MCMC

MCMCで平均値の分布範囲を示します。注釈文が文字化けしています。折を見て修正します。

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| install.packages('MCMCpack')  #繝｢繝ｳ繝?繧ｫ繝ｫ繝ｭ繧ｷ繝溘Η繝ｬ繝ｼ繧ｷ繝ｧ繝ｳ縺ｫ繧医▲縺ｦ縲∵耳螳壹＆繧後ｋ蟷ｳ蝮?蛟､縺ｮ蛻?蟶?遽?蝗ｲ  library(MCMCpack)  LogPoisFun <- function(lambda, x) {  + ## Poisson distribution: p(x) = lambda^x exp(-lambda)/x!  + ifelse(lambda < 0, -Inf, # lambda must be non-negative  + # prior: dunif(0, 10^4)  + log(ifelse(lambda >= 0 & lambda < 10^4, 10^-4, 0)) +  + # likelihood  + sum(log(lambda^x \* exp(-lambda) / factorial(x))))  }  x <-Forcast  post21 <- MCMCmetrop1R(fun = LogPoisFun, theta.init = 1,  burnin = 2000, mcmc = 8000, thin = 20,  tune = 1.9, seed = 1117,  verbose = 1000, logfun = TRUE,  x = x)  post22 <- MCMCmetrop1R(fun = LogPoisFun, theta.init = 4,  burnin = 2000, mcmc = 8000, thin = 20,  tune = 1.9, seed = 1123,  verbose = 1000, logfun = TRUE,  x = x)  post23 <- MCMCmetrop1R(fun = LogPoisFun, theta.init = 8,  burnin = 2000, mcmc = 8000, thin = 20,  tune = 1.9, seed = 1129,  verbose = 1000, logfun = TRUE,  x = x)  post2 <- mcmc.list(post21, post22, post23)  summary(post2)  plot(post2, trace = TRUE, density = TRUE)  #蜿取據遒ｺ隱搾ｼ托ｼ趣ｼ台ｻ･荳九↑繧我ｸ闊ｬ逧?縺ｫ蜿取據縺ｨ蛻､譁ｭ  gelman.diag(post2)  #繝｢繝ｳ繝?繧ｫ繝ｫ繝ｭ繧ｷ繝溘Η繝ｬ繝ｼ繧ｷ繝ｧ繝ｳ縺ｫ繧医▲縺ｦ縲∝腰蝗槫ｸｰ縺ｮ蛻?迚?縺ｨ蛯ｾ縺阪?ｮ蛻?蟶?遽?蝗ｲ繧定ｨ育ｮ励☆繧九?  library(MCMCpack)  mdata<-Q247  #莉ｮ繝?繝ｼ繧ｿ縺ｮ菴懈?舌√％縺薙?ｮ繝?繝ｼ繧ｿ縺ｮ邨?縺ｿ遶九※繧呈悽蠖薙?ｮ繝?繝ｼ繧ｿ縺ｫ譖ｿ縺医※蛻?譫舌＆繧後※縺上□縺輔＞  y <-mdata[,1]  x1<-mdata[,2]  x2<-mdata[,3]  x3<-mdata[,4]  x4<-mdata[,5]  x5<-mdata[,6]  x <- matrix(c(x1,x2,x3,x4),ncol=4,nrow=945)  result3.sim <- MCMCregress(y~x, data = parent.frame(), burnin = 10000, mcmc = 100000)  plot(result3.sim)  raftery.diag(result3.sim)  summary(result3.sim) |