Supplementary Figure 4: Residual Plots of EJ Neighborhood Proximity Analysis Models

Quantile-Quantile (Q-Q) plots and residual vs. predicted value plots of model predictions implemented in the DHARMa R package v.0.4.7. Q-Q plots show dispersion test via SD of the residuals fitted vs. simulated values, as well as outlier test results. Red stars in the residual vs. predicted plots represent outliers. A. pH. B. DO. C. logSPCOND. D. TEMP

A.

DHARMa residual

QQ plot residuals

KS test: p= 0
Deviation significant

Dispersion test: p= 0.182
Deviation n.s.

Outlier test: p= 0
Deviation significant

Observed

Expected

0.0 0.2 0.4 0.6 0.8 1.0

DHARMa residual vs. predicted

DHARMa residual

Model predictions (rank transformed)

0.00 0.25 0.50 0.75 1.00

0.0 0.2 0.4 0.6 0.8 1.0

B.

DHARMa residual

QQ plot residuals

KS test: p= 0
Deviation significant

Dispersion test: p= 0
Deviation significant

Outlier test: p= 0
Deviation significant

Observed

Expected

0.0 0.2 0.4 0.6 0.8 1.0

DHARMa residual vs. predicted

DHARMa residual

Model predictions (rank transformed)

0.00 0.25 0.50 0.75 1.00

0.0 0.2 0.4 0.6 0.8 1.0

C.

DHARMa residual

QQ plot residuals

KS test: p= 0
Deviation significant

Dispersion test: p= 0.452
Deviation n.s.

Outlier test: p= 0
Deviation significant

Observed

0.0 0.2 0.4 0.6 0.8 1.0

Expected

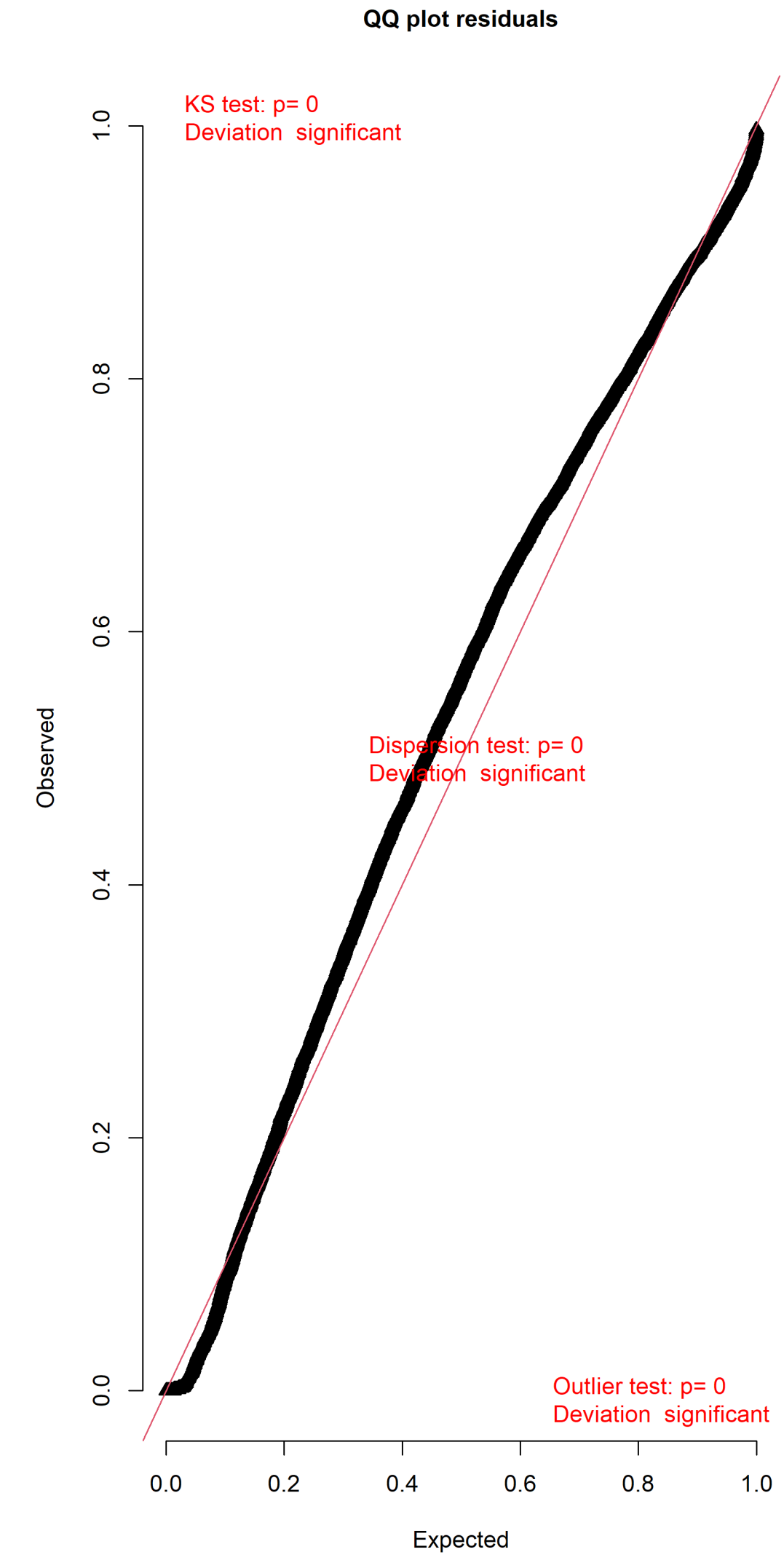
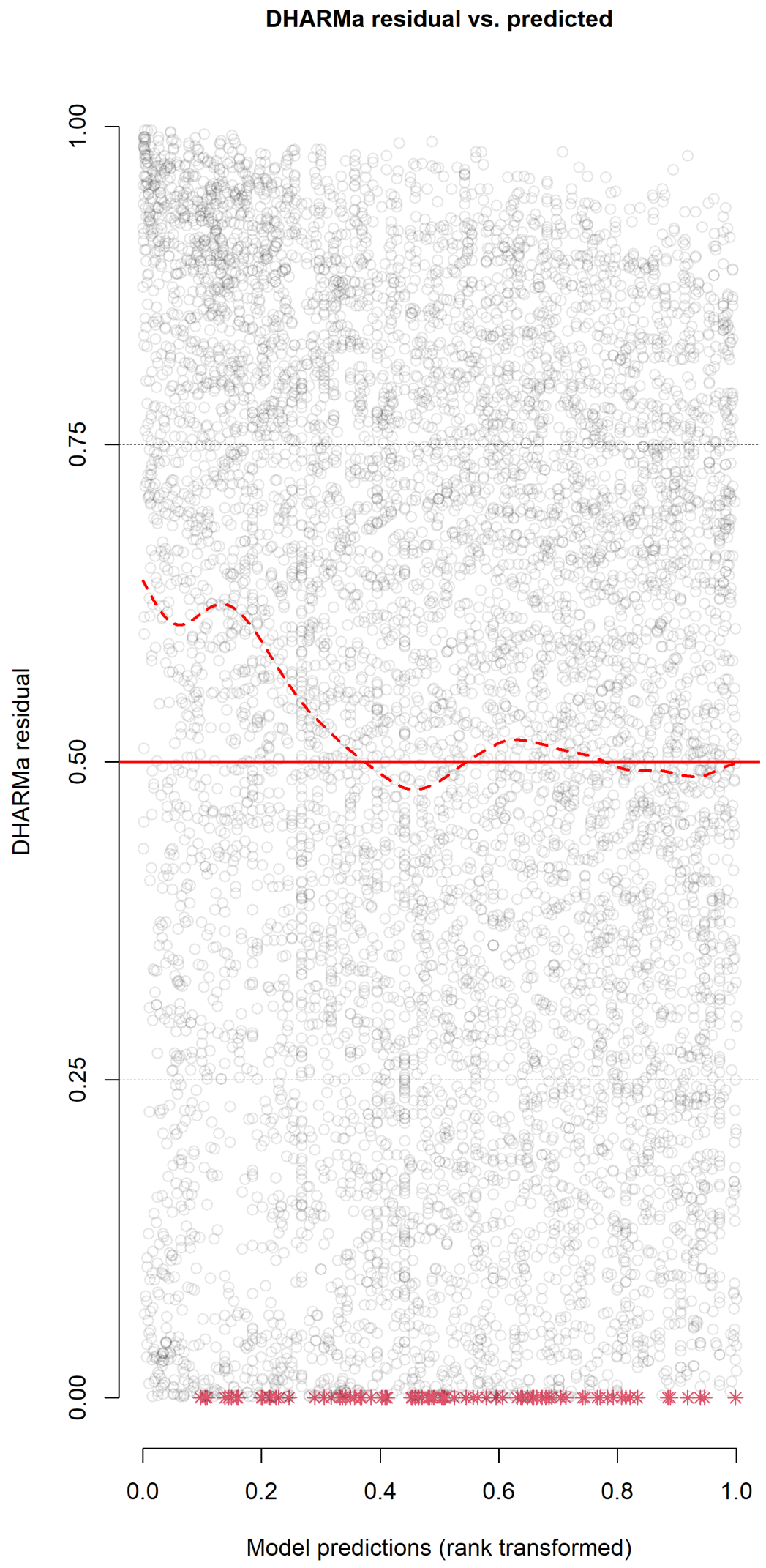
DHARMa residual vs. predicted

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)

D.

DHARMa residual