

Introduction to Applied Bayesian Modeling for the Social Sciences

ICPSR 2012 HW3

Write code for and run a linear model in WinBUGS or JAGS using the data file `elec.txt` located in `z:/bakker/app.bayes.2011`.

The outcome variable is `vote`, the vote share for the incumbent party in 15 U.S. presidential elections. The explanatory variables are `gnp`, the change in GNP from the previous year, and `approval`, the approval rate of the incumbent in July of the election year. (You can consider the data points independent of each other.)

The data are already in WinBUGS format. Users of R2Jags and R2WinBUGS can just open the file, and define a data object with the content of the file:

```
> elec.dat <- list(vote = c(57.1, 16.8, [...])
```

This should give you the data in a format that both packages can read.

Play around with different priors for the betas and compare/contrast the different results.

If differing priors lead to different results, discuss why this is the case.

Have fun!