

BDA Project

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```
QSAR <- read.csv(file = 'qsar_aquatic_toxicity.csv')
colnames(QSAR)

## [1] "TSPA"                 "Saacc"                "H050"
## [4] "MLOGP"                "RDCHI"                "GATS1p"
## [7] "nN"                   "C040"                 "quantitative_response"

for(col in colnames(QSAR))
{
  QSAR[col]<-scale(QSAR[col])
}

#creating linear model
#fullmodel=lm(X2014~poly(X2013,3)+poly(X2012,3)+poly(X2011,3)+poly(X2010,3),data=YE)
```

```

fullmodel=lm(quantitative_response~TSPA+Saacc+H050+MLOGP+RDCHI+GATS1p+nN+C040, data =QSAR)
summary(fullmodel)

##
## Call:
## lm(formula = quantitative_response ~ TSPA + Saacc + H050 + MLOGP +
##     RDCHI + GATS1p + nN + C040, data = QSAR)
##
## Residuals:
##       Min     1Q   Median     3Q    Max 
## -2.69840 -0.45513 -0.06727  0.35004  2.98929
##
## Coefficients:
##             Estimate Std. Error t value Pr(>|t|)    
## (Intercept) -3.246e-16 3.091e-02  0.000 1.000000  
## TSPA         7.639e-01 7.474e-02 10.220 < 2e-16 ***
## Saacc        -6.173e-01 8.562e-02 -7.211 1.90e-12 ***
## H050          3.948e-02 5.811e-02  0.679 0.497186  
## MLOGP         4.666e-01 6.621e-02  7.048 5.60e-12 ***
## RDCHI         2.503e-01 6.602e-02  3.791 0.000167 *** 
## GATS1p        -1.385e-01 3.730e-02 -3.713 0.000227 *** 
## nN            -1.886e-01 4.053e-02 -4.653 4.12e-06 *** 
## C040          1.548e-03 3.778e-02  0.041 0.967340  
## ---      
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.7222 on 537 degrees of freedom
## Multiple R-squared:  0.4861, Adjusted R-squared:  0.4785 
## F-statistic:  63.5 on 8 and 537 DF, p-value: < 2.2e-16

```

1) Introduction

Motivation

The problem

Modeling idea

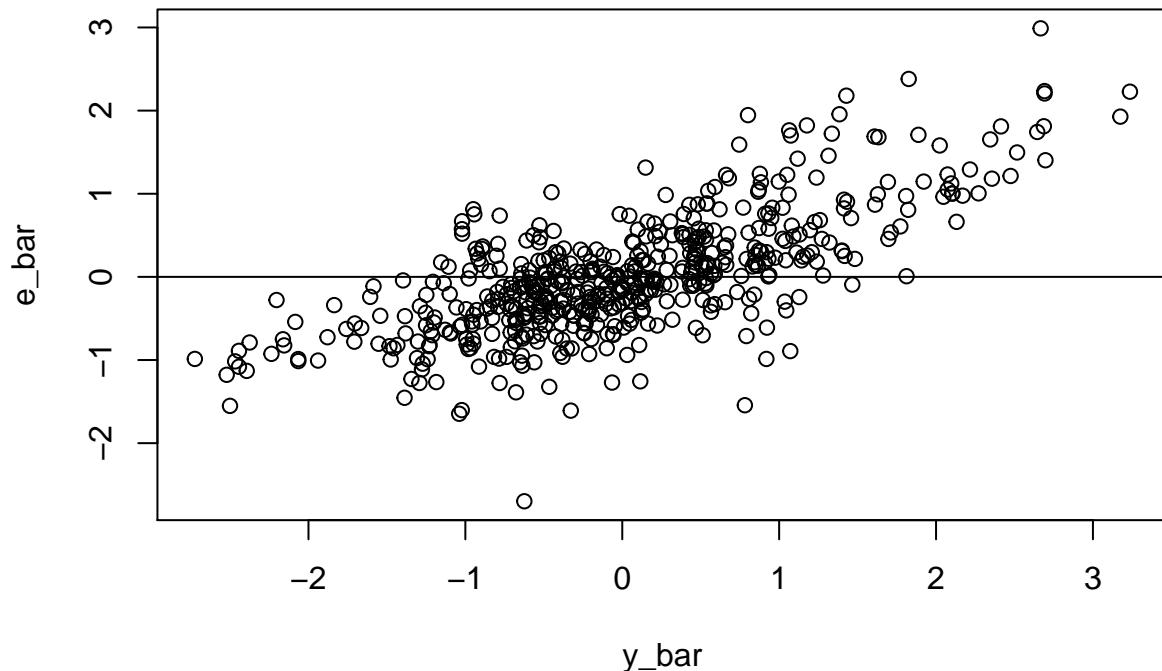
illustrative figure is recommended.

```

plot(QSAR$quantitative_response,fullmodel$res, ylab="e_bar", xlab="y_bar", main="Residual plot")
abline(0,0)

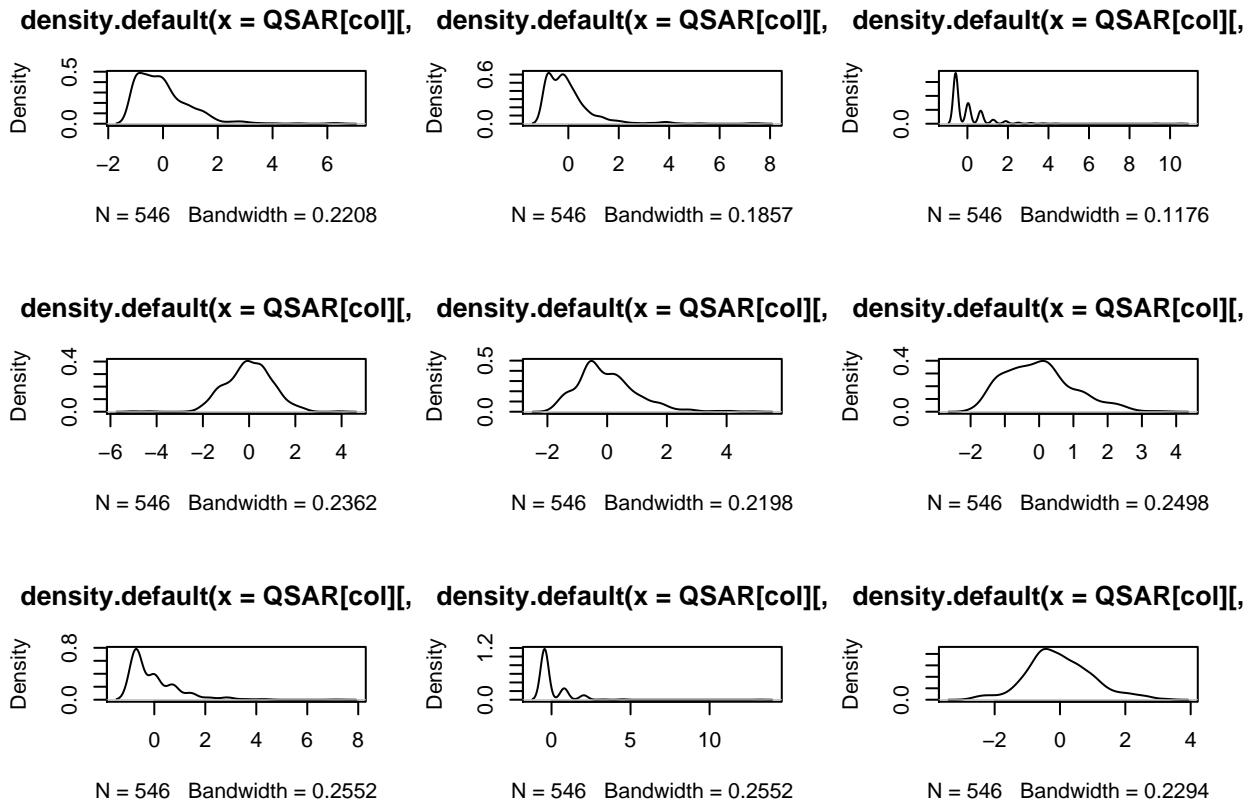
```

Residual plot



```
par(mfrow=c(3,3))
cols = colnames(QSAR)

for(col in cols)
{
  plot(density(QSAR[col] [,1]))
}
```



2) Description of the data and the analysis problem.

Provide information where the data was obtained, and if it has been previously used in some online case study and how your analysis differs from the existing analyses.

3) Description of at least two models, for example:

non hierarchical and hierarchical,

linear and non linear

variable selection with many models.

4) Informative or weakly informative priors

and justification of their choices.

5) Stan code

(brms can be used to generate the code, but Stan code needs to be present and explained).

```
TSPA=QSAR$TSPA[,1]
Saacc=QSAR$Saacc[,1]
H050=QSAR$H050[,1]
MLOGP=QSAR$MLOGP[,1]
```

```

RDCHI=QSAR$RDCHI[,1]
GATS1p=QSAR$GATS1p[,1]
nN=QSAR$nN[,1]
C040=QSAR$C040[,1]
qr=QSAR$quantitative_response[,1]
n=dim(QSAR)[1]

qsar_data <-list(N=n,qr=qr,TSPA=TSPA,Saacc=Saacc,H050=H050,MLOGP=MLOGP,RDCHI=RDCHI,GATS1p=GATS1p,nN=nN,)

model_simple <-stan(file = 'QSARproject.stan' , data = qsar_data, chains=4, iter=1000)
print(model_simple)

## Inference for Stan model: QSARproject.
## 4 chains, each with iter=1000; warmup=500; thin=1;
## post-warmup draws per chain=500, total post-warmup draws=2000.
##
##          mean se_mean    sd   2.5%   25%   50%   75% 97.5% n_eff Rhat
## a        0.00  0.00 0.03 -0.06 -0.02  0.00  0.02  0.06  2736 1.00
## b        0.77  0.00 0.08  0.61  0.72  0.76  0.81  0.91  1381 1.00
## c       -0.62  0.00 0.09 -0.79 -0.68 -0.62 -0.56 -0.45  1211 1.00
## d        0.04  0.00 0.06 -0.08  0.00  0.04  0.08  0.15  1445 1.00
## e        0.47  0.00 0.07  0.34  0.42  0.47  0.51  0.60  1063 1.01
## f        0.25  0.00 0.07  0.12  0.20  0.25  0.29  0.39  1074 1.01
## g       -0.14  0.00 0.04 -0.21 -0.16 -0.14 -0.11 -0.06  1571 1.00
## h       -0.19  0.00 0.04 -0.27 -0.21 -0.19 -0.16 -0.11  1700 1.00
## i        0.00  0.00 0.04 -0.07 -0.02  0.00  0.03  0.08  2057 1.00
## sigma    0.72  0.00 0.02  0.68  0.71  0.72  0.74  0.77  1852 1.00
## mu[1]   -0.38  0.00 0.07 -0.51 -0.43 -0.38 -0.33 -0.24  2146 1.00
## mu[2]   -0.25  0.00 0.06 -0.38 -0.30 -0.25 -0.21 -0.13  2365 1.00
## mu[3]    1.17  0.00 0.07  1.03  1.12  1.17  1.22  1.32  2610 1.00
## mu[4]    1.06  0.00 0.07  0.93  1.01  1.06  1.10  1.20  2688 1.00
## mu[5]    0.58  0.00 0.06  0.47  0.54  0.58  0.62  0.69  1964 1.00
## mu[6]    0.49  0.00 0.20  0.10  0.36  0.49  0.62  0.87  2721 1.00
## mu[7]   -0.08  0.00 0.05 -0.17 -0.11 -0.08 -0.05  0.01  2515 1.00
## mu[8]    0.08  0.00 0.05 -0.01  0.05  0.08  0.12  0.18  2335 1.00
## mu[9]   -0.50  0.00 0.05 -0.60 -0.53 -0.50 -0.46 -0.39  2541 1.00
## mu[10]   -0.41  0.00 0.07 -0.53 -0.45 -0.41 -0.36 -0.27  1575 1.00
## mu[11]   -0.27  0.00 0.07 -0.40 -0.31 -0.27 -0.22 -0.13  1518 1.00
## mu[12]   -0.99  0.00 0.07 -1.13 -1.04 -0.99 -0.94 -0.85  2838 1.00
## mu[13]   0.64  0.00 0.10  0.46  0.57  0.64  0.70  0.83  2694 1.00
## mu[14]  -1.15  0.00 0.08 -1.31 -1.21 -1.15 -1.09 -1.00  2251 1.00
## mu[15]   1.28  0.00 0.08  1.11  1.22  1.28  1.34  1.45  2367 1.00
## mu[16]  -0.12  0.00 0.05 -0.21 -0.15 -0.12 -0.09 -0.03  2375 1.00
## mu[17]  -0.77  0.00 0.08 -0.93 -0.83 -0.77 -0.72 -0.61  2042 1.00
## mu[18]   1.02  0.00 0.09  0.84  0.96  1.02  1.07  1.19  2135 1.00
## mu[19]  -1.26  0.00 0.08 -1.42 -1.32 -1.27 -1.21 -1.11  2383 1.00
## mu[20]  -1.06  0.00 0.08 -1.21 -1.11 -1.06 -1.01 -0.91  2133 1.00
## mu[21]   0.58  0.00 0.06  0.45  0.53  0.58  0.62  0.70  2607 1.00
## mu[22]  -0.59  0.00 0.06 -0.70 -0.63 -0.59 -0.55 -0.48  2555 1.00
## mu[23]  -0.25  0.00 0.11 -0.47 -0.32 -0.25 -0.18 -0.04  2628 1.00
## mu[24]  -0.62  0.00 0.07 -0.75 -0.66 -0.62 -0.57 -0.48  2884 1.00
## mu[25]   2.33  0.00 0.20  1.95  2.20  2.33  2.46  2.71  2792 1.00
## mu[26]   1.37  0.00 0.15  1.10  1.27  1.37  1.47  1.67  2712 1.00
## mu[27]   1.56  0.00 0.12  1.32  1.48  1.56  1.64  1.79  2243 1.00

```

| | | | | | | | | | | |
|-----------|-------|------|------|-------|-------|-------|-------|-------|------|------|
| ## mu[28] | 0.07 | 0.00 | 0.13 | -0.18 | -0.02 | 0.07 | 0.15 | 0.31 | 2683 | 1.00 |
| ## mu[29] | 0.12 | 0.00 | 0.06 | 0.00 | 0.08 | 0.12 | 0.16 | 0.24 | 2074 | 1.00 |
| ## mu[30] | 0.47 | 0.00 | 0.08 | 0.30 | 0.41 | 0.47 | 0.53 | 0.64 | 2927 | 1.00 |
| ## mu[31] | 0.36 | 0.00 | 0.09 | 0.18 | 0.30 | 0.36 | 0.41 | 0.53 | 2642 | 1.00 |
| ## mu[32] | -0.39 | 0.00 | 0.07 | -0.52 | -0.43 | -0.39 | -0.34 | -0.25 | 2426 | 1.00 |
| ## mu[33] | -0.63 | 0.00 | 0.07 | -0.77 | -0.67 | -0.63 | -0.58 | -0.48 | 1900 | 1.00 |
| ## mu[34] | 0.46 | 0.00 | 0.05 | 0.37 | 0.43 | 0.46 | 0.50 | 0.55 | 2578 | 1.00 |
| ## mu[35] | -0.91 | 0.00 | 0.09 | -1.07 | -0.97 | -0.92 | -0.86 | -0.73 | 1914 | 1.00 |
| ## mu[36] | -0.45 | 0.00 | 0.07 | -0.57 | -0.49 | -0.45 | -0.40 | -0.32 | 2879 | 1.00 |
| ## mu[37] | 1.08 | 0.00 | 0.14 | 0.80 | 0.99 | 1.08 | 1.17 | 1.36 | 1670 | 1.00 |
| ## mu[38] | 0.93 | 0.00 | 0.09 | 0.74 | 0.87 | 0.93 | 0.99 | 1.11 | 2305 | 1.00 |
| ## mu[39] | 0.91 | 0.00 | 0.07 | 0.78 | 0.87 | 0.91 | 0.95 | 1.04 | 2475 | 1.00 |
| ## mu[40] | 0.19 | 0.00 | 0.07 | 0.06 | 0.15 | 0.19 | 0.24 | 0.32 | 1692 | 1.00 |
| ## mu[41] | 0.20 | 0.00 | 0.06 | 0.09 | 0.16 | 0.21 | 0.24 | 0.31 | 3116 | 1.00 |
| ## mu[42] | -0.05 | 0.00 | 0.05 | -0.14 | -0.08 | -0.05 | -0.02 | 0.04 | 2225 | 1.00 |
| ## mu[43] | -0.26 | 0.00 | 0.06 | -0.38 | -0.30 | -0.26 | -0.22 | -0.15 | 2328 | 1.00 |
| ## mu[44] | -0.42 | 0.00 | 0.05 | -0.52 | -0.45 | -0.42 | -0.39 | -0.33 | 2486 | 1.00 |
| ## mu[45] | -0.08 | 0.00 | 0.05 | -0.18 | -0.11 | -0.08 | -0.04 | 0.03 | 2265 | 1.00 |
| ## mu[46] | -0.08 | 0.00 | 0.05 | -0.18 | -0.11 | -0.08 | -0.04 | 0.03 | 2265 | 1.00 |
| ## mu[47] | -0.03 | 0.00 | 0.05 | -0.13 | -0.07 | -0.03 | 0.00 | 0.07 | 2172 | 1.00 |
| ## mu[48] | -1.45 | 0.00 | 0.09 | -1.62 | -1.51 | -1.45 | -1.40 | -1.28 | 2546 | 1.00 |
| ## mu[49] | 0.11 | 0.00 | 0.06 | 0.00 | 0.07 | 0.11 | 0.15 | 0.22 | 2627 | 1.00 |
| ## mu[50] | -1.23 | 0.00 | 0.08 | -1.40 | -1.29 | -1.23 | -1.17 | -1.07 | 2166 | 1.00 |
| ## mu[51] | -1.05 | 0.00 | 0.08 | -1.20 | -1.11 | -1.05 | -1.00 | -0.90 | 2227 | 1.00 |
| ## mu[52] | -0.43 | 0.00 | 0.06 | -0.54 | -0.47 | -0.43 | -0.39 | -0.32 | 2141 | 1.00 |
| ## mu[53] | 0.47 | 0.00 | 0.12 | 0.24 | 0.39 | 0.47 | 0.54 | 0.70 | 1365 | 1.00 |
| ## mu[54] | 0.27 | 0.00 | 0.12 | 0.04 | 0.20 | 0.28 | 0.35 | 0.50 | 1440 | 1.00 |
| ## mu[55] | -0.15 | 0.00 | 0.04 | -0.24 | -0.18 | -0.15 | -0.12 | -0.06 | 3293 | 1.00 |
| ## mu[56] | -0.48 | 0.00 | 0.08 | -0.65 | -0.54 | -0.48 | -0.42 | -0.33 | 2586 | 1.00 |
| ## mu[57] | -1.23 | 0.00 | 0.08 | -1.38 | -1.28 | -1.23 | -1.18 | -1.08 | 2550 | 1.00 |
| ## mu[58] | -0.16 | 0.00 | 0.07 | -0.30 | -0.21 | -0.15 | -0.11 | -0.02 | 2467 | 1.00 |
| ## mu[59] | -1.05 | 0.00 | 0.08 | -1.21 | -1.10 | -1.05 | -0.99 | -0.89 | 2081 | 1.00 |
| ## mu[60] | 0.51 | 0.00 | 0.09 | 0.34 | 0.45 | 0.50 | 0.57 | 0.67 | 2101 | 1.00 |
| ## mu[61] | 0.25 | 0.00 | 0.10 | 0.06 | 0.19 | 0.25 | 0.32 | 0.45 | 1473 | 1.00 |
| ## mu[62] | -0.45 | 0.00 | 0.10 | -0.66 | -0.52 | -0.45 | -0.38 | -0.25 | 1254 | 1.00 |
| ## mu[63] | -0.88 | 0.00 | 0.08 | -1.03 | -0.93 | -0.88 | -0.83 | -0.73 | 2010 | 1.00 |
| ## mu[64] | -0.49 | 0.00 | 0.08 | -0.65 | -0.54 | -0.49 | -0.44 | -0.34 | 1616 | 1.00 |
| ## mu[65] | -0.53 | 0.00 | 0.07 | -0.66 | -0.58 | -0.53 | -0.48 | -0.39 | 1863 | 1.00 |
| ## mu[66] | 0.96 | 0.00 | 0.11 | 0.74 | 0.88 | 0.96 | 1.04 | 1.18 | 2422 | 1.00 |
| ## mu[67] | 1.21 | 0.00 | 0.11 | 0.98 | 1.13 | 1.21 | 1.28 | 1.43 | 2093 | 1.00 |
| ## mu[68] | 1.34 | 0.00 | 0.11 | 1.11 | 1.26 | 1.34 | 1.41 | 1.55 | 2006 | 1.00 |
| ## mu[69] | -0.29 | 0.00 | 0.10 | -0.49 | -0.36 | -0.29 | -0.22 | -0.08 | 1257 | 1.00 |
| ## mu[70] | 1.37 | 0.00 | 0.15 | 1.08 | 1.27 | 1.38 | 1.48 | 1.68 | 2075 | 1.00 |
| ## mu[71] | 0.67 | 0.00 | 0.08 | 0.50 | 0.61 | 0.67 | 0.73 | 0.83 | 1935 | 1.00 |
| ## mu[72] | 0.57 | 0.00 | 0.08 | 0.41 | 0.51 | 0.57 | 0.62 | 0.72 | 1867 | 1.00 |
| ## mu[73] | 0.59 | 0.00 | 0.06 | 0.47 | 0.55 | 0.59 | 0.63 | 0.71 | 1998 | 1.00 |
| ## mu[74] | -0.63 | 0.00 | 0.07 | -0.75 | -0.67 | -0.63 | -0.58 | -0.49 | 2253 | 1.00 |
| ## mu[75] | -0.57 | 0.00 | 0.09 | -0.74 | -0.63 | -0.57 | -0.51 | -0.40 | 1747 | 1.00 |
| ## mu[76] | 0.10 | 0.00 | 0.05 | 0.00 | 0.06 | 0.10 | 0.13 | 0.20 | 3062 | 1.00 |
| ## mu[77] | 0.20 | 0.00 | 0.07 | 0.06 | 0.15 | 0.20 | 0.25 | 0.34 | 1790 | 1.00 |
| ## mu[78] | -0.14 | 0.00 | 0.07 | -0.27 | -0.19 | -0.14 | -0.10 | -0.01 | 1218 | 1.00 |
| ## mu[79] | -0.25 | 0.00 | 0.08 | -0.42 | -0.31 | -0.25 | -0.19 | -0.09 | 2022 | 1.00 |
| ## mu[80] | 0.52 | 0.00 | 0.09 | 0.35 | 0.46 | 0.52 | 0.59 | 0.70 | 2687 | 1.00 |
| ## mu[81] | 0.84 | 0.00 | 0.09 | 0.66 | 0.77 | 0.84 | 0.90 | 1.01 | 2812 | 1.00 |

| | | | | | | | | | | |
|------------|-------|------|------|-------|-------|-------|-------|-------|------|------|
| ## mu[82] | -0.46 | 0.00 | 0.07 | -0.59 | -0.51 | -0.46 | -0.41 | -0.30 | 3028 | 1.00 |
| ## mu[83] | 0.31 | 0.00 | 0.13 | 0.06 | 0.23 | 0.31 | 0.40 | 0.56 | 1307 | 1.00 |
| ## mu[84] | 0.71 | 0.00 | 0.10 | 0.51 | 0.64 | 0.70 | 0.78 | 0.90 | 2089 | 1.00 |
| ## mu[85] | 0.09 | 0.00 | 0.05 | -0.01 | 0.05 | 0.09 | 0.12 | 0.19 | 2523 | 1.00 |
| ## mu[86] | -0.02 | 0.00 | 0.05 | -0.12 | -0.06 | -0.02 | 0.01 | 0.08 | 3032 | 1.00 |
| ## mu[87] | 1.91 | 0.00 | 0.15 | 1.61 | 1.81 | 1.90 | 2.01 | 2.21 | 1801 | 1.00 |
| ## mu[88] | 0.24 | 0.00 | 0.16 | -0.08 | 0.14 | 0.25 | 0.34 | 0.55 | 1333 | 1.00 |
| ## mu[89] | -1.31 | 0.00 | 0.08 | -1.47 | -1.37 | -1.31 | -1.26 | -1.15 | 2214 | 1.00 |
| ## mu[90] | -0.92 | 0.00 | 0.09 | -1.09 | -0.98 | -0.92 | -0.86 | -0.73 | 3167 | 1.00 |
| ## mu[91] | -0.16 | 0.00 | 0.09 | -0.33 | -0.21 | -0.16 | -0.10 | 0.02 | 1284 | 1.00 |
| ## mu[92] | 0.91 | 0.00 | 0.10 | 0.72 | 0.85 | 0.91 | 0.98 | 1.11 | 1695 | 1.00 |
| ## mu[93] | 0.53 | 0.00 | 0.08 | 0.38 | 0.48 | 0.53 | 0.58 | 0.68 | 2810 | 1.00 |
| ## mu[94] | 0.46 | 0.00 | 0.10 | 0.27 | 0.39 | 0.46 | 0.52 | 0.65 | 2731 | 1.00 |
| ## mu[95] | -0.09 | 0.00 | 0.08 | -0.23 | -0.14 | -0.09 | -0.04 | 0.07 | 2549 | 1.00 |
| ## mu[96] | -0.41 | 0.00 | 0.07 | -0.55 | -0.46 | -0.41 | -0.36 | -0.28 | 2480 | 1.00 |
| ## mu[97] | 0.20 | 0.00 | 0.07 | 0.06 | 0.15 | 0.20 | 0.25 | 0.32 | 2436 | 1.00 |
| ## mu[98] | -0.62 | 0.00 | 0.12 | -0.86 | -0.70 | -0.62 | -0.54 | -0.37 | 1541 | 1.00 |
| ## mu[99] | -0.63 | 0.00 | 0.14 | -0.90 | -0.72 | -0.63 | -0.53 | -0.35 | 1529 | 1.00 |
| ## mu[100] | -1.56 | 0.00 | 0.10 | -1.74 | -1.62 | -1.56 | -1.49 | -1.36 | 2242 | 1.00 |
| ## mu[101] | 0.81 | 0.00 | 0.13 | 0.56 | 0.72 | 0.81 | 0.89 | 1.05 | 2269 | 1.00 |
| ## mu[102] | -0.89 | 0.00 | 0.08 | -1.05 | -0.95 | -0.90 | -0.84 | -0.73 | 2398 | 1.00 |
| ## mu[103] | -0.69 | 0.00 | 0.10 | -0.89 | -0.76 | -0.69 | -0.63 | -0.49 | 3155 | 1.00 |
| ## mu[104] | 0.92 | 0.00 | 0.15 | 0.64 | 0.82 | 0.92 | 1.02 | 1.22 | 2122 | 1.00 |
| ## mu[105] | 0.11 | 0.00 | 0.09 | -0.06 | 0.05 | 0.11 | 0.17 | 0.27 | 3027 | 1.00 |
| ## mu[106] | -0.71 | 0.00 | 0.07 | -0.85 | -0.75 | -0.71 | -0.66 | -0.58 | 3306 | 1.00 |
| ## mu[107] | -1.13 | 0.00 | 0.09 | -1.31 | -1.20 | -1.14 | -1.08 | -0.94 | 2631 | 1.00 |
| ## mu[108] | 0.49 | 0.00 | 0.11 | 0.26 | 0.41 | 0.49 | 0.56 | 0.71 | 1785 | 1.00 |
| ## mu[109] | 1.97 | 0.00 | 0.15 | 1.67 | 1.87 | 1.96 | 2.06 | 2.26 | 1469 | 1.00 |
| ## mu[110] | 0.69 | 0.00 | 0.09 | 0.51 | 0.63 | 0.69 | 0.75 | 0.87 | 2394 | 1.00 |
| ## mu[111] | 0.97 | 0.00 | 0.11 | 0.76 | 0.90 | 0.97 | 1.04 | 1.18 | 2117 | 1.00 |
| ## mu[112] | 1.02 | 0.00 | 0.09 | 0.85 | 0.97 | 1.02 | 1.08 | 1.19 | 1738 | 1.00 |
| ## mu[113] | 1.47 | 0.00 | 0.14 | 1.18 | 1.38 | 1.47 | 1.56 | 1.76 | 1552 | 1.00 |
| ## mu[114] | -0.21 | 0.00 | 0.08 | -0.35 | -0.26 | -0.21 | -0.15 | -0.06 | 2952 | 1.00 |
| ## mu[115] | -0.02 | 0.00 | 0.06 | -0.13 | -0.05 | -0.02 | 0.02 | 0.10 | 2803 | 1.00 |
| ## mu[116] | 1.24 | 0.00 | 0.10 | 1.04 | 1.17 | 1.24 | 1.31 | 1.45 | 1538 | 1.00 |
| ## mu[117] | -0.34 | 0.00 | 0.09 | -0.51 | -0.39 | -0.34 | -0.28 | -0.16 | 1428 | 1.00 |
| ## mu[118] | -0.06 | 0.00 | 0.06 | -0.17 | -0.10 | -0.06 | -0.02 | 0.06 | 1983 | 1.00 |
| ## mu[119] | 1.27 | 0.00 | 0.14 | 0.98 | 1.18 | 1.26 | 1.36 | 1.55 | 1634 | 1.00 |
| ## mu[120] | -0.15 | 0.00 | 0.15 | -0.47 | -0.25 | -0.15 | -0.05 | 0.14 | 1983 | 1.00 |
| ## mu[121] | -0.23 | 0.00 | 0.14 | -0.50 | -0.32 | -0.23 | -0.13 | 0.03 | 1953 | 1.00 |
| ## mu[122] | -0.02 | 0.00 | 0.15 | -0.32 | -0.12 | -0.02 | 0.08 | 0.26 | 1786 | 1.00 |
| ## mu[123] | 0.72 | 0.00 | 0.10 | 0.52 | 0.65 | 0.72 | 0.79 | 0.91 | 2189 | 1.00 |
| ## mu[124] | -0.25 | 0.00 | 0.06 | -0.37 | -0.29 | -0.25 | -0.21 | -0.14 | 2388 | 1.00 |
| ## mu[125] | -0.62 | 0.00 | 0.06 | -0.74 | -0.66 | -0.62 | -0.58 | -0.50 | 1800 | 1.00 |
| ## mu[126] | 0.17 | 0.00 | 0.11 | -0.05 | 0.09 | 0.17 | 0.24 | 0.39 | 1882 | 1.00 |
| ## mu[127] | -0.53 | 0.00 | 0.09 | -0.70 | -0.59 | -0.53 | -0.47 | -0.37 | 1515 | 1.00 |
| ## mu[128] | -1.50 | 0.00 | 0.11 | -1.70 | -1.57 | -1.50 | -1.43 | -1.28 | 2690 | 1.00 |
| ## mu[129] | -0.75 | 0.00 | 0.12 | -0.98 | -0.83 | -0.75 | -0.67 | -0.52 | 1753 | 1.00 |
| ## mu[130] | -0.60 | 0.00 | 0.07 | -0.74 | -0.65 | -0.60 | -0.55 | -0.45 | 2772 | 1.00 |
| ## mu[131] | -0.64 | 0.00 | 0.08 | -0.79 | -0.70 | -0.64 | -0.59 | -0.49 | 2687 | 1.00 |
| ## mu[132] | 0.55 | 0.00 | 0.12 | 0.33 | 0.47 | 0.55 | 0.63 | 0.79 | 2378 | 1.00 |
| ## mu[133] | 1.05 | 0.00 | 0.15 | 0.77 | 0.96 | 1.05 | 1.16 | 1.36 | 2224 | 1.00 |
| ## mu[134] | -0.05 | 0.00 | 0.11 | -0.25 | -0.12 | -0.05 | 0.02 | 0.16 | 2134 | 1.00 |
| ## mu[135] | -0.93 | 0.00 | 0.12 | -1.16 | -1.01 | -0.94 | -0.86 | -0.69 | 2124 | 1.00 |

| | | | | | | | | | | |
|------------|-------|------|------|-------|-------|-------|-------|-------|------|------|
| ## mu[136] | -0.53 | 0.00 | 0.14 | -0.82 | -0.63 | -0.53 | -0.44 | -0.26 | 2227 | 1.00 |
| ## mu[137] | -0.70 | 0.00 | 0.14 | -0.98 | -0.80 | -0.70 | -0.60 | -0.43 | 2226 | 1.00 |
| ## mu[138] | -0.49 | 0.00 | 0.06 | -0.61 | -0.53 | -0.50 | -0.46 | -0.38 | 2524 | 1.00 |
| ## mu[139] | 0.15 | 0.00 | 0.07 | 0.01 | 0.10 | 0.15 | 0.19 | 0.28 | 2511 | 1.00 |
| ## mu[140] | 0.08 | 0.00 | 0.11 | -0.13 | 0.01 | 0.08 | 0.15 | 0.29 | 2207 | 1.00 |
| ## mu[141] | -0.69 | 0.00 | 0.09 | -0.87 | -0.76 | -0.69 | -0.63 | -0.50 | 1520 | 1.00 |
| ## mu[142] | -0.53 | 0.00 | 0.10 | -0.73 | -0.60 | -0.53 | -0.46 | -0.32 | 1212 | 1.00 |
| ## mu[143] | -0.09 | 0.00 | 0.10 | -0.28 | -0.16 | -0.09 | -0.03 | 0.11 | 2077 | 1.00 |
| ## mu[144] | -0.57 | 0.00 | 0.09 | -0.74 | -0.63 | -0.57 | -0.50 | -0.37 | 2285 | 1.00 |
| ## mu[145] | 0.20 | 0.00 | 0.12 | -0.03 | 0.12 | 0.20 | 0.28 | 0.44 | 1854 | 1.00 |
| ## mu[146] | -0.71 | 0.00 | 0.10 | -0.90 | -0.77 | -0.71 | -0.64 | -0.54 | 3066 | 1.00 |
| ## mu[147] | -0.85 | 0.00 | 0.09 | -1.02 | -0.91 | -0.85 | -0.79 | -0.68 | 2014 | 1.00 |
| ## mu[148] | -0.35 | 0.00 | 0.06 | -0.46 | -0.38 | -0.35 | -0.31 | -0.23 | 2490 | 1.00 |
| ## mu[149] | -0.31 | 0.00 | 0.06 | -0.42 | -0.35 | -0.31 | -0.27 | -0.19 | 1651 | 1.00 |
| ## mu[150] | -0.39 | 0.00 | 0.06 | -0.51 | -0.43 | -0.39 | -0.35 | -0.27 | 1618 | 1.00 |
| ## mu[151] | -0.06 | 0.00 | 0.05 | -0.16 | -0.10 | -0.06 | -0.03 | 0.03 | 1629 | 1.00 |
| ## mu[152] | -0.69 | 0.00 | 0.10 | -0.88 | -0.76 | -0.69 | -0.62 | -0.50 | 2612 | 1.00 |
| ## mu[153] | -0.65 | 0.00 | 0.07 | -0.79 | -0.70 | -0.65 | -0.60 | -0.51 | 2715 | 1.00 |
| ## mu[154] | -0.18 | 0.00 | 0.10 | -0.37 | -0.24 | -0.18 | -0.11 | 0.03 | 2242 | 1.00 |
| ## mu[155] | -0.51 | 0.00 | 0.05 | -0.61 | -0.54 | -0.51 | -0.47 | -0.41 | 2628 | 1.00 |
| ## mu[156] | -1.93 | 0.00 | 0.13 | -2.16 | -2.01 | -1.93 | -1.84 | -1.68 | 2272 | 1.00 |
| ## mu[157] | 0.29 | 0.00 | 0.11 | 0.08 | 0.22 | 0.30 | 0.37 | 0.51 | 1482 | 1.00 |
| ## mu[158] | 0.57 | 0.00 | 0.11 | 0.37 | 0.50 | 0.57 | 0.65 | 0.79 | 1677 | 1.00 |
| ## mu[159] | 0.55 | 0.00 | 0.12 | 0.32 | 0.47 | 0.55 | 0.63 | 0.78 | 2277 | 1.00 |
| ## mu[160] | 0.11 | 0.00 | 0.07 | -0.02 | 0.06 | 0.11 | 0.16 | 0.25 | 1760 | 1.00 |
| ## mu[161] | -0.11 | 0.00 | 0.09 | -0.27 | -0.17 | -0.11 | -0.05 | 0.06 | 3229 | 1.00 |
| ## mu[162] | 0.56 | 0.00 | 0.08 | 0.40 | 0.50 | 0.56 | 0.61 | 0.71 | 3125 | 1.00 |
| ## mu[163] | -0.17 | 0.00 | 0.08 | -0.32 | -0.22 | -0.17 | -0.12 | -0.01 | 3965 | 1.00 |
| ## mu[164] | 0.07 | 0.00 | 0.05 | -0.03 | 0.04 | 0.07 | 0.11 | 0.18 | 3460 | 1.00 |
| ## mu[165] | -1.36 | 0.00 | 0.09 | -1.53 | -1.43 | -1.37 | -1.31 | -1.19 | 2930 | 1.00 |
| ## mu[166] | -0.94 | 0.00 | 0.09 | -1.10 | -1.00 | -0.94 | -0.88 | -0.77 | 3334 | 1.00 |
| ## mu[167] | -1.05 | 0.00 | 0.08 | -1.21 | -1.11 | -1.05 | -1.00 | -0.88 | 3760 | 1.00 |
| ## mu[168] | -0.56 | 0.00 | 0.07 | -0.69 | -0.60 | -0.56 | -0.51 | -0.42 | 2655 | 1.00 |
| ## mu[169] | -0.49 | 0.00 | 0.09 | -0.66 | -0.55 | -0.49 | -0.44 | -0.32 | 2291 | 1.00 |
| ## mu[170] | -0.65 | 0.00 | 0.09 | -0.83 | -0.71 | -0.65 | -0.58 | -0.45 | 2035 | 1.00 |
| ## mu[171] | 0.84 | 0.00 | 0.11 | 0.63 | 0.77 | 0.84 | 0.91 | 1.04 | 2165 | 1.00 |
| ## mu[172] | 0.74 | 0.00 | 0.10 | 0.53 | 0.67 | 0.74 | 0.81 | 0.95 | 2298 | 1.00 |
| ## mu[173] | 0.77 | 0.00 | 0.12 | 0.54 | 0.70 | 0.78 | 0.85 | 1.00 | 2762 | 1.00 |
| ## mu[174] | 0.49 | 0.00 | 0.06 | 0.37 | 0.45 | 0.48 | 0.52 | 0.60 | 2507 | 1.00 |
| ## mu[175] | 0.15 | 0.00 | 0.06 | 0.04 | 0.11 | 0.15 | 0.19 | 0.26 | 2667 | 1.00 |
| ## mu[176] | 0.04 | 0.00 | 0.05 | -0.07 | 0.00 | 0.04 | 0.07 | 0.14 | 2490 | 1.00 |
| ## mu[177] | 0.45 | 0.00 | 0.12 | 0.21 | 0.38 | 0.46 | 0.53 | 0.70 | 1462 | 1.00 |
| ## mu[178] | 0.04 | 0.00 | 0.05 | -0.07 | 0.00 | 0.04 | 0.07 | 0.14 | 2482 | 1.00 |
| ## mu[179] | -0.49 | 0.00 | 0.06 | -0.60 | -0.52 | -0.49 | -0.45 | -0.38 | 2612 | 1.00 |
| ## mu[180] | -0.37 | 0.00 | 0.06 | -0.48 | -0.41 | -0.37 | -0.33 | -0.25 | 2114 | 1.00 |
| ## mu[181] | 0.31 | 0.00 | 0.11 | 0.09 | 0.23 | 0.31 | 0.38 | 0.53 | 1582 | 1.00 |
| ## mu[182] | -0.49 | 0.00 | 0.06 | -0.60 | -0.53 | -0.49 | -0.45 | -0.38 | 2621 | 1.00 |
| ## mu[183] | -0.58 | 0.00 | 0.05 | -0.67 | -0.61 | -0.58 | -0.54 | -0.48 | 2147 | 1.00 |
| ## mu[184] | -0.41 | 0.00 | 0.05 | -0.51 | -0.45 | -0.42 | -0.38 | -0.31 | 2097 | 1.00 |
| ## mu[185] | -0.50 | 0.00 | 0.05 | -0.61 | -0.53 | -0.49 | -0.46 | -0.39 | 2632 | 1.00 |
| ## mu[186] | -0.58 | 0.00 | 0.05 | -0.68 | -0.62 | -0.58 | -0.55 | -0.48 | 2178 | 1.00 |
| ## mu[187] | 0.58 | 0.00 | 0.14 | 0.30 | 0.48 | 0.57 | 0.67 | 0.85 | 1443 | 1.00 |
| ## mu[188] | 1.27 | 0.00 | 0.12 | 1.03 | 1.19 | 1.26 | 1.34 | 1.51 | 1494 | 1.00 |
| ## mu[189] | 0.22 | 0.00 | 0.12 | -0.01 | 0.14 | 0.23 | 0.31 | 0.46 | 1764 | 1.00 |

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|------------|-------|------|------|-------|-------|-------|-------|-------|------|------|
| ## mu[190] | -0.03 | 0.00 | 0.13 | -0.28 | -0.12 | -0.03 | 0.06 | 0.21 | 1491 | 1.00 |
| ## mu[191] | 0.01 | 0.00 | 0.05 | -0.09 | -0.02 | 0.01 | 0.05 | 0.12 | 1774 | 1.00 |
| ## mu[192] | -0.07 | 0.00 | 0.05 | -0.17 | -0.11 | -0.08 | -0.04 | 0.02 | 2008 | 1.00 |
| ## mu[193] | -0.36 | 0.00 | 0.04 | -0.45 | -0.39 | -0.36 | -0.33 | -0.28 | 2625 | 1.00 |
| ## mu[194] | -0.16 | 0.00 | 0.05 | -0.25 | -0.19 | -0.16 | -0.13 | -0.07 | 2295 | 1.00 |
| ## mu[195] | 0.27 | 0.00 | 0.09 | 0.10 | 0.22 | 0.28 | 0.33 | 0.44 | 1763 | 1.00 |
| ## mu[196] | 0.04 | 0.00 | 0.05 | -0.06 | 0.00 | 0.04 | 0.07 | 0.14 | 2008 | 1.00 |
| ## mu[197] | 0.01 | 0.00 | 0.05 | -0.09 | -0.03 | 0.01 | 0.04 | 0.10 | 2470 | 1.00 |
| ## mu[198] | -0.44 | 0.00 | 0.05 | -0.54 | -0.47 | -0.44 | -0.41 | -0.35 | 2540 | 1.00 |
| ## mu[199] | -0.13 | 0.00 | 0.05 | -0.23 | -0.17 | -0.13 | -0.10 | -0.03 | 1694 | 1.00 |
| ## mu[200] | 0.23 | 0.00 | 0.05 | 0.14 | 0.20 | 0.23 | 0.27 | 0.33 | 2510 | 1.00 |
| ## mu[201] | 0.58 | 0.00 | 0.06 | 0.47 | 0.54 | 0.58 | 0.62 | 0.69 | 2041 | 1.00 |
| ## mu[202] | -0.16 | 0.00 | 0.05 | -0.25 | -0.19 | -0.16 | -0.13 | -0.07 | 2280 | 1.00 |
| ## mu[203] | -0.36 | 0.00 | 0.06 | -0.48 | -0.40 | -0.36 | -0.32 | -0.25 | 2691 | 1.00 |
| ## mu[204] | -0.44 | 0.00 | 0.05 | -0.54 | -0.48 | -0.44 | -0.41 | -0.35 | 2546 | 1.00 |
| ## mu[205] | -0.10 | 0.00 | 0.05 | -0.20 | -0.13 | -0.10 | -0.06 | 0.01 | 1708 | 1.00 |
| ## mu[206] | 0.23 | 0.00 | 0.05 | 0.13 | 0.20 | 0.23 | 0.26 | 0.32 | 2521 | 1.00 |
| ## mu[207] | -0.16 | 0.00 | 0.05 | -0.25 | -0.20 | -0.16 | -0.13 | -0.07 | 2255 | 1.00 |
| ## mu[208] | -0.45 | 0.00 | 0.05 | -0.54 | -0.48 | -0.45 | -0.42 | -0.36 | 2555 | 1.00 |
| ## mu[209] | -0.70 | 0.00 | 0.06 | -0.83 | -0.75 | -0.70 | -0.66 | -0.58 | 1929 | 1.00 |
| ## mu[210] | 0.58 | 0.00 | 0.05 | 0.47 | 0.54 | 0.58 | 0.61 | 0.68 | 2054 | 1.00 |
| ## mu[211] | -0.58 | 0.00 | 0.08 | -0.72 | -0.63 | -0.58 | -0.53 | -0.43 | 1475 | 1.00 |
| ## mu[212] | -0.54 | 0.00 | 0.08 | -0.69 | -0.59 | -0.54 | -0.49 | -0.39 | 2092 | 1.00 |
| ## mu[213] | 1.08 | 0.00 | 0.09 | 0.91 | 1.02 | 1.08 | 1.14 | 1.27 | 1790 | 1.00 |
| ## mu[214] | -0.67 | 0.00 | 0.07 | -0.80 | -0.72 | -0.67 | -0.62 | -0.53 | 2429 | 1.00 |
| ## mu[215] | -0.50 | 0.00 | 0.13 | -0.76 | -0.59 | -0.50 | -0.42 | -0.25 | 1278 | 1.00 |
| ## mu[216] | -0.10 | 0.00 | 0.07 | -0.23 | -0.15 | -0.10 | -0.06 | 0.03 | 2620 | 1.00 |
| ## mu[217] | -0.20 | 0.00 | 0.07 | -0.33 | -0.24 | -0.20 | -0.15 | -0.06 | 2528 | 1.00 |
| ## mu[218] | -0.72 | 0.00 | 0.09 | -0.90 | -0.78 | -0.72 | -0.67 | -0.54 | 1468 | 1.00 |
| ## mu[219] | 1.20 | 0.00 | 0.08 | 1.04 | 1.14 | 1.20 | 1.25 | 1.36 | 2465 | 1.00 |
| ## mu[220] | -1.05 | 0.00 | 0.16 | -1.35 | -1.15 | -1.05 | -0.94 | -0.73 | 1432 | 1.00 |
| ## mu[221] | -0.48 | 0.00 | 0.08 | -0.64 | -0.54 | -0.49 | -0.43 | -0.33 | 2192 | 1.00 |
| ## mu[222] | 0.05 | 0.00 | 0.05 | -0.06 | 0.01 | 0.04 | 0.08 | 0.15 | 1874 | 1.00 |
| ## mu[223] | 0.82 | 0.00 | 0.06 | 0.70 | 0.77 | 0.82 | 0.86 | 0.94 | 2039 | 1.00 |
| ## mu[224] | 0.66 | 0.00 | 0.06 | 0.53 | 0.62 | 0.66 | 0.71 | 0.79 | 2114 | 1.00 |
| ## mu[225] | 0.71 | 0.00 | 0.06 | 0.60 | 0.67 | 0.71 | 0.75 | 0.83 | 2097 | 1.00 |
| ## mu[226] | 0.82 | 0.00 | 0.07 | 0.69 | 0.78 | 0.82 | 0.86 | 0.95 | 2736 | 1.00 |
| ## mu[227] | 0.93 | 0.00 | 0.07 | 0.79 | 0.88 | 0.92 | 0.97 | 1.07 | 2585 | 1.00 |
| ## mu[228] | -0.36 | 0.00 | 0.07 | -0.50 | -0.41 | -0.36 | -0.31 | -0.21 | 2097 | 1.00 |
| ## mu[229] | -0.51 | 0.00 | 0.07 | -0.66 | -0.56 | -0.51 | -0.46 | -0.36 | 1873 | 1.00 |
| ## mu[230] | -0.23 | 0.00 | 0.06 | -0.34 | -0.27 | -0.22 | -0.19 | -0.11 | 2372 | 1.00 |
| ## mu[231] | -0.21 | 0.00 | 0.07 | -0.35 | -0.26 | -0.21 | -0.17 | -0.08 | 2576 | 1.00 |
| ## mu[232] | -0.43 | 0.00 | 0.06 | -0.54 | -0.47 | -0.43 | -0.39 | -0.32 | 2141 | 1.00 |
| ## mu[233] | -0.80 | 0.00 | 0.08 | -0.96 | -0.85 | -0.80 | -0.75 | -0.64 | 1420 | 1.00 |
| ## mu[234] | -0.39 | 0.00 | 0.06 | -0.51 | -0.43 | -0.39 | -0.35 | -0.26 | 2001 | 1.00 |
| ## mu[235] | -0.52 | 0.00 | 0.07 | -0.65 | -0.57 | -0.53 | -0.48 | -0.39 | 2099 | 1.00 |
| ## mu[236] | -0.44 | 0.00 | 0.06 | -0.55 | -0.48 | -0.44 | -0.40 | -0.32 | 1708 | 1.00 |
| ## mu[237] | -1.05 | 0.00 | 0.08 | -1.21 | -1.10 | -1.05 | -0.99 | -0.88 | 2089 | 1.00 |
| ## mu[238] | 0.53 | 0.00 | 0.07 | 0.39 | 0.49 | 0.53 | 0.58 | 0.67 | 2356 | 1.00 |
| ## mu[239] | 0.35 | 0.00 | 0.06 | 0.22 | 0.31 | 0.35 | 0.39 | 0.47 | 2618 | 1.00 |
| ## mu[240] | 0.40 | 0.00 | 0.08 | 0.25 | 0.35 | 0.40 | 0.45 | 0.54 | 3052 | 1.00 |
| ## mu[241] | 1.17 | 0.00 | 0.08 | 1.00 | 1.12 | 1.17 | 1.22 | 1.34 | 2205 | 1.00 |
| ## mu[242] | 1.26 | 0.00 | 0.09 | 1.09 | 1.21 | 1.26 | 1.32 | 1.45 | 2207 | 1.00 |
| ## mu[243] | 0.03 | 0.00 | 0.06 | -0.09 | -0.01 | 0.03 | 0.06 | 0.13 | 2853 | 1.00 |

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|------------|-------|------|------|-------|-------|-------|-------|-------|------|------|
| ## mu[244] | 0.53 | 0.00 | 0.07 | 0.39 | 0.49 | 0.53 | 0.58 | 0.67 | 2371 | 1.00 |
| ## mu[245] | 0.17 | 0.00 | 0.07 | 0.03 | 0.12 | 0.17 | 0.21 | 0.29 | 3038 | 1.00 |
| ## mu[246] | 0.62 | 0.00 | 0.07 | 0.47 | 0.57 | 0.62 | 0.67 | 0.77 | 2143 | 1.00 |
| ## mu[247] | 0.26 | 0.00 | 0.07 | 0.11 | 0.20 | 0.25 | 0.31 | 0.40 | 2803 | 1.00 |
| ## mu[248] | 0.17 | 0.00 | 0.07 | 0.03 | 0.12 | 0.17 | 0.21 | 0.30 | 3043 | 1.00 |
| ## mu[249] | 1.27 | 0.00 | 0.09 | 1.10 | 1.21 | 1.27 | 1.33 | 1.45 | 2232 | 1.00 |
| ## mu[250] | 0.92 | 0.00 | 0.07 | 0.79 | 0.87 | 0.92 | 0.96 | 1.06 | 2502 | 1.00 |
| ## mu[251] | 0.92 | 0.00 | 0.07 | 0.78 | 0.87 | 0.91 | 0.96 | 1.05 | 2009 | 1.00 |
| ## mu[252] | 0.31 | 0.00 | 0.07 | 0.17 | 0.26 | 0.31 | 0.36 | 0.46 | 2012 | 1.00 |
| ## mu[253] | 0.44 | 0.00 | 0.11 | 0.21 | 0.36 | 0.44 | 0.51 | 0.66 | 1735 | 1.00 |
| ## mu[254] | -0.19 | 0.00 | 0.05 | -0.29 | -0.23 | -0.19 | -0.16 | -0.10 | 2637 | 1.00 |
| ## mu[255] | 0.23 | 0.00 | 0.05 | 0.12 | 0.19 | 0.22 | 0.26 | 0.33 | 2456 | 1.00 |
| ## mu[256] | -0.04 | 0.00 | 0.13 | -0.28 | -0.12 | -0.04 | 0.05 | 0.21 | 1309 | 1.00 |
| ## mu[257] | 0.35 | 0.00 | 0.06 | 0.23 | 0.31 | 0.35 | 0.39 | 0.47 | 2640 | 1.00 |
| ## mu[258] | 0.05 | 0.00 | 0.07 | -0.09 | 0.00 | 0.05 | 0.10 | 0.18 | 3309 | 1.00 |
| ## mu[259] | -0.04 | 0.00 | 0.06 | -0.16 | -0.08 | -0.04 | 0.00 | 0.08 | 2754 | 1.00 |
| ## mu[260] | 0.31 | 0.00 | 0.07 | 0.17 | 0.26 | 0.31 | 0.36 | 0.46 | 2011 | 1.00 |
| ## mu[261] | 1.09 | 0.00 | 0.08 | 0.94 | 1.04 | 1.09 | 1.14 | 1.26 | 2323 | 1.00 |
| ## mu[262] | 0.05 | 0.00 | 0.07 | -0.09 | 0.00 | 0.05 | 0.10 | 0.18 | 3309 | 1.00 |
| ## mu[263] | 0.55 | 0.00 | 0.06 | 0.44 | 0.51 | 0.55 | 0.59 | 0.67 | 2345 | 1.00 |
| ## mu[264] | 0.15 | 0.00 | 0.06 | 0.04 | 0.11 | 0.15 | 0.20 | 0.28 | 1804 | 1.00 |
| ## mu[265] | 0.64 | 0.00 | 0.13 | 0.38 | 0.55 | 0.64 | 0.72 | 0.89 | 2315 | 1.00 |
| ## mu[266] | 0.15 | 0.00 | 0.06 | 0.04 | 0.11 | 0.15 | 0.19 | 0.26 | 2682 | 1.00 |
| ## mu[267] | 0.26 | 0.00 | 0.07 | 0.13 | 0.21 | 0.25 | 0.30 | 0.40 | 2006 | 1.00 |
| ## mu[268] | 0.97 | 0.00 | 0.07 | 0.83 | 0.93 | 0.97 | 1.02 | 1.10 | 1915 | 1.00 |
| ## mu[269] | 0.09 | 0.00 | 0.07 | -0.04 | 0.05 | 0.09 | 0.14 | 0.22 | 1800 | 1.00 |
| ## mu[270] | 0.93 | 0.00 | 0.07 | 0.80 | 0.88 | 0.93 | 0.97 | 1.07 | 2536 | 1.00 |
| ## mu[271] | 0.56 | 0.00 | 0.06 | 0.46 | 0.53 | 0.56 | 0.60 | 0.67 | 2549 | 1.00 |
| ## mu[272] | 1.10 | 0.00 | 0.08 | 0.95 | 1.05 | 1.10 | 1.15 | 1.26 | 2366 | 1.00 |
| ## mu[273] | 1.09 | 0.00 | 0.08 | 0.93 | 1.04 | 1.08 | 1.14 | 1.25 | 2287 | 1.00 |
| ## mu[274] | 0.35 | 0.00 | 0.10 | 0.16 | 0.29 | 0.35 | 0.42 | 0.54 | 1752 | 1.00 |
| ## mu[275] | 0.37 | 0.00 | 0.05 | 0.27 | 0.34 | 0.37 | 0.41 | 0.48 | 2532 | 1.00 |
| ## mu[276] | 0.15 | 0.00 | 0.06 | 0.04 | 0.11 | 0.15 | 0.19 | 0.26 | 2681 | 1.00 |
| ## mu[277] | 0.09 | 0.00 | 0.07 | -0.04 | 0.04 | 0.09 | 0.13 | 0.22 | 1805 | 1.00 |
| ## mu[278] | 0.56 | 0.00 | 0.06 | 0.45 | 0.52 | 0.56 | 0.60 | 0.67 | 2560 | 1.00 |
| ## mu[279] | 0.37 | 0.00 | 0.05 | 0.26 | 0.33 | 0.37 | 0.40 | 0.47 | 2566 | 1.00 |
| ## mu[280] | -0.07 | 0.00 | 0.05 | -0.18 | -0.11 | -0.07 | -0.04 | 0.03 | 2325 | 1.00 |
| ## mu[281] | 0.15 | 0.00 | 0.06 | 0.04 | 0.11 | 0.15 | 0.19 | 0.26 | 2680 | 1.00 |
| ## mu[282] | -0.82 | 0.00 | 0.09 | -1.00 | -0.88 | -0.82 | -0.76 | -0.64 | 2934 | 1.00 |
| ## mu[283] | 0.18 | 0.00 | 0.09 | 0.01 | 0.12 | 0.18 | 0.25 | 0.37 | 1316 | 1.00 |
| ## mu[284] | -0.96 | 0.00 | 0.11 | -1.18 | -1.04 | -0.96 | -0.89 | -0.76 | 2093 | 1.00 |
| ## mu[285] | -1.47 | 0.00 | 0.12 | -1.72 | -1.55 | -1.48 | -1.40 | -1.23 | 1589 | 1.00 |
| ## mu[286] | -1.07 | 0.00 | 0.07 | -1.21 | -1.12 | -1.07 | -1.02 | -0.94 | 2403 | 1.00 |
| ## mu[287] | -0.36 | 0.00 | 0.08 | -0.53 | -0.42 | -0.36 | -0.31 | -0.19 | 1478 | 1.00 |
| ## mu[288] | 0.54 | 0.00 | 0.10 | 0.36 | 0.48 | 0.54 | 0.61 | 0.73 | 1819 | 1.00 |
| ## mu[289] | 0.42 | 0.00 | 0.09 | 0.24 | 0.36 | 0.42 | 0.48 | 0.60 | 1522 | 1.00 |
| ## mu[290] | 0.37 | 0.00 | 0.13 | 0.12 | 0.29 | 0.37 | 0.46 | 0.61 | 2293 | 1.00 |
| ## mu[291] | 1.18 | 0.00 | 0.10 | 0.99 | 1.11 | 1.18 | 1.24 | 1.37 | 2769 | 1.00 |
| ## mu[292] | 0.60 | 0.00 | 0.11 | 0.40 | 0.53 | 0.60 | 0.67 | 0.81 | 2219 | 1.00 |
| ## mu[293] | 1.25 | 0.00 | 0.10 | 1.05 | 1.18 | 1.25 | 1.32 | 1.45 | 2571 | 1.00 |
| ## mu[294] | 0.90 | 0.00 | 0.10 | 0.72 | 0.84 | 0.90 | 0.97 | 1.10 | 2333 | 1.00 |
| ## mu[295] | -0.16 | 0.00 | 0.13 | -0.42 | -0.25 | -0.16 | -0.08 | 0.08 | 3133 | 1.00 |
| ## mu[296] | 0.61 | 0.00 | 0.09 | 0.45 | 0.55 | 0.61 | 0.66 | 0.78 | 2361 | 1.00 |
| ## mu[297] | 0.13 | 0.00 | 0.12 | -0.11 | 0.05 | 0.12 | 0.21 | 0.36 | 3155 | 1.00 |

| | | | | | | | | | | |
|------------|-------|------|------|-------|-------|-------|-------|-------|------|------|
| ## mu[298] | 0.88 | 0.00 | 0.10 | 0.69 | 0.81 | 0.88 | 0.94 | 1.07 | 2681 | 1.00 |
| ## mu[299] | 1.01 | 0.00 | 0.10 | 0.82 | 0.94 | 1.01 | 1.08 | 1.21 | 2286 | 1.00 |
| ## mu[300] | 0.18 | 0.00 | 0.08 | 0.02 | 0.12 | 0.18 | 0.23 | 0.34 | 1877 | 1.00 |
| ## mu[301] | -1.19 | 0.00 | 0.11 | -1.40 | -1.26 | -1.19 | -1.12 | -0.98 | 1542 | 1.00 |
| ## mu[302] | 0.61 | 0.01 | 0.22 | 0.18 | 0.47 | 0.61 | 0.76 | 1.05 | 1448 | 1.00 |
| ## mu[303] | -1.15 | 0.00 | 0.08 | -1.31 | -1.20 | -1.15 | -1.09 | -0.99 | 2362 | 1.00 |
| ## mu[304] | 0.33 | 0.00 | 0.20 | -0.09 | 0.20 | 0.34 | 0.46 | 0.71 | 2185 | 1.00 |
| ## mu[305] | 0.14 | 0.00 | 0.06 | 0.03 | 0.10 | 0.14 | 0.19 | 0.26 | 2661 | 1.00 |
| ## mu[306] | 0.07 | 0.00 | 0.08 | -0.08 | 0.02 | 0.07 | 0.12 | 0.22 | 2656 | 1.00 |
| ## mu[307] | -0.69 | 0.00 | 0.13 | -0.93 | -0.78 | -0.69 | -0.61 | -0.44 | 2577 | 1.00 |
| ## mu[308] | 0.14 | 0.00 | 0.09 | -0.04 | 0.08 | 0.14 | 0.19 | 0.30 | 2278 | 1.00 |
| ## mu[309] | -1.13 | 0.00 | 0.08 | -1.28 | -1.18 | -1.13 | -1.08 | -0.98 | 2314 | 1.00 |
| ## mu[310] | -1.52 | 0.00 | 0.12 | -1.75 | -1.59 | -1.52 | -1.44 | -1.28 | 2080 | 1.00 |
| ## mu[311] | -0.95 | 0.00 | 0.09 | -1.13 | -1.01 | -0.95 | -0.89 | -0.78 | 2407 | 1.00 |
| ## mu[312] | 0.05 | 0.00 | 0.07 | -0.09 | 0.00 | 0.05 | 0.10 | 0.18 | 3318 | 1.00 |
| ## mu[313] | 0.25 | 0.00 | 0.08 | 0.11 | 0.20 | 0.25 | 0.30 | 0.40 | 2759 | 1.00 |
| ## mu[314] | -0.18 | 0.00 | 0.06 | -0.30 | -0.22 | -0.18 | -0.13 | -0.05 | 3365 | 1.00 |
| ## mu[315] | -0.51 | 0.00 | 0.10 | -0.71 | -0.58 | -0.51 | -0.45 | -0.33 | 2637 | 1.00 |
| ## mu[316] | -0.44 | 0.00 | 0.06 | -0.56 | -0.48 | -0.44 | -0.40 | -0.32 | 2889 | 1.00 |
| ## mu[317] | -0.75 | 0.00 | 0.07 | -0.88 | -0.79 | -0.75 | -0.71 | -0.62 | 2476 | 1.00 |
| ## mu[318] | 0.05 | 0.00 | 0.19 | -0.32 | -0.07 | 0.05 | 0.18 | 0.42 | 1583 | 1.00 |
| ## mu[319] | -1.36 | 0.00 | 0.10 | -1.55 | -1.42 | -1.36 | -1.30 | -1.16 | 2423 | 1.00 |
| ## mu[320] | -0.31 | 0.00 | 0.07 | -0.46 | -0.36 | -0.31 | -0.27 | -0.16 | 1286 | 1.00 |
| ## mu[321] | -0.13 | 0.00 | 0.09 | -0.32 | -0.19 | -0.12 | -0.07 | 0.06 | 1211 | 1.00 |
| ## mu[322] | 0.84 | 0.00 | 0.09 | 0.66 | 0.78 | 0.84 | 0.91 | 1.02 | 2541 | 1.00 |
| ## mu[323] | 0.18 | 0.00 | 0.07 | 0.04 | 0.13 | 0.18 | 0.23 | 0.31 | 2265 | 1.00 |
| ## mu[324] | 0.55 | 0.00 | 0.07 | 0.42 | 0.50 | 0.55 | 0.60 | 0.69 | 3324 | 1.00 |
| ## mu[325] | 0.84 | 0.00 | 0.06 | 0.72 | 0.80 | 0.84 | 0.89 | 0.97 | 2555 | 1.00 |
| ## mu[326] | -0.44 | 0.00 | 0.06 | -0.55 | -0.48 | -0.44 | -0.40 | -0.32 | 1569 | 1.00 |
| ## mu[327] | -0.03 | 0.00 | 0.06 | -0.14 | -0.07 | -0.03 | 0.01 | 0.09 | 1339 | 1.00 |
| ## mu[328] | 0.43 | 0.00 | 0.10 | 0.22 | 0.36 | 0.43 | 0.50 | 0.62 | 2137 | 1.00 |
| ## mu[329] | 0.40 | 0.00 | 0.06 | 0.29 | 0.36 | 0.40 | 0.44 | 0.51 | 3167 | 1.00 |
| ## mu[330] | -0.73 | 0.00 | 0.11 | -0.95 | -0.81 | -0.73 | -0.65 | -0.51 | 1919 | 1.00 |
| ## mu[331] | -0.52 | 0.00 | 0.11 | -0.73 | -0.59 | -0.52 | -0.45 | -0.32 | 1643 | 1.00 |
| ## mu[332] | -1.55 | 0.00 | 0.09 | -1.72 | -1.61 | -1.55 | -1.48 | -1.37 | 2275 | 1.00 |
| ## mu[333] | 0.85 | 0.00 | 0.19 | 0.47 | 0.73 | 0.85 | 0.98 | 1.20 | 1655 | 1.00 |
| ## mu[334] | 0.63 | 0.00 | 0.20 | 0.23 | 0.51 | 0.64 | 0.77 | 1.00 | 1848 | 1.00 |
| ## mu[335] | -1.00 | 0.00 | 0.08 | -1.16 | -1.05 | -1.00 | -0.95 | -0.85 | 1867 | 1.00 |
| ## mu[336] | -1.59 | 0.00 | 0.11 | -1.79 | -1.66 | -1.59 | -1.52 | -1.38 | 2744 | 1.00 |
| ## mu[337] | -0.68 | 0.00 | 0.09 | -0.86 | -0.74 | -0.68 | -0.61 | -0.50 | 2310 | 1.00 |
| ## mu[338] | -0.36 | 0.00 | 0.06 | -0.47 | -0.39 | -0.36 | -0.32 | -0.24 | 1500 | 1.00 |
| ## mu[339] | -0.32 | 0.00 | 0.07 | -0.45 | -0.36 | -0.32 | -0.27 | -0.19 | 1647 | 1.00 |
| ## mu[340] | 0.07 | 0.00 | 0.07 | -0.06 | 0.03 | 0.07 | 0.12 | 0.20 | 1500 | 1.00 |
| ## mu[341] | 1.22 | 0.00 | 0.10 | 1.02 | 1.15 | 1.22 | 1.28 | 1.40 | 2184 | 1.00 |
| ## mu[342] | 0.08 | 0.00 | 0.10 | -0.12 | 0.01 | 0.08 | 0.15 | 0.29 | 1249 | 1.00 |
| ## mu[343] | -0.20 | 0.00 | 0.06 | -0.30 | -0.24 | -0.20 | -0.16 | -0.08 | 1798 | 1.00 |
| ## mu[344] | 0.31 | 0.00 | 0.05 | 0.22 | 0.28 | 0.31 | 0.35 | 0.41 | 2065 | 1.00 |
| ## mu[345] | 0.71 | 0.00 | 0.06 | 0.59 | 0.67 | 0.71 | 0.75 | 0.82 | 2040 | 1.00 |
| ## mu[346] | -0.32 | 0.00 | 0.10 | -0.51 | -0.39 | -0.32 | -0.25 | -0.13 | 2272 | 1.00 |
| ## mu[347] | 0.00 | 0.00 | 0.06 | -0.10 | -0.04 | 0.00 | 0.04 | 0.12 | 2388 | 1.00 |
| ## mu[348] | -0.48 | 0.00 | 0.12 | -0.71 | -0.56 | -0.48 | -0.40 | -0.25 | 1742 | 1.00 |
| ## mu[349] | 0.52 | 0.00 | 0.06 | 0.41 | 0.48 | 0.52 | 0.56 | 0.63 | 1580 | 1.00 |
| ## mu[350] | 0.59 | 0.00 | 0.13 | 0.33 | 0.50 | 0.60 | 0.68 | 0.85 | 2030 | 1.00 |
| ## mu[351] | 0.43 | 0.00 | 0.06 | 0.31 | 0.39 | 0.43 | 0.47 | 0.55 | 2684 | 1.00 |

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|------------|-------|------|------|-------|-------|-------|-------|-------|------|------|
| ## mu[352] | 0.63 | 0.00 | 0.08 | 0.48 | 0.58 | 0.63 | 0.68 | 0.78 | 1867 | 1.00 |
| ## mu[353] | -1.33 | 0.00 | 0.14 | -1.61 | -1.42 | -1.33 | -1.24 | -1.07 | 2645 | 1.00 |
| ## mu[354] | -0.11 | 0.00 | 0.06 | -0.22 | -0.15 | -0.11 | -0.07 | 0.00 | 2837 | 1.00 |
| ## mu[355] | 0.03 | 0.00 | 0.06 | -0.09 | -0.01 | 0.03 | 0.07 | 0.15 | 2751 | 1.00 |
| ## mu[356] | 0.04 | 0.00 | 0.11 | -0.17 | -0.03 | 0.04 | 0.11 | 0.24 | 2471 | 1.00 |
| ## mu[357] | -0.38 | 0.00 | 0.08 | -0.53 | -0.43 | -0.38 | -0.33 | -0.23 | 2539 | 1.00 |
| ## mu[358] | -0.33 | 0.00 | 0.09 | -0.49 | -0.38 | -0.33 | -0.27 | -0.16 | 3144 | 1.00 |
| ## mu[359] | 0.18 | 0.00 | 0.08 | 0.02 | 0.13 | 0.18 | 0.23 | 0.34 | 1981 | 1.00 |
| ## mu[360] | 0.02 | 0.00 | 0.06 | -0.10 | -0.02 | 0.02 | 0.06 | 0.14 | 2803 | 1.00 |
| ## mu[361] | -0.35 | 0.00 | 0.09 | -0.52 | -0.40 | -0.34 | -0.29 | -0.18 | 2139 | 1.00 |
| ## mu[362] | -0.34 | 0.00 | 0.09 | -0.51 | -0.40 | -0.34 | -0.28 | -0.17 | 2856 | 1.00 |
| ## mu[363] | 0.18 | 0.00 | 0.10 | -0.02 | 0.11 | 0.18 | 0.25 | 0.38 | 2086 | 1.00 |
| ## mu[364] | 0.00 | 0.00 | 0.09 | -0.19 | -0.07 | 0.00 | 0.06 | 0.18 | 1898 | 1.00 |
| ## mu[365] | -1.15 | 0.00 | 0.08 | -1.30 | -1.20 | -1.15 | -1.09 | -0.99 | 1953 | 1.00 |
| ## mu[366] | -0.61 | 0.00 | 0.08 | -0.77 | -0.66 | -0.61 | -0.55 | -0.45 | 2127 | 1.00 |
| ## mu[367] | -1.60 | 0.00 | 0.09 | -1.77 | -1.66 | -1.60 | -1.54 | -1.42 | 3179 | 1.00 |
| ## mu[368] | -1.74 | 0.00 | 0.10 | -1.92 | -1.80 | -1.74 | -1.68 | -1.55 | 2723 | 1.00 |
| ## mu[369] | -1.33 | 0.00 | 0.09 | -1.50 | -1.39 | -1.33 | -1.28 | -1.16 | 3202 | 1.00 |
| ## mu[370] | -1.16 | 0.00 | 0.09 | -1.34 | -1.22 | -1.16 | -1.09 | -0.97 | 3560 | 1.00 |
| ## mu[371] | -1.77 | 0.01 | 0.30 | -2.34 | -1.97 | -1.77 | -1.57 | -1.20 | 2328 | 1.00 |
| ## mu[372] | -0.11 | 0.00 | 0.07 | -0.27 | -0.16 | -0.11 | -0.07 | 0.03 | 2065 | 1.00 |
| ## mu[373] | -1.70 | 0.01 | 0.34 | -2.38 | -1.92 | -1.70 | -1.47 | -1.04 | 2346 | 1.00 |
| ## mu[374] | -1.26 | 0.00 | 0.11 | -1.48 | -1.33 | -1.26 | -1.18 | -1.04 | 2530 | 1.00 |
| ## mu[375] | -0.15 | 0.00 | 0.15 | -0.44 | -0.25 | -0.15 | -0.05 | 0.13 | 2665 | 1.00 |
| ## mu[376] | -0.19 | 0.00 | 0.05 | -0.29 | -0.23 | -0.19 | -0.16 | -0.10 | 2637 | 1.00 |
| ## mu[377] | -0.18 | 0.00 | 0.06 | -0.31 | -0.22 | -0.18 | -0.14 | -0.06 | 2244 | 1.00 |
| ## mu[378] | -0.26 | 0.00 | 0.06 | -0.38 | -0.30 | -0.26 | -0.22 | -0.15 | 2155 | 1.00 |
| ## mu[379] | -0.31 | 0.00 | 0.07 | -0.44 | -0.35 | -0.31 | -0.27 | -0.18 | 1628 | 1.00 |
| ## mu[380] | 0.16 | 0.00 | 0.05 | 0.06 | 0.13 | 0.16 | 0.19 | 0.26 | 2289 | 1.00 |
| ## mu[381] | 0.34 | 0.00 | 0.07 | 0.22 | 0.30 | 0.34 | 0.39 | 0.47 | 3180 | 1.00 |
| ## mu[382] | -0.04 | 0.00 | 0.05 | -0.14 | -0.07 | -0.04 | -0.01 | 0.05 | 2166 | 1.00 |
| ## mu[383] | -0.53 | 0.00 | 0.06 | -0.63 | -0.56 | -0.53 | -0.49 | -0.42 | 1979 | 1.00 |
| ## mu[384] | -0.27 | 0.00 | 0.06 | -0.39 | -0.31 | -0.27 | -0.23 | -0.16 | 2196 | 1.00 |
| ## mu[385] | 0.15 | 0.00 | 0.05 | 0.05 | 0.12 | 0.15 | 0.18 | 0.24 | 2399 | 1.00 |
| ## mu[386] | -0.69 | 0.00 | 0.10 | -0.88 | -0.76 | -0.69 | -0.62 | -0.49 | 1940 | 1.00 |
| ## mu[387] | 0.73 | 0.00 | 0.11 | 0.52 | 0.66 | 0.73 | 0.80 | 0.94 | 2162 | 1.00 |
| ## mu[388] | 0.73 | 0.00 | 0.07 | 0.60 | 0.69 | 0.73 | 0.78 | 0.87 | 2040 | 1.00 |
| ## mu[389] | 0.62 | 0.00 | 0.07 | 0.49 | 0.58 | 0.62 | 0.67 | 0.76 | 2300 | 1.00 |
| ## mu[390] | 1.45 | 0.00 | 0.14 | 1.17 | 1.36 | 1.46 | 1.55 | 1.73 | 1629 | 1.00 |
| ## mu[391] | 0.58 | 0.00 | 0.07 | 0.44 | 0.53 | 0.58 | 0.63 | 0.73 | 2341 | 1.00 |
| ## mu[392] | -0.30 | 0.00 | 0.12 | -0.54 | -0.38 | -0.30 | -0.22 | -0.04 | 1585 | 1.00 |
| ## mu[393] | -0.23 | 0.00 | 0.11 | -0.45 | -0.31 | -0.23 | -0.15 | 0.00 | 2010 | 1.00 |
| ## mu[394] | 0.76 | 0.00 | 0.09 | 0.58 | 0.70 | 0.76 | 0.82 | 0.95 | 1665 | 1.00 |
| ## mu[395] | 0.24 | 0.00 | 0.14 | -0.04 | 0.14 | 0.23 | 0.33 | 0.52 | 1298 | 1.00 |
| ## mu[396] | -0.36 | 0.00 | 0.13 | -0.61 | -0.45 | -0.36 | -0.27 | -0.12 | 1548 | 1.00 |
| ## mu[397] | -0.23 | 0.00 | 0.18 | -0.59 | -0.35 | -0.23 | -0.11 | 0.13 | 1720 | 1.00 |
| ## mu[398] | -0.53 | 0.00 | 0.13 | -0.78 | -0.62 | -0.53 | -0.44 | -0.28 | 2095 | 1.00 |
| ## mu[399] | 0.14 | 0.00 | 0.10 | -0.07 | 0.06 | 0.14 | 0.20 | 0.35 | 1634 | 1.00 |
| ## mu[400] | 0.17 | 0.00 | 0.11 | -0.04 | 0.10 | 0.17 | 0.24 | 0.37 | 1681 | 1.00 |
| ## mu[401] | 0.01 | 0.00 | 0.11 | -0.21 | -0.06 | 0.02 | 0.09 | 0.24 | 1597 | 1.00 |
| ## mu[402] | 0.41 | 0.00 | 0.16 | 0.09 | 0.30 | 0.42 | 0.52 | 0.74 | 1639 | 1.00 |
| ## mu[403] | 0.22 | 0.00 | 0.17 | -0.11 | 0.11 | 0.23 | 0.33 | 0.56 | 1669 | 1.00 |
| ## mu[404] | -0.01 | 0.00 | 0.05 | -0.11 | -0.05 | -0.01 | 0.02 | 0.10 | 1635 | 1.00 |
| ## mu[405] | 0.03 | 0.00 | 0.07 | -0.10 | -0.01 | 0.03 | 0.08 | 0.16 | 2709 | 1.00 |

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|------------|-------|------|------|-------|-------|-------|-------|-------|------|------|
| ## mu[406] | 0.15 | 0.00 | 0.10 | -0.05 | 0.08 | 0.15 | 0.21 | 0.36 | 1642 | 1.00 |
| ## mu[407] | 0.34 | 0.00 | 0.11 | 0.12 | 0.26 | 0.34 | 0.41 | 0.56 | 1774 | 1.00 |
| ## mu[408] | -0.05 | 0.00 | 0.11 | -0.28 | -0.13 | -0.05 | 0.02 | 0.17 | 1663 | 1.00 |
| ## mu[409] | 0.08 | 0.00 | 0.10 | -0.12 | 0.01 | 0.08 | 0.15 | 0.29 | 1699 | 1.00 |
| ## mu[410] | -0.02 | 0.00 | 0.05 | -0.12 | -0.06 | -0.02 | 0.01 | 0.09 | 1614 | 1.00 |
| ## mu[411] | 0.15 | 0.00 | 0.06 | 0.03 | 0.11 | 0.15 | 0.19 | 0.27 | 1801 | 1.00 |
| ## mu[412] | 0.31 | 0.00 | 0.07 | 0.16 | 0.26 | 0.31 | 0.36 | 0.45 | 2010 | 1.00 |
| ## mu[413] | -0.18 | 0.00 | 0.06 | -0.29 | -0.22 | -0.18 | -0.14 | -0.06 | 1636 | 1.00 |
| ## mu[414] | -0.10 | 0.00 | 0.05 | -0.21 | -0.14 | -0.10 | -0.07 | 0.01 | 1705 | 1.00 |
| ## mu[415] | 0.38 | 0.00 | 0.05 | 0.28 | 0.34 | 0.38 | 0.41 | 0.48 | 2443 | 1.00 |
| ## mu[416] | -0.28 | 0.00 | 0.10 | -0.47 | -0.35 | -0.28 | -0.22 | -0.08 | 1591 | 1.00 |
| ## mu[417] | 0.29 | 0.00 | 0.06 | 0.18 | 0.25 | 0.29 | 0.33 | 0.40 | 1835 | 1.00 |
| ## mu[418] | 0.36 | 0.00 | 0.05 | 0.26 | 0.32 | 0.36 | 0.39 | 0.46 | 2314 | 1.00 |
| ## mu[419] | 0.29 | 0.00 | 0.07 | 0.14 | 0.23 | 0.29 | 0.34 | 0.43 | 1889 | 1.00 |
| ## mu[420] | -0.14 | 0.00 | 0.07 | -0.29 | -0.19 | -0.15 | -0.10 | -0.01 | 1872 | 1.00 |
| ## mu[421] | 1.07 | 0.00 | 0.08 | 0.93 | 1.02 | 1.07 | 1.12 | 1.23 | 2456 | 1.00 |
| ## mu[422] | 0.74 | 0.00 | 0.06 | 0.62 | 0.70 | 0.75 | 0.79 | 0.87 | 2385 | 1.00 |
| ## mu[423] | 0.56 | 0.00 | 0.06 | 0.45 | 0.52 | 0.56 | 0.60 | 0.67 | 2355 | 1.00 |
| ## mu[424] | 0.57 | 0.00 | 0.06 | 0.45 | 0.53 | 0.57 | 0.61 | 0.68 | 2300 | 1.00 |
| ## mu[425] | 0.61 | 0.00 | 0.07 | 0.47 | 0.56 | 0.61 | 0.66 | 0.75 | 1530 | 1.00 |
| ## mu[426] | 1.26 | 0.00 | 0.07 | 1.12 | 1.21 | 1.26 | 1.31 | 1.40 | 1896 | 1.00 |
| ## mu[427] | 0.16 | 0.00 | 0.05 | 0.06 | 0.13 | 0.16 | 0.19 | 0.26 | 2192 | 1.00 |
| ## mu[428] | -0.29 | 0.00 | 0.07 | -0.42 | -0.34 | -0.30 | -0.25 | -0.16 | 1326 | 1.00 |
| ## mu[429] | 0.13 | 0.00 | 0.07 | 0.01 | 0.08 | 0.13 | 0.18 | 0.27 | 1402 | 1.00 |
| ## mu[430] | -0.29 | 0.00 | 0.07 | -0.42 | -0.34 | -0.30 | -0.25 | -0.16 | 1326 | 1.00 |
| ## mu[431] | 2.08 | 0.00 | 0.15 | 1.77 | 1.98 | 2.07 | 2.17 | 2.36 | 2041 | 1.00 |
| ## mu[432] | 0.91 | 0.00 | 0.06 | 0.79 | 0.87 | 0.91 | 0.95 | 1.03 | 1915 | 1.00 |
| ## mu[433] | 0.50 | 0.00 | 0.06 | 0.38 | 0.46 | 0.50 | 0.53 | 0.61 | 2022 | 1.00 |
| ## mu[434] | -0.93 | 0.00 | 0.09 | -1.10 | -0.99 | -0.93 | -0.88 | -0.76 | 1312 | 1.00 |
| ## mu[435] | -0.12 | 0.00 | 0.08 | -0.27 | -0.17 | -0.12 | -0.07 | 0.03 | 1825 | 1.00 |
| ## mu[436] | -0.31 | 0.00 | 0.11 | -0.53 | -0.38 | -0.31 | -0.23 | -0.08 | 2697 | 1.00 |
| ## mu[437] | -0.16 | 0.00 | 0.05 | -0.25 | -0.19 | -0.16 | -0.12 | -0.06 | 2329 | 1.00 |
| ## mu[438] | -0.34 | 0.01 | 0.43 | -1.20 | -0.63 | -0.33 | -0.03 | 0.48 | 2712 | 1.00 |
| ## mu[439] | -0.04 | 0.00 | 0.05 | -0.15 | -0.08 | -0.05 | -0.01 | 0.06 | 2036 | 1.00 |
| ## mu[440] | -1.15 | 0.00 | 0.07 | -1.29 | -1.20 | -1.15 | -1.10 | -1.00 | 2082 | 1.00 |
| ## mu[441] | -1.41 | 0.00 | 0.09 | -1.58 | -1.48 | -1.41 | -1.35 | -1.25 | 2489 | 1.00 |
| ## mu[442] | -0.06 | 0.00 | 0.06 | -0.18 | -0.11 | -0.07 | -0.02 | 0.05 | 2718 | 1.00 |
| ## mu[443] | 0.61 | 0.00 | 0.07 | 0.48 | 0.57 | 0.61 | 0.65 | 0.74 | 2426 | 1.00 |
| ## mu[444] | -0.51 | 0.00 | 0.11 | -0.72 | -0.58 | -0.51 | -0.44 | -0.30 | 2238 | 1.00 |
| ## mu[445] | -1.08 | 0.00 | 0.08 | -1.23 | -1.13 | -1.08 | -1.03 | -0.92 | 2034 | 1.00 |
| ## mu[446] | -0.41 | 0.00 | 0.05 | -0.51 | -0.44 | -0.41 | -0.37 | -0.30 | 2263 | 1.00 |
| ## mu[447] | -0.08 | 0.00 | 0.04 | -0.15 | -0.11 | -0.08 | -0.05 | 0.00 | 2471 | 1.00 |
| ## mu[448] | -0.43 | 0.00 | 0.09 | -0.60 | -0.49 | -0.43 | -0.37 | -0.25 | 2427 | 1.00 |
| ## mu[449] | 0.45 | 0.00 | 0.07 | 0.32 | 0.41 | 0.45 | 0.50 | 0.58 | 2953 | 1.00 |
| ## mu[450] | -0.16 | 0.00 | 0.08 | -0.31 | -0.21 | -0.16 | -0.11 | -0.01 | 1404 | 1.00 |
| ## mu[451] | -0.71 | 0.00 | 0.06 | -0.83 | -0.76 | -0.72 | -0.68 | -0.59 | 2842 | 1.00 |
| ## mu[452] | 0.01 | 0.00 | 0.10 | -0.19 | -0.06 | 0.01 | 0.08 | 0.21 | 1295 | 1.00 |
| ## mu[453] | 0.28 | 0.00 | 0.11 | 0.07 | 0.21 | 0.28 | 0.35 | 0.48 | 1367 | 1.00 |
| ## mu[454] | 1.54 | 0.00 | 0.13 | 1.28 | 1.45 | 1.54 | 1.62 | 1.79 | 1923 | 1.00 |
| ## mu[455] | 0.09 | 0.00 | 0.07 | -0.05 | 0.05 | 0.09 | 0.14 | 0.23 | 2115 | 1.00 |
| ## mu[456] | 0.42 | 0.00 | 0.11 | 0.22 | 0.35 | 0.42 | 0.50 | 0.63 | 1977 | 1.00 |
| ## mu[457] | 1.81 | 0.00 | 0.13 | 1.54 | 1.72 | 1.81 | 1.89 | 2.07 | 1502 | 1.00 |
| ## mu[458] | 0.32 | 0.00 | 0.10 | 0.13 | 0.25 | 0.32 | 0.38 | 0.51 | 1655 | 1.00 |
| ## mu[459] | 0.59 | 0.00 | 0.13 | 0.35 | 0.51 | 0.59 | 0.68 | 0.84 | 1476 | 1.00 |

| | | | | | | | | | | |
|------------|-------|------|------|-------|-------|-------|-------|-------|------|------|
| ## mu[460] | 0.55 | 0.00 | 0.05 | 0.44 | 0.51 | 0.55 | 0.59 | 0.65 | 2287 | 1.00 |
| ## mu[461] | -0.15 | 0.00 | 0.06 | -0.26 | -0.18 | -0.15 | -0.11 | -0.04 | 3269 | 1.00 |
| ## mu[462] | 1.50 | 0.00 | 0.15 | 1.22 | 1.41 | 1.50 | 1.60 | 1.79 | 2060 | 1.00 |
| ## mu[463] | -0.53 | 0.00 | 0.09 | -0.71 | -0.59 | -0.54 | -0.47 | -0.36 | 2460 | 1.00 |
| ## mu[464] | -1.21 | 0.00 | 0.09 | -1.37 | -1.27 | -1.21 | -1.15 | -1.02 | 2304 | 1.00 |
| ## mu[465] | -0.39 | 0.00 | 0.05 | -0.49 | -0.43 | -0.39 | -0.36 | -0.29 | 2770 | 1.00 |
| ## mu[466] | -0.52 | 0.00 | 0.13 | -0.77 | -0.60 | -0.52 | -0.44 | -0.26 | 1512 | 1.00 |
| ## mu[467] | -0.14 | 0.00 | 0.12 | -0.36 | -0.22 | -0.14 | -0.06 | 0.09 | 1743 | 1.00 |
| ## mu[468] | -1.08 | 0.00 | 0.09 | -1.25 | -1.13 | -1.08 | -1.02 | -0.89 | 2427 | 1.00 |
| ## mu[469] | 0.52 | 0.00 | 0.11 | 0.31 | 0.45 | 0.51 | 0.59 | 0.73 | 2132 | 1.00 |
| ## mu[470] | 0.95 | 0.00 | 0.09 | 0.76 | 0.88 | 0.95 | 1.01 | 1.12 | 1474 | 1.00 |
| ## mu[471] | 1.03 | 0.00 | 0.11 | 0.80 | 0.95 | 1.03 | 1.10 | 1.25 | 1194 | 1.00 |
| ## mu[472] | 1.30 | 0.00 | 0.16 | 0.97 | 1.19 | 1.30 | 1.40 | 1.62 | 1629 | 1.00 |
| ## mu[473] | -0.14 | 0.00 | 0.05 | -0.23 | -0.17 | -0.14 | -0.11 | -0.05 | 2436 | 1.00 |
| ## mu[474] | -1.36 | 0.00 | 0.15 | -1.65 | -1.46 | -1.37 | -1.27 | -1.07 | 1878 | 1.00 |
| ## mu[475] | 0.64 | 0.00 | 0.08 | 0.49 | 0.58 | 0.64 | 0.69 | 0.79 | 2632 | 1.00 |
| ## mu[476] | -0.25 | 0.00 | 0.09 | -0.41 | -0.31 | -0.25 | -0.19 | -0.08 | 3009 | 1.00 |
| ## mu[477] | -1.69 | 0.00 | 0.12 | -1.90 | -1.77 | -1.69 | -1.61 | -1.46 | 2251 | 1.00 |
| ## mu[478] | -0.57 | 0.00 | 0.06 | -0.70 | -0.61 | -0.57 | -0.53 | -0.45 | 2949 | 1.00 |
| ## mu[479] | -0.34 | 0.00 | 0.05 | -0.44 | -0.37 | -0.34 | -0.30 | -0.23 | 2792 | 1.00 |
| ## mu[480] | -0.70 | 0.00 | 0.08 | -0.85 | -0.76 | -0.70 | -0.65 | -0.55 | 2590 | 1.00 |
| ## mu[481] | 0.16 | 0.00 | 0.08 | 0.02 | 0.11 | 0.16 | 0.21 | 0.31 | 2302 | 1.00 |
| ## mu[482] | 0.61 | 0.00 | 0.10 | 0.40 | 0.54 | 0.61 | 0.67 | 0.80 | 2632 | 1.00 |
| ## mu[483] | 0.51 | 0.00 | 0.08 | 0.34 | 0.45 | 0.51 | 0.57 | 0.67 | 2638 | 1.00 |
| ## mu[484] | -0.36 | 0.00 | 0.07 | -0.50 | -0.41 | -0.37 | -0.32 | -0.22 | 2555 | 1.00 |
| ## mu[485] | -0.02 | 0.00 | 0.11 | -0.24 | -0.10 | -0.02 | 0.05 | 0.21 | 1092 | 1.00 |
| ## mu[486] | -0.32 | 0.00 | 0.09 | -0.49 | -0.38 | -0.33 | -0.27 | -0.15 | 2358 | 1.00 |
| ## mu[487] | 0.99 | 0.00 | 0.13 | 0.73 | 0.90 | 0.98 | 1.07 | 1.24 | 2118 | 1.00 |
| ## mu[488] | 0.44 | 0.00 | 0.13 | 0.19 | 0.35 | 0.43 | 0.52 | 0.69 | 1075 | 1.00 |
| ## mu[489] | 0.75 | 0.00 | 0.06 | 0.63 | 0.71 | 0.75 | 0.79 | 0.88 | 1936 | 1.00 |
| ## mu[490] | 0.17 | 0.00 | 0.05 | 0.06 | 0.13 | 0.17 | 0.20 | 0.27 | 2781 | 1.00 |
| ## mu[491] | -0.95 | 0.00 | 0.08 | -1.11 | -1.00 | -0.95 | -0.90 | -0.79 | 2479 | 1.00 |
| ## mu[492] | -0.47 | 0.00 | 0.11 | -0.67 | -0.54 | -0.47 | -0.40 | -0.25 | 1537 | 1.00 |
| ## mu[493] | 0.62 | 0.00 | 0.06 | 0.51 | 0.58 | 0.62 | 0.66 | 0.74 | 2553 | 1.00 |
| ## mu[494] | -0.07 | 0.00 | 0.05 | -0.17 | -0.11 | -0.07 | -0.04 | 0.02 | 2019 | 1.00 |
| ## mu[495] | -0.09 | 0.00 | 0.05 | -0.20 | -0.13 | -0.09 | -0.06 | 0.02 | 1709 | 1.00 |
| ## mu[496] | -0.37 | 0.00 | 0.05 | -0.46 | -0.40 | -0.37 | -0.34 | -0.28 | 2586 | 1.00 |
| ## mu[497] | -0.25 | 0.00 | 0.05 | -0.34 | -0.28 | -0.25 | -0.22 | -0.15 | 2372 | 1.00 |
| ## mu[498] | -0.36 | 0.00 | 0.06 | -0.48 | -0.40 | -0.36 | -0.32 | -0.26 | 2672 | 1.00 |
| ## mu[499] | 0.79 | 0.00 | 0.06 | 0.68 | 0.75 | 0.79 | 0.83 | 0.91 | 2299 | 1.00 |
| ## mu[500] | -0.34 | 0.00 | 0.07 | -0.48 | -0.39 | -0.34 | -0.30 | -0.21 | 2289 | 1.00 |
| ## mu[501] | -0.40 | 0.00 | 0.06 | -0.50 | -0.44 | -0.40 | -0.36 | -0.29 | 2198 | 1.00 |
| ## mu[502] | -0.49 | 0.00 | 0.06 | -0.60 | -0.53 | -0.49 | -0.46 | -0.38 | 1826 | 1.00 |
| ## mu[503] | -0.65 | 0.00 | 0.08 | -0.81 | -0.71 | -0.65 | -0.60 | -0.50 | 1966 | 1.00 |
| ## mu[504] | 0.39 | 0.00 | 0.06 | 0.28 | 0.35 | 0.39 | 0.43 | 0.51 | 2722 | 1.00 |
| ## mu[505] | 0.38 | 0.00 | 0.08 | 0.22 | 0.32 | 0.38 | 0.43 | 0.53 | 2754 | 1.00 |
| ## mu[506] | 0.28 | 0.00 | 0.07 | 0.14 | 0.24 | 0.28 | 0.33 | 0.42 | 3060 | 1.00 |
| ## mu[507] | 0.28 | 0.00 | 0.07 | 0.14 | 0.24 | 0.28 | 0.33 | 0.42 | 3060 | 1.00 |
| ## mu[508] | 0.43 | 0.00 | 0.06 | 0.30 | 0.39 | 0.43 | 0.47 | 0.55 | 2310 | 1.00 |
| ## mu[509] | 0.31 | 0.00 | 0.07 | 0.17 | 0.26 | 0.31 | 0.36 | 0.46 | 2010 | 1.00 |
| ## mu[510] | 1.18 | 0.00 | 0.08 | 1.02 | 1.13 | 1.18 | 1.23 | 1.35 | 2268 | 1.00 |
| ## mu[511] | 0.91 | 0.00 | 0.07 | 0.78 | 0.87 | 0.91 | 0.96 | 1.06 | 2477 | 1.00 |
| ## mu[512] | 0.28 | 0.00 | 0.08 | 0.11 | 0.22 | 0.27 | 0.33 | 0.44 | 2079 | 1.00 |
| ## mu[513] | 0.23 | 0.00 | 0.07 | 0.09 | 0.18 | 0.23 | 0.28 | 0.37 | 2153 | 1.00 |

| | | | | | | | | | | |
|----------------|-------|------|------|-------|-------|-------|-------|-------|------|------|
| ## mu[514] | 0.55 | 0.00 | 0.06 | 0.45 | 0.52 | 0.55 | 0.59 | 0.66 | 2574 | 1.00 |
| ## mu[515] | 0.17 | 0.00 | 0.11 | -0.03 | 0.10 | 0.17 | 0.24 | 0.38 | 3237 | 1.00 |
| ## mu[516] | -0.55 | 0.00 | 0.09 | -0.73 | -0.61 | -0.55 | -0.49 | -0.37 | 2067 | 1.00 |
| ## mu[517] | 0.05 | 0.00 | 0.07 | -0.09 | 0.00 | 0.05 | 0.10 | 0.18 | 3309 | 1.00 |
| ## mu[518] | 0.54 | 0.00 | 0.11 | 0.33 | 0.47 | 0.54 | 0.62 | 0.75 | 2019 | 1.00 |
| ## mu[519] | -0.18 | 0.00 | 0.06 | -0.30 | -0.22 | -0.18 | -0.13 | -0.06 | 3365 | 1.00 |
| ## mu[520] | -0.18 | 0.00 | 0.06 | -0.30 | -0.22 | -0.18 | -0.14 | -0.06 | 3363 | 1.00 |
| ## mu[521] | -0.10 | 0.00 | 0.13 | -0.37 | -0.19 | -0.10 | -0.01 | 0.16 | 2618 | 1.00 |
| ## mu[522] | 0.30 | 0.00 | 0.07 | 0.17 | 0.26 | 0.30 | 0.35 | 0.44 | 3022 | 1.00 |
| ## mu[523] | 1.10 | 0.00 | 0.11 | 0.89 | 1.03 | 1.10 | 1.17 | 1.32 | 1612 | 1.00 |
| ## mu[524] | -1.17 | 0.00 | 0.08 | -1.33 | -1.22 | -1.17 | -1.11 | -1.01 | 2708 | 1.00 |
| ## mu[525] | 0.38 | 0.00 | 0.07 | 0.23 | 0.33 | 0.38 | 0.42 | 0.52 | 2166 | 1.00 |
| ## mu[526] | -0.32 | 0.00 | 0.08 | -0.47 | -0.37 | -0.33 | -0.27 | -0.17 | 1333 | 1.00 |
| ## mu[527] | -0.38 | 0.00 | 0.05 | -0.49 | -0.42 | -0.38 | -0.35 | -0.28 | 1962 | 1.00 |
| ## mu[528] | -1.06 | 0.00 | 0.11 | -1.28 | -1.13 | -1.06 | -0.99 | -0.84 | 2898 | 1.00 |
| ## mu[529] | -0.04 | 0.00 | 0.05 | -0.15 | -0.08 | -0.04 | -0.01 | 0.06 | 2763 | 1.00 |
| ## mu[530] | -1.27 | 0.00 | 0.17 | -1.61 | -1.39 | -1.27 | -1.16 | -0.95 | 2583 | 1.00 |
| ## mu[531] | -1.47 | 0.00 | 0.11 | -1.67 | -1.55 | -1.47 | -1.40 | -1.27 | 2171 | 1.00 |
| ## mu[532] | 0.54 | 0.00 | 0.07 | 0.40 | 0.49 | 0.54 | 0.59 | 0.68 | 2375 | 1.00 |
| ## mu[533] | -1.04 | 0.00 | 0.07 | -1.17 | -1.08 | -1.04 | -0.99 | -0.90 | 2078 | 1.00 |
| ## mu[534] | -1.54 | 0.00 | 0.09 | -1.72 | -1.61 | -1.55 | -1.48 | -1.35 | 2865 | 1.00 |
| ## mu[535] | -1.35 | 0.00 | 0.10 | -1.54 | -1.42 | -1.35 | -1.28 | -1.15 | 3052 | 1.00 |
| ## mu[536] | 0.28 | 0.00 | 0.07 | 0.14 | 0.24 | 0.28 | 0.33 | 0.42 | 3060 | 1.00 |
| ## mu[537] | 0.17 | 0.00 | 0.07 | 0.03 | 0.12 | 0.17 | 0.21 | 0.29 | 3038 | 1.00 |
| ## mu[538] | 0.71 | 0.00 | 0.08 | 0.56 | 0.66 | 0.71 | 0.77 | 0.86 | 2235 | 1.00 |
| ## mu[539] | 0.75 | 0.00 | 0.13 | 0.50 | 0.66 | 0.74 | 0.83 | 1.00 | 2471 | 1.00 |
| ## mu[540] | 0.08 | 0.00 | 0.07 | -0.05 | 0.04 | 0.08 | 0.13 | 0.21 | 1813 | 1.00 |
| ## mu[541] | 0.74 | 0.00 | 0.06 | 0.62 | 0.70 | 0.74 | 0.78 | 0.87 | 2402 | 1.00 |
| ## mu[542] | 0.15 | 0.00 | 0.08 | 0.01 | 0.09 | 0.15 | 0.20 | 0.29 | 3026 | 1.00 |
| ## mu[543] | 0.29 | 0.00 | 0.06 | 0.17 | 0.25 | 0.29 | 0.33 | 0.42 | 1558 | 1.00 |
| ## mu[544] | 0.92 | 0.00 | 0.07 | 0.78 | 0.87 | 0.92 | 0.96 | 1.06 | 2392 | 1.00 |
| ## mu[545] | 0.24 | 0.00 | 0.06 | 0.11 | 0.20 | 0.24 | 0.28 | 0.37 | 1387 | 1.00 |
| ## mu[546] | -0.33 | 0.00 | 0.05 | -0.43 | -0.37 | -0.33 | -0.30 | -0.23 | 2114 | 1.00 |
| ## log_lik[1] | -0.63 | 0.00 | 0.04 | -0.71 | -0.65 | -0.63 | -0.60 | -0.56 | 1802 | 1.00 |
| ## log_lik[2] | -0.60 | 0.00 | 0.03 | -0.67 | -0.62 | -0.60 | -0.58 | -0.55 | 1859 | 1.00 |
| ## log_lik[3] | -0.66 | 0.00 | 0.04 | -0.76 | -0.69 | -0.66 | -0.63 | -0.58 | 2383 | 1.00 |
| ## log_lik[4] | -0.63 | 0.00 | 0.04 | -0.71 | -0.65 | -0.63 | -0.60 | -0.56 | 2186 | 1.00 |
| ## log_lik[5] | -0.64 | 0.00 | 0.04 | -0.72 | -0.67 | -0.64 | -0.62 | -0.57 | 1618 | 1.00 |
| ## log_lik[6] | -0.75 | 0.00 | 0.15 | -1.13 | -0.82 | -0.72 | -0.65 | -0.57 | 2108 | 1.00 |
| ## log_lik[7] | -3.33 | 0.00 | 0.20 | -3.73 | -3.46 | -3.33 | -3.19 | -2.93 | 2455 | 1.00 |
| ## log_lik[8] | -0.77 | 0.00 | 0.04 | -0.86 | -0.79 | -0.76 | -0.73 | -0.69 | 2436 | 1.00 |
| ## log_lik[9] | -0.60 | 0.00 | 0.03 | -0.67 | -0.62 | -0.60 | -0.58 | -0.54 | 1886 | 1.00 |
| ## log_lik[10] | -0.61 | 0.00 | 0.03 | -0.68 | -0.63 | -0.61 | -0.59 | -0.55 | 1470 | 1.00 |
| ## log_lik[11] | -0.61 | 0.00 | 0.03 | -0.67 | -0.63 | -0.60 | -0.58 | -0.54 | 2121 | 1.00 |
| ## log_lik[12] | -0.89 | 0.00 | 0.08 | -1.05 | -0.94 | -0.89 | -0.84 | -0.76 | 2794 | 1.00 |
| ## log_lik[13] | -1.55 | 0.00 | 0.18 | -1.91 | -1.67 | -1.54 | -1.42 | -1.20 | 2932 | 1.00 |
| ## log_lik[14] | -0.97 | 0.00 | 0.10 | -1.18 | -1.04 | -0.96 | -0.90 | -0.80 | 2166 | 1.00 |
| ## log_lik[15] | -3.08 | 0.01 | 0.28 | -3.66 | -3.27 | -3.08 | -2.89 | -2.55 | 1987 | 1.00 |
| ## log_lik[16] | -0.89 | 0.00 | 0.05 | -1.00 | -0.92 | -0.89 | -0.86 | -0.80 | 2382 | 1.00 |
| ## log_lik[17] | -1.15 | 0.00 | 0.12 | -1.40 | -1.23 | -1.15 | -1.07 | -0.93 | 2019 | 1.00 |
| ## log_lik[18] | -1.23 | 0.00 | 0.14 | -1.52 | -1.31 | -1.22 | -1.13 | -0.98 | 2195 | 1.00 |
| ## log_lik[19] | -1.82 | 0.00 | 0.18 | -2.20 | -1.93 | -1.82 | -1.70 | -1.49 | 2379 | 1.00 |
| ## log_lik[20] | -0.66 | 0.00 | 0.05 | -0.77 | -0.69 | -0.66 | -0.63 | -0.58 | 1757 | 1.00 |
| ## log_lik[21] | -3.06 | 0.01 | 0.23 | -3.52 | -3.21 | -3.05 | -2.90 | -2.61 | 1814 | 1.00 |

```

## log_lik[22] -0.70 0.00 0.04 -0.79 -0.73 -0.70 -0.67 -0.62 2361 1.00
## log_lik[23] -1.54 0.00 0.21 -1.97 -1.68 -1.54 -1.40 -1.17 2697 1.00
## log_lik[24] -1.24 0.00 0.11 -1.47 -1.30 -1.23 -1.16 -1.05 2784 1.00
## log_lik[25] -2.92 0.01 0.59 -4.20 -3.31 -2.88 -2.50 -1.90 2739 1.00
## log_lik[26] -0.67 0.00 0.08 -0.88 -0.71 -0.66 -0.61 -0.56 2191 1.00
## log_lik[27] -0.62 0.00 0.04 -0.71 -0.64 -0.61 -0.59 -0.55 1496 1.00
## log_lik[28] -1.55 0.00 0.25 -2.09 -1.70 -1.53 -1.38 -1.14 2577 1.00
## log_lik[29] -0.69 0.00 0.04 -0.77 -0.72 -0.69 -0.66 -0.61 1586 1.00
## log_lik[30] -0.63 0.00 0.04 -0.71 -0.65 -0.63 -0.60 -0.56 2098 1.00
## log_lik[31] -0.61 0.00 0.04 -0.69 -0.63 -0.61 -0.59 -0.55 2129 1.00
## log_lik[32] -0.63 0.00 0.04 -0.71 -0.65 -0.63 -0.60 -0.56 1990 1.00
## log_lik[33] -0.60 0.00 0.03 -0.67 -0.62 -0.60 -0.58 -0.54 1893 1.00
## log_lik[34] -0.96 0.00 0.06 -1.08 -1.00 -0.96 -0.92 -0.86 2492 1.00
## log_lik[35] -0.82 0.00 0.08 -1.01 -0.86 -0.81 -0.76 -0.69 1802 1.00
## log_lik[36] -0.92 0.00 0.07 -1.07 -0.96 -0.91 -0.86 -0.78 2861 1.00
## log_lik[37] -0.97 0.00 0.17 -1.35 -1.07 -0.95 -0.86 -0.70 1716 1.00
## log_lik[38] -1.25 0.00 0.14 -1.55 -1.34 -1.24 -1.15 -0.98 2314 1.00
## log_lik[39] -0.76 0.00 0.06 -0.89 -0.80 -0.76 -0.72 -0.66 2375 1.00
## log_lik[40] -1.26 0.00 0.11 -1.48 -1.33 -1.25 -1.19 -1.07 1714 1.00
## log_lik[41] -0.77 0.00 0.05 -0.87 -0.80 -0.77 -0.73 -0.67 2937 1.00
## log_lik[42] -0.82 0.00 0.05 -0.92 -0.85 -0.81 -0.79 -0.73 2115 1.00
## log_lik[43] -0.60 0.00 0.03 -0.66 -0.62 -0.60 -0.58 -0.54 1772 1.00
## log_lik[44] -0.87 0.00 0.05 -0.98 -0.90 -0.87 -0.84 -0.78 2511 1.00
## log_lik[45] -0.64 0.00 0.04 -0.71 -0.66 -0.63 -0.61 -0.57 2285 1.00
## log_lik[46] -0.84 0.00 0.05 -0.95 -0.88 -0.84 -0.80 -0.74 2362 1.00
## log_lik[47] -1.00 0.00 0.07 -1.14 -1.04 -1.00 -0.96 -0.88 2130 1.00
## log_lik[48] -1.59 0.00 0.17 -1.95 -1.70 -1.58 -1.47 -1.27 2510 1.00
## log_lik[49] -0.60 0.00 0.03 -0.67 -0.62 -0.60 -0.58 -0.54 1901 1.00
## log_lik[50] -0.71 0.00 0.06 -0.84 -0.74 -0.70 -0.67 -0.61 2108 1.00
## log_lik[51] -1.58 0.00 0.15 -1.89 -1.67 -1.57 -1.48 -1.30 2323 1.00
## log_lik[52] -0.63 0.00 0.04 -0.71 -0.65 -0.63 -0.61 -0.57 1856 1.00
## log_lik[53] -1.62 0.01 0.23 -2.09 -1.76 -1.61 -1.46 -1.21 1398 1.00
## log_lik[54] -0.88 0.00 0.12 -1.15 -0.95 -0.86 -0.79 -0.68 1452 1.00
## log_lik[55] -1.86 0.00 0.11 -2.07 -1.93 -1.86 -1.79 -1.65 3325 1.00
## log_lik[56] -1.55 0.00 0.16 -1.87 -1.66 -1.54 -1.44 -1.25 2547 1.00
## log_lik[57] -0.62 0.00 0.04 -0.69 -0.64 -0.61 -0.59 -0.55 1961 1.00
## log_lik[58] -0.71 0.00 0.05 -0.82 -0.75 -0.71 -0.68 -0.62 2594 1.00
## log_lik[59] -0.62 0.00 0.04 -0.70 -0.65 -0.62 -0.60 -0.55 2060 1.00
## log_lik[60] -0.81 0.00 0.08 -0.98 -0.87 -0.80 -0.75 -0.67 2141 1.00
## log_lik[61] -0.80 0.00 0.09 -0.99 -0.85 -0.79 -0.74 -0.65 1745 1.00
## log_lik[62] -0.61 0.00 0.04 -0.68 -0.63 -0.60 -0.58 -0.54 1409 1.00
## log_lik[63] -0.61 0.00 0.03 -0.68 -0.63 -0.61 -0.59 -0.55 2060 1.00
## log_lik[64] -0.80 0.00 0.07 -0.95 -0.84 -0.79 -0.75 -0.68 1468 1.00
## log_lik[65] -0.75 0.00 0.06 -0.88 -0.79 -0.75 -0.71 -0.65 1695 1.00
## log_lik[66] -0.70 0.00 0.07 -0.87 -0.74 -0.69 -0.64 -0.59 2115 1.00
## log_lik[67] -2.16 0.01 0.28 -2.74 -2.34 -2.15 -1.97 -1.64 2254 1.00
## log_lik[68] -0.69 0.00 0.07 -0.85 -0.73 -0.68 -0.64 -0.58 1656 1.00
## log_lik[69] -0.61 0.00 0.04 -0.70 -0.64 -0.61 -0.59 -0.55 1817 1.00
## log_lik[70] -2.14 0.01 0.36 -2.91 -2.38 -2.12 -1.88 -1.47 2165 1.00
## log_lik[71] -0.63 0.00 0.04 -0.72 -0.66 -0.63 -0.60 -0.56 2157 1.00
## log_lik[72] -0.80 0.00 0.07 -0.96 -0.84 -0.79 -0.75 -0.68 2002 1.00
## log_lik[73] -0.66 0.00 0.04 -0.76 -0.69 -0.66 -0.64 -0.59 2037 1.00
## log_lik[74] -0.65 0.00 0.04 -0.75 -0.68 -0.65 -0.62 -0.58 1683 1.00
## log_lik[75] -1.01 0.00 0.11 -1.24 -1.08 -1.00 -0.93 -0.81 1785 1.00

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## log_lik[76] -0.64 0.00 0.03 -0.71 -0.66 -0.64 -0.62 -0.58 2189 1.00
## log_lik[77] -0.67 0.00 0.05 -0.77 -0.69 -0.66 -0.64 -0.58 1960 1.00
## log_lik[78] -2.64 0.01 0.21 -3.05 -2.77 -2.63 -2.49 -2.25 1558 1.00
## log_lik[79] -0.65 0.00 0.05 -0.76 -0.68 -0.65 -0.62 -0.57 1661 1.00
## log_lik[80] -0.75 0.00 0.07 -0.91 -0.80 -0.74 -0.70 -0.63 2399 1.00
## log_lik[81] -0.86 0.00 0.09 -1.06 -0.92 -0.85 -0.79 -0.70 2956 1.00
## log_lik[82] -0.61 0.00 0.04 -0.69 -0.64 -0.61 -0.59 -0.55 1752 1.00
## log_lik[83] -0.62 0.00 0.04 -0.71 -0.64 -0.61 -0.59 -0.55 1299 1.01
## log_lik[84] -0.62 0.00 0.04 -0.71 -0.64 -0.62 -0.59 -0.55 1919 1.00
## log_lik[85] -0.79 0.00 0.05 -0.89 -0.82 -0.79 -0.75 -0.70 2469 1.00
## log_lik[86] -0.60 0.00 0.03 -0.66 -0.62 -0.60 -0.58 -0.54 1855 1.00
## log_lik[87] -1.55 0.01 0.29 -2.18 -1.73 -1.53 -1.36 -1.06 1902 1.00
## log_lik[88] -1.10 0.01 0.22 -1.60 -1.23 -1.07 -0.95 -0.75 1336 1.00
## log_lik[89] -1.42 0.00 0.15 -1.74 -1.51 -1.41 -1.32 -1.15 2270 1.00
## log_lik[90] -0.61 0.00 0.03 -0.68 -0.63 -0.61 -0.58 -0.55 1691 1.00
## log_lik[91] -1.60 0.01 0.17 -1.96 -1.71 -1.60 -1.48 -1.28 1139 1.00
## log_lik[92] -0.66 0.00 0.05 -0.79 -0.69 -0.65 -0.62 -0.57 1747 1.00
## log_lik[93] -1.38 0.00 0.13 -1.66 -1.47 -1.38 -1.28 -1.14 2851 1.00
## log_lik[94] -5.39 0.01 0.50 -6.37 -5.72 -5.36 -5.06 -4.44 2395 1.00
## log_lik[95] -0.82 0.00 0.07 -0.97 -0.87 -0.81 -0.77 -0.68 2542 1.00
## log_lik[96] -1.04 0.00 0.09 -1.23 -1.11 -1.04 -0.98 -0.88 2488 1.00
## log_lik[97] -1.53 0.00 0.13 -1.78 -1.61 -1.52 -1.44 -1.28 2486 1.00
## log_lik[98] -0.64 0.00 0.06 -0.79 -0.67 -0.63 -0.60 -0.56 1267 1.00
## log_lik[99] -3.38 0.01 0.47 -4.41 -3.67 -3.37 -3.07 -2.49 1629 1.00
## log_lik[100] -1.36 0.00 0.16 -1.72 -1.46 -1.35 -1.24 -1.07 2289 1.00
## log_lik[101] -0.94 0.00 0.14 -1.25 -1.02 -0.93 -0.83 -0.70 2324 1.00
## log_lik[102] -0.64 0.00 0.04 -0.74 -0.67 -0.64 -0.61 -0.57 1884 1.00
## log_lik[103] -0.73 0.00 0.07 -0.90 -0.78 -0.73 -0.68 -0.61 2913 1.00
## log_lik[104] -2.21 0.01 0.37 -3.00 -2.46 -2.20 -1.96 -1.55 2192 1.00
## log_lik[105] -1.13 0.00 0.12 -1.38 -1.21 -1.12 -1.04 -0.92 3072 1.00
## log_lik[106] -0.83 0.00 0.06 -0.96 -0.87 -0.82 -0.78 -0.71 3402 1.00
## log_lik[107] -0.98 0.00 0.11 -1.23 -1.04 -0.96 -0.90 -0.79 2560 1.00
## log_lik[108] -5.27 0.01 0.55 -6.39 -5.63 -5.26 -4.89 -4.25 1642 1.00
## log_lik[109] -1.38 0.01 0.25 -1.95 -1.54 -1.36 -1.21 -0.94 1523 1.00
## log_lik[110] -3.22 0.01 0.31 -3.88 -3.42 -3.22 -3.00 -2.62 2332 1.00
## log_lik[111] -1.82 0.01 0.23 -2.32 -1.96 -1.80 -1.65 -1.39 2114 1.00
## log_lik[112] -2.74 0.01 0.26 -3.30 -2.91 -2.74 -2.56 -2.24 1690 1.00
## log_lik[113] -1.03 0.00 0.18 -1.45 -1.14 -1.01 -0.90 -0.73 1563 1.00
## log_lik[114] -1.14 0.00 0.11 -1.37 -1.21 -1.13 -1.06 -0.94 3002 1.00
## log_lik[115] -0.65 0.00 0.04 -0.73 -0.68 -0.65 -0.63 -0.58 2212 1.00
## log_lik[116] -0.80 0.00 0.09 -1.01 -0.86 -0.79 -0.74 -0.65 1544 1.00
## log_lik[117] -1.35 0.00 0.15 -1.65 -1.44 -1.35 -1.24 -1.07 1388 1.00
## log_lik[118] -0.60 0.00 0.03 -0.67 -0.62 -0.60 -0.58 -0.54 2043 1.00
## log_lik[119] -0.66 0.00 0.07 -0.84 -0.69 -0.64 -0.61 -0.56 1496 1.00
## log_lik[120] -1.06 0.00 0.20 -1.50 -1.18 -1.04 -0.92 -0.73 2075 1.00
## log_lik[121] -0.69 0.00 0.08 -0.89 -0.74 -0.68 -0.63 -0.57 2229 1.00
## log_lik[122] -0.62 0.00 0.04 -0.72 -0.64 -0.61 -0.59 -0.55 1622 1.00
## log_lik[123] -1.44 0.00 0.18 -1.82 -1.56 -1.43 -1.30 -1.10 2222 1.00
## log_lik[124] -1.84 0.00 0.14 -2.12 -1.92 -1.83 -1.74 -1.59 1980 1.00
## log_lik[125] -0.61 0.00 0.03 -0.67 -0.63 -0.60 -0.58 -0.55 1905 1.00
## log_lik[126] -0.64 0.00 0.05 -0.76 -0.67 -0.63 -0.60 -0.56 1490 1.00
## log_lik[127] -0.64 0.00 0.04 -0.74 -0.67 -0.64 -0.61 -0.57 1793 1.00
## log_lik[128] -0.71 0.00 0.08 -0.89 -0.76 -0.70 -0.66 -0.60 2416 1.00
## log_lik[129] -5.17 0.01 0.56 -6.36 -5.53 -5.15 -4.78 -4.13 2016 1.00

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## log_lik[130] -1.30 0.00 0.12 -1.57 -1.38 -1.30 -1.22 -1.08 2723 1.00
## log_lik[131] -0.61 0.00 0.04 -0.69 -0.64 -0.61 -0.59 -0.55 1797 1.00
## log_lik[132] -0.79 0.00 0.10 -1.02 -0.85 -0.77 -0.71 -0.63 2424 1.00
## log_lik[133] -0.66 0.00 0.08 -0.85 -0.69 -0.64 -0.61 -0.56 1995 1.00
## log_lik[134] -3.31 0.01 0.37 -4.06 -3.55 -3.30 -3.07 -2.64 2122 1.00
## log_lik[135] -1.58 0.00 0.23 -2.09 -1.72 -1.56 -1.41 -1.17 2278 1.00
## log_lik[136] -0.63 0.00 0.05 -0.74 -0.65 -0.62 -0.59 -0.55 1863 1.00
## log_lik[137] -3.60 0.01 0.49 -4.64 -3.93 -3.57 -3.25 -2.72 2297 1.00
## log_lik[138] -0.70 0.00 0.04 -0.79 -0.73 -0.70 -0.67 -0.62 2242 1.00
## log_lik[139] -1.49 0.00 0.13 -1.74 -1.58 -1.48 -1.40 -1.25 2601 1.00
## log_lik[140] -2.13 0.01 0.27 -2.70 -2.30 -2.12 -1.95 -1.66 2019 1.00
## log_lik[141] -1.12 0.00 0.13 -1.40 -1.21 -1.12 -1.03 -0.88 1526 1.00
## log_lik[142] -0.61 0.00 0.04 -0.68 -0.63 -0.61 -0.58 -0.55 1613 1.00
## log_lik[143] -0.93 0.00 0.11 -1.16 -1.00 -0.92 -0.85 -0.72 2022 1.00
## log_lik[144] -2.05 0.00 0.23 -2.51 -2.20 -2.05 -1.89 -1.61 2129 1.00
## log_lik[145] -0.62 0.00 0.04 -0.71 -0.64 -0.61 -0.59 -0.55 1479 1.00
## log_lik[146] -1.54 0.00 0.18 -1.93 -1.65 -1.53 -1.40 -1.23 3169 1.00
## log_lik[147] -3.04 0.01 0.29 -3.64 -3.23 -3.02 -2.84 -2.53 2209 1.00
## log_lik[148] -1.34 0.00 0.10 -1.54 -1.41 -1.34 -1.28 -1.16 2530 1.00
## log_lik[149] -2.54 0.00 0.18 -2.91 -2.66 -2.54 -2.42 -2.20 2212 1.00
## log_lik[150] -3.45 0.01 0.25 -3.97 -3.61 -3.44 -3.28 -2.98 2305 1.00
## log_lik[151] -1.26 0.00 0.08 -1.42 -1.32 -1.26 -1.21 -1.11 1739 1.00
## log_lik[152] -0.68 0.00 0.06 -0.82 -0.72 -0.67 -0.64 -0.58 2523 1.00
## log_lik[153] -1.26 0.00 0.11 -1.50 -1.34 -1.26 -1.18 -1.06 2736 1.00
## log_lik[154] -1.24 0.00 0.15 -1.58 -1.33 -1.22 -1.13 -0.96 2227 1.00
## log_lik[155] -1.95 0.00 0.13 -2.21 -2.03 -1.94 -1.86 -1.70 2652 1.00
## log_lik[156] -0.68 0.00 0.08 -0.86 -0.72 -0.67 -0.63 -0.57 2083 1.00
## log_lik[157] -0.73 0.00 0.08 -0.91 -0.78 -0.72 -0.67 -0.60 1279 1.00
## log_lik[158] -1.05 0.00 0.14 -1.35 -1.14 -1.05 -0.96 -0.81 1703 1.00
## log_lik[159] -1.14 0.00 0.17 -1.51 -1.25 -1.13 -1.03 -0.85 2296 1.00
## log_lik[160] -0.61 0.00 0.03 -0.68 -0.63 -0.61 -0.59 -0.55 2240 1.00
## log_lik[161] -0.77 0.00 0.07 -0.93 -0.82 -0.77 -0.72 -0.65 3087 1.00
## log_lik[162] -0.60 0.00 0.03 -0.68 -0.63 -0.60 -0.58 -0.55 1871 1.00
## log_lik[163] -0.84 0.00 0.08 -1.02 -0.89 -0.84 -0.79 -0.71 4143 1.00
## log_lik[164] -0.67 0.00 0.04 -0.75 -0.69 -0.66 -0.64 -0.60 3104 1.00
## log_lik[165] -1.72 0.00 0.19 -2.12 -1.83 -1.71 -1.58 -1.38 2921 1.00
## log_lik[166] -0.72 0.00 0.06 -0.86 -0.76 -0.71 -0.68 -0.61 2804 1.00
## log_lik[167] -0.96 0.00 0.10 -1.18 -1.02 -0.95 -0.89 -0.79 3631 1.00
## log_lik[168] -6.04 0.01 0.43 -6.88 -6.32 -6.02 -5.75 -5.21 2203 1.00
## log_lik[169] -0.63 0.00 0.04 -0.72 -0.65 -0.62 -0.60 -0.55 1944 1.00
## log_lik[170] -3.79 0.01 0.37 -4.53 -4.03 -3.78 -3.54 -3.08 2028 1.00
## log_lik[171] -1.51 0.00 0.20 -1.94 -1.64 -1.50 -1.37 -1.15 2143 1.00
## log_lik[172] -1.33 0.00 0.17 -1.70 -1.44 -1.32 -1.20 -1.01 2272 1.00
## log_lik[173] -1.87 0.00 0.26 -2.42 -2.04 -1.86 -1.69 -1.41 2902 1.00
## log_lik[174] -1.42 0.00 0.10 -1.63 -1.48 -1.42 -1.35 -1.23 2563 1.00
## log_lik[175] -1.15 0.00 0.08 -1.32 -1.20 -1.14 -1.09 -1.00 2701 1.00
## log_lik[176] -0.82 0.00 0.05 -0.93 -0.86 -0.82 -0.79 -0.73 2280 1.00
## log_lik[177] -0.63 0.00 0.05 -0.74 -0.65 -0.62 -0.59 -0.55 1567 1.00
## log_lik[178] -0.74 0.00 0.05 -0.84 -0.77 -0.74 -0.71 -0.66 2139 1.00
## log_lik[179] -1.62 0.00 0.11 -1.86 -1.70 -1.62 -1.55 -1.42 2597 1.00
## log_lik[180] -0.87 0.00 0.06 -1.00 -0.91 -0.87 -0.83 -0.76 2133 1.00
## log_lik[181] -1.46 0.01 0.20 -1.91 -1.58 -1.45 -1.32 -1.10 1545 1.00
## log_lik[182] -1.72 0.00 0.12 -1.97 -1.80 -1.71 -1.64 -1.50 2602 1.00
## log_lik[183] -0.61 0.00 0.03 -0.68 -0.64 -0.61 -0.59 -0.55 2075 1.00

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## log_lik[184] -0.70 0.00 0.04 -0.78 -0.72 -0.69 -0.67 -0.62 2267 1.00
## log_lik[185] -0.61 0.00 0.03 -0.68 -0.63 -0.61 -0.59 -0.55 2075 1.00
## log_lik[186] -0.60 0.00 0.03 -0.66 -0.62 -0.60 -0.58 -0.54 1825 1.00
## log_lik[187] -0.69 0.00 0.09 -0.90 -0.74 -0.68 -0.63 -0.57 1714 1.00
## log_lik[188] -0.61 0.00 0.04 -0.69 -0.63 -0.61 -0.58 -0.54 1316 1.00
## log_lik[189] -0.71 0.00 0.08 -0.90 -0.76 -0.70 -0.65 -0.59 1470 1.00
## log_lik[190] -0.65 0.00 0.06 -0.78 -0.68 -0.63 -0.60 -0.56 1085 1.00
## log_lik[191] -0.80 0.00 0.05 -0.91 -0.84 -0.80 -0.77 -0.71 1952 1.00
## log_lik[192] -0.60 0.00 0.03 -0.66 -0.62 -0.60 -0.58 -0.54 1849 1.00
## log_lik[193] -0.77 0.00 0.04 -0.86 -0.80 -0.77 -0.74 -0.69 2506 1.00
## log_lik[194] -0.86 0.00 0.05 -0.96 -0.89 -0.85 -0.82 -0.77 2207 1.00
## log_lik[195] -0.93 0.00 0.10 -1.14 -0.99 -0.93 -0.86 -0.76 1811 1.00
## log_lik[196] -0.65 0.00 0.04 -0.73 -0.68 -0.65 -0.63 -0.59 1554 1.00
## log_lik[197] -0.62 0.00 0.03 -0.69 -0.64 -0.62 -0.60 -0.56 1932 1.00
## log_lik[198] -0.61 0.00 0.03 -0.68 -0.63 -0.61 -0.59 -0.55 1961 1.00
## log_lik[199] -0.83 0.00 0.05 -0.94 -0.87 -0.83 -0.79 -0.73 1814 1.00
## log_lik[200] -0.60 0.00 0.03 -0.66 -0.62 -0.60 -0.58 -0.54 1838 1.00
## log_lik[201] -1.48 0.00 0.10 -1.69 -1.55 -1.48 -1.41 -1.29 2095 1.00
## log_lik[202] -0.78 0.00 0.04 -0.88 -0.81 -0.78 -0.76 -0.70 2154 1.00
## log_lik[203] -1.02 0.00 0.08 -1.18 -1.07 -1.02 -0.97 -0.89 2705 1.00
## log_lik[204] -0.61 0.00 0.03 -0.67 -0.63 -0.60 -0.58 -0.55 1916 1.00
## log_lik[205] -0.67 0.00 0.04 -0.75 -0.70 -0.67 -0.64 -0.60 1961 1.00
## log_lik[206] -0.60 0.00 0.03 -0.66 -0.62 -0.60 -0.58 -0.54 1836 1.00
## log_lik[207] -0.72 0.00 0.04 -0.80 -0.74 -0.72 -0.69 -0.65 1924 1.00
## log_lik[208] -0.60 0.00 0.03 -0.66 -0.62 -0.60 -0.58 -0.54 1856 1.00
## log_lik[209] -1.04 0.00 0.08 -1.21 -1.09 -1.04 -0.98 -0.88 1899 1.00
## log_lik[210] -0.86 0.00 0.06 -0.97 -0.89 -0.85 -0.82 -0.75 2058 1.00
## log_lik[211] -0.63 0.00 0.04 -0.72 -0.66 -0.63 -0.60 -0.56 1970 1.00
## log_lik[212] -0.68 0.00 0.05 -0.78 -0.71 -0.67 -0.64 -0.59 2129 1.00
## log_lik[213] -1.49 0.00 0.17 -1.84 -1.60 -1.48 -1.38 -1.18 1891 1.00
## log_lik[214] -0.92 0.00 0.08 -1.09 -0.97 -0.92 -0.87 -0.79 2384 1.00
## log_lik[215] -1.03 0.00 0.16 -1.40 -1.13 -1.01 -0.91 -0.76 1322 1.00
## log_lik[216] -0.63 0.00 0.04 -0.71 -0.65 -0.63 -0.61 -0.56 1940 1.00
## log_lik[217] -0.86 0.00 0.07 -1.01 -0.91 -0.86 -0.81 -0.74 2480 1.00
## log_lik[218] -0.69 0.00 0.06 -0.82 -0.72 -0.68 -0.65 -0.59 1391 1.00
## log_lik[219] -1.51 0.00 0.15 -1.82 -1.61 -1.50 -1.41 -1.23 2475 1.00
## log_lik[220] -0.80 0.00 0.14 -1.11 -0.88 -0.78 -0.70 -0.61 1510 1.00
## log_lik[221] -0.72 0.00 0.06 -0.85 -0.76 -0.72 -0.68 -0.63 2213 1.00
## log_lik[222] -1.96 0.00 0.13 -2.21 -2.04 -1.96 -1.88 -1.72 1531 1.00
## log_lik[223] -0.68 0.00 0.04 -0.77 -0.71 -0.68 -0.65 -0.60 1745 1.00
## log_lik[224] -0.67 0.00 0.04 -0.76 -0.70 -0.67 -0.64 -0.59 2022 1.00
## log_lik[225] -0.64 0.00 0.04 -0.72 -0.67 -0.64 -0.62 -0.57 1676 1.00
## log_lik[226] -0.80 0.00 0.06 -0.93 -0.84 -0.79 -0.75 -0.69 2607 1.00
## log_lik[227] -0.66 0.00 0.04 -0.76 -0.69 -0.66 -0.63 -0.58 2404 1.00
## log_lik[228] -0.71 0.00 0.05 -0.83 -0.75 -0.71 -0.68 -0.62 2164 1.00
## log_lik[229] -1.07 0.00 0.10 -1.29 -1.13 -1.06 -1.00 -0.89 1922 1.00
## log_lik[230] -0.73 0.00 0.05 -0.83 -0.76 -0.73 -0.70 -0.65 2139 1.00
## log_lik[231] -0.67 0.00 0.05 -0.77 -0.70 -0.67 -0.64 -0.60 2147 1.00
## log_lik[232] -0.72 0.00 0.05 -0.82 -0.75 -0.72 -0.69 -0.64 1953 1.00
## log_lik[233] -0.62 0.00 0.04 -0.71 -0.65 -0.62 -0.60 -0.55 1070 1.00
## log_lik[234] -0.63 0.00 0.04 -0.71 -0.65 -0.63 -0.61 -0.56 1598 1.00
## log_lik[235] -1.18 0.00 0.10 -1.38 -1.24 -1.17 -1.11 -1.01 2102 1.00
## log_lik[236] -0.94 0.00 0.07 -1.09 -0.98 -0.93 -0.89 -0.81 1814 1.00
## log_lik[237] -0.61 0.00 0.03 -0.68 -0.63 -0.61 -0.58 -0.55 2001 1.00

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## log_lik[238] -0.60 0.00 0.03 -0.67 -0.62 -0.60 -0.58 -0.54 1981 1.00
## log_lik[239] -0.68 0.00 0.04 -0.77 -0.71 -0.68 -0.65 -0.60 2066 1.00
## log_lik[240] -0.62 0.00 0.04 -0.70 -0.64 -0.62 -0.59 -0.56 2157 1.00
## log_lik[241] -0.95 0.00 0.10 -1.16 -1.01 -0.95 -0.88 -0.77 2226 1.00
## log_lik[242] -2.01 0.00 0.21 -2.45 -2.14 -2.00 -1.86 -1.61 2171 1.00
## log_lik[243] -0.90 0.00 0.06 -1.03 -0.94 -0.89 -0.85 -0.79 2778 1.00
## log_lik[244] -0.76 0.00 0.06 -0.89 -0.79 -0.75 -0.72 -0.65 2032 1.00
## log_lik[245] -0.67 0.00 0.04 -0.76 -0.69 -0.66 -0.64 -0.59 2348 1.00
## log_lik[246] -0.96 0.00 0.09 -1.15 -1.01 -0.95 -0.90 -0.81 2083 1.00
## log_lik[247] -0.64 0.00 0.04 -0.72 -0.66 -0.63 -0.61 -0.56 1814 1.00
## log_lik[248] -0.60 0.00 0.03 -0.67 -0.62 -0.60 -0.58 -0.54 1835 1.00
## log_lik[249] -1.56 0.00 0.17 -1.92 -1.67 -1.56 -1.45 -1.24 2220 1.00
## log_lik[250] -0.70 0.00 0.05 -0.81 -0.73 -0.70 -0.67 -0.61 2333 1.00
## log_lik[251] -0.63 0.00 0.04 -0.71 -0.66 -0.63 -0.60 -0.56 2259 1.00
## log_lik[252] -0.79 0.00 0.07 -0.94 -0.84 -0.79 -0.75 -0.68 2099 1.00
## log_lik[253] -1.05 0.00 0.15 -1.37 -1.14 -1.04 -0.94 -0.79 1747 1.00
## log_lik[254] -1.23 0.00 0.08 -1.39 -1.28 -1.23 -1.18 -1.09 2637 1.00
## log_lik[255] -0.65 0.00 0.04 -0.73 -0.67 -0.65 -0.62 -0.58 2347 1.00
## log_lik[256] -0.61 0.00 0.04 -0.70 -0.64 -0.61 -0.59 -0.55 1118 1.01
## log_lik[257] -0.66 0.00 0.04 -0.74 -0.68 -0.65 -0.63 -0.58 2014 1.00
## log_lik[258] -0.76 0.00 0.06 -0.89 -0.80 -0.76 -0.72 -0.66 3401 1.00
## log_lik[259] -0.61 0.00 0.03 -0.68 -0.63 -0.61 -0.59 -0.55 1593 1.00
## log_lik[260] -0.69 0.00 0.05 -0.80 -0.73 -0.69 -0.66 -0.61 2127 1.00
## log_lik[261] -0.69 0.00 0.05 -0.81 -0.72 -0.69 -0.65 -0.60 2263 1.00
## log_lik[262] -0.60 0.00 0.03 -0.66 -0.62 -0.60 -0.58 -0.54 1826 1.00
## log_lik[263] -0.70 0.00 0.04 -0.79 -0.72 -0.69 -0.67 -0.62 1753 1.00
## log_lik[264] -0.74 0.00 0.05 -0.85 -0.78 -0.74 -0.71 -0.65 1901 1.00
## log_lik[265] -0.91 0.00 0.14 -1.23 -0.99 -0.90 -0.81 -0.68 2199 1.00
## log_lik[266] -0.80 0.00 0.05 -0.91 -0.84 -0.80 -0.77 -0.71 2490 1.00
## log_lik[267] -0.60 0.00 0.03 -0.67 -0.62 -0.60 -0.58 -0.54 1905 1.00
## log_lik[268] -1.45 0.00 0.12 -1.69 -1.53 -1.44 -1.36 -1.21 1937 1.00
## log_lik[269] -0.69 0.00 0.05 -0.78 -0.72 -0.68 -0.65 -0.61 2049 1.00
## log_lik[270] -0.60 0.00 0.03 -0.66 -0.62 -0.60 -0.58 -0.54 1841 1.00
## log_lik[271] -0.60 0.00 0.03 -0.66 -0.62 -0.60 -0.58 -0.54 1831 1.00
## log_lik[272] -1.56 0.00 0.15 -1.88 -1.66 -1.56 -1.46 -1.27 2355 1.00
## log_lik[273] -0.70 0.00 0.05 -0.81 -0.73 -0.69 -0.66 -0.60 2244 1.00
## log_lik[274] -0.93 0.00 0.11 -1.16 -1.00 -0.92 -0.85 -0.74 1735 1.00
## log_lik[275] -0.61 0.00 0.03 -0.68 -0.64 -0.61 -0.59 -0.55 1892 1.00
## log_lik[276] -0.72 0.00 0.05 -0.81 -0.75 -0.72 -0.69 -0.65 2335 1.00
## log_lik[277] -0.92 0.00 0.07 -1.08 -0.97 -0.92 -0.87 -0.79 1910 1.00
## log_lik[278] -0.60 0.00 0.03 -0.66 -0.62 -0.60 -0.58 -0.54 1839 1.00
## log_lik[279] -0.62 0.00 0.03 -0.69 -0.64 -0.62 -0.60 -0.56 2009 1.00
## log_lik[280] -0.73 0.00 0.04 -0.82 -0.76 -0.73 -0.70 -0.65 2286 1.00
## log_lik[281] -0.60 0.00 0.03 -0.67 -0.62 -0.60 -0.58 -0.54 1871 1.00
## log_lik[282] -0.78 0.00 0.08 -0.95 -0.83 -0.77 -0.73 -0.65 2796 1.00
## log_lik[283] -0.60 0.00 0.03 -0.67 -0.63 -0.60 -0.58 -0.54 1680 1.00
## log_lik[284] -0.61 0.00 0.03 -0.68 -0.63 -0.60 -0.58 -0.55 1564 1.00
## log_lik[285] -0.62 0.00 0.05 -0.73 -0.64 -0.62 -0.59 -0.55 1411 1.00
## log_lik[286] -0.84 0.00 0.07 -1.00 -0.89 -0.84 -0.79 -0.72 2339 1.00
## log_lik[287] -0.64 0.00 0.04 -0.73 -0.66 -0.63 -0.61 -0.56 1902 1.00
## log_lik[288] -0.94 0.00 0.11 -1.18 -1.01 -0.93 -0.86 -0.75 1833 1.00
## log_lik[289] -0.66 0.00 0.05 -0.77 -0.69 -0.65 -0.62 -0.57 1272 1.01
## log_lik[290] -0.68 0.00 0.07 -0.84 -0.72 -0.67 -0.63 -0.57 2275 1.00
## log_lik[291] -1.94 0.00 0.22 -2.41 -2.08 -1.93 -1.78 -1.53 2918 1.00

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## log_lik[292] -3.75 0.01 0.40 -4.55 -4.02 -3.73 -3.47 -3.00 2666 1.00
## log_lik[293] -4.16 0.01 0.42 -4.98 -4.44 -4.15 -3.86 -3.39 2857 1.00
## log_lik[294] -3.51 0.01 0.35 -4.22 -3.75 -3.51 -3.26 -2.85 2678 1.00
## log_lik[295] -1.80 0.00 0.27 -2.38 -1.97 -1.78 -1.60 -1.30 3151 1.00
## log_lik[296] -0.83 0.00 0.08 -1.00 -0.88 -0.82 -0.77 -0.68 2265 1.00
## log_lik[297] -1.27 0.00 0.19 -1.68 -1.38 -1.26 -1.14 -0.94 3089 1.00
## log_lik[298] -3.75 0.01 0.36 -4.47 -4.00 -3.73 -3.49 -3.06 3003 1.00
## log_lik[299] -5.35 0.01 0.50 -6.33 -5.69 -5.35 -5.00 -4.43 2688 1.00
## log_lik[300] -0.60 0.00 0.03 -0.67 -0.62 -0.60 -0.58 -0.54 1784 1.00
## log_lik[301] -0.76 0.00 0.09 -0.96 -0.81 -0.75 -0.70 -0.62 1394 1.00
## log_lik[302] -3.26 0.02 0.71 -4.82 -3.71 -3.20 -2.75 -2.04 1538 1.00
## log_lik[303] -0.60 0.00 0.03 -0.67 -0.63 -0.60 -0.58 -0.54 1661 1.00
## log_lik[304] -0.94 0.00 0.22 -1.45 -1.06 -0.91 -0.78 -0.61 2195 1.00
## log_lik[305] -0.75 0.00 0.05 -0.86 -0.78 -0.75 -0.71 -0.66 2660 1.00
## log_lik[306] -2.63 0.00 0.23 -3.12 -2.78 -2.62 -2.47 -2.19 2605 1.00
## log_lik[307] -0.66 0.00 0.07 -0.81 -0.69 -0.65 -0.61 -0.56 2278 1.00
## log_lik[308] -1.29 0.00 0.14 -1.57 -1.37 -1.28 -1.19 -1.03 2306 1.00
## log_lik[309] -0.65 0.00 0.04 -0.74 -0.67 -0.64 -0.62 -0.57 2491 1.00
## log_lik[310] -1.13 0.00 0.17 -1.50 -1.23 -1.12 -1.01 -0.84 2101 1.00
## log_lik[311] -0.77 0.00 0.08 -0.94 -0.81 -0.76 -0.71 -0.64 2335 1.00
## log_lik[312] -0.66 0.00 0.04 -0.75 -0.69 -0.66 -0.63 -0.58 3001 1.00
## log_lik[313] -0.64 0.00 0.04 -0.74 -0.67 -0.64 -0.61 -0.57 2828 1.00
## log_lik[314] -2.04 0.00 0.16 -2.36 -2.14 -2.03 -1.93 -1.75 2871 1.00
## log_lik[315] -0.68 0.00 0.06 -0.81 -0.71 -0.67 -0.63 -0.58 2698 1.00
## log_lik[316] -1.32 0.00 0.10 -1.53 -1.38 -1.31 -1.25 -1.13 2868 1.00
## log_lik[317] -1.22 0.00 0.10 -1.43 -1.28 -1.21 -1.15 -1.03 2466 1.00
## log_lik[318] -0.67 0.00 0.09 -0.91 -0.70 -0.64 -0.61 -0.56 1336 1.00
## log_lik[319] -0.60 0.00 0.03 -0.68 -0.63 -0.60 -0.58 -0.54 1677 1.00
## log_lik[320] -0.60 0.00 0.03 -0.67 -0.63 -0.60 -0.58 -0.54 1921 1.00
## log_lik[321] -0.85 0.00 0.09 -1.07 -0.91 -0.84 -0.79 -0.70 1306 1.00
## log_lik[322] -2.06 0.00 0.23 -2.51 -2.21 -2.04 -1.90 -1.64 2727 1.00
## log_lik[323] -3.39 0.01 0.26 -3.92 -3.57 -3.38 -3.22 -2.90 2410 1.00
## log_lik[324] -1.85 0.00 0.16 -2.16 -1.96 -1.84 -1.74 -1.55 3274 1.00
## log_lik[325] -0.64 0.00 0.04 -0.72 -0.66 -0.63 -0.61 -0.57 2136 1.00
## log_lik[326] -0.99 0.00 0.07 -1.15 -1.04 -0.99 -0.95 -0.85 1516 1.00
## log_lik[327] -0.90 0.00 0.07 -1.03 -0.95 -0.90 -0.86 -0.78 1204 1.00
## log_lik[328] -1.04 0.00 0.13 -1.31 -1.13 -1.04 -0.95 -0.80 2147 1.00
## log_lik[329] -0.61 0.00 0.03 -0.67 -0.63 -0.60 -0.58 -0.55 1898 1.00
## log_lik[330] -0.64 0.00 0.05 -0.77 -0.67 -0.63 -0.60 -0.56 1607 1.00
## log_lik[331] -0.63 0.00 0.05 -0.74 -0.66 -0.63 -0.60 -0.56 1885 1.00
## log_lik[332] -0.88 0.00 0.10 -1.09 -0.94 -0.87 -0.81 -0.72 2236 1.00
## log_lik[333] -2.29 0.01 0.47 -3.28 -2.60 -2.26 -1.96 -1.43 1681 1.00
## log_lik[334] -1.09 0.01 0.27 -1.67 -1.25 -1.05 -0.90 -0.68 1983 1.00
## log_lik[335] -0.82 0.00 0.07 -0.98 -0.87 -0.82 -0.77 -0.69 1721 1.00
## log_lik[336] -1.20 0.00 0.16 -1.53 -1.30 -1.19 -1.08 -0.93 2779 1.00
## log_lik[337] -0.61 0.00 0.04 -0.69 -0.63 -0.61 -0.58 -0.55 1709 1.00
## log_lik[338] -0.60 0.00 0.03 -0.67 -0.62 -0.60 -0.58 -0.54 1902 1.00
## log_lik[339] -0.60 0.00 0.03 -0.67 -0.62 -0.60 -0.58 -0.54 2048 1.00
## log_lik[340] -0.65 0.00 0.04 -0.73 -0.68 -0.65 -0.62 -0.58 1899 1.00
## log_lik[341] -1.08 0.00 0.13 -1.35 -1.16 -1.07 -0.98 -0.84 2183 1.00
## log_lik[342] -0.72 0.00 0.07 -0.89 -0.76 -0.71 -0.66 -0.60 1502 1.00
## log_lik[343] -0.62 0.00 0.03 -0.69 -0.64 -0.62 -0.60 -0.56 2257 1.00
## log_lik[344] -0.73 0.00 0.04 -0.81 -0.75 -0.72 -0.70 -0.65 2506 1.00
## log_lik[345] -0.62 0.00 0.03 -0.69 -0.64 -0.62 -0.60 -0.56 1810 1.00

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## log_lik[346] -0.61 0.00 0.03 -0.68 -0.63 -0.60 -0.58 -0.54 1566 1.00
## log_lik[347] -0.74 0.00 0.05 -0.84 -0.77 -0.73 -0.70 -0.65 2648 1.00
## log_lik[348] -0.75 0.00 0.09 -0.95 -0.80 -0.74 -0.68 -0.60 1811 1.00
## log_lik[349] -1.40 0.00 0.10 -1.60 -1.47 -1.40 -1.33 -1.21 1602 1.00
## log_lik[350] -1.06 0.00 0.18 -1.45 -1.17 -1.05 -0.94 -0.76 2046 1.00
## log_lik[351] -1.69 0.00 0.13 -1.95 -1.78 -1.69 -1.61 -1.45 2559 1.00
## log_lik[352] -1.06 0.00 0.10 -1.27 -1.12 -1.06 -0.99 -0.87 1864 1.00
## log_lik[353] -0.64 0.00 0.06 -0.79 -0.67 -0.63 -0.60 -0.55 2026 1.00
## log_lik[354] -1.30 0.00 0.09 -1.49 -1.36 -1.30 -1.24 -1.13 2795 1.00
## log_lik[355] -0.89 0.00 0.07 -1.03 -0.93 -0.89 -0.85 -0.77 2850 1.00
## log_lik[356] -0.70 0.00 0.07 -0.86 -0.75 -0.70 -0.65 -0.59 2287 1.00
## log_lik[357] -0.92 0.00 0.08 -1.10 -0.97 -0.91 -0.86 -0.76 2561 1.00
## log_lik[358] -0.68 0.00 0.05 -0.80 -0.71 -0.67 -0.64 -0.59 2474 1.00
## log_lik[359] -0.91 0.00 0.09 -1.11 -0.96 -0.90 -0.85 -0.75 2001 1.00
## log_lik[360] -0.80 0.00 0.06 -0.92 -0.84 -0.80 -0.77 -0.70 2893 1.00
## log_lik[361] -0.61 0.00 0.04 -0.69 -0.64 -0.61 -0.59 -0.55 1782 1.00
## log_lik[362] -0.83 0.00 0.08 -1.01 -0.89 -0.83 -0.77 -0.69 3103 1.00
## log_lik[363] -0.75 0.00 0.08 -0.93 -0.80 -0.74 -0.70 -0.62 2083 1.00
## log_lik[364] -0.77 0.00 0.08 -0.94 -0.81 -0.76 -0.71 -0.64 2164 1.00
## log_lik[365] -0.90 0.00 0.09 -1.09 -0.95 -0.89 -0.84 -0.75 1921 1.00
## log_lik[366] -0.74 0.00 0.06 -0.88 -0.78 -0.74 -0.70 -0.64 2253 1.00
## log_lik[367] -0.92 0.00 0.10 -1.13 -0.98 -0.91 -0.85 -0.74 3125 1.00
## log_lik[368] -1.53 0.00 0.18 -1.92 -1.65 -1.52 -1.41 -1.20 2732 1.00
## log_lik[369] -1.25 0.00 0.14 -1.56 -1.33 -1.24 -1.15 -1.00 3152 1.00
## log_lik[370] -1.10 0.00 0.13 -1.39 -1.18 -1.09 -1.01 -0.88 3455 1.00
## log_lik[371] -1.32 0.01 0.48 -2.49 -1.59 -1.23 -0.96 -0.65 2249 1.00
## log_lik[372] -1.32 0.00 0.12 -1.57 -1.39 -1.31 -1.24 -1.08 2061 1.00
## log_lik[373] -1.25 0.01 0.52 -2.57 -1.51 -1.15 -0.86 -0.61 2167 1.00
## log_lik[374] -0.74 0.00 0.08 -0.93 -0.79 -0.73 -0.68 -0.60 2239 1.00
## log_lik[375] -0.88 0.00 0.15 -1.24 -0.97 -0.86 -0.77 -0.65 2333 1.00
## log_lik[376] -0.69 0.00 0.04 -0.77 -0.71 -0.69 -0.66 -0.62 2173 1.00
## log_lik[377] -0.60 0.00 0.03 -0.67 -0.62 -0.60 -0.58 -0.54 1585 1.00
## log_lik[378] -0.61 0.00 0.03 -0.68 -0.63 -0.61 -0.59 -0.55 1446 1.00
## log_lik[379] -0.60 0.00 0.03 -0.67 -0.63 -0.60 -0.58 -0.54 2089 1.00
## log_lik[380] -0.62 0.00 0.03 -0.69 -0.64 -0.62 -0.60 -0.56 2163 1.00
## log_lik[381] -0.62 0.00 0.04 -0.70 -0.65 -0.62 -0.60 -0.56 1988 1.00
## log_lik[382] -0.60 0.00 0.03 -0.66 -0.62 -0.60 -0.58 -0.54 1783 1.00
## log_lik[383] -0.60 0.00 0.03 -0.66 -0.62 -0.60 -0.58 -0.54 1694 1.00
## log_lik[384] -0.60 0.00 0.03 -0.66 -0.62 -0.60 -0.58 -0.54 1774 1.00
## log_lik[385] -0.67 0.00 0.04 -0.75 -0.70 -0.67 -0.65 -0.61 1745 1.00
## log_lik[386] -0.61 0.00 0.03 -0.68 -0.63 -0.60 -0.58 -0.54 1341 1.00
## log_lik[387] -0.91 0.00 0.12 -1.17 -0.98 -0.90 -0.83 -0.71 2068 1.00
## log_lik[388] -0.62 0.00 0.03 -0.69 -0.64 -0.61 -0.59 -0.55 2091 1.00
## log_lik[389] -0.85 0.00 0.07 -0.99 -0.89 -0.84 -0.80 -0.72 2276 1.00
## log_lik[390] -0.78 0.00 0.12 -1.05 -0.84 -0.76 -0.69 -0.60 1534 1.00
## log_lik[391] -0.69 0.00 0.05 -0.79 -0.72 -0.68 -0.65 -0.60 2296 1.00
## log_lik[392] -0.66 0.00 0.06 -0.81 -0.70 -0.65 -0.62 -0.57 1670 1.00
## log_lik[393] -1.65 0.01 0.23 -2.16 -1.80 -1.63 -1.48 -1.24 1924 1.00
## log_lik[394] -1.31 0.00 0.15 -1.65 -1.41 -1.30 -1.20 -1.04 1739 1.00
## log_lik[395] -1.20 0.01 0.22 -1.69 -1.32 -1.17 -1.04 -0.83 1301 1.00
## log_lik[396] -0.61 0.00 0.04 -0.70 -0.64 -0.61 -0.59 -0.55 1410 1.00
## log_lik[397] -0.69 0.00 0.10 -0.95 -0.73 -0.66 -0.62 -0.56 1583 1.00
## log_lik[398] -0.68 0.00 0.07 -0.85 -0.72 -0.67 -0.62 -0.57 2103 1.00
## log_lik[399] -0.71 0.00 0.07 -0.88 -0.76 -0.70 -0.66 -0.60 1634 1.00

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## log_lik[400] -1.72 0.01 0.22 -2.18 -1.87 -1.71 -1.57 -1.31 1730 1.00
## log_lik[401] -0.61 0.00 0.04 -0.69 -0.63 -0.61 -0.59 -0.55 1751 1.00
## log_lik[402] -0.94 0.00 0.18 -1.37 -1.04 -0.92 -0.80 -0.66 1624 1.00
## log_lik[403] -1.51 0.01 0.31 -2.20 -1.69 -1.49 -1.28 -0.97 1667 1.00
## log_lik[404] -0.75 0.00 0.05 -0.84 -0.78 -0.75 -0.72 -0.66 1735 1.00
## log_lik[405] -0.62 0.00 0.03 -0.69 -0.64 -0.61 -0.59 -0.55 1960 1.00
## log_lik[406] -1.09 0.00 0.14 -1.40 -1.18 -1.08 -0.99 -0.85 1647 1.00
## log_lik[407] -0.62 0.00 0.04 -0.71 -0.64 -0.61 -0.59 -0.55 1680 1.00
## log_lik[408] -0.61 0.00 0.04 -0.68 -0.63 -0.61 -0.58 -0.55 1813 1.00
## log_lik[409] -1.10 0.00 0.14 -1.41 -1.19 -1.09 -1.00 -0.85 1705 1.00
## log_lik[410] -0.60 0.00 0.03 -0.66 -0.62 -0.60 -0.58 -0.54 1892 1.00
## log_lik[411] -0.63 0.00 0.04 -0.70 -0.65 -0.63 -0.60 -0.56 2030 1.00
## log_lik[412] -0.70 0.00 0.05 -0.82 -0.74 -0.70 -0.67 -0.61 2115 1.00
## log_lik[413] -0.79 0.00 0.06 -0.91 -0.83 -0.79 -0.75 -0.69 1818 1.00
## log_lik[414] -0.64 0.00 0.04 -0.71 -0.66 -0.64 -0.62 -0.57 2015 1.00
## log_lik[415] -1.61 0.00 0.11 -1.83 -1.68 -1.61 -1.53 -1.41 2331 1.00
## log_lik[416] -0.84 0.00 0.09 -1.04 -0.89 -0.83 -0.77 -0.67 1492 1.00
## log_lik[417] -0.63 0.00 0.03 -0.70 -0.65 -0.63 -0.60 -0.56 1547 1.00
## log_lik[418] -0.64 0.00 0.04 -0.71 -0.66 -0.64 -0.61 -0.57 2193 1.00
## log_lik[419] -0.67 0.00 0.05 -0.76 -0.69 -0.66 -0.63 -0.59 1995 1.00
## log_lik[420] -0.75 0.00 0.06 -0.87 -0.78 -0.74 -0.70 -0.64 1770 1.00
## log_lik[421] -0.67 0.00 0.05 -0.77 -0.70 -0.66 -0.63 -0.59 2439 1.00
## log_lik[422] -0.65 0.00 0.04 -0.73 -0.68 -0.65 -0.62 -0.58 2003 1.00
## log_lik[423] -0.61 0.00 0.03 -0.68 -0.63 -0.61 -0.59 -0.55 1947 1.00
## log_lik[424] -1.02 0.00 0.07 -1.17 -1.06 -1.01 -0.96 -0.88 2282 1.00
## log_lik[425] -0.90 0.00 0.08 -1.07 -0.95 -0.90 -0.85 -0.76 1604 1.00
## log_lik[426] -0.79 0.00 0.06 -0.92 -0.83 -0.78 -0.74 -0.67 1911 1.00
## log_lik[427] -0.81 0.00 0.05 -0.90 -0.84 -0.80 -0.77 -0.72 2307 1.00
## log_lik[428] -0.67 0.00 0.04 -0.76 -0.70 -0.67 -0.64 -0.59 1676 1.00
## log_lik[429] -0.60 0.00 0.03 -0.66 -0.62 -0.60 -0.58 -0.54 1737 1.00
## log_lik[430] -0.74 0.00 0.05 -0.85 -0.78 -0.74 -0.70 -0.64 1525 1.00
## log_lik[431] -7.60 0.02 0.86 -9.29 -8.15 -7.59 -7.01 -5.98 1990 1.00
## log_lik[432] -0.71 0.00 0.05 -0.81 -0.74 -0.71 -0.68 -0.63 1943 1.00
## log_lik[433] -2.16 0.00 0.16 -2.47 -2.26 -2.16 -2.05 -1.87 2035 1.00
## log_lik[434] -1.18 0.00 0.13 -1.46 -1.26 -1.17 -1.09 -0.95 1312 1.00
## log_lik[435] -2.04 0.00 0.19 -2.42 -2.16 -2.04 -1.91 -1.68 1723 1.00
## log_lik[436] -0.89 0.00 0.12 -1.16 -0.96 -0.88 -0.81 -0.69 2728 1.00
## log_lik[437] -0.69 0.00 0.04 -0.77 -0.71 -0.69 -0.66 -0.62 2144 1.00
## log_lik[438] -0.93 0.01 0.44 -2.15 -1.07 -0.77 -0.64 -0.57 1798 1.00
## log_lik[439] -0.81 0.00 0.05 -0.92 -0.85 -0.81 -0.78 -0.72 1934 1.00
## log_lik[440] -4.24 0.01 0.33 -4.93 -4.44 -4.22 -4.01 -3.60 2239 1.00
## log_lik[441] -1.14 0.00 0.13 -1.40 -1.22 -1.14 -1.05 -0.92 2498 1.00
## log_lik[442] -0.64 0.00 0.04 -0.71 -0.66 -0.63 -0.61 -0.57 2252 1.00
## log_lik[443] -0.61 0.00 0.03 -0.67 -0.63 -0.60 -0.58 -0.55 2143 1.00
## log_lik[444] -0.62 0.00 0.04 -0.70 -0.64 -0.61 -0.59 -0.55 1663 1.00
## log_lik[445] -1.53 0.00 0.15 -1.85 -1.63 -1.53 -1.43 -1.26 2128 1.00
## log_lik[446] -1.24 0.00 0.08 -1.42 -1.29 -1.24 -1.18 -1.09 2201 1.00
## log_lik[447] -0.62 0.00 0.03 -0.68 -0.64 -0.61 -0.59 -0.56 1752 1.00
## log_lik[448] -1.03 0.00 0.11 -1.28 -1.10 -1.02 -0.95 -0.84 2414 1.00
## log_lik[449] -0.60 0.00 0.03 -0.66 -0.62 -0.60 -0.58 -0.54 1735 1.00
## log_lik[450] -0.66 0.00 0.05 -0.76 -0.69 -0.66 -0.63 -0.58 1790 1.00
## log_lik[451] -0.71 0.00 0.05 -0.81 -0.74 -0.71 -0.68 -0.62 2497 1.00
## log_lik[452] -0.82 0.00 0.10 -1.04 -0.88 -0.81 -0.75 -0.66 1408 1.00
## log_lik[453] -0.62 0.00 0.04 -0.71 -0.64 -0.61 -0.59 -0.55 1846 1.00

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## log_lik[454] -0.97 0.00 0.15 -1.30 -1.07 -0.96 -0.86 -0.71 1868 1.00
## log_lik[455] -1.18 0.00 0.10 -1.39 -1.24 -1.17 -1.11 -0.98 2130 1.00
## log_lik[456] -0.69 0.00 0.07 -0.85 -0.73 -0.68 -0.64 -0.59 1570 1.00
## log_lik[457] -0.61 0.00 0.04 -0.70 -0.63 -0.61 -0.59 -0.55 1216 1.00
## log_lik[458] -0.62 0.00 0.04 -0.71 -0.65 -0.62 -0.60 -0.55 1941 1.00
## log_lik[459] -1.26 0.01 0.20 -1.69 -1.38 -1.24 -1.12 -0.91 1491 1.00
## log_lik[460] -0.60 0.00 0.03 -0.66 -0.62 -0.60 -0.58 -0.54 1874 1.00
## log_lik[461] -1.22 0.00 0.09 -1.39 -1.27 -1.21 -1.15 -1.06 3207 1.00
## log_lik[462] -1.10 0.00 0.20 -1.55 -1.22 -1.08 -0.96 -0.77 2118 1.00
## log_lik[463] -0.61 0.00 0.04 -0.69 -0.63 -0.61 -0.59 -0.55 2001 1.00
## log_lik[464] -0.68 0.00 0.06 -0.80 -0.71 -0.67 -0.64 -0.59 2462 1.00
## log_lik[465] -1.33 0.00 0.09 -1.51 -1.38 -1.33 -1.27 -1.16 2777 1.00
## log_lik[466] -0.62 0.00 0.05 -0.74 -0.65 -0.62 -0.59 -0.55 1095 1.00
## log_lik[467] -0.83 0.00 0.11 -1.07 -0.89 -0.81 -0.75 -0.65 1671 1.00
## log_lik[468] -0.81 0.00 0.08 -1.00 -0.86 -0.80 -0.75 -0.67 2341 1.00
## log_lik[469] -0.63 0.00 0.04 -0.73 -0.65 -0.62 -0.60 -0.55 1506 1.00
## log_lik[470] -0.64 0.00 0.05 -0.75 -0.67 -0.64 -0.61 -0.56 1842 1.00
## log_lik[471] -1.66 0.01 0.23 -2.16 -1.80 -1.65 -1.50 -1.25 1173 1.00
## log_lik[472] -2.50 0.01 0.44 -3.47 -2.77 -2.47 -2.21 -1.69 1741 1.00
## log_lik[473] -0.60 0.00 0.03 -0.66 -0.62 -0.60 -0.58 -0.54 1910 1.00
## log_lik[474] -0.67 0.00 0.08 -0.88 -0.71 -0.65 -0.62 -0.57 1496 1.00
## log_lik[475] -0.61 0.00 0.03 -0.69 -0.63 -0.61 -0.59 -0.55 2034 1.00
## log_lik[476] -1.08 0.00 0.12 -1.32 -1.15 -1.07 -1.00 -0.87 3007 1.00
## log_lik[477] -1.04 0.00 0.15 -1.34 -1.13 -1.03 -0.93 -0.78 2262 1.00
## log_lik[478] -4.27 0.01 0.31 -4.89 -4.47 -4.27 -4.04 -3.71 2888 1.00
## log_lik[479] -0.83 0.00 0.05 -0.93 -0.86 -0.82 -0.79 -0.73 2243 1.00
## log_lik[480] -0.64 0.00 0.04 -0.73 -0.66 -0.64 -0.61 -0.56 2287 1.00
## log_lik[481] -0.85 0.00 0.08 -1.02 -0.90 -0.85 -0.80 -0.71 2147 1.00
## log_lik[482] -0.78 0.00 0.09 -0.98 -0.84 -0.77 -0.72 -0.64 2370 1.00
## log_lik[483] -1.31 0.00 0.14 -1.60 -1.40 -1.31 -1.21 -1.06 2621 1.00
## log_lik[484] -2.08 0.00 0.18 -2.44 -2.19 -2.07 -1.95 -1.73 2632 1.00
## log_lik[485] -2.15 0.01 0.28 -2.78 -2.33 -2.14 -1.96 -1.64 959 1.00
## log_lik[486] -9.17 0.02 0.70 -10.51 -9.64 -9.14 -8.70 -7.82 1924 1.00
## log_lik[487] -0.78 0.00 0.11 -1.04 -0.84 -0.76 -0.70 -0.62 2114 1.00
## log_lik[488] -3.02 0.01 0.41 -3.87 -3.28 -3.01 -2.74 -2.25 1328 1.00
## log_lik[489] -1.08 0.00 0.09 -1.26 -1.13 -1.07 -1.02 -0.92 1954 1.00
## log_lik[490] -1.05 0.00 0.07 -1.19 -1.09 -1.04 -1.00 -0.91 2854 1.00
## log_lik[491] -2.90 0.01 0.26 -3.44 -3.07 -2.89 -2.72 -2.42 2340 1.00
## log_lik[492] -0.92 0.00 0.12 -1.17 -0.99 -0.91 -0.84 -0.70 1474 1.01
## log_lik[493] -0.68 0.00 0.04 -0.77 -0.71 -0.68 -0.65 -0.61 2275 1.00
## log_lik[494] -0.62 0.00 0.03 -0.69 -0.64 -0.61 -0.59 -0.56 1653 1.00
## log_lik[495] -0.68 0.00 0.04 -0.76 -0.71 -0.68 -0.65 -0.61 1947 1.00
## log_lik[496] -0.60 0.00 0.03 -0.66 -0.62 -0.60 -0.58 -0.54 1863 1.00
## log_lik[497] -1.13 0.00 0.07 -1.27 -1.17 -1.13 -1.08 -1.01 2348 1.00
## log_lik[498] -1.14 0.00 0.08 -1.32 -1.20 -1.14 -1.08 -1.00 2692 1.00
## log_lik[499] -0.67 0.00 0.04 -0.76 -0.70 -0.67 -0.64 -0.60 2430 1.00
## log_lik[500] -0.72 0.00 0.05 -0.83 -0.75 -0.72 -0.68 -0.63 2199 1.00
## log_lik[501] -1.26 0.00 0.09 -1.45 -1.32 -1.26 -1.20 -1.10 2199 1.00
## log_lik[502] -0.98 0.00 0.07 -1.13 -1.03 -0.98 -0.94 -0.86 1850 1.00
## log_lik[503] -0.89 0.00 0.08 -1.07 -0.94 -0.88 -0.83 -0.74 2046 1.00
## log_lik[504] -0.60 0.00 0.03 -0.66 -0.62 -0.60 -0.58 -0.54 1907 1.00
## log_lik[505] -0.63 0.00 0.04 -0.71 -0.65 -0.62 -0.60 -0.56 2647 1.00
## log_lik[506] -0.74 0.00 0.06 -0.86 -0.77 -0.73 -0.69 -0.64 2805 1.00
## log_lik[507] -0.68 0.00 0.05 -0.78 -0.71 -0.67 -0.64 -0.60 2656 1.00

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## log_lik[508] -0.61 0.00 0.03 -0.68 -0.63 -0.61 -0.59 -0.55 2120 1.00
## log_lik[509] -0.90 0.00 0.08 -1.07 -0.95 -0.89 -0.84 -0.76 2077 1.00
## log_lik[510] -0.87 0.00 0.09 -1.06 -0.92 -0.87 -0.81 -0.72 2262 1.00
## log_lik[511] -0.68 0.00 0.05 -0.78 -0.71 -0.68 -0.65 -0.60 2352 1.00
## log_lik[512] -0.60 0.00 0.03 -0.67 -0.63 -0.60 -0.58 -0.55 1521 1.00
## log_lik[513] -0.62 0.00 0.03 -0.69 -0.64 -0.61 -0.59 -0.55 2228 1.00
## log_lik[514] -0.61 0.00 0.03 -0.67 -0.63 -0.60 -0.58 -0.55 1864 1.00
## log_lik[515] -1.16 0.00 0.16 -1.49 -1.26 -1.15 -1.05 -0.88 3216 1.00
## log_lik[516] -0.61 0.00 0.03 -0.68 -0.63 -0.60 -0.58 -0.55 1733 1.00
## log_lik[517] -0.77 0.00 0.06 -0.89 -0.81 -0.77 -0.72 -0.67 3408 1.00
## log_lik[518] -0.62 0.00 0.04 -0.71 -0.64 -0.61 -0.59 -0.55 1479 1.00
## log_lik[519] -1.65 0.00 0.13 -1.91 -1.74 -1.65 -1.56 -1.42 3072 1.00
## log_lik[520] -0.84 0.00 0.06 -0.97 -0.88 -0.83 -0.79 -0.73 3302 1.00
## log_lik[521] -0.69 0.00 0.08 -0.88 -0.74 -0.68 -0.63 -0.58 2176 1.00
## log_lik[522] -0.74 0.00 0.05 -0.85 -0.77 -0.73 -0.70 -0.64 3013 1.00
## log_lik[523] -1.57 0.00 0.20 -2.00 -1.69 -1.56 -1.43 -1.19 1688 1.00
## log_lik[524] -2.26 0.00 0.22 -2.70 -2.40 -2.25 -2.11 -1.87 2769 1.00
## log_lik[525] -1.15 0.00 0.11 -1.37 -1.22 -1.15 -1.08 -0.95 2191 1.00
## log_lik[526] -0.75 0.00 0.06 -0.88 -0.78 -0.74 -0.70 -0.64 1673 1.00
## log_lik[527] -0.66 0.00 0.04 -0.74 -0.69 -0.66 -0.64 -0.59 1587 1.00
## log_lik[528] -0.61 0.00 0.04 -0.69 -0.63 -0.61 -0.59 -0.55 1866 1.00
## log_lik[529] -1.03 0.00 0.07 -1.17 -1.07 -1.02 -0.98 -0.90 2826 1.00
## log_lik[530] -0.73 0.00 0.12 -1.03 -0.80 -0.70 -0.65 -0.58 2311 1.00
## log_lik[531] -1.60 0.00 0.21 -2.02 -1.74 -1.59 -1.46 -1.24 2102 1.00
## log_lik[532] -1.31 0.00 0.12 -1.55 -1.39 -1.31 -1.23 -1.10 2343 1.00
## log_lik[533] -0.64 0.00 0.04 -0.73 -0.67 -0.64 -0.62 -0.57 2164 1.00
## log_lik[534] -0.86 0.00 0.09 -1.06 -0.93 -0.86 -0.80 -0.69 2801 1.00
## log_lik[535] -1.92 0.00 0.23 -2.41 -2.07 -1.91 -1.76 -1.50 2811 1.00
## log_lik[536] -0.93 0.00 0.08 -1.10 -0.98 -0.92 -0.87 -0.79 2988 1.00
## log_lik[537] -0.70 0.00 0.05 -0.80 -0.73 -0.69 -0.66 -0.61 2651 1.00
## log_lik[538] -2.45 0.00 0.22 -2.88 -2.60 -2.45 -2.29 -2.03 2291 1.00
## log_lik[539] -0.61 0.00 0.04 -0.69 -0.63 -0.61 -0.58 -0.54 1387 1.00
## log_lik[540] -1.06 0.00 0.09 -1.25 -1.12 -1.05 -1.00 -0.90 1879 1.00
## log_lik[541] -0.63 0.00 0.04 -0.70 -0.65 -0.62 -0.60 -0.56 1878 1.00
## log_lik[542] -0.62 0.00 0.04 -0.70 -0.65 -0.62 -0.60 -0.56 2055 1.00
## log_lik[543] -1.09 0.00 0.08 -1.27 -1.14 -1.09 -1.03 -0.94 1558 1.00
## log_lik[544] -0.60 0.00 0.03 -0.67 -0.62 -0.60 -0.58 -0.54 1778 1.00
## log_lik[545] -0.60 0.00 0.03 -0.66 -0.62 -0.60 -0.58 -0.54 1839 1.00
## log_lik[546] -1.51 0.00 0.10 -1.73 -1.58 -1.51 -1.44 -1.32 2059 1.00
## lp__ -96.13 0.07 2.29 -101.48 -97.43 -95.80 -94.47 -92.67 939 1.00
##
## Samples were drawn using NUTS(diag_e) at Sat Dec 5 09:49:19 2020.
## 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).

params=extract(model_simple, permuted=FALSE, inc_warmup=TRUE)
#fit_summary <- summary(model_simple)
#View(fit_summary$summary)
#print(params)
monitor(params)

## Inference for the input samples (4 chains: each with iter = 1000; warmup = 500):
## 
##          Q5    Q50    Q95   Mean    SD   Rhat Bulk_ESS Tail_ESS

```

| | | | | | | | | |
|-----------|------|------|------|------|-----|------|------|------|
| ## a | -0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 1.00 | 2808 | 1672 |
| ## b | 0.6 | 0.8 | 0.9 | 0.8 | 0.1 | 1.01 | 1418 | 1131 |
| ## c | -0.8 | -0.6 | -0.5 | -0.6 | 0.1 | 1.00 | 1226 | 1384 |
| ## d | -0.1 | 0.0 | 0.1 | 0.0 | 0.1 | 1.00 | 1481 | 1546 |
| ## e | 0.4 | 0.5 | 0.6 | 0.5 | 0.1 | 1.01 | 1121 | 1292 |
| ## f | 0.1 | 0.2 | 0.4 | 0.2 | 0.1 | 1.01 | 1120 | 1458 |
| ## g | -0.2 | -0.1 | -0.1 | -0.1 | 0.0 | 1.00 | 1620 | 1540 |
| ## h | -0.3 | -0.2 | -0.1 | -0.2 | 0.0 | 1.00 | 1821 | 1461 |
| ## i | -0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 1.00 | 2090 | 1437 |
| ## sigma | 0.7 | 0.7 | 0.8 | 0.7 | 0.0 | 1.00 | 2025 | 1306 |
| ## mu[1] | -0.5 | -0.4 | -0.3 | -0.4 | 0.1 | 1.00 | 2250 | 1883 |
| ## mu[2] | -0.4 | -0.3 | -0.1 | -0.3 | 0.1 | 1.00 | 2468 | 1777 |
| ## mu[3] | 1.0 | 1.2 | 1.3 | 1.2 | 0.1 | 1.00 | 2644 | 1960 |
| ## mu[4] | 0.9 | 1.1 | 1.2 | 1.1 | 0.1 | 1.00 | 2727 | 1943 |
| ## mu[5] | 0.5 | 0.6 | 0.7 | 0.6 | 0.1 | 1.00 | 1992 | 1929 |
| ## mu[6] | 0.2 | 0.5 | 0.8 | 0.5 | 0.2 | 1.00 | 2844 | 1755 |
| ## mu[7] | -0.2 | -0.1 | 0.0 | -0.1 | 0.0 | 1.00 | 2523 | 1760 |
| ## mu[8] | 0.0 | 0.1 | 0.2 | 0.1 | 0.0 | 1.00 | 2376 | 1819 |
| ## mu[9] | -0.6 | -0.5 | -0.4 | -0.5 | 0.1 | 1.00 | 2542 | 1761 |
| ## mu[10] | -0.5 | -0.4 | -0.3 | -0.4 | 0.1 | 1.00 | 1622 | 1612 |
| ## mu[11] | -0.4 | -0.3 | -0.2 | -0.3 | 0.1 | 1.00 | 1567 | 1521 |
| ## mu[12] | -1.1 | -1.0 | -0.9 | -1.0 | 0.1 | 1.00 | 2839 | 1976 |
| ## mu[13] | 0.5 | 0.6 | 0.8 | 0.6 | 0.1 | 1.00 | 2766 | 1576 |
| ## mu[14] | -1.3 | -1.1 | -1.0 | -1.1 | 0.1 | 1.00 | 2184 | 1569 |
| ## mu[15] | 1.1 | 1.3 | 1.4 | 1.3 | 0.1 | 1.00 | 2473 | 1887 |
| ## mu[16] | -0.2 | -0.1 | 0.0 | -0.1 | 0.0 | 1.00 | 2415 | 1804 |
| ## mu[17] | -0.9 | -0.8 | -0.6 | -0.8 | 0.1 | 1.00 | 2093 | 2015 |
| ## mu[18] | 0.9 | 1.0 | 1.2 | 1.0 | 0.1 | 1.00 | 2212 | 1729 |
| ## mu[19] | -1.4 | -1.3 | -1.1 | -1.3 | 0.1 | 1.00 | 2383 | 1705 |
| ## mu[20] | -1.2 | -1.1 | -0.9 | -1.1 | 0.1 | 1.00 | 2058 | 1832 |
| ## mu[21] | 0.5 | 0.6 | 0.7 | 0.6 | 0.1 | 1.00 | 2536 | 1680 |
| ## mu[22] | -0.7 | -0.6 | -0.5 | -0.6 | 0.1 | 1.00 | 2584 | 1749 |
| ## mu[23] | -0.4 | -0.2 | -0.1 | -0.3 | 0.1 | 1.00 | 2632 | 1511 |
| ## mu[24] | -0.7 | -0.6 | -0.5 | -0.6 | 0.1 | 1.00 | 2761 | 1860 |
| ## mu[25] | 2.0 | 2.3 | 2.6 | 2.3 | 0.2 | 1.00 | 2783 | 1832 |
| ## mu[26] | 1.1 | 1.4 | 1.6 | 1.4 | 0.1 | 1.00 | 2639 | 1739 |
| ## mu[27] | 1.4 | 1.6 | 1.7 | 1.6 | 0.1 | 1.00 | 2345 | 1628 |
| ## mu[28] | -0.1 | 0.1 | 0.3 | 0.1 | 0.1 | 1.00 | 2764 | 1808 |
| ## mu[29] | 0.0 | 0.1 | 0.2 | 0.1 | 0.1 | 1.00 | 2094 | 1679 |
| ## mu[30] | 0.3 | 0.5 | 0.6 | 0.5 | 0.1 | 1.00 | 2958 | 1783 |
| ## mu[31] | 0.2 | 0.4 | 0.5 | 0.4 | 0.1 | 1.01 | 2649 | 1671 |
| ## mu[32] | -0.5 | -0.4 | -0.3 | -0.4 | 0.1 | 1.00 | 2482 | 1924 |
| ## mu[33] | -0.7 | -0.6 | -0.5 | -0.6 | 0.1 | 1.00 | 1924 | 1595 |
| ## mu[34] | 0.4 | 0.5 | 0.5 | 0.5 | 0.0 | 1.00 | 2616 | 1351 |
| ## mu[35] | -1.0 | -0.9 | -0.8 | -0.9 | 0.1 | 1.00 | 1957 | 1680 |
| ## mu[36] | -0.6 | -0.4 | -0.3 | -0.4 | 0.1 | 1.01 | 2756 | 1756 |
| ## mu[37] | 0.8 | 1.1 | 1.3 | 1.1 | 0.1 | 1.00 | 1727 | 1698 |
| ## mu[38] | 0.8 | 0.9 | 1.1 | 0.9 | 0.1 | 1.00 | 2330 | 1728 |
| ## mu[39] | 0.8 | 0.9 | 1.0 | 0.9 | 0.1 | 1.00 | 2497 | 1971 |
| ## mu[40] | 0.1 | 0.2 | 0.3 | 0.2 | 0.1 | 1.00 | 1729 | 1627 |
| ## mu[41] | 0.1 | 0.2 | 0.3 | 0.2 | 0.1 | 1.00 | 3211 | 1822 |
| ## mu[42] | -0.1 | -0.1 | 0.0 | -0.1 | 0.0 | 1.00 | 2296 | 1815 |
| ## mu[43] | -0.4 | -0.3 | -0.2 | -0.3 | 0.1 | 1.00 | 2326 | 1793 |
| ## mu[44] | -0.5 | -0.4 | -0.3 | -0.4 | 0.0 | 1.00 | 2487 | 1605 |

| | | | | | | | | |
|-----------|------|------|------|------|-----|------|------|------|
| ## mu[45] | -0.2 | -0.1 | 0.0 | -0.1 | 0.1 | 1.00 | 2338 | 1746 |
| ## mu[46] | -0.2 | -0.1 | 0.0 | -0.1 | 0.1 | 1.00 | 2338 | 1746 |
| ## mu[47] | -0.1 | 0.0 | 0.1 | 0.0 | 0.1 | 1.00 | 2242 | 1711 |
| ## mu[48] | -1.6 | -1.5 | -1.3 | -1.5 | 0.1 | 1.00 | 2521 | 1733 |
| ## mu[49] | 0.0 | 0.1 | 0.2 | 0.1 | 0.1 | 1.00 | 2662 | 1681 |
| ## mu[50] | -1.4 | -1.2 | -1.1 | -1.2 | 0.1 | 1.00 | 2209 | 1586 |
| ## mu[51] | -1.2 | -1.1 | -0.9 | -1.1 | 0.1 | 1.00 | 2256 | 1822 |
| ## mu[52] | -0.5 | -0.4 | -0.3 | -0.4 | 0.1 | 1.00 | 2222 | 1910 |
| ## mu[53] | 0.3 | 0.5 | 0.7 | 0.5 | 0.1 | 1.00 | 1372 | 1333 |
| ## mu[54] | 0.1 | 0.3 | 0.5 | 0.3 | 0.1 | 1.00 | 1443 | 1382 |
| ## mu[55] | -0.2 | -0.1 | -0.1 | -0.1 | 0.0 | 1.01 | 3303 | 1605 |
| ## mu[56] | -0.6 | -0.5 | -0.4 | -0.5 | 0.1 | 1.00 | 2587 | 1710 |
| ## mu[57] | -1.4 | -1.2 | -1.1 | -1.2 | 0.1 | 1.00 | 2517 | 1764 |
| ## mu[58] | -0.3 | -0.2 | 0.0 | -0.2 | 0.1 | 1.00 | 2349 | 1774 |
| ## mu[59] | -1.2 | -1.0 | -0.9 | -1.0 | 0.1 | 1.00 | 2104 | 1550 |
| ## mu[60] | 0.4 | 0.5 | 0.6 | 0.5 | 0.1 | 1.00 | 2097 | 1588 |
| ## mu[61] | 0.1 | 0.3 | 0.4 | 0.3 | 0.1 | 1.00 | 1607 | 1789 |
| ## mu[62] | -0.6 | -0.5 | -0.3 | -0.5 | 0.1 | 1.00 | 1289 | 1434 |
| ## mu[63] | -1.0 | -0.9 | -0.8 | -0.9 | 0.1 | 1.00 | 2024 | 1500 |
| ## mu[64] | -0.6 | -0.5 | -0.4 | -0.5 | 0.1 | 1.00 | 1645 | 1508 |
| ## mu[65] | -0.6 | -0.5 | -0.4 | -0.5 | 0.1 | 1.00 | 1905 | 1533 |
| ## mu[66] | 0.8 | 1.0 | 1.1 | 1.0 | 0.1 | 1.00 | 2533 | 1535 |
| ## mu[67] | 1.0 | 1.2 | 1.4 | 1.2 | 0.1 | 1.00 | 2223 | 1569 |
| ## mu[68] | 1.1 | 1.3 | 1.5 | 1.3 | 0.1 | 1.00 | 2088 | 1579 |
| ## mu[69] | -0.5 | -0.3 | -0.1 | -0.3 | 0.1 | 1.00 | 1292 | 1410 |
| ## mu[70] | 1.1 | 1.4 | 1.6 | 1.4 | 0.1 | 1.00 | 2170 | 1792 |
| ## mu[71] | 0.5 | 0.7 | 0.8 | 0.7 | 0.1 | 1.00 | 1963 | 1821 |
| ## mu[72] | 0.4 | 0.6 | 0.7 | 0.6 | 0.1 | 1.00 | 1900 | 1683 |
| ## mu[73] | 0.5 | 0.6 | 0.7 | 0.6 | 0.1 | 1.00 | 2027 | 1636 |
| ## mu[74] | -0.7 | -0.6 | -0.5 | -0.6 | 0.1 | 1.01 | 2303 | 1696 |
| ## mu[75] | -0.7 | -0.6 | -0.4 | -0.6 | 0.1 | 1.00 | 1772 | 1586 |
| ## mu[76] | 0.0 | 0.1 | 0.2 | 0.1 | 0.1 | 1.00 | 3041 | 1321 |
| ## mu[77] | 0.1 | 0.2 | 0.3 | 0.2 | 0.1 | 1.00 | 1844 | 1443 |
| ## mu[78] | -0.3 | -0.1 | 0.0 | -0.1 | 0.1 | 1.00 | 1239 | 1296 |
| ## mu[79] | -0.4 | -0.3 | -0.1 | -0.3 | 0.1 | 1.00 | 2053 | 1747 |
| ## mu[80] | 0.4 | 0.5 | 0.7 | 0.5 | 0.1 | 1.00 | 2726 | 1668 |
| ## mu[81] | 0.7 | 0.8 | 1.0 | 0.8 | 0.1 | 1.00 | 2715 | 1544 |
| ## mu[82] | -0.6 | -0.5 | -0.3 | -0.5 | 0.1 | 1.01 | 3010 | 1743 |
| ## mu[83] | 0.1 | 0.3 | 0.5 | 0.3 | 0.1 | 1.00 | 1381 | 1710 |
| ## mu[84] | 0.5 | 0.7 | 0.9 | 0.7 | 0.1 | 1.00 | 2125 | 1566 |
| ## mu[85] | 0.0 | 0.1 | 0.2 | 0.1 | 0.1 | 1.00 | 2560 | 1784 |
| ## mu[86] | -0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 1.00 | 2987 | 1371 |
| ## mu[87] | 1.7 | 1.9 | 2.2 | 1.9 | 0.1 | 1.00 | 1871 | 1278 |
| ## mu[88] | 0.0 | 0.2 | 0.5 | 0.2 | 0.2 | 1.00 | 1340 | 1223 |
| ## mu[89] | -1.5 | -1.3 | -1.2 | -1.3 | 0.1 | 1.00 | 2255 | 1691 |
| ## mu[90] | -1.1 | -0.9 | -0.8 | -0.9 | 0.1 | 1.00 | 3097 | 1507 |
| ## mu[91] | -0.3 | -0.2 | 0.0 | -0.2 | 0.1 | 1.00 | 1319 | 1548 |
| ## mu[92] | 0.7 | 0.9 | 1.1 | 0.9 | 0.1 | 1.00 | 1741 | 1325 |
| ## mu[93] | 0.4 | 0.5 | 0.7 | 0.5 | 0.1 | 1.00 | 2760 | 1710 |
| ## mu[94] | 0.3 | 0.5 | 0.6 | 0.5 | 0.1 | 1.00 | 2905 | 1468 |
| ## mu[95] | -0.2 | -0.1 | 0.0 | -0.1 | 0.1 | 1.00 | 2655 | 1700 |
| ## mu[96] | -0.5 | -0.4 | -0.3 | -0.4 | 0.1 | 1.00 | 2486 | 1918 |
| ## mu[97] | 0.1 | 0.2 | 0.3 | 0.2 | 0.1 | 1.00 | 2386 | 1742 |
| ## mu[98] | -0.8 | -0.6 | -0.4 | -0.6 | 0.1 | 1.00 | 1637 | 1325 |

| | | | | | | | | |
|------------|------|------|------|------|-----|------|------|------|
| ## mu[99] | -0.9 | -0.6 | -0.4 | -0.6 | 0.1 | 1.00 | 1634 | 1393 |
| ## mu[100] | -1.7 | -1.6 | -1.4 | -1.6 | 0.1 | 1.00 | 2277 | 1659 |
| ## mu[101] | 0.6 | 0.8 | 1.0 | 0.8 | 0.1 | 1.00 | 2260 | 1894 |
| ## mu[102] | -1.0 | -0.9 | -0.8 | -0.9 | 0.1 | 1.00 | 2379 | 1638 |
| ## mu[103] | -0.8 | -0.7 | -0.5 | -0.7 | 0.1 | 1.00 | 3072 | 1432 |
| ## mu[104] | 0.7 | 0.9 | 1.2 | 0.9 | 0.1 | 1.00 | 2165 | 1526 |
| ## mu[105] | 0.0 | 0.1 | 0.3 | 0.1 | 0.1 | 1.00 | 2960 | 1569 |
| ## mu[106] | -0.8 | -0.7 | -0.6 | -0.7 | 0.1 | 1.00 | 3093 | 1682 |
| ## mu[107] | -1.3 | -1.1 | -1.0 | -1.1 | 0.1 | 1.00 | 2593 | 1800 |
| ## mu[108] | 0.3 | 0.5 | 0.7 | 0.5 | 0.1 | 1.00 | 1871 | 1389 |
| ## mu[109] | 1.7 | 2.0 | 2.2 | 2.0 | 0.1 | 1.00 | 1522 | 1336 |
| ## mu[110] | 0.5 | 0.7 | 0.8 | 0.7 | 0.1 | 1.00 | 2492 | 1305 |
| ## mu[111] | 0.8 | 1.0 | 1.2 | 1.0 | 0.1 | 1.00 | 2190 | 1044 |
| ## mu[112] | 0.9 | 1.0 | 1.2 | 1.0 | 0.1 | 1.00 | 1823 | 1205 |
| ## mu[113] | 1.2 | 1.5 | 1.7 | 1.5 | 0.1 | 1.00 | 1587 | 1426 |
| ## mu[114] | -0.3 | -0.2 | -0.1 | -0.2 | 0.1 | 1.00 | 2898 | 1564 |
| ## mu[115] | -0.1 | 0.0 | 0.1 | 0.0 | 0.1 | 1.00 | 2838 | 1661 |
| ## mu[116] | 1.1 | 1.2 | 1.4 | 1.2 | 0.1 | 1.00 | 1598 | 1349 |
| ## mu[117] | -0.5 | -0.3 | -0.2 | -0.3 | 0.1 | 1.00 | 1466 | 1633 |
| ## mu[118] | -0.2 | -0.1 | 0.0 | -0.1 | 0.1 | 1.00 | 2018 | 1166 |
| ## mu[119] | 1.0 | 1.3 | 1.5 | 1.3 | 0.1 | 1.00 | 1673 | 1441 |
| ## mu[120] | -0.4 | -0.1 | 0.1 | -0.2 | 0.2 | 1.00 | 2088 | 1706 |
| ## mu[121] | -0.5 | -0.2 | 0.0 | -0.2 | 0.1 | 1.00 | 2055 | 1566 |
| ## mu[122] | -0.3 | 0.0 | 0.2 | 0.0 | 0.1 | 1.00 | 1898 | 1797 |
| ## mu[123] | 0.6 | 0.7 | 0.9 | 0.7 | 0.1 | 1.00 | 2213 | 1679 |
| ## mu[124] | -0.4 | -0.3 | -0.2 | -0.3 | 0.1 | 1.00 | 2381 | 1760 |
| ## mu[125] | -0.7 | -0.6 | -0.5 | -0.6 | 0.1 | 1.00 | 1807 | 1687 |
| ## mu[126] | 0.0 | 0.2 | 0.4 | 0.2 | 0.1 | 1.00 | 1997 | 1383 |
| ## mu[127] | -0.7 | -0.5 | -0.4 | -0.5 | 0.1 | 1.01 | 1544 | 1473 |
| ## mu[128] | -1.7 | -1.5 | -1.3 | -1.5 | 0.1 | 1.00 | 2565 | 1649 |
| ## mu[129] | -0.9 | -0.8 | -0.6 | -0.8 | 0.1 | 1.00 | 1810 | 1486 |
| ## mu[130] | -0.7 | -0.6 | -0.5 | -0.6 | 0.1 | 1.00 | 2785 | 1830 |
| ## mu[131] | -0.8 | -0.6 | -0.5 | -0.6 | 0.1 | 1.00 | 2675 | 1741 |
| ## mu[132] | 0.4 | 0.5 | 0.8 | 0.6 | 0.1 | 1.00 | 2395 | 1108 |
| ## mu[133] | 0.8 | 1.1 | 1.3 | 1.1 | 0.2 | 1.00 | 2257 | 1184 |
| ## mu[134] | -0.2 | 0.0 | 0.1 | 0.0 | 0.1 | 1.00 | 2165 | 1707 |
| ## mu[135] | -1.1 | -0.9 | -0.7 | -0.9 | 0.1 | 1.00 | 2199 | 1711 |
| ## mu[136] | -0.8 | -0.5 | -0.3 | -0.5 | 0.1 | 1.00 | 2291 | 1843 |
| ## mu[137] | -0.9 | -0.7 | -0.5 | -0.7 | 0.1 | 1.00 | 2294 | 1793 |
| ## mu[138] | -0.6 | -0.5 | -0.4 | -0.5 | 0.1 | 1.00 | 2567 | 1735 |
| ## mu[139] | 0.0 | 0.1 | 0.3 | 0.1 | 0.1 | 1.00 | 2546 | 1607 |
| ## mu[140] | -0.1 | 0.1 | 0.3 | 0.1 | 0.1 | 1.00 | 2259 | 1437 |
| ## mu[141] | -0.8 | -0.7 | -0.5 | -0.7 | 0.1 | 1.00 | 1535 | 1569 |
| ## mu[142] | -0.7 | -0.5 | -0.4 | -0.5 | 0.1 | 1.00 | 1248 | 1338 |
| ## mu[143] | -0.3 | -0.1 | 0.1 | -0.1 | 0.1 | 1.00 | 2105 | 1307 |
| ## mu[144] | -0.7 | -0.6 | -0.4 | -0.6 | 0.1 | 1.00 | 2283 | 1559 |
| ## mu[145] | 0.0 | 0.2 | 0.4 | 0.2 | 0.1 | 1.00 | 1883 | 1697 |
| ## mu[146] | -0.9 | -0.7 | -0.6 | -0.7 | 0.1 | 1.00 | 3148 | 1533 |
| ## mu[147] | -1.0 | -0.8 | -0.7 | -0.8 | 0.1 | 1.00 | 1965 | 1831 |
| ## mu[148] | -0.4 | -0.3 | -0.3 | -0.3 | 0.1 | 1.00 | 2467 | 1450 |
| ## mu[149] | -0.4 | -0.3 | -0.2 | -0.3 | 0.1 | 1.00 | 1712 | 1468 |
| ## mu[150] | -0.5 | -0.4 | -0.3 | -0.4 | 0.1 | 1.00 | 1682 | 1363 |
| ## mu[151] | -0.1 | -0.1 | 0.0 | -0.1 | 0.0 | 1.00 | 1654 | 1408 |
| ## mu[152] | -0.8 | -0.7 | -0.5 | -0.7 | 0.1 | 1.00 | 2579 | 1641 |

| | | | | | | | | |
|------------|------|------|------|------|-----|------|------|------|
| ## mu[153] | -0.8 | -0.7 | -0.5 | -0.7 | 0.1 | 1.00 | 2739 | 1863 |
| ## mu[154] | -0.3 | -0.2 | 0.0 | -0.2 | 0.1 | 1.00 | 2274 | 1637 |
| ## mu[155] | -0.6 | -0.5 | -0.4 | -0.5 | 0.1 | 1.00 | 2658 | 1781 |
| ## mu[156] | -2.1 | -1.9 | -1.7 | -1.9 | 0.1 | 1.00 | 2296 | 1741 |
| ## mu[157] | 0.1 | 0.3 | 0.5 | 0.3 | 0.1 | 1.00 | 1511 | 1589 |
| ## mu[158] | 0.4 | 0.6 | 0.7 | 0.6 | 0.1 | 1.00 | 1727 | 1664 |
| ## mu[159] | 0.4 | 0.5 | 0.7 | 0.5 | 0.1 | 1.00 | 2289 | 1740 |
| ## mu[160] | 0.0 | 0.1 | 0.2 | 0.1 | 0.1 | 1.01 | 1825 | 1453 |
| ## mu[161] | -0.2 | -0.1 | 0.0 | -0.1 | 0.1 | 1.00 | 3159 | 1568 |
| ## mu[162] | 0.4 | 0.6 | 0.7 | 0.6 | 0.1 | 1.00 | 2858 | 1787 |
| ## mu[163] | -0.3 | -0.2 | 0.0 | -0.2 | 0.1 | 1.00 | 3770 | 1431 |
| ## mu[164] | 0.0 | 0.1 | 0.2 | 0.1 | 0.1 | 1.00 | 3434 | 1931 |
| ## mu[165] | -1.5 | -1.4 | -1.2 | -1.4 | 0.1 | 1.00 | 2908 | 1692 |
| ## mu[166] | -1.1 | -0.9 | -0.8 | -0.9 | 0.1 | 1.00 | 3157 | 1399 |
| ## mu[167] | -1.2 | -1.1 | -0.9 | -1.1 | 0.1 | 1.00 | 3561 | 1409 |
| ## mu[168] | -0.7 | -0.6 | -0.4 | -0.6 | 0.1 | 1.00 | 2628 | 1586 |
| ## mu[169] | -0.6 | -0.5 | -0.4 | -0.5 | 0.1 | 1.00 | 2333 | 1849 |
| ## mu[170] | -0.8 | -0.6 | -0.5 | -0.6 | 0.1 | 1.00 | 2069 | 1641 |
| ## mu[171] | 0.7 | 0.8 | 1.0 | 0.8 | 0.1 | 1.00 | 2223 | 1099 |
| ## mu[172] | 0.6 | 0.7 | 0.9 | 0.7 | 0.1 | 1.00 | 2349 | 1278 |
| ## mu[173] | 0.6 | 0.8 | 1.0 | 0.8 | 0.1 | 1.00 | 2807 | 1448 |
| ## mu[174] | 0.4 | 0.5 | 0.6 | 0.5 | 0.1 | 1.00 | 2535 | 1972 |
| ## mu[175] | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | 1.00 | 2712 | 1787 |
| ## mu[176] | -0.1 | 0.0 | 0.1 | 0.0 | 0.1 | 1.00 | 2559 | 1767 |
| ## mu[177] | 0.2 | 0.5 | 0.6 | 0.5 | 0.1 | 1.00 | 1468 | 1467 |
| ## mu[178] | -0.1 | 0.0 | 0.1 | 0.0 | 0.1 | 1.00 | 2552 | 1767 |
| ## mu[179] | -0.6 | -0.5 | -0.4 | -0.5 | 0.1 | 1.00 | 2628 | 1698 |
| ## mu[180] | -0.5 | -0.4 | -0.3 | -0.4 | 0.1 | 1.00 | 2133 | 1416 |
| ## mu[181] | 0.1 | 0.3 | 0.5 | 0.3 | 0.1 | 1.00 | 1628 | 1304 |
| ## mu[182] | -0.6 | -0.5 | -0.4 | -0.5 | 0.1 | 1.00 | 2637 | 1657 |
| ## mu[183] | -0.7 | -0.6 | -0.5 | -0.6 | 0.1 | 1.00 | 2138 | 1738 |
| ## mu[184] | -0.5 | -0.4 | -0.3 | -0.4 | 0.1 | 1.00 | 2081 | 1696 |
| ## mu[185] | -0.6 | -0.5 | -0.4 | -0.5 | 0.1 | 1.00 | 2649 | 1624 |
| ## mu[186] | -0.7 | -0.6 | -0.5 | -0.6 | 0.1 | 1.00 | 2171 | 1706 |
| ## mu[187] | 0.3 | 0.6 | 0.8 | 0.6 | 0.1 | 1.00 | 1517 | 1663 |
| ## mu[188] | 1.1 | 1.3 | 1.5 | 1.3 | 0.1 | 1.00 | 1547 | 1362 |
| ## mu[189] | 0.0 | 0.2 | 0.4 | 0.2 | 0.1 | 1.00 | 1865 | 1483 |
| ## mu[190] | -0.2 | 0.0 | 0.2 | 0.0 | 0.1 | 1.00 | 1569 | 1329 |
| ## mu[191] | -0.1 | 0.0 | 0.1 | 0.0 | 0.1 | 1.00 | 1831 | 1721 |
| ## mu[192] | -0.2 | -0.1 | 0.0 | -0.1 | 0.0 | 1.00 | 2077 | 1785 |
| ## mu[193] | -0.4 | -0.4 | -0.3 | -0.4 | 0.0 | 1.00 | 2687 | 1769 |
| ## mu[194] | -0.2 | -0.2 | -0.1 | -0.2 | 0.0 | 1.00 | 2362 | 1905 |
| ## mu[195] | 0.1 | 0.3 | 0.4 | 0.3 | 0.1 | 1.00 | 1781 | 1676 |
| ## mu[196] | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 1.00 | 2081 | 1745 |
| ## mu[197] | -0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 1.00 | 2507 | 1970 |
| ## mu[198] | -0.5 | -0.4 | -0.4 | -0.4 | 0.0 | 1.00 | 2542 | 1801 |
| ## mu[199] | -0.2 | -0.1 | 0.0 | -0.1 | 0.1 | 1.00 | 1711 | 1451 |
| ## mu[200] | 0.2 | 0.2 | 0.3 | 0.2 | 0.0 | 1.00 | 2542 | 1566 |
| ## mu[201] | 0.5 | 0.6 | 0.7 | 0.6 | 0.1 | 1.00 | 2097 | 1591 |
| ## mu[202] | -0.2 | -0.2 | -0.1 | -0.2 | 0.0 | 1.00 | 2346 | 1905 |
| ## mu[203] | -0.5 | -0.4 | -0.3 | -0.4 | 0.1 | 1.00 | 2677 | 1710 |
| ## mu[204] | -0.5 | -0.4 | -0.4 | -0.4 | 0.0 | 1.00 | 2551 | 1799 |
| ## mu[205] | -0.2 | -0.1 | 0.0 | -0.1 | 0.1 | 1.00 | 1718 | 1453 |
| ## mu[206] | 0.1 | 0.2 | 0.3 | 0.2 | 0.0 | 1.00 | 2552 | 1517 |

| | | | | | | | | |
|------------|------|------|------|------|-----|------|------|------|
| ## mu[207] | -0.2 | -0.2 | -0.1 | -0.2 | 0.0 | 1.00 | 2321 | 1868 |
| ## mu[208] | -0.5 | -0.4 | -0.4 | -0.4 | 0.0 | 1.00 | 2562 | 1807 |
| ## mu[209] | -0.8 | -0.7 | -0.6 | -0.7 | 0.1 | 1.00 | 1976 | 1763 |
| ## mu[210] | 0.5 | 0.6 | 0.7 | 0.6 | 0.1 | 1.00 | 2110 | 1617 |
| ## mu[211] | -0.7 | -0.6 | -0.4 | -0.6 | 0.1 | 1.00 | 1516 | 1720 |
| ## mu[212] | -0.7 | -0.5 | -0.4 | -0.5 | 0.1 | 1.00 | 2146 | 2015 |
| ## mu[213] | 0.9 | 1.1 | 1.2 | 1.1 | 0.1 | 1.00 | 1835 | 1561 |
| ## mu[214] | -0.8 | -0.7 | -0.6 | -0.7 | 0.1 | 1.00 | 2505 | 1586 |
| ## mu[215] | -0.7 | -0.5 | -0.3 | -0.5 | 0.1 | 1.00 | 1312 | 1430 |
| ## mu[216] | -0.2 | -0.1 | 0.0 | -0.1 | 0.1 | 1.00 | 2602 | 1857 |
| ## mu[217] | -0.3 | -0.2 | -0.1 | -0.2 | 0.1 | 1.00 | 2537 | 1934 |
| ## mu[218] | -0.9 | -0.7 | -0.6 | -0.7 | 0.1 | 1.00 | 1464 | 1569 |
| ## mu[219] | 1.1 | 1.2 | 1.3 | 1.2 | 0.1 | 1.00 | 2484 | 1999 |
| ## mu[220] | -1.3 | -1.0 | -0.8 | -1.0 | 0.2 | 1.00 | 1465 | 1468 |
| ## mu[221] | -0.6 | -0.5 | -0.4 | -0.5 | 0.1 | 1.00 | 2250 | 1974 |
| ## mu[222] | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 1.00 | 1929 | 1512 |
| ## mu[223] | 0.7 | 0.8 | 0.9 | 0.8 | 0.1 | 1.00 | 2071 | 1768 |
| ## mu[224] | 0.6 | 0.7 | 0.8 | 0.7 | 0.1 | 1.00 | 2150 | 1802 |
| ## mu[225] | 0.6 | 0.7 | 0.8 | 0.7 | 0.1 | 1.00 | 2124 | 1911 |
| ## mu[226] | 0.7 | 0.8 | 0.9 | 0.8 | 0.1 | 1.00 | 2765 | 2087 |
| ## mu[227] | 0.8 | 0.9 | 1.0 | 0.9 | 0.1 | 1.00 | 2617 | 2002 |
| ## mu[228] | -0.5 | -0.4 | -0.2 | -0.4 | 0.1 | 1.00 | 2148 | 1895 |
| ## mu[229] | -0.6 | -0.5 | -0.4 | -0.5 | 0.1 | 1.00 | 1925 | 1973 |
| ## mu[230] | -0.3 | -0.2 | -0.1 | -0.2 | 0.1 | 1.00 | 2452 | 1923 |
| ## mu[231] | -0.3 | -0.2 | -0.1 | -0.2 | 0.1 | 1.00 | 2582 | 1934 |
| ## mu[232] | -0.5 | -0.4 | -0.3 | -0.4 | 0.1 | 1.00 | 2222 | 1910 |
| ## mu[233] | -0.9 | -0.8 | -0.7 | -0.8 | 0.1 | 1.00 | 1445 | 1537 |
| ## mu[234] | -0.5 | -0.4 | -0.3 | -0.4 | 0.1 | 1.00 | 2064 | 1934 |
| ## mu[235] | -0.6 | -0.5 | -0.4 | -0.5 | 0.1 | 1.00 | 2164 | 1842 |
| ## mu[236] | -0.5 | -0.4 | -0.3 | -0.4 | 0.1 | 1.00 | 1744 | 1692 |
| ## mu[237] | -1.2 | -1.0 | -0.9 | -1.0 | 0.1 | 1.00 | 2122 | 1729 |
| ## mu[238] | 0.4 | 0.5 | 0.6 | 0.5 | 0.1 | 1.00 | 2347 | 1821 |
| ## mu[239] | 0.2 | 0.3 | 0.4 | 0.3 | 0.1 | 1.00 | 2641 | 1856 |
| ## mu[240] | 0.3 | 0.4 | 0.5 | 0.4 | 0.1 | 1.00 | 2998 | 1857 |
| ## mu[241] | 1.0 | 1.2 | 1.3 | 1.2 | 0.1 | 1.00 | 2253 | 1955 |
| ## mu[242] | 1.1 | 1.3 | 1.4 | 1.3 | 0.1 | 1.00 | 2255 | 1990 |
| ## mu[243] | -0.1 | 0.0 | 0.1 | 0.0 | 0.1 | 1.00 | 2896 | 1818 |
| ## mu[244] | 0.4 | 0.5 | 0.6 | 0.5 | 0.1 | 1.00 | 2365 | 1821 |
| ## mu[245] | 0.1 | 0.2 | 0.3 | 0.2 | 0.1 | 1.00 | 3029 | 1857 |
| ## mu[246] | 0.5 | 0.6 | 0.7 | 0.6 | 0.1 | 1.00 | 2156 | 1893 |
| ## mu[247] | 0.1 | 0.3 | 0.4 | 0.3 | 0.1 | 1.00 | 2951 | 1715 |
| ## mu[248] | 0.1 | 0.2 | 0.3 | 0.2 | 0.1 | 1.00 | 3034 | 1836 |
| ## mu[249] | 1.1 | 1.3 | 1.4 | 1.3 | 0.1 | 1.00 | 2278 | 1956 |
| ## mu[250] | 0.8 | 0.9 | 1.0 | 0.9 | 0.1 | 1.00 | 2533 | 2036 |
| ## mu[251] | 0.8 | 0.9 | 1.0 | 0.9 | 0.1 | 1.00 | 2028 | 1850 |
| ## mu[252] | 0.2 | 0.3 | 0.4 | 0.3 | 0.1 | 1.00 | 2034 | 1746 |
| ## mu[253] | 0.2 | 0.4 | 0.6 | 0.4 | 0.1 | 1.00 | 1735 | 1710 |
| ## mu[254] | -0.3 | -0.2 | -0.1 | -0.2 | 0.1 | 1.00 | 2689 | 1817 |
| ## mu[255] | 0.1 | 0.2 | 0.3 | 0.2 | 0.1 | 1.00 | 2475 | 1894 |
| ## mu[256] | -0.2 | 0.0 | 0.2 | 0.0 | 0.1 | 1.00 | 1310 | 1417 |
| ## mu[257] | 0.3 | 0.4 | 0.5 | 0.4 | 0.1 | 1.00 | 2663 | 1857 |
| ## mu[258] | -0.1 | 0.0 | 0.2 | 0.0 | 0.1 | 1.00 | 3408 | 1762 |
| ## mu[259] | -0.1 | 0.0 | 0.1 | 0.0 | 0.1 | 1.00 | 2789 | 1751 |
| ## mu[260] | 0.2 | 0.3 | 0.4 | 0.3 | 0.1 | 1.00 | 2033 | 1746 |

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|------------|------|------|------|----------|------|------|------|
| ## mu[261] | 1.0 | 1.1 | 1.2 | 1.1 0.1 | 1.00 | 2361 | 1957 |
| ## mu[262] | -0.1 | 0.0 | 0.2 | 0.0 0.1 | 1.00 | 3408 | 1762 |
| ## mu[263] | 0.5 | 0.6 | 0.6 | 0.6 0.1 | 1.00 | 2384 | 1802 |
| ## mu[264] | 0.1 | 0.2 | 0.3 | 0.2 0.1 | 1.00 | 1820 | 1711 |
| ## mu[265] | 0.4 | 0.6 | 0.9 | 0.6 0.1 | 1.00 | 2359 | 1271 |
| ## mu[266] | 0.1 | 0.2 | 0.2 | 0.2 0.1 | 1.00 | 2703 | 1934 |
| ## mu[267] | 0.1 | 0.3 | 0.4 | 0.3 0.1 | 1.00 | 2096 | 1536 |
| ## mu[268] | 0.9 | 1.0 | 1.1 | 1.0 0.1 | 1.00 | 1946 | 1820 |
| ## mu[269] | 0.0 | 0.1 | 0.2 | 0.1 0.1 | 1.00 | 1832 | 1654 |
| ## mu[270] | 0.8 | 0.9 | 1.0 | 0.9 0.1 | 1.00 | 2568 | 2038 |
| ## mu[271] | 0.5 | 0.6 | 0.7 | 0.6 0.1 | 1.00 | 2574 | 1932 |
| ## mu[272] | 1.0 | 1.1 | 1.2 | 1.1 0.1 | 1.00 | 2396 | 1997 |
| ## mu[273] | 1.0 | 1.1 | 1.2 | 1.1 0.1 | 1.00 | 2330 | 1956 |
| ## mu[274] | 0.2 | 0.4 | 0.5 | 0.4 0.1 | 1.00 | 1761 | 1698 |
| ## mu[275] | 0.3 | 0.4 | 0.5 | 0.4 0.1 | 1.00 | 2562 | 1917 |
| ## mu[276] | 0.1 | 0.2 | 0.2 | 0.2 0.1 | 1.00 | 2703 | 1934 |
| ## mu[277] | 0.0 | 0.1 | 0.2 | 0.1 0.1 | 1.00 | 1841 | 1655 |
| ## mu[278] | 0.5 | 0.6 | 0.7 | 0.6 0.1 | 1.00 | 2585 | 1972 |
| ## mu[279] | 0.3 | 0.4 | 0.4 | 0.4 0.1 | 1.00 | 2588 | 1970 |
| ## mu[280] | -0.2 | -0.1 | 0.0 | -0.1 0.1 | 1.00 | 2333 | 1972 |
| ## mu[281] | 0.1 | 0.1 | 0.2 | 0.1 0.1 | 1.00 | 2699 | 1934 |
| ## mu[282] | -1.0 | -0.8 | -0.7 | -0.8 0.1 | 1.00 | 2932 | 1714 |
| ## mu[283] | 0.0 | 0.2 | 0.3 | 0.2 0.1 | 1.00 | 1335 | 1612 |
| ## mu[284] | -1.1 | -1.0 | -0.8 | -1.0 0.1 | 1.00 | 2128 | 1567 |
| ## mu[285] | -1.7 | -1.5 | -1.3 | -1.5 0.1 | 1.00 | 1624 | 1496 |
| ## mu[286] | -1.2 | -1.1 | -1.0 | -1.1 0.1 | 1.00 | 2403 | 1488 |
| ## mu[287] | -0.5 | -0.4 | -0.2 | -0.4 0.1 | 1.00 | 1538 | 1580 |
| ## mu[288] | 0.4 | 0.5 | 0.7 | 0.5 0.1 | 1.00 | 1832 | 1733 |
| ## mu[289] | 0.3 | 0.4 | 0.6 | 0.4 0.1 | 1.00 | 1576 | 1612 |
| ## mu[290] | 0.2 | 0.4 | 0.6 | 0.4 0.1 | 1.00 | 2331 | 1666 |
| ## mu[291] | 1.0 | 1.2 | 1.3 | 1.2 0.1 | 1.00 | 2778 | 1869 |
| ## mu[292] | 0.4 | 0.6 | 0.8 | 0.6 0.1 | 1.00 | 2322 | 1951 |
| ## mu[293] | 1.1 | 1.2 | 1.4 | 1.2 0.1 | 1.00 | 2581 | 1893 |
| ## mu[294] | 0.7 | 0.9 | 1.1 | 0.9 0.1 | 1.00 | 2378 | 1920 |
| ## mu[295] | -0.4 | -0.2 | 0.0 | -0.2 0.1 | 1.00 | 3143 | 1691 |
| ## mu[296] | 0.5 | 0.6 | 0.8 | 0.6 0.1 | 1.00 | 2413 | 1595 |
| ## mu[297] | -0.1 | 0.1 | 0.3 | 0.1 0.1 | 1.00 | 3239 | 1592 |
| ## mu[298] | 0.7 | 0.9 | 1.0 | 0.9 0.1 | 1.00 | 2662 | 1819 |
| ## mu[299] | 0.8 | 1.0 | 1.2 | 1.0 0.1 | 1.00 | 2325 | 1919 |
| ## mu[300] | 0.0 | 0.2 | 0.3 | 0.2 0.1 | 1.00 | 1909 | 1643 |
| ## mu[301] | -1.4 | -1.2 | -1.0 | -1.2 0.1 | 1.00 | 1565 | 1597 |
| ## mu[302] | 0.2 | 0.6 | 1.0 | 0.6 0.2 | 1.00 | 1464 | 1720 |
| ## mu[303] | -1.3 | -1.1 | -1.0 | -1.1 0.1 | 1.00 | 2413 | 1819 |
| ## mu[304] | 0.0 | 0.3 | 0.6 | 0.3 0.2 | 1.00 | 2221 | 1711 |
| ## mu[305] | 0.0 | 0.1 | 0.2 | 0.1 0.1 | 1.00 | 2691 | 1553 |
| ## mu[306] | -0.1 | 0.1 | 0.2 | 0.1 0.1 | 1.00 | 2603 | 1599 |
| ## mu[307] | -0.9 | -0.7 | -0.5 | -0.7 0.1 | 1.00 | 2633 | 1636 |
| ## mu[308] | 0.0 | 0.1 | 0.3 | 0.1 0.1 | 1.00 | 2319 | 1598 |
| ## mu[309] | -1.3 | -1.1 | -1.0 | -1.1 0.1 | 1.00 | 2357 | 1706 |
| ## mu[310] | -1.7 | -1.5 | -1.3 | -1.5 0.1 | 1.00 | 2111 | 1691 |
| ## mu[311] | -1.1 | -0.9 | -0.8 | -0.9 0.1 | 1.00 | 2403 | 1567 |
| ## mu[312] | -0.1 | 0.0 | 0.2 | 0.0 0.1 | 1.00 | 3417 | 1762 |
| ## mu[313] | 0.1 | 0.3 | 0.4 | 0.3 0.1 | 1.00 | 2901 | 1621 |
| ## mu[314] | -0.3 | -0.2 | -0.1 | -0.2 0.1 | 1.00 | 3440 | 1748 |

| | | | | | | | | |
|------------|------|------|------|------|-----|------|------|------|
| ## mu[315] | -0.7 | -0.5 | -0.4 | -0.5 | 0.1 | 1.00 | 2636 | 1570 |
| ## mu[316] | -0.5 | -0.4 | -0.3 | -0.4 | 0.1 | 1.00 | 2902 | 1584 |
| ## mu[317] | -0.9 | -0.7 | -0.6 | -0.7 | 0.1 | 1.00 | 2477 | 1702 |
| ## mu[318] | -0.2 | 0.1 | 0.4 | 0.1 | 0.2 | 1.00 | 1710 | 1584 |
| ## mu[319] | -1.5 | -1.4 | -1.2 | -1.4 | 0.1 | 1.00 | 2332 | 1974 |
| ## mu[320] | -0.4 | -0.3 | -0.2 | -0.3 | 0.1 | 1.00 | 1314 | 1175 |
| ## mu[321] | -0.3 | -0.1 | 0.0 | -0.1 | 0.1 | 1.00 | 1297 | 1320 |
| ## mu[322] | 0.7 | 0.8 | 1.0 | 0.8 | 0.1 | 1.00 | 2511 | 1553 |
| ## mu[323] | 0.1 | 0.2 | 0.3 | 0.2 | 0.1 | 1.00 | 2296 | 1570 |
| ## mu[324] | 0.4 | 0.6 | 0.7 | 0.6 | 0.1 | 1.00 | 3303 | 1662 |
| ## mu[325] | 0.7 | 0.8 | 0.9 | 0.8 | 0.1 | 1.00 | 2582 | 1879 |
| ## mu[326] | -0.5 | -0.4 | -0.3 | -0.4 | 0.1 | 1.00 | 1583 | 1581 |
| ## mu[327] | -0.1 | 0.0 | 0.1 | 0.0 | 0.1 | 1.00 | 1358 | 1483 |
| ## mu[328] | 0.3 | 0.4 | 0.6 | 0.4 | 0.1 | 1.00 | 2158 | 1773 |
| ## mu[329] | 0.3 | 0.4 | 0.5 | 0.4 | 0.1 | 1.00 | 3258 | 1823 |
| ## mu[330] | -0.9 | -0.7 | -0.5 | -0.7 | 0.1 | 1.00 | 1958 | 1786 |
| ## mu[331] | -0.7 | -0.5 | -0.3 | -0.5 | 0.1 | 1.00 | 1719 | 1739 |
| ## mu[332] | -1.7 | -1.5 | -1.4 | -1.5 | 0.1 | 1.00 | 2261 | 1789 |
| ## mu[333] | 0.5 | 0.9 | 1.2 | 0.9 | 0.2 | 1.00 | 1757 | 1534 |
| ## mu[334] | 0.3 | 0.6 | 0.9 | 0.6 | 0.2 | 1.00 | 1943 | 1485 |
| ## mu[335] | -1.1 | -1.0 | -0.9 | -1.0 | 0.1 | 1.00 | 1929 | 1823 |
| ## mu[336] | -1.8 | -1.6 | -1.4 | -1.6 | 0.1 | 1.00 | 2694 | 1611 |
| ## mu[337] | -0.8 | -0.7 | -0.5 | -0.7 | 0.1 | 1.00 | 2357 | 2016 |
| ## mu[338] | -0.4 | -0.4 | -0.3 | -0.4 | 0.1 | 1.00 | 1493 | 1660 |
| ## mu[339] | -0.4 | -0.3 | -0.2 | -0.3 | 0.1 | 1.00 | 1658 | 1738 |
| ## mu[340] | 0.0 | 0.1 | 0.2 | 0.1 | 0.1 | 1.00 | 1508 | 1463 |
| ## mu[341] | 1.0 | 1.2 | 1.4 | 1.2 | 0.1 | 1.00 | 2296 | 1718 |
| ## mu[342] | -0.1 | 0.1 | 0.3 | 0.1 | 0.1 | 1.00 | 1290 | 1564 |
| ## mu[343] | -0.3 | -0.2 | -0.1 | -0.2 | 0.1 | 1.00 | 1824 | 1459 |
| ## mu[344] | 0.2 | 0.3 | 0.4 | 0.3 | 0.0 | 1.00 | 2117 | 1509 |
| ## mu[345] | 0.6 | 0.7 | 0.8 | 0.7 | 0.1 | 1.00 | 2141 | 1490 |
| ## mu[346] | -0.5 | -0.3 | -0.2 | -0.3 | 0.1 | 1.00 | 2319 | 1833 |
| ## mu[347] | -0.1 | 0.0 | 0.1 | 0.0 | 0.1 | 1.00 | 2391 | 1655 |
| ## mu[348] | -0.7 | -0.5 | -0.3 | -0.5 | 0.1 | 1.00 | 1762 | 1495 |
| ## mu[349] | 0.4 | 0.5 | 0.6 | 0.5 | 0.1 | 1.00 | 1610 | 1399 |
| ## mu[350] | 0.4 | 0.6 | 0.8 | 0.6 | 0.1 | 1.00 | 2038 | 1857 |
| ## mu[351] | 0.3 | 0.4 | 0.5 | 0.4 | 0.1 | 1.00 | 2718 | 1853 |
| ## mu[352] | 0.5 | 0.6 | 0.8 | 0.6 | 0.1 | 1.00 | 1907 | 1892 |
| ## mu[353] | -1.6 | -1.3 | -1.1 | -1.3 | 0.1 | 1.00 | 2638 | 1610 |
| ## mu[354] | -0.2 | -0.1 | 0.0 | -0.1 | 0.1 | 1.00 | 2873 | 1502 |
| ## mu[355] | -0.1 | 0.0 | 0.1 | 0.0 | 0.1 | 1.00 | 2788 | 1440 |
| ## mu[356] | -0.1 | 0.0 | 0.2 | 0.0 | 0.1 | 1.00 | 2466 | 1724 |
| ## mu[357] | -0.5 | -0.4 | -0.3 | -0.4 | 0.1 | 1.00 | 2559 | 1484 |
| ## mu[358] | -0.5 | -0.3 | -0.2 | -0.3 | 0.1 | 1.00 | 3068 | 1573 |
| ## mu[359] | 0.0 | 0.2 | 0.3 | 0.2 | 0.1 | 1.00 | 1956 | 1586 |
| ## mu[360] | -0.1 | 0.0 | 0.1 | 0.0 | 0.1 | 1.00 | 2562 | 1719 |
| ## mu[361] | -0.5 | -0.3 | -0.2 | -0.3 | 0.1 | 1.00 | 2011 | 1651 |
| ## mu[362] | -0.5 | -0.3 | -0.2 | -0.3 | 0.1 | 1.00 | 3023 | 1856 |
| ## mu[363] | 0.0 | 0.2 | 0.3 | 0.2 | 0.1 | 1.00 | 2030 | 1663 |
| ## mu[364] | -0.2 | 0.0 | 0.1 | 0.0 | 0.1 | 1.00 | 1974 | 1897 |
| ## mu[365] | -1.3 | -1.1 | -1.0 | -1.1 | 0.1 | 1.00 | 1988 | 1735 |
| ## mu[366] | -0.7 | -0.6 | -0.5 | -0.6 | 0.1 | 1.00 | 2175 | 1931 |
| ## mu[367] | -1.7 | -1.6 | -1.5 | -1.6 | 0.1 | 1.00 | 3209 | 1847 |
| ## mu[368] | -1.9 | -1.7 | -1.6 | -1.7 | 0.1 | 1.00 | 2752 | 1755 |

| | | | | | | | | |
|------------|------|------|------|------|-----|------|------|------|
| ## mu[369] | -1.5 | -1.3 | -1.2 | -1.3 | 0.1 | 1.00 | 3149 | 1627 |
| ## mu[370] | -1.3 | -1.2 | -1.0 | -1.2 | 0.1 | 1.00 | 3448 | 1675 |
| ## mu[371] | -2.2 | -1.8 | -1.3 | -1.8 | 0.3 | 1.00 | 2347 | 1855 |
| ## mu[372] | -0.2 | -0.1 | 0.0 | -0.1 | 0.1 | 1.00 | 2120 | 1697 |
| ## mu[373] | -2.3 | -1.7 | -1.2 | -1.7 | 0.3 | 1.00 | 2385 | 1916 |
| ## mu[374] | -1.4 | -1.3 | -1.1 | -1.3 | 0.1 | 1.00 | 2595 | 1782 |
| ## mu[375] | -0.4 | -0.1 | 0.1 | -0.1 | 0.1 | 1.00 | 2737 | 1735 |
| ## mu[376] | -0.3 | -0.2 | -0.1 | -0.2 | 0.1 | 1.00 | 2689 | 1817 |
| ## mu[377] | -0.3 | -0.2 | -0.1 | -0.2 | 0.1 | 1.00 | 2284 | 1715 |
| ## mu[378] | -0.4 | -0.3 | -0.2 | -0.3 | 0.1 | 1.00 | 2199 | 1814 |
| ## mu[379] | -0.4 | -0.3 | -0.2 | -0.3 | 0.1 | 1.00 | 1642 | 1650 |
| ## mu[380] | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | 1.00 | 2326 | 1596 |
| ## mu[381] | 0.2 | 0.3 | 0.4 | 0.3 | 0.1 | 1.00 | 3284 | 1761 |
| ## mu[382] | -0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 1.00 | 2193 | 1581 |
| ## mu[383] | -0.6 | -0.5 | -0.4 | -0.5 | 0.1 | 1.00 | 2006 | 1775 |
| ## mu[384] | -0.4 | -0.3 | -0.2 | -0.3 | 0.1 | 1.00 | 2237 | 1780 |
| ## mu[385] | 0.1 | 0.1 | 0.2 | 0.1 | 0.0 | 1.00 | 2443 | 1635 |
| ## mu[386] | -0.8 | -0.7 | -0.5 | -0.7 | 0.1 | 1.00 | 1971 | 1790 |
| ## mu[387] | 0.6 | 0.7 | 0.9 | 0.7 | 0.1 | 1.00 | 2217 | 1542 |
| ## mu[388] | 0.6 | 0.7 | 0.8 | 0.7 | 0.1 | 1.00 | 2091 | 1403 |
| ## mu[389] | 0.5 | 0.6 | 0.7 | 0.6 | 0.1 | 1.00 | 2349 | 1578 |
| ## mu[390] | 1.2 | 1.5 | 1.7 | 1.5 | 0.1 | 1.00 | 1669 | 1388 |
| ## mu[391] | 0.5 | 0.6 | 0.7 | 0.6 | 0.1 | 1.00 | 2401 | 1607 |
| ## mu[392] | -0.5 | -0.3 | -0.1 | -0.3 | 0.1 | 1.00 | 1625 | 1342 |
| ## mu[393] | -0.4 | -0.2 | 0.0 | -0.2 | 0.1 | 1.00 | 2030 | 1560 |
| ## mu[394] | 0.6 | 0.8 | 0.9 | 0.8 | 0.1 | 1.00 | 1703 | 1547 |
| ## mu[395] | 0.0 | 0.2 | 0.5 | 0.2 | 0.1 | 1.00 | 1324 | 1472 |
| ## mu[396] | -0.6 | -0.4 | -0.2 | -0.4 | 0.1 | 1.00 | 1585 | 1489 |
| ## mu[397] | -0.5 | -0.2 | 0.1 | -0.2 | 0.2 | 1.00 | 1713 | 1721 |
| ## mu[398] | -0.7 | -0.5 | -0.3 | -0.5 | 0.1 | 1.00 | 2079 | 1517 |
| ## mu[399] | 0.0 | 0.1 | 0.3 | 0.1 | 0.1 | 1.00 | 1647 | 1548 |
| ## mu[400] | 0.0 | 0.2 | 0.3 | 0.2 | 0.1 | 1.00 | 1703 | 1629 |
| ## mu[401] | -0.2 | 0.0 | 0.2 | 0.0 | 0.1 | 1.00 | 1607 | 1586 |
| ## mu[402] | 0.1 | 0.4 | 0.7 | 0.4 | 0.2 | 1.00 | 1646 | 1583 |
| ## mu[403] | -0.1 | 0.2 | 0.5 | 0.2 | 0.2 | 1.00 | 1680 | 1555 |
| ## mu[404] | -0.1 | 0.0 | 0.1 | 0.0 | 0.1 | 1.00 | 1647 | 1387 |
| ## mu[405] | -0.1 | 0.0 | 0.1 | 0.0 | 0.1 | 1.00 | 2792 | 1715 |
| ## mu[406] | 0.0 | 0.1 | 0.3 | 0.1 | 0.1 | 1.00 | 1655 | 1522 |
| ## mu[407] | 0.2 | 0.3 | 0.5 | 0.3 | 0.1 | 1.00 | 1790 | 1432 |
| ## mu[408] | -0.2 | -0.1 | 0.1 | -0.1 | 0.1 | 1.00 | 1690 | 1510 |
| ## mu[409] | -0.1 | 0.1 | 0.3 | 0.1 | 0.1 | 1.00 | 1715 | 1562 |
| ## mu[410] | -0.1 | 0.0 | 0.1 | 0.0 | 0.1 | 1.00 | 1626 | 1408 |
| ## mu[411] | 0.1 | 0.1 | 0.3 | 0.2 | 0.1 | 1.00 | 1817 | 1714 |
| ## mu[412] | 0.2 | 0.3 | 0.4 | 0.3 | 0.1 | 1.00 | 2031 | 1714 |
| ## mu[413] | -0.3 | -0.2 | -0.1 | -0.2 | 0.1 | 1.00 | 1644 | 1681 |
| ## mu[414] | -0.2 | -0.1 | 0.0 | -0.1 | 0.1 | 1.00 | 1713 | 1453 |
| ## mu[415] | 0.3 | 0.4 | 0.5 | 0.4 | 0.1 | 1.00 | 2485 | 1840 |
| ## mu[416] | -0.4 | -0.3 | -0.1 | -0.3 | 0.1 | 1.00 | 1596 | 1596 |
| ## mu[417] | 0.2 | 0.3 | 0.4 | 0.3 | 0.1 | 1.00 | 1859 | 1818 |
| ## mu[418] | 0.3 | 0.4 | 0.4 | 0.4 | 0.1 | 1.00 | 2349 | 1838 |
| ## mu[419] | 0.2 | 0.3 | 0.4 | 0.3 | 0.1 | 1.00 | 1911 | 1754 |
| ## mu[420] | -0.3 | -0.1 | 0.0 | -0.1 | 0.1 | 1.00 | 1887 | 1782 |
| ## mu[421] | 0.9 | 1.1 | 1.2 | 1.1 | 0.1 | 1.00 | 2511 | 1838 |
| ## mu[422] | 0.6 | 0.7 | 0.8 | 0.7 | 0.1 | 1.00 | 2430 | 1805 |

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|------------|------|------|------|------|-----|------|------|------|
| ## mu[423] | 0.5 | 0.6 | 0.7 | 0.6 | 0.1 | 1.00 | 2398 | 1834 |
| ## mu[424] | 0.5 | 0.6 | 0.7 | 0.6 | 0.1 | 1.00 | 2343 | 1797 |
| ## mu[425] | 0.5 | 0.6 | 0.7 | 0.6 | 0.1 | 1.00 | 1556 | 1590 |
| ## mu[426] | 1.1 | 1.3 | 1.4 | 1.3 | 0.1 | 1.00 | 1956 | 1871 |
| ## mu[427] | 0.1 | 0.2 | 0.2 | 0.2 | 0.0 | 1.00 | 2204 | 1708 |
| ## mu[428] | -0.4 | -0.3 | -0.2 | -0.3 | 0.1 | 1.00 | 1335 | 978 |
| ## mu[429] | 0.0 | 0.1 | 0.2 | 0.1 | 0.1 | 1.00 | 1428 | 1295 |
| ## mu[430] | -0.4 | -0.3 | -0.2 | -0.3 | 0.1 | 1.00 | 1335 | 978 |
| ## mu[431] | 1.8 | 2.1 | 2.3 | 2.1 | 0.2 | 1.00 | 2113 | 1269 |
| ## mu[432] | 0.8 | 0.9 | 1.0 | 0.9 | 0.1 | 1.00 | 1971 | 1870 |
| ## mu[433] | 0.4 | 0.5 | 0.6 | 0.5 | 0.1 | 1.00 | 2075 | 1704 |
| ## mu[434] | -1.1 | -0.9 | -0.8 | -0.9 | 0.1 | 1.00 | 1333 | 1359 |
| ## mu[435] | -0.2 | -0.1 | 0.0 | -0.1 | 0.1 | 1.00 | 1864 | 1670 |
| ## mu[436] | -0.5 | -0.3 | -0.1 | -0.3 | 0.1 | 1.00 | 2728 | 1442 |
| ## mu[437] | -0.2 | -0.2 | -0.1 | -0.2 | 0.0 | 1.00 | 2360 | 1947 |
| ## mu[438] | -1.0 | -0.3 | 0.3 | -0.3 | 0.4 | 1.00 | 2751 | 1546 |
| ## mu[439] | -0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 1.00 | 2105 | 1711 |
| ## mu[440] | -1.3 | -1.1 | -1.0 | -1.1 | 0.1 | 1.00 | 2036 | 1676 |
| ## mu[441] | -1.6 | -1.4 | -1.3 | -1.4 | 0.1 | 1.00 | 2477 | 1702 |
| ## mu[442] | -0.2 | -0.1 | 0.0 | -0.1 | 0.1 | 1.00 | 2708 | 1614 |
| ## mu[443] | 0.5 | 0.6 | 0.7 | 0.6 | 0.1 | 1.00 | 2514 | 1706 |
| ## mu[444] | -0.7 | -0.5 | -0.3 | -0.5 | 0.1 | 1.00 | 2293 | 1811 |
| ## mu[445] | -1.2 | -1.1 | -0.9 | -1.1 | 0.1 | 1.00 | 2064 | 1822 |
| ## mu[446] | -0.5 | -0.4 | -0.3 | -0.4 | 0.1 | 1.00 | 2227 | 1541 |
| ## mu[447] | -0.1 | -0.1 | 0.0 | -0.1 | 0.0 | 1.01 | 2509 | 1574 |
| ## mu[448] | -0.6 | -0.4 | -0.3 | -0.4 | 0.1 | 1.00 | 2434 | 1451 |
| ## mu[449] | 0.3 | 0.5 | 0.6 | 0.5 | 0.1 | 1.00 | 3017 | 1898 |
| ## mu[450] | -0.3 | -0.2 | 0.0 | -0.2 | 0.1 | 1.00 | 1444 | 1436 |
| ## mu[451] | -0.8 | -0.7 | -0.6 | -0.7 | 0.1 | 1.00 | 2785 | 1683 |
| ## mu[452] | -0.2 | 0.0 | 0.2 | 0.0 | 0.1 | 1.00 | 1325 | 1273 |
| ## mu[453] | 0.1 | 0.3 | 0.4 | 0.3 | 0.1 | 1.00 | 1393 | 1283 |
| ## mu[454] | 1.3 | 1.5 | 1.7 | 1.5 | 0.1 | 1.00 | 2035 | 1688 |
| ## mu[455] | 0.0 | 0.1 | 0.2 | 0.1 | 0.1 | 1.00 | 2065 | 1665 |
| ## mu[456] | 0.3 | 0.4 | 0.6 | 0.4 | 0.1 | 1.00 | 2009 | 1389 |
| ## mu[457] | 1.6 | 1.8 | 2.0 | 1.8 | 0.1 | 1.00 | 1549 | 1456 |
| ## mu[458] | 0.2 | 0.3 | 0.5 | 0.3 | 0.1 | 1.00 | 1676 | 1553 |
| ## mu[459] | 0.4 | 0.6 | 0.8 | 0.6 | 0.1 | 1.00 | 1487 | 1527 |
| ## mu[460] | 0.5 | 0.5 | 0.6 | 0.5 | 0.1 | 1.00 | 2338 | 1286 |
| ## mu[461] | -0.2 | -0.1 | -0.1 | -0.1 | 0.1 | 1.00 | 3217 | 1701 |
| ## mu[462] | 1.3 | 1.5 | 1.8 | 1.5 | 0.1 | 1.00 | 2127 | 1241 |
| ## mu[463] | -0.7 | -0.5 | -0.4 | -0.5 | 0.1 | 1.00 | 2510 | 1616 |
| ## mu[464] | -1.4 | -1.2 | -1.0 | -1.2 | 0.1 | 1.00 | 2333 | 1762 |
| ## mu[465] | -0.5 | -0.4 | -0.3 | -0.4 | 0.1 | 1.00 | 2789 | 1665 |
| ## mu[466] | -0.7 | -0.5 | -0.3 | -0.5 | 0.1 | 1.00 | 1606 | 1248 |
| ## mu[467] | -0.3 | -0.1 | 0.0 | -0.1 | 0.1 | 1.00 | 1854 | 1383 |
| ## mu[468] | -1.2 | -1.1 | -0.9 | -1.1 | 0.1 | 1.00 | 2412 | 1545 |
| ## mu[469] | 0.3 | 0.5 | 0.7 | 0.5 | 0.1 | 1.00 | 2200 | 1304 |
| ## mu[470] | 0.8 | 0.9 | 1.1 | 0.9 | 0.1 | 1.00 | 1527 | 1578 |
| ## mu[471] | 0.8 | 1.0 | 1.2 | 1.0 | 0.1 | 1.00 | 1232 | 1267 |
| ## mu[472] | 1.0 | 1.3 | 1.6 | 1.3 | 0.2 | 1.00 | 1680 | 1440 |
| ## mu[473] | -0.2 | -0.1 | -0.1 | -0.1 | 0.0 | 1.00 | 2503 | 1793 |
| ## mu[474] | -1.6 | -1.4 | -1.1 | -1.4 | 0.1 | 1.00 | 1945 | 1657 |
| ## mu[475] | 0.5 | 0.6 | 0.8 | 0.6 | 0.1 | 1.00 | 2666 | 1970 |
| ## mu[476] | -0.4 | -0.2 | -0.1 | -0.2 | 0.1 | 1.00 | 3144 | 1609 |

| | | | | | | | | |
|------------|------|------|------|------|-----|------|------|------|
| ## mu[477] | -1.9 | -1.7 | -1.5 | -1.7 | 0.1 | 1.00 | 2272 | 1804 |
| ## mu[478] | -0.7 | -0.6 | -0.5 | -0.6 | 0.1 | 1.00 | 3030 | 1734 |
| ## mu[479] | -0.4 | -0.3 | -0.3 | -0.3 | 0.1 | 1.00 | 2642 | 1695 |
| ## mu[480] | -0.8 | -0.7 | -0.6 | -0.7 | 0.1 | 1.00 | 2596 | 1841 |
| ## mu[481] | 0.0 | 0.2 | 0.3 | 0.2 | 0.1 | 1.00 | 2340 | 1753 |
| ## mu[482] | 0.4 | 0.6 | 0.8 | 0.6 | 0.1 | 1.00 | 2611 | 1949 |
| ## mu[483] | 0.4 | 0.5 | 0.6 | 0.5 | 0.1 | 1.00 | 2608 | 1849 |
| ## mu[484] | -0.5 | -0.4 | -0.2 | -0.4 | 0.1 | 1.00 | 2593 | 1495 |
| ## mu[485] | -0.2 | 0.0 | 0.2 | 0.0 | 0.1 | 1.00 | 1143 | 1229 |
| ## mu[486] | -0.5 | -0.3 | -0.2 | -0.3 | 0.1 | 1.00 | 2377 | 1482 |
| ## mu[487] | 0.8 | 1.0 | 1.2 | 1.0 | 0.1 | 1.00 | 2147 | 1489 |
| ## mu[488] | 0.2 | 0.4 | 0.7 | 0.4 | 0.1 | 1.00 | 1129 | 1184 |
| ## mu[489] | 0.6 | 0.8 | 0.9 | 0.8 | 0.1 | 1.00 | 1970 | 1527 |
| ## mu[490] | 0.1 | 0.2 | 0.3 | 0.2 | 0.1 | 1.00 | 2741 | 1646 |
| ## mu[491] | -1.1 | -0.9 | -0.8 | -1.0 | 0.1 | 1.00 | 2537 | 1606 |
| ## mu[492] | -0.6 | -0.5 | -0.3 | -0.5 | 0.1 | 1.00 | 1540 | 1609 |
| ## mu[493] | 0.5 | 0.6 | 0.7 | 0.6 | 0.1 | 1.00 | 2572 | 1832 |
| ## mu[494] | -0.2 | -0.1 | 0.0 | -0.1 | 0.0 | 1.00 | 2090 | 1785 |
| ## mu[495] | -0.2 | -0.1 | 0.0 | -0.1 | 0.1 | 1.00 | 1721 | 1523 |
| ## mu[496] | -0.4 | -0.4 | -0.3 | -0.4 | 0.0 | 1.00 | 2641 | 1768 |
| ## mu[497] | -0.3 | -0.2 | -0.2 | -0.2 | 0.0 | 1.00 | 2419 | 1798 |
| ## mu[498] | -0.5 | -0.4 | -0.3 | -0.4 | 0.1 | 1.00 | 2655 | 1710 |
| ## mu[499] | 0.7 | 0.8 | 0.9 | 0.8 | 0.1 | 1.00 | 2336 | 1909 |
| ## mu[500] | -0.5 | -0.3 | -0.2 | -0.3 | 0.1 | 1.00 | 2344 | 1895 |
| ## mu[501] | -0.5 | -0.4 | -0.3 | -0.4 | 0.1 | 1.00 | 2240 | 1843 |
| ## mu[502] | -0.6 | -0.5 | -0.4 | -0.5 | 0.1 | 1.00 | 1828 | 1793 |
| ## mu[503] | -0.8 | -0.7 | -0.5 | -0.7 | 0.1 | 1.00 | 2017 | 2015 |
| ## mu[504] | 0.3 | 0.4 | 0.5 | 0.4 | 0.1 | 1.00 | 2741 | 1931 |
| ## mu[505] | 0.2 | 0.4 | 0.5 | 0.4 | 0.1 | 1.00 | 2893 | 1705 |
| ## mu[506] | 0.2 | 0.3 | 0.4 | 0.3 | 0.1 | 1.00 | 3024 | 1822 |
| ## mu[507] | 0.2 | 0.3 | 0.4 | 0.3 | 0.1 | 1.00 | 3024 | 1822 |
| ## mu[508] | 0.3 | 0.4 | 0.5 | 0.4 | 0.1 | 1.00 | 2328 | 1857 |
| ## mu[509] | 0.2 | 0.3 | 0.4 | 0.3 | 0.1 | 1.00 | 2031 | 1746 |
| ## mu[510] | 1.0 | 1.2 | 1.3 | 1.2 | 0.1 | 1.00 | 2308 | 1956 |
| ## mu[511] | 0.8 | 0.9 | 1.0 | 0.9 | 0.1 | 1.00 | 2507 | 2037 |
| ## mu[512] | 0.1 | 0.3 | 0.4 | 0.3 | 0.1 | 1.00 | 2065 | 1545 |
| ## mu[513] | 0.1 | 0.2 | 0.3 | 0.2 | 0.1 | 1.00 | 2198 | 1855 |
| ## mu[514] | 0.5 | 0.6 | 0.6 | 0.6 | 0.1 | 1.00 | 2598 | 1972 |
| ## mu[515] | 0.0 | 0.2 | 0.3 | 0.2 | 0.1 | 1.00 | 3157 | 1808 |
| ## mu[516] | -0.7 | -0.5 | -0.4 | -0.6 | 0.1 | 1.00 | 2115 | 1742 |
| ## mu[517] | -0.1 | 0.0 | 0.2 | 0.0 | 0.1 | 1.00 | 3408 | 1762 |
| ## mu[518] | 0.4 | 0.5 | 0.7 | 0.5 | 0.1 | 1.00 | 2078 | 1622 |
| ## mu[519] | -0.3 | -0.2 | -0.1 | -0.2 | 0.1 | 1.00 | 3450 | 1748 |
| ## mu[520] | -0.3 | -0.2 | -0.1 | -0.2 | 0.1 | 1.00 | 3450 | 1715 |
| ## mu[521] | -0.3 | -0.1 | 0.1 | -0.1 | 0.1 | 1.00 | 2669 | 1735 |
| ## mu[522] | 0.2 | 0.3 | 0.4 | 0.3 | 0.1 | 1.00 | 3151 | 1954 |
| ## mu[523] | 0.9 | 1.1 | 1.3 | 1.1 | 0.1 | 1.00 | 1637 | 1683 |
| ## mu[524] | -1.3 | -1.2 | -1.0 | -1.2 | 0.1 | 1.00 | 2609 | 1821 |
| ## mu[525] | 0.2 | 0.4 | 0.5 | 0.4 | 0.1 | 1.00 | 2172 | 1809 |
| ## mu[526] | -0.4 | -0.3 | -0.2 | -0.3 | 0.1 | 1.00 | 1377 | 1441 |
| ## mu[527] | -0.5 | -0.4 | -0.3 | -0.4 | 0.1 | 1.00 | 1967 | 1720 |
| ## mu[528] | -1.2 | -1.1 | -0.9 | -1.1 | 0.1 | 1.00 | 2928 | 1793 |
| ## mu[529] | -0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 1.00 | 2804 | 1663 |
| ## mu[530] | -1.6 | -1.3 | -1.0 | -1.3 | 0.2 | 1.00 | 2557 | 1573 |

| | | | | | | | | |
|----------------|------|------|------|------|-----|------|------|------|
| ## mu[531] | -1.6 | -1.5 | -1.3 | -1.5 | 0.1 | 1.00 | 2187 | 1685 |
| ## mu[532] | 0.4 | 0.5 | 0.7 | 0.5 | 0.1 | 1.00 | 2347 | 1726 |
| ## mu[533] | -1.1 | -1.0 | -0.9 | -1.0 | 0.1 | 1.00 | 2121 | 1844 |
| ## mu[534] | -1.7 | -1.5 | -1.4 | -1.5 | 0.1 | 1.00 | 2814 | 1728 |
| ## mu[535] | -1.5 | -1.3 | -1.2 | -1.3 | 0.1 | 1.00 | 2980 | 1670 |
| ## mu[536] | 0.2 | 0.3 | 0.4 | 0.3 | 0.1 | 1.00 | 3024 | 1822 |
| ## mu[537] | 0.1 | 0.2 | 0.3 | 0.2 | 0.1 | 1.00 | 3029 | 1857 |
| ## mu[538] | 0.6 | 0.7 | 0.8 | 0.7 | 0.1 | 1.00 | 2344 | 1737 |
| ## mu[539] | 0.5 | 0.7 | 1.0 | 0.7 | 0.1 | 1.00 | 2501 | 1216 |
| ## mu[540] | 0.0 | 0.1 | 0.2 | 0.1 | 0.1 | 1.00 | 1849 | 1685 |
| ## mu[541] | 0.6 | 0.7 | 0.8 | 0.7 | 0.1 | 1.00 | 2446 | 1805 |
| ## mu[542] | 0.0 | 0.1 | 0.3 | 0.1 | 0.1 | 1.01 | 3041 | 1703 |
| ## mu[543] | 0.2 | 0.3 | 0.4 | 0.3 | 0.1 | 1.00 | 1576 | 1563 |
| ## mu[544] | 0.8 | 0.9 | 1.0 | 0.9 | 0.1 | 1.00 | 2440 | 1695 |
| ## mu[545] | 0.1 | 0.2 | 0.3 | 0.2 | 0.1 | 1.00 | 1398 | 1397 |
| ## mu[546] | -0.4 | -0.3 | -0.2 | -0.3 | 0.1 | 1.00 | 2130 | 1910 |
| ## log_lik[1] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 1882 | 1591 |
| ## log_lik[2] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 2091 | 1330 |
| ## log_lik[3] | -0.7 | -0.7 | -0.6 | -0.7 | 0.0 | 1.00 | 2421 | 1872 |
| ## log_lik[4] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 2325 | 1642 |
| ## log_lik[5] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 1764 | 1452 |
| ## log_lik[6] | -1.0 | -0.7 | -0.6 | -0.8 | 0.1 | 1.00 | 2464 | 1906 |
| ## log_lik[7] | -3.7 | -3.3 | -3.0 | -3.3 | 0.2 | 1.00 | 2498 | 1696 |
| ## log_lik[8] | -0.8 | -0.8 | -0.7 | -0.8 | 0.0 | 1.00 | 2504 | 1858 |
| ## log_lik[9] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 2046 | 1415 |
| ## log_lik[10] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 1673 | 1036 |
| ## log_lik[11] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 2196 | 1438 |
| ## log_lik[12] | -1.0 | -0.9 | -0.8 | -0.9 | 0.1 | 1.00 | 2813 | 2054 |
| ## log_lik[13] | -1.9 | -1.5 | -1.3 | -1.5 | 0.2 | 1.00 | 3095 | 1613 |
| ## log_lik[14] | -1.2 | -1.0 | -0.8 | -1.0 | 0.1 | 1.00 | 2135 | 1544 |
| ## log_lik[15] | -3.6 | -3.1 | -2.6 | -3.1 | 0.3 | 1.00 | 2063 | 1669 |
| ## log_lik[16] | -1.0 | -0.9 | -0.8 | -0.9 | 0.1 | 1.00 | 2424 | 1928 |
| ## log_lik[17] | -1.4 | -1.1 | -1.0 | -1.1 | 0.1 | 1.00 | 2100 | 2002 |
| ## log_lik[18] | -1.5 | -1.2 | -1.0 | -1.2 | 0.1 | 1.00 | 2290 | 1708 |
| ## log_lik[19] | -2.1 | -1.8 | -1.5 | -1.8 | 0.2 | 1.00 | 2406 | 1694 |
| ## log_lik[20] | -0.7 | -0.7 | -0.6 | -0.7 | 0.0 | 1.00 | 1826 | 1683 |
| ## log_lik[21] | -3.4 | -3.1 | -2.7 | -3.1 | 0.2 | 1.00 | 1876 | 1374 |
| ## log_lik[22] | -0.8 | -0.7 | -0.6 | -0.7 | 0.0 | 1.00 | 2429 | 1574 |
| ## log_lik[23] | -1.9 | -1.5 | -1.2 | -1.5 | 0.2 | 1.00 | 2632 | 1742 |
| ## log_lik[24] | -1.4 | -1.2 | -1.1 | -1.2 | 0.1 | 1.00 | 2681 | 1858 |
| ## log_lik[25] | -4.0 | -2.9 | -2.0 | -2.9 | 0.6 | 1.00 | 2716 | 1819 |
| ## log_lik[26] | -0.8 | -0.7 | -0.6 | -0.7 | 0.1 | 1.00 | 2368 | 1482 |
| ## log_lik[27] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 1668 | 1571 |
| ## log_lik[28] | -2.0 | -1.5 | -1.2 | -1.6 | 0.2 | 1.00 | 2795 | 1805 |
| ## log_lik[29] | -0.8 | -0.7 | -0.6 | -0.7 | 0.0 | 1.00 | 1692 | 1550 |
| ## log_lik[30] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 2197 | 1600 |
| ## log_lik[31] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 2302 | 1536 |
| ## log_lik[32] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 2056 | 1729 |
| ## log_lik[33] | -0.7 | -0.6 | -0.5 | -0.6 | 0.0 | 1.00 | 2038 | 1314 |
| ## log_lik[34] | -1.1 | -1.0 | -0.9 | -1.0 | 0.1 | 1.00 | 2566 | 1330 |
| ## log_lik[35] | -1.0 | -0.8 | -0.7 | -0.8 | 0.1 | 1.00 | 1890 | 1556 |
| ## log_lik[36] | -1.0 | -0.9 | -0.8 | -0.9 | 0.1 | 1.01 | 2782 | 1709 |
| ## log_lik[37] | -1.3 | -1.0 | -0.7 | -1.0 | 0.2 | 1.00 | 1807 | 1641 |
| ## log_lik[38] | -1.5 | -1.2 | -1.0 | -1.2 | 0.1 | 1.00 | 2353 | 1800 |

| | | | | | | | | |
|----------------|------|------|------|------|-----|------|------|------|
| ## log_lik[39] | -0.9 | -0.8 | -0.7 | -0.8 | 0.1 | 1.00 | 2403 | 1974 |
| ## log_lik[40] | -1.4 | -1.3 | -1.1 | -1.3 | 0.1 | 1.00 | 1729 | 1627 |
| ## log_lik[41] | -0.9 | -0.8 | -0.7 | -0.8 | 0.1 | 1.00 | 3034 | 1859 |
| ## log_lik[42] | -0.9 | -0.8 | -0.7 | -0.8 | 0.0 | 1.00 | 2224 | 1693 |
| ## log_lik[43] | -0.7 | -0.6 | -0.5 | -0.6 | 0.0 | 1.00 | 1894 | 1282 |
| ## log_lik[44] | -1.0 | -0.9 | -0.8 | -0.9 | 0.1 | 1.00 | 2540 | 1584 |
| ## log_lik[45] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 2351 | 1618 |
| ## log_lik[46] | -0.9 | -0.8 | -0.8 | -0.8 | 0.1 | 1.00 | 2406 | 1730 |
| ## log_lik[47] | -1.1 | -1.0 | -0.9 | -1.0 | 0.1 | 1.00 | 2238 | 1711 |
| ## log_lik[48] | -1.9 | -1.6 | -1.3 | -1.6 | 0.2 | 1.00 | 2497 | 1704 |
| ## log_lik[49] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 2008 | 1327 |
| ## log_lik[50] | -0.8 | -0.7 | -0.6 | -0.7 | 0.1 | 1.00 | 2272 | 1547 |
| ## log_lik[51] | -1.8 | -1.6 | -1.3 | -1.6 | 0.2 | 1.00 | 2335 | 1744 |
| ## log_lik[52] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 1937 | 1708 |
| ## log_lik[53] | -2.0 | -1.6 | -1.3 | -1.6 | 0.2 | 1.00 | 1404 | 1400 |
| ## log_lik[54] | -1.1 | -0.9 | -0.7 | -0.9 | 0.1 | 1.00 | 1467 | 1551 |
| ## log_lik[55] | -2.0 | -1.9 | -1.7 | -1.9 | 0.1 | 1.01 | 3314 | 1446 |
| ## log_lik[56] | -1.8 | -1.5 | -1.3 | -1.5 | 0.2 | 1.00 | 2544 | 1709 |
| ## log_lik[57] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 2110 | 1541 |
| ## log_lik[58] | -0.8 | -0.7 | -0.6 | -0.7 | 0.1 | 1.00 | 2543 | 1543 |
| ## log_lik[59] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 2194 | 1571 |
| ## log_lik[60] | -1.0 | -0.8 | -0.7 | -0.8 | 0.1 | 1.00 | 2223 | 1764 |
| ## log_lik[61] | -1.0 | -0.8 | -0.7 | -0.8 | 0.1 | 1.00 | 1773 | 1570 |
| ## log_lik[62] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 1693 | 1019 |
| ## log_lik[63] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 2190 | 1464 |
| ## log_lik[64] | -0.9 | -0.8 | -0.7 | -0.8 | 0.1 | 1.00 | 1532 | 1543 |
| ## log_lik[65] | -0.9 | -0.7 | -0.7 | -0.8 | 0.1 | 1.00 | 1796 | 1330 |
| ## log_lik[66] | -0.8 | -0.7 | -0.6 | -0.7 | 0.1 | 1.00 | 2312 | 1638 |
| ## log_lik[67] | -2.6 | -2.2 | -1.7 | -2.2 | 0.3 | 1.00 | 2302 | 1781 |
| ## log_lik[68] | -0.8 | -0.7 | -0.6 | -0.7 | 0.1 | 1.00 | 1900 | 1626 |
| ## log_lik[69] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 1920 | 1527 |
| ## log_lik[70] | -2.8 | -2.1 | -1.6 | -2.1 | 0.4 | 1.00 | 2209 | 1797 |
| ## log_lik[71] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 2201 | 1635 |
| ## log_lik[72] | -0.9 | -0.8 | -0.7 | -0.8 | 0.1 | 1.00 | 2050 | 1856 |
| ## log_lik[73] | -0.7 | -0.7 | -0.6 | -0.7 | 0.0 | 1.00 | 2134 | 1548 |
| ## log_lik[74] | -0.7 | -0.6 | -0.6 | -0.7 | 0.0 | 1.00 | 1882 | 1378 |
| ## log_lik[75] | -1.2 | -1.0 | -0.8 | -1.0 | 0.1 | 1.00 | 1819 | 1711 |
| ## log_lik[76] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 2406 | 1401 |
| ## log_lik[77] | -0.7 | -0.7 | -0.6 | -0.7 | 0.0 | 1.00 | 2071 | 1410 |
| ## log_lik[78] | -3.0 | -2.6 | -2.3 | -2.6 | 0.2 | 1.00 | 1581 | 1552 |
| ## log_lik[79] | -0.7 | -0.6 | -0.6 | -0.7 | 0.0 | 1.00 | 1780 | 1424 |
| ## log_lik[80] | -0.9 | -0.7 | -0.6 | -0.7 | 0.1 | 1.00 | 2525 | 1741 |
| ## log_lik[81] | -1.0 | -0.9 | -0.7 | -0.9 | 0.1 | 1.00 | 2832 | 1544 |
| ## log_lik[82] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 1993 | 1126 |
| ## log_lik[83] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.01 | 1535 | 1443 |
| ## log_lik[84] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 2075 | 1307 |
| ## log_lik[85] | -0.9 | -0.8 | -0.7 | -0.8 | 0.0 | 1.00 | 2512 | 1893 |
| ## log_lik[86] | -0.7 | -0.6 | -0.5 | -0.6 | 0.0 | 1.00 | 2012 | 1270 |
| ## log_lik[87] | -2.1 | -1.5 | -1.1 | -1.6 | 0.3 | 1.00 | 1923 | 1315 |
| ## log_lik[88] | -1.5 | -1.1 | -0.8 | -1.1 | 0.2 | 1.00 | 1358 | 1237 |
| ## log_lik[89] | -1.7 | -1.4 | -1.2 | -1.4 | 0.2 | 1.00 | 2297 | 1731 |
| ## log_lik[90] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 1796 | 1307 |
| ## log_lik[91] | -1.9 | -1.6 | -1.3 | -1.6 | 0.2 | 1.00 | 1189 | 1384 |
| ## log_lik[92] | -0.8 | -0.7 | -0.6 | -0.7 | 0.1 | 1.00 | 2038 | 1297 |

| | | | | | | | | |
|-----------------|------|------|------|------|-----|------|------|------|
| ## log_lik[93] | -1.6 | -1.4 | -1.2 | -1.4 | 0.1 | 1.00 | 2782 | 1709 |
| ## log_lik[94] | -6.2 | -5.4 | -4.6 | -5.4 | 0.5 | 1.00 | 2491 | 1502 |
| ## log_lik[95] | -0.9 | -0.8 | -0.7 | -0.8 | 0.1 | 1.00 | 2651 | 1582 |
| ## log_lik[96] | -1.2 | -1.0 | -0.9 | -1.0 | 0.1 | 1.00 | 2488 | 1908 |
| ## log_lik[97] | -1.7 | -1.5 | -1.3 | -1.5 | 0.1 | 1.00 | 2481 | 1714 |
| ## log_lik[98] | -0.7 | -0.6 | -0.6 | -0.6 | 0.1 | 1.00 | 1688 | 1376 |
| ## log_lik[99] | -4.2 | -3.4 | -2.6 | -3.4 | 0.5 | 1.00 | 1666 | 1356 |
| ## log_lik[100] | -1.7 | -1.3 | -1.1 | -1.4 | 0.2 | 1.00 | 2302 | 1659 |
| ## log_lik[101] | -1.2 | -0.9 | -0.7 | -0.9 | 0.1 | 1.00 | 2325 | 1895 |
| ## log_lik[102] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 2043 | 1505 |
| ## log_lik[103] | -0.9 | -0.7 | -0.6 | -0.7 | 0.1 | 1.00 | 3076 | 1733 |
| ## log_lik[104] | -2.8 | -2.2 | -1.7 | -2.2 | 0.4 | 1.00 | 2231 | 1561 |
| ## log_lik[105] | -1.3 | -1.1 | -0.9 | -1.1 | 0.1 | 1.00 | 2994 | 1692 |
| ## log_lik[106] | -0.9 | -0.8 | -0.7 | -0.8 | 0.1 | 1.00 | 3212 | 1728 |
| ## log_lik[107] | -1.2 | -1.0 | -0.8 | -1.0 | 0.1 | 1.00 | 2572 | 1766 |
| ## log_lik[108] | -6.2 | -5.3 | -4.4 | -5.3 | 0.5 | 1.00 | 1713 | 1441 |
| ## log_lik[109] | -1.8 | -1.4 | -1.0 | -1.4 | 0.3 | 1.00 | 1566 | 1302 |
| ## log_lik[110] | -3.8 | -3.2 | -2.7 | -3.2 | 0.3 | 1.01 | 2333 | 1398 |
| ## log_lik[111] | -2.2 | -1.8 | -1.4 | -1.8 | 0.2 | 1.00 | 2130 | 1186 |
| ## log_lik[112] | -3.2 | -2.7 | -2.3 | -2.7 | 0.3 | 1.00 | 1683 | 1183 |
| ## log_lik[113] | -1.4 | -1.0 | -0.8 | -1.0 | 0.2 | 1.00 | 1649 | 1414 |
| ## log_lik[114] | -1.3 | -1.1 | -1.0 | -1.1 | 0.1 | 1.00 | 2877 | 1748 |
| ## log_lik[115] | -0.7 | -0.7 | -0.6 | -0.7 | 0.0 | 1.00 | 2356 | 1520 |
| ## log_lik[116] | -1.0 | -0.8 | -0.7 | -0.8 | 0.1 | 1.00 | 1736 | 1385 |
| ## log_lik[117] | -1.6 | -1.3 | -1.1 | -1.3 | 0.1 | 1.00 | 1446 | 1671 |
| ## log_lik[118] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 2223 | 1334 |
| ## log_lik[119] | -0.8 | -0.6 | -0.6 | -0.7 | 0.1 | 1.00 | 1903 | 1302 |
| ## log_lik[120] | -1.4 | -1.0 | -0.8 | -1.1 | 0.2 | 1.00 | 2099 | 1740 |
| ## log_lik[121] | -0.9 | -0.7 | -0.6 | -0.7 | 0.1 | 1.00 | 2354 | 1849 |
| ## log_lik[122] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 1906 | 1582 |
| ## log_lik[123] | -1.7 | -1.4 | -1.1 | -1.4 | 0.2 | 1.00 | 2199 | 1771 |
| ## log_lik[124] | -2.1 | -1.8 | -1.6 | -1.8 | 0.1 | 1.00 | 2068 | 1735 |
| ## log_lik[125] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 2071 | 1328 |
| ## log_lik[126] | -0.7 | -0.6 | -0.6 | -0.6 | 0.1 | 1.00 | 1749 | 1398 |
| ## log_lik[127] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 2053 | 1271 |
| ## log_lik[128] | -0.9 | -0.7 | -0.6 | -0.7 | 0.1 | 1.00 | 2439 | 1811 |
| ## log_lik[129] | -6.1 | -5.1 | -4.3 | -5.2 | 0.6 | 1.00 | 2000 | 1326 |
| ## log_lik[130] | -1.5 | -1.3 | -1.1 | -1.3 | 0.1 | 1.00 | 2759 | 1828 |
| ## log_lik[131] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 1940 | 1568 |
| ## log_lik[132] | -1.0 | -0.8 | -0.6 | -0.8 | 0.1 | 1.00 | 2575 | 1683 |
| ## log_lik[133] | -0.8 | -0.6 | -0.6 | -0.7 | 0.1 | 1.00 | 2255 | 1598 |
| ## log_lik[134] | -3.9 | -3.3 | -2.7 | -3.3 | 0.4 | 1.00 | 2134 | 1677 |
| ## log_lik[135] | -2.0 | -1.6 | -1.2 | -1.6 | 0.2 | 1.00 | 2259 | 1603 |
| ## log_lik[136] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 2049 | 1724 |
| ## log_lik[137] | -4.4 | -3.6 | -2.8 | -3.6 | 0.5 | 1.00 | 2326 | 1739 |
| ## log_lik[138] | -0.8 | -0.7 | -0.6 | -0.7 | 0.0 | 1.00 | 2186 | 1644 |
| ## log_lik[139] | -1.7 | -1.5 | -1.3 | -1.5 | 0.1 | 1.00 | 2565 | 1722 |
| ## log_lik[140] | -2.6 | -2.1 | -1.7 | -2.1 | 0.3 | 1.00 | 2095 | 1367 |
| ## log_lik[141] | -1.3 | -1.1 | -0.9 | -1.1 | 0.1 | 1.00 | 1525 | 1622 |
| ## log_lik[142] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 1793 | 1379 |
| ## log_lik[143] | -1.1 | -0.9 | -0.8 | -0.9 | 0.1 | 1.00 | 2111 | 1307 |
| ## log_lik[144] | -2.4 | -2.0 | -1.7 | -2.0 | 0.2 | 1.00 | 2110 | 1650 |
| ## log_lik[145] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 1624 | 1460 |
| ## log_lik[146] | -1.9 | -1.5 | -1.3 | -1.5 | 0.2 | 1.00 | 3243 | 1715 |

| | | | | | | | | |
|-----------------|------|------|------|------|-----|------|------|------|
| ## log_lik[147] | -3.5 | -3.0 | -2.6 | -3.0 | 0.3 | 1.00 | 2177 | 1673 |
| ## log_lik[148] | -1.5 | -1.3 | -1.2 | -1.3 | 0.1 | 1.00 | 2557 | 1402 |
| ## log_lik[149] | -2.8 | -2.5 | -2.3 | -2.5 | 0.2 | 1.01 | 2184 | 1457 |
| ## log_lik[150] | -3.9 | -3.4 | -3.1 | -3.4 | 0.2 | 1.00 | 2262 | 1468 |
| ## log_lik[151] | -1.4 | -1.3 | -1.1 | -1.3 | 0.1 | 1.00 | 1768 | 1436 |
| ## log_lik[152] | -0.8 | -0.7 | -0.6 | -0.7 | 0.1 | 1.00 | 2789 | 1302 |
| ## log_lik[153] | -1.5 | -1.3 | -1.1 | -1.3 | 0.1 | 1.00 | 2756 | 1784 |
| ## log_lik[154] | -1.5 | -1.2 | -1.0 | -1.2 | 0.2 | 1.00 | 2276 | 1572 |
| ## log_lik[155] | -2.2 | -1.9 | -1.7 | -1.9 | 0.1 | 1.00 | 2679 | 1649 |
| ## log_lik[156] | -0.8 | -0.7 | -0.6 | -0.7 | 0.1 | 1.00 | 2067 | 1786 |
| ## log_lik[157] | -0.9 | -0.7 | -0.6 | -0.7 | 0.1 | 1.00 | 1315 | 1499 |
| ## log_lik[158] | -1.3 | -1.0 | -0.8 | -1.1 | 0.1 | 1.00 | 1693 | 1741 |
| ## log_lik[159] | -1.4 | -1.1 | -0.9 | -1.1 | 0.2 | 1.00 | 2325 | 1677 |
| ## log_lik[160] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 2409 | 1498 |
| ## log_lik[161] | -0.9 | -0.8 | -0.7 | -0.8 | 0.1 | 1.00 | 3135 | 1755 |
| ## log_lik[162] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 2033 | 1220 |
| ## log_lik[163] | -1.0 | -0.8 | -0.7 | -0.8 | 0.1 | 1.00 | 3951 | 1658 |
| ## log_lik[164] | -0.7 | -0.7 | -0.6 | -0.7 | 0.0 | 1.00 | 3249 | 1516 |
| ## log_lik[165] | -2.1 | -1.7 | -1.4 | -1.7 | 0.2 | 1.00 | 2956 | 1690 |
| ## log_lik[166] | -0.8 | -0.7 | -0.6 | -0.7 | 0.1 | 1.00 | 2935 | 1990 |
| ## log_lik[167] | -1.1 | -1.0 | -0.8 | -1.0 | 0.1 | 1.00 | 3542 | 1674 |
| ## log_lik[168] | -6.8 | -6.0 | -5.4 | -6.0 | 0.4 | 1.00 | 2291 | 1428 |
| ## log_lik[169] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 2116 | 1511 |
| ## log_lik[170] | -4.4 | -3.8 | -3.2 | -3.8 | 0.4 | 1.00 | 2052 | 1459 |
| ## log_lik[171] | -1.9 | -1.5 | -1.2 | -1.5 | 0.2 | 1.00 | 2199 | 1116 |
| ## log_lik[172] | -1.6 | -1.3 | -1.1 | -1.3 | 0.2 | 1.00 | 2349 | 1313 |
| ## log_lik[173] | -2.3 | -1.9 | -1.5 | -1.9 | 0.3 | 1.00 | 2961 | 1433 |
| ## log_lik[174] | -1.6 | -1.4 | -1.3 | -1.4 | 0.1 | 1.00 | 2586 | 1916 |
| ## log_lik[175] | -1.3 | -1.1 | -1.0 | -1.1 | 0.1 | 1.00 | 2748 | 1760 |
| ## log_lik[176] | -0.9 | -0.8 | -0.7 | -0.8 | 0.1 | 1.00 | 2340 | 1825 |
| ## log_lik[177] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 1693 | 1450 |
| ## log_lik[178] | -0.8 | -0.7 | -0.7 | -0.7 | 0.0 | 1.00 | 2232 | 1693 |
| ## log_lik[179] | -1.8 | -1.6 | -1.4 | -1.6 | 0.1 | 1.00 | 2577 | 1569 |
| ## log_lik[180] | -1.0 | -0.9 | -0.8 | -0.9 | 0.1 | 1.00 | 2172 | 1435 |
| ## log_lik[181] | -1.8 | -1.4 | -1.2 | -1.5 | 0.2 | 1.00 | 1559 | 1268 |
| ## log_lik[182] | -1.9 | -1.7 | -1.5 | -1.7 | 0.1 | 1.00 | 2573 | 1582 |
| ## log_lik[183] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 2200 | 1367 |
| ## log_lik[184] | -0.8 | -0.7 | -0.6 | -0.7 | 0.0 | 1.00 | 2303 | 1793 |
| ## log_lik[185] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 2242 | 1435 |
| ## log_lik[186] | -0.6 | -0.6 | -0.5 | -0.6 | 0.0 | 1.00 | 1962 | 1322 |
| ## log_lik[187] | -0.9 | -0.7 | -0.6 | -0.7 | 0.1 | 1.00 | 1635 | 1635 |
| ## log_lik[188] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 1490 | 930 |
| ## log_lik[189] | -0.9 | -0.7 | -0.6 | -0.7 | 0.1 | 1.00 | 2023 | 1499 |
| ## log_lik[190] | -0.8 | -0.6 | -0.6 | -0.6 | 0.1 | 1.00 | 1640 | 1516 |
| ## log_lik[191] | -0.9 | -0.8 | -0.7 | -0.8 | 0.1 | 1.00 | 1985 | 1623 |
| ## log_lik[192] | -0.7 | -0.6 | -0.5 | -0.6 | 0.0 | 1.00 | 1995 | 1253 |
| ## log_lik[193] | -0.8 | -0.8 | -0.7 | -0.8 | 0.0 | 1.00 | 2591 | 1586 |
| ## log_lik[194] | -0.9 | -0.9 | -0.8 | -0.9 | 0.0 | 1.00 | 2303 | 1890 |
| ## log_lik[195] | -1.1 | -0.9 | -0.8 | -0.9 | 0.1 | 1.00 | 1829 | 1676 |
| ## log_lik[196] | -0.7 | -0.7 | -0.6 | -0.7 | 0.0 | 1.00 | 1729 | 1395 |
| ## log_lik[197] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 2184 | 1381 |
| ## log_lik[198] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 2072 | 1310 |
| ## log_lik[199] | -0.9 | -0.8 | -0.7 | -0.8 | 0.1 | 1.00 | 1866 | 1723 |
| ## log_lik[200] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 1982 | 1330 |

| | | | | | | | | |
|-----------------|------|------|------|------|-----|------|------|------|
| ## log_lik[201] | -1.7 | -1.5 | -1.3 | -1.5 | 0.1 | 1.00 | 2111 | 1548 |
| ## log_lik[202] | -0.9 | -0.8 | -0.7 | -0.8 | 0.0 | 1.00 | 2152 | 1696 |
| ## log_lik[203] | -1.2 | -1.0 | -0.9 | -1.0 | 0.1 | 1.00 | 2696 | 1743 |
| ## log_lik[204] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 2035 | 1313 |
| ## log_lik[205] | -0.7 | -0.7 | -0.6 | -0.7 | 0.0 | 1.00 | 2035 | 1445 |
| ## log_lik[206] | -0.7 | -0.6 | -0.5 | -0.6 | 0.0 | 1.00 | 1976 | 1325 |
| ## log_lik[207] | -0.8 | -0.7 | -0.7 | -0.7 | 0.0 | 1.00 | 1985 | 1670 |
| ## log_lik[208] | -0.7 | -0.6 | -0.5 | -0.6 | 0.0 | 1.00 | 1983 | 1311 |
| ## log_lik[209] | -1.2 | -1.0 | -0.9 | -1.0 | 0.1 | 1.00 | 1999 | 1759 |
| ## log_lik[210] | -1.0 | -0.9 | -0.8 | -0.9 | 0.1 | 1.00 | 2086 | 1711 |
| ## log_lik[211] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 2034 | 1593 |
| ## log_lik[212] | -0.8 | -0.7 | -0.6 | -0.7 | 0.0 | 1.00 | 2148 | 1718 |
| ## log_lik[213] | -1.8 | -1.5 | -1.2 | -1.5 | 0.2 | 1.00 | 1920 | 1562 |
| ## log_lik[214] | -1.1 | -0.9 | -0.8 | -0.9 | 0.1 | 1.00 | 2387 | 1613 |
| ## log_lik[215] | -1.3 | -1.0 | -0.8 | -1.0 | 0.2 | 1.00 | 1334 | 1448 |
| ## log_lik[216] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 2033 | 1568 |
| ## log_lik[217] | -1.0 | -0.9 | -0.8 | -0.9 | 0.1 | 1.00 | 2481 | 1905 |
| ## log_lik[218] | -0.8 | -0.7 | -0.6 | -0.7 | 0.1 | 1.00 | 1409 | 1749 |
| ## log_lik[219] | -1.8 | -1.5 | -1.3 | -1.5 | 0.1 | 1.00 | 2520 | 1840 |
| ## log_lik[220] | -1.1 | -0.8 | -0.6 | -0.8 | 0.1 | 1.00 | 1555 | 1464 |
| ## log_lik[221] | -0.8 | -0.7 | -0.6 | -0.7 | 0.1 | 1.00 | 2245 | 1763 |
| ## log_lik[222] | -2.2 | -2.0 | -1.8 | -2.0 | 0.1 | 1.00 | 1728 | 1637 |
| ## log_lik[223] | -0.8 | -0.7 | -0.6 | -0.7 | 0.0 | 1.00 | 1913 | 1723 |
| ## log_lik[224] | -0.7 | -0.7 | -0.6 | -0.7 | 0.0 | 1.00 | 2159 | 1527 |
| ## log_lik[225] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 1828 | 1579 |
| ## log_lik[226] | -0.9 | -0.8 | -0.7 | -0.8 | 0.1 | 1.00 | 2617 | 1995 |
| ## log_lik[227] | -0.7 | -0.7 | -0.6 | -0.7 | 0.0 | 1.00 | 2426 | 1831 |
| ## log_lik[228] | -0.8 | -0.7 | -0.6 | -0.7 | 0.1 | 1.00 | 2188 | 1700 |
| ## log_lik[229] | -1.2 | -1.1 | -0.9 | -1.1 | 0.1 | 1.00 | 1944 | 1974 |
| ## log_lik[230] | -0.8 | -0.7 | -0.7 | -0.7 | 0.0 | 1.00 | 2208 | 1712 |
| ## log_lik[231] | -0.8 | -0.7 | -0.6 | -0.7 | 0.0 | 1.00 | 2199 | 1715 |
| ## log_lik[232] | -0.8 | -0.7 | -0.7 | -0.7 | 0.0 | 1.00 | 1980 | 1708 |
| ## log_lik[233] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 1312 | 1499 |
| ## log_lik[234] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 1814 | 1445 |
| ## log_lik[235] | -1.3 | -1.2 | -1.0 | -1.2 | 0.1 | 1.00 | 2149 | 1812 |
| ## log_lik[236] | -1.1 | -0.9 | -0.8 | -0.9 | 0.1 | 1.00 | 1822 | 1738 |
| ## log_lik[237] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 2122 | 1495 |
| ## log_lik[238] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 2140 | 1312 |
| ## log_lik[239] | -0.8 | -0.7 | -0.6 | -0.7 | 0.0 | 1.00 | 2100 | 1759 |
| ## log_lik[240] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 2329 | 1470 |
| ## log_lik[241] | -1.1 | -0.9 | -0.8 | -1.0 | 0.1 | 1.00 | 2240 | 1918 |
| ## log_lik[242] | -2.4 | -2.0 | -1.7 | -2.0 | 0.2 | 1.00 | 2205 | 1837 |
| ## log_lik[243] | -1.0 | -0.9 | -0.8 | -0.9 | 0.1 | 1.00 | 2821 | 1765 |
| ## log_lik[244] | -0.9 | -0.8 | -0.7 | -0.8 | 0.1 | 1.00 | 2085 | 1880 |
| ## log_lik[245] | -0.7 | -0.7 | -0.6 | -0.7 | 0.0 | 1.00 | 2369 | 1670 |
| ## log_lik[246] | -1.1 | -1.0 | -0.8 | -1.0 | 0.1 | 1.00 | 2140 | 1893 |
| ## log_lik[247] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 1890 | 1625 |
| ## log_lik[248] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 1957 | 1423 |
| ## log_lik[249] | -1.8 | -1.6 | -1.3 | -1.6 | 0.2 | 1.00 | 2259 | 1949 |
| ## log_lik[250] | -0.8 | -0.7 | -0.6 | -0.7 | 0.1 | 1.00 | 2404 | 1860 |
| ## log_lik[251] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 2422 | 1672 |
| ## log_lik[252] | -0.9 | -0.8 | -0.7 | -0.8 | 0.1 | 1.00 | 2127 | 1755 |
| ## log_lik[253] | -1.3 | -1.0 | -0.8 | -1.0 | 0.1 | 1.00 | 1753 | 1711 |
| ## log_lik[254] | -1.4 | -1.2 | -1.1 | -1.2 | 0.1 | 1.00 | 2684 | 1770 |

| | | | | | | | | |
|-----------------|------|------|------|------|-----|------|------|------|
| ## log_lik[255] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 2424 | 1392 |
| ## log_lik[256] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 1273 | 1186 |
| ## log_lik[257] | -0.7 | -0.7 | -0.6 | -0.7 | 0.0 | 1.00 | 2068 | 1676 |
| ## log_lik[258] | -0.9 | -0.8 | -0.7 | -0.8 | 0.1 | 1.00 | 3454 | 1720 |
| ## log_lik[259] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 1869 | 1312 |
| ## log_lik[260] | -0.8 | -0.7 | -0.6 | -0.7 | 0.1 | 1.00 | 2192 | 1654 |
| ## log_lik[261] | -0.8 | -0.7 | -0.6 | -0.7 | 0.1 | 1.00 | 2285 | 1974 |
| ## log_lik[262] | -0.7 | -0.6 | -0.5 | -0.6 | 0.0 | 1.00 | 1959 | 1254 |
| ## log_lik[263] | -0.8 | -0.7 | -0.6 | -0.7 | 0.0 | 1.00 | 1907 | 1705 |
| ## log_lik[264] | -0.8 | -0.7 | -0.7 | -0.7 | 0.1 | 1.00 | 1952 | 1610 |
| ## log_lik[265] | -1.2 | -0.9 | -0.7 | -0.9 | 0.1 | 1.00 | 2408 | 1254 |
| ## log_lik[266] | -0.9 | -0.8 | -0.7 | -0.8 | 0.1 | 1.00 | 2495 | 1897 |
| ## log_lik[267] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 2070 | 1380 |
| ## log_lik[268] | -1.6 | -1.4 | -1.2 | -1.4 | 0.1 | 1.00 | 1982 | 1777 |
| ## log_lik[269] | -0.8 | -0.7 | -0.6 | -0.7 | 0.0 | 1.00 | 2127 | 1597 |
| ## log_lik[270] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 1968 | 1344 |
| ## log_lik[271] | -0.7 | -0.6 | -0.5 | -0.6 | 0.0 | 1.00 | 1964 | 1380 |
| ## log_lik[272] | -1.8 | -1.6 | -1.3 | -1.6 | 0.2 | 1.00 | 2397 | 1957 |
| ## log_lik[273] | -0.8 | -0.7 | -0.6 | -0.7 | 0.1 | 1.00 | 2267 | 1974 |
| ## log_lik[274] | -1.1 | -0.9 | -0.8 | -0.9 | 0.1 | 1.00 | 1732 | 1608 |
| ## log_lik[275] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 2016 | 1422 |
| ## log_lik[276] | -0.8 | -0.7 | -0.7 | -0.7 | 0.0 | 1.00 | 2326 | 1774 |
| ## log_lik[277] | -1.1 | -0.9 | -0.8 | -0.9 | 0.1 | 1.00 | 1920 | 1682 |
| ## log_lik[278] | -0.7 | -0.6 | -0.5 | -0.6 | 0.0 | 1.00 | 1973 | 1360 |
| ## log_lik[279] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 2102 | 1591 |
| ## log_lik[280] | -0.8 | -0.7 | -0.7 | -0.7 | 0.0 | 1.00 | 2229 | 1726 |
| ## log_lik[281] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 1988 | 1383 |
| ## log_lik[282] | -0.9 | -0.8 | -0.7 | -0.8 | 0.1 | 1.00 | 3024 | 1463 |
| ## log_lik[283] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 1828 | 1323 |
| ## log_lik[284] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 1687 | 1413 |
| ## log_lik[285] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 1676 | 1358 |
| ## log_lik[286] | -1.0 | -0.8 | -0.7 | -0.8 | 0.1 | 1.00 | 2372 | 1808 |
| ## log_lik[287] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 2090 | 1685 |
| ## log_lik[288] | -1.1 | -0.9 | -0.8 | -0.9 | 0.1 | 1.00 | 1884 | 1808 |
| ## log_lik[289] | -0.8 | -0.7 | -0.6 | -0.7 | 0.1 | 1.01 | 1407 | 1426 |
| ## log_lik[290] | -0.8 | -0.7 | -0.6 | -0.7 | 0.1 | 1.00 | 2515 | 1711 |
| ## log_lik[291] | -2.3 | -1.9 | -1.6 | -1.9 | 0.2 | 1.00 | 2930 | 1852 |
| ## log_lik[292] | -4.4 | -3.7 | -3.1 | -3.7 | 0.4 | 1.00 | 2644 | 1931 |
| ## log_lik[293] | -4.9 | -4.1 | -3.5 | -4.2 | 0.4 | 1.00 | 2860 | 1902 |
| ## log_lik[294] | -4.1 | -3.5 | -3.0 | -3.5 | 0.4 | 1.00 | 2653 | 1875 |
| ## log_lik[295] | -2.3 | -1.8 | -1.4 | -1.8 | 0.3 | 1.00 | 3087 | 1524 |
| ## log_lik[296] | -1.0 | -0.8 | -0.7 | -0.8 | 0.1 | 1.00 | 2378 | 1573 |
| ## log_lik[297] | -1.6 | -1.3 | -1.0 | -1.3 | 0.2 | 1.00 | 3207 | 1514 |
| ## log_lik[298] | -4.4 | -3.7 | -3.2 | -3.7 | 0.4 | 1.00 | 2988 | 1855 |
| ## log_lik[299] | -6.2 | -5.3 | -4.6 | -5.4 | 0.5 | 1.00 | 2686 | 1919 |
| ## log_lik[300] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 1908 | 1351 |
| ## log_lik[301] | -0.9 | -0.8 | -0.6 | -0.8 | 0.1 | 1.00 | 1450 | 1607 |
| ## log_lik[302] | -4.5 | -3.2 | -2.2 | -3.3 | 0.7 | 1.00 | 1541 | 1731 |
| ## log_lik[303] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 1792 | 1379 |
| ## log_lik[304] | -1.3 | -0.9 | -0.6 | -0.9 | 0.2 | 1.00 | 2227 | 1822 |
| ## log_lik[305] | -0.8 | -0.7 | -0.7 | -0.8 | 0.1 | 1.00 | 2729 | 1660 |
| ## log_lik[306] | -3.0 | -2.6 | -2.3 | -2.6 | 0.2 | 1.00 | 2622 | 1544 |
| ## log_lik[307] | -0.8 | -0.6 | -0.6 | -0.7 | 0.1 | 1.00 | 2767 | 1342 |
| ## log_lik[308] | -1.5 | -1.3 | -1.1 | -1.3 | 0.1 | 1.00 | 2389 | 1598 |

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|-----------------|------|------|------|------|-----|------|------|------|
| ## log_lik[309] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 2612 | 1752 |
| ## log_lik[310] | -1.4 | -1.1 | -0.9 | -1.1 | 0.2 | 1.00 | 2125 | 1534 |
| ## log_lik[311] | -0.9 | -0.8 | -0.7 | -0.8 | 0.1 | 1.00 | 2420 | 1614 |
| ## log_lik[312] | -0.7 | -0.7 | -0.6 | -0.7 | 0.0 | 1.00 | 3099 | 1592 |
| ## log_lik[313] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 2904 | 1518 |
| ## log_lik[314] | -2.3 | -2.0 | -1.8 | -2.0 | 0.2 | 1.00 | 2882 | 1631 |
| ## log_lik[315] | -0.8 | -0.7 | -0.6 | -0.7 | 0.1 | 1.00 | 2798 | 1748 |
| ## log_lik[316] | -1.5 | -1.3 | -1.2 | -1.3 | 0.1 | 1.00 | 2869 | 1609 |
| ## log_lik[317] | -1.4 | -1.2 | -1.0 | -1.2 | 0.1 | 1.00 | 2500 | 1731 |
| ## log_lik[318] | -0.8 | -0.6 | -0.6 | -0.7 | 0.1 | 1.00 | 1808 | 1456 |
| ## log_lik[319] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 1884 | 1382 |
| ## log_lik[320] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 2082 | 1379 |
| ## log_lik[321] | -1.0 | -0.8 | -0.7 | -0.9 | 0.1 | 1.00 | 1406 | 1359 |
| ## log_lik[322] | -2.4 | -2.0 | -1.7 | -2.1 | 0.2 | 1.00 | 2731 | 1523 |
| ## log_lik[323] | -3.8 | -3.4 | -3.0 | -3.4 | 0.3 | 1.00 | 2546 | 1697 |
| ## log_lik[324] | -2.1 | -1.8 | -1.6 | -1.8 | 0.2 | 1.00 | 3316 | 1569 |
| ## log_lik[325] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 2269 | 1521 |
| ## log_lik[326] | -1.1 | -1.0 | -0.9 | -1.0 | 0.1 | 1.00 | 1542 | 1636 |
| ## log_lik[327] | -1.0 | -0.9 | -0.8 | -0.9 | 0.1 | 1.00 | 1273 | 1296 |
| ## log_lik[328] | -1.3 | -1.0 | -0.8 | -1.0 | 0.1 | 1.00 | 2176 | 1807 |
| ## log_lik[329] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 2061 | 1304 |
| ## log_lik[330] | -0.7 | -0.6 | -0.6 | -0.6 | 0.1 | 1.00 | 1844 | 1585 |
| ## log_lik[331] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 2045 | 1674 |
| ## log_lik[332] | -1.0 | -0.9 | -0.7 | -0.9 | 0.1 | 1.00 | 2264 | 1756 |
| ## log_lik[333] | -3.1 | -2.3 | -1.6 | -2.3 | 0.5 | 1.00 | 1755 | 1562 |
| ## log_lik[334] | -1.6 | -1.1 | -0.7 | -1.1 | 0.3 | 1.00 | 1960 | 1558 |
| ## log_lik[335] | -1.0 | -0.8 | -0.7 | -0.8 | 0.1 | 1.00 | 1747 | 1859 |
| ## log_lik[336] | -1.5 | -1.2 | -1.0 | -1.2 | 0.2 | 1.00 | 2707 | 1645 |
| ## log_lik[337] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 1870 | 1500 |
| ## log_lik[338] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 2071 | 1341 |
| ## log_lik[339] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 2185 | 1298 |
| ## log_lik[340] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 2007 | 1688 |
| ## log_lik[341] | -1.3 | -1.1 | -0.9 | -1.1 | 0.1 | 1.00 | 2391 | 1804 |
| ## log_lik[342] | -0.9 | -0.7 | -0.6 | -0.7 | 0.1 | 1.00 | 1592 | 1645 |
| ## log_lik[343] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 2418 | 1487 |
| ## log_lik[344] | -0.8 | -0.7 | -0.7 | -0.7 | 0.0 | 1.00 | 2588 | 1455 |
| ## log_lik[345] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 1948 | 1258 |
| ## log_lik[346] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 1727 | 1301 |
| ## log_lik[347] | -0.8 | -0.7 | -0.7 | -0.7 | 0.0 | 1.00 | 2734 | 1691 |
| ## log_lik[348] | -0.9 | -0.7 | -0.6 | -0.7 | 0.1 | 1.00 | 2014 | 1449 |
| ## log_lik[349] | -1.6 | -1.4 | -1.2 | -1.4 | 0.1 | 1.00 | 1609 | 1399 |
| ## log_lik[350] | -1.4 | -1.1 | -0.8 | -1.1 | 0.2 | 1.00 | 2058 | 1933 |
| ## log_lik[351] | -1.9 | -1.7 | -1.5 | -1.7 | 0.1 | 1.00 | 2562 | 1817 |
| ## log_lik[352] | -1.2 | -1.1 | -0.9 | -1.1 | 0.1 | 1.00 | 1930 | 1689 |
| ## log_lik[353] | -0.8 | -0.6 | -0.6 | -0.6 | 0.1 | 1.00 | 2232 | 1749 |
| ## log_lik[354] | -1.5 | -1.3 | -1.2 | -1.3 | 0.1 | 1.00 | 2813 | 1492 |
| ## log_lik[355] | -1.0 | -0.9 | -0.8 | -0.9 | 0.1 | 1.00 | 2890 | 1777 |
| ## log_lik[356] | -0.8 | -0.7 | -0.6 | -0.7 | 0.1 | 1.00 | 2359 | 1857 |
| ## log_lik[357] | -1.1 | -0.9 | -0.8 | -0.9 | 0.1 | 1.00 | 2595 | 1752 |
| ## log_lik[358] | -0.8 | -0.7 | -0.6 | -0.7 | 0.1 | 1.00 | 2651 | 1556 |
| ## log_lik[359] | -1.1 | -0.9 | -0.8 | -0.9 | 0.1 | 1.00 | 2024 | 1545 |
| ## log_lik[360] | -0.9 | -0.8 | -0.7 | -0.8 | 0.1 | 1.00 | 2692 | 1673 |
| ## log_lik[361] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 1867 | 1475 |
| ## log_lik[362] | -1.0 | -0.8 | -0.7 | -0.8 | 0.1 | 1.00 | 3060 | 1771 |

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|-----------------|------|------|------|------|-----|------|------|------|
| ## log_lik[363] | -0.9 | -0.7 | -0.6 | -0.8 | 0.1 | 1.00 | 2095 | 1663 |
| ## log_lik[364] | -0.9 | -0.8 | -0.7 | -0.8 | 0.1 | 1.00 | 2226 | 1707 |
| ## log_lik[365] | -1.1 | -0.9 | -0.8 | -0.9 | 0.1 | 1.00 | 1941 | 1735 |
| ## log_lik[366] | -0.9 | -0.7 | -0.7 | -0.7 | 0.1 | 1.00 | 2266 | 1798 |
| ## log_lik[367] | -1.1 | -0.9 | -0.8 | -0.9 | 0.1 | 1.00 | 3173 | 1812 |
| ## log_lik[368] | -1.9 | -1.5 | -1.2 | -1.5 | 0.2 | 1.00 | 2767 | 1722 |
| ## log_lik[369] | -1.5 | -1.2 | -1.0 | -1.2 | 0.1 | 1.00 | 3148 | 1572 |
| ## log_lik[370] | -1.3 | -1.1 | -0.9 | -1.1 | 0.1 | 1.00 | 3331 | 1747 |
| ## log_lik[371] | -2.2 | -1.2 | -0.7 | -1.3 | 0.5 | 1.00 | 2323 | 1845 |
| ## log_lik[372] | -1.5 | -1.3 | -1.1 | -1.3 | 0.1 | 1.00 | 2105 | 1608 |
| ## log_lik[373] | -2.3 | -1.1 | -0.6 | -1.3 | 0.5 | 1.00 | 2322 | 1881 |
| ## log_lik[374] | -0.9 | -0.7 | -0.6 | -0.7 | 0.1 | 1.00 | 2408 | 1599 |
| ## log_lik[375] | -1.2 | -0.9 | -0.7 | -0.9 | 0.2 | 1.00 | 2675 | 1736 |
| ## log_lik[376] | -0.8 | -0.7 | -0.6 | -0.7 | 0.0 | 1.00 | 2316 | 1601 |
| ## log_lik[377] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 1820 | 1278 |
| ## log_lik[378] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 1729 | 1300 |
| ## log_lik[379] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 2196 | 1336 |
| ## log_lik[380] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 2265 | 1481 |
| ## log_lik[381] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 2145 | 1451 |
| ## log_lik[382] | -0.7 | -0.6 | -0.5 | -0.6 | 0.0 | 1.00 | 1912 | 1381 |
| ## log_lik[383] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 1865 | 1360 |
| ## log_lik[384] | -0.6 | -0.6 | -0.5 | -0.6 | 0.0 | 1.00 | 1894 | 1341 |
| ## log_lik[385] | -0.7 | -0.7 | -0.6 | -0.7 | 0.0 | 1.00 | 1933 | 1358 |
| ## log_lik[386] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 1588 | 1206 |
| ## log_lik[387] | -1.1 | -0.9 | -0.7 | -0.9 | 0.1 | 1.00 | 2156 | 1580 |
| ## log_lik[388] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 2217 | 1252 |
| ## log_lik[389] | -1.0 | -0.8 | -0.7 | -0.8 | 0.1 | 1.00 | 2355 | 1454 |
| ## log_lik[390] | -1.0 | -0.8 | -0.6 | -0.8 | 0.1 | 1.00 | 1587 | 1459 |
| ## log_lik[391] | -0.8 | -0.7 | -0.6 | -0.7 | 0.0 | 1.00 | 2410 | 1486 |
| ## log_lik[392] | -0.8 | -0.7 | -0.6 | -0.7 | 0.1 | 1.00 | 1826 | 1593 |
| ## log_lik[393] | -2.1 | -1.6 | -1.3 | -1.6 | 0.2 | 1.00 | 1975 | 1488 |
| ## log_lik[394] | -1.6 | -1.3 | -1.1 | -1.3 | 0.2 | 1.00 | 1745 | 1550 |
| ## log_lik[395] | -1.6 | -1.2 | -0.9 | -1.2 | 0.2 | 1.00 | 1331 | 1342 |
| ## log_lik[396] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 1564 | 1468 |
| ## log_lik[397] | -0.9 | -0.7 | -0.6 | -0.7 | 0.1 | 1.00 | 1823 | 1675 |
| ## log_lik[398] | -0.8 | -0.7 | -0.6 | -0.7 | 0.1 | 1.00 | 2267 | 1736 |
| ## log_lik[399] | -0.8 | -0.7 | -0.6 | -0.7 | 0.1 | 1.00 | 1684 | 1575 |
| ## log_lik[400] | -2.1 | -1.7 | -1.4 | -1.7 | 0.2 | 1.00 | 1751 | 1603 |
| ## log_lik[401] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 1858 | 1539 |
| ## log_lik[402] | -1.3 | -0.9 | -0.7 | -0.9 | 0.2 | 1.00 | 1672 | 1596 |
| ## log_lik[403] | -2.1 | -1.5 | -1.0 | -1.5 | 0.3 | 1.00 | 1684 | 1582 |
| ## log_lik[404] | -0.8 | -0.7 | -0.7 | -0.7 | 0.0 | 1.00 | 1790 | 1344 |
| ## log_lik[405] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 2065 | 1561 |
| ## log_lik[406] | -1.3 | -1.1 | -0.9 | -1.1 | 0.1 | 1.00 | 1668 | 1606 |
| ## log_lik[407] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 1780 | 1394 |
| ## log_lik[408] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 1903 | 1462 |
| ## log_lik[409] | -1.4 | -1.1 | -0.9 | -1.1 | 0.1 | 1.00 | 1721 | 1683 |
| ## log_lik[410] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 2065 | 1315 |
| ## log_lik[411] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 2134 | 1536 |
| ## log_lik[412] | -0.8 | -0.7 | -0.6 | -0.7 | 0.1 | 1.00 | 2179 | 1682 |
| ## log_lik[413] | -0.9 | -0.8 | -0.7 | -0.8 | 0.1 | 1.00 | 1846 | 1698 |
| ## log_lik[414] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 2104 | 1424 |
| ## log_lik[415] | -1.8 | -1.6 | -1.4 | -1.6 | 0.1 | 1.00 | 2373 | 1738 |
| ## log_lik[416] | -1.0 | -0.8 | -0.7 | -0.8 | 0.1 | 1.00 | 1513 | 1662 |

| | | | | | | | | |
|-----------------|------|------|------|------|-----|------|------|------|
| ## log_lik[417] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 1676 | 1355 |
| ## log_lik[418] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 2260 | 1879 |
| ## log_lik[419] | -0.7 | -0.7 | -0.6 | -0.7 | 0.0 | 1.00 | 2052 | 1690 |
| ## log_lik[420] | -0.8 | -0.7 | -0.7 | -0.7 | 0.1 | 1.00 | 1837 | 1569 |
| ## log_lik[421] | -0.8 | -0.7 | -0.6 | -0.7 | 0.0 | 1.00 | 2591 | 1800 |
| ## log_lik[422] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 2140 | 1701 |
| ## log_lik[423] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 2058 | 1538 |
| ## log_lik[424] | -1.1 | -1.0 | -0.9 | -1.0 | 0.1 | 1.00 | 2317 | 1757 |
| ## log_lik[425] | -1.0 | -0.9 | -0.8 | -0.9 | 0.1 | 1.00 | 1645 | 1678 |
| ## log_lik[426] | -0.9 | -0.8 | -0.7 | -0.8 | 0.1 | 1.00 | 1972 | 1825 |
| ## log_lik[427] | -0.9 | -0.8 | -0.7 | -0.8 | 0.0 | 1.00 | 2359 | 1852 |
| ## log_lik[428] | -0.7 | -0.7 | -0.6 | -0.7 | 0.0 | 1.00 | 1765 | 1610 |
| ## log_lik[429] | -0.7 | -0.6 | -0.5 | -0.6 | 0.0 | 1.00 | 1875 | 1277 |
| ## log_lik[430] | -0.8 | -0.7 | -0.7 | -0.7 | 0.1 | 1.00 | 1587 | 1670 |
| ## log_lik[431] | -9.1 | -7.6 | -6.2 | -7.6 | 0.9 | 1.00 | 2035 | 1205 |
| ## log_lik[432] | -0.8 | -0.7 | -0.6 | -0.7 | 0.0 | 1.00 | 2005 | 1848 |
| ## log_lik[433] | -2.4 | -2.2 | -1.9 | -2.2 | 0.2 | 1.00 | 2053 | 1432 |
| ## log_lik[434] | -1.4 | -1.2 | -1.0 | -1.2 | 0.1 | 1.00 | 1316 | 1392 |
| ## log_lik[435] | -2.4 | -2.0 | -1.8 | -2.0 | 0.2 | 1.00 | 1710 | 1483 |
| ## log_lik[436] | -1.1 | -0.9 | -0.7 | -0.9 | 0.1 | 1.00 | 2733 | 1529 |
| ## log_lik[437] | -0.8 | -0.7 | -0.6 | -0.7 | 0.0 | 1.00 | 2138 | 1878 |
| ## log_lik[438] | -1.8 | -0.8 | -0.6 | -0.9 | 0.4 | 1.00 | 2045 | 1545 |
| ## log_lik[439] | -0.9 | -0.8 | -0.7 | -0.8 | 0.1 | 1.00 | 2054 | 1600 |
| ## log_lik[440] | -4.8 | -4.2 | -3.7 | -4.2 | 0.3 | 1.00 | 2199 | 1746 |
| ## log_lik[441] | -1.3 | -1.1 | -0.9 | -1.1 | 0.1 | 1.00 | 2485 | 1645 |
| ## log_lik[442] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 2346 | 1440 |
| ## log_lik[443] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 2276 | 1337 |
| ## log_lik[444] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 1701 | 1467 |
| ## log_lik[445] | -1.8 | -1.5 | -1.3 | -1.5 | 0.2 | 1.00 | 2140 | 1797 |
| ## log_lik[446] | -1.4 | -1.2 | -1.1 | -1.2 | 0.1 | 1.00 | 2173 | 1726 |
| ## log_lik[447] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 1869 | 1297 |
| ## log_lik[448] | -1.2 | -1.0 | -0.9 | -1.0 | 0.1 | 1.00 | 2423 | 1509 |
| ## log_lik[449] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 1895 | 1265 |
| ## log_lik[450] | -0.7 | -0.7 | -0.6 | -0.7 | 0.0 | 1.00 | 1850 | 1606 |
| ## log_lik[451] | -0.8 | -0.7 | -0.6 | -0.7 | 0.0 | 1.00 | 2518 | 1735 |
| ## log_lik[452] | -1.0 | -0.8 | -0.7 | -0.8 | 0.1 | 1.00 | 1420 | 1470 |
| ## log_lik[453] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 1968 | 1499 |
| ## log_lik[454] | -1.2 | -1.0 | -0.7 | -1.0 | 0.2 | 1.00 | 1984 | 1717 |
| ## log_lik[455] | -1.4 | -1.2 | -1.0 | -1.2 | 0.1 | 1.00 | 2097 | 1712 |
| ## log_lik[456] | -0.8 | -0.7 | -0.6 | -0.7 | 0.1 | 1.00 | 1796 | 1506 |
| ## log_lik[457] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 1425 | 1172 |
| ## log_lik[458] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 2095 | 1750 |
| ## log_lik[459] | -1.6 | -1.2 | -1.0 | -1.3 | 0.2 | 1.00 | 1501 | 1548 |
| ## log_lik[460] | -0.7 | -0.6 | -0.5 | -0.6 | 0.0 | 1.00 | 2022 | 1324 |
| ## log_lik[461] | -1.4 | -1.2 | -1.1 | -1.2 | 0.1 | 1.00 | 3208 | 1673 |
| ## log_lik[462] | -1.5 | -1.1 | -0.8 | -1.1 | 0.2 | 1.00 | 2181 | 1299 |
| ## log_lik[463] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 2285 | 1315 |
| ## log_lik[464] | -0.8 | -0.7 | -0.6 | -0.7 | 0.1 | 1.00 | 2524 | 1776 |
| ## log_lik[465] | -1.5 | -1.3 | -1.2 | -1.3 | 0.1 | 1.00 | 2809 | 1610 |
| ## log_lik[466] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 1508 | 1352 |
| ## log_lik[467] | -1.0 | -0.8 | -0.7 | -0.8 | 0.1 | 1.00 | 2005 | 1454 |
| ## log_lik[468] | -1.0 | -0.8 | -0.7 | -0.8 | 0.1 | 1.00 | 2369 | 1597 |
| ## log_lik[469] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 1773 | 1174 |
| ## log_lik[470] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 1961 | 1547 |

| | | | | | | | | |
|-----------------|-------|------|------|------|-----|------|------|------|
| ## log_lik[471] | -2.1 | -1.6 | -1.3 | -1.7 | 0.2 | 1.00 | 1171 | 1216 |
| ## log_lik[472] | -3.3 | -2.5 | -1.8 | -2.5 | 0.4 | 1.00 | 1724 | 1407 |
| ## log_lik[473] | -0.7 | -0.6 | -0.5 | -0.6 | 0.0 | 1.00 | 2046 | 1374 |
| ## log_lik[474] | -0.8 | -0.7 | -0.6 | -0.7 | 0.1 | 1.00 | 1749 | 1552 |
| ## log_lik[475] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.01 | 2238 | 1509 |
| ## log_lik[476] | -1.3 | -1.1 | -0.9 | -1.1 | 0.1 | 1.00 | 3128 | 1611 |
| ## log_lik[477] | -1.3 | -1.0 | -0.8 | -1.0 | 0.1 | 1.00 | 2313 | 1733 |
| ## log_lik[478] | -4.8 | -4.3 | -3.8 | -4.3 | 0.3 | 1.00 | 2896 | 1629 |
| ## log_lik[479] | -0.9 | -0.8 | -0.7 | -0.8 | 0.1 | 1.00 | 2205 | 1646 |
| ## log_lik[480] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 2473 | 1504 |
| ## log_lik[481] | -1.0 | -0.8 | -0.7 | -0.9 | 0.1 | 1.00 | 2189 | 1753 |
| ## log_lik[482] | -0.9 | -0.8 | -0.7 | -0.8 | 0.1 | 1.00 | 2341 | 1769 |
| ## log_lik[483] | -1.6 | -1.3 | -1.1 | -1.3 | 0.1 | 1.00 | 2570 | 1849 |
| ## log_lik[484] | -2.4 | -2.1 | -1.8 | -2.1 | 0.2 | 1.00 | 2643 | 1455 |
| ## log_lik[485] | -2.7 | -2.1 | -1.7 | -2.2 | 0.3 | 1.00 | 1038 | 1199 |
| ## log_lik[486] | -10.3 | -9.1 | -8.0 | -9.2 | 0.7 | 1.00 | 2005 | 1261 |
| ## log_lik[487] | -1.0 | -0.8 | -0.6 | -0.8 | 0.1 | 1.00 | 2243 | 1626 |
| ## log_lik[488] | -3.7 | -3.0 | -2.4 | -3.0 | 0.4 | 1.00 | 1375 | 1430 |
| ## log_lik[489] | -1.2 | -1.1 | -0.9 | -1.1 | 0.1 | 1.00 | 1968 | 1605 |
| ## log_lik[490] | -1.2 | -1.0 | -0.9 | -1.0 | 0.1 | 1.00 | 2797 | 1710 |
| ## log_lik[491] | -3.3 | -2.9 | -2.5 | -2.9 | 0.3 | 1.00 | 2381 | 1756 |
| ## log_lik[492] | -1.1 | -0.9 | -0.7 | -0.9 | 0.1 | 1.00 | 1485 | 1579 |
| ## log_lik[493] | -0.8 | -0.7 | -0.6 | -0.7 | 0.0 | 1.00 | 2352 | 1807 |
| ## log_lik[494] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 1784 | 1196 |
| ## log_lik[495] | -0.7 | -0.7 | -0.6 | -0.7 | 0.0 | 1.00 | 2014 | 1445 |
| ## log_lik[496] | -0.6 | -0.6 | -0.5 | -0.6 | 0.0 | 1.00 | 1992 | 1329 |
| ## log_lik[497] | -1.2 | -1.1 | -1.0 | -1.1 | 0.1 | 1.00 | 2406 | 1837 |
| ## log_lik[498] | -1.3 | -1.1 | -1.0 | -1.1 | 0.1 | 1.00 | 2653 | 1683 |
| ## log_lik[499] | -0.7 | -0.7 | -0.6 | -0.7 | 0.0 | 1.00 | 2524 | 1871 |
| ## log_lik[500] | -0.8 | -0.7 | -0.6 | -0.7 | 0.1 | 1.00 | 2241 | 1690 |
| ## log_lik[501] | -1.4 | -1.3 | -1.1 | -1.3 | 0.1 | 1.00 | 2226 | 1840 |
| ## log_lik[502] | -1.1 | -1.0 | -0.9 | -1.0 | 0.1 | 1.00 | 1871 | 1903 |
| ## log_lik[503] | -1.0 | -0.9 | -0.8 | -0.9 | 0.1 | 1.00 | 2064 | 1820 |
| ## log_lik[504] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 2040 | 1339 |
| ## log_lik[505] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 2747 | 1465 |
| ## log_lik[506] | -0.8 | -0.7 | -0.7 | -0.7 | 0.1 | 1.00 | 2861 | 1736 |
| ## log_lik[507] | -0.8 | -0.7 | -0.6 | -0.7 | 0.0 | 1.00 | 2752 | 1740 |
| ## log_lik[508] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 2288 | 1351 |
| ## log_lik[509] | -1.0 | -0.9 | -0.8 | -0.9 | 0.1 | 1.00 | 2088 | 1747 |
| ## log_lik[510] | -1.0 | -0.9 | -0.7 | -0.9 | 0.1 | 1.00 | 2281 | 1880 |
| ## log_lik[511] | -0.8 | -0.7 | -0.6 | -0.7 | 0.0 | 1.00 | 2373 | 1800 |
| ## log_lik[512] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 1859 | 1390 |
| ## log_lik[513] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 2353 | 1349 |
| ## log_lik[514] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 1985 | 1351 |
| ## log_lik[515] | -1.4 | -1.2 | -0.9 | -1.2 | 0.2 | 1.00 | 3152 | 1806 |
| ## log_lik[516] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 1859 | 1279 |
| ## log_lik[517] | -0.9 | -0.8 | -0.7 | -0.8 | 0.1 | 1.00 | 3460 | 1720 |
| ## log_lik[518] | -0.7 | -0.6 | -0.6 | -0.6 | 0.0 | 1.00 | 1624 | 1201 |
| ## log_lik[519] | -1.9 | -1.6 | -1.4 | -1.7 | 0.1 | 1.00 | 3035 | 1690 |
| ## log_lik[520] | -0.9 | -0.8 | -0.7 | -0.8 | 0.1 | 1.00 | 3381 | 1690 |
| ## log_lik[521] | -0.8 | -0.7 | -0.6 | -0.7 | 0.1 | 1.00 | 2296 | 1697 |
| ## log_lik[522] | -0.8 | -0.7 | -0.7 | -0.7 | 0.1 | 1.00 | 3139 | 1888 |
| ## log_lik[523] | -1.9 | -1.6 | -1.3 | -1.6 | 0.2 | 1.00 | 1747 | 1727 |
| ## log_lik[524] | -2.6 | -2.3 | -1.9 | -2.3 | 0.2 | 1.00 | 2674 | 1789 |

```

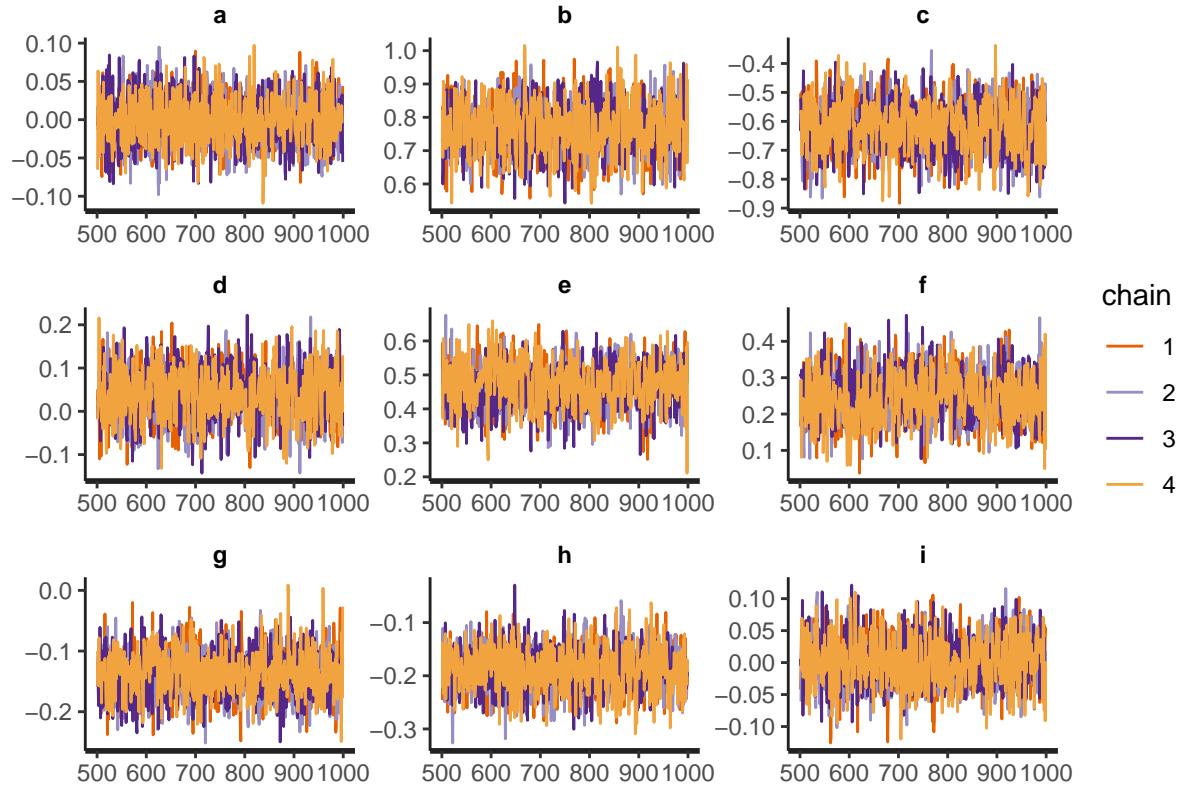
## log_lik[525] -1.3 -1.1 -1.0 -1.1 0.1 1.00 2189 1735
## log_lik[526] -0.9 -0.7 -0.7 -0.7 0.1 1.01 1692 1601
## log_lik[527] -0.7 -0.7 -0.6 -0.7 0.0 1.00 1747 1385
## log_lik[528] -0.7 -0.6 -0.6 -0.6 0.0 1.00 1979 1356
## log_lik[529] -1.1 -1.0 -0.9 -1.0 0.1 1.00 2856 1554
## log_lik[530] -1.0 -0.7 -0.6 -0.7 0.1 1.00 2469 1687
## log_lik[531] -2.0 -1.6 -1.3 -1.6 0.2 1.00 2143 1848
## log_lik[532] -1.5 -1.3 -1.1 -1.3 0.1 1.00 2342 1676
## log_lik[533] -0.7 -0.6 -0.6 -0.6 0.0 1.00 2193 1881
## log_lik[534] -1.0 -0.9 -0.7 -0.9 0.1 1.00 2828 1696
## log_lik[535] -2.3 -1.9 -1.6 -1.9 0.2 1.00 2827 1795
## log_lik[536] -1.1 -0.9 -0.8 -0.9 0.1 1.00 3018 1823
## log_lik[537] -0.8 -0.7 -0.6 -0.7 0.0 1.00 2773 1784
## log_lik[538] -2.8 -2.4 -2.1 -2.5 0.2 1.00 2372 1504
## log_lik[539] -0.7 -0.6 -0.6 -0.6 0.0 1.00 1541 1283
## log_lik[540] -1.2 -1.1 -0.9 -1.1 0.1 1.00 1889 1766
## log_lik[541] -0.7 -0.6 -0.6 -0.6 0.0 1.00 2079 1420
## log_lik[542] -0.7 -0.6 -0.6 -0.6 0.0 1.00 2150 1507
## log_lik[543] -1.2 -1.1 -1.0 -1.1 0.1 1.00 1586 1572
## log_lik[544] -0.7 -0.6 -0.6 -0.6 0.0 1.00 1907 1321
## log_lik[545] -0.7 -0.6 -0.6 -0.6 0.0 1.00 1985 1429
## log_lik[546] -1.7 -1.5 -1.3 -1.5 0.1 1.00 2077 2005
## lp__ -100.4 -95.8 -93.0 -96.1 2.3 1.00 969 1249
##
## For each parameter, Bulk_ESS and Tail_ESS are crude measures of
## effective sample size for bulk and tail quantities respectively (an ESS > 100
## per chain is considered good), and Rhat is the potential scale reduction
## factor on rank normalized split chains (at convergence, Rhat <= 1.05).

```

6) How to the Stan model was run

that is, what options were used. This is also more clear as combination of textual explanation and the actual code line.

```
#mcmc_trace(as.array(model_simple), pars = c("a", "b", "c", "d", "e", "f", "g", "h", "i"), facet_args = list(nr
traceplot(model_simple, pars=c("a","b","c","d","e","f","g","h","i")))
```



7) Convergence diagnostics

($R^\hat{}$, ESS, divergences) and what was done if the convergence was not good with the first try.

1 traceplot-done 2 rhat - done 3 neff- done

```
neff=summary(model_simple)$summary[, 'n_eff']
val=neff/1000
#print(val)
which(val < 0.01)
```

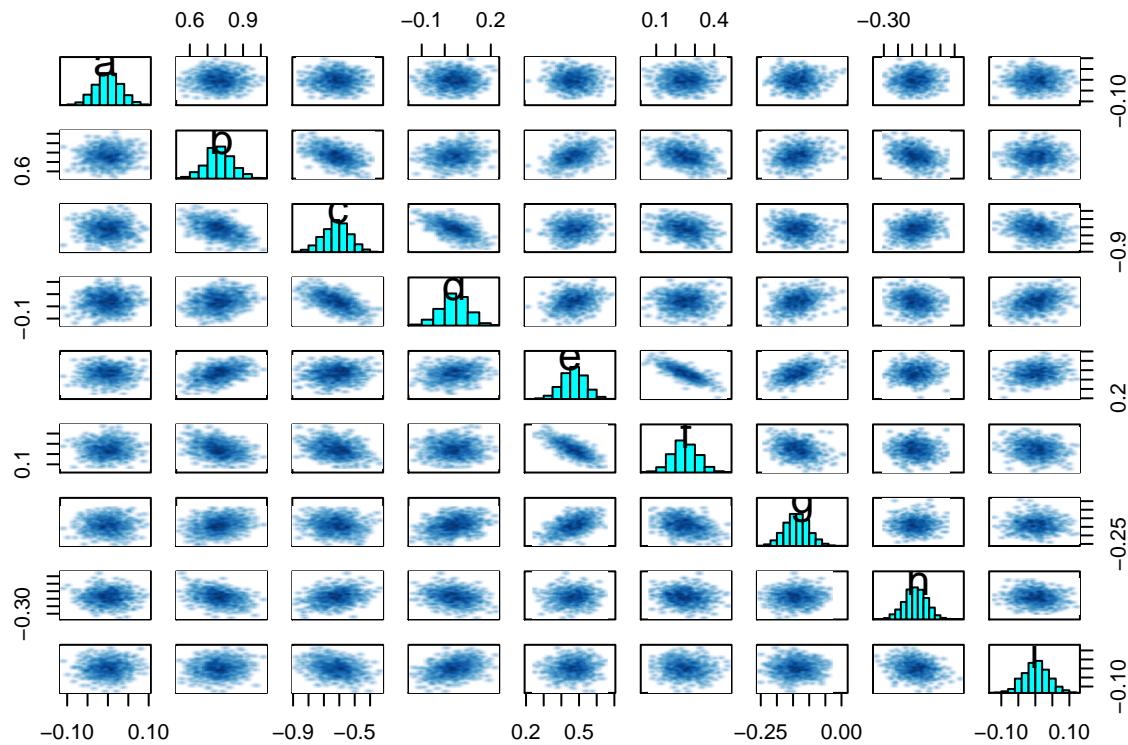
```
## named integer(0)
```

samples/ total iterations > 0.01, this means samples are not biased and true effect of sample size is not overestimated

4) Bulk ESS and tail ess over 100 for all the parameters

5) divergences

```
pairs(model_simple,pars=c("a","b","c","d","e","f","g","h","i"))
```



```
get_num_divergent(model_simple)
```

```
## [1] 0
```

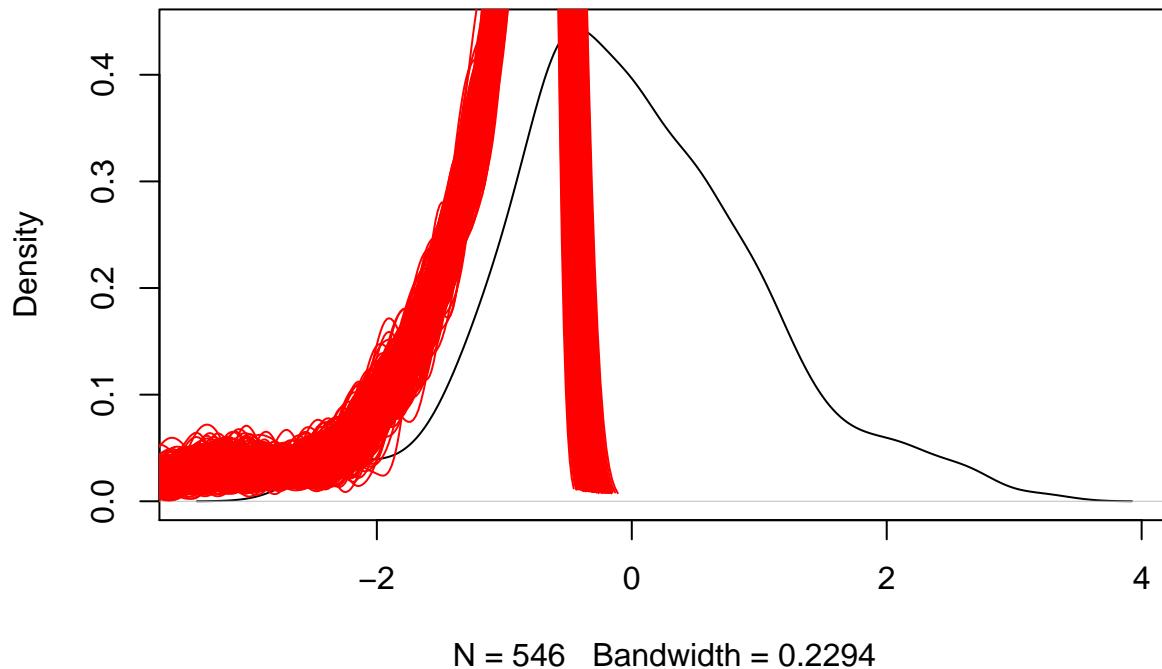
No divergences in the pairplot

8) Posterior predictive checks

and what was done to improve the model.

```
plot(density(QSAR$quantitative_response[,1]))
params<-extract(model_simple)
for (ind in 1:n)
{
  lines(density(params$log_lik[ind,]), col='red');
```

```
density.default(x = QSAR$quantitative_response[, 1])
```



9) Model comparison

(e.g. with LOO-CV).

```
library(loo)

## This is loo version 2.3.1
## - Online documentation and vignettes at mc-stan.org/loo
## - As of v2.0.0 loo defaults to 1 core but we recommend using as many as possible. Use the 'cores' arg
##
## Attaching package: 'loo'
## The following object is masked from 'package:rstan':
## 
##     loo
loo_model_simple <- loo(extract_log_lik(model_simple))

## Warning: Relative effective sample sizes ('r_eff' argument) not specified.
## For models fit with MCMC, the reported PSIS effective sample sizes and
## MCSE estimates will be over-optimistic.

## Warning: Some Pareto k diagnostic values are slightly high. See help('pareto-k-diagnostic') for details
loo_model_simple

##
```

```

## Computed from 2000 by 546 log-likelihood matrix
##
##           Estimate    SE
## elpd_loo     -604.0 21.3
## p_loo        12.4   1.4
## looic      1208.1 42.6
## -----
## Monte Carlo SE of elpd_loo is 0.1.
##
## Pareto k diagnostic values:
##                               Count Pct.    Min. n_eff
## (-Inf, 0.5]    (good)    545 99.8%    909
## (0.5, 0.7]    (ok)       1  0.2%    907
## (0.7, 1]      (bad)      0  0.0%    <NA>
## (1, Inf)     (very bad) 0  0.0%    <NA>
##
## All Pareto k estimates are ok (k < 0.7).
## See help('pareto-k-diagnostic') for details.

```

10) Predictive performance assessment

if applicable (e.g. classification accuracy) and evaluation of practical usefulness of the accuracy.

11) Sensitivity analysis

with respect to prior choices (i.e. checking whether the result changes a lot if prior is changed)

12) Discussion of issues and potential improvements.

13) Conclusion

what was learned from the data analysis.

14) Self-reflection of what the group learned while making the project.