

	Actual	Median	MAD_{SD}	CI5	CI95
Intercept	8	8.3	1.4	5.99	10.67
doy	0.1	0.1	0.0	0.0337	0.159
sigma	4	4.1	0.1		

0.1 Modeling temporal bias and correction

	Median	MAD_{SD}	CI5	CI95
Intercept	0.3	0.3	-1.8e-01	0.82
doy	0.0	0.0	-1.03e-03	0.008
sigma	1.4.1	0.0	1.4042e+00	1.45046

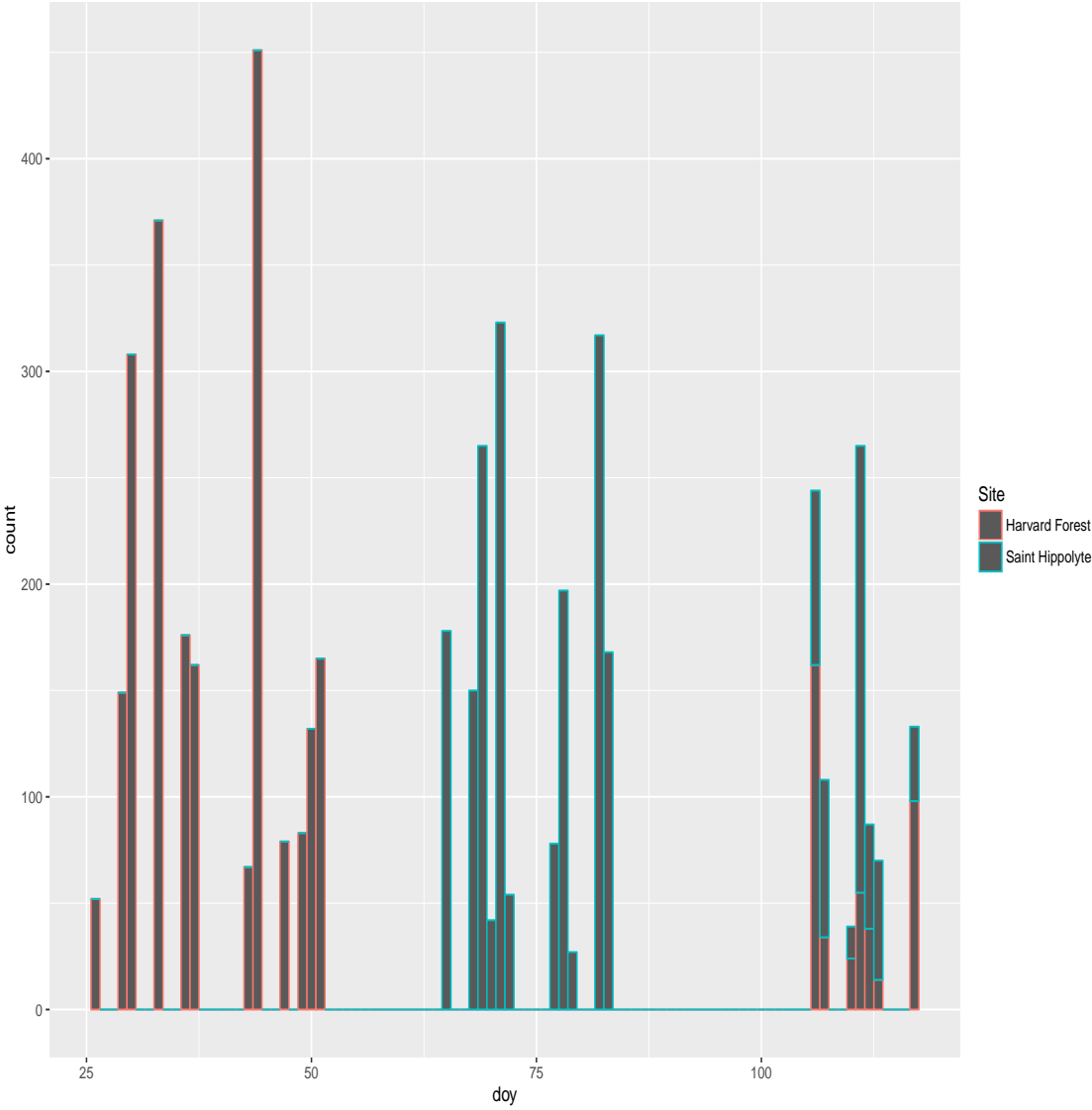


Figure 1: Measurement days of buds colored by site. Twigs from the different site were measured non-randomly, producing a temporal bias

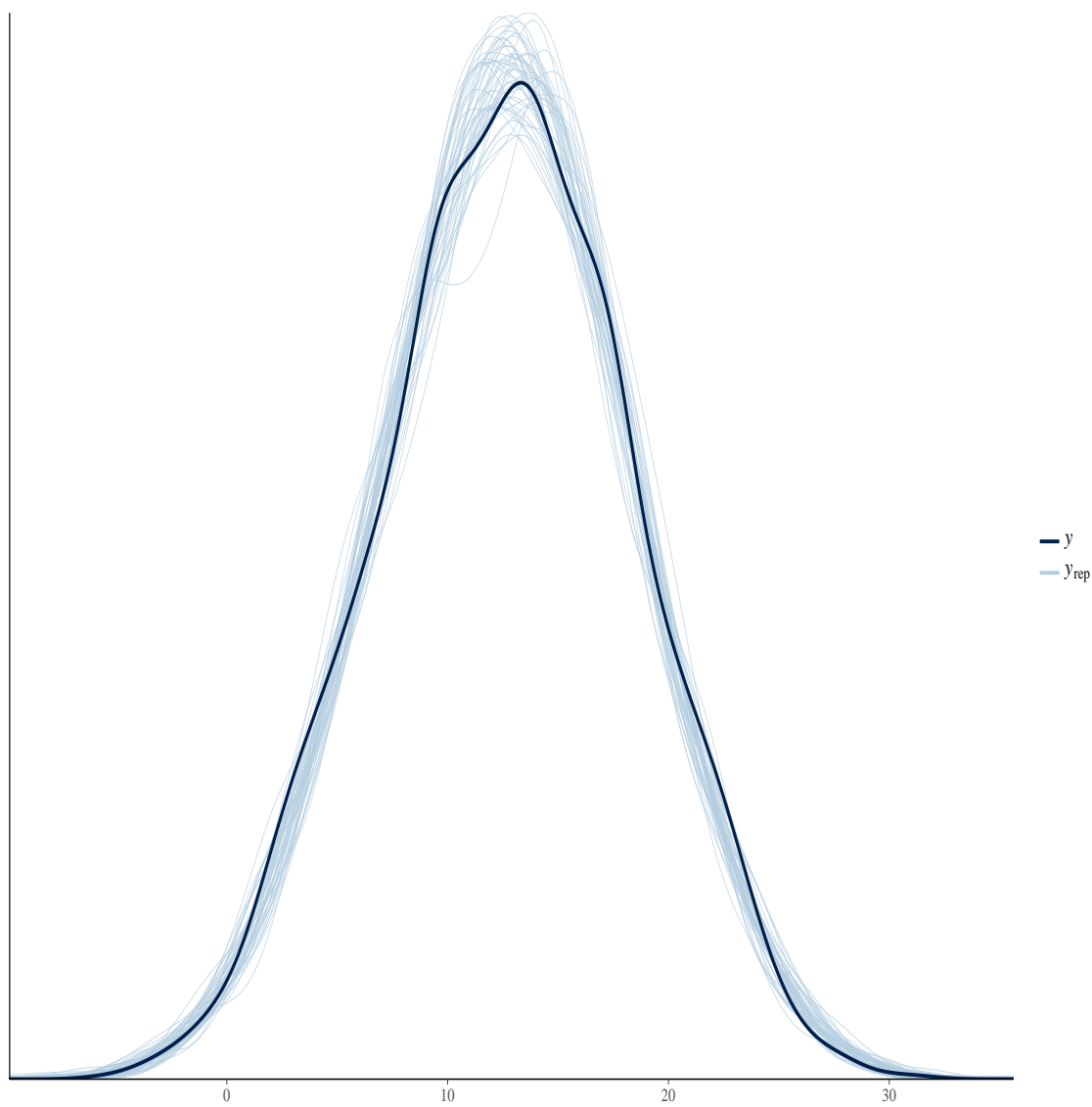


Figure 2: Posterior predictive checks for model $bvol \sim doy + (doy \mid sp)$ on fake data

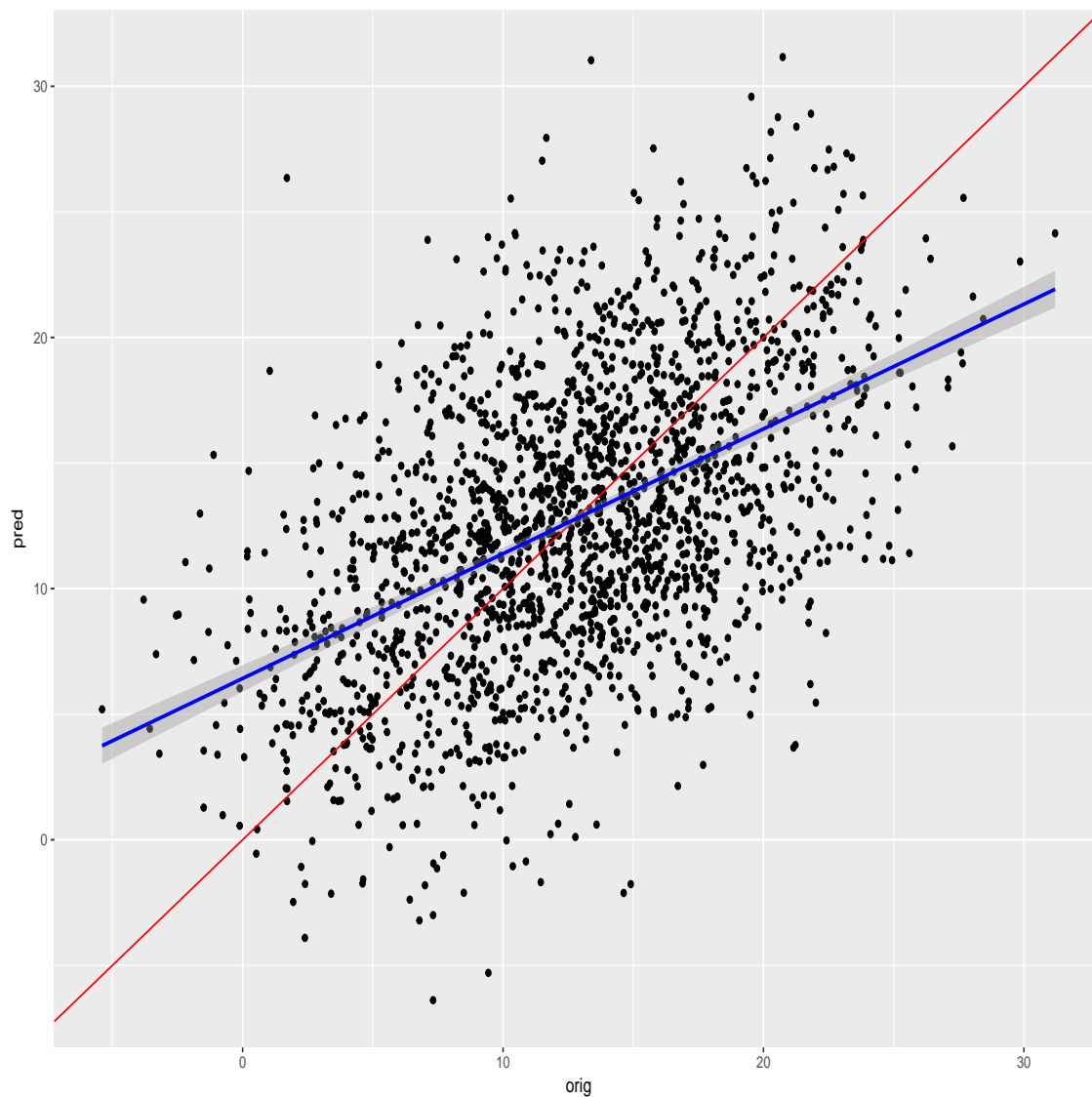


Figure 3: Predicted vs. original values for fake data. The red line represents the 1:1 line which would represent perfect prediction. The blue line is the actual slope, demonstration some deviation

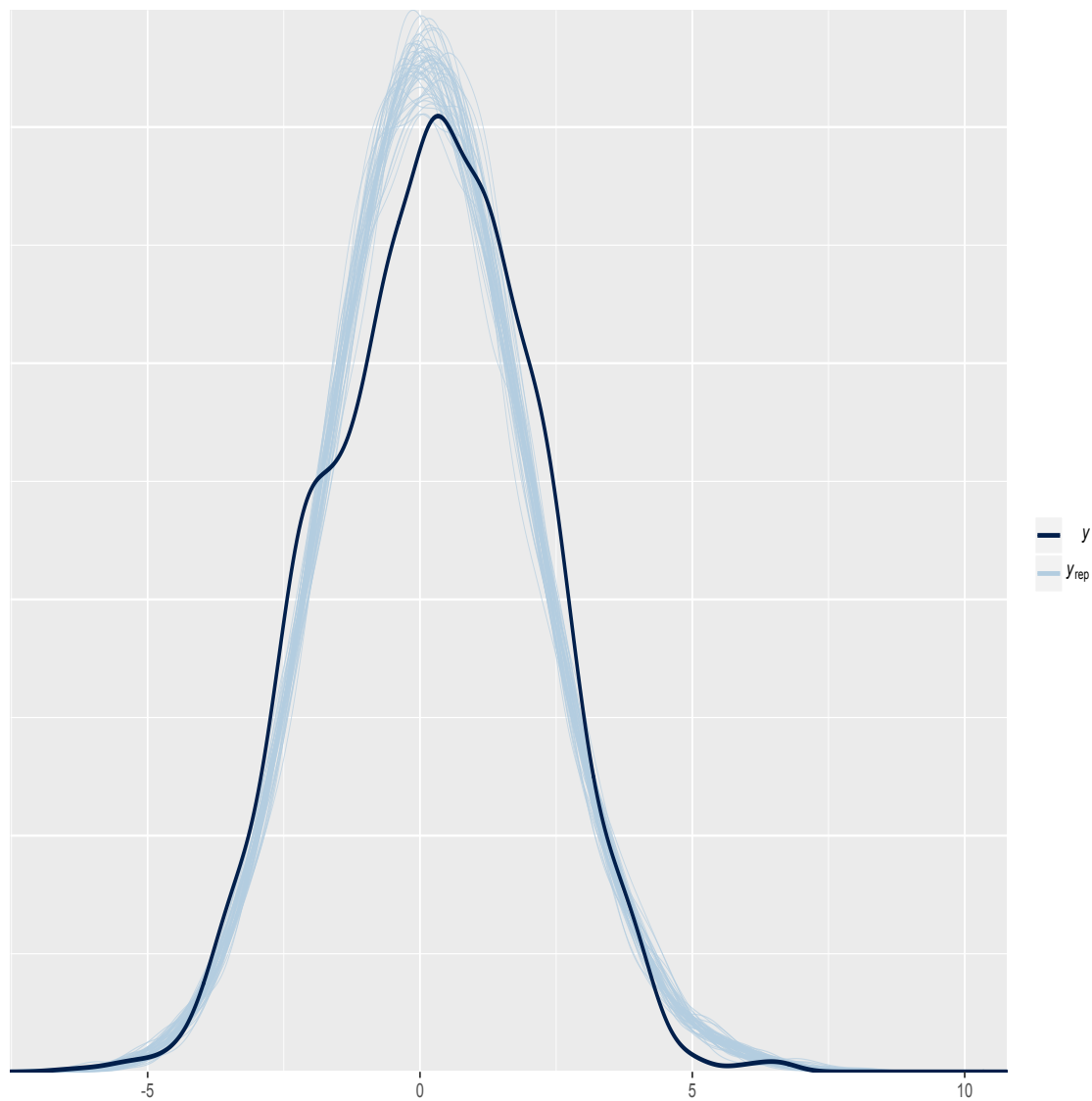


Figure 4: Posterior predictive checks for model $\text{bvol} \sim \text{doy} + (\text{doy} \mid \text{sp})$ on real data

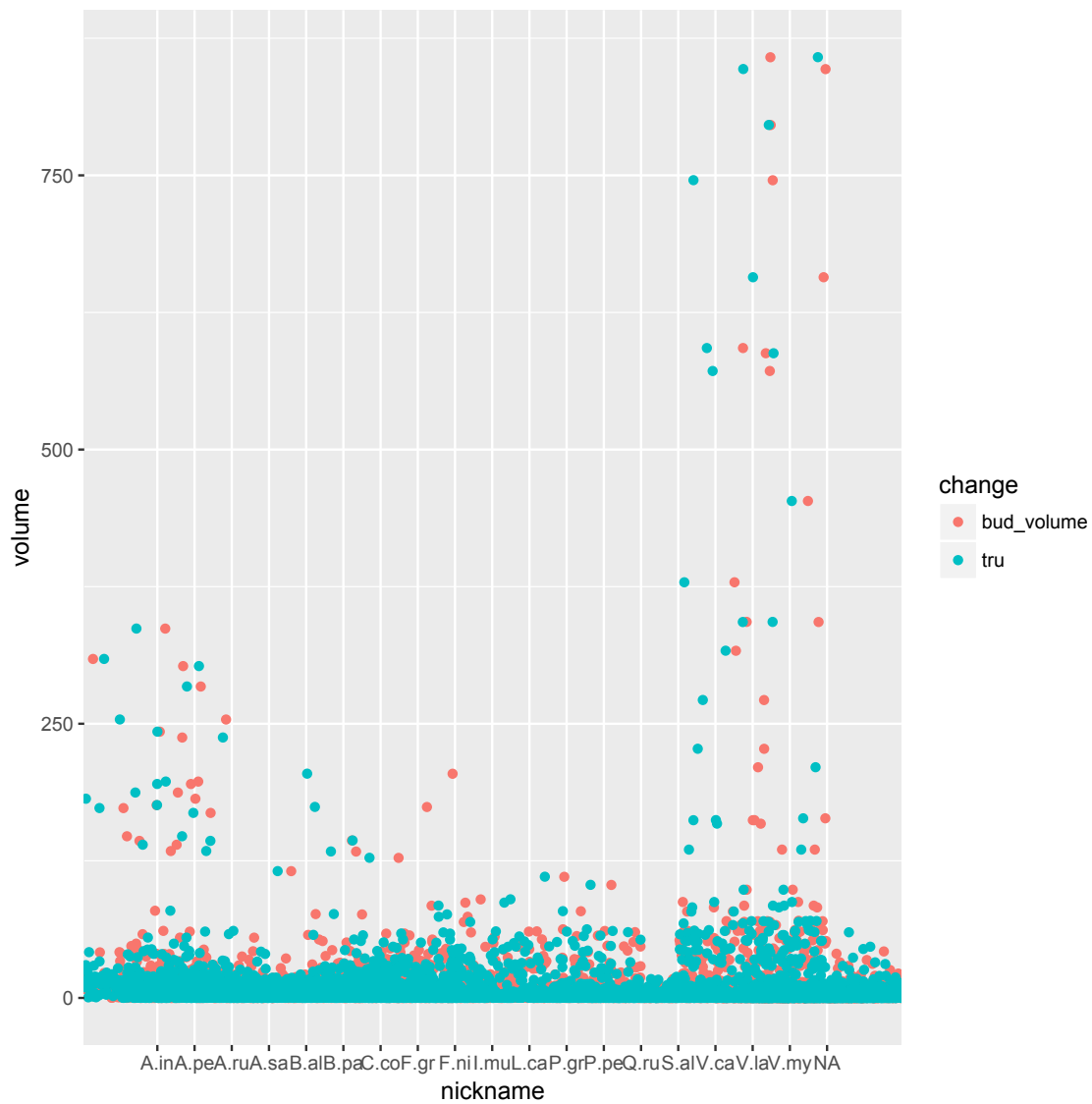


Figure 5: Temporal bias correction. Blue dots demonstrate the corrected values against the original (red). The plot has been horizontally jittered for better viewing

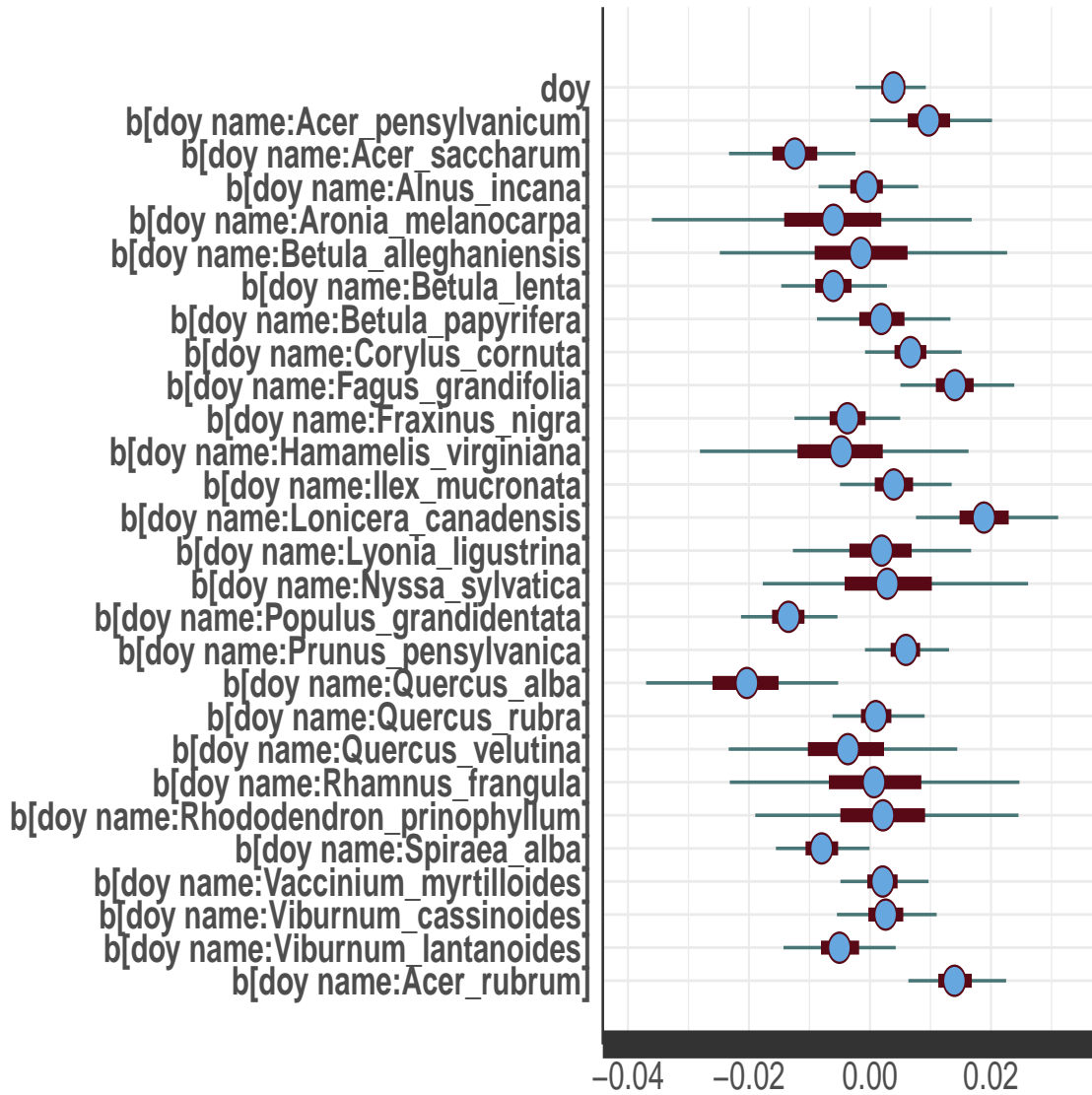


Figure 6: The mean effect sizes estimates and 50 and 95 credible intervals of day of measurement on each of the 27 study species from the model $bvol \sim doy + (doy | sp)$

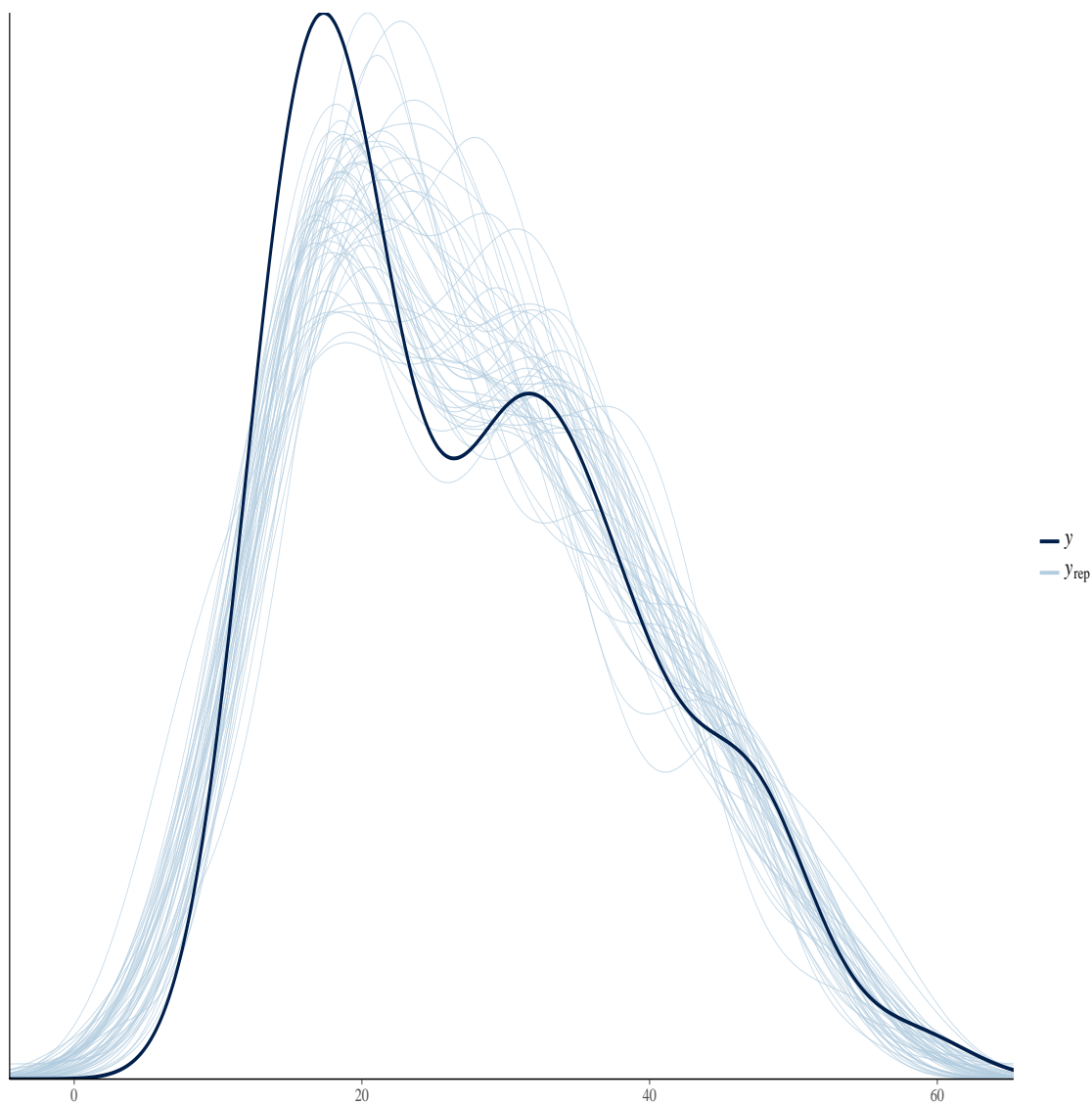


Figure 7: Posterior predictive check for exploratory model $\text{meanbday} \sim \text{meanstemdiam} + \text{meanbvol} + (\text{meanstemdiam} + \text{meanbvol} \mid \text{SP})$