Applied Bayesian Analysis : NCSU ST 540

Midterm2

 $Bruce\ Campbell$

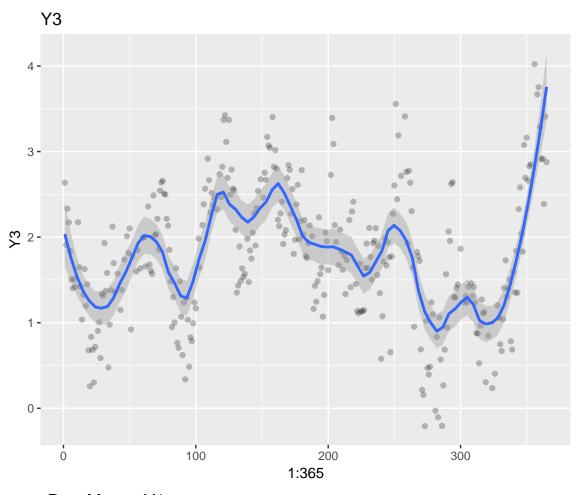
This section is a test section where we generate and fit a vector autoregressive model - $VAR(1) \in \mathbf{R}^6$ given by

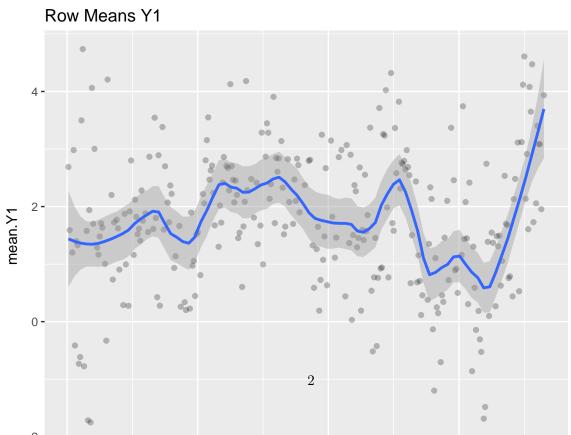
$$y_t = \nu + \rho * y_{t-1} + \epsilon$$

$$\epsilon \sim N(0, \Sigma)$$

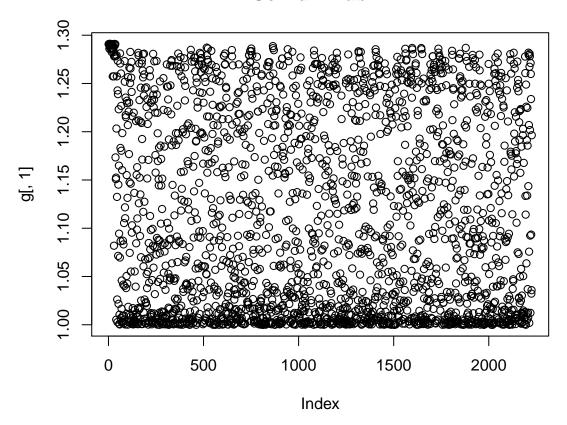
We use the y1 data to calculate a NaN firendly sample covariance and then we find the nearest positive semidefinite matrix to use to generate data for the model.

OPENBUGS MODEL

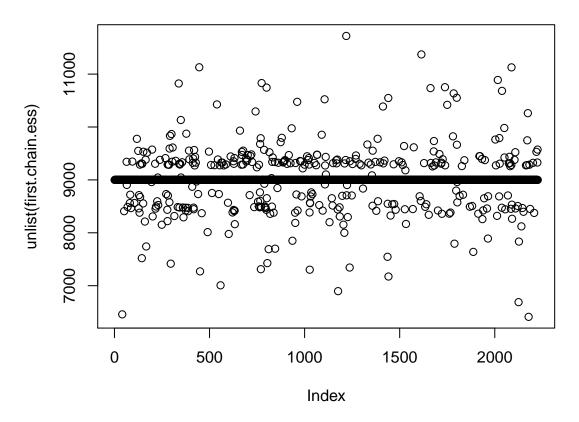




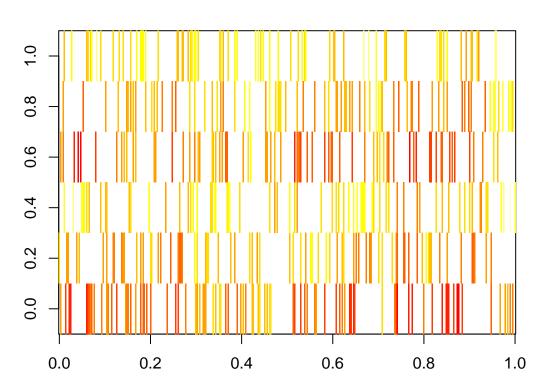
Gelman-Rubin



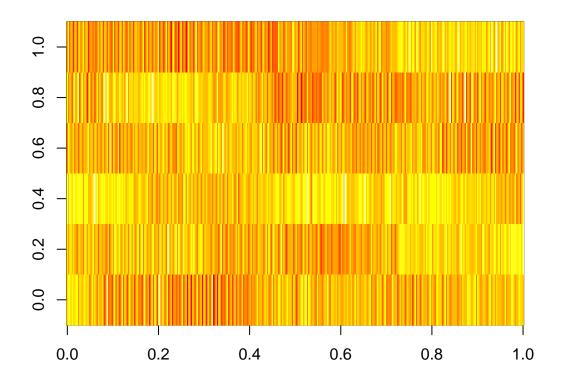
Effective Sample Size



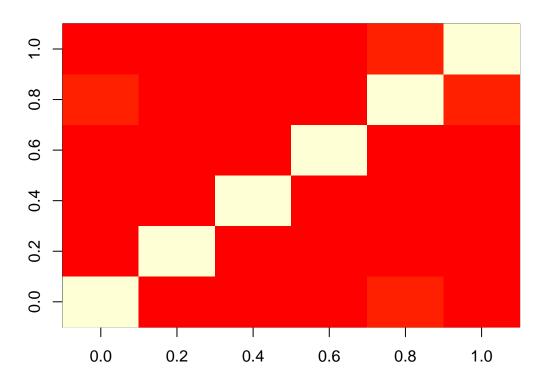




Imputed



MAP Sigma



cov of Y1

