Posterior Predictive Check
Model–predicted lines should resemble observed data line
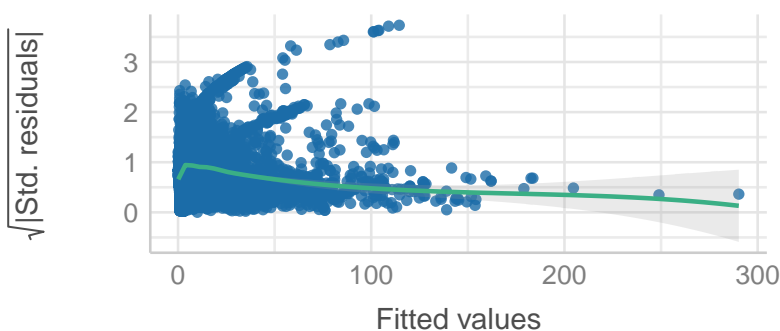
— Observed data — Model–predicted data
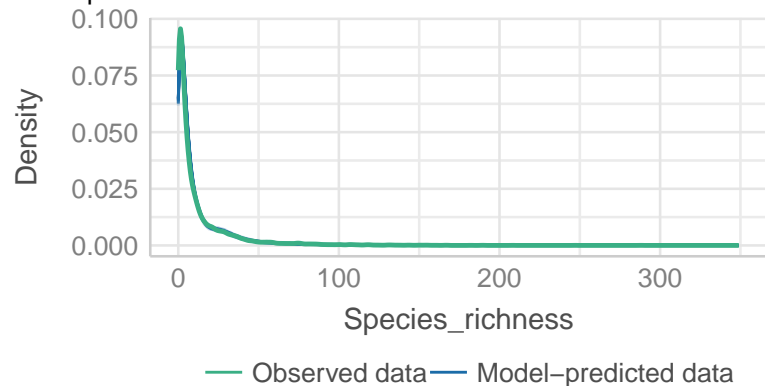
Overdispersion and zero–inflation
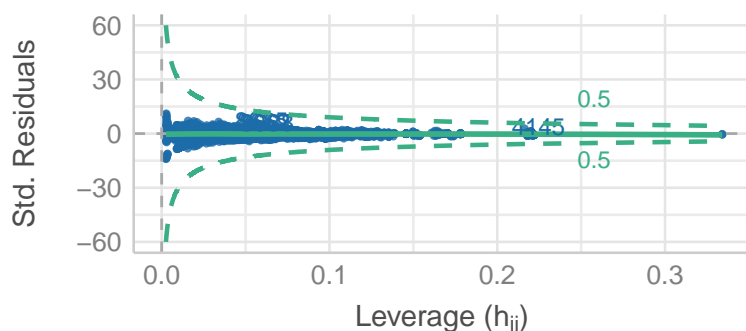Observed residual variance (green) should follow predicted residu
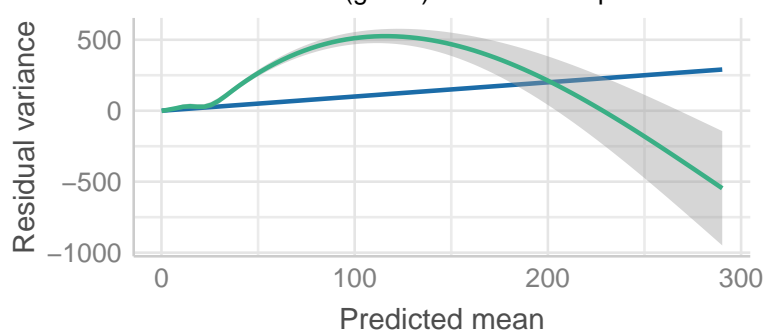
Homogeneity of Variance
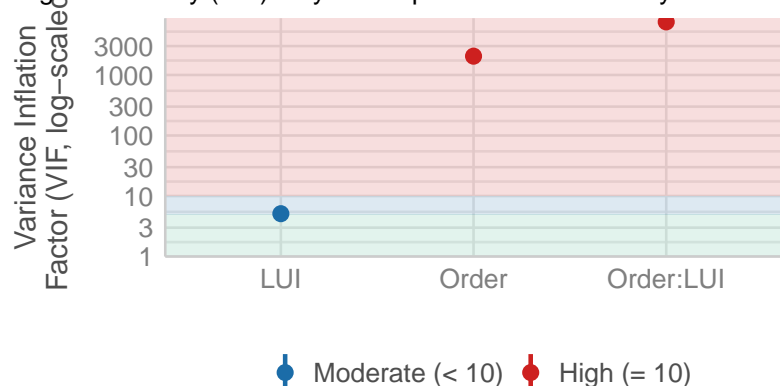Reference line should be flat and horizontal

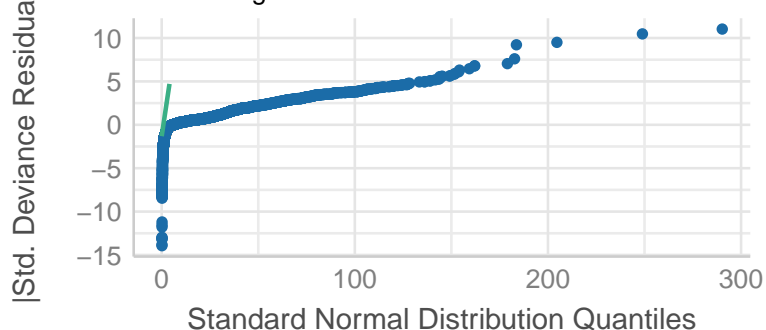## Influential Observations
Points should be inside the contour lines

Collinearity
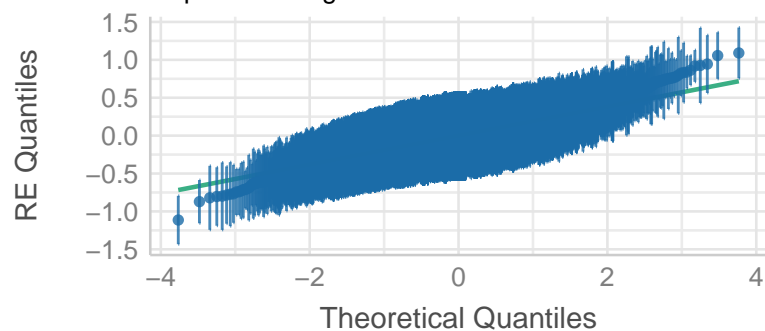High collinearity (VIF) may inflate parameter uncertainty

● Moderate (< 10) ● High (= 10)

Normality of Residuals
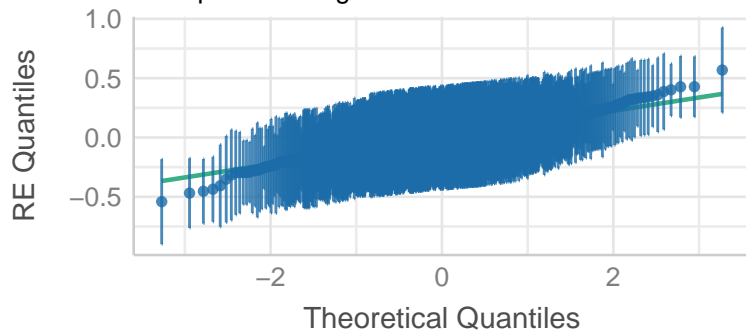Dots should fall along the line

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

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

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