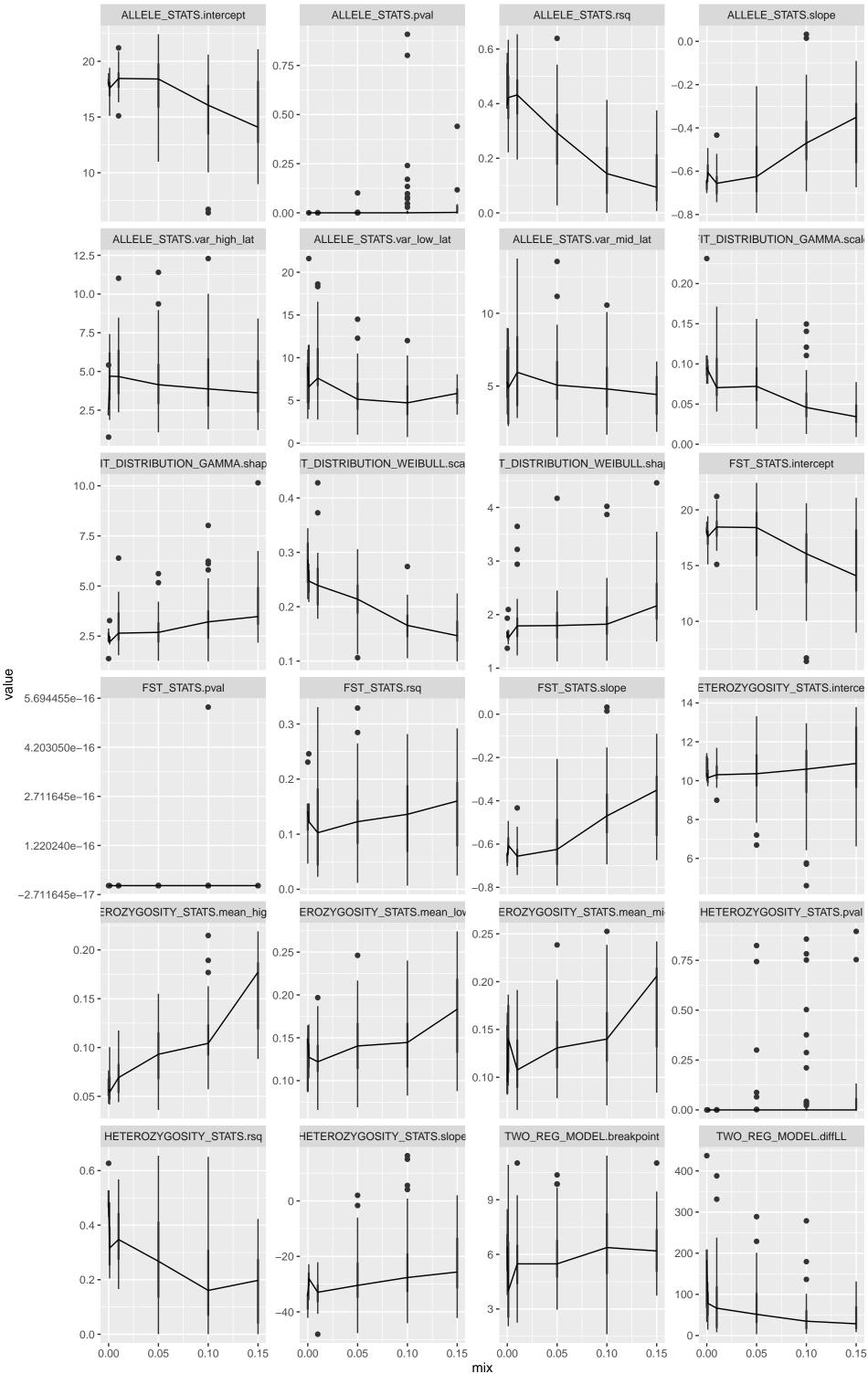
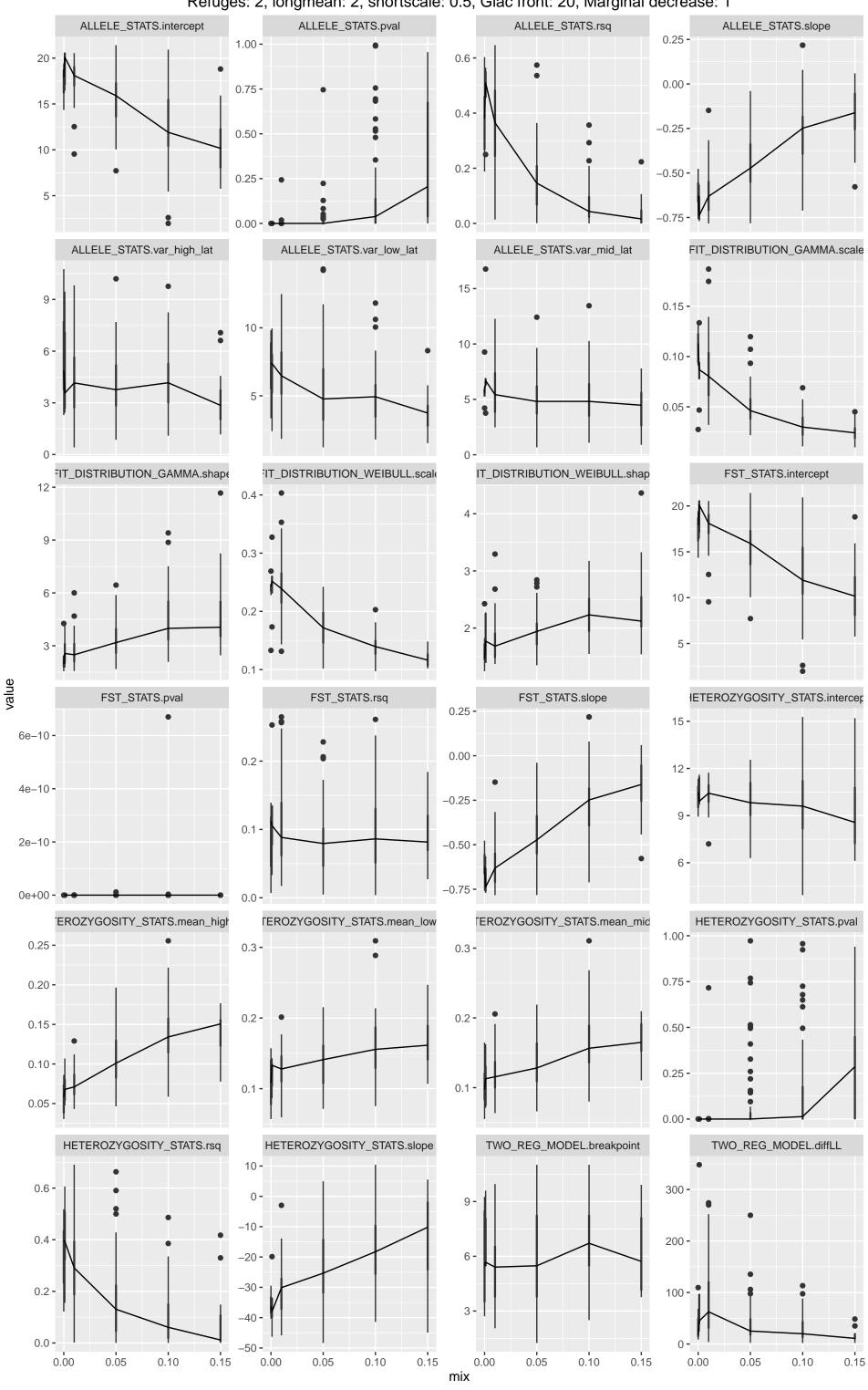
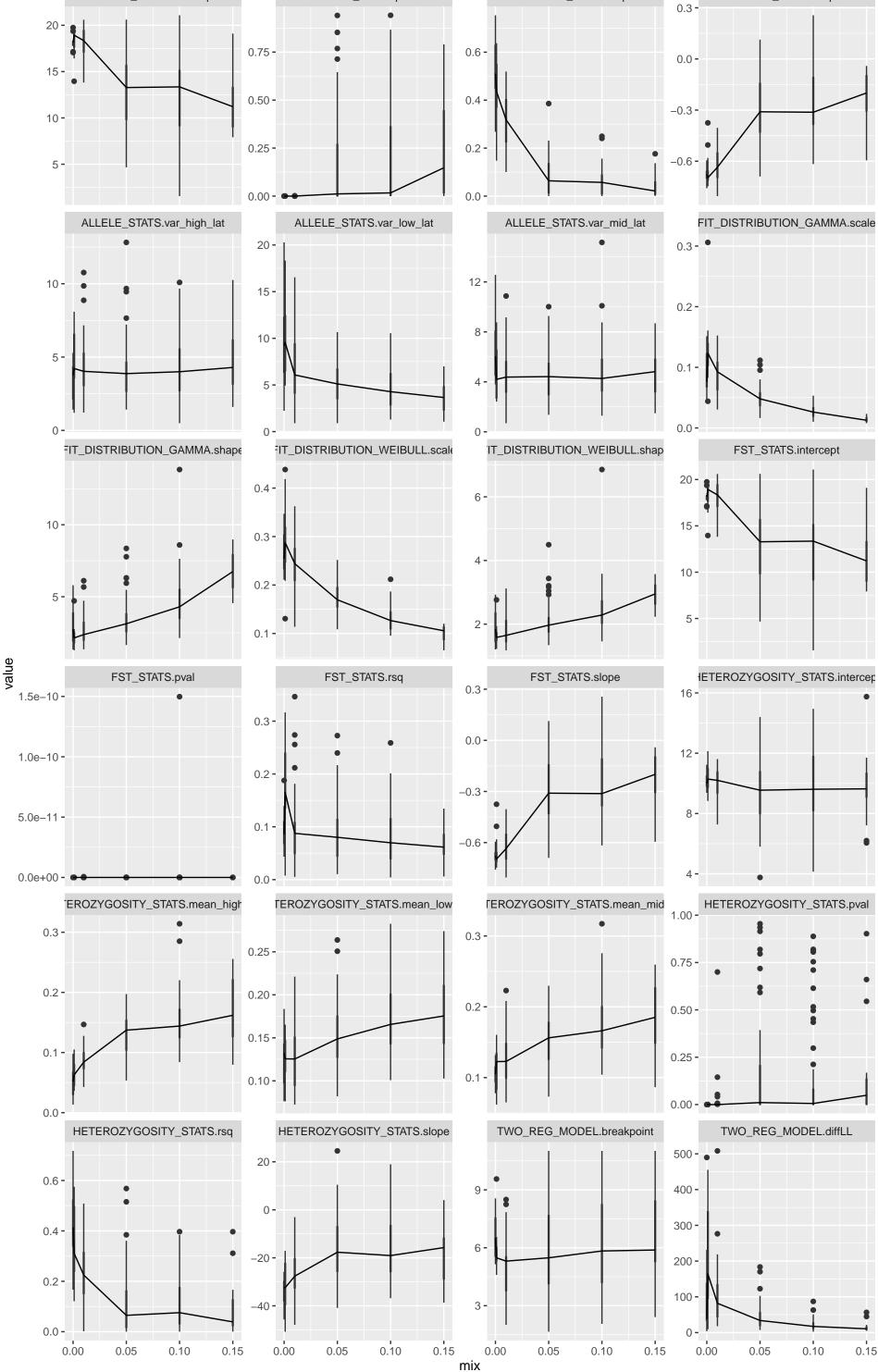
Refuges: 2, longmean: 1.5, shortscale: 0.5, Glac front: 20, Marginal decrease: 1



Refuges: 2, longmean: 2, shortscale: 0.5, Glac front: 20, Marginal decrease: 1





Refuges: 2, longmean: 3, shortscale: 0.5, Glac front: 20, Marginal decrease: 1 ALLELE_STATS.rsq ALLELE_STATS.intercept ALLELE_STATS.pval ALLELE_STATS.slope 1.00 -0.6 0.0 -0.75 -0.4 0.50 --0.30.2 -0.25 --0.60.00 -0.0 -ALLELE_STATS.var_high_lat ALLELE_STATS.var_low_lat ALLELE_STATS.var_mid_lat FIT_DISTRIBUTION_GAMMA.scale 0.20 20 -9 0.15 15 -6 -0.10 10-0.05 3 -5 -0.00 IT_DISTRIBUTION_WEIBULL.shap FIT_DISTRIBUTION_GAMMA.shape FIT_DISTRIBUTION_WEIBULL.scale FST_STATS.intercept 0.4 -6 20 · 0.3 -15 -0.2 10 -3 0.1 -5 -FST_STATS.pval FST_STATS.rsq FST_STATS.slope IETEROZYGOSITY_STATS.intercep 0.0 -12 **-**0.2 --0.3 0.1 -6 --0.6 0.0 -3 **-**FEROZYGOSITY_STATS.mean_mid EROZYGOSITY_STATS.mean_high FEROZYGOSITY_STATS.mean_low HETEROZYGOSITY_STATS.pval 1.00 -0.3 -0.75 -0.2 -0.2 -0.50 0.25 -0.1 -0.00 -HETEROZYGOSITY_STATS.slope HETEROZYGOSITY_STATS.rsq TWO_REG_MODEL.breakpoint TWO_REG_MODEL.diffLL 20 -400 -0 -300 -6 -200 –20 **-**

0 -

0.00

0.15

0.05

0.10

0.15

0.10

20 -

15 -

10 -

5 -

10.0 -

7.5

5.0 -

2.5 -

16 **-**

12 -

8 -

<u>nan</u> 0.00025 -

0.00020 -

0.00015 -

0.00010 -

0.00005 -

0.00000 -

0.2 -

0.1 -

0.6 -

0.4

0.2 -

0.0 -

0.00

0.05

0.10

0.15

0.00

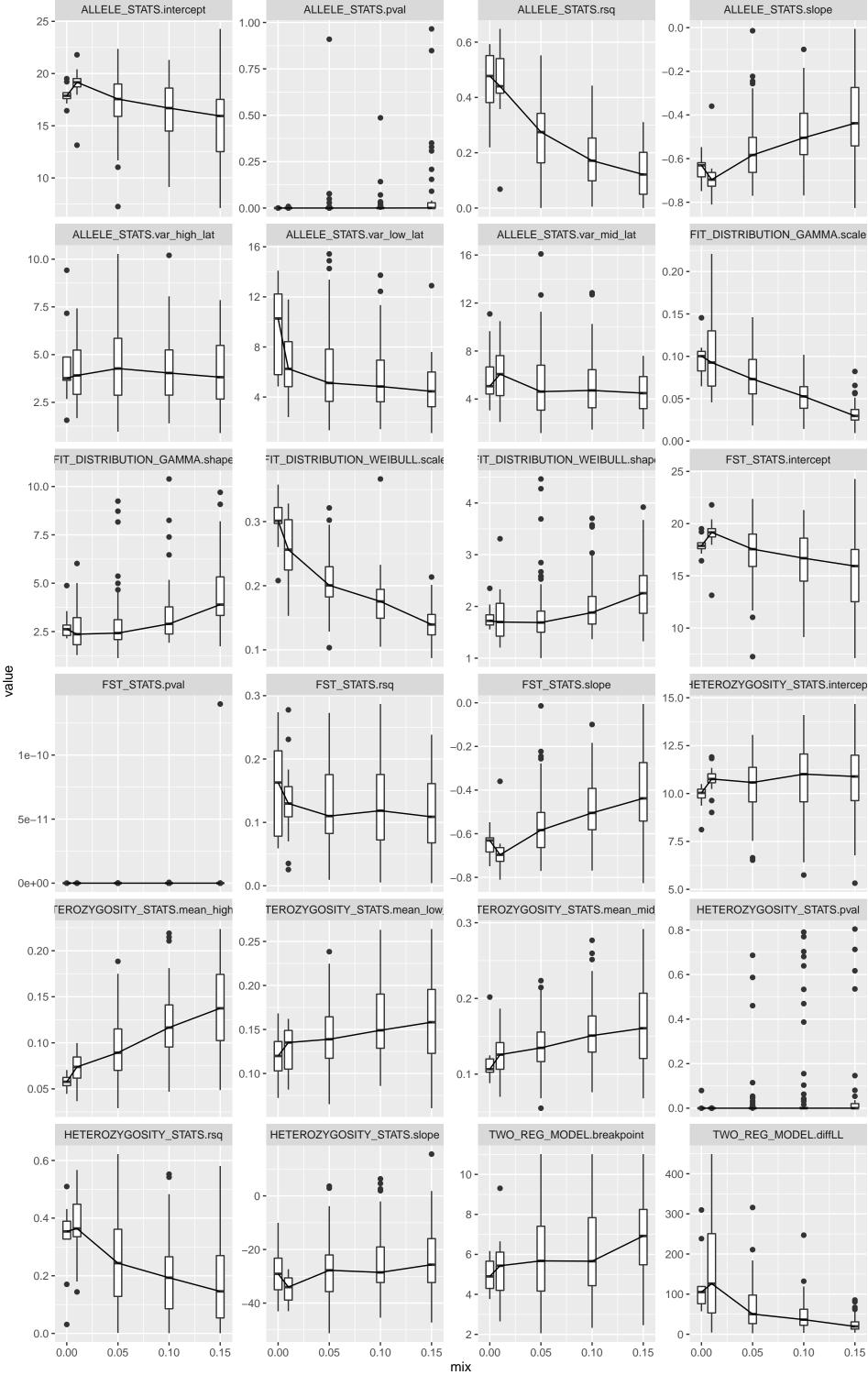
0.05

0.10

0.15

0.00

mix



Refuges: 3, longmean: 2, shortscale: 0.5, Glac front: 20, Marginal decrease: 1 ALLELE_STATS.pval ALLELE_STATS.rsq ALLELE_STATS.intercept ALLELE_STATS.slope 1.00 -0.6 -20 -0.0 -0.75 --0.2 **-**0.4 15 **-**0.50 --0.4 **-**10 -0.2 0.25 --0.6 5 -0.00 -0.0 -0.8 ALLELE_STATS.var_high_lat ALLELE_STATS.var_low_lat ALLELE_STATS.var_mid_lat FIT_DISTRIBUTION_GAMMA.scale 12.5 12.5 10.0 -0.15 10.0 20 -7.5 -7.5 -0.10 5.0 -10 -5.0 -0.05 -2.5 -2.5 0.0 -FIT_DISTRIBUTION_GAMMA.shape FIT_DISTRIBUTION_WEIBULL.scale IT_DISTRIBUTION_WEIBULL.shap FST_STATS.intercept 16 **-**0.4 -6 -20 -12 **-**0.3 -15 8 -0.2 -10 -0.1 -5 value FST_STATS.pval FST_STATS.rsq FST_STATS.slope IETEROZYGOSITY_STATS.intercep 0.3 -16 -1.5e-13 -0.0 -12 **-**0.2 --0.2 1.0e-13 --0.4 **-**0.1 -5.0e-14 --0.60.0e+00 -0.0 --0.8 EROZYGOSITY_STATS.mean_high TEROZYGOSITY_STATS.mean_low FEROZYGOSITY_STATS.mean_mid HETEROZYGOSITY_STATS.pval 1.00 0.25 -0.3 -0.25 -0.20 0.75 -0.20 -0.2 -0.15 -0.50 -0.15 -0.10 -0.25 -0.1 -0.05 -0.00 -0.05 -HETEROZYGOSITY_STATS.rsq HETEROZYGOSITY_STATS.slope TWO_REG_MODEL.breakpoint TWO_REG_MODEL.diffLL 0.6 -300 -20 -9 0.4 200 -6 --20 **-**0.2 -100 -0.0 -0 -

0.15

mix

0.00

0.05

0.10

0.15

0.00

0.05

0.10

0.00

0.05

0.15

0.00

0.05

0.15

Refuges: 3, longmean: 2.5, shortscale: 0.5, Glac front: 20, Marginal decrease: 1 ALLELE_STATS.pval ALLELE_STATS.rsq ALLELE_STATS.intercept ALLELE_STATS.slope 0.4 1.00 -0.6 -20 -0.75 -0.0 -15 -0.4 0.50 -10 --0.4 0.2 0.25 -5 -0 -0.00 - -0.0 -ALLELE_STATS.var_high_lat ALLELE_STATS.var_mid_lat ALLELE_STATS.var_low_lat FIT_DISTRIBUTION_GAMMA.scale 0.20 15 -10 -10 -0.15 -10 -0.10 5 -5 -5 **-**0.05 0.00 TT_DISTRIBUTION_WEIBULL.shap FIT_DISTRIBUTION_GAMMA.shape FIT_DISTRIBUTION_WEIBULL.scale FST_STATS.intercept 0.4 -20 -9 -0.3 -15 -3 **-**10 -0.2 5 -3 -0.1 -0 -FST_STATS.slope IETEROZYGOSITY_STATS.intercep FST_STATS.pval FST_STATS.rsq 0.4 -0.3 -2.0e-07 -1.5e-07 -0.0 -0.2 -1.0e-07 --0.4 0.1 -5.0e-08 **-**0 --0.8 0.0e+00 - • 0.0 -HETEROZYGOSITY_STATS.pval EROZYGOSITY_STATS.mean_high TEROZYGOSITY_STATS.mean_low FEROZYGOSITY_STATS.mean_mid 1.00 -0.3 -0.3 -0.25 -0.75 -0.20 -0.2 -0.2 -0.50 -0.15 -0.25 -0.1 -0.1 -0.00 -0.05 TWO_REG_MODEL.diffLL HETEROZYGOSITY_STATS.rsq TWO_REG_MODEL.breakpoint HETEROZYGOSITY_STATS.slope 500 -0.6 -25 -9 -400 -0.4 300 -0 -6 -200 -0.2 --25 **-**100 -0.0 -0 -

0.15

0.10

0.00

0.05

0.05

0.10

0.15

mix

0.00

0.05

0.10

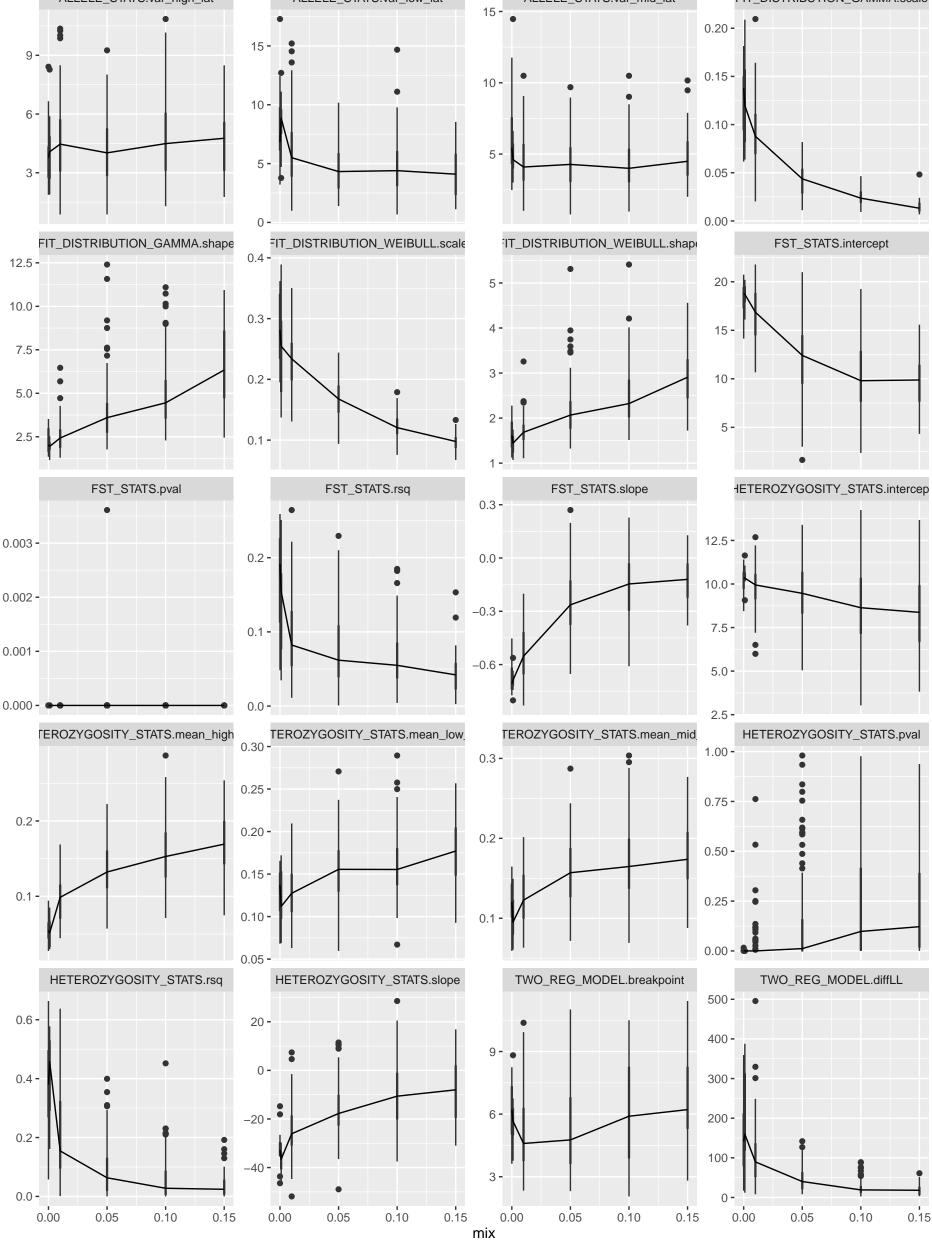
0.15

0.00

0.15

0.10

Refuges: 3, longmean: 3, shortscale: 0.5, Glac front: 20, Marginal decrease: 1 ALLELE_STATS.intercept ALLELE_STATS.pval ALLELE_STATS.rsq ALLELE_STATS.slope 0.3 -1.00 -0.6 -0.75 **-**0.0 -0.4 0.50 --0.3 **-**0.2 -0.25 --0.6 0.00 -0.0 -ALLELE_STATS.var_mid_lat FIT_DISTRIBUTION_GAMMA.scale ALLELE_STATS.var_high_lat ALLELE_STATS.var_low_lat 15 **-**0.20 -15 **-**0.15 10 -10 -0.10 5 · 5 -0.05 0.00 -FIT_DISTRIBUTION_WEIBULL.scale IT_DISTRIBUTION_WEIBULL.shape FST_STATS.intercept 20 -5 -0.3 -15 -3 10 -0.2 5 -0.1 -FST_STATS.slope HETEROZYGOSITY_STATS.intercep FST_STATS.rsq 0.3 12.5 **-**0.2 -0.0 -10.0 --0.3 **-**7.5 0.1 --0.6 5.0 -0.0 -2.5 TEROZYGOSITY_STATS.mean_low TEROZYGOSITY_STATS.mean_mid_ HETEROZYGOSITY_STATS.pval 0.30 1.00 -0.3 -0.25 -0.75 -0.20 -0.2 -0.50 0.15 -0.25 -0.1 -0.00 -0.05 TWO_REG_MODEL.breakpoint TWO_REG_MODEL.diffLL HETEROZYGOSITY_STATS.slope 500 -20 -400 -0 -300 -

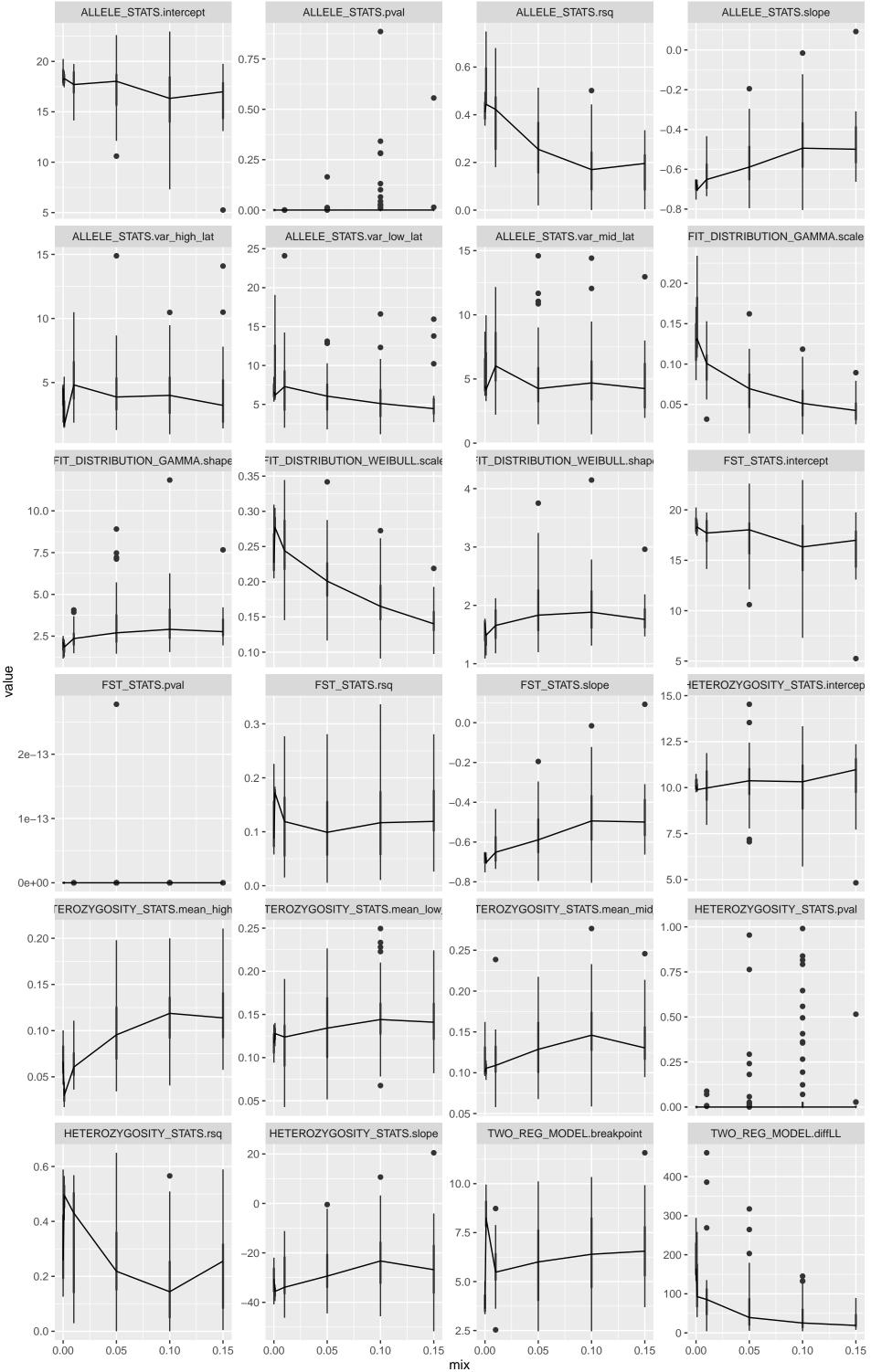


15 -

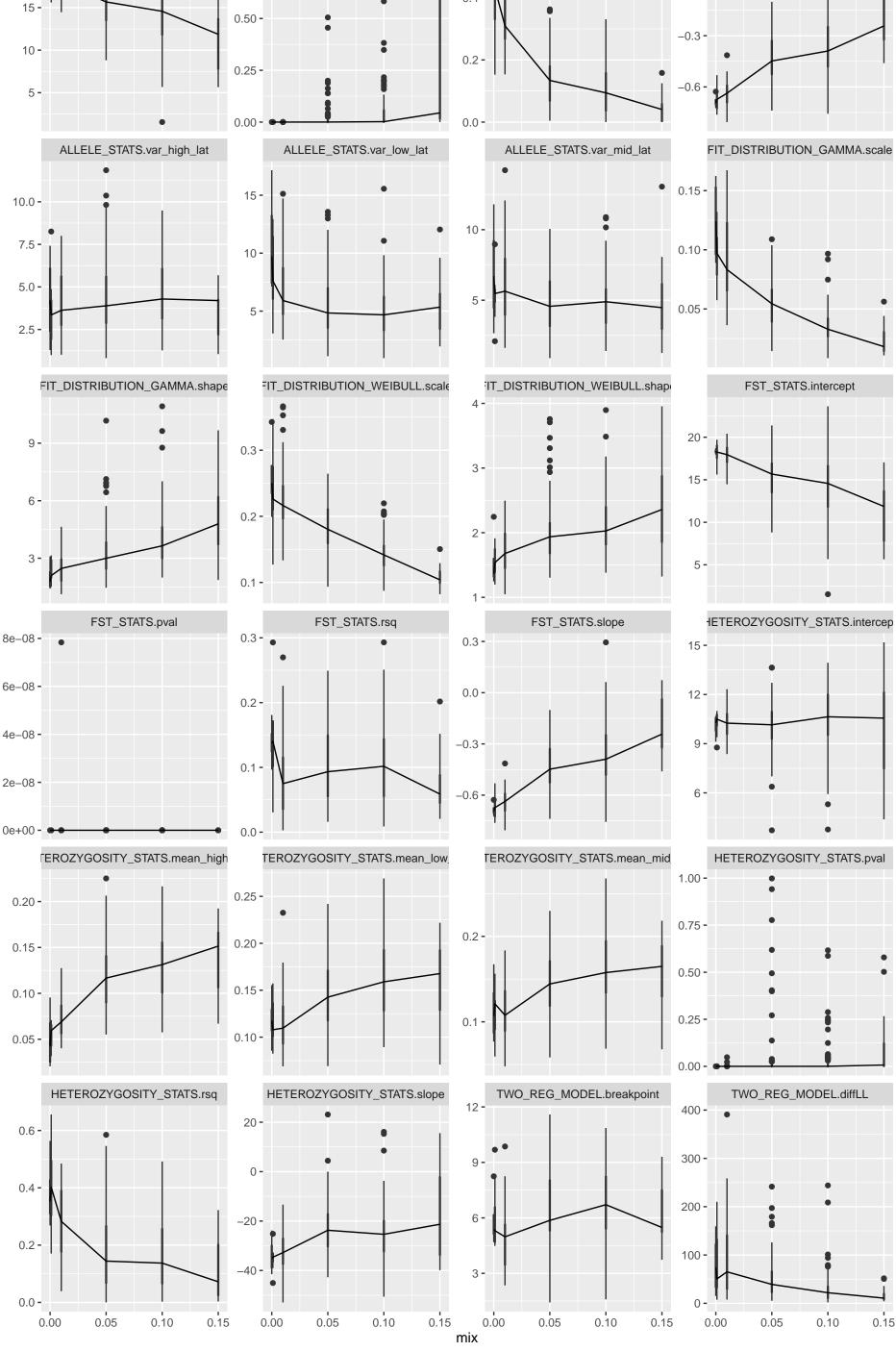
10 -

5 -

Refuges: 4, longmean: 1.5, shortscale: 0.5, Glac front: 20, Marginal decrease: 1 ALLELE_STATS.rsq ALLELE_STATS.pval



Refuges: 4, longmean: 2, shortscale: 0.5, Glac front: 20, Marginal decrease: 1 ALLELE_STATS.intercept ALLELE_STATS.pval ALLELE_STATS.rsq ALLELE_STATS.slope 0.3 -0.6 -0.75 -0.0 -0.4 0.50 --0.3 **-**0.2 -0.25 --0.6 0.0 -0.00 -ALLELE_STATS.var_low_lat ALLELE_STATS.var_mid_lat FIT_DISTRIBUTION_GAMMA.scale 0.15 -15**-**10 -0.10 -10 5 -0.05 5 -IT_DISTRIBUTION_WEIBULL.shape FIT_DISTRIBUTION_WEIBULL.scale FST_STATS.intercept 20 -0.3 3 -15 **-**0.2 -10 -5 -HETEROZYGOSITY_STATS.intercep FST_STATS.rsq FST_STATS.slope 0.3 -0.3 -15 **-**0.0 -12 -0.2 --0.3 **-**0.1 -6 **-**-0.6 0.0 TEROZYGOSITY_STATS.mean_low_ TEROZYGOSITY_STATS.mean_mid HETEROZYGOSITY_STATS.pval 1.00 -0.25 -0.75 -0.2 -0.20 -0.50 -0.15 0.25 -0.1 -0.10 -0.00 -HETEROZYGOSITY_STATS.slope TWO_REG_MODEL.diffLL TWO_REG_MODEL.breakpoint 400 -20 -300 -0 -200 -6 -–20 **-**



Refuges: 4, longmean: 2.5, shortscale: 0.5, Glac front: 20, Marginal decrease: 1 ALLELE_STATS.intercept ALLELE_STATS.pval ALLELE_STATS.rsq ALLELE_STATS.slope 0.6 -0.0 -0.75 --0.2 -0.4 -0.50 --0.4 **-**0.2 -0.25 --0.6· -0.8 0.0 -0.00 -ALLELE_STATS.var_low_lat ALLELE_STATS.var_mid_lat FIT_DISTRIBUTION_GAMMA.scale ALLELE_STATS.var_high_lat 0.20 -12 **-**10 -0.15 8 -0.10 -5 -0.05 -0.00 -FIT_DISTRIBUTION_GAMMA.shape FIT_DISTRIBUTION_WEIBULL.scale IT_DISTRIBUTION_WEIBULL.shape FST_STATS.intercept 0.4 -20 -4 -0.3 15 **-**0.2 10 -0.1 -5 -FST_STATS.pval FST_STATS.rsq HETEROZYGOSITY_STATS.intercep FST_STATS.slope 16-0.3 -0.0 -12 --0.2 **-**0.2 --0.40.1 --0.6 -0.8 0.0 FEROZYGOSITY_STATS.mean_high TEROZYGOSITY_STATS.mean_low_ TEROZYGOSITY_STATS.mean_mid HETEROZYGOSITY_STATS.pval 0.30 -0.3 -0.75 -0.25 -0.2 -0.20 -0.50 0.15 -0.25 0.10 -0.00 -TWO_REG_MODEL.breakpoint HETEROZYGOSITY_STATS.rsq HETEROZYGOSITY_STATS.slope TWO_REG_MODEL.diffLL 400 -9 -0 -300 -

0.00

mix

0.05

200

100 -

0 -

0.00

0.05

0.15

0.10

0.15

0.10

20 -

15

5

12.5

10.0

7.5

5.0

2.5

12 -

6 -

value value

4e-11 -

2e-11 -

0e+00 - •

0.2 -

0.1 -

0.6

0.4

0.2

0.0 -

0.00

-25 **-**

-50 **-**

0.15

0.00

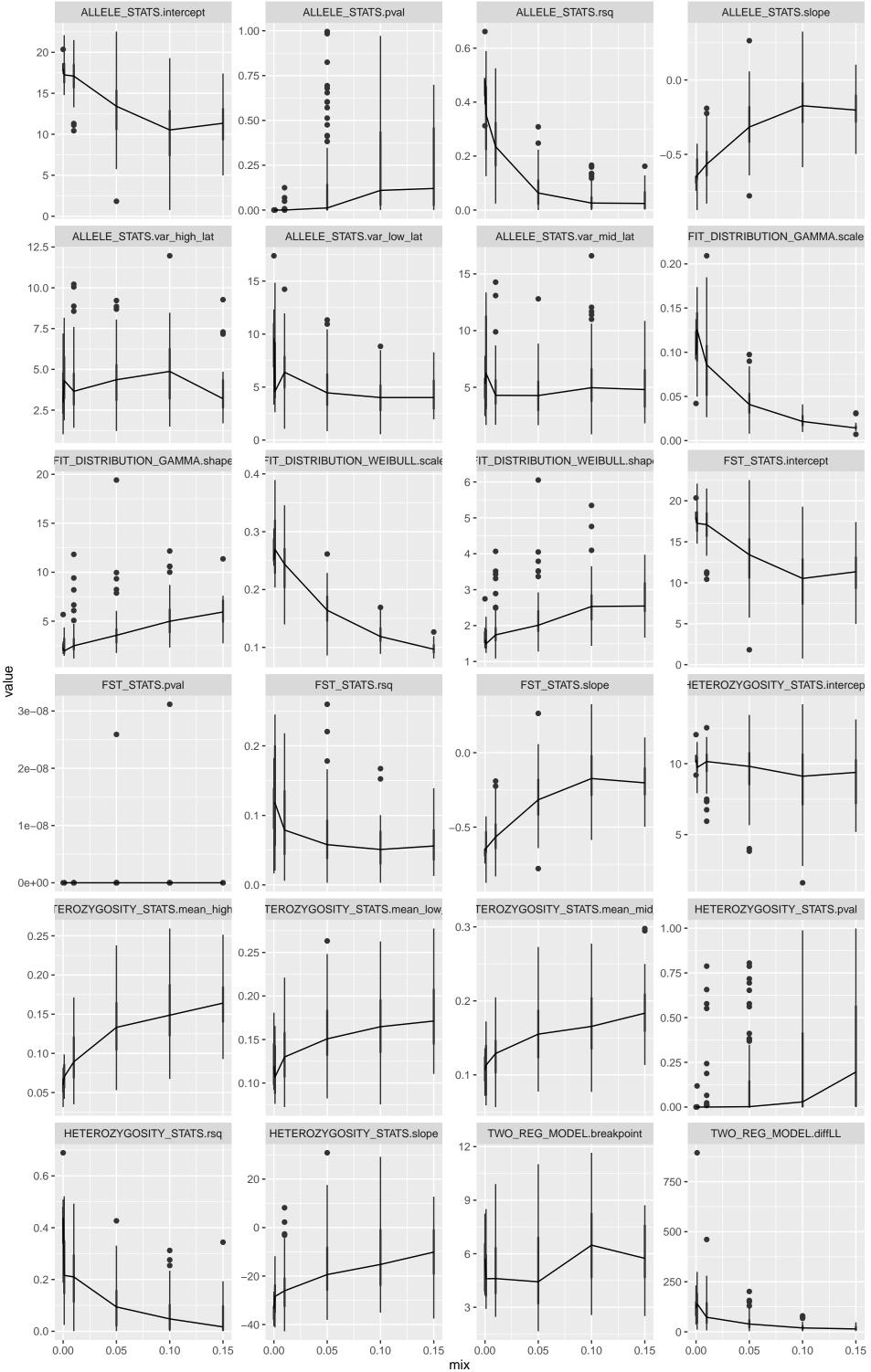
0.10

0.15

0.05

0.10

Refuges: 4, longmean: 3, shortscale: 0.5, Glac front: 20, Marginal decrease: 1 ALLELE_STATS.pval ALLELE_STATS.rsq 1.00 -



Refuges: 5, longmean: 1.5, shortscale: 0.5, Glac front: 20, Marginal decrease: 1 ALLELE_STATS.rsq ALLELE_STATS.slope ALLELE_STATS.intercept ALLELE_STATS.pval 1.00 -0.0 -0.6 0.75 --0.2 **-**0.4 0.50 --0.4 **-**0.2 0.25 --0.6 0.0 -0.8 0.00 -ALLELE_STATS.var_high_lat ALLELE_STATS.var_low_lat ALLELE_STATS.var_mid_lat FIT_DISTRIBUTION_GAMMA.scale 16 0.20 -15**-**12 **-**0.15 10 -8 0.10 5 -0.05 FIT_DISTRIBUTION_GAMMA.shape FIT_DISTRIBUTION_WEIBULL.scale IT_DISTRIBUTION_WEIBULL.shap FST_STATS.intercept 0.4 5 -20 -0.3 15 -3 0.2 10 FST_STATS.pval FST_STATS.rsq FST_STATS.slope IETEROZYGOSITY_STATS.intercep 0.0 -0.3 -12 --0.2 **-**0.2 -0.40.1 --0.6 -0.8 0.0 -EROZYGOSITY_STATS.mean_high TEROZYGOSITY_STATS.mean_low FEROZYGOSITY_STATS.mean_mid HETEROZYGOSITY_STATS.pval 0.3 -0.3 -0.75 -0.2 -0.15 -0.50 -0.2 -0.25 -0.1 -0.00 -TWO_REG_MODEL.diffLL HETEROZYGOSITY_STATS.rsq HETEROZYGOSITY_STATS.slope TWO_REG_MODEL.breakpoint 20 -400 -10 -300 -0 -8 200 --20 **-**6 -100 -

0.15

mix

0.05

0.10

0.10

0 -

0.00

0.05

0.15

0.10

0.15

20 -

15 -

10 -

5 -

20 -

15 **-**

10 -

5 -

12.5 -

10.0 -

7.5 -

5.0 -

1.0e-04 **-**

7.5e-05 **-**

5.0e-05 -

2.5e-05 -

0.0e+00 -

0.25 -

0.20 -

0.10 -

0.05 -

0.6 -

0.4

0.2

0.0 -

0.00

0.05

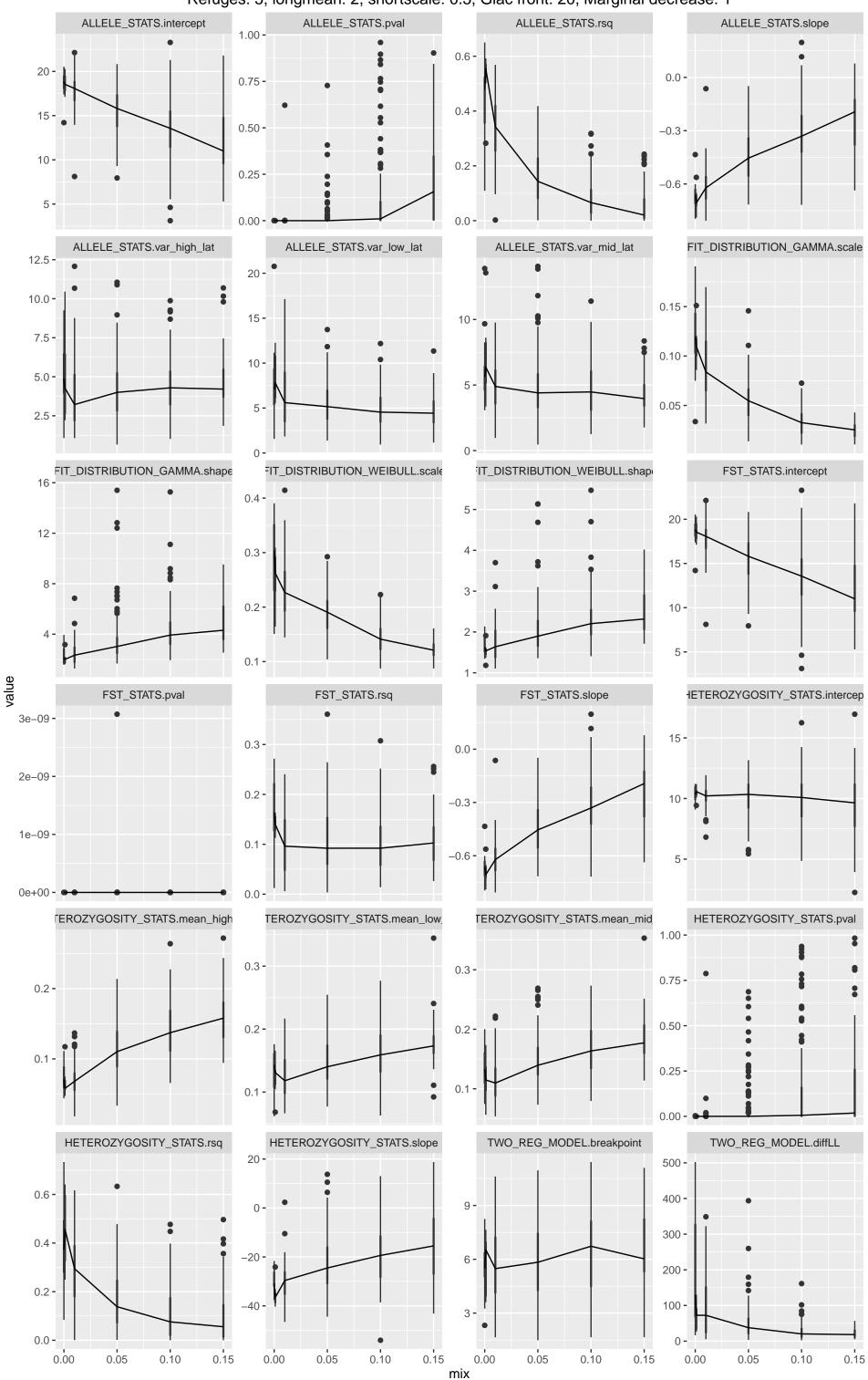
0.10

0.00

0.15

0.05

Refuges: 5, longmean: 2, shortscale: 0.5, Glac front: 20, Marginal decrease: 1



Refuges: 5, longmean: 2.5, shortscale: 0.5, Glac front: 20, Marginal decrease: 1 ALLELE_STATS.rsq ALLELE_STATS.slope ALLELE_STATS.intercept ALLELE_STATS.pval 1.00 -0.3 -0.6 -0.75 -0.0 -0.4 -0.50 -0.3 **-**0.2 -0.25 --0.6 **-**0.00 -0.0 -ALLELE_STATS.var_high_lat ALLELE_STATS.var_low_lat ALLELE_STATS.var_mid_lat FIT_DISTRIBUTION_GAMMA.scale 15 **-**0.20 -20 -0.15 10 -0.10 -10 -5 -0.05 0.00 -TT_DISTRIBUTION_WEIBULL.shape FIT_DISTRIBUTION_GAMMA.shape FIT_DISTRIBUTION_WEIBULL.scale FST_STATS.intercept 0.4 -20 -4 -0.3 -15**-**3 -10 -0.2 5 -0.1 -FST_STATS.rsq HETEROZYGOSITY_STATS.intercep FST_STATS.pval FST_STATS.slope 0.3 -0.3 -0.0 10 -0.2 --0.3 **-**0.1 --0.6 **-**0.0 FEROZYGOSITY_STATS.mean_high TEROZYGOSITY_STATS.mean_low_ TEROZYGOSITY_STATS.mean_mid HETEROZYGOSITY_STATS.pval 1.00 0.3 -0.75 0.2 -0.2 -0.50 -0.25 -0.00 - 🔠 TWO_REG_MODEL.diffLL HETEROZYGOSITY_STATS.rsq HETEROZYGOSITY_STATS.slope TWO_REG_MODEL.breakpoint 25 **-**750 **-**9 -500 -0 6 -250 –25 **-**

0.10

0.05

0.10

0.15

0.00

20 -

15

10

5 -

9 -

6 **-**

3 -

9 -

6 -

value

4e-10 -

3e-10 -

2e-10 -

1e-10 -

0e+00 - •

0.2 -

0.1

0.6 -

0.4

0.2

0.0

0.00

-50

0.00

0.15

0.10

0.05

0.10

0.15

0.00

mix

0.05

Refuges: 5, longmean: 3, shortscale: 0.5, Glac front: 20, Marginal decrease: 1 ALLELE_STATS.pval ALLELE_STATS.rsq ALLELE_STATS.intercept ALLELE_STATS.slope 1.00 -0.6 -0.75 -0.0 -0.4 0.50 -0.2 -0.25 -0.00 -0.0 ALLELE_STATS.var_high_lat ALLELE_STATS.var_low_lat ALLELE_STATS.var_mid_lat FIT_DISTRIBUTION_GAMMA.scale 16 0.20 -12 -0.15 -10 -0.10 -5 -0.05 -0.00 -FIT_DISTRIBUTION_WEIBULL.scale FIT_DISTRIBUTION_GAMMA.shape FIT_DISTRIBUTION_WEIBULL.shape FST_STATS.intercept 20 -0.4 -15 -0.3 -10 -0.2 0.1 -FST_STATS.pval HETEROZYGOSITY_STATS.intercept FST_STATS.rsq FST_STATS.slope 0.4 0.3 10-0.2 --0.4 **-**0.1 -0.0 -0.8 TEROZYGOSITY_STATS.mean_high TEROZYGOSITY_STATS.mean_low_ TEROZYGOSITY_STATS.mean_mid_ HETEROZYGOSITY_STATS.pval 1.00 -0.3 -0.3 -0.75 0.2 -0.2 0.50 0.25 -0.1 -0.00 -HETEROZYGOSITY_STATS.rsq HETEROZYGOSITY_STATS.slope TWO_REG_MODEL.diffLL TWO_REG_MODEL.breakpoint 25 -600 -9 -400 -6 -–25 **-**200 -

0.05

0.00

mix

0.15

0.10

0.15

0.00

0.05

0.15

0.10

0.05

20 -

15 **-**

10-

0 -

10-

16-

12 -

0.4 -

0.3 -

0.2 -

0.1 -

0.3 -

0.2 -

0.6 -

0.4 -

0.2 -

0.0

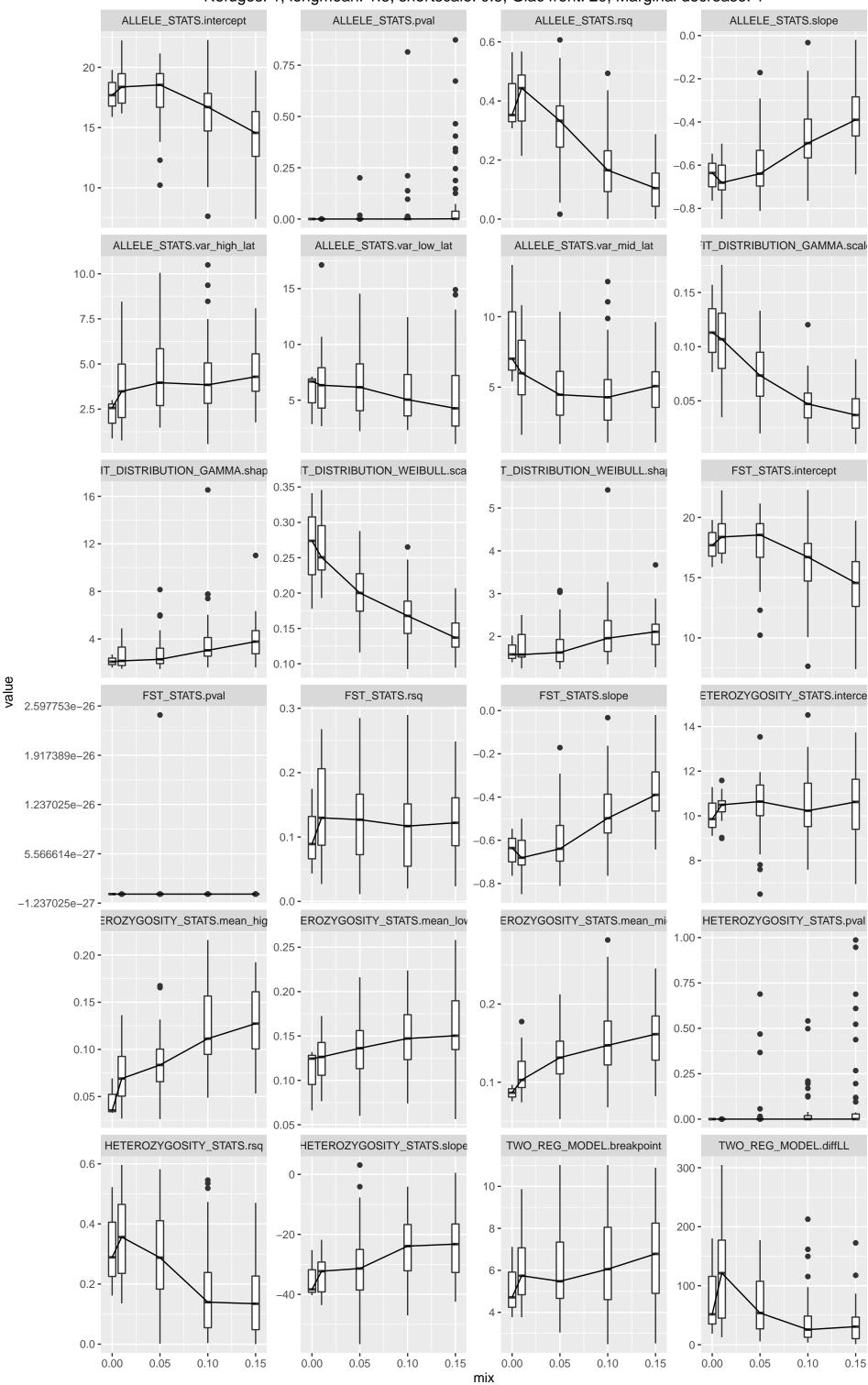
0.00

0.10

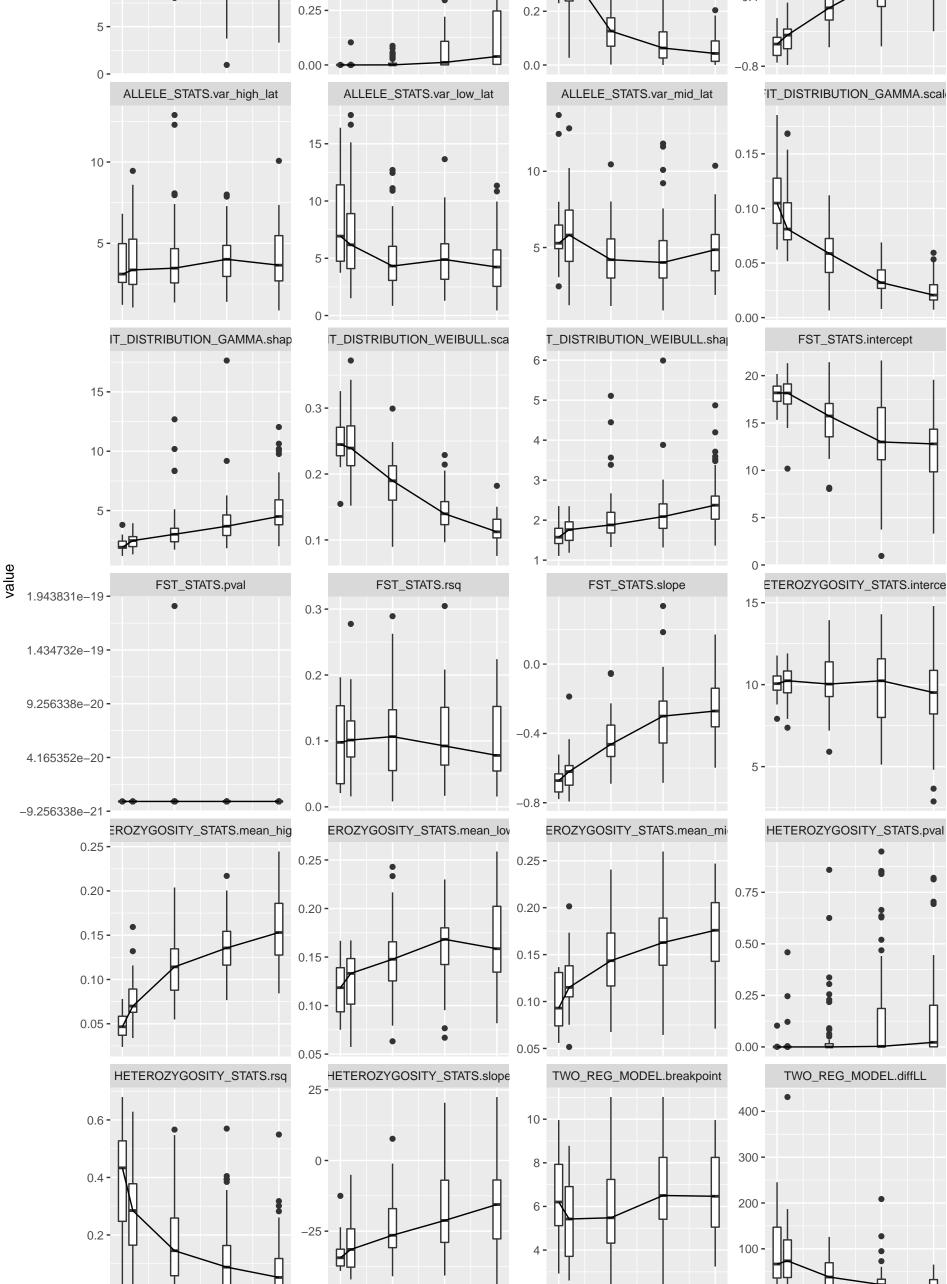
0.15

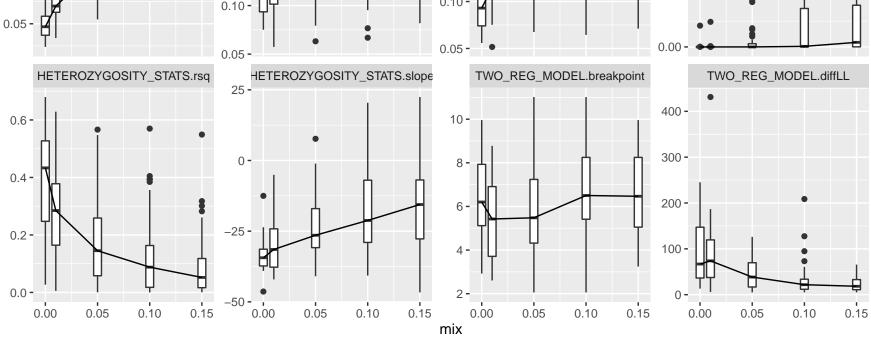
0.00

Refuges: 1, longmean: 1.5, shortscale: 0.5, Glac front: 20, Marginal decrease: 1



Refuges: 1, longmean: 2, shortscale: 0.5, Glac front: 20, Marginal decrease: 1 ALLELE_STATS.pval ALLELE_STATS.rsq ALLELE_STATS.slope ALLELE_STATS.intercept 20 -0.75 -0.6 0.0 -15 0.50 0.4 10 -0.40.25 -0.2 0.00 0.0 --0.8 ALLELE_STATS.var_high_lat ALLELE_STATS.var_low_lat ALLELE_STATS.var_mid_lat IT_DISTRIBUTION_GAMMA.scale 15 0.15 10-10 0.10 5 -0.05 -0.00 IT_DISTRIBUTION_GAMMA.shap T_DISTRIBUTION_WEIBULL.sca T_DISTRIBUTION_WEIBULL.shap FST_STATS.intercept 6 -20 -5 -0.3 15 **-**0.2 3 -





Refuges: 1, longmean: 2.5, shortscale: 0.5, Glac front: 20, Marginal decrease: 1

