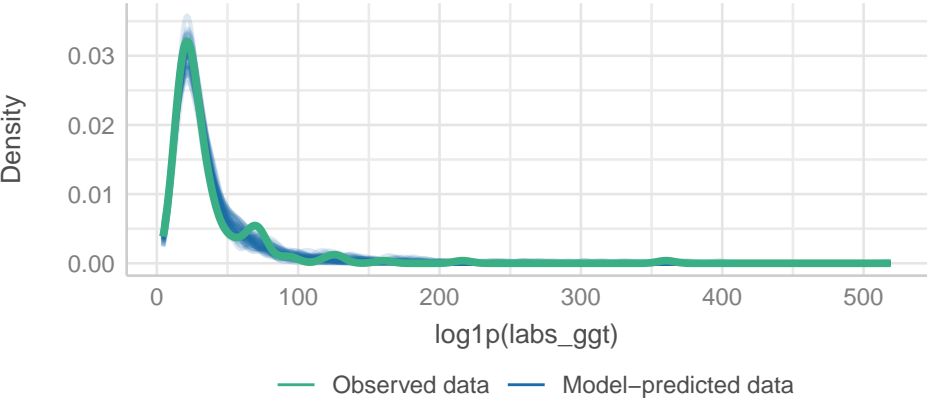**Posterior Predictive Check**
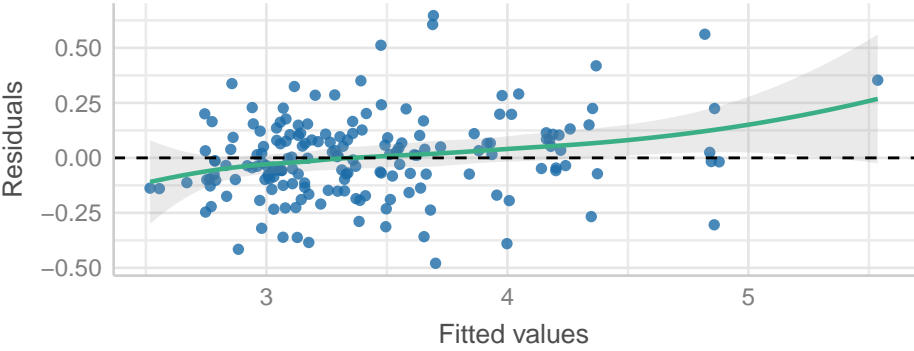Model−predicted lines should resemble observed data line
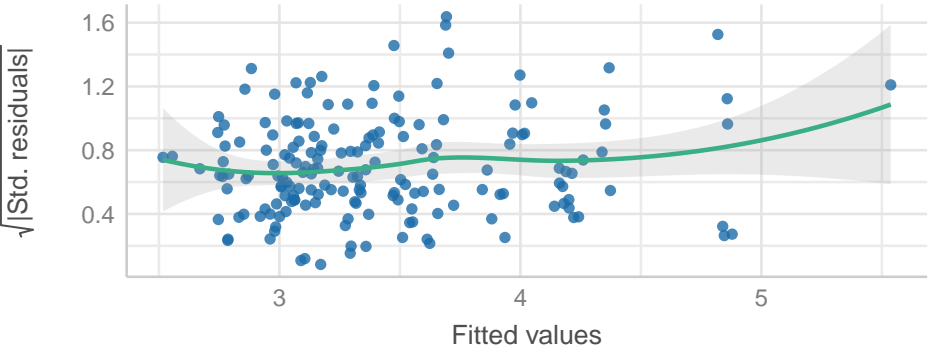
Linearity
Reference line should be flat and horizontal

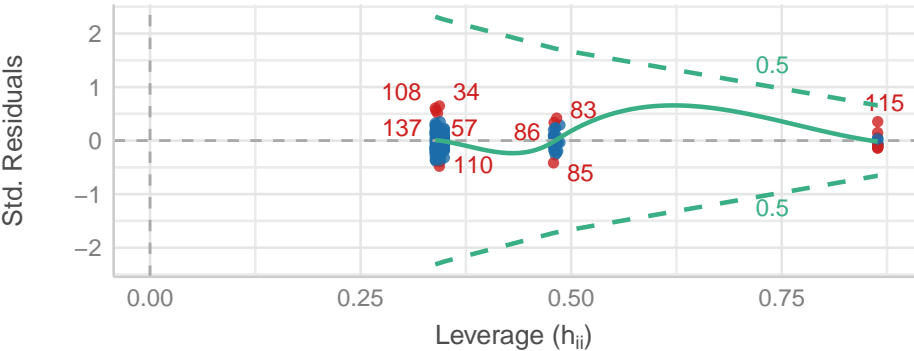Observed data — Model−predicted data

Homogeneity of Variance
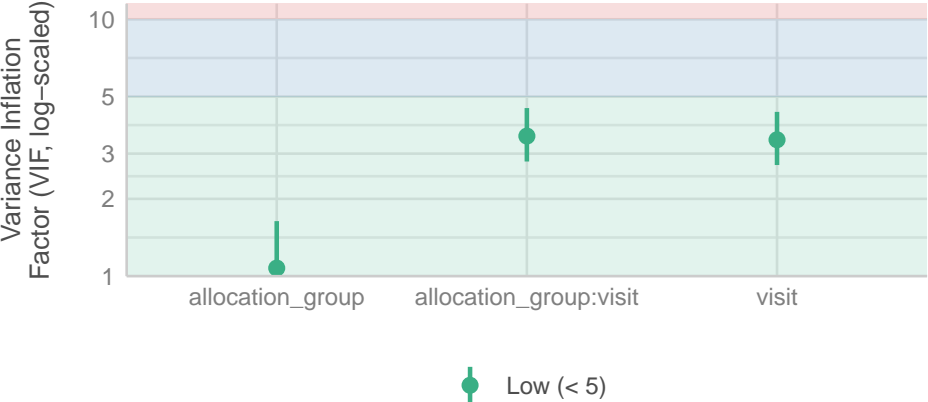Reference line should be flat and horizontal

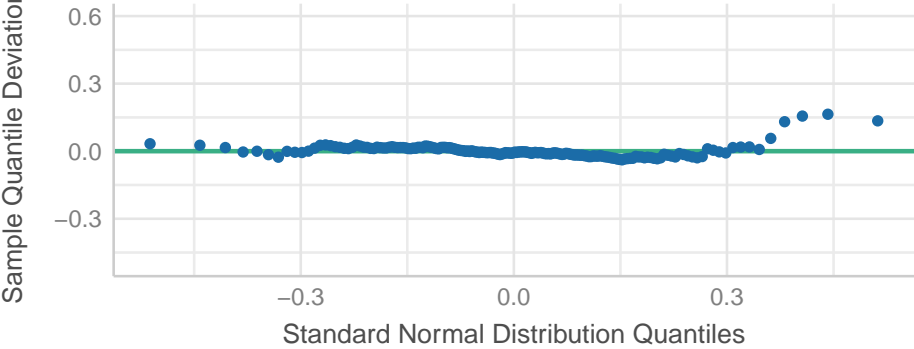**Influential Observations**
Points should be inside the contour lines

Collinearity
High collinearity (VIF) may inflate parameter uncertainty

Normality of Residuals
Dots should fall along the line

Low (< 5)

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