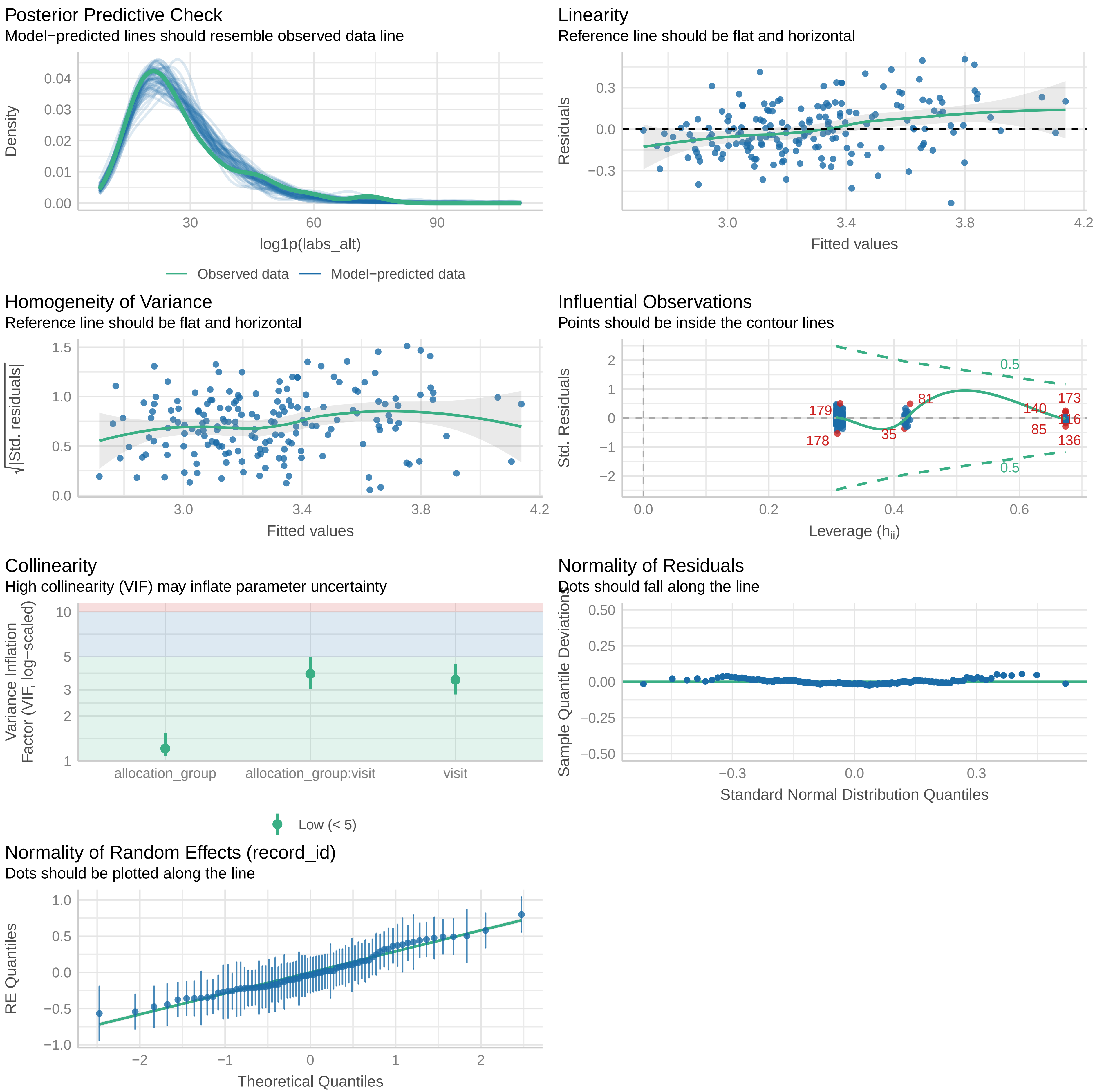
Posterior Predictive Check
Model−predicted lines should resemble observed data line
Density
0.04
0.03
0.02
0.01
0.00
30
60
90
log1p(labs_alt)
Observed data
Model−predicted data
Linearity
Reference line should be flat and horizontal
Residuals
0.3
0.0
−0.3
3.0
3.4
3.8
4.2
Fitted values
Homogeneity of Variance
Reference line should be flat and horizontal
√|Std. residuals|
1.5
1.0
0.5
0.0
3.0
3.4
3.8
4.2
Fitted values
Influential Observations
Points should be inside the contour lines
Std. Residuals
2
1
0
−1
−2
0.5
0.5
179
178
35
81
173
140
116
85
136
0.0
0.2
0.4
0.6
Leverage (h_{ii})
Collinearity
High collinearity (VIF) may inflate parameter uncertainty
Variance Inflation Factor (VIF, log−scaled)
10
5
3
2
1
allocation_group
allocation_group:visit
visit
Low (< 5)
Normality of Residuals
Dots should fall along the line
Sample Quantile Deviations
0.50
0.25
0.00
−0.25
−0.50
−0.3
0.0
0.3
Standard Normal Distribution Quantiles
Normality of Random Effects (record_id)
Dots should be plotted along the line
RE Quantiles
1.0
0.5
0.0
−0.5
−1.0
−2
−1
0
1
2
Theoretical Quantiles