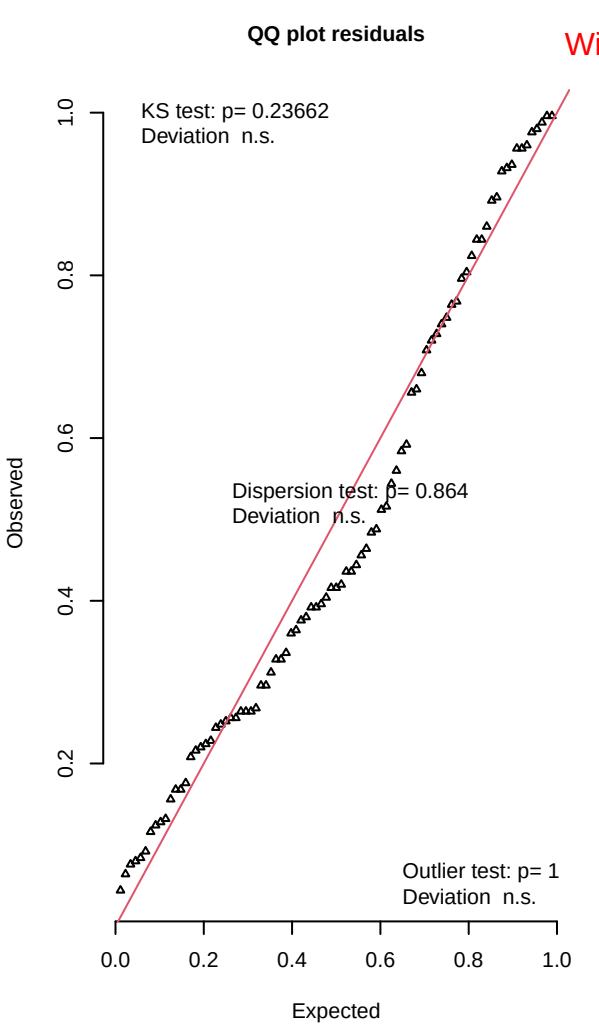
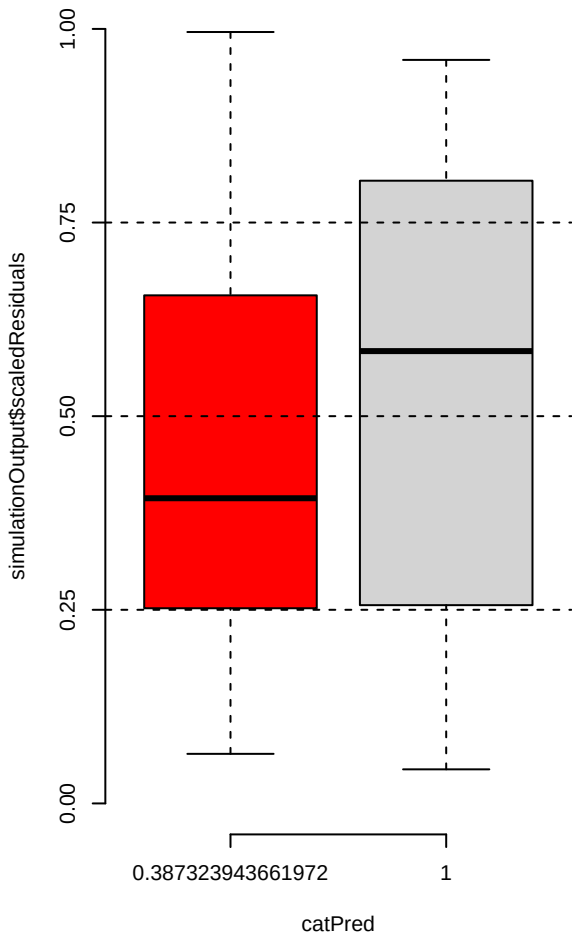
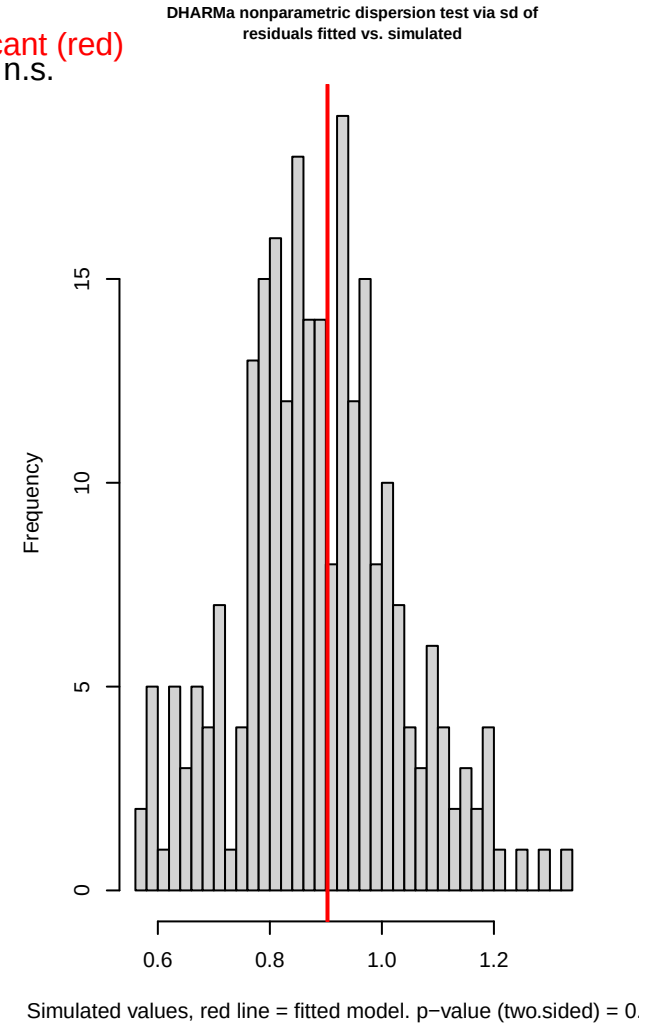
FRic ~ intercept + fish1



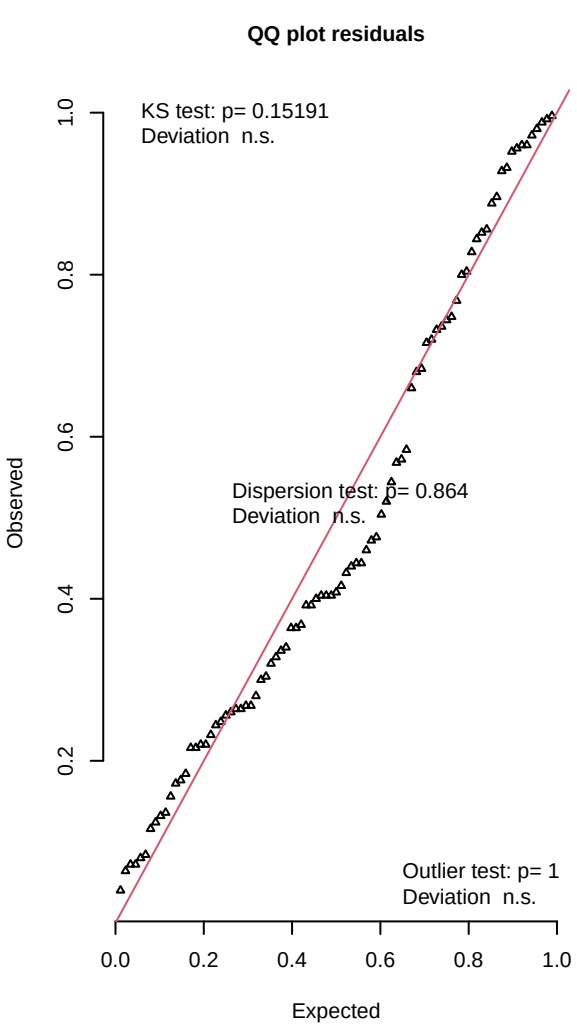
Within−group deviations from uniformity significant (red)

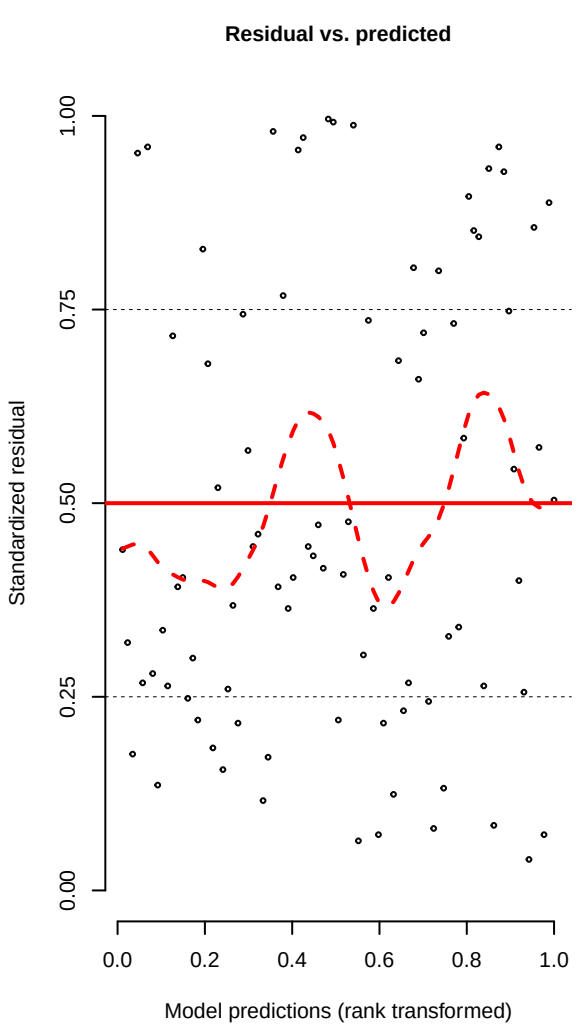
Levene Test for homongeneity of variance n.s.

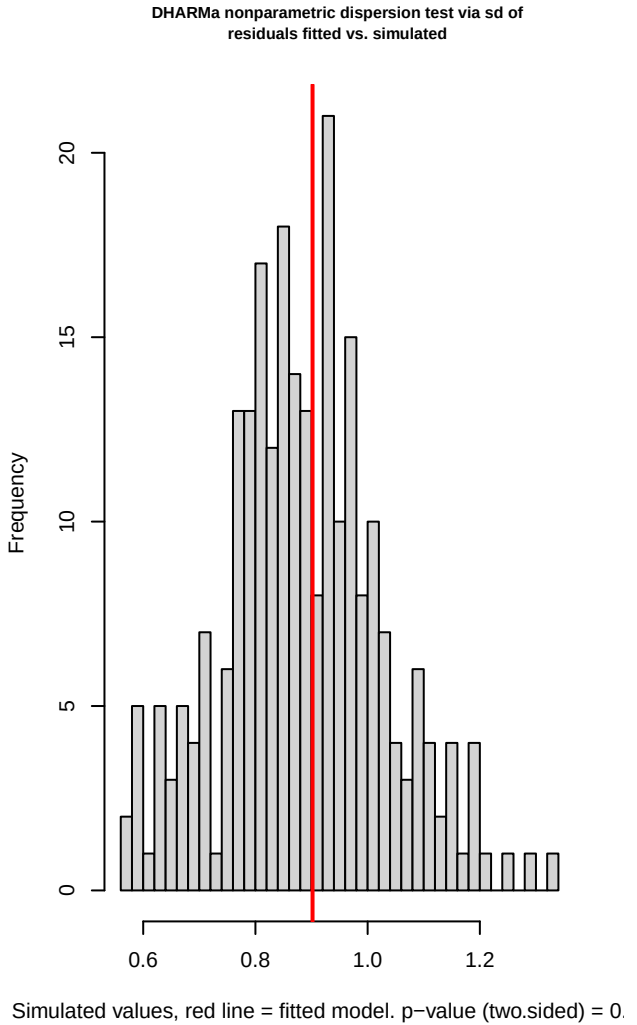




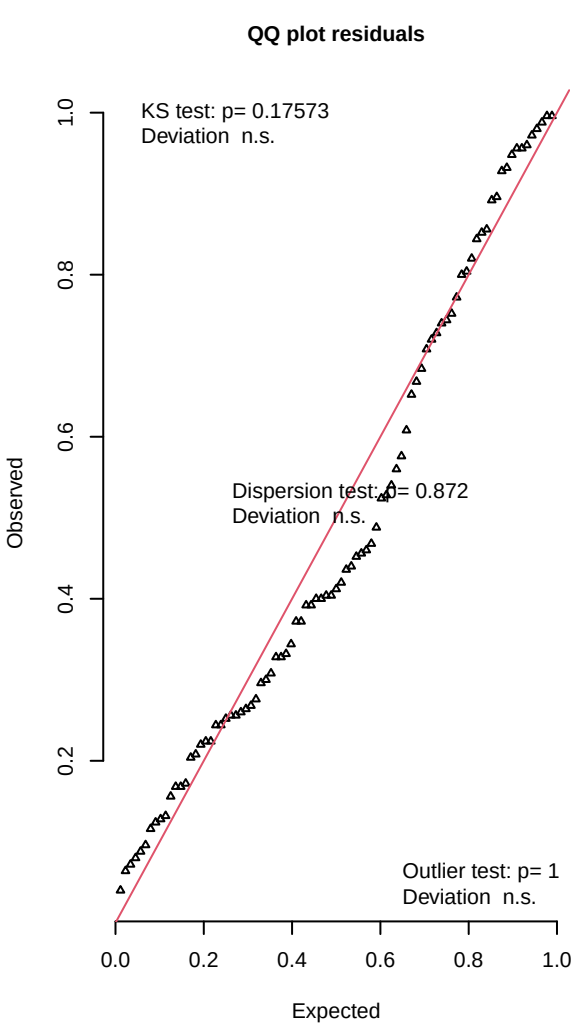
FRic ~ intercept + area_std + fish1

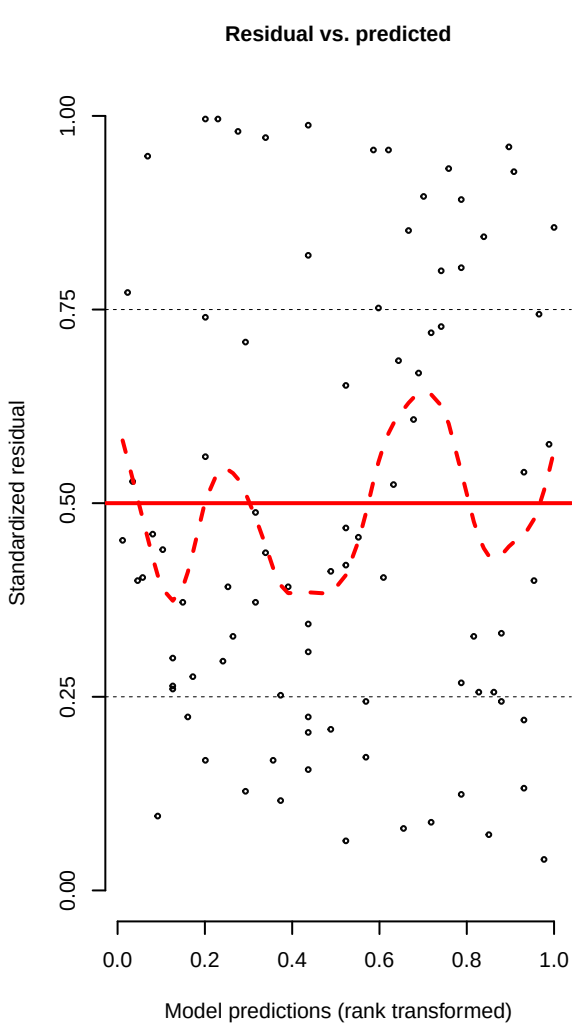


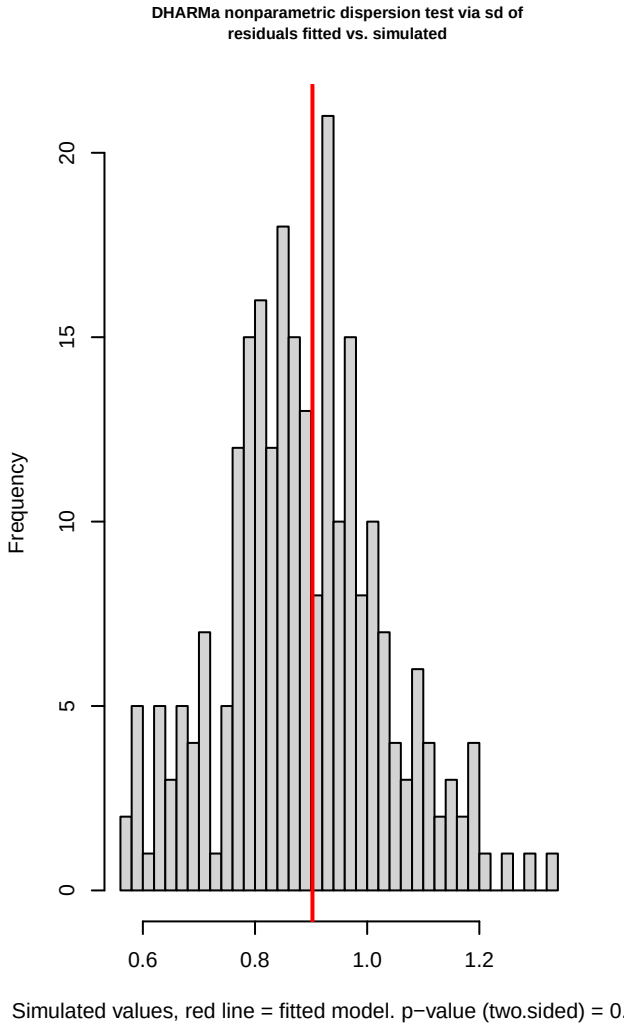




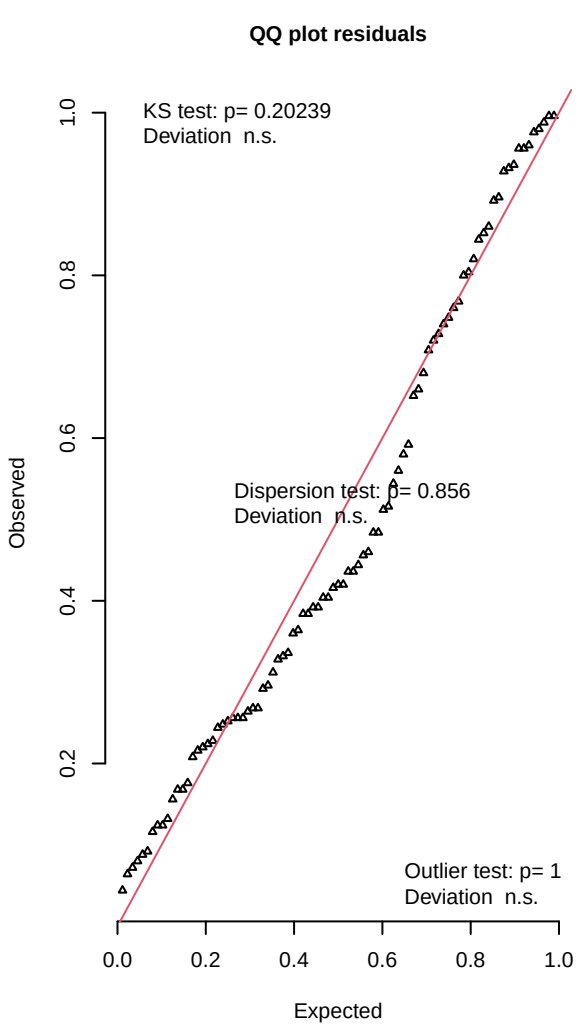
FRic ~ intercept + fish1 + time_convert_std

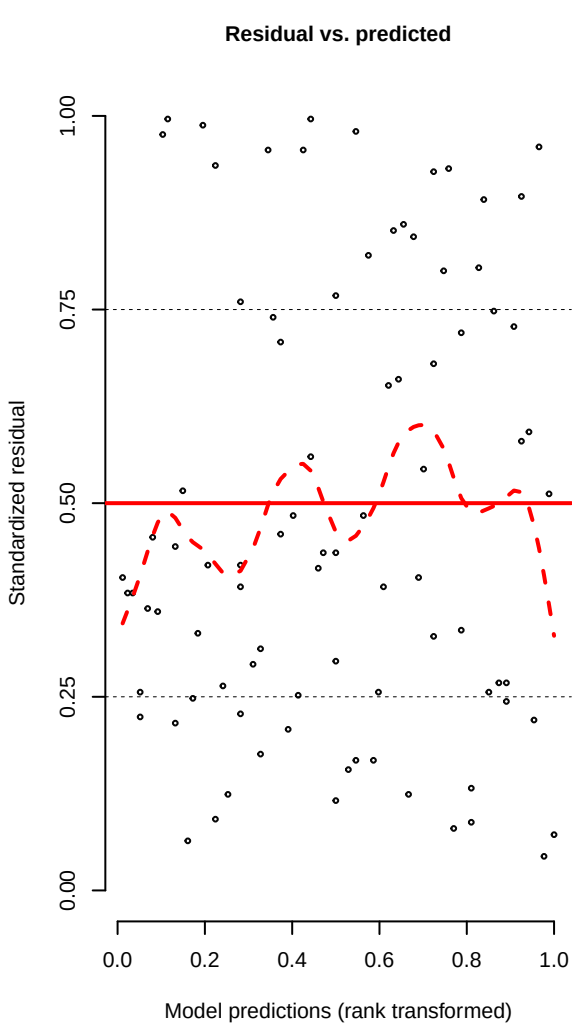


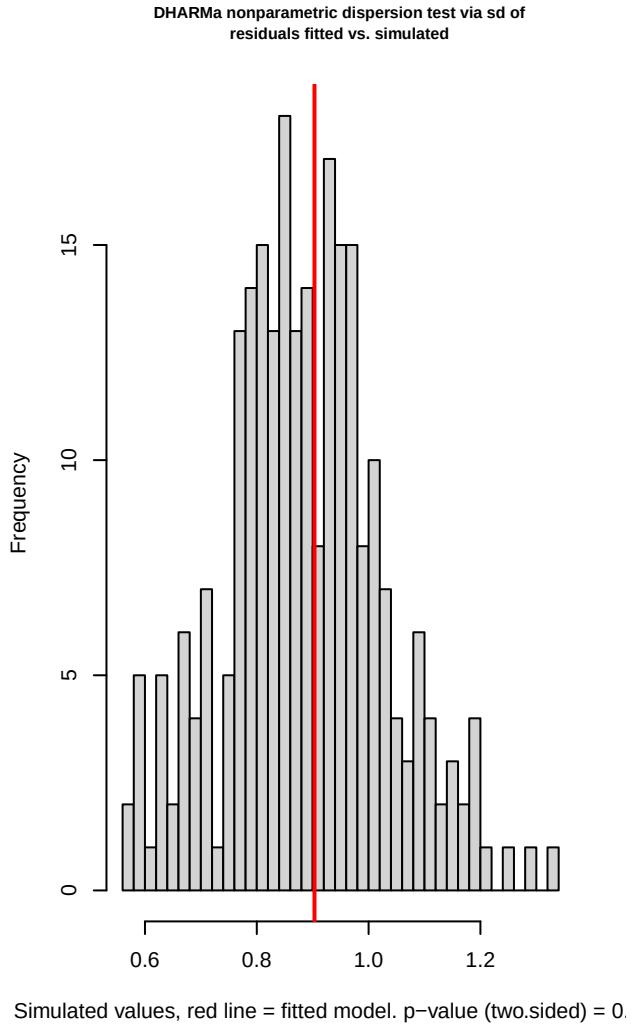




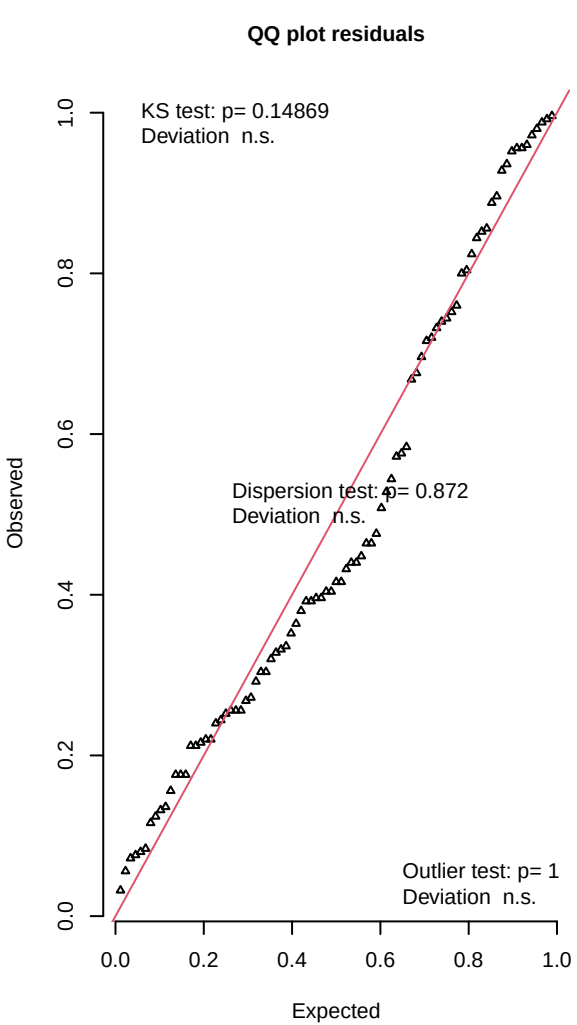
FRic ~ intercept + fish1 + temp_std

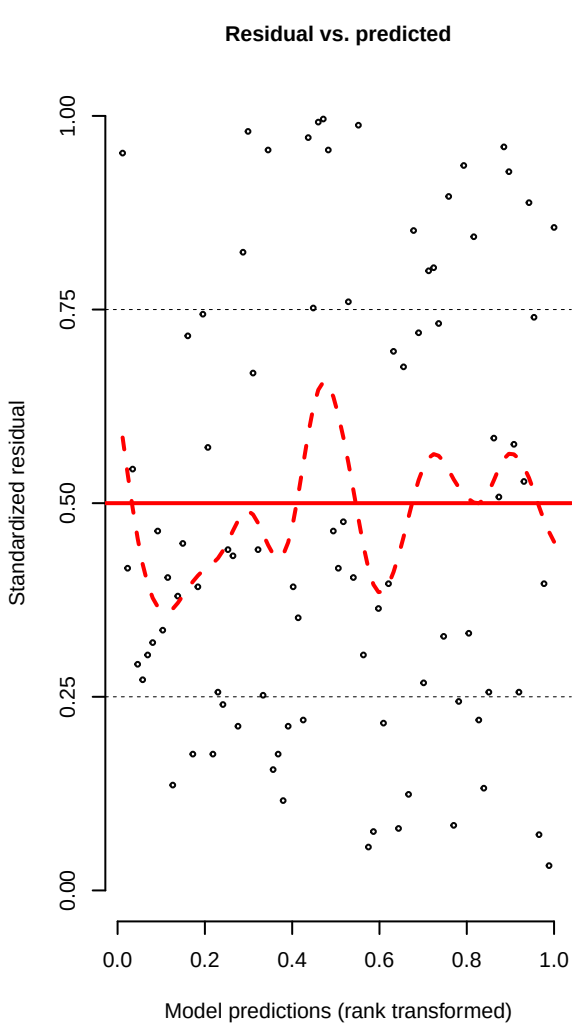


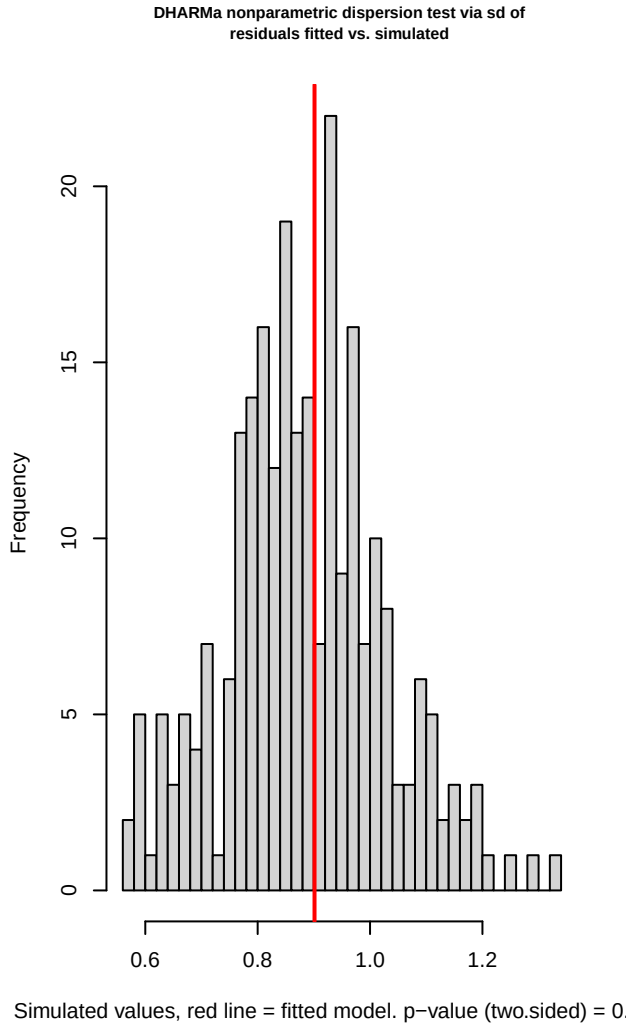




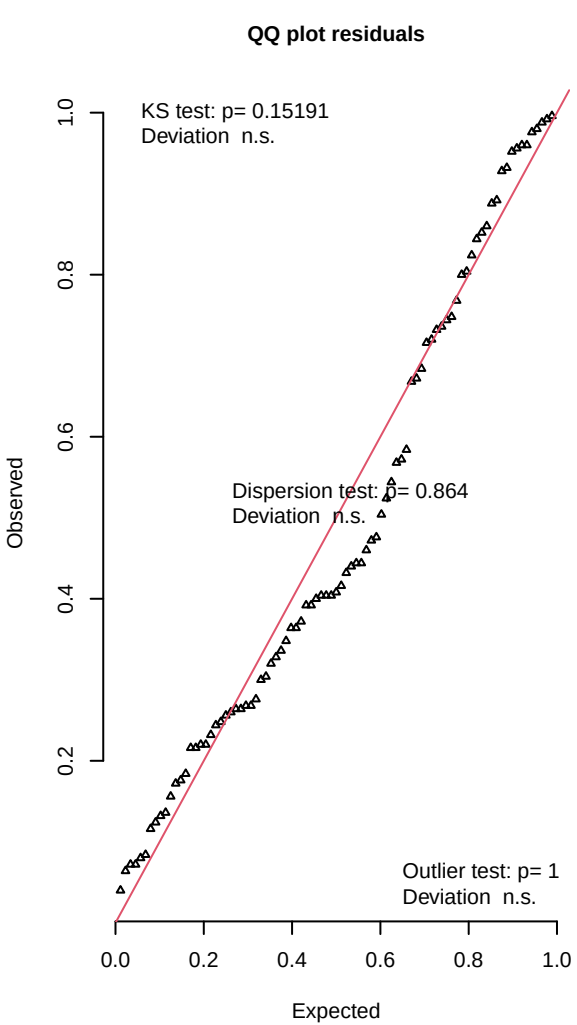
FRic ~ intercept + area_std + fish1 + time_convert_std

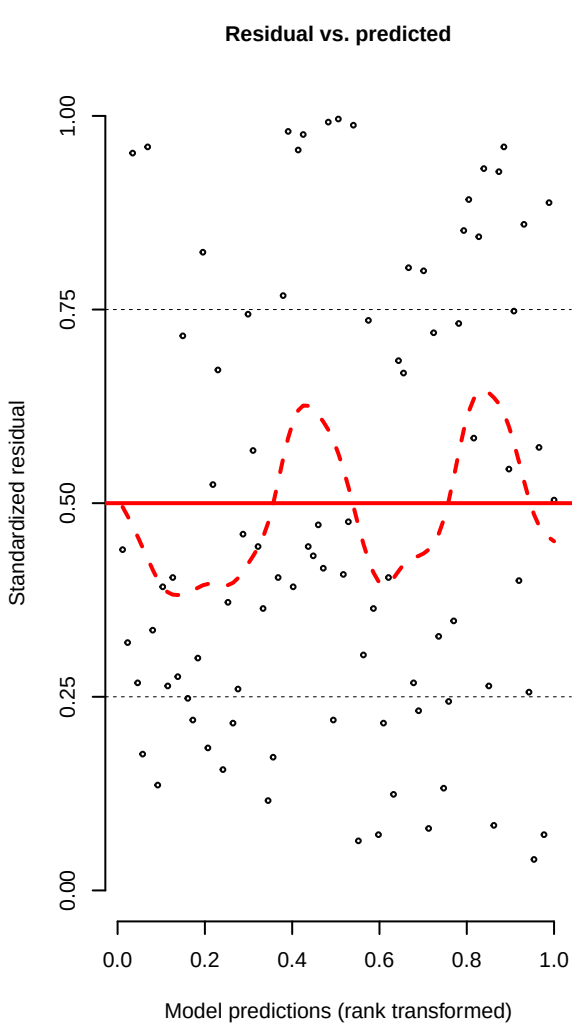


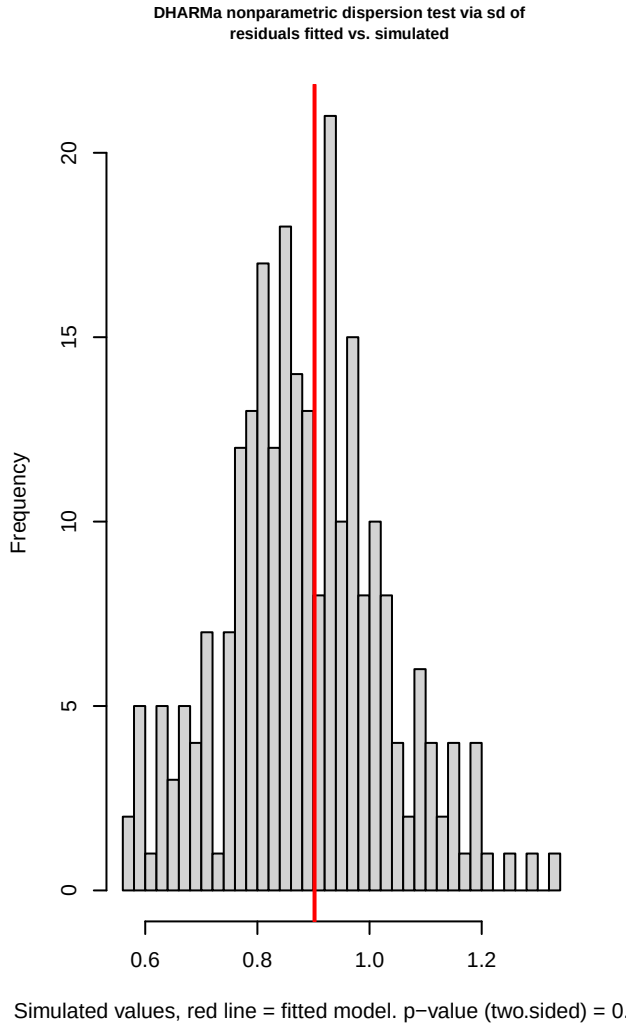




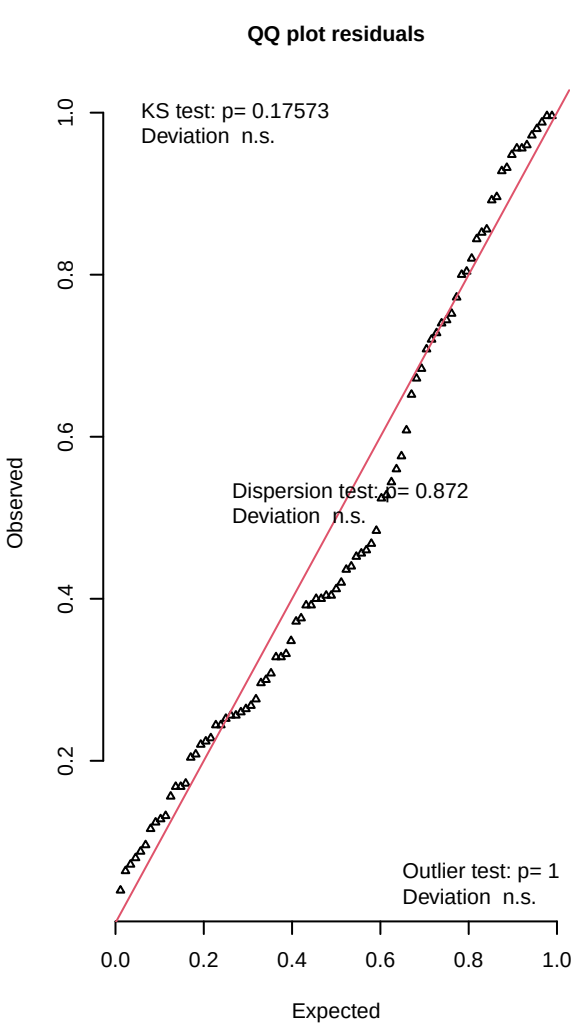
FRic ~ intercept + area_std + fish1 + temp_std

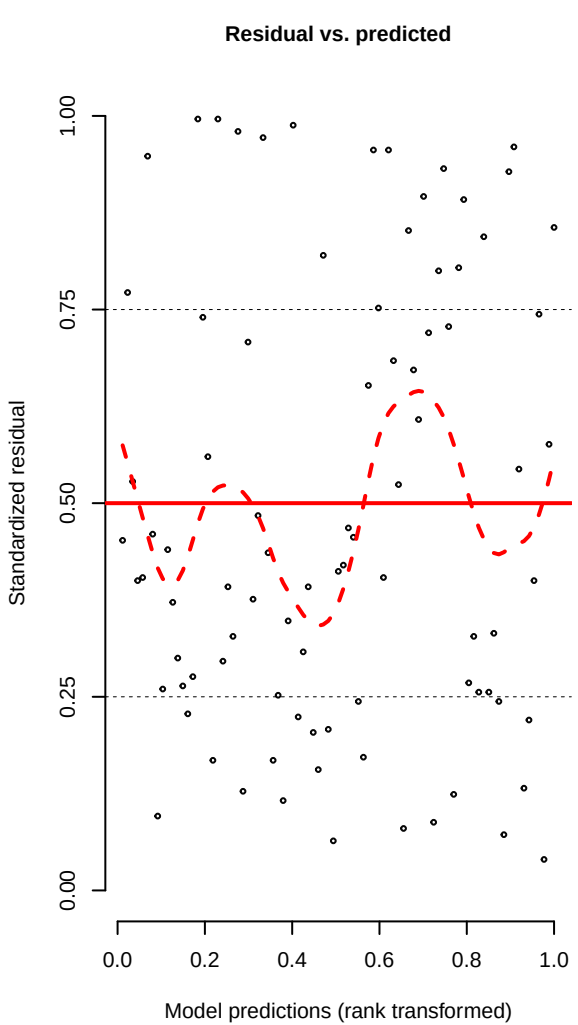


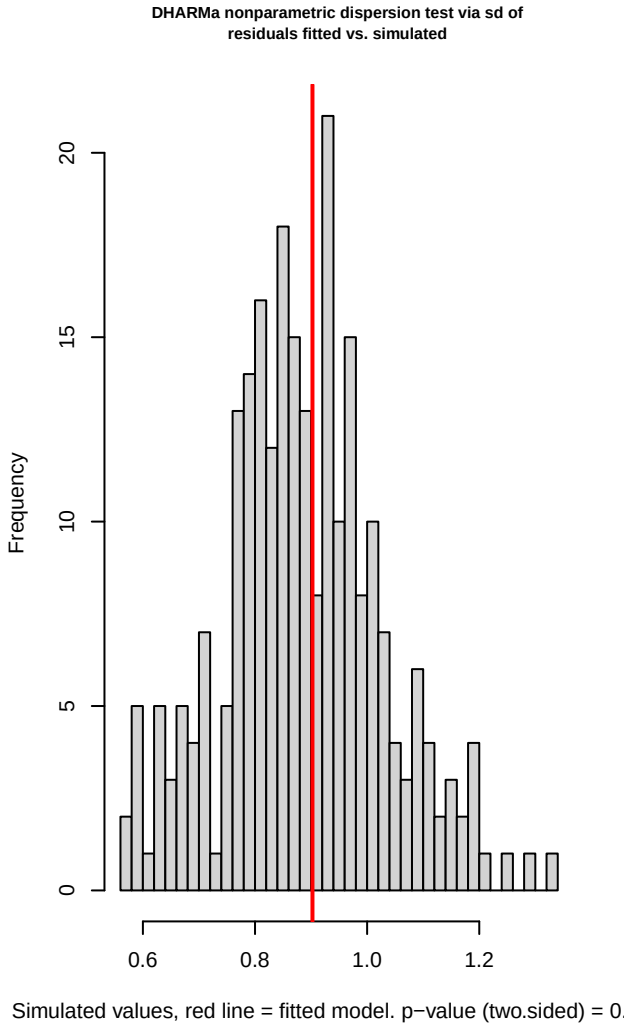




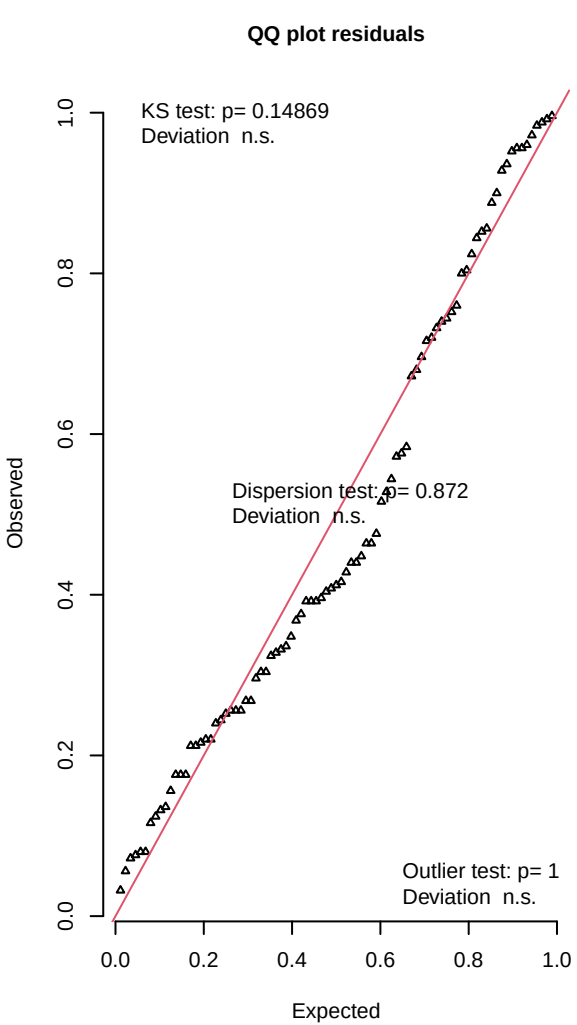
FRic ~ intercept + fish1 + temp_std + time_convert_std

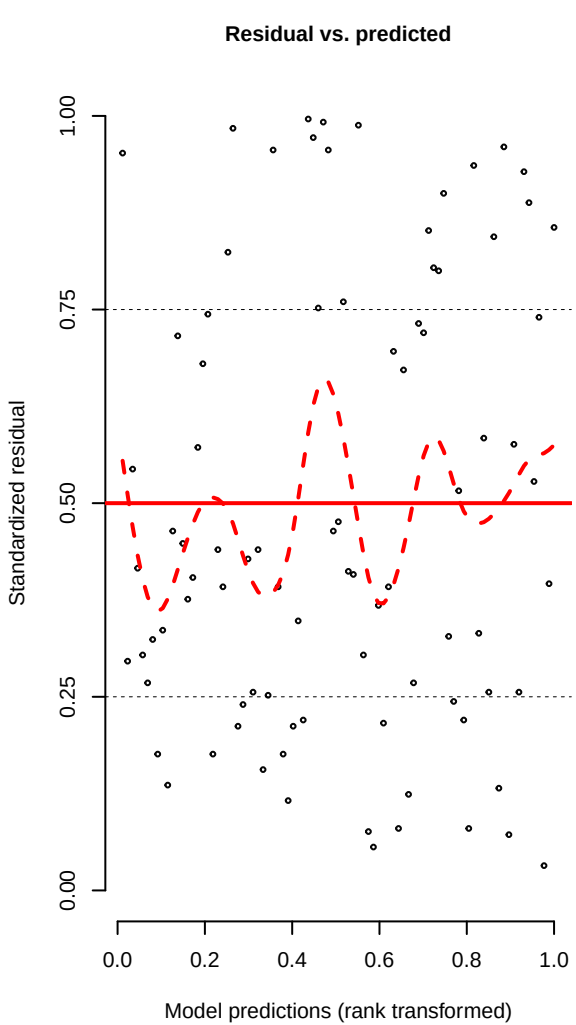


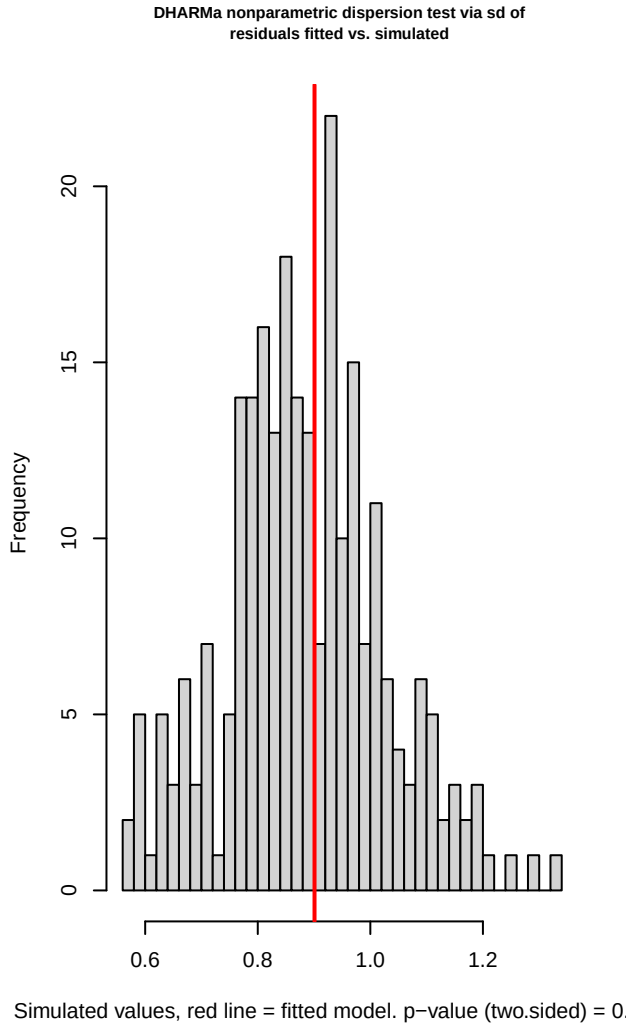




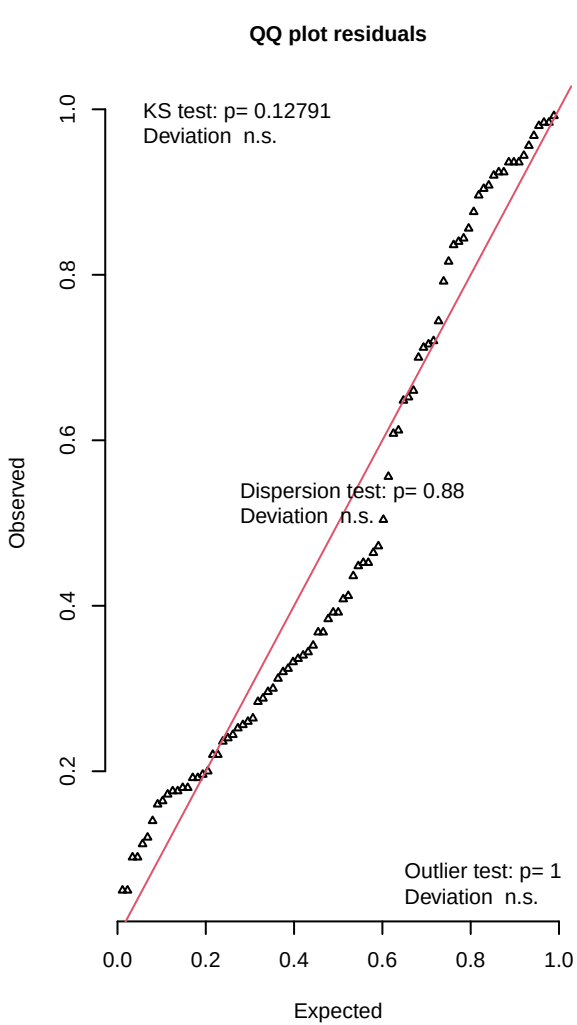
FRic ~ intercept + area_std + fish1 + temp_std + time_convert_std

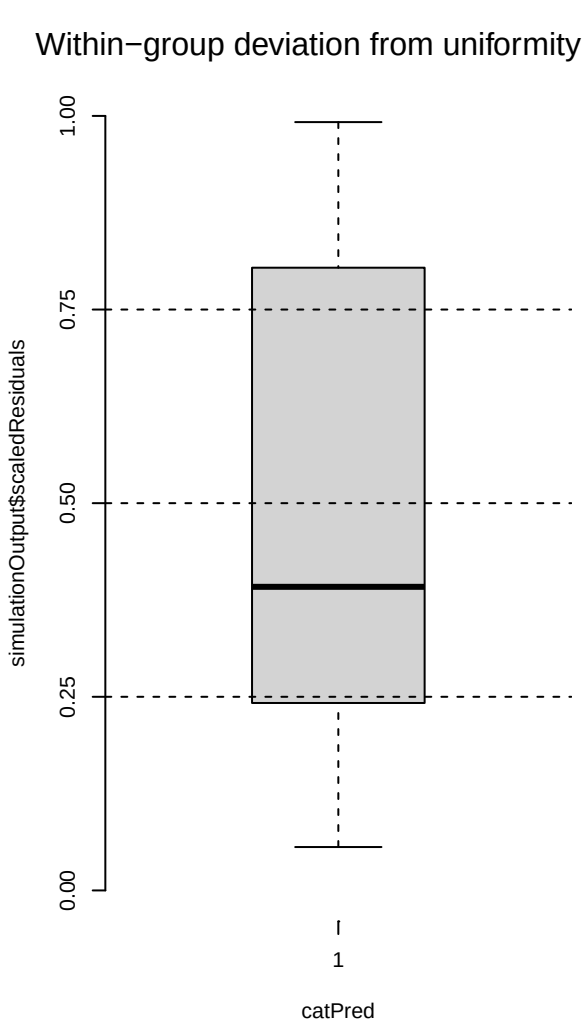


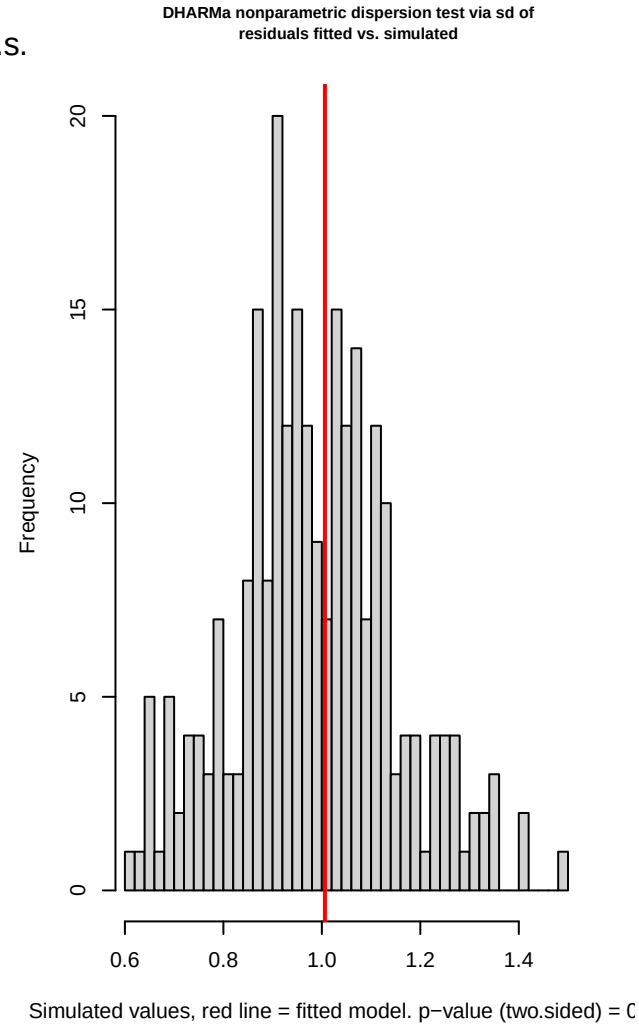




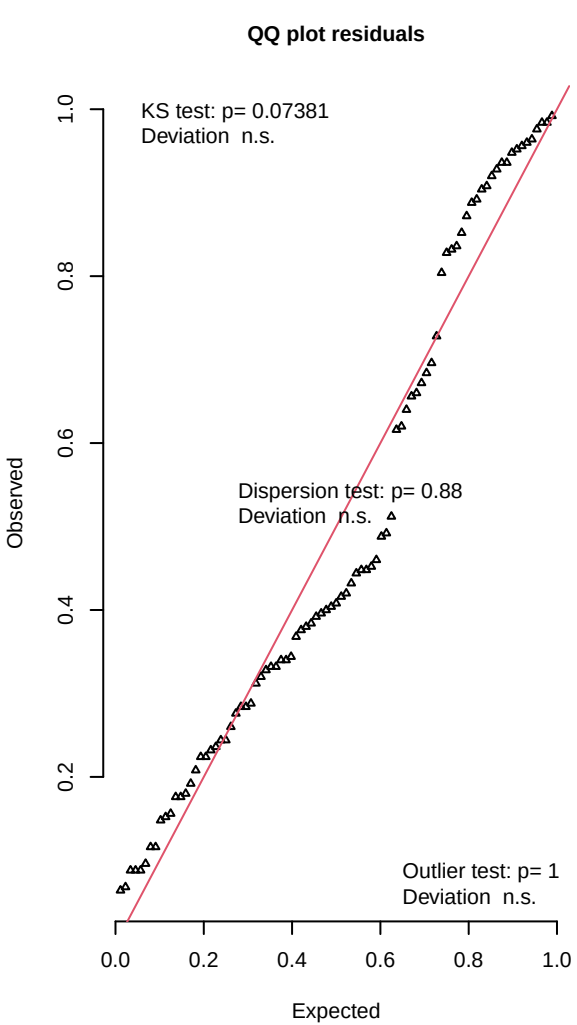
FRic ~ intercept

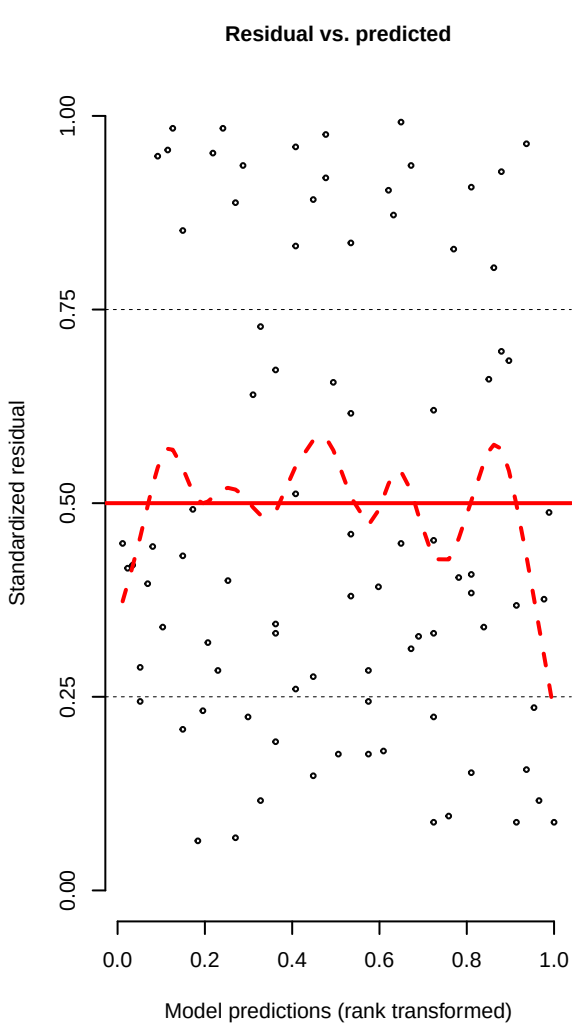


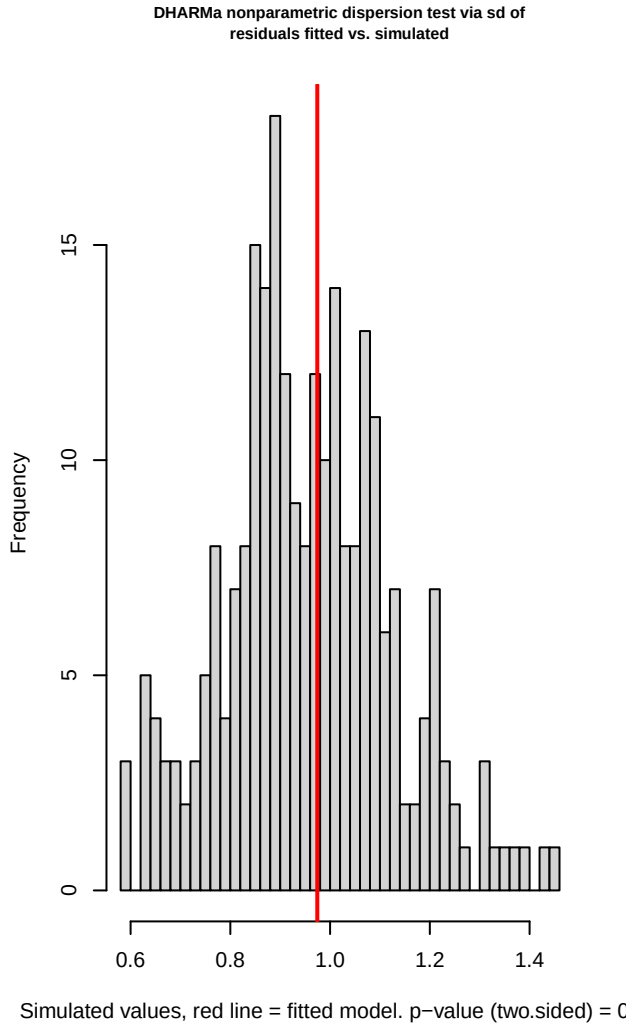




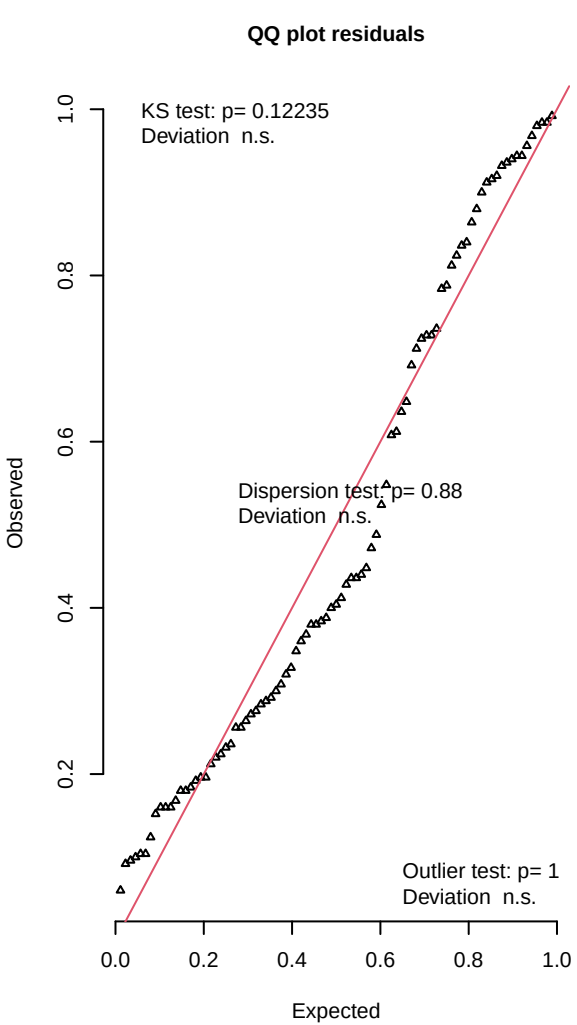
FRic ~ intercept + temp_std

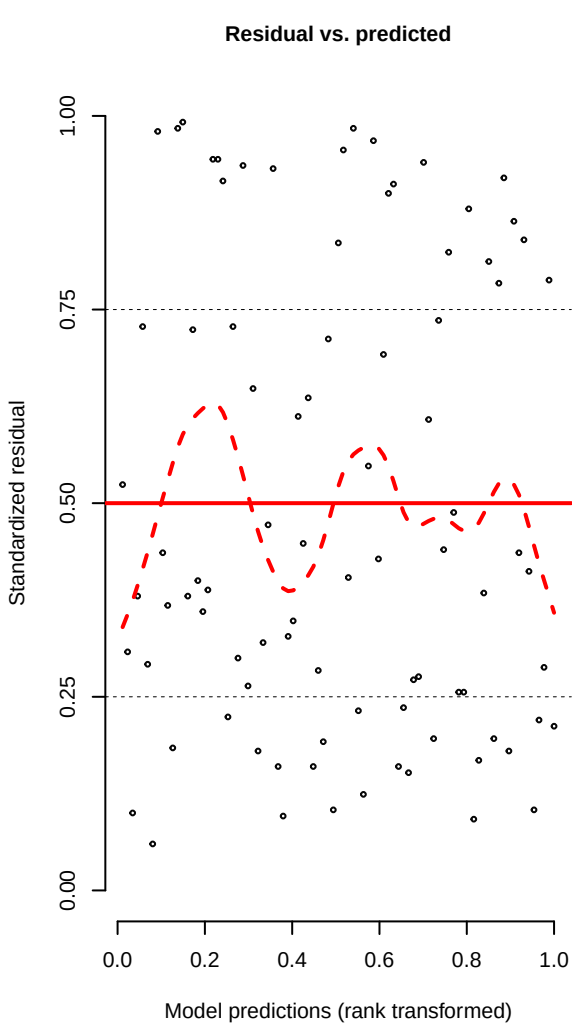


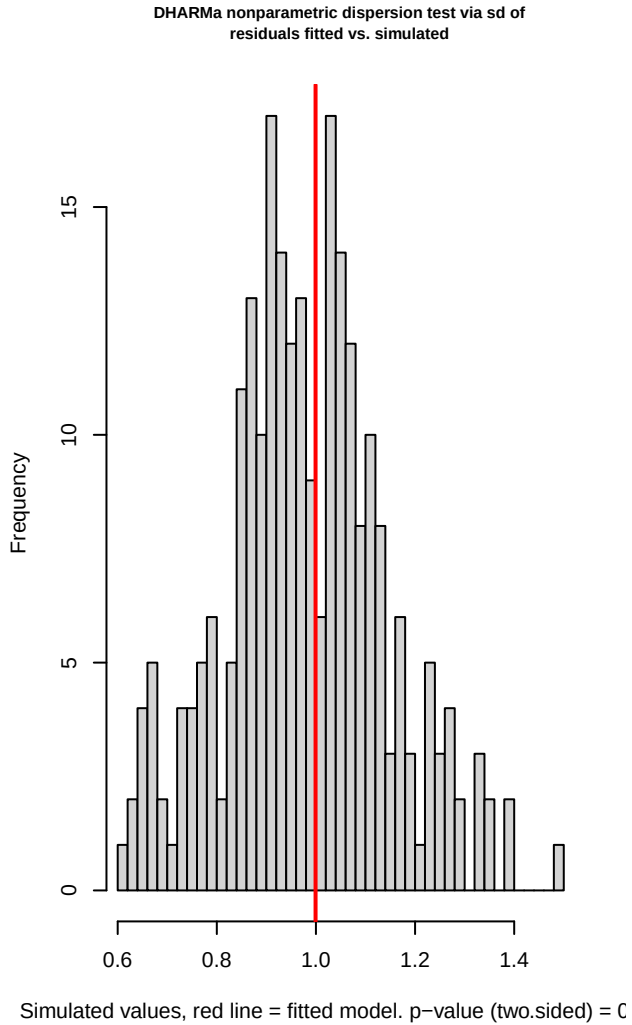




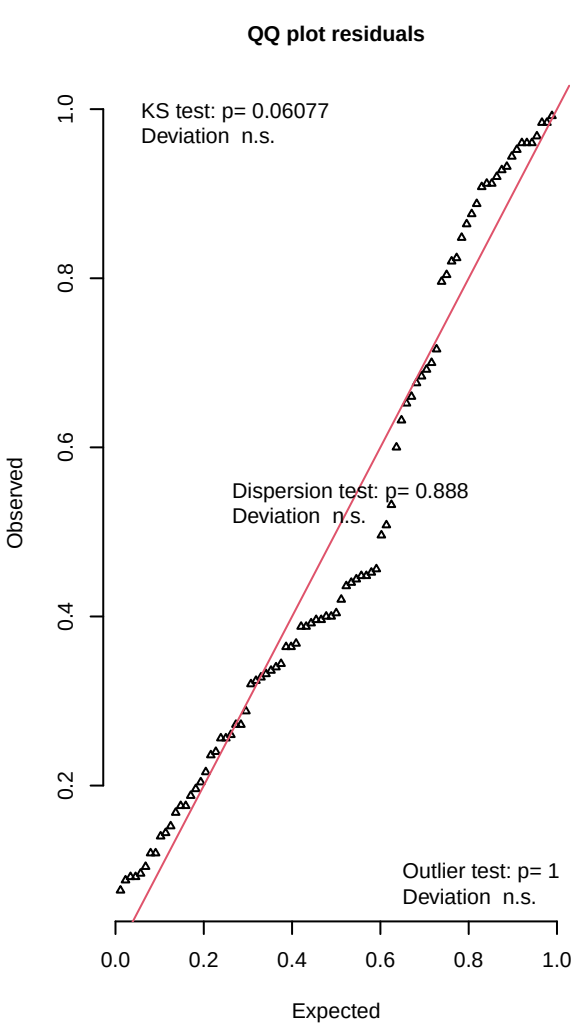
FRic ~ intercept + area_std

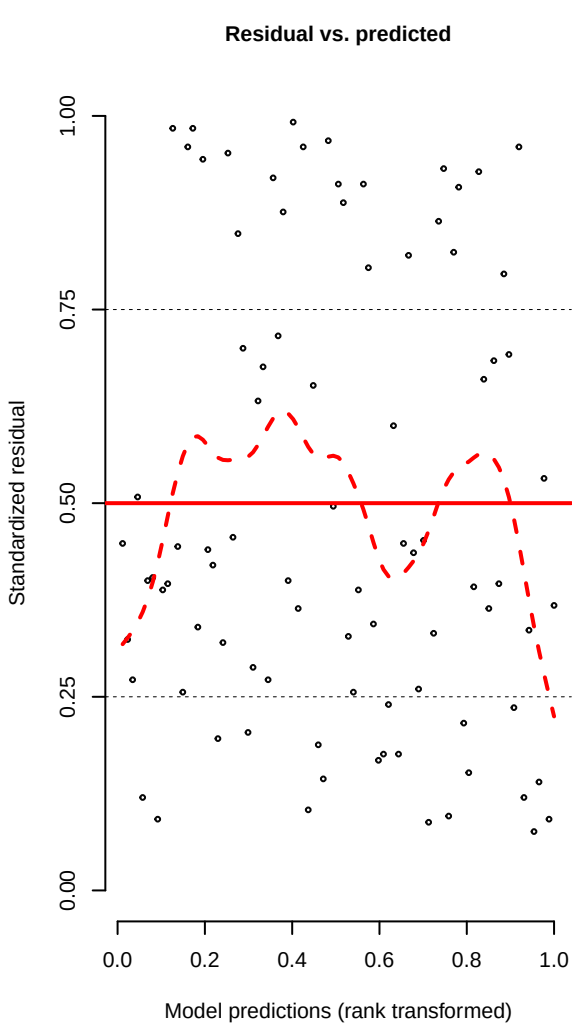


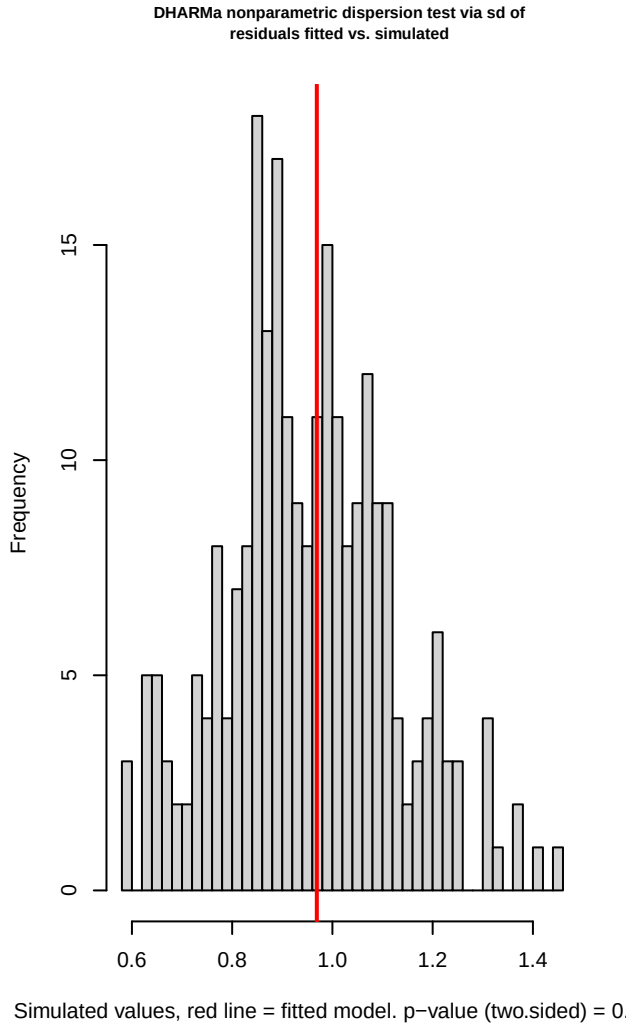




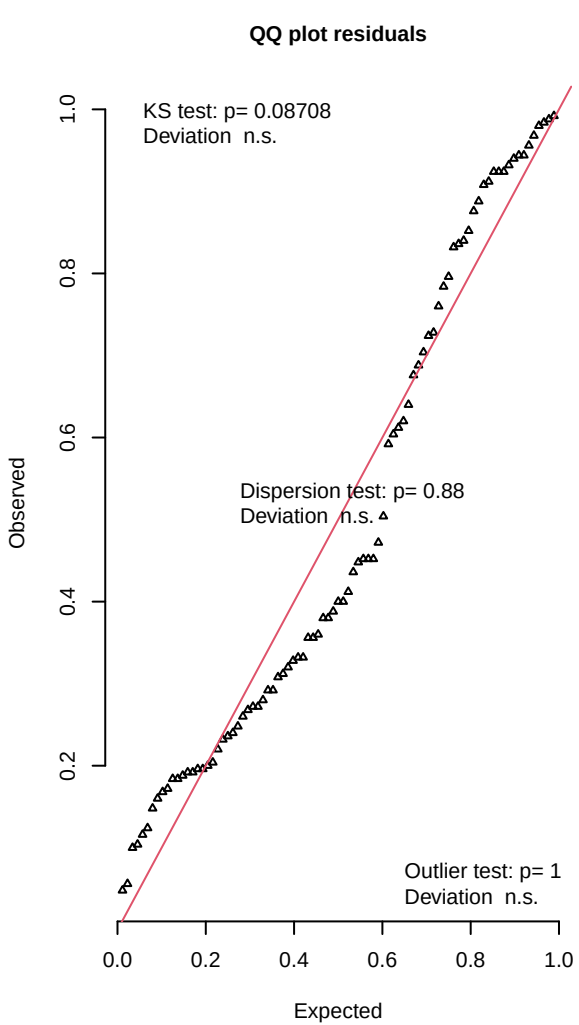
FRic ~ intercept + area_std + temp_std

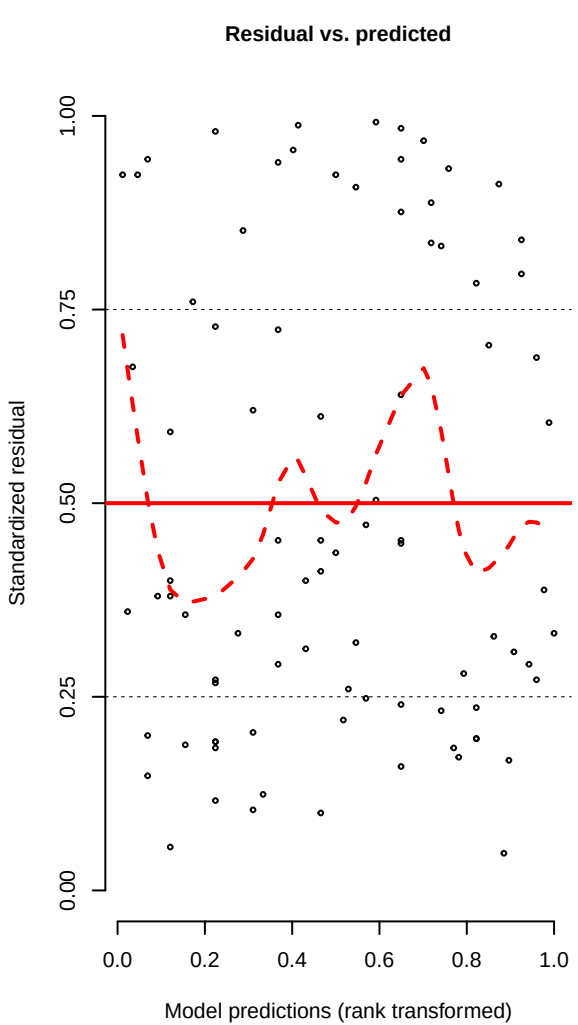


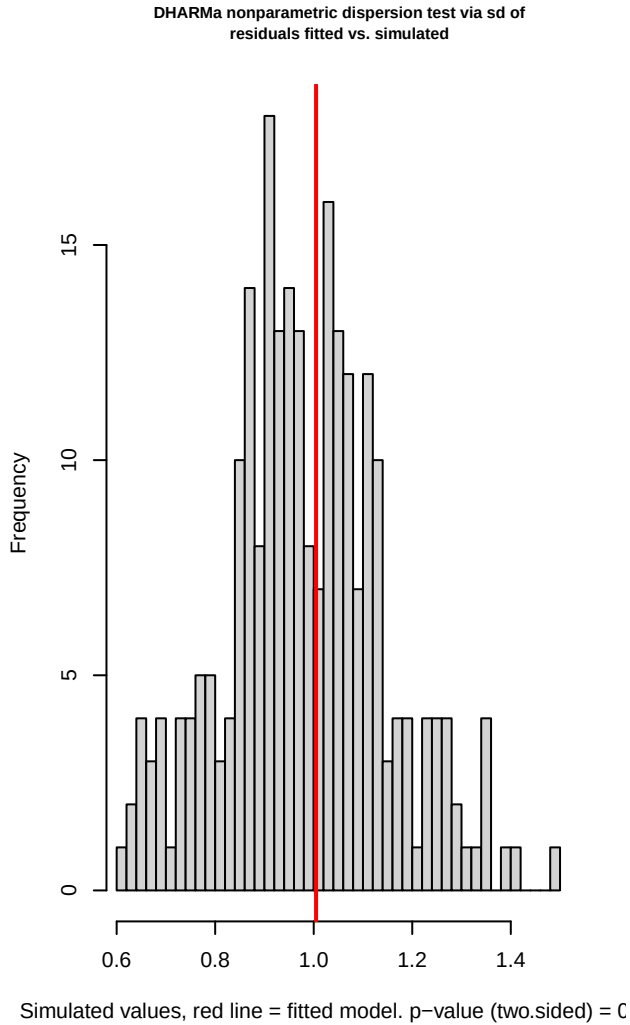




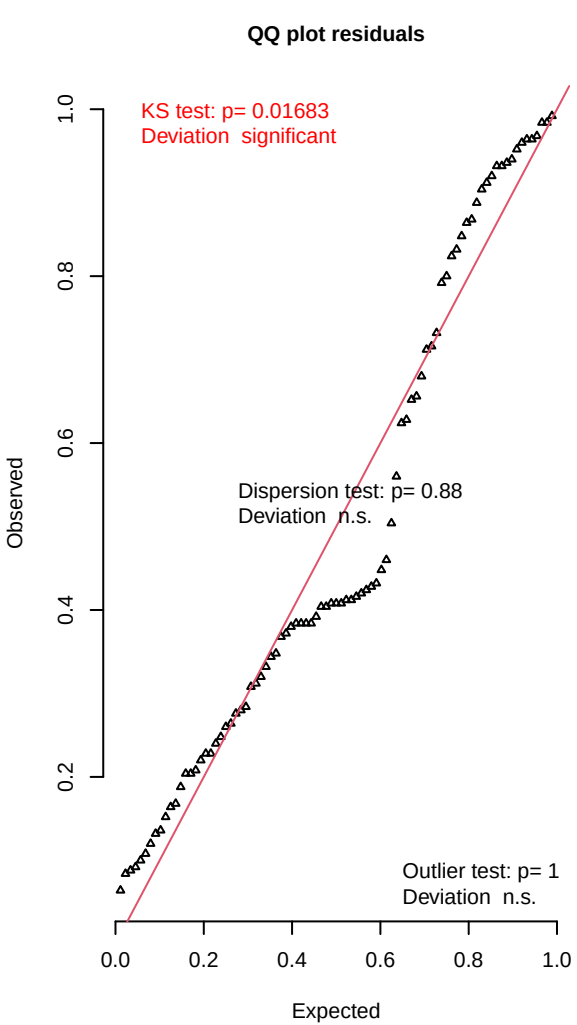
FRic ~ intercept + time_convert_std

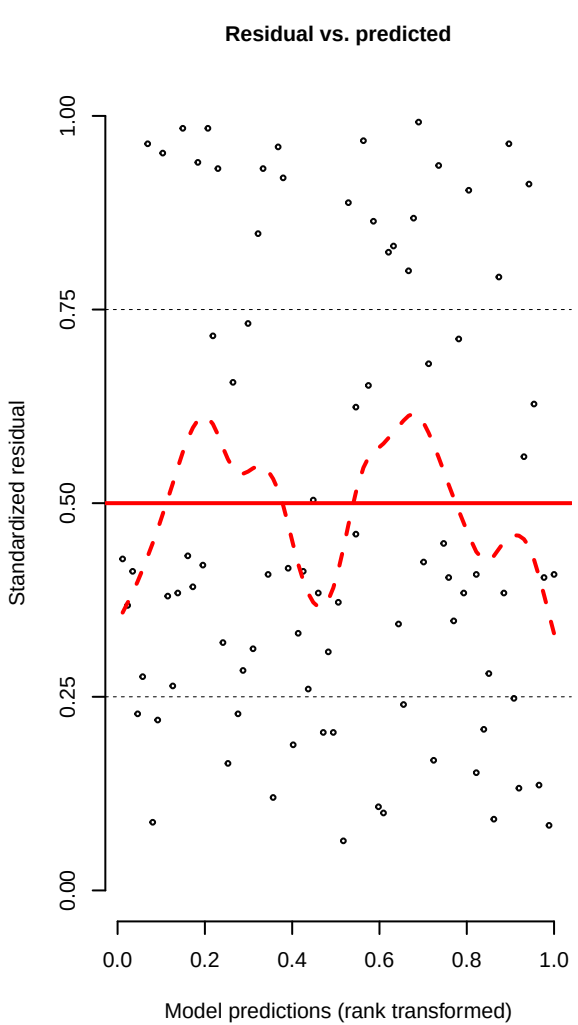


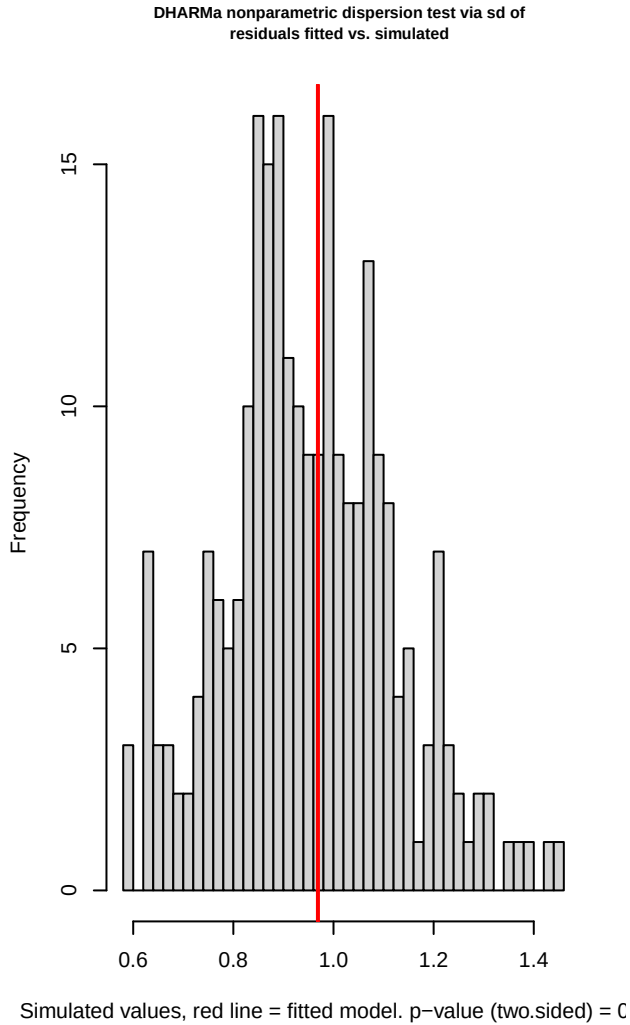




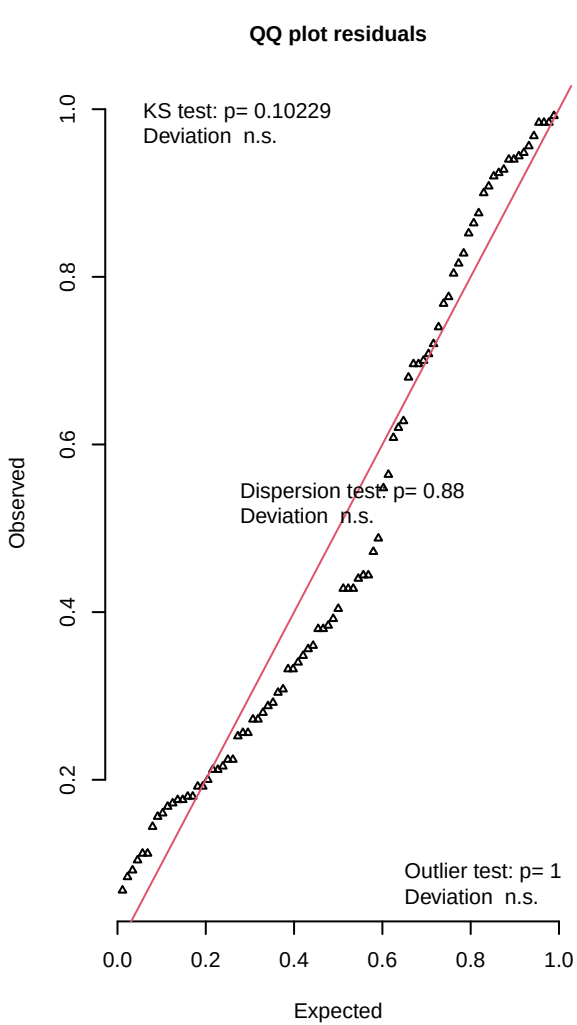
FRic ~ intercept + temp_std + time_convert_std

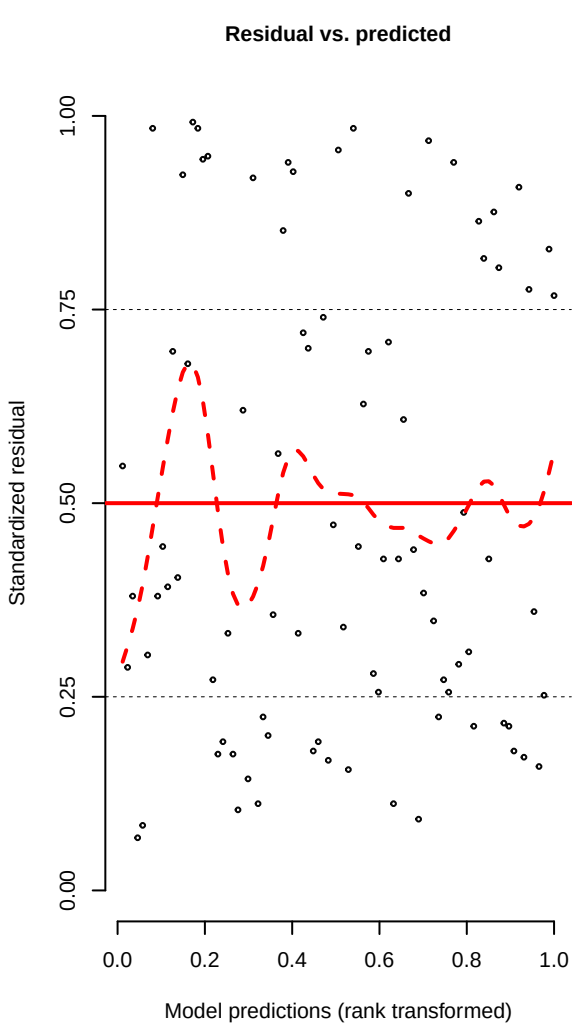


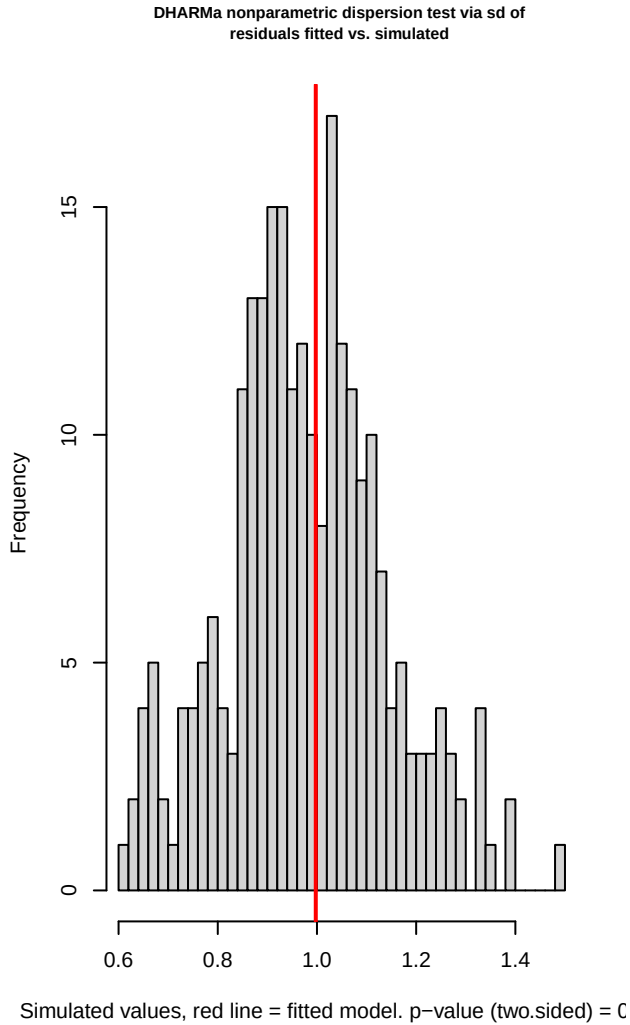




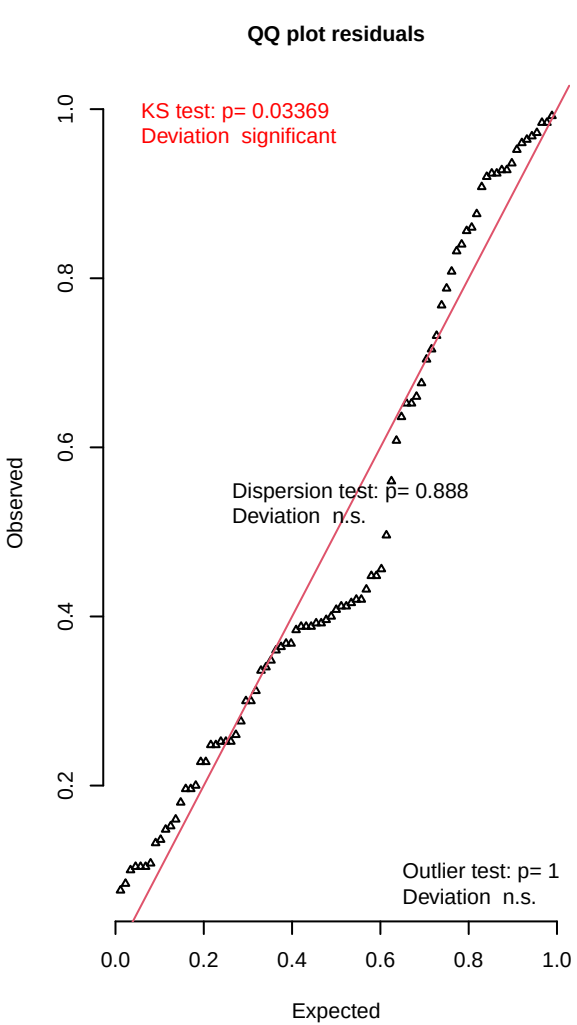
FRic ~ intercept + area_std + time_convert_std

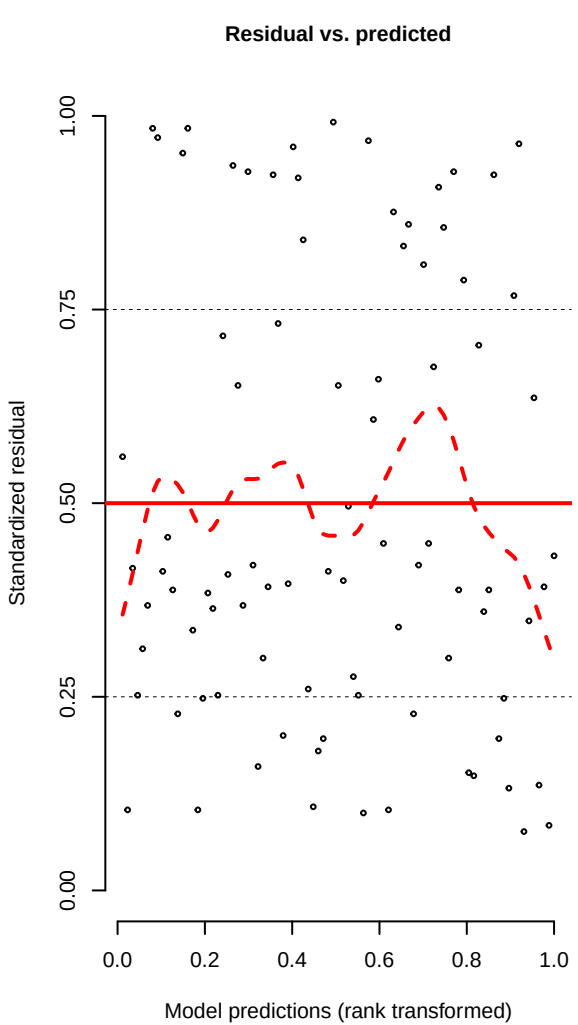


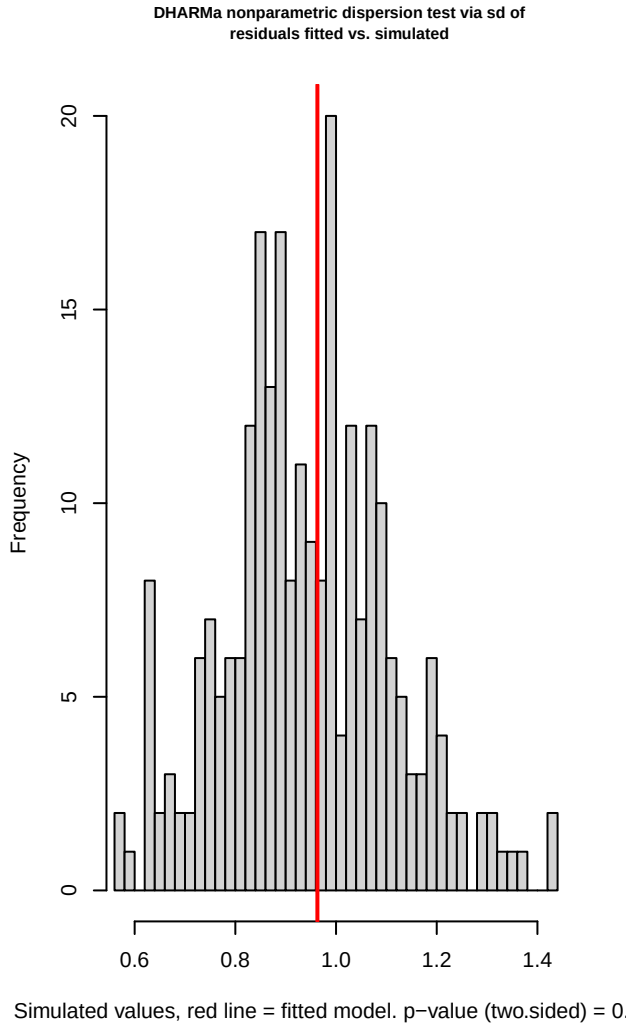




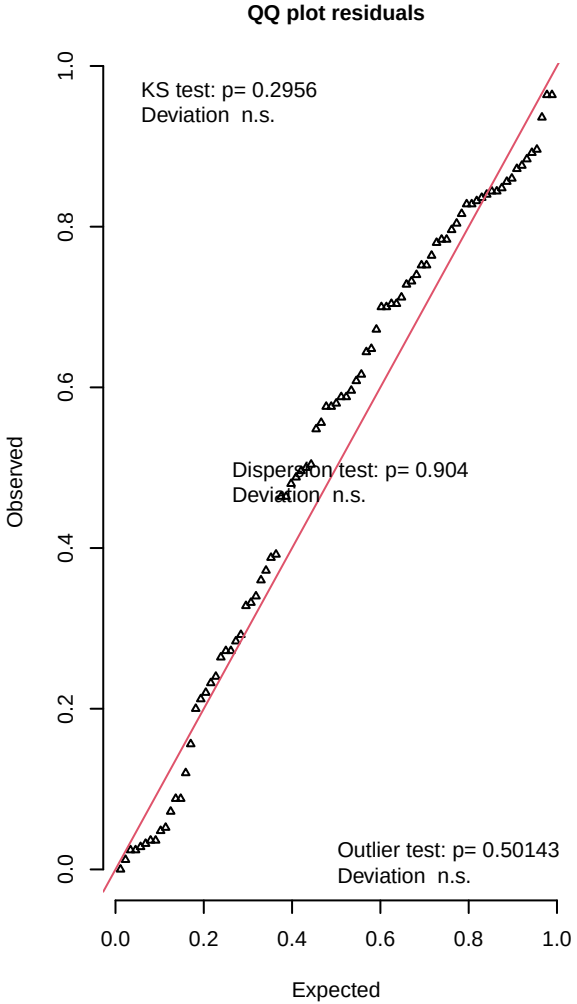
FRic ~ intercept + area_std + temp_std + time_convert_std

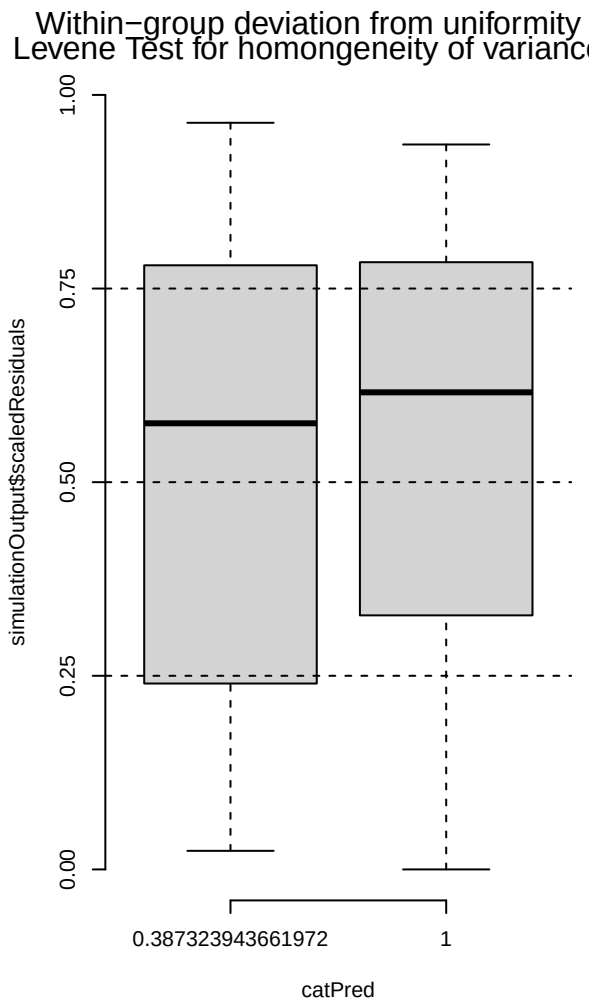


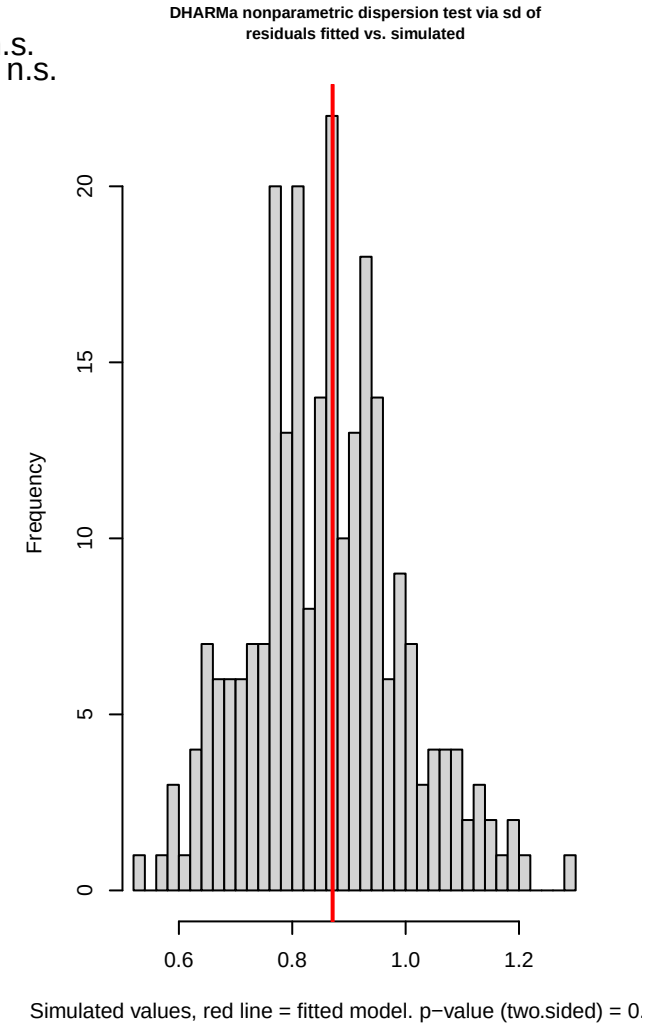




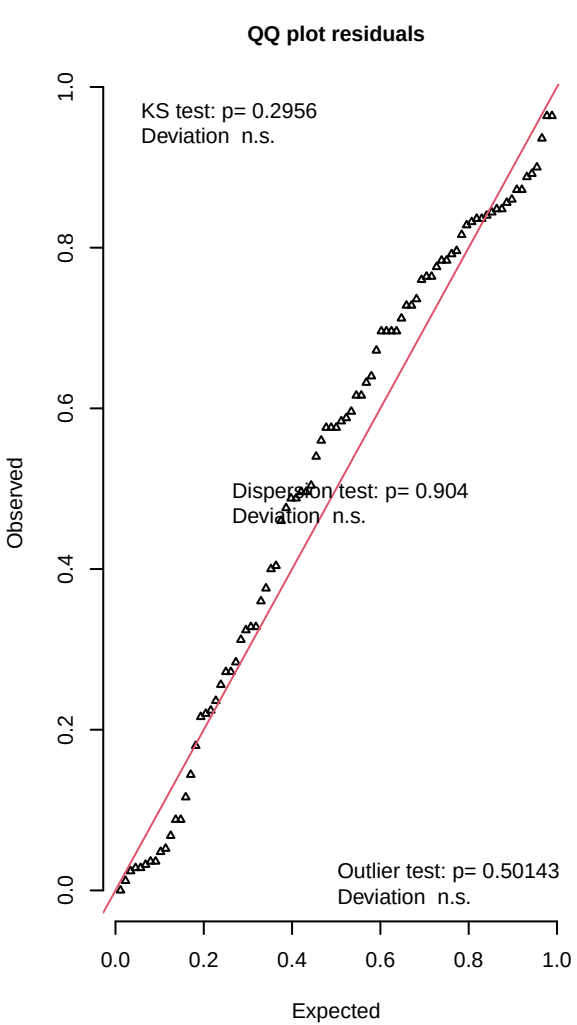
FDis ~ intercept + fish1

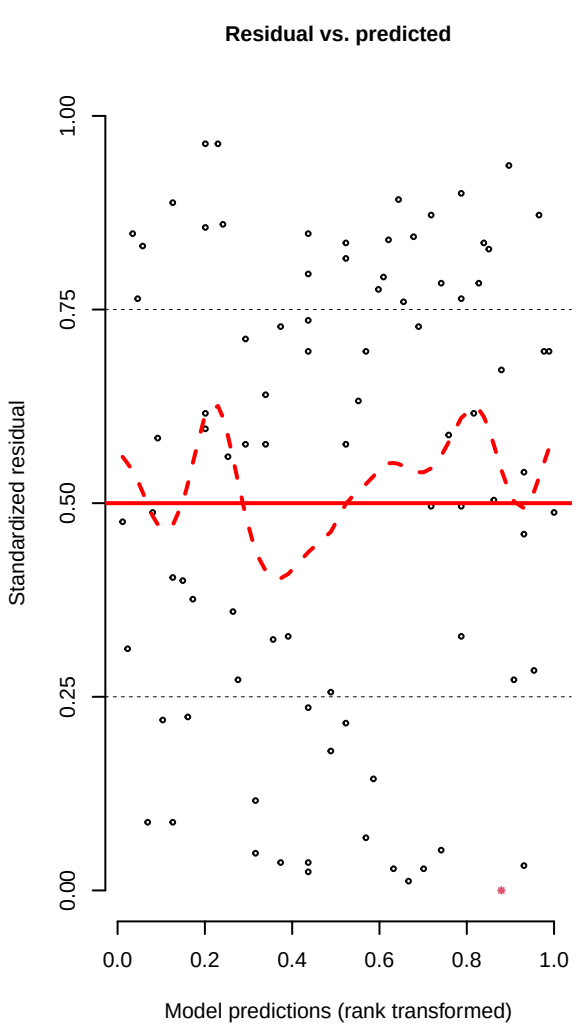


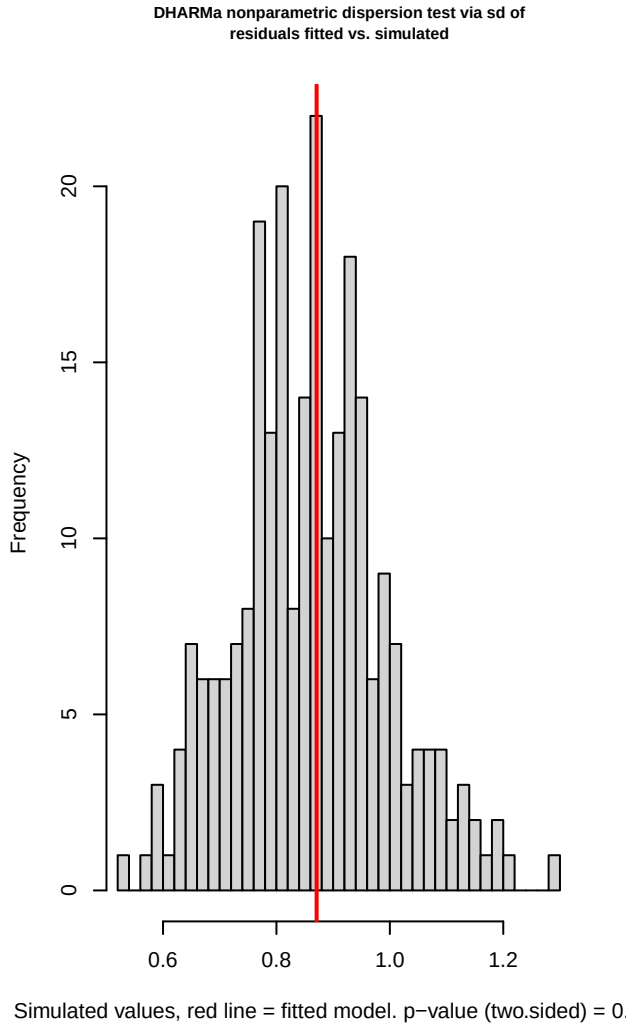




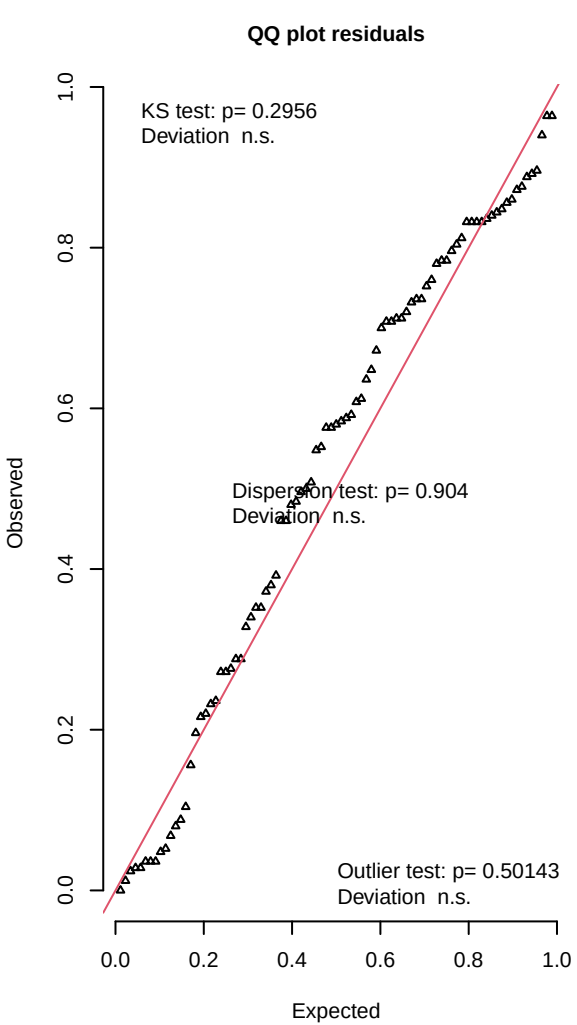
FDis ~ intercept + fish1 + time_convert_std

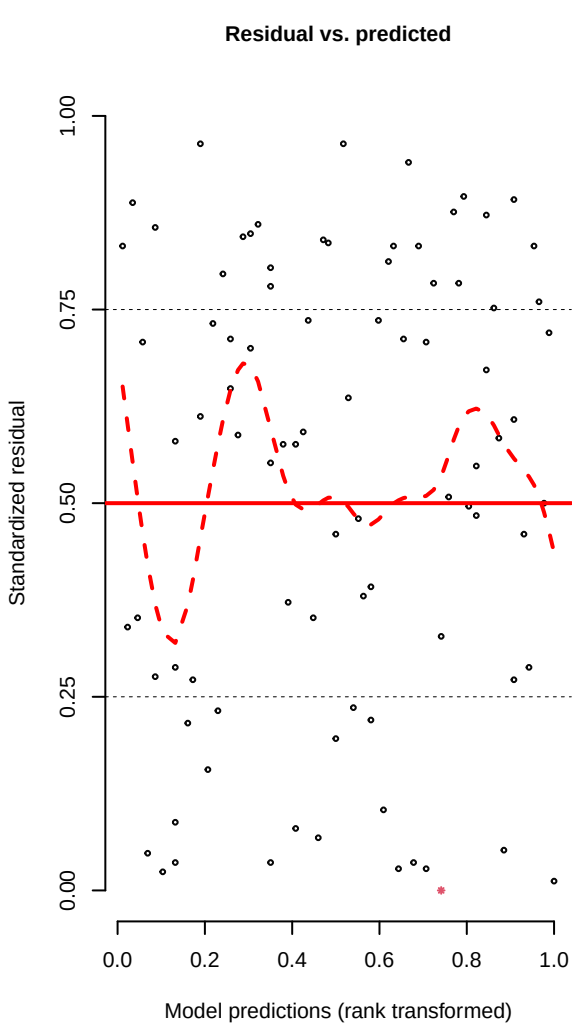


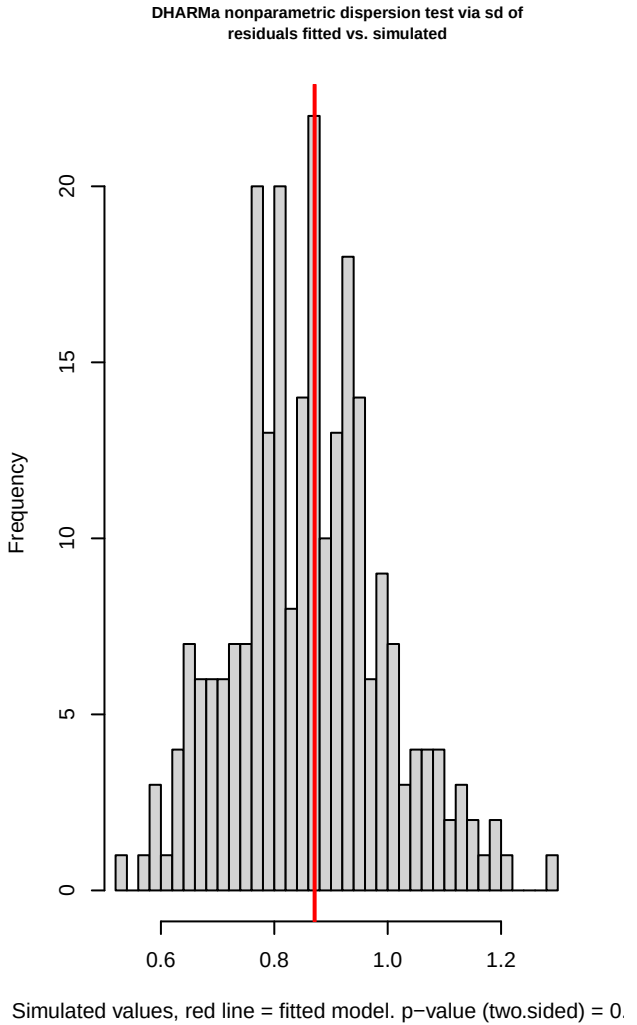




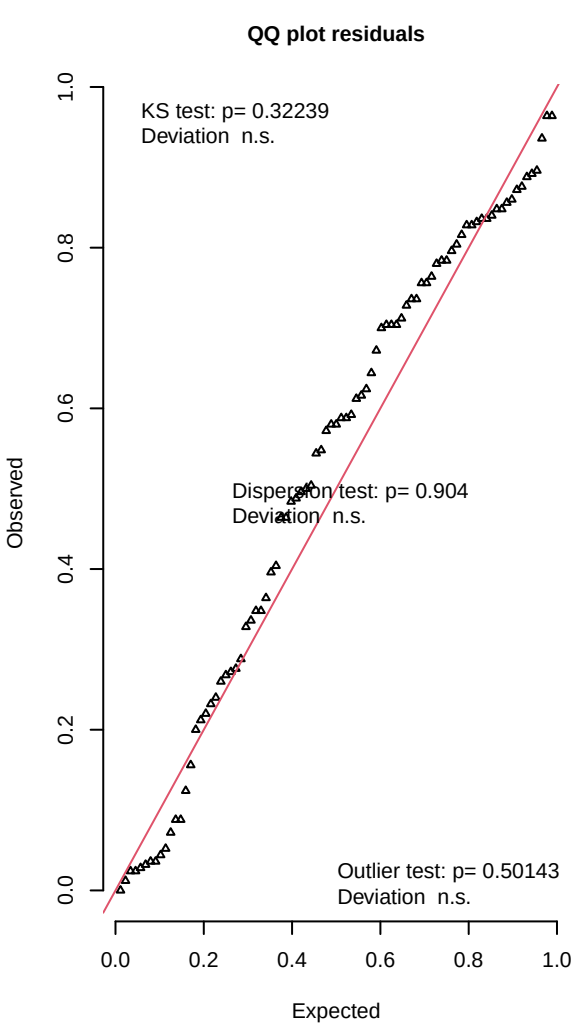
FDis ~ intercept + fish1 + temp_std

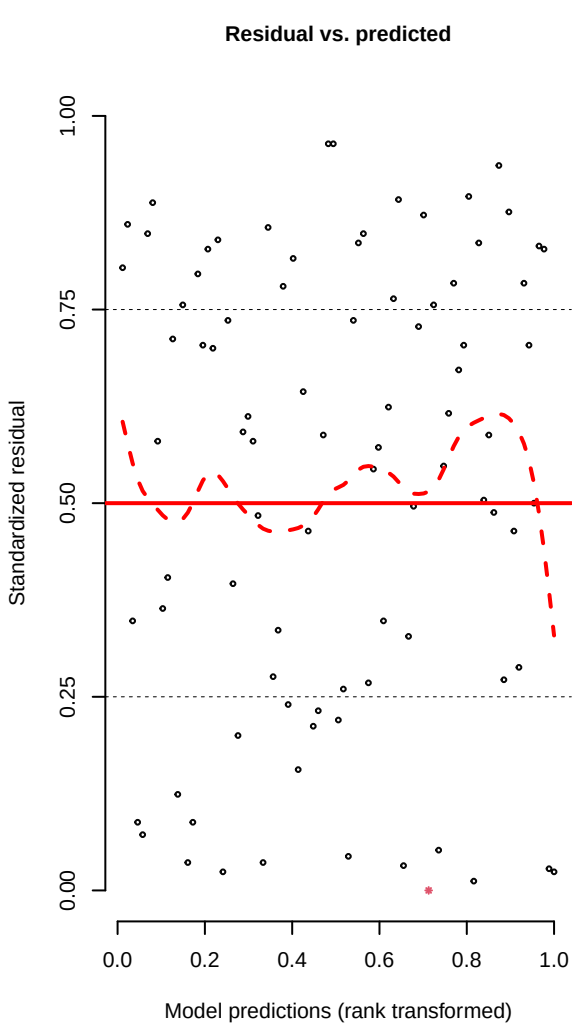


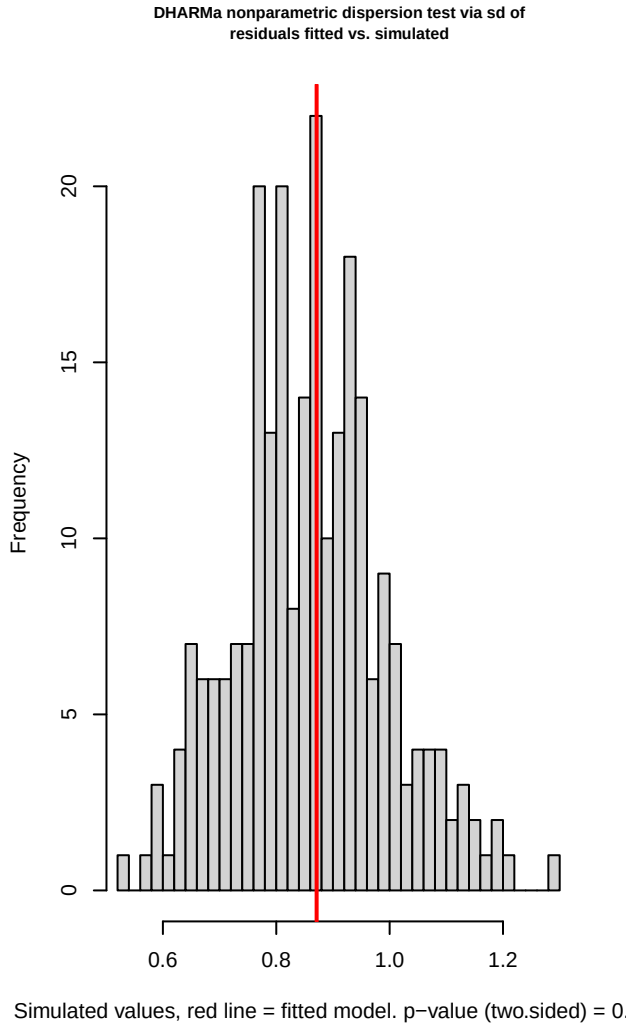




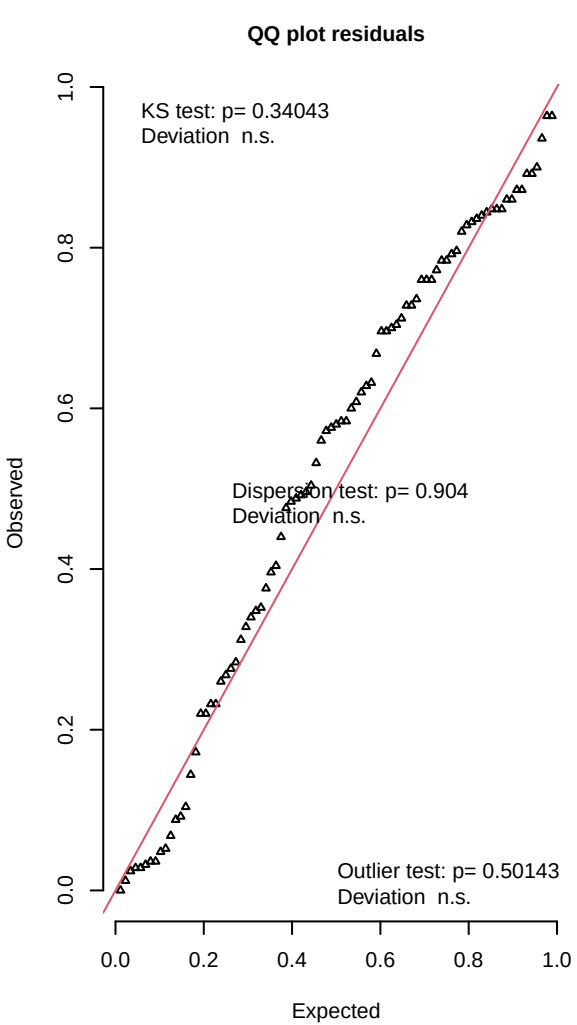
FDis ~ intercept + area_std + fish1

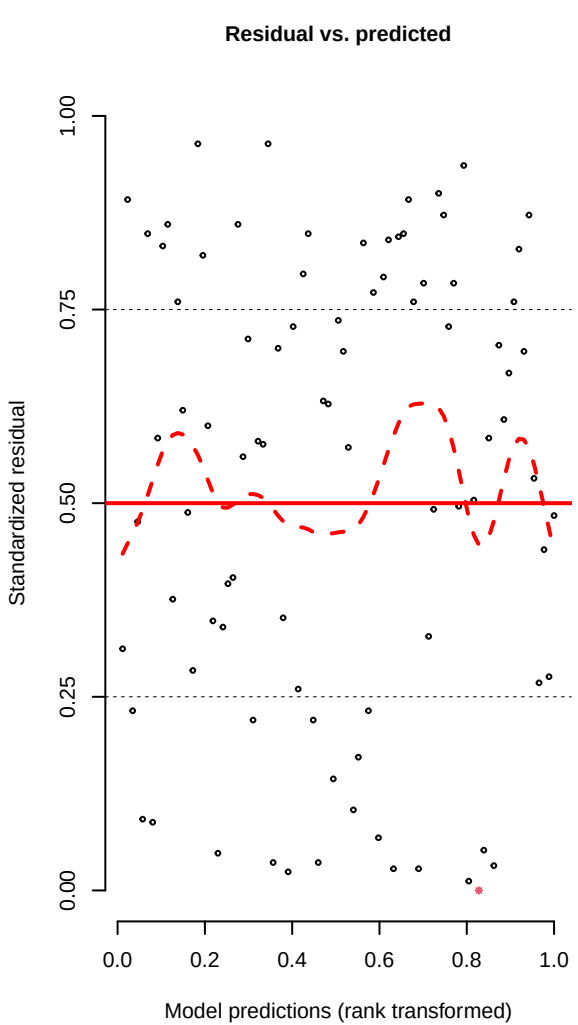


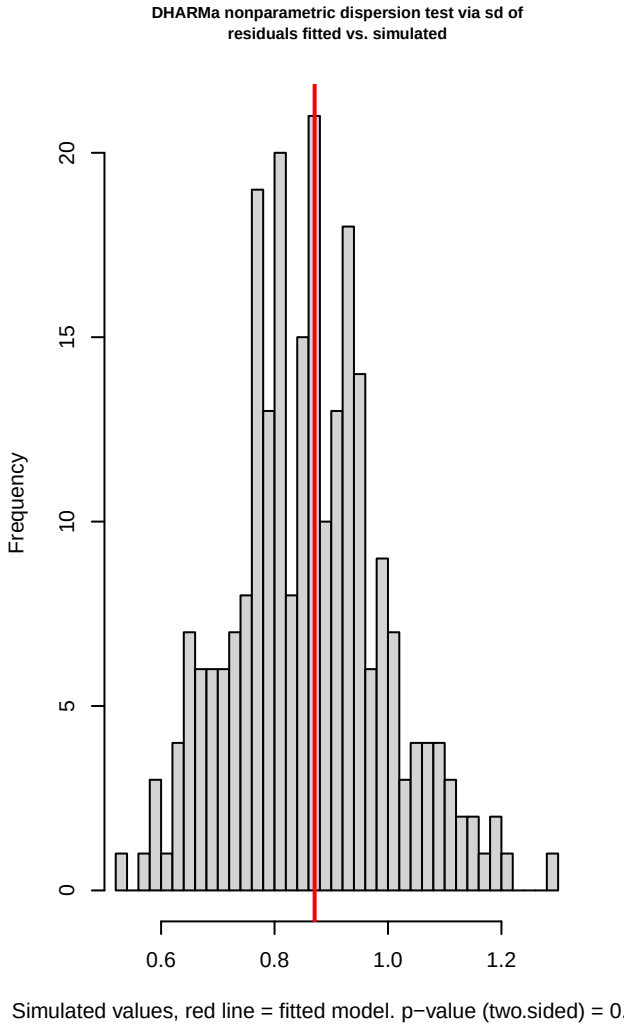




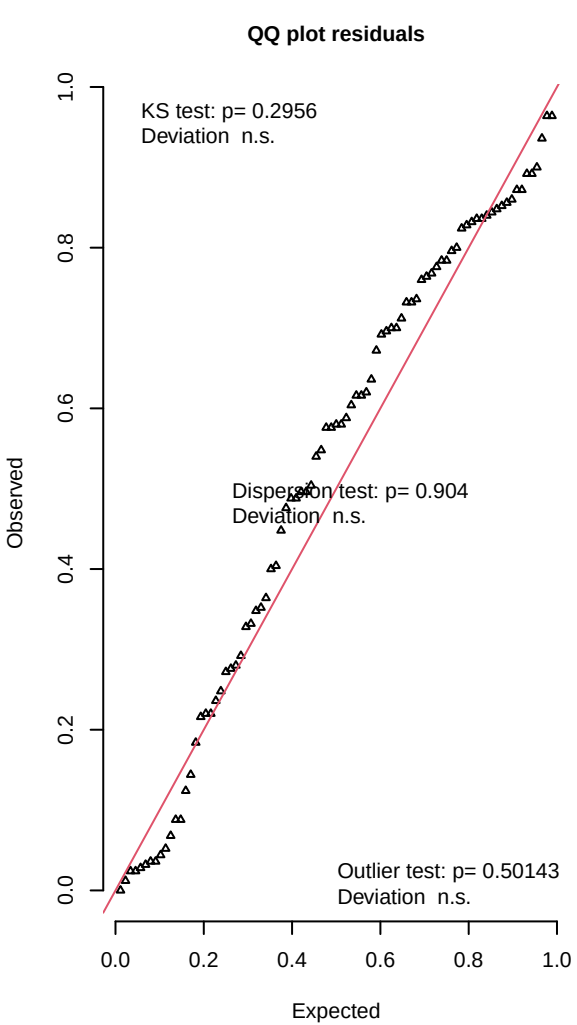
FDis ~ intercept + fish1 + temp_std + time_convert_std

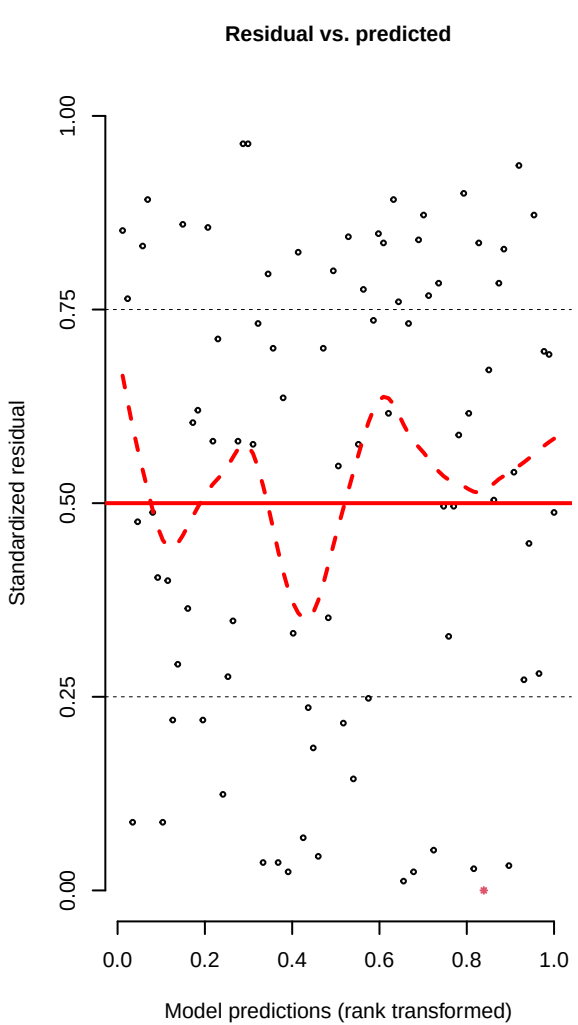


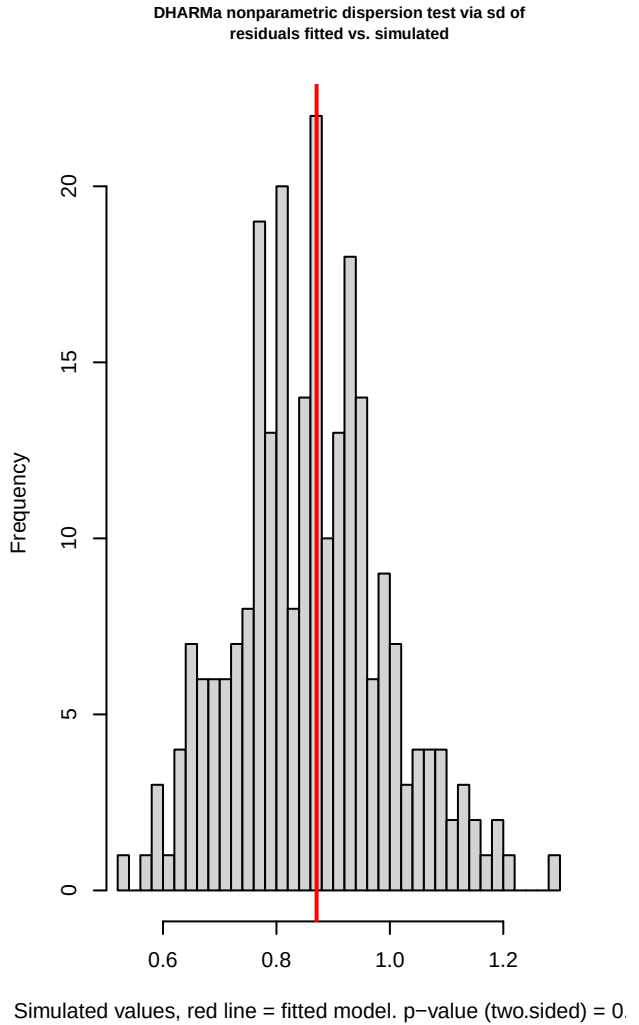




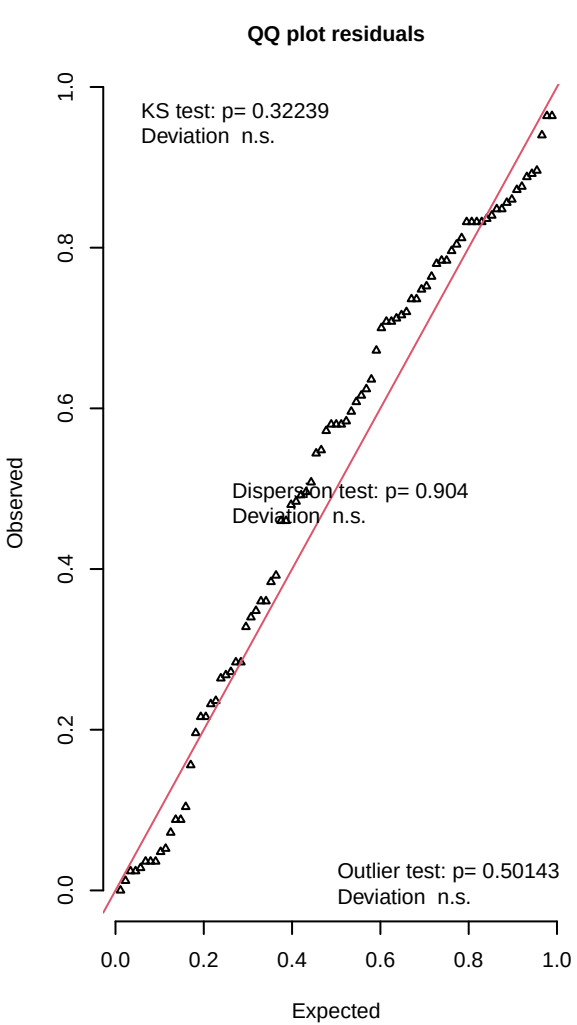
FDis ~ intercept + area_std + fish1 + time_convert_std

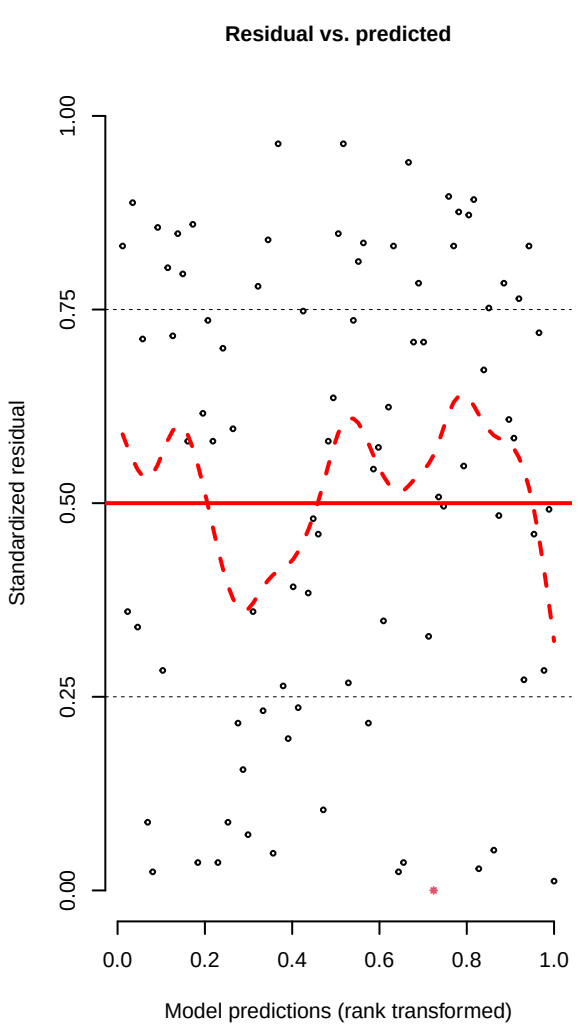


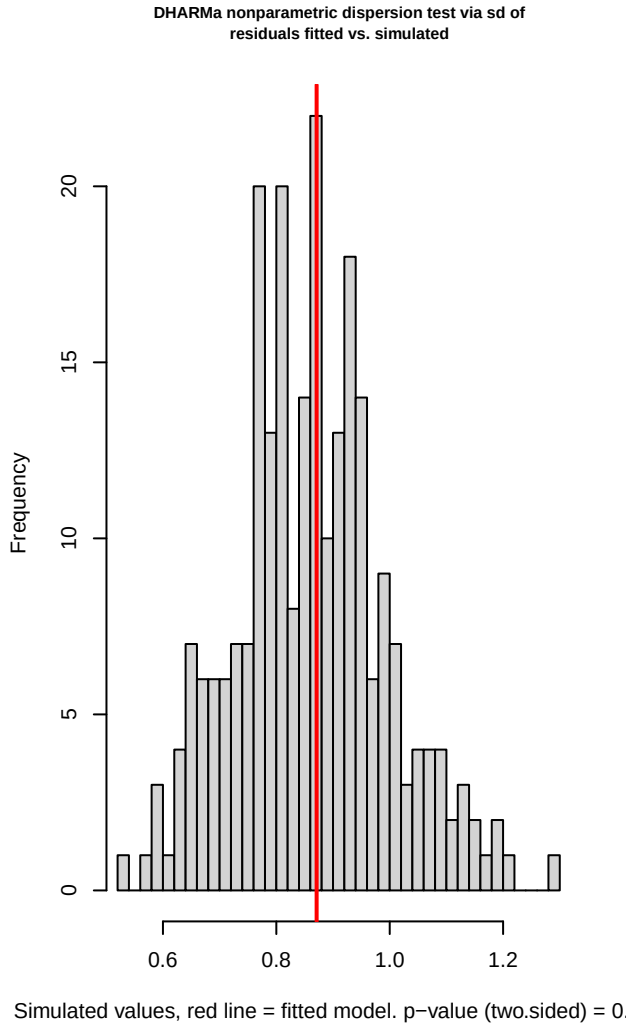




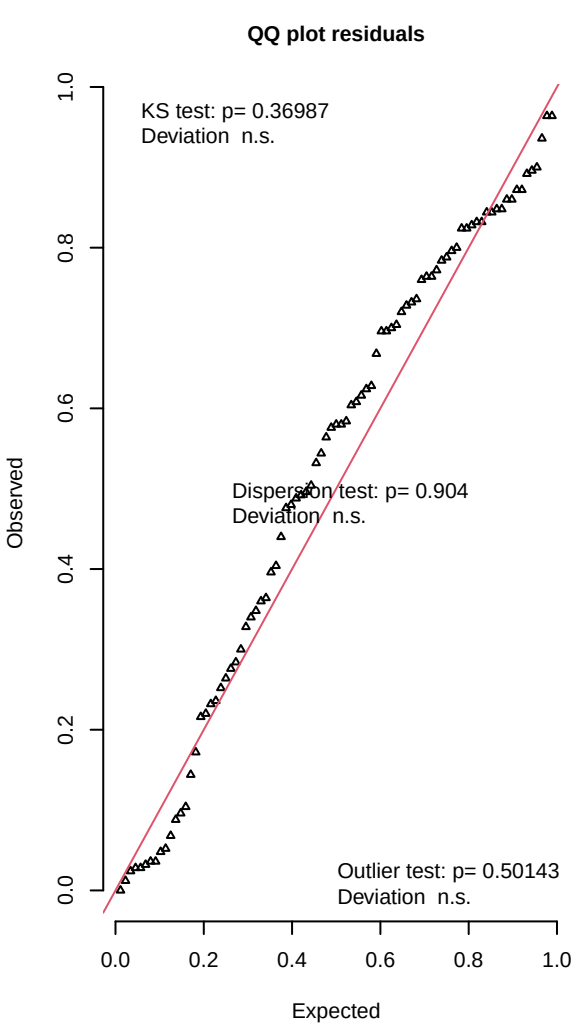
FDis ~ intercept + area_std + fish1 + temp_std

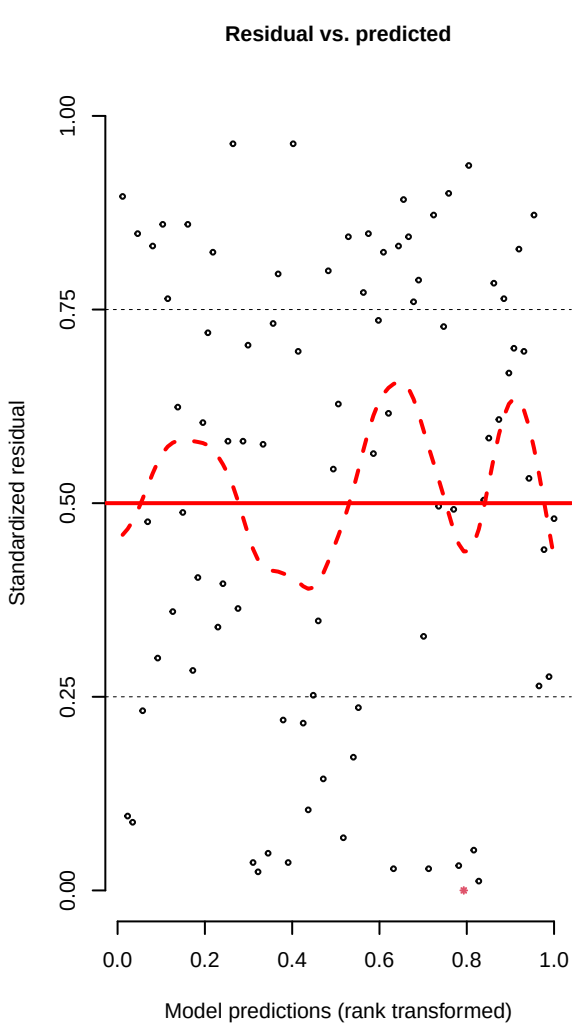


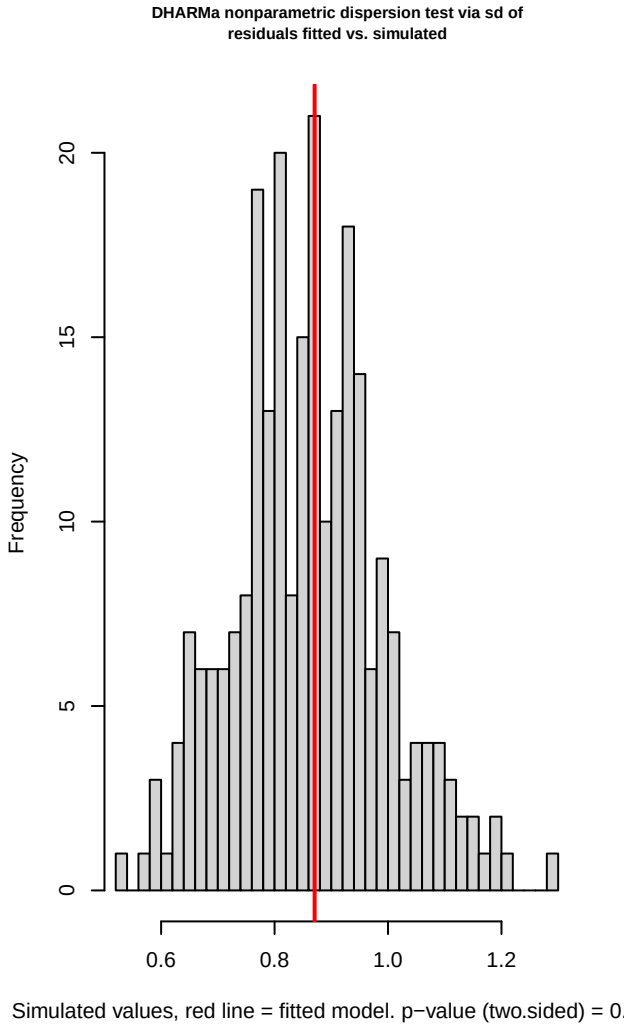




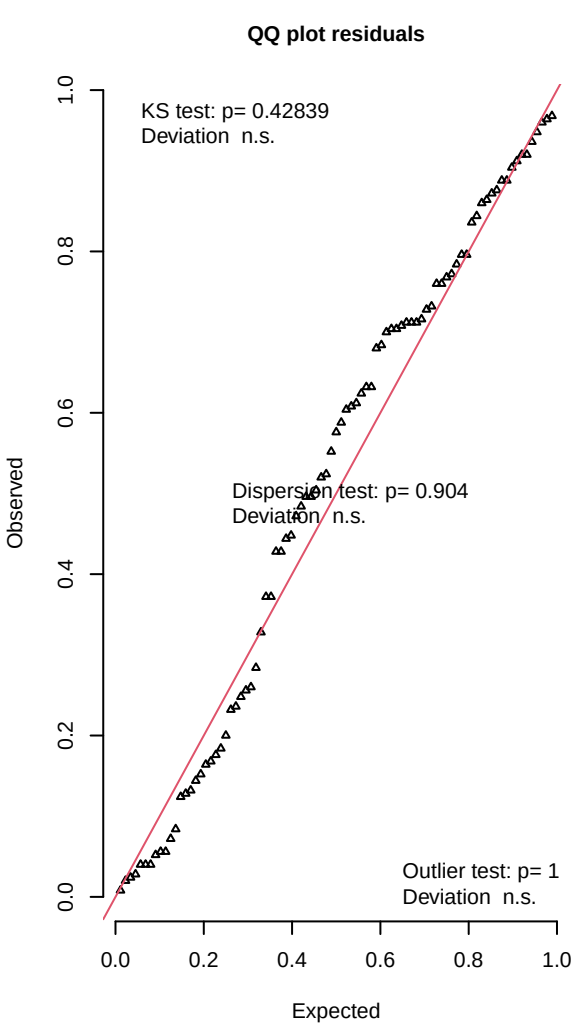
FDis ~ intercept + area_std + fish1 + temp_std + time_convert_std

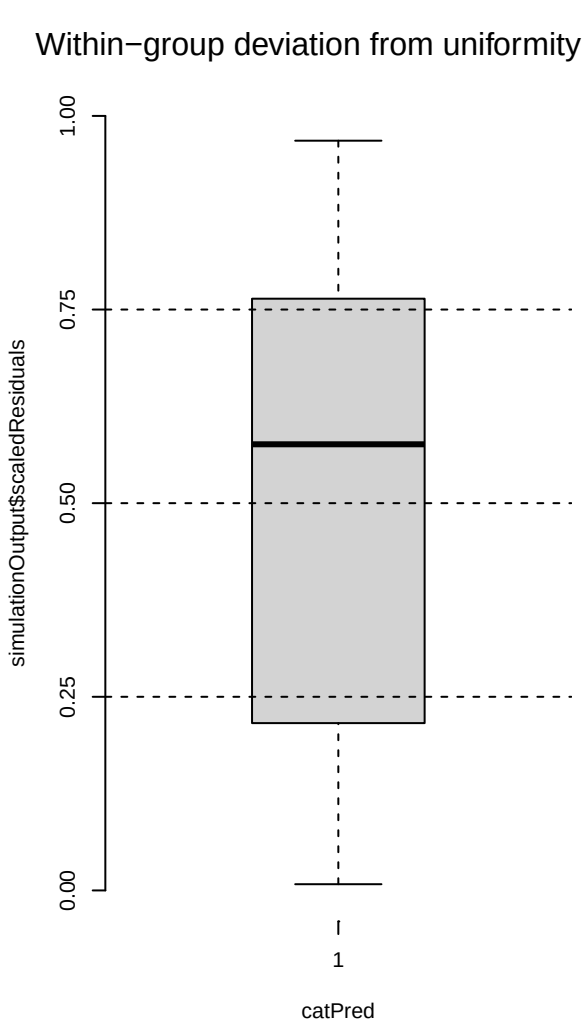


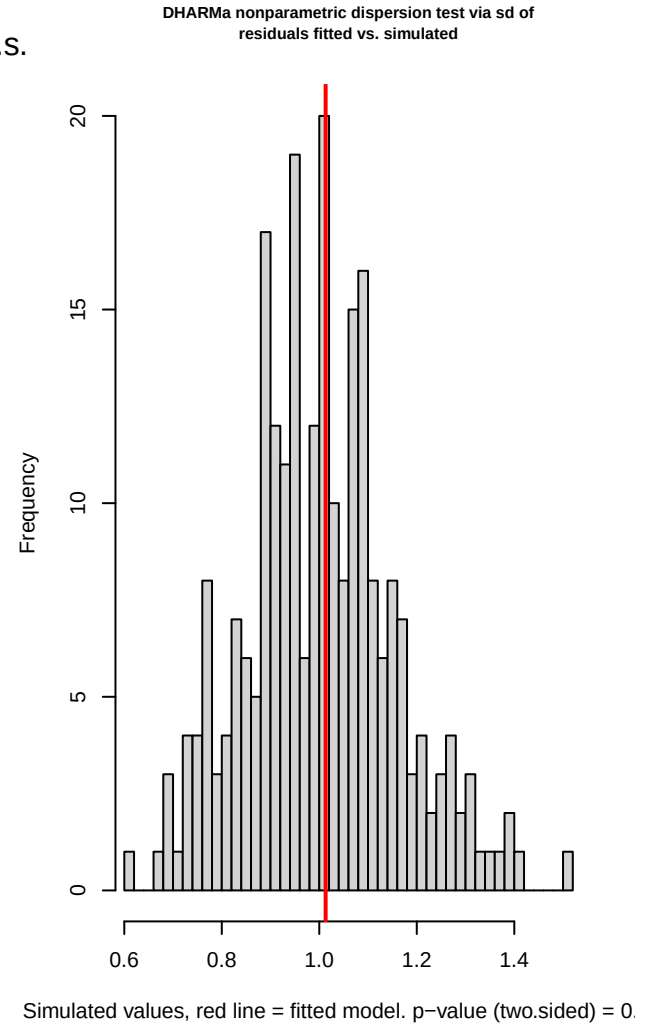




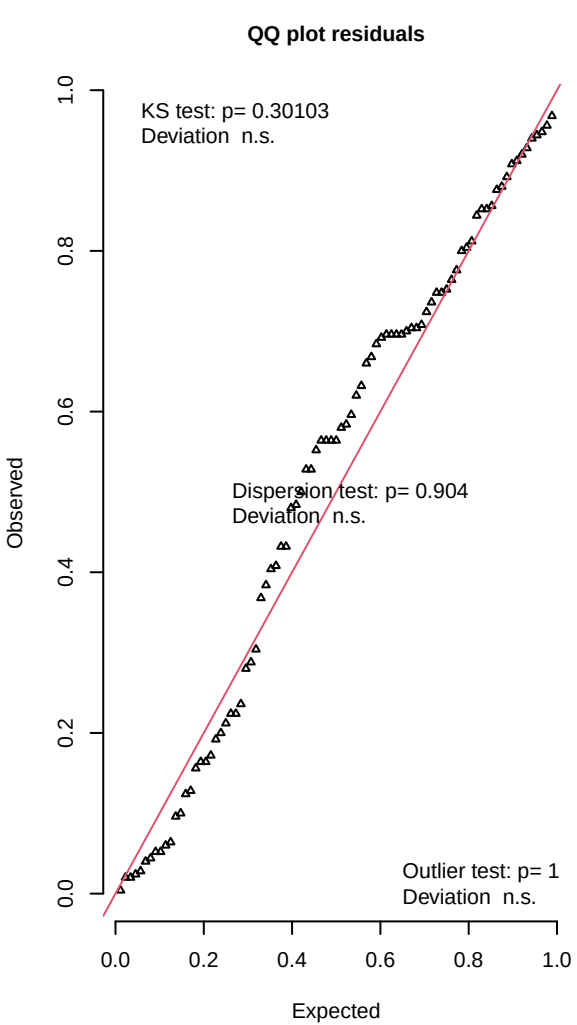
FDis ~ intercept

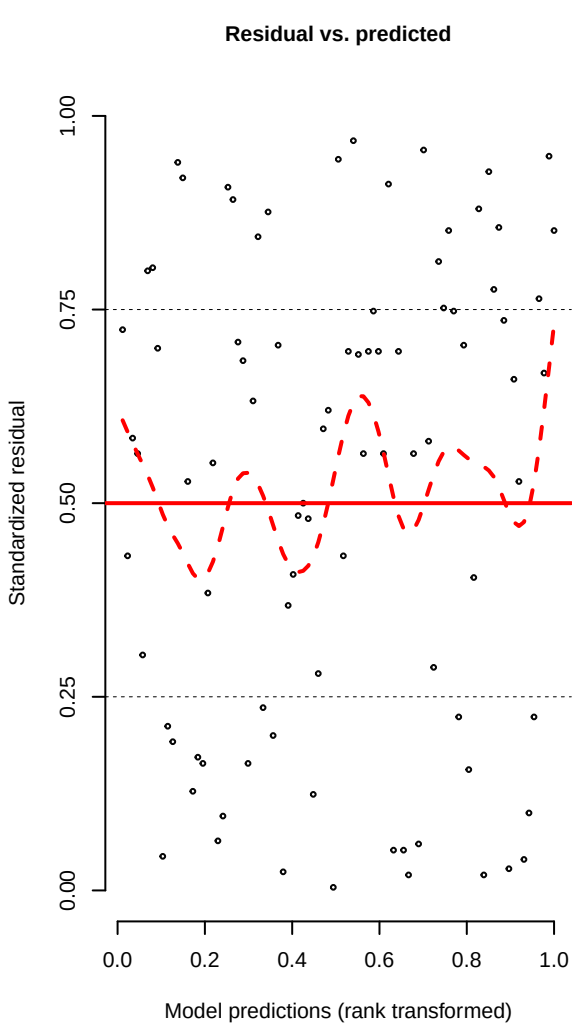


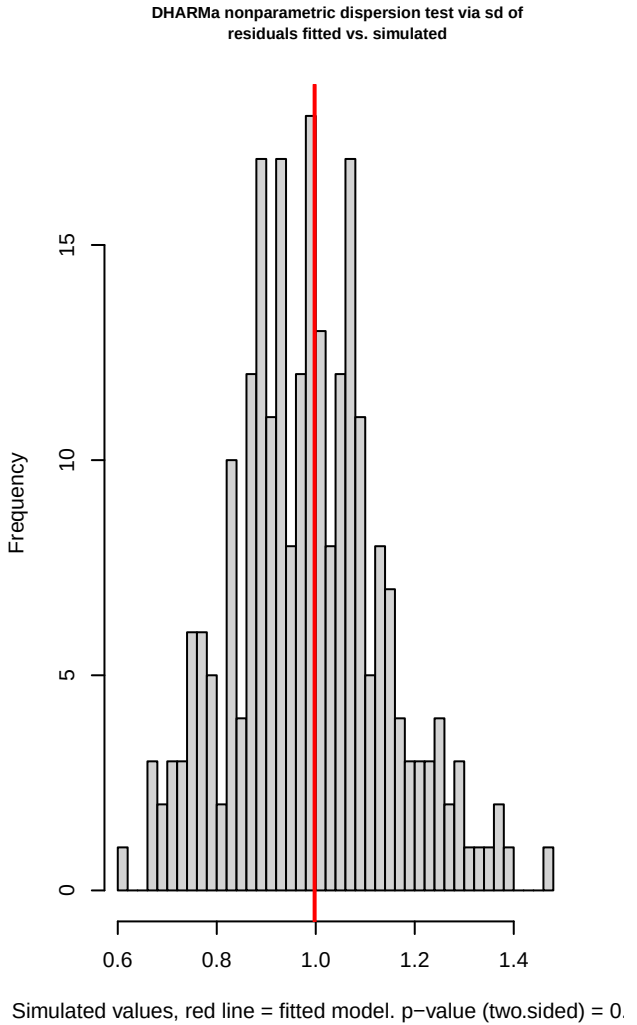




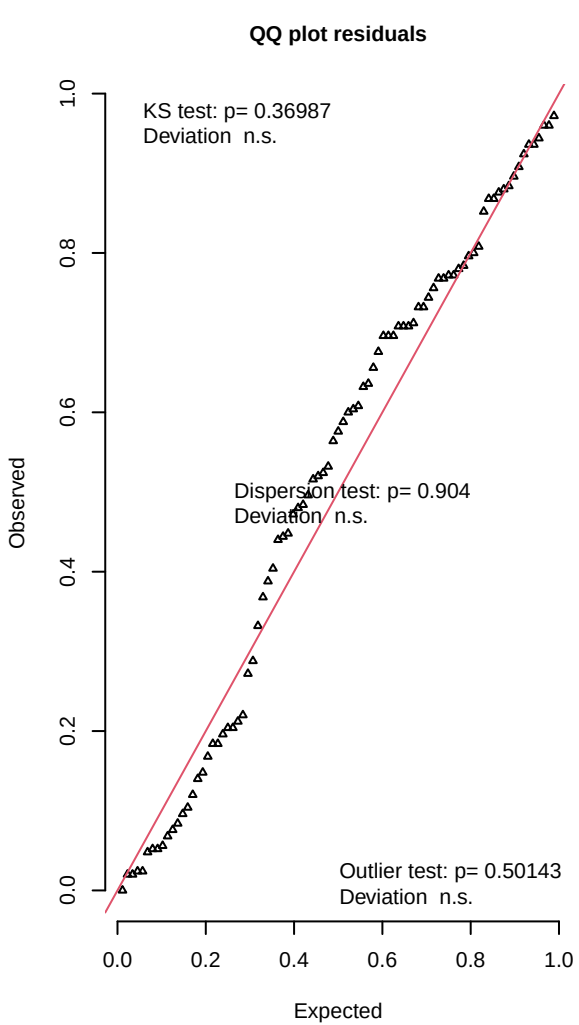
FDis ~ intercept + area_std

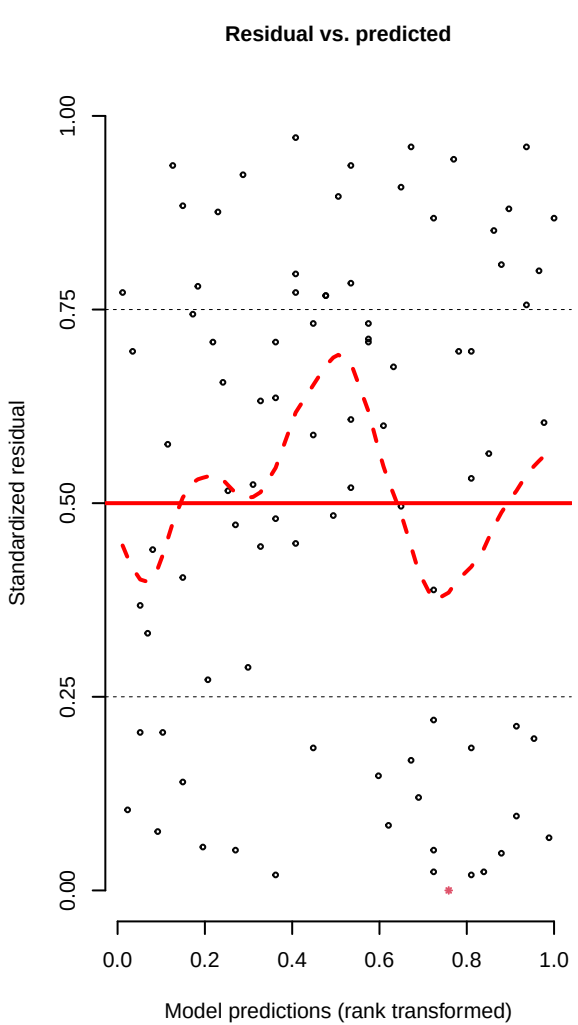


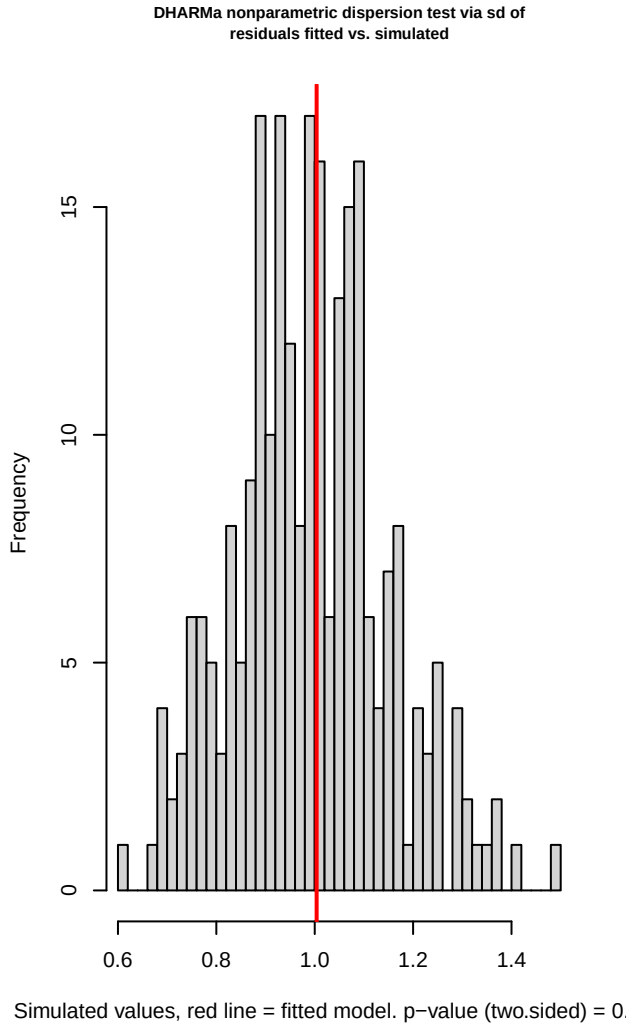




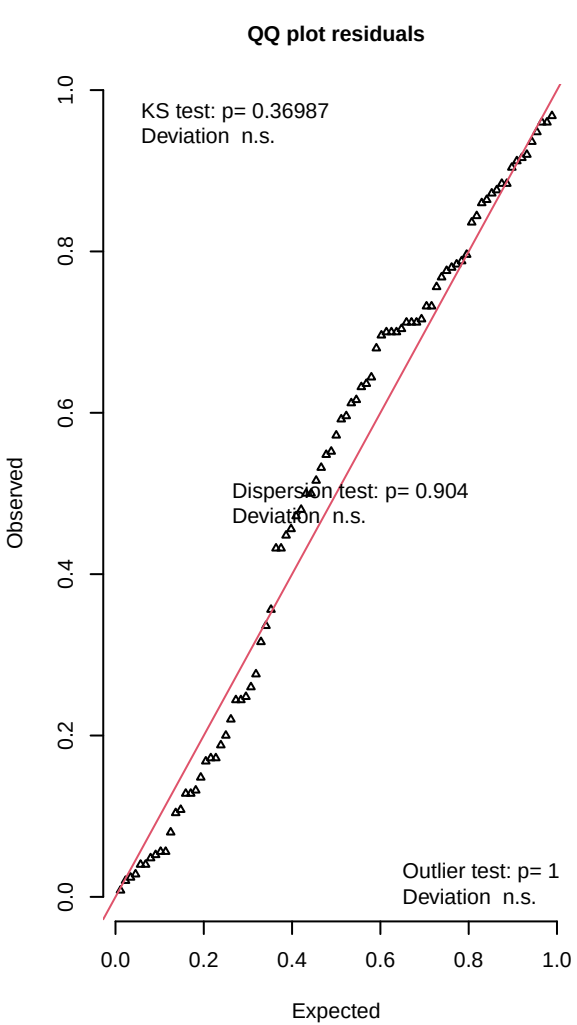
FDis ~ intercept + temp_std

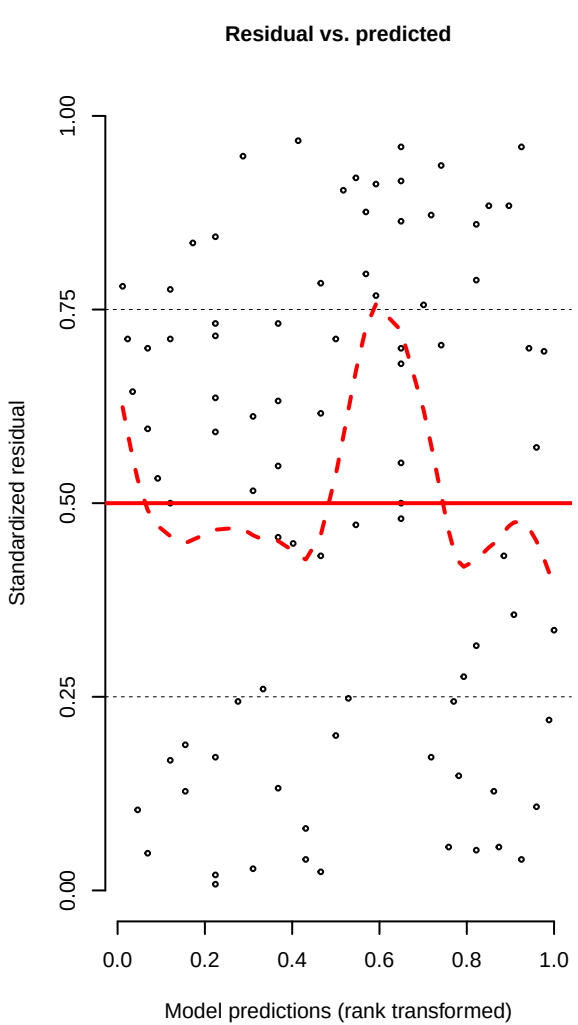


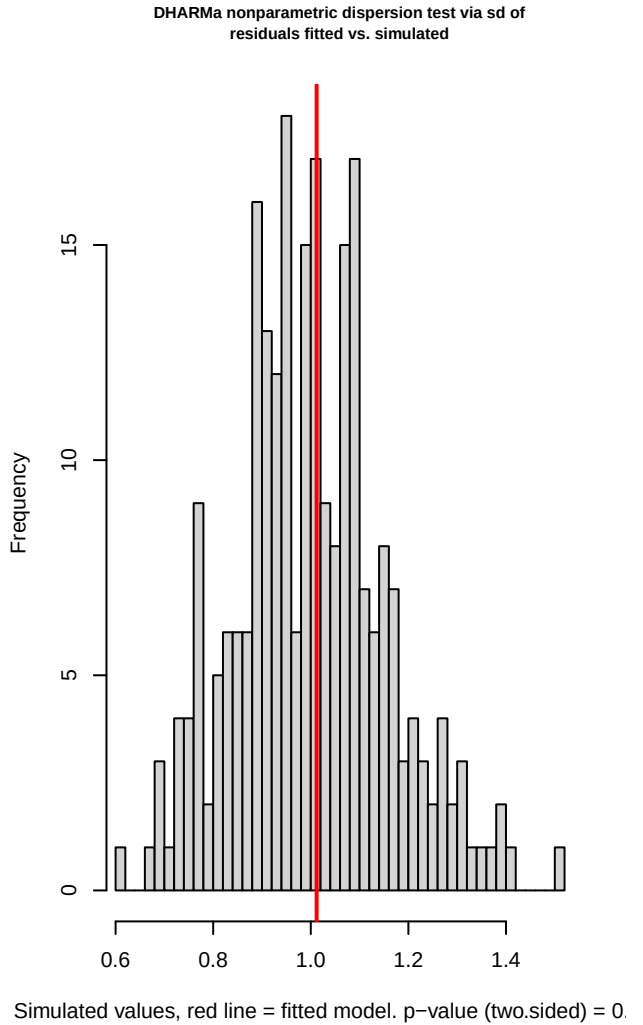




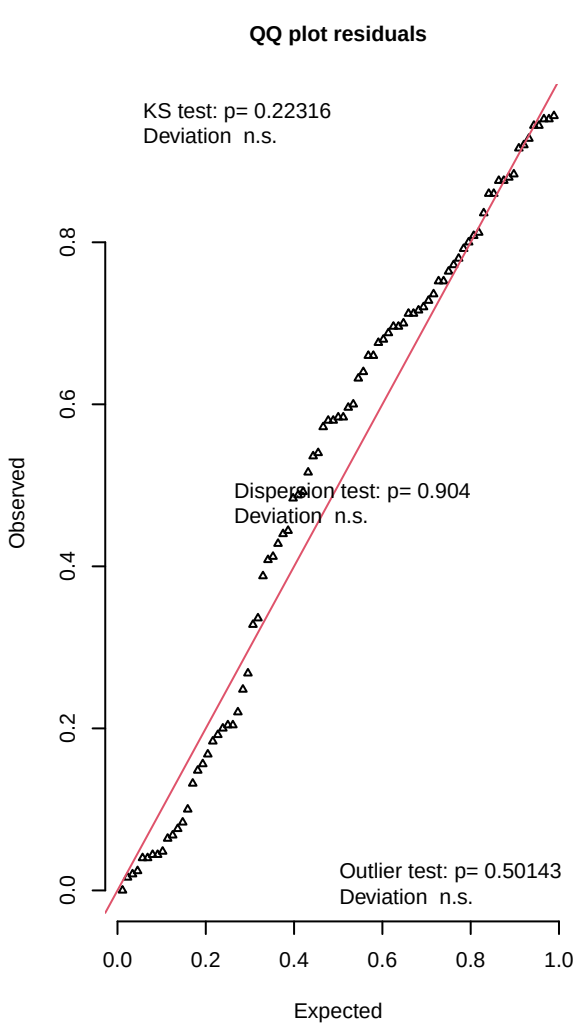
FDis ~ intercept + time_convert_std

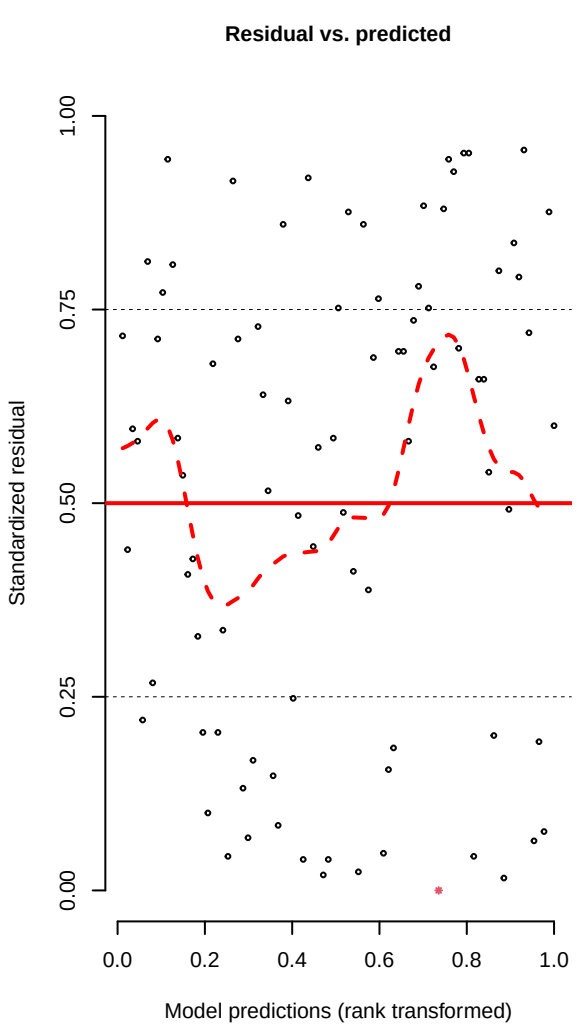


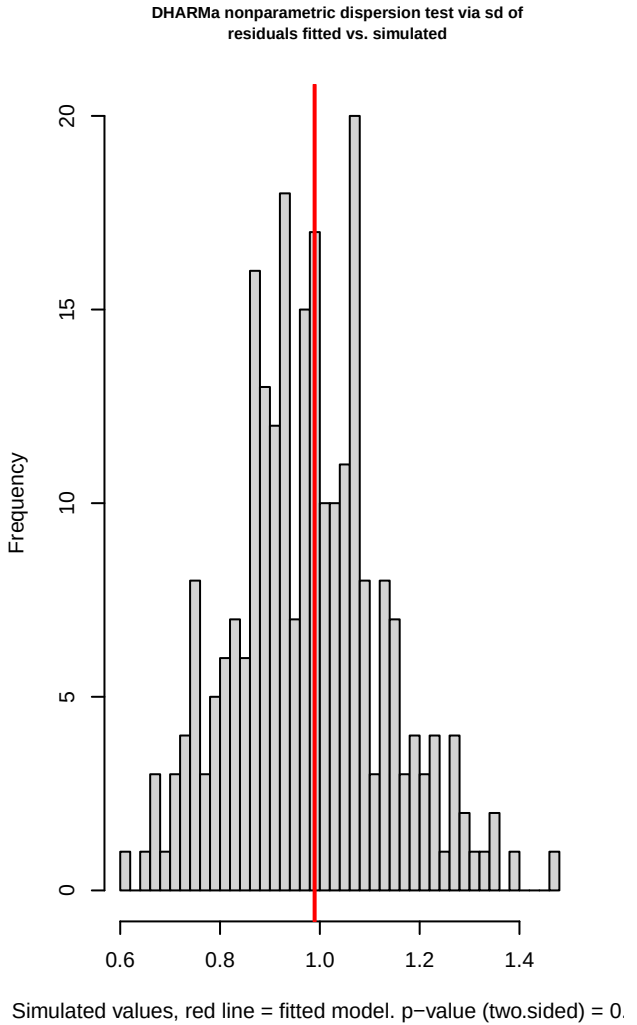




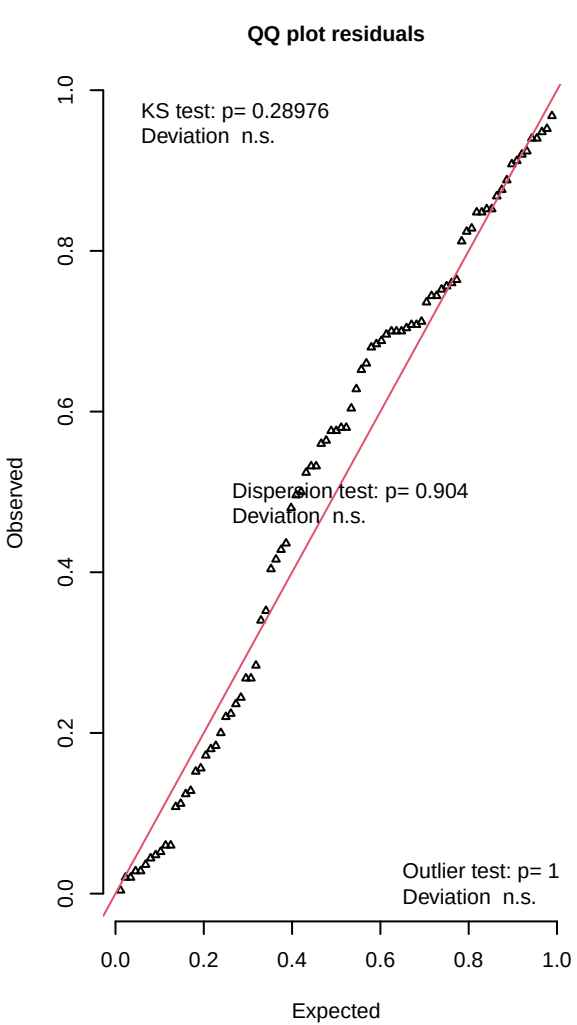
FDis ~ intercept + area_std + temp_std

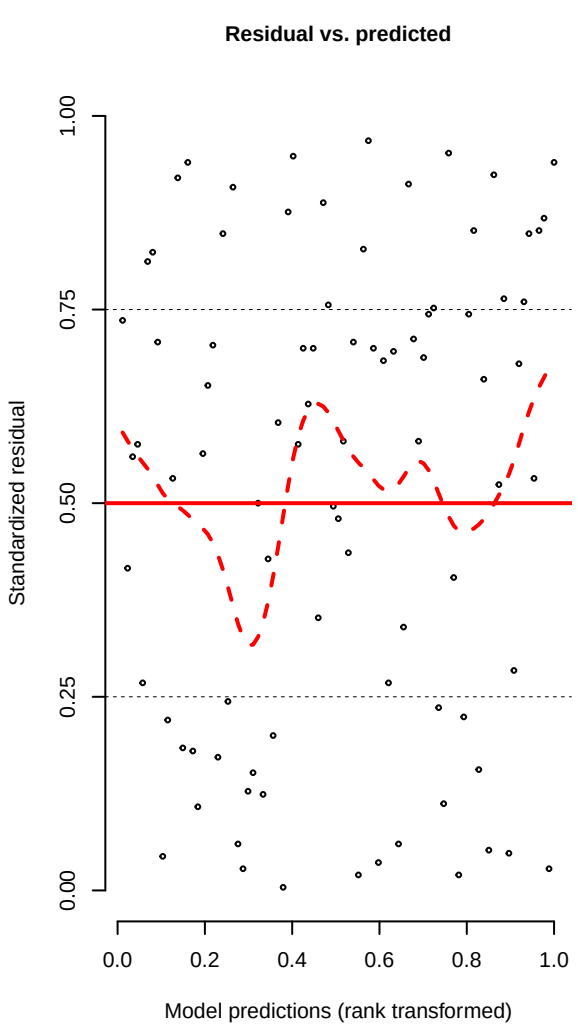


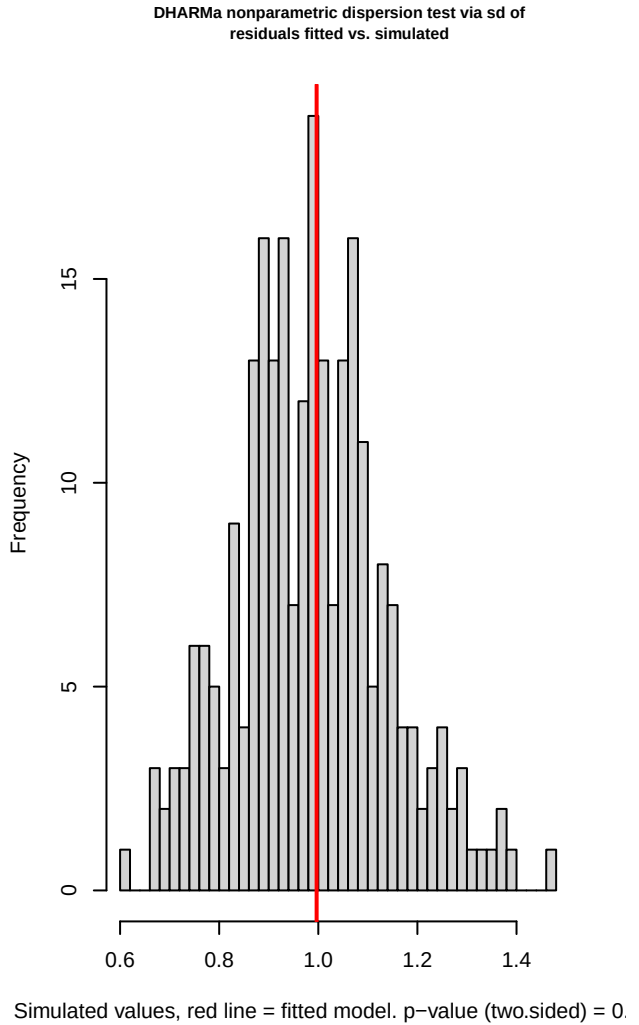




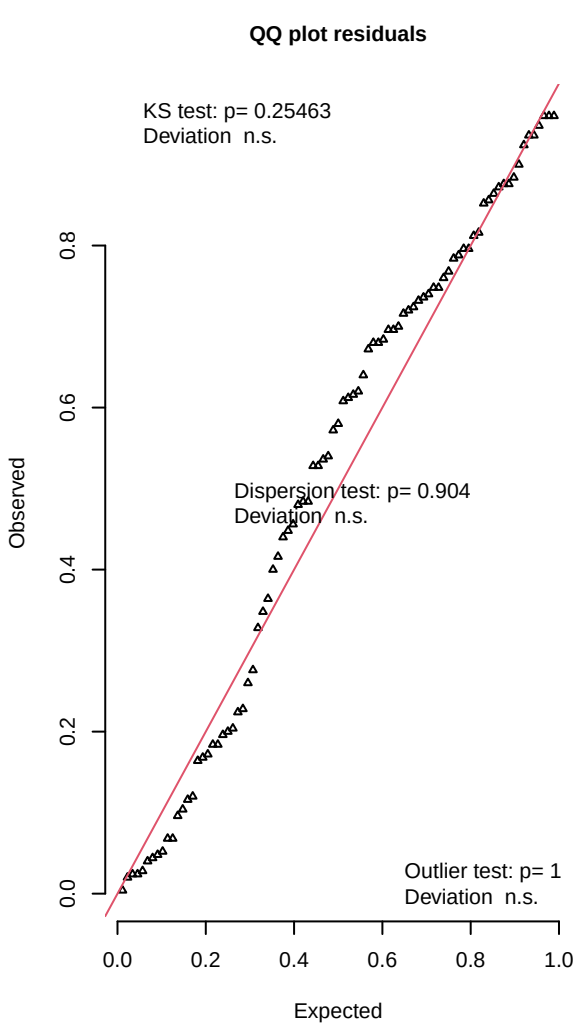
FDis ~ intercept + area_std + time_convert_std

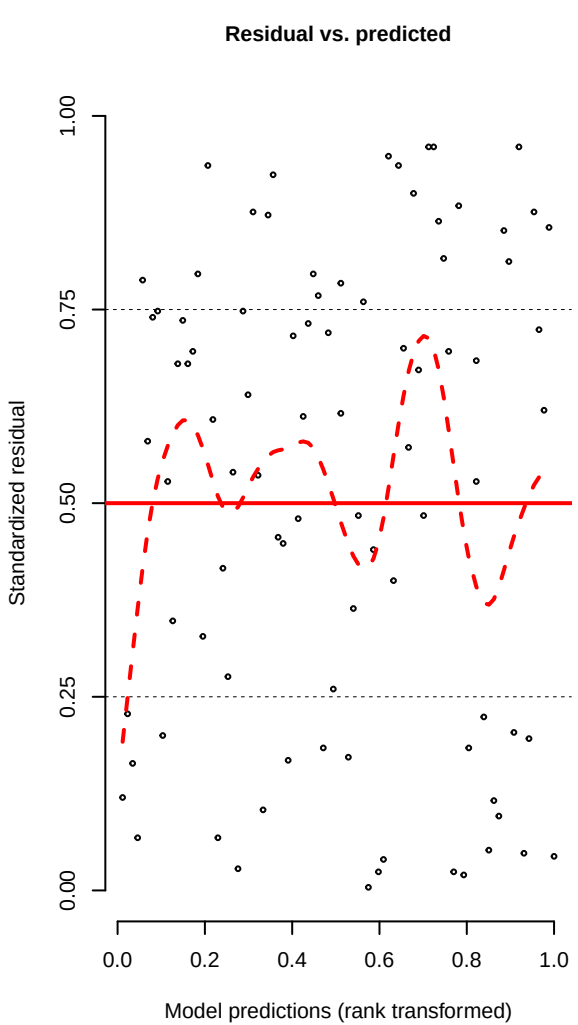


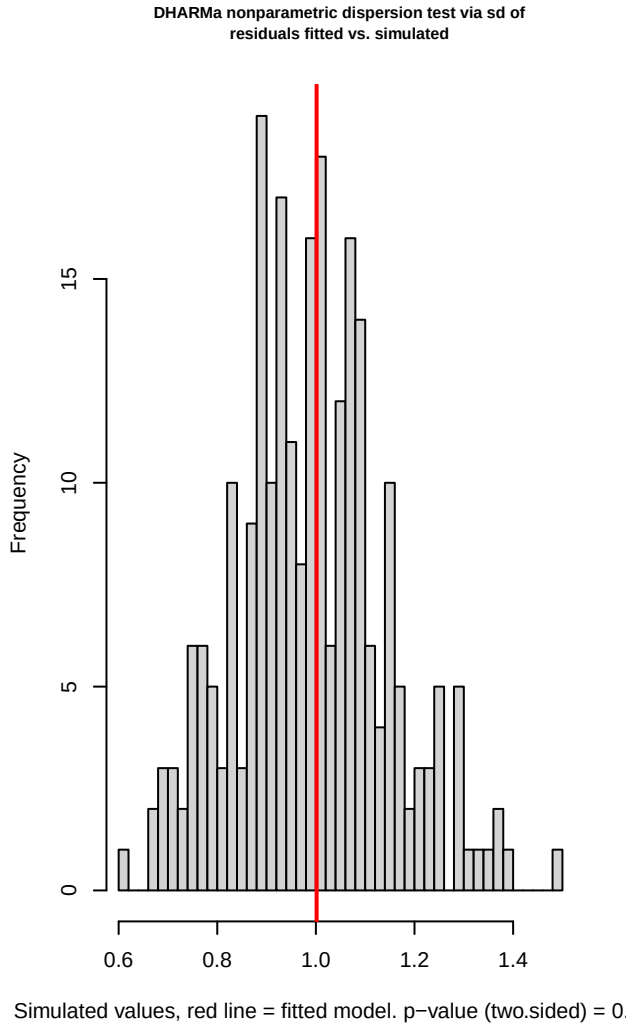




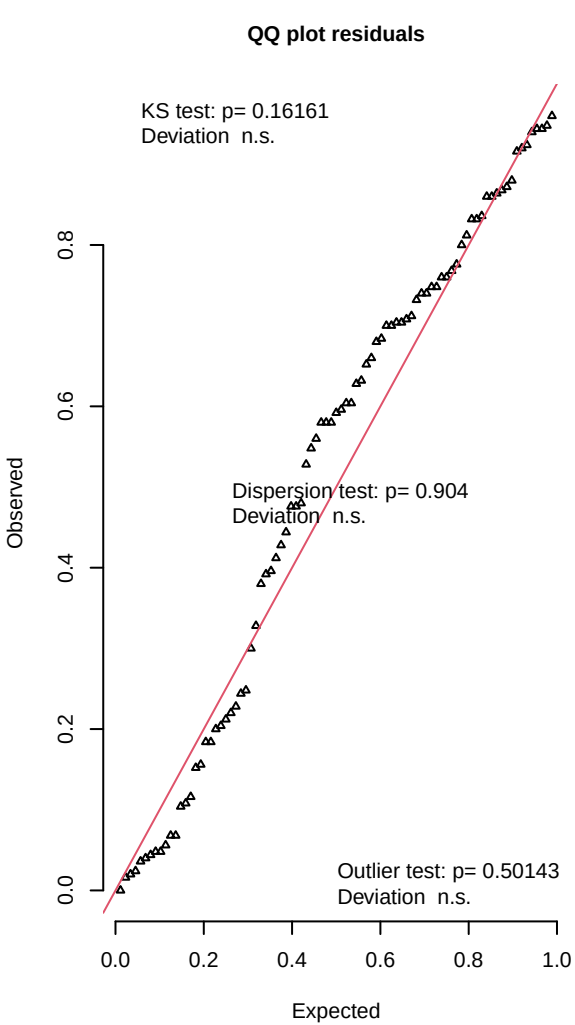
FDis ~ intercept + temp_std + time_convert_std

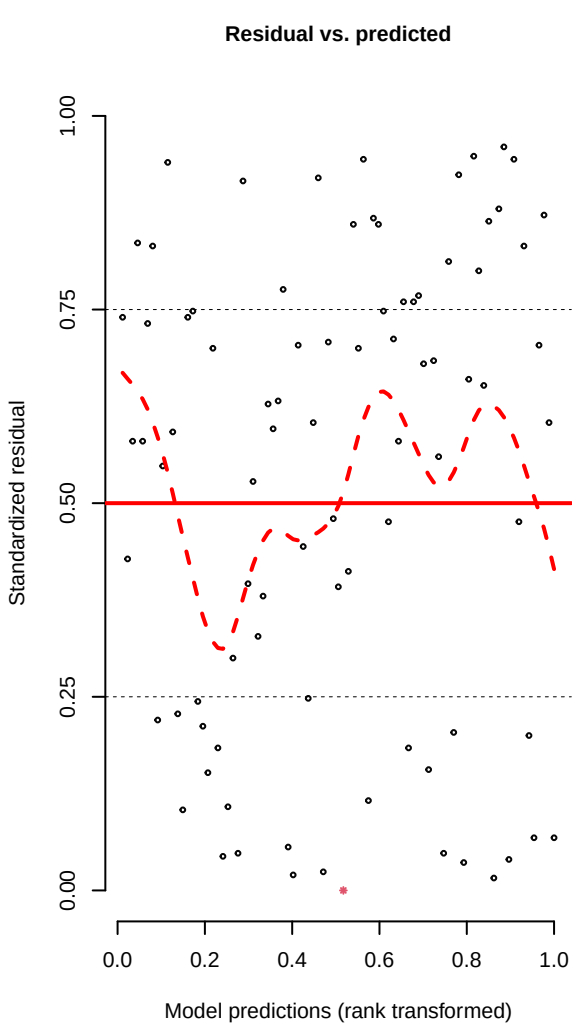


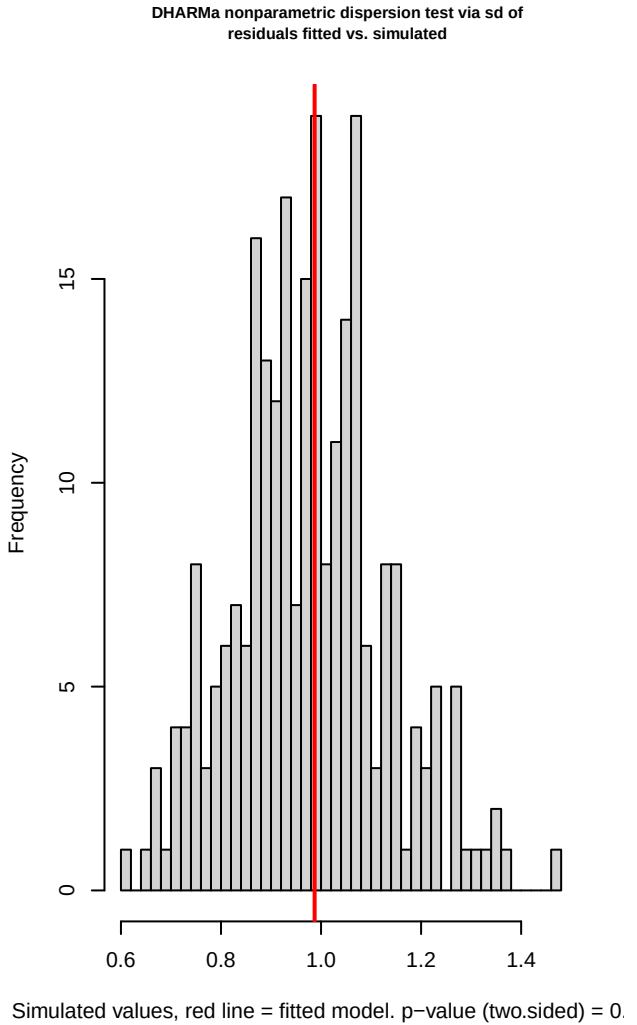




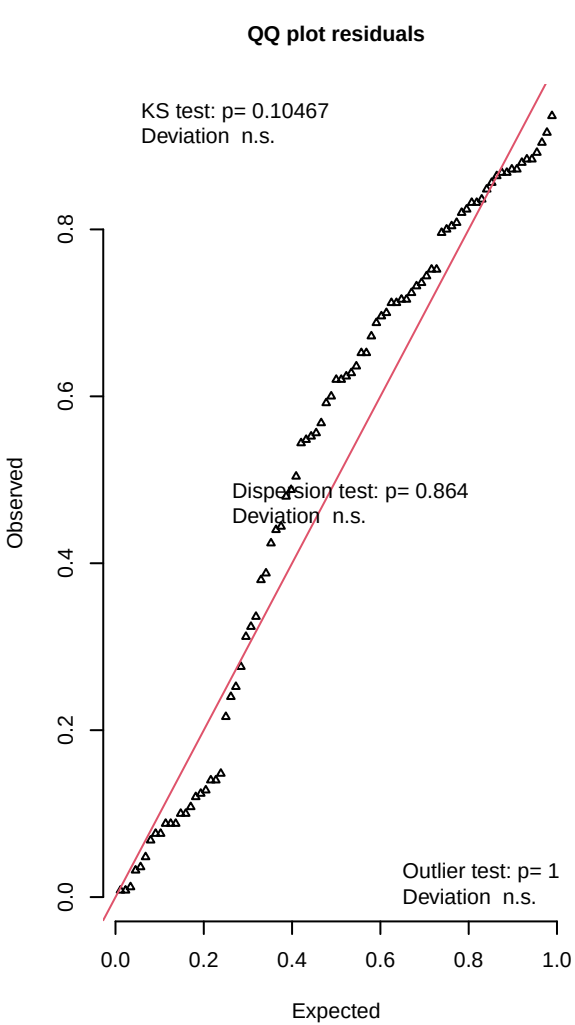
FDis ~ intercept + area_std + temp_std + time_convert_std

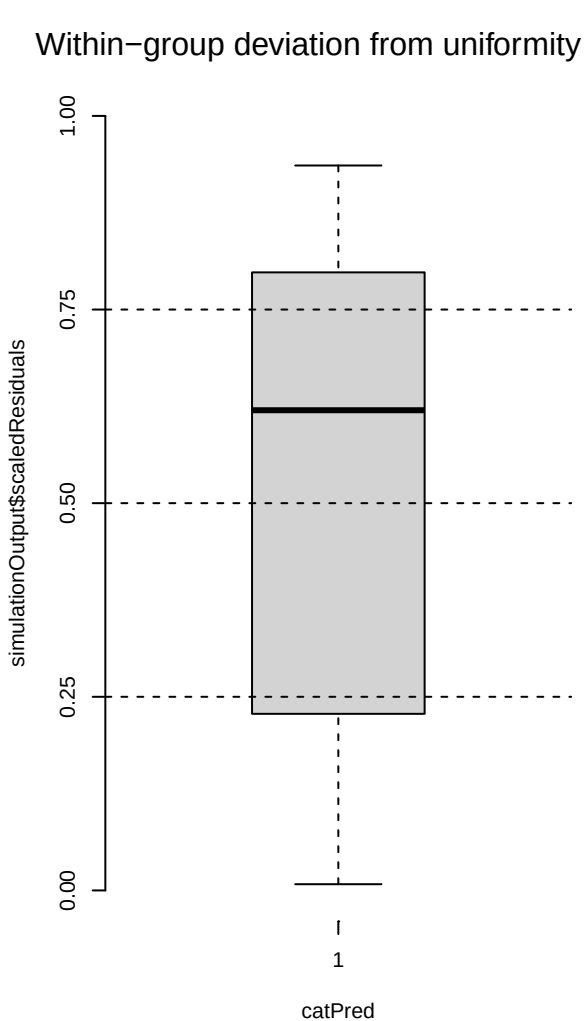


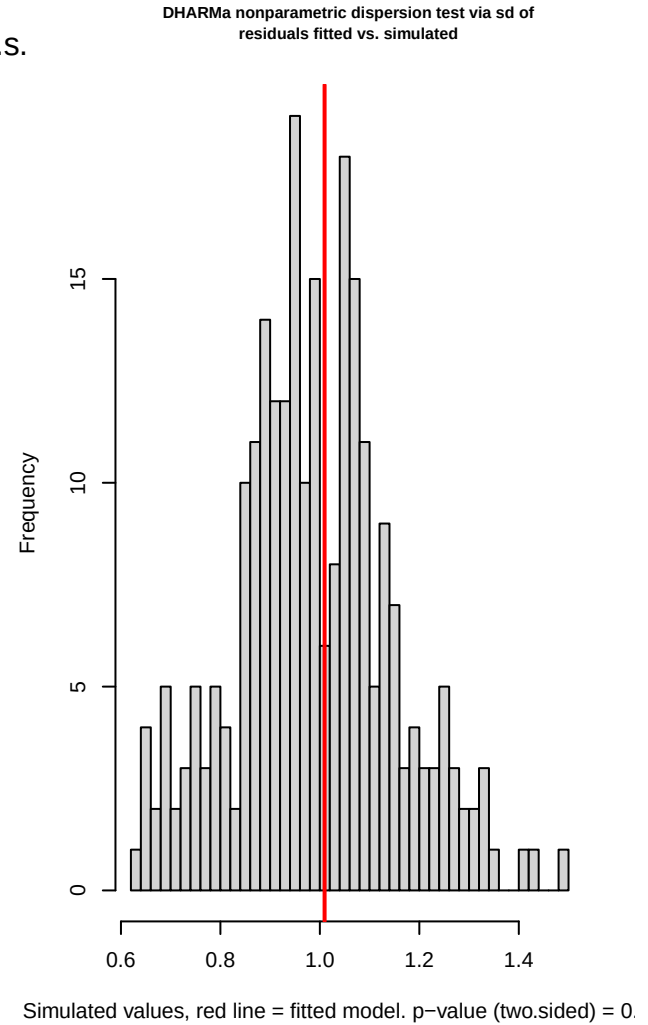




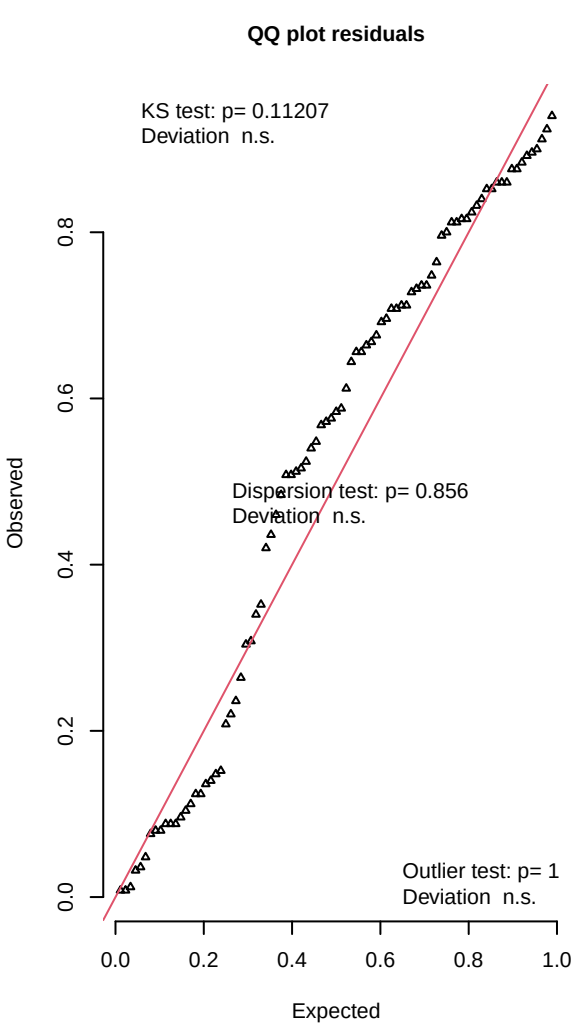
FDiv ~ intercept

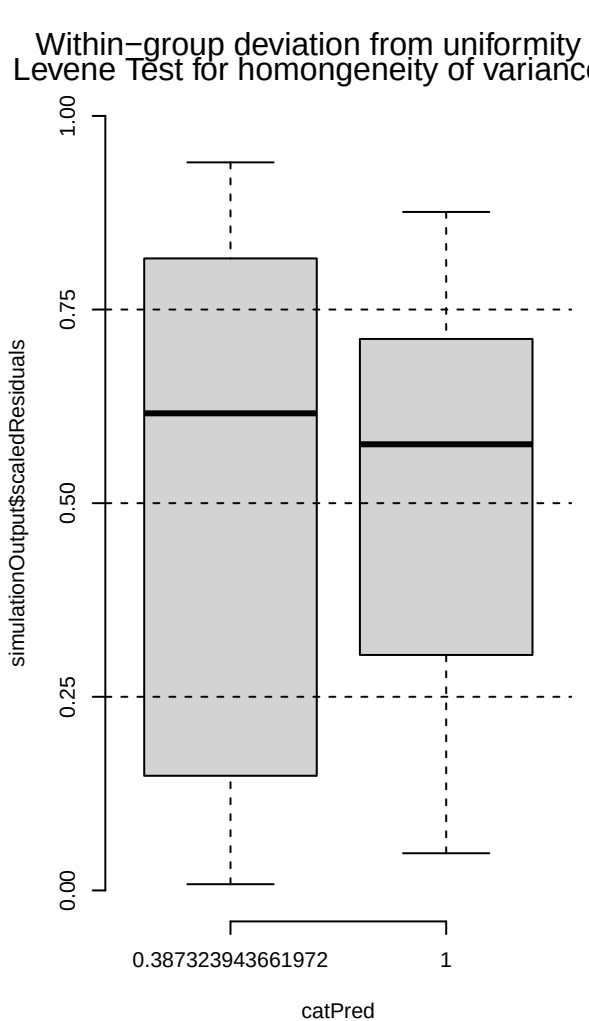


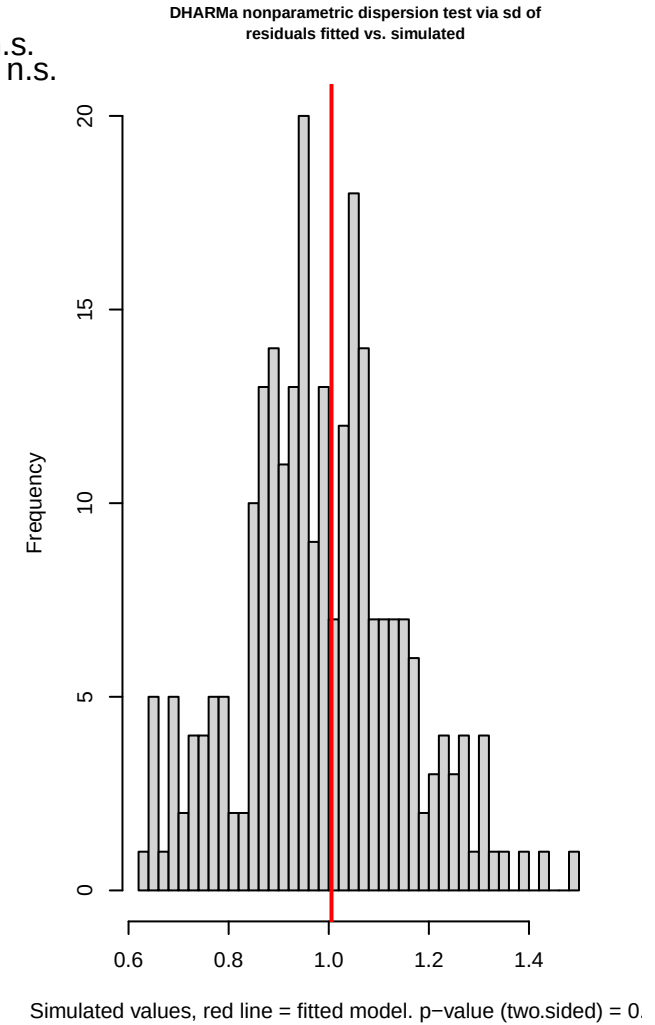




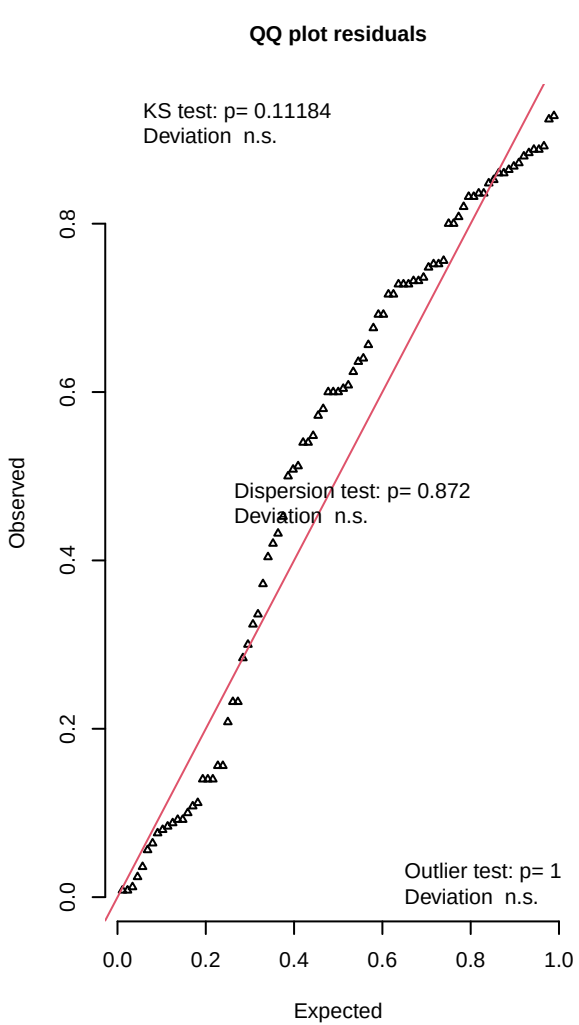
FDiv ~ intercept + fish1

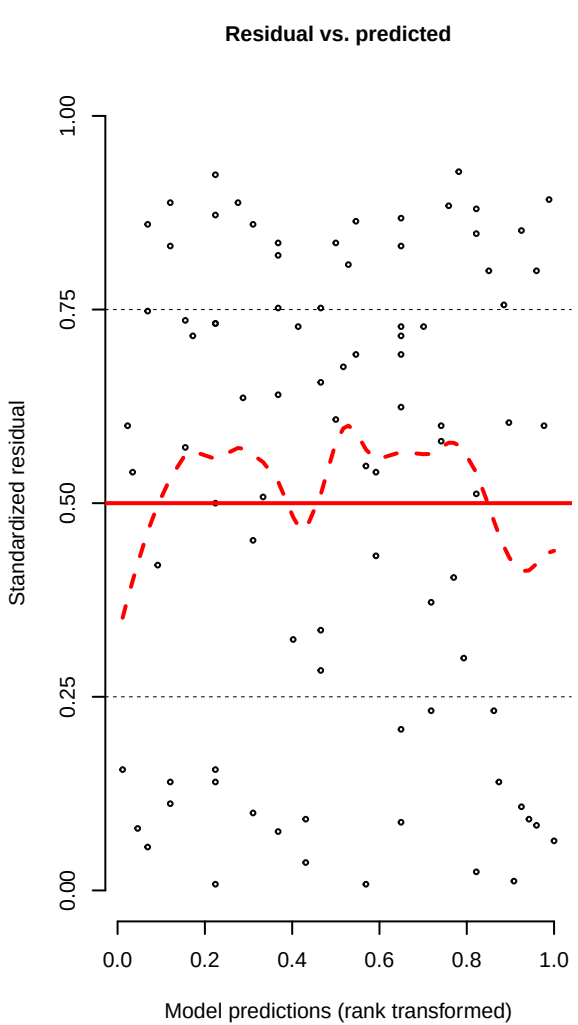


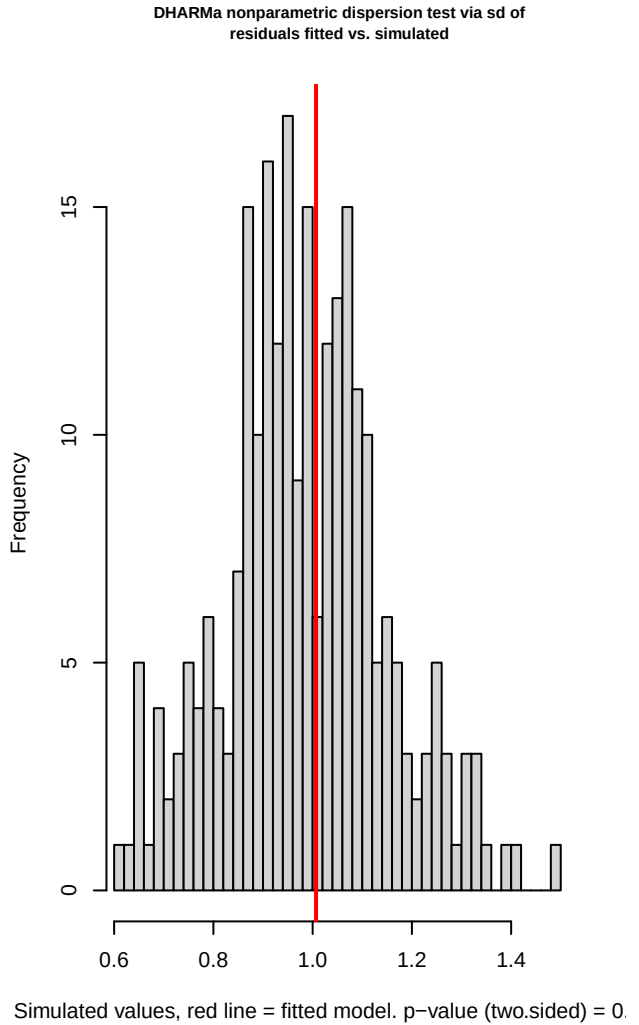




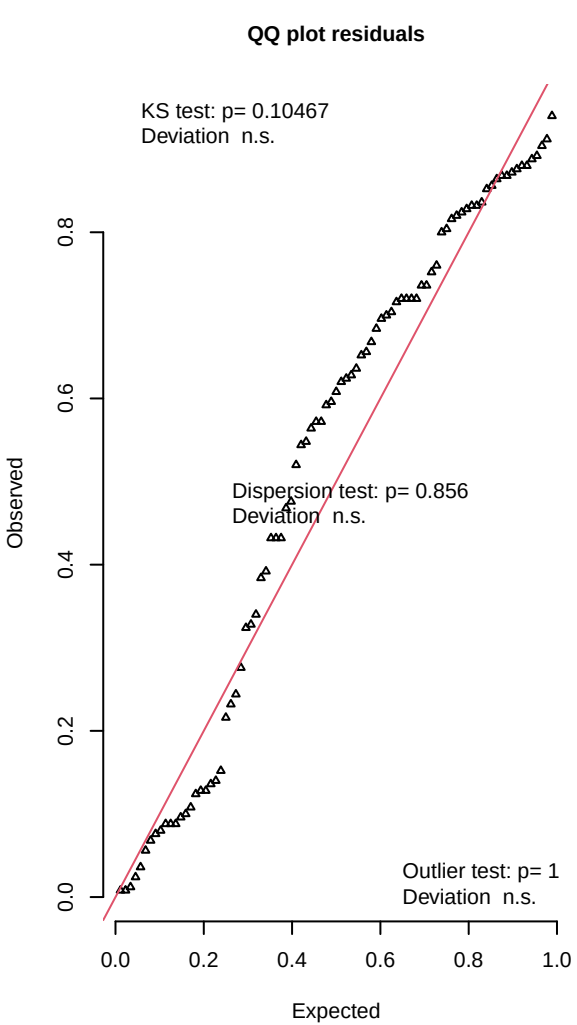
FDiv ~ intercept + time_convert_std

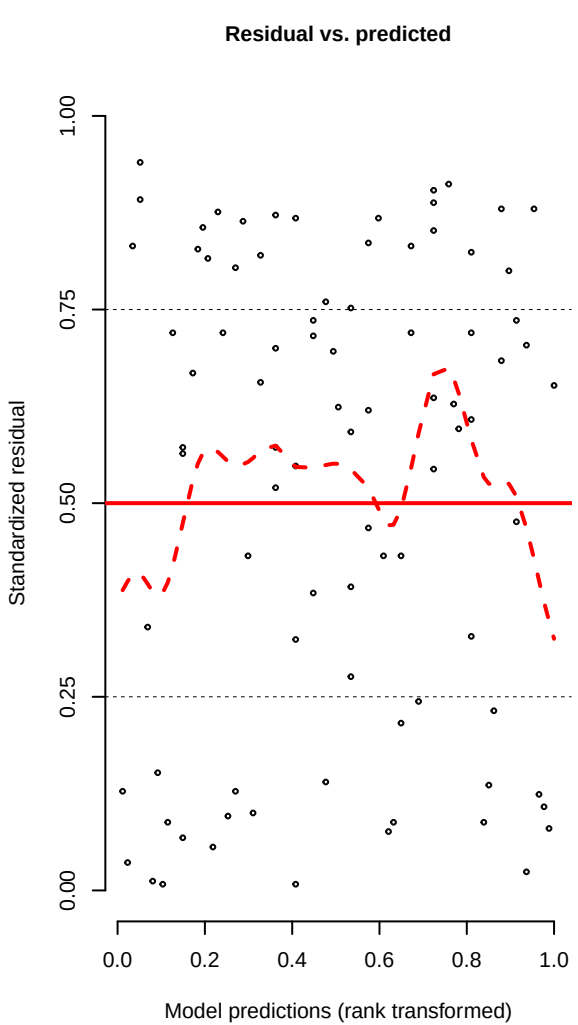


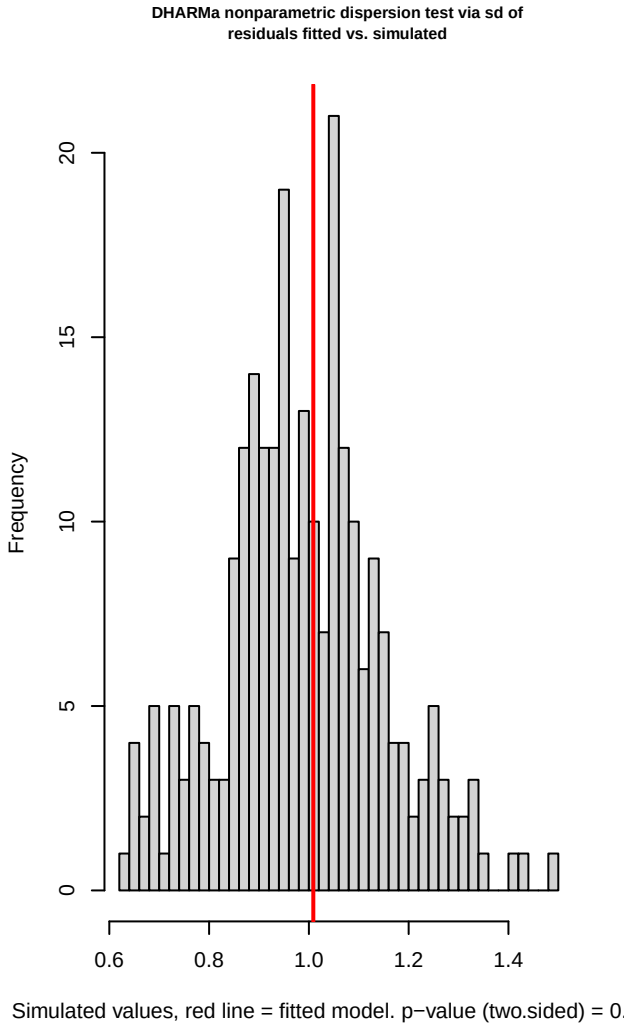




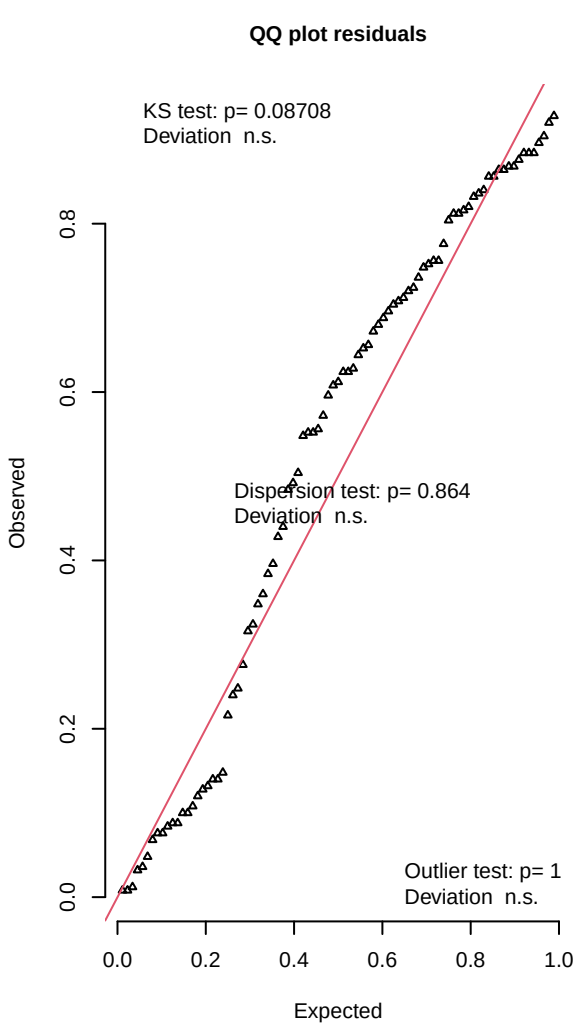
FDiv ~ intercept + temp_std

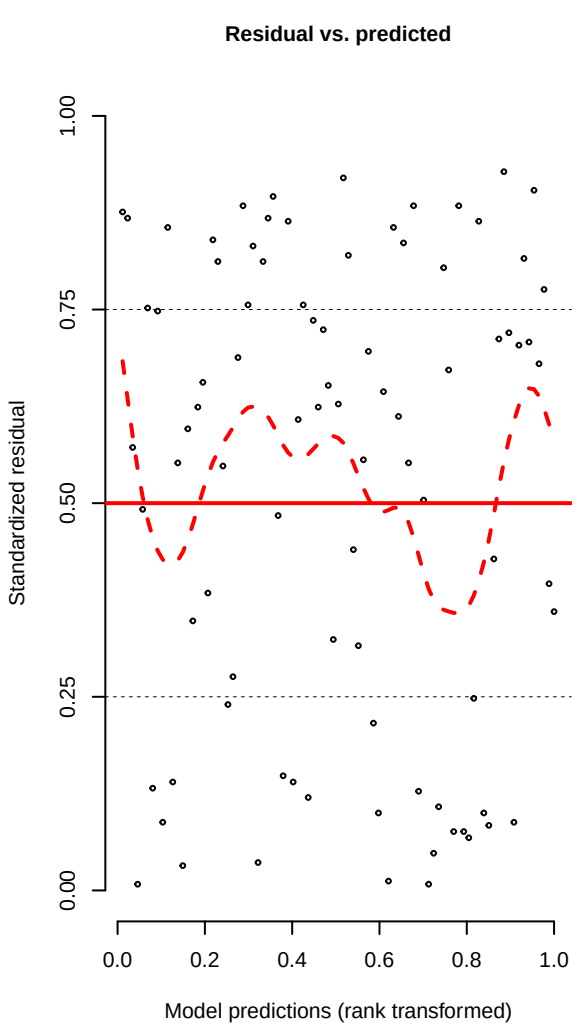


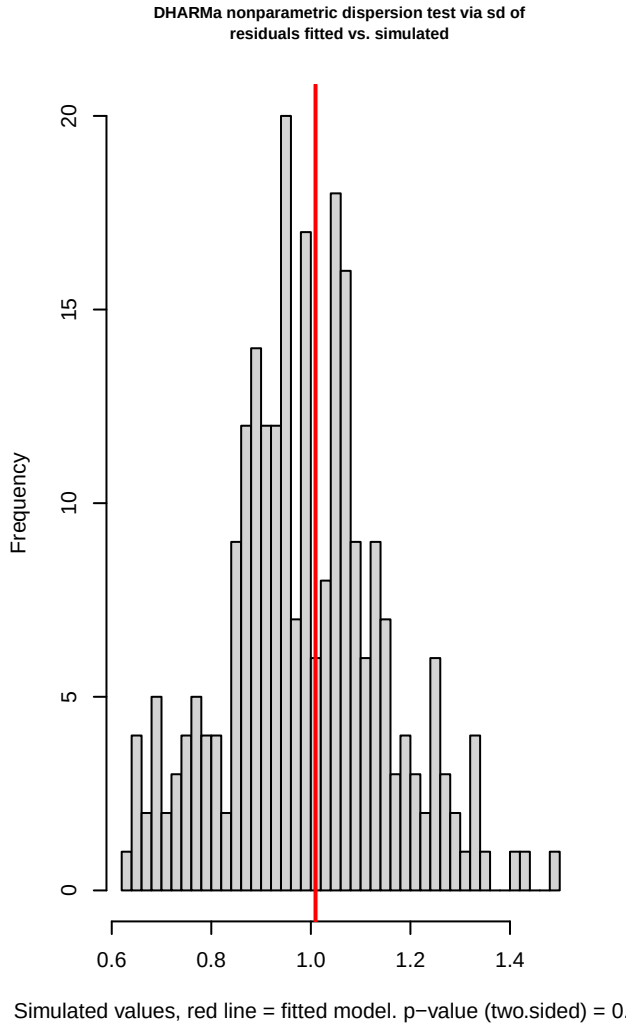




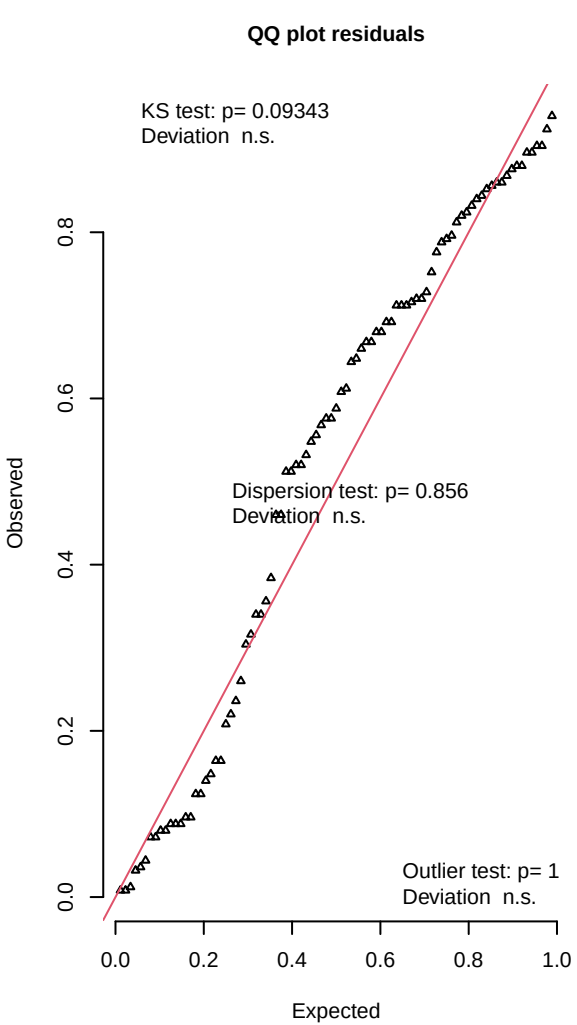
FDiv ~ intercept + area_std

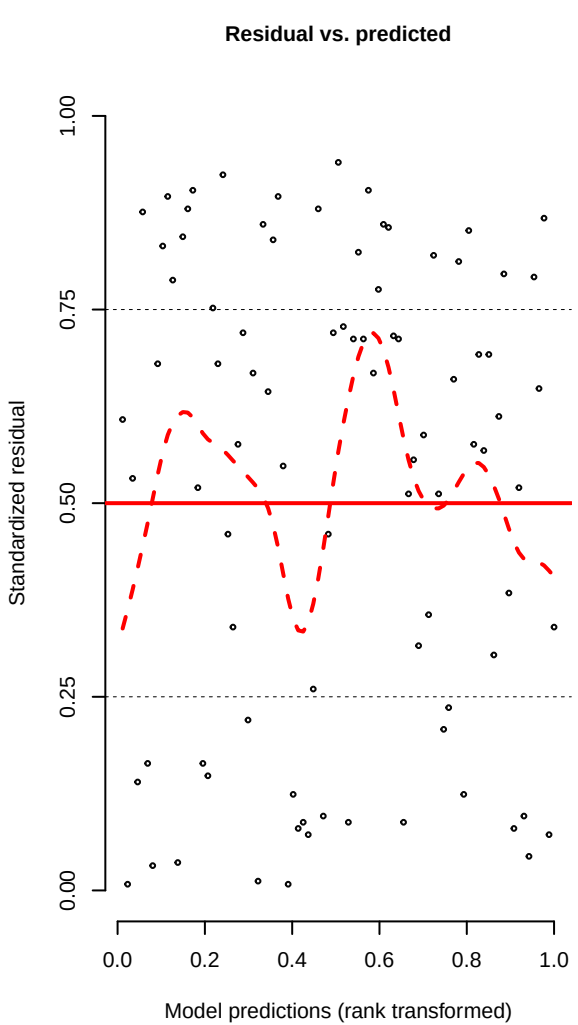


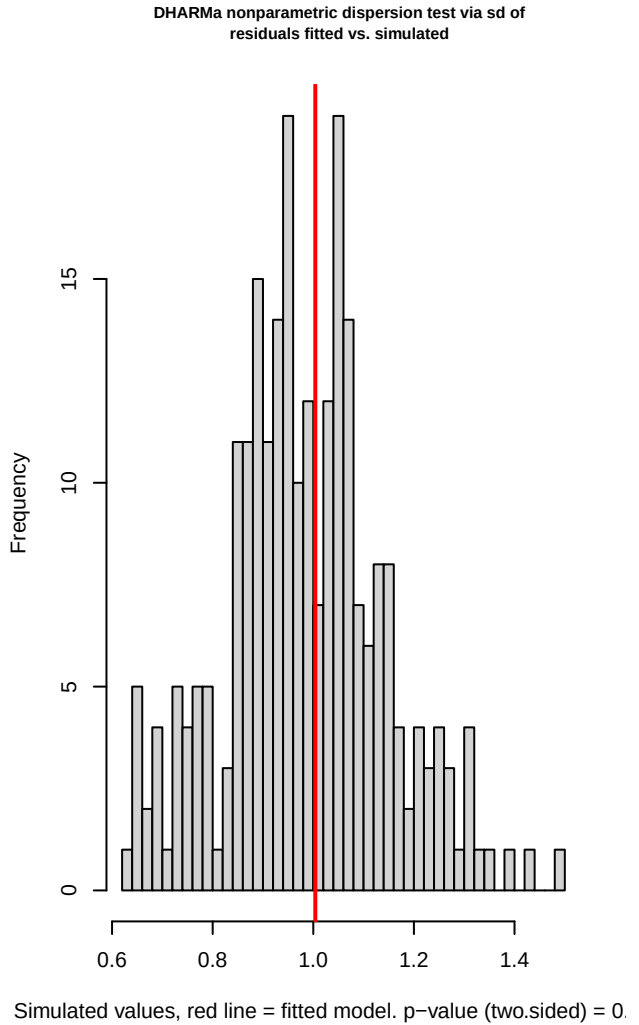




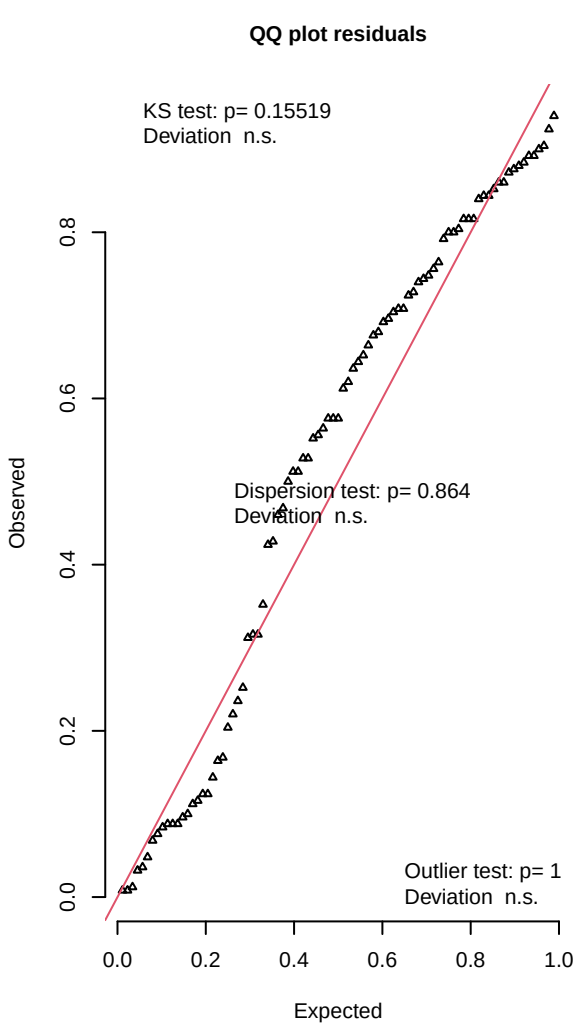
FDiv ~ intercept + area_std + fish1

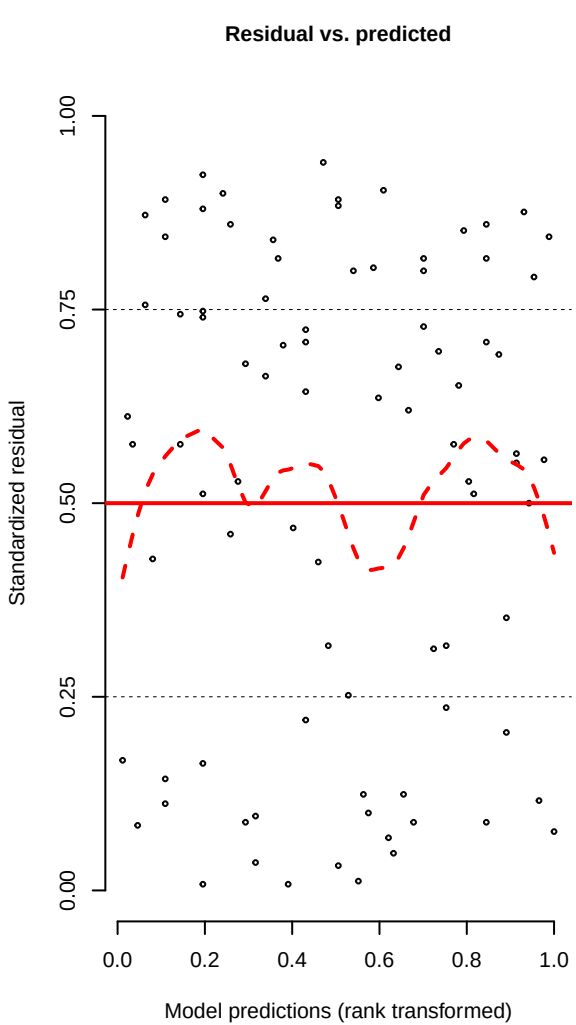


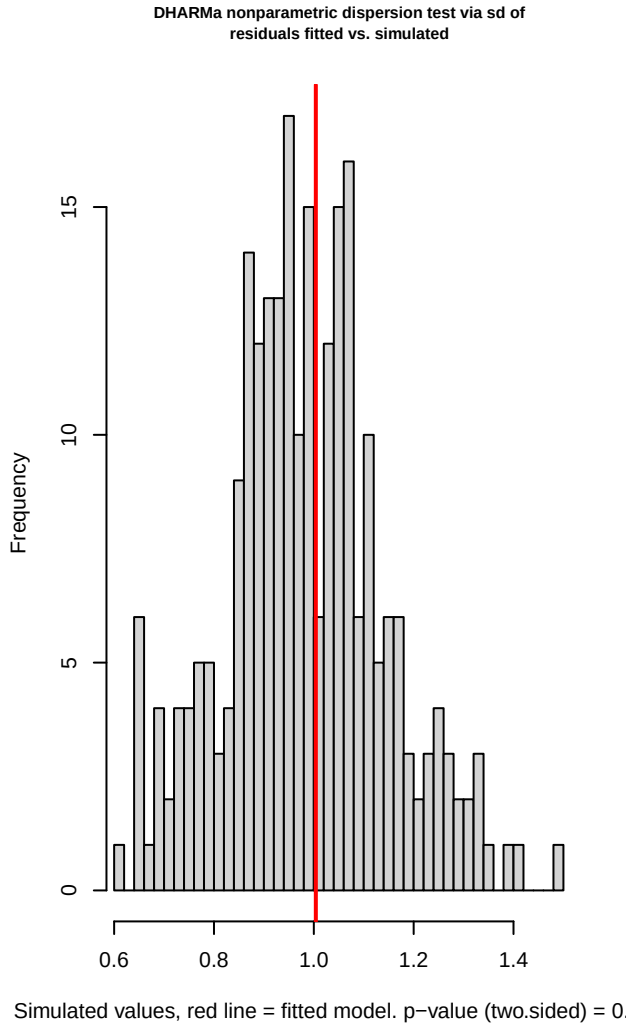




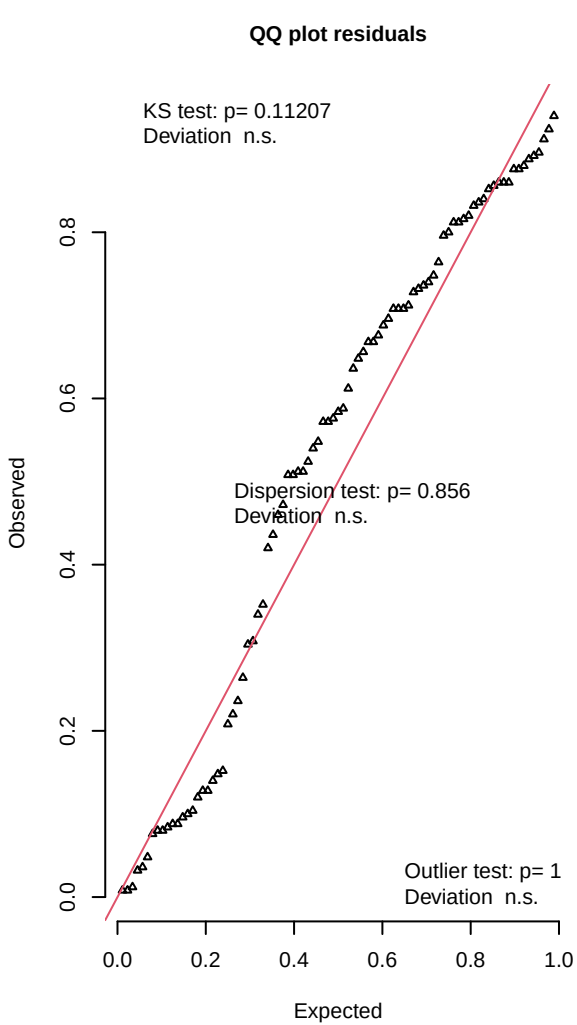
FDiv ~ intercept + fish1 + time_convert_std

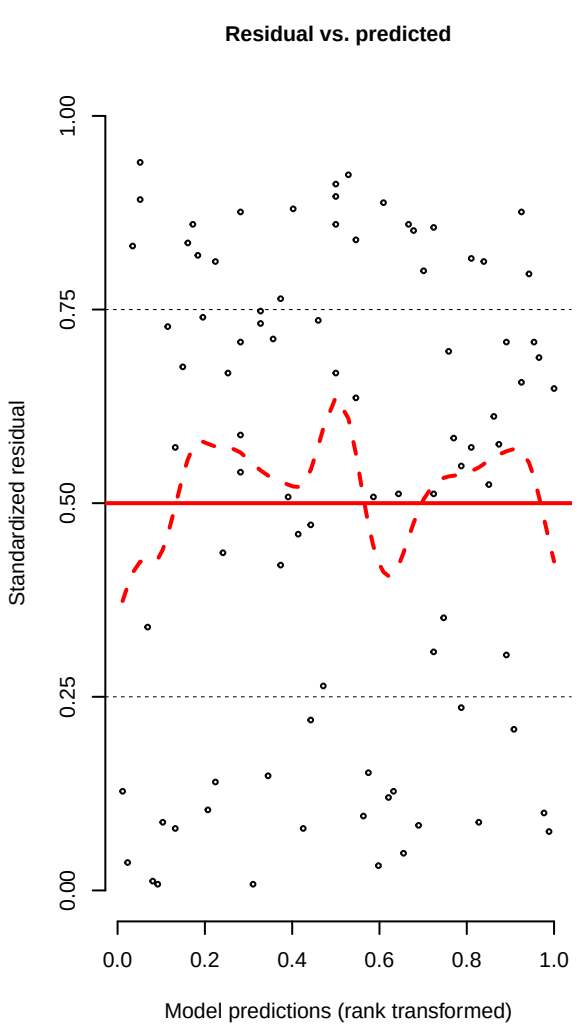


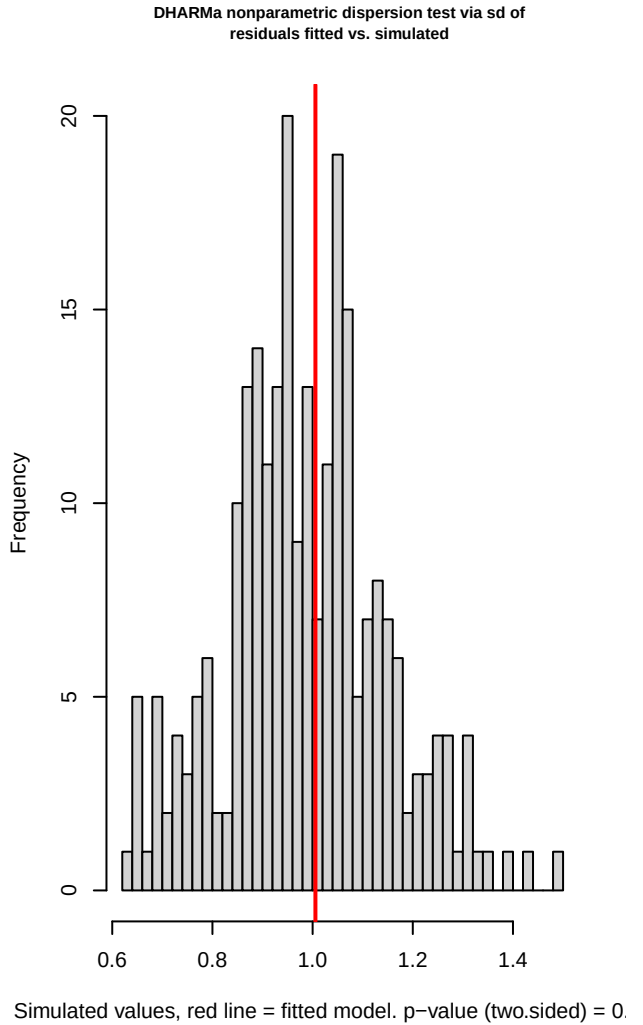




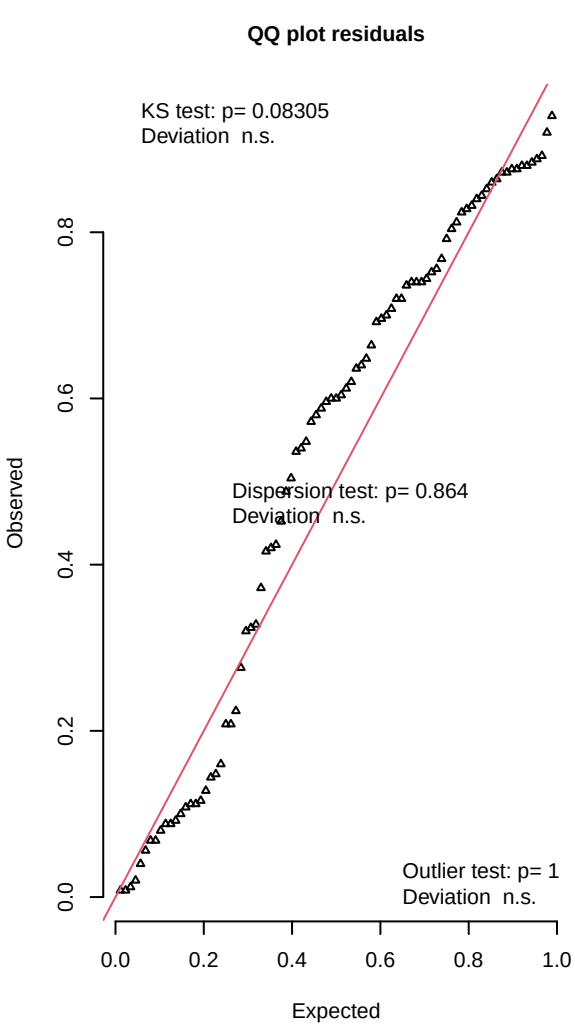
FDiv ~ intercept + fish1 + temp_std

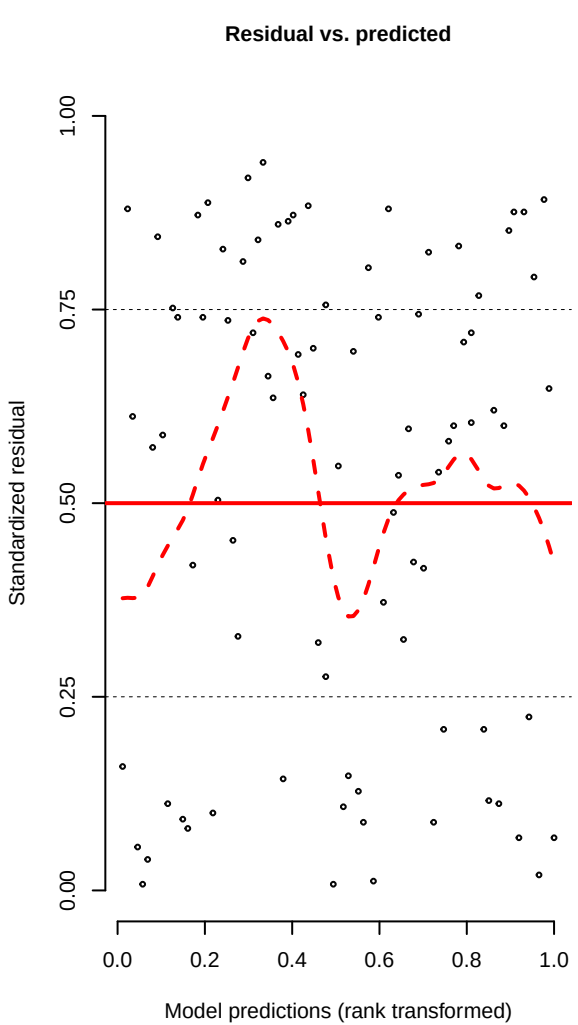


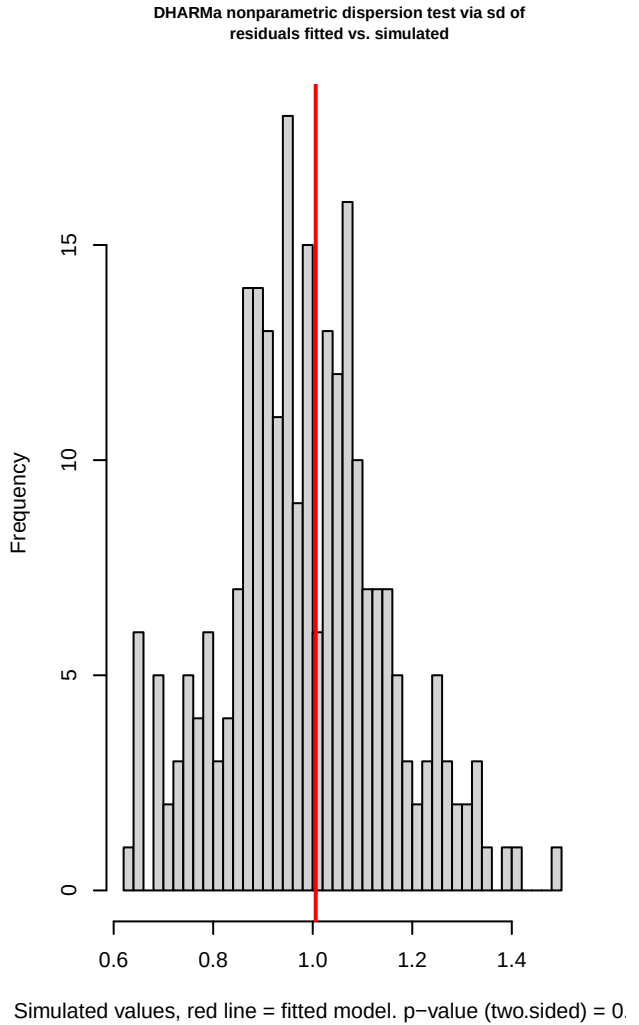




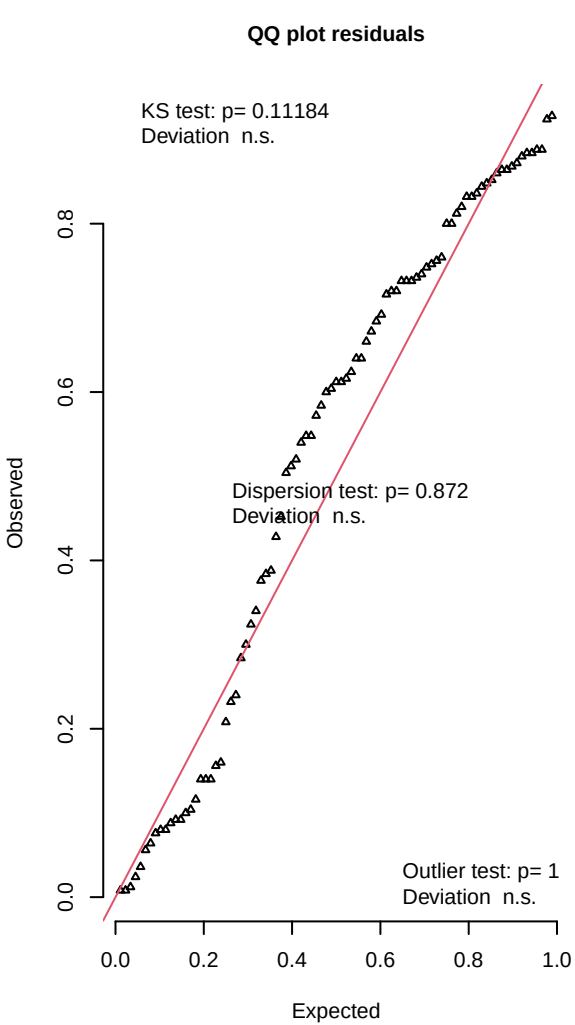
FDiv ~ intercept + temp_std + time_convert_std

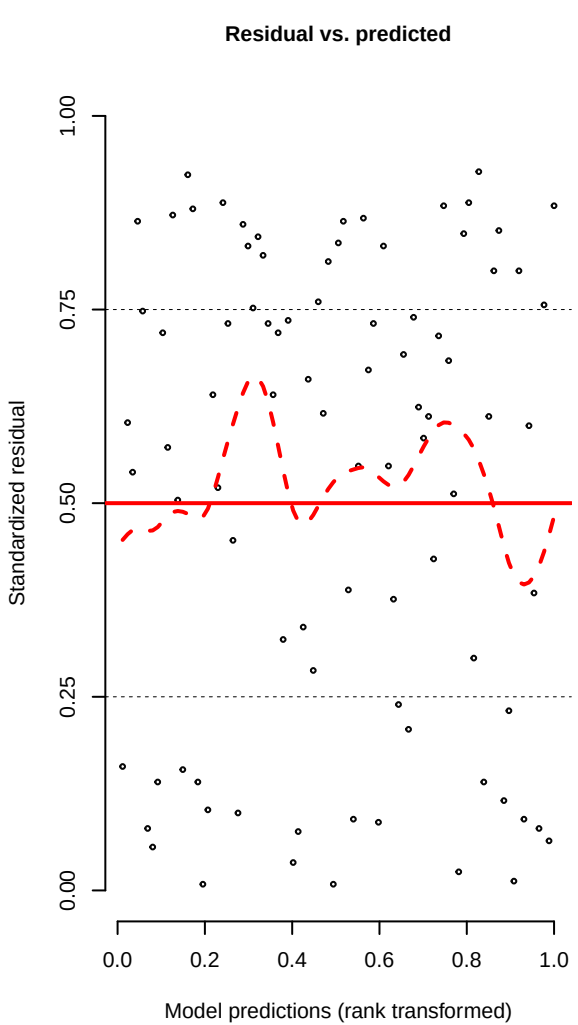


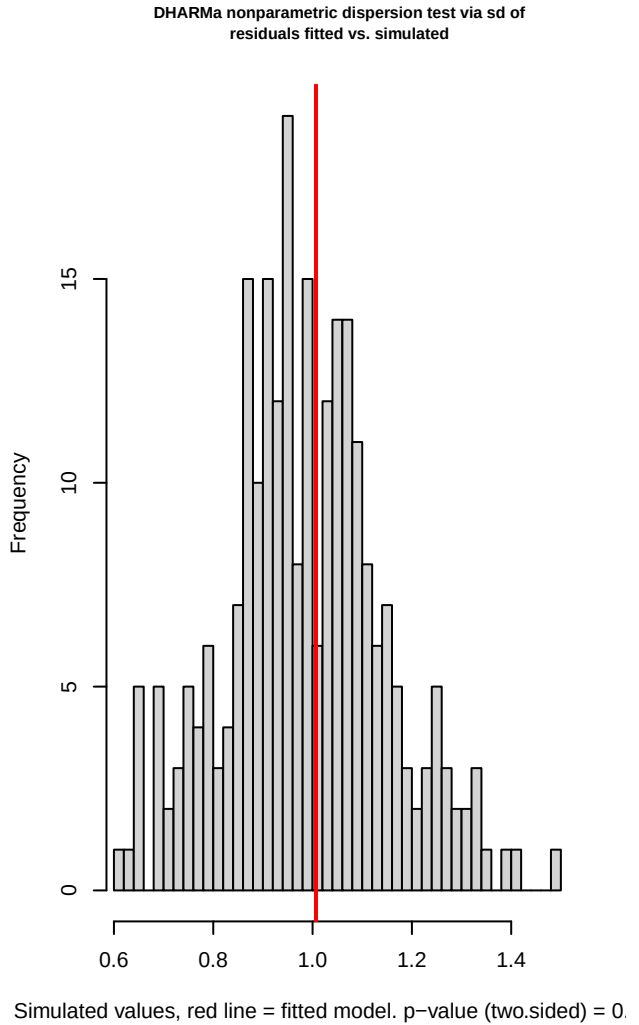




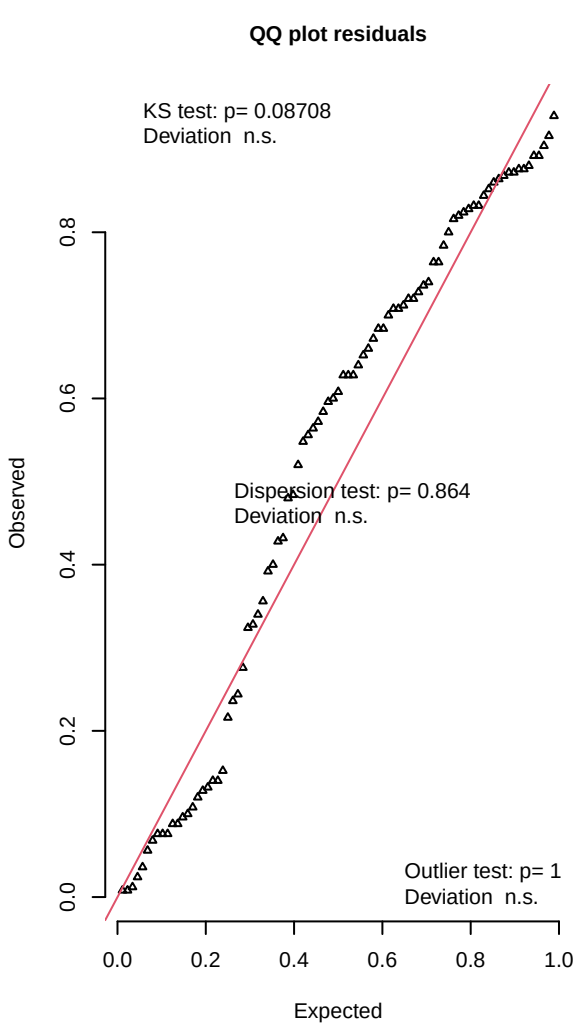
FDiv ~ intercept + area_std + time_convert_std

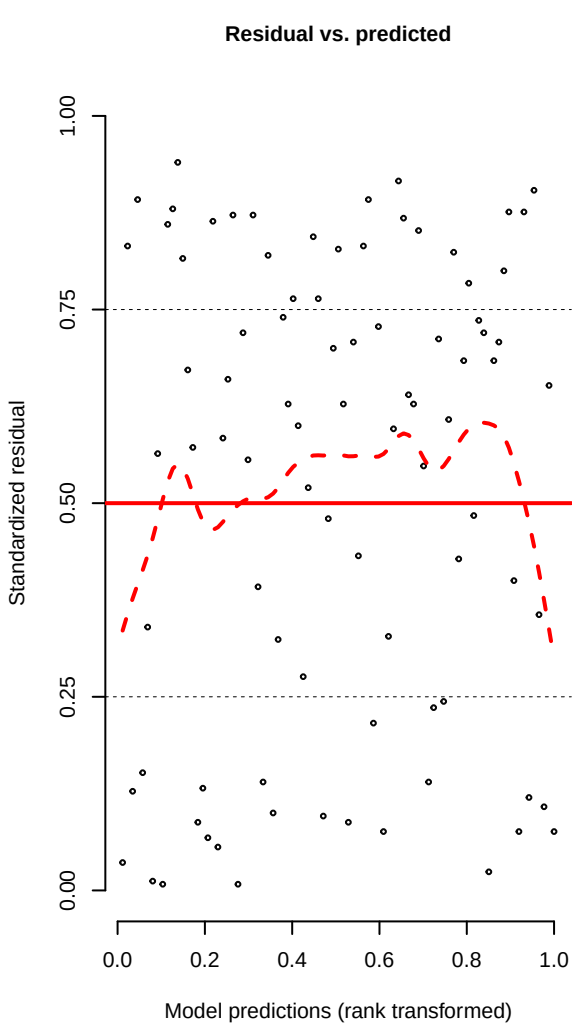


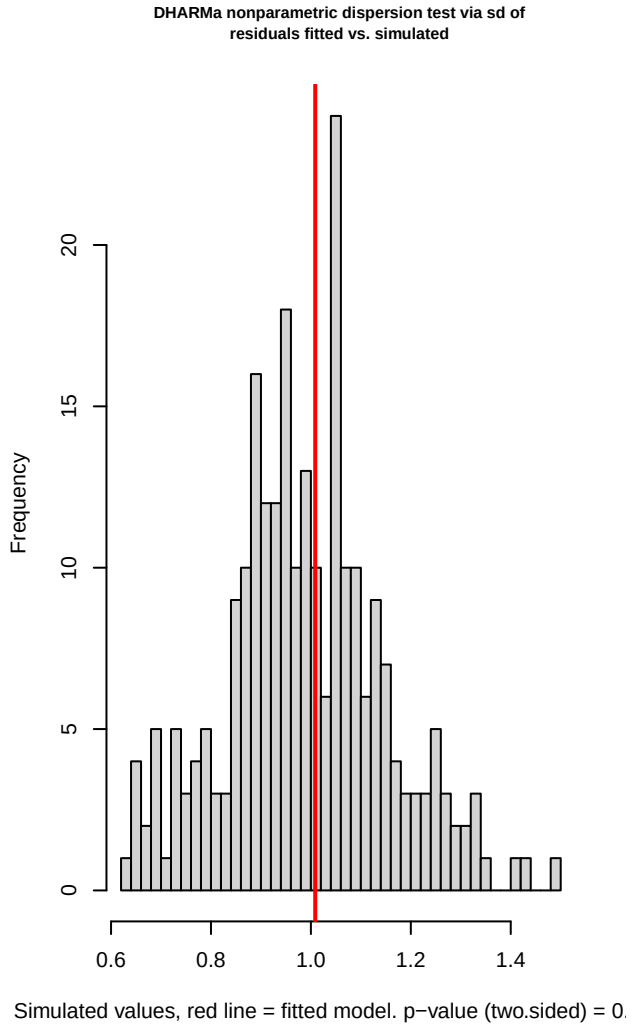




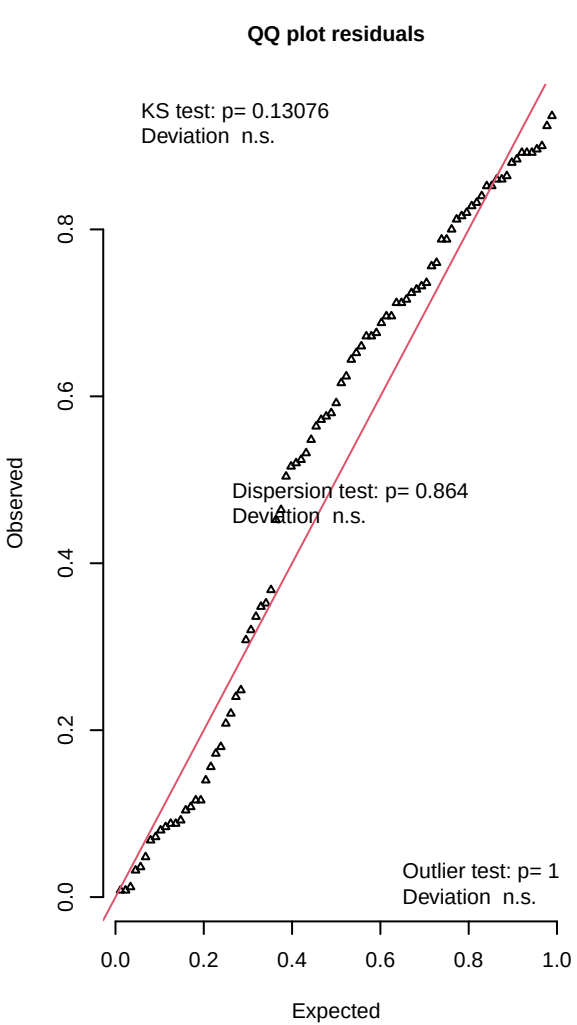
FDiv ~ intercept + area_std + temp_std

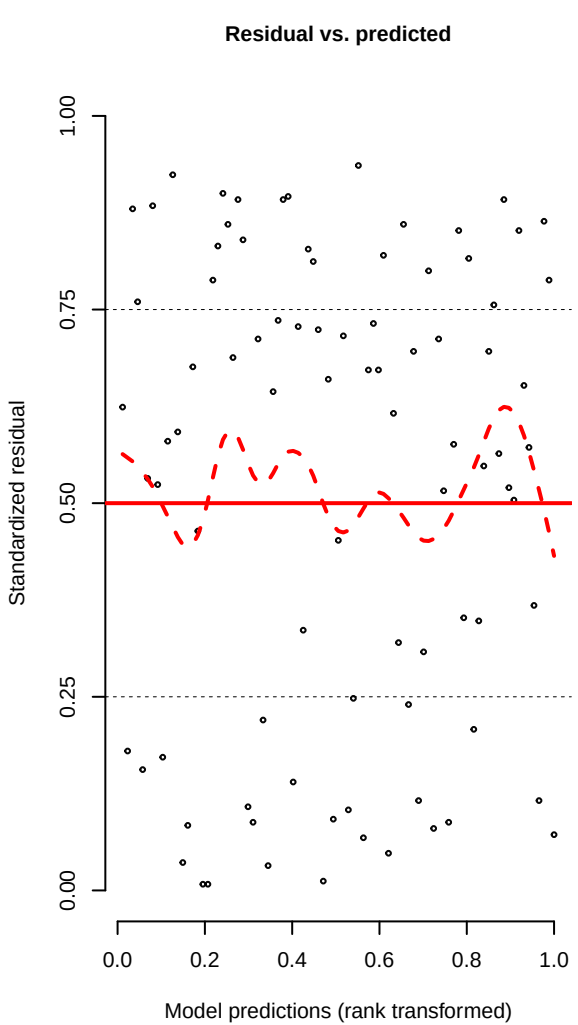


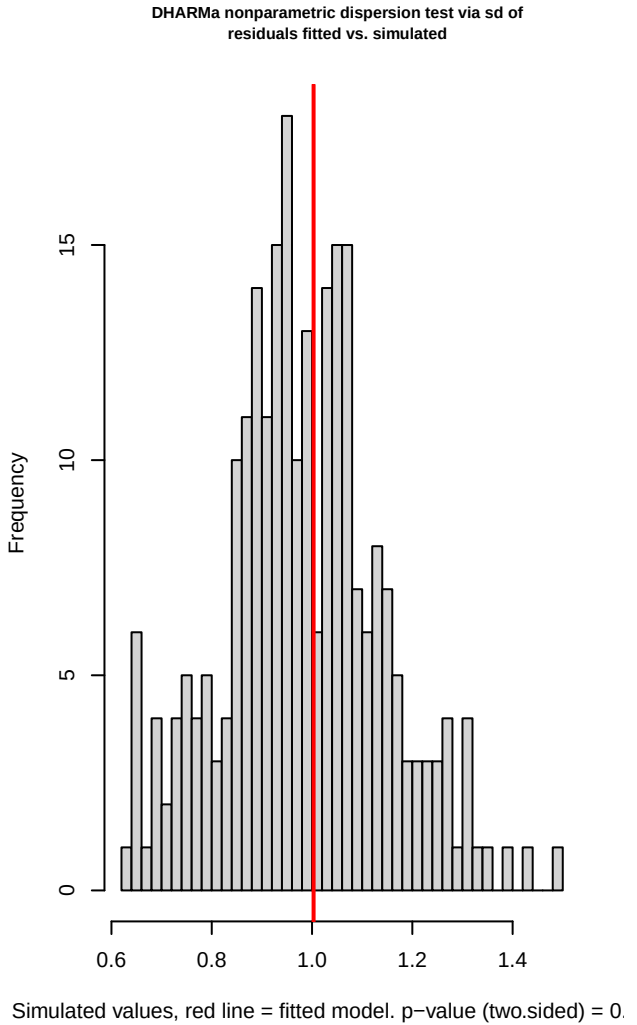




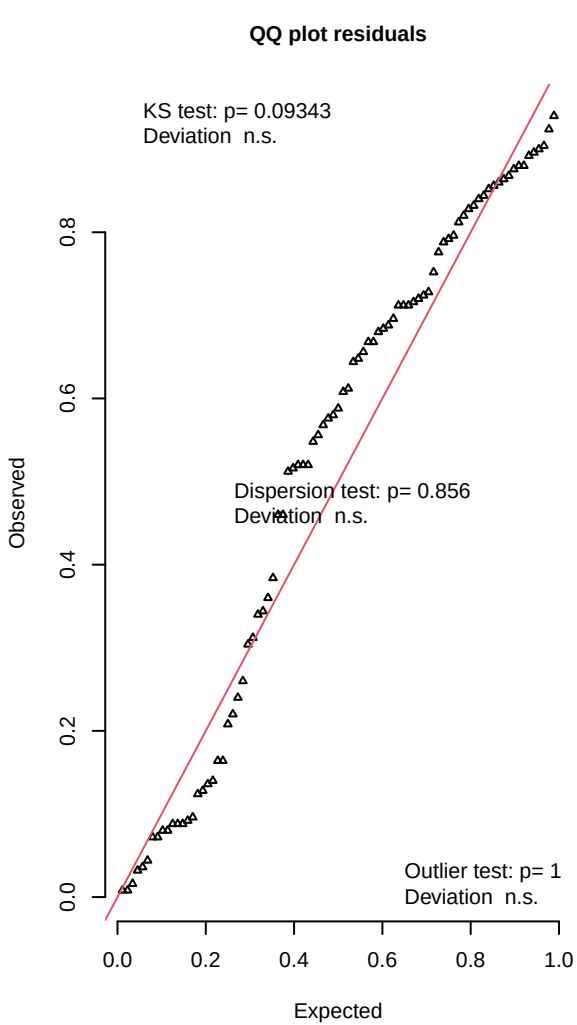
FDiv ~ intercept + area_std + fish1 + time_convert_std

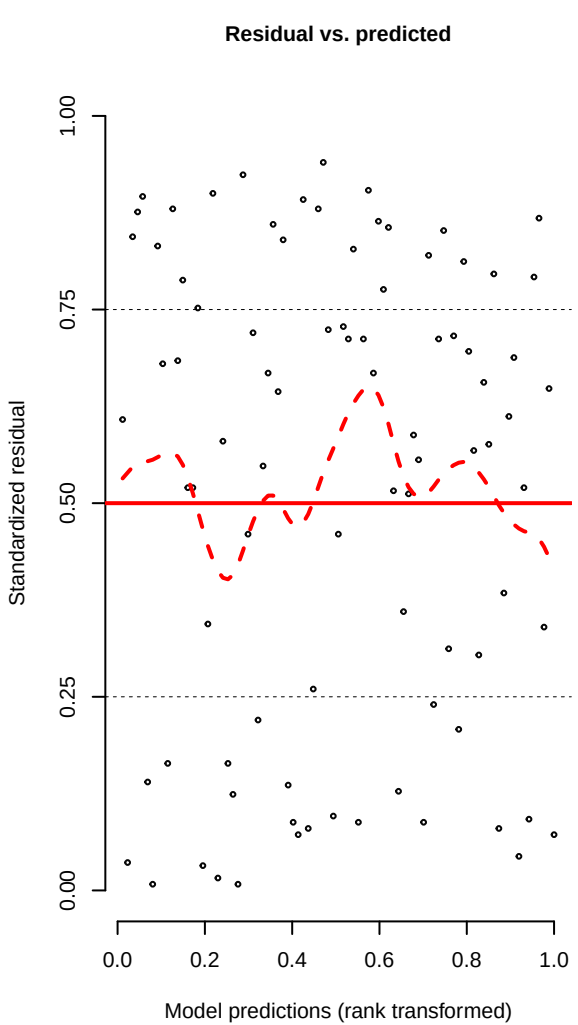


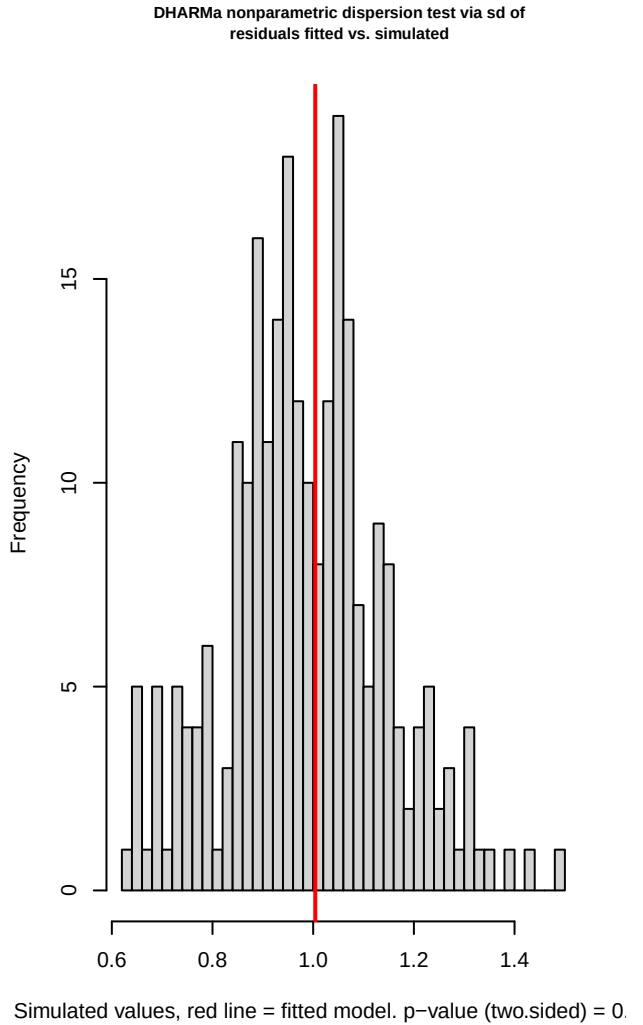




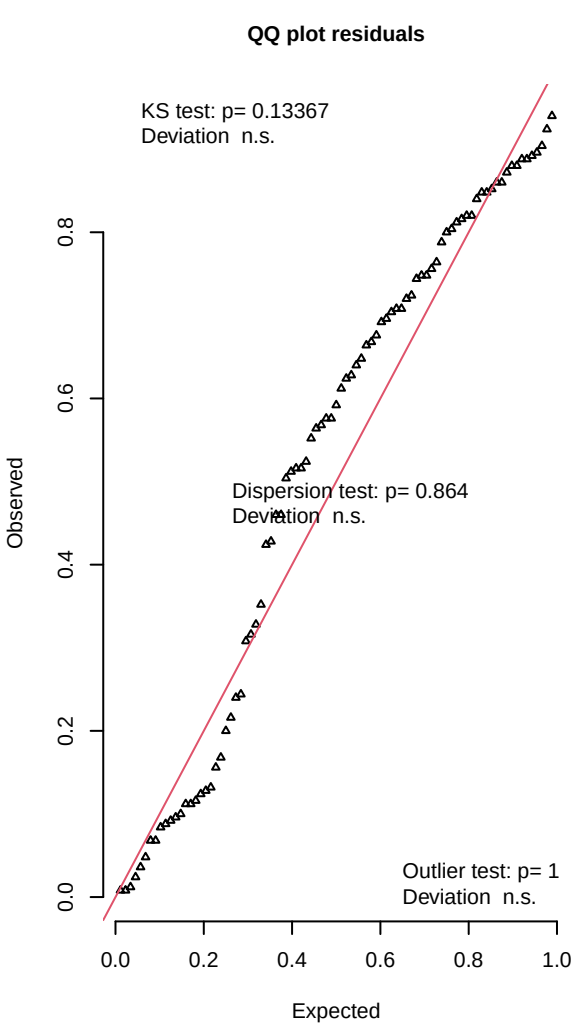
FDiv ~ intercept + area_std + fish1 + temp_std

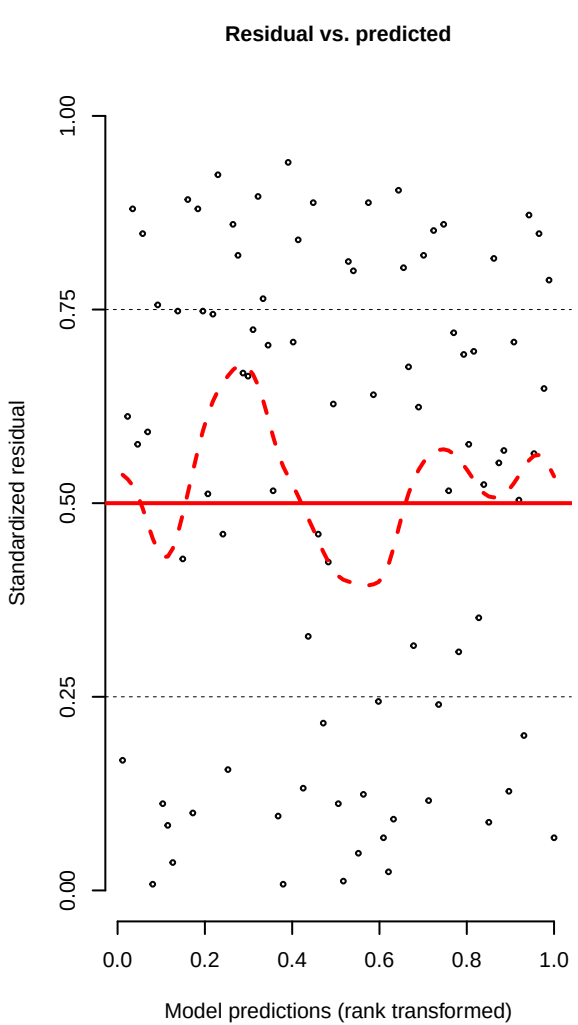


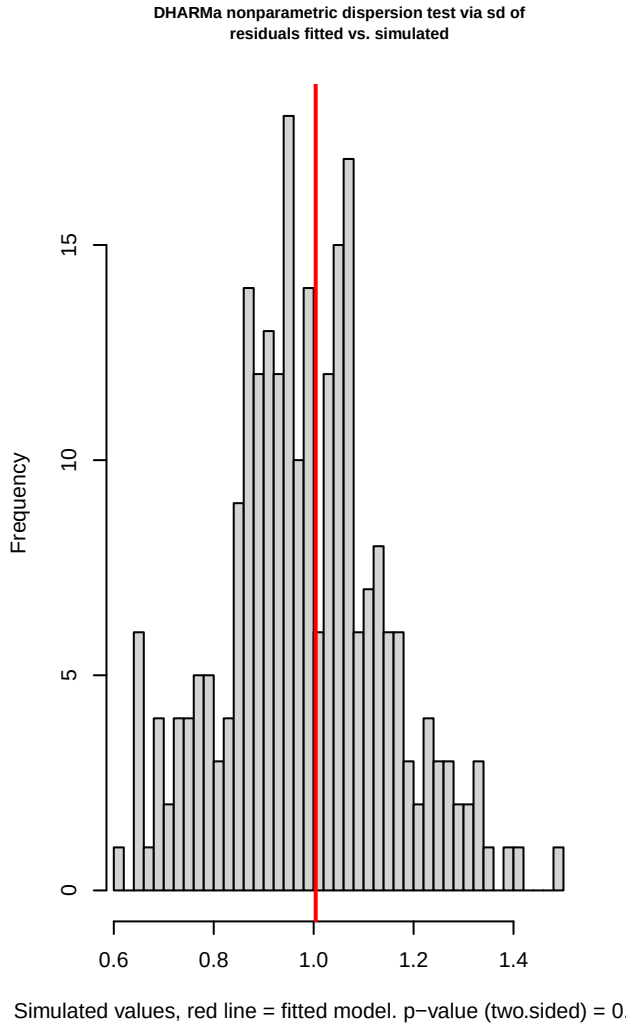




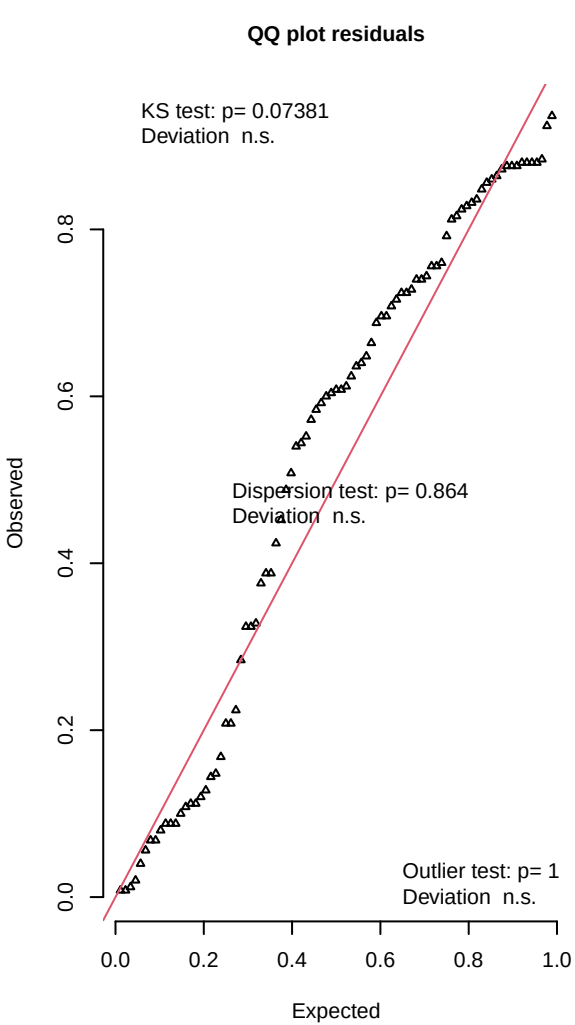
FDiv ~ intercept + fish1 + temp_std + time_convert_std

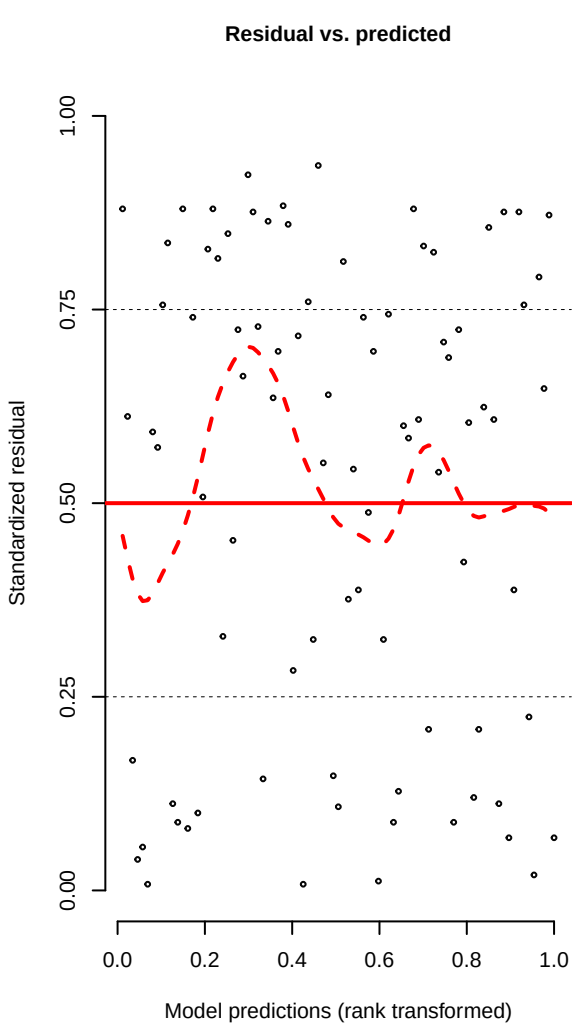


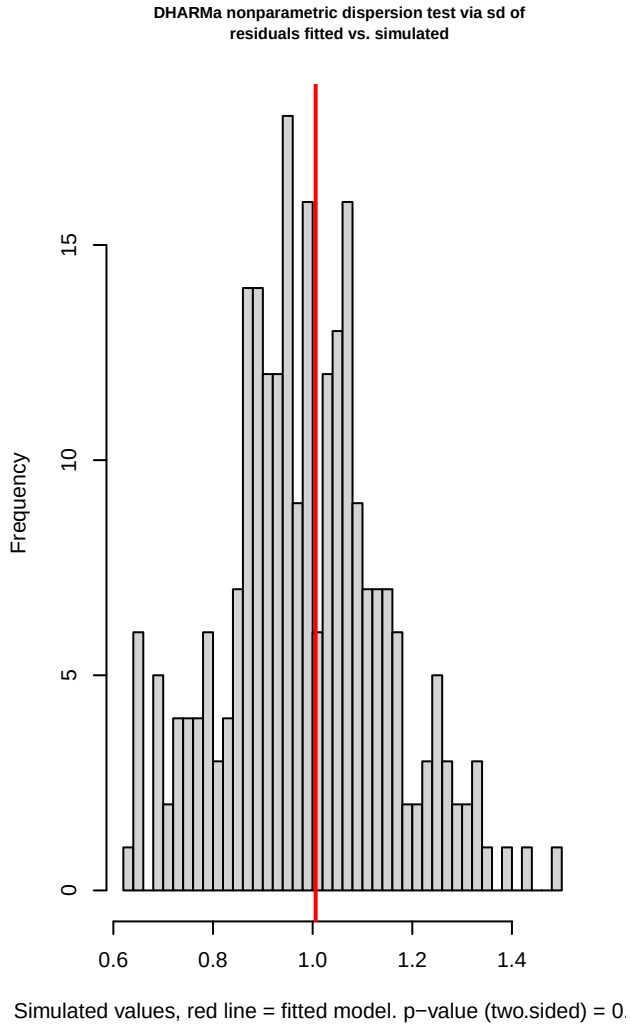




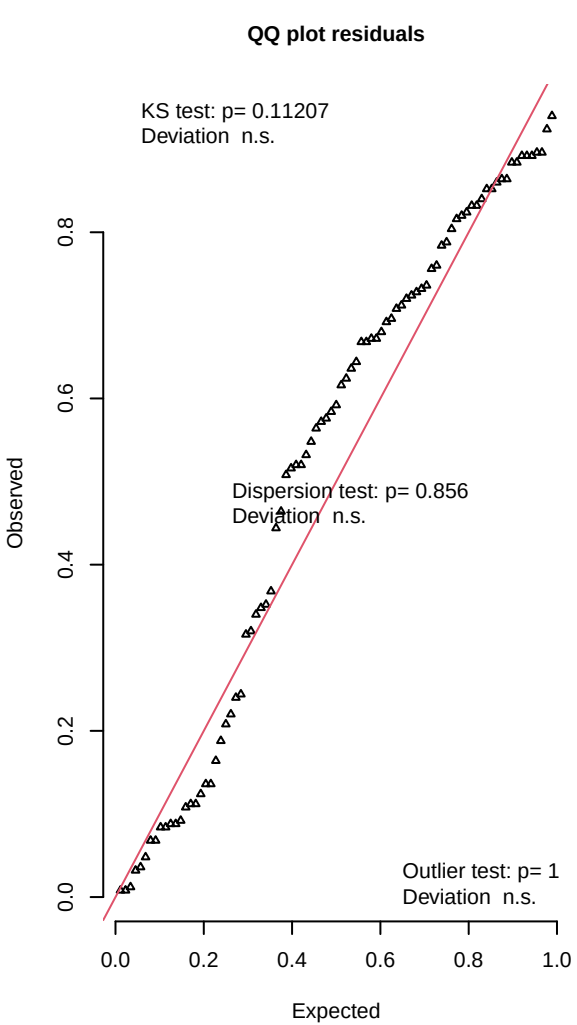
FDiv ~ intercept + area_std + temp_std + time_convert_std

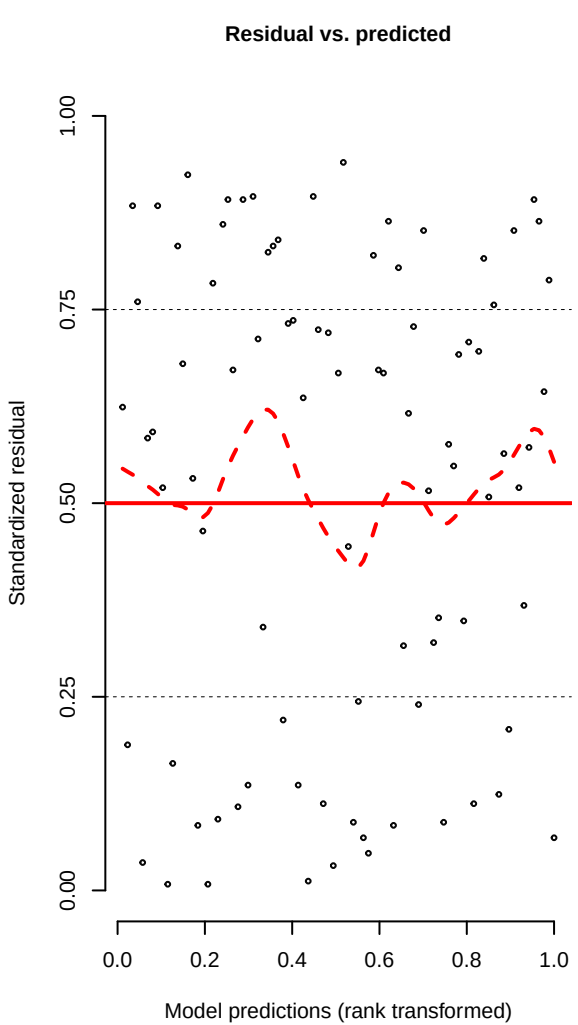


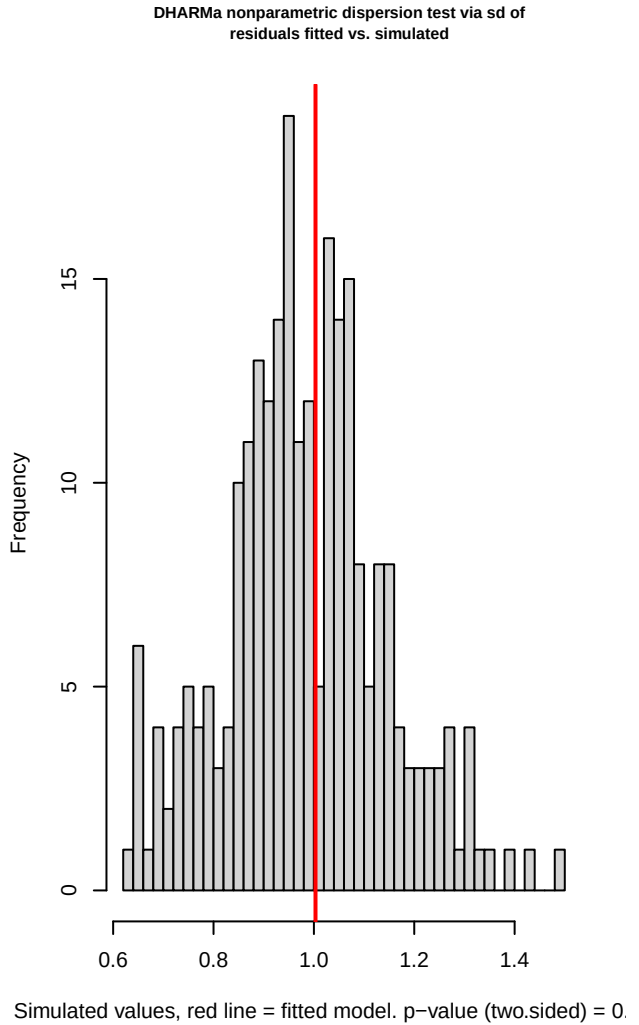




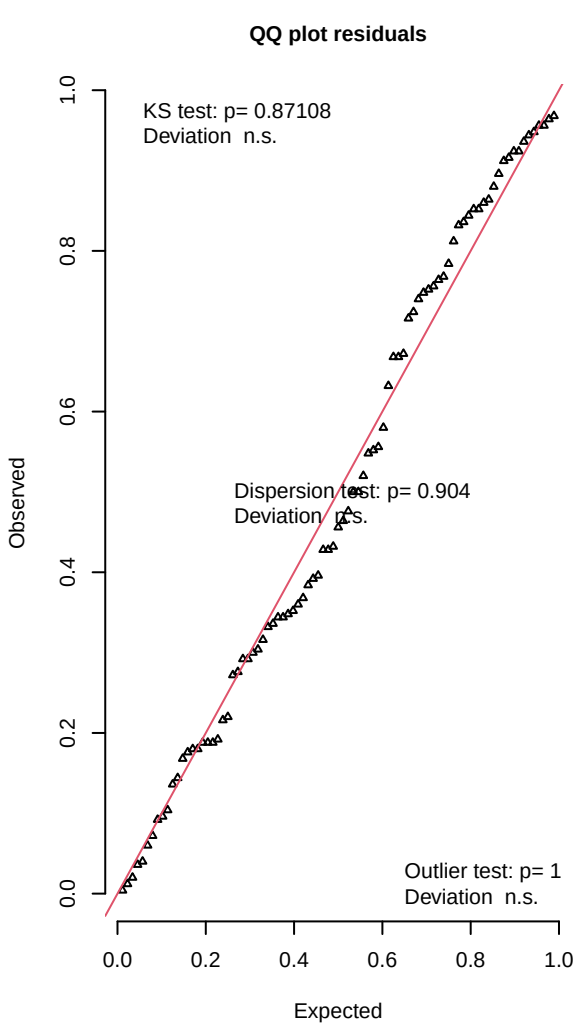
FDiv ~ intercept + area_std + fish1 + temp_std + time_convert_std

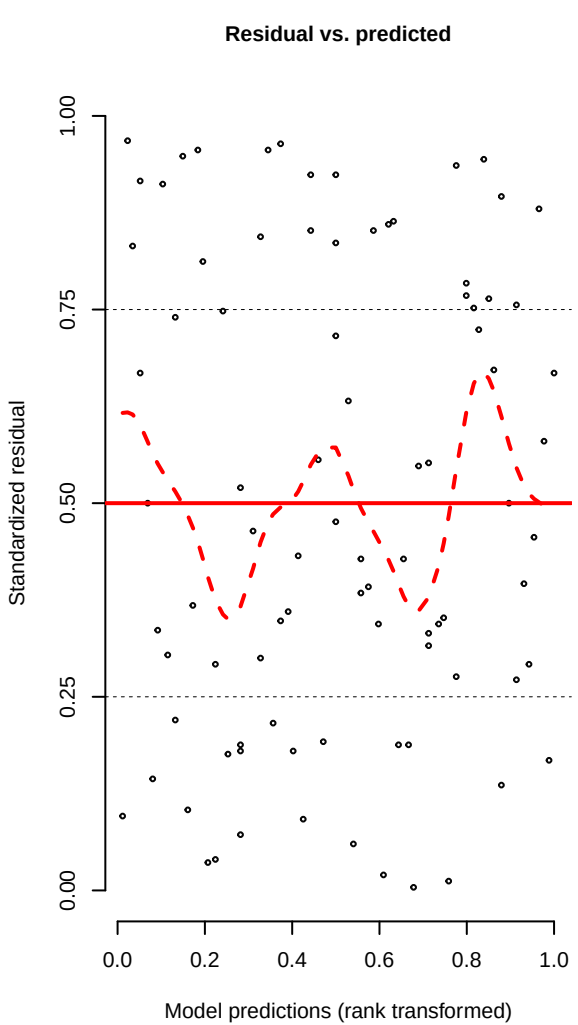


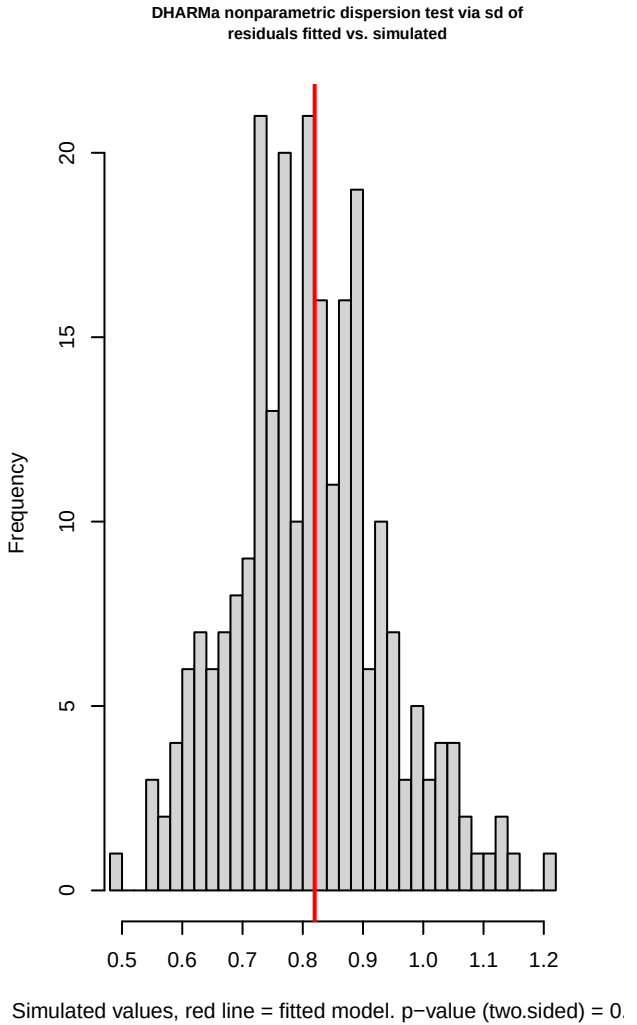




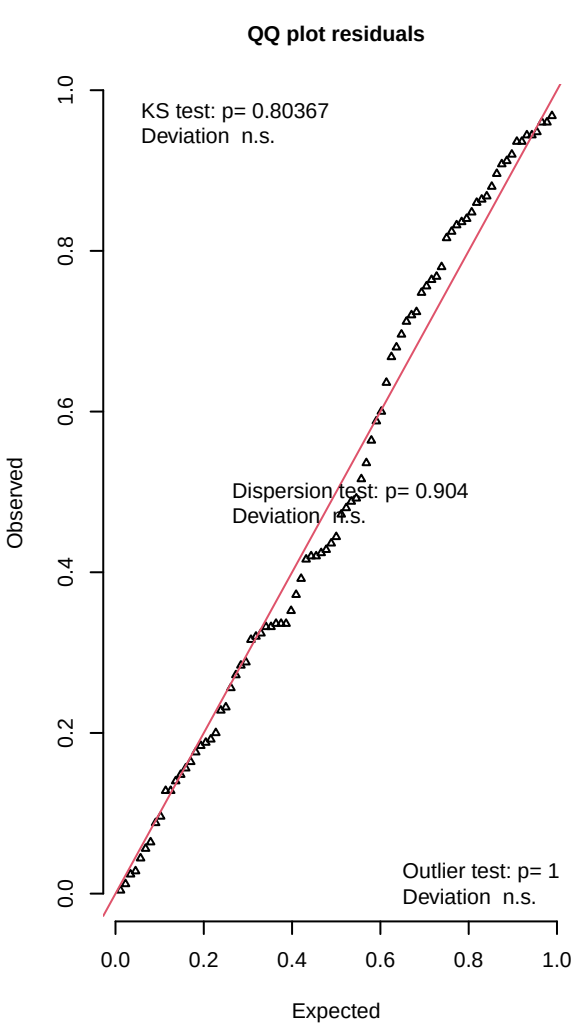
FEve ~ intercept + fish1 + temp_std

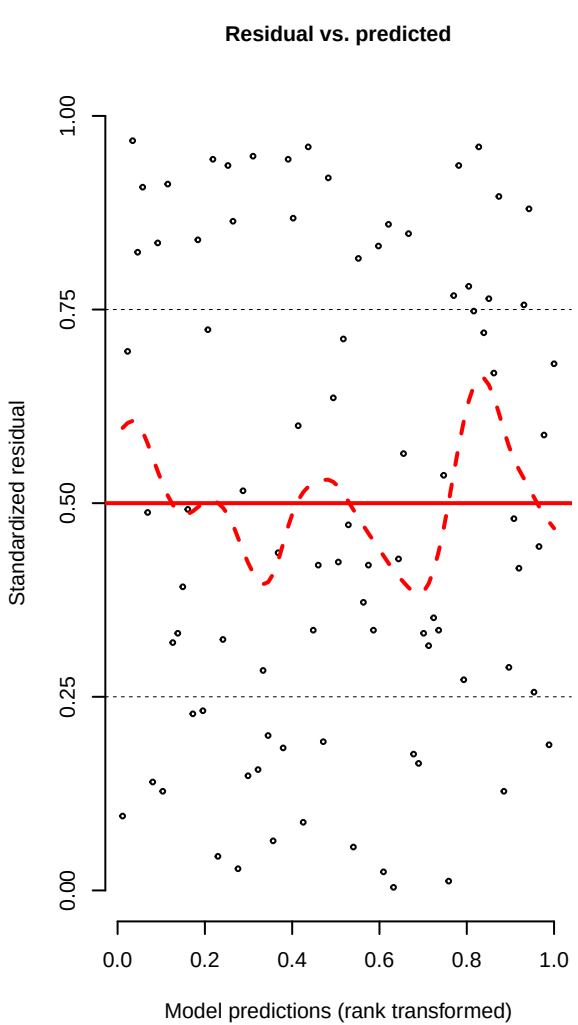


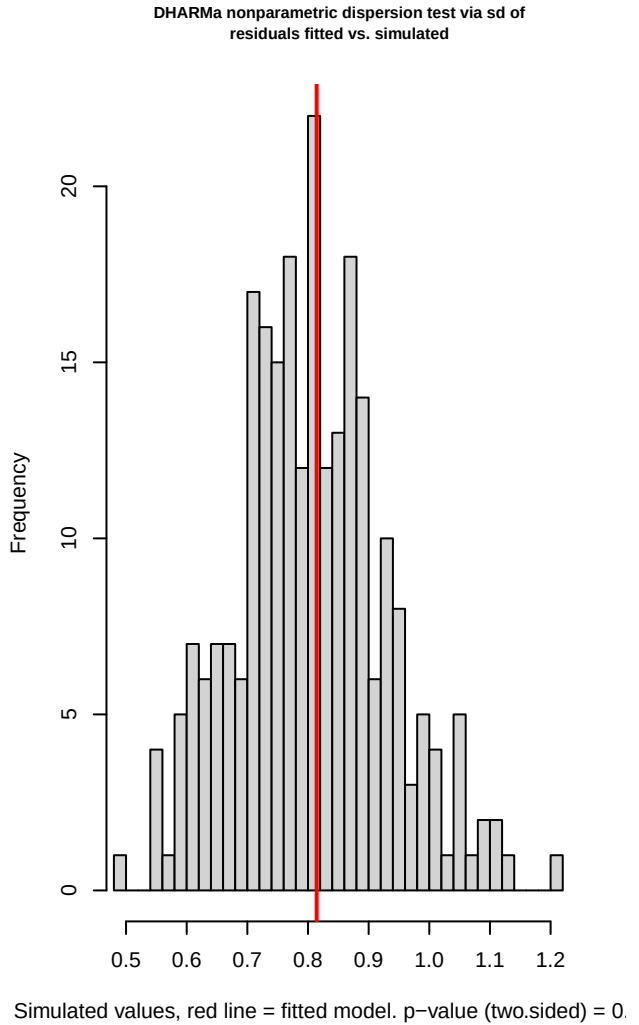




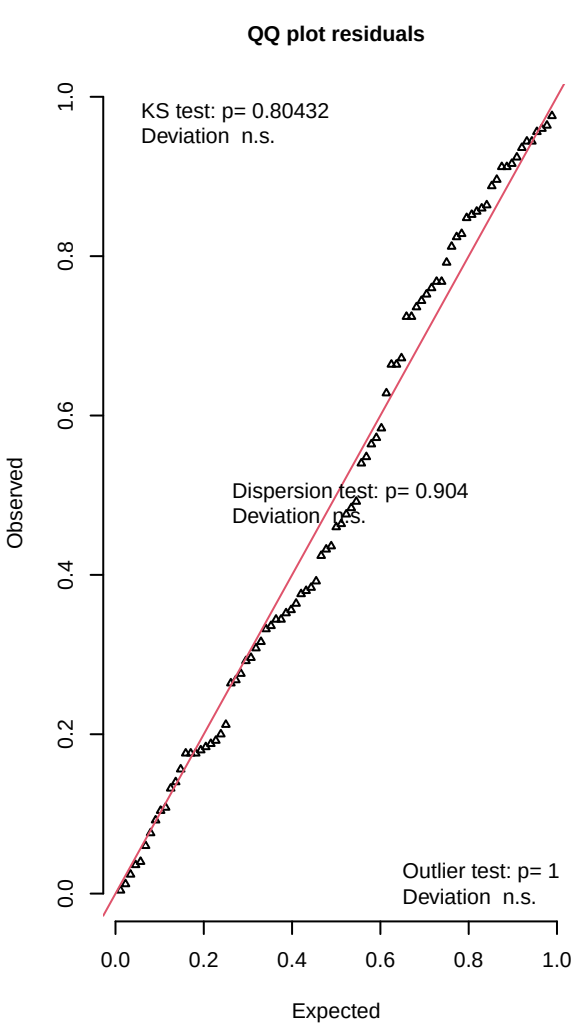
FEve ~ intercept + area_std + fish1 + temp_std

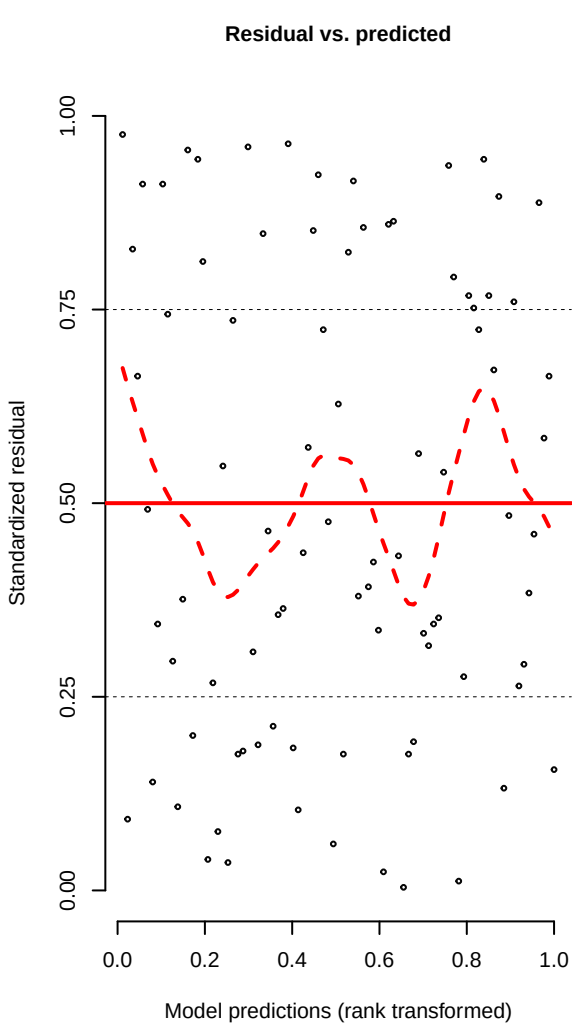


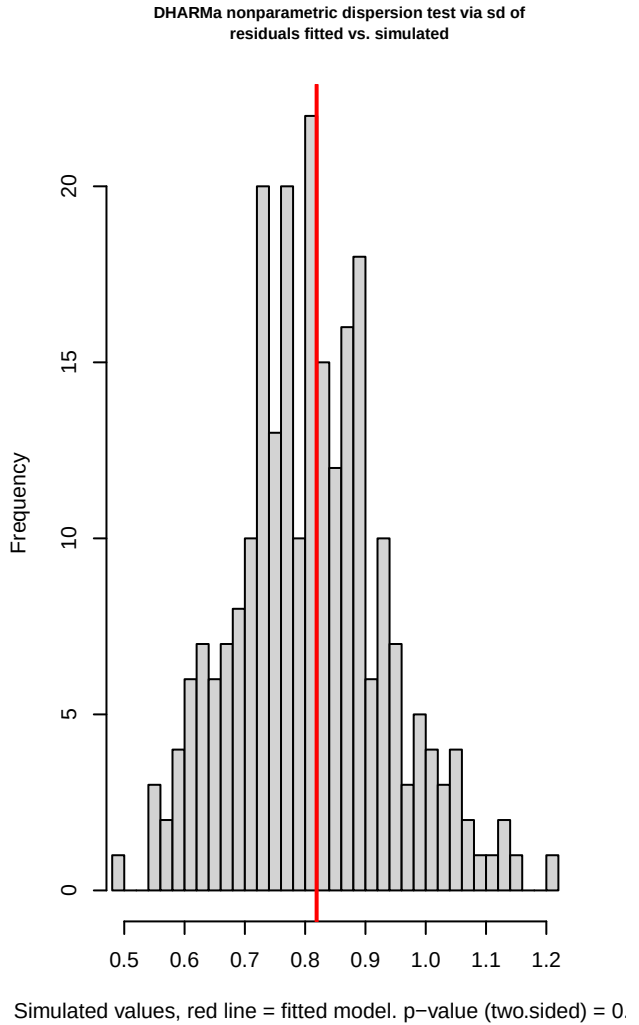




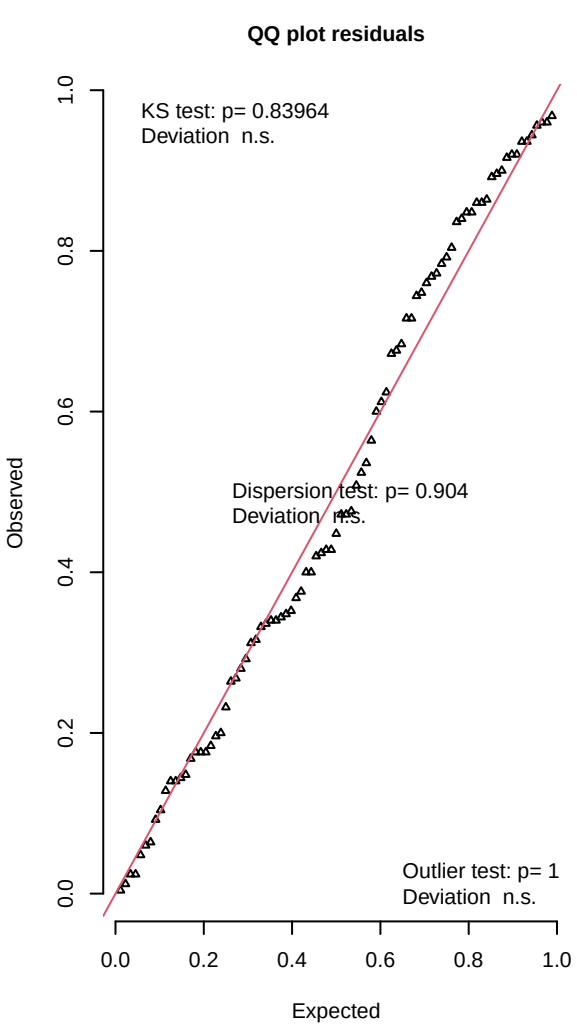
FEve ~ intercept + fish1 + temp_std + time_convert_std

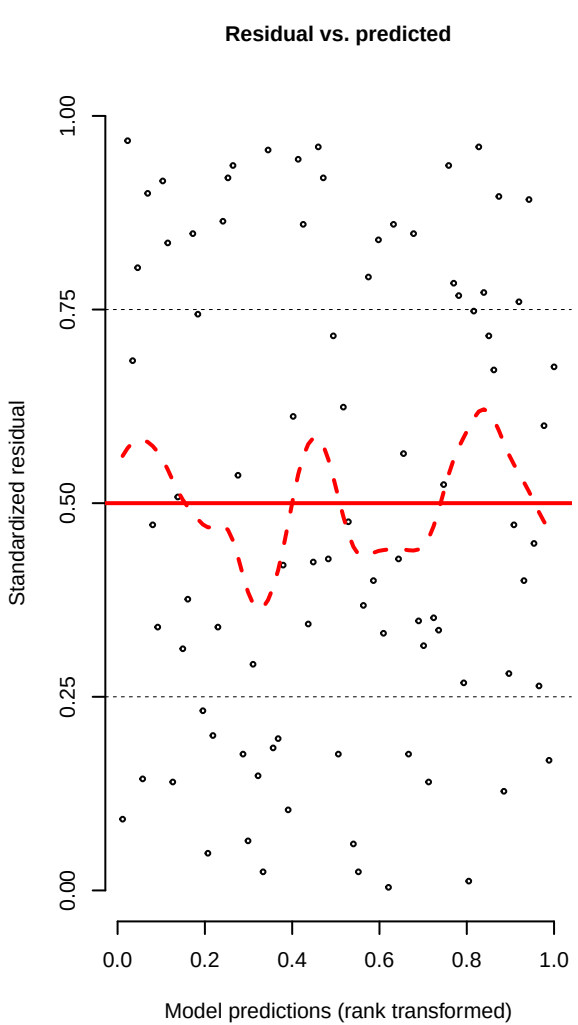


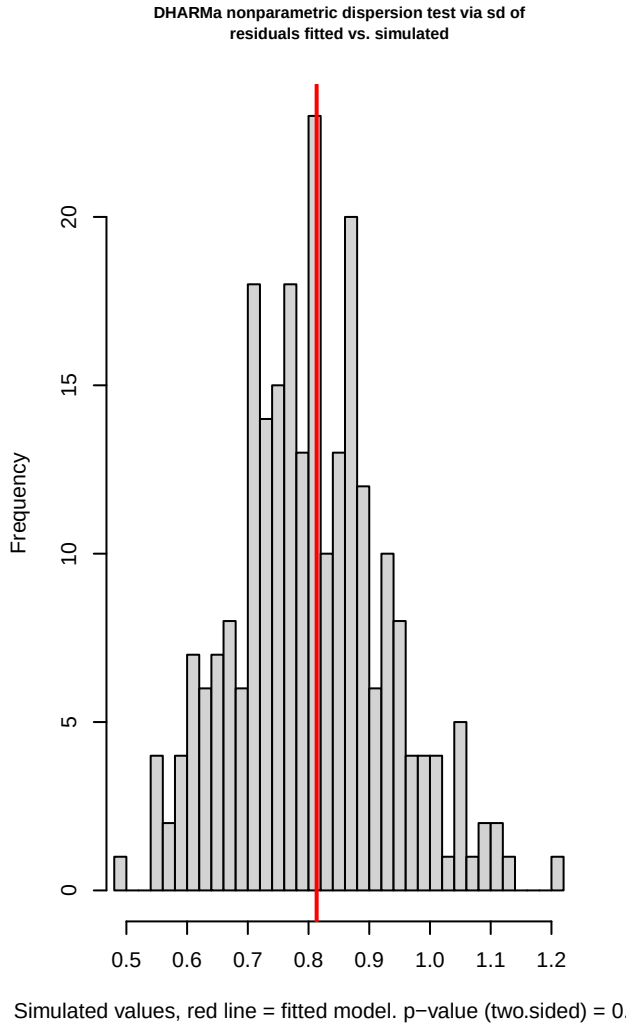




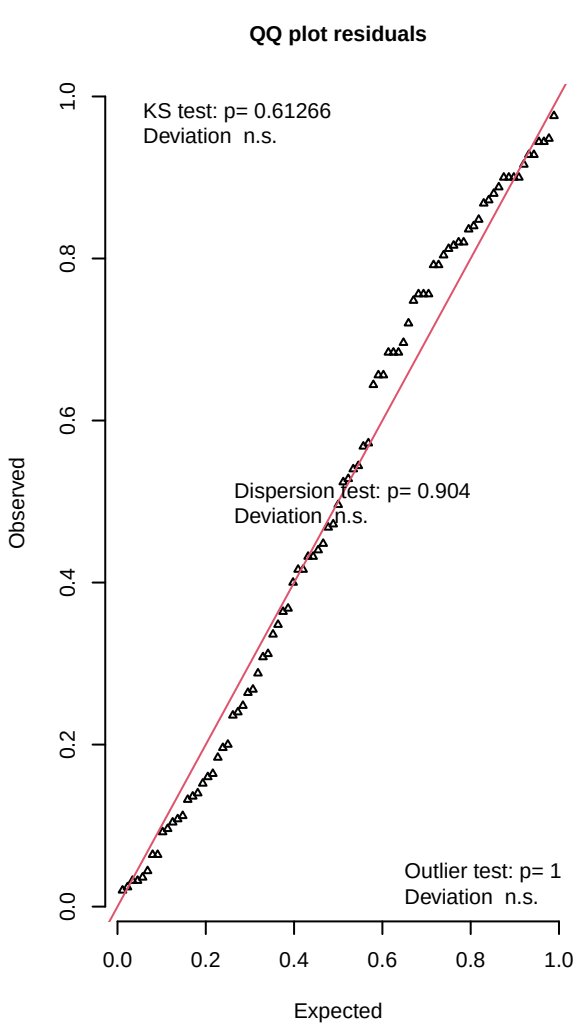
FEve ~ intercept + area_std + fish1 + temp_std + time_convert_std

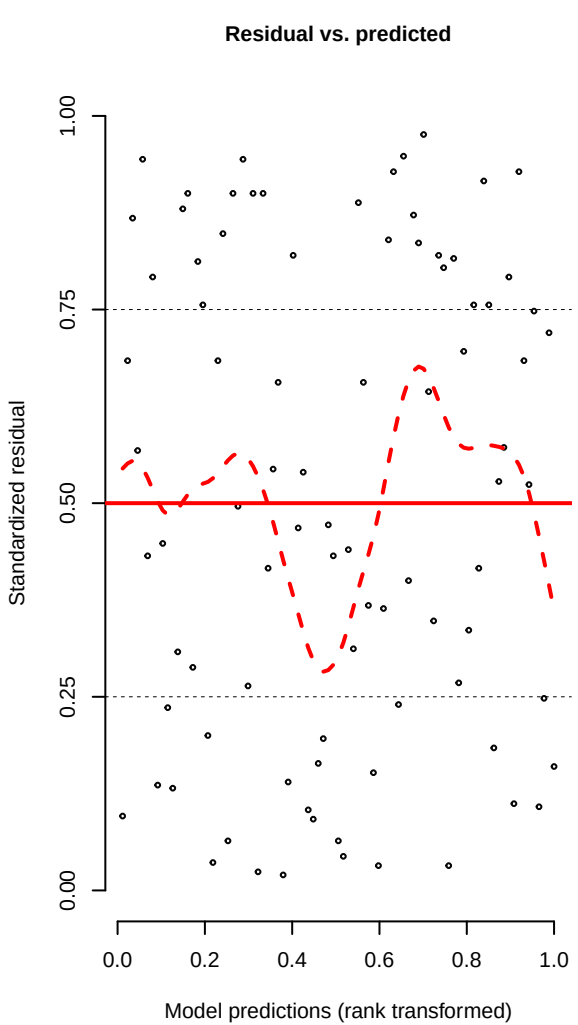


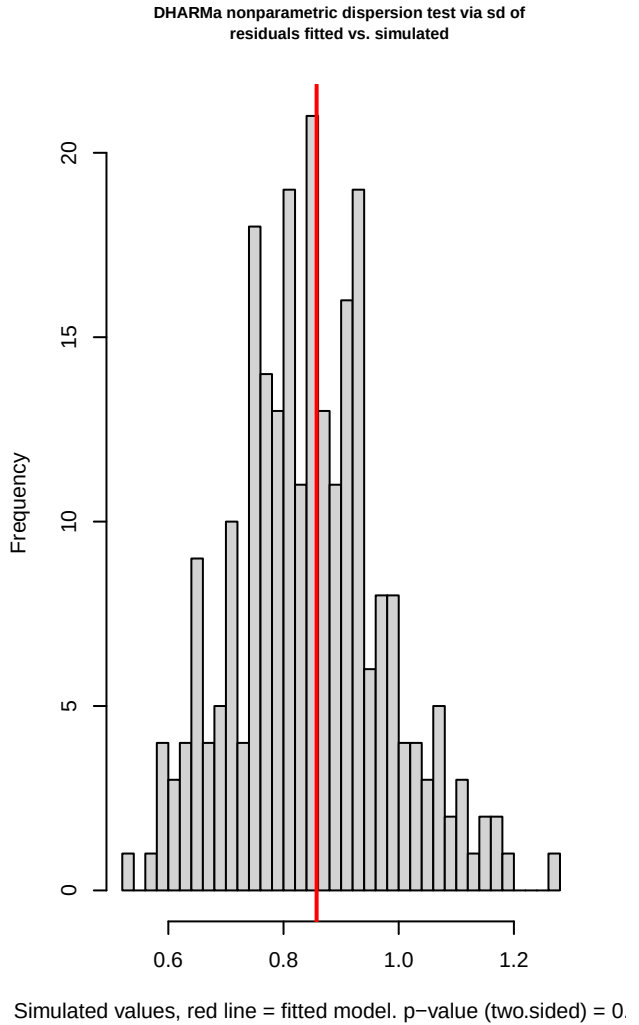




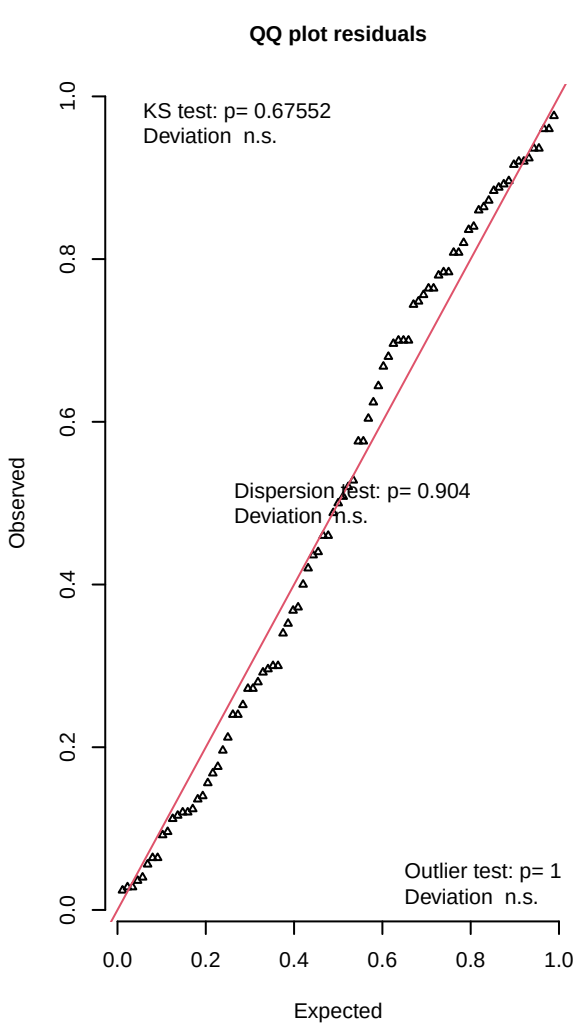
FEve ~ intercept + area_std + temp_std

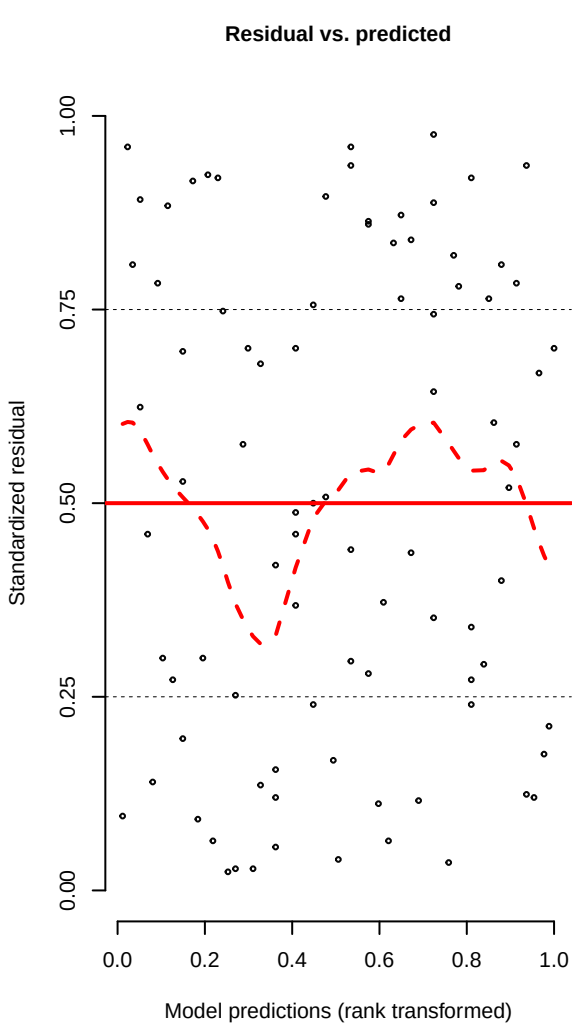


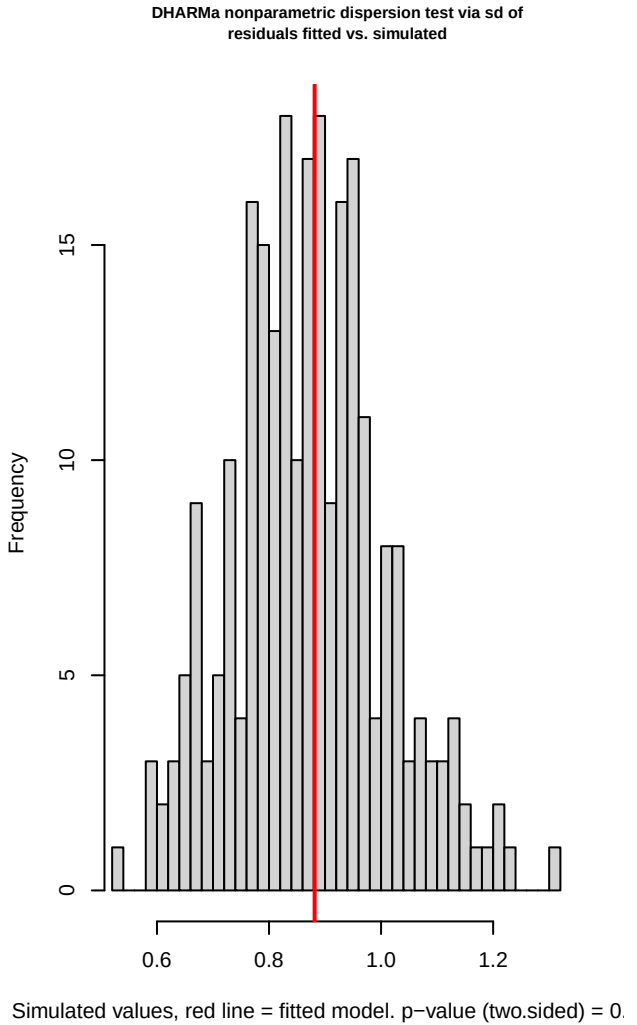




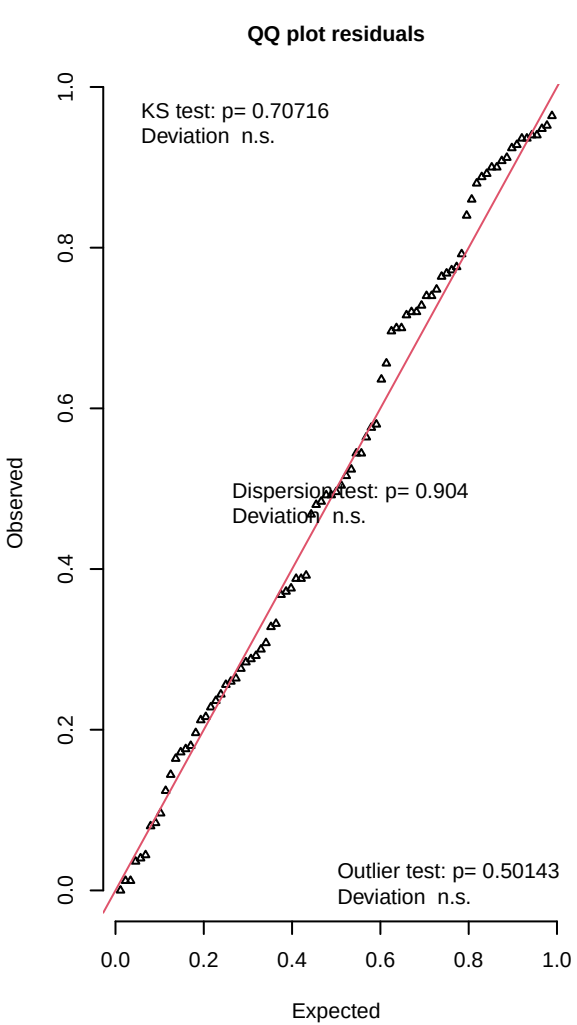
FEve ~ intercept + temp_std

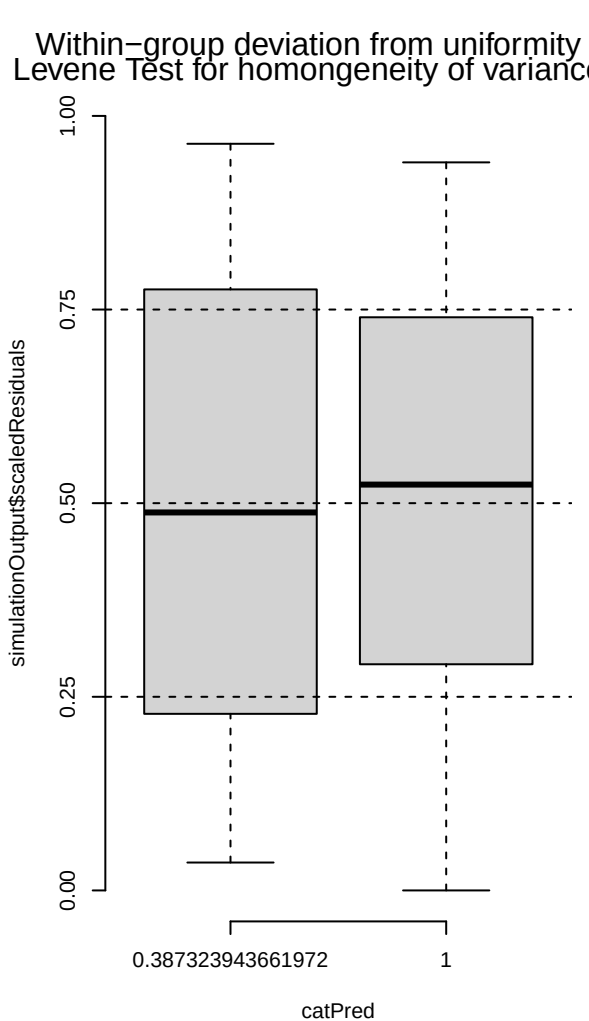


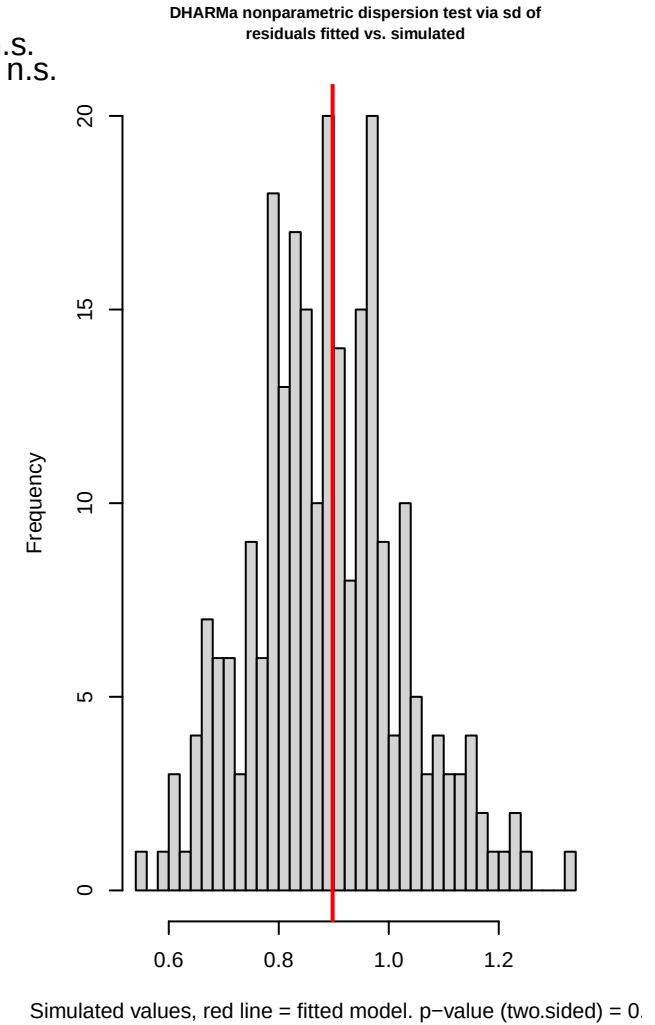




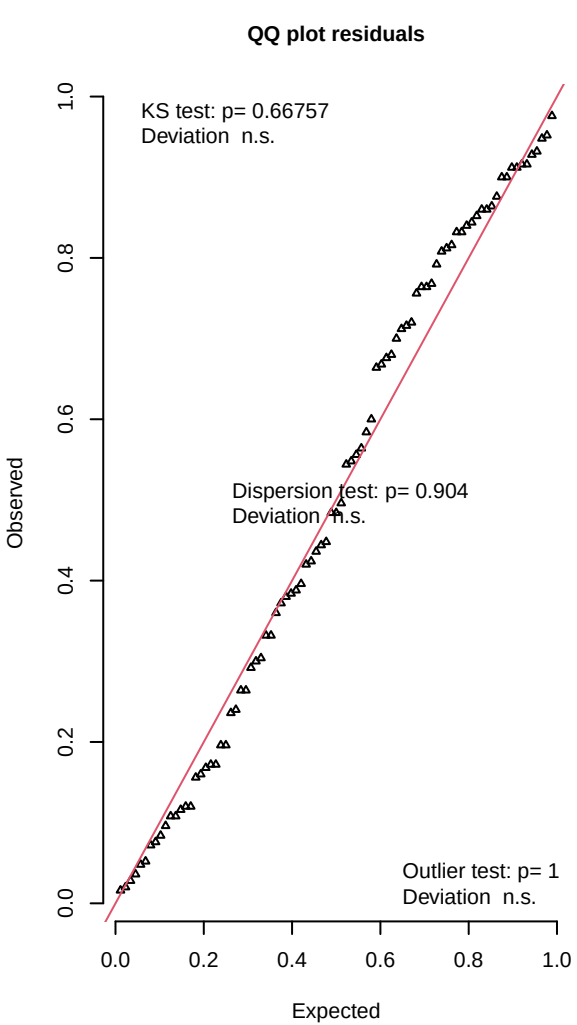
FEve ~ intercept + fish1

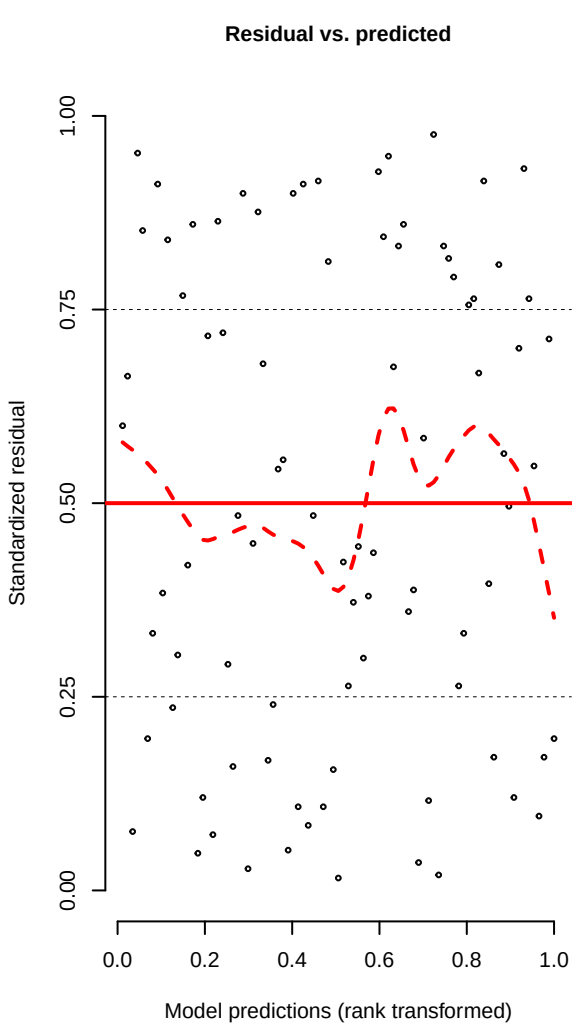


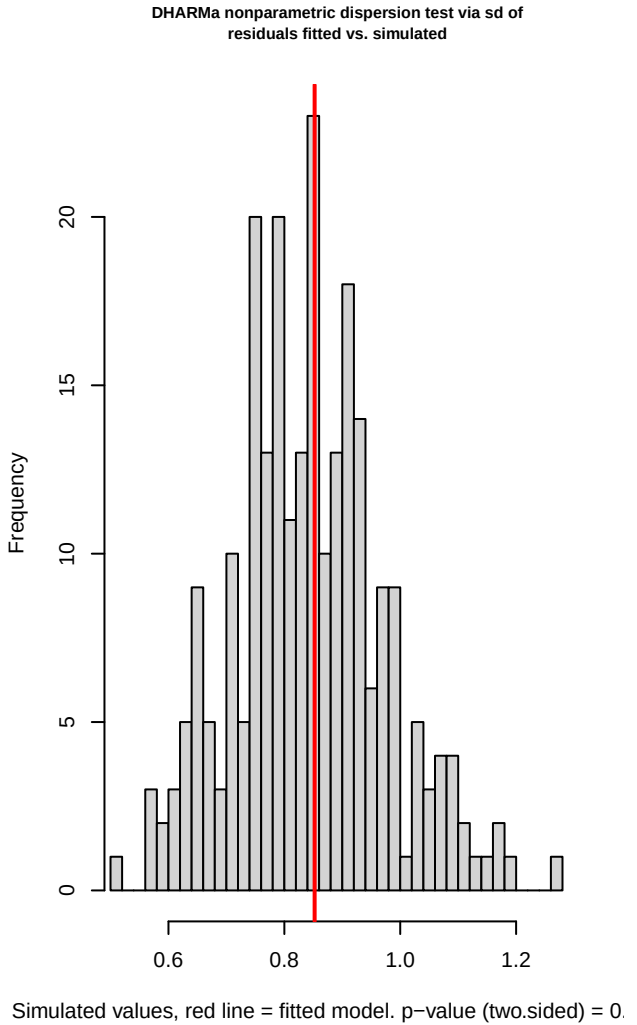




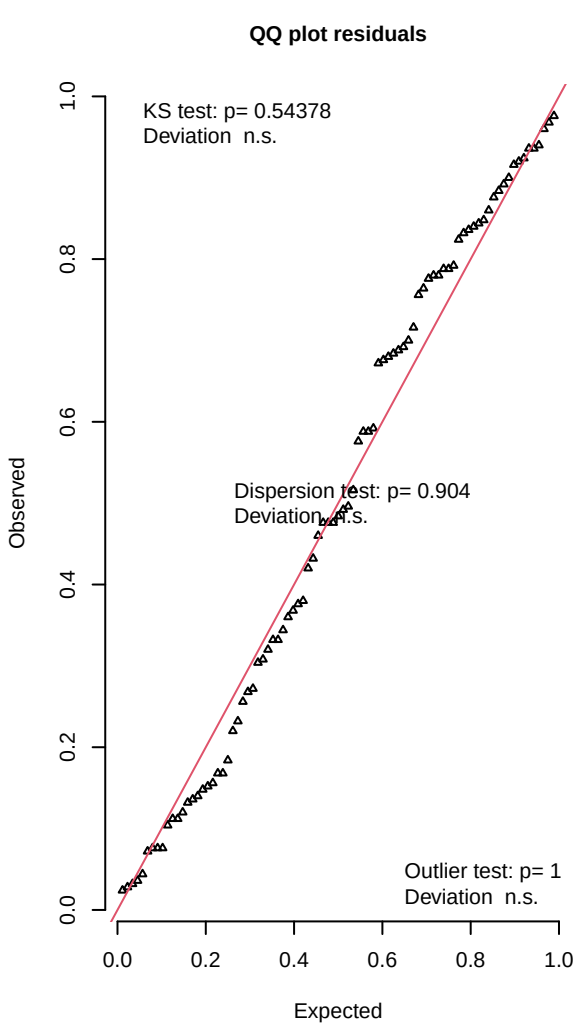
FEve ~ intercept + area_std + temp_std + time_convert_std

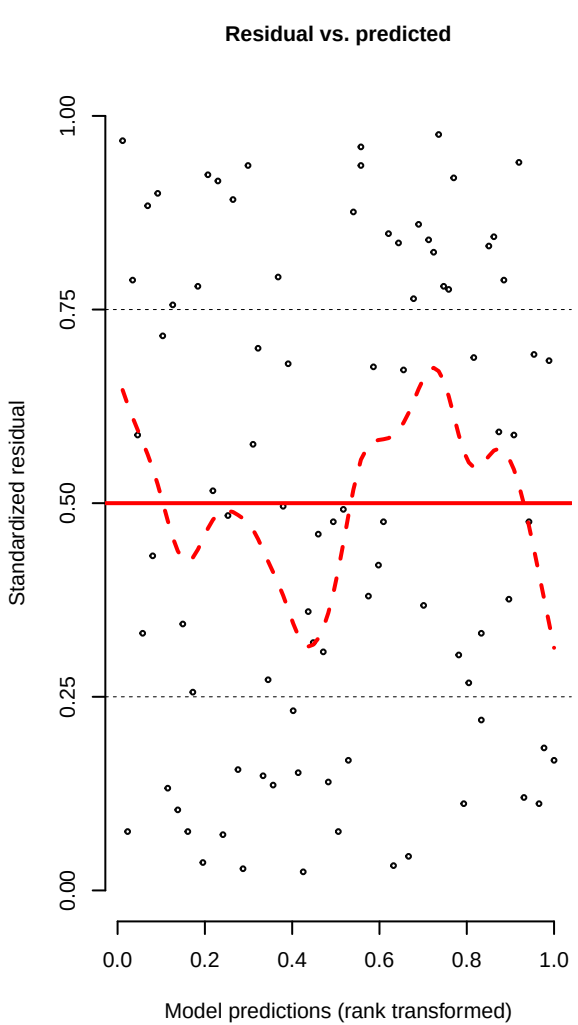


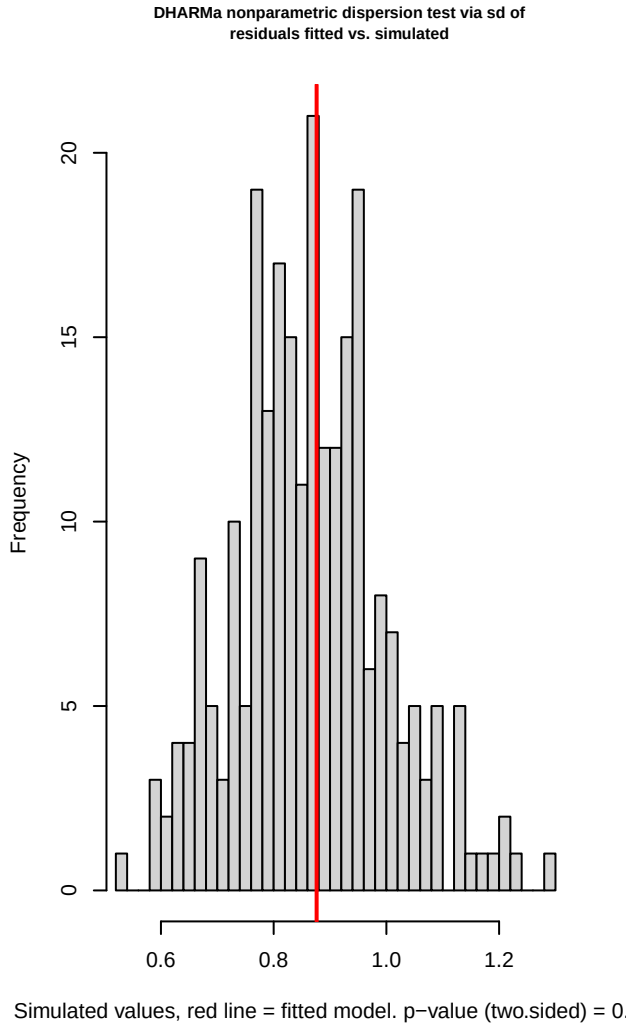




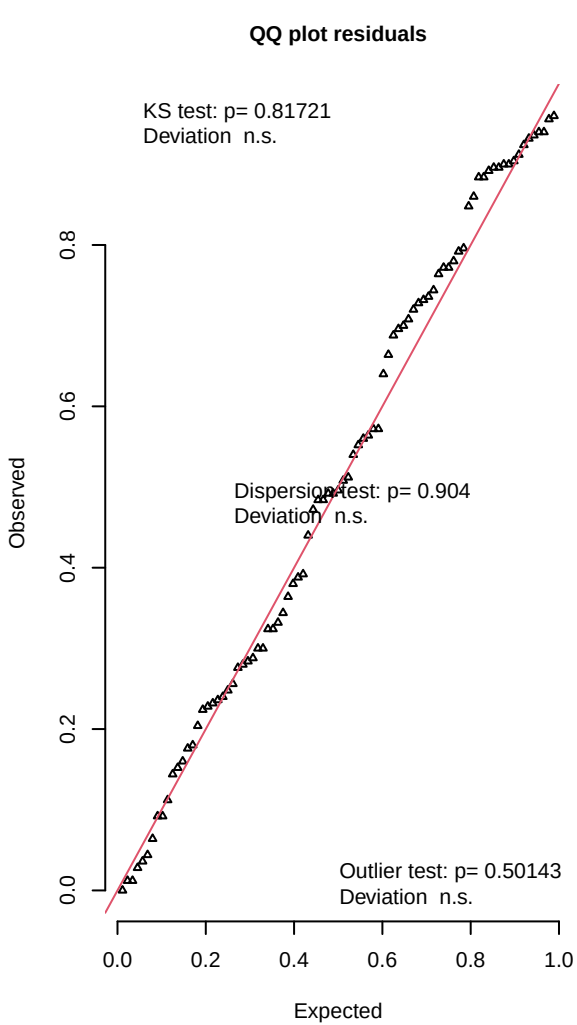
FEve ~ intercept + temp_std + time_convert_std

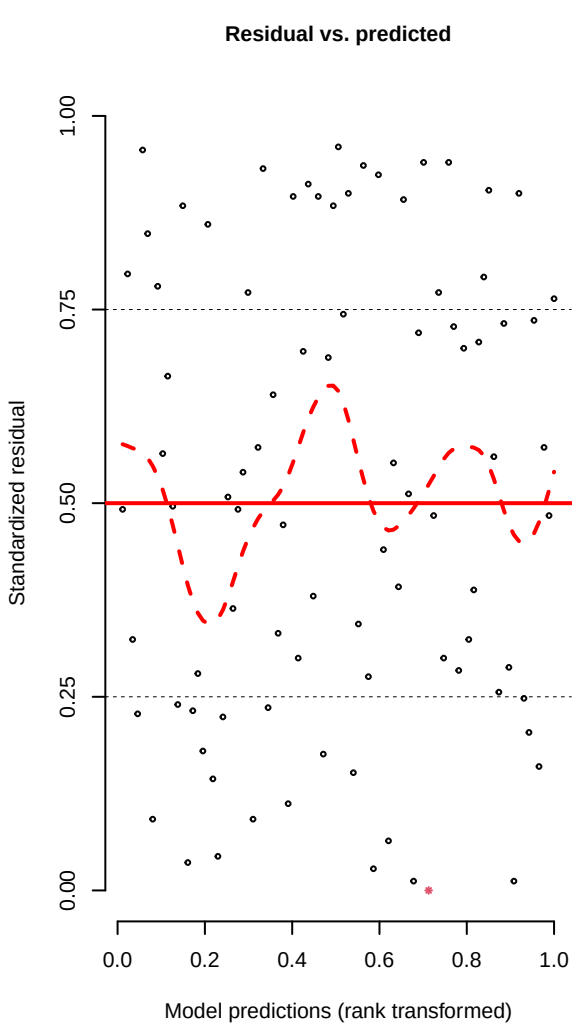


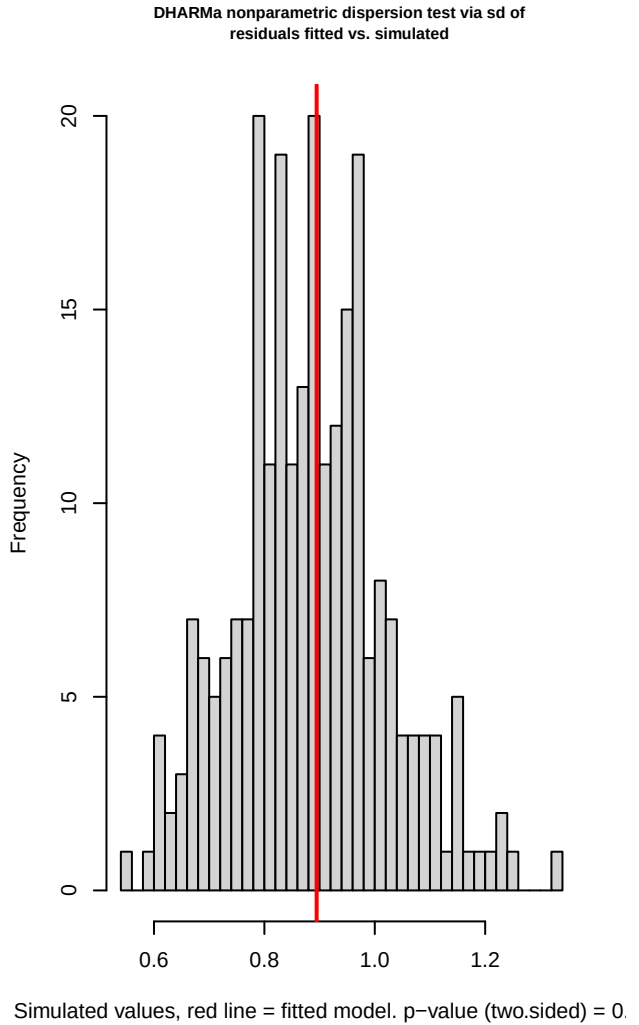




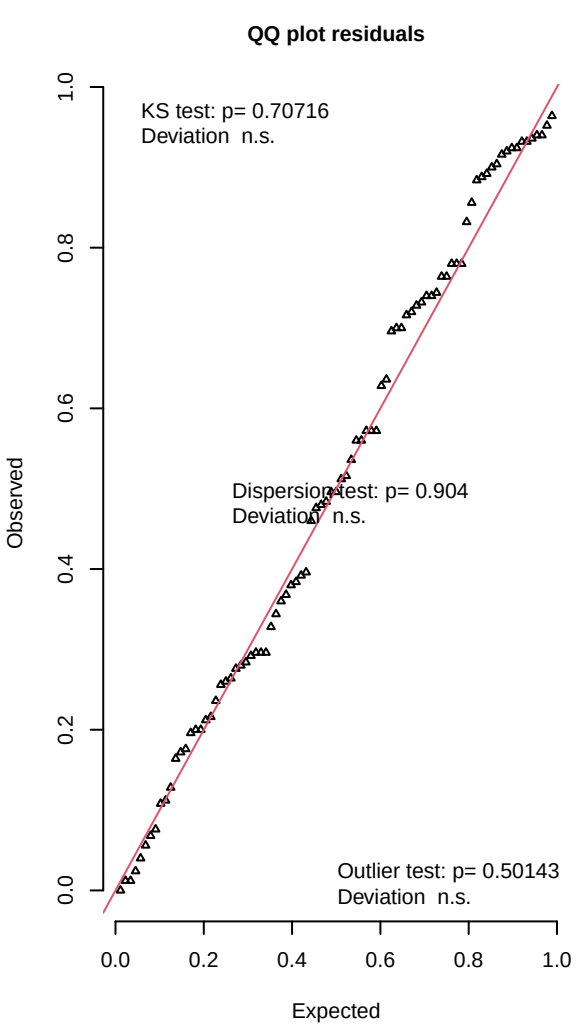
FEve ~ intercept + area_std + fish1

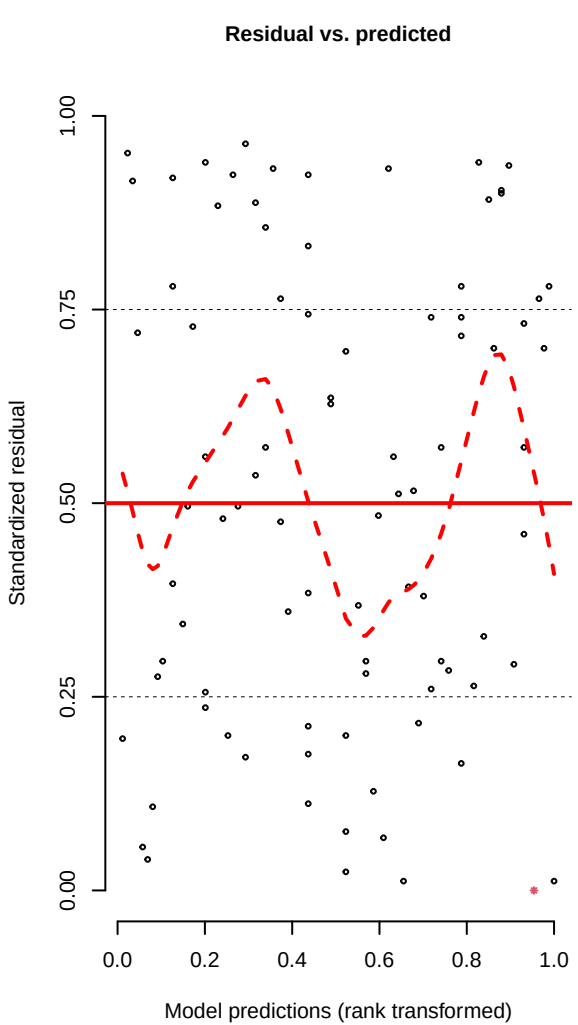


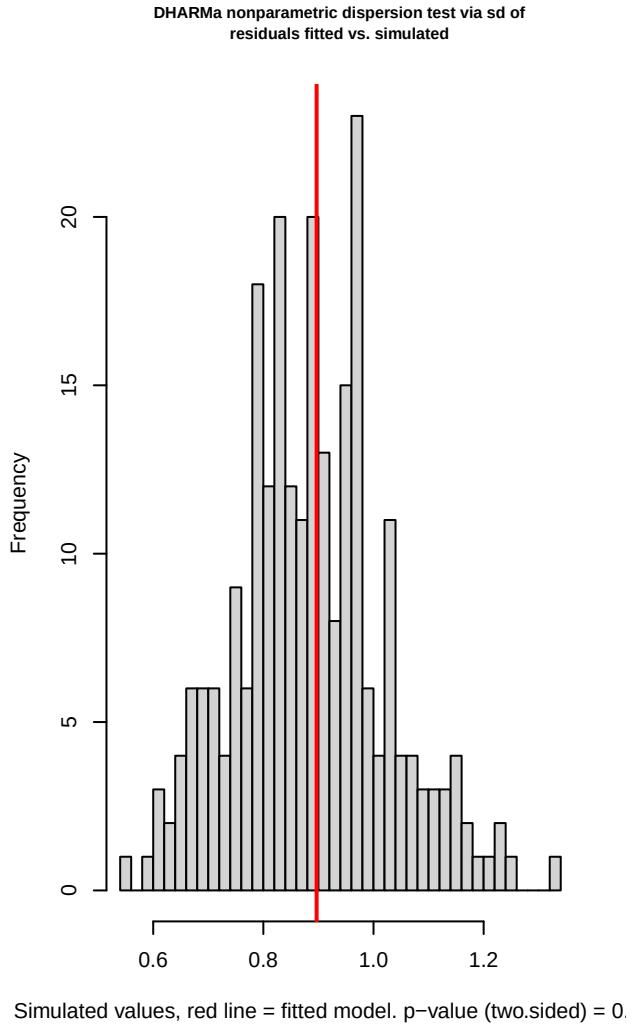




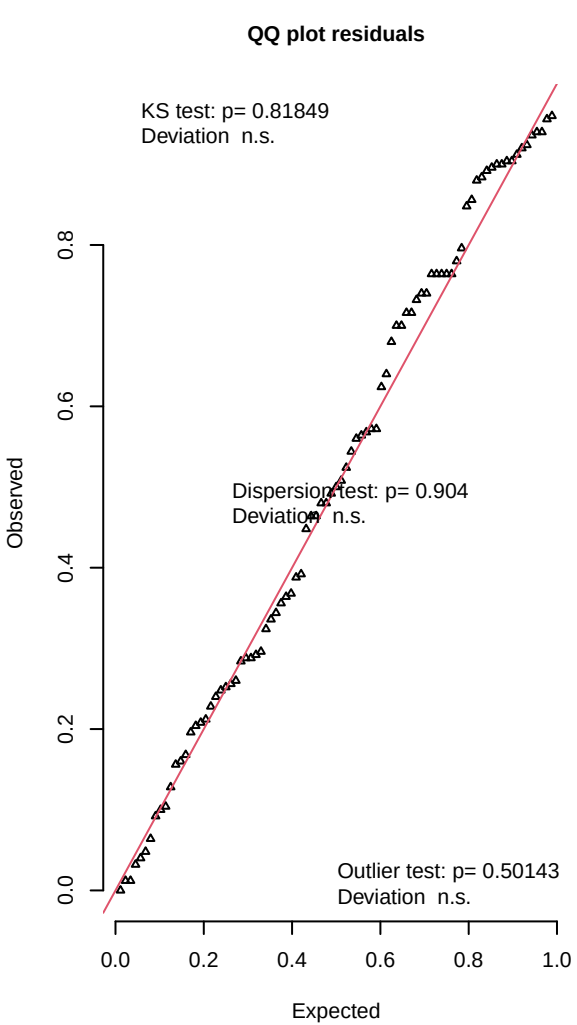
FEve ~ intercept + fish1 + time_convert_std

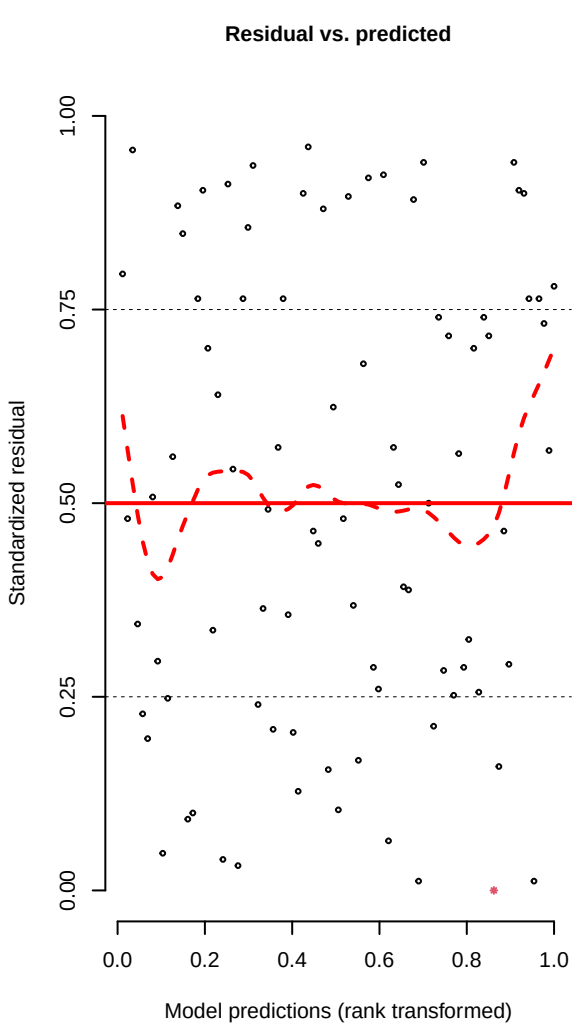


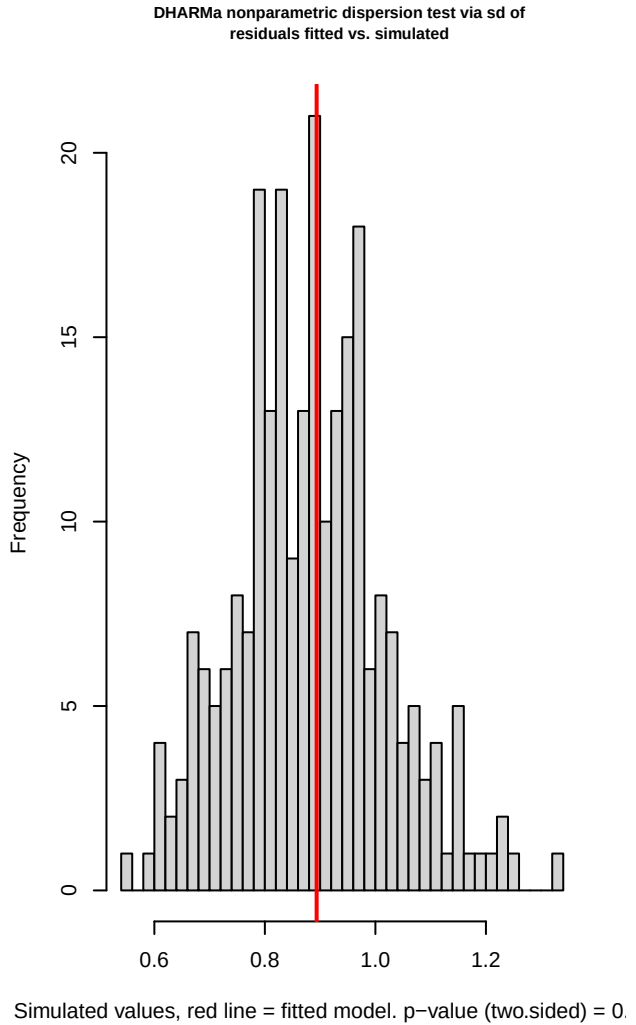




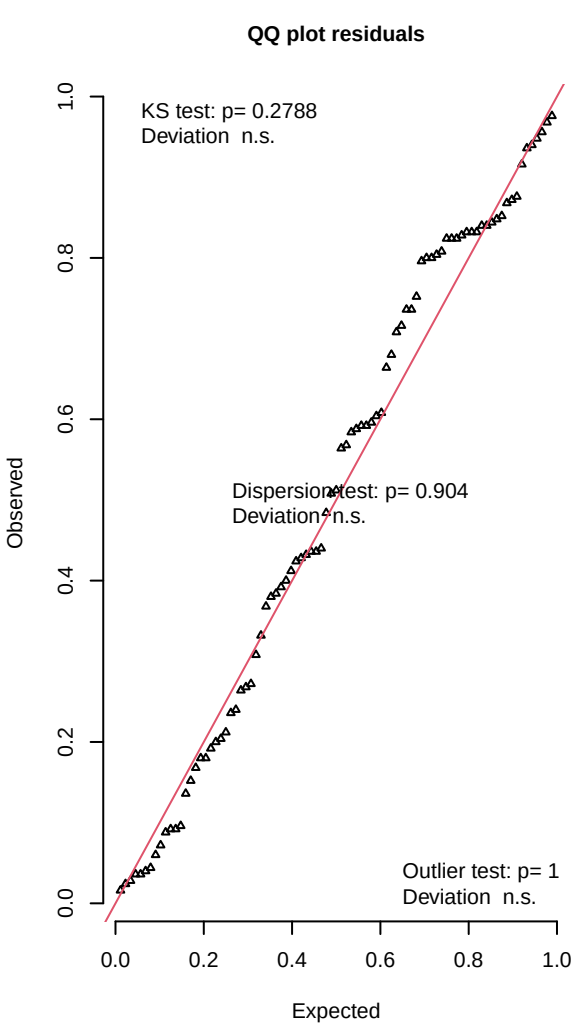
FEve ~ intercept + area_std + fish1 + time_convert_std

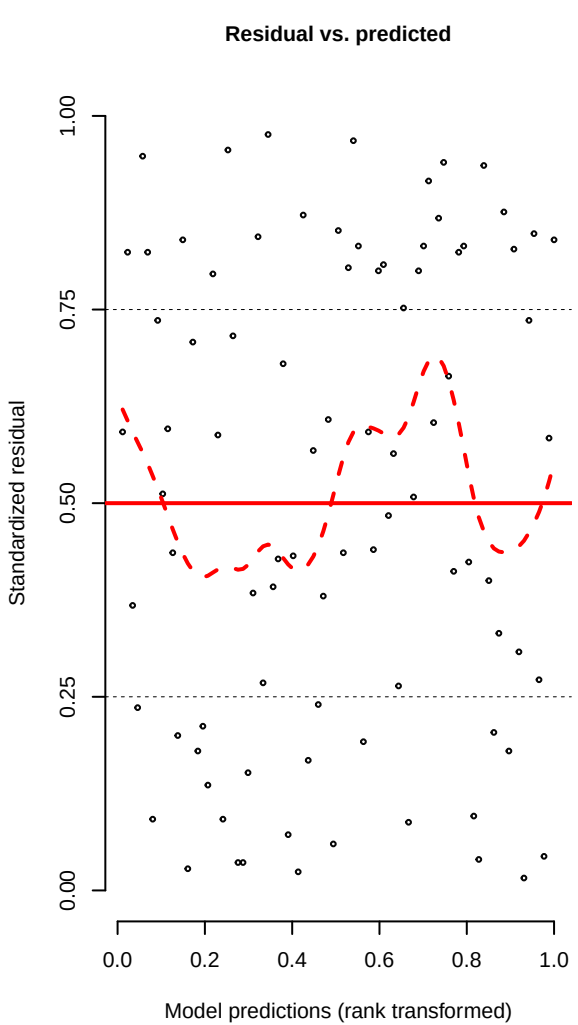


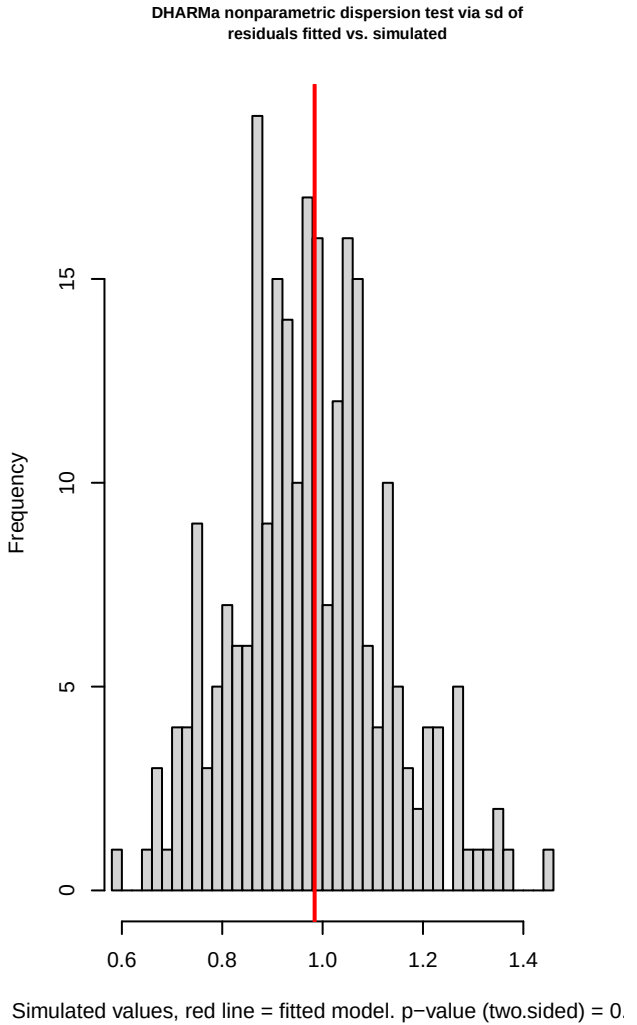




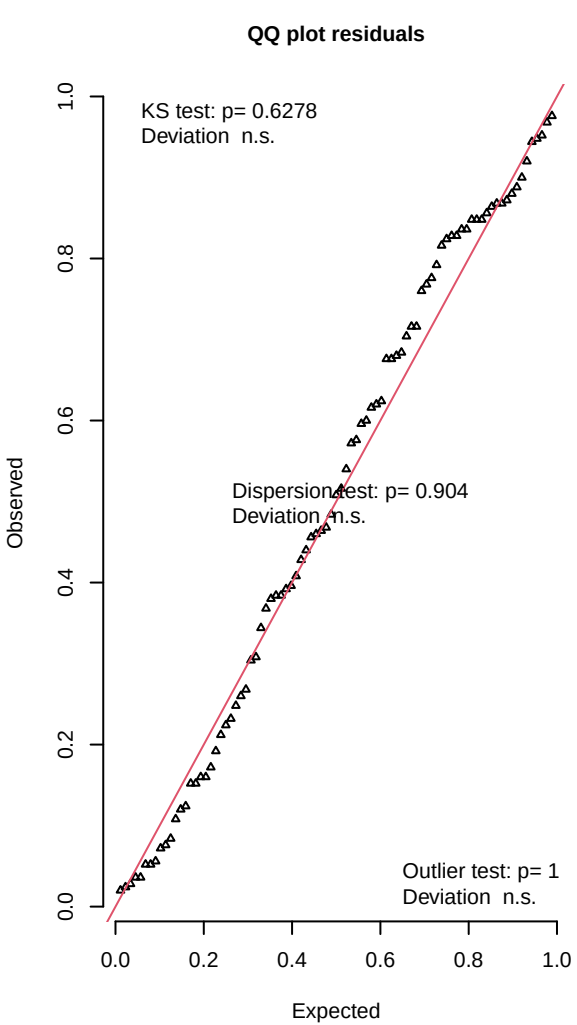
FEve ~ intercept + area_std

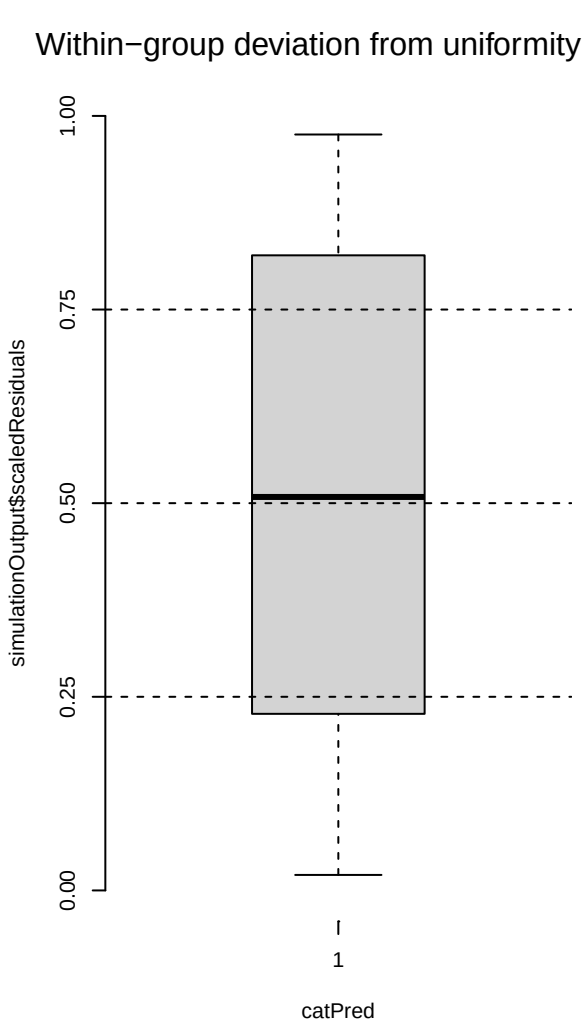


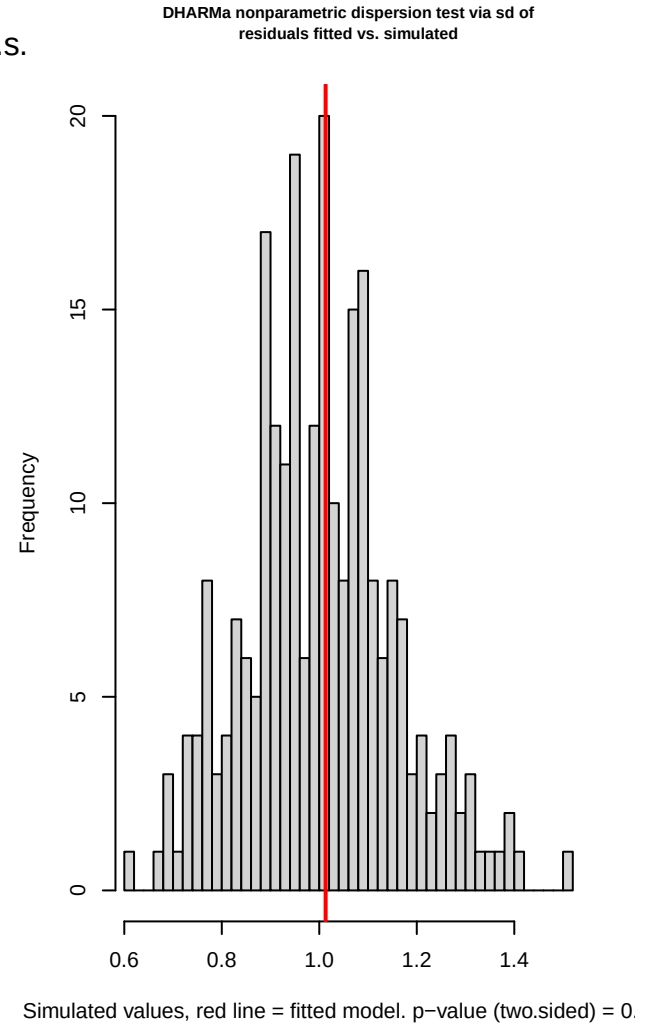




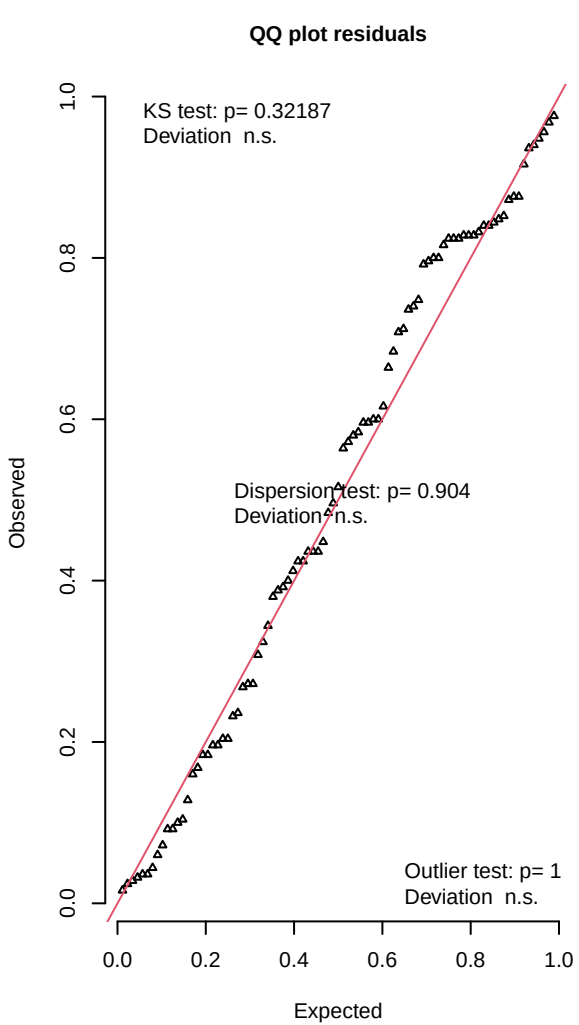
FEve ~ intercept

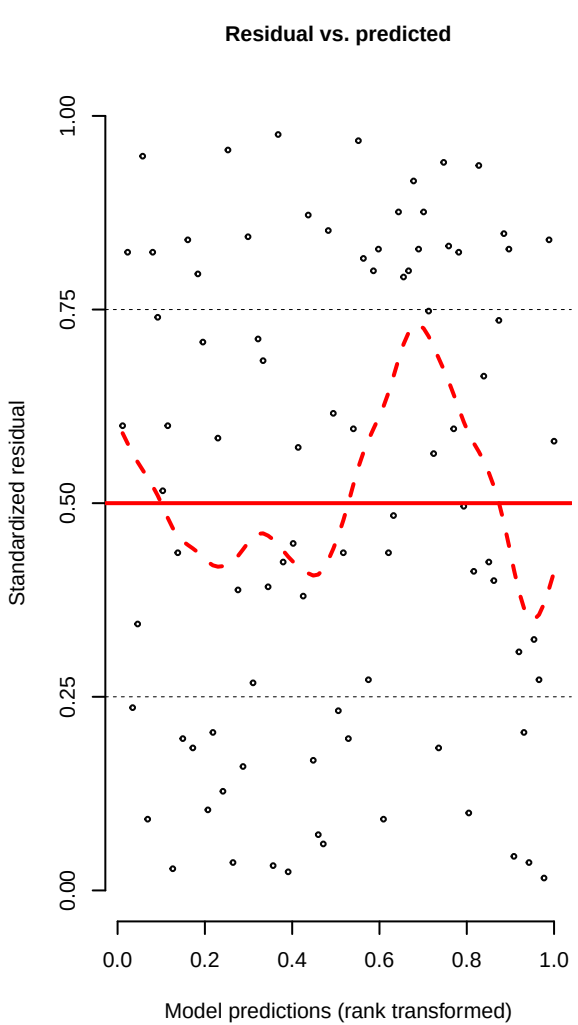


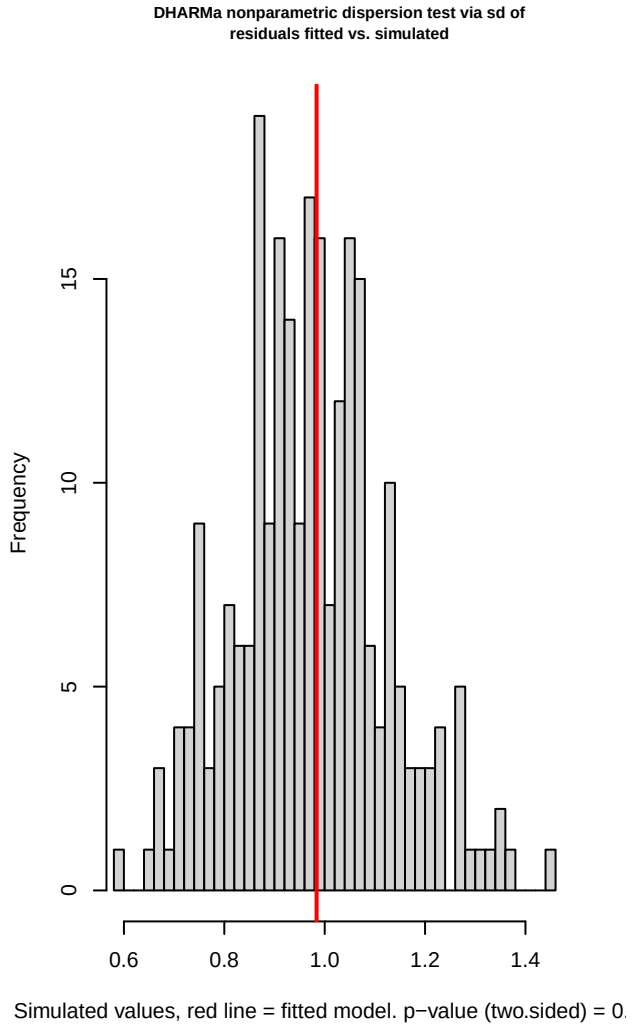




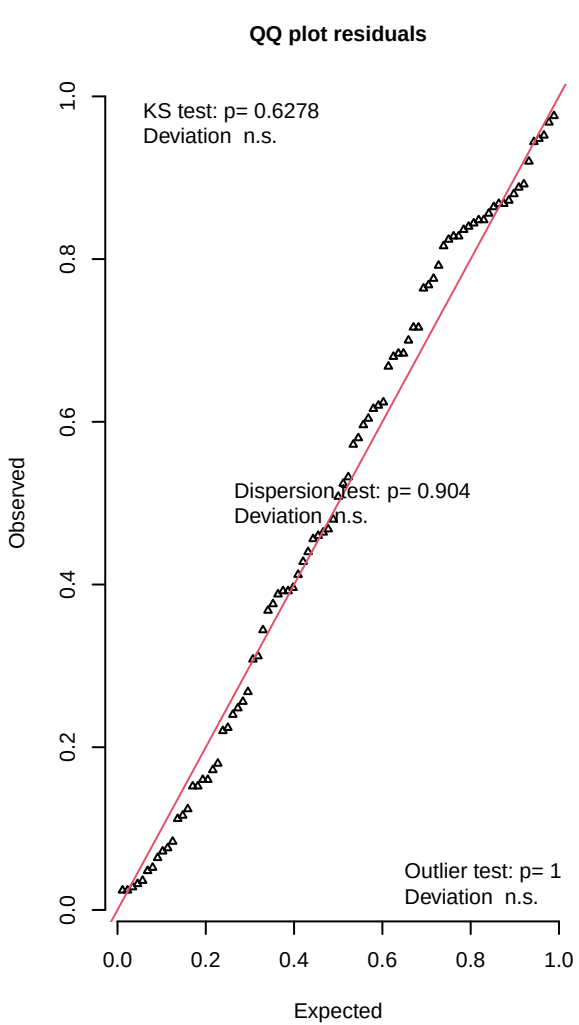
FEve ~ intercept + area_std + time_convert_std

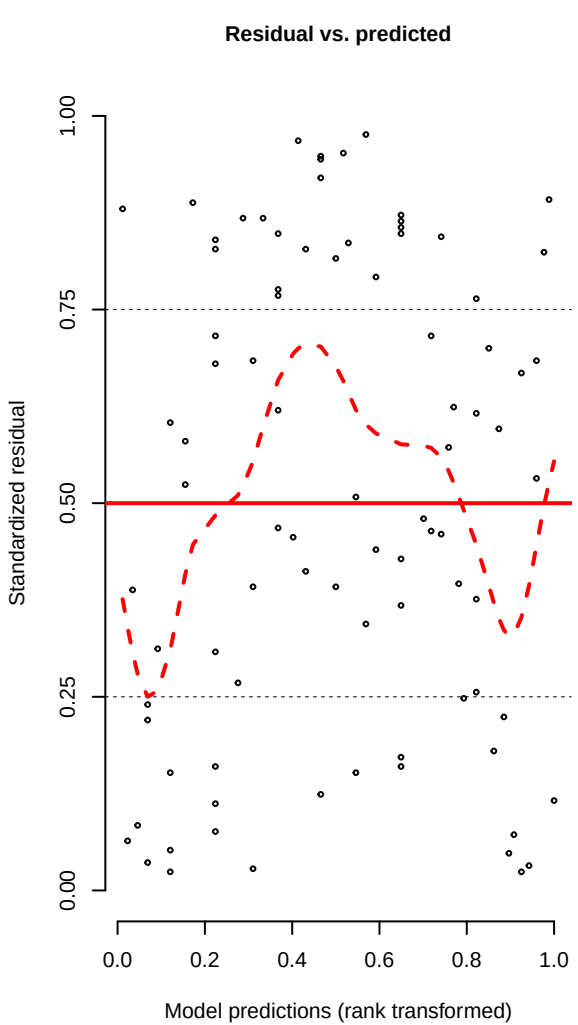


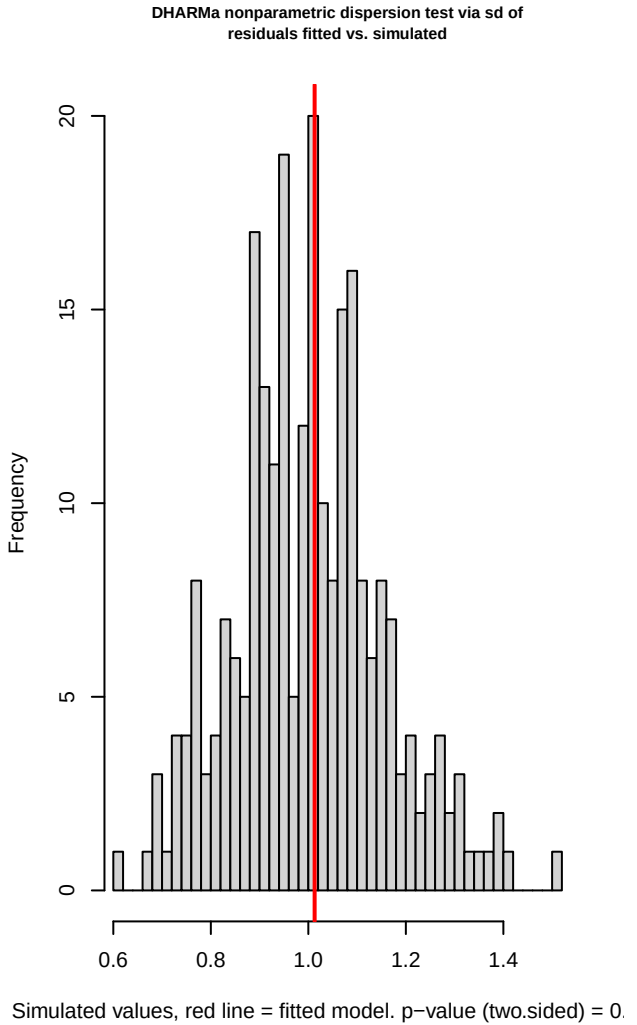




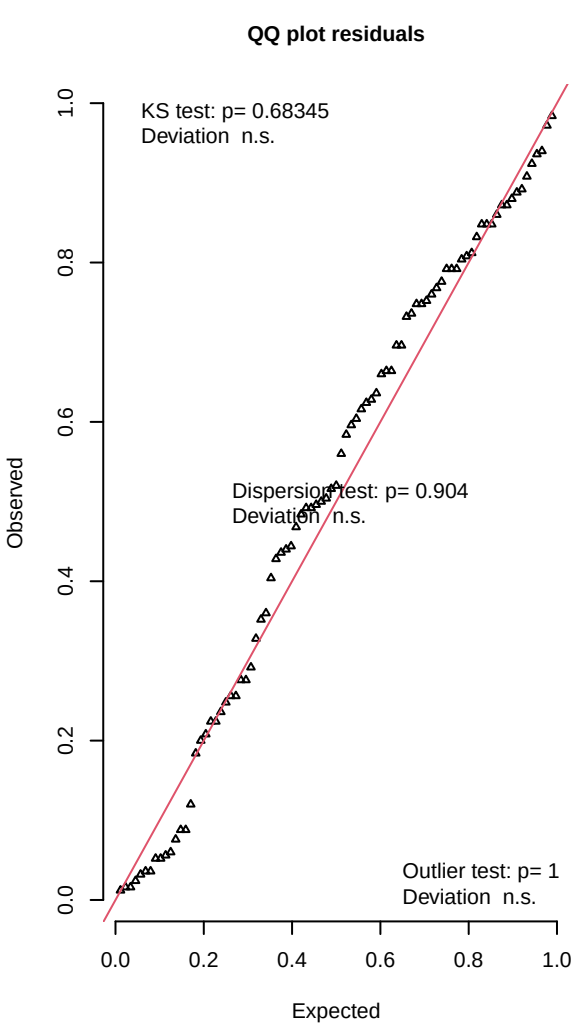
FEve ~ intercept + time_convert_std

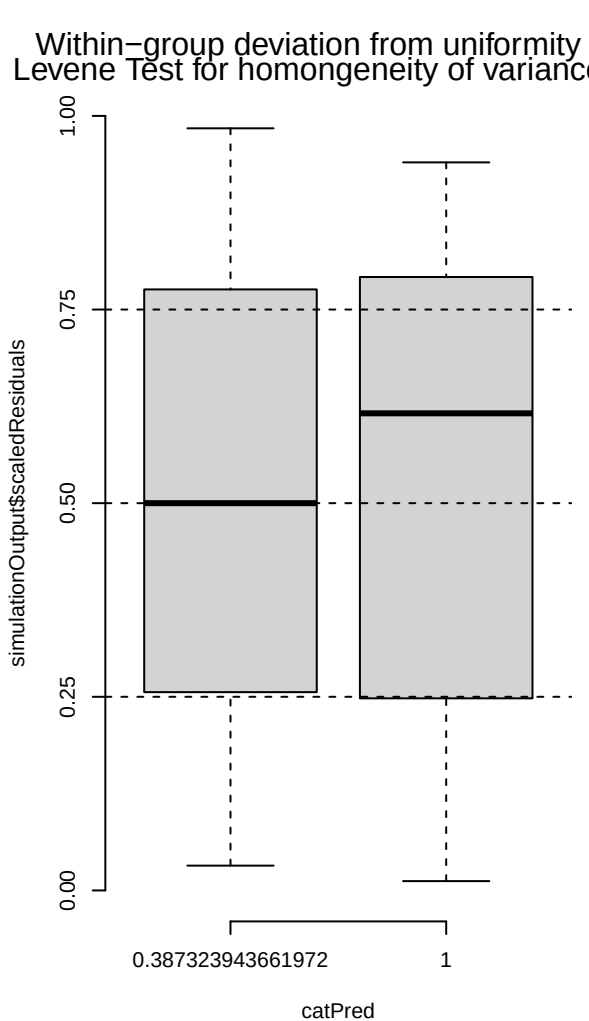


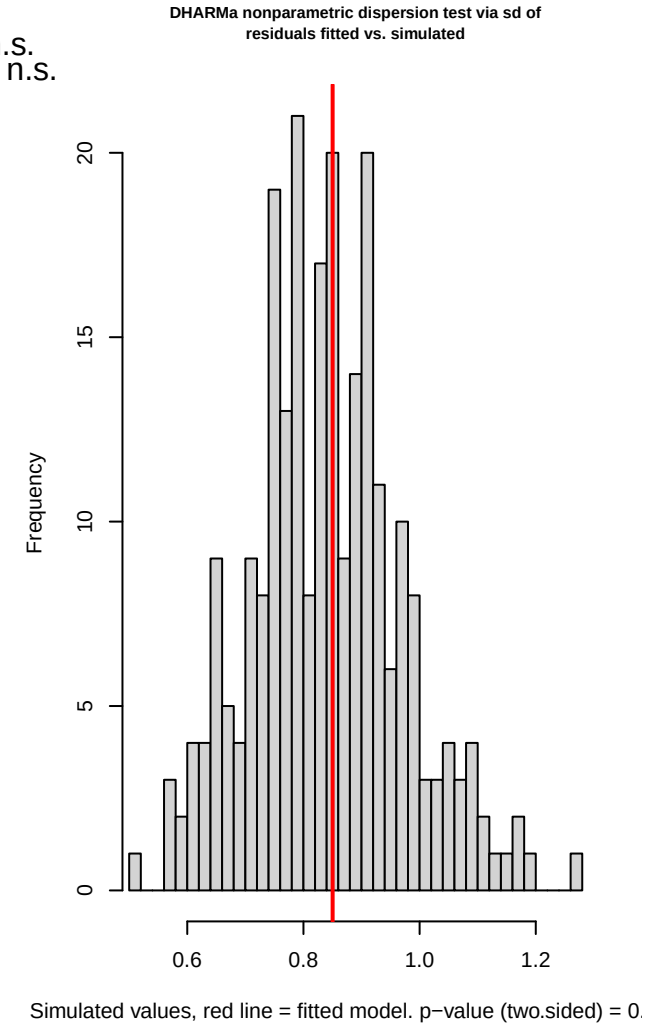




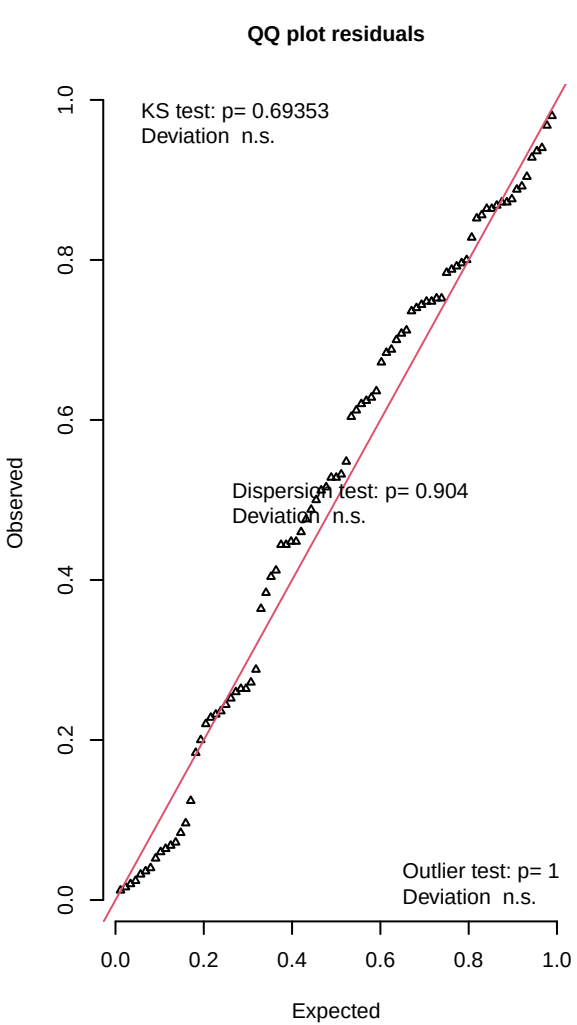
M.prime ~ intercept + fish1

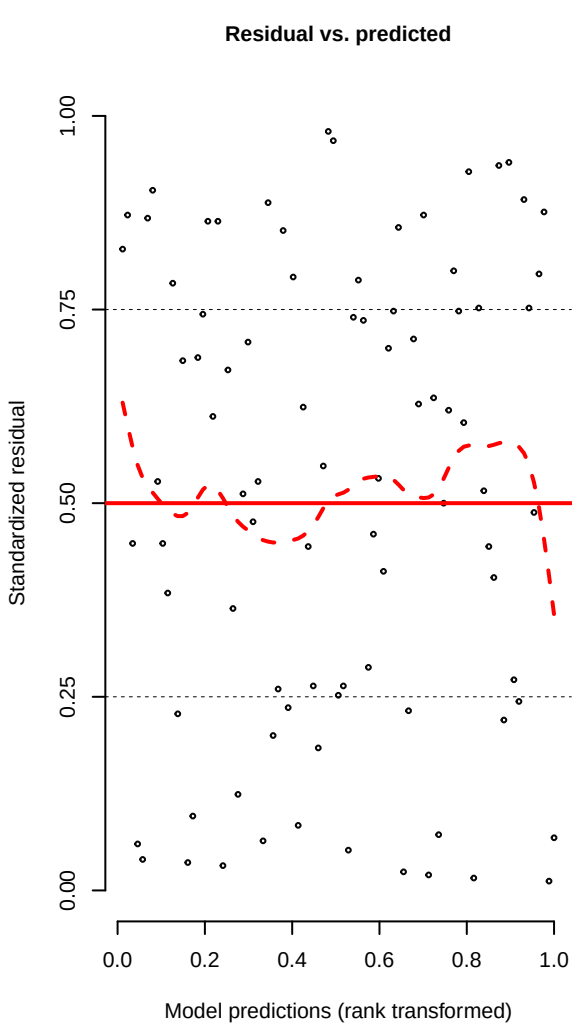


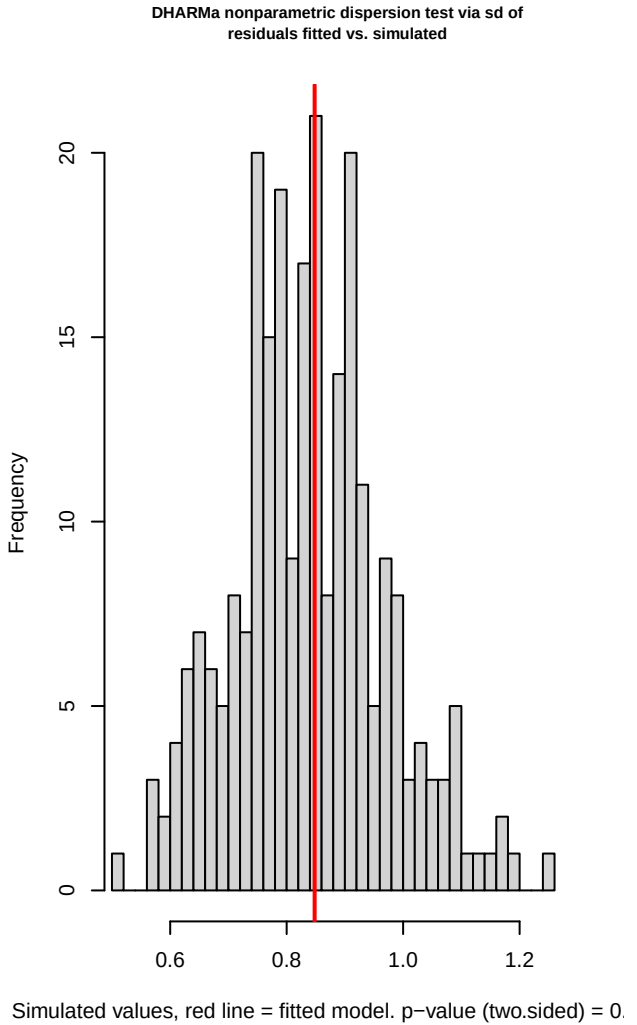




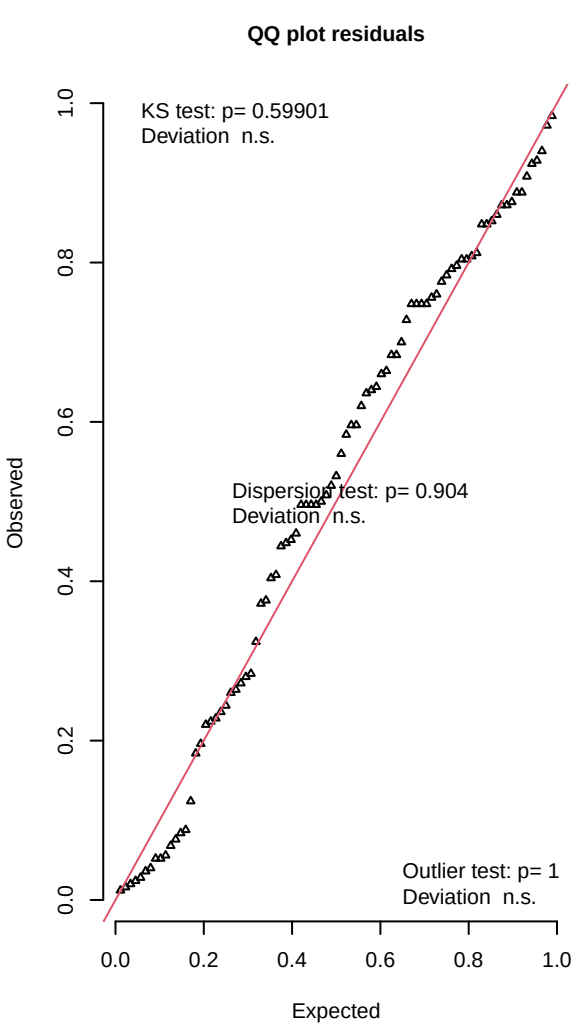
M.prime ~ intercept + area_std + fish1

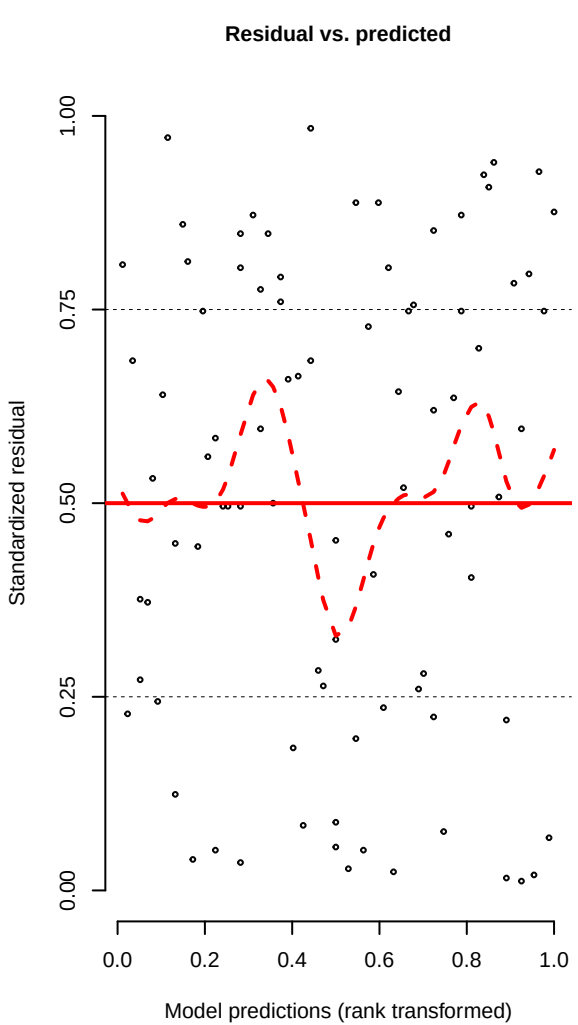


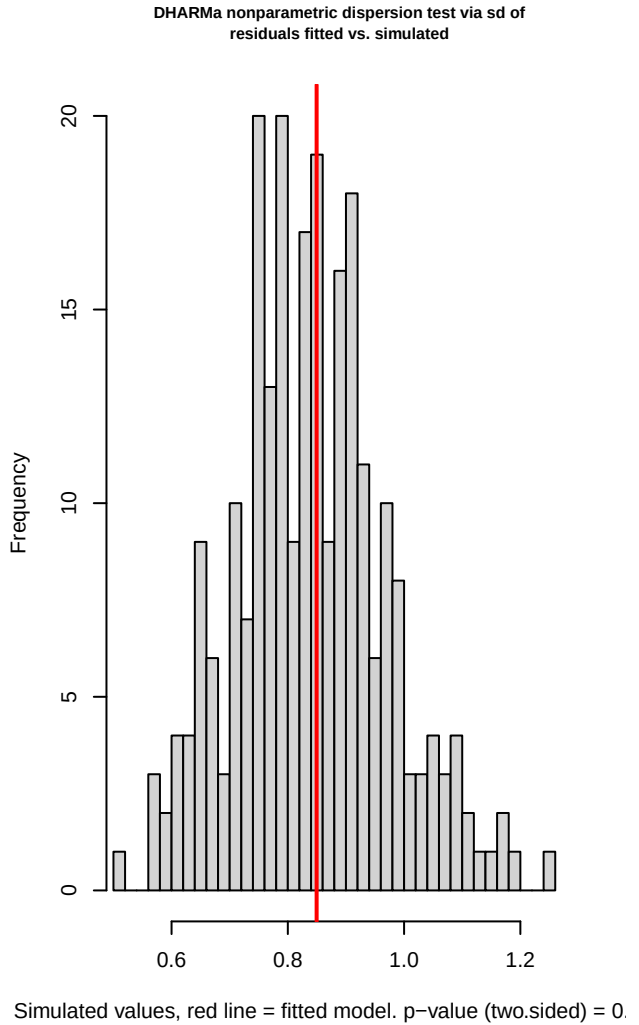




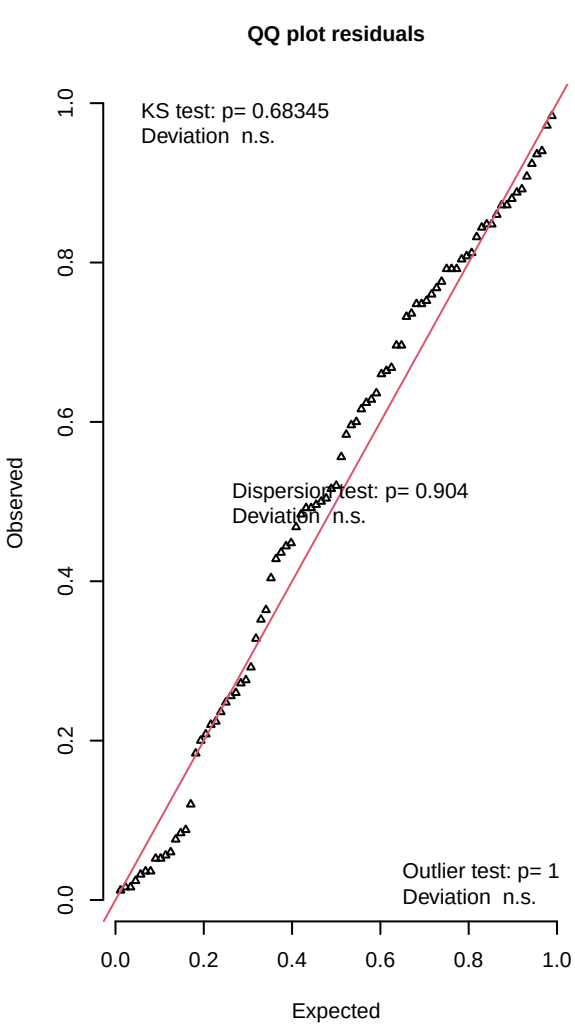
M.prime ~ intercept + fish1 + temp_std

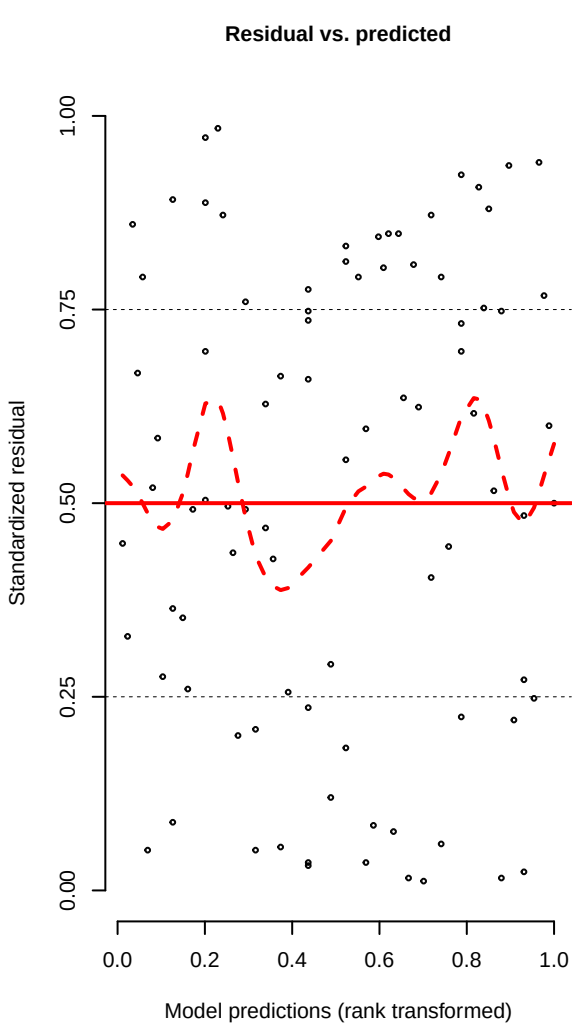


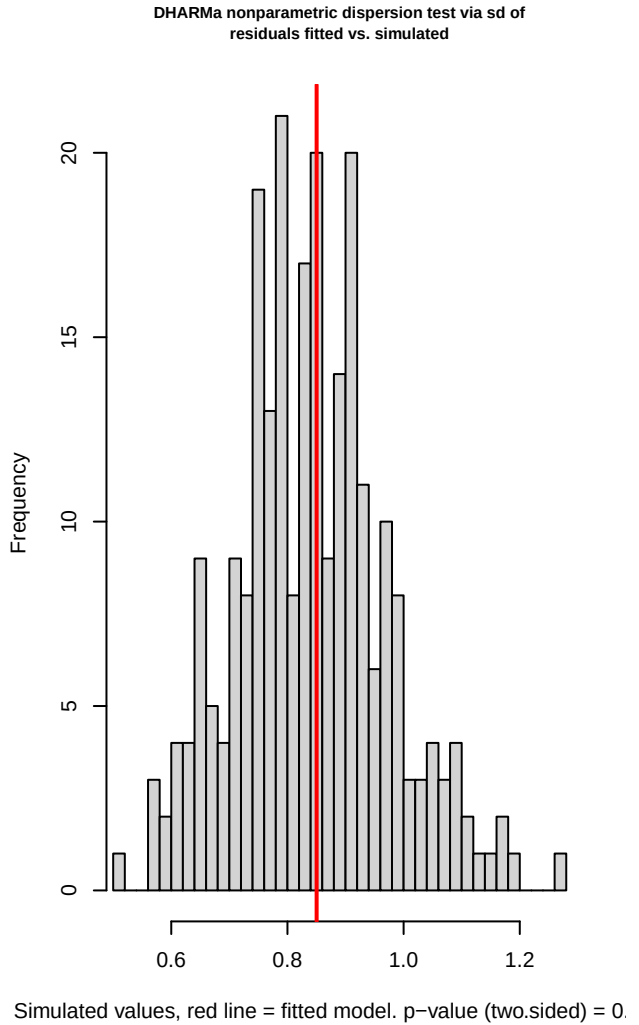




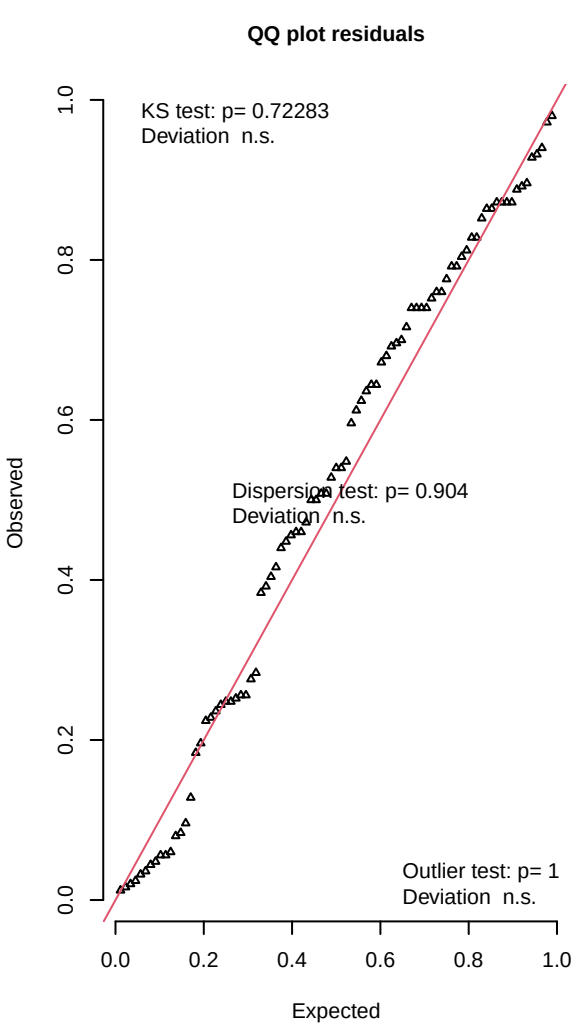
M.prime ~ intercept + fish1 + time_convert_std

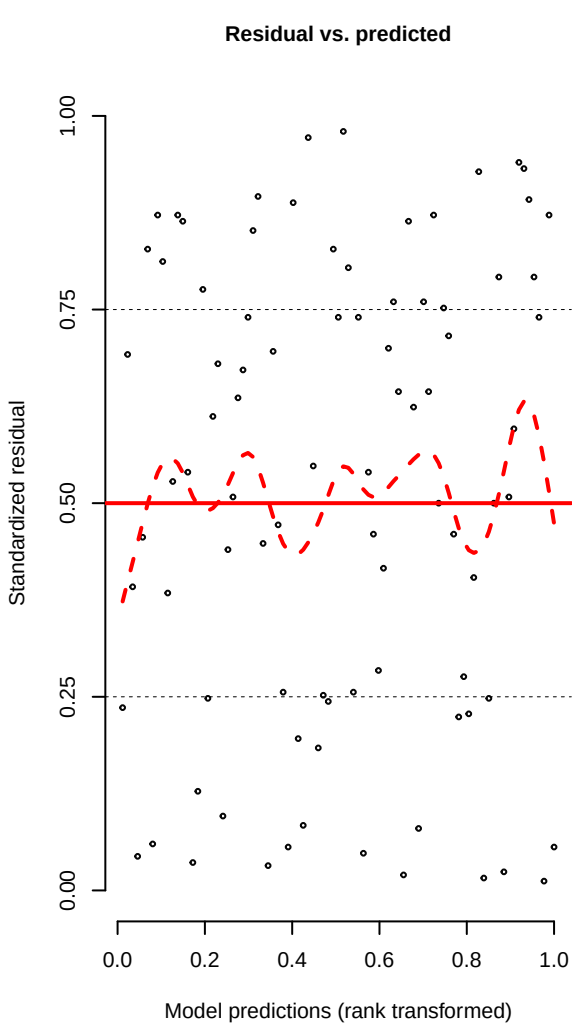


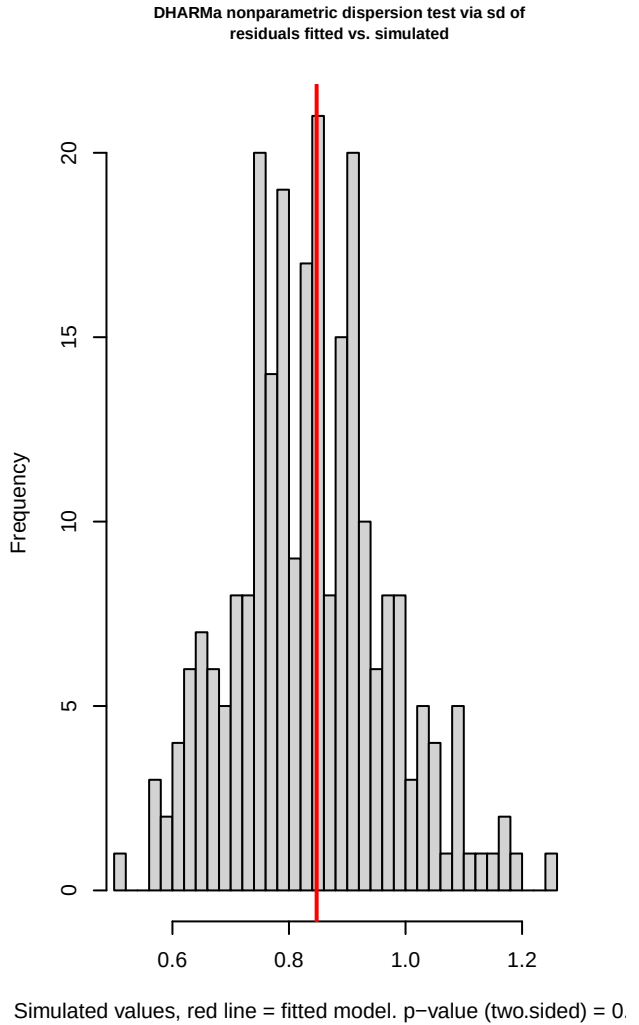




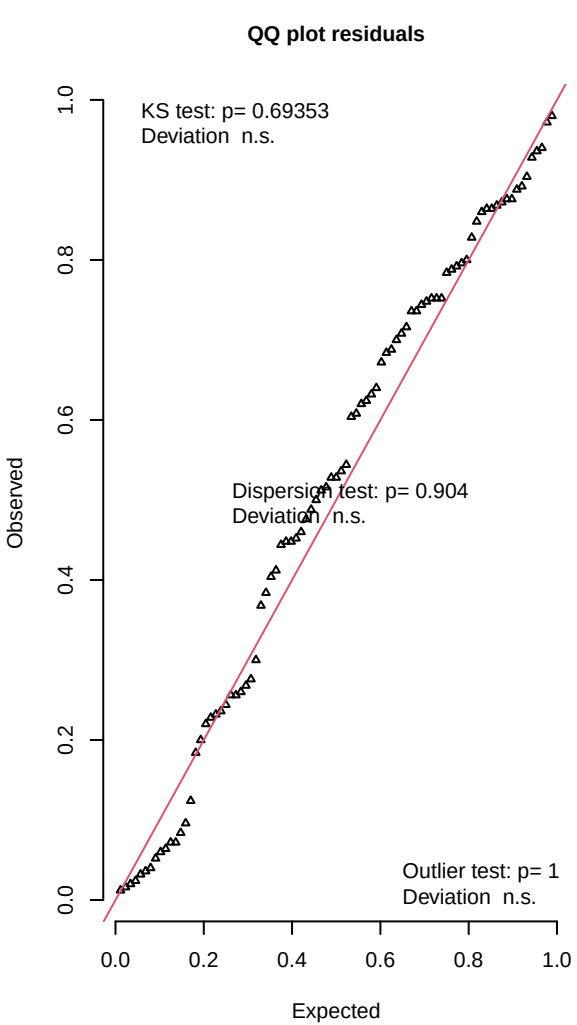
M.prime ~ intercept + area_std + fish1 + temp_std

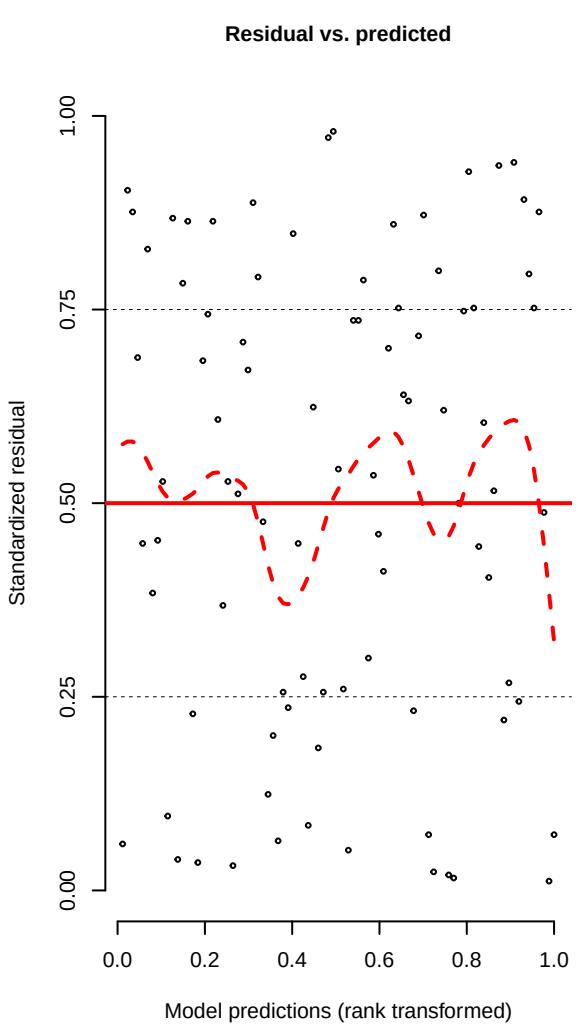


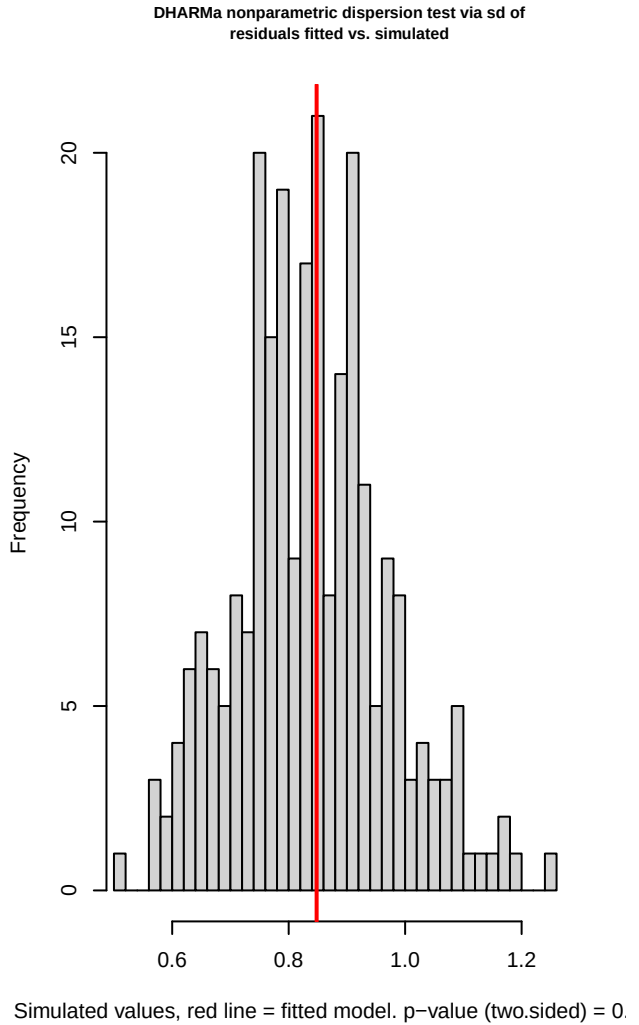




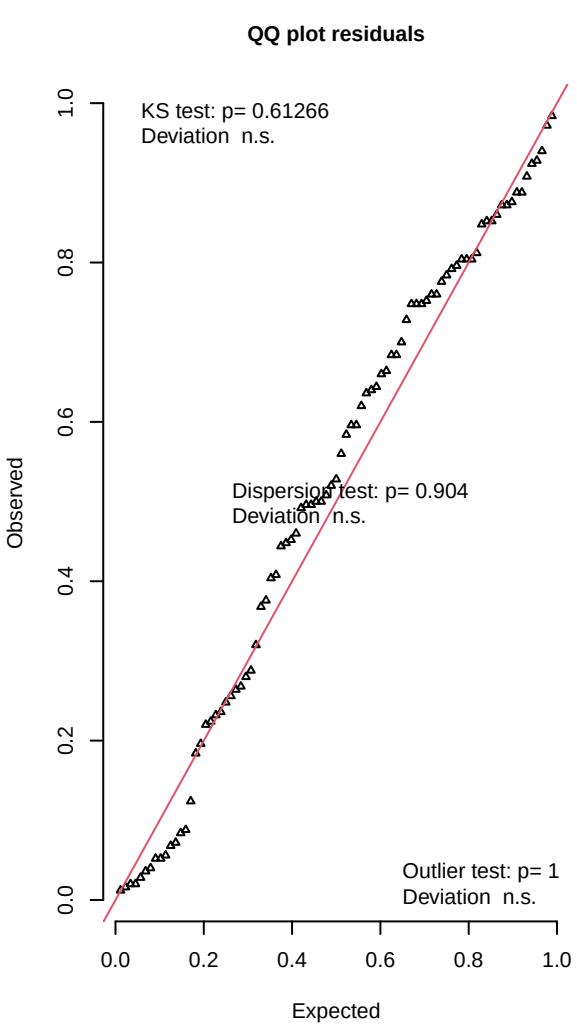
M.prime ~ intercept + area_std + fish1 + time_convert_std

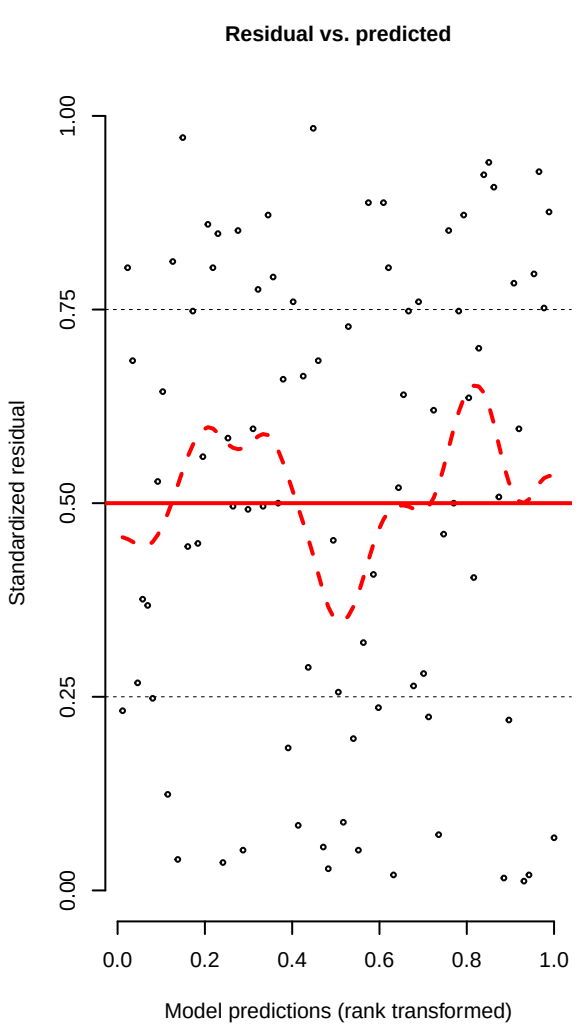


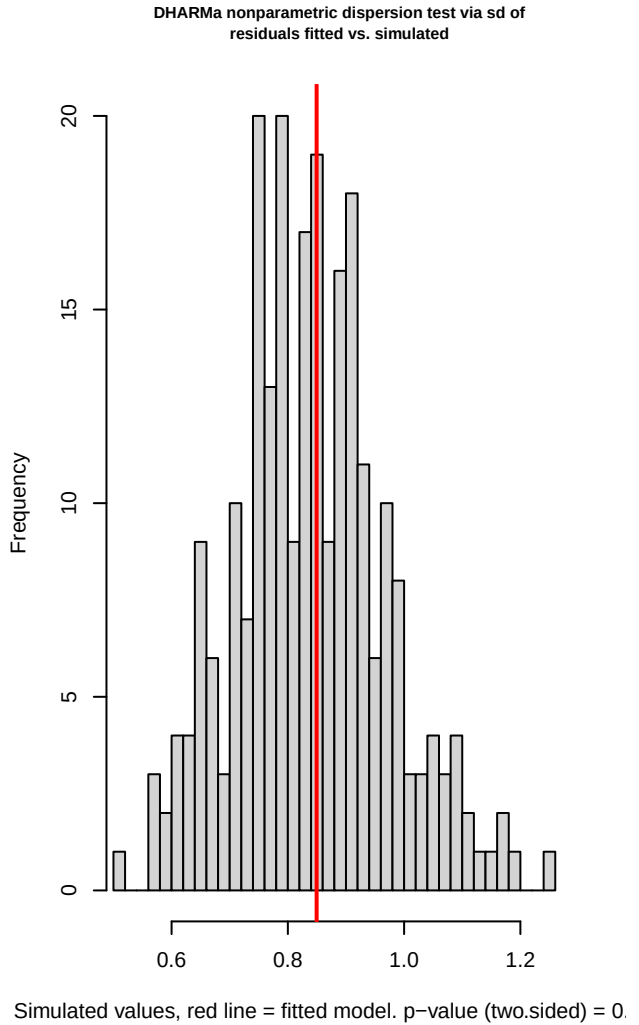




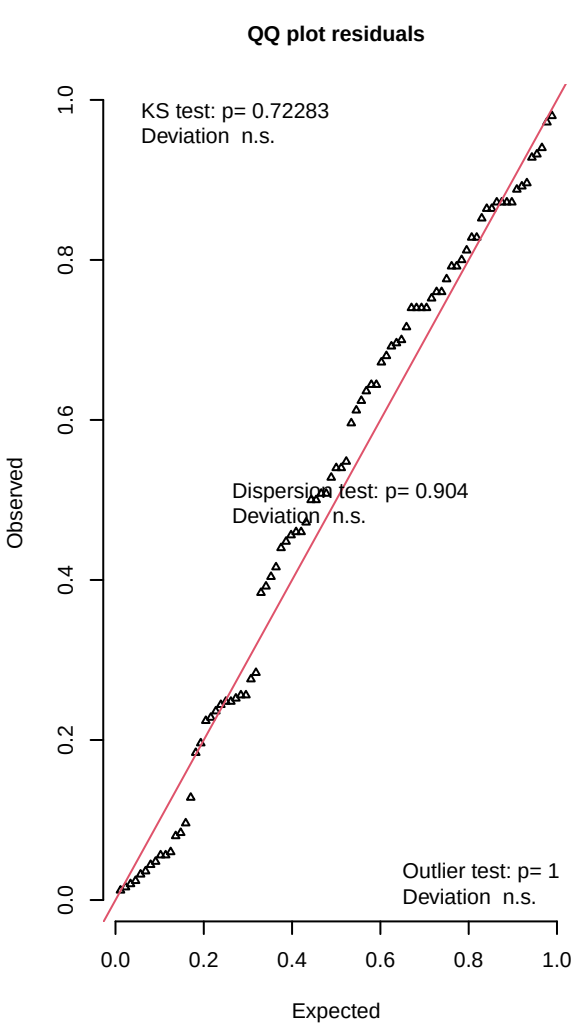
M.prime ~ intercept + fish1 + temp_std + time_convert_std

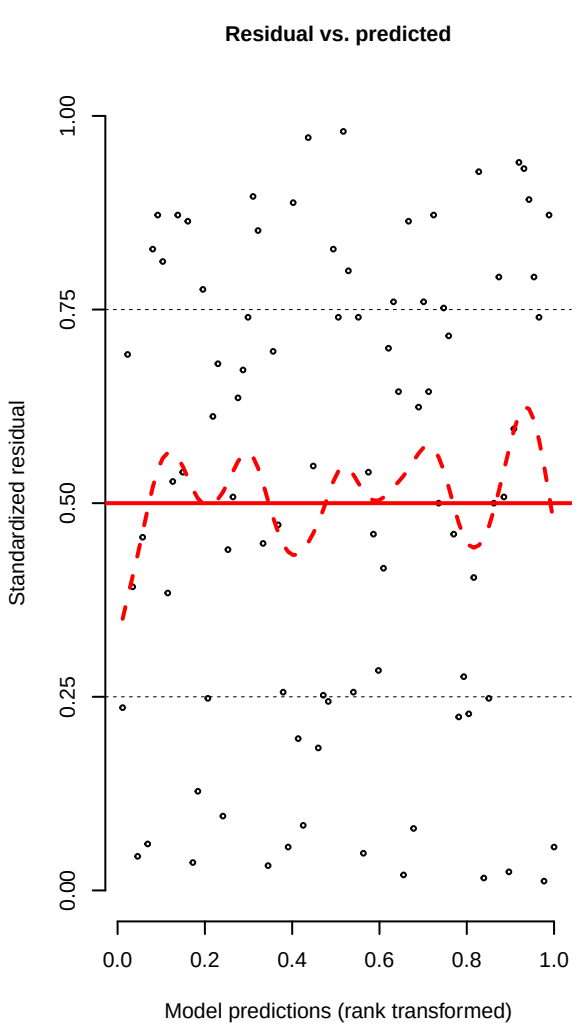


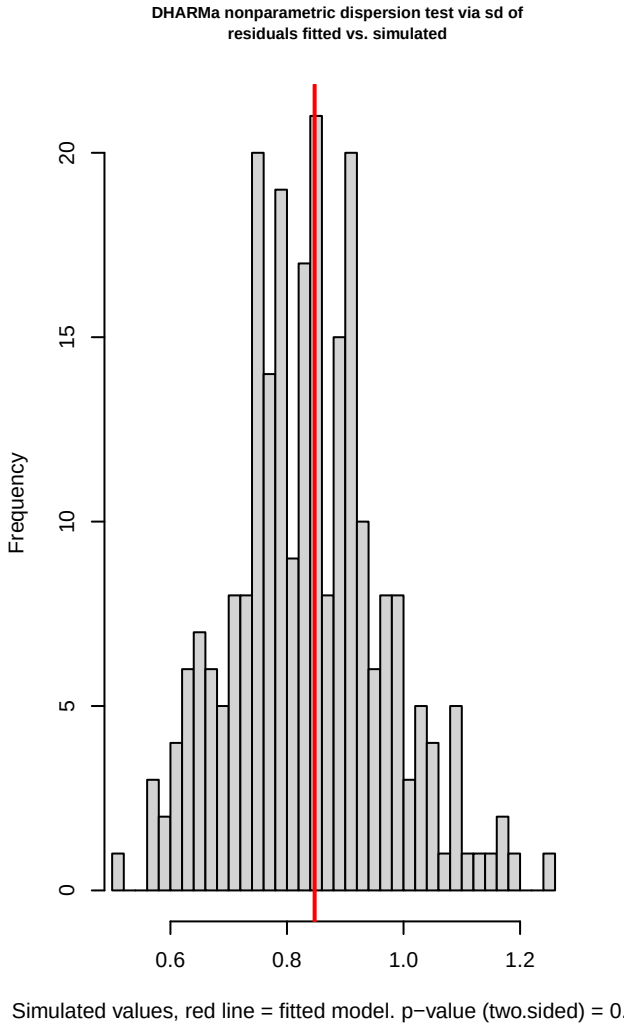




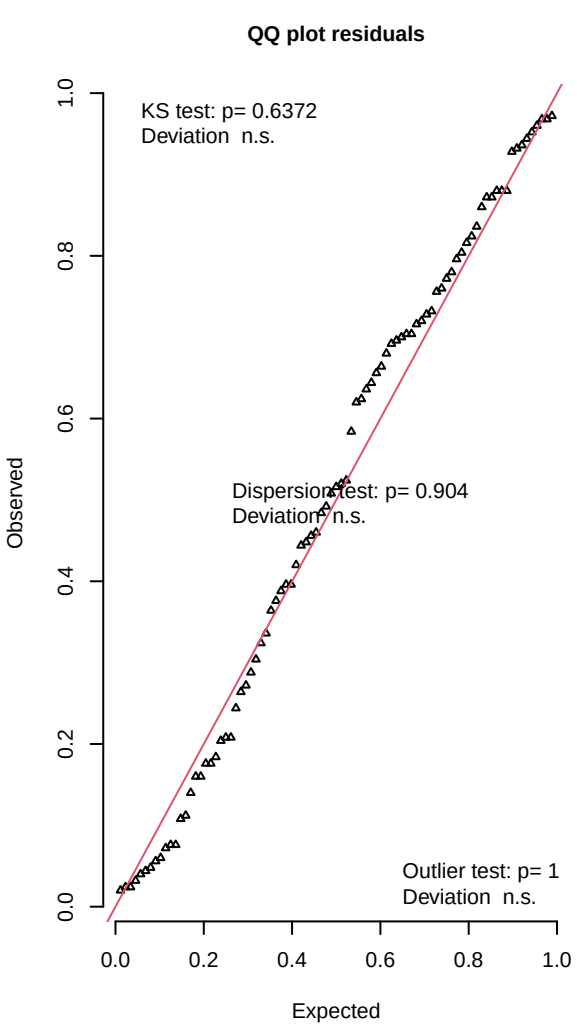
M.prime ~ intercept + area_std + fish1 + temp_std + time_convert_std

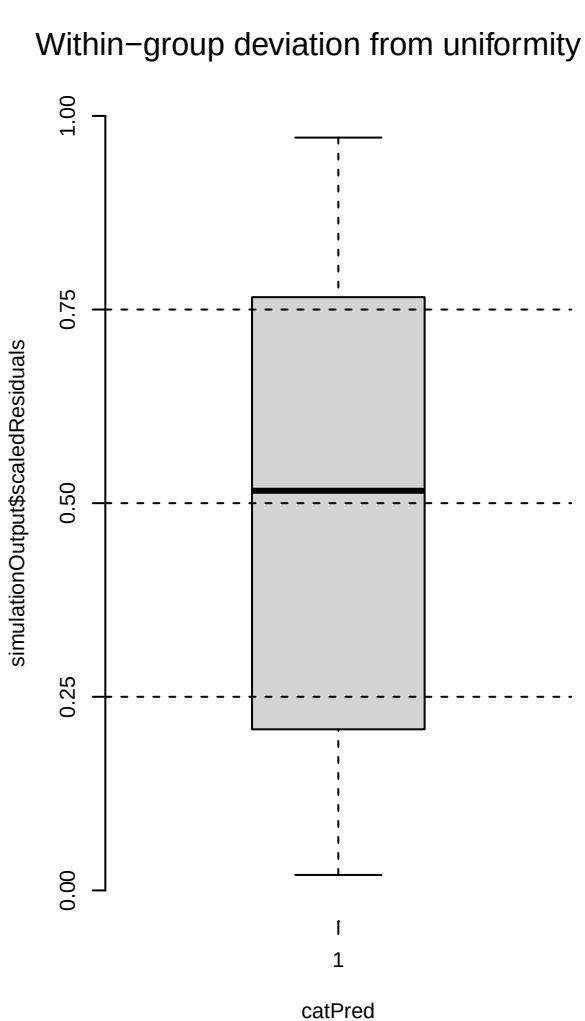


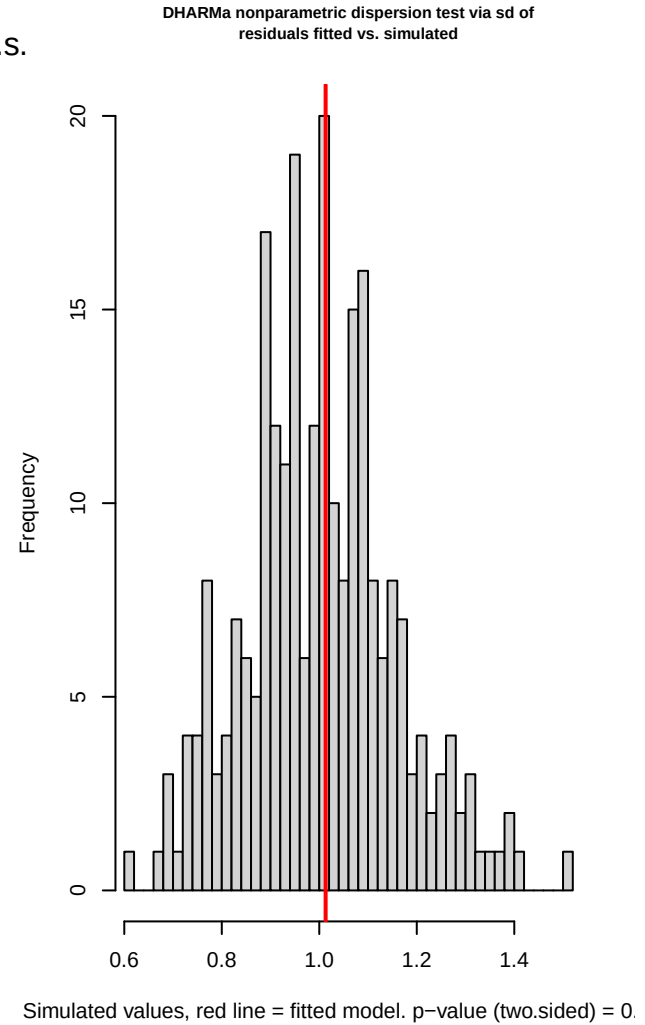




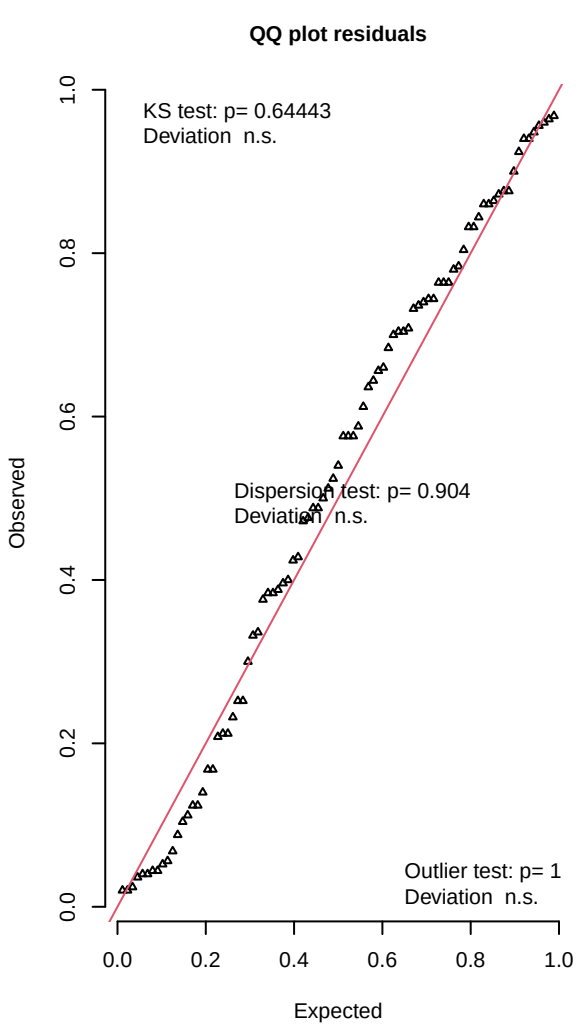
M.prime ~ intercept

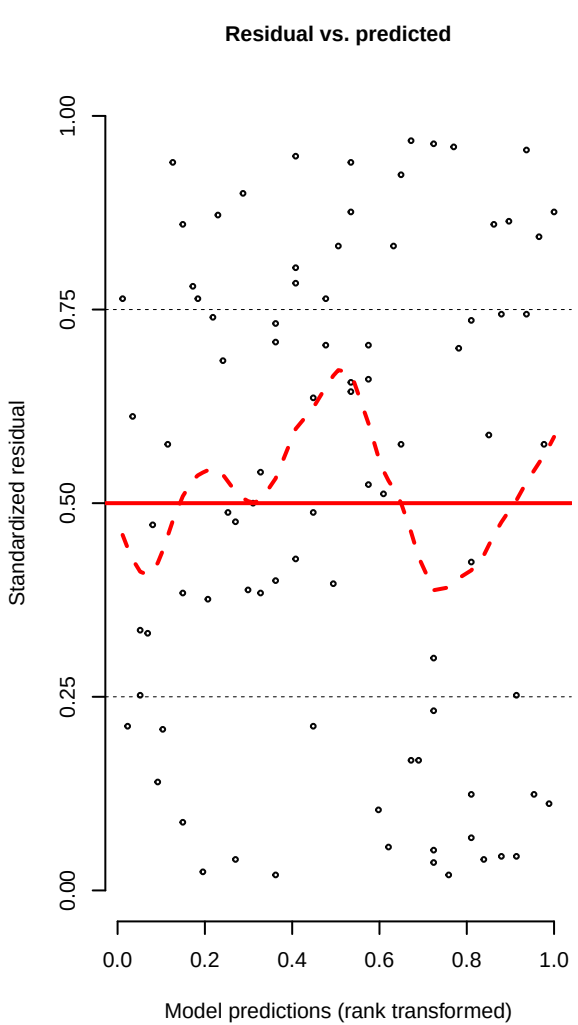


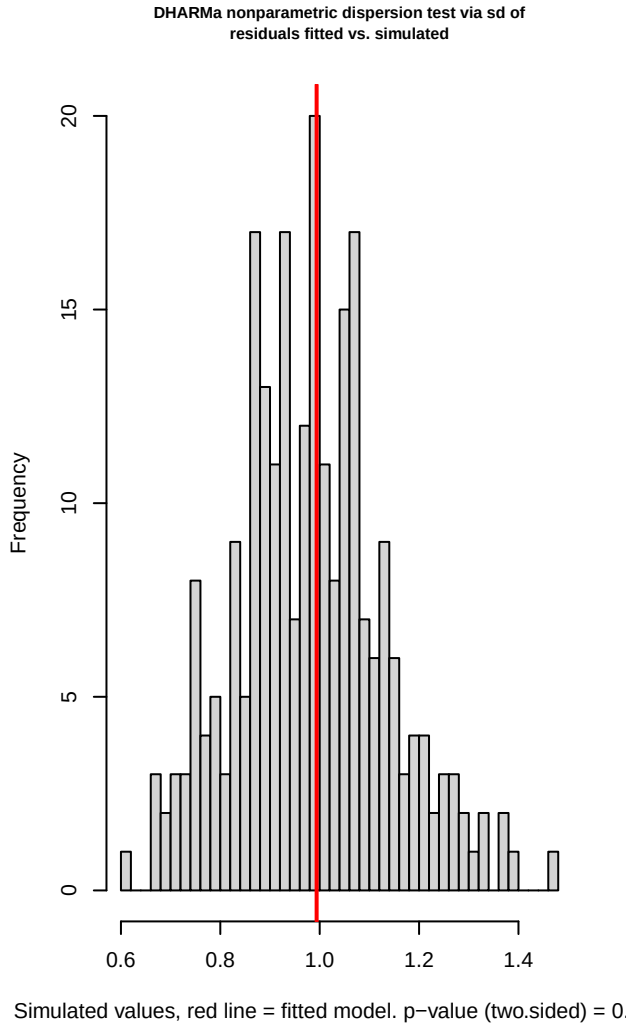




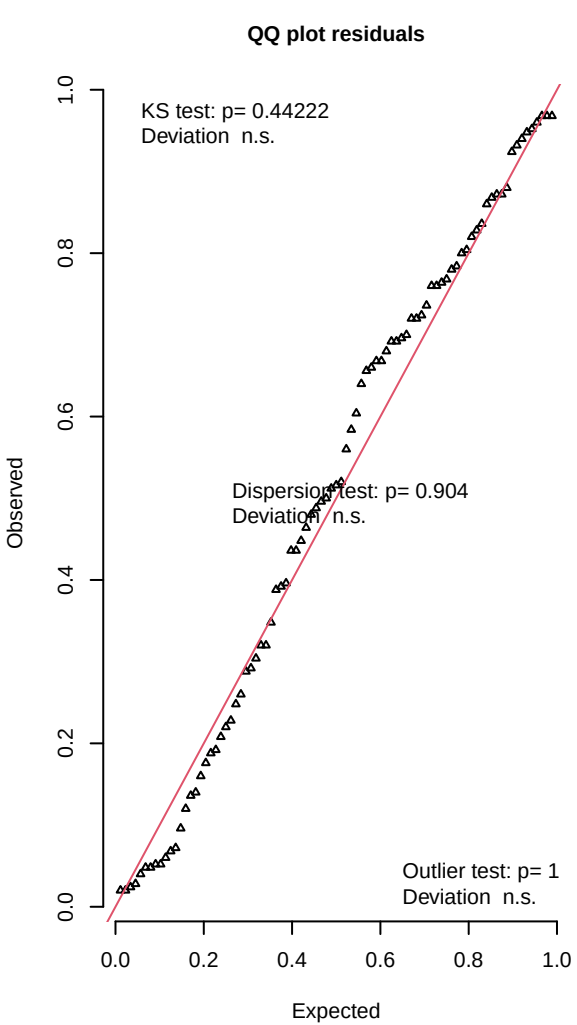
M.prime ~ intercept + temp_std

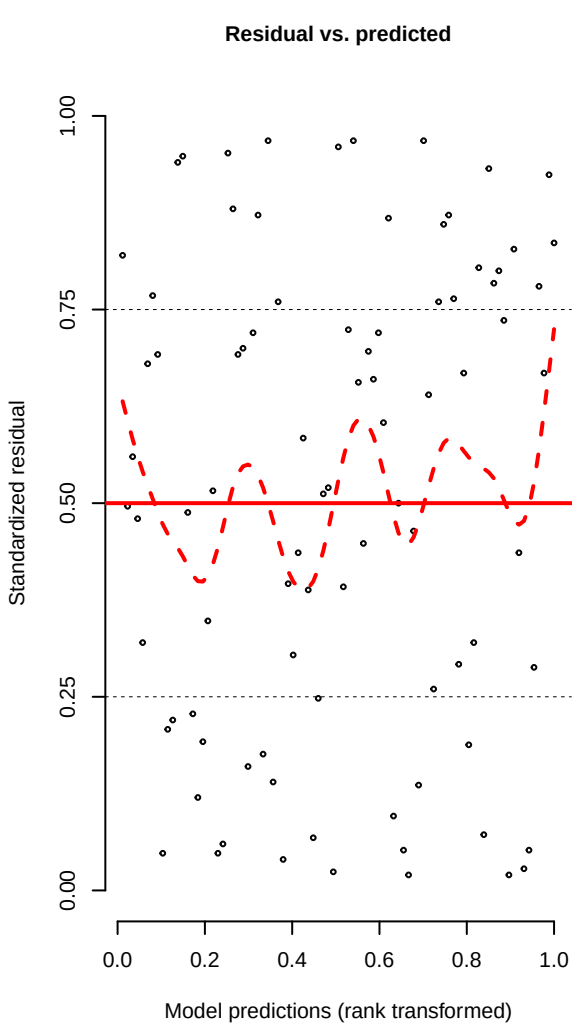


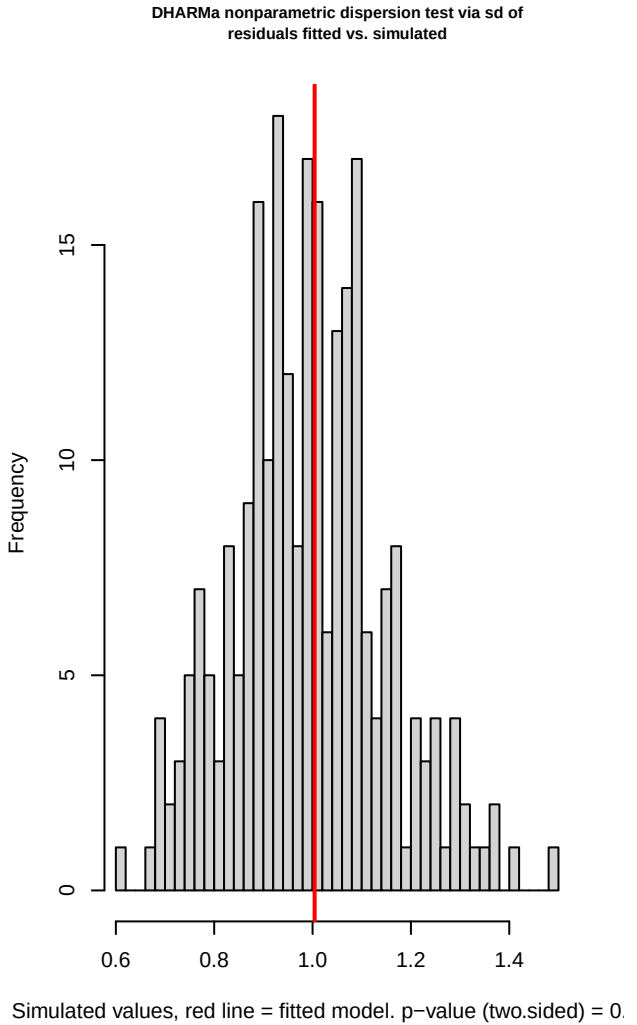




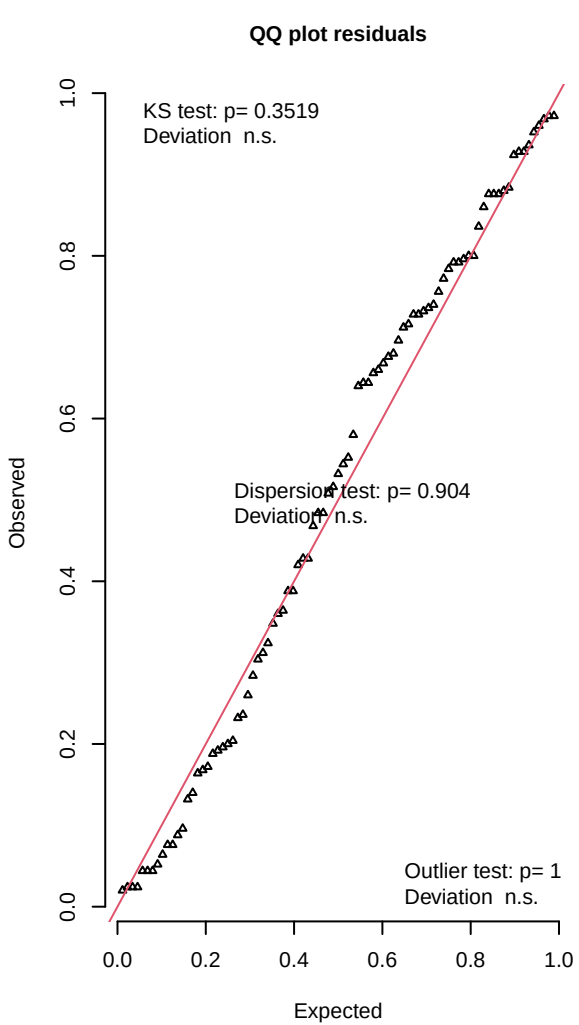
M.prime ~ intercept + area_std

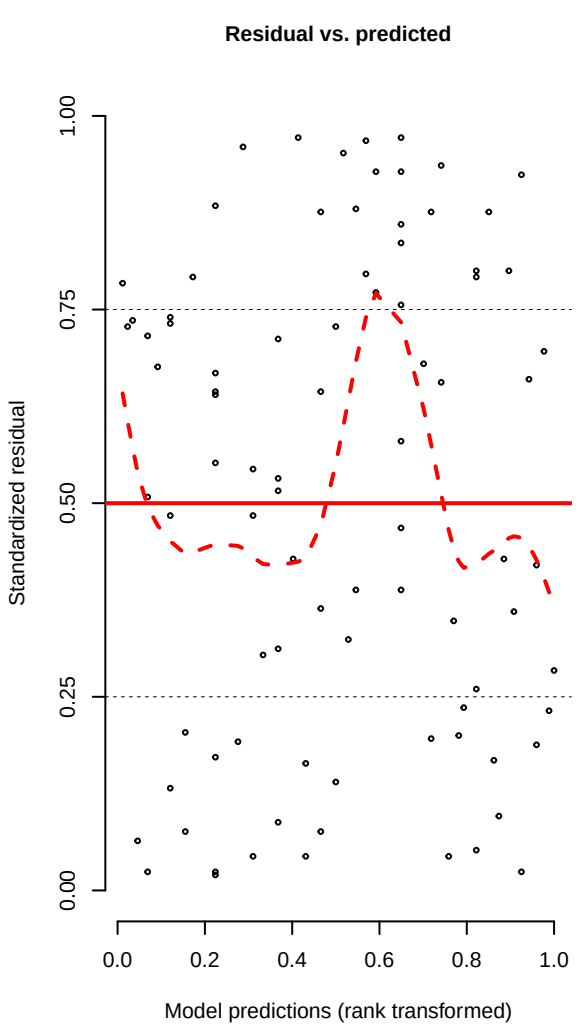


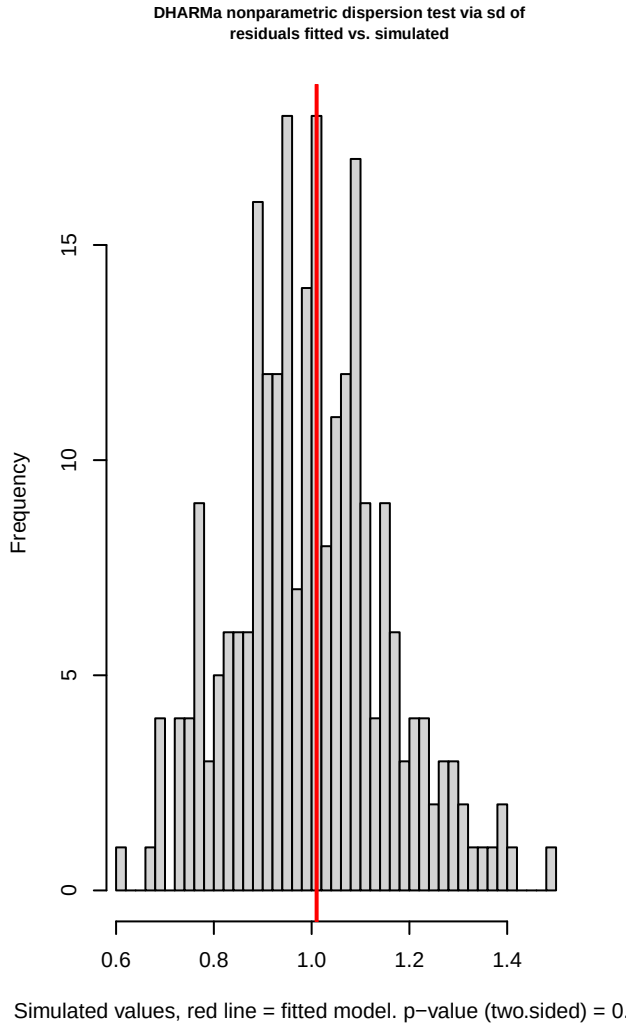




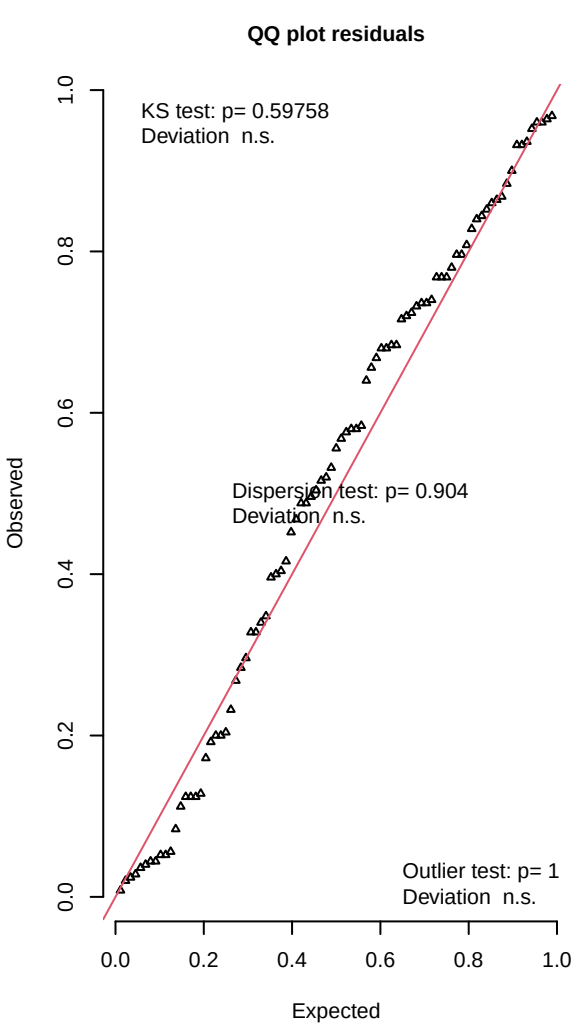
M.prime ~ intercept + time_convert_std

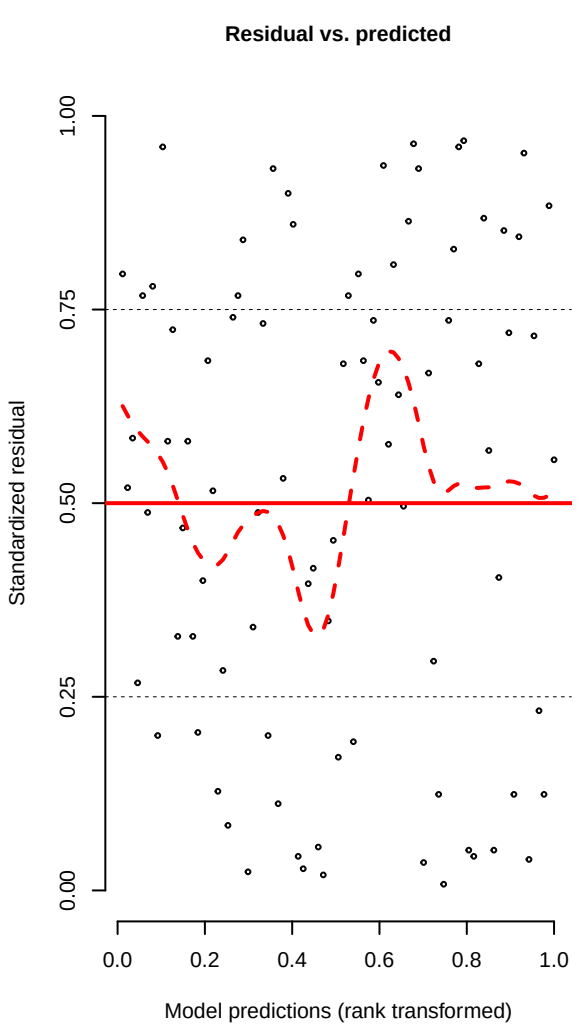


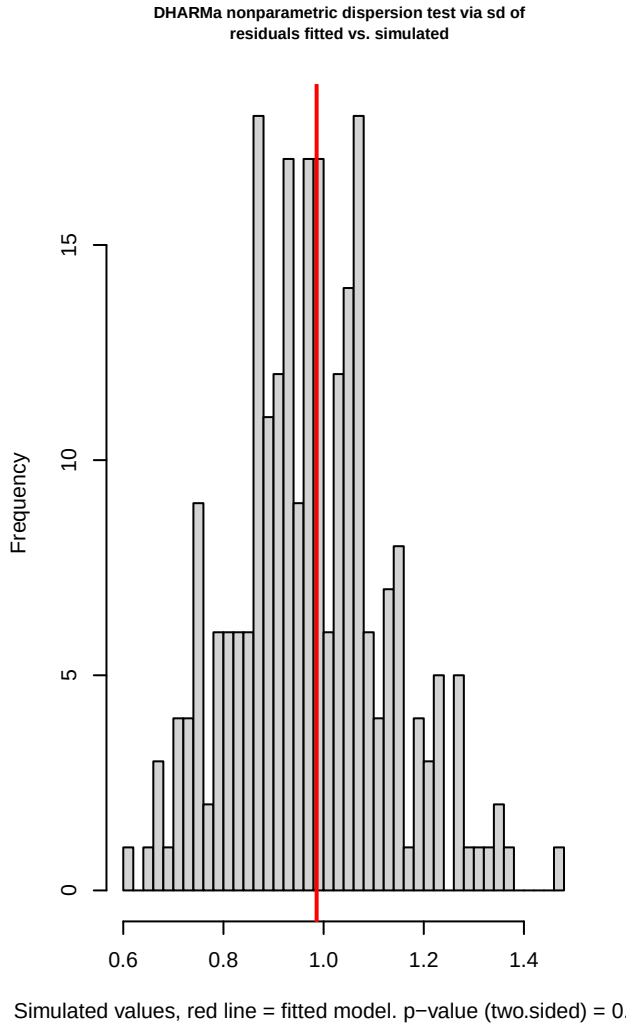




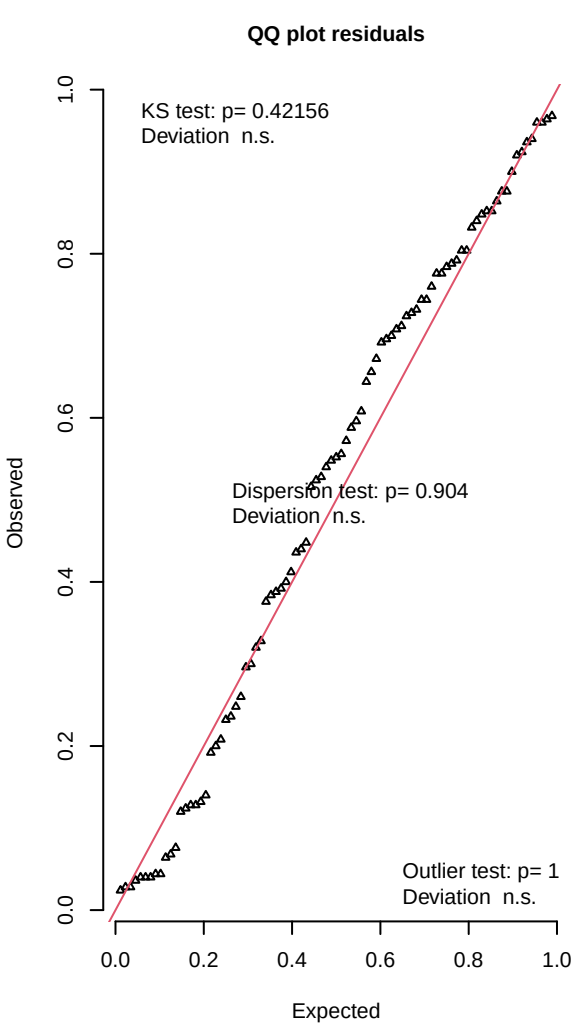
M.prime ~ intercept + area_std + temp_std

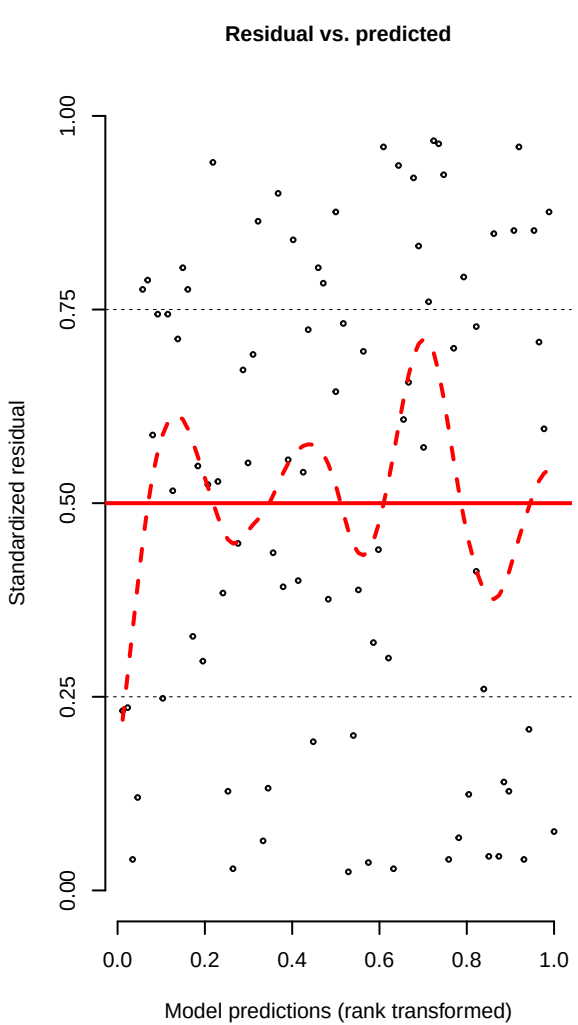


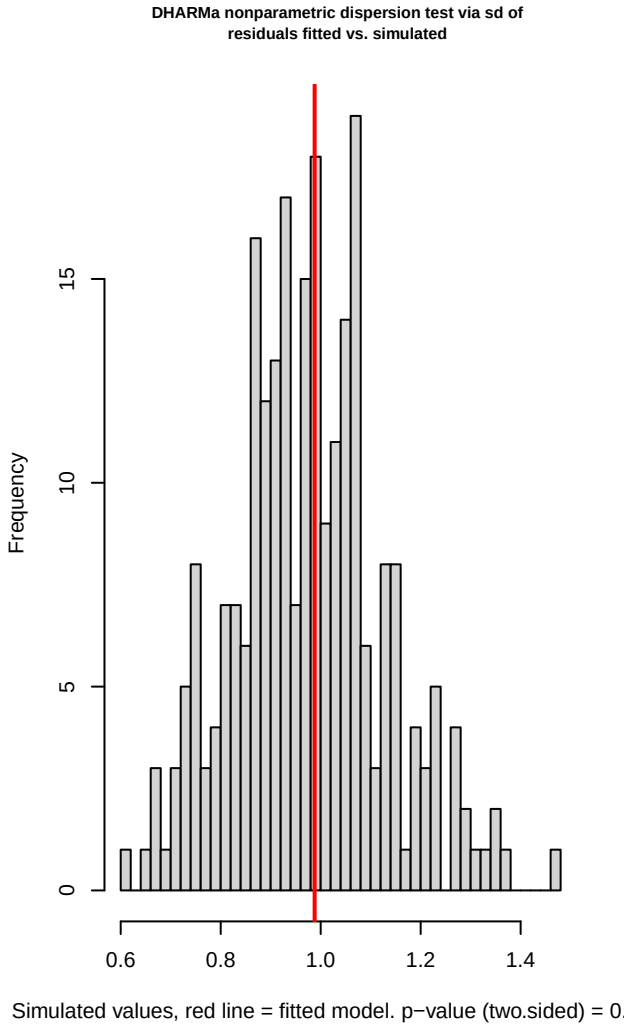




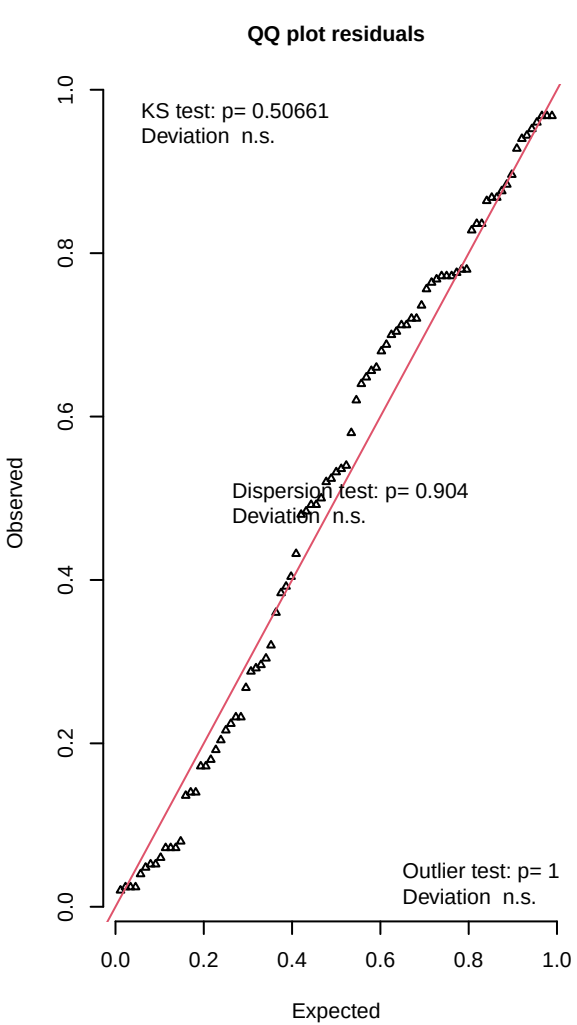
M.prime ~ intercept + temp_std + time_convert_std

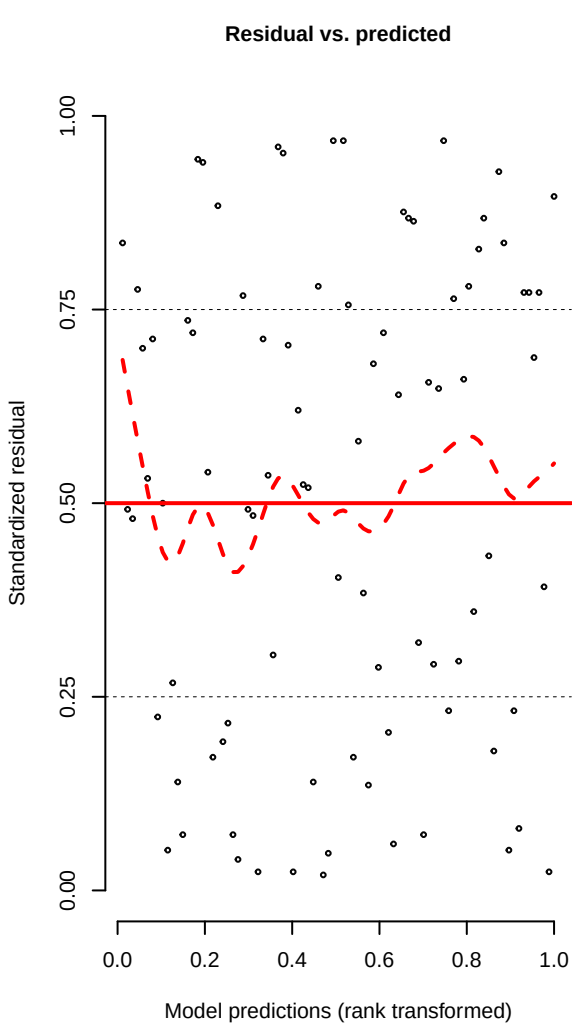


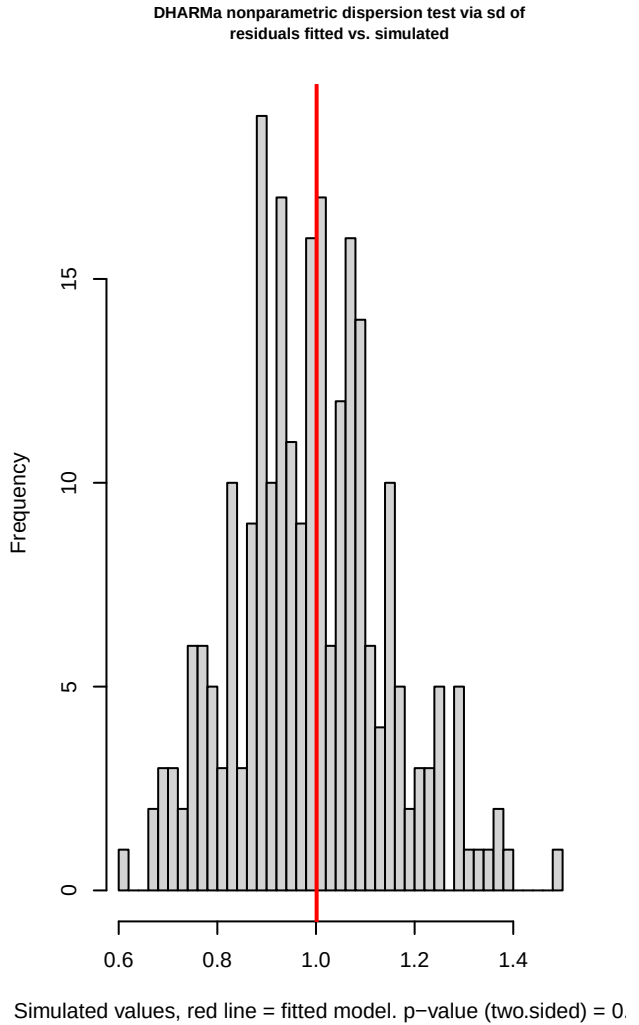




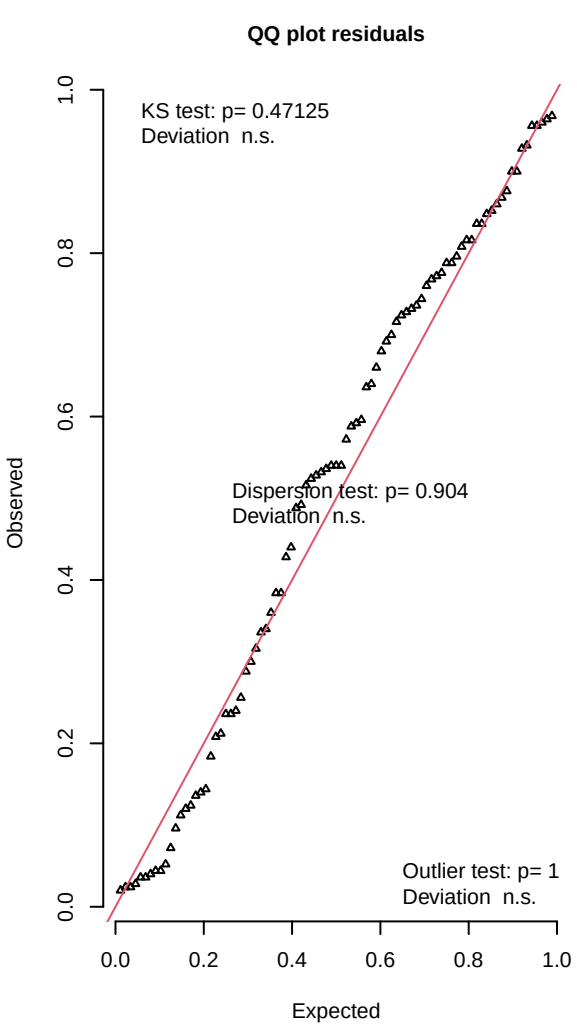
M.prime ~ intercept + area_std + time_convert_std

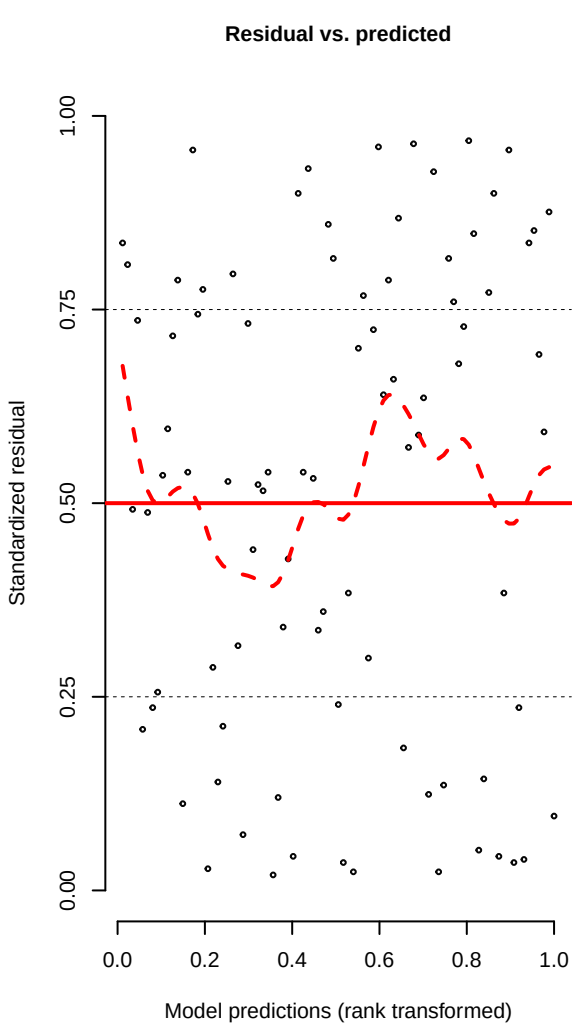


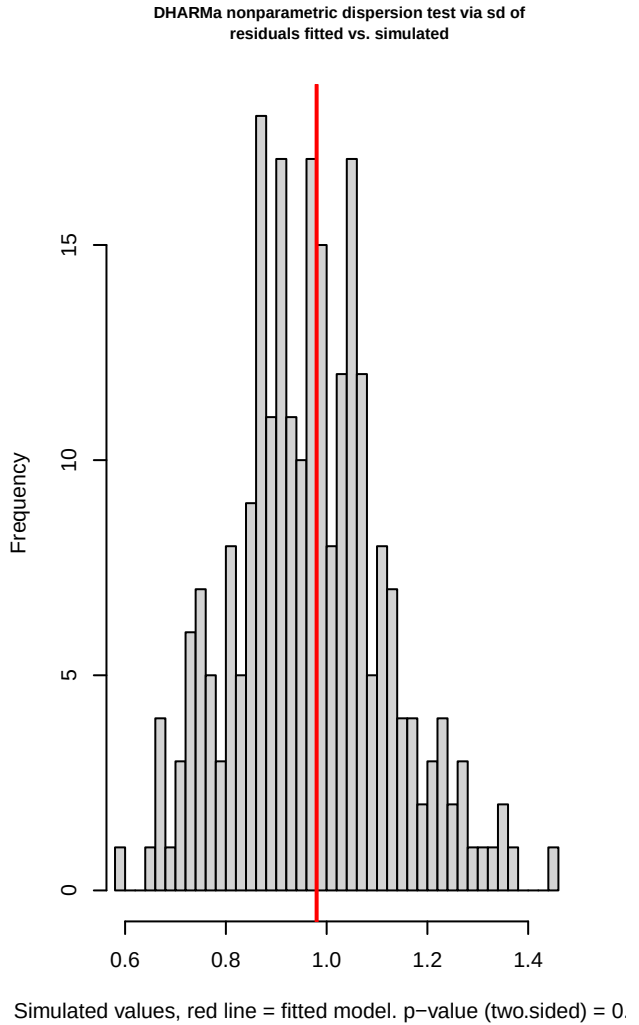




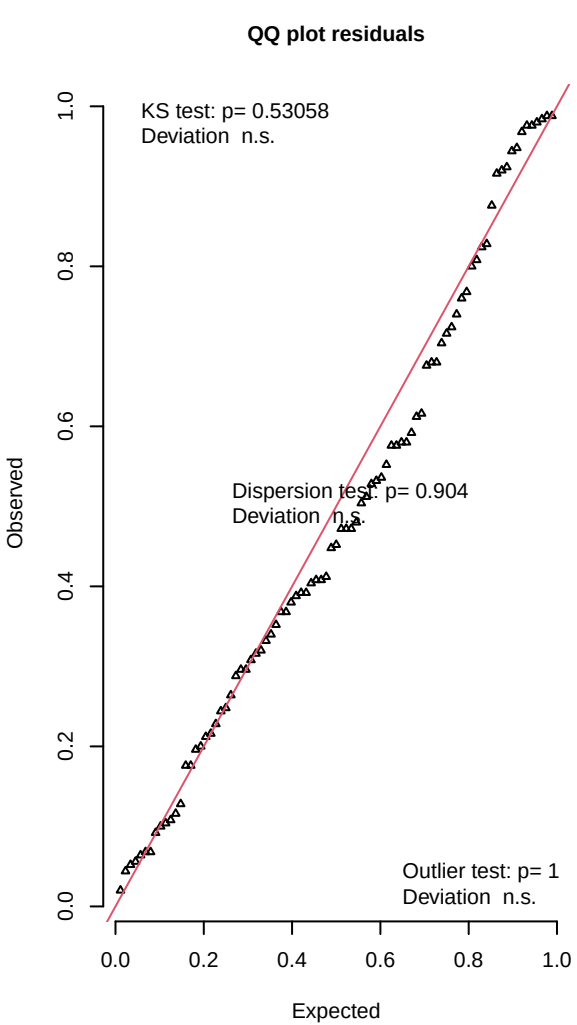
M.prime ~ intercept + area_std + temp_std + time_convert_std

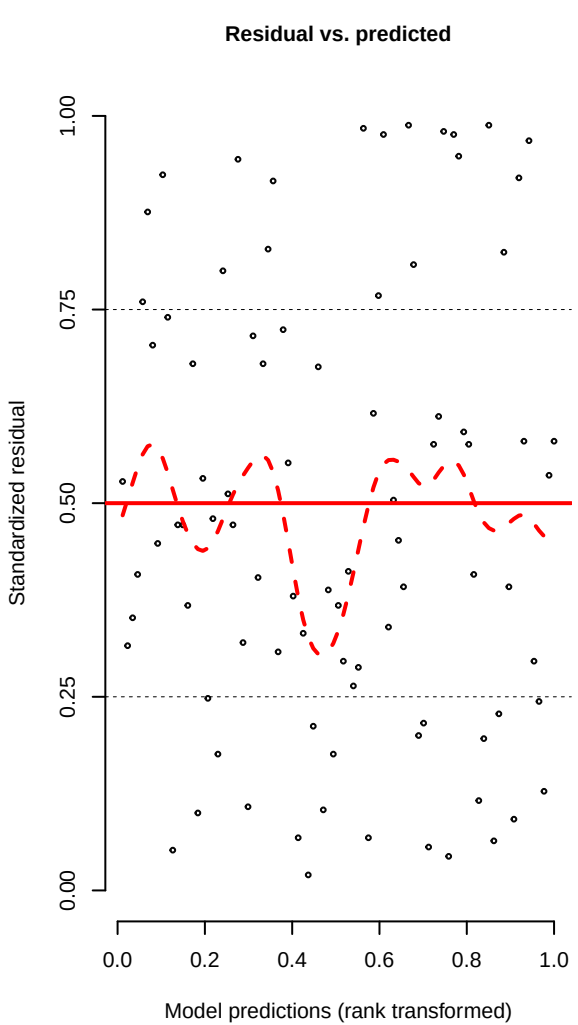


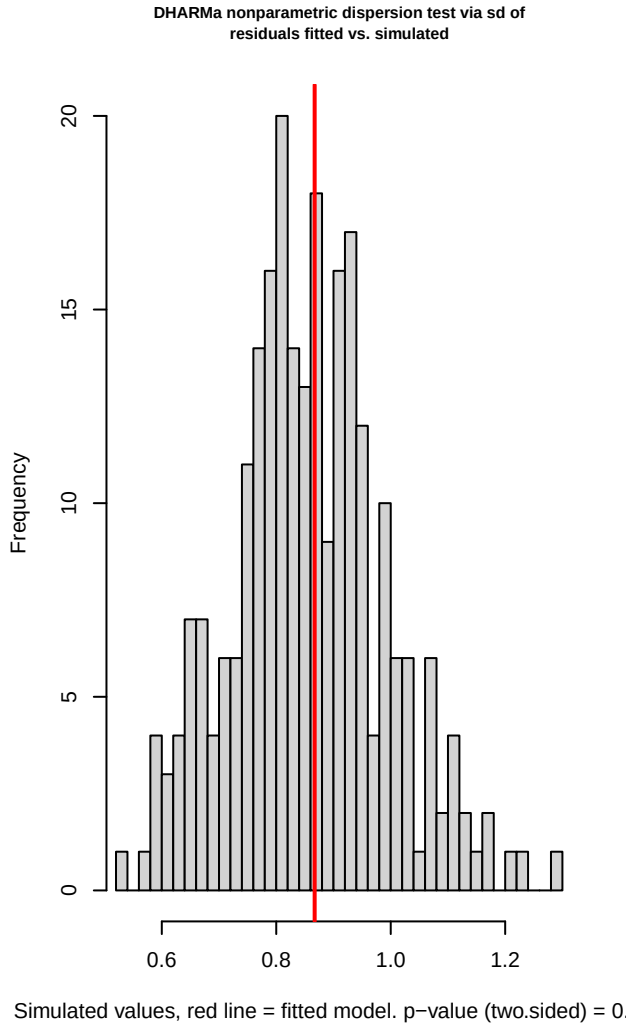




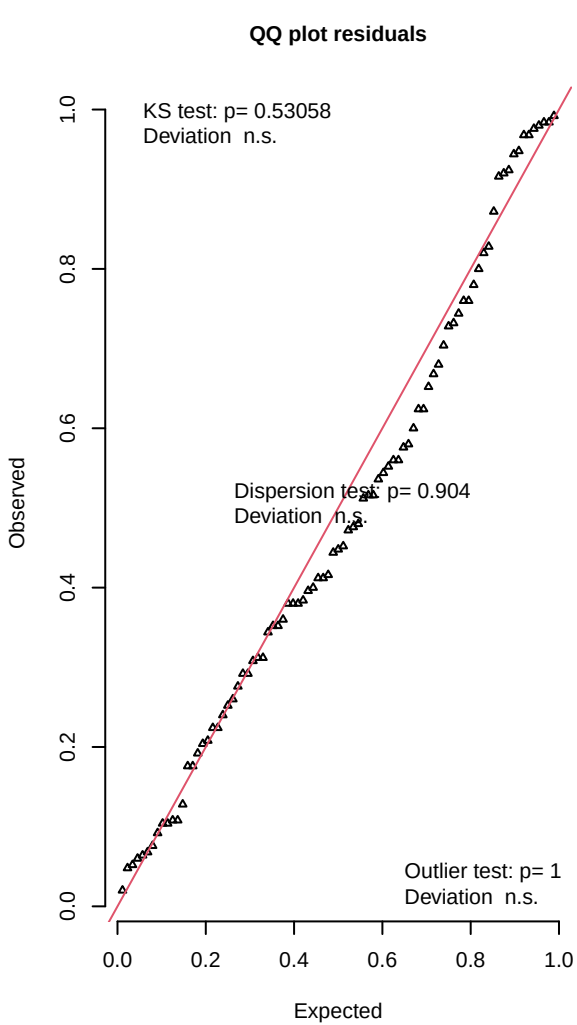
qEt ~ intercept + area_std + temp_std

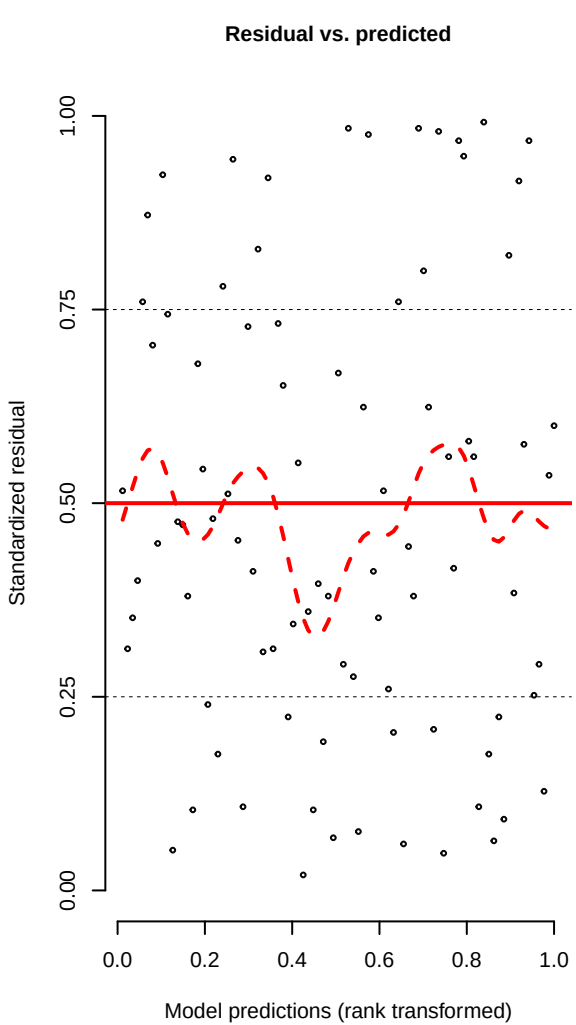


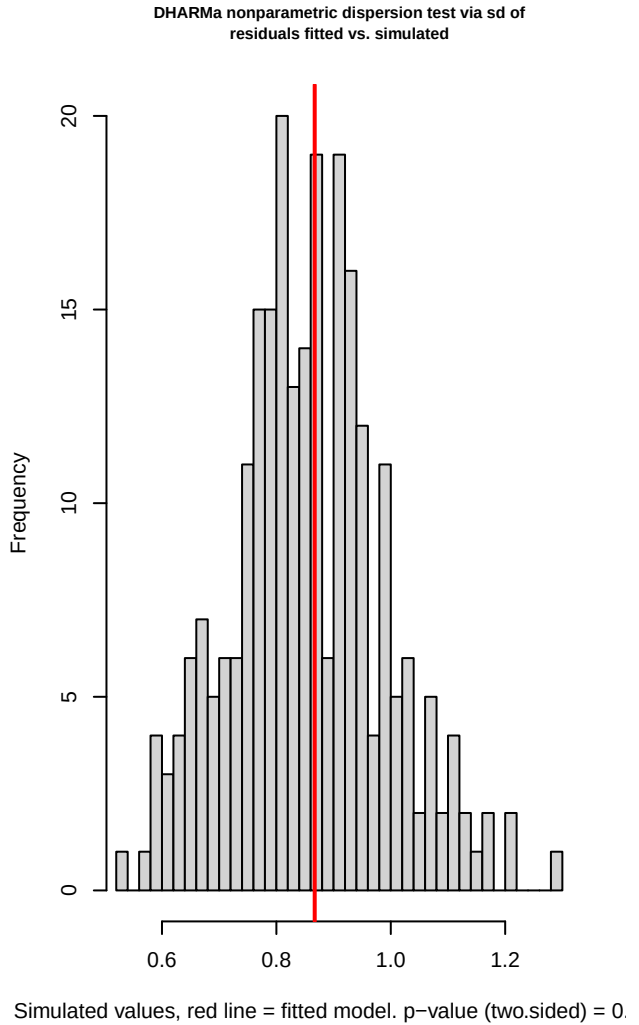




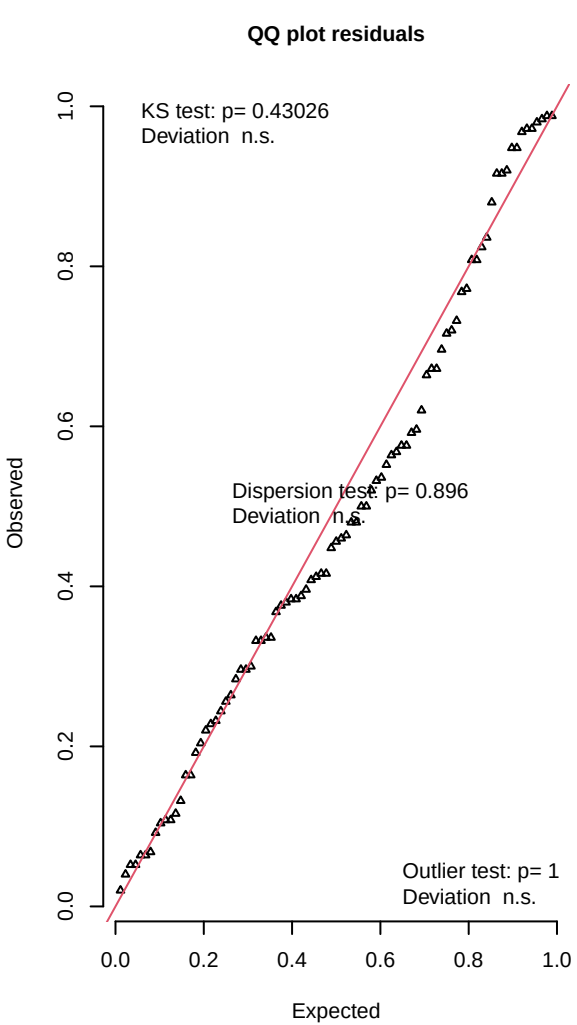
qEt ~ intercept + area_std + fish1 + temp_std

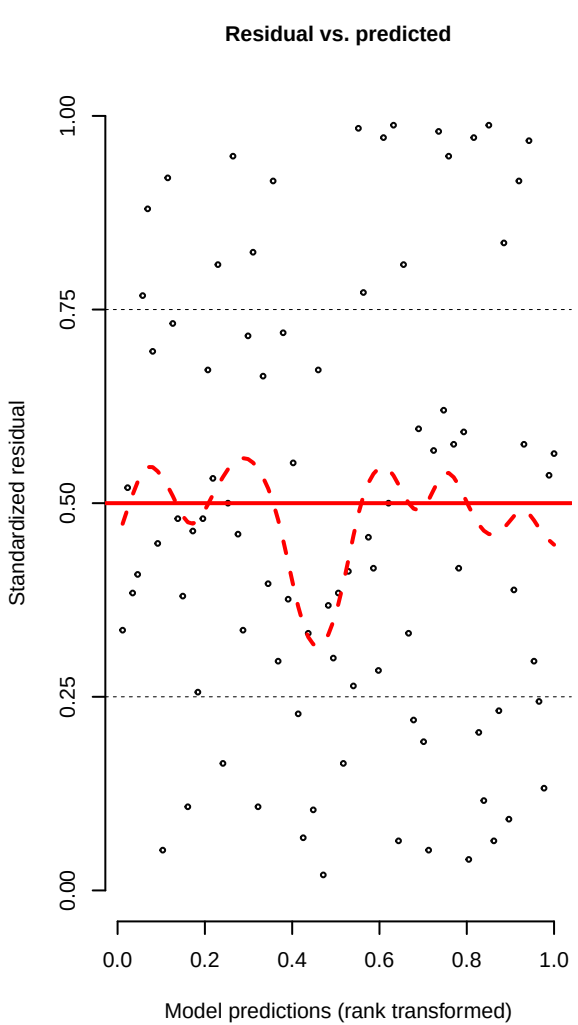


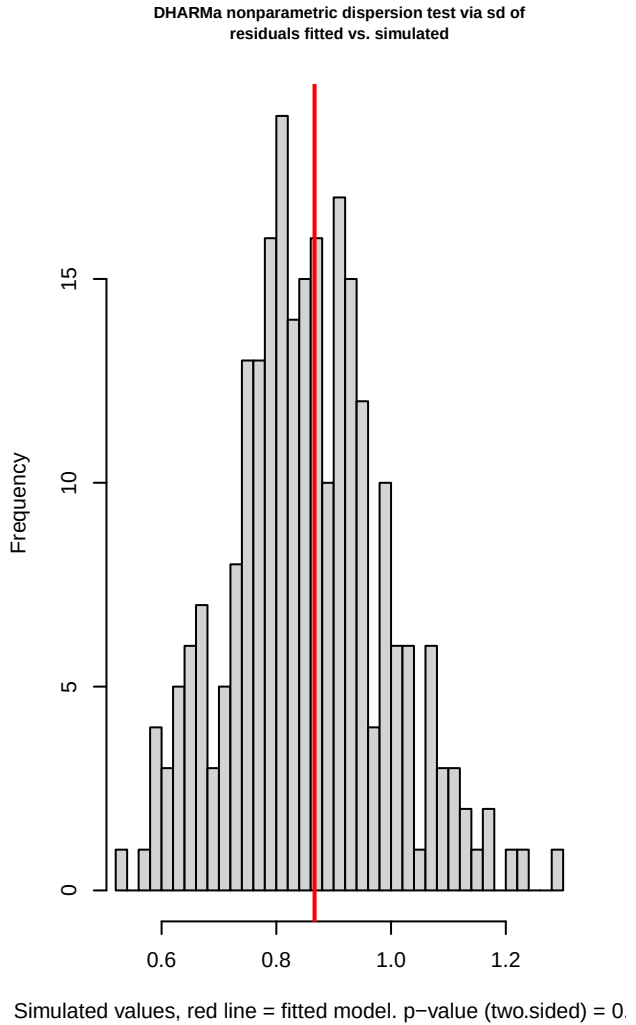




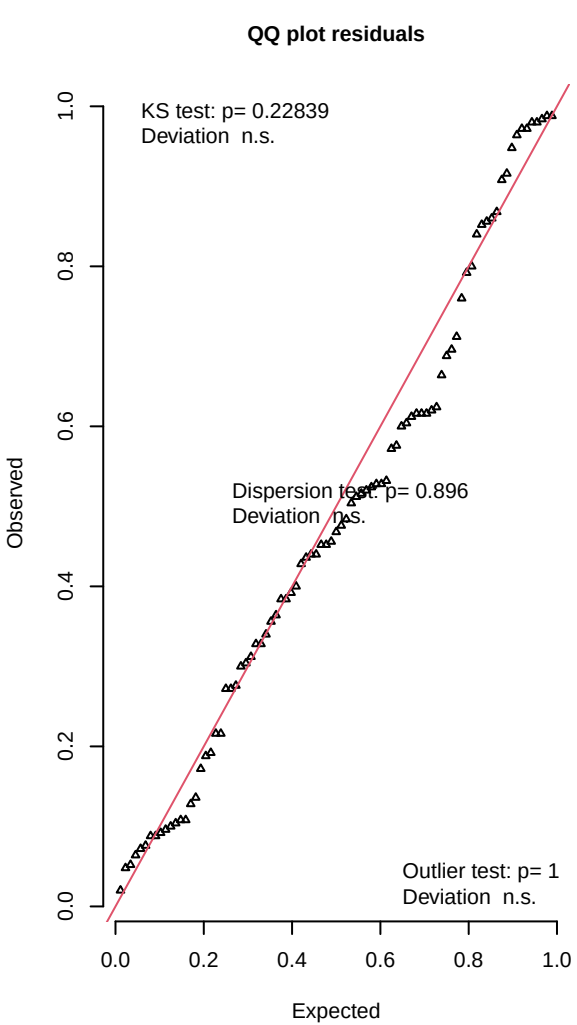
qEt ~ intercept + area_std + temp_std + time_convert_std

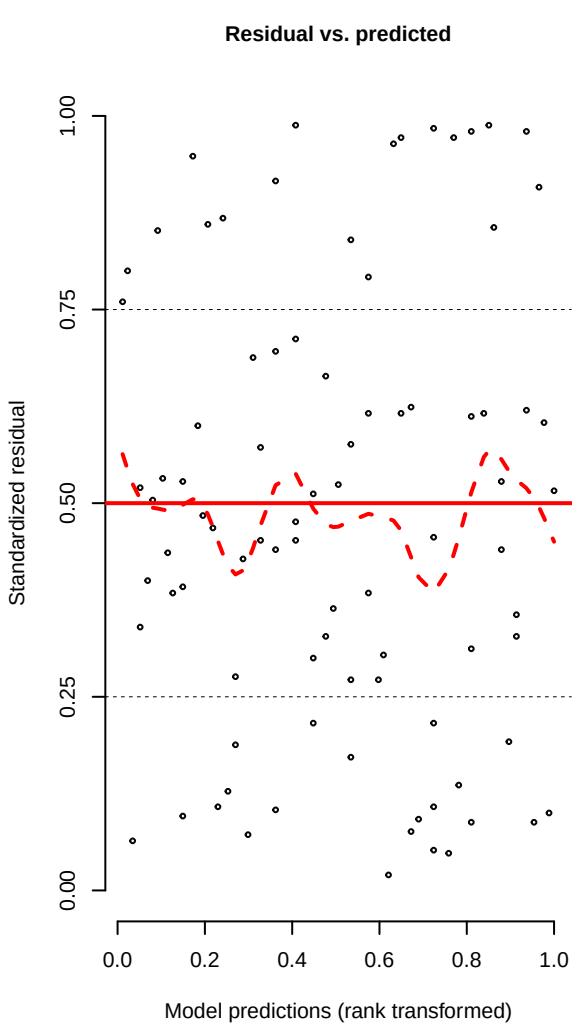


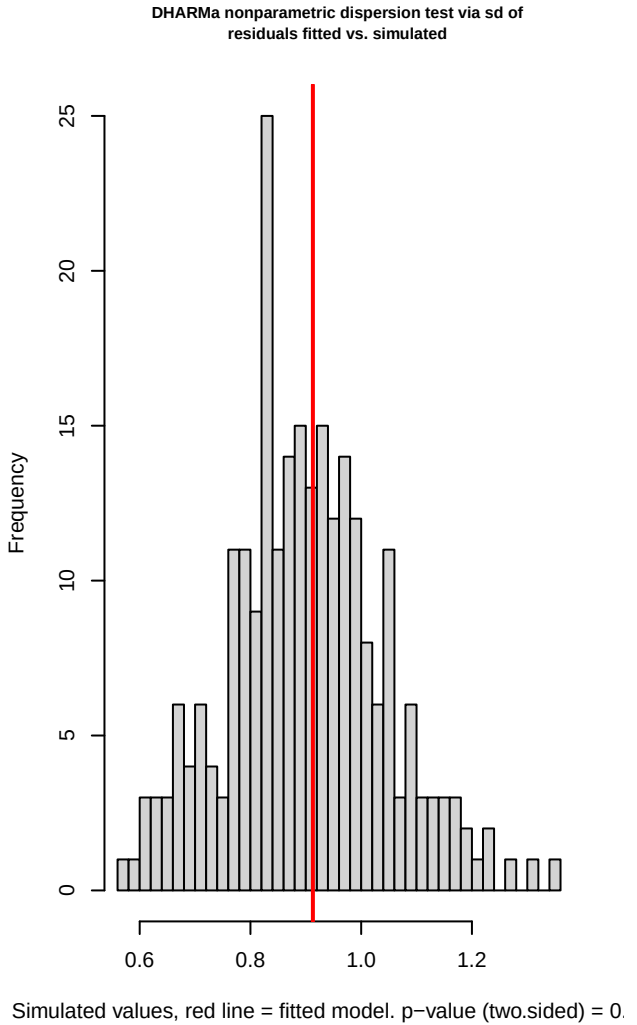




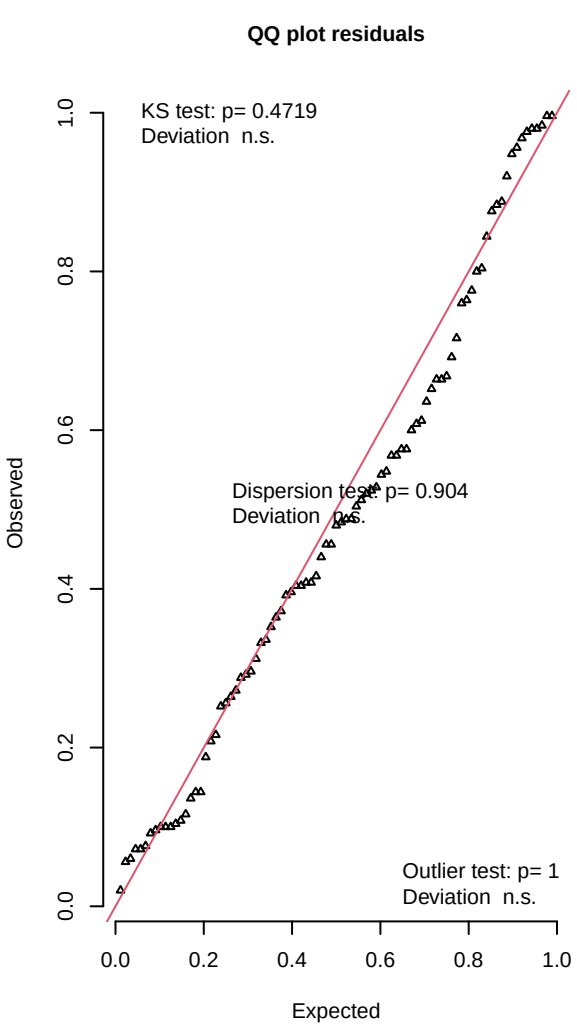
qEt ~ intercept + temp_std

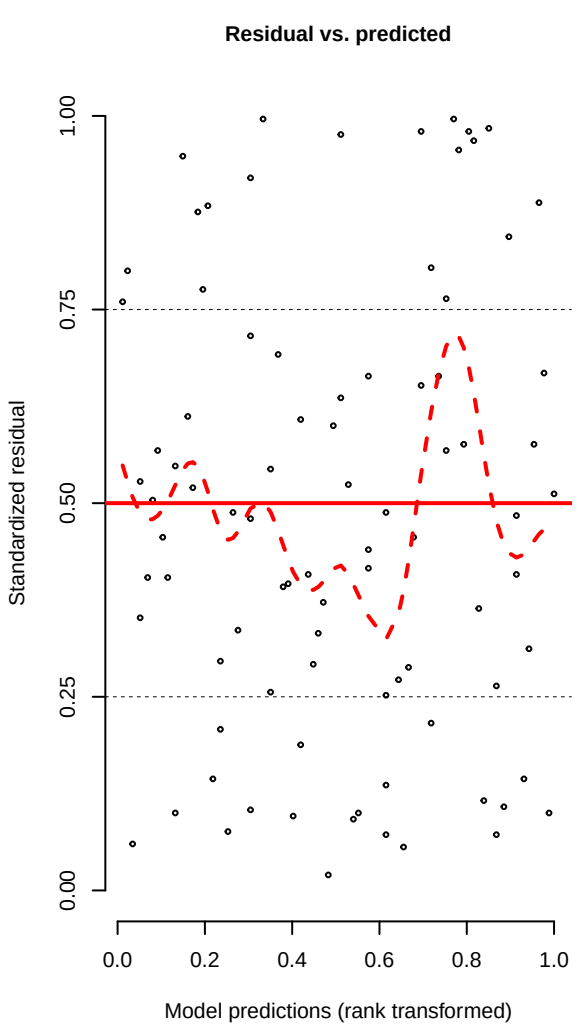


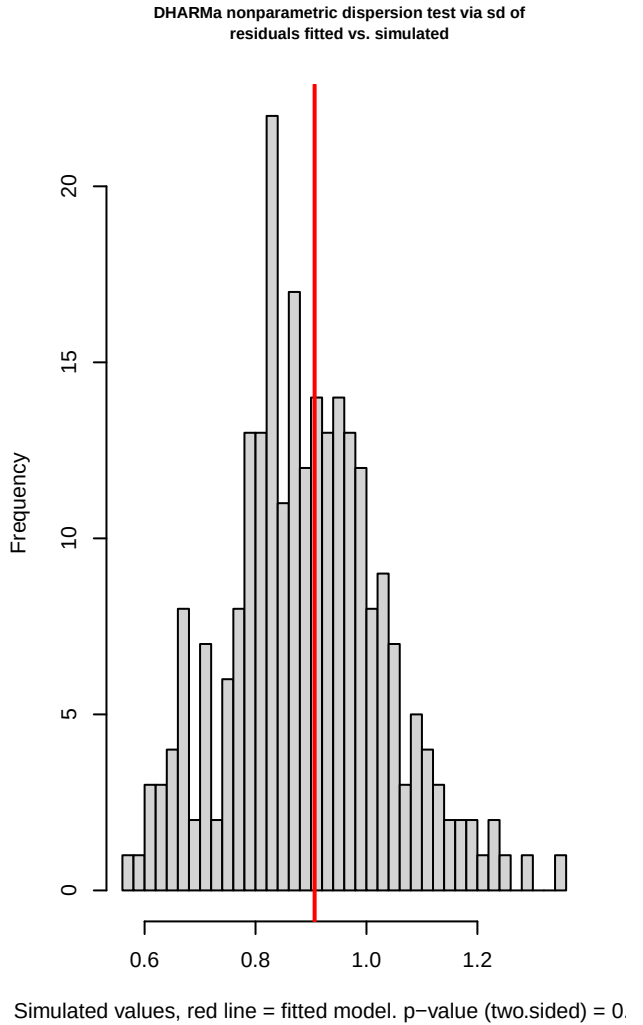




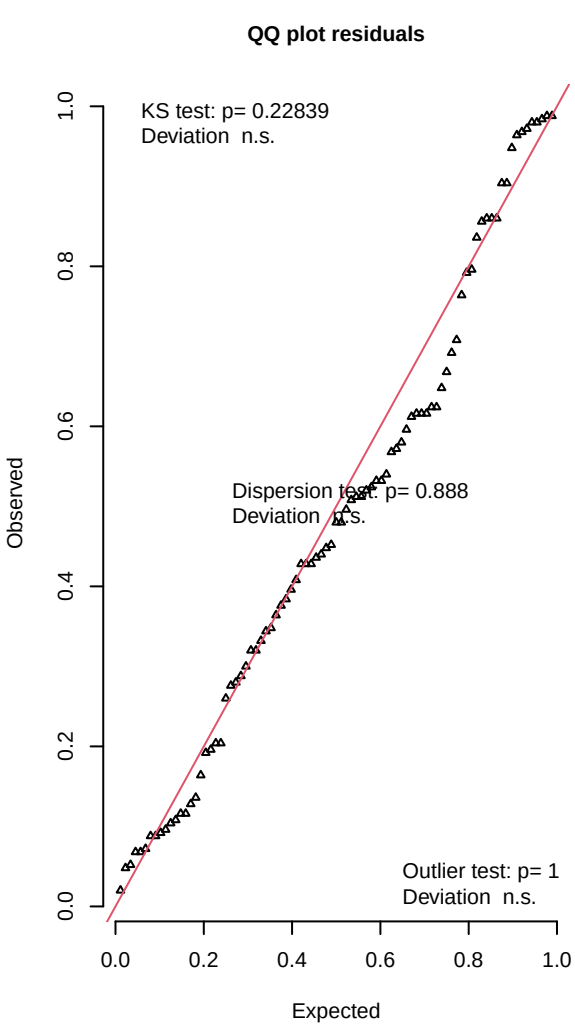
qEt ~ intercept + fish1 + temp_std

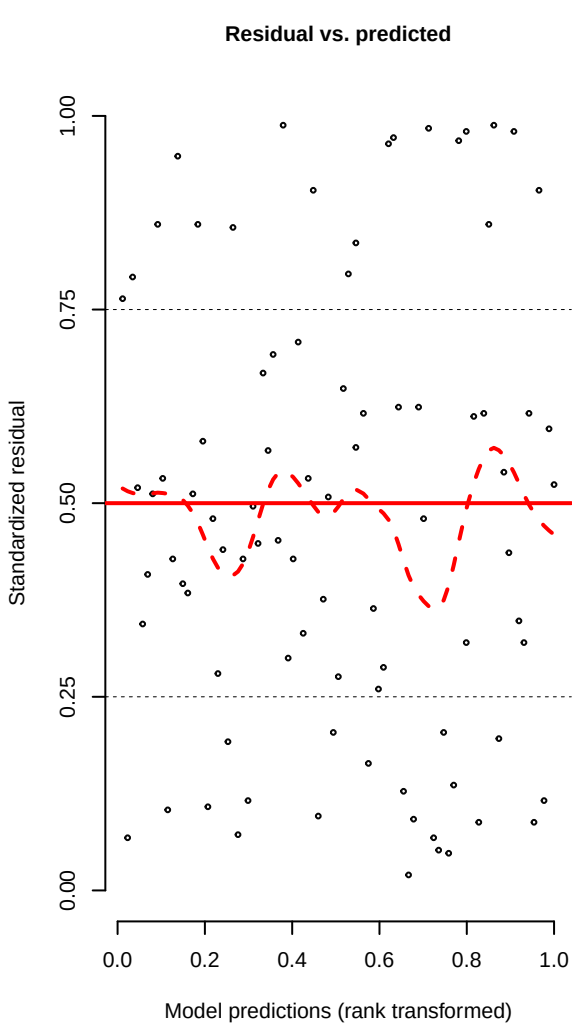


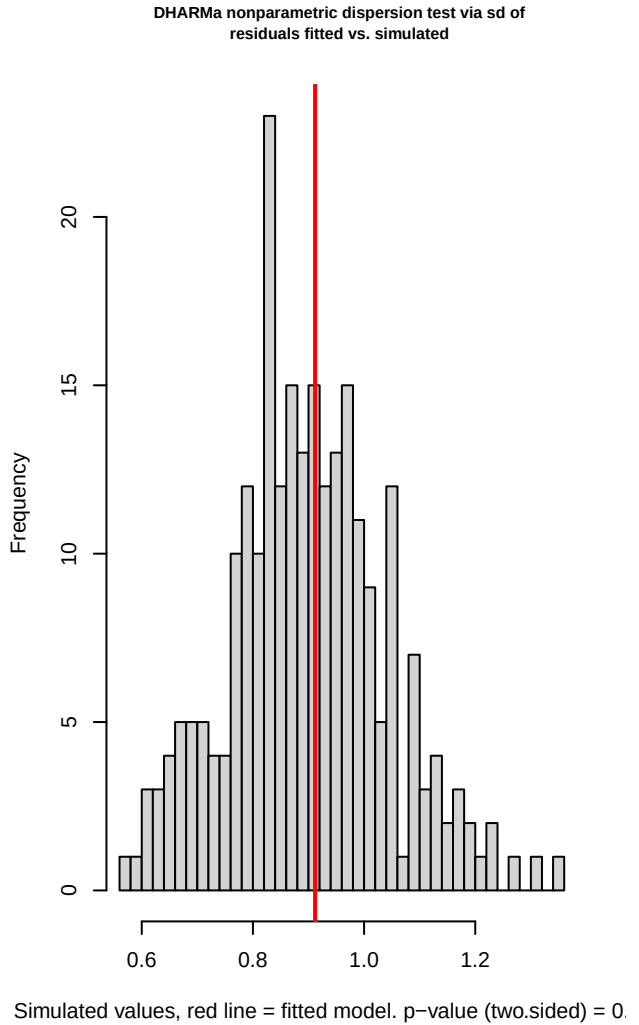




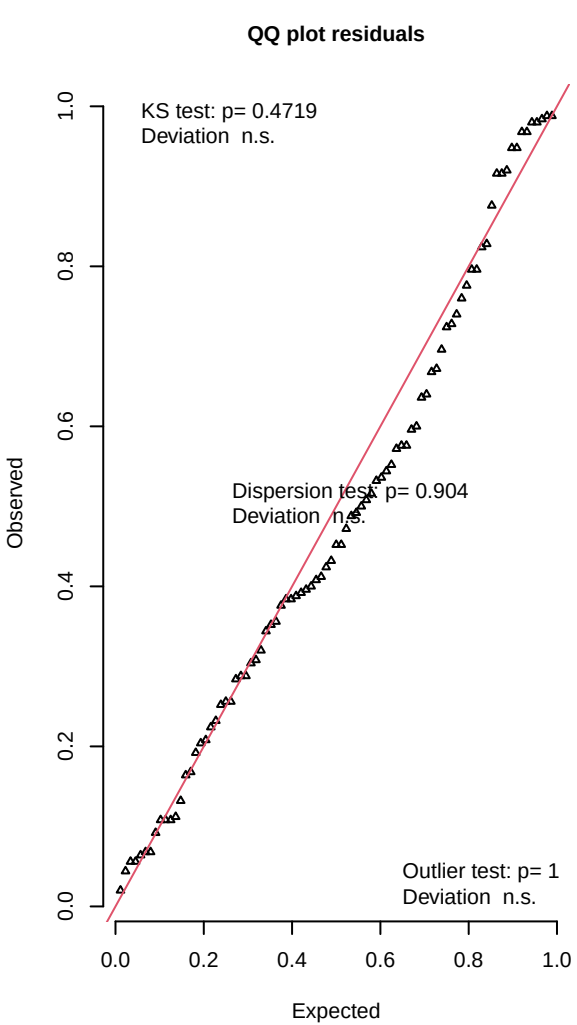
qEt ~ intercept + temp_std + time_convert_std

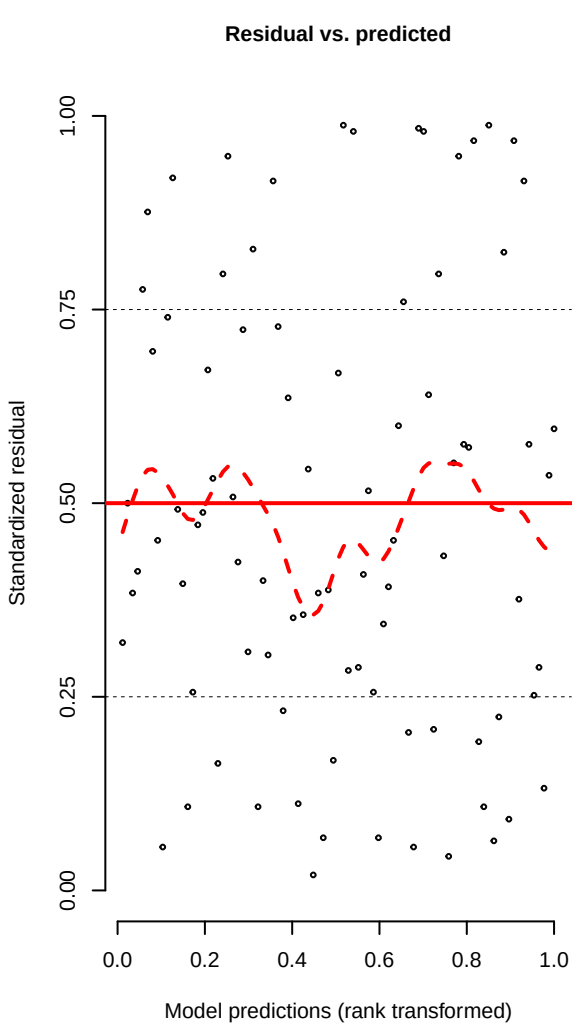


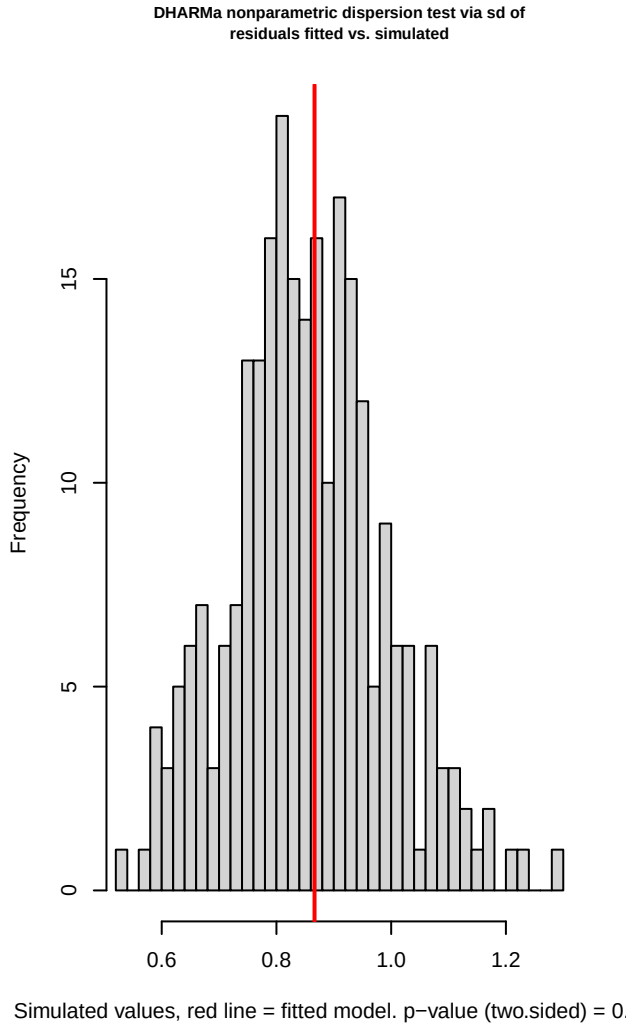


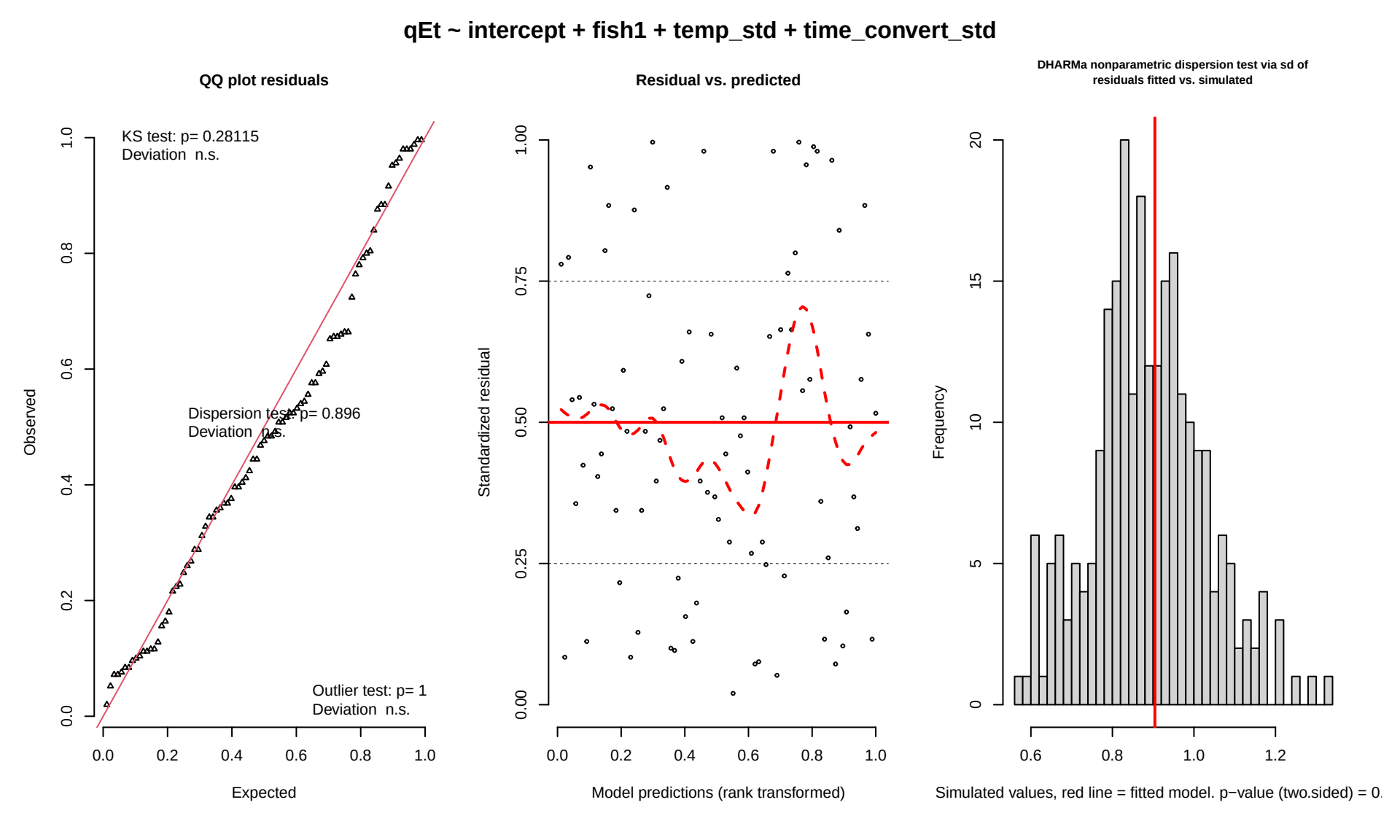


qEt ~ intercept + area_std + fish1 + temp_std + time_convert_std

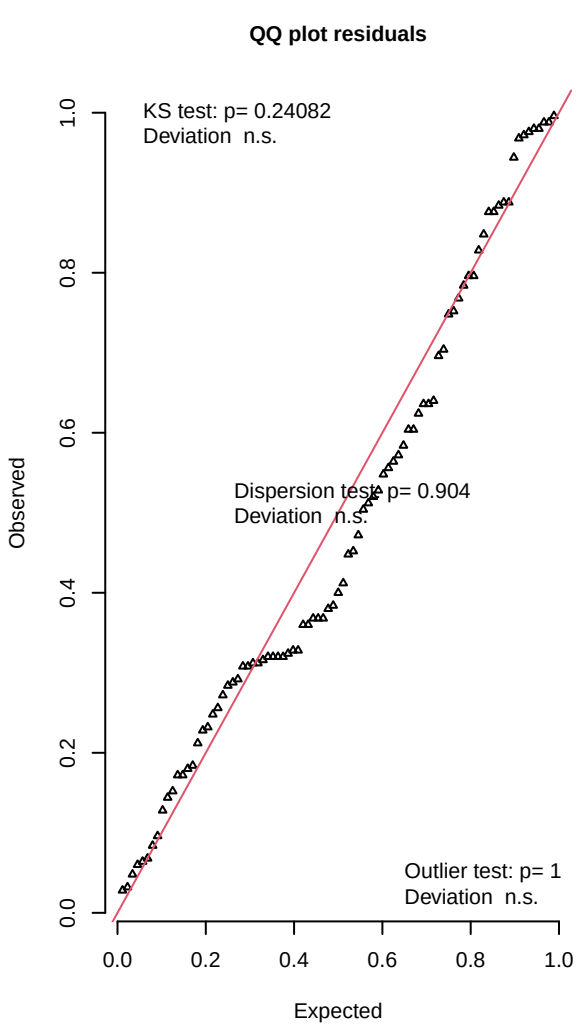


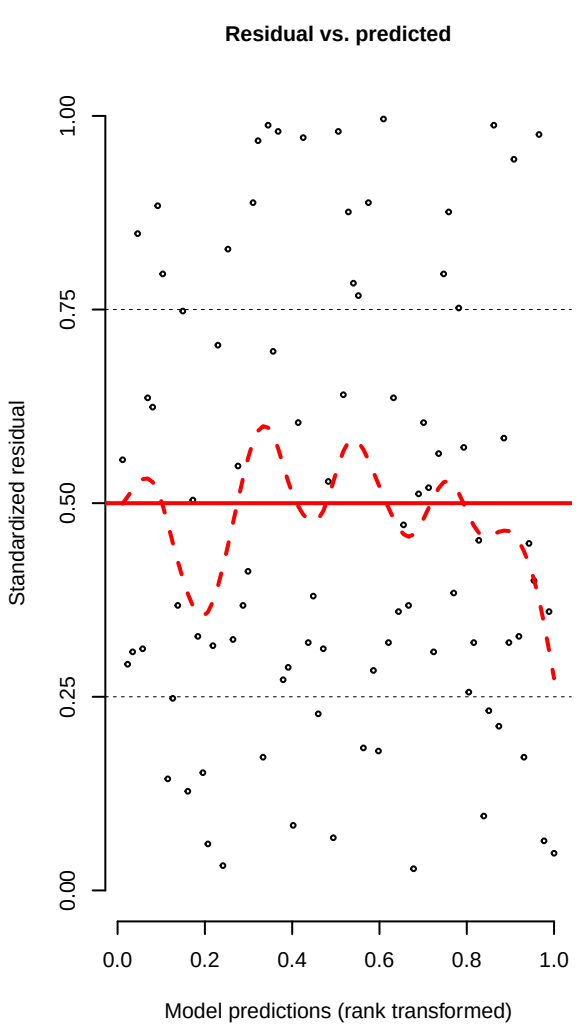


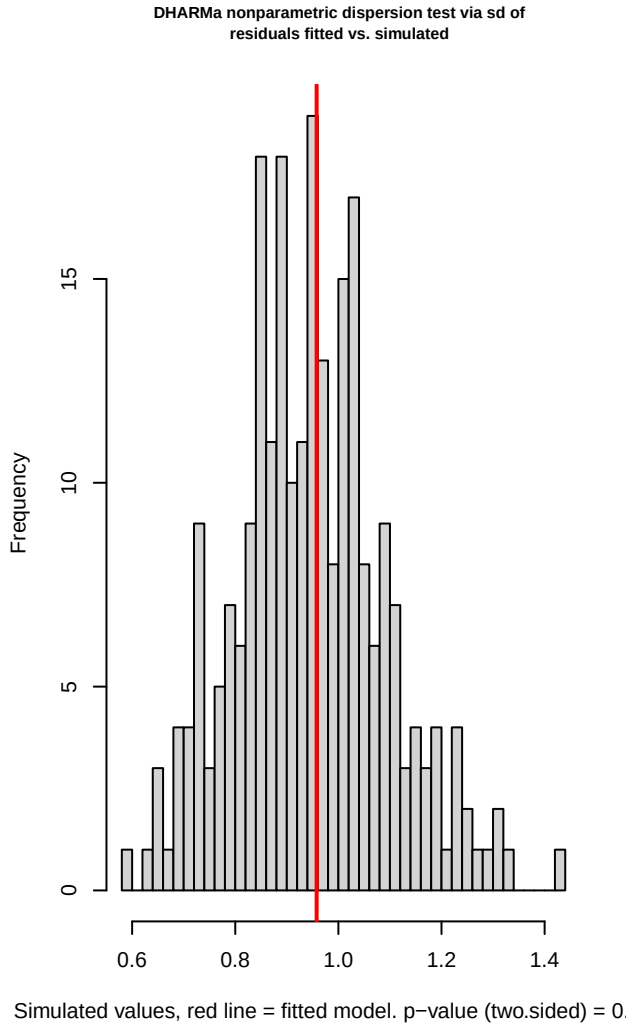



qEt ~ intercept + fish1 + temp_std + time_convert_std
QQ plot residuals
KS test: p= 0.28115
Deviation n.s.
Dispersion test: p= 0.896
Deviation n.s.
Outlier test: p= 1
Deviation n.s.
Observed
Expected
Residual vs. predicted
Standardized residual
Model predictions (rank transformed)
DHARMa nonparametric dispersion test via sd of residuals fitted vs. simulated
Frequency
Simulated values, red line = fitted model. p−value (two.sided) = 0.

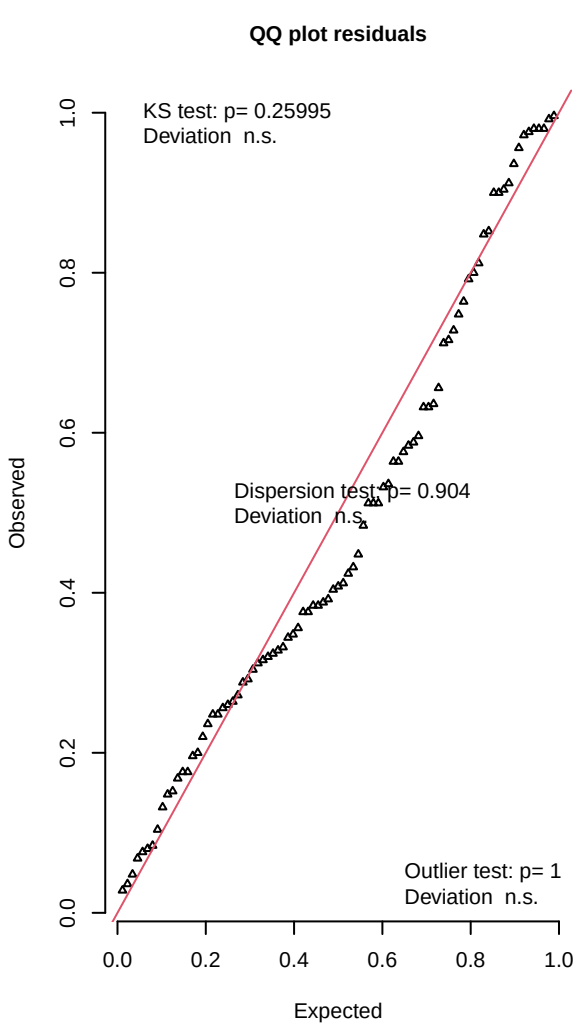
qEt ~ intercept + area_std

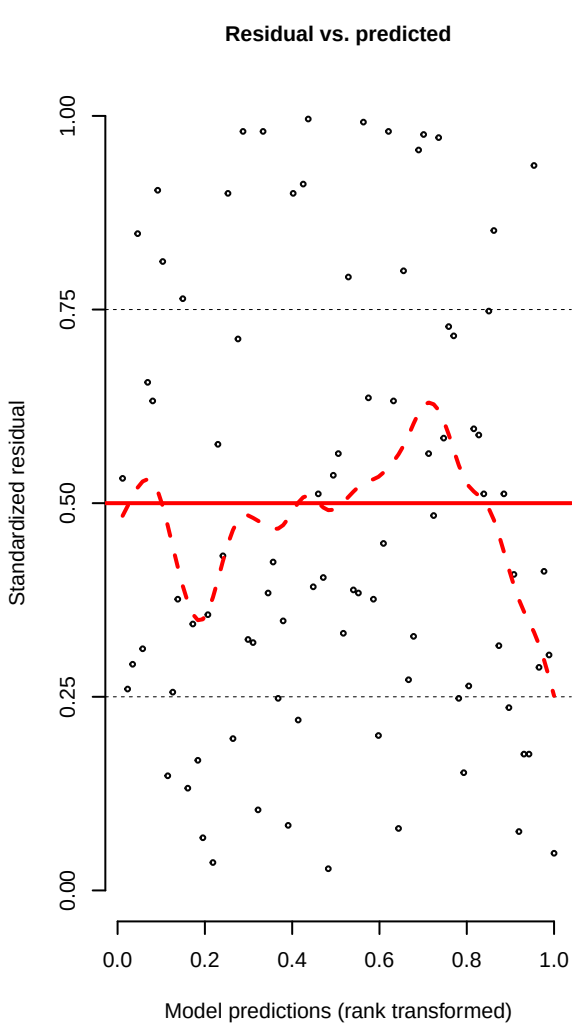


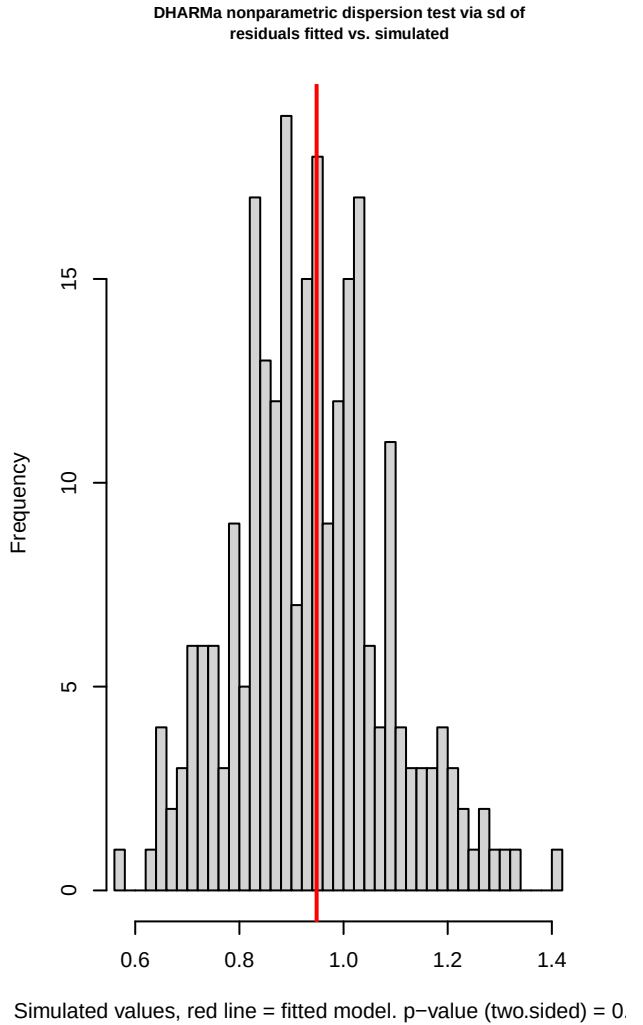




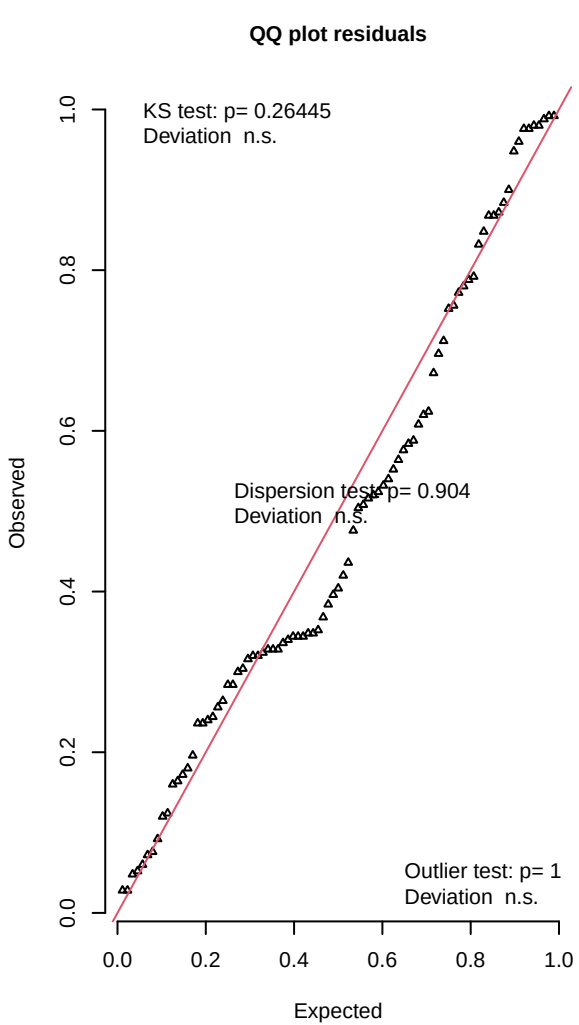
qEt ~ intercept + area_std + fish1

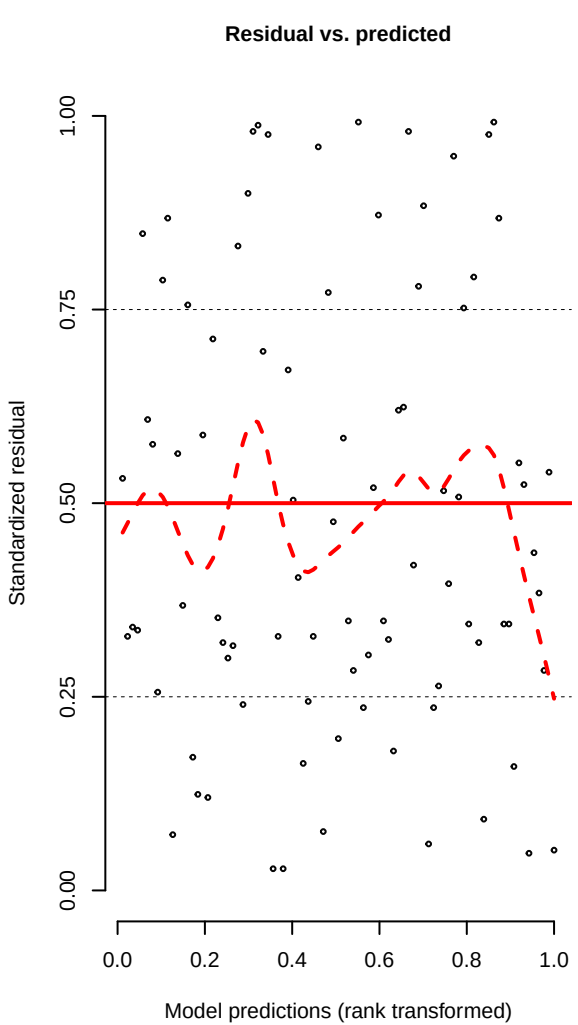


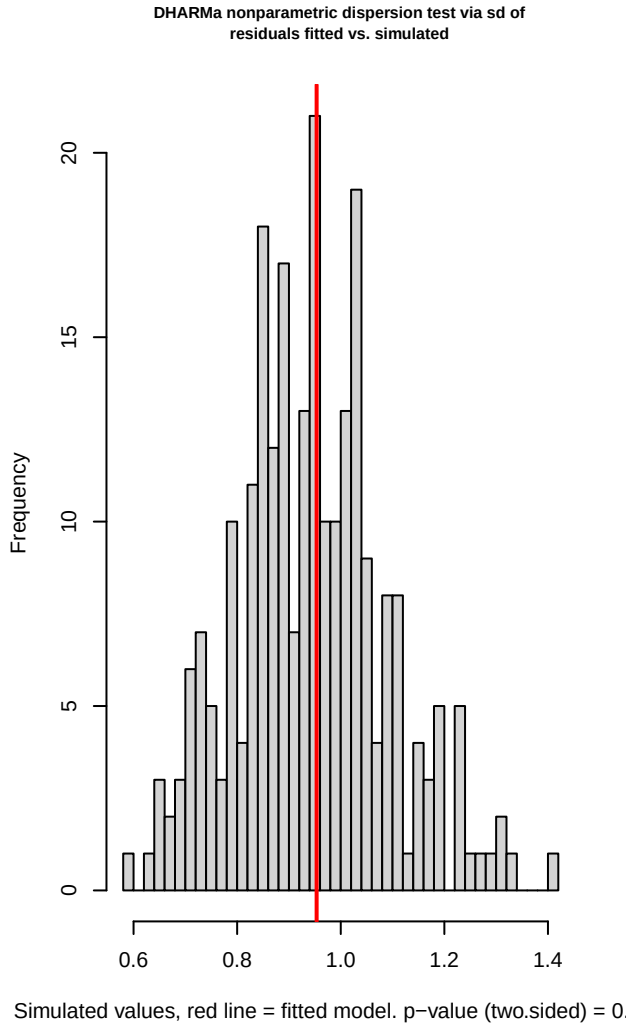




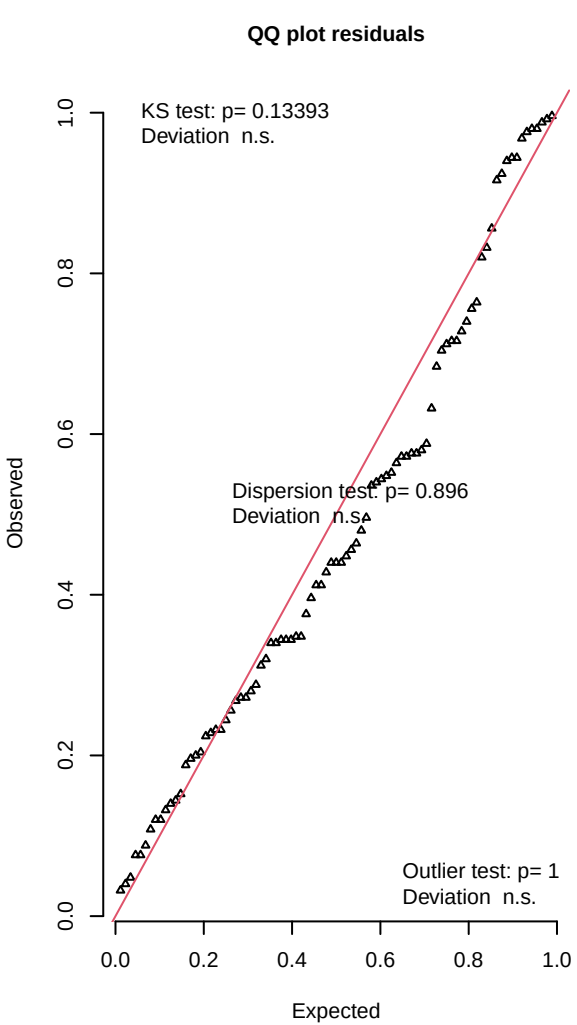
qEt ~ intercept + area_std + time_convert_std

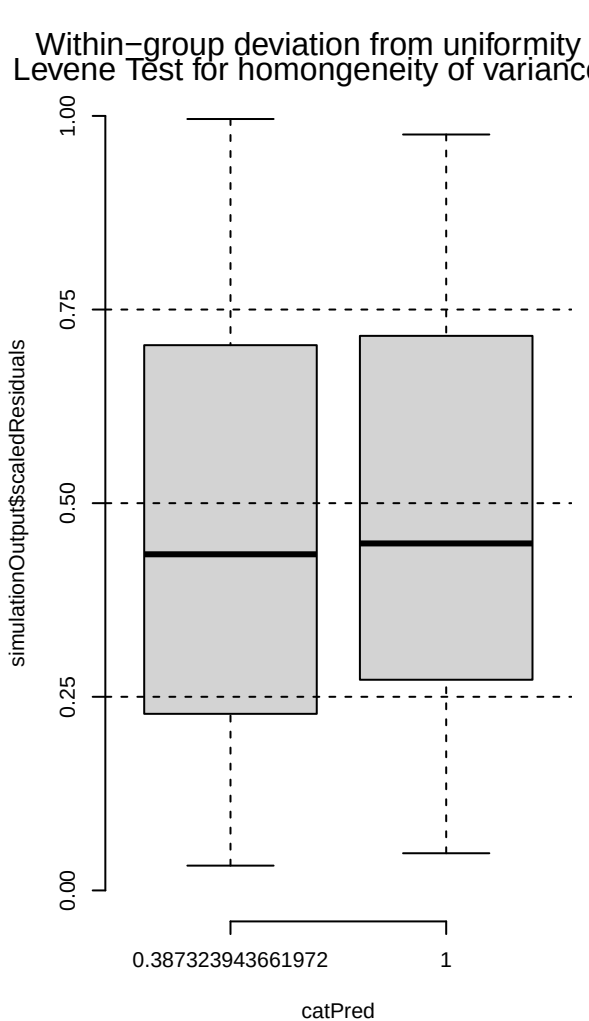


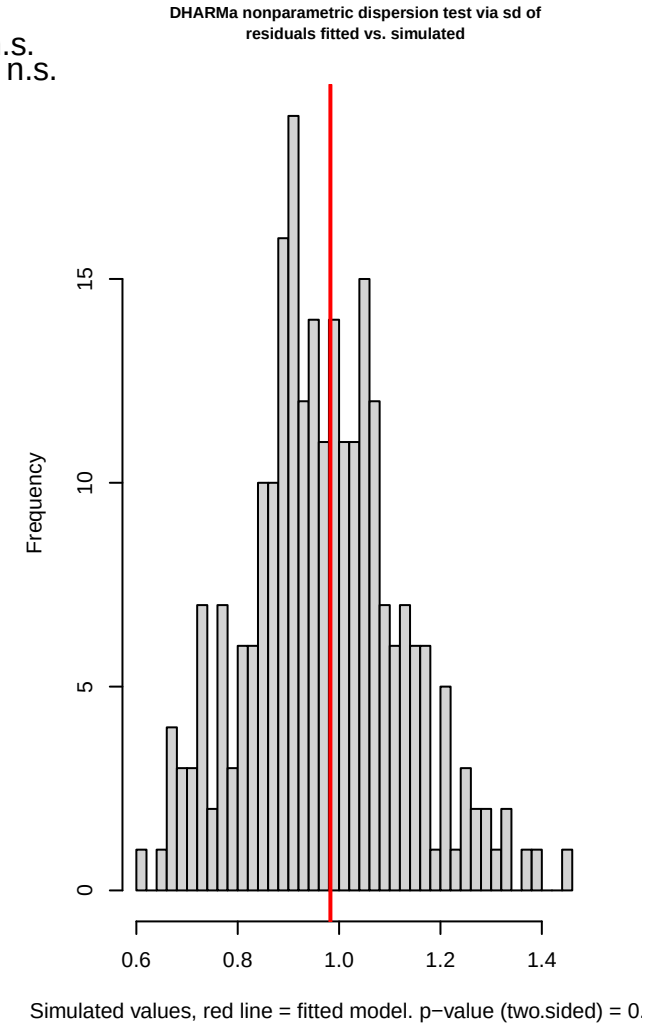




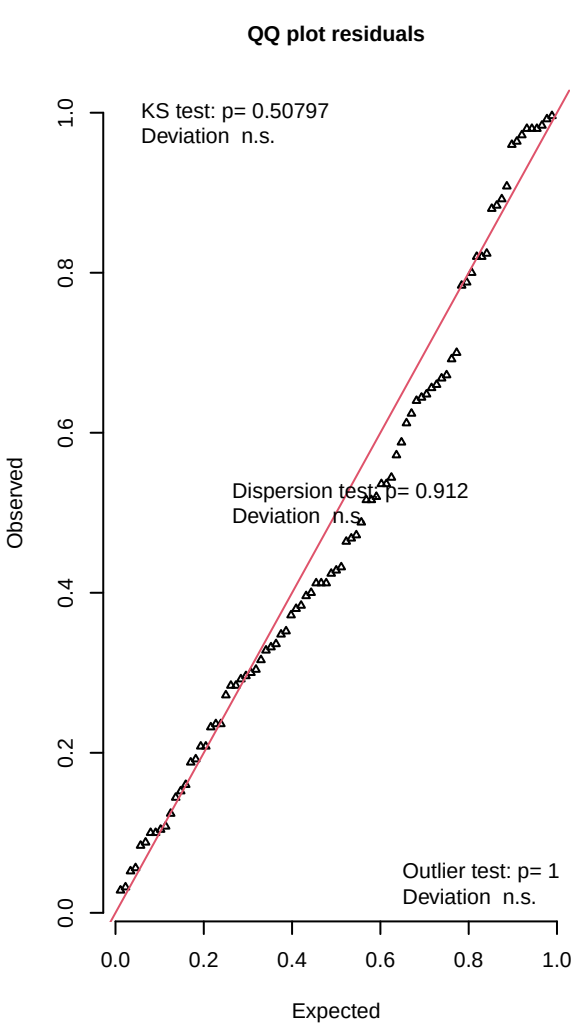
qEt ~ intercept + fish1

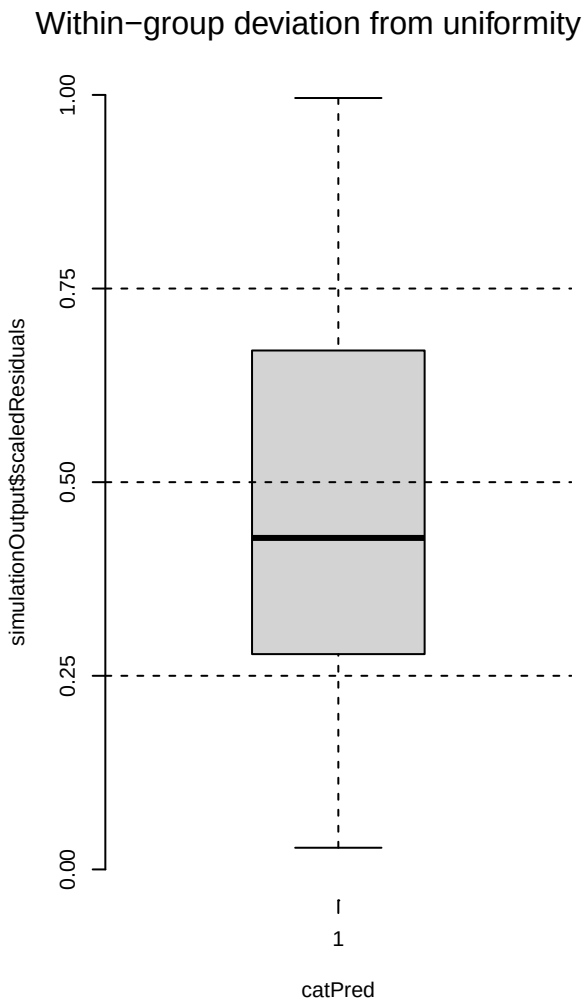


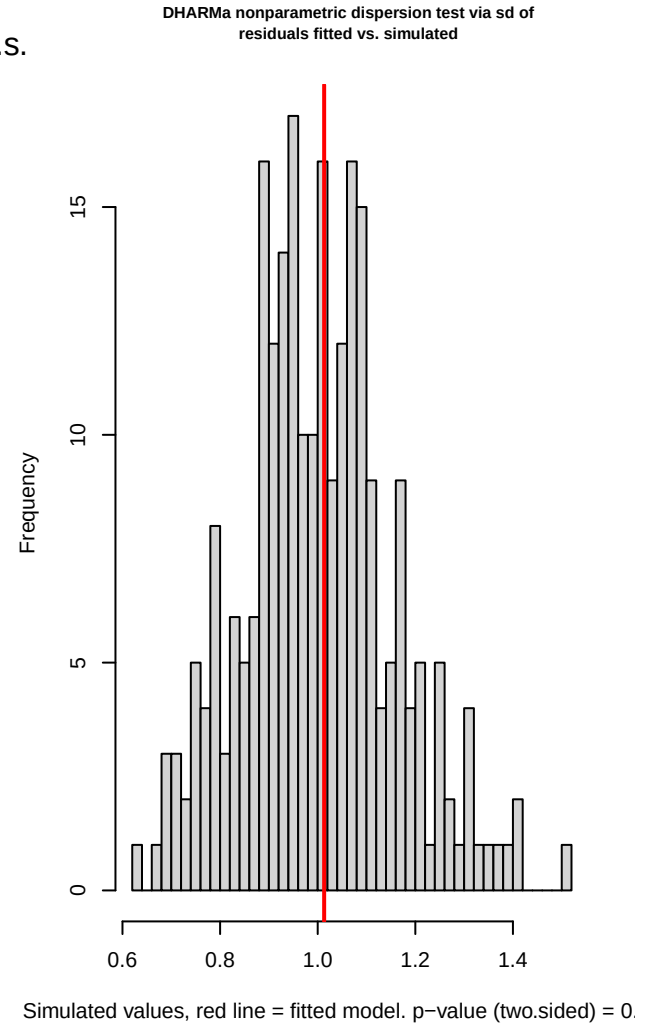




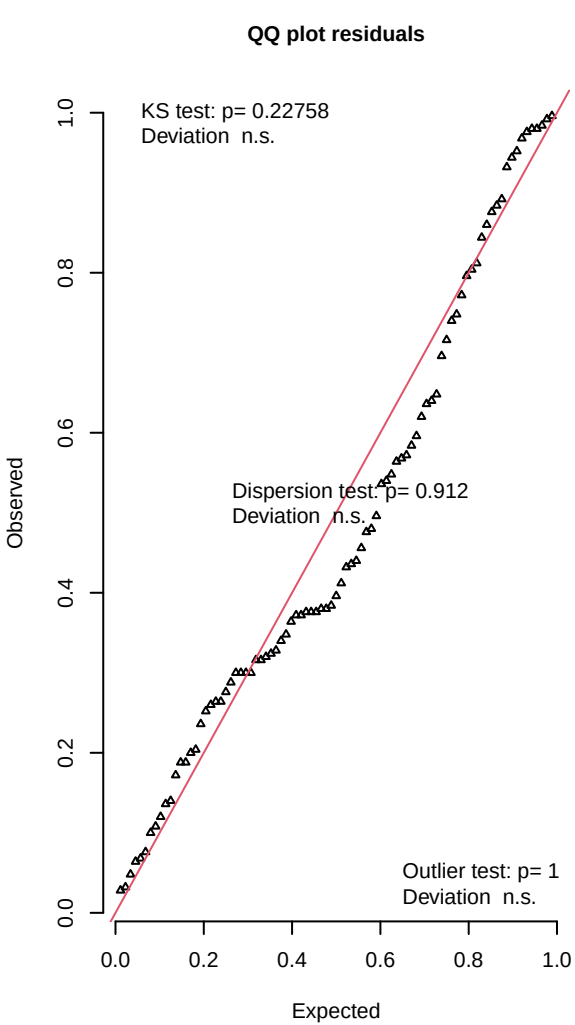
qEt ~ intercept

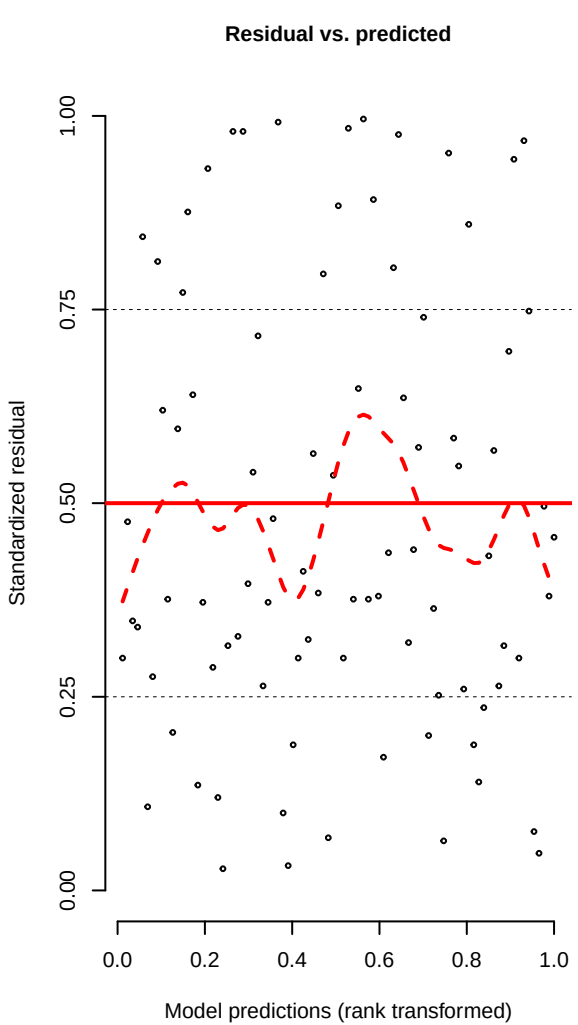


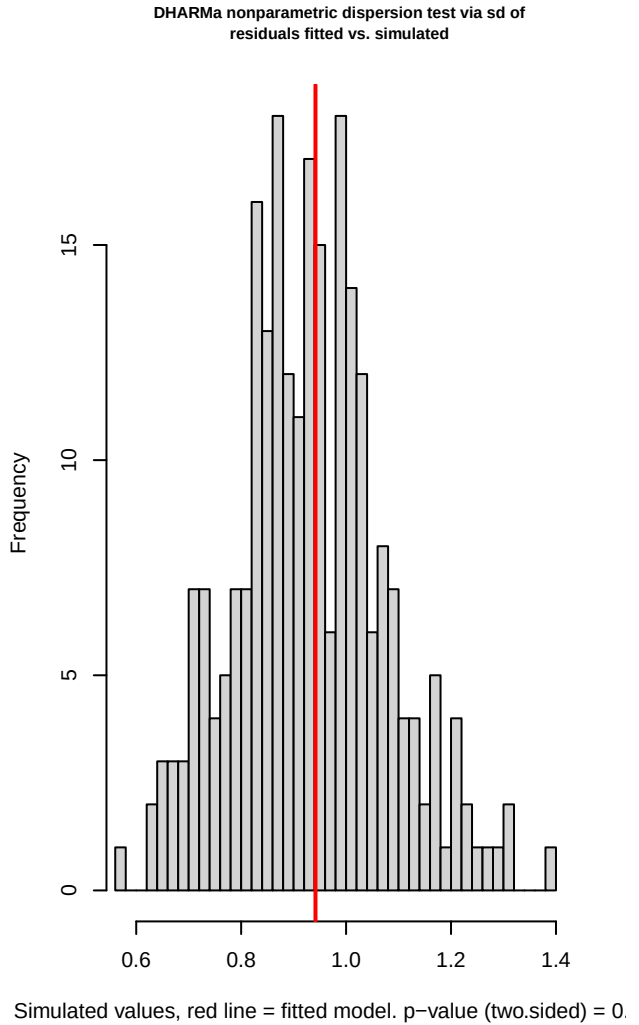




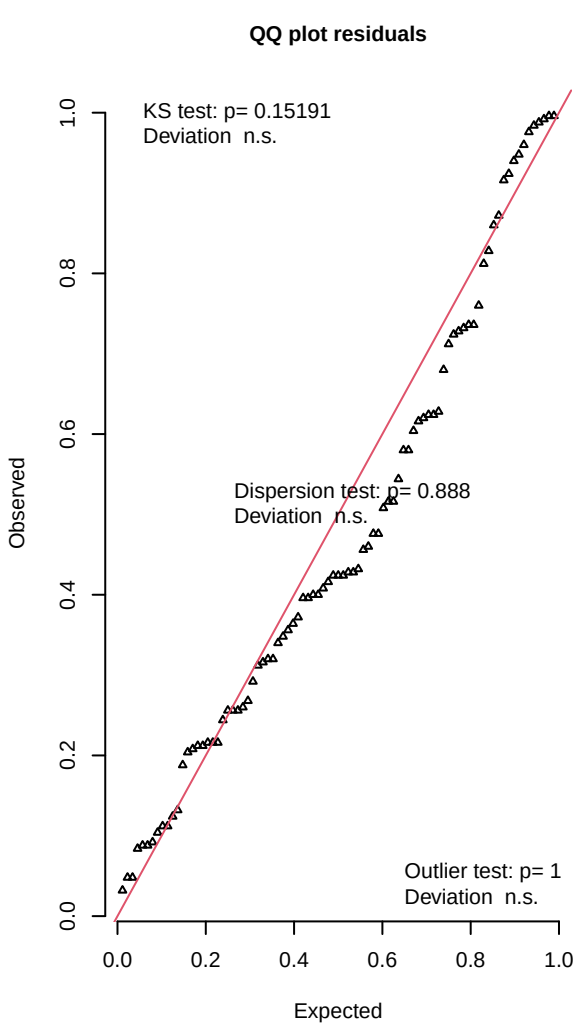
qEt ~ intercept + area_std + fish1 + time_convert_std

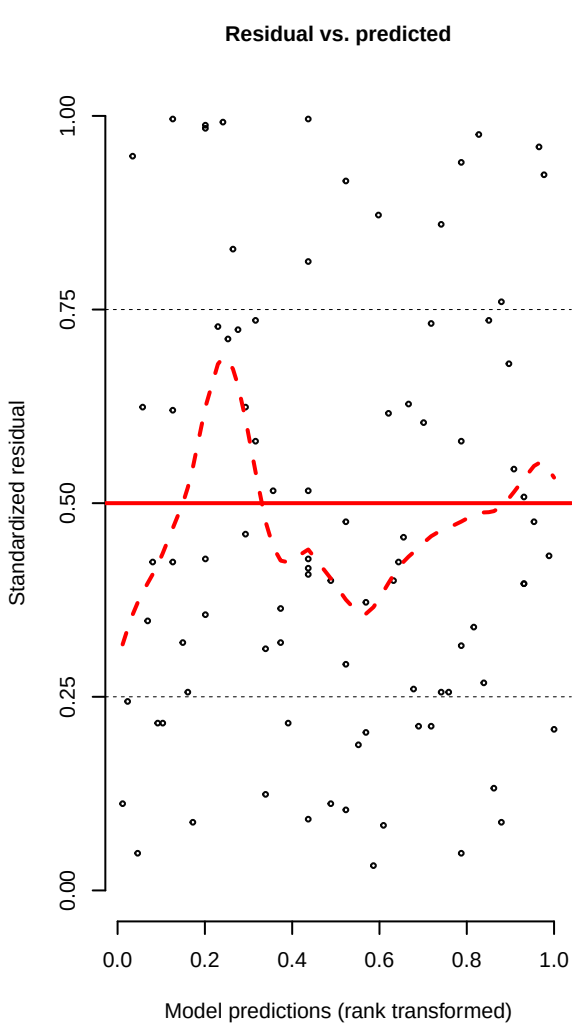


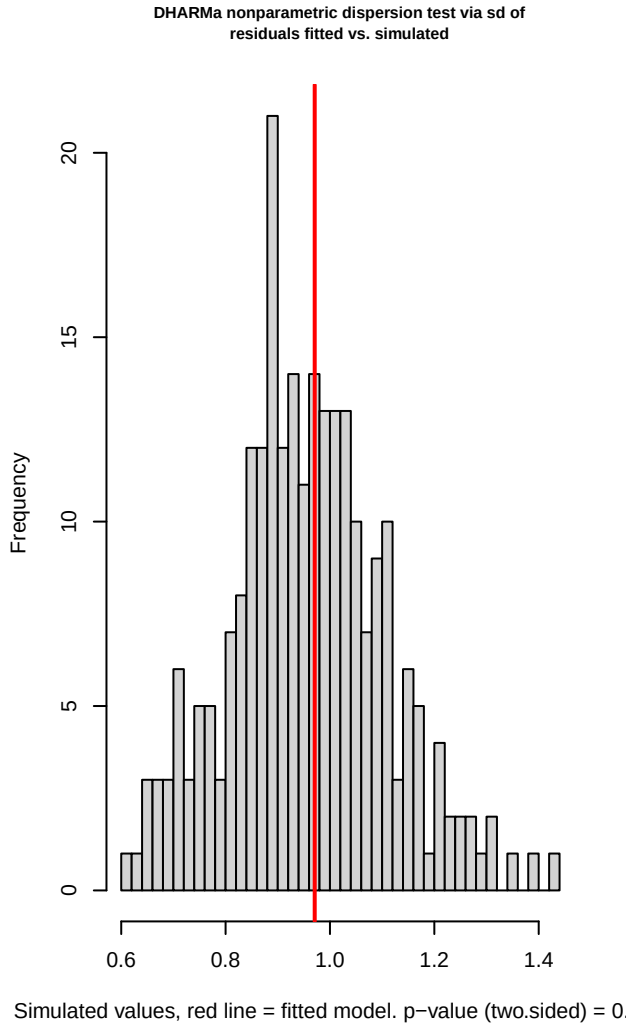




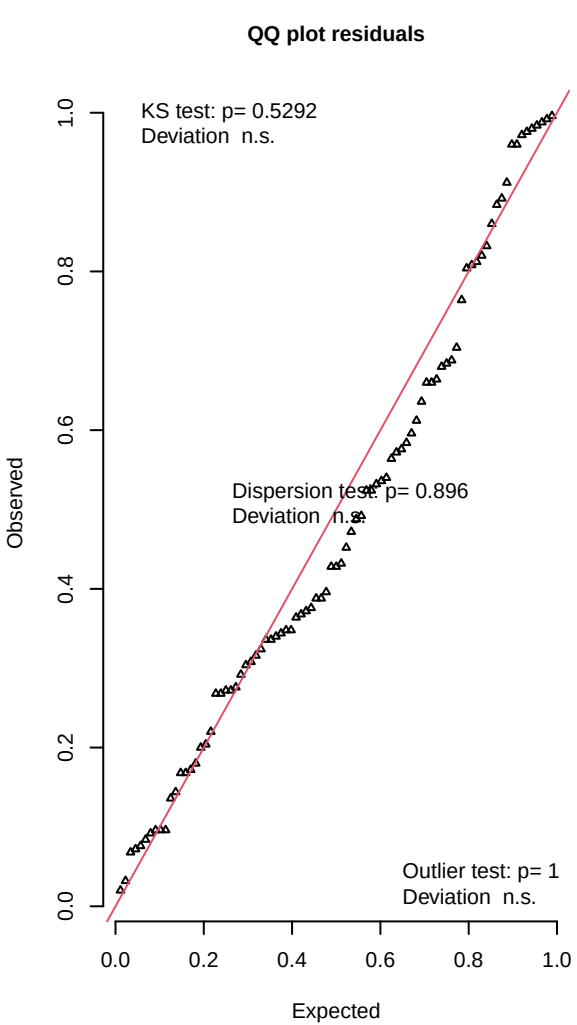
qEt ~ intercept + fish1 + time_convert_std

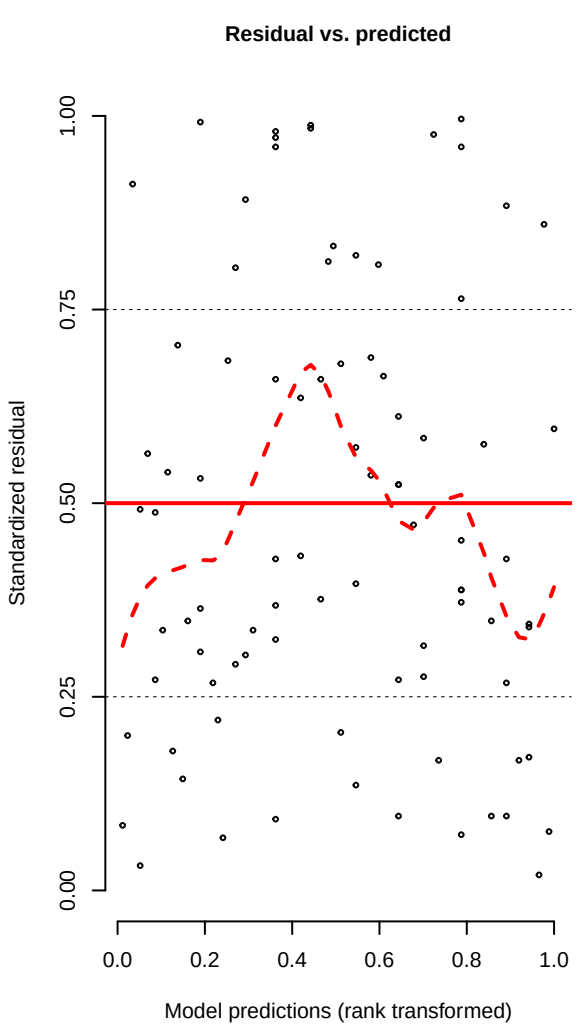


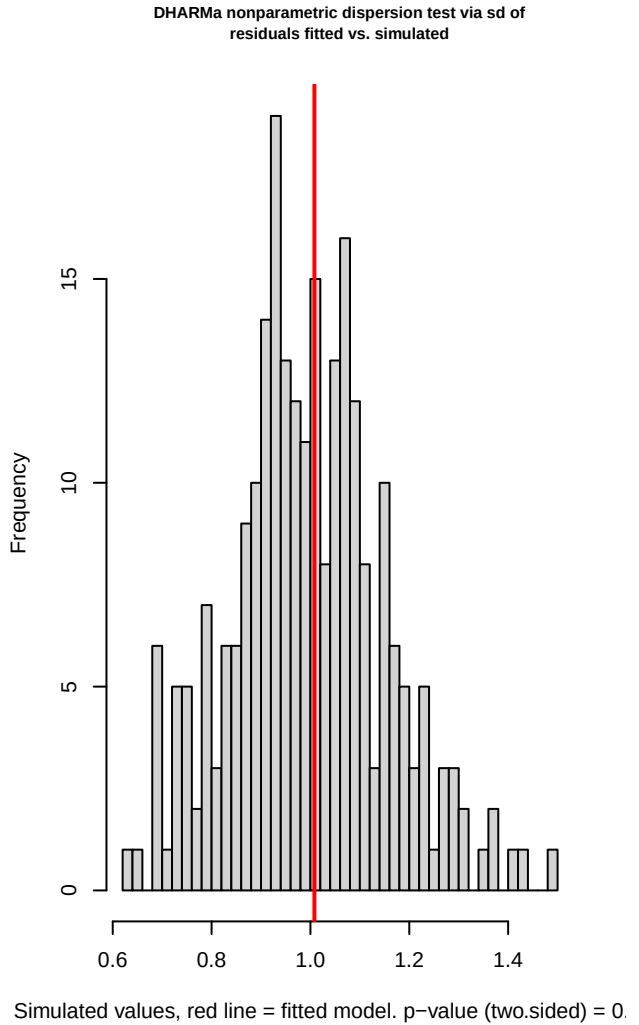




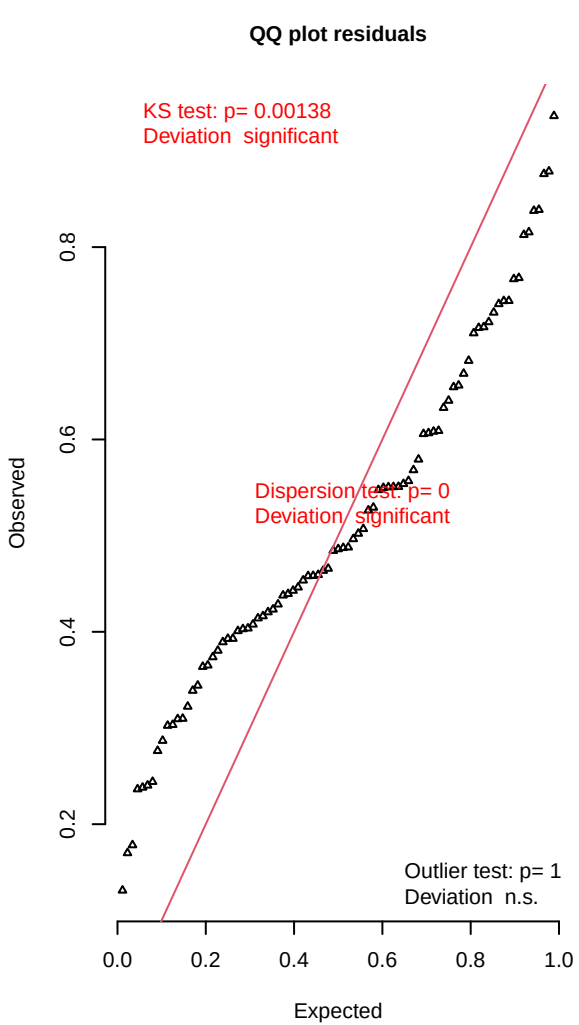
qEt ~ intercept + time_convert_std

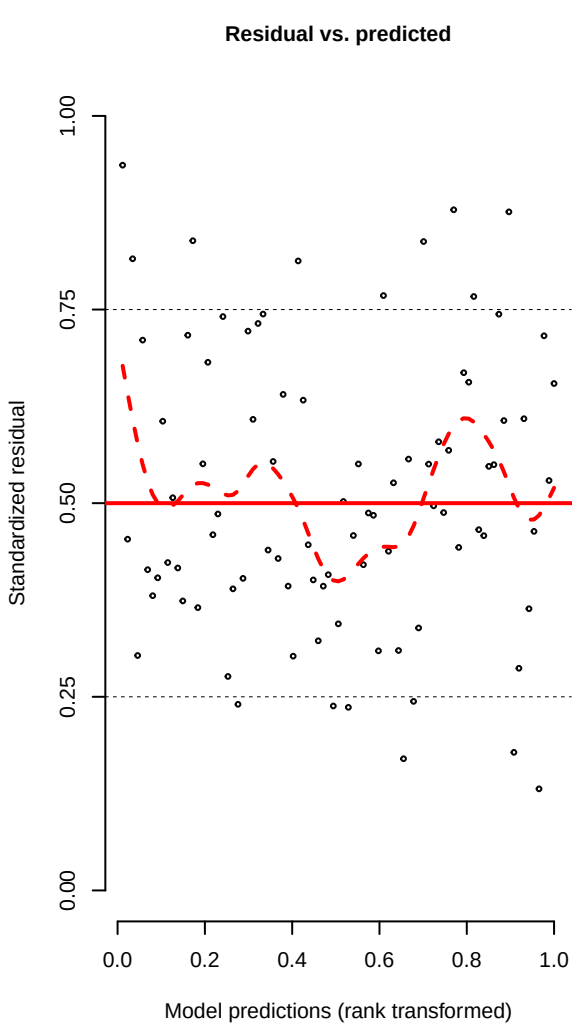


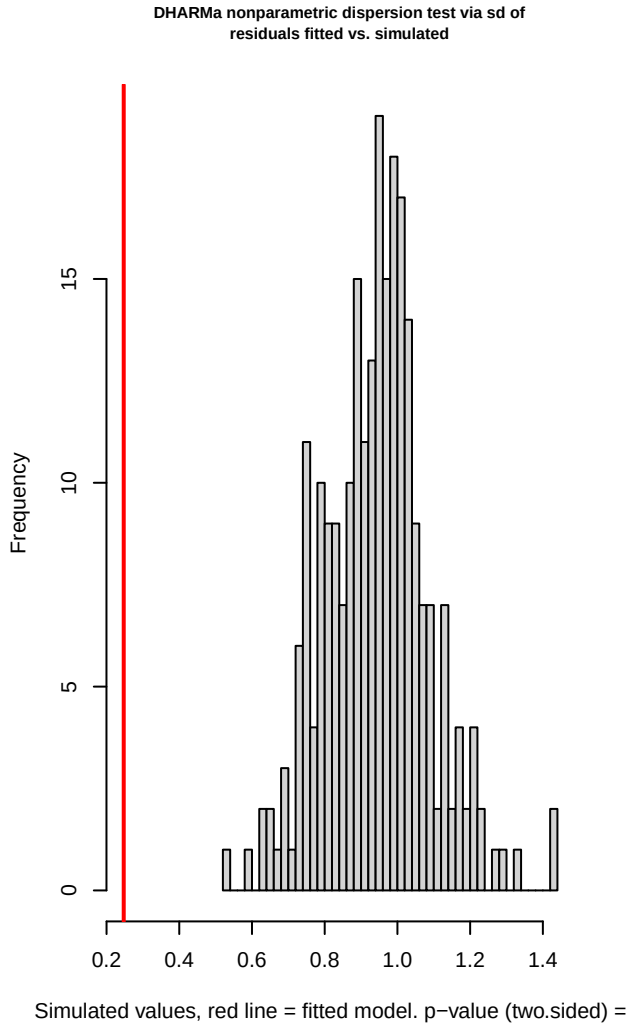




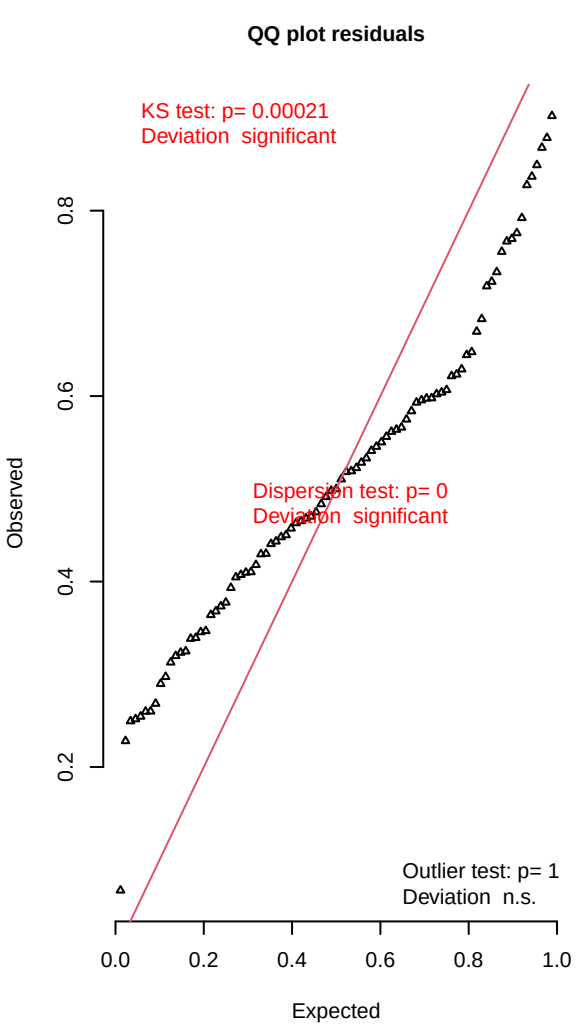
nsp ~ intercept + area_std

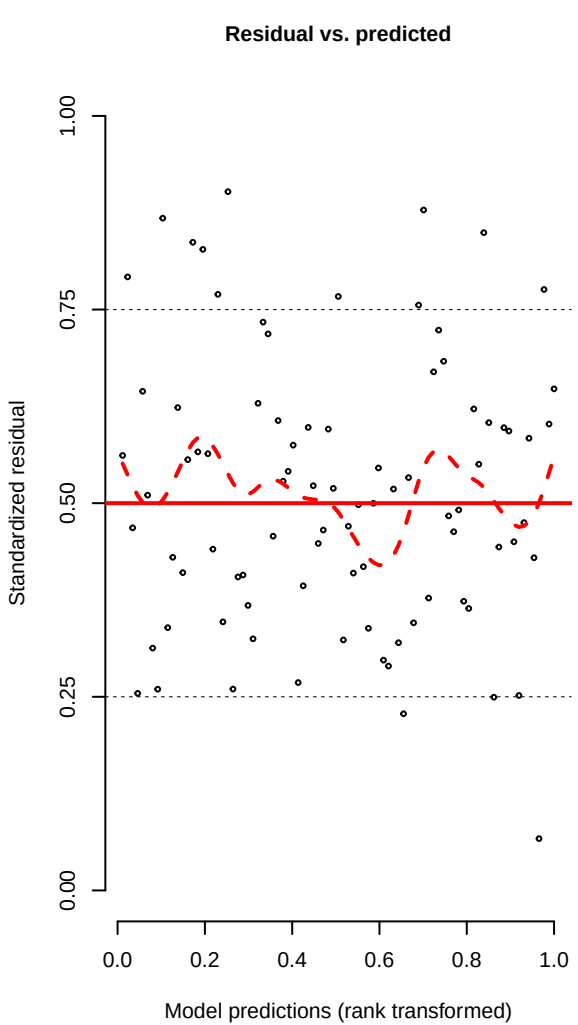


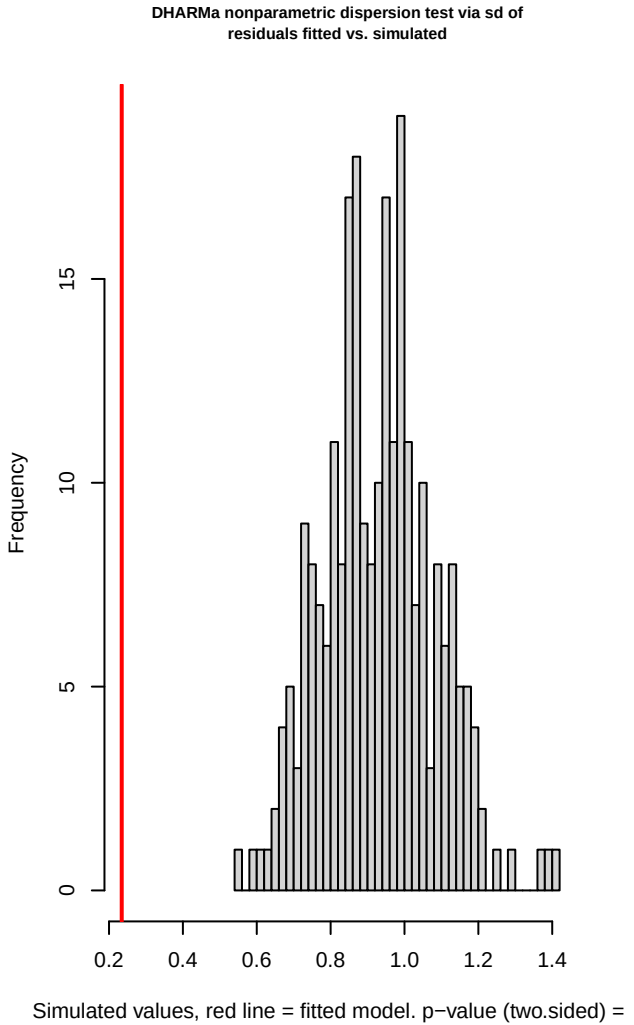




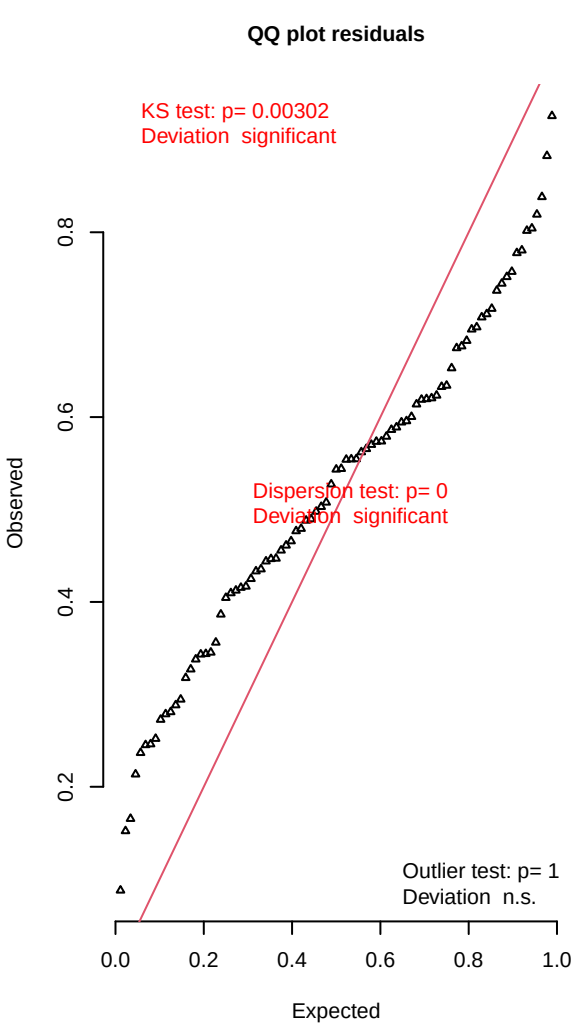
nsp ~ intercept + area_std + temp_std

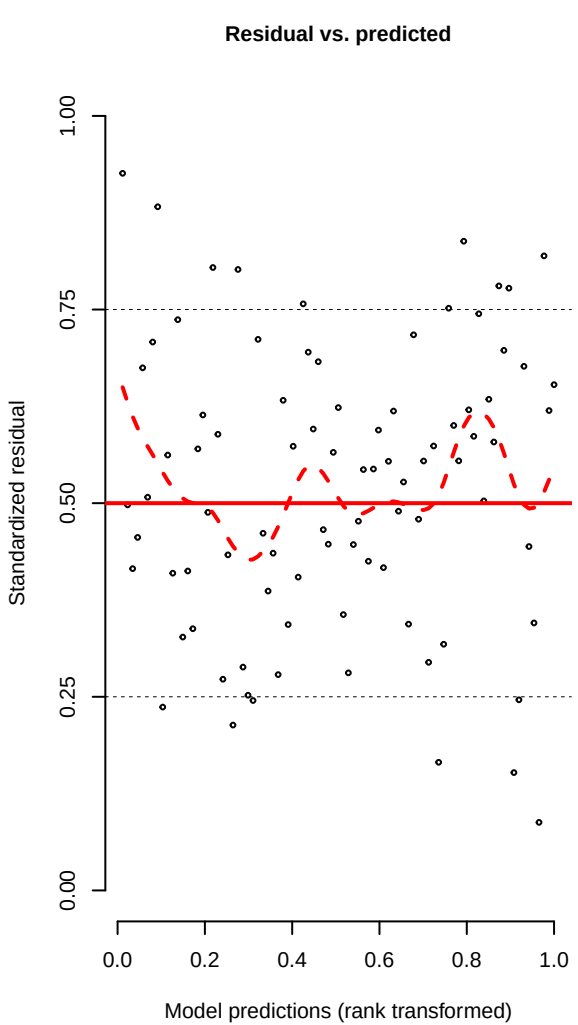


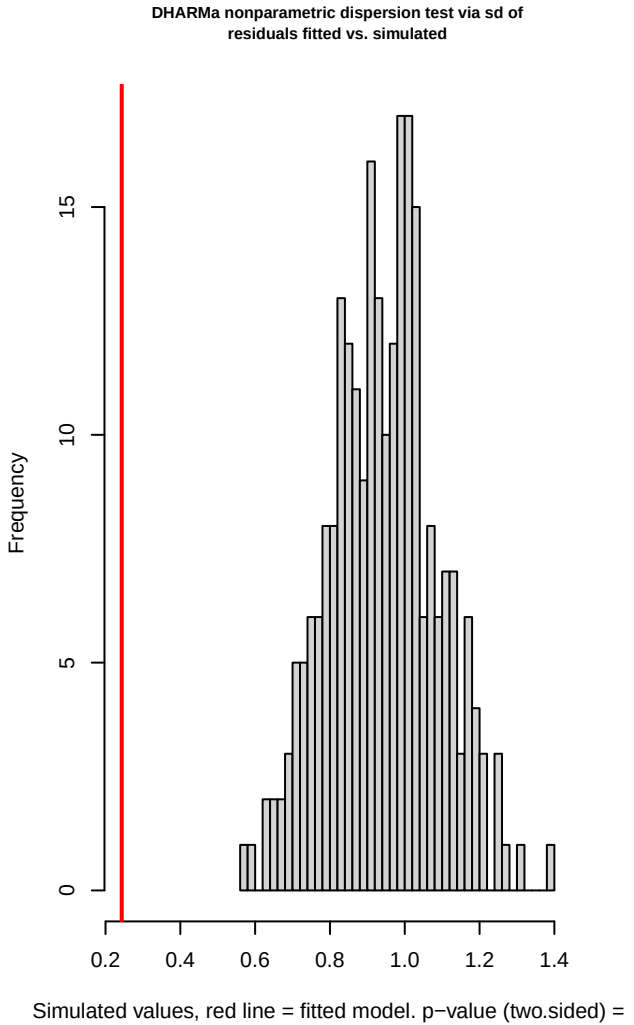




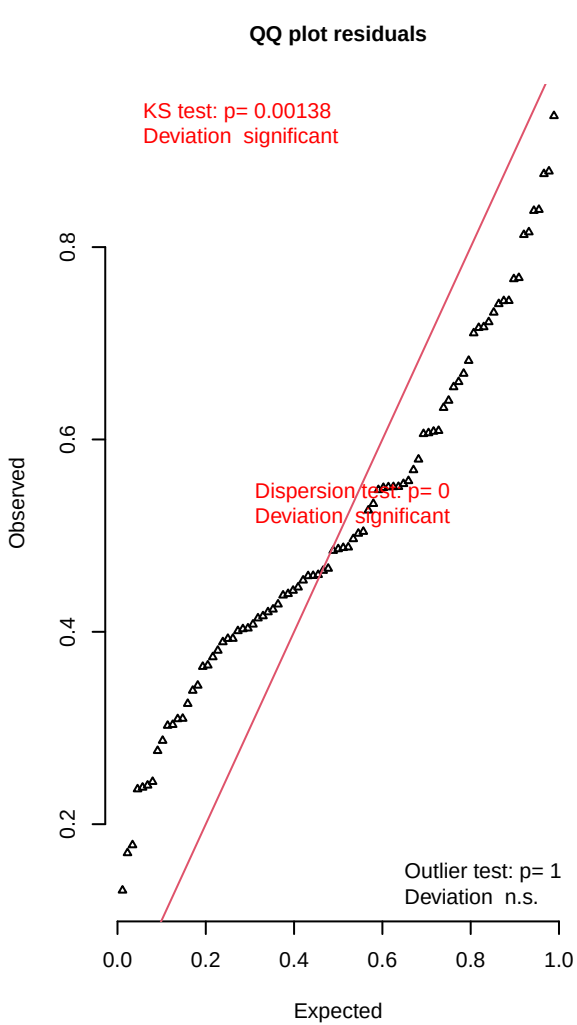
nsp ~ intercept + area_std + fish1

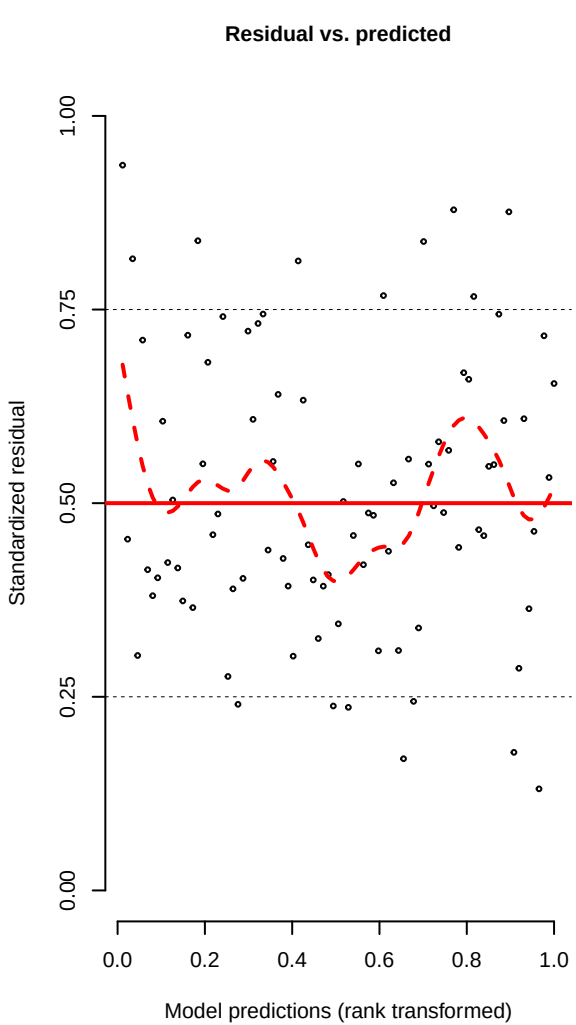


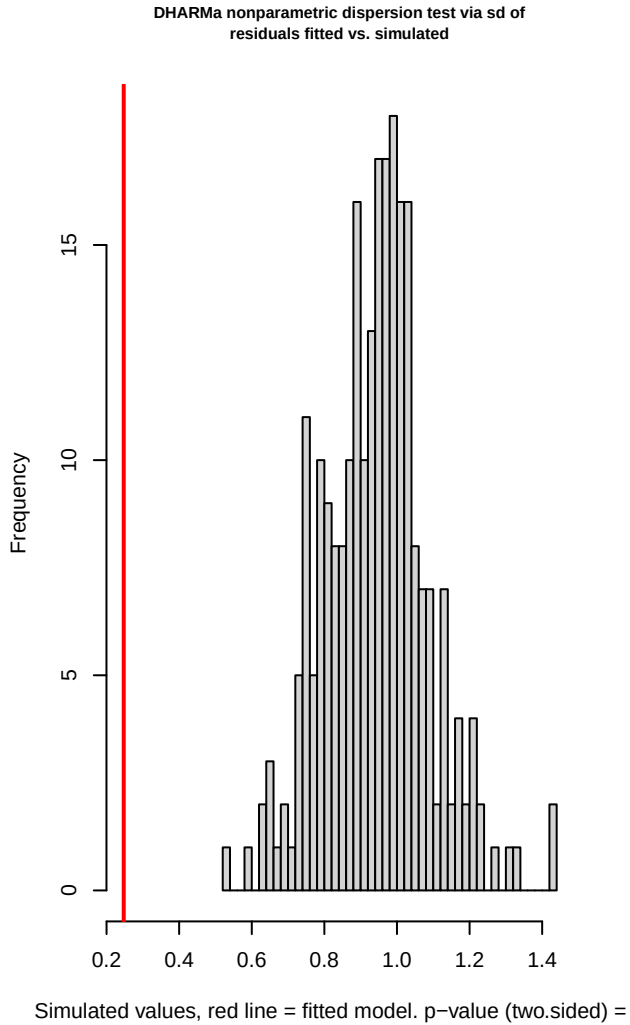


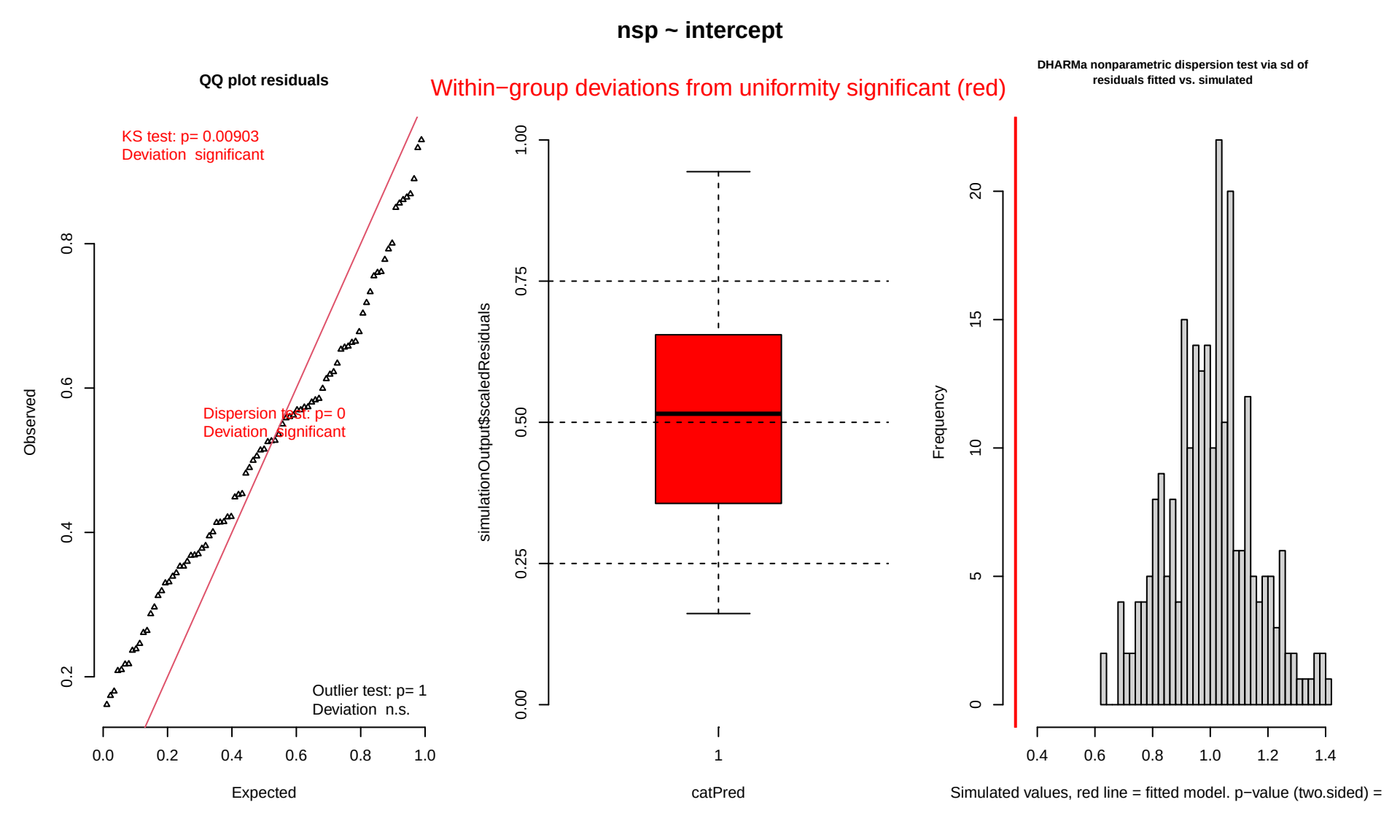


nsp ~ intercept + area_std + time_convert_std

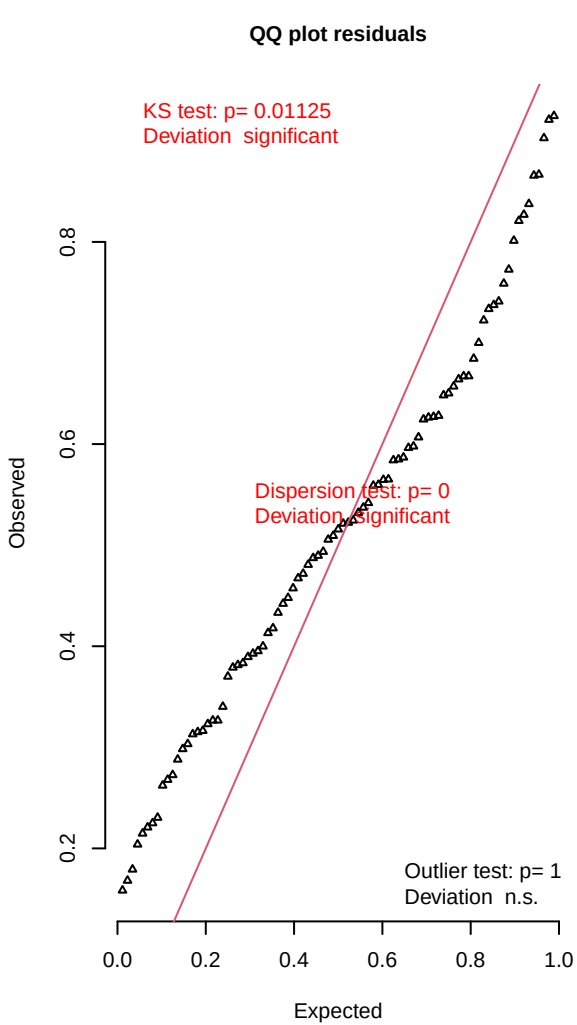


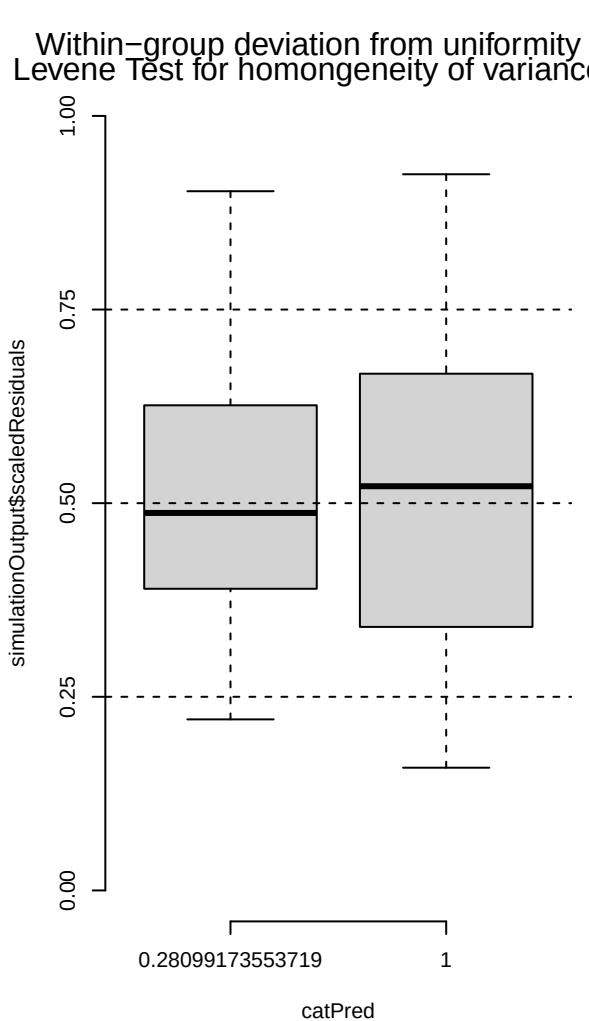


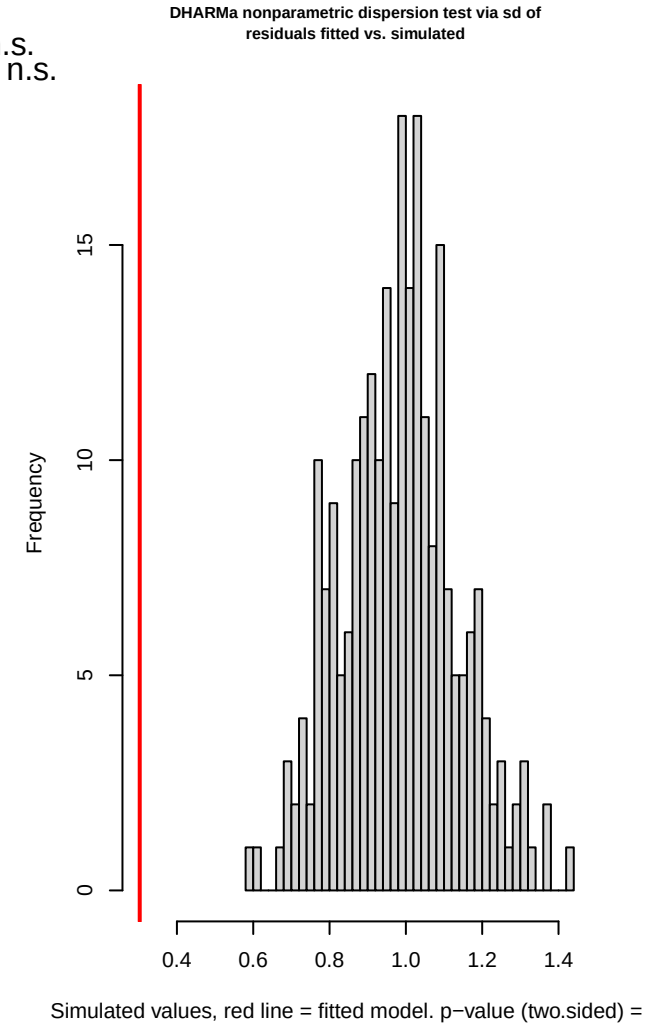



nsp ~ intercept
QQ plot residuals
KS test: p= 0.00903
Deviation significant
Dispersion test: p= 0
Deviation significant
Outlier test: p= 1
Deviation n.s.
Observed
Expected
0.0
0.2
0.4
0.6
0.8
1.0
Within−group deviations from uniformity significant (red)
simulationOutput$scaledResiduals
catPred
0.00
0.25
0.50
0.75
1.00
1
DHARMa nonparametric dispersion test via sd of residuals fitted vs. simulated
Frequency
0
5
10
15
20
0.4
0.6
0.8
1.0
1.2
1.4
Simulated values, red line = fitted model. p−value (two.sided) =

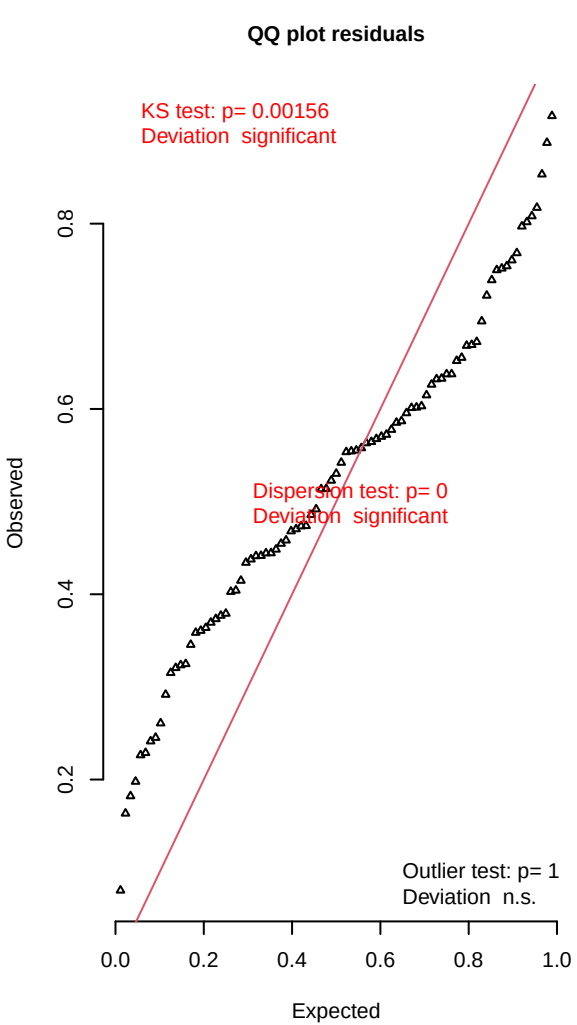
nsp ~ intercept + fish1

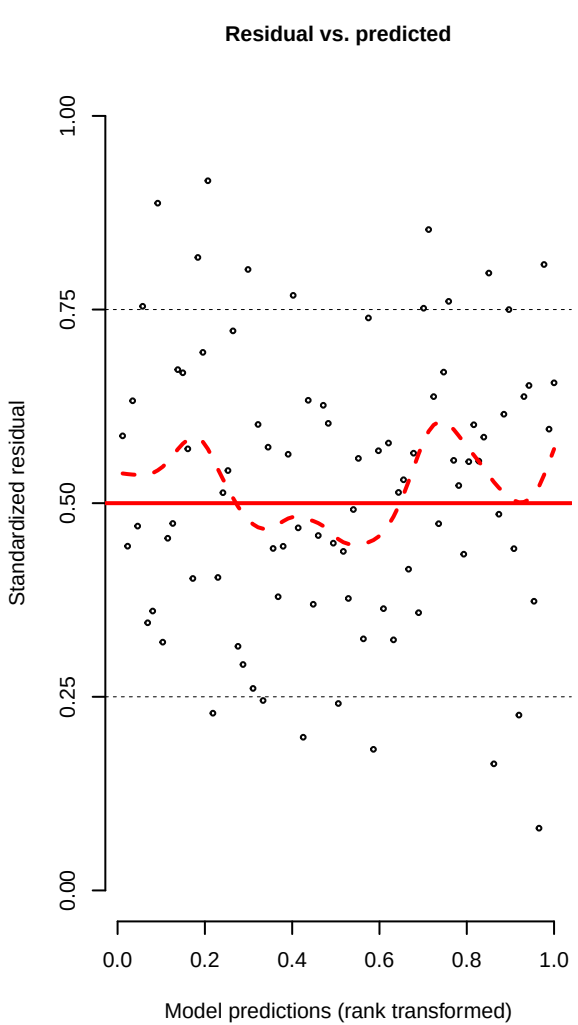


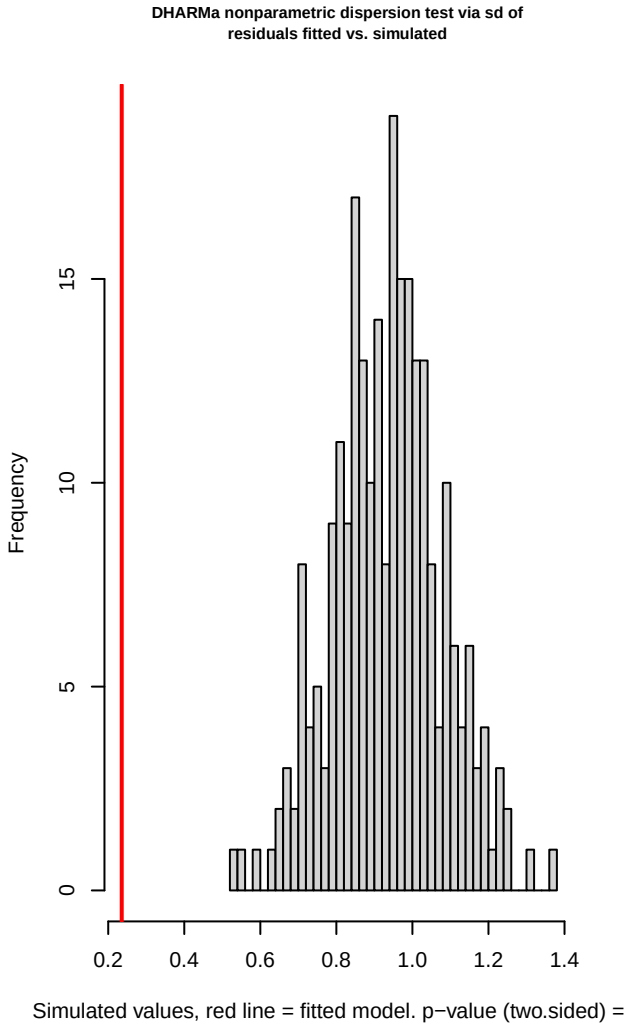




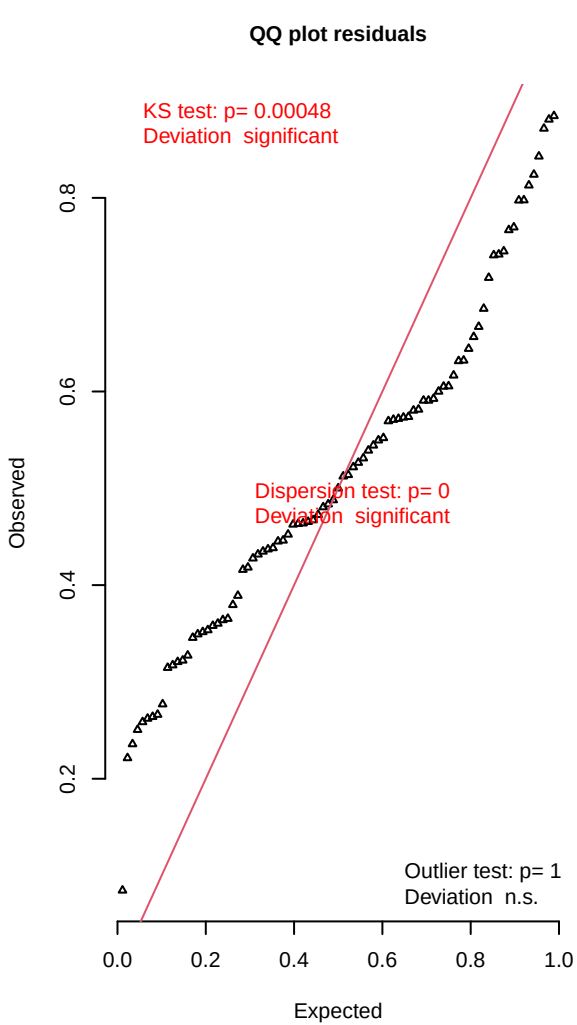
nsp ~ intercept + area_std + fish1 + temp_std

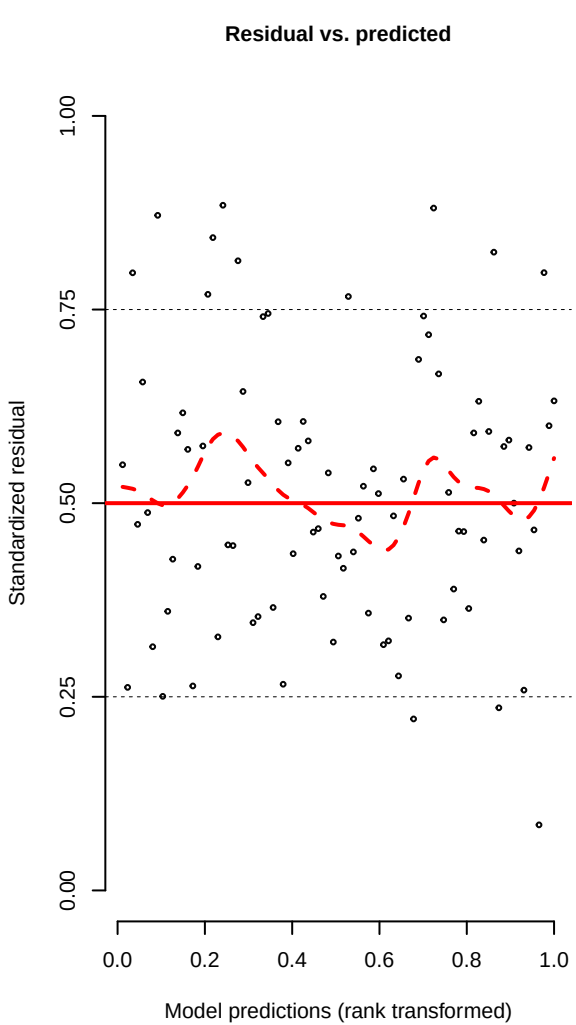


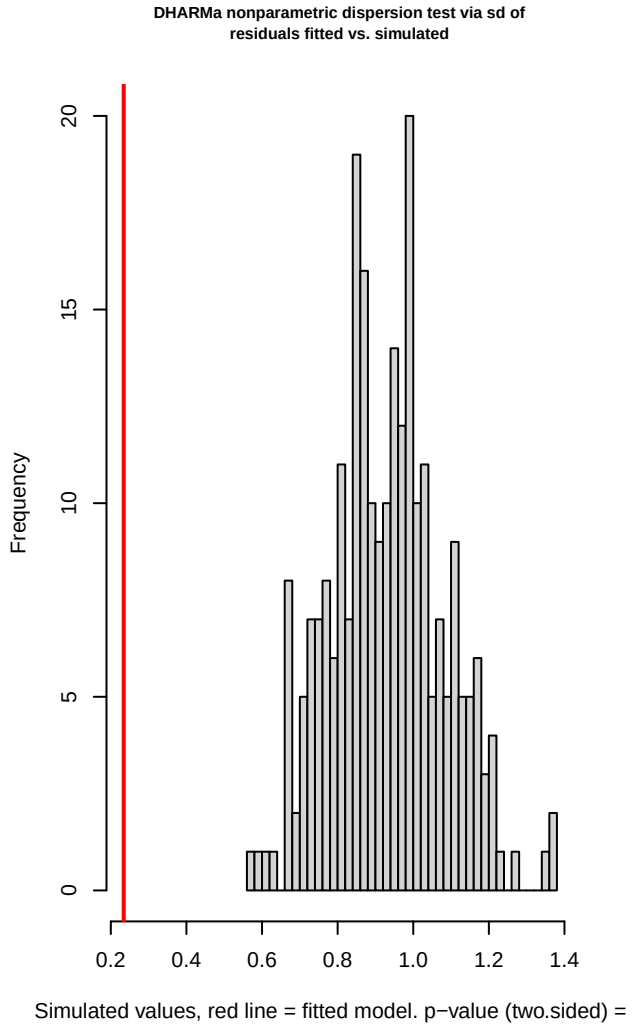


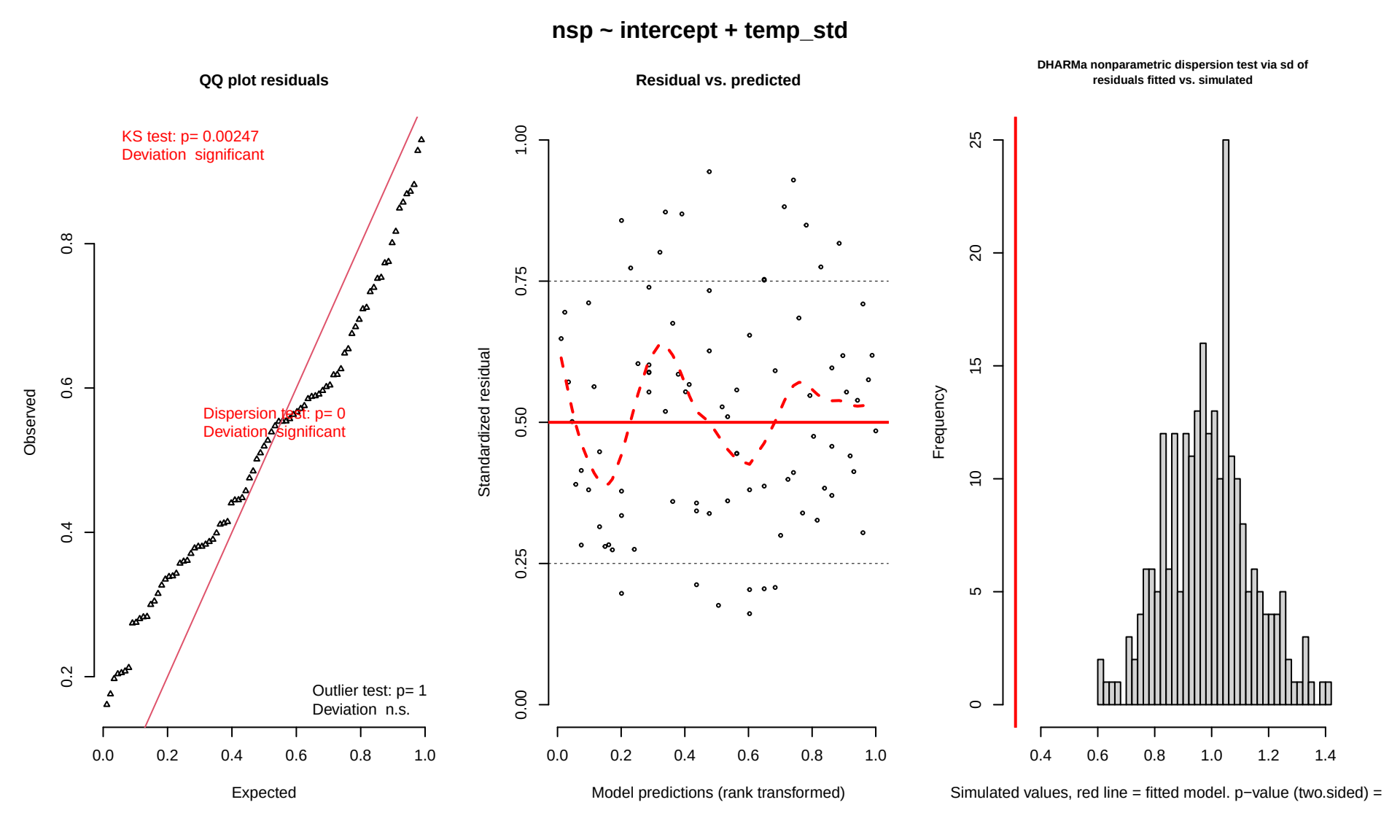


nsp ~ intercept + area_std + temp_std + time_convert_std

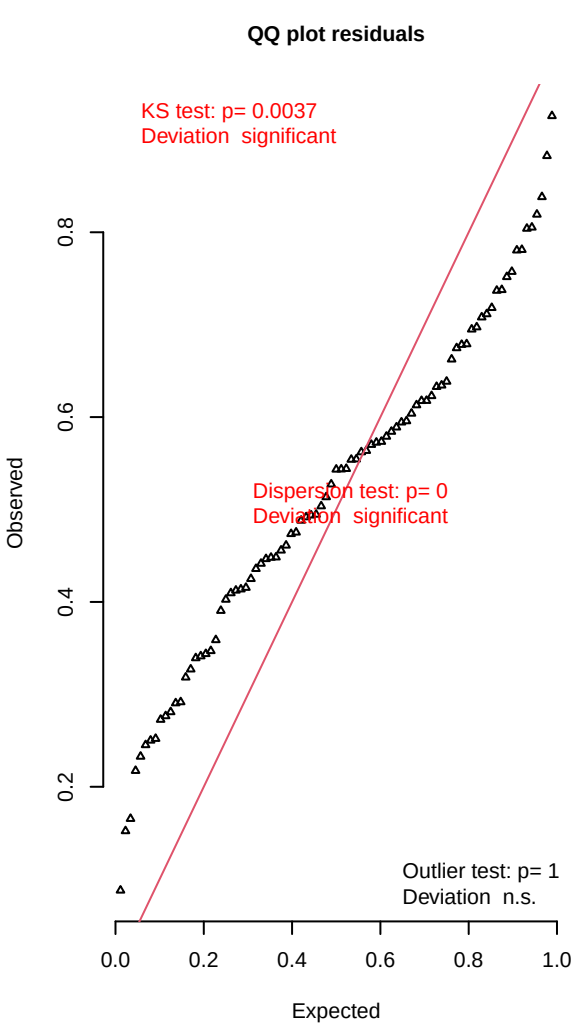


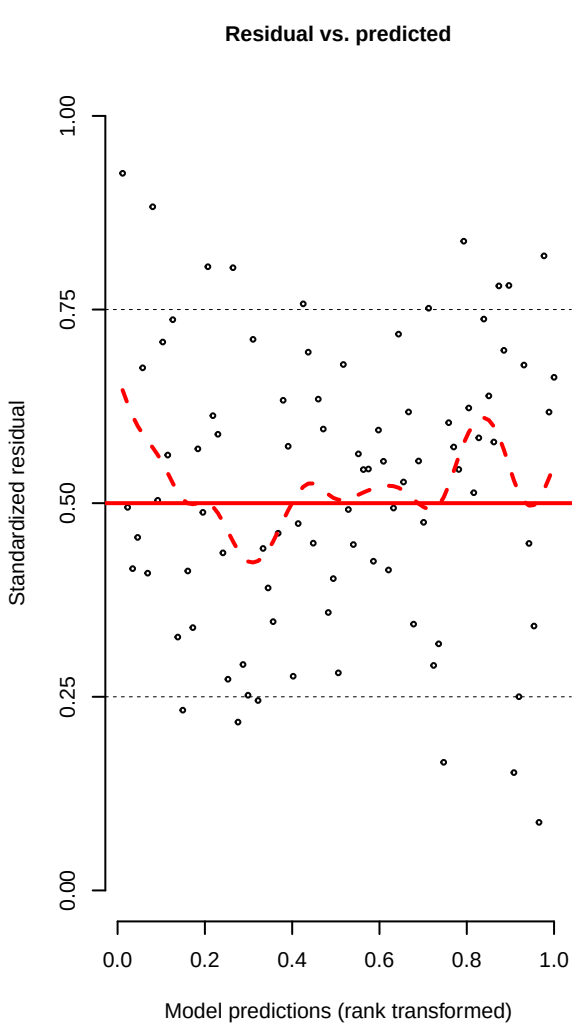


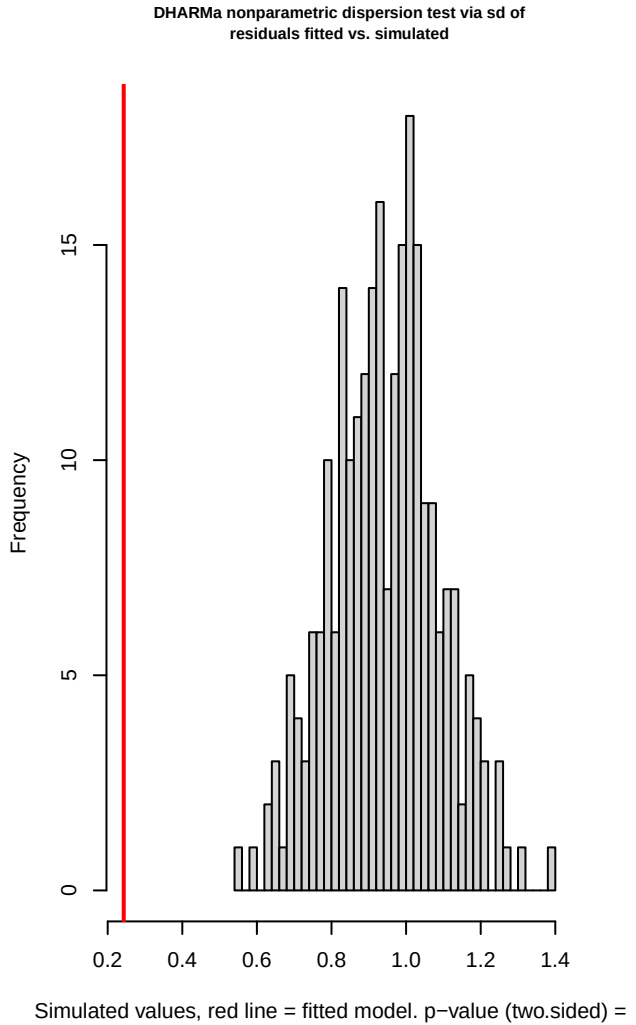


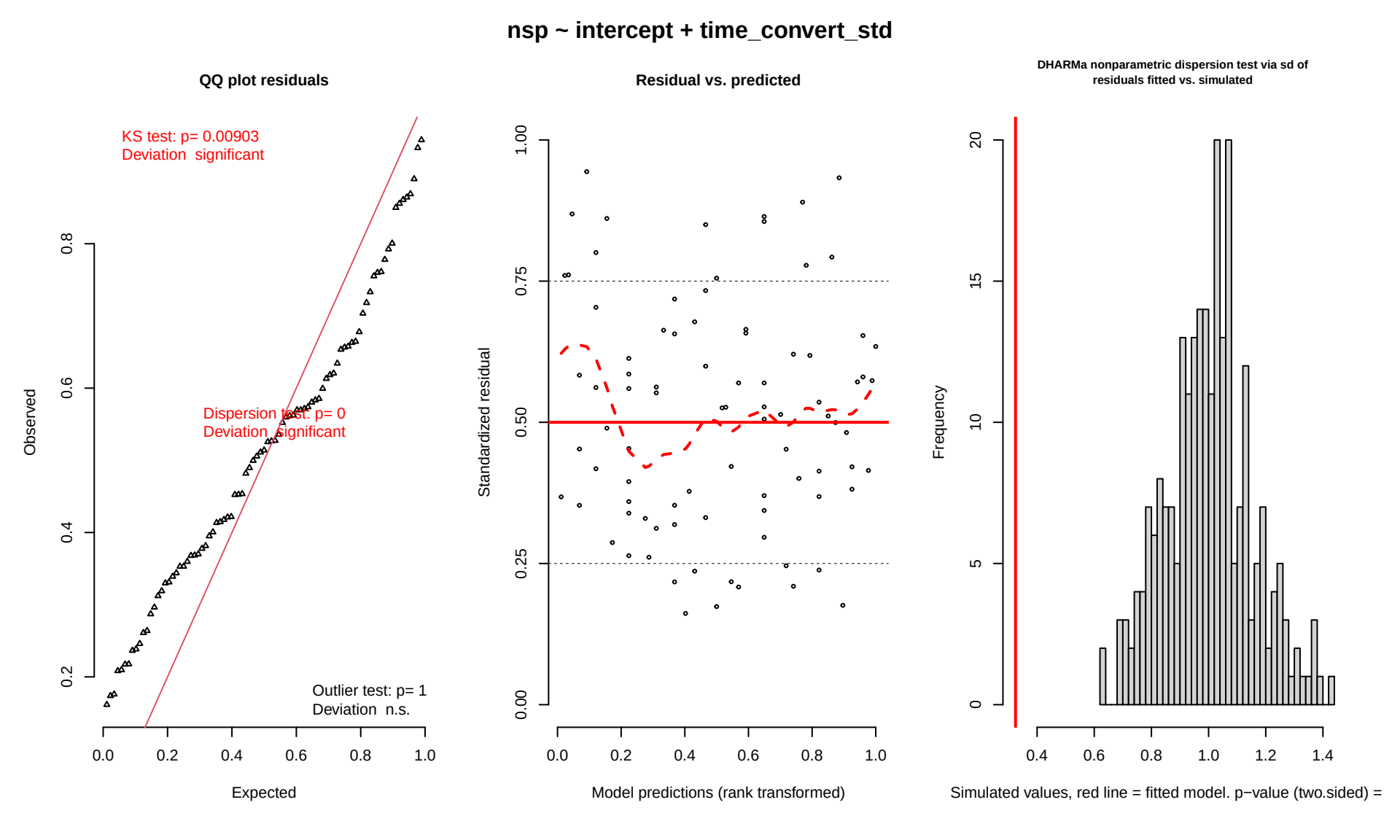

nsp ~ intercept + temp_std
QQ plot residuals
KS test: p= 0.00247
Deviation significant
Dispersion test: p= 0
Deviation significant
Outlier test: p= 1
Deviation n.s.
Observed
Expected
0.0
0.2
0.4
0.6
0.8
1.0
Residual vs. predicted
Standardized residual
Model predictions (rank transformed)
0.00
0.25
0.50
0.75
1.00
DHARMa nonparametric dispersion test via sd of residuals fitted vs. simulated
Frequency
Simulated values, red line = fitted model. p−value (two.sided) =
0
5
10
15
20
25
0.4
0.6
0.8
1.0
1.2
1.4

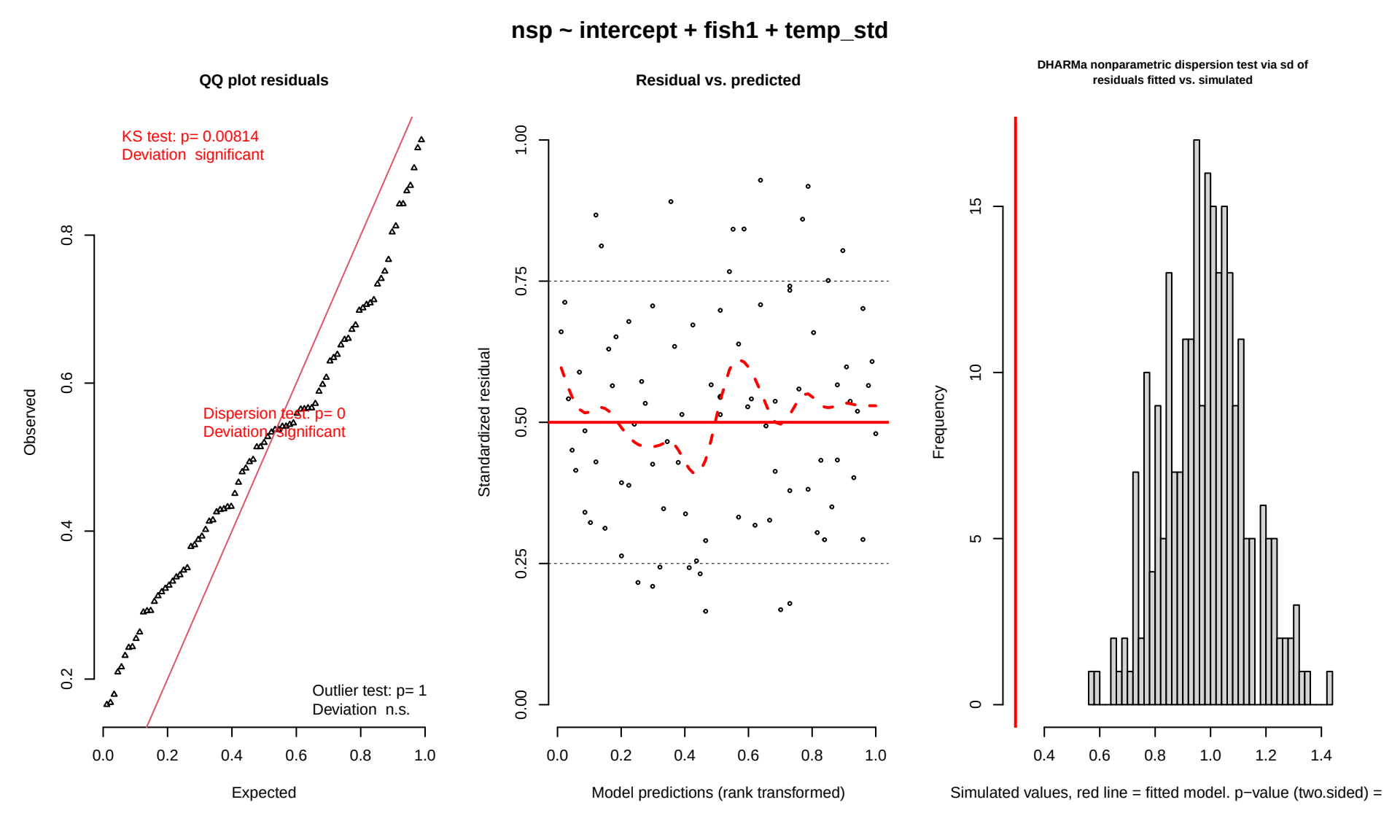
nsp ~ intercept + area_std + fish1 + time_convert_std



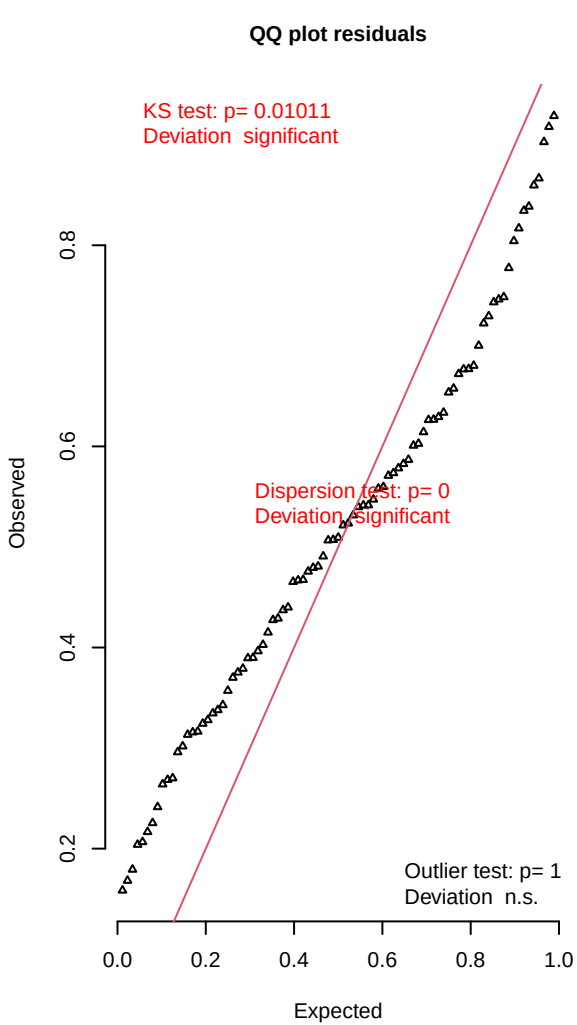


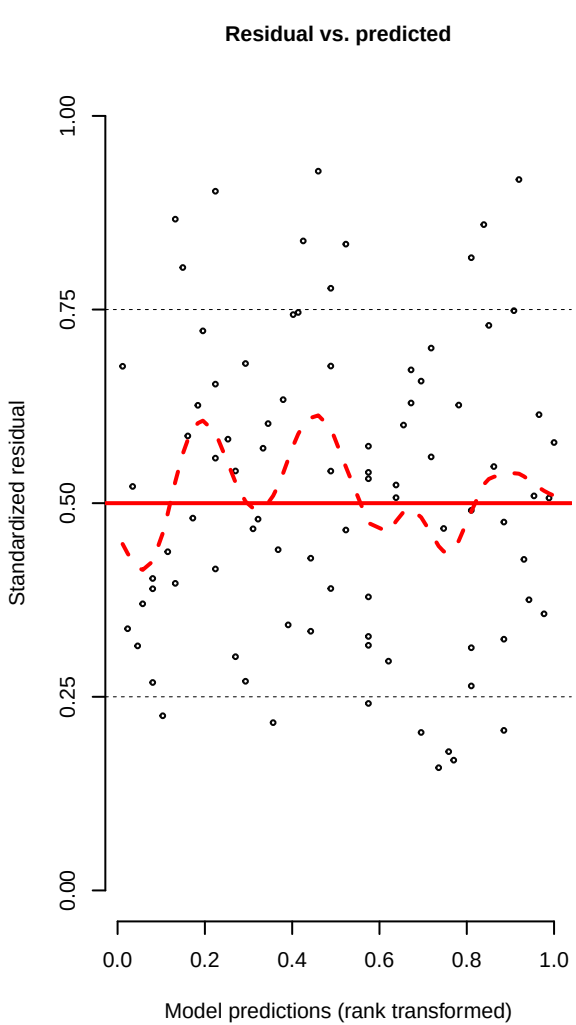


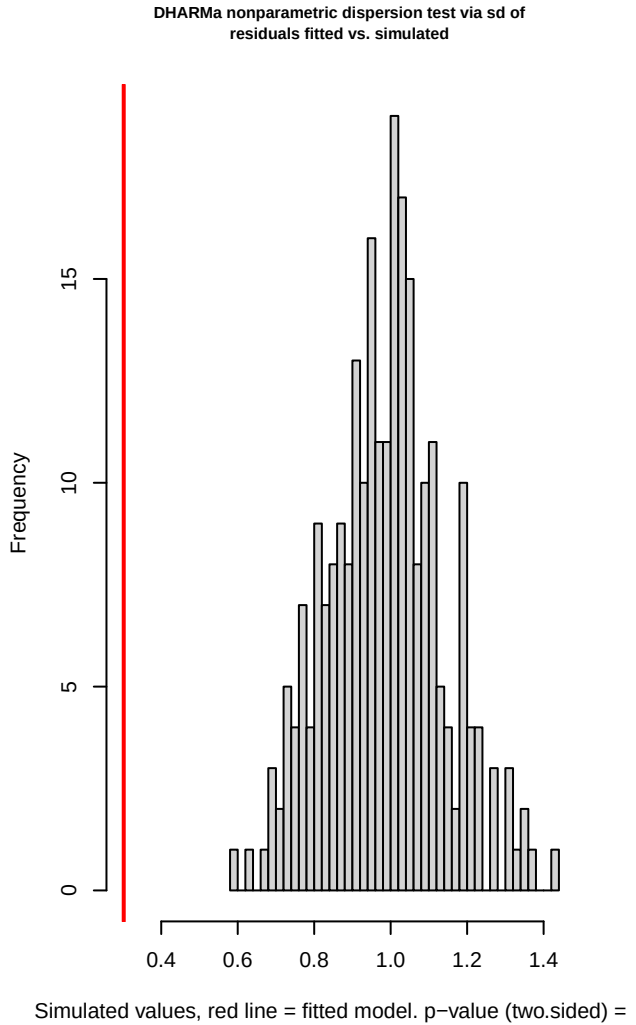

nsp ~ intercept + time_convert_std
QQ plot residuals
KS test: p= 0.00903
Deviation significant
Dispersion test: p= 0
Deviation significant
Outlier test: p= 1
Deviation n.s.
Observed
Expected
0.0
0.2
0.4
0.6
0.8
1.0
Residual vs. predicted
Standardized residual
Model predictions (rank transformed)
0.00
0.25
0.50
0.75
1.00
DHARMa nonparametric dispersion test via sd of residuals fitted vs. simulated
Frequency
Simulated values, red line = fitted model. p−value (two.sided) =
0
5
10
15
20
0.4
0.6
0.8
1.0
1.2
1.4


nsp ~ intercept + fish1 + temp_std
QQ plot residuals
KS test: p= 0.00814
Deviation significant
Dispersion test: p= 0
Deviation significant
Outlier test: p= 1
Deviation n.s.
Observed
Expected
Residual vs. predicted
Standardized residual
Model predictions (rank transformed)
DHARMa nonparametric dispersion test via sd of residuals fitted vs. simulated
Frequency
Simulated values, red line = fitted model. p−value (two.sided) =

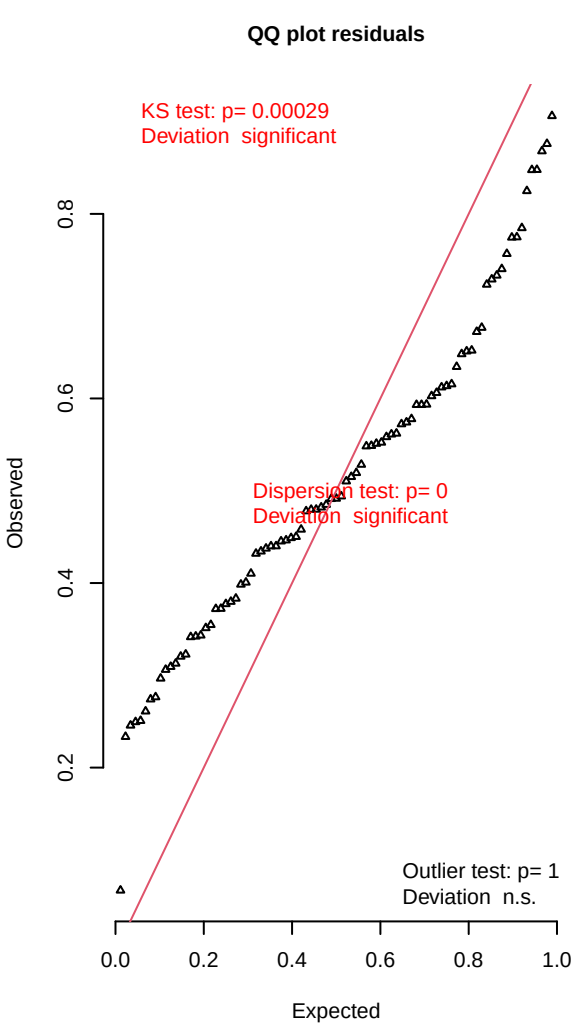
nsp ~ intercept + fish1 + time_convert_std

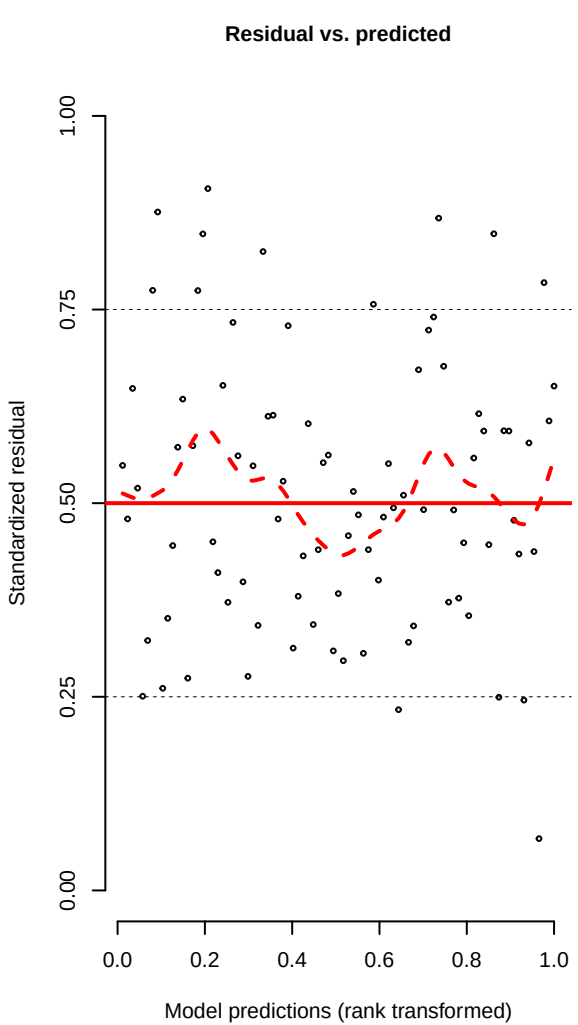


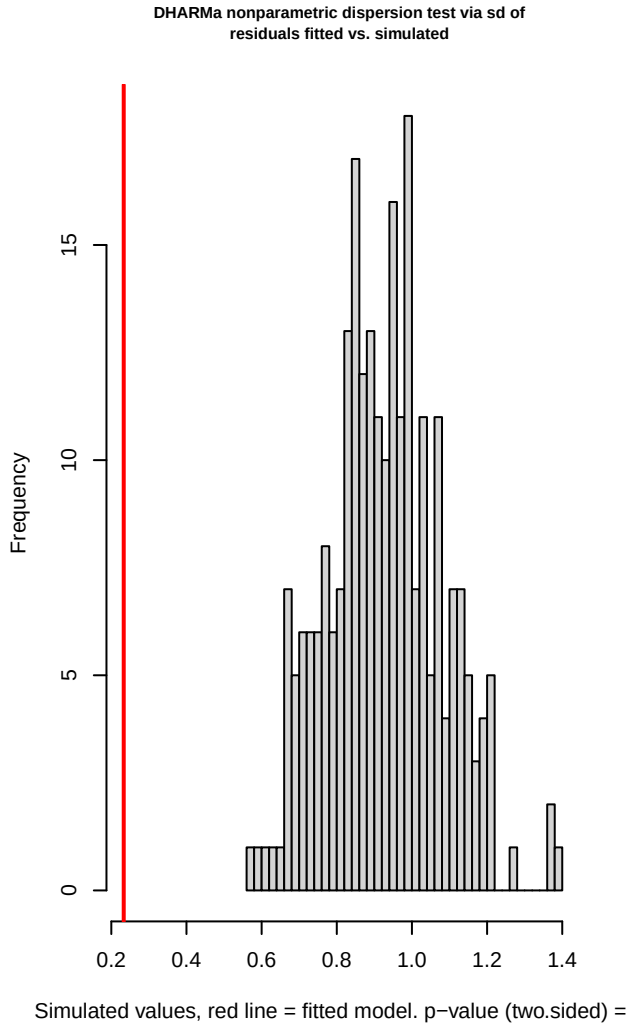


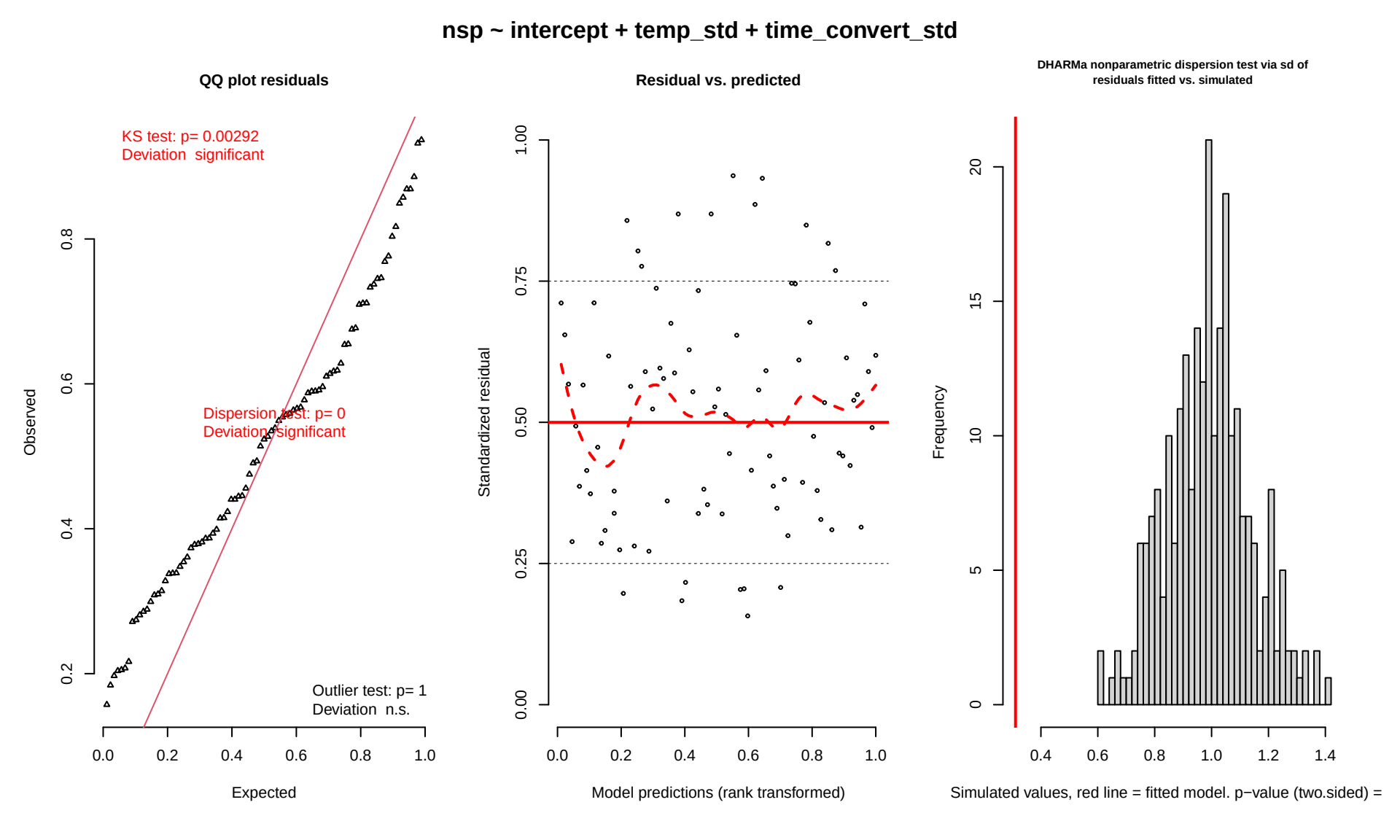


nsp ~ intercept + area_std + fish1 + temp_std + time_convert_std

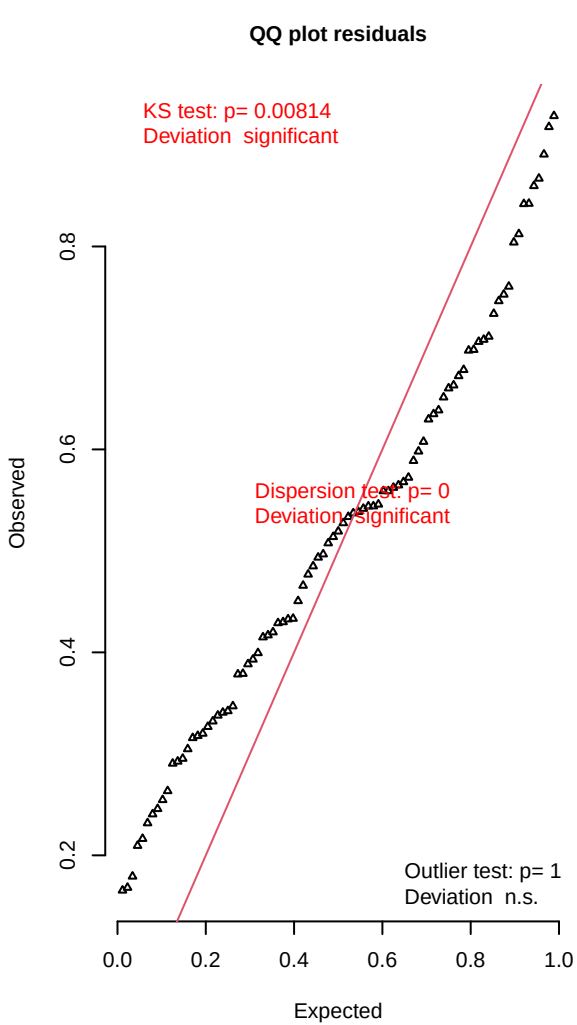


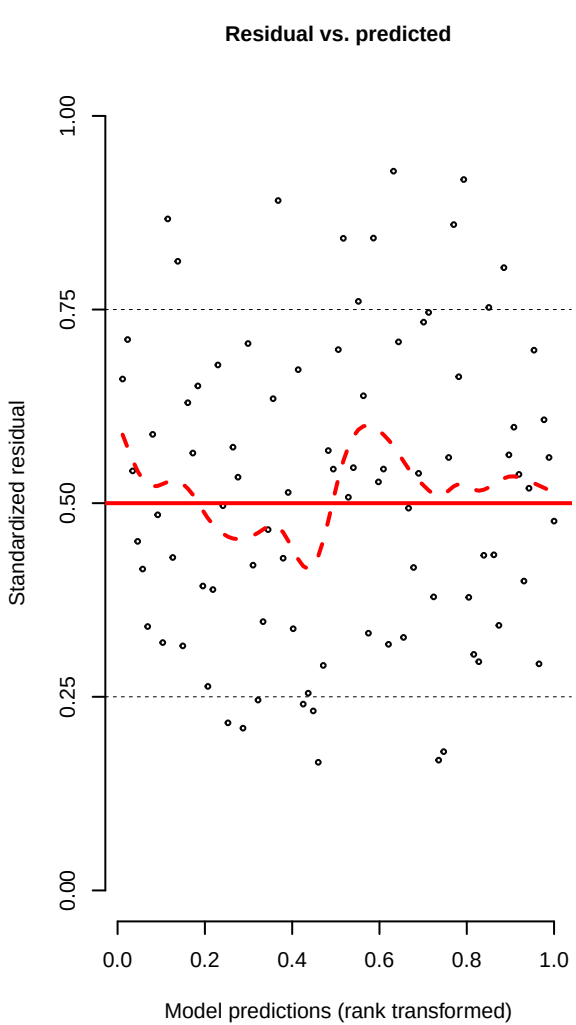


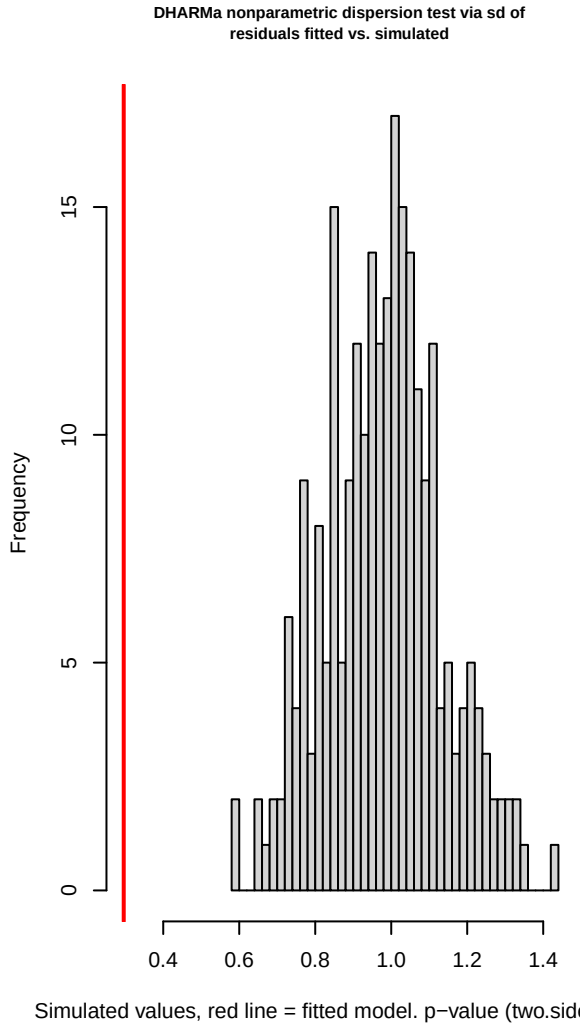



nsp ~ intercept + temp_std + time_convert_std
QQ plot residuals
KS test: p= 0.00292
Deviation significant
Dispersion test: p= 0
Deviation significant
Outlier test: p= 1
Deviation n.s.
Observed
Expected
0.0
0.2
0.4
0.6
0.8
1.0
Residual vs. predicted
Standardized residual
Model predictions (rank transformed)
0.00
0.25
0.50
0.75
1.00
DHARMa nonparametric dispersion test via sd of residuals fitted vs. simulated
Frequency
Simulated values, red line = fitted model. p−value (two.sided) =
0
5
10
15
20
0.4
0.6
0.8
1.0
1.2
1.4

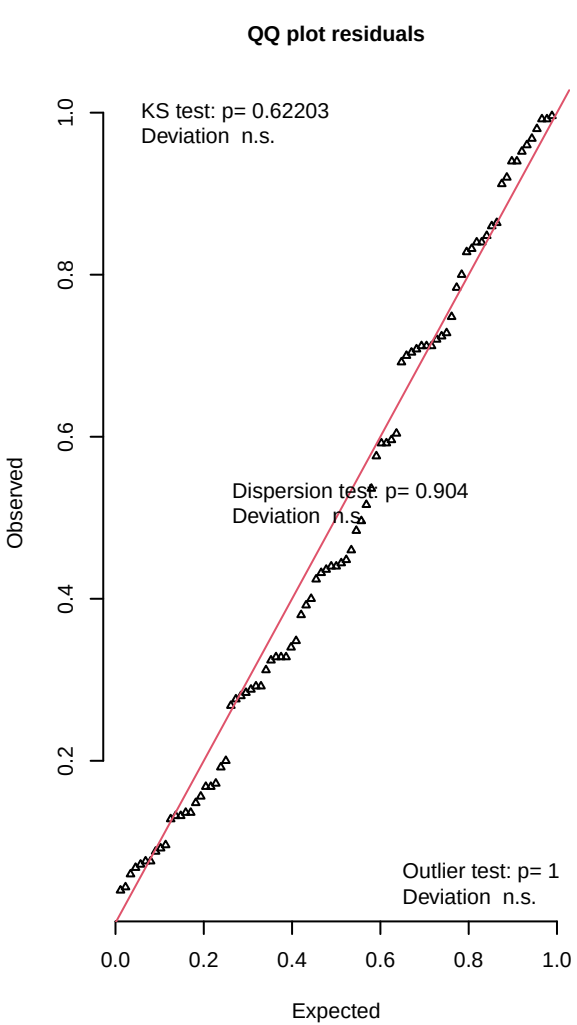
nsp ~ intercept + fish1 + temp_std + time_convert_std

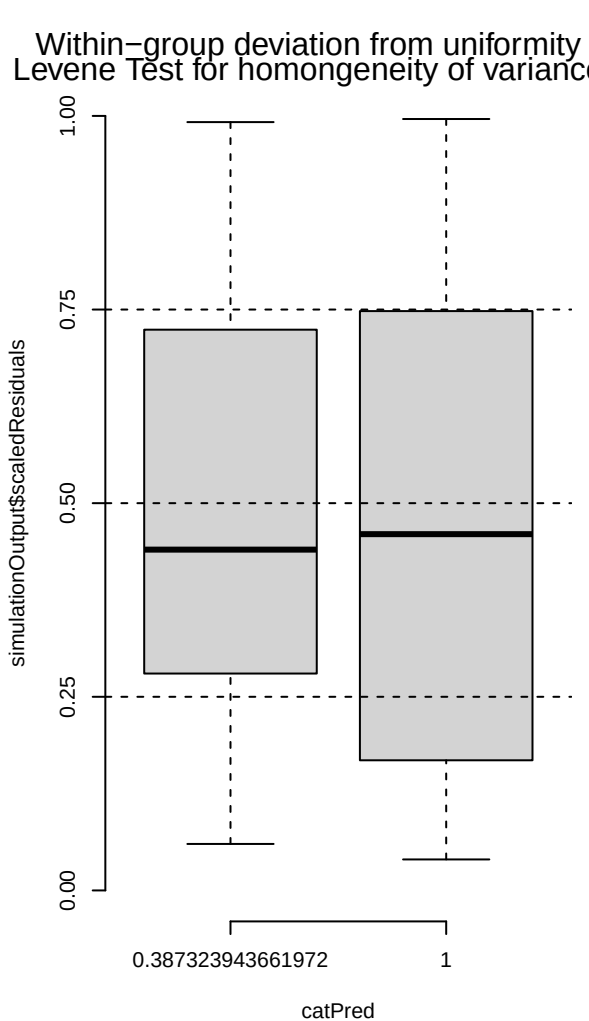


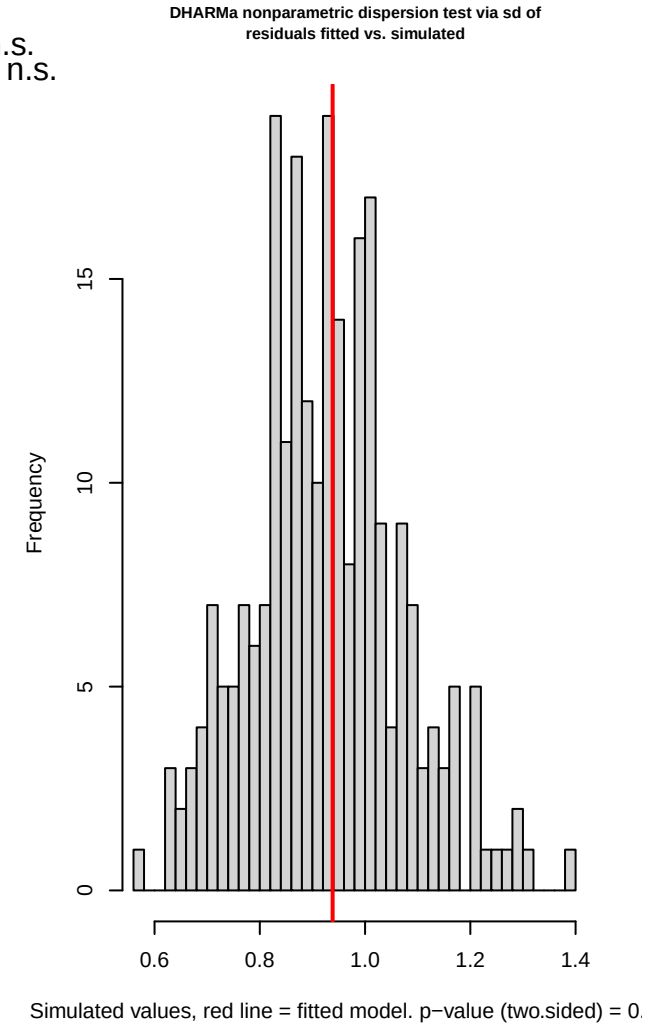




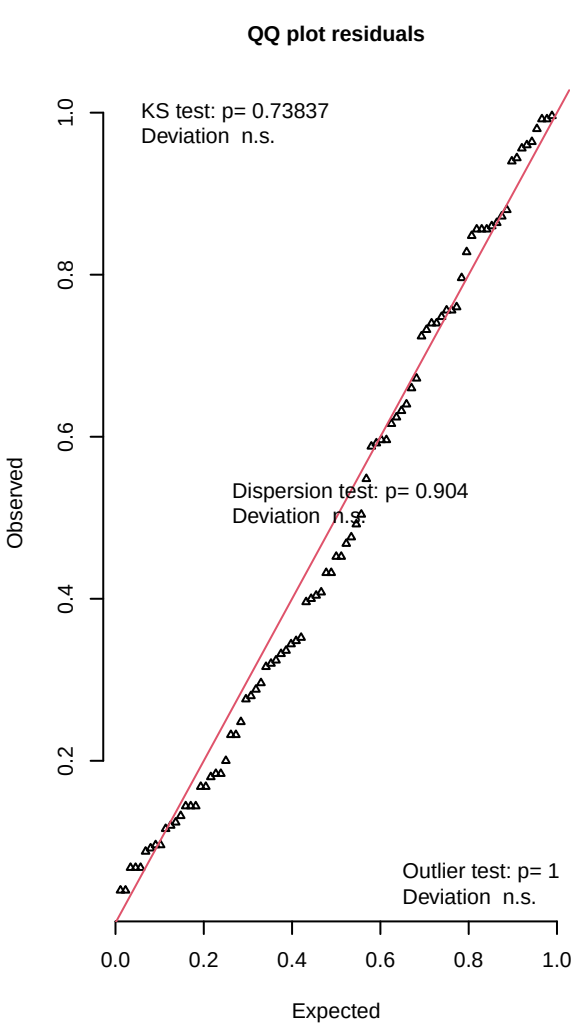
qDTM ~ intercept + fish1

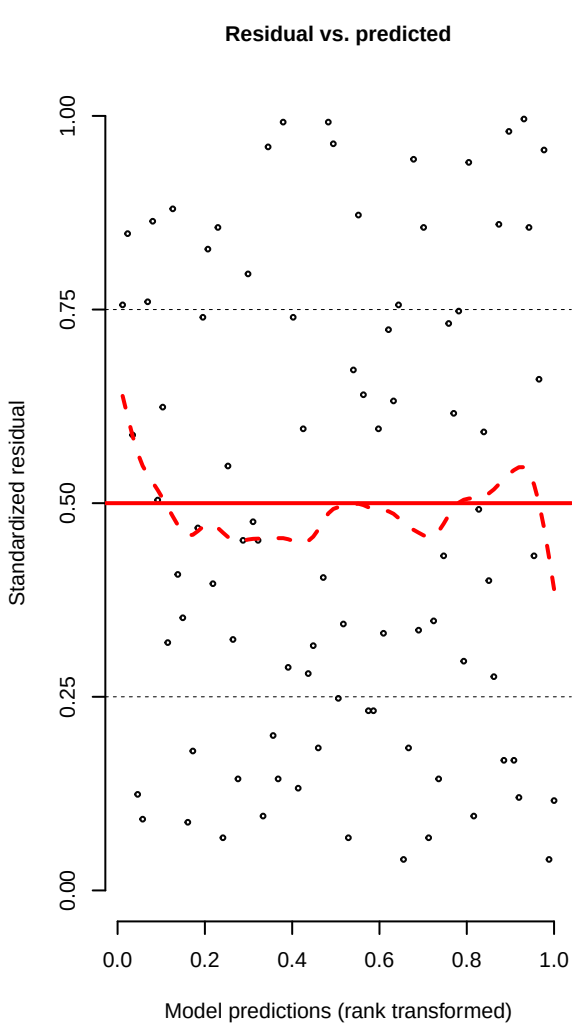


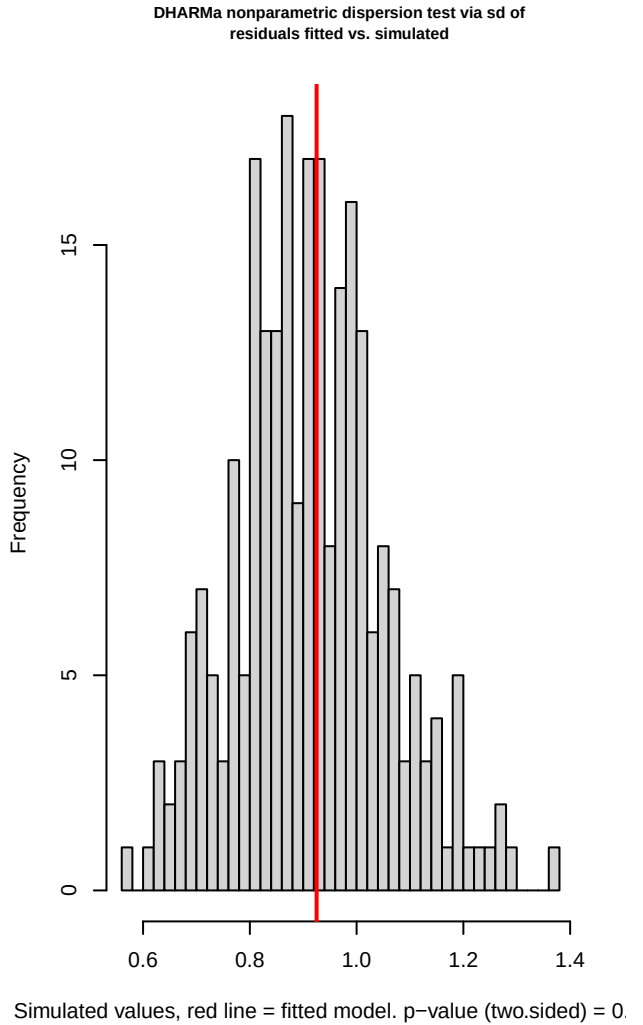




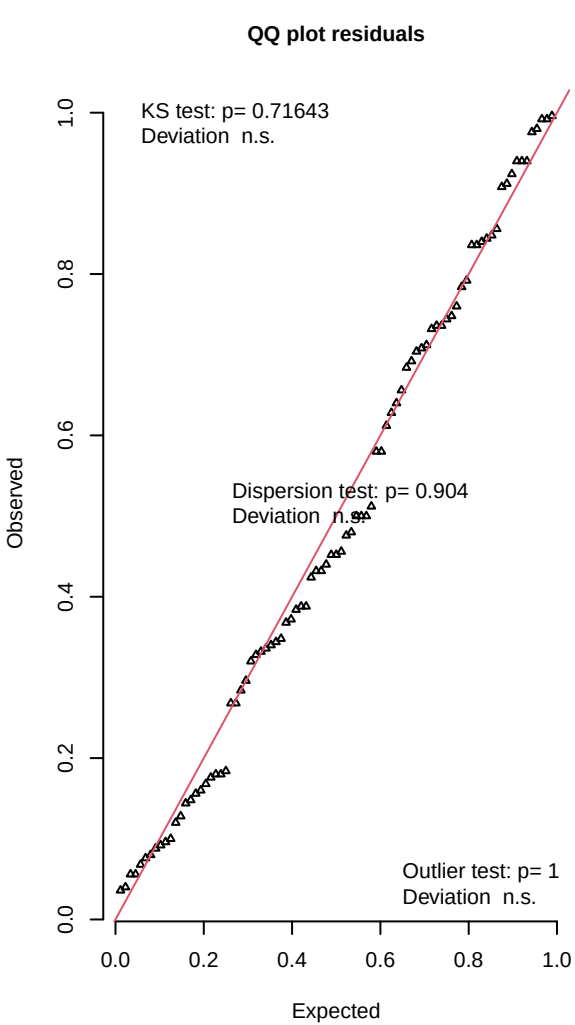
qDTM ~ intercept + area_std + fish1

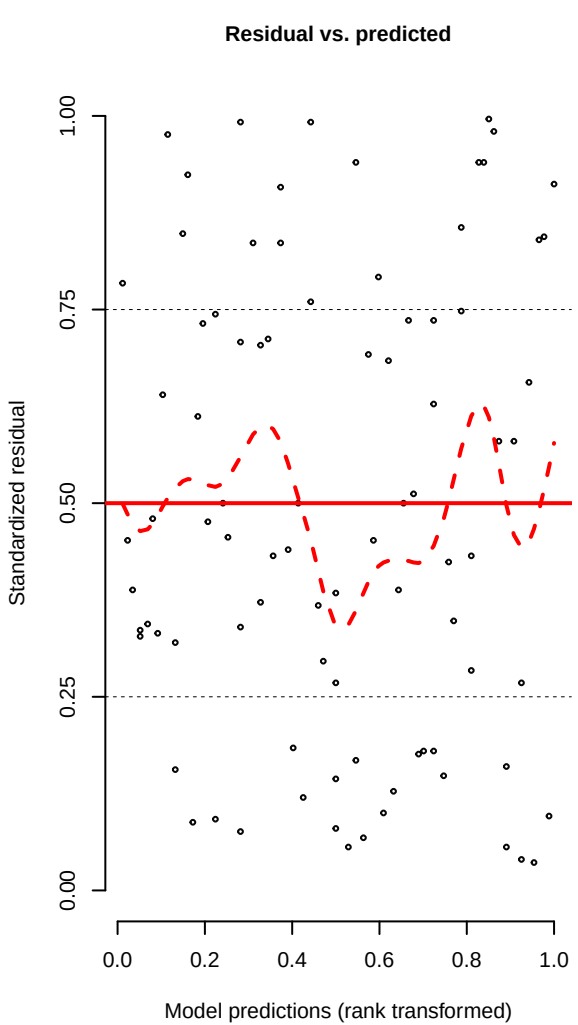


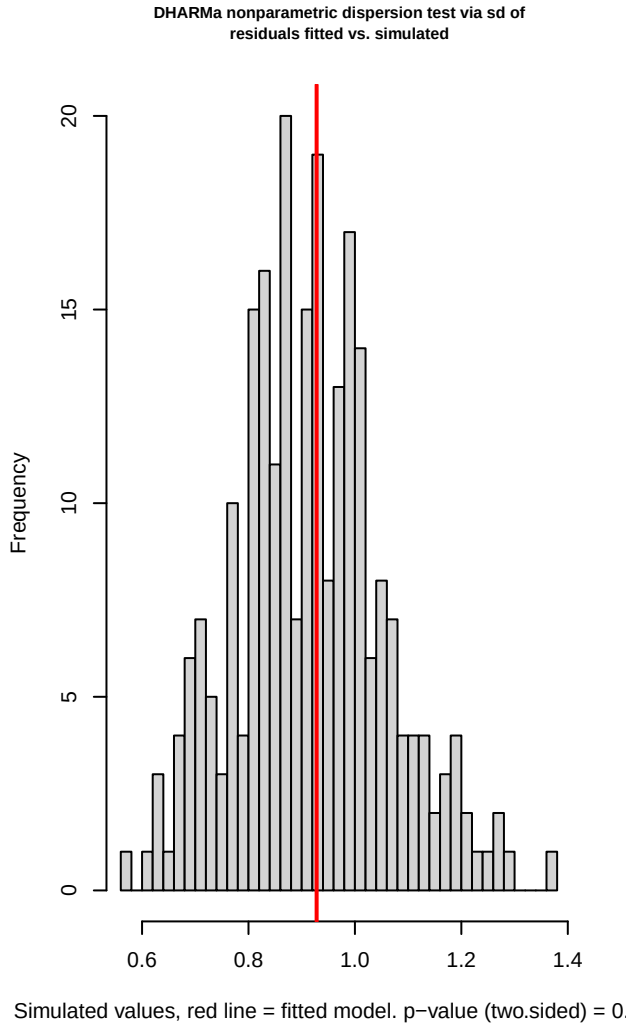




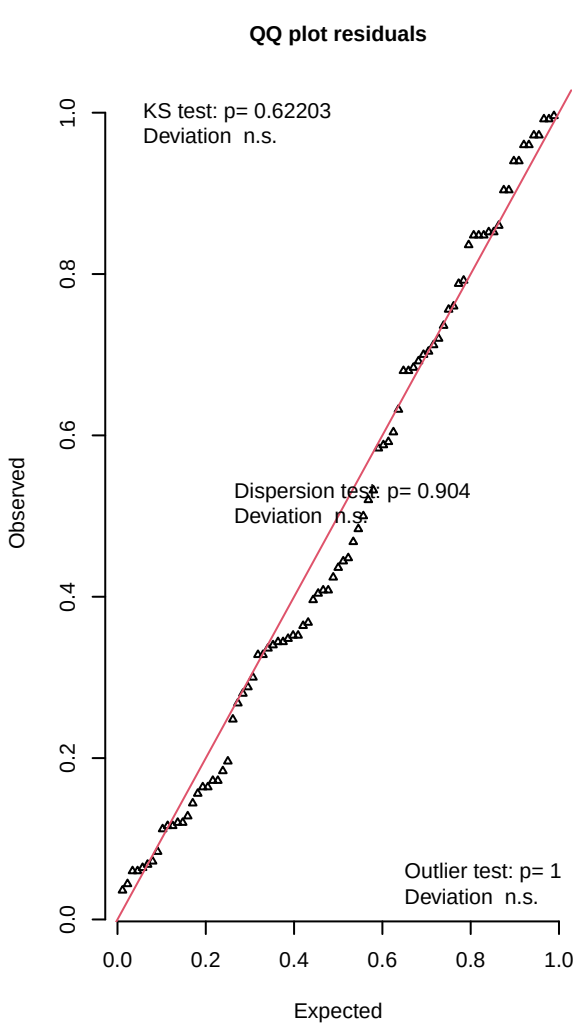
qDTM ~ intercept + fish1 + temp_std

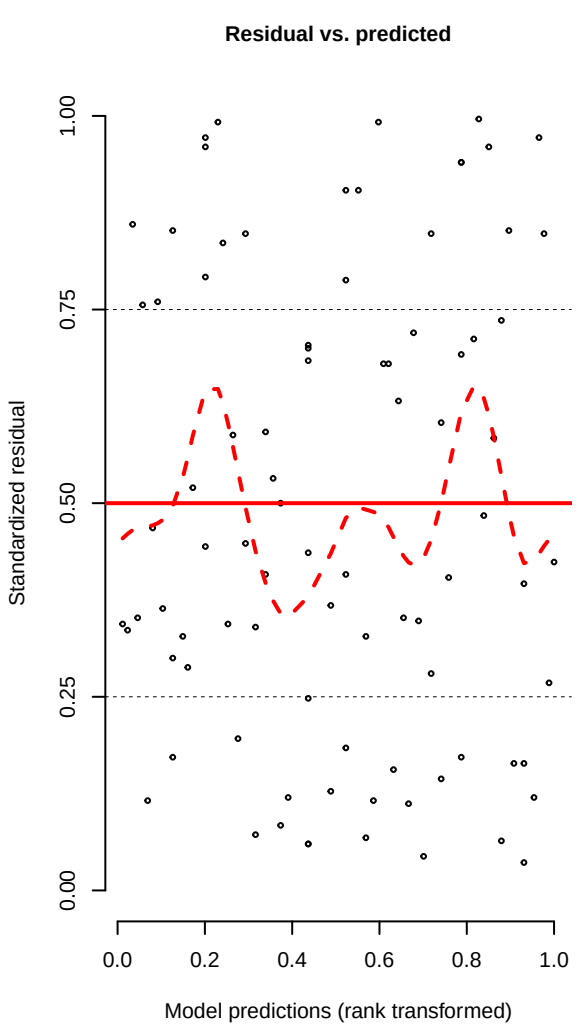


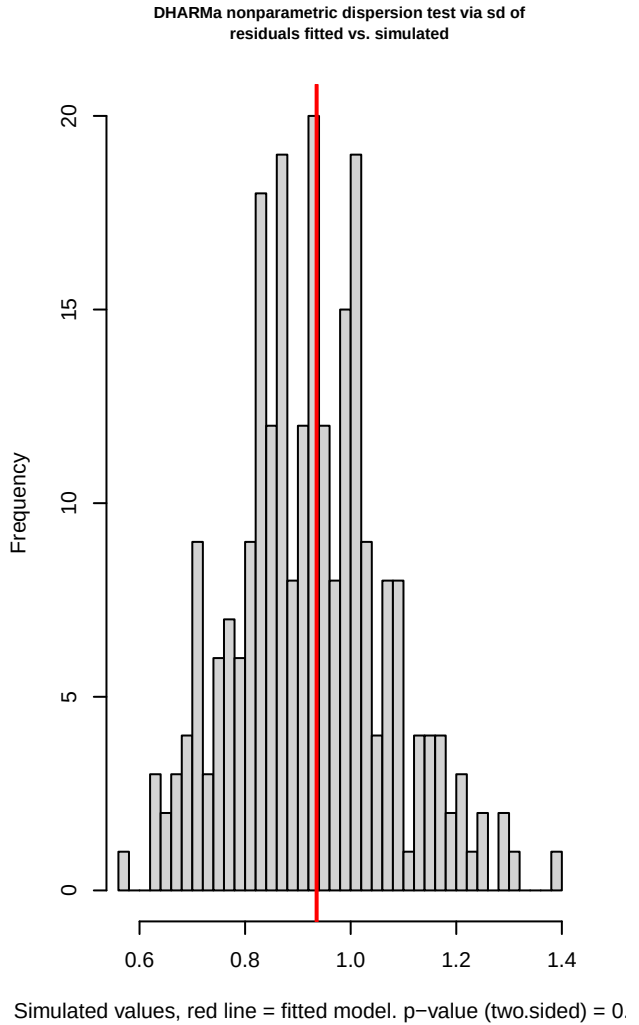




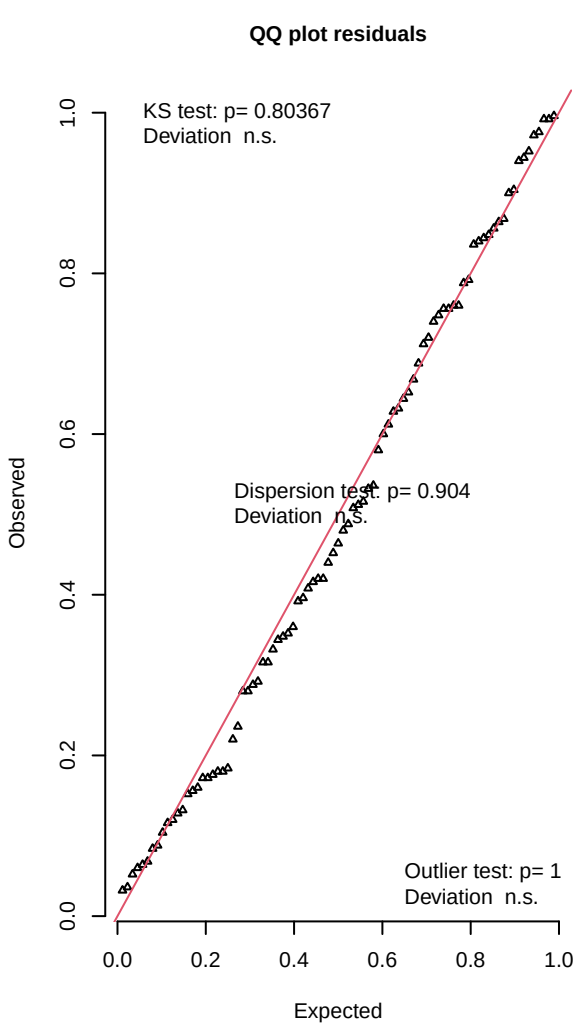
qDTM ~ intercept + fish1 + time_convert_std

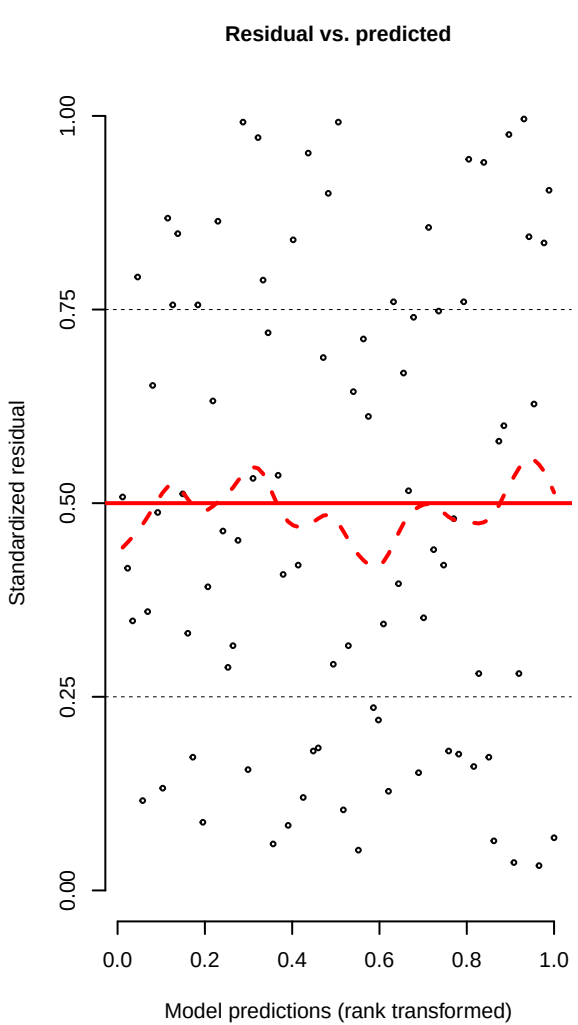


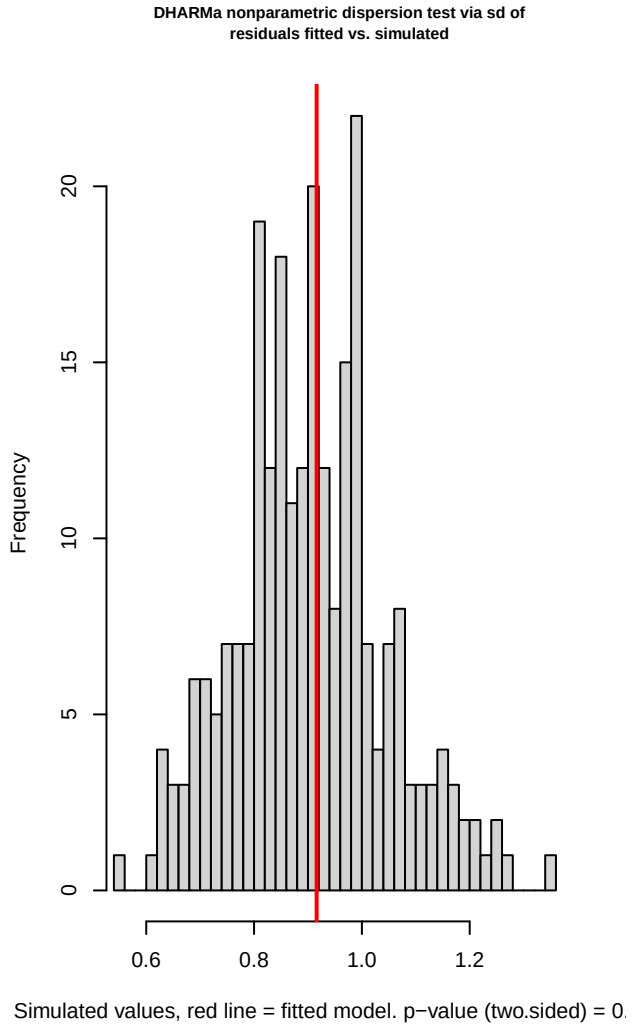




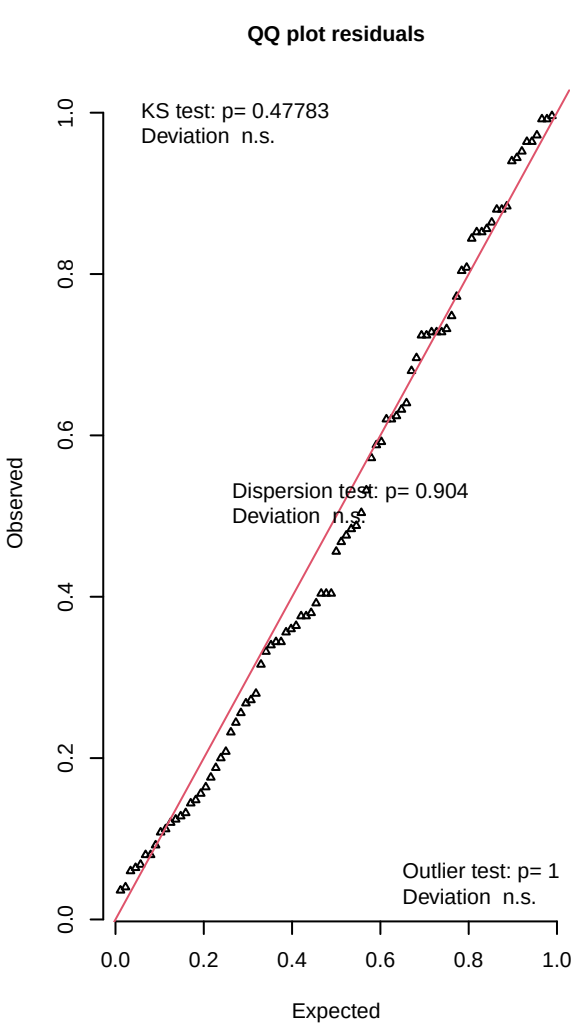
qDTM ~ intercept + area_std + fish1 + temp_std

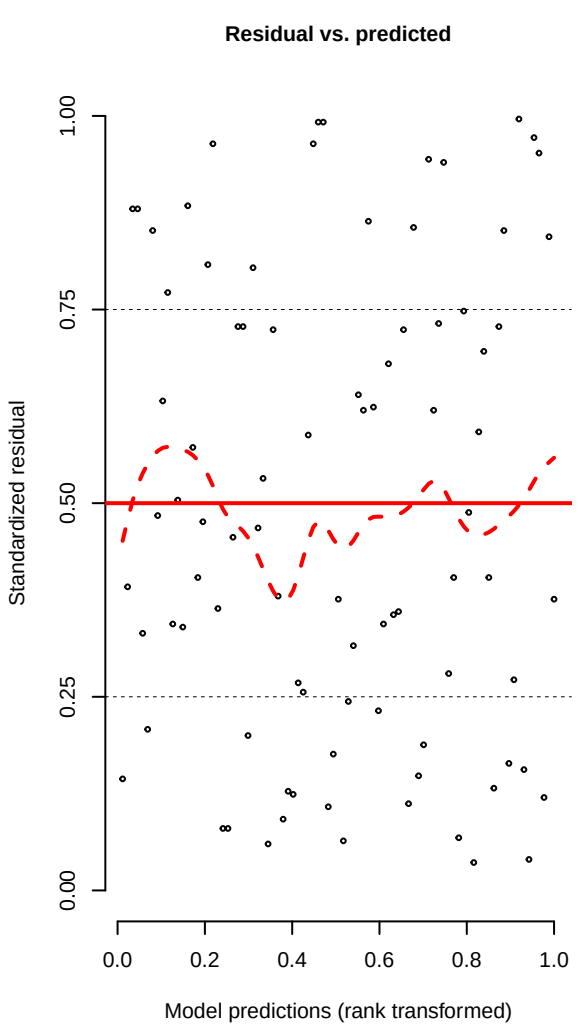


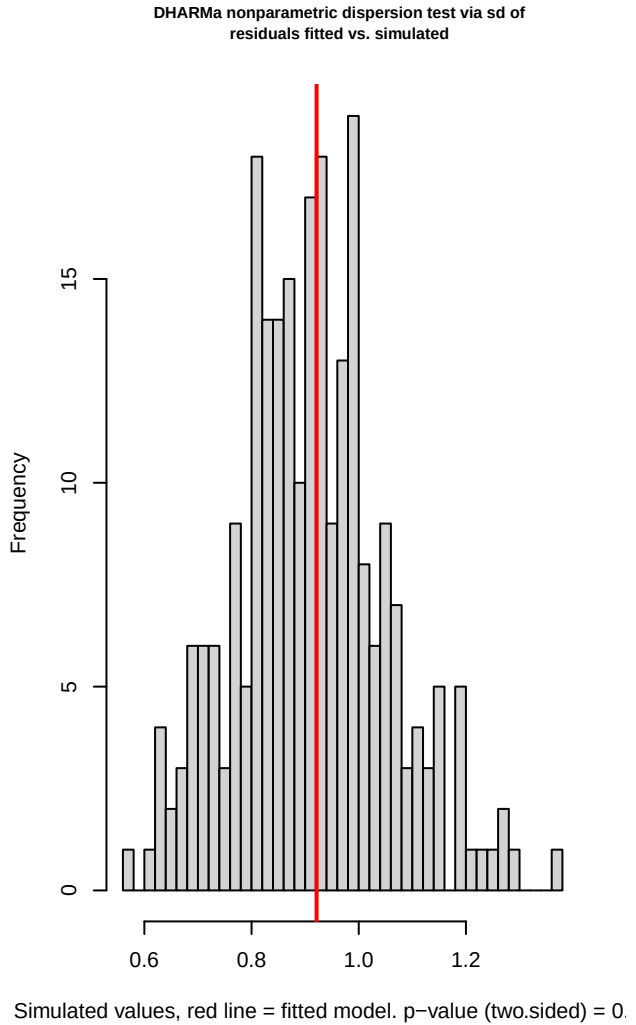




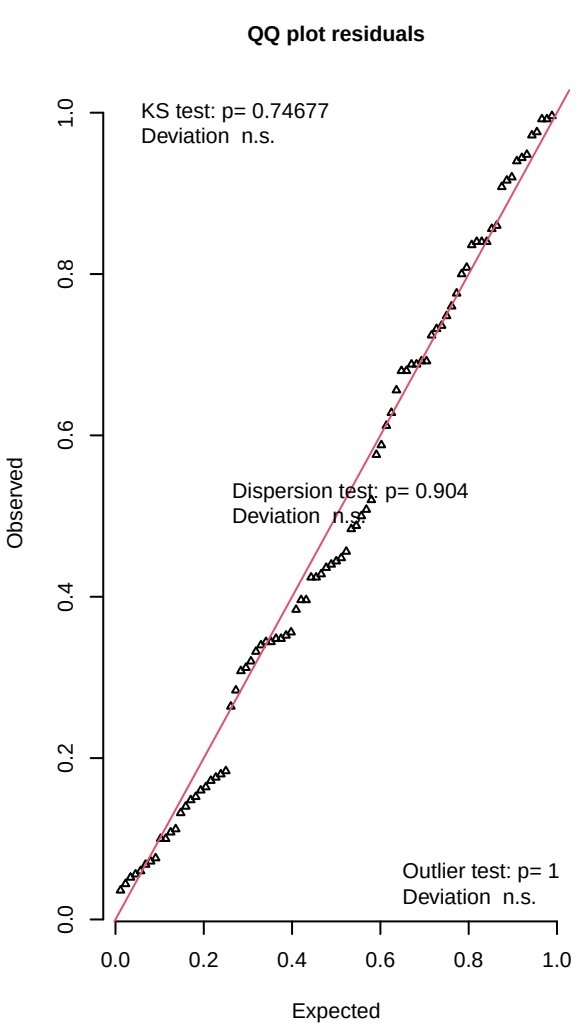
qDTM ~ intercept + area_std + fish1 + time_convert_std

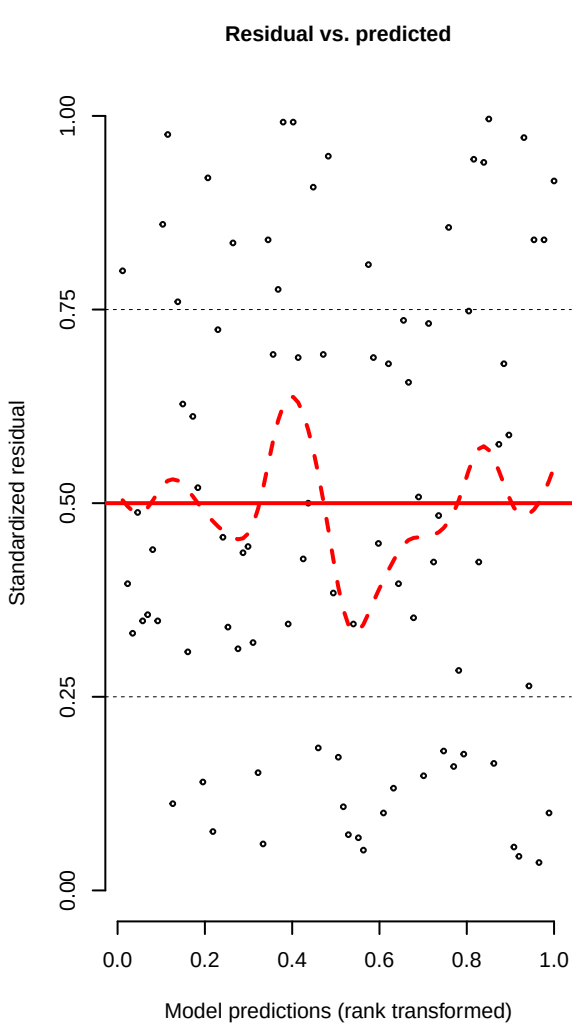


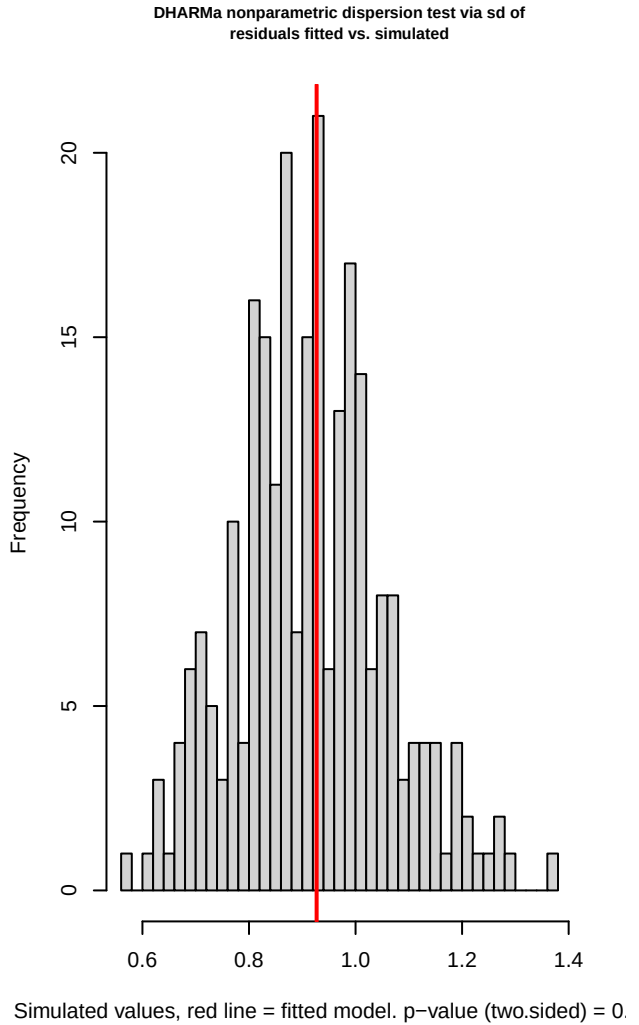




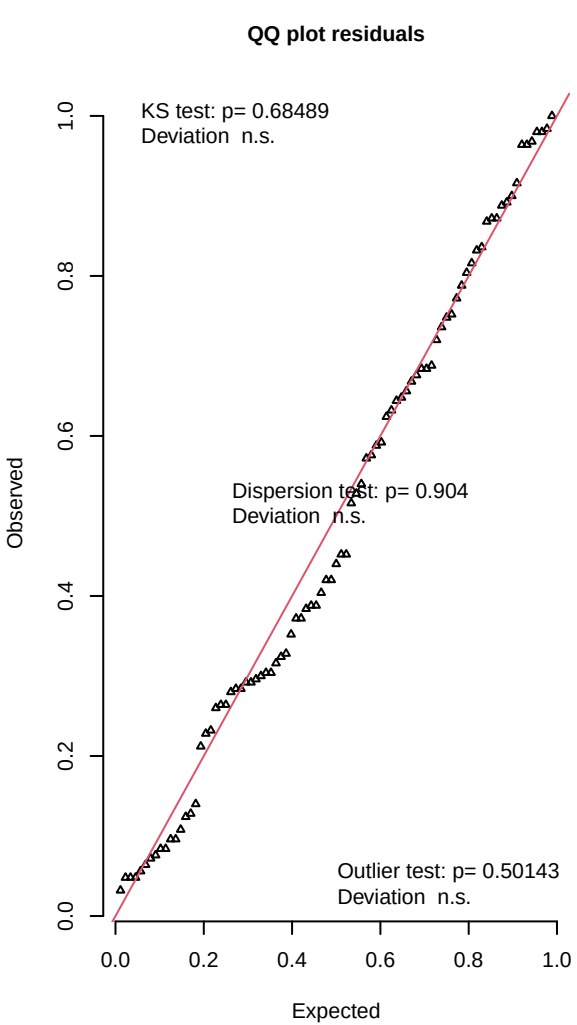
qDTM ~ intercept + fish1 + temp_std + time_convert_std

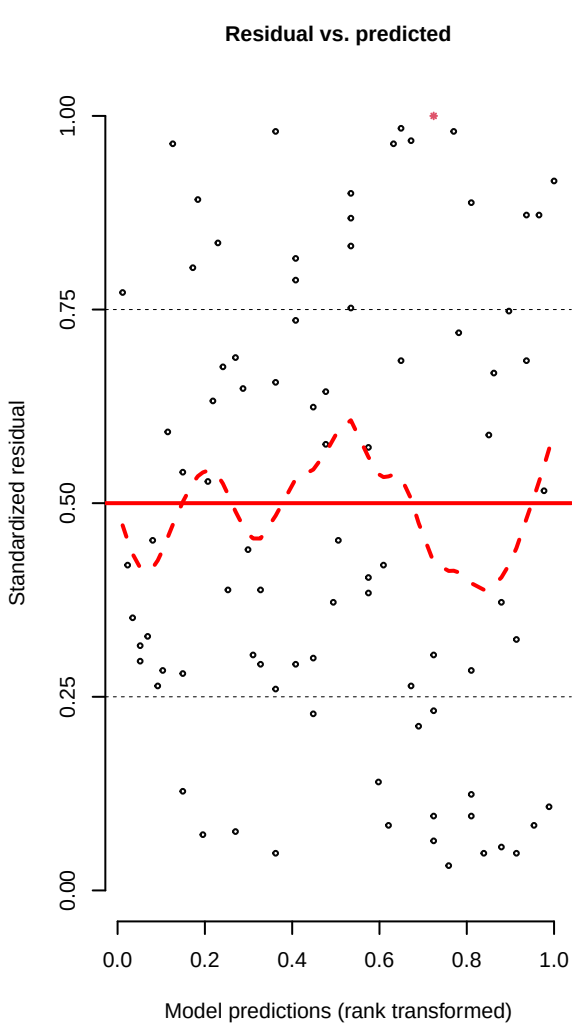


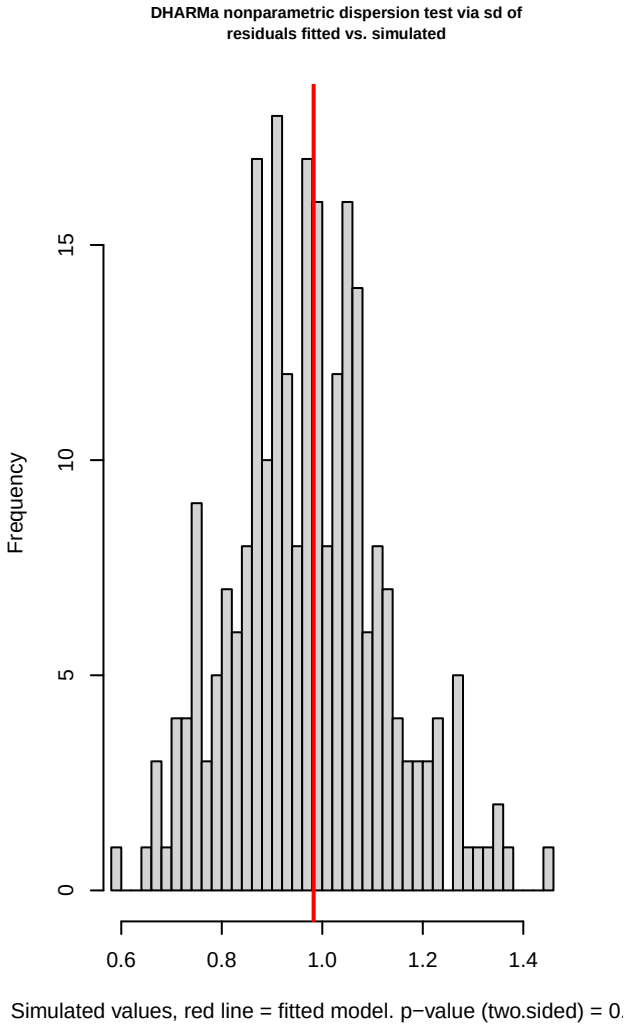




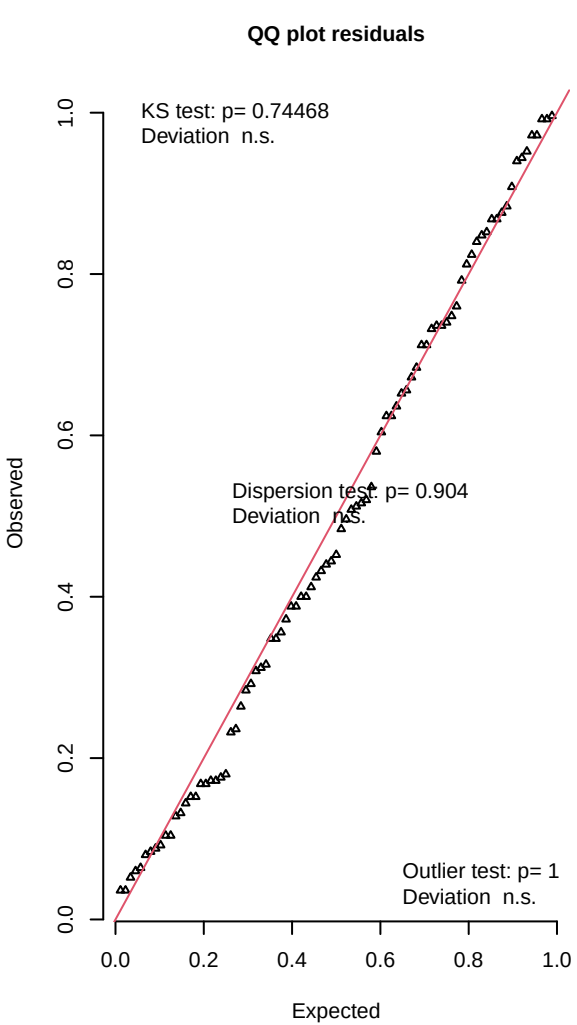
qDTM ~ intercept + temp_std

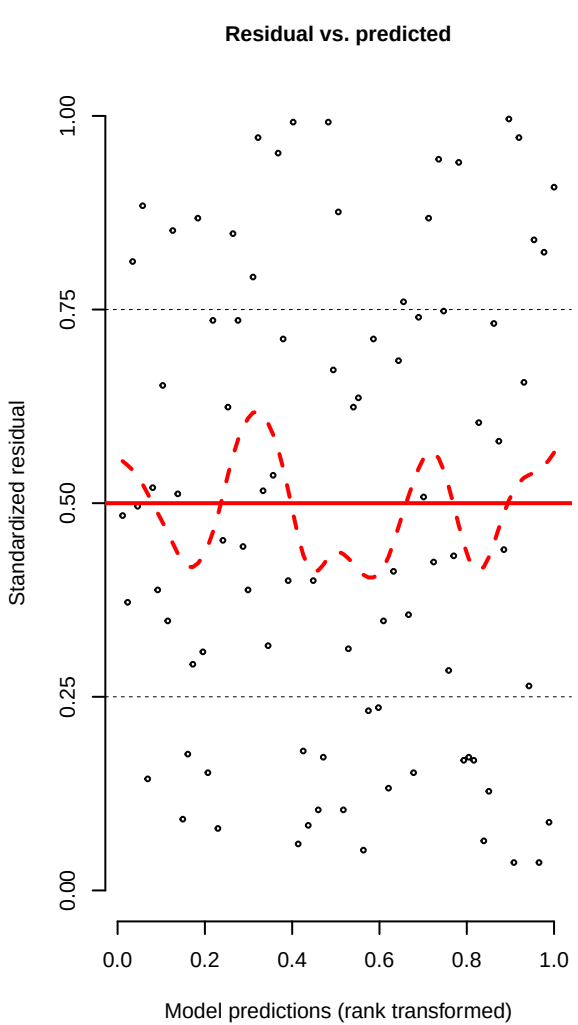


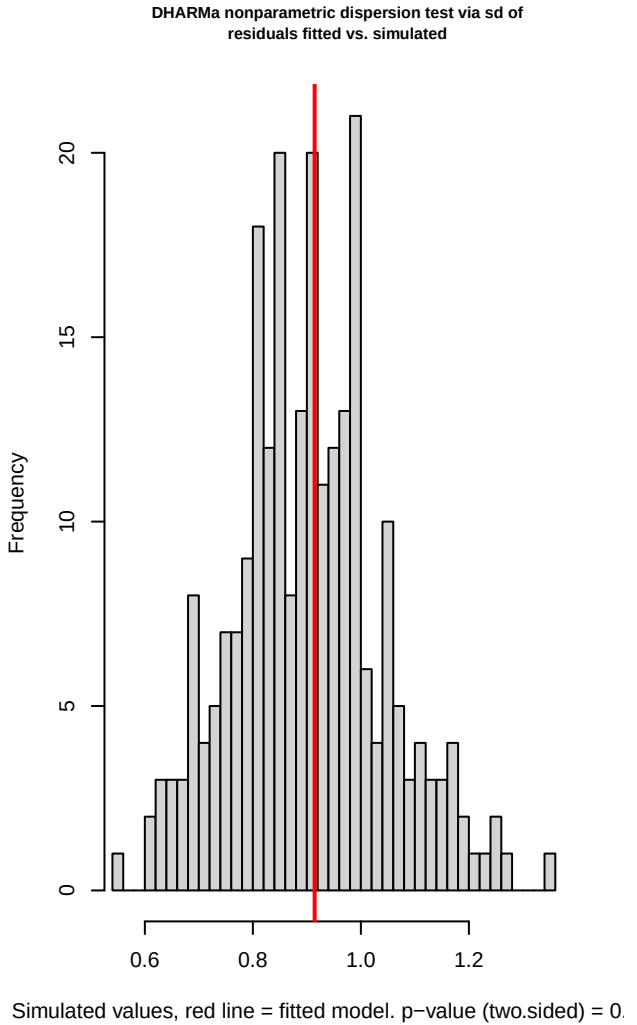




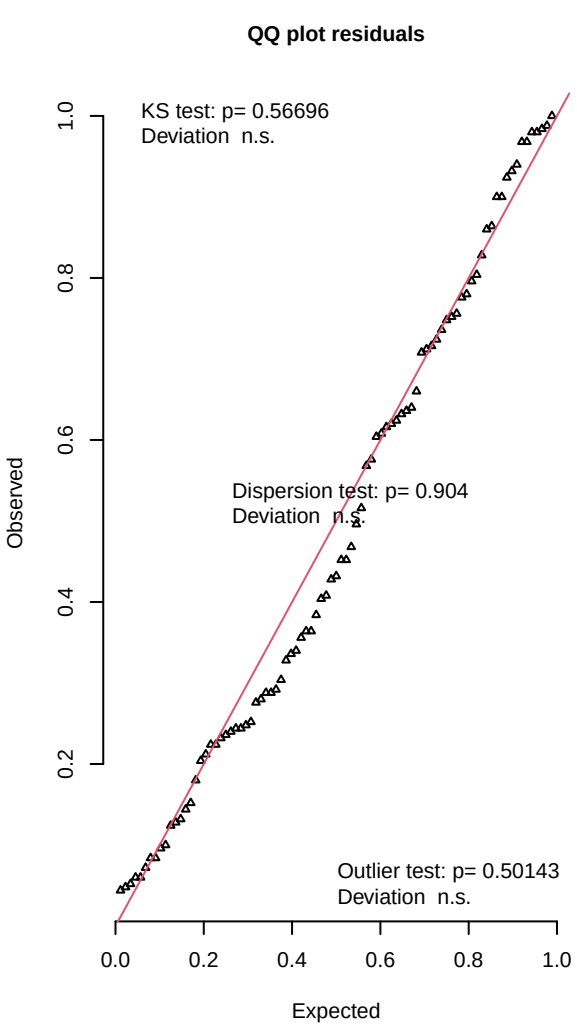
qDTM ~ intercept + area_std + fish1 + temp_std + time_convert_std

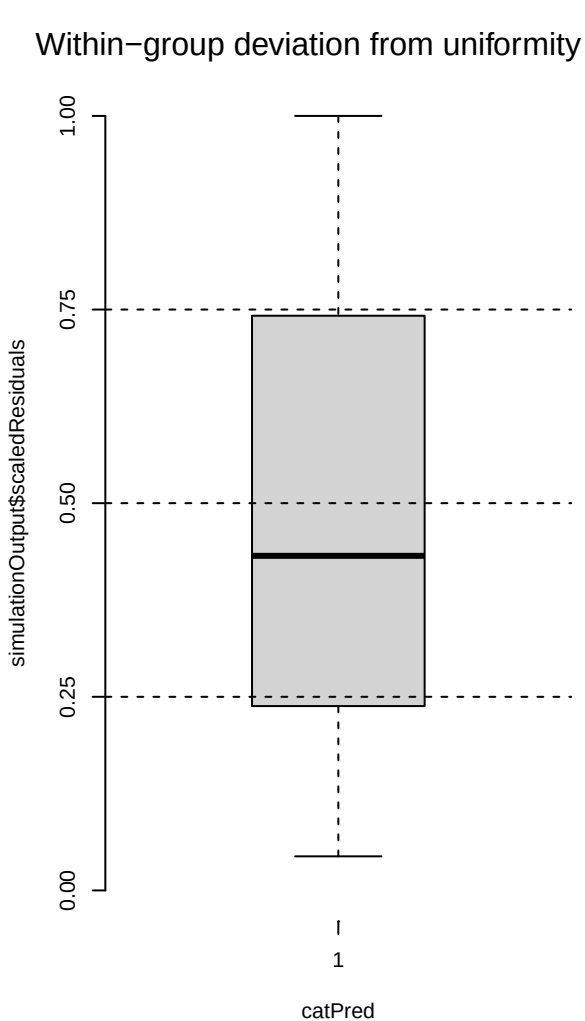


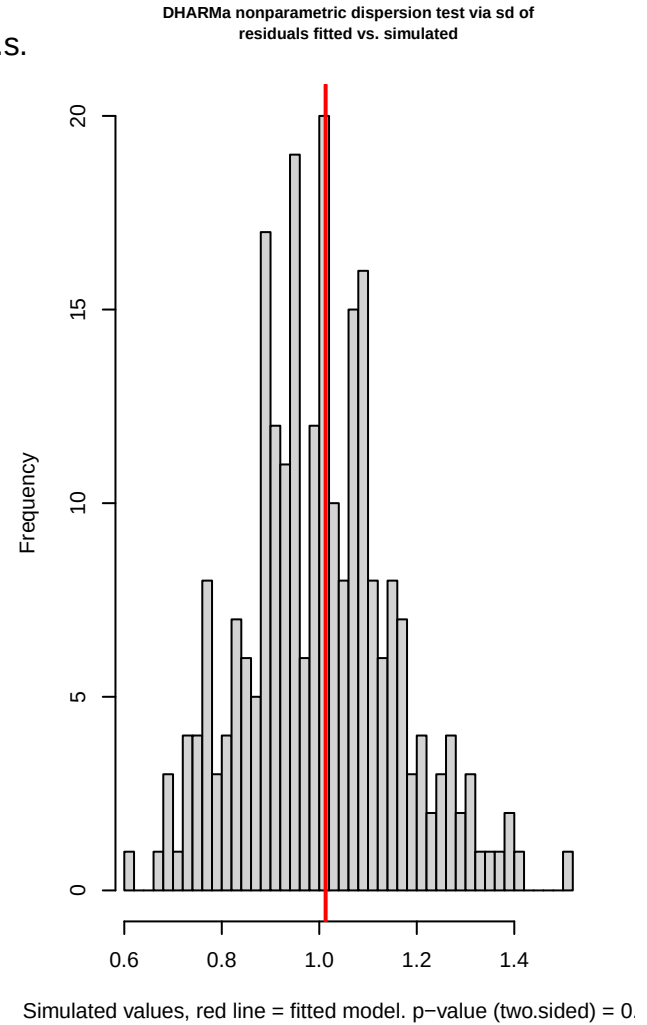




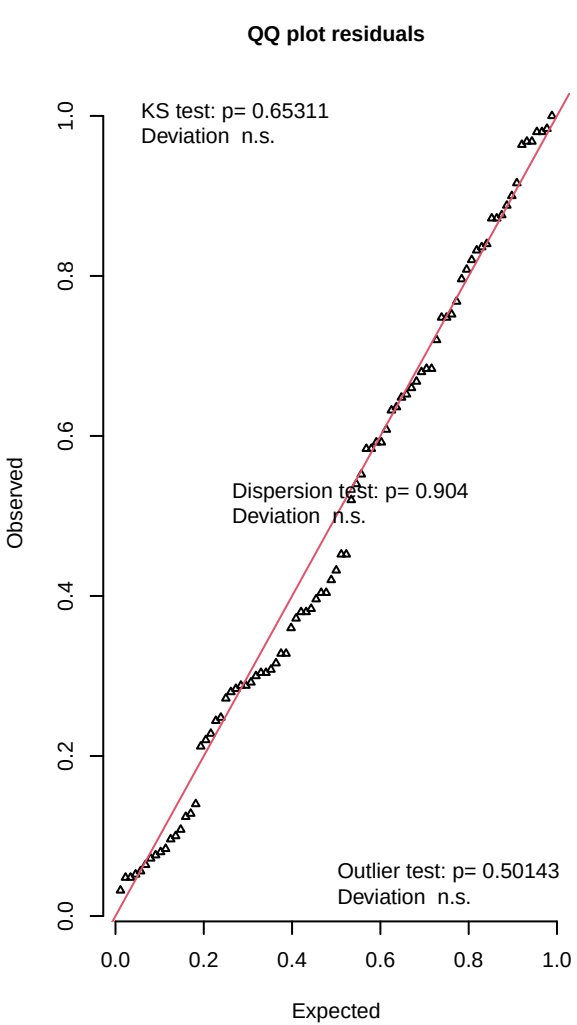
qDTM ~ intercept

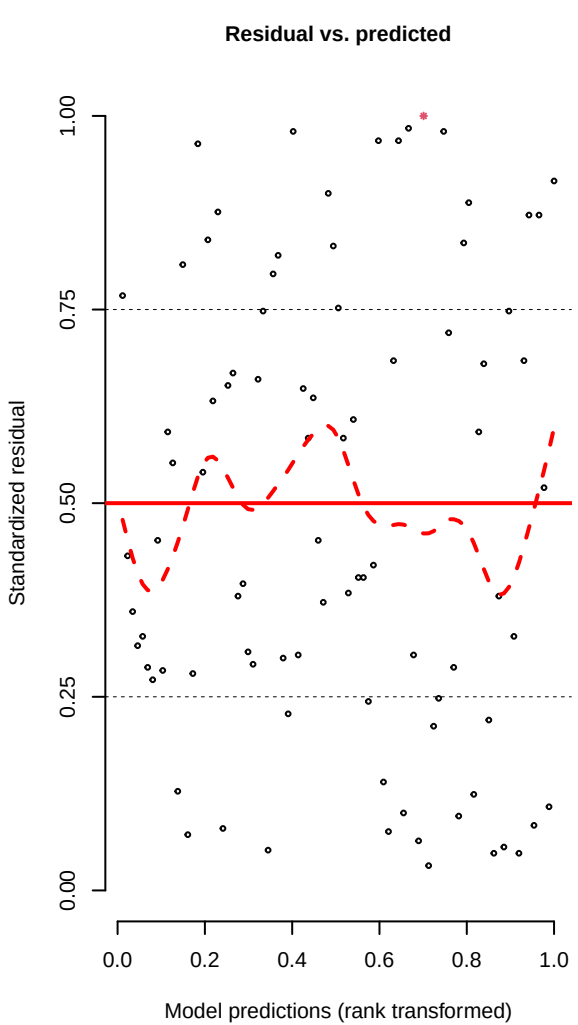


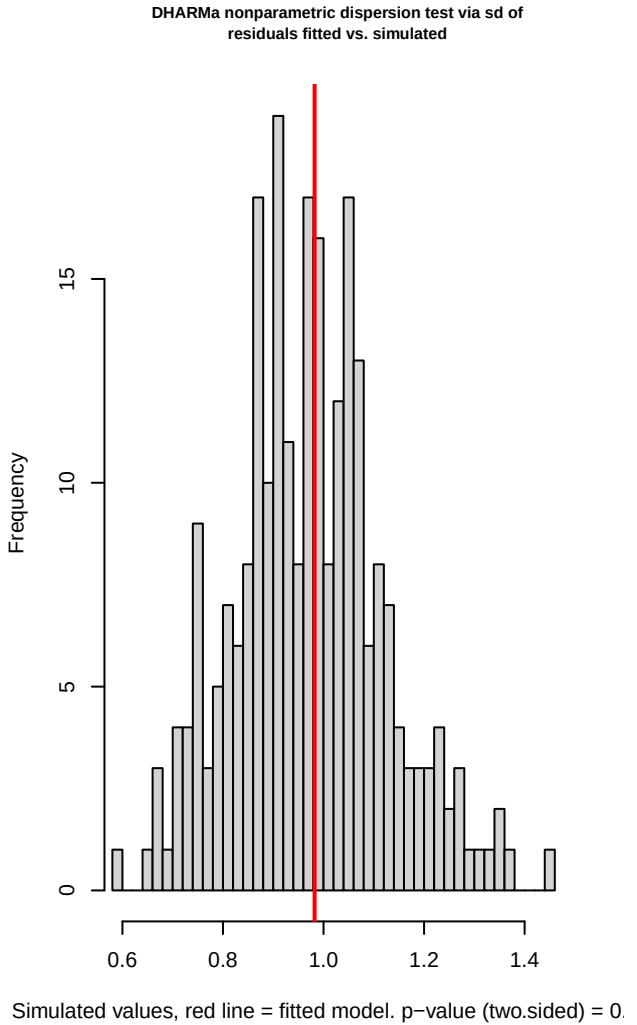




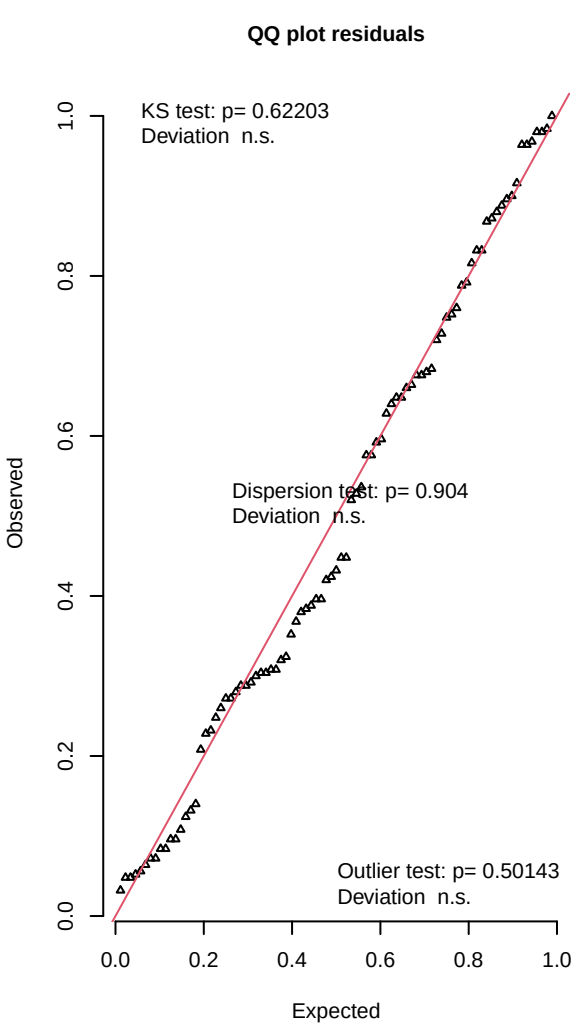
qDTM ~ intercept + area_std + temp_std

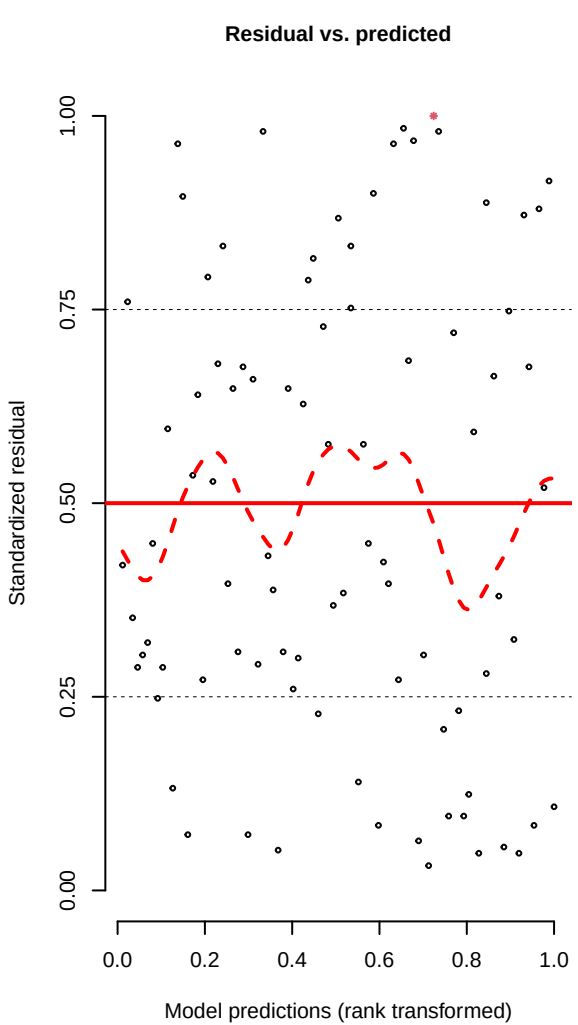


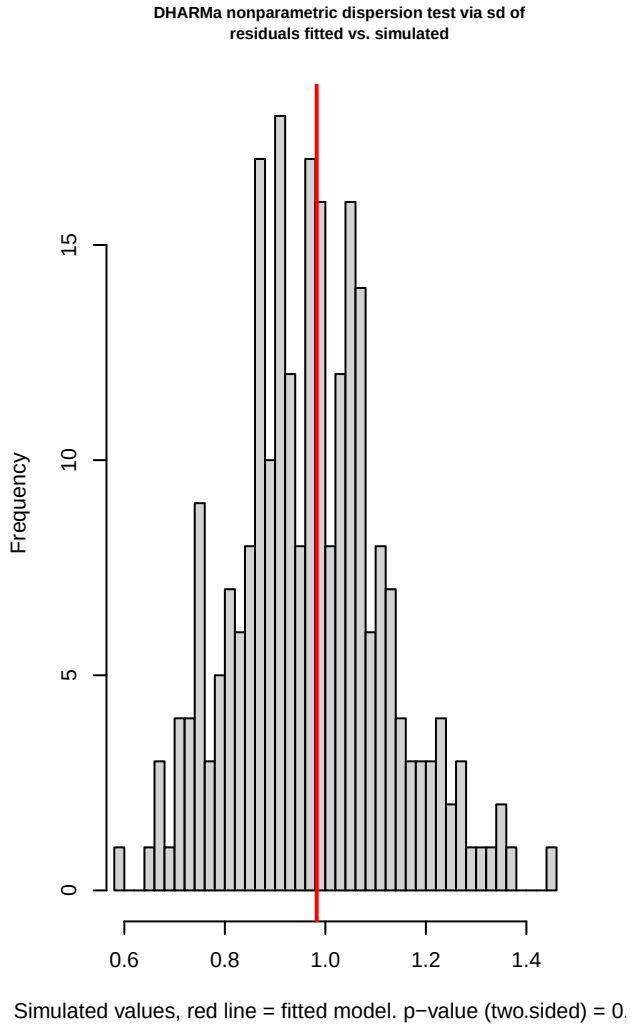




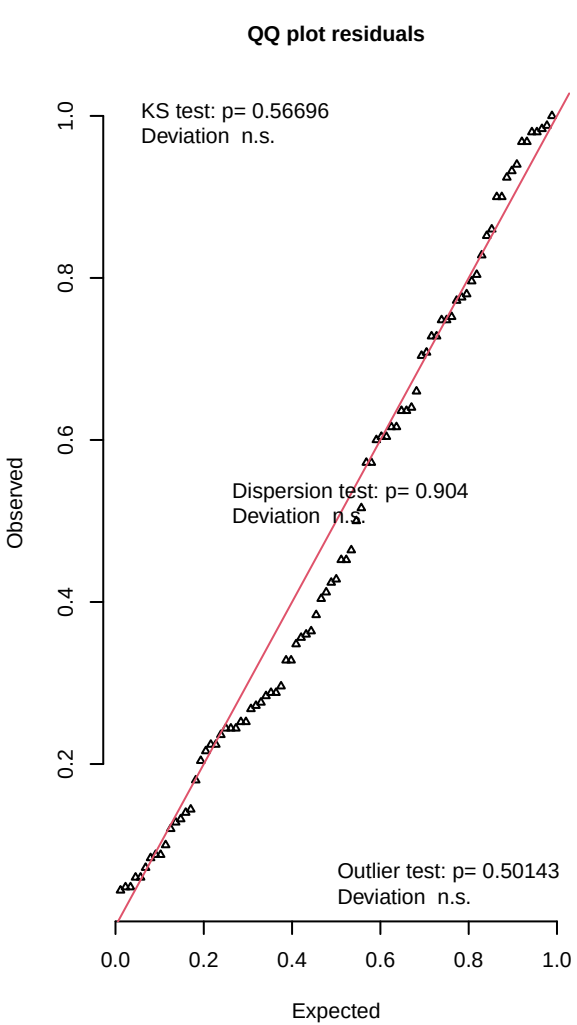
qDTM ~ intercept + temp_std + time_convert_std

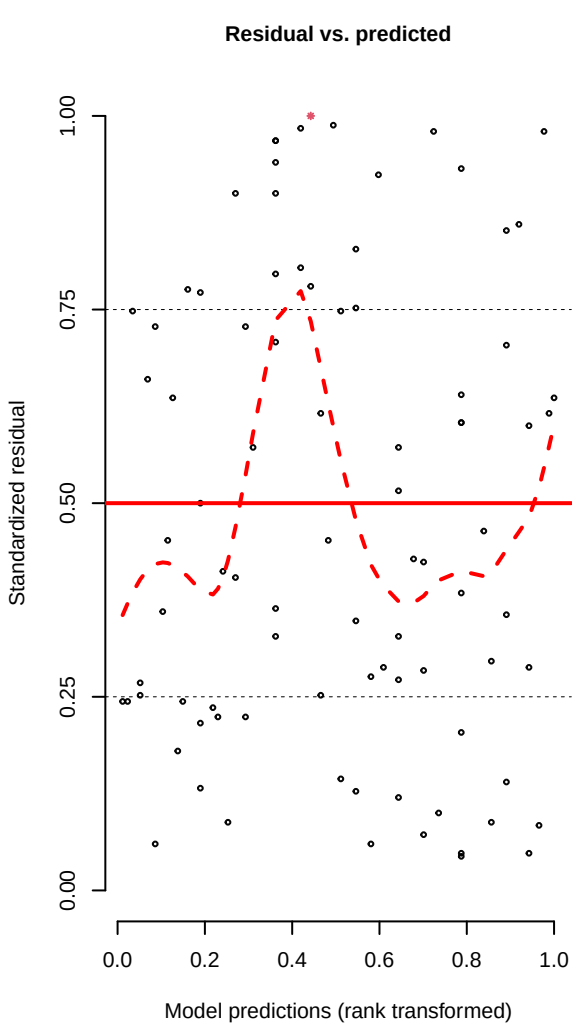


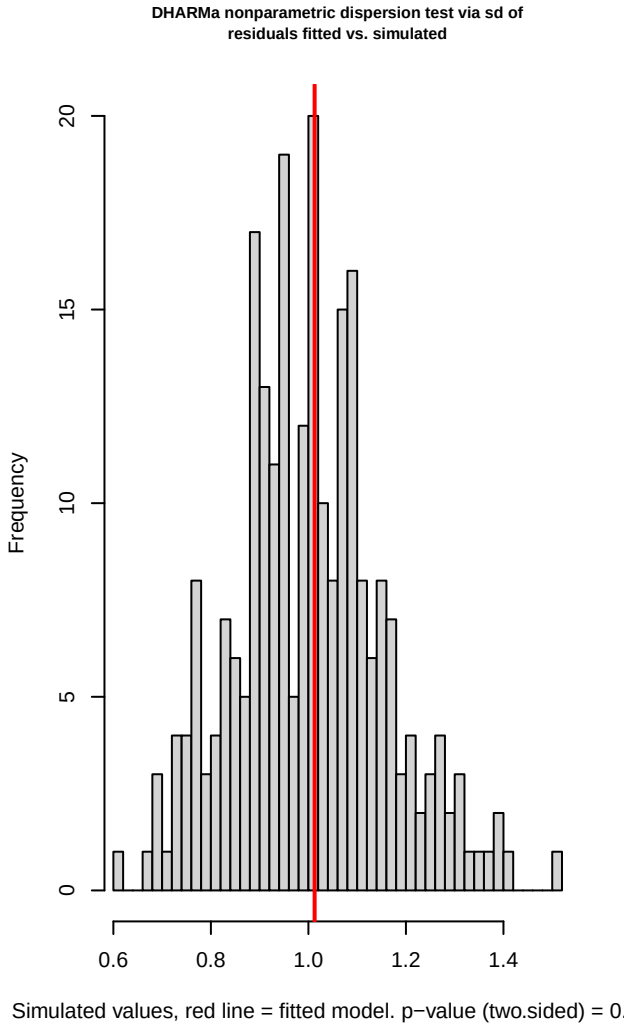




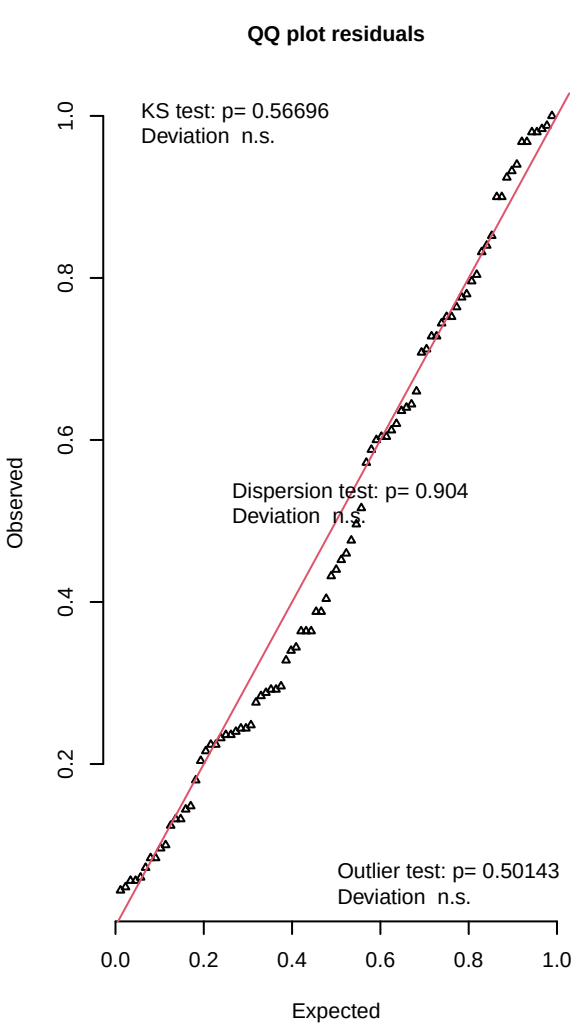
qDTM ~ intercept + time_convert_std

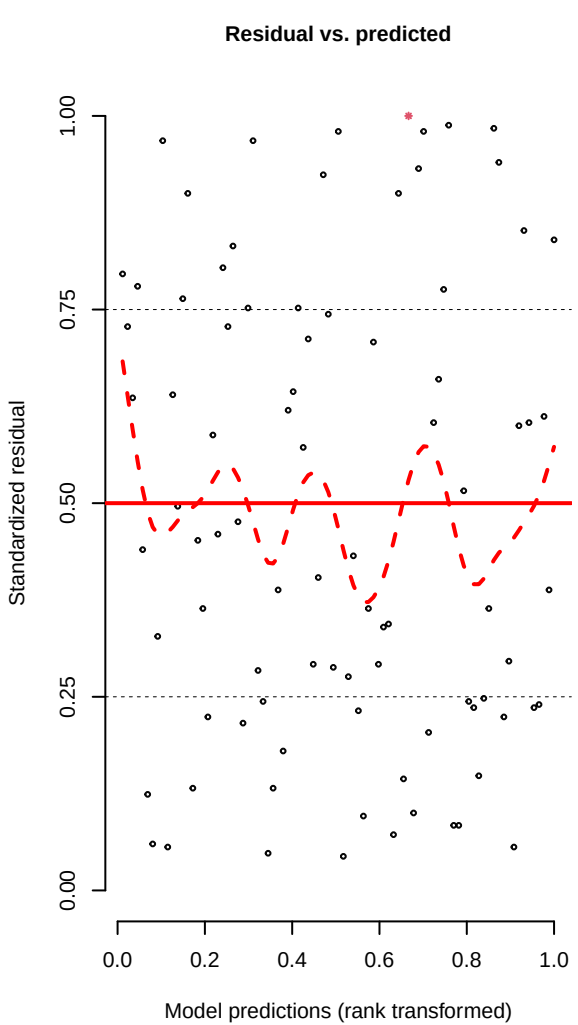


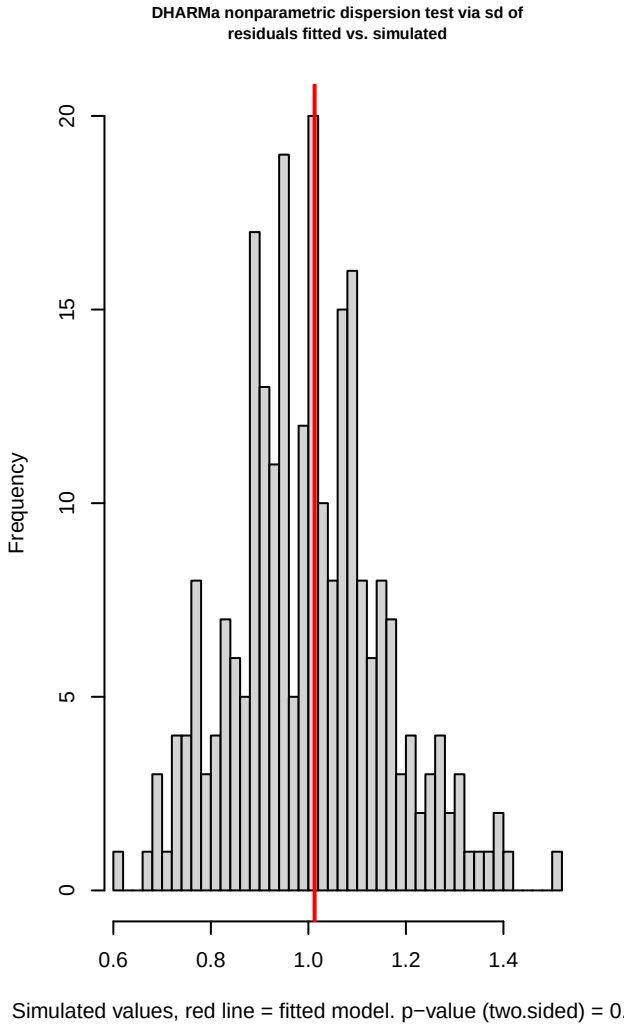




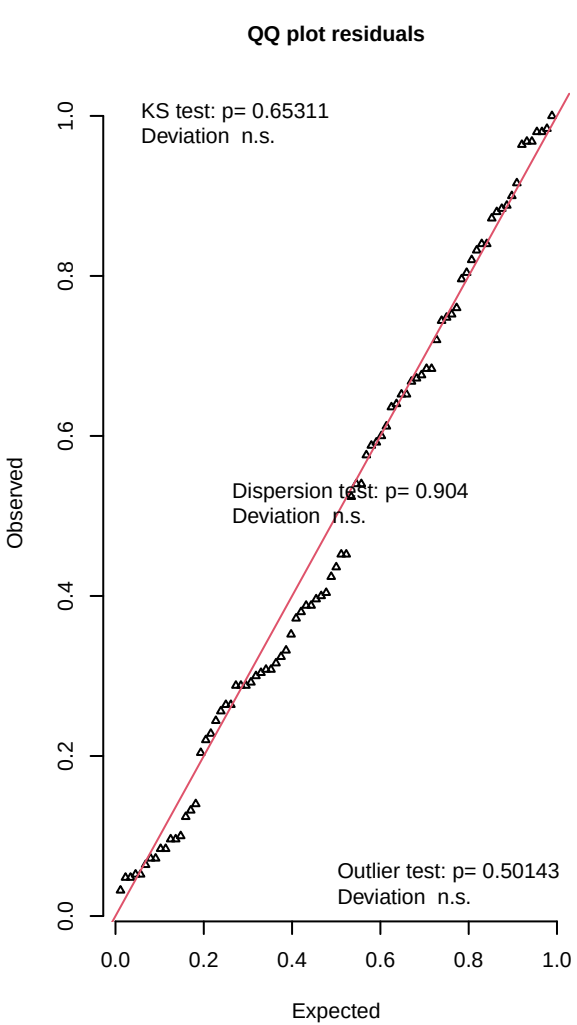
qDTM ~ intercept + area_std

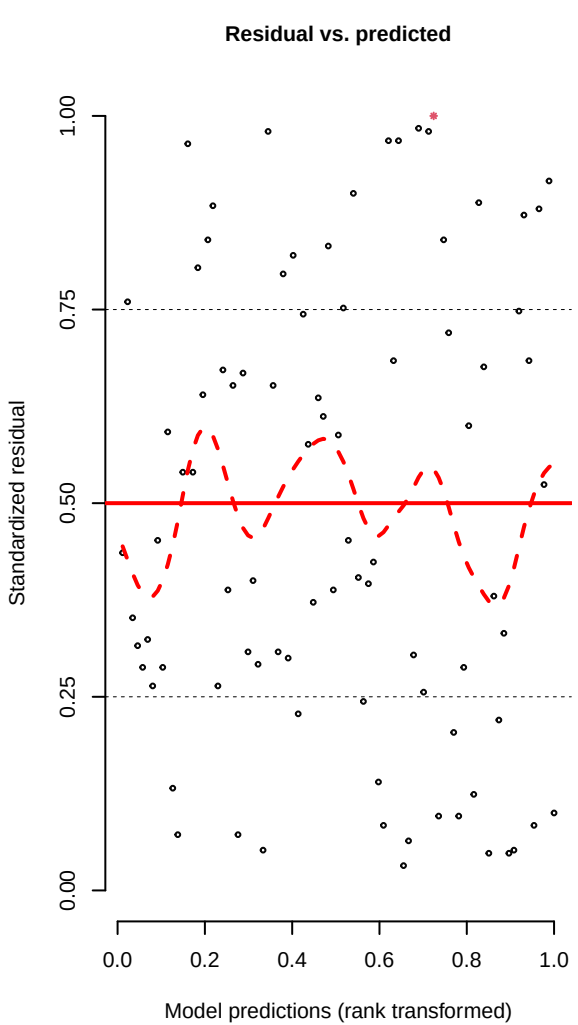


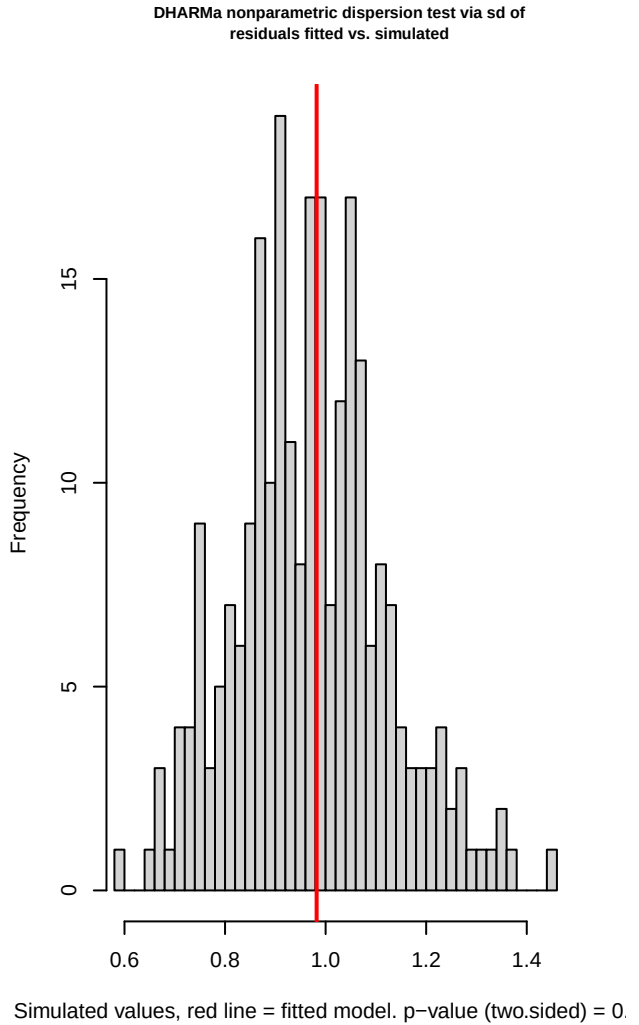
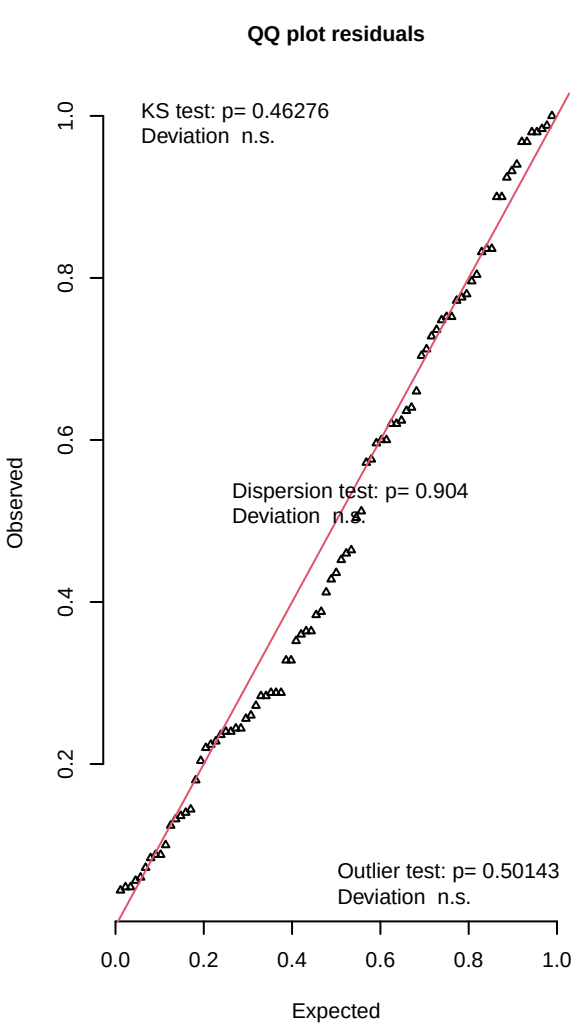
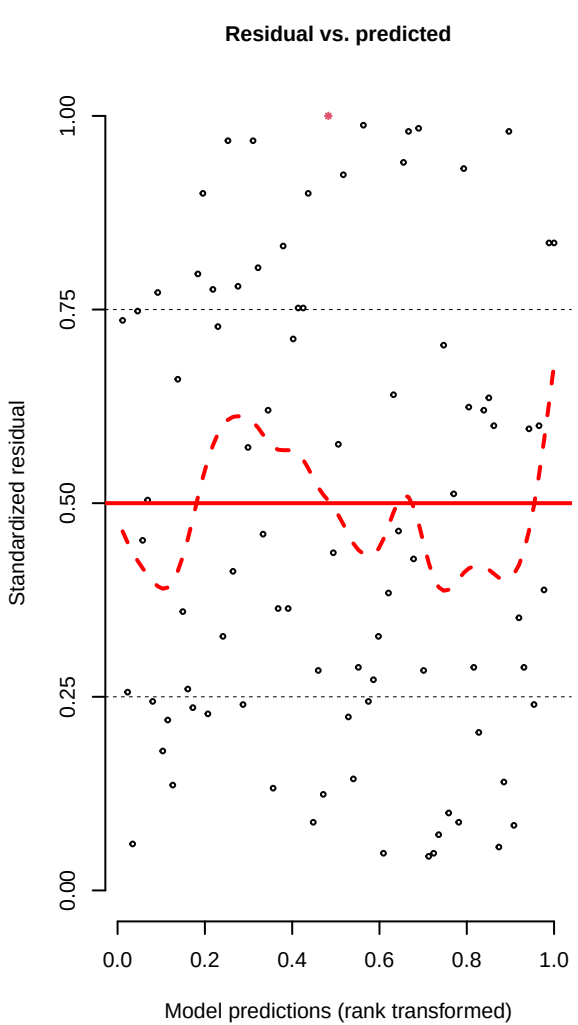
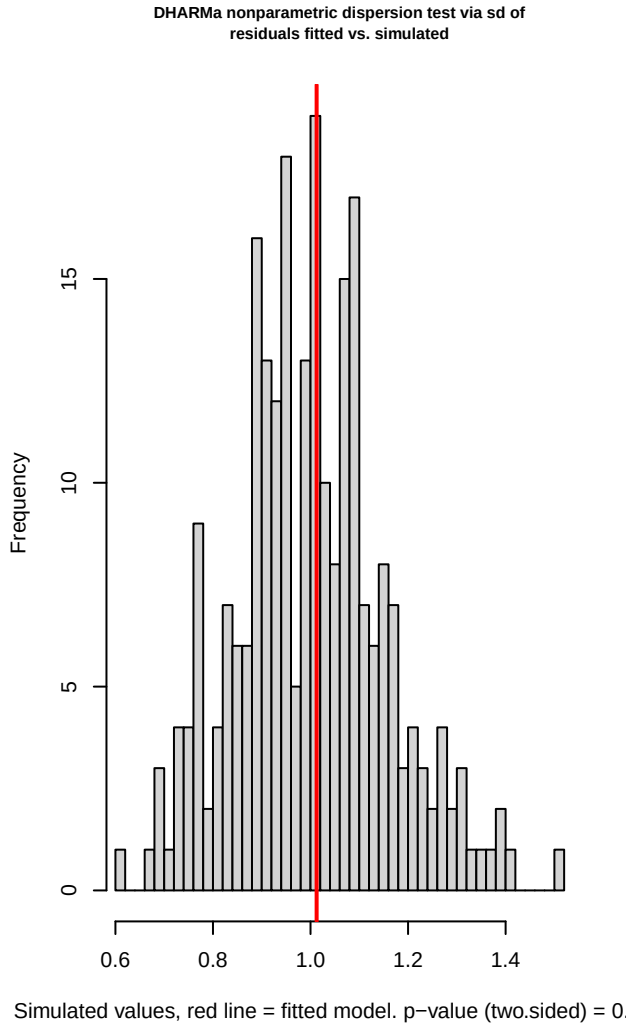




qDTM ~ intercept + area_std + temp_std + time_convert_std







qDTM ~ intercept + area_std + time_convert_std