R Program to Run RtoWINBUGS – This version reads the data from a text file on disk

# Attempt to Run simple Probit Copying Ernesto’s Code

library(arm)
setwd("C:/calvo")

# Read in data from STATA output

rcx.file <- "c:/calvo/h106_data.txt"

# X[,1] = 1 if bush vote >= 50%
# X[,2] = 1 if Gore vote >= 50%
# X[,3] = Bush Percentage in CD
# X[,4] = Gore Percentage in CD
# X[,5] = Black Percentage in CD
# X[,6] = 1 if Southern State (11 states of Confederacy + OK + KY
# X[,7] = Hispanic Percentage in CD
# X[,8] = Median Family Income (in thousands) in CD
# X[,9] = Percent Owner-Occupied Housing
# X[,10] = DW-NOMINATE 1st Dimension
# X[,11] = DW-NOMINATE 2nd Dimension

# Standard fields and their widths

rcx.fields <- c("ybush","ygore","bushvote","gorevote","black","south","hispanic","income","owner","dwnom1n","dwnom2n")
rcx.fieldWidths <- c(9,11,10,10,11,10,11,11,11,11,11)

# Input File

TT <- read.fwf(file=rcx.file,widths=rcx.fieldWidths,as.is=TRUE,col.names=rcx.fields)
dim(TT)
nrow <- length(TT[,1])
ncol <- length(TT[1,])
data = read.dta("hdmg106_2009_fixed.dta")
attach(data)

V <- cbind(TT[,1],TT[,5],TT[,6],TT[,7],TT[,8],TT[,9],TT[,10],TT[,11])

N = nrow
K = ncol(V)

data.data = list(N=N,K=K,V=V)
data.inits = function() {list(beta=runif(K,-2,2), delta=runif(N,-1,1))}
data.parameters = c("beta")

wide.sim = bugs(data.data, data.inits, data.parameters,"h106_probit_RtoWINBUGS_model.txt", n.chains=4, n.thin=1, n.burnin=15000,n.iter=40000, debug=T)
detach(data)
Log File From R2WINBUGS

display(log)
check(C:/DOCUME~1/ADMINI~1/LOCALS~1/Temp/RtmpxqgeVs/h106_probit_RtoWINBUGS_model.txt)
model is syntactically correct
data(C:/DOCUME~1/ADMINI~1/LOCALS~1/Temp/RtmpxqgeVs/data.txt)
data loaded
compile(4)
model compiled
inits(1,C:/DOCUME~1/ADMINI~1/LOCALS~1/Temp/RtmpxqgeVs/inits1.txt)
chain initialized but other chain(s) contain uninitialized variables
inits(2,C:/DOCUME~1/ADMINI~1/LOCALS~1/Temp/RtmpxqgeVs/inits2.txt)
chain initialized but other chain(s) contain uninitialized variables
inits(3,C:/DOCUME~1/ADMINI~1/LOCALS~1/Temp/RtmpxqgeVs/inits3.txt)
chain initialized but other chain(s) contain uninitialized variables
inits(4,C:/DOCUME~1/ADMINI~1/LOCALS~1/Temp/RtmpxqgeVs/inits4.txt)
model is initialized

gen.inits()

command `Bugs:gen.inits cannot be executed (is greyed out)
thin.updater(1)
update(15000)
set(beta)
set(deviance)
dic.set()
update(25000)
coda(*,C:/DOCUME~1/ADMINI~1/LOCALS~1/Temp/RtmpxqgeVs/coda)
stats(*)

Node statistics
node  mean  sd  MC error 2.5% median 97.5% start sample
beta[1]  0.6577  0.8384 0.006402 -0.9619 0.6525 2.315 15001 100000
beta[2]  -0.01095  0.006821 4.995E-5 -0.02418 -0.011 0.002577 15001 100000
beta[3]   0.4028  0.2418 0.001864 -0.07036 0.4015 0.8802 15001 100000
beta[4]  -0.009434  0.006907 5.474E-5 -0.02418 -0.011 0.002577 15001 100000
beta[5]  -0.03236  0.01344 1.075E-4 -0.07036 -0.03236 -0.006079 15001 100000
beta[6]   0.004185  0.01096 8.175E-5 -0.0175 0.004249 0.0253 15001 100000
beta[7]   2.785  0.2339 0.001814 2.326 2.785 3.243 15001 100000
beta[8]   0.9214  0.2409 0.001887 0.4474 0.9223 1.393 15001 100000
deviance   239.8  14.72 0.04829 212.0 239.4 269.5 15001 100000

dic.stats()

DIC
Dbar = post.mean of -2logL; Dhat = -2LogL at post.mean of stochastic nodes
Dbar  Dhat  pD  DIC
V   217.913 131.096 86.817 304.729
total 239.793 150.333 89.460 329.252

history(*,C:/DOCUME~1/ADMINI~1/LOCALS~1/Temp/RtmpxqgeVs/history.odc)

History
save(C:/DOCUME~1/ADMINI~1/LOCALS~1/Temp/RtmpxqqeVs/log.odc)
save(C:/DOCUME~1/ADMINI~1/LOCALS~1/Temp/RtmpxqqeVs/log.txt)

Output Done While WINBUGS is Still Running