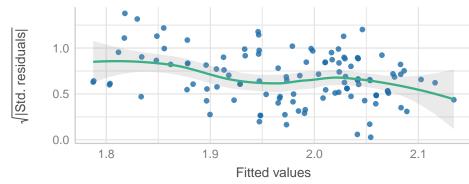
# Posterior Predictive Check Model-predicted lines should resemble observed data line 0.75 Density 0.50 0.25 0.00 log1p(phase\_angle) Observed data — Model-predicted data

# Homogeneity of Variance

Reference line should be flat and horizontal



### Collinearity

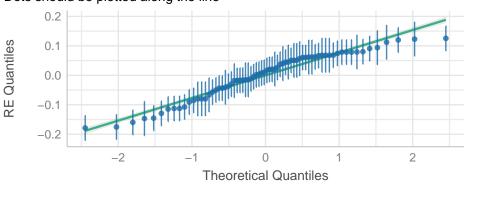
High collinearity (VIF) may inflate parameter uncertainty



Low (< 5)

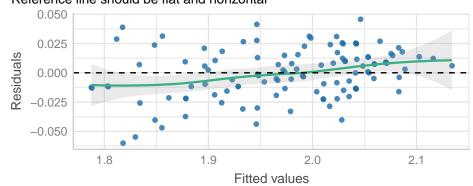
# Normality of Random Effects (record\_id)

Dots should be plotted along the line



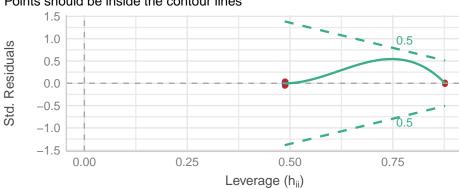
#### Linearity

Reference line should be flat and horizontal



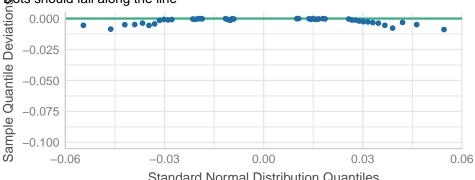
#### Influential Observations

Points should be inside the contour lines



### Normality of Residuals

Dots should fall along the line



Standard Normal Distribution Quantiles