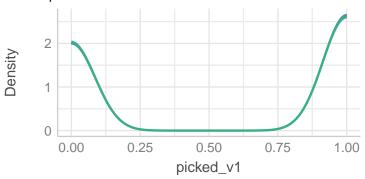
## reg\_rate + baseline\_log\_odds\_jitter \* reg\_dist \* variation

#### Posterior Predictive Check

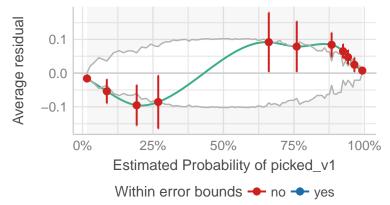
Model-predicted lines should resemble observed data line



#### del-predicted data — Observed data — Observed data —

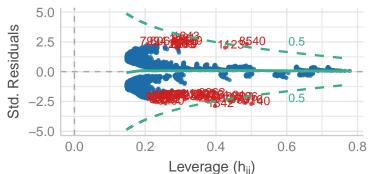
#### Binned Residuals

Points should be within error bounds



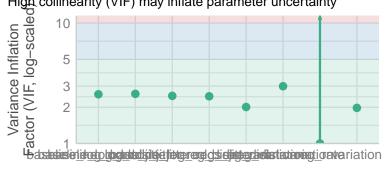
#### Influential Observations

Points should be inside the contour lines



## Collinearity

High collinearity (VIF) may inflate parameter uncertainty

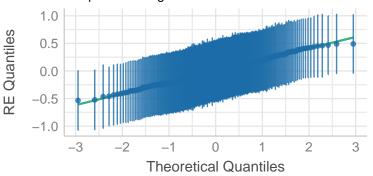


### Normality of Residuals Dots should fall along the line

6 Sample Quantiles 3 0 -6 -2 0 Standard Normal Distribution Quantiles

# Normality of Random Effects (base)

Dots should be plotted along the line



Low (< 5)

## Normality of Random Effects (part\_id)

Dots should be plotted along the line

