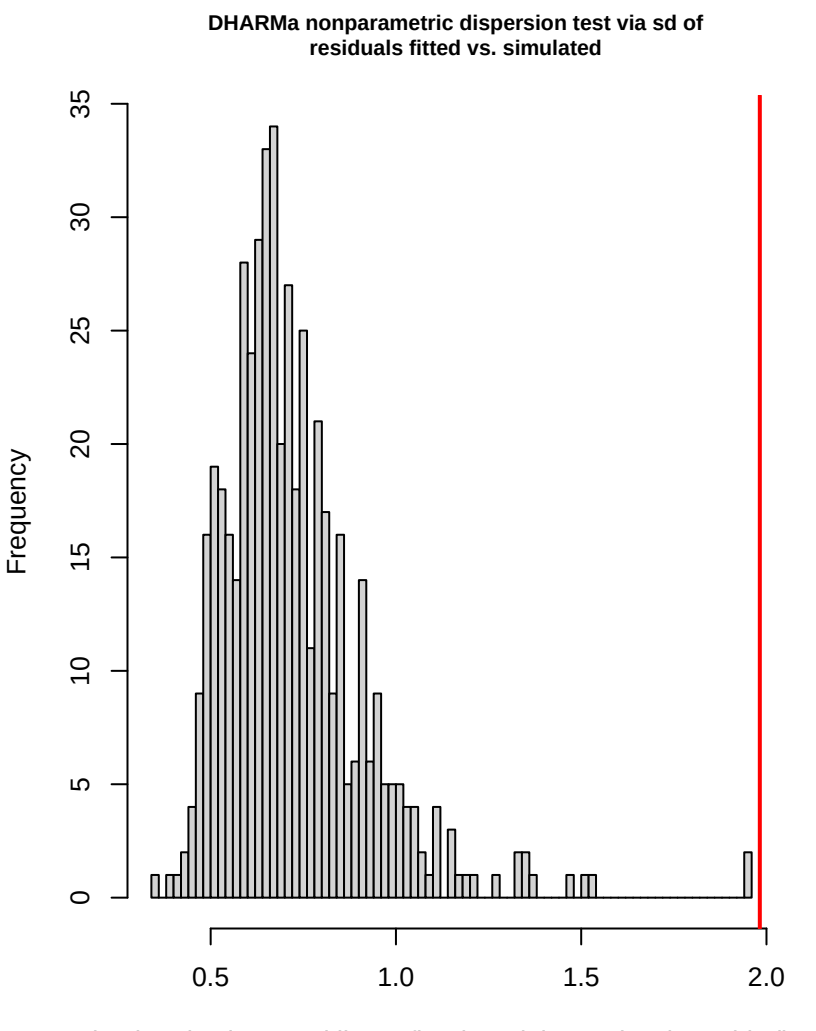
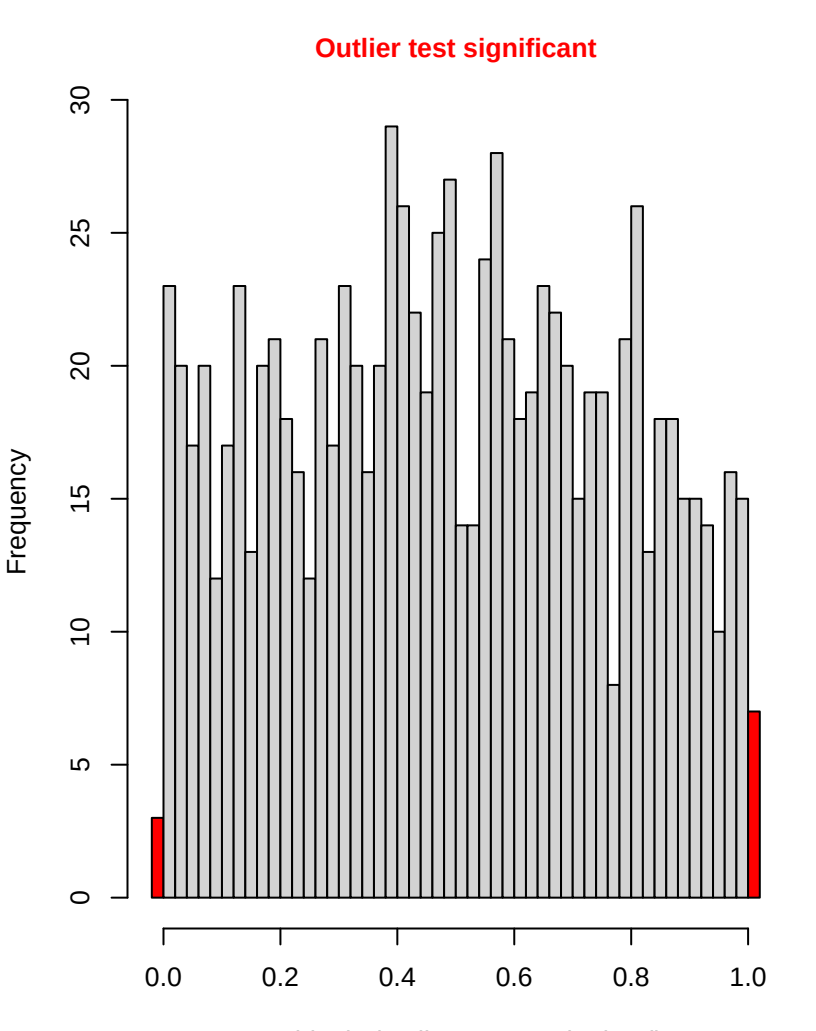
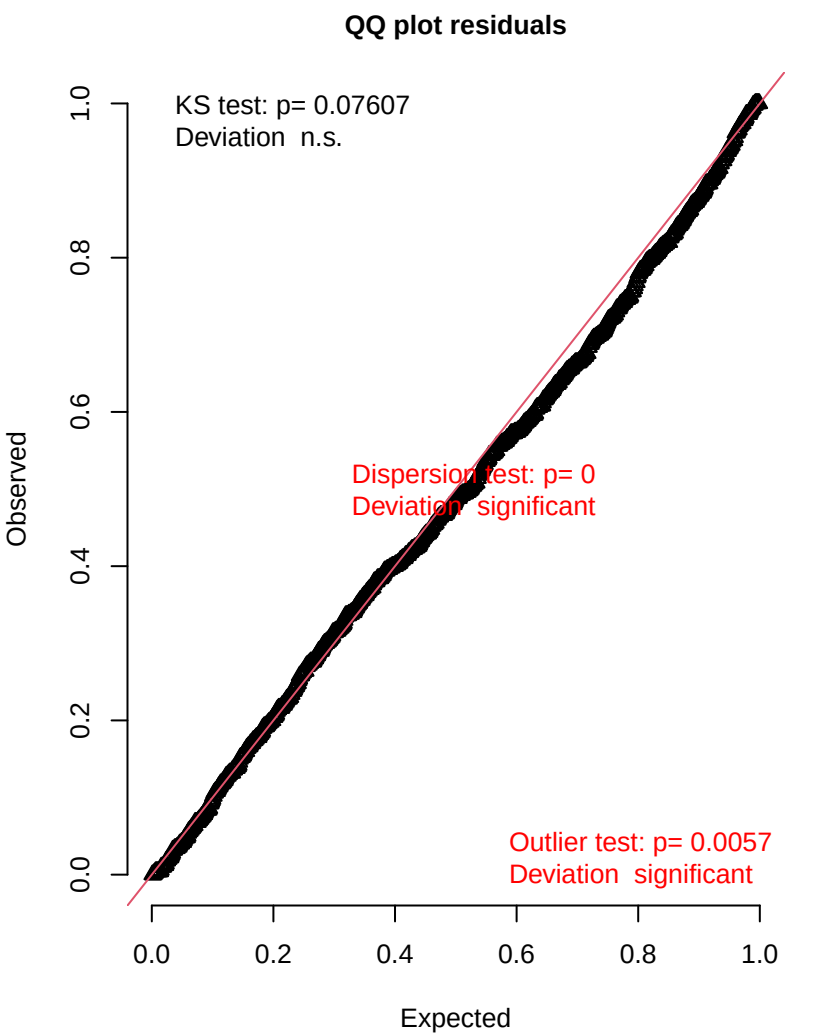
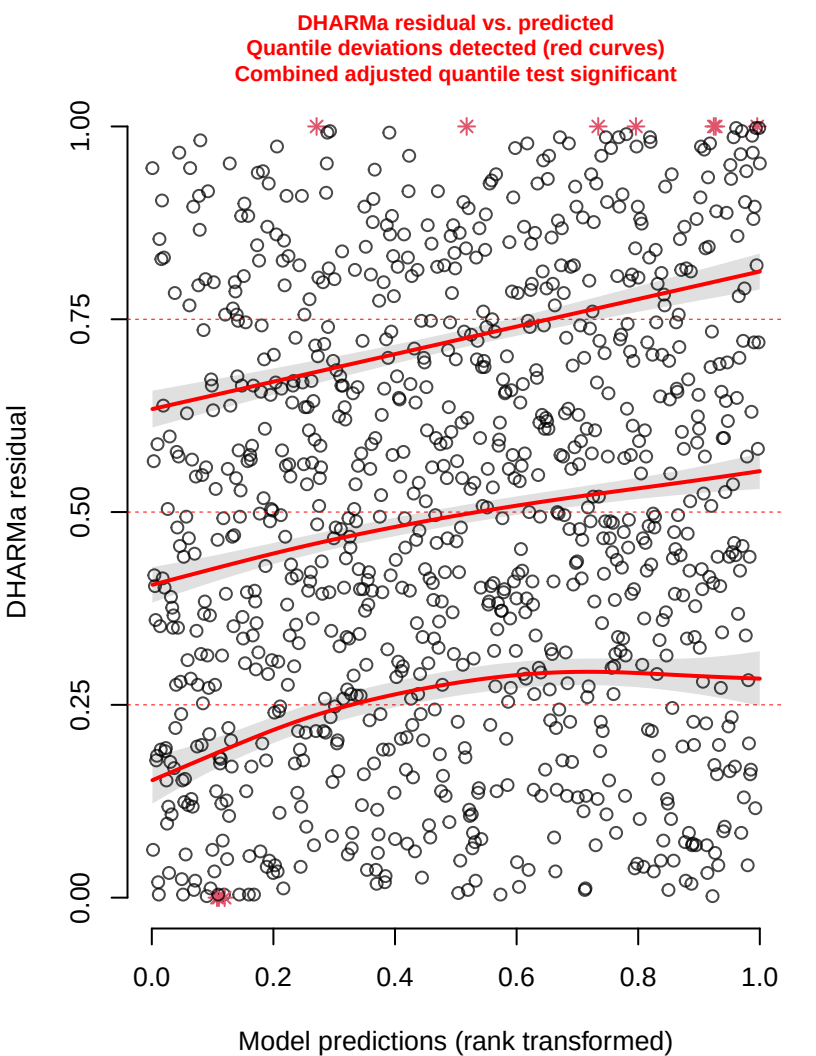
Model validation report

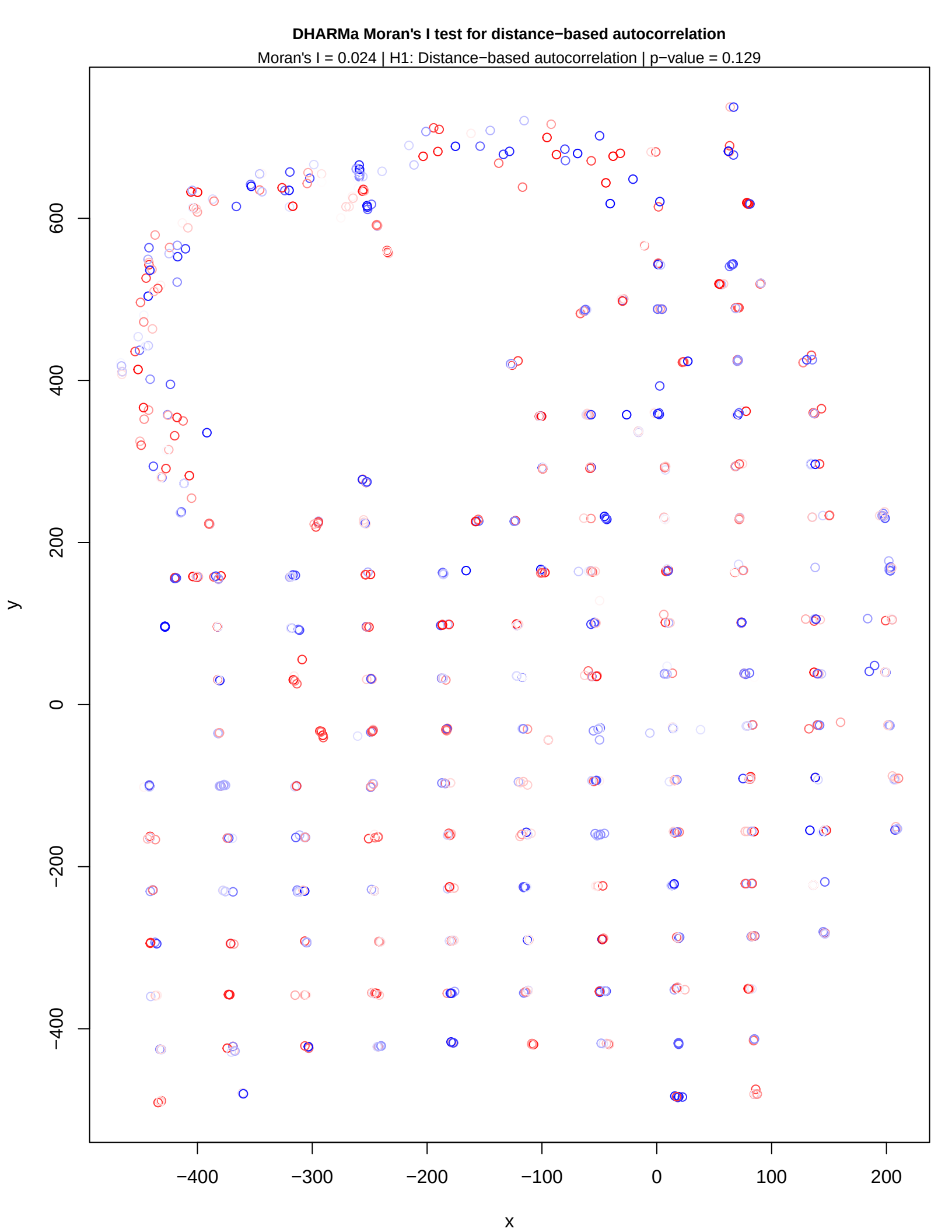
Model: 2017_2022_biomass
Observations: 952
Date: 2025−12−21

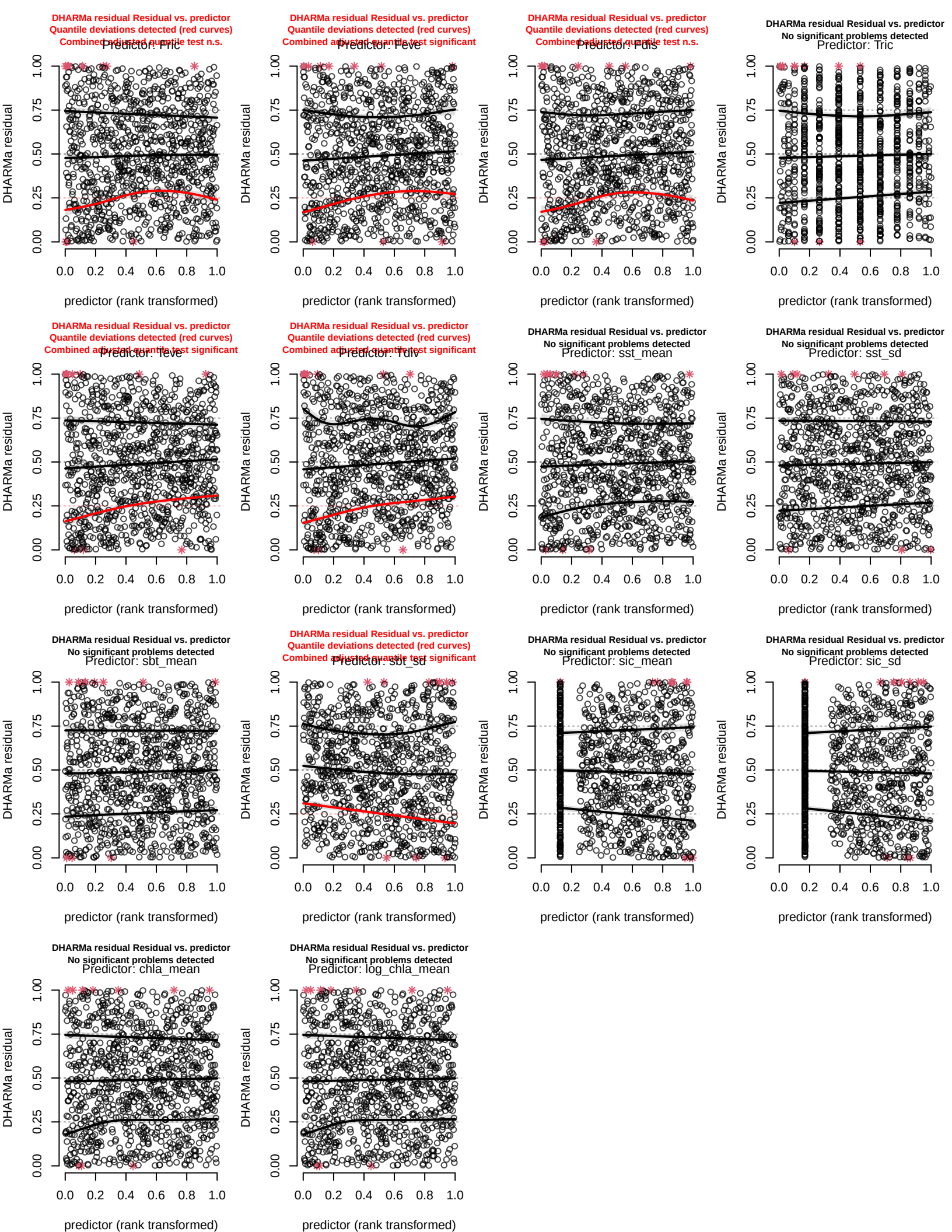

DHARMa nonparametric dispersion test via sd of residuals fitted vs. simulated
Frequency
0
5
10
15
20
25
30
35
0.5
1.0
1.5
2.0
Simulated values, red line = fitted model. p−value (two.sided) =


Outlier test significant
Frequency
0
5
10
15
20
25
30
0.0
0.2
0.4
0.6
0.8
1.0
Residuals (outliers are marked red)


QQ plot residuals
KS test: p= 0.07607
Deviation n.s.
Dispersion test: p= 0
Deviation significant
Outlier test: p= 0.0057
Deviation significant
Observed
0.0
0.2
0.4
0.6
0.8
1.0
Expected


DHARMa residual vs. predicted
Quantile deviations detected (red curves)
Combined adjusted quantile test significant
DHARMa residual
0.00
0.25
0.50
0.75
1.00
0.0
0.2
0.4
0.6
0.8
1.0
Model predictions (rank transformed)


DHARMa Moran's I test for distance−based autocorrelation
Moran's I = 0.024 | H1: Distance−based autocorrelation | p−value = 0.129
y
600
400
200
0
−200
−400
−400
−300
−200
−100
0
100
200
x


DHARMa residual Residual vs. predictor
Quantile deviations detected (red curves)
Combined adjusted quantile test n.s.
Predictor: Fric
DHARMa residual Residual vs. predictor
Quantile deviations detected (red curves)
Combined adjusted quantile test significant
Predictor: Feve
DHARMa residual Residual vs. predictor
Quantile deviations detected (red curves)
Combined adjusted quantile test n.s.
Predictor: Fdis
DHARMa residual Residual vs. predictor
No significant problems detected
Predictor: Tric
DHARMa residual Residual vs. predictor
Quantile deviations detected (red curves)
Combined adjusted quantile test significant
Predictor: Teve
DHARMa residual Residual vs. predictor
Quantile deviations detected (red curves)
Combined adjusted quantile test significant
Predictor: Tdiv
DHARMa residual Residual vs. predictor
No significant problems detected
Predictor: sst_mean
DHARMa residual Residual vs. predictor
No significant problems detected
Predictor: sst_sd
DHARMa residual Residual vs. predictor
No significant problems detected
Predictor: sbt_mean
DHARMa residual Residual vs. predictor
Quantile deviations detected (red curves)
Combined adjusted quantile test significant
Predictor: sbt_sd
DHARMa residual Residual vs. predictor
No significant problems detected
Predictor: sic_mean
DHARMa residual Residual vs. predictor
No significant problems detected
Predictor: sic_sd
DHARMa residual Residual vs. predictor
No significant problems detected
Predictor: chla_mean
DHARMa residual Residual vs. predictor
No significant problems detected
Predictor: log_chla_mean
DHARMa residual
predictor (rank transformed)
0.00
0.25
0.50
0.75
1.00
0.0
0.2
0.4
0.6
0.8
1.0