hierarhical linear regression with MCMC (iteration = 1100, burnin = 100)

GMH

HMC

data (N=3)

(a) single regression

(b) multiple regression

class 1
class 2
class 3

x

y

w_1 sequence (GMH), acceptance rate = 0.078

w_1 sequence (HMC), acceptance rate = 1.0

w_2 sequence (GMH)

w_2 sequence (HMC)

burnin phase
trace

iteration

hist

hist with burnin=100 removed

hist with burnin=100 consid

prob dens

predictive distributions (GMH)

prediction (GMH)

predictive distributions (HMC)

prediction (HMC)

prediction