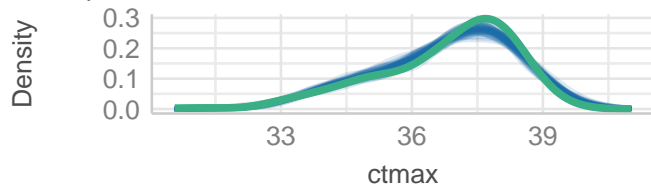## Posterior Predictive Check
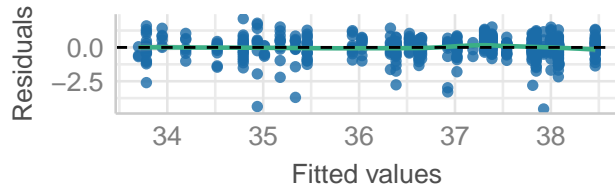Model−predicted lines should resemble observed data lines

Density / ctmax

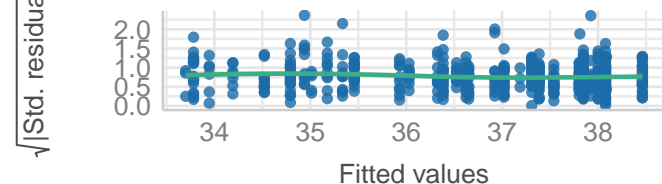— Observed data — Model−predicted data

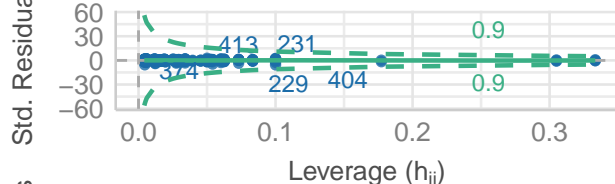## Linearity
Reference line should be flat and horizontal

Residuals / Fitted values

Homogeneity of Variance
Reference line should be flat and horizontal

$\sqrt{|\text{Std. residuals}|}$ / Fitted values

Influential Observations
Points should be inside the contour lines

Std. Residuals / Leverage (h_{ii})

413 231 0.9
324
229 404 0.9

Collinearity
High collinearity (VIF) may inflate parameter uncertainty

Variance Inflation Factor (VIF, log-scaled)

collection_temp   species   species:collection_te

● High (>= 10)
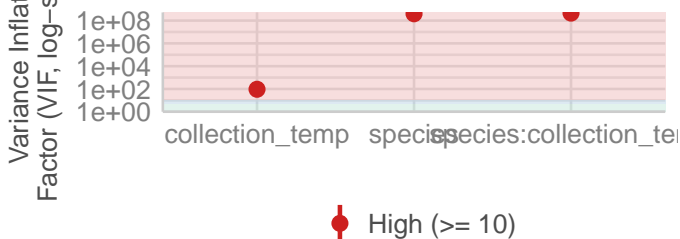
Normality of Residuals
Dots should fall along the line

Sample Quantile Deviations / Standard Normal Distribution Quantiles