_mean[272]
y_mean[273]
                    -0.66
                           3.5e-4
                                      0.02
                                              -0.7
                                                    -0.67
                                                            -0.66
                                                                    -0.64
                                                                            -0.61
                                                                                     4709
                                                                                              1.0
                    -0.92
                           5.3e-4
                                      0.04
                                            -0.99
                                                    -0.95
                                                            -0.92
                                                                     -0.9
                                                                            -0.85
                                                                                     4840
y_mean[274]
                                                                                              1.0
                     0.09
                           6.2e-4
                                             0.01
                                                             0.09
                                                                             0.17
                                      0.04
                                                     0.06
                                                                     0.12
                                                                                     4048
                                                                                              1.0
y_mean[275]
                     0.88
                           5.3e-4
                                      0.04
                                             0.81
                                                     0.85
                                                             0.88
                                                                      0.9
                                                                             0.95
                                                                                     4789
y_mean[276]
                                                                                              1.0
                           2.9e-4
                                                                             -0.5
y_mean[277]
                    -0.54
                                      0.02
                                            -0.58
                                                    -0.55
                                                            -0.54
                                                                    -0.52
                                                                                     4866
                                                                                              1.0
y_mean[278]
                    -0.41
                           3.3e-4
                                      0.02
                                            -0.45
                                                    -0.42
                                                            -0.41
                                                                    -0.39
                                                                            -0.36
                                                                                     4539
                                                                                              1.0
                                      0.04
y_mean[279]
                      1.2
                           6.6e-4
                                              1.11
                                                     1.17
                                                              1.2
                                                                     1.23
                                                                             1.28
                                                                                     4058
                                                                                              1.0
y_mean[280]
                     0.63
                           4.5e-4
                                      0.03
                                             0.57
                                                     0.61
                                                             0.63
                                                                     0.65
                                                                             0.69
                                                                                     4487
                                                                                              1.0
y mean [281]
                     -0.5
                           2.9e-4
                                      0.02
                                            -0.54
                                                    -0.51
                                                             -0.5
                                                                    -0.48
                                                                            -0.46
                                                                                     4831
                                                                                              1.0
                 -8.2e-3
                           5.6e-4
                                            -0.08
                                                    -0.03-7.8e-3
                                                                     0.02
                                                                             0.06
y_mean[282]
                                      0.04
                                                                                     4531
                                                                                              1.0
                    -1.17
                           4.3e-4
                                      0.03
                                            -1.22
                                                    -1.19
                                                            -1.17
                                                                    -1.15
                                                                            -1.11
                                                                                     4443
y_mean[283]
                                                                                              1.0
                    -0.48
                           3.7e-4
                                      0.03
                                            -0.53
                                                     -0.5
                                                            -0.48
                                                                    -0.47
                                                                            -0.43
y_mean[284]
                                                                                     5044
                                                                                              1.0
                                            -0.52
                    -0.48
                           3.5e-4
                                      0.02
                                                    -0.49
                                                            -0.48
                                                                    -0.46
                                                                            -0.43
                                                                                     4493
                                                                                              1.0
y_mean[285]
y_mean[286]
                    -0.03
                           5.8e-4
                                      0.04
                                            -0.11
                                                    -0.06
                                                            -0.03-3.5e-3
                                                                             0.05
                                                                                     4753
                                                                                              1.0
                     1.94
                           8.4e-4
                                      0.05
                                             1.83
                                                       1.9
                                                             1.94
                                                                     1.97
                                                                             2.04
                                                                                     4144
y_mean[287]
                                                                                              1.0
                                      0.03
                                            -0.62
                                                                             -0.5
y_mean[288]
                    -0.56
                           4.5e-4
                                                    -0.58
                                                            -0.56
                                                                    -0.54
                                                                                     4595
                                                                                              1.0
y_mean[289]
                     2.14
                           1.1e-3
                                      0.07
                                             2.01
                                                       2.1
                                                             2.14
                                                                     2.19
                                                                             2.27
                                                                                     4054
                                                                                              1.0
                     -1.6
                           6.0e-4
                                            -1.67
                                                             -1.6
                                                                    -1.57
                                                                            -1.52
                                                                                     4279
                                      0.04
                                                    -1.62
                                                                                              1.0
y_mean[290]
y_mean[291]
                    -0.45
                           3.7e-4
                                      0.02
                                              -0.5
                                                    -0.47
                                                            -0.45
                                                                    -0.44
                                                                            -0.41
                                                                                     4314
                                                                                              1.0
                                            -0.56
                                                            -0.52
y_mean[292]
                    -0.52
                           2.8e-4
                                      0.02
                                                    -0.54
                                                                    -0.51
                                                                            -0.48
                                                                                     4810
                                                                                              1.0
y_mean[293]
                    -0.38
                           6.0e-4
                                      0.04
                                            -0.46
                                                    -0.41
                                                            -0.38
                                                                    -0.35
                                                                             -0.3
                                                                                     4606
                                                                                              1.0
                    -0.52
                           3.9e-4
                                      0.03
                                            -0.57
                                                    -0.54
                                                            -0.52
                                                                     -0.5
                                                                            -0.47
y_mean[294]
                                                                                     4502
                                                                                              1.0
y_mean[295]
                    -0.25
                           4.6e-4
                                      0.03
                                            -0.31
                                                    -0.27
                                                            -0.25
                                                                    -0.23
                                                                            -0.19
                                                                                     4877
                                                                                              1.0
                     1.16
                           9.1e-4
                                      0.06
                                              1.03
                                                     1.11
                                                             1.16
                                                                      1.2
                                                                             1.28
                                                                                     5023
                                                                                              1.0
y mean [296]
                                            -1.15
y_mean[297]
                    -1.09
                           4.1e-4
                                      0.03
                                                   -1.11
                                                            -1.09
                                                                            -1.04
                                                                    -1.07
                                                                                     4454
                                                                                              1.0
                     0.05
                                            -0.13-9.6e-3
                                                             0.05
                                                                             0.22
                           1.3e-3
                                      0.09
                                                                      0.1
                                                                                     4639
y mean [298]
                                                                                              1.0
y_mean[299]
                     0.01
                           2.8e-4
                                      0.02
                                            -0.02-3.5e-4
                                                             0.01
                                                                     0.03
                                                                             0.05
                                                                                     4731
                                                                                              1.0
                    -0.12
                           4.2e-4
                                      0.03
                                            -0.17
                                                    -0.14
                                                            -0.12
                                                                     -0.1
                                                                            -0.06
                                                                                     4642
                                                                                              1.0
y_mean[300]
                    -0.66
                           7.1e-4
                                      0.05
                                            -0.75
                                                    -0.69
                                                            -0.66
                                                                    -0.63
                                                                            -0.56
                                                                                     4570
y_mean[301]
                                                                                              1.0
                                      0.05
                     1.56
                           7.1e-4
                                             1.47
                                                     1.53
                                                             1.56
                                                                      1.6
                                                                             1.66
                                                                                     4834
                                                                                              1.0
y_mean[302]
                     0.64
                           5.5e-4
                                      0.04
                                             0.56
                                                             0.64
y_mean[303]
                                                     0.61
                                                                     0.66
                                                                             0.71
                                                                                     4825
                                                                                              1.0
y_mean[304]
                    -0.35
                           3.8e-4
                                      0.02
                                              -0.4
                                                    -0.37
                                                            -0.35
                                                                    -0.33
                                                                             -0.3
                                                                                     4383
                                                                                              1.0
                           6.3e-4
                                      0.04
                                             0.58
                                                             0.65
                                                                             0.73
                     0.65
                                                     0.63
                                                                     0.68
                                                                                     4100
                                                                                              1.0
y_{mean}[305]
                           4.5e-4
                                      0.03
                                            -1.16
                                                    -1.13
                                                             -1.1
                                                                    -1.08
                                                                            -1.04
                                                                                     4415
y_mean[306]
                     -1.1
                                                                                              1.0
                                             0.09
y_{mean}[307]
                     0.13
                           3.2e-4
                                      0.02
                                                     0.12
                                                             0.13
                                                                     0.14
                                                                             0.17
                                                                                     4492
                                                                                              1.0
y_mean[308]
                     0.22
                           4.4e-4
                                      0.03
                                             0.16
                                                     0.19
                                                             0.22
                                                                     0.24
                                                                             0.27
                                                                                     4837
                                                                                              1.0
y_mean[309]
                    -0.15
                           5.9e-4
                                      0.04
                                            -0.22
                                                    -0.17
                                                            -0.15
                                                                    -0.13
                                                                            -0.08
                                                                                     3901
                                                                                              1.0
```

```
-0.67
                                                    -0.64
                                                            -0.63
y_mean[310]
                    -0.63
                           3.3e-4
                                     0.02
                                                                   -0.61
                                                                           -0.58
                                                                                    4843
                                                                                             1.0
                     -0.5
                           3.2e-4
                                     0.02
                                            -0.54
                                                    -0.51
                                                             -0.5
                                                                   -0.49
                                                                           -0.46
                                                                                    4483
y_mean[311]
                                                                                             1.0
y_mean[312]
                    -0.73
                           4.3e-4
                                     0.03
                                            -0.78
                                                    -0.75
                                                            -0.73
                                                                   -0.71
                                                                           -0.67
                                                                                    4560
                                                                                             1.0
                     0.53
                           1.0e-3
                                     0.07
                                             0.38
                                                     0.48
                                                             0.53
                                                                     0.58
                                                                            0.67
                                                                                    5079
                                                                                             1.0
y_mean[313]
                                            -0.07
y_mean[314]
                    -0.03
                           3.0e-4
                                     0.02
                                                    -0.05
                                                           -0.03
                                                                   -0.02 9.5e-3
                                                                                    4762
                                                                                             1.0
                                                             1.42
                     1.42
                           1.1e-3
                                     0.07
                                             1.27
                                                     1.37
                                                                     1.47
                                                                             1.56
                                                                                    4555
                                                                                             1.0
y_mean[315]
                                            -0.04
                                                    -0.01 4.6e-3
y_mean[316]
                   4.5e-3
                           3.2e-4
                                     0.02
                                                                     0.02
                                                                            0.05
                                                                                    4792
                                                                                             1.0
                                            -0.47
                    -0.43
                           2.9e-4
                                     0.02
                                                    -0.44
                                                            -0.43
                                                                   -0.42
                                                                           -0.39
y_mean[317]
                                                                                    4672
                                                                                             1.0
                     1.12
                           8.8e-4
                                     0.06
                                             1.01
                                                     1.09
                                                             1.13
                                                                     1.16
                                                                             1.23
                                                                                    4153
                                                                                             1.0
y_mean[318]
                    -0.37
                           3.9e-4
                                     0.03
                                            -0.42
                                                    -0.39
                                                            -0.37
                                                                   -0.35
                                                                           -0.32
                                                                                    4380
y_mean[319]
                                                                                             1.0
                     0.18
                           3.6e-4
                                     0.02
                                             0.14
                                                     0.17
                                                             0.18
                                                                      0.2
                                                                            0.23
                                                                                    4172
                                                                                             1.0
y_mean[320]
                    -1.26
                           5.0e-4
                                     0.03
                                            -1.33
                                                    -1.29
                                                            -1.26
                                                                   -1.24
                                                                           -1.19
                                                                                    4617
                                                                                             1.0
y_mean[321]
y_mean[322]
                    -0.08
                           5.7e-4
                                     0.04
                                            -0.15
                                                    -0.11
                                                            -0.08
                                                                   -0.06-5.3e-3
                                                                                    4435
                                                                                             1.0
                    -0.59
                                            -0.64
                                                            -0.59
                           3.4e-4
                                     0.02
                                                    -0.61
                                                                   -0.58
                                                                           -0.55
                                                                                    4761
y_mean[323]
                                                                                             1.0
                     0.69
                           4.5e-4
                                     0.03
                                             0.64
                                                     0.67
                                                             0.69
                                                                     0.71
                                                                             0.75
                                                                                    4147
y_mean[324]
                                                                                             1.0
                           8.0e-4
                                     0.05
                     0.25
                                             0.15
                                                     0.21
                                                             0.25
                                                                     0.28
                                                                            0.34
                                                                                    4023
                                                                                             1.0
y_{mean}[325]
y_mean[326]
                    -0.33
                           2.9e-4
                                     0.02
                                            -0.37
                                                    -0.34
                                                            -0.33
                                                                   -0.32
                                                                           -0.29
                                                                                    4622
                                                                                             1.0
                                            -0.15
                     -0.1
                                     0.02
                                                    -0.12
                                                             -0.1
                                                                                    4914
                           3.4e-4
                                                                    -0.08
                                                                           -0.05
                                                                                             1.0
y_mean[327]
y_mean[328]
                    -0.49
                           4.4e-4
                                     0.03
                                            -0.55
                                                    -0.51
                                                            -0.49
                                                                   -0.47
                                                                           -0.43
                                                                                    5062
                                                                                             1.0
                                            -0.42
y_mean[329]
                    -0.37
                           4.4e-4
                                     0.03
                                                    -0.39
                                                           -0.37
                                                                   -0.35
                                                                           -0.31
                                                                                    4127
                                                                                             1.0
                 -7.5e-3
                           2.9e-4
                                     0.02
                                            -0.05
                                                    -0.02-8.0e-3 6.1e-3
                                                                            0.03
                                                                                    4762
y_mean[330]
                                                                                             1.0
                    -0.52
                           2.8e-4
                                     0.02
                                            -0.55
                                                    -0.53
                                                            -0.52
                                                                     -0.5
                                                                           -0.48
                                                                                    4742
                                                                                             1.0
y_mean[331]
                    -1.07
                           4.4e-4
                                     0.03
                                            -1.12
                                                    -1.09
                                                            -1.07
                                                                           -1.01
                                                                                    4609
y_mean[332]
                                                                   -1.05
                                                                                             1.0
                    -0.62
                           3.3e-4
                                     0.02
                                            -0.66
                                                    -0.63
                                                            -0.62
                                                                     -0.6
                                                                           -0.57
                                                                                    4797
                                                                                             1.0
y_mean[333]
y_mean[334]
                    -0.26
                           4.7e-4
                                     0.03
                                            -0.31
                                                    -0.28
                                                           -0.26
                                                                   -0.24
                                                                           -0.19
                                                                                    4273
                                                                                             1.0
                    -0.61
                           4.3e-4
                                     0.03
                                            -0.67
                                                    -0.63
                                                            -0.61
                                                                    -0.59
                                                                           -0.55
                                                                                    4788
y_mean[335]
                                                                                             1.0
                                     0.04
                                              0.7
                                                             0.77
                                                                                    5233
                     0.77
                           5.1e-4
                                                     0.75
                                                                     0.79
                                                                            0.84
                                                                                             1.0
y_mean[336]
y_mean[337]
                    -0.46
                           3.0e-4
                                     0.02
                                             -0.5
                                                    -0.47
                                                            -0.46
                                                                   -0.45
                                                                           -0.42
                                                                                    4545
                                                                                             1.0
                     0.06
                           4.1e-4
                                     0.03 3.0e-3
                                                     0.04
                                                             0.06
                                                                            0.11
                                                                     0.08
                                                                                    4649
                                                                                             1.0
y_mean[338]
y_mean[339]
                    -1.06
                           4.2e-4
                                     0.03
                                            -1.11
                                                    -1.08
                                                            -1.06
                                                                   -1.04
                                                                            -1.0
                                                                                    4423
                                                                                             1.0
                                            -0.24
                                                                           -0.15
                     -0.2
                           3.8e-4
                                     0.03
                                                    -0.21
                                                             -0.2
                                                                   -0.18
                                                                                    4422
                                                                                             1.0
y_mean[340]
                                                    -0.58
                                                            -0.57
                                                                                             1.0
y_mean[341]
                    -0.57
                           2.9e-4
                                     0.02
                                            -0.61
                                                                    -0.56
                                                                           -0.53
                                                                                    4863
y_mean[342]
                    -0.19
                           3.7e-4
                                     0.02
                                            -0.24
                                                    -0.21
                                                            -0.19
                                                                           -0.14
                                                                                    4292
                                                                   -0.17
                                                                                             1.0
                    -0.51
                           7.8e-4
                                     0.06
                                            -0.61
                                                    -0.54
                                                           -0.51
                                                                   -0.47
                                                                            -0.4
                                                                                    4958
                                                                                             1.0
y_mean[343]
                    -0.52
                           3.3e-4
                                     0.02
                                            -0.57
                                                    -0.54
                                                           -0.52
                                                                   -0.51
                                                                           -0.48
                                                                                    4959
                                                                                             1.0
y mean [344]
                    -0.13
                           3.7e-4
                                     0.02
                                            -0.18
                                                    -0.15
                                                            -0.13
                                                                   -0.11
                                                                           -0.08
y_mean[345]
                                                                                    4430
                                                                                             1.0
                                            -1.17
                                                            -1.11
                                                                           -1.05
                    -1.11
                           4.4e-4
                                     0.03
                                                    -1.13
                                                                   -1.09
                                                                                    4489
y_mean[346]
                                                                                             1.0
y_mean[347]
                     0.75
                           4.6e-4
                                     0.03
                                             0.69
                                                     0.73
                                                             0.75
                                                                     0.77
                                                                            0.81
                                                                                    4160
                                                                                             1.0
                     0.65
                           4.3e-4
                                     0.03
                                              0.6
                                                     0.64
                                                             0.65
                                                                     0.67
                                                                            0.71
                                                                                    4230
                                                                                             1.0
y_mean[348]
                    -0.38
                           3.5e-4
                                     0.02
                                            -0.43
                                                     -0.4
                                                            -0.38
                                                                   -0.37
                                                                           -0.33
                                                                                    4467
y_mean[349]
                                                                                             1.0
                                            -0.81
                    -0.76
                           4.3e-4
                                     0.03
                                                    -0.78
                                                            -0.76
                                                                   -0.74
                                                                            -0.7
                                                                                    4529
                                                                                             1.0
y_{mean}[350]
                    -0.47
                           2.9e-4
                                             -0.5
                                                            -0.47
                                                                           -0.42
                                     0.02
                                                    -0.48
                                                                    -0.45
                                                                                    4716
                                                                                             1.0
y_mean[351]
y_{mean}[352]
                    -0.19
                           5.5e-4
                                     0.04
                                            -0.26
                                                    -0.21
                                                            -0.19
                                                                   -0.17
                                                                           -0.12
                                                                                    4197
                                                                                             1.0
                     0.39
                           5.2e-4
                                     0.03
                                             0.32
                                                     0.37
                                                             0.39
                                                                            0.46
                                                                     0.41
                                                                                    4526
y_{mean}[353]
                                                                                             1.0
                           3.7e-4
                                     0.03
                                            -0.15
                                                    -0.12
                                                             -0.1
                                                                           -0.05
                                                                                    4962
y_mean[354]
                     -0.1
                                                                   -0.08
                                                                                             1.0
                                            -0.86
y_{mean}[355]
                     -0.8
                           4.5e-4
                                     0.03
                                                    -0.82
                                                             -0.8
                                                                   -0.78
                                                                           -0.74
                                                                                    4770
                                                                                             1.0
y_mean[356]
                    -0.09
                           3.7e-4
                                     0.03
                                            -0.14
                                                    -0.11
                                                            -0.09
                                                                   -0.07
                                                                           -0.04
                                                                                    4963
                                                                                             1.0
y_mean[357]
                    -1.04
                           4.2e-4
                                     0.03
                                             -1.1
                                                    -1.06
                                                            -1.04
                                                                   -1.02
                                                                           -0.99
                                                                                    4571
                                                                                             1.0
```

y_mean[358]	2.36	8.6e-4	0.05	2.25	2.32	2.36	2.4	2.47	4049	1.0
y_mean[359]	0.16	4.3e-4	0.03	0.1	0.14	0.16	0.18	0.22	5000	1.0
y_mean[360]	0.29	4.7e-4	0.03	0.23	0.27	0.29	0.31	0.35	4028	1.0
y_mean[361]	0.7	5.6e-4	0.04	0.63	0.68	0.7	0.73	0.77	4120	1.0
y_mean[362]	0.08	3.7e-4	0.03	0.02	0.06	0.08	0.1	0.13	5593	1.0
y_mean[363]	-0.55	3.0e-4	0.02	-0.59	-0.56	-0.55	-0.54	-0.51	4859	1.0
y_mean[364]	-0.61	3.3e-4	0.02	-0.66	-0.63	-0.61	-0.6	-0.57	4814	1.0
y_mean[365]	-0.21	4.8e-4	0.03	-0.27	-0.23	-0.21	-0.19	-0.14	4647	1.0
y_mean[366]	-0.21	3.2e-4	0.02	-0.26	-0.23	-0.21	-0.2	-0.17	4584	1.0
y_mean[367]	1.48	7.4e-4	0.05	1.39	1.45	1.48	1.51	1.57	4069	1.0
y_mean[368]	0.27	3.6e-4	0.03	0.22	0.26	0.27	0.29	0.32	5092	1.0
y_mean[369]	-0.04	3.6e-4	0.02	-0.09	-0.06	-0.04		8.4e-3	4822	1.0
y_mean[370]	-0.39	3.3e-4	0.02	-0.43	-0.4	-0.39	-0.37	-0.34	4570	1.0
y_mean[370] y_mean[371]	-1.01	4.3e-4	0.02	-1.07	-1.03	-1.01	-0.99	-0.95	4603	1.0
y_mean[371] y_mean[372]	-1.15	4.2e-4	0.03	-1.2	-1.17	-1.15	-1.13	-1.09	4404	1.0
y_mean[372] y_mean[373]	1.66	1.1e-3	0.03	1.53	1.61	1.66	1.71	1.8	4208	1.0
y_mean[373] y_mean[374]	-0.45	4.7e-4	0.07	-0.51	-0.47	-0.45	-0.43	-0.39	4315	1.0
y_mean[374] y_mean[375]	-0.43	4.7e-4 6.5e-4	0.03	-0.81	-0.47	-0.43 -0.73	-0.43	-0.65	4220	1.0
• =										
y_mean[376]	0.5	5.5e-4	0.04	0.43	0.47	0.5	0.52	0.57	4380	1.0
y_mean[377]	0.36	3.8e-4	0.03	0.31	0.35	0.36	0.38	0.41	4540	1.0
y_mean[378]	-0.04	3.4e-4	0.02	-0.08	-0.06	-0.04		6.9e-3	4755	1.0
y_mean[379]	0.11	3.0e-4	0.02	0.07	0.09	0.11	0.12	0.15	4452	1.0
y_mean[380]	-1.36	8.4e-4	0.05	-1.47	-1.4	-1.36	-1.33	-1.26	4153	1.0
y_mean[381]	-0.74	3.9e-4	0.03	-0.79	-0.76	-0.74	-0.72	-0.69	4788	1.0
y_mean[382]	-0.27	5.1e-4	0.03	-0.34	-0.29	-0.27	-0.25	-0.2	4532	1.0
y_mean[383]	-0.41	3.5e-4	0.02	-0.45	-0.43	-0.41	-0.4	-0.37	4304	1.0
y_mean[384]	-0.76	4.5e-4	0.03	-0.82	-0.78	-0.76	-0.74	-0.7	4509	1.0
y_mean[385]	-0.53	4.1e-4	0.03	-0.59	-0.55	-0.53	-0.52	-0.48	4738	1.0
y_mean[386]	-0.37	6.7e-4	0.04	-0.46	-0.4	-0.37	-0.34	-0.28	4265	1.0
y_mean[387]	0.12	2.5e-4	0.02	0.08	0.11	0.12	0.13	0.15	5048	1.0
y_mean[388]	-0.53	6.3e-4	0.04	-0.62	-0.56	-0.53	-0.51	-0.45	4382	1.0
y_mean[389]	-0.23	5.2e-4	0.03	-0.29	-0.25	-0.23	-0.2	-0.16	4023	1.0
y_mean[390]	0.09	3.4e-4	0.02	0.05	0.08	0.09	0.11	0.14	4317	1.0
y_mean[391]	-0.59	2.9e-4	0.02	-0.63	-0.6	-0.59	-0.58	-0.55	4836	1.0
y_mean[392]	1.5	7.8e-4	0.05	1.4	1.47	1.5	1.54	1.6	4321	1.0
y_mean[393]	0.83	5.3e-4	0.04	0.76	0.8	0.83	0.85	0.9	4359	1.0
y_mean[394]	0.21	6.6e-4	0.04	0.13	0.19	0.22	0.24	0.3	4324	1.0
y_mean[395]	-3.8e-4	4.2e-4	0.03	-0.06	-0.02-	-5.5e-4	0.02	0.06	4463	1.0
y_mean[396]	-0.42	3.1e-4	0.02	-0.46	-0.43	-0.42	-0.41	-0.38	4571	1.0
y_mean[397]	-0.63	3.9e-4	0.03	-0.69	-0.65	-0.63	-0.61	-0.58	5182	1.0
y_mean[398]	-0.1	3.4e-4	0.02	-0.15	-0.12	-0.1	-0.09	-0.05	4723	1.0
y_mean[399]	0.12	9.5e-4		2.3e-3	0.08	0.12	0.16	0.24	4092	1.0
y_mean[400]	-0.49	3.4e-4	0.02	-0.53	-0.5	-0.49	-0.47	-0.44	4541	1.0
y_mean[401]	-0.3	2.6e-4	0.02	-0.34	-0.31	-0.3	-0.29	-0.26	4969	1.0
y_mean[402]	-0.47	2.7e-4	0.02	-0.5	-0.48	-0.47	-0.46	-0.43	4840	1.0
y_mean[403]	1.44	8.6e-4	0.06	1.32	1.4	1.44	1.47	1.55	4364	1.0
y_mean[404]	0.33	5.5e-4	0.04	0.26	0.3	0.33	0.35	0.4	4561	1.0
y_mean[405]	0.35	3.3e-4	0.01	0.31	0.33	0.35	0.36	0.39	4544	1.0
J C 100 J	0.00	3.35 1	J. UZ	0.01	0.00	0.00	0.00	0.00	-0 - 1	1.0

y_mean[406]	-0.99	5.3e-4	0.03	-1.06	-1.02	-0.99	-0.97	-0.93	4260	1.0
$y_{mean}[407]$	0.71	5.9e-4	0.04	0.63	0.68	0.71	0.73	0.78	4449	1.0
y_mean[408]	0.19	3.7e-4	0.02	0.15	0.18	0.19	0.21	0.24	4145	1.0
y_mean[409]	0.42	8.5e-4	0.06	0.32	0.39	0.42	0.46	0.53	4356	1.0
y_mean[410]	1.51	5.9e-4	0.04	1.43	1.48	1.51	1.54	1.59	4213	1.0
y_mean[411]	1.32	6.7e-4	0.04	1.23	1.29	1.32	1.35	1.41	4367	1.0
y_mean[412]	0.28	4.5e-4	0.03	0.22	0.26	0.28	0.3	0.34	5247	1.0
y_mean[413]	-0.5	2.9e-4	0.02	-0.54	-0.52	-0.5	-0.49	-0.46	4841	1.0
y_mean[414]	-0.28	4.0e-4	0.03	-0.33	-0.3	-0.28	-0.26	-0.23	4149	1.0
y_mean[415]	-0.25	3.2e-4	0.02	-0.29	-0.26	-0.25	-0.23	-0.2	4551	1.0
y_mean[416]	1.27	6.4e-4	0.04	1.19	1.25	1.27	1.3	1.35	4035	1.0
y_mean[417]	-0.09	5.0e-4	0.03	-0.16	-0.12	-0.1	-0.07	-0.03	4096	1.0
y_mean[418]	1.45	7.3e-4	0.05	1.36	1.42	1.45	1.48	1.55	4404	1.0
y_mean[419]	-0.33	4.9e-4	0.04	-0.4	-0.36	-0.33	-0.31	-0.26	5069	1.0
y_mean[420]	-0.53	2.9e-4	0.02	-0.57	-0.54	-0.53	-0.52	-0.49	4886	1.0
y_mean[421]	-1.01	6.7e-4	0.04	-1.1	-1.04	-1.01	-0.98	-0.92	4354	1.0
y_mean[422]	1.03	7.8e-4	0.05	0.94	1.0	1.03	1.07	1.13	3930	1.0
y_mean[423]	0.65	5.3e-4	0.03	0.58	0.63	0.65	0.68	0.72	4185	1.0
y_mean[424]	-0.08	3.4e-4	0.02	-0.13	-0.1	-0.08	-0.07	-0.03	4890	1.0
y_mean[425]	-0.79	6.3e-4	0.04	-0.88	-0.82	-0.79	-0.76	-0.71	4859	1.0
y_mean[426]	0.15	7.0e-4	0.05	0.05	0.12	0.15	0.18	0.24	4646	1.0
y_mean[427]	-0.6	3.1e-4	0.02	-0.64	-0.61	-0.6	-0.58	-0.55	4853	1.0
y_mean[428]	0.59	4.1e-4	0.03	0.54	0.57	0.59	0.61	0.64	4353	1.0
y_mean[429]	-1.24	4.7e-4	0.03	-1.3	-1.26	-1.24	-1.22	-1.17	4489	1.0
y_mean[430]	-0.66	3.7e-4	0.03	-0.71	-0.68	-0.66	-0.64	-0.61	4898	1.0
y_mean[431]	0.34	3.5e-4	0.02	0.29	0.32	0.34	0.35	0.38	4407	1.0
y_mean[432]	1.0	4.5e-4	0.03	0.94	0.98	1.0	1.02	1.06	4568	1.0
y_mean[433]	0.94	6.2e-4	0.04	0.86	0.91	0.94	0.96	1.01	4120	1.0
y_mean[434]	2.35	9.8e-4	0.06	2.23	2.31	2.35	2.39	2.48	4093	1.0
y_mean[435]	0.13	3.2e-4	0.02	0.08	0.11	0.13	0.14	0.17	4350	1.0
y_mean[436]	1.02	5.7e-4	0.04	0.95	1.0	1.02	1.05	1.09	4067	1.0
y_mean[437]	-0.37	4.2e-4	0.03	-0.43	-0.39	-0.37	-0.35	-0.31	4991	1.0
y_mean[438]	1.17	6.0e-4	0.04	1.09	1.14	1.17	1.2	1.25	4104	1.0
y_mean[439]	-0.51	3.8e-4	0.03	-0.56	-0.53	-0.51	-0.49	-0.45	5010	1.0
y_mean[440]	0.21	3.9e-4	0.02	0.16	0.19	0.21	0.22	0.26	4105	1.0
y_mean[441]	-0.59	3.1e-4	0.02	-0.63	-0.6	-0.59	-0.57	-0.54	4870	1.0
y_mean[442]	-0.28	5.6e-4	0.04	-0.35	-0.3	-0.28	-0.26	-0.21	3970	1.0
y_mean[443]	2.22	9.3e-4	0.06	2.11	2.18	2.22	2.26	2.33	4018	1.0
y_mean[444]	0.05	5.3e-4	0.03	-0.02	0.02	0.05	0.07	0.12	4328	1.0
y_mean[445]	-1.08	4.2e-4	0.03	-1.14	-1.1	-1.08	-1.07	-1.03	4410	1.0
y_mean[446]	-0.9	5.3e-4	0.04	-0.97	-0.93	-0.9	-0.88	-0.83	4830	1.0
y_mean[447]	1.2	8.3e-4	0.06	1.09	1.16	1.2	1.24	1.31	4617	1.0
y_mean[448]	0.8	5.8e-4	0.04	0.72	0.77	0.8	0.82	0.87	4172	1.0
y_mean[449]	-1.03	4.5e-4	0.03	-1.09	-1.05	-1.03	-1.01	-0.97	4711	1.0
y_mean[450]	-0.37	3.7e-4	0.02	-0.41	-0.39	-0.37	-0.35	-0.32	4293	1.0
y_mean[451]	-0.8	5.0e-4	0.03	-0.86	-0.82	-0.8	-0.77	-0.73	4458	1.0
y_mean[452]	0.27	4.3e-4	0.03	0.21	0.25	0.27	0.28	0.32	4138	1.0
y_mean[453]	0.37	6.8e-4	0.05	0.28	0.34	0.37	0.4	0.46	4525	1.0

y_mean[454]	0.6	4.9e-4	0.03	0.54	0.58	0.6	0.62	0.66	4276	1.0
y_mean[455]	-0.67	3.4e-4	0.02	-0.71	-0.69	-0.67	-0.65	-0.62	4720	1.0
y_mean[456]	-0.46	5.6e-4	0.04	-0.54	-0.49	-0.46	-0.44	-0.39	4407	1.0
y_mean[457]	1.01	7.0e-4	0.04	0.92	0.98	1.01	1.04	1.1	4094	1.0
y_mean[458]	1.93	1.2e-3	0.08	1.78	1.88	1.93	1.98	2.08	4086	1.0
y_mean[459]	-0.26	5.5e-4	0.04	-0.33	-0.28	-0.26	-0.23	-0.19	4118	1.0
y_mean[460]	-1.6	6.2e-4	0.04	-1.68	-1.63	-1.6	-1.58	-1.52	4398	1.0
y_mean[461]	0.62	6.1e-4	0.04	0.54	0.59	0.62	0.65	0.7	4191	1.0
y_mean[462]	0.02	3.0e-4	0.02	-0.02	4.3e-3	0.02	0.03	0.06	4757	1.0
y_mean[463]	-0.17	4.0e-4	0.03	-0.22	-0.19	-0.17	-0.15	-0.12	4326	1.0
y_mean[464]	-0.55	3.0e-4	0.02	-0.59	-0.56	-0.55	-0.54	-0.51	4696	1.0
y_mean[465]	-1.02	4.8e-4	0.03	-1.08	-1.04	-1.02	-0.99	-0.95	4793	1.0
y_mean[466]	-0.19	4.2e-4	0.03	-0.24	-0.2	-0.19	-0.17	-0.13	4124	1.0
y_mean[467]	0.68	4.4e-4	0.03	0.63	0.66	0.68	0.7	0.74	4180	1.0
y_mean[468]	0.45	9.4e-4	0.06	0.33	0.4	0.45	0.49	0.57	4431	1.0
y_mean[469]	3.85	1.7e-3	0.11	3.64	3.78	3.85	3.93	4.08	4149	1.0
y_mean[470]	-0.47	3.0e-4	0.02	-0.51	-0.48	-0.47	-0.46	-0.43	4751	1.0
y_mean[471]	0.82	6.6e-4	0.04	0.74	0.79	0.82	0.85	0.9	4060	1.0
y_mean[472]	-0.49	3.2e-4	0.02	-0.53	-0.5	-0.49	-0.47	-0.44	4948	1.0
y_mean[473]	-0.63	3.4e-4	0.02	-0.67	-0.64	-0.63	-0.61	-0.58	4792	1.0
$y_{mean}[474]$	-0.72	4.1e-4	0.03	-0.77	-0.74	-0.72	-0.7	-0.66	4575	1.0
y_mean[475]	0.61	4.1e-4	0.03	0.55	0.59	0.61	0.62	0.66	4326	1.0
y_mean[476]	1.77	1.2e-3	0.07	1.62	1.72	1.77	1.82	1.91	3862	1.0
y_mean[477]	-1.07	4.1e-4	0.03	-1.13	-1.09	-1.07	-1.05	-1.02	4502	1.0
y_mean[478]	-1.01	4.7e-4	0.03	-1.07	-1.03	-1.01	-0.99	-0.94	4772	1.0
y_mean[479]	0.32	4.8e-4	0.03	0.26	0.29	0.32	0.34	0.38	4198	1.0
y_mean[480]	-0.53	3.0e-4	0.02	-0.57	-0.55	-0.53	-0.52	-0.49	5038	1.0
y_mean[481]	0.23	4.3e-4	0.03	0.18	0.22	0.23	0.25	0.29	4038	1.0
y_mean[482]	-0.67	4.0e-4	0.03	-0.73	-0.69	-0.68	-0.66	-0.62	4678	1.0
y_mean[483]	0.23	4.3e-4	0.03	0.18	0.21	0.23	0.25	0.28	4026	1.0
y_mean[484]	-0.16	3.5e-4	0.02	-0.21	-0.18	-0.16	-0.15	-0.12	4489	1.0
y_mean[485]	1.33	9.2e-4	0.06	1.21	1.29	1.33	1.38	1.45	4713	1.0
y_mean[486]	-1.19	4.4e-4	0.03	-1.24	-1.21	-1.19	-1.17	-1.13	4457	1.0
y_mean[487]	-0.05	3.4e-4	0.02	-0.1	-0.07	-0.06	-0.04-	8.0e-3	4732	1.0
y_mean[488]	0.05	2.9e-4	0.02	0.02	0.04	0.05	0.07	0.09	4675	1.0
y_mean[489]	1.32	9.3e-4	0.06	1.2	1.28	1.32	1.36	1.44	4482	1.0
y_mean[490]	-0.73	4.0e-4	0.03	-0.78	-0.75	-0.73	-0.71	-0.67	4574	1.0
y_mean[491]	-0.66	3.3e-4	0.02	-0.71	-0.68	-0.66	-0.65	-0.62	4864	1.0
y_mean[492]	-0.23	3.2e-4	0.02	-0.27	-0.24	-0.23	-0.21	-0.18	4593	1.0
y_mean[493]	1.16	6.7e-4	0.04	1.08	1.14	1.16	1.19	1.25	4104	1.0
y_mean[494]	-0.4	3.0e-4	0.02	-0.44	-0.41	-0.4	-0.39	-0.36	4771	1.0
y_mean[495]	-0.51	2.9e-4	0.02	-0.55	-0.52	-0.51	-0.49	-0.47	4850	1.0
y_mean[496]	0.43	7.2e-4	0.05	0.34	0.4	0.43	0.46	0.52	3938	1.0
y_mean[497]	-0.2	3.1e-4	0.02	-0.24	-0.21	-0.2	-0.18	-0.15	4657	1.0
y_mean[498]	-0.34	5.4e-4	0.04	-0.42	-0.37	-0.34	-0.32	-0.27	5129	1.0
y_mean[499]	-0.38	3.6e-4	0.03	-0.43	-0.4	-0.38	-0.37	-0.33	5053	1.0
y_mean[500]	0.09	3.0e-4	0.02	0.05	0.07	0.09	0.1	0.13	4432	1.0
y_mean[501]	0.53	4.1e-4	0.03	0.48	0.52	0.53	0.55	0.59	4473	1.0

y_mean[502]	0.16	3.4e-4	0.02	0.12	0.15	0.16	0.18	0.21	4282	1.0
y_mean[503]	0.71	4.5e-4	0.03	0.65	0.68	0.71	0.73	0.76	4641	1.0
y_mean[504]	0.24	3.6e-4	0.02	0.2	0.23	0.25	0.26	0.29	4602	1.0
y_mean[505]	-0.72	3.7e-4	0.03	-0.76	-0.73	-0.72	-0.7	-0.67	4693	1.0
y_mean[506]	-0.02	2.9e-4	0.02	-0.06	-0.04		8.7e-3	0.02	4770	1.0
y_mean[507]	0.73	4.9e-4	0.03	0.67	0.71	0.73	0.75	0.79	4077	1.0
y_mean[508]	-0.4	4.1e-4	0.03	-0.45	-0.42	-0.4	-0.38	-0.34	4182	1.0
y_mean[509]	-0.63	4.4e-4	0.03	-0.68	-0.65	-0.63	-0.6	-0.57	4815	1.0
y_mean[510]	-0.53	3.8e-4	0.03	-0.58	-0.55	-0.53	-0.51	-0.48	4803	1.0
y_mean[511]	-0.53	2.9e-4	0.02	-0.57	-0.54	-0.53	-0.51	-0.49	4888	1.0
y_mean[512]	-0.58	4.0e-4	0.03	-0.63	-0.6	-0.58	-0.56	-0.52	5234	1.0
y_mean[513]	-0.48	3.0e-4	0.02	-0.52	-0.5	-0.48	-0.47	-0.44	4705	1.0
y_mean[513] y_mean[514]	0.40	4.1e-4	0.02	0.84	0.87	0.40	0.91	0.44	4359	1.0
y_mean[514] y_mean[515]	-0.6	4.0e-4	0.03	-0.65	-0.62	-0.6	-0.58	-0.55	4763	1.0
y_mean[515] y_mean[516]	-0.53	2.9e-4	0.03	-0.57	-0.54	-0.53	-0.51	-0.33	4888	1.0
y_mean[510] y_mean[517]	-0.19	4.3e-4	0.02	-0.25	-0.34	-0.33	-0.31	-0.49	4597	1.0
• –								-0.14		
y_mean[518]	-0.47	3.4e-4	0.02	-0.51	-0.48	-0.47	-0.45		4636	1.0
y_mean[519]	0.32	4.2e-4	0.03	0.26	0.3	0.32	0.34	0.38	4774	1.0
y_mean[520]	0.61	4.1e-4	0.03	0.55	0.59	0.61	0.62	0.66	4387	1.0
y_mean[521]	3.97	1.5e-3	0.1	3.78	3.9	3.96	4.03	4.15	4202	1.0
y_mean[522]	-0.4	3.7e-4	0.02	-0.45	-0.42	-0.4	-0.39	-0.35	4578	1.0
y_mean[523]	-0.31	5.2e-4	0.04	-0.38	-0.33	-0.31	-0.29	-0.24	4633	1.0
y_mean[524]	0.2	3.1e-4	0.02	0.16	0.18	0.2	0.21	0.24	5167	1.0
y_mean[525]	-0.29	4.4e-4	0.03	-0.34	-0.31	-0.29	-0.27	-0.23	4261	1.0
y_mean[526]	1.09	8.6e-4	0.06	0.98	1.05	1.09	1.13	1.19	4096	1.0
y_mean[527]	-0.07	4.7e-4	0.03	-0.13	-0.09	-0.07		2.1e-3	4454	1.0
y_mean[528]	0.73	6.7e-4	0.04	0.65	0.7	0.73	0.76	0.81	4037	1.0
y_mean[529]	-1.05	4.2e-4	0.03	-1.1	-1.07	-1.05	-1.03	-0.99	4397	1.0
y_mean[530]	-0.7	3.5e-4	0.02	-0.75	-0.72	-0.7	-0.68	-0.65	4747	1.0
y_mean[531]	-0.4	4.4e-4	0.03	-0.46	-0.42	-0.4	-0.38	-0.34	5082	1.0
y_mean[532]	-0.52	4.0e-4	0.03	-0.58	-0.54	-0.52	-0.51	-0.47	4827	1.0
y_mean[533]	-0.5	3.1e-4	0.02	-0.54	-0.51	-0.5	-0.48	-0.45	5073	1.0
y_mean[534]	-0.48	2.8e-4	0.02	-0.52	-0.5	-0.48	-0.47	-0.44	4838	1.0
y_mean[535]	0.22	2.5e-4	0.02	0.19	0.21	0.22	0.24	0.26	5003	1.0
y_mean[536]	0.38	7.7e-4	0.05	0.28	0.35	0.38	0.42	0.49	4360	1.0
y_mean[537]	0.51	5.3e-4	0.03	0.44	0.49	0.51	0.54	0.58	4340	1.0
y_mean[538]	2.26	9.5e-4	0.06	2.14	2.22	2.26	2.3	2.38	4028	1.0
y_mean[539]	-0.14	4.6e-4	0.03	-0.2	-0.16	-0.14	-0.12	-0.07	4851	1.0
y_mean[540]	2.28	1.1e-3	0.07	2.13	2.23	2.28	2.33	2.42	4262	1.0
y_mean[541]	0.05	3.0e-4		7.5e-3	0.03	0.05	0.06	0.09	4768	1.0
y_mean[542]	0.09	3.0e-4	0.02	0.05	0.07	0.08	0.1	0.13	4444	1.0
y_mean[543]	1.03	9.0e-4	0.06	0.92	0.99	1.03	1.07	1.14	3942	1.0
y_mean[544]	0.21	4.3e-4	0.03	0.16	0.19	0.21	0.23	0.27	4033	1.0
y_mean[545]	0.99	9.0e-4	0.06	0.10	0.15	0.99	1.03	1.11	4412	1.0
y_mean[546] y_mean[546]	0.63	4.2e-4	0.03	0.58	0.61	0.63	0.65	0.69	4280	1.0
y_mean[547]	-0.49	3.1e-4	0.03	-0.53	-0.5	-0.49	-0.47	-0.44	4918	1.0
y_mean[547] y_mean[548]	-0.72	4.0e-4	0.02	-0.77	-0.74	-0.72	-0.7	-0.66	4579	1.0
y_mean[548] y_mean[549]	-0.72	3.0e-4	0.03	-0.63	-0.74	-0.72	-0.57	-0.54	4860	1.0
y_mean[043]	-0.09	5.08-4	0.02	0.03	-0.0	0.09	0.57	0.04	±000	1.0

y_mean[550]	0.06	2.9e-4	0.02	0.02	0.04	0.06	0.07	0.1	4629	1.0
y_mean[551]	1.34	6.7e-4	0.04	1.26	1.31	1.34	1.37	1.43	4032	1.0
y_mean[552]	2.72	9.9e-4	0.06	2.59	2.68	2.72	2.76	2.85	4204	1.0
y_mean[553]	0.13	3.2e-4	0.02	0.09	0.12	0.13	0.15	0.18	4322	1.0
y_mean[554]	-0.15	4.6e-4	0.03	-0.21	-0.17	-0.15	-0.13	-0.09	4617	1.0
y_mean[555]	-0.14	5.3e-4	0.04	-0.22	-0.17	-0.14	-0.12	-0.07	4958	1.0
y_mean[556]	-1.52	7.0e-4	0.05	-1.6	-1.55	-1.52	-1.49	-1.43	4221	1.0
y_mean[557]	0.1	5.3e-4	0.03	0.03	0.07	0.1	0.12	0.17	4337	1.0
y_mean[558]	0.92	4.5e-4	0.03	0.86	0.9	0.92	0.94	0.98	4662	1.0
y_mean[559]	0.18	3.3e-4	0.02	0.13	0.16	0.18	0.19	0.22	4920	1.0
y_mean[560]	-6.8e-3	4.4e-4	0.03	-0.07	-0.03-	-7.1e-3	0.01	0.05	4906	1.0
y_mean[561]	-0.03	5.1e-4	0.03	-0.1	-0.06	-0.03	-0.01	0.03	4042	1.0
y_mean[562]	1.96	8.7e-4	0.06	1.84	1.92	1.96	2.0	2.07	4359	1.0
y_mean[563]	-1.65	6.1e-4	0.04	-1.72	-1.67	-1.65	-1.62	-1.57	4263	1.0
y_mean[564]	0.92	6.3e-4	0.04	0.84	0.89	0.92	0.95	1.0	3970	1.0
y_mean[565]	-0.15	6.1e-4	0.04	-0.23	-0.17	-0.15	-0.12	-0.06	4741	1.0
y_mean[566]	-0.16	3.9e-4	0.03	-0.21	-0.18	-0.16	-0.14	-0.11	4676	1.0
y_mean[567]	2.05	8.4e-4	0.05	1.94	2.01	2.05	2.09	2.16	4107	1.0
y_mean[568]	-0.19	4.4e-4	0.03	-0.24	-0.21	-0.19	-0.17	-0.13	4070	1.0
y_mean[569]	-0.26	3.8e-4	0.02	-0.31	-0.28	-0.26	-0.25	-0.21	4220	1.0
y_mean[570]	0.71	4.6e-4	0.03	0.65	0.69	0.71	0.73	0.76	4125	1.0
y_mean[571]	-0.33	4.0e-4	0.03	-0.38	-0.35	-0.33	-0.31	-0.28	4271	1.0
y_mean[572]	-0.55	2.9e-4	0.02	-0.59	-0.56	-0.55	-0.53	-0.51	4699	1.0
y_mean[573]	0.65	5.1e-4	0.03	0.58	0.62	0.65	0.67	0.72	4655	1.0
y_mean[574]	-0.31	3.6e-4	0.02	-0.36	-0.33	-0.31	-0.3	-0.27	4730	1.0
y_mean[575]	0.32	4.9e-4	0.03	0.25	0.29	0.32	0.34	0.38	4072	1.0
y_mean[576]	-0.49	2.9e-4	0.02	-0.53	-0.5	-0.49	-0.48	-0.45	4799	1.0
y_mean[577]	1.63	9.4e-4	0.06	1.51	1.59	1.63	1.67	1.74	4088	1.0
y_mean[578]	1.06	6.2e-4	0.04	0.98	1.03	1.06	1.09	1.14	4340	1.0
y_mean[579]	-0.44	2.8e-4	0.02	-0.47	-0.45	-0.44	-0.42	-0.4	4771	1.0
y_mean[580]	0.24	2.5e-4	0.02	0.2	0.23	0.24	0.25	0.28	5078	1.0
y_mean[581]	-0.54	2.9e-4	0.02	-0.58	-0.55	-0.54	-0.52	-0.5	4872	1.0
y_mean[582]	-0.22	4.6e-4	0.03	-0.28	-0.24	-0.22	-0.2	-0.16	4564	1.0
y_mean[583]	-1.08	4.2e-4	0.03	-1.14	-1.1	-1.09	-1.07	-1.03	4486	1.0
y_mean[584]	0.54	5.1e-4	0.03	0.48	0.52	0.54	0.57	0.61	4043	1.0
y_mean[585]	-0.74	4.2e-4	0.03	-0.8	-0.76	-0.74	-0.72	-0.68	4950	1.0
y_mean[586]	-0.12	3.9e-4	0.03	-0.17	-0.14	-0.12	-0.1	-0.06	5011	1.0
y_mean[587]	2.41	2.2e-3	0.15	2.1	2.31	2.41	2.52	2.71	4957	1.0
y_mean[588]	-0.71	4.1e-4	0.03	-0.76	-0.73	-0.71	-0.69	-0.65	4666	1.0
y_mean[589]	0.5	4.5e-4	0.03	0.44	0.48	0.5	0.52	0.56	4713	1.0
y_mean[590]	-0.32	3.1e-4	0.02	-0.36	-0.33	-0.32	-0.3	-0.27	4982	1.0
y_mean[591]	-1.35	7.1e-4	0.05	-1.44	-1.38	-1.35	-1.32	-1.26	4362	1.0
y_mean[592]	-0.55	3.0e-4	0.02	-0.59	-0.56	-0.55	-0.53	-0.5	4845	1.0
y_mean[593]	-0.54	3.7e-4	0.02	-0.59	-0.56	-0.54	-0.53	-0.5	4590	1.0
y_mean[594]	-0.58	3.1e-4	0.02	-0.62	-0.59	-0.58	-0.56	-0.54	4886	1.0
y_mean[595]	-1.1	4.2e-4	0.03	-1.15	-1.12	-1.1	-1.08	-1.05	4455	1.0
y_mean[596]	1.45	7.6e-4	0.05	1.35	1.42	1.45	1.48	1.55	4337	1.0
y_mean[597]	0.5	5.0e-4	0.04	0.43	0.47	0.5	0.52	0.57	4949	1.0

y_mean[598]	-0.66	5.1e-4	0.03	-0.72	-0.68	-0.66	-0.64	-0.59	4462	1.0
y_mean[599]	-0.73	3.8e-4	0.03	-0.78	-0.75	-0.73	-0.71	-0.68	4809	1.0
y_mean[600]	0.74	6.9e-4	0.05	0.64	0.71	0.74	0.77	0.83	4514	1.0
y_mean[601]	-0.77	4.1e-4	0.03	-0.82	-0.78	-0.77	-0.75	-0.71	4674	1.0
y_mean[602]	0.71	4.7e-4	0.03	0.65	0.69	0.71	0.73	0.77	4108	1.0
y_mean[603]	0.83	5.3e-4	0.03	0.77	0.81	0.83	0.86	0.9	4041	1.0
y_mean[604]	-0.19	3.9e-4	0.03	-0.24	-0.21	-0.19	-0.18	-0.14	4412	1.0
y_mean[605]	0.32	3.9e-4	0.03	0.27	0.3	0.32	0.34	0.37	4680	1.0
y_mean[606]	-0.37	3.8e-4	0.03	-0.42	-0.39	-0.37	-0.35	-0.32	4852	1.0
y_mean[607]	0.9	5.5e-4	0.04	0.83	0.88	0.9	0.93	0.98	4220	1.0
y_mean[608]	2.62	1.6e-3	0.11	2.41	2.55	2.62	2.69	2.82	4662	1.0
y_mean[609]	-0.58	5.6e-4	0.04	-0.65	-0.6	-0.58	-0.55	-0.5	4687	1.0
y_mean[610]	-0.56	2.8e-4	0.02	-0.6	-0.57	-0.56	-0.54	-0.52	4830	1.0
y_mean[611]	-0.45	5.3e-4	0.04	-0.52	-0.48	-0.45	-0.43	-0.38	4365	1.0
y_mean[612]	2.01	7.9e-4	0.05	1.91	1.97	2.01	2.04	2.1	4150	1.0
y_mean[613]	-0.07	5.5e-4	0.04	-0.14	-0.09	-0.07		9.3e-3	4849	1.0
y_mean[614]	0.07	1.0e-3	0.04	-0.08	0.03	0.06	0.11	0.21	5056	1.0
y_mean[615]	-0.72	3.8e-4	0.03	-0.77	-0.74	-0.72	-0.7	-0.67	4624	1.0
y_mean[616]	0.72	5.4e-4	0.03	0.77	0.74	0.72	0.39	0.43	4454	1.0
y_mean[617]	0.36	5.4e-4 5.9e-4	0.04	0.29	0.34	0.36	0.39	0.43	5031	1.0
y_mean[618]	-0.2	5.9e-4 5.8e-4	0.04	-0.27	-0.22	-0.2	-0.17	-0.12	4520	1.0
y_mean[619]	-0.2	3.2e-4	0.04	-0.27	-0.22	-0.2	-0.17	-0.12	4520 4740	1.0
-				2.7						
y_mean[620]	2.86	1.3e-3	0.08		2.81	2.86	2.92	3.02	4059	1.0
y_mean[621]	-1.45	7.5e-4	0.05	-1.54	-1.48	-1.45	-1.42	-1.35	4187	1.0
y_mean[622]	-1.0	4.3e-4	0.03	-1.06	-1.02	-1.01	-0.99	-0.95	4442	1.0
y_mean[623]	1.34	8.0e-4	0.05	1.24	1.3	1.34	1.37	1.43	3913	1.0
y_mean[624]	-0.61	3.1e-4	0.02	-0.65	-0.62	-0.61	-0.6	-0.57	4820	1.0
y_mean[625]	-0.55	2.8e-4	0.02	-0.58	-0.56	-0.55	-0.53	-0.51	4784	1.0
y_mean[626]	0.03	3.5e-4	0.02	-0.02	0.01	0.03	0.05	0.08	4881	1.0
y_mean[627]	-0.23	5.9e-4	0.04	-0.3	-0.25	-0.23	-0.2	-0.15	4383	1.0
y_mean[628]	0.79	5.8e-4	0.04	0.71	0.76	0.79	0.82	0.87	4523	1.0
y_mean[629]	-0.08	4.0e-4	0.03	-0.13	-0.09	-0.08	-0.06	-0.02	4330	1.0
y_mean[630]	-0.34	3.0e-4	0.02	-0.38	-0.36	-0.34	-0.33		4791	1.0
y_mean[631]		4.2e-4	0.03	-0.8	-0.76	-0.74	-0.72	-0.69	4540	1.0
y_mean[632]	-0.39	3.5e-4	0.02	-0.44	-0.41	-0.39	-0.38	-0.34	4788	1.0
y_mean[633]	-0.61	3.4e-4	0.02	-0.66	-0.63	-0.61	-0.6	-0.57	5063	1.0
y_mean[634]	-0.79	4.9e-4	0.03	-0.85	-0.81	-0.79	-0.77	-0.72	4468	1.0
y_mean[635]	1.31	7.6e-4	0.05	1.22	1.28	1.31	1.35	1.41	3971	1.0
y_mean[636]	-0.08	4.4e-4	0.03	-0.14	-0.1	-0.08	-0.06	-0.02	4911	1.0
y_mean[637]	0.01	2.9e-4	0.02	-0.03-	4.8e-4	0.01	0.03	0.05	4741	1.0
y_mean[638]	-0.99	5.5e-4	0.04	-1.06	-1.02	-0.99	-0.97	-0.92	4266	1.0
y_mean[639]	-0.05	4.6e-4	0.03	-0.11	-0.07	-0.05	-0.02	0.02	4648	1.0
y_mean[640]	-0.56	3.0e-4	0.02	-0.6	-0.57	-0.56	-0.54	-0.52	4901	1.0
y_mean[641]	-0.92	4.1e-4	0.03	-0.97	-0.94	-0.92	-0.9	-0.86	4553	1.0
y_mean[642]	-0.79	4.9e-4	0.03	-0.85	-0.81	-0.79	-0.77	-0.72	4464	1.0
y_mean[643]	0.47	6.5e-4	0.04	0.39	0.44	0.47	0.49	0.55	4260	1.0
y_mean[644]	0.58	4.8e-4	0.03	0.52	0.56	0.58	0.6	0.64	4309	1.0
y_mean[645]	-0.26	5.0e-4	0.03	-0.32	-0.28	-0.26	-0.23	-0.19	4523	1.0

y_mean[646]	-0.08	5.6e-4	0.04	-0.15	-0.1	-0.08	-0.05	2.5e-3	4869	1.0
y_mean[647]	-0.2	4.0e-4	0.03	-0.25	-0.22	-0.2	-0.18	-0.15	4302	1.0
y_mean[648]	0.02	2.9e-4	0.02	-0.02	3.5e-3	0.02	0.03	0.06	4737	1.0
y_mean[649]	0.06	3.1e-4	0.02	0.02	0.04	0.06	0.07	0.1	4790	1.0
y_mean[650]	-0.08	3.9e-4	0.03	-0.13	-0.1	-0.08	-0.06	-0.03	4579	1.0
y_mean[651]	1.65	1.0e-3	0.07	1.53	1.61	1.65	1.7	1.78	4239	1.0
y_mean[652]	-0.67	4.4e-4	0.03	-0.73	-0.69	-0.67	-0.65	-0.61	4906	1.0
y_mean[653]	0.28	5.3e-4	0.03	0.21	0.25	0.28	0.3	0.34	4148	1.0
y_mean[654]	-0.55	3.2e-4	0.02	-0.59	-0.57	-0.55	-0.54	-0.51	4644	1.0
y_mean[655]	-0.89	4.9e-4	0.03	-0.96	-0.92	-0.89	-0.87	-0.83	4512	1.0
y_mean[656]	0.08	3.7e-4	0.03	0.03	0.06	0.08	0.1	0.13	4946	1.0
y_mean[657]	1.41	8.4e-4	0.06	1.3	1.37	1.41	1.45	1.52	4623	1.0
y_mean[658]	-1.2	4.5e-4	0.03	-1.26	-1.23	-1.2	-1.18	-1.14	4478	1.0
• =	0.14	3.5e-4	0.03	0.1	0.13	0.14	0.16	0.19	4185	1.0
y_mean[659]										
y_mean[660]	0.24	4.2e-4	0.03	0.19	0.22	0.24	0.26	0.3	4633	1.0
y_mean[661]	-0.54	3.9e-4	0.03	-0.59	-0.56	-0.54	-0.52	-0.49	4567	1.0
y_mean[662]	0.05	5.7e-4	0.04	-0.02	0.03	0.05	0.08	0.13	4285	1.0
y_mean[663]	-1.14	4.4e-4	0.03	-1.2	-1.16	-1.14	-1.12	-1.08	4457	1.0
y_mean[664]	0.13	2.8e-4	0.02	0.09	0.12	0.13	0.15	0.17	5741	1.0
y_mean[665]	0.78	4.9e-4	0.03	0.72	0.76	0.78	0.81	0.85	4076	1.0
y_mean[666]	1.02	7.1e-4	0.05	0.93	0.99	1.02	1.05	1.11	4055	1.0
y_mean[667]	-0.23	4.7e-4	0.03	-0.29	-0.25	-0.23	-0.21	-0.17	4548	1.0
y_mean[668]	-0.6	2.9e-4	0.02	-0.64	-0.61	-0.6	-0.59	-0.56	4828	1.0
y_mean[669]	0.7	4.5e-4	0.03	0.64	0.68	0.7	0.72	0.75	4153	1.0
y_mean[670]	0.8	6.4e-4	0.04	0.71	0.77	0.79	0.82	0.88	4102	1.0
y_mean[671]	-0.68	4.4e-4	0.03	-0.75	-0.7	-0.68	-0.66	-0.62	4932	1.0
y_mean[672]	0.13	3.2e-4	0.02	0.09	0.12	0.13	0.15	0.18	4309	1.0
y_mean[673]	-0.11	5.3e-4	0.04	-0.18	-0.13	-0.1	-0.08	-0.03	5163	1.0
y_mean[674]	-0.55	3.2e-4	0.02	-0.6	-0.57	-0.55	-0.54	-0.51	4658	1.0
y_mean[675]	-0.35	6.1e-4	0.04	-0.43	-0.38	-0.35	-0.32	-0.27	4443	1.0
y_mean[676]	0.59	6.3e-4	0.04	0.5	0.56	0.59	0.62	0.67	4679	1.0
y_mean[677]	-0.54	3.0e-4	0.02	-0.58	-0.56	-0.54	-0.53	-0.5	4665	1.0
y_mean[678]	0.07	3.1e-4	0.02	0.03	0.06	0.07	0.09	0.12	5513	1.0
y_mean[679]	0.18	4.6e-4	0.03	0.12	0.16	0.17	0.2	0.23	4192	1.0
y_mean[680]	-0.98	5.1e-4	0.04	-1.05	-1.0	-0.98	-0.95	-0.91	4842	1.0
y_mean[681]	0.11	5.7e-4	0.04	0.04	0.09	0.11	0.14	0.19	4243	1.0
y_mean[682]	-0.1	4.9e-4	0.03	-0.16	-0.12	-0.1	-0.08	-0.04	4013	1.0
y_mean[683]	0.38	3.0e-4	0.02	0.33	0.36	0.38	0.39	0.42	5136	1.0
y_mean[684]	0.39	3.6e-4	0.03	0.34	0.38	0.39	0.41	0.44	4924	1.0
y_mean[685]	0.69	4.5e-4	0.03	0.63	0.67	0.69	0.71	0.75	4146	1.0
y_mean[686]	0.69	4.3e-4	0.03	0.64	0.67	0.69	0.71	0.75	4236	1.0
y_mean[687]	-0.34	3.9e-4	0.03	-0.39	-0.36	-0.34	-0.32	-0.29	4546	1.0
y_mean[688]	-0.71	3.6e-4	0.02	-0.76	-0.72	-0.71	-0.69	-0.66	4708	1.0
y_mean[689]	-0.05	4.2e-4	0.02	-0.1	-0.07	-0.05		8.7e-3	4413	1.0
y_mean[690]	-0.03	4.2e-4 4.3e-4	0.03	-0.13	-0.79	-0.03	-0.03	-0.72	4822	1.0
y_mean[690] y_mean[691]	-0.77 -1.12	4.3e-4 4.2e-4	0.03	-0.63 -1.17		-0.77 -1.12	-0.75	-1.06		1.0
• =							-0.64		4440	
y_mean[692]	-0.66	3.4e-4	0.02	-0.7		-0.66		-0.61	4707	1.0
y_mean[693]	0.02	3.3e-4	0.02	-0.03	2.0e-3	0.02	0.03	0.06	4825	1.0

y_mean[694]	0.1	3.0e-4	0.02	0.06	0.08	0.1	0.11	0.14	4463	1.0
y_mean[695]	0.47	8.1e-4	0.05	0.37	0.44	0.47	0.51	0.58	4135	1.0
y_mean[696]	-0.04	5.8e-4	0.04	-0.12	-0.07	-0.04	-0.02	0.03	3929	1.0
y_mean[697]	-0.46	3.2e-4	0.02	-0.5	-0.47	-0.46	-0.44	-0.41	4849	1.0
y_mean[698]	-0.27	4.6e-4	0.03	-0.32	-0.29	-0.27	-0.25	-0.2	4233	1.0
y_mean[699]	2.29	8.5e-4	0.05	2.18	2.25	2.29	2.32	2.39	4013	1.0
y_mean[700]	-0.6	3.4e-4	0.02	-0.64	-0.61	-0.6	-0.58	-0.55	4874	1.0
y_mean[701]	-1.02	4.3e-4	0.03	-1.07	-1.04	-1.02	-1.0	-0.96	4386	1.0
y_mean[702]	-0.61	3.5e-4	0.02	-0.65	-0.62	-0.61	-0.59	-0.56	4794	1.0
y_mean[703]	-0.14	5.6e-4	0.04	-0.21	-0.16	-0.14	-0.12	-0.07	4007	1.0
y_mean[704]	0.73	5.5e-4	0.04	0.66	0.71	0.73	0.76	0.81	4674	1.0
y_mean[705]	0.44	5.9e-4	0.04	0.36	0.41	0.44	0.47	0.52	5134	1.0
y_mean[706]	0.19	3.5e-4	0.02	0.14	0.17	0.19	0.2	0.23	4844	1.0
y_mean[707]	-0.28	3.1e-4	0.02	-0.32	-0.29	-0.28	-0.26	-0.24	4732	1.0
y_mean[708]	-0.61	3.0e-4	0.02	-0.65	-0.63	-0.61	-0.6	-0.57	4830	1.0
y_mean[709]	1.07	7.0e-4	0.05	0.97	1.03	1.06	1.1	1.16	4830	1.0
y_mean[710]	-0.42	6.6e-4	0.04	-0.51	-0.45	-0.42	-0.39	-0.33	4510	1.0
y_mean[711]	-0.6	3.3e-4	0.02	-0.65	-0.62	-0.6	-0.59	-0.56	4843	1.0
y_mean[712]	-0.44	3.3e-4	0.02	-0.49	-0.46	-0.44	-0.43	-0.4	4355	1.0
y_mean[713]	-0.43	3.3e-4	0.02	-0.47	-0.44	-0.43	-0.41	-0.38	4493	1.0
y_mean[714]	-0.07	3.1e-4	0.02	-0.11	-0.08	-0.07	-0.05	-0.02	4753	1.0
y_mean[715]	0.06	4.3e-4	0.03-	6.9e-5	0.04	0.06	0.07	0.11	4562	1.0
y_mean[716]	-0.56	4.3e-4	0.03	-0.61	-0.58	-0.56	-0.54	-0.5	4627	1.0
y_mean[717]	-0.48	2.8e-4	0.02	-0.52	-0.5	-0.48	-0.47	-0.44	4838	1.0
y_mean[718]	0.97	7.0e-4	0.04	0.88	0.94	0.97	1.0	1.06	3928	1.0
y_mean[719]	-0.9	4.9e-4	0.03	-0.97	-0.93	-0.9	-0.88	-0.84	4641	1.0
y_mean[720]	-1.07	4.3e-4	0.03	-1.13	-1.09	-1.07	-1.05	-1.02	4391	1.0
y_mean[721]	0.49	4.2e-4	0.03	0.44	0.48	0.49	0.51	0.55	4564	1.0
y_mean[722]	-0.98	4.5e-4	0.03	-1.03	-1.0	-0.98	-0.95	-0.91	4611	1.0
y_mean[723]	-0.21	4.8e-4	0.03	-0.27	-0.23	-0.21	-0.18	-0.14	4532	1.0
y_mean[724]	0.12	3.2e-4	0.02	0.08	0.11	0.12	0.14	0.17	4677	1.0
y_mean[725]	0.97	6.4e-4	0.04	0.88	0.94	0.97	1.0	1.05	4385	1.0
y_mean[726]	-0.07	4.6e-4	0.03	-0.13	-0.09	-0.07	-0.05	-0.01	4159	1.0
y_mean[727]	-0.61	3.0e-4	0.02	-0.65	-0.63	-0.61	-0.6	-0.57	4809	1.0
y_mean[728]	0.04	2.8e-4	0.02	6.1e-3	0.03	0.04	0.06	0.08	4687	1.0
y_mean[729]	-0.6	4.8e-4	0.03	-0.66	-0.62	-0.6	-0.58	-0.53	4465	1.0
y_mean[730]	0.19	8.1e-4	0.05	0.09	0.16	0.19	0.23	0.29	4046	1.0
y_mean[731]	0.64	4.2e-4	0.03	0.59	0.62	0.64	0.66	0.7	4261	1.0
y_mean[732]	-0.56	3.0e-4	0.02	-0.6	-0.58	-0.56	-0.55	-0.52	4726	1.0
y_mean[733]	-0.39	3.7e-4	0.03	-0.44	-0.4	-0.39	-0.37	-0.34	4852	1.0
y_mean[734]	-0.54	2.8e-4	0.02	-0.58	-0.56	-0.54	-0.53	-0.5	4853	1.0
y_mean[735]	0.94	7.6e-4	0.05	0.84	0.91	0.94	0.98	1.04	4472	1.0
y_mean[736]	-0.41	5.5e-4	0.04	-0.49	-0.44	-0.41	-0.39	-0.34	4956	1.0
y_mean[737]	-0.69	3.9e-4	0.03	-0.74	-0.71	-0.69	-0.67	-0.64	4630	1.0
y_mean[738]	0.54	4.2e-4	0.03	0.49	0.52	0.54	0.56	0.59	4420	1.0
y_mean[739]	0.62	6.0e-4	0.04	0.54	0.59	0.62	0.65	0.71	5282	1.0
y_mean[740]	0.2	6.6e-4	0.04	0.11	0.17	0.2	0.23	0.29	4575	1.0
y_mean[741]	1.91	8.4e-4	0.05	1.8	1.87	1.91	1.94	2.01	4001	1.0

y_mean[742]	-0.6	3.0e-4	0.02	-0.64	-0.62	-0.6	-0.59	-0.56	4822	1.0
y_mean[743]	-1.02	5.2e-4	0.03	-1.08	-1.04	-1.02	-1.0	-0.95	4295	1.0
y_mean[744]	-0.09	4.1e-4	0.03	-0.14	-0.11	-0.09	-0.07	-0.04	4230	1.0
y_mean[745]	-0.57	2.8e-4	0.02	-0.61	-0.58	-0.57	-0.55	-0.53	4851	1.0
y_mean[746]	-0.44	7.0e-4	0.05	-0.53	-0.47	-0.44	-0.41	-0.35	4458	1.0
y_mean[747]	-0.58	2.9e-4	0.02	-0.62	-0.6	-0.58	-0.57	-0.54	4812	1.0
y_mean[748]	-1.13	4.2e-4	0.03	-1.19	-1.15	-1.13	-1.12	-1.08	4415	1.0
y_mean[749]	-0.51	4.2e-4	0.03	-0.56	-0.53	-0.51	-0.49	-0.45	4475	1.0
y_mean[750]	-0.5	6.0e-4	0.04	-0.58	-0.53	-0.5	-0.48	-0.42	4254	1.0
y_mean[751]	-0.6	3.0e-4	0.02	-0.64	-0.61	-0.6	-0.58	-0.56	4825	1.0
y_mean[752]	0.36	4.0e-4	0.03	0.31	0.34	0.36	0.38	0.41	4394	1.0
y_mean[753]	-0.11	4.4e-4	0.03	-0.16	-0.13	-0.11	-0.09	-0.05	4368	1.0
y_mean[754]	0.83	7.2e-4	0.05	0.74	0.8	0.83	0.86	0.92	4309	1.0
y_mean[755]	-0.03	4.3e-4	0.03	-0.08	-0.05		9.7e-3	0.03	4296	1.0
y_mean[756]	1.78	8.2e-4	0.05	1.68	1.75	1.78	1.82	1.89	4244	1.0
y_mean[757]	0.75	8.8e-4	0.06	0.63	0.71	0.75	0.79	0.86	4392	1.0
y_mean[758]	-0.03	4.2e-4	0.03	-0.09	-0.05	-0.04	-0.01	0.02	4532	1.0
y_mean[759] y_mean[759]	0.51	4.3e-4	0.03	0.45	0.49	0.51	0.53	0.57	4760	1.0
y_mean[760]	0.31	6.3e-4	0.03	0.43	0.49	0.31	0.33	0.36	4216	1.0
y_mean[760] y_mean[761]	0.27	5.8e-4	0.04	0.19	0.25	0.66	0.69	0.30	4115	1.0
y_mean[761] y_mean[762]	-0.45	4.7e-4	0.04	-0.51	-0.47	-0.45	-0.43	-0.39	4113	1.0
y_mean[763] y_mean[763]	-0.45 -0.66	4.7e-4 4.3e-4	0.03	-0.51	-0.47	-0.45	-0.43	-0.39	4883	1.0
y_mean[763] y_mean[764]	-0.55	2.8e-4	0.03	-0.71	-0.56	-0.55	-0.54	-0.51	4761	1.0
• –			0.02					-0.51		1.0
y_mean[765]	-0.37	5.0e-4		-0.43	-0.39	-0.37	-0.35		4148	
y_mean[766]	0.92	6.2e-4	0.04	0.84	0.9	0.92	0.95	1.0	3980	1.0
y_mean[767]	0.84	5.4e-4	0.04	0.77	0.82	0.84	0.87	0.91	4304	1.0
y_mean[768]	-0.68	3.4e-4	0.02	-0.73	-0.7	-0.68	-0.67	-0.64	4708	1.0
y_mean[769]	0.3	4.7e-4	0.03	0.24	0.28	0.3	0.32	0.36	4417	1.0
y_mean[770]	0.11	3.3e-4	0.02	0.06	0.09	0.11	0.12	0.15	4815	1.0
y_mean[771]	-0.31	5.3e-4	0.04	-0.39	-0.34	-0.31	-0.29	-0.24	4948	1.0
y_mean[772]	-0.59	2.9e-4	0.02	-0.63	-0.61	-0.59	-0.58	-0.55	4824	1.0
y_mean[773]	-1.13	4.3e-4	0.03	-1.19	-1.15	-1.13	-1.11	-1.07	4437	1.0
y_mean[774]	0.16	3.4e-4	0.02	0.12	0.15	0.16	0.18	0.21	4233	1.0
y_mean[775]	-0.63	3.1e-4	0.02	-0.67	-0.64	-0.63	-0.61	-0.58	4775	1.0
y_mean[776]	0.07	2.9e-4	0.02	0.03	0.05	0.07	0.08	0.11	4702	1.0
y_mean[777]	0.46	5.9e-4	0.04	0.38	0.44	0.46	0.49	0.55	4695	1.0
y_mean[778]	-0.4	3.5e-4	0.02	-0.45	-0.42	-0.4	-0.39	-0.36	4413	1.0
y_mean[779]	-0.25	4.9e-4	0.03	-0.31	-0.27	-0.25	-0.23	-0.18	4536	1.0
y_mean[780]	-0.95	4.1e-4	0.03	-1.01	-0.97	-0.95	-0.93	-0.9	4605	1.0
y_mean[781]	0.09	3.3e-4	0.02	0.04	0.07	0.09	0.1	0.13	4340	1.0
y_mean[782]	-0.36	3.5e-4	0.02	-0.41	-0.38	-0.36	-0.35	-0.31	4923	1.0
y_mean[783]	-0.59	3.0e-4	0.02	-0.63	-0.61	-0.59	-0.58	-0.55	4789	1.0
y_mean[784]	-0.59	2.9e-4	0.02	-0.63	-0.6	-0.59	-0.58	-0.55	4801	1.0
y_mean[785]	-0.84	5.1e-4	0.04	-0.91	-0.86	-0.84	-0.82	-0.77	4912	1.0
y_mean[786]	-0.58	3.9e-4	0.03	-0.64	-0.6	-0.58	-0.57	-0.53	4925	1.0
y_mean[787]	-0.98	6.1e-4	0.04	-1.06	-1.01	-0.98	-0.95	-0.9	4571	1.0
y_mean[788]	-0.13	4.7e-4	0.03	-0.19	-0.15	-0.13	-0.1	-0.06	4804	1.0
y_mean[789]	0.07	4.8e-4	0.03	9.2e-3	0.05	0.07	0.09	0.13	4332	1.0

y_mean[790]	-0.13	4.2e-4	0.03	-0.18	-0.15	-0.13	-0.11	-0.08	4328	1.0
y_mean[791]	-0.45	3.1e-4	0.02	-0.49	-0.46	-0.45	-0.43	-0.4	4624	1.0
y_mean[792]	0.47	6.5e-4	0.04	0.39	0.44	0.47	0.5	0.55	4179	1.0
y_mean[793]	-0.64	3.8e-4	0.03	-0.69	-0.66	-0.64	-0.62	-0.59	4766	1.0
y_mean[794]	0.1	3.2e-4	0.02	0.06	0.09	0.1	0.12	0.15	4924	1.0
y_mean[795]	9.5e-3	5.6e-4	0.04	-0.06		9.6e-3	0.04	0.09	4710	1.0
y_mean[796]	-0.08	4.8e-4	0.03	-0.14	-0.1	-0.08	-0.06	-0.02	4176	1.0
y_mean[797]	0.41	5.1e-4	0.03	0.34	0.39	0.41	0.43	0.47	4146	1.0
y_mean[798]	-0.56	3.0e-4	0.02	-0.6	-0.58	-0.56	-0.55	-0.52	4915	1.0
y_mean[799]	-1.05	4.4e-4	0.03	-1.11	-1.07	-1.05	-1.03	-0.99	4643	1.0
y_mean[800]	0.19	3.7e-4	0.03	0.14	0.17	0.19	0.21	0.24	4625	1.0
y_mean[801]	-0.41	3.3e-4	0.02	-0.46	-0.43	-0.41	-0.4	-0.37	4565	1.0
y_mean[802]	0.11	4.2e-4	0.02	0.19	0.23	0.25	0.26	0.3	4070	1.0
y_mean[803]	-1.03	4.6e-4	0.03	-1.09	-1.05	-1.03	-1.01	-0.97	4740	1.0
y_mean[804]	-0.44	3.6e-4	0.03	-0.49	-0.46	-0.44	-0.42	-0.39	4995	1.0
y_mean[805]	-0.09	6.0e-4	0.03	-0.18	-0.12	-0.09	-0.07	-0.01	4902	1.0
y_mean[806] y_mean[806]	-0.09	4.7e-4	0.04	-0.18	-0.12	-0.09	-0.79	-0.74	4902 4746	1.0
•										
y_mean[807]	0.16	4.0e-4	0.03	0.11	0.14	0.16	0.18	0.22	4897	1.0
y_mean[808]	-1.06	5.2e-4	0.03	-1.13	-1.08	-1.06	-1.04	-0.99	4367	1.0
y_mean[809]	-0.45	3.2e-4	0.02	-0.49	-0.46	-0.45	-0.43	-0.4	4752	1.0
y_mean[810]	-0.42	3.5e-4	0.02	-0.47	-0.44	-0.42	-0.4	-0.37	4917	1.0
y_mean[811]	-0.52	3.3e-4	0.02	-0.56	-0.53	-0.52	-0.5	-0.47	4993	1.0
y_mean[812]	-0.23	5.6e-4	0.04	-0.3	-0.25	-0.23	-0.2	-0.15	4466	1.0
y_mean[813]	0.41	2.9e-4	0.02	0.37	0.4	0.41	0.42	0.45	4636	1.0
y_mean[814]	-1.18	4.3e-4	0.03	-1.24	-1.2	-1.18	-1.16	-1.12	4460	1.0
y_mean[815]	-0.26	3.3e-4	0.02	-0.3	-0.27	-0.26	-0.24	-0.21	4417	1.0
y_mean[816]	-0.19	3.9e-4	0.03	-0.24	-0.2	-0.19	-0.17	-0.13	4822	1.0
y_mean[817]	-0.16	3.8e-4	0.03	-0.21	-0.17	-0.16	-0.14	-0.1	4678	1.0
y_mean[818]	0.05	2.8e-4	0.02	0.02	0.04	0.05	0.07	0.09	4646	1.0
y_mean[819]	0.53	4.2e-4	0.03	0.48	0.51	0.53	0.55	0.58	4424	1.0
y_mean[820]	0.24	4.0e-4	0.03	0.19	0.22	0.24	0.26	0.29	4212	1.0
y_mean[821]	-0.58	3.8e-4	0.03	-0.63	-0.6	-0.58	-0.57	-0.53	4493	1.0
y_mean[822]	-0.33	4.6e-4	0.03	-0.39	-0.35	-0.33	-0.31	-0.28	4144	1.0
y_mean[823]	-0.21	3.6e-4	0.02	-0.25	-0.22	-0.21	-0.19	-0.16	4440	1.0
y_mean[824]	-0.37	3.2e-4	0.02	-0.41	-0.38	-0.37	-0.35	-0.32	4553	1.0
y_mean[825]	0.78	5.1e-4	0.04	0.71	0.76	0.78	0.8	0.85	4957	1.0
y_mean[826]	0.15	3.4e-4	0.02	0.11	0.14	0.15	0.17	0.2	4257	1.0
y_mean[827]	0.14	3.3e-4	0.02	0.1	0.13	0.14	0.16	0.18	4594	1.0
y_mean[828]	-0.62	4.2e-4	0.03	-0.68	-0.64	-0.62	-0.6	-0.57	4740	1.0
y_mean[829]	-1.14	4.3e-4	0.03	-1.19	-1.16	-1.14	-1.12	-1.08	4429	1.0
y_mean[830]	-0.69	3.5e-4	0.02	-0.73	-0.7	-0.69	-0.67	-0.64	4736	1.0
y_mean[831]	-0.27	5.8e-4	0.04	-0.34	-0.29	-0.27	-0.24	-0.19	4471	1.0
y_mean[832]	-0.59	2.9e-4	0.02	-0.63	-0.61	-0.59	-0.58	-0.55	4833	1.0
y_mean[833]	-0.62	3.1e-4	0.02	-0.67	-0.64	-0.63	-0.61	-0.58	4826	1.0
y_mean[834]	0.23	4.0e-4	0.03	0.18	0.21	0.23	0.24	0.28	4125	1.0
y_mean[835]	0.79	4.9e-4	0.03	0.73	0.77	0.79	0.81	0.85	4252	1.0
y_mean[836]	-0.68	3.6e-4	0.02	-0.73	-0.7	-0.68	-0.67	-0.63	4652	1.0
y_mean[837]	-0.39	6.9e-4	0.05	-0.49	-0.43	-0.39	-0.36	-0.3	5118	1.0
,	5.50									

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-0.76
                                            -0.82
                                                    -0.78
                                                            -0.76
                                                                    -0.74
                                                                            -0.71
                                                                                     4644
y_mean[838]
                           4.1e-4
                                      0.03
                                                                                              1.0
                    -0.08
                           3.2e-4
                                      0.02
                                            -0.12
                                                    -0.09
                                                            -0.08
                                                                    -0.06
                                                                            -0.03
                                                                                     4742
y_mean[839]
                                                                                              1.0
y_mean[840]
                    -0.39
                           3.5e-4
                                      0.02
                                            -0.43
                                                     -0.4
                                                            -0.39
                                                                    -0.37
                                                                            -0.34
                                                                                     4478
                                                                                              1.0
                 -2.0e-3
                           5.4e-4
                                      0.03
                                            -0.07
                                                   -0.03-2.0e-3
                                                                     0.02
                                                                             0.06
                                                                                     4082
                                                                                              1.0
y_mean[841]
                            4.5e-4
                                            -0.05-9.3e-3
                                                             0.01
                                                                             0.07
y_mean[842]
                     0.01
                                      0.03
                                                                     0.03
                                                                                     4346
                                                                                              1.0
                      3.0
                            1.2e-3
                                      0.08
                                              2.85
                                                     2.94
                                                              3.0
                                                                     3.05
                                                                             3.15
                                                                                     3999
                                                                                              1.0
y_mean[843]
                     0.44
                                                             0.44
y_mean[844]
                           4.6e-4
                                      0.03
                                             0.38
                                                     0.42
                                                                     0.46
                                                                              0.5
                                                                                     4544
                                                                                              1.0
y_mean[845]
                     0.06
                            4.8e-4
                                      0.03-4.2e-3
                                                     0.04
                                                             0.06
                                                                     0.08
                                                                             0.12
                                                                                     4254
                                                                                              1.0
                     0.68
                           4.3e-4
                                      0.03
                                             0.62
                                                     0.66
                                                             0.68
                                                                      0.7
                                                                             0.73
                                                                                     4306
                                                                                              1.0
y_mean[846]
                           6.6e-4
                                      0.05
                                              1.11
                                                     1.17
                                                              1.2
                                                                     1.23
                                                                             1.29
                                                                                     4767
y_mean[847]
                      1.2
                                                                                              1.0
                     0.58
                           4.6e-4
                                      0.03
                                             0.52
                                                     0.56
                                                             0.58
                                                                      0.6
                                                                             0.65
                                                                                     4721
                                                                                              1.0
y_mean[848]
                    -0.47
                            3.6e-4
                                      0.02
                                            -0.52
                                                    -0.49
                                                            -0.47
                                                                    -0.46
                                                                            -0.42
                                                                                     4366
                                                                                              1.0
y_mean[849]
                    -0.54
                           2.8e-4
                                      0.02
                                            -0.57
                                                            -0.54
                                                                             -0.5
                                                                                     4828
y_mean[850]
                                                    -0.55
                                                                    -0.52
                                                                                              1.0
                     2.63
                            1.2e-3
                                      0.08
                                             2.48
                                                     2.58
                                                             2.64
                                                                     2.69
                                                                             2.79
                                                                                     3895
y_mean[851]
                                                                                              1.0
                     0.14
                           5.2e-4
                                      0.03
                                             0.07
                                                     0.12
                                                             0.14
                                                                     0.16
                                                                             0.21
                                                                                     4445
y_mean[852]
                                                                                              1.0
                                                             -1.1
                     -1.1
                           4.1e-4
                                      0.03
                                            -1.15
                                                    -1.11
                                                                    -1.08
                                                                           -1.04
                                                                                     4457
                                                                                              1.0
y_mean[853]
y_mean[854]
                    -0.63
                           3.1e-4
                                      0.02
                                            -0.67
                                                    -0.64
                                                            -0.63
                                                                    -0.61
                                                                            -0.58
                                                                                     4772
                                                                                              1.0
                    -0.54
                           5.9e-4
                                            -0.61
                                                            -0.54
                                                                            -0.46
                                                                                     4215
                                      0.04
                                                    -0.56
                                                                    -0.51
                                                                                              1.0
y_mean[855]
                     0.51
                           7.2e-4
                                      0.05
                                             0.42
                                                     0.47
                                                             0.51
                                                                     0.54
                                                                              0.6
                                                                                     4559
                                                                                              1.0
y_mean[856]
y_mean[857]
                     0.26
                           5.5e-4
                                      0.04
                                             0.19
                                                     0.24
                                                             0.26
                                                                     0.28
                                                                             0.33
                                                                                     4268
                                                                                              1.0
                    -0.75
                           4.3e-4
                                      0.03
                                             -0.8
                                                    -0.77
                                                            -0.75
                                                                    -0.73
                                                                            -0.69
y_mean[858]
                                                                                     4534
                                                                                              1.0
                     0.14
                           3.1e-4
                                      0.02
                                              0.1
                                                     0.12
                                                             0.14
                                                                     0.15
                                                                             0.18
                                                                                     4805
y_mean[859]
                                                                                              1.0
y_mean[860]
                           4.9e-4
                                      0.03
                                             0.69
                                                     0.73
                                                             0.75
                                                                             0.81
                     0.75
                                                                     0.77
                                                                                     4051
                                                                                              1.0
                     0.15
                           3.1e-4
                                      0.02
                                             0.11
                                                     0.14
                                                             0.15
                                                                     0.16
                                                                             0.19
                                                                                     4650
                                                                                              1.0
y_mean[861]
y_mean[862]
                    -0.44
                           3.2e-4
                                      0.02
                                            -0.48
                                                    -0.46
                                                            -0.44
                                                                    -0.43
                                                                             -0.4
                                                                                     4412
                                                                                              1.0
                    -0.07
                           3.3e-4
                                      0.02
                                            -0.12
                                                    -0.09
                                                            -0.07
                                                                    -0.06
                                                                           -0.03
                                                                                     4844
y_mean[863]
                                                                                              1.0
                    -1.11
                                      0.04
                                            -1.18
                                                    -1.13
                                                                            -1.04
                           5.3e-4
                                                            -1.11
                                                                    -1.09
                                                                                     4459
y_mean[864]
                                                                                              1.0
                     1.48
                            1.0e-3
                                      0.07
                                              1.34
                                                     1.44
                                                             1.48
                                                                     1.53
                                                                             1.62
                                                                                     4779
y_mean[865]
                                                                                              1.0
                      0.7
                           4.6e-4
                                      0.03
                                             0.64
                                                              0.7
                                                                     0.72
                                                                             0.76
                                                                                     4419
                                                     0.68
                                                                                              1.0
y_mean[866]
y_mean[867]
                    -0.47
                            3.0e-4
                                      0.02
                                            -0.51
                                                    -0.48
                                                            -0.47
                                                                    -0.46
                                                                            -0.43
                                                                                     4751
                                                                                              1.0
                                             0.18
                                                                                     4305
                     0.23
                           3.9e-4
                                      0.03
                                                     0.21
                                                             0.23
                                                                     0.24
                                                                             0.28
                                                                                              1.0
y_mean[868]
                           8.5e-4
y_mean[869]
                     1.43
                                      0.06
                                              1.31
                                                     1.39
                                                             1.43
                                                                     1.46
                                                                             1.54
                                                                                     4641
                                                                                              1.0
y_mean[870]
                    -0.26
                           5.2e-4
                                      0.04
                                                    -0.28
                                                            -0.26
                                                                           -0.19
                                            -0.33
                                                                    -0.24
                                                                                     4604
                                                                                              1.0
                    -0.58
                           3.8e-4
                                      0.03
                                            -0.63
                                                     -0.6
                                                            -0.58
                                                                    -0.57
                                                                            -0.53
                                                                                     4714
                                                                                              1.0
y_mean[871]
y_mean[872]
                     0.76
                           4.9e-4
                                      0.03
                                             0.69
                                                     0.74
                                                             0.76
                                                                     0.78
                                                                             0.83
                                                                                     4924
                                                                                              1.0
                    -0.98
                           6.6e-4
                                            -1.07
                                                    -1.01
                                                            -0.98
                                                                           -0.89
y_mean[873]
                                      0.04
                                                                    -0.95
                                                                                     4303
                                                                                              1.0
                                             0.67
                                                     0.75
                                                             0.78
                                                                              0.9
                     0.78
                           8.5e-4
                                      0.06
                                                                     0.82
                                                                                     4397
y_mean[874]
                                                                                              1.0
y_mean[875]
                     1.33
                           6.0e-4
                                      0.04
                                              1.25
                                                     1.31
                                                             1.33
                                                                     1.36
                                                                             1.42
                                                                                     4632
                                                                                              1.0
                                                            -0.57
                    -0.57
                            4.2e-4
                                      0.03
                                            -0.63
                                                    -0.59
                                                                    -0.55
                                                                           -0.51
                                                                                     4663
                                                                                              1.0
y_mean[876]
                    -0.53
                           3.0e-4
                                      0.02
                                            -0.57
                                                    -0.54
                                                            -0.53
                                                                    -0.52
                                                                           -0.49
                                                                                     4910
y_mean[877]
                                                                                              1.0
                                            -0.15
                                                                    -0.05-1.6e-3
                    -0.08
                           6.0e-4
                                      0.04
                                                     -0.1
                                                            -0.08
                                                                                     3937
                                                                                              1.0
y_mean[878]
                    -0.22
                                            -0.28
                                                            -0.22
                                                                     -0.2
                                                                           -0.16
y_mean[879]
                           4.1e-4
                                      0.03
                                                    -0.24
                                                                                     5033
                                                                                              1.0
y_mean[880]
                     0.39
                           5.7e-4
                                      0.04
                                             0.32
                                                     0.37
                                                             0.39
                                                                     0.41
                                                                             0.46
                                                                                     4060
                                                                                              1.0
                           6.0e-4
                                            -0.23
                                                    -0.18
                    -0.16
                                      0.04
                                                            -0.16
                                                                    -0.13
                                                                           -0.08
                                                                                     4131
y_mean[881]
                                                                                              1.0
                           4.0e-4
                                      0.03
                                            -0.14
                                                     -0.1
                                                            -0.08
                                                                    -0.07
                                                                            -0.03
                                                                                     4515
y_mean[882]
                    -0.08
                                                                                              1.0
y_mean[883]
                      2.1
                            1.0e-3
                                      0.07
                                             1.97
                                                     2.06
                                                              2.1
                                                                     2.15
                                                                             2.23
                                                                                     4333
                                                                                              1.0
                                                                     0.15
y_mean[884]
                     0.14
                           2.5e-4
                                      0.02
                                             0.11
                                                     0.13
                                                             0.14
                                                                             0.18
                                                                                     5090
                                                                                              1.0
y_mean[885]
                    -0.53
                           3.1e-4
                                      0.02
                                            -0.57
                                                    -0.54
                                                            -0.53
                                                                    -0.51
                                                                            -0.48
                                                                                     4581
                                                                                              1.0
```

y_mean[886]	-0.33	4.3e-4	0.03	-0.38	-0.35	-0.33	-0.31	-0.28	4133	1.0
y_mean[887]	-1.14	4.2e-4	0.03	-1.19	-1.16	-1.14	-1.12	-1.09	4404	1.0
y_mean[888]	0.23	4.7e-4	0.03	0.17	0.21	0.23	0.25	0.29	4005	1.0
y_mean[889]	-0.46	3.4e-4	0.02	-0.51	-0.48	-0.46	-0.44	-0.41	5098	1.0
y_mean[890]	0.98	6.9e-4	0.04	0.9	0.95	0.98	1.01	1.07	3975	1.0
y_mean[891]	-0.79	4.4e-4	0.03	-0.85	-0.81	-0.79	-0.77	-0.73	4791	1.0
y_mean[892]	1.4	7.1e-4	0.05	1.31	1.37	1.4	1.43	1.49	4159	1.0
y_mean[893]	-0.38	3.9e-4	0.03	-0.42	-0.39	-0.38	-0.36	-0.33	4184	1.0
y_mean[894]	1.08	4.2e-4	0.03	1.03	1.06	1.08	1.1	1.14	4430	1.0
y_mean[895]	-0.02	2.9e-4	0.02	-0.06	-0.03		-5.6e-3	0.02	4759	1.0
y_mean[896]	1.33	7.5e-4	0.05	1.23	1.29	1.33	1.36	1.42	3967	1.0
y_mean[897]	0.77	4.9e-4	0.03	0.71	0.74	0.77	0.79	0.83	4063	1.0
y_mean[898]	-0.54	2.8e-4	0.03	-0.57	-0.55	-0.54	-0.52	-0.5	4742	1.0
y_mean[899]	0.34	6.5e-4	0.02	0.13	0.33	0.34	0.32	0.29	4175	1.0
y_mean[099] y_mean[900]	-0.53	2.9e-4	0.04	-0.57	-0.55	-0.54	-0.52	-0.49	4898	1.0
· ·		4.3e-4	0.02	-0.57	-0.55	-0.48	-0.32	-0.49	4390	1.0
y_mean[901]	-0.48							0.77		
y_mean[902]	0.69	6.0e-4	0.04	0.62	0.67	0.69	0.72		4131	1.0
y_mean[903]	-0.65	4.0e-4	0.03	-0.71	-0.67	-0.66	-0.64	-0.6	4505	1.0
y_mean[904]	0.03	2.8e-4		4.4e-3	0.02	0.03	0.05	0.07	4695	1.0
y_mean[905]	-0.67	3.6e-4	0.02	-0.72	-0.69	-0.67	-0.66	-0.62	4673	1.0
y_mean[906]	-0.19	4.4e-4	0.03	-0.25	-0.21	-0.19	-0.17	-0.13	5004	1.0
y_mean[907]	-0.9	5.2e-4	0.03	-0.96	-0.92	-0.9	-0.87	-0.83	4211	1.0
y_mean[908]	1.72	8.3e-4	0.06	1.61	1.68	1.72	1.76	1.82	4603	1.0
y_mean[909]	0.29	2.8e-4	0.02	0.25	0.28	0.29	0.3	0.33	5151	1.0
y_mean[910]	-0.68	7.6e-4	0.05	-0.78	-0.72	-0.68	-0.64	-0.58	4913	1.0
y_mean[911]	-0.12	3.5e-4	0.02	-0.17	-0.14	-0.12	-0.11	-0.07	4762	1.0
y_mean[912]	0.16	3.4e-4	0.02	0.12	0.15	0.16	0.18	0.21	4354	1.0
y_mean[913]	-0.01	5.4e-4	0.04	-0.08	-0.03	-0.01	0.01	0.06	4213	1.0
y_mean[914]	0.31	4.0e-4	0.03	0.26	0.3	0.31	0.33	0.36	4357	1.0
y_mean[915]	0.02	6.4e-4	0.04	-0.06-	4.4e-3	0.02	0.05	0.1	4098	1.0
y_mean[916]	0.88	7.6e-4	0.05	0.77	0.84	0.88	0.91	0.98	4849	1.0
y_mean[917]	-1.03	4.4e-4	0.03	-1.08	-1.05	-1.03	-1.01	-0.97	4641	1.0
y_mean[918]	-0.08	3.7e-4	0.03	-0.13	-0.1	-0.09	-0.07	-0.03	4693	1.0
y_mean[919]	0.29	3.0e-4	0.02	0.25	0.28	0.29	0.31	0.33	4967	1.0
y_mean[920]	0.21	3.8e-4	0.02	0.16	0.19	0.21	0.22	0.26	4131	1.0
y_mean[921]	0.21	7.2e-4	0.05	0.12	0.18	0.21	0.25	0.31	4495	1.0
y_mean[922]	1.4	5.9e-4	0.04	1.32	1.37	1.4	1.43	1.48	4629	1.0
y_mean[923]	0.21	4.0e-4	0.03	0.15	0.19	0.21	0.23	0.26	5489	1.0
y_mean[924]	-0.28	4.9e-4	0.03	-0.35	-0.31	-0.28	-0.26	-0.22	4661	1.0
y_mean[925]	-0.19	4.2e-4	0.03	-0.24	-0.21	-0.19	-0.17	-0.13	4670	1.0
y_mean[926]	-0.47	3.1e-4	0.02	-0.51	-0.49	-0.47	-0.46	-0.43	4479	1.0
y_mean[927]	0.18	2.7e-4	0.02	0.14	0.17	0.18	0.19	0.22	5605	1.0
y_mean[928]	0.9	5.1e-4	0.03	0.83	0.87	0.9	0.92	0.96	4597	1.0
y_mean[929]	-0.34	4.3e-4	0.03	-0.39	-0.35	-0.34	-0.32	-0.28	4122	1.0
y_mean[930]	1.16	8.3e-4	0.06	1.05	1.12	1.16	1.2	1.27	4575	1.0
y_mean[931]	-1.38	7.9e-4	0.05	-1.48	-1.42	-1.38	-1.35	-1.28	4161	1.0
y_mean[932]	0.53	4.9e-4	0.03	0.47	0.51	0.53	0.55	0.59	4076	1.0
y_mean[933]	1.84	6.5e-4	0.03	1.76	1.81	1.84	1.87	1.92	4068	1.0
3 _mcan [300]	1.04	0.06 4	0.04	1.70	1.01	1.04	1.01	1.52	1000	1.0

y_mean[934]	1.11	8.0e-4	0.05	1.01	1.08	1.11	1.15	1.22	4294	1.0
y_mean[935]	2.6	1.2e-3	0.08	2.44	2.54	2.6	2.65	2.74	4048	1.0
y_mean[936]	-0.41	7.2e-4	0.05	-0.51	-0.45	-0.41	-0.38	-0.32	4446	1.0
y_mean[937]	-0.51	2.9e-4	0.02	-0.55	-0.52	-0.51	-0.5	-0.47	5167	1.0
y_mean[938]	1.1	4.5e-4	0.03	1.04	1.08	1.1	1.12	1.16	4308	1.0
y_mean[939]	-0.36	4.7e-4	0.03	-0.42	-0.38	-0.36	-0.34	-0.3	4273	1.0
y_mean[940]	0.2	3.4e-4	0.02	0.15	0.18	0.2	0.21	0.24	4922	1.0
y_mean[941]	-0.77	9.2e-4	0.06	-0.89	-0.82	-0.77	-0.73	-0.65	4629	1.0
y_mean[942]	-0.13	3.7e-4	0.02	-0.18	-0.15	-0.13	-0.11	-0.08	4356	1.0
y_mean[943]	0.48	4.5e-4	0.03	0.43	0.46	0.48	0.5	0.54	4460	1.0
y_mean[944]	0.99	7.1e-4	0.05	0.89	0.95	0.99	1.02	1.08	4425	1.0
y_mean[945]	-0.3	2.9e-4	0.02	-0.34	-0.32	-0.3	-0.29	-0.26	4680	1.0
y_mean[946]	-0.25	5.0e-4	0.03	-0.32	-0.27	-0.25	-0.23	-0.18	4804	1.0
y_mean[947]	1.77	9.3e-4	0.06	1.66	1.73	1.77	1.81	1.89	4230	1.0
y_mean[948]	1.02	6.2e-4	0.04	0.94	0.99	1.02	1.05	1.1	4280	1.0
y_mean[949]	0.33	5.3e-4	0.03	0.27	0.31	0.33	0.36	0.4	4003	1.0
y_mean[950]	0.06	4.2e-4	0.03	4.9e-3	0.04	0.06	0.08	0.12	4633	1.0
y_mean[951]	0.38	5.6e-4	0.04	0.31	0.36	0.38	0.41	0.45	4115	1.0
y_mean[952]	0.2	4.7e-4	0.03	0.14	0.18	0.2	0.22	0.26	4954	1.0
y_mean[953]	-0.53	3.6e-4	0.03	-0.58	-0.55	-0.53	-0.51	-0.48	4991	1.0
y_mean[954]	-0.64	3.1e-4	0.02	-0.68	-0.65	-0.64	-0.63	-0.6	4768	1.0
y_mean[955]	-1.02	4.5e-4	0.03	-1.08	-1.04	-1.02	-1.0	-0.96	4703	1.0
y_mean[956]	-0.66	3.3e-4	0.02	-0.71	-0.68	-0.66	-0.65	-0.62	4791	1.0
y_mean[957]	-0.54	3.8e-4	0.03	-0.59	-0.56	-0.54	-0.53	-0.49	4744	1.0
y_mean[958]	1.13	8.6e-4	0.06	1.01	1.09	1.13	1.17	1.24	4530	1.0
y_mean[959]	0.43	7.9e-4	0.05	0.33	0.4	0.43	0.47	0.53	4126	1.0
y_mean[960]	-0.21	3.3e-4	0.02	-0.25	-0.22	-0.21	-0.19	-0.16	4673	1.0
y_mean[961]	-0.38	3.4e-4	0.02	-0.42	-0.39	-0.38	-0.36	-0.33	4387	1.0
y_mean[962]	-0.88	4.7e-4	0.03	-0.94	-0.9	-0.88	-0.86	-0.82	4529	1.0
y_mean[963]	-0.3	3.1e-4	0.02	-0.34	-0.31	-0.3	-0.28	-0.26	4786	1.0
y_mean[964]	-0.32	5.4e-4	0.04	-0.39	-0.34	-0.32	-0.29	-0.24	4585	1.0
y_mean[965]	-0.61	4.2e-4	0.03	-0.67	-0.63	-0.61	-0.6	-0.56	4793	1.0
y_mean[966]	-0.47	3.3e-4	0.02	-0.52	-0.49	-0.47	-0.46	-0.43	5122	1.0
y_mean[967]	-0.1	3.4e-4	0.02	-0.14	-0.11	-0.1	-0.08	-0.05	4728	1.0
y_mean[968]	1.57	8.1e-4	0.05	1.46	1.53	1.56	1.6	1.67	4242	1.0
y_mean[969]	-0.95	4.5e-4	0.03	-1.01	-0.97	-0.95	-0.93	-0.89	4485	1.0
y_mean[970]	-1.5e-3	5.2e-4	0.03	-0.07	-0.02-	-1.7e-3	0.02	0.06	4138	1.0
y_mean[971]	-0.57	3.1e-4	0.02	-0.62	-0.59	-0.57	-0.56	-0.53	5111	1.0
y_mean[972]	0.22	4.5e-4	0.03	0.17	0.2	0.22	0.24	0.28	4283	1.0
y_mean[973]	-1.15	4.6e-4	0.03	-1.2	-1.17	-1.15	-1.12	-1.08	4476	1.0
y_mean[974]	-0.74	3.9e-4	0.03	-0.79	-0.76	-0.74	-0.72	-0.69	4652	1.0
y_mean[975]	-0.09	3.9e-4	0.03	-0.14	-0.11	-0.09	-0.07	-0.04	4316	1.0
y_mean[976]	-0.24	4.3e-4	0.03	-0.3	-0.26	-0.24	-0.22	-0.18	4873	1.0
y_mean[977]	-0.38	3.8e-4	0.02	-0.43	-0.4	-0.38	-0.36	-0.33	4220	1.0
y_mean[978]	0.02	2.8e-4	0.02	-0.02	7.6e-3	0.02	0.03	0.06	4699	1.0
y_mean[979]	-0.04	3.0e-4	0.02	-0.08	-0.06	-0.04	-0.03-	1.9e-3	4761	1.0
y_mean[980]	-0.24	3.3e-4	0.02	-0.29	-0.26	-0.24	-0.23	-0.19	5156	1.0
y_mean[981]	-0.58	2.9e-4	0.02	-0.62	-0.6	-0.58	-0.57	-0.54	4785	1.0

```
0.04
                                             1.21
                                                             1.29
                                                                     1.32
                                                                             1.37
                                                                                    4030
y_mean[982]
                     1.29
                           6.5e-4
                                                     1.27
                                                                                             1.0
                      0.5
                           7.4e-4
                                      0.05
                                              0.4
                                                     0.47
                                                              0.5
                                                                     0.53
                                                                              0.6
                                                                                    4718
y_mean[983]
                                                                                             1.0
                     -0.3
                           3.1e-4
                                      0.02
                                            -0.34
                                                    -0.31
                                                             -0.3
                                                                    -0.28
y_mean[984]
                                                                           -0.26
                                                                                    4496
                                                                                             1.0
                    -1.07
                           4.3e-4
                                      0.03
                                            -1.13
                                                    -1.09
                                                           -1.07
                                                                    -1.05
                                                                           -1.02
                                                                                    4564
                                                                                             1.0
y_mean[985]
                                             0.11
                                                                             0.27
                     0.19
                           6.4e-4
                                      0.04
                                                     0.16
                                                             0.19
                                                                     0.22
                                                                                    4067
y_mean[986]
                                                                                             1.0
                     0.06
                           3.2e-4
                                      0.02
                                             0.01
                                                     0.04
                                                             0.06
                                                                     0.07
                                                                              0.1
                                                                                    4701
                                                                                             1.0
y_mean[987]
                    -0.33
                                            -0.38
                                                                           -0.27
y_mean[988]
                           4.3e-4
                                      0.03
                                                    -0.34
                                                            -0.33
                                                                    -0.31
                                                                                    4135
                                                                                             1.0
                     0.15
                           3.3e-4
                                              0.1
                                                     0.13
                                                             0.15
                                                                     0.16
                                                                             0.19
y_mean[989]
                                      0.02
                                                                                     4282
                                                                                             1.0
                     3.09
                           1.5e-3
                                       0.1
                                              2.9
                                                     3.02
                                                             3.09
                                                                     3.15
                                                                             3.28
                                                                                    4507
                                                                                             1.0
y_mean[990]
                    -0.62
                           3.3e-4
                                      0.02
                                            -0.66
                                                    -0.64
                                                            -0.62
                                                                           -0.58
                                                                                    4790
y_mean[991]
                                                                    -0.61
                                                                                             1.0
                    -0.49
                           4.3e-4
                                      0.03
                                            -0.54
                                                     -0.5
                                                            -0.49
                                                                    -0.47
                                                                           -0.43
                                                                                    4409
                                                                                             1.0
y_mean[992]
                     0.12
                           5.3e-4
                                      0.04
                                             0.05
                                                      0.1
                                                             0.12
                                                                     0.14
                                                                             0.19
                                                                                    4432
                                                                                             1.0
y_mean[993]
                     0.24
                           3.0e-4
                                      0.02
                                              0.2
                                                     0.23
                                                             0.24
                                                                     0.26
                                                                             0.28
                                                                                    5557
y_mean[994]
                                                                                             1.0
                    -0.68
                                            -0.72
                                                            -0.68
                                                                           -0.63
                           3.4e-4
                                      0.02
                                                    -0.69
                                                                    -0.66
                                                                                    4773
y_mean[995]
                                                                                             1.0
                    -1.08
                           4.1e-4
                                      0.03
                                            -1.13
                                                     -1.1
                                                            -1.08
                                                                    -1.06
                                                                           -1.03
                                                                                    4469
y_mean[996]
                                                                                             1.0
                           3.9e-4
                                            -0.39
                                                            -0.34
y_mean[997]
                    -0.34
                                      0.03
                                                    -0.36
                                                                    -0.32
                                                                           -0.29
                                                                                    4250
                                                                                             1.0
y_mean[998]
                     0.59
                           6.2e-4
                                      0.04
                                             0.52
                                                     0.56
                                                             0.59
                                                                     0.62
                                                                             0.67
                                                                                    3908
                                                                                             1.0
                    -0.48
                                      0.02
                                            -0.52
                                                    -0.49
                                                            -0.48
                                                                           -0.43
y_mean[999]
                           3.3e-4
                                                                    -0.46
                                                                                    4967
                                                                                             1.0
y_mean[1000]
                    -0.65
                           3.5e-4
                                      0.02
                                             -0.7
                                                    -0.67
                                                            -0.65
                                                                    -0.64
                                                                             -0.6
                                                                                    4720
                                                                                             1.0
y mean[1001]
                    -0.38
                           3.5e-4
                                      0.02
                                            -0.43
                                                     -0.4
                                                           -0.38
                                                                    -0.37
                                                                           -0.34
                                                                                    4818
                                                                                             1.0
y_mean[1002]
                    -0.54
                           5.7e-4
                                      0.04
                                            -0.61
                                                    -0.56
                                                           -0.53
                                                                    -0.51
                                                                           -0.46
                                                                                    4645
                                                                                             1.0
                      0.9
                           5.8e-4
                                      0.04
                                             0.82
                                                     0.87
                                                              0.9
                                                                     0.92
                                                                             0.97
                                                                                    4227
y_mean[1003]
                                                                                             1.0
                           6.9e-4
                                      0.05
                                             0.96
                                                             1.05
y_mean[1004]
                     1.05
                                                     1.02
                                                                     1.08
                                                                             1.14
                                                                                    4546
                                                                                             1.0
                    -0.48
                           2.9e-4
                                      0.02
                                            -0.52
                                                     -0.5
                                                            -0.48
                                                                    -0.47
                                                                            -0.44
                                                                                    4787
                                                                                             1.0
y_mean[1005]
y_mean[1006]
                     0.81
                           6.1e-4
                                      0.04
                                             0.73
                                                     0.78
                                                             0.81
                                                                     0.84
                                                                             0.89
                                                                                    4404
                                                                                             1.0
                     1.22
                           6.2e-4
                                      0.04
                                             1.14
                                                     1.19
                                                             1.22
                                                                     1.25
                                                                              1.3
                                                                                    4057
y_mean[1007]
                                                                                             1.0
                    -0.07
                                      0.02
                                                           -0.07
                                                                                    4749
                           3.2e-4
                                            -0.11
                                                    -0.08
                                                                    -0.05
                                                                           -0.02
y_mean[1008]
                                                                                             1.0
y_mean[1009]
                     -0.1
                           4.3e-4
                                      0.03
                                            -0.15
                                                    -0.11
                                                             -0.1
                                                                    -0.08
                                                                           -0.04
                                                                                    4176
                                                                                             1.0
                 -8.9e-3
                           3.0e-4
                                      0.02
                                            -0.05
                                                    -0.02-9.2e-3 5.0e-3
                                                                             0.03
                                                                                    4755
                                                                                             1.0
y_mean[1010]
y_mean[1011]
                    -0.29
                           2.7e-4
                                      0.02
                                            -0.33
                                                    -0.31
                                                            -0.29
                                                                    -0.28
                                                                           -0.26
                                                                                    5070
                                                                                             1.0
y_mean[1012]
                                            -0.45
                                                            -0.41
                    -0.41
                           2.7e-4
                                      0.02
                                                    -0.43
                                                                     -0.4
                                                                           -0.38
                                                                                    4785
                                                                                             1.0
                                                                           -1.05
y_mean[1013]
                    -1.11
                           4.5e-4
                                      0.03
                                            -1.17
                                                    -1.13
                                                            -1.11
                                                                    -1.09
                                                                                    4501
                                                                                             1.0
                     0.33
                           5.0e-4
                                      0.03
                                             0.27
                                                     0.31
                                                             0.33
                                                                              0.4
y_mean[1014]
                                                                     0.35
                                                                                    4129
                                                                                             1.0
                     0.18
                           5.6e-4
                                      0.04
                                             0.11
                                                     0.16
                                                             0.18
                                                                     0.21
                                                                             0.25
                                                                                    4265
                                                                                             1.0
y_mean[1015]
                   8.3e-4
                           4.6e-4
                                      0.03
                                            -0.06
                                                    -0.02 5.8e-4
                                                                     0.02
                                                                             0.06
                                                                                    4312
y mean[1016]
                                                                                             1.0
y_mean[1017]
                    -0.34
                           3.1e-4
                                      0.02
                                            -0.38
                                                    -0.35
                                                            -0.34
                                                                    -0.32
                                                                           -0.29
                                                                                    5004
                                                                                             1.0
                                            -0.38
                                                           -0.34
                                                                             -0.3
                    -0.34
                           3.2e-4
                                      0.02
                                                    -0.36
                                                                    -0.33
                                                                                    4467
y_mean[1018]
                                                                                             1.0
y_mean[1019]
                    -0.38
                           2.9e-4
                                      0.02
                                            -0.42
                                                     -0.4
                                                            -0.38
                                                                    -0.37
                                                                            -0.34
                                                                                    4719
                                                                                             1.0
                                            -0.03-4.7e-3 8.7e-3
                   9.0e-3
                           2.8e-4
                                      0.02
                                                                     0.02
                                                                             0.05
                                                                                    4735
                                                                                             1.0
y_mean[1020]
                     0.58
                           4.2e-4
                                      0.03
                                             0.52
                                                     0.56
                                                             0.58
                                                                      0.6
                                                                             0.63
                                                                                    4311
y_mean[1021]
                                                                                             1.0
                                      0.08
                                             2.38
                     2.53
                           1.2e-3
                                                     2.48
                                                             2.53
                                                                     2.58
                                                                             2.68
                                                                                    4194
                                                                                             1.0
y_mean[1022]
y_mean[1023]
                    -0.62
                           3.1e-4
                                      0.02
                                            -0.66
                                                    -0.63
                                                            -0.62
                                                                     -0.6
                                                                           -0.57
                                                                                    4796
                                                                                             1.0
                                             0.31
y_mean[1024]
                     0.37
                           4.7e-4
                                      0.03
                                                     0.35
                                                             0.37
                                                                     0.39
                                                                             0.43
                                                                                    4439
                                                                                             1.0
                    -0.48
                           4.5e-4
                                      0.03
                                            -0.54
                                                     -0.5
                                                                           -0.42
                                                            -0.48
                                                                    -0.46
                                                                                    4410
y_mean[1025]
                                                                                             1.0
                     0.27
                           4.0e-4
                                      0.03
                                             0.21
                                                             0.27
                                                                     0.29
                                                                             0.32
                                                                                    4735
y_mean[1026]
                                                     0.25
                                                                                             1.0
                           3.0e-4
                    -0.01
                                           -0.05
                                                            -0.01 7.8e-4
                                                                             0.03
y_mean[1027]
                                      0.02
                                                    -0.03
                                                                                    4754
                                                                                             1.0
y_mean[1028]
                     0.07
                           5.3e-4
                                      0.04 - 2.9e - 3
                                                     0.04
                                                             0.07
                                                                     0.09
                                                                             0.14
                                                                                    4433
                                                                                             1.0
y_mean[1029]
                     -0.3
                           5.4e-4
                                      0.04
                                            -0.37
                                                    -0.33
                                                            -0.31
                                                                    -0.28
                                                                           -0.23
                                                                                    4525
                                                                                             1.0
```

```
-0.56
y_mean[1030]
                    -0.51
                           3.5e-4
                                     0.02
                                                    -0.53
                                                           -0.51
                                                                    -0.5 -0.47
                                                                                    4480
                                                                                             1.0
                    -0.06
                           3.9e-4
                                     0.03
                                            -0.11
                                                    -0.08
                                                           -0.06
                                                                   -0.04-7.0e-3
                                                                                    4669
y_mean[1031]
                                                                                             1.0
y_mean[1032]
                     0.47
                                     0.03
                                             0.41
                                                             0.47
                                                                    0.48
                                                                                    4839
                           3.8e-4
                                                     0.45
                                                                            0.52
                                                                                             1.0
y_mean[1033]
                     0.51
                           5.7e-4
                                     0.04
                                             0.44
                                                     0.49
                                                             0.51
                                                                    0.54
                                                                            0.59
                                                                                    4399
                                                                                             1.0
                                                     -0.9
                                                           -0.88
y_mean[1034]
                   -0.88
                           4.7e-4
                                     0.03
                                            -0.94
                                                                   -0.86
                                                                           -0.82
                                                                                    4681
                                                                                             1.0
                    -0.83
                           4.7e-4
                                     0.03
                                            -0.89
                                                    -0.85
                                                           -0.83
                                                                   -0.81
                                                                           -0.77
                                                                                    4307
y_mean[1035]
                                                                                             1.0
y_mean[1036]
                   5.0e-3
                           2.9e-4
                                     0.02
                                            -0.03-8.7e-3 4.7e-3
                                                                    0.02
                                                                            0.04
                                                                                    4740
                                                                                             1.0
                           2.9e-4
                                            -0.44
                                                    -0.41
                                                                   -0.38
                                                                           -0.36
y_mean[1037]
                     -0.4
                                     0.02
                                                             -0.4
                                                                                    4690
                                                                                             1.0
                    -0.58
                           3.8e-4
                                     0.03
                                            -0.63
                                                     -0.6
                                                           -0.58
                                                                   -0.56
                                                                           -0.53
                                                                                    5239
                                                                                             1.0
y_mean[1038]
                     3.54
                           1.5e-3
                                     0.09
                                             3.36
                                                     3.48
                                                             3.54
                                                                            3.72
y_mean[1039]
                                                                    3.61
                                                                                    4124
                                                                                             1.0
                     0.22
                           3.8e-4
                                     0.03
                                             0.17
                                                      0.2
                                                             0.22
                                                                    0.23
                                                                            0.27
                                                                                    4400
y_mean[1040]
                                                                                             1.0
                     -0.7
                           3.9e-4
                                     0.03
                                            -0.75
                                                    -0.71
                                                             -0.7
                                                                   -0.68
                                                                           -0.64
                                                                                    4622
y_mean[1041]
                                                                                             1.0
y_mean[1042]
                    -0.12
                           3.6e-4
                                     0.02
                                            -0.16
                                                    -0.14
                                                           -0.12
                                                                    -0.1
                                                                           -0.07
                                                                                    4681
                                                                                             1.0
                     0.32
                                             0.29
                                                             0.32
                           2.5e-4
                                     0.02
                                                     0.31
                                                                    0.33
                                                                            0.36
                                                                                    4981
y_mean[1043]
                                                                                             1.0
                     1.48
                           8.3e-4
                                     0.05
                                             1.38
                                                     1.45
                                                             1.48
                                                                    1.51
                                                                            1.58
                                                                                    3959
y_mean[1044]
                                                                                             1.0
                           4.0e-4
                    -0.74
                                                           -0.74
                                     0.03
                                            -0.79
                                                    -0.76
                                                                   -0.72
                                                                           -0.68
                                                                                    4893
                                                                                             1.0
y_{mean}[1045]
y_mean[1046]
                    -0.44
                           2.8e-4
                                     0.02
                                            -0.48
                                                    -0.46
                                                           -0.44
                                                                   -0.43
                                                                            -0.4
                                                                                    4857
                                                                                             1.0
                     0.11
                                     0.02
                                             0.07
y_mean[1047]
                           3.0e-4
                                                     0.09
                                                             0.11
                                                                    0.12
                                                                            0.15
                                                                                    4464
                                                                                             1.0
y_mean[1048]
                     0.83
                           7.8e-4
                                     0.05
                                             0.73
                                                      0.8
                                                             0.83
                                                                    0.86
                                                                            0.93
                                                                                    3976
                                                                                             1.0
y_mean[1049]
                 -7.9e-3
                           6.1e-4
                                     0.04
                                            -0.08
                                                    -0.03-8.1e-3
                                                                    0.02
                                                                            0.07
                                                                                    3933
                                                                                             1.0
                     -0.7
                           3.6e-4
                                     0.02
                                                    -0.72
                                                             -0.7
                                                                           -0.65
y_mean[1050]
                                            -0.75
                                                                   -0.69
                                                                                    4653
                                                                                             1.0
                    -0.52
                           2.9e-4
                                     0.02
                                            -0.56
                                                    -0.54
                                                           -0.52
                                                                   -0.51
                                                                           -0.48
                                                                                    4881
y_mean[1051]
                                                                                             1.0
                                     0.06
y_mean[1052]
                     1.12
                           9.7e-4
                                              1.0
                                                     1.08
                                                             1.12
                                                                    1.17
                                                                            1.25
                                                                                    4361
                                                                                             1.0
                    -1.01
                           4.6e-4
                                     0.03
                                            -1.06
                                                    -1.03
                                                           -1.01
                                                                   -0.99
                                                                           -0.95
                                                                                    4291
                                                                                             1.0
y_mean[1053]
y_mean[1054]
                     1.29
                           6.2e-4
                                     0.04
                                             1.22
                                                     1.27
                                                             1.29
                                                                    1.32
                                                                            1.37
                                                                                    4095
                                                                                             1.0
                   -0.36
                           3.4e-4
                                     0.02
                                            -0.41
                                                    -0.38
                                                           -0.37
                                                                   -0.35
                                                                           -0.32
                                                                                    4522
y_mean[1055]
                                                                                             1.0
                    -0.14
                                             -0.2
                                                    -0.16
                                                                                    4209
                           4.3e-4
                                     0.03
                                                           -0.14
                                                                   -0.13
                                                                           -0.09
y_mean[1056]
                                                                                             1.0
y_mean[1057]
                     0.58
                           4.1e-4
                                     0.03
                                             0.53
                                                     0.56
                                                             0.58
                                                                     0.6
                                                                            0.63
                                                                                    4327
                                                                                             1.0
                           6.4e-4
                                             1.18
                                                     1.23
                                                                    1.29
                                                                            1.34
                     1.26
                                     0.04
                                                             1.26
                                                                                    4041
y_mean[1058]
                                                                                             1.0
y_mean[1059]
                  8.3e-3
                           3.2e-4
                                     0.02
                                            -0.03-6.1e-3 8.1e-3
                                                                    0.02
                                                                            0.05
                                                                                    4663
                                                                                             1.0
                                     0.02-9.5e-3
                     0.03
                           3.0e-4
                                                     0.02
                                                             0.03
                                                                    0.04
                                                                            0.07
                                                                                    4766
                                                                                             1.0
y_mean[1060]
                                                    -0.57
y_mean[1061]
                    -0.56
                           2.8e-4
                                     0.02
                                            -0.59
                                                            -0.56
                                                                   -0.54
                                                                           -0.52
                                                                                    4819
                                                                                             1.0
                    -0.22
                           3.5e-4
                                     0.02
                                            -0.27
                                                    -0.24
                                                            -0.22
                                                                   -0.21
                                                                           -0.18
y_mean[1062]
                                                                                    4368
                                                                                             1.0
                   -0.48
                           2.7e-4
                                     0.02
                                            -0.52
                                                    -0.49
                                                           -0.48
                                                                   -0.47
                                                                           -0.44
                                                                                    4931
                                                                                             1.0
y_mean[1063]
                   -0.98
                           4.5e-4
                                     0.03
                                            -1.04
                                                     -1.0
                                                           -0.98
                                                                   -0.96
                                                                           -0.92
                                                                                    4657
y mean[1064]
                                                                                             1.0
                    -0.51
                           2.9e-4
                                     0.02
                                            -0.55
                                                    -0.52
                                                           -0.51
                                                                           -0.47
y_mean[1065]
                                                                   -0.49
                                                                                    4850
                                                                                             1.0
                                            -1.07
                                                           -1.02
                                                                           -0.95
                   -1.02
                           4.4e-4
                                     0.03
                                                    -1.04
                                                                   -0.99
                                                                                    4669
y_mean[1066]
                                                                                             1.0
y_mean[1067]
                     -0.6
                           3.5e-4
                                     0.02
                                            -0.64
                                                    -0.61
                                                             -0.6
                                                                   -0.58
                                                                           -0.55
                                                                                    4610
                                                                                             1.0
                    -0.59
                           2.9e-4
                                     0.02
                                            -0.63
                                                    -0.61
                                                           -0.59
                                                                   -0.58
                                                                           -0.55
                                                                                    4831
                                                                                             1.0
y_mean[1068]
                     0.02
                           7.8e-4
                                     0.05
                                            -0.08
                                                    -0.02
                                                             0.02
                                                                    0.05
                                                                            0.12
                                                                                    4282
y_mean[1069]
                                                                                             1.0
                                            -1.23
                   -1.18
                           4.4e-4
                                     0.03
                                                     -1.2
                                                           -1.18
                                                                   -1.16
                                                                           -1.12
                                                                                    4455
                                                                                             1.0
y_mean[1070]
y_mean[1071]
                     2.62
                           9.2e-4
                                     0.06
                                             2.51
                                                     2.58
                                                             2.62
                                                                            2.74
                                                                    2.66
                                                                                    3957
                                                                                             1.0
y_mean[1072]
                    -0.26
                           4.8e-4
                                     0.03
                                            -0.32
                                                    -0.28
                                                           -0.26
                                                                   -0.24
                                                                            -0.2
                                                                                    4050
                                                                                             1.0
                    -0.34
                           4.7e-4
                                            -0.41
                                                           -0.34
                                                                           -0.28
                                     0.03
                                                    -0.37
                                                                   -0.32
                                                                                    5048
y_mean[1073]
                                                                                             1.0
                    -0.39
                           2.6e-4
                                     0.02
                                            -0.43
                                                     -0.4
                                                           -0.39
                                                                   -0.38
                                                                           -0.36
y_mean[1074]
                                                                                    4855
                                                                                             1.0
y_mean[1075]
                     0.63
                           4.2e-4
                                     0.03
                                             0.57
                                                     0.61
                                                             0.63
                                                                    0.64
                                                                            0.68
                                                                                    4303
                                                                                             1.0
y_mean[1076]
                    -0.45
                           3.3e-4
                                     0.02
                                            -0.49
                                                    -0.46
                                                           -0.45
                                                                   -0.43
                                                                            -0.4
                                                                                    4367
                                                                                             1.0
y_mean[1077]
                     0.13
                           3.9e-4
                                     0.03
                                             0.08
                                                     0.11
                                                             0.13
                                                                    0.15
                                                                            0.18
                                                                                    4936
                                                                                             1.0
```

y_mean[1078]	0.97	7.0e-4	0.04	0.88	0.94	0.97	1.0	1.05	3931	1.0
y_mean[1079]	0.07	3.5e-4	0.02	0.03	0.06	0.07	0.09	0.12	4825	1.0
y_mean[1080]	-0.12	4.6e-4	0.03	-0.17	-0.14	-0.12	-0.1	-0.06	4069	1.0
y_mean[1081]	-0.96	6.5e-4	0.04	-1.04	-0.98	-0.96	-0.93	-0.87	4254	1.0
y_mean[1082]	0.01	3.0e-4	0.02	-0.03	5.1e-4	0.01	0.03	0.06	5080	1.0
y_mean[1083]	-1.13	4.5e-4	0.03	-1.19	-1.15	-1.13	-1.11	-1.07	4454	1.0
y_mean[1084]	0.38	6.0e-4	0.04	0.3	0.35	0.38	0.4	0.46	4506	1.0
y_mean[1085]	0.88	5.7e-4	0.04	0.81	0.85	0.88	0.9	0.95	4046	1.0
y_mean[1086]	0.12	3.1e-4	0.02	0.08	0.11	0.12	0.14	0.16	4365	1.0
y_mean[1087]	1.35	6.8e-4	0.04	1.26	1.32	1.35	1.38	1.43	4027	1.0
y_mean[1088]	0.79	4.9e-4	0.03	0.73	0.77	0.79	0.82	0.86	4125	1.0
y_mean[1089]	0.03	2.8e-4		7.3e-3	0.02	0.03	0.02	0.07	4699	1.0
y_mean[1090]	0.03	3.6e-4	0.02	-0.02	0.02	0.03	0.05	0.08	4889	1.0
y_mean[1090] y_mean[1091]	0.03	5.1e-4	0.03		-5.0e-3	0.03	0.03	0.08	4278	1.0
y_mean[1091] y_mean[1092]	-0.28	4.6e-4	0.03	-0.34	-0.31	-0.29	-0.27	-0.23	4157	1.0
y_mean[1092] y_mean[1093]	-1.0	4.0e-4 4.0e-4	0.03	-1.05	-1.02	-1.0	-0.27	-0.25	4563	1.0
V —					-1.02 -4.5e-6					
y_mean[1094]	0.02	3.3e-4	0.02			0.02	0.03	0.06	4751	1.0
y_mean[1095]	0.38	3.6e-4	0.02	0.33	0.36	0.38	0.39	0.42	4354	1.0
y_mean[1096]	0.49	5.0e-4	0.03	0.42	0.46	0.49	0.51	0.55	4001	1.0
y_mean[1097]	0.14	6.1e-4	0.04	0.06	0.11	0.14	0.16	0.21	4047	1.0
y_mean[1098]	0.64	4.3e-4	0.03	0.58	0.62	0.64	0.66	0.69	4260	1.0
y_mean[1099]	-0.59	2.9e-4	0.02	-0.63	-0.61	-0.6	-0.58	-0.55	4828	1.0
y_mean[1100]	-0.28	3.9e-4	0.03	-0.33	-0.3	-0.28	-0.27	-0.23	4310	1.0
y_mean[1101]	-0.9	4.6e-4	0.03	-0.96	-0.92	-0.9	-0.87	-0.83	4721	1.0
y_mean[1102]	-0.67	3.7e-4	0.03	-0.72	-0.68	-0.67	-0.65	-0.62	4909	1.0
y_mean[1103]	0.15	3.3e-4	0.02	0.1	0.13	0.15	0.16	0.19	4259	1.0
y_mean[1104]	-1.06	5.1e-4	0.03	-1.13	-1.08	-1.06	-1.04	-0.99	4362	1.0
y_mean[1105]	0.09	3.0e-4	0.02	0.06	0.08	0.09	0.11	0.13	4501	1.0
y_mean[1106]	-0.37	7.5e-4	0.05	-0.47	-0.41	-0.38	-0.34	-0.28	4044	1.0
y_mean[1107]	-0.14	3.8e-4	0.03	-0.19	-0.16	-0.14	-0.13	-0.09	4660	1.0
y_mean[1108]	1.36	6.7e-4	0.04	1.28	1.33	1.36	1.39	1.45	4242	1.0
y_mean[1109]	-0.18	3.9e-4	0.03	-0.23	-0.2	-0.18	-0.16	-0.12	4928	1.0
y_mean[1110]	-0.69	3.9e-4	0.03	-0.74	-0.7	-0.69	-0.67	-0.63	4639	1.0
y_mean[1111]	1.42	7.0e-4	0.04	1.33	1.39	1.42	1.45	1.5	4012	1.0
y_mean[1112]	0.78	1.2e-3	0.08	0.63	0.73	0.78	0.84	0.94	4604	1.0
y_mean[1113]	1.87	7.4e-4	0.05	1.77	1.84	1.87	1.9	1.96	4339	1.0
y_mean[1114]	-0.41	3.3e-4	0.02	-0.45	-0.43	-0.41	-0.4	-0.37	4568	1.0
y_mean[1115]	-0.56	4.6e-4	0.03	-0.62	-0.58	-0.56	-0.54	-0.5	4633	1.0
y_mean[1116]	-0.35	3.7e-4	0.02	-0.4	-0.37	-0.35	-0.34	-0.3	4392	1.0
y_mean[1117]	0.27	7.2e-4	0.05	0.17	0.23	0.27	0.3	0.37	4779	1.0
y_mean[1118]	0.34	5.3e-4	0.03	0.27	0.32	0.34	0.36	0.41	4002	1.0
y_mean[1119]	-0.04		0.02	-0.08	-0.05	-0.04		9.9e-3	4760	1.0
y_mean[1120]	-0.2	5.7e-4	0.04	-0.28	-0.23	-0.2	-0.17	-0.12	5061	1.0
y_mean[1121]	0.35	5.2e-4	0.03	0.28	0.32	0.35	0.37	0.41	4257	1.0
y_mean[1122]	-1.44	6.6e-4	0.04	-1.52	-1.47	-1.44	-1.41	-1.36	4301	1.0
y_mean[1123]	0.7	6.7e-4	0.04	0.62	0.68	0.7	0.73	0.79	4097	1.0
y_mean[1124]	0.6	6.2e-4	0.04	0.52	0.57	0.6	0.62	0.73	3916	1.0
y_mean[1124] y_mean[1125]	-0.61	3.0e-4	0.04	-0.65	-0.63	-0.61	-0.6	-0.57	4825	1.0
\" \" \" \" \" \" \" \" \" \" \" \" \" \	0.01	J.UE 4	0.02	0.00	0.00	0.01	0.0	0.57	1 020	1.0

y_mean[1126]	-1.03	4.3e-4	0.03	-1.09	-1.05	-1.03	-1.01	-0.97	4617	1.0
y_mean[1127]	0.6	4.2e-4	0.03	0.55	0.58	0.6	0.62	0.66	4547	1.0
y_mean[1128]	-0.51	2.9e-4	0.02	-0.55	-0.53	-0.51	-0.5	-0.47	5121	1.0
y_mean[1129]	0.08	3.7e-4	0.03	0.03	0.07	0.08	0.1	0.14	4948	1.0
y_mean[1130]	0.18	3.5e-4	0.02	0.14	0.17	0.18	0.2	0.23	4673	1.0
y_mean[1131]	-0.2	3.9e-4	0.03	-0.25	-0.21	-0.2	-0.18	-0.14	4416	1.0
y_mean[1132]	0.05	3.3e-4		1.3e-3	0.03	0.04	0.06	0.09	4501	1.0
y_mean[1133]	-0.04	3.0e-4	0.02	-0.08	-0.06	-0.04		3.1e-4	4755	1.0
y_mean[1134]	-0.49	2.9e-4	0.02	-0.53	-0.51	-0.49	-0.48	-0.45	4701	1.0
y_mean[1135]	0.81	5.2e-4	0.03	0.74	0.78	0.81	0.83	0.87	4007	1.0
y_mean[1136]	-0.33	3.5e-4	0.02	-0.38	-0.35	-0.33	-0.31	-0.28	5151	1.0
y_mean[1137]	-0.68	3.7e-4	0.03	-0.72	-0.69	-0.68	-0.66	-0.62	4665	1.0
y_mean[1138]	0.05	3.7e-4		2.6e-3	0.04	0.05	0.07	0.1	4464	1.0
y_mean[1139]	-1.08	4.4e-4	0.03	-1.14	-1.1	-1.08	-1.06	-1.02	4572	1.0
y_mean[1140]	0.04	2.9e-4		1.2e-3	0.03	0.04	0.05	0.08	4983	1.0
y_mean[1141]	1.11	6.1e-4	0.02	1.03	1.08	1.11	1.14	1.19	4140	1.0
y_mean[1142]	-0.4	3.3e-4	0.02	-0.44	-0.42	-0.4	-0.39	-0.36	4527	1.0
y_mean[1143]	-0.7	3.5e-4	0.02	-0.75	-0.72	-0.7	-0.68	-0.65	4722	1.0
y_mean[1144]	0.23	4.4e-4	0.02	0.18	0.72	0.23	0.25	0.29	4010	1.0
y_mean[1144] y_mean[1145]	-0.62	3.4e-4	0.03	-0.67	-0.64	-0.62	-0.61	-0.57	4679	1.0
y_mean[1146]	-1.1	4.6e-4	0.02	-1.15	-1.12	-1.1	-1.08	-1.04	4407	1.0
y_mean[1147]	-0.39	4.4e-4	0.03	-0.44	-0.41	-0.39	-0.37	-0.33	4160	1.0
y_mean[1147] y_mean[1148]	-0.22	5.2e-4	0.03	-0.28	-0.24	-0.22	-0.2	-0.15	4183	1.0
y_mean[1149]	0.44	4.8e-4	0.03	0.20	0.41	0.22	0.46	0.15	4572	1.0
y_mean[1149] y_mean[1150]	0.72	1.0e-3	0.06	0.59	0.41	0.72	0.76	0.84	4027	1.0
y_mean[1150] y_mean[1151]	0.72	2.3e-4	0.00	0.39	0.00	0.72	0.76	0.18	5189	1.0
y_mean[1151] y_mean[1152]	-0.51	3.1e-4	0.02	-0.55	-0.52	-0.51	-0.49	-0.46	4670	1.0
• –			0.02		0.17		0.2	0.22		
y_mean[1153]	0.18	2.8e-4		0.15		0.18	-0.05		4999	1.0
y_mean[1154]	-0.07	4.3e-4	0.03	-0.13	-0.09	-0.07		-0.01	4621	1.0
y_mean[1155]	0.87	7.4e-4	0.05	0.78	0.84	0.87	0.9	0.96	4007	1.0
y_mean[1156]	0.34	2.8e-4	0.02	0.3	0.33	0.34	0.35	0.38	4622	1.0
y_mean[1157]	-0.5	4.2e-4	0.03	-0.56	-0.52	-0.5	-0.48	-0.44	5035	1.0
y_mean[1158]	0.31	4.4e-4	0.03	0.26	0.29	0.31	0.34	0.37	4729	1.0
y_mean[1159]	3.0	1.3e-3	0.08	2.84	2.95	3.0	3.06	3.17	4510	1.0
y_mean[1160]	-0.14	5.6e-4	0.04	-0.22	-0.17	-0.14	-0.12	-0.07	4672	1.0
y_mean[1161]	-1.13	4.3e-4	0.03	-1.19	-1.15	-1.13	-1.11	-1.08	4430	1.0
y_mean[1162]	0.48	5.6e-4	0.04	0.41	0.45	0.48	0.5	0.55	4415	1.0
y_mean[1163]	-1.08	4.8e-4	0.03	-1.14	-1.1	-1.08	-1.06	-1.02	4381	1.0
y_mean[1164]	-0.01	4.3e-4	0.03	-0.07	-0.03		7.0e-3	0.04	4436	1.0
y_mean[1165]	0.64	4.2e-4	0.03	0.59	0.62	0.64	0.66	0.7	4261	1.0
y_mean[1166]	-0.26	5.9e-4	0.04	-0.34	-0.29	-0.26	-0.23	-0.18	4440	1.0
y_mean[1167]	-0.02	3.4e-4	0.02	-0.06	-0.03		-3.3e-3	0.03	4784	1.0
y_mean[1168]	-0.27	4.5e-4	0.03	-0.33	-0.29	-0.27	-0.25	-0.21	4147	1.0
y_mean[1169]	-0.62	3.2e-4	0.02	-0.66	-0.64	-0.62	-0.61	-0.58	4829	1.0
y_mean[1170]	-0.5	2.8e-4	0.02	-0.54	-0.52	-0.5	-0.49	-0.46	5156	1.0
y_mean[1171]	-0.32	5.8e-4	0.04	-0.4	-0.35	-0.32	-0.3	-0.25	4465	1.0
y_mean[1172]	0.39	5.9e-4	0.04	0.31	0.36	0.39	0.42	0.47	4631	1.0
y_mean[1173]	2.43	1.0e-3	0.07	2.31	2.39	2.43	2.48	2.56	4186	1.0

y_mean[1174]	-0.24	5.7e-4	0.04	-0.31	-0.26	-0.24	-0.21	-0.16	4438	1.0
y_mean[1175]	0.53	5.1e-4	0.03	0.47	0.51	0.53	0.56	0.6	4589	1.0
y_mean[1176]	-0.02	2.9e-4	0.02	-0.06	-0.04	-0.02-	7.9e-3	0.02	4817	1.0
y_mean[1177]	-1.11	4.1e-4	0.03	-1.16	-1.13	-1.11	-1.09	-1.05	4426	1.0
y_mean[1178]	-0.62	3.2e-4	0.02	-0.66	-0.64	-0.62	-0.61	-0.58	4819	1.0
y_mean[1179]	-0.33	3.9e-4	0.03	-0.38	-0.35	-0.33	-0.32	-0.28	4364	1.0
y_mean[1180]	-0.44	3.7e-4	0.02	-0.49	-0.46	-0.44	-0.42	-0.39	4280	1.0
y_mean[1181]	-0.27	3.3e-4	0.02	-0.31	-0.28	-0.27	-0.25	-0.22	4441	1.0
y_mean[1182]	-0.03	2.9e-4	0.02	-0.07	-0.04	-0.03	-0.01	0.01	4762	1.0
y_mean[1183]	0.81	6.1e-4	0.04	0.73	0.78	0.81	0.83	0.88	4108	1.0
y_mean[1184]	-0.16	3.4e-4	0.02	-0.2	-0.17	-0.16	-0.14	-0.11	4543	1.0
y_mean[1185]	-0.46	3.0e-4	0.02	-0.5	-0.47	-0.46	-0.44	-0.42	4544	1.0
y_mean[1186]	-0.87	4.2e-4	0.03	-0.92	-0.89	-0.87	-0.85	-0.81	4497	1.0
y_mean[1187]	1.75	1.1e-3	0.07	1.61	1.71	1.75	1.8	1.9	4575	1.0
y_mean[1188]	1.46	6.1e-4	0.04	1.38	1.43	1.46	1.49	1.54	4653	1.0
y_mean[1189]	0.56	7.9e-4	0.05	0.45	0.52	0.56	0.6	0.66	4632	1.0
y_mean[1190]	-0.68	3.4e-4	0.02	-0.72	-0.69	-0.68	-0.66	-0.63	4841	1.0
y_mean[1191]	0.72	4.5e-4	0.03	0.66	0.7	0.72	0.74	0.78	4286	1.0
y_mean[1192]	-0.16	5.4e-4	0.04	-0.23	-0.19	-0.16	-0.14	-0.09	4426	1.0
y_mean[1193]	-0.67	3.7e-4	0.03	-0.72	-0.69	-0.68	-0.66	-0.62	4667	1.0
y_mean[1194]	0.14	7.2e-4	0.05	0.04	0.1	0.13	0.17	0.22	4099	1.0
y_mean[1195]	-0.59	2.9e-4	0.02	-0.63	-0.61	-0.59	-0.58	-0.55	4831	1.0
y_mean[1196]	0.68	4.6e-4	0.03	0.62	0.66	0.68	0.7	0.74	4162	1.0
y_mean[1197]	-0.33	2.9e-4	0.02	-0.37	-0.34	-0.33	-0.32	-0.29	4619	1.0
y_mean[1198]	-0.49	2.9e-4	0.02	-0.53	-0.5	-0.49	-0.48	-0.45	4610	1.0
y_mean[1199]	-0.79	4.9e-4	0.03	-0.85	-0.81	-0.79	-0.77	-0.73	4274	1.0
y_mean[1200]	1.7	1.0e-3	0.07	1.57	1.65	1.7	1.74	1.82	4271	1.0
y_mean[1201]	-1.19	4.7e-4	0.03	-1.25	-1.21	-1.19	-1.17	-1.13	4488	1.0
y_mean[1202]	0.06	3.5e-4	0.02	0.01	0.04	0.06	0.07	0.1	4438	1.0
y_mean[1203]	-0.06	4.0e-4	0.03	-0.11	-0.07	-0.06		1.3e-3	4744	1.0
y_mean[1204]	1.05	8.4e-4	0.06	0.93	1.01	1.05	1.08	1.16	4514	1.0
y_mean[1205]	0.33	3.0e-4	0.02	0.29	0.32	0.33	0.35	0.37	4657	1.0
y_mean[1206]		3.5e-4				-0.14			4900	1.0
y_mean[1207]	-0.68	5.5e-4	0.04	-0.75	-0.7	-0.68	-0.65	-0.6	4900	1.0
y_mean[1208]	-0.45	3.6e-4	0.02	-0.5	-0.47	-0.45	-0.44	-0.41	4318	1.0
y_mean[1209]	-0.63	3.1e-4	0.02	-0.67	-0.65	-0.63	-0.62	-0.59	4865	1.0
y_mean[1210]	0.51	3.6e-4	0.02	0.46	0.49	0.51	0.52	0.55	4633	1.0
y_mean[1211]	-1.05	4.1e-4	0.03	-1.11	-1.07	-1.05	-1.04	-1.0	4456	1.0
y_mean[1212]	-0.48	3.1e-4	0.02	-0.52	-0.49	-0.48	-0.47	-0.44	4754	1.0
y_mean[1213]	-0.76	5.0e-4	0.03	-0.82	-0.78	-0.76	-0.74	-0.7	4256	1.0
y_mean[1214]	-0.09	6.5e-4	0.04	-0.18	-0.12	-0.09		8.7e-3	4324	1.0
y_mean[1215]	-0.2	4.6e-4	0.03	-0.26	-0.22	-0.2	-0.18	-0.14	4266	1.0
y_mean[1216]	-0.61	3.0e-4	0.02	-0.65	-0.63	-0.61	-0.6	-0.57	4833	1.0
y_mean[1217]	0.08	8.5e-4	0.06	-0.03	0.04	0.08	0.11	0.19	4362	1.0
y_mean[1218]	0.41	4.5e-4	0.03	0.34	0.38	0.41	0.43	0.47	5120	1.0
y_mean[1219]	0.97	7.9e-4	0.05	0.87	0.94	0.97	1.01	1.07	4438	1.0
y_mean[1220]	0.54	4.8e-4	0.03	0.48	0.52	0.54	0.56	0.61	4390	1.0
y_mean[1221]	0.81	7.8e-4	0.05	0.71	0.78	0.81	0.85	0.92	4894	1.0

y_mean[1222]	-0.06	3.1e-4	0.02	-0.1	-0.07	-0.06	-0.05	-0.02	4754	1.0
y_mean[1223]	-0.63	3.4e-4	0.02	-0.68	-0.65	-0.63	-0.62	-0.58	4768	1.0
y_mean[1224]	-0.23	4.0e-4	0.03	-0.28	-0.25	-0.23	-0.21	-0.18	4911	1.0
y_mean[1225]	-0.12	3.4e-4	0.02	-0.16	-0.13	-0.12	-0.1	-0.07	4756	1.0
y_mean[1226]	0.52	4.4e-4	0.03	0.46	0.49	0.52	0.53	0.57	4514	1.0
y_mean[1227]	-1.18	4.7e-4	0.03	-1.23	-1.2	-1.18	-1.15	-1.11	4489	1.0
y_mean[1228]	-0.27	3.5e-4	0.02	-0.31	-0.28	-0.27	-0.25	-0.22	5167	1.0
y_mean[1229]	-0.58	3.4e-4	0.02	-0.62	-0.59	-0.58	-0.56	-0.53	4849	1.0
y_mean[1230]	-1.05	4.2e-4	0.03	-1.1	-1.07	-1.05	-1.03	-0.99	4545	1.0
y_mean[1231]	1.1	6.0e-4	0.04	1.03	1.08	1.1	1.13	1.18	4143	1.0
y_mean[1232]	0.22	4.3e-4	0.03	0.16	0.2	0.22	0.24	0.27	4025	1.0
y_mean[1233]	1.3	5.8e-4	0.04	1.22	1.27	1.3	1.32	1.37	4428	1.0
y_mean[1234]	-0.58	2.9e-4	0.02	-0.62	-0.59	-0.58	-0.57	-0.54	4849	1.0
y_mean[1235]	0.09	3.1e-4	0.02	0.05	0.08	0.09	0.11	0.14	4705	1.0
y_mean[1236]	0.05	3.1e-4	0.02	0.01	0.04	0.05	0.07	0.09	4502	1.0
y_mean[1237]	-0.48	3.1e-4	0.02	-0.52	-0.5	-0.48	-0.47	-0.44	4891	1.0
y_mean[1238]	-0.58	4.8e-4	0.03	-0.64	-0.6	-0.58	-0.55	-0.51	4684	1.0
y_mean[1239]	0.83	7.5e-4	0.05	0.73	0.79	0.82	0.86	0.92	3897	1.0
y_mean[1240]	0.85	5.6e-4	0.03	0.78	0.73	0.85	0.88	0.93	4170	1.0
y_mean[1240] y_mean[1241]	0.85	5.6e-4	0.04	0.78	0.82	0.85	0.87	0.93	3974	1.0
y_mean[1241] y_mean[1242]	-0.03	2.9e-4	0.04	-0.06	-0.04	-0.03	-0.01	0.92	4800	1.0
y_mean[1243] y_mean[1243]	0.37	2.9e-4 4.6e-4	0.02	0.31	0.35	0.37	0.39	0.43	4371	1.0
y_mean[1244]	0.82	5.3e-4	0.03	0.31	0.8	0.82	0.85	0.43	4006	1.0
• –										
y_mean[1245]	0.05	6.5e-4	0.04	-0.04	0.02	0.05	0.07	0.13	4071	1.0
y_mean[1246]	-0.3	2.9e-4	0.02	-0.34	-0.31	-0.3	-0.29	-0.26	4770	1.0
y_mean[1247]	-0.11	3.7e-4	0.03	-0.16	-0.12	-0.11	-0.09	-0.06	4845	1.0
y_mean[1248]	-0.58	3.1e-4	0.02	-0.62	-0.59	-0.58	-0.56	-0.53	4908	1.0
y_mean[1249]	0.05	2.8e-4	0.02	0.02	0.04	0.05	0.07	0.09	4646	1.0
y_mean[1250]	-0.26	5.0e-4	0.03	-0.32	-0.28	-0.26	-0.23	-0.19	4523	1.0
y_mean[1251]	-0.55	3.0e-4	0.02	-0.59	-0.56	-0.55	-0.53	-0.5	4845	1.0
y_mean[1252]	-0.49	2.9e-4	0.02	-0.53	-0.5	-0.49	-0.47	-0.45	4771	1.0
y_mean[1253]	-0.3	3.4e-4	0.02	-0.35	-0.32	-0.3	-0.29	-0.26	4377	1.0
y_mean[1254]	-0.81	5.2e-4	0.03	-0.88	-0.84	-0.81	-0.79	-0.74	4439	1.0
y_mean[1255]	0.37	2.9e-4	0.02	0.33	0.36	0.37	0.39	0.41	5125	1.0
y_mean[1256]	0.11	3.1e-4	0.02	0.07	0.1	0.11	0.12	0.15	4411	1.0
y_mean[1257]	0.21	3.7e-4	0.02	0.16	0.19	0.21	0.23	0.26	4310	1.0
y_mean[1258]	0.34	3.3e-4	0.02	0.3	0.33	0.34	0.36	0.38	4397	1.0
y_mean[1259]	-1.41	6.7e-4	0.04	-1.5	-1.44	-1.41	-1.38	-1.33	4315	1.0
y_mean[1260]	0.04	3.7e-4	0.03	-0.01	0.02	0.03	0.05	0.08	4531	1.0
y_mean[1261]	0.64	4.5e-4	0.03	0.58	0.62	0.64	0.66	0.69	4237	1.0
y_mean[1262]	0.72	4.8e-4	0.03	0.66	0.69	0.72	0.74	0.77	4096	1.0
y_mean[1263]	0.49	8.4e-4	0.05	0.38	0.45	0.49	0.52	0.6	4167	1.0
y_mean[1264]	-0.05	3.0e-4	0.02	-0.09	-0.07	-0.05	-0.04	-0.01	4848	1.0
y_mean[1265]	0.03	5.4e-4	0.03	-0.04	2.2e-3	0.03	0.05	0.09	4019	1.0
y_mean[1266]	2.01	1.0e-3	0.06	1.88	1.96	2.01	2.05	2.13	3845	1.0
y_mean[1267]	-0.38	3.6e-4	0.02	-0.42	-0.39	-0.38	-0.36	-0.33	4658	1.0
y_mean[1268]	-0.01	3.0e-4	0.02	-0.05	-0.03	-0.01	1.9e-3	0.03	4755	1.0
y_mean[1269]	0.66	4.3e-4	0.03	0.61	0.64	0.66	0.68	0.72	4215	1.0

y_mean[1270]	-0.35	3.9e-4	0.03	-0.4	-0.37	-0.35	-0.33	-0.3	4265	1.0
y_mean[1271]	-0.47	3.1e-4	0.02	-0.51	-0.48	-0.47	-0.45	-0.42	4612	1.0
y_mean[1272]	0.56	6.4e-4	0.04	0.48	0.53	0.56	0.59	0.64	3912	1.0
y_mean[1273]	-0.26	5.0e-4	0.03	-0.32	-0.28	-0.26	-0.23	-0.19	4523	1.0
y_mean[1274]	-0.49	3.1e-4	0.02	-0.53	-0.5	-0.49	-0.47	-0.44	4928	1.0
y_mean[1275]	-0.81	4.5e-4	0.03	-0.87	-0.83	-0.81	-0.78	-0.74	4742	1.0
y_mean[1276]	-0.73	3.9e-4	0.03	-0.78	-0.75	-0.73	-0.71	-0.68	4634	1.0
y_mean[1277]	0.54	4.7e-4	0.03	0.47	0.51	0.54	0.56	0.6	4674	1.0
y_mean[1278]	-0.26	5.2e-4	0.04	-0.33	-0.28	-0.26	-0.24	-0.19	4929	1.0
y_mean[1279]	0.23	3.9e-4	0.03	0.18	0.21	0.23	0.25	0.28	4196	1.0
y_mean[1280]	-0.43	3.2e-4	0.02	-0.47	-0.44	-0.43	-0.41	-0.39	4491	1.0
y_mean[1281]	0.13	7.8e-4	0.05	0.83	0.89	0.93	0.96	1.02	4161	1.0
y_mean[1281] y_mean[1282]	-1.08	4.3e-4	0.03	-1.13	-1.1	-1.08	-1.06	-1.02	4538	1.0
y_mean[1283]	1.41	7.2e-4	0.05	1.32	1.38	1.41	1.44	1.5	3984	1.0
y_mean[1284]	-0.57	3.7e-4	0.03	-0.62	-0.59	-0.57	-0.55	-0.52	4675	1.0
y_mean[1284] y_mean[1285]	0.1	3.7e-4 3.6e-4	0.03	0.05	0.09	0.1	0.12	0.16	5575	1.0
v –			0.03			-0.51		-0.47		
y_mean[1286]	-0.51	2.9e-4		-0.55	-0.52		-0.49		4850	1.0
y_mean[1287]	-0.3	3.0e-4	0.02	-0.34	-0.31	-0.3	-0.28	-0.26	5029	1.0
y_mean[1288]	0.05	2.8e-4	0.02	0.02	0.04	0.05	0.07	0.09	4626	1.0
y_mean[1289]	-0.41	3.3e-4	0.02	-0.45	-0.42	-0.41	-0.39	-0.36	4539	1.0
y_mean[1290]	0.53	4.7e-4	0.03	0.47	0.51	0.53	0.55	0.59	4424	1.0
y_mean[1291]	-0.14	4.7e-4	0.03	-0.2	-0.16	-0.14	-0.12	-0.08	4247	1.0
y_mean[1292]	0.35	3.8e-4	0.03	0.3	0.34		0.37	0.4	4855	1.0
y_mean[1293]	1.33	6.4e-4	0.04	1.25	1.3	1.33	1.36	1.41	4076	1.0
y_mean[1294]	-0.52	7.3e-4	0.05	-0.62	-0.55	-0.52	-0.48	-0.42	4591	1.0
y_mean[1295]	0.25	7.6e-4	0.05	0.15	0.22	0.25	0.29	0.35	4466	1.0
y_mean[1296]	-0.47	3.2e-4	0.02	-0.51	-0.48	-0.47	-0.45	-0.42	4908	1.0
y_mean[1297]	-3.0e-3	2.9e-4	0.02	-0.04		-3.4e-3	0.01	0.04	4748	1.0
y_mean[1298]	-0.49	2.9e-4	0.02	-0.53	-0.5	-0.49	-0.47	-0.45	4793	1.0
y_mean[1299]	0.68	6.5e-4	0.04	0.59	0.65	0.68	0.7	0.76	4022	1.0
y_mean[1300]	0.65	5.8e-4	0.04	0.58	0.63	0.65	0.68	0.72	4238	1.0
y_mean[1301]	-0.35	3.8e-4	0.03	-0.4	-0.36	-0.35	-0.33	-0.29	5245	1.0
y_mean[1302]	-1.0	4.5e-4	0.03	-1.06	-1.03	-1.0	-0.98	-0.95	4303	1.0
y_mean[1303]	0.26	2.7e-4	0.02	0.23	0.25	0.26	0.27	0.3	4742	1.0
y_mean[1304]	-0.62	3.1e-4	0.02	-0.66	-0.63	-0.62	-0.6	-0.57	4791	1.0
y_mean[1305]	-0.16	4.9e-4	0.03	-0.22	-0.18	-0.16	-0.14	-0.09	4608	1.0
y_mean[1306]	-0.6	3.0e-4	0.02	-0.64	-0.61	-0.6	-0.59	-0.56	4822	1.0
y_mean[1307]	0.04	3.9e-4	0.03	-0.02	0.02	0.04	0.06	0.09	4527	1.0
y_mean[1308]	-0.42	2.9e-4	0.02	-0.46	-0.43		-0.4	-0.37	5128	1.0
y_mean[1309]	9.5e-3	5.2e-4	0.03	-0.06		9.3e-3	0.03	0.07	4046	1.0
y_mean[1310]	-0.11	4.6e-4	0.03	-0.17	-0.13		-0.09	-0.05	4086	1.0
y_mean[1311]	0.38	7.4e-4	0.05	0.29	0.35	0.38	0.41	0.47	4114	1.0
y_mean[1312]	-0.37	3.5e-4	0.02	-0.42	-0.39		-0.36	-0.33	4493	1.0
y_mean[1313]	-0.49	3.1e-4	0.02	-0.53	-0.5	-0.49	-0.48	-0.45	4504	1.0
y_mean[1314]	0.43	4.6e-4	0.02	0.33	0.45	0.47	0.49	0.53	4490	1.0
y_mean[1314] y_mean[1315]	0.4	6.5e-4	0.05	0.41	0.43	0.4	0.43	0.49	4893	1.0
y_mean[1316] y_mean[1316]	-1.05	4.3e-4	0.03	-1.11	-1.07	-1.05	-1.03	-1.0	4603	1.0
y_mean[1317]					1.48					
<pre>y_mean[131/]</pre>	1.52	8.4e-4	0.06	1.41	1.48	1.52	1.55	1.63	4494	1.0

y_mean[1318]	-0.02	7.3e-4	0.05	-0.12	-0.05	-0.02	9.2e-3	0.08	4448	1.0
y_mean[1319]	-0.53	6.3e-4	0.04	-0.61	-0.56	-0.53	-0.5	-0.45	4197	1.0
y_mean[1320]	-0.06	3.3e-4	0.02	-0.1	-0.07	-0.06	-0.04	-0.01	4836	1.0
y_mean[1321]	-0.21	3.6e-4	0.02	-0.26	-0.22	-0.21	-0.19	-0.16	4466	1.0
y_mean[1322]	-0.17	5.0e-4	0.04	-0.24	-0.2	-0.17	-0.15	-0.1	5038	1.0
y_mean[1323]	0.53	4.1e-4	0.03	0.47	0.51	0.53	0.54	0.58	4345	1.0
y_mean[1324]	0.07	4.9e-4		8.3e-3	0.05	0.07	0.09	0.13	4243	1.0
y_mean[1325]	-0.34	4.0e-4	0.03	-0.4	-0.36	-0.34	-0.32	-0.29	4823	1.0
y_mean[1326]	0.12	3.2e-4	0.02	0.08	0.11	0.12	0.14	0.16	4330	1.0
y_mean[1327]	0.26	4.1e-4	0.03	0.21	0.25	0.26	0.28	0.32	4240	1.0
y_mean[1328]	-1.06	4.0e-4	0.03	-1.11	-1.08	-1.06	-1.04	-1.0	4581	1.0
y_mean[1329]	-0.55	3.2e-4	0.02	-0.6	-0.57	-0.55	-0.54	-0.51	4960	1.0
y_mean[1330]	2.33	8.3e-4	0.05	2.22	2.29	2.33	2.37	2.43	4126	1.0
y_mean[1331]	-0.59	3.1e-4	0.02	-0.63	-0.6	-0.59	-0.57	-0.54	4840	1.0
y_mean[1332]	0.03	2.8e-4	0.02		4.7e-3	0.02	0.03	0.06	4722	1.0
y_mean[1333]	-0.34	3.2e-4	0.02	-0.39	-0.36	-0.34	-0.33	-0.3	4921	1.0
y_mean[1334]	0.17	7.2e-4	0.02	0.08	0.14	0.17	0.2	0.27	4545	1.0
y_mean[1335]	-0.68	7.2e-4 5.9e-4	0.03	-0.76	-0.71	-0.68	-0.65	-0.6	4543	1.0
v –										1.0
y_mean[1336]	-0.95	4.6e-4	0.03	-1.0	-0.97	-0.95	-0.93	-0.88	4541	
y_mean[1337]	-0.54	2.9e-4	0.02	-0.58	-0.56	-0.54	-0.53	-0.5	4685	1.0
y_mean[1338]	0.26	6.4e-4	0.04	0.18	0.23	0.26	0.29	0.34	4075	1.0
y_mean[1339]	0.62	6.1e-4	0.04	0.54	0.59	0.62	0.64	0.69	3936	1.0
y_mean[1340]	-0.44	3.5e-4	0.02	-0.49	-0.46	-0.44	-0.42	-0.39	4980	1.0
y_mean[1341]	-0.38	2.9e-4	0.02	-0.42	-0.4	-0.38	-0.37	-0.34	4978	1.0
y_mean[1342]	0.86	6.0e-4	0.04	0.78	0.83	0.86	0.88	0.93	3950	1.0
y_mean[1343]	-0.53	9.4e-4	0.06	-0.65	-0.57	-0.53	-0.48	-0.4	4603	1.0
y_mean[1344]	0.03	5.6e-4	0.04		2.6e-3	0.03	0.05	0.1	3988	1.0
y_mean[1345]	-0.76	4.1e-4	0.03	-0.81	-0.78	-0.76	-0.74	-0.7	4670	1.0
y_mean[1346]	0.25	4.3e-4	0.03	0.19	0.23	0.25	0.27	0.3	4036	1.0
y_mean[1347]	-1.22	4.5e-4	0.03	-1.28	-1.24	-1.22	-1.2	-1.16	4485	1.0
y_mean[1348]	2.21	9.5e-4	0.06	2.09	2.17	2.21	2.26	2.33	4206	1.0
y_mean[1349]	0.44	4.9e-4	0.03	0.37	0.42	0.44	0.46	0.5	4527	1.0
y_mean[1350]	-0.68	3.7e-4	0.03	-0.73	-0.7	-0.68	-0.66	-0.63	4658	1.0
y_mean[1351]	-0.98	4.3e-4	0.03	-1.04	-1.0	-0.98	-0.96	-0.92	4627	1.0
y_mean[1352]	-0.25	4.7e-4	0.03	-0.31	-0.27	-0.25	-0.23	-0.19	4620	1.0
y_mean[1353]	-0.63	3.4e-4	0.02	-0.68	-0.65	-0.63	-0.62	-0.58	4774	1.0
y_mean[1354]	-0.48	2.9e-4	0.02	-0.52	-0.5	-0.48	-0.47	-0.44	4779	1.0
y_mean[1355]	-0.41	3.3e-4	0.02	-0.46	-0.43	-0.41	-0.4	-0.37	4565	1.0
y_mean[1356]	0.4	3.1e-4	0.02	0.36	0.39	0.4	0.42	0.44	4476	1.0
y_mean[1357]	-0.07	3.1e-4	0.02	-0.11	-0.08	-0.07	-0.05	-0.02	4892	1.0
y_mean[1358]	0.82	5.7e-4	0.04	0.75	0.8	0.82	0.85	0.9	4353	1.0
y_mean[1359]	-0.44	2.5e-4	0.02	-0.47	-0.45	-0.44	-0.43	-0.4	5078	1.0
y_mean[1360]	0.34	5.2e-4	0.04	0.27	0.31	0.34	0.36	0.41	4638	1.0
y_mean[1361]	-1.09	4.3e-4	0.03	-1.14	-1.11	-1.09	-1.07	-1.03	4516	1.0
y_mean[1362]	-0.08	3.9e-4	0.03	-0.14	-0.1	-0.08	-0.07	-0.03	4701	1.0
y_mean[1363]	-0.71	3.7e-4	0.03	-0.76	-0.73	-0.71	-0.7	-0.66	4633	1.0
y_mean[1364]	0.01	2.8e-4	0.02		-5.6e-4	0.01	0.03	0.05	4730	1.0
y_mean[1365]	1.14	4.6e-4	0.03	1.08	1.12	1.14	1.16	1.2	4376	1.0
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y_mean[1366]	0.58	4.1e-4	0.03	0.53	0.56	0.58	0.6	0.63	4434	1.0
y_mean[1367]	-1.23	4.5e-4	0.03	-1.28	-1.25	-1.23	-1.21	-1.16	4488	1.0
y_mean[1368]	0.8	7.1e-4	0.05	0.71	0.76	0.79	0.83	0.89	4378	1.0
y_mean[1369]	0.26	6.0e-4	0.04	0.17	0.23	0.26	0.28	0.34	4852	1.0
y_mean[1370]	-0.6	3.8e-4	0.03	-0.65	-0.61	-0.6	-0.58	-0.54	4750	1.0
y_mean[1371]	1.51	6.9e-4	0.04	1.42	1.48	1.51	1.54	1.6	4245	1.0
y_mean[1372]	0.69	4.7e-4	0.03	0.63	0.67	0.69	0.71	0.75	4295	1.0
y_mean[1373]	0.61	5.4e-4	0.04	0.54	0.59	0.61	0.64	0.68	4471	1.0
y_mean[1374]	-0.65	3.2e-4	0.02	-0.7	-0.67	-0.65	-0.64	-0.61	4825	1.0
y_mean[1375]	1.75	1.1e-3	0.08	1.6	1.7	1.75	1.8	1.9	4559	1.0
y_mean[1376]	-0.53	2.9e-4	0.02	-0.57	-0.54	-0.53	-0.51	-0.49	4888	1.0
y_mean[1377]	1.03	5.9e-4	0.04	0.95	1.0	1.03	1.06	1.11	4726	1.0
y_mean[1378]	0.11	5.7e-4	0.04	0.04	0.09	0.11	0.14	0.19	4057	1.0
y_mean[1379]	-0.75	4.6e-4	0.03	-0.81	-0.77	-0.75	-0.73	-0.69	4548	1.0
y_mean[1380]	-0.62	3.4e-4	0.02	-0.67	-0.64	-0.62	-0.61	-0.57	4802	1.0
y_mean[1381]	-0.31	4.4e-4	0.03	-0.37	-0.33	-0.31	-0.29	-0.25	4861	1.0
y_mean[1382]	1.14	7.6e-4	0.05	1.04	1.11	1.14	1.17	1.24	4203	1.0
y_mean[1383]	0.08	3.3e-4	0.02	0.03	0.06	0.07	0.09	0.12	4649	1.0
y_mean[1384]	-0.17	3.9e-4	0.03	-0.22	-0.19	-0.17	-0.16	-0.12	4224	1.0
y_mean[1385]	-0.96	4.9e-4	0.03	-1.02	-0.98	-0.96	-0.94	-0.89	4773	1.0
y_mean[1386]	-0.05	4.4e-4	0.03	-0.1	-0.07	-0.05	-0.03	6.5e-3	4218	1.0
y_mean[1387]	0.65	4.2e-4	0.03	0.59	0.63	0.65	0.66	0.7	4283	1.0
y_mean[1388]	-0.3	4.2e-4	0.03	-0.35	-0.32	-0.3	-0.28	-0.24	4432	1.0
y_mean[1389]	-0.23	5.0e-4	0.03	-0.29	-0.25	-0.23	-0.21	-0.17	3982	1.0
y_mean[1390]	-0.77	4.5e-4	0.03	-0.83	-0.79	-0.77	-0.75	-0.71	4504	1.0
y_mean[1391]	-0.51	4.0e-4	0.03	-0.56	-0.53	-0.51	-0.49	-0.46	4730	1.0
y_mean[1392]	-0.39	4.5e-4	0.03	-0.46	-0.42	-0.39	-0.37	-0.33	5096	1.0
y_mean[1393]	-0.13	4.4e-4	0.03	-0.19	-0.15	-0.13	-0.12	-0.08	4142	1.0
y_mean[1394]	0.71	4.5e-4	0.03	0.66	0.69	0.71	0.73	0.77	4123	1.0
y_mean[1395]	1.85	1.2e-3	0.08	1.7	1.8	1.85	1.9	2.0	4652	1.0
y_mean[1396]	0.44	4.6e-4	0.03	0.38	0.42	0.44	0.46	0.5	4535	1.0
y_mean[1397]	0.42	4.9e-4	0.03	0.36	0.4	0.42	0.44	0.48	4067	1.0
y_mean[1398]	-0.71	3.7e-4	0.03	-0.76	-0.73	-0.71	-0.7	-0.66	4663	1.0
y_mean[1399]	1.32	6.3e-4	0.04	1.24	1.29	1.32	1.35	1.4	4128	1.0
y_mean[1400]	-0.2	3.8e-4	0.03	-0.25	-0.22	-0.2	-0.18	-0.15	4510	1.0
y_mean[1401]	-0.71	3.6e-4	0.03	-0.76	-0.72	-0.71	-0.69	-0.66	4790	1.0
y_mean[1402]	0.67	5.1e-4	0.03	0.6	0.65	0.67	0.69	0.73	4167	1.0
y_mean[1403]	0.35	5.1e-4	0.03	0.28	0.33	0.35	0.37	0.41	4281	1.0
y_mean[1404]	-0.64	3.6e-4	0.03	-0.69	-0.66	-0.64	-0.63	-0.59	5005	1.0
y_mean[1405]	-0.51	2.8e-4	0.02	-0.55	-0.53	-0.51	-0.5	-0.47	4757	1.0
y_mean[1406]	1.77	1.0e-3	0.07	1.63	1.72	1.77	1.82	1.9	4388	1.0
y_mean[1407]	-0.3	4.3e-4	0.03	-0.36	-0.32	-0.3	-0.28	-0.24	4681	1.0
y_mean[1408]	-0.55	3.0e-4	0.02	-0.59	-0.56	-0.55	-0.53	-0.51	4835	1.0
y_mean[1409]	-0.86	5.2e-4	0.03	-0.92	-0.88	-0.86	-0.83	-0.79	4387	1.0
y_mean[1410]	-0.07	3.4e-4	0.02	-0.12	-0.09	-0.07	-0.05	-0.02	4870	1.0
y_mean[1411]	-0.4	3.7e-4	0.02	-0.44	-0.41	-0.4	-0.38	-0.35	4295	1.0
y_mean[1412]	-0.38	3.5e-4	0.02	-0.42	-0.39	-0.38	-0.36	-0.33	4555	1.0
y_mean[1413]	0.22	4.0e-4	0.03	0.17	0.2	0.22	0.23	0.27	4092	1.0

y_mean[1414]	-0.21	3.6e-4	0.02	-0.26	-0.23	-0.22	-0.2	-0.17	4472	1.0
y_mean[1415]	1.12	9.6e-4	0.06	1.0	1.08	1.12	1.16	1.24	3838	1.0
y_mean[1416]	-0.1	6.9e-4	0.05	-0.2	-0.13	-0.1	-0.07-	-4.7e-3	4842	1.0
y_mean[1417]	1.4	6.9e-4	0.04	1.31	1.37	1.4	1.43	1.48	4250	1.0
y_mean[1418]	-0.34	3.3e-4	0.02	-0.38	-0.35	-0.34	-0.33	-0.3	4480	1.0
y_mean[1419]	0.03	4.7e-4	0.03	-0.04	5.1e-3	0.03	0.05	0.09	4344	1.0
y_mean[1420]	-0.34	5.8e-4	0.04	-0.42	-0.37	-0.34	-0.32	-0.26	4518	1.0
y_mean[1421]	-0.81	4.3e-4	0.03	-0.87	-0.83	-0.82	-0.8	-0.76	4550	1.0
y_mean[1422]	0.47	4.3e-4	0.03	0.42	0.45	0.47	0.49	0.53	4597	1.0
y_mean[1423]	0.05	2.9e-4		8.4e-3	0.03	0.05	0.06	0.08	4609	1.0
y_mean[1424]	-0.57	2.8e-4	0.02	-0.61	-0.58	-0.57	-0.55	-0.53	4851	1.0
y_mean[1425]	-0.6	3.0e-4	0.02	-0.64	-0.62	-0.6	-0.59	-0.56	4807	1.0
y_mean[1426]	-0.06	4.5e-4	0.03	-0.12	-0.08	-0.06		-3.0e-3	4259	1.0
y_mean[1427]	-0.17	3.8e-4	0.03	-0.21	-0.18	-0.17	-0.15	-0.12	4529	1.0
y_mean[1428]	0.01	7.7e-4	0.05	-0.09	-0.02	0.01	0.04	0.11	4298	1.0
y_mean[1429]	1.62	6.3e-4	0.04	1.54	1.59	1.62	1.65	1.7	4269	1.0
y_mean[1430]	0.18	3.4e-4	0.03	0.13	0.16	0.18	0.19	0.23	5655	1.0
y_mean[1431]	0.10	6.4e-4	0.04	0.83	0.88	0.91	0.93	0.99	3937	1.0
y_mean[1431] y_mean[1432]	-0.21	4.4e-4	0.03	-0.27	-0.23	-0.21	-0.19	-0.15	4576	1.0
y_mean[1432] y_mean[1433]	-0.41	3.3e-4	0.02	-0.45	-0.42	-0.41	-0.39	-0.36	4539	1.0
y_mean[1434]	0.4	5.5e-4	0.02	0.43	0.42	0.4	0.43	0.48	4823	1.0
y_mean[1434] y_mean[1435]	-0.13	4.4e-4	0.04	-0.19	-0.16	-0.13	-0.11	-0.07	4853	1.0
y_mean[1436]	-0.13	4.4e-4 4.3e-4	0.03	-0.19	-0.13	-0.13	-0.11	-0.07	4450	1.0
y_mean[1437]	-1.17	4.7e-4	0.03	-1.23	-1.19	-1.17	-1.15	-1.1	4494	1.0
y_mean[1437] y_mean[1438]		6.3e-4	0.03	-0.33	-0.28	-0.25	-0.22	-0.17	4494	1.0
• –	-0.25									
y_mean[1439]	-0.24	4.8e-4	0.03	-0.3	-0.26	-0.24	-0.21	-0.17	4544	1.0
y_mean[1440]	-0.48	6.2e-4	0.04	-0.56	-0.51	-0.48	-0.45	-0.4	4365	1.0
y_mean[1441]	-0.2	4.3e-4	0.03	-0.25	-0.22	-0.2	-0.18	-0.14	4586	1.0
y_mean[1442]	-0.71	4.1e-4	0.03	-0.77	-0.73	-0.71	-0.69	-0.66	4590	1.0
y_mean[1443]	-0.05	4.0e-4	0.03	-0.1	-0.07	-0.05		3.0e-3	4404	1.0
y_mean[1444]	-0.3	2.9e-4	0.02	-0.34	-0.32	-0.3	-0.29	-0.26	4788	1.0
y_mean[1445]	-0.28	4.4e-4	0.03	-0.34	-0.3	-0.28	-0.26	-0.22	4527	1.0
y_mean[1446]	-0.16	3.8e-4	0.03	-0.22			-0.14	-0.11	5004	1.0
y_mean[1447]	-0.21	4.9e-4	0.03	-0.27		-0.21	-0.19	-0.14	4524	1.0
y_mean[1448]	0.68	5.0e-4	0.03	0.62	0.66	0.68	0.71	0.75	4419	1.0
y_mean[1449]	-1.04		0.03	-1.1	-1.06	-1.04	-1.03	-0.99	4555	1.0
y_mean[1450]	-1.12	4.1e-4	0.03	-1.17	-1.14	-1.12	-1.1	-1.06	4417	1.0
y_mean[1451]	0.57	4.4e-4	0.03	0.51	0.55	0.57	0.59	0.62	4497	1.0
y_mean[1452]	-0.01	6.7e-4	0.04	-0.09	-0.04	-0.01	0.02	0.07	3915	1.0
y_mean[1453]	1.88	8.0e-4	0.05	1.78	1.85	1.88	1.92	1.99	4455	1.0
y_mean[1454]	1.91	8.7e-4	0.05	1.8	1.87	1.91	1.95	2.01	3954	1.0
y_mean[1455]	0.38	6.9e-4	0.04	0.29	0.35	0.38	0.41	0.46	3897	1.0
y_mean[1456]	-0.29	4.3e-4	0.03	-0.35	-0.31	-0.29	-0.27	-0.24	4428	1.0
y_mean[1457]	-0.07	4.5e-4	0.03	-0.14	-0.09	-0.07	-0.05	-0.01	4893	1.0
y_mean[1458]	-0.69	3.6e-4	0.02	-0.74	-0.71	-0.7	-0.68	-0.64	4642	1.0
y_mean[1459]	-0.01	4.9e-4	0.03	-0.08	-0.03	-0.01	0.01	0.05	4706	1.0
y_mean[1460]	2.04	9.7e-4	0.06	1.92	2.0	2.04	2.08	2.16	4088	1.0
y_mean[1461]	-1.07	5.0e-4	0.03	-1.13	-1.09	-1.07	-1.04	-1.0	4364	1.0

```
0.03
                                             -0.1
                                                    -0.06
                                                            -0.04
                                                                   -0.02
                                                                                    4647
y_mean[1462]
                    -0.04
                           4.3e-4
                                                                            0.02
                                                                                             1.0
                    -0.35
                           2.5e-4
                                     0.02
                                            -0.39
                                                    -0.37
                                                            -0.35
                                                                   -0.34
                                                                           -0.32
                                                                                    5063
y_mean[1463]
                                                                                             1.0
y_mean[1464]
                    -0.05
                                     0.03
                                                            -0.05
                                                                   -0.03 9.3e-3
                           4.4e-4
                                            -0.11
                                                    -0.07
                                                                                    4536
                                                                                             1.0
                   -0.27
                           3.3e-4
                                     0.02
                                            -0.31
                                                    -0.29
                                                           -0.27
                                                                   -0.26
                                                                           -0.23
                                                                                    4457
                                                                                             1.0
y_mean[1465]
y_mean[1466]
                     0.93
                           6.6e-4
                                     0.04
                                             0.84
                                                      0.9
                                                             0.93
                                                                    0.95
                                                                            1.01
                                                                                    3932
                                                                                             1.0
                     0.65
                           5.7e-4
                                     0.04
                                             0.57
                                                     0.62
                                                             0.65
                                                                    0.67
                                                                            0.72
                                                                                    4203
                                                                                             1.0
y_mean[1467]
                                                                            0.45
y_mean[1468]
                     0.38
                           5.7e-4
                                     0.04
                                             0.31
                                                     0.35
                                                             0.38
                                                                     0.4
                                                                                    4020
                                                                                             1.0
                           4.2e-4
                                                             0.54
                                                                            0.59
y_mean[1469]
                     0.54
                                     0.03
                                             0.48
                                                     0.52
                                                                    0.56
                                                                                    4348
                                                                                             1.0
                     1.12
                           8.4e-4
                                     0.05
                                             1.02
                                                     1.09
                                                             1.12
                                                                    1.16
                                                                            1.22
                                                                                    4011
                                                                                             1.0
y_mean[1470]
                           6.9e-4
y_mean[1471]
                     0.96
                                     0.04
                                             0.87
                                                     0.93
                                                             0.96
                                                                    0.99
                                                                            1.04
                                                                                    3936
                                                                                             1.0
                    -0.71
                           3.7e-4
                                     0.03
                                            -0.76
                                                    -0.73
                                                            -0.71
                                                                    -0.7
                                                                           -0.66
                                                                                    4673
y_mean[1472]
                                                                                             1.0
                    -1.27
                           7.8e-4
                                     0.05
                                            -1.36
                                                     -1.3
                                                           -1.27
                                                                   -1.23
                                                                           -1.17
                                                                                    4346
y_mean[1473]
                                                                                             1.0
y_mean[1474]
                    -1.17
                           4.2e-4
                                     0.03
                                            -1.22
                                                    -1.19
                                                           -1.17
                                                                   -1.15
                                                                           -1.11
                                                                                    4430
                                                                                             1.0
                     0.08
                                     0.04-7.8e-3
                           6.3e-4
                                                     0.05
                                                             0.08
                                                                     0.1
                                                                            0.16
                                                                                    4429
y_mean[1475]
                                                                                             1.0
                    -0.68
                           3.4e-4
                                     0.02
                                            -0.73
                                                     -0.7
                                                            -0.68
                                                                   -0.67
                                                                           -0.64
                                                                                    4753
y_mean[1476]
                                                                                             1.0
                    -1.12
                           5.2e-4
                                     0.03
                                            -1.19
                                                    -1.14
                                                           -1.12
                                                                    -1.1
                                                                           -1.05
                                                                                    4465
                                                                                             1.0
y_mean[1477]
y_mean[1478]
                    0.46
                           4.6e-4
                                     0.03
                                              0.4
                                                     0.44
                                                             0.46
                                                                    0.48
                                                                            0.52
                                                                                    4171
                                                                                             1.0
                                     0.05
                                             1.12
                                                             1.22
                                                                                    4450
y_mean[1479]
                     1.22
                           7.4e-4
                                                     1.18
                                                                    1.25
                                                                            1.31
                                                                                             1.0
y_mean[1480]
                   -0.51
                           2.9e-4
                                     0.02
                                            -0.55
                                                    -0.53
                                                           -0.52
                                                                    -0.5
                                                                           -0.47
                                                                                    4834
                                                                                             1.0
                    -0.26
                                            -0.32
                                                                           -0.19
y_mean[1481]
                           4.9e-4
                                     0.03
                                                    -0.28
                                                           -0.26
                                                                   -0.24
                                                                                    4015
                                                                                             1.0
                     0.34
                           3.5e-4
                                     0.02
                                             0.29
                                                     0.32
                                                             0.34
                                                                            0.38
                                                                                    5085
y_mean[1482]
                                                                    0.35
                                                                                             1.0
                     0.87
                           7.0e-4
                                     0.04
                                             0.78
                                                     0.84
                                                             0.87
                                                                     0.9
                                                                            0.95
                                                                                    3982
y_mean[1483]
                                                                                             1.0
                           2.2e-4
                                             0.08
y_mean[1484]
                     0.11
                                     0.02
                                                      0.1
                                                             0.11
                                                                    0.13
                                                                            0.15
                                                                                    5285
                                                                                             1.0
                     1.48
                           6.0e-4
                                     0.04
                                              1.4
                                                     1.45
                                                             1.48
                                                                     1.5
                                                                            1.55
                                                                                    4245
y_mean[1485]
                                                                                             1.0
y_mean[1486]
                     0.29
                           6.5e-4
                                     0.04
                                             0.21
                                                     0.26
                                                             0.29
                                                                    0.32
                                                                            0.38
                                                                                    4243
                                                                                             1.0
                    -0.73
                           4.0e-4
                                     0.03
                                            -0.78
                                                    -0.75
                                                            -0.73
                                                                   -0.71
                                                                           -0.68
                                                                                    4570
y_mean[1487]
                                                                                             1.0
                                             1.11
                                                     1.16
                                                             1.19
                                                                    1.22
                                                                            1.27
                     1.19
                           6.3e-4
                                     0.04
                                                                                    4067
y_mean[1488]
                                                                                             1.0
y_mean[1489]
                     0.41
                           3.6e-4
                                     0.03
                                             0.36
                                                     0.39
                                                             0.41
                                                                    0.43
                                                                            0.46
                                                                                    5180
                                                                                             1.0
                    -0.09
                                            -0.16
                                                    -0.12
                                                            -0.09
                                                                   -0.07
                                                                           -0.03
                           4.8e-4
                                     0.03
                                                                                    4936
                                                                                             1.0
y_mean[1490]
y_mean[1491]
                    -0.21
                           5.2e-4
                                     0.03
                                            -0.27
                                                    -0.23
                                                           -0.21
                                                                   -0.18
                                                                           -0.14
                                                                                    4336
                                                                                             1.0
                    -0.61
                           4.5e-4
                                     0.03
                                            -0.67
                                                    -0.63
                                                           -0.61
                                                                   -0.59
                                                                           -0.55
                                                                                    4550
                                                                                             1.0
y_mean[1492]
                                                           -0.26
y_mean[1493]
                    -0.26
                           3.9e-4
                                     0.03
                                            -0.32
                                                    -0.28
                                                                   -0.25
                                                                           -0.21
                                                                                    5025
                                                                                             1.0
y_mean[1494]
                    -0.01
                           5.2e-4
                                     0.04
                                            -0.09
                                                           -0.01
                                                                            0.06
                                                    -0.04
                                                                    0.01
                                                                                    5449
                                                                                             1.0
y_mean[1495]
                     0.46
                           3.5e-4
                                     0.02
                                             0.41
                                                     0.44
                                                            0.46
                                                                    0.47
                                                                             0.5
                                                                                    4555
                                                                                             1.0
                    -0.63
                           3.2e-4
                                     0.02
                                            -0.68
                                                    -0.65
                                                           -0.63
                                                                   -0.62
                                                                           -0.59
                                                                                    4840
y mean [1496]
                                                                                             1.0
                    -0.26
                           2.9e-4
                                     0.02
                                             -0.3
                                                    -0.28
                                                            -0.26
                                                                   -0.25
                                                                           -0.22
y_mean[1497]
                                                                                    4755
                                                                                             1.0
                                             -0.5
                    -0.45
                           3.3e-4
                                     0.02
                                                    -0.47
                                                            -0.45
                                                                   -0.44
                                                                           -0.41
                                                                                    4539
y_mean[1498]
                                                                                             1.0
y_mean[1499]
                    -0.05
                           5.2e-4
                                     0.04
                                            -0.12
                                                    -0.07
                                                           -0.05
                                                                   -0.02
                                                                            0.02
                                                                                    4808
                                                                                             1.0
                   1.3e-4
                           5.5e-4
                                     0.04
                                            -0.07
                                                    -0.02 2.7e-4
                                                                    0.02
                                                                            0.07
                                                                                    4486
                                                                                             1.0
y_mean[1500]
                     0.05
                           4.6e-4
                                     0.03
                                            -0.02
                                                     0.02
                                                             0.05
                                                                    0.07
                                                                            0.11
                                                                                    4837
y_mean[1501]
                                                                                             1.0
                     1.86
                           8.3e-4
                                     0.05
                                             1.76
                                                     1.83
                                                             1.87
                                                                     1.9
                                                                            1.97
                                                                                    4226
                                                                                             1.0
y_mean[1502]
y_mean[1503]
                    -0.51
                           4.9e-4
                                     0.03
                                            -0.58
                                                    -0.54
                                                           -0.51
                                                                           -0.45
                                                                   -0.49
                                                                                    5157
                                                                                             1.0
y_mean[1504]
                    -0.64
                           3.1e-4
                                     0.02
                                            -0.68
                                                    -0.65
                                                            -0.64
                                                                   -0.62
                                                                           -0.59
                                                                                    4836
                                                                                             1.0
                    -1.06
                           4.3e-4
                                            -1.11
                                                           -1.06
                                                                            -1.0
                                     0.03
                                                    -1.08
                                                                   -1.04
                                                                                    4593
y_mean[1505]
                                                                                             1.0
                     0.11
                           3.4e-4
                                     0.02
                                             0.07
                                                            0.11
                                                                    0.13
                                                                            0.16
                                                                                    4257
y_mean[1506]
                                                      0.1
                                                                                             1.0
                                                            -0.94
y_{mean}[1507]
                    -0.94
                           4.6e-4
                                     0.03
                                             -1.0
                                                    -0.97
                                                                   -0.92
                                                                           -0.88
                                                                                    4522
                                                                                             1.0
                           2.9e-4
y_mean[1508]
                    -0.58
                                     0.02
                                            -0.62
                                                    -0.59
                                                           -0.58
                                                                   -0.57
                                                                           -0.54
                                                                                    4844
                                                                                             1.0
y_mean[1509]
                    -0.54
                           3.0e-4
                                     0.02
                                            -0.58
                                                    -0.56
                                                           -0.54
                                                                   -0.53
                                                                            -0.5
                                                                                    4825
                                                                                             1.0
```

y_mean[1510]	1.76	8.0e-4	0.05	1.66	1.72	1.76	1.79	1.86	4192	1.0
y_mean[1511]	1.07	6.1e-4	0.04	0.99	1.04	1.07	1.1	1.15	4193	1.0
y_mean[1512]	0.38	5.1e-4	0.03	0.32	0.36	0.38	0.4	0.45	4174	1.0
y_mean[1513]	-0.55	3.0e-4	0.02	-0.59	-0.56	-0.55	-0.53	-0.5	4837	1.0
y_mean[1514]	0.57	7.8e-4	0.05	0.48	0.54	0.57	0.61	0.67	4140	1.0
y_mean[1515]	-0.71	3.9e-4	0.03	-0.76	-0.73	-0.71	-0.69	-0.65	4941	1.0
y_mean[1516]	-0.5	3.1e-4	0.02	-0.54	-0.52	-0.5	-0.49	-0.46	5207	1.0
y_mean[1517]	-0.26	3.3e-4	0.02	-0.3	-0.27	-0.26	-0.24	-0.21	4630	1.0
y_mean[1518]	1.64	7.1e-4	0.05	1.55	1.61	1.64	1.67	1.73	4062	1.0
y_mean[1519]	-0.34	3.8e-4	0.03	-0.39	-0.36	-0.34	-0.33	-0.29	4364	1.0
y_mean[1520]	0.52	4.3e-4	0.03	0.46	0.5	0.52	0.54	0.58	4381	1.0
y_mean[1521]	-0.95	4.5e-4	0.03	-1.01	-0.97	-0.95	-0.93	-0.89	4508	1.0
y_mean[1522]	-0.04	5.2e-4	0.03	-0.11	-0.07	-0.04	-0.02	0.02	4086	1.0
y_mean[1523]	0.06	3.5e-4	0.02	0.01	0.04	0.06	0.08	0.11	4947	1.0
y_mean[1524]	-0.34	3.9e-4	0.03	-0.39	-0.36	-0.34	-0.33	-0.29	4671	1.0
y_mean[1525]	1.19	7.6e-4	0.05	1.1	1.16	1.19	1.23	1.29	3997	1.0
y_mean[1526]	0.85	3.8e-4	0.03	0.8	0.84	0.86	0.87	0.91	4788	1.0
y_mean[1527]	-0.15	5.9e-4	0.04	-0.23	-0.18	-0.15	-0.13	-0.07	4585	1.0
y_mean[1528]	-0.07	5.2e-4	0.03	-0.13	-0.09	-0.07	-0.05-	5.6e-3	3987	1.0
y_mean[1529]	0.99	6.8e-4	0.04	0.9	0.96	0.99	1.02	1.08	4249	1.0
y_mean[1530]	0.08	5.9e-4	0.04	4.8e-3	0.05	0.08	0.1	0.15	4032	1.0
y_mean[1531]	-0.7	3.6e-4	0.03	-0.75	-0.71	-0.7	-0.68	-0.65	4870	1.0
y_mean[1532]	-0.68	3.5e-4	0.02	-0.72	-0.69	-0.68	-0.66	-0.63	4670	1.0
y_mean[1533]	-1.01	4.3e-4	0.03	-1.07	-1.03	-1.01	-0.99	-0.95	4570	1.0
y_mean[1534]	-1.05	4.3e-4	0.03	-1.1	-1.07	-1.05	-1.03	-0.99	4369	1.0
y_mean[1535]	0.41	5.8e-4	0.04	0.33	0.38	0.41	0.43	0.48	4448	1.0
y_mean[1536]	0.66	7.2e-4	0.04	0.57	0.63	0.66	0.69	0.75	3856	1.0
y_mean[1537]	0.05	3.2e-4	0.02	0.01	0.04	0.05	0.07	0.1	4826	1.0
y_mean[1538]	-0.25	4.4e-4	0.03	-0.31	-0.27	-0.26	-0.24	-0.2	4147	1.0
y_mean[1539]	-0.1	4.5e-4	0.03	-0.16	-0.12	-0.1	-0.08	-0.03	4950	1.0
y_mean[1540]	1.37	8.2e-4	0.05	1.26	1.33	1.37	1.4	1.47	3935	1.0
y_mean[1541]	0.75	4.7e-4	0.03	0.69	0.73	0.75	0.77	0.81	4290	1.0
y_mean[1542]	0.14	4.2e-4	0.03	0.08	0.12	0.14	0.16	0.19	4189	1.0
y_mean[1543]	-0.3	5.7e-4	0.04	-0.38	-0.33	-0.3	-0.27	-0.22	4574	1.0
y_mean[1544]	0.14	3.2e-4	0.02	0.1	0.12	0.14	0.15	0.18	4308	1.0
y_mean[1545]	0.97	6.2e-4	0.04	0.9	0.94	0.97	1.0	1.05	4054	1.0
y_mean[1546]	-0.45	3.8e-4	0.02	-0.5	-0.47	-0.45	-0.44	-0.4	4338	1.0
y_mean[1547]	-0.42	4.5e-4	0.03	-0.47	-0.44	-0.42	-0.4	-0.36	4142	1.0
y_mean[1548]	-0.45	3.5e-4	0.02	-0.5	-0.47	-0.45	-0.43	-0.4	4956	1.0
y_mean[1549]	-0.39	4.3e-4	0.03	-0.44	-0.41	-0.39	-0.37	-0.33	4415	1.0
y_mean[1550]	0.1	4.3e-4	0.03	0.04	0.08	0.1	0.12	0.16	5477	1.0
y_mean[1551]	0.27	4.8e-4	0.03	0.21	0.25	0.27	0.29	0.33	3986	1.0
y_mean[1552]	0.05	3.0e-4	0.02	0.01	0.04	0.05	0.07	0.09	4764	1.0
y_mean[1553]	-0.43	6.3e-4	0.04	-0.51	-0.46	-0.43	-0.4	-0.35	4386	1.0
y_mean[1554]	-1.13	4.2e-4	0.03	-1.18	-1.15	-1.13	-1.11	-1.07	4423	1.0
y_mean[1555]	-0.74		0.03	-0.8	-0.76	-0.74	-0.72	-0.68	4539	1.0
y_mean[1556]	0.49	4.7e-4	0.03	0.43	0.47	0.49	0.52	0.56	4644	1.0
y_mean[1557]	-0.4	3.3e-4	0.02	-0.45	-0.42	-0.4	-0.39	-0.36	4494	1.0

y_mean[1558]	-0.73	6.6e-4	0.05	-0.82	-0.77	-0.74	-0.7	-0.64	4779	1.0
y_mean[1559]	1.08	6.1e-4	0.04	1.0	1.05	1.08	1.1	1.15	4180	1.0
y_mean[1560]	0.31	4.6e-4	0.03	0.25	0.29	0.31	0.33	0.37	4113	1.0
y_mean[1561]	0.71	5.6e-4	0.04	0.64	0.68	0.71	0.73	0.78	4116	1.0
y_mean[1562]	0.02	3.5e-4	0.02	-0.03	4.2e-3	0.02	0.04	0.07	4865	1.0
y_mean[1563]	-0.37	3.6e-4	0.02	-0.41	-0.38	-0.37	-0.35	-0.32	4536	1.0
y_mean[1564]	0.59	4.2e-4	0.03	0.54	0.57	0.59	0.61	0.65	4461	1.0
y_mean[1565]	-0.11	4.6e-4	0.03	-0.18	-0.14	-0.12	-0.09	-0.05	4673	1.0
y_mean[1566]	0.2	3.8e-4	0.03	0.15	0.18	0.2	0.22	0.25	4621	1.0
y_mean[1567]	0.64	4.3e-4	0.03	0.58	0.62	0.64	0.65	0.69	4268	1.0
y_mean[1568]	-0.13	6.2e-4	0.04	-0.21	-0.16	-0.13	-0.1	-0.05	4194	1.0
y_mean[1569]	0.67	4.3e-4	0.03	0.61	0.65	0.67	0.69	0.72	4233	1.0
y_mean[1570]	-0.2	4.0e-4	0.03	-0.25	-0.21	-0.2	-0.18	-0.15	4449	1.0
y_mean[1570] y_mean[1571]	-0.6	3.0e-4	0.03	-0.64	-0.61	-0.6	-0.58	-0.56	4825	1.0
y_mean[1571] y_mean[1572]	-0.66	3.3e-4	0.02	-0.7	-0.68	-0.66	-0.65	-0.61	4764	1.0
y_mean[1572] y_mean[1573]	-0.25	6.3e-4	0.02	-0.33	-0.28	-0.25	-0.22	-0.17	4219	1.0
y_mean[1573] y_mean[1574]	0.89	6.8e-4	0.04	0.8	0.86	0.89	0.92	0.99	4448	1.0
• –		3.7e-4	0.03						4777	
y_mean[1575]	-0.04			-0.09	-0.06	-0.04	-0.02	0.01		1.0
y_mean[1576]	-0.1	4.6e-4	0.03	-0.16	-0.12	-0.1	-0.08	-0.04	4529	1.0
y_mean[1577]	1.61	8.4e-4	0.05	1.5	1.57	1.61	1.64	1.72	4194	1.0
y_mean[1578]	-0.12	4.3e-4	0.03	-0.19	-0.14	-0.12	-0.1	-0.06	5014	1.0
y_mean[1579]	0.25	5.5e-4	0.03	0.18	0.23	0.25	0.27	0.32	4020	1.0
y_mean[1580]	-0.63	3.3e-4	0.02	-0.68	-0.65	-0.63	-0.62	-0.58	4763	1.0
y_mean[1581]	1.87	8.0e-4	0.05	1.77	1.83	1.87	1.9	1.97	4162	1.0
y_mean[1582]	-0.29	2.8e-4	0.02	-0.33	-0.3	-0.29	-0.28	-0.25	4794	1.0
y_mean[1583]	-1.0	4.1e-4	0.03	-1.05	-1.02	-1.0	-0.98	-0.94	4572	1.0
y_mean[1584]	1.64	8.8e-4	0.06	1.53	1.6	1.64	1.68	1.75	4161	1.0
y_mean[1585]	0.48	7.0e-4	0.04	0.39	0.45	0.47	0.5	0.56	3982	1.0
y_mean[1586]	-0.11	3.4e-4	0.02	-0.15	-0.12	-0.11	-0.09	-0.06	4978	1.0
y_mean[1587]	0.13	3.2e-4	0.02	0.09	0.12	0.13	0.14	0.17	4336	1.0
y_mean[1588]	1.61	9.1e-4	0.06	1.5	1.57	1.61	1.65	1.73	4396	1.0
y_mean[1589]	-0.57	3.1e-4	0.02	-0.61	-0.58	-0.57	-0.55	-0.52	4924	1.0
y_mean[1590]	0.26	3.4e-4	0.02	0.21	0.24	0.26	0.27	0.3	5006	1.0
y_mean[1591]	-1.58	6.3e-4	0.04	-1.66	-1.61	-1.58	-1.55	-1.5	4258	1.0
y_mean[1592]	-0.61	3.0e-4	0.02	-0.65	-0.62	-0.61	-0.59	-0.57	4843	1.0
y_mean[1593]	-0.6	3.0e-4	0.02	-0.64	-0.62	-0.6	-0.59	-0.56	4817	1.0
y_mean[1594]	-1.1	4.1e-4	0.03	-1.15	-1.12	-1.1	-1.08	-1.04	4443	1.0
y_mean[1595]	1.5	6.3e-4	0.04	1.42	1.47	1.5	1.53	1.58	4380	1.0
y_mean[1596]	0.24	3.5e-4	0.03	0.19	0.22	0.24	0.26	0.29	5299	1.0
y_mean[1597]	-0.7	3.8e-4	0.03	-0.75	-0.72	-0.7	-0.68	-0.65	4620	1.0
y_mean[1598]	-0.03	4.2e-4	0.03	-0.08	-0.05	-0.03	-0.01	0.02	4338	1.0
y_mean[1599]	0.18	2.4e-4	0.02	0.15	0.17	0.18	0.19	0.22	5449	1.0
y_mean[1600]	-0.46	3.2e-4	0.02	-0.5	-0.47	-0.46	-0.44	-0.41	4911	1.0
y_mean[1601]	1.24	6.3e-4	0.04	1.16	1.21	1.24	1.26	1.32	4049	1.0
y_mean[1601] y_mean[1602]	0.98	6.7e-4	0.04	0.89	0.95	0.98	1.01	1.06	4013	1.0
y_mean[1603]	2.24	9.4e-4	0.04	2.13	2.2	2.24	2.28	2.36	4032	1.0
y_mean[1604]	0.48	6.4e-4	0.04	0.4	0.45	0.48	0.51	0.57	4333	1.0
y_mean[1604] y_mean[1605]	0.40	3.0e-4	0.04	0.35	0.43	0.48	0.31	0.43	4845	1.0
λ Tmeam[1009]	0.39	J.06-4	0.02	0.55	0.57	0.09	0.4	0.43	-10-10	1.0

y_mean[1606]	-0.25	4.7e-4	0.03	-0.31	-0.27	-0.25	-0.23	-0.19	4553	1.0
y_mean[1607]	1.1	8.0e-4	0.05	0.99	1.06	1.1	1.13	1.2	4356	1.0
y_mean[1608]	0.34	2.7e-4	0.02	0.3	0.33	0.34	0.35	0.38	4942	1.0
y_mean[1609]	-0.54	5.9e-4	0.04	-0.62	-0.57	-0.54	-0.51	-0.47	4268	1.0
y_mean[1610]	0.99	8.9e-4	0.06	0.87	0.94	0.98	1.03	1.1	4577	1.0
y_mean[1611]	0.83	7.1e-4	0.05	0.74	0.8	0.83	0.86	0.92	4021	1.0
y_mean[1612]	-0.46	3.0e-4	0.02	-0.5	-0.48	-0.46	-0.45	-0.42	4740	1.0
y_mean[1613]	0.37	5.0e-4	0.03	0.31	0.35	0.37	0.39	0.44	4447	1.0
y_mean[1614]	-1.07	4.7e-4	0.03	-1.12	-1.09	-1.07	-1.05	-1.0	4359	1.0
y_mean[1615]	-1.83	9.7e-4	0.06	-1.95	-1.87	-1.83	-1.79	-1.7	4211	1.0
y_mean[1616]	-1.59	6.0e-4	0.04	-1.66	-1.61	-1.59	-1.56	-1.51	4294	1.0
y_mean[1617]	-1.18	4.3e-4	0.03	-1.24	-1.2	-1.18	-1.17	-1.13	4461	1.0
y_mean[1618]	-0.44	3.3e-4	0.02	-0.49	-0.46	-0.44	-0.43	-0.39	4874	1.0
y_mean[1619]	0.14	2.9e-4	0.02	0.1	0.13	0.14	0.15	0.18	4689	1.0
y_mean[1620]	-0.17	4.1e-4	0.03	-0.22	-0.19	-0.17	-0.15	-0.12	4207	1.0
y_mean[1621]	0.08	2.9e-4	0.02	0.04	0.07	0.08	0.1	0.12	4616	1.0
y_mean[1622]	0.16	4.1e-4	0.03	0.1	0.14	0.16	0.18	0.21	4912	1.0
y_mean[1623]	4.06	1.7e-3	0.11	3.85	3.98	4.06	4.13	4.27	4161	1.0
y_mean[1624]	-0.04	3.9e-4	0.03	-0.09	-0.06	-0.04	-0.02	0.01	4604	1.0
y_mean[1625]	-0.65	3.2e-4	0.02	-0.7	-0.67	-0.65	-0.64	-0.61	4764	1.0
y_mean[1626]	-0.15	5.2e-4	0.03	-0.22	-0.18	-0.15	-0.13	-0.09	3949	1.0
y_mean[1627]	-0.02	3.5e-4	0.02	-0.07	-0.04	-0.02-	6.6e-3	0.02	4763	1.0
y_mean[1628]	0.08	2.9e-4	0.02	0.04	0.07	0.08	0.09	0.12	4618	1.0
y_mean[1629]	-0.17	3.8e-4	0.03	-0.22	-0.19	-0.17	-0.15	-0.12	4902	1.0
y_mean[1630]	-0.16	5.7e-4	0.04	-0.23	-0.19	-0.16	-0.14	-0.08	4424	1.0
y_mean[1631]	-0.06	8.0e-4	0.06	-0.17	-0.1	-0.06	-0.02	0.05	4985	1.0
y_mean[1632]	-0.55	3.0e-4	0.02	-0.59	-0.56	-0.55	-0.53	-0.51	4835	1.0
y_mean[1633]	0.79	6.4e-4	0.04	0.71	0.76	0.79	0.81	0.86	3998	1.0
y_mean[1634]	0.24	4.1e-4	0.03	0.18	0.22	0.24	0.26	0.29	4899	1.0
y_mean[1635]	-0.4	3.3e-4	0.02	-0.44	-0.42	-0.4	-0.39	-0.36	4527	1.0
y_mean[1636]	0.73	5.3e-4	0.03	0.67	0.71	0.73	0.76	0.8	4081	1.0
y_mean[1637]	-0.52	3.3e-4	0.02	-0.56	-0.54	-0.52	-0.51	-0.48	4546	1.0
y_mean[1638]	0.04	2.9e-4	0.02	6.6e-3	0.03	0.04	0.06	0.08	4605	1.0
y_mean[1639]	-1.06	4.9e-4	0.03	-1.12	-1.08	-1.06	-1.04	-1.0	4355	1.0
y_mean[1640]	-0.41	2.8e-4	0.02	-0.45	-0.43	-0.42	-0.4	-0.38	4721	1.0
y_mean[1641]	-0.13	3.8e-4	0.03	-0.18	-0.15	-0.13	-0.11	-0.08	4647	1.0
y_mean[1642]	-0.51	2.9e-4	0.02	-0.55	-0.52	-0.51	-0.49	-0.47	4850	1.0
y_mean[1643]	0.11	5.5e-4	0.04	0.04	0.09	0.11	0.14	0.18	4442	1.0
y_mean[1644]	-0.06	3.5e-4	0.02	-0.11	-0.07	-0.06	-0.04	-0.01	4870	1.0
y_mean[1645]	1.93	9.9e-4	0.06	1.8	1.88	1.93	1.97	2.05	4190	1.0
y_mean[1646]	-0.51	3.3e-4	0.02	-0.55	-0.52	-0.51	-0.49	-0.46	5056	1.0
y_mean[1647]	0.38	3.4e-4	0.02	0.33	0.36	0.38	0.39	0.42	4637	1.0
y_mean[1648]	-0.2	5.7e-4	0.04	-0.27	-0.22	-0.2	-0.17	-0.12	4400	1.0
y_mean[1649]	-0.03	3.1e-4	0.02	-0.07	-0.04	-0.03	-0.02	0.01	4785	1.0
y_mean[1650]	-0.02	2.9e-4	0.02	-0.05	-0.03	-0.02-	1.9e-3	0.02	4773	1.0
y_mean[1651]	-0.4	3.4e-4	0.02	-0.44	-0.41	-0.39	-0.38	-0.35	5164	1.0
y_mean[1652]	0.48	5.1e-4	0.04	0.41	0.45	0.48	0.5	0.54	4842	1.0
y_mean[1653]	-0.57	4.8e-4	0.03	-0.63	-0.59	-0.57	-0.55	-0.5	4662	1.0

y_mean[1654]	0.49	9.3e-4	0.06	0.37	0.45	0.49	0.54	0.62	4422	1.0
y_mean[1655]	-0.57	4.0e-4	0.03	-0.62	-0.59	-0.57	-0.55	-0.52	4671	1.0
y_mean[1656]	0.32	7.3e-4	0.05	0.21	0.28	0.32	0.35	0.42	5077	1.0
y_mean[1657]	-0.27	2.9e-4	0.02	-0.31	-0.28	-0.27	-0.26	-0.23	4717	1.0
y_mean[1658]	0.15	4.1e-4	0.03	0.09	0.13	0.16	0.18	0.22	5521	1.0
y_mean[1659]	0.13	7.4e-4	0.05	0.03	0.09	0.13	0.16	0.23	5019	1.0
y_mean[1660]	-0.38	4.5e-4	0.03	-0.43	-0.4	-0.38	-0.36	-0.32	4384	1.0
y_mean[1661]	0.3	6.4e-4	0.04	0.22	0.27	0.3	0.33	0.38	4335	1.0
y_mean[1662]	-0.47	5.7e-4	0.04	-0.55	-0.5	-0.48	-0.45	-0.4	4441	1.0
y_mean[1663]	-0.37	3.6e-4	0.02	-0.41	-0.38	-0.37	-0.35	-0.32	4423	1.0
y_mean[1664]	-0.53	3.9e-4	0.03	-0.59	-0.55	-0.53	-0.52	-0.48	4459	1.0
y_mean[1665]	-0.47	7.0e-4	0.05	-0.57	-0.51	-0.47	-0.44	-0.38	4493	1.0
y_mean[1666]	1.68	1.1e-3	0.07	1.54	1.63	1.68	1.73	1.83	4130	1.0
y_mean[1667]	-0.33	2.7e-4	0.02	-0.37	-0.34	-0.33	-0.32	-0.29	4883	1.0
y_mean[1668]	-0.6	3.2e-4	0.02	-0.64	-0.61	-0.6	-0.58	-0.55	4844	1.0
y_mean[1669]	0.19	4.4e-4	0.03	0.13	0.17	0.19	0.21	0.24	4064	1.0
y_mean[1670]	0.22	2.5e-4	0.02	0.19	0.21	0.22	0.24	0.26	4992	1.0
y_mean[1671]	1.19	5.9e-4	0.04	1.11	1.16	1.19	1.21	1.26	4164	1.0
y_mean[1672]	0.41	7.8e-4	0.05	0.31	0.37	0.41	0.44	0.5	4058	1.0
y_mean[1673]	1.47	1.0e-3	0.07	1.34	1.43	1.47	1.52	1.61	4764	1.0
y_mean[1674]	-0.59	3.8e-4	0.03	-0.64	-0.61	-0.59	-0.57	-0.54	4510	1.0
y_mean[1675]	-0.64	3.2e-4	0.02	-0.68	-0.65	-0.64	-0.62	-0.59	4755	1.0
y_mean[1676]	1.3	6.3e-4	0.04	1.22	1.28	1.3	1.33	1.38	4084	1.0
y_mean[1677]	-0.62	3.1e-4	0.02	-0.66	-0.63	-0.62	-0.6	-0.57	4795	1.0
y_mean[1678]	-0.41	4.2e-4	0.03	-0.47	-0.43	-0.41	-0.4	-0.36	4296	1.0
y_mean[1679]	-0.35	3.8e-4	0.03	-0.39	-0.36	-0.35	-0.33	-0.29	4467	1.0
y_mean[1680]	-0.12	3.5e-4	0.02	-0.16	-0.14	-0.12	-0.1	-0.07	4718	1.0
y_mean[1681]	-0.55	5.3e-4	0.04	-0.62	-0.58	-0.55	-0.53	-0.48	4540	1.0
y_mean[1682]	-1.03	4.2e-4	0.03	-1.08	-1.04	-1.03	-1.01	-0.97	4448	1.0
y_mean[1683]	-0.91	4.4e-4	0.03	-0.97	-0.93	-0.91	-0.89	-0.85	4392	1.0
y_mean[1684]	0.6	5.1e-4	0.03	0.53	0.57	0.6	0.62	0.66	4679	1.0
y_mean[1685]	-0.37	3.6e-4	0.02	-0.41	-0.39	-0.37	-0.35	-0.32	4467	1.0
y_mean[1686]	-0.91	4.8e-4	0.03	-0.98	-0.94	-0.92	-0.89	-0.85	4613	1.0
y_mean[1687]	-0.52	2.9e-4	0.02	-0.56	-0.54	-0.52	-0.51	-0.48	4881	1.0
y_mean[1688]	-0.65	3.4e-4	0.02	-0.69	-0.66	-0.65	-0.63	-0.6	4861	1.0
y_mean[1689]	0.1	2.9e-4	0.02	0.06	0.08	0.1	0.11	0.14	4876	1.0
y_mean[1690]	-0.55	3.0e-4	0.02	-0.59	-0.56	-0.55	-0.53	-0.51	4842	1.0
y_mean[1691]	0.42	3.7e-4	0.03	0.37	0.4	0.42	0.44	0.47	5126	1.0
y_mean[1692]	-0.6	2.9e-4	0.02	-0.64	-0.61	-0.6	-0.58	-0.56	4828	1.0
y_mean[1693]	0.16	2.3e-4	0.02	0.13	0.15	0.16	0.17	0.19	5171	1.0
y_mean[1694]	-0.6	3.0e-4	0.02	-0.64	-0.62	-0.6	-0.59	-0.56	4817	1.0
y_mean[1695]	-0.23	4.2e-4	0.03	-0.28	-0.25	-0.23	-0.21	-0.17	4910	1.0
y_mean[1696]	-0.03	2.9e-4	0.02	-0.07	-0.04	-0.03	-0.02	9.5e-3	4788	1.0
y_mean[1697]	-0.21	5.5e-4	0.04	-0.29	-0.24	-0.21	-0.19	-0.14	4948	1.0
y_mean[1698]	-0.42	3.4e-4	0.02	-0.47	-0.44	-0.42	-0.4	-0.37	4851	1.0
y_mean[1699]	-0.7	3.9e-4	0.03	-0.75	-0.72	-0.7	-0.68	-0.65	4941	1.0
y_mean[1700]	-0.96	4.7e-4	0.03	-1.02	-0.98	-0.96	-0.94	-0.9	4643	1.0
y_mean[1701]	-0.05	5.6e-4	0.04	-0.13	-0.07	-0.05	-0.02	0.03	4806	1.0

y_mean[1702]	-0.74	4.6e-4	0.03	-0.8	-0.76	-0.74	-0.72	-0.68	4547	1.0
y_mean[1703]	-0.23	4.6e-4	0.03	-0.29	-0.26	-0.24	-0.21	-0.17	4585	1.0
y_mean[1704]	0.08	2.9e-4	0.02	0.04	0.06	0.08	0.09	0.12	4544	1.0
y_mean[1705]	-0.47	2.8e-4	0.02	-0.51	-0.48	-0.47	-0.46	-0.43	4885	1.0
y_mean[1706]	1.54	7.8e-4	0.05	1.44	1.5	1.54	1.57	1.64	4436	1.0
y_mean[1707]	0.16	3.9e-4	0.03	0.1	0.14	0.16	0.18	0.21	4875	1.0
y_mean[1708]	0.26	3.3e-4	0.02	0.21	0.24	0.26	0.28	0.3	5003	1.0
y_mean[1709]	0.91	5.2e-4	0.03	0.85	0.89	0.91	0.94	0.98	4319	1.0
y_mean[1710]	0.15	7.1e-4	0.04	0.06	0.12	0.15	0.18	0.24	3961	1.0
y_mean[1711]	-0.98	4.4e-4	0.03	-1.04	-1.0	-0.98	-0.96	-0.92	4579	1.0
y_mean[1712]	-0.08	4.6e-4	0.03	-0.14	-0.1	-0.08	-0.06	-0.02	4258	1.0
y_mean[1713]	1.2	9.7e-4	0.06	1.08	1.16	1.2	1.24	1.32	3958	1.0
y_mean[1714]	-0.68	3.5e-4	0.02	-0.73	-0.7	-0.68	-0.66	-0.63	4675	1.0
y_mean[1715]	-0.52	2.9e-4	0.02	-0.56	-0.53	-0.52	-0.51	-0.48	4637	1.0
y_mean[1716]	-0.59	3.2e-4	0.02	-0.63	-0.61	-0.59	-0.58	-0.55	4769	1.0
y_mean[1717]	-0.18	3.6e-4	0.02	-0.23	-0.2	-0.18	-0.17	-0.13	4367	1.0
y_mean[1718]	0.35	5.1e-4	0.02	0.28	0.32	0.35	0.37	0.41	4244	1.0
y_mean[1719]	-0.31	3.2e-4	0.02	-0.36	-0.33	-0.31	-0.3	-0.27	4492	1.0
y_mean[1710] y_mean[1720]	0.9	8.0e-4	0.02	0.8	0.87	0.9	0.94	1.01	4760	1.0
y_mean[1721]	0.97	6.6e-4	0.04	0.89	0.94	0.97	1.0	1.01	4028	1.0
y_mean[1721] y_mean[1722]	1.11	9.2e-4	0.04	1.0	1.07	1.11	1.15	1.23	4043	1.0
y_mean[1723]	-0.33	2.6e-4	0.00	-0.36	-0.34	-0.33	-0.32	-0.29	4929	1.0
y_mean[1724]	-0.53	4.1e-4	0.02	-0.58	-0.55	-0.53	-0.52	-0.29	4775	1.0
y_mean[1724] y_mean[1725]	-0.33	5.2e-4	0.03	-0.37	-0.32	-0.33	-0.31	-0.47	4368	1.0
• =	-0.09	3.3e-4	0.03	-0.37	-0.32	-0.09	-0.28	-0.23	4730	1.0
y_mean[1726]										
y_mean[1727]	0.27	5.8e-4	0.04	0.2	0.24	0.27	0.29	0.34	4129	1.0
y_mean[1728]	-0.5	3.1e-4	0.02	-0.54	-0.51	-0.5	-0.48	-0.46	4515	1.0
y_mean[1729]	0.62	4.6e-4	0.03	0.56	0.59	0.62	0.64	0.67	4491	1.0
y_mean[1730]	0.08	5.7e-4		5.5e-3	0.05	0.08	0.1	0.15	4015	1.0
y_mean[1731]	-0.4	3.4e-4	0.02	-0.44	-0.41	-0.4	-0.38	-0.35	4600	1.0
y_mean[1732]	-0.42	5.8e-4	0.04	-0.49	-0.44	-0.42	-0.39	-0.34	4311	1.0
y_mean[1733]	0.12	4.0e-4	0.03	0.07	0.1	0.12	0.14	0.18	5149	1.0
y_mean[1734]	-0.97	4.5e-4	0.03	-1.03	-0.99	-0.97	-0.95	-0.91	4638	1.0
y_mean[1735]	0.09	3.0e-4	0.02	0.05	0.08	0.09	0.1	0.13	4404	1.0
y_mean[1736]	-0.34	6.0e-4	0.04	-0.41	-0.36	-0.34	-0.31	-0.26	4452	1.0
y_mean[1737]	0.8	4.7e-4	0.03	0.74	0.78	0.8	0.82	0.86	4112	1.0
y_mean[1738]	-0.1	5.9e-4	0.04	-0.18	-0.13	-0.1	-0.08	-0.03	3934	1.0
y_mean[1739]	2.51	8.6e-4	0.05	2.4	2.47	2.51	2.54	2.61	3992	1.0
y_mean[1740]	-0.79	4.7e-4	0.03	-0.85	-0.81	-0.79	-0.77	-0.73	4474	1.0
y_mean[1741]	-0.13	3.6e-4	0.02	-0.17	-0.14	-0.13	-0.11	-0.07	4676	1.0
y_mean[1742]	-0.16	3.9e-4	0.03	-0.21	-0.17	-0.16	-0.14	-0.1	4644	1.0
y_mean[1743]	0.04		0.04	-0.03	0.01	0.04	0.06	0.11	4333	1.0
y_mean[1744]	0.48	4.3e-4	0.03	0.42	0.46	0.48	0.5	0.53	4568	1.0
y_mean[1745]	1.0	7.2e-4	0.05	0.91	0.97	1.0	1.03	1.09	3958	1.0
y_mean[1746]	0.63	7.5e-4	0.05	0.53	0.6	0.63	0.66	0.73	4312	1.0
y_mean[1747]	-0.15	6.0e-4	0.04	-0.23	-0.18	-0.15	-0.13	-0.07	4141	1.0
y_mean[1748]	-0.68	3.6e-4	0.03	-0.73	-0.7	-0.68	-0.66	-0.63	4911	1.0
y_mean[1749]	1.73	7.3e-4	0.05	1.64	1.7	1.73	1.76	1.83	4501	1.0

```
0.02
                                             0.34
                                                     0.37
                                                            0.38
y_mean[1750]
                     0.38
                           3.3e-4
                                                                     0.4
                                                                            0.43
                                                                                    5024
                                                                                             1.0
                           4.0e-4
                    -0.16
                                     0.03
                                            -0.21
                                                   -0.18
                                                           -0.16
                                                                   -0.14
                                                                            -0.1
                                                                                    4618
y_mean[1751]
                                                                                             1.0
y_mean[1752]
                                     0.02
                                            -0.03-9.3e-3 3.7e-3
                                                                                    4750
                   4.0e-3
                           2.9e-4
                                                                    0.02
                                                                            0.04
                                                                                             1.0
y_mean[1753]
                      0.3
                           2.9e-4
                                     0.02
                                             0.26
                                                     0.28
                                                              0.3
                                                                    0.31
                                                                            0.34
                                                                                    5311
                                                                                             1.0
                                            -0.52
                                                           -0.47
y_mean[1754]
                   -0.47
                           3.7e-4
                                     0.03
                                                    -0.49
                                                                   -0.45
                                                                           -0.42
                                                                                    5045
                                                                                             1.0
                      0.7
                           4.6e-4
                                     0.03
                                             0.64
                                                     0.68
                                                              0.7
                                                                    0.72
                                                                            0.76
                                                                                    4125
y_mean[1755]
                                                                                             1.0
                                             0.51
                                                            0.57
y_mean[1756]
                     0.57
                           4.3e-4
                                     0.03
                                                     0.55
                                                                    0.59
                                                                            0.62
                                                                                    4488
                                                                                             1.0
y_mean[1757]
                                                                   -1.15
                   -1.17
                                     0.03
                                            -1.22
                                                   -1.19
                                                           -1.17
                                                                           -1.11
                           4.4e-4
                                                                                    4470
                                                                                             1.0
                    -0.41
                           3.8e-4
                                     0.02
                                            -0.46
                                                   -0.43
                                                           -0.41
                                                                    -0.4
                                                                           -0.36
                                                                                    4300
y_mean[1758]
                                                                                             1.0
y_mean[1759]
                   6.4e-3
                           2.7e-4
                                     0.02
                                            -0.03-6.7e-3 6.2e-3
                                                                    0.02
                                                                            0.04
                                                                                    5054
                                                                                             1.0
                     1.41
                           7.4e-4
                                     0.05
                                             1.31
                                                     1.37
                                                             1.41
                                                                    1.44
                                                                            1.51
                                                                                    4653
y_mean[1760]
                                                                                             1.0
                   -0.55
                           2.8e-4
                                     0.02
                                            -0.59
                                                   -0.56
                                                           -0.55
                                                                   -0.54
                                                                           -0.51
                                                                                    4803
y_mean[1761]
                                                                                             1.0
y_mean[1762]
                    -0.35
                           3.8e-4
                                     0.03
                                             -0.4
                                                           -0.35
                                                                            -0.3
                                                                                    4573
                                                    -0.37
                                                                   -0.33
                                                                                             1.0
                   -0.49
                                                            -0.5
                           5.7e-4
                                     0.04
                                            -0.57
                                                    -0.52
                                                                   -0.47
                                                                           -0.42
                                                                                    4492
y_mean[1763]
                                                                                             1.0
                     0.04
                           4.3e-4
                                     0.03
                                            -0.02
                                                     0.02
                                                            0.04
                                                                    0.06
                                                                            0.09
                                                                                    4531
y_mean[1764]
                                                                                             1.0
                                            -0.18
                   -0.12
                           4.6e-4
                                     0.03
                                                    -0.14
                                                           -0.12
                                                                    -0.1
                                                                           -0.06
                                                                                    4078
                                                                                             1.0
y_mean[1765]
y_mean[1766]
                     0.57
                           8.8e-4
                                     0.06
                                             0.45
                                                     0.53
                                                            0.57
                                                                    0.61
                                                                            0.69
                                                                                    4851
                                                                                             1.0
y_mean[1767]
                   -0.35
                           3.8e-4
                                     0.03
                                             -0.4
                                                    -0.37
                                                           -0.35
                                                                   -0.33
                                                                           -0.29
                                                                                    5188
                                                                                             1.0
y_mean[1768]
                      2.2
                           1.0e-3
                                     0.07
                                             2.07
                                                     2.16
                                                              2.2
                                                                    2.25
                                                                            2.33
                                                                                    4295
                                                                                             1.0
y_mean[1769]
                    -0.32
                           3.1e-4
                                     0.02
                                            -0.36
                                                    -0.33
                                                           -0.32
                                                                    -0.3
                                                                           -0.28
                                                                                    4589
                                                                                             1.0
                   -0.07
                           4.3e-4
                                     0.03
                                            -0.13
                                                           -0.07
                                                                   -0.06
y_mean[1770]
                                                    -0.09
                                                                           -0.02
                                                                                    4308
                                                                                             1.0
                    -0.13
                           4.9e-4
                                     0.03
                                             -0.2
                                                    -0.15
                                                           -0.13
                                                                    -0.1
                                                                           -0.06
                                                                                    5000
y_mean[1771]
                                                                                             1.0
                           5.3e-4
                                     0.04
                                             0.63
                                                              0.7
                                                                            0.77
y_mean[1772]
                      0.7
                                                     0.68
                                                                    0.73
                                                                                    4660
                                                                                             1.0
                    -0.02
                           3.9e-4
                                     0.03
                                            -0.07
                                                    -0.03
                                                           -0.02 2.1e-3
                                                                            0.04
                                                                                    4848
y_mean[1773]
                                                                                             1.0
y_mean[1774]
                    -0.58
                           3.0e-4
                                     0.02
                                            -0.62
                                                    -0.59
                                                           -0.58
                                                                   -0.56
                                                                           -0.54
                                                                                    4874
                                                                                             1.0
                     0.41
                           4.4e-4
                                     0.03
                                             0.36
                                                      0.4
                                                            0.41
                                                                    0.43
                                                                            0.47
                                                                                    4080
y_mean[1775]
                                                                                             1.0
                                     0.03
                                             0.53
                                                     0.57
                                                            0.59
                                                                                    4385
                     0.59
                           4.1e-4
                                                                     0.6
                                                                            0.64
y_mean[1776]
                                                                                             1.0
y_mean[1777]
                    -0.05
                           3.9e-4
                                     0.03
                                             -0.1
                                                    -0.07
                                                           -0.05
                                                                   -0.03 1.9e-3
                                                                                    4845
                                                                                             1.0
                    -1.15
                                             -1.2
                                                    -1.17
                                                           -1.15
                                                                   -1.13
                                                                           -1.09
y_mean[1778]
                           4.2e-4
                                     0.03
                                                                                    4402
                                                                                             1.0
y_mean[1779]
                     0.22
                           4.1e-4
                                     0.03
                                             0.17
                                                     0.21
                                                            0.22
                                                                    0.24
                                                                            0.28
                                                                                    4066
                                                                                             1.0
y_mean[1780]
                 -2.1e-3
                           5.0e-4
                                     0.03
                                            -0.06
                                                    -0.02-1.9e-3
                                                                    0.02
                                                                            0.06
                                                                                    4099
                                                                                             1.0
                           5.1e-4
y_mean[1781]
                     0.08
                                     0.03
                                             0.02
                                                     0.06
                                                            0.08
                                                                    0.11
                                                                            0.15
                                                                                    4195
                                                                                             1.0
                                            -0.37
                                                    -0.33
y_mean[1782]
                   -0.31
                           4.6e-4
                                     0.03
                                                           -0.31
                                                                   -0.29
                                                                           -0.25
                                                                                    4091
                                                                                             1.0
y_mean[1783]
                      0.6
                           9.7e-4
                                     0.07
                                             0.47
                                                     0.56
                                                              0.6
                                                                    0.65
                                                                            0.74
                                                                                    4945
                                                                                             1.0
                     0.77
                           5.4e-4
                                     0.04
                                              0.7
                                                     0.74
                                                            0.77
                                                                    0.79
                                                                            0.84
                                                                                    4360
y mean[1784]
                                                                                             1.0
                    -0.21
                           3.8e-4
                                            -0.26
                                                    -0.22
                                                           -0.21
                                                                   -0.19
                                                                           -0.16
y_mean[1785]
                                     0.03
                                                                                    4421
                                                                                             1.0
                                                            0.85
                     0.85
                           5.8e-4
                                     0.04
                                             0.77
                                                     0.82
                                                                    0.87
                                                                            0.92
                                                                                    3957
y_mean[1786]
                                                                                             1.0
y_mean[1787]
                     -0.4
                           4.7e-4
                                     0.03
                                            -0.46
                                                    -0.42
                                                           -0.41
                                                                   -0.38
                                                                           -0.34
                                                                                    4134
                                                                                             1.0
                     0.41
                           4.4e-4
                                     0.03
                                             0.35
                                                     0.39
                                                            0.41
                                                                    0.43
                                                                            0.47
                                                                                    4725
                                                                                             1.0
y_mean[1788]
                    -1.52
                           6.1e-4
                                     0.04
                                             -1.6
                                                    -1.55
                                                           -1.52
                                                                   -1.49
                                                                           -1.44
                                                                                    4400
y_mean[1789]
                                                                                             1.0
                                     0.02
                                             0.02
                    0.07
                           3.3e-4
                                                     0.05
                                                            0.07
                                                                    0.08
                                                                            0.11
                                                                                    4412
                                                                                             1.0
y_mean[1790]
                     0.13
                           4.0e-4
                                     0.03
                                             0.07
y_mean[1791]
                                                     0.11
                                                            0.13
                                                                    0.15
                                                                            0.19
                                                                                    5365
                                                                                             1.0
y_mean[1792]
                    -0.44
                           3.9e-4
                                     0.03
                                            -0.49
                                                    -0.46
                                                           -0.44
                                                                   -0.42
                                                                           -0.39
                                                                                    4278
                                                                                             1.0
                     -0.9
                           4.9e-4
                                            -0.96
                                                             -0.9
                                                                           -0.83
                                     0.03
                                                    -0.92
                                                                   -0.88
                                                                                    4527
y_mean[1793]
                                                                                             1.0
                     0.84
                                     0.04
                                             0.77
                                                     0.81
                                                            0.84
                                                                            0.91
                                                                                    4370
y_mean[1794]
                           5.4e-4
                                                                    0.86
                                                                                             1.0
                                            -0.51
y_mean[1795]
                    -0.47
                           3.1e-4
                                     0.02
                                                    -0.49
                                                           -0.47
                                                                   -0.46
                                                                           -0.43
                                                                                    4479
                                                                                             1.0
                           3.3e-4
y_mean[1796]
                    -0.41
                                     0.02
                                            -0.46
                                                    -0.43
                                                           -0.41
                                                                    -0.4
                                                                           -0.37
                                                                                    4565
                                                                                             1.0
y_mean[1797]
                      0.6
                           5.8e-4
                                     0.04
                                             0.52
                                                     0.57
                                                              0.6
                                                                    0.63
                                                                            0.68
                                                                                    4714
                                                                                             1.0
```

y_mean[1798]	-0.49	3.1e-4	0.02	-0.54	-0.51	-0.49	-0.48	-0.45	4919	1.0
y_mean[1799]	-0.57	2.9e-4	0.02	-0.6	-0.58	-0.57	-0.55	-0.53	4867	1.0
y_mean[1800]	-0.58	3.0e-4	0.02	-0.62	-0.59	-0.58	-0.57	-0.54	4865	1.0
ypred[1]	0.19	9.8e-3	0.64	-1.06	-0.26	0.18	0.63	1.46	4347	1.0
ypred[2]	0.81	0.01	0.66	-0.49	0.38	0.82	1.25	2.13	3742	1.0
ypred[3]	0.57	0.01	0.65	-0.69	0.14	0.57	1.01	1.85	3937	1.0
ypred[4]	0.84	0.01	0.65	-0.42	0.39	0.83	1.29	2.1	4020	1.0
ypred[5]	-0.11	0.01	0.64	-1.37	-0.55	-0.1	0.34	1.13	3949	1.0
ypred[6]	-0.14	0.01	0.66	-1.43	-0.59	-0.12	0.3	1.11	4004	1.0
ypred[7]	-0.21	0.01	0.66	-1.47	-0.65	-0.21	0.23	1.13	3999	1.0
ypred[8]	-1.01	0.01	0.66	-2.33	-1.46	-1.01	-0.55	0.26	3953	1.0
ypred[9]	0.4	0.01	0.65	-0.84	-0.03	0.4	0.83	1.66	3990	1.0
ypred[10]	1.78	0.01	0.66	0.53	1.35	1.78	2.22	3.09	4035	1.0
ypred[11]	0.08	0.01	0.64	-1.19	-0.35	0.09	0.52	1.33	3837	1.0
ypred[11] ypred[12]	1.95	0.01	0.66	0.63	1.51	1.94	2.39	3.21	3524	1.0
ypred[12]	-1.1	0.01	0.64	-2.36	-1.54	-1.1	-0.67	0.15	4023	1.0
v -	-0.24	0.01	0.65	-2.50	-0.67	-0.23	0.19	1.02	3790	
ypred[14]										1.0
ypred[15]	-0.64	0.01	0.66	-1.91	-1.08	-0.65	-0.19	0.67	3913	1.0
ypred[16]	-0.49	0.01	0.66	-1.8	-0.92	-0.49	-0.04	0.79	3970	1.0
ypred[17]	2.06	0.01	0.65	0.79	1.62	2.07	2.49	3.34	3542	1.0
ypred[18]	1.4	0.01	0.68	0.08	0.93	1.4	1.86	2.74	3901	1.0
ypred[19]	-1.09	0.01	0.65	-2.35	-1.53	-1.1	-0.65	0.15	4088	1.0
ypred[20]	0.46	0.01	0.65	-0.82	0.01	0.45	0.91	1.74	3858	1.0
ypred[21]	0.62	0.01	0.64	-0.66	0.18	0.63	1.05	1.85	3544	1.0
ypred[22]	-0.05	0.01	0.65	-1.29	-0.5	-0.06	0.4	1.21	3842	1.0
ypred[23]	-0.72	0.01	0.65	-1.99	-1.15	-0.72	-0.27	0.55	4076	1.0
ypred[24]	-0.2	0.01	0.64	-1.44	-0.64	-0.2	0.24	1.04	3799	1.0
ypred[25]	-0.65	0.01	0.64	-1.92	-1.07	-0.64	-0.22	0.61	4133	1.0
ypred[26]	-0.6	0.01	0.65	-1.86	-1.03	-0.6	-0.17	0.67	3853	1.0
ypred[27]	0.02	0.01	0.66	-1.26	-0.41	0.02	0.47	1.29	3575	1.0
ypred[28]	-0.38	0.01	0.65	-1.67	-0.81	-0.39	0.07	0.86	3971	1.0
ypred[29]	0.11	0.01	0.66	-1.19	-0.33	0.11	0.54	1.41	3875	1.0
ypred[30]	-0.57	0.01	0.65	-1.85	-1.01	-0.55	-0.13	0.69	3890	1.0
ypred[31]	-0.66	0.01	0.65	-1.89	-1.1	-0.68	-0.21	0.64	4001	1.0
ypred[32]	-0.77	9.9e-3	0.64	-2.06	-1.2	-0.77	-0.33	0.47	4215	1.0
ypred[33]	-0.35	0.01	0.66	-1.66	-0.79	-0.36	0.09	0.95	3962	1.0
ypred[34]	-0.5	0.01	0.64	-1.72	-0.93	-0.5	-0.07	0.77	4025	1.0
ypred[35]	-0.48	0.01	0.65	-1.78	-0.93	-0.49	-0.04	0.79	4073	1.0
ypred[36]	0.09	0.01	0.65	-1.18	-0.33	0.08	0.53	1.37	4041	1.0
ypred[37]	0.41	0.01	0.64	-0.82	-0.03	0.4	0.85	1.65	3879	1.0
ypred[38]	-1.1	0.01	0.65	-2.36	-1.55	-1.1	-0.66	0.19	3834	1.0
ypred[39]	-0.35	0.01	0.64	-1.63	-0.77	-0.35	0.08	0.89	3829	1.0
ypred[40]	-0.75	0.01	0.66	-2.02	-1.19	-0.74	-0.31	0.53	4145	1.0
ypred[41]	1.78	0.01	0.65	0.44	1.36	1.79	2.22	3.05	3435	1.0
ypred[41] ypred[42]	-0.23	0.01	0.65	-1.52	-0.68	-0.23	0.19	1.03	4097	1.0
ypred[42] ypred[43]	1.01	0.01	0.65	-0.23	0.57	1.01	1.44	2.31	3911	1.0
v -	-0.21	0.01	0.65		-0.66			1.07		
ypred[44]				-1.46		-0.22	0.23		3579	1.0
ypred[45]	1.37	0.01	0.65	0.07	0.94	1.37	1.8	2.67	3977	1.0

ypred[46]	-0.48	0.01	0.64	-1.75	-0.9	-0.48	-0.03	0.77	3888	1.0
ypred[47]	1.05	0.01	0.67	-0.29	0.61	1.03	1.5	2.35	3967	1.0
ypred[48]	0.02	0.01	0.66	-1.25	-0.43	9.7e-3	0.46	1.32	3689	1.0
ypred[49]	-1.11	0.01	0.66	-2.44	-1.54	-1.1	-0.67	0.16	3749	1.0
ypred[50]	-0.33	0.01	0.66	-1.64	-0.77	-0.33	0.12	0.94	3887	1.0
ypred[51]	-0.49	0.01	0.65	-1.76	-0.92	-0.49	-0.05	0.81	4066	1.0
ypred[52]	0.76	0.01	0.65	-0.49	0.32	0.76	1.21	2.03	3949	1.0
ypred[53]	0.1	0.01	0.64	-1.17	-0.34	0.1	0.52	1.39	4063	1.0
ypred[54]	-0.6	0.01	0.66	-1.91	-1.06	-0.59	-0.14	0.66	4069	1.0
ypred[55]	-0.64	0.01	0.66	-1.95	-1.09	-0.65	-0.21	0.64	3825	1.0
ypred[56]	-0.22	0.01	0.64	-1.49	-0.66	-0.22	0.21	1.07	3904	1.0
ypred[57]	-0.36	0.01	0.65	-1.64	-0.81	-0.37	0.07	0.93	3778	1.0
ypred[58]	-1.12	0.01	0.66	-2.43	-1.56	-1.11	-0.68	0.16	4090	1.0
ypred[59]	-0.29	0.01	0.65	-1.55	-0.74	-0.29	0.15	1.0	3484	1.0
ypred[60]	-0.09	0.01	0.65	-1.35	-0.54	-0.1	0.34	1.2	3882	1.0
ypred[61]	0.37	0.01	0.65	-0.91	-0.05	0.37	0.81	1.62	3851	1.0
ypred[62]	-0.47	0.01	0.65	-1.73	-0.9	-0.46	-0.05	0.8	3787	1.0
ypred[63]	-0.97	0.01	0.65	-2.27	-1.42	-0.97	-0.53	0.28	4002	1.0
ypred[64]	-0.21	0.01	0.66	-1.52	-0.64	-0.2	0.23	1.11	4051	1.0
ypred[65]	0.64	0.01	0.64	-0.64	0.2	0.64	1.08	1.91	3779	1.0
ypred[66]	-0.57	0.01	0.66	-1.88	-0.99	-0.57	-0.12	0.74	4015	1.0
ypred[67]	-0.45	0.01	0.64	-1.72	-0.88		9.0e-3	0.8	3861	1.0
ypred[68]	-0.15	0.01	0.66	-1.46	-0.59	-0.16	0.28	1.15	3737	1.0
ypred[69]	-0.98	0.01	0.65	-2.26	-1.41	-0.98	-0.55	0.3	3987	1.0
ypred[70]	0.32	0.01	0.66	-0.96	-0.12	0.33	0.77	1.62	4039	1.0
V -	-0.07	0.01	0.65	-1.32	-0.12	-0.08	0.77	1.02	3832	
ypred[71]										1.0
ypred[72]	-0.96	0.01	0.66	-2.23	-1.41	-0.98	-0.51	0.33	4017	1.0
ypred[73]	-0.16	0.01	0.65	-1.45	-0.59	-0.15	0.27	1.15	3947	1.0
ypred[74]	-0.68	0.01	0.65	-1.97	-1.13	-0.67	-0.24	0.6	3871	1.0
ypred[75]	-0.48	0.01	0.65	-1.76	-0.92	-0.48	-0.06	0.79	3688	1.0
ypred[76]	-0.64	0.01	0.65	-1.9	-1.07	-0.63	-0.2	0.64	3778	1.0
ypred[77]	-0.09	0.01	0.65	-1.34	-0.52	-0.1	0.36	1.19	3847	1.0
ypred[78]	-0.35	0.01	0.64	-1.61	-0.8	-0.35	0.1	0.87	3926	1.0
ypred[79]	-0.47	0.01	0.64	-1.72	-0.92	-0.47	-0.03	0.77	3479	1.0
ypred[80]	0.15	0.01	0.65	-1.15	-0.27	0.16	0.6	1.43	4197	1.0
ypred[81]	-0.08	0.01	0.65	-1.36	-0.51	-0.07	0.36	1.21	4070	1.0
ypred[82]	-1.22	0.01	0.65	-2.45	-1.68	-1.22	-0.78	0.07	4089	1.0
ypred[83]	-0.32	0.01	0.66	-1.62	-0.76	-0.32	0.13	0.93	3897	1.0
ypred[84]	-1.0	9.8e-3	0.64	-2.24	-1.42	-1.0	-0.58	0.24	4307	1.0
ypred[85]	-0.37	0.01	0.65	-1.66	-0.79	-0.37	0.08	0.88	3513	1.0
ypred[86]	-0.71	0.01	0.65	-1.99	-1.13	-0.71	-0.28	0.58	3924	1.0
ypred[87]	-0.31	0.01	0.65	-1.57	-0.76	-0.29	0.15	0.97	4118	1.0
ypred[88]	-0.31	0.01	0.65	-1.6	-0.75	-0.31	0.12	0.96	4237	1.0
ypred[89]	0.73	0.01	0.66	-0.53	0.27	0.73	1.19	2.05	3913	1.0
ypred[90]	-0.13	0.01	0.65	-1.42	-0.57	-0.13	0.3	1.14	3897	1.0
ypred[91]	0.23	0.01	0.65	-1.05	-0.23	0.23	0.67	1.54	4184	1.0
ypred[92]	0.04	0.01	0.66	-1.25	-0.41	0.03	0.47	1.4	4099	1.0
ypred[93]	-0.85	0.01	0.64	-2.1	-1.28	-0.85	-0.42	0.42	3760	1.0

ypred[94]	1.13	0.01	0.65	-0.16	0.7	1.13	1.57	2.41	3886	1.0
ypred[95]	-0.1	0.01	0.65	-1.39	-0.55	-0.1	0.33	1.19	4103	1.0
ypred[96]	-0.65	0.01	0.65	-1.93	-1.1	-0.64	-0.21	0.63	4169	1.0
ypred[97]	0.57	0.01	0.65	-0.69	0.12	0.56	1.0	1.9	3972	1.0
ypred[98]	-0.61	0.01	0.64	-1.85	-1.05	-0.62	-0.16	0.61	3862	1.0
ypred[99]	-0.02	0.01	0.65	-1.28	-0.46	-0.04	0.41	1.27	4174	1.0
ypred[100]	0.75	0.01	0.65	-0.52	0.32	0.75	1.19	2.03	4049	1.0
ypred[101]	0.53	0.01	0.65	-0.8	0.1	0.54	0.97	1.75	3820	1.0
ypred[102]	-0.7	0.01	0.65	-1.99	-1.14	-0.69	-0.27	0.54	4134	1.0
ypred[103]	-0.67	0.01	0.66	-2.01	-1.12	-0.67	-0.23	0.64	3758	1.0
ypred[104]	-0.43	0.01	0.65	-1.66	-0.87		-1.2e-3	0.89	3863	1.0
ypred[105]	-0.4	0.01	0.66	-1.72	-0.84	-0.39	0.05	0.86	3946	1.0
ypred[106]	-0.13	0.01	0.66	-1.43	-0.56	-0.14	0.32	1.15	4109	1.0
ypred[107]	-0.07	0.01	0.65	-1.33	-0.52	-0.06	0.38	1.19	4023	1.0
ypred[108]	-1.63	0.01	0.65	-2.91	-2.06	-1.62	-1.2	-0.35	4234	1.0
ypred[109]	0.73	0.01	0.66	-0.59	0.29	0.74	1.17	2.02	4034	1.0
ypred[110]	-0.35	0.01	0.66	-1.63	-0.8	-0.34	0.09	0.94	3841	1.0
ypred[111]	3.71	0.01	0.65	2.44	3.28	3.71	4.15	4.98	3862	1.0
ypred[112]	-1.4e-3	0.01	0.64	-1.26	-0.44	-8.1e-3	0.44	1.28	4129	1.0
ypred[113]	-0.25	0.01	0.66	-1.54	-0.69	-0.25	0.19	1.05	4030	1.0
ypred[114]	-1.02	0.01	0.65	-2.29	-1.47	-1.02	-0.58	0.22	3918	1.0
ypred[115]	-0.61	0.01	0.65	-1.88	-1.05	-0.61	-0.17	0.71	3883	1.0
ypred[116]	-0.52	0.01	0.66	-1.8	-0.99	-0.52	-0.07	0.78	4038	1.0
ypred[117]	-0.22	0.01	0.65	-1.49	-0.65	-0.22	0.23	1.06	3943	1.0
ypred[118]	-0.62	0.01	0.66	-1.87	-1.05	-0.63	-0.19	0.69	3941	1.0
ypred[119]	-0.63	9.8e-3	0.65	-1.92	-1.08	-0.63	-0.19	0.63	4305	1.0
ypred[120]	0.28	0.01	0.66	-1.01	-0.17	0.28	0.73	1.57	3741	1.0
ypred[121]	0.75	0.01	0.65	-0.51	0.31	0.76	1.19	2.03	3922	1.0
ypred[122]	-0.48	0.01	0.65	-1.75	-0.93	-0.47	-0.04	0.77	3934	1.0
ypred[123]	-0.24	0.01	0.65	-1.52	-0.69	-0.24	0.2	0.98	3848	1.0
ypred[124]	-1.1	0.01	0.66	-2.4	-1.54	-1.1	-0.65	0.18	3917	1.0
ypred[125]	-0.67	0.01	0.65	-1.94	-1.11	-0.67	-0.24	0.64	3891	1.0
ypred[126]	0.39	0.01	0.66	-0.9	-0.05	0.4	0.85	1.65	3742	1.0
ypred[127]	-0.87	0.01	0.66	-2.18	-1.32	-0.86	-0.43	0.42	4074	1.0
ypred[128]	-0.29	0.01	0.65	-1.6	-0.73	-0.3	0.14	1.0	4051	1.0
ypred[129]	0.4	0.01	0.65	-0.86	-0.03	0.4	0.83	1.69	3980	1.0
ypred[130]	0.02	0.01	0.65	-1.27		4.8e-3	0.46	1.25	3742	1.0
ypred[131]	-0.55	0.01	0.66	-1.86	-1.0	-0.56	-0.11	0.74	3940	1.0
ypred[132]	1.29	0.01	0.64	0.05	0.85	1.28	1.72	2.56	3938	1.0
ypred[133]	1.5	0.01	0.64	0.24	1.05	1.51	1.94	2.76	3950	1.0
ypred[134]	0.24	0.01	0.66	-1.06	-0.21	0.24	0.69	1.53	3933	1.0
ypred[135]	0.23	0.01	0.65	-1.03	-0.22	0.23	0.67	1.48	3881	1.0
ypred[136]	-0.71	0.01	0.64	-2.02	-1.14	-0.7	-0.27	0.54	3809	1.0
ypred[137]	-0.56	0.01	0.66	-1.84	-1.01	-0.55	-0.11	0.71	3984	1.0
ypred[138]	0.43	0.01	0.65	-0.84	-0.01	0.43	0.85	1.73	3999	1.0
ypred[139]	-0.7	0.01	0.65	-1.98	-1.13	-0.7	-0.27	0.57	3913	1.0
ypred[140]	-0.5	0.01	0.63	-1.73	-0.93	-0.51	-0.06	0.74	4013	1.0
ypred[141]	-0.33	0.01	0.65	-1.6	-0.78	-0.33	0.11	0.94	4216	1.0

ypred[142]	-0.59	0.01	0.66	-1.91	-1.01	-0.58	-0.16	0.7	3816	1.0
ypred[143]	-0.25	0.01	0.67	-1.54	-0.71	-0.25	0.19	1.06	3756	1.0
ypred[144]	-0.62	0.01	0.65	-1.95	-1.06	-0.63	-0.18	0.65	3899	1.0
ypred[145]	-0.7	0.01	0.66	-2.02	-1.14	-0.69	-0.25	0.57	3885	1.0
ypred[146]	-1.13	0.01	0.66	-2.44	-1.57	-1.12	-0.69	0.17	4139	1.0
ypred[147]	-0.1	0.01	0.65	-1.37	-0.54	-0.11	0.34	1.17	3771	1.0
ypred[148]	-0.45	0.01	0.65	-1.73	-0.89	-0.46-	8.1e-3	0.85	3728	1.0
ypred[149]	0.2	0.01	0.64	-1.05	-0.24	0.19	0.63	1.45	3931	1.0
ypred[150]	0.58	0.01	0.64	-0.69	0.17	0.58	1.0	1.86	3844	1.0
ypred[151]	9.1e-3	0.01	0.65	-1.22	-0.44-	2.5e-3	0.46	1.27	4016	1.0
ypred[152]	0.19	0.01	0.65	-1.11	-0.24	0.21	0.63	1.43	3834	1.0
ypred[153]	-0.57	0.01	0.66	-1.85	-1.0	-0.56	-0.12	0.71	4008	1.0
ypred[154]	-0.57	0.01	0.65	-1.83	-1.01	-0.57	-0.13	0.72	3813	1.0
ypred[155]	-0.22	0.01	0.66	-1.54	-0.67	-0.22	0.23	1.07	3963	1.0
ypred[156]	-0.22	0.01	0.66	-1.52	-0.66	-0.23	0.22	1.11	3906	1.0
ypred[157]	-0.74	0.01	0.65	-2.0	-1.18	-0.74	-0.32	0.59	3927	1.0
ypred[158]	-0.45	0.01	0.65	-1.71	-0.89	-0.46-	8.7e-3	0.82	3974	1.0
ypred[159]	0.25	0.01	0.66	-1.07	-0.18	0.25	0.69	1.56	4007	1.0
ypred[160]	-0.38	0.01	0.65	-1.63	-0.83	-0.38	0.05	0.94	3892	1.0
ypred[161]	0.07	0.01	0.64	-1.19	-0.37	0.07	0.5	1.35	3677	1.0
ypred[162]	-0.7	9.8e-3	0.65	-1.95	-1.14	-0.7	-0.26	0.56	4433	1.0
ypred[163]	-0.03	0.01	0.65	-1.24	-0.49	-0.03	0.4	1.23	3963	1.0
ypred[164]	0.28	0.01	0.63	-0.94	-0.14	0.29	0.7	1.51	3660	1.0
ypred[165]	-0.01	0.01	0.66	-1.28	-0.46	-0.02	0.43	1.29	3837	1.0
ypred[166]	-0.41	0.01	0.66	-1.71	-0.85	-0.41	0.03	0.88	3814	1.0
ypred[167]	-0.26	9.9e-3	0.64	-1.51	-0.69	-0.27	0.16	1.0	4186	1.0
ypred[168]	0.65	0.01	0.65	-0.62	0.23	0.65	1.08	1.97	3848	1.0
ypred[169]	1.79	0.01	0.65	0.53	1.34	1.79	2.23	3.06	4049	1.0
ypred[170]	0.61	0.01	0.65	-0.66	0.17	0.59	1.05	1.91	3678	1.0
ypred[171]	-0.16	0.01	0.66	-1.42	-0.61	-0.16	0.29	1.15	3639	1.0
ypred[172]	1.35	0.01	0.66	0.05	0.92	1.34	1.79	2.7	3881	1.0
ypred[173]	-1.12	0.01	0.65	-2.38	-1.55	-1.12	-0.67	0.14	3958	1.0
ypred[174]	-0.39	0.01	0.65	-1.68	-0.82	-0.39	0.04	0.86	4183	1.0
ypred[175]	0.04	0.01	0.65	-1.22	-0.42	0.02	0.49	1.32	4056	1.0
ypred[176]	-1.87	0.01	0.65	-3.11	-2.3	-1.87	-1.42	-0.62	3910	1.0
ypred[177]	-0.19	0.01	0.65	-1.47	-0.63	-0.2	0.24	1.13	3868	1.0
ypred[178]	-0.7	0.01	0.64	-1.96	-1.13	-0.71	-0.25	0.54	3771	1.0
ypred[179]	0.64	0.01	0.65	-0.63	0.2	0.64	1.07	1.93	4017	1.0
ypred[180]	-0.73	0.01	0.66	-1.99	-1.18	-0.74	-0.28	0.55	3931	1.0
ypred[181]	-0.02	0.01	0.65	-1.27	-0.45	-0.02	0.43	1.23	3961	1.0
ypred[182]	-0.23	0.01	0.65	-1.51	-0.68	-0.22	0.21	1.02	3858	1.0
ypred[183]	-0.56	0.01	0.66	-1.87	-1.01	-0.56	-0.12	0.74	3795	1.0
ypred[184]	-0.38	0.01	0.65	-1.64	-0.8	-0.37	0.06	0.88	3695	1.0
ypred[185]	-0.61	0.01	0.66	-1.91	-1.06	-0.62	-0.15	0.67	4270	1.0
ypred[186]	2.46	0.01	0.66	1.14	2.02	2.46	2.91	3.76	3960	1.0
ypred[187]	-0.7	0.01	0.65	-1.97	-1.12	-0.7	-0.26	0.58	3958	1.0
ypred[188]	-0.8	0.01	0.65	-2.09	-1.24	-0.79	-0.36	0.47	3981	1.0
ypred[189]	-9.0e-3	0.01	0.66	-1.28	-0.46	-0.01	0.43	1.27	4245	1.0

ypred[190]	-0.1	0.01	0.65	-1.35	-0.54	-0.09	0.34	1.16	3960	1.0
ypred[191]	1.56	0.01	0.64	0.33	1.13	1.57	2.0	2.81	3584	1.0
ypred[192]	0.02	0.01	0.66	-1.27	-0.42	0.02	0.47	1.31	4041	1.0
ypred[193]	2.41	0.01	0.66	1.06	1.97	2.41	2.86	3.66	3834	1.0
ypred[194]	-0.65	0.01	0.65	-1.95	-1.09	-0.66	-0.23	0.61	4185	1.0
ypred[195]	-0.2	0.01	0.66	-1.52	-0.63	-0.2	0.24	1.08	3961	1.0
ypred[196]	0.38	0.01	0.65	-0.9	-0.06	0.38	0.82	1.67	3932	1.0
ypred[197]	-1.49	0.01	0.67	-2.82	-1.95	-1.49	-1.05	-0.18	3883	1.0
ypred[198]	-0.61	0.01	0.65	-1.91	-1.04	-0.6	-0.17	0.64	4101	1.0
ypred[199]	-0.15	0.01	0.66	-1.45	-0.6	-0.15	0.3	1.13	3952	1.0
ypred[200]	0.57	0.01	0.66	-0.72	0.13	0.56	1.01	1.88	3750	1.0
y_predicted[1]	0.2	1.3e-3	0.09	0.01	0.14	0.2	0.26	0.39	5098	1.0
y_predicted[2]	0.8	5.4e-4	0.03	0.73	0.78	0.8	0.82	0.86	3992	1.0
y_predicted[3]	0.58	8.5e-4	0.06	0.47	0.55	0.58	0.62	0.7	4478	1.0
y_predicted[4]	0.86	7.2e-4	0.05	0.77	0.83	0.86	0.89	0.95	3988	1.0
y_predicted[5]	-0.1	3.9e-4	0.03	-0.15	-0.12	-0.1	-0.09	-0.05	4666	1.0
y_predicted[6]	-0.13	6.3e-4	0.04	-0.2	-0.15	-0.13	-0.1	-0.04	4128	1.0
y_predicted[7]	-0.21	6.0e-4	0.04	-0.29	-0.24	-0.21	-0.18	-0.12	4990	1.0
y_predicted[8]	-1.0	4.5e-4	0.03	-1.06	-1.02	-1.0	-0.98	-0.94	4660	1.0
y_predicted[9]	0.42	6.4e-4	0.04	0.34	0.4	0.42	0.45	0.51	3978	1.0
y_predicted[10]		10.0e-4	0.06	1.67	1.76	1.8	1.84	1.93	4200	1.0
y_predicted[11]	0.1	4.2e-4	0.03	0.04	0.08	0.1	0.12	0.16	4640	1.0
y_predicted[12]	1.96	1.0e-3	0.07	1.83	1.91	1.96	2.0	2.09	4427	1.0
y_predicted[13]	-1.1	4.2e-4	0.03	-1.15	-1.12	-1.1	-1.08	-1.04	4420	1.0
y_predicted[14]	-0.26	5.2e-4	0.04	-0.33	-0.28	-0.26	-0.23	-0.18	5123	1.0
y_predicted[15]	-0.64	3.4e-4	0.02	-0.68	-0.66	-0.64	-0.62	-0.59	4749	1.0
y_predicted[16]	-0.49	3.0e-4	0.02	-0.53	-0.5	-0.49	-0.47	-0.45	4572	1.0
y_predicted[17]	2.05	1.3e-3	0.08	1.88	1.99	2.05	2.11	2.22	4461	1.0
y_predicted[18]	1.39	7.6e-4	0.05	1.3	1.36	1.39	1.43	1.49	4471	1.0
y_predicted[19]	-1.08	4.1e-4	0.03	-1.13	-1.1	-1.08	-1.06	-1.02	4469	1.0
y_predicted[20]	0.45	4.7e-4	0.03	0.38	0.43	0.45	0.47	0.51	5095	1.0
y_predicted[21]	0.62	4.4e-4	0.03	0.56	0.6	0.62	0.64	0.67	4256	1.0
y_predicted[22]	-0.05	5.4e-4	0.04	-0.12	-0.07	-0.05	-0.02	0.02	4568	1.0
y_predicted[23]	-0.71	3.7e-4	0.03	-0.76	-0.73	-0.71	-0.69	-0.66	4842	1.0
y_predicted[24]	-0.2	3.5e-4	0.02	-0.24	-0.21	-0.2	-0.18	-0.15	4553	1.0
y_predicted[25]	-0.64	3.2e-4	0.02	-0.68	-0.66	-0.64	-0.63	-0.6	4852	1.0
y_predicted[26]	-0.6	3.1e-4	0.02	-0.65	-0.62	-0.61	-0.59	-0.56	4800	1.0
y_predicted[27]	0.02	3.0e-4	0.02		7.9e-3	0.02	0.04	0.06	4636	1.0
y_predicted[28]	-0.37	3.1e-4	0.02	-0.41	-0.38	-0.37	-0.35	-0.32	5139	1.0
y_predicted[29]	0.1	3.1e-4	0.02	0.06	0.09	0.1	0.11	0.14	4346	1.0
y_predicted[30]	-0.55	3.3e-4	0.02	-0.6	-0.57	-0.55	-0.54	-0.5	4848	1.0
y_predicted[31]	-0.65	4.7e-4	0.03	-0.72	-0.68	-0.65	-0.63	-0.59	4873	1.0
y_predicted[31] y_predicted[32]	-0.75	4.1e-4	0.03	-0.81	-0.77	-0.75	-0.73	-0.7	4843	1.0
y_predicted[32] y_predicted[33]	-0.75	5.8e-4	0.03	-0.42	-0.77	-0.75	-0.73	-0.27	4538	1.0
y_predicted[34]	-0.33	4.7e-4	0.04	-0.42	-0.51	-0.49	-0.32	-0.27	4437	1.0
y_predicted[34] y_predicted[35]	-0.49	3.4e-4	0.03	-0.53	-0.51	-0.49	-0.47	-0.43	4995	1.0
y_predicted[36]		3.4e-4 3.8e-4	0.02	0.04	0.08	0.09	0.11	0.14		1.0
• -	0.09								4954	
$y_predicted[37]$	0.4	4.5e-4	0.03	0.34	0.38	0.4	0.42	0.45	4245	1.0

```
y_predicted[38]
                   -1.09
                           4.2e-4
                                     0.03
                                            -1.14
                                                   -1.11
                                                           -1.09
                                                                  -1.07
                                                                          -1.03
                                                                                   4489
                                                                                            1.0
                   -0.35
                                     0.03
                                            -0.41
                                                   -0.37
                                                           -0.35
                                                                   -0.33
                                                                                   4115
y_predicted[39]
                           5.1e-4
                                                                          -0.28
                                                                                            1.0
y_predicted[40]
                   -0.73
                           6.3e-4
                                     0.04
                                            -0.81
                                                   -0.76
                                                           -0.73
                                                                   -0.71
                                                                          -0.65
                                                                                   4400
                                                                                            1.0
                      1.8
                           7.9e-4
                                     0.05
                                             1.69
                                                    1.76
                                                            1.79
                                                                    1.83
                                                                             1.9
                                                                                   4201
                                                                                            1.0
y_predicted[41]
                           3.4e-4
y_predicted[42]
                   -0.23
                                     0.02
                                            -0.28
                                                   -0.25
                                                           -0.23
                                                                   -0.22
                                                                          -0.19
                                                                                   4853
                                                                                            1.0
                      1.0
                           8.6e-4
                                     0.06
                                             0.88
                                                    0.96
                                                             1.0
                                                                    1.04
                                                                            1.12
                                                                                   4840
y_predicted[43]
                                                                                            1.0
y_predicted[44]
                   -0.23
                           5.4e-4
                                     0.03
                                             -0.3
                                                   -0.25
                                                           -0.23
                                                                    -0.2
                                                                          -0.16
                                                                                   4055
                                                                                            1.0
y_predicted[45]
                     1.37
                           6.6e-4
                                     0.04
                                             1.29
                                                    1.34
                                                            1.37
                                                                     1.4
                                                                            1.45
                                                                                    4087
                                                                                            1.0
                   -0.49
                                     0.04
                                            -0.57
                                                   -0.52
                                                           -0.49
                                                                   -0.46
                                                                            -0.4
                                                                                   4396
y_predicted[46]
                           6.4e-4
                                                                                            1.0
                                     0.05
                                             0.95
                                                            1.04
y_predicted[47]
                     1.04
                           7.3e-4
                                                    1.01
                                                                    1.07
                                                                            1.13
                                                                                   4137
                                                                                            1.0
                           3.2e-4
                                     0.02
                                            -0.02 9.4e-3
                                                            0.02
                                                                    0.04
                                                                            0.07
                                                                                   4814
y_predicted[48]
                    0.02
                                                                                            1.0
y_predicted[49]
                   -1.11
                           4.4e-4
                                     0.03
                                            -1.17
                                                   -1.13
                                                           -1.11
                                                                   -1.09
                                                                          -1.06
                                                                                   4482
                                                                                            1.0
                   -0.34
                                     0.03
                                            -0.39
                                                           -0.34
                                                                                   4229
                           4.0e-4
                                                   -0.35
                                                                   -0.32
                                                                          -0.28
                                                                                            1.0
y_predicted[50]
                   -0.51
                           8.8e-4
                                     0.06
                                            -0.63
                                                   -0.55
                                                           -0.51
                                                                           -0.39
                                                                                   4566
y_predicted[51]
                                                                   -0.47
                                                                                            1.0
y_predicted[52]
                    0.76
                                     0.03
                                              0.7
                                                    0.74
                                                            0.76
                                                                    0.78
                                                                            0.82
                           5.0e-4
                                                                                   4033
                                                                                            1.0
                    0.09
                           3.0e-4
                                     0.02
                                             0.06
                                                    0.08
                                                            0.09
                                                                    0.11
                                                                            0.13
                                                                                   4463
y_predicted[53]
                                                                                            1.0
y_predicted[54]
                   -0.65
                           3.5e-4
                                     0.02
                                            -0.69
                                                   -0.66
                                                           -0.65
                                                                   -0.63
                                                                            -0.6
                                                                                   4730
                                                                                            1.0
                   -0.65
                           3.2e-4
                                     0.02
                                            -0.69
                                                   -0.67
                                                           -0.65
                                                                   -0.64
                                                                          -0.61
                                                                                   4796
                                                                                            1.0
y_predicted[55]
y_predicted[56]
                   -0.23
                           4.4e-4
                                     0.03
                                            -0.28
                                                   -0.25
                                                           -0.23
                                                                   -0.21
                                                                           -0.17
                                                                                   4644
                                                                                            1.0
y_predicted[57]
                   -0.35
                           2.6e-4
                                     0.02
                                            -0.39
                                                   -0.36
                                                           -0.35
                                                                   -0.34
                                                                          -0.31
                                                                                   5071
                                                                                            1.0
y_predicted[58]
                   -1.11
                           4.2e-4
                                     0.03
                                            -1.16
                                                   -1.13
                                                           -1.11
                                                                   -1.09
                                                                          -1.05
                                                                                   4420
                                                                                            1.0
                   -0.28
                           4.2e-4
                                     0.03
                                            -0.33
                                                    -0.3
                                                           -0.28
                                                                   -0.26
                                                                          -0.23
                                                                                   4176
y_predicted[59]
                                                                                            1.0
                                            -0.13
y_predicted[60]
                   -0.07
                           4.7e-4
                                     0.03
                                                   -0.09
                                                           -0.07
                                                                   -0.05
                                                                          -0.02
                                                                                   4116
                                                                                            1.0
                    0.39
                           5.9e-4
                                     0.04
                                             0.31
                                                    0.36
                                                            0.39
                                                                    0.41
                                                                            0.46
                                                                                   3979
y_predicted[61]
                                                                                            1.0
                   -0.47
                           3.1e-4
                                     0.02
                                            -0.51
                                                   -0.48
                                                           -0.47
                                                                   -0.46
                                                                          -0.43
                                                                                   4457
                                                                                            1.0
y_predicted[62]
                   -0.98
                           4.6e-4
                                     0.03
                                            -1.04
                                                    -1.0
                                                           -0.98
                                                                   -0.96
                                                                          -0.92
                                                                                   4704
y_predicted[63]
                                                                                            1.0
                                            -0.24
                    -0.2
                           3.4e-4
                                     0.02
                                                   -0.21
                                                            -0.2
                                                                   -0.18
                                                                          -0.15
                                                                                   4544
y_predicted[64]
                                                                                            1.0
                                     0.03
                                             0.57
                                                                             0.7
y_predicted[65]
                    0.64
                           4.5e-4
                                                    0.61
                                                            0.64
                                                                    0.66
                                                                                   5177
                                                                                            1.0
                   -0.56
                           2.9e-4
                                     0.02
                                             -0.6
                                                   -0.58
                                                           -0.56
                                                                   -0.55
                                                                          -0.52
                                                                                   4900
y_predicted[66]
                                                                                            1.0
y_predicted[67]
                   -0.45
                           3.1e-4
                                     0.02
                                            -0.49
                                                   -0.46
                                                           -0.45
                                                                   -0.43
                                                                            -0.4
                                                                                   4672
                                                                                            1.0
                   -0.16
                           5.8e-4
                                     0.04
                                            -0.23
                                                   -0.19
                                                           -0.16
                                                                   -0.14
                                                                          -0.08
                                                                                   4188
y_predicted[68]
                                                                                            1.0
y_predicted[69]
                   -0.99
                           4.5e-4
                                     0.03
                                            -1.05
                                                   -1.01
                                                           -0.99
                                                                  -0.97
                                                                           -0.93
                                                                                   4641
                                                                                            1.0
                                                                            0.37
y_predicted[70]
                    0.31
                           5.0e-4
                                     0.03
                                             0.25
                                                    0.29
                                                            0.31
                                                                    0.33
                                                                                   4076
                                                                                            1.0
                   -0.06
                           3.1e-4
                                     0.02
                                             -0.1
                                                   -0.08
                                                           -0.06
                                                                  -0.05
                                                                          -0.02
                                                                                   4751
                                                                                            1.0
y_predicted[71]
                   -0.97
                                     0.03
                                            -1.03
                                                   -0.99
                                                           -0.97
                                                                          -0.91
                                                                                   4699
y_predicted[72]
                           4.3e-4
                                                                   -0.95
                                                                                            1.0
                                            -0.22
                                                   -0.18
                                                           -0.15
                                                                          -0.08
y_predicted[73]
                   -0.15
                           5.7e-4
                                     0.04
                                                                   -0.13
                                                                                   4098
                                                                                            1.0
                   -0.68
                                     0.02
                                            -0.72
                                                   -0.69
                                                           -0.68
                                                                          -0.63
                                                                                   4868
y_predicted[74]
                           3.4e-4
                                                                   -0.66
                                                                                            1.0
y_predicted[75]
                   -0.48
                           4.5e-4
                                     0.03
                                            -0.54
                                                    -0.5
                                                           -0.48
                                                                   -0.46
                                                                          -0.42
                                                                                   4199
                                                                                            1.0
                   -0.63
                                     0.02
                                            -0.67
                                                   -0.65
                                                           -0.63
                                                                   -0.62
                                                                          -0.59
                                                                                   4770
y_predicted[76]
                           3.1e-4
                                                                                            1.0
                                     0.02
                                            -0.14
                                                   -0.11
                                                           -0.09
y_predicted[77]
                   -0.09
                           3.5e-4
                                                                   -0.08
                                                                          -0.05
                                                                                   4693
                                                                                            1.0
                           3.8e-4
                   -0.35
                                     0.02
                                             -0.4
                                                   -0.37
                                                           -0.35
                                                                   -0.34
                                                                            -0.3
                                                                                   4295
                                                                                            1.0
y_predicted[78]
                                     0.02
y_predicted[79]
                   -0.48
                           2.9e-4
                                            -0.52
                                                    -0.5
                                                           -0.48
                                                                   -0.47
                                                                          -0.44
                                                                                   4745
                                                                                            1.0
                    0.15
                           3.7e-4
                                     0.02
                                             0.11
                                                    0.14
                                                            0.15
                                                                    0.17
                                                                             0.2
                                                                                   4141
                                                                                            1.0
y_predicted[80]
                   -0.08
                           3.2e-4
                                     0.02
                                            -0.12
                                                    -0.1
                                                           -0.08
                                                                   -0.07
                                                                          -0.04
                                                                                   4923
y_predicted[81]
                                                                                            1.0
                                            -1.29
                                                                          -1.16
y_predicted[82]
                   -1.22
                           4.9e-4
                                     0.03
                                                   -1.25
                                                           -1.22
                                                                    -1.2
                                                                                   4485
                                                                                            1.0
y_predicted[83]
                   -0.32
                           3.7e-4
                                     0.02
                                            -0.37
                                                   -0.34
                                                           -0.32
                                                                    -0.3
                                                                          -0.27
                                                                                   4264
                                                                                            1.0
y_predicted[84]
                   -0.99
                           4.6e-4
                                     0.03
                                            -1.05
                                                   -1.01
                                                           -0.99
                                                                   -0.97
                                                                           -0.92
                                                                                   4681
                                                                                            1.0
                   -0.37
                           2.6e-4
                                     0.02
                                            -0.41
                                                   -0.39
                                                           -0.37
                                                                   -0.36
                                                                          -0.34
                                                                                   4920
                                                                                            1.0
y_predicted[85]
```

```
y_predicted[86]
                                           -0.76
                                                   -0.73
                   -0.71
                           3.9e-4
                                     0.03
                                                           -0.71
                                                                   -0.69
                                                                          -0.66
                                                                                   4596
                                                                                            1.0
                   -0.28
                                     0.03
                                           -0.33
                                                    -0.3
                                                           -0.28
                                                                  -0.26
                                                                          -0.22
                                                                                   4249
y_predicted[87]
                           4.5e-4
                                                                                            1.0
                   -0.31
                           5.3e-4
                                     0.04
                                           -0.38
                                                   -0.34
                                                           -0.32
                                                                  -0.29
                                                                          -0.24
                                                                                   4619
                                                                                            1.0
y_predicted[88]
y_predicted[89]
                    0.73
                           4.7e-4
                                     0.03
                                             0.67
                                                    0.71
                                                            0.73
                                                                    0.75
                                                                           0.79
                                                                                   4083
                                                                                            1.0
                           4.0e-4
y_predicted[90]
                   -0.13
                                     0.03
                                           -0.18
                                                   -0.15
                                                           -0.13
                                                                          -0.08
                                                                                   4551
                                                                  -0.11
                                                                                            1.0
                    0.21
                           4.4e-4
                                     0.03
                                             0.16
                                                    0.19
                                                            0.21
                                                                    0.23
                                                                           0.27
                                                                                   4028
y_predicted[91]
                                                                                            1.0
y_predicted[92]
                    0.05
                           2.8e-4
                                     0.02 7.7e-3
                                                    0.03
                                                            0.05
                                                                    0.06
                                                                           0.08
                                                                                   4669
                                                                                            1.0
y_predicted[93]
                                           -0.92
                                                   -0.88
                                                          -0.85
                   -0.85
                           5.2e-4
                                     0.03
                                                                  -0.83
                                                                          -0.78
                                                                                   4392
                                                                                            1.0
                                     0.06
                                             1.01
                                                    1.08
                                                            1.13
                                                                    1.17
                                                                           1.25
                                                                                   4110
y_predicted[94]
                    1.13
                           9.8e-4
                                                                                            1.0
y_predicted[95]
                                     0.03
                   -0.09
                           4.4e-4
                                           -0.15
                                                   -0.11
                                                           -0.09
                                                                  -0.08
                                                                          -0.04
                                                                                   4137
                                                                                            1.0
                   -0.65
                                     0.02
                                             -0.7
                                                   -0.67
                                                           -0.65
                                                                  -0.64
                                                                          -0.61
                                                                                   4723
y_predicted[96]
                           3.3e-4
                                                                                            1.0
y_predicted[97]
                    0.57
                           4.1e-4
                                     0.03
                                             0.52
                                                    0.56
                                                            0.57
                                                                    0.59
                                                                           0.63
                                                                                   4387
                                                                                            1.0
                                     0.02
                                           -0.66
                                                   -0.63
                                                                          -0.57
                                                                                   4814
                   -0.61
                           3.3e-4
                                                           -0.61
                                                                    -0.6
                                                                                            1.0
y_predicted[98]
                   -0.03
                                     0.02
                                           -0.08
                                                   -0.05
                                                           -0.03
                                                                   -0.02
                                                                           0.02
                                                                                   4763
y_predicted[99]
                           3.6e-4
                                                                                            1.0
                    0.74
                                             0.68
                                                    0.72
                                                            0.74
                                                                    0.76
                                                                                   4065
y_predicted[100]
                           4.8e-4
                                     0.03
                                                                            0.8
                                                                                            1.0
                    0.53
                           4.2e-4
                                     0.03
                                             0.48
                                                    0.51
                                                            0.53
                                                                    0.55
                                                                           0.59
                                                                                   4443
y_predicted[101]
                                                                                            1.0
y_predicted[102]
                     -0.7
                           4.0e-4
                                     0.03
                                           -0.75
                                                   -0.72
                                                            -0.7
                                                                  -0.68
                                                                          -0.64
                                                                                   4613
                                                                                            1.0
                   -0.68
                           3.4e-4
                                     0.02
                                           -0.73
                                                    -0.7
                                                           -0.68
                                                                  -0.67
                                                                          -0.63
                                                                                   4715
                                                                                            1.0
y_predicted[103]
y_predicted[104]
                   -0.42
                           4.0e-4
                                     0.03
                                           -0.47
                                                   -0.44
                                                           -0.42
                                                                    -0.4
                                                                          -0.36
                                                                                   5047
                                                                                            1.0
y_predicted[105]
                   -0.39
                           3.0e-4
                                     0.02
                                           -0.44
                                                   -0.41
                                                           -0.39
                                                                  -0.38
                                                                          -0.35
                                                                                   5218
                                                                                            1.0
                                                           -0.12
                                                                          -0.07
y_predicted[106]
                   -0.12
                           3.9e-4
                                     0.03
                                           -0.17
                                                   -0.14
                                                                    -0.1
                                                                                   4628
                                                                                            1.0
                   -0.07
                                     0.02
                                           -0.11
                                                   -0.08
                                                           -0.07
                                                                   -0.05
                                                                          -0.03
                                                                                   4740
y_predicted[107]
                           3.2e-4
                                                                                            1.0
y_predicted[108]
                   -1.62
                           5.9e-4
                                     0.04
                                           -1.69
                                                   -1.64
                                                           -1.61
                                                                  -1.59
                                                                          -1.54
                                                                                   4306
                                                                                            1.0
                    0.73
                           4.9e-4
                                     0.03
                                             0.66
                                                     0.7
                                                            0.73
                                                                    0.75
                                                                           0.79
                                                                                   4524
y_predicted[109]
                                                                                            1.0
y_predicted[110]
                   -0.35
                           3.6e-4
                                     0.02
                                           -0.39
                                                   -0.36
                                                           -0.35
                                                                  -0.33
                                                                           -0.3
                                                                                   4473
                                                                                            1.0
                    3.71
                                     0.11
                                              3.5
                                                    3.64
                                                            3.71
                                                                    3.79
                                                                           3.93
                                                                                   4033
y_predicted[111]
                           1.8e-3
                                                                                            1.0
                                     0.03
                                           -0.08
                   -0.02
                           4.6e-4
                                                   -0.04
                                                           -0.02-1.7e-3
                                                                           0.04
                                                                                   4741
y_predicted[112]
                                                                                            1.0
                   -0.25
                                     0.03
                                                           -0.25
                                                                  -0.23
                                                                          -0.18
                                                                                   4531
y_predicted[113]
                           4.9e-4
                                           -0.31
                                                   -0.27
                                                                                            1.0
                                                           -1.03
                                                                  -1.01
                   -1.03
                           4.3e-4
                                     0.03
                                           -1.09
                                                   -1.05
                                                                          -0.97
                                                                                   4590
y_predicted[114]
                                                                                            1.0
y_predicted[115]
                    -0.6
                           3.1e-4
                                     0.02
                                           -0.64
                                                   -0.61
                                                            -0.6
                                                                  -0.58
                                                                          -0.55
                                                                                   4845
                                                                                            1.0
                   -0.54
                           3.6e-4
                                     0.02
                                           -0.58
                                                   -0.55
                                                           -0.54
                                                                  -0.52
                                                                          -0.49
                                                                                   4777
y_predicted[116]
                                                                                            1.0
y_predicted[117]
                   -0.22
                           6.0e-4
                                     0.04
                                             -0.3
                                                   -0.25
                                                           -0.22
                                                                  -0.19
                                                                          -0.14
                                                                                   5008
                                                                                            1.0
y_predicted[118]
                   -0.61
                           3.2e-4
                                     0.02
                                           -0.65
                                                   -0.63
                                                           -0.61
                                                                    -0.6
                                                                          -0.57
                                                                                   4816
                                                                                            1.0
y_predicted[119]
                   -0.63
                           3.6e-4
                                     0.02
                                           -0.67
                                                   -0.64
                                                           -0.63
                                                                  -0.61
                                                                          -0.58
                                                                                   4799
                                                                                            1.0
                    0.28
                                     0.03
                                             0.23
                                                    0.26
                                                            0.28
                                                                     0.3
                                                                           0.34
                                                                                   4073
y_predicted[120]
                           4.6e-4
                                                                                            1.0
                                             0.67
                                                    0.73
                                                            0.76
                                                                    0.79
y_predicted[121]
                    0.76
                           6.6e-4
                                     0.04
                                                                           0.85
                                                                                   4425
                                                                                            1.0
                    -0.5
                           2.8e-4
                                     0.02
                                           -0.53
                                                   -0.51
                                                            -0.5
                                                                          -0.46
                                                                                   4826
y_predicted[122]
                                                                  -0.48
                                                                                            1.0
y_predicted[123]
                   -0.25
                           3.1e-4
                                     0.02
                                           -0.29
                                                   -0.26
                                                           -0.25
                                                                  -0.23
                                                                          -0.21
                                                                                   5082
                                                                                            1.0
                    -1.1
                           4.2e-4
                                     0.03
                                           -1.16
                                                   -1.12
                                                            -1.1
                                                                  -1.08
                                                                          -1.05
                                                                                   4465
y_predicted[124]
                                                                                            1.0
                   -0.67
                                     0.02
                                           -0.71
                                                   -0.68
                                                           -0.67
                                                                          -0.62
                                                                                   4694
y_predicted[125]
                           3.4e-4
                                                                  -0.65
                                                                                            1.0
                    0.39
                           3.5e-4
                                     0.03
                                             0.34
                                                    0.38
                                                            0.39
                                                                    0.41
                                                                           0.44
                                                                                   5161
                                                                                            1.0
y_predicted[126]
y_predicted[127]
                   -0.85
                           5.6e-4
                                     0.04
                                           -0.92
                                                   -0.88
                                                           -0.85
                                                                  -0.82
                                                                          -0.77
                                                                                   4781
                                                                                            1.0
y_predicted[128]
                   -0.29
                           3.6e-4
                                     0.03
                                           -0.33
                                                    -0.3
                                                           -0.29
                                                                  -0.27
                                                                          -0.24
                                                                                   4867
                                                                                            1.0
                     0.4
                           6.1e-4
                                     0.04
                                             0.31
                                                    0.37
                                                             0.4
                                                                    0.43
                                                                           0.48
                                                                                   4692
y_predicted[129]
                                                                                            1.0
y_predicted[130]
                                     0.02
                                                                                   4744
                    0.01
                           2.9e-4
                                           -0.03-1.6e-3
                                                            0.01
                                                                    0.03
                                                                           0.05
                                                                                            1.0
y_predicted[131]
                   -0.54
                           3.0e-4
                                     0.02
                                           -0.58
                                                   -0.55
                                                           -0.54
                                                                   -0.53
                                                                           -0.5
                                                                                   4659
                                                                                            1.0
y_predicted[132]
                     1.29
                           6.2e-4
                                     0.04
                                             1.21
                                                    1.26
                                                            1.29
                                                                    1.32
                                                                           1.37
                                                                                   4117
                                                                                            1.0
                      1.5
                           7.6e-4
                                     0.05
                                              1.4
                                                    1.47
                                                             1.5
                                                                    1.54
                                                                            1.6
                                                                                   4212
                                                                                            1.0
y_predicted[133]
```

```
y_predicted[134]
                                                    0.23
                                                                    0.26
                    0.25
                           3.5e-4
                                     0.03
                                              0.2
                                                            0.25
                                                                            0.3
                                                                                   5336
                                                                                            1.0
                    0.22
                                     0.03
                                            0.16
                                                     0.2
                                                            0.22
                                                                   0.23
                                                                           0.27
                                                                                   4035
y_predicted[135]
                           4.2e-4
                                                                                            1.0
y_predicted[136]
                   -0.71
                           3.6e-4
                                     0.02
                                           -0.75
                                                   -0.72
                                                           -0.71
                                                                  -0.69
                                                                          -0.66
                                                                                   4724
                                                                                            1.0
                   -0.56
                           3.0e-4
                                     0.02
                                            -0.6
                                                   -0.57
                                                           -0.56
                                                                  -0.55
                                                                          -0.52
                                                                                   4720
                                                                                            1.0
y_predicted[137]
                           6.3e-4
y_predicted[138]
                    0.42
                                     0.04
                                            0.34
                                                     0.4
                                                            0.42
                                                                    0.45
                                                                            0.5
                                                                                   3997
                                                                                            1.0
                   -0.72
                           3.7e-4
                                     0.03
                                           -0.76
                                                   -0.73
                                                           -0.72
                                                                   -0.7
                                                                          -0.67
                                                                                   4719
y_predicted[139]
                                                                                            1.0
y_predicted[140]
                   -0.51
                           3.2e-4
                                     0.02
                                           -0.56
                                                   -0.53
                                                           -0.51
                                                                    -0.5
                                                                          -0.47
                                                                                   5225
                                                                                            1.0
y_predicted[141]
                                           -0.37
                                                   -0.34
                                                           -0.33
                                                                  -0.31
                                                                          -0.27
                   -0.33
                           4.0e-4
                                     0.03
                                                                                   4330
                                                                                            1.0
                    -0.6
                                     0.03
                                           -0.66
                                                   -0.62
                                                            -0.6
                                                                  -0.59
                                                                          -0.55
                                                                                   4414
y_predicted[142]
                           4.2e-4
                                                                                            1.0
y_predicted[143]
                                     0.02
                   -0.26
                           3.3e-4
                                             -0.3
                                                   -0.27
                                                           -0.26
                                                                  -0.24
                                                                          -0.22
                                                                                   4548
                                                                                            1.0
                   -0.62
                                     0.02
                                           -0.66
                                                   -0.64
                                                           -0.62
                                                                  -0.61
                                                                          -0.58
                                                                                   4787
y_predicted[144]
                           3.1e-4
                                                                                            1.0
y_predicted[145]
                    -0.7
                           3.6e-4
                                     0.02
                                           -0.75
                                                   -0.72
                                                            -0.7
                                                                  -0.68
                                                                          -0.65
                                                                                   4655
                                                                                            1.0
                                     0.03
                                           -1.16
                                                   -1.13
                                                                                   4499
                   -1.11
                           4.4e-4
                                                           -1.11
                                                                  -1.09
                                                                          -1.05
                                                                                            1.0
y_predicted[146]
                   -0.12
                                     0.03
                                           -0.17
                                                   -0.14
                                                           -0.12
                                                                    -0.1
                                                                          -0.06
                                                                                   4133
y_predicted[147]
                           4.4e-4
                                                                                            1.0
y_predicted[148]
                   -0.44
                           2.7e-4
                                           -0.48
                                                           -0.44
                                     0.02
                                                   -0.45
                                                                  -0.43
                                                                           -0.4
                                                                                   5076
                                                                                            1.0
                     0.2
                           4.3e-4
                                     0.03
                                            0.14
                                                    0.18
                                                             0.2
                                                                   0.22
                                                                           0.26
                                                                                   4867
y_predicted[149]
                                                                                            1.0
y_predicted[150]
                    0.57
                           4.1e-4
                                     0.03
                                            0.51
                                                    0.55
                                                            0.57
                                                                    0.58
                                                                           0.62
                                                                                   4343
                                                                                            1.0
y_predicted[151]
                           3.0e-4
                    0.01
                                     0.02
                                           -0.03-2.3e-3
                                                            0.01
                                                                   0.03
                                                                           0.05
                                                                                   4674
                                                                                            1.0
y_predicted[152]
                    0.18
                           3.5e-4
                                     0.02
                                            0.14
                                                    0.17
                                                            0.18
                                                                     0.2
                                                                           0.23
                                                                                   4324
                                                                                            1.0
y_predicted[153]
                   -0.56
                           3.0e-4
                                     0.02
                                             -0.6
                                                   -0.57
                                                           -0.56
                                                                  -0.54
                                                                          -0.52
                                                                                   4900
                                                                                            1.0
                                     0.02
y_predicted[154]
                   -0.56
                           2.9e-4
                                           -0.59
                                                   -0.57
                                                           -0.56
                                                                  -0.54
                                                                          -0.52
                                                                                   4848
                                                                                            1.0
                   -0.23
                                     0.02
                                           -0.27
                                                   -0.24
                                                           -0.23
                                                                  -0.21
                                                                          -0.18
                                                                                   4852
y_predicted[155]
                           3.1e-4
                                                                                            1.0
y_predicted[156]
                   -0.21
                           5.5e-4
                                     0.03
                                           -0.28
                                                   -0.23
                                                           -0.21
                                                                  -0.19
                                                                          -0.14
                                                                                   4067
                                                                                            1.0
                   -0.73
                                     0.03
                                           -0.79
                                                   -0.75
                                                           -0.73
                                                                  -0.71
                                                                          -0.67
                                                                                   4553
y_predicted[157]
                           4.3e-4
                                                                                            1.0
                                            -0.5
y_predicted[158]
                   -0.46
                           3.0e-4
                                     0.02
                                                   -0.47
                                                           -0.46
                                                                  -0.44
                                                                          -0.42
                                                                                   4712
                                                                                            1.0
                    0.24
                           4.0e-4
                                     0.03
                                            0.19
                                                    0.22
                                                            0.24
                                                                    0.26
                                                                           0.29
                                                                                   4288
y_predicted[159]
                                                                                            1.0
                           3.6e-4
                                     0.02
                                           -0.42
                                                                          -0.33
                   -0.38
                                                    -0.4
                                                           -0.38
                                                                  -0.36
                                                                                   4348
y_predicted[160]
                                                                                            1.0
                                     0.02
                                            0.01
                                                                                   4524
y_predicted[161]
                    0.05
                           3.0e-4
                                                    0.04
                                                            0.05
                                                                   0.07
                                                                           0.09
                                                                                            1.0
                   -0.72
                                           -0.76
                                                   -0.73
                                                           -0.72
                           3.7e-4
                                     0.03
                                                                    -0.7
                                                                          -0.66
                                                                                   4649
y_predicted[162]
                                                                                            1.0
y_predicted[163]
                   -0.04
                           5.6e-4
                                     0.04
                                           -0.12
                                                   -0.07
                                                           -0.04
                                                                  -0.02
                                                                           0.03
                                                                                   4560
                                                                                            1.0
                    0.27
                           3.4e-4
                                     0.02
                                            0.22
                                                    0.25
                                                            0.27
                                                                    0.28
                                                                           0.31
                                                                                   4728
y_predicted[164]
                                                                                            1.0
                                                           -0.02-6.4e-3
y_predicted[165]
                   -0.02
                           3.4e-4
                                     0.02
                                           -0.07
                                                   -0.04
                                                                           0.02
                                                                                   4824
                                                                                            1.0
y_predicted[166]
                   -0.41
                           3.3e-4
                                     0.02
                                           -0.46
                                                   -0.43
                                                           -0.41
                                                                    -0.4
                                                                          -0.37
                                                                                   4751
                                                                                            1.0
y_predicted[167]
                   -0.27
                           3.1e-4
                                     0.02
                                           -0.31
                                                   -0.28
                                                           -0.27
                                                                  -0.25
                                                                          -0.23
                                                                                   4642
                                                                                            1.0
                    0.64
                           4.2e-4
                                     0.03
                                            0.59
                                                    0.62
                                                            0.64
                                                                    0.66
                                                                            0.7
                                                                                   4324
y_predicted[168]
                                                                                            1.0
                    1.79
                                                    1.75
                                                            1.79
                                                                    1.83
                                                                           1.91
                                                                                   4240
y_predicted[169]
                           9.4e-4
                                     0.06
                                             1.67
                                                                                            1.0
                    0.62
                           4.9e-4
                                     0.03
                                            0.55
                                                            0.62
                                                                    0.64
                                                                           0.68
                                                                                   4241
y_predicted[170]
                                                     0.6
                                                                                            1.0
y_predicted[171]
                   -0.16
                           7.3e-4
                                     0.05
                                           -0.26
                                                   -0.19
                                                           -0.16
                                                                  -0.12
                                                                          -0.05
                                                                                   5079
                                                                                            1.0
                    1.35
                           8.0e-4
                                     0.05
                                             1.24
                                                    1.31
                                                            1.35
                                                                    1.39
                                                                           1.45
                                                                                   4748
y_predicted[172]
                                                                                            1.0
                                     0.03
                                                                                   4420
y_predicted[173]
                   -1.12
                           4.1e-4
                                           -1.17
                                                   -1.14
                                                           -1.12
                                                                   -1.1
                                                                          -1.06
                                                                                            1.0
                   -0.38
                           2.6e-4
                                     0.02
                                           -0.42
                                                   -0.39
                                                           -0.38
                                                                  -0.37
                                                                          -0.35
                                                                                   4907
                                                                                            1.0
y_predicted[174]
y_predicted[175]
                    0.05
                           2.8e-4
                                     0.02
                                            0.01
                                                    0.04
                                                            0.05
                                                                   0.06
                                                                           0.09
                                                                                   4620
                                                                                            1.0
                   -1.87
                           9.4e-4
                                     0.06
                                           -1.98
                                                   -1.91
                                                           -1.87
                                                                  -1.82
                                                                          -1.74
                                                                                   4226
                                                                                            1.0
y_predicted[176]
                                           -0.27
                    -0.2
                           5.4e-4
                                     0.04
                                                   -0.22
                                                            -0.2
                                                                  -0.17
                                                                          -0.12
                                                                                   4660
y_predicted[177]
                                                                                            1.0
y_predicted[178]
                                           -0.75
                                                   -0.71
                   -0.69
                           4.6e-4
                                     0.03
                                                           -0.69
                                                                  -0.67
                                                                          -0.63
                                                                                   4937
                                                                                            1.0
y_predicted[179]
                    0.62
                           5.9e-4
                                     0.04
                                            0.55
                                                    0.59
                                                            0.62
                                                                    0.64
                                                                           0.69
                                                                                   4005
                                                                                            1.0
y_predicted[180]
                   -0.73
                           4.1e-4
                                     0.03
                                           -0.79
                                                   -0.75
                                                           -0.73
                                                                  -0.71
                                                                          -0.68
                                                                                   4560
                                                                                            1.0
y_predicted[181]
                   -0.02
                           2.9e-4
                                     0.02
                                           -0.06
                                                   -0.03
                                                           -0.02-5.6e-3
                                                                           0.02
                                                                                   4759
                                                                                            1.0
```

```
y_predicted[182]
                   -0.24
                           4.8e-4
                                     0.03
                                           -0.31
                                                   -0.27
                                                           -0.24
                                                                  -0.22
                                                                          -0.18
                                                                                   4535
                                                                                            1.0
                   -0.57
                           3.3e-4
                                     0.02
                                           -0.61
                                                   -0.58
                                                           -0.57
                                                                  -0.55
                                                                          -0.52
                                                                                   4787
                                                                                            1.0
y_predicted[183]
                   -0.38
                           2.9e-4
                                           -0.42
                                                   -0.39
                                                           -0.38
y_predicted[184]
                                     0.02
                                                                  -0.37
                                                                          -0.34
                                                                                   4673
                                                                                            1.0
y_predicted[185]
                    -0.6
                           3.3e-4
                                     0.02
                                           -0.64
                                                   -0.61
                                                            -0.6
                                                                  -0.58
                                                                          -0.55
                                                                                   4782
                                                                                            1.0
y predicted[186]
                    2.48
                           1.1e-3
                                     0.07
                                            2.35
                                                    2.44
                                                            2.48
                                                                    2.53
                                                                           2.62
                                                                                   4129
                                                                                            1.0
y_predicted[187]
                    -0.7
                           5.1e-4
                                     0.03
                                           -0.76
                                                   -0.72
                                                            -0.7
                                                                  -0.68
                                                                          -0.63
                                                                                   4280
                                                                                            1.0
y predicted[188]
                   -0.79
                           4.4e-4
                                     0.03
                                           -0.85
                                                   -0.81
                                                           -0.79
                                                                  -0.77
                                                                          -0.73
                                                                                   4657
                                                                                            1.0
                                           -0.06
                   -0.02
                           2.9e-4
                                                           -0.02-5.6e-3
                                                                           0.02
y_predicted[189]
                                     0.02
                                                   -0.03
                                                                                   4759
                                                                                            1.0
y_predicted[190]
                    -0.1
                           3.8e-4
                                     0.03
                                           -0.15
                                                   -0.11
                                                            -0.1
                                                                  -0.08
                                                                          -0.05
                                                                                   4399
                                                                                            1.0
                           1.2e-3
                                     0.07
                                                            1.57
y_predicted[191]
                    1.58
                                             1.43
                                                    1.53
                                                                    1.62
                                                                           1.71
                                                                                   3837
                                                                                            1.0
                    0.04
                           5.0e-4
                                     0.03
                                           -0.03
                                                    0.01
                                                            0.04
                                                                   0.06
                                                                            0.1
                                                                                   4425
y_predicted[192]
                                                                                            1.0
y_predicted[193]
                    2.41
                           1.1e-3
                                     0.07
                                            2.27
                                                    2.36
                                                            2.41
                                                                   2.46
                                                                           2.54
                                                                                   3975
                                                                                            1.0
y_predicted[194]
                                     0.02
                                           -0.71
                   -0.66
                           3.6e-4
                                                   -0.68
                                                           -0.66
                                                                  -0.65
                                                                          -0.61
                                                                                   4692
                                                                                            1.0
                   -0.21
                           6.0e-4
                                     0.04
                                           -0.29
                                                   -0.24
                                                           -0.21
                                                                  -0.18
                                                                          -0.13
                                                                                   4433
y_predicted[195]
                                                                                            1.0
                    0.37
                           2.9e-4
                                            0.33
                                                    0.36
                                                            0.37
                                                                    0.39
                                                                           0.42
y_predicted[196]
                                     0.02
                                                                                   5138
                                                                                            1.0
y_predicted[197]
                   -1.49
                           7.0e-4
                                     0.05
                                           -1.58
                                                   -1.52
                                                           -1.49
                                                                  -1.46
                                                                           -1.4
                                                                                   4209
                                                                                            1.0
y_predicted[198]
                   -0.61
                           5.3e-4
                                     0.04
                                           -0.69
                                                   -0.64
                                                           -0.61
                                                                  -0.59
                                                                          -0.54
                                                                                   4774
                                                                                            1.0
y_predicted[199]
                   -0.16
                           3.9e-4
                                     0.03
                                            -0.2
                                                   -0.17
                                                           -0.16
                                                                  -0.14
                                                                          -0.11
                                                                                   4280
                                                                                            1.0
y_predicted[200]
                    0.57
                           4.4e-4
                                     0.03
                                            0.52
                                                    0.55
                                                            0.57
                                                                    0.59
                                                                           0.63
                                                                                   4314
                                                                                            1.0
loglik pred[1]
                   -0.71
                           4.5e-4
                                     0.03
                                           -0.77
                                                   -0.73
                                                          -0.71
                                                                  -0.69
                                                                          -0.65
                                                                                   4813
                                                                                            1.0
                                                   -0.69
                                                           -0.67
loglik_pred[2]
                   -0.67
                           4.3e-4
                                     0.03
                                           -0.73
                                                                  -0.65
                                                                          -0.62
                                                                                   4511
                                                                                            1.0
loglik pred[3]
                   -1.42
                           1.7e-3
                                     0.11
                                           -1.64
                                                   -1.49
                                                           -1.41
                                                                  -1.34
                                                                          -1.21
                                                                                   4481
                                                                                            1.0
                           5.8e-4
                                           -0.96
                                                           -0.88
loglik_pred[4]
                   -0.88
                                     0.04
                                                    -0.9
                                                                  -0.85
                                                                           -0.8
                                                                                   4697
                                                                                            1.0
loglik_pred[5]
                   -0.56
                           3.1e-4
                                     0.02
                                           -0.61
                                                   -0.58
                                                          -0.56
                                                                  -0.55
                                                                          -0.52
                                                                                   4633
                                                                                            1.0
loglik_pred[6]
                   -0.57
                           3.2e-4
                                     0.02
                                           -0.62
                                                   -0.59
                                                           -0.57
                                                                  -0.56
                                                                          -0.53
                                                                                   4781
                                                                                            1.0
loglik_pred[7]
                   -0.54
                           2.2e-4
                                     0.02
                                           -0.57
                                                   -0.55
                                                           -0.54
                                                                  -0.53
                                                                          -0.51
                                                                                   6168
                                                                                            1.0
                                     0.06
                                                          -1.35
                                                                          -1.24
loglik_pred[8]
                   -1.35
                           9.3e-4
                                           -1.48
                                                   -1.39
                                                                  -1.31
                                                                                   4644
                                                                                            1.0
loglik_pred[9]
                    -0.5
                           2.3e-4
                                     0.02
                                           -0.53
                                                   -0.51
                                                            -0.5
                                                                  -0.49
                                                                          -0.47
                                                                                   5627
                                                                                            1.0
                                           -0.53
loglik_pred[10]
                   -0.49
                           2.3e-4
                                     0.02
                                                   -0.51
                                                           -0.49
                                                                  -0.48
                                                                          -0.46
                                                                                   5504
                                                                                            1.0
loglik_pred[11]
                   -0.52
                           2.3e-4
                                     0.02
                                           -0.55
                                                   -0.53
                                                           -0.52
                                                                  -0.51
                                                                          -0.48
                                                                                   6013
                                                                                            1.0
loglik_pred[12]
                   -0.51
                           2.7e-4
                                     0.02
                                           -0.55
                                                   -0.52
                                                          -0.51
                                                                    -0.5
                                                                          -0.47
                                                                                   5340
                                                                                            1.0
                                           -0.53
loglik_pred[13]
                    -0.5
                           2.3e-4
                                     0.02
                                                   -0.51
                                                            -0.5
                                                                  -0.48
                                                                          -0.46
                                                                                   5935
                                                                                            1.0
                                                   -0.59
                                                                  -0.56
                                                                          -0.53
loglik_pred[14]
                   -0.58
                           2.9e-4
                                     0.02
                                           -0.62
                                                          -0.58
                                                                                   5816
                                                                                            1.0
loglik_pred[15]
                   -0.59
                           3.3e-4
                                     0.02
                                           -0.64
                                                    -0.6
                                                          -0.59
                                                                  -0.57
                                                                          -0.55
                                                                                   4733
                                                                                            1.0
loglik pred[16]
                   -1.07
                           8.6e-4
                                     0.05
                                           -1.17
                                                    -1.1
                                                           -1.06
                                                                  -1.03
                                                                          -0.96
                                                                                   4015
                                                                                            1.0
                                           -0.72
                                                   -0.68
                                                                          -0.62
loglik pred[17]
                   -0.67
                           3.6e-4
                                     0.02
                                                           -0.67
                                                                  -0.65
                                                                                   4789
                                                                                            1.0
loglik pred[18]
                   -1.36
                           1.3e-3
                                     0.08
                                           -1.53
                                                   -1.41
                                                           -1.36
                                                                    -1.3
                                                                          -1.21
                                                                                   4150
                                                                                            1.0
loglik_pred[19]
                   -0.75
                           1.2e-3
                                     0.08
                                           -0.92
                                                    -0.8
                                                          -0.75
                                                                   -0.7
                                                                          -0.62
                                                                                   4007
                                                                                            1.0
loglik_pred[20]
                   -0.68
                           5.9e-4
                                     0.04
                                           -0.76
                                                   -0.71
                                                           -0.68
                                                                  -0.65
                                                                          -0.61
                                                                                   4361
                                                                                            1.0
                           5.9e-4
                                     0.04
                                           -0.92
                                                   -0.87
                                                           -0.84
                                                                  -0.81
                                                                          -0.76
loglik_pred[21]
                   -0.84
                                                                                   4531
                                                                                            1.0
loglik_pred[22]
                   -1.15
                           1.8e-3
                                     0.13
                                           -1.41
                                                   -1.23
                                                          -1.14
                                                                  -1.06
                                                                          -0.92
                                                                                   4795
                                                                                            1.0
                                     0.02
                                           -0.59
                                                   -0.56
loglik_pred[23]
                   -0.55
                           2.5e-4
                                                           -0.55
                                                                  -0.54
                                                                          -0.51
                                                                                   5737
                                                                                            1.0
loglik_pred[24]
                   -0.95
                           5.5e-4
                                     0.04
                                           -1.02
                                                   -0.97
                                                           -0.95
                                                                  -0.93
                                                                          -0.88
                                                                                   4150
                                                                                            1.0
loglik_pred[25]
                   -3.11
                           1.6e-3
                                     0.11
                                           -3.35
                                                   -3.18
                                                           -3.11
                                                                  -3.03
                                                                          -2.89
                                                                                   5161
                                                                                            1.0
                                           -0.52
loglik_pred[26]
                   -0.49
                           2.1e-4
                                     0.02
                                                    -0.5
                                                          -0.49
                                                                  -0.48
                                                                          -0.46
                                                                                   6440
                                                                                            1.0
                                           -0.76
loglik_pred[27]
                   -0.69
                           5.6e-4
                                     0.04
                                                   -0.71
                                                           -0.69
                                                                  -0.66
                                                                          -0.62
                                                                                   3974
                                                                                            1.0
loglik_pred[28]
                   -0.56
                           3.1e-4
                                     0.02
                                           -0.61
                                                   -0.58
                                                           -0.56
                                                                  -0.55
                                                                          -0.52
                                                                                   4948
                                                                                            1.0
loglik_pred[29]
                   -0.51
                           2.5e-4
                                     0.02
                                           -0.55
                                                   -0.53
                                                          -0.51
                                                                    -0.5
                                                                          -0.48
                                                                                   5561
                                                                                            1.0
```

loglik_pred[30]	-1.11	1.1e-3	0.07	-1.24	-1.15	-1.11	-1.06	-0.98	3928	1.0
loglik_pred[31]	-1.33	8.7e-4	0.06	-1.45	-1.37	-1.33	-1.29	-1.22	4778	1.0
loglik_pred[32]	-0.54	2.3e-4	0.02	-0.57	-0.55	-0.54	-0.52	-0.5	5723	1.0
loglik_pred[33]	-1.12	9.8e-4	0.06	-1.25	-1.16	-1.12	-1.08	-1.01	3936	1.0
loglik_pred[34]	-0.87	4.2e-4	0.03	-0.93	-0.89	-0.87	-0.85	-0.81	5216	1.0
loglik_pred[35]	-0.98	1.3e-3	0.08	-1.15	-1.03	-0.98	-0.93	-0.83	3934	1.0
loglik_pred[36]	-0.52	2.3e-4	0.02	-0.55	-0.53	-0.52	-0.5	-0.48	5908	1.0
loglik_pred[37]	-0.63	6.3e-4	0.04	-0.72	-0.66	-0.63	-0.6	-0.56	4047	1.0
loglik_pred[38]	-0.83	5.0e-4	0.03	-0.91	-0.86	-0.83	-0.81	-0.77	4761	1.0
loglik_pred[39]	-0.76	3.8e-4	0.03	-0.81	-0.78	-0.76	-0.74	-0.71	4484	1.0
loglik_pred[40]	-1.34	7.5e-4	0.05	-1.44	-1.37	-1.34	-1.31	-1.25	4209	1.0
loglik_pred[41]	-0.8	9.1e-4	0.06	-0.92	-0.84	-0.8	-0.76	-0.69	3984	1.0
loglik_pred[42]	-0.52	2.6e-4	0.02	-0.56	-0.54	-0.52	-0.51	-0.49	5209	1.0
loglik_pred[43]	-2.7	2.4e-3	0.16	-3.03	-2.81	-2.7	-2.59	-2.4	4447	1.0
loglik_pred[44]	-0.85	6.1e-4	0.04	-0.94	-0.88	-0.85	-0.82	-0.77	4621	1.0
loglik_pred[45]	-0.84	6.3e-4	0.04	-0.93	-0.87	-0.84	-0.81	-0.76	4612	1.0
loglik_pred[46]	-1.51	1.6e-3	0.1	-1.72	-1.58	-1.51	-1.44	-1.31	4292	1.0
loglik_pred[47]	-0.78	4.2e-4	0.03	-0.85	-0.8	-0.78	-0.76	-0.72	5640	1.0
loglik_pred[48]	-0.6	3.0e-4	0.02	-0.64	-0.61	-0.59	-0.58	-0.55	5245	1.0
loglik_pred[49]	-0.76	4.9e-4	0.03	-0.83	-0.79	-0.76	-0.74	-0.7	4567	1.0
loglik_pred[50]	-0.72	4.3e-4	0.03	-0.78	-0.74	-0.72	-0.7	-0.67	4711	1.0
loglik_pred[51]	-0.51	2.2e-4	0.02	-0.54	-0.52	-0.51	-0.49	-0.47	6337	1.0
loglik_pred[52]	-1.09	5.9e-4	0.04	-1.16	-1.11	-1.08	-1.06	-1.01	4221	1.0
loglik_pred[53]	-0.5	2.2e-4	0.02	-0.54	-0.52	-0.5	-0.49	-0.47	5912	1.0
loglik_pred[54]	-0.61	4.2e-4	0.03	-0.66	-0.62	-0.6	-0.59	-0.55	4724	1.0
loglik_pred[55]	-1.11	1.0e-3	0.07	-1.25	-1.16	-1.11	-1.06	-0.98	4325	1.0
loglik_pred[56]	-0.63	3.8e-4	0.03	-0.69	-0.65	-0.63	-0.62	-0.59	4546	1.0
loglik_pred[57]	-1.02	6.4e-4	0.04	-1.1	-1.05	-1.02	-1.0	-0.94	4051	1.0
loglik_pred[58]	-0.96	2.2e-3	0.14	-1.25	-1.05	-0.95	-0.86	-0.72	3898	1.0
loglik_pred[59]	-0.5	2.4e-4	0.02	-0.53	-0.51	-0.5	-0.49	-0.47	5706	1.0
loglik_pred[60]	-0.5	2.2e-4	0.02	-0.53	-0.51	-0.5	-0.49	-0.46	6347	1.0
loglik_pred[61]	-0.53	3.0e-4	0.02	-0.58	-0.55	-0.53	-0.52	-0.49	5207	1.0
loglik_pred[62]	-0.71	5.2e-4	0.03	-0.78	-0.74	-0.71	-0.69	-0.65	4152	1.0
loglik_pred[63]	-0.54	3.3e-4	0.02	-0.59	-0.56	-0.54	-0.53	-0.5	5183	1.0
loglik_pred[64]	-0.61	3.2e-4	0.02	-0.66	-0.62	-0.61	-0.59	-0.56	5530	1.0
loglik_pred[65]	-0.54	2.8e-4	0.02	-0.58	-0.56	-0.54	-0.53	-0.51	4558	1.0
loglik_pred[66]	-0.58	3.6e-4	0.03	-0.64	-0.6	-0.58	-0.57	-0.54	5348	1.0
loglik_pred[67]	-0.65	4.1e-4	0.03	-0.71	-0.67	-0.65	-0.63	-0.6	5111	1.0
loglik_pred[68]	-0.9	4.7e-4	0.03	-0.96	-0.92	-0.89	-0.87	-0.84	4711	1.0
loglik_pred[69]	-0.78	3.5e-4	0.02	-0.83	-0.8	-0.78	-0.77	-0.73	5146	1.0
loglik_pred[70]	-1.14	8.4e-4	0.06	-1.25	-1.18	-1.14	-1.1	-1.03	4693	1.0
loglik_pred[71]	-0.82	6.1e-4	0.04	-0.9	-0.84	-0.81	-0.79	-0.74	4838	1.0
loglik_pred[72]	-0.52	3.2e-4	0.02	-0.57	-0.53	-0.51	-0.5	-0.47	5355	1.0
loglik_pred[73]	-0.5	2.4e-4	0.02	-0.54	-0.52	-0.5	-0.49	-0.47	5388	1.0
loglik_pred[74]	-0.5	2.2e-4	0.02	-0.54	-0.51	-0.5	-0.49	-0.47	6348	1.0
loglik_pred[75]	-1.39	1.1e-3	0.07	-1.54	-1.44	-1.39	-1.34	-1.26	4010	1.0
loglik_pred[76]	-0.51	2.2e-4	0.02	-0.54	-0.52	-0.51	-0.49	-0.47	6083	1.0
loglik_pred[77]	-0.74	5.4e-4	0.04	-0.81	-0.76	-0.73	-0.71	-0.67	4642	1.0
<u> </u>										

loglik_pred[78]	-0.64	2.5e-4	0.02	-0.67	-0.65	-0.64	-0.62	-0.6	5603	1.0
loglik_pred[79]	-0.52	2.5e-4	0.02	-0.55	-0.53	-0.52	-0.5	-0.48	5254	1.0
loglik_pred[80]	-0.57	3.5e-4	0.02	-0.62	-0.59	-0.57	-0.55	-0.52	4653	1.0
loglik_pred[81]	-0.56	2.4e-4	0.02	-0.59	-0.57	-0.56	-0.54	-0.52	5584	1.0
loglik_pred[82]	-4.09	2.9e-3	0.2	-4.49	-4.22	-4.08	-3.95	-3.71	4796	1.0
loglik_pred[83]	-0.74	5.1e-4	0.03	-0.81	-0.77	-0.74	-0.72	-0.68	4079	1.0
loglik_pred[84]	-0.57	3.1e-4	0.02	-0.61	-0.58	-0.57	-0.55	-0.53	4807	1.0
loglik_pred[85]	-0.53	2.4e-4	0.02	-0.56	-0.54	-0.53	-0.51	-0.49	5484	1.0
loglik_pred[86]	-0.66	2.8e-4	0.02	-0.7	-0.67	-0.66	-0.64	-0.62	5146	1.0
loglik_pred[87]	-0.81	4.1e-4	0.03	-0.87	-0.83	-0.81	-0.8	-0.76	4649	1.0
loglik_pred[88]	-0.57	3.8e-4	0.03	-0.62	-0.59	-0.57	-0.55	-0.52	4855	1.0
loglik_pred[89]	-0.5	2.2e-4	0.02	-0.53	-0.51	-0.5	-0.48	-0.46	6107	1.0
loglik_pred[90]	-0.49	2.1e-4	0.02	-0.53	-0.5	-0.49	-0.48	-0.46	6408	1.0
loglik_pred[91]	-0.49	2.4e-4	0.02	-0.53	-0.51	-0.49	-0.48	-0.46	5421	1.0
loglik_pred[92]	-0.51	2.3e-4	0.02	-0.54	-0.52	-0.51	-0.49	-0.47	5977	1.0
loglik_pred[93]	-0.72	8.3e-4	0.06	-0.84	-0.75	-0.71	-0.67	-0.61	5047	1.0
loglik_pred[94]	-0.87	8.9e-4	0.06	-0.98	-0.91	-0.87	-0.83	-0.77	3856	1.0
loglik_pred[95]	-1.43	8.7e-4	0.06	-1.55	-1.47	-1.43	-1.4	-1.32	4224	1.0
loglik_pred[96]	-0.53	2.3e-4	0.02	-0.57	-0.54	-0.53	-0.52	-0.5	5819	1.0
loglik_pred[97]	-0.73	3.5e-4	0.02	-0.78	-0.75	-0.73	-0.71	-0.68	4871	1.0
loglik_pred[98]	-0.58	3.3e-4	0.02	-0.62	-0.59	-0.58	-0.56	-0.53	4726	1.0
loglik_pred[99]	-0.61	7.8e-4	0.06	-0.74	-0.65	-0.61	-0.57	-0.52	5008	1.0
loglik_pred[100]	-0.68	4.6e-4	0.03	-0.74	-0.7	-0.67	-0.65	-0.62	4716	1.0
loglik_pred[101]	-0.49	2.2e-4	0.02	-0.52	-0.5	-0.49	-0.48	-0.46	6086	1.0
loglik_pred[102]	-0.73	3.8e-4	0.03	-0.79	-0.75	-0.73	-0.72	-0.68	4870	1.0
loglik_pred[103]	-0.52	2.6e-4	0.02	-0.56	-0.53	-0.52	-0.51	-0.49	5128	1.0
loglik_pred[104]	-0.87	5.2e-4	0.04	-0.94	-0.89	-0.87	-0.85	-0.8	4589	1.0
loglik_pred[105]	-3.14	2.1e-3	0.14	-3.43	-3.24	-3.14	-3.04	-2.88	4555	1.0
loglik_pred[106]	-0.5	2.4e-4	0.02	-0.54	-0.51	-0.5	-0.49	-0.47	5791	1.0
loglik_pred[107]	-0.49	2.3e-4	0.02	-0.53	-0.51	-0.5	-0.48	-0.46	5844	1.0
loglik_pred[108]	-7.77	5.5e-3	0.37	-8.51	-8.02	-7.76	-7.51	-7.07	4539	1.0
loglik_pred[109]	-2.09	1.3e-3	0.09	-2.27	-2.15	-2.08	-2.03	-1.92	4808	1.0
loglik_pred[110]	-0.8	9.8e-4	0.06	-0.93	-0.84	-0.8	-0.76	-0.69	4121	1.0
loglik_pred[111]	-0.76	9.4e-4	0.06	-0.88	-0.79	-0.75	-0.71	-0.65	3986	1.0
loglik_pred[112]	-0.77	5.1e-4	0.03	-0.84	-0.79	-0.77	-0.75	-0.71	4255	1.0
loglik_pred[113]	-0.54	2.8e-4	0.02	-0.58	-0.56	-0.54	-0.53	-0.51	4959	1.0
loglik_pred[114]	-0.5	2.2e-4	0.02	-0.54	-0.51	-0.5	-0.49	-0.47	6085	1.0
loglik_pred[115]	-0.49	2.2e-4	0.02	-0.53	-0.51	-0.49	-0.48	-0.46	6146	1.0
loglik_pred[116]	-0.56	3.4e-4	0.02	-0.61	-0.58	-0.56	-0.55	-0.52	4639	1.0
loglik_pred[117]	-0.61	3.6e-4	0.02	-0.66	-0.63	-0.61	-0.59	-0.56	4605	1.0
loglik_pred[118]	-0.7	6.9e-4	0.04	-0.79	-0.73	-0.7	-0.67	-0.62	4171	1.0
loglik_pred[119]	-0.81	6.4e-4	0.05	-0.91	-0.84	-0.81	-0.78	-0.72	5365	1.0
loglik_pred[120]	-0.49	2.1e-4	0.03	-0.53	-0.5	-0.49	-0.48	-0.46	6302	1.0
loglik_pred[121]	-0.54	3.1e-4	0.02	-0.59	-0.56	-0.54	-0.53	-0.5	5005	1.0
loglik_pred[122]	-0.65	4.4e-4	0.02	-0.71	-0.67	-0.65	-0.63	-0.6	4522	1.0
loglik_pred[123]	-0.59	2.8e-4	0.03	-0.63	-0.6	-0.59	-0.57	-0.55	5487	1.0
loglik_pred[124]	-0.5 <i>9</i>	2.7e-4	0.02	-0.58	-0.55	-0.54	-0.57	-0.5	5466	1.0
loglik_pred[125]	-0.96	4.7e-4	0.02	-1.02	-0.98	-0.96	-0.94	-0.9	4411	1.0
108114 brea[170]	0.50	-1.16-4	0.00	1.02	0.30	0.90	0.34	0.5	-1-11	1.0

```
loglik_pred[126]
                    -1.8
                           1.1e-3
                                     0.07
                                           -1.94
                                                   -1.85
                                                            -1.8
                                                                  -1.75
                                                                          -1.66
                                                                                   4501
                                                                                            1.0
loglik_pred[127]
                    -0.5
                           2.2e-4
                                     0.02
                                           -0.53
                                                   -0.51
                                                            -0.5
                                                                  -0.49
                                                                          -0.47
                                                                                   5819
                                                                                            1.0
                   -0.65
                           4.1e-4
                                     0.03
                                           -0.71
loglik_pred[128]
                                                   -0.67
                                                           -0.65
                                                                  -0.63
                                                                           -0.6
                                                                                   4711
                                                                                            1.0
loglik_pred[129]
                   -0.49
                           2.2e-4
                                     0.02
                                           -0.53
                                                   -0.51
                                                           -0.49
                                                                  -0.48
                                                                          -0.46
                                                                                   6150
                                                                                            1.0
loglik pred[130]
                   -0.52
                           2.7e-4
                                     0.02
                                           -0.55
                                                   -0.53
                                                           -0.52
                                                                    -0.5
                                                                          -0.48
                                                                                   5043
                                                                                            1.0
loglik pred[131]
                   -1.08
                           1.6e-3
                                      0.1
                                           -1.28
                                                   -1.14
                                                           -1.07
                                                                  -1.01
                                                                          -0.89
                                                                                   3908
                                                                                            1.0
loglik_pred[132]
                   -0.53
                           2.4e-4
                                     0.02
                                           -0.57
                                                   -0.54
                                                           -0.53
                                                                  -0.52
                                                                           -0.5
                                                                                   5881
                                                                                            1.0
                                           -1.63
                                                   -1.52
                                                           -1.46
                                                                  -1.41
                                                                          -1.31
loglik_pred[133]
                   -1.47
                           1.2e-3
                                     0.08
                                                                                   4492
                                                                                            1.0
loglik pred[134]
                   -1.03
                           1.1e-3
                                     0.07
                                           -1.17
                                                   -1.08
                                                          -1.03
                                                                  -0.98
                                                                           -0.9
                                                                                   3995
                                                                                            1.0
                                           -0.59
loglik_pred[135]
                           2.5e-4
                                     0.02
                                                   -0.57
                                                           -0.55
                   -0.55
                                                                  -0.54
                                                                          -0.52
                                                                                   5379
                                                                                            1.0
loglik_pred[136]
                   -0.52
                           2.5e-4
                                     0.02
                                           -0.56
                                                   -0.53
                                                           -0.52
                                                                  -0.51
                                                                          -0.48
                                                                                   5684
                                                                                            1.0
loglik_pred[137]
                   -0.73
                           3.9e-4
                                     0.03
                                           -0.78
                                                   -0.74
                                                           -0.73
                                                                  -0.71
                                                                          -0.68
                                                                                   4282
                                                                                            1.0
loglik_pred[138]
                           5.4e-4
                                     0.04
                                           -0.66
                                                   -0.61
                                                           -0.58
                                                                          -0.52
                                                                                   4283
                   -0.59
                                                                  -0.56
                                                                                            1.0
loglik_pred[139]
                   -0.71
                           4.7e-4
                                     0.03
                                           -0.77
                                                   -0.73
                                                           -0.71
                                                                  -0.69
                                                                          -0.65
                                                                                   4373
                                                                                            1.0
loglik_pred[140]
                   -0.74
                           5.0e-4
                                     0.03
                                             -0.8
                                                   -0.76
                                                           -0.74
                                                                  -0.71
                                                                          -0.67
                                                                                   4443
                                                                                            1.0
                           3.0e-4
loglik_pred[141]
                   -0.54
                                     0.02
                                           -0.59
                                                   -0.56
                                                           -0.54
                                                                  -0.53
                                                                           -0.5
                                                                                   5107
                                                                                            1.0
loglik_pred[142]
                   -0.55
                           3.4e-4
                                     0.03
                                           -0.61
                                                   -0.57
                                                           -0.55
                                                                  -0.54
                                                                          -0.51
                                                                                   5671
                                                                                            1.0
                                           -0.52
loglik_pred[143]
                   -0.49
                           2.1e-4
                                     0.02
                                                    -0.5
                                                           -0.49
                                                                  -0.48
                                                                          -0.46
                                                                                   6431
                                                                                            1.0
loglik_pred[144]
                    -0.5
                           2.2e-4
                                     0.02
                                           -0.53
                                                   -0.51
                                                            -0.5
                                                                  -0.49
                                                                          -0.47
                                                                                   6244
                                                                                            1.0
loglik pred[145]
                   -0.49
                           2.1e-4
                                     0.02
                                           -0.53
                                                   -0.51
                                                           -0.49
                                                                  -0.48
                                                                          -0.46
                                                                                   6439
                                                                                            1.0
                           3.2e-4
                                     0.02
                                                           -0.55
                                                                  -0.54
loglik_pred[146]
                   -0.55
                                            -0.6
                                                   -0.57
                                                                          -0.51
                                                                                   5086
                                                                                            1.0
loglik pred[147]
                   -0.51
                           2.3e-4
                                     0.02
                                           -0.54
                                                   -0.52
                                                           -0.51
                                                                  -0.49
                                                                          -0.47
                                                                                   5948
                                                                                            1.0
loglik_pred[148]
                   -0.52
                           2.6e-4
                                     0.02
                                           -0.56
                                                   -0.53
                                                           -0.52
                                                                  -0.51
                                                                          -0.48
                                                                                   5637
                                                                                            1.0
loglik pred[149]
                   -0.75
                           4.9e-4
                                     0.03
                                           -0.82
                                                   -0.77
                                                           -0.75
                                                                  -0.73
                                                                          -0.69
                                                                                   4981
                                                                                            1.0
loglik_pred[150]
                   -0.84
                           3.8e-4
                                     0.03
                                           -0.89
                                                   -0.85
                                                           -0.83
                                                                  -0.82
                                                                          -0.79
                                                                                   4595
                                                                                            1.0
loglik_pred[151]
                   -0.62
                           3.3e-4
                                     0.02
                                           -0.67
                                                   -0.64
                                                           -0.62
                                                                  -0.61
                                                                          -0.58
                                                                                   5203
                                                                                            1.0
                                     0.02
loglik_pred[152]
                   -0.55
                           2.6e-4
                                           -0.59
                                                   -0.57
                                                           -0.55
                                                                  -0.54
                                                                          -0.52
                                                                                   5584
                                                                                            1.0
loglik_pred[153]
                           5.1e-4
                                     0.03
                                           -1.18
                                                   -1.14
                                                           -1.11
                                                                  -1.09
                                                                          -1.05
                   -1.11
                                                                                   4486
                                                                                            1.0
                   -0.95
                                           -1.01
                                                           -0.95
loglik_pred[154]
                           4.5e-4
                                     0.03
                                                   -0.97
                                                                  -0.93
                                                                          -0.89
                                                                                   4712
                                                                                            1.0
loglik_pred[155]
                   -0.94
                           4.8e-4
                                     0.03
                                            -1.0
                                                   -0.96
                                                           -0.94
                                                                  -0.91
                                                                          -0.87
                                                                                   4512
                                                                                            1.0
loglik_pred[156]
                   -0.67
                           3.6e-4
                                     0.03
                                           -0.72
                                                   -0.69
                                                           -0.67
                                                                  -0.65
                                                                          -0.62
                                                                                   4938
                                                                                            1.0
loglik_pred[157]
                   -0.53
                           2.3e-4
                                     0.02
                                           -0.57
                                                   -0.55
                                                           -0.53
                                                                  -0.52
                                                                           -0.5
                                                                                   5474
                                                                                            1.0
                                     0.02
                                                   -0.51
loglik_pred[158]
                    -0.5
                           2.3e-4
                                           -0.53
                                                            -0.5
                                                                  -0.49
                                                                          -0.46
                                                                                   6122
                                                                                            1.0
loglik_pred[159]
                   -0.87
                           6.9e-4
                                     0.04
                                           -0.96
                                                    -0.9
                                                          -0.87
                                                                  -0.84
                                                                          -0.78
                                                                                   4182
                                                                                            1.0
loglik pred[160]
                    -0.5
                           2.1e-4
                                     0.02
                                           -0.53
                                                   -0.51
                                                            -0.5
                                                                  -0.48
                                                                          -0.46
                                                                                   6383
                                                                                            1.0
loglik pred[161]
                                     0.02
                                                           -0.56
                                                                          -0.53
                   -0.56
                           2.5e-4
                                            -0.6
                                                   -0.58
                                                                  -0.55
                                                                                   5592
                                                                                            1.0
loglik pred[162]
                   -0.71
                           5.8e-4
                                     0.04
                                           -0.78
                                                   -0.73
                                                           -0.71
                                                                  -0.68
                                                                          -0.64
                                                                                   4121
                                                                                            1.0
loglik_pred[163]
                   -0.81
                           4.2e-4
                                     0.03
                                           -0.87
                                                   -0.83
                                                          -0.81
                                                                  -0.79
                                                                          -0.76
                                                                                   4763
                                                                                            1.0
loglik_pred[164]
                   -2.64
                           2.1e-3
                                     0.14
                                           -2.91
                                                   -2.73
                                                           -2.64
                                                                  -2.54
                                                                          -2.38
                                                                                   4392
                                                                                            1.0
loglik_pred[165]
                   -0.58
                           3.2e-4
                                     0.02
                                           -0.63
                                                    -0.6
                                                           -0.58
                                                                  -0.57
                                                                          -0.54
                                                                                   4851
                                                                                            1.0
                                     0.02
loglik_pred[166]
                   -0.57
                           2.7e-4
                                           -0.61
                                                   -0.59
                                                          -0.57
                                                                  -0.56
                                                                          -0.54
                                                                                   5423
                                                                                            1.0
loglik_pred[167]
                                           -0.53
                                                            -0.5
                    -0.5
                           2.2e-4
                                     0.02
                                                   -0.51
                                                                  -0.49
                                                                          -0.47
                                                                                   6341
                                                                                            1.0
loglik_pred[168]
                   -1.94
                           2.2e-3
                                     0.15
                                           -2.24
                                                   -2.04
                                                           -1.94
                                                                  -1.84
                                                                          -1.66
                                                                                   4307
                                                                                            1.0
loglik_pred[169]
                   -0.62
                           2.8e-4
                                     0.02
                                           -0.66
                                                   -0.64
                                                           -0.62
                                                                  -0.61
                                                                          -0.58
                                                                                   5246
                                                                                            1.0
                           3.0e-4
                                           -0.68
                                                                          -0.59
loglik_pred[170]
                   -0.64
                                     0.02
                                                   -0.65
                                                           -0.63
                                                                  -0.62
                                                                                   5202
                                                                                            1.0
loglik_pred[171]
                   -0.58
                           3.6e-4
                                     0.02
                                           -0.63
                                                    -0.6
                                                           -0.58
                                                                  -0.57
                                                                          -0.54
                                                                                   4663
                                                                                            1.0
loglik_pred[172]
                   -6.08
                           3.9e-3
                                     0.27
                                           -6.62
                                                   -6.27
                                                           -6.07
                                                                    -5.9
                                                                          -5.57
                                                                                   4923
                                                                                            1.0
loglik_pred[173]
                   -0.66
                           7.7e-4
                                     0.05
                                           -0.77
                                                   -0.69
                                                           -0.66
                                                                  -0.63
                                                                          -0.58
                                                                                   4093
                                                                                            1.0
```

```
loglik_pred[174]
                        2.5e-4
                                 0.02 -0.55 -0.53 -0.51
                                                             -0.5 -0.48
                 -0.51
                                                                           5510
                                                                                   1.0
loglik_pred[175]
                 -0.53
                        2.8e-4
                                 0.02 - 0.57
                                              -0.54 -0.53
                                                           -0.51
                                                                   -0.49
                                                                           5392
                                                                                   1.0
loglik_pred[176]
                 -1.49
                        7.5e-4
                                 0.05 - 1.59
                                              -1.52 -1.49
                                                            -1.45
                                                                  -1.38
                                                                           4955
                                                                                   1.0
loglik_pred[177]
                        2.9e-4
                                 0.02 -0.68
                                              -0.66 -0.64
                                                            -0.63
                                                                    -0.6
                 -0.64
                                                                           5369
                                                                                   1.0
loglik_pred[178]
                 -0.52 2.5e-4
                                 0.02 - 0.55
                                              -0.53 -0.52
                                                             -0.5
                                                                  -0.48
                                                                           5311
                                                                                   1.0
loglik_pred[179]
                                 0.02 - 0.58
                                                                           5234
                 -0.55
                        2.6e-4
                                              -0.56
                                                    -0.54
                                                            -0.53
                                                                  -0.51
                                                                                   1.0
loglik_pred[180]
                  -0.9 8.2e-4
                                 0.06 - 1.02
                                              -0.94
                                                      -0.9
                                                            -0.86
                                                                  -0.79
                                                                           4833
                                                                                   1.0
loglik_pred[181]
                 -1.03 7.7e-4
                                 0.05 - 1.14
                                              -1.07 -1.03
                                                             -1.0
                                                                  -0.94
                                                                           4470
                                                                                   1.0
loglik_pred[182]
                                 0.02 - 0.54
                                                      -0.5
                                                           -0.49 -0.47
                  -0.5 2.3e-4
                                              -0.51
                                                                           5982
                                                                                   1.0
loglik_pred[183]
                 -4.24 2.5e-3
                                 0.17 - 4.58
                                              -4.35 - 4.24
                                                            -4.13 -3.92
                                                                           4724
                                                                                   1.0
                                                            -1.34 -1.27
loglik_pred[184]
                 -1.38 8.8e-4
                                 0.06 - 1.49
                                              -1.41 -1.38
                                                                           4235
                                                                                   1.0
loglik_pred[185]
                  -1.1 5.2e-4
                                 0.04 - 1.17
                                              -1.13
                                                      -1.1
                                                            -1.08 -1.03
                                                                           4824
                                                                                   1.0
loglik_pred[186]
                 -1.02 8.2e-4
                                 0.05 - 1.13
                                              -1.06
                                                    -1.02
                                                           -0.99
                                                                  -0.92
                                                                           4283
                                                                                   1.0
                                 0.02 - 0.54
                                              -0.52 -0.51
                                                                  -0.48
loglik_pred[187]
                 -0.51
                       2.4e-4
                                                             -0.5
                                                                           5320
                                                                                   1.0
loglik_pred[188]
                 -0.51
                        2.8e-4
                                 0.02 - 0.55
                                              -0.52 -0.51
                                                             -0.5
                                                                  -0.47
                                                                           4768
                                                                                   1.0
loglik_pred[189]
                 -0.56 3.5e-4
                                 0.02 - 0.61
                                              -0.58 -0.56 -0.54 -0.52
                                                                           4681
                                                                                   1.0
loglik_pred[190]
                 -1.07 5.6e-4
                                 0.04 - 1.15
                                               -1.1 -1.07
                                                            -1.04 -0.99
                                                                           4926
                                                                                   1.0
loglik_pred[191]
                                 0.08 -1.02 -0.91 -0.85
                                                             -0.8 -0.71
                                                                           4816
                                                                                   1.0
                 -0.86 1.1e-3
loglik_pred[192]
                 -0.51 2.7e-4
                                 0.02 - 0.55
                                              -0.52 -0.51
                                                           -0.49 -0.47
                                                                           5187
                                                                                   1.0
loglik pred[193]
                 -0.51 2.3e-4
                                 0.02 - 0.55
                                              -0.53 -0.51
                                                             -0.5 -0.48
                                                                           5892
                                                                                   1.0
loglik_pred[194]
                 -0.87 4.7e-4
                                 0.03 - 0.93
                                              -0.89 -0.87
                                                            -0.85
                                                                  -0.81
                                                                           4462
                                                                                   1.0
                                                                  -0.47
loglik_pred[195]
                  -0.5 2.1e-4
                                 0.02 - 0.53
                                              -0.51
                                                      -0.5
                                                            -0.49
                                                                           6465
                                                                                   1.0
loglik_pred[196]
                 -0.67 7.9e-4
                                 0.05 - 0.78
                                               -0.7 -0.67
                                                            -0.64 -0.58
                                                                           4242
                                                                                   1.0
loglik_pred[197]
                 -1.23 9.5e-4
                                 0.06 -1.36 -1.27 -1.23
                                                                  -1.12
                                                                           4093
                                                           -1.19
                                                                                   1.0
loglik_pred[198]
                 -0.88 4.4e-4
                                 0.03 - 0.93
                                               -0.9 -0.87
                                                            -0.86 -0.82
                                                                           4656
                                                                                   1.0
                                 0.02 -0.59 -0.56 -0.54 -0.53
loglik_pred[199]
                 -0.55
                        2.9e-4
                                                                    -0.5
                                                                           5252
                                                                                   1.0
loglik_pred[200]
                                 0.03 -0.68 -0.63 -0.61
                                                           -0.59
                 -0.61
                       4.5e-4
                                                                  -0.56
                                                                           4344
                                                                                   1.0
lp__
                -129.5
                          0.04
                                 1.71 -133.6 -130.4 -129.2 -128.2 -127.1
                                                                           1666
                                                                                   1.0
```

Samples were drawn using NUTS at Sat Dec 8 00:36:29 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).

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

# 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
```

Inference for Stan model: anon_model_fdf10200661fa3c5ef96589091fabb87.

stan_utility.check_treedepth(fit_poly)

4 chains, each with iter=2000; warmup=1000; thin=1; post-warmup draws per chain=1000, total post-warmup draws=4000.

	mean	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	3728	1.0
theta[1]	0.37	7.1e-4	0.04	0.3	0.35	0.37	0.4	0.44	2594	1.0
theta[2]	0.38	3.8e-4	0.02	0.34	0.37	0.38	0.4	0.43	3736	1.0
theta[3]	-0.2	7.1e-4	0.04	-0.27	-0.22	-0.2	-0.17	-0.13	2502	1.0
theta[4]	0.08	4.3e-4	0.03	0.03	0.07	0.08	0.1	0.13	3486	1.0
theta[5]	0.1	2.5e-4	0.01	0.07	0.09	0.1	0.11	0.12	2643	1.0
theta[6]	0.12	1.6e-4	0.01	0.1	0.11	0.12	0.12	0.14	4132	1.0
theta[7]	-0.04	2.9e-4	0.01	-0.07	-0.05	-0.04	-0.03	-0.01	2431	1.0
theta[8]	-0.02	1.9e-4	0.01	-0.05	-0.03	-0.02	-0.02-	9.0e-4	3715	1.0
sigma	0.6	1.4e-41	.0.0e-3	0.58	0.59	0.6	0.6	0.62	4927	1.0
y_mean[1]	-0.13	5.2e-4	0.03	-0.2	-0.16	-0.13	-0.11	-0.07	3795	1.0
$y_{mean}[2]$	-0.19	5.7e-4	0.03	-0.25	-0.21	-0.19	-0.17	-0.13	3015	1.0
$y_{mean}[3]$	0.06	8.0e-4	0.05	-0.04	0.02	0.06	0.09	0.16	3962	1.0
$y_{mean}[4]$	-0.58	6.4e-4	0.04	-0.66	-0.61	-0.58	-0.56	-0.51	3654	1.0
y_mean[5]	0.01	4.8e-4	0.03	-0.05	-8.0e-3	0.01	0.03	0.07	3768	1.0
y_mean[6]	-0.68	5.7e-4	0.03	-0.74	-0.7	-0.68	-0.65	-0.61	3396	1.0
y_mean[7]	-0.43	3.4e-4	0.02	-0.47	-0.45	-0.43	-0.42	-0.39	3642	1.0
y_mean[8]	0.87	4.6e-4	0.03	0.81	0.85	0.87	0.89	0.93	4341	1.0
y_mean[9]	-0.43	5.8e-4	0.03	-0.49	-0.45	-0.43	-0.41	-0.37	2890	1.0
y_mean[10]	-0.05	6.9e-4	0.04	-0.13	-0.08	-0.05	-0.02	0.03	3422	1.0
y_mean[11]	-0.46	5.0e-4	0.03	-0.51	-0.47	-0.46	-0.44	-0.4	3040	1.0
y_mean[12]	1.31	6.0e-4	0.04	1.22	1.28	1.31	1.33	1.39	4894	1.0
y_mean[13]	-0.66	6.3e-4	0.04	-0.73	-0.68	-0.66	-0.63	-0.59	3355	1.0
y_mean[14]	0.18	4.3e-4	0.03	0.12	0.16	0.18	0.2	0.23	4416	1.0
y_mean[15]	-0.41	5.3e-4	0.03	-0.46	-0.42	-0.41	-0.39	-0.35	2763	1.0
y_mean[16]	0.02	5.1e-4	0.03	-0.04	4.9e-4	0.02	0.04	0.09	4237	1.0
y_mean[17]	-0.43	4.7e-4	0.03	-0.48	-0.45	-0.43	-0.41	-0.38	2981	1.0
y_mean[18]	1.26	6.0e-4	0.04	1.18	1.23	1.26	1.29	1.34	5066	1.0
y_mean[19]	2.84	2.7e-3	0.14	2.56	2.74	2.84	2.93	3.11	2809	1.0
y_mean[20]	-0.73	1.0e-3	0.06	-0.85	-0.77	-0.73	-0.69	-0.61	3828	1.0
y_mean[21]	-0.26	5.6e-4	0.03	-0.32	-0.28	-0.26	-0.23	-0.19	3450	1.0
y_mean[22]	1.02	1.3e-3	0.09	0.83	0.96	1.02	1.08	1.2	4864	1.0
y_mean[23]	-0.56	4.2e-4	0.02	-0.61	-0.58	-0.56	-0.54	-0.51	3271	1.0
y_mean[24]	-0.03	4.6e-4	0.03	-0.08	-0.04	-0.03-	9.5e-3	0.03	3295	1.0
y_mean[25]	-0.48	5.3e-4	0.03	-0.54	-0.5	-0.48	-0.46	-0.43	2962	1.0
y_mean[26]	-0.39	5.0e-4	0.03	-0.45	-0.41	-0.39	-0.37	-0.34	3039	1.0
y_mean[27]	-0.23	8.3e-4	0.04	-0.31	-0.26	-0.23	-0.2	-0.15	2475	1.0
y_mean[28]	-0.71	6.3e-4	0.04	-0.78	-0.73	-0.71	-0.68	-0.63	3805	1.0
y_mean[29]	0.47	4.6e-4	0.03	0.41	0.45	0.47	0.49	0.53	3886	1.0
y_mean[30]	0.44	6.6e-4	0.04	0.37	0.41	0.44	0.47	0.52	3472	1.0
y_mean[31]	0.06	6.3e-4	0.03-	3.0e-3	0.04	0.06	0.08	0.13	2801	1.0
y_mean[32]	0.03	3.5e-4	0.02	-0.01	0.02	0.03	0.05	0.08	4014	1.0
y_mean[33]	0.07	5.4e-4	0.04-	1.1e-3	0.05	0.07	0.09	0.14	4332	1.0
y_mean[34]	0.06	4.2e-4	0.02	0.02	0.04	0.06	0.08	0.11	3354	1.0

y_mean[35]	1.66	9.0e-4	0.06	1.55	1.62	1.66	1.7	1.77	4079	1.0
y_mean[36]	-0.07	4.2e-4	0.02	-0.11	-0.09	-0.07	-0.05	-0.02	3220	1.0
y_mean[37]	0.81	7.4e-4	0.05	0.71	0.77	0.81	0.84	0.9	4179	1.0
y_mean[38]	-0.43	4.9e-4	0.03	-0.49	-0.45	-0.43	-0.41	-0.38	3395	1.0
y_mean[39]	-0.04	4.3e-4	0.02	-0.09	-0.06	-0.04	-0.02	8.1e-3	3290	1.0
y_mean[40]	-1.5e-3	4.4e-4	0.03	-0.05	-0.02-	1.7e-3	0.02	0.05	3507	1.0
y_mean[41]	0.64	8.8e-4	0.06	0.53	0.61	0.64	0.68	0.76	4395	1.0
y_mean[42]	-0.77	6.1e-4	0.04	-0.84	-0.79	-0.77	-0.74	-0.7	3640	1.0
y_mean[43]	2.26	9.0e-4	0.05	2.15	2.22	2.26	2.29	2.36	3701	1.0
y_mean[44]	0.38	5.4e-4	0.03	0.32	0.36	0.38	0.41	0.45	3678	1.0
y_mean[45]	0.49	5.0e-4	0.03	0.43	0.47	0.49	0.51	0.55	4421	1.0
y_mean[46]	0.12	8.4e-4	0.05	0.03	0.09	0.12	0.15	0.21	3075	1.0
y_mean[47]	-0.08	4.7e-4	0.03	-0.14	-0.1	-0.08	-0.06	-0.03	3506	1.0
y_mean[48]	-0.6	4.9e-4	0.03	-0.65	-0.61	-0.6	-0.58	-0.54	3471	1.0
y_mean[49]	-0.75	5.8e-4	0.04	-0.82	-0.77	-0.75	-0.72	-0.68	3634	1.0
y_mean[50]	-0.18	5.0e-4	0.03	-0.24	-0.2	-0.18	-0.16	-0.12	3313	1.0
y_mean[50] y_mean[51]	0.13	4.3e-4	0.03	0.24	0.11	0.13	0.15	0.12	3359	1.0
y_mean[51] y_mean[52]	-0.04	4.5e-4	0.02	-0.09	-0.05	-0.04	-0.02	0.10	3195	1.0
y_mean[52] y_mean[53]	-0.55	4.0e-4	0.03	-0.6	-0.57	-0.55	-0.54	-0.51	3321	1.0
y_mean[54]	-0.68	7.1e-4	0.02	-0.77	-0.37	-0.68	-0.66	-0.51	3603	1.0
• –	-0.00	1.0e-3	0.04	-0.77	-0.71	-0.71	-0.67		3843	1.0
y_mean[55]			0.06	-0.63 -0.77				-0.59		
y_mean[56]	-0.69	6.1e-4			-0.72	-0.69	-0.67	-0.62	3681	1.0
y_mean[57]	-2.3e-3	4.6e-4	0.03	-0.06		2.1e-3	0.02	0.05	3492	1.0
y_mean[58]	3.93	2.4e-3	0.15	3.63	3.82	3.93	4.03	4.23	3942	1.0
y_mean[59]	-0.25	5.7e-4	0.03	-0.31	-0.27	-0.25	-0.23	-0.18	3492	1.0
y_mean[60]	-0.61	5.3e-4	0.03	-0.67	-0.63	-0.61	-0.59	-0.55	3502	1.0
y_mean[61]	-0.34	5.8e-4	0.03	-0.41	-0.37	-0.34	-0.32	-0.28	3340	1.0
y_mean[62]	-0.36	5.9e-4	0.03	-0.42	-0.38	-0.36	-0.34	-0.3	3071	1.0
y_mean[63]	0.62	5.6e-4	0.03	0.56	0.6	0.62	0.65	0.69	3731	1.0
y_mean[64]	-0.48	4.7e-4	0.03	-0.54	-0.5	-0.48	-0.46	-0.43	3592	1.0
y_mean[65]	0.16	4.3e-4	0.03	0.11	0.14	0.16	0.18	0.21	3456	1.0
y_mean[66]	-0.21	7.4e-4	0.04	-0.29	-0.24	-0.21	-0.19	-0.13	2905	1.0
y_mean[67]	-0.49	7.1e-4	0.04	-0.57	-0.51	-0.49	-0.46	-0.41	3233	1.0
y_mean[68]	-0.18	4.4e-4	0.02	-0.23	-0.2	-0.18	-0.16	-0.13	3175	1.0
y_mean[69]	0.14	3.8e-4	0.02	0.09	0.12	0.14	0.15	0.18	3691	1.0
y_mean[70]	0.23	6.6e-4	0.04	0.16	0.2	0.23	0.25	0.3	2926	1.0
y_mean[71]	0.28	6.4e-4	0.04	0.21	0.25	0.28	0.3	0.35	3109	1.0
y_mean[72]	0.29	9.5e-4	0.06	0.18	0.26	0.29	0.33	0.41	3566	1.0
y_mean[73]	-0.73	5.7e-4	0.03	-0.79	-0.75	-0.73	-0.7	-0.66	3591	1.0
y_mean[74]	-0.53	3.9e-4	0.02	-0.57	-0.55	-0.53	-0.52	-0.49	3177	1.0
y_mean[75]	-0.25	8.2e-4	0.04	-0.33	-0.28	-0.25	-0.22	-0.17	2474	1.0
y_mean[76]	-0.18	4.4e-4	0.02	-0.23	-0.2	-0.18	-0.17	-0.13	3166	1.0
y_mean[77]	-0.25	5.8e-4	0.03	-0.32	-0.27	-0.25	-0.23	-0.18	3418	1.0
y_mean[78]	-0.39	3.3e-4	0.02	-0.43	-0.41	-0.39	-0.38	-0.35	3504	1.0
y_mean[79]	-0.76	5.9e-4	0.04	-0.83	-0.78	-0.76	-0.73	-0.69	3654	1.0
y_mean[80]	-0.19	5.9e-4	0.03	-0.26	-0.21	-0.19	-0.17	-0.13	3090	1.0
y_mean[81]	-0.12	4.2e-4	0.02	-0.17	-0.14	-0.13	-0.11	-0.08	3039	1.0
y_mean[82]	1.31	6.5e-4	0.04	1.23	1.29	1.31	1.34	1.4	4223	1.0

y_mean[83]	-0.34	6.8e-4	0.03	-0.4	-0.36	-0.34	-0.31	-0.27	2553	1.0
y_mean[84]	-0.76	5.8e-4	0.04	-0.83	-0.78	-0.76	-0.74	-0.69	3687	1.0
y_mean[85]	-0.36	3.6e-4	0.02	-0.4	-0.37	-0.36	-0.35	-0.32	3341	1.0
y_mean[86]	-0.39	3.5e-4	0.02	-0.43	-0.41	-0.39	-0.38	-0.35	3386	1.0
y_mean[87]	-0.33	4.3e-4	0.02	-0.37	-0.34	-0.33	-0.31	-0.28	3120	1.0
y_mean[88]	0.69	5.4e-4	0.04	0.62	0.66	0.69	0.71	0.76	4409	1.0
y_mean[89]	-0.46	5.5e-4	0.03	-0.51	-0.48	-0.46	-0.44	-0.4	2898	1.0
y_mean[90]	-0.16	4.2e-4	0.02	-0.2	-0.17	-0.16	-0.14	-0.11	3209	1.0
y_mean[91]	-0.1	7.1e-4	0.04	-0.17	-0.12	-0.1	-0.07	-0.02	2917	1.0
y_mean[92]	-0.44	4.7e-4	0.02	-0.49	-0.46	-0.44	-0.43	-0.39	2630	1.0
y_mean[93]	0.36	1.0e-3	0.06	0.25	0.32	0.36	0.4	0.48	3420	1.0
y_mean[94]	0.44	7.1e-4	0.04	0.36	0.41	0.44	0.47	0.52	3320	1.0
y_mean[95]	0.02	4.6e-4	0.03		1.9e-3	0.02	0.03	0.07	3588	1.0
y_mean[96]	-0.05	3.7e-4	0.02	-0.09	-0.06	-0.05		-4.1e-3	3448	1.0
y_mean[97]	-0.56	4.0e-4	0.02	-0.6	-0.57	-0.56	-0.54	-0.51	3243	1.0
y_mean[97] y_mean[98]	-0.79	6.7e-4	0.02	-0.87	-0.81	-0.79	-0.76	-0.71	3721	1.0
y_mean[99]	0.78	1.1e-3	0.04	0.64	0.74	0.78	0.70	0.71	4514	1.0
y_mean[100]	0.78	5.3e-4	0.07	0.36	0.74	0.78	0.45	0.49	3671	1.0
y_mean[101]	-0.43	4.8e-4	0.03	-0.48	-0.45	-0.43	-0.41	-0.37	3198	1.0
V –		4.3e-4	0.03	-0.48	-0.45	-0.43	-0.41		3285	1.0
y_mean[102]	-0.18							-0.13		
y_mean[103]	-0.79	6.6e-4	0.04	-0.87	-0.82	-0.79	-0.76	-0.71	3619	1.0
y_mean[104]	-0.61	5.3e-4	0.03	-0.67	-0.63	-0.6	-0.58	-0.54	3521	1.0
y_mean[105]	0.67	5.2e-4	0.03	0.61	0.65	0.68	0.7	0.74	4057	1.0
y_mean[106]	-0.21	8.6e-4	0.04	-0.29	-0.24	-0.21	-0.18	-0.12	2535	1.0
y_mean[107]	-0.05	5.7e-4	0.04	-0.12	-0.08	-0.05	-0.03	0.02	4037	1.0
y_mean[108]	1.47	1.2e-3	0.07	1.34	1.43	1.47	1.52	1.6	3219	1.0
y_mean[109]	0.17	6.1e-4	0.03	0.11	0.15	0.17	0.19	0.24	2876	1.0
y_mean[110]	2.17	1.1e-3	0.07	2.02	2.12	2.17	2.22	2.31	4831	1.0
y_mean[111]	2.28	1.2e-3	0.07	2.13	2.23	2.28	2.33	2.43	4019	1.0
y_mean[112]	0.29	5.2e-4	0.03	0.24	0.27	0.29	0.31	0.35	3359	1.0
y_mean[113]	-0.75	5.7e-4	0.04	-0.82	-0.78	-0.75	-0.73	-0.69	3805	1.0
y_mean[114]	-0.14	4.9e-4	0.03	-0.19	-0.15	-0.14	-0.12	-0.08	2888	1.0
y_mean[115]	-0.45	5.5e-4	0.03	-0.51	-0.47	-0.45	-0.43	-0.39	2868	1.0
y_mean[116]	-0.13	5.8e-4	0.03	-0.19	-0.15	-0.13	-0.1	-0.06	3205	1.0
y_mean[117]	-0.19	5.4e-4	0.03	-0.25	-0.21	-0.19	-0.17	-0.13	3023	1.0
y_mean[118]	0.77	7.1e-4	0.04	0.68	0.74	0.77	0.8	0.85	3600	1.0
y_mean[119]	0.16	6.3e-4	0.04	0.09	0.13	0.16	0.19	0.24	3630	1.0
y_mean[120]	-0.18	5.9e-4	0.03	-0.24	-0.2	-0.18	-0.15	-0.11	3524	1.0
y_mean[121]	-0.16	5.1e-4	0.03	-0.23	-0.19	-0.16	-0.14	-0.1	3659	1.0
y_mean[122]	-0.66	7.4e-4	0.04	-0.74	-0.69	-0.66	-0.63	-0.57	3467	1.0
y_mean[123]	-0.57	4.2e-4	0.02	-0.62	-0.59	-0.57	-0.55	-0.52	3374	1.0
y_mean[124]	-0.6	5.3e-4	0.03	-0.66	-0.62	-0.6	-0.58	-0.54	3523	1.0
y_mean[125]	-0.05	4.2e-4	0.02	-0.09	-0.06	-0.05	-0.03	2.6e-3	3327	1.0
y_mean[126]	0.23		0.03	0.17	0.21	0.23	0.25	0.28	3384	1.0
y_mean[127]	-0.47	4.3e-4	0.02	-0.51	-0.48	-0.47	-0.45	-0.42	3066	1.0
y_mean[128]	0.44	5.0e-4	0.03	0.38	0.42	0.44	0.46	0.5	3703	1.0
y_mean[129]	-0.42	4.9e-4	0.03	-0.47	-0.44	-0.42	-0.4	-0.37	2802	1.0
y_mean[130]	-0.25	8.0e-4	0.04	-0.33	-0.27	-0.25	-0.22	-0.17	2535	1.0
J =		- -	- -			-	-	•		

```
1.7e-3
                                       0.1
                                             1.25
                                                     1.38
                                                                     1.52
                                                                                    3471
y_mean[131]
                     1.45
                                                             1.45
                                                                             1.65
                                                                                             1.0
                    -0.46
                           4.7e-4
                                     0.03
                                            -0.51
                                                    -0.48
                                                            -0.46
                                                                   -0.44
                                                                           -0.41
                                                                                    3171
y_mean[132]
                                                                                             1.0
                    -0.04
                           6.9e-4
                                     0.04
                                            -0.12
                                                    -0.07
                                                            -0.04
                                                                             0.04
y_mean[133]
                                                                   -0.01
                                                                                    3173
                                                                                             1.0
                     1.71
                           8.0e-4
                                     0.05
                                             1.61
                                                     1.68
                                                             1.71
                                                                     1.75
                                                                             1.81
                                                                                    3965
                                                                                             1.0
y_mean[134]
                                            -0.52
y_mean[135]
                    -0.48
                           4.3e-4
                                     0.02
                                                    -0.49
                                                            -0.48
                                                                   -0.46
                                                                           -0.43
                                                                                    3191
                                                                                             1.0
                    -0.25
                           5.4e-4
                                     0.03
                                            -0.31
                                                    -0.27
                                                            -0.25
                                                                   -0.23
                                                                           -0.19
                                                                                    3356
                                                                                             1.0
y_mean[136]
                                            -0.07
                                                            -0.01 2.8e-3
y_mean[137]
                    -0.01
                           4.5e-4
                                     0.03
                                                    -0.03
                                                                             0.04
                                                                                    3372
                                                                                             1.0
                           1.0e-3
                                             1.49
                                                                             1.73
y_mean[138]
                     1.61
                                     0.06
                                                     1.57
                                                             1.61
                                                                     1.65
                                                                                    3757
                                                                                             1.0
                     0.51
                           4.4e-4
                                     0.03
                                             0.45
                                                     0.49
                                                             0.51
                                                                     0.53
                                                                             0.57
                                                                                    4149
                                                                                             1.0
y_mean[139]
                     -0.8
                           7.2e-4
                                     0.04
                                            -0.89
                                                    -0.83
                                                             -0.8
                                                                   -0.77
                                                                           -0.72
y_mean[140]
                                                                                    3642
                                                                                             1.0
                     0.43
                           5.3e-4
                                     0.03
                                             0.37
                                                     0.41
                                                             0.43
                                                                     0.45
                                                                              0.5
                                                                                    3699
                                                                                             1.0
y_mean[141]
                    -0.33
                           6.3e-4
                                     0.04
                                             -0.4
                                                    -0.35
                                                            -0.33
                                                                     -0.3
                                                                           -0.25
                                                                                    3736
                                                                                             1.0
y_mean[142]
                    -0.55
                           3.9e-4
                                     0.02
                                            -0.59
                                                                           -0.51
                                                                                    3262
y_mean[143]
                                                    -0.56
                                                            -0.55
                                                                   -0.53
                                                                                             1.0
                    -0.09
                           4.6e-4
                                            -0.14
                                                                           -0.04
                                     0.02
                                                     -0.1
                                                            -0.09
                                                                   -0.07
                                                                                    2891
                                                                                             1.0
y_{mean}[144]
                    -0.56
                           4.3e-4
                                     0.03
                                            -0.61
                                                    -0.58
                                                            -0.56
                                                                    -0.55
                                                                           -0.52
y_mean[145]
                                                                                    3445
                                                                                             1.0
y_mean[146]
                    -0.64
                           7.2e-4
                                     0.04
                                            -0.72
                                                    -0.67
                                                            -0.64
                                                                   -0.61
                                                                           -0.55
                                                                                    3630
                                                                                             1.0
y_mean[147]
                 -5.0e-3
                           4.4e-4
                                     0.03
                                            -0.06
                                                    -0.02-5.3e-3
                                                                     0.01
                                                                             0.05
                                                                                    3695
                                                                                             1.0
                    -0.23
                                     0.03
                                            -0.29
                                                           -0.23
                                                                           -0.17
y_mean[148]
                           5.1e-4
                                                    -0.25
                                                                   -0.21
                                                                                    3270
                                                                                             1.0
y_mean[149]
                    -0.43
                           5.2e-4
                                     0.03
                                            -0.49
                                                    -0.45
                                                            -0.43
                                                                   -0.41
                                                                           -0.37
                                                                                    3698
                                                                                             1.0
                                            -0.12
y_mean[150]
                    -0.07
                           4.2e-4
                                     0.02
                                                    -0.09
                                                            -0.07
                                                                   -0.06
                                                                           -0.03
                                                                                    3150
                                                                                             1.0
                    -0.54
                           5.5e-4
                                     0.03
                                             -0.6
                                                    -0.56
                                                            -0.54
                                                                   -0.52
                                                                           -0.48
y_mean[151]
                                                                                    3392
                                                                                             1.0
                    -0.57
                           4.6e-4
                                     0.03
                                            -0.62
                                                    -0.59
                                                            -0.57
                                                                    -0.55
                                                                           -0.52
                                                                                    3388
                                                                                             1.0
y_mean[152]
                    -0.07
                           4.2e-4
                                            -0.12
                                                            -0.07
                                                                           -0.02
y_mean[153]
                                     0.02
                                                    -0.09
                                                                   -0.05
                                                                                    3122
                                                                                             1.0
                                            -0.12
                    -0.08
                           4.2e-4
                                     0.02
                                                     -0.1
                                                            -0.08
                                                                   -0.06
                                                                           -0.03
                                                                                    3500
                                                                                             1.0
y_mean[154]
                                                     -0.5
y_mean[155]
                    -0.48
                           4.4e-4
                                     0.03
                                            -0.53
                                                            -0.48
                                                                   -0.47
                                                                           -0.43
                                                                                    3314
                                                                                             1.0
                    -0.58
                           4.8e-4
                                     0.03
                                            -0.64
                                                     -0.6
                                                            -0.58
                                                                   -0.56
                                                                           -0.53
                                                                                    3453
y_mean[156]
                                                                                             1.0
                                     0.02
                                            -0.54
                                                                           -0.45
                    -0.49
                           4.0e-4
                                                    -0.51
                                                            -0.49
                                                                   -0.48
                                                                                    2972
                                                                                             1.0
y_mean[157]
y_mean[158]
                     0.77
                           6.2e-4
                                     0.04
                                              0.7
                                                     0.74
                                                             0.77
                                                                     0.79
                                                                             0.84
                                                                                    3457
                                                                                             1.0
                           6.0e-4
                                            -0.14
                                                            -0.07
                                                                   -0.05-8.2e-3
                    -0.07
                                     0.03
                                                     -0.1
                                                                                    3243
                                                                                             1.0
y_mean[159]
y_mean[160]
                    -0.53
                           3.8e-4
                                     0.02
                                            -0.57
                                                    -0.54
                                                            -0.53
                                                                   -0.52
                                                                           -0.49
                                                                                    2986
                                                                                             1.0
y_mean[161]
                                            -0.58
                                                                           -0.48
                    -0.53
                           4.4e-4
                                     0.02
                                                    -0.55
                                                            -0.53
                                                                   -0.52
                                                                                    3096
                                                                                             1.0
                                                    -0.34
                                                                           -0.25
y_mean[162]
                    -0.32
                           6.2e-4
                                     0.04
                                            -0.39
                                                            -0.32
                                                                     -0.3
                                                                                    3286
                                                                                             1.0
                    -0.47
                           4.4e-4
                                     0.03
                                            -0.52
                                                    -0.49
                                                                           -0.42
y_mean[163]
                                                            -0.47
                                                                   -0.46
                                                                                    3253
                                                                                             1.0
y_mean[164]
                     1.36
                           6.2e-4
                                     0.04
                                             1.27
                                                     1.33
                                                             1.36
                                                                     1.38
                                                                             1.44
                                                                                    4514
                                                                                             1.0
                                                                             0.07
                     0.01
                           4.5e-4
                                     0.03
                                            -0.04-4.7e-3
                                                             0.01
                                                                     0.03
                                                                                    3584
                                                                                             1.0
y mean [165]
                    -0.13
                           4.7e-4
                                     0.02
                                            -0.17
                                                    -0.14
                                                            -0.13
                                                                           -0.08
y_mean[166]
                                                                   -0.11
                                                                                    2841
                                                                                             1.0
                    -0.04
                           4.6e-4
                                             -0.1
                                                            -0.05
                                                                             0.01
                                     0.03
                                                    -0.07
                                                                   -0.02
                                                                                    4218
                                                                                             1.0
y mean[167]
y_mean[168]
                    -0.56
                           1.4e-3
                                     0.08
                                            -0.72
                                                    -0.62
                                                            -0.56
                                                                     -0.5
                                                                             -0.4
                                                                                    3411
                                                                                             1.0
                                            -0.53
                    -0.49
                           4.1e-4
                                     0.02
                                                     -0.5
                                                            -0.49
                                                                    -0.47
                                                                           -0.45
                                                                                    2632
                                                                                             1.0
y_mean[169]
                    -0.47
                           4.2e-4
                                     0.02
                                            -0.51
                                                    -0.48
                                                            -0.47
                                                                    -0.45
                                                                           -0.42
                                                                                    2939
y_mean[170]
                                                                                             1.0
                                     0.05
                                            -0.91
y_mean[171]
                    -0.82
                           7.8e-4
                                                    -0.85
                                                            -0.82
                                                                   -0.79
                                                                           -0.73
                                                                                    3512
                                                                                             1.0
                           6.3e-4
                                     0.05
                                             1.27
                                                     1.33
                                                             1.36
                                                                             1.46
y_mean[172]
                     1.36
                                                                     1.39
                                                                                    5471
                                                                                             1.0
                                                                   -0.15
y_mean[173]
                    -0.19
                           7.8e-4
                                     0.05
                                            -0.28
                                                    -0.22
                                                            -0.18
                                                                           -0.09
                                                                                    3829
                                                                                             1.0
                    -0.66
                           6.1e-4
                                            -0.73
                                                            -0.65
                                                                           -0.58
                                     0.04
                                                    -0.68
                                                                   -0.63
                                                                                    3463
y_mean[174]
                                                                                             1.0
                           5.3e-4
                                     0.03
                                            -0.11
                                                    -0.07
                                                            -0.05
                                                                            0.02
y_mean[175]
                    -0.05
                                                                   -0.03
                                                                                    3801
                                                                                             1.0
                                            -0.63
                                                                           -0.53
y_mean[176]
                    -0.58
                           4.4e-4
                                     0.03
                                                     -0.6
                                                            -0.58
                                                                   -0.56
                                                                                    3435
                                                                                             1.0
y_mean[177]
                    -0.52
                           3.8e-4
                                     0.02
                                            -0.56
                                                    -0.54
                                                            -0.52
                                                                   -0.51
                                                                           -0.48
                                                                                    2973
                                                                                             1.0
y_mean[178]
                    -0.28
                           4.3e-4
                                     0.02
                                            -0.33
                                                     -0.3
                                                            -0.28
                                                                   -0.27
                                                                           -0.24
                                                                                    3176
                                                                                             1.0
```

y_mean[179]	-0.44	5.0e-4	0.03	-0.49	-0.46	-0.44	-0.42	-0.38	2974	1.0
y_mean[180]	-0.35	6.4e-4	0.04	-0.42	-0.37	-0.35	-0.32	-0.27	3966	1.0
y_mean[181]	-0.27	5.8e-4	0.03	-0.33	-0.29	-0.27	-0.24	-0.2	3441	1.0
y_mean[182]	-0.65	7.3e-4	0.04	-0.73	-0.68	-0.65	-0.62	-0.56	3540	1.0
y_mean[183]	0.02	4.8e-4	0.03	-0.04-	2.0e-3	0.02	0.04	0.08	3848	1.0
y_mean[184]	0.04	4.8e-4	0.03	-0.01	0.02	0.04	0.06	0.1	3716	1.0
y_mean[185]	-0.32	3.8e-4	0.02	-0.37	-0.34	-0.32	-0.31	-0.28	3574	1.0
y_mean[186]	0.28	5.8e-4	0.04	0.21	0.26	0.28	0.3	0.35	3761	1.0
y_mean[187]	-0.71	5.6e-4	0.03	-0.78	-0.73	-0.71	-0.69	-0.65	3538	1.0
y_mean[188]	-0.05	6.3e-4	0.04	-0.12	-0.07	-0.05	-0.02	0.02	3159	1.0
y_mean[189]	-0.21	6.0e-4	0.04	-0.28	-0.24	-0.21	-0.19	-0.14	3508	1.0
y_mean[190]	-0.56	4.5e-4	0.03	-0.61	-0.58	-0.56	-0.54	-0.51	3487	1.0
y_mean[191]	-0.33	9.7e-4	0.06	-0.45	-0.37	-0.33	-0.29	-0.21	3936	1.0
y_mean[191]	0.77	6.3e-4	0.05	0.68	0.74	0.77	0.81	0.87	5914	1.0
y_mean[193]	-0.57	4.3e-4	0.02	-0.62	-0.59	-0.57	-0.56	-0.53	3380	1.0
y_mean[194]	-0.32	4.1e-4	0.02	-0.37	-0.34	-0.32	-0.31	-0.28	3379	1.0
y_mean[194] y_mean[195]	0.32	4.1e-4	0.02	0.07	0.09	0.32	0.13	0.16	3439	1.0
y_mean[196] y_mean[196]	2.14	1.1e-3	0.02	1.99	2.09	2.14	2.19	2.29	5055	1.0
y_mean[197]	0.59	4.5e-4	0.03	0.53	0.57	0.59	0.61	0.65	4615	1.0
y_mean[198]	-0.48	4.7e-4	0.03	-0.53	-0.5	-0.48	-0.46	-0.43	2821	1.0
y_mean[190] y_mean[199]	-0.48	5.0e-4	0.03	-0.13	-0.09	-0.48		-0.43 -3.1e-3	4181	1.0
y_mean[200]	0.1	5.0e-4 5.5e-4	0.03	0.04	0.08	0.1	0.13		3808	1.0
-					-0.5	-0.49	-0.47	0.17		1.0
y_mean[201]	-0.49	5.0e-4	0.03	-0.54				-0.43	2901	
y_mean[202]	-0.44	4.4e-4	0.02	-0.48	-0.45	-0.44	-0.42	-0.39	3113	1.0
y_mean[203]	0.12	5.9e-4	0.04	0.05	0.09	0.12	0.15	0.19	4161	1.0
y_mean[204]	-0.21	6.1e-4	0.03	-0.27	-0.23	-0.21	-0.19	-0.15	2883	1.0
y_mean[205]	-0.33	3.3e-4	0.02	-0.37	-0.35	-0.33	-0.32	-0.29	3679	1.0
y_mean[206]	0.19	9.1e-4	0.07	0.06	0.15	0.19	0.24	0.32	5562	1.0
y_mean[207]	-0.44	3.2e-4	0.02	-0.48	-0.45	-0.44	-0.43	-0.4	3605	1.0
y_mean[208]	-0.28	2.3e-3	0.14	-0.54	-0.37	-0.28		7.9e-3	3536	1.0
y_mean[209]	0.56	4.4e-4	0.03	0.5	0.54	0.56	0.58	0.62	4573	1.0
y_mean[210]	0.32	7.4e-4	0.05	0.24	0.29	0.32	0.35	0.41	3743	1.0
y_mean[211]	-0.57	6.4e-4	0.04	-0.64	-0.59	-0.57		-0.49	3533	1.0
y_mean[212]	0.35	6.8e-4	0.04	0.28	0.33	0.36	0.38	0.43	3440	1.0
y_mean[213]	-0.01	7.0e-4	0.04	-0.09	-0.04	-0.01	0.01	0.07	3288	1.0
y_mean[214]	0.66	5.0e-4	0.03	0.59	0.64	0.66	0.68	0.72	4090	1.0
y_mean[215]	-0.56	4.0e-4	0.02	-0.6	-0.57	-0.56	-0.54	-0.51	3272	1.0
y_mean[216]	-0.05	4.3e-4	0.02	-0.1	-0.07	-0.05	-0.03-	1.4e-3	3238	1.0
y_mean[217]	-0.3	7.1e-4	0.04	-0.37	-0.33	-0.3	-0.28	-0.23	2572	1.0
y_mean[218]	-0.71	1.0e-3	0.06	-0.83	-0.75	-0.71	-0.66	-0.58	3764	1.0
y_mean[219]	0.92	5.5e-4	0.03	0.85	0.9	0.92	0.94	0.98	3699	1.0
y_mean[220]	0.05	5.2e-4	0.03	-0.01	0.03	0.05	0.08	0.12	4222	1.0
y_mean[221]	-0.24	6.6e-4	0.04	-0.32	-0.27	-0.24	-0.22	-0.17	3568	1.0
y_mean[222]	0.04	4.8e-4	0.03	-0.01	0.02	0.04	0.06	0.1	3748	1.0
y_mean[223]	-0.51	4.3e-4	0.02	-0.56	-0.52	-0.51	-0.49	-0.46	3339	1.0
y_mean[224]	-0.22	8.3e-4	0.04	-0.3	-0.24	-0.21	-0.19	-0.13	2547	1.0
y_mean[225]	-0.15	5.0e-4	0.03	-0.21	-0.17	-0.15	-0.13	-0.09	3791	1.0
y_mean[226]	-0.52	4.1e-4	0.02	-0.57	-0.54	-0.52	-0.51	-0.48	2992	1.0

```
0.03
                                            -0.46
                                                    -0.42
                                                                   -0.38
                                                                           -0.34
                                                                                    2782
y_mean[227]
                     -0.4
                           5.4e-4
                                                             -0.4
                                                                                             1.0
                    -0.39
                           7.0e-4
                                      0.04
                                            -0.46
                                                    -0.42
                                                            -0.39
                                                                   -0.37
                                                                           -0.32
                                                                                    2658
y_mean[228]
                                                                                             1.0
                    -0.48
                           4.5e-4
                                      0.03
                                            -0.53
                                                    -0.49
                                                            -0.48
                                                                           -0.42
                                                                                    3384
y_mean[229]
                                                                   -0.46
                                                                                             1.0
y_mean[230]
                     0.57
                           4.3e-4
                                      0.03
                                             0.51
                                                     0.55
                                                             0.57
                                                                     0.59
                                                                             0.63
                                                                                    4221
                                                                                             1.0
                                            -0.67
y_mean[231]
                    -0.61
                           5.3e-4
                                      0.03
                                                    -0.63
                                                            -0.61
                                                                   -0.59
                                                                           -0.55
                                                                                    3504
                                                                                             1.0
                    -0.56
                           4.0e-4
                                      0.02
                                             -0.6
                                                    -0.57
                                                            -0.56
                                                                   -0.54
                                                                           -0.51
                                                                                    3355
                                                                                             1.0
y_mean[232]
                                             0.48
y_mean[233]
                     0.55
                           6.1e-4
                                      0.04
                                                     0.53
                                                             0.56
                                                                     0.58
                                                                             0.63
                                                                                    3681
                                                                                             1.0
                           6.2e-4
                                             0.65
                                                             0.72
                                                                             0.79
y_mean[234]
                     0.72
                                      0.04
                                                     0.69
                                                                     0.74
                                                                                    3741
                                                                                             1.0
                    -0.15
                           3.9e-4
                                      0.02
                                             -0.2
                                                    -0.17
                                                            -0.15
                                                                   -0.13
                                                                             -0.1
                                                                                    3671
                                                                                             1.0
y_mean[235]
                                                    -0.17
                    -0.15
                           4.2e-4
                                      0.02
                                             -0.2
                                                            -0.15
                                                                            -0.11
y_mean[236]
                                                                   -0.14
                                                                                    3109
                                                                                             1.0
                    -0.61
                           6.4e-4
                                      0.04
                                            -0.68
                                                    -0.64
                                                            -0.61
                                                                    -0.59
                                                                           -0.54
                                                                                    3519
                                                                                             1.0
y_mean[237]
y_mean[238]
                     1.46
                           1.0e-3
                                      0.07
                                             1.32
                                                     1.41
                                                             1.46
                                                                     1.51
                                                                             1.61
                                                                                    5285
                                                                                             1.0
                   4.4e-3
                           3.3e-4
                                      0.02
                                            -0.03-9.0e-3 4.1e-3
                                                                     0.02
                                                                             0.04
                                                                                    3621
y_mean[239]
                                                                                             1.0
                    -0.53
                           4.3e-4
                                            -0.58
                                                            -0.53
                                                                           -0.47
                                      0.03
                                                    -0.54
                                                                   -0.51
                                                                                    3823
y_mean[240]
                                                                                             1.0
                    -0.35
                           5.7e-4
                                      0.03
                                            -0.41
                                                    -0.37
                                                            -0.35
                                                                    -0.33
                                                                           -0.28
                                                                                    3348
y_mean[241]
                                                                                             1.0
                           4.0e-4
                                            -0.14
                    -0.09
                                      0.02
                                                            -0.09
y_mean[242]
                                                    -0.11
                                                                   -0.07
                                                                           -0.04
                                                                                    3637
                                                                                             1.0
y_mean[243]
                    -0.07
                           4.7e-4
                                      0.03
                                            -0.12
                                                    -0.08
                                                            -0.07
                                                                   -0.05
                                                                           -0.01
                                                                                    3025
                                                                                             1.0
                    -0.38
                                      0.03
                                            -0.43
                                                     -0.4
                                                            -0.38
                                                                           -0.32
y_mean[244]
                           5.3e-4
                                                                   -0.36
                                                                                    2783
                                                                                             1.0
y_mean[245]
                    -0.35
                           5.9e-4
                                      0.03
                                            -0.42
                                                    -0.38
                                                            -0.35
                                                                    -0.33
                                                                           -0.29
                                                                                    3075
                                                                                             1.0
y mean [246]
                    -0.47
                           5.0e-4
                                      0.03
                                            -0.53
                                                    -0.49
                                                            -0.47
                                                                   -0.46
                                                                           -0.42
                                                                                    2847
                                                                                             1.0
                     -0.5
                           4.3e-4
                                      0.02
                                            -0.54
                                                    -0.51
                                                             -0.5
                                                                   -0.48
                                                                           -0.45
y_mean[247]
                                                                                    2851
                                                                                             1.0
y_mean[248]
                     0.05
                           4.8e-4
                                      0.03
                                            -0.01
                                                     0.03
                                                             0.05
                                                                     0.07
                                                                              0.1
                                                                                    3775
                                                                                             1.0
                                                            -0.53
                    -0.53
                           5.7e-4
                                      0.03
                                            -0.59
                                                                           -0.46
y_mean[249]
                                                    -0.55
                                                                   -0.51
                                                                                    3347
                                                                                             1.0
                     0.61
                           5.0e-4
                                      0.03
                                             0.54
                                                     0.59
                                                             0.61
                                                                     0.63
                                                                             0.68
                                                                                    4625
                                                                                             1.0
y_mean[250]
y_mean[251]
                    -0.24
                           5.2e-4
                                      0.03
                                             -0.3
                                                    -0.26
                                                            -0.24
                                                                   -0.22
                                                                           -0.18
                                                                                    3352
                                                                                             1.0
                     0.58
                           7.0e-4
                                      0.04
                                              0.5
                                                     0.55
                                                             0.58
                                                                     0.61
                                                                             0.66
                                                                                    3698
y_mean[252]
                                                                                             1.0
                                      0.02
                                            -0.54
                                                            -0.49
                                                                           -0.45
y_mean[253]
                    -0.49
                           4.3e-4
                                                    -0.51
                                                                   -0.48
                                                                                    2783
                                                                                             1.0
                    -0.02
                           6.4e-4
                                      0.03
                                            -0.09
                                                    -0.04
                                                            -0.02 1.7e-3
                                                                             0.05
y_mean[254]
                                                                                    2837
                                                                                             1.0
                    -0.15
                           7.1e-4
                                            -0.23
                                                    -0.18
                                                            -0.15
                                                                           -0.07
                                      0.04
                                                                   -0.12
                                                                                    3137
                                                                                             1.0
y_{mean}[255]
y_mean[256]
                     1.41
                           7.0e-4
                                      0.04
                                             1.32
                                                     1.38
                                                             1.41
                                                                     1.44
                                                                              1.5
                                                                                    4016
                                                                                             1.0
y_mean[257]
                                            -0.15
                     -0.1
                           4.7e-4
                                      0.03
                                                    -0.12
                                                             -0.1
                                                                   -0.08
                                                                           -0.05
                                                                                    2845
                                                                                             1.0
                    -0.06
y_mean[258]
                           3.6e-4
                                      0.02
                                            -0.11
                                                    -0.08
                                                            -0.06
                                                                   -0.05
                                                                           -0.02
                                                                                    3960
                                                                                             1.0
                           5.6e-4
                                      0.03
                                             -0.3
                                                    -0.26
                                                            -0.23
                                                                   -0.21
                                                                            -0.17
y_mean[259]
                    -0.23
                                                                                    3537
                                                                                             1.0
y_mean[260]
                      0.6
                           4.2e-4
                                      0.03
                                             0.54
                                                     0.58
                                                              0.6
                                                                     0.61
                                                                             0.65
                                                                                    4064
                                                                                             1.0
                    -0.56
                           6.0e-4
                                      0.04
                                            -0.63
                                                    -0.58
                                                           -0.56
                                                                   -0.54
                                                                           -0.49
                                                                                    3556
                                                                                             1.0
y mean [261]
y_mean[262]
                     -0.2
                           4.5e-4
                                            -0.25
                                                    -0.21
                                                             -0.2
                                                                   -0.18
                                                                           -0.14
                                      0.03
                                                                                    3304
                                                                                             1.0
                                             0.07
                                                                             0.16
                     0.11
                           3.6e-4
                                      0.02
                                                      0.1
                                                             0.11
                                                                     0.13
                                                                                    3762
                                                                                             1.0
y mean [263]
y_mean[264]
                    -0.47
                           4.5e-4
                                      0.03
                                            -0.52
                                                    -0.48
                                                            -0.47
                                                                   -0.45
                                                                           -0.42
                                                                                    3287
                                                                                             1.0
                     -0.1
                           3.0e-3
                                      0.18
                                            -0.45
                                                    -0.23
                                                             -0.1
                                                                     0.02
                                                                             0.26
                                                                                    3740
                                                                                             1.0
y_mean[265]
                    -0.43
                           6.3e-4
                                      0.03
                                            -0.49
                                                    -0.45
                                                            -0.43
                                                                     -0.4
                                                                           -0.36
                                                                                    2737
y_mean[266]
                                                                                             1.0
                    -0.35
                                      0.04
                                            -0.43
                           7.5e-4
                                                    -0.38
                                                            -0.35
                                                                   -0.32
                                                                           -0.27
                                                                                    3161
                                                                                             1.0
y_mean[267]
                    -0.29
                           6.8e-4
                                            -0.36
                                                    -0.31
                                                            -0.29
                                                                   -0.26
                                                                           -0.22
y_mean[268]
                                      0.04
                                                                                    3004
                                                                                             1.0
y_mean[269]
                     0.03
                           4.6e-4
                                      0.03
                                            -0.03 9.8e-3
                                                             0.03
                                                                     0.05
                                                                             0.09
                                                                                    3782
                                                                                             1.0
                    -0.02
                           5.2e-4
                                      0.03
                                            -0.08
                                                            -0.02 3.3e-3
                                                                             0.05
                                                    -0.04
                                                                                    4137
                                                                                             1.0
y_mean[270]
                    -0.49
                           3.8e-4
                                      0.02
                                            -0.53
                                                     -0.5
                                                            -0.49
                                                                   -0.47
                                                                           -0.44
                                                                                    3604
y_mean[271]
                                                                                             1.0
                                                             -0.4
y_mean[272]
                                            -0.46
                     -0.4
                           5.3e-4
                                      0.03
                                                    -0.42
                                                                   -0.38
                                                                           -0.34
                                                                                    2818
                                                                                             1.0
y_mean[273]
                    -0.59
                           4.7e-4
                                      0.03
                                            -0.64
                                                    -0.61
                                                            -0.59
                                                                   -0.57
                                                                            -0.54
                                                                                    3455
                                                                                             1.0
y_mean[274]
                    -0.73
                           7.4e-4
                                      0.04
                                            -0.81
                                                    -0.76
                                                            -0.73
                                                                     -0.7
                                                                           -0.64
                                                                                    3635
                                                                                             1.0
```

y_mean[275]	-0.12	7.8e-4	0.04	-0.2	-0.15	-0.12	-0.09	-0.04	2900	1.0
y_mean[276]	0.76	6.1e-4	0.04	0.69	0.74	0.76	0.79	0.83	3503	1.0
y_mean[277]	-0.53	3.8e-4	0.02	-0.57	-0.54	-0.53	-0.51	-0.49	3133	1.0
y_mean[278]	-0.45	4.4e-4	0.02	-0.49	-0.46	-0.45	-0.43	-0.4	2955	1.0
y_mean[279]	1.28	6.2e-4	0.04	1.19	1.25	1.28	1.31	1.37	5141	1.0
y_mean[280]	0.42	5.2e-4	0.03	0.35	0.39	0.42	0.44	0.48	3946	1.0
y_mean[281]	-0.5	3.9e-4	0.02	-0.55	-0.52	-0.5	-0.49	-0.46	3004	1.0
y_mean[282]	-0.17	8.6e-4	0.04	-0.26	-0.2	-0.17	-0.14	-0.08	2721	1.0
y_mean[283]	-0.71	6.3e-4	0.04	-0.79	-0.74	-0.71	-0.68	-0.63	3843	1.0
y_mean[284]	-0.54	4.9e-4	0.03	-0.6	-0.56	-0.54	-0.52	-0.48	3642	1.0
y_mean[285]	-0.49	5.0e-4	0.03	-0.55	-0.51	-0.49	-0.47	-0.43	3224	1.0
y_mean[286]	-0.09	6.6e-4	0.04	-0.16	-0.11	-0.09		8.9e-3	3593	1.0
y_mean[287]	2.48	1.3e-3	0.08	2.31	2.42	2.47	2.53	2.63	3723	1.0
y_mean[288]	-0.61	6.8e-4	0.04	-0.69	-0.63	-0.61	-0.58	-0.53	3475	1.0
y_mean[289]	2.31	1.7e-3	0.12	2.08	2.24	2.32	2.39	2.54	4720	1.0
y_mean[290] y_mean[290]	-0.71	1.0e-3	0.12	-0.83	-0.75	-0.71	-0.66	-0.58	3856	1.0
y_mean[290] y_mean[291]	-0.44	5.1e-4	0.03	-0.49	-0.46	-0.44	-0.42	-0.39	2674	1.0
y_mean[291] y_mean[292]	-0.51	3.1e 4 3.8e-4	0.03	-0.55	-0.52	-0.51	-0.49	-0.47	2916	1.0
y_mean[293]	-0.31	7.7e-4	0.02	-0.37	-0.32	-0.31	-0.45	-0.47	3451	1.0
y_mean[294]	-0.25	5.4e-4	0.03	-0.51	-0.31	-0.25	-0.25	-0.2	2869	1.0
• –			0.03	-0.51						
y_mean[295]	-0.21	6.0e-4			-0.23	-0.21	-0.19	-0.15	3190	1.0
y_mean[296]	1.25	9.1e-4	0.07	1.11	1.2	1.25	1.3	1.39	6197	1.0
y_mean[297]	-0.73	5.3e-4	0.03	-0.79	-0.75	-0.73	-0.71	-0.67	3751	1.0
y_mean[298]	0.16	1.3e-3		4.5e-3	0.1	0.15	0.21	0.31	3736	1.0
y_mean[299]	-0.1	4.2e-4	0.02	-0.15	-0.12	-0.1	-0.09	-0.06	2967	1.0
y_mean[300]	-0.22	5.1e-4	0.03	-0.28	-0.24	-0.22	-0.2	-0.16	3564	1.0
y_mean[301]	-0.54	8.8e-4	0.05	-0.64	-0.57	-0.54	-0.51	-0.44	3439	1.0
y_mean[302]	1.68	7.0e-4	0.05	1.58	1.65	1.68	1.72	1.79	5776	1.0
y_mean[303]	0.44	6.1e-4	0.04	0.36	0.41	0.44	0.47	0.52	4213	1.0
y_mean[304]	-0.41	4.9e-4	0.03	-0.47	-0.43	-0.41	-0.4	-0.36	3021	1.0
y_mean[305]	0.4	7.9e-4	0.04	0.31	0.37	0.4	0.42	0.48	2884	1.0
y_mean[306]	-0.67	6.6e-4	0.04	-0.75	-0.7	-0.67	-0.65	-0.6	3526	1.0
y_mean[307]	-0.05	4.2e-4	0.02	-0.09	-0.06	-0.04	-0.03	4.1e-3	3398	1.0
y_mean[308]	-6.1e-3	4.8e-4	0.03	-0.06	-0.03-	6.2e-3	0.02	0.05	4291	1.0
y_mean[309]	-0.35	9.8e-4	0.05	-0.44	-0.38	-0.35	-0.32	-0.26	2409	1.0
y_mean[310]	-0.51	4.8e-4	0.03	-0.56	-0.53	-0.51	-0.49	-0.46	3040	1.0
y_mean[311]	-0.46	4.6e-4	0.02	-0.51	-0.48	-0.46	-0.45	-0.42	2640	1.0
y_mean[312]	-0.64	6.3e-4	0.04	-0.71	-0.66	-0.64	-0.61	-0.56	3516	1.0
y_mean[313]	0.24	1.1e-3	0.07	0.1	0.2	0.24	0.29	0.39	4391	1.0
y_mean[314]	-0.14	4.2e-4	0.02	-0.18	-0.15	-0.14	-0.12	-0.09	3087	1.0
y_mean[315]	1.36	1.6e-3	0.12	1.12	1.28	1.36	1.44	1.59	5217	1.0
y_mean[316]	-0.13	4.2e-4	0.02	-0.18	-0.15	-0.13	-0.12	-0.09	3480	1.0
y_mean[317]	-0.47	3.4e-4	0.02	-0.51	-0.48	-0.47	-0.45	-0.43	3681	1.0
y_mean[318]	0.95	8.4e-4	0.06	0.84	0.91	0.95	0.99	1.06	4419	1.0
y_mean[319]	-0.47	5.5e-4	0.03	-0.53	-0.49	-0.47	-0.45	-0.41	3185	1.0
y_mean[320]	-7.5e-3	4.4e-4	0.03	-0.06		7.7e-3	0.01	0.04	3449	1.0
y_mean[321]	-0.69	9.0e-4	0.06	-0.8		-0.69	-0.66	-0.59	3827	1.0
y_mean[322]	-0.28	8.0e-4	0.05	-0.37	-0.31	-0.28	-0.25	-0.19	3208	1.0
J	-	- -				-	-	-		

y_mean[323]	-0.49	5.0e-4	0.03	-0.54	-0.51	-0.49	-0.47	-0.44	2933	1.0
y_mean[324]	0.56	4.3e-4	0.03	0.5	0.54	0.56	0.58	0.61	4280	1.0
y_mean[325]	0.02	9.5e-4	0.05	-0.08	-0.02	0.02	0.05	0.12	3013	1.0
y_mean[326]	-0.4	3.5e-4	0.02	-0.44	-0.42	-0.4	-0.39	-0.36	3405	1.0
y_mean[327]	-0.15	4.8e-4	0.03	-0.2	-0.17	-0.15	-0.13	-0.1	2907	1.0
y_mean[328]	-0.57	6.6e-4	0.04	-0.65	-0.6	-0.57	-0.54	-0.49	3520	1.0
y_mean[329]	-0.4	5.5e-4	0.03	-0.45	-0.42	-0.4	-0.38	-0.34	2847	1.0
y_mean[330]	-0.11	4.4e-4	0.02	-0.15	-0.13	-0.11	-0.09	-0.06	2895	1.0
y_mean[331]	-0.5	3.9e-4	0.02	-0.54	-0.51	-0.5	-0.49	-0.46	2768	1.0
y_mean[332]	-0.77	6.3e-4	0.04	-0.84	-0.79	-0.76	-0.74	-0.69	3631	1.0
y_mean[333]	-0.58	4.3e-4	0.03	-0.62	-0.59	-0.58	-0.56	-0.53	3421	1.0
y_mean[334]	-0.36	5.6e-4	0.03	-0.42	-0.38	-0.36	-0.34	-0.3	3216	1.0
y_mean[335]	-0.47	6.5e-4	0.04	-0.54	-0.5	-0.47	-0.44	-0.4	3124	1.0
y_mean[336]	0.66	5.0e-4	0.03	0.59	0.64	0.66	0.68	0.73	4776	1.0
y_mean[337]	-0.47	4.2e-4	0.02	-0.51	-0.48	-0.47	-0.45	-0.42	2707	1.0
y_mean[338]	-0.08	5.2e-4	0.02	-0.13	-0.1	-0.08	-0.06	-0.02	3172	1.0
y_mean[339]	-0.7	5.2e 4 5.3e-4	0.03	-0.76	-0.72	-0.7	-0.68	-0.63	3698	1.0
y_mean[340]	-0.31	5.7e-4	0.03	-0.76	-0.72	-0.31	-0.29	-0.05	2762	1.0
• =	-0.53	3.8e-4	0.03			-0.53	-0.29	-0.25		1.0
y_mean[341]				-0.57	-0.54				3015	
y_mean[342]	-0.31	4.9e-4	0.03	-0.36	-0.33	-0.31	-0.29	-0.26	2846	1.0
y_mean[343]	-0.48	1.1e-3	0.07	-0.61	-0.53	-0.48	-0.43	-0.35	3445	1.0
y_mean[344]	-0.54	4.4e-4	0.03	-0.59	-0.56	-0.54	-0.52	-0.49	3429	1.0
y_mean[345]	-0.25	4.9e-4	0.03	-0.31	-0.27	-0.25	-0.24	-0.2	2994	1.0
y_mean[346]	-0.78	6.3e-4	0.04	-0.85	-0.8	-0.78	-0.75	-0.7	3637	1.0
y_mean[347]	0.6	4.4e-4	0.03	0.54	0.58	0.6	0.62	0.66	4293	1.0
y_mean[348]	0.53	4.3e-4	0.03	0.48	0.52	0.53	0.55	0.59	4094	1.0
y_mean[349]	-0.43	4.6e-4	0.03	-0.48	-0.45	-0.43	-0.42	-0.38	2983	1.0
y_mean[350]	-0.63	6.2e-4	0.04	-0.7	-0.65	-0.63	-0.61	-0.56	3553	1.0
y_mean[351]	-0.48	3.3e-4	0.02	-0.52	-0.5	-0.48	-0.47	-0.44	3766	1.0
y_mean[352]	-0.32	6.1e-4	0.04	-0.39	-0.34	-0.32	-0.29	-0.25	3324	1.0
y_mean[353]	0.35	5.6e-4	0.03	0.29	0.33	0.35	0.38	0.42	3879	1.0
y_mean[354]	-0.14	5.2e-4	0.03	-0.19	-0.16	-0.14	-0.12	-0.08	2927	1.0
y_mean[355]	-0.57	7.0e-4	0.04	-0.65	-0.6	-0.57	-0.54	-0.49	3690	1.0
y_mean[356]	-0.13	5.3e-4	0.03	-0.18	-0.15	-0.13	-0.11	-0.07	2940	1.0
y_mean[357]	-0.73	5.5e-4	0.03	-0.8	-0.75	-0.73	-0.71	-0.66	3604	1.0
y_mean[358]	3.18	1.2e-3	0.07	3.04	3.13	3.18	3.23	3.33	4013	1.0
y_mean[359]	7.8e-3	6.6e-4	0.04	-0.06	-0.02	7.9e-3	0.03	0.08	2897	1.0
y_mean[360]	0.06	4.9e-4	0.03-	9.2e-4	0.04	0.06	0.08	0.12	3839	1.0
y_mean[361]	0.55	5.0e-4	0.04	0.48	0.52	0.55	0.57	0.62	5135	1.0
y_mean[362]	-0.03	5.1e-4	0.03	-0.09	-0.05	-0.03-	6.8e-3	0.03	3415	1.0
y_mean[363]	-0.54	3.9e-4	0.02	-0.58	-0.55	-0.54	-0.52	-0.49	3230	1.0
y_mean[364]	-0.58	4.4e-4	0.03	-0.63	-0.59	-0.58	-0.56	-0.53	3440	1.0
y_mean[365]	-0.37	6.7e-4	0.04	-0.45	-0.4	-0.37	-0.34	-0.29	3464	1.0
y_mean[366]	-0.33	3.7e-4	0.02	-0.37	-0.34	-0.33	-0.31	-0.28	3539	1.0
y_mean[367]	1.52	8.0e-4	0.05	1.41	1.48	1.51	1.55	1.62	4258	1.0
y_mean[368]	0.09	5.1e-4	0.03	0.03	0.07	0.09	0.11	0.15	3118	1.0
y_mean[369]	-0.11	5.1e-4	0.03	-0.16	-0.13	-0.11	-0.09	-0.06	2910	1.0
y_mean[370]	-0.43	4.6e-4	0.03	-0.48	-0.45	-0.43	-0.41	-0.38	3093	1.0
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-0.72
                           5.7e-4
                                            -0.79
                                                    -0.74
                                                            -0.72
                                                                     -0.7
y_mean[371]
                                      0.03
                                                                            -0.66
                                                                                     3577
                                                                                              1.0
                    -0.75
                           5.6e-4
                                      0.04
                                            -0.81
                                                    -0.77
                                                            -0.75
                                                                    -0.72
                                                                            -0.68
                                                                                     3928
y_mean[372]
                                                                                              1.0
                           1.9e-3
                                              1.26
                                                              1.5
                                                                     1.59
y_mean[373]
                      1.5
                                      0.12
                                                     1.42
                                                                             1.74
                                                                                     4402
                                                                                              1.0
                    -0.42
                           5.9e-4
                                      0.03
                                            -0.48
                                                    -0.44
                                                            -0.42
                                                                     -0.4
                                                                           -0.36
                                                                                     2959
                                                                                              1.0
y_mean[374]
                                            -0.64
                    -0.55
                           8.4e-4
                                      0.05
                                                    -0.58
                                                            -0.55
                                                                    -0.51
                                                                            -0.45
                                                                                     3159
y_mean[375]
                                                                                              1.0
                     0.27
                           6.3e-4
                                      0.04
                                             0.19
                                                     0.24
                                                             0.27
                                                                     0.29
                                                                             0.34
                                                                                     3759
                                                                                              1.0
y_mean[376]
y_mean[377]
                     0.15
                           4.2e-4
                                      0.03
                                               0.1
                                                     0.13
                                                             0.15
                                                                     0.17
                                                                              0.2
                                                                                     4135
                                                                                              1.0
                    -0.16
                           4.4e-4
                                            -0.21
                                                    -0.18
                                                            -0.16
                                                                    -0.15
                                                                           -0.11
y_mean[378]
                                      0.03
                                                                                     3493
                                                                                              1.0
                    -0.06
                           4.2e-4
                                      0.02
                                              -0.1
                                                    -0.07
                                                            -0.06
                                                                    -0.04-8.7e-3
                                                                                     3240
                                                                                              1.0
y_mean[379]
                    -0.56
                           1.3e-3
                                      0.08
                                            -0.71
                                                    -0.61
                                                            -0.56
                                                                    -0.51
                                                                           -0.41
y_mean[380]
                                                                                     3418
                                                                                              1.0
                    -0.56
                           5.8e-4
                                      0.03
                                            -0.63
                                                    -0.58
                                                            -0.56
                                                                    -0.54
                                                                            -0.49
                                                                                     3534
                                                                                              1.0
y_mean[381]
                    -0.27
                            6.1e-4
                                      0.04
                                            -0.34
                                                     -0.3
                                                            -0.27
                                                                    -0.25
                                                                             -0.2
                                                                                     3385
                                                                                              1.0
y_mean[382]
y_mean[383]
                    -0.43
                           4.8e-4
                                      0.02
                                            -0.48
                                                            -0.43
                                                                    -0.42
                                                                            -0.39
                                                                                     2684
                                                    -0.45
                                                                                              1.0
                    -0.65
                                            -0.73
                                                            -0.65
                                                                           -0.57
                           6.8e-4
                                      0.04
                                                    -0.68
                                                                    -0.62
                                                                                     3525
y_mean[384]
                                                                                              1.0
                    -0.58
                           5.9e-4
                                      0.03
                                            -0.65
                                                     -0.6
                                                            -0.58
                                                                    -0.55
                                                                            -0.51
                                                                                     3536
y_mean[385]
                                                                                              1.0
                           6.8e-4
y_mean[386]
                    -0.38
                                      0.04
                                            -0.46
                                                    -0.41
                                                            -0.38
                                                                    -0.36
                                                                             -0.3
                                                                                     3671
                                                                                              1.0
y_mean[387]
                    -0.04
                           3.5e-4
                                      0.02
                                            -0.09
                                                    -0.06
                                                            -0.04
                                                                    -0.03-1.1e-3
                                                                                     3827
                                                                                              1.0
                                            -0.59
                    -0.49
                                      0.05
                                                            -0.49
                                                                    -0.46
y_mean[388]
                           9.5e-4
                                                    -0.53
                                                                           -0.39
                                                                                     2909
                                                                                              1.0
y_mean[389]
                     -0.4
                           8.3e-4
                                      0.04
                                            -0.48
                                                    -0.43
                                                             -0.4
                                                                    -0.37
                                                                           -0.31
                                                                                     2631
                                                                                              1.0
y mean [390]
                    -0.05
                           4.5e-4
                                      0.03
                                             -0.1
                                                    -0.07
                                                            -0.05
                                                                    -0.04-1.9e-3
                                                                                     3081
                                                                                              1.0
                    -0.53
                           3.9e-4
                                      0.02
                                            -0.57
                                                    -0.54
                                                            -0.53
                                                                    -0.51
                                                                           -0.48
y_mean[391]
                                                                                     2997
                                                                                              1.0
                     1.62
                            1.0e-3
                                      0.07
                                              1.49
                                                     1.57
                                                             1.62
                                                                     1.66
                                                                             1.74
                                                                                     3971
y_mean[392]
                                                                                              1.0
                            5.3e-4
                                      0.03
                                                             0.67
                                                                             0.74
y_mean[393]
                     0.67
                                               0.6
                                                     0.65
                                                                     0.69
                                                                                     4403
                                                                                              1.0
                     0.02
                           8.2e-4
                                      0.04
                                            -0.06-7.7e-3
                                                             0.02
                                                                     0.05
                                                                             0.11
                                                                                     2964
                                                                                              1.0
y_mean[394]
y_mean[395]
                    -0.14
                           5.0e-4
                                      0.03
                                             -0.2
                                                    -0.16
                                                            -0.14
                                                                    -0.12
                                                                           -0.09
                                                                                     3480
                                                                                              1.0
                    -0.46
                            4.0e-4
                                      0.02
                                              -0.5
                                                    -0.47
                                                            -0.46
                                                                    -0.44
                                                                            -0.41
                                                                                     3313
y_mean[396]
                                                                                              1.0
                                      0.04
                                            -0.56
                                                                           -0.42
                    -0.49
                           6.3e-4
                                                    -0.51
                                                            -0.49
                                                                    -0.46
                                                                                     3516
y_mean[397]
                                                                                              1.0
y_mean[398]
                    -0.18
                           4.3e-4
                                      0.02
                                            -0.23
                                                     -0.2
                                                            -0.18
                                                                    -0.16
                                                                           -0.13
                                                                                     3186
                                                                                              1.0
                    -0.12
                           9.1e-4
                                      0.06
                                            -0.23
                                                    -0.16
                                                            -0.12
                                                                            -0.01
                                                                    -0.08
                                                                                     3890
                                                                                              1.0
y_mean[399]
y_mean[400]
                    -0.49
                           4.7e-4
                                      0.03
                                            -0.55
                                                    -0.51
                                                            -0.49
                                                                    -0.47
                                                                            -0.44
                                                                                     3329
                                                                                              1.0
y_mean[401]
                    -0.37
                           3.1e-4
                                      0.02
                                             -0.4
                                                    -0.38
                                                            -0.37
                                                                    -0.35
                                                                            -0.33
                                                                                     3723
                                                                                              1.0
                           3.0e-4
                                                                    -0.47
y_mean[402]
                    -0.48
                                      0.02
                                            -0.52
                                                     -0.5
                                                            -0.48
                                                                            -0.45
                                                                                     3989
                                                                                              1.0
                     2.03
                            1.2e-3
                                      0.08
                                                             2.03
                                                                              2.2
y_mean[403]
                                              1.87
                                                     1.98
                                                                     2.09
                                                                                     4835
                                                                                              1.0
y_mean[404]
                     0.33
                           5.8e-4
                                      0.04
                                             0.26
                                                      0.3
                                                             0.33
                                                                     0.35
                                                                              0.4
                                                                                     3758
                                                                                              1.0
                     0.15
                           4.1e-4
                                      0.02
                                              0.1
                                                     0.13
                                                             0.15
                                                                     0.16
                                                                             0.19
                                                                                     3492
                                                                                              1.0
y mean [405]
                    -0.62
                           7.3e-4
                                      0.04
                                             -0.7
                                                    -0.65
                                                            -0.62
                                                                            -0.54
                                                                                     3255
y_mean[406]
                                                                    -0.59
                                                                                              1.0
                           6.6e-4
                                                             0.46
                                                                             0.54
                     0.46
                                      0.04
                                             0.39
                                                     0.43
                                                                     0.49
                                                                                     3527
                                                                                              1.0
y mean [407]
                                                    -0.02-3.2e-4
y_mean[408]
                 -9.9e-5
                           4.5e-4
                                      0.03
                                            -0.05
                                                                     0.02
                                                                             0.05
                                                                                     3490
                                                                                              1.0
                     0.21
                           9.2e-4
                                      0.05
                                             0.11
                                                     0.18
                                                             0.21
                                                                     0.25
                                                                             0.32
                                                                                     3369
                                                                                              1.0
y_mean[409]
                     1.64
                           5.8e-4
                                      0.04
                                              1.56
                                                     1.61
                                                             1.64
                                                                             1.72
                                                                                     5003
y_{mean}[410]
                                                                     1.67
                                                                                              1.0
                     1.44
                           7.7e-4
                                      0.05
                                              1.34
                                                      1.4
                                                             1.44
                                                                     1.47
                                                                             1.54
                                                                                     4329
                                                                                              1.0
y_mean[411]
                      0.1
                           4.9e-4
                                      0.03
                                             0.04
                                                     0.08
                                                              0.1
                                                                             0.16
y_mean[412]
                                                                     0.12
                                                                                     4158
                                                                                              1.0
y_mean[413]
                    -0.51
                           3.9e-4
                                      0.02
                                            -0.55
                                                    -0.52
                                                            -0.51
                                                                    -0.49
                                                                            -0.46
                                                                                     3014
                                                                                              1.0
                    -0.39
                           6.1e-4
                                            -0.46
                                                            -0.39
                                                                            -0.34
                                      0.03
                                                    -0.42
                                                                    -0.37
                                                                                     2665
                                                                                              1.0
y_{mean}[414]
                    -0.34
                           4.4e-4
                                      0.02
                                            -0.38
                                                    -0.35
                                                            -0.34
                                                                    -0.32
                                                                           -0.29
y_mean[415]
                                                                                     3024
                                                                                              1.0
y_mean[416]
                     1.34
                           6.5e-4
                                      0.04
                                              1.26
                                                     1.31
                                                             1.34
                                                                     1.37
                                                                             1.43
                                                                                     4473
                                                                                              1.0
y_mean[417]
                    -0.26
                           8.0e-4
                                      0.04
                                            -0.33
                                                    -0.28
                                                            -0.26
                                                                    -0.23
                                                                            -0.18
                                                                                     2480
                                                                                              1.0
y_mean[418]
                     1.37
                           7.0e-4
                                      0.05
                                              1.27
                                                     1.34
                                                             1.37
                                                                      1.4
                                                                             1.47
                                                                                     5248
                                                                                              1.0
```

y_mean[419]	-0.46	6.1e-4	0.04	-0.54	-0.49	-0.46	-0.44	-0.39	3810	1.0
y_mean[420]	-0.52	3.8e-4	0.02	-0.56	-0.54	-0.52	-0.51	-0.48	3080	1.0
y_mean[421]	-0.58	9.4e-4	0.05	-0.69	-0.62	-0.58	-0.55	-0.48	3243	1.0
y_mean[422]	0.78	1.0e-3	0.06	0.67	0.74	0.78	0.82	0.9	3352	1.0
y_mean[423]	0.52	4.7e-4	0.03	0.46	0.5	0.52	0.54	0.59	4889	1.0
y_mean[424]	-0.13	4.9e-4	0.03	-0.18	-0.15	-0.13	-0.11	-0.08	2883	1.0
y_mean[425]	-0.66	8.3e-4	0.05	-0.76	-0.69	-0.66	-0.62	-0.56	3638	1.0
y_mean[426]	0.26	7.4e-4	0.04	0.17	0.23	0.26	0.29	0.35	3601	1.0
y_mean[427]	-0.56	4.1e-4	0.02	-0.61	-0.58	-0.56	-0.55	-0.51	3370	1.0
y_mean[428]	0.49	4.5e-4	0.03	0.44	0.48	0.49	0.51	0.55	3985	1.0
y_mean[429]	-0.81	7.9e-4	0.05	-0.91	-0.85	-0.81	-0.78	-0.72	3607	1.0
y_mean[430]	-0.51	5.8e-4	0.03	-0.57	-0.53	-0.51	-0.48	-0.44	3197	1.0
y_mean[431]	0.13	4.1e-4	0.03	0.08	0.11	0.13	0.14	0.18	3913	1.0
y_mean[431] y_mean[432]	0.13	4.1e 4 4.4e-4	0.03	0.81	0.11	0.13	0.14	0.13	4816	1.0
y_mean[433]	0.75	6.5e-4	0.03	0.67	0.72	0.75	0.78	0.83	3845	1.0
y_mean[434]	2.87	1.3e-3	0.04	2.7	2.81	2.87	2.93	3.04	4437	1.0
•			0.09	-0.09	-0.06	-0.04				
y_mean[435]	-0.04	4.3e-4						5.8e-3	3277	1.0
y_mean[436]	0.92	5.9e-4	0.04	0.85	0.9	0.92	0.95	1.0	3933	1.0
y_mean[437]	-0.47	5.1e-4	0.03	-0.53	-0.49	-0.47	-0.45	-0.4	3815	1.0
y_mean[438]	1.28	6.0e-4	0.04	1.2	1.26	1.28	1.31	1.37	4892	1.0
y_mean[439]	-0.56	5.4e-4	0.03	-0.62	-0.58	-0.56	-0.54	-0.49	3585	1.0
y_mean[440]	7.0e-3	4.5e-4	0.03	-0.05		6.9e-3	0.02	0.06	3524	1.0
y_mean[441]	-0.56	4.0e-4	0.02	-0.6	-0.57	-0.56	-0.54	-0.51	3338	1.0
y_mean[442]	-0.45	9.9e-4	0.05	-0.54	-0.48	-0.45	-0.41	-0.35	2473	1.0
y_mean[443]	2.73	1.2e-3	0.08	2.59	2.68	2.73	2.79	2.88	4084	1.0
$y_{mean}[444]$	-0.12	7.2e-4	0.04	-0.19	-0.14	-0.12	-0.09	-0.04	2807	1.0
y_mean[445]	-0.69	5.6e-4	0.03	-0.76	-0.71	-0.69	-0.67	-0.62	3652	1.0
y_mean[446]	-0.71	7.4e-4	0.04	-0.8	-0.74	-0.71	-0.68	-0.62	3639	1.0
y_mean[447]	1.33	8.7e-4	0.06	1.21	1.28	1.33	1.37	1.44	4563	1.0
y_mean[448]	0.61	6.2e-4	0.04	0.53	0.58	0.61	0.64	0.69	4054	1.0
y_mean[449]	-0.76	6.4e-4	0.04	-0.83	-0.78	-0.76	-0.73	-0.68	3630	1.0
y_mean[450]	-0.42	4.9e-4	0.03	-0.47	-0.44	-0.42	-0.4	-0.37	2839	1.0
y_mean[451]	-0.68	8.1e-4	0.05	-0.77	-0.71	-0.68	-0.65	-0.58	3505	1.0
$y_{mean}[452]$	0.04	4.7e-4	0.03	-0.01	0.02	0.04	0.06	0.1	3719	1.0
y_mean[453]	0.36	6.8e-4	0.04	0.28	0.33	0.36	0.39	0.44	3775	1.0
y_mean[454]	0.5	4.6e-4	0.03	0.44	0.48	0.5	0.52	0.56	4343	1.0
y_mean[455]	-0.57	4.4e-4	0.03	-0.62	-0.59	-0.57	-0.55	-0.52	3353	1.0
y_mean[456]	-0.41	6.7e-4	0.04	-0.49	-0.44	-0.41	-0.39	-0.34	3211	1.0
y_mean[457]	0.81	8.2e-4	0.05	0.72	0.78	0.81	0.84	0.91	3539	1.0
y_mean[458]	1.99	2.8e-3	0.15	1.69	1.89	1.99	2.09	2.28	2844	1.0
y_mean[459]	-0.44	9.1e-4	0.05	-0.53	-0.47	-0.44	-0.41	-0.34	2809	1.0
y_mean[460]	-0.81	1.1e-3	0.07	-0.94	-0.85	-0.81	-0.76	-0.67	3827	1.0
y_mean[461]	0.36	8.0e-4	0.04	0.28	0.33	0.36	0.39	0.45	2816	1.0
y_mean[462]	-0.12	4.1e-4	0.02	-0.16	-0.13	-0.12	-0.1	-0.07	3269	1.0
y_mean[463]	-0.29	6.1e-4	0.03	-0.35	-0.31	-0.29	-0.27	-0.23	2688	1.0
y_mean[464]	-0.49	4.2e-4	0.02	-0.54	-0.51	-0.49	-0.48	-0.45	2748	1.0
y_mean[465]	-0.77	7.2e-4	0.02	-0.86	-0.8		-0.74	-0.69	3645	1.0
y_mean[466]	-0.33	5.9e-4	0.03	-0.39	-0.35	-0.33	-0.31	-0.27	2669	1.0
3 _mcan [400]	0.00	J.J6 4	0.00	0.00	0.00	0.00	0.01	0.21	2000	1.0

y_mean[467]	0.55	4.3e-4	0.03	0.5	0.53	0.55	0.57	0.61	4190	1.0
y_mean[468]	0.26	1.3e-3	0.07	0.11	0.21	0.26	0.31	0.41	3366	1.0
y_mean[469]	6.02	4.5e-3	0.29	5.47	5.83	6.02	6.21	6.58	4022	1.0
y_mean[470]	-0.49	4.0e-4	0.02	-0.53	-0.5	-0.49	-0.47	-0.44	2955	1.0
y_mean[471]	0.7	6.9e-4	0.04	0.61	0.67	0.7	0.73	0.78	3843	1.0
y_mean[472]	-0.51	4.2e-4	0.02	-0.56	-0.53	-0.51	-0.5	-0.47	3293	1.0
y_mean[473]	-0.59	4.6e-4	0.03	-0.64	-0.61	-0.59	-0.57	-0.53	3478	1.0
y_mean[474]	-0.63	6.0e-4	0.04	-0.7	-0.66	-0.63	-0.61	-0.56	3516	1.0
y_mean[475]	0.5	4.4e-4	0.03	0.45	0.49	0.5	0.52	0.56	4001	1.0
y_mean[476]	1.93	1.2e-3	0.08	1.77	1.88	1.93	1.99	2.09	4512	1.0
y_mean[477]	-0.73	5.4e-4	0.03	-0.8	-0.75	-0.73	-0.71	-0.67	3644	1.0
y_mean[478]	-0.76	6.9e-4	0.04	-0.84	-0.79	-0.76	-0.73	-0.68	3635	1.0
y_mean[479]	0.08	5.2e-4	0.03	0.02	0.06	0.08	0.1	0.14	3661	1.0
y_mean[480]	-0.48	3.9e-4	0.02	-0.53	-0.5	-0.48	-0.47	-0.44	3761	1.0
y_mean[481]	0.02	4.7e-4	0.03		5.9e-3	0.02	0.04	0.08	3648	1.0
y_mean[482]	-0.62	5.8e-4	0.03	-0.69	-0.65	-0.62	-0.6	-0.55	3514	1.0
y_mean[483]	0.02	4.7e-4	0.03		2.0e-3	0.02	0.04	0.08	3667	1.0
y_mean[484]	-0.28	4.6e-4	0.03	-0.33	-0.3	-0.28	-0.26	-0.23	3037	1.0
y_mean[485]	1.47	1.0e-3	0.07	1.33	1.42	1.47	1.51	1.6	4615	1.0
y_mean[486]	-0.71	6.6e-4	0.04	-0.79	-0.74	-0.71	-0.68	-0.63	3869	1.0
y_mean[487]	-0.17	4.4e-4	0.03	-0.22	-0.19	-0.17	-0.15	-0.12	3412	1.0
y_mean[488]	-0.09	4.1e-4	0.02	-0.13	-0.11	-0.09	-0.07	-0.04	3180	1.0
y_mean[489]	1.13	1.1e-3	0.06	1.01	1.09	1.13	1.17	1.25	3010	1.0
y_mean[490]	-0.62	5.6e-4	0.03	-0.68	-0.64	-0.62	-0.59	-0.55	3531	1.0
y_mean[491]	-0.53	4.8e-4	0.03	-0.59	-0.55	-0.53	-0.52	-0.48	3211	1.0
y_mean[492]	-0.34	3.8e-4	0.02	-0.39	-0.36	-0.34	-0.33	-0.3	3574	1.0
y_mean[493]	1.25	6.3e-4	0.05	1.16	1.22	1.25	1.28	1.34	5357	1.0
y_mean[494]	-0.43	4.0e-4	0.02	-0.47	-0.44	-0.43	-0.41	-0.38	3328	1.0
y_mean[495]	-0.51	3.9e-4	0.02	-0.55	-0.52	-0.51	-0.49	-0.47	3025	1.0
y_mean[496]	0.13	7.1e-4	0.05	0.03	0.09	0.13	0.16	0.22	4456	1.0
y_mean[497]	-0.3	3.8e-4	0.02	-0.34	-0.31	-0.3	-0.28	-0.25	3429	1.0
y_mean[498]	-0.49	7.2e-4	0.04	-0.58	-0.52	-0.49	-0.46	-0.4	3674	1.0
y_mean[499]	-0.48	5.1e-4	0.03	-0.54	-0.5	-0.48	-0.46	-0.42	3640	1.0
y_mean[500]	-0.06	4.3e-4	0.02	-0.11	-0.08	-0.06	-0.05	-0.02	3120	1.0
y_mean[501]	0.46	4.7e-4	0.03	0.4	0.44	0.46	0.48	0.52	3838	1.0
y_mean[502]	-0.02	4.3e-4	0.03	-0.07	-0.04	-0.02-	3.6e-3	0.03	3433	1.0
y_mean[503]	0.62	4.9e-4	0.03	0.56	0.6	0.62	0.64	0.68	3961	1.0
y_mean[504]	0.06	4.7e-4	0.03	7.3e-3	0.04	0.06	0.08	0.11	3132	1.0
y_mean[505]	-0.58	5.0e-4	0.03	-0.63	-0.6	-0.58	-0.56	-0.52	3478	1.0
y_mean[506]	-0.13	4.2e-4	0.02	-0.17	-0.15	-0.13	-0.11	-0.08	3021	1.0
y_mean[507]	0.58	4.4e-4	0.03	0.52	0.56	0.58	0.6	0.64	4595	1.0
y_mean[508]	-0.41	5.4e-4	0.03	-0.47	-0.43	-0.41	-0.39	-0.36	2757	1.0
y_mean[509]	-0.47	6.6e-4	0.04	-0.55	-0.5	-0.47	-0.45	-0.4	3150	1.0
y_mean[510]	-0.57	5.2e-4	0.03	-0.63	-0.59	-0.57	-0.54	-0.5	3579	1.0
y_mean[511]	-0.52	3.8e-4	0.02	-0.56	-0.54	-0.52	-0.51	-0.48	3088	1.0
y_mean[512]	-0.46	6.3e-4	0.04	-0.53	-0.49	-0.46	-0.44	-0.39	3458	1.0
y_mean[513]	-0.49	3.4e-4	0.02	-0.54	-0.51	-0.49	-0.48	-0.45	3791	1.0
y_mean[514]	0.79	4.7e-4	0.03	0.73	0.77	0.79	0.81	0.85	3897	1.0

y_mean[515]	-0.48	6.0e-4	0.03	-0.54	-0.5	-0.48	-0.45	-0.41	3045	1.0
y_mean[516]	-0.52	3.8e-4	0.02	-0.56	-0.54	-0.52	-0.51	-0.48	3088	1.0
y_mean[517]	-0.24	5.1e-4	0.03	-0.29	-0.26	-0.24	-0.22	-0.18	3339	1.0
y_mean[518]	-0.47	4.9e-4	0.03	-0.53	-0.49	-0.47	-0.45	-0.42	3281	1.0
y_mean[519]	0.12	6.0e-4	0.03	0.06	0.1	0.12	0.14	0.18	2884	1.0
y_mean[520]	0.5	4.5e-4	0.03	0.45	0.48	0.5	0.52	0.56	4032	1.0
y_mean[521]	6.74	3.5e-3	0.23	6.28	6.59	6.74	6.89	7.19	4367	1.0
y_mean[522]	-0.49	5.1e-4	0.03	-0.55	-0.51	-0.49	-0.47	-0.43	3479	1.0
y_mean[523]	-0.26	6.5e-4	0.04	-0.33	-0.29	-0.26	-0.24	-0.19	3359	1.0
y_mean[524]	0.04	4.1e-4		8.9e-3	0.02	0.04	0.05	0.08	3374	1.0
y_mean[525]	-0.38	5.4e-4	0.03	-0.43	-0.4	-0.38	-0.35	-0.31	3111	1.0
y_mean[526]	0.91	8.2e-4	0.05	0.8	0.87	0.91	0.95	1.01	4245	1.0
y_mean[527]	-0.2	5.7e-4	0.03	-0.27	-0.22	-0.2	-0.17	-0.13	3576	1.0
y_mean[528]	0.48	7.8e-4	0.04	0.39	0.45	0.48	0.51	0.56	3050	1.0
y_mean[529]	-0.69	5.4e-4	0.03	-0.75	-0.71	-0.69	-0.67	-0.62	3629	1.0
y_mean[530]	-0.56	4.9e-4	0.03	-0.62	-0.58	-0.56	-0.54	-0.51	3406	1.0
y_mean[531]	-0.5	5.7e-4	0.03	-0.57	-0.52	-0.5	-0.48	-0.43	3711	1.0
y_mean[532]	-0.57	5.7e-4	0.03	-0.64	-0.59	-0.57	-0.55	-0.5	3554	1.0
y_mean[533]	-0.46	4.3e-4	0.03	-0.52	-0.48	-0.46	-0.45	-0.41	3657	1.0
y_mean[534]	-0.49	3.0e-4	0.03	-0.52	-0.46	-0.49	-0.48	-0.41	3998	1.0
• =	0.05	3.0e-4 3.3e-4		8.9e-3	0.03	0.05	0.06	0.09	3804	1.0
y_mean[535]			0.02		0.03					1.0
y_mean[536]	0.2	7.9e-4		0.1		0.2	0.23	0.29	3740	
y_mean[537]	0.27	7.1e-4	0.04	0.2	0.24	0.27	0.29	0.35	2819	1.0
y_mean[538]	2.84	1.3e-3	0.08	2.68	2.78	2.84	2.89	2.99	3979	1.0
y_mean[539]	-0.25	6.7e-4	0.04	-0.32	-0.27	-0.25	-0.22	-0.17	3019	1.0
y_mean[540]	2.91	2.5e-3	0.14	2.63	2.82	2.91	3.01	3.19	3408	1.0
y_mean[541]	-0.1	4.1e-4	0.02	-0.15	-0.12	-0.1	-0.09	-0.06	3411	1.0
y_mean[542]	-0.06	4.3e-4	0.02	-0.11	-0.08	-0.06	-0.05	-0.02	3121	1.0
y_mean[543]	0.72	1.3e-3	0.08	0.55	0.66	0.72	0.77	0.88	3863	1.0
y_mean[544]	0.01	4.7e-4	0.03		7.9e-3	0.01	0.03	0.07	3641	1.0
y_mean[545]	0.9	9.7e-4	0.06	0.78	0.85	0.9	0.94	1.02	4314	1.0
y_mean[546]	0.52	4.4e-4	0.03	0.47	0.5	0.52	0.54	0.58	4053	1.0
y_mean[547]	-0.51	4.1e-4	0.02	-0.56	-0.53	-0.51	-0.49	-0.46	3214	1.0
y_mean[548]	-0.62	5.7e-4	0.03	-0.69	-0.64	-0.62	-0.6	-0.55	3521	1.0
y_mean[549]	-0.55	3.9e-4	0.02	-0.6	-0.57	-0.55	-0.54	-0.51	3282	1.0
y_mean[550]	-0.08	4.2e-4	0.02	-0.13	-0.1	-0.08	-0.07	-0.04	3113	1.0
y_mean[551]	1.4	7.6e-4	0.05	1.3	1.36	1.4	1.43	1.49	3879	1.0
y_mean[552]	3.89	1.5e-3	0.1	3.7	3.82	3.88	3.95	4.08	4301	1.0
y_mean[553]	-0.04	4.3e-4	0.02	-0.09	-0.05	-0.04	-0.02	0.01	3304	1.0
y_mean[554]	-0.2	5.2e-4	0.03	-0.26	-0.22	-0.2	-0.18	-0.14	3609	1.0
y_mean[555]	-0.16	7.5e-4	0.04	-0.25	-0.19	-0.16	-0.13	-0.08	3419	1.0
y_mean[556]	-0.61	1.2e-3	0.07	-0.76	-0.66	-0.61	-0.57	-0.48	3537	1.0
y_mean[557]	-0.11	7.2e-4	0.04	-0.2	-0.14	-0.11	-0.09	-0.03	3339	1.0
y_mean[558]	0.82	4.9e-4	0.03	0.76	0.8	0.82	0.84	0.88	4075	1.0
y_mean[559]	0.01	4.4e-4	0.02	-0.03-	2.4e-3	0.01	0.03	0.06	3271	1.0
y_mean[560]	-0.18	5.7e-4	0.03	-0.25	-0.2	-0.18	-0.16	-0.11	3657	1.0
y_mean[561]	-0.21	7.4e-4	0.04	-0.28	-0.23	-0.21	-0.18	-0.14	2548	1.0
y_mean[562]	2.19	8.1e-4	0.06	2.08	2.15	2.19	2.23	2.3	5253	1.0

y_mean[563]	-0.69	1.1e-3	0.07	-0.82	-0.73	-0.69	-0.64	-0.55	3850	1.0
y_mean[564]	0.72	6.7e-4	0.04	0.64	0.69	0.72	0.74	0.8	3623	1.0
y_mean[565]	-0.31	6.5e-4	0.04	-0.39	-0.34	-0.31	-0.28	-0.23	3869	1.0
y_mean[566]	-0.27	5.5e-4	0.03	-0.32	-0.29	-0.27	-0.25	-0.21	2989	1.0
y_mean[567]	2.54	1.1e-3	0.07	2.4	2.49	2.54	2.58	2.67	3996	1.0
y_mean[568]	-0.34	6.5e-4	0.03	-0.4	-0.36	-0.34	-0.31	-0.27	2613	1.0
y_mean[569]	-0.37	5.5e-4	0.03	-0.43	-0.39	-0.37	-0.35	-0.32	2709	1.0
y_mean[570]	0.57	4.3e-4	0.03	0.51	0.55	0.57	0.59	0.62	4331	1.0
y_mean[571]	-0.4	5.1e-4	0.03	-0.45	-0.42	-0.4	-0.38	-0.34	2962	1.0
y_mean[572]	-0.5	4.2e-4	0.02	-0.54	-0.51	-0.49	-0.48	-0.45	2732	1.0
y_mean[573]	0.41	5.2e-4	0.04	0.34	0.39	0.41	0.43	0.48	4498	1.0
y_mean[574]	-0.37	5.6e-4	0.03	-0.43	-0.39	-0.37	-0.35	-0.31	2963	1.0
y_mean[574] y_mean[575]	0.08	5.2e-4	0.03	0.43	0.06	0.08	0.33	0.31	3657	1.0
y_mean[576] y_mean[576]	-0.48	3.4e-4	0.03	-0.53	-0.5	-0.49	-0.47	-0.44	3777	1.0
y_mean[577]	1.61	8.6e-4	0.02	1.5	1.57	1.61	1.66	1.73	4632	1.0
y_mean[577] y_mean[578]	1.01	7.0e-4	0.05	1.12	1.18	1.01	1.24	1.73	4636	1.0
v –			0.03			-0.46				
y_mean[579]	-0.46	3.2e-4		-0.5	-0.47		-0.45	-0.42	3708	1.0
y_mean[580]	0.05	3.5e-4		6.0e-3	0.03	0.05	0.06	0.09	4182	1.0
y_mean[581]	-0.52	3.8e-4	0.02	-0.56	-0.54	-0.52	-0.51	-0.48	3039	1.0
y_mean[582]	-0.25	5.4e-4	0.03	-0.31	-0.27	-0.25	-0.23	-0.19	3370	1.0
y_mean[583]	-0.74	5.4e-4	0.03	-0.8	-0.76	-0.74	-0.72	-0.67	3669	1.0
y_mean[584]	0.31	6.0e-4	0.03	0.24	0.28	0.31	0.33	0.37	3155	1.0
y_mean[585]	-0.53	6.7e-4	0.04	-0.61	-0.56	-0.53	-0.51	-0.46	3459	1.0
y_mean[586]	-0.14	5.5e-4	0.03	-0.2	-0.16	-0.14	-0.12	-0.08	2952	1.0
y_mean[587]	3.44	4.5e-3	0.3	2.86	3.24	3.44	3.64	4.02	4500	1.0
y_mean[588]	-0.57	5.9e-4	0.04	-0.64	-0.6	-0.57	-0.55	-0.5	3798	1.0
y_mean[589]	0.45	4.9e-4	0.03	0.39	0.43	0.45	0.47	0.51	4011	1.0
y_mean[590]	-0.41	3.8e-4	0.02	-0.46	-0.43	-0.41	-0.4	-0.37	3907	1.0
y_mean[591]	-0.65	1.2e-3	0.07	-0.79	-0.7	-0.65	-0.6	-0.51	3632	1.0
y_mean[592]	-0.54	3.9e-4	0.02	-0.58	-0.55	-0.54	-0.52	-0.49	3236	1.0
y_mean[593]	-0.46	5.3e-4	0.03	-0.52	-0.48	-0.46	-0.44	-0.41	2874	1.0
y_mean[594]	-0.55	4.0e-4	0.02	-0.6	-0.57	-0.55	-0.54	-0.51	3304	1.0
y_mean[595]	-0.74	5.5e-4	0.03	-0.81	-0.76	-0.74	-0.72	-0.68	3715	1.0
y_mean[596]	1.62	8.5e-4	0.05	1.51	1.58	1.62	1.66	1.73	4132	1.0
y_mean[597]	0.26	6.5e-4	0.04	0.19	0.24	0.26	0.29	0.34	3213	1.0
y_mean[598]	-0.5	7.2e-4	0.04	-0.57	-0.52	-0.5	-0.47	-0.41	3253	1.0
y_mean[599]	-0.56	5.6e-4	0.03	-0.62	-0.58	-0.56	-0.53	-0.49	3490	1.0
y_mean[600]	0.55	7.5e-4	0.05	0.46	0.52	0.55	0.59	0.65	4065	1.0
y_mean[601]	-0.59	6.0e-4	0.04	-0.66	-0.61	-0.59	-0.56	-0.51	3613	1.0
y_mean[602]	0.57	4.3e-4	0.03	0.51	0.55	0.57	0.58	0.62	4485	1.0
y_mean[603]	0.66	5.1e-4	0.03	0.6	0.64	0.66	0.68	0.73	4060	1.0
y_mean[604]	-0.3	5.8e-4	0.03	-0.36	-0.32	-0.3	-0.28	-0.24	2745	1.0
y_mean[605]	0.12	5.3e-4	0.03	0.06	0.1	0.12	0.14	0.18	3010	1.0
y_mean[606]	-0.45	4.8e-4	0.03	-0.51	-0.47	-0.45	-0.43	-0.4	3527	1.0
y_mean[607]	0.8	5.8e-4	0.04	0.73	0.78	0.8	0.83	0.87	4094	1.0
y_mean[608]	3.9	2.7e-3	0.2	3.51	3.77	3.91	4.03	4.3	5239	1.0
y_mean[609]	-0.44	7.6e-4	0.04	-0.52	-0.47	-0.44	-0.41	-0.35	3228	1.0
y_mean[610]	-0.52	3.8e-4	0.04	-0.56	-0.54	-0.52	-0.51	-0.48	2932	1.0
2 _mcan [O10]	0.02	J.06 4	0.02	0.00	0.04	0.02	0.01	0.40	2002	1.0

y_mean[611]	-0.41	6.4e-4	0.04	-0.48	-0.44	-0.41	-0.39	-0.34	3141	1.0
y_mean[612]	2.34	8.6e-4	0.06	2.23	2.31	2.34	2.38	2.45	4292	1.0
y_mean[613]	-0.1	6.7e-4	0.04	-0.17	-0.12	-0.1	-0.07	-0.02	3381	1.0
y_mean[614]	-0.17	1.0e-3	0.07	-0.29	-0.21	-0.17	-0.12	-0.03	4207	1.0
y_mean[615]	-0.6	5.1e-4	0.03	-0.65	-0.62	-0.59	-0.58	-0.54	3511	1.0
y_mean[616]	0.13	8.5e-4	0.04	0.05	0.1	0.13	0.16	0.22	2557	1.0
y_mean[617]	4.6e-3	6.0e-4	0.04	-0.07	-0.02	4.5e-3	0.03	0.08	4555	1.0
y_mean[618]	-0.23	7.4e-4	0.04	-0.31	-0.26	-0.23	-0.2	-0.14	3384	1.0
y_mean[619]	-0.16	4.2e-4	0.02	-0.21	-0.18	-0.16	-0.14	-0.11	3206	1.0
y_mean[620]	4.59	3.1e-3	0.2	4.21	4.46	4.59	4.72	4.98	3895	1.0
y_mean[621]	-0.59	1.3e-3	0.07	-0.74	-0.64	-0.59	-0.54	-0.45	3465	1.0
y_mean[622]	-0.69	5.5e-4	0.03	-0.75	-0.71	-0.69	-0.67	-0.63	3458	1.0
y_mean[623]	1.27	7.7e-4	0.05	1.18	1.23	1.27	1.3	1.36	4000	1.0
y_mean[624]	-0.52	4.3e-4	0.02	-0.57	-0.53	-0.52	-0.5	-0.47	2987	1.0
y_mean[625]	-0.51	3.9e-4	0.02	-0.55	-0.52	-0.51	-0.5	-0.47	2746	1.0
y_mean[626]	-0.13	4.4e-4	0.03	-0.18	-0.15	-0.13	-0.11	-0.08	3854	1.0
y_mean[627]	-0.29	7.7e-4	0.05	-0.38	-0.32	-0.29	-0.26	-0.2	3465	1.0
y_mean[628]	0.62	6.6e-4	0.04	0.54	0.59	0.62	0.65	0.7	4117	1.0
y_mean[629]	-0.23	4.9e-4	0.03	-0.28	-0.24	-0.23	-0.21	-0.17	3255	1.0
y_mean[630]	-0.43	3.5e-4	0.02	-0.47	-0.44	-0.43	-0.41	-0.39	3870	1.0
y_mean[631]	-0.63	6.1e-4	0.04	-0.7	-0.66	-0.63	-0.61	-0.56	3534	1.0
y_mean[632]	-0.46	4.6e-4	0.03	-0.51	-0.48	-0.46	-0.44	-0.41	3320	1.0
y_mean[633]	-0.51	4.8e-4	0.03	-0.56	-0.53	-0.51	-0.49	-0.45	3631	1.0
y_mean[634]	-0.67	7.9e-4	0.05	-0.76	-0.7	-0.67	-0.64	-0.58	3507	1.0
y_mean[635]	1.33	9.0e-4	0.06	1.21	1.29	1.33	1.37	1.45	4339	1.0
y_mean[636]	-0.11	5.9e-4	0.03	-0.18	-0.14	-0.11	-0.09	-0.05	3077	1.0
y_mean[637]	-0.12	4.1e-4	0.02	-0.16	-0.13	-0.12	-0.1	-0.07	3171	1.0
y_mean[638]	-0.61	7.7e-4	0.04	-0.7	-0.64	-0.61	-0.58	-0.53	3240	1.0
y_mean[639]	-0.18	5.8e-4	0.03	-0.24	-0.2	-0.18	-0.16	-0.11	3205	1.0
y_mean[640]	-0.54	3.9e-4	0.02	-0.58	-0.55	-0.54	-0.53	-0.5	3216	1.0
y_mean[641]	-0.68	5.9e-4	0.03	-0.75	-0.7	-0.68	-0.66	-0.61	3431	1.0
y_mean[642]	-0.67	7.9e-4	0.05	-0.76	-0.7	-0.67	-0.64	-0.58	3510	1.0
y_mean[643]	0.19	6.6e-4	0.04	0.11	0.17	0.19	0.22	0.28	3937	1.0
y_mean[644]	0.49	4.7e-4	0.03	0.43	0.47	0.49	0.51	0.55	4205	1.0
y_mean[645]	-0.27	6.0e-4	0.04	-0.34	-0.3	-0.27	-0.25	-0.2	3399	1.0
y_mean[646]	-0.1	6.8e-4	0.04	-0.18	-0.13	-0.1	-0.07	-0.02	3382	1.0
y_mean[647]	-0.34	5.2e-4	0.03	-0.4	-0.36	-0.34	-0.32	-0.29	3080	1.0
y_mean[648]	-0.11	4.1e-4	0.02	-0.16	-0.13	-0.11	-0.1	-0.07	3171	1.0
y_mean[649]	-0.1	4.2e-4	0.02	-0.15	-0.12	-0.1	-0.08	-0.05	3530	1.0
y_mean[650]	-0.21	4.8e-4	0.03	-0.26	-0.22	-0.21	-0.19	-0.15	3355	1.0
y_mean[651]	1.52	1.7e-3	0.11	1.29	1.44	1.52	1.6	1.74	4563	1.0
y_mean[652]	-0.49	7.0e-4	0.04	-0.57	-0.51	-0.49	-0.46	-0.41	3220	1.0
y_mean[653]	0.05	7.6e-4	0.04	-0.02	0.03	0.05	0.08	0.13	2592	1.0
y_mean[654]	-0.48	4.7e-4	0.02	-0.53	-0.5	-0.48	-0.46	-0.43	2819	1.0
y_mean[655]	-0.66	6.5e-4	0.04	-0.73	-0.68	-0.66	-0.63	-0.58	3381	1.0
y_mean[656]	-0.1	4.5e-4	0.03	-0.16	-0.12	-0.1	-0.08	-0.05	3992	1.0
y_mean[657]	1.55	1.0e-3	0.07	1.41	1.5	1.55	1.59	1.68	4511	1.0
y_mean[658]	-0.79	6.9e-4	0.04	-0.88	-0.82	-0.79	-0.76	-0.71	3690	1.0

y_mean[659]	-0.03	4.5e-4	0.03	-0.08	-0.05	-0.03	-0.01	0.02	3265	1.0
y_mean[660]	0.03	5.3e-4	0.03	-0.04	4.5e-3	0.03	0.05	0.09	3679	1.0
y_mean[661]	-0.46	5.5e-4	0.03	-0.52	-0.48	-0.46	-0.44	-0.4	2901	1.0
y_mean[662]	-0.12	8.3e-4	0.04	-0.21	-0.15	-0.12	-0.1	-0.04	2656	1.0
y_mean[663]	-0.78	6.3e-4	0.04	-0.86	-0.81	-0.78	-0.75	-0.7	3657	1.0
y_mean[664]	-3.8e-3	3.8e-4	0.02	-0.05		-3.9e-3	0.01	0.04	3522	1.0
y_mean[665]	0.62	4.6e-4	0.03	0.56	0.6	0.62	0.64	0.68	4337	1.0
y_mean[666]	0.81	8.6e-4	0.05	0.72	0.78	0.81	0.85	0.91	3412	1.0
y_mean[667]	-0.26	5.6e-4	0.03	-0.32	-0.28	-0.26	-0.24	-0.19	3382	1.0
y_mean[668]	-0.53	3.9e-4	0.02	-0.57	-0.55	-0.53	-0.52	-0.49	3033	1.0
y_mean[669]	0.56	4.3e-4	0.03	0.51	0.54	0.56	0.58	0.62	4247	1.0
y_mean[670]	0.6	6.7e-4	0.04	0.52	0.58	0.6	0.63	0.69	4054	1.0
y_mean[671]	-0.49	7.1e-4	0.04	-0.57	-0.52	-0.49	-0.46	-0.41	3253	1.0
y_mean[671] y_mean[672]	-0.04	4.3e-4	0.04	-0.09	-0.05	-0.04	-0.02	0.01	3303	1.0
y_mean[673]	-0.13	8.0e-4	0.02	-0.22	-0.03	-0.13	-0.02	-0.03	3377	1.0
• =	-0.13		0.03	-0.22	-0.16	-0.13			2826	1.0
y_mean[674]		4.7e-4					-0.47	-0.43		
y_mean[675]	-0.33	7.9e-4	0.05	-0.42	-0.36	-0.33	-0.3	-0.24	3430	1.0
y_mean[676]	0.45	6.4e-4	0.04	0.37	0.42	0.45	0.48	0.53	4237	1.0
y_mean[677]	-0.49	4.3e-4	0.02	-0.53	-0.5	-0.49	-0.47	-0.45	2732	1.0
y_mean[678]	-0.04	4.1e-4	0.02	-0.09	-0.06	-0.04		6.7e-3	3496	1.0
y_mean[679]	-0.03	5.5e-4	0.03	-0.09	-0.05		-4.4e-3	0.04	3204	1.0
y_mean[680]	-0.76	7.6e-4	0.05	-0.85	-0.79	-0.76	-0.73	-0.67	3624	1.0
y_mean[681]	-0.07	7.6e-4	0.04	-0.15	-0.09	-0.07	-0.04	0.01	2811	1.0
y_mean[682]	-0.27	7.1e-4	0.04	-0.34	-0.3	-0.27	-0.25	-0.2	2570	1.0
y_mean[683]	0.18	3.9e-4	0.02	0.13	0.16	0.18	0.19	0.22	3819	1.0
y_mean[684]	0.19	4.7e-4	0.03	0.13	0.17	0.19	0.2	0.24	3377	1.0
y_mean[685]	0.56	4.3e-4	0.03	0.5	0.54	0.56	0.57	0.61	4323	1.0
y_mean[686]	0.56	4.4e-4	0.03	0.51	0.54	0.56	0.58	0.62	4156	1.0
y_mean[687]	-0.42	4.9e-4	0.03	-0.47	-0.44	-0.42	-0.4	-0.36	3197	1.0
y_mean[688]	-0.57	4.9e-4	0.03	-0.63	-0.59	-0.57	-0.55	-0.51	3449	1.0
y_mean[689]	-0.19	5.5e-4	0.03	-0.25	-0.21	-0.19	-0.17	-0.12	3041	1.0
y_mean[690]	-0.56	6.6e-4	0.04	-0.64	-0.59	-0.56	-0.53	-0.48	3624	1.0
y_mean[691]	-0.76	5.8e-4	0.04	-0.83	-0.78	-0.76	-0.74	-0.69	3701	1.0
y_mean[692]	-0.58	4.4e-4	0.03	-0.63	-0.6	-0.58	-0.56	-0.53	3396	1.0
y_mean[693]	-0.13	4.2e-4	0.03	-0.18	-0.15	-0.13	-0.11	-0.08	3645	1.0
y_mean[694]	-0.06	4.2e-4	0.02	-0.11	-0.08	-0.06	-0.04	-0.01	3194	1.0
y_mean[695]	0.3	8.5e-4	0.05	0.2	0.27	0.3	0.33	0.4	3504	1.0
y_mean[696]	-0.25	8.7e-4	0.04	-0.33	-0.28	-0.25	-0.22	-0.17	2495	1.0
y_mean[697]	-0.49	4.2e-4	0.02	-0.54	-0.51	-0.49	-0.47	-0.44	3156	1.0
y_mean[698]	-0.36	5.6e-4	0.03	-0.43	-0.38	-0.36	-0.34	-0.3	3147	1.0
y_mean[699]	3.14	1.2e-3	0.08	2.99	3.09	3.14	3.19	3.29	3923	1.0
y_mean[700]	-0.58	4.6e-4	0.03	-0.63	-0.6	-0.58	-0.56	-0.53	3499	1.0
y_mean[701]	-0.68	5.5e-4	0.03	-0.74	-0.7	-0.68	-0.66	-0.62	3518	1.0
y_mean[702]	-0.49	5.2e-4	0.03	-0.55	-0.51	-0.49	-0.47	-0.44	2994	1.0
y_mean[703]	-0.34	8.6e-4	0.04	-0.42	-0.37	-0.34	-0.31	-0.25	2630	1.0
y_mean[704]	0.59	5.4e-4	0.04	0.52	0.57	0.59	0.62	0.66	4567	1.0
y_mean[704] y_mean[705]	0.33	6.7e-4	0.04	0.12	0.18	0.2	0.23	0.29	3898	1.0
y_mean[706] y_mean[706]	0.02	4.7e-4	0.04		7.8e-4	0.02	0.23	0.29	3149	1.0
y_mean[100]	0.02	4.76-4	0.03	-0.03	7.0e-4	0.02	0.04	0.07	2149	1.0

y_mean[707]	-0.35	4.2e-4	0.02	-0.4	-0.37	-0.35	-0.33	-0.3	3133	1.0
y_mean[708]	-0.52	4.3e-4	0.02	-0.57	-0.54	-0.52	-0.51	-0.48	2994	1.0
y_mean[709]	0.9	7.9e-4	0.05	0.82	0.87	0.9	0.94	1.0	3447	1.0
y_mean[710]	-0.32	8.7e-4	0.05	-0.42	-0.35	-0.32	-0.28	-0.22	3480	1.0
y_mean[711]	-0.57	4.3e-4	0.03	-0.62	-0.59	-0.57	-0.55	-0.52	3432	1.0
y_mean[712]	-0.45	4.7e-4	0.02	-0.49	-0.46	-0.45	-0.43	-0.4	2599	1.0
y_mean[713]	-0.48	4.2e-4	0.02	-0.53	-0.49	-0.48	-0.46	-0.43	3379	1.0
y_mean[714]	-0.16	4.2e-4	0.02	-0.2	-0.18	-0.16	-0.14	-0.11	3123	1.0
y_mean[715]	-0.08	5.4e-4	0.03	-0.14	-0.1	-0.08	-0.06	-0.02	3140	1.0
y_mean[716]	-0.46	6.1e-4	0.03	-0.52	-0.48	-0.46	-0.43	-0.39	2993	1.0
y_mean[717]	-0.49	3.0e-4	0.02	-0.53	-0.5	-0.49	-0.48	-0.45	3998	1.0
y_mean[718]	0.74	8.3e-4	0.05	0.64	0.7	0.74	0.77	0.43	3539	1.0
y_mean[710] y_mean[719]	-0.68	6.5e-4	0.03	-0.76	-0.71	-0.68	-0.65	-0.6	3516	1.0
y_mean[719] y_mean[720]	-0.68	5.7e-4	0.04	-0.75	-0.71	-0.68	-0.66	-0.62	3594	1.0
y_mean[720] y_mean[721]	0.43	4.9e-4	0.03	0.73	0.41	0.43	0.45	0.49	3772	1.0
y_mean[721] y_mean[722]	-0.71	5.9e-4	0.03	-0.78	-0.73	-0.71	-0.68	-0.64	3542	1.0
• =								-0.64		
y_mean[723]	-0.27	5.8e-4	0.03	-0.33	-0.29	-0.27	-0.24		3471	1.0
y_mean[724]	-0.06	4.2e-4	0.03	-0.1	-0.07	-0.06		6.9e-3	3589	1.0
y_mean[725]	1.15	7.1e-4	0.05	1.05	1.12	1.15	1.18	1.25	4668	1.0
y_mean[726]	-0.24	5.9e-4	0.03	-0.3	-0.26	-0.24	-0.22	-0.18	2939	1.0
y_mean[727]	-0.54	3.9e-4	0.02	-0.59	-0.56	-0.54	-0.53	-0.5	3127	1.0
y_mean[728]	-0.1	4.1e-4	0.02	-0.14	-0.11	-0.1	-0.08	-0.05	3147	1.0
y_mean[729]	-0.64	7.7e-4	0.05	-0.73	-0.67	-0.64	-0.61	-0.55	3431	1.0
y_mean[730]	-0.05	1.0e-3	0.06	-0.16	-0.09	-0.05	-0.01	0.06	2950	1.0
y_mean[731]	0.53	4.3e-4	0.03	0.47	0.51	0.53	0.54	0.58	4069	1.0
y_mean[732]	-0.5	4.2e-4	0.02	-0.54	-0.51	-0.5	-0.48	-0.45	2825	1.0
y_mean[733]	-0.46	4.7e-4	0.03	-0.51	-0.48	-0.46	-0.44	-0.41	3463	1.0
y_mean[734]	-0.52	3.8e-4	0.02	-0.56	-0.53	-0.52	-0.51	-0.48	2988	1.0
y_mean[735]	0.7	7.4e-4	0.05	0.6	0.67	0.7	0.74	0.8	4814	1.0
y_mean[736]	-0.37	7.0e-4	0.04	-0.46	-0.4	-0.37	-0.34	-0.29	3537	1.0
y_mean[737]	-0.62	5.5e-4	0.03	-0.68	-0.64	-0.62	-0.6	-0.55	3506	1.0
y_mean[738]	0.46	4.7e-4	0.03	0.41	0.44	0.46	0.48	0.52	3836	1.0
y_mean[739]	0.55	6.0e-4	0.04	0.47	0.53	0.55	0.58	0.63	4527	1.0
y_mean[740]	0.27	6.8e-4	0.04	0.19	0.24	0.27	0.29	0.35	3674	1.0
y_mean[741]	2.38	1.3e-3	0.08	2.23	2.33	2.38	2.44	2.54	3474	1.0
y_mean[742]	-0.54	3.9e-4	0.02	-0.58	-0.55	-0.54	-0.52	-0.49	3076	1.0
y_mean[743]	-0.62	7.4e-4	0.04	-0.71	-0.65	-0.62	-0.6	-0.54	3272	1.0
y_mean[744]	-0.24	5.5e-4	0.03	-0.29	-0.26	-0.24	-0.22	-0.18	2851	1.0
y_mean[745]	-0.53	3.8e-4	0.02	-0.57	-0.54	-0.53	-0.51	-0.49	2929	1.0
y_mean[746]	-0.34	9.4e-4	0.06	-0.45	-0.38	-0.34	-0.31	-0.23	3471	1.0
y_mean[747]	-0.52	3.9e-4	0.02	-0.56	-0.53	-0.52	-0.51	-0.48	2943	1.0
y_mean[748]	-0.71		0.04	-0.78	-0.74	-0.71	-0.69	-0.65	3852	1.0
y_mean[749]	-0.44	5.8e-4	0.03	-0.5	-0.46	-0.44	-0.42	-0.38	2930	1.0
y_mean[750]	-0.42	9.0e-4	0.05	-0.51	-0.45	-0.42	-0.39	-0.32	2826	1.0
y_mean[751]	-0.54	3.8e-4	0.02	-0.58	-0.56	-0.54	-0.53	-0.5	3140	1.0
y_mean[751] y_mean[752]	0.15	5.2e-4	0.02	0.09	0.13	0.15	0.33	0.2	3064	1.0
y_mean[752] y_mean[753]	-0.24	6.7e-4	0.03	-0.31	-0.27	-0.24	-0.22	-0.17	2689	1.0
y_mean[753] y_mean[754]	0.57	8.0e-4	0.05	0.48	0.54	0.57	0.6	0.66	3342	1.0
y_mean[194]	0.57	0.06-4	0.05	0.40	0.54	0.57	0.0	0.00	JJ42	1.0

y_mean[755]	-0.18	5.5e-4	0.03	-0.24	-0.2	-0.18	-0.16	-0.12	2999	1.0
y_mean[756]	2.35	1.2e-3	0.08	2.19	2.29	2.35	2.4	2.5	4195	1.0
y_mean[757]	0.97	9.4e-4	0.06	0.85	0.92	0.97	1.01	1.09	4355	1.0
y_mean[758]	-0.17	5.0e-4	0.03	-0.23	-0.19	-0.17	-0.15	-0.11	3680	1.0
y_mean[759]	0.28	5.2e-4	0.03	0.22	0.26	0.28	0.3	0.35	3533	1.0
y_mean[760]	0.11	6.9e-4	0.04	0.02	0.08	0.11	0.13	0.18	3512	1.0
y_mean[761]	0.44	6.1e-4	0.04	0.37	0.42	0.44	0.47	0.52	3885	1.0
y_mean[762]	-0.55	7.8e-4	0.04	-0.63	-0.58	-0.55	-0.52	-0.46	3066	1.0
y_mean[763]	-0.49	6.7e-4	0.04	-0.56	-0.51	-0.49	-0.46	-0.41	3197	1.0
y_mean[764]	-0.51	4.0e-4	0.02	-0.55	-0.52	-0.51	-0.49	-0.47	2736	1.0
y_mean[765]	-0.39	5.9e-4	0.03	-0.45	-0.41	-0.39	-0.37	-0.33	3034	1.0
y_mean[766]	0.72	6.7e-4	0.04	0.64	0.69	0.72	0.75	0.8	3612	1.0
y_mean[767]	0.68	5.3e-4	0.04	0.61	0.66	0.68	0.71	0.75	4362	1.0
y_mean[768]	-0.57	4.6e-4	0.03	-0.62	-0.59	-0.57	-0.55	-0.52	3388	1.0
y_mean[769]	0.07	5.0e-4		5.9e-3	0.04	0.07	0.09	0.13	3972	1.0
y_mean[770]	-0.07	4.2e-4	0.03	-0.12	-0.09	-0.07	-0.06	-0.02	3769	1.0
y_mean[771]	-0.22	7.3e-4	0.04	-0.3	-0.24	-0.22	-0.19	-0.13	3317	1.0
y_mean[772]	-0.52	4.0e-4	0.02	-0.56	-0.54	-0.52	-0.51	-0.48	2956	1.0
y_mean[773]	-0.69	6.2e-4	0.02	-0.77	-0.72	-0.69	-0.67	-0.62	3697	1.0
y_mean[774]	-0.02	4.4e-4	0.03	-0.07	-0.04		-3.6e-3	0.02	3386	1.0
y_mean[774] y_mean[775]	-0.56	4.0e-4	0.02	-0.6	-0.57	-0.56	-0.54	-0.51	3270	1.0
y_mean[776]	-0.09	4.1e-4	0.02	-0.13	-0.1	-0.09	-0.07	-0.04	3296	1.0
y_mean[777]	0.43	5.8e-4	0.02	0.36	0.41	0.43	0.46	0.51	4157	1.0
y_mean[777] y_mean[778]	-0.45	5.2e-4	0.04	-0.51	-0.47	-0.45	-0.43	-0.4	2983	1.0
y_mean[779] y_mean[779]	-0.43	5.2e-4 5.8e-4	0.03	-0.31	-0.47	-0.43	-0.43	-0.4	3388	1.0
• =	-0.69	5.2e-4	0.03	-0.35 -0.75	-0.23	-0.69	-0.67		3892	1.0
y_mean[780]			0.03					-0.63		1.0
y_mean[781]	-0.06	4.5e-4		-0.11	-0.07	-0.06		-5.9e-3	3059	
y_mean[782]	-0.46	4.9e-4	0.03	-0.52	-0.48	-0.46	-0.44	-0.41	3631	1.0
y_mean[783]	-0.52	4.1e-4	0.02	-0.56	-0.53	-0.52	-0.5	-0.47	2934	1.0
y_mean[784]	-0.52	4.0e-4	0.02	-0.56	-0.53	-0.52	-0.5	-0.48	2937	1.0
y_mean[785]	-0.55	8.8e-4	0.05	-0.65	-0.59	-0.55	-0.51	-0.45	3649	1.0
y_mean[786]	-0.5	6.1e-4	0.04	-0.57	-0.53	-0.5	-0.48	-0.43	3637	1.0
y_mean[787]	-0.58	9.1e-4	0.05	-0.68	-0.61	-0.58	-0.54	-0.47	3363	1.0
y_mean[788]	-0.29	6.1e-4	0.04	-0.36	-0.32	-0.29	-0.27	-0.22	3523	1.0
y_mean[789]	-0.09	5.5e-4	0.03	-0.15	-0.11	-0.09	-0.07	-0.02	3389	1.0
y_mean[790]	-0.26	6.2e-4	0.03	-0.32	-0.28	-0.26	-0.24	-0.2	2700	1.0
y_mean[791]	-0.47	4.2e-4	0.02	-0.51	-0.48	-0.47	-0.45	-0.42	2886	1.0
y_mean[792]	0.19	6.6e-4	0.04	0.11	0.16	0.19	0.22	0.27	3903	1.0
y_mean[793]	-0.61	5.4e-4	0.03	-0.67	-0.63	-0.61	-0.59	-0.55	3523	1.0
y_mean[794]	-0.04	3.9e-4	0.02	-0.08	-0.05	-0.04		8.2e-3	3507	1.0
y_mean[795]	-0.14	6.3e-4	0.04	-0.21	-0.16	-0.14	-0.11	-0.06	3571	1.0
y_mean[796]	-0.24	7.5e-4	0.04	-0.31	-0.26	-0.24	-0.21	-0.16	2551	1.0
y_mean[797]	0.17	6.9e-4	0.04	0.1	0.15	0.17	0.19	0.24	2722	1.0
y_mean[798]	-0.54	3.9e-4	0.02	-0.59	-0.56	-0.54	-0.53	-0.5	3233	1.0
y_mean[799]	-0.76	6.1e-4	0.04	-0.83	-0.78	-0.76	-0.73	-0.68	3632	1.0
y_mean[800]	-0.01	4.4e-4	0.03	-0.07	-0.03		3.9e-3	0.04	3878	1.0
y_mean[801]	-0.45	4.4e-4	0.02	-0.5	-0.47	-0.45	-0.44	-0.41	2948	1.0
y_mean[802]	0.03	4.7e-4	0.03	-0.02	0.01	0.03	0.05	0.09	3676	1.0

y_mean[803]	-0.77	6.8e-4	0.04	-0.85	-0.79	-0.77	-0.74	-0.69	3627	1.0
y_mean[804]	-0.5	4.6e-4	0.03	-0.56	-0.52	-0.5	-0.48	-0.45	3613	1.0
y_mean[805]	-0.1	7.2e-4	0.04	-0.18	-0.13	-0.1	-0.07	-0.02	3425	1.0
y_mean[806]	-0.65	6.5e-4	0.04	-0.72	-0.67	-0.65	-0.62	-0.57	3578	1.0
y_mean[807]	-0.04	4.6e-4	0.03	-0.1	-0.07	-0.04	-0.02	0.01	4247	1.0
y_mean[808]	-0.63	7.8e-4	0.04	-0.72	-0.66	-0.63	-0.6	-0.54	3301	1.0
y_mean[809]	-0.43	4.3e-4	0.02	-0.47	-0.44	-0.43	-0.41	-0.38	3078	1.0
y_mean[810]	-0.48	4.5e-4	0.03	-0.53	-0.5	-0.48	-0.46	-0.43	3478	1.0
y_mean[811]	-0.54	4.4e-4	0.03	-0.59	-0.56	-0.54	-0.52	-0.49	3464	1.0
y_mean[812]	-0.26	6.7e-4	0.04	-0.34	-0.29	-0.26	-0.23	-0.18	3515	1.0
y_mean[813]	0.2	3.9e-4	0.02	0.16	0.19	0.2	0.22	0.25	3826	1.0
y_mean[814]	-0.78	6.4e-4	0.04	-0.86	-0.8	-0.78	-0.75	-0.7	3736	1.0
y_mean[815]	-0.35	4.3e-4	0.01	-0.4	-0.37	-0.35	-0.34	-0.31	3006	1.0
y_mean[816]	-0.2	5.1e-4	0.02	-0.25	-0.22	-0.2	-0.18	-0.14	3090	1.0
y_mean[817]	-0.21	4.7e-4	0.03	-0.26	-0.22	-0.21	-0.19	-0.15	3229	1.0
y_mean[818]	-0.09	4.7e 4 4.2e-4	0.03	-0.13	-0.1	-0.09	-0.07	-0.04	3107	1.0
y_mean[819]	0.46	4.2e-4 4.7e-4	0.02	0.13	0.44	0.46	0.48	0.52	3806	1.0
y_mean[820]	0.40	4.7e-4 4.6e-4	0.03		8.3e-3	0.40	0.45	0.08	3714	1.0
• =		5.3e-4								1.0
y_mean[821]	-0.55		0.03	-0.61	-0.57	-0.55	-0.53	-0.49	3510	
y_mean[822]	-0.43	8.3e-4	0.04	-0.51	-0.46	-0.43	-0.4	-0.35	2497	1.0
y_mean[823]	-0.34	4.5e-4	0.03	-0.39	-0.36	-0.34	-0.32	-0.29	3325	1.0
y_mean[824]	-0.44	3.9e-4	0.02	-0.49	-0.46	-0.44	-0.43	-0.4	3468	1.0
y_mean[825]	0.68	5.8e-4	0.04	0.61	0.66	0.68	0.7	0.75	3633	1.0
y_mean[826]	-0.03	4.3e-4	0.03	-0.07	-0.04		8.7e-3	0.02	3363	1.0
y_mean[827]	-0.04	4.3e-4	0.03	-0.09	-0.06	-0.04		6.1e-3	3570	1.0
y_mean[828]	-0.62	6.5e-4	0.04	-0.7	-0.65	-0.62	-0.6	-0.55	3494	1.0
y_mean[829]	-0.7	6.0e-4	0.04	-0.78	-0.73	-0.7	-0.68	-0.63	3768	1.0
y_mean[830]	-0.56	4.7e-4	0.03	-0.62	-0.58	-0.56	-0.55	-0.51	3377	1.0
y_mean[831]	-0.28	7.0e-4	0.04	-0.36	-0.3	-0.28	-0.25	-0.2	3516	1.0
y_mean[832]	-0.53	3.8e-4	0.02	-0.58	-0.55	-0.53	-0.52	-0.49	3072	1.0
y_mean[833]	-0.53	4.2e-4	0.02	-0.58	-0.55	-0.53	-0.52	-0.49	3084	1.0
y_mean[834]	0.02	4.6e-4	0.03	-0.04	2.7e-4	0.02	0.04	0.07	3611	1.0
y_mean[835]	0.64	4.8e-4	0.03	0.57	0.62	0.64	0.66	0.7	4319	1.0
y_mean[836]	-0.6	4.9e-4	0.03	-0.65	-0.62	-0.6	-0.58	-0.54	3478	1.0
y_mean[837]	-0.58	1.1e-3	0.07	-0.71	-0.63	-0.58	-0.54	-0.45	3380	1.0
y_mean[838]	-0.59	5.9e-4	0.04	-0.66	-0.61	-0.59	-0.57	-0.52	3604	1.0
y_mean[839]	-0.17	4.2e-4	0.02	-0.21	-0.18	-0.17	-0.15	-0.12	3154	1.0
y_mean[840]	-0.44	4.6e-4	0.03	-0.48	-0.45	-0.44	-0.42	-0.39	2977	1.0
y_mean[841]	-0.18	8.0e-4	0.04	-0.26	-0.21	-0.18	-0.15	-0.1	2526	1.0
y_mean[842]	-0.15	5.2e-4	0.03	-0.21	-0.17	-0.15	-0.13	-0.09	3430	1.0
y_mean[843]	4.23	1.8e-3	0.12	4.0	4.15	4.23	4.31	4.46	4077	1.0
y_mean[844]	0.41	5.3e-4	0.03	0.35	0.39	0.41	0.43	0.47	3603	1.0
y_mean[845]	-0.11	5.6e-4	0.03	-0.17	-0.13	-0.11	-0.09	-0.04	3282	1.0
y_mean[846]	0.55	4.4e-4	0.03	0.5	0.53	0.55	0.57	0.61	4142	1.0
y_mean[847]	1.05	6.3e-4	0.04	0.97	1.02	1.05	1.08	1.14	4924	1.0
y_mean[848]	0.38	5.4e-4	0.03	0.31	0.35	0.38	0.4	0.44	4073	1.0
y_mean[849]	-0.45	5.0e-4	0.03	-0.5	-0.46	-0.45	-0.43	-0.39	2683	1.0
y_mean[850]	-0.51	3.8e-4	0.02	-0.55	-0.53	-0.51	-0.5	-0.47	2923	1.0

```
3.18
                                                             3.54
                                                                     3.66
                                                                                     3044
y_mean[851]
                     3.55
                           3.3e-3
                                      0.18
                                                     3.43
                                                                              3.9
                                                                                              1.0
                    -0.08
                           7.1e-4
                                      0.04
                                            -0.16
                                                    -0.11
                                                            -0.08
                                                                   -0.05 2.0e-3
                                                                                     3375
y_mean[852]
                                                                                              1.0
y_mean[853]
                    -0.73
                           5.4e-4
                                      0.03
                                             -0.8
                                                    -0.76
                                                            -0.73
                                                                                     3735
                                                                    -0.71
                                                                            -0.67
                                                                                              1.0
                    -0.56
                           4.0e-4
                                      0.02
                                            -0.61
                                                    -0.58
                                                            -0.56
                                                                    -0.55
                                                                            -0.51
                                                                                     3285
                                                                                              1.0
y_mean[854]
                                            -0.55
                    -0.45
                           9.3e-4
                                      0.05
                                                    -0.49
                                                            -0.45
                                                                    -0.42
                                                                           -0.36
                                                                                     2732
y_mean[855]
                                                                                              1.0
                     0.37
                           8.1e-4
                                      0.05
                                             0.27
                                                     0.34
                                                             0.37
                                                                      0.4
                                                                             0.47
                                                                                     3777
                                                                                              1.0
y_mean[856]
                                            -0.04
                                                             0.04
y_mean[857]
                     0.04
                           8.7e-4
                                      0.04
                                                     0.01
                                                                     0.07
                                                                             0.13
                                                                                     2504
                                                                                              1.0
                    -0.63
                           6.2e-4
                                      0.04
                                            -0.71
                                                    -0.66
                                                            -0.64
                                                                            -0.56
y_mean[858]
                                                                   -0.61
                                                                                     3535
                                                                                              1.0
                    -0.02
                           3.7e-4
                                      0.02
                                            -0.06
                                                    -0.03
                                                            -0.02-2.9e-3
                                                                             0.03
                                                                                     3606
                                                                                              1.0
y_mean[859]
                     0.59
                           4.4e-4
                                      0.03
                                             0.54
                                                     0.58
                                                             0.59
                                                                     0.61
                                                                             0.65
                                                                                     4467
y_mean[860]
                                                                                              1.0
                    -0.02
                           3.6e-4
                                      0.02
                                            -0.06
                                                    -0.03
                                                            -0.02-1.2e-4
                                                                             0.03
                                                                                     3762
                                                                                              1.0
y_mean[861]
                    -0.45
                           4.5e-4
                                      0.02
                                             -0.5
                                                    -0.47
                                                            -0.45
                                                                    -0.44
                                                                           -0.41
                                                                                     2639
                                                                                              1.0
y_mean[862]
y_mean[863]
                    -0.13
                           4.8e-4
                                      0.03
                                            -0.18
                                                    -0.15
                                                            -0.13
                                                                    -0.12
                                                                                     2852
                                                                            -0.08
                                                                                              1.0
                    -0.63
                           8.5e-4
                                            -0.73
                                                            -0.63
                                                                            -0.54
                                      0.05
                                                    -0.67
                                                                     -0.6
                                                                                     3367
y_mean[864]
                                                                                              1.0
                     1.65
                           1.3e-3
                                      0.09
                                             1.47
                                                     1.59
                                                             1.65
                                                                     1.71
                                                                             1.82
                                                                                     4639
y_mean[865]
                                                                                              1.0
                                      0.03
                                             0.51
                     0.57
                           4.6e-4
                                                     0.55
                                                             0.57
                                                                     0.59
                                                                             0.63
                                                                                     4286
                                                                                              1.0
y_mean[866]
y_mean[867]
                    -0.49
                           4.0e-4
                                      0.02
                                            -0.53
                                                     -0.5
                                                            -0.49
                                                                    -0.47
                                                                            -0.44
                                                                                     2955
                                                                                              1.0
                     0.02
                                      0.03
                                            -0.04-1.6e-3
                           4.5e-4
                                                             0.02
                                                                     0.04
                                                                             0.07
                                                                                     3729
                                                                                              1.0
y_mean[868]
y_mean[869]
                     1.56
                           9.6e-4
                                      0.06
                                             1.44
                                                     1.52
                                                             1.56
                                                                      1.6
                                                                             1.68
                                                                                     3909
                                                                                              1.0
y_mean[870]
                    -0.25
                           6.1e-4
                                      0.04
                                            -0.32
                                                    -0.27
                                                            -0.25
                                                                    -0.22
                                                                           -0.18
                                                                                     3528
                                                                                              1.0
                    -0.47
                           5.7e-4
                                      0.03
                                            -0.53
                                                    -0.49
                                                            -0.47
                                                                           -0.41
y_mean[871]
                                                                    -0.45
                                                                                     2978
                                                                                              1.0
                     0.67
                           5.6e-4
                                      0.03
                                               0.6
                                                     0.64
                                                             0.67
                                                                     0.69
                                                                             0.73
                                                                                     3696
y_mean[872]
                                                                                              1.0
y_mean[873]
                    -0.58
                           9.0e-4
                                            -0.68
                                                            -0.58
                                                                    -0.55
                                                                           -0.48
                                      0.05
                                                    -0.62
                                                                                     3237
                                                                                              1.0
                     0.99
                           9.2e-4
                                      0.06
                                             0.88
                                                     0.95
                                                             0.99
                                                                     1.03
                                                                             1.11
                                                                                     4392
                                                                                              1.0
y_mean[874]
y_mean[875]
                      1.5
                           6.9e-4
                                      0.05
                                             1.41
                                                     1.47
                                                              1.5
                                                                     1.53
                                                                              1.6
                                                                                     4563
                                                                                              1.0
                    -0.46
                           6.1e-4
                                      0.03
                                            -0.53
                                                    -0.48
                                                            -0.46
                                                                    -0.44
                                                                             -0.4
                                                                                     3007
y_mean[876]
                                                                                              1.0
                    -0.53
                                      0.02
                                            -0.57
                           3.9e-4
                                                    -0.54
                                                            -0.53
                                                                    -0.51
                                                                            -0.48
                                                                                     3154
y_mean[877]
                                                                                              1.0
                    -0.29
                           9.2e-4
                                      0.05
                                            -0.38
                                                    -0.32
                                                            -0.29
                                                                    -0.26
                                                                             -0.2
                                                                                     2524
y_mean[878]
                                                                                              1.0
                    -0.29
                           5.6e-4
                                            -0.35
                                                    -0.31
                                                            -0.29
                                                                    -0.27
                                                                            -0.23
                                                                                     3299
                                      0.03
                                                                                              1.0
y_mean[879]
y_mean[880]
                     0.13
                           5.7e-4
                                      0.04
                                             0.06
                                                      0.1
                                                             0.13
                                                                     0.15
                                                                              0.2
                                                                                     3886
                                                                                              1.0
y_mean[881]
                                                            -0.29
                    -0.29
                           6.4e-4
                                      0.04
                                            -0.37
                                                    -0.32
                                                                    -0.27
                                                                            -0.22
                                                                                     3381
                                                                                              1.0
                                                                            -0.15
y_mean[882]
                    -0.21
                           5.2e-4
                                      0.03
                                            -0.27
                                                    -0.23
                                                            -0.21
                                                                    -0.19
                                                                                     3090
                                                                                              1.0
y_mean[883]
                     2.36
                           9.3e-4
                                      0.07
                                             2.22
                                                     2.32
                                                             2.36
                                                                             2.49
                                                                     2.41
                                                                                     5482
                                                                                              1.0
                    -0.01
                           3.7e-4
                                      0.02
                                            -0.05
                                                    -0.03
                                                           -0.01 4.1e-3
                                                                             0.03
                                                                                     3320
                                                                                              1.0
y_mean[884]
                    -0.48
                           4.5e-4
                                      0.02
                                            -0.52
                                                    -0.49
                                                            -0.48
                                                                    -0.46
                                                                            -0.43
                                                                                     2702
                                                                                              1.0
y mean [885]
                    -0.39
                           5.4e-4
                                      0.03
                                            -0.45
                                                    -0.41
                                                            -0.39
                                                                    -0.37
                                                                            -0.33
                                                                                     2870
y_mean[886]
                                                                                              1.0
                           5.5e-4
                                      0.03
                                             -0.8
                                                            -0.73
                                                                            -0.66
                    -0.73
                                                    -0.75
                                                                    -0.71
                                                                                     3955
y_mean[887]
                                                                                              1.0
                                            -0.04 2.1e-3
y_mean[888]
                     0.02
                           4.8e-4
                                      0.03
                                                             0.02
                                                                     0.04
                                                                             0.08
                                                                                     3900
                                                                                              1.0
                                             -0.5
                    -0.44
                           5.2e-4
                                      0.03
                                                    -0.46
                                                            -0.44
                                                                    -0.42
                                                                           -0.38
                                                                                     3459
                                                                                              1.0
y_mean[889]
                     0.77
                           8.0e-4
                                      0.05
                                             0.67
                                                     0.73
                                                             0.77
                                                                      0.8
                                                                             0.86
y_mean[890]
                                                                                     3424
                                                                                              1.0
                    -0.57
                                            -0.65
                           6.8e-4
                                      0.04
                                                    -0.59
                                                            -0.57
                                                                    -0.54
                                                                           -0.49
                                                                                     3663
                                                                                              1.0
y_mean[891]
                     1.43
                           8.0e-4
                                             1.33
                                                     1.39
                                                             1.43
y_mean[892]
                                      0.05
                                                                     1.47
                                                                             1.53
                                                                                     4152
                                                                                              1.0
y_mean[893]
                    -0.41
                           5.2e-4
                                      0.03
                                            -0.46
                                                    -0.43
                                                            -0.41
                                                                    -0.39
                                                                           -0.36
                                                                                     2740
                                                                                              1.0
                     0.98
                           4.6e-4
                                             0.93
                                                             0.98
                                                                             1.04
                                      0.03
                                                     0.96
                                                                      1.0
                                                                                     3905
y_mean[894]
                                                                                              1.0
                    -0.13
                           4.1e-4
                                      0.02
                                            -0.18
                                                    -0.15
                                                            -0.13
                                                                            -0.09
                                                                                     3078
y_mean[895]
                                                                   -0.12
                                                                                              1.0
                     1.35
                                             1.23
y_mean[896]
                           8.8e-4
                                      0.06
                                                     1.31
                                                             1.35
                                                                     1.38
                                                                             1.46
                                                                                     4179
                                                                                              1.0
                                                                     0.63
y_mean[897]
                     0.61
                           4.5e-4
                                      0.03
                                             0.55
                                                     0.59
                                                             0.61
                                                                             0.67
                                                                                     4371
                                                                                              1.0
y_mean[898]
                     -0.5
                           4.0e-4
                                      0.02
                                            -0.54
                                                    -0.52
                                                             -0.5
                                                                    -0.49
                                                                            -0.46
                                                                                     2691
                                                                                              1.0
```

y_mean[899]	0.01	8.4e-4	0.04	-0.07	-0.02	0.01	0.04	0.1	2813	1.0
y_mean[900]	-0.53	3.8e-4	0.02	-0.57	-0.54	-0.53	-0.51	-0.48	3117	1.0
y_mean[901]	-0.43	5.7e-4	0.03	-0.49	-0.45	-0.43	-0.41	-0.37	2897	1.0
y_mean[902]	0.54	5.3e-4	0.04	0.46	0.51	0.54	0.56	0.61	5305	1.0
y_mean[903]	-0.6	5.7e-4	0.03	-0.67	-0.62	-0.6	-0.58	-0.53	3614	1.0
y_mean[904]	-0.1	4.1e-4	0.02	-0.14	-0.12	-0.1	-0.08	-0.05	3084	1.0
y_mean[905]	-0.6	4.9e-4	0.03	-0.66	-0.62	-0.6	-0.58	-0.54	3479	1.0
y_mean[906]	-0.27	5.8e-4	0.03	-0.34	-0.3	-0.27	-0.25	-0.21	3300	1.0
y_mean[907]	-0.61	6.9e-4	0.04	-0.69	-0.64	-0.61	-0.59	-0.53	3187	1.0
y_mean[908]	2.03	9.2e-4	0.06	1.9	1.99	2.03	2.07	2.16	4814	1.0
y_mean[909]	0.1	3.7e-4	0.02	0.06	0.09	0.1	0.12	0.15	3768	1.0
y_mean[910]	-0.6	9.6e-4	0.06	-0.71	-0.64	-0.6	-0.56	-0.49	3670	1.0
y_mean[911]	-0.18	4.5e-4	0.02	-0.23	-0.2	-0.18	-0.16	-0.13	3112	1.0
y_mean[912]	-0.02	4.3e-4	0.03	-0.07	-0.04		4.5e-3	0.03	3475	1.0
y_mean[913]	-0.2	6.7e-4	0.04	-0.27	-0.23	-0.2	-0.17	-0.13	3116	1.0
y_mean[914]	0.11	5.2e-4	0.03	0.05	0.09	0.11	0.13	0.16	3036	1.0
y_mean[914] y_mean[915]	-0.2	8.5e-4	0.05	-0.29	-0.23	-0.2	-0.17	-0.11	2900	1.0
y_mean[916]	1.13	8.5e-4	0.06	1.02	1.09	1.13	1.17	1.24	4453	1.0
y_mean[917]	-0.74	5.9e-4	0.04	-0.81	-0.76	-0.74	-0.71	-0.67	3615	1.0
y_mean[917] y_mean[918]	-0.74	5.9e-4 4.6e-4	0.04	-0.81	-0.76	-0.19	-0.17	-0.14	3481	1.0
• =	0.19	4.0e-4 4.0e-4	0.03	0.06	0.09	0.1	0.12	0.15	3444	1.0
y_mean[919]		4.0e-4 4.5e-4	0.02	-0.05		6.3e-3	0.12			1.0
y_mean[920]	6.6e-3							0.06	3531	
y_mean[921]	0.01	9.1e-4	0.05	-0.08	-0.02	0.01	0.04	0.11	2997	1.0
y_mean[922]	1.56	6.6e-4	0.04	1.47	1.53	1.56	1.59	1.65	4646	1.0
y_mean[923]	0.05	5.6e-4		9.4e-3	0.03	0.05	0.07	0.11	3232	1.0
y_mean[924]	-0.25	6.1e-4	0.03	-0.32	-0.27	-0.25	-0.23	-0.18	3312	1.0
y_mean[925]	-0.29	6.6e-4	0.03	-0.36	-0.31	-0.29	-0.27	-0.22	2834	1.0
y_mean[926]	-0.46	4.4e-4	0.02	-0.51	-0.48	-0.46	-0.45	-0.42	2591	1.0
y_mean[927]	0.03	3.8e-4	0.02	-0.02	0.01	0.03	0.04	0.07	3571	1.0
y_mean[928]	0.78	5.8e-4	0.03	0.72	0.76	0.78	0.81	0.85	3517	1.0
y_mean[929]	-0.39	5.4e-4	0.03	-0.45	-0.41	-0.39	-0.37	-0.33	2855	1.0
y_mean[930]	1.29	8.6e-4	0.06	1.17	1.25	1.29	1.33	1.4	4541	1.0
y_mean[931]	-0.58	1.3e-3	0.08	-0.72	-0.63	-0.58	-0.52	-0.43	3443	1.0
y_mean[932]	0.3	5.4e-4	0.03	0.24	0.28	0.3	0.32	0.36	3701	1.0
y_mean[933]	2.12	6.9e-4	0.04	2.04	2.09	2.12	2.15	2.21	3854	1.0
y_mean[934]	1.19	7.7e-4	0.06	1.07	1.15	1.19	1.23	1.3	5992	1.0
y_mean[935]	4.03	2.1e-3	0.14	3.76	3.93	4.02	4.12	4.29	4282	1.0
y_mean[936]	-0.32	9.3e-4	0.05	-0.42	-0.35	-0.32	-0.28	-0.21	3236	1.0
y_mean[937]	-0.46	3.8e-4	0.02	-0.51	-0.48	-0.46	-0.45	-0.42	3580	1.0
y_mean[938]	1.02	5.1e-4	0.03	0.95	0.99	1.01	1.04	1.08	3893	1.0
y_mean[939]	-0.49	7.4e-4	0.04	-0.57	-0.52	-0.49	-0.46	-0.41	3030	1.0
y_mean[940]	0.03	4.5e-4	0.03	-0.02	0.01	0.03	0.05	0.08	3207	1.0
y_mean[941]	-0.49	1.1e-3	0.07	-0.62	-0.53	-0.49	-0.44	-0.35	3574	1.0
y_mean[942]	-0.26	4.6e-4	0.03	-0.32	-0.28	-0.26	-0.25	-0.21	3129	1.0
y_mean[943]	0.44	5.1e-4	0.03	0.38	0.42	0.44	0.46	0.5	3695	1.0
y_mean[944]	1.15	7.9e-4	0.05	1.04	1.11	1.15	1.18	1.25	4569	1.0
y_mean[945]	-0.39	3.3e-4	0.02	-0.43	-0.4	-0.39	-0.37	-0.35	3639	1.0
y_mean[946]	-0.38	5.7e-4	0.04	-0.45	-0.41	-0.38	-0.36	-0.31	3788	1.0

y_mean[947]	1.96	9.3e-4	0.06	1.84	1.91	1.96	1.99	2.07	4020	1.0
y_mean[948]	1.18	6.7e-4	0.05	1.09	1.15	1.18	1.21	1.27	4776	1.0
y_mean[949]	0.09	5.3e-4	0.03	0.02	0.07	0.09	0.11	0.15	3831	1.0
y_mean[950]	-0.12	5.5e-4	0.03	-0.19	-0.14	-0.12	-0.1	-0.06	3615	1.0
y_mean[951]	0.12	5.7e-4	0.04	0.06	0.1	0.12	0.15	0.19	3829	1.0
y_mean[952]	-0.02	5.0e-4	0.03	-0.09	-0.05		-1.3e-3	0.04	4437	1.0
y_mean[953]	-0.45	5.1e-4	0.03	-0.51	-0.47	-0.45	-0.43	-0.4	3289	1.0
y_mean[954]	-0.56	4.1e-4	0.02	-0.6	-0.57	-0.56	-0.54	-0.51	3240	1.0
y_mean[955]	-0.75	6.3e-4	0.04	-0.82	-0.77	-0.75	-0.72	-0.67	3629	1.0
y_mean[956]	-0.55	4.5e-4	0.03	-0.6	-0.57	-0.55	-0.53	-0.5	3249	1.0
y_mean[957]	-0.57	5.2e-4	0.03	-0.63	-0.59	-0.57	-0.55	-0.51	3575	1.0
y_mean[957] y_mean[958]	1.25	8.8e-4	0.03	1.13	1.21	1.25	1.29	1.36	4466	1.0
v –		8.6e-4	0.05	0.15	0.21	0.25				
y_mean[959]	0.25						0.28	0.34	3314	1.0
y_mean[960]	-0.33	3.9e-4	0.02	-0.37	-0.34	-0.33	-0.31	-0.28	3730	1.0
y_mean[961]	-0.45	4.6e-4	0.03	-0.5	-0.47	-0.45	-0.44	-0.4	3139	1.0
y_mean[962]	-0.7	7.8e-4	0.04	-0.79	-0.73	-0.7	-0.67	-0.62	3152	1.0
y_mean[963]	-0.36	4.3e-4	0.02	-0.41	-0.38	-0.36	-0.35	-0.32	3160	1.0
y_mean[964]	-0.27	6.6e-4	0.04	-0.35	-0.3	-0.27	-0.25	-0.2	3381	1.0
y_mean[965]	-0.47	6.3e-4	0.04	-0.54	-0.5	-0.47	-0.45	-0.41	3106	1.0
y_mean[966]	-0.43	4.5e-4	0.03	-0.48	-0.45	-0.43	-0.41	-0.38	3405	1.0
y_mean[967]	-0.18	4.3e-4	0.02	-0.22	-0.19	-0.18	-0.16	-0.13	3176	1.0
y_mean[968]	2.12	1.1e-3	0.08	1.97	2.07	2.12	2.18	2.28	4795	1.0
y_mean[969]	-0.68	5.9e-4	0.03	-0.75	-0.7	-0.68	-0.66	-0.61	3392	1.0
y_mean[970]	-0.18	6.4e-4	0.04	-0.25	-0.21	-0.18	-0.16	-0.12	2993	1.0
y_mean[971]	-0.49	4.3e-4	0.03	-0.54	-0.51	-0.49	-0.47	-0.44	3617	1.0
y_mean[972]	0.03	6.0e-4	0.03	-0.03	3.9e-3	0.03	0.05	0.09	2837	1.0
y_mean[973]	-0.68	7.0e-4	0.04	-0.76	-0.71	-0.68	-0.65	-0.6	3606	1.0
y_mean[974]	-0.59	5.5e-4	0.03	-0.65	-0.61	-0.59	-0.57	-0.52	3557	1.0
y_mean[975]	-0.23	5.0e-4	0.03	-0.28	-0.25	-0.23	-0.21	-0.18	3045	1.0
y_mean[976]	-0.39	6.0e-4	0.04	-0.46	-0.42	-0.39	-0.37	-0.32	3474	1.0
y_mean[977]	-0.42	5.0e-4	0.03	-0.47	-0.43	-0.42	-0.4	-0.36	2741	1.0
y_mean[978]	-0.1	4.2e-4	0.02	-0.14	-0.12	-0.1	-0.08	-0.05	2975	1.0
y_mean[979]	-0.15	4.2e-4	0.02	-0.19	-0.16		-0.13	-0.1	3101	1.0
y_mean[980]	-0.35	4.0e-4	0.03	-0.4	-0.37	-0.35	-0.34	-0.3	4006	1.0
y_mean[981]	-0.51	4.1e-4	0.02	-0.56	-0.53	-0.51	-0.5	-0.47	2913	1.0
y_mean[982]	1.36	6.8e-4	0.02	1.27	1.33	1.36	1.39	1.45	4303	1.0
y_mean[983]	0.23	7.7e-4	0.05	0.14	0.2	0.23	0.27	0.33	4302	1.0
y_mean[983] y_mean[984]	-0.38	3.9e-4	0.03	-0.43	-0.4	-0.39	-0.37	-0.34	3202	1.0
• =										
y_mean[985]	-0.76	6.0e-4	0.04	-0.83	-0.78	-0.76	-0.74	-0.69	3642	1.0
y_mean[986]	-7.3e-3	8.2e-4	0.04	-0.09		-7.1e-3	0.02	0.08	2760	1.0
y_mean[987]	-0.09	3.5e-4	0.02	-0.13	-0.1	-0.09	-0.07	-0.04	4069	1.0
y_mean[988]	-0.39	5.4e-4	0.03	-0.44	-0.41	-0.39	-0.37	-0.33	2891	1.0
y_mean[989]	-0.03	4.3e-4	0.02	-0.08	-0.05	-0.03	-0.01	0.02	3340	1.0
y_mean[990]	4.39	2.0e-3	0.14	4.1	4.29	4.39	4.49	4.66	5238	1.0
y_mean[991]	-0.57	4.3e-4	0.02	-0.62	-0.59	-0.57	-0.56	-0.52	3405	1.0
y_mean[992]	-0.43	5.7e-4	0.03	-0.49	-0.46	-0.43	-0.41	-0.37	2916	1.0
y_mean[993]	-0.04	5.9e-4	0.04	-0.11	-0.06	-0.04	-0.01	0.03	3607	1.0
y_mean[994]	0.07	3.9e-4	0.02	0.03	0.06	0.07	0.09	0.12	3734	1.0

y_mean[995]	-0.56	4.6e-4	0.03	-0.61	-0.57	-0.56	-0.54	-0.5	3316	1.0
y_mean[996]	-0.73	5.3e-4	0.03	-0.79	-0.75	-0.73	-0.7	-0.66	3715	1.0
y_mean[997]	-0.4	5.1e-4	0.03	-0.46	-0.42	-0.4	-0.38	-0.35	2916	1.0
y_mean[998]	0.33	7.3e-4	0.04	0.26	0.31	0.33	0.36	0.41	2971	1.0
y_mean[999]	-0.51	4.3e-4	0.03	-0.56	-0.53	-0.51	-0.5	-0.46	3398	1.0
y_mean[1000]	-0.59	4.8e-4	0.03	-0.65	-0.61	-0.59	-0.58	-0.54	3472	1.0
y_mean[1001]	-0.41	5.6e-4	0.03	-0.47	-0.43	-0.41	-0.39	-0.35	3107	1.0
y_mean[1002]	-0.64	9.8e-4	0.06	-0.75	-0.68	-0.64	-0.6	-0.53	3369	1.0
y_mean[1003]	0.73	5.9e-4	0.04	0.65	0.7	0.73	0.75	0.8	4190	1.0
y_mean[1004]	0.9	8.1e-4	0.05	0.81	0.87	0.9	0.93	0.99	3082	1.0
y_mean[1005]	-0.49	4.0e-4	0.02	-0.54	-0.51	-0.49	-0.48	-0.45	2972	1.0
y_mean[1006]	0.61	6.4e-4	0.04	0.53	0.58	0.61	0.64	0.69	4111	1.0
y_mean[1007]	1.31	6.0e-4	0.04	1.23	1.28	1.31	1.34	1.39	4863	1.0
y_mean[1008]	-0.16	4.2e-4	0.02	-0.21	-0.18	-0.16	-0.14	-0.11	3139	1.0
y_mean[1009]	-0.24	5.8e-4	0.03	-0.3	-0.26	-0.24	-0.22	-0.18	2741	1.0
y_mean[1010]	-0.13	4.1e-4	0.02	-0.18	-0.15	-0.13	-0.12	-0.09	3207	1.0
y_mean[1011]	-0.38	3.2e-4	0.02	-0.41	-0.39	-0.38	-0.36	-0.34	3935	1.0
y_mean[1012]	-0.45	3.1e-4	0.02	-0.49	-0.46	-0.45	-0.43	-0.41	3743	1.0
y_mean[1013]	-0.79	6.7e-4	0.04	-0.87	-0.82	-0.79	-0.76	-0.71	3601	1.0
y_mean[1014]	0.09	5.3e-4	0.03	0.03	0.07	0.09	0.11	0.15	3669	1.0
y_mean[1015]	0.01	6.2e-4	0.04		9.8e-3	0.02	0.04	0.09	3510	1.0
y_mean[1016]	-0.16	5.4e-4	0.03	-0.22	-0.18	-0.16	-0.14	-0.1	3365	1.0
y_mean[1017]	-0.38	4.4e-4	0.03	-0.43	-0.39	-0.38	-0.36	-0.33	3284	1.0
y_mean[1018]	-0.42	4.0e-4	0.02	-0.46	-0.43	-0.42	-0.4	-0.38	3195	1.0
y_mean[1019]	-0.44	3.2e-4	0.02	-0.48	-0.46	-0.44	-0.43	-0.4	3773	1.0
y_mean[1020]	-0.11	4.1e-4	0.02	-0.16	-0.13	-0.11	-0.1	-0.07	3071	1.0
y_mean[1021]	0.49	4.5e-4	0.03	0.43	0.47	0.49	0.51	0.55	3955	1.0
y_mean[1021]	3.09	1.6e-3	0.11	2.88	3.02	3.09	3.16	3.3	4701	1.0
y_mean[1023]	-0.56	4.0e-4	0.02	-0.6	-0.57	-0.56	-0.54	-0.51	3272	1.0
y_mean[1024]	0.15	6.8e-4	0.04	0.08	0.12	0.15	0.17	0.22	2730	1.0
y_mean[1025]	-0.43	5.9e-4	0.03	-0.49	-0.45	-0.43	-0.41	-0.37	2974	1.0
y_mean[1026]	0.08	5.6e-4	0.03	0.02	0.06	0.08	0.1	0.14	2927	1.0
y_mean[1027]	-0.13	4.1e-4	0.02	-0.18	-0.15		-0.12	-0.09	3153	1.0
y_mean[1028]	-0.1	6.7e-4	0.04	-0.17	-0.12	-0.1	-0.07	-0.02	3044	1.0
y_mean[1029]	-0.28	6.6e-4	0.04	-0.36	-0.31	-0.28	-0.26	-0.21	3397	1.0
y_mean[1030]	-0.52	4.8e-4	0.03	-0.57	-0.54		-0.5	-0.46	3398	1.0
y_mean[1031]	-0.18	4.7e-4	0.03	-0.24	-0.2	-0.18	-0.16	-0.13	3703	1.0
y_mean[1032]	0.25	4.7e-4	0.03	0.19	0.23	0.25	0.27	0.31	4059	1.0
y_mean[1033]	0.28	6.5e-4	0.04	0.21	0.25	0.28	0.31	0.36	3750	1.0
y_mean[1034]	-0.7	7.1e-4	0.04	-0.78	-0.73	-0.7	-0.67	-0.62	3535	1.0
y_mean[1035]	-0.64	7.9e-4	0.04	-0.72	-0.67		-0.61	-0.56	2921	1.0
y_mean[1036]	-0.12	4.1e-4	0.02	-0.16	-0.13		-0.1	-0.07	3071	1.0
y_mean[1037]	-0.44		0.02	-0.48	-0.45	-0.44	-0.43	-0.4	3491	1.0
y_mean[1038]	-0.48	5.9e-4	0.04	-0.54	-0.5	-0.47	-0.45	-0.41	3560	1.0
y_mean[1039]	5.4	2.3e-3	0.15	5.1	5.29	5.4	5.5	5.69	4438	1.0
y_mean[1040]	9.0e-3	4.5e-4	0.03	-0.04		8.6e-3	0.03	0.06	3740	1.0
y_mean[1041]	-0.62	5.6e-4	0.03	-0.69	-0.64		-0.6	-0.55	3508	1.0
y_mean[1042]	-0.19	4.5e-4	0.03	-0.24	-0.21	-0.19	-0.18	-0.14	3294	1.0
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y_mean[1043]	0.12	3.7e-4	0.02	0.08	0.11	0.12	0.14	0.17	3736	1.0
y_mean[1044]	1.46	1.3e-3	0.07	1.32	1.41	1.46	1.51	1.61	3328	1.0
y_mean[1045]	-0.54	6.1e-4	0.04	-0.61	-0.57	-0.54	-0.52	-0.47	3505	1.0
y_mean[1046]	-0.46	3.3e-4	0.02	-0.5	-0.47	-0.46	-0.44	-0.42	3710	1.0
y_mean[1047]	-0.06	4.2e-4	0.02	-0.1	-0.07	-0.06	-0.04-	-8.2e-3	3259	1.0
y_mean[1048]	0.59	8.9e-4	0.06	0.47	0.54	0.59	0.63	0.71	4878	1.0
y_mean[1049]	-0.22	8.7e-4	0.04	-0.31	-0.25	-0.22	-0.19	-0.14	2534	1.0
y_mean[1050]	-0.59	4.9e-4	0.03	-0.64	-0.61	-0.59	-0.57	-0.53	3471	1.0
y_mean[1051]	-0.52	3.8e-4	0.02	-0.56	-0.53	-0.52	-0.5	-0.48	3074	1.0
y_mean[1052]	1.06	1.0e-3	0.06	0.93	1.01	1.06	1.1	1.18	3840	1.0
y_mean[1053]	-0.65	6.2e-4	0.04	-0.72	-0.67	-0.65	-0.62	-0.58	3378	1.0
y_mean[1054]	1.38	6.4e-4	0.04	1.29	1.35	1.38	1.4	1.46	4402	1.0
y_mean[1055]	-0.45	4.4e-4	0.03	-0.5	-0.47	-0.45	-0.44	-0.4	3418	1.0
y_mean[1056]	-0.28	6.4e-4	0.03	-0.34	-0.3	-0.28	-0.26	-0.22	2619	1.0
y_mean[1057]	0.49	4.5e-4	0.03	0.43	0.47	0.49	0.51	0.55	3952	1.0
y_mean[1057]	1.33	6.3e-4	0.04	1.25	1.3	1.33	1.36	1.42	4610	1.0
y_mean[1059]	-0.09	4.6e-4	0.04	-0.14	-0.11	-0.09	-0.08	-0.05	2866	1.0
y_mean[1060]	-0.11	4.1e-4	0.02	-0.16	-0.13	-0.11	-0.1	-0.07	3338	1.0
y_mean[1060] y_mean[1061]	-0.52	3.8e-4	0.02	-0.56	-0.53	-0.52	-0.51	-0.48	2876	1.0
y_mean[1061] y_mean[1062]	-0.34	4.4e-4	0.02	-0.39	-0.36	-0.34	-0.33	-0.48	3100	1.0
y_mean[1062] y_mean[1063]	-0.48	3.0e-4	0.02	-0.59	-0.49	-0.48	-0.46	-0.29	3920	1.0
y_mean[1063] y_mean[1064]	-0.48	6.0e-4	0.02	-0.51	-0.49	-0.48	-0.40	-0.44	3586	1.0
y_mean[1064] y_mean[1065]	-0.72 -0.51	3.9e-4	0.04	-0. <i>19</i>	-0.74	-0.72 -0.51	-0.49	-0.65	3025	1.0
•		6.0e-4	0.02				-0.49		3618	1.0
y_mean[1066]	-0.74			-0.81	-0.76	-0.74		-0.67		
y_mean[1067]	-0.56	4.5e-4	0.03	-0.62	-0.58	-0.56	-0.55	-0.51	3731	1.0
y_mean[1068]	-0.54	3.8e-4	0.02	-0.58	-0.55	-0.54	-0.52	-0.5	3106	1.0
y_mean[1069]	-0.18	7.7e-4	0.05	-0.27	-0.21	-0.18	-0.15	-0.09	3744	1.0
y_mean[1070]	-0.71	6.5e-4	0.04	-0.79	-0.74	-0.71	-0.68	-0.63	3843	1.0
y_mean[1071]	3.56	1.2e-3	0.08	3.41	3.51	3.56	3.61	3.71	4147	1.0
y_mean[1072]	-0.39	8.3e-4	0.04	-0.47	-0.42	-0.39	-0.36	-0.31	2421	1.0
y_mean[1073]	-0.46	5.8e-4	0.04	-0.53	-0.49	-0.46	-0.44	-0.39	3817	1.0
y_mean[1074]	-0.44	2.9e-4	0.02	-0.47	-0.45	-0.44	-0.42	-0.4	3895	1.0
y_mean[1075]	0.52	4.4e-4	0.03	0.46	0.5	0.52	0.54	0.57	4035	1.0
y_mean[1076]	-0.45	4.7e-4	0.02	-0.5	-0.46	-0.45	-0.43	-0.4	2594	1.0
y_mean[1077]	-0.07	4.6e-4	0.03	-0.13	-0.09	-0.07	-0.05	-0.01	4163	1.0
y_mean[1078]	0.74	8.2e-4	0.05	0.64	0.7	0.74	0.77	0.83	3534	1.0
y_mean[1079]	-0.06	4.2e-4	0.02	-0.11	-0.08	-0.06	-0.04	-0.01	3481	1.0
y_mean[1080]	-0.28	6.4e-4	0.03	-0.34	-0.3	-0.28	-0.26	-0.22	2669	1.0
y_mean[1081]	-0.58	8.6e-4	0.05	-0.68	-0.61	-0.58	-0.55	-0.49	3235	1.0
y_mean[1082]	-0.08	4.3e-4	0.02	-0.13	-0.1	-0.08	-0.06	-0.03	3036	1.0
y_mean[1083]	-0.68	6.6e-4	0.04	-0.76	-0.71	-0.68	-0.65	-0.6	3609	1.0
y_mean[1084]	0.32	6.4e-4	0.04	0.24	0.29	0.32	0.34	0.4	3969	1.0
y_mean[1085]	0.7	5.7e-4	0.04	0.63	0.67	0.7	0.72	0.77	3872	1.0
y_mean[1086]	-0.05	4.3e-4	0.02	-0.09	-0.06	-0.05	-0.03	2.9e-3	3265	1.0
y_mean[1087]	1.4	7.7e-4	0.05	1.3	1.37	1.4	1.43	1.49	3843	1.0
y_mean[1088]	0.64	4.7e-4	0.03	0.57	0.61	0.64	0.66	0.7	4261	1.0
y_mean[1089]	-0.1	4.2e-4	0.02	-0.14	-0.12	-0.1	-0.09	-0.06	3071	1.0
y_mean[1090]	-0.13	4.5e-4	0.03	-0.19	-0.15	-0.13	-0.11	-0.08	3846	1.0

y_mean[1091]	-0.15	7.1e-4	0.04	-0.22	-0.17	-0.15	-0.12	-0.07	2742	1.0
y_mean[1092]	-0.37	5.6e-4	0.03	-0.43	-0.39	-0.37	-0.35	-0.31	3033	1.0
y_mean[1093]	-0.7	5.0e-4	0.03	-0.76	-0.72	-0.7	-0.68	-0.64	3977	1.0
y_mean[1094]	-0.11	3.5e-4	0.02	-0.15	-0.12	-0.11	-0.09	-0.06	3947	1.0
y_mean[1095]	0.17	4.4e-4	0.03	0.12	0.15	0.17	0.18	0.22	3447	1.0
y_mean[1096]	0.25	5.9e-4	0.03	0.18	0.22	0.25	0.27	0.31	3136	1.0
y_mean[1097]	-0.06	8.1e-4	0.04	-0.14	-0.09	-0.06	-0.03	0.02	2672	1.0
y_mean[1098]	0.52	4.4e-4	0.03	0.47	0.5	0.52	0.54	0.58	4118	1.0
y_mean[1099]	-0.52	4.0e-4	0.02	-0.56	-0.54	-0.52	-0.51	-0.48	2962	1.0
y_mean[1100]	-0.4	5.3e-4	0.03	-0.46	-0.42	-0.4	-0.38	-0.35	3056	1.0
y_mean[1101]	-0.68	5.9e-4	0.04	-0.75	-0.7	-0.68	-0.65	-0.6	3758	1.0
y_mean[1102]	-0.51	5.6e-4	0.03	-0.58	-0.54	-0.51	-0.49	-0.45	3223	1.0
y_mean[1103]	-0.03	4.3e-4	0.03	-0.08	-0.05	-0.03	-0.01	0.02	3332	1.0
y_mean[1104]	-0.63	7.6e-4	0.04	-0.72	-0.66	-0.63	-0.6	-0.55	3317	1.0
y_mean[1105]	-0.06	4.2e-4	0.02	-0.11	-0.08	-0.06	-0.05	-0.02	3210	1.0
y_mean[1106]	-0.37	1.2e-3	0.06	-0.49	-0.41	-0.37	-0.33	-0.25	2486	1.0
y_mean[1107]	-0.21	4.6e-4	0.03	-0.26	-0.22	-0.21	-0.19	-0.15	3290	1.0
y_mean[1107] y_mean[1108]	1.47	7.7e-4	0.05	1.37	1.43	1.47	1.5	1.56	4112	1.0
y_mean[1109]	-0.19	5.2e-4	0.03	-0.24	-0.2	-0.19	-0.17	-0.13	3037	1.0
y_mean[1110] y_mean[1110]	-0.62	5.4e-4	0.03	-0.68	-0.64	-0.62	-0.59	-0.55	3504	1.0
y_mean[1110] y_mean[1111]	1.47	8.5e-4	0.05	1.37	1.44	1.47	1.51	1.57	3477	1.0
y_mean[1111] y_mean[1112]	0.86	1.3e-3	0.03	0.69	0.8	0.86	0.91	1.02	4424	1.0
y_mean[1112] y_mean[1113]	2.09	7.2e-4	0.05	1.99	2.06	2.09	2.13	2.19	5121	1.0
• –			0.05				-0.44	-0.4		
y_mean[1114]	-0.45	4.4e-4		-0.5	-0.47	-0.45			2962	1.0
y_mean[1115]	-0.45	6.5e-4	0.04	-0.52	-0.47	-0.45	-0.42	-0.38	3058	1.0
y_mean[1116]	-0.42	4.9e-4	0.03	-0.47	-0.44	-0.42	-0.4	-0.36	3017	1.0
y_mean[1117]	0.06	7.0e-4	0.05	-0.03	0.03	0.06	0.1	0.16	5177	1.0
y_mean[1118]	0.09	5.4e-4	0.03	0.02	0.07	0.09	0.11	0.15	3843	1.0
y_mean[1119]	-0.16	4.4e-4	0.03	-0.21	-0.18	-0.16	-0.15	-0.11	3515	1.0
y_mean[1120]	-0.28	7.7e-4	0.04	-0.36	-0.3	-0.28	-0.25	-0.19	3333	1.0
y_mean[1121]	0.1	6.3e-4	0.04	0.03	0.08	0.1	0.13	0.18	3437	1.0
y_mean[1122]	-0.67	1.1e-3	0.07	-0.8	-0.71	-0.67	-0.62	-0.54	3670	1.0
y_mean[1123]	0.58		0.04	0.49	0.55	0.58	0.61	0.67	3772	1.0
y_mean[1124]	0.34	7.3e-4	0.04	0.26	0.31	0.34	0.37	0.42	2953	1.0
y_mean[1125]	-0.53	4.0e-4	0.02	-0.58	-0.55	-0.53	-0.52	-0.49	3054	1.0
y_mean[1126]	-0.73	5.7e-4	0.03	-0.8	-0.76	-0.73	-0.71	-0.67	3609	1.0
y_mean[1127]	0.39	5.0e-4	0.03	0.33	0.37	0.39	0.42	0.45	3988	1.0
y_mean[1128]	-0.47	3.7e-4	0.02	-0.52	-0.49	-0.47	-0.45	-0.43	3698	1.0
y_mean[1129]	-0.1	4.5e-4	0.03	-0.15	-0.12	-0.1	-0.08	-0.04	4007	1.0
y_mean[1130]	0.02	4.2e-4	0.03	-0.03	2.8e-3	0.02	0.04	0.07	3633	1.0
y_mean[1131]	-0.31	6.0e-4	0.03	-0.37	-0.33	-0.31	-0.29	-0.24	2724	1.0
y_mean[1132]	-0.08	4.6e-4	0.02	-0.12	-0.09	-0.08	-0.06	-0.03	2939	1.0
y_mean[1133]	-0.15	4.2e-4	0.02	-0.19	-0.16	-0.15	-0.13	-0.1	3140	1.0
y_mean[1134]	-0.49	4.0e-4	0.02	-0.53	-0.5	-0.49	-0.48	-0.45	2809	1.0
y_mean[1135]	0.63	4.8e-4	0.03	0.57	0.61	0.64	0.66	0.7	4369	1.0
y_mean[1136]	-0.43	4.6e-4	0.03	-0.49	-0.45	-0.43	-0.42	-0.38	3769	1.0
y_mean[1137]	-0.61	5.2e-4	0.03	-0.67	-0.63	-0.61	-0.59	-0.55	3496	1.0
y_mean[1138]	-0.07	4.9e-4	0.03	-0.12	-0.09	-0.07	-0.05	-0.01	3090	1.0

y_mean[1139]	-0.77	6.4e-4	0.04	-0.85	-0.8	-0.77	-0.75	-0.7	3626	1.0
y_mean[1140]	-0.08	3.3e-4	0.02	-0.12	-0.1	-0.08	-0.07	-0.04	3866	1.0
y_mean[1141]	1.24	6.1e-4	0.04	1.15	1.21	1.24	1.27	1.32	4974	1.0
y_mean[1142]	-0.45	4.5e-4	0.02	-0.49	-0.46	-0.45	-0.43	-0.4	2959	1.0
y_mean[1143]	-0.57	4.8e-4	0.03	-0.62	-0.59	-0.57	-0.55	-0.51	3419	1.0
y_mean[1144]	0.02	4.7e-4	0.03		4.2e-3	0.02	0.04	0.08	3752	1.0
y_mean[1145]	-0.57	4.3e-4	0.03	-0.62	-0.59	-0.57	-0.56	-0.52	3700	1.0
y_mean[1146]	-0.67	6.7e-4	0.04	-0.74	-0.69	-0.67	-0.64	-0.59	3492	1.0
y_mean[1147]	-0.4	5.5e-4	0.03	-0.46	-0.42	-0.4	-0.38	-0.35	2844	1.0
y_mean[1148]	-0.33	5.9e-4	0.03	-0.4	-0.36	-0.33	-0.31	-0.27	3243	1.0
y_mean[1149]	0.41	5.4e-4	0.03	0.35	0.39	0.41	0.43	0.48	3587	1.0
y_mean[1150] y_mean[1150]	0.35	1.3e-3	0.08	0.2	0.3	0.35	0.4	0.5	3521	1.0
y_mean[1150] y_mean[1151]	-0.01	3.2e-4	0.02	-0.05	-0.03		2.8e-6	0.03	3942	1.0
y_mean[1151] y_mean[1152]	-0.51	3.7e-4	0.02	-0.55	-0.52	-0.51	-0.49	-0.46	3748	1.0
y_mean[1153] y_mean[1153]	0.02	3.7e-4 3.5e-4	0.02		4.0e-3	0.02	0.03	0.06	3633	1.0
y_mean[1153] y_mean[1154]	-0.16	4.7e-4	0.02	-0.02	-0.18	-0.16	-0.14	-0.1	3614	1.0
y_mean[1154] y_mean[1155]			0.03			0.63		0.74		
• –	0.63	8.5e-4		0.52	0.59		0.67		4537	1.0
y_mean[1156]	0.14	3.7e-4	0.02	0.1	0.12	0.14	0.15	0.18	3839	1.0
y_mean[1157]	-0.57	6.2e-4	0.04	-0.64	-0.59	-0.57	-0.54	-0.49	3539	1.0
y_mean[1158]	0.11	6.4e-4	0.03	0.05	0.09	0.11	0.13	0.18	2814	1.0
y_mean[1159]	4.35	1.9e-3	0.14	4.08	4.25	4.35	4.44	4.61	5095	1.0
y_mean[1160]	-0.18	7.7e-4	0.04	-0.27	-0.22	-0.19	-0.16	-0.1	3244	1.0
y_mean[1161]	-0.7	6.0e-4	0.04	-0.77	-0.72	-0.7	-0.67	-0.63	3738	1.0
y_mean[1162]	0.23	8.3e-4	0.04	0.15	0.2	0.23	0.26	0.32	2628	1.0
y_mean[1163]	-0.65	7.0e-4	0.04	-0.73	-0.68	-0.65	-0.62	-0.57	3396	1.0
y_mean[1164]	-0.16	5.2e-4	0.03	-0.21	-0.18	-0.16	-0.14	-0.1	3277	1.0
y_mean[1165]	0.53	4.3e-4	0.03	0.47	0.51	0.53	0.54	0.58	4069	1.0
y_mean[1166]	-0.28	7.4e-4	0.04	-0.37	-0.31	-0.28	-0.25	-0.19	3486	1.0
y_mean[1167]	-0.15	4.3e-4	0.03	-0.2	-0.17	-0.15	-0.14	-0.1	3556	1.0
y_mean[1168]	-0.41	6.7e-4	0.04	-0.48	-0.44	-0.41	-0.39	-0.34	2805	1.0
y_mean[1169]	-0.51	4.6e-4	0.03	-0.56	-0.53	-0.52	-0.5	-0.47	3023	1.0
y_mean[1170]	-0.46	3.7e-4	0.02	-0.5	-0.48	-0.46	-0.45	-0.42	3442	1.0
y_mean[1171]	-0.31	7.3e-4	0.04	-0.39	-0.34	-0.31	-0.28	-0.23	3426	1.0
y_mean[1172]	0.14	6.0e-4	0.04	0.06	0.11	0.13	0.16	0.21	4259	1.0
y_mean[1173]	3.07	1.5e-3	0.1	2.88	3.0	3.07	3.13	3.26	4236	1.0
y_mean[1174]	-0.27	6.9e-4	0.04	-0.35	-0.3	-0.27	-0.25	-0.19	3505	1.0
y_mean[1175]	0.43	5.3e-4	0.03	0.37	0.41	0.43	0.46	0.5	4331	1.0
y_mean[1176]	-0.12	4.3e-4	0.02	-0.17	-0.14	-0.12	-0.11	-0.07	2915	1.0
y_mean[1177]	-0.72	5.3e-4	0.03	-0.79	-0.74	-0.72	-0.7	-0.66	3890	1.0
y_mean[1178]	-0.52	4.5e-4	0.02	-0.57	-0.53	-0.52	-0.5	-0.47	3020	1.0
y_mean[1179]	-0.4	5.0e-4	0.03	-0.46	-0.42	-0.4		-0.35	3068	1.0
y_mean[1180]	-0.43	5.1e-4	0.03	-0.48	-0.45	-0.43		-0.38	2686	1.0
y_mean[1181]	-0.36	4.4e-4	0.02	-0.41	-0.37	-0.36		-0.31	2962	1.0
y_mean[1182]	-0.14	4.2e-4	0.02	-0.18	-0.15	-0.14	-0.12	-0.09	3084	1.0
y_mean[1183]	0.6	6.3e-4	0.04	0.52	0.57	0.6	0.62	0.67	3954	1.0
y_mean[1184]	-0.28	4.0e-4	0.02	-0.33	-0.3	-0.28	-0.27	-0.24	3521	1.0
y_mean[1185]	-0.47	4.2e-4	0.02	-0.51	-0.48	-0.47	-0.45	-0.42	2724	1.0
y_mean[1186] y_mean[1186]	-0.64	6.1e-4	0.02	-0.71	-0.66	-0.64		-0.57	3372	1.0
3 _mcan[1100]	0.04	J.16 4	0.04	0.11	0.00	0.04	0.02	0.01	0012	1.0

y_mean[1187]	1.96	1.9e-3	0.13	1.71	1.88	1.96	2.05	2.21	4214	1.0
y_mean[1188]	1.61	6.2e-4	0.04	1.52	1.58	1.61	1.64	1.69	5171	1.0
y_mean[1189]	0.39	8.9e-4	0.05	0.29	0.36	0.39	0.43	0.5	3739	1.0
y_mean[1190]	-0.54	4.8e-4	0.03	-0.6	-0.56	-0.54	-0.52	-0.49	3275	1.0
y_mean[1191]	0.58	4.5e-4	0.03	0.52	0.56	0.58	0.6	0.64	4247	1.0
y_mean[1192]	-0.23	6.5e-4	0.04	-0.31	-0.26	-0.23	-0.21	-0.16	3463	1.0
y_mean[1193]	-0.61	5.1e-4	0.03	-0.66	-0.63	-0.61	-0.59	-0.55	3492	1.0
y_mean[1194]	-0.09	9.0e-4	0.05	-0.19	-0.13	-0.09		2.8e-3	3022	1.0
y_mean[1195]	-0.53	3.9e-4	0.02	-0.57	-0.54	-0.53	-0.52	-0.49	3027	1.0
y_mean[1196]	0.55	4.3e-4	0.03	0.49	0.53	0.55	0.57	0.61	4352	1.0
y_mean[1197]	-0.4	3.6e-4	0.02	-0.44	-0.41	-0.4	-0.39	-0.36	3325	1.0
y_mean[1198]	-0.48	4.1e-4	0.02	-0.52	-0.49	-0.48	-0.47	-0.44	2649	1.0
y_mean[1199]	-0.61	8.9e-4	0.05	-0.7	-0.64	-0.61	-0.58	-0.51	2838	1.0
y_mean[1200]	1.61	1.5e-3	0.11	1.41	1.54	1.61	1.68	1.82	4631	1.0
y_mean[1200] y_mean[1201]	-0.82	7.9e-4	0.05	-0.92	-0.85	-0.82	-0.79	-0.73	3506	1.0
y_mean[1201] y_mean[1202]	-0.07	4.7e-4	0.03	-0.12	-0.09	-0.07	-0.05	-0.02	3012	1.0
y_mean[1202] y_mean[1203]	-0.14	4.6e-4	0.03	-0.19	-0.16	-0.14	-0.12	-0.09	3614	1.0
y_mean[1204]	0.14	9.0e-4	0.06	0.13	0.10	0.14	0.12	1.06	4380	1.0
y_mean[1204] y_mean[1205]	0.33	3.8e-4	0.00	0.09	0.12	0.33	0.15	0.18	3626	1.0
y_mean[1206]	-0.17	3.8e-4 4.8e-4	0.02	-0.22	-0.19	-0.17	-0.16	-0.12	2995	1.0
y_mean[1200] y_mean[1207]	-0.17	8.8e-4	0.05	-0.22 -0.56	-0.19	-0.17	-0.10	-0.12	3246	1.0
y_mean[1207] y_mean[1208]			0.03	-0.36	-0.49	-0.46	-0.43	-0.39		1.0
~	-0.44	5.0e-4							2666	
y_mean[1209]	-0.53	4.5e-4	0.02	-0.57	-0.54	-0.53	-0.51	-0.48	3074	1.0
y_mean[1210]	0.29	4.4e-4	0.03	0.23	0.27	0.29	0.31	0.34	3977	1.0
y_mean[1211]	-0.71	5.3e-4	0.03	-0.77	-0.73	-0.71	-0.68	-0.64	3651	1.0
y_mean[1212]	-0.48	3.9e-4	0.02	-0.52	-0.49	-0.48	-0.46	-0.43	3580	1.0
y_mean[1213]	-0.6	8.6e-4	0.05	-0.69	-0.63	-0.6	-0.56	-0.5	2809	1.0
y_mean[1214]	-0.26	6.7e-4	0.04	-0.34	-0.28	-0.26	-0.23	-0.18	3612	1.0
y_mean[1215]	-0.32	7.9e-4	0.04	-0.4	-0.35	-0.32	-0.29	-0.24	2550	1.0
y_mean[1216]	-0.53	4.1e-4	0.02	-0.57	-0.54	-0.53	-0.52	-0.49	3031	1.0
y_mean[1217]	-0.13	8.3e-4	0.05	-0.23	-0.16	-0.13	-0.09	-0.03	3873	1.0
y_mean[1218]	0.19	6.0e-4	0.03	0.13	0.17	0.19	0.21	0.26	3185	1.0
y_mean[1219]	1.12	8.5e-4	0.06	1.01	1.09	1.12	1.16	1.24	4482	1.0
y_mean[1220]	0.47	4.8e-4	0.03	0.41	0.45	0.47	0.49	0.53	4042	1.0
y_mean[1221]	0.65	7.7e-4	0.05	0.55	0.62	0.65	0.68	0.75	4539	1.0
y_mean[1222]	-0.16	4.2e-4	0.02	-0.2	-0.17	-0.16	-0.14	-0.11	3124	1.0
y_mean[1223]	-0.58	4.5e-4	0.03	-0.63	-0.6	-0.58	-0.56	-0.53	3442	1.0
y_mean[1224]	-0.37	5.3e-4	0.03	-0.43	-0.39	-0.37	-0.35	-0.31	3593	1.0
y_mean[1225]	-0.18	4.4e-4	0.02	-0.23	-0.2	-0.18	-0.16	-0.13	3117	1.0
y_mean[1226]	0.28	4.7e-4	0.03	0.22	0.26	0.28	0.3	0.34	4331	1.0
y_mean[1227]	-0.82	7.7e-4	0.05	-0.91	-0.85	-0.82	-0.79	-0.73	3522	1.0
y_mean[1228]	-0.38	4.4e-4	0.03	-0.44	-0.4	-0.38	-0.37	-0.33	3864	1.0
y_mean[1229]	-0.57	4.6e-4	0.03	-0.63	-0.59	-0.57	-0.55	-0.52	3499	1.0
y_mean[1230]	-0.73	5.4e-4	0.03	-0.79	-0.75	-0.73	-0.7	-0.66	3602	1.0
y_mean[1231]	1.24	6.2e-4	0.04	1.15	1.21	1.24	1.27	1.33	4888	1.0
y_mean[1232]	0.01	4.7e-4	0.03	-0.04-	5.0e-3	0.01	0.03	0.07	3684	1.0
y_mean[1233]	1.28	6.5e-4	0.04	1.2	1.26	1.28	1.31	1.36	3987	1.0
y_mean[1234]	-0.53	3.8e-4	0.02	-0.57	-0.55	-0.53	-0.52	-0.49	3034	1.0

y_mean[1235]	-0.07	4.2e-4	0.02	-0.12	-0.09	-0.07	-0.06	-0.02	3463	1.0
y_mean[1236]	-0.08	4.4e-4	0.02	-0.12	-0.09	-0.08	-0.06	-0.03	2967	1.0
y_mean[1237]	-0.5	4.1e-4	0.02	-0.55	-0.52	-0.5	-0.49	-0.46	3166	1.0
y_mean[1238]	-0.45	6.8e-4	0.04	-0.52	-0.48	-0.45	-0.42	-0.38	3110	1.0
y_mean[1239]	0.6	7.6e-4	0.05	0.51	0.57	0.6	0.63	0.69	3627	1.0
y_mean[1240]	0.75	5.8e-4	0.04	0.67	0.72	0.75	0.77	0.82	4063	1.0
y_mean[1241]	0.66	5.4e-4	0.03	0.59	0.64	0.66	0.68	0.73	4115	1.0
y_mean[1242]	-0.13	4.2e-4	0.02	-0.17	-0.14	-0.13	-0.11	-0.08	2949	1.0
y_mean[1243]	0.15	6.3e-4	0.03	0.09	0.13	0.15	0.17	0.22	2803	1.0
y_mean[1244]	0.65	5.0e-4	0.03	0.58	0.63	0.65	0.67	0.71	4216	1.0
y_mean[1245]	-0.18	8.6e-4	0.05	-0.27	-0.21	-0.18	-0.15	-0.09	2873	1.0
y_mean[1246]	-0.37	3.8e-4	0.02	-0.41	-0.38	-0.37	-0.35	-0.32	3278	1.0
y_mean[1247]	-0.17	4.2e-4	0.02	-0.22	-0.18	-0.17	-0.15	-0.12	3531	1.0
y_mean[1248]	-0.56	4.1e-4	0.02	-0.6	-0.57	-0.56	-0.54	-0.51	3364	1.0
y_mean[1249]	-0.09	4.2e-4	0.02	-0.13	-0.1	-0.09	-0.07	-0.04	3107	1.0
y_mean[1250]	-0.27	6.0e-4	0.04	-0.34	-0.3	-0.27	-0.25	-0.2	3399	1.0
y_mean[1251]	-0.54	3.9e-4	0.02	-0.58	-0.55	-0.54	-0.52	-0.49	3236	1.0
y_mean[1252]	-0.49	3.9e-4	0.02	-0.54	-0.51	-0.49	-0.48	-0.45	2931	1.0
y_mean[1253]	-0.39	4.6e-4	0.02	-0.44	-0.41	-0.39	-0.37	-0.34	2936	1.0
y_mean[1254]	-0.69	8.6e-4	0.05	-0.78	-0.72	-0.69	-0.65	-0.58	3499	1.0
y_mean[1255]	0.17	3.8e-4	0.02	0.12	0.15	0.17	0.19	0.22	3823	1.0
y_mean[1256]	-0.05	4.2e-4	0.02	-0.1	-0.07	-0.05	-0.04-	5.3e-3	3229	1.0
y_mean[1257]	6.1e-3	4.5e-4	0.03	-0.05	-0.01	5.9e-3	0.02	0.06	3659	1.0
y_mean[1258]	0.13	4.0e-4	0.02	0.09	0.12	0.13	0.15	0.18	3707	1.0
y_mean[1259]	-0.66	1.1e-3	0.07	-0.79	-0.71	-0.66	-0.62	-0.53	3656	1.0
y_mean[1260]	-0.07	4.9e-4	0.03	-0.13	-0.09	-0.07	-0.06	-0.02	3056	1.0
y_mean[1261]	0.52	4.4e-4	0.03	0.46	0.5	0.52	0.54	0.58	4202	1.0
y_mean[1262]	0.57	4.3e-4	0.03	0.51	0.55	0.57	0.59	0.63	4497	1.0
y_mean[1263]	0.3	8.9e-4	0.05	0.2	0.27	0.3	0.34	0.41	3400	1.0
y_mean[1264]	-0.14	4.3e-4	0.02	-0.18	-0.15	-0.14	-0.12	-0.09	2922	1.0
y_mean[1265]	-0.16	7.1e-4	0.04	-0.24	-0.19	-0.16	-0.14	-0.09	2708	1.0
y_mean[1266]	2.37	1.1e-3	0.07	2.24	2.33	2.37	2.42	2.51	4167	1.0
y_mean[1267]	-0.44	4.6e-4	0.03	-0.49	-0.46	-0.44	-0.43	-0.39	3174	1.0
y_mean[1268]	-0.13	4.1e-4	0.02	-0.18	-0.15	-0.13	-0.12	-0.09	3195	1.0
y_mean[1269]	0.54	4.3e-4	0.03	0.48	0.52	0.54	0.56	0.59	4128	1.0
y_mean[1270]	-0.45	5.5e-4	0.03	-0.51	-0.47	-0.45	-0.43	-0.39	2968	1.0
y_mean[1271]	-0.48	3.8e-4	0.02	-0.53	-0.5	-0.49	-0.47	-0.44	3543	1.0
y_mean[1272]	0.29	8.0e-4	0.04	0.21	0.27	0.29	0.32	0.38	2756	1.0
y_mean[1273]	-0.27	6.0e-4	0.04	-0.34	-0.3	-0.27	-0.25	-0.2	3399	1.0
y_mean[1274]	-0.51	4.1e-4	0.02	-0.56	-0.53	-0.51	-0.5	-0.47	3236	1.0
y_mean[1275]	-0.58	7.0e-4	0.04	-0.66	-0.61	-0.58	-0.55	-0.49	3705	1.0
y_mean[1276]	-0.59	5.3e-4	0.03	-0.65	-0.61	-0.59	-0.57	-0.53	3535	1.0
y_mean[1277]	0.3	5.8e-4	0.03	0.24	0.28	0.3	0.33	0.37	3329	1.0
y_mean[1278]	-0.4	5.9e-4	0.04	-0.47	-0.43	-0.4	-0.37	-0.33	3949	1.0
y_mean[1279]	0.02	4.5e-4	0.03	-0.03	1.2e-3	0.02	0.04	0.07	3659	1.0
y_mean[1280]	-0.45	4.4e-4	0.02	-0.5	-0.47	-0.45	-0.44	-0.41	2798	1.0
y_mean[1281]	0.69	8.0e-4	0.05	0.6	0.66	0.69	0.72	0.78	3613	1.0
y_mean[1282]	-0.75	5.7e-4	0.03	-0.82	-0.77	-0.75	-0.73	-0.68	3652	1.0

y_mean[1283]	1.44	9.2e-4	0.05	1.34	1.41	1.44	1.48	1.55	3421	1.0
y_mean[1284]	-0.47	5.4e-4	0.03	-0.53	-0.49	-0.47	-0.45	-0.42	2922	1.0
y_mean[1285]	-0.02	5.0e-4	0.03	-0.07	-0.04	-0.01	4.2e-3	0.04	3363	1.0
y_mean[1286]	-0.51	3.9e-4	0.02	-0.55	-0.52	-0.51	-0.49	-0.47	3025	1.0
y_mean[1287]	-0.35	3.8e-4	0.02	-0.39	-0.37	-0.35	-0.33	-0.3	3486	1.0
y_mean[1288]	-0.09	4.2e-4	0.02	-0.13	-0.1	-0.09	-0.07	-0.04	3080	1.0
y_mean[1289]	-0.45	4.4e-4	0.02	-0.49	-0.46	-0.45	-0.43	-0.4	2955	1.0
y_mean[1290]	0.46	4.9e-4	0.03	0.4	0.44	0.46	0.48	0.52	3964	1.0
y_mean[1291]	-0.28	7.8e-4	0.04	-0.36	-0.31	-0.28	-0.26	-0.21	2545	1.0
y_mean[1292]	0.15	5.1e-4	0.03	0.1	0.13	0.15	0.17	0.21	3131	1.0
y_mean[1293]	1.4	6.7e-4	0.04	1.32	1.38	1.41	1.43	1.49	4205	1.0
y_mean[1294]	-0.41	8.4e-4	0.05	-0.51	-0.44	-0.41	-0.38	-0.31	3557	1.0
y_mean[1295]	0.28	7.6e-4	0.05	0.19	0.25	0.28	0.31	0.37	3742	1.0
y_mean[1296]	-0.5	4.2e-4	0.02	-0.55	-0.52	-0.5	-0.48	-0.45	3243	1.0
y_mean[1297]	-0.12	4.1e-4	0.02	-0.17	-0.14	-0.12	-0.11	-0.08	3071	1.0
y_mean[1298]	-0.5	3.9e-4	0.02	-0.54	-0.51	-0.5	-0.48	-0.45	2967	1.0
y_mean[1299]	0.42	7.8e-4	0.04	0.34	0.39	0.42	0.45	0.5	2932	1.0
y_mean[1300]	0.55	5.8e-4	0.04	0.48	0.53	0.55	0.58	0.62	3997	1.0
y_mean[1301]	-0.36	5.6e-4	0.03	-0.43	-0.39	-0.36	-0.34	-0.3	3362	1.0
y_mean[1302]	-0.65	6.0e-4	0.04	-0.73	-0.68	-0.65	-0.63	-0.59	3414	1.0
y_mean[1303]	0.07	3.4e-4	0.02	0.03	0.06	0.07	0.09	0.12	4104	1.0
y_mean[1304]	-0.56	4.0e-4	0.02	-0.61	-0.58	-0.56	-0.55	-0.52	3319	1.0
y_mean[1305]	-0.2	5.7e-4	0.03	-0.27	-0.23	-0.2	-0.18	-0.14	3568	1.0
y_mean[1306]	-0.55	3.8e-4	0.02	-0.59	-0.56	-0.55	-0.53	-0.5	3175	1.0
y_mean[1307]	-0.07	5.0e-4	0.03	-0.13	-0.09	-0.07	-0.05	-0.02	3135	1.0
y_mean[1308]	-0.47	3.7e-4	0.02	-0.51	-0.48	-0.47	-0.45	-0.42	3717	1.0
y_mean[1309]	-0.17	6.8e-4	0.04	-0.25	-0.2	-0.17	-0.15	-0.1	2763	1.0
y_mean[1310]	-0.27	6.9e-4	0.03	-0.33	-0.29	-0.26	-0.24	-0.2	2551	1.0
y_mean[1311]	0.2	8.1e-4	0.05	0.11	0.17	0.2	0.23	0.29	3318	1.0
y_mean[1312]	-0.43	4.7e-4	0.03	-0.48	-0.45	-0.43	-0.41	-0.38	3032	1.0
y_mean[1313]	-0.47	4.4e-4	0.02	-0.51	-0.48	-0.47	-0.45	-0.42	2577	1.0
y_mean[1314]	0.43	5.2e-4	0.03	0.37	0.41	0.43	0.45	0.49	3660	1.0
y_mean[1315]	0.16	6.5e-4	0.05	0.07	0.13	0.16	0.19	0.25	4926	1.0
y_mean[1316]	-0.75	5.8e-4	0.04	-0.82	-0.77	-0.75	-0.72	-0.68	3634	1.0
y_mean[1317]	1.66	1.2e-3	0.08	1.51	1.61	1.66	1.71	1.8	4219	1.0
y_mean[1318]	-0.21	7.3e-4	0.05	-0.29	-0.24	-0.21	-0.18	-0.12	3807	1.0
y_mean[1319]	-0.48	9.9e-4	0.05	-0.58	-0.52	-0.48	-0.45	-0.38	2668	1.0
y_mean[1320]	-0.13	4.8e-4	0.03	-0.18	-0.14	-0.13	-0.11	-0.08	2838	1.0
y_mean[1321]	-0.31	5.3e-4	0.03	-0.37	-0.33	-0.31	-0.29	-0.26	2836	1.0
y_mean[1322]	-0.34	6.9e-4	0.04	-0.42	-0.37	-0.34	-0.31	-0.26	3565	1.0
y_mean[1323]	0.3	4.8e-4	0.03	0.25	0.28	0.3	0.32	0.36	3592	1.0
y_mean[1324]	-0.1	5.7e-4	0.03	-0.16	-0.12	-0.1	-0.07	-0.03	3296	1.0
y_mean[1325]	-0.44	5.0e-4	0.03	-0.49	-0.46	-0.44	-0.42	-0.38	3574	1.0
y_mean[1326]	-0.04	4.3e-4	0.02	-0.09	-0.06	-0.04		4.6e-3	3246	1.0
y_mean[1327]	0.06	5.1e-4		5.1e-3	0.04	0.06	0.08	0.12	3107	1.0
y_mean[1328]	-0.73	5.4e-4	0.03	-0.8	-0.75	-0.73	-0.71	-0.66	3937	1.0
y_mean[1329]	-0.47	4.6e-4	0.03	-0.52	-0.49	-0.47	-0.46	-0.43	3170	1.0
y_mean[1330]	3.03	1.0e-3	0.07	2.9	2.98	3.03	3.08	3.17	4606	1.0
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y_mean[1331]	-0.56	3.9e-4	0.02	-0.6	-0.57	-0.56	-0.54	-0.51	3562	1.0
y_mean[1332]	-0.1	4.2e-4	0.02	-0.15	-0.12	-0.1	-0.09	-0.06	2992	1.0
y_mean[1333]	-0.39	4.6e-4	0.03	-0.44	-0.4	-0.39	-0.37	-0.33	3211	1.0
y_mean[1334]	-0.02	8.5e-4	0.05	-0.12	-0.06	-0.02	0.01	0.07	3541	1.0
y_mean[1335]	-0.62	9.9e-4	0.05	-0.72	-0.65	-0.62	-0.58	-0.51	2991	1.0
y_mean[1336]	-0.68	6.0e-4	0.04	-0.75	-0.71	-0.68	-0.66	-0.62	3444	1.0
y_mean[1337]	-0.49		0.02	-0.54	-0.51	-0.49	-0.48	-0.45	2715	1.0
y_mean[1338]	0.02		0.04		2.8e-3	0.02	0.05	0.11	4891	1.0
y_mean[1339]	0.36		0.04	0.29	0.34	0.36	0.39	0.44	3027	1.0
y_mean[1340]	-0.5	4.6e-4	0.03	-0.55	-0.52	-0.5	-0.48	-0.44	3573	1.0
y_mean[1341]	-0.45		0.02	-0.5	-0.47	-0.45	-0.44	-0.41	3999	1.0
y_mean[1342]	0.66		0.04	0.58	0.63	0.66	0.68	0.73	4223	1.0
y_mean[1343]		10.0e-4	0.06	-0.53	-0.45	-0.4	-0.36	-0.28	4017	1.0
y_mean[1344]	-0.17		0.04	-0.24	-0.19	-0.17	-0.14	-0.09	2647	1.0
y_mean[1345]	-0.59		0.03	-0.65	-0.61	-0.59	-0.56	-0.52	3598	1.0
y_mean[1346]	0.03		0.03	-0.02	0.01	0.03	0.05	0.09	3693	1.0
y_mean[1347]	-0.8		0.03	-0.89	-0.83	-0.8	-0.77	-0.71	3663	1.0
y_mean[1348]	2.93		0.04	2.77	2.87	2.93	2.98	3.09	4466	1.0
y_mean[1349]	0.38		0.03	0.32	0.36	0.38	0.41	0.45	3930	1.0
y_mean[1349] y_mean[1350]	-0.61		0.03	-0.67	-0.63	-0.61	-0.59	-0.55	3496	1.0
y_mean[1351]	-0.01		0.03	-0.81	-0.76	-0.73	-0.39	-0.66	3590	1.0
• –			0.04	-0.31		-0.73 -0.25	-0.71			1.0
y_mean[1352]	-0.25				-0.27			-0.18	3302	
y_mean[1353]	-0.59		0.03	-0.64	-0.61	-0.59	-0.57	-0.53	3471	1.0
y_mean[1354]	-0.49		0.02	-0.53	-0.51	-0.49	-0.48	-0.46	3924	1.0
y_mean[1355]	-0.45	4.4e-4	0.02	-0.5	-0.47	-0.45	-0.44	-0.41	2948	1.0
y_mean[1356]	0.19	3.9e-4	0.02	0.15	0.18	0.19	0.21	0.24	3902	1.0
y_mean[1357]	-0.14		0.02	-0.19	-0.16	-0.14	-0.12	-0.09	2904	1.0
y_mean[1358]	0.65		0.04	0.57	0.62	0.65	0.67	0.73	4052	1.0
y_mean[1359]	-0.45	2.9e-4	0.02	-0.48	-0.46	-0.45	-0.43	-0.41	3811	1.0
y_mean[1360]	0.34		0.03	0.27	0.32	0.34	0.37	0.41	3652	1.0
y_mean[1361]	-0.76		0.04	-0.83	-0.78	-0.76	-0.73	-0.69	3657	1.0
y_mean[1362]	-0.2	4.9e-4	0.03	-0.26	-0.22	-0.2	-0.18	-0.14	3610	1.0
y_mean[1363]	-0.59	5.0e-4	0.03	-0.65	-0.61	-0.59	-0.57	-0.53	3497	1.0
y_mean[1364]	-0.11	4.1e-4	0.02	-0.16	-0.13	-0.11	-0.1	-0.07	3072	1.0
y_mean[1365]	1.05	5.0e-4	0.03	0.99	1.03	1.05	1.07	1.11	3956	1.0
y_mean[1366]	0.49	4.6e-4	0.03	0.43	0.47	0.49	0.5	0.54	3978	1.0
y_mean[1367]	-0.78	6.9e-4	0.04	-0.87	-0.81	-0.78	-0.75	-0.7	3838	1.0
y_mean[1368]	0.53	7.5e-4	0.05	0.42	0.5	0.53	0.57	0.63	4877	1.0
y_mean[1369]	0.34	6.9e-4	0.04	0.26	0.31	0.34	0.36	0.42	3451	1.0
y_mean[1370]	-0.48	5.7e-4	0.03	-0.54	-0.5	-0.48	-0.46	-0.42	3005	1.0
y_mean[1371]	1.56	7.9e-4	0.05	1.46	1.52	1.56	1.59	1.65	4163	1.0
y_mean[1372]	0.49	5.4e-4	0.03	0.42	0.46	0.49	0.51	0.55	4001	1.0
y_mean[1373]	0.53	5.5e-4	0.03	0.47	0.51	0.53	0.56	0.6	3907	1.0
y_mean[1374]	-0.54	4.5e-4	0.03	-0.59	-0.56	-0.54	-0.52	-0.49	3193	1.0
y_mean[1375]	2.35		0.1	2.16	2.28	2.35	2.41	2.54	4396	1.0
y_mean[1376]	-0.52		0.02	-0.56	-0.54	-0.52	-0.51	-0.48	3875	1.0
y_mean[1377]	0.9		0.04	0.82	0.87	0.9	0.92	0.97	3592	1.0
y_mean[1378]	-0.07		0.04	-0.15	-0.1	-0.07	-0.05	1.6e-3	2861	1.0

y_mean[1379]	-0.54	6.3e-4	0.04	-0.62	-0.57	-0.54	-0.52	-0.47	3448	1.0
y_mean[1380]	-0.58	4.6e-4	0.03	-0.64	-0.6	-0.58	-0.57	-0.53	3474	1.0
y_mean[1381]	-0.42	5.3e-4	0.03	-0.49	-0.45	-0.43	-0.4	-0.36	3728	1.0
y_mean[1382]	1.21	7.2e-4	0.05	1.1	1.18	1.21	1.25	1.32	5790	1.0
y_mean[1383]	-0.07	3.6e-4	0.02	-0.12	-0.09	-0.07	-0.06	-0.03	4012	1.0
y_mean[1384]	-0.31	5.1e-4	0.03	-0.37	-0.33	-0.31	-0.29	-0.26	2899	1.0
y_mean[1385]	-0.73	6.8e-4	0.04	-0.81	-0.76	-0.73	-0.7	-0.65	3638	1.0
y_mean[1386]	-0.21	5.4e-4	0.03	-0.27	-0.23	-0.21	-0.19	-0.15	3047	1.0
y_mean[1387]	0.53	4.4e-4	0.03	0.48	0.51	0.53	0.55	0.58	4063	1.0
y_mean[1388]	-0.39	5.2e-4	0.03	-0.45	-0.41	-0.39	-0.37	-0.33	3229	1.0
y_mean[1389]	-0.38	8.5e-4	0.04	-0.46	-0.41	-0.38	-0.35	-0.3	2428	1.0
y_mean[1390]	-0.64	6.6e-4	0.04	-0.72	-0.67	-0.64	-0.62	-0.56	3552	1.0
y_mean[1391]	-0.56	5.7e-4	0.03	-0.63	-0.59	-0.56	-0.54	-0.5	3570	1.0
y_mean[1391] y_mean[1392]	-0.5	6.0e-4	0.03	-0.58	-0.53	-0.5	-0.48	-0.43	3693	1.0
y_mean[1393]	-0.28	6.4e-4	0.03	-0.34	-0.3	-0.28	-0.26	-0.21	2593	1.0
y_mean[1394]	0.20	4.3e-4	0.03	0.54	0.55	0.23	0.59	0.63	4309	1.0
*	2.24	1.6e-3	0.03	2.01	2.17	2.24	2.32	2.47	5165	1.0
y_mean[1395]			0.11							
y_mean[1396]	0.41	5.3e-4		0.35	0.39	0.41	0.43	0.48	3609	1.0
y_mean[1397]	0.18	6.2e-4	0.03	0.12	0.16	0.18	0.2	0.25	2898	1.0
y_mean[1398]	-0.58	5.0e-4	0.03	-0.64	-0.6	-0.58	-0.56	-0.52	3485	1.0
y_mean[1399]	1.41	6.7e-4	0.04	1.32	1.38	1.41	1.44	1.5	4188	1.0
y_mean[1400]	-0.3	5.8e-4	0.03	-0.36	-0.32	-0.3	-0.28	-0.24	2802	1.0
y_mean[1401]	-0.56	5.2e-4	0.03	-0.62	-0.58	-0.56	-0.54	-0.5	3419	1.0
y_mean[1402]	0.53	4.6e-4	0.03	0.47	0.51	0.53	0.55	0.6	4796	1.0
y_mean[1403]	0.1	5.4e-4	0.03	0.04	0.08	0.1	0.12	0.17	3766	1.0
y_mean[1404]	-0.52	5.2e-4	0.03	-0.58	-0.54	-0.52	-0.5	-0.46	3688	1.0
y_mean[1405]	-0.5	3.9e-4	0.02	-0.54	-0.51	-0.5	-0.49	-0.46	2818	1.0
y_mean[1406]	2.09	1.4e-3	0.09	1.91	2.03	2.1	2.16	2.27	4347	1.0
y_mean[1407]	-0.4	5.2e-4	0.03	-0.46	-0.43	-0.41	-0.38	-0.34	3494	1.0
y_mean[1408]	-0.53	3.8e-4	0.02	-0.58	-0.55	-0.53	-0.52	-0.49	3165	1.0
y_mean[1409]	-0.63	6.9e-4	0.04	-0.7	-0.65	-0.62	-0.6	-0.55	3246	1.0
y_mean[1410]	-0.13	4.9e-4	0.03	-0.18	-0.15	-0.13	-0.11	-0.08	2865	1.0
y_mean[1411]	-0.47	5.3e-4	0.03	-0.52	-0.49	-0.47	-0.45	-0.41	2980	1.0
y_mean[1412]	-0.44	4.6e-4	0.03	-0.49	-0.45	-0.44	-0.42	-0.39	3071	1.0
y_mean[1413]	0.01	4.6e-4	0.03	-0.04-	4.7e-3	0.01	0.03	0.07	3567	1.0
y_mean[1414]	-0.32	5.2e-4	0.03	-0.37	-0.34	-0.32	-0.3	-0.26	2846	1.0
y_mean[1415]	1.03	9.8e-4	0.06	0.92	0.99	1.03	1.07	1.15	3740	1.0
y_mean[1416]	-0.28	7.1e-4	0.05	-0.37	-0.31	-0.28	-0.25	-0.19	4014	1.0
y_mean[1417]	1.5	8.2e-4	0.05	1.4	1.47	1.5	1.54	1.6	4035	1.0
y_mean[1418]	-0.41	4.6e-4	0.03	-0.46	-0.42	-0.41	-0.39	-0.36	2972	1.0
y_mean[1419]	-0.14	5.5e-4	0.03	-0.2	-0.16	-0.14	-0.12	-0.08	3469	1.0
y_mean[1420]	-0.3	7.2e-4	0.04	-0.38	-0.32	-0.3	-0.27	-0.21	3420	1.0
y_mean[1421]	-0.61	5.8e-4	0.03	-0.68	-0.63	-0.61	-0.59	-0.54	3471	1.0
y_mean[1422]	0.42	5.0e-4	0.03	0.36	0.4	0.42	0.44	0.48	3737	1.0
y_mean[1423]	-0.09	4.2e-4	0.02	-0.13	-0.1	-0.09	-0.07	-0.04	3028	1.0
y_mean[1424]	-0.53	3.8e-4	0.02	-0.57	-0.54	-0.53	-0.51	-0.49	2929	1.0
y_mean[1425]	-0.52	4.2e-4	0.02	-0.56	-0.53	-0.52	-0.5	-0.47	2958	1.0
y_mean[1426]	-0.21	6.2e-4	0.03	-0.27	-0.23	-0.21	-0.19	-0.14	2744	1.0
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y_mean[1427]	-0.28	5.3e-4	0.03	-0.33	-0.3	-0.28	-0.26	-0.22	2908	1.0
y_mean[1428]	-0.18	7.6e-4	0.05	-0.27	-0.21	-0.18	-0.15	-0.09	3732	1.0
y_mean[1429]	1.87	7.4e-4	0.05	1.79	1.84	1.87	1.9	1.96	3830	1.0
y_mean[1430]	0.03	4.5e-4	0.03	-0.02	0.01	0.03	0.05	0.09	3539	1.0
y_mean[1431]	0.69	6.8e-4	0.04	0.61	0.67	0.7	0.72	0.78	3797	1.0
y_mean[1432]	-0.24	5.3e-4	0.03	-0.3	-0.27	-0.24	-0.22	-0.18	3360	1.0
y_mean[1433]	-0.45	4.4e-4	0.02	-0.49	-0.46	-0.45	-0.43	-0.4	2955	1.0
y_mean[1434]	0.41	6.1e-4	0.04	0.33	0.38	0.41	0.43	0.48	3668	1.0
y_mean[1435]	-0.24	5.4e-4	0.03	-0.3	-0.26	-0.24	-0.22	-0.17	3427	1.0
y_mean[1436]	-0.24	6.4e-4	0.03	-0.31	-0.26	-0.24	-0.22	-0.17	2767	1.0
y_mean[1437]	-0.82	7.9e-4	0.05	-0.92	-0.85	-0.82	-0.79	-0.73	3496	1.0
y_mean[1438]	-0.34	6.4e-4	0.04	-0.42	-0.36	-0.34	-0.31	-0.27	3564	1.0
y_mean[1439]	-0.26	5.7e-4	0.03	-0.33	-0.28	-0.26	-0.24	-0.2	3385	1.0
y_mean[1440]	-0.42	8.6e-4	0.05	-0.51	-0.46	-0.42	-0.39	-0.33	2996	1.0
y_mean[1441]	-0.24	5.2e-4	0.03	-0.3	-0.26	-0.24	-0.22	-0.18	3357	1.0
y_mean[1441] y_mean[1442]	-0.63	5.2e 4 5.9e-4	0.03	-0.7	-0.65	-0.63	-0.61	-0.56	3514	1.0
y_mean[1443]	-0.03	4.7e-4	0.04	-0.7	-0.03	-0.03	-0.01	-0.14	3367	1.0
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y_mean[1444]	-0.37	3.8e-4	0.02	-0.41	-0.38	-0.37	-0.35	-0.32	3270	
y_mean[1445]	-0.38	5.3e-4	0.03	-0.44	-0.41	-0.39	-0.36	-0.32	3364	1.0
y_mean[1446]	-0.17	5.3e-4	0.03	-0.23	-0.19	-0.17	-0.15	-0.12	2993	1.0
y_mean[1447]	-0.27	6.1e-4	0.04	-0.34	-0.3	-0.27	-0.25	-0.2	3486	1.0
y_mean[1448]	0.59	5.2e-4	0.03	0.53	0.57	0.59	0.62	0.66	3952	1.0
y_mean[1449]	-0.72	5.7e-4	0.04	-0.79	-0.74	-0.72	-0.69	-0.64	3921	1.0
y_mean[1450]	-0.73	5.4e-4	0.03	-0.79	-0.75	-0.73	-0.7	-0.66	3920	1.0
y_mean[1451]	0.47	4.7e-4	0.03	0.41	0.45	0.47	0.49	0.53	4133	1.0
y_mean[1452]	-0.25	1.0e-3	0.05	-0.35	-0.28	-0.25	-0.21	-0.15	2518	1.0
y_mean[1453]	2.07	8.2e-4	0.06	1.95	2.03	2.07	2.11	2.18	5561	1.0
y_mean[1454]	2.35	1.4e-3	0.08	2.19	2.3	2.35	2.41	2.51	3385	1.0
y_mean[1455]	0.09	9.5e-4		1.0e-3	0.06	0.09	0.13	0.19	2617	1.0
y_mean[1456]	-0.39	5.3e-4	0.03	-0.44	-0.41	-0.39	-0.37	-0.33	3248	1.0
y_mean[1457]	-0.11	6.0e-4	0.03	-0.17	-0.13	-0.11	-0.09	-0.04	3101	1.0
y_mean[1458]	-0.59	4.9e-4	0.03	-0.65	-0.61	-0.59	-0.58	-0.54	3475	1.0
y_mean[1459]	-0.08	5.8e-4	0.03	-0.15	-0.11	-0.08	-0.06	-0.02	3347	1.0
y_mean[1460]	2.74	1.3e-3	0.09	2.57	2.68	2.74	2.8	2.91	4323	1.0
y_mean[1461]	-0.64	7.3e-4	0.04	-0.72	-0.67	-0.64	-0.61	-0.56	3340	1.0
y_mean[1462]	-0.19	5.5e-4	0.03	-0.25	-0.21	-0.19	-0.17	-0.12	3604	1.0
y_mean[1463]	-0.4	2.9e-4	0.02	-0.43	-0.41	-0.4	-0.39	-0.36	3746	1.0
y_mean[1464]	-0.15	5.1e-4	0.03	-0.21	-0.17	-0.15	-0.13	-0.09	3499	1.0
y_mean[1465]	-0.36	4.5e-4	0.02	-0.41	-0.38	-0.36	-0.34	-0.31	2947	1.0
y_mean[1466]	0.71	7.3e-4	0.04	0.62	0.68	0.71	0.74	0.79	3703	1.0
y_mean[1467]	0.51	5.0e-4	0.04	0.44	0.49	0.51	0.54	0.59	5168	1.0
y_mean[1468]	0.12	5.6e-4	0.04	0.05	0.09	0.12	0.14	0.18	3904	1.0
y_mean[1469]	0.46	4.7e-4	0.03	0.41	0.44	0.46	0.48	0.52	3819	1.0
y_mean[1470]	0.88	1.2e-3	0.07	0.75	0.84	0.88	0.93	1.01	3116	1.0
y_mean[1471]	0.74	7.9e-4	0.05	0.64	0.7	0.74	0.77	0.83	3540	1.0
y_mean[1472]	-0.58	5.0e-4	0.03	-0.64	-0.6	-0.58	-0.56	-0.52	3521	1.0
y_mean[1473]	-0.61	1.2e-3	0.07	-0.76	-0.66	-0.61	-0.56	-0.46	3580	1.0
y_mean[1474] y_mean[1474]	-0.75	5.8e-4	0.04	-0.82	-0.78	-0.75	-0.73	-0.68	4006	1.0
7 _mcan[1414]	0.10	0.06 4	0.04	0.02	0.70	0.10	0.75	0.00	1000	1.0

y_mean[1475]	-0.05	6.2e-4	0.04	-0.13	-0.08	-0.05	-0.03	0.03	4373	1.0
y_mean[1476]	-0.56	4.6e-4	0.03	-0.61	-0.58	-0.56	-0.54	-0.51	3347	1.0
y_mean[1477]	-0.64	8.2e-4	0.05	-0.73	-0.67	-0.64	-0.61	-0.55	3398	1.0
y_mean[1478]	0.23	5.8e-4	0.03	0.17	0.2	0.23	0.25	0.29	3024	1.0
y_mean[1479]	1.07	7.8e-4	0.05	0.99	1.04	1.07	1.1	1.17	3416	1.0
y_mean[1480]	-0.51	3.8e-4	0.02	-0.55	-0.52	-0.51	-0.5	-0.47	2977	1.0
y_mean[1481]	-0.4	7.8e-4	0.04	-0.48	-0.43	-0.41	-0.38	-0.33	2571	1.0
y_mean[1482]	0.12	4.4e-4	0.03	0.07	0.1	0.12	0.14	0.18	4159	1.0
y_mean[1483]	0.64	7.7e-4	0.05	0.54	0.6	0.64	0.67	0.74	4451	1.0
y_mean[1484]	-0.03	3.5e-4	0.02	-0.07	-0.05	-0.03		8.3e-3	3426	1.0
y_mean[1485]	1.6	5.8e-4	0.04	1.52	1.57	1.6	1.63	1.68	5178	1.0
y_mean[1486]	0.13	7.0e-4	0.04	0.04	0.1	0.13	0.15	0.21	3537	1.0
y_mean[1487]	-0.62	5.6e-4	0.03	-0.68	-0.64	-0.62	-0.6	-0.55	3532	1.0
y_mean[1488]	1.28	6.0e-4	0.03	1.2	1.25	1.28	1.31	1.37	5049	1.0
y_mean[1489]	0.2	4.4e-4	0.03	0.15	0.18	0.2	0.22	0.25	3875	1.0
y_mean[1490]	-0.11	6.3e-4	0.03	-0.18	-0.14	-0.11	-0.09	-0.05	3131	1.0
y_mean[1491]	-0.11	5.9e-4	0.04	-0.18	-0.14	-0.11	-0.03	-0.26	3406	1.0
y_mean[1491] y_mean[1492]	-0.63	6.9e-4	0.03	-0.4	-0.66	-0.63	-0.51	-0.55	3466	1.0
• =	-0.33	5.9e-4	0.04	-0.71	-0.35	-0.03	-0.3	-0.35	3127	1.0
y_mean[1493]										
y_mean[1494]	-0.06	7.0e-4	0.04	-0.14	-0.09	-0.06	-0.03	0.02	3580	1.0
y_mean[1495]	0.24	4.4e-4	0.03	0.19	0.23	0.24	0.26	0.3	4012	1.0
y_mean[1496]	-0.52	4.7e-4	0.03	-0.57	-0.54	-0.52	-0.5	-0.47	3074	1.0
y_mean[1497]	-0.34	3.6e-4	0.02	-0.38	-0.36	-0.34	-0.33	-0.3	3403	1.0
y_mean[1498]	-0.48	4.6e-4	0.03	-0.53	-0.49	-0.48	-0.46	-0.42	3255	1.0
y_mean[1499]	-0.09	6.3e-4	0.04	-0.16	-0.12	-0.09	-0.07	-0.02	3337	1.0
y_mean[1500]	-0.16	8.3e-4	0.04	-0.25	-0.19	-0.16	-0.13	-0.07	2724	1.0
y_mean[1501]	-0.15	6.2e-4	0.04	-0.22	-0.17	-0.15	-0.12	-0.07	3596	1.0
y_mean[1502]	2.42	1.3e-3	0.08	2.26	2.37	2.42	2.48	2.58	3986	1.0
y_mean[1503]	-0.42	7.4e-4	0.04	-0.5	-0.45	-0.42	-0.39	-0.34	3401	1.0
y_mean[1504]	-0.53	4.3e-4	0.02	-0.58	-0.55	-0.53	-0.52	-0.49	3113	1.0
y_mean[1505]	-0.75	5.8e-4	0.04	-0.82	-0.77	-0.75	-0.73	-0.68	3636	1.0
y_mean[1506]	-0.04	4.5e-4	0.03	-0.09	-0.06	-0.04	-0.03	7.2e-3	3146	1.0
y_mean[1507]	-0.68	6.0e-4	0.04	-0.75	-0.7	-0.68	-0.66	-0.61	3422	1.0
y_mean[1508]	-0.53	3.8e-4	0.02	-0.57	-0.54	-0.53	-0.51	-0.48	2978	1.0
y_mean[1509]	-0.53	3.9e-4	0.02	-0.57	-0.55	-0.53	-0.52	-0.49	3171	1.0
y_mean[1510]	2.31	1.2e-3	0.08	2.16	2.26	2.31	2.36	2.46	4249	1.0
y_mean[1511]	1.21	6.4e-4	0.04	1.13	1.18	1.21	1.24	1.3	4870	1.0
y_mean[1512]	0.14	6.0e-4	0.04	0.07	0.12	0.14	0.16	0.21	3467	1.0
y_mean[1513]	-0.54	3.9e-4	0.02	-0.58	-0.55	-0.54	-0.52	-0.49	3214	1.0
y_mean[1514]	0.27	8.4e-4	0.05	0.17	0.24	0.27	0.31	0.37	3738	1.0
y_mean[1515]	-0.53	6.1e-4	0.04	-0.59	-0.55	-0.52	-0.5	-0.46	3380	1.0
y_mean[1516]	-0.46	4.3e-4	0.03	-0.51	-0.47	-0.46	-0.44	-0.41	3616	1.0
y_mean[1517]	-0.34	4.6e-4	0.03	-0.39	-0.36	-0.34	-0.32	-0.29	3004	1.0
y_mean[1518]	1.73	9.2e-4	0.05	1.63	1.7	1.74	1.77	1.84	3520	1.0
y_mean[1519]	-0.41	5.0e-4	0.03	-0.46	-0.43	-0.41	-0.39	-0.36	3030	1.0
y_mean[1520]	0.45	4.8e-4	0.03	0.39	0.43	0.45	0.47	0.51	3777	1.0
y_mean[1521]	-0.68	5.9e-4	0.03	-0.75	-0.71	-0.68	-0.66	-0.61	3416	1.0
y_mean[1522]	-0.22	8.0e-4	0.04	-0.29	-0.24	-0.22	-0.19	-0.13	2499	1.0
÷ -										

```
-0.11
                                                    -0.08
y_mean[1523]
                    -0.06
                           4.3e-4
                                     0.03
                                                           -0.06
                                                                   -0.05
                                                                           -0.01
                                                                                    3448
                                                                                             1.0
                    -0.43
                           4.9e-4
                                     0.03
                                            -0.48
                                                    -0.45
                                                           -0.43
                                                                   -0.41
                                                                           -0.37
                                                                                    3339
y_mean[1524]
                                                                                             1.0
y_mean[1525]
                           7.9e-4
                                     0.05
                                             0.99
                                                             1.07
                     1.07
                                                     1.04
                                                                     1.1
                                                                            1.16
                                                                                    3404
                                                                                             1.0
                     0.75
                           4.2e-4
                                     0.03
                                             0.69
                                                     0.73
                                                            0.74
                                                                    0.76
                                                                             0.8
                                                                                    4121
                                                                                             1.0
y_mean[1526]
y_mean[1527]
                   -0.31
                           6.3e-4
                                     0.04
                                            -0.38
                                                    -0.33
                                                           -0.31
                                                                   -0.28
                                                                           -0.23
                                                                                    3712
                                                                                             1.0
                    -0.25
                           8.0e-4
                                     0.04
                                            -0.33
                                                    -0.27
                                                           -0.25
                                                                   -0.22
                                                                           -0.17
                                                                                    2452
y_mean[1528]
                                                                                             1.0
                     0.81
                                             0.72
y_mean[1529]
                           7.5e-4
                                     0.05
                                                     0.78
                                                            0.81
                                                                    0.84
                                                                            0.91
                                                                                    4002
                                                                                             1.0
y_mean[1530]
                   -0.12
                           7.4e-4
                                             -0.2
                                                    -0.15
                                                           -0.12
                                                                    -0.1
                                                                           -0.05
                                     0.04
                                                                                    2850
                                                                                             1.0
                    -0.54
                           5.3e-4
                                     0.03
                                             -0.6
                                                    -0.56
                                                           -0.54
                                                                   -0.52
                                                                           -0.48
                                                                                    3352
                                                                                             1.0
y_mean[1531]
                    -0.59
                           4.7e-4
                                     0.03
                                            -0.64
                                                    -0.61
                                                           -0.59
                                                                           -0.53
y_mean[1532]
                                                                   -0.57
                                                                                    3447
                                                                                             1.0
                    -0.72
                           5.6e-4
                                     0.03
                                            -0.78
                                                    -0.74
                                                           -0.72
                                                                   -0.69
                                                                           -0.65
                                                                                    3557
y_mean[1533]
                                                                                             1.0
                    -0.68
                           5.7e-4
                                     0.03
                                            -0.74
                                                     -0.7
                                                           -0.68
                                                                   -0.66
                                                                           -0.61
                                                                                    3552
                                                                                             1.0
y_mean[1534]
                     0.15
                           6.0e-4
                                     0.04
                                             0.07
                                                     0.12
                                                            0.15
                                                                    0.17
                                                                            0.23
                                                                                    4007
y_mean[1535]
                                                                                             1.0
                                             0.31
                                                     0.37
                                                             0.4
                      0.4
                           8.1e-4
                                     0.04
                                                                    0.43
                                                                            0.49
                                                                                    3006
y_mean[1536]
                                                                                             1.0
                    -0.11
                           4.2e-4
                                     0.03
                                            -0.16
                                                    -0.12
                                                           -0.11
                                                                   -0.09
                                                                           -0.06
y_mean[1537]
                                                                                    3646
                                                                                             1.0
                     -0.4
                                                             -0.4
                           6.4e-4
                                     0.03
                                            -0.46
                                                    -0.42
                                                                   -0.37
                                                                           -0.33
                                                                                    2794
                                                                                             1.0
y_mean[1538]
y_mean[1539]
                    -0.12
                           6.1e-4
                                     0.03
                                            -0.18
                                                    -0.14
                                                           -0.12
                                                                   -0.09
                                                                           -0.05
                                                                                    3078
                                                                                             1.0
y_mean[1540]
                     1.35
                           1.1e-3
                                     0.07
                                             1.21
                                                      1.3
                                                            1.35
                                                                     1.4
                                                                            1.49
                                                                                    4073
                                                                                             1.0
y_mean[1541]
                      0.6
                           4.6e-4
                                     0.03
                                             0.55
                                                     0.58
                                                              0.6
                                                                    0.62
                                                                            0.66
                                                                                    4329
                                                                                             1.0
y_mean[1542]
                    -0.03
                           4.8e-4
                                     0.03
                                            -0.08
                                                    -0.05
                                                           -0.03-9.1e-3
                                                                            0.03
                                                                                    3513
                                                                                             1.0
                                                           -0.27
                    -0.27
                           7.0e-4
                                     0.04
                                            -0.35
                                                                   -0.24
                                                                           -0.19
y_mean[1543]
                                                    -0.29
                                                                                    3542
                                                                                             1.0
                    -0.04
                           4.3e-4
                                     0.02
                                            -0.08
                                                    -0.05
                                                           -0.04
                                                                   -0.02
                                                                            0.01
                                                                                    3317
y_mean[1544]
                                                                                             1.0
y_mean[1545]
                     0.85
                           6.5e-4
                                     0.04
                                                            0.85
                                                                            0.93
                                             0.78
                                                     0.83
                                                                    0.88
                                                                                    3579
                                                                                             1.0
                    -0.49
                           5.6e-4
                                     0.03
                                            -0.55
                                                    -0.51
                                                           -0.49
                                                                   -0.47
                                                                           -0.43
                                                                                    3003
y_mean[1546]
                                                                                             1.0
y_mean[1547]
                     -0.5
                           7.6e-4
                                     0.04
                                            -0.58
                                                    -0.53
                                                             -0.5
                                                                   -0.47
                                                                           -0.42
                                                                                    2681
                                                                                             1.0
                   -0.44
                           5.4e-4
                                     0.03
                                            -0.51
                                                    -0.46
                                                           -0.44
                                                                   -0.42
                                                                           -0.38
                                                                                    3346
y_mean[1548]
                                                                                             1.0
                                     0.04
                                            -0.57
                                                                           -0.42
                     -0.5
                           6.5e-4
                                                    -0.52
                                                             -0.5
                                                                   -0.47
                                                                                    3228
y_mean[1549]
                                                                                             1.0
y_mean[1550]
                 -8.2e-3
                           5.4e-4
                                     0.03
                                            -0.07
                                                    -0.03-8.5e-3
                                                                    0.01
                                                                            0.06
                                                                                    3634
                                                                                             1.0
                                            -0.01
                                                            0.05
                                                                            0.11
                     0.05
                           4.9e-4
                                     0.03
                                                     0.03
                                                                    0.07
                                                                                    3915
                                                                                             1.0
y_mean[1551]
y_mean[1552]
                     -0.1
                           4.1e-4
                                     0.02
                                            -0.15
                                                    -0.12
                                                             -0.1
                                                                   -0.08
                                                                           -0.05
                                                                                    3413
                                                                                             1.0
                    -0.36
                           8.3e-4
                                     0.05
                                            -0.45
                                                    -0.39
                                                           -0.36
                                                                   -0.33
                                                                           -0.27
                                                                                    3157
                                                                                             1.0
y_mean[1553]
                                                           -0.76
y_mean[1554]
                    -0.76
                           5.8e-4
                                     0.04
                                            -0.83
                                                    -0.78
                                                                   -0.74
                                                                           -0.69
                                                                                    3713
                                                                                             1.0
                                     0.04
                                            -0.72
                                                                           -0.57
y_mean[1555]
                    -0.65
                           6.6e-4
                                                    -0.67
                                                           -0.65
                                                                   -0.62
                                                                                    3516
                                                                                             1.0
                     0.26
                           6.1e-4
                                     0.03
                                              0.2
                                                     0.24
                                                            0.26
                                                                    0.29
                                                                            0.33
                                                                                    3097
                                                                                             1.0
y_mean[1556]
                    -0.45
                           4.5e-4
                                     0.03
                                             -0.5
                                                    -0.47
                                                           -0.45
                                                                   -0.43
                                                                            -0.4
y mean[1557]
                                                                                    3122
                                                                                             1.0
                    -0.61
                           8.4e-4
                                            -0.71
                                                    -0.65
                                                           -0.61
                                                                           -0.51
y_mean[1558]
                                     0.05
                                                                   -0.58
                                                                                    3627
                                                                                             1.0
                                                             1.22
                     1.22
                           6.3e-4
                                     0.04
                                             1.13
                                                     1.19
                                                                    1.25
                                                                            1.31
                                                                                    4892
y_mean[1559]
                                                                                             1.0
y_mean[1560]
                     0.08
                           5.4e-4
                                     0.03
                                             0.02
                                                     0.06
                                                            0.08
                                                                     0.1
                                                                            0.14
                                                                                    3333
                                                                                             1.0
                     0.55
                           4.9e-4
                                     0.04
                                             0.48
                                                     0.53
                                                            0.55
                                                                    0.57
                                                                            0.62
                                                                                    5094
                                                                                             1.0
y_mean[1561]
                    -0.14
                           4.4e-4
                                     0.03
                                            -0.19
                                                    -0.15
                                                           -0.14
                                                                   -0.12
                                                                           -0.08
y_mean[1562]
                                                                                    3828
                                                                                             1.0
                                            -0.48
                    -0.43
                           4.7e-4
                                     0.03
                                                    -0.45
                                                           -0.43
                                                                   -0.41
                                                                           -0.38
                                                                                    3093
                                                                                             1.0
y_mean[1563]
                     0.49
                           4.6e-4
                                     0.03
                                             0.43
                                                            0.49
y_mean[1564]
                                                     0.47
                                                                    0.51
                                                                            0.55
                                                                                    4132
                                                                                             1.0
y_mean[1565]
                    -0.24
                           6.1e-4
                                     0.04
                                            -0.31
                                                    -0.26
                                                           -0.24
                                                                   -0.22
                                                                           -0.17
                                                                                    3510
                                                                                             1.0
                 -7.9e-3
                           4.5e-4
                                            -0.06
                                                    -0.03-8.2e-3
                                                                            0.05
                                     0.03
                                                                    0.01
                                                                                    3916
y_mean[1566]
                                                                                             1.0
                     0.52
                           4.4e-4
                                     0.03
                                                            0.52
                                                                            0.58
y_mean[1567]
                                             0.47
                                                      0.5
                                                                    0.54
                                                                                    4069
                                                                                             1.0
                                                           -0.28
y_mean[1568]
                   -0.28
                           6.5e-4
                                     0.04
                                            -0.35
                                                     -0.3
                                                                   -0.25
                                                                            -0.2
                                                                                    3468
                                                                                             1.0
y_mean[1569]
                     0.54
                           4.3e-4
                                     0.03
                                             0.49
                                                     0.52
                                                             0.54
                                                                    0.56
                                                                             0.6
                                                                                    4084
                                                                                             1.0
y_mean[1570]
                    -0.31
                           6.1e-4
                                     0.03
                                            -0.37
                                                    -0.33
                                                           -0.31
                                                                   -0.28
                                                                           -0.24
                                                                                    2734
                                                                                             1.0
```

y_mean[1571]	-0.54	3.8e-4	0.02	-0.58	-0.56	-0.54	-0.53	-0.5	3140	1.0
y_mean[1572]	-0.56	4.3e-4	0.02	-0.6	-0.57	-0.56	-0.54	-0.51	3272	1.0
y_mean[1573]	-0.45	1.0e-3	0.06	-0.56	-0.49	-0.45	-0.41	-0.34	3250	1.0
y_mean[1574]	1.1	7.8e-4	0.05	1.0	1.07	1.1	1.14	1.21	4455	1.0
y_mean[1575]	-0.17	4.6e-4	0.03	-0.23	-0.19	-0.17	-0.16	-0.12	3691	1.0
y_mean[1576]	-0.23	7.1e-4	0.04	-0.31	-0.26	-0.23	-0.21	-0.16	2758	1.0
y_mean[1577]	2.13	1.1e-3	0.08	1.98	2.07	2.13	2.18	2.28	5085	1.0
y_mean[1578]	-0.13	6.1e-4	0.03	-0.2	-0.15	-0.13	-0.11	-0.07	3024	1.0
y_mean[1579]	0.03	5.2e-4	0.03		3.9e-3	0.03	0.05	0.1	4390	1.0
y_mean[1580]	-0.58	4.4e-4	0.03	-0.63	-0.6	-0.58	-0.56	-0.53	3419	1.0
y_mean[1581]	2.53	1.2e-3	0.08	2.37	2.48	2.53	2.58	2.68	4362	1.0
y_mean[1582]	-0.37	3.3e-4	0.02	-0.4	-0.38	-0.37	-0.35	-0.33	3529	1.0
y_mean[1583]	-0.72	5.3e-4	0.03	-0.78	-0.74	-0.72	-0.69	-0.65	3860	1.0
y_mean[1584]	2.12	1.1e-3	0.08	1.97	2.07	2.12	2.18	2.28	5159	1.0
y_mean[1585]	0.18	7.2e-4	0.04	0.09	0.15	0.18	0.21	0.26	3889	1.0
y_mean[1586] y_mean[1586]	-0.15	4.8e-4	0.04	-0.2	-0.17	-0.15	-0.14	-0.1	2926	1.0
y_mean[1587]	-0.13	4.3e-4	0.03	-0.09	-0.17	-0.13		8.1e-3	3290	1.0
y_mean[1588]	1.55	4.5e-4 8.5e-4	0.02	1.42	1.5	1.55	1.59	1.67	5416	1.0
• =	-0.55	4.1e-4	0.00	-0.6	-0.57	-0.55	-0.54	-0.51		1.0
y_mean[1589]									3356	
y_mean[1590]	0.08	4.7e-4	0.03	0.03	0.06	0.08	0.09	0.13	3174	1.0
y_mean[1591]	-0.66	1.1e-3	0.07	-0.79	-0.71	-0.66	-0.62	-0.53	3718	1.0
y_mean[1592]	-0.52	4.1e-4	0.02	-0.57	-0.54	-0.52	-0.51	-0.48	2991	1.0
y_mean[1593]	-0.55	3.9e-4	0.02	-0.59	-0.56	-0.55	-0.53	-0.5	3173	1.0
y_mean[1594]	-0.73	5.3e-4	0.03	-0.79	-0.75	-0.73	-0.71	-0.66	3796	1.0
y_mean[1595]	1.69	7.2e-4	0.05	1.59	1.65	1.69	1.72	1.78	4283	1.0
y_mean[1596]	0.07	4.9e-4	0.03	0.01	0.05	0.07	0.09	0.12	3197	1.0
y_mean[1597]	-0.61	5.2e-4	0.03	-0.67	-0.63	-0.61	-0.59	-0.55	3500	1.0
y_mean[1598]	-0.18	5.0e-4	0.03	-0.24	-0.2	-0.18	-0.16	-0.12	3277	1.0
y_mean[1599]	0.02	3.6e-4	0.02		7.2e-3	0.02	0.04	0.06	3493	1.0
y_mean[1600]	-0.5	4.3e-4	0.02	-0.55	-0.51	-0.5	-0.48	-0.45	3294	1.0
y_mean[1601]	1.32	6.1e-4	0.04	1.24	1.29	1.32	1.35	1.4	4763	1.0
y_mean[1602]	0.77	7.7e-4	0.05	0.68	0.74	0.77	0.8	0.86	3474	1.0
y_mean[1603]	2.76	1.2e-3	0.08	2.61	2.71	2.76	2.81	2.91	4110	1.0
y_mean[1604]	0.4	6.6e-4	0.04	0.32	0.37	0.4	0.43	0.48	3948	1.0
y_mean[1605]	0.18	3.9e-4	0.02	0.13	0.16	0.18	0.2	0.23	3873	1.0
y_mean[1606]	-0.37	5.5e-4	0.03	-0.43	-0.39	-0.37	-0.35	-0.31	3462	1.0
y_mean[1607]	0.92	1.0e-3	0.06	0.8	0.88	0.92	0.96	1.05	3987	1.0
y_mean[1608]	0.15	3.7e-4	0.02	0.1	0.13	0.15	0.16	0.19	3727	1.0
y_mean[1609]	-0.44	9.3e-4	0.05	-0.54	-0.47	-0.44	-0.41	-0.34	2802	1.0
y_mean[1610]	0.7	9.2e-4	0.06	0.57	0.66	0.7	0.74	0.82	4847	1.0
y_mean[1611]	0.59	7.6e-4	0.04	0.5	0.56	0.59	0.62	0.68	3379	1.0
y_mean[1612]	-0.48	4.1e-4	0.02	-0.53	-0.5	-0.48	-0.47	-0.44	2964	1.0
y_mean[1613]	0.14	6.1e-4	0.04	0.07	0.11	0.14	0.16	0.21	3651	1.0
y_mean[1614]	-0.65	6.7e-4	0.04	-0.73	-0.68	-0.65	-0.63	-0.58	3403	1.0
y_mean[1615]	-0.42	2.0e-3	0.12	-0.65	-0.5	-0.42	-0.34	-0.18	3633	1.0
y_mean[1616]	-0.71	1.0e-3	0.06	-0.84	-0.76	-0.71	-0.67	-0.59	3865	1.0
y_mean[1617]	-0.77	6.3e-4	0.04	-0.85	-0.8	-0.78	-0.75	-0.7	3782	1.0
y_mean[1618]	-0.49	4.3e-4	0.02	-0.54	-0.5	-0.49	-0.47	-0.44	3273	1.0
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-0.08
                                                   -0.05
                                                                   -0.02
y_mean[1619]
                   -0.03
                           4.1e-4
                                     0.02
                                                           -0.03
                                                                            0.01
                                                                                    3467
                                                                                            1.0
                     -0.3
                           6.0e-4
                                     0.03
                                            -0.36
                                                   -0.32
                                                            -0.3
                                                                   -0.28
                                                                          -0.24
                                                                                    2640
y_mean[1620]
                                                                                            1.0
y_mean[1621]
                                     0.02
                                            -0.12
                                                   -0.09
                                                                   -0.06
                   -0.07
                           4.2e-4
                                                           -0.07
                                                                          -0.03
                                                                                    3253
                                                                                            1.0
y_mean[1622]
                   -0.05
                           4.6e-4
                                     0.03
                                            -0.11
                                                   -0.07
                                                           -0.05
                                                                   -0.03 9.9e-3
                                                                                    4263
                                                                                            1.0
                                     0.25
                                             7.18
y_mean[1623]
                    7.68
                           3.9e-3
                                                     7.51
                                                            7.68
                                                                    7.85
                                                                            8.18
                                                                                    4333
                                                                                            1.0
                   -0.16
                           4.4e-4
                                     0.03
                                            -0.22
                                                   -0.18
                                                           -0.16
                                                                   -0.15
                                                                           -0.11
                                                                                    3790
y_mean[1624]
                                                                                            1.0
y_mean[1625]
                   -0.56
                           4.3e-4
                                     0.02
                                             -0.6
                                                   -0.57
                                                           -0.56
                                                                   -0.54
                                                                          -0.51
                                                                                    3259
                                                                                            1.0
y_mean[1626]
                           8.4e-4
                   -0.33
                                     0.04
                                            -0.41
                                                   -0.36
                                                           -0.33
                                                                    -0.3
                                                                           -0.25
                                                                                    2437
                                                                                            1.0
                    -0.1
                           5.0e-4
                                     0.03
                                            -0.15
                                                   -0.12
                                                            -0.1
                                                                   -0.08
                                                                          -0.05
                                                                                    2902
                                                                                            1.0
y_mean[1627]
y_mean[1628]
                   -0.07
                           4.2e-4
                                     0.02
                                            -0.12
                                                   -0.09
                                                           -0.07
                                                                           -0.03
                                                                                    3237
                                                                   -0.06
                                                                                            1.0
                   -0.19
                           5.1e-4
                                     0.03
                                            -0.24
                                                     -0.2
                                                           -0.19
                                                                   -0.17
                                                                           -0.13
                                                                                    3033
y_mean[1629]
                                                                                            1.0
                   -0.31
                           6.2e-4
                                     0.04
                                            -0.38
                                                   -0.33
                                                           -0.31
                                                                   -0.28
                                                                           -0.23
                                                                                    3583
y_mean[1630]
                                                                                            1.0
y_mean[1631]
                   -0.27
                           8.1e-4
                                     0.05
                                            -0.36
                                                     -0.3
                                                           -0.27
                                                                           -0.16
                                                                                    4132
                                                                   -0.23
                                                                                            1.0
                   -0.53
                                                           -0.53
                           3.8e-4
                                     0.02
                                            -0.58
                                                    -0.55
                                                                   -0.52
                                                                           -0.49
                                                                                    3165
y_mean[1632]
                                                                                            1.0
                    0.67
                           6.4e-4
                                     0.04
                                             0.59
                                                     0.64
                                                            0.67
                                                                    0.69
                                                                            0.74
                                                                                    3918
y_mean[1633]
                                                                                            1.0
                           5.9e-4
                    0.06
                                     0.03-1.1e-3
                                                     0.04
                                                            0.06
                                                                    0.08
                                                                            0.12
                                                                                    2907
                                                                                            1.0
y_mean[1634]
y_mean[1635]
                   -0.45
                           4.5e-4
                                     0.02
                                           -0.49
                                                   -0.46
                                                           -0.45
                                                                   -0.43
                                                                            -0.4
                                                                                    2959
                                                                                            1.0
y_mean[1636]
                                     0.03
                    0.57
                           4.7e-4
                                             0.51
                                                     0.55
                                                            0.57
                                                                    0.59
                                                                            0.64
                                                                                    4849
                                                                                            1.0
y_mean[1637]
                   -0.47
                           4.7e-4
                                     0.02
                                            -0.52
                                                   -0.49
                                                           -0.47
                                                                   -0.45
                                                                           -0.42
                                                                                    2719
                                                                                            1.0
y_mean[1638]
                   -0.09
                           4.2e-4
                                     0.02
                                            -0.13
                                                     -0.1
                                                           -0.09
                                                                   -0.07
                                                                           -0.04
                                                                                    3014
                                                                                            1.0
                   -0.64
                                     0.04
                                            -0.72
                                                           -0.64
                                                                   -0.62
                                                                           -0.56
y_mean[1639]
                           7.1e-4
                                                   -0.67
                                                                                    3349
                                                                                            1.0
                   -0.45
                           3.3e-4
                                     0.02
                                            -0.49
                                                    -0.46
                                                           -0.45
                                                                   -0.44
                                                                           -0.41
                                                                                    3613
y_mean[1640]
                                                                                            1.0
                   -0.21
                           4.6e-4
                                            -0.26
                                                   -0.23
                                                           -0.21
                                                                           -0.15
y_mean[1641]
                                     0.03
                                                                   -0.19
                                                                                    3373
                                                                                            1.0
                   -0.51
                           3.9e-4
                                     0.02
                                            -0.55
                                                   -0.52
                                                           -0.51
                                                                   -0.49
                                                                           -0.47
                                                                                    3025
y_mean[1642]
                                                                                            1.0
y_mean[1643]
                   -0.05
                           6.4e-4
                                     0.04
                                            -0.12
                                                   -0.08
                                                           -0.05
                                                                   -0.03
                                                                            0.02
                                                                                    3319
                                                                                            1.0
                   -0.12
                           5.1e-4
                                     0.03
                                            -0.17
                                                   -0.14
                                                           -0.12
                                                                    -0.1
                                                                           -0.06
                                                                                    2895
y_mean[1644]
                                                                                            1.0
                    2.15
                                     0.06
                                             2.03
                                                                            2.27
                           9.3e-4
                                                     2.11
                                                            2.15
                                                                    2.19
                                                                                    4316
y_mean[1645]
                                                                                            1.0
y_mean[1646]
                   -0.45
                           4.6e-4
                                     0.03
                                             -0.5
                                                   -0.47
                                                           -0.45
                                                                   -0.43
                                                                            -0.4
                                                                                    3318
                                                                                            1.0
                    0.17
                           4.3e-4
                                             0.12
                                                     0.15
                                                            0.17
                                                                    0.19
                                                                            0.22
                                     0.03
                                                                                    3447
                                                                                            1.0
y_mean[1647]
y_mean[1648]
                   -0.26
                           7.1e-4
                                     0.04
                                            -0.34
                                                   -0.29
                                                           -0.26
                                                                   -0.23
                                                                           -0.18
                                                                                    3467
                                                                                            1.0
                   -0.12
                           4.6e-4
                                     0.02
                                            -0.16
                                                   -0.13
                                                           -0.12
                                                                    -0.1
                                                                           -0.07
                                                                                    2843
                                                                                            1.0
y_mean[1649]
                           4.2e-4
                                            -0.17
y_mean[1650]
                   -0.12
                                     0.02
                                                    -0.14
                                                           -0.12
                                                                   -0.11
                                                                           -0.08
                                                                                    2989
                                                                                            1.0
y_mean[1651]
                           4.5e-4
                                            -0.44
                                                   -0.41
                                                           -0.39
                                                                           -0.34
                   -0.39
                                     0.03
                                                                   -0.37
                                                                                    3470
                                                                                            1.0
                    0.25
                           6.0e-4
                                     0.04
                                             0.18
                                                     0.23
                                                            0.25
                                                                    0.28
                                                                            0.33
                                                                                    3935
                                                                                            1.0
y_mean[1652]
                   -0.45
                           6.8e-4
                                     0.04
                                            -0.52
                                                   -0.47
                                                           -0.45
                                                                   -0.42
                                                                           -0.37
                                                                                    3102
y mean[1653]
                                                                                            1.0
                    0.29
                           9.0e-4
                                     0.06
                                             0.17
                                                     0.25
                                                            0.29
                                                                    0.33
                                                                             0.4
y_mean[1654]
                                                                                    4515
                                                                                            1.0
                                            -0.53
                                                           -0.47
                   -0.47
                           5.8e-4
                                     0.03
                                                   -0.49
                                                                   -0.44
                                                                            -0.4
                                                                                    2978
y_mean[1655]
                                                                                            1.0
y_mean[1656]
                    0.04
                           7.4e-4
                                     0.05
                                            -0.06 5.2e-3
                                                            0.04
                                                                    0.07
                                                                            0.14
                                                                                    4433
                                                                                            1.0
                   -0.35
                           3.5e-4
                                     0.02
                                            -0.39
                                                  -0.37
                                                           -0.35
                                                                   -0.34
                                                                           -0.31
                                                                                    3406
                                                                                            1.0
y_mean[1657]
                    0.02
                           5.9e-4
                                     0.03
                                            -0.05-4.2e-3
                                                            0.02
                                                                    0.04
                                                                            0.09
                                                                                    3258
y_mean[1658]
                                                                                            1.0
                   -0.15
                           1.0e-3
                                     0.06
                                            -0.27
                                                   -0.19
                                                           -0.15
                                                                   -0.11
                                                                           -0.04
                                                                                    3509
                                                                                            1.0
y_mean[1659]
y_mean[1660]
                    -0.5
                                            -0.58
                                                   -0.52
                                                            -0.5
                                                                           -0.42
                           7.1e-4
                                     0.04
                                                                   -0.47
                                                                                    3176
                                                                                            1.0
y_mean[1661]
                    0.15
                           6.9e-4
                                     0.04
                                             0.06
                                                     0.12
                                                            0.15
                                                                    0.17
                                                                            0.23
                                                                                    3763
                                                                                            1.0
                   -0.41
                                                           -0.41
                           6.8e-4
                                     0.04
                                            -0.49
                                                   -0.44
                                                                   -0.39
                                                                           -0.34
                                                                                    3221
y_mean[1662]
                                                                                            1.0
                   -0.42
                                     0.03
                                            -0.47
                                                   -0.44
                                                           -0.42
                                                                           -0.37
y_mean[1663]
                           4.8e-4
                                                                   -0.41
                                                                                    3006
                                                                                            1.0
                                                           -0.52
y_mean[1664]
                    -0.52
                           5.8e-4
                                     0.03
                                            -0.59
                                                    -0.55
                                                                    -0.5
                                                                           -0.46
                                                                                    3213
                                                                                            1.0
y_mean[1665]
                     -0.4
                           7.8e-4
                                     0.05
                                             -0.5
                                                   -0.44
                                                           -0.41
                                                                   -0.37
                                                                           -0.31
                                                                                    3562
                                                                                            1.0
y_mean[1666]
                     2.31
                           1.5e-3
                                      0.1
                                             2.12
                                                     2.24
                                                            2.31
                                                                    2.38
                                                                             2.5
                                                                                    4474
                                                                                            1.0
```

```
-0.44
                                                   -0.41
                                                                   -0.39
y_mean[1667]
                     -0.4
                           2.9e-4
                                     0.02
                                                            -0.4
                                                                           -0.37
                                                                                   3999
                                                                                            1.0
                   -0.56
                           4.1e-4
                                     0.02
                                            -0.61
                                                   -0.58
                                                           -0.56
                                                                   -0.55
                                                                           -0.52
                                                                                   3379
y_mean[1668]
                                                                                            1.0
y_mean[1669]
                                     0.03
                                            -0.06
                 -1.1e-3
                           4.7e-4
                                                   -0.02-6.0e-4
                                                                    0.02
                                                                            0.06
                                                                                   3687
                                                                                            1.0
                    0.05
                           3.7e-4
                                     0.02 2.5e-3
                                                     0.03
                                                            0.05
                                                                    0.06
                                                                            0.09
                                                                                   3536
                                                                                            1.0
y_mean[1670]
y_mean[1671]
                      1.3
                           6.2e-4
                                     0.04
                                             1.22
                                                     1.28
                                                             1.3
                                                                    1.33
                                                                            1.39
                                                                                   4648
                                                                                            1.0
                    0.22
                           8.4e-4
                                     0.05
                                             0.13
                                                     0.19
                                                            0.22
                                                                    0.25
                                                                            0.32
                                                                                   3280
y_mean[1672]
                                                                                            1.0
                     1.64
y_mean[1673]
                           1.3e-3
                                     0.09
                                             1.47
                                                     1.58
                                                            1.63
                                                                    1.69
                                                                             1.8
                                                                                   4628
                                                                                            1.0
                   -0.55
                                            -0.61
                                                   -0.57
                                                           -0.55
                                                                   -0.53
                                                                           -0.49
y_mean[1674]
                           5.1e-4
                                     0.03
                                                                                   3562
                                                                                            1.0
                   -0.56
                           4.1e-4
                                     0.02
                                            -0.61
                                                   -0.58
                                                           -0.56
                                                                   -0.55
                                                                           -0.51
                                                                                   3302
                                                                                            1.0
y_mean[1675]
y_mean[1676]
                     1.38
                           6.5e-4
                                     0.04
                                              1.3
                                                     1.35
                                                            1.38
                                                                            1.47
                                                                                   4347
                                                                    1.41
                                                                                            1.0
                   -0.55
                           3.9e-4
                                     0.02
                                             -0.6
                                                   -0.57
                                                           -0.55
                                                                   -0.54
                                                                           -0.51
                                                                                   3238
y_mean[1677]
                                                                                            1.0
                   -0.47
                           7.1e-4
                                     0.04
                                            -0.54
                                                   -0.49
                                                           -0.47
                                                                   -0.44
                                                                          -0.39
                                                                                   2718
                                                                                            1.0
y_mean[1678]
                           4.9e-4
y_mean[1679]
                   -0.42
                                     0.03
                                            -0.47
                                                   -0.44
                                                           -0.42
                                                                    -0.4
                                                                           -0.36
                                                                                   3108
                                                                                            1.0
                   -0.19
                                            -0.23
                           4.4e-4
                                     0.02
                                                     -0.2
                                                           -0.19
                                                                   -0.17
                                                                           -0.14
                                                                                   3192
y_mean[1680]
                                                                                            1.0
                   -0.63
                           8.7e-4
                                     0.05
                                            -0.73
                                                   -0.66
                                                           -0.63
                                                                    -0.6
                                                                           -0.53
y_mean[1681]
                                                                                   3400
                                                                                            1.0
                     -0.7
                           5.4e-4
                                     0.03
                                            -0.76
                                                   -0.72
                                                            -0.7
                                                                   -0.68
                                                                           -0.63
                                                                                   3532
                                                                                            1.0
y_mean[1682]
y_mean[1683]
                   -0.69
                           7.3e-4
                                     0.04
                                            -0.76
                                                   -0.71
                                                           -0.69
                                                                   -0.66
                                                                          -0.61
                                                                                   3061
                                                                                            1.0
                                             0.29
                     0.36
                           5.9e-4
                                     0.04
                                                     0.33
                                                            0.36
                                                                    0.38
                                                                            0.43
                                                                                   3559
                                                                                            1.0
y_mean[1684]
y_mean[1685]
                   -0.43
                           4.7e-4
                                     0.03
                                            -0.48
                                                   -0.45
                                                           -0.43
                                                                   -0.41
                                                                          -0.38
                                                                                   3029
                                                                                            1.0
y_mean[1686]
                   -0.68
                           6.4e-4
                                     0.04
                                            -0.76
                                                   -0.71
                                                           -0.68
                                                                   -0.66
                                                                          -0.61
                                                                                   3494
                                                                                            1.0
                   -0.52
                           3.8e-4
                                     0.02
                                            -0.56
                                                   -0.53
                                                           -0.52
                                                                    -0.5
                                                                          -0.48
y_mean[1687]
                                                                                   3074
                                                                                            1.0
                   -0.52
                           4.9e-4
                                     0.03
                                            -0.57
                                                    -0.54
                                                           -0.52
                                                                    -0.5
                                                                           -0.47
                                                                                   3140
y_mean[1688]
                                                                                            1.0
                   -0.05
                                            -0.09
                                                   -0.06
                                                           -0.05
                                                                   -0.04-9.1e-3
y_mean[1689]
                           3.3e-4
                                     0.02
                                                                                   3899
                                                                                            1.0
                   -0.53
                           3.9e-4
                                     0.02
                                            -0.58
                                                   -0.55
                                                           -0.53
                                                                   -0.52
                                                                          -0.49
                                                                                   3187
y_mean[1690]
                                                                                            1.0
                                             0.15
                                                                            0.26
y_mean[1691]
                    0.21
                           4.5e-4
                                     0.03
                                                     0.19
                                                            0.21
                                                                    0.22
                                                                                   3767
                                                                                            1.0
                   -0.53
                           3.9e-4
                                     0.02
                                            -0.58
                                                   -0.55
                                                           -0.53
                                                                   -0.52
                                                                           -0.49
                                                                                   3057
y_mean[1692]
                                                                                            1.0
                                     0.02
                                                   -0.02-9.4e-3 4.3e-3
                 -9.6e-3
                           3.3e-4
                                            -0.05
                                                                            0.03
                                                                                   3874
y_mean[1693]
                                                                                            1.0
y_mean[1694]
                   -0.55
                           3.9e-4
                                     0.02
                                            -0.59
                                                   -0.56
                                                           -0.55
                                                                   -0.53
                                                                            -0.5
                                                                                   3173
                                                                                            1.0
                                     0.03
                                            -0.44
                                                           -0.37
                                                                   -0.35
                                                                           -0.31
                   -0.37
                           5.8e-4
                                                     -0.4
                                                                                   3530
                                                                                            1.0
y_mean[1695]
y_mean[1696]
                   -0.13
                           4.2e-4
                                     0.02
                                            -0.18
                                                   -0.15
                                                           -0.13
                                                                   -0.12
                                                                           -0.09
                                                                                    2985
                                                                                            1.0
                   -0.28
                           6.5e-4
                                     0.04
                                            -0.36
                                                   -0.31
                                                           -0.28
                                                                   -0.25
                                                                            -0.2
                                                                                   3607
                                                                                            1.0
y_mean[1697]
                           4.4e-4
                                            -0.53
                                                   -0.49
                                                           -0.48
y_mean[1698]
                   -0.48
                                     0.03
                                                                   -0.46
                                                                           -0.43
                                                                                   3321
                                                                                            1.0
y_mean[1699]
                   -0.52
                           6.2e-4
                                     0.04
                                            -0.59
                                                   -0.54
                                                           -0.52
                                                                    -0.5
                                                                           -0.45
                                                                                   3352
                                                                                            1.0
y_mean[1700]
                   -0.75
                           7.2e-4
                                     0.04
                                            -0.83
                                                   -0.78
                                                           -0.75
                                                                   -0.72
                                                                          -0.66
                                                                                   3594
                                                                                            1.0
                   -0.09
                           6.6e-4
                                     0.04
                                            -0.17
                                                   -0.12
                                                           -0.09
                                                                   -0.07
                                                                           -0.02
                                                                                   3460
y mean[1701]
                                                                                            1.0
y_mean[1702]
                   -0.66
                           7.2e-4
                                     0.04
                                            -0.75
                                                   -0.69
                                                           -0.66
                                                                   -0.63
                                                                           -0.57
                                                                                   3499
                                                                                            1.0
                                            -0.31
                                                           -0.25
                   -0.25
                           5.5e-4
                                     0.03
                                                   -0.27
                                                                   -0.23
                                                                          -0.19
                                                                                   3332
y_mean[1703]
                                                                                            1.0
y_mean[1704]
                   -0.07
                           4.2e-4
                                     0.02
                                           -0.12
                                                   -0.09
                                                           -0.07
                                                                   -0.06
                                                                          -0.03
                                                                                   3150
                                                                                            1.0
                   -0.47
                           3.2e-4
                                     0.02
                                           -0.51
                                                   -0.48
                                                           -0.47
                                                                   -0.46
                                                                          -0.43
                                                                                   3817
                                                                                            1.0
y_mean[1705]
                     1.66
                           9.4e-4
                                     0.06
                                             1.54
                                                     1.62
                                                            1.66
                                                                            1.78
y_mean[1706]
                                                                     1.7
                                                                                   4316
                                                                                            1.0
                   -0.05
                           4.5e-4
                                     0.03
                                             -0.1
                                                   -0.07
                                                           -0.05
                                                                   -0.03 9.9e-3
                                                                                   4172
                                                                                            1.0
y_mean[1707]
                    0.08
                                     0.03
                                             0.03
                                                            0.08
                                                                            0.13
y_mean[1708]
                           4.6e-4
                                                     0.06
                                                                     0.1
                                                                                   3224
                                                                                            1.0
y_mean[1709]
                    0.75
                           4.9e-4
                                     0.04
                                             0.69
                                                     0.73
                                                            0.75
                                                                    0.78
                                                                            0.82
                                                                                   5401
                                                                                            1.0
                                            -0.23
                                                                   -0.07 4.8e-3
                   -0.11
                           1.1e-3
                                     0.06
                                                   -0.15
                                                           -0.11
                                                                                   3218
y_mean[1710]
                                                                                            1.0
                   -0.71
                                     0.03
                                            -0.77
                                                   -0.73
                                                           -0.71
                                                                   -0.68
                                                                          -0.64
                                                                                   3522
y_mean[1711]
                           5.8e-4
                                                                                            1.0
                   -0.23
y_mean[1712]
                           6.8e-4
                                     0.03
                                            -0.29
                                                   -0.25
                                                           -0.23
                                                                    -0.2
                                                                           -0.16
                                                                                   2653
                                                                                            1.0
y_mean[1713]
                    0.91
                           1.6e-3
                                     0.09
                                             0.74
                                                     0.85
                                                            0.91
                                                                    0.97
                                                                            1.08
                                                                                   3121
                                                                                            1.0
y_mean[1714]
                   -0.58
                           4.6e-4
                                     0.03
                                            -0.64
                                                     -0.6
                                                           -0.58
                                                                   -0.57
                                                                           -0.53
                                                                                   3431
                                                                                            1.0
```

y_mean[1715]	-0.49	4.2e-4	0.02	-0.53	-0.5	-0.49	-0.47	-0.45	2617	1.0
y_mean[1716]	-0.5	4.7e-4	0.03	-0.55	-0.51	-0.5	-0.48	-0.45	2912	1.0
y_mean[1717]	-0.3	4.9e-4	0.03	-0.35	-0.32	-0.3	-0.28	-0.25	2868	1.0
y_mean[1718]	0.1	5.4e-4	0.03	0.04	0.08	0.1	0.12	0.17	3733	1.0
y_mean[1719]	-0.39	4.4e-4	0.02	-0.44	-0.41	-0.39	-0.37	-0.34	2985	1.0
y_mean[1720]	0.8	8.5e-4	0.06	0.69	0.76	0.8	0.84	0.91	4534	1.0
y_mean[1721]	0.77	7.5e-4	0.04	0.68	0.74	0.77	0.8	0.85	3517	1.0
y_mean[1722]	1.04	9.3e-4	0.06	0.92	0.99	1.04	1.08	1.15	3829	1.0
y_mean[1723]	-0.38	3.1e-4	0.02	-0.42	-0.4	-0.38	-0.37	-0.35	3661	1.0
y_mean[1724]	-0.58	5.8e-4	0.03	-0.65	-0.6	-0.58	-0.55	-0.51	3541	1.0
y_mean[1725]	-0.47	8.5e-4	0.05	-0.56	-0.5	-0.46	-0.43	-0.37	3122	1.0
y_mean[1726]	-0.17	4.3e-4	0.02	-0.22	-0.19	-0.17	-0.16	-0.12	3180	1.0
y_mean[1727]	0.04	8.7e-4	0.04		7.0e-3	0.04	0.07	0.12	2486	1.0
y_mean[1728]	-0.47	4.4e-4	0.02	-0.51	-0.49	-0.47	-0.46	-0.43	2590	1.0
y_mean[1729]	0.39	5.1e-4	0.03	0.33	0.37	0.39	0.41	0.45	3871	1.0
y_mean[1730]	-0.12	7.3e-4	0.04	-0.19	-0.14	-0.12	-0.09	-0.04	2770	1.0
y_mean[1731]	-0.45	4.5e-4	0.02	-0.5	-0.47	-0.45	-0.43	-0.4	3044	1.0
y_mean[1732]	-0.4	6.5e-4	0.04	-0.47	-0.42	-0.4	-0.37	-0.33	3303	1.0
y_mean[1733]	-0.01	5.9e-4	0.03	-0.08	-0.04		7.7e-3	0.05	3062	1.0
y_mean[1734]	-0.71	6.0e-4	0.04	-0.78	-0.74	-0.71	-0.69	-0.64	3561	1.0
y_mean[1735]	-0.06	4.3e-4	0.02	-0.11	-0.08	-0.06	-0.04	-0.01	3129	1.0
y_mean[1736]	-0.32	7.6e-4	0.04	-0.41	-0.35	-0.32	-0.29	-0.23	3429	1.0
y_mean[1737]	0.65	4.4e-4	0.03	0.59	0.63	0.65	0.67	0.7	4358	1.0
y_mean[1738]	-0.31	9.2e-4	0.05	-0.4	-0.34	-0.31	-0.28	-0.22	2506	1.0
y_mean[1739]	3.37	1.1e-3	0.07	3.23	3.33	3.37	3.42	3.51	3939	1.0
y_mean[1740]	-0.65	7.2e-4	0.04	-0.74	-0.68	-0.65	-0.63	-0.57	3549	1.0
y_mean[1741]	-0.2	4.5e-4	0.03	-0.25	-0.22	-0.2	-0.18	-0.15	3295	1.0
y_mean[1742]	-0.21	4.7e-4	0.03	-0.27	-0.23	-0.21	-0.19	-0.16	3304	1.0
y_mean[1743]	-0.14	8.2e-4	0.04	-0.22	-0.16	-0.14	-0.11	-0.05	2678	1.0
y_mean[1744]	0.42	5.0e-4	0.03	0.36	0.4	0.42	0.44	0.49	3719	1.0
y_mean[1745]	0.78	8.7e-4	0.05	0.68	0.74	0.78	0.81	0.88	3375	1.0
y_mean[1746]	0.48	7.0e-4	0.05	0.38	0.45	0.48	0.52	0.58	5701	1.0
y_mean[1747]	-0.29	6.4e-4	0.04	-0.37		-0.29	-0.27	-0.22	3389	1.0
y_mean[1748]	-0.53	5.5e-4	0.03	-0.59	-0.55	-0.53	-0.51	-0.47	3280	1.0
y_mean[1749]	1.92	7.0e-4	0.05	1.82	1.88	1.91	1.95	2.01	5047	1.0
y_mean[1750]	0.18	4.3e-4	0.03	0.13	0.16	0.18	0.19	0.23	3576	1.0
y_mean[1751]	-0.22	4.8e-4	0.03	-0.28	-0.24	-0.22	-0.2	-0.16	3362	1.0
y_mean[1752]	-0.11	4.3e-4	0.02	-0.15	-0.12	-0.11	-0.09	-0.06	2940	1.0
y_mean[1753]	0.11	3.9e-4	0.02	0.07	0.1	0.11	0.13	0.16	3568	1.0
y_mean[1754]	-0.53	4.9e-4	0.03	-0.59	-0.55	-0.53	-0.51	-0.47	3664	1.0
y_mean[1755]	0.56	4.3e-4	0.03	0.5	0.54	0.56	0.58	0.62	4395	1.0
y_mean[1756]	0.47	4.7e-4	0.03	0.41	0.45	0.47	0.49	0.53	4094	1.0
y_mean[1757]	-0.79	6.7e-4	0.04	-0.87	-0.82	-0.79	-0.76	-0.71	3641	1.0
y_mean[1758]	-0.48	5.4e-4	0.03	-0.54	-0.5	-0.48	-0.46	-0.42	3027	1.0
y_mean[1759]	-0.1	3.7e-4	0.02	-0.14	-0.12	-0.1	-0.09	-0.06	3296	1.0
y_mean[1760]	1.56	8.1e-4	0.05	1.45	1.52	1.56	1.59	1.67	4338	1.0
y_mean[1761]	-0.51	3.9e-4	0.02	-0.55	-0.53	-0.51	-0.5	-0.47	2777	1.0
y_mean[1762]	-0.4	6.3e-4	0.03	-0.47	-0.43	-0.4	-0.38	-0.34	2869	1.0

y_mean[1763]	-0.42	7.0e-4	0.04	-0.5	-0.45	-0.42	-0.39	-0.34	3219	1.0
y_mean[1764]	-0.07	5.2e-4	0.03	-0.13	-0.09	-0.07	-0.05	-0.01	3261	1.0
y_mean[1765]	-0.28	7.0e-4	0.04	-0.34	-0.3	-0.28	-0.25	-0.21	2527	1.0
y_mean[1766]	0.31	9.5e-4	0.06	0.19	0.27	0.31	0.35	0.43	4451	1.0
y_mean[1767]	-0.37	5.9e-4	0.03	-0.44	-0.39	-0.37	-0.35	-0.3	3275	1.0
y_mean[1768]	3.07	1.3e-3	0.09	2.9	3.01	3.07	3.13	3.24	4487	1.0
y_mean[1769]	-0.39	4.1e-4	0.02	-0.43	-0.4	-0.39	-0.37	-0.34	3104	1.0
y_mean[1770]	-0.22	6.0e-4	0.03	-0.28	-0.24	-0.22	-0.2	-0.15	2783	1.0
y_mean[1771]	-0.12	6.7e-4	0.04	-0.19	-0.15	-0.12	-0.1	-0.05	3128	1.0
y_mean[1772]	0.56	5.2e-4	0.04	0.5	0.54	0.56	0.59	0.63	4531	1.0
y_mean[1773]	-0.17	5.0e-4	0.03	-0.23	-0.19	-0.17	-0.15	-0.11	3706	1.0
y_mean[1774]	-0.54	3.8e-4	0.03	-0.59	-0.56	-0.54	-0.53	-0.5	3222	1.0
y_mean[1774] y_mean[1775]	0.19	5.2e-4	0.02	0.13	0.17	0.19	0.21	0.24	3319	1.0
•		4.5e-4	0.03	0.13	0.17	0.19	0.51		3980	1.0
y_mean[1776]	0.49							0.55		
y_mean[1777]	-0.11	5.3e-4	0.03	-0.16	-0.13	-0.11	-0.09	-0.05	2982	1.0
y_mean[1778]	-0.74	5.6e-4	0.04	-0.81	-0.77	-0.74	-0.72	-0.68	3967	1.0
y_mean[1779]	0.02	4.6e-4	0.03		5.2e-4	0.02	0.04	0.07	3595	1.0
y_mean[1780]	-0.17	7.0e-4	0.04	-0.25	-0.2	-0.17	-0.15	-0.1	2644	1.0
y_mean[1781]	-0.09	6.2e-4	0.03	-0.15	-0.11	-0.09	-0.06	-0.02	3076	1.0
y_mean[1782]	-0.38	5.6e-4	0.03	-0.44	-0.4	-0.38	-0.36	-0.32	2926	1.0
y_mean[1783]	0.34	1.1e-3	0.07	0.2	0.29	0.34	0.39	0.48	4446	1.0
y_mean[1784]	0.66	5.9e-4	0.04	0.59	0.64	0.66	0.69	0.73	3574	1.0
y_mean[1785]	-0.31	5.7e-4	0.03	-0.37	-0.33	-0.31	-0.29	-0.26	2760	1.0
y_mean[1786]	0.65	5.6e-4	0.04	0.58	0.63	0.65	0.68	0.73	4269	1.0
y_mean[1787]	-0.51	8.0e-4	0.04	-0.59	-0.54	-0.51	-0.48	-0.42	2740	1.0
y_mean[1788]	0.19	6.0e-4	0.03	0.13	0.17	0.19	0.21	0.26	2970	1.0
y_mean[1789]	-0.73	1.0e-3	0.06	-0.86	-0.78	-0.73	-0.69	-0.61	3821	1.0
y_mean[1790]	-0.07	4.6e-4	0.03	-0.11	-0.08	-0.07	-0.05	-0.02	2999	1.0
y_mean[1791]	-4.3e-3	5.9e-4	0.03	-0.07	-0.03-	-4.2e-3	0.02	0.06	3132	1.0
y_mean[1792]	-0.43	5.3e-4	0.03	-0.48	-0.45	-0.43	-0.41	-0.37	2743	1.0
y_mean[1793]	-0.66	6.4e-4	0.04	-0.74	-0.69	-0.66	-0.64	-0.59	3398	1.0
y_mean[1794]	0.68	5.3e-4	0.04	0.61	0.65	0.68	0.7	0.75	4429	1.0
y_mean[1795]	-0.46	4.4e-4	0.02	-0.51	-0.48	-0.46	-0.45	-0.42	2591	1.0
y_mean[1796]	-0.45	4.4e-4	0.02	-0.5	-0.47	-0.45	-0.44	-0.41	2948	1.0
y_mean[1797]	0.47	5.8e-4	0.04	0.4	0.44	0.47	0.5	0.55	4403	1.0
y_mean[1798]	-0.51	4.1e-4	0.02	-0.56	-0.53	-0.51	-0.5	-0.47	3206	1.0
y_mean[1799]	-0.53	3.8e-4	0.02	-0.57	-0.54	-0.53	-0.52	-0.49	2996	1.0
y_mean[1800]	-0.54	3.8e-4	0.02	-0.59	-0.56	-0.54	-0.53	-0.5	3201	1.0
ypred[1]	-0.04	9.8e-3	0.6	-1.21	-0.45	-0.04	0.36	1.14	3793	1.0
ypred[2]	0.62	9.0e-3	0.59	-0.54	0.22	0.62	1.01	1.81	4364	1.0
ypred[3]	0.27	9.4e-3	0.6	-0.94	-0.14	0.28	0.7	1.39	4094	1.0
ypred[4]	0.73	9.9e-3	0.59	-0.43	0.32	0.72	1.14	1.9	3607	1.0
ypred[4] ypred[5]	-0.2	9.1e-3	0.59	-1.38	-0.6	-0.2	0.2	0.96	4263	1.0
ypred[5] ypred[6]	-0.29	9.1e-3 9.3e-3	0.59	-1.46	-0.69	-0.2	0.2	0.96	4203	
· -										1.0
ypred[7]	-0.38 -0.75	0.01	0.59	-1.51 -1.86	-0.78	-0.4	0.02	0.79	3430	1.0
ypred[8]	-0.75	9.3e-3	0.58	-1.86	-1.14	-0.76	-0.37	0.38	3860	1.0
ypred[9]	0.13	9.7e-3	0.59	-1.02	-0.25	0.13	0.53	1.29	3676	1.0
ypred[10]	2.09	9.9e-3	0.61	0.9	1.69	2.09	2.49	3.3	3713	1.0

ypred[11]	-0.04	9.6e-3	0.6	-1.2	-0.44	-0.04	0.37	1.15	3878	1.0
ypred[12]	2.45	9.5e-3	0.6	1.25	2.06	2.45	2.84	3.63	4037	1.0
ypred[13]	-0.7	9.6e-3	0.59	-1.87	-1.08	-0.69	-0.3	0.45	3774	1.0
ypred[14]	-0.29	9.3e-3	0.6	-1.46	-0.69	-0.28	0.11	0.89	4171	1.0
ypred[15]	-0.58	9.3e-3	0.59	-1.75	-0.97	-0.59	-0.19	0.58	3991	1.0
ypred[16]	-0.46	9.5e-3	0.6	-1.64	-0.86	-0.46	-0.06	0.71	4044	1.0
ypred[17]	2.67	9.2e-3	0.59	1.5	2.26	2.68	3.07	3.87	4164	1.0
ypred[18]	1.28	9.6e-3	0.6	0.09	0.89	1.29	1.69	2.44	3870	1.0
ypred[19]	-0.71	0.01	0.61	-1.92	-1.13	-0.69	-0.3	0.46	3455	1.0
ypred[20]	0.23	9.3e-3	0.59	-0.91	-0.17	0.22	0.64	1.38	4052	1.0
ypred[21]	0.5	9.6e-3	0.6	-0.7	0.1	0.51	0.9	1.68	3936	1.0
ypred[22]	-0.2	9.5e-3	0.59	-1.34	-0.6	-0.21	0.21	0.97	3849	1.0
ypred[23]	-0.55	9.6e-3	0.6	-1.75	-0.94	-0.55	-0.15	0.64	3948	1.0
ypred[24]	-0.3	0.01	0.6	-1.5	-0.7	-0.29	0.11	0.86	3605	1.0
ypred[25]	-0.53	9.4e-3	0.59	-1.7	-0.94	-0.51	-0.11	0.62	4002	1.0
ypred[26]	-0.53	0.01	0.61	-1.71	-0.95	-0.52	-0.12	0.71	3622	1.0
ypred[27]	-0.08	9.5e-3	0.6	-1.26	-0.49	-0.08	0.32	1.09	4035	1.0
ypred[28]	-0.39	9.1e-3	0.6	-1.56	-0.81	-0.39	0.01	0.77	4303	1.0
ypred[29]	-0.06	9.6e-3	0.6	-1.23	-0.46	-0.05	0.34	1.11	3904	1.0
ypred[30]	-0.56	9.7e-3	0.6	-1.74	-0.97	-0.57	-0.15	0.6	3862	1.0
ypred[31]	-0.48	9.4e-3	0.59	-1.68	-0.86	-0.48	-0.07	0.64	3938	1.0
ypred[32]	-0.57	9.6e-3	0.59	-1.72	-0.96	-0.57	-0.17	0.6	3723	1.0
ypred[33]	-0.28	9.5e-3	0.59	-1.42	-0.69	-0.28	0.12	0.86	3914	1.0
ypred[34]	-0.45	9.7e-3	0.6	-1.64	-0.85	-0.45	-0.04	0.7	3821	1.0
ypred[35]	-0.51	9.4e-3	0.6	-1.7	-0.9	-0.51	-0.11	0.66	4072	1.0
ypred[36]	-0.08	9.6e-3	0.61	-1.24	-0.48	-0.07	0.11	1.1	3965	1.0
ypred[30] ypred[37]	0.00	9.3e-3	0.59	-0.98	-0.21	0.07	0.59	1.34	4031	1.0
ypred[37] ypred[38]	-0.75	9.5e 3 9.5e-3	0.6	-1.89	-1.15	-0.75	-0.34	0.42	3996	1.0
ypred[30]	-0.38	9.2e-3	0.6	-1.58	-0.77	-0.39	0.02	0.42	4234	1.0
ypred[39] ypred[40]	-0.59	9.2e-3 9.2e-3	0.59	-1.76	-0.77	-0.59	-0.21	0.58	4057	1.0
ypred[40] ypred[41]	2.16	9.5e-3	0.59	1.01	1.75	2.17	2.55	3.35	4050	1.0
ypred[41] ypred[42]	-0.32	9.6e-3	0.61	-1.51	-0.74	-0.31	0.09	0.87	4006	1.0
ypred[42] ypred[43]	0.87	9.4e-3	0.51	-0.3	0.47	0.86	1.25	2.05	4000	1.0
				-0.3 -1.5						
ypred[44] ypred[45]	-0.33	9.6e-3	0.6 0.61	0.29	-0.73	-0.33	0.07 1.86	0.86	3843	1.0
0 1	1.45	9.6e-3		-1.58	1.02 -0.81	1.45 -0.41	0.02	2.64 0.81	3974	1.0
ypred[46] ypred[47]	-0.4	9.7e-3	0.61 0.59		0.44	0.84	1.25	2.01	4034 4059	1.0
• -	0.85	9.3e-3		-0.31			0.27	1.03		1.0
ypred[48]	-0.13	9.4e-3	0.6	-1.3	-0.52 -1.18	-0.13	-0.39		4010	1.0
ypred[49]	-0.79	9.5e-3	0.59	-1.95		-0.79		0.4	3862	1.0
ypred[50]	-0.39	9.7e-3	0.6	-1.56	-0.78	-0.38	0.01	0.79	3760	1.0
ypred[51]	-0.42	9.4e-3	0.6	-1.6	-0.82		6.2e-3	0.78	4125	1.0
ypred[52]	0.59	9.3e-3	0.59	-0.53	0.19	0.58	1.01	1.72	4028	1.0
ypred[53]	-0.05	9.0e-3	0.59	-1.2	-0.46	-0.05	0.36	1.11	4306	1.0
ypred[54]	-0.59	9.4e-3	0.59	-1.76	-0.98	-0.58	-0.19	0.55	3957	1.0
ypred[55]	-0.55	9.3e-3	0.58	-1.69	-0.94	-0.56	-0.17	0.61	3914	1.0
ypred[56]	-0.24	9.2e-3	0.59	-1.41	-0.64	-0.24	0.15	0.92	4093	1.0
ypred[57]	-0.4	9.4e-3	0.59	-1.57	-0.8		2.4e-3	0.77	3941	1.0
ypred[58]	-0.7	9.8e-3	0.6	-1.88	-1.11	-0.7	-0.29	0.46	3737	1.0

ypred[59]	-0.39	9.5e-3	0.59	-1.58	-0.77	-0.39 3.2e-3	0.77	3911	1.0
ypred[60]	-0.25	9.8e-3	0.59	-1.41	-0.67	-0.25 0.15	0.89	3600	1.0
ypred[61]	0.12	9.5e-3	0.6	-1.03	-0.3	0.12 0.54	1.3	4066	1.0
ypred[62]	-0.47	9.6e-3	0.59	-1.59	-0.87	-0.47 -0.08	0.66	3786	1.0
ypred[63]	-0.71	9.9e-3	0.6	-1.9	-1.12	-0.71 -0.3	0.46	3627	1.0
ypred[64]	-0.3	9.3e-3	0.6	-1.51	-0.71	-0.31 0.1	0.86	4080	1.0
ypred[65]	0.57	9.7e-3	0.58	-0.56	0.18	0.57 0.97	7 1.72	3654	1.0
ypred[66]	-0.53	9.3e-3	0.59	-1.7	-0.92	-0.53 -0.14	1 0.63	4010	1.0
ypred[67]	-0.47	9.2e-3	0.59	-1.66	-0.86	-0.47 -0.07	7 0.68	4165	1.0
ypred[68]	-0.29	9.7e-3	0.6	-1.46	-0.7	-0.29 0.12		3833	1.0
ypred[69]	-0.73	9.7e-3	0.6	-1.93	-1.14	-0.73 -0.31		3855	1.0
ypred[70]	0.09	9.3e-3	0.6	-1.06	-0.31	0.09 0.5		4113	1.0
ypred[71]	-0.15	9.7e-3	0.6	-1.34	-0.55	-0.15 0.26		3902	1.0
ypred[72]	-0.73	9.5e-3	0.59	-1.85	-1.14	-0.74 -0.33		3870	1.0
ypred[73]	-0.35	9.2e-3	0.59	-1.51	-0.74	-0.34 0.06		4092	1.0
ypred[74]	-0.53	9.6e-3	0.6	-1.7	-0.92	-0.53 -0.12		3818	1.0
ypred[75]	-0.55	9.6e-3	0.6	-1.72	-0.95	-0.57 -0.15		3826	1.0
ypred[76]	-0.54	9.2e-3	0.59	-1.67	-0.94	-0.55 -0.14		4070	1.0
ypred[77]	-0.18	9.4e-3	0.59	-1.37	-0.56	-0.17 0.22		3955	1.0
ypred[78]	-0.41	9.9e-3	0.6	-1.58	-0.83	-0.4-6.7e-3		3743	1.0
ypred[79]	-0.49	0.01	0.59	-1.69	-0.89	-0.48 -0.09		3497	1.0
ypred[80]	-0.03	9.8e-3	0.61	-1.26	-0.45	-0.03 0.38		3948	1.0
ypred[81]	-0.13	9.7e-3	0.6	-1.32	-0.54	-0.13 0.28		3886	1.0
ypred[82]	-0.85	9.7e-3	0.6	-2.0	-1.25	-0.85 -0.46		3835	1.0
ypred[83]	-0.41	0.01	0.6	-1.56	-0.82	-0.41 4.7e-3		3431	1.0
v -	-0.41	9.5e-3	0.59	-1.88	-1.12	-0.41 4.7e-3		3835	
ypred[84]	-0.73	9.8e-3	0.59	-1.57	-0.82			3647	1.0
ypred[85]			0.59						
ypred[86]	-0.61	9.4e-3		-1.8 -1.53	-0.99	-0.62 -0.21 -0.38 0.04		3945	1.0
ypred[87]	-0.37	9.1e-3	0.59		-0.78			4210	1.0
ypred[88]	-0.28	9.7e-3	0.6	-1.43	-0.69	-0.27 0.13		3924	1.0
ypred[89]	0.57	9.6e-3	0.6	-0.59	0.17	0.57 0.98		3805	1.0
ypred[90]	-0.24	9.5e-3	0.59	-1.42	-0.64	-0.24 0.16		3872	1.0
ypred[91]	0.02	9.2e-3	0.59	-1.15	-0.38	0.03 0.41		4158	1.0
ypred[92]	-0.1	0.01	0.6	-1.28	-0.51	-0.1 0.3		3444	1.0
ypred[93]	-0.63	0.01	0.59	-1.8	-1.03	-0.64 -0.23		3512	1.0
ypred[94]	1.27	9.4e-3	0.59	0.13	0.85	1.27 1.68		3899	1.0
ypred[95]	-0.27	9.6e-3	0.6	-1.43	-0.68	-0.26 0.14		3894	1.0
ypred[96]	-0.57	9.3e-3	0.6	-1.78	-0.98	-0.58 -0.16		4177	1.0
ypred[97]	0.49	9.7e-3	0.6	-0.67	0.08	0.48 0.9		3852	1.0
ypred[98]	-0.57	9.8e-3	0.6	-1.79	-0.96	-0.56 -0.15		3786	1.0
ypred[99]	-0.13	9.8e-3	0.6	-1.28	-0.54	-0.13 0.26		3694	1.0
ypred[100]	0.58	9.8e-3	0.6	-0.57	0.17	0.57 0.97		3742	1.0
ypred[101]	0.48	9.6e-3	0.6	-0.68	0.07	0.48 0.89		3877	1.0
ypred[102]	-0.63	9.9e-3	0.59	-1.79	-1.04	-0.63 -0.22		3579	1.0
ypred[103]	-0.58	9.7e-3	0.59	-1.75	-0.97	-0.58 -0.19		3646	1.0
ypred[104]	-0.5	9.4e-3	0.6	-1.65	-0.91	-0.5 -0.09		4104	1.0
ypred[105]	-0.4	9.5e-3	0.6	-1.56	-0.81	-0.4-4.7e-3	0.76	3966	1.0
ypred[106]	-0.24	9.7e-3	0.6	-1.4	-0.65	-0.25 0.15	0.95	3803	1.0

ypred[107]	-0.17	9.1e-3	0.58	-1.31	-0.55	-0.16	0.22	0.97	4126	1.0
ypred[108]	-0.76	9.6e-3	0.59	-1.95	-1.16	-0.77	-0.36	0.41	3847	1.0
ypred[109]	0.59	9.3e-3	0.59	-0.62	0.19	0.6	0.98	1.73	4078	1.0
ypred[110]	-0.42	9.1e-3	0.6	-1.58	-0.82	-0.41-	-6.6e-3	0.72	4270	1.0
ypred[111]	5.65	0.01	0.63	4.4	5.22	5.63	6.08	6.89	3883	1.0
ypred[112]	-0.08	9.3e-3	0.6	-1.24	-0.48	-0.07	0.32	1.09	4083	1.0
ypred[113]	-0.28	9.1e-3	0.6	-1.44	-0.69	-0.28	0.13	0.93	4324	1.0
ypred[114]	-0.74	9.5e-3	0.58	-1.89	-1.14	-0.73	-0.34	0.41	3750	1.0
ypred[115]	-0.56	9.4e-3	0.6	-1.75	-0.97	-0.56	-0.17	0.63	4037	1.0
ypred[116]	-0.55	9.6e-3	0.61	-1.73	-0.96	-0.56	-0.16	0.64	3988	1.0
ypred[117]	-0.4	9.6e-3	0.59	-1.53	-0.81	-0.4	-0.01	0.75	3770	1.0
ypred[118]	-0.56	9.6e-3	0.6	-1.75	-0.97	-0.57	-0.16	0.63	3924	1.0
ypred[119]	-0.6	9.7e-3	0.6	-1.78	-1.01	-0.59	-0.19	0.59	3814	1.0
ypred[120]	0.05	9.6e-3	0.6	-1.1	-0.37	0.06	0.46	1.21	3855	1.0
ypred[121]	0.51	9.5e-3	0.59	-0.66	0.11	0.49	0.91	1.7	3894	1.0
ypred[122]	-0.51	9.7e-3	0.61	-1.7	-0.92	-0.51	-0.09	0.67	3972	1.0
ypred[123]	-0.35	9.4e-3	0.6	-1.52	-0.75	-0.36	0.05	0.86	4014	1.0
ypred[124]	-0.75	9.9e-3	0.6	-1.93	-1.14	-0.75	-0.34	0.39	3711	1.0
ypred[125]	-0.58	9.7e-3	0.61	-1.77	-0.98	-0.58	-0.16	0.61	3932	1.0
ypred[126]	0.18	9.4e-3	0.6	-0.96	-0.23	0.17	0.58	1.36	4031	1.0
ypred[127]	-0.69	9.5e-3	0.61	-1.88	-1.09	-0.68	-0.27	0.54	4095	1.0
ypred[128]	-0.39	9.4e-3	0.59	-1.55	-0.8	-0.38	0.01	0.74	3969	1.0
ypred[129]	0.39	9.3e-3	0.59	-0.72-	-6.8e-3	0.39	0.79	1.55	4048	1.0
ypred[130]	-0.12	9.3e-3	0.6	-1.3	-0.52	-0.12	0.27	1.07	4064	1.0
ypred[131]	-0.49	9.1e-3	0.59	-1.65	-0.9	-0.49	-0.09	0.69	4189	1.0
ypred[132]	1.4	9.3e-3	0.6	0.21	1.0	1.4	1.81	2.57	4209	1.0
ypred[133]	1.61	9.2e-3	0.59	0.43	1.21	1.62	2.02	2.72	4152	1.0
ypred[134]	0.07	9.5e-3	0.59	-1.1	-0.31	0.07	0.47	1.27	3926	1.0
ypred[135]	8.3e-3	9.3e-3	0.59	-1.12	-0.4	6.3e-3	0.4	1.16	3994	1.0
ypred[136]	-0.56	9.6e-3	0.6	-1.72	-0.98	-0.55	-0.16	0.61	3902	1.0
ypred[137]	-0.5	9.4e-3	0.6	-1.69	-0.9	-0.5	-0.08	0.66	3996	1.0
ypred[138]	0.16	9.5e-3	0.59	-1.02	-0.23	0.16	0.55	1.33	3873	1.0
ypred[139]	-0.58	9.2e-3	0.59	-1.77	-0.97	-0.58	-0.18	0.58	4169	1.0
ypred[140]	-0.45	0.01	0.6	-1.63	-0.84	-0.44	-0.05	0.73	3478	1.0
ypred[141]	-0.4	9.3e-3	0.6	-1.58	-0.8	-0.39	-0.01	0.79	4115	1.0
ypred[142]	-0.59	9.8e-3	0.6	-1.74	-0.99	-0.58	-0.2	0.58	3670	1.0
ypred[143]	-0.35	9.7e-3	0.6	-1.51	-0.77	-0.35	0.06	0.83	3904	1.0
ypred[144]	-0.57	9.3e-3	0.6	-1.73	-0.97	-0.58	-0.16	0.66	4169	1.0
ypred[145]	-0.58	10.0e-3	0.59	-1.73	-0.98	-0.59	-0.17	0.52	3526	1.0
ypred[146]	-0.79	0.01	0.6	-1.98	-1.19	-0.79	-0.41	0.42	3607	1.0
ypred[147]	-0.26	9.7e-3	0.6	-1.43	-0.67	-0.27	0.15	0.94	3816	1.0
ypred[148]	-0.44	9.2e-3	0.59	-1.61	-0.85	-0.45	-0.04	0.7	4113	1.0
ypred[149]	0.05	9.5e-3	0.6	-1.1	-0.36	0.06	0.46	1.26	4058	1.0
ypred[150]	0.49	9.5e-3	0.6	-0.69	0.09	0.49	0.89	1.65	3955	1.0
ypred[151]	-0.09	9.4e-3	0.6	-1.28	-0.51	-0.11	0.32	1.07	4067	1.0
ypred[152]	-0.02	9.5e-3	0.6	-1.22	-0.43	-0.02	0.39	1.13	4016	1.0
ypred[153]	-0.54	9.4e-3	0.59	-1.68	-0.93	-0.54	-0.14	0.66	3915	1.0
ypred[154]	-0.53	0.01	0.59	-1.71	-0.93	-0.54	-0.13	0.63	3461	1.0

ypred[155]	-0.3	9.7e-3	0.6	-1.46	-0.71	-0.3	0.11	0.87	3850	1.0
ypred[156]	-0.39	9.2e-3	0.58	-1.55	-0.78	-0.4	2.1e-3	0.77	4058	1.0
ypred[157]	-0.63	9.8e-3	0.6	-1.84	-1.03	-0.63	-0.23	0.56	3728	1.0
ypred[158]	-0.47	9.0e-3	0.59	-1.61	-0.87	-0.46	-0.07	0.68	4242	1.0
ypred[159]	0.03	9.1e-3	0.59	-1.13	-0.37	0.03	0.44	1.16	4209	1.0
ypred[160]	-0.43	9.3e-3	0.6	-1.59	-0.83	-0.42	-0.02	0.74	4099	1.0
ypred[161]	-0.08	9.3e-3	0.59	-1.26	-0.47	-0.06	0.33	1.04	4066	1.0
ypred[162]	-0.58	9.4e-3	0.6	-1.76	-0.98	-0.59	-0.19	0.61	4070	1.0
ypred[163]	-0.17	9.3e-3	0.6	-1.37	-0.57	-0.17	0.22	1.0	4100	1.0
ypred[164]	0.09	9.5e-3	0.59	-1.03	-0.32	0.09	0.47	1.28	3869	1.0
ypred[165]	-0.11	9.6e-3	0.6	-1.3	-0.5	-0.1	0.31	1.07	3937	1.0
ypred[166]	-0.45	9.6e-3	0.59	-1.61	-0.85	-0.45	-0.06	0.72	3795	1.0
ypred[167]	-0.35	9.7e-3	0.6	-1.51	-0.73	-0.34	0.04	0.82	3778	1.0
ypred[168]	0.55	9.3e-3	0.59	-0.62	0.15	0.53	0.96	1.7	4029	1.0
ypred[169]	2.44	9.5e-3	0.61	1.27	2.02	2.44	2.85	3.64	4087	1.0
ypred[170]	0.5	9.8e-3	0.61	-0.68	0.09	0.51	0.92	1.67	3836	1.0
ypred[170] ypred[171]	-0.35	9.5e-3	0.6	-1.52	-0.75	-0.35	0.92	0.83	3969	1.0
V -	1.38	9.3e-3 9.2e-3	0.59	0.23	0.75	1.38	1.78	2.54	4209	
ypred[172]										1.0
ypred[173]	-0.71	9.7e-3	0.6	-1.86	-1.13	-0.72	-0.3	0.45	3854	1.0
ypred[174]	-0.42	9.6e-3	0.59	-1.6	-0.82	-0.42	-0.03	0.75	3803	1.0
ypred[175]	-0.09	9.3e-3	0.6	-1.31	-0.49	-0.07	0.32	1.07	4093	1.0
ypred[176]	-0.45	9.3e-3	0.6	-1.64	-0.86	-0.45	-0.06	0.75	4177	1.0
ypred[177]	-0.33	9.2e-3	0.59	-1.48	-0.73	-0.33	0.08	0.82	4142	1.0
ypred[178]	-0.49	9.7e-3	0.6	-1.67	-0.89	-0.49	-0.09	0.64	3768	1.0
ypred[179]	0.36	9.7e-3	0.6	-0.81	-0.05	0.38	0.77	1.53	3795	1.0
ypred[180]	-0.63	9.6e-3	0.6	-1.82	-1.03	-0.64	-0.22	0.58	3967	1.0
ypred[181]	-0.14	9.4e-3	0.6	-1.3	-0.55	-0.14	0.27	1.0	4024	1.0
ypred[182]	-0.28	9.2e-3	0.59	-1.43	-0.69	-0.29	0.12	0.92	4199	1.0
ypred[183]	-0.57	9.4e-3	0.6	-1.75	-0.98	-0.57	-0.18	0.6	4053	1.0
ypred[184]	-0.43	9.5e-3	0.6	-1.64	-0.83	-0.43	-0.01	0.74	4039	1.0
ypred[185]	-0.49	9.6e-3	0.59	-1.64	-0.88	-0.5	-0.1	0.67	3773	1.0
ypred[186]	3.08	9.7e-3	0.61	1.88	2.67	3.07	3.49	4.26	3998	1.0
ypred[187]	-0.55	9.5e-3	0.61	-1.73	-0.96	-0.54	-0.13	0.64	4055	1.0
ypred[188]	-0.59	9.2e-3	0.6	-1.78	-0.99	-0.59	-0.19	0.6	4247	1.0
ypred[189]	-0.11	9.6e-3	0.59	-1.27	-0.5	-0.11	0.29	1.03	3759	1.0
ypred[190]	-0.23	9.7e-3	0.6	-1.39	-0.63	-0.23	0.17	0.97	3803	1.0
ypred[191]	1.74	9.5e-3	0.6	0.57	1.35	1.74	2.14	2.91	3890	1.0
ypred[192]	-0.13	9.1e-3	0.59	-1.31	-0.53	-0.14	0.27	1.0	4164	1.0
ypred[193]	3.41	9.7e-3	0.61	2.19	3.01	3.39	3.81	4.61	3897	1.0
ypred[194]	-0.61	9.7e-3	0.61	-1.79	-1.03	-0.62	-0.2	0.61	3897	1.0
ypred[195]	-0.31	9.3e-3	0.59	-1.47	-0.7	-0.3	0.08	0.83	3963	1.0
ypred[196]	0.17	9.3e-3	0.59	-0.96	-0.24	0.17	0.56	1.31	3973	1.0
ypred[197]	-0.62	9.4e-3	0.59	-1.8	-1.01	-0.63	-0.22	0.55	3990	1.0
ypred[198]	-0.45	9.5e-3	0.6	-1.61	-0.85	-0.45	-0.03	0.68	3976	1.0
ypred[190] ypred[199]	-0.29	9.7e-3	0.6	-1.45	-0.69	-0.28	0.12	0.84	3758	1.0
ypred[200]	0.51	9.6e-3	0.6	-0.66	0.03	0.52	0.12	1.67	4007	1.0
y_predicted[1]	-0.03	1.4e-3	0.09	-0.21	-0.09	-0.04	0.02	0.14	4137	1.0
y_predicted[1] y_predicted[2]	0.62	4.9e-4	0.03	0.56	0.6	0.62	0.65	0.69	4482	1.0
J-broarcoea[z]	0.02	1.00 1	0.00	0.00	0.0	0.02	0.00	0.00	1 102	1.0

y_predicted[3]	0.27	9.4e-4	0.07	0.13	0.22	0.27	0.31	0.4	5452	1.0
y_predicted[4]	0.72	7.4e-4	0.04	0.63	0.69	0.72	0.75	0.81	3563	1.0
y_predicted[5]	-0.21	4.8e-4	0.03	-0.26	-0.22	-0.21	-0.19	-0.15	3527	1.0
y_predicted[6]	-0.28	6.6e-4	0.04	-0.35	-0.3	-0.28	-0.25	-0.2	3456	1.0
y_predicted[7]	-0.38	6.6e-4	0.04	-0.46	-0.4	-0.38	-0.35	-0.29	4085	1.0
y_predicted[8]	-0.73	6.0e-4	0.04	-0.8	-0.75	-0.73	-0.7	-0.66	3601	1.0
y_predicted[9]	0.14	6.3e-4	0.04	0.06	0.12	0.14	0.17	0.22	3976	1.0
y_predicted[10]	2.09	1.4e-3	0.09	1.92	2.03	2.09	2.15	2.26	4148	1.0
y_predicted[11]	-0.05	5.6e-4	0.03	-0.11	-0.07	-0.05	-0.03	0.01	3015	1.0
y_predicted[12]	2.47	1.2e-3	0.08	2.31	2.41	2.47	2.52	2.63	4612	1.0
y_predicted[13]	-0.7	5.6e-4	0.03	-0.77	-0.72	-0.7	-0.68	-0.63	3713	1.0
y_predicted[14]	-0.3	7.3e-4	0.04	-0.39	-0.33	-0.31	-0.28	-0.22	3340	1.0
y_predicted[15]	-0.59	4.6e-4	0.03	-0.64	-0.6	-0.59	-0.57	-0.53	3455	1.0
y_predicted[16]	-0.48	4.2e-4	0.02	-0.52	-0.49	-0.48	-0.46	-0.43	2619	1.0
y_predicted[17]	2.67	1.4e-3	0.1	2.47	2.6	2.67	2.73	2.86	4732	1.0
y_predicted[18]	1.28	7.0e-4	0.05	1.18	1.25	1.28	1.31	1.38	4821	1.0
y_predicted[19]	-0.72	5.3e-4	0.03	-0.78	-0.74	-0.72	-0.7	-0.66	3715	1.0
<pre>y_predicted[20]</pre>	0.22	5.9e-4	0.03	0.16	0.2	0.22	0.25	0.29	3402	1.0
<pre>y_predicted[21]</pre>	0.51	4.4e-4	0.03	0.45	0.49	0.51	0.53	0.57	4133	1.0
$y_predicted[22]$	-0.2	8.5e-4	0.04	-0.29	-0.23	-0.2	-0.17	-0.11	2713	1.0
$y_predicted[23]$	-0.55	5.4e-4	0.03	-0.61	-0.57	-0.55	-0.53	-0.49	3410	1.0
$y_predicted[24]$	-0.33	4.2e-4	0.03	-0.38	-0.34	-0.33	-0.31	-0.28	3537	1.0
$y_predicted[25]$	-0.53	4.5e-4	0.02	-0.58	-0.55	-0.53	-0.52	-0.48	3119	1.0
<pre>y_predicted[26]</pre>	-0.52	4.3e-4	0.02	-0.56	-0.53	-0.52	-0.5	-0.47	2964	1.0
$y_predicted[27]$	-0.09	4.4e-4	0.02	-0.14	-0.11	-0.09	-0.08	-0.05	2913	1.0
<pre>y_predicted[28]</pre>	-0.39	4.3e-4	0.03	-0.44	-0.4	-0.39	-0.37	-0.34	3414	1.0
<pre>y_predicted[29]</pre>	-0.05	4.3e-4	0.02	-0.1	-0.07	-0.05	-0.04-	5.4e-3	3127	1.0
<pre>y_predicted[30]</pre>	-0.56	4.4e-4	0.03	-0.61	-0.57	-0.56	-0.54	-0.51	3447	1.0
<pre>y_predicted[31]</pre>	-0.47	7.4e-4	0.04	-0.55	-0.5	-0.47	-0.44	-0.39	3198	1.0
<pre>y_predicted[32]</pre>	-0.55	6.2e-4	0.04	-0.63	-0.58	-0.55	-0.53	-0.48	3561	1.0
<pre>y_predicted[33]</pre>	-0.29	7.2e-4	0.04	-0.37	-0.32	-0.29	-0.26	-0.21	3420	1.0
$y_predicted[34]$	-0.43	6.1e-4	0.03	-0.49	-0.45	-0.43	-0.41	-0.36	3009	1.0
<pre>y_predicted[35]</pre>	-0.52	4.4e-4	0.03	-0.57	-0.54	-0.52	-0.5	-0.47	3498	1.0
<pre>y_predicted[36]</pre>	-0.09	4.6e-4	0.03	-0.15	-0.11	-0.1	-0.07	-0.04	4033	1.0
<pre>y_predicted[37]</pre>	0.18	5.8e-4	0.03	0.11	0.15	0.18	0.2	0.24	2951	1.0
<pre>y_predicted[38]</pre>	-0.74	5.5e-4	0.03	-0.81	-0.76	-0.74	-0.72	-0.68	3672	1.0
<pre>y_predicted[39]</pre>	-0.38	5.9e-4	0.03	-0.45	-0.41	-0.38	-0.36	-0.32	3062	1.0
y_predicted[40]	-0.57	8.1e-4	0.05	-0.66	-0.6	-0.56	-0.53	-0.47	3284	1.0
y_predicted[41]	2.16	9.4e-4	0.06	2.04	2.12	2.16	2.19	2.27	3929	1.0
y_predicted[42]	-0.31	4.5e-4	0.03	-0.36	-0.33	-0.31	-0.3	-0.26	3211	1.0
y_predicted[43]	0.86	9.5e-4	0.07	0.72	0.81	0.85	0.9	0.99	4885	1.0
y_predicted[44]	-0.33	6.1e-4	0.03	-0.4	-0.36	-0.33	-0.31	-0.27	3205	1.0
y_predicted[45]	1.45	7.3e-4	0.05	1.36	1.42	1.45	1.48	1.54	3980	1.0
y_predicted[46]	-0.38	9.1e-4	0.05	-0.48	-0.41	-0.38	-0.35	-0.28	3050	1.0
y_predicted[47]	0.84	8.8e-4	0.05	0.74	0.81	0.84	0.88	0.94	3546	1.0
y_predicted[48]	-0.12	4.2e-4	0.03	-0.17	-0.14	-0.12	-0.11	-0.07	3574	1.0
y_predicted[49]	-0.78	6.5e-4	0.04	-0.86	-0.81	-0.78	-0.76	-0.71	3623	1.0
y_predicted[50]	-0.4		0.03	-0.45	-0.42	-0.4	-0.38	-0.34	2907	1.0

y_predicted[51]	-0.4	9.3e-4	0.06	-0.52	-0.44	-0.4	-0.37	-0.29	3921	1.0
y_predicted[52]	0.6	4.5e-4	0.03	0.54	0.58	0.6	0.62	0.66	4510	1.0
y_predicted[53]	-0.06	4.2e-4	0.02	-0.11	-0.08	-0.06	-0.05	-0.01	3182	1.0
y_predicted[54]	-0.59	4.7e-4	0.03	-0.65	-0.61	-0.59	-0.57	-0.54	3466	1.0
y_predicted[55]	-0.55	4.3e-4	0.02	-0.59	-0.56	-0.55	-0.53	-0.5	3211	1.0
y_predicted[56]	-0.23	5.3e-4	0.03	-0.3	-0.26	-0.23	-0.21	-0.17	3266	1.0
y_predicted[57]	-0.41	3.2e-4	0.02	-0.44	-0.42	-0.41	-0.39	-0.37	3625	1.0
y_predicted[58]	-0.71	5.5e-4	0.03	-0.78	-0.73	-0.71	-0.69	-0.64	3801	1.0
y_predicted[59]	-0.39	6.8e-4	0.03	-0.45	-0.41	-0.39	-0.36	-0.32	2597	1.0
y_predicted[60]	-0.24	6.1e-4	0.03	-0.31	-0.27	-0.24	-0.22	-0.18	2833	1.0
y_predicted[61]	0.12	5.8e-4	0.04	0.05	0.09	0.12	0.14	0.19	3999	1.0
y_predicted[62]	-0.46	4.5e-4	0.02	-0.51	-0.48	-0.46	-0.45	-0.42	2581	1.0
<pre>y_predicted[63]</pre>	-0.73	6.3e-4	0.04	-0.8	-0.75	-0.73	-0.7	-0.65	3612	1.0
<pre>y_predicted[64]</pre>	-0.3	4.6e-4	0.03	-0.35	-0.32	-0.3	-0.28	-0.25	3031	1.0
<pre>y_predicted[65]</pre>	0.56	4.7e-4	0.03	0.5	0.54	0.56	0.58	0.63	4347	1.0
<pre>y_predicted[66]</pre>	-0.54	3.8e-4	0.02	-0.58	-0.55	-0.54	-0.52	-0.49	3166	1.0
<pre>y_predicted[67]</pre>	-0.47	4.2e-4	0.02	-0.52	-0.49	-0.47	-0.46	-0.43	2939	1.0
<pre>y_predicted[68]</pre>	-0.3	6.3e-4	0.04	-0.37	-0.32	-0.3	-0.27	-0.23	3393	1.0
<pre>y_predicted[69]</pre>	-0.72	5.9e-4	0.04	-0.79	-0.75	-0.72	-0.7	-0.65	3584	1.0
<pre>y_predicted[70]</pre>	0.08	6.4e-4	0.03	0.02	0.06	0.08	0.1	0.15	2816	1.0
$y_predicted[71]$	-0.16	4.2e-4	0.02	-0.2	-0.17	-0.16	-0.14	-0.11	3131	1.0
$y_predicted[72]$	-0.72	5.8e-4	0.04	-0.79	-0.75	-0.72	-0.7	-0.65	3793	1.0
y_predicted[73]	-0.35	8.6e-4	0.05	-0.44	-0.38	-0.35	-0.32	-0.26	2788	1.0
$y_predicted[74]$	-0.54	5.0e-4	0.03	-0.59	-0.56	-0.54	-0.52	-0.48	3267	1.0
y_predicted[75]	-0.53	7.7e-4	0.04	-0.61	-0.55	-0.53	-0.5	-0.45	2717	1.0
y_predicted[76]	-0.56	4.1e-4	0.02	-0.6	-0.57	-0.56	-0.54	-0.51	3258	1.0
y_predicted[77]	-0.19	4.4e-4	0.03	-0.23	-0.2	-0.19	-0.17	-0.14	3333	1.0
y_predicted[78]	-0.41	5.0e-4	0.03	-0.46	-0.43	-0.41	-0.39	-0.36	2903	1.0
y_predicted[79]	-0.49	4.0e-4	0.02	-0.53	-0.5	-0.49	-0.48	-0.45	2908	1.0
y_predicted[80]	-0.02	4.5e-4	0.03	-0.07	-0.04	-0.02-	3.8e-3	0.03	3320	1.0
y_predicted[81]	-0.15	4.6e-4	0.02	-0.19	-0.16	-0.15	-0.13	-0.1	2909	1.0
y_predicted[82]	-0.84	8.8e-4	0.05	-0.94	-0.87	-0.84	-0.81	-0.74	3444	1.0
y_predicted[83]	-0.41	5.2e-4	0.03	-0.47	-0.43	-0.41	-0.39	-0.36	2838	1.0
y_predicted[84]	-0.73	6.1e-4	0.04	-0.8	-0.75	-0.73	-0.7	-0.65	3604	1.0
y_predicted[85]	-0.42	2.8e-4	0.02	-0.45	-0.43	-0.42	-0.41	-0.39	3914	1.0
y_predicted[86]	-0.61	5.4e-4	0.03	-0.68	-0.64	-0.61	-0.59	-0.55	3513	1.0
y_predicted[87]	-0.37	5.5e-4	0.03	-0.43	-0.39	-0.37	-0.35	-0.31	3125	1.0
y_predicted[88]	-0.26	6.5e-4	0.04	-0.34	-0.29	-0.27	-0.24	-0.19	3369	1.0
y_predicted[89]	0.58	4.3e-4	0.03	0.52	0.56	0.58	0.6	0.64	4413	1.0
y_predicted[90]	-0.25	5.5e-4	0.03	-0.31	-0.27	-0.25	-0.23	-0.19	2940	1.0
y_predicted[91]	0.01	4.7e-4	0.03		7.4e-3	0.01	0.03	0.07	3710	1.0
y_predicted[92]	-0.09	4.2e-4	0.02		-0.11	-0.09	-0.08	-0.05	3097	1.0
y_predicted[93]	-0.62	6.9e-4	0.04	-0.7	-0.65	-0.62	-0.6	-0.55	3250	1.0
y_predicted[94]	1.27	1.1e-3	0.07	1.14	1.22	1.27	1.32	1.4	4026	1.0
y_predicted[95]	-0.25	5.8e-4	0.03	-0.31	-0.27	-0.25	-0.23	-0.19	2773	1.0
y_predicted[96]	-0.57	4.3e-4	0.03	-0.62	-0.59	-0.57	-0.56	-0.52	3370	1.0
y_predicted[97]	0.48	4.6e-4	0.03	0.43	0.46	0.48	0.5	0.54	3939	1.0
y_predicted[98]	-0.58	4.4e-4	0.03	-0.63	-0.59	-0.58	-0.56	-0.53	3440	1.0
J_Prodressed[50]	3.00	1.10 1	0.00	0.00	0.00	0.00	0.00	0.00	0110	1.0

```
y_predicted[99]
                   -0.13
                           3.9e-4
                                     0.02
                                           -0.18
                                                   -0.15
                                                           -0.13
                                                                  -0.11
                                                                          -0.08
                                                                                   3762
                                                                                            1.0
                    0.59
                                     0.03
                                             0.53
                                                    0.57
                                                            0.59
                                                                    0.61
                                                                                   4443
y_predicted[100]
                           4.4e-4
                                                                           0.65
                                                                                            1.0
y_predicted[101]
                    0.46
                           4.7e-4
                                     0.03
                                              0.4
                                                    0.44
                                                            0.46
                                                                   0.48
                                                                           0.52
                                                                                   3824
                                                                                            1.0
y_predicted[102]
                   -0.62
                           5.7e-4
                                     0.03
                                           -0.69
                                                   -0.64
                                                           -0.62
                                                                   -0.6
                                                                          -0.55
                                                                                   3510
                                                                                            1.0
y_predicted[103]
                   -0.57
                                     0.03
                                           -0.62
                                                   -0.59
                                                           -0.57
                                                                  -0.55
                                                                          -0.52
                                                                                   3379
                           4.6e-4
                                                                                            1.0
                    -0.5
                           5.1e-4
                                     0.03
                                           -0.56
                                                   -0.52
                                                            -0.5
                                                                  -0.48
                                                                          -0.44
                                                                                   3728
y_predicted[104]
                                                                                            1.0
y_predicted[105]
                    -0.4
                           4.0e-4
                                     0.02
                                           -0.45
                                                   -0.42
                                                            -0.4
                                                                  -0.38
                                                                          -0.35
                                                                                   3507
                                                                                            1.0
y_predicted[106]
                                                   -0.26
                   -0.24
                           5.2e-4
                                     0.03
                                            -0.3
                                                           -0.24
                                                                  -0.22
                                                                          -0.18
                                                                                   3093
                                                                                            1.0
                                     0.02
                                           -0.21
                                                   -0.18
                                                           -0.16
                                                                  -0.15
                                                                          -0.12
                                                                                   3170
y_predicted[107]
                   -0.16
                           4.2e-4
                                                                                            1.0
y_predicted[108]
                                     0.06
                                                           -0.76
                   -0.76
                           1.0e-3
                                           -0.88
                                                    -0.8
                                                                  -0.72
                                                                          -0.63
                                                                                   3936
                                                                                            1.0
                    0.59
                                     0.03
                                            0.52
                                                    0.57
                                                            0.59
                                                                   0.61
                                                                           0.65
                                                                                   4423
y_predicted[109]
                           4.9e-4
                                                                                            1.0
y_predicted[110]
                   -0.41
                           5.7e-4
                                     0.03
                                           -0.47
                                                   -0.43
                                                           -0.41
                                                                  -0.39
                                                                          -0.35
                                                                                   2856
                                                                                            1.0
                                     0.22
                                            5.21
                                                    5.49
                                                            5.64
                                                                     5.8
                                                                                   3801
                    5.64
                           3.6e-3
                                                                           6.07
                                                                                            1.0
y_predicted[111]
                   -0.09
                           5.7e-4
                                     0.03
                                           -0.15
                                                   -0.11
                                                           -0.09
                                                                  -0.07
                                                                          -0.03
                                                                                   3225
y_predicted[112]
                                                                                            1.0
y_predicted[113]
                   -0.27
                                           -0.33
                                                   -0.29
                                                           -0.27
                                                                  -0.25
                                                                                   3394
                           5.9e-4
                                     0.03
                                                                           -0.2
                                                                                            1.0
                   -0.73
                           5.6e-4
                                     0.03
                                             -0.8
                                                   -0.75
                                                           -0.73
                                                                  -0.71
                                                                          -0.66
                                                                                   3596
y_predicted[114]
                                                                                            1.0
y_predicted[115]
                   -0.56
                           4.0e-4
                                     0.02
                                             -0.6
                                                   -0.57
                                                           -0.56
                                                                  -0.54
                                                                          -0.51
                                                                                   3332
                                                                                            1.0
                           4.8e-4
                   -0.56
                                     0.03
                                           -0.62
                                                   -0.58
                                                           -0.56
                                                                  -0.54
                                                                           -0.5
                                                                                   3602
                                                                                            1.0
y_predicted[116]
y_predicted[117]
                   -0.39
                           6.6e-4
                                     0.04
                                           -0.47
                                                   -0.41
                                                           -0.39
                                                                  -0.36
                                                                           -0.3
                                                                                   4063
                                                                                            1.0
y_predicted[118]
                   -0.57
                           4.2e-4
                                     0.02
                                           -0.62
                                                   -0.59
                                                           -0.57
                                                                  -0.55
                                                                          -0.52
                                                                                   3405
                                                                                            1.0
                                     0.03
                                                   -0.61
                                                           -0.59
                                                                          -0.54
y_predicted[119]
                   -0.59
                           4.9e-4
                                           -0.65
                                                                  -0.57
                                                                                   3507
                                                                                            1.0
                    0.06
                                     0.03-2.7e-3
                                                    0.04
                                                            0.06
                                                                    0.08
                                                                           0.11
                                                                                   3721
y_predicted[120]
                           4.9e-4
                                                                                            1.0
y_predicted[121]
                     0.5
                           7.5e-4
                                     0.04
                                            0.42
                                                    0.47
                                                             0.5
                                                                   0.53
                                                                           0.59
                                                                                   3389
                                                                                            1.0
                    -0.5
                                     0.02
                                           -0.54
                                                   -0.51
                                                            -0.5
                                                                  -0.48
                                                                                   3978
y_predicted[122]
                           3.1e-4
                                                                          -0.46
                                                                                            1.0
y_predicted[123]
                   -0.35
                           3.6e-4
                                     0.02
                                            -0.4
                                                   -0.37
                                                           -0.35
                                                                  -0.34
                                                                          -0.31
                                                                                   4059
                                                                                            1.0
                   -0.75
                                     0.03
                                           -0.82
                                                   -0.77
                                                           -0.75
                                                                  -0.73
                                                                          -0.68
                                                                                   3692
y_predicted[124]
                           5.6e-4
                                                                                            1.0
                   -0.58
                                     0.03
                                           -0.63
                                                    -0.6
                                                           -0.58
                                                                  -0.56
                                                                          -0.53
                                                                                   3410
y_predicted[125]
                           4.5e-4
                                                                                            1.0
                                     0.03
y_predicted[126]
                    0.19
                           4.4e-4
                                            0.14
                                                    0.17
                                                            0.19
                                                                     0.2
                                                                           0.24
                                                                                   3660
                                                                                            1.0
                                           -0.76
                                                   -0.71
                   -0.67
                           7.4e-4
                                     0.04
                                                           -0.67
                                                                  -0.64
                                                                          -0.59
                                                                                   3634
y_predicted[127]
                                                                                            1.0
y_predicted[128]
                   -0.38
                           4.5e-4
                                     0.03
                                           -0.44
                                                    -0.4
                                                           -0.38
                                                                  -0.37
                                                                          -0.33
                                                                                   3614
                                                                                            1.0
                     0.4
                           6.2e-4
                                     0.04
                                            0.32
                                                    0.37
                                                             0.4
                                                                   0.42
                                                                           0.47
                                                                                   3859
y_predicted[129]
                                                                                            1.0
                                           -0.16
y_predicted[130]
                   -0.12
                           4.1e-4
                                     0.02
                                                   -0.13
                                                           -0.12
                                                                    -0.1
                                                                          -0.07
                                                                                   3185
                                                                                            1.0
y_predicted[131]
                   -0.49
                           4.3e-4
                                     0.02
                                           -0.53
                                                    -0.5
                                                           -0.49
                                                                  -0.47
                                                                          -0.45
                                                                                   2716
                                                                                            1.0
y_predicted[132]
                    1.38
                           6.4e-4
                                     0.04
                                              1.3
                                                    1.35
                                                            1.38
                                                                    1.41
                                                                           1.47
                                                                                   4343
                                                                                            1.0
y_predicted[133]
                                     0.06
                                             1.48
                                                    1.56
                                                             1.6
                                                                    1.64
                                                                           1.72
                                                                                   3808
                     1.6
                           1.0e-3
                                                                                            1.0
                    0.07
                                     0.03
                                            0.02
                                                            0.07
                                                                   0.09
                                                                           0.13
                                                                                   3225
y_predicted[134]
                           4.9e-4
                                                    0.05
                                                                                            1.0
                    0.01
                                     0.03
                                           -0.04-5.5e-3
                                                            0.01
                                                                   0.03
                                                                           0.07
                                                                                   3620
y_predicted[135]
                           4.7e-4
                                                                                            1.0
y_predicted[136]
                   -0.57
                           4.9e-4
                                     0.03
                                           -0.63
                                                   -0.59
                                                           -0.57
                                                                  -0.55
                                                                          -0.51
                                                                                   3436
                                                                                            1.0
                    -0.5
                                     0.02
                                           -0.54
                                                   -0.51
                                                            -0.5
                                                                  -0.48
                                                                          -0.45
                                                                                   2807
y_predicted[137]
                           4.2e-4
                                                                                            1.0
                                     0.04
                                            0.07
                                                    0.12
                                                                           0.22
                                                                                   3953
y_predicted[138]
                    0.14
                           6.2e-4
                                                            0.15
                                                                    0.17
                                                                                            1.0
                   -0.57
                                     0.03
                                           -0.63
                                                   -0.59
                                                           -0.57
                                                                  -0.55
                                                                          -0.51
                                                                                   3469
                                                                                            1.0
y_predicted[139]
                           5.1e-4
y_predicted[140]
                   -0.46
                           4.6e-4
                                     0.03
                                           -0.51
                                                   -0.48
                                                           -0.46
                                                                  -0.44
                                                                          -0.41
                                                                                   3591
                                                                                            1.0
                    -0.4
                           5.1e-4
                                     0.03
                                           -0.45
                                                   -0.42
                                                            -0.4
                                                                  -0.38
                                                                          -0.34
                                                                                   3050
                                                                                            1.0
y_predicted[141]
                   -0.57
                           6.3e-4
                                     0.04
                                           -0.64
                                                   -0.59
                                                           -0.57
                                                                  -0.54
                                                                           -0.5
                                                                                   3303
y_predicted[142]
                                                                                            1.0
                                                           -0.35
y_predicted[143]
                   -0.35
                           4.5e-4
                                     0.02
                                            -0.4
                                                   -0.36
                                                                  -0.33
                                                                           -0.3
                                                                                   2983
                                                                                            1.0
y_predicted[144]
                   -0.55
                           4.0e-4
                                     0.02
                                            -0.6
                                                   -0.57
                                                           -0.55
                                                                  -0.54
                                                                          -0.51
                                                                                   3209
                                                                                            1.0
y_predicted[145]
                   -0.59
                           4.8e-4
                                     0.03
                                           -0.64
                                                   -0.61
                                                           -0.59
                                                                  -0.57
                                                                          -0.53
                                                                                   3466
                                                                                            1.0
                                     0.04
                                           -0.85
                                                    -0.8
                                                           -0.78
                                                                  -0.75
                                                                           -0.7
                                                                                   3630
                                                                                            1.0
y_predicted[146]
                   -0.78
                           6.4e-4
```

```
y_predicted[147]
                   -0.26
                           6.3e-4
                                     0.03
                                           -0.33
                                                   -0.29
                                                           -0.26
                                                                  -0.24
                                                                           -0.2
                                                                                   2620
                                                                                            1.0
                   -0.44
                                     0.02
                                           -0.48
                                                   -0.45
                                                           -0.44
                                                                           -0.4
                                                                                   3699
y_predicted[148]
                           3.3e-4
                                                                  -0.43
                                                                                            1.0
                    0.03
                           6.4e-4
                                     0.03
                                           -0.04 5.3e-3
                                                            0.03
                                                                   0.05
                                                                            0.1
                                                                                   2850
                                                                                            1.0
y_predicted[149]
                    0.48
                           4.6e-4
                                     0.03
                                            0.42
                                                    0.46
                                                            0.48
                                                                     0.5
                                                                           0.54
                                                                                   3904
                                                                                            1.0
y_predicted[150]
                    -0.1
y_predicted[151]
                                     0.02
                                           -0.14
                                                   -0.11
                                                            -0.1
                                                                  -0.08
                                                                          -0.05
                           4.4e-4
                                                                                   2893
                                                                                            1.0
                   -0.01
                                     0.03
                                           -0.06
                                                   -0.03
                                                           -0.01 7.0e-3
                                                                           0.04
                                                                                   3544
y_predicted[152]
                           4.4e-4
                                                                                            1.0
y_predicted[153]
                   -0.54
                           3.9e-4
                                     0.02
                                           -0.59
                                                   -0.56
                                                           -0.54
                                                                  -0.53
                                                                           -0.5
                                                                                   3262
                                                                                            1.0
y_predicted[154]
                                           -0.57
                                                           -0.53
                   -0.53
                           3.8e-4
                                     0.02
                                                   -0.54
                                                                  -0.51
                                                                          -0.48
                                                                                   3002
                                                                                            1.0
                   -0.31
                           3.9e-4
                                     0.02
                                           -0.35
                                                   -0.32
                                                           -0.31
                                                                  -0.29
                                                                          -0.26
                                                                                   3525
y_predicted[155]
                                                                                            1.0
y_predicted[156]
                                     0.05
                   -0.39
                           8.7e-4
                                           -0.48
                                                   -0.43
                                                           -0.39
                                                                  -0.36
                                                                          -0.31
                                                                                   2725
                                                                                            1.0
                   -0.64
                                     0.04
                                           -0.71
                                                   -0.67
                                                           -0.64
                                                                  -0.62
                                                                          -0.56
                                                                                   3517
y_predicted[157]
                           6.4e-4
                                                                                            1.0
y_predicted[158]
                   -0.48
                           4.1e-4
                                     0.02
                                           -0.52
                                                   -0.49
                                                           -0.48
                                                                  -0.46
                                                                          -0.44
                                                                                   2945
                                                                                            1.0
                                     0.03-8.7e-3
                                                                                   3122
                    0.04
                           5.0e-4
                                                    0.02
                                                            0.04
                                                                   0.06
                                                                            0.1
y_predicted[159]
                                                                                            1.0
                   -0.43
                                     0.03
                                           -0.48
                                                   -0.44
                                                           -0.43
                                                                          -0.38
                                                                                   2846
y_predicted[160]
                           4.8e-4
                                                                  -0.41
                                                                                            1.0
y_predicted[161]
                                           -0.12
                                                    -0.1
                                                           -0.08
                                                                  -0.06
                                                                          -0.03
                   -0.08
                           4.3e-4
                                     0.02
                                                                                   2991
                                                                                            1.0
                   -0.59
                           5.0e-4
                                     0.03
                                           -0.65
                                                   -0.61
                                                           -0.59
                                                                  -0.57
                                                                          -0.53
                                                                                   3495
y_predicted[162]
                                                                                            1.0
y_predicted[163]
                   -0.18
                           5.7e-4
                                     0.04
                                           -0.25
                                                    -0.2
                                                           -0.18
                                                                  -0.15
                                                                           -0.1
                                                                                   3971
                                                                                            1.0
                    0.08
                           4.6e-4
                                     0.03
                                            0.03
                                                    0.06
                                                            0.08
                                                                     0.1
                                                                           0.13
                                                                                   3195
                                                                                            1.0
y_predicted[164]
y_predicted[165]
                   -0.12
                           3.7e-4
                                     0.02
                                           -0.17
                                                   -0.14
                                                           -0.12
                                                                  -0.11
                                                                          -0.08
                                                                                   3800
                                                                                            1.0
y_predicted[166]
                   -0.46
                           4.4e-4
                                     0.02
                                           -0.51
                                                   -0.48
                                                           -0.47
                                                                  -0.45
                                                                          -0.42
                                                                                   3158
                                                                                            1.0
y_predicted[167]
                   -0.35
                           4.0e-4
                                     0.02
                                           -0.39
                                                   -0.36
                                                           -0.35
                                                                  -0.33
                                                                           -0.3
                                                                                   3164
                                                                                            1.0
                                     0.03
                                            0.47
                                                    0.51
                                                            0.53
                                                                   0.55
                                                                           0.58
                                                                                   4081
y_predicted[168]
                    0.53
                           4.4e-4
                                                                                            1.0
y_predicted[169]
                    2.44
                           1.3e-3
                                     0.09
                                            2.27
                                                    2.38
                                                            2.44
                                                                     2.5
                                                                           2.62
                                                                                   4463
                                                                                            1.0
                    0.51
                                     0.03
                                            0.45
                                                    0.49
                                                            0.51
                                                                    0.53
                                                                           0.57
                                                                                   4462
y_predicted[170]
                           4.6e-4
                                                                                            1.0
y_predicted[171]
                   -0.36
                           7.9e-4
                                     0.05
                                           -0.45
                                                   -0.39
                                                           -0.36
                                                                  -0.32
                                                                          -0.26
                                                                                   4119
                                                                                            1.0
                    1.38
                                     0.06
                                             1.26
                                                    1.34
                                                            1.38
                                                                    1.42
                                                                             1.5
                                                                                   4822
y_predicted[172]
                           8.6e-4
                                                                                            1.0
                           5.3e-4
                                     0.03
                                           -0.79
                   -0.73
                                                   -0.75
                                                           -0.73
                                                                  -0.71
                                                                          -0.66
                                                                                   3921
y_predicted[173]
                                                                                            1.0
                                     0.02
                                                                          -0.39
y_predicted[174]
                   -0.42
                           2.9e-4
                                           -0.46
                                                   -0.43
                                                           -0.42
                                                                  -0.41
                                                                                   3801
                                                                                            1.0
                                           -0.13
                   -0.09
                           4.2e-4
                                     0.02
                                                    -0.1
                                                           -0.09
                                                                  -0.07
                                                                          -0.04
                                                                                   3062
y_predicted[175]
                                                                                            1.0
y_predicted[176]
                   -0.44
                           1.9e-3
                                     0.12
                                           -0.67
                                                   -0.52
                                                           -0.44
                                                                  -0.36
                                                                          -0.21
                                                                                   3663
                                                                                            1.0
                   -0.34
                           6.0e-4
                                     0.04
                                           -0.41
                                                   -0.37
                                                           -0.34
                                                                  -0.32
                                                                          -0.27
                                                                                   3703
y_predicted[177]
                                                                                            1.0
y_predicted[178]
                   -0.49
                           7.6e-4
                                     0.04
                                           -0.57
                                                   -0.52
                                                           -0.49
                                                                  -0.46
                                                                           -0.4
                                                                                   3257
                                                                                            1.0
y_predicted[179]
                    0.37
                           6.9e-4
                                     0.04
                                              0.3
                                                    0.34
                                                            0.37
                                                                     0.4
                                                                           0.45
                                                                                   3038
                                                                                            1.0
y_predicted[180]
                   -0.62
                           5.8e-4
                                     0.03
                                           -0.69
                                                   -0.65
                                                           -0.62
                                                                   -0.6
                                                                          -0.55
                                                                                   3532
                                                                                            1.0
                                     0.02
                                           -0.18
                                                   -0.15
                                                           -0.13
                                                                          -0.09
                                                                                   3078
y_predicted[181]
                   -0.13
                           4.1e-4
                                                                  -0.12
                                                                                            1.0
                   -0.27
                                           -0.33
                                                   -0.29
                                                           -0.27
                                                                  -0.24
y_predicted[182]
                           5.8e-4
                                     0.03
                                                                           -0.2
                                                                                   3391
                                                                                            1.0
                   -0.56
                                     0.03
                                           -0.61
                                                   -0.58
                                                           -0.56
                                                                  -0.54
                                                                          -0.51
                                                                                   3458
y_predicted[183]
                           4.4e-4
                                                                                            1.0
y_predicted[184]
                   -0.43
                           3.4e-4
                                     0.02
                                           -0.47
                                                   -0.44
                                                           -0.43
                                                                  -0.42
                                                                          -0.39
                                                                                   3506
                                                                                            1.0
                    -0.5
                           4.8e-4
                                     0.03
                                           -0.55
                                                   -0.52
                                                            -0.5
                                                                  -0.48
                                                                          -0.45
                                                                                   2935
y_predicted[185]
                                                                                            1.0
                                             2.87
                                                     3.0
                                                            3.08
                                                                           3.29
y_predicted[186]
                    3.08
                           1.6e-3
                                     0.11
                                                                    3.15
                                                                                   4410
                                                                                            1.0
                   -0.55
                                     0.05
                                           -0.64
                                                   -0.58
                                                           -0.55
                                                                  -0.52
                                                                          -0.46
                                                                                   2825
                                                                                            1.0
y_predicted[187]
                           8.5e-4
                           6.5e-4
y_predicted[188]
                   -0.59
                                     0.04
                                           -0.67
                                                   -0.62
                                                           -0.59
                                                                  -0.57
                                                                          -0.51
                                                                                   3674
                                                                                            1.0
                   -0.13
                           4.1e-4
                                     0.02
                                           -0.18
                                                   -0.15
                                                           -0.13
                                                                  -0.12
                                                                          -0.09
                                                                                   3078
                                                                                            1.0
y_predicted[189]
                                                           -0.24
                   -0.24
                           4.5e-4
                                     0.03
                                           -0.29
                                                   -0.25
                                                                  -0.22
                                                                          -0.19
                                                                                   3319
y_predicted[190]
                                                                                            1.0
y_predicted[191]
                    1.74
                           1.1e-3
                                     0.07
                                              1.6
                                                    1.69
                                                            1.74
                                                                    1.79
                                                                           1.88
                                                                                   3869
                                                                                            1.0
y_predicted[192]
                   -0.12
                           6.5e-4
                                     0.04
                                           -0.19
                                                   -0.15
                                                           -0.12
                                                                    -0.1
                                                                          -0.05
                                                                                   3002
                                                                                            1.0
y_predicted[193]
                    3.41
                           2.2e-3
                                     0.13
                                            3.14
                                                    3.32
                                                            3.41
                                                                     3.5
                                                                           3.67
                                                                                   3638
                                                                                            1.0
                    -0.6
                           5.0e-4
                                     0.03
                                           -0.66
                                                   -0.62
                                                            -0.6
                                                                  -0.58
                                                                          -0.54
                                                                                   3485
                                                                                            1.0
y_predicted[194]
```

```
y_predicted[195]
                   -0.31
                           8.5e-4
                                     0.05
                                           -0.41
                                                   -0.34
                                                           -0.31
                                                                  -0.28
                                                                          -0.21
                                                                                   3412
                                                                                           1.0
y_predicted[196]
                           3.9e-4
                                     0.02
                                            0.13
                                                    0.16
                                                            0.17
                                                                   0.19
                                                                           0.22
                                                                                   3834
                    0.17
                                                                                           1.0
                                     0.07
y_predicted[197]
                   -0.62
                           1.2e-3
                                           -0.76
                                                   -0.67
                                                           -0.62
                                                                  -0.57
                                                                          -0.48
                                                                                   3535
                                                                                           1.0
y_predicted[198]
                   -0.45
                           7.7e-4
                                     0.04
                                           -0.54
                                                   -0.48
                                                          -0.45
                                                                  -0.42
                                                                          -0.37
                                                                                   3193
                                                                                           1.0
y predicted[199]
                   -0.28
                           5.3e-4
                                     0.03
                                           -0.34
                                                    -0.3
                                                          -0.28
                                                                  -0.27
                                                                          -0.23
                                                                                   2792
                                                                                           1.0
y_predicted[200]
                           4.6e-4
                                     0.03
                                            0.43
                                                    0.47
                                                            0.48
                                                                    0.5
                                                                           0.54
                                                                                   3988
                    0.48
                                                                                           1.0
loglik pred[1]
                   -0.87
                           8.3e-4
                                     0.05
                                           -0.97
                                                    -0.9
                                                          -0.87
                                                                  -0.83
                                                                          -0.77
                                                                                   3798
                                                                                           1.0
loglik_pred[2]
                   -0.49
                           4.5e-4
                                     0.03
                                           -0.55
                                                   -0.51
                                                           -0.49
                                                                  -0.48
                                                                          -0.44
                                                                                   3288
                                                                                           1.0
loglik_pred[3]
                   -2.08
                           2.5e-3
                                     0.16
                                           -2.41
                                                   -2.19
                                                          -2.08
                                                                  -1.97
                                                                          -1.78
                                                                                   3927
                                                                                           1.0
loglik_pred[4]
                           6.8e-4
                                     0.04
                                           -0.68
                                                   -0.62
                    -0.6
                                                            -0.6
                                                                  -0.57
                                                                          -0.52
                                                                                   3719
                                                                                           1.0
loglik_pred[5]
                   -0.68
                           6.0e-4
                                     0.04
                                           -0.76
                                                   -0.71
                                                           -0.68
                                                                  -0.66
                                                                          -0.61
                                                                                   3870
                                                                                           1.0
loglik_pred[6]
                   -0.41
                           2.5e-4
                                     0.02
                                           -0.44
                                                   -0.42
                                                           -0.41
                                                                  -0.39
                                                                          -0.37
                                                                                   4792
                                                                                           1.0
loglik_pred[7]
                                     0.02
                                                   -0.48
                                                                          -0.43
                   -0.46
                           3.0e-4
                                            -0.5
                                                          -0.46
                                                                  -0.45
                                                                                   4256
                                                                                           1.0
                                                          -1.74
loglik_pred[8]
                   -1.74
                           1.3e-3
                                     0.09
                                           -1.92
                                                    -1.8
                                                                  -1.68
                                                                          -1.58
                                                                                   4398
                                                                                           1.0
                    -0.4
                           2.5e-4
                                           -0.44
                                                   -0.42
                                                            -0.4
                                                                  -0.39
                                                                          -0.37
loglik_pred[9]
                                     0.02
                                                                                   4667
                                                                                           1.0
loglik_pred[10]
                   -0.44
                           4.0e-4
                                     0.03
                                           -0.49
                                                   -0.46
                                                          -0.44
                                                                  -0.42
                                                                           -0.4
                                                                                   3856
                                                                                           1.0
loglik_pred[11]
                   -0.46
                           3.5e-4
                                     0.02
                                            -0.5
                                                   -0.47
                                                           -0.46
                                                                  -0.44
                                                                          -0.42
                                                                                   3828
                                                                                           1.0
loglik_pred[12]
                    -0.4
                           2.5e-4
                                     0.02
                                           -0.44
                                                   -0.42
                                                            -0.4
                                                                  -0.39
                                                                          -0.37
                                                                                   4674
                                                                                           1.0
loglik_pred[13]
                   -0.54
                           5.7e-4
                                     0.03
                                           -0.61
                                                   -0.56
                                                          -0.53
                                                                  -0.51
                                                                          -0.47
                                                                                   3643
                                                                                           1.0
loglik pred[14]
                   -0.73
                           5.9e-4
                                     0.04
                                            -0.8
                                                   -0.75
                                                          -0.73
                                                                   -0.7
                                                                          -0.65
                                                                                   4463
                                                                                           1.0
loglik_pred[15]
                           4.0e-4
                                     0.02
                                           -0.54
                   -0.49
                                                   -0.51
                                                          -0.49
                                                                  -0.47
                                                                          -0.45
                                                                                   3535
                                                                                           1.0
loglik pred[16]
                   -0.73
                           7.0e-4
                                     0.05
                                           -0.82
                                                   -0.76
                                                          -0.73
                                                                   -0.7
                                                                          -0.64
                                                                                   4227
                                                                                           1.0
loglik_pred[17]
                   -0.56
                           4.7e-4
                                     0.03
                                           -0.61
                                                   -0.58
                                                          -0.56
                                                                  -0.54
                                                                          -0.51
                                                                                   3246
                                                                                           1.0
loglik pred[18]
                   -1.73
                           1.7e-3
                                     0.12
                                           -1.98
                                                    -1.8
                                                          -1.73
                                                                  -1.65
                                                                           -1.5
                                                                                   5172
                                                                                           1.0
loglik_pred[19]
                   -0.44
                           1.1e-3
                                     0.05
                                           -0.58
                                                   -0.45
                                                          -0.42
                                                                   -0.4
                                                                          -0.38
                                                                                   2362
                                                                                           1.0
loglik_pred[20]
                   -0.63
                           1.2e-3
                                     0.07
                                           -0.78
                                                   -0.68
                                                          -0.63
                                                                  -0.58
                                                                          -0.51
                                                                                   3825
                                                                                           1.0
loglik_pred[21]
                   -0.91
                           9.4e-4
                                     0.06
                                           -1.02
                                                   -0.95
                                                          -0.91
                                                                  -0.87
                                                                          -0.81
                                                                                   3478
                                                                                           1.0
loglik_pred[22]
                   -0.96
                                           -1.32
                                                   -1.06
                                                          -0.95
                                                                          -0.68
                           2.4e-3
                                     0.16
                                                                  -0.85
                                                                                   4540
                                                                                           1.0
loglik_pred[23]
                   -0.53
                           3.9e-4
                                     0.02
                                           -0.58
                                                   -0.55
                                                           -0.53
                                                                  -0.52
                                                                          -0.49
                                                                                   3657
                                                                                           1.0
loglik_pred[24]
                   -0.69
                           6.0e-4
                                     0.03
                                           -0.77
                                                   -0.72
                                                           -0.69
                                                                  -0.67
                                                                          -0.63
                                                                                   3363
                                                                                           1.0
loglik_pred[25]
                    -3.1
                           2.3e-3
                                     0.13
                                           -3.37
                                                   -3.19
                                                            -3.1
                                                                  -3.01
                                                                          -2.84
                                                                                   3406
                                                                                           1.0
                                           -0.44
loglik_pred[26]
                   -0.41
                           2.5e-4
                                     0.02
                                                   -0.42
                                                           -0.41
                                                                  -0.39
                                                                          -0.37
                                                                                   4701
                                                                                           1.0
loglik_pred[27]
                   -0.47
                           5.4e-4
                                     0.03
                                           -0.53
                                                   -0.48
                                                           -0.47
                                                                  -0.45
                                                                          -0.42
                                                                                   2722
                                                                                           1.0
loglik_pred[28]
                   -0.46
                           4.3e-4
                                     0.03
                                           -0.52
                                                   -0.48
                                                          -0.46
                                                                  -0.44
                                                                          -0.41
                                                                                   4027
                                                                                           1.0
loglik pred[29]
                   -0.41
                           2.5e-4
                                     0.02
                                           -0.44
                                                   -0.42
                                                          -0.41
                                                                   -0.4
                                                                          -0.37
                                                                                   4789
                                                                                           1.0
                   -0.74
                                           -0.85
                                                   -0.77
                                                           -0.74
                                                                   -0.7
                                                                          -0.64
loglik pred[30]
                           9.1e-4
                                     0.05
                                                                                   3461
                                                                                           1.0
loglik pred[31]
                    -1.0
                           1.2e-3
                                     0.06
                                           -1.14
                                                   -1.04
                                                            -1.0
                                                                  -0.96
                                                                          -0.89
                                                                                   2851
                                                                                           1.0
loglik_pred[32]
                    -0.4
                           2.4e-4
                                     0.02
                                           -0.43
                                                   -0.41
                                                            -0.4
                                                                  -0.39
                                                                          -0.37
                                                                                   4894
                                                                                           1.0
loglik_pred[33]
                   -0.73
                           7.4e-4
                                     0.05
                                           -0.83
                                                   -0.76
                                                          -0.73
                                                                   -0.7
                                                                          -0.64
                                                                                   4311
                                                                                           1.0
                   -0.62
                           4.8e-4
                                     0.03
                                           -0.68
                                                   -0.64
                                                           -0.62
                                                                   -0.6
                                                                          -0.57
loglik_pred[34]
                                                                                   3516
                                                                                           1.0
loglik_pred[35]
                   -0.67
                           1.1e-3
                                     0.07
                                           -0.82
                                                   -0.71
                                                          -0.66
                                                                  -0.62
                                                                          -0.54
                                                                                   4115
                                                                                           1.0
                                                            -0.4
loglik_pred[36]
                    -0.4
                           2.4e-4
                                     0.02
                                           -0.43
                                                   -0.41
                                                                  -0.39
                                                                          -0.37
                                                                                   4905
                                                                                           1.0
loglik_pred[37]
                   -0.44
                           4.2e-4
                                     0.03
                                            -0.5
                                                   -0.46
                                                          -0.44
                                                                  -0.42
                                                                          -0.39
                                                                                   4173
                                                                                           1.0
loglik_pred[38]
                   -0.69
                           6.3e-4
                                     0.04
                                           -0.77
                                                   -0.72
                                                           -0.69
                                                                  -0.67
                                                                          -0.63
                                                                                   3484
                                                                                           1.0
loglik_pred[39]
                           4.2e-4
                                           -0.59
                                                   -0.55
                                                          -0.54
                                                                          -0.49
                   -0.54
                                     0.02
                                                                  -0.52
                                                                                   3515
                                                                                           1.0
loglik_pred[40]
                    -1.0
                           8.2e-4
                                     0.05
                                            -1.1
                                                   -1.04
                                                            -1.0
                                                                  -0.97
                                                                          -0.91
                                                                                   3529
                                                                                           1.0
loglik_pred[41]
                    -0.5
                           6.9e-4
                                     0.04
                                            -0.6
                                                   -0.53
                                                            -0.5
                                                                  -0.47
                                                                          -0.42
                                                                                   4234
                                                                                           1.0
loglik_pred[42]
                   -0.44
                           3.4e-4
                                     0.02
                                           -0.48
                                                   -0.45
                                                           -0.44
                                                                  -0.42
                                                                           -0.4
                                                                                   4255
                                                                                           1.0
```

loglik_pred[43]	-4.65	4.6e-3	0.3	-5.23	-4.85	-4.64	-4.44	-4.1	4222	1.0
loglik_pred[44]	-0.88	8.7e-4	0.05	-0.98	-0.91	-0.87	-0.84	-0.78	3689	1.0
loglik_pred[45]	-0.66	6.2e-4	0.04	-0.74	-0.69	-0.66	-0.63	-0.59	4375	1.0
<pre>loglik_pred[46]</pre>	-1.16	1.7e-3	0.1	-1.36	-1.22	-1.16	-1.09	-0.98	3112	1.0
loglik_pred[47]	-0.85	7.5e-4	0.04	-0.94	-0.88	-0.85	-0.82	-0.77	3492	1.0
loglik_pred[48]	-0.61	5.5e-4	0.03	-0.69	-0.64	-0.61	-0.59	-0.55	3591	1.0
loglik_pred[49]	-0.45	3.8e-4	0.02	-0.49	-0.46	-0.44	-0.43	-0.4	3864	1.0
loglik_pred[50]	-0.87	8.1e-4	0.05	-0.97	-0.9	-0.87	-0.84	-0.78	3322	1.0
<pre>loglik_pred[51]</pre>	-0.54	4.1e-4	0.03	-0.59	-0.56	-0.54	-0.52	-0.49	3777	1.0
loglik_pred[52]	-0.83	7.0e-4	0.04	-0.91	-0.85	-0.83	-0.8	-0.75	3186	1.0
loglik_pred[53]	-0.41	2.5e-4	0.02	-0.44	-0.42	-0.41	-0.4	-0.38	4600	1.0
loglik_pred[54]	-0.42	3.5e-4	0.02	-0.47	-0.44	-0.42	-0.41	-0.38	3884	1.0
loglik_pred[55]	-0.43	4.6e-4	0.03	-0.5	-0.45	-0.43	-0.41	-0.38	4055	1.0
loglik_pred[56]	-0.41	2.8e-4	0.02	-0.45	-0.43	-0.41	-0.4	-0.38	4468	1.0
loglik_pred[57]	-1.45	1.1e-3	0.07	-1.59	-1.5	-1.45	-1.4	-1.32	3646	1.0
loglik_pred[58]	-4.27	0.01	0.72	-5.76	-4.76	-4.23	-3.75	-2.96	3957	1.0
loglik_pred[59]	-0.41	2.7e-4	0.02	-0.45	-0.42	-0.41	-0.4	-0.38	4565	1.0
loglik_pred[60]	-0.43	3.1e-4	0.02	-0.47	-0.44	-0.43	-0.42	-0.39	4254	1.0
loglik_pred[61]	-0.41	2.6e-4	0.02	-0.45	-0.42	-0.41	-0.4	-0.37	4627	1.0
loglik_pred[62]	-0.78	8.5e-4	0.05	-0.87	-0.81	-0.77	-0.74	-0.69	3087	1.0
loglik_pred[63]	-0.54	5.2e-4	0.03	-0.6	-0.56	-0.53	-0.51	-0.48	3909	1.0
loglik_pred[64]	-0.49	3.7e-4	0.02	-0.53	-0.5	-0.48	-0.47	-0.44	4055	1.0
loglik_pred[65]	-0.4	2.4e-4	0.02	-0.44	-0.41	-0.4	-0.39	-0.37	4891	1.0
loglik_pred[66]	-0.64	8.6e-4	0.05	-0.74	-0.67	-0.64	-0.61	-0.55	2988	1.0
loglik_pred[67]	-0.45	4.3e-4	0.03	-0.51	-0.47	-0.45	-0.43	-0.4	3641	1.0
loglik_pred[68]	-0.77	6.3e-4	0.04	-0.85	-0.8	-0.77	-0.75	-0.71	3221	1.0
loglik_pred[69]	-0.53	3.7e-4	0.02	-0.58	-0.55	-0.53	-0.52	-0.49	3991	1.0
loglik_pred[70]	-0.77	9.5e-4	0.05	-0.88	-0.8	-0.77	-0.74	-0.68	2930	1.0
loglik_pred[71]	-1.22	1.4e-3	0.08	-1.37	-1.27	-1.22	-1.16	-1.07	3147	1.0
loglik_pred[72]	-0.41	2.9e-4	0.02	-0.44	-0.42	-0.41	-0.39	-0.37	3923	1.0
loglik_pred[73]	-0.45	3.6e-4	0.02	-0.5	-0.47	-0.45	-0.43	-0.41	4180	1.0
loglik_pred[74]	-0.42	2.5e-4	0.02	-0.45	-0.43	-0.42	-0.41	-0.38	4754	1.0
loglik_pred[75]	-1.06	1.6e-3	0.08	-1.22	-1.11	-1.06	-1.0	-0.91	2497	1.0
loglik_pred[76]	-0.4	2.4e-4	0.02	-0.44	-0.42	-0.4	-0.39	-0.37	4912	1.0
loglik_pred[77]	-0.71	7.7e-4	0.05	-0.8	-0.73	-0.7	-0.67	-0.62	3468	1.0
loglik_pred[78]	-0.61	4.0e-4	0.02	-0.66	-0.63	-0.61	-0.6	-0.57	3515	1.0
loglik_pred[79]	-0.45	3.6e-4	0.02	-0.5	-0.46	-0.45	-0.43	-0.4	4197	1.0
loglik_pred[80]	-0.41	2.7e-4	0.02	-0.45	-0.42	-0.41	-0.4	-0.38	4280	1.0
loglik_pred[81]	-0.57	4.4e-4	0.02	-0.62	-0.59	-0.57	-0.56	-0.53	3256	1.0
loglik_pred[82]	-4.47	3.5e-3	0.24	-4.95	-4.63	-4.47	-4.31	-4.02	4608	1.0
loglik_pred[83]	-0.54	6.3e-4	0.03	-0.61	-0.56	-0.54	-0.52	-0.48	2665	1.0
loglik_pred[84]	-0.42	2.8e-4	0.02	-0.45	-0.43	-0.42	-0.4	-0.38	4547	1.0
loglik_pred[85]	-0.41	2.5e-4	0.02	-0.44	-0.42	-0.41	-0.4	-0.38	4703	1.0
loglik_pred[86]	-0.68	4.5e-4	0.03	-0.74	-0.7	-0.68	-0.67	-0.63	3505	1.0
loglik_pred[87]	-0.67	5.4e-4	0.03	-0.74	-0.69	-0.67	-0.65	-0.61	3172	1.0
loglik_pred[88]	-0.42	2.9e-4	0.02	-0.46	-0.43	-0.42	-0.4	-0.38	4345	1.0
loglik_pred[89]	-0.43	3.1e-4	0.02	-0.47	-0.44	-0.43	-0.42	-0.39	3988	1.0
loglik_pred[90]	-0.43	2.8e-4	0.02	-0.46	-0.44	-0.43	-0.42	-0.39	4274	1.0
0 _1	-	- -			-	-	-		•	-

loglik_pred[91]	-0.44	3.9e-4	0.02	-0.49	-0.45	-0.44	-0.42	-0.4	3627	1.0
loglik_pred[92]	-0.42	2.6e-4	0.02	-0.45	-0.43	-0.42	-0.41	-0.38	4522	1.0
loglik_pred[93]	-1.18	2.1e-3	0.12	-1.43	-1.26	-1.17	-1.09	-0.95	3426	1.0
loglik_pred[94]	-0.55	6.6e-4	0.04	-0.63	-0.58	-0.55	-0.52	-0.48	3356	1.0
loglik_pred[95]	-2.11	1.5e-3	0.09	-2.29	-2.17	-2.1	-2.04	-1.92	3769	1.0
loglik_pred[96]	-0.41	2.4e-4	0.02	-0.44	-0.42	-0.41	-0.4	-0.38	4829	1.0
loglik_pred[97]	-0.6	4.5e-4	0.03	-0.65	-0.62	-0.6	-0.58	-0.55	3367	1.0
loglik_pred[98]	-0.43	3.5e-4	0.02	-0.48	-0.45	-0.43	-0.42	-0.39	4185	1.0
loglik_pred[99]	-0.44	6.2e-4	0.04	-0.53	-0.46	-0.44	-0.42	-0.38	3587	1.0
loglik_pred[100]	-0.59	5.6e-4	0.03	-0.66	-0.61	-0.59	-0.56	-0.52	3804	1.0
loglik_pred[101]	-0.42	2.7e-4	0.02	-0.45	-0.43	-0.42	-0.4	-0.38	4357	1.0
loglik_pred[102]	-0.59	4.7e-4	0.03	-0.64	-0.61	-0.59	-0.57	-0.54	3523	1.0
loglik_pred[103]	-0.45	4.1e-4	0.03	-0.51	-0.47	-0.45	-0.44	-0.41	3995	1.0
loglik_pred[104]	-0.69	6.8e-4	0.04	-0.77	-0.71	-0.69	-0.66	-0.61	3556	1.0
loglik_pred[105]	-4.34	3.0e-3	0.19	-4.73	-4.47	-4.34	-4.21	-3.96	4180	1.0
loglik_pred[106]	-0.53	7.5e-4	0.04	-0.61	-0.56	-0.53	-0.5	-0.46	2725	1.0
loglik_pred[107]	-0.41	2.7e-4	0.02	-0.45	-0.42	-0.41	-0.4	-0.38	4705	1.0
loglik_pred[108]	-9.09	9.1e-3	0.53	-10.15	-9.46	-9.08	-8.73	-8.08	3433	1.0
loglik_pred[109]	-1.65	1.7e-3	0.09	-1.84	-1.71	-1.65	-1.59	-1.49	3017	1.0
loglik_pred[110]	-1.91	3.1e-3	0.22	-2.35	-2.06	-1.9	-1.76	-1.51	4875	1.0
loglik_pred[111]	-1.66	3.2e-3	0.2	-2.08	-1.79	-1.65	-1.52	-1.28	4037	1.0
loglik_pred[112]	-0.5	4.3e-4	0.03	-0.55	-0.51	-0.5	-0.48	-0.45	3562	1.0
loglik_pred[113]	-0.45	3.5e-4	0.02	-0.49	-0.46	-0.45	-0.43	-0.4	4273	1.0
loglik_pred[114]	-0.41	2.4e-4	0.02	-0.44	-0.42	-0.41	-0.39	-0.37	4856	1.0
loglik_pred[115]	-0.42	2.9e-4	0.02	-0.46	-0.43	-0.42	-0.41	-0.38	4220	1.0
loglik_pred[116]	-0.43	3.2e-4	0.02	-0.47	-0.44	-0.43	-0.42	-0.39	3973	1.0
loglik_pred[117]	-0.45	3.5e-4	0.02	-0.49	-0.46	-0.45	-0.43	-0.41	3661	1.0
loglik_pred[118]	-0.83	1.1e-3	0.07	-0.97	-0.87	-0.83	-0.78	-0.71	3609	1.0
loglik_pred[119]	-1.15	1.3e-3	0.08	-1.31	-1.21	-1.15	-1.1	-1.0	3678	1.0
loglik_pred[120]	-0.41	2.6e-4	0.02	-0.44	-0.42	-0.41	-0.4	-0.37	4612	1.0
loglik_pred[121]	-0.41	2.6e-4	0.02	-0.45	-0.42	-0.41	-0.4	-0.38	4627	1.0
loglik_pred[122]	-0.42	3.1e-4	0.02	-0.46	-0.43	-0.41	-0.4	-0.38	4244	1.0
loglik_pred[123]	-0.57	4.3e-4	0.03	-0.62	-0.58	-0.57	-0.55	-0.52	3652	1.0
loglik_pred[124]	-0.41	2.7e-4	0.02	-0.45	-0.42	-0.41	-0.4	-0.38	4493	1.0
loglik_pred[125]	-1.31	9.7e-4	0.06	-1.42	-1.35	-1.31	-1.27	-1.2	3433	1.0
loglik_pred[126]	-1.37	1.2e-3	0.07	-1.52	-1.42	-1.37	-1.33	-1.25	3496	1.0
loglik_pred[127]	-0.42	2.8e-4	0.02	-0.46	-0.44	-0.42	-0.41	-0.39	4253	1.0
loglik_pred[128]	-0.54	4.8e-4	0.03	-0.61	-0.56	-0.54	-0.52	-0.49	3894	1.0
loglik_pred[129]	-0.4	2.4e-4	0.02	-0.44	-0.41	-0.4	-0.39	-0.37	4866	1.0
loglik_pred[130]	-0.4	2.5e-4	0.02	-0.44	-0.41	-0.4	-0.39	-0.37	4567	1.0
loglik_pred[131]	-0.95	3.0e-3	0.18	-1.34	-1.06	-0.94	-0.83	-0.65	3402	1.0
loglik_pred[132]	-0.47	3.5e-4	0.02	-0.51	-0.48	-0.47	-0.45	-0.43	3835	1.0
loglik_pred[133]	-1.17	1.4e-3	0.08	-1.34	-1.22	-1.17	-1.11	-1.02	3223	1.0
loglik_pred[134]	-0.7	1.0e-3	0.07	-0.84	-0.74	-0.7	-0.65	-0.58	4003	1.0
loglik_pred[135]	-0.51	3.9e-4	0.02	-0.56	-0.52	-0.51	-0.49	-0.46	3564	1.0
loglik_pred[136]	-0.42	2.9e-4	0.02	-0.46	-0.44	-0.42	-0.41	-0.39	4366	1.0
loglik_pred[137]	-0.96	7.9e-4	0.05	-1.06	-0.99	-0.96	-0.93	-0.87	3418	1.0
loglik_pred[138]	-0.46	5.7e-4	0.04	-0.54	-0.48	-0.45	-0.43	-0.4	4239	1.0

```
loglik_pred[139]
                   -0.55
                           4.4e-4
                                     0.03
                                            -0.61
                                                   -0.57
                                                           -0.55
                                                                   -0.53
                                                                           -0.49
                                                                                   4245
                                                                                            1.0
loglik_pred[140]
                   -0.41
                           2.8e-4
                                     0.02
                                            -0.44
                                                   -0.42
                                                           -0.41
                                                                   -0.39
                                                                           -0.37
                                                                                   4297
                                                                                            1.0
                   -0.44
                           3.4e-4
                                            -0.49
loglik_pred[141]
                                     0.02
                                                   -0.46
                                                           -0.44
                                                                   -0.43
                                                                            -0.4
                                                                                   4332
                                                                                            1.0
loglik_pred[142]
                   -0.49
                           4.9e-4
                                     0.03
                                            -0.56
                                                   -0.51
                                                           -0.49
                                                                   -0.47
                                                                          -0.44
                                                                                   3924
                                                                                            1.0
loglik pred[143]
                   -0.41
                           2.4e-4
                                     0.02
                                            -0.44
                                                   -0.42
                                                           -0.41
                                                                   -0.39
                                                                           -0.37
                                                                                   4903
                                                                                            1.0
loglik pred[144]
                   -0.46
                           3.4e-4
                                     0.02
                                             -0.5
                                                   -0.48
                                                           -0.46
                                                                   -0.45
                                                                           -0.42
                                                                                   3691
                                                                                            1.0
loglik_pred[145]
                   -0.41
                           2.5e-4
                                     0.02
                                            -0.44
                                                   -0.42
                                                           -0.41
                                                                    -0.4
                                                                          -0.37
                                                                                   4825
                                                                                            1.0
                           2.7e-4
                                            -0.45
                                                           -0.41
loglik_pred[146]
                   -0.41
                                     0.02
                                                   -0.42
                                                                   -0.39
                                                                          -0.37
                                                                                   4464
                                                                                            1.0
loglik pred[147]
                   -0.41
                           2.6e-4
                                     0.02
                                            -0.45
                                                   -0.43
                                                           -0.41
                                                                    -0.4
                                                                          -0.38
                                                                                   4675
                                                                                            1.0
loglik_pred[148]
                           3.4e-4
                   -0.45
                                     0.02
                                            -0.49
                                                   -0.46
                                                           -0.45
                                                                   -0.43
                                                                          -0.41
                                                                                   3865
                                                                                            1.0
loglik_pred[149]
                   -0.59
                           5.5e-4
                                     0.03
                                            -0.66
                                                   -0.61
                                                           -0.59
                                                                   -0.57
                                                                           -0.53
                                                                                   3838
                                                                                            1.0
loglik_pred[150]
                   -0.62
                           4.8e-4
                                     0.03
                                            -0.67
                                                   -0.64
                                                           -0.62
                                                                    -0.6
                                                                          -0.57
                                                                                   3309
                                                                                            1.0
loglik_pred[151]
                                     0.02
                   -0.44
                           3.5e-4
                                            -0.49
                                                   -0.46
                                                           -0.44
                                                                   -0.43
                                                                            -0.4
                                                                                   3964
                                                                                            1.0
loglik_pred[152]
                   -0.57
                           4.7e-4
                                     0.03
                                            -0.63
                                                   -0.59
                                                           -0.57
                                                                   -0.55
                                                                           -0.52
                                                                                   3602
                                                                                            1.0
                           6.9e-4
                                            -0.95
loglik_pred[153]
                   -0.87
                                     0.04
                                                    -0.9
                                                           -0.87
                                                                   -0.85
                                                                            -0.8
                                                                                   3120
                                                                                            1.0
loglik_pred[154]
                   -1.28
                           9.4e-4
                                     0.06
                                            -1.38
                                                   -1.31
                                                           -1.28
                                                                   -1.24
                                                                          -1.17
                                                                                   3597
                                                                                            1.0
loglik_pred[155]
                   -0.98
                           7.9e-4
                                     0.05
                                            -1.07
                                                   -1.01
                                                           -0.98
                                                                   -0.95
                                                                          -0.89
                                                                                   3336
                                                                                            1.0
loglik_pred[156]
                   -0.76
                           6.8e-4
                                     0.04
                                            -0.85
                                                   -0.79
                                                           -0.76
                                                                   -0.73
                                                                          -0.69
                                                                                   3484
                                                                                            1.0
loglik_pred[157]
                   -0.46
                           3.1e-4
                                     0.02
                                             -0.5
                                                   -0.47
                                                           -0.46
                                                                   -0.45
                                                                          -0.42
                                                                                   3821
                                                                                            1.0
loglik pred[158]
                   -0.45
                           3.9e-4
                                     0.02
                                             -0.5
                                                   -0.47
                                                           -0.45
                                                                   -0.44
                                                                          -0.41
                                                                                   3966
                                                                                            1.0
                                                                    -0.6
loglik_pred[159]
                   -0.63
                           6.8e-4
                                     0.04
                                             -0.7
                                                   -0.65
                                                           -0.62
                                                                          -0.55
                                                                                   3280
                                                                                            1.0
loglik pred[160]
                   -0.42
                           2.5e-4
                                     0.02
                                            -0.45
                                                   -0.43
                                                           -0.42
                                                                   -0.41
                                                                           -0.38
                                                                                   4717
                                                                                            1.0
loglik_pred[161]
                   -0.43
                           2.9e-4
                                     0.02
                                            -0.47
                                                   -0.44
                                                           -0.43
                                                                   -0.42
                                                                            -0.4
                                                                                   4122
                                                                                            1.0
loglik pred[162]
                   -0.82
                           9.5e-4
                                     0.05
                                            -0.93
                                                   -0.86
                                                           -0.82
                                                                   -0.78
                                                                          -0.72
                                                                                   3315
                                                                                            1.0
loglik_pred[163]
                   -0.87
                           7.1e-4
                                     0.04
                                            -0.95
                                                    -0.9
                                                           -0.87
                                                                   -0.84
                                                                          -0.79
                                                                                   3261
                                                                                            1.0
loglik_pred[164]
                   -3.33
                           2.7e-3
                                     0.19
                                             -3.7
                                                   -3.45
                                                           -3.32
                                                                    -3.2
                                                                          -2.97
                                                                                   4769
                                                                                            1.0
loglik_pred[165]
                   -0.41
                           2.5e-4
                                     0.02
                                            -0.45
                                                   -0.42
                                                           -0.41
                                                                    -0.4
                                                                          -0.38
                                                                                   4749
                                                                                            1.0
loglik_pred[166]
                                     0.02
                                             -0.5
                                                   -0.47
                                                           -0.45
                                                                   -0.44
                                                                          -0.42
                   -0.45
                           3.3e-4
                                                                                   3862
                                                                                            1.0
                                                                   -0.41
                                                                           -0.39
loglik_pred[167]
                    -0.42
                           2.8e-4
                                     0.02
                                            -0.46
                                                   -0.43
                                                           -0.42
                                                                                   4562
                                                                                            1.0
loglik_pred[168]
                   -0.45
                           7.5e-4
                                     0.04
                                            -0.56
                                                   -0.47
                                                           -0.44
                                                                   -0.42
                                                                           -0.39
                                                                                   3403
                                                                                            1.0
loglik_pred[169]
                   -0.58
                           4.2e-4
                                     0.02
                                            -0.63
                                                    -0.6
                                                           -0.58
                                                                   -0.56
                                                                          -0.54
                                                                                   3116
                                                                                            1.0
loglik_pred[170]
                   -0.55
                           4.1e-4
                                     0.02
                                             -0.6
                                                   -0.56
                                                           -0.55
                                                                   -0.53
                                                                            -0.5
                                                                                   3358
                                                                                            1.0
                           3.0e-4
                                                                    -0.4
loglik_pred[171]
                   -0.41
                                     0.02
                                            -0.45
                                                   -0.43
                                                           -0.41
                                                                          -0.38
                                                                                   4264
                                                                                            1.0
loglik_pred[172]
                   -6.26
                           4.3e-3
                                     0.32
                                            -6.89
                                                   -6.46
                                                           -6.25
                                                                  -6.04
                                                                          -5.64
                                                                                   5460
                                                                                            1.0
loglik pred[173]
                   -0.45
                           4.4e-4
                                     0.03
                                            -0.51
                                                   -0.46
                                                           -0.44
                                                                   -0.43
                                                                            -0.4
                                                                                   4071
                                                                                            1.0
                                            -0.71
                                                           -0.62
loglik pred[174]
                   -0.63
                           6.9e-4
                                     0.04
                                                   -0.65
                                                                    -0.6
                                                                          -0.55
                                                                                   3530
                                                                                            1.0
loglik pred[175]
                   -0.54
                           5.0e-4
                                     0.03
                                             -0.6
                                                   -0.56
                                                           -0.54
                                                                   -0.52
                                                                          -0.48
                                                                                   3893
                                                                                            1.0
loglik_pred[176]
                   -1.47
                           1.1e-3
                                     0.07
                                            -1.61
                                                   -1.51
                                                           -1.47
                                                                   -1.43
                                                                          -1.34
                                                                                   3598
                                                                                            1.0
loglik_pred[177]
                   -0.61
                           4.3e-4
                                     0.02
                                            -0.66
                                                   -0.63
                                                           -0.61
                                                                    -0.6
                                                                          -0.57
                                                                                   3270
                                                                                            1.0
loglik_pred[178]
                           2.4e-4
                                     0.02
                                            -0.44
                                                   -0.41
                                                            -0.4
                                                                  -0.39
                                                                          -0.37
                    -0.4
                                                                                   4810
                                                                                            1.0
loglik_pred[179]
                   -0.44
                           3.1e-4
                                     0.02
                                            -0.48
                                                   -0.45
                                                           -0.44
                                                                   -0.42
                                                                            -0.4
                                                                                   3811
                                                                                            1.0
loglik_pred[180]
                   -1.19
                           1.3e-3
                                     0.09
                                            -1.36
                                                   -1.25
                                                            -1.2
                                                                   -1.13
                                                                          -1.03
                                                                                   4044
                                                                                            1.0
loglik_pred[181]
                   -0.97
                           1.0e-3
                                     0.06
                                            -1.09
                                                   -1.01
                                                           -0.96
                                                                   -0.92
                                                                           -0.85
                                                                                   3444
                                                                                            1.0
loglik_pred[182]
                    -0.4
                           2.5e-4
                                     0.02
                                            -0.44
                                                   -0.42
                                                            -0.4
                                                                   -0.39
                                                                           -0.37
                                                                                   4609
                                                                                            1.0
                           3.6e-3
                                            -6.45
                                                   -6.15
loglik_pred[183]
                   -5.99
                                     0.24
                                                           -5.98
                                                                   -5.82
                                                                          -5.53
                                                                                   4412
                                                                                            1.0
loglik_pred[184]
                   -0.99
                           8.6e-4
                                     0.05
                                            -1.09
                                                   -1.02
                                                           -0.99
                                                                   -0.95
                                                                           -0.89
                                                                                   3727
                                                                                            1.0
loglik_pred[185]
                   -1.32
                           8.6e-4
                                     0.05
                                            -1.42
                                                   -1.35
                                                           -1.31
                                                                   -1.28
                                                                           -1.21
                                                                                   3746
                                                                                            1.0
loglik_pred[186]
                   -0.68
                           7.3e-4
                                     0.04
                                            -0.77
                                                   -0.71
                                                           -0.68
                                                                   -0.65
                                                                            -0.6
                                                                                   3788
                                                                                            1.0
```

```
loglik_pred[187]
                 -0.44 3.4e-4
                                0.02 - 0.49 - 0.46 - 0.44 - 0.43
                                                                 -0.4
                                                                        4228
                                                                                1.0
loglik_pred[188]
                 -0.41 2.6e-4
                                0.02 -0.44 -0.42 -0.41 -0.39 -0.37
                                                                        4556
                                                                                1.0
loglik_pred[189]
                 -0.45 3.7e-4
                                0.02 -0.5 -0.46 -0.45 -0.43
                                                                 -0.4
                                                                        3913
                                                                                1.0
loglik_pred[190]
                 -1.12 9.1e-4
                                0.05 -1.23 -1.15 -1.11 -1.08 -1.01
                                                                                1.0
                                                                        3583
loglik_pred[191]
                                0.09 -1.01 -0.88 -0.81 -0.75 -0.65
                 -0.82 1.5e-3
                                                                         3860
                                                                                1.0
loglik_pred[192]
                 -0.41 2.8e-4
                                0.02 -0.46 -0.43 -0.41
                                                           -0.4 -0.38
                                                                        5040
                                                                                1.0
loglik_pred[193]
                 -0.41 2.6e-4
                                0.02 -0.44 -0.42 -0.41
                                                           -0.4 -0.38
                                                                         4602
                                                                                1.0
                                0.03 - 0.74
loglik_pred[194]
                 -0.68 5.2e-4
                                             -0.7 -0.67 -0.65 -0.62
                                                                        3441
                                                                                1.0
loglik_pred[195]
                -0.51 3.7e-4
                                0.02 - 0.55 - 0.52 - 0.51 - 0.49 - 0.46
                                                                        4004
                                                                                1.0
loglik_pred[196]
                -0.43 5.0e-4
                                0.03 -0.51 -0.45 -0.42 -0.41 -0.38
                                                                        4274
                                                                                1.0
loglik_pred[197]
                 -0.97 8.1e-4
                                0.06 -1.08 -1.01 -0.97 -0.93 -0.87
                                                                        4603
                                                                                1.0
loglik_pred[198]
                -0.76 6.7e-4
                                0.04 -0.83 -0.78 -0.75 -0.73 -0.69
                                                                         2800
                                                                                1.0
loglik_pred[199]
                                0.04 -0.74 -0.69 -0.66 -0.63 -0.58
                 -0.66 6.2e-4
                                                                        4183
                                                                                1.0
loglik_pred[200]
                 -0.41 2.6e-4
                                0.02 - 0.45 - 0.42 - 0.41
                                                           -0.4 -0.38
                                                                         4668
                                                                                1.0
                 32.03
                                2.25 26.73 30.73 32.36 33.68 35.43
lp__
                         0.06
                                                                         1639
                                                                                1.0
```

Samples were drawn using NUTS at Sat Dec $8\ 00:37:17\ 2018$. 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). 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.

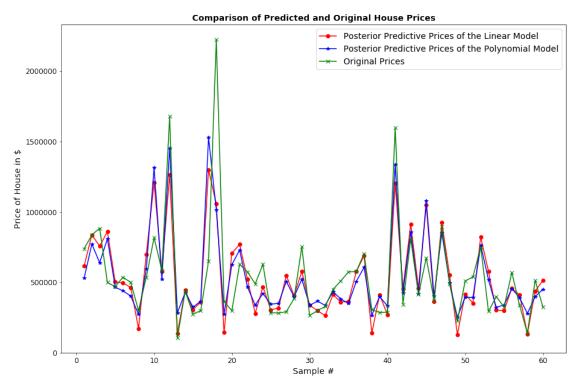
1.3 3. Comparative Analysis of Model

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

Firsty, we *unscaled* the predicted prices retreived 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:

```
y_poly_unscaled = scaler_new.inverse_transform(y_ax_poly)
YTest_Unscaled = scaler_new.inverse_transform(YTest_Scaled)
# Extract a fraction (30%) of the Predictive Posterior values from the test samples a
predictionSamples = int(len(YTest_Scaled) * 0.3)
x_ax = np.arange(1, predictionSamples + 1, 1)
# Plot the predictions from both models versus the 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 Predictive
plt.plot(x_ax, y_poly_unscaled[:predictionSamples], label = "Posterior Predictive Pri-
plt.plot(x_ax, YTest_Unscaled[:predictionSamples], label = "Original Prices", marker
plt.legend(fontsize = 14)
plt.tick_params(labelsize = 12)
plt.title('Comparison of Predicted and Original House Prices', fontsize = 14, fontweight
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: 1.781007323260178

RMS error of the Polynomial model: 1.7570609721068275
```

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. 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.shap.p_loo_linear = lppd_linear - loo_linear

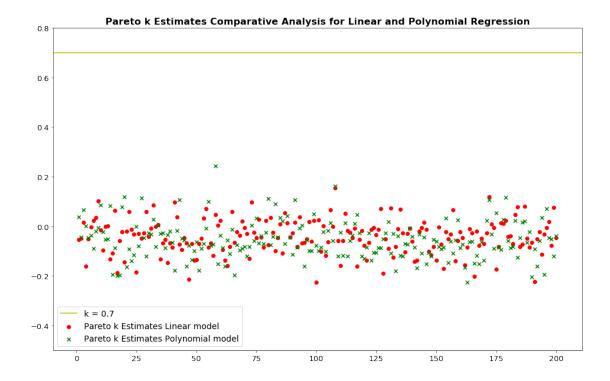
    print("Estimated effective number of parameters in the model: ", p_loo_linear)

    ksn1 = (ks_linear >= 0.7).sum()
    print("Number of k values greater than 0.7: ", ksn1)

Linear Model:
PSIS-LOO value: -174.99283071811473
Estimated effective number of parameters in the model: 0.684007525568262

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: -170.4180698811343
Estimated effective number of parameters in the model: 1.671914139234417
Number of k values greater than 0.7 : 0
In [14]: # Scatter plots for Pareto k-values for Linear and Polynomial Regression 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 =
         plt.scatter(x_poly, ks_poly, label = "Pareto k Estimates Polynomial model", marker =
         plt.tick_params(labelsize = 13)
         plt.ylim((-0.5, 0.8))
         plt.title("Pareto k Estimates Comparative Analysis for Linear and Polynomial Regression
         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.

1.4 4. 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.