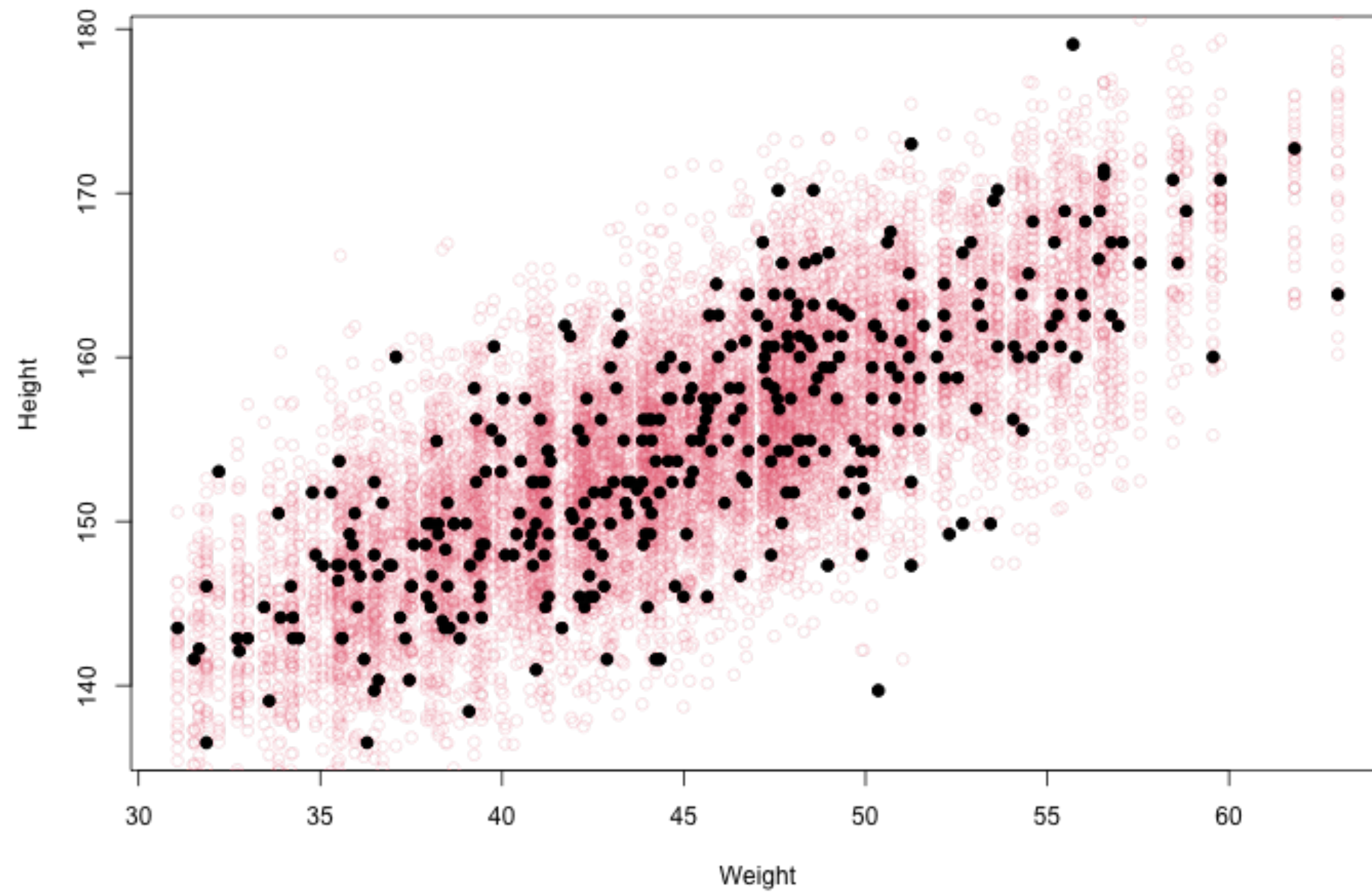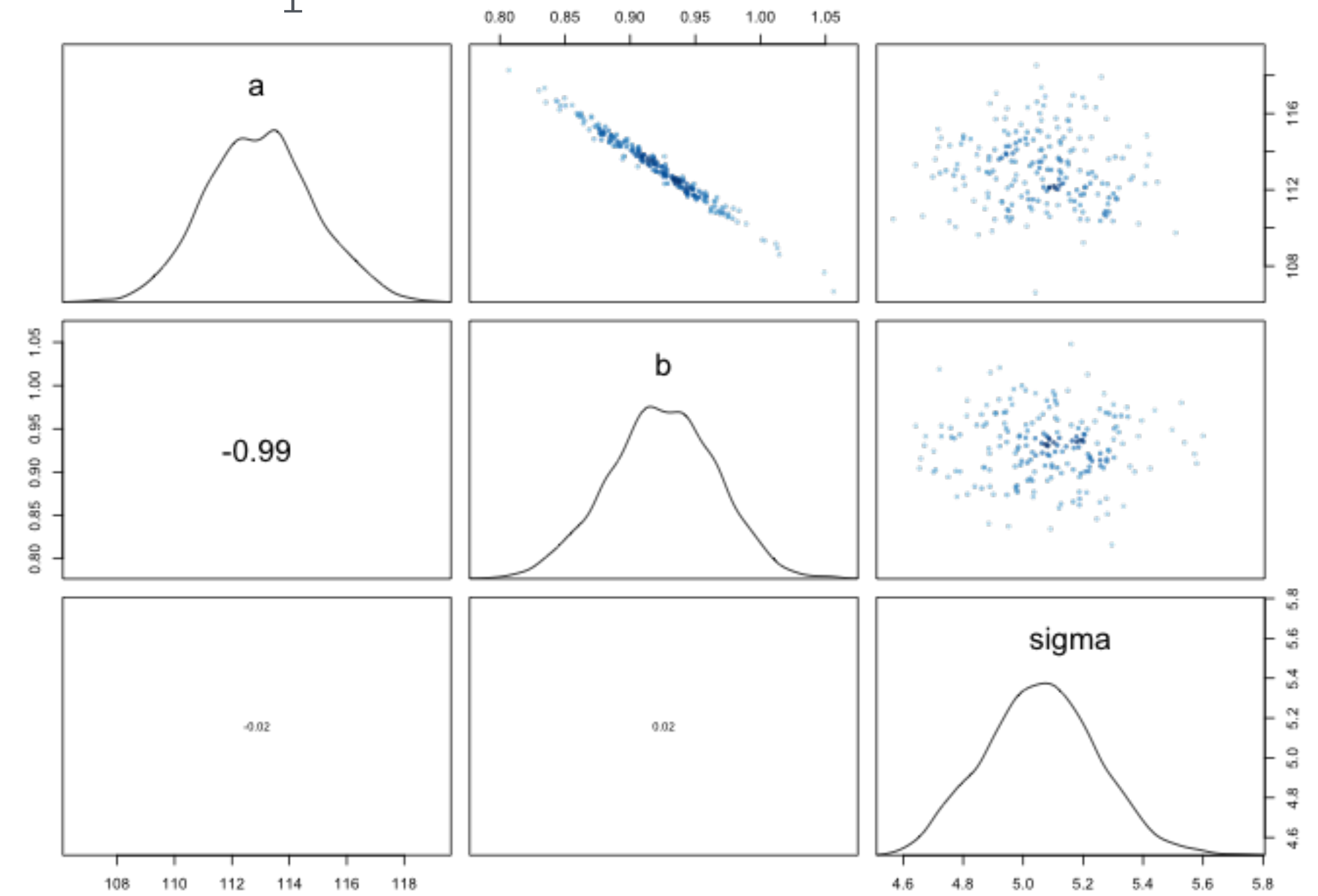# Model Check

Posterior simulations

Pairs plot

Summary

- The posterior distribution contains a lot of useful information not accessible by other methods, all including uncertainty.

- We need to understand the computation methods we use to probe the posterior.

  - Convergence checks are fundamental and can help us diagnose bad models.

  - Stan provides many (many!) tools for model checking.

- There are no true unique residuals in Bayesian models, but can use posterior simulations to make and understand our predictions.