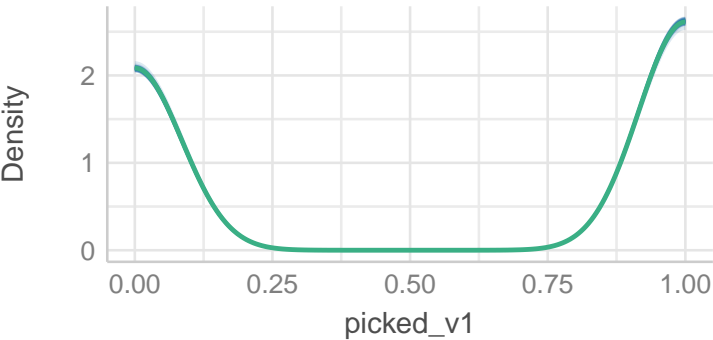# reg_rate * variation + baseline_p * reg_dist
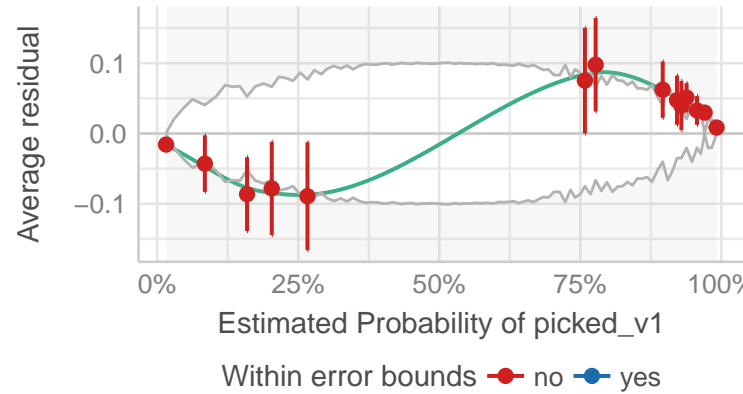
Posterior Predictive Check
Model−predicted lines should resemble observed data line
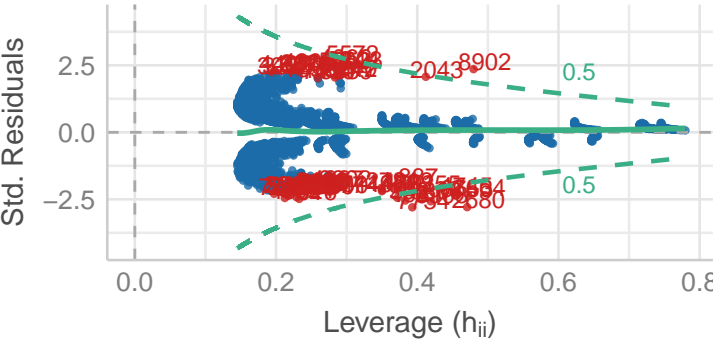

Binned Residuals
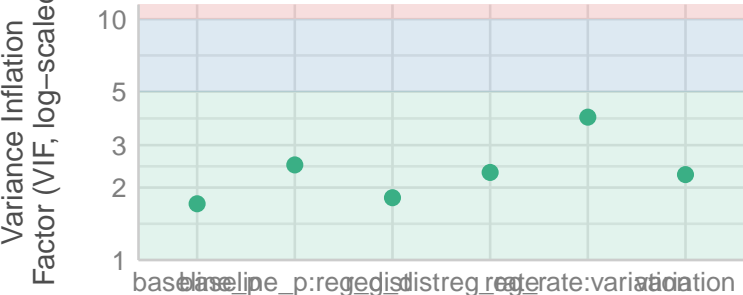Points should be within error bounds

Influential Observations
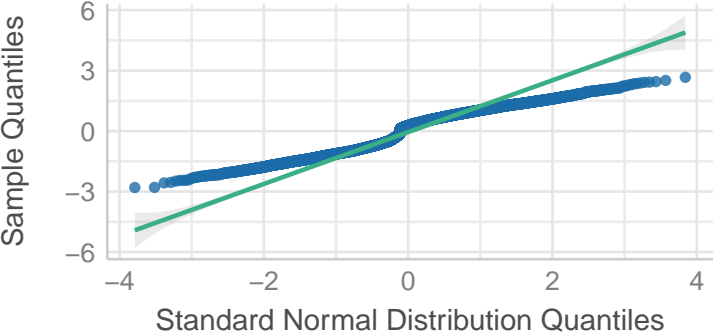Points should be inside the contour lines

Collinearity
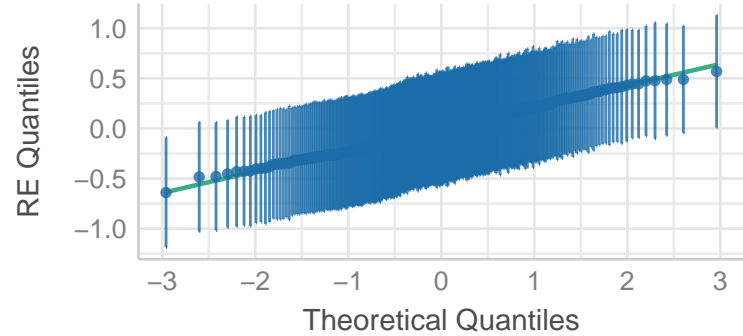High collinearity (VIF) may inflate parameter uncertainty

Normality of Residuals
Dots should fall along the line

Normality of Random Effects (base)
Dots should be plotted along the line

Normality of Random Effects (part_id)
Dots should be plotted along the line