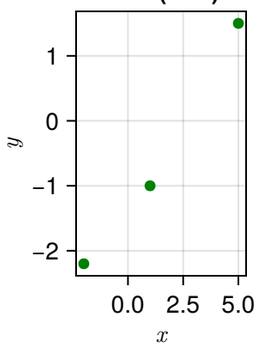
logistic regression (red: mean, purple: median, red dash: mean±std)

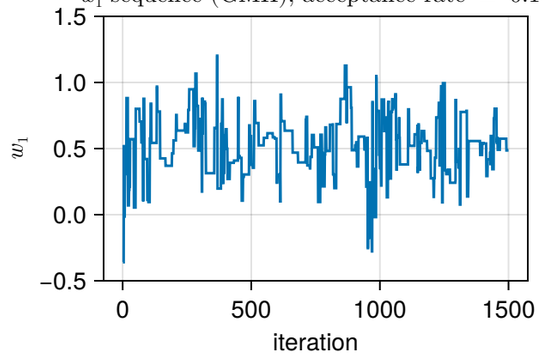
data (N=3)



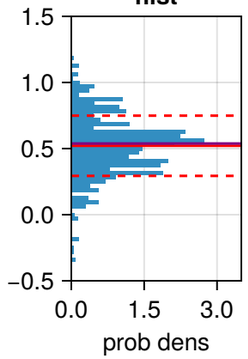
function form

$$f(x|w_1,w_2) = w_1 x + w_2)$$

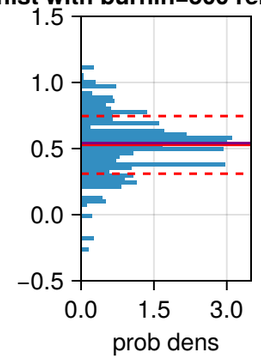
w_1 sequence (GMH), acceptance rate = 0.14



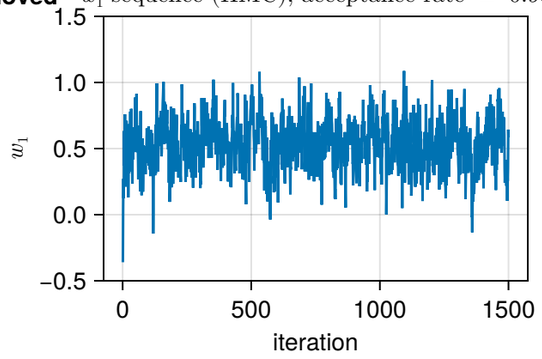
hist



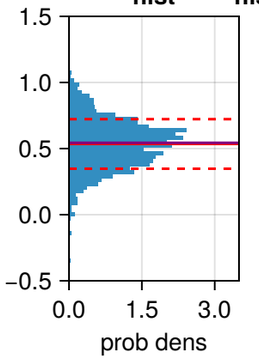
hist with burnin=500 removed



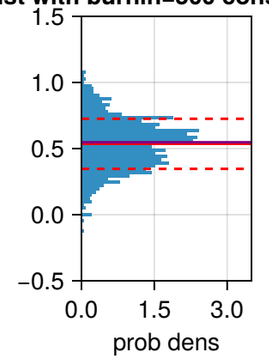
w_1 sequence (HMC), acceptance rate = 0.98



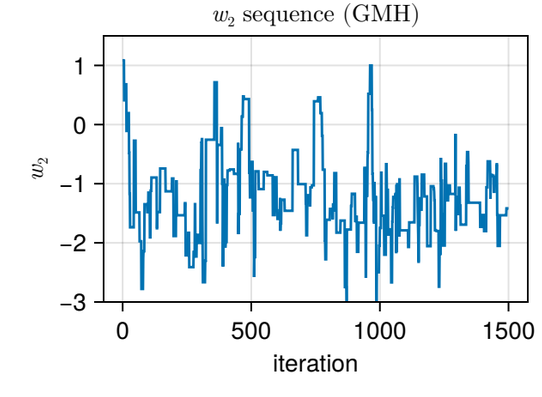
hist



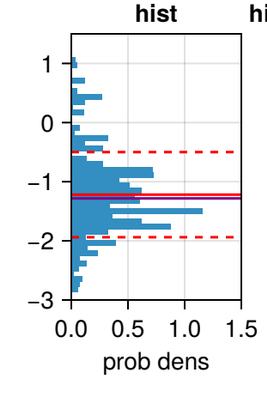
hist with burnin=500 conside



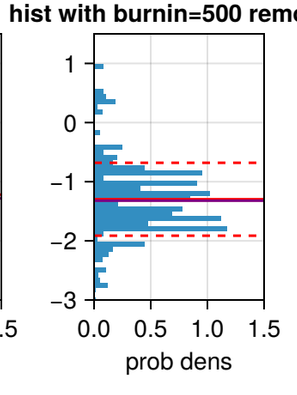
w_2 sequence (GMH)



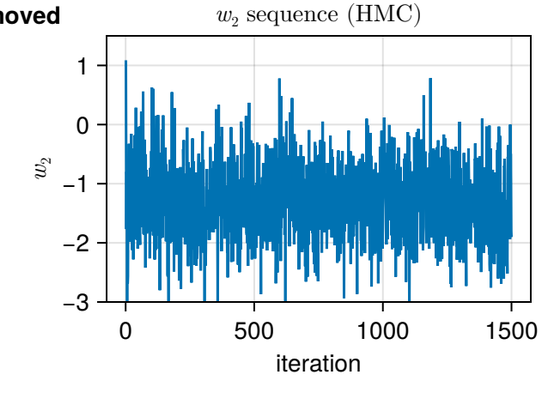
hist



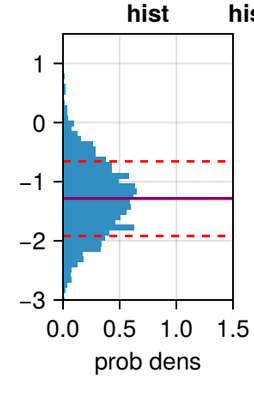
hist with burnin=500 removed



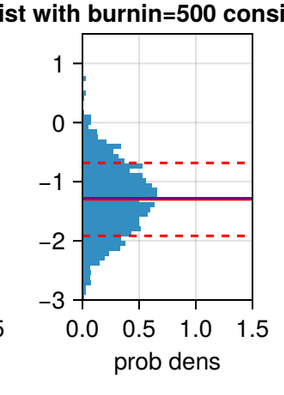
w_2 sequence (HMC)



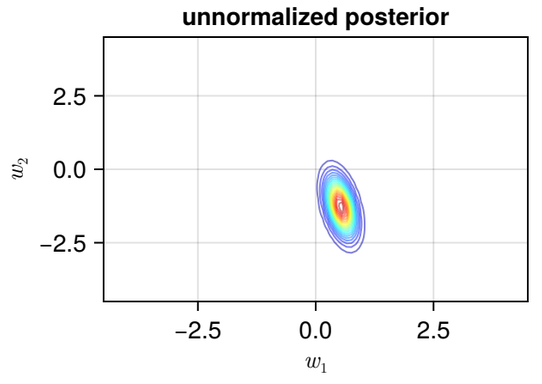
hist



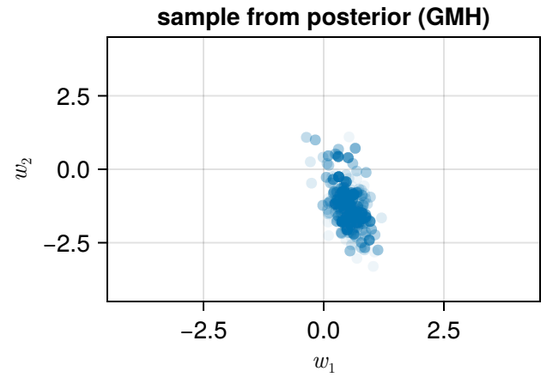
hist with burnin=500 conside



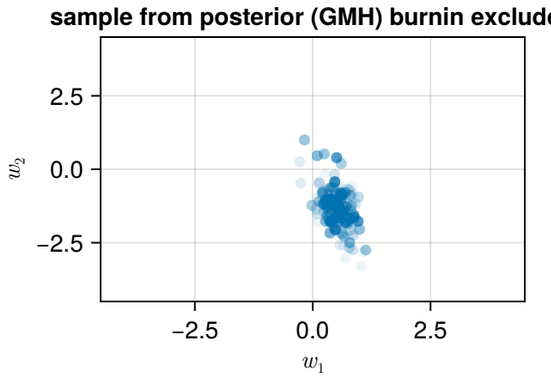
unnormalized posterior



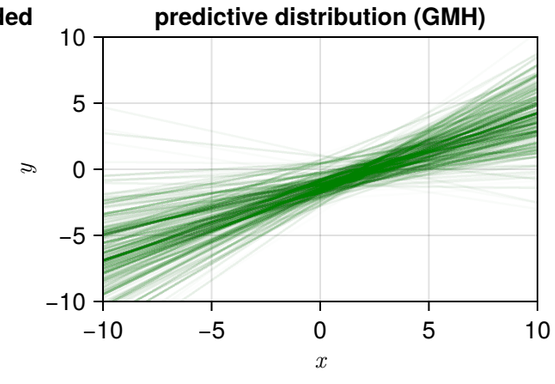
sample from posterior (GMH)



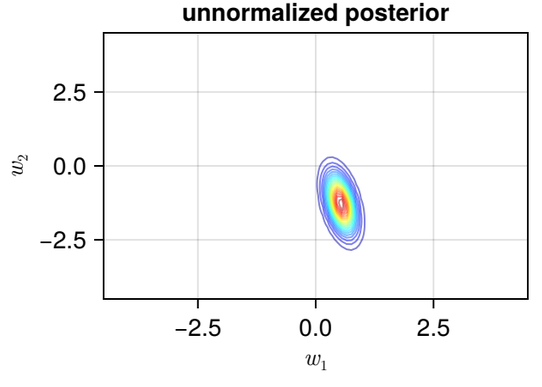
sample from posterior (GMH) burnin excluded



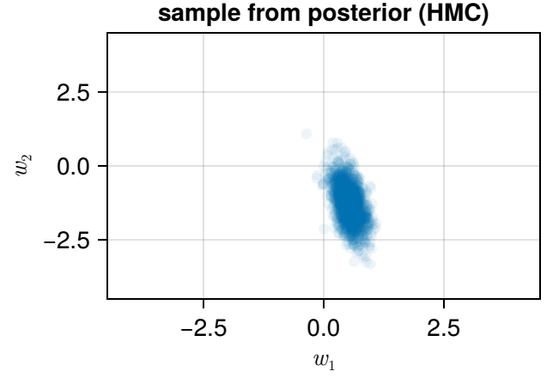
predictive distribution (GMH)



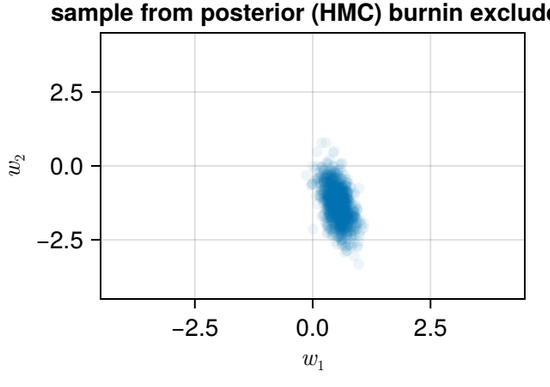
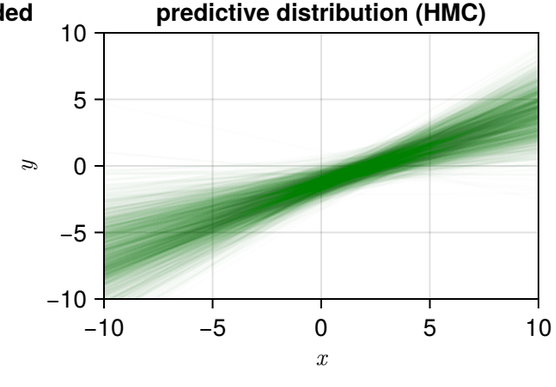
unnormalized posterior



sample from posterior (HMC)



sample from posterior (HMC) burnin excluded



predictive distribution (HMC)