CALVO MODEL OF KING DATA

```
library(arm)
setwd("C:/calvo")
data = read.dta("kingengland.dta")
attach(data)

V <- cbind(v1,v2,v3,v4)
S <- cbind(s1,s2,s3,s4)

N = nrow(data)
K = ncol(V)

data.data = list(N=N,K=K, S=S, V=V)

data.inits = function() {list(bias=c(NA,0,0,0), rho=runif(N,2,4))}

data.parameters = c("rho","bias")

wide.sim = bugs(data.data, data.inits, data.parameters,"kingmlogcalvo_mod.txt", n.chains=2,
n.thin=1, n.burnin=15000,n.iter=20000, debug=T)
```

display(log)
check(C:/DOCUME~1/kpoole/LOCALS~1/Temp/RtmpDdfNtf/kingmlogcalvo_mod.txt)
model is syntactically correct
data(C:/DOCUME~1/kpoole/LOCALS~1/Temp/RtmpDdfNtf/data.txt)
data loaded
compile(2)
model compiled
inits(1,C:/DOCUME~1/kpoole/LOCALS~1/Temp/RtmpDdfNtf/inits1.txt)
expected a number or an NA
inits(2,C:/DOCUME~1/kpoole/LOCALS~1/Temp/RtmpDdfNtf/inits2.txt)
gen.inits()
initial values generated, model initialized
thin.updater(1)
update(15000)
set(rho)
set(bias)
set(deviance)
dic.set()
update(5000)
coda(*,C:/DOCUME~1/kpoole/LOCALS~1/Temp/RtmpDdfNtf/coda)
stats(*)

Node statistics

	node	mean	sd	MC error	2.5%	median	97.5%	start	sample
Labor	bias[2]	-0.0438	0.02516	7.886E-4	-0.09317	-0.04374	0.004599	15001	10000
Lib/All	bias[3]	-1.998	0.1208	0.006009	-2.233	-1.997	-1.761	15001	10000
Other	bias[4]	-0.4855	0.2225	0.01364	-0.9013	-0.4886	-0.02502	15001	10000
	deviance	240.2	2.877	0.1041	236.6	239.6	247.6	15001	10000
Repsonsive	rho	1.152	0.08894	0.005528	0.988	1.147	1.337	15001	10000

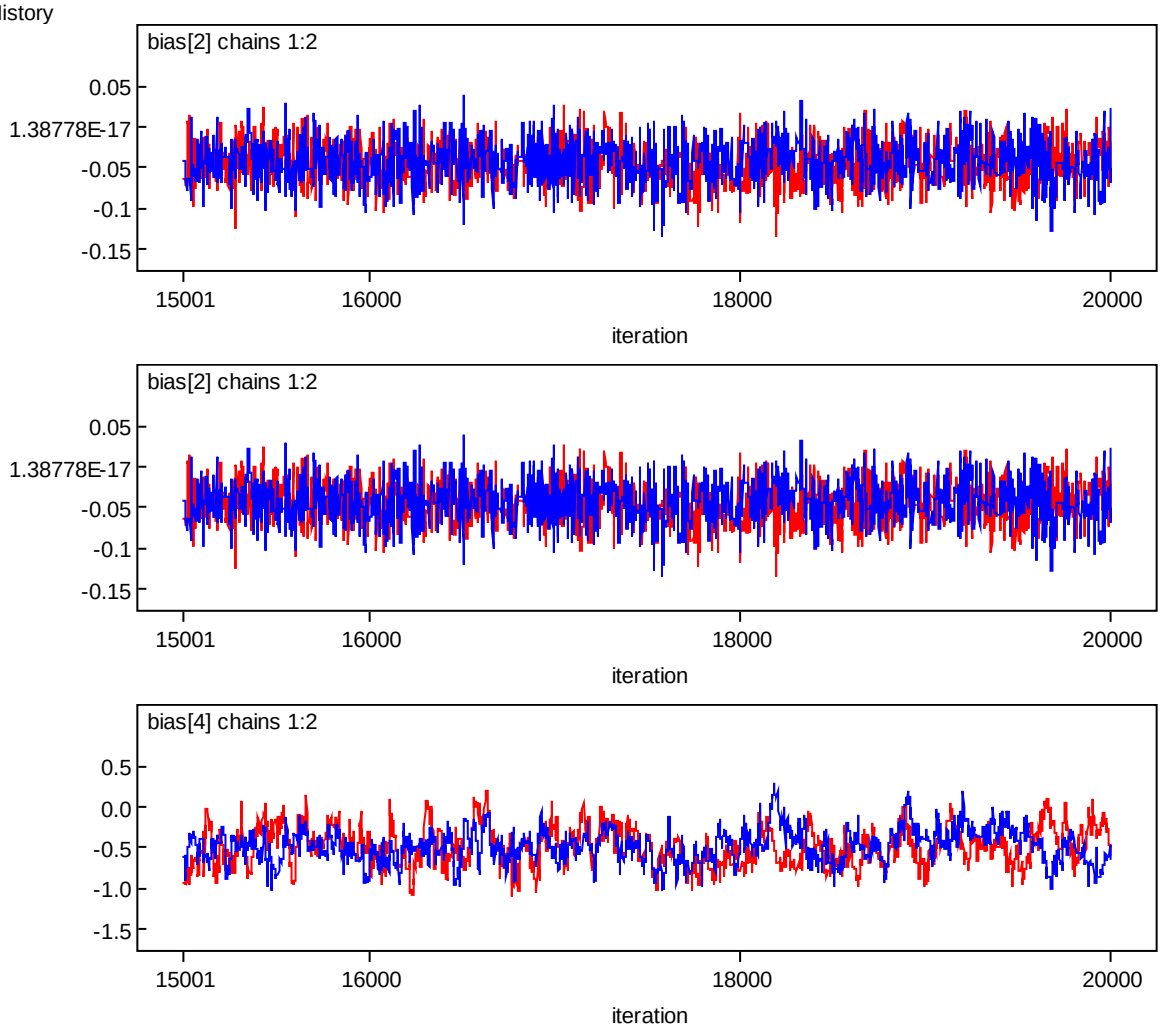
dic.stats()

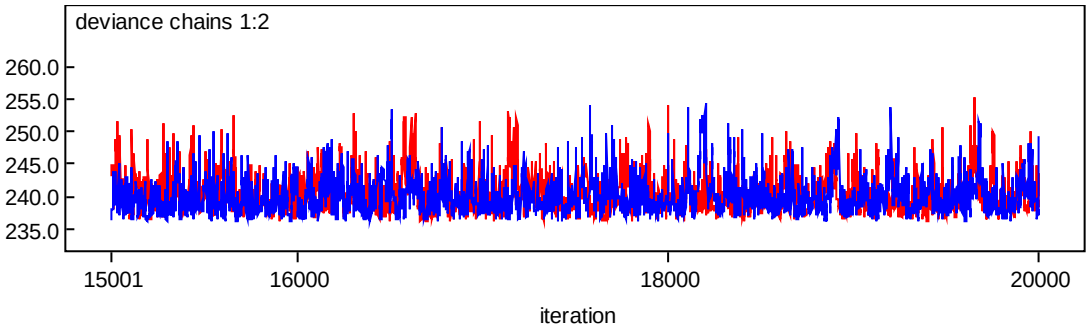
DIC
Dbar = post.mean of -2logL; Dhat = -2LogL at post.mean of stochastic nodes

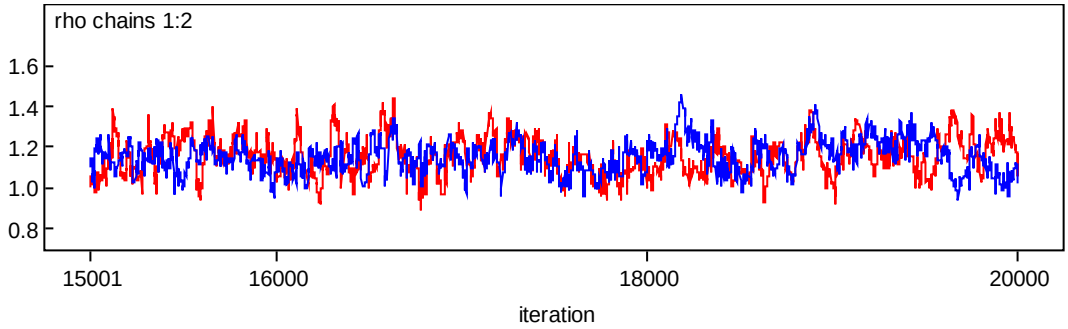
	Dbar	Dhat	pD	DIC
S	240.247	236.134	4.113	244.361
total	240.247	236.134	4.113	244.361

history(*,C:/DOCUME~1/kpoole/LOCALS~1/Temp/RtmpDdfNtf/history.odc)

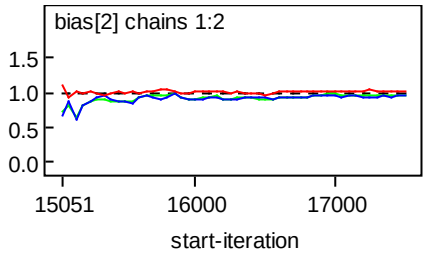
History

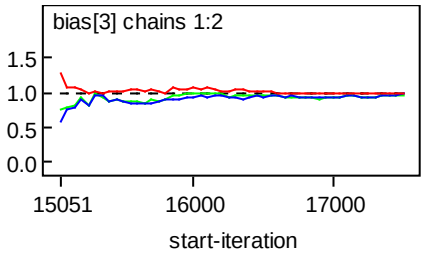

bias[2] chains 1:2
0.05
1.38778E-17
-0.05
-0.1
-0.15
15001
16000
18000
20000
iteration
bias[2] chains 1:2
0.05
1.38778E-17
-0.05
-0.1
-0.15
15001
16000
18000
20000
iteration
bias[4] chains 1:2
0.5
0.0
-0.5
-1.0
-1.5
15001
16000
18000
20000
iteration

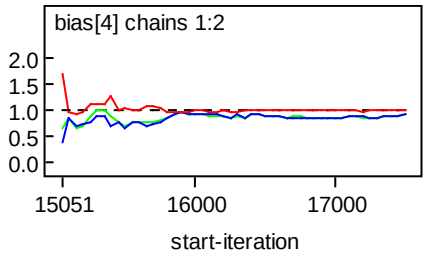


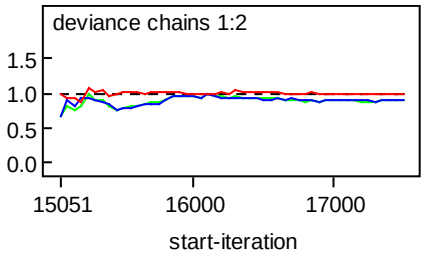


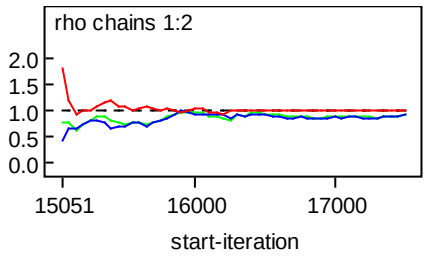
save(C:/DOCUME~1/kpoole/LOCALS~1/Temp/RtmpDdfNtf/log.odc)
save(C:/DOCUME~1/kpoole/LOCALS~1/Temp/RtmpDdfNtf/log.txt)

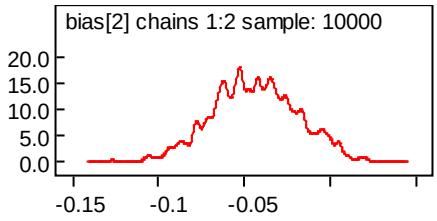


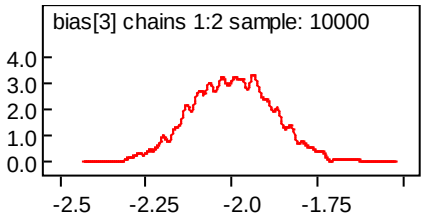


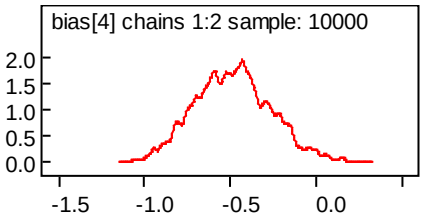


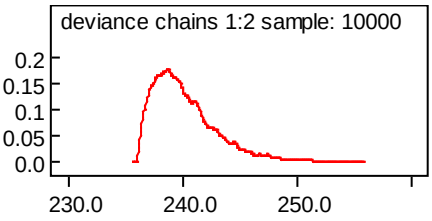


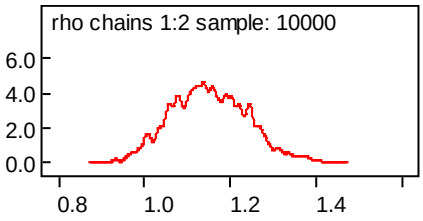



bias[2] chains 1:2 sample: 10000
20.0
15.0
10.0
5.0
0.0
-0.15
-0.1
-0.05


bias[3] chains 1:2 sample: 10000
4.0
3.0
2.0
1.0
0.0
-2.5
-2.25
-2.0
-1.75


bias[4] chains 1:2 sample: 10000
2.0
1.5
1.0
0.5
0.0
-1.5
-1.0
-0.5
0.0


deviance chains 1:2 sample: 10000
0.2
0.15
0.1
0.05
0.0
230.0
240.0
250.0


rho chains 1:2 sample: 10000
6.0
4.0
2.0
0.0
0.8
1.0
1.2
1.4