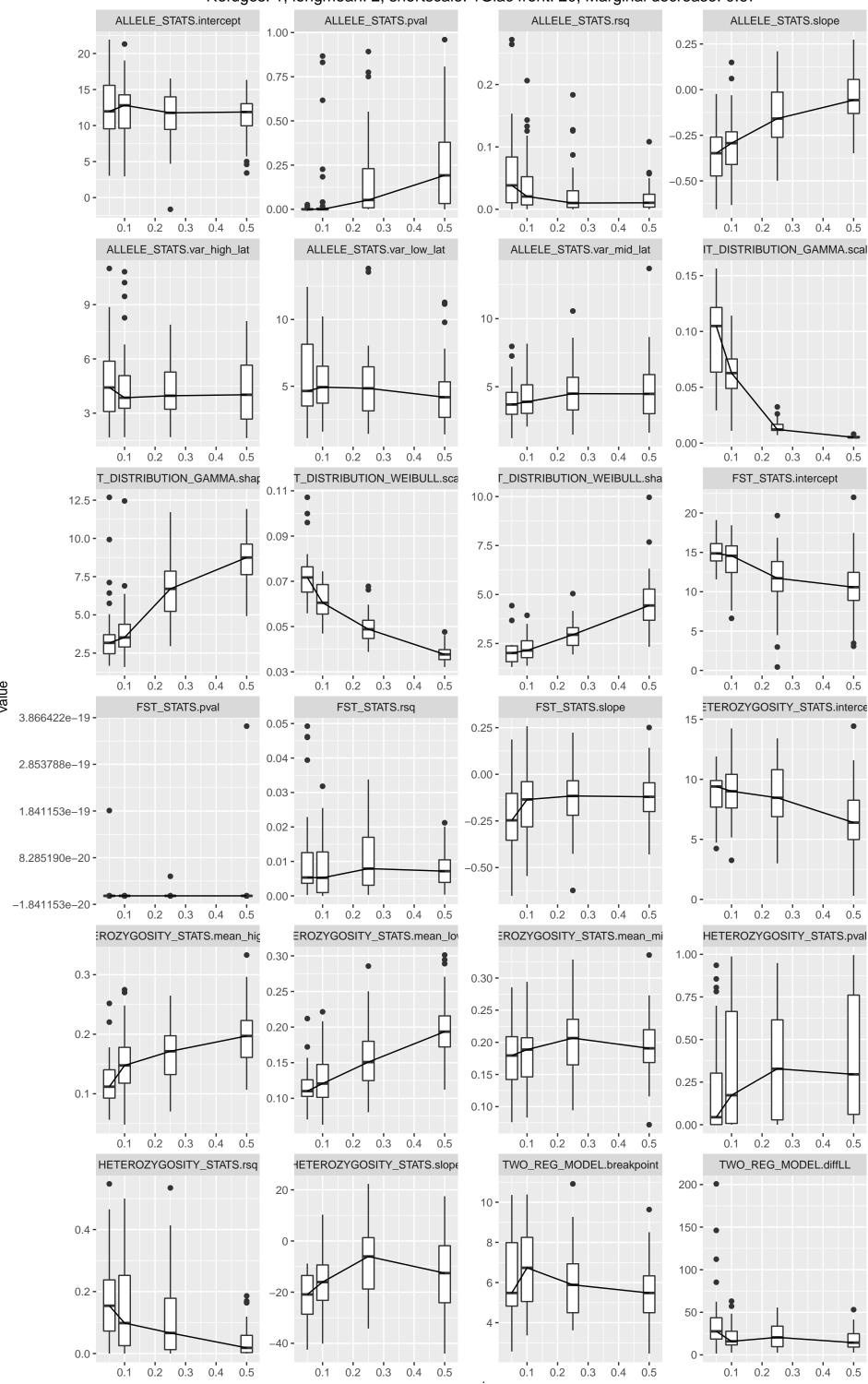
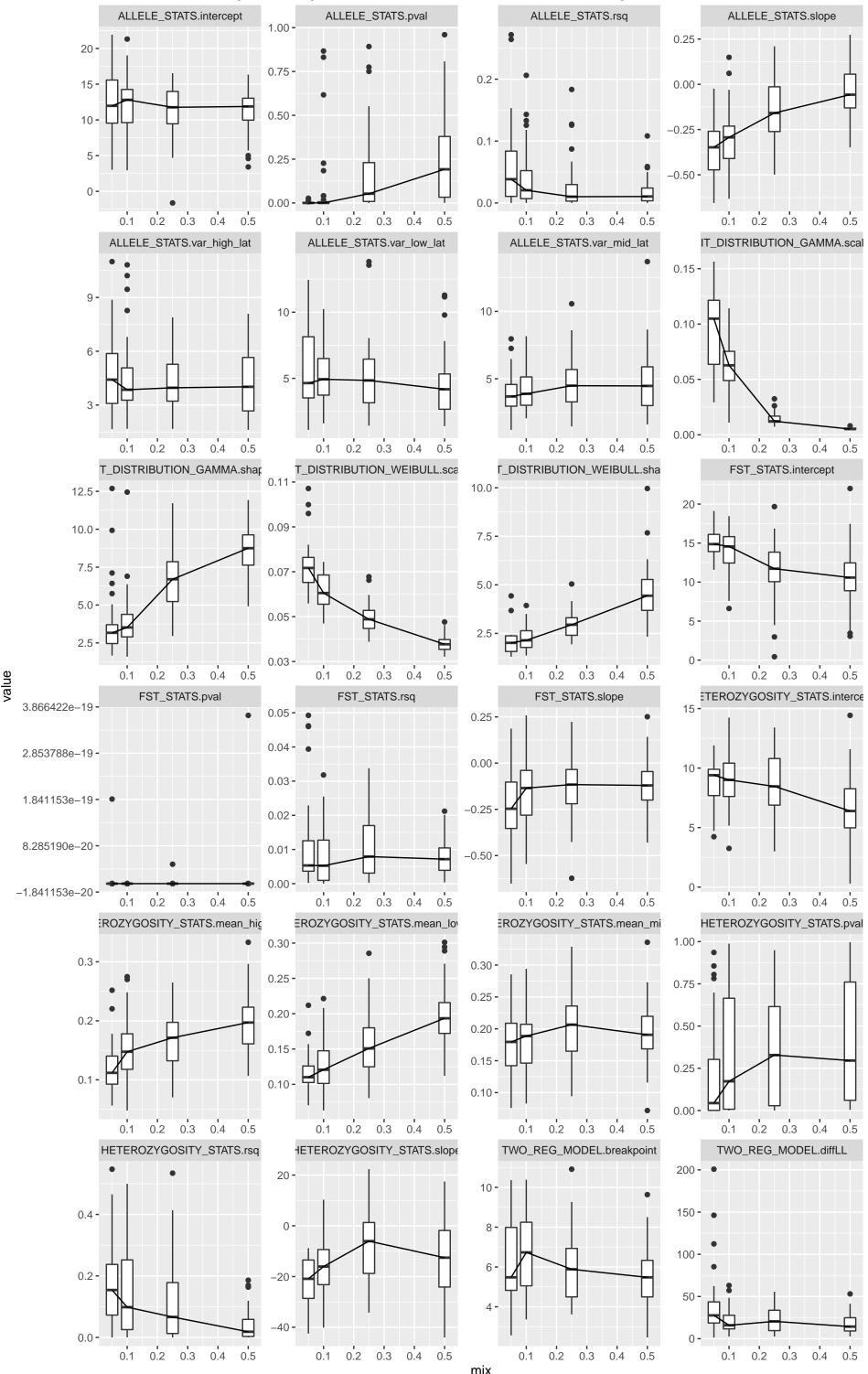
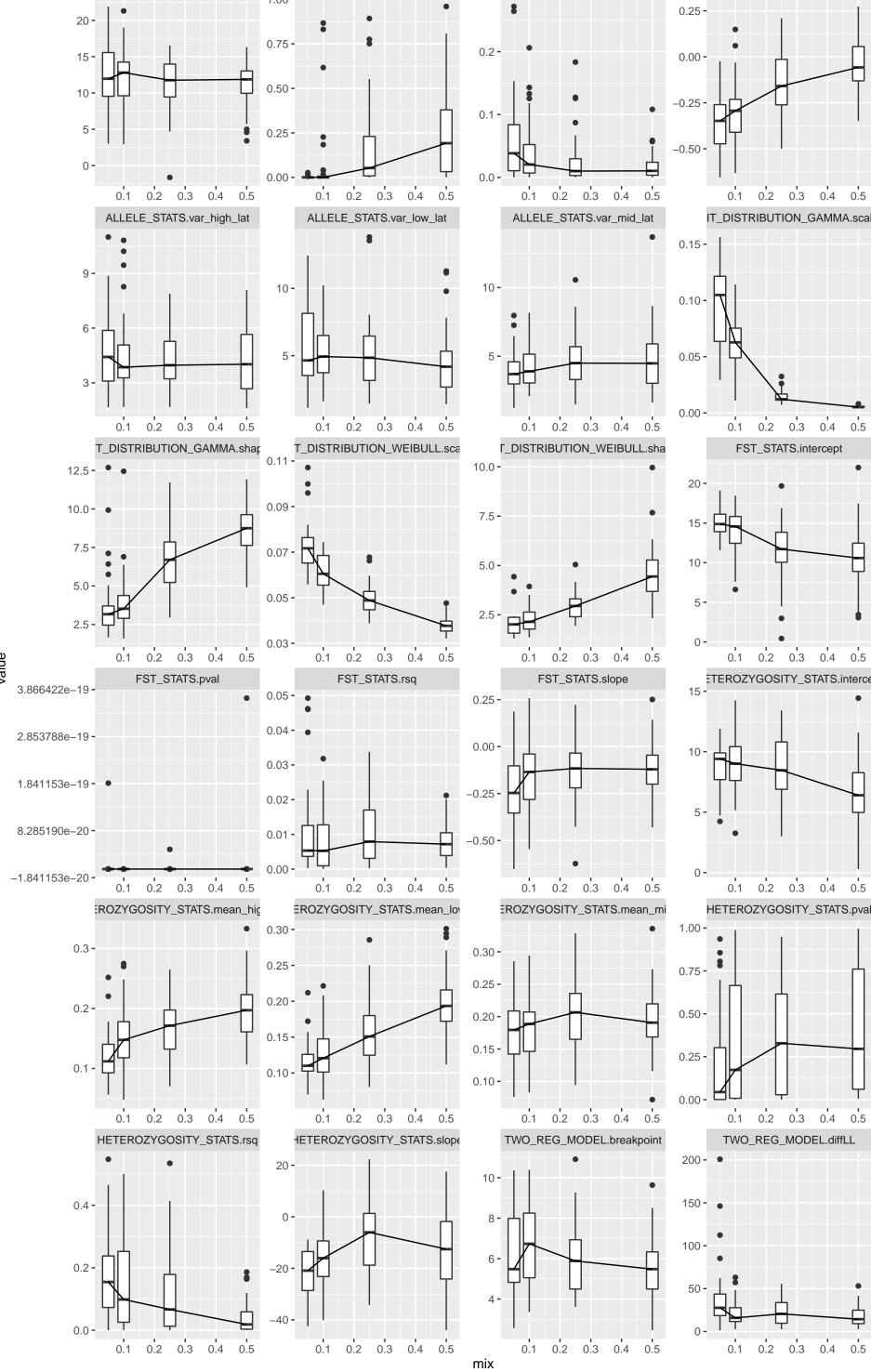
Refuges: 1, longmean: 2, shortscale: 1Glac front: 20, Marginal decrease: 0.67



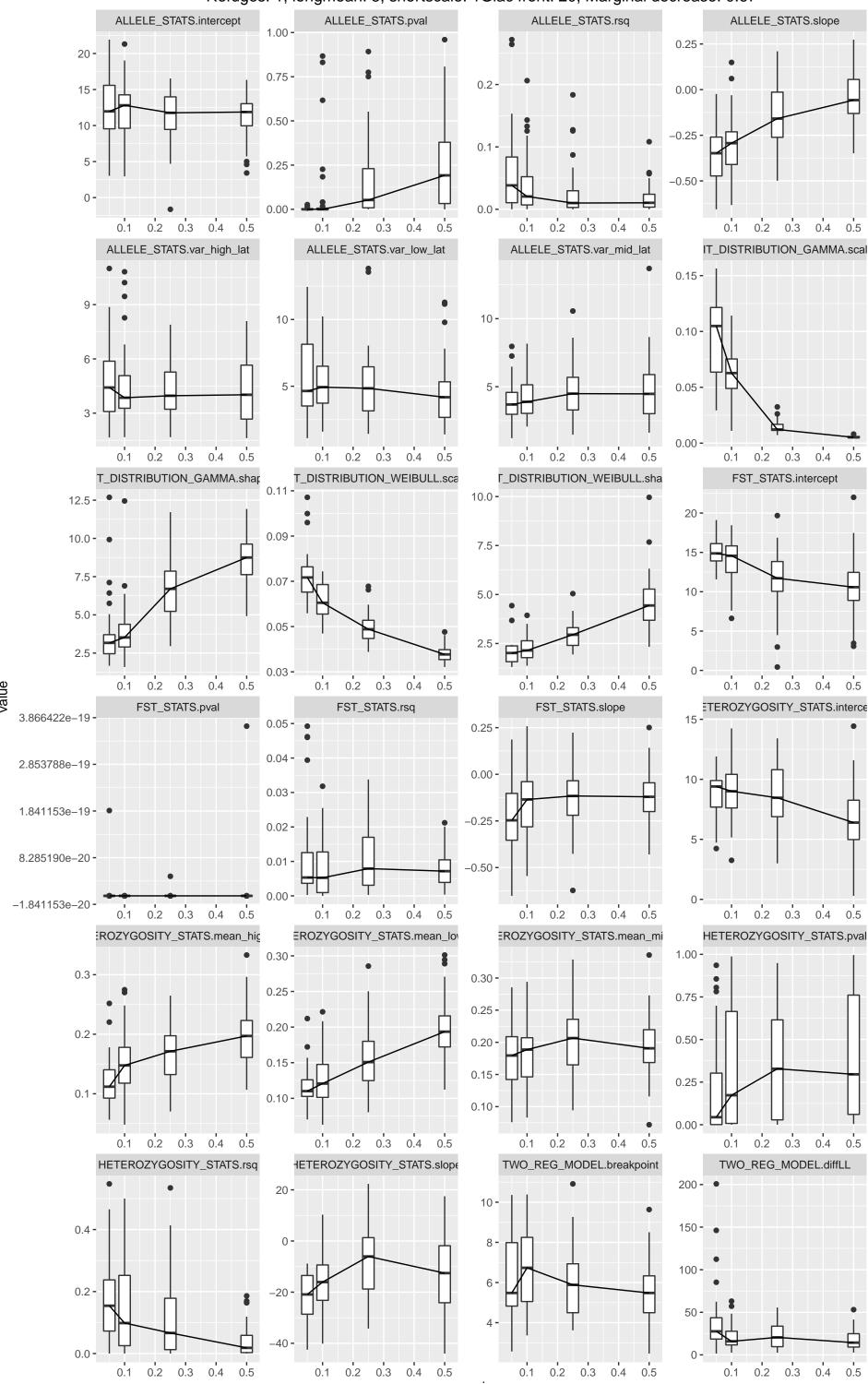
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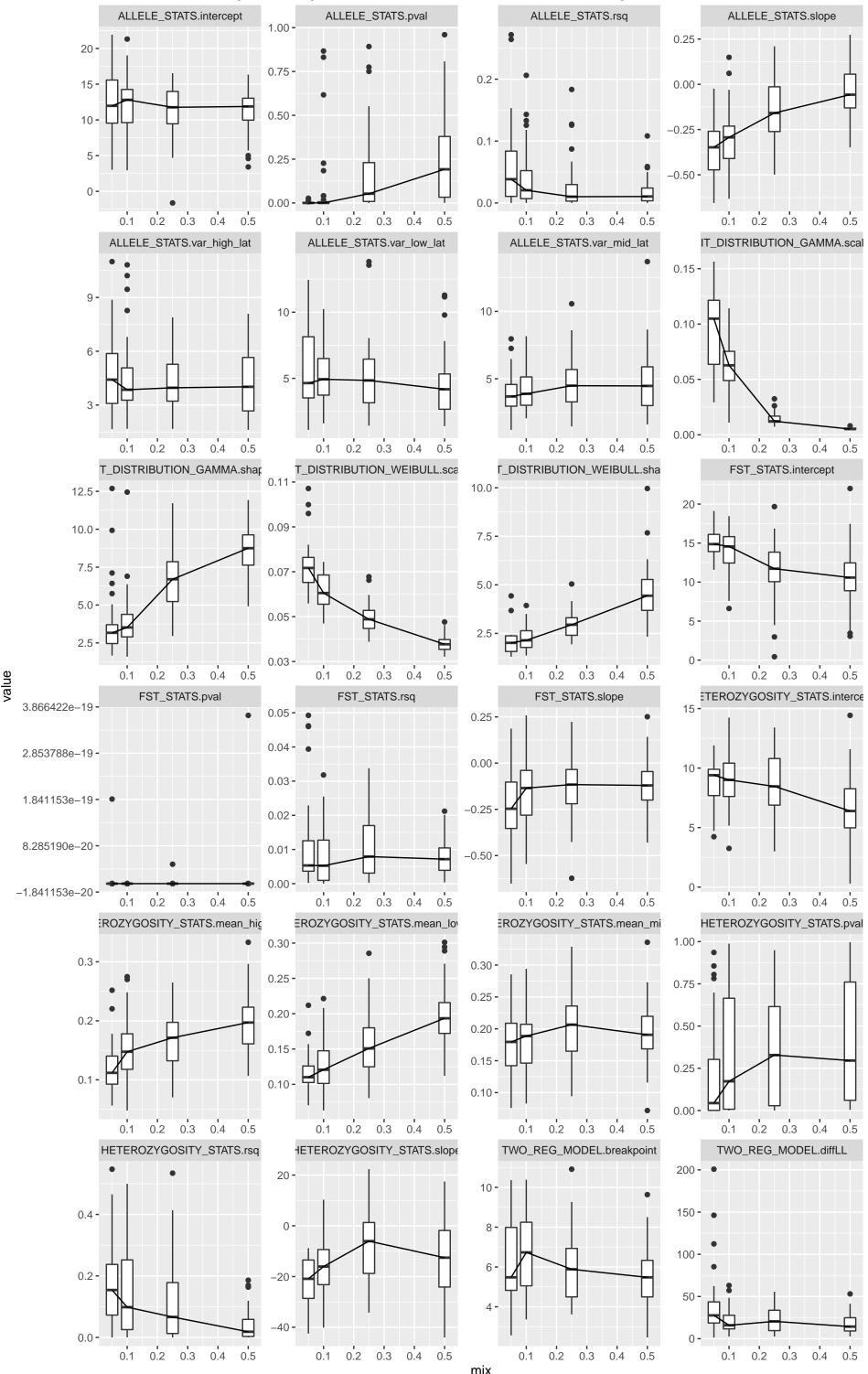
Refuges: 1, longmean: 2, shortscale: 0.25Glac front: 20, Marginal decrease: 0.67 ALLELE_STATS.intercept ALLELE_STATS.pval ALLELE_STATS.rsq ALLELE_STATS.slope 1.00 -0.25 -20 -0.75 -0.2 -0.00 -15 -0.50 -10--0.25 · 0.1 0.25 --0.50 0.00 -0.0 0.1 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 ALLELE_STATS.var_mid_lat IT_DISTRIBUTION_GAMMA.scal ALLELE_STATS.var_low_lat ${\sf ALLELE_STATS.var_high_lat}$ 0.15 -10-10 -0.10 0.05 0.00 -0.2 0.3 0.4 0.1 0.2 0.3 0.4 0.1 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 T_DISTRIBUTION_GAMMA.shap T_DISTRIBUTION_WEIBULL.sca Γ_DISTRIBUTION_WEIBULL.sha FST_STATS.intercept 0.11 10.0 -20 -0.09 -7.5 -15 -7.5 -0.07 10 -5.0 0.05 -0.03 -0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.1 0.2 0.3 0.4 ETEROZYGOSITY_STATS.interce FST_STATS.pval FST_STATS.slope FST_STATS.rsq 0.05 -0.25 -0.04 -0.00 -10-0.03 --0.250.02 -0.01 --0.500.00 -0.1 0.2 0.3 0.4 0.5 0.2 0.3 0.4 0.5 0.2 0.3 0.4 0.1 0.1 0.2 0.3 0.4 EROZYGOSITY_STATS.mean_mi HETEROZYGOSITY_STATS.pval ROZYGOSITY_STATS.mean_hig EROZYGOSITY_STATS.mean_lov 1.00 -0.30 -0.3 -0.30 -0.25 -0.75 -0.25 -0.20 -0.2 -0.50 -0.20 -0.15 -0.15 -0.25 -0.10 -0.1 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 TWO_REG_MODEL.diffLL HETEROZYGOSITY_STATS.rsq HETEROZYGOSITY_STATS.slope TWO_REG_MODEL.breakpoint



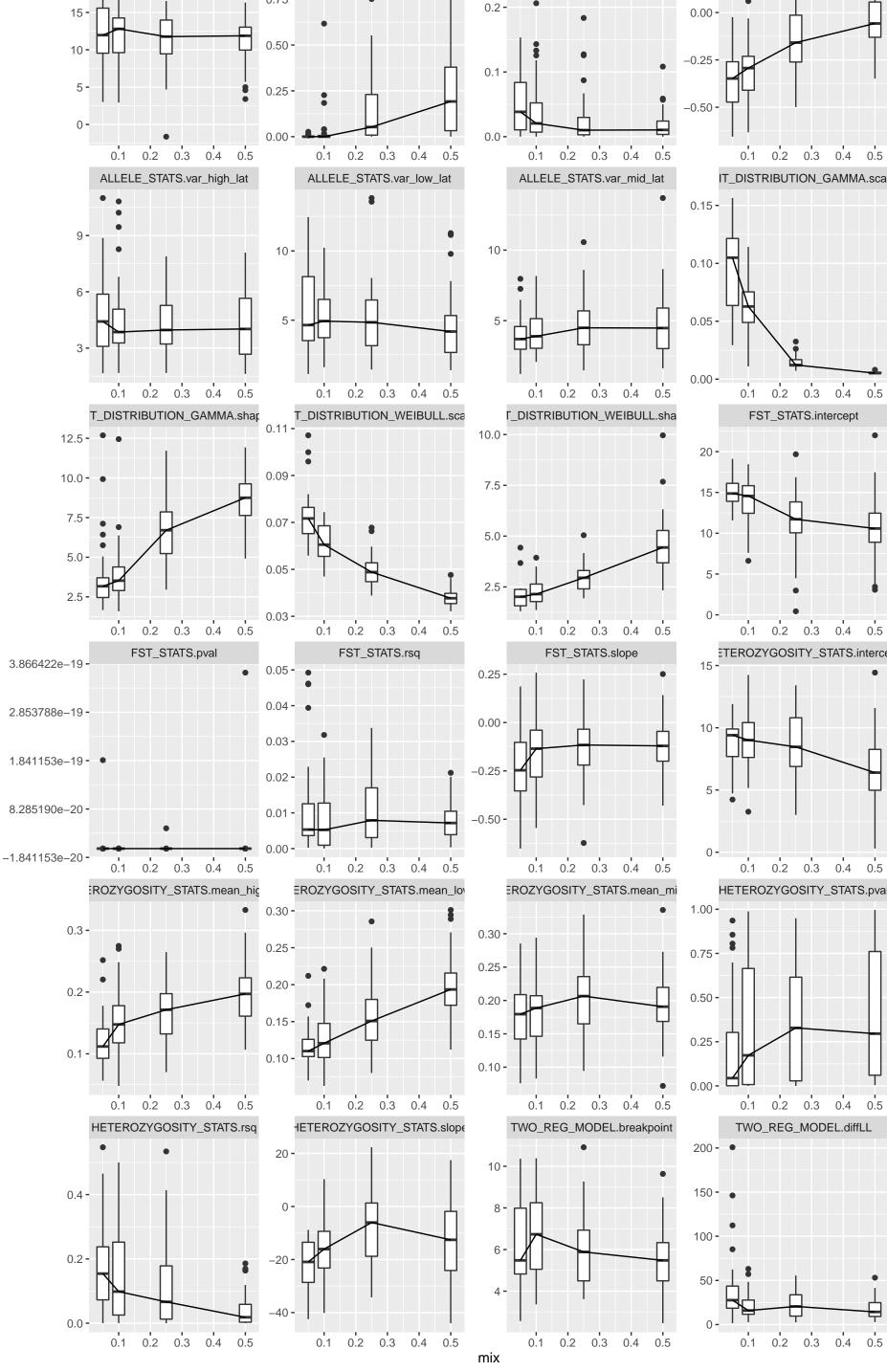
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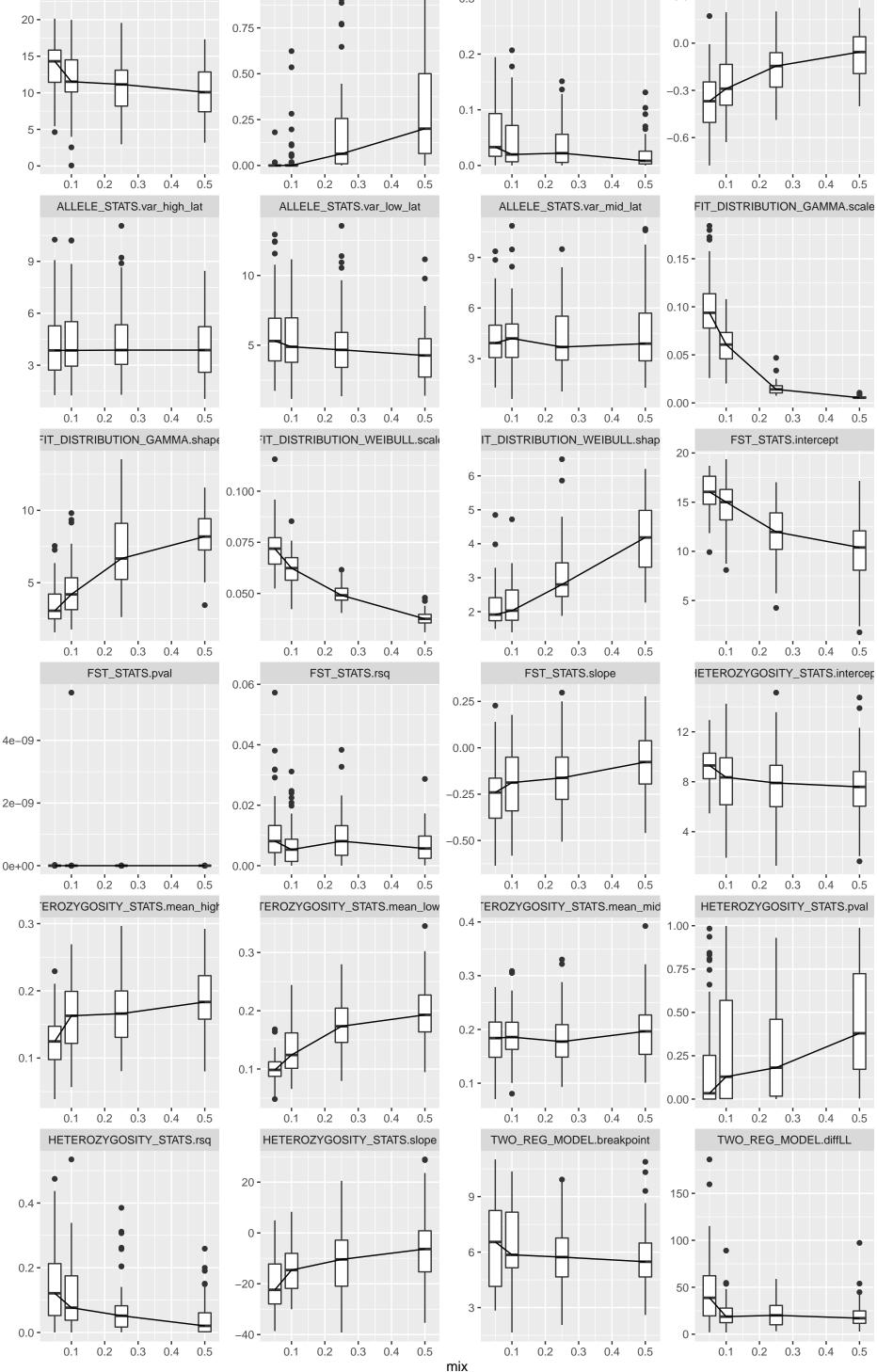
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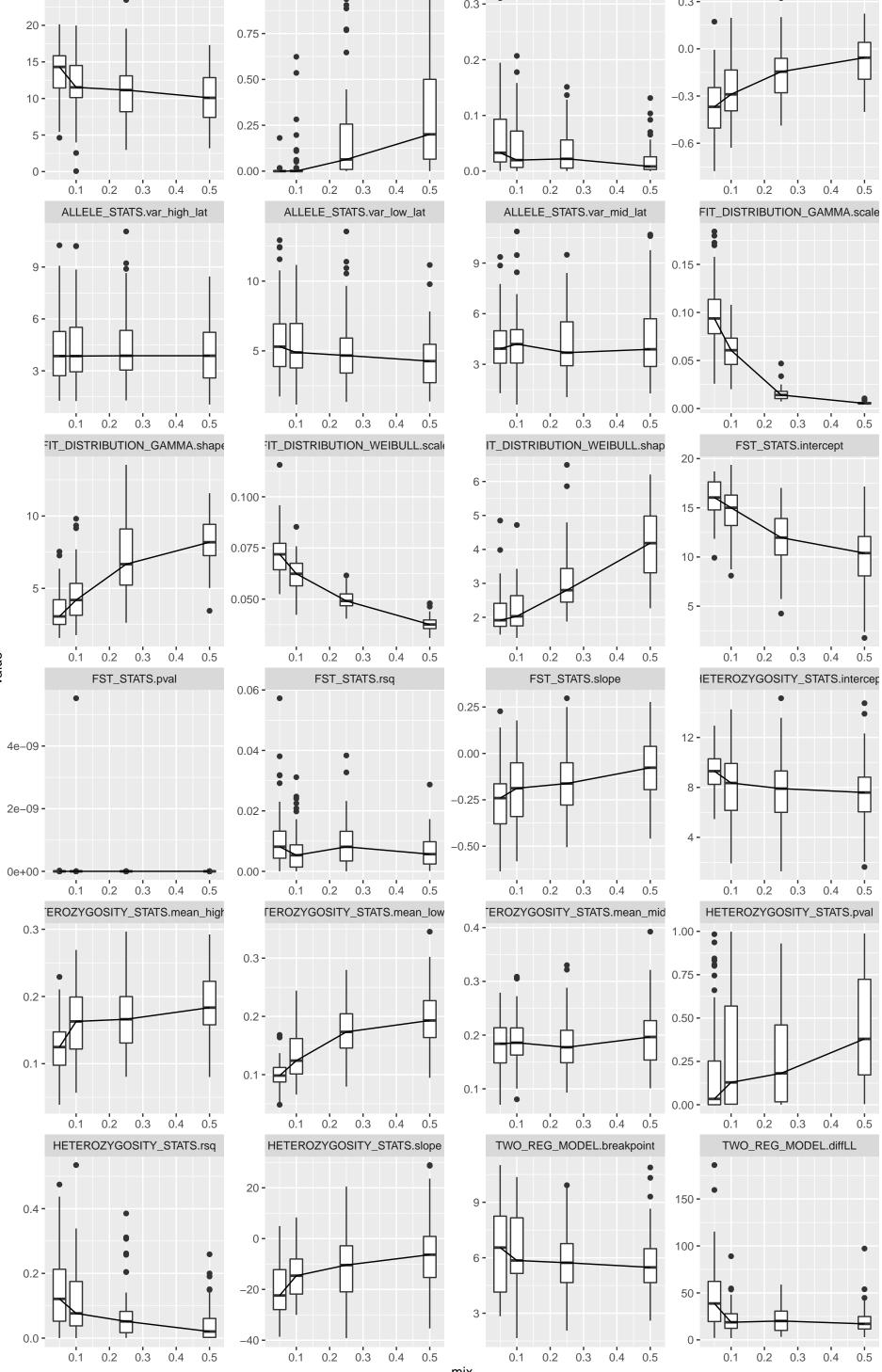
Refuges: 1, longmean: 3, shortscale: 0.25Glac front: 20, Marginal decrease: 0.67 ALLELE_STATS.intercept ALLELE_STATS.pval ALLELE_STATS.rsq ALLELE_STATS.slope 1.00 -0.25 -20 -0.75 -0.2 -0.00 -15 -0.50 -10--0.25 · 0.1 0.25 --0.50 0.00 -0.0 0.1 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 ALLELE_STATS.var_mid_lat IT_DISTRIBUTION_GAMMA.scal ALLELE_STATS.var_low_lat ${\sf ALLELE_STATS.var_high_lat}$ 0.15 -10-10 -0.10 0.05 0.00 -0.2 0.3 0.4 0.1 0.2 0.3 0.4 0.1 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 T_DISTRIBUTION_GAMMA.shap T_DISTRIBUTION_WEIBULL.sca Γ_DISTRIBUTION_WEIBULL.sha FST_STATS.intercept 0.11 10.0 -12.5 -20 -0.09 -10.0 -7.5 -15 -7.5 -0.07 10 -5.0 0.05 -0.03 -0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.1 0.2 0.3 0.4 ETEROZYGOSITY_STATS.interce FST_STATS.pval FST_STATS.slope FST_STATS.rsq 0.05 -0.25 -0.04 -0.00 -10-0.03 --0.250.02 -0.01 --0.500.00 -0.1 0.2 0.3 0.4 0.2 0.3 0.4 0.5 0.2 0.3 0.4 0.5 0.1 0.1 0.2 0.3 0.4 EROZYGOSITY_STATS.mean_mi HETEROZYGOSITY_STATS.pval ROZYGOSITY_STATS.mean_hig EROZYGOSITY_STATS.mean_lov 1.00 -0.30 -0.3 -0.30 -0.25 -0.75 -0.25 -0.20 -0.2 -0.50 -0.20 -0.15 -0.15 -0.25 -0.10 -0.1 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 TWO_REG_MODEL.diffLL HETEROZYGOSITY_STATS.rsq HETEROZYGOSITY_STATS.slope TWO_REG_MODEL.breakpoint 200 -20 -10 -150 -0.4 -



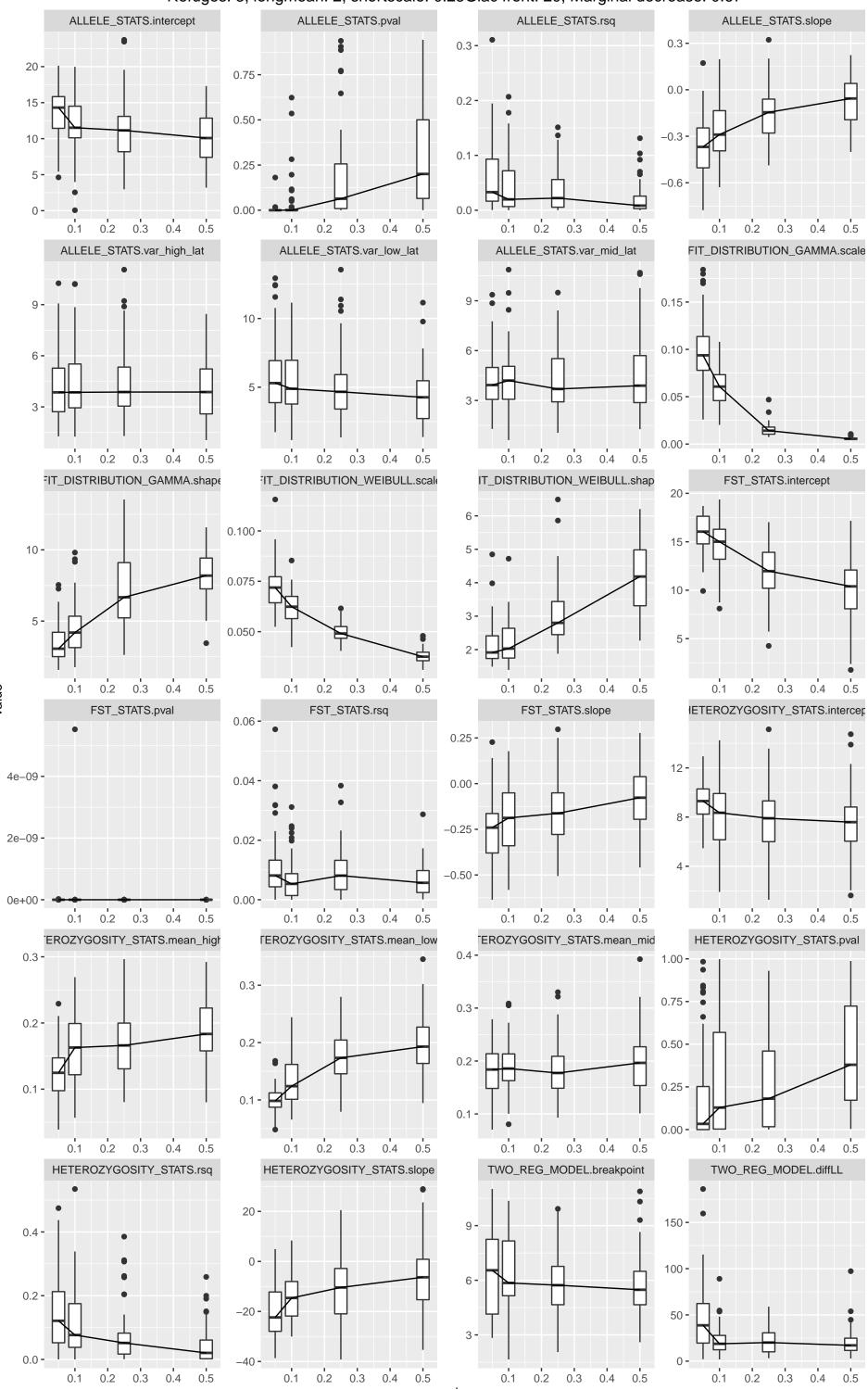
Refuges: 3, longmean: 2, shortscale: 1Glac front: 20, Marginal decrease: 0.67 ALLELE_STATS.intercept ALLELE_STATS.pval ALLELE_STATS.rsq ALLELE_STATS.slope 0.3 -0.3 -0.75 -0.0 0.2 0.50 --0.30.1 -0.25 -0.60.0 -0.2 0.3 0.4 0.2 0.3 0.4 0.3 0.1 0.1 0.2 0.3 ALLELE_STATS.var_low_lat ALLELE_STATS.var_mid_lat FIT_DISTRIBUTION_GAMMA.scale 0.15 10 -0.10 0.05 0.00 -0.3 0.3 0.4 0.2 0.3 0.4 0.5 0.2 0.4 0.2 0.3 0.4 0.1 0.5 0.1 IT_DISTRIBUTION_WEIBULL.scale IT_DISTRIBUTION_WEIBULL.shap FST_STATS.intercept 20 -0.100 -0.075 -10 0.050 -0.2 0.3 0.4 0.2 0.3 0.4 0.1 0.2 0.3 0.4 FST_STATS.rsq FST_STATS.slope IETEROZYGOSITY_STATS.intercep 0.06 -0.25 -12 -0.04 -0.00 -0.25 · 0.02 --0.50 0.00 -0.2 0.2 0.3 0.4 0.1 0.2 0.3 0.4 0.5 0.3 0.1 0.1 0.4 FEROZYGOSITY_STATS.mean_low HETEROZYGOSITY_STATS.pval FEROZYGOSITY_STATS.mean_mid 0.4 -1.00 -0.3 -0.75 -0.3 0.2 -0.50 0.25 0.2 0.3 0.4 0.5



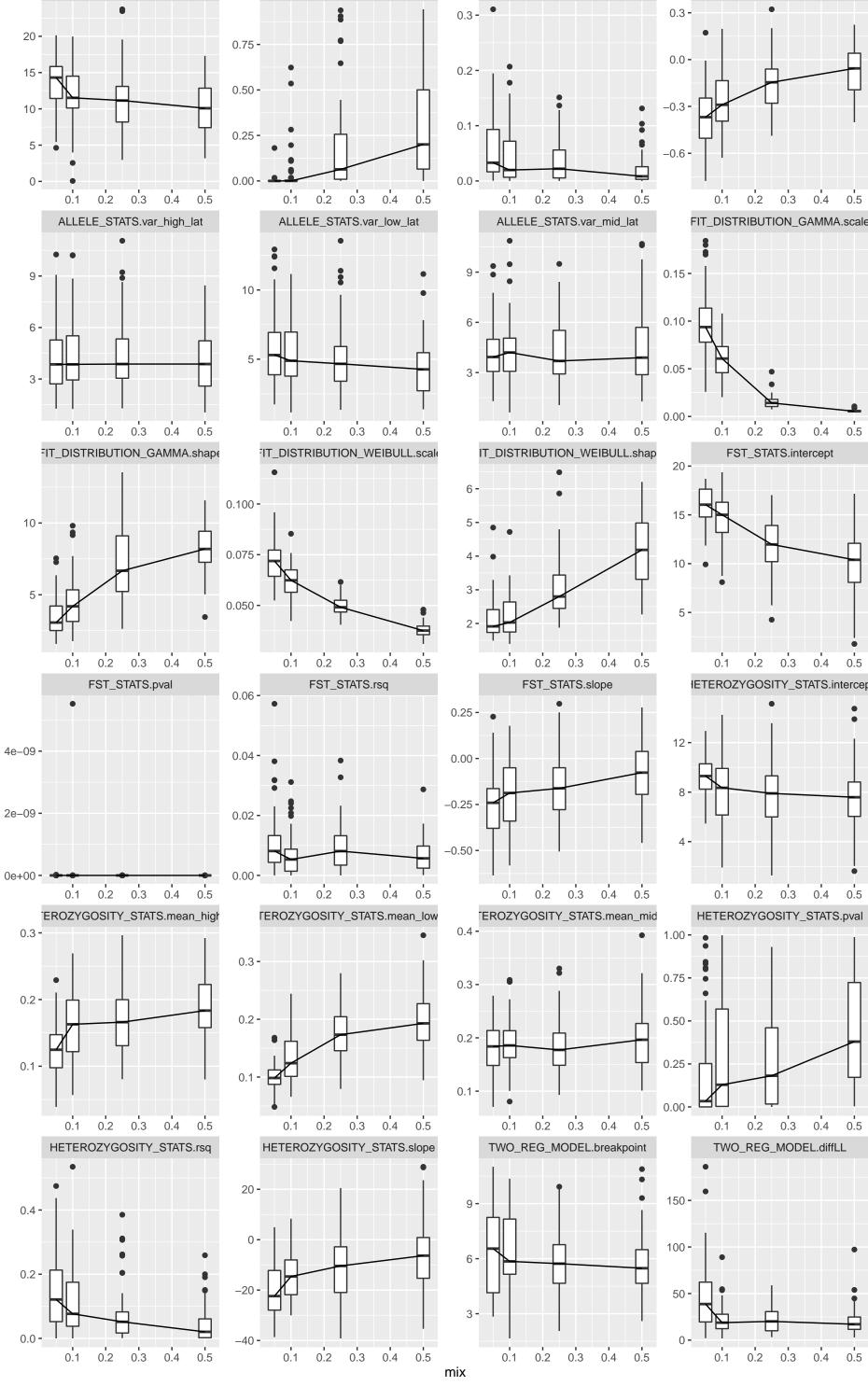
Refuges: 3, longmean: 2, shortscale: 0.5Glac front: 20, Marginal decrease: 0.67 ALLELE_STATS.intercept ALLELE_STATS.pval ALLELE_STATS.rsq ALLELE_STATS.slope 0.3 -0.3 -0.75 -0.0 0.2 0.50 --0.30.1 -0.25 -0.60.0 -0.2 0.3 0.4 0.2 0.3 0.4 0.3 0.1 0.1 0.2 0.3 ALLELE_STATS.var_low_lat ALLELE_STATS.var_mid_lat FIT_DISTRIBUTION_GAMMA.scale 0.15 10 -0.10 0.05 0.00 -0.3 0.3 0.4 0.2 0.3 0.4 0.5 0.2 0.4 0.2 0.3 0.4 0.1 0.5 0.1 IT_DISTRIBUTION_WEIBULL.scale IT_DISTRIBUTION_WEIBULL.shap FST_STATS.intercept 20 -0.100 -0.075 -10 0.050 -0.2 0.3 0.4 0.2 0.3 0.4 0.1 0.2 0.3 0.4 FST_STATS.rsq FST_STATS.slope IETEROZYGOSITY_STATS.intercep 0.25 -12 0.04 -0.00 -0.25 · 0.02 --0.50 0.00 -0.2 0.2 0.3 0.4 0.1 0.2 0.3 0.4 0.5 0.3 0.1 0.1 0.4 HETEROZYGOSITY_STATS.pval FEROZYGOSITY_STATS.mean_low FEROZYGOSITY_STATS.mean_mid 0.4 -1.00 -0.3 -0.75 -0.3 0.2 -0.50 0.25



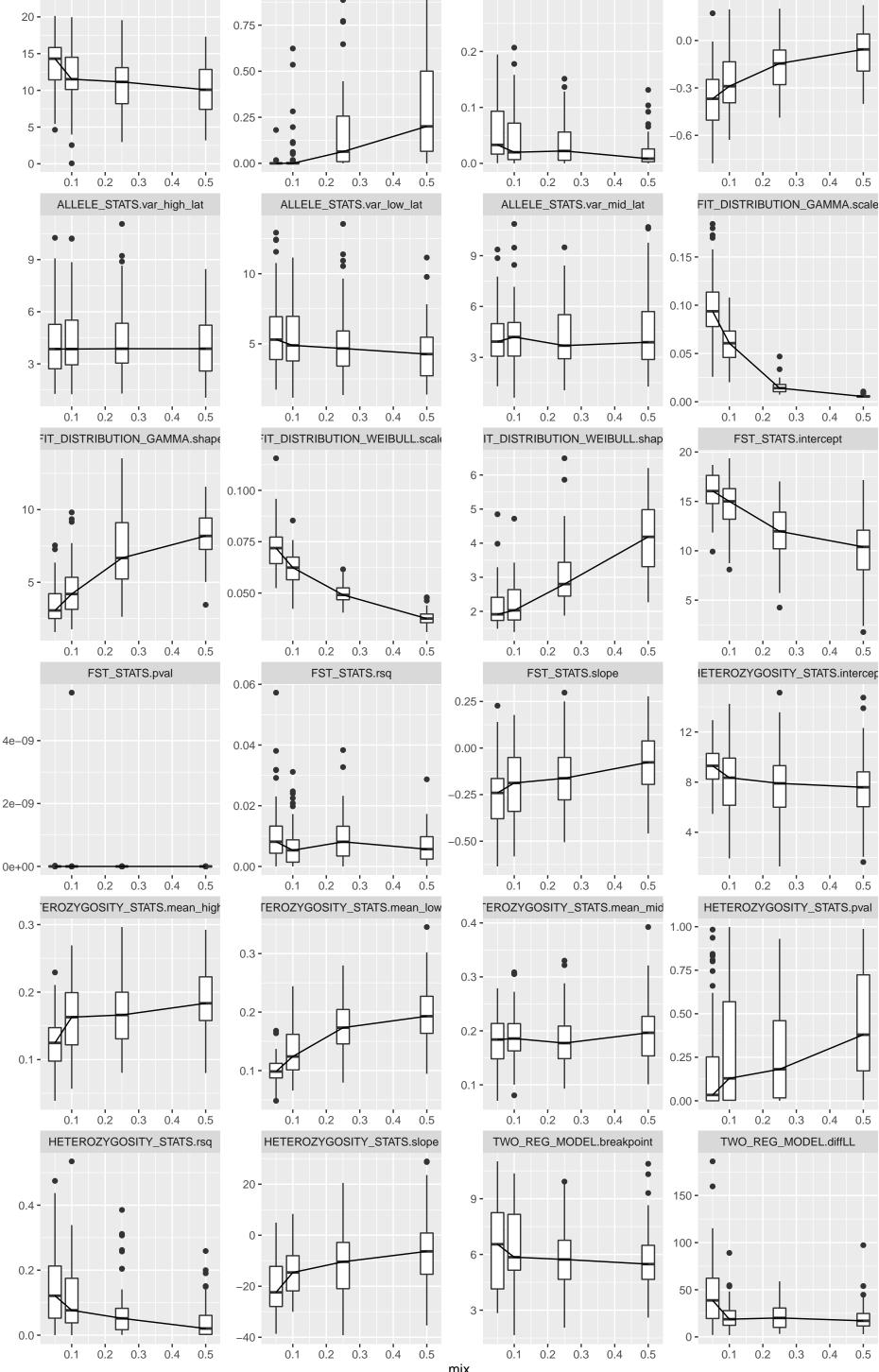
Refuges: 3, longmean: 2, shortscale: 0.25Glac front: 20, Marginal decrease: 0.67



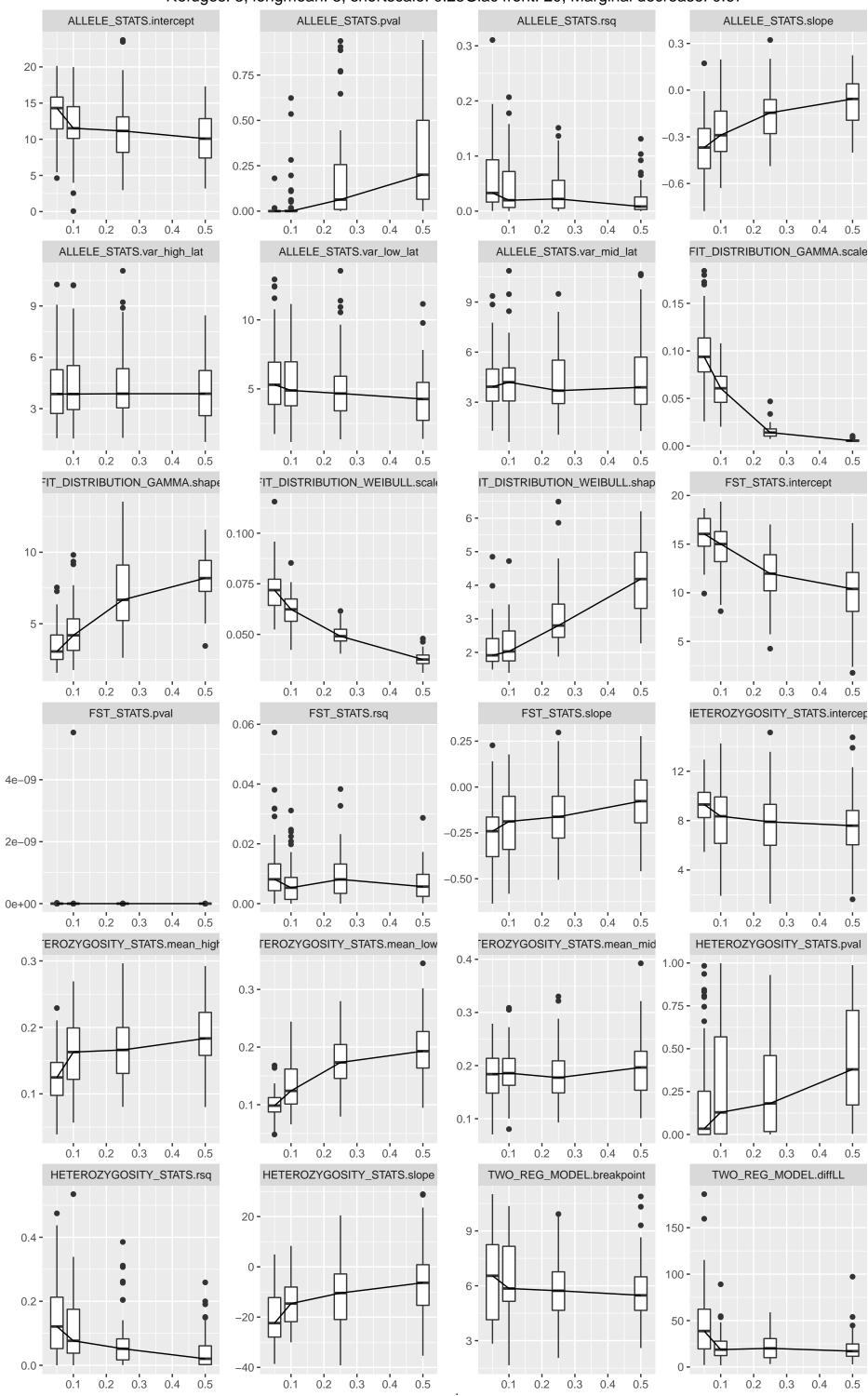
Refuges: 3, longmean: 3, shortscale: 1Glac front: 20, Marginal decrease: 0.67 ALLELE_STATS.intercept ALLELE_STATS.pval ALLELE_STATS.rsq ALLELE_STATS.slope 0.3 -0.3 -0.75 -0.0 0.2 0.50 --0.30.1 -0.25 -0.60.0 -0.2 0.3 0.4 0.2 0.3 0.4 0.3 0.1 0.1 0.2 0.3 ALLELE_STATS.var_low_lat ALLELE_STATS.var_mid_lat FIT_DISTRIBUTION_GAMMA.scale 0.15 10 -0.10 0.05 0.00 -0.3 0.3 0.4 0.2 0.3 0.4 0.5 0.2 0.4 0.2 0.3 0.4 0.1 0.5 0.1 IT_DISTRIBUTION_WEIBULL.scale IT_DISTRIBUTION_WEIBULL.shap FST_STATS.intercept 20 -0.100 -0.075 -10 0.050 -0.2 0.3 0.4 0.2 0.3 0.4 0.1 0.2 0.3 0.4 FST_STATS.rsq FST_STATS.slope IETEROZYGOSITY_STATS.intercep 0.06 -0.25 -12 -0.04 -0.00 -0.25 · 0.02 --0.50 0.00 -0.2 0.2 0.3 0.4 0.1 0.2 0.3 0.4 0.5 0.3 0.1 0.1 0.4 FEROZYGOSITY_STATS.mean_low HETEROZYGOSITY_STATS.pval FEROZYGOSITY_STATS.mean_mid 0.4 -1.00 -0.3 -0.75 -0.3 0.2 -0.50 0.25 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 TWO_REG_MODEL.diffLL TWO_REG_MODEL.breakpoint HETEROZYGOSITY_STATS.slope 20 -150 -



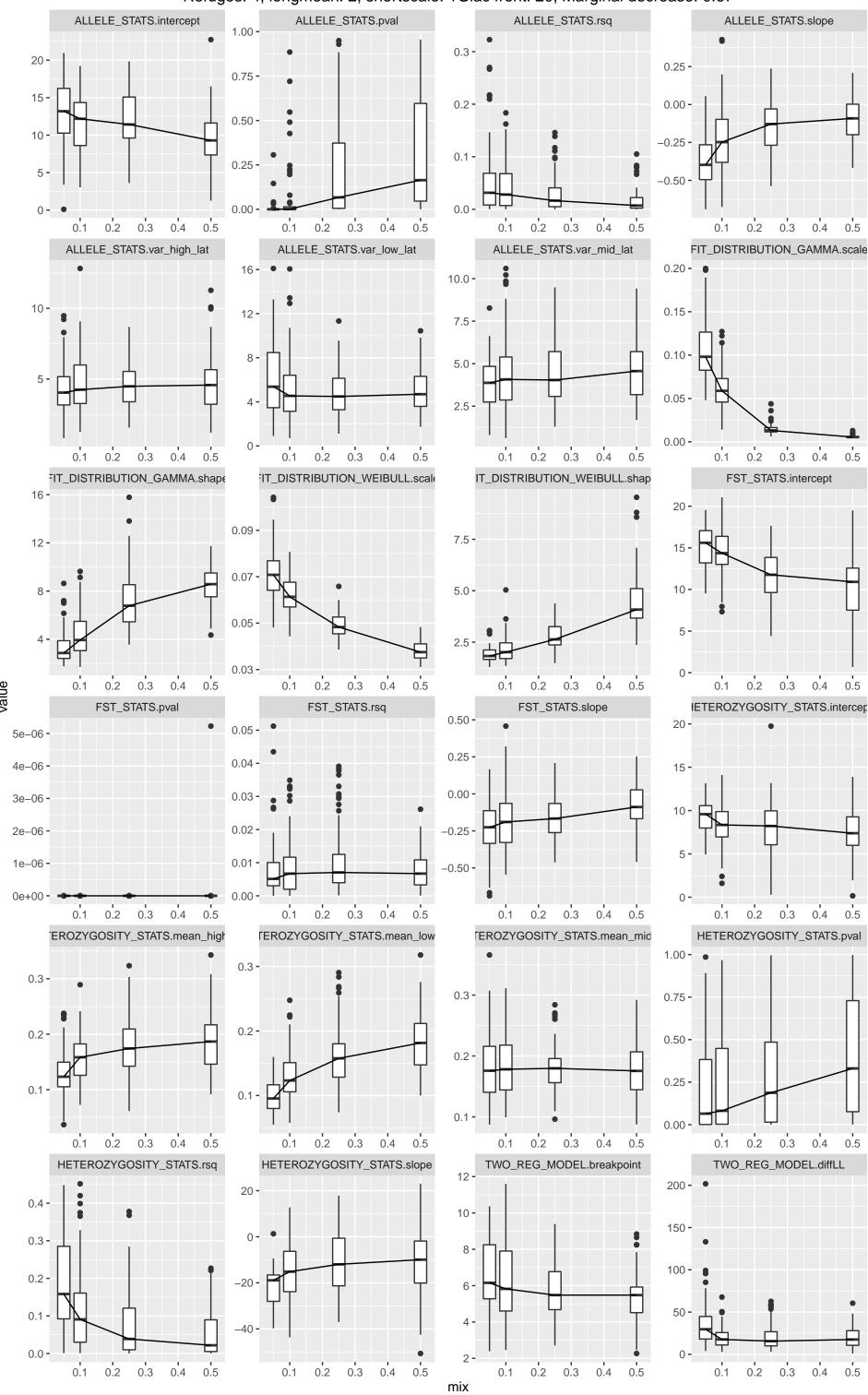
Refuges: 3, longmean: 3, shortscale: 0.5Glac front: 20, Marginal decrease: 0.67 ALLELE_STATS.intercept ALLELE_STATS.pval ALLELE_STATS.rsq ALLELE_STATS.slope 0.3 -0.3 -0.75 -0.0 0.2 0.50 --0.30.1 -0.25 -0.60.0 -0.2 0.3 0.4 0.2 0.3 0.4 0.3 0.1 0.1 0.2 0.3 FIT_DISTRIBUTION_GAMMA.scale ALLELE_STATS.var_low_lat ALLELE_STATS.var_mid_lat 0.15 10 -0.10 0.05 0.00 -0.3 0.3 0.4 0.2 0.3 0.4 0.5 0.2 0.4 0.2 0.3 0.4 0.1 0.5 0.1 IT_DISTRIBUTION_WEIBULL.scale IT_DISTRIBUTION_WEIBULL.shap FST_STATS.intercept 20 -0.100 -0.075 -10 0.050 -0.2 0.3 0.4 0.2 0.3 0.4 0.1 0.2 0.3 0.4 FST_STATS.rsq FST_STATS.slope IETEROZYGOSITY_STATS.intercep 0.25 -12 0.04 -0.00 -0.25 · 0.02 --0.50 0.00 -0.2 0.2 0.3 0.4 0.1 0.2 0.3 0.4 0.5 0.3 0.1 0.1 0.4 HETEROZYGOSITY_STATS.pval FEROZYGOSITY_STATS.mean_low FEROZYGOSITY_STATS.mean_mid 0.4 -1.00 -0.3 -0.75 -0.3 0.2 -0.50 0.25 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 TWO_REG_MODEL.diffLL TWO_REG_MODEL.breakpoint HETEROZYGOSITY_STATS.slope



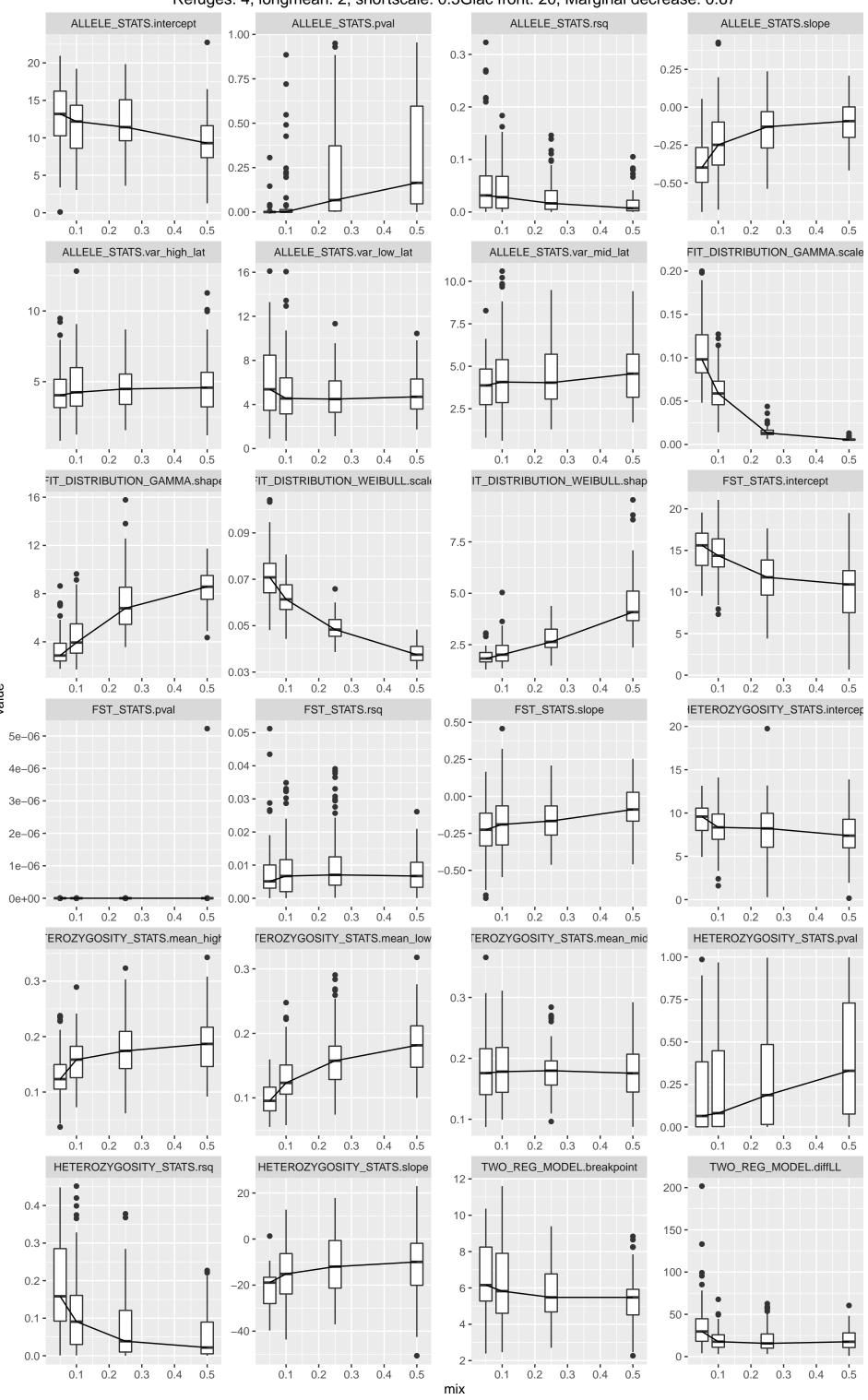
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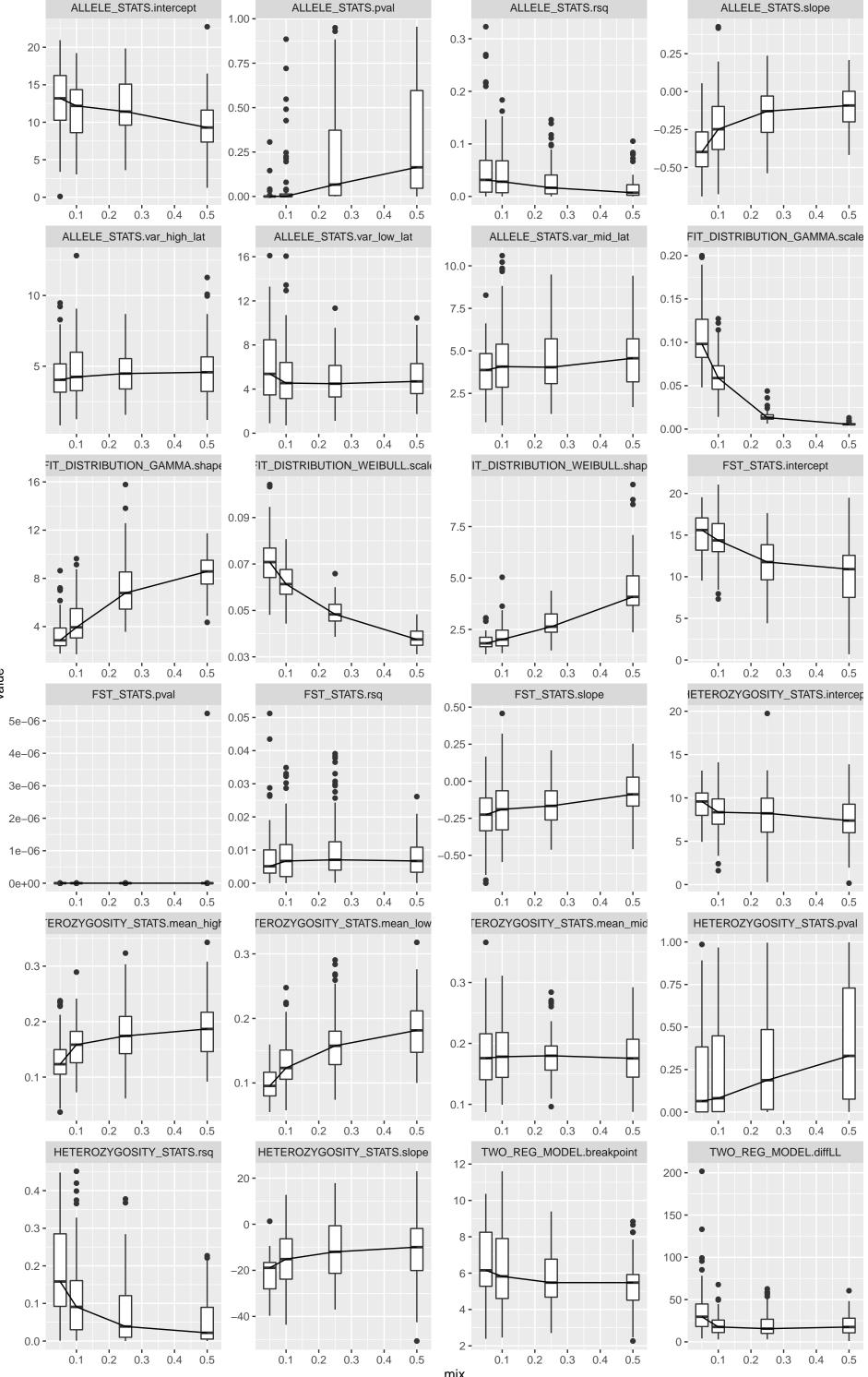
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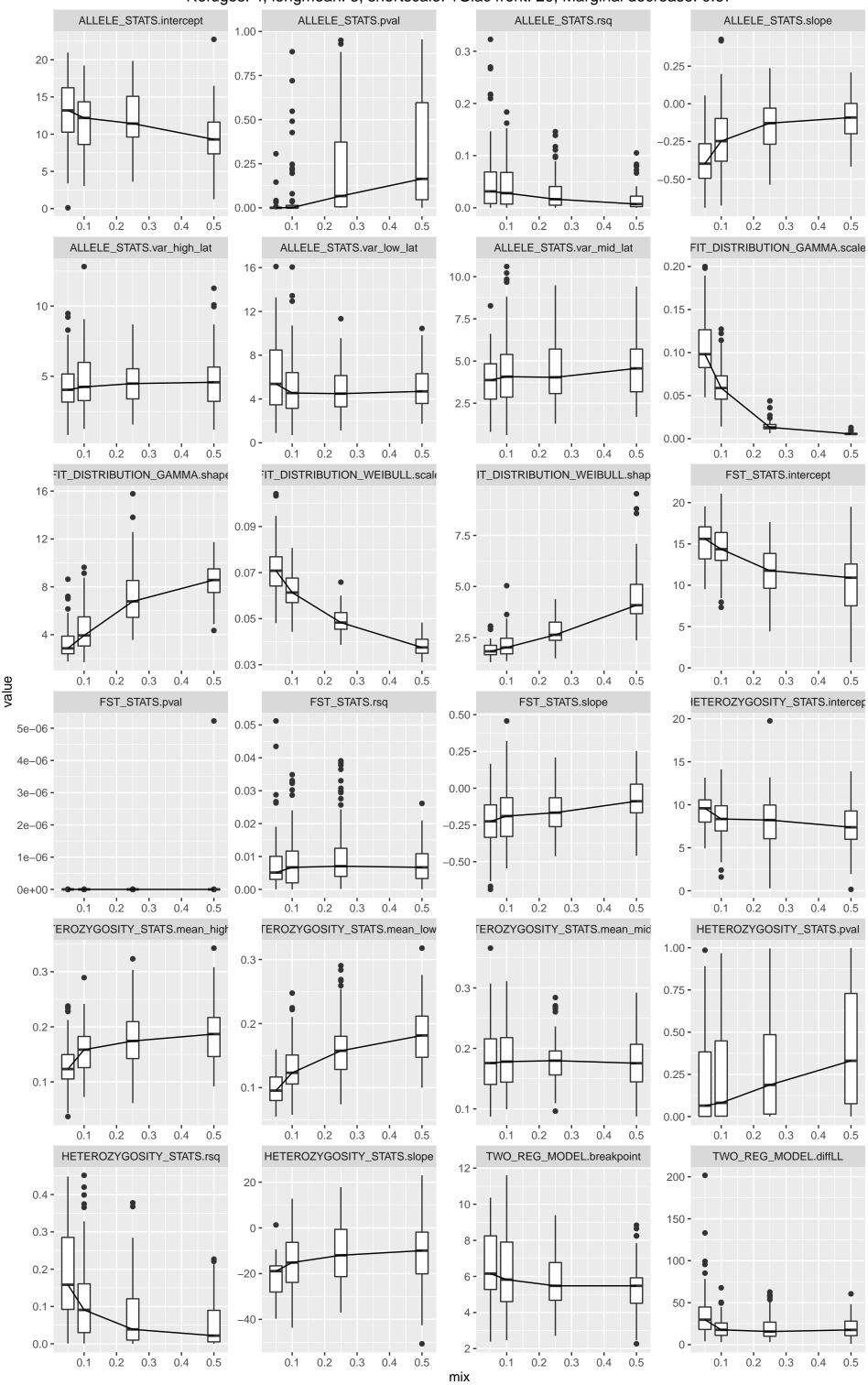
Refuges: 4, longmean: 2, shortscale: 0.5Glac front: 20, Marginal decrease: 0.67 ALLELE_STATS.pval ALLELE_STATS.rsq



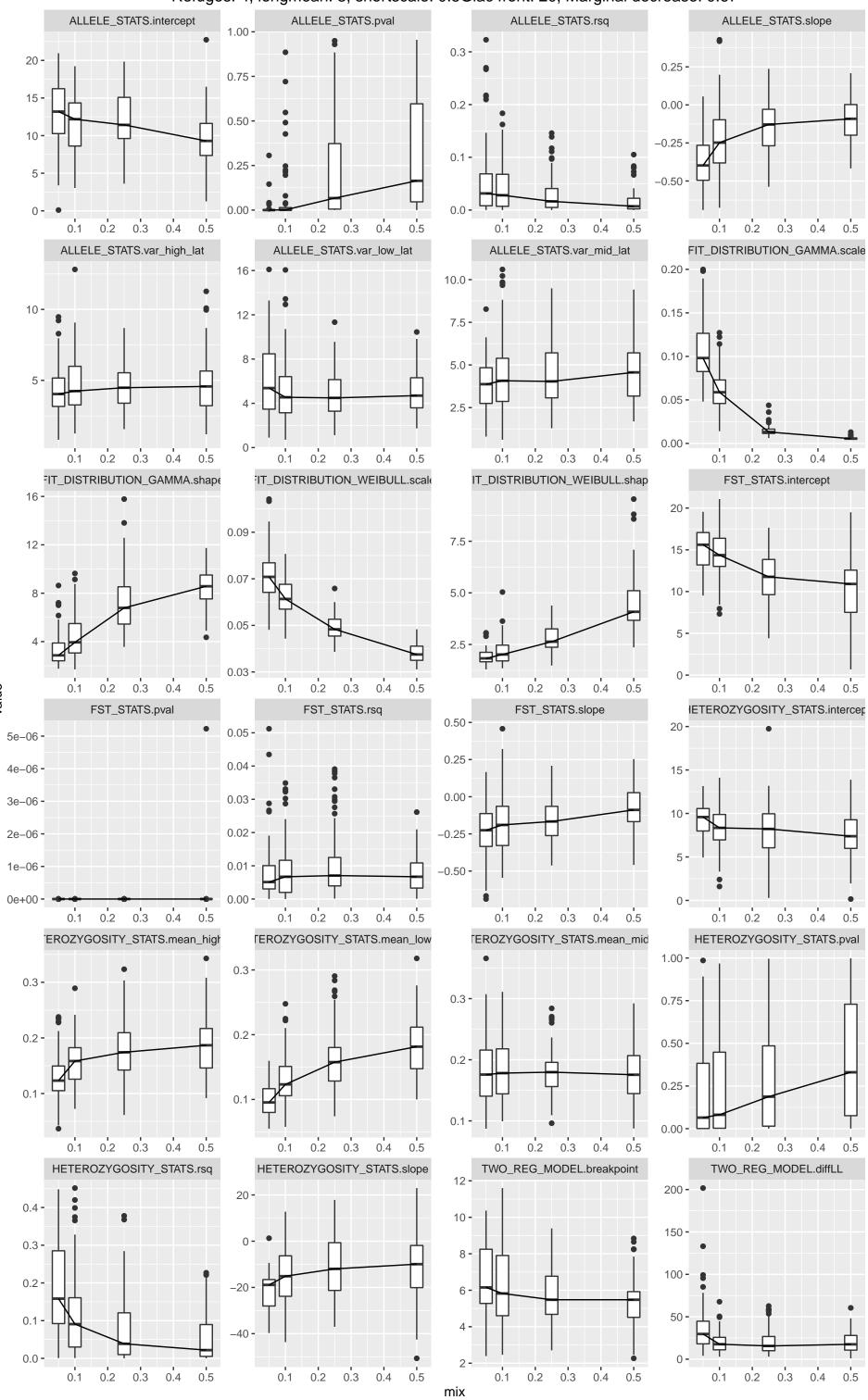
Refuges: 4, longmean: 2, shortscale: 0.25Glac front: 20, Marginal decrease: 0.67 ALLELE_STATS.pval ALLELE_STATS.rsq 1.00 -0.3 0.25 0.75 -



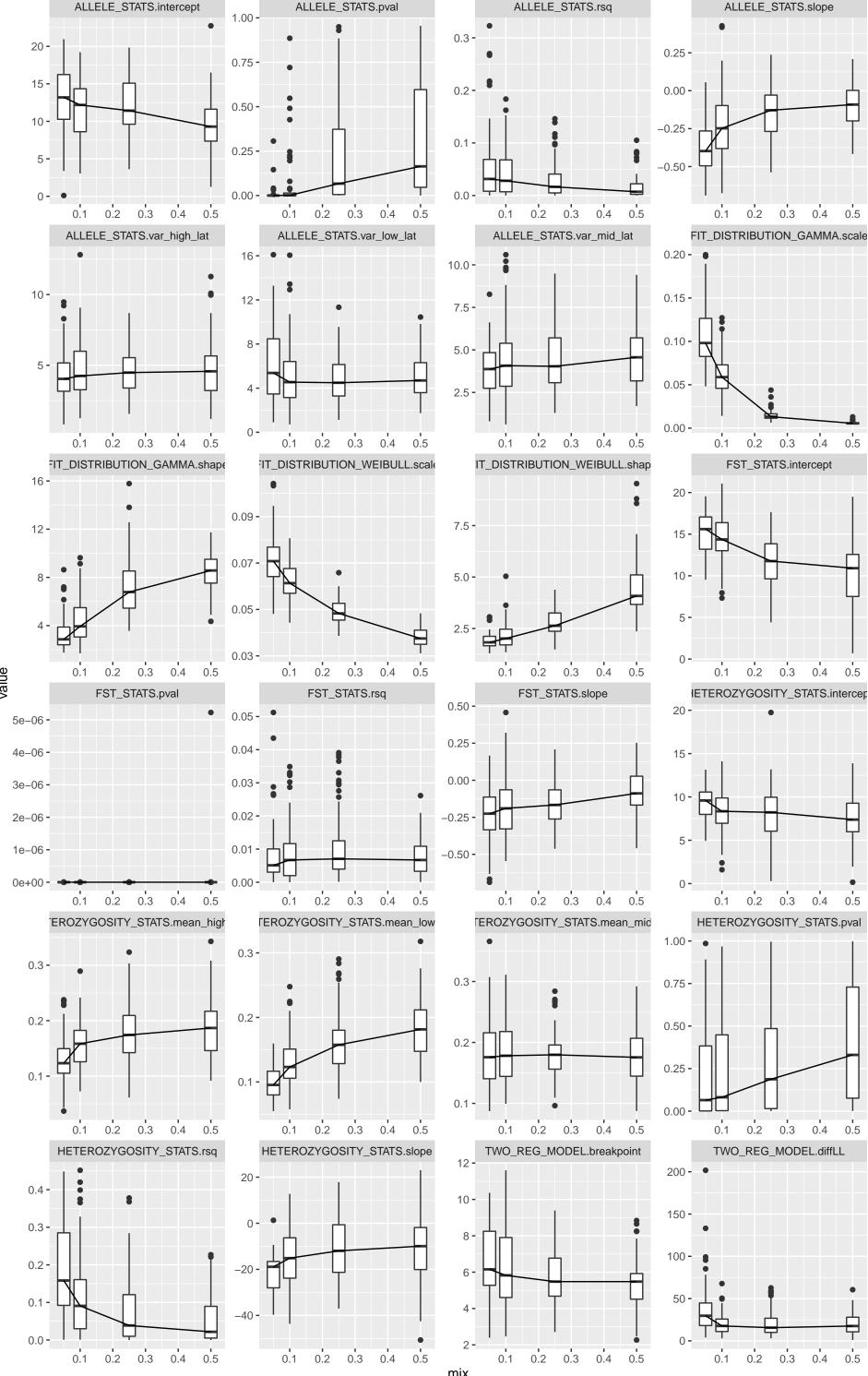
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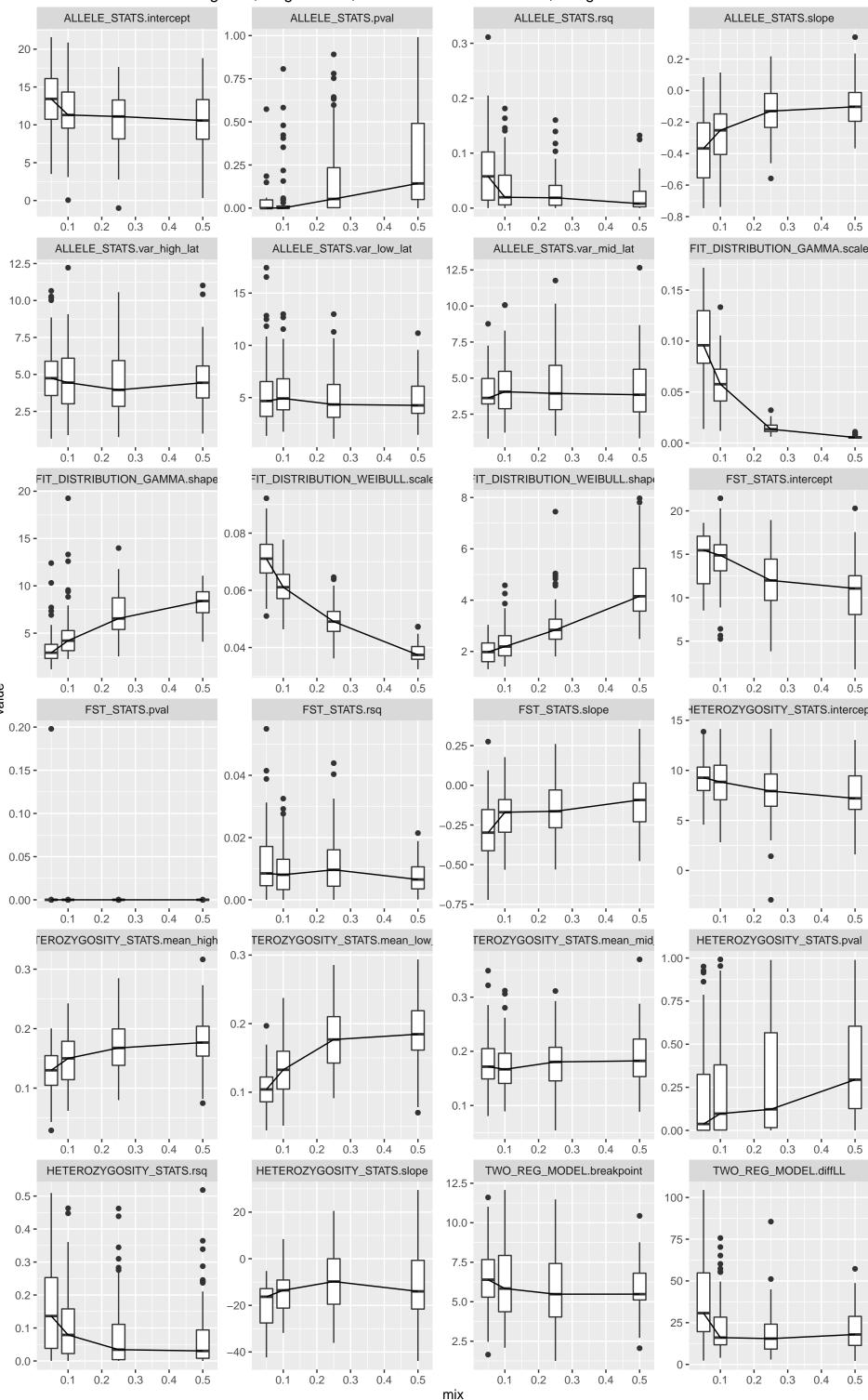
Refuges: 4, longmean: 3, shortscale: 0.5Glac front: 20, Marginal decrease: 0.67



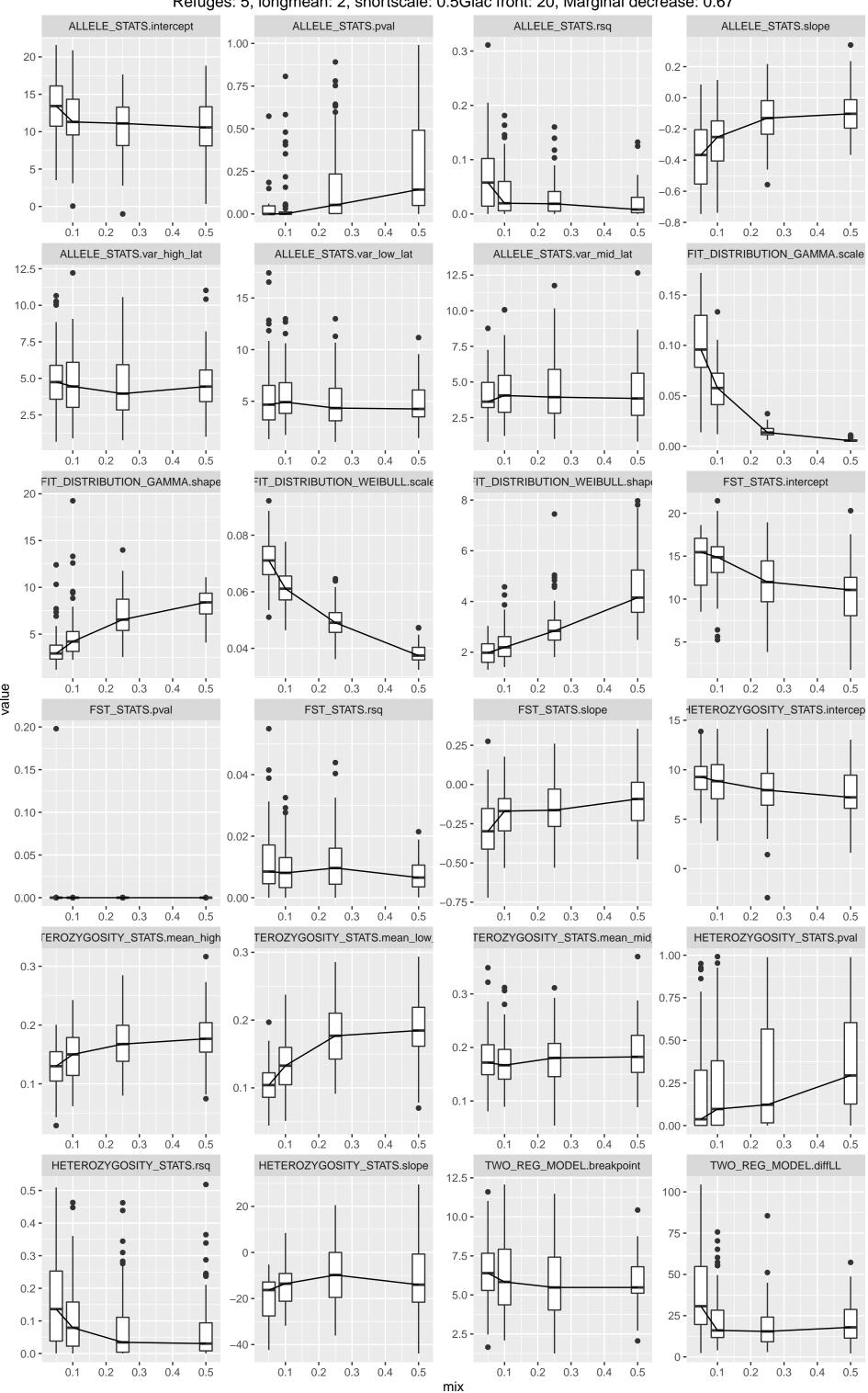
Refuges: 4, longmean: 3, shortscale: 0.25Glac front: 20, Marginal decrease: 0.67 ALLELE_STATS.pval ALLELE_STATS.rsq ALLELE_STATS.slope 1.00 -0.3 0.25 0.75 -0.2 0.00 0.50 --0.25 0.25 --0.50 0.0 -



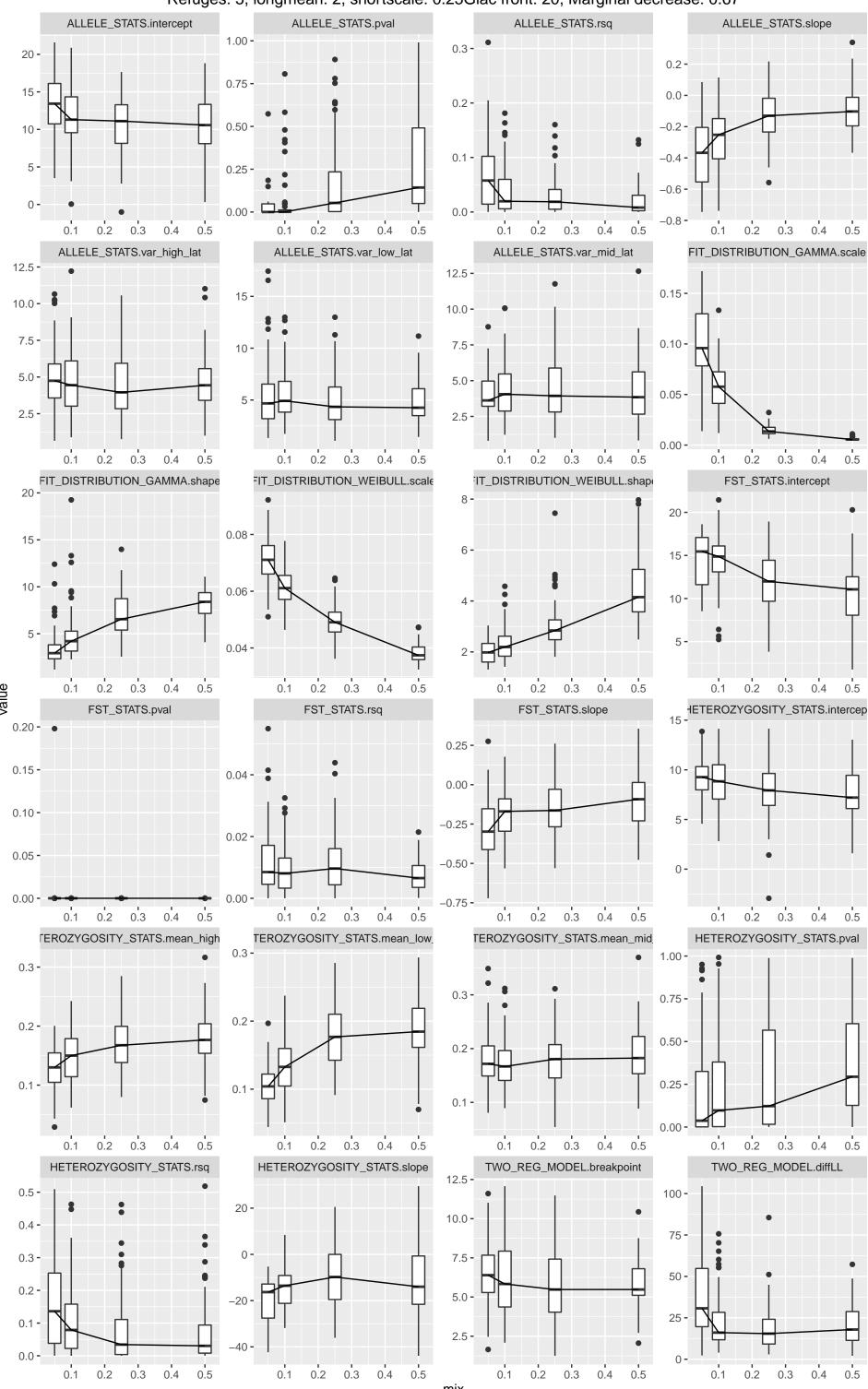
Refuges: 5, longmean: 2, shortscale: 1Glac front: 20, Marginal decrease: 0.67 ALLELE_STATS.pval ALLELE_STATS.rsq ALLELE_STATS.slope 1.00 -0.3 -0.2 -0.75 -0.0 -0.2 -0.50 -0.2 **-**0.1 --0.4 0.25 --0.6 0.00 -0.0 -0.1 0.2 0.3 0.2 0.3 0.4 0.5 0.4 0.3 0.4 0.2 0.3 FIT_DISTRIBUTION_GAMMA.scale ALLELE_STATS.var_low_lat ALLELE_STATS.var_mid_lat 12.5 -0.15 -10.0 0.10 7.5 10 -5.0 -0.05 2.5 0.00 0.2 0.3 0.4 0.3 0.4 0.2 0.3 0.4 0.2 0.3 0.4 0.5 0.1 0.5 0.1 FIT_DISTRIBUTION_WEIBULL.scale IT_DISTRIBUTION_WEIBULL.shape FST_STATS.intercept 20 -0.08 -15 · 0.06 0.04 0.4 0.2 0.3 0.4 0.2 0.3 0.2 0.3 0.4 0.3 0.5 HETEROZYGOSITY_STATS.intercep FST_STATS.slope FST_STATS.rsq 0.25 -10 -0.04 -0.00 -0.250.02 --0.50 0.00 --0.75 **-**0.2 0.3 0.1 0.1 0.2 0.3 0.3 0.4 0.5 0.4 0.2 0.3 TEROZYGOSITY_STATS.mean_low_ HETEROZYGOSITY_STATS.pval TEROZYGOSITY_STATS.mean_mid_ 1.00 0.3 0.75 -0.2 -0.50 -0.2 -0.25 -0.1 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 TWO_REG_MODEL.breakpoint HETEROZYGOSITY_STATS.slope TWO_REG_MODEL.diffLL 100 -20 -10.0 -75 **-**



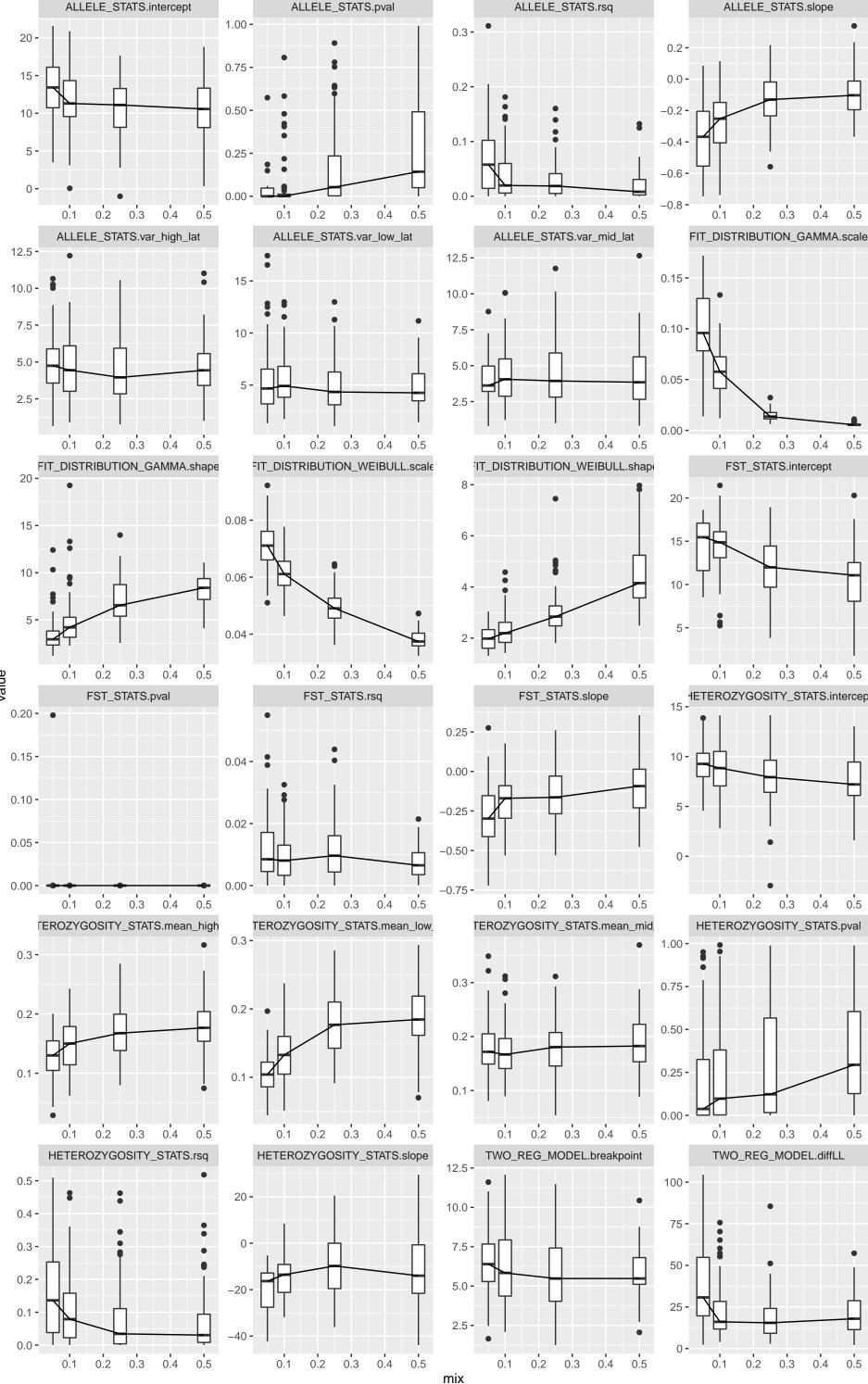
Refuges: 5, longmean: 2, shortscale: 0.5Glac front: 20, Marginal decrease: 0.67



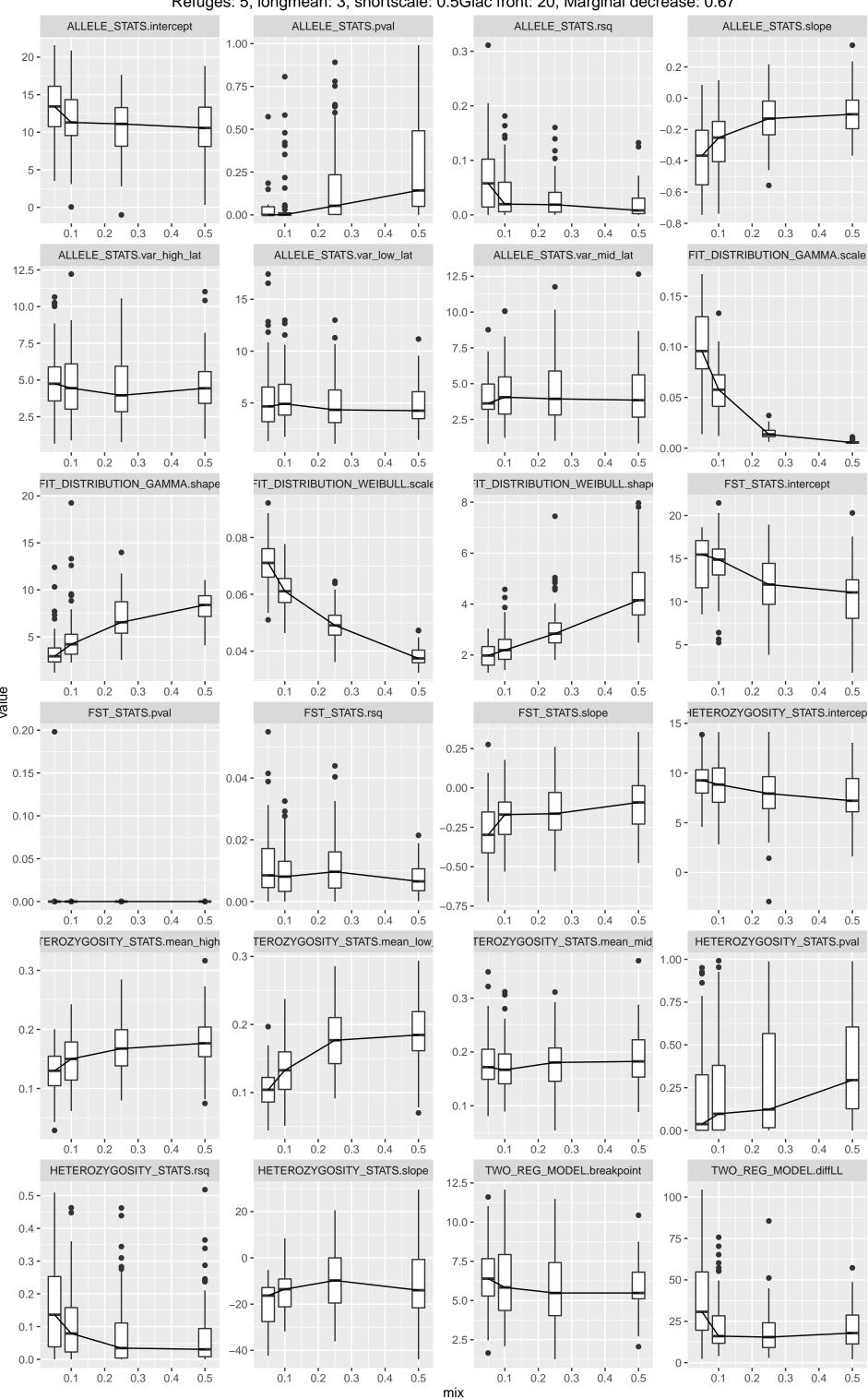
Refuges: 5, longmean: 2, shortscale: 0.25Glac front: 20, Marginal decrease: 0.67



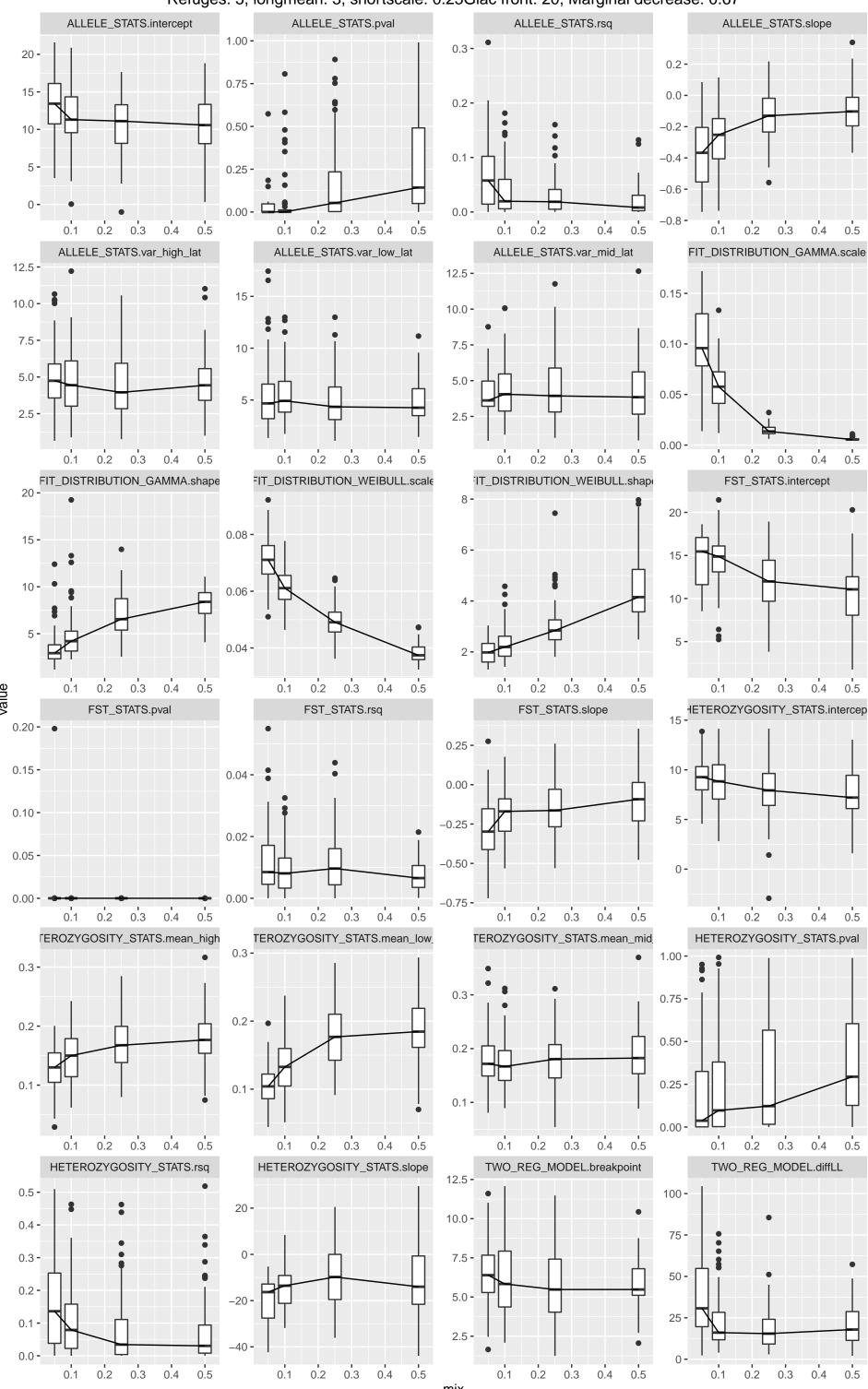
Refuges: 5, longmean: 3, shortscale: 1Glac front: 20, Marginal decrease: 0.67 ALLELE_STATS.pval ALLELE_STATS.rsq ALLELE_STATS.slope 1.00 -0.3 -0.2 -0.75 -0.0 -0.2 -0.50 -0.2 **-**0.1 --0.4 0.25 --0.6 0.00 -0.0 -0.1 0.2 0.3 0.2 0.3 0.4 0.5 0.4 0.3 0.4 0.2 0.3 FIT_DISTRIBUTION_GAMMA.scale ALLELE_STATS.var_low_lat ALLELE_STATS.var_mid_lat 12.5 -0.15 -10.0 0.10 7.5 10 -5.0 -0.05 2.5 0.00 0.2 0.3 0.4 0.3 0.4 0.2 0.3 0.4 0.2 0.3 0.4 0.5 0.1 0.5 0.1 FIT_DISTRIBUTION_WEIBULL.scale IT_DISTRIBUTION_WEIBULL.shape FST_STATS.intercept 20 -0.08 -15 · 0.06 0.04 0.4 0.2 0.3 0.4 0.2 0.3 0.2 0.3 0.4 0.3 0.5 HETEROZYGOSITY_STATS.intercep FST_STATS.slope FST_STATS.rsq 0.25 -10 -0.04 -0.00 -0.250.02 --0.50 0.00 --0.75 **-**0.2 0.3 0.1 0.1 0.2 0.3 0.3 0.4 0.5 0.4 0.2 0.3 TEROZYGOSITY_STATS.mean_low_ HETEROZYGOSITY_STATS.pval TEROZYGOSITY_STATS.mean_mid_ 1.00 0.3 0.75 -0.2 -0.50 -0.2 -0.25 -0.1 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 TWO_REG_MODEL.breakpoint HETEROZYGOSITY_STATS.slope TWO_REG_MODEL.diffLL 100 -20 -10.0 -75 **-**



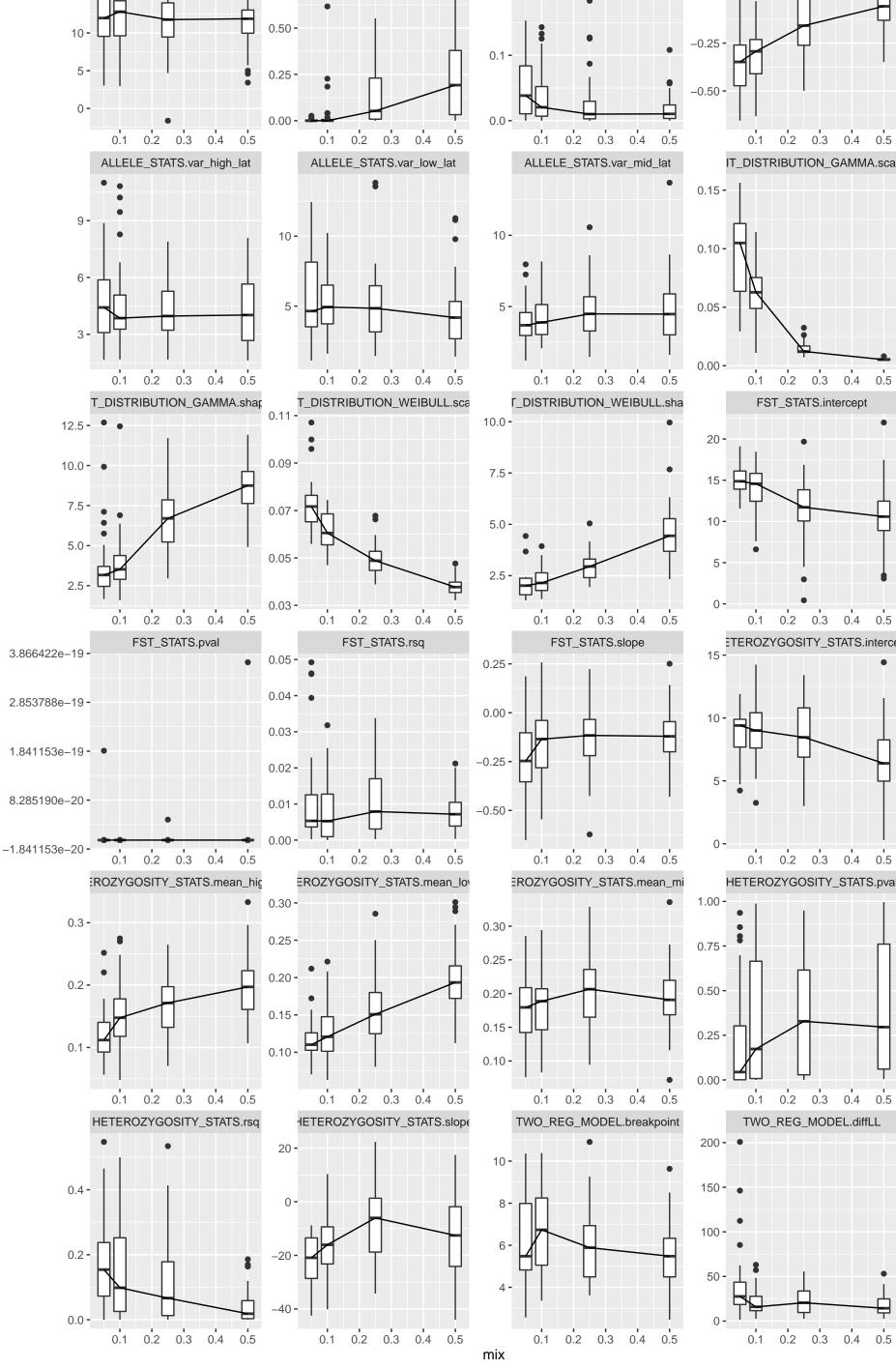
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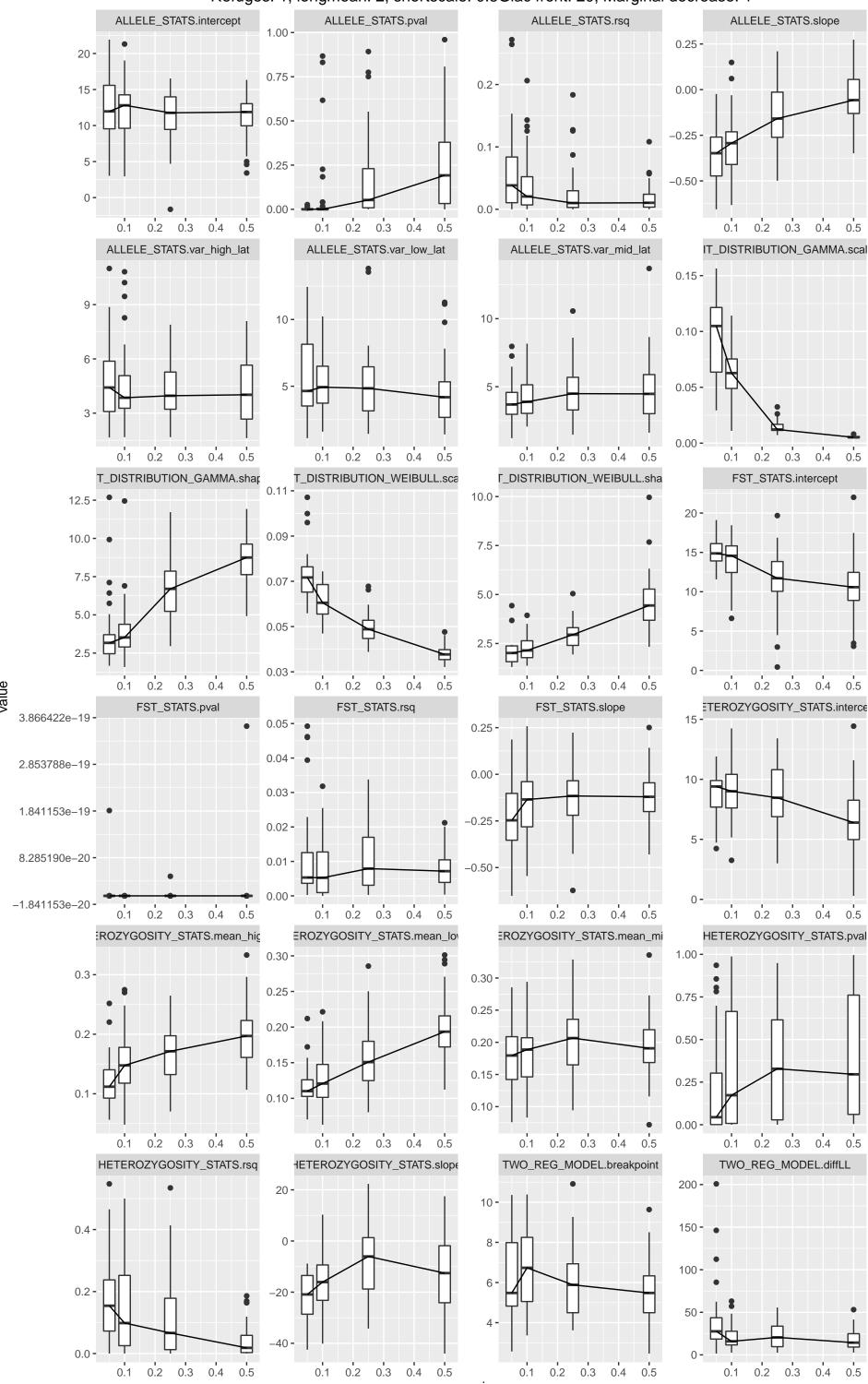
Refuges: 5, longmean: 3, shortscale: 0.25Glac front: 20, Marginal decrease: 0.67



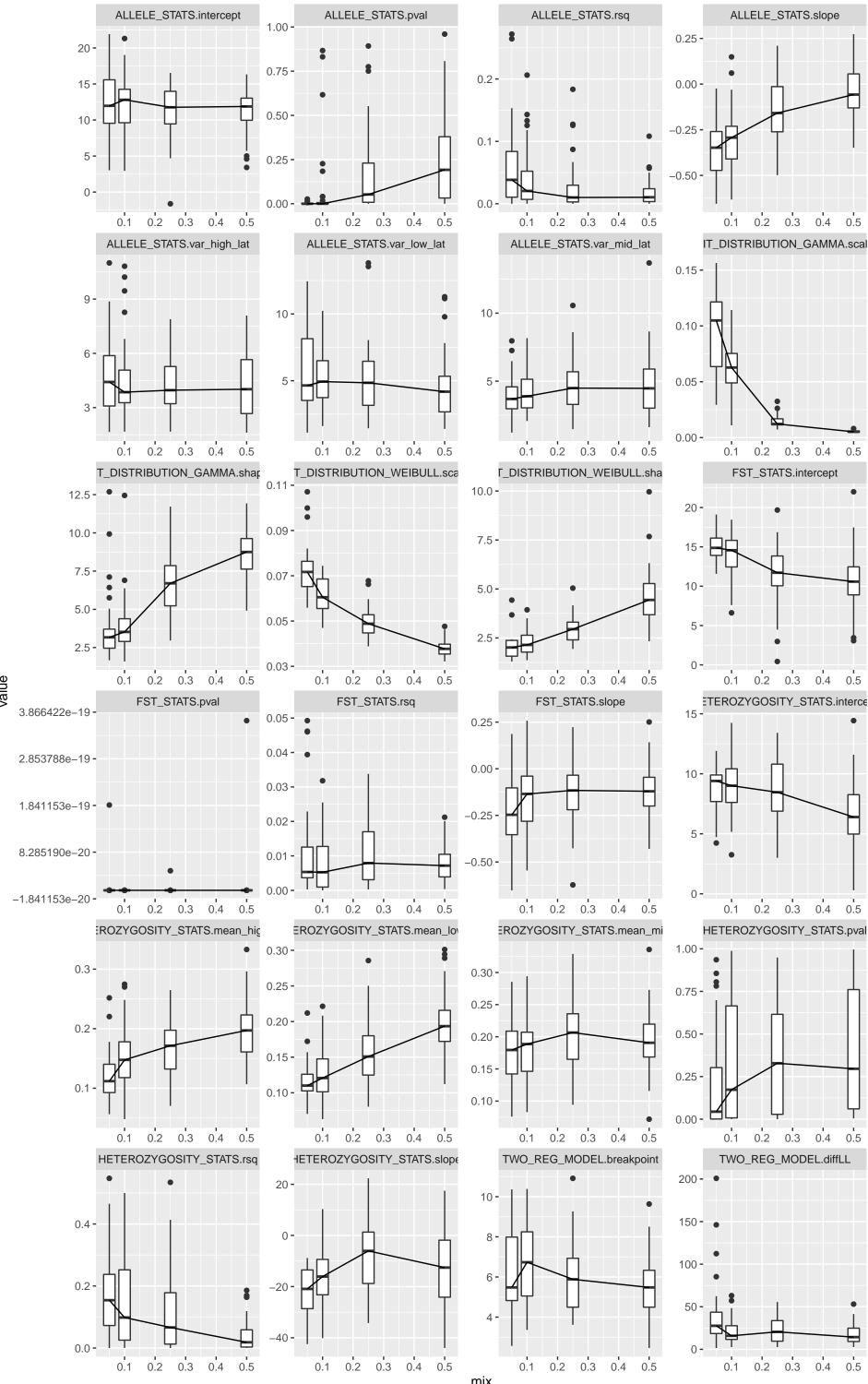
Refuges: 1, longmean: 2, shortscale: 1Glac front: 20, Marginal decrease: 1 ALLELE_STATS.rsq ALLELE_STATS.intercept ALLELE_STATS.pval ALLELE_STATS.slope 1.00 -0.25 -20 -0.75 -0.2 -0.00 -15 -0.50 -10--0.25 **-**0.1 0.25 --0.50 0.00 -0.0 0.1 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.1 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 ALLELE_STATS.var_mid_lat IT_DISTRIBUTION_GAMMA.scal ALLELE_STATS.var_low_lat ${\sf ALLELE_STATS.var_high_lat}$ 0.15 -10-10 -0.10 0.05 0.00 -0.2 0.3 0.4 0.1 0.2 0.3 0.4 0.5 0.5 0.1 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 T_DISTRIBUTION_GAMMA.shap T_DISTRIBUTION_WEIBULL.sca Γ_DISTRIBUTION_WEIBULL.sha FST_STATS.intercept 0.11 10.0 -12.5 -20 -0.09 -10.0 -7.5 -15 -7.5 -0.07 10 -5.0 0.05 -0.03 -0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.1 0.2 0.3 0.4 ETEROZYGOSITY_STATS.interce FST_STATS.pval FST_STATS.slope FST_STATS.rsq 3.866422e-19 0.05 -0.25 -0.04 -2.853788e-19 -0.00 -10-0.03 -1.841153e-19 --0.250.02 -8.285190e-20 -0.01 --0.500.00 --1.841153e-20 **-**0.1 0.2 0.3 0.4 0.5 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.1 0.1 0.2 0.3 0.4 EROZYGOSITY_STATS.mean_mi HETEROZYGOSITY_STATS.pval ROZYGOSITY_STATS.mean_hig EROZYGOSITY_STATS.mean_lov 1.00 -0.30 -0.3 -0.30 -0.25 -0.75 -0.25 -0.20 -0.2 -0.50 -0.20 -0.15 -0.15 -0.25 -0.10 -0.1 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 TWO_REG_MODEL.diffLL HETEROZYGOSITY_STATS.rsq HETEROZYGOSITY_STATS.slope TWO_REG_MODEL.breakpoint 200 -20 -10 -150 -0.4 -



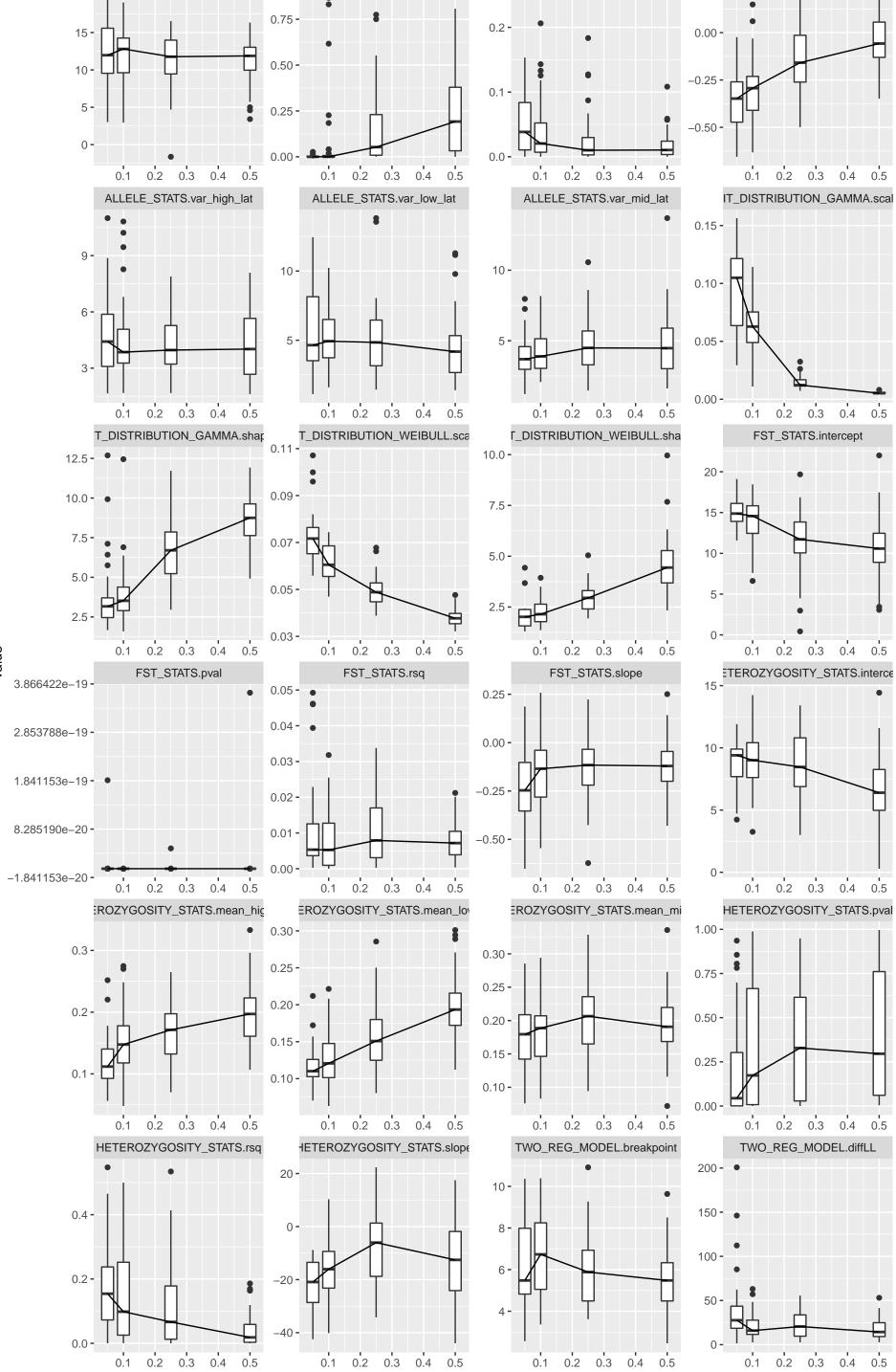
Refuges: 1, longmean: 2, shortscale: 0.5Glac front: 20, Marginal decrease: 1



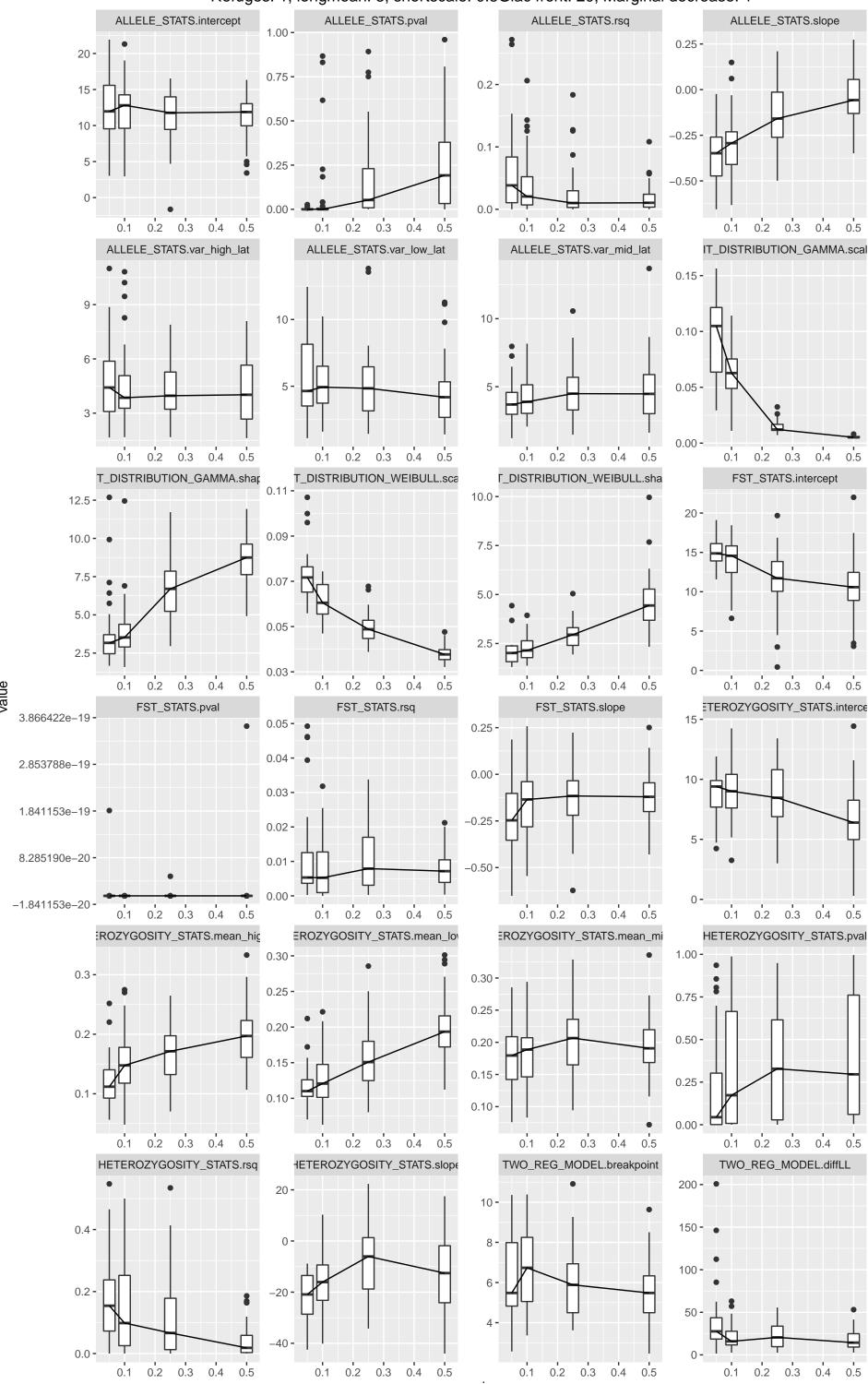
Refuges: 1, longmean: 2, shortscale: 0.25Glac front: 20, Marginal decrease: 1



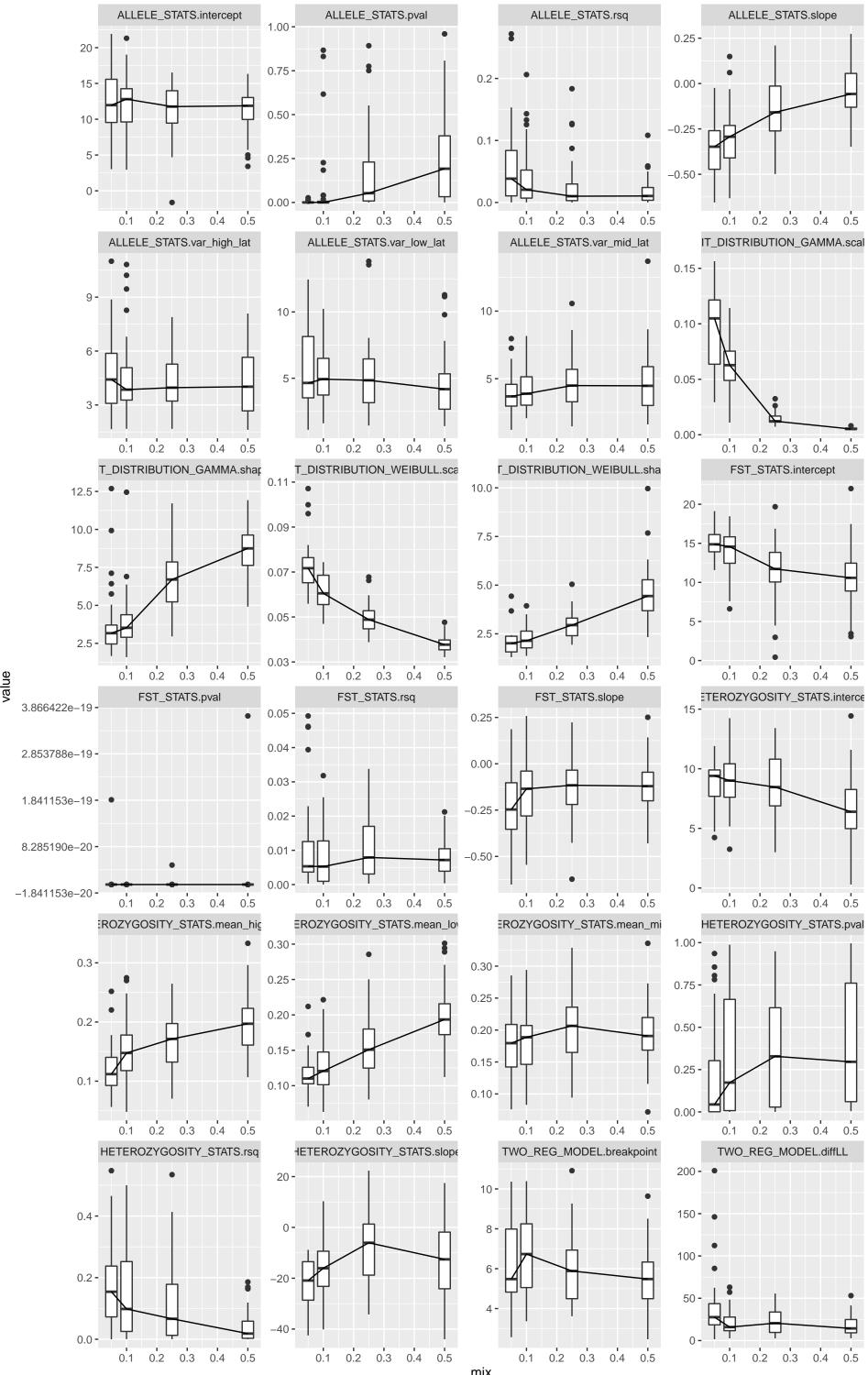
Refuges: 1, longmean: 3, shortscale: 1Glac front: 20, Marginal decrease: 1 ALLELE_STATS.pval ALLELE_STATS.rsq ALLELE_STATS.intercept ALLELE_STATS.slope 1.00 -0.25 -20 -0.75 -0.2 -0.00 -15 -0.50 -10--0.25 **-**0.1 0.25 --0.50 0.00 -0.0 0.1 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.1 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 ALLELE_STATS.var_mid_lat IT_DISTRIBUTION_GAMMA.scal ALLELE_STATS.var_low_lat ${\sf ALLELE_STATS.var_high_lat}$ 0.15 -10-10 -0.10 0.05 0.00 -0.2 0.3 0.4 0.1 0.2 0.3 0.4 0.5 0.5 0.1 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 T_DISTRIBUTION_GAMMA.shap T_DISTRIBUTION_WEIBULL.sca Γ_DISTRIBUTION_WEIBULL.sha FST_STATS.intercept 0.11 10.0 -12.5 -20 -0.09 -10.0 -7.5 -15 -7.5 -0.07 10 -5.0 0.05 -0.03 -0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.1 0.2 0.3 0.4 ETEROZYGOSITY_STATS.interce FST_STATS.pval FST_STATS.slope FST_STATS.rsq 0.05 -0.25 -0.04 -0.00 -10-0.03 --0.250.02 -0.01 --0.500.00 -0.1 0.2 0.3 0.4 0.5 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.1 0.1 0.2 0.3 0.4 EROZYGOSITY_STATS.mean_mi HETEROZYGOSITY_STATS.pval ROZYGOSITY_STATS.mean_hig EROZYGOSITY_STATS.mean_lov 1.00 -0.30 -0.3 -0.30 -0.25 -0.75 -0.25 -0.20 -0.2 -0.50 -0.20 -0.15 -0.15 -0.25 -0.10 -0.1 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5



Refuges: 1, longmean: 3, shortscale: 0.5Glac front: 20, Marginal decrease: 1



Refuges: 1, longmean: 3, shortscale: 0.25Glac front: 20, Marginal decrease: 1



Refuges: 3, longmean: 2, shortscale: 1Glac front: 20, Marginal decrease: 1 ALLELE_STATS.intercept ALLELE_STATS.pval ALLELE_STATS.rsq ALLELE_STATS.slope 0.3 -0.3 -0.75 -0.0 0.2 0.50 --0.30.1 -0.25 -0.60.0 -0.2 0.2 0.3 0.4 0.2 0.3 0.1 0.3 0.4 0.1 0.2 0.3 ALLELE_STATS.var_low_lat ALLELE_STATS.var_mid_lat FIT_DISTRIBUTION_GAMMA.scale ALLELE_STATS.var_high_lat 0.15 10 -0.10 0.05 0.00 -0.2 0.3 0.3 0.4 0.2 0.3 0.4 0.5 0.2 0.4 0.2 0.3 0.4 0.1 0.5 0.1 FIT_DISTRIBUTION_GAMMA.shape IT_DISTRIBUTION_WEIBULL.scale IT_DISTRIBUTION_WEIBULL.shap FST_STATS.intercept 20 -0.100 -0.075 -10 0.050 -0.2 0.3 0.4 0.2 0.3 0.4 0.2 0.3 0.4 0.1 0.2 0.3 0.4 FST_STATS.pval FST_STATS.rsq FST_STATS.slope IETEROZYGOSITY_STATS.intercep 0.25 -12 0.04 -0.00 -0.25 · 0.02 --0.50 0.00 -0.2 0.2 0.3 0.4 0.1 0.2 0.3 0.4 0.5 0.3 0.2 0.3 0.1 0.1 0.4 EROZYGOSITY_STATS.mean_high HETEROZYGOSITY_STATS.pval FEROZYGOSITY_STATS.mean_low FEROZYGOSITY_STATS.mean_mid 0.4 -1.00 -0.3 -0.75 -0.3 0.2 -0.50 0.25 0.1 0.2 0.3 0.4 0.5 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 TWO_REG_MODEL.diffLL TWO_REG_MODEL.breakpoint HETEROZYGOSITY_STATS.rsq HETEROZYGOSITY_STATS.slope 20 -150 **-**100 -

50 -

0.2 0.3

0.2

0.3

0.4 0.5

20 -

15 -

10 -

6 -

10 -

4e-09 -

2e-09 -

0.3 -

0.2 -

0.4 -

0.2 -

0.2 0.3

0.4

0.5

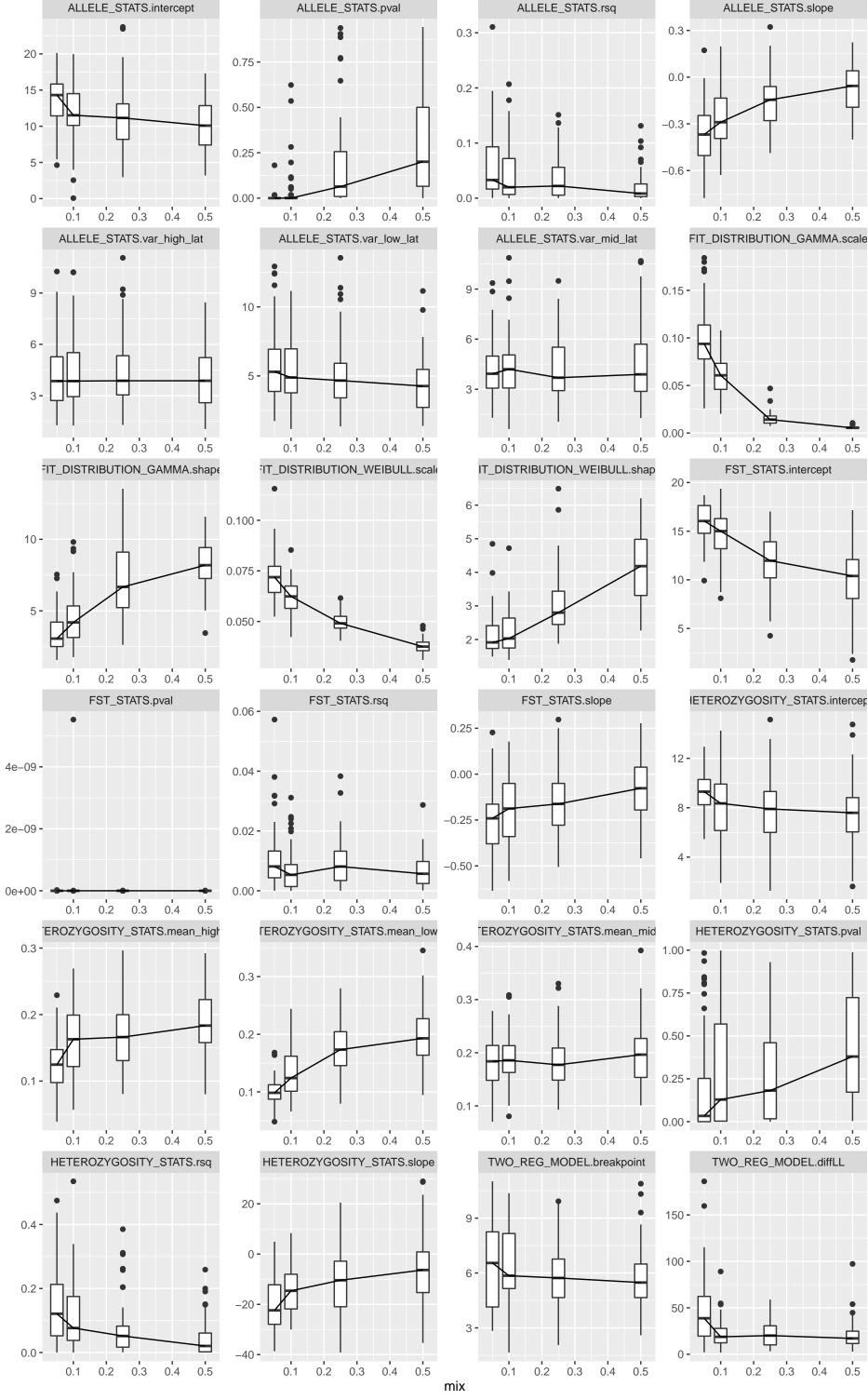
-20 **-**

0.1

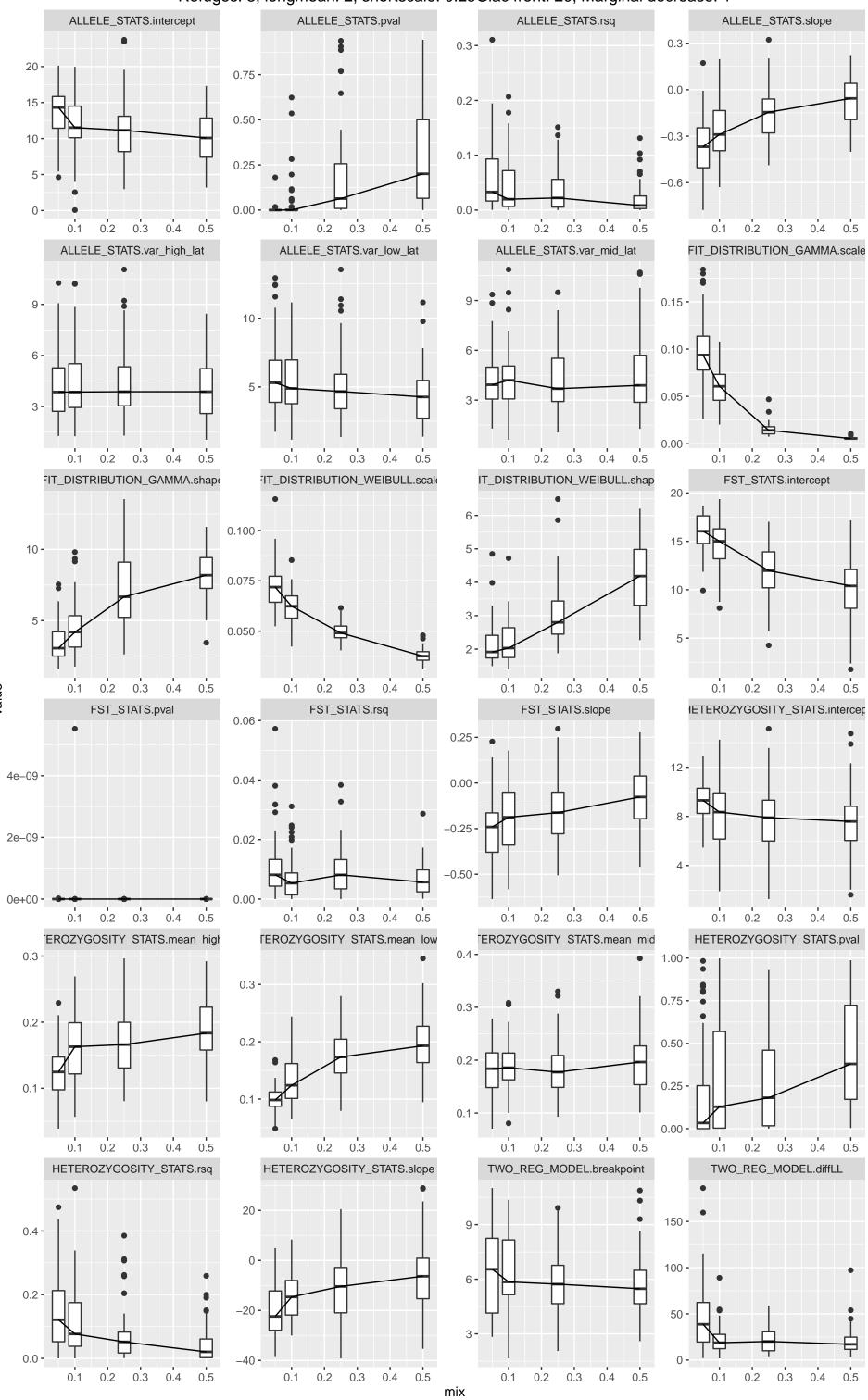
0.2

0.3 0.4

Refuges: 3, longmean: 2, shortscale: 0.5Glac front: 20, Marginal decrease: 1 ALLELE_STATS.pval ALLELE_STATS.rsq ALLELE_STATS.slope 0.3 -0.3 -0.75 -0.0 0.2 0.50 --0.30.1 -0.25 -0.60.0 -0.2 0.3 0.4 0.2 0.3 0.4 0.3 0.1 0.1 0.2 0.3 ALLELE_STATS.var_low_lat ALLELE_STATS.var_mid_lat FIT_DISTRIBUTION_GAMMA.scale 0.15 10 -0.10 0.05 0.00 -0.3 0.3 0.4 0.2 0.3 0.4 0.5 0.2 0.4 0.2 0.3 0.4 0.1 0.5 0.1 IT_DISTRIBUTION_WEIBULL.scale IT_DISTRIBUTION_WEIBULL.shap FST_STATS.intercept 20 -0.100 -0.075 -10 0.050 -0.2 0.3 0.4 0.2 0.3 0.4 0.1 0.2 0.3 0.4 FST_STATS.rsq FST_STATS.slope IETEROZYGOSITY_STATS.intercep 0.06 -0.25 -12 -0.04 -0.00 -0.25 · 0.02 --0.50 0.00 -0.2 0.2 0.3 0.4 0.1 0.2 0.3 0.4 0.5 0.3 0.1 0.1 0.4 FEROZYGOSITY_STATS.mean_low HETEROZYGOSITY_STATS.pval FEROZYGOSITY_STATS.mean_mid 0.4 -1.00 -0.3 -0.75 -0.3 0.2 -0.50 0.25 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 TWO_REG_MODEL.diffLL TWO_REG_MODEL.breakpoint HETEROZYGOSITY_STATS.slope 20 -150 -



Refuges: 3, longmean: 2, shortscale: 0.25Glac front: 20, Marginal decrease: 1



Refuges: 3, longmean: 3, shortscale: 1Glac front: 20, Marginal decrease: 1 ALLELE_STATS.intercept ALLELE_STATS.pval ALLELE_STATS.rsq ALLELE_STATS.slope 0.3 -0.3 -0.75 -0.0 0.2 0.50 --0.30.1 -0.25 -0.60.0 -0.2 0.2 0.3 0.4 0.2 0.3 0.1 0.3 0.4 0.1 0.2 0.3 ALLELE_STATS.var_low_lat ALLELE_STATS.var_mid_lat FIT_DISTRIBUTION_GAMMA.scale ALLELE_STATS.var_high_lat 0.15 10 -0.10 0.05 0.00 -0.2 0.3 0.3 0.4 0.2 0.3 0.4 0.5 0.2 0.4 0.2 0.3 0.4 0.1 0.5 0.1 FIT_DISTRIBUTION_GAMMA.shape IT_DISTRIBUTION_WEIBULL.scale IT_DISTRIBUTION_WEIBULL.shap FST_STATS.intercept 20 -0.100 -0.075 -10 0.050 -0.2 0.3 0.4 0.2 0.3 0.4 0.2 0.3 0.4 0.1 0.2 0.3 0.4 FST_STATS.pval FST_STATS.rsq FST_STATS.slope IETEROZYGOSITY_STATS.intercep 0.06 -0.25 -12 0.04 -0.00 -0.25 · 0.02 --0.50 0.00 -0.2 0.2 0.3 0.4 0.1 0.2 0.3 0.4 0.5 0.3 0.2 0.3 0.1 0.1 0.4 HETEROZYGOSITY_STATS.pval EROZYGOSITY_STATS.mean_high FEROZYGOSITY_STATS.mean_low FEROZYGOSITY_STATS.mean_mid 0.4 -1.00 -0.3 -0.75 -0.3 0.2 -0.50 0.25 0.1 0.2 0.3 0.4 0.5 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 TWO_REG_MODEL.diffLL TWO_REG_MODEL.breakpoint HETEROZYGOSITY_STATS.rsq HETEROZYGOSITY_STATS.slope 20 -150 **-**100 -

50 -

0.2 0.3

0.2

0.3

0.4 0.5

20 -

15 -

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6 -

10 -

4e-09 -

2e-09 -

0.3 -

0.2 -

0.4 -

0.2 -

0.2 0.3

0.4

0.5

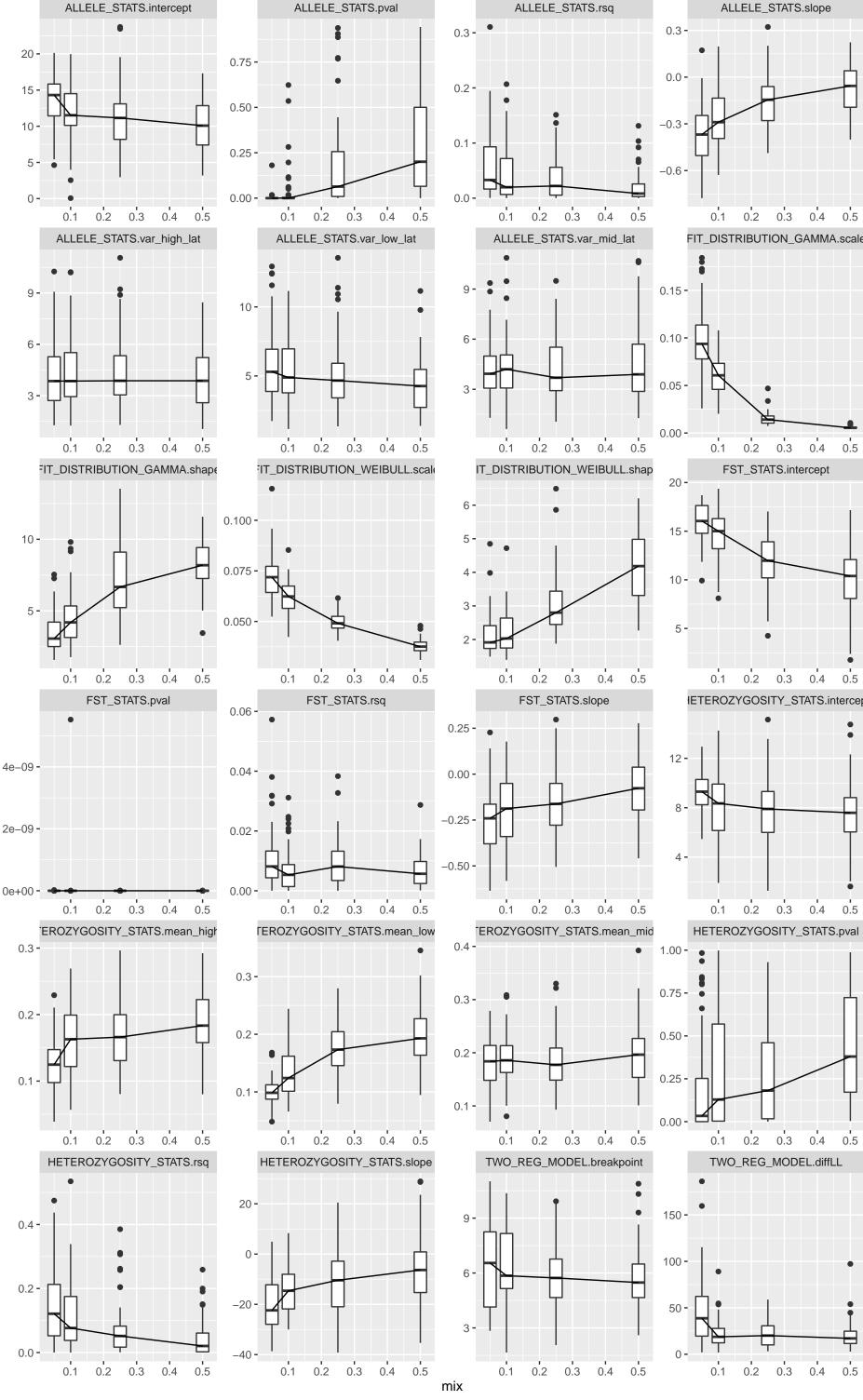
-20 **-**

0.1

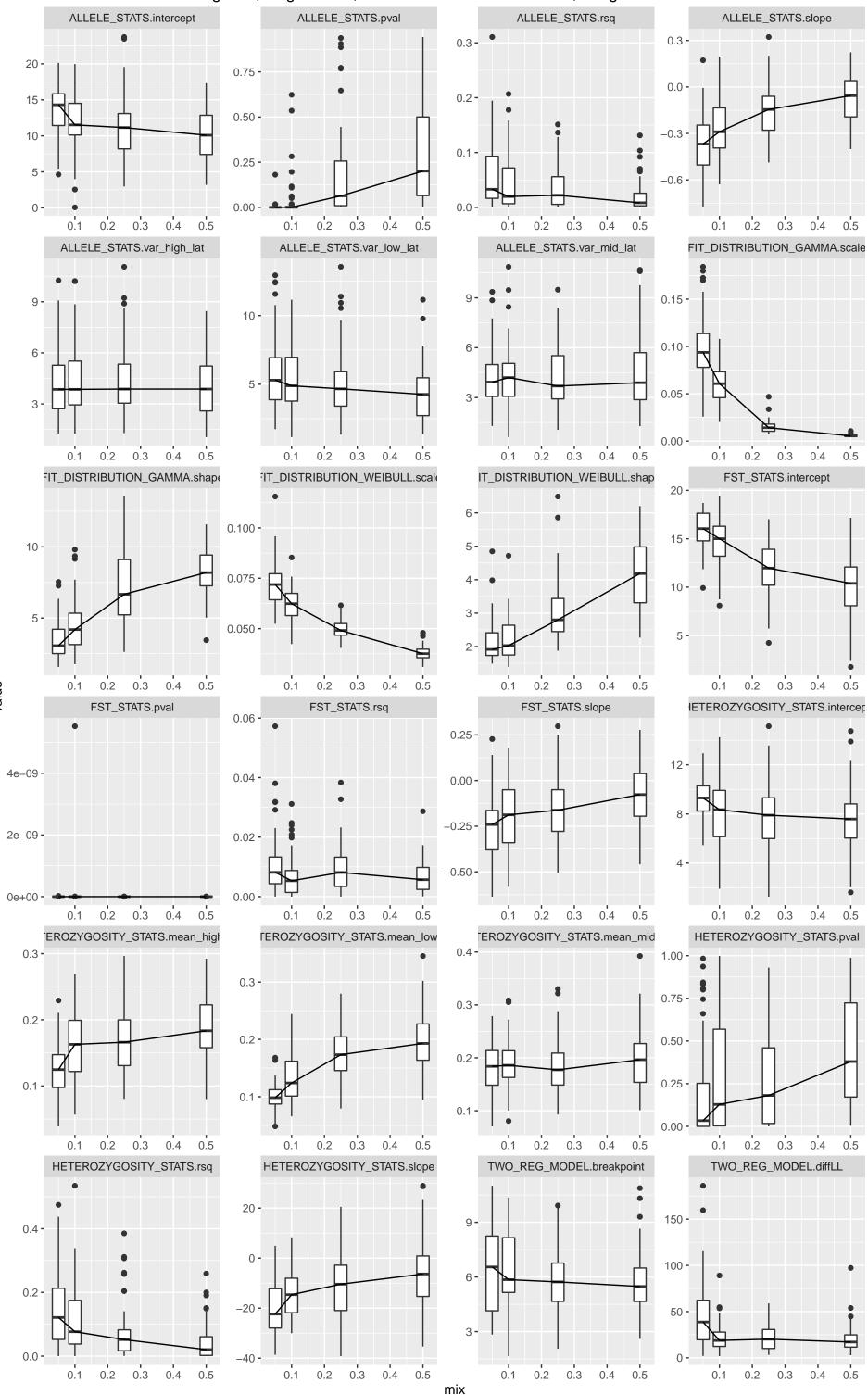
0.2

0.3 0.4

Refuges: 3, longmean: 3, shortscale: 0.5Glac front: 20, Marginal decrease: 1 ALLELE_STATS.pval ALLELE_STATS.rsq ALLELE_STATS.slope 0.3 -0.3 -0.75 -0.0 0.2 0.50 --0.30.1 -0.25 -0.60.0 -0.2 0.3 0.4 0.2 0.3 0.4 0.3 0.1 0.1 0.2 0.3 ALLELE_STATS.var_low_lat ALLELE_STATS.var_mid_lat FIT_DISTRIBUTION_GAMMA.scale 0.15 10 -0.10 0.05 0.00 -0.3 0.3 0.4 0.2 0.3 0.4 0.5 0.2 0.4 0.2 0.3 0.4 0.1 0.5 0.1 IT_DISTRIBUTION_WEIBULL.scale IT_DISTRIBUTION_WEIBULL.shap FST_STATS.intercept 20 -0.100 -0.075 -10 0.050 -0.2 0.3 0.4 0.2 0.3 0.4 0.1 0.2 0.3 0.4 FST_STATS.rsq FST_STATS.slope IETEROZYGOSITY_STATS.intercep 0.06 -0.25 -12 -0.04 -0.00 -0.25 · 0.02 --0.50 0.00 -0.2 0.2 0.3 0.4 0.1 0.2 0.3 0.4 0.5 0.3 0.1 0.1 0.4 FEROZYGOSITY_STATS.mean_low HETEROZYGOSITY_STATS.pval FEROZYGOSITY_STATS.mean_mid 0.4 -1.00 -0.3 -0.75 -0.3 0.2 -0.50 0.25 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 TWO_REG_MODEL.diffLL TWO_REG_MODEL.breakpoint HETEROZYGOSITY_STATS.slope 20 -150 **-**100 -



Refuges: 3, longmean: 3, shortscale: 0.25Glac front: 20, Marginal decrease: 1 ALLELE_STATS.pval ALLELE_STATS.rsq



Refuges: 4, longmean: 2, shortscale: 1Glac front: 20, Marginal decrease: 1 ALLELE_STATS.intercept ALLELE_STATS.pval ALLELE_STATS.rsq ALLELE_STATS.slope 1.00 -0.3 0.25 0.75 -0.2 0.00 0.50 --0.25 0.25 --0.50 0.0 -0.5 0.1 0.2 0.4 0.2 0.4 0.5 0.2 0.3 0.3 0.3 0.2 0.3 ALLELE_STATS.var_low_lat ALLELE_STATS.var_mid_lat FIT_DISTRIBUTION_GAMMA.scale ALLELE_STATS.var_high_lat 0.20 -16-10.0 -0.15 12 -7.5 0.10 8 -5.0 -0.05 2.5 -0.00 0.2 0.2 0.3 0.4 0.1 0.2 0.3 0.4 0.5 0.2 0.3 0.4 0.3 0.4 FIT_DISTRIBUTION_GAMMA.shape IT_DISTRIBUTION_WEIBULL.scale IT_DISTRIBUTION_WEIBULL.shap FST_STATS.intercept 20 -0.09 -7.5 **-**0.07 -10 5.0 0.05 0.03 -0.3 0.4 0.5 0.3 0.2 0.3 0.2 0.3 0.4 0.2 FST_STATS.pval FST_STATS.rsq FST_STATS.slope IETEROZYGOSITY_STATS.intercep 0.50 20 -0.05 -0.25 -0.04 -15 0.00 -0.03 -10 0.02 -–0.25 **-**0.01 --0.50 **-**0.00 -0.2 0.1 0.3 0.4 0.2 0.3 0.2 0.3 0.2 0.3 0.4 0.4 EROZYGOSITY_STATS.mean_high FEROZYGOSITY_STATS.mean_low FEROZYGOSITY_STATS.mean_mid HETEROZYGOSITY_STATS.pval 1.00 -0.3 -0.3 -0.75 0.2 -0.50 0.2 -0.25 0.1 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 TWO_REG_MODEL.breakpoint HETEROZYGOSITY_STATS.slope TWO_REG_MODEL.diffLL HETEROZYGOSITY_STATS.rsq 200 -10 -150 -100 -

0.2 0.3 0.4

0.1 0.2 0.3

0.4

20 -

15

10 -

10-

16-

12 -

5e-06 **-**

4e-06 -

3e-06 -

2e-06 -

1e-06 -

0e+00 -

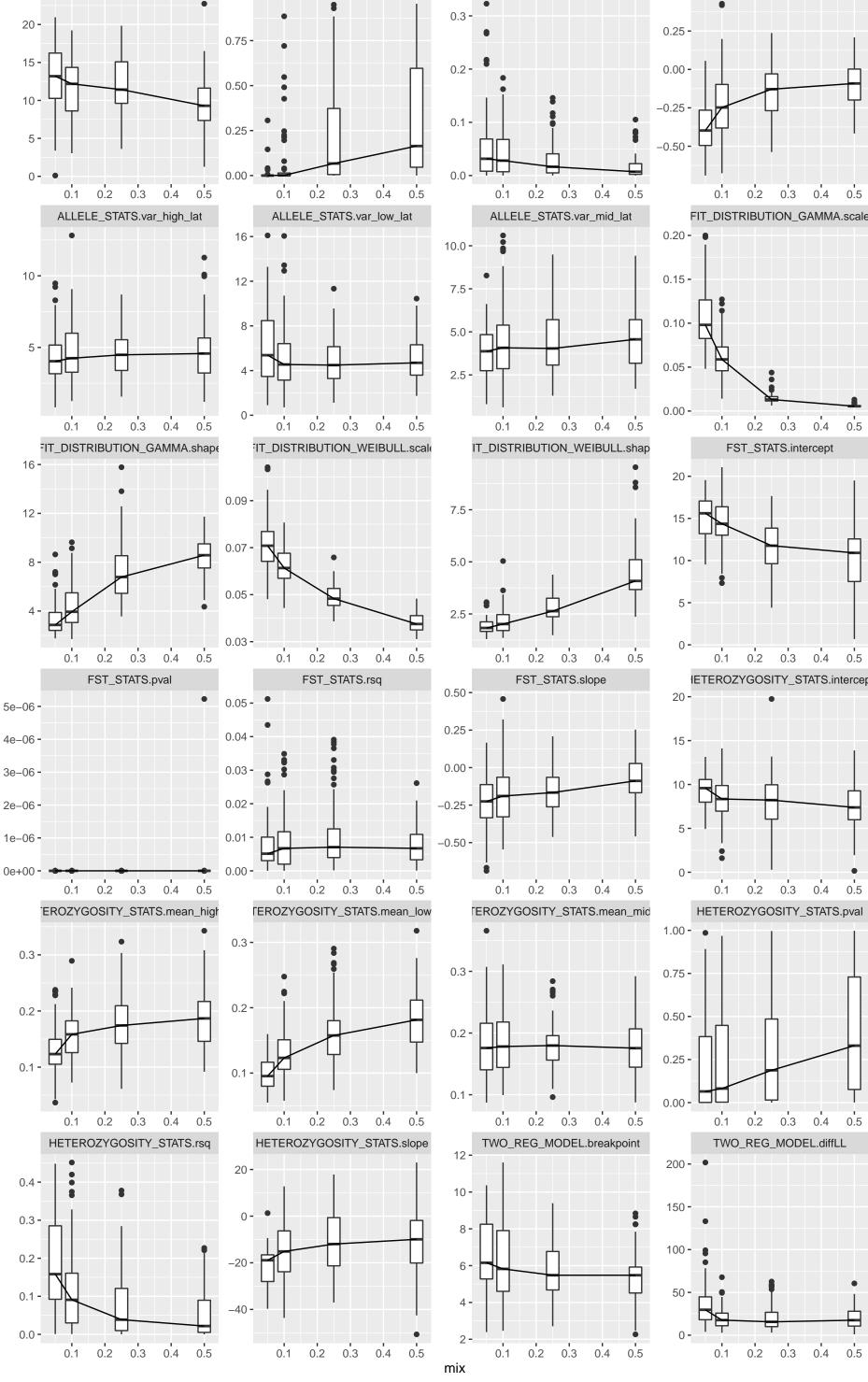
0.3 -

0.2 -

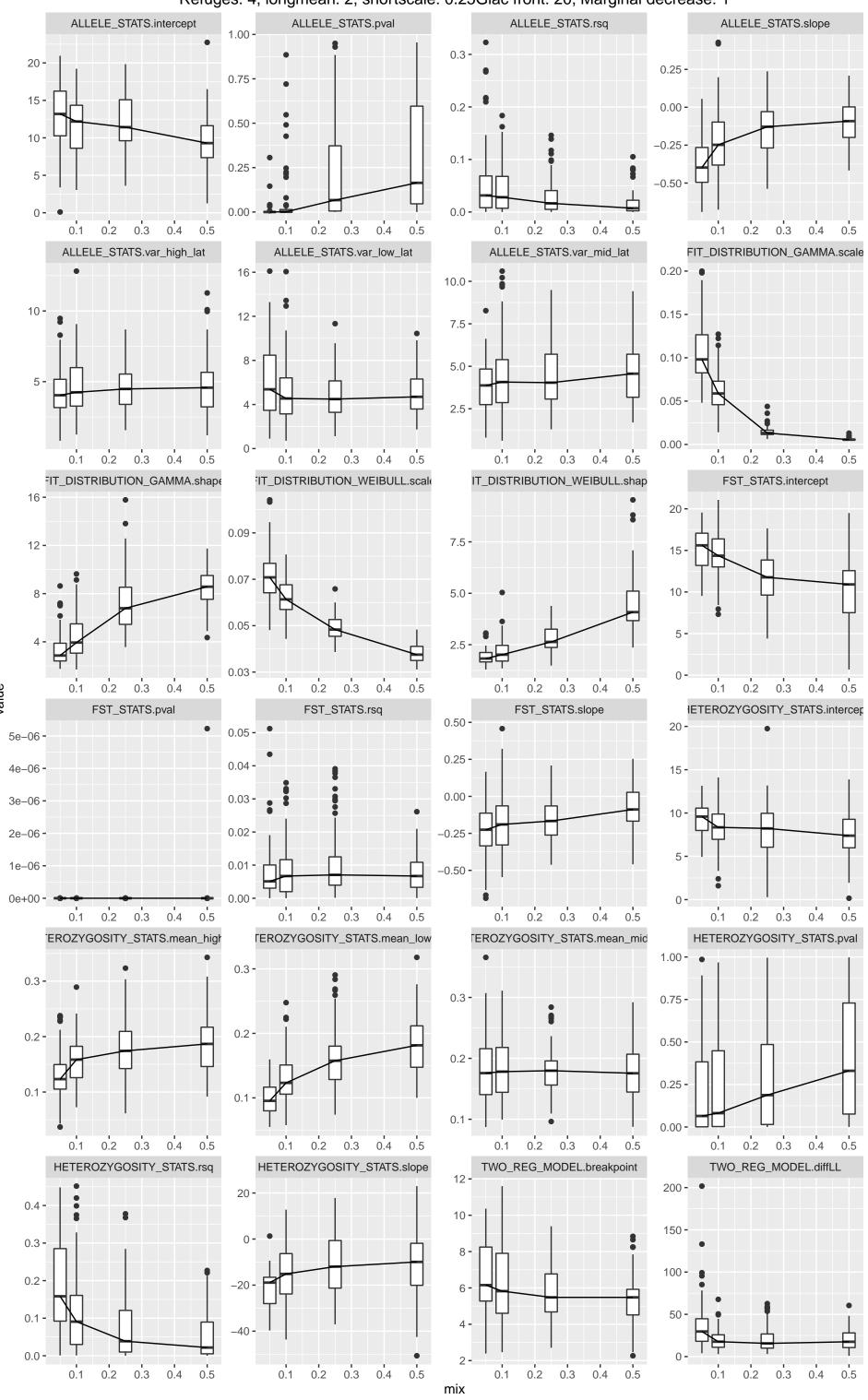
0.4 -

0.3 -

0.1 0.2 0.3 0.4 0.5



Refuges: 4, longmean: 2, shortscale: 0.25Glac front: 20, Marginal decrease: 1



Refuges: 4, longmean: 3, shortscale: 1Glac front: 20, Marginal decrease: 1 ALLELE_STATS.intercept ALLELE_STATS.pval ALLELE_STATS.rsq ALLELE_STATS.slope 1.00 -0.3 0.25 0.75 -0.2 0.00 0.50 --0.25 0.25 --0.50 0.0 -0.5 0.1 0.2 0.4 0.2 0.4 0.5 0.2 0.3 0.3 0.3 0.2 0.3 ALLELE_STATS.var_low_lat ALLELE_STATS.var_mid_lat FIT_DISTRIBUTION_GAMMA.scale ALLELE_STATS.var_high_lat 0.20 -16-10.0 -0.15 12 -7.5 0.10 8 -5.0 -0.05 2.5 -0.00 0.2 0.2 0.3 0.4 0.1 0.2 0.3 0.4 0.5 0.2 0.3 0.4 0.3 0.4 0.5 FIT_DISTRIBUTION_GAMMA.shape IT_DISTRIBUTION_WEIBULL.scale IT_DISTRIBUTION_WEIBULL.shap FST_STATS.intercept 20 -0.09 -7.5 **-**0.07 -10 5.0 0.05 0.03 -0.3 0.4 0.5 0.3 0.2 0.3 0.2 0.3 0.4 0.2 FST_STATS.pval FST_STATS.rsq FST_STATS.slope IETEROZYGOSITY_STATS.intercep 0.50 20 -0.05 -0.25 -0.04 -15 0.00 -0.03 -10 0.02 -–0.25 **-**0.01 --0.50 **-**0.00 -0.2 0.1 0.3 0.4 0.2 0.3 0.2 0.3 0.2 0.3 0.4 0.4 EROZYGOSITY_STATS.mean_high FEROZYGOSITY_STATS.mean_low FEROZYGOSITY_STATS.mean_mid HETEROZYGOSITY_STATS.pval 1.00 -0.3 -0.3 -0.75 0.2 -0.50 0.2 -0.25 0.1 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 TWO_REG_MODEL.breakpoint HETEROZYGOSITY_STATS.slope TWO_REG_MODEL.diffLL HETEROZYGOSITY_STATS.rsq 200 -10 -150 -100 -

0.2 0.3 0.4

0.1 0.2 0.3

0.4

20 -

15

10 -

10-

16-

12 -

5e-06 **-**

4e-06 -

3e-06 -

2e-06 -

1e-06 -

0e+00 -

0.3 -

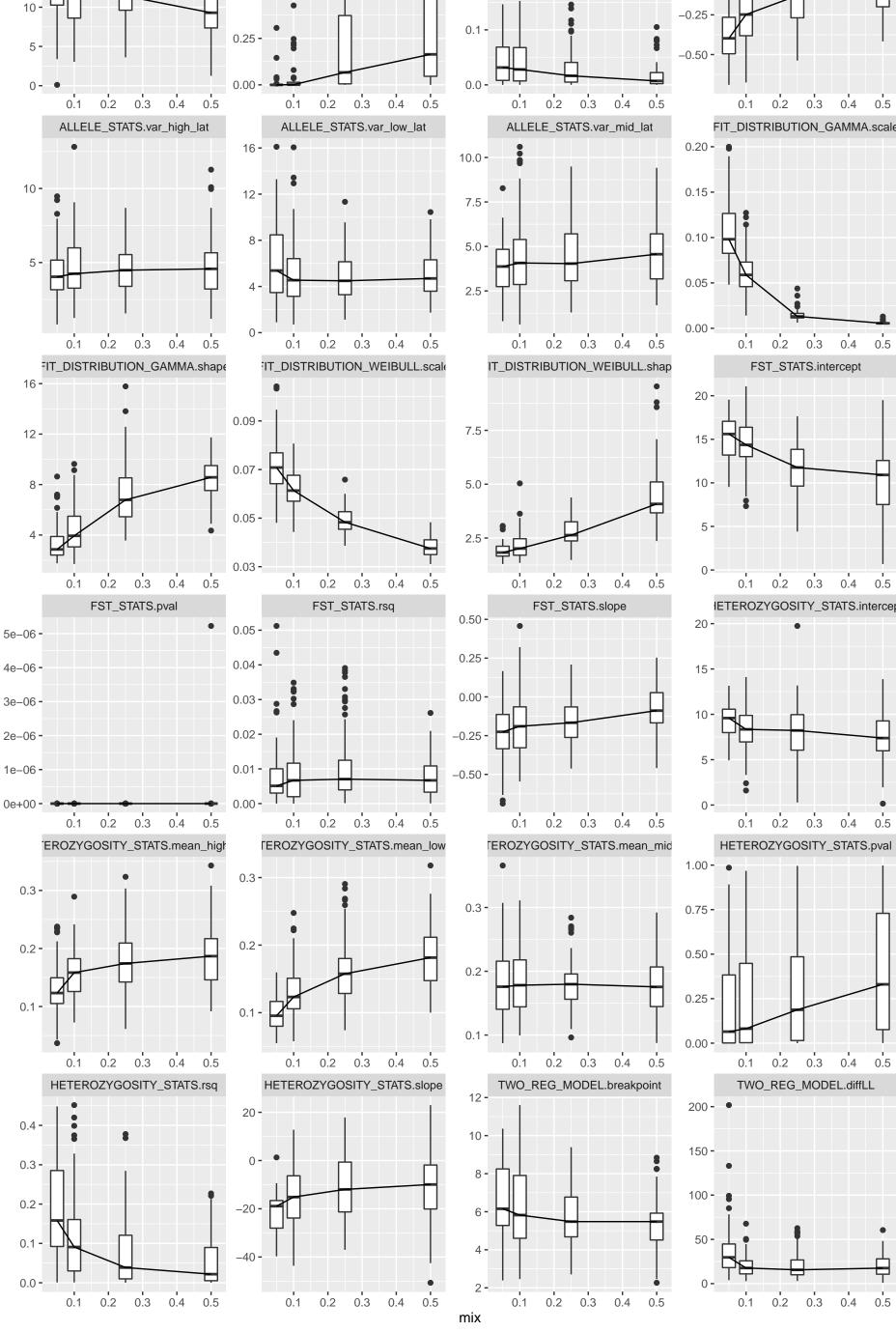
0.2 -

0.4 -

0.3 -

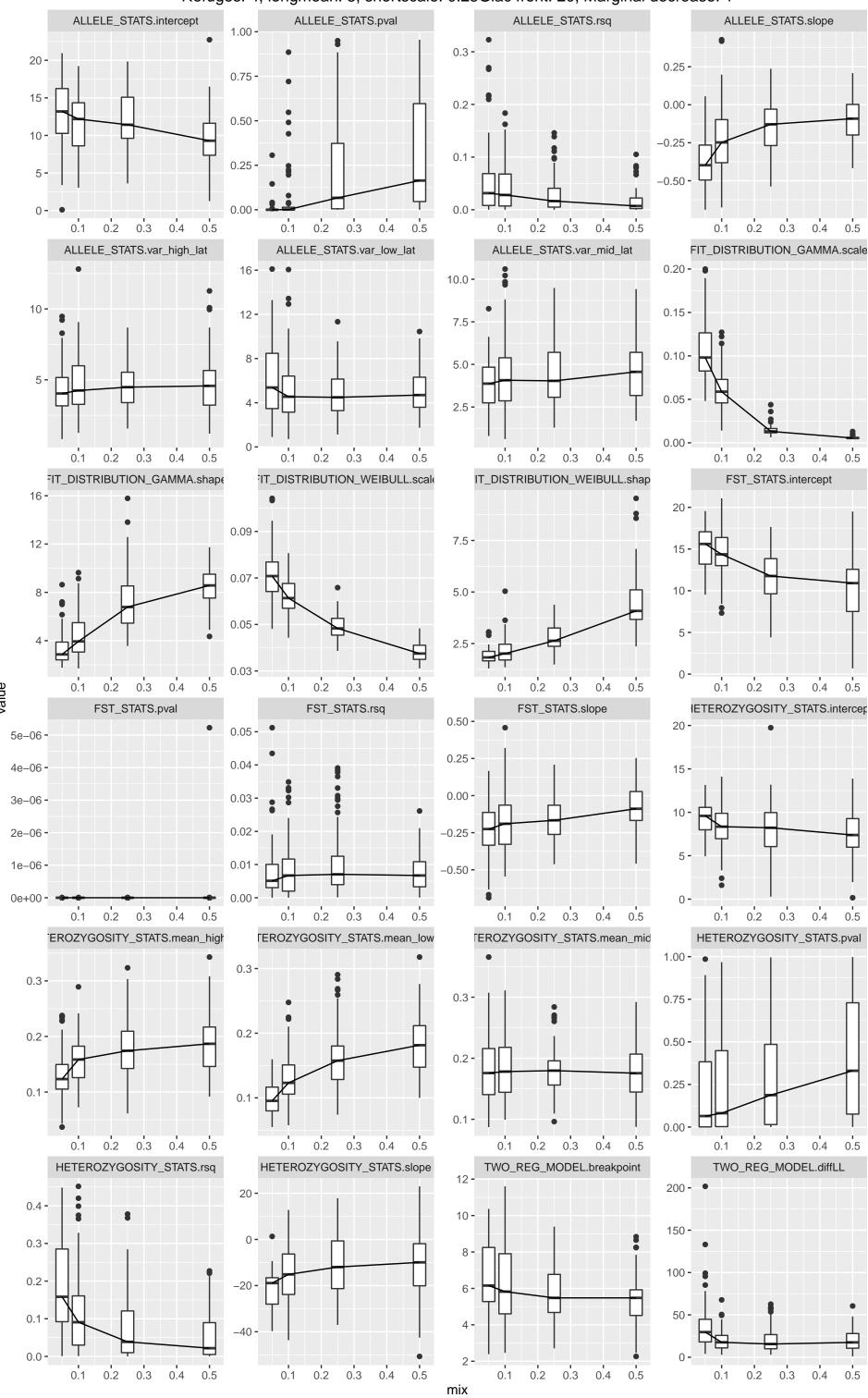
0.1 0.2 0.3 0.4 0.5

Refuges: 4, longmean: 3, shortscale: 0.5Glac front: 20, Marginal decrease: 1 ALLELE_STATS.intercept ALLELE_STATS.pval ALLELE_STATS.rsq ALLELE_STATS.slope 1.00 -0.3 0.25 0.75 -0.2 0.00 0.50 --0.25 0.25 --0.50 0.0 -0.5 0.1 0.2 0.4 0.2 0.4 0.5 0.3 0.3 0.3 0.2 0.3 ALLELE_STATS.var_low_lat ALLELE_STATS.var_mid_lat FIT_DISTRIBUTION_GAMMA.scale 0.20 -10.0 -0.15 12 -7.5 0.10 8 -5.0 -0.05 2.5 -0.00 0.2 0.3 0.4 0.1 0.2 0.3 0.4 0.5 0.2 0.3 0.4 0.3 0.4 IT_DISTRIBUTION_WEIBULL.scale IT_DISTRIBUTION_WEIBULL.shap FST_STATS.intercept 20 -0.09 -7.5 **-**0.07 -10 5.0 0.05 0.03 -0.3 0.4 0.5 0.3 0.2 0.3 0.2 0.3 0.4 FST_STATS.rsq FST_STATS.slope IETEROZYGOSITY_STATS.intercep 0.50 20 -0.05 -0.25 -0.04 -15 0.00 -0.03 -10 0.02 -–0.25 **-**0.01 --0.50 **-**0.00 -0.2 0.1 0.3 0.4 0.2 0.3 0.3 0.2 0.3 0.4 0.4 HETEROZYGOSITY_STATS.pval FEROZYGOSITY_STATS.mean_low FEROZYGOSITY_STATS.mean_mid 1.00 -0.3 -0.3 -0.75 0.2 -0.50 0.2 -0.25 0.1 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 TWO_REG_MODEL.breakpoint HETEROZYGOSITY_STATS.slope TWO_REG_MODEL.diffLL 200 -10 -150 -100 -



15

Refuges: 4, longmean: 3, shortscale: 0.25Glac front: 20, Marginal decrease: 1



Refuges: 5, longmean: 2, shortscale: 1Glac front: 20, Marginal decrease: 1 ALLELE_STATS.intercept ALLELE_STATS.pval ALLELE_STATS.rsq ALLELE_STATS.slope 1.00 -0.3 -0.2 -0.75 -0.0 -0.2 -0.50 -0.2 **-**0.1 --0.4 0.25 --0.6 0.00 -0.0 -0.1 0.2 0.3 0.4 0.2 0.3 0.4 0.5 0.3 0.4 0.2 0.3 ALLELE_STATS.var_low_lat FIT_DISTRIBUTION_GAMMA.scale ALLELE_STATS.var_mid_lat ALLELE_STATS.var_high_lat 12.5 -0.15 -10.0 0.10 7.5 10 -5.0 -0.05 2.5 0.00 0.2 0.2 0.3 0.3 0.4 0.2 0.3 0.4 0.2 0.3 0.4 0.4 0.5 0.1 0.5 0.1 FIT_DISTRIBUTION_GAMMA.shape FIT_DISTRIBUTION_WEIBULL.scale IT_DISTRIBUTION_WEIBULL.shape FST_STATS.intercept 20 -0.08 -15 · 0.06 0.04 0.4 0.2 0.3 0.4 0.2 0.3 0.2 0.3 0.4 0.3 0.5 HETEROZYGOSITY_STATS.intercep FST_STATS.pval FST_STATS.rsq FST_STATS.slope 0.25 -10 -0.04 -0.00 -0.25 **-**0.02 --0.50 0.00 --0.75 **-**0.2 0.3 0.1 0.1 0.2 0.3 0.2 0.3 0.4 0.5 0.4 0.2 0.3 TEROZYGOSITY_STATS.mean_low_ FEROZYGOSITY_STATS.mean_high HETEROZYGOSITY_STATS.pval TEROZYGOSITY_STATS.mean_mid_ 1.00 0.3 0.75 -0.2 -0.50 -0.2 -0.25 -0.1 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 TWO_REG_MODEL.breakpoint HETEROZYGOSITY_STATS.rsq TWO_REG_MODEL.diffLL HETEROZYGOSITY_STATS.slope 100 -20 -10.0 -75 **-**7.5 -50 **-**

5.0 -

0.2

0.3

0.4

25 -

0.2

0.3

20 -

15 -

10 -

12.5 **-**

10.0 -

7.5 -

20

15 **-**

0.20 -

0.15 -

0.10 -

0.05 -

0.00 -

0.3 -

0.5 -

0.4 -

0.3 -

0.2 -

0.1 -

0.2 0.3

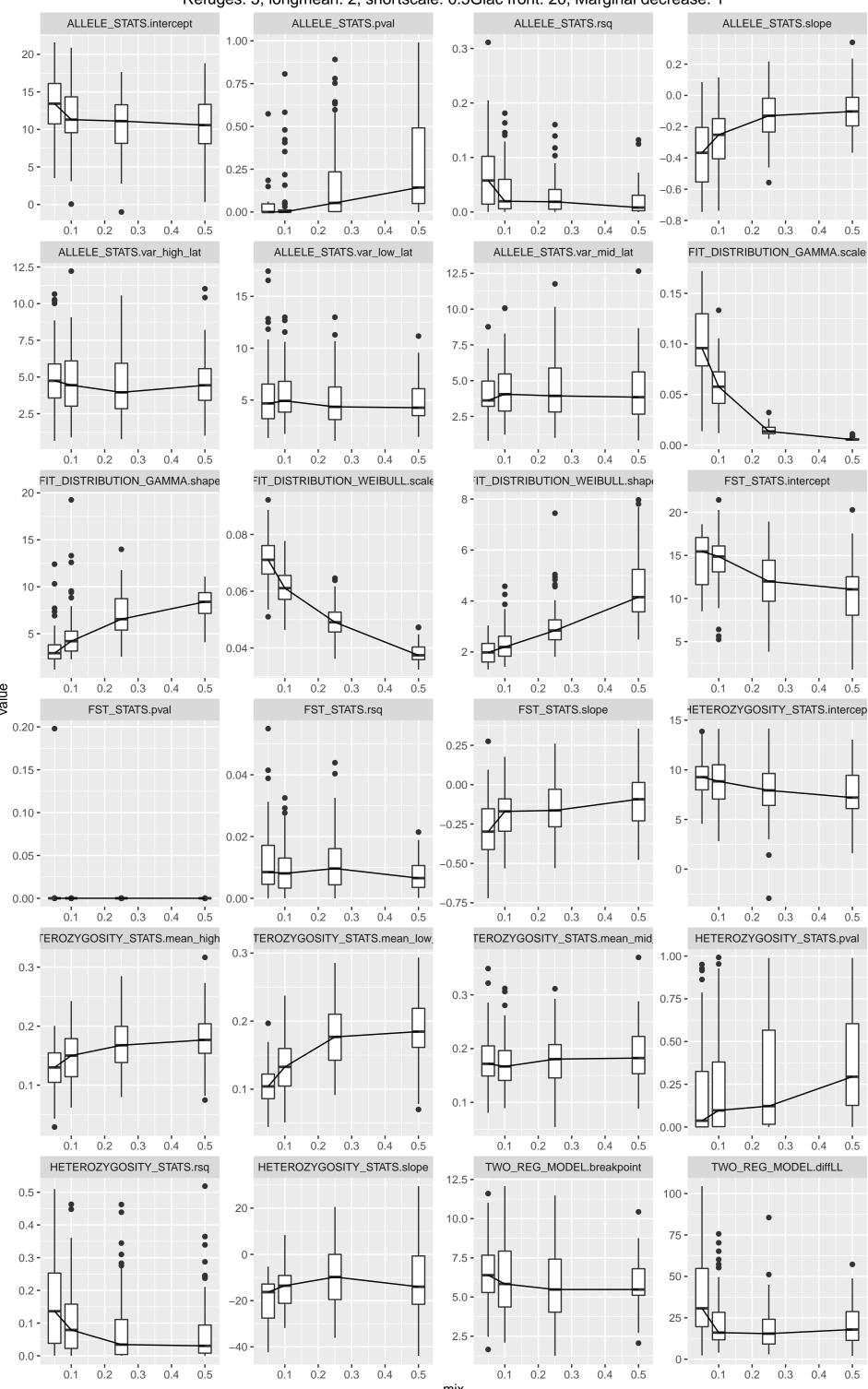
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0.5

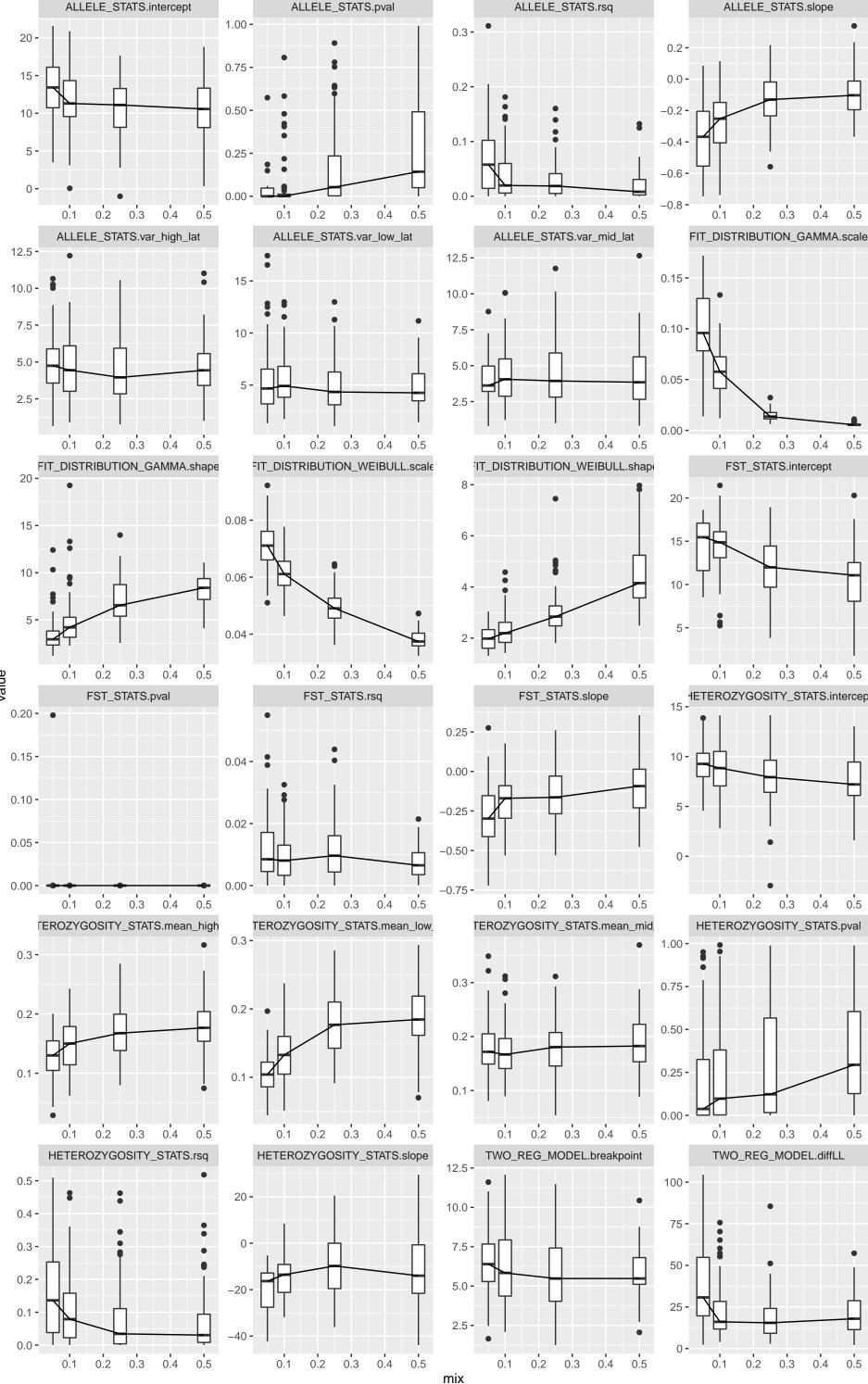
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0.2 0.3 0.4

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



Refuges: 5, longmean: 2, shortscale: 0.25Glac front: 20, Marginal decrease: 1 ALLELE_STATS.pval ALLELE_STATS.rsq ALLELE_STATS.slope 1.00 -0.3 -0.2 -0.75 -0.0 -0.2 -0.50 -0.2 **-**0.1 --0.4 0.25 --0.6 0.00 -0.0 -0.1 0.2 0.3 0.4 0.2 0.3 0.4 0.5 0.3 0.4 0.2 0.3 ALLELE_STATS.var_mid_lat ALLELE_STATS.var_low_lat FIT_DISTRIBUTION_GAMMA.scale 12.5 -0.15 -10.0 0.10 7.5 10 -5.0 -0.05 2.5 0.00 0.3 0.2 0.3 0.4 0.2 0.3 0.4 0.2 0.3 0.4 0.4 0.5 0.1 0.5 0.1 FIT_DISTRIBUTION_WEIBULL.scale IT_DISTRIBUTION_WEIBULL.shape FST_STATS.intercept 20 -0.08 -15 · 0.04 0.4 0.2 0.3 0.4 0.2 0.3 0.2 0.3 0.4 0.3 0.5 HETEROZYGOSITY_STATS.intercep FST_STATS.slope FST_STATS.rsq 0.25 -0.04 -0.00 -0.250.02 --0.50 0.00 --0.75 **-**0.2 0.3 0.1 0.1 0.2 0.3 0.3 0.4 0.5 0.4 0.3 TEROZYGOSITY_STATS.mean_low_ HETEROZYGOSITY_STATS.pval TEROZYGOSITY_STATS.mean_mid_ 1.00 0.3 0.75 -0.2 -0.50 -0.2 -0.25 -0.1 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 TWO_REG_MODEL.breakpoint HETEROZYGOSITY_STATS.slope TWO_REG_MODEL.diffLL 100 -20 -10.0 -75 **-**



Refuges: 5, longmean: 3, shortscale: 1Glac front: 20, Marginal decrease: 1 ALLELE_STATS.pval ALLELE_STATS.intercept ALLELE_STATS.rsq ALLELE_STATS.slope 1.00 -0.3 -0.2 -0.75 -0.0 -0.2 -0.50 -0.2 **-**0.1 --0.4 0.25 --0.6 0.00 -0.0 -0.1 0.2 0.3 0.2 0.3 0.4 0.5 0.4 0.3 0.4 0.2 0.3 FIT_DISTRIBUTION_GAMMA.scale ALLELE_STATS.var_low_lat ALLELE_STATS.var_mid_lat ALLELE_STATS.var_high_lat 12.5 -0.15 -10.0 0.10 7.5 10 -5.0 -0.05 2.5 0.00 0.2 0.2 0.3 0.3 0.4 0.2 0.3 0.4 0.2 0.3 0.4 0.4 0.5 0.1 0.5 0.1 FIT_DISTRIBUTION_GAMMA.shape FIT_DISTRIBUTION_WEIBULL.scale IT_DISTRIBUTION_WEIBULL.shape FST_STATS.intercept 20 -0.08 -15 · 0.06 0.04 0.4 0.2 0.3 0.4 0.2 0.3 0.2 0.3 0.4 0.3 0.5 HETEROZYGOSITY_STATS.intercep FST_STATS.pval FST_STATS.rsq FST_STATS.slope 0.25 -10 -0.04 -0.00 -0.250.02 --0.50 0.00 --0.75 **-**0.2 0.3 0.1 0.1 0.2 0.3 0.2 0.3 0.4 0.5 0.4 0.2 0.3 TEROZYGOSITY_STATS.mean_low_ FEROZYGOSITY_STATS.mean_high HETEROZYGOSITY_STATS.pval TEROZYGOSITY_STATS.mean_mid_ 1.00 0.3 0.75 -0.2 -0.50 -0.2 -0.25 -0.1 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 TWO_REG_MODEL.breakpoint HETEROZYGOSITY_STATS.rsq TWO_REG_MODEL.diffLL HETEROZYGOSITY_STATS.slope 100 -20 -10.0 -75 **-**7.5 -50 **-**5.0 -

0.2

0.3

0.2

0.3

0.4

20 -

15 -

10 -

12.5 **-**

10.0 -

7.5 -

20

15 **-**

0.20 -

0.15 -

0.10 -

0.05 -

0.00 -

0.3 -

0.5 -

0.4 -

0.3 -

0.2 -

0.1 -

0.2 0.3

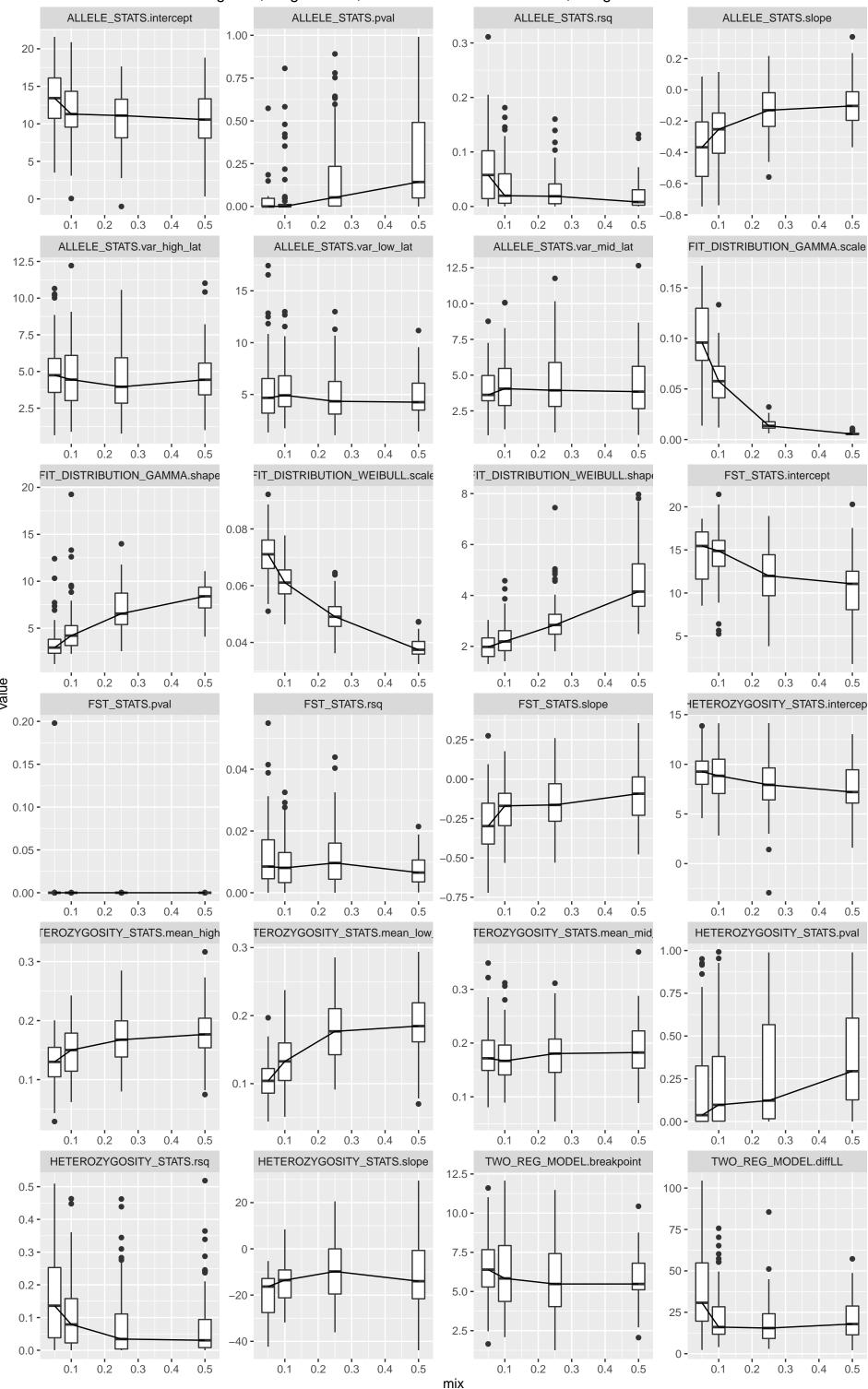
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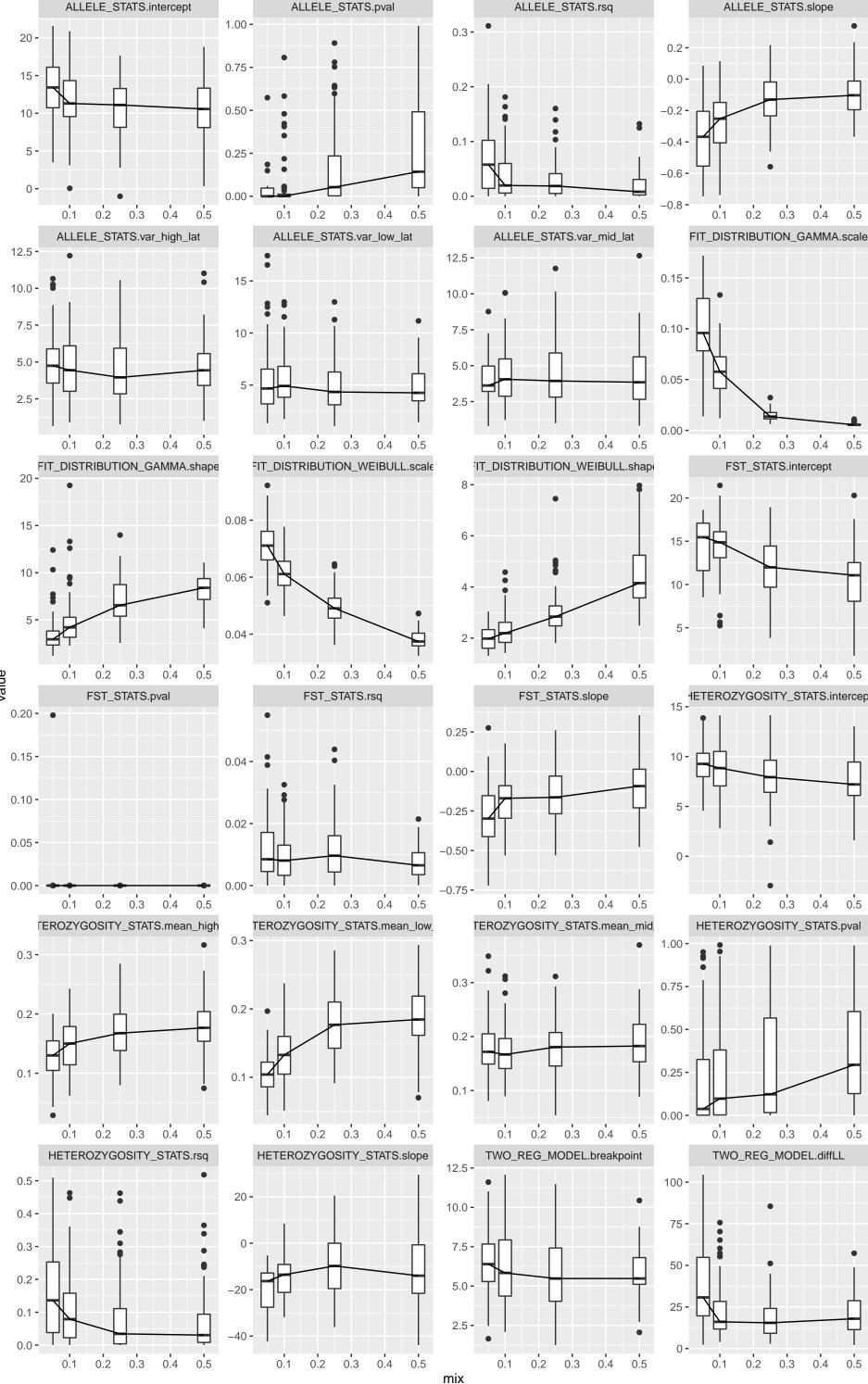
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0.2 0.3 0.4

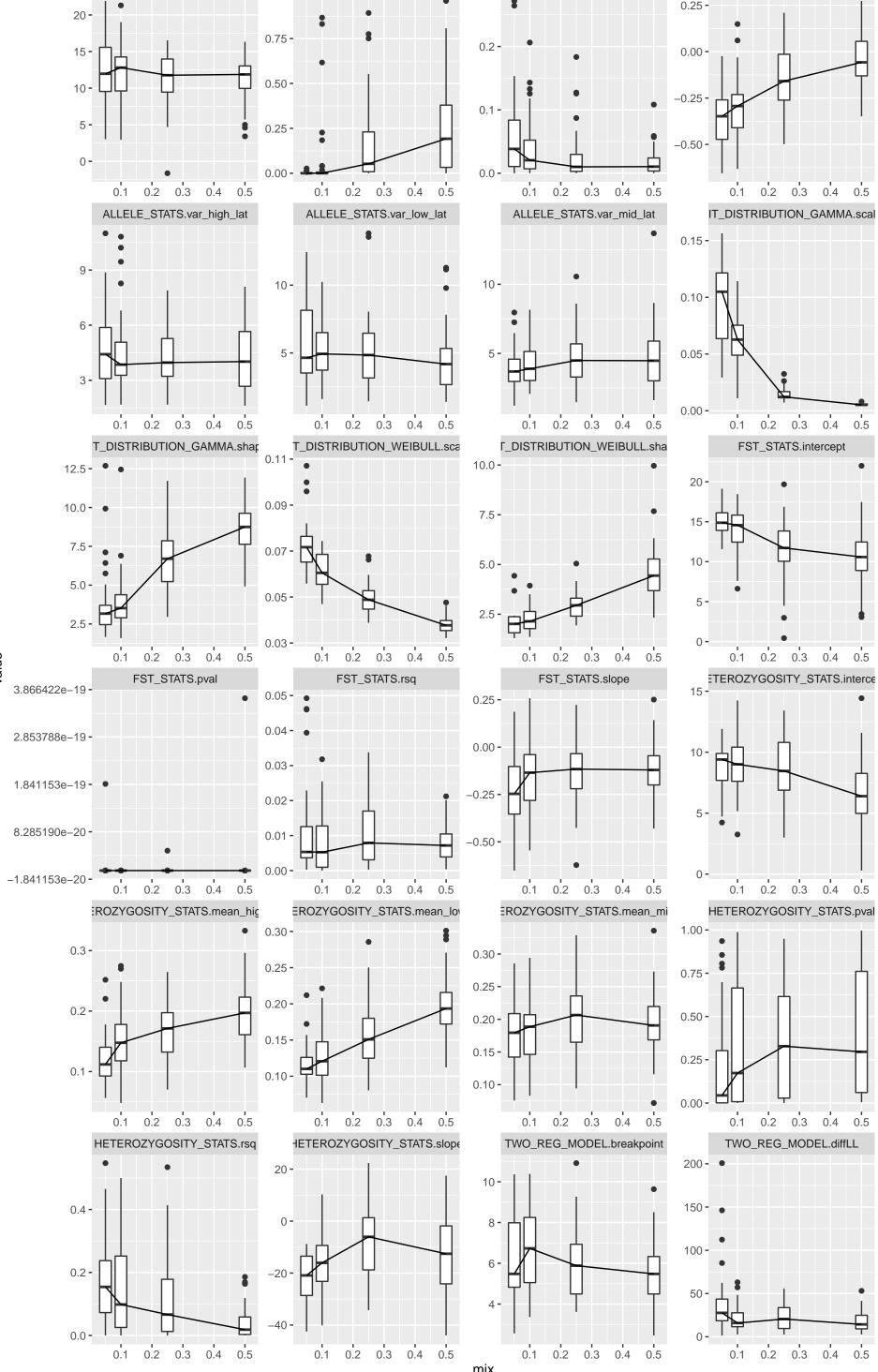
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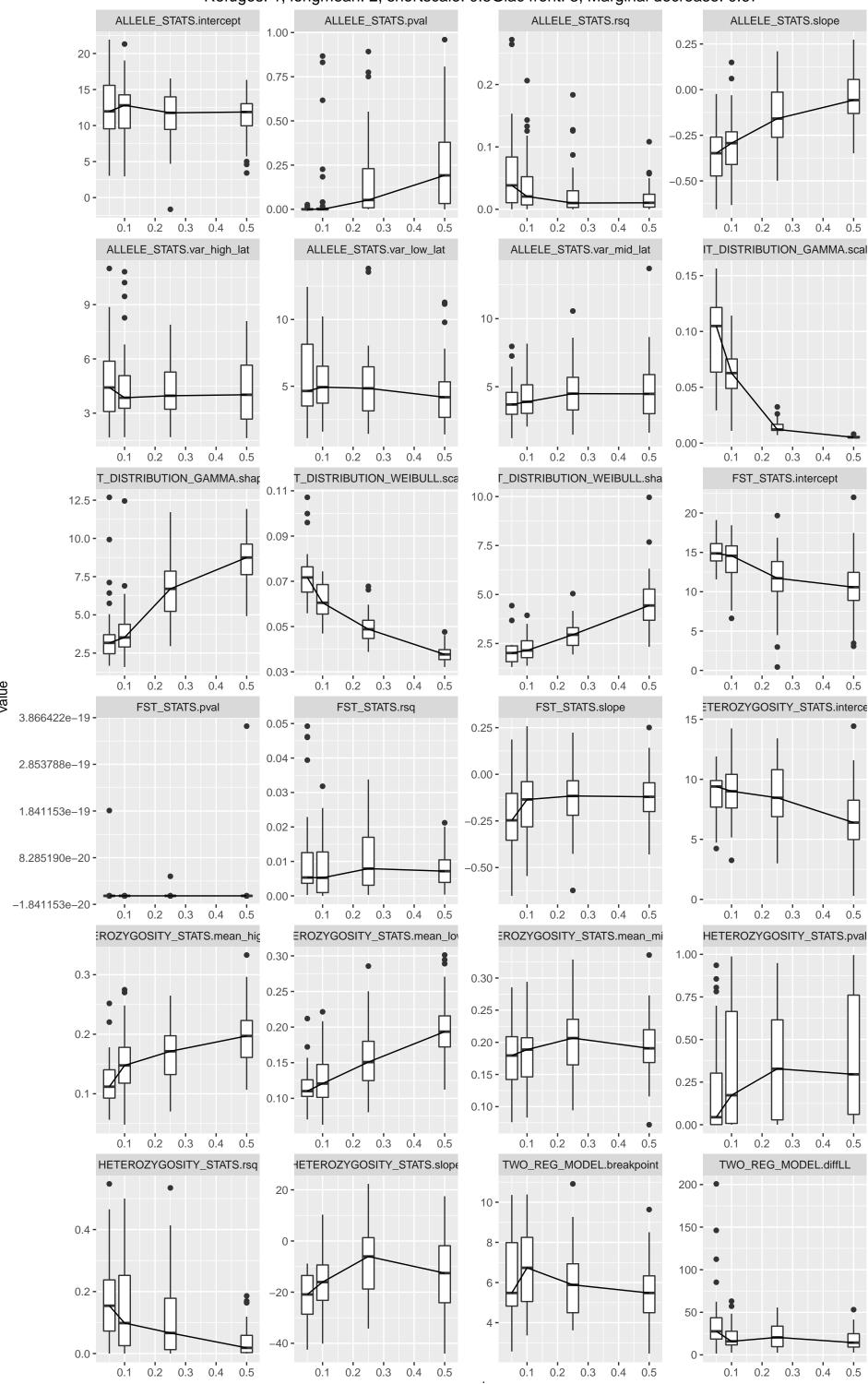
Refuges: 5, longmean: 3, shortscale: 0.25Glac front: 20, Marginal decrease: 1 ALLELE_STATS.pval ALLELE_STATS.rsq ALLELE_STATS.slope 1.00 -0.3 -0.2 -0.75 -0.0 -0.2 -0.50 -0.2 **-**0.1 --0.4 0.25 --0.6 0.00 -0.0 -0.1 0.2 0.3 0.2 0.3 0.4 0.5 0.4 0.3 0.4 0.2 0.3 ALLELE_STATS.var_mid_lat ALLELE_STATS.var_low_lat FIT_DISTRIBUTION_GAMMA.scale 12.5 -0.15 -10.0 0.10 7.5 10 -5.0 -0.05 2.5 0.00 0.3 0.2 0.3 0.4 0.2 0.3 0.4 0.2 0.3 0.4 0.4 0.5 0.1 0.5 0.1 FIT_DISTRIBUTION_WEIBULL.scale IT_DISTRIBUTION_WEIBULL.shape FST_STATS.intercept 20 -0.08 -15 · 0.06 0.04 0.4 0.2 0.3 0.4 0.2 0.3 0.2 0.3 0.4 0.3 0.5 HETEROZYGOSITY_STATS.intercep FST_STATS.slope FST_STATS.rsq 0.25 -0.04 -0.00 -0.250.02 --0.50 0.00 --0.75 **-**0.2 0.3 0.1 0.1 0.2 0.3 0.3 0.4 0.5 0.4 0.3 TEROZYGOSITY_STATS.mean_low_ HETEROZYGOSITY_STATS.pval TEROZYGOSITY_STATS.mean_mid_ 1.00 0.3 0.75 -0.2 -0.50 -0.2 -0.25 -0.1 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 TWO_REG_MODEL.breakpoint HETEROZYGOSITY_STATS.slope TWO_REG_MODEL.diffLL 100 -20 -10.0 -75 **-**



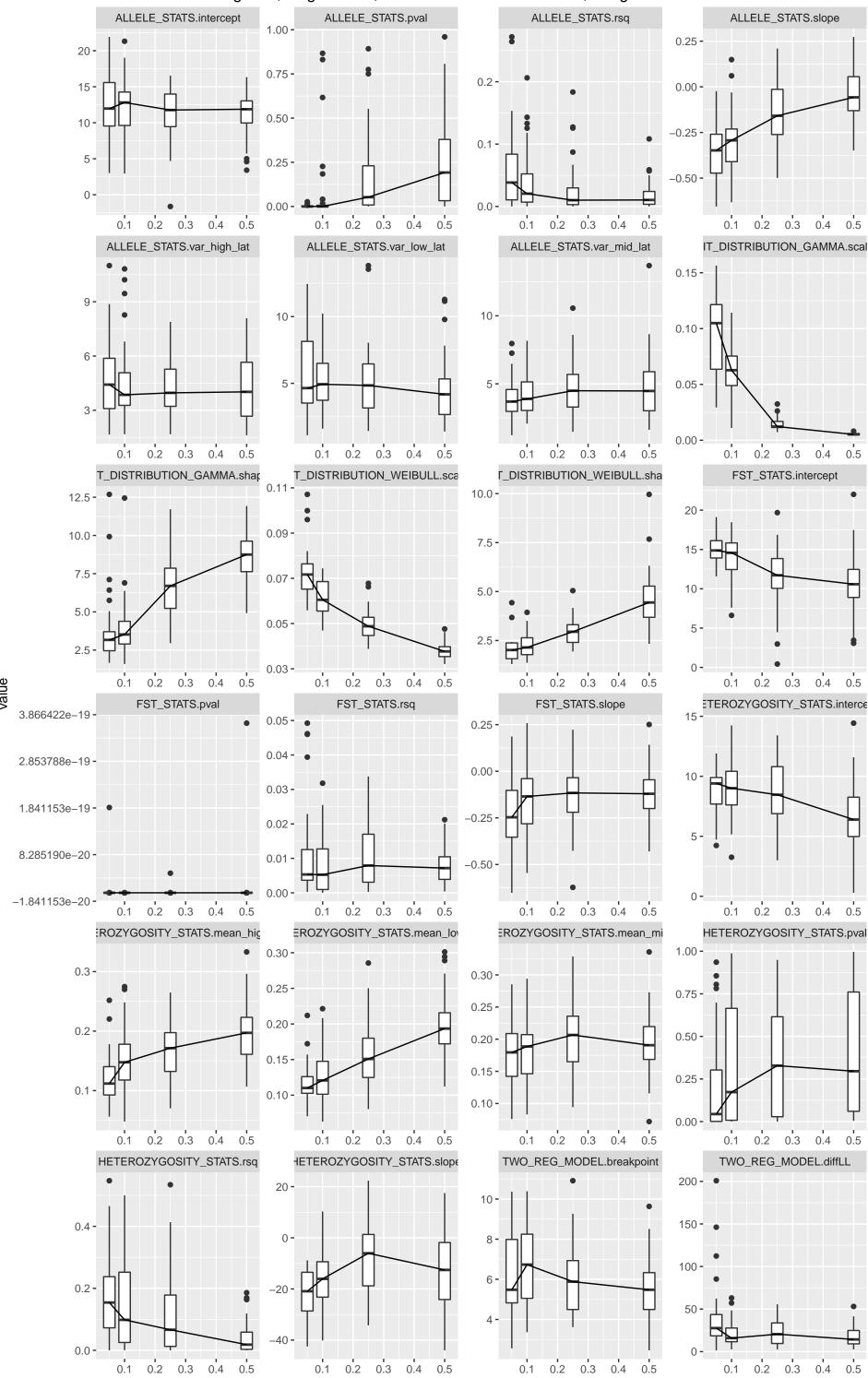
Refuges: 1, longmean: 2, shortscale: 1Glac front: 3, Marginal decrease: 0.67 ALLELE_STATS.intercept ALLELE_STATS.pval ALLELE_STATS.rsq ALLELE_STATS.slope 1.00 -0.25 -0.75 -0.2 -0.00 -0.50 --0.25 **-**0.1 0.25 --0.50 0.00 -0.0 0.1 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 ALLELE_STATS.var_low_lat ALLELE_STATS.var_mid_lat IT_DISTRIBUTION_GAMMA.scal ${\sf ALLELE_STATS.var_high_lat}$ 0.15 -10-10 -0.10 0.05 0.00 -0.2 0.3 0.4 0.1 0.2 0.3 0.4 0.1 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 T_DISTRIBUTION_GAMMA.shap T_DISTRIBUTION_WEIBULL.sca Γ_DISTRIBUTION_WEIBULL.sha FST_STATS.intercept 0.11 10.0 -20 -0.09 -7.5 -15 -0.07 10 -5.0 0.05 -0.03 -0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.1 0.2 0.3 0.4 ETEROZYGOSITY_STATS.interce FST_STATS.pval FST_STATS.slope FST_STATS.rsq 0.05 -0.25 -0.04 -0.00 -10-0.03 --0.250.02 -0.01 --0.500.00 -0.1 0.2 0.3 0.4 0.2 0.3 0.4 0.5 0.2 0.3 0.4 0.5 0.1 0.1 0.2 0.3 0.4 EROZYGOSITY_STATS.mean_mi HETEROZYGOSITY_STATS.pval ROZYGOSITY_STATS.mean_hic EROZYGOSITY_STATS.mean_lov 1.00 -0.30 -0.30 -0.25 -0.75 -0.25 -0.20 -0.50 -0.20 -0.15 -0.15 -0.25 -0.10 -0.1 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 TWO_REG_MODEL.diffLL HETEROZYGOSITY_STATS.rsq HETEROZYGOSITY_STATS.slope TWO_REG_MODEL.breakpoint



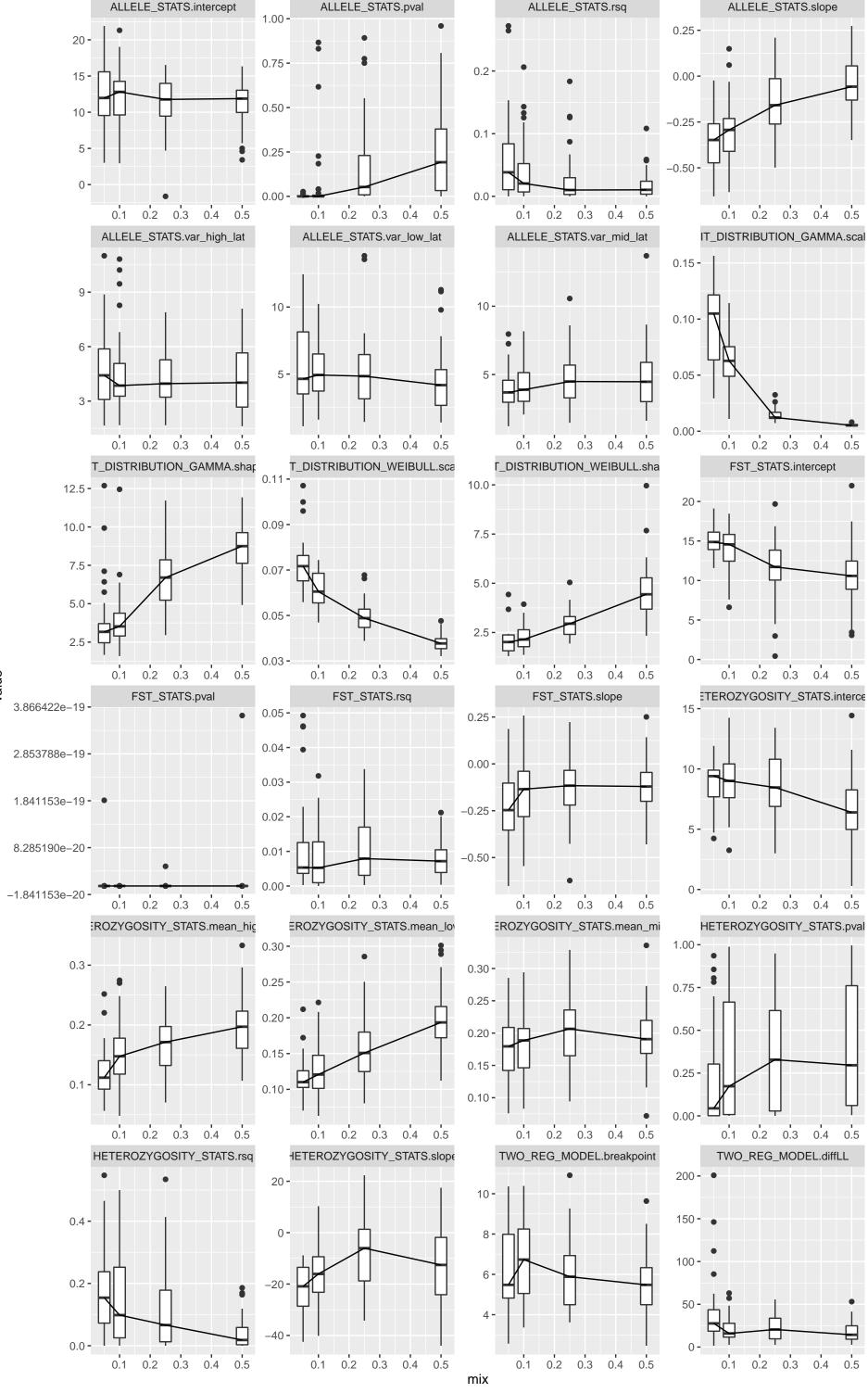
Refuges: 1, longmean: 2, shortscale: 0.5Glac front: 3, Marginal decrease: 0.67



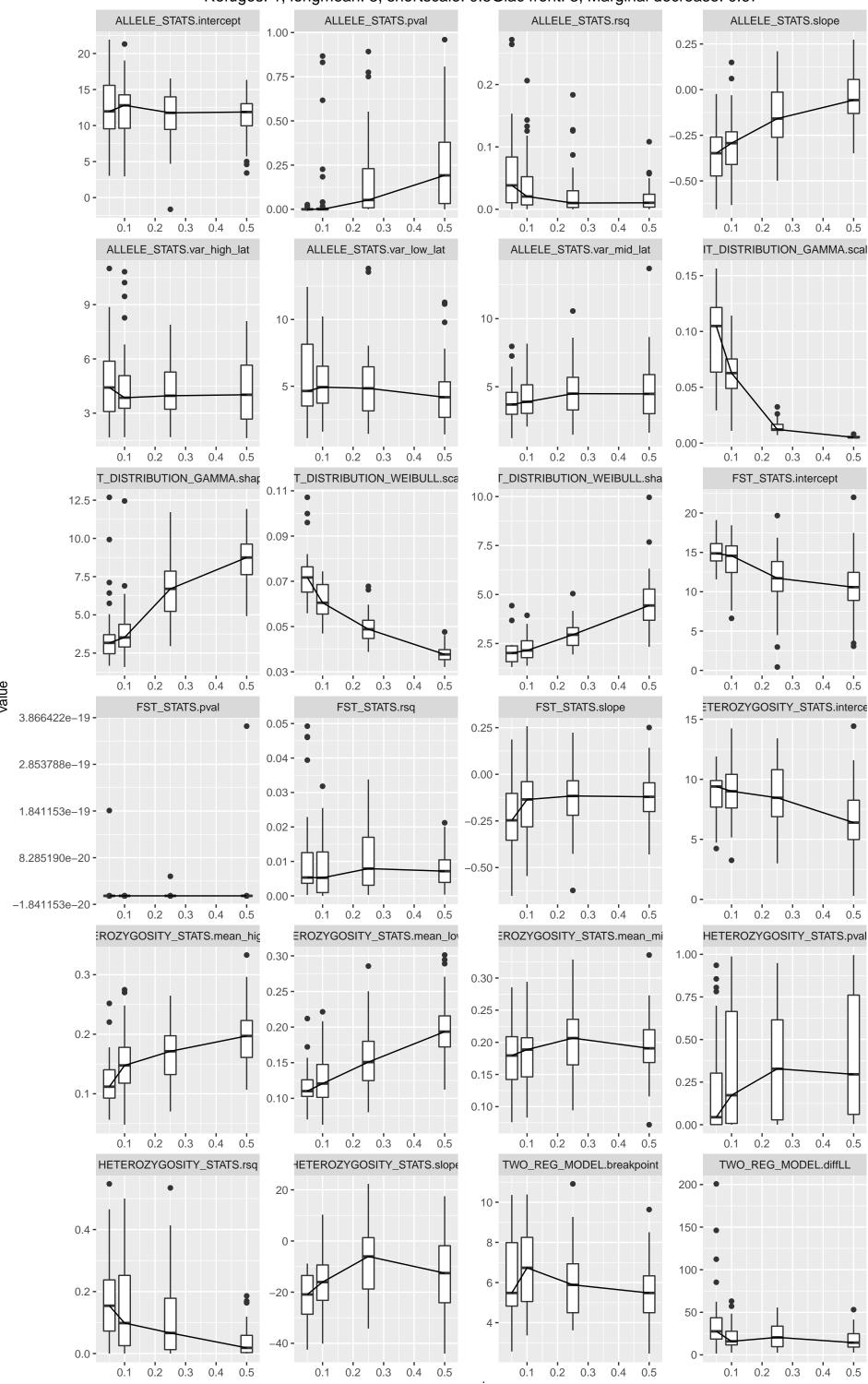
Refuges: 1, longmean: 2, shortscale: 0.25Glac front: 3, Marginal decrease: 0.67



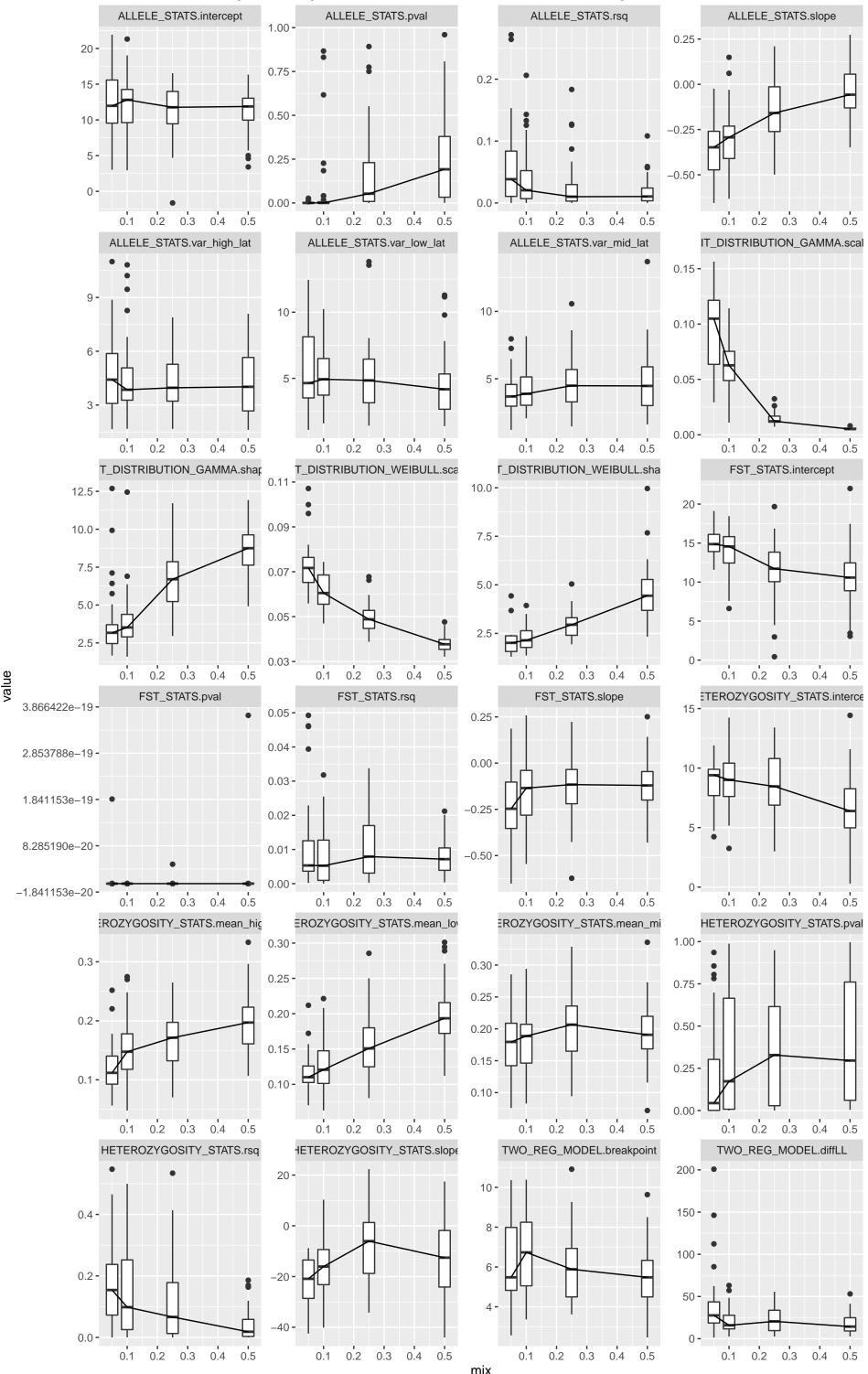
Refuges: 1, longmean: 3, shortscale: 1Glac front: 3, Marginal decrease: 0.67 ALLELE_STATS.pval ALLELE_STATS.intercept ALLELE_STATS.rsq ALLELE_STATS.slope 1.00 -0.25 -0.75 -0.2 -0.00 -0.50 --0.25 · 0.1 0.25 --0.50 0.00 -0.0 0.1 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.2 0.3 0.4 0.5 ALLELE_STATS.var_low_lat ALLELE_STATS.var_mid_lat IT_DISTRIBUTION_GAMMA.scal ${\sf ALLELE_STATS.var_high_lat}$ 0.15 -10-10 -0.10 0.05 0.00 -0.2 0.3 0.4 0.2 0.3 0.4 0.1 0.2 0.3 0.4 0.5 0.1 0.1 0.2 0.3 0.4 0.5 T_DISTRIBUTION_WEIBULL.sca Γ_DISTRIBUTION_WEIBULL.sha FST_STATS.intercept 0.11 10.0 -20 -0.09 -7.5 -15 -0.07 10 -5.0 0.05 -0.03 -0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.1 0.2 0.3 0.4 ETEROZYGOSITY_STATS.interce FST_STATS.pval FST_STATS.slope FST_STATS.rsq 0.05 -0.25 -0.04 -0.00 -10-0.03 --0.250.02 -0.01 --0.500.00 -0.1 0.2 0.3 0.4 0.2 0.3 0.4 0.5 0.2 0.3 0.4 0.5 0.1 0.1 0.2 0.3 0.4 EROZYGOSITY_STATS.mean_mi HETEROZYGOSITY_STATS.pval EROZYGOSITY_STATS.mean_lov 1.00 -0.30 -0.30 -0.25 -0.75 -0.25 -0.20 -0.50 -0.20 -0.15 -0.15 -0.25 -0.10 -0.1 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5



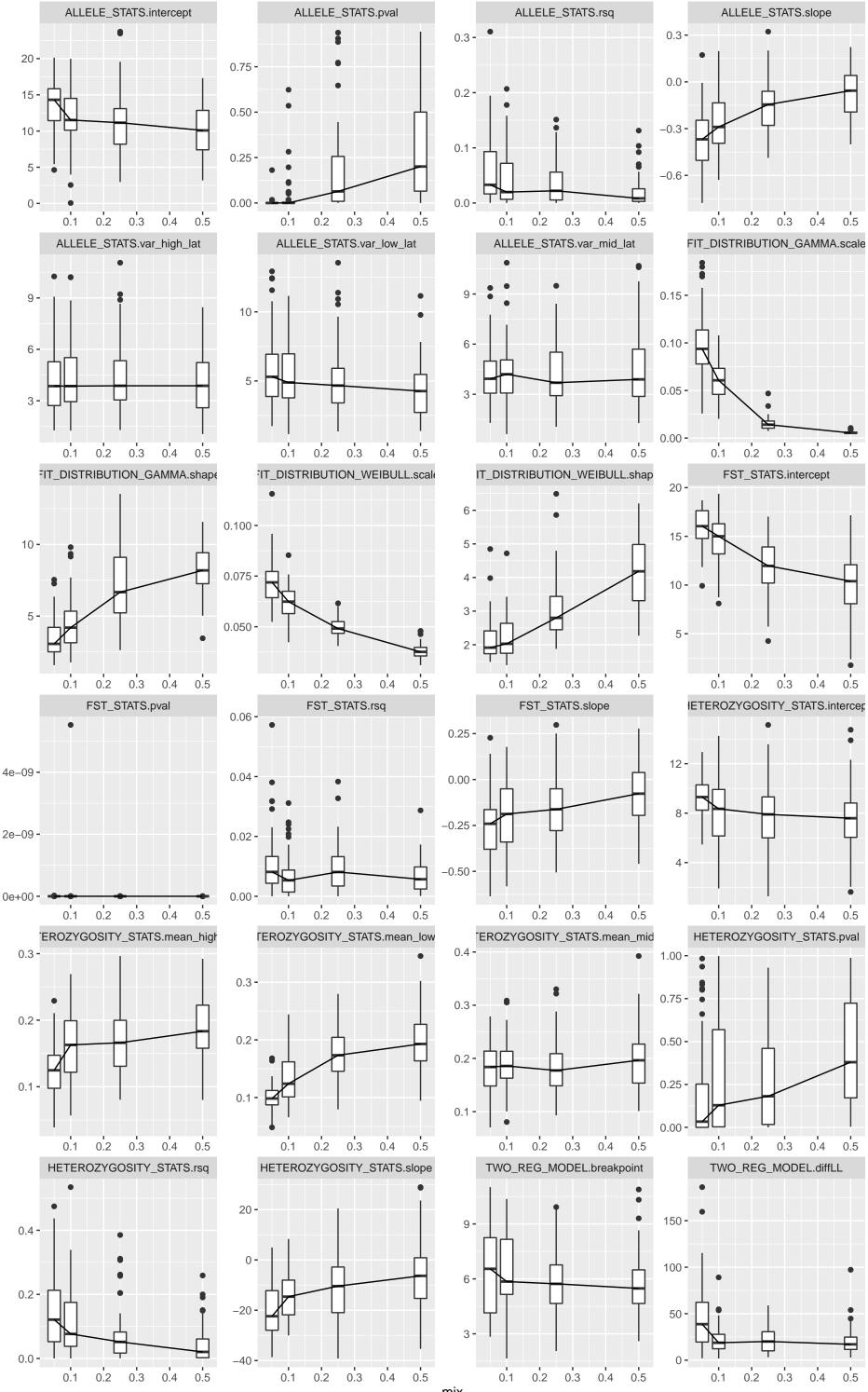
Refuges: 1, longmean: 3, shortscale: 0.5Glac front: 3, Marginal decrease: 0.67



Refuges: 1, longmean: 3, shortscale: 0.25Glac front: 3, Marginal decrease: 0.67



Refuges: 3, longmean: 2, shortscale: 1Glac front: 3, Marginal decrease: 0.67 ALLELE_STATS.pval ALLELE_STATS.rsq 0.3 -0.3 -



Refuges: 3, longmean: 2, shortscale: 0.5Glac front: 3, Marginal decrease: 0.67 ALLELE_STATS.intercept ALLELE_STATS.pval ALLELE_STATS.rsq ALLELE_STATS.slope 0.3 -0.3 -0.75 -0.0 0.2 0.50 --0.30.1 -0.25 -0.60.0 -0.1 0.2 0.3 0.4 0.2 0.3 0.4 0.2 0.3 0.1 0.1 0.2 0.3 0.4 ALLELE_STATS.var_low_lat ALLELE_STATS.var_mid_lat FIT_DISTRIBUTION_GAMMA.scale ALLELE_STATS.var_high_lat 0.15 10 -0.10 0.05 0.00 -0.3 0.2 0.3 0.4 0.5 0.2 0.3 0.4 0.5 0.2 0.4 0.2 0.3 0.4 0.1 0.5 0.1 FIT_DISTRIBUTION_GAMMA.shape IT_DISTRIBUTION_WEIBULL.scale IT_DISTRIBUTION_WEIBULL.shap FST_STATS.intercept 20 -0.100 -0.075 -10 0.050 -0.2 0.3 0.4 0.2 0.3 0.4 0.2 0.3 0.4 0.1 0.2 0.3 0.4 FST_STATS.pval FST_STATS.rsq FST_STATS.slope IETEROZYGOSITY_STATS.intercep 0.06 -0.25 -12 0.04 -0.00 -0.25 · 0.02 --0.50 0.00 -0.2 0.2 0.3 0.4 0.1 0.2 0.3 0.4 0.5 0.3 0.2 0.3 0.1 0.1 0.4 EROZYGOSITY_STATS.mean_high FEROZYGOSITY_STATS.mean_low HETEROZYGOSITY_STATS.pval FEROZYGOSITY_STATS.mean_mid 0.4 -1.00 -0.3 -0.75 -0.3 0.2 -0.50 0.25 0.1 0.2 0.3 0.4 0.5 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 TWO_REG_MODEL.diffLL TWO_REG_MODEL.breakpoint HETEROZYGOSITY_STATS.rsq HETEROZYGOSITY_STATS.slope 20 -150 -100 -

0.2 0.3

0.2

0.3

0.4 0.5

20 -

15 -

10 -

6 -

10 -

4e-09 -

2e-09 -

0.3 -

0.2 -

0.4 -

0.2 -

0.2 0.3

0.4

0.5

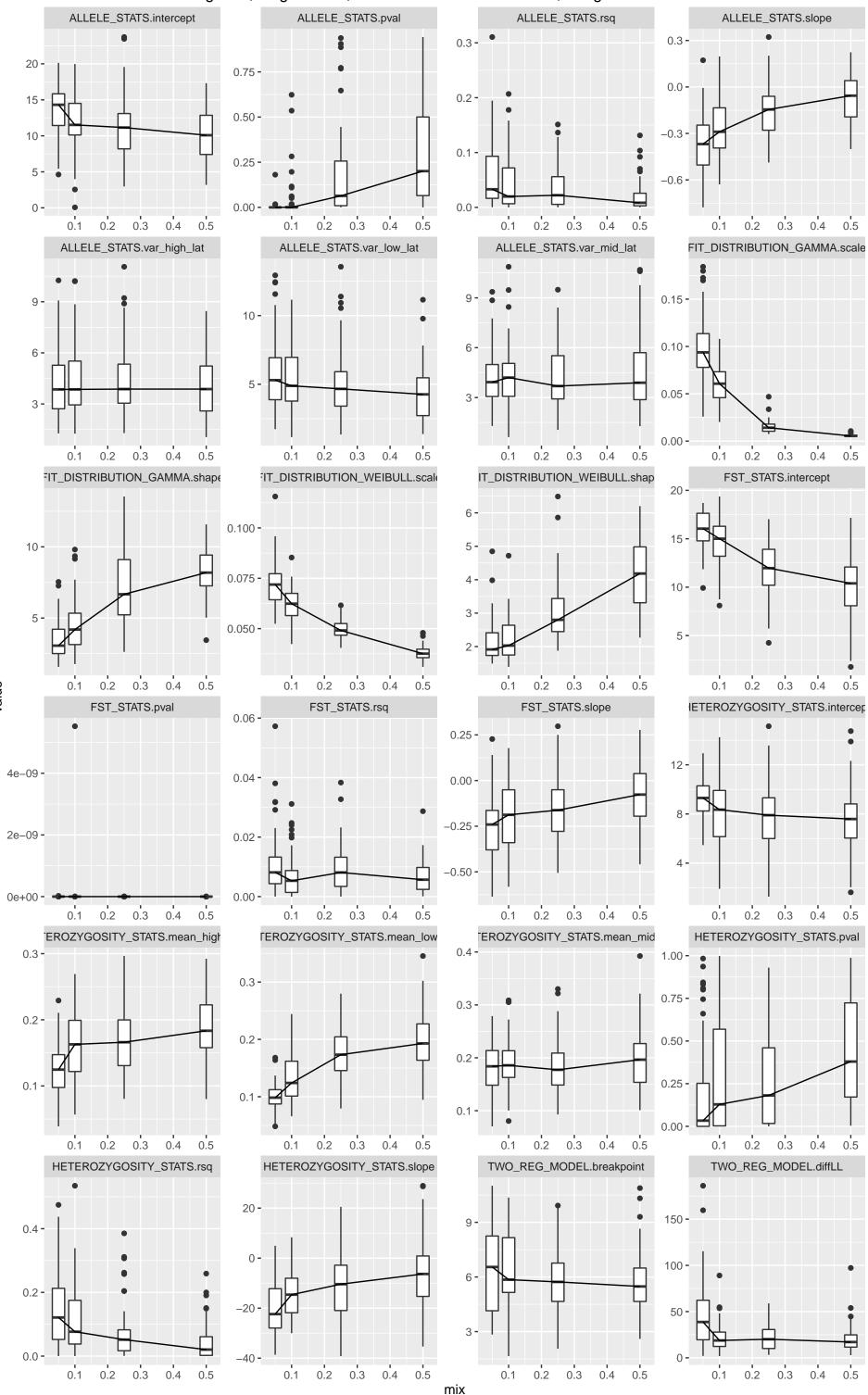
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0.1

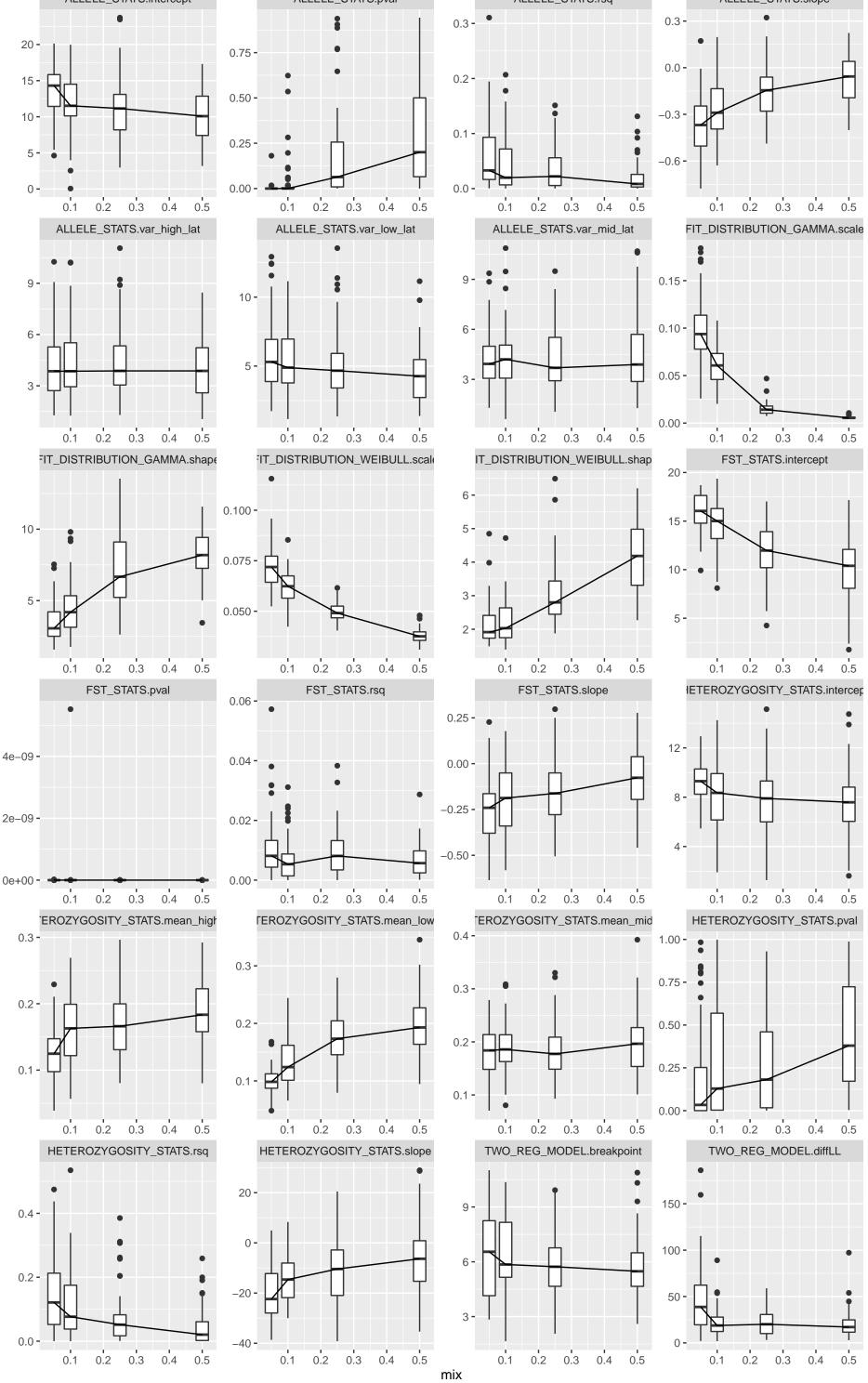
0.2

0.3 0.4

Refuges: 3, longmean: 2, shortscale: 0.25Glac front: 3, Marginal decrease: 0.67



Refuges: 3, longmean: 3, shortscale: 1Glac front: 3, Marginal decrease: 0.67 ALLELE_STATS.pval ALLELE_STATS.intercept ALLELE_STATS.rsq ALLELE_STATS.slope 0.3 -0.3 -0.75 -0.0 0.2 0.50 --0.30.1 -0.25 -0.60.0 -0.2 0.3 0.4 0.2 0.3 0.4 0.3 0.1 0.1 0.2 0.3 ALLELE_STATS.var_low_lat ALLELE_STATS.var_mid_lat FIT_DISTRIBUTION_GAMMA.scale 0.15 10 -0.10 0.05 0.00 -0.3 0.3 0.4 0.2 0.3 0.4 0.5 0.2 0.4 0.2 0.3 0.4 0.1 0.5 0.1 IT_DISTRIBUTION_WEIBULL.scale IT_DISTRIBUTION_WEIBULL.shap FST_STATS.intercept 20 -0.100 -0.075 -10 0.050 -0.2 0.3 0.4 0.2 0.3 0.4 0.1 0.2 0.3 0.4 FST_STATS.rsq FST_STATS.slope IETEROZYGOSITY_STATS.intercep 0.25 -12 -0.04 -0.00 -0.25 · 0.02 --0.50 0.00 -0.2 0.2 0.3 0.4 0.1 0.2 0.3 0.4 0.5 0.3 0.1 0.1 0.4 FEROZYGOSITY_STATS.mean_low HETEROZYGOSITY_STATS.pval FEROZYGOSITY_STATS.mean_mid 0.4 -1.00 -0.3 -0.75 -0.3 0.2 -0.50 0.25 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 TWO_REG_MODEL.diffLL TWO_REG_MODEL.breakpoint HETEROZYGOSITY_STATS.slope



Refuges: 3, longmean: 3, shortscale: 0.5Glac front: 3, Marginal decrease: 0.67 ALLELE_STATS.intercept ALLELE_STATS.pval ALLELE_STATS.rsq ALLELE_STATS.slope 0.3 -0.3 -0.75 -0.0 0.2 0.50 --0.30.1 -0.25 -0.60.0 -0.2 0.3 0.4 0.2 0.2 0.3 0.1 0.3 0.4 0.1 0.1 0.2 0.3 0.4 ALLELE_STATS.var_low_lat ALLELE_STATS.var_mid_lat FIT_DISTRIBUTION_GAMMA.scale ALLELE_STATS.var_high_lat 0.15 10 -0.10 0.05 0.00 -0.3 0.2 0.3 0.4 0.5 0.2 0.3 0.4 0.5 0.2 0.4 0.2 0.3 0.4 0.1 0.5 0.1 FIT_DISTRIBUTION_GAMMA.shape IT_DISTRIBUTION_WEIBULL.scale IT_DISTRIBUTION_WEIBULL.shap FST_STATS.intercept 20 -0.100 -0.075 -10 0.050 -0.2 0.3 0.4 0.2 0.3 0.4 0.2 0.3 0.4 0.1 0.2 0.3 0.4 FST_STATS.pval FST_STATS.rsq FST_STATS.slope IETEROZYGOSITY_STATS.intercep 0.06 -0.25 -12 0.04 -0.00 -0.25 · 0.02 --0.50 0.00 -0.2 0.2 0.3 0.4 0.1 0.2 0.3 0.4 0.5 0.3 0.2 0.3 0.1 0.1 0.4 EROZYGOSITY_STATS.mean_high FEROZYGOSITY_STATS.mean_low HETEROZYGOSITY_STATS.pval FEROZYGOSITY_STATS.mean_mid 0.4 -1.00 -0.3 -0.75 -0.3 0.2 -0.50 0.25 0.1 0.2 0.3 0.4 0.5 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 TWO_REG_MODEL.diffLL TWO_REG_MODEL.breakpoint HETEROZYGOSITY_STATS.rsq HETEROZYGOSITY_STATS.slope 20 -150 -100 -

0.2 0.3

0.2

0.3

0.4 0.5

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15 -

10 -

6 -

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4e-09 -

2e-09 -

0.3 -

0.2 -

0.4 -

0.2 -

0.2 0.3

0.4

0.5

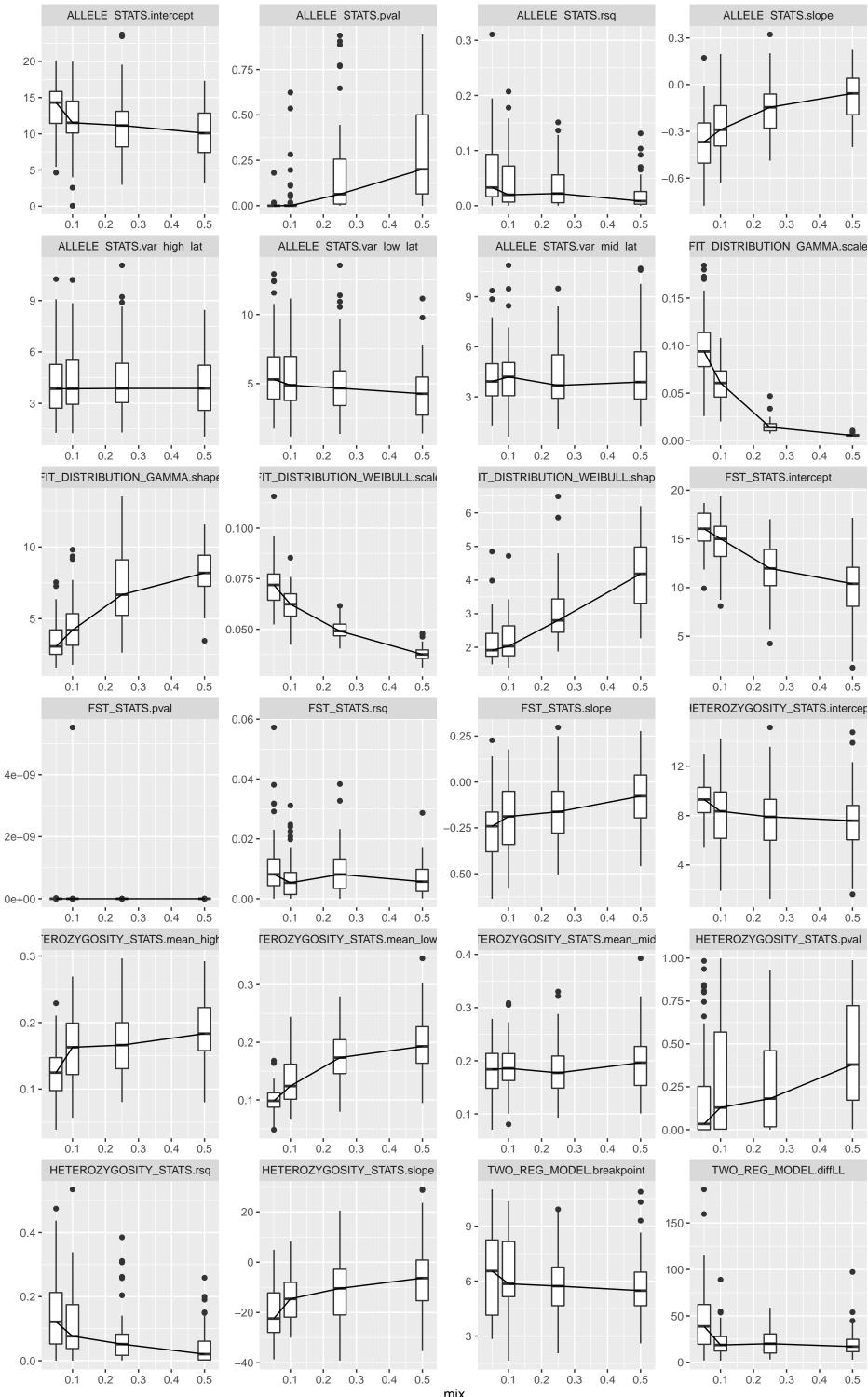
-20 **-**

0.1

0.2

0.3 0.4

Refuges: 3, longmean: 3, shortscale: 0.25Glac front: 3, Marginal decrease: 0.67



0.2 0.3 0.4

0.1 0.2 0.3

0.4

20 -

15

10 -

10-

16 -

12 -

5e-06 **-**

4e-06 -

3e-06 -

2e-06 -

1e-06 -

0e+00 -

0.3 -

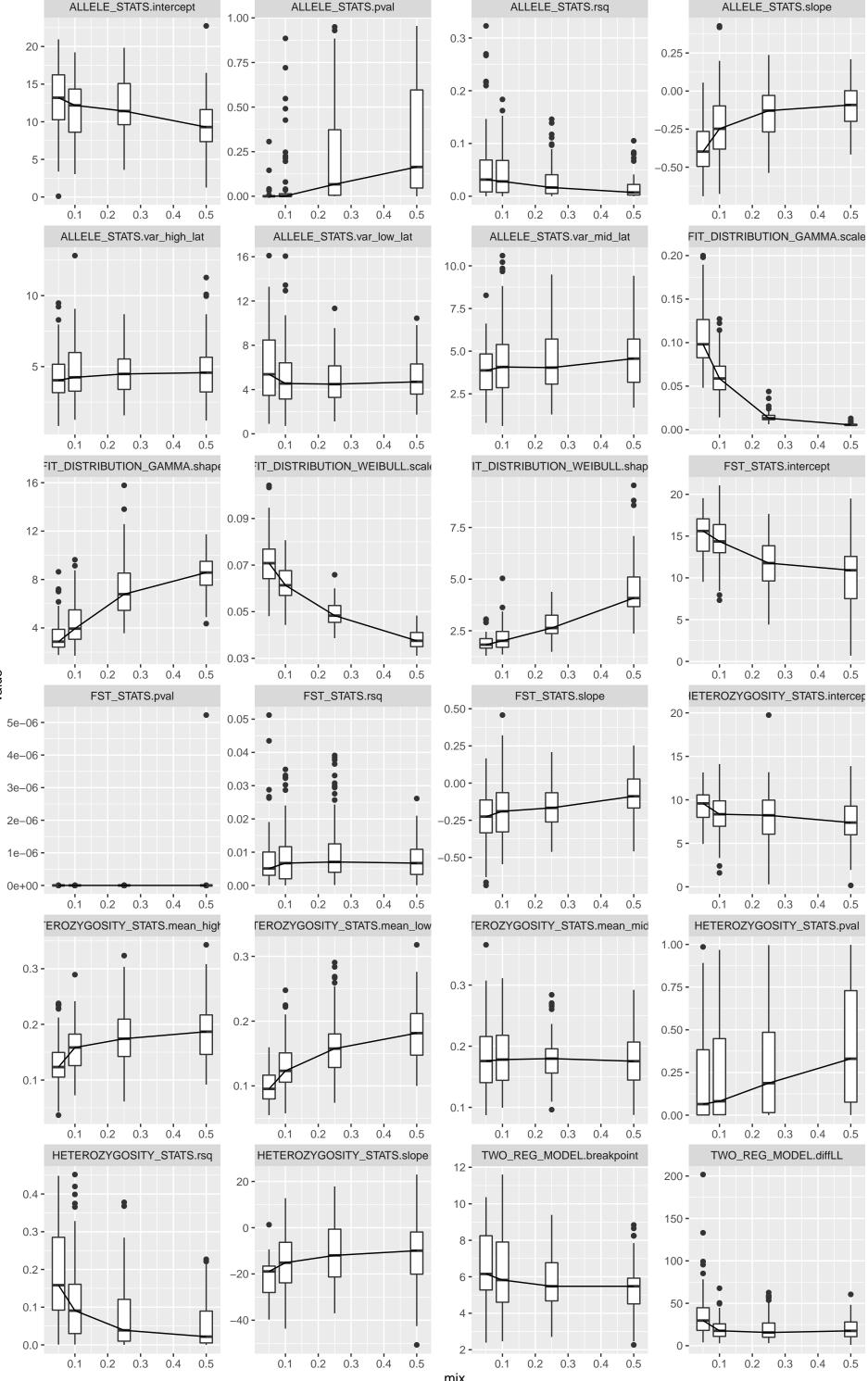
0.2 -

0.4 -

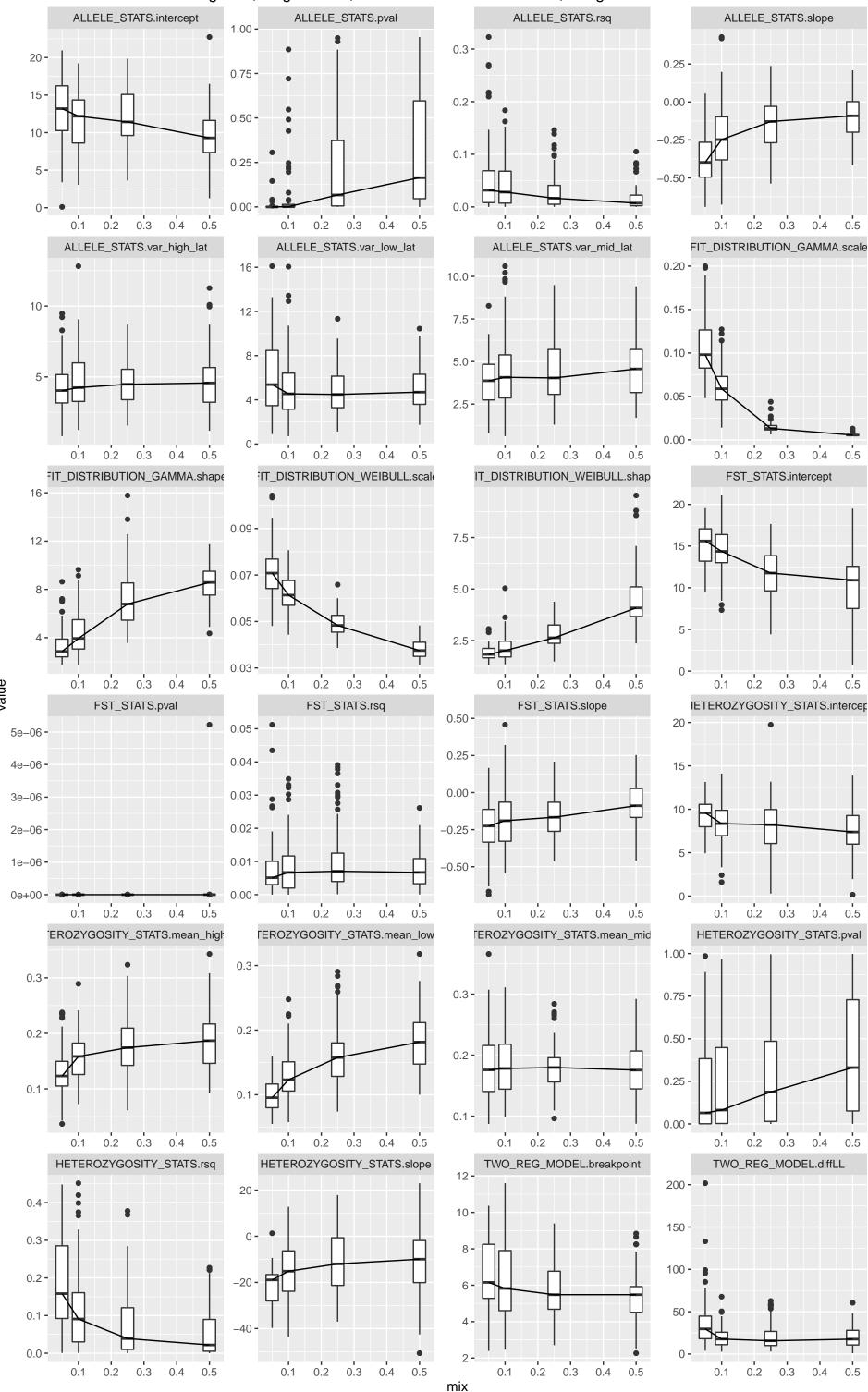
0.3 -

0.1 0.2 0.3 0.4 0.5

Refuges: 4, longmean: 2, shortscale: 0.5Glac front: 3, Marginal decrease: 0.67 ALLELE_STATS.pval ALLELE_STATS.rsq 1.00 -0.3 0.25



Refuges: 4, longmean: 2, shortscale: 0.25Glac front: 3, Marginal decrease: 0.67



0.2 0.3 0.4

0.1 0.2 0.3

0.4

20 -

15

10 -

10-

16 -

12 -

5e-06 **-**

4e-06 -

3e-06 -

2e-06 -

1e-06 -

0e+00 -

0.3 -

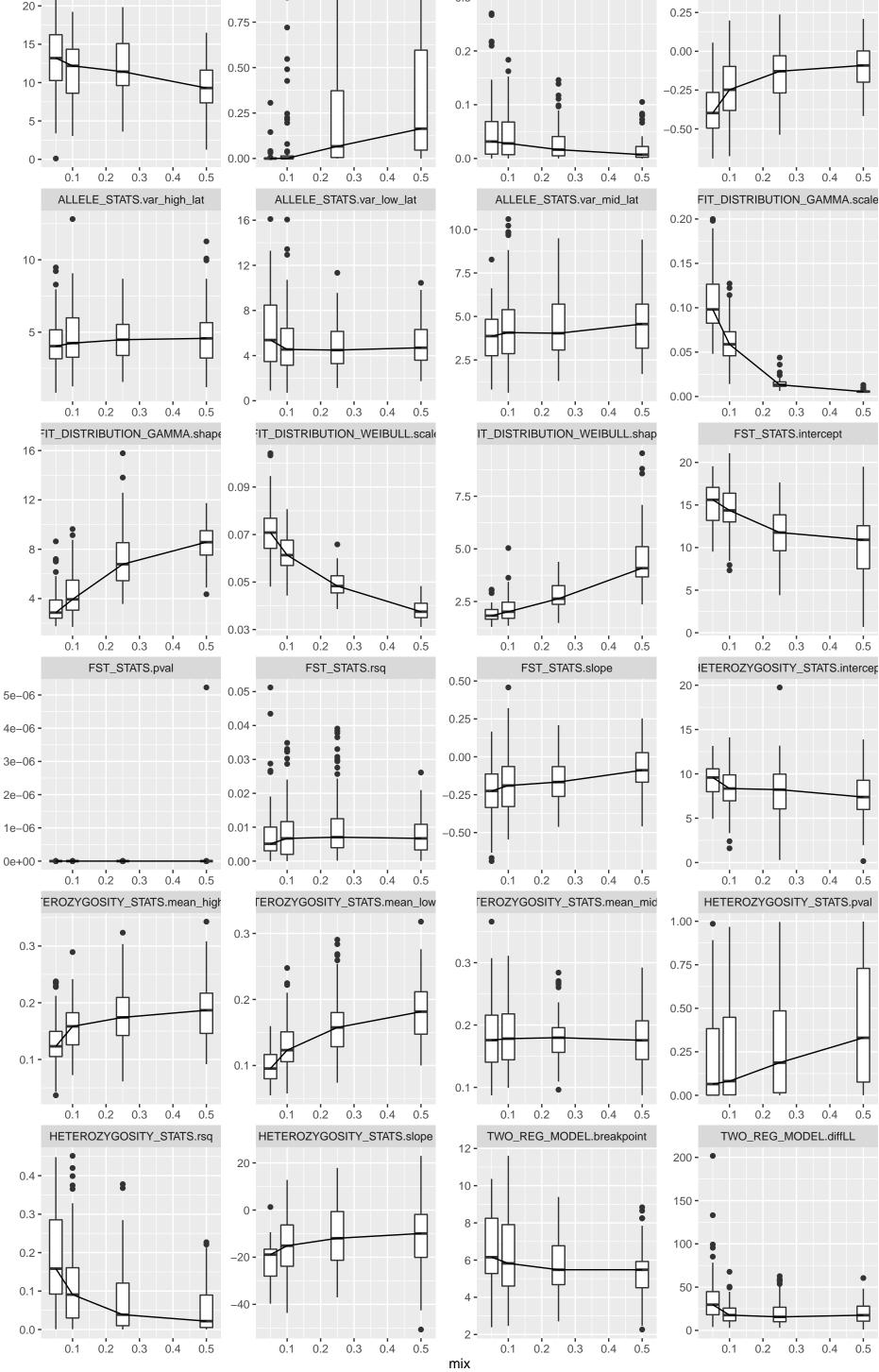
0.2 -

0.4 -

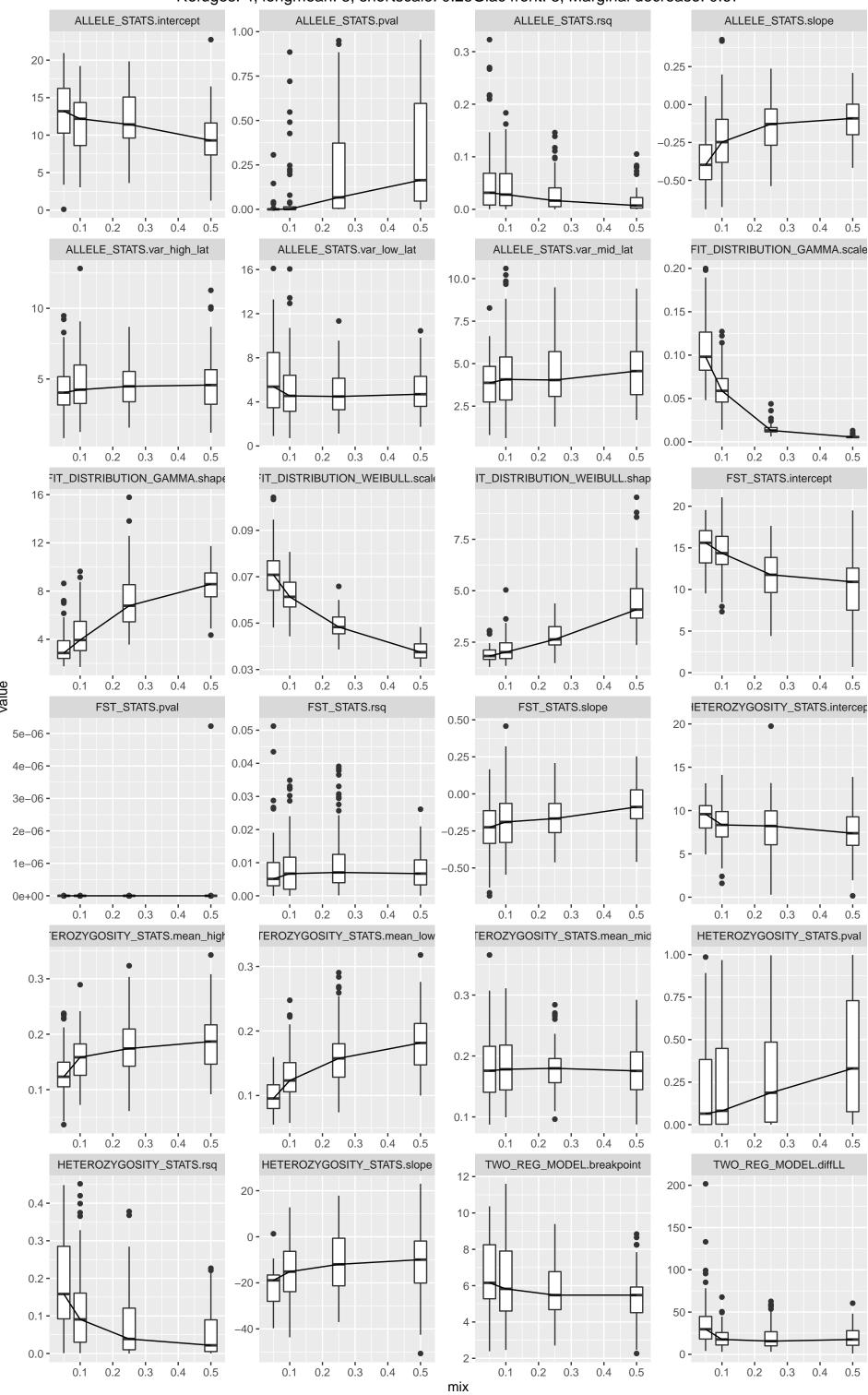
0.3 -

0.1 0.2 0.3 0.4 0.5

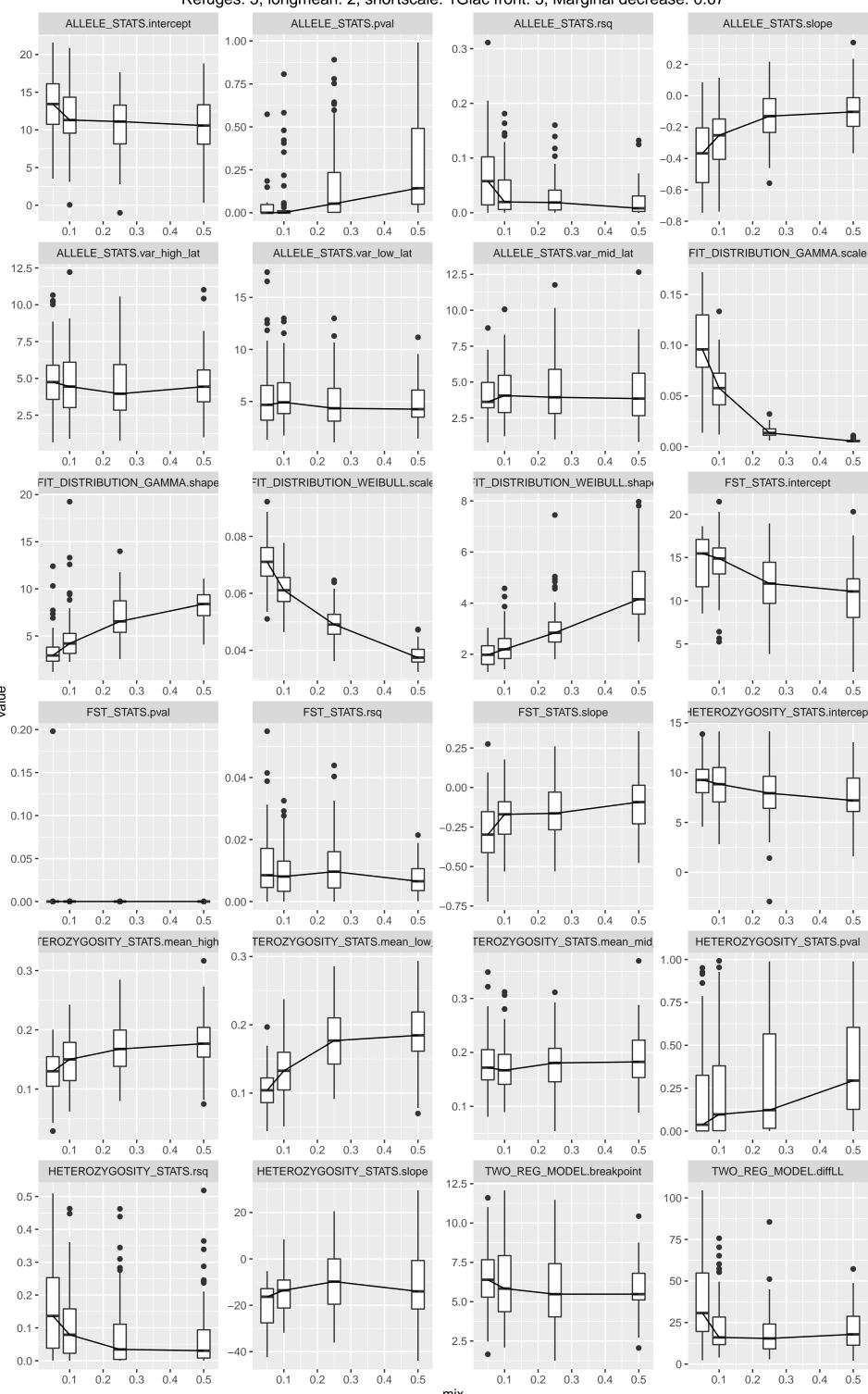
Refuges: 4, longmean: 3, shortscale: 0.5Glac front: 3, Marginal decrease: 0.67 ALLELE_STATS.intercept ALLELE_STATS.pval ALLELE_STATS.rsq ALLELE_STATS.slope 1.00 -0.3 0.25 0.75 -0.2 0.00 0.50 --0.25 0.25 --0.50 0.0 -0.5 0.1 0.2 0.4 0.2 0.4 0.5 0.3 0.3 0.3 0.2 0.3 ALLELE_STATS.var_mid_lat ALLELE_STATS.var_low_lat FIT_DISTRIBUTION_GAMMA.scale 0.20 -16 -10.0 -0.15 12 -7.5 0.10 8 -5.0 -0.05 2.5 -0.00 0.2 0.3 0.4 0.1 0.2 0.3 0.4 0.5 0.2 0.3 0.4 0.3 0.4 IT_DISTRIBUTION_WEIBULL.scale IT_DISTRIBUTION_WEIBULL.shap FST_STATS.intercept 20 -0.09 -7.5 **-**0.07 -5.0 0.05 0.03 -0.3 0.4 0.5 0.3 0.2 0.3 0.2 0.3 0.4 FST_STATS.rsq FST_STATS.slope IETEROZYGOSITY_STATS.intercep 0.50 20 -0.05 -0.25 -0.04 -15 0.00 -0.03 -10 0.02 -–0.25 **-**0.01 --0.50 **-**0.00 -0.2 0.3 0.1 0.4 0.2 0.3 0.3 0.2 0.3 0.4 0.4 HETEROZYGOSITY_STATS.pval FEROZYGOSITY_STATS.mean_low FEROZYGOSITY_STATS.mean_mid 1.00 -0.3 -0.3 -0.75 0.2 -0.50 0.2 -0.1 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 TWO_REG_MODEL.breakpoint HETEROZYGOSITY_STATS.slope TWO_REG_MODEL.diffLL 200 -

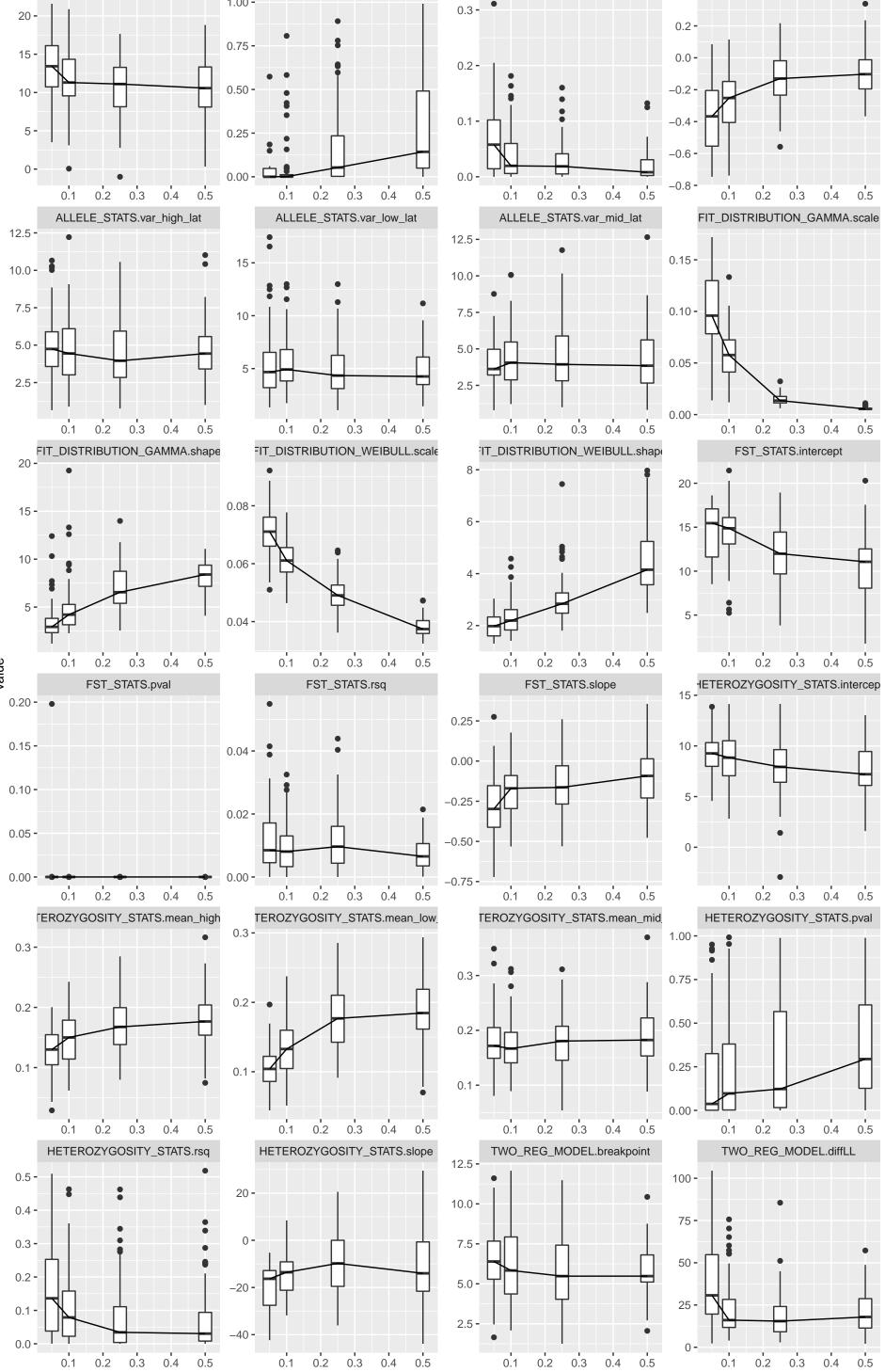


Refuges: 4, longmean: 3, shortscale: 0.25Glac front: 3, Marginal decrease: 0.67

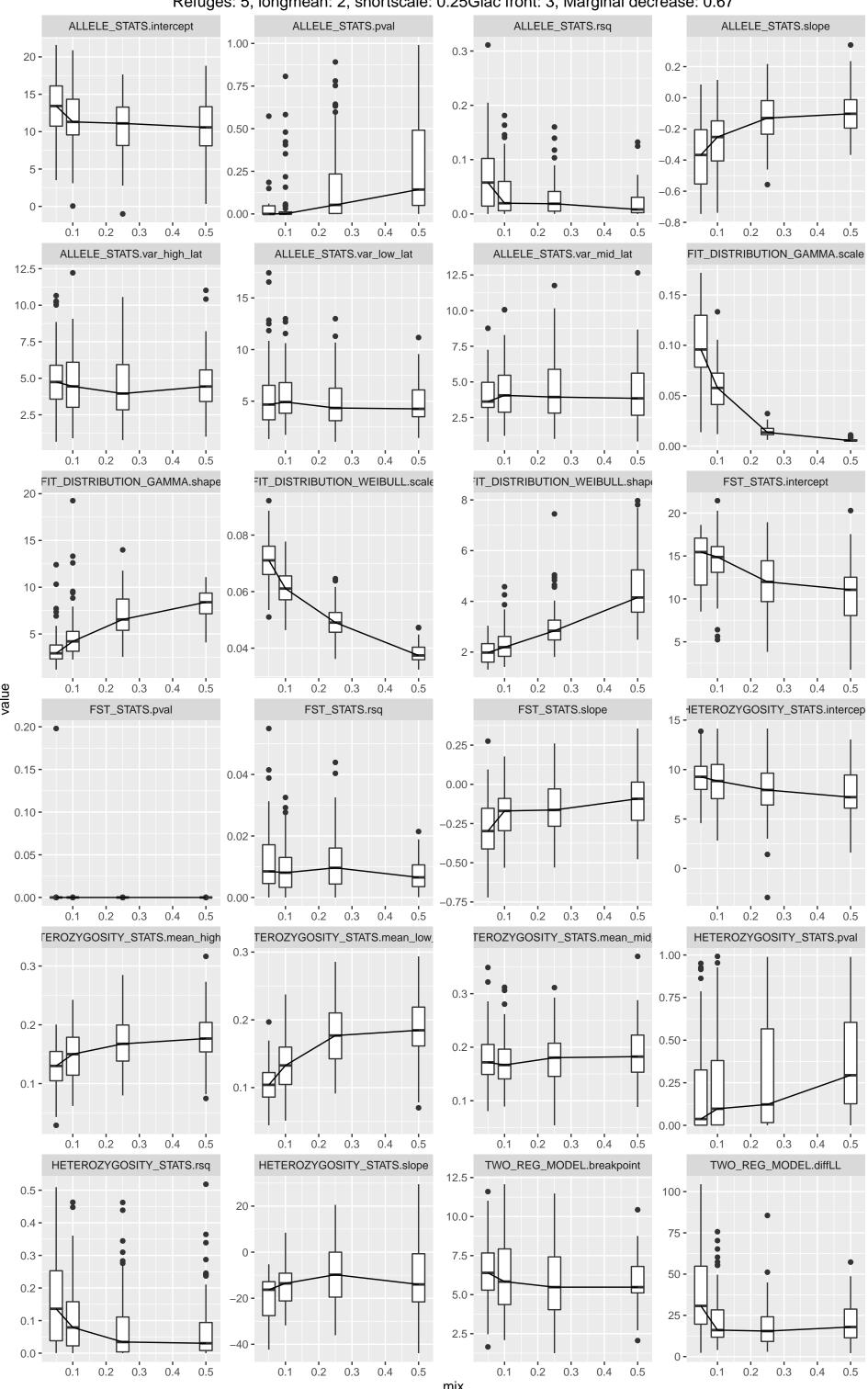


Refuges: 5, longmean: 2, shortscale: 1Glac front: 3, Marginal decrease: 0.67

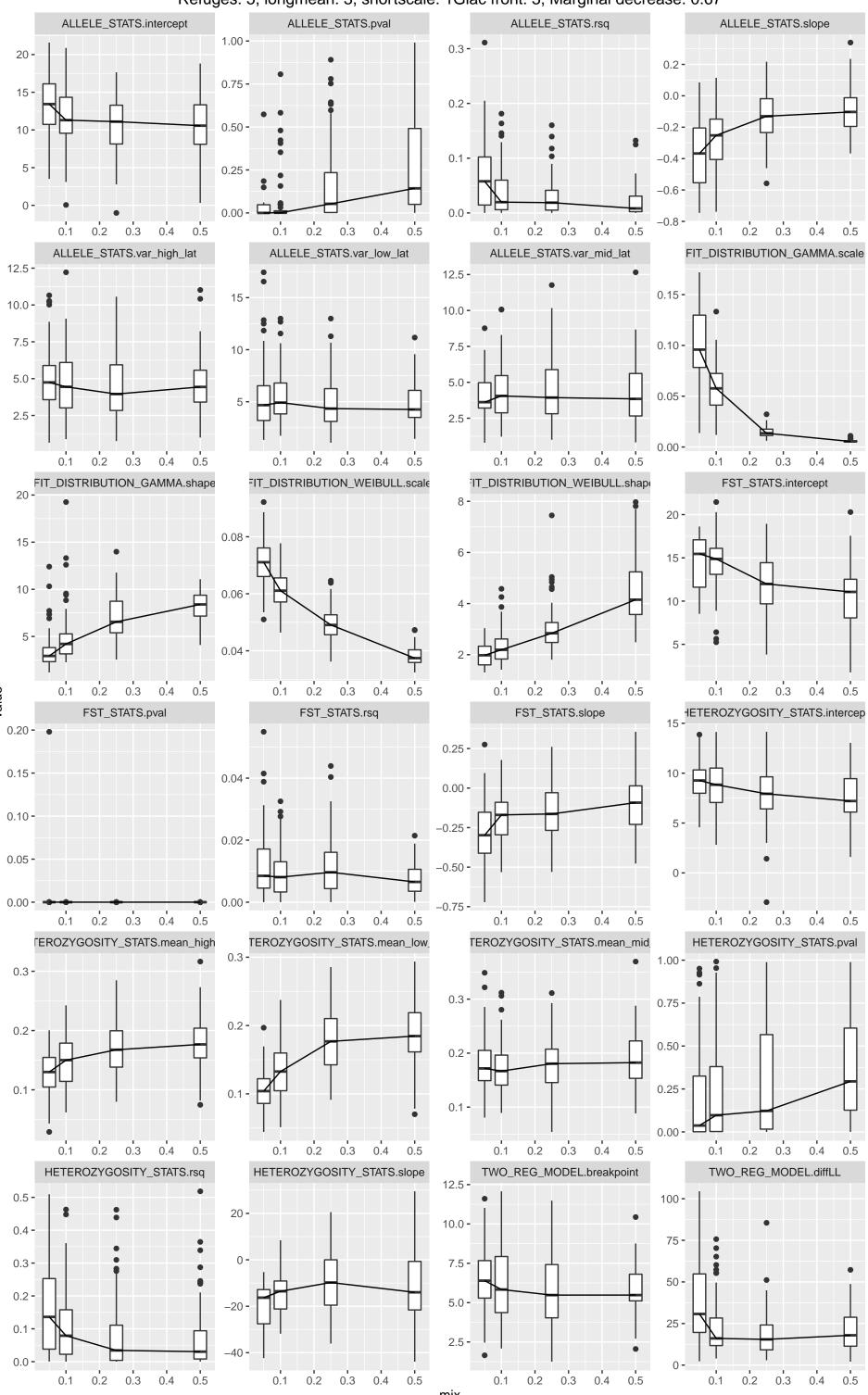


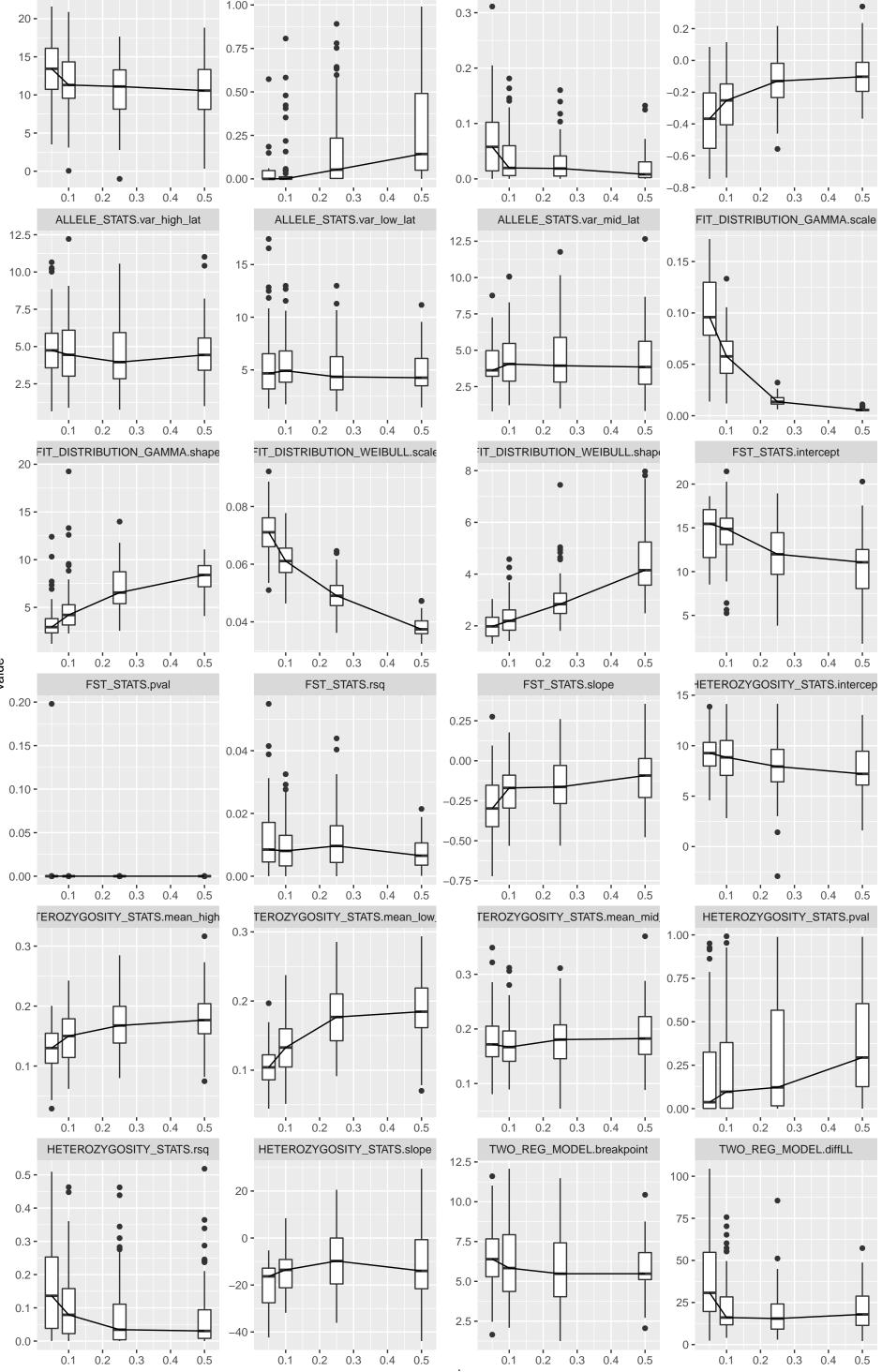


Refuges: 5, longmean: 2, shortscale: 0.25Glac front: 3, Marginal decrease: 0.67

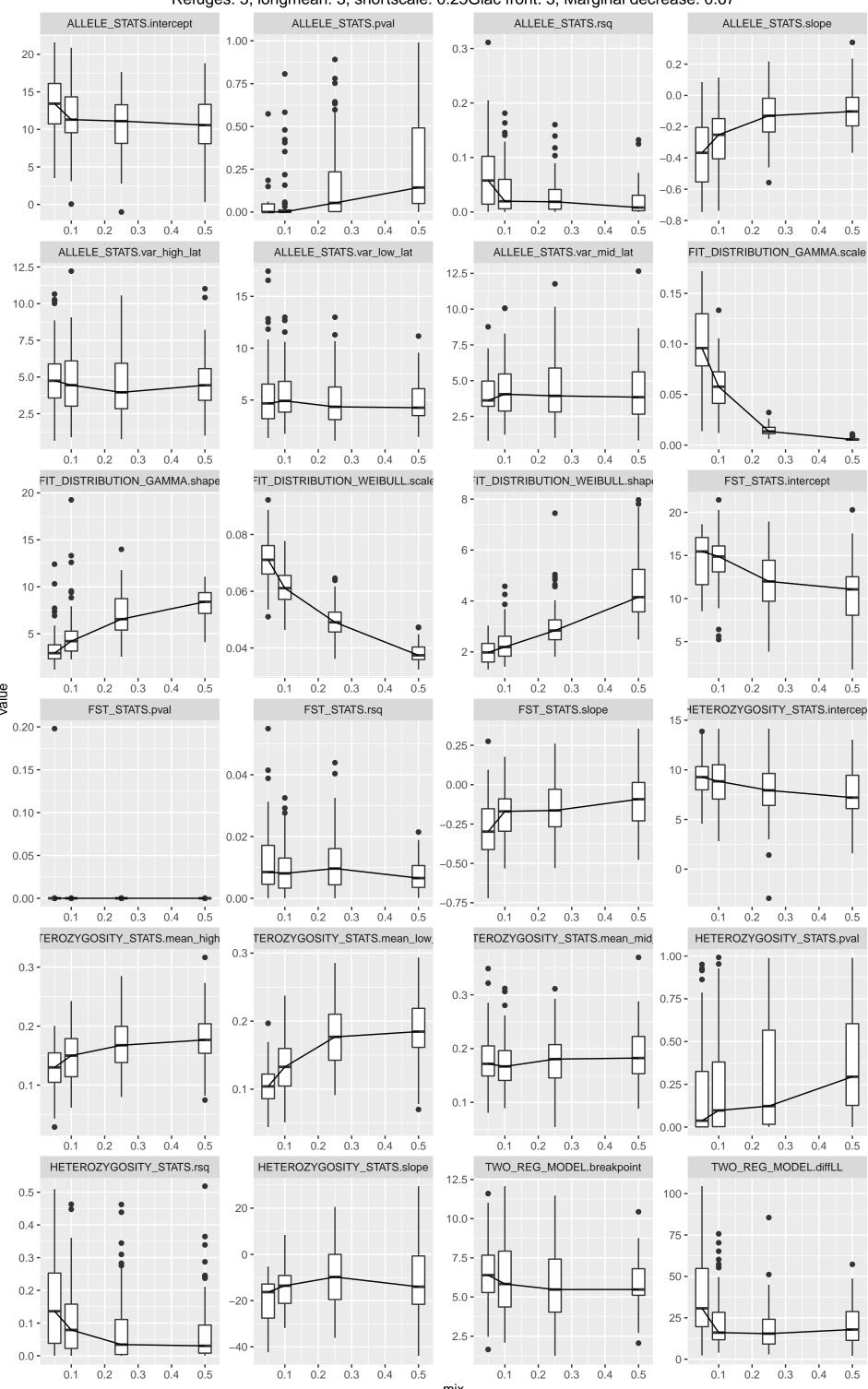


Refuges: 5, longmean: 3, shortscale: 1Glac front: 3, Marginal decrease: 0.67





Refuges: 5, longmean: 3, shortscale: 0.25Glac front: 3, Marginal decrease: 0.67 ALLELE_STATS.pval ALLELE_STATS.rsq 1.00 -



Refuges: 1, longmean: 2, shortscale: 1Glac front: 3, Marginal decrease: 1 ALLELE_STATS.intercept ALLELE_STATS.pval ALLELE_STATS.rsq ALLELE_STATS.slope 1.00 -0.25 -20 -0.75 -0.2 -0.00 -15 -0.50 -10--0.25 **-**0.1 0.25 --0.50 0.00 -0.0 0.1 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.1 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 ALLELE_STATS.var_mid_lat IT_DISTRIBUTION_GAMMA.scal ALLELE_STATS.var_low_lat ${\sf ALLELE_STATS.var_high_lat}$ 0.15 -10-10 -0.10 0.05 0.00 -0.2 0.3 0.4 0.1 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 T_DISTRIBUTION_GAMMA.shap T_DISTRIBUTION_WEIBULL.sca Γ_DISTRIBUTION_WEIBULL.sha FST_STATS.intercept 0.11 10.0 -12.5 -20 -0.09 -10.0 -7.5 -15 -7.5 -0.07 10 -5.0 0.05 -0.03 -0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.1 0.2 0.3 0.4 ETEROZYGOSITY_STATS.interce FST_STATS.pval FST_STATS.slope FST_STATS.rsq 3.866422e-19 0.05 -0.25 -0.04 -2.853788e-19 -0.00 -10-0.03 -1.841153e-19 --0.250.02 -8.285190e-20 -0.01 --0.500.00 --1.841153e-20 -0.1 0.2 0.3 0.4 0.5 0.2 0.3 0.4 0.5 0.2 0.3 0.4 0.1 0.1 0.2 0.3 0.4 EROZYGOSITY_STATS.mean_mi HETEROZYGOSITY_STATS.pval ROZYGOSITY_STATS.mean_hig EROZYGOSITY_STATS.mean_lov 1.00 -0.30 -0.3 -0.30 -0.25 -0.75 -0.25 -0.20 -0.2 -0.50 -0.20 -0.15 -0.15 -0.25 -0.10 -0.1 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 TWO_REG_MODEL.diffLL HETEROZYGOSITY_STATS.rsq HETEROZYGOSITY_STATS.slope TWO_REG_MODEL.breakpoint 200 -20 -10 -150 -0.4 -8 -100 -0.2 -–20 **-**

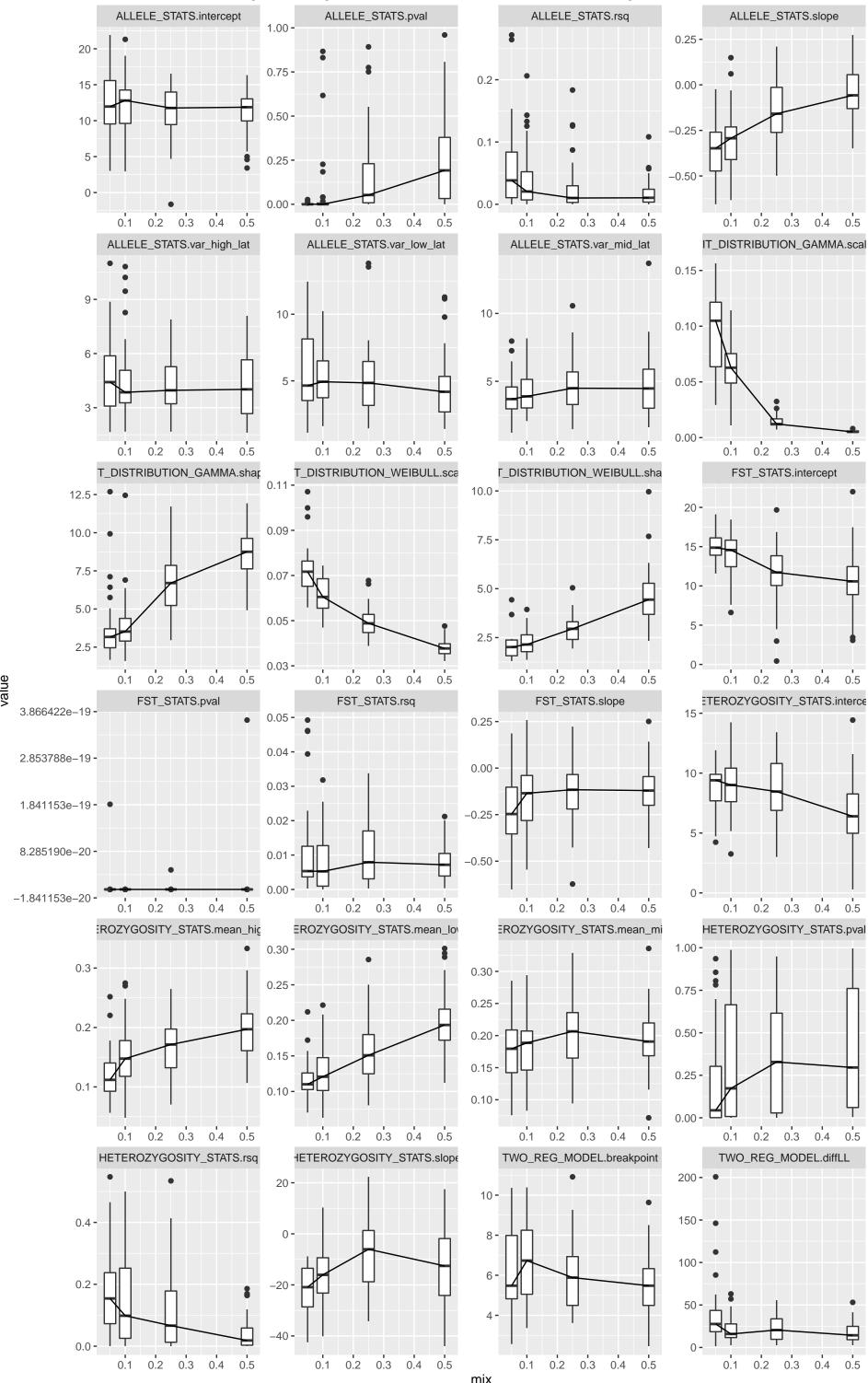
0.1 0.2 0.3 0.4 0.5

0.1 0.2 0.3 0.4 0.5

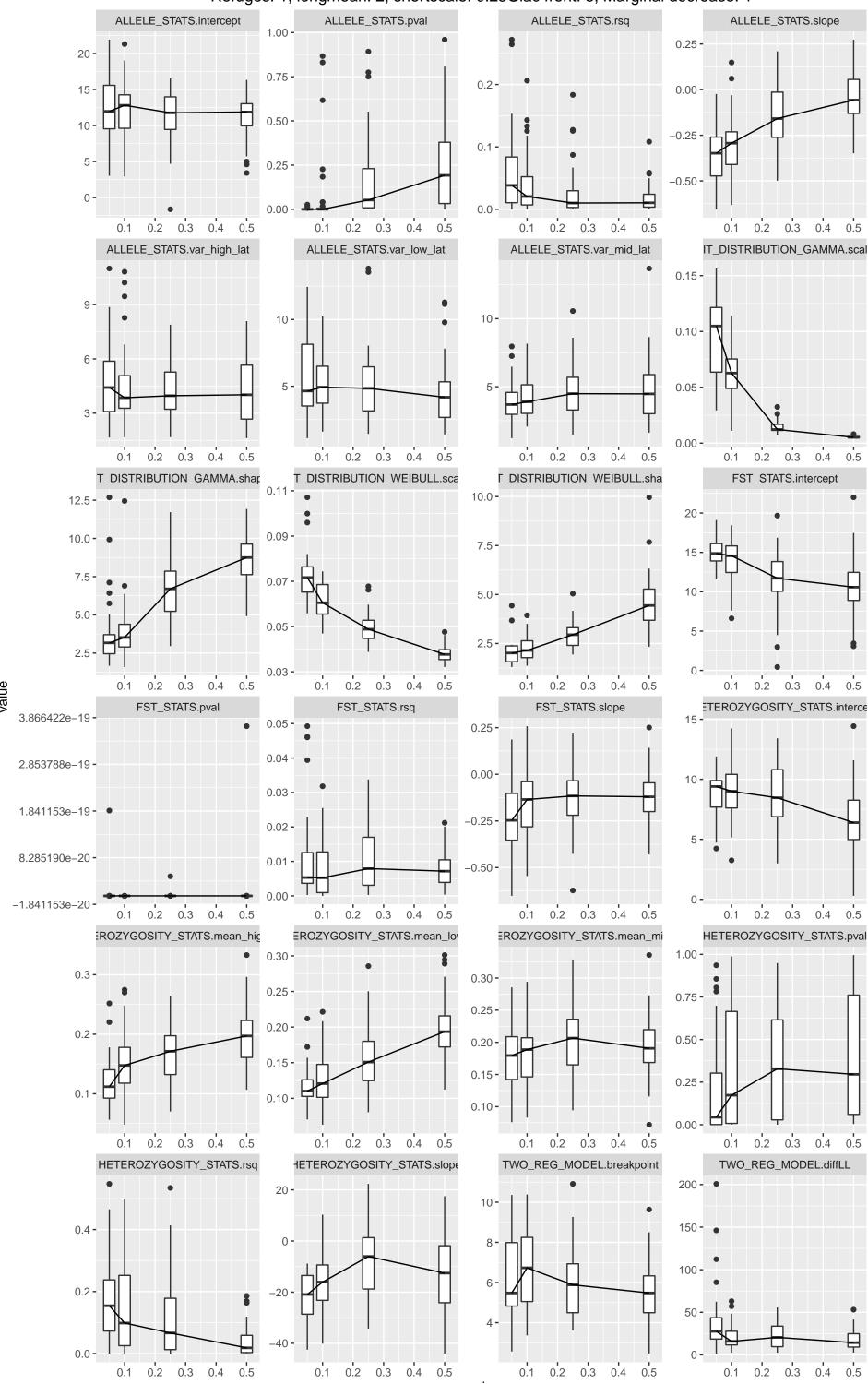
0.1 0.2 0.3 0.4 0.5

0.1 0.2 0.3 0.4

Refuges: 1, longmean: 2, shortscale: 0.5Glac front: 3, Marginal decrease: 1



Refuges: 1, longmean: 2, shortscale: 0.25Glac front: 3, Marginal decrease: 1



Refuges: 1, longmean: 3, shortscale: 1Glac front: 3, Marginal decrease: 1 ALLELE_STATS.intercept ALLELE_STATS.pval ALLELE_STATS.rsq ALLELE_STATS.slope 1.00 -0.25 -20 -0.75 -0.2 -0.00 -15 -0.50 -10--0.25 **-**0.1 0.25 --0.50 0.00 -0.0 0.1 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.1 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 ALLELE_STATS.var_mid_lat IT_DISTRIBUTION_GAMMA.scal ALLELE_STATS.var_low_lat ${\sf ALLELE_STATS.var_high_lat}$ 0.15 -10-10 -0.10 0.05 0.00 -0.2 0.3 0.4 0.1 0.2 0.3 0.4 0.1 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 T_DISTRIBUTION_GAMMA.shap T_DISTRIBUTION_WEIBULL.sca Γ_DISTRIBUTION_WEIBULL.sha FST_STATS.intercept 0.11 10.0 -12.5 -20 -0.09 -10.0 -7.5 -15 -7.5 -0.07 10 -5.0 0.05 -0.03 -0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.1 0.2 0.3 0.4 ETEROZYGOSITY_STATS.interce FST_STATS.pval FST_STATS.slope FST_STATS.rsq 3.866422e-19 0.05 -0.25 -0.04 -2.853788e-19 -0.00 -10-0.03 -1.841153e-19 --0.250.02 -8.285190e-20 -0.01 --0.500.00 --1.841153e-20 -0.1 0.2 0.3 0.4 0.5 0.2 0.3 0.4 0.5 0.2 0.3 0.4 0.1 0.1 0.2 0.3 0.4 EROZYGOSITY_STATS.mean_mi HETEROZYGOSITY_STATS.pval ROZYGOSITY_STATS.mean_hig EROZYGOSITY_STATS.mean_lov 1.00 -0.30 -0.3 -0.30 -0.25 -0.75 -0.25 -0.20 -0.2 -0.50 -0.20 -0.15 -0.15 -0.25 -0.10 -0.1 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 TWO_REG_MODEL.diffLL HETEROZYGOSITY_STATS.rsq HETEROZYGOSITY_STATS.slope TWO_REG_MODEL.breakpoint 200 -20 -10 -150 -0.4 -8 -100 -0.2 -–20 **-**

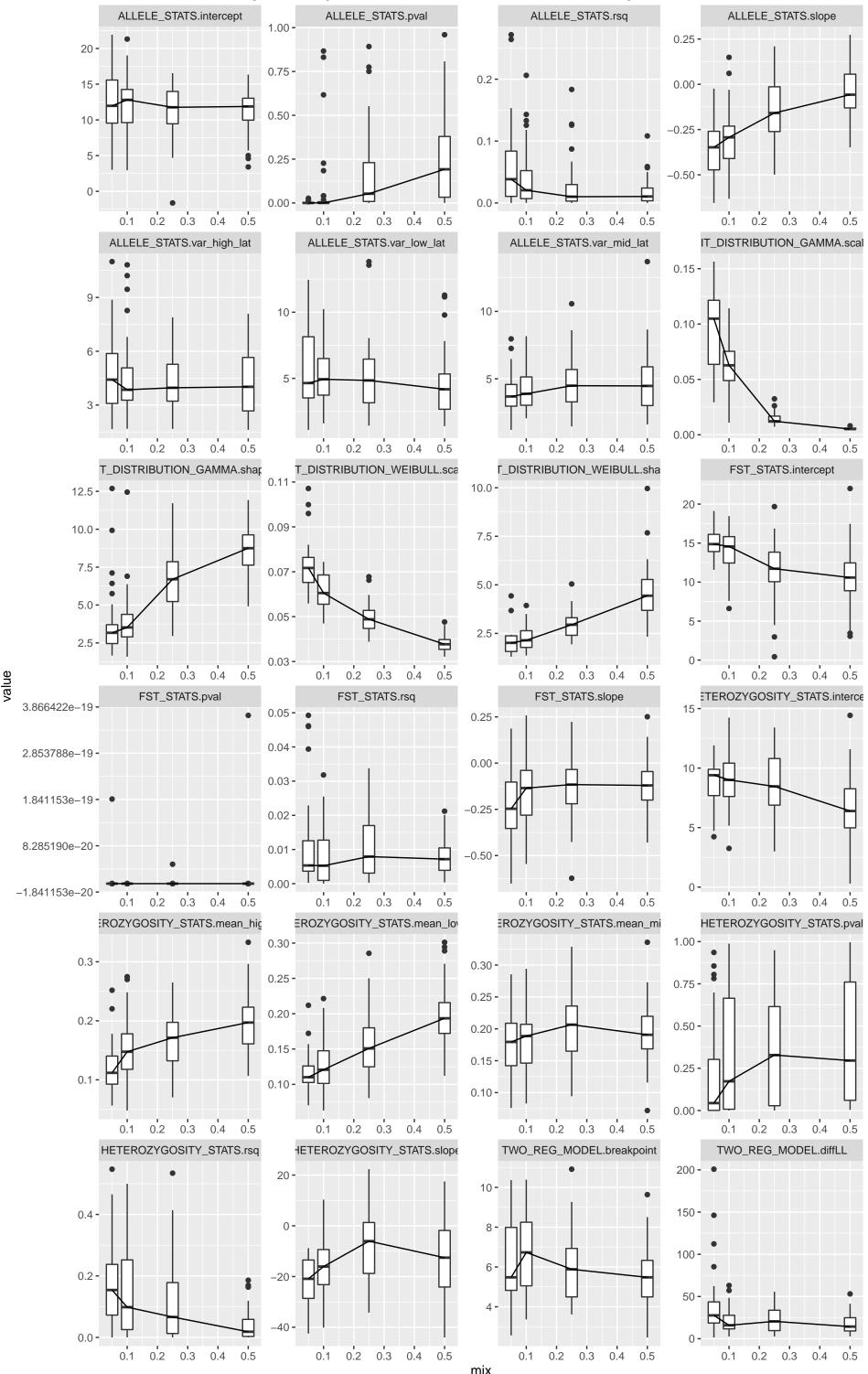
0.1 0.2 0.3 0.4 0.5

0.1 0.2 0.3 0.4 0.5

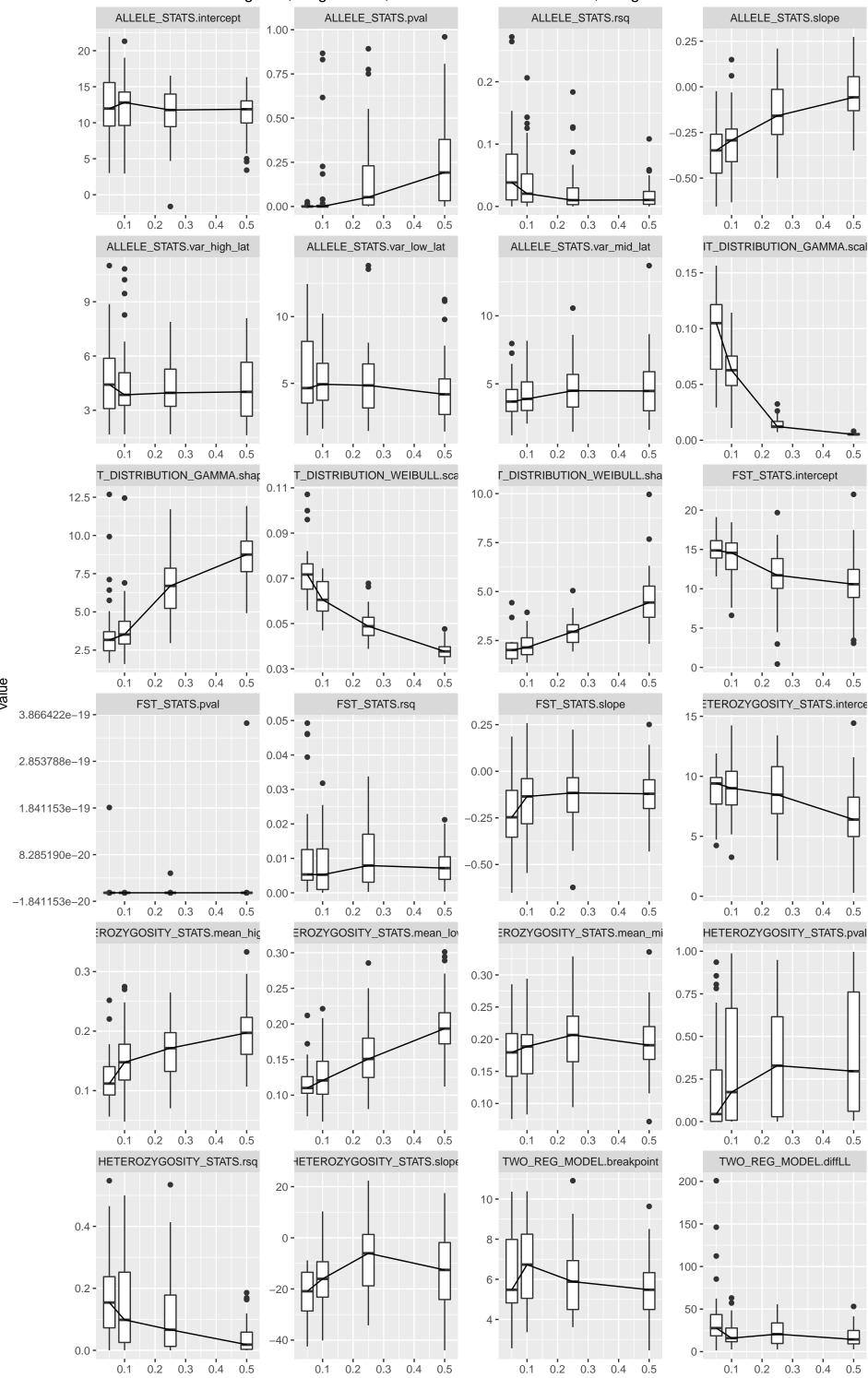
0.1 0.2 0.3 0.4 0.5

0.1 0.2 0.3 0.4

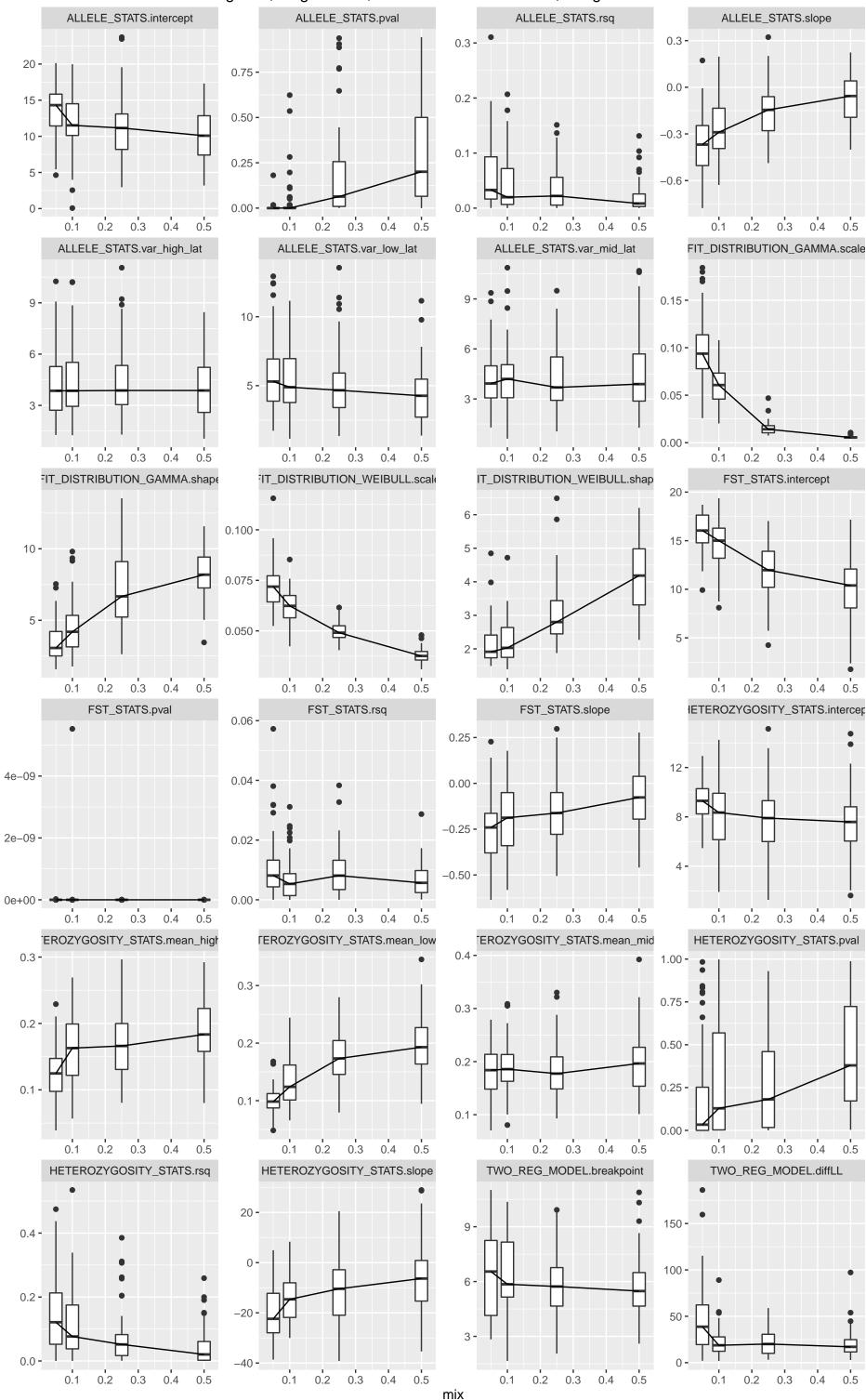
Refuges: 1, longmean: 3, shortscale: 0.5Glac front: 3, Marginal decrease: 1



Refuges: 1, longmean: 3, shortscale: 0.25Glac front: 3, Marginal decrease: 1



Refuges: 3, longmean: 2, shortscale: 1Glac front: 3, Marginal decrease: 1



Refuges: 3, longmean: 2, shortscale: 0.5Glac front: 3, Marginal decrease: 1 ALLELE_STATS.intercept ALLELE_STATS.pval ALLELE_STATS.rsq ALLELE_STATS.slope 0.3 -0.3 -0.75 -0.0 0.2 0.50 --0.30.1 -0.25 -0.60.0 -0.2 0.3 0.4 0.2 0.3 0.4 0.2 0.3 0.1 0.1 0.2 0.3 ALLELE_STATS.var_low_lat ALLELE_STATS.var_mid_lat FIT_DISTRIBUTION_GAMMA.scale ALLELE_STATS.var_high_lat 0.15 10 -0.10 0.05 0.00 -0.3 0.2 0.3 0.4 0.2 0.3 0.4 0.5 0.2 0.4 0.2 0.3 0.4 0.1 0.5 0.1 FIT_DISTRIBUTION_GAMMA.shape IT_DISTRIBUTION_WEIBULL.scale IT_DISTRIBUTION_WEIBULL.shap FST_STATS.intercept 20 -0.100 -0.075 -10 0.050 -0.2 0.3 0.4 0.2 0.3 0.4 0.2 0.3 0.4 0.1 0.2 0.3 0.4 FST_STATS.pval FST_STATS.rsq FST_STATS.slope IETEROZYGOSITY_STATS.intercep 0.25 -12 -0.04 -0.00 -0.25 · 0.02 --0.50 0.00 -0.2 0.2 0.3 0.4 0.1 0.2 0.3 0.4 0.5 0.3 0.2 0.3 0.1 0.1 0.4 EROZYGOSITY_STATS.mean_high FEROZYGOSITY_STATS.mean_low HETEROZYGOSITY_STATS.pval FEROZYGOSITY_STATS.mean_mid 0.4 -1.00 -0.3 -0.75 -0.3 0.2 -0.50 0.25 0.1 0.2 0.3 0.4 0.5 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 TWO_REG_MODEL.diffLL TWO_REG_MODEL.breakpoint HETEROZYGOSITY_STATS.rsq HETEROZYGOSITY_STATS.slope 20 -150 **-**100 -

50 -

0.2 0.3

0.2

0.3

0.4 0.5

20 -

15 -

10 -

6 -

10 -

4e-09 -

2e-09 -

0.3 -

0.2 -

0.4 -

0.2 -

0.2 0.3

0.4

0.5

0.1

0.2

0.3 0.4

Refuges: 3, longmean: 2, shortscale: 0.25Glac front: 3, Marginal decrease: 1 ALLELE_STATS.intercept ALLELE_STATS.pval ALLELE_STATS.rsq ALLELE_STATS.slope 0.3 -0.3 -0.75 -0.0 0.2 0.50 --0.30.1 -0.25 -0.60.0 -0.2 0.3 0.4 0.2 0.3 0.4 0.2 0.3 0.1 0.1 0.2 0.3 0.4 ALLELE_STATS.var_low_lat ALLELE_STATS.var_mid_lat FIT_DISTRIBUTION_GAMMA.scale ALLELE_STATS.var_high_lat 0.15 10 -0.10 0.05 0.00 -0.2 0.3 0.3 0.4 0.2 0.3 0.4 0.5 0.2 0.4 0.2 0.3 0.4 0.1 0.5 0.1 FIT_DISTRIBUTION_GAMMA.shape IT_DISTRIBUTION_WEIBULL.scale IT_DISTRIBUTION_WEIBULL.shap FST_STATS.intercept 20 -0.100 -0.075 -10 0.050 -0.2 0.3 0.4 0.2 0.3 0.4 0.2 0.3 0.4 0.1 0.2 0.3 0.4 FST_STATS.pval FST_STATS.rsq FST_STATS.slope IETEROZYGOSITY_STATS.intercep 0.25 -12 -0.04 -0.00 -0.25 · 0.02 --0.50 0.00 -0.2 0.2 0.3 0.4 0.1 0.2 0.3 0.4 0.5 0.3 0.2 0.3 0.1 0.1 0.4 EROZYGOSITY_STATS.mean_high FEROZYGOSITY_STATS.mean_low HETEROZYGOSITY_STATS.pval FEROZYGOSITY_STATS.mean_mid 0.4 -1.00 -0.3 -0.75 -0.3 0.2 -0.50 0.25 0.1 0.2 0.3 0.4 0.5 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 TWO_REG_MODEL.diffLL TWO_REG_MODEL.breakpoint HETEROZYGOSITY_STATS.rsq HETEROZYGOSITY_STATS.slope 20 -150 **-**100 -

50 -

0.2 0.3

0.2

0.3

0.4 0.5

20 -

15 -

10 -

6 -

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4e-09 -

2e-09 -

0.3 -

0.2 -

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0.2 -

0.2 0.3

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0.5

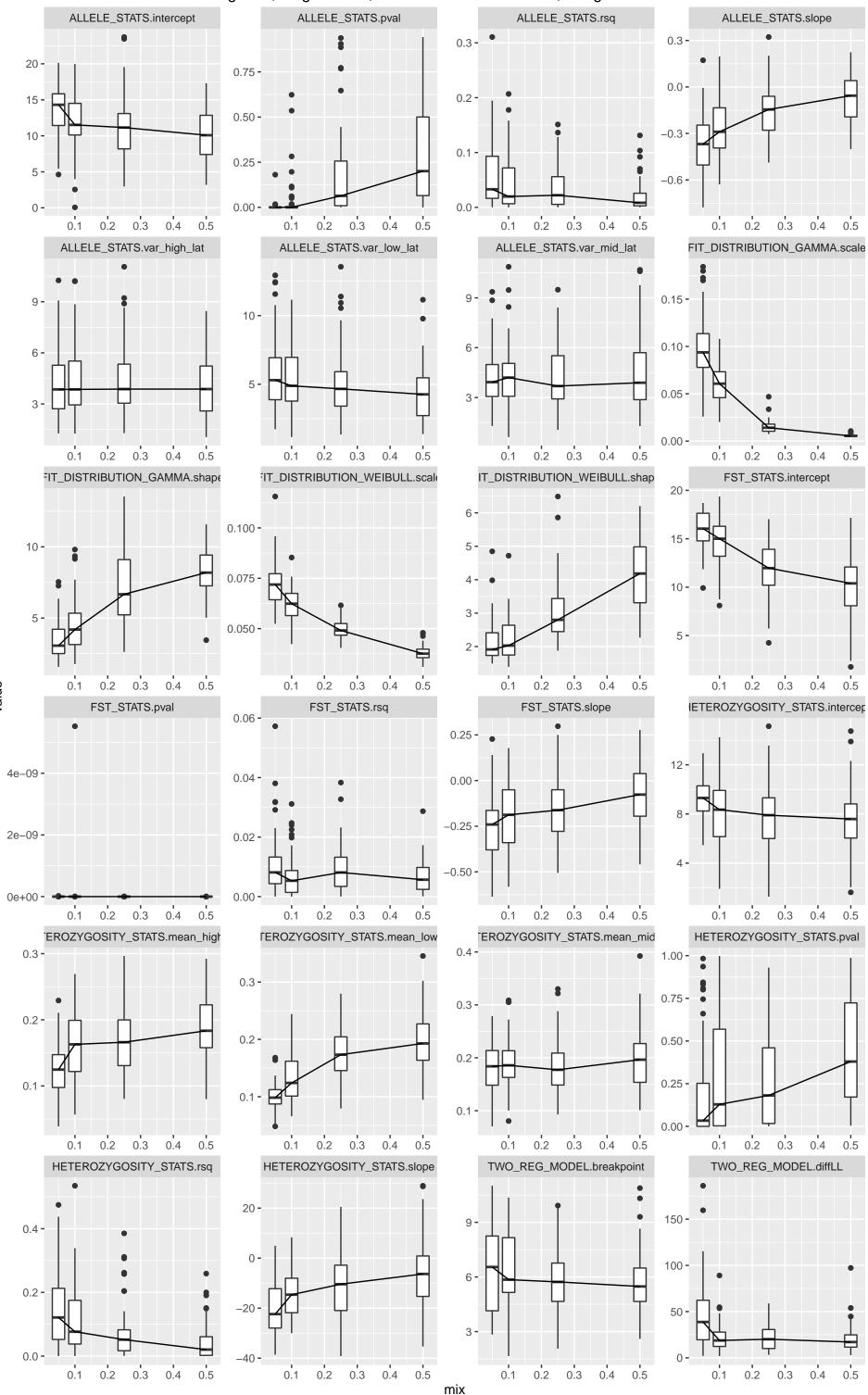
-20 **-**

0.1

0.2

0.3 0.4

Refuges: 3, longmean: 3, shortscale: 1Glac front: 3, Marginal decrease: 1 ALLELE_STATS.pval ALLELE_STATS.rsq



Refuges: 3, longmean: 3, shortscale: 0.5Glac front: 3, Marginal decrease: 1 ALLELE_STATS.intercept ALLELE_STATS.pval ALLELE_STATS.rsq ALLELE_STATS.slope 0.3 -0.3 -0.75 -0.0 0.2 0.50 --0.30.1 -0.25 -0.60.0 -0.2 0.3 0.4 0.2 0.3 0.4 0.2 0.3 0.1 0.1 0.2 0.3 ALLELE_STATS.var_low_lat ALLELE_STATS.var_mid_lat FIT_DISTRIBUTION_GAMMA.scale ALLELE_STATS.var_high_lat 0.15 10 -0.10 0.05 0.00 -0.2 0.3 0.3 0.4 0.2 0.3 0.4 0.5 0.2 0.4 0.2 0.3 0.4 0.1 0.5 0.1 FIT_DISTRIBUTION_GAMMA.shape IT_DISTRIBUTION_WEIBULL.scale IT_DISTRIBUTION_WEIBULL.shap FST_STATS.intercept 20 -0.100 -0.075 -10 0.050 -0.2 0.3 0.4 0.2 0.3 0.4 0.2 0.3 0.4 0.1 0.2 0.3 0.4 FST_STATS.pval FST_STATS.rsq FST_STATS.slope IETEROZYGOSITY_STATS.intercep 0.25 -12 -0.04 -0.00 -0.25 · 0.02 --0.50 0.00 -0.2 0.2 0.3 0.4 0.1 0.2 0.3 0.4 0.5 0.3 0.2 0.3 0.1 0.1 0.4 EROZYGOSITY_STATS.mean_high FEROZYGOSITY_STATS.mean_low HETEROZYGOSITY_STATS.pval FEROZYGOSITY_STATS.mean_mid 0.4 -1.00 -0.3 -0.75 -0.3 0.2 -0.50 0.25 0.1 0.2 0.3 0.4 0.5 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 TWO_REG_MODEL.diffLL TWO_REG_MODEL.breakpoint HETEROZYGOSITY_STATS.rsq HETEROZYGOSITY_STATS.slope 20 -150 **-**100 -

50 -

0.2 0.3

0.2

0.3

0.4 0.5

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4e-09 -

2e-09 -

0.3 -

0.2 -

0.4 -

0.2 -

0.2 0.3

0.4

0.5

-20 **-**

0.1

0.2

0.3 0.4

Refuges: 3, longmean: 3, shortscale: 0.25Glac front: 3, Marginal decrease: 1 ALLELE_STATS.intercept ALLELE_STATS.pval ALLELE_STATS.rsq ALLELE_STATS.slope 0.3 -0.3 -0.75 -0.0 0.2 0.50 --0.30.1 -0.25 -0.60.0 -0.2 0.2 0.3 0.4 0.2 0.3 0.1 0.3 0.4 0.1 0.2 0.3 0.4 ALLELE_STATS.var_low_lat ALLELE_STATS.var_mid_lat FIT_DISTRIBUTION_GAMMA.scale 0.15 10 -0.10 0.05 0.00 -0.2 0.3 0.3 0.4 0.2 0.3 0.4 0.5 0.2 0.4 0.2 0.3 0.4 0.1 0.5 0.1 IT_DISTRIBUTION_WEIBULL.scale IT_DISTRIBUTION_WEIBULL.shap FST_STATS.intercept 20 -0.100 -0.075 -10 0.050 -0.2 0.3 0.4 0.2 0.3 0.4 0.2 0.3 0.4 0.1 0.2 0.3 0.4 FST_STATS.pval FST_STATS.rsq FST_STATS.slope IETEROZYGOSITY_STATS.intercep 0.25 -12 -0.04 -0.00 -0.25 · 0.02 --0.50 0.00 -0.2 0.2 0.3 0.4 0.1 0.2 0.3 0.4 0.5 0.3 0.2 0.3 0.1 0.1 0.4 FEROZYGOSITY_STATS.mean_low HETEROZYGOSITY_STATS.pval FEROZYGOSITY_STATS.mean_mid 0.4 -1.00 -0.3 -0.75 -0.3 0.2 -0.50 0.25 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 TWO_REG_MODEL.diffLL TWO_REG_MODEL.breakpoint HETEROZYGOSITY_STATS.slope 20 -150 **-**100 -

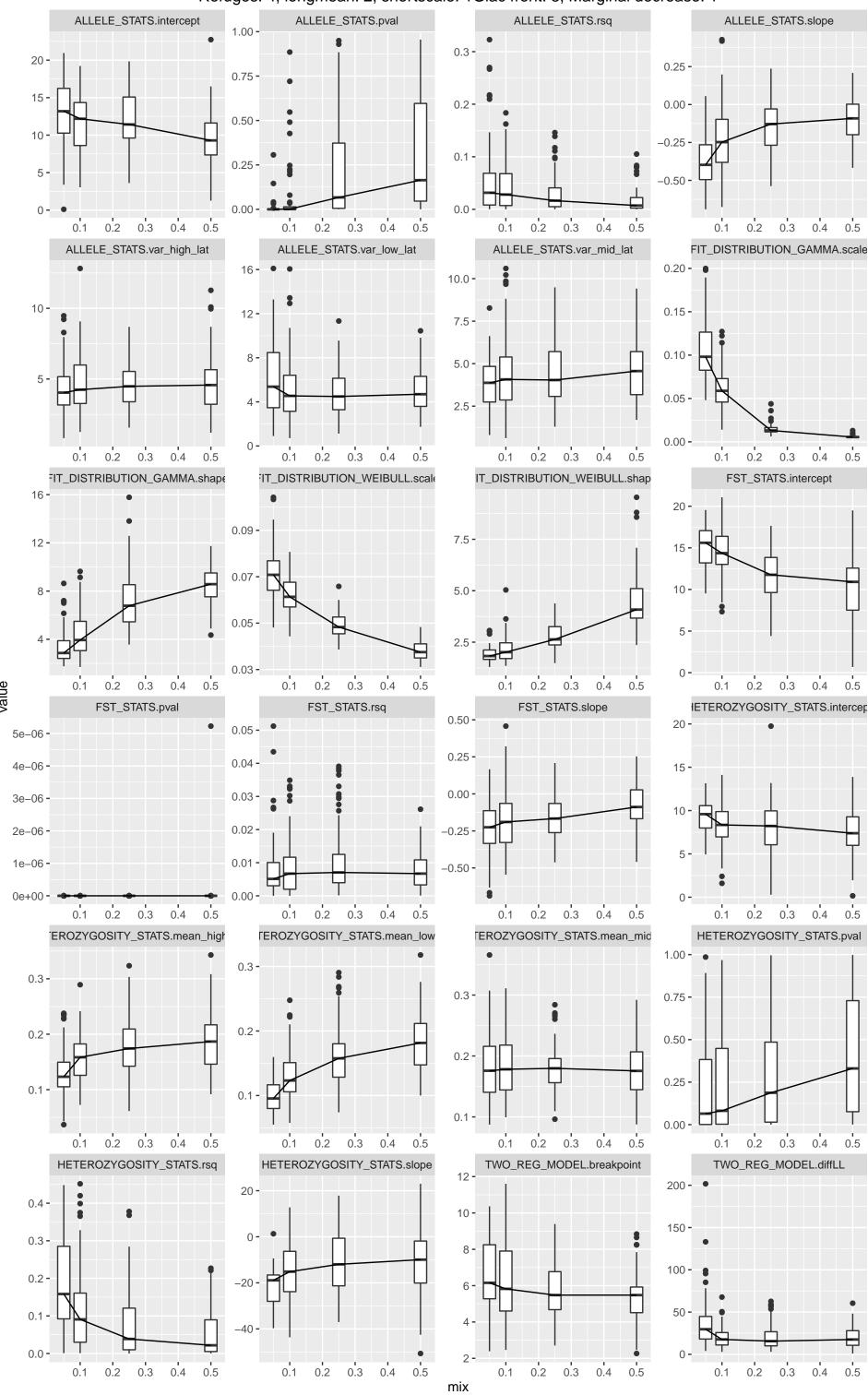
ALLELE_STATS.var_high_lat 6 -FIT_DISTRIBUTION_GAMMA.shape 10 -4e-09 -2e-09 -EROZYGOSITY_STATS.mean_high 0.3 -0.2 -0.1 0.2 0.3 0.4 0.5 HETEROZYGOSITY_STATS.rsq 0.4 -0.2 --20 **-**50 -0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.2 0.3 0.4 0.5 0.2 0.3

20 -

15 -

10 -

Refuges: 4, longmean: 2, shortscale: 1Glac front: 3, Marginal decrease: 1 ALLELE_STATS.pval ALLELE_STATS.rsq



Refuges: 4, longmean: 2, shortscale: 0.5Glac front: 3, Marginal decrease: 1 ALLELE_STATS.pval ALLELE_STATS.intercept ALLELE_STATS.rsq ALLELE_STATS.slope 1.00 -0.3 0.25 0.75 -0.2 0.00 0.50 --0.25 0.25 --0.50 0.0 -0.5 0.1 0.2 0.4 0.2 0.4 0.5 0.2 0.3 0.3 0.3 0.2 0.3 ALLELE_STATS.var_low_lat ALLELE_STATS.var_mid_lat FIT_DISTRIBUTION_GAMMA.scale ALLELE_STATS.var_high_lat 0.20 -16-10.0 -0.15 12**-**7.5 0.10 8 -5.0 -0.05 2.5 -0.00 0.2 0.2 0.3 0.4 0.1 0.2 0.3 0.4 0.5 0.2 0.3 0.4 0.3 0.4 FIT_DISTRIBUTION_GAMMA.shape IT_DISTRIBUTION_WEIBULL.scale IT_DISTRIBUTION_WEIBULL.shap FST_STATS.intercept 20 -0.09 -7.5 **-**0.07 -10 5.0 0.05 0.03 -0.3 0.4 0.5 0.3 0.2 0.3 0.2 0.3 0.4 0.2 FST_STATS.pval FST_STATS.rsq FST_STATS.slope IETEROZYGOSITY_STATS.intercep 0.50 20 -0.05 -0.25 -0.04 -15 0.00 -0.03 -10 0.02 --0.25 **-**0.01 --0.50 **-**0.00 -0.2 0.1 0.3 0.4 0.2 0.3 0.2 0.3 0.2 0.3 0.4 0.4 EROZYGOSITY_STATS.mean_high FEROZYGOSITY_STATS.mean_low FEROZYGOSITY_STATS.mean_mid HETEROZYGOSITY_STATS.pval 1.00 -0.3 -0.3 -0.75 0.2 -0.50 0.2 -0.25 0.1 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 TWO_REG_MODEL.breakpoint HETEROZYGOSITY_STATS.slope TWO_REG_MODEL.diffLL HETEROZYGOSITY_STATS.rsq 200 -10 -150 -100 -

50

0.2 0.3 0.4

0.1 0.2 0.3

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16-

12 -

5e-06 **-**

4e-06 -

3e-06 -

2e-06 -

1e-06 -

0e+00 -

0.3 -

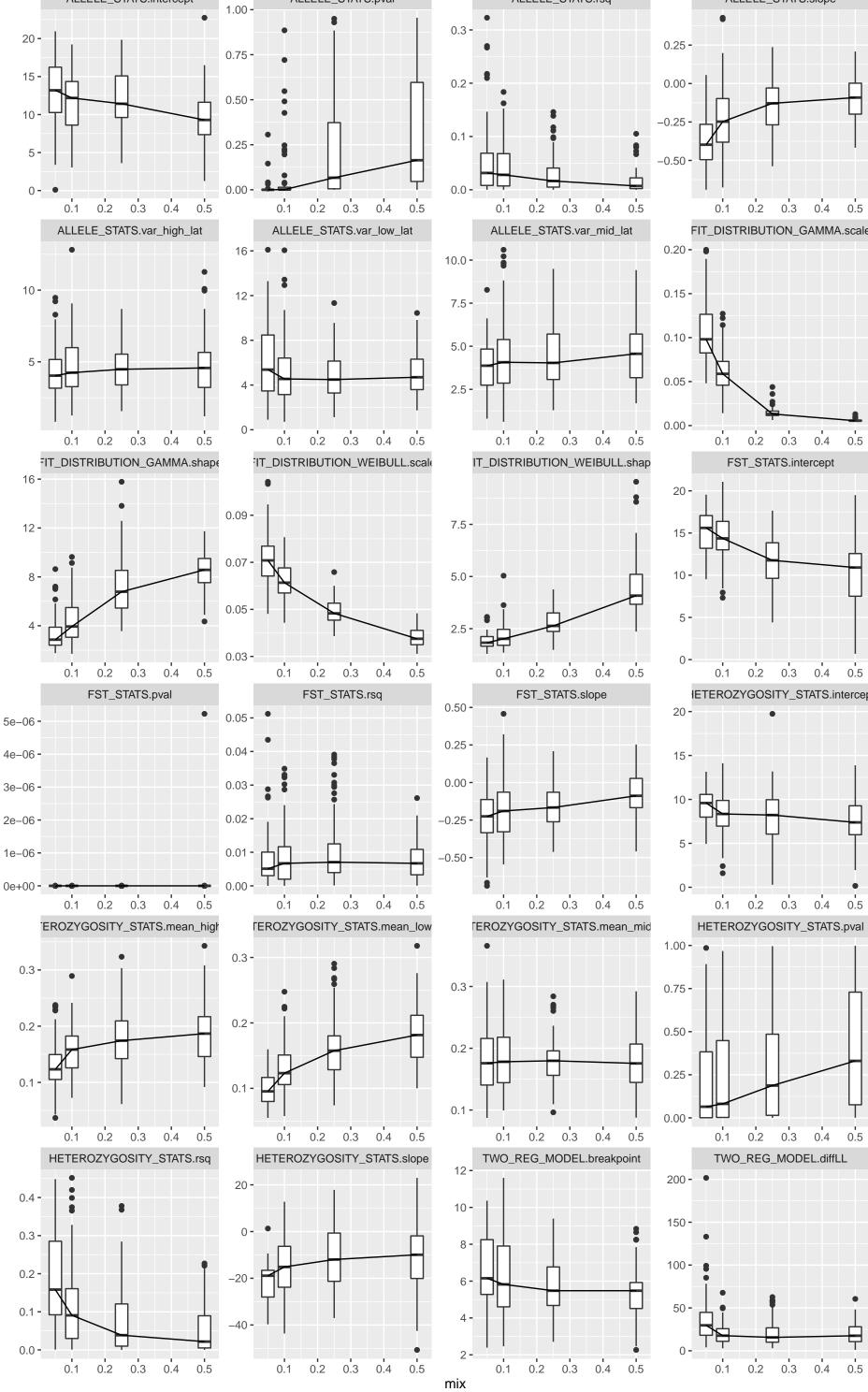
0.2 -

0.4 -

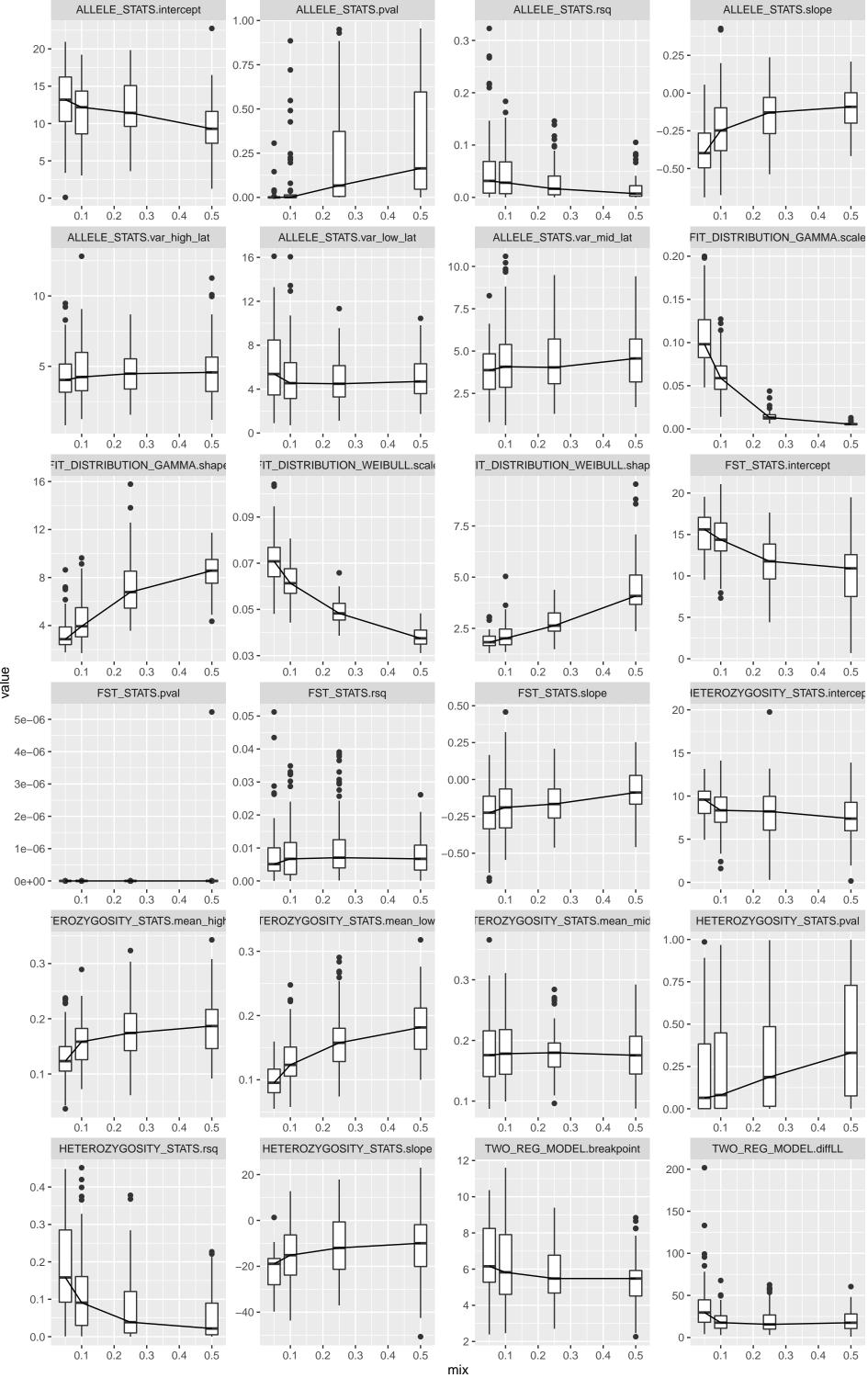
0.3 -

0.1 0.2 0.3 0.4 0.5

0.1 0.2 0.3 0.4 0.5



Refuges: 4, longmean: 3, shortscale: 1Glac front: 3, Marginal decrease: 1 ALLELE_STATS.pval ALLELE_STATS.rsq 1.00 -0.3



Refuges: 4, longmean: 3, shortscale: 0.5Glac front: 3, Marginal decrease: 1 ALLELE_STATS.pval ALLELE_STATS.rsq ALLELE_STATS.intercept ALLELE_STATS.slope 1.00 -0.3 0.25 0.75 -0.2 0.00 0.50 --0.25 0.25 --0.50 0.0 -0.5 0.1 0.2 0.4 0.2 0.4 0.5 0.2 0.3 0.3 0.3 0.2 0.3 ALLELE_STATS.var_low_lat ALLELE_STATS.var_mid_lat FIT_DISTRIBUTION_GAMMA.scale ALLELE_STATS.var_high_lat 0.20 -16-10.0 -0.15 12**-**7.5 0.10 8 -5.0 -0.05 2.5 -0.00 0.2 0.2 0.3 0.4 0.1 0.2 0.3 0.4 0.5 0.2 0.3 0.4 0.3 0.4 0.5 FIT_DISTRIBUTION_GAMMA.shape IT_DISTRIBUTION_WEIBULL.scale IT_DISTRIBUTION_WEIBULL.shap FST_STATS.intercept 20 -0.09 -7.5 **-**0.07 -10 5.0 0.05 0.03 -0.3 0.4 0.5 0.3 0.2 0.3 0.2 0.3 0.4 0.2 FST_STATS.pval FST_STATS.rsq FST_STATS.slope IETEROZYGOSITY_STATS.intercep 0.50 20 -0.05 -0.25 -0.04 -15 0.00 -0.03 -10 0.02 --0.25 **-**0.01 --0.50 **-**0.00 -0.2 0.1 0.3 0.4 0.2 0.3 0.2 0.3 0.2 0.3 0.4 0.4 EROZYGOSITY_STATS.mean_high FEROZYGOSITY_STATS.mean_low FEROZYGOSITY_STATS.mean_mid HETEROZYGOSITY_STATS.pval 1.00 -0.3 -0.3 -0.75 0.2 -0.50 0.2 -0.25 0.1 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 TWO_REG_MODEL.breakpoint HETEROZYGOSITY_STATS.slope TWO_REG_MODEL.diffLL HETEROZYGOSITY_STATS.rsq 200 -10 -150 -100 -

50

0.2 0.3 0.4

0.1 0.2 0.3

0.4

20 -

15

10 -

10-

16-

12 -

5e-06 **-**

4e-06 -

3e-06 -

2e-06 -

1e-06 -

0e+00 -

0.3 -

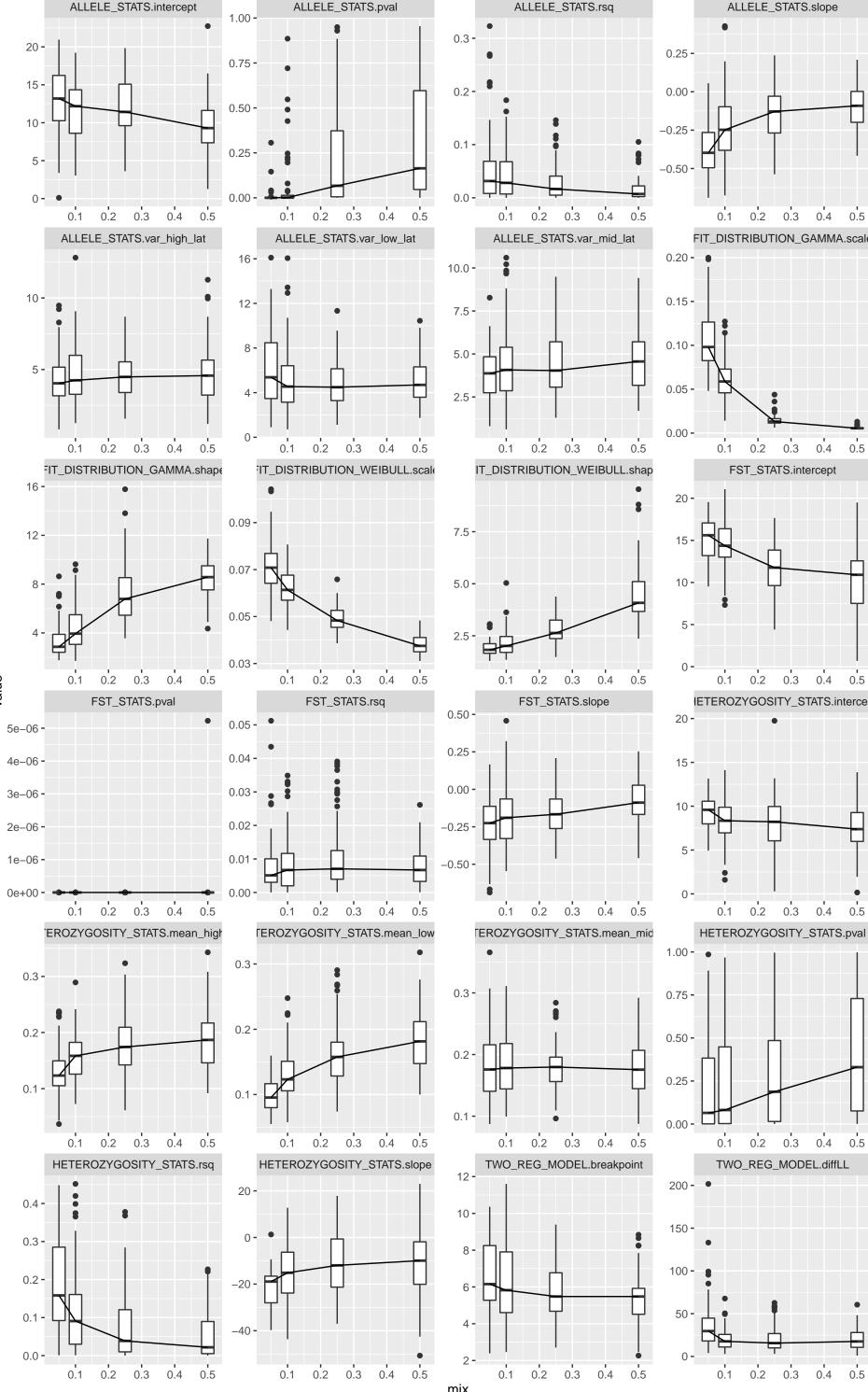
0.2 -

0.4 -

0.3 -

0.1 0.2 0.3 0.4 0.5

0.1 0.2 0.3 0.4 0.5



Refuges: 5, longmean: 2, shortscale: 1Glac front: 3, Marginal decrease: 1 ALLELE_STATS.pval ALLELE_STATS.intercept ALLELE_STATS.rsq ALLELE_STATS.slope 1.00 -0.3 -20 -0.2 -0.75 -15 -0.0 -0.2 -0.50 -0.2 **-**10 -0.1 --0.4 0.25 --0.6 0.00 -0.0 -0.1 0.2 0.3 0.4 0.2 0.3 0.4 0.5 0.3 0.4 0.2 0.3 ALLELE_STATS.var_low_lat FIT_DISTRIBUTION_GAMMA.scale ALLELE_STATS.var_mid_lat ALLELE_STATS.var_high_lat 12.5 **-**12.5 -0.15 -10.0 -10.0 7.5 -0.10 7.5 10 -5.0 -0.05 2.5 0.00 0.2 0.2 0.3 0.3 0.4 0.2 0.3 0.4 0.2 0.3 0.4 0.4 0.5 0.1 0.5 0.1 FIT_DISTRIBUTION_GAMMA.shape FIT_DISTRIBUTION_WEIBULL.scale IT_DISTRIBUTION_WEIBULL.shape FST_STATS.intercept 20 -0.08 -15 -15 · 0.06 0.04 0.4 0.2 0.3 0.4 0.2 0.3 0.2 0.3 0.4 0.3 0.5 HETEROZYGOSITY_STATS.intercep FST_STATS.pval FST_STATS.rsq FST_STATS.slope 0.20 -0.25 -0.15 -10 -0.04 -0.00 0.10 --0.250.02 -0.05 --0.50 0.00 -0.00 --0.75 **-**0.2 0.3 0.1 0.1 0.2 0.3 0.2 0.3 0.4 0.5 0.4 0.2 0.3 TEROZYGOSITY_STATS.mean_low_ FEROZYGOSITY_STATS.mean_high HETEROZYGOSITY_STATS.pval TEROZYGOSITY_STATS.mean_mid_ 1.00 0.3 -0.3 0.75 -0.2 -0.50 -0.2 -0.25 -0.1 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 TWO_REG_MODEL.breakpoint HETEROZYGOSITY_STATS.rsq TWO_REG_MODEL.diffLL HETEROZYGOSITY_STATS.slope 0.5 -100 -20 -10.0 -0.4 -75 **-**0.3 -7.5 -50 **-**0.2 -5.0 -25 -0.1 -

20

0.2 0.3

0.4

0.5

0.1

0.2 0.3 0.4

0.2

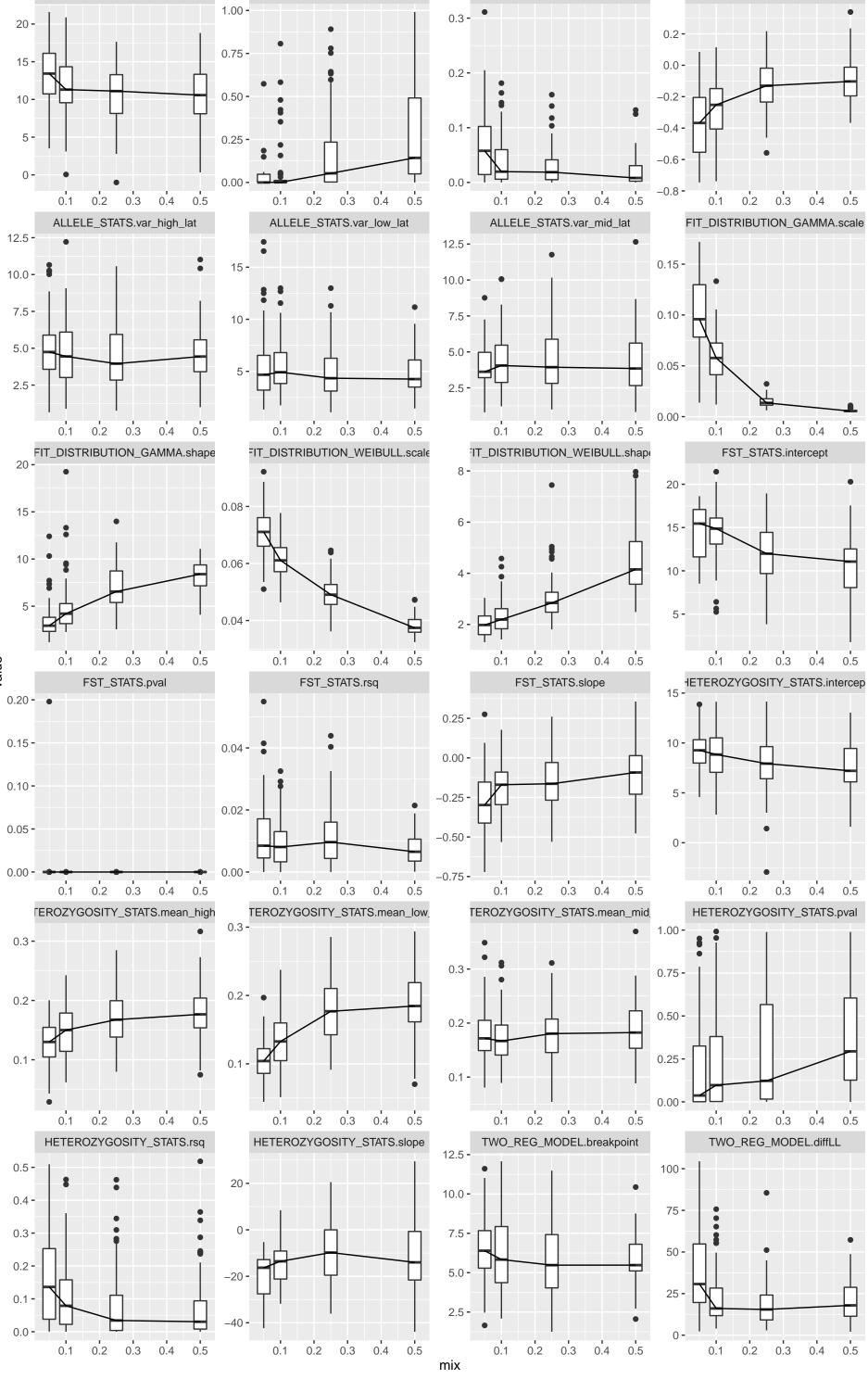
0.3

0.4

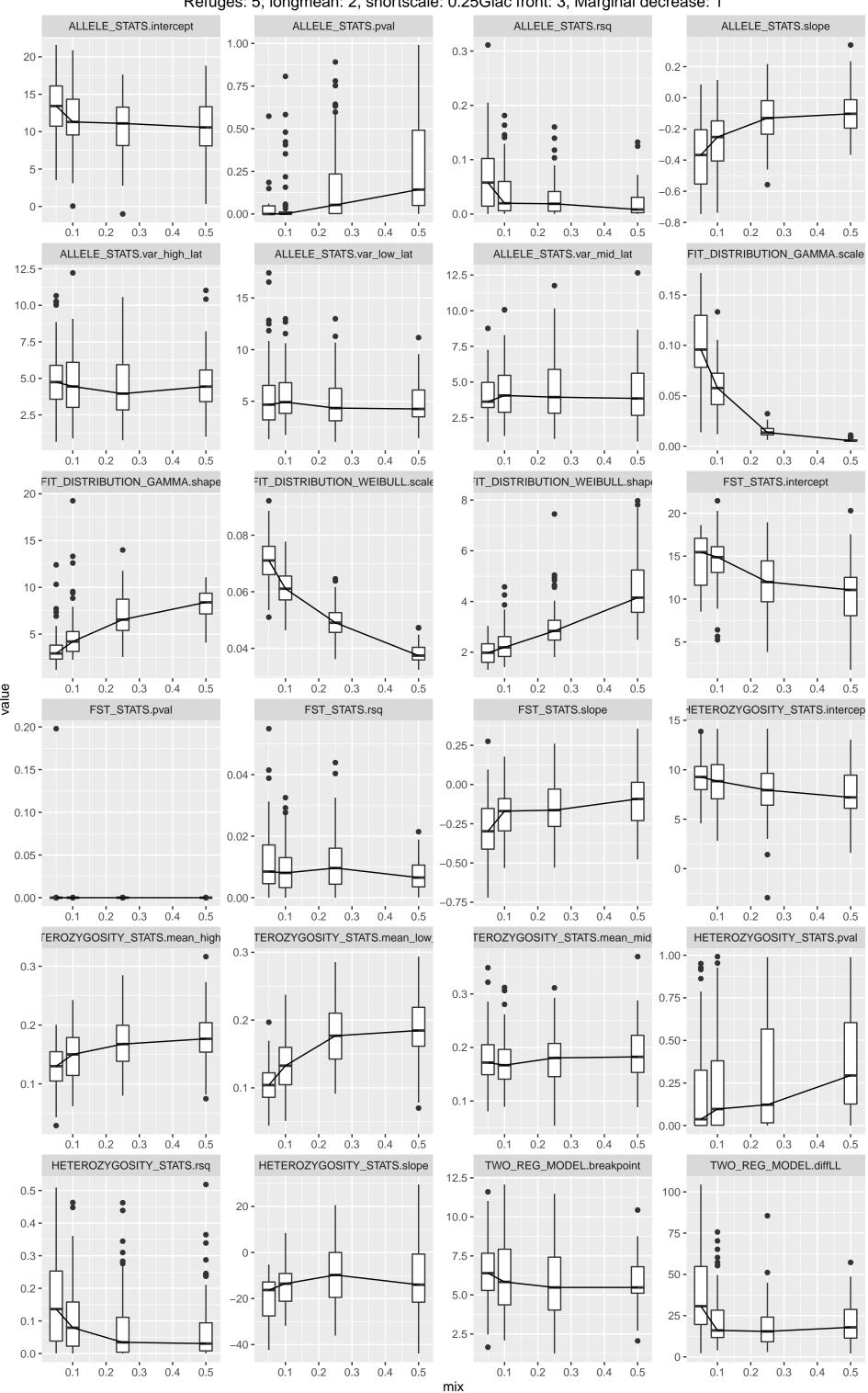
0.2

0.3

Refuges: 5, longmean: 2, shortscale: 0.5Glac front: 3, Marginal decrease: 1 ALLELE_STATS.pval ALLELE_STATS.intercept ALLELE_STATS.rsq ALLELE_STATS.slope 1.00 -0.3 -0.2 -0.75 -0.0 -0.2 -0.50 -0.2 **-**0.1 --0.4 0.25 --0.6 0.00 -0.0 -0.1 0.2 0.3 0.2 0.3 0.4 0.5 0.4 0.3 0.4 0.2 0.3 ALLELE_STATS.var_low_lat FIT_DISTRIBUTION_GAMMA.scale ALLELE_STATS.var_mid_lat 12.5 -0.15 -10.0 0.10 7.5 10 -5.0 -0.05 2.5 0.00 0.2 0.3 0.4 0.3 0.4 0.2 0.3 0.4 0.2 0.3 0.4 0.5 0.1 0.5 0.1 FIT_DISTRIBUTION_WEIBULL.scale IT_DISTRIBUTION_WEIBULL.shape FST_STATS.intercept 20 -0.08 -15 · 0.06 0.04 0.4 0.2 0.3 0.4 0.2 0.3 0.2 0.3 0.4 0.3 0.5 HETEROZYGOSITY_STATS.intercep FST_STATS.slope FST_STATS.rsq 0.25 -10 -0.04 -0.00 -0.250.02 --0.50 0.00 --0.75 **-**0.2 0.3 0.1 0.1 0.2 0.3 0.3 0.4 0.5 0.4 0.2 0.3 TEROZYGOSITY_STATS.mean_low_ HETEROZYGOSITY_STATS.pval TEROZYGOSITY_STATS.mean_mid_ 1.00 0.3 0.75 -0.2 -0.50 -0.2 -0.25 -0.1 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 TWO_REG_MODEL.breakpoint HETEROZYGOSITY_STATS.slope TWO_REG_MODEL.diffLL 100 -20 -



Refuges: 5, longmean: 2, shortscale: 0.25Glac front: 3, Marginal decrease: 1



Refuges: 5, longmean: 3, shortscale: 1Glac front: 3, Marginal decrease: 1 ALLELE_STATS.pval ALLELE_STATS.intercept ALLELE_STATS.rsq ALLELE_STATS.slope 1.00 -0.3 -20 -0.2 -0.75 -15 -0.0 -0.2 -0.50 -0.2 **-**10 -0.1 --0.4 0.25 --0.6 0.00 -0.0 -0.1 0.2 0.3 0.4 0.2 0.3 0.4 0.5 0.3 0.4 0.2 0.3 ALLELE_STATS.var_low_lat FIT_DISTRIBUTION_GAMMA.scale ALLELE_STATS.var_mid_lat ALLELE_STATS.var_high_lat 12.5 **-**12.5 -0.15 -10.0 -10.0 7.5 -0.10 7.5 10 -5.0 -0.05 2.5 0.00 0.2 0.2 0.3 0.3 0.4 0.2 0.3 0.4 0.2 0.3 0.4 0.4 0.5 0.1 0.5 0.1 FIT_DISTRIBUTION_GAMMA.shape FIT_DISTRIBUTION_WEIBULL.scale IT_DISTRIBUTION_WEIBULL.shape FST_STATS.intercept 20 -0.08 -15 -15 · 0.06 0.04 0.4 0.2 0.3 0.4 0.2 0.3 0.2 0.3 0.4 0.3 0.5 HETEROZYGOSITY_STATS.intercep FST_STATS.pval FST_STATS.rsq FST_STATS.slope 0.20 -0.25 -0.15 -10 -0.04 -0.00 0.10 --0.250.02 -0.05 --0.50 0.00 -0.00 --0.75 **-**0.2 0.3 0.1 0.1 0.2 0.3 0.2 0.3 0.4 0.5 0.4 0.2 0.3 TEROZYGOSITY_STATS.mean_low_ FEROZYGOSITY_STATS.mean_high HETEROZYGOSITY_STATS.pval TEROZYGOSITY_STATS.mean_mid_ 1.00 0.3 -0.3 0.75 -0.2 -0.50 -0.2 -0.25 -0.1 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 TWO_REG_MODEL.breakpoint HETEROZYGOSITY_STATS.rsq TWO_REG_MODEL.diffLL HETEROZYGOSITY_STATS.slope 0.5 -100 -20 -10.0 -0.4 -75 **-**0.3 -7.5 -50 **-**0.2 -5.0 -25 -0.1 -

20

0.2 0.3

0.4

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0.1

0.2 0.3 0.4

0.2

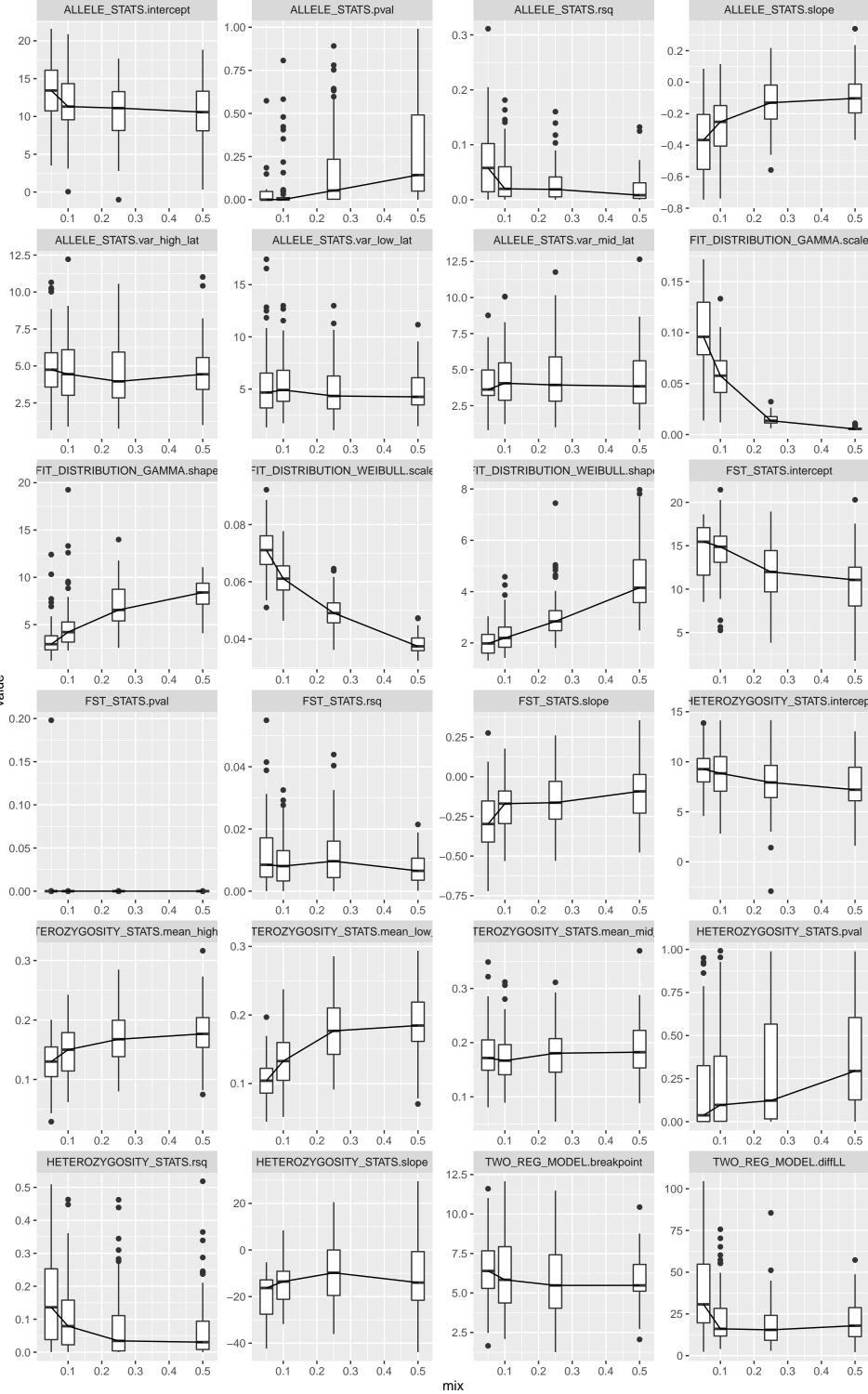
0.3

0.4

0.2

0.3

Refuges: 5, longmean: 3, shortscale: 0.5Glac front: 3, Marginal decrease: 1 ALLELE_STATS.pval ALLELE_STATS.rsq ALLELE_STATS.slope 1.00 -0.3 -0.2 -0.75 -0.0 -0.2 -0.50 -0.2 **-**0.1 --0.4 0.25 --0.6 0.00 -0.0 -0.1 0.2 0.3 0.2 0.3 0.4 0.5 0.4 0.3 0.4 0.2 0.3 ALLELE_STATS.var_low_lat ALLELE_STATS.var_mid_lat FIT_DISTRIBUTION_GAMMA.scale 12.5 -0.15 -10.0 0.10 7.5 10 -5.0 -0.05 2.5 0.00 0.2 0.3 0.4 0.3 0.4 0.2 0.3 0.4 0.2 0.3 0.4 0.5 0.1 0.5 0.1 FIT_DISTRIBUTION_WEIBULL.scale IT_DISTRIBUTION_WEIBULL.shape FST_STATS.intercept 20 -0.08 -15 · 0.06 0.04 0.4 0.2 0.3 0.4 0.2 0.3 0.2 0.3 0.4 0.3 0.5 HETEROZYGOSITY_STATS.intercep FST_STATS.slope FST_STATS.rsq 0.25 -10 -0.04 -0.00 -0.250.02 --0.50 0.00 --0.75 **-**0.2 0.3 0.1 0.1 0.2 0.3 0.3 0.4 0.5 0.4 0.2 0.3 TEROZYGOSITY_STATS.mean_low_ HETEROZYGOSITY_STATS.pval TEROZYGOSITY_STATS.mean_mid_ 1.00 0.3 0.75 -0.2 -0.50 -0.2 -0.25 -0.1 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 0.1 0.2 0.3 0.4 0.5 TWO_REG_MODEL.breakpoint HETEROZYGOSITY_STATS.slope TWO_REG_MODEL.diffLL 100 -20 -10.0 -75 **-**7.5 -



Refuges: 5, longmean: 3, shortscale: 0.25Glac front: 3, Marginal decrease: 1 ALLELE_STATS.pval ALLELE_STATS.rsq

