

Final Report: Election Prediction

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Introduction

Data Description

In literature, election prediction relies on polling data as well as the fundamentals, which are economic indicators (The Economist, 2020) and voter turnout by demographic groups *cite in Reference*. To forecast the outcomes of presidential election, senate election and house election (for North Carolina only), we obtained 2020 presidential polling data from *The Economist*, 2020 senate and house polling data as well as partisan lean data from *FiveThirtyEight*.

The fundamentals data were retrieved from various online sources, including Andrew Gelman's presidential election prediction model Github repository (for correlation across states and historical incumbent party's June approval ratings), Federal Reserve Economic Data (for second quarter real income growth), and NC Board of Elections website (for 2020 NC registered voter demographics). Please refer to Appendix B for a detailed description of all data sets used.

Appendix B stuff

Presidential Election Model:

- **2020 US presidential election polls - all_polls.csv**: 2020 U.S. Presidential Election Polls compiled by *The Economist*, publicly available at <https://projects.economist.com/us-2020-forecast/president/how-this-works>.
- **partisan_leans_538.csv**: effect of partisan lean on the Democratic candidate's presidential election vote share in each state. Available at <https://github.com/fivethirtyeight/data/tree/master/partisan-lean>.
- **abramowitz_data.csv**: downloaded from Andrew Gelman's Github repository on 2020 Presidential Election. This data set contains information on each 1948-2016 election year's 2nd quarter GDP performance, incumbent party's June approval rating and incumbent party's vote share. Available at <https://github.com/TheEconomist/us-potus-model>.
- **states_cov_matrix_full.csv**: covariance matrix of states which take into account similarity between states based on their demographic and political profiles. Retrieved from Andrew Gelman's Github repository on 2020 Presidential Election.
- **abramowitz_additional.csv**: Supplemented **abramowitz_data.csv** with the corresponding year's 2nd quarter real income growth, 3rd quarter real income growth (data from *FRED* <https://fred.stlouisfed.org/series/A067RO1Q156NBEA>) and S&P stock performance 3 months prior to the election (data from <https://www.multpl.com/s-p-500-historical-prices/table/by-month>).

Senate Election Model:

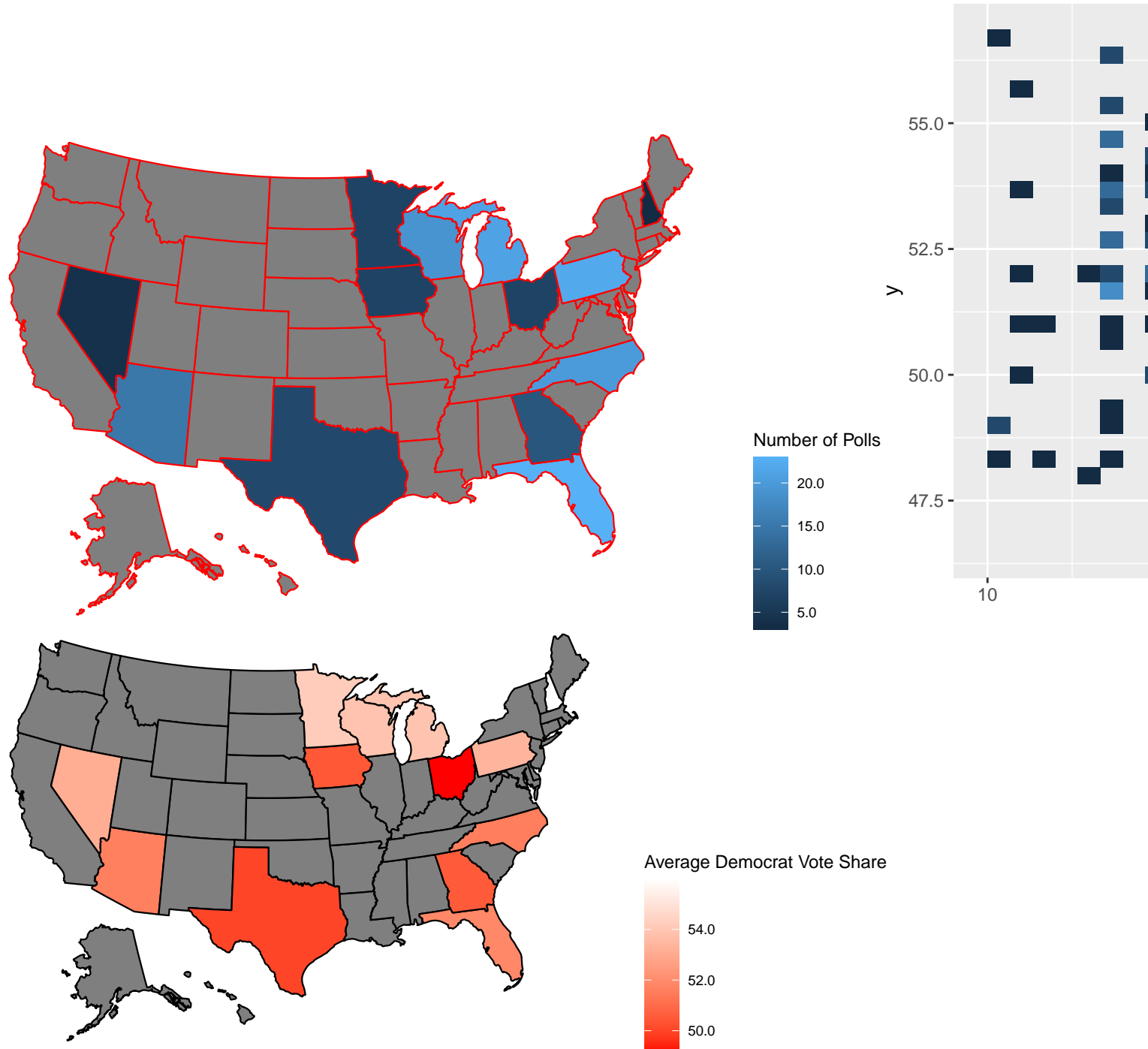
- **senate_polls.csv**: *this is from course website* https://projects.fivethirtyeight.com/polls-page/senate_polls.csv
- **partisan_leans_538.csv**: same as the data set in presidential election model

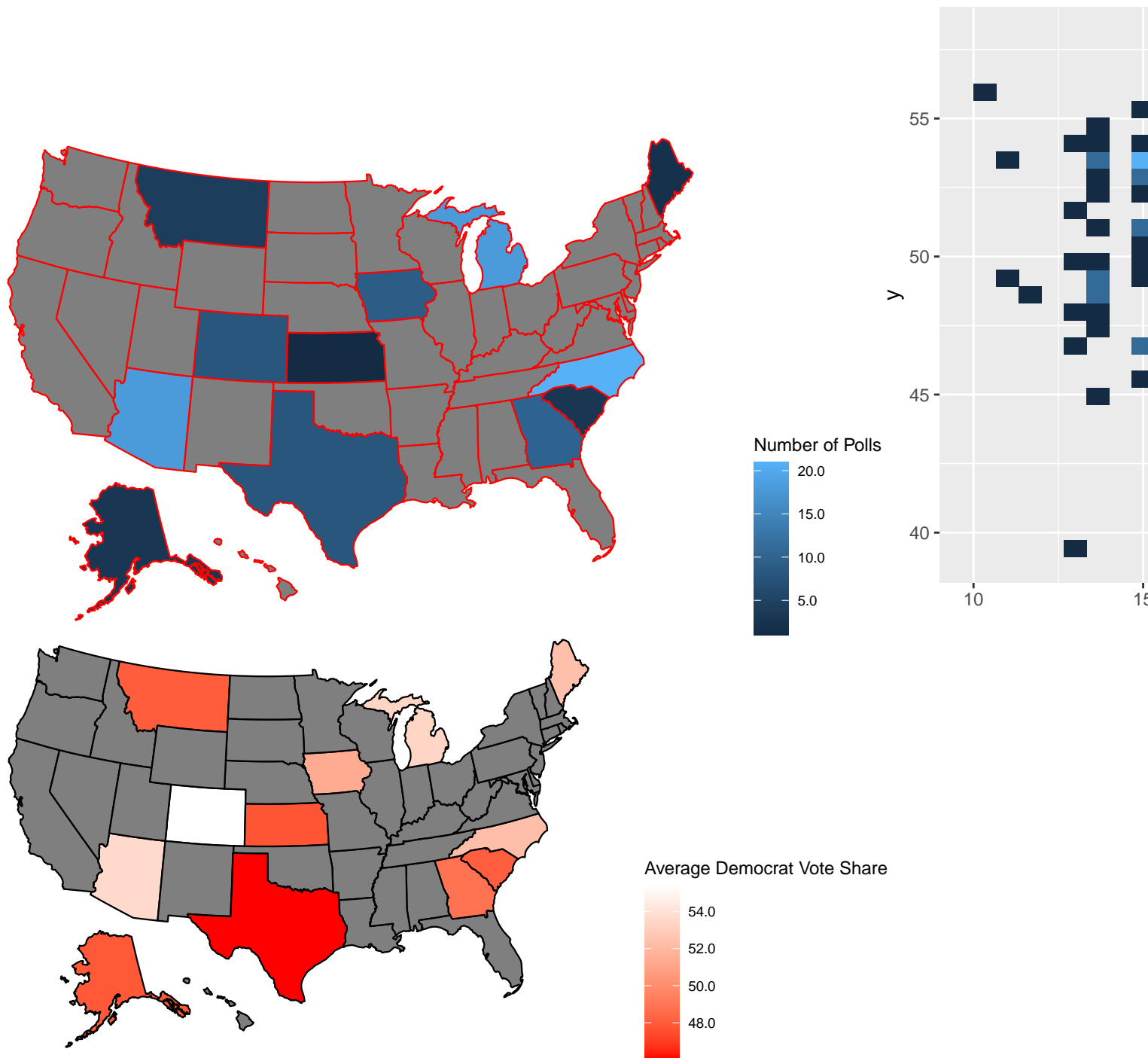
- We also incorporated incumbency advantage in the model, which as *FiveThirtyEight* suggests, is on average 2.6 for senate incumbents (<https://fivethirtyeight.com/features/how-much-was-incumbency-worth-in-2018/>).

House Election Model (for North Carolina):

- `house_polls.csv`: this is from course website https://projects.fivethirtyeight.com/polls-page/house_polls.csv
- `ncvoter_1027_small.rds`: NC registered voter demographics information provided by the NC State Board of Elections (<https://dl.ncsbe.gov/list.html>).

Exploratory Data Analysis





#biden percentage in polling data

```
ggplot(house_eda_df, aes(x=days_to_election, y=y,color=as.factor(seat_number))) + geom_point()
```

Methods

Similarly to prior work (Linzer 2013), we use a hierarchical model structure for our election models to overcome the limitation that not every state is polled on every day, allowing the model to borrow data across states (or Congressional districts). This also helps account for the fact that polls from each individual state are correlated data observations.

For both the President and Senate models, we had to choose which states we considered to be “battlegrounds” to include in the models. We chose states for the models separately, since some states have a competitive race for President but not for Senate or vice versa.

To specify priors for the mean of two-party vote share for Democrats in each state or district, we used a combination of state partisanship, economic fundamentals, candidate incumbency, and projected voter turnout based on demographics. First, we started with state or district partisan lean calculated by FiveThirtyEight (CITE). Partisan lean is the average difference between how a state or district votes and how the country votes overall, based on results from the past two presidential elections as well as statewide elections in 2018. For example, North Carolina has a partisan lean of R+4, meaning that in a 50/50 political environment nationwide, a Republican would be expected to win North Carolina by 4 points. For each partisan lean, we turn the partisan lean into a prior mean of Democratic vote share by adding or subtracting half the partisan lean from 50%. North Carolina is a Republican-leaning state, so we subtract 2 from 50% to get a partisan lean prior of 48% (note that the Republican would then get 52% of the two-party vote, resulting in an R+4 margin of victory).

Presidential Election Model

For the presidential model, the states chosen are Arizona, Florida, Georgia, Iowa, Michigan, Minnesota, Nevada, New Hampshire, North Carolina, Ohio, Pennsylvania, Texas, and Wisconsin. These thirteen states are rated as either “Toss Up”, “Lean Republican”, or “Lean Democrat” races (the three most competitive categories) by the Cook Political Report (CITE), a nonpartisan elections newsletter, as of October 28. These states are also projected to be competitive in the Presidential race by both the FiveThirtyEight and Economist models. We select poll responses from likely voters only, since it is known that using all responses may overestimate support for the Democratic party, according to FiveThirtyEight (Silver, 2014).

The response we will use is Y_k , Biden’s share of the two-party vote using the following model where the poll k (of $K=3361$ [insert final number] polls) ended t days (of $T = 30$ days) before the election and was conducted on state j (of $J=13$ states of interest). We choose to use polling data from 30 days before the election (as opposed to over 30 days), as this aligns with Andrew Gelman’s observation that polling data becomes more predictive as the day of poll becomes closer to election day (The Economist).

$Y_k \sim N(\theta_{jt}, \sigma_{yj}^2)$
 Priors for θ_{jt} : $\theta_{...t} \sim MVN(\theta_{...t-1}, \Sigma)$
 $\Sigma \sim Wishart(S, J + 1)$ where S is the state covariance matrix (obtained from Andrew Gelman’s model) and J is the number of states in the model.
 Priors for σ_{yj}^2 : $\sigma_{yj}^2 \sim InvGamma(\nu_u, \nu_y \tau_y)$
 $\nu_y \sim Uniform(0, 100)$ and $\tau_y \sim Uniform(0, 100)$.
 $\theta_{j1} \sim N(\mu_j, \sigma^2)$
 $\sigma^2 \sim InvGamma(0.5, 0.5)$
 $\mu_j \sim N(h_j, 7.5^2)$
 $h_j = 0.1 * \text{Presidential Fundamentals}_{2020} + 0.9 * \text{Vote Share from Partisan Lean}_j$
 $\text{Presidential Fundamentals}_i = \gamma_0 + \gamma_1 \text{June Approval Ratings for Incumbent Party}_i + \gamma_2 \text{Three Month Stock Growth}_i + \gamma_3 \text{2nd Quarter Real Income Growth}_i + \epsilon_i$
 $\epsilon_i \sim N(0, \phi^2)$

For our presidential model, we wanted to incorporate state-level correlations that differ between each pair of states. For example, Wisconsin is much more similar to its Great Lakes neighbor Michigan both geographically and demographically than it is to Arizona, which is in the Southwest and has a much larger Hispanic population. So, we would expect that Wisconsin and Michigan have a higher correlation in their election results than Wisconsin and Arizona. In order to incorporate this into our presidential model, we used a multivariate normal distribution to model two-party vote share in each state, which allowed us to specify a covariance matrix for the states. We used a covariance matrix which was downloaded from the Economist forecast model (Gelman, 2020). These similarities between states were calculated by comparing their demographic and political profiles, such as the state’s share of white voters and how urban/rural the state is.

where explain variables later the S&P stock growth three months prior to the election also explain i where i is each year in that Abramowitz data - kinda explained this in Appendix B.

In essence, the presidential model used fundamentals and vote share from partisan lean as a starting point for the expected vote share for the Democratic party, and update the priors with presidential election polling data. We predicted Presidential Fundamentals_i from a linear regression model that used historical election year’s economic data and June approval rating of the incumbent party. When computing the prior, 10% weight is allocated to the fundamentals based on economic data and 90% weight to partisan lean because the effect of economic indicators has shrunk over the years as electorates became increasingly polarized (The Economist, 2020). In addition, economic indicators are particularly volatile in 2020 due to the COVID-19 pandemic. We chose not to do this for the U.S. House and Senate models because these races are generally a bit more localized (Gillespie et al. 2020).

one sentence on hyperparameters

Presidential elections in the United States are decided by the Electoral College, so estimating percentage support in each state alone does not tell us who wins the election. For each set of MCMC samples of two-party vote share by state, we subsequently use the predicted winner in each state to add up the electoral votes of each candidate. For states not in the model, their electoral votes are allocated assuming they vote the same way as in 2016. The probability of President Trump winning re-election is then the probability that he receives 270 or more electoral votes across simulations. Note that although Maine and Nebraska allocate some electoral votes by Congressional District, only two electoral votes are competitive due to this wrinkle, so for simplicity we simply allocate all electoral votes to the statewide winner of each respective state.

Senate Election Model

For the Senate model, the states chosen are Alabama, Alaska, Arizona, Colorado, Georgia, Iowa, Kansas, Maine, Michigan, Montana, North Carolina, South Carolina, and Texas. There is also a special election for the Senate in Georgia in addition to the regularly scheduled election. These fourteen races are rated as either “Toss Up”, “Lean Republican”, or “Lean Democrat” (the three most competitive categories) by the Cook Political Report (CITE) as of October 29. These states are also projected to have competitive Senate races by both the FiveThirtyEight and Economist models. Note that the Georgia special election actually has multiple Republicans and Democrats running on the same ballot. If no candidate wins over 50% of the vote, which is considered likely, the top two finishers will advance to a one-on-one runoff election in January (Ballotpedia, 2020). For simplicity, our model simply sums up the support for Republican candidates and compares that to the sum of the support for Democratic candidates, then treats this election like the others. (This is not the ideal way to simulate this election, but the difficulty of predicting turnout and the political environment for the January runoff election made this decision seem like the best one to make.) Once again, we only included poll responses from likely voters that responded within 30 days of the election.

The response we will use is Y_k , the Democrat candidate’s share of the two-party vote using the following model where the poll k (of $K=fill$ in polls) ended t days (of $T = 60$ days) before the election and was conducted on state j (of $J=14$ states of interest).

$$\begin{aligned}
Y_k &\sim N(\beta_{jt}, \sigma_{yj}^2) \\
\beta_{jt} &\sim N(\beta_{jt-1}, \sigma_{\beta j}^2) \\
\sigma_{yj}^2 &\sim InvGamma(\nu_u, \nu_y \tau_y) \\
\nu_y &\sim Uniform(0, 100) \text{ and } \tau_y \sim Uniform(0, 100). \\
\sigma_{\beta j}^2 &\sim InvGamma(\nu_\beta, \nu_\beta \tau_\beta) \\
\nu_\beta &\sim Uniform(0, 100) \text{ and } \tau_\beta \sim Uniform(0, 100). \\
\beta_{j1} &\sim N(\mu_j, \sigma^2) \\
\sigma^2 &\sim InvGamma(0.5, 0.5) \\
\mu_j &\sim N(h_j, 7.5^2) \\
h_j &= \text{Vote Share from Partisan Lean}_j + \text{Incumbency Advantage}_j
\end{aligned}$$

For the U.S. Senate model we also take into account incumbency advantage. Analysis by FiveThirtyEight (Rakich, 2018) found that incumbent senators get a 2.6-point boost. For each incumbent was running a Senate

race, depending on whether they were a Democrat or Republican, we either added or subtracted this incumbency adjustment with the prior mean computed from partisan lean.

For the NC-specific prior, we supplemented partisan lean and incumbency adjustment with voter turnout predicted by the model in the Interim Report (CITE). When computing the prior for NC only, 10% weight is allocated to predicted Democratic vote share from turnout and demographics, and 90% weight is allocated to partisan lean and incumbency adjustment. The turnout is weighted much less because there is considerable uncertainty surrounding turnout because of the COVID-19 pandemic. See Appendix A.2 for more specifics on how the voter turnout model was used to compute predicted Democratic vote share.

For predicting control of the U.S. Senate, things are complicated slightly by the fact that a 50/50 split of Senate seats is a possible outcome of the elections. In this case, the Vice President breaks the tie, so the party that wins the Presidential election will only need 50 Senate seats for a Senate majority, while the party that loses will need 51. Since our President model gives Democrat Joe Biden a very high chance of winning (discussed more below), we assume in the Senate model that Democrats will control the Senate in the case of a 50/50 split.

House Election Model

The response we will use is Y_k , the Democrat candidate’s share of the two-party vote using the following model where the poll k (of $K=fill$ in polls) ended t days (of $T = 60$ days) before the election and was conducted on district j (where j is in districts 1, \dots , 11, 13 of North Carolina). For district 12, the vote share is coded as 100 because there is only one candidate, and she is a Democrat. Note that, due to the scarcity of poll responses for the NC House elections, we included all poll responses within 115 days of the election.

$$\begin{aligned}
Y_k &\sim N(\beta_{jt}, \sigma_{yj}^2) \\
\beta_{jt} &\sim N(\beta_{jt-1}, \sigma_{\beta j}^2) \\
\sigma_{yj}^2 &\sim InvGamma(\nu_u, \nu_y \tau_y) \\
\nu_y &\sim Uniform(0, 100) \text{ and } \tau_y \sim Uniform(0, 100). \\
\sigma_{\beta j}^2 &\sim InvGamma(\nu_\beta, \nu_\beta \tau_\beta) \\
\nu_\beta &\sim Uniform(0, 100) \text{ and } \tau_\beta \sim Uniform(0, 100). \\
\beta_{j1} &\sim N(h_j, 7.5) \\
h_j &= 0.9 * \text{Vote Share from Partisan Lean}_j + 0.1 * \text{Expected Vote Share from Voter Turnout}_j
\end{aligned}$$

According to FiveThirtyEight (Rakich, 2018), incumbent members of the House get a 2.7-point margin boost in their favor. For the U.S. House races, the incumbency adjustment was calculated by the same method as it was for the Senate races.

Expected Vote Share from Voter Turnout _{j} was calculated from the model in the Interim Report *insert citation whatever that ends up being and also say something like our method for splitting undecided voters is in appendix A.3*. Please see Appendix A.3 for more details.

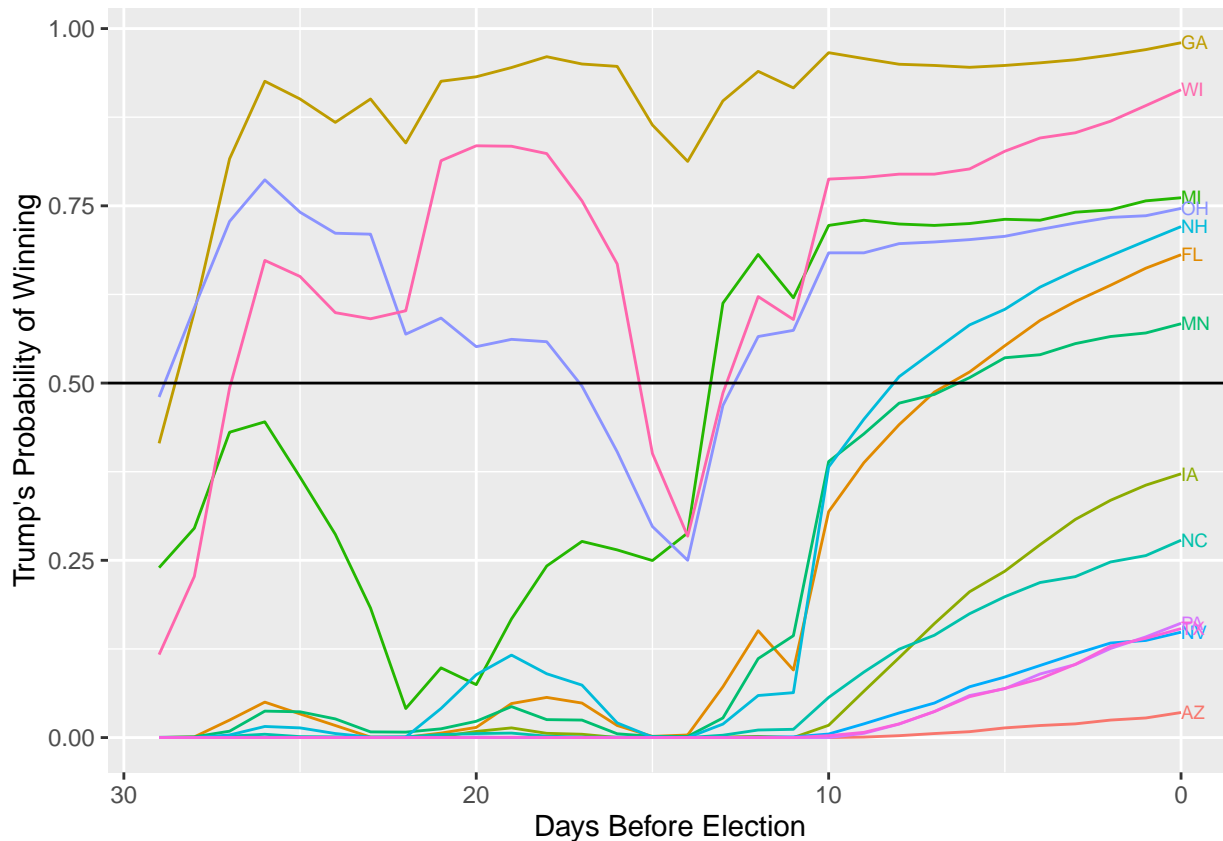
Results

Presidential Election Model

Table 1: Predicted Probability of Winning and Electoral Vote Count

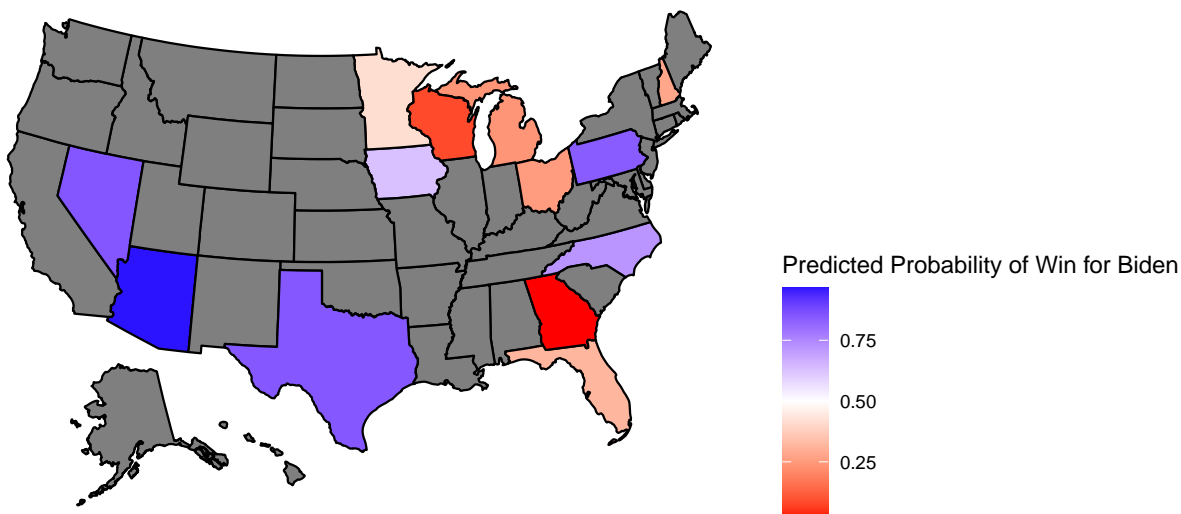
	Win Probability	Estimated EC Votes	2.5% Quantile EC Votes	97.5% Quantile EC Votes
Trump	0.13	222	152	288
Biden	0.87	316	250	386

The probability that Trump wins re-election is 0.13. The predicted electoral colleges votes for Trump is 222 with a 95% confidence interval of (152, 288).



insert Figure label shows how Trump's probability of winning the election changes over the 60 days before the election in each state of interest.

```
pres_state_df = data.frame(state = states, pwin = (elec_sims>50) %>% colMeans())
plot_usmap(data = pres_state_df, values = "pwin", color = "black") +
  scale_fill_gradient2(low = "red", mid = "white", high = "blue", midpoint = 0.5,
    aesthetics = "fill", name = "Predicted Probability of Win for Biden", label =
  theme(legend.position = "right")
```



Senate Election Model

```
## [1] 48.21682
```

```
## [1] 45.00924 51.79719
```

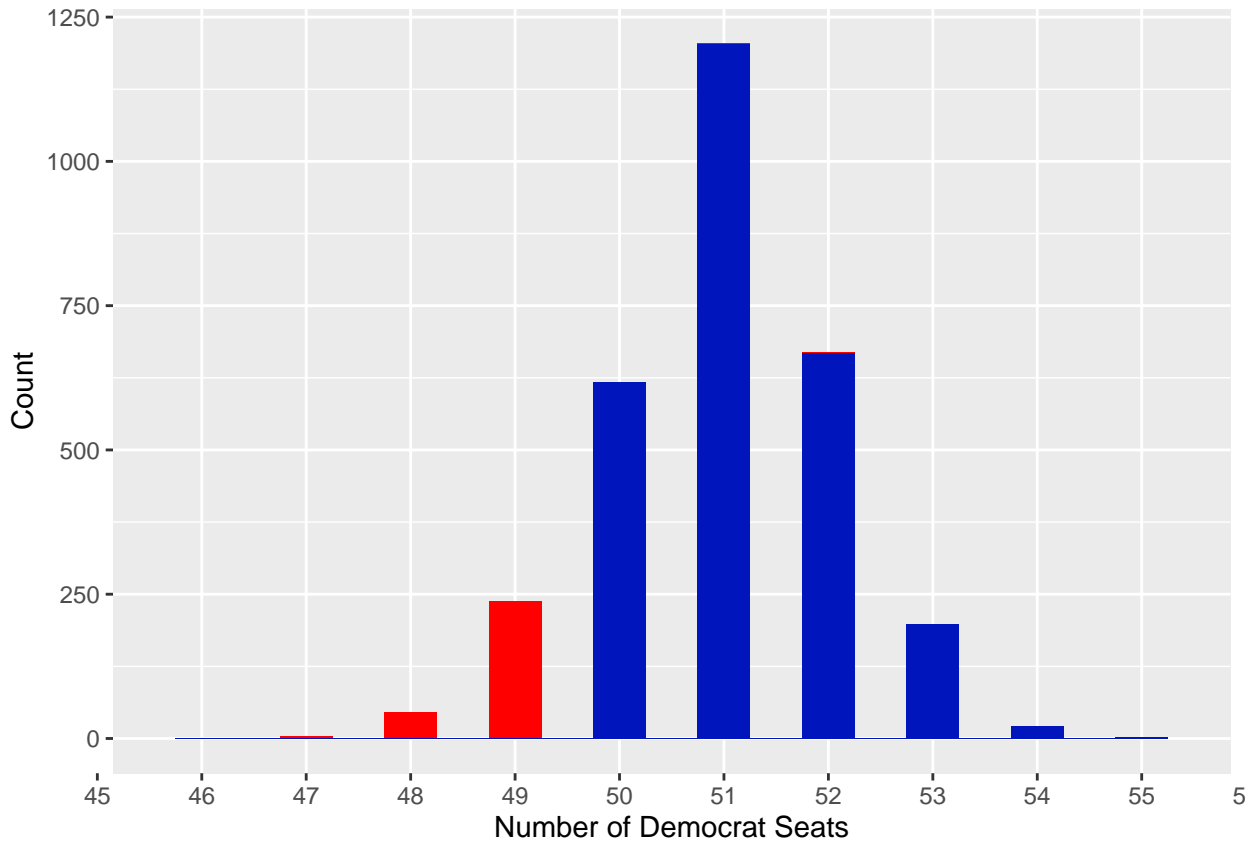
Table 2: Predicted Vote Share for Tillis-Cunningham Race

	Estimate	2.5% Quantile	97.5% Quantile
Tillis	48.22	45.01	51.80
Cunningham	51.78	48.20	54.99

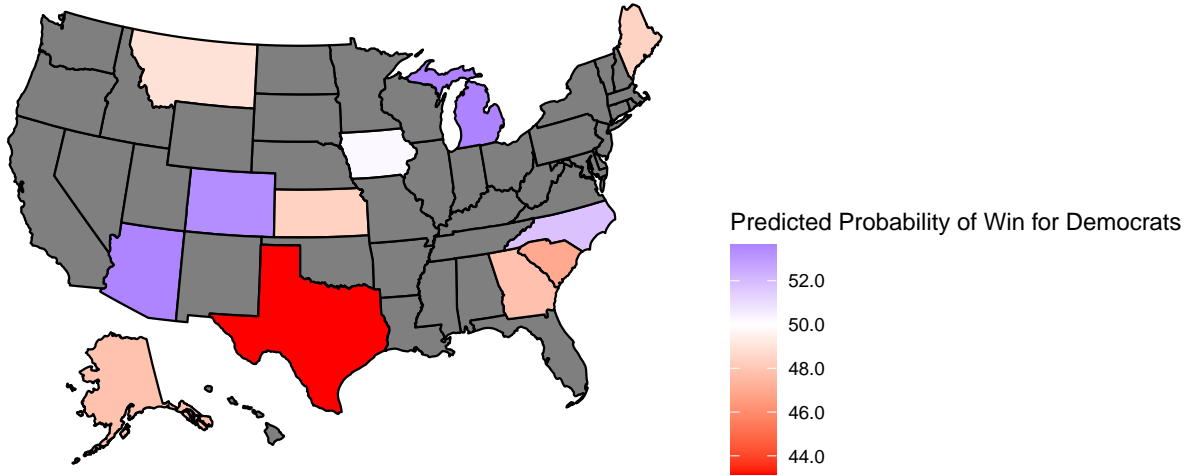
The probability that Republicans retain control of the Senate is 0.1. For the NC Senate race (Tillis vs. Cunningham), the predicted vote share for Cunningham is 51.78% with a 95% confidence interval of (48.2, 54.99).

```
## Warning: Continuous limits supplied to discrete scale.
```

```
## Did you mean `limits = factor(...)` or `scale_*_continuous()`?
```



```
senate_state_df$pwin = preds
plot_usmap(data = senate_state_df, values = "pwin", color = "black") +
  scale_fill_gradient2(low = "red", mid = "white", high = "blue", midpoint = 50,
    aesthetics = "fill", name = "Predicted Probability of Win for Democrats", lab
  theme(legend.position = "right")
```

House Election Model

Table 3: Predicted Republican Vote Share in NC's 13 Districts

	Estimate	2.5% Quantile	97.5% Quantile
District 1	41.69	36.32	47.02
District 2	40.75	35.29	46.17
District 3	63.61	58.32	68.56
District 4	33.29	27.84	38.48
District 5	69.54	64.20	74.93
District 6	41.19	35.87	46.64
District 7	61.81	56.40	67.43
District 8	55.74	50.67	61.01
District 9	56.79	51.40	61.90
District 10	70.68	65.16	75.96
District 11	56.12	51.86	60.59
District 12	0.00	0.00	0.00
District 13	69.60	64.12	75.01

From the table of predicted Republican vote share in the House elections for each district, it appears that the Republican candidate will win in districts 3, 5, 7, 8, 9, 10, 11, and 13 (where the lower bounds of the 95% confidence intervals for predicted vote share are also all above 50).

```
download.file("https://webservices.ncleg.gov/ViewBillDocument/2019/6953/0/HB%201029,%203rd%20Edition",
# Unzip this file. You can do it with R (as below), or clicking on the object you downloaded.
system("unzip nc_map.zip"))
```

```
nc_cong_dist <- rgdal::readOGR("C-Goodwin-A-1-TC.shp")
```

```
nc_cong_dist@data <- nc_cong_dist@data %>%
  mutate(rep_vote_shares = rep_vote_shares) %>%
  mutate(binned_rep_vs = case_when(
    rep_vote_shares >= 0 ~ 1,
    rep_vote_shares >= 25 ~ 2,
    rep_vote_shares >= 50 ~ 3,
    rep_vote_shares >= 75 ~ 4,
    TRUE ~ rep_vote_shares
```

```
))
```

```
# 'fortify' the data to get a dataframe format required by ggplot2
nc_cong_dist_df <- broom::tidy(nc_cong_dist, region = "DISTRICT")
```

```
rep_vote_shares_df = data.frame(dist = seq(1:13), vote_share = rep_vote_shares)
```

```
nc_cong_dist_vs_df = merge(nc_cong_dist_df, rep_vote_shares_df, all.x = TRUE, by.x = "id", by.y = "dist")
mutate(binned_rep_vs = case_when(
  vote_share >= 75 ~ 4,
  vote_share >= 50 ~ 3,
  vote_share >= 25 ~ 2,
  vote_share >= 0 ~ 1,
  TRUE ~ vote_share
)) %>%
mutate(dist_color = case_when(
  binned_rep_vs == 1 ~ "#0015BC",
  binned_rep_vs == 2 ~ "#B0CEFF",
  binned_rep_vs == 3 ~ "#FFCCCB",
  binned_rep_vs == 4 ~ "#FF0000",
  TRUE ~ ""
))
```

```
ggplot()+
  geom_polygon( data=mapbase,
    aes(long, lat, group = region, fill = region),
    alpha = 0.3) +
  coord_fixed() + theme_void() +
  geom_text(data=cnames,
    aes(x, y , label = abb),
    color= "black", size=3, fontface = 2,
    hjust = 0.5, vjust = 0.5) + #central alignment
  scale_fill_discrete(guide = F)
```

```
# use midpoint of county to find where labels should go
rnames <- aggregate(cbind(long, lat) ~ id, data=nc_cong_dist_vs_df,
  FUN=function(x) mean(range(x)))
```

```
# adjust where labels should go because counties aren't exactly square
rnames$lat[which(rnames$id==11)] = rnames$lat[which(rnames$id==11)]-20500
rnames$lat[which(rnames$id==10)] = rnames$lat[which(rnames$id==10)]+25000
rnames$lat[which(rnames$id==13)] = rnames$lat[which(rnames$id==13)]-20000
rnames$long[which(rnames$id==13)] = rnames$long[which(rnames$id==13)]-12000
```

```
rnames$lat[which(rnames$id==8)] = rnames$lat[which(rnames$id==8)]+10500
rnames$long[which(rnames$id==8)] = rnames$long[which(rnames$id==8)]+8000
```

```
rnames$lat[which(rnames$id==9)] = rnames$lat[which(rnames$id==9)]+20500
rnames$long[which(rnames$id==7)] = rnames$long[which(rnames$id==7)]-20000
rnames$lat[which(rnames$id==7)] = rnames$lat[which(rnames$id==7)]-18000
```

```

rnames$lat[which(rnames$id==3)] = rnames$lat[which(rnames$id==3)]-20500

ggplot() +
  geom_polygon(data = nc_cong_dist_vs_df,
    aes(x = long, y = lat, group = group),
    fill=nc_cong_dist_vs_df$dist_color#,"#0015BC", "#B0CEFF")
    , color="white") +
  geom_text(data=rnames, aes(long, lat, label = id), size=3) +

  # geom_text(data=nc_cong_dist_vs_df,
  #           aes(x = long, y = lat, group = group, label = dist_id),
  #           color= "black", size=3, fontface = 2,
  #           hjust = 0.5, vjust = 0.5) +

  theme_void()
  #central alignment

nc_cong_dist_df <- broom::tidy(nc_cong_dist, binned_rep_vs = "binned_rep_vs")
head(nc_cong_dist_df)

map <- ggplot() + geom_polygon(data = nc_cong_dist, aes(x = long, y = lat, group = group, fill = nc.
map

```

Model Validation and Sensitivity Analysis

For model validation, we trained our 2020 presidential election model on 2016 polling data and adjusted fundamentals accordingly. For instance, instead of predicting on 2020 economic indicators, we removed the year 2016 from the fundamentals training data and predicted on 2016 economic indicators. This 2016 model produced a 7% probability that Trump would win the presidency, which is within the range of predictions by respected models available in 2016 (The Economist, 2016). Polls were skewed in 2016, so it is expected that the model would not be entirely accurate.

For sensitivity analysis, we adjusted the relative weights placed on the components of prior for the presidential election model. Instead of 10% fundamentals and 90% partisan lean, we ran a model with 50% fundamentals and 50% partisan lean multiple times and the predictions for Trump's re-election probability was generally higher (approximately 0.25) than that from our main model, which makes sense since economic fundamental model contains stock growth and is slightly favored toward Trump. However, the sensitivity analysis models still point to an unlikely re-election.

σ_{yj}

President model: $\text{unif}(0,1)$ – I think this makes it more uninformative for gamma (does this hold for inv gamma?)
 $\text{Pr}(\text{Trump wins}) = 0.128, 0.1176667, 0.2456667$ TLDR: comparable? Senate model: $\mu_0 \sim N(\text{priors}, 1)$ (less variance)
 $\text{Pr}(\text{Rep control}) = 0.1656667$ $\text{unif}(0,1)$ $\text{Pr}(\text{Rep control}) = 0.1436667$ $\text{sigma2_0_inv} \sim \text{gamma}(3,0.5)$
 (stronger prior?) $\text{Pr}(\text{Rep control}) = 0.07466667$ TLDR: Tillis vote share + confidence intervals have been comparable, probability of republican control more sensitive

To account for shock events,

Diagnostics

Discussion and Limitations

Appendix A

A.1 Presidential Election Model

Raw Model Output

```
options(max.print = 999999999)
jags_sims_mv$BUGSoutput$summary
```

##		mean	sd	2.5%	25%	50%
##	Sigma[1,1]	0.51987746	0.3933511	1.156134e-01	0.270184830	0.40818966
##	Sigma[2,1]	0.38953623	0.3309322	-1.867469e-02	0.170194463	0.31763610
##	Sigma[3,1]	0.23964838	0.3853611	-3.089195e-01	0.032620517	0.16167867
##	Sigma[4,1]	0.28981049	0.2979531	-1.443629e-01	0.112440071	0.23068308
##	Sigma[5,1]	0.28184391	0.2537920	-6.275136e-02	0.121133839	0.23155253
##	Sigma[6,1]	0.23817951	0.2626441	-1.239967e-01	0.082368223	0.18746767
##	Sigma[7,1]	0.24372195	0.2779328	-1.173188e-01	0.079314216	0.18211643
##	Sigma[8,1]	0.21989390	0.2805532	-2.302451e-01	0.058601490	0.17455633
##	Sigma[9,1]	0.41393687	0.3800912	1.366012e-02	0.177070423	0.31533361
##	Sigma[10,1]	0.27889410	0.2672737	-6.489311e-02	0.111661023	0.22298579
##	Sigma[11,1]	0.30180210	0.2729730	-5.888208e-02	0.126235255	0.24092312
##	Sigma[12,1]	0.34233314	0.3712682	-9.432422e-02	0.120174283	0.25625536
##	Sigma[13,1]	0.26267684	0.2737047	-9.677056e-02	0.092542023	0.20957437
##	Sigma[1,2]	0.38953623	0.3309322	-1.867469e-02	0.170194463	0.31763610
##	Sigma[2,2]	0.64618099	0.4754109	1.411700e-01	0.330306729	0.51974670
##	Sigma[3,2]	0.23999365	0.4266796	-4.910891e-01	0.023112235	0.17526910
##	Sigma[4,2]	0.41250993	0.3584455	2.081135e-04	0.175748962	0.32959517
##	Sigma[5,2]	0.42167587	0.3235304	5.228408e-02	0.208230932	0.34448046
##	Sigma[6,2]	0.29861881	0.2925953	-8.259871e-02	0.120993178	0.23688406
##	Sigma[7,2]	0.33032929	0.3081441	-6.661036e-02	0.135058983	0.26023059
##	Sigma[8,2]	0.33853921	0.3764351	-1.594721e-01	0.122158983	0.26295885
##	Sigma[9,2]	0.41009043	0.3916092	-4.291406e-02	0.161573573	0.32307571
##	Sigma[10,2]	0.36521129	0.3113452	-2.922984e-03	0.167179416	0.28955892
##	Sigma[11,2]	0.46144968	0.3514015	5.244388e-02	0.224013274	0.37192255
##	Sigma[12,2]	0.28440518	0.3602500	-1.963869e-01	0.064089953	0.20389376
##	Sigma[13,2]	0.34536737	0.2955454	-2.786315e-02	0.150847097	0.27391617
##	Sigma[1,3]	0.23964838	0.3853611	-3.089195e-01	0.032620517	0.16167867
##	Sigma[2,3]	0.23999365	0.4266796	-4.910891e-01	0.023112235	0.17526910
##	Sigma[3,3]	0.67502250	0.6672952	1.266001e-01	0.287702293	0.46874369
##	Sigma[4,3]	0.18150817	0.3865737	-5.318948e-01	0.002851790	0.13916717
##	Sigma[5,3]	0.21471471	0.3313413	-3.213280e-01	0.036664795	0.16238040
##	Sigma[6,3]	0.14763493	0.3043408	-3.837453e-01	-0.006669637	0.10677882
##	Sigma[7,3]	0.37205590	0.3978839	-6.326026e-02	0.135314875	0.26014756
##	Sigma[8,3]	0.03796519	0.3562941	-7.852614e-01	-0.094224533	0.04987477
##	Sigma[9,3]	0.23722854	0.4488951	-3.677442e-01	0.015106692	0.14192601
##	Sigma[10,3]	0.26568655	0.3543004	-1.970817e-01	0.072558313	0.19487572
##	Sigma[11,3]	0.18676033	0.3661480	-4.756871e-01	0.000127347	0.13997626
##	Sigma[12,3]	0.21189799	0.4640664	-4.156919e-01	-0.005773619	0.12954246
##	Sigma[13,3]	0.16036588	0.3173309	-4.389436e-01	0.007148836	0.12269293

## Sigma[1,4]	0.28981049	0.2979531	-1.443629e-01	0.112440071	0.23068308
## Sigma[2,4]	0.41250993	0.3584455	2.081135e-04	0.175748962	0.32959517
## Sigma[3,4]	0.18150817	0.3865737	-5.318948e-01	0.002851790	0.13916717
## Sigma[4,4]	0.58660228	0.4694489	1.259422e-01	0.280055759	0.45130426
## Sigma[5,4]	0.44115720	0.3477625	7.237218e-02	0.213890092	0.35064596
## Sigma[6,4]	0.40129852	0.3735988	3.352521e-02	0.172244571	0.29921085
## Sigma[7,4]	0.33511708	0.3026762	-5.138766e-02	0.139452356	0.25812977
## Sigma[8,4]	0.39284650	0.3770341	-3.594956e-02	0.165013542	0.29593952
## Sigma[9,4]	0.26187267	0.3262248	-1.750608e-01	0.077635009	0.19384966
## Sigma[10,4]	0.39313282	0.3349352	3.473401e-02	0.180261993	0.30658559
## Sigma[11,4]	0.45136403	0.3545973	5.890792e-02	0.209413371	0.35125578
## Sigma[12,4]	0.20738486	0.3473195	-3.377567e-01	0.031354755	0.14893453
## Sigma[13,4]	0.38825834	0.2955196	5.509267e-02	0.188949018	0.30964964
## Sigma[1,5]	0.28184391	0.2537920	-6.275136e-02	0.121133839	0.23155253
## Sigma[2,5]	0.42167587	0.3235304	5.228408e-02	0.208230932	0.34448046
## Sigma[3,5]	0.21471471	0.3313413	-3.213280e-01	0.036664795	0.16238040
## Sigma[4,5]	0.44115720	0.3477625	7.237218e-02	0.213890092	0.35064596
## Sigma[5,5]	0.47322856	0.3347465	1.177318e-01	0.254494026	0.38441593
## Sigma[6,5]	0.35919289	0.3020024	3.807455e-02	0.170759903	0.27529029
## Sigma[7,5]	0.32653964	0.2780086	-3.418933e-03	0.149749530	0.25669980
## Sigma[8,5]	0.35362894	0.3155137	-2.170619e-02	0.157716121	0.27568444
## Sigma[9,5]	0.27207970	0.2982570	-1.302091e-01	0.100367922	0.21202180
## Sigma[10,5]	0.37970564	0.2754389	6.343928e-02	0.197151363	0.30980270
## Sigma[11,5]	0.43275744	0.3078648	8.028473e-02	0.221950667	0.35399306
## Sigma[12,5]	0.20615160	0.2849943	-2.112427e-01	0.039105826	0.14985505
## Sigma[13,5]	0.36961542	0.2603924	6.460165e-02	0.189637663	0.30371423
## Sigma[1,6]	0.23817951	0.2626441	-1.239967e-01	0.082368223	0.18746767
## Sigma[2,6]	0.29861881	0.2925953	-8.259871e-02	0.120993178	0.23688406
## Sigma[3,6]	0.14763493	0.3043408	-3.837453e-01	-0.006669637	0.10677882
## Sigma[4,6]	0.40129852	0.3735988	3.352521e-02	0.172244571	0.29921085
## Sigma[5,6]	0.35919289	0.3020024	3.807455e-02	0.170759903	0.27529029
## Sigma[6,6]	0.44591736	0.3799608	1.074060e-01	0.215019227	0.33128714
## Sigma[7,6]	0.26238398	0.2733913	-8.869625e-02	0.100272641	0.19993254
## Sigma[8,6]	0.35125180	0.3115048	1.398337e-02	0.158817687	0.26627968
## Sigma[9,6]	0.17159501	0.2702688	-2.967945e-01	0.034402370	0.13536623
## Sigma[10,6]	0.33985087	0.2839697	2.802690e-02	0.157905138	0.26393728
## Sigma[11,6]	0.37123661	0.3047187	2.927235e-02	0.173499832	0.28929257
## Sigma[12,6]	0.14894560	0.2833509	-3.105226e-01	0.004838068	0.11047166
## Sigma[13,6]	0.33791768	0.2646669	3.937558e-02	0.166439219	0.26676948
## Sigma[1,7]	0.24372195	0.2779328	-1.173188e-01	0.079314216	0.18211643
## Sigma[2,7]	0.33032929	0.3081441	-6.661036e-02	0.135058983	0.26023059
## Sigma[3,7]	0.37205590	0.3978839	-6.326026e-02	0.135314875	0.26014756
## Sigma[4,7]	0.33511708	0.3026762	-5.138766e-02	0.139452356	0.25812977
## Sigma[5,7]	0.32653964	0.2780086	-3.418933e-03	0.149749530	0.25669980
## Sigma[6,7]	0.26238398	0.2733913	-8.869625e-02	0.100272641	0.19993254
## Sigma[7,7]	0.45912539	0.3662298	1.030620e-01	0.226917597	0.35290608
## Sigma[8,7]	0.19557188	0.2801388	-3.211454e-01	0.052960645	0.16036068
## Sigma[9,7]	0.23477781	0.3005152	-1.450943e-01	0.060460986	0.16434581
## Sigma[10,7]	0.32504221	0.2663717	1.359319e-02	0.149919957	0.25490212
## Sigma[11,7]	0.30984287	0.2807752	-6.908920e-02	0.130732636	0.24762257
## Sigma[12,7]	0.21622495	0.3215119	-1.910120e-01	0.037120037	0.14336729
## Sigma[13,7]	0.27118140	0.2427112	-7.783449e-02	0.114458035	0.21719516

## Sigma[1,8]	0.21989390	0.2805532	-2.302451e-01	0.058601490	0.17455633
## Sigma[2,8]	0.33853921	0.3764351	-1.594721e-01	0.122158983	0.26295885
## Sigma[3,8]	0.03796519	0.3562941	-7.852614e-01	-0.094224533	0.04987477
## Sigma[4,8]	0.39284650	0.3770341	-3.594956e-02	0.165013542	0.29593952
## Sigma[5,8]	0.35362894	0.3155137	-2.170619e-02	0.157716121	0.27568444
## Sigma[6,8]	0.35125180	0.3115048	1.398337e-02	0.158817687	0.26627968
## Sigma[7,8]	0.19557188	0.2801388	-3.211454e-01	0.052960645	0.16036068
## Sigma[8,8]	0.52552326	0.4217314	1.210525e-01	0.251259837	0.40453935
## Sigma[9,8]	0.18243116	0.3018213	-3.420622e-01	0.026036121	0.14260691
## Sigma[10,8]	0.29793801	0.2899143	-8.637275e-02	0.123455397	0.23124287
## Sigma[11,8]	0.38786892	0.3449333	-2.155481e-02	0.168094423	0.29736512
## Sigma[12,8]	0.16145021	0.3242072	-4.022376e-01	0.004989034	0.11962785
## Sigma[13,8]	0.34956655	0.2860953	2.652835e-02	0.162662638	0.27409273
## Sigma[1,9]	0.41393687	0.3800912	1.366012e-02	0.177070423	0.31533361
## Sigma[2,9]	0.41009043	0.3916092	-4.291406e-02	0.161573573	0.32307571
## Sigma[3,9]	0.23722854	0.4488951	-3.677442e-01	0.015106692	0.14192601
## Sigma[4,9]	0.26187267	0.3262248	-1.750608e-01	0.077635009	0.19384966
## Sigma[5,9]	0.27207970	0.2982570	-1.302091e-01	0.100367922	0.21202180
## Sigma[6,9]	0.17159501	0.2702688	-2.967945e-01	0.034402370	0.13536623
## Sigma[7,9]	0.23477781	0.3005152	-1.450943e-01	0.060460986	0.16434581
## Sigma[8,9]	0.18243116	0.3018213	-3.420622e-01	0.026036121	0.14260691
## Sigma[9,9]	0.56704323	0.4842785	1.169267e-01	0.261168359	0.42681803
## Sigma[10,9]	0.26023221	0.3013516	-9.261918e-02	0.086995945	0.19114384
## Sigma[11,9]	0.29080857	0.3087608	-1.202712e-01	0.101618847	0.22549350
## Sigma[12,9]	0.37412652	0.4132303	-6.730674e-02	0.116858924	0.26056926
## Sigma[13,9]	0.23512977	0.2904571	-1.573066e-01	0.070237613	0.17371025
## Sigma[1,10]	0.27889410	0.2672737	-6.489311e-02	0.111661023	0.22298579
## Sigma[2,10]	0.36521129	0.3113452	-2.922984e-03	0.167179416	0.28955892
## Sigma[3,10]	0.26568655	0.3543004	-1.970817e-01	0.072558313	0.19487572
## Sigma[4,10]	0.39313282	0.3349352	3.473401e-02	0.180261993	0.30658559
## Sigma[5,10]	0.37970564	0.2754389	6.343928e-02	0.197151363	0.30980270
## Sigma[6,10]	0.33985087	0.2839697	2.802690e-02	0.157905138	0.26393728
## Sigma[7,10]	0.32504221	0.2663717	1.359319e-02	0.149919957	0.25490212
## Sigma[8,10]	0.29793801	0.2899143	-8.637275e-02	0.123455397	0.23124287
## Sigma[9,10]	0.26023221	0.3013516	-9.261918e-02	0.086995945	0.19114384
## Sigma[10,10]	0.44565726	0.3296097	1.076348e-01	0.232465113	0.35113648
## Sigma[11,10]	0.38489672	0.2934968	4.716397e-02	0.189763100	0.30813014
## Sigma[12,10]	0.18937217	0.3196248	-2.475441e-01	0.029217140	0.13088906
## Sigma[13,10]	0.33731691	0.2578744	2.722331e-02	0.168049367	0.27618133
## Sigma[1,11]	0.30180210	0.2729730	-5.888208e-02	0.126235255	0.24092312
## Sigma[2,11]	0.46144968	0.3514015	5.244388e-02	0.224013274	0.37192255
## Sigma[3,11]	0.18676033	0.3661480	-4.756871e-01	0.000127347	0.13997626
## Sigma[4,11]	0.45136403	0.3545973	5.890792e-02	0.209413371	0.35125578
## Sigma[5,11]	0.43275744	0.3078648	8.028473e-02	0.221950667	0.35399306
## Sigma[6,11]	0.37123661	0.3047187	2.927235e-02	0.173499832	0.28929257
## Sigma[7,11]	0.30984287	0.2807752	-6.908920e-02	0.130732636	0.24762257
## Sigma[8,11]	0.38786892	0.3449333	-2.155481e-02	0.168094423	0.29736512
## Sigma[9,11]	0.29080857	0.3087608	-1.202712e-01	0.101618847	0.22549350
## Sigma[10,11]	0.38489672	0.2934968	4.716397e-02	0.189763100	0.30813014
## Sigma[11,11]	0.52624693	0.3669703	1.267513e-01	0.272909635	0.42719531
## Sigma[12,11]	0.20525923	0.3080462	-2.616868e-01	0.029089566	0.15017146
## Sigma[13,11]	0.38716482	0.2806620	7.157830e-02	0.192736070	0.31276483

## Sigma[1,12]	0.34233314	0.3712682	-9.432422e-02	0.120174283	0.25625536
## Sigma[2,12]	0.28440518	0.3602500	-1.963869e-01	0.064089953	0.20389376
## Sigma[3,12]	0.21189799	0.4640664	-4.156919e-01	-0.005773619	0.12954246
## Sigma[4,12]	0.20738486	0.3473195	-3.377567e-01	0.031354755	0.14893453
## Sigma[5,12]	0.20615160	0.2849943	-2.112427e-01	0.039105826	0.14985505
## Sigma[6,12]	0.14894560	0.2833509	-3.105226e-01	0.004838068	0.11047166
## Sigma[7,12]	0.21622495	0.3215119	-1.910120e-01	0.037120037	0.14336729
## Sigma[8,12]	0.16145021	0.3242072	-4.022376e-01	0.004989034	0.11962785
## Sigma[9,12]	0.37412652	0.4132303	-6.730674e-02	0.116858924	0.26056926
## Sigma[10,12]	0.18937217	0.3196248	-2.475441e-01	0.029217140	0.13088906
## Sigma[11,12]	0.20525923	0.3080462	-2.616868e-01	0.029089566	0.15017146
## Sigma[12,12]	0.57262219	0.5471140	1.128074e-01	0.251307009	0.41087169
## Sigma[13,12]	0.20078949	0.2875892	-1.974099e-01	0.034074674	0.14197541
## Sigma[1,13]	0.26267684	0.2737047	-9.677056e-02	0.092542023	0.20957437
## Sigma[2,13]	0.34536737	0.2955454	-2.786315e-02	0.150847097	0.27391617
## Sigma[3,13]	0.16036588	0.3173309	-4.389436e-01	0.007148836	0.12269293
## Sigma[4,13]	0.38825834	0.2955196	5.509267e-02	0.188949018	0.30964964
## Sigma[5,13]	0.36961542	0.2603924	6.460165e-02	0.189637663	0.30371423
## Sigma[6,13]	0.33791768	0.2646669	3.937558e-02	0.166439219	0.26676948
## Sigma[7,13]	0.27118140	0.2427112	-7.783449e-02	0.114458035	0.21719516
## Sigma[8,13]	0.34956655	0.2860953	2.652835e-02	0.162662638	0.27409273
## Sigma[9,13]	0.23512977	0.2904571	-1.573066e-01	0.070237613	0.17371025
## Sigma[10,13]	0.33731691	0.2578744	2.722331e-02	0.168049367	0.27618133
## Sigma[11,13]	0.38716482	0.2806620	7.157830e-02	0.192736070	0.31276483
## Sigma[12,13]	0.20078949	0.2875892	-1.974099e-01	0.034074674	0.14197541
## Sigma[13,13]	0.42486456	0.2911567	1.114859e-01	0.229560864	0.34814144
## deviance	583.45507081	12.4399067	5.589056e+02	574.995406707	583.47277668
## p[1]	50.73653071	0.7325670	4.917861e+01	50.279278268	50.77443787
## p[2]	50.22247240	0.8599420	4.844836e+01	49.666939336	50.26446768
## p[3]	50.24795297	1.0117758	4.809365e+01	49.619689537	50.26829899
## p[4]	53.04597647	0.7358915	5.159404e+01	52.571049677	53.05622467
## p[5]	53.04597647	0.7358915	5.159404e+01	52.571049677	53.05622467
## p[6]	50.93021373	0.7272399	4.945192e+01	50.458301328	50.93849476
## p[7]	49.70538724	0.9116882	4.786022e+01	49.098970642	49.73259211
## p[8]	51.08505204	0.7085639	4.962465e+01	50.616570771	51.10038725
## p[9]	50.44877775	0.6875996	4.911783e+01	50.000682035	50.43026693
## p[10]	53.76516269	0.7413942	5.236443e+01	53.259478176	53.74489316
## p[11]	52.84373199	0.7430620	5.135225e+01	52.351440752	52.83367376
## p[12]	49.74742075	0.8272208	4.795987e+01	49.239730542	49.77420573
## p[13]	51.56935298	0.5213941	5.055164e+01	51.218218341	51.57323621
## p[14]	51.14318201	0.7361783	4.964301e+01	50.656897525	51.16595474
## p[15]	53.49503714	0.4491669	5.259886e+01	53.201526657	53.50654063
## p[16]	54.13615478	0.4888002	5.317577e+01	53.807577770	54.13351361
## p[17]	54.12731026	0.4941451	5.318653e+01	53.799542150	54.10897671
## p[18]	54.46711136	0.6752465	5.314154e+01	54.019393867	54.46420081
## p[19]	54.12731026	0.4941451	5.318653e+01	53.799542150	54.10897671
## p[20]	50.44877775	0.6875996	4.911783e+01	50.000682035	50.43026693
## p[21]	53.49503714	0.4491669	5.259886e+01	53.201526657	53.50654063
## p[22]	49.41529691	0.6394835	4.810819e+01	49.003020076	49.41343510
## p[23]	51.61435877	0.5394127	5.051804e+01	51.269471524	51.62100413
## p[24]	54.46711136	0.6752465	5.314154e+01	54.019393867	54.46420081
## p[25]	54.36810319	0.5007707	5.338390e+01	54.032955194	54.36130501

## p[26]	50.40374701	0.7542246	4.889892e+01	49.927122008	50.39154209
## p[27]	52.21031792	0.5225568	5.117080e+01	51.864039148	52.21356778
## p[28]	51.91506295	0.6584649	5.066063e+01	51.470263534	51.91467835
## p[29]	51.27333666	0.9512450	4.962022e+01	50.606278660	51.22056953
## p[30]	53.62496994	0.5422778	5.250645e+01	53.274810140	53.64753280
## p[31]	54.36810319	0.5007707	5.338390e+01	54.032955194	54.36130501
## p[32]	49.41529691	0.6394835	4.810819e+01	49.003020076	49.41343510
## p[33]	53.49503714	0.4491669	5.259886e+01	53.201526657	53.50654063
## p[34]	54.12731026	0.4941451	5.318653e+01	53.799542150	54.10897671
## p[35]	51.45418021	0.7605965	4.994421e+01	50.953203481	51.44091731
## p[36]	52.21031792	0.5225568	5.117080e+01	51.864039148	52.21356778
## p[37]	53.49503714	0.4491669	5.259886e+01	53.201526657	53.50654063
## p[38]	52.21031792	0.5225568	5.117080e+01	51.864039148	52.21356778
## p[39]	50.37877459	0.6893930	4.909340e+01	49.897451872	50.37199560
## p[40]	53.18658809	0.4514256	5.224271e+01	52.905536511	53.19929999
## p[41]	53.87279774	0.4837610	5.291107e+01	53.559226981	53.86426576
## p[42]	50.42174608	0.7796437	4.884472e+01	49.919945667	50.43304173
## p[43]	53.18658809	0.4514256	5.224271e+01	52.905536511	53.19929999
## p[44]	50.18886464	0.7618236	4.866236e+01	49.699046273	50.20634364
## p[45]	54.46711136	0.6752465	5.314154e+01	54.019393867	54.46420081
## p[46]	52.21031792	0.5225568	5.117080e+01	51.864039148	52.21356778
## p[47]	53.61520069	0.8632723	5.190680e+01	53.044562928	53.59210086
## p[48]	53.87279774	0.4837610	5.291107e+01	53.559226981	53.86426576
## p[49]	53.18658809	0.4514256	5.224271e+01	52.905536511	53.19929999
## p[50]	51.56935298	0.5213941	5.055164e+01	51.218218341	51.57323621
## p[51]	54.13615478	0.4888002	5.317577e+01	53.807577770	54.13351361
## p[52]	52.03067167	0.5782913	5.087606e+01	51.663798397	52.02420610
## p[53]	51.94529567	0.6288833	5.073655e+01	51.525836650	51.93616003
## p[54]	54.36810319	0.5007707	5.338390e+01	54.032955194	54.36130501
## p[55]	51.61435877	0.5394127	5.051804e+01	51.269471524	51.62100413
## p[56]	51.31326717	0.5981297	5.011277e+01	50.922991971	51.32054881
## p[57]	53.49891997	0.8572469	5.185192e+01	52.932290639	53.47728015
## p[58]	51.07038938	0.7786954	4.946730e+01	50.589870451	51.12237619
## p[59]	50.50826264	0.7586946	4.905647e+01	50.000548116	50.50540512
## p[60]	51.71899809	0.6820610	5.040971e+01	51.267905136	51.70923146
## p[61]	51.16399980	0.6698260	4.978408e+01	50.729935027	51.18097330
## p[62]	50.20346998	0.7855656	4.868488e+01	49.677100684	50.20752570
## p[63]	53.87279774	0.4837610	5.291107e+01	53.559226981	53.86426576
## p[64]	53.18658809	0.4514256	5.224271e+01	52.905536511	53.19929999
## p[65]	53.38165099	0.5856220	5.216721e+01	53.001700086	53.41151173
## p[66]	52.62351431	0.6173674	5.130530e+01	52.228516110	52.65982582
## p[67]	53.62496994	0.5422778	5.250645e+01	53.274810140	53.64753280
## p[68]	53.10370182	0.6962234	5.163147e+01	52.666937339	53.13846745
## p[69]	51.41221780	0.7339099	4.998929e+01	50.929020486	51.40851662
## p[70]	53.22329674	0.6787079	5.175573e+01	52.790999710	53.26500995
## p[71]	51.83051074	0.5371980	5.080689e+01	51.470411649	51.82446907
## p[72]	53.15232915	0.4638716	5.224203e+01	52.840306453	53.16542852
## p[73]	49.25342199	0.5898458	4.807388e+01	48.874620992	49.26228709
## p[74]	53.89179815	0.4766578	5.295798e+01	53.564700478	53.89367258
## p[75]	53.98229983	0.4741996	5.305416e+01	53.682189685	53.97403285
## p[76]	53.48894093	0.5403602	5.237525e+01	53.128351812	53.50760918
## p[77]	51.54440902	0.7068410	5.018307e+01	51.055112194	51.54017971

## p[78]	51.47310635	0.6637975	5.014514e+01	51.035344043	51.46183819
## p[79]	49.85658128	0.7092564	4.846127e+01	49.393539177	49.85983805
## p[80]	51.10751197	0.6297612	4.983822e+01	50.686310805	51.10925733
## p[81]	50.58089248	0.6531785	4.929526e+01	50.149531420	50.58827371
## p[82]	51.83051074	0.5371980	5.080689e+01	51.470411649	51.82446907
## p[83]	51.51254917	0.7810585	5.003265e+01	50.988028339	51.48634812
## p[84]	51.10189857	0.7768818	4.937546e+01	50.639767778	51.15058272
## p[85]	53.51598142	0.6227093	5.222365e+01	53.130511843	53.52039643
## p[86]	53.91549444	0.7706238	5.249759e+01	53.394439877	53.85958357
## p[87]	49.29662678	0.8266122	4.761057e+01	48.784167023	49.31063974
## p[88]	49.37259853	0.6538867	4.809160e+01	48.935801422	49.36424405
## p[89]	51.19538667	0.6849082	4.987592e+01	50.746080490	51.17978635
## p[90]	51.50223664	0.5753137	5.039053e+01	51.121239575	51.49983995
## p[91]	51.83051074	0.5371980	5.080689e+01	51.470411649	51.82446907
## p[92]	51.23551042	0.6747577	4.985288e+01	50.822210455	51.28049456
## p[93]	53.06321320	0.5193039	5.203391e+01	52.717379651	53.06714053
## p[94]	51.19538667	0.6849082	4.987592e+01	50.746080490	51.17978635
## p[95]	53.98213344	0.5289011	5.293127e+01	53.639657259	53.98764833
## p[96]	55.90799096	0.7503001	5.439251e+01	55.416846126	55.91228270
## p[97]	51.59557956	0.6889199	5.017424e+01	51.141657316	51.61495628
## p[98]	51.62929198	0.4722989	5.070939e+01	51.320279176	51.63503859
## p[99]	55.90799096	0.7503001	5.439251e+01	55.416846126	55.91228270
## p[100]	51.62929198	0.4722989	5.070939e+01	51.320279176	51.63503859
## p[101]	51.50223664	0.5753137	5.039053e+01	51.121239575	51.49983995
## p[102]	53.48894093	0.5403602	5.237525e+01	53.128351812	53.50760918
## p[103]	53.06321320	0.5193039	5.203391e+01	52.717379651	53.06714053
## p[104]	52.79027169	0.7659395	5.136181e+01	52.278314792	52.76791550
## p[105]	51.62929198	0.4722989	5.070939e+01	51.320279176	51.63503859
## p[106]	51.85258026	0.5482085	5.078539e+01	51.484546051	51.84060282
## p[107]	49.56119810	0.7971595	4.793114e+01	49.049304296	49.56388989
## p[108]	53.15232915	0.4638716	5.224203e+01	52.840306453	53.16542852
## p[109]	49.25342199	0.5898458	4.807388e+01	48.874620992	49.26228709
## p[110]	51.62929198	0.4722989	5.070939e+01	51.320279176	51.63503859
## p[111]	50.58089248	0.6531785	4.929526e+01	50.149531420	50.58827371
## p[112]	53.98229983	0.4741996	5.305416e+01	53.682189685	53.97403285
## p[113]	51.49597364	0.6269430	5.030614e+01	51.069318808	51.48623765
## p[114]	53.89179815	0.4766578	5.295798e+01	53.564700478	53.89367258
## p[115]	54.20123411	0.7324045	5.281879e+01	53.697996020	54.18175818
## p[116]	51.80964898	0.6891976	5.041622e+01	51.369156175	51.81699701
## p[117]	53.15232915	0.4638716	5.224203e+01	52.840306453	53.16542852
## p[118]	53.89179815	0.4766578	5.295798e+01	53.564700478	53.89367258
## p[119]	53.89179815	0.4766578	5.295798e+01	53.564700478	53.89367258
## p[120]	53.98229983	0.4741996	5.305416e+01	53.682189685	53.97403285
## p[121]	52.95220598	0.6214680	5.170149e+01	52.543137915	52.97506959
## p[122]	53.75948550	0.6085659	5.258883e+01	53.352190129	53.76331242
## p[123]	52.70245493	0.8061803	5.111312e+01	52.150548018	52.70966642
## p[124]	49.70682463	0.7938901	4.809570e+01	49.198283512	49.70552079
## p[125]	52.88243352	0.6016879	5.167263e+01	52.491049642	52.89525480
## p[126]	53.68106127	0.5961050	5.249215e+01	53.289461261	53.68431530
## p[127]	49.01076638	0.6942045	4.758751e+01	48.549847465	49.02293121
## p[128]	53.57004950	0.6350478	5.232284e+01	53.144265284	53.57680229
## p[129]	50.12499043	0.9340830	4.813974e+01	49.540478052	50.14652191

## p[130]	52.67502790	0.6244427	5.147182e+01	52.266918705	52.67173266
## p[131]	51.87222964	0.5660203	5.075275e+01	51.503462608	51.87317819
## p[132]	53.79586611	0.5433522	5.270792e+01	53.432126140	53.78804196
## p[133]	52.12530292	0.6595801	5.084235e+01	51.681171458	52.10869177
## p[134]	54.47683516	0.5637243	5.334541e+01	54.109652126	54.47187107
## p[135]	54.26567422	0.5853673	5.312015e+01	53.873226953	54.26967828
## p[136]	51.10751197	0.6297612	4.983822e+01	50.686310805	51.10925733
## p[137]	49.36719597	0.8625392	4.764424e+01	48.806425698	49.37829472
## p[138]	56.31773966	0.9039508	5.453955e+01	55.682168851	56.32221424
## p[139]	50.02838402	0.8157884	4.842004e+01	49.477326524	50.04010436
## p[140]	52.26674090	0.6506759	5.098164e+01	51.823781602	52.26212049
## p[141]	54.61688182	0.8427305	5.291583e+01	54.069111637	54.58212002
## p[142]	51.52521276	0.6542520	5.023660e+01	51.080008418	51.52771803
## p[143]	52.05507630	0.6887345	5.064251e+01	51.610176651	52.06206193
## p[144]	53.21647300	0.7193896	5.187935e+01	52.731239555	53.17767087
## p[145]	54.22862521	0.5649929	5.315135e+01	53.861625585	54.20495397
## p[146]	50.98839829	0.8450612	4.934074e+01	50.420100065	50.97423710
## p[147]	53.94310034	0.5903759	5.280337e+01	53.542415498	53.93875766
## p[148]	49.81591533	0.6857500	4.845295e+01	49.364157273	49.82173467
## p[149]	53.42600962	0.8097599	5.186811e+01	52.868947690	53.41222009
## p[150]	52.52593565	0.7540794	5.107722e+01	52.007718394	52.50527332
## p[151]	49.79799270	0.7657786	4.829054e+01	49.284911304	49.80512746
## p[152]	50.53334731	0.7451807	4.910331e+01	50.047381740	50.52038651
## p[153]	51.65786596	0.6109789	5.049868e+01	51.249913604	51.66187882
## p[154]	54.47683516	0.5637243	5.334541e+01	54.109652126	54.47187107
## p[155]	54.22862521	0.5649929	5.315135e+01	53.861625585	54.20495397
## p[156]	51.87222964	0.5660203	5.075275e+01	51.503462608	51.87317819
## p[157]	54.54344645	0.6367023	5.331764e+01	54.125256843	54.52530750
## p[158]	53.94310034	0.5903759	5.280337e+01	53.542415498	53.93875766
## p[159]	53.53000965	0.5711645	5.242727e+01	53.162503940	53.51214866
## p[160]	51.65786596	0.6109789	5.049868e+01	51.249913604	51.66187882
## p[161]	54.21206266	0.6322007	5.296789e+01	53.789320448	54.21152422
## p[162]	52.36215642	0.6029952	5.117805e+01	51.967475892	52.35072704
## p[163]	51.94547519	0.7483833	5.053711e+01	51.433344989	51.92971600
## p[164]	53.53000965	0.5711645	5.242727e+01	53.162503940	53.51214866
## p[165]	52.36215642	0.6029952	5.117805e+01	51.967475892	52.35072704
## p[166]	52.36215642	0.6029952	5.117805e+01	51.967475892	52.35072704
## sigma2_y[1]	2.12598895	0.4348540	1.439683e+00	1.822023860	2.07547233
## sigma2_y[2]	1.99508481	0.3790867	1.336624e+00	1.737083007	1.95916041
## sigma2_y[3]	2.14954683	0.4836874	1.406672e+00	1.830221997	2.09054235
## sigma2_y[4]	2.12291338	0.4791012	1.409491e+00	1.794090628	2.05501105
## sigma2_y[5]	2.27318361	0.4485815	1.591601e+00	1.973549376	2.21772026
## sigma2_y[6]	2.02767123	0.4474855	1.328827e+00	1.732850762	1.98092280
## sigma2_y[7]	1.90846193	0.3705648	1.246300e+00	1.651645485	1.88628692
## sigma2_y[8]	2.02212075	0.4500000	1.287043e+00	1.714095831	1.97707593
## sigma2_y[9]	2.04028775	0.4358620	1.320686e+00	1.743030597	1.99984407
## sigma2_y[10]	1.97388568	0.4147912	1.242343e+00	1.700392194	1.93636779
## sigma2_y[11]	2.02192418	0.3734588	1.417849e+00	1.755760410	1.98860851
## sigma2_y[12]	2.02197890	0.4431448	1.281851e+00	1.724158073	1.97631604
## sigma2_y[13]	2.01081577	0.3880073	1.363083e+00	1.749512402	1.97481754
## theta[1,1]	49.31630184	2.3278948	4.374854e+01	48.265386951	49.62665792
## theta[2,1]	48.61514971	2.1032226	4.455602e+01	47.105305495	48.75498120

## theta[3,1]	48.22994230	2.5928733	4.272137e+01	46.547420749	48.32594410
## theta[4,1]	47.40204242	2.2122616	4.234602e+01	46.027706997	47.84379102
## theta[5,1]	51.56693090	1.5850242	4.852014e+01	50.501714099	51.61041671
## theta[6,1]	52.20270823	2.2899325	4.665846e+01	50.959068368	52.40535662
## theta[7,1]	49.01046533	2.0525306	4.386360e+01	47.780845800	49.18324074
## theta[8,1]	54.18727679	2.4043001	4.987130e+01	52.329828535	54.16290310
## theta[9,1]	51.02586199	2.2729597	4.579641e+01	49.789818447	51.25394648
## theta[10,1]	46.95904934	1.7401335	4.329904e+01	45.745800032	47.08243423
## theta[11,1]	50.48179504	1.9446678	4.674559e+01	49.006499470	50.67532964
## theta[12,1]	48.39323646	2.4472631	4.288401e+01	46.891788625	48.66168711
## theta[13,1]	51.64710421	1.6335555	4.806951e+01	50.608319500	51.78001389
## theta[1,2]	49.40654315	2.2461800	4.381651e+01	48.294612216	49.68039595
## theta[2,2]	48.77089537	2.0774177	4.464827e+01	47.303330004	48.98067677
## theta[3,2]	48.32150875	2.5438073	4.305205e+01	46.684510339	48.43502094
## theta[4,2]	47.55750202	2.2033818	4.256125e+01	46.236608692	47.88994943
## theta[5,2]	51.71619627	1.6124299	4.848816e+01	50.662711273	51.75525606
## theta[6,2]	52.32501430	2.2662257	4.694270e+01	51.041623911	52.52347668
## theta[7,2]	49.12167997	2.0205082	4.435487e+01	47.946757625	49.30455153
## theta[8,2]	54.32869808	2.4123592	4.992250e+01	52.526505458	54.29741243
## theta[9,2]	51.12525242	2.2355240	4.580196e+01	49.959835329	51.33047235
## theta[10,2]	47.08851498	1.7599063	4.331695e+01	45.922482864	47.22808446
## theta[11,2]	50.63309745	1.9599056	4.670272e+01	49.212235171	50.83132540
## theta[12,2]	48.47123122	2.3939830	4.318379e+01	47.018794681	48.69447644
## theta[13,2]	51.80026465	1.6589098	4.816378e+01	50.765067728	51.91721576
## theta[1,3]	49.47809777	2.1546212	4.442445e+01	48.360038972	49.70231642
## theta[2,3]	48.90385185	2.0256577	4.477440e+01	47.542016844	49.06572897
## theta[3,3]	48.41045410	2.4610314	4.318948e+01	46.827537614	48.51196600
## theta[4,3]	47.71245928	2.1802426	4.277069e+01	46.336618984	47.99741975
## theta[5,3]	51.83751186	1.6208987	4.849867e+01	50.805453592	51.86751746
## theta[6,3]	52.44020288	2.2268614	4.731051e+01	51.136140251	52.67672070
## theta[7,3]	49.23304307	1.9858403	4.469505e+01	48.125294465	49.40279408
## theta[8,3]	54.44532305	2.4056147	5.000630e+01	52.667748178	54.43836969
## theta[9,3]	51.19535732	2.1631507	4.602590e+01	50.013196954	51.34554662
## theta[10,3]	47.19498927	1.7586411	4.346884e+01	46.040089610	47.34257426
## theta[11,3]	50.77977458	1.9361975	4.684765e+01	49.409346669	50.93797952
## theta[12,3]	48.52945687	2.3217030	4.339324e+01	47.087544568	48.73703223
## theta[13,3]	51.93119018	1.6512899	4.843476e+01	50.890517340	52.03191157
## theta[1,4]	49.57329897	2.0566433	4.479758e+01	48.469129795	49.74088584
## theta[2,4]	49.04586505	1.9600079	4.507392e+01	47.743293400	49.18045327
## theta[3,4]	48.51961208	2.3420746	4.361766e+01	47.086924673	48.57441614
## theta[4,4]	47.85472159	2.1243882	4.305342e+01	46.576588033	48.10244736
## theta[5,4]	51.97111526	1.5909850	4.862421e+01	50.961883473	51.98773628
## theta[6,4]	52.57216197	2.1749912	4.767473e+01	51.320395770	52.74202386
## theta[7,4]	49.36931236	1.9130571	4.489200e+01	48.337614316	49.52322931
## theta[8,4]	54.58371708	2.3471309	5.025546e+01	52.916090660	54.56574145
## theta[9,4]	51.28041247	2.0958802	4.651392e+01	50.148459692	51.39343725
## theta[10,4]	47.32199879	1.7047193	4.365566e+01	46.230027123	47.43258570
## theta[11,4]	50.94034591	1.8764190	4.709010e+01	49.599329087	51.04629461
## theta[12,4]	48.60472086	2.2427979	4.352706e+01	47.264374121	48.77322597
## theta[13,4]	52.08109825	1.6277137	4.864956e+01	51.105371502	52.16529683
## theta[1,5]	49.67638221	1.9664470	4.513908e+01	48.614073890	49.82930949
## theta[2,5]	49.20252591	1.8792251	4.531880e+01	47.972499175	49.33966742

## theta[3,5]	48.63374302	2.2478901	4.389326e+01	47.251765801	48.65522568
## theta[4,5]	48.01016872	2.0756996	4.334099e+01	46.766263595	48.27631694
## theta[5,5]	52.12176088	1.5617742	4.877631e+01	51.193182053	52.13560362
## theta[6,5]	52.70022730	2.1035339	4.785002e+01	51.500087597	52.89452520
## theta[7,5]	49.50106527	1.8710757	4.519411e+01	48.524524675	49.63897652
## theta[8,5]	54.71708191	2.2687625	5.038008e+01	53.129739624	54.71019024
## theta[9,5]	51.38419913	2.0178197	4.664098e+01	50.258157564	51.52946053
## theta[10,5]	47.45246423	1.6817376	4.388584e+01	46.380059310	47.57886795
## theta[11,5]	51.09467185	1.8252462	4.729431e+01	49.853984988	51.24890308
## theta[12,5]	48.73228573	2.1573074	4.387989e+01	47.430051051	48.88360148
## theta[13,5]	52.23325927	1.5955226	4.880387e+01	51.231990980	52.30586634
## theta[1,6]	49.77002629	1.8794267	4.542944e+01	48.759900365	49.85180264
## theta[2,6]	49.35434206	1.8164284	4.549299e+01	48.193766451	49.49572938
## theta[3,6]	48.72661849	2.1345666	4.429513e+01	47.396682379	48.78700265
## theta[4,6]	48.16553604	2.0276310	4.349003e+01	46.967409418	48.39829510
## theta[5,6]	52.26091900	1.5224872	4.896464e+01	51.351780111	52.30610848
## theta[6,6]	52.81727554	2.0359542	4.820731e+01	51.653895883	52.95285547
## theta[7,6]	49.63225943	1.7973151	4.533917e+01	48.687049699	49.77161167
## theta[8,6]	54.85126086	2.2273333	5.057457e+01	53.335594768	54.89169495
## theta[9,6]	51.48527411	1.9513136	4.682945e+01	50.353687969	51.65200730
## theta[10,6]	47.56518035	1.6370208	4.407701e+01	46.525947453	47.71198402
## theta[11,6]	51.25010163	1.7882089	4.746710e+01	50.088831427	51.41863713
## theta[12,6]	48.81159893	2.1248769	4.421194e+01	47.568740461	48.94087315
## theta[13,6]	52.37740076	1.5702154	4.886454e+01	51.453720748	52.46757215
## theta[1,7]	49.85462645	1.7481656	4.577086e+01	48.896291667	49.96315668
## theta[2,7]	49.51828831	1.7125596	4.582651e+01	48.433132307	49.66453964
## theta[3,7]	48.82968806	2.0279954	4.457831e+01	47.627703144	48.92219856
## theta[4,7]	48.33565864	1.9499763	4.382079e+01	47.211104262	48.55916179
## theta[5,7]	52.40420252	1.4548051	4.921334e+01	51.530613033	52.47673576
## theta[6,7]	52.95785647	1.9504757	4.874936e+01	51.808430333	53.11454435
## theta[7,7]	49.79003342	1.6821506	4.591536e+01	48.889331705	49.93479895
## theta[8,7]	54.98873658	2.1369539	5.078918e+01	53.562258469	55.03565225
## theta[9,7]	51.58001556	1.8582935	4.728460e+01	50.541976525	51.72355150
## theta[10,7]	47.69802373	1.5701294	4.433028e+01	46.688712196	47.81436135
## theta[11,7]	51.40810558	1.7077977	4.772111e+01	50.315400580	51.56182315
## theta[12,7]	48.88571826	2.0063617	4.455459e+01	47.673771830	49.01641482
## theta[13,7]	52.53163477	1.5045950	4.927459e+01	51.652790271	52.62978173
## theta[1,8]	49.95818910	1.5999568	4.634159e+01	49.014934516	50.05707739
## theta[2,8]	49.70490331	1.5635353	4.634465e+01	48.740322563	49.82192387
## theta[3,8]	48.92543855	1.8728864	4.485115e+01	47.795591782	48.97752739
## theta[4,8]	48.51420447	1.8330275	4.438113e+01	47.390699070	48.71584401
## theta[5,8]	52.56592890	1.3471811	4.968677e+01	51.759173191	52.61746613
## theta[6,8]	53.09311261	1.8226716	4.892040e+01	52.041054222	53.20657923
## theta[7,8]	49.92242663	1.5810810	4.633875e+01	49.098156285	50.05021625
## theta[8,8]	55.13870756	2.0137528	5.114582e+01	53.748555482	55.18868043
## theta[9,8]	51.70452341	1.7424956	4.773966e+01	50.704858179	51.82393503
## theta[10,8]	47.82862822	1.4684973	4.465965e+01	46.912311949	47.91765378
## theta[11,8]	51.58945931	1.5745259	4.831165e+01	50.605659957	51.74821289
## theta[12,8]	48.98742829	1.8871502	4.486182e+01	47.824698308	49.09777691
## theta[13,8]	52.69941359	1.4006820	4.963023e+01	51.884575958	52.77798885
## theta[1,9]	50.04289602	1.4450450	4.676667e+01	49.192713588	50.10580784
## theta[2,9]	49.86033313	1.3868604	4.685992e+01	48.973019200	49.97687536

## theta[3,9]	49.02585352	1.7321859	4.521280e+01	47.992165921	49.11486833
## theta[4,9]	48.68157198	1.6526901	4.514587e+01	47.674524797	48.82458761
## theta[5,9]	52.71368813	1.1992741	5.018919e+01	52.017980960	52.76744329
## theta[6,9]	53.23298665	1.6786064	4.972253e+01	52.224437269	53.33976349
## theta[7,9]	50.07284143	1.4325809	4.656775e+01	49.327762264	50.19938064
## theta[8,9]	55.26180833	1.9104930	5.152841e+01	53.927363503	55.31196516
## theta[9,9]	51.78912880	1.6331432	4.810612e+01	50.849597908	51.84883483
## theta[10,9]	47.95086401	1.3488982	4.506329e+01	47.140095193	48.03075165
## theta[11,9]	51.75385988	1.4163530	4.881686e+01	50.840710754	51.87623406
## theta[12,9]	49.06091896	1.7581566	4.515397e+01	47.996570303	49.14122521
## theta[13,9]	52.84911617	1.2873991	5.017611e+01	52.082544305	52.91052163
## theta[1,10]	50.13808479	1.2569822	4.729649e+01	49.433608133	50.19803008
## theta[2,10]	50.04697529	1.1696917	4.751777e+01	49.303261892	50.12509191
## theta[3,10]	49.12292634	1.5406974	4.580853e+01	48.258703054	49.18461162
## theta[4,10]	48.85899428	1.4401531	4.574543e+01	47.960020246	48.96849451
## theta[5,10]	52.88176978	1.0055696	5.073755e+01	52.274238292	52.91274575
## theta[6,10]	53.36833321	1.4917645	5.019534e+01	52.454518307	53.42632669
## theta[7,10]	50.21373403	1.2352348	4.735230e+01	49.557306462	50.30241659
## theta[8,10]	55.41172488	1.7540172	5.194321e+01	54.202355089	55.43502735
## theta[9,10]	51.89965589	1.4699252	4.865970e+01	51.052632099	52.00118102
## theta[10,10]	48.08534823	1.1966506	4.560811e+01	47.344560220	48.14672338
## theta[11,10]	51.93305587	1.2295147	4.937131e+01	51.138905205	52.01673948
## theta[12,10]	49.16366502	1.6127272	4.571374e+01	48.179203467	49.22856404
## theta[13,10]	53.00574664	1.1386994	5.061116e+01	52.323023889	53.06395791
## theta[1,11]	50.24795297	1.0117758	4.809365e+01	49.619689537	50.26829899
## theta[2,11]	50.22247240	0.8599420	4.844836e+01	49.666939336	50.26446768
## theta[3,11]	49.26548903	1.2692511	4.664141e+01	48.497521202	49.29514422
## theta[4,11]	49.04599635	1.2084090	4.662826e+01	48.249505205	49.09231765
## theta[5,11]	53.04597647	0.7358915	5.159404e+01	52.571049677	53.05622467
## theta[6,11]	53.50110983	1.2779429	5.103992e+01	52.633852612	53.48617020
## theta[7,11]	50.36939780	0.9811612	4.817166e+01	49.805905479	50.41816518
## theta[8,11]	55.52657727	1.5735285	5.260774e+01	54.429824195	55.46748752
## theta[9,11]	52.01945190	1.2682572	4.942189e+01	51.224871978	52.05183039
## theta[10,11]	48.22600301	0.9903190	4.622026e+01	47.624709909	48.24836551
## theta[11,11]	52.10937004	0.9507712	5.016201e+01	51.476839616	52.14115104
## theta[12,11]	49.26823116	1.4149875	4.639597e+01	48.357493444	49.29738296
## theta[13,11]	53.17127919	0.9121631	5.130620e+01	52.602616400	53.18340062
## theta[1,12]	50.95775496	0.9257952	4.911825e+01	50.359457743	50.97793458
## theta[2,12]	51.08505204	0.7085639	4.962465e+01	50.616570771	51.10038725
## theta[3,12]	49.70538724	0.9116882	4.786022e+01	49.098970642	49.73259211
## theta[4,12]	49.74888180	1.0641151	4.756106e+01	49.051389193	49.79213062
## theta[5,12]	53.71255163	0.7254559	5.227722e+01	53.228766763	53.70164121
## theta[6,12]	54.04730902	1.0766255	5.192625e+01	53.339097664	54.02542603
## theta[7,12]	50.93021373	0.7272399	4.945192e+01	50.458301328	50.93849476
## theta[8,12]	56.06166384	1.3914286	5.337340e+01	55.120954738	56.06967692
## theta[9,12]	52.68050449	1.1086347	5.051067e+01	51.978055612	52.67425806
## theta[10,12]	48.83608444	0.8733491	4.715064e+01	48.266232487	48.84592948
## theta[11,12]	52.84373199	0.7430620	5.135225e+01	52.351440752	52.83367376
## theta[12,12]	49.77163698	1.1697673	4.745748e+01	49.004258483	49.77676812
## theta[13,12]	53.76516269	0.7413942	5.236443e+01	53.259478176	53.74489316
## theta[1,13]	51.04810868	0.8805199	4.922165e+01	50.490371338	51.05245801
## theta[2,13]	51.14318201	0.7361783	4.964301e+01	50.656897525	51.16595474

## theta[3,13]	49.53541545	0.9401705	4.753233e+01	48.969774226	49.58582035
## theta[4,13]	49.65972644	1.0666188	4.744809e+01	48.965445985	49.72106187
## theta[5,13]	53.61998008	0.7523346	5.212870e+01	53.135321090	53.62365721
## theta[6,13]	53.94110097	1.0744827	5.187883e+01	53.230284657	53.94985029
## theta[7,13]	50.73653071	0.7325670	4.917861e+01	50.279278268	50.77443787
## theta[8,13]	55.99712433	1.3752374	5.337417e+01	55.073874915	55.96724033
## theta[9,13]	52.75885253	1.1164312	5.050590e+01	52.037138096	52.80016343
## theta[10,13]	48.71422120	0.8693936	4.693666e+01	48.190176277	48.73623946
## theta[11,13]	52.76370093	0.8152107	5.114063e+01	52.235226370	52.78391131
## theta[12,13]	49.79378973	1.1254298	4.753844e+01	49.090421994	49.80502052
## theta[13,13]	53.63115787	0.7683228	5.207911e+01	53.143509763	53.63198926
## theta[1,14]	51.45418021	0.7605965	4.994421e+01	50.953203481	51.44091731
## theta[2,14]	51.62394026	0.7581074	5.008373e+01	51.160456309	51.61315687
## theta[3,14]	49.74742075	0.8272208	4.795987e+01	49.239730542	49.77420573
## theta[4,14]	49.99613958	0.9913765	4.799802e+01	49.346008538	50.03743433
## theta[5,14]	53.93666999	0.7212340	5.247298e+01	53.470982452	53.93205091
## theta[6,14]	54.16034451	0.9484036	5.234270e+01	53.532880669	54.17053414
## theta[7,14]	51.06556804	0.7302014	4.940664e+01	50.612882947	51.08956880
## theta[8,14]	56.21068990	1.2736138	5.362428e+01	55.375257854	56.19580379
## theta[9,14]	53.14115237	1.0229168	5.114606e+01	52.468785044	53.13406368
## theta[10,14]	48.99446301	0.8148792	4.736998e+01	48.477008389	49.00298252
## theta[11,14]	53.08533610	0.7537628	5.153974e+01	52.615677388	53.09411728
## theta[12,14]	50.07333806	0.9608818	4.815434e+01	49.476875762	50.05047219
## theta[13,14]	53.83614310	0.7223967	5.236960e+01	53.377583441	53.82789602
## theta[1,15]	51.91506295	0.6584649	5.066063e+01	51.470263534	51.91467835
## theta[2,15]	52.21031792	0.5225568	5.117080e+01	51.864039148	52.21356778
## theta[3,15]	50.40374701	0.7542246	4.889892e+01	49.927122008	50.39154209
## theta[4,15]	50.42174608	0.7796437	4.884472e+01	49.919945667	50.43304173
## theta[5,15]	54.36810319	0.5007707	5.338390e+01	54.032955194	54.36130501
## theta[6,15]	54.46711136	0.6752465	5.314154e+01	54.019393867	54.46420081
## theta[7,15]	51.61435877	0.5394127	5.051804e+01	51.269471524	51.62100413
## theta[8,15]	56.42938908	1.0708752	5.431498e+01	55.723344970	56.46607283
## theta[9,15]	53.61520069	0.8632723	5.190680e+01	53.044562928	53.59210086
## theta[10,15]	49.41529691	0.6394835	4.810819e+01	49.003020076	49.41343510
## theta[11,15]	53.49503714	0.4491669	5.259886e+01	53.201526657	53.50654063
## theta[12,15]	50.44877775	0.6875996	4.911783e+01	50.000682035	50.43026693
## theta[13,15]	54.12731026	0.4941451	5.318653e+01	53.799542150	54.10897671
## theta[1,16]	51.94529567	0.6288833	5.073655e+01	51.525836650	51.93616003
## theta[2,16]	52.03067167	0.5782913	5.087606e+01	51.663798397	52.02420610
## theta[3,16]	50.50826264	0.7586946	4.905647e+01	50.000548116	50.50540512
## theta[4,16]	50.18886464	0.7618236	4.866236e+01	49.699046273	50.20634364
## theta[5,16]	54.13615478	0.4888002	5.317577e+01	53.807577770	54.13351361
## theta[6,16]	54.27013797	0.7347512	5.285105e+01	53.786825510	54.25681419
## theta[7,16]	51.56935298	0.5213941	5.055164e+01	51.218218341	51.57323621
## theta[8,16]	56.14797398	1.0323557	5.402564e+01	55.448794381	56.18329290
## theta[9,16]	53.53792154	0.9152055	5.177681e+01	52.933450950	53.52139360
## theta[10,16]	49.27400037	0.6626287	4.799718e+01	48.825060127	49.27190679
## theta[11,16]	53.18658809	0.4514256	5.224271e+01	52.905536511	53.19929999
## theta[12,16]	50.37877459	0.6893930	4.909340e+01	49.897451872	50.37199560
## theta[13,16]	53.87279774	0.4837610	5.291107e+01	53.559226981	53.86426576
## theta[1,17]	51.71899809	0.6820610	5.040971e+01	51.267905136	51.70923146
## theta[2,17]	51.54137554	0.7251419	5.005379e+01	51.075456731	51.54355675

## theta[3,17]	50.53185237	0.9060230	4.875416e+01	49.961478831	50.52682566
## theta[4,17]	49.60956438	0.8648520	4.792242e+01	49.029459148	49.62647236
## theta[5,17]	53.62496994	0.5422778	5.250645e+01	53.274810140	53.64753280
## theta[6,17]	53.81991301	0.8402156	5.220805e+01	53.255020405	53.80711460
## theta[7,17]	51.31326717	0.5981297	5.011277e+01	50.922991971	51.32054881
## theta[8,17]	55.63769627	1.0647999	5.350219e+01	54.962333382	55.66364041
## theta[9,17]	53.26009429	0.9462357	5.149578e+01	52.623332057	53.23599194
## theta[10,17]	48.86421573	0.7375450	4.735807e+01	48.393410775	48.89235171
## theta[11,17]	52.62351431	0.6173674	5.130530e+01	52.228516110	52.65982582
## theta[12,17]	50.20346998	0.7855656	4.868488e+01	49.677100684	50.20752570
## theta[13,17]	53.38165099	0.5856220	5.216721e+01	53.001700086	53.41151173
## theta[1,18]	51.51772052	0.7779384	5.000498e+01	50.998188386	51.52245336
## theta[2,18]	51.24581000	0.8444526	4.946384e+01	50.738542860	51.28896561
## theta[3,18]	50.56516965	1.0126409	4.857813e+01	49.922396498	50.53327502
## theta[4,18]	49.30331569	0.9798833	4.732737e+01	48.652582849	49.33892479
## theta[5,18]	53.34208430	0.6894137	5.198217e+01	52.882418676	53.36574009
## theta[6,18]	53.61651546	0.9138068	5.184312e+01	53.028948100	53.62056420
## theta[7,18]	51.16399980	0.6698260	4.978408e+01	50.729935027	51.18097330
## theta[8,18]	55.39999253	1.1350292	5.297720e+01	54.709821867	55.46467882
## theta[9,18]	53.02412891	1.0343199	5.106157e+01	52.329527727	52.97936066
## theta[10,18]	48.67053465	0.8372602	4.696979e+01	48.132478816	48.68485915
## theta[11,18]	52.36716944	0.7804237	5.065687e+01	51.886187115	52.42266187
## theta[12,18]	49.99019694	0.9663173	4.805103e+01	49.372415089	50.00928449
## theta[13,18]	53.19475198	0.7078118	5.174563e+01	52.749951653	53.22240416
## theta[1,19]	51.41221780	0.7339099	4.998929e+01	50.929020486	51.40851662
## theta[2,19]	51.07038938	0.7786954	4.946730e+01	50.589870451	51.12237619
## theta[3,19]	50.71371547	1.0408426	4.870836e+01	50.030366452	50.67614541
## theta[4,19]	49.10405862	0.9759778	4.712391e+01	48.494024188	49.13389594
## theta[5,19]	53.18666400	0.7017242	5.175340e+01	52.745667002	53.22281965
## theta[6,19]	53.50863300	0.8898702	5.175322e+01	52.915727294	53.51736283
## theta[7,19]	51.16341974	0.7291234	4.968084e+01	50.710350726	51.18308873
## theta[8,19]	55.24114320	1.1368256	5.288527e+01	54.548201987	55.29447731
## theta[9,19]	52.88093363	1.0357720	5.089775e+01	52.185775011	52.83786656
## theta[10,19]	48.60531775	0.8388545	4.688649e+01	48.078239585	48.63593464
## theta[11,19]	52.22852915	0.7795300	5.054451e+01	51.750508808	52.28281625
## theta[12,19]	49.88011905	1.0669979	4.779127e+01	49.201802409	49.85398448
## theta[13,19]	53.10370182	0.6962234	5.163147e+01	52.666937339	53.13846745
## theta[1,20]	51.42273877	0.8305305	4.981595e+01	50.867795783	51.40432234
## theta[2,20]	51.03777831	0.8808583	4.916630e+01	50.493772039	51.09931705
## theta[3,20]	50.97147296	1.0551437	4.906241e+01	50.265140400	50.90144937
## theta[4,20]	49.02591029	1.0293130	4.691578e+01	48.373619571	49.05248310
## theta[5,20]	53.14526199	0.7603788	5.149631e+01	52.679855520	53.16501452
## theta[6,20]	53.49891997	0.8572469	5.185192e+01	52.932290639	53.47728015
## theta[7,20]	51.27535338	0.7660689	4.970886e+01	50.791378770	51.27600532
## theta[8,20]	55.16284618	1.1397017	5.276253e+01	54.459571170	55.21578773
## theta[9,20]	52.85041681	1.1056368	5.083140e+01	52.105543067	52.83415874
## theta[10,20]	48.63780928	0.8890531	4.687339e+01	48.055573529	48.65471229
## theta[11,20]	52.19964622	0.8440958	5.041144e+01	51.694397130	52.26046331
## theta[12,20]	49.84105185	1.1889048	4.750343e+01	49.082426236	49.83500699
## theta[13,20]	53.11262879	0.7804801	5.144165e+01	52.625693909	53.14823231
## theta[1,21]	51.51254917	0.7810585	5.003265e+01	50.988028339	51.48634812
## theta[2,21]	51.10189857	0.7768818	4.937546e+01	50.639767778	51.15058272

## theta[3,21]	51.27333666	0.9512450	4.962022e+01	50.606278660	51.22056953
## theta[4,21]	49.07958815	1.0018414	4.696357e+01	48.473211437	49.13468453
## theta[5,21]	53.22329674	0.6787079	5.175573e+01	52.790999710	53.26500995
## theta[6,21]	53.62964205	0.8721442	5.196583e+01	53.032594700	53.61308524
## theta[7,21]	51.47310635	0.6637975	5.014514e+01	51.035344043	51.46183819
## theta[8,21]	55.20813495	1.0833474	5.283836e+01	54.549496425	55.27669265
## theta[9,21]	52.85459512	1.0975037	5.077783e+01	52.138129285	52.82584401
## theta[10,21]	48.78059708	0.8420449	4.708745e+01	48.239052099	48.79898877
## theta[11,21]	52.30478079	0.8084146	5.058928e+01	51.819980199	52.36382085
## theta[12,21]	49.86165264	1.2026539	4.741456e+01	49.143197864	49.86870261
## theta[13,21]	53.23997032	0.7560874	5.161154e+01	52.773959349	53.27338918
## theta[1,22]	51.54440902	0.7068410	5.018307e+01	51.055112194	51.54017971
## theta[2,22]	51.23551042	0.6747577	4.985288e+01	50.822210455	51.28049456
## theta[3,22]	51.07889293	0.8757920	4.944273e+01	50.514599005	51.04687300
## theta[4,22]	49.29662678	0.8266122	4.761057e+01	48.784167023	49.31063974
## theta[5,22]	53.48894093	0.5403602	5.237525e+01	53.128351812	53.50760918
## theta[6,22]	53.91549444	0.7706238	5.249759e+01	53.394439877	53.85958357
## theta[7,22]	51.50223664	0.5753137	5.039053e+01	51.121239575	51.49983995
## theta[8,22]	55.52625486	0.9518153	5.348354e+01	54.910320654	55.56491897
## theta[9,22]	52.81341167	0.9946301	5.094589e+01	52.159827658	52.77321252
## theta[10,22]	48.97542386	0.7408187	4.753585e+01	48.485914855	48.98896764
## theta[11,22]	52.56494387	0.6529409	5.118714e+01	52.152893881	52.59795428
## theta[12,22]	49.78631408	1.0642331	4.765779e+01	49.132569704	49.77694550
## theta[13,22]	53.51598142	0.6227093	5.222365e+01	53.130511843	53.52039643
## theta[1,23]	51.73677815	0.7089433	5.033602e+01	51.257407185	51.72387817
## theta[2,23]	51.83051074	0.5371980	5.080689e+01	51.470411649	51.82446907
## theta[3,23]	51.19538667	0.6849082	4.987592e+01	50.746080490	51.17978635
## theta[4,23]	49.80706237	0.7870538	4.823173e+01	49.294614005	49.79783924
## theta[5,23]	53.98213344	0.5289011	5.293127e+01	53.639657259	53.98764833
## theta[6,23]	54.22896683	0.7596425	5.283849e+01	53.713355012	54.20039172
## theta[7,23]	51.85024733	0.5710779	5.077165e+01	51.464596759	51.83778852
## theta[8,23]	55.90799096	0.7503001	5.439251e+01	55.416846126	55.91228270
## theta[9,23]	53.02491708	0.8931667	5.136955e+01	52.424821239	52.99926466
## theta[10,23]	49.37259853	0.6538867	4.809160e+01	48.935801422	49.36424405
## theta[11,23]	53.06321320	0.5193039	5.203391e+01	52.717379651	53.06714053
## theta[12,23]	49.84742166	0.9551707	4.797232e+01	49.239113072	49.85528778
## theta[13,23]	53.88146700	0.5806298	5.274195e+01	53.497328480	53.87372497
## theta[1,24]	51.49597364	0.6269430	5.030614e+01	51.069318808	51.48623765
## theta[2,24]	51.85258026	0.5482085	5.078539e+01	51.484546051	51.84060282
## theta[3,24]	50.58089248	0.6531785	4.929526e+01	50.149531420	50.58827371
## theta[4,24]	49.85658128	0.7092564	4.846127e+01	49.393539177	49.85983805
## theta[5,24]	53.98229983	0.4741996	5.305416e+01	53.682189685	53.97403285
## theta[6,24]	54.20123411	0.7324045	5.281879e+01	53.697996020	54.18175818
## theta[7,24]	51.62929198	0.4722989	5.070939e+01	51.320279176	51.63503859
## theta[8,24]	56.06202130	0.8472423	5.434737e+01	55.505888327	56.07270659
## theta[9,24]	52.79027169	0.7659395	5.136181e+01	52.278314792	52.76791550
## theta[10,24]	49.25342199	0.5898458	4.807388e+01	48.874620992	49.26228709
## theta[11,24]	53.15232915	0.4638716	5.224203e+01	52.840306453	53.16542852
## theta[12,24]	49.56119810	0.7971595	4.793114e+01	49.049304296	49.56388989
## theta[13,24]	53.89179815	0.4766578	5.295798e+01	53.564700478	53.89367258
## theta[1,25]	51.41330533	0.7577639	4.997894e+01	50.917501008	51.40876788
## theta[2,25]	51.80964898	0.6891976	5.041622e+01	51.369156175	51.81699701

## theta[3,25]	50.46056384	0.9116127	4.858403e+01	49.885383175	50.47686934
## theta[4,25]	49.79668635	0.8384430	4.814163e+01	49.259419802	49.80722659
## theta[5,25]	53.89243022	0.6463582	5.262344e+01	53.470481692	53.88859417
## theta[6,25]	54.11991391	0.8857963	5.232533e+01	53.531491020	54.11428784
## theta[7,25]	51.53687817	0.6806740	5.019264e+01	51.108369587	51.54164402
## theta[8,25]	55.99892558	0.9911312	5.397096e+01	55.365262338	56.00420113
## theta[9,25]	52.77356430	0.8534005	5.107878e+01	52.216195143	52.77624195
## theta[10,25]	49.19080183	0.7450432	4.774998e+01	48.705428321	49.18784860
## theta[11,25]	53.08039999	0.6442016	5.178267e+01	52.660078290	53.09442860
## theta[12,25]	49.48788336	0.9379009	4.755155e+01	48.913507533	49.51510956
## theta[13,25]	53.79430884	0.6627807	5.248870e+01	53.388400911	53.78583620
## theta[1,26]	51.28354282	0.7071452	4.989318e+01	50.825728285	51.27072551
## theta[2,26]	51.69198463	0.7310242	5.024908e+01	51.218215125	51.71128984
## theta[3,26]	50.26417912	0.9682377	4.826192e+01	49.672081449	50.28703424
## theta[4,26]	49.70682463	0.7938901	4.809570e+01	49.198283512	49.70552079
## theta[5,26]	53.75948550	0.6085659	5.258883e+01	53.352190129	53.76331242
## theta[6,26]	54.00673885	0.9101539	5.224726e+01	53.391070698	54.00769294
## theta[7,26]	51.39306620	0.7305657	4.989058e+01	50.945968087	51.42347573
## theta[8,26]	55.92779084	1.0068644	5.388246e+01	55.308251442	55.91808673
## theta[9,26]	52.70245493	0.8061803	5.111312e+01	52.150548018	52.70966642
## theta[10,26]	49.08323370	0.7144163	4.768885e+01	48.600218564	49.09172371
## theta[11,26]	52.95220598	0.6214680	5.170149e+01	52.543137915	52.97506959
## theta[12,26]	49.38637371	0.9619820	4.740276e+01	48.783760289	49.39516025
## theta[13,26]	53.66127679	0.6516777	5.235714e+01	53.226221711	53.66906537
## theta[1,27]	51.10751197	0.6297612	4.983822e+01	50.686310805	51.10925733
## theta[2,27]	51.59557956	0.6889199	5.017424e+01	51.141657316	51.61495628
## theta[3,27]	50.06829435	1.0053589	4.795550e+01	49.468206244	50.12835665
## theta[4,27]	49.65015382	0.8349751	4.796580e+01	49.108978840	49.65155449
## theta[5,27]	53.68106127	0.5961050	5.249215e+01	53.289461261	53.68431530
## theta[6,27]	53.93777094	0.9274105	5.214003e+01	53.292527278	53.93720368
## theta[7,27]	51.26773885	0.7425197	4.971113e+01	50.823004942	51.29792363
## theta[8,27]	55.88485248	1.0170439	5.387163e+01	55.228545309	55.89364264
## theta[9,27]	52.54618642	0.8848469	5.070885e+01	51.968104132	52.55835652
## theta[10,27]	49.01076638	0.6942045	4.758751e+01	48.549847465	49.02293121
## theta[11,27]	52.88243352	0.6016879	5.167263e+01	52.491049642	52.89525480
## theta[12,27]	49.20612287	0.9886721	4.715411e+01	48.572782992	49.23361124
## theta[13,27]	53.57004950	0.6350478	5.232284e+01	53.144265284	53.57680229
## theta[1,28]	51.52521276	0.6542520	5.023660e+01	51.080008418	51.52771803
## theta[2,28]	52.05507630	0.6887345	5.064251e+01	51.610176651	52.06206193
## theta[3,28]	50.12499043	0.9340830	4.813974e+01	49.540478052	50.14652191
## theta[4,28]	50.01536838	0.8509644	4.827818e+01	49.494022571	50.01638152
## theta[5,28]	54.00163501	0.6514727	5.272757e+01	53.566500929	54.00717856
## theta[6,28]	54.22122218	0.9355926	5.242634e+01	53.591667869	54.20671505
## theta[7,28]	51.45993802	0.6861236	5.001130e+01	51.031315148	51.47707262
## theta[8,28]	56.20466660	1.0443394	5.409201e+01	55.549232975	56.19586777
## theta[9,28]	52.89991244	0.8949028	5.115406e+01	52.286005325	52.92220350
## theta[10,28]	49.32678451	0.7424127	4.779665e+01	48.839763988	49.34347273
## theta[11,28]	53.27253695	0.6640182	5.193909e+01	52.861126224	53.29246133
## theta[12,28]	49.43351495	0.9078139	4.756182e+01	48.839558389	49.46213950
## theta[13,28]	53.85897852	0.6612574	5.254317e+01	53.425956524	53.85298401
## theta[1,29]	52.12530292	0.6595801	5.084235e+01	51.681171458	52.10869177
## theta[2,29]	52.67502790	0.6244427	5.147182e+01	52.266918705	52.67173266

## theta[3,29]	50.52154996	1.0344398	4.838643e+01	49.873225829	50.55000182
## theta[4,29]	50.53334731	0.7451807	4.910331e+01	50.047381740	50.52038651
## theta[5,29]	54.47683516	0.5637243	5.334541e+01	54.109652126	54.47187107
## theta[6,29]	54.61688182	0.8427305	5.291583e+01	54.069111637	54.58212002
## theta[7,29]	51.87222964	0.5660203	5.075275e+01	51.503462608	51.87317819
## theta[8,29]	56.57034917	0.9457518	5.471221e+01	55.946456807	56.54928134
## theta[9,29]	53.42600962	0.8097599	5.186811e+01	52.868947690	53.41222009
## theta[10,29]	49.81591533	0.6857500	4.845295e+01	49.364157273	49.82173467
## theta[11,29]	53.79586611	0.5433522	5.270792e+01	53.432126140	53.78804196
## theta[12,29]	49.79799270	0.7657786	4.829054e+01	49.284911304	49.80512746
## theta[13,29]	54.26567422	0.5853673	5.312015e+01	53.873226953	54.26967828
## theta[1,30]	52.52593565	0.7540794	5.107722e+01	52.007718394	52.50527332
## theta[2,30]	53.21647300	0.7193896	5.187935e+01	52.731239555	53.17767087
## theta[3,30]	50.82178011	1.2450955	4.821270e+01	50.037072234	50.84142177
## theta[4,30]	50.98839829	0.8450612	4.934074e+01	50.420100065	50.97423710
## theta[5,30]	54.88852015	0.6926992	5.356265e+01	54.427729737	54.87903778
## theta[6,30]	54.94428988	0.9292286	5.307271e+01	54.341089589	54.92894676
## theta[7,30]	52.26674090	0.6506759	5.098164e+01	51.823781602	52.26212049
## theta[8,30]	56.87259489	0.9958884	5.489914e+01	56.216283071	56.85504929
## theta[9,30]	53.79041736	0.9685055	5.194082e+01	53.123751051	53.79874750
## theta[10,30]	50.18104473	0.7972637	4.864601e+01	49.641556036	50.19228100
## theta[11,30]	54.22862521	0.5649929	5.315135e+01	53.861625585	54.20495397
## theta[12,30]	50.02838402	0.8157884	4.842004e+01	49.477326524	50.04010436
## theta[13,30]	54.54344645	0.6367023	5.331764e+01	54.125256843	54.52530750
## theta[1,31]	51.94547519	0.7483833	5.053711e+01	51.433344989	51.92971600
## theta[2,31]	52.36215642	0.6029952	5.117805e+01	51.967475892	52.35072704
## theta[3,31]	50.38912175	1.1796043	4.790543e+01	49.659550995	50.42209729
## theta[4,31]	50.28603788	0.8865586	4.852210e+01	49.697073610	50.27913808
## theta[5,31]	54.21206266	0.6322007	5.296789e+01	53.789320448	54.21152422
## theta[6,31]	54.41930293	0.9607636	5.260454e+01	53.783389948	54.35476032
## theta[7,31]	51.65786596	0.6109789	5.049868e+01	51.249913604	51.66187882
## theta[8,31]	56.31773966	0.9039508	5.453955e+01	55.682168851	56.32221424
## theta[9,31]	53.16384374	1.0044223	5.123221e+01	52.477903726	53.19241355
## theta[10,31]	49.57179888	0.7906614	4.798029e+01	49.042697370	49.58977588
## theta[11,31]	53.53000965	0.5711645	5.242727e+01	53.162503940	53.51214866
## theta[12,31]	49.36719597	0.8625392	4.764424e+01	48.806425698	49.37829472
## theta[13,31]	53.94310034	0.5903759	5.280337e+01	53.542415498	53.93875766
##	75%	97.5%	Rhat	n.eff	
## Sigma[1,1]	0.6460141	1.6216700	1.014594	320	
## Sigma[2,1]	0.5210137	1.2504349	1.023486	180	
## Sigma[3,1]	0.3667319	1.2260179	1.066548	47	
## Sigma[4,1]	0.4129807	0.9936661	1.018137	150	
## Sigma[5,1]	0.3829331	0.9088115	1.005142	450	
## Sigma[6,1]	0.3433932	0.8596522	1.037296	61	
## Sigma[7,1]	0.3490970	0.9193907	1.059810	110	
## Sigma[8,1]	0.3349156	0.9301554	1.038885	59	
## Sigma[9,1]	0.5223139	1.4437415	1.076709	70	
## Sigma[10,1]	0.3780062	0.9194782	1.005964	610	
## Sigma[11,1]	0.4100791	1.0292865	1.002522	3000	
## Sigma[12,1]	0.4587475	1.3532501	1.043994	140	
## Sigma[13,1]	0.3640986	0.9595077	1.036147	180	
## Sigma[1,2]	0.5210137	1.2504349	1.023486	180	

## Sigma[2,2]	0.8121113	1.9290753	1.008303	260
## Sigma[3,2]	0.3862671	1.2688728	1.130060	25
## Sigma[4,2]	0.5536738	1.3127487	1.002976	1000
## Sigma[5,2]	0.5440428	1.2678316	1.004219	540
## Sigma[6,2]	0.4129119	1.0034704	1.018184	120
## Sigma[7,2]	0.4568088	1.1306039	1.048624	78
## Sigma[8,2]	0.4734150	1.2407230	1.093913	29
## Sigma[9,2]	0.5469638	1.4282996	1.047755	87
## Sigma[10,2]	0.4844644	1.1400261	1.012729	760
## Sigma[11,2]	0.6024785	1.3803640	1.020878	140
## Sigma[12,2]	0.4212131	1.2320766	1.010009	290
## Sigma[13,2]	0.4618384	1.1069803	1.015973	220
## Sigma[1,3]	0.3667319	1.2260179	1.066548	47
## Sigma[2,3]	0.3862671	1.2688728	1.130060	25
## Sigma[3,3]	0.8116282	2.4648287	1.045466	49
## Sigma[4,3]	0.3330491	1.0561554	1.029087	100
## Sigma[5,3]	0.3378839	1.0128667	1.050735	53
## Sigma[6,3]	0.2599072	0.8771322	1.005881	540
## Sigma[7,3]	0.4921495	1.4694670	1.128419	32
## Sigma[8,3]	0.1935565	0.7362797	1.004170	1400
## Sigma[9,3]	0.3491775	1.4012362	1.109453	31
## Sigma[10,3]	0.3753611	1.1333807	1.008445	290
## Sigma[11,3]	0.3289759	1.0333468	1.080815	37
## Sigma[12,3]	0.3413712	1.3180710	1.054300	50
## Sigma[13,3]	0.2880257	0.9149381	1.050828	47
## Sigma[1,4]	0.4129807	0.9936661	1.018137	150
## Sigma[2,4]	0.5536738	1.3127487	1.002976	1000
## Sigma[3,4]	0.3330491	1.0561554	1.029087	100
## Sigma[4,4]	0.7362181	1.8823080	1.029586	76
## Sigma[5,4]	0.5677382	1.3070032	1.024082	230
## Sigma[6,4]	0.5106424	1.4038863	1.079999	61
## Sigma[7,4]	0.4577844	1.1305403	1.014300	370
## Sigma[8,4]	0.5190724	1.4192533	1.059259	49
## Sigma[9,4]	0.3841440	1.0648012	1.003099	3000
## Sigma[10,4]	0.5132756	1.2479423	1.029148	260
## Sigma[11,4]	0.5919579	1.4053985	1.016846	190
## Sigma[12,4]	0.3359490	0.9937596	1.015950	180
## Sigma[13,4]	0.5111001	1.1547793	1.016733	210
## Sigma[1,5]	0.3829331	0.9088115	1.005142	450
## Sigma[2,5]	0.5440428	1.2678316	1.004219	540
## Sigma[3,5]	0.3378839	1.0128667	1.050735	53
## Sigma[4,5]	0.5677382	1.3070032	1.024082	230
## Sigma[5,5]	0.5901466	1.3020556	1.001021	3000
## Sigma[6,5]	0.4614879	1.0779491	1.047053	110
## Sigma[7,5]	0.4357466	1.0491111	1.017001	440
## Sigma[8,5]	0.4743836	1.1564248	1.033250	73
## Sigma[9,5]	0.3756270	1.0149302	1.018664	220
## Sigma[10,5]	0.4909123	1.0705666	1.000704	3000
## Sigma[11,5]	0.5551545	1.2371083	1.003235	730
## Sigma[12,5]	0.3178918	0.9390071	1.010215	210
## Sigma[13,5]	0.4791503	1.0158881	1.005637	940
## Sigma[1,6]	0.3433932	0.8596522	1.037296	61

## Sigma[2,6]	0.4129119	1.0034704	1.018184	120
## Sigma[3,6]	0.2599072	0.8771322	1.005881	540
## Sigma[4,6]	0.5106424	1.4038863	1.079999	61
## Sigma[5,6]	0.4614879	1.0779491	1.047053	110
## Sigma[6,6]	0.5404078	1.4573110	1.025207	100
## Sigma[7,6]	0.3511846	0.9964831	1.064047	68
## Sigma[8,6]	0.4547643	1.1372684	1.025358	140
## Sigma[9,6]	0.2814374	0.7913024	1.010241	260
## Sigma[10,6]	0.4425220	1.0865598	1.032048	110
## Sigma[11,6]	0.4886570	1.1890576	1.025831	100
## Sigma[12,6]	0.2529861	0.8523354	1.057045	46
## Sigma[13,6]	0.4364725	1.0221773	1.016475	200
## Sigma[1,7]	0.3490970	0.9193907	1.059810	110
## Sigma[2,7]	0.4568088	1.1306039	1.048624	78
## Sigma[3,7]	0.4921495	1.4694670	1.128419	32
## Sigma[4,7]	0.4577844	1.1305403	1.014300	370
## Sigma[5,7]	0.4357466	1.0491111	1.017001	440
## Sigma[6,7]	0.3511846	0.9964831	1.064047	68
## Sigma[7,7]	0.5723896	1.4917692	1.032744	80
## Sigma[8,7]	0.3190344	0.8224671	1.058070	42
## Sigma[9,7]	0.3346162	0.9753830	1.097092	48
## Sigma[10,7]	0.4325439	1.0276670	1.002168	3000
## Sigma[11,7]	0.4250722	1.0199939	1.013794	440
## Sigma[12,7]	0.3163045	1.0310385	1.049972	130
## Sigma[13,7]	0.3789876	0.8915151	1.011451	390
## Sigma[1,8]	0.3349156	0.9301554	1.038885	59
## Sigma[2,8]	0.4734150	1.2407230	1.093913	29
## Sigma[3,8]	0.1935565	0.7362797	1.004170	1400
## Sigma[4,8]	0.5190724	1.4192533	1.059259	49
## Sigma[5,8]	0.4743836	1.1564248	1.033250	73
## Sigma[6,8]	0.4547643	1.1372684	1.025358	140
## Sigma[7,8]	0.3190344	0.8224671	1.058070	42
## Sigma[8,8]	0.6597801	1.6986723	1.019096	110
## Sigma[9,8]	0.3016407	0.8816777	1.028090	84
## Sigma[10,8]	0.4102107	0.9770471	1.028265	97
## Sigma[11,8]	0.5289258	1.3385041	1.065982	39
## Sigma[12,8]	0.2809773	0.9515610	1.063166	40
## Sigma[13,8]	0.4576782	1.0861515	1.027932	110
## Sigma[1,9]	0.5223139	1.4437415	1.076709	70
## Sigma[2,9]	0.5469638	1.4282996	1.047755	87
## Sigma[3,9]	0.3491775	1.4012362	1.109453	31
## Sigma[4,9]	0.3841440	1.0648012	1.003099	3000
## Sigma[5,9]	0.3756270	1.0149302	1.018664	220
## Sigma[6,9]	0.2814374	0.7913024	1.010241	260
## Sigma[7,9]	0.3346162	0.9753830	1.097092	48
## Sigma[8,9]	0.3016407	0.8816777	1.028090	84
## Sigma[9,9]	0.7023796	1.8251032	1.022465	130
## Sigma[10,9]	0.3576844	1.0180868	1.019084	450
## Sigma[11,9]	0.4075599	1.0517140	1.032508	150
## Sigma[12,9]	0.4899423	1.5320960	1.041860	150
## Sigma[13,9]	0.3440016	0.9748217	1.047102	110
## Sigma[1,10]	0.3780062	0.9194782	1.005964	610

## Sigma[2,10]	0.4844644	1.1400261	1.012729	760
## Sigma[3,10]	0.3753611	1.1333807	1.008445	290
## Sigma[4,10]	0.5132756	1.2479423	1.029148	260
## Sigma[5,10]	0.4909123	1.0705666	1.000704	3000
## Sigma[6,10]	0.4425220	1.0865598	1.032048	110
## Sigma[7,10]	0.4325439	1.0276670	1.002168	3000
## Sigma[8,10]	0.4102107	0.9770471	1.028265	97
## Sigma[9,10]	0.3576844	1.0180868	1.019084	450
## Sigma[10,10]	0.5573830	1.3255160	1.008559	920
## Sigma[11,10]	0.5096478	1.1145557	1.017795	520
## Sigma[12,10]	0.2918636	0.9257476	1.019027	180
## Sigma[13,10]	0.4427202	0.9776188	1.005480	3000
## Sigma[1,11]	0.4100791	1.0292865	1.002522	3000
## Sigma[2,11]	0.6024785	1.3803640	1.020878	140
## Sigma[3,11]	0.3289759	1.0333468	1.080815	37
## Sigma[4,11]	0.5919579	1.4053985	1.016846	190
## Sigma[5,11]	0.5551545	1.2371083	1.003235	730
## Sigma[6,11]	0.4886570	1.1890576	1.025831	100
## Sigma[7,11]	0.4250722	1.0199939	1.013794	440
## Sigma[8,11]	0.5289258	1.3385041	1.065982	39
## Sigma[9,11]	0.4075599	1.0517140	1.032508	150
## Sigma[10,11]	0.5096478	1.1145557	1.017795	520
## Sigma[11,11]	0.6629683	1.5458765	1.019938	110
## Sigma[12,11]	0.3243123	0.9769332	1.006886	1800
## Sigma[13,11]	0.5073764	1.0931656	1.017858	220
## Sigma[1,12]	0.4587475	1.3532501	1.043994	140
## Sigma[2,12]	0.4212131	1.2320766	1.010009	290
## Sigma[3,12]	0.3413712	1.3180710	1.054300	50
## Sigma[4,12]	0.3359490	0.9937596	1.015950	180
## Sigma[5,12]	0.3178918	0.9390071	1.010215	210
## Sigma[6,12]	0.2529861	0.8523354	1.057045	46
## Sigma[7,12]	0.3163045	1.0310385	1.049972	130
## Sigma[8,12]	0.2809773	0.9515610	1.063166	40
## Sigma[9,12]	0.4899423	1.5320960	1.041860	150
## Sigma[10,12]	0.2918636	0.9257476	1.019027	180
## Sigma[11,12]	0.3243123	0.9769332	1.006886	1800
## Sigma[12,12]	0.6870171	1.9874786	1.003264	1300
## Sigma[13,12]	0.3029381	0.9805224	1.016185	240
## Sigma[1,13]	0.3640986	0.9595077	1.036147	180
## Sigma[2,13]	0.4618384	1.1069803	1.015973	220
## Sigma[3,13]	0.2880257	0.9149381	1.050828	47
## Sigma[4,13]	0.5111001	1.1547793	1.016733	210
## Sigma[5,13]	0.4791503	1.0158881	1.005637	940
## Sigma[6,13]	0.4364725	1.0221773	1.016475	200
## Sigma[7,13]	0.3789876	0.8915151	1.011451	390
## Sigma[8,13]	0.4576782	1.0861515	1.027932	110
## Sigma[9,13]	0.3440016	0.9748217	1.047102	110
## Sigma[10,13]	0.4427202	0.9776188	1.005480	3000
## Sigma[11,13]	0.5073764	1.0931656	1.017858	220
## Sigma[12,13]	0.3029381	0.9805224	1.016185	240
## Sigma[13,13]	0.5352613	1.1743461	1.002081	1300
## deviance	591.7650817	608.4296040	1.009107	230

## p[1]	51.2357705	52.1012792	1.030477	92
## p[2]	50.8230954	51.7607621	1.011803	180
## p[3]	50.9154744	52.1418131	1.012784	230
## p[4]	53.5260686	54.5027303	1.013540	160
## p[5]	53.5260686	54.5027303	1.013540	160
## p[6]	51.4090866	52.3173074	1.017686	170
## p[7]	50.3263625	51.4788625	1.016343	130
## p[8]	51.5453591	52.4598532	1.004889	460
## p[9]	50.8915923	51.8404070	1.007420	290
## p[10]	54.2544460	55.2504908	1.009528	280
## p[11]	53.3379429	54.3088018	1.016840	130
## p[12]	50.2976584	51.3194030	1.010250	210
## p[13]	51.9139385	52.6157470	1.008441	290
## p[14]	51.6591707	52.5283591	1.003146	760
## p[15]	53.8003946	54.3478578	1.007927	370
## p[16]	54.4635815	55.1181307	1.018835	140
## p[17]	54.4514570	55.1590844	1.024994	91
## p[18]	54.9003150	55.8430736	1.004408	2200
## p[19]	54.4514570	55.1590844	1.024994	91
## p[20]	50.8915923	51.8404070	1.007420	290
## p[21]	53.8003946	54.3478578	1.007927	370
## p[22]	49.8567663	50.6334826	1.023568	110
## p[23]	51.9745576	52.6516863	1.008822	330
## p[24]	54.9003150	55.8430736	1.004408	2200
## p[25]	54.7082192	55.3630416	1.018008	160
## p[26]	50.8909069	51.9631619	1.017738	130
## p[27]	52.5616945	53.2308971	1.002000	1300
## p[28]	52.3446086	53.2184009	1.001999	1500
## p[29]	51.8485277	53.3953562	1.003986	580
## p[30]	53.9775081	54.6584048	1.013298	200
## p[31]	54.7082192	55.3630416	1.018008	160
## p[32]	49.8567663	50.6334826	1.023568	110
## p[33]	53.8003946	54.3478578	1.007927	370
## p[34]	54.4514570	55.1590844	1.024994	91
## p[35]	51.9482864	52.9865441	1.008635	250
## p[36]	52.5616945	53.2308971	1.002000	1300
## p[37]	53.8003946	54.3478578	1.007927	370
## p[38]	52.5616945	53.2308971	1.002000	1300
## p[39]	50.8295882	51.7887985	1.011960	180
## p[40]	53.4880388	54.0477193	1.005755	380
## p[41]	54.1951861	54.8463971	1.022037	110
## p[42]	50.9605663	51.8673395	1.069846	38
## p[43]	53.4880388	54.0477193	1.005755	380
## p[44]	50.7153915	51.6492456	1.075465	36
## p[45]	54.9003150	55.8430736	1.004408	2200
## p[46]	52.5616945	53.2308971	1.002000	1300
## p[47]	54.1820717	55.3618781	1.027482	83
## p[48]	54.1951861	54.8463971	1.022037	110
## p[49]	53.4880388	54.0477193	1.005755	380
## p[50]	51.9139385	52.6157470	1.008441	290
## p[51]	54.4635815	55.1181307	1.018835	140
## p[52]	52.3918061	53.1837072	1.005525	400

## p[53]	52.3600042	53.2692076	1.003635	1200
## p[54]	54.7082192	55.3630416	1.018008	160
## p[55]	51.9745576	52.6516863	1.008822	330
## p[56]	51.7011386	52.5004026	1.002838	1000
## p[57]	54.0365870	55.2840263	1.002224	3000
## p[58]	51.5976869	52.5473568	1.004167	550
## p[59]	50.9999460	52.0029974	1.008103	270
## p[60]	52.1621510	53.1111873	1.000652	3000
## p[61]	51.6079049	52.4568381	1.003538	940
## p[62]	50.7090195	51.7828785	1.029118	73
## p[63]	54.1951861	54.8463971	1.022037	110
## p[64]	53.4880388	54.0477193	1.005755	380
## p[65]	53.7651898	54.5035626	1.010438	220
## p[66]	53.0668865	53.7410978	1.015781	150
## p[67]	53.9775081	54.6584048	1.013298	200
## p[68]	53.5664713	54.3664493	1.009781	250
## p[69]	51.8936503	52.8600606	1.002068	1300
## p[70]	53.6994004	54.4409280	1.008874	340
## p[71]	52.1862494	52.9211594	1.005324	440
## p[72]	53.4647379	54.0644509	1.001933	1600
## p[73]	49.6398391	50.3995249	1.019874	130
## p[74]	54.2090116	54.8412670	1.024944	88
## p[75]	54.2988117	54.9376769	1.032429	75
## p[76]	53.8592645	54.5168804	1.016274	140
## p[77]	52.0104440	52.9747642	1.000509	3000
## p[78]	51.8942336	52.8131776	1.001788	1600
## p[79]	50.3070741	51.2591000	1.057945	45
## p[80]	51.5396663	52.3240974	1.000860	3000
## p[81]	51.0215238	51.8337899	1.000879	3000
## p[82]	52.1862494	52.9211594	1.005324	440
## p[83]	52.0188947	53.1173938	1.002511	1000
## p[84]	51.6211626	52.5318371	1.018051	120
## p[85]	53.9372772	54.7261366	1.021907	130
## p[86]	54.3957268	55.5294393	1.005979	390
## p[87]	49.8418544	50.8874923	1.067204	39
## p[88]	49.8047392	50.6952406	1.022118	110
## p[89]	51.6327892	52.5715691	1.002445	3000
## p[90]	51.8784756	52.6523275	1.004503	500
## p[91]	52.1862494	52.9211594	1.005324	440
## p[92]	51.6853370	52.4716523	1.007852	270
## p[93]	53.4153022	54.0687130	1.010088	220
## p[94]	51.6327892	52.5715691	1.002445	3000
## p[95]	54.3385975	54.9901009	1.020809	140
## p[96]	56.4461164	57.3129156	1.012249	170
## p[97]	52.0607565	52.9001904	1.004781	470
## p[98]	51.9441582	52.5659113	1.008455	250
## p[99]	56.4461164	57.3129156	1.012249	170
## p[100]	51.9441582	52.5659113	1.008455	250
## p[101]	51.8784756	52.6523275	1.004503	500
## p[102]	53.8592645	54.5168804	1.016274	140
## p[103]	53.4153022	54.0687130	1.010088	220
## p[104]	53.2836577	54.3852592	1.038759	82

## p[105]	51.9441582	52.5659113	1.008455	250
## p[106]	52.2254410	52.9063464	1.001874	1500
## p[107]	50.0927834	51.0739261	1.047405	47
## p[108]	53.4647379	54.0644509	1.001933	1600
## p[109]	49.6398391	50.3995249	1.019874	130
## p[110]	51.9441582	52.5659113	1.008455	250
## p[111]	51.0215238	51.8337899	1.000879	3000
## p[112]	54.2988117	54.9376769	1.032429	75
## p[113]	51.9089479	52.7368807	1.000903	3000
## p[114]	54.2090116	54.8412670	1.024944	88
## p[115]	54.6781118	55.6763131	1.006355	340
## p[116]	52.2598856	53.1934351	1.001149	3000
## p[117]	53.4647379	54.0644509	1.001933	1600
## p[118]	54.2090116	54.8412670	1.024944	88
## p[119]	54.2090116	54.8412670	1.024944	88
## p[120]	54.2988117	54.9376769	1.032429	75
## p[121]	53.3710280	54.1632835	1.007459	290
## p[122]	54.1577053	54.9643919	1.008425	250
## p[123]	53.2329541	54.2767263	1.036834	75
## p[124]	50.2188899	51.2446513	1.045625	59
## p[125]	53.2912796	54.0152223	1.006042	360
## p[126]	54.0660045	54.8615402	1.014433	150
## p[127]	49.4851416	50.3089769	1.014547	200
## p[128]	54.0042275	54.8008538	1.026490	81
## p[129]	50.7606657	51.9130561	1.006147	360
## p[130]	53.0726401	53.9259424	1.001601	1800
## p[131]	52.2343619	53.0156321	1.002547	980
## p[132]	54.1622963	54.8479905	1.002264	1200
## p[133]	52.5651373	53.4707311	1.001781	1600
## p[134]	54.8464874	55.5777261	1.030502	85
## p[135]	54.6571013	55.4225389	1.016423	150
## p[136]	51.5396663	52.3240974	1.000860	3000
## p[137]	49.9452985	51.0683891	1.015261	140
## p[138]	56.9280481	58.0594851	1.003983	3000
## p[139]	50.5622828	51.6320572	1.022532	98
## p[140]	52.6952526	53.6009989	1.000704	3000
## p[141]	55.1461161	56.3232763	1.015451	170
## p[142]	51.9699000	52.8079937	1.001344	2400
## p[143]	52.5143007	53.4041565	1.005298	420
## p[144]	53.6858822	54.7308610	1.000593	3000
## p[145]	54.5984494	55.3472148	1.007347	320
## p[146]	51.5160040	52.6981022	1.005852	440
## p[147]	54.3335531	55.0799736	1.011763	190
## p[148]	50.2682946	51.1721647	1.017288	120
## p[149]	53.9773268	55.0537921	1.028896	100
## p[150]	53.0338423	54.0251223	1.004373	520
## p[151]	50.3078500	51.2936409	1.027217	79
## p[152]	51.0119088	52.0260710	1.026264	94
## p[153]	52.0539947	52.8529058	1.001426	2200
## p[154]	54.8464874	55.5777261	1.030502	85
## p[155]	54.5984494	55.3472148	1.007347	320
## p[156]	52.2343619	53.0156321	1.002547	980

## p[157]	54.9758272	55.8161953	1.018194	140
## p[158]	54.3335531	55.0799736	1.011763	190
## p[159]	53.9067232	54.6956747	1.001149	3000
## p[160]	52.0539947	52.8529058	1.001426	2200
## p[161]	54.6289640	55.4232146	1.027719	90
## p[162]	52.7728461	53.5150612	1.002002	1300
## p[163]	52.4311567	53.4441194	1.002428	1000
## p[164]	53.9067232	54.6956747	1.001149	3000
## p[165]	52.7728461	53.5150612	1.002002	1300
## p[166]	52.7728461	53.5150612	1.002002	1300
## sigma2_y[1]	2.3627823	3.1353584	1.002548	980
## sigma2_y[2]	2.2059713	2.8508695	1.007178	300
## sigma2_y[3]	2.3816736	3.2639373	1.001983	1300
## sigma2_y[4]	2.3737077	3.2382886	1.006970	310
## sigma2_y[5]	2.4872399	3.3223183	1.001828	2400
## sigma2_y[6]	2.2654467	2.9592578	1.002464	1000
## sigma2_y[7]	2.1371164	2.6894502	1.003346	700
## sigma2_y[8]	2.2789415	3.0265158	1.004736	470
## sigma2_y[9]	2.2941201	3.0054007	1.003427	690
## sigma2_y[10]	2.2042202	2.8739492	1.005926	400
## sigma2_y[11]	2.2417849	2.8695117	1.000713	3000
## sigma2_y[12]	2.2578135	2.9924149	1.003674	630
## sigma2_y[13]	2.2338357	2.8686848	1.001062	3000
## theta[1,1]	50.8257410	53.0360420	1.127605	32
## theta[2,1]	50.1695878	52.5532443	1.042505	53
## theta[3,1]	49.9343588	53.3772480	1.348534	10
## theta[4,1]	48.9831280	50.7763148	1.119433	24
## theta[5,1]	52.5814143	54.7552930	1.001197	2900
## theta[6,1]	53.8822467	55.8549684	1.116651	29
## theta[7,1]	50.3680002	52.6149248	1.134844	26
## theta[8,1]	56.0612809	58.6093133	1.302809	11
## theta[9,1]	52.4992896	55.1415460	1.226644	15
## theta[10,1]	48.3041883	49.8995618	1.037848	1800
## theta[11,1]	51.9139154	53.7740001	1.047834	49
## theta[12,1]	50.0343075	53.0718523	1.081979	43
## theta[13,1]	52.7551188	54.5905309	1.048560	92
## theta[1,2]	50.8452909	53.0773708	1.118536	35
## theta[2,2]	50.3074989	52.3898351	1.046903	48
## theta[3,2]	49.9541119	53.3209266	1.320984	10
## theta[4,2]	49.1255174	51.0798024	1.104360	27
## theta[5,2]	52.7537078	54.8828893	1.001941	1400
## theta[6,2]	53.9767102	55.9879705	1.103012	31
## theta[7,2]	50.4710844	52.6845680	1.125944	27
## theta[8,2]	56.1737058	58.7167831	1.289554	11
## theta[9,2]	52.5652853	55.1462320	1.214878	16
## theta[10,2]	48.4228614	50.0936811	1.028836	1500
## theta[11,2]	52.1092683	53.9472034	1.048642	47
## theta[12,2]	50.0906016	53.0166569	1.075648	48
## theta[13,2]	52.9257046	54.7240439	1.043963	87
## theta[1,3]	50.8157040	53.0691824	1.111138	39
## theta[2,3]	50.3622471	52.5088040	1.039410	56
## theta[3,3]	50.0369867	53.2025771	1.283447	11

## theta[4,3]	49.2866155	51.2417200	1.105059	27
## theta[5,3]	52.9127647	54.9617215	1.004074	960
## theta[6,3]	54.0546552	56.0335989	1.099723	31
## theta[7,3]	50.5579397	52.6361246	1.118882	30
## theta[8,3]	56.2918018	58.9238368	1.273956	11
## theta[9,3]	52.6107321	55.1531345	1.184784	18
## theta[10,3]	48.5354527	50.1763960	1.018945	960
## theta[11,3]	52.2218969	54.1012694	1.040048	56
## theta[12,3]	50.1137759	52.8065348	1.068148	52
## theta[13,3]	53.0600925	54.8014674	1.036065	110
## theta[1,4]	50.8637206	53.1264144	1.097449	43
## theta[2,4]	50.4624183	52.6129464	1.035269	62
## theta[3,4]	50.0710814	53.0375040	1.258091	12
## theta[4,4]	49.3727320	51.2659266	1.104448	27
## theta[5,4]	53.0502665	54.9459959	1.003547	750
## theta[6,4]	54.1689595	56.0677503	1.094279	33
## theta[7,4]	50.6279597	52.6317569	1.108228	32
## theta[8,4]	56.3640469	58.9677197	1.259690	12
## theta[9,4]	52.6532123	55.1172501	1.161035	19
## theta[10,4]	48.5615331	50.3020444	1.015665	830
## theta[11,4]	52.3529915	54.1743740	1.035276	62
## theta[12,4]	50.1515192	52.6788447	1.056356	62
## theta[13,4]	53.1837670	55.0306631	1.031961	120
## theta[1,5]	50.9499434	53.0781358	1.086201	48
## theta[2,5]	50.5583115	52.5216288	1.028757	74
## theta[3,5]	50.1322880	52.8531787	1.230209	13
## theta[4,5]	49.4866087	51.3217393	1.104714	28
## theta[5,5]	53.1863892	54.9815925	1.004020	600
## theta[6,5]	54.2201794	56.1217543	1.088235	35
## theta[7,5]	50.7402945	52.6939441	1.104186	34
## theta[8,5]	56.4100090	58.9196538	1.242678	13
## theta[9,5]	52.6874556	55.0722316	1.142046	21
## theta[10,5]	48.6650925	50.4094895	1.012315	720
## theta[11,5]	52.4595035	54.2169951	1.028141	76
## theta[12,5]	50.1901511	52.6198554	1.048099	74
## theta[13,5]	53.3468227	55.0443700	1.030607	120
## theta[1,6]	51.0074048	53.1303173	1.070073	57
## theta[2,6]	50.6622814	52.5774962	1.022419	94
## theta[3,6]	50.1040997	52.6567835	1.196657	15
## theta[4,6]	49.5896899	51.4579014	1.103430	28
## theta[5,6]	53.2735627	54.9952045	1.004964	450
## theta[6,6]	54.2318909	56.1598019	1.082612	36
## theta[7,6]	50.8518853	52.6071114	1.088297	40
## theta[8,6]	56.4583983	59.0657551	1.227908	13
## theta[9,6]	52.7667782	55.0097877	1.117714	24
## theta[10,6]	48.7142618	50.4026901	1.014345	550
## theta[11,6]	52.5377297	54.3749701	1.024354	91
## theta[12,6]	50.2230384	52.5702758	1.037639	99
## theta[13,6]	53.4540808	55.1944711	1.028161	140
## theta[1,7]	50.9868235	53.0665105	1.055183	70
## theta[2,7]	50.7276109	52.4591500	1.018348	120
## theta[3,7]	50.1445393	52.6141216	1.154275	18

## theta[4,7]	49.7041760	51.5191232	1.109422	26
## theta[5,7]	53.3952133	55.0421795	1.007817	280
## theta[6,7]	54.3351680	56.2364969	1.079261	37
## theta[7,7]	50.9082202	52.5603374	1.075162	46
## theta[8,7]	56.5334376	58.9646815	1.218294	14
## theta[9,7]	52.8280046	54.8910709	1.095784	28
## theta[10,7]	48.7787796	50.4923750	1.020083	330
## theta[11,7]	52.6255146	54.4027319	1.018936	120
## theta[12,7]	50.2339235	52.4249930	1.029013	130
## theta[13,7]	53.5447279	55.2102001	1.021022	200
## theta[1,8]	51.0151158	52.9377807	1.041574	98
## theta[2,8]	50.8253305	52.4319258	1.016893	130
## theta[3,8]	50.1479782	52.3958939	1.123200	22
## theta[4,8]	49.7876788	51.5288065	1.112395	26
## theta[5,8]	53.4489515	55.1016104	1.009455	230
## theta[6,8]	54.3568697	56.1868169	1.076973	38
## theta[7,8]	50.9581326	52.5635886	1.057382	65
## theta[8,8]	56.6051525	58.8051164	1.219012	14
## theta[9,8]	52.8757052	54.8221902	1.083717	31
## theta[10,8]	48.8619966	50.4483837	1.018960	270
## theta[11,8]	52.6801941	54.3551117	1.019973	110
## theta[12,8]	50.2710535	52.3576303	1.020195	230
## theta[13,8]	53.6361439	55.2471289	1.018731	190
## theta[1,9]	51.0187972	52.7086095	1.029316	130
## theta[2,9]	50.8417302	52.2384131	1.018953	110
## theta[3,9]	50.1445553	52.1740275	1.106976	25
## theta[4,9]	49.8065299	51.5063192	1.112076	25
## theta[5,9]	53.4785796	54.9293748	1.010340	210
## theta[6,9]	54.3802879	56.0995223	1.065868	40
## theta[7,9]	50.9939385	52.5178528	1.052886	67
## theta[8,9]	56.6150114	58.8447094	1.215789	14
## theta[9,9]	52.8545556	54.6776065	1.075080	33
## theta[10,9]	48.8794857	50.4043975	1.020815	260
## theta[11,9]	52.7123081	54.2427752	1.024611	94
## theta[12,9]	50.2806064	52.3045262	1.012636	440
## theta[13,9]	53.7015935	55.2728646	1.018418	200
## theta[1,10]	50.9604850	52.4299996	1.025636	130
## theta[2,10]	50.8636266	52.1211956	1.016172	130
## theta[3,10]	50.1410347	51.9393977	1.094339	28
## theta[4,10]	49.8548385	51.3556660	1.113650	24
## theta[5,10]	53.5364583	54.7805187	1.009588	220
## theta[6,10]	54.4030507	56.0600203	1.053614	45
## theta[7,10]	51.0241958	52.3872406	1.055331	71
## theta[8,10]	56.5976907	58.8360809	1.211212	14
## theta[9,10]	52.8727097	54.5839551	1.075120	32
## theta[10,10]	48.8881695	50.3808419	1.020154	300
## theta[11,10]	52.7970058	54.1492823	1.024766	91
## theta[12,10]	50.2826551	52.1084218	1.009258	660
## theta[13,10]	53.7308604	55.1385497	1.022898	160
## theta[1,11]	50.9154744	52.1418131	1.012784	230
## theta[2,11]	50.8230954	51.7607621	1.011803	180
## theta[3,11]	50.1030142	51.7012032	1.074244	32

## theta[4,11]	49.8682818	51.2006766	1.140616	20
## theta[5,11]	53.5260686	54.5027303	1.013540	160
## theta[6,11]	54.4246559	55.8479870	1.052007	44
## theta[7,11]	50.9997910	52.2038229	1.051944	66
## theta[8,11]	56.5995068	58.7019962	1.217993	14
## theta[9,11]	52.8374851	54.4543557	1.067006	36
## theta[10,11]	48.8714155	50.1291839	1.035392	200
## theta[11,11]	52.7589164	53.9275372	1.032514	73
## theta[12,11]	50.2696554	51.8428757	1.005509	900
## theta[13,11]	53.7397654	54.9424449	1.019870	150
## theta[1,12]	51.5710954	52.7205315	1.002181	1200
## theta[2,12]	51.5453591	52.4598532	1.004889	460
## theta[3,12]	50.3263625	51.4788625	1.016343	130
## theta[4,12]	50.4624178	51.6995861	1.132030	21
## theta[5,12]	54.1724933	55.1692649	1.018646	110
## theta[6,12]	54.7968467	56.1147855	1.029276	73
## theta[7,12]	51.4090866	52.3173074	1.017686	170
## theta[8,12]	56.9934394	58.7336110	1.125982	22
## theta[9,12]	53.4046740	54.7841622	1.044950	54
## theta[10,12]	49.4124322	50.5385284	1.034228	120
## theta[11,12]	53.3379429	54.3088018	1.016840	130
## theta[12,12]	50.5544832	51.9765688	1.004977	1100
## theta[13,12]	54.2544460	55.2504908	1.009528	280
## theta[1,13]	51.6298553	52.7361493	1.002596	960
## theta[2,13]	51.6591707	52.5283591	1.003146	760
## theta[3,13]	50.1615942	51.2463020	1.021666	97
## theta[4,13]	50.3830407	51.5952560	1.109976	25
## theta[5,13]	54.1138655	55.0900010	1.014422	150
## theta[6,13]	54.6740189	56.0131097	1.021659	97
## theta[7,13]	51.2357705	52.1012792	1.030477	92
## theta[8,13]	56.9267557	58.6556361	1.101020	26
## theta[9,13]	53.5170392	54.9049904	1.053382	44
## theta[10,13]	49.2641805	50.3983110	1.029002	130
## theta[11,13]	53.3159084	54.3071827	1.007054	350
## theta[12,13]	50.5303668	51.9596991	1.001421	2200
## theta[13,13]	54.1507003	55.1127093	1.013068	160
## theta[1,14]	51.9482864	52.9865441	1.008635	250
## theta[2,14]	52.1206911	53.0997783	1.008552	260
## theta[3,14]	50.2976584	51.3194030	1.010250	210
## theta[4,14]	50.6691911	51.8715322	1.062793	44
## theta[5,14]	54.4068149	55.3591441	1.012141	180
## theta[6,14]	54.7888573	55.9669120	1.004538	500
## theta[7,14]	51.5383526	52.4183992	1.033193	87
## theta[8,14]	57.0631546	58.7277825	1.049193	47
## theta[9,14]	53.7990176	55.1890378	1.059579	40
## theta[10,14]	49.5284382	50.5633578	1.021738	220
## theta[11,14]	53.5746794	54.4935976	1.008393	550
## theta[12,14]	50.6750315	52.0128499	1.000855	3000
## theta[13,14]	54.3130360	55.2650827	1.025580	85
## theta[1,15]	52.3446086	53.2184009	1.001999	1500
## theta[2,15]	52.5616945	53.2308971	1.002000	1300
## theta[3,15]	50.8909069	51.9631619	1.017738	130

## theta[4,15]	50.9605663	51.8673395	1.069846	38
## theta[5,15]	54.7082192	55.3630416	1.018008	160
## theta[6,15]	54.9003150	55.8430736	1.004408	2200
## theta[7,15]	51.9745576	52.6516863	1.008822	330
## theta[8,15]	57.1479187	58.4608223	1.029873	78
## theta[9,15]	54.1820717	55.3618781	1.027482	83
## theta[10,15]	49.8567663	50.6334826	1.023568	110
## theta[11,15]	53.8003946	54.3478578	1.007927	370
## theta[12,15]	50.8915923	51.8404070	1.007420	290
## theta[13,15]	54.4514570	55.1590844	1.024994	91
## theta[1,16]	52.3600042	53.2692076	1.003635	1200
## theta[2,16]	52.3918061	53.1837072	1.005525	400
## theta[3,16]	50.9999460	52.0029974	1.008103	270
## theta[4,16]	50.7153915	51.6492456	1.075465	36
## theta[5,16]	54.4635815	55.1181307	1.018835	140
## theta[6,16]	54.7332272	55.7731576	1.001440	2700
## theta[7,16]	51.9139385	52.6157470	1.008441	290
## theta[8,16]	56.8511391	58.0880642	1.029545	84
## theta[9,16]	54.1401710	55.4179126	1.024283	95
## theta[10,16]	49.7205917	50.5630331	1.027143	93
## theta[11,16]	53.4880388	54.0477193	1.005755	380
## theta[12,16]	50.8295882	51.7887985	1.011960	180
## theta[13,16]	54.1951861	54.8463971	1.022037	110
## theta[1,17]	52.1621510	53.1111873	1.000652	3000
## theta[2,17]	52.0221582	52.9841221	1.014490	150
## theta[3,17]	51.1068062	52.3215237	1.006579	330
## theta[4,17]	50.2303810	51.2330986	1.092529	28
## theta[5,17]	53.9775081	54.6584048	1.013298	200
## theta[6,17]	54.3509677	55.5646899	1.002954	1500
## theta[7,17]	51.7011386	52.5004026	1.002838	1000
## theta[8,17]	56.3766553	57.6174024	1.038841	59
## theta[9,17]	53.8732928	55.1887004	1.019085	130
## theta[10,17]	49.3503413	50.2071833	1.024419	110
## theta[11,17]	53.0668865	53.7410978	1.015781	150
## theta[12,17]	50.7090195	51.7828785	1.029118	73
## theta[13,17]	53.7651898	54.5035626	1.010438	220
## theta[1,18]	52.0606077	53.0068472	1.001109	3000
## theta[2,18]	51.8064049	52.8562091	1.008256	260
## theta[3,18]	51.2017396	52.6602279	1.010437	220
## theta[4,18]	49.9794252	51.1386599	1.076622	33
## theta[5,18]	53.8218427	54.6350661	1.012257	180
## theta[6,18]	54.1892153	55.4665957	1.003239	1200
## theta[7,18]	51.6079049	52.4568381	1.003538	940
## theta[8,18]	56.1572161	57.5141098	1.038505	58
## theta[9,18]	53.7250264	55.1385674	1.023288	110
## theta[10,18]	49.2328332	50.2932371	1.023214	100
## theta[11,18]	52.9132358	53.7338138	1.010329	210
## theta[12,18]	50.6181875	51.8385571	1.031269	68
## theta[13,18]	53.6661891	54.4965475	1.005467	410
## theta[1,19]	51.8936503	52.8600606	1.002068	1300
## theta[2,19]	51.5976869	52.5473568	1.004167	550
## theta[3,19]	51.3415102	52.9284996	1.012652	170

## theta[4,19]	49.7366297	50.9324522	1.072547	35
## theta[5,19]	53.6657244	54.4663774	1.026163	98
## theta[6,19]	54.0737638	55.3137053	1.003142	3000
## theta[7,19]	51.6255079	52.5557353	1.006591	540
## theta[8,19]	56.0111541	57.2895012	1.033667	68
## theta[9,19]	53.5529399	54.9727982	1.024565	100
## theta[10,19]	49.1659413	50.1966157	1.028414	94
## theta[11,19]	52.7542304	53.6354257	1.005286	440
## theta[12,19]	50.5603003	52.0349551	1.039375	56
## theta[13,19]	53.5664713	54.3664493	1.009781	250
## theta[1,20]	51.9474334	53.0544451	1.001516	2000
## theta[2,20]	51.6246220	52.6688931	1.009607	220
## theta[3,20]	51.5962336	53.2189017	1.007916	300
## theta[4,20]	49.7325017	50.9677135	1.059562	42
## theta[5,20]	53.6553469	54.5640135	1.015145	150
## theta[6,20]	54.0365870	55.2840263	1.002224	3000
## theta[7,20]	51.7768936	52.8054359	1.005048	3000
## theta[8,20]	55.9413411	57.2775162	1.029087	80
## theta[9,20]	53.5900124	55.0313962	1.021496	110
## theta[10,20]	49.2097579	50.3861348	1.022494	120
## theta[11,20]	52.7571889	53.7644496	1.009468	230
## theta[12,20]	50.5935711	52.2200859	1.046312	48
## theta[13,20]	53.6176157	54.5701670	1.009257	290
## theta[1,21]	52.0188947	53.1173938	1.002511	1000
## theta[2,21]	51.6211626	52.5318371	1.018051	120
## theta[3,21]	51.8485277	53.3953562	1.003986	580
## theta[4,21]	49.7414696	50.9347933	1.057257	44
## theta[5,21]	53.6994004	54.4409280	1.008874	340
## theta[6,21]	54.1816934	55.4355479	1.004092	650
## theta[7,21]	51.8942336	52.8131776	1.001788	1600
## theta[8,21]	55.9208273	57.2101187	1.030496	73
## theta[9,21]	53.5633450	55.1113574	1.026153	100
## theta[10,21]	49.3263479	50.4146767	1.016377	190
## theta[11,21]	52.8246665	53.7662942	1.021798	110
## theta[12,21]	50.5966732	52.2340679	1.060752	39
## theta[13,21]	53.7465724	54.5979979	1.016498	160
## theta[1,22]	52.0104440	52.9747642	1.000509	3000
## theta[2,22]	51.6853370	52.4716523	1.007852	270
## theta[3,22]	51.6333844	52.9140803	1.013184	190
## theta[4,22]	49.8418544	50.8874923	1.067204	39
## theta[5,22]	53.8592645	54.5168804	1.016274	140
## theta[6,22]	54.3957268	55.5294393	1.005979	390
## theta[7,22]	51.8784756	52.6523275	1.004503	500
## theta[8,22]	56.1710746	57.3324362	1.036995	59
## theta[9,22]	53.4648612	54.8541347	1.036716	77
## theta[10,22]	49.4546432	50.4471601	1.019842	160
## theta[11,22]	52.9941408	53.7854525	1.019150	130
## theta[12,22]	50.4762359	51.8507596	1.043879	51
## theta[13,22]	53.9372772	54.7261366	1.021907	130
## theta[1,23]	52.1943094	53.1571837	1.002277	1100
## theta[2,23]	52.1862494	52.9211594	1.005324	440
## theta[3,23]	51.6327892	52.5715691	1.002445	3000

## theta[4,23]	50.3324956	51.3252891	1.054427	47
## theta[5,23]	54.3385975	54.9901009	1.020809	140
## theta[6,23]	54.7090864	55.7865353	1.010869	200
## theta[7,23]	52.2213183	53.0463132	1.008383	260
## theta[8,23]	56.4461164	57.3129156	1.012249	170
## theta[9,23]	53.5932524	54.8851592	1.034213	84
## theta[10,23]	49.8047392	50.6952406	1.022118	110
## theta[11,23]	53.4153022	54.0687130	1.010088	220
## theta[12,23]	50.4675808	51.7003830	1.054442	42
## theta[13,23]	54.2709320	55.0322865	1.020232	130
## theta[1,24]	51.9089479	52.7368807	1.000903	3000
## theta[2,24]	52.2254410	52.9063464	1.001874	1500
## theta[3,24]	51.0215238	51.8337899	1.000879	3000
## theta[4,24]	50.3070741	51.2591000	1.057945	45
## theta[5,24]	54.2988117	54.9376769	1.032429	75
## theta[6,24]	54.6781118	55.6763131	1.006355	340
## theta[7,24]	51.9441582	52.5659113	1.008455	250
## theta[8,24]	56.6179232	57.6893726	1.011108	250
## theta[9,24]	53.2836577	54.3852592	1.038759	82
## theta[10,24]	49.6398391	50.3995249	1.019874	130
## theta[11,24]	53.4647379	54.0644509	1.001933	1600
## theta[12,24]	50.0927834	51.0739261	1.047405	47
## theta[13,24]	54.2090116	54.8412670	1.024944	88
## theta[1,25]	51.9139890	52.8936963	1.001986	1300
## theta[2,25]	52.2598856	53.1934351	1.001149	3000
## theta[3,25]	51.0632182	52.2105464	1.002913	830
## theta[4,25]	50.3581772	51.4041106	1.054304	48
## theta[5,25]	54.3077484	55.1932915	1.012331	180
## theta[6,25]	54.7354762	55.8304374	1.006164	360
## theta[7,25]	51.9987248	52.7937137	1.003982	580
## theta[8,25]	56.6528158	57.9101619	1.012127	240
## theta[9,25]	53.3313806	54.4727880	1.026207	99
## theta[10,25]	49.6673109	50.6893508	1.014089	180
## theta[11,25]	53.5000555	54.3478200	1.003166	750
## theta[12,25]	50.1000967	51.2521099	1.033605	64
## theta[13,25]	54.2070747	55.1226913	1.014478	150
## theta[1,26]	51.7362331	52.6735620	1.000932	3000
## theta[2,26]	52.1763651	53.0795560	1.007243	300
## theta[3,26]	50.8789001	52.1645167	1.006981	310
## theta[4,26]	50.2188899	51.2446513	1.045625	59
## theta[5,26]	54.1577053	54.9643919	1.008425	250
## theta[6,26]	54.6195520	55.7499504	1.010292	210
## theta[7,26]	51.8754477	52.7883192	1.012155	220
## theta[8,26]	56.6053812	57.8620855	1.016253	140
## theta[9,26]	53.2329541	54.2767263	1.036834	75
## theta[10,26]	49.5511925	50.4596450	1.007556	400
## theta[11,26]	53.3710280	54.1632835	1.007459	290
## theta[12,26]	50.0212885	51.1700311	1.025452	82
## theta[13,26]	54.1021820	54.9231280	1.027623	77
## theta[1,27]	51.5396663	52.3240974	1.000860	3000
## theta[2,27]	52.0607565	52.9001904	1.004781	470
## theta[3,27]	50.7400667	51.8824707	1.009432	230

## theta[4,27]	50.1989962	51.3178277	1.055457	50
## theta[5,27]	54.0660045	54.8615402	1.014433	150
## theta[6,27]	54.5602415	55.8078190	1.010181	210
## theta[7,27]	51.7498132	52.5936738	1.013313	260
## theta[8,27]	56.5413417	57.8579918	1.020997	120
## theta[9,27]	53.1497881	54.2529611	1.049961	64
## theta[10,27]	49.4851416	50.3089769	1.014547	200
## theta[11,27]	53.2912796	54.0152223	1.006042	360
## theta[12,27]	49.8864181	51.0529016	1.013772	150
## theta[13,27]	54.0042275	54.8008538	1.026490	81
## theta[1,28]	51.9699000	52.8079937	1.001344	2400
## theta[2,28]	52.5143007	53.4041565	1.005298	420
## theta[3,28]	50.7606657	51.9130561	1.006147	360
## theta[4,28]	50.5720951	51.7032976	1.039764	71
## theta[5,28]	54.4392483	55.2844871	1.016367	130
## theta[6,28]	54.8531827	56.0597690	1.008480	250
## theta[7,28]	51.9275678	52.7072014	1.009310	330
## theta[8,28]	56.8768156	58.3059915	1.006907	480
## theta[9,28]	53.4997724	54.6059930	1.042257	77
## theta[10,28]	49.8192832	50.7437920	1.013080	170
## theta[11,28]	53.7140142	54.5361494	1.001284	2500
## theta[12,28]	50.0620764	51.1154915	1.011403	190
## theta[13,28]	54.2938190	55.2075711	1.020808	100
## theta[1,29]	52.5651373	53.4707311	1.001781	1600
## theta[2,29]	53.0726401	53.9259424	1.001601	1800
## theta[3,29]	51.1914412	52.5612354	1.006710	320
## theta[4,29]	51.0119088	52.0260710	1.026264	94
## theta[5,29]	54.8464874	55.5777261	1.030502	85
## theta[6,29]	55.1461161	56.3232763	1.015451	170
## theta[7,29]	52.2343619	53.0156321	1.002547	980
## theta[8,29]	57.2046609	58.4691233	1.006999	720
## theta[9,29]	53.9773268	55.0537921	1.028896	100
## theta[10,29]	50.2682946	51.1721647	1.017288	120
## theta[11,29]	54.1622963	54.8479905	1.002264	1200
## theta[12,29]	50.3078500	51.2936409	1.027217	79
## theta[13,29]	54.6571013	55.4225389	1.016423	150
## theta[1,30]	53.0338423	54.0251223	1.004373	520
## theta[2,30]	53.6858822	54.7308610	1.000593	3000
## theta[3,30]	51.6216694	53.1899638	1.013208	160
## theta[4,30]	51.5160040	52.6981022	1.005852	440
## theta[5,30]	55.3344083	56.2624302	1.017368	190
## theta[6,30]	55.5361829	56.8014527	1.028109	91
## theta[7,30]	52.6952526	53.6009989	1.000704	3000
## theta[8,30]	57.5368366	58.8425715	1.023978	95
## theta[9,30]	54.4193126	55.7191593	1.013260	170
## theta[10,30]	50.7254591	51.7227332	1.013867	160
## theta[11,30]	54.5984494	55.3472148	1.007347	320
## theta[12,30]	50.5622828	51.6320572	1.022532	98
## theta[13,30]	54.9758272	55.8161953	1.018194	140
## theta[1,31]	52.4311567	53.4441194	1.002428	1000
## theta[2,31]	52.7728461	53.5150612	1.002002	1300
## theta[3,31]	51.1618526	52.6632150	1.003959	580


```
## theta[4,31] 50.8517342 52.0830561 1.029747 92
## theta[5,31] 54.6289640 55.4232146 1.027719 90
## theta[6,31] 55.0516404 56.4407635 1.005179 590
## theta[7,31] 52.0539947 52.8529058 1.001426 2200
## theta[8,31] 56.9280481 58.0594851 1.003983 3000
## theta[9,31] 53.8048462 55.1274606 1.034089 98
## theta[10,31] 50.0994297 51.0916952 1.020253 110
## theta[11,31] 53.9067232 54.6956747 1.001149 3000
## theta[12,31] 49.9452985 51.0683891 1.015261 140
## theta[13,31] 54.3335531 55.0799736 1.011763 190
```

A.2 Senate Election Model

Raw Model Output

```
options(max.print = 999999999)
jags_sims$BUGSoutput$summary
```

##	mean	sd	2.5%	25%	50%
## beta[1,1]	46.4507584	2.2433708	41.59965446	45.06833380	46.6843236
## beta[2,1]	52.3060134	2.1867985	46.72905116	51.34368088	52.6853925
## beta[3,1]	54.3407636	1.7697115	50.52703121	53.19407540	54.4806907
## beta[4,1]	48.6580340	1.6538193	45.60341428	47.55989540	48.6799222
## beta[5,1]	45.5772068	1.9532845	41.67556604	44.29661103	45.5862026
## beta[6,1]	50.7226677	1.6592584	47.18653081	49.63497053	50.8716461
## beta[7,1]	46.2249577	2.6063537	40.90148615	44.48914168	46.0658387
## beta[8,1]	52.0308945	2.2519892	47.08007333	50.58152316	52.2532858
## beta[9,1]	53.9554866	1.7664757	50.67107557	52.82377142	53.8021779
## beta[10,1]	47.5874120	2.0102568	43.45416459	46.28983329	47.7140380
## beta[11,1]	51.7831808	1.6530492	48.20280605	50.82465008	51.8168892
## beta[12,1]	48.8159096	1.9127126	45.15421200	47.59645475	48.7652730
## beta[13,1]	45.7833702	1.8480167	42.38430159	44.64648669	45.6933647
## beta[1,2]	46.4896459	2.2087097	41.73140473	45.05180864	46.7360385
## beta[2,2]	52.3289635	2.1332011	46.76305635	51.38238604	52.7036918
## beta[3,2]	54.3711092	1.7153990	50.70312546	53.26276663	54.4957116
## beta[4,2]	48.6820835	1.5900333	45.55906919	47.66441579	48.7047994
## beta[5,2]	45.5860786	1.8948276	41.78424188	44.35543964	45.5947855
## beta[6,2]	50.7492053	1.6070817	47.32136332	49.71935994	50.9010108
## beta[7,2]	46.2482261	2.5790858	40.95415039	44.53920522	46.1037024
## beta[8,2]	52.0342957	2.2127825	47.17982380	50.64896441	52.2076912
## beta[9,2]	53.9700156	1.7005589	50.93251803	52.87367725	53.8143182
## beta[10,2]	47.6105677	1.9664164	43.60635351	46.31612496	47.7399194
## beta[11,2]	51.8087928	1.5742675	48.42741143	50.89187006	51.8353788
## beta[12,2]	48.8315938	1.8713619	45.27158091	47.64002241	48.7669949
## beta[13,2]	45.8203025	1.8035136	42.50382068	44.70735965	45.7293344
## beta[1,3]	46.4972722	2.1748183	41.79078922	45.06521198	46.7352766
## beta[2,3]	52.3504019	2.0757404	46.89180959	51.43148095	52.7195366
## beta[3,3]	54.4025269	1.6743724	50.83741377	53.31762402	54.5140426
## beta[4,3]	48.7026871	1.5316694	45.66027082	47.71430559	48.7395947
## beta[5,3]	45.5939497	1.8587148	41.96836855	44.35299054	45.6193736
## beta[6,3]	50.7842206	1.5345155	47.56099990	49.79304541	50.9096548
## beta[7,3]	46.2874322	2.5704155	41.03692954	44.61276095	46.1055460
## beta[8,3]	52.0451801	2.1927681	47.31900495	50.67229639	52.2397271

## beta[9,3]	53.9616679	1.6422515	51.02280354	52.88742944	53.8074806
## beta[10,3]	47.6457081	1.9178816	43.67544160	46.41047156	47.7450972
## beta[11,3]	51.8224261	1.5060512	48.57959501	50.91919470	51.8631610
## beta[12,3]	48.8449458	1.8210090	45.44757736	47.67800372	48.7316820
## beta[13,3]	45.8366463	1.7529638	42.65491212	44.74622703	45.7451300
## beta[1,4]	46.5096325	2.1446964	41.93718701	45.06519640	46.7238602
## beta[2,4]	52.3811437	2.0084432	47.18445415	51.46210125	52.7498783
## beta[3,4]	54.4305865	1.6369488	51.02141715	53.38205965	54.5391073
## beta[4,4]	48.7264314	1.4754701	45.70538022	47.78197286	48.7649835
## beta[5,4]	45.5914780	1.8051970	42.05007872	44.38598314	45.6485252
## beta[6,4]	50.8000562	1.4696533	47.72206160	49.82847595	50.9398163
## beta[7,4]	46.3211874	2.5536161	41.19514273	44.61757675	46.1341784
## beta[8,4]	52.0428598	2.1662293	47.43433726	50.70638505	52.2294240
## beta[9,4]	53.9696348	1.5858942	51.09637291	52.93185039	53.8224854
## beta[10,4]	47.6724513	1.8668032	43.89282346	46.45834399	47.8061374
## beta[11,4]	51.8493091	1.4369846	48.83034407	51.00766763	51.8707834
## beta[12,4]	48.8576964	1.7708459	45.71742528	47.72061033	48.7541964
## beta[13,4]	45.8545564	1.6860656	42.79886556	44.78897917	45.8023489
## beta[1,5]	46.5270050	2.1184366	42.04091230	45.08848746	46.7241352
## beta[2,5]	52.3960022	1.9357695	47.40427586	51.46010089	52.7840899
## beta[3,5]	54.4590620	1.6011863	51.10509080	53.43536260	54.5567344
## beta[4,5]	48.7412904	1.4171168	45.81660090	47.83009684	48.8022826
## beta[5,5]	45.5938862	1.7675097	42.11294752	44.42397500	45.6603172
## beta[6,5]	50.8211279	1.4119876	47.90429088	49.84218299	50.9741377
## beta[7,5]	46.3494214	2.5448663	41.13449596	44.66603377	46.1676491
## beta[8,5]	52.0688027	2.1458932	47.40572776	50.72981059	52.2305437
## beta[9,5]	53.9749684	1.5443841	51.16636715	52.95473946	53.8479276
## beta[10,5]	47.7098359	1.8038902	43.97822741	46.50844645	47.8224889
## beta[11,5]	51.8806487	1.3733100	48.98335827	51.04760267	51.8986722
## beta[12,5]	48.8678520	1.7168686	45.75473610	47.70636929	48.7629858
## beta[13,5]	45.8739376	1.6433555	42.91525381	44.85980224	45.7941561
## beta[1,6]	46.5369181	2.0918170	42.30038580	45.12007226	46.7328379
## beta[2,6]	52.4209609	1.8622084	47.65261644	51.59006952	52.7736716
## beta[3,6]	54.4934255	1.5479439	51.22021999	53.50316171	54.5738167
## beta[4,6]	48.7565441	1.3599191	45.99376876	47.85843214	48.8111725
## beta[5,6]	45.5914292	1.7333413	42.14084013	44.43980165	45.6580207
## beta[6,6]	50.8723847	1.3477733	48.15517471	49.96929978	50.9794363
## beta[7,6]	46.3865869	2.5345902	41.11783543	44.76248261	46.1887387
## beta[8,6]	52.0944968	2.1202371	47.53904839	50.76966374	52.2588258
## beta[9,6]	53.9684720	1.4624460	51.34241802	52.99481607	53.8263546
## beta[10,6]	47.7515750	1.7459987	44.24095880	46.58611186	47.8457926
## beta[11,6]	51.9025948	1.3072086	49.13922418	51.13130003	51.9030556
## beta[12,6]	48.8775857	1.6746169	45.86563107	47.74407898	48.7436518
## beta[13,6]	45.9026161	1.5877677	42.99714600	44.93547025	45.8341173
## beta[1,7]	46.5517737	2.0788082	42.20078284	45.16616169	46.7183265
## beta[2,7]	52.4423884	1.8214850	47.83797315	51.59844252	52.8059916
## beta[3,7]	54.5344213	1.5061993	51.42066337	53.57162470	54.5939435
## beta[4,7]	48.7721559	1.3043131	46.11785442	47.94468488	48.7970590
## beta[5,7]	45.5929511	1.6707891	42.26243636	44.51395268	45.6610699
## beta[6,7]	50.9084257	1.2986088	48.29994155	50.07327689	51.0184924
## beta[7,7]	46.4051745	2.5277135	41.18396603	44.79100378	46.2260456
## beta[8,7]	52.1100098	2.0981936	47.66774052	50.80535073	52.2607123

## beta[9,7]	53.9754413	1.3875629	51.51574680	53.04801930	53.8590318
## beta[10,7]	47.7693629	1.6955459	44.26638293	46.71808840	47.8499592
## beta[11,7]	51.9338738	1.2186668	49.50430523	51.24710472	51.9575562
## beta[12,7]	48.8928983	1.6291872	45.94802949	47.78056132	48.7848797
## beta[13,7]	45.9204989	1.5234208	43.04064776	44.98946146	45.8432942
## beta[1,8]	46.5557695	2.0482870	42.29479623	45.18849842	46.7203793
## beta[2,8]	52.4693559	1.7171679	48.18092780	51.63595036	52.7983705
## beta[3,8]	54.5658777	1.4590191	51.64203041	53.63188096	54.6248484
## beta[4,8]	48.7917064	1.2390551	46.29392651	47.97730356	48.8246583
## beta[5,8]	45.6090295	1.6115669	42.32538218	44.58687012	45.6597655
## beta[6,8]	50.9393386	1.2460120	48.40704975	50.12067925	51.0475926
## beta[7,8]	46.4466889	2.5029317	41.22708808	44.86886570	46.2570980
## beta[8,8]	52.1339057	2.0695220	47.70566073	50.83575315	52.3105580
## beta[9,8]	53.9720083	1.3142507	51.60079827	53.10247887	53.8569008
## beta[10,8]	47.8072502	1.6310934	44.51403974	46.76126051	47.8861737
## beta[11,8]	51.9786793	1.1525195	49.61881294	51.29582900	51.9734160
## beta[12,8]	48.8842396	1.5855617	46.06751590	47.78558391	48.7748389
## beta[13,8]	45.9357006	1.4643750	43.17433684	45.04963005	45.8582033
## beta[1,9]	46.5670768	2.0241419	42.28102749	45.24457200	46.7172389
## beta[2,9]	52.5028970	1.6293033	48.32601925	51.71899898	52.7790829
## beta[3,9]	54.6185609	1.3956296	51.75957982	53.65885891	54.6759353
## beta[4,9]	48.8034662	1.1744828	46.48385806	48.04898423	48.8324576
## beta[5,9]	45.6034800	1.5457346	42.46873154	44.60777973	45.6270220
## beta[6,9]	50.9476722	1.1788262	48.51608288	50.20916745	51.0476271
## beta[7,9]	46.4908841	2.4581752	41.26567023	45.00513978	46.3173830
## beta[8,9]	52.1616163	2.0472942	47.62660697	50.86403955	52.3497434
## beta[9,9]	53.9766551	1.2299404	51.74557072	53.16598254	53.8803015
## beta[10,9]	47.8441955	1.5706324	44.69935624	46.82944730	47.9233911
## beta[11,9]	52.0023916	1.0794169	49.80329178	51.36582176	52.0133866
## beta[12,9]	48.8734921	1.5387937	46.15679907	47.78923624	48.7400519
## beta[13,9]	45.9468701	1.3896232	43.27160058	45.10489716	45.8782597
## beta[1,10]	46.5678919	2.0058839	42.32787193	45.26680730	46.6836951
## beta[2,10]	52.5390031	1.5105729	48.69645194	51.82735844	52.8022237
## beta[3,10]	54.6743274	1.3283331	51.95506185	53.79397933	54.7231748
## beta[4,10]	48.8089650	1.1067851	46.59030224	48.06832257	48.8513962
## beta[5,10]	45.6182920	1.4673513	42.62461690	44.71425158	45.6556960
## beta[6,10]	50.9589061	1.1176928	48.65209331	50.20165561	51.0458247
## beta[7,10]	46.5379063	2.4407841	41.33779109	45.06376478	46.3337537
## beta[8,10]	52.1807310	2.0268314	47.64778182	50.91637520	52.3848431
## beta[9,10]	53.9739212	1.1381429	51.91497703	53.22468165	53.8877489
## beta[10,10]	47.8871395	1.5012262	44.87418303	46.89384315	47.9479144
## beta[11,10]	52.0246213	1.0056766	49.98163736	51.40756763	52.0044756
## beta[12,10]	48.8645445	1.5075891	46.23353781	47.79214168	48.7193609
## beta[13,10]	45.9557357	1.3205726	43.33332685	45.15963435	45.9066453
## beta[1,11]	46.5657722	1.9884405	42.47851727	45.27686087	46.6612628
## beta[2,11]	52.5871373	1.3717250	49.06990092	51.88822499	52.8092868
## beta[3,11]	54.7400065	1.2813795	52.04151691	53.90094625	54.8025180
## beta[4,11]	48.8263871	1.0265121	46.80608246	48.16538612	48.8652230
## beta[5,11]	45.6229736	1.3946257	42.81182773	44.74455218	45.6532280
## beta[6,11]	50.9801055	1.0438403	48.76111023	50.31098187	51.0657785
## beta[7,11]	46.5696643	2.4023754	41.27155079	45.15471848	46.3969160
## beta[8,11]	52.2079035	2.0094587	47.72323788	50.95628765	52.4625688

## beta[9,11]	53.9590365	1.0167393	52.09094606	53.26462865	53.9064149
## beta[10,11]	47.9399924	1.4382705	45.08574550	47.00489211	48.0226595
## beta[11,11]	52.0390239	0.9176663	50.21353504	51.48285260	52.0201915
## beta[12,11]	48.8479921	1.4812537	46.24737533	47.79234223	48.7060868
## beta[13,11]	45.9599444	1.2276616	43.47051693	45.23221089	45.9154950
## beta[1,12]	46.5714547	1.9538748	42.56145599	45.28887707	46.6965502
## beta[2,12]	52.6422271	1.2120834	49.65909631	51.98838589	52.8086000
## beta[3,12]	54.7796973	1.2322518	52.24493741	53.97305884	54.8434753
## beta[4,12]	48.8241898	0.9347758	46.96862712	48.22120835	48.8301867
## beta[5,12]	45.6430506	1.3163577	42.89452579	44.82184253	45.6593721
## beta[6,12]	50.9883574	0.9800345	48.91056324	50.36782640	51.0583967
## beta[7,12]	46.6107457	2.3502945	41.38512564	45.20403552	46.4612115
## beta[8,12]	52.2146382	2.0078566	47.80023470	50.99202205	52.5127585
## beta[9,12]	53.8425879	0.9400988	52.10605867	53.19965305	53.8183430
## beta[10,12]	47.9706309	1.3642976	45.24576448	47.03348442	48.0497089
## beta[11,12]	52.0693416	0.8175119	50.41380058	51.52754844	52.0625158
## beta[12,12]	48.8440897	1.4287400	46.28222135	47.86054493	48.7320638
## beta[13,12]	45.9811842	1.1335226	43.68615188	45.28878891	45.9335219
## beta[1,13]	46.5876383	1.9218749	42.58312108	45.29961957	46.6801182
## beta[2,13]	52.6891150	1.0461506	50.27943163	52.07308844	52.7988010
## beta[3,13]	54.8395928	1.1751190	52.48355262	54.03997410	54.8956191
## beta[4,13]	48.7926745	0.8883001	47.04169779	48.19966941	48.8076616
## beta[5,13]	45.6557143	1.2381279	43.13541646	44.87870749	45.6672394
## beta[6,13]	51.0000905	0.8927554	49.09466934	50.40006580	51.0846574
## beta[7,13]	46.6552101	2.2921448	41.57173330	45.27477592	46.5014198
## beta[8,13]	52.2276404	1.9684165	47.85446957	51.04265970	52.5068730
## beta[9,13]	53.7173751	0.8618031	52.08186888	53.14049831	53.7118813
## beta[10,13]	48.0013049	1.2600938	45.42117298	47.13277512	48.0768302
## beta[11,13]	52.0184638	0.7707851	50.49038887	51.51678524	52.0153012
## beta[12,13]	48.8407254	1.3757495	46.33568886	47.89455877	48.7412708
## beta[13,13]	45.9923947	1.0500376	43.91426454	45.37793937	45.9867033
## beta[1,14]	46.6229871	1.8726832	42.85334043	45.35411021	46.7220091
## beta[2,14]	52.9666038	0.8457280	51.15682373	52.46443832	53.0290572
## beta[3,14]	54.9092964	1.1112883	52.66372207	54.15881177	54.9335068
## beta[4,14]	48.7760120	0.8189630	47.17509433	48.20941643	48.7952747
## beta[5,14]	45.6609027	1.1838267	43.23871605	44.93457714	45.6691406
## beta[6,14]	51.0115363	0.7988418	49.40733822	50.45633218	51.0645965
## beta[7,14]	46.7010099	2.2500168	41.64344074	45.36471825	46.5739002
## beta[8,14]	52.2455939	1.9593516	47.90972633	51.08601256	52.5136109
## beta[9,14]	53.6008012	0.7617864	52.06529968	53.09368302	53.5884048
## beta[10,14]	48.0410622	1.1925141	45.53014963	47.24484641	48.0998137
## beta[11,14]	51.9433993	0.7044818	50.51203083	51.49584488	51.9472192
## beta[12,14]	48.8306216	1.3210952	46.45141792	47.90165487	48.7372489
## beta[13,14]	45.9985113	0.9352965	44.09483641	45.42075260	46.0027950
## beta[1,15]	46.6458309	1.8442028	42.95508554	45.44469704	46.7423868
## beta[2,15]	53.1461151	0.7395091	51.61317260	52.67908394	53.1670879
## beta[3,15]	54.9750359	1.0182329	52.99031086	54.29245073	54.9865554
## beta[4,15]	48.8341676	0.7962061	47.29228520	48.28462930	48.8360085
## beta[5,15]	45.9265245	1.1217179	43.56152539	45.22314017	45.9269657
## beta[6,15]	51.1413157	0.7525674	49.60599917	50.64311011	51.1838613
## beta[7,15]	46.7357382	2.1813822	41.77010350	45.46058027	46.6600615
## beta[8,15]	52.2572799	1.9496084	47.88088430	51.12903841	52.5253402

## beta[9,15]	53.4845287	0.6461339	52.20040491	53.05487148	53.4894071
## beta[10,15]	48.0739475	1.1115507	45.72275331	47.36780688	48.1410500
## beta[11,15]	51.9966479	0.6396810	50.72183860	51.57782647	51.9986656
## beta[12,15]	48.8230295	1.2764186	46.45960717	47.91996049	48.7654380
## beta[13,15]	46.0059997	0.8319034	44.25857352	45.48294483	46.0396986
## beta[1,16]	46.6857907	1.7850144	43.15820470	45.50818519	46.7811362
## beta[2,16]	53.3670823	0.6463870	52.03214116	52.94556664	53.3897012
## beta[3,16]	55.0755165	0.9922047	53.09893958	54.43462885	55.0933814
## beta[4,16]	48.9124194	0.7855444	47.36550357	48.37248743	48.9200969
## beta[5,16]	46.1857349	1.0956328	43.84692791	45.50586949	46.1950936
## beta[6,16]	51.3535917	0.7244868	49.89473148	50.90579407	51.3662046
## beta[7,16]	46.7427876	2.2430579	41.80418504	45.37380429	46.6958957
## beta[8,16]	52.2782003	1.9247401	48.06497504	51.18497390	52.5309928
## beta[9,16]	53.3664815	0.6365839	52.05778199	52.95366548	53.3729579
## beta[10,16]	48.0084506	1.1192421	45.65320355	47.29428795	48.0548782
## beta[11,16]	52.0820862	0.6131808	50.91801927	51.66490845	52.0924601
## beta[12,16]	48.7129144	1.2720920	46.37203848	47.77101332	48.6550256
## beta[13,16]	46.0164093	0.8116112	44.36180327	45.50965917	46.0216670
## beta[1,17]	46.7028880	1.7228092	43.35995183	45.59510943	46.8068590
## beta[2,17]	53.5305265	0.6793261	52.16274992	53.09154960	53.5401295
## beta[3,17]	55.1803550	0.9332272	53.28641361	54.58831742	55.1980817
## beta[4,17]	48.9319298	0.8485414	47.31213588	48.35855510	48.9408182
## beta[5,17]	46.2653397	1.1300489	43.89912988	45.55374367	46.2934674
## beta[6,17]	51.3887070	0.8243632	49.70430353	50.86653227	51.4095766
## beta[7,17]	46.7497226	2.2991594	41.63006534	45.34620017	46.6906723
## beta[8,17]	52.2843067	1.9094081	48.08334810	51.14997044	52.5226610
## beta[9,17]	53.2805018	0.6635770	51.91987207	52.86020655	53.2987960
## beta[10,17]	47.9371653	1.1271367	45.66019767	47.19868172	48.0009749
## beta[11,17]	52.0230307	0.6489327	50.75655496	51.59693942	52.0292696
## beta[12,17]	48.5740598	1.2640516	46.18405026	47.68342327	48.5564062
## beta[13,17]	46.0250522	0.8851848	44.24224428	45.48762722	46.0350843
## beta[1,18]	46.7191474	1.6849682	43.37287806	45.62700612	46.7990110
## beta[2,18]	53.6993091	0.7032252	52.30481462	53.26607291	53.6912355
## beta[3,18]	55.2918572	0.8898372	53.51782732	54.71845362	55.3165625
## beta[4,18]	48.9570142	0.8990033	47.26337927	48.34744050	48.9386545
## beta[5,18]	46.3654826	1.1661034	44.02401079	45.63358126	46.3797104
## beta[6,18]	51.4340005	0.8929114	49.57896593	50.87289513	51.4622666
## beta[7,18]	46.7545369	2.3458972	41.57946265	45.32992406	46.6746398
## beta[8,18]	52.2918695	1.8741920	48.21060194	51.18551788	52.4812362
## beta[9,18]	53.1913995	0.7125515	51.70608770	52.74763387	53.2160567
## beta[10,18]	47.8208705	1.1798427	45.45918056	47.02868642	47.8684725
## beta[11,18]	52.0348514	0.6632475	50.65707936	51.61145616	52.0448657
## beta[12,18]	48.4413338	1.2539374	46.05390072	47.56759283	48.4187977
## beta[13,18]	46.0264615	0.9369834	44.12348258	45.44080626	46.0211755
## beta[1,19]	46.7421722	1.6016921	43.54344622	45.70915565	46.8004916
## beta[2,19]	53.8693082	0.7158984	52.52157535	53.39481276	53.8512660
## beta[3,19]	55.4003856	0.8175367	53.78862581	54.86412392	55.4290282
## beta[4,19]	48.9647817	0.9209987	47.21677596	48.35042723	48.9601271
## beta[5,19]	46.4612821	1.2003758	44.06536548	45.70100273	46.4527678
## beta[6,19]	51.4905103	0.9519827	49.52667423	50.90846625	51.5150890
## beta[7,19]	46.7601683	2.3832760	41.63232402	45.28024349	46.6938376
## beta[8,19]	52.2944480	1.8615495	48.19078230	51.18779546	52.4499998

## beta[9,19]	53.1191294	0.7229911	51.64951317	52.66163209	53.1515651
## beta[10,19]	47.7283845	1.2228423	45.28487685	46.92441556	47.7707365
## beta[11,19]	52.1019241	0.6812656	50.67895815	51.67172738	52.1180928
## beta[12,19]	48.3219121	1.2352106	45.94940141	47.46620192	48.3160324
## beta[13,19]	46.0205789	0.9521834	44.04763945	45.45478244	45.9958262
## beta[1,20]	46.7582842	1.5352911	43.73173446	45.79595039	46.8292488
## beta[2,20]	53.9160116	0.7264295	52.57913230	53.43267970	53.8929940
## beta[3,20]	55.3806216	0.7737028	53.82986717	54.88645582	55.4037438
## beta[4,20]	48.9781951	0.9234619	47.22012021	48.36458330	48.9692896
## beta[5,20]	46.5439817	1.2129056	44.19475206	45.77636828	46.5352708
## beta[6,20]	51.5285021	0.9917533	49.48773575	50.92988515	51.5459200
## beta[7,20]	46.7639945	2.4207134	41.58969934	45.29181309	46.6739846
## beta[8,20]	52.3163486	1.8168325	48.26509074	51.22748159	52.4663530
## beta[9,20]	53.0319687	0.7065565	51.50450038	52.59968142	53.0671851
## beta[10,20]	47.6212562	1.2740673	45.08221853	46.78756015	47.6653693
## beta[11,20]	52.1880136	0.6670004	50.86017541	51.76014873	52.2038805
## beta[12,20]	48.1991681	1.2166046	45.88051505	47.34059544	48.1925299
## beta[13,20]	46.0143552	0.9618815	44.05770633	45.43697710	45.9944240
## beta[1,21]	46.7867748	1.4608324	43.78679190	45.88637792	46.8631582
## beta[2,21]	53.9627333	0.7133019	52.64062644	53.48218694	53.9355737
## beta[3,21]	55.3917216	0.7602843	53.86113700	54.90413132	55.4246314
## beta[4,21]	48.9973325	0.9028998	47.28894242	48.40171519	48.9805740
## beta[5,21]	46.6284567	1.2130280	44.27558319	45.84814084	46.6355271
## beta[6,21]	51.5949363	1.0058461	49.51228545	50.99350266	51.6014952
## beta[7,21]	46.7686597	2.4794534	41.48974505	45.24713301	46.7028279
## beta[8,21]	52.3184579	1.7838715	48.31533347	51.27950771	52.4295290
## beta[9,21]	53.1274968	0.7071195	51.64861973	52.67640300	53.1591942
## beta[10,21]	47.5207537	1.3034189	44.89221432	46.68346187	47.5727120
## beta[11,21]	52.2554363	0.6082433	51.07245111	51.84601213	52.2515359
## beta[12,21]	48.0540662	1.1969640	45.75188289	47.22332842	48.0560177
## beta[13,21]	46.0102836	0.9687428	44.05574358	45.41832671	45.9939517
## beta[1,22]	46.9138681	1.4702115	43.87444960	45.99164609	46.9815439
## beta[2,22]	53.9280857	0.6806370	52.66031623	53.45812160	53.9052793
## beta[3,22]	55.3909755	0.7627844	53.89025506	54.89046334	55.4116217
## beta[4,22]	49.0171836	0.8686521	47.29466320	48.44860481	49.0188026
## beta[5,22]	46.7094752	1.2132755	44.28517901	45.94543158	46.7459618
## beta[6,22]	51.6452200	1.0085701	49.56952211	51.03916050	51.6541633
## beta[7,22]	46.7599454	2.5191544	41.44002023	45.17734266	46.6893661
## beta[8,22]	52.3274020	1.7383628	48.40335725	51.30129884	52.4494129
## beta[9,22]	53.2003764	0.6739861	51.82058867	52.78417737	53.2007503
## beta[10,22]	47.4205357	1.3180979	44.78243620	46.55349285	47.5008619
## beta[11,22]	52.3761841	0.5800552	51.24988800	51.98221263	52.3781257
## beta[12,22]	48.0102021	1.2333392	45.61759356	47.17462731	48.0345514
## beta[13,22]	46.0085939	0.9463558	44.11870181	45.41498940	45.9920969
## beta[1,23]	47.0232361	1.4814496	43.91782910	46.12626484	47.1048061
## beta[2,23]	53.8669594	0.7174250	52.50044430	53.37602637	53.8493105
## beta[3,23]	55.3670157	0.8033922	53.77174617	54.83723762	55.3796455
## beta[4,23]	49.0392598	0.8268835	47.40021465	48.47936979	49.0596817
## beta[5,23]	46.7962967	1.2039744	44.43139050	46.02403611	46.8198519
## beta[6,23]	51.6930843	1.0107959	49.71234878	51.05545274	51.7068488
## beta[7,23]	46.7614674	2.5658209	41.35513589	45.11914546	46.7033577
## beta[8,23]	52.3389353	1.6916018	48.58238159	51.30102931	52.4559072

## beta[9,23]	53.2287894	0.6573569	51.86899606	52.80849932	53.2383213
## beta[10,23]	47.3236751	1.3460824	44.58790379	46.43962908	47.4068507
## beta[11,23]	52.4861980	0.5989203	51.37275263	52.07242094	52.4744415
## beta[12,23]	47.9452698	1.2447301	45.45634922	47.08813711	47.9700002
## beta[13,23]	46.0020642	0.9207214	44.15558873	45.42154402	45.9940629
## beta[1,24]	47.1305436	1.4869033	43.88884664	46.23918441	47.1848153
## beta[2,24]	53.8081838	0.7034063	52.45534988	53.32201879	53.8097032
## beta[3,24]	55.3511499	0.8095567	53.71748443	54.82093657	55.3730700
## beta[4,24]	48.8683044	0.8151464	47.23374258	48.33021426	48.8783009
## beta[5,24]	46.6405702	1.1818212	44.32265636	45.86800265	46.6537580
## beta[6,24]	51.7246580	0.9944392	49.79219166	51.12114484	51.7151403
## beta[7,24]	46.7495695	2.6084561	41.44290247	45.12555737	46.6806352
## beta[8,24]	52.3529625	1.6348484	48.77106141	51.31414114	52.4260460
## beta[9,24]	53.2245996	0.6638911	51.87331308	52.80605550	53.2315294
## beta[10,24]	47.2340111	1.3460257	44.42973164	46.38757181	47.3248467
## beta[11,24]	52.6098662	0.5596440	51.58168714	52.22381678	52.5853276
## beta[12,24]	47.8901211	1.2638985	45.43499646	47.04489344	47.9073527
## beta[13,24]	45.9815802	0.8946495	44.19968961	45.41114006	45.9753399
## beta[1,25]	47.2423711	1.4813390	43.96972453	46.38437076	47.3043762
## beta[2,25]	53.6804149	0.7280380	52.21821671	53.19331310	53.6875963
## beta[3,25]	55.3100243	0.8440411	53.62275803	54.77145624	55.3139179
## beta[4,25]	48.7773472	0.8666345	47.08144277	48.20357792	48.7751769
## beta[5,25]	46.4909435	1.1667758	44.24379518	45.69942900	46.4874915
## beta[6,25]	51.7657467	0.9760860	49.79779801	51.16557275	51.7652578
## beta[7,25]	46.7458671	2.6409454	41.43742045	45.04044268	46.6525475
## beta[8,25]	52.3512352	1.5890911	48.92201779	51.36165357	52.4398158
## beta[9,25]	53.2668154	0.7064152	51.82130832	52.80835643	53.2916842
## beta[10,25]	47.1365071	1.3479176	44.32592250	46.27323257	47.2239747
## beta[11,25]	52.5266708	0.6568606	51.33416299	52.07742406	52.5019416
## beta[12,25]	47.9037261	1.3397291	45.30471282	47.00911603	47.9326422
## beta[13,25]	46.0381220	0.9314409	44.21415386	45.43932678	46.0083297
## beta[1,26]	47.3565627	1.4751398	43.93836281	46.49427281	47.3913141
## beta[2,26]	53.5714810	0.7184205	52.12762987	53.10287252	53.5759795
## beta[3,26]	55.2790811	0.8710228	53.49875774	54.70197752	55.2995688
## beta[4,26]	48.6911341	0.9040403	46.88819116	48.09866350	48.6919211
## beta[5,26]	46.3461420	1.1552840	44.08583818	45.53946273	46.3628468
## beta[6,26]	51.8022736	0.9293562	49.97182332	51.22509696	51.7921048
## beta[7,26]	46.7498456	2.6828938	41.39557134	45.02996996	46.6677054
## beta[8,26]	52.3537983	1.5436570	48.99796781	51.40222501	52.4339284
## beta[9,26]	53.2971362	0.6964640	51.88290091	52.85426537	53.3169750
## beta[10,26]	47.0431523	1.3533366	44.26502066	46.17095645	47.1105788
## beta[11,26]	52.4467005	0.7354556	51.04320166	51.97105434	52.4283640
## beta[12,26]	47.9046602	1.4283001	44.93686676	46.98198972	47.9253253
## beta[13,26]	46.0984842	0.9448671	44.28554119	45.50024042	46.0546939
## beta[1,27]	47.4618450	1.4700258	44.09461319	46.60243317	47.5107243
## beta[2,27]	53.6111881	0.7078093	52.24430199	53.14315617	53.6087755
## beta[3,27]	55.2679870	0.9362267	53.37511242	54.65656131	55.2850599
## beta[4,27]	48.6024534	0.9173805	46.74524389	48.00573699	48.5979601
## beta[5,27]	46.2016904	1.1621773	43.91817702	45.41114161	46.2361727
## beta[6,27]	51.8327335	0.9539375	49.97904837	51.22805653	51.8198290
## beta[7,27]	46.7452836	2.7133898	41.29619052	44.98810162	46.6553874
## beta[8,27]	52.3640944	1.4948538	49.20271106	51.38543443	52.4378560

## beta[9,27]	53.4495606	0.7081610	52.07726318	52.98540734	53.4359635
## beta[10,27]	46.9520061	1.3574939	44.08995442	46.08560351	46.9872765
## beta[11,27]	52.3771826	0.7578924	50.91932501	51.88328051	52.3563329
## beta[12,27]	47.9196206	1.5196270	44.77370048	46.94063517	47.9501397
## beta[13,27]	46.1524774	0.9366134	44.33378084	45.53770991	46.1264718
## beta[1,28]	47.5722609	1.4605450	44.23145966	46.71927025	47.6287834
## beta[2,28]	53.6942170	0.7224197	52.29598129	53.20092196	53.7050105
## beta[3,28]	55.2672804	0.9914321	53.25603453	54.60200790	55.2801112
## beta[4,28]	48.5022231	0.9164981	46.66678874	47.90942346	48.5000398
## beta[5,28]	46.0848688	1.1801998	43.82973407	45.27840853	46.1260787
## beta[6,28]	51.8413230	0.9615027	49.95065859	51.23039017	51.8161335
## beta[7,28]	46.7603785	2.7476268	41.24162876	44.98928907	46.6410178
## beta[8,28]	52.3590314	1.4207960	49.40816857	51.43478929	52.4449551
## beta[9,28]	53.6043712	0.7257379	52.16331887	53.11754091	53.5998372
## beta[10,28]	46.8523748	1.3631335	44.02617140	45.97338574	46.9020466
## beta[11,28]	52.3068993	0.7784794	50.74224627	51.83089400	52.2987649
## beta[12,28]	47.9131191	1.6167875	44.54409007	46.91334493	47.9780811
## beta[13,28]	46.1935809	0.9022764	44.56786932	45.59332057	46.1554177
## beta[1,29]	47.6848497	1.4344787	44.45177709	46.83798890	47.7172724
## beta[2,29]	53.6673304	0.7679560	52.13265892	53.16801794	53.6668478
## beta[3,29]	55.2585334	1.0287523	53.13190571	54.61429334	55.2917457
## beta[4,29]	48.3580718	0.9985588	46.30876496	47.72082937	48.3702795
## beta[5,29]	46.0312334	1.2366088	43.54426637	45.20078979	46.0448231
## beta[6,29]	51.8677925	0.9387419	50.03582876	51.27918910	51.8400854
## beta[7,29]	46.7554409	2.7807474	41.15111317	44.99503440	46.6594594
## beta[8,29]	52.3619139	1.3557810	49.48227192	51.48928870	52.4286718
## beta[9,29]	53.6382803	0.7852292	52.09806866	53.11251483	53.6323750
## beta[10,29]	46.8636525	1.4377624	43.83159561	45.93638915	46.9198850
## beta[11,29]	52.2322878	0.7727406	50.59331291	51.74868867	52.2522219
## beta[12,29]	47.9130771	1.7037495	44.21988677	46.86577294	47.9841326
## beta[13,29]	46.2489814	0.8655470	44.69269510	45.65470828	46.2203023
## beta[1,30]	47.7991288	1.4156141	44.69305877	46.95616299	47.8208822
## beta[2,30]	53.6506213	0.7774959	52.13880114	53.12479006	53.6719785
## beta[3,30]	55.2627770	1.1256573	53.01983584	54.56101354	55.2812598
## beta[4,30]	48.3550312	1.1031878	46.08211241	47.67325142	48.3693653
## beta[5,30]	46.0259933	1.3216892	43.37429385	45.14616469	46.0475711
## beta[6,30]	51.9194306	0.9743408	50.02526565	51.30020711	51.8867361
## beta[7,30]	46.7472582	2.8285276	41.14622590	44.90905745	46.6667750
## beta[8,30]	52.2579323	1.3622229	49.49011940	51.35592777	52.3286915
## beta[9,30]	53.6713997	0.8551522	52.03762314	53.09027929	53.6718687
## beta[10,30]	46.8650164	1.5038064	43.80688647	45.89417564	46.9520579
## beta[11,30]	52.1206822	0.8143506	50.38648947	51.62227801	52.1566737
## beta[12,30]	47.9236093	1.7686198	44.21213856	46.82269353	47.9857400
## beta[13,30]	46.2149077	0.9222641	44.50317426	45.59248437	46.1703064
## beta[1,31]	47.8996625	1.3788202	44.76095190	47.09714605	47.9687920
## beta[2,31]	53.6912338	0.8528018	52.00973344	53.12498576	53.6756297
## beta[3,31]	55.2785179	1.2092872	52.90852160	54.50763494	55.3074909
## beta[4,31]	48.3585808	1.2016861	45.86013835	47.62670610	48.3830434
## beta[5,31]	46.0219710	1.3913000	43.19006592	45.11102905	46.0422812
## beta[6,31]	51.9119956	1.0926269	49.75673560	51.24208635	51.8757556
## beta[7,31]	46.7432851	2.8569825	41.01971904	44.88721097	46.7120921
## beta[8,31]	52.1675439	1.3656409	49.40700955	51.29580591	52.2451299

## beta[9,31]	53.6930802	0.9112265	51.84999218	53.09593529	53.6928807
## beta[10,31]	46.8551461	1.5830819	43.61816394	45.83303233	46.9156421
## beta[11,31]	52.0090255	0.8341724	50.25811229	51.49993697	52.0413059
## beta[12,31]	47.9192727	1.8396770	43.94391158	46.78265377	47.9981418
## beta[13,31]	46.1789356	0.9681142	44.33602796	45.52844738	46.1579968
## deviance	463.8151761	11.2632859	441.12523676	456.52440863	463.6726578
## p[1]	53.9590365	1.0167393	52.09094606	53.26462865	53.9064149
## p[2]	48.8241898	0.9347758	46.96862712	48.22120835	48.8301867
## p[3]	52.0693416	0.8175119	50.41380058	51.52754844	52.0625158
## p[4]	52.6891150	1.0461506	50.27943163	52.07308844	52.7988010
## p[5]	48.7760120	0.8189630	47.17509433	48.20941643	48.7952747
## p[6]	51.9433993	0.7044818	50.51203083	51.49584488	51.9472192
## p[7]	51.0115363	0.7988418	49.40733822	50.45633218	51.0645965
## p[8]	51.0115363	0.7988418	49.40733822	50.45633218	51.0645965
## p[9]	52.9666038	0.8457280	51.15682373	52.46443832	53.0290572
## p[10]	51.1413157	0.7525674	49.60599917	50.64311011	51.1838613
## p[11]	46.7357382	2.1813822	41.77010350	45.46058027	46.6600615
## p[12]	48.0739475	1.1115507	45.72275331	47.36780688	48.1410500
## p[13]	53.4845287	0.6461339	52.20040491	53.05487148	53.4894071
## p[14]	48.0739475	1.1115507	45.72275331	47.36780688	48.1410500
## p[15]	53.4845287	0.6461339	52.20040491	53.05487148	53.4894071
## p[16]	51.9966479	0.6396810	50.72183860	51.57782647	51.9986656
## p[17]	46.0059997	0.8319034	44.25857352	45.48294483	46.0396986
## p[18]	53.1461151	0.7395091	51.61317260	52.67908394	53.1670879
## p[19]	54.9750359	1.0182329	52.99031086	54.29245073	54.9865554
## p[20]	48.8341676	0.7962061	47.29228520	48.28462930	48.8360085
## p[21]	53.4845287	0.6461339	52.20040491	53.05487148	53.4894071
## p[22]	51.9966479	0.6396810	50.72183860	51.57782647	51.9986656
## p[23]	48.8230295	1.2764186	46.45960717	47.91996049	48.7654380
## p[24]	46.0059997	0.8319034	44.25857352	45.48294483	46.0396986
## p[25]	46.0164093	0.8116112	44.36180327	45.50965917	46.0216670
## p[26]	51.3535917	0.7244868	49.89473148	50.90579407	51.3662046
## p[27]	53.3670823	0.6463870	52.03214116	52.94556664	53.3897012
## p[28]	48.9124194	0.7855444	47.36550357	48.37248743	48.9200969
## p[29]	53.3670823	0.6463870	52.03214116	52.94556664	53.3897012
## p[30]	53.3664815	0.6365839	52.05778199	52.95366548	53.3729579
## p[31]	52.0820862	0.6131808	50.91801927	51.66490845	52.0924601
## p[32]	46.0164093	0.8116112	44.36180327	45.50965917	46.0216670
## p[33]	52.0820862	0.6131808	50.91801927	51.66490845	52.0924601
## p[34]	51.3535917	0.7244868	49.89473148	50.90579407	51.3662046
## p[35]	51.3535917	0.7244868	49.89473148	50.90579407	51.3662046
## p[36]	53.3664815	0.6365839	52.05778199	52.95366548	53.3729579
## p[37]	53.3670823	0.6463870	52.03214116	52.94556664	53.3897012
## p[38]	48.9124194	0.7855444	47.36550357	48.37248743	48.9200969
## p[39]	53.2805018	0.6635770	51.91987207	52.86020655	53.2987960
## p[40]	53.5305265	0.6793261	52.16274992	53.09154960	53.5401295
## p[41]	47.9371653	1.1271367	45.66019767	47.19868172	48.0009749
## p[42]	52.0230307	0.6489327	50.75655496	51.59693942	52.0292696
## p[43]	52.0348514	0.6632475	50.65707936	51.61145616	52.0448657
## p[44]	53.8693082	0.7158984	52.52157535	53.39481276	53.8512660
## p[45]	55.4003856	0.8175367	53.78862581	54.86412392	55.4290282
## p[46]	53.0319687	0.7065565	51.50450038	52.59968142	53.0671851

## p[47]	53.0319687	0.7065565	51.50450038	52.59968142	53.0671851
## p[48]	55.3806216	0.7737028	53.82986717	54.88645582	55.4037438
## p[49]	52.2554363	0.6082433	51.07245111	51.84601213	52.2515359
## p[50]	55.3917216	0.7602843	53.86113700	54.90413132	55.4246314
## p[51]	52.2554363	0.6082433	51.07245111	51.84601213	52.2515359
## p[52]	48.0540662	1.1969640	45.75188289	47.22332842	48.0560177
## p[53]	46.7867748	1.4608324	43.78679190	45.88637792	46.8631582
## p[54]	53.9627333	0.7133019	52.64062644	53.48218694	53.9355737
## p[55]	52.3761841	0.5800552	51.24988800	51.98221263	52.3781257
## p[56]	53.9280857	0.6806370	52.66031623	53.45812160	53.9052793
## p[57]	53.9280857	0.6806370	52.66031623	53.45812160	53.9052793
## p[58]	55.3909755	0.7627844	53.89025506	54.89046334	55.4116217
## p[59]	53.2003764	0.6739861	51.82058867	52.78417737	53.2007503
## p[60]	52.3761841	0.5800552	51.24988800	51.98221263	52.3781257
## p[61]	53.2287894	0.6573569	51.86899606	52.80849932	53.2383213
## p[62]	49.0392598	0.8268835	47.40021465	48.47936979	49.0596817
## p[63]	49.0392598	0.8268835	47.40021465	48.47936979	49.0596817
## p[64]	52.6098662	0.5596440	51.58168714	52.22381678	52.5853276
## p[65]	52.6098662	0.5596440	51.58168714	52.22381678	52.5853276
## p[66]	52.6098662	0.5596440	51.58168714	52.22381678	52.5853276
## p[67]	52.6098662	0.5596440	51.58168714	52.22381678	52.5853276
## p[68]	52.6098662	0.5596440	51.58168714	52.22381678	52.5853276
## p[69]	53.2245996	0.6638911	51.87331308	52.80605550	53.2315294
## p[70]	53.8081838	0.7034063	52.45534988	53.32201879	53.8097032
## p[71]	55.3511499	0.8095567	53.71748443	54.82093657	55.3730700
## p[72]	48.8683044	0.8151464	47.23374258	48.33021426	48.8783009
## p[73]	53.2245996	0.6638911	51.87331308	52.80605550	53.2315294
## p[74]	52.6098662	0.5596440	51.58168714	52.22381678	52.5853276
## p[75]	47.8901211	1.2638985	45.43499646	47.04489344	47.9073527
## p[76]	45.9815802	0.8946495	44.19968961	45.41114006	45.9753399
## p[77]	53.2971362	0.6964640	51.88290091	52.85426537	53.3169750
## p[78]	51.8022736	0.9293562	49.97182332	51.22509696	51.7921048
## p[79]	53.5714810	0.7184205	52.12762987	53.10287252	53.5759795
## p[80]	55.2790811	0.8710228	53.49875774	54.70197752	55.2995688
## p[81]	53.6111881	0.7078093	52.24430199	53.14315617	53.6087755
## p[82]	53.4495606	0.7081610	52.07726318	52.98540734	53.4359635
## p[83]	48.5022231	0.9164981	46.66678874	47.90942346	48.5000398
## p[84]	53.6043712	0.7257379	52.16331887	53.11754091	53.5998372
## p[85]	46.8523748	1.3631335	44.02617140	45.97338574	46.9020466
## p[86]	53.6942170	0.7224197	52.29598129	53.20092196	53.7050105
## p[87]	46.2489814	0.8655470	44.69269510	45.65470828	46.2203023
## p[88]	51.8677925	0.9387419	50.03582876	51.27918910	51.8400854
## p[89]	46.2489814	0.8655470	44.69269510	45.65470828	46.2203023
## p[90]	52.3619139	1.3557810	49.48227192	51.48928870	52.4286718
## p[91]	55.2585334	1.0287523	53.13190571	54.61429334	55.2917457
## p[92]	53.6382803	0.7852292	52.09806866	53.11251483	53.6323750
## p[93]	52.2322878	0.7727406	50.59331291	51.74868867	52.2522219
## p[94]	48.3580718	0.9985588	46.30876496	47.72082937	48.3702795
## p[95]	53.6506213	0.7774959	52.13880114	53.12479006	53.6719785
## p[96]	51.9194306	0.9743408	50.02526565	51.30020711	51.8867361
## p[97]	53.6506213	0.7774959	52.13880114	53.12479006	53.6719785
## p[98]	53.6912338	0.8528018	52.00973344	53.12498576	53.6756297

## p[99]	53.6930802	0.9112265	51.84999218	53.09593529	53.6928807
## p[100]	52.0090255	0.8341724	50.25811229	51.49993697	52.0413059
## p[101]	52.0090255	0.8341724	50.25811229	51.49993697	52.0413059
## p[102]	47.8996625	1.3788202	44.76095190	47.09714605	47.9687920
## p[103]	52.1675439	1.3656409	49.40700955	51.29580591	52.2451299
## p[104]	47.8996625	1.3788202	44.76095190	47.09714605	47.9687920
## p[105]	46.1789356	0.9681142	44.33602796	45.52844738	46.1579968
## p[106]	46.0312334	1.2366088	43.54426637	45.20078979	46.0448231
## p[107]	46.0848688	1.1801998	43.82973407	45.27840853	46.1260787
## p[108]	46.7962967	1.2039744	44.43139050	46.02403611	46.8198519
## p[109]	46.7962967	1.2039744	44.43139050	46.02403611	46.8198519
## p[110]	46.1857349	1.0956328	43.84692791	45.50586949	46.1950936
## p[111]	46.1857349	1.0956328	43.84692791	45.50586949	46.1950936
## p[112]	45.6609027	1.1838267	43.23871605	44.93457714	45.6691406
## sigma2_beta[1]	0.2174465	0.1709002	0.03591539	0.08842681	0.1744787
## sigma2_beta[2]	0.2195665	0.1769982	0.03763168	0.08703796	0.1713845
## sigma2_beta[3]	0.2117813	0.1594372	0.03599774	0.08719752	0.1705960
## sigma2_beta[4]	0.2150078	0.1639863	0.03653461	0.08682300	0.1711817
## sigma2_beta[5]	0.2248891	0.1892429	0.03824851	0.08943135	0.1770938
## sigma2_beta[6]	0.2127312	0.1623794	0.03671041	0.08508576	0.1685107
## sigma2_beta[7]	0.2177799	0.1719668	0.03634232	0.08702707	0.1748251
## sigma2_beta[8]	0.2146970	0.1668502	0.03705036	0.08698819	0.1736128
## sigma2_beta[9]	0.2103161	0.1587663	0.03750246	0.08735281	0.1680613
## sigma2_beta[10]	0.2202669	0.1761017	0.03688560	0.08751451	0.1749257
## sigma2_beta[11]	0.2111939	0.1591431	0.03804373	0.08560992	0.1681237
## sigma2_beta[12]	0.2172667	0.1701173	0.03499755	0.08683836	0.1750060
## sigma2_beta[13]	0.2134587	0.1636727	0.03839452	0.08520558	0.1708493
## sigma2_y[1]	4.3393222	2.2137569	2.06291739	3.26183007	3.9195893
## sigma2_y[2]	3.8692044	1.0191342	2.27841397	3.16248842	3.7338290
## sigma2_y[3]	3.4111862	1.1556115	1.48423175	2.67215654	3.3418784
## sigma2_y[4]	3.9842974	1.2215696	2.22593396	3.20348206	3.7814353
## sigma2_y[5]	7.4445583	4.5573201	3.38615960	4.71436188	6.0377158
## sigma2_y[6]	3.7518461	1.1728339	1.95333042	2.99384903	3.5941268
## sigma2_y[7]	4.3641806	3.0370416	1.89056380	3.14458999	3.8468971
## sigma2_y[8]	4.2269202	2.2465433	1.94931827	3.17140150	3.8497088
## sigma2_y[9]	3.5124807	0.9368648	1.89915246	2.86677502	3.4214960
## sigma2_y[10]	3.9496067	1.6799443	1.69059348	3.01299748	3.6972295
## sigma2_y[11]	3.6043268	0.9004233	2.11599421	2.99497514	3.5133296
## sigma2_y[12]	4.2285806	1.8916422	1.99432151	3.19653403	3.8952745
## sigma2_y[13]	3.7806794	1.1815197	1.90567452	3.02411888	3.6568346
##	75%	97.5%	Rhat	n.eff	
## beta[1,1]	47.9750589	50.6435166	1.052972	480	
## beta[2,1]	53.7054675	55.6747117	1.344077	11	
## beta[3,1]	55.5453487	57.6127336	1.091465	35	
## beta[4,1]	49.6826206	51.9550692	1.032401	220	
## beta[5,1]	46.7554107	49.6975127	1.029499	110	
## beta[6,1]	51.8602662	53.7717883	1.098211	26	
## beta[7,1]	48.0374235	51.1973216	1.116435	26	
## beta[8,1]	53.5981490	55.9982111	1.159725	18	
## beta[9,1]	54.9544170	57.9060076	1.108435	31	
## beta[10,1]	48.9038097	51.5177091	1.081119	37	
## beta[11,1]	52.7697482	54.9907635	1.060438	520	

## beta[12,1]	49.9526885	52.8553178	1.083866	86
## beta[13,1]	46.7853121	49.9298690	1.119000	45
## beta[1,2]	47.9503673	50.7067420	1.057248	510
## beta[2,2]	53.6803149	55.6280756	1.367718	10
## beta[3,2]	55.5410618	57.5107585	1.095423	33
## beta[4,2]	49.6884151	51.7720312	1.033557	180
## beta[5,2]	46.7294222	49.4964545	1.030407	100
## beta[6,2]	51.8510127	53.6024884	1.100757	25
## beta[7,2]	48.0256846	51.1620338	1.121946	25
## beta[8,2]	53.5479073	55.9353012	1.167879	17
## beta[9,2]	54.9394795	57.7808375	1.117899	27
## beta[10,2]	48.9074944	51.4052042	1.089321	33
## beta[11,2]	52.7483345	54.8897353	1.058556	490
## beta[12,2]	49.9400119	52.8845275	1.084802	86
## beta[13,2]	46.7850323	49.8369427	1.128304	41
## beta[1,3]	47.9427850	50.6082250	1.057271	560
## beta[2,3]	53.6863234	55.5676551	1.375855	10
## beta[3,3]	55.5438952	57.4734257	1.093730	33
## beta[4,3]	49.6976959	51.6917491	1.035470	150
## beta[5,3]	46.6982360	49.4744802	1.029423	100
## beta[6,3]	51.8403171	53.5312636	1.099935	26
## beta[7,3]	48.0541768	51.1878884	1.127626	24
## beta[8,3]	53.5390079	56.0179210	1.176273	17
## beta[9,3]	54.8940154	57.7440600	1.121419	26
## beta[10,3]	48.8963174	51.3512848	1.097706	30
## beta[11,3]	52.7267967	54.7184358	1.054755	550
## beta[12,3]	49.9184552	52.9417926	1.094139	71
## beta[13,3]	46.8034608	49.7247423	1.133747	37
## beta[1,4]	47.9304845	50.5971583	1.059808	540
## beta[2,4]	53.6663227	55.4559586	1.381811	10
## beta[3,4]	55.5655946	57.4256656	1.090961	32
## beta[4,4]	49.7058596	51.5413339	1.040052	100
## beta[5,4]	46.6912996	49.3659552	1.029541	99
## beta[6,4]	51.8248729	53.3727090	1.110368	23
## beta[7,4]	48.1125120	51.1742377	1.133400	23
## beta[8,4]	53.5431445	55.9819806	1.180781	16
## beta[9,4]	54.8597064	57.6014267	1.134014	24
## beta[10,4]	48.8900680	51.2309429	1.102902	29
## beta[11,4]	52.6989930	54.6103632	1.058851	840
## beta[12,4]	49.8899618	52.7111169	1.094790	63
## beta[13,4]	46.7624862	49.5855540	1.136576	34
## beta[1,5]	47.9342905	50.5605798	1.065091	450
## beta[2,5]	53.6193321	55.3663511	1.389356	10
## beta[3,5]	55.5687677	57.3259556	1.089022	32
## beta[4,5]	49.6901011	51.4376954	1.040341	99
## beta[5,5]	46.6842071	49.1187604	1.031252	99
## beta[6,5]	51.8206598	53.3159518	1.113609	23
## beta[7,5]	48.1227607	51.2228690	1.133247	23
## beta[8,5]	53.5232554	55.9524187	1.178290	16
## beta[9,5]	54.8466898	57.5088164	1.139104	23
## beta[10,5]	48.9280554	51.1170287	1.097301	31
## beta[11,5]	52.6962300	54.5870886	1.061381	1500

## beta[12,5]	49.8749092	52.6724863	1.094103	60
## beta[13,5]	46.7450248	49.5902015	1.142382	31
## beta[1,6]	47.9043653	50.5286182	1.071731	450
## beta[2,6]	53.5834791	55.3620168	1.390036	10
## beta[3,6]	55.5714180	57.3540242	1.083636	34
## beta[4,6]	49.6752013	51.3513729	1.044249	84
## beta[5,6]	46.6656979	49.1108980	1.030086	100
## beta[6,6]	51.8131643	53.2286846	1.116555	23
## beta[7,6]	48.2109742	51.2642474	1.135894	22
## beta[8,6]	53.4974405	56.0144854	1.176431	17
## beta[9,6]	54.8047703	57.3044058	1.143279	22
## beta[10,6]	48.8925318	51.1506414	1.100076	30
## beta[11,6]	52.6557396	54.5755418	1.068829	1300
## beta[12,6]	49.8681974	52.5292894	1.092291	61
## beta[13,6]	46.7493428	49.4096485	1.135458	31
## beta[1,7]	47.8926834	50.5648052	1.074956	390
## beta[2,7]	53.6051975	55.2662000	1.403966	10
## beta[3,7]	55.5716397	57.3478975	1.080315	36
## beta[4,7]	49.6824425	51.2292675	1.042817	85
## beta[5,7]	46.6627534	48.9654654	1.032324	92
## beta[6,7]	51.8252419	53.1661204	1.111077	24
## beta[7,7]	48.1527684	51.2405435	1.133845	22
## beta[8,7]	53.4947390	55.9174251	1.175601	17
## beta[9,7]	54.7787580	57.0159137	1.146215	21
## beta[10,7]	48.8755532	51.0479234	1.094557	32
## beta[11,7]	52.6656905	54.4152876	1.062183	2800
## beta[12,7]	49.8898769	52.3799161	1.092506	54
## beta[13,7]	46.7387434	49.3011859	1.146579	28
## beta[1,8]	47.8604300	50.5355847	1.077224	360
## beta[2,8]	53.5678607	55.1291038	1.408018	9
## beta[3,8]	55.5837326	57.3086507	1.081596	35
## beta[4,8]	49.6486040	51.1663349	1.048454	69
## beta[5,8]	46.6247442	48.7935958	1.036509	79
## beta[6,8]	51.8131124	53.1458583	1.110398	24
## beta[7,8]	48.1580982	51.2999787	1.136004	22
## beta[8,8]	53.5031894	55.8567010	1.178910	17
## beta[9,8]	54.7376604	56.9336924	1.149527	21
## beta[10,8]	48.8618655	50.9382348	1.090892	33
## beta[11,8]	52.6635551	54.4439017	1.060736	3000
## beta[12,8]	49.8349007	52.3273228	1.093174	51
## beta[13,8]	46.7382566	49.1612021	1.142116	28
## beta[1,9]	47.8660426	50.5473141	1.076895	250
## beta[2,9]	53.5576660	55.0614260	1.403867	10
## beta[3,9]	55.5955303	57.2449812	1.069066	40
## beta[4,9]	49.6005697	51.0059174	1.046895	69
## beta[5,9]	46.5966800	48.6337861	1.036298	76
## beta[6,9]	51.7526869	53.0401498	1.111997	24
## beta[7,9]	48.1283969	51.1615794	1.140131	21
## beta[8,9]	53.5256513	55.8343743	1.184175	16
## beta[9,9]	54.7062815	56.6013325	1.156045	20
## beta[10,9]	48.8606919	50.8690019	1.091213	32
## beta[11,9]	52.6349214	54.2249423	1.056489	3000

## beta[12,9]	49.8450541	52.3062505	1.090492	49
## beta[13,9]	46.7549456	49.0166319	1.135462	28
## beta[1,10]	47.8779518	50.4871242	1.076455	200
## beta[2,10]	53.5125457	54.8742624	1.404111	10
## beta[3,10]	55.5783855	57.1823165	1.064215	43
## beta[4,10]	49.5583292	50.9459729	1.045988	63
## beta[5,10]	46.5688710	48.4394718	1.039876	70
## beta[6,10]	51.7451975	52.8557514	1.113373	23
## beta[7,10]	48.2204446	51.2025385	1.143298	20
## beta[8,10]	53.5250665	55.7261525	1.191724	15
## beta[9,10]	54.6666900	56.3897657	1.158303	19
## beta[10,10]	48.8745904	50.8326995	1.085589	33
## beta[11,10]	52.6496564	54.0750713	1.053784	1900
## beta[12,10]	49.7911288	52.2559794	1.088698	51
## beta[13,10]	46.7279761	48.9188215	1.133698	27
## beta[1,11]	47.8359291	50.4111217	1.075840	190
## beta[2,11]	53.5068626	54.7918520	1.397659	10
## beta[3,11]	55.5919763	57.2546969	1.054706	48
## beta[4,11]	49.5036789	50.7639370	1.043178	60
## beta[5,11]	46.5477715	48.3699546	1.044485	62
## beta[6,11]	51.7131868	52.8246632	1.112870	24
## beta[7,11]	48.2495014	51.1483077	1.150070	19
## beta[8,11]	53.5371766	55.5756930	1.199760	15
## beta[9,11]	54.5863852	56.1472696	1.149709	19
## beta[10,11]	48.8840328	50.8092628	1.084306	34
## beta[11,11]	52.6125385	53.8657094	1.051310	1100
## beta[12,11]	49.7661956	52.1934658	1.082875	54
## beta[13,11]	46.6659522	48.6080411	1.126537	27
## beta[1,12]	47.8698419	50.2601810	1.072408	150
## beta[2,12]	53.4644841	54.6130190	1.388677	10
## beta[3,12]	55.6150303	57.1065122	1.046504	58
## beta[4,12]	49.4723352	50.5515212	1.039081	62
## beta[5,12]	46.5000337	48.1590470	1.048905	55
## beta[6,12]	51.6740677	52.7813585	1.116252	23
## beta[7,12]	48.2708802	51.1682618	1.154581	19
## beta[8,12]	53.5568363	55.5988958	1.208930	14
## beta[9,12]	54.4245167	55.7705086	1.115534	25
## beta[10,12]	48.8997963	50.5990511	1.078642	35
## beta[11,12]	52.5946516	53.6838658	1.033600	850
## beta[12,12]	49.7620171	52.0444698	1.076116	56
## beta[13,12]	46.6497826	48.3956155	1.120079	27
## beta[1,13]	47.8448404	50.3284772	1.072159	120
## beta[2,13]	53.3957368	54.4381734	1.369435	10
## beta[3,13]	55.6357061	57.0792011	1.037726	80
## beta[4,13]	49.4049210	50.4494619	1.032517	70
## beta[5,13]	46.4713859	48.0919228	1.049551	54
## beta[6,13]	51.6285467	52.5801656	1.120570	22
## beta[7,13]	48.2674475	51.1101449	1.161324	18
## beta[8,13]	53.5390560	55.4976038	1.215154	14
## beta[9,13]	54.2458346	55.5516843	1.087634	33
## beta[10,13]	48.8522057	50.4480650	1.073070	37
## beta[11,13]	52.5113004	53.5629130	1.022987	940

## beta[12,13]	49.7096599	51.8699864	1.076200	54
## beta[13,13]	46.6196614	48.1153740	1.110140	27
## beta[1,14]	47.8425351	50.2933601	1.075259	95
## beta[2,14]	53.5490513	54.4630778	1.209395	15
## beta[3,14]	55.6905153	57.0326530	1.035811	86
## beta[4,14]	49.3515948	50.3058560	1.027269	80
## beta[5,14]	46.4478905	47.9725141	1.050203	51
## beta[6,14]	51.5788944	52.4348770	1.130425	20
## beta[7,14]	48.2553261	51.0391557	1.166207	18
## beta[8,14]	53.5809687	55.5146364	1.217336	14
## beta[9,14]	54.1090786	55.0934147	1.053451	52
## beta[10,14]	48.8547250	50.2580502	1.076792	34
## beta[11,14]	52.4020548	53.3278228	1.028051	240
## beta[12,14]	49.6575038	51.6902215	1.069843	54
## beta[13,14]	46.5627018	47.8686881	1.091155	31
## beta[1,15]	47.8606995	50.2851475	1.078837	83
## beta[2,15]	53.6565294	54.4908439	1.114496	24
## beta[3,15]	55.6882078	56.9488146	1.027887	110
## beta[4,15]	49.3781003	50.3736713	1.038716	57
## beta[5,15]	46.6538109	48.1300919	1.079943	35
## beta[6,15]	51.6573803	52.5815186	1.087583	28
## beta[7,15]	48.2138403	50.9043960	1.170486	17
## beta[8,15]	53.6170364	55.3668462	1.222413	14
## beta[9,15]	53.9022245	54.7143214	1.034916	76
## beta[10,15]	48.8158373	50.1018411	1.079313	33
## beta[11,15]	52.4065697	53.2612563	1.025806	220
## beta[12,15]	49.6554012	51.5080448	1.061034	60
## beta[13,15]	46.5421343	47.6864369	1.069436	37
## beta[1,16]	47.8309619	50.1988322	1.080185	69
## beta[2,16]	53.8156212	54.5841181	1.032599	81
## beta[3,16]	55.7360468	56.9708163	1.024480	150
## beta[4,16]	49.4484384	50.5040986	1.057744	39
## beta[5,16]	46.9016369	48.3209172	1.143557	20
## beta[6,16]	51.8291833	52.7222249	1.045521	60
## beta[7,16]	48.3117139	51.0793865	1.162651	18
## beta[8,16]	53.6013473	55.3736604	1.221002	14
## beta[9,16]	53.7870307	54.5860187	1.019982	210
## beta[10,16]	48.7710832	50.1161985	1.060466	43
## beta[11,16]	52.4739114	53.3244301	1.023579	210
## beta[12,16]	49.5674498	51.3063113	1.057204	65
## beta[13,16]	46.5284707	47.6053965	1.054166	47
## beta[1,17]	47.8004645	50.0810660	1.083630	61
## beta[2,17]	53.9650805	54.8757080	1.017214	370
## beta[3,17]	55.7867489	56.9787842	1.019206	230
## beta[4,17]	49.4715566	50.6031499	1.061142	39
## beta[5,17]	47.0138543	48.4355767	1.162367	18
## beta[6,17]	51.9198850	52.9750254	1.039020	110
## beta[7,17]	48.3049555	51.0984169	1.159093	18
## beta[8,17]	53.6331787	55.3344178	1.219209	14
## beta[9,17]	53.7241262	54.5118972	1.021789	300
## beta[10,17]	48.6885752	50.0652831	1.045452	56
## beta[11,17]	52.4411248	53.3063521	1.037725	160

## beta[12,17]	49.4644560	51.0738517	1.049587	75
## beta[13,17]	46.5667360	47.7693131	1.051955	58
## beta[1,18]	47.8235545	49.9894809	1.079100	60
## beta[2,18]	54.1442225	55.0809696	1.023088	270
## beta[3,18]	55.8763380	57.0021850	1.015995	260
## beta[4,18]	49.5327697	50.7539149	1.063540	40
## beta[5,18]	47.1229696	48.6048889	1.185725	16
## beta[6,18]	52.0101371	53.1963433	1.040951	160
## beta[7,18]	48.3637782	51.2566181	1.147570	19
## beta[8,18]	53.6137133	55.3887927	1.212016	14
## beta[9,18]	53.6722135	54.5131026	1.024558	310
## beta[10,18]	48.6147823	50.1042142	1.030766	94
## beta[11,18]	52.4840684	53.3067999	1.042404	100
## beta[12,18]	49.3013710	50.8629306	1.050359	72
## beta[13,18]	46.6154801	47.9383915	1.050784	69
## beta[1,19]	47.7981135	49.7863545	1.078752	54
## beta[2,19]	54.3133109	55.3957116	1.037512	99
## beta[3,19]	55.9311598	56.9665940	1.019614	130
## beta[4,19]	49.5645938	50.7942971	1.062771	42
## beta[5,19]	47.2435763	48.7720284	1.208333	15
## beta[6,19]	52.0907133	53.3854068	1.045373	170
## beta[7,19]	48.3686259	51.3653629	1.145057	19
## beta[8,19]	53.6379601	55.3370190	1.204944	14
## beta[9,19]	53.5910927	54.4534752	1.034831	120
## beta[10,19]	48.5440277	50.1013232	1.026167	130
## beta[11,19]	52.5473416	53.4229057	1.030720	180
## beta[12,19]	49.1630968	50.7075071	1.047738	69
## beta[13,19]	46.6154306	47.9163047	1.060145	64
## beta[1,20]	47.7658004	49.7050819	1.075065	52
## beta[2,20]	54.3720188	55.4433531	1.038017	110
## beta[3,20]	55.8778560	56.8416627	1.011600	250
## beta[4,20]	49.5613997	50.8176672	1.068199	38
## beta[5,20]	47.3318976	48.8982318	1.222847	14
## beta[6,20]	52.1404188	53.5262365	1.048934	260
## beta[7,20]	48.3988239	51.3864437	1.137653	20
## beta[8,20]	53.6270967	55.2879608	1.201319	15
## beta[9,20]	53.5014158	54.3218997	1.058427	57
## beta[10,20]	48.4606973	50.1020328	1.023491	240
## beta[11,20]	52.6126050	53.4863884	1.031052	200
## beta[12,20]	49.0533339	50.4596289	1.049910	58
## beta[13,20]	46.5829803	48.0022406	1.060270	69
## beta[1,21]	47.7308571	49.5976637	1.073457	46
## beta[2,21]	54.4186033	55.4582007	1.045401	83
## beta[3,21]	55.8976813	56.8728672	1.012471	230
## beta[4,21]	49.5842404	50.8021263	1.074363	34
## beta[5,21]	47.4024611	49.1251114	1.226125	14
## beta[6,21]	52.1961082	53.6714812	1.048787	310
## beta[7,21]	48.4159000	51.5905315	1.127163	21
## beta[8,21]	53.6188509	55.2417579	1.197984	15
## beta[9,21]	53.6011782	54.4375554	1.041570	92
## beta[10,21]	48.3904172	50.0244359	1.021440	440
## beta[11,21]	52.6530369	53.4918906	1.024128	200

## beta[12,21]	48.9163025	50.2858863	1.062986	40
## beta[13,21]	46.5925918	47.8820252	1.061788	74
## beta[1,22]	47.8558221	49.7132180	1.083526	38
## beta[2,22]	54.3782195	55.3697297	1.033352	100
## beta[3,22]	55.8987572	56.8790100	1.010779	300
## beta[4,22]	49.5814620	50.7478746	1.088717	29
## beta[5,22]	47.5087414	49.0972275	1.229814	14
## beta[6,22]	52.2718997	53.6278500	1.046030	340
## beta[7,22]	48.4693781	51.6686499	1.121129	22
## beta[8,22]	53.5851921	55.2711821	1.190647	15
## beta[9,22]	53.6641595	54.4739230	1.023690	170
## beta[10,22]	48.2906485	49.8706666	1.018531	920
## beta[11,22]	52.7625938	53.5497691	1.019236	240
## beta[12,22]	48.8845827	50.3119820	1.066285	39
## beta[13,22]	46.5918452	47.8884170	1.054037	79
## beta[1,23]	47.9580041	49.9315878	1.089469	33
## beta[2,23]	54.3392080	55.3438474	1.025481	160
## beta[3,23]	55.8937373	56.9774226	1.007571	510
## beta[4,23]	49.5864365	50.6494120	1.123149	22
## beta[5,23]	47.5858524	49.1931114	1.257234	12
## beta[6,23]	52.2928273	53.8058706	1.041474	510
## beta[7,23]	48.5087480	51.8528121	1.115966	23
## beta[8,23]	53.5807741	55.2809663	1.181641	16
## beta[9,23]	53.6621795	54.5250160	1.024070	160
## beta[10,23]	48.2164106	49.8583770	1.019669	1300
## beta[11,23]	52.8738653	53.7528760	1.032681	140
## beta[12,23]	48.8177310	50.2473777	1.071969	35
## beta[13,23]	46.5725045	47.8619245	1.046320	80
## beta[1,24]	48.0607901	50.0421037	1.106336	28
## beta[2,24]	54.2642193	55.2121716	1.013667	680
## beta[3,24]	55.8761409	56.9488549	1.006570	560
## beta[4,24]	49.3983067	50.4731764	1.069591	37
## beta[5,24]	47.4332767	48.9996827	1.172210	17
## beta[6,24]	52.3399929	53.8391161	1.031766	1000
## beta[7,24]	48.5429063	51.8995926	1.109771	24
## beta[8,24]	53.5183155	55.1723407	1.168104	17
## beta[9,24]	53.6689496	54.5047005	1.029083	120
## beta[10,24]	48.1339977	49.6907910	1.015768	1900
## beta[11,24]	52.9687560	53.7578403	1.040656	64
## beta[12,24]	48.7634224	50.2952325	1.079265	33
## beta[13,24]	46.5425325	47.8335330	1.040946	86
## beta[1,25]	48.1453301	50.0950786	1.113300	25
## beta[2,25]	54.1755313	55.1005840	1.015198	1000
## beta[3,25]	55.8731238	56.9828277	1.006929	720
## beta[4,25]	49.3460452	50.4819196	1.049618	55
## beta[5,25]	47.2753350	48.7740719	1.112105	24
## beta[6,25]	52.3433934	53.7531843	1.031183	1200
## beta[7,25]	48.5784456	51.9413585	1.107553	24
## beta[8,25]	53.4890429	55.1477914	1.156406	18
## beta[9,25]	53.7194482	54.6135692	1.030786	140
## beta[10,25]	48.0627877	49.6017676	1.015573	850
## beta[11,25]	52.9201465	53.9571469	1.033186	120

## beta[12,25]	48.8045920	50.3954086	1.075718	36
## beta[13,25]	46.6084248	47.9691454	1.048505	73
## beta[1,26]	48.2346252	50.3243612	1.122624	23
## beta[2,26]	54.0672238	54.9467133	1.025551	130
## beta[3,26]	55.8575110	56.9581881	1.008944	500
## beta[4,26]	49.2823336	50.4056816	1.041913	66
## beta[5,26]	47.1175291	48.5561571	1.066234	37
## beta[6,26]	52.3618207	53.6897940	1.026155	2300
## beta[7,26]	48.5417146	51.9919580	1.103477	25
## beta[8,26]	53.4281895	55.1439165	1.143753	19
## beta[9,26]	53.7531402	54.6503765	1.025938	190
## beta[10,26]	47.9833092	49.4627238	1.020678	330
## beta[11,26]	52.9010219	53.9862058	1.036056	300
## beta[12,26]	48.8732877	50.5560030	1.081297	37
## beta[13,26]	46.6706223	48.0987626	1.054623	62
## beta[1,27]	48.3504257	50.3972924	1.138565	21
## beta[2,27]	54.0942006	54.9594438	1.017330	200
## beta[3,27]	55.8930801	57.1152185	1.010962	470
## beta[4,27]	49.2075988	50.3933464	1.033908	100
## beta[5,27]	46.9906578	48.3829458	1.048770	48
## beta[6,27]	52.4074197	53.7463876	1.027931	1600
## beta[7,27]	48.5650574	52.0879452	1.101373	25
## beta[8,27]	53.4053612	55.1464839	1.131227	21
## beta[9,27]	53.9219519	54.8664754	1.016209	1300
## beta[10,27]	47.8848374	49.4453710	1.023589	180
## beta[11,27]	52.8654399	53.8852459	1.034267	610
## beta[12,27]	48.9788625	50.7517371	1.075214	44
## beta[13,27]	46.7350490	48.0825628	1.058045	50
## beta[1,28]	48.4571139	50.4744615	1.142717	20
## beta[2,28]	54.1822733	55.1091818	1.008810	790
## beta[3,28]	55.9272432	57.2040805	1.010353	940
## beta[4,28]	49.1035853	50.2971843	1.021728	200
## beta[5,28]	46.8894780	48.3405981	1.038768	57
## beta[6,28]	52.4541714	53.7982913	1.023087	1700
## beta[7,28]	48.5729675	52.2203267	1.098712	26
## beta[8,28]	53.3214764	55.0015970	1.123407	21
## beta[9,28]	54.0928244	55.0172231	1.019597	270
## beta[10,28]	47.8182853	49.3986889	1.029524	120
## beta[11,28]	52.7952978	53.8319352	1.032549	660
## beta[12,28]	49.0169766	51.0062493	1.073849	49
## beta[13,28]	46.7661860	48.1391365	1.061477	42
## beta[1,29]	48.5923799	50.5091427	1.153846	18
## beta[2,29]	54.1773037	55.1472795	1.015631	400
## beta[3,29]	55.9429267	57.2435084	1.011781	1600
## beta[4,29]	49.0098137	50.2707486	1.021409	560
## beta[5,29]	46.8558292	48.3755283	1.036484	60
## beta[6,29]	52.4731228	53.7358149	1.014426	2500
## beta[7,29]	48.6105213	52.2648013	1.095219	26
## beta[8,29]	53.2769046	54.8444986	1.110148	23
## beta[9,29]	54.1364748	55.1898938	1.027531	220
## beta[10,29]	47.8596556	49.6131254	1.029821	130
## beta[11,29]	52.7337479	53.7419728	1.025397	460

## beta[12,29]	49.0433046	50.9993214	1.071208	56
## beta[13,29]	46.7912821	48.0894850	1.065107	38
## beta[1,30]	48.6922591	50.5769502	1.174909	17
## beta[2,30]	54.1745860	55.1265817	1.010818	380
## beta[3,30]	56.0109466	57.3903348	1.015460	1400
## beta[4,30]	49.0713787	50.4331675	1.025657	630
## beta[5,30]	46.9123195	48.5746496	1.033130	68
## beta[6,30]	52.5535359	53.8536274	1.016957	780
## beta[7,30]	48.6039618	52.2613860	1.089978	28
## beta[8,30]	53.2004148	54.8201552	1.113693	23
## beta[9,30]	54.2315945	55.4141234	1.029763	180
## beta[10,30]	47.9069239	49.6510935	1.031833	120
## beta[11,30]	52.6599528	53.6985330	1.034763	170
## beta[12,30]	49.1013118	51.1759230	1.069065	60
## beta[13,30]	46.8042086	48.1660882	1.053609	51
## beta[1,31]	48.7996795	50.4355935	1.181713	16
## beta[2,31]	54.2412585	55.3179302	1.010995	610
## beta[3,31]	56.0806400	57.6307819	1.018281	1500
## beta[4,31]	49.1258774	50.6686478	1.028543	740
## beta[5,31]	46.9549617	48.7444100	1.033207	73
## beta[6,31]	52.5949281	54.1812027	1.025091	3000
## beta[7,31]	48.6817718	52.3066243	1.086592	29
## beta[8,31]	53.1132073	54.7009520	1.121755	21
## beta[9,31]	54.2820294	55.5205501	1.024310	200
## beta[10,31]	47.9583299	49.7614292	1.029420	140
## beta[11,31]	52.5594412	53.5760578	1.039425	88
## beta[12,31]	49.1193876	51.3031586	1.072991	62
## beta[13,31]	46.7923930	48.1880520	1.043358	69
## deviance	470.7027399	486.2065711	1.078440	36
## p[1]	54.5863852	56.1472696	1.149709	19
## p[2]	49.4723352	50.5515212	1.039081	62
## p[3]	52.5946516	53.6838658	1.033600	850
## p[4]	53.3957368	54.4381734	1.369435	10
## p[5]	49.3515948	50.3058560	1.027269	80
## p[6]	52.4020548	53.3278228	1.028051	240
## p[7]	51.5788944	52.4348770	1.130425	20
## p[8]	51.5788944	52.4348770	1.130425	20
## p[9]	53.5490513	54.4630778	1.209395	15
## p[10]	51.6573803	52.5815186	1.087583	28
## p[11]	48.2138403	50.9043960	1.170486	17
## p[12]	48.8158373	50.1018411	1.079313	33
## p[13]	53.9022245	54.7143214	1.034916	76
## p[14]	48.8158373	50.1018411	1.079313	33
## p[15]	53.9022245	54.7143214	1.034916	76
## p[16]	52.4065697	53.2612563	1.025806	220
## p[17]	46.5421343	47.6864369	1.069436	37
## p[18]	53.6565294	54.4908439	1.114496	24
## p[19]	55.6882078	56.9488146	1.027887	110
## p[20]	49.3781003	50.3736713	1.038716	57
## p[21]	53.9022245	54.7143214	1.034916	76
## p[22]	52.4065697	53.2612563	1.025806	220
## p[23]	49.6554012	51.5080448	1.061034	60

## p[24]	46.5421343	47.6864369	1.069436	37
## p[25]	46.5284707	47.6053965	1.054166	47
## p[26]	51.8291833	52.7222249	1.045521	60
## p[27]	53.8156212	54.5841181	1.032599	81
## p[28]	49.4484384	50.5040986	1.057744	39
## p[29]	53.8156212	54.5841181	1.032599	81
## p[30]	53.7870307	54.5860187	1.019982	210
## p[31]	52.4739114	53.3244301	1.023579	210
## p[32]	46.5284707	47.6053965	1.054166	47
## p[33]	52.4739114	53.3244301	1.023579	210
## p[34]	51.8291833	52.7222249	1.045521	60
## p[35]	51.8291833	52.7222249	1.045521	60
## p[36]	53.7870307	54.5860187	1.019982	210
## p[37]	53.8156212	54.5841181	1.032599	81
## p[38]	49.4484384	50.5040986	1.057744	39
## p[39]	53.7241262	54.5118972	1.021789	300
## p[40]	53.9650805	54.8757080	1.017214	370
## p[41]	48.6885752	50.0652831	1.045452	56
## p[42]	52.4411248	53.3063521	1.037725	160
## p[43]	52.4840684	53.3067999	1.042404	100
## p[44]	54.3133109	55.3957116	1.037512	99
## p[45]	55.9311598	56.9665940	1.019614	130
## p[46]	53.5014158	54.3218997	1.058427	57
## p[47]	53.5014158	54.3218997	1.058427	57
## p[48]	55.8778560	56.8416627	1.011600	250
## p[49]	52.6530369	53.4918906	1.024128	200
## p[50]	55.8976813	56.8728672	1.012471	230
## p[51]	52.6530369	53.4918906	1.024128	200
## p[52]	48.9163025	50.2858863	1.062986	40
## p[53]	47.7308571	49.5976637	1.073457	46
## p[54]	54.4186033	55.4582007	1.045401	83
## p[55]	52.7625938	53.5497691	1.019236	240
## p[56]	54.3782195	55.3697297	1.033352	100
## p[57]	54.3782195	55.3697297	1.033352	100
## p[58]	55.8987572	56.8790100	1.010779	300
## p[59]	53.6641595	54.4739230	1.023690	170
## p[60]	52.7625938	53.5497691	1.019236	240
## p[61]	53.6621795	54.5250160	1.024070	160
## p[62]	49.5864365	50.6494120	1.123149	22
## p[63]	49.5864365	50.6494120	1.123149	22
## p[64]	52.9687560	53.7578403	1.040656	64
## p[65]	52.9687560	53.7578403	1.040656	64
## p[66]	52.9687560	53.7578403	1.040656	64
## p[67]	52.9687560	53.7578403	1.040656	64
## p[68]	52.9687560	53.7578403	1.040656	64
## p[69]	53.6689496	54.5047005	1.029083	120
## p[70]	54.2642193	55.2121716	1.013667	680
## p[71]	55.8761409	56.9488549	1.006570	560
## p[72]	49.3983067	50.4731764	1.069591	37
## p[73]	53.6689496	54.5047005	1.029083	120
## p[74]	52.9687560	53.7578403	1.040656	64
## p[75]	48.7634224	50.2952325	1.079265	33

## p[76]	46.5425325	47.8335330	1.040946	86
## p[77]	53.7531402	54.6503765	1.025938	190
## p[78]	52.3618207	53.6897940	1.026155	2300
## p[79]	54.0672238	54.9467133	1.025551	130
## p[80]	55.8575110	56.9581881	1.008944	500
## p[81]	54.0942006	54.9594438	1.017330	200
## p[82]	53.9219519	54.8664754	1.016209	1300
## p[83]	49.1035853	50.2971843	1.021728	200
## p[84]	54.0928244	55.0172231	1.019597	270
## p[85]	47.8182853	49.3986889	1.029524	120
## p[86]	54.1822733	55.1091818	1.008810	790
## p[87]	46.7912821	48.0894850	1.065107	38
## p[88]	52.4731228	53.7358149	1.014426	2500
## p[89]	46.7912821	48.0894850	1.065107	38
## p[90]	53.2769046	54.8444986	1.110148	23
## p[91]	55.9429267	57.2435084	1.011781	1600
## p[92]	54.1364748	55.1898938	1.027531	220
## p[93]	52.7337479	53.7419728	1.025397	460
## p[94]	49.0098137	50.2707486	1.021409	560
## p[95]	54.1745860	55.1265817	1.010818	380
## p[96]	52.5535359	53.8536274	1.016957	780
## p[97]	54.1745860	55.1265817	1.010818	380
## p[98]	54.2412585	55.3179302	1.010995	610
## p[99]	54.2820294	55.5205501	1.024310	200
## p[100]	52.5594412	53.5760578	1.039425	88
## p[101]	52.5594412	53.5760578	1.039425	88
## p[102]	48.7996795	50.4355935	1.181713	16
## p[103]	53.1132073	54.7009520	1.121755	21
## p[104]	48.7996795	50.4355935	1.181713	16
## p[105]	46.7923930	48.1880520	1.043358	69
## p[106]	46.8558292	48.3755283	1.036484	60
## p[107]	46.8894780	48.3405981	1.038768	57
## p[108]	47.5858524	49.1931114	1.257234	12
## p[109]	47.5858524	49.1931114	1.257234	12
## p[110]	46.9016369	48.3209172	1.143557	20
## p[111]	46.9016369	48.3209172	1.143557	20
## p[112]	46.4478905	47.9725141	1.050203	51
## sigma2_beta[1]	0.2965570	0.6455778	1.694690	6
## sigma2_beta[2]	0.2943798	0.6657771	1.716340	6
## sigma2_beta[3]	0.2928216	0.6146854	1.712452	6
## sigma2_beta[4]	0.2996984	0.6168701	1.704775	6
## sigma2_beta[5]	0.3006760	0.6904631	1.705221	6
## sigma2_beta[6]	0.2934773	0.6352535	1.720035	6
## sigma2_beta[7]	0.2963595	0.6345328	1.716944	6
## sigma2_beta[8]	0.2929146	0.6189533	1.708166	6
## sigma2_beta[9]	0.2888181	0.6029883	1.718444	6
## sigma2_beta[10]	0.2982069	0.6480835	1.668654	6
## sigma2_beta[11]	0.2929917	0.5951090	1.688251	6
## sigma2_beta[12]	0.3015576	0.6603020	1.705822	6
## sigma2_beta[13]	0.2928576	0.6263231	1.711971	6
## sigma2_y[1]	4.8684290	8.9778112	1.025041	120
## sigma2_y[2]	4.3835933	6.2710692	1.011007	190

```
## sigma2_y[3]      3.9983434    6.0022095  1.006740    560
## sigma2_y[4]      4.5421599    6.8663237  1.007585    300
## sigma2_y[5]      8.5255139   20.3325823  1.051956     44
## sigma2_y[6]      4.3128801    6.6424013  1.005338    420
## sigma2_y[7]      4.7561150   10.3323020  1.027861    180
## sigma2_y[8]      4.8025322    8.4792981  1.007600    460
## sigma2_y[9]      4.0592430    5.5939477  1.002745   1000
## sigma2_y[10]     4.5311038    7.7787986  1.019381    130
## sigma2_y[11]     4.0832914    5.7642380  1.001007   3000
## sigma2_y[12]     4.8080832    8.2372830  1.007726    300
## sigma2_y[13]     4.3461022    6.6652333  1.001413   3000
```

A.3 House Election Model

Raw Output for Appendix

```
options(max.print = 99999999)
jags_sims_house$BUGSoutput$summary
```

##	mean	sd	2.5%	25%	50%
## beta[1,1]	58.306127	2.716740	52.977697539	56.4662507	58.379270
## beta[2,1]	59.253823	2.777571	53.830873329	57.4088740	59.273996
## beta[3,1]	36.385167	2.670935	31.436792575	34.5577536	36.341616
## beta[4,1]	66.711295	2.729256	61.523445759	64.8377033	66.686941
## beta[5,1]	30.463614	2.735714	25.070167216	28.5661222	30.449518
## beta[6,1]	58.811408	2.742312	53.362761435	56.9571059	58.812686
## beta[7,1]	38.194965	2.812420	32.566439603	36.3678721	38.104172
## beta[8,1]	44.256514	2.564823	38.991609441	42.5496619	44.383614
## beta[9,1]	43.211496	2.580971	38.101328337	41.6144934	43.290627
## beta[10,1]	29.324002	2.730484	24.043756131	27.4603225	29.293274
## beta[11,1]	43.880322	2.187492	39.408639848	42.5381177	43.901056
## beta[12,1]	68.969534	2.744467	63.677429845	67.0782120	69.002504
## beta[13,1]	30.396369	2.731562	24.989800885	28.5549426	30.352075
## beta[1,2]	58.352260	3.040225	52.320255196	56.2574118	58.381490
## beta[2,2]	59.267556	3.127547	53.209654701	57.1471144	59.248163
## beta[3,2]	36.362939	3.021067	30.639348890	34.3602819	36.301076
## beta[4,2]	66.670367	3.077007	60.774331456	64.5366823	66.599133
## beta[5,2]	30.484026	3.009829	24.789901778	28.4580160	30.461791
## beta[6,2]	58.837266	3.089096	52.785350981	56.8037853	58.764987
## beta[7,2]	38.250039	3.142514	32.211870346	36.2162564	38.221710
## beta[8,2]	44.391225	2.886468	38.351914439	42.6744081	44.558212
## beta[9,2]	43.362126	2.858532	37.344276524	41.7289271	43.462788
## beta[10,2]	29.309636	3.026344	23.355513128	27.2279538	29.278667
## beta[11,2]	44.172316	2.432975	39.122144150	42.7484477	44.124387
## beta[12,2]	68.944352	3.063979	62.817791974	66.9772654	68.957596
## beta[13,2]	30.438862	3.056301	24.270146352	28.5013319	30.389125
## beta[1,3]	58.368669	3.332791	51.870150051	56.1871095	58.319173
## beta[2,3]	59.276091	3.526879	52.585839537	57.0361480	59.157991
## beta[3,3]	36.311190	3.348195	29.895473390	34.2178813	36.244291
## beta[4,3]	66.643560	3.379636	59.891919751	64.5219595	66.587194
## beta[5,3]	30.509747	3.382913	23.975655355	28.2426306	30.452087
## beta[6,3]	58.835481	3.416625	52.333112910	56.6862347	58.723672
## beta[7,3]	38.270992	3.489868	31.412035147	36.0037630	38.251516

## beta[8,3]	44.527720	3.128332	37.845925520	42.7115322	44.636541
## beta[9,3]	43.556225	3.070066	37.057456871	41.8053611	43.642239
## beta[10,3]	29.268348	3.338790	22.691576703	27.1427130	29.292450
## beta[11,3]	44.449054	2.628877	39.078423450	42.9560399	44.363819
## beta[12,3]	68.965937	3.371608	62.124234052	66.7852462	69.014909
## beta[13,3]	30.413120	3.372929	23.691910985	28.2600707	30.388418
## beta[1,4]	58.365505	3.632878	51.204359548	56.0058260	58.332434
## beta[2,4]	59.247331	3.801727	51.932215509	56.9748130	59.207530
## beta[3,4]	36.324428	3.628670	29.518788188	34.1144497	36.216136
## beta[4,4]	66.643179	3.638378	59.100184032	64.4013971	66.623169
## beta[5,4]	30.524889	3.683148	23.559421377	28.0774644	30.533977
## beta[6,4]	58.827705	3.658566	51.710010972	56.4906869	58.791989
## beta[7,4]	38.288599	3.758513	31.153627517	35.9863073	38.255757
## beta[8,4]	44.679465	3.376841	37.482810933	42.8055450	44.742682
## beta[9,4]	43.751912	3.263212	36.798965705	41.9966192	43.853103
## beta[10,4]	29.255932	3.636745	22.086106219	26.9755576	29.241171
## beta[11,4]	44.764004	2.895262	39.063448015	43.1155627	44.623334
## beta[12,4]	68.929958	3.615904	61.456805864	66.6335470	68.949739
## beta[13,4]	30.387894	3.640859	23.327469316	28.1203892	30.396378
## beta[1,5]	58.338204	3.859056	50.811769371	55.9598853	58.324819
## beta[2,5]	59.304872	4.080726	51.184248393	56.9109769	59.298706
## beta[3,5]	36.328763	3.875191	28.770960718	33.9765680	36.260874
## beta[4,5]	66.607566	3.872030	58.584637237	64.2841204	66.590866
## beta[5,5]	30.536652	3.969847	23.111815665	28.0877838	30.390390
## beta[6,5]	58.801986	3.931892	51.305185383	56.3064297	58.783500
## beta[7,5]	38.303831	4.005214	30.444724652	35.8701049	38.251968
## beta[8,5]	44.773397	3.540718	37.028889643	42.7695466	44.873110
## beta[9,5]	43.976716	3.452329	36.669634874	42.1432210	44.040470
## beta[10,5]	29.244137	3.967901	21.102460081	26.8027855	29.256808
## beta[11,5]	45.018522	3.070197	38.894429749	43.3330741	44.760548
## beta[12,5]	68.949205	3.894044	60.863494047	66.5633263	68.975657
## beta[13,5]	30.420340	3.879809	22.998457762	27.9586104	30.389074
## beta[1,6]	58.304867	4.125022	50.187979967	55.7930454	58.266629
## beta[2,6]	59.298593	4.224963	51.048209626	56.7646311	59.287493
## beta[3,6]	36.296599	4.130048	28.526117351	33.7934934	36.225684
## beta[4,6]	66.611332	4.056136	58.438574939	64.1866924	66.504122
## beta[5,6]	30.540835	4.284264	22.771174840	28.0137922	30.352883
## beta[6,6]	58.798035	4.185780	50.655577589	56.2723454	58.711396
## beta[7,6]	38.278691	4.287222	29.909428996	35.8049889	38.170854
## beta[8,6]	44.859569	3.693646	36.777941715	42.8185372	44.926925
## beta[9,6]	44.177958	3.607561	36.320956602	42.2993670	44.160265
## beta[10,6]	29.234336	4.202400	20.191063565	26.7356159	29.236036
## beta[11,6]	45.344910	3.243098	39.247710483	43.4946411	45.018508
## beta[12,6]	68.955890	4.177474	60.000992617	66.4203798	68.996259
## beta[13,6]	30.437395	4.104944	22.633896225	27.9134928	30.460107
## beta[1,7]	58.260632	4.306509	49.709411964	55.5412470	58.254715
## beta[2,7]	59.296329	4.427612	50.649496907	56.6673016	59.219108
## beta[3,7]	36.290133	4.390128	27.648299375	33.7380264	36.213619
## beta[4,7]	66.587814	4.284334	58.055145300	64.1254898	66.554858
## beta[5,7]	30.550488	4.468446	21.970548559	27.9598037	30.447574
## beta[6,7]	58.785063	4.453932	50.054345089	56.1016926	58.711988
## beta[7,7]	38.232816	4.527592	29.557921255	35.6112786	38.092615

## beta[8,7]	45.012496	3.785056	36.749567232	42.9603718	45.067784
## beta[9,7]	44.386974	3.706472	35.800904827	42.4782940	44.300638
## beta[10,7]	29.210670	4.395346	19.810118586	26.7677693	29.179628
## beta[11,7]	45.643531	3.361235	39.595918578	43.6921793	45.272573
## beta[12,7]	68.881387	4.407658	59.847795152	66.2680648	68.969285
## beta[13,7]	30.427835	4.341382	21.856797765	27.8700614	30.419097
## beta[1,8]	58.268414	4.475594	49.406168860	55.6192807	58.234450
## beta[2,8]	59.289803	4.702609	49.959924066	56.6411963	59.296604
## beta[3,8]	36.292499	4.672751	27.042237016	33.5296793	36.179208
## beta[4,8]	66.587719	4.522559	57.369607330	63.9027697	66.664883
## beta[5,8]	30.536804	4.699414	20.920941442	27.8941253	30.478654
## beta[6,8]	58.820231	4.711010	49.813537225	55.9913059	58.740547
## beta[7,8]	38.252243	4.708654	29.162048851	35.5603905	38.046077
## beta[8,8]	45.170439	3.882223	36.650085483	43.0293713	45.226012
## beta[9,8]	44.573776	3.851951	36.114132518	42.5613634	44.517596
## beta[10,8]	29.236626	4.584843	19.645196332	26.7081482	29.230988
## beta[11,8]	45.918617	3.534732	39.925660440	43.8121810	45.456517
## beta[12,8]	68.925147	4.622607	59.228405231	66.2824408	68.993624
## beta[13,8]	30.458401	4.556214	21.540221068	27.7265402	30.413461
## beta[1,9]	58.227481	4.705658	48.827534270	55.5069924	58.185573
## beta[2,9]	59.300895	4.902999	49.486445285	56.5571185	59.282086
## beta[3,9]	36.300910	4.859348	26.559610569	33.5036888	36.205803
## beta[4,9]	66.595457	4.741732	56.713108738	63.8965572	66.669886
## beta[5,9]	30.514089	4.885376	20.698788360	27.7244690	30.531040
## beta[6,9]	58.815551	4.893609	49.066195290	55.9948460	58.706439
## beta[7,9]	38.219263	4.860930	29.018163419	35.4696301	38.113163
## beta[8,9]	45.337447	4.021454	36.231640253	43.2178668	45.365964
## beta[9,9]	44.811520	3.851604	36.438462750	42.8037778	44.743166
## beta[10,9]	29.238296	4.809784	19.195282646	26.6099532	29.332356
## beta[11,9]	46.232525	3.600083	40.118419854	44.0178234	45.645877
## beta[12,9]	68.932522	4.855149	58.768413473	66.1912385	68.975115
## beta[13,9]	30.448421	4.741623	21.260496585	27.7587135	30.477964
## beta[1,10]	58.247449	4.972730	48.729943726	55.3815840	58.251568
## beta[2,10]	59.271930	5.101482	49.054202063	56.4253404	59.275085
## beta[3,10]	36.288553	5.062371	26.103773020	33.4357323	36.255415
## beta[4,10]	66.613195	5.029024	55.863463490	63.8387642	66.670883
## beta[5,10]	30.529794	5.336355	20.587857122	27.7105541	30.516779
## beta[6,10]	58.820469	5.103717	48.872829775	55.9530082	58.710176
## beta[7,10]	38.203178	5.053553	28.439100941	35.2118188	38.108654
## beta[8,10]	45.505679	4.107839	36.658987968	43.2703199	45.517093
## beta[9,10]	45.013589	3.916728	36.868484116	42.9099527	44.923444
## beta[10,10]	29.230443	4.927455	18.593361748	26.4613037	29.300608
## beta[11,10]	46.492548	3.656128	40.393340003	44.2131366	45.904976
## beta[12,10]	68.973765	5.087724	58.200282340	66.1816146	68.950205
## beta[13,10]	30.435523	4.949181	20.576660287	27.6484709	30.408363
## beta[1,11]	58.266623	5.150298	47.914787416	55.3071724	58.308617
## beta[2,11]	59.261359	5.348439	48.660363549	56.3420521	59.213169
## beta[3,11]	36.290370	5.306424	25.568221934	33.3610728	36.246540
## beta[4,11]	66.608036	5.238743	55.543123369	63.7725126	66.715057
## beta[5,11]	30.567121	5.348584	20.332275024	27.6496801	30.497937
## beta[6,11]	58.783717	5.348421	48.383420142	55.7193185	58.751398
## beta[7,11]	38.163950	5.306011	27.768373582	35.0877956	38.029098

## beta[8,11]	45.631587	4.169952	36.246264533	43.3571862	45.625878
## beta[9,11]	45.259294	3.992133	37.023478633	43.0169762	45.123031
## beta[10,11]	29.197206	5.155472	18.512118346	26.3050746	29.323629
## beta[11,11]	46.792953	3.766233	40.804479041	44.4020827	46.090814
## beta[12,11]	68.962130	5.267353	57.936207098	66.1009137	68.933915
## beta[13,11]	30.415973	5.158791	20.418780079	27.6128844	30.378040
## beta[1,12]	58.302510	5.318072	47.413902113	55.2983504	58.277644
## beta[2,12]	59.254457	5.585898	48.007494430	56.3360981	59.223843
## beta[3,12]	36.339969	5.544313	25.012205351	33.3857139	36.294808
## beta[4,12]	66.627207	5.403722	55.412321982	63.7888345	66.757178
## beta[5,12]	30.557454	5.570089	19.567388996	27.5106997	30.503460
## beta[6,12]	58.769380	5.549584	47.746141566	55.6787338	58.692276
## beta[7,12]	38.166790	5.430003	27.333278172	35.0446660	38.023788
## beta[8,12]	45.783401	4.210739	36.437352864	43.5006939	45.670226
## beta[9,12]	45.508003	4.035619	37.326282803	43.2433511	45.331430
## beta[10,12]	29.166221	5.344817	18.173942715	26.2300707	29.262715
## beta[11,12]	47.065534	3.793021	41.070979469	44.5586514	46.384477
## beta[12,12]	68.972807	5.379676	57.898251724	66.1181006	68.910049
## beta[13,12]	30.449992	5.372069	19.841436368	27.4752846	30.384918
## beta[1,13]	58.262313	5.470788	46.995975079	55.1520531	58.302442
## beta[2,13]	59.234750	5.773217	47.389997901	56.2283224	59.176322
## beta[3,13]	36.337262	5.687907	24.650370831	33.2961104	36.365634
## beta[4,13]	66.681401	5.595423	54.717485504	63.8245517	66.719254
## beta[5,13]	30.571042	5.675612	18.524365707	27.4739374	30.584535
## beta[6,13]	58.766203	5.708592	47.507514407	55.4978097	58.676483
## beta[7,13]	38.154545	5.642853	26.812866801	35.0168981	38.048715
## beta[8,13]	45.946299	4.255413	36.752409829	43.6815583	45.797891
## beta[9,13]	45.740808	4.017914	37.658940787	43.3805486	45.526397
## beta[10,13]	29.180726	5.505926	17.687237104	26.1811553	29.318859
## beta[11,13]	47.335563	3.862901	41.262953767	44.7209336	46.643029
## beta[12,13]	68.959719	5.617269	57.312723831	65.9260614	68.824061
## beta[13,13]	30.421329	5.540451	19.387162344	27.3761506	30.338694
## beta[1,14]	58.301873	5.622821	46.772466916	55.1633313	58.342180
## beta[2,14]	59.256256	5.875500	47.116404303	56.1119606	59.165968
## beta[3,14]	36.321832	5.837515	24.440119288	33.2662748	36.349064
## beta[4,14]	66.664215	5.733737	54.466354809	63.6650697	66.759933
## beta[5,14]	30.584811	5.892816	18.677108888	27.4117241	30.642357
## beta[6,14]	58.786263	5.882636	46.692209525	55.4194333	58.640726
## beta[7,14]	38.155730	5.745581	26.623484389	34.9794135	38.082690
## beta[8,14]	46.065682	4.284096	36.994539345	43.7787724	45.842843
## beta[9,14]	45.967892	4.063710	38.607971485	43.5197315	45.716416
## beta[10,14]	29.178485	5.697925	17.281554521	26.1937201	29.319763
## beta[11,14]	47.624024	3.934260	41.512498814	44.9324562	46.940990
## beta[12,14]	68.946208	5.777823	56.821399985	65.9582862	68.827507
## beta[13,14]	30.397295	5.665580	19.325979259	27.2344520	30.342372
## beta[1,15]	58.338386	5.770202	46.809363654	55.0257228	58.312658
## beta[2,15]	59.267685	6.008962	46.820573422	56.1147522	59.247563
## beta[3,15]	36.324546	6.065624	24.029639291	33.1676408	36.332016
## beta[4,15]	66.652767	5.893977	53.977288833	63.6067629	66.723001
## beta[5,15]	30.562379	5.967742	17.874243540	27.2579711	30.638231
## beta[6,15]	58.771929	5.988793	46.153458767	55.3975610	58.632545
## beta[7,15]	38.148955	5.947232	26.109563892	34.8606807	37.972055

## beta[8,15]	46.171479	4.323291	36.802827741	43.8190429	45.915959
## beta[9,15]	46.157744	4.125107	38.508443584	43.7162777	45.848124
## beta[10,15]	29.197460	5.843681	17.000430591	26.0763352	29.352219
## beta[11,15]	47.927912	3.905768	41.786060481	45.1395722	47.315772
## beta[12,15]	68.943342	5.970391	56.365425554	65.7577542	68.885392
## beta[13,15]	30.339386	5.851190	18.255294150	27.1516295	30.384897
## beta[1,16]	58.336171	6.020326	45.998982492	55.0574775	58.312564
## beta[2,16]	59.285772	6.080984	47.306352062	56.0447378	59.265914
## beta[3,16]	36.318764	6.268369	23.478254023	33.1229470	36.312108
## beta[4,16]	66.611462	6.068660	53.806954659	63.4660995	66.722853
## beta[5,16]	30.598517	6.381035	17.291937897	27.3326285	30.537884
## beta[6,16]	58.755407	6.164153	46.238480893	55.2851132	58.610714
## beta[7,16]	38.117870	6.125044	26.140244127	34.7664959	38.064951
## beta[8,16]	46.307109	4.334710	37.058711739	43.9176565	46.008906
## beta[9,16]	46.349035	4.112395	38.477622404	43.8466424	46.000521
## beta[10,16]	29.183833	6.025569	15.892613625	26.0413847	29.345787
## beta[11,16]	48.233554	3.989519	41.852107165	45.2513232	47.596571
## beta[12,16]	68.966861	6.125410	56.060643175	65.6634556	68.884914
## beta[13,16]	30.342432	6.034239	18.207775029	27.1443108	30.300118
## beta[1,17]	58.321885	6.179098	45.735560302	54.9865003	58.330122
## beta[2,17]	59.277326	6.286190	46.436573437	55.9428360	59.263088
## beta[3,17]	36.322355	6.468998	22.724240017	33.1243782	36.378482
## beta[4,17]	66.647102	6.272970	53.352299422	63.4049104	66.798417
## beta[5,17]	30.614980	6.461924	16.467270534	27.3295568	30.590695
## beta[6,17]	58.753352	6.341515	45.959687652	55.2838892	58.704864
## beta[7,17]	38.128562	6.295447	25.498031197	34.6660794	38.146895
## beta[8,17]	46.443068	4.308399	37.910732732	44.0333728	46.104785
## beta[9,17]	46.528473	4.091345	38.567649964	43.8841481	46.183945
## beta[10,17]	29.150410	6.280176	15.540721166	25.9164985	29.316314
## beta[11,17]	48.514818	3.997312	42.317656921	45.4357920	48.055830
## beta[12,17]	68.975130	6.289467	55.886608126	65.5970974	68.920357
## beta[13,17]	30.305449	6.211051	17.864343045	27.0669576	30.297196
## beta[1,18]	58.306574	6.348285	45.470567881	54.8312925	58.343130
## beta[2,18]	59.268614	6.502635	45.688482924	55.7849846	59.260077
## beta[3,18]	36.322982	6.643092	22.464560254	33.0120647	36.484932
## beta[4,18]	66.630158	6.401904	52.954368029	63.3362348	66.839061
## beta[5,18]	30.634613	6.599235	16.839208491	27.2954954	30.576840
## beta[6,18]	58.836614	6.502314	45.957680319	55.2658249	58.696712
## beta[7,18]	38.132090	6.409905	25.235019125	34.6315397	38.124118
## beta[8,18]	46.544646	4.300672	38.174085608	44.2119497	46.159281
## beta[9,18]	46.747231	4.170000	39.175698347	43.9987278	46.383831
## beta[10,18]	29.165170	6.495744	15.358244357	25.9572559	29.321783
## beta[11,18]	48.669777	4.250977	42.192984959	45.4918808	47.973040
## beta[12,18]	68.954676	6.433772	55.553014150	65.4608511	68.931251
## beta[13,18]	30.287081	6.379433	17.509148367	27.0362505	30.252804
## beta[1,19]	58.317593	6.482085	45.184238176	54.8380644	58.335720
## beta[2,19]	59.261916	6.664147	45.869593571	55.7437025	59.357908
## beta[3,19]	36.309328	6.756385	22.138946429	32.9354345	36.395017
## beta[4,19]	66.618513	6.610978	52.565389495	63.3128184	66.779263
## beta[5,19]	30.637351	6.769377	16.736999562	27.2520774	30.580130
## beta[6,19]	58.899817	6.710655	45.392925886	55.2002236	58.708453
## beta[7,19]	38.147194	6.531765	25.102000748	34.5977831	38.218606

## beta[8,19]	46.643279	4.303104	38.414612893	44.3435046	46.245705
## beta[9,19]	46.945444	4.146384	39.448491536	44.1610312	46.538254
## beta[10,19]	29.171655	6.624807	14.916578822	25.9336873	29.291209
## beta[11,19]	48.807238	4.395896	42.300357935	45.5210692	48.063016
## beta[12,19]	68.914446	6.623577	54.334482328	65.4121925	68.894424
## beta[13,19]	30.258996	6.527071	17.231882583	26.9989298	30.287597
## beta[1,20]	58.384975	6.629628	45.184399152	54.7786985	58.335016
## beta[2,20]	59.262215	6.814608	45.546585146	55.7578381	59.345059
## beta[3,20]	36.329758	6.939561	21.656203568	32.8308773	36.427105
## beta[4,20]	66.599803	6.796110	52.160772009	63.2567884	66.782010
## beta[5,20]	30.621707	6.867378	16.535627750	27.1890814	30.563679
## beta[6,20]	58.843324	6.814834	45.077492033	55.0854134	58.734170
## beta[7,20]	38.150904	6.613662	24.365897975	34.6436987	38.198413
## beta[8,20]	46.801834	4.223229	38.828148397	44.4988538	46.321289
## beta[9,20]	47.139525	4.155936	39.719027087	44.2657840	46.741705
## beta[10,20]	29.165116	6.708796	14.798461824	25.8073530	29.303737
## beta[11,20]	48.953740	4.567724	42.088507479	45.5087164	48.193278
## beta[12,20]	68.932992	6.755592	54.376634353	65.3936153	68.901717
## beta[13,20]	30.239741	6.746749	16.863660637	26.8573054	30.258466
## beta[1,21]	58.333028	6.823553	44.745900753	54.5800556	58.298116
## beta[2,21]	59.277259	6.900809	44.862863959	55.7962996	59.393784
## beta[3,21]	36.338224	7.106053	21.382581325	32.8522986	36.354759
## beta[4,21]	66.618064	6.913746	52.232482411	63.2321261	66.829440
## beta[5,21]	30.622130	6.982153	16.631665016	27.1336913	30.582186
## beta[6,21]	58.787358	7.062388	44.782995340	54.9318888	58.677153
## beta[7,21]	38.123990	6.832153	24.532088954	34.6414786	38.210517
## beta[8,21]	46.948894	4.219319	38.977576236	44.6294261	46.451147
## beta[9,21]	47.362618	4.201026	39.939018308	44.3666925	46.952361
## beta[10,21]	29.154332	6.881683	14.575735504	25.7565241	29.269904
## beta[11,21]	49.027885	4.711607	41.857931032	45.5800558	48.157614
## beta[12,21]	68.911713	6.893027	54.036193279	65.2432313	68.873444
## beta[13,21]	30.173366	7.019513	16.517150409	26.7744563	30.156209
## beta[1,22]	58.379061	6.911633	44.840159036	54.5764175	58.304947
## beta[2,22]	59.301829	7.086533	44.849758762	55.7046359	59.378242
## beta[3,22]	36.334380	7.252386	20.908706664	32.7127385	36.332235
## beta[4,22]	66.658360	7.109628	52.255798392	63.1499333	66.829875
## beta[5,22]	30.669940	6.985330	16.059923887	27.1563553	30.632660
## beta[6,22]	58.778950	7.239992	44.404180745	54.9640979	58.656459
## beta[7,22]	38.142335	7.000180	24.102572084	34.5413092	38.184891
## beta[8,22]	47.111675	4.149624	39.196836491	44.8144589	46.584960
## beta[9,22]	47.603159	4.265260	40.614446872	44.5266191	47.244302
## beta[10,22]	29.132797	7.100869	14.316880108	25.6027771	29.276768
## beta[11,22]	49.128431	4.882646	41.976107304	45.5809960	48.139048
## beta[12,22]	68.932881	7.068263	54.207193517	65.1850276	68.856216
## beta[13,22]	30.166614	7.216423	15.671189128	26.7709526	30.244055
## beta[1,23]	58.351089	7.051408	44.868240496	54.4264974	58.247486
## beta[2,23]	59.288893	7.202677	44.676707287	55.6280501	59.417228
## beta[3,23]	36.310744	7.370730	21.193100408	32.6919167	36.371029
## beta[4,23]	66.711161	7.246430	51.889429279	63.1788546	66.787929
## beta[5,23]	30.641085	7.261301	15.413448042	27.0103323	30.589027
## beta[6,23]	58.799939	7.281320	44.031787435	54.9562765	58.640804
## beta[7,23]	38.098832	7.213834	23.954320030	34.4804507	38.108504

## beta[8,23]	47.307544	4.132758	39.502083029	44.9978691	46.749532
## beta[9,23]	47.790716	4.298330	40.322991956	44.7368779	47.492998
## beta[10,23]	29.119000	7.159204	13.544456447	25.6280382	29.211142
## beta[11,23]	49.212014	5.017169	41.892056284	45.6292416	48.092075
## beta[12,23]	68.935403	7.174223	54.031189201	65.1553331	68.840733
## beta[13,23]	30.115630	7.334874	14.515217728	26.5224494	30.149186
## beta[1,24]	58.336031	7.198778	43.923917841	54.4773828	58.223194
## beta[2,24]	59.270694	7.295185	44.419761293	55.5469807	59.385876
## beta[3,24]	36.314991	7.440503	20.997475824	32.6625489	36.305144
## beta[4,24]	66.708827	7.373735	51.476692114	63.0741258	66.812437
## beta[5,24]	30.685977	7.431120	15.430687298	26.9706081	30.615964
## beta[6,24]	58.812885	7.442241	43.492548274	54.9190308	58.708850
## beta[7,24]	38.055070	7.427031	23.139100328	34.3500728	38.097133
## beta[8,24]	47.527704	4.090125	39.811023449	45.1581808	46.980052
## beta[9,24]	47.954563	4.295914	40.438208619	44.8827133	47.622381
## beta[10,24]	29.142509	7.290425	13.803735115	25.5516715	29.305081
## beta[11,24]	49.245636	5.132736	41.545158973	45.6606736	48.104945
## beta[12,24]	68.990411	7.294981	54.268737105	65.2262680	68.894022
## beta[13,24]	30.140435	7.430950	14.293596367	26.6092819	30.201336
## beta[1,25]	58.359116	7.329318	43.605945472	54.4004004	58.184621
## beta[2,25]	59.271064	7.500391	44.006202915	55.3829263	59.424322
## beta[3,25]	36.334136	7.633326	20.440892035	32.4271985	36.355965
## beta[4,25]	66.700430	7.444504	50.970011594	63.0731212	66.793897
## beta[5,25]	30.689227	7.655568	15.219242366	26.8640401	30.603826
## beta[6,25]	58.813084	7.574588	43.722227739	54.9590906	58.681409
## beta[7,25]	38.080828	7.470243	22.681492650	34.3120177	38.137706
## beta[8,25]	47.713083	3.919387	40.433527135	45.3591515	47.142286
## beta[9,25]	48.079428	4.352540	40.457255275	45.0101674	47.687603
## beta[10,25]	29.130557	7.429949	13.506115896	25.4657755	29.338696
## beta[11,25]	49.290853	5.243420	41.667173561	45.6461924	48.114057
## beta[12,25]	68.966794	7.383241	53.811914763	65.1786085	68.753944
## beta[13,25]	30.160118	7.595330	14.092971878	26.6481244	30.289882
## beta[1,26]	58.360611	7.479748	43.205607838	54.4390311	58.195398
## beta[2,26]	59.232147	7.595289	43.765551891	55.4185127	59.371768
## beta[3,26]	36.314586	7.797782	20.101718783	32.4054714	36.377261
## beta[4,26]	66.685476	7.643953	50.722188456	62.9064893	66.740833
## beta[5,26]	30.680942	7.977261	14.898505814	26.8855929	30.532663
## beta[6,26]	58.787844	7.684557	43.414280882	54.8433535	58.656566
## beta[7,26]	38.114291	7.589911	22.239582752	34.3769540	38.106818
## beta[8,26]	47.895263	3.844534	40.882362570	45.5414512	47.327798
## beta[9,26]	48.260340	4.357672	40.732152402	45.1309271	47.904028
## beta[10,26]	29.124755	7.512582	12.881415916	25.4468123	29.197456
## beta[11,26]	49.408161	5.408229	41.771690631	45.7234308	48.138898
## beta[12,26]	68.948972	7.509845	53.463921133	65.0971504	68.832423
## beta[13,26]	30.133584	7.734837	13.776098867	26.4832718	30.250017
## beta[1,27]	58.352661	7.577134	43.384365724	54.3063021	58.201250
## beta[2,27]	59.213533	7.764217	43.320253250	55.3989939	59.310715
## beta[3,27]	36.327205	7.919219	19.929613001	32.3750057	36.355523
## beta[4,27]	66.702326	7.768731	50.515620001	62.9628149	66.743868
## beta[5,27]	30.664580	8.011198	13.989054365	26.8205952	30.616052
## beta[6,27]	58.781013	7.864430	42.957864910	54.9012864	58.621228
## beta[7,27]	38.154901	7.757022	22.025412803	34.3998758	38.106115

## beta[8,27]	48.059529	3.747971	41.404372109	45.7291539	47.562026
## beta[9,27]	48.381731	4.306679	41.169647913	45.3000240	48.107733
## beta[10,27]	29.120428	7.686989	12.719665265	25.3209022	29.275834
## beta[11,27]	49.461466	5.477838	41.822762660	45.7380114	48.246009
## beta[12,27]	68.968277	7.675911	53.083295671	65.0953082	68.885840
## beta[13,27]	30.109131	7.836403	13.845008502	26.3890925	30.235866
## beta[1,28]	58.388813	7.749344	43.126231736	54.3746320	58.191555
## beta[2,28]	59.221344	7.886189	43.094458205	55.4258931	59.309241
## beta[3,28]	36.325693	8.130292	19.330446330	32.3802420	36.307801
## beta[4,28]	66.704719	7.907875	49.217919743	62.9317751	66.787368
## beta[5,28]	30.647430	7.878266	13.348651640	26.7436633	30.617788
## beta[6,28]	58.770549	7.953038	42.896862188	54.7074327	58.559758
## beta[7,28]	38.176783	7.859607	22.124564158	34.3843746	38.209835
## beta[8,28]	48.180134	3.536938	42.151152631	45.8946730	47.691279
## beta[9,28]	48.543158	4.354064	41.426635951	45.4216559	48.365787
## beta[10,28]	29.076100	7.784649	12.518390421	25.3325648	29.217941
## beta[11,28]	49.538702	5.573821	41.729774462	45.8528153	48.254791
## beta[12,28]	69.016248	7.725038	53.192741102	65.1532565	68.963448
## beta[13,28]	30.112135	7.955354	13.758173225	26.3730885	30.167461
## beta[1,29]	58.388375	7.895937	42.912426552	54.2455751	58.246401
## beta[2,29]	59.209923	8.037368	42.330713311	55.2158194	59.302207
## beta[3,29]	36.329592	8.136441	19.091861127	32.2625529	36.326089
## beta[4,29]	66.693147	8.056034	49.686300795	62.8398672	66.831466
## beta[5,29]	30.661621	8.051739	13.586113546	26.6692252	30.596093
## beta[6,29]	58.786726	8.042698	42.789835667	54.5865518	58.552145
## beta[7,29]	38.121583	8.011942	22.261782318	34.1668891	38.142064
## beta[8,29]	48.374186	3.343004	42.666469128	46.1493326	48.051881
## beta[9,29]	48.675968	4.291979	41.636738451	45.5675591	48.477424
## beta[10,29]	29.076926	7.940232	12.168736672	25.1936240	29.159872
## beta[11,29]	49.619604	5.729946	41.795605221	45.8360661	48.355277
## beta[12,29]	69.006914	7.903579	53.233256734	65.0384255	69.026962
## beta[13,29]	30.113794	8.038976	13.931821996	26.2408784	30.101547
## beta[1,30]	58.405280	7.985358	42.409859745	54.3058049	58.261652
## beta[2,30]	59.190132	8.121986	42.414946881	55.2843787	59.119110
## beta[3,30]	36.324500	8.257989	18.505170231	32.3980929	36.432770
## beta[4,30]	66.717932	8.279229	48.587751944	62.8098795	66.871592
## beta[5,30]	30.665387	8.125884	13.108117849	26.7672712	30.627129
## beta[6,30]	58.809266	8.241909	42.766113711	54.5068575	58.603154
## beta[7,30]	38.136258	8.113950	21.605238611	34.2442047	38.109512
## beta[8,30]	48.374920	3.469840	42.472431181	46.2188103	47.953167
## beta[9,30]	48.858458	4.321865	41.742379798	45.7421440	48.704905
## beta[10,30]	29.068039	8.061060	11.651731872	25.2349016	29.261272
## beta[11,30]	49.676875	5.836066	41.725145417	45.8838847	48.381920
## beta[12,30]	68.984087	8.023210	52.746320250	64.8519817	68.847537
## beta[13,30]	30.099370	8.099412	13.371774534	26.1886723	30.281340
## beta[1,31]	58.405322	8.141417	42.219517033	54.2360572	58.241065
## beta[2,31]	59.202163	8.240867	41.428756071	55.2083326	59.271484
## beta[3,31]	36.330624	8.318322	18.474305923	32.2768737	36.375660
## beta[4,31]	66.767165	8.409721	48.561604539	62.7139449	66.883825
## beta[5,31]	30.715365	8.161749	12.896407598	26.6857642	30.737049
## beta[6,31]	58.770578	8.336039	42.180950777	54.4080458	58.644296
## beta[7,31]	38.141041	8.281447	20.753533164	34.1695746	38.306629

## beta[8,31]	48.352146	3.591761	42.522402831	46.1314827	47.982822
## beta[9,31]	48.978578	4.344048	41.827528315	45.8048954	48.860705
## beta[10,31]	29.087480	8.203606	11.815270435	25.1639607	29.197264
## beta[11,31]	49.766943	5.867911	41.699531137	45.9931416	48.419272
## beta[12,31]	69.001572	8.110464	52.811669334	64.8233424	68.967349
## beta[13,31]	30.043771	8.164211	12.790561647	26.1292935	30.097538
## beta[1,32]	58.397283	8.327742	41.754774571	54.2516902	58.223467
## beta[2,32]	59.246670	8.354888	41.310874283	55.2838404	59.300215
## beta[3,32]	36.379510	8.494378	18.216258228	32.1928078	36.477975
## beta[4,32]	66.717809	8.491812	48.188657130	62.5504520	66.881089
## beta[5,32]	30.691713	8.319938	12.536224390	26.6870220	30.693342
## beta[6,32]	58.749662	8.442745	42.234912385	54.4176274	58.589602
## beta[7,32]	38.171561	8.363757	21.210772986	34.2637219	38.180977
## beta[8,32]	48.337925	3.652381	42.018881707	46.1387262	47.962715
## beta[9,32]	49.197333	4.253861	42.081565198	45.9416219	49.204501
## beta[10,32]	29.101255	8.323924	11.581156230	25.1703488	29.167557
## beta[11,32]	49.760127	5.910531	41.478098841	45.9661390	48.457736
## beta[12,32]	69.002466	8.346700	52.206337790	64.6135035	68.942304
## beta[13,32]	30.057511	8.293582	12.521668364	26.1288062	30.138586
## beta[1,33]	58.363050	8.515607	41.803872189	54.1351777	58.241201
## beta[2,33]	59.259829	8.510742	40.988121226	55.1087763	59.293721
## beta[3,33]	36.357808	8.639713	17.787882918	32.0732344	36.445483
## beta[4,33]	66.702033	8.650870	48.669019007	62.5971641	66.882388
## beta[5,33]	30.690800	8.508055	12.309171787	26.6233293	30.690851
## beta[6,33]	58.738126	8.479283	42.122644404	54.3397950	58.654080
## beta[7,33]	38.188739	8.564912	20.622662113	34.0430381	38.262968
## beta[8,33]	48.336329	3.620403	42.115415592	46.1341595	47.880608
## beta[9,33]	49.385765	4.251209	42.021157236	46.0683696	49.503997
## beta[10,33]	29.129031	8.438221	10.715903408	25.1175396	29.287332
## beta[11,33]	49.782489	5.897437	41.199014102	46.0377062	48.373926
## beta[12,33]	69.015222	8.476621	51.883178649	64.6437448	68.956909
## beta[13,33]	30.056081	8.435342	11.935030707	26.0313410	30.256726
## beta[1,34]	58.337080	8.585368	41.250944281	54.1452645	58.303177
## beta[2,34]	59.240301	8.626346	41.114094045	55.0446345	59.302438
## beta[3,34]	36.337712	8.749139	17.777673824	31.9361663	36.351056
## beta[4,34]	66.733223	8.718471	49.012065320	62.5409607	66.767106
## beta[5,34]	30.696055	8.617647	11.972031662	26.6398733	30.610627
## beta[6,34]	58.690203	8.601654	41.788576846	54.2637955	58.662848
## beta[7,34]	38.152323	8.823461	20.538360018	34.0054234	38.254652
## beta[8,34]	48.327681	3.661307	41.724390849	46.1701434	47.916081
## beta[9,34]	49.386044	4.491684	41.855367443	46.0065052	49.379722
## beta[10,34]	29.116853	8.587442	10.510940846	25.1507077	29.255510
## beta[11,34]	49.753827	5.831538	41.100226162	46.0020883	48.457212
## beta[12,34]	69.021027	8.630769	51.688666137	64.5788938	68.986393
## beta[13,34]	30.038949	8.533841	11.542266387	25.9758539	30.229472
## beta[1,35]	58.301167	8.676634	41.391949657	54.0573192	58.260077
## beta[2,35]	59.239932	8.936085	40.114102584	55.0585270	59.224213
## beta[3,35]	36.375970	8.968403	17.820692170	31.9547065	36.324596
## beta[4,35]	66.707187	8.772537	49.030541861	62.6650348	66.768705
## beta[5,35]	30.738280	8.669593	12.272459321	26.4927325	30.718860
## beta[6,35]	58.691741	8.685950	41.421417352	54.1858082	58.512828
## beta[7,35]	38.179575	8.954459	20.402896140	34.0634627	38.185008

## beta[8,35]	48.326164	3.592566	42.098410192	46.1837402	47.884177
## beta[9,35]	49.385504	4.656056	41.464022839	45.9227185	49.320824
## beta[10,35]	29.089098	8.695084	10.685081980	25.1069598	29.182268
## beta[11,35]	49.734665	5.763414	41.148496195	46.0568824	48.489731
## beta[12,35]	68.956366	8.779555	50.967050708	64.5277928	68.912344
## beta[13,35]	29.994411	8.704314	11.022609108	25.9629440	30.163062
## beta[1,36]	58.322351	8.786967	40.933249212	54.0262447	58.310453
## beta[2,36]	59.270942	9.032085	39.860439848	54.9962997	59.291230
## beta[3,36]	36.362008	9.088661	17.601532312	31.7653209	36.321472
## beta[4,36]	66.752500	8.920629	48.845998864	62.5415433	66.784545
## beta[5,36]	30.764507	8.803632	12.629435694	26.4596890	30.800632
## beta[6,36]	58.702858	8.836718	40.971385361	54.2288721	58.588871
## beta[7,36]	38.163203	9.002164	20.205639274	34.1222085	38.195466
## beta[8,36]	48.321837	3.524404	42.052537616	46.2717882	47.953927
## beta[9,36]	49.399843	4.873875	41.347955702	45.7960752	49.177690
## beta[10,36]	29.047275	8.894310	10.064662584	24.9742738	29.235397
## beta[11,36]	49.756600	5.642103	41.228426815	46.0920025	48.632636
## beta[12,36]	68.951891	8.874267	51.020552750	64.5614215	68.887262
## beta[13,36]	30.002838	8.850375	11.200756574	26.0224567	30.195481
## beta[1,37]	58.341108	8.840590	41.264843599	54.0122996	58.338312
## beta[2,37]	59.287404	9.157310	40.322821289	54.9171723	59.280655
## beta[3,37]	36.366248	9.252908	17.627972176	31.8069752	36.284105
## beta[4,37]	66.757056	9.043156	47.926249689	62.4621618	66.762547
## beta[5,37]	30.773170	8.844649	11.760803474	26.4794830	30.815280
## beta[6,37]	58.704776	8.950223	41.133307694	54.2381930	58.634165
## beta[7,37]	38.149012	9.195791	20.160715882	34.0279150	38.171201
## beta[8,37]	48.335032	3.320553	42.530093976	46.3999836	48.027775
## beta[9,37]	49.415194	5.086141	40.750152182	45.8195552	49.095719
## beta[10,37]	29.055831	9.028082	10.065773373	24.9316082	29.240720
## beta[11,37]	49.736746	5.492626	41.056461263	46.1720398	48.771363
## beta[12,37]	68.953397	8.939985	51.127304349	64.5086045	68.934813
## beta[13,37]	30.016123	8.999085	10.699783852	25.8469818	30.138550
## beta[1,38]	58.340468	8.915533	40.180364778	53.9614919	58.338812
## beta[2,38]	59.286290	9.297610	40.067979567	54.9140128	59.235616
## beta[3,38]	36.368730	9.367791	17.491857229	31.7073780	36.247708
## beta[4,38]	66.788116	9.225656	47.588104682	62.4627952	66.802763
## beta[5,38]	30.767453	8.905424	11.422559599	26.4113708	30.788498
## beta[6,38]	58.720409	9.082314	41.162307046	54.1664286	58.616321
## beta[7,38]	38.172983	9.242998	19.182914386	33.8729570	38.175760
## beta[8,38]	48.387789	3.498412	42.168388358	46.3482043	48.052591
## beta[9,38]	49.444886	5.306420	40.800231582	45.6110143	49.047366
## beta[10,38]	29.035435	9.142563	9.418918387	24.8743649	29.232512
## beta[11,38]	49.715431	5.352785	41.035532568	46.2785761	48.789790
## beta[12,38]	68.920898	9.070841	50.354393036	64.3871790	68.920941
## beta[13,38]	30.038596	9.063264	10.567711050	25.8902499	30.258324
## beta[1,39]	58.359120	9.055597	40.087699119	53.9165957	58.335554
## beta[2,39]	59.284449	9.469253	39.502874714	54.6481634	59.341140
## beta[3,39]	36.408078	9.519165	16.818198437	31.7742168	36.222488
## beta[4,39]	66.776303	9.306232	47.168488626	62.3754104	66.872036
## beta[5,39]	30.758422	9.050036	11.085774912	26.4911504	30.739289
## beta[6,39]	58.710203	9.205787	40.576298194	54.0959664	58.723997
## beta[7,39]	38.140829	9.300548	18.894201298	33.8142741	38.170333

## beta[8,39]	48.429538	3.622395	41.858979011	46.3603642	48.079229
## beta[9,39]	49.473816	5.450238	40.357940479	45.6545527	49.024146
## beta[10,39]	28.995772	9.302294	9.130487427	24.7672950	29.190651
## beta[11,39]	49.709755	5.169734	41.182487243	46.4215716	48.839825
## beta[12,39]	68.942451	9.235935	49.783307056	64.3694533	69.050584
## beta[13,39]	30.003333	9.221598	10.393625232	25.7426893	30.211989
## beta[1,40]	58.353360	9.231575	39.431915295	53.7441931	58.243746
## beta[2,40]	59.290483	9.635168	38.411617382	54.7386532	59.354568
## beta[3,40]	36.399430	9.659436	16.597760585	31.6803626	36.247746
## beta[4,40]	66.768518	9.424373	47.229364921	62.2619781	66.776057
## beta[5,40]	30.727088	9.094256	11.412599951	26.4191928	30.687819
## beta[6,40]	58.709054	9.289561	39.995344031	54.0979951	58.688156
## beta[7,40]	38.146629	9.373491	19.164503954	33.8041055	38.167462
## beta[8,40]	48.451595	3.813805	41.368817089	46.3388481	48.102759
## beta[9,40]	49.448852	5.644211	39.983535608	45.5674471	48.937511
## beta[10,40]	28.999952	9.442012	8.618916745	24.7234334	29.158786
## beta[11,40]	49.685392	4.965266	41.061955231	46.5476536	48.782754
## beta[12,40]	68.931455	9.355081	49.594773334	64.4166422	69.020447
## beta[13,40]	30.051289	9.299604	9.718960143	25.8153853	30.206913
## beta[1,41]	58.336727	9.363785	39.071837410	53.6798160	58.306565
## beta[2,41]	59.286191	9.722480	38.720183462	54.6900059	59.295188
## beta[3,41]	36.418498	9.713833	16.493530288	31.6214748	36.247260
## beta[4,41]	66.831560	9.482985	47.615645885	62.2361126	66.785626
## beta[5,41]	30.701429	9.188257	11.048517588	26.4031701	30.605664
## beta[6,41]	58.741832	9.421281	39.671102795	54.0546688	58.683668
## beta[7,41]	38.183375	9.411449	19.164451608	33.7441988	38.169594
## beta[8,41]	48.495216	3.912999	41.193255320	46.3595598	48.120886
## beta[9,41]	49.441621	5.840838	39.995993475	45.4345621	48.898497
## beta[10,41]	29.026590	9.435413	8.788286374	24.6814896	29.183396
## beta[11,41]	49.671192	4.730102	41.188750018	46.6454337	48.942965
## beta[12,41]	68.911594	9.396281	49.524821191	64.3921705	68.972728
## beta[13,41]	30.080213	9.401652	10.507102014	25.8121386	30.179581
## beta[1,42]	58.327299	9.464999	38.494441114	53.7224964	58.241185
## beta[2,42]	59.315197	9.904535	38.758678715	54.6161530	59.305133
## beta[3,42]	36.431269	9.855190	16.702552703	31.5475496	36.088107
## beta[4,42]	66.794619	9.618841	47.270909739	62.1765958	66.777863
## beta[5,42]	30.724200	9.270947	11.697667477	26.3541863	30.633209
## beta[6,42]	58.709875	9.539052	39.072112399	54.0691888	58.681581
## beta[7,42]	38.200600	9.499330	19.127685432	33.7975219	38.129939
## beta[8,42]	48.485498	4.018009	40.977861641	46.4011138	48.067043
## beta[9,42]	49.489778	5.953679	39.464632502	45.3901833	48.880333
## beta[10,42]	28.976214	9.587119	8.456011989	24.5280829	29.228675
## beta[11,42]	49.606954	4.854200	40.985117783	46.6194153	48.704223
## beta[12,42]	68.922454	9.483470	49.213112779	64.3898943	69.023586
## beta[13,42]	30.113020	9.519371	10.527053415	25.7220917	30.172237
## beta[1,43]	58.394157	9.561621	38.319952365	53.7340084	58.372727
## beta[2,43]	59.262977	9.878818	38.906056136	54.4516695	59.326733
## beta[3,43]	36.390810	9.981834	16.160352123	31.4380232	36.141162
## beta[4,43]	66.806487	9.716313	47.240231384	62.1522972	66.816638
## beta[5,43]	30.755100	9.442915	11.307810825	26.2976791	30.628838
## beta[6,43]	58.698953	9.636199	38.785208086	54.0446709	58.694053
## beta[7,43]	38.189758	9.633878	19.518471948	33.7835380	38.084274

## beta[8,43]	48.496378	4.160272	40.617589007	46.4136651	48.017773
## beta[9,43]	49.483359	6.064949	39.055451967	45.3783710	49.040136
## beta[10,43]	28.983426	9.576681	8.159164170	24.5848808	29.167640
## beta[11,43]	49.552887	5.009932	40.541488469	46.5326911	48.722892
## beta[12,43]	68.939115	9.540294	49.246824195	64.2416077	69.079675
## beta[13,43]	30.138320	9.697521	9.535885444	25.8006215	30.361790
## beta[1,44]	58.405969	9.633922	38.387239157	53.6294886	58.300619
## beta[2,44]	59.302714	9.957654	38.498677602	54.4711099	59.294990
## beta[3,44]	36.412800	10.035501	16.343707023	31.5159181	36.214327
## beta[4,44]	66.854301	9.828002	46.902249065	62.2494900	66.875942
## beta[5,44]	30.755484	9.481572	10.800641827	26.4762960	30.592512
## beta[6,44]	58.702254	9.784251	39.029395870	54.0098721	58.699204
## beta[7,44]	38.203245	9.651559	18.652743731	33.6442771	38.190977
## beta[8,44]	48.529961	4.245846	40.282785902	46.5180151	48.131761
## beta[9,44]	49.453420	6.148721	38.741434479	45.3825064	48.886804
## beta[10,44]	29.014147	9.656701	8.626992705	24.6743022	29.182204
## beta[11,44]	49.427021	5.099508	39.999163899	46.4865696	48.538892
## beta[12,44]	68.923515	9.702870	48.915360632	64.2386937	69.103740
## beta[13,44]	30.141496	9.814635	10.204458277	25.7287531	30.309527
## beta[1,45]	58.430856	9.717739	38.972051096	53.6119823	58.355263
## beta[2,45]	59.312852	10.088833	38.256471921	54.3666509	59.312953
## beta[3,45]	36.378715	10.062634	15.659445261	31.4875828	36.182279
## beta[4,45]	66.802716	9.866866	47.024185883	62.1082021	66.737965
## beta[5,45]	30.766169	9.586867	9.965656773	26.3465922	30.594980
## beta[6,45]	58.714490	9.897630	38.570894024	53.9719969	58.688065
## beta[7,45]	38.219739	9.718123	19.029486536	33.5579662	38.202050
## beta[8,45]	48.549159	4.309225	39.720507688	46.5346994	48.222541
## beta[9,45]	49.478769	6.373041	38.560404723	45.2550201	48.901930
## beta[10,45]	29.032992	9.689625	8.090693482	24.6058995	29.131902
## beta[11,45]	49.344680	5.196111	39.642010590	46.4883962	48.487449
## beta[12,45]	68.878893	9.754842	49.325852234	64.1334594	69.013067
## beta[13,45]	30.166113	9.855824	10.166690817	25.5818590	30.278585
## beta[1,46]	58.499507	9.761177	38.409384574	53.6997490	58.325599
## beta[2,46]	59.330301	10.269850	38.493708436	54.3832307	59.254786
## beta[3,46]	36.410325	10.179832	15.619467395	31.4756613	36.203882
## beta[4,46]	66.721869	10.040144	45.963368365	61.9992832	66.777108
## beta[5,46]	30.790977	9.689562	9.849343843	26.3099094	30.621933
## beta[6,46]	58.752577	9.997818	38.282581329	54.0406112	58.723242
## beta[7,46]	38.224216	9.806980	18.222606321	33.6340419	38.195310
## beta[8,46]	48.568829	4.392153	39.555711824	46.5823001	48.169054
## beta[9,46]	49.478814	6.492325	38.766877622	45.2073887	48.886907
## beta[10,46]	29.081176	9.858958	7.923523351	24.5985490	29.102454
## beta[11,46]	49.269274	5.350192	39.254654944	46.4503241	48.385964
## beta[12,46]	68.918785	9.965804	48.085270324	64.0332726	69.061413
## beta[13,46]	30.181177	9.998305	9.735086322	25.5045465	30.266238
## beta[1,47]	58.423416	9.879746	38.576325587	53.5142446	58.315268
## beta[2,47]	59.283561	10.292897	38.303267450	54.2414076	59.193040
## beta[3,47]	36.379006	10.324383	15.081852478	31.3458045	36.216104
## beta[4,47]	66.729498	10.071167	45.610250117	61.9812824	66.819001
## beta[5,47]	30.815304	9.835193	9.599901756	26.2164315	30.579089
## beta[6,47]	58.758131	10.071746	37.866078057	53.9528582	58.685518
## beta[7,47]	38.212291	9.921624	17.729374945	33.5098610	38.230158

## beta[8,47]	48.608688	4.478398	39.193238629	46.6039410	48.243556
## beta[9,47]	49.442414	6.546517	38.139298413	45.2021202	48.835687
## beta[10,47]	29.121687	9.988454	7.296830671	24.5874386	29.119243
## beta[11,47]	49.197262	5.449391	38.616841354	46.4428275	48.302727
## beta[12,47]	68.936028	10.148096	47.907419430	63.9857416	68.971467
## beta[13,47]	30.190164	10.029180	10.412857376	25.3570310	30.324662
## beta[1,48]	58.376473	9.966157	38.088012056	53.4792975	58.341350
## beta[2,48]	59.316804	10.499138	38.339091728	54.2892308	59.297805
## beta[3,48]	36.383144	10.409268	14.380657387	31.2679733	36.297416
## beta[4,48]	66.735541	10.190436	45.536808312	61.9313095	66.815987
## beta[5,48]	30.821549	9.952443	10.212783464	26.1945867	30.551346
## beta[6,48]	58.763379	10.163826	37.563366017	53.9159636	58.656494
## beta[7,48]	38.192056	10.039275	18.057363093	33.4228613	38.159332
## beta[8,48]	48.643146	4.443255	39.692474090	46.6514054	48.325569
## beta[9,48]	49.456994	6.703917	37.905764264	45.1173394	48.776225
## beta[10,48]	29.111836	10.032908	6.897197424	24.5057017	29.182003
## beta[11,48]	49.073080	5.475640	37.974862071	46.4144201	48.263577
## beta[12,48]	68.953508	10.210129	48.101115995	63.8326581	68.980289
## beta[13,48]	30.215184	10.143215	10.135639255	25.4183966	30.261809
## beta[1,49]	58.371748	10.076427	37.610775850	53.4425293	58.299490
## beta[2,49]	59.262730	10.537179	38.194307498	54.1891797	59.171220
## beta[3,49]	36.401477	10.576266	14.374298813	31.3719439	36.365608
## beta[4,49]	66.791020	10.392486	44.781314836	61.8679636	66.853600
## beta[5,49]	30.861386	10.016867	9.679411445	26.1331295	30.696020
## beta[6,49]	58.727007	10.214012	37.561745616	53.8822849	58.580334
## beta[7,49]	38.173544	10.068986	17.952996392	33.4997461	38.222776
## beta[8,49]	48.665191	4.589358	39.611942349	46.6346543	48.350197
## beta[9,49]	49.393515	6.896712	36.959567670	45.0538634	48.804592
## beta[10,49]	29.149170	10.113054	6.766574563	24.5065528	29.229120
## beta[11,49]	48.979910	5.479934	37.953116067	46.4002448	48.294963
## beta[12,49]	68.975411	10.222189	47.854051187	63.9187740	68.913664
## beta[13,49]	30.183653	10.215848	9.427334993	25.3357028	30.236725
## beta[1,50]	58.359633	10.173904	37.726434046	53.4725762	58.367822
## beta[2,50]	59.254114	10.660825	37.828848998	54.2143708	59.144326
## beta[3,50]	36.373283	10.709186	14.387938771	31.3131857	36.317166
## beta[4,50]	66.780769	10.471904	44.737988893	61.8817993	66.876414
## beta[5,50]	30.846789	10.105321	9.152477380	26.0075240	30.720438
## beta[6,50]	58.759141	10.279610	37.756613081	53.8364676	58.605235
## beta[7,50]	38.121702	10.177687	17.780112791	33.4242150	38.236202
## beta[8,50]	48.679945	4.567504	39.497142616	46.6482947	48.384170
## beta[9,50]	49.385363	6.986503	36.891909846	44.9546017	48.722576
## beta[10,50]	29.142695	10.250042	6.658297429	24.5175364	29.109142
## beta[11,50]	48.894773	5.482486	37.388418318	46.3861118	48.315241
## beta[12,50]	68.939555	10.367675	47.644376610	63.9492698	68.964444
## beta[13,50]	30.187666	10.255948	8.777585890	25.2954263	30.210036
## beta[1,51]	58.360508	10.253196	37.391792101	53.3597512	58.294663
## beta[2,51]	59.214193	10.762827	37.563021517	54.2553245	59.148537
## beta[3,51]	36.372563	10.788348	14.107608358	31.2433525	36.391214
## beta[4,51]	66.832387	10.530477	44.684969452	61.9462691	66.889413
## beta[5,51]	30.842377	10.285400	9.259517983	25.9800389	30.833325
## beta[6,51]	58.771224	10.342302	37.582263220	53.7215520	58.601624
## beta[7,51]	38.124566	10.325040	17.343901195	33.3086115	38.183484

## beta[8,51]	48.666946	4.547974	39.576742231	46.5913041	48.388133
## beta[9,51]	49.403413	7.142299	36.147592232	44.9638017	48.744242
## beta[10,51]	29.173840	10.417500	6.709338557	24.5423032	29.183145
## beta[11,51]	48.796643	5.539586	37.460855979	46.3003935	48.261411
## beta[12,51]	68.933561	10.493311	47.371023231	63.9552526	68.893346
## beta[13,51]	30.177794	10.336718	8.327671177	25.2601360	30.183489
## beta[1,52]	58.358538	10.238379	37.396494319	53.2964434	58.288086
## beta[2,52]	59.234402	10.865255	37.556279355	54.0911583	59.132745
## beta[3,52]	36.379327	10.957520	13.548887188	31.1744502	36.353352
## beta[4,52]	66.896477	10.540694	45.137626078	61.9417145	66.967888
## beta[5,52]	30.812262	10.383023	8.924519973	25.9348335	30.711744
## beta[6,52]	58.737873	10.494347	36.513691614	53.7151632	58.719538
## beta[7,52]	38.129867	10.375952	17.131317373	33.1538065	38.249108
## beta[8,52]	48.648500	4.516445	39.721257965	46.5705528	48.334008
## beta[9,52]	49.408848	7.220367	36.147935818	44.8217951	48.834782
## beta[10,52]	29.167035	10.390763	6.073941805	24.5772382	29.195322
## beta[11,52]	48.734515	5.636700	37.446339036	46.3164644	48.207397
## beta[12,52]	68.880616	10.535383	47.012084178	63.8816584	68.930975
## beta[13,52]	30.193530	10.389880	8.003942688	25.2849207	30.292881
## beta[1,53]	58.341440	10.260756	36.870105757	53.3557769	58.281622
## beta[2,53]	59.218473	10.946704	38.010436406	54.0525215	59.123162
## beta[3,53]	36.386089	11.063236	13.740314043	31.0948744	36.312400
## beta[4,53]	66.874743	10.623580	45.084557438	61.8984085	66.934996
## beta[5,53]	30.807665	10.542474	9.332499709	25.9040160	30.641259
## beta[6,53]	58.789201	10.545334	36.597044566	53.6966071	58.651658
## beta[7,53]	38.128572	10.490000	16.936744619	33.0682444	38.272152
## beta[8,53]	48.564014	4.514155	39.632684987	46.4925515	48.307011
## beta[9,53]	49.402590	7.391540	35.937221252	44.8609848	48.705940
## beta[10,53]	29.157230	10.403835	6.254603198	24.5280229	29.157695
## beta[11,53]	48.644189	5.629157	36.752845703	46.3477209	48.175608
## beta[12,53]	68.867769	10.657177	46.960059281	63.7105745	68.880517
## beta[13,53]	30.235656	10.580251	7.845516186	25.4930972	30.262404
## beta[1,54]	58.351241	10.423225	37.282258057	53.2942690	58.321409
## beta[2,54]	59.222953	11.046093	37.419624873	54.0060836	59.094399
## beta[3,54]	36.414459	11.100828	13.226809567	31.1119088	36.327591
## beta[4,54]	66.900985	10.686572	45.026811314	61.7652183	66.967658
## beta[5,54]	30.773649	10.644238	8.799265359	25.7515897	30.691663
## beta[6,54]	58.755876	10.612440	36.207909358	53.7115689	58.655226
## beta[7,54]	38.121836	10.591404	16.351813840	33.1716953	38.212635
## beta[8,54]	48.564066	4.464247	39.684957586	46.4804657	48.387952
## beta[9,54]	49.432602	7.581063	35.819965337	44.8859678	48.641576
## beta[10,54]	29.159083	10.544954	6.541942937	24.4452972	29.081844
## beta[11,54]	48.582843	5.714138	36.756121162	46.3446222	48.191681
## beta[12,54]	68.880772	10.740436	46.541235569	63.6942208	68.941666
## beta[13,54]	30.232632	10.707013	7.507528645	25.3363757	30.247666
## beta[1,55]	58.343371	10.547482	36.562238189	53.3389051	58.226999
## beta[2,55]	59.229158	11.097615	36.900865752	54.0799973	59.204290
## beta[3,55]	36.365920	11.176318	12.864779686	31.0606108	36.304131
## beta[4,55]	66.917908	10.803984	45.010219945	61.7621171	66.917414
## beta[5,55]	30.780107	10.864908	7.786811227	25.6914367	30.731127
## beta[6,55]	58.805079	10.744315	36.586321595	53.5330425	58.695097
## beta[7,55]	38.134680	10.726170	16.027044153	33.1651826	38.246329

## beta[8,55]	48.510220	4.407804	39.514798471	46.5128493	48.351978
## beta[9,55]	49.460040	7.780201	35.172964231	44.7635809	48.637453
## beta[10,55]	29.164294	10.530930	6.561905336	24.4216017	29.077823
## beta[11,55]	48.556084	5.763693	36.819071593	46.2140705	48.153220
## beta[12,55]	68.863385	10.851512	46.136422023	63.7193763	68.847729
## beta[13,55]	30.232908	10.832946	7.900152233	25.2946884	30.302265
## beta[1,56]	58.371922	10.665882	36.116386784	53.2598496	58.263266
## beta[2,56]	59.267522	11.182612	37.492784085	53.9467124	59.098724
## beta[3,56]	36.382676	11.345059	12.963487104	31.0370177	36.263599
## beta[4,56]	66.910817	10.900907	44.729870439	61.6928300	66.957565
## beta[5,56]	30.793502	10.982388	7.895552844	25.7476431	30.738358
## beta[6,56]	58.835567	10.851720	36.431103803	53.5433733	58.724165
## beta[7,56]	38.163235	10.752045	16.026432348	33.2101147	38.278529
## beta[8,56]	48.513139	4.419162	39.451658984	46.4753319	48.365562
## beta[9,56]	49.452286	7.901976	34.663283088	44.6594715	48.721918
## beta[10,56]	29.169069	10.648283	6.478439505	24.4466242	29.076218
## beta[11,56]	48.484691	5.854181	36.702473733	46.1952527	48.198001
## beta[12,56]	68.844701	10.991723	46.272332667	63.7152805	68.937683
## beta[13,56]	30.267814	10.897896	7.626706282	25.3129094	30.386939
## beta[1,57]	58.356785	10.820326	36.309412844	53.3721290	58.288050
## beta[2,57]	59.218785	11.207454	37.275134821	53.8581233	59.184615
## beta[3,57]	36.366838	11.413242	13.057425364	31.0223782	36.264236
## beta[4,57]	66.934335	10.901233	44.588549850	61.7281837	67.015271
## beta[5,57]	30.808424	11.120891	7.637684719	25.6625786	30.652828
## beta[6,57]	58.846877	10.993248	36.490434651	53.4894034	58.703801
## beta[7,57]	38.143969	10.809271	16.376183478	33.0543093	38.174923
## beta[8,57]	48.465420	4.422176	39.367811830	46.4568721	48.313457
## beta[9,57]	49.453209	8.008460	33.884218092	44.6300160	48.666614
## beta[10,57]	29.194361	10.776201	6.490554527	24.4452116	29.113592
## beta[11,57]	48.381313	5.945537	36.673099218	46.0598005	48.225535
## beta[12,57]	68.849023	11.130463	45.255149913	63.5820317	68.895518
## beta[13,57]	30.285477	10.956350	8.390324596	25.2739402	30.327998
## beta[1,58]	58.329161	11.000672	35.470286955	53.2335782	58.317878
## beta[2,58]	59.206358	11.190222	37.808780208	53.8712452	59.150361
## beta[3,58]	36.380671	11.531063	12.910055425	30.8294561	36.286171
## beta[4,58]	66.931938	10.959597	43.796551416	61.7368036	66.964484
## beta[5,58]	30.786600	11.258816	7.020274303	25.6165570	30.727089
## beta[6,58]	58.828922	11.026541	35.863443852	53.5246223	58.781760
## beta[7,58]	38.137641	10.875510	15.960975008	32.9651342	38.185260
## beta[8,58]	48.393890	4.464992	39.102932054	46.3772517	48.279145
## beta[9,58]	49.421673	8.139247	34.164584881	44.5698612	48.584368
## beta[10,58]	29.142205	10.914206	6.707854288	24.4117312	29.084688
## beta[11,58]	48.268719	6.069698	36.436398721	45.9228549	48.148026
## beta[12,58]	68.841191	11.217644	45.055445507	63.6735613	68.946028
## beta[13,58]	30.263699	11.063687	8.004322381	25.3078593	30.308514
## beta[1,59]	58.367483	11.096307	35.187186501	53.3256132	58.179105
## beta[2,59]	59.208403	11.255258	37.442798539	53.8494940	59.111940
## beta[3,59]	36.398560	11.657224	13.115135881	30.8832081	36.221743
## beta[4,59]	66.896607	11.024604	44.344113119	61.5107237	66.981469
## beta[5,59]	30.822151	11.357791	7.259622816	25.6354599	30.796446
## beta[6,59]	58.854387	11.030556	36.276026604	53.4904971	58.794801
## beta[7,59]	38.137141	11.039464	15.874004305	32.9492884	38.151788

## beta[8,59]	48.337983	4.427708	38.844276032	46.3199197	48.265256
## beta[9,59]	49.423118	8.348622	33.655405610	44.4770507	48.567001
## beta[10,59]	29.146749	10.966565	6.162773092	24.3371556	29.175604
## beta[11,59]	48.200853	6.185793	36.399784986	45.8258740	48.084101
## beta[12,59]	68.800269	11.283705	45.041936902	63.6435345	68.922207
## beta[13,59]	30.233704	11.034258	7.467569945	25.1720640	30.303308
## beta[1,60]	58.399385	11.216877	35.299687117	53.2422514	58.280237
## beta[2,60]	59.221091	11.384827	36.293106530	53.7983303	59.100053
## beta[3,60]	36.407102	11.697158	13.333197127	30.9816175	36.173198
## beta[4,60]	66.928589	11.098653	43.383818775	61.4874147	66.899211
## beta[5,60]	30.787482	11.349042	6.824251845	25.5716369	30.719163
## beta[6,60]	58.858079	11.013371	36.868076389	53.4357067	58.751333
## beta[7,60]	38.165060	11.156202	15.786224385	32.7138424	38.261478
## beta[8,60]	48.267115	4.438814	38.898205129	46.2287907	48.315371
## beta[9,60]	49.413152	8.526230	33.105198061	44.4799858	48.558840
## beta[10,60]	29.199060	11.088639	5.441454211	24.3888348	29.176369
## beta[11,60]	48.077798	6.195604	36.350945112	45.6677117	48.069936
## beta[12,60]	68.837330	11.351994	45.059385147	63.6009379	68.930307
## beta[13,60]	30.190974	11.126890	7.239842949	25.2508507	30.266096
## beta[1,61]	58.371852	11.356562	34.701425186	53.2132201	58.330698
## beta[2,61]	59.219874	11.487686	36.450351763	53.6850950	59.096798
## beta[3,61]	36.437960	11.735315	12.703765676	30.9218499	36.211372
## beta[4,61]	66.916942	11.121217	43.104250789	61.6693504	66.888577
## beta[5,61]	30.781223	11.545389	6.576052289	25.5446572	30.687330
## beta[6,61]	58.853556	11.117743	36.304430192	53.3356297	58.827103
## beta[7,61]	38.158854	11.218346	15.518861044	32.7212448	38.247068
## beta[8,61]	48.256132	4.430269	39.239965241	46.1603888	48.316673
## beta[9,61]	49.420281	8.603216	32.650724922	44.3924268	48.528942
## beta[10,61]	29.148674	11.172535	5.309437026	24.3389948	29.190546
## beta[11,61]	47.976439	6.233249	35.826713427	45.5389765	48.031815
## beta[12,61]	68.837590	11.398324	45.624958727	63.5903904	68.802426
## beta[13,61]	30.162911	11.213700	6.334993787	25.1705358	30.253901
## beta[1,62]	58.391343	11.447857	34.461657051	53.2301480	58.439144
## beta[2,62]	59.238652	11.534219	36.204043700	53.7995702	59.110651
## beta[3,62]	36.429648	11.802938	12.458547333	30.9819058	36.253597
## beta[4,62]	66.953771	11.290503	42.995189708	61.6887351	66.860394
## beta[5,62]	30.777061	11.719088	6.643962964	25.4613861	30.614254
## beta[6,62]	58.822960	11.239776	36.133674386	53.3368701	58.675050
## beta[7,62]	38.192201	11.337867	14.988273257	32.8061774	38.259282
## beta[8,62]	48.153490	4.306677	39.115646432	46.1180159	48.252684
## beta[9,62]	49.431759	8.723153	32.894364583	44.3463271	48.545598
## beta[10,62]	29.151681	11.306333	5.169229961	24.2145324	29.215579
## beta[11,62]	47.866026	6.251211	34.834361162	45.4073609	48.043212
## beta[12,62]	68.848084	11.504274	45.165849442	63.3883748	68.832172
## beta[13,62]	30.166750	11.290535	6.122693283	25.2188788	30.255881
## beta[1,63]	58.373729	11.515945	34.079818559	53.3049860	58.391561
## beta[2,63]	59.202479	11.628876	35.727945320	53.6058768	59.108454
## beta[3,63]	36.417399	11.930145	11.885525227	30.8618415	36.298347
## beta[4,63]	66.954686	11.349544	42.698047641	61.4480969	66.883223
## beta[5,63]	30.810003	11.822721	6.933093799	25.3529797	30.659889
## beta[6,63]	58.880541	11.368932	35.940211580	53.4262089	58.674526
## beta[7,63]	38.203453	11.496070	13.864259274	32.7679666	38.204889

## beta[8,63]	48.116468	4.324737	38.586997265	45.9595433	48.260144
## beta[9,63]	49.420086	8.879292	32.314616284	44.3787208	48.495743
## beta[10,63]	29.112195	11.457877	4.775617753	24.1244011	29.114315
## beta[11,63]	47.772666	6.241172	34.831031978	45.3761723	47.963491
## beta[12,63]	68.849640	11.618509	45.129750446	63.4710957	68.904649
## beta[13,63]	30.149187	11.327947	5.711058387	25.1737836	30.420788
## beta[1,64]	58.375628	11.520699	33.872698478	53.2130425	58.371492
## beta[2,64]	59.177138	11.763269	35.605706196	53.5737553	59.124613
## beta[3,64]	36.427187	11.994397	12.360076599	30.7412639	36.192114
## beta[4,64]	66.942923	11.447698	42.963776574	61.3186071	66.837901
## beta[5,64]	30.829439	11.696516	6.622654464	25.4427172	30.715726
## beta[6,64]	58.895988	11.467617	35.351837032	53.4040538	58.648597
## beta[7,64]	38.213059	11.631348	13.813603747	32.6343889	38.313403
## beta[8,64]	47.992343	4.335173	38.520324624	45.9284498	48.198475
## beta[9,64]	49.397296	9.073611	32.534713759	44.2841891	48.496082
## beta[10,64]	29.107985	11.607488	4.081686529	24.0491531	29.189629
## beta[11,64]	47.694091	6.249770	34.814495849	45.2927555	47.964623
## beta[12,64]	68.870790	11.735939	44.863761849	63.3634318	68.871030
## beta[13,64]	30.178077	11.407891	5.821665232	25.0617485	30.383532
## beta[1,65]	58.360293	11.615244	33.923621724	53.2861395	58.343968
## beta[2,65]	59.152876	11.851874	35.142731077	53.6615970	59.126132
## beta[3,65]	36.462653	12.092097	11.707490776	30.6636820	36.227454
## beta[4,65]	66.967801	11.554573	42.683096204	61.4073474	66.843208
## beta[5,65]	30.896622	11.819904	6.511232906	25.4208493	30.693863
## beta[6,65]	58.843573	11.538920	34.853962209	53.3591331	58.637034
## beta[7,65]	38.223277	11.735928	14.018747249	32.7443237	38.229221
## beta[8,65]	47.938952	4.317256	38.274920125	45.7740309	48.166975
## beta[9,65]	49.416578	9.197400	32.083009851	44.2810979	48.483911
## beta[10,65]	29.087871	11.675726	4.266908684	24.0782338	29.201240
## beta[11,65]	47.639925	6.274316	34.509333380	45.1670333	47.931204
## beta[12,65]	68.871959	11.789986	45.340007609	63.4031768	68.770313
## beta[13,65]	30.194340	11.510016	5.337938975	25.0509719	30.405567
## beta[1,66]	58.319068	11.740632	33.433443007	53.2516589	58.366774
## beta[2,66]	59.153497	11.874212	34.720834645	53.6182184	59.101722
## beta[3,66]	36.467368	12.177388	11.887423043	30.8404026	36.198142
## beta[4,66]	66.964838	11.623368	43.095558132	61.3895181	66.852531
## beta[5,66]	30.882659	11.820394	6.591294988	25.5393922	30.762265
## beta[6,66]	58.876684	11.578933	35.000832680	53.3811327	58.734219
## beta[7,66]	38.213197	11.823833	14.037734423	32.7231692	38.263309
## beta[8,66]	47.828085	4.290763	38.277693346	45.7857676	48.054777
## beta[9,66]	49.433882	9.350091	31.521365898	44.2929308	48.521816
## beta[10,66]	29.071038	11.765064	3.798024744	23.9392506	29.193511
## beta[11,66]	47.582478	6.293944	34.431942064	45.2039872	47.966595
## beta[12,66]	68.843516	11.845838	44.454908881	63.4420657	68.802802
## beta[13,66]	30.166756	11.654989	5.591366970	24.9104857	30.355539
## beta[1,67]	58.335350	11.863195	33.593979298	53.1888793	58.416176
## beta[2,67]	59.145296	11.935702	35.110508035	53.5254419	59.190911
## beta[3,67]	36.490503	12.214464	11.822771719	30.9435592	36.226376
## beta[4,67]	66.955054	11.710533	43.636065803	61.2980675	66.886236
## beta[5,67]	30.911322	12.170245	5.635220508	25.4381823	30.844339
## beta[6,67]	58.880914	11.657765	34.889448986	53.4158528	58.648242
## beta[7,67]	38.229864	11.899796	14.117395868	32.7825455	38.278362

## beta[8,67]	47.704448	4.283660	38.268340695	45.7082644	48.014781
## beta[9,67]	49.457194	9.423271	31.340991634	44.2994833	48.507469
## beta[10,67]	29.083442	11.892838	3.614520539	23.8637577	29.153204
## beta[11,67]	47.550898	6.239501	33.837221721	45.0246784	47.916910
## beta[12,67]	68.824949	11.981327	43.763197087	63.3931164	68.688893
## beta[13,67]	30.204274	11.704860	4.155919560	24.9124020	30.372093
## beta[1,68]	58.338325	11.984597	32.761158696	53.1989860	58.311915
## beta[2,68]	59.167650	11.970022	34.454614518	53.4962576	59.146426
## beta[3,68]	36.483560	12.314699	11.850445126	30.7738383	36.220188
## beta[4,68]	67.004598	11.854641	42.587606149	61.2566457	66.935636
## beta[5,68]	30.951491	12.311378	5.820253640	25.4363806	30.794859
## beta[6,68]	58.831470	11.750276	34.038952511	53.1856950	58.621807
## beta[7,68]	38.266988	11.959153	13.903926425	32.6907654	38.368026
## beta[8,68]	47.647819	4.303650	38.250003639	45.6012281	47.987469
## beta[9,68]	49.423036	9.534090	31.534536076	44.2358410	48.511352
## beta[10,68]	29.139129	12.069566	2.914690032	23.7887351	29.191009
## beta[11,68]	47.513857	6.232526	33.774650920	45.0286870	47.878942
## beta[12,68]	68.820723	12.079601	43.832960337	63.4038263	68.800531
## beta[13,68]	30.232503	11.772844	4.815861901	24.8032034	30.313168
## beta[1,69]	58.340948	12.141020	32.308162336	53.0381243	58.377731
## beta[2,69]	59.180642	11.972796	34.794681196	53.5226350	59.139462
## beta[3,69]	36.517004	12.364581	11.180227182	30.7788013	36.131072
## beta[4,69]	67.074346	11.904119	42.591502206	61.2172518	66.990111
## beta[5,69]	30.980940	12.468565	5.372143052	25.2871337	30.818122
## beta[6,69]	58.827283	11.835322	34.368102837	53.2018456	58.676628
## beta[7,69]	38.276345	11.954292	13.672977752	32.6995461	38.336501
## beta[8,69]	47.582802	4.374362	37.674961692	45.5150585	47.894730
## beta[9,69]	49.440078	9.673483	31.160361510	44.2776306	48.524822
## beta[10,69]	29.137937	12.065679	3.517033752	23.8862650	29.211686
## beta[11,69]	47.497258	6.176592	34.060121599	45.0381327	47.844254
## beta[12,69]	68.835773	12.113050	43.921416916	63.4297146	68.729415
## beta[13,69]	30.271566	11.860393	5.118499679	24.7371703	30.371220
## beta[1,70]	58.376557	12.113884	32.307987744	52.8344335	58.356739
## beta[2,70]	59.180403	11.994052	34.317278123	53.4864096	59.067743
## beta[3,70]	36.532871	12.493138	10.847719694	30.8210261	36.111803
## beta[4,70]	67.045646	12.039169	42.391243970	61.3498281	66.937524
## beta[5,70]	30.971603	12.793942	4.982994407	25.2696989	30.771464
## beta[6,70]	58.825254	11.849343	34.594148388	53.1213013	58.740899
## beta[7,70]	38.257487	12.069729	13.910830265	32.5459053	38.350281
## beta[8,70]	47.499951	4.363396	37.361483064	45.4827059	47.966982
## beta[9,70]	49.462794	9.778698	30.726174630	44.1713261	48.510373
## beta[10,70]	29.141884	12.062563	3.109836522	24.0253430	29.218306
## beta[11,70]	47.512724	6.143290	34.206399401	45.0263439	47.868792
## beta[12,70]	68.878035	12.193529	44.242526446	63.4464369	68.838669
## beta[13,70]	30.295872	11.995297	4.955058760	24.7634710	30.477875
## beta[1,71]	58.389135	12.171906	32.094280559	52.8699766	58.451109
## beta[2,71]	59.139176	12.034133	34.170543889	53.4165234	59.098644
## beta[3,71]	36.512162	12.617404	10.104695942	30.7209081	36.070597
## beta[4,71]	67.073922	12.111629	42.616533721	61.3060518	67.018464
## beta[5,71]	30.991149	13.092239	4.279579041	25.2423617	30.756452
## beta[6,71]	58.821858	11.867665	34.551054006	53.2466232	58.585326
## beta[7,71]	38.253813	12.207121	12.485185945	32.4752555	38.254537

## beta[8,71]	47.469760	4.376404	37.278858315	45.5238398	47.952316
## beta[9,71]	49.517369	9.920173	30.063638875	44.1950516	48.558574
## beta[10,71]	29.124487	12.126597	3.328032843	23.9730280	29.190821
## beta[11,71]	47.477054	6.149547	34.299553257	45.0607997	47.832107
## beta[12,71]	68.899953	12.265686	43.669368042	63.4834674	68.772595
## beta[13,71]	30.368542	12.080691	4.998923155	24.8450729	30.419601
## beta[1,72]	58.414393	12.298819	31.666610346	52.9998725	58.471998
## beta[2,72]	59.200237	12.180809	34.115466880	53.4107640	59.106554
## beta[3,72]	36.507679	12.752761	9.715142074	30.7265447	36.127758
## beta[4,72]	67.044334	12.133782	41.785651851	61.2693172	66.961269
## beta[5,72]	30.949765	13.209077	4.594940175	25.3309493	30.693403
## beta[6,72]	58.802256	12.001162	34.052073739	53.0910317	58.692258
## beta[7,72]	38.278682	12.312897	13.036511822	32.5745053	38.271706
## beta[8,72]	47.410875	4.399645	37.113256583	45.3549222	47.927392
## beta[9,72]	49.516255	9.991996	30.322847470	44.1242635	48.585604
## beta[10,72]	29.120122	12.193277	3.477082916	23.9413118	29.171100
## beta[11,72]	47.462080	6.109807	34.517458640	45.0060547	47.781509
## beta[12,72]	68.919687	12.334761	43.163687501	63.4132438	68.703213
## beta[13,72]	30.358773	12.203530	4.401692206	24.8817288	30.436401
## beta[1,73]	58.449060	12.372700	30.798546104	52.8837370	58.469287
## beta[2,73]	59.238416	12.271963	34.275660387	53.6045084	59.143544
## beta[3,73]	36.521323	12.887359	9.981926698	30.6973632	36.041870
## beta[4,73]	67.040703	12.202768	41.548395113	61.2504297	66.980093
## beta[5,73]	30.963490	13.312499	4.609267070	25.2532969	30.828046
## beta[6,73]	58.758012	12.023991	32.920769845	53.1170847	58.716568
## beta[7,73]	38.261928	12.384401	12.577460540	32.5722145	38.278031
## beta[8,73]	47.356301	4.342371	37.152438616	45.2933419	47.962580
## beta[9,73]	49.543790	9.998745	30.851432615	44.2196015	48.657468
## beta[10,73]	29.151020	12.195170	3.476246834	23.8473127	29.234924
## beta[11,73]	47.465257	6.057054	34.323694181	44.9540050	47.854965
## beta[12,73]	68.916134	12.465056	42.488397083	63.3350888	68.775739
## beta[13,73]	30.330845	12.258066	4.500789090	24.7268957	30.402609
## beta[1,74]	58.463040	12.501422	30.294223787	52.8087897	58.528767
## beta[2,74]	59.259105	12.357756	34.266725650	53.5637737	59.121050
## beta[3,74]	36.520008	12.942036	9.465940951	30.7055440	36.095256
## beta[4,74]	67.011043	12.250510	42.102533514	61.1936188	66.985620
## beta[5,74]	30.950975	13.247195	3.862107925	25.1923687	30.793239
## beta[6,74]	58.792671	12.099198	32.649687665	53.1907221	58.681898
## beta[7,74]	38.231942	12.470705	12.165510732	32.5563532	38.305305
## beta[8,74]	47.348046	4.417501	37.251180494	45.2673180	47.950075
## beta[9,74]	49.459961	10.060066	30.657190794	44.2079502	48.513262
## beta[10,74]	29.184352	12.281924	3.420815648	23.9179684	29.306562
## beta[11,74]	47.463473	6.039339	34.628183337	44.9413431	47.832954
## beta[12,74]	68.889007	12.601500	42.615350553	63.3212660	68.702786
## beta[13,74]	30.331375	12.363635	4.960443263	24.6714968	30.395504
## beta[1,75]	58.434137	12.638000	30.394348276	52.8369583	58.481814
## beta[2,75]	59.263301	12.399018	33.439190924	53.4464107	59.190425
## beta[3,75]	36.506027	13.024933	9.125295795	30.5694029	36.008081
## beta[4,75]	67.027579	12.294680	41.817997232	61.0093386	66.966852
## beta[5,75]	30.957306	13.526832	3.553272651	25.1834249	30.806735
## beta[6,75]	58.806512	12.187032	32.904725204	53.1271443	58.651780
## beta[7,75]	38.244119	12.578479	11.746589641	32.3982251	38.303243

## beta[8,75]	47.361629	4.387525	37.441233029	45.0953076	48.015628
## beta[9,75]	49.487540	10.020795	29.914458405	44.2039643	48.501583
## beta[10,75]	29.199321	12.284474	2.863219821	23.8509246	29.280857
## beta[11,75]	47.469991	5.968461	34.302432028	44.9371810	47.870023
## beta[12,75]	68.850578	12.730594	41.985190023	63.1984842	68.718020
## beta[13,75]	30.339860	12.389446	4.247127217	24.5890755	30.474188
## beta[1,76]	58.474796	12.772836	30.159055192	52.7327838	58.561382
## beta[2,76]	59.253370	12.504782	32.921076769	53.5205763	59.238384
## beta[3,76]	36.471748	13.134295	8.315161521	30.4800195	36.030096
## beta[4,76]	67.071777	12.361497	41.465248810	61.0198941	67.082274
## beta[5,76]	30.989195	13.577187	2.961328379	25.2240022	30.872877
## beta[6,76]	58.792099	12.284230	32.671086447	53.0740856	58.754462
## beta[7,76]	38.228862	12.593232	11.142634379	32.4217976	38.250912
## beta[8,76]	47.380522	4.366588	37.476536224	45.0591086	48.022974
## beta[9,76]	49.512021	10.181306	29.345030677	44.1580741	48.566858
## beta[10,76]	29.246713	12.329187	3.676782078	23.9206808	29.421066
## beta[11,76]	47.449339	5.942041	34.406261691	44.9837411	47.871164
## beta[12,76]	68.818546	12.787133	42.340259523	63.2450078	68.693151
## beta[13,76]	30.348127	12.484313	4.029957544	24.7338739	30.406195
## beta[1,77]	58.440115	12.839389	30.194062579	52.7542249	58.532404
## beta[2,77]	59.285687	12.612232	33.074322410	53.4149897	59.291613
## beta[3,77]	36.458178	13.145206	9.857862274	30.5424377	36.058913
## beta[4,77]	67.075767	12.439711	41.643106008	61.0474402	67.038244
## beta[5,77]	30.995338	13.668198	2.777438536	25.2724533	30.891948
## beta[6,77]	58.803491	12.300718	32.929037354	53.0445553	58.599671
## beta[7,77]	38.217071	12.671162	11.537155924	32.5110680	38.274073
## beta[8,77]	47.354370	4.361285	37.327727416	45.1296129	47.921893
## beta[9,77]	49.489741	10.318856	28.625434689	44.0761793	48.554829
## beta[10,77]	29.231871	12.392294	3.612038822	23.7910648	29.315200
## beta[11,77]	47.451691	5.989854	34.211588926	44.8756444	47.858975
## beta[12,77]	68.821310	12.801531	42.445271876	63.0644202	68.701316
## beta[13,77]	30.361160	12.497925	3.894510184	24.6823599	30.437896
## beta[1,78]	58.442399	12.945947	30.286695099	52.7087576	58.618965
## beta[2,78]	59.297688	12.637853	33.438602249	53.4451313	59.319909
## beta[3,78]	36.501079	13.260490	8.946310993	30.4095981	36.081393
## beta[4,78]	67.079286	12.470051	41.254533868	61.1969222	67.010374
## beta[5,78]	31.030724	14.130040	2.330889531	25.2483771	30.960787
## beta[6,78]	58.710647	12.355916	32.579096109	52.9351380	58.626916
## beta[7,78]	38.227864	12.742695	10.985115421	32.3759390	38.287703
## beta[8,78]	47.336597	4.387756	37.359393957	45.1590532	47.979688
## beta[9,78]	49.499875	10.496797	29.162125590	44.0541137	48.537757
## beta[10,78]	29.231761	12.487892	2.873191906	23.7737943	29.255694
## beta[11,78]	47.480486	5.902921	34.457122278	45.0020541	47.861963
## beta[12,78]	68.774596	12.927679	41.726635381	63.0605543	68.763930
## beta[13,78]	30.326017	12.526485	3.673811482	24.6612313	30.457037
## beta[1,79]	58.418095	13.078510	30.262801135	52.7555709	58.529329
## beta[2,79]	59.281973	12.710055	32.299275965	53.2905676	59.231956
## beta[3,79]	36.462680	13.365958	8.404600955	30.4411529	36.118978
## beta[4,79]	67.117670	12.594917	41.711344061	60.9825104	67.175062
## beta[5,79]	30.982659	13.717177	1.829955961	25.2648507	30.934672
## beta[6,79]	58.750004	12.537748	32.701258175	52.9788835	58.668739
## beta[7,79]	38.264444	12.820554	10.454754609	32.4637052	38.241511

## beta[8,79]	47.315194	4.401318	37.180134967	45.0481128	47.981599
## beta[9,79]	49.532062	10.542824	29.136100369	44.0263071	48.432143
## beta[10,79]	29.222979	12.502015	3.044710347	23.6307842	29.246101
## beta[11,79]	47.547716	5.872066	34.735857209	45.0306072	47.885959
## beta[12,79]	68.773562	12.962920	41.316164105	63.0313063	68.664038
## beta[13,79]	30.303660	12.574035	3.202266224	24.6883833	30.546347
## beta[1,80]	58.450192	13.202012	31.153967472	52.7138449	58.613096
## beta[2,80]	59.270896	12.739603	32.643423179	53.3223485	59.252286
## beta[3,80]	36.447746	13.374385	8.607800548	30.2864529	36.158099
## beta[4,80]	67.133856	12.682451	41.207539943	60.9567446	67.077928
## beta[5,80]	30.996376	13.982576	1.414040497	25.2381611	30.956203
## beta[6,80]	58.764803	12.611418	31.640037146	52.9901937	58.739749
## beta[7,80]	38.243988	12.896864	10.788548998	32.3371677	38.419680
## beta[8,80]	47.271060	4.452798	37.109150453	45.0080436	47.921695
## beta[9,80]	49.545967	10.597010	28.982333137	43.9945376	48.372959
## beta[10,80]	29.295029	12.514982	2.754774552	23.6958945	29.350723
## beta[11,80]	47.514720	5.725496	34.965498472	44.9514141	47.956444
## beta[12,80]	68.792624	13.032590	41.493209905	63.0994770	68.753127
## beta[13,80]	30.306317	12.608364	3.062780582	24.5518989	30.499961
## beta[1,81]	58.442139	13.340047	30.628266799	52.6890980	58.594858
## beta[2,81]	59.307031	12.922564	32.496577079	53.3071679	59.201505
## beta[3,81]	36.471298	13.445158	8.511642093	30.1506257	36.085184
## beta[4,81]	67.132254	12.744687	40.886507530	61.0009562	67.112921
## beta[5,81]	31.010128	14.031865	1.068535156	25.2017937	30.936395
## beta[6,81]	58.720344	12.717022	31.496459500	52.9581146	58.766545
## beta[7,81]	38.263884	13.018900	10.594698851	32.2529582	38.389260
## beta[8,81]	47.287926	4.482460	37.291124907	45.0029364	47.901308
## beta[9,81]	49.567884	10.651740	28.480436150	43.9857267	48.480239
## beta[10,81]	29.294580	12.680438	2.603868098	23.7266138	29.353639
## beta[11,81]	47.536844	5.599482	35.140365008	45.1075620	47.965196
## beta[12,81]	68.831353	13.101126	41.547322992	63.0680612	68.775682
## beta[13,81]	30.298639	12.665924	2.226043615	24.4181684	30.397473
## beta[1,82]	58.446079	13.313209	30.104044759	52.6458627	58.654925
## beta[2,82]	59.344437	12.957502	32.188058657	53.2908656	59.322081
## beta[3,82]	36.474577	13.599161	8.633338176	30.3515662	36.122661
## beta[4,82]	67.100393	12.843710	41.158613904	60.9760800	67.030216
## beta[5,82]	31.014529	14.226937	2.045232788	25.1527214	31.006437
## beta[6,82]	58.734116	12.831532	31.087698640	52.9570678	58.657695
## beta[7,82]	38.244843	13.046531	10.190872996	32.2614564	38.278938
## beta[8,82]	47.325448	4.442578	37.191517119	45.1359325	47.925659
## beta[9,82]	49.627856	10.755914	28.994929267	43.9370452	48.377285
## beta[10,82]	29.353550	12.726875	1.712609381	23.5278234	29.402540
## beta[11,82]	47.526263	5.448350	35.421864097	45.0813284	48.007382
## beta[12,82]	68.800796	13.138503	41.169607961	63.0963276	68.734758
## beta[13,82]	30.295392	12.743703	1.841897214	24.4935358	30.457056
## beta[1,83]	58.451397	13.309849	29.804767288	52.3992434	58.593177
## beta[2,83]	59.318403	13.002163	31.920984149	53.2779656	59.284127
## beta[3,83]	36.495897	13.632266	8.216115795	30.3085525	36.174046
## beta[4,83]	67.078619	12.860300	40.502382408	60.8496295	67.020490
## beta[5,83]	31.064226	14.614560	1.838264011	25.1038600	31.003838
## beta[6,83]	58.773653	12.910748	31.733657930	52.8470853	58.612028
## beta[7,83]	38.196548	13.170629	9.736291597	32.2458314	38.267278

## beta[8,83]	47.320611	4.421482	37.124546160	45.1458412	47.961617
## beta[9,83]	49.632754	10.920383	28.457661251	43.8582807	48.340409
## beta[10,83]	29.357860	12.809497	1.491561971	23.3394621	29.379178
## beta[11,83]	47.551638	5.370239	35.332850154	45.0834229	48.066963
## beta[12,83]	68.828486	13.217327	41.510878793	63.1472937	68.776621
## beta[13,83]	30.320098	12.809140	1.519127453	24.5694369	30.478784
## beta[1,84]	58.479495	13.369851	30.577309577	52.3904834	58.618470
## beta[2,84]	59.328970	13.099365	31.718523608	53.3137898	59.309514
## beta[3,84]	36.501320	13.733241	8.427217125	30.2116678	36.127439
## beta[4,84]	67.117476	12.955959	40.185280012	60.9121090	66.914531
## beta[5,84]	31.074040	14.692053	2.177909512	25.1671512	31.049395
## beta[6,84]	58.779312	12.969305	31.435276279	52.7464119	58.662382
## beta[7,84]	38.199893	13.253178	9.564712697	32.2432906	38.222518
## beta[8,84]	47.310601	4.383836	36.908493658	45.0499941	47.933298
## beta[9,84]	49.658444	11.016255	28.170202380	43.8505032	48.374903
## beta[10,84]	29.344164	12.910673	1.653413421	23.2803532	29.345745
## beta[11,84]	47.549821	5.276159	35.367699322	45.2446282	48.009575
## beta[12,84]	68.863841	13.243987	41.304902907	63.0912222	68.941176
## beta[13,84]	30.315187	12.912650	1.373321751	24.5069532	30.375763
## beta[1,85]	58.450981	13.446973	30.170860361	52.3804566	58.670046
## beta[2,85]	59.319050	13.257428	32.360578257	53.2478893	59.256086
## beta[3,85]	36.482719	13.740438	7.957199609	30.1551568	36.153222
## beta[4,85]	67.164678	13.013702	40.719959879	60.8806978	66.890166
## beta[5,85]	31.073472	14.555819	1.888448595	25.0631149	31.007634
## beta[6,85]	58.779733	12.999525	31.890488762	52.8046382	58.652743
## beta[7,85]	38.192673	13.453433	9.154076625	32.1036213	38.081202
## beta[8,85]	47.349584	4.353061	36.756278448	45.1135944	47.946174
## beta[9,85]	49.617940	11.169704	27.719251817	43.8214285	48.492914
## beta[10,85]	29.346789	13.061989	1.594366474	23.4165915	29.272113
## beta[11,85]	47.561990	5.121236	35.386786642	45.3460870	48.066047
## beta[12,85]	68.866892	13.303604	41.998672753	62.9523182	68.844912
## beta[13,85]	30.254567	13.016166	1.939608534	24.4617742	30.475285
## beta[1,86]	58.472047	13.515010	29.719558080	52.2434884	58.746154
## beta[2,86]	59.315879	13.331707	31.537552222	53.2768352	59.336516
## beta[3,86]	36.463548	13.888965	7.182969407	30.2043769	36.202989
## beta[4,86]	67.176013	13.109186	40.870965281	60.8783963	66.893208
## beta[5,86]	31.086835	14.560016	1.553743888	25.1513133	30.985234
## beta[6,86]	58.781629	13.069621	31.365959452	52.8544153	58.726340
## beta[7,86]	38.191801	13.444150	8.838913672	32.1010665	38.216056
## beta[8,86]	47.351458	4.361169	36.713539351	45.1046545	48.037695
## beta[9,86]	49.640554	11.280721	27.944028588	43.7912907	48.489477
## beta[10,86]	29.338459	13.094629	1.181589780	23.3971220	29.319882
## beta[11,86]	47.517310	4.959121	35.321525812	45.3597539	48.098931
## beta[12,86]	68.888690	13.292049	41.688129982	62.8931837	68.874938
## beta[13,86]	30.297120	13.069863	1.922848588	24.4009836	30.463807
## beta[1,87]	58.450824	13.591812	30.343039121	52.1397978	58.680916
## beta[2,87]	59.299618	13.449319	30.804740647	53.1715002	59.364976
## beta[3,87]	36.417415	13.934157	6.979624160	30.0488427	36.212927
## beta[4,87]	67.225310	13.221147	40.792196519	60.9705423	66.999325
## beta[5,87]	31.075939	14.709691	1.771144810	25.0310756	30.978453
## beta[6,87]	58.782616	13.157511	31.286870200	52.9697211	58.649337
## beta[7,87]	38.186399	13.533528	8.294664597	32.0873722	38.133411

## beta[8,87]	47.363533	4.321938	36.652024423	45.3503841	48.037672
## beta[9,87]	49.613345	11.365495	27.603298939	43.7450958	48.541908
## beta[10,87]	29.327194	13.180760	1.279026979	23.3835619	29.349468
## beta[11,87]	47.512452	4.821468	35.279910431	45.4336887	48.054606
## beta[12,87]	68.900888	13.388940	41.240044693	62.7988163	68.750232
## beta[13,87]	30.321100	13.177257	1.948253278	24.5070396	30.463925
## beta[1,88]	58.455364	13.657766	29.963649679	52.1094575	58.576925
## beta[2,88]	59.298919	13.499998	31.243585377	53.2023654	59.260393
## beta[3,88]	36.415218	13.969182	7.108364831	30.1368256	36.179391
## beta[4,88]	67.232183	13.254010	40.419797044	60.9684650	66.871349
## beta[5,88]	31.066556	14.521748	1.099408845	25.1122702	30.989026
## beta[6,88]	58.773534	13.312460	30.061747979	52.7602397	58.628674
## beta[7,88]	38.163138	13.630254	8.136026309	32.0297307	38.180473
## beta[8,88]	47.379579	4.337303	36.483659657	45.3949753	48.020351
## beta[9,88]	49.583559	11.499147	26.873136594	43.7853548	48.584611
## beta[10,88]	29.370933	13.289700	0.982845701	23.3094813	29.271927
## beta[11,88]	47.463292	4.672813	35.360682726	45.3565339	48.056844
## beta[12,88]	68.921394	13.439166	41.491560507	62.7121212	68.826736
## beta[13,88]	30.284860	13.267151	2.251015829	24.3963272	30.390631
## beta[1,89]	58.490435	13.734478	29.073572307	52.2982503	58.508956
## beta[2,89]	59.275649	13.684315	30.701411466	52.9019412	59.310317
## beta[3,89]	36.409046	14.010696	6.486718581	29.9824125	36.249545
## beta[4,89]	67.228914	13.344590	40.438214172	60.7681556	66.936859
## beta[5,89]	31.015448	14.512065	1.188575826	24.9478878	30.899047
## beta[6,89]	58.797814	13.427819	30.570428238	52.8262051	58.728679
## beta[7,89]	38.160310	13.717254	8.042544992	32.0480493	38.173446
## beta[8,89]	47.419292	4.331050	36.572815906	45.5688827	48.071997
## beta[9,89]	49.600551	11.655872	26.556160027	43.7116557	48.576323
## beta[10,89]	29.379659	13.334638	0.777739093	23.2322747	29.265929
## beta[11,89]	47.442683	4.527536	35.550487136	45.5137066	48.069085
## beta[12,89]	68.911740	13.533632	41.390790421	62.6373855	68.882646
## beta[13,89]	30.269347	13.395703	2.107129687	24.4539004	30.465172
## beta[1,90]	58.503702	13.828103	28.524807485	52.2709241	58.415005
## beta[2,90]	59.256433	13.797696	30.277394685	52.9060627	59.257375
## beta[3,90]	36.381748	14.195180	5.450641477	29.7958417	36.198828
## beta[4,90]	67.239086	13.452026	39.787298646	60.8085975	66.872771
## beta[5,90]	31.026342	14.588261	0.538517549	24.9938308	30.872880
## beta[6,90]	58.786394	13.496273	30.352589842	52.6975946	58.717389
## beta[7,90]	38.125724	13.842857	7.501782909	32.0439697	38.118064
## beta[8,90]	47.437551	4.368079	36.694080236	45.5076567	48.079341
## beta[9,90]	49.619771	11.739493	25.578959090	43.6436642	48.632170
## beta[10,90]	29.459543	13.452899	1.096111340	23.2532526	29.307182
## beta[11,90]	47.384902	4.289008	35.605570979	45.6186449	47.997301
## beta[12,90]	68.910305	13.601626	41.475952669	62.6346783	68.894654
## beta[13,90]	30.263290	13.504422	2.207613559	24.4848627	30.418138
## beta[1,91]	58.481698	13.814705	28.720929554	52.1803556	58.423800
## beta[2,91]	59.284588	13.872279	29.956252266	52.9422748	59.290933
## beta[3,91]	36.419896	14.316089	5.942044071	29.8871870	36.150936
## beta[4,91]	67.223129	13.492837	40.068851229	60.8025497	66.974064
## beta[5,91]	31.089511	14.773280	0.147549870	24.9623943	31.034662
## beta[6,91]	58.767858	13.612250	29.353352911	52.5856357	58.614966
## beta[7,91]	38.137107	13.894436	7.219636029	32.0112486	38.108735

## beta[8,91]	47.501993	4.273436	37.015406041	45.6131486	48.112632
## beta[9,91]	49.602096	11.804760	25.656752845	43.6707401	48.529261
## beta[10,91]	29.457050	13.526091	-0.431972067	23.1828744	29.295071
## beta[11,91]	47.374163	4.465825	35.372902753	45.4415283	48.056469
## beta[12,91]	68.898816	13.654034	40.756598685	62.8181715	68.848683
## beta[13,91]	30.269491	13.551687	1.570205521	24.2107647	30.488118
## beta[1,92]	58.487072	13.886613	28.144193822	52.2245920	58.473566
## beta[2,92]	59.300380	13.917326	28.815908071	52.8879419	59.298573
## beta[3,92]	36.465951	14.350817	5.866131724	29.9640517	36.150787
## beta[4,92]	67.218516	13.605910	39.361666354	61.0171918	66.948407
## beta[5,92]	31.096583	14.926044	0.790871303	24.9301619	31.002096
## beta[6,92]	58.779828	13.692409	29.352800520	52.5811328	58.676682
## beta[7,92]	38.157595	13.924427	7.072891348	31.8196371	38.098750
## beta[8,92]	47.556838	4.259204	37.261004492	45.5943951	48.115325
## beta[9,92]	49.591745	11.858030	26.315650160	43.5895078	48.519232
## beta[10,92]	29.421657	13.540965	-0.401557400	23.1937582	29.286228
## beta[11,92]	47.371563	4.592290	35.313944451	45.3347472	48.124432
## beta[12,92]	68.904757	13.756313	40.350982444	62.7559881	68.864256
## beta[13,92]	30.255230	13.593713	0.731245872	24.2500187	30.405937
## beta[1,93]	58.505022	13.991163	28.882161558	52.2382608	58.364960
## beta[2,93]	59.331251	13.928071	29.200141303	52.8977439	59.338336
## beta[3,93]	36.487717	14.405551	6.165259593	29.9744479	36.139658
## beta[4,93]	67.254018	13.705624	39.422730850	61.0038551	67.016201
## beta[5,93]	31.083305	14.940060	0.784822563	24.7025617	30.931061
## beta[6,93]	58.813315	13.676760	30.078270812	52.5090283	58.605836
## beta[7,93]	38.159992	13.901255	7.103293309	31.8525865	38.144512
## beta[8,93]	47.629225	4.158204	37.366183868	45.7241562	48.191608
## beta[9,93]	49.551770	12.046538	24.786687215	43.5160590	48.470292
## beta[10,93]	29.404384	13.511006	0.053257895	23.0935519	29.244312
## beta[11,93]	47.329129	4.711456	35.110188947	45.1548901	48.080687
## beta[12,93]	68.863087	13.899593	39.755665925	62.7576955	68.904128
## beta[13,93]	30.238805	13.663890	1.424466846	24.1186000	30.429221
## beta[1,94]	58.467914	14.059569	28.485090541	52.1937934	58.435989
## beta[2,94]	59.345293	14.008480	29.280251184	52.8862773	59.251668
## beta[3,94]	36.461428	14.473528	6.013463359	29.8317256	36.106573
## beta[4,94]	67.299892	13.732530	39.418030383	60.9053356	66.990314
## beta[5,94]	31.132974	14.972969	0.116464872	24.7254782	31.000902
## beta[6,94]	58.779761	13.734265	30.422117162	52.5683982	58.504375
## beta[7,94]	38.186749	14.012908	7.577535614	31.9218579	38.155465
## beta[8,94]	47.732827	3.990566	38.463843577	45.8372031	48.143131
## beta[9,94]	49.519404	12.144891	24.549838750	43.5470424	48.519998
## beta[10,94]	29.371810	13.569355	-0.147888897	23.0879079	29.275410
## beta[11,94]	47.361416	4.808430	35.244023668	45.1391472	48.155733
## beta[12,94]	68.861086	14.014480	39.897491680	62.8758015	68.976178
## beta[13,94]	30.222478	13.698995	0.755021410	24.1824583	30.474604
## beta[1,95]	58.482808	14.175845	28.485783910	52.3193128	58.357539
## beta[2,95]	59.351240	14.132131	28.652784587	52.9064067	59.427466
## beta[3,95]	36.462526	14.512482	5.751421249	29.8769507	36.089574
## beta[4,95]	67.291735	13.835573	38.635527609	60.8922869	66.990994
## beta[5,95]	31.157622	14.798585	0.423109146	24.8032551	30.979024
## beta[6,95]	58.797763	13.760962	30.428505922	52.5561852	58.481997
## beta[7,95]	38.219543	14.111109	7.659775227	31.9219769	38.120916

## beta[8,95]	47.887089	3.881354	39.044230588	46.0583211	48.284546
## beta[9,95]	49.479677	12.289840	24.946801583	43.6071449	48.350143
## beta[10,95]	29.365906	13.664192	-0.213591842	23.1117316	29.365283
## beta[11,95]	47.347834	4.890665	35.075989258	45.1077563	48.123373
## beta[12,95]	68.907631	14.009427	39.882085597	62.8931224	69.040555
## beta[13,95]	30.250757	13.794187	0.966625646	24.1994247	30.508533
## beta[1,96]	58.470147	14.341229	28.007354065	52.1931662	58.486177
## beta[2,96]	59.383379	14.237811	29.223881702	52.8770611	59.369151
## beta[3,96]	36.475569	14.603313	5.961839464	29.7237122	36.132332
## beta[4,96]	67.350706	13.927575	37.466005696	60.9984922	67.048299
## beta[5,96]	31.162449	14.892975	0.126986471	24.5775410	31.006519
## beta[6,96]	58.780786	13.841211	30.246819785	52.5245200	58.488322
## beta[7,96]	38.221740	14.146828	7.631020547	31.9619659	38.128969
## beta[8,96]	47.991230	3.794238	39.499304572	46.1831755	48.275851
## beta[9,96]	49.464369	12.330496	24.615125709	43.6008736	48.413083
## beta[10,96]	29.368463	13.689555	-0.216200567	23.1750078	29.206286
## beta[11,96]	47.339879	4.907446	35.113948413	44.9377896	48.112603
## beta[12,96]	68.898168	14.006979	40.346360446	62.7873140	68.927420
## beta[13,96]	30.230053	13.894176	0.599638460	23.9932625	30.449538
## beta[1,97]	58.422051	14.347631	27.440604529	51.9959444	58.466862
## beta[2,97]	59.398398	14.426555	29.321168830	52.8043761	59.413311
## beta[3,97]	36.505868	14.654644	6.446507279	29.6367779	36.130107
## beta[4,97]	67.429649	13.999151	37.503238721	61.0829620	67.032158
## beta[5,97]	31.144112	14.839137	0.589855152	24.7015428	31.066641
## beta[6,97]	58.761657	13.933559	29.533231026	52.5937725	58.412090
## beta[7,97]	38.225421	14.214132	7.572076666	31.8887873	38.113746
## beta[8,97]	48.076125	3.620083	39.799179406	46.4402504	48.347192
## beta[9,97]	49.474629	12.407843	24.576602727	43.4622285	48.555096
## beta[10,97]	29.372509	13.779314	-0.445664576	23.0662418	29.271086
## beta[11,97]	47.347251	4.941268	34.937497435	45.0541798	48.091713
## beta[12,97]	68.906167	14.087631	39.478769479	62.8624530	69.006660
## beta[13,97]	30.274044	13.866641	-0.427158997	24.1060731	30.397332
## beta[1,98]	58.463782	14.395777	28.194444764	52.1151499	58.402952
## beta[2,98]	59.413152	14.516360	28.938822420	52.7998901	59.450390
## beta[3,98]	36.505273	14.664654	5.487817382	29.6160925	36.167009
## beta[4,98]	67.406780	14.070760	37.725935495	60.9293176	67.015774
## beta[5,98]	31.138782	14.779542	0.261473277	24.7787329	31.025929
## beta[6,98]	58.772726	13.974799	28.728758701	52.5562469	58.432490
## beta[7,98]	38.242399	14.276853	7.442526449	31.8469016	38.196269
## beta[8,98]	48.043589	3.860131	39.149747167	46.1968998	48.304019
## beta[9,98]	49.450973	12.425590	23.712587454	43.4042348	48.493952
## beta[10,98]	29.401973	13.869587	-0.009670088	23.1763105	29.196399
## beta[11,98]	47.395392	4.943761	35.110375281	45.0671918	48.100298
## beta[12,98]	68.932335	14.140465	39.908564843	62.7801781	69.052956
## beta[13,98]	30.268511	13.976989	-0.305729195	23.9059538	30.445682
## beta[1,99]	58.499174	14.510359	28.097884337	52.1299985	58.480234
## beta[2,99]	59.418196	14.563652	29.156445006	52.8575576	59.365008
## beta[3,99]	36.490699	14.699476	5.878880701	29.6097860	36.173291
## beta[4,99]	67.419464	14.146375	37.704625936	60.8431304	67.075885
## beta[5,99]	31.165018	14.708415	0.301018704	24.6048039	30.994515
## beta[6,99]	58.843354	14.035628	29.205962075	52.7629747	58.546609
## beta[7,99]	38.220541	14.355419	7.338553207	31.6417027	38.121213

## beta[8,99]	48.042217	4.127688	38.219562586	46.0963374	48.316600
## beta[9,99]	49.478334	12.547817	23.555054498	43.5155219	48.573650
## beta[10,99]	29.414188	13.925284	-0.218125998	23.0764873	29.124086
## beta[11,99]	47.465187	4.987996	34.776077602	45.0554088	48.146432
## beta[12,99]	68.923579	14.223529	39.798434781	62.6738204	69.053629
## beta[13,99]	30.246880	14.110841	-0.572031303	23.9228532	30.330787
## beta[1,100]	58.534356	14.670160	27.492948858	52.0400125	58.428683
## beta[2,100]	59.460839	14.643741	29.342075834	52.9364407	59.438555
## beta[3,100]	36.435958	14.797745	5.795247637	29.5048527	36.123676
## beta[4,100]	67.454667	14.189188	37.535697856	60.8020371	67.103304
## beta[5,100]	31.148354	14.851306	0.798445748	24.5583155	31.079924
## beta[6,100]	58.827908	14.055433	29.144694590	52.6706952	58.582401
## beta[7,100]	38.208685	14.532615	7.872218580	31.5771179	38.154220
## beta[8,100]	48.073761	4.366229	38.166698215	46.0060655	48.362173
## beta[9,100]	49.466808	12.539796	23.947357982	43.5682454	48.583179
## beta[10,100]	29.371451	14.032972	-0.209541674	23.0004495	29.071576
## beta[11,100]	47.501948	4.987343	34.834993438	45.0644923	48.139853
## beta[12,100]	68.922751	14.295474	39.827583202	62.4016667	69.063579
## beta[13,100]	30.348948	14.185084	-0.816649133	23.9097400	30.436184
## beta[1,101]	58.529822	14.724542	27.827608597	52.0228118	58.471538
## beta[2,101]	59.453514	14.723742	28.725260014	52.8545310	59.319926
## beta[3,101]	36.423404	14.836332	5.729896311	29.6341958	36.133653
## beta[4,101]	67.410830	14.314282	37.623476356	60.6492860	67.167292
## beta[5,101]	31.174707	15.053658	0.462350540	24.6483148	31.003877
## beta[6,101]	58.832297	14.126485	28.907162929	52.6108866	58.545661
## beta[7,101]	38.222217	14.623938	7.644012334	31.6507009	38.147602
## beta[8,101]	48.107596	4.542158	37.428722570	45.9736512	48.399145
## beta[9,101]	49.413702	12.665056	23.668460312	43.4596160	48.395670
## beta[10,101]	29.401776	14.115092	-1.331262971	23.1494946	29.206838
## beta[11,101]	47.561980	5.012752	34.776263139	45.2008236	48.095652
## beta[12,101]	68.901387	14.392575	39.213791642	62.3830478	68.987542
## beta[13,101]	30.360479	14.249116	-0.712555535	24.0425745	30.396121
## beta[1,102]	58.521702	14.913876	27.187243468	52.0958775	58.438451
## beta[2,102]	59.457708	14.812161	28.746759008	52.8317526	59.424083
## beta[3,102]	36.410562	14.844185	5.917651220	29.5774420	36.130807
## beta[4,102]	67.415961	14.337409	37.846790360	60.6026657	67.149913
## beta[5,102]	31.162766	15.211181	0.413221855	24.5800755	30.986623
## beta[6,102]	58.859362	14.100761	28.848892298	52.6525730	58.479037
## beta[7,102]	38.238055	14.680565	6.986384293	31.6705784	38.130286
## beta[8,102]	48.106959	4.724519	37.344831468	45.8685810	48.422004
## beta[9,102]	49.375945	12.804696	23.648705129	43.3283714	48.420165
## beta[10,102]	29.440138	14.205465	-0.855583642	23.1548614	29.130690
## beta[11,102]	47.617317	4.978334	34.971509545	45.2825044	48.096178
## beta[12,102]	68.889719	14.448748	39.662058718	62.4936183	68.883422
## beta[13,102]	30.369069	14.258307	-0.266364472	24.0404622	30.345147
## beta[1,103]	58.517287	15.010239	28.930458941	52.0345512	58.452089
## beta[2,103]	59.486934	14.763821	29.014057882	52.8393024	59.463991
## beta[3,103]	36.422907	14.861680	5.989911688	29.5340012	36.049984
## beta[4,103]	67.423203	14.424688	37.246279328	60.6440197	67.197090
## beta[5,103]	31.144332	15.166507	0.158879528	24.5355794	31.011975
## beta[6,103]	58.851272	14.164084	29.200453354	52.6208081	58.581223
## beta[7,103]	38.313594	14.807774	7.456951065	31.4862950	38.127015

## beta[8,103]	48.158270	4.896836	37.094423327	45.8681463	48.507006
## beta[9,103]	49.388000	12.867716	23.677683052	43.2755590	48.277408
## beta[10,103]	29.425878	14.260382	-1.136299170	23.1393876	29.102708
## beta[11,103]	47.672236	4.986336	34.770470366	45.3414219	48.155760
## beta[12,103]	68.871270	14.537572	38.418041527	62.4594058	68.949812
## beta[13,103]	30.411603	14.306189	-1.139135510	23.9877156	30.340120
## beta[1,104]	58.544594	15.100534	26.909723825	51.8891851	58.433020
## beta[2,104]	59.515983	14.852131	28.966174975	52.7467286	59.361524
## beta[3,104]	36.434451	14.952258	5.650089117	29.5916285	35.983172
## beta[4,104]	67.437531	14.462891	37.345534276	60.6910406	67.116927
## beta[5,104]	31.174100	15.365335	0.163437593	24.5379420	30.994400
## beta[6,104]	58.854444	14.231139	28.978202559	52.4129861	58.599947
## beta[7,104]	38.313777	14.902038	7.353152015	31.5627909	38.172991
## beta[8,104]	48.148655	5.052438	36.621283000	45.7148043	48.503084
## beta[9,104]	49.389890	12.927949	24.090460257	43.1756026	48.327275
## beta[10,104]	29.421340	14.274005	-1.510781794	23.1919017	29.077632
## beta[11,104]	47.744162	4.990501	34.818052656	45.4940677	48.095884
## beta[12,104]	68.878453	14.583227	37.113884658	62.5028538	68.966937
## beta[13,104]	30.373950	14.371021	-0.757236832	23.7853778	30.338410
## beta[1,105]	58.552910	15.130429	27.162968167	52.0138354	58.401913
## beta[2,105]	59.496220	14.948010	28.535133470	52.6534198	59.470884
## beta[3,105]	36.455978	15.047226	5.363157804	29.4837250	36.057585
## beta[4,105]	67.405996	14.530614	37.242263226	60.6067094	67.256350
## beta[5,105]	31.145710	15.594986	-0.460060907	24.4836137	31.061711
## beta[6,105]	58.855607	14.311385	28.212065465	52.3684489	58.644548
## beta[7,105]	38.300764	14.910170	6.918394815	31.6961839	38.233226
## beta[8,105]	48.127553	5.329854	35.713633388	45.6549507	48.485783
## beta[9,105]	49.417462	13.011171	23.405940699	43.2430154	48.279059
## beta[10,105]	29.423359	14.326569	-1.418406720	23.2127474	29.145658
## beta[11,105]	47.799051	5.029693	34.817944439	45.5473457	48.193850
## beta[12,105]	68.872178	14.590462	37.946993600	62.4712632	68.956915
## beta[13,105]	30.388877	14.463342	0.262617665	23.8559391	30.340147
## beta[1,106]	58.570802	15.163902	27.067249277	51.9568642	58.458914
## beta[2,106]	59.518113	14.994128	28.695201146	52.5663812	59.466802
## beta[3,106]	36.460448	15.132319	5.156811011	29.4065822	36.165353
## beta[4,106]	67.435537	14.628972	36.769868924	60.6612591	67.174065
## beta[5,106]	31.171708	15.566392	-0.025628651	24.3512346	31.053060
## beta[6,106]	58.876191	14.396628	28.221159745	52.4569082	58.721490
## beta[7,106]	38.303126	14.996612	6.677285931	31.5601560	38.143157
## beta[8,106]	48.156693	5.603683	35.936097054	45.6862606	48.463364
## beta[9,106]	49.415531	13.073247	23.124763105	43.3048155	48.309001
## beta[10,106]	29.448561	14.408729	-1.463237263	23.0902453	29.259693
## beta[11,106]	47.846381	5.015558	34.818447099	45.6490342	48.223808
## beta[12,106]	68.882775	14.554444	38.077909283	62.3514590	69.086644
## beta[13,106]	30.389892	14.566982	-0.223573344	23.8709833	30.434838
## beta[1,107]	58.552472	15.250208	27.241626457	51.8385223	58.424101
## beta[2,107]	59.526814	15.083464	27.775031205	52.7136514	59.499193
## beta[3,107]	36.460840	15.142161	4.844790553	29.3587066	36.068396
## beta[4,107]	67.422996	14.631275	36.997562514	60.5339313	67.280270
## beta[5,107]	31.192744	15.677314	-0.619976216	24.4549357	30.943653
## beta[6,107]	58.871325	14.442019	28.173915577	52.3878704	58.664637
## beta[7,107]	38.288381	15.009083	6.950172900	31.4471082	38.100433

## beta[8,107]	48.186743	5.741478	35.762459031	45.7645282	48.521608
## beta[9,107]	49.423711	13.141094	23.184197734	43.2335441	48.355074
## beta[10,107]	29.443143	14.496671	-0.869191926	23.0867227	29.279675
## beta[11,107]	47.885350	5.024630	34.886000230	45.6082886	48.257329
## beta[12,107]	68.861550	14.673255	37.733814740	62.2688584	69.040493
## beta[13,107]	30.348519	14.604726	-1.198661825	23.6119822	30.493660
## beta[1,108]	58.544221	15.232621	26.911381778	51.7097573	58.446782
## beta[2,108]	59.538989	15.111997	27.644695957	52.6925710	59.508129
## beta[3,108]	36.441877	15.262197	5.113834547	29.2686233	36.052742
## beta[4,108]	67.432595	14.679484	36.469311440	60.5830104	67.258360
## beta[5,108]	31.195703	15.943643	-1.750979455	24.4020755	31.044922
## beta[6,108]	58.874570	14.441085	28.256350076	52.4585948	58.609438
## beta[7,108]	38.292938	15.101103	6.421582645	31.2822734	38.071646
## beta[8,108]	48.176146	5.895478	35.677776457	45.5450290	48.575135
## beta[9,108]	49.454760	13.165819	22.750586273	43.0810207	48.326104
## beta[10,108]	29.440327	14.565796	-1.485287948	23.0837266	29.270389
## beta[11,108]	47.918438	5.009081	35.156977527	45.7024072	48.264220
## beta[12,108]	68.891212	14.786904	37.807289181	62.3295432	69.108215
## beta[13,108]	30.318894	14.673154	-0.990335556	23.8408065	30.353651
## beta[1,109]	58.578381	15.260406	25.788257857	51.9740541	58.530778
## beta[2,109]	59.485097	15.189719	27.339304653	52.6262196	59.410094
## beta[3,109]	36.447677	15.292005	4.098015234	29.2176042	36.069744
## beta[4,109]	67.426084	14.801718	36.850682105	60.5388616	67.173882
## beta[5,109]	31.204160	15.885864	-1.725583908	24.4933242	30.999894
## beta[6,109]	58.889569	14.458076	28.393632931	52.2875689	58.735436
## beta[7,109]	38.247543	15.130284	6.155371904	31.2523025	38.178794
## beta[8,109]	48.131687	6.046735	35.095250614	45.4183989	48.497115
## beta[9,109]	49.485247	13.176027	22.734438962	43.1367078	48.328013
## beta[10,109]	29.402153	14.615564	-1.914017531	22.9304366	29.189850
## beta[11,109]	47.912860	5.001895	35.426172746	45.5890901	48.281892
## beta[12,109]	68.898512	14.886954	37.652883068	62.2684925	69.141113
## beta[13,109]	30.314435	14.769204	-1.886341589	23.9772447	30.307573
## beta[1,110]	58.574114	15.352939	25.963782478	51.9713703	58.510331
## beta[2,110]	59.534774	15.234252	26.731660150	52.5524033	59.490026
## beta[3,110]	36.457748	15.386269	4.908989639	29.2573202	36.121450
## beta[4,110]	67.440380	14.887063	36.171478342	60.4401340	67.196683
## beta[5,110]	31.222180	15.820166	-1.641929183	24.5043741	31.038365
## beta[6,110]	58.884785	14.579627	28.454970948	52.5009486	58.750152
## beta[7,110]	38.264974	15.241585	6.114061278	31.2614058	38.168615
## beta[8,110]	48.110088	6.204888	34.834746404	45.3218284	48.524754
## beta[9,110]	49.454403	13.256462	22.160783119	43.1030106	48.344592
## beta[10,110]	29.360868	14.675493	-2.299724194	23.0417804	29.208781
## beta[11,110]	47.938202	4.933461	35.368095977	45.7194914	48.226538
## beta[12,110]	68.909035	14.916958	37.107266150	62.2283475	69.073717
## beta[13,110]	30.342436	14.851165	-1.492861174	24.0109564	30.323363
## beta[1,111]	58.564797	15.462214	25.634529326	51.9065546	58.546300
## beta[2,111]	59.515223	15.240979	27.475753312	52.6358202	59.389434
## beta[3,111]	36.383021	15.454878	4.128870601	29.1712859	36.030355
## beta[4,111]	67.456707	14.999565	36.481841054	60.4156735	67.361304
## beta[5,111]	31.205580	15.867948	-1.406752424	24.4671159	30.919685
## beta[6,111]	58.855824	14.655752	27.785173340	52.3721596	58.778351
## beta[7,111]	38.241728	15.349047	6.496787798	31.2123353	38.076728

## beta[8,111]	48.146661	6.314744	34.753354661	45.2087671	48.576345
## beta[9,111]	49.473490	13.343273	22.106760491	43.0956235	48.394122
## beta[10,111]	29.344498	14.784262	-1.870301499	22.8105467	29.277953
## beta[11,111]	48.031646	4.863332	35.506032665	45.7639202	48.300092
## beta[12,111]	68.891588	14.983982	36.596948151	62.3653934	69.055502
## beta[13,111]	30.348096	14.939825	-1.533104954	23.7845100	30.381198
## beta[1,112]	58.532854	15.463239	25.150847947	51.9435992	58.502431
## beta[2,112]	59.553275	15.282585	27.963490818	52.7692210	59.439723
## beta[3,112]	36.371279	15.455754	3.941339189	29.1178829	36.120277
## beta[4,112]	67.424977	15.144009	35.933950358	60.4642158	67.271691
## beta[5,112]	31.181657	15.790971	-1.704779282	24.3653010	30.870703
## beta[6,112]	58.893787	14.724141	28.350776947	52.5016680	58.770174
## beta[7,112]	38.224304	15.448736	6.068094473	31.2351468	38.102141
## beta[8,112]	48.153561	6.450529	35.044014384	45.1989863	48.558554
## beta[9,112]	49.445104	13.443656	22.066419673	43.0822081	48.445351
## beta[10,112]	29.340805	14.821354	-1.805016737	22.7744128	29.255570
## beta[11,112]	48.046158	4.810704	35.410971090	45.9695011	48.372896
## beta[12,112]	68.940182	15.061226	36.627503261	62.1122398	69.085693
## beta[13,112]	30.340149	15.001039	-2.501783385	23.9183866	30.298928
## beta[1,113]	58.512854	15.582554	24.798178375	51.8674291	58.532573
## beta[2,113]	59.573891	15.307105	26.817808832	52.7538810	59.612586
## beta[3,113]	36.355777	15.500318	3.907971815	29.2534877	36.063470
## beta[4,113]	67.447400	15.173743	36.180667980	60.3743429	67.296782
## beta[5,113]	31.145040	15.862183	-1.813990146	24.2654694	30.878383
## beta[6,113]	58.881602	14.801884	27.984599577	52.3881419	58.753346
## beta[7,113]	38.267546	15.570668	6.043142050	31.2948671	38.057055
## beta[8,113]	48.169177	6.586409	34.417454327	45.1049930	48.566666
## beta[9,113]	49.416787	13.472163	21.451649705	42.9876328	48.372699
## beta[10,113]	29.337697	14.842759	-2.201555402	22.8968544	29.243865
## beta[11,113]	48.047547	4.731630	35.519314497	46.0232240	48.334933
## beta[12,113]	68.942640	15.096326	36.587673985	62.2281117	69.106894
## beta[13,113]	30.323328	15.056708	-2.513245288	23.7831224	30.328550
## beta[1,114]	58.480654	15.633596	25.004711826	51.7861347	58.520298
## beta[2,114]	59.563926	15.379890	27.208771989	52.5199544	59.566073
## beta[3,114]	36.394915	15.556948	4.013376121	29.1100279	36.112881
## beta[4,114]	67.452730	15.255744	36.665513183	60.3863231	67.299552
## beta[5,114]	31.171045	15.915308	-2.260333397	24.1772731	30.821574
## beta[6,114]	58.854556	14.861429	28.193465128	52.3450718	58.795567
## beta[7,114]	38.265627	15.716984	5.714380488	31.2598392	38.105449
## beta[8,114]	48.214652	6.815766	33.682449793	45.0278604	48.544433
## beta[9,114]	49.377833	13.589180	21.054750172	43.0319888	48.292667
## beta[10,114]	29.355287	14.929723	-1.528255157	22.7776948	29.272511
## beta[11,114]	48.084391	4.697465	35.690524648	46.1615679	48.366751
## beta[12,114]	68.949386	15.132711	36.527058511	62.3707760	69.124047
## beta[13,114]	30.338341	15.208953	-2.996330970	23.6431922	30.269710
## beta[1,115]	58.461322	15.672772	24.470528695	51.8645475	58.543341
## beta[2,115]	59.569209	15.531058	26.443103930	52.5767492	59.578396
## beta[3,115]	36.398617	15.687246	3.893716597	29.1659692	36.138492
## beta[4,115]	67.428692	15.337208	36.012638208	60.3827170	67.258214
## beta[5,115]	31.192249	16.068145	-2.367557346	24.2011859	30.826985
## beta[6,115]	58.890005	14.895428	28.953342686	52.3011286	58.824497
## beta[7,115]	38.261816	15.709511	5.967598825	31.2116506	38.064375

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## beta[8,115]      48.258049      6.950195 33.652875577 45.0043932 48.583077
## beta[9,115]      49.404457     13.716344 20.621321785 42.9390435 48.318463
## beta[10,115]     29.338346     14.959042 -1.555941243 22.6202964 29.348319
## beta[11,115]     48.075969      4.590628 35.691189070 46.2256612 48.372574
## beta[12,115]     68.966326     15.217738 37.266791466 62.4615291 69.062928
## beta[13,115]     30.353083     15.265654 -2.345823449 23.8148316 30.278085
## deviance         45.926129      6.701346 31.065023107 41.8910621 46.786911
## p[1]             48.514818      3.997312 42.317656921 45.4357920 48.055830
## p[2]             48.374186      3.343004 42.666469128 46.1493326 48.051881
## p[3]             49.385765      4.251209 42.021157236 46.0683696 49.503997
## p[4]             48.335032      3.320553 42.530093976 46.3999836 48.027775
## p[5]             49.671192      4.730102 41.188750018 46.6454337 48.942965
## p[6]             47.384902      4.289008 35.605570979 45.6186449 47.997301
## p[7]             48.076125      3.620083 39.799179406 46.4402504 48.347192
## p[8]             48.075969      4.590628 35.691189070 46.2256612 48.372574
## sigma2_beta[1]   1.983584      2.619386 0.067432770 0.3053832 1.108950
## sigma2_beta[2]   2.123004      6.608926 0.068747630 0.2946153 1.129179
## sigma2_beta[3]   1.998874      2.700569 0.067607334 0.2996867 1.110079
## sigma2_beta[4]   1.990037      2.628090 0.069899162 0.2997088 1.128335
## sigma2_beta[5]   2.177180     10.277233 0.068706091 0.2964567 1.130944
## sigma2_beta[6]   2.009647      2.882833 0.070212655 0.3041389 1.132086
## sigma2_beta[7]   2.016162      2.950729 0.070508205 0.2962711 1.106484
## sigma2_beta[8]   1.922471      2.481571 0.074708213 0.3009150 1.131484
## sigma2_beta[9]   1.990683      2.643962 0.062246212 0.2951939 1.101437
## sigma2_beta[10]  2.011775      3.124264 0.069299203 0.3006641 1.108023
## sigma2_beta[11]  1.903645      2.461996 0.079021045 0.2911496 1.095284
## sigma2_beta[12]  2.002740      2.699599 0.069533108 0.2994514 1.103332
## sigma2_beta[13]  1.980313      2.623479 0.070235126 0.3054613 1.110019
## sigma2_y[1]      110.421134 4140.772763 3.630945679 12.0137388 23.209928
## sigma2_y[2]      37.433096   219.283024 3.657232440 11.9937957 23.219277
## sigma2_y[3]      32.606741    32.253440 3.605711682 12.2598385 23.746032
## sigma2_y[4]      32.953798    63.934587 3.779732662 12.0637061 22.906990
## sigma2_y[5]      37.302642   226.543715 3.702411676 11.8354158 23.283188
## sigma2_y[6]      32.556122    31.099612 3.834331138 11.9821724 23.178503
## sigma2_y[7]      43.575421   555.350283 3.686516698 12.2463613 23.368697
## sigma2_y[8]      31.245772    26.743780 3.666795868 12.0548295 22.770310
## sigma2_y[9]      32.297343    28.016058 3.940521011 12.3533045 23.292372
## sigma2_y[10]     32.578443    31.998891 3.694215054 12.3390814 23.120932
## sigma2_y[11]     31.093843    27.015430 3.591506985 11.7664750 22.746941
## sigma2_y[12]     32.599110    38.049204 3.647017778 12.1331381 23.306556
## sigma2_y[13]     35.672709    90.873938 3.742074546 11.9612645 23.433590
##              75%      97.5%      Rhat n.eff
## beta[1,1]      60.184480 63.675746 1.002115 2100
## beta[2,1]      61.132810 64.707466 1.000560 3000
## beta[3,1]      38.189564 41.684174 1.000864 3000
## beta[4,1]      68.593619 72.155486 1.001235 2700
## beta[5,1]      32.376900 35.796273 1.000790 3000
## beta[6,1]      60.672597 64.131692 1.000771 3000
## beta[7,1]      40.104508 43.595922 1.000651 3000
## beta[8,1]      45.779233 49.328885 1.071960 40
## beta[9,1]      44.747478 48.597018 1.089930 37
## beta[10,1]     31.163651 34.836887 1.001398 2200

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## beta[11,1]	45.241405	48.139221	1.028138	1000
## beta[12,1]	70.791445	74.298244	1.000530	3000
## beta[13,1]	32.211575	35.883334	1.000771	3000
## beta[1,2]	60.438656	64.302066	1.002102	3000
## beta[2,2]	61.326712	65.536052	1.003506	3000
## beta[3,2]	38.358228	42.443572	1.005998	3000
## beta[4,2]	68.741026	72.879396	1.007284	3000
## beta[5,2]	32.502402	36.339399	1.006303	2500
## beta[6,2]	60.931817	64.904593	1.003674	2000
## beta[7,2]	40.325302	44.520885	1.005084	3000
## beta[8,2]	46.101000	50.094210	1.090594	43
## beta[9,2]	45.032190	49.189518	1.112043	33
## beta[10,2]	31.321479	35.415154	1.005810	2100
## beta[11,2]	45.694009	48.877901	1.047167	1100
## beta[12,2]	70.939553	75.036508	1.003218	3000
## beta[13,2]	32.444038	36.417821	1.004844	3000
## beta[1,3]	60.533845	65.069312	1.009111	3000
## beta[2,3]	61.514173	66.302592	1.014206	3000
## beta[3,3]	38.407163	43.097538	1.020972	3000
## beta[4,3]	68.794055	73.405557	1.015350	3000
## beta[5,3]	32.750427	37.144857	1.013290	1900
## beta[6,3]	60.997918	65.587899	1.013336	1700
## beta[7,3]	40.551628	45.103616	1.018808	1500
## beta[8,3]	46.305500	50.696095	1.103129	49
## beta[9,3]	45.364987	49.830085	1.127379	31
## beta[10,3]	31.389571	36.030820	1.015222	3000
## beta[11,3]	46.006419	49.665543	1.063807	200
## beta[12,3]	71.143564	75.664384	1.011079	3000
## beta[13,3]	32.572075	37.108805	1.016524	3000
## beta[1,4]	60.661071	65.601744	1.023196	1900
## beta[2,4]	61.586080	66.917361	1.025470	1700
## beta[3,4]	38.590975	43.596500	1.031439	3000
## beta[4,4]	68.925991	73.824224	1.022278	3000
## beta[5,4]	32.918746	37.711960	1.027299	3000
## beta[6,4]	61.127956	65.968050	1.018373	1400
## beta[7,4]	40.646351	45.668316	1.027054	3000
## beta[8,4]	46.566130	51.309609	1.120418	52
## beta[9,4]	45.643002	50.308274	1.144032	28
## beta[10,4]	31.504519	36.447439	1.023155	3000
## beta[11,4]	46.466052	50.837896	1.085744	82
## beta[12,4]	71.235642	76.261149	1.017219	3000
## beta[13,4]	32.693904	37.687980	1.026596	3000
## beta[1,5]	60.710941	65.923478	1.028655	2800
## beta[2,5]	61.742645	67.420540	1.033550	2900
## beta[3,5]	38.633243	43.989578	1.042995	1700
## beta[4,5]	69.033980	74.066816	1.029147	1500
## beta[5,5]	33.018978	38.045611	1.034733	3000
## beta[6,5]	61.239597	66.367658	1.026203	1100
## beta[7,5]	40.793821	46.468960	1.030139	3000
## beta[8,5]	46.758387	51.641192	1.124478	54
## beta[9,5]	45.938677	51.004485	1.159704	27
## beta[10,5]	31.652587	37.069445	1.036597	3000

## beta[11,5]	46.773458	51.740404	1.104640	51
## beta[12,5]	71.351697	76.536290	1.028778	3000
## beta[13,5]	32.821249	38.371319	1.035086	3000
## beta[1,6]	60.815073	66.708488	1.034998	2200
## beta[2,6]	61.826693	67.985691	1.040100	2500
## beta[3,6]	38.677199	44.655085	1.050468	900
## beta[4,6]	69.138829	74.625763	1.033009	1100
## beta[5,6]	32.982303	38.650854	1.037014	3000
## beta[6,6]	61.415599	67.076381	1.032931	1400
## beta[7,6]	40.782871	46.882767	1.036767	3000
## beta[8,6]	46.863431	52.028967	1.136299	51
## beta[9,6]	46.198380	51.437296	1.192711	22
## beta[10,6]	31.774890	37.803459	1.044889	2700
## beta[11,6]	47.122290	52.329855	1.120227	37
## beta[12,6]	71.533787	77.507457	1.035837	3000
## beta[13,6]	32.958761	38.840688	1.044788	3000
## beta[1,7]	60.876676	66.726407	1.044836	1600
## beta[2,7]	61.900902	68.289360	1.046052	3000
## beta[3,7]	38.824536	44.901723	1.060715	650
## beta[4,7]	69.159461	74.968408	1.041573	1100
## beta[5,7]	33.127970	39.483955	1.042008	3000
## beta[6,7]	61.471459	67.709637	1.042975	1200
## beta[7,7]	40.762266	47.813748	1.041545	2200
## beta[8,7]	47.111341	52.526230	1.133938	60
## beta[9,7]	46.525018	51.635625	1.207122	19
## beta[10,7]	31.794581	38.031075	1.052153	1800
## beta[11,7]	47.354206	52.994591	1.146307	26
## beta[12,7]	71.574418	77.936175	1.042222	3000
## beta[13,7]	32.940250	39.307411	1.058178	3000
## beta[1,8]	61.038574	67.277460	1.047435	1400
## beta[2,8]	61.918097	69.108799	1.047132	2600
## beta[3,8]	38.814627	45.811325	1.061722	710
## beta[4,8]	69.238092	75.431523	1.047224	940
## beta[5,8]	33.138589	39.485781	1.046139	3000
## beta[6,8]	61.638352	68.160952	1.053823	1300
## beta[7,8]	40.827005	48.192117	1.050073	1600
## beta[8,8]	47.260600	53.032581	1.137723	63
## beta[9,8]	46.725965	52.188508	1.224848	18
## beta[10,8]	31.924021	38.439721	1.065989	810
## beta[11,8]	47.787162	54.117024	1.168215	21
## beta[12,8]	71.584996	78.340733	1.046046	3000
## beta[13,8]	33.089769	40.207513	1.067056	2700
## beta[1,9]	61.053028	67.469793	1.050999	1300
## beta[2,9]	62.082894	68.985516	1.047770	3000
## beta[3,9]	38.925540	46.483395	1.068389	610
## beta[4,9]	69.393744	76.074615	1.048049	1100
## beta[5,9]	33.248704	40.394455	1.054533	2400
## beta[6,9]	61.670963	68.597732	1.056760	1300
## beta[7,9]	40.934816	48.782226	1.052943	1600
## beta[8,9]	47.498404	53.609536	1.136772	74
## beta[9,9]	46.967862	52.170171	1.240015	16
## beta[10,9]	31.971173	38.955400	1.083145	490

## beta[11,9]	48.147016	54.684602	1.207710	17
## beta[12,9]	71.649632	78.859970	1.049647	3000
## beta[13,9]	33.191541	40.199192	1.062036	1700
## beta[1,10]	61.139189	68.096116	1.055075	1300
## beta[2,10]	62.187027	69.489015	1.051338	2300
## beta[3,10]	39.241410	46.527697	1.077557	540
## beta[4,10]	69.450412	77.038381	1.052690	1200
## beta[5,10]	33.358149	40.700657	1.070561	1900
## beta[6,10]	61.717051	69.218663	1.060816	1500
## beta[7,10]	41.018532	48.950892	1.055230	1100
## beta[8,10]	47.724055	54.134671	1.128445	80
## beta[9,10]	47.192565	52.509908	1.252860	14
## beta[10,10]	31.998022	38.984593	1.086244	380
## beta[11,10]	48.448417	55.071663	1.237858	14
## beta[12,10]	71.832584	79.389829	1.055348	3000
## beta[13,10]	33.149825	40.537013	1.057170	2800
## beta[1,11]	61.233102	68.444945	1.057690	1200
## beta[2,11]	62.189733	70.413664	1.055957	1600
## beta[3,11]	39.305621	46.688181	1.082810	480
## beta[4,11]	69.544129	76.979618	1.055552	1200
## beta[5,11]	33.484039	40.832868	1.047510	3000
## beta[6,11]	61.716354	69.777938	1.064548	930
## beta[7,11]	41.069870	49.661997	1.069169	610
## beta[8,11]	47.935986	54.293494	1.132965	84
## beta[9,11]	47.476488	53.159288	1.269729	13
## beta[10,11]	32.149023	39.628136	1.066933	1200
## beta[11,11]	48.759024	55.857930	1.284747	12
## beta[12,11]	71.836847	80.052020	1.059583	3000
## beta[13,11]	33.192358	40.832706	1.059240	2100
## beta[1,12]	61.462447	68.966592	1.060529	1500
## beta[2,12]	62.276833	70.723173	1.062056	1600
## beta[3,12]	39.430132	47.060490	1.087368	520
## beta[4,12]	69.658172	77.221734	1.059172	1400
## beta[5,12]	33.527148	41.269077	1.079264	1300
## beta[6,12]	61.669223	70.927868	1.067363	760
## beta[7,12]	41.151250	49.773512	1.071799	770
## beta[8,12]	48.094600	54.277444	1.129093	100
## beta[9,12]	47.794990	53.433867	1.263040	13
## beta[10,12]	32.119996	39.838540	1.073586	1700
## beta[11,12]	49.161157	56.422165	1.321673	11
## beta[12,12]	72.007835	80.041023	1.058179	3000
## beta[13,12]	33.280301	41.483756	1.064540	2800
## beta[1,13]	61.441342	69.220810	1.066266	1100
## beta[2,13]	62.377801	71.195490	1.065444	1200
## beta[3,13]	39.404248	47.574810	1.103083	510
## beta[4,13]	69.734200	77.793053	1.065603	2100
## beta[5,13]	33.611297	41.905032	1.065529	1900
## beta[6,13]	61.780541	70.808711	1.067304	850
## beta[7,13]	41.177469	50.231639	1.070436	960
## beta[8,13]	48.228464	54.615902	1.127603	110
## beta[9,13]	48.088781	53.461500	1.274964	13
## beta[10,13]	32.250411	40.514079	1.073111	2500

## beta[11,13]	49.563427	56.209493	1.352715	10
## beta[12,13]	72.075456	80.479439	1.063477	3000
## beta[13,13]	33.403848	41.702633	1.066491	2700
## beta[1,14]	61.447382	69.775547	1.067674	1100
## beta[2,14]	62.511658	71.167237	1.073883	1300
## beta[3,14]	39.485635	47.524982	1.097224	420
## beta[4,14]	69.783964	78.439103	1.071340	1500
## beta[5,14]	33.719993	42.366872	1.068429	1900
## beta[6,14]	61.952784	71.088970	1.069627	790
## beta[7,14]	41.267393	50.353594	1.068403	870
## beta[8,14]	48.568619	55.070331	1.120008	120
## beta[9,14]	48.346988	53.715757	1.277148	12
## beta[10,14]	32.324770	41.122449	1.075489	2000
## beta[11,14]	49.874016	56.677932	1.389623	9
## beta[12,14]	72.094252	80.522566	1.060993	3000
## beta[13,14]	33.374999	41.994068	1.067597	2400
## beta[1,15]	61.564350	70.520053	1.064390	1300
## beta[2,15]	62.505704	71.862300	1.065245	1500
## beta[3,15]	39.552890	48.310091	1.075302	3000
## beta[4,15]	69.764730	78.749912	1.073660	1400
## beta[5,15]	33.748908	42.629890	1.069249	1700
## beta[6,15]	61.982644	71.306672	1.071080	810
## beta[7,15]	41.313181	50.253487	1.072433	640
## beta[8,15]	48.725659	55.095160	1.122747	150
## beta[9,15]	48.656809	54.359149	1.279229	12
## beta[10,15]	32.311549	41.134019	1.079324	2900
## beta[11,15]	50.228930	56.732997	1.456457	8
## beta[12,15]	72.171841	80.908491	1.063410	3000
## beta[13,15]	33.461870	42.375917	1.068649	3000
## beta[1,16]	61.692990	71.063162	1.069836	990
## beta[2,16]	62.447926	72.365226	1.074064	970
## beta[3,16]	39.492238	48.889813	1.079207	3000
## beta[4,16]	69.892464	79.289792	1.073614	990
## beta[5,16]	33.875180	43.244396	1.077285	1600
## beta[6,16]	61.999420	71.749485	1.075880	700
## beta[7,16]	41.351362	50.603916	1.080030	590
## beta[8,16]	48.845101	55.486353	1.122663	160
## beta[9,16]	48.948299	54.326619	1.281739	12
## beta[10,16]	32.418837	41.596688	1.084645	2500
## beta[11,16]	50.790589	56.849217	1.505687	7
## beta[12,16]	72.334545	81.237433	1.063921	3000
## beta[13,16]	33.522984	42.661679	1.070208	3000
## beta[1,17]	61.710651	71.086734	1.073765	980
## beta[2,17]	62.644478	72.419428	1.084754	730
## beta[3,17]	39.624738	49.132843	1.083905	3000
## beta[4,17]	70.022743	78.970055	1.076093	970
## beta[5,17]	33.942636	43.295403	1.072982	1500
## beta[6,17]	62.022137	72.076108	1.078054	510
## beta[7,17]	41.485340	50.544361	1.082534	580
## beta[8,17]	48.991646	55.805522	1.118321	180
## beta[9,17]	49.148559	54.672241	1.286381	12
## beta[10,17]	32.463023	42.205867	1.084032	2200

## beta[11,17]	51.053064	56.910574	1.584353	7
## beta[12,17]	72.412604	81.612148	1.068297	3000
## beta[13,17]	33.459675	43.255705	1.070857	3000
## beta[1,18]	61.725188	70.878594	1.077279	1100
## beta[2,18]	62.730347	72.741568	1.088632	650
## beta[3,18]	39.655438	49.742693	1.090135	3000
## beta[4,18]	70.070851	79.301547	1.080403	880
## beta[5,18]	34.003240	43.901412	1.077237	1400
## beta[6,18]	62.101702	72.923843	1.075440	720
## beta[7,18]	41.549420	50.910532	1.095671	450
## beta[8,18]	48.978785	55.803514	1.114592	180
## beta[9,18]	49.448231	55.130454	1.286808	12
## beta[10,18]	32.599847	42.315736	1.088578	2000
## beta[11,18]	51.205602	58.346601	1.544351	7
## beta[12,18]	72.564416	81.849917	1.067440	3000
## beta[13,18]	33.479569	43.407955	1.075197	3000
## beta[1,19]	61.840037	71.461042	1.078409	1300
## beta[2,19]	62.733513	73.014204	1.085009	560
## beta[3,19]	39.764215	49.995614	1.091705	3000
## beta[4,19]	70.062251	79.545391	1.084521	950
## beta[5,19]	34.161144	43.598655	1.084364	970
## beta[6,19]	62.223445	73.139528	1.078225	970
## beta[7,19]	41.636253	50.886627	1.066724	3000
## beta[8,19]	49.040299	56.288110	1.110277	240
## beta[9,19]	49.741652	55.268373	1.297898	11
## beta[10,19]	32.641368	42.486671	1.088160	1800
## beta[11,19]	51.433196	59.218277	1.535828	7
## beta[12,19]	72.529526	81.901753	1.069506	3000
## beta[13,19]	33.673155	43.309585	1.072891	3000
## beta[1,20]	61.876247	72.558088	1.079380	2500
## beta[2,20]	62.905174	73.152117	1.093927	480
## beta[3,20]	39.910500	50.302140	1.090513	3000
## beta[4,20]	70.082532	80.203364	1.093240	750
## beta[5,20]	34.157139	44.618199	1.094277	690
## beta[6,20]	62.260633	73.329814	1.081175	720
## beta[7,20]	41.660429	51.139155	1.070968	3000
## beta[8,20]	49.244307	55.990622	1.105775	260
## beta[9,20]	49.843658	55.747196	1.312520	11
## beta[10,20]	32.756419	42.528742	1.085516	3000
## beta[11,20]	51.504291	59.896537	1.518225	7
## beta[12,20]	72.667163	82.577678	1.068922	3000
## beta[13,20]	33.751058	43.761707	1.079127	1800
## beta[1,21]	61.803669	73.257284	1.079202	2200
## beta[2,21]	62.831668	73.239429	1.095508	580
## beta[3,21]	40.021718	50.741968	1.088700	3000
## beta[4,21]	70.149614	80.653652	1.090162	800
## beta[5,21]	34.245269	44.548853	1.066545	3000
## beta[6,21]	62.286492	73.652071	1.088843	720
## beta[7,21]	41.641996	51.516649	1.072849	3000
## beta[8,21]	49.276373	55.886760	1.102344	280
## beta[9,21]	50.208444	56.273426	1.317967	11
## beta[10,21]	32.712199	43.223389	1.087806	3000

## beta[11,21]	51.631603	60.606829	1.490861	8
## beta[12,21]	72.633064	82.982557	1.069060	2400
## beta[13,21]	33.721218	44.207430	1.080588	1600
## beta[1,22]	61.819720	73.412273	1.083287	3000
## beta[2,22]	62.879335	74.169925	1.095693	560
## beta[3,22]	40.101015	50.910205	1.092272	3000
## beta[4,22]	70.164038	81.190738	1.093171	1000
## beta[5,22]	34.300391	44.707825	1.071388	3000
## beta[6,22]	62.285747	74.098098	1.088395	810
## beta[7,22]	41.732292	51.911347	1.073909	3000
## beta[8,22]	49.419764	55.741875	1.099227	300
## beta[9,22]	50.503813	56.875426	1.317712	11
## beta[10,22]	32.746175	43.495748	1.092523	2200
## beta[11,22]	51.769994	61.152214	1.465202	8
## beta[12,22]	72.753355	82.832962	1.068278	3000
## beta[13,22]	33.846153	44.467775	1.081034	1700
## beta[1,23]	61.878297	74.288377	1.084331	3000
## beta[2,23]	62.896234	74.032352	1.103072	480
## beta[3,23]	40.186559	50.997657	1.093768	3000
## beta[4,23]	70.276983	81.337818	1.095609	1200
## beta[5,23]	34.303780	44.719305	1.068917	3000
## beta[6,23]	62.319956	74.778473	1.085962	850
## beta[7,23]	41.803527	52.044849	1.071458	3000
## beta[8,23]	49.582429	56.313161	1.101254	230
## beta[9,23]	50.624740	56.888825	1.319578	11
## beta[10,23]	32.883605	43.218340	1.091113	1700
## beta[11,23]	51.924965	61.738726	1.460553	8
## beta[12,23]	72.862292	83.249761	1.069230	3000
## beta[13,23]	33.799130	44.475752	1.082485	1700
## beta[1,24]	62.041282	73.272731	1.085713	2400
## beta[2,24]	62.902491	74.227630	1.107247	470
## beta[3,24]	40.218002	51.450585	1.093899	3000
## beta[4,24]	70.446376	81.649857	1.095326	1100
## beta[5,24]	34.501107	45.368144	1.072775	3000
## beta[6,24]	62.415062	75.069349	1.087512	750
## beta[7,24]	41.778454	52.620093	1.071594	3000
## beta[8,24]	49.755103	56.178769	1.104943	160
## beta[9,24]	50.748493	57.221168	1.329569	11
## beta[10,24]	32.861231	43.611149	1.092677	2100
## beta[11,24]	51.972328	62.085743	1.435629	8
## beta[12,24]	72.849958	83.550418	1.066302	3000
## beta[13,24]	33.909384	44.936380	1.083566	2000
## beta[1,25]	62.059561	74.203684	1.090039	2000
## beta[2,25]	62.979867	74.728816	1.102743	570
## beta[3,25]	40.307773	51.878908	1.092163	3000
## beta[4,25]	70.339365	81.687284	1.097224	1100
## beta[5,25]	34.546330	46.221770	1.071607	3000
## beta[6,25]	62.476892	74.929812	1.089720	840
## beta[7,25]	41.848649	52.842327	1.072089	3000
## beta[8,25]	49.885335	56.775155	1.103659	110
## beta[9,25]	50.912968	57.418738	1.320056	11
## beta[10,25]	32.897170	44.280967	1.093561	1800

## beta[11,25]	51.931350	62.025878	1.429173	9
## beta[12,25]	72.914337	84.126075	1.069635	3000
## beta[13,25]	33.901797	45.275305	1.085386	1900
## beta[1,26]	62.208395	74.028565	1.089414	1700
## beta[2,26]	62.991464	74.685200	1.105345	540
## beta[3,26]	40.258937	52.162711	1.093797	3000
## beta[4,26]	70.356676	82.136138	1.103845	940
## beta[5,26]	34.565746	46.489211	1.067951	3000
## beta[6,26]	62.534830	75.071718	1.084500	830
## beta[7,26]	41.869196	53.103183	1.071309	3000
## beta[8,26]	50.043091	56.815278	1.107604	91
## beta[9,26]	51.027692	57.445194	1.331996	10
## beta[10,26]	32.946185	44.244382	1.090413	2400
## beta[11,26]	52.046866	62.720774	1.420497	9
## beta[12,26]	72.894313	84.132349	1.070409	3000
## beta[13,26]	34.000374	45.385171	1.086780	1700
## beta[1,27]	62.165610	74.126017	1.088084	2200
## beta[2,27]	63.118645	75.383021	1.106479	470
## beta[3,27]	40.343066	52.171283	1.095646	3000
## beta[4,27]	70.450764	82.360221	1.103006	970
## beta[5,27]	34.560373	46.819722	1.070557	3000
## beta[6,27]	62.649760	75.284220	1.085449	950
## beta[7,27]	41.922398	53.359401	1.070319	3000
## beta[8,27]	50.192811	56.688012	1.108500	78
## beta[9,27]	51.181452	57.342771	1.346470	10
## beta[10,27]	32.945159	44.763436	1.089532	1800
## beta[11,27]	52.136002	63.932493	1.423652	9
## beta[12,27]	73.019040	84.497324	1.069563	3000
## beta[13,27]	34.015828	45.501562	1.081707	1400
## beta[1,28]	62.277848	74.114999	1.095955	2600
## beta[2,28]	63.195613	75.254985	1.111176	420
## beta[3,28]	40.553132	52.314718	1.101256	3000
## beta[4,28]	70.480763	82.686228	1.101593	920
## beta[5,28]	34.768780	46.757838	1.079535	3000
## beta[6,28]	62.687547	75.768467	1.083400	980
## beta[7,28]	42.008508	53.623693	1.068872	3000
## beta[8,28]	50.180781	56.040795	1.110159	63
## beta[9,28]	51.367826	57.451410	1.356323	10
## beta[10,28]	32.886613	45.048406	1.090845	1800
## beta[11,28]	52.166012	64.569799	1.422851	9
## beta[12,28]	72.928495	85.110034	1.070539	3000
## beta[13,28]	34.061532	45.728022	1.083653	1700
## beta[1,29]	62.313887	74.772536	1.101547	1700
## beta[2,29]	63.167876	75.337637	1.116439	410
## beta[3,29]	40.522354	52.356614	1.094823	3000
## beta[4,29]	70.653692	82.997463	1.104200	890
## beta[5,29]	34.780344	47.113767	1.077479	3000
## beta[6,29]	62.831992	75.772358	1.084164	1100
## beta[7,29]	42.026810	53.609690	1.066576	3000
## beta[8,29]	50.299162	55.689562	1.114826	47
## beta[9,29]	51.472303	57.494187	1.370327	9
## beta[10,29]	32.996610	45.255600	1.089845	2000

## beta[11,29]	52.192035	65.059051	1.420649	9
## beta[12,29]	73.083709	85.516148	1.072766	3000
## beta[13,29]	34.124485	46.138378	1.084865	1400
## beta[1,30]	62.412899	75.375195	1.094928	2000
## beta[2,30]	63.193915	75.714370	1.110998	410
## beta[3,30]	40.578457	52.519473	1.098617	3000
## beta[4,30]	70.605016	83.738281	1.112923	940
## beta[5,30]	34.797856	47.456315	1.081312	3000
## beta[6,30]	62.830656	76.314390	1.086350	1100
## beta[7,30]	42.018782	53.838367	1.066378	3000
## beta[8,30]	50.216511	56.262291	1.108889	61
## beta[9,30]	51.662213	57.650443	1.396614	9
## beta[10,30]	33.032420	45.545969	1.089864	2100
## beta[11,30]	52.267397	65.500220	1.414127	9
## beta[12,30]	73.046663	85.452682	1.075992	2900
## beta[13,30]	34.174416	45.976690	1.085349	1300
## beta[1,31]	62.530876	75.767319	1.099406	1700
## beta[2,31]	63.283872	76.259253	1.109340	420
## beta[3,31]	40.528754	52.465169	1.097687	3000
## beta[4,31]	70.666999	84.166468	1.107898	1000
## beta[5,31]	34.871939	48.113251	1.089970	3000
## beta[6,31]	62.828455	75.876092	1.087313	930
## beta[7,31]	41.915299	54.228917	1.065773	3000
## beta[8,31]	50.162699	56.547823	1.111464	85
## beta[9,31]	51.788502	57.965734	1.407264	9
## beta[10,31]	33.044922	45.626210	1.089681	2600
## beta[11,31]	52.352849	65.662993	1.419129	9
## beta[12,31]	73.076126	85.757175	1.078554	2900
## beta[13,31]	34.248235	45.798382	1.084989	1200
## beta[1,32]	62.489581	75.982748	1.097884	1400
## beta[2,32]	63.374861	76.355037	1.101801	460
## beta[3,32]	40.554553	53.359564	1.100658	3000
## beta[4,32]	70.793769	84.293506	1.104454	950
## beta[5,32]	34.825801	47.799236	1.090050	3000
## beta[6,32]	62.831517	76.185943	1.088297	890
## beta[7,32]	42.125986	54.146962	1.065649	3000
## beta[8,32]	50.047153	57.012004	1.110434	110
## beta[9,32]	51.990818	57.846987	1.469615	8
## beta[10,32]	33.034902	46.233340	1.089700	3000
## beta[11,32]	52.324450	66.011081	1.409429	9
## beta[12,32]	73.133026	86.132964	1.080979	3000
## beta[13,32]	34.225511	46.299268	1.085928	1500
## beta[1,33]	62.590235	76.780161	1.103770	1100
## beta[2,33]	63.562497	77.221818	1.101353	440
## beta[3,33]	40.549351	53.958855	1.098795	3000
## beta[4,33]	70.827274	84.441895	1.106391	890
## beta[5,33]	35.029480	48.083626	1.089199	3000
## beta[6,33]	62.932779	75.922231	1.090629	820
## beta[7,33]	42.116840	54.501034	1.065818	3000
## beta[8,33]	49.976043	56.800534	1.101540	130
## beta[9,33]	52.322540	57.793415	1.515201	7
## beta[10,33]	33.204036	46.283507	1.090675	3000

## beta[11,33]	52.332197	65.772357	1.404693	10
## beta[12,33]	73.196044	86.552070	1.081648	3000
## beta[13,33]	34.316382	46.595457	1.086194	1700
## beta[1,34]	62.560031	76.227461	1.091243	920
## beta[2,34]	63.432385	77.206329	1.101965	410
## beta[3,34]	40.762265	54.126746	1.097209	2400
## beta[4,34]	70.884829	84.902938	1.106484	1100
## beta[5,34]	35.043577	48.263148	1.089454	3000
## beta[6,34]	62.981684	77.036900	1.095519	700
## beta[7,34]	42.169896	54.864974	1.066019	3000
## beta[8,34]	50.012095	56.810018	1.103641	200
## beta[9,34]	52.435464	58.049463	1.450032	8
## beta[10,34]	33.285452	46.748104	1.091122	2400
## beta[11,34]	52.522582	65.096384	1.405141	10
## beta[12,34]	73.158773	87.282493	1.099791	2500
## beta[13,34]	34.292693	46.922635	1.086416	1500
## beta[1,35]	62.523836	76.495223	1.096363	3000
## beta[2,35]	63.569741	77.601488	1.103034	360
## beta[3,35]	40.785975	54.768484	1.100274	2000
## beta[4,35]	70.864015	85.027266	1.109054	910
## beta[5,35]	35.009304	48.876473	1.094849	3000
## beta[6,35]	62.924125	77.411867	1.118661	700
## beta[7,35]	42.284996	55.122419	1.067129	3000
## beta[8,35]	49.993399	56.683027	1.103697	250
## beta[9,35]	52.493726	58.689330	1.417542	8
## beta[10,35]	33.340471	46.845660	1.089858	2000
## beta[11,35]	52.447433	64.073444	1.399929	10
## beta[12,35]	73.231976	87.263363	1.116348	1700
## beta[13,35]	34.329730	47.259752	1.089141	1300
## beta[1,36]	62.635944	76.883964	1.097763	3000
## beta[2,36]	63.731810	78.529761	1.109503	380
## beta[3,36]	40.876875	55.174064	1.102480	2900
## beta[4,36]	70.884196	85.994887	1.107180	1100
## beta[5,36]	34.988121	49.131105	1.096097	3000
## beta[6,36]	63.006263	77.716841	1.088763	3000
## beta[7,36]	42.260767	55.511474	1.067364	3000
## beta[8,36]	49.879778	56.383302	1.103973	400
## beta[9,36]	52.568003	59.500296	1.375800	9
## beta[10,36]	33.397955	46.861783	1.088054	2100
## beta[11,36]	52.481077	64.068104	1.411235	9
## beta[12,36]	73.239114	87.590803	1.138268	1700
## beta[13,36]	34.509562	47.942744	1.089715	1400
## beta[1,37]	62.668183	77.051938	1.096902	3000
## beta[2,37]	63.680073	78.633457	1.103335	390
## beta[3,37]	40.909575	55.296685	1.106384	2900
## beta[4,37]	70.935349	85.193607	1.107873	1100
## beta[5,37]	35.069502	49.231633	1.096016	3000
## beta[6,37]	63.023025	78.306443	1.089278	3000
## beta[7,37]	42.312325	56.041741	1.070364	3000
## beta[8,37]	49.863467	56.179212	1.098403	550
## beta[9,37]	52.660162	60.281467	1.337306	10
## beta[10,37]	33.378425	47.103764	1.089572	1900

## beta[11,37]	52.452715	64.073448	1.406941	9
## beta[12,37]	73.279715	87.830202	1.101679	1500
## beta[13,37]	34.556048	48.176534	1.089894	1400
## beta[1,38]	62.735692	77.327484	1.096036	3000
## beta[2,38]	63.777598	78.734585	1.107606	320
## beta[3,38]	40.853723	55.832696	1.105894	2500
## beta[4,38]	71.135376	85.396471	1.113247	1100
## beta[5,38]	35.080166	49.843618	1.094103	3000
## beta[6,38]	63.203319	78.581337	1.091879	3000
## beta[7,38]	42.399296	56.549156	1.072671	3000
## beta[8,38]	50.021650	56.413607	1.105178	960
## beta[9,38]	52.812420	60.749636	1.309280	11
## beta[10,38]	33.363693	47.089320	1.090847	1600
## beta[11,38]	52.307831	63.293734	1.410544	9
## beta[12,38]	73.345658	88.211045	1.096835	1200
## beta[13,38]	34.568177	48.120986	1.089743	1700
## beta[1,39]	62.755143	77.355351	1.098361	3000
## beta[2,39]	63.900461	78.399574	1.110506	350
## beta[3,39]	40.875847	56.536652	1.108452	2200
## beta[4,39]	71.007629	85.992522	1.116378	960
## beta[5,39]	35.072039	49.653635	1.091656	3000
## beta[6,39]	63.255471	78.587820	1.091441	3000
## beta[7,39]	42.475181	56.998035	1.074984	3000
## beta[8,39]	50.108965	56.709754	1.104928	1200
## beta[9,39]	52.848106	60.951173	1.297500	11
## beta[10,39]	33.479118	47.417964	1.090990	1300
## beta[11,39]	52.333820	62.277429	1.412179	9
## beta[12,39]	73.405970	88.434486	1.101383	1100
## beta[13,39]	34.580946	47.771017	1.090954	1400
## beta[1,40]	62.815102	77.871004	1.103199	3000
## beta[2,40]	63.826763	78.866058	1.113579	330
## beta[3,40]	40.986465	56.977430	1.109627	2300
## beta[4,40]	71.057629	85.992447	1.114474	930
## beta[5,40]	35.172540	49.889352	1.092707	3000
## beta[6,40]	63.252773	78.472721	1.127581	600
## beta[7,40]	42.585093	57.627618	1.076261	3000
## beta[8,40]	50.163635	57.200151	1.114623	2200
## beta[9,40]	52.862107	61.891590	1.269248	12
## beta[10,40]	33.474789	47.525784	1.089771	1600
## beta[11,40]	52.374761	61.435476	1.422595	9
## beta[12,40]	73.419322	88.582473	1.143796	880
## beta[13,40]	34.672143	48.051397	1.091174	2100
## beta[1,41]	62.864897	78.805922	1.102451	3000
## beta[2,41]	64.021320	79.558980	1.116086	320
## beta[3,41]	41.078975	57.493731	1.106331	1900
## beta[4,41]	71.099785	86.931792	1.116120	1100
## beta[5,41]	35.073083	49.874717	1.092164	3000
## beta[6,41]	63.402895	78.852236	1.091317	3000
## beta[7,41]	42.466176	57.790796	1.079197	3000
## beta[8,41]	50.242992	57.663554	1.122426	1200
## beta[9,41]	52.853024	62.198043	1.251899	13
## beta[10,41]	33.628431	47.850572	1.088775	1400

## beta[11,41]	52.331930	60.665107	1.438388	9
## beta[12,41]	73.492983	88.890187	1.105543	740
## beta[13,41]	34.793961	48.092876	1.091918	1500
## beta[1,42]	63.008037	79.135529	1.104795	3000
## beta[2,42]	63.918697	79.756946	1.122631	350
## beta[3,42]	41.154373	57.422336	1.108089	1700
## beta[4,42]	71.177286	87.279727	1.116683	940
## beta[5,42]	35.150643	49.581526	1.093001	3000
## beta[6,42]	63.285077	78.369050	1.091120	3000
## beta[7,42]	42.349821	58.811867	1.081810	3000
## beta[8,42]	50.184977	58.217997	1.129752	860
## beta[9,42]	52.978441	62.525827	1.244944	14
## beta[10,42]	33.647320	48.057925	1.088366	1400
## beta[11,42]	52.298890	61.233931	1.418006	9
## beta[12,42]	73.499854	88.231759	1.106927	780
## beta[13,42]	34.906319	48.956384	1.091523	2200
## beta[1,43]	63.070199	79.931830	1.104090	3000
## beta[2,43]	63.972893	78.935442	1.122019	300
## beta[3,43]	41.201550	57.869348	1.108720	1500
## beta[4,43]	71.160607	88.402134	1.117350	900
## beta[5,43]	35.219881	50.556291	1.090904	3000
## beta[6,43]	63.387555	78.747404	1.092117	3000
## beta[7,43]	42.483131	58.635497	1.083776	3000
## beta[8,43]	50.143444	58.535339	1.141390	570
## beta[9,43]	52.943306	63.309265	1.238337	14
## beta[10,43]	33.773417	47.874831	1.087970	1500
## beta[11,43]	52.275190	61.582569	1.396725	9
## beta[12,43]	73.597549	88.995207	1.106015	820
## beta[13,43]	34.854360	49.358725	1.092381	2100
## beta[1,44]	63.064054	79.697591	1.089615	820
## beta[2,44]	64.093042	79.710075	1.116714	340
## beta[3,44]	41.062049	57.240067	1.109706	1400
## beta[4,44]	71.172650	88.266295	1.116231	1100
## beta[5,44]	35.180948	50.965044	1.091447	3000
## beta[6,44]	63.387678	78.735606	1.093631	3000
## beta[7,44]	42.560809	58.949260	1.082006	3000
## beta[8,44]	50.145989	59.027521	1.149694	540
## beta[9,44]	52.939756	62.775051	1.227254	15
## beta[10,44]	33.733771	48.055538	1.086290	1700
## beta[11,44]	52.253966	61.011901	1.364735	10
## beta[12,44]	73.496335	89.206240	1.099515	820
## beta[13,44]	34.898565	50.130765	1.093563	1800
## beta[1,45]	63.058571	79.758418	1.105795	3000
## beta[2,45]	64.091936	80.287300	1.120812	350
## beta[3,45]	41.144658	57.202105	1.108761	1300
## beta[4,45]	71.120805	88.505745	1.112786	930
## beta[5,45]	35.299169	50.708335	1.091645	3000
## beta[6,45]	63.256177	79.643478	1.095459	3000
## beta[7,45]	42.515628	59.264245	1.080505	3000
## beta[8,45]	50.157974	58.072259	1.159518	550
## beta[9,45]	53.022082	63.430349	1.215772	16
## beta[10,45]	33.807278	48.261811	1.087427	1800

## beta[11,45]	52.139332	61.275254	1.332847	11
## beta[12,45]	73.378409	89.337864	1.095001	940
## beta[13,45]	34.836717	50.701074	1.094230	2100
## beta[1,46]	63.128089	80.097271	1.106481	830
## beta[2,46]	64.196835	80.978253	1.117446	350
## beta[3,46]	41.060315	57.070546	1.109966	1200
## beta[4,46]	71.090437	88.335803	1.118036	640
## beta[5,46]	35.322445	50.858197	1.091892	3000
## beta[6,46]	63.427006	79.618938	1.094462	3000
## beta[7,46]	42.709570	58.963267	1.080785	3000
## beta[8,46]	50.290537	58.544346	1.164589	520
## beta[9,46]	53.067904	63.394037	1.209838	17
## beta[10,46]	33.810791	48.403863	1.089946	2500
## beta[11,46]	51.954018	61.349672	1.305508	12
## beta[12,46]	73.486348	89.964039	1.099196	870
## beta[13,46]	35.074676	50.057624	1.095100	1900
## beta[1,47]	63.195058	80.338348	1.117021	700
## beta[2,47]	64.075496	81.235734	1.121281	300
## beta[3,47]	41.067652	57.482141	1.110044	1200
## beta[4,47]	71.195781	88.876759	1.114808	710
## beta[5,47]	35.352072	51.673917	1.090315	3000
## beta[6,47]	63.486473	79.835772	1.093909	3000
## beta[7,47]	42.778014	59.259893	1.080316	3000
## beta[8,47]	50.380788	57.986176	1.168241	540
## beta[9,47]	53.073187	64.214771	1.200298	18
## beta[10,47]	33.912027	49.486167	1.088452	3000
## beta[11,47]	51.876288	60.913929	1.275184	14
## beta[12,47]	73.588075	89.631177	1.096325	850
## beta[13,47]	35.082427	50.130141	1.093244	1800
## beta[1,48]	63.149980	79.725484	1.117766	630
## beta[2,48]	64.093286	81.578694	1.130722	280
## beta[3,48]	41.168041	57.154426	1.108799	1400
## beta[4,48]	71.259120	88.417871	1.118638	760
## beta[5,48]	35.405107	51.782073	1.089957	3000
## beta[6,48]	63.503823	79.826758	1.093060	3000
## beta[7,48]	42.757860	59.112538	1.081055	3000
## beta[8,48]	50.436523	57.852687	1.171784	840
## beta[9,48]	53.284188	64.284976	1.191111	19
## beta[10,48]	34.041832	49.585019	1.089719	3000
## beta[11,48]	51.716297	61.387713	1.266503	15
## beta[12,48]	73.764898	90.397385	1.094287	950
## beta[13,48]	35.152047	50.678913	1.093862	2100
## beta[1,49]	63.038575	80.675610	1.115414	640
## beta[2,49]	64.253711	81.923461	1.128405	270
## beta[3,49]	41.293722	57.507530	1.109672	1500
## beta[4,49]	71.327369	89.294955	1.117448	900
## beta[5,49]	35.657866	52.220877	1.092025	3000
## beta[6,49]	63.588374	79.754401	1.092260	3000
## beta[7,49]	42.757799	58.910903	1.082679	3000
## beta[8,49]	50.388070	58.550163	1.179286	1200
## beta[9,49]	53.267877	64.542820	1.182121	22
## beta[10,49]	34.191941	49.558695	1.089145	3000

## beta[11,49]	51.659732	61.139598	1.243014	17
## beta[12,49]	73.793605	90.485636	1.089308	1100
## beta[13,49]	35.229802	50.598959	1.095914	1600
## beta[1,50]	63.117915	80.278073	1.122861	570
## beta[2,50]	64.252906	81.586989	1.138865	270
## beta[3,50]	41.303268	57.587661	1.111241	1600
## beta[4,50]	71.354163	89.022409	1.123026	760
## beta[5,50]	35.734343	52.042250	1.090163	3000
## beta[6,50]	63.669600	80.158068	1.139227	390
## beta[7,50]	42.791645	59.767881	1.080904	3000
## beta[8,50]	50.494006	57.927683	1.179357	1200
## beta[9,50]	53.394211	64.707378	1.181357	22
## beta[10,50]	34.086997	49.806549	1.089413	3000
## beta[11,50]	51.540752	60.792996	1.220426	20
## beta[12,50]	73.827372	91.177732	1.095947	970
## beta[13,50]	35.277214	50.407425	1.094768	1800
## beta[1,51]	63.265301	80.466785	1.125469	540
## beta[2,51]	64.195481	81.792932	1.161816	250
## beta[3,51]	41.354260	57.888447	1.110854	1400
## beta[4,51]	71.466481	89.726578	1.130060	760
## beta[5,51]	35.637354	52.490213	1.093158	3000
## beta[6,51]	63.578991	80.131550	1.104187	420
## beta[7,51]	42.811066	59.462827	1.080122	3000
## beta[8,51]	50.492152	58.176938	1.182425	1800
## beta[9,51]	53.446758	65.078941	1.178723	23
## beta[10,51]	34.136695	50.130286	1.089976	3000
## beta[11,51]	51.516204	60.910156	1.201484	24
## beta[12,51]	73.807446	91.104252	1.096464	870
## beta[13,51]	35.294325	50.996954	1.093498	1900
## beta[1,52]	63.185359	80.939294	1.128488	550
## beta[2,52]	64.312085	82.498279	1.137589	230
## beta[3,52]	41.403581	57.988779	1.110474	1300
## beta[4,52]	71.591870	89.427730	1.123009	980
## beta[5,52]	35.612565	53.395845	1.094481	3000
## beta[6,52]	63.710850	80.817242	1.107754	360
## beta[7,52]	42.913603	60.727658	1.079863	3000
## beta[8,52]	50.471583	57.914559	1.176328	1400
## beta[9,52]	53.547260	64.860569	1.172800	24
## beta[10,52]	34.216984	50.503183	1.090741	3000
## beta[11,52]	51.429116	60.993169	1.186510	30
## beta[12,52]	73.838097	90.937786	1.100181	790
## beta[13,52]	35.360817	51.143873	1.092546	1700
## beta[1,53]	63.248362	80.802492	1.135197	510
## beta[2,53]	64.287750	81.834745	1.083474	1200
## beta[3,53]	41.418829	59.118357	1.110486	1300
## beta[4,53]	71.508336	88.915980	1.125462	920
## beta[5,53]	35.676233	53.797092	1.094110	3000
## beta[6,53]	63.689679	80.953247	1.100467	420
## beta[7,53]	43.097039	60.634267	1.079893	3000
## beta[8,53]	50.480976	58.633418	1.175481	830
## beta[9,53]	53.503815	65.269496	1.171598	26
## beta[10,53]	34.246641	50.162928	1.088066	3000

## beta[11,53]	51.295234	61.395883	1.174184	37
## beta[12,53]	73.906390	91.292683	1.110489	650
## beta[13,53]	35.353939	51.964238	1.094413	1600
## beta[1,54]	63.311737	81.733496	1.137750	460
## beta[2,54]	64.337057	82.533546	1.084624	1300
## beta[3,54]	41.407815	59.347321	1.108435	1300
## beta[4,54]	71.465437	89.628045	1.127290	1000
## beta[5,54]	35.755234	54.224195	1.093076	3000
## beta[6,54]	63.701786	81.116149	1.098556	400
## beta[7,54]	43.194437	60.820745	1.079673	3000
## beta[8,54]	50.428347	58.439100	1.174455	870
## beta[9,54]	53.564628	66.004459	1.167845	27
## beta[10,54]	34.366861	51.352615	1.090576	2400
## beta[11,54]	51.205459	61.381583	1.169381	46
## beta[12,54]	74.066870	91.511470	1.113182	660
## beta[13,54]	35.498504	51.545120	1.096073	1500
## beta[1,55]	63.323307	81.479082	1.112085	3000
## beta[2,55]	64.310328	82.705022	1.173677	240
## beta[3,55]	41.419399	59.466620	1.108760	1200
## beta[4,55]	71.736245	89.941779	1.119751	1100
## beta[5,55]	35.759550	53.919234	1.088867	3000
## beta[6,55]	63.722856	81.370895	1.101310	440
## beta[7,55]	43.145931	61.503235	1.081307	3000
## beta[8,55]	50.402990	57.916517	1.168912	540
## beta[9,55]	53.504418	66.315828	1.157570	29
## beta[10,55]	34.302946	50.806524	1.091988	2400
## beta[11,55]	51.195293	61.521158	1.169433	51
## beta[12,55]	73.995613	91.602013	1.087614	3000
## beta[13,55]	35.479266	51.800465	1.095701	1500
## beta[1,56]	63.385732	81.913443	1.113853	3000
## beta[2,56]	64.406444	83.161382	1.085530	1400
## beta[3,56]	41.534019	60.321347	1.109732	1200
## beta[4,56]	71.687905	90.445138	1.116596	1000
## beta[5,56]	35.873017	53.916957	1.088666	3000
## beta[6,56]	63.855624	81.554842	1.099251	490
## beta[7,56]	43.136676	60.646408	1.081234	3000
## beta[8,56]	50.380630	57.990484	1.168374	480
## beta[9,56]	53.633089	66.420171	1.155317	31
## beta[10,56]	34.412009	51.585557	1.094139	2500
## beta[11,56]	51.101217	61.666074	1.170055	62
## beta[12,56]	73.925331	91.873197	1.088255	3000
## beta[13,56]	35.472414	52.009110	1.095866	2000
## beta[1,57]	63.332900	82.617113	1.114905	3000
## beta[2,57]	64.273082	82.897199	1.088271	1600
## beta[3,57]	41.518690	60.329897	1.111057	910
## beta[4,57]	71.716166	90.700158	1.117118	1200
## beta[5,57]	36.022249	54.254930	1.086321	3000
## beta[6,57]	63.915773	81.787732	1.105329	460
## beta[7,57]	43.156014	61.043716	1.079675	3000
## beta[8,57]	50.388666	57.935443	1.168866	350
## beta[9,57]	53.845364	66.651680	1.154737	32
## beta[10,57]	34.575015	51.299729	1.092646	2700

## beta[11,57]	51.093969	61.690526	1.165504	85
## beta[12,57]	73.908718	92.088191	1.088016	3000
## beta[13,57]	35.523152	52.622708	1.097140	2100
## beta[1,58]	63.331776	82.345793	1.117406	3000
## beta[2,58]	64.322346	83.013399	1.089363	1500
## beta[3,58]	41.536630	60.636513	1.113035	960
## beta[4,58]	71.743084	90.622406	1.115369	1100
## beta[5,58]	35.950916	54.419597	1.087883	3000
## beta[6,58]	63.840766	81.851471	1.107275	440
## beta[7,58]	43.318252	61.244778	1.080742	3000
## beta[8,58]	50.452201	58.065218	1.167472	260
## beta[9,58]	53.845757	66.743577	1.154933	35
## beta[10,58]	34.462944	51.584996	1.092160	2700
## beta[11,58]	50.939546	62.264508	1.171690	100
## beta[12,58]	73.847757	92.216677	1.090470	3000
## beta[13,58]	35.528114	52.672884	1.096088	2300
## beta[1,59]	63.453809	83.697803	1.114571	3000
## beta[2,59]	64.295005	82.954968	1.089531	1400
## beta[3,59]	41.509957	60.861212	1.111645	950
## beta[4,59]	71.681539	90.822548	1.114304	1000
## beta[5,59]	35.840905	54.458574	1.086645	3000
## beta[6,59]	63.907782	82.682631	1.107241	460
## beta[7,59]	43.302286	61.027153	1.080486	3000
## beta[8,59]	50.443152	57.868409	1.163655	190
## beta[9,59]	53.929196	66.933881	1.157758	40
## beta[10,59]	34.571517	50.860331	1.094155	3000
## beta[11,59]	50.826711	62.582954	1.176596	100
## beta[12,59]	73.748160	92.512809	1.089085	3000
## beta[13,59]	35.587983	52.322719	1.096685	2400
## beta[1,60]	63.372898	83.912895	1.117545	3000
## beta[2,60]	64.372685	82.595534	1.086282	1500
## beta[3,60]	41.539913	61.079396	1.110282	950
## beta[4,60]	71.843440	90.714565	1.118625	1000
## beta[5,60]	35.994211	54.764170	1.090452	2900
## beta[6,60]	63.892751	82.592953	1.105632	450
## beta[7,60]	43.104018	61.782034	1.080975	3000
## beta[8,60]	50.387013	57.504716	1.157798	140
## beta[9,60]	53.923625	68.323963	1.153483	41
## beta[10,60]	34.474561	51.715760	1.093289	3000
## beta[11,60]	50.716072	62.273026	1.176227	110
## beta[12,60]	73.869200	92.416020	1.088238	3000
## beta[13,60]	35.549186	53.175586	1.097918	2000
## beta[1,61]	63.429114	83.659054	1.119136	3000
## beta[2,61]	64.579527	83.746174	1.087137	1500
## beta[3,61]	41.675541	61.793046	1.110526	770
## beta[4,61]	71.941500	91.228247	1.119211	1000
## beta[5,61]	35.902080	54.329584	1.089814	3000
## beta[6,61]	64.027517	82.952119	1.109519	450
## beta[7,61]	43.179723	61.261440	1.079933	3000
## beta[8,61]	50.512668	57.361407	1.150166	130
## beta[9,61]	53.864214	68.153958	1.155562	42
## beta[10,61]	34.433114	52.322882	1.091514	2600

## beta[11,61]	50.705416	61.475557	1.178529	95
## beta[12,61]	74.023366	92.615233	1.087533	3000
## beta[13,61]	35.633389	53.166707	1.096322	1600
## beta[1,62]	63.392219	82.773453	1.118932	3000
## beta[2,62]	64.574702	83.918613	1.087967	1500
## beta[3,62]	41.503140	61.602292	1.110426	750
## beta[4,62]	71.963967	91.811529	1.101772	3000
## beta[5,62]	36.100925	54.700657	1.089976	3000
## beta[6,62]	64.129713	82.527150	1.118740	410
## beta[7,62]	43.180213	61.409143	1.080453	3000
## beta[8,62]	50.489365	56.658797	1.146538	97
## beta[9,62]	54.082834	68.274806	1.154192	43
## beta[10,62]	34.485027	52.452953	1.092155	2600
## beta[11,62]	50.624543	61.797696	1.180166	89
## beta[12,62]	73.908869	92.573702	1.088411	3000
## beta[13,62]	35.576085	53.399221	1.097443	1800
## beta[1,63]	63.506476	84.043405	1.117989	3000
## beta[2,63]	64.568931	84.208520	1.088906	1600
## beta[3,63]	41.576167	61.881696	1.110025	740
## beta[4,63]	72.039876	91.513979	1.137082	840
## beta[5,63]	36.290494	54.825385	1.089894	3000
## beta[6,63]	64.163426	83.389061	1.114119	410
## beta[7,63]	43.291959	62.037468	1.082007	3000
## beta[8,63]	50.467524	57.050284	1.142139	91
## beta[9,63]	54.099423	68.501876	1.154652	48
## beta[10,63]	34.374545	52.606172	1.092916	2600
## beta[11,63]	50.510547	61.623744	1.178418	80
## beta[12,63]	73.964282	93.230882	1.088701	3000
## beta[13,63]	35.603204	53.599843	1.096094	1800
## beta[1,64]	63.577431	83.599130	1.169043	300
## beta[2,64]	64.499982	84.651303	1.090136	2300
## beta[3,64]	41.524852	61.910626	1.109594	700
## beta[4,64]	72.020712	91.565736	1.131319	830
## beta[5,64]	36.301046	55.359942	1.094704	3000
## beta[6,64]	64.224191	84.106282	1.114931	410
## beta[7,64]	43.372485	62.804926	1.082721	3000
## beta[8,64]	50.305276	56.755129	1.145432	72
## beta[9,64]	54.063816	68.376852	1.163265	53
## beta[10,64]	34.504109	52.564719	1.091116	2300
## beta[11,64]	50.577863	61.420876	1.180267	70
## beta[12,64]	74.105902	93.904641	1.087865	3000
## beta[13,64]	35.577459	53.480482	1.095361	2400
## beta[1,65]	63.553050	83.323372	1.165198	280
## beta[2,65]	64.558873	85.146911	1.090080	2000
## beta[3,65]	41.585708	61.670257	1.110373	620
## beta[4,65]	72.099865	91.463034	1.103479	3000
## beta[5,65]	36.483062	55.885813	1.093384	3000
## beta[6,65]	64.122667	84.591943	1.123643	370
## beta[7,65]	43.421308	62.881761	1.083623	3000
## beta[8,65]	50.278957	57.092983	1.146933	66
## beta[9,65]	54.251973	68.838766	1.161471	53
## beta[10,65]	34.457011	52.742621	1.093486	2100

## beta[11,65]	50.494141	60.919568	1.183369	64
## beta[12,65]	74.243580	94.105321	1.088323	3000
## beta[13,65]	35.666103	54.040600	1.096337	2600
## beta[1,66]	63.627942	83.614582	1.116348	3000
## beta[2,66]	64.601887	84.958936	1.090044	2400
## beta[3,66]	41.693262	62.034647	1.109101	620
## beta[4,66]	72.201476	91.223000	1.103361	3000
## beta[5,66]	36.323256	55.942858	1.096030	3000
## beta[6,66]	64.138204	84.249143	1.126130	380
## beta[7,66]	43.443166	63.043339	1.084990	3000
## beta[8,66]	50.222779	56.159101	1.151277	55
## beta[9,66]	54.236433	69.135348	1.166337	59
## beta[10,66]	34.442843	52.709295	1.095442	2300
## beta[11,66]	50.438664	61.430073	1.187780	59
## beta[12,66]	74.119179	94.459279	1.087137	3000
## beta[13,66]	35.794564	54.338490	1.098603	2100
## beta[1,67]	63.813606	83.070067	1.114793	3000
## beta[2,67]	64.599541	85.251156	1.090716	2000
## beta[3,67]	41.764743	62.087071	1.110326	540
## beta[4,67]	72.062322	91.682543	1.104299	3000
## beta[5,67]	36.280988	56.720341	1.093772	3000
## beta[6,67]	64.209904	84.544273	1.121099	370
## beta[7,67]	43.463182	63.434659	1.085420	3000
## beta[8,67]	50.125716	55.915032	1.150329	48
## beta[9,67]	54.381800	69.631722	1.146486	32
## beta[10,67]	34.659576	52.397398	1.096367	3000
## beta[11,67]	50.436922	60.831068	1.185773	52
## beta[12,67]	74.136252	95.013018	1.087800	3000
## beta[13,67]	35.825157	54.274206	1.099602	1900
## beta[1,68]	63.747584	83.665478	1.113327	3000
## beta[2,68]	64.511642	86.098268	1.091317	2000
## beta[3,68]	41.846499	62.589779	1.110880	570
## beta[4,68]	72.220315	92.807817	1.105631	3000
## beta[5,68]	36.472853	57.063566	1.091045	3000
## beta[6,68]	64.258111	84.533575	1.117998	340
## beta[7,68]	43.697103	63.739515	1.087189	3000
## beta[8,68]	50.021700	56.235636	1.150482	45
## beta[9,68]	54.468322	69.782768	1.143963	33
## beta[10,68]	34.822352	53.526170	1.097049	3000
## beta[11,68]	50.384192	60.842811	1.187458	46
## beta[12,68]	74.266571	94.977532	1.088508	3000
## beta[13,68]	35.870861	54.330568	1.099559	1800
## beta[1,69]	63.714196	83.671443	1.113815	3000
## beta[2,69]	64.507049	84.628579	1.089628	2100
## beta[3,69]	41.863793	63.024401	1.109984	590
## beta[4,69]	72.382884	93.206374	1.130599	1100
## beta[5,69]	36.512608	57.498884	1.091667	3000
## beta[6,69]	64.263212	84.737354	1.120217	310
## beta[7,69]	43.697559	64.366874	1.085500	3000
## beta[8,69]	49.986232	56.003573	1.153580	41
## beta[9,69]	54.404794	70.014294	1.144595	34
## beta[10,69]	34.804231	53.795796	1.097547	3000

## beta[11,69]	50.420978	60.997473	1.188081	42
## beta[12,69]	74.250415	94.873925	1.088891	3000
## beta[13,69]	36.109034	54.615339	1.098752	2100
## beta[1,70]	63.814114	84.039839	1.112149	3000
## beta[2,70]	64.503168	84.715138	1.088299	2200
## beta[3,70]	41.943131	63.308818	1.111792	620
## beta[4,70]	72.321540	93.138444	1.105260	3000
## beta[5,70]	36.420618	57.275895	1.087406	3000
## beta[6,70]	64.404281	84.647890	1.120265	300
## beta[7,70]	43.694073	64.611359	1.087005	3000
## beta[8,70]	49.928336	56.000985	1.159628	36
## beta[9,70]	54.604302	70.453000	1.146130	34
## beta[10,70]	34.747141	53.955494	1.094927	3000
## beta[11,70]	50.310166	61.177899	1.188258	40
## beta[12,70]	74.309403	95.134336	1.089903	3000
## beta[13,70]	36.047544	55.732865	1.099823	1800
## beta[1,71]	63.796380	84.138663	1.113621	3000
## beta[2,71]	64.605891	84.868332	1.088199	2100
## beta[3,71]	41.967621	63.608130	1.113570	600
## beta[4,71]	72.335255	93.493815	1.127951	980
## beta[5,71]	36.414302	57.150367	1.084481	3000
## beta[6,71]	64.416084	84.285714	1.121554	320
## beta[7,71]	43.636882	64.915939	1.087786	3000
## beta[8,71]	49.933763	55.803421	1.156373	36
## beta[9,71]	54.718334	71.616799	1.144487	34
## beta[10,71]	34.755865	54.763195	1.093775	3000
## beta[11,71]	50.259663	61.363167	1.190867	36
## beta[12,71]	74.406028	94.927925	1.089044	3000
## beta[13,71]	36.170320	56.128048	1.097716	2000
## beta[1,72]	64.064751	84.186927	1.114206	3000
## beta[2,72]	64.608591	85.234820	1.088255	2100
## beta[3,72]	42.048068	64.297358	1.114040	650
## beta[4,72]	72.416948	93.558911	1.128068	1000
## beta[5,72]	36.455977	56.814419	1.082996	3000
## beta[6,72]	64.419570	84.539552	1.095403	3000
## beta[7,72]	43.630143	64.869772	1.087170	3000
## beta[8,72]	49.930592	55.943761	1.160460	34
## beta[9,72]	54.675184	72.141849	1.143586	35
## beta[10,72]	34.683470	54.102608	1.092973	3000
## beta[11,72]	50.222617	61.028475	1.192501	32
## beta[12,72]	74.333715	95.580325	1.089146	3000
## beta[13,72]	36.225727	55.667976	1.099173	1900
## beta[1,73]	64.115472	85.222698	1.113338	3000
## beta[2,73]	64.707463	85.614054	1.088331	2400
## beta[3,73]	42.056417	63.729871	1.115088	720
## beta[4,73]	72.436799	93.486045	1.126525	1000
## beta[5,73]	36.596127	56.619057	1.083405	3000
## beta[6,73]	64.482635	84.581795	1.095790	3000
## beta[7,73]	43.711208	64.197204	1.086730	3000
## beta[8,73]	49.854113	55.215584	1.165415	31
## beta[9,73]	54.665951	71.710668	1.142202	35
## beta[10,73]	34.798922	54.522922	1.094113	3000

## beta[11,73]	50.245479	60.893485	1.190567	31
## beta[12,73]	74.370987	95.467160	1.087433	3000
## beta[13,73]	36.248124	55.023851	1.098762	2100
## beta[1,74]	64.205885	84.434830	1.114186	3000
## beta[2,74]	64.731255	85.591715	1.089664	2700
## beta[3,74]	42.068961	64.439258	1.114033	810
## beta[4,74]	72.459682	93.556858	1.104433	2700
## beta[5,74]	36.690685	56.923023	1.085821	3000
## beta[6,74]	64.407301	84.857500	1.097865	3000
## beta[7,74]	43.748041	64.076279	1.085551	3000
## beta[8,74]	49.917155	55.568351	1.157940	33
## beta[9,74]	54.742475	71.021424	1.138572	37
## beta[10,74]	34.704940	54.323875	1.093653	3000
## beta[11,74]	50.205215	61.251493	1.191011	30
## beta[12,74]	74.411856	95.895221	1.087449	3000
## beta[13,74]	36.248904	55.846072	1.100205	2100
## beta[1,75]	64.180609	84.352801	1.114845	3000
## beta[2,75]	64.724845	85.487078	1.088307	2600
## beta[3,75]	42.154952	64.452571	1.113091	950
## beta[4,75]	72.489000	94.363861	1.104216	2300
## beta[5,75]	36.718401	57.181566	1.083320	3000
## beta[6,75]	64.518879	85.320917	1.098464	3000
## beta[7,75]	43.726517	63.913766	1.084768	3000
## beta[8,75]	49.956662	55.237735	1.150802	34
## beta[9,75]	54.706443	71.205841	1.135941	37
## beta[10,75]	34.763942	55.071708	1.092956	3000
## beta[11,75]	50.179215	61.262171	1.192323	28
## beta[12,75]	74.463919	96.106345	1.089277	3000
## beta[13,75]	36.214640	56.113875	1.100864	2100
## beta[1,76]	64.227110	85.414651	1.114482	3000
## beta[2,76]	64.811586	86.101379	1.088203	2300
## beta[3,76]	42.147312	64.852105	1.114901	1000
## beta[4,76]	72.409355	93.968322	1.102972	2500
## beta[5,76]	36.656819	58.097902	1.084703	3000
## beta[6,76]	64.435106	86.096819	1.099280	3000
## beta[7,76]	43.802822	65.086725	1.085602	3000
## beta[8,76]	50.024834	55.116488	1.142631	35
## beta[9,76]	54.881856	71.536225	1.134979	37
## beta[10,76]	34.786137	54.261305	1.091632	3000
## beta[11,76]	50.094612	61.103637	1.194071	27
## beta[12,76]	74.405169	96.016407	1.091433	3000
## beta[13,76]	36.218341	56.098686	1.100616	2800
## beta[1,77]	64.251437	84.842276	1.115358	3000
## beta[2,77]	64.926801	85.726805	1.089616	3000
## beta[3,77]	42.126318	65.602520	1.116272	960
## beta[4,77]	72.487859	93.944982	1.130740	890
## beta[5,77]	36.714606	58.093984	1.084812	3000
## beta[6,77]	64.496403	85.831217	1.098905	3000
## beta[7,77]	43.746961	65.494304	1.084664	3000
## beta[8,77]	49.941130	55.048040	1.138648	37
## beta[9,77]	54.831144	71.959150	1.134272	39
## beta[10,77]	34.804510	54.266606	1.092656	3000

## beta[11,77]	50.071781	61.428655	1.194063	27
## beta[12,77]	74.431860	97.086950	1.092572	3000
## beta[13,77]	36.206137	56.419447	1.099868	2700
## beta[1,78]	64.132380	84.665727	1.113509	3000
## beta[2,78]	64.650808	86.420344	1.090503	3000
## beta[3,78]	42.189268	65.639211	1.116483	870
## beta[4,78]	72.542241	94.069775	1.133994	870
## beta[5,78]	36.715585	58.781413	1.083103	2800
## beta[6,78]	64.574012	85.523627	1.099903	3000
## beta[7,78]	43.887907	66.055869	1.084359	3000
## beta[8,78]	49.929425	55.136432	1.129049	38
## beta[9,78]	54.865534	72.437681	1.135652	40
## beta[10,78]	34.842125	54.678556	1.092905	3000
## beta[11,78]	50.061097	61.027930	1.195021	26
## beta[12,78]	74.401148	97.127861	1.093035	3000
## beta[13,78]	36.368002	56.419497	1.097494	2300
## beta[1,79]	64.169139	84.313174	1.113134	3000
## beta[2,79]	64.794497	86.800214	1.092030	3000
## beta[3,79]	42.183185	66.662058	1.116833	890
## beta[4,79]	72.639927	94.735824	1.104280	2600
## beta[5,79]	36.649603	58.189314	1.090398	3000
## beta[6,79]	64.631688	85.517729	1.100764	3000
## beta[7,79]	43.758799	65.887888	1.083090	2800
## beta[8,79]	49.984624	55.269292	1.131430	36
## beta[9,79]	54.828980	72.491871	1.134440	40
## beta[10,79]	34.759119	54.166543	1.093558	3000
## beta[11,79]	50.072471	60.955238	1.200803	24
## beta[12,79]	74.402675	96.779547	1.093162	3000
## beta[13,79]	36.250153	56.557982	1.098083	3000
## beta[1,80]	64.164454	85.372306	1.113250	3000
## beta[2,80]	64.818533	86.528572	1.091959	3000
## beta[3,80]	42.167162	65.990425	1.114511	1100
## beta[4,80]	72.619626	95.340824	1.103500	2600
## beta[5,80]	36.637739	59.429336	1.087638	3000
## beta[6,80]	64.545776	86.333946	1.101660	3000
## beta[7,80]	43.822172	66.071397	1.083538	3000
## beta[8,80]	50.024395	55.201199	1.131178	36
## beta[9,80]	55.027250	72.511281	1.131723	40
## beta[10,80]	34.992628	54.495338	1.093038	3000
## beta[11,80]	50.043581	60.871616	1.199450	23
## beta[12,80]	74.591505	96.587079	1.094184	3000
## beta[13,80]	36.358927	56.320468	1.097251	3000
## beta[1,81]	64.226803	85.095463	1.113574	3000
## beta[2,81]	64.951374	86.561729	1.092155	3000
## beta[3,81]	42.339621	66.355875	1.112665	1000
## beta[4,81]	72.679937	94.692614	1.105781	2500
## beta[5,81]	36.807755	58.413731	1.086512	2900
## beta[6,81]	64.531549	86.777700	1.103022	3000
## beta[7,81]	43.734302	66.461683	1.083423	2500
## beta[8,81]	49.992300	55.367806	1.126904	37
## beta[9,81]	54.879371	72.808832	1.128800	41
## beta[10,81]	35.087012	55.451300	1.093477	3000

## beta[11,81]	50.062016	59.818959	1.197640	23
## beta[12,81]	74.510066	97.338746	1.094063	3000
## beta[13,81]	36.256292	57.201053	1.096880	3000
## beta[1,82]	64.305942	85.376755	1.112512	3000
## beta[2,82]	64.998681	86.701779	1.094650	3000
## beta[3,82]	42.359393	66.686279	1.115079	1100
## beta[4,82]	72.715652	94.848676	1.106165	2100
## beta[5,82]	36.730946	59.299384	1.084309	3000
## beta[6,82]	64.685521	87.498141	1.103919	3000
## beta[7,82]	44.013618	66.530521	1.083159	2500
## beta[8,82]	49.953276	55.069577	1.125601	37
## beta[9,82]	55.019839	74.046594	1.129803	41
## beta[10,82]	35.296615	55.530820	1.093130	3000
## beta[11,82]	50.132664	58.877770	1.198911	21
## beta[12,82]	74.549239	97.028130	1.092145	3000
## beta[13,82]	36.395835	56.323586	1.098885	3000
## beta[1,83]	64.281321	85.255314	1.112742	3000
## beta[2,83]	65.109331	87.272427	1.094892	3000
## beta[3,83]	42.508215	67.438267	1.115306	1000
## beta[4,83]	72.729755	95.625360	1.104614	2400
## beta[5,83]	36.771573	59.385550	1.082056	3000
## beta[6,83]	64.724025	86.939983	1.102543	3000
## beta[7,83]	43.963093	67.105815	1.083826	2600
## beta[8,83]	49.983463	54.806194	1.121988	36
## beta[9,83]	55.177887	74.219645	1.130195	41
## beta[10,83]	35.031822	56.300331	1.093615	3000
## beta[11,83]	50.144051	59.287343	1.197544	21
## beta[12,83]	74.595181	96.420626	1.091683	3000
## beta[13,83]	36.346084	56.574302	1.097854	3000
## beta[1,84]	64.318183	85.751641	1.112785	3000
## beta[2,84]	64.916397	86.892667	1.096414	3000
## beta[3,84]	42.477252	67.274308	1.115822	840
## beta[4,84]	72.906165	96.244169	1.106982	2300
## beta[5,84]	36.676941	59.044887	1.082069	3000
## beta[6,84]	64.841158	87.202697	1.102176	3000
## beta[7,84]	43.924127	66.728874	1.083612	2700
## beta[8,84]	49.912878	54.861786	1.123139	36
## beta[9,84]	55.248756	74.361974	1.128828	42
## beta[10,84]	35.187993	56.376747	1.094397	3000
## beta[11,84]	50.044373	59.122216	1.196255	21
## beta[12,84]	74.591069	96.575641	1.091746	3000
## beta[13,84]	36.498261	57.488981	1.098248	3000
## beta[1,85]	64.407545	85.594329	1.113198	3000
## beta[2,85]	64.933632	87.450596	1.097434	3000
## beta[3,85]	42.475768	67.556561	1.114254	800
## beta[4,85]	72.864154	96.006662	1.105159	2300
## beta[5,85]	36.736115	59.792780	1.082383	3000
## beta[6,85]	64.802863	87.790030	1.101334	3000
## beta[7,85]	44.069081	66.328917	1.083412	3000
## beta[8,85]	50.008728	54.969211	1.118764	38
## beta[9,85]	55.259349	74.494411	1.128417	44
## beta[10,85]	35.478791	56.869497	1.094929	3000

## beta[11,85]	50.032233	58.332326	1.195187	20
## beta[12,85]	74.718167	97.146323	1.091483	3000
## beta[13,85]	36.275501	58.090779	1.099761	3000
## beta[1,86]	64.416721	86.016975	1.113632	3000
## beta[2,86]	64.987117	87.756812	1.098329	3000
## beta[3,86]	42.412095	68.353288	1.115120	870
## beta[4,86]	72.917766	95.888008	1.103532	2400
## beta[5,86]	36.825056	60.146822	1.082146	3000
## beta[6,86]	64.889365	87.812980	1.103489	3000
## beta[7,86]	44.161388	66.563783	1.083930	3000
## beta[8,86]	50.004984	54.929296	1.116366	38
## beta[9,86]	55.203053	74.673949	1.127114	46
## beta[10,86]	35.403932	56.322007	1.094730	3000
## beta[11,86]	49.971765	57.853291	1.191103	20
## beta[12,86]	74.825886	97.103812	1.090329	3000
## beta[13,86]	36.298488	58.858301	1.100347	3000
## beta[1,87]	64.294422	86.450893	1.113864	3000
## beta[2,87]	65.028275	88.040584	1.099552	3000
## beta[3,87]	42.409701	68.039295	1.114146	940
## beta[4,87]	72.927913	96.938613	1.103084	1900
## beta[5,87]	36.829044	59.991173	1.081942	2900
## beta[6,87]	64.854403	87.842434	1.103088	3000
## beta[7,87]	44.037645	66.734514	1.086891	3000
## beta[8,87]	49.935194	54.483616	1.111785	40
## beta[9,87]	55.270704	74.483422	1.126533	47
## beta[10,87]	35.280945	56.392973	1.096215	3000
## beta[11,87]	49.949936	56.765063	1.200541	19
## beta[12,87]	74.842632	96.975178	1.090714	3000
## beta[13,87]	36.378880	58.525529	1.100524	3000
## beta[1,88]	64.457697	87.392755	1.112908	3000
## beta[2,88]	65.074183	88.184607	1.098687	3000
## beta[3,88]	42.403705	67.769917	1.113926	850
## beta[4,88]	72.970172	97.475984	1.101436	1700
## beta[5,88]	36.940618	60.309538	1.085311	3000
## beta[6,88]	64.934405	88.519206	1.103648	3000
## beta[7,88]	44.088547	67.202803	1.090278	2900
## beta[8,88]	50.006630	54.707998	1.108537	40
## beta[9,88]	55.299872	74.419207	1.125244	49
## beta[10,88]	35.450578	56.486055	1.097147	3000
## beta[11,88]	49.906357	56.014810	1.200638	18
## beta[12,88]	74.779363	97.139183	1.091276	3000
## beta[13,88]	36.287338	58.779831	1.099817	3000
## beta[1,89]	64.519492	86.508526	1.112168	3000
## beta[2,89]	65.142377	88.392121	1.096155	3000
## beta[3,89]	42.376870	67.311473	1.114249	770
## beta[4,89]	72.999202	97.156912	1.100856	2000
## beta[5,89]	36.907735	60.600105	1.084742	3000
## beta[6,89]	65.012612	88.359945	1.103178	3000
## beta[7,89]	44.309607	66.394773	1.092097	3000
## beta[8,89]	49.945281	54.474855	1.105053	41
## beta[9,89]	55.608370	74.833353	1.124697	50
## beta[10,89]	35.406060	56.611651	1.096780	3000

## beta[11,89]	49.904299	55.237011	1.202887	18
## beta[12,89]	74.960156	97.602479	1.091055	3000
## beta[13,89]	36.550074	58.666754	1.100913	3000
## beta[1,90]	64.605387	87.025442	1.111382	3000
## beta[2,90]	65.024718	88.306656	1.097131	3000
## beta[3,90]	42.370151	67.550584	1.114964	920
## beta[4,90]	73.148631	97.315084	1.100591	2000
## beta[5,90]	36.846018	60.441714	1.086260	3000
## beta[6,90]	64.933870	88.382582	1.104235	3000
## beta[7,90]	44.337581	66.891963	1.093575	3000
## beta[8,90]	49.991404	54.809547	1.103426	41
## beta[9,90]	55.546654	74.673209	1.125864	49
## beta[10,90]	35.565313	57.344588	1.097092	3000
## beta[11,90]	49.759861	54.545550	1.210317	17
## beta[12,90]	74.857477	97.699939	1.091330	3000
## beta[13,90]	36.516976	58.962556	1.101230	3000
## beta[1,91]	64.653549	87.079811	1.110011	3000
## beta[2,91]	65.218284	88.149971	1.097797	3000
## beta[3,91]	42.474136	68.488022	1.116853	970
## beta[4,91]	73.253582	97.497651	1.099793	1800
## beta[5,91]	36.834942	61.019326	1.085393	3000
## beta[6,91]	64.998429	88.540321	1.104192	3000
## beta[7,91]	44.363122	67.046431	1.094932	3000
## beta[8,91]	49.944238	54.803213	1.101701	42
## beta[9,91]	55.555696	75.005149	1.124680	50
## beta[10,91]	35.624074	57.249462	1.097935	3000
## beta[11,91]	49.868209	54.704423	1.206037	18
## beta[12,91]	74.849201	98.653165	1.090485	3000
## beta[13,91]	36.462881	59.404653	1.100836	3000
## beta[1,92]	64.738788	86.565171	1.110356	3000
## beta[2,92]	65.211395	88.213779	1.100202	3000
## beta[3,92]	42.469594	68.794601	1.118043	930
## beta[4,92]	73.274726	97.947839	1.100880	2000
## beta[5,92]	37.041955	60.589752	1.083728	3000
## beta[6,92]	65.110923	89.323443	1.104601	3000
## beta[7,92]	44.419077	67.230771	1.092802	3000
## beta[8,92]	50.018784	54.799448	1.100811	43
## beta[9,92]	55.585117	75.688881	1.124929	51
## beta[10,92]	35.501445	58.776704	1.097673	3000
## beta[11,92]	49.983546	55.166417	1.208453	17
## beta[12,92]	75.051992	98.438777	1.091190	3000
## beta[13,92]	36.527692	59.175457	1.100031	2800
## beta[1,93]	64.748574	87.859738	1.111411	3000
## beta[2,93]	65.274288	89.019961	1.098759	3000
## beta[3,93]	42.595534	69.177613	1.117625	840
## beta[4,93]	73.103041	98.075588	1.101917	2000
## beta[5,93]	37.016245	60.977175	1.084296	3000
## beta[6,93]	65.180141	88.748184	1.103743	3000
## beta[7,93]	44.359887	67.443064	1.093079	3000
## beta[8,93]	50.085215	54.953121	1.096442	47
## beta[9,93]	55.577291	75.260830	1.124490	54
## beta[10,93]	35.556103	58.729657	1.096329	3000

## beta[11,93]	50.033931	55.259214	1.209482	17
## beta[12,93]	75.065269	98.824786	1.090705	3000
## beta[13,93]	36.650412	59.465303	1.102373	2800
## beta[1,94]	64.736034	87.514468	1.108496	3000
## beta[2,94]	65.316477	88.909074	1.095810	3000
## beta[3,94]	42.699590	68.277224	1.117096	860
## beta[4,94]	73.239040	97.799708	1.102710	1900
## beta[5,94]	37.238677	61.279563	1.084939	3000
## beta[6,94]	65.111278	88.864566	1.102396	3000
## beta[7,94]	44.249181	67.682480	1.093302	3000
## beta[8,94]	50.068285	55.041498	1.094550	49
## beta[9,94]	55.759794	75.022243	1.123334	56
## beta[10,94]	35.518789	58.056595	1.096742	3000
## beta[11,94]	50.156108	55.564992	1.207349	18
## beta[12,94]	75.096497	99.272416	1.090663	3000
## beta[13,94]	36.631452	59.035740	1.102528	3000
## beta[1,95]	64.836388	87.631161	1.108132	3000
## beta[2,95]	65.386571	89.370345	1.098143	3000
## beta[3,95]	42.738264	67.557621	1.116835	840
## beta[4,95]	73.360401	98.114346	1.104064	2200
## beta[5,95]	37.356610	61.808388	1.087435	3000
## beta[6,95]	65.040371	88.359082	1.102329	3000
## beta[7,95]	44.445920	68.122932	1.093096	3000
## beta[8,95]	50.144388	54.968705	1.093683	56
## beta[9,95]	55.809895	75.346613	1.122707	59
## beta[10,95]	35.603792	58.101443	1.096387	3000
## beta[11,95]	50.267358	55.801208	1.204590	18
## beta[12,95]	75.206768	98.965252	1.089064	3000
## beta[13,95]	36.638729	59.564176	1.101599	3000
## beta[1,96]	64.772479	88.063465	1.110402	3000
## beta[2,96]	65.513695	89.960092	1.098213	3000
## beta[3,96]	42.757319	67.878356	1.116060	880
## beta[4,96]	73.355297	98.781810	1.103659	1900
## beta[5,96]	37.170376	62.037761	1.087208	3000
## beta[6,96]	65.024218	88.557202	1.101303	3000
## beta[7,96]	44.551171	68.156196	1.093260	3000
## beta[8,96]	50.155122	55.092858	1.091164	63
## beta[9,96]	55.691815	75.509600	1.122255	60
## beta[10,96]	35.555311	58.211732	1.094907	3000
## beta[11,96]	50.307579	55.753835	1.207539	17
## beta[12,96]	75.160407	99.261886	1.088516	3000
## beta[13,96]	36.707700	59.102963	1.101793	3000
## beta[1,97]	64.738576	87.708792	1.109517	3000
## beta[2,97]	65.535971	89.977041	1.097763	3000
## beta[3,97]	42.793129	68.574365	1.116377	840
## beta[4,97]	73.419591	98.338374	1.104393	1500
## beta[5,97]	37.265291	62.221399	1.088996	2900
## beta[6,97]	64.966142	87.842365	1.102334	3000
## beta[7,97]	44.471446	68.382226	1.094035	3000
## beta[8,97]	50.158275	54.741156	1.086525	72
## beta[9,97]	55.819074	75.102741	1.123037	61
## beta[10,97]	35.565072	58.307552	1.095032	3000

## beta[11,97]	50.359651	55.833838	1.210660	17
## beta[12,97]	75.181145	99.224588	1.088797	3000
## beta[13,97]	36.742540	59.006927	1.099696	3000
## beta[1,98]	64.914084	88.065125	1.109887	3000
## beta[2,98]	65.726139	90.159595	1.098727	3000
## beta[3,98]	42.736683	68.163572	1.115665	910
## beta[4,98]	73.525011	98.268650	1.105289	1700
## beta[5,98]	37.404920	61.977819	1.091929	2800
## beta[6,98]	65.105387	88.659861	1.100589	3000
## beta[7,98]	44.456952	67.969882	1.094893	3000
## beta[8,98]	50.337903	55.251722	1.088215	78
## beta[9,98]	55.773390	75.378349	1.119163	63
## beta[10,98]	35.560260	58.381403	1.094995	3000
## beta[11,98]	50.456158	56.209231	1.220630	16
## beta[12,98]	75.159940	99.154203	1.088160	3000
## beta[13,98]	36.736980	59.415597	1.100119	3000
## beta[1,99]	64.878050	89.147595	1.111352	3000
## beta[2,99]	65.566253	90.238250	1.097783	3000
## beta[3,99]	42.705725	69.284636	1.115942	830
## beta[4,99]	73.639127	98.283254	1.106939	1700
## beta[5,99]	37.557793	61.902421	1.095961	2700
## beta[6,99]	65.069471	88.766827	1.099900	3000
## beta[7,99]	44.401832	69.052431	1.093948	3000
## beta[8,99]	50.423651	55.815799	1.091490	87
## beta[9,99]	56.001099	75.477932	1.119055	63
## beta[10,99]	35.500734	58.993668	1.095967	3000
## beta[11,99]	50.591279	56.146041	1.223070	16
## beta[12,99]	75.355987	99.758196	1.088081	3000
## beta[13,99]	36.793930	60.071933	1.100681	3000
## beta[1,100]	64.855797	89.026205	1.113586	3000
## beta[2,100]	65.547850	91.052187	1.098345	3000
## beta[3,100]	42.812136	69.327556	1.114118	990
## beta[4,100]	73.708653	98.773128	1.107388	1400
## beta[5,100]	37.666225	62.431481	1.095824	2700
## beta[6,100]	65.242786	89.412444	1.098752	3000
## beta[7,100]	44.459412	68.988919	1.094613	3000
## beta[8,100]	50.543362	56.229272	1.091682	96
## beta[9,100]	55.697206	75.294324	1.117031	64
## beta[10,100]	35.498756	59.131644	1.094902	3000
## beta[11,100]	50.570553	56.538364	1.229426	16
## beta[12,100]	75.287742	99.836571	1.088030	3000
## beta[13,100]	36.873631	60.599818	1.101496	3000
## beta[1,101]	64.844231	89.306480	1.113356	3000
## beta[2,101]	65.637309	91.317838	1.098043	3000
## beta[3,101]	42.639631	68.904759	1.113030	1100
## beta[4,101]	73.762030	98.391202	1.107118	1800
## beta[5,101]	37.585291	62.434975	1.094510	2700
## beta[6,101]	65.142486	89.093957	1.098978	3000
## beta[7,101]	44.460350	69.202068	1.094746	3000
## beta[8,101]	50.713249	57.044382	1.091498	110
## beta[9,101]	55.634138	75.561908	1.114263	69
## beta[10,101]	35.673774	58.578592	1.094986	2600

## beta[11,101]	50.614767	56.554404	1.229551	16
## beta[12,101]	75.356357	100.067515	1.088352	3000
## beta[13,101]	36.874828	60.370076	1.101047	3000
## beta[1,102]	64.925535	89.117030	1.115856	3000
## beta[2,102]	65.756376	91.098138	1.096739	3000
## beta[3,102]	42.699588	69.210490	1.112817	1200
## beta[4,102]	73.819538	98.265397	1.105146	2200
## beta[5,102]	37.617978	62.510389	1.094734	3000
## beta[6,102]	65.203705	90.078939	1.097125	3000
## beta[7,102]	44.472790	69.468690	1.094434	3000
## beta[8,102]	50.762678	57.142700	1.092160	130
## beta[9,102]	55.573431	75.467155	1.113792	71
## beta[10,102]	35.738082	59.038375	1.093752	2100
## beta[11,102]	50.620196	56.656813	1.228218	17
## beta[12,102]	75.291556	99.865979	1.088348	3000
## beta[13,102]	36.811113	61.134376	1.100841	3000
## beta[1,103]	64.959583	89.328765	1.117463	3000
## beta[2,103]	65.826689	91.565093	1.097654	3000
## beta[3,103]	42.867093	69.054668	1.113373	1100
## beta[4,103]	73.752873	98.364621	1.104075	2200
## beta[5,103]	37.741817	63.396573	1.098970	3000
## beta[6,103]	65.169110	89.785004	1.097791	3000
## beta[7,103]	44.489820	69.719509	1.093815	3000
## beta[8,103]	50.834861	57.823683	1.097276	140
## beta[9,103]	55.614290	76.523458	1.115227	70
## beta[10,103]	35.788719	59.025516	1.094052	2400
## beta[11,103]	50.545297	56.700244	1.227405	17
## beta[12,103]	75.225864	100.122615	1.088342	3000
## beta[13,103]	37.002618	60.704431	1.100352	3000
## beta[1,104]	65.024369	90.038070	1.119053	3000
## beta[2,104]	65.932595	91.372763	1.098990	3000
## beta[3,104]	43.050052	68.880497	1.112102	1200
## beta[4,104]	73.716989	98.581485	1.104207	2200
## beta[5,104]	37.698698	63.238677	1.097379	3000
## beta[6,104]	65.291485	90.022006	1.097162	3000
## beta[7,104]	44.505184	71.417893	1.094875	3000
## beta[8,104]	50.927929	58.037955	1.095408	150
## beta[9,104]	55.757699	76.376971	1.115161	71
## beta[10,104]	35.906108	59.131230	1.093676	2400
## beta[11,104]	50.603947	56.747213	1.222175	17
## beta[12,104]	75.251898	99.586788	1.088701	3000
## beta[13,104]	36.824128	61.354466	1.099439	3000
## beta[1,105]	65.055301	91.401876	1.119987	3000
## beta[2,105]	65.892239	92.355080	1.098927	3000
## beta[3,105]	42.982424	68.925238	1.111419	1100
## beta[4,105]	73.945921	98.466239	1.106053	2400
## beta[5,105]	37.524554	63.726685	1.095163	3000
## beta[6,105]	65.355902	89.021862	1.098456	3000
## beta[7,105]	44.341498	70.386569	1.094646	3000
## beta[8,105]	50.970562	58.377534	1.102117	160
## beta[9,105]	55.831420	76.120228	1.115495	71
## beta[10,105]	35.868832	59.317289	1.093021	2500

## beta[11,105]	50.574388	57.072574	1.220645	18
## beta[12,105]	75.231416	99.943065	1.088782	3000
## beta[13,105]	37.022587	61.282308	1.098690	3000
## beta[1,106]	65.094729	90.523098	1.119817	3000
## beta[2,106]	65.936120	92.130398	1.100307	3000
## beta[3,106]	43.178764	69.605806	1.112603	1000
## beta[4,106]	73.864123	99.538277	1.107023	2300
## beta[5,106]	37.600700	63.378785	1.098720	3000
## beta[6,106]	65.396846	90.362644	1.097894	3000
## beta[7,106]	44.604860	70.075741	1.094291	2800
## beta[8,106]	51.135310	58.794730	1.123108	200
## beta[9,106]	55.904947	76.460347	1.113651	73
## beta[10,106]	35.873840	59.269382	1.092657	2100
## beta[11,106]	50.693862	57.062207	1.220463	18
## beta[12,106]	75.484377	99.770044	1.087918	3000
## beta[13,106]	37.081050	61.912249	1.098948	3000
## beta[1,107]	65.142692	90.104349	1.119286	3000
## beta[2,107]	65.952257	91.781373	1.101960	3000
## beta[3,107]	43.133374	68.865694	1.113430	1100
## beta[4,107]	73.856865	98.903184	1.107651	2400
## beta[5,107]	37.874448	63.784903	1.096855	3000
## beta[6,107]	65.364332	91.128825	1.096875	3000
## beta[7,107]	44.559610	71.139246	1.094259	2600
## beta[8,107]	51.256744	59.568449	1.095657	220
## beta[9,107]	56.107381	76.383584	1.114078	74
## beta[10,107]	35.975129	60.155940	1.093495	2300
## beta[11,107]	50.789609	56.963134	1.217322	18
## beta[12,107]	75.474902	99.641203	1.090191	3000
## beta[13,107]	37.020158	61.660106	1.098786	3000
## beta[1,108]	65.187383	90.849436	1.118121	3000
## beta[2,108]	65.985007	92.331898	1.102564	3000
## beta[3,108]	43.080137	69.764514	1.113554	1000
## beta[4,108]	73.867306	98.880791	1.106532	2200
## beta[5,108]	37.822424	63.992782	1.094511	3000
## beta[6,108]	65.279940	90.777014	1.096243	3000
## beta[7,108]	44.546968	71.870207	1.093873	2300
## beta[8,108]	51.238872	59.373725	1.096269	200
## beta[9,108]	56.096035	76.848945	1.114419	74
## beta[10,108]	36.058811	60.396572	1.094889	2900
## beta[11,108]	50.711664	57.158629	1.213341	19
## beta[12,108]	75.446463	100.019358	1.090552	3000
## beta[13,108]	37.087867	61.679571	1.098919	3000
## beta[1,109]	65.199870	90.848784	1.116793	3000
## beta[2,109]	65.963266	91.909942	1.101983	3000
## beta[3,109]	43.188445	69.574413	1.113041	960
## beta[4,109]	74.024660	99.044158	1.106620	2300
## beta[5,109]	37.787174	64.639333	1.096205	2900
## beta[6,109]	65.391933	90.777817	1.096998	3000
## beta[7,109]	44.501041	71.547239	1.093027	2500
## beta[8,109]	51.334955	59.560235	1.146191	230
## beta[9,109]	56.005473	77.459559	1.114568	72
## beta[10,109]	36.110837	59.461746	1.095077	2600

## beta[11,109]	50.816430	57.025462	1.206137	19
## beta[12,109]	75.460313	99.654569	1.092175	3000
## beta[13,109]	37.023067	62.172336	1.099872	3000
## beta[1,110]	65.239968	90.609463	1.117675	3000
## beta[2,110]	66.212063	92.569710	1.102962	3000
## beta[3,110]	43.131199	69.652404	1.113150	930
## beta[4,110]	73.920089	98.904479	1.106786	2100
## beta[5,110]	37.825064	63.127376	1.098564	3000
## beta[6,110]	65.440026	91.234244	1.098256	3000
## beta[7,110]	44.495448	71.745790	1.093926	2300
## beta[8,110]	51.474636	59.883539	1.096351	240
## beta[9,110]	56.026417	76.941123	1.113002	73
## beta[10,110]	36.023906	59.530251	1.094188	2600
## beta[11,110]	50.756065	56.810279	1.200741	20
## beta[12,110]	75.455921	101.050474	1.093315	3000
## beta[13,110]	36.905386	61.936053	1.100797	3000
## beta[1,111]	65.319426	91.233327	1.118303	3000
## beta[2,111]	66.187118	92.300253	1.102289	3000
## beta[3,111]	43.125784	69.400622	1.111646	1300
## beta[4,111]	74.051609	99.719814	1.107365	2100
## beta[5,111]	37.751708	64.086389	1.099035	3000
## beta[6,111]	65.445346	90.562325	1.098496	3000
## beta[7,111]	44.508803	71.807272	1.094950	2900
## beta[8,111]	51.452062	59.857590	1.096239	240
## beta[9,111]	56.142675	77.137463	1.112879	74
## beta[10,111]	35.776539	60.299285	1.095928	2800
## beta[11,111]	50.832891	56.791706	1.199850	20
## beta[12,111]	75.506170	100.596558	1.093645	3000
## beta[13,111]	36.968553	61.755255	1.103218	3000
## beta[1,112]	65.336344	90.577494	1.117081	3000
## beta[2,112]	66.008811	92.695369	1.101231	3000
## beta[3,112]	42.970375	70.007357	1.112685	1200
## beta[4,112]	74.009234	100.222911	1.108265	2300
## beta[5,112]	37.881226	63.032831	1.103152	3000
## beta[6,112]	65.467855	91.308534	1.098193	3000
## beta[7,112]	44.561235	72.499084	1.096644	3000
## beta[8,112]	51.556427	60.361278	1.095816	270
## beta[9,112]	56.183517	77.500670	1.113284	77
## beta[10,112]	35.864775	59.783853	1.095505	2300
## beta[11,112]	50.708048	56.877441	1.194271	21
## beta[12,112]	75.594758	100.815146	1.093985	3000
## beta[13,112]	36.932602	62.138620	1.103249	3000
## beta[1,113]	65.314246	91.472426	1.117779	3000
## beta[2,113]	66.047744	92.201276	1.100320	3000
## beta[3,113]	42.881479	70.483131	1.112890	1200
## beta[4,113]	74.085573	100.069040	1.107490	2200
## beta[5,113]	37.668476	63.311154	1.102137	3000
## beta[6,113]	65.540615	91.282050	1.098860	3000
## beta[7,113]	44.679879	72.800092	1.098211	2500
## beta[8,113]	51.544210	60.752258	1.136826	240
## beta[9,113]	56.224486	77.396961	1.112402	78
## beta[10,113]	35.897012	60.306090	1.096408	2700

## beta[11,113]	50.600415	56.775413	1.194644	21
## beta[12,113]	75.567123	100.506048	1.094369	3000
## beta[13,113]	37.027453	61.655171	1.104171	3000
## beta[1,114]	65.279216	90.792900	1.117635	3000
## beta[2,114]	66.013685	92.592575	1.099870	3000
## beta[3,114]	43.009002	71.004690	1.112701	1200
## beta[4,114]	74.086384	100.311589	1.108675	2100
## beta[5,114]	37.826385	64.094180	1.103591	3000
## beta[6,114]	65.581248	91.301716	1.099953	3000
## beta[7,114]	44.650658	72.526767	1.096943	2700
## beta[8,114]	51.716152	62.125410	1.146079	270
## beta[9,114]	56.233052	77.534027	1.111115	81
## beta[10,114]	36.016986	59.873379	1.097587	3000
## beta[11,114]	50.600911	56.631079	1.191233	21
## beta[12,114]	75.634715	100.720395	1.093868	3000
## beta[13,114]	37.150994	61.734911	1.104645	3000
## beta[1,115]	65.347475	90.919361	1.116836	3000
## beta[2,115]	66.141994	93.410377	1.100146	3000
## beta[3,115]	42.969744	70.869696	1.113027	1200
## beta[4,115]	74.291203	100.386296	1.107573	2400
## beta[5,115]	37.793908	64.529868	1.102845	3000
## beta[6,115]	65.421034	90.781675	1.098280	3000
## beta[7,115]	44.844834	72.553018	1.096834	2500
## beta[8,115]	51.802034	62.324705	1.138840	280
## beta[9,115]	56.455782	77.487928	1.111278	81
## beta[10,115]	36.181838	60.506202	1.098880	3000
## beta[11,115]	50.487035	56.318053	1.177377	24
## beta[12,115]	75.802941	101.520492	1.093269	3000
## beta[13,115]	37.119284	61.604019	1.104976	3000
## deviance	50.380605	57.838686	1.131470	28
## p[1]	51.053064	56.910574	1.584353	7
## p[2]	50.299162	55.689562	1.114826	47
## p[3]	52.322540	57.793415	1.515201	7
## p[4]	49.863467	56.179212	1.098403	550
## p[5]	52.331930	60.665107	1.438388	9
## p[6]	49.759861	54.545550	1.210317	17
## p[7]	50.158275	54.741156	1.086525	72
## p[8]	50.487035	56.318053	1.177377	24
## sigma2_beta[1]	2.488040	9.811024	2.481936	4
## sigma2_beta[2]	2.485968	9.154619	2.465340	4
## sigma2_beta[3]	2.450238	9.785534	2.460970	4
## sigma2_beta[4]	2.479119	9.827270	2.444970	4
## sigma2_beta[5]	2.464541	9.399325	2.440760	4
## sigma2_beta[6]	2.465464	9.610445	2.468404	4
## sigma2_beta[7]	2.433388	9.488029	2.454623	4
## sigma2_beta[8]	2.387604	9.502068	2.509040	4
## sigma2_beta[9]	2.498810	9.629270	2.478104	4
## sigma2_beta[10]	2.483451	9.668897	2.448863	4
## sigma2_beta[11]	2.385529	9.060829	2.569191	4
## sigma2_beta[12]	2.454827	9.788253	2.448704	4
## sigma2_beta[13]	2.530328	9.407093	2.462033	4
## sigma2_y[1]	44.853164	98.700218	1.070929	51


```
## sigma2_y[2]      44.054800 100.172850 1.069514    51
## sigma2_y[3]      45.427169  97.711550 1.072118    47
## sigma2_y[4]      44.213476  97.786865 1.073954    45
## sigma2_y[5]      44.453333  98.689607 1.062417    50
## sigma2_y[6]      45.499017  99.768413 1.067538    49
## sigma2_y[7]      45.140750 100.398992 1.071511    47
## sigma2_y[8]      43.218845  94.702051 1.068553    49
## sigma2_y[9]      45.334158  97.735543 1.078915    42
## sigma2_y[10]     44.546839  99.966396 1.070961    47
## sigma2_y[11]     43.206337  95.332058 1.074840    45
## sigma2_y[12]     45.098484  98.692937 1.066710    50
## sigma2_y[13]     45.937245 101.658292 1.068750    51
```

insert interim report model here

We fit the voter turnout model from the Interim Report on the 2020 registered voter dataset. The predicted values were the number of people that will vote for each demographic subgroup in each congressional district. We made a reasonable assumption that if someone is registered as a Democrat, that they will indeed vote for the Democratic candidate (and made the same assumption for registered Republicans). If the demographic subgroup had third/unaffiliated party, then we split their predicted number of voters evenly between the Democrat and Republican parties. From this, we calculated Democratic party vote share for each district by taking the ratio of the predicted number of Democratic voters to total number of registered voters in that district.

Appendix B

Appendix C

Traceplots for Presidential Model

```
# change N_states to be pres specific
betas_day_of_election = sapply(1:N_states, function(i) {paste0("theta.", i, ".1.")} )
parameters = c(betas_day_of_election)

tp_vars = data.frame(jags_sims_mv$BUGSoutput$sims.matrix)[,parameters]

tps <- function(var){
  ggplot(tp_vars, aes_(y=as.name(var), x=seq(1,nrow(tp_vars)))) +
    geom_line() +
    labs(x="Iterations", y = as.name(var))
}

all_beta_trace = lapply(names(tp_vars), tps)
do.call(grid.arrange, all_beta_trace)
```

Traceplots for Senate Model

```
# CHANGE STATES TO BE SENATE SPECIFIC
betas_day_of_election = sapply(1:N_states, function(i) {paste0("beta.", i, ".1.")} )
parameters = c(betas_day_of_election)

tp_vars = data.frame(jags_sims$BUGSoutput$sims.matrix)[,parameters]
```

```
tps <- function(var){
  ggplot(tp_vars, aes_(y=as.name(var), x=seq(1,nrow(tp_vars)))) +
    geom_line() +
    labs(x = "Iterations", y = as.name(var))
}

all_beta_trace = lapply(names(tp_vars), tps)
do.call(grid.arrange, all_beta_trace)
```

Traceplots for House Model

```
# CHANGE TO BE HOUSE SPECIFIC, IT WOULD BE DISTRICTS
betas_day_of_election = sapply(1:N_states, function(i) {paste0("theta.", i, ".1.")} )
parameters = c(betas_day_of_election)

tp_vars = data.frame(jags_sims_house$BUGSoutput$sims.matrix)[,parameters]

tps <- function(var){
  ggplot(tp_vars, aes_(y=as.name(var), x=seq(1,nrow(tp_vars)))) +
    geom_line() +
    labs(x = "Iterations", y = as.name(var))
}

all_beta_trace = lapply(names(tp_vars), tps)
do.call(grid.arrange, all_beta_trace)
```

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