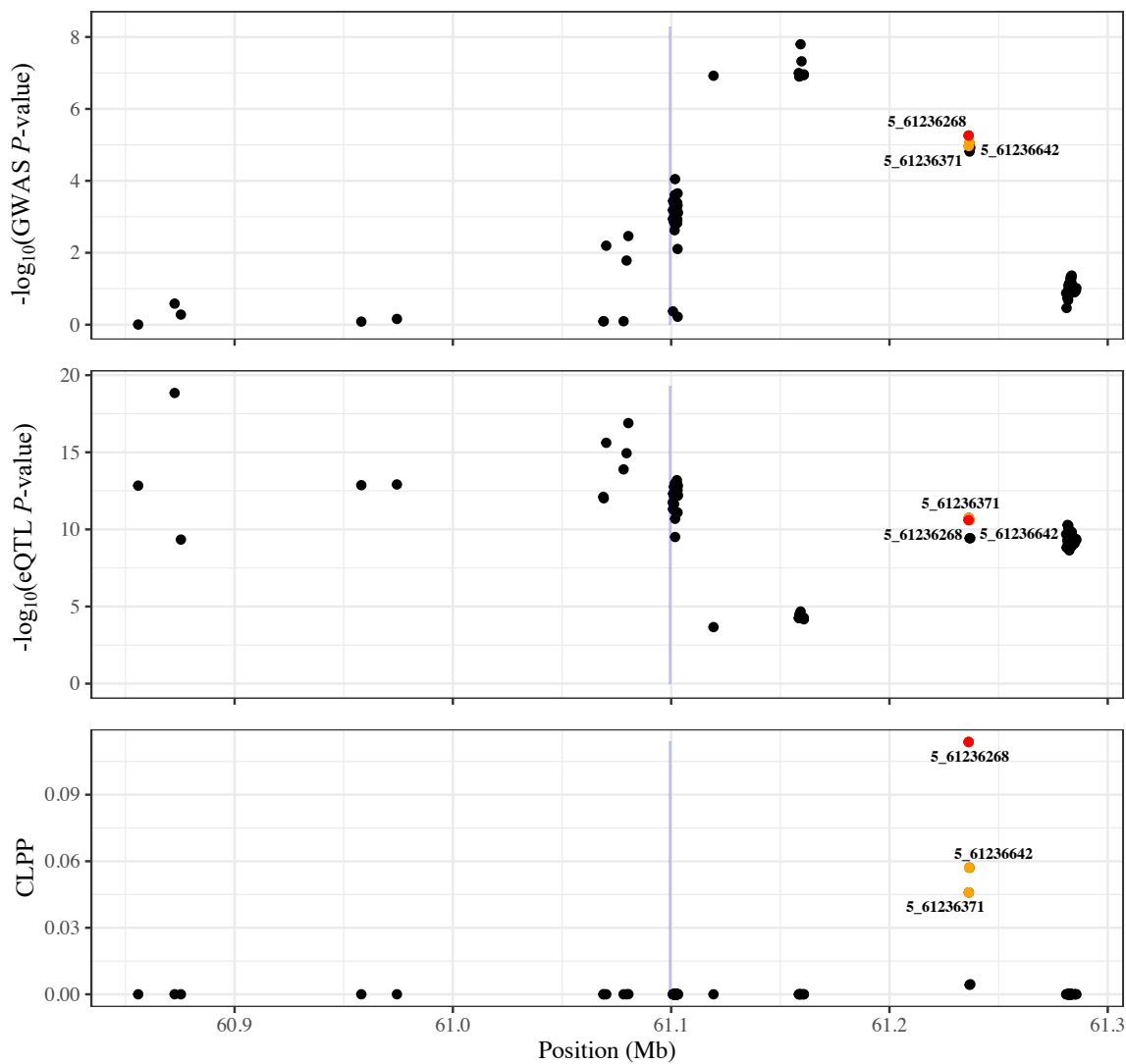


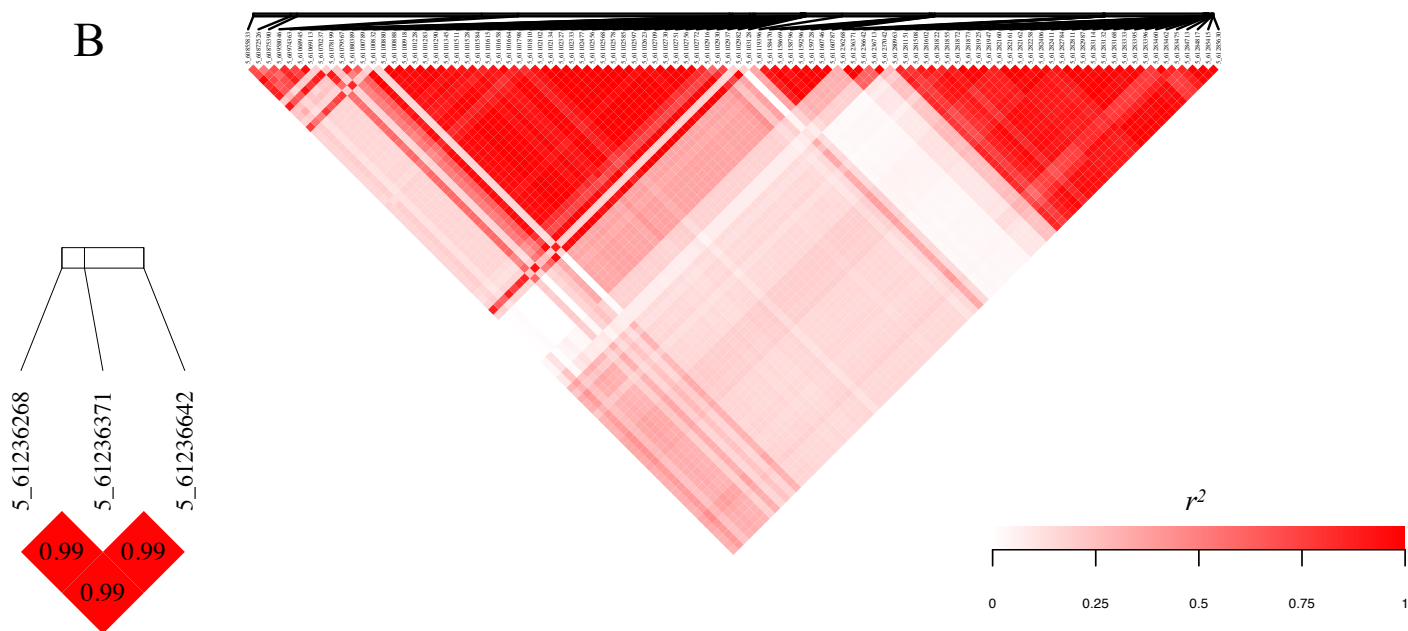
Supplementary Figure S5. Genome-wide association study (GWAS), expression quantitative trait loci (eQTL), and eQTL and GWAS CAusal Variants Identification in Associated Regions (eCAVIAR) results of 22 gene-phenotype pairs. A, Three local Manhattan plots (± 100 kb) showing the GWAS, eQTL, and eCAVIAR results of each gene-phenotype pair. Each point represents a SNP with its $-\log_{10} P$ -value (y-axis) from a mixed linear model analysis in GWAS or eQTL, or the CLPP value from eCAVIAR, plotted as a function of physical position (Mb, B73 RefGen_v4) on x-axis. The blue rectangle represents the physical position of the gene. The red dot represents the SNP with the highest CLPP value, and the orange dot represents the other SNPs with a CLPP value passing the ≥ 0.01 threshold. B, Pairwise linkage disequilibrium (LD, r^2) of all SNPs included in A, with the LD between SNPs with CLPP values ≥ 0.01 indicated in the bottom left.

GWAS, eQTL and eCAVIAR results at *arodeH2* (Zm00001d014734) for γ T3

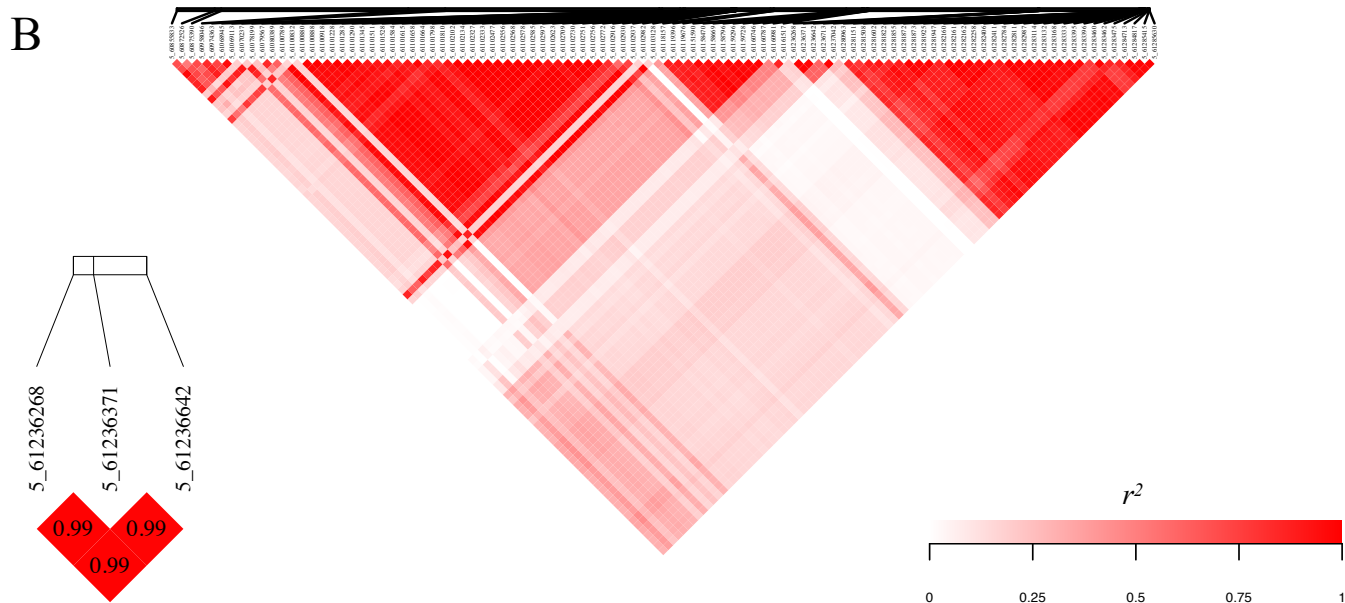
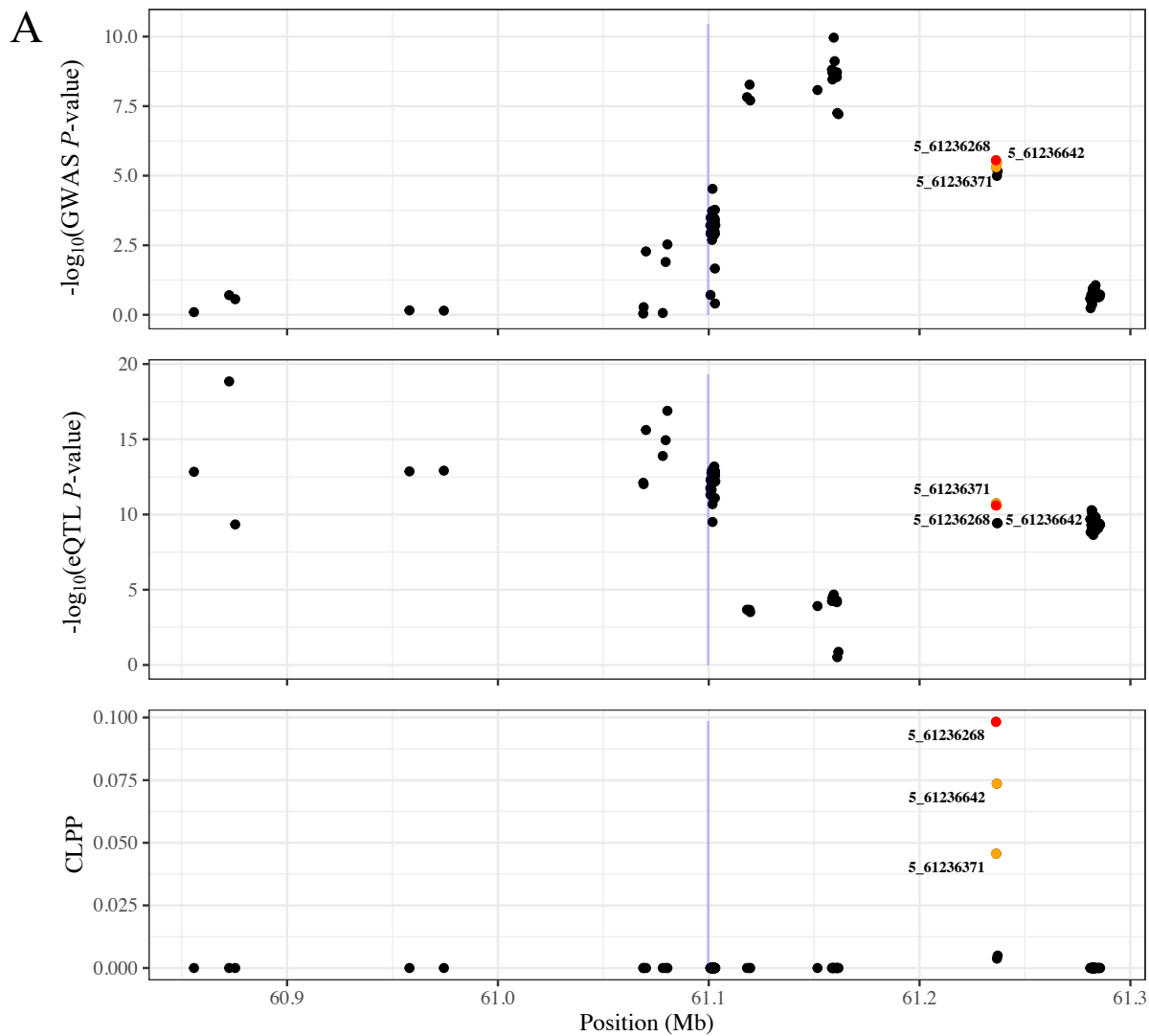
A



B

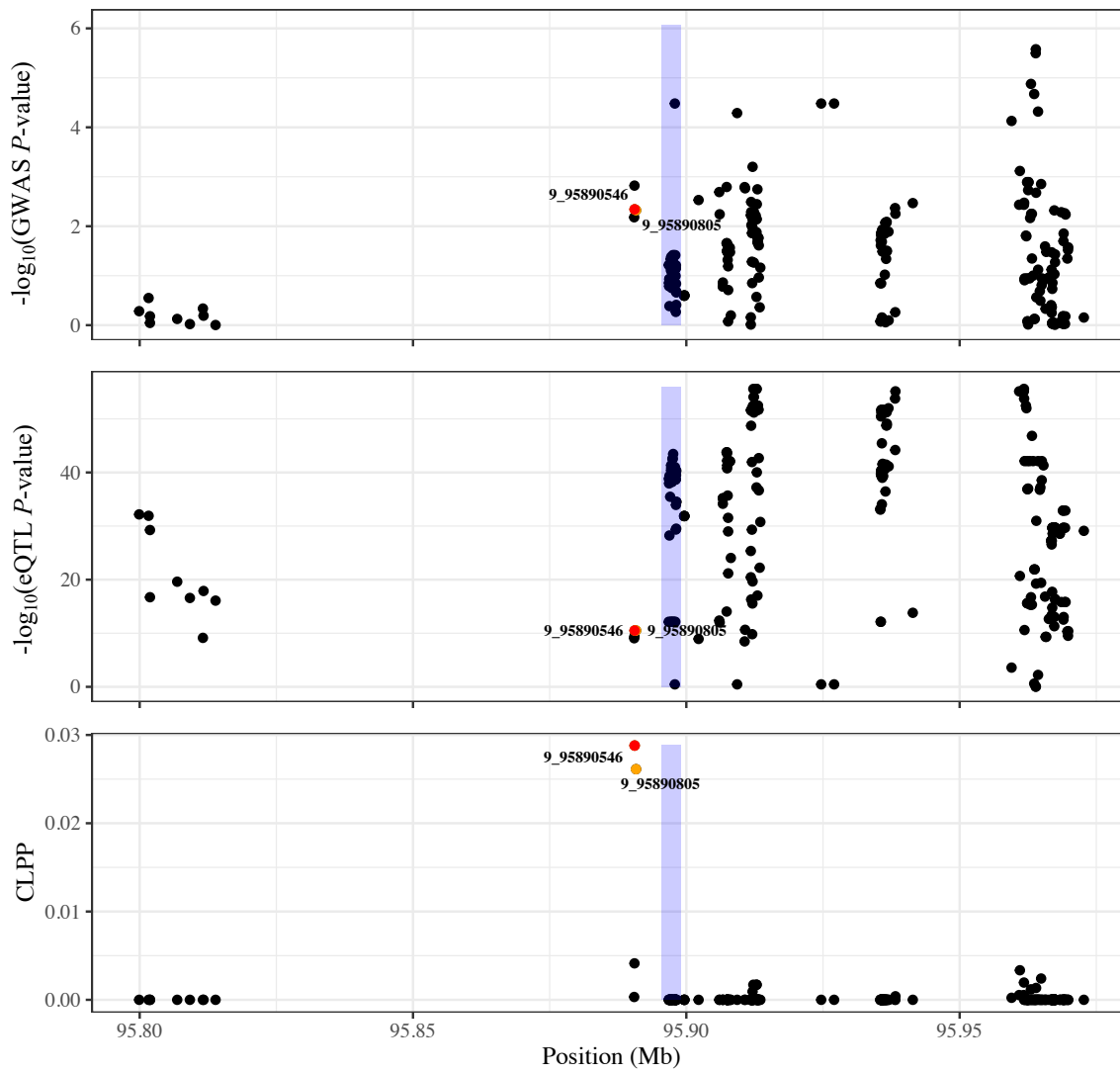


GWAS, eQTL and eCAVIAR results at *arodeH2* (Zm00001d014734) for $\Sigma T3$

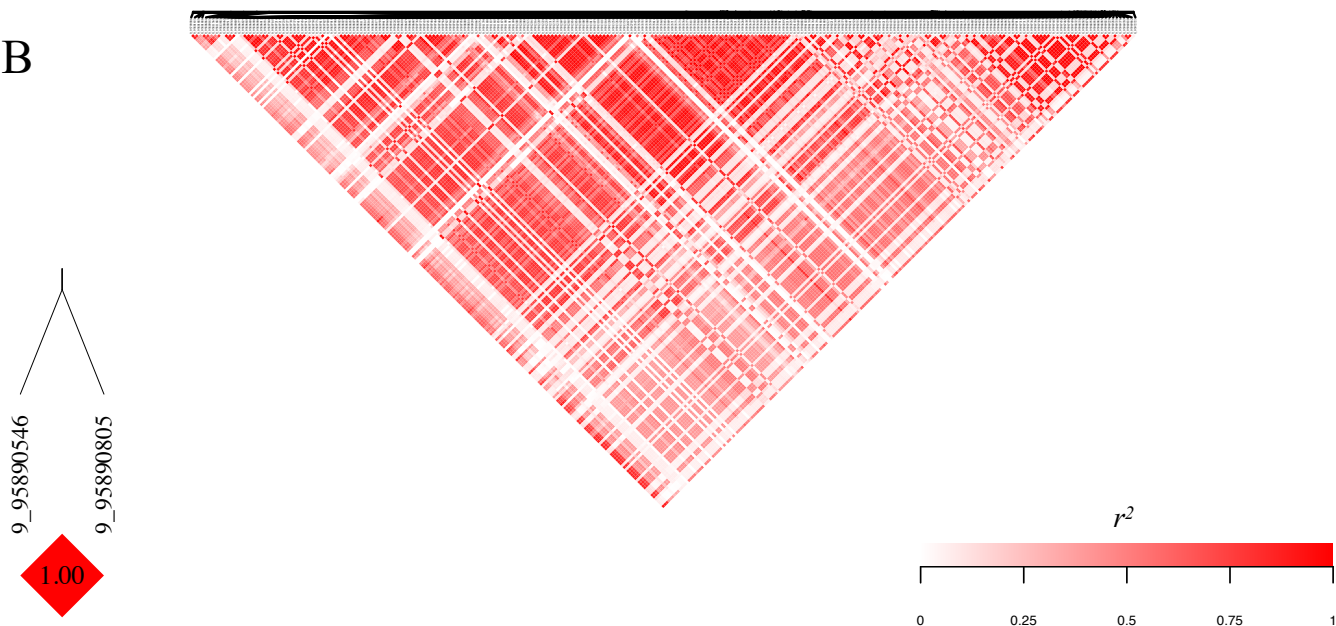


GWAS, eQTL and eCAVIAR results at *hggt1* for α T3

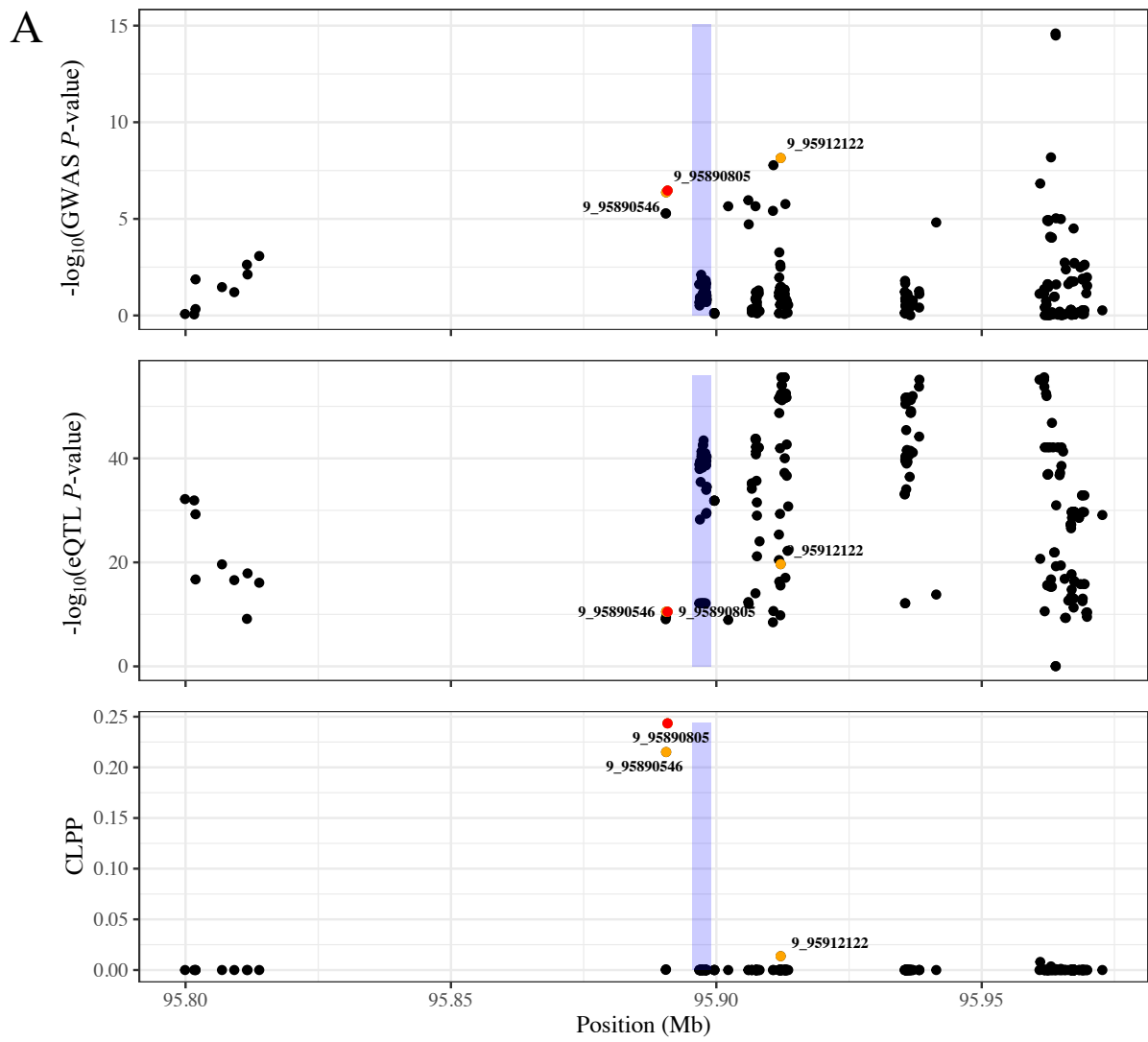
A



B

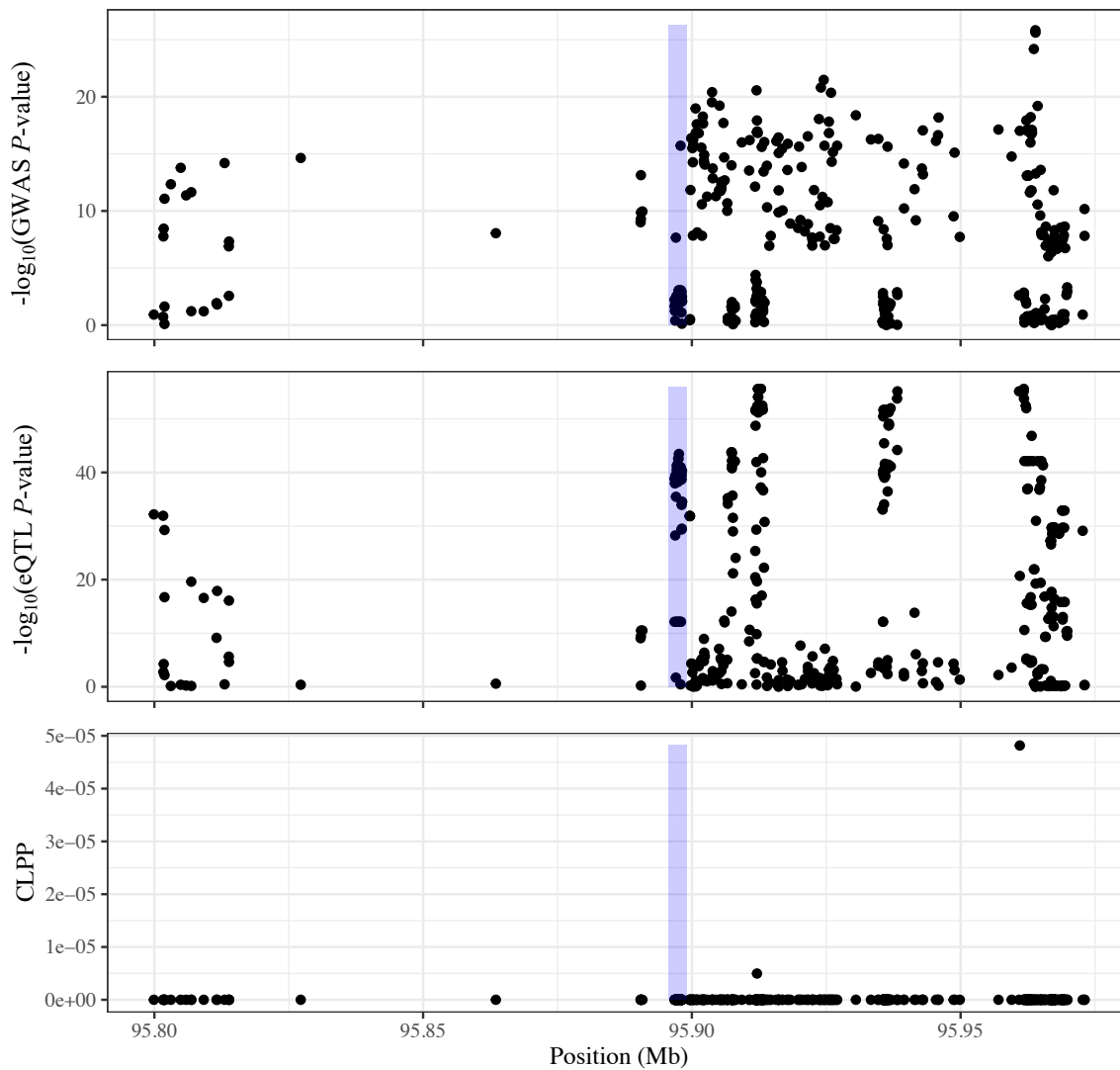


GWAS, eQTL and eCAVIAR results at *hggt1* for $\delta T3$

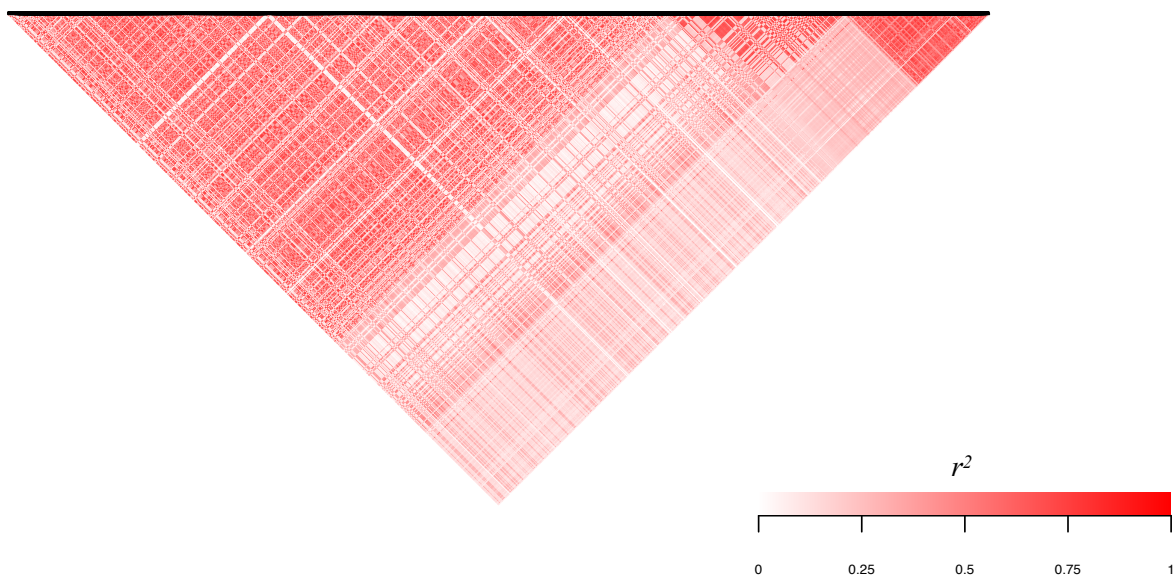


GWAS, eQTL and eCAVIAR results at *hggt1* for γ T3

A

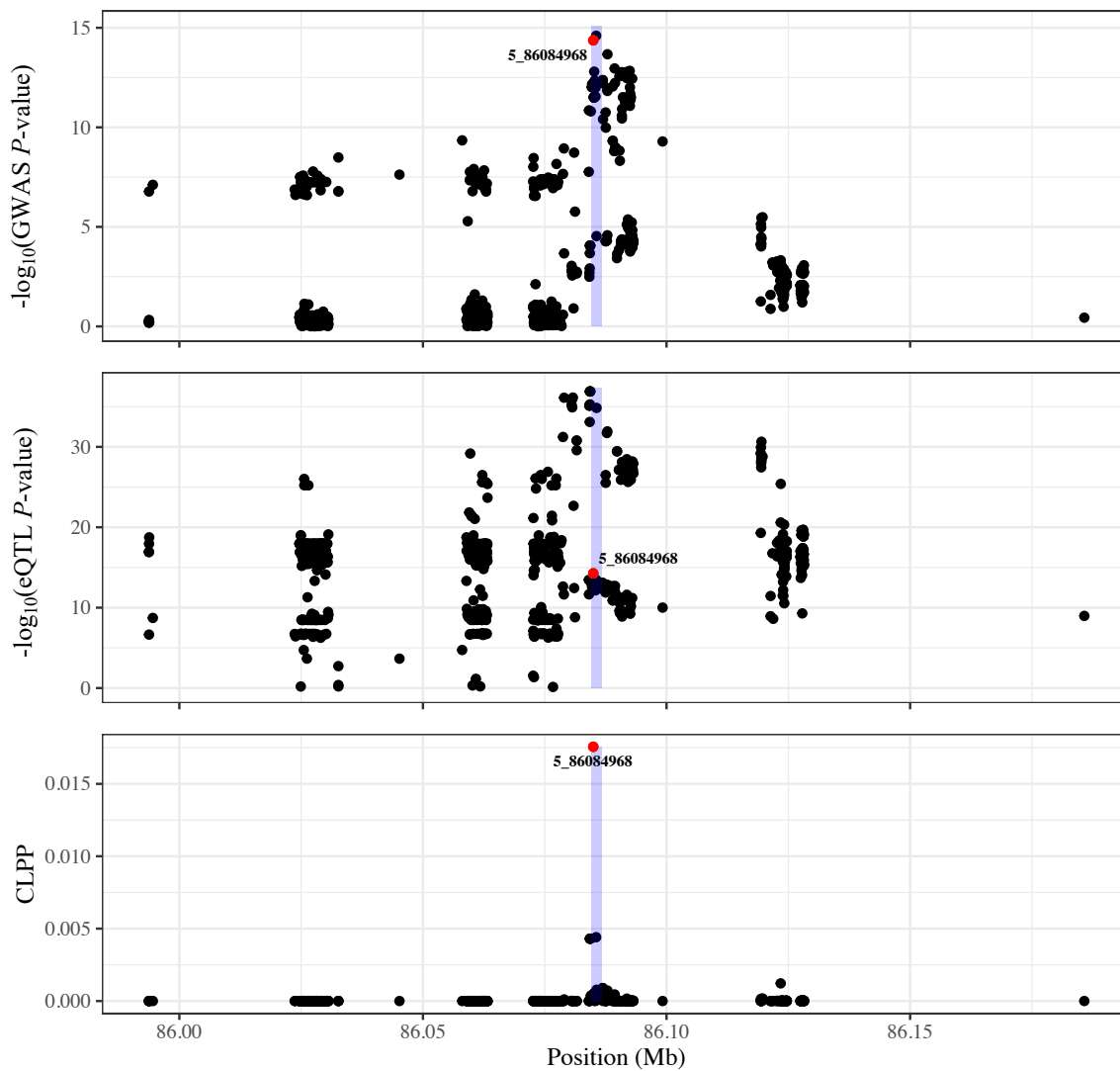


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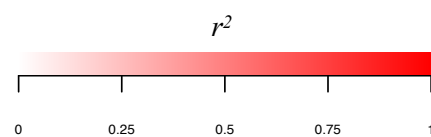
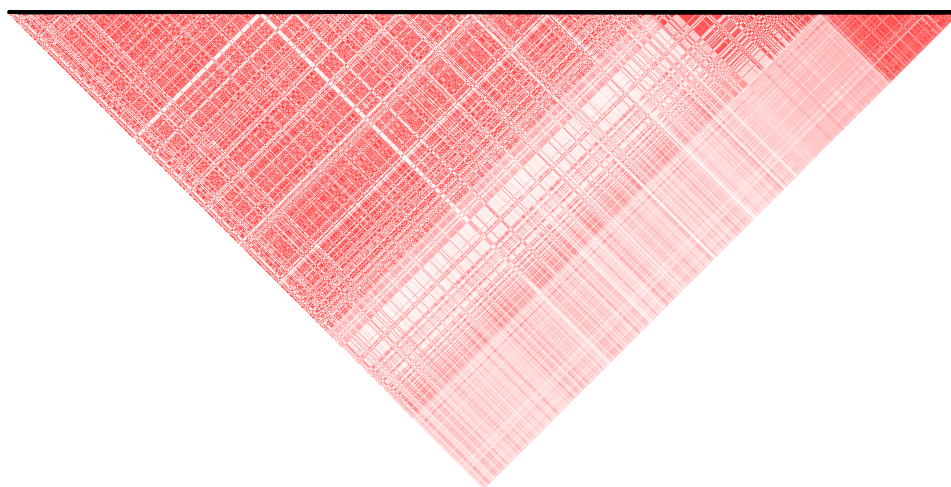


GWAS, eQTL and eCAVIAR results at *hppd1* for γ T3

A

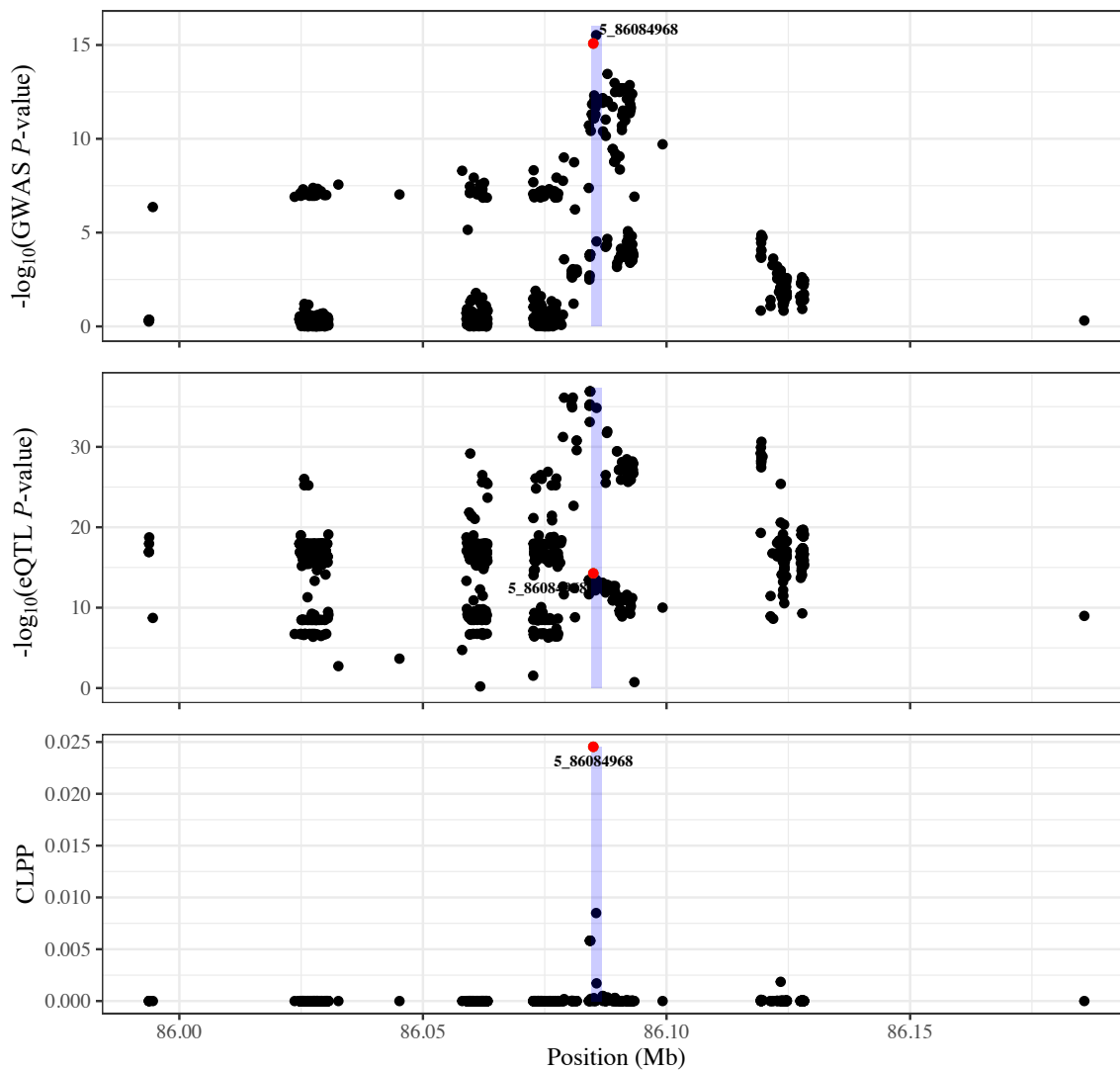


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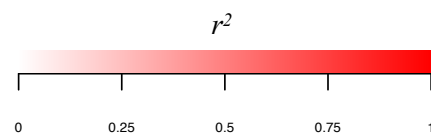
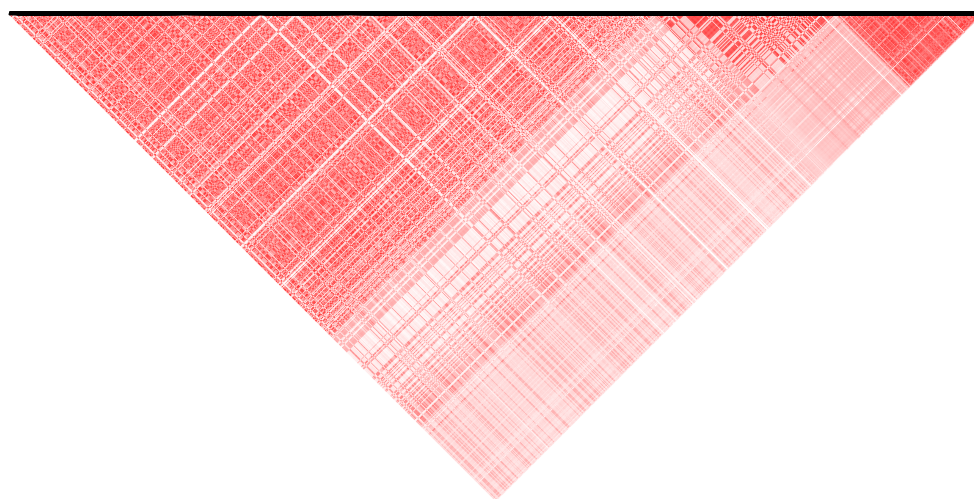


GWAS, eQTL and eCAVIAR results at *hppd1* for $\Sigma T3$

A

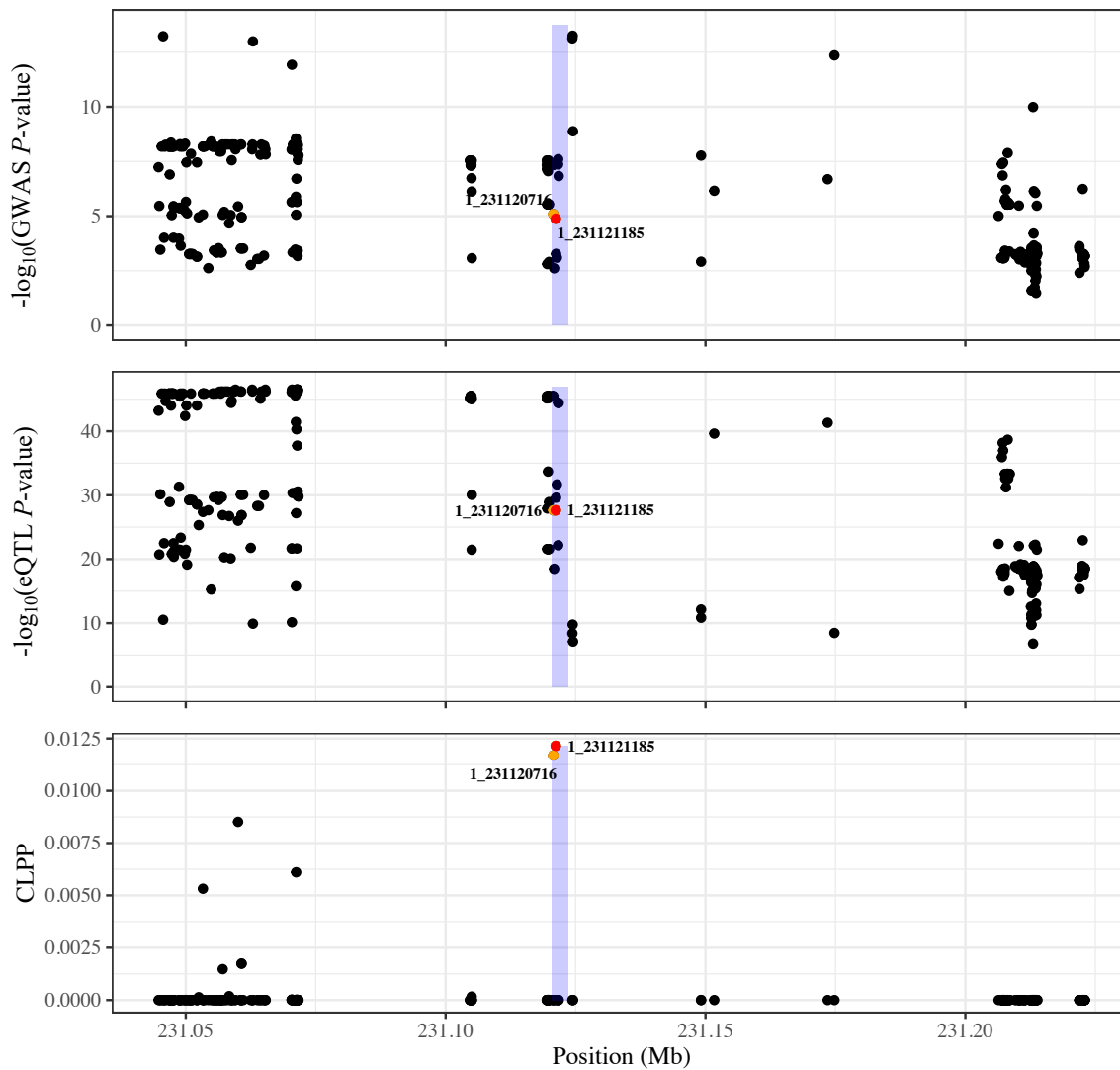


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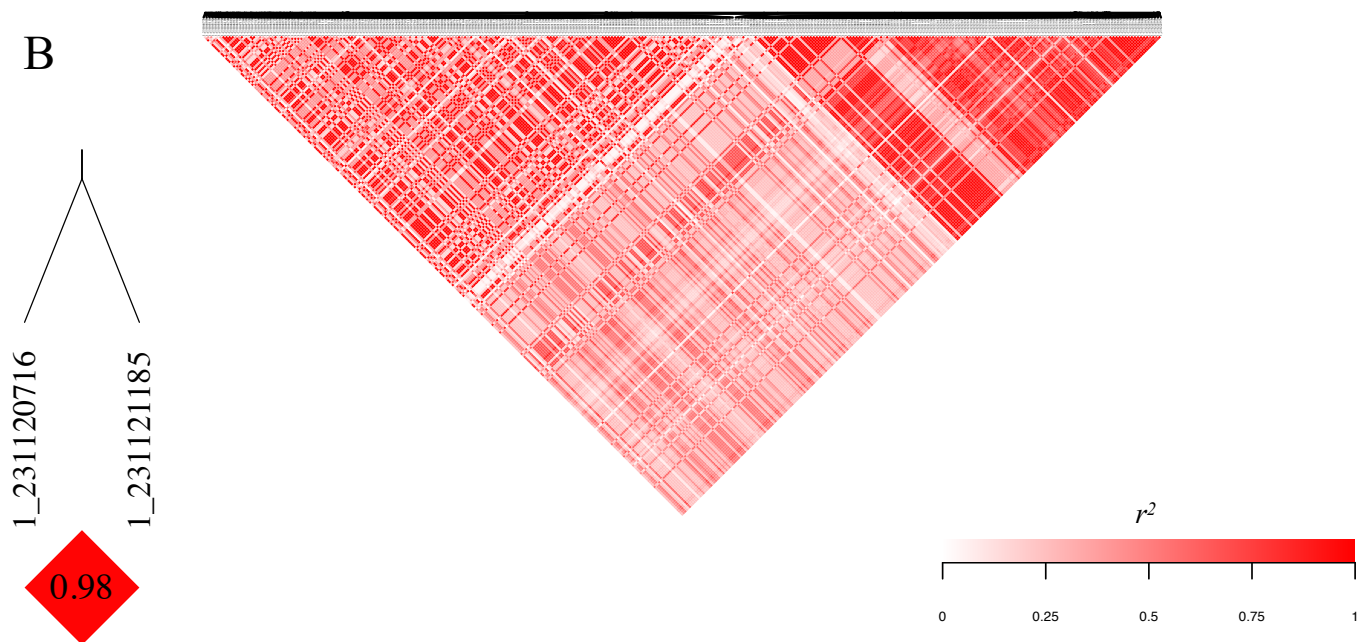


GWAS, eQTL and eCAVIAR results at *por1* for ΣT

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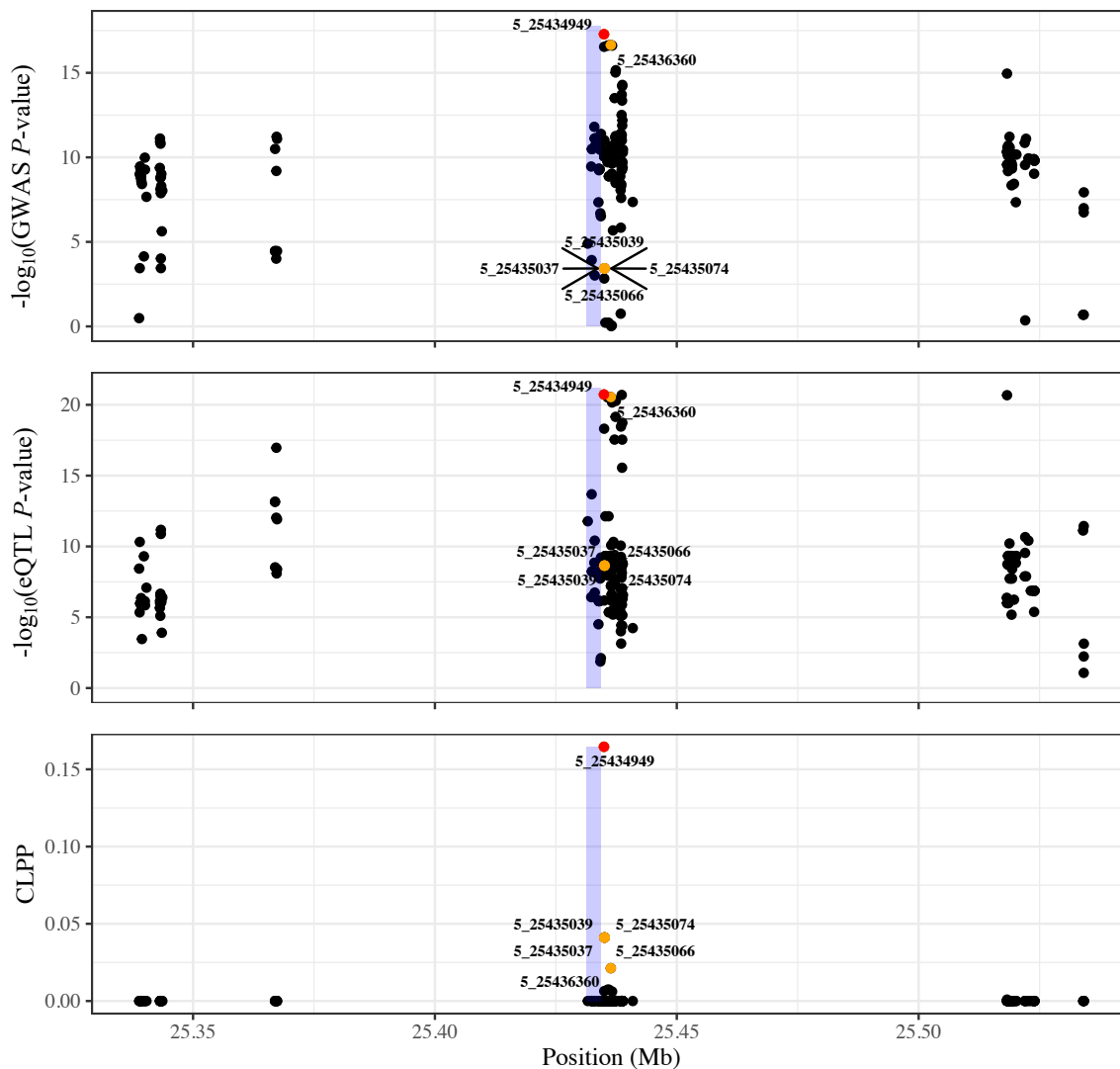


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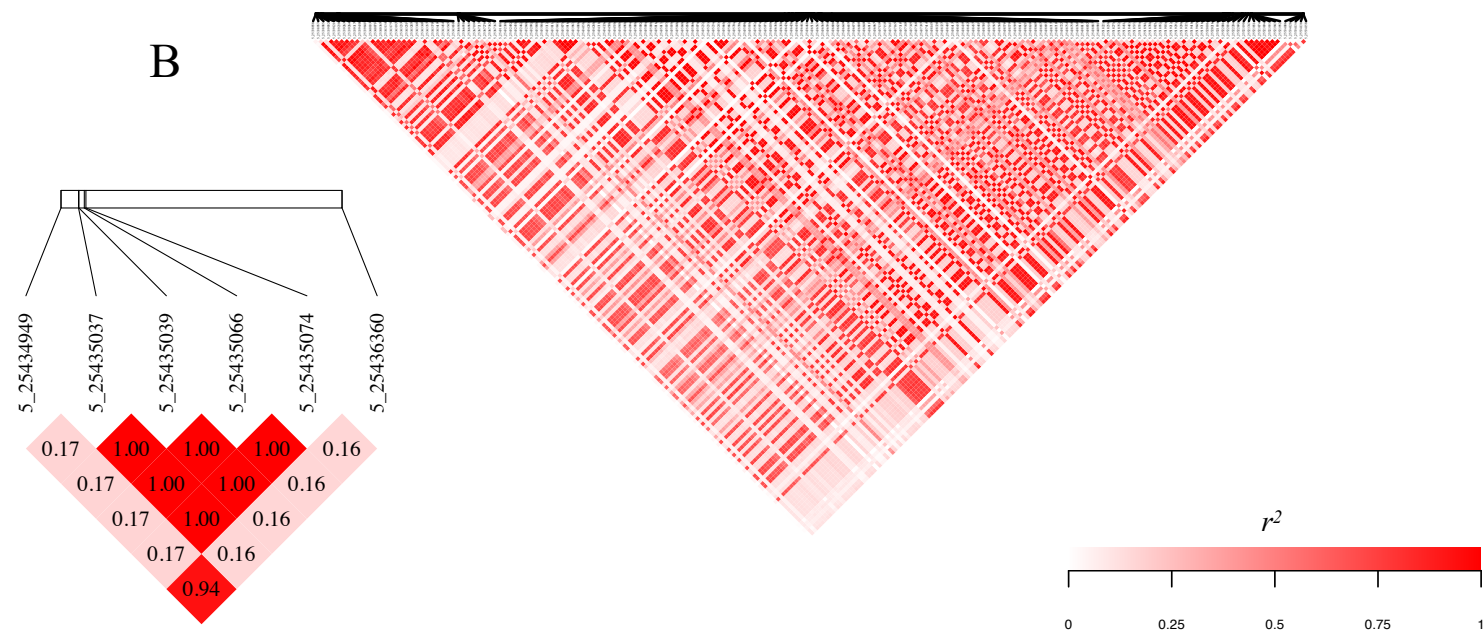


GWAS, eQTL and eCAVIAR results at *por2* for γ T

A

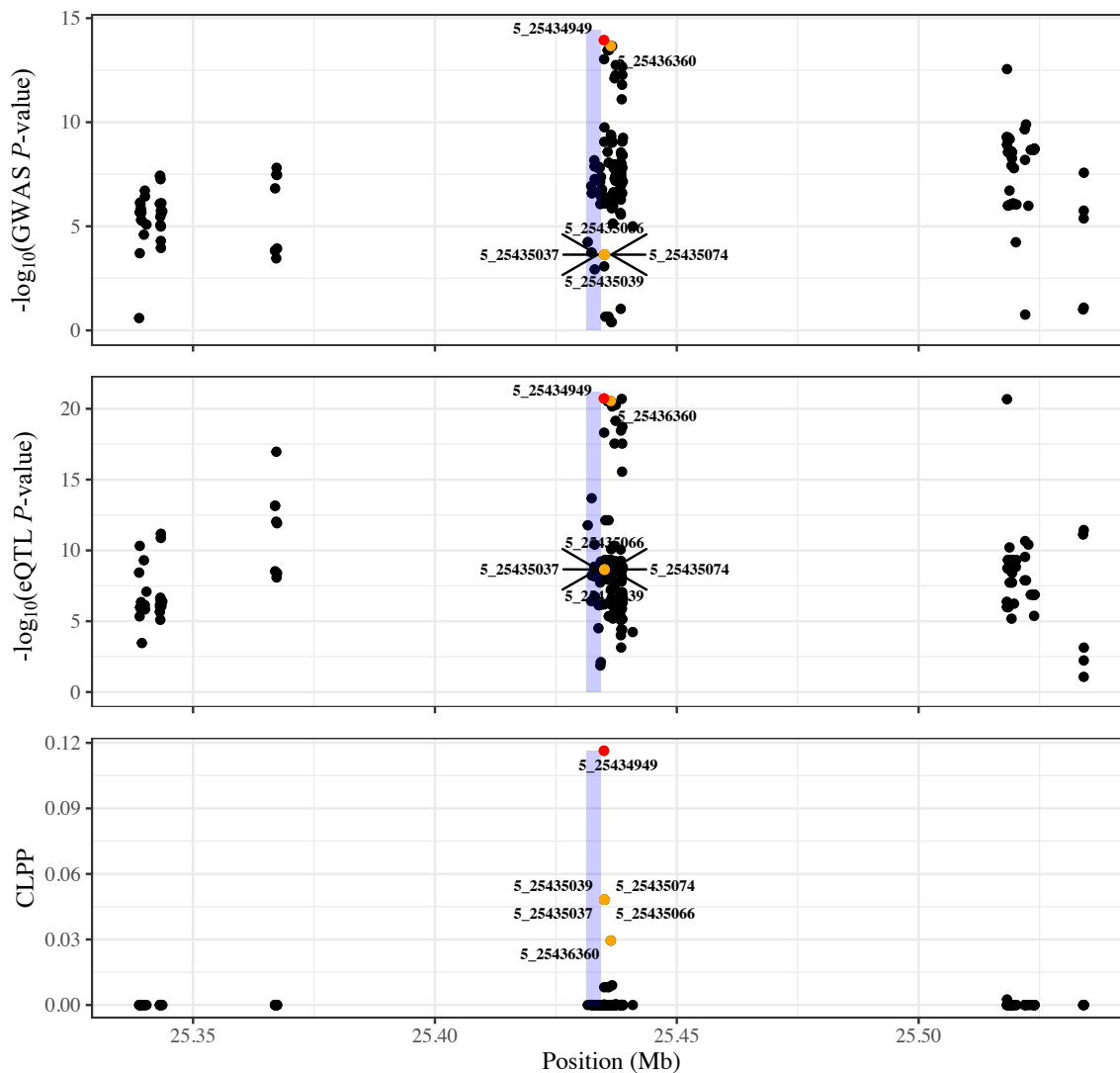


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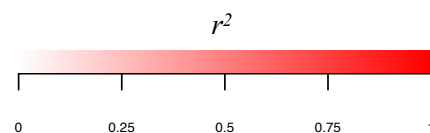
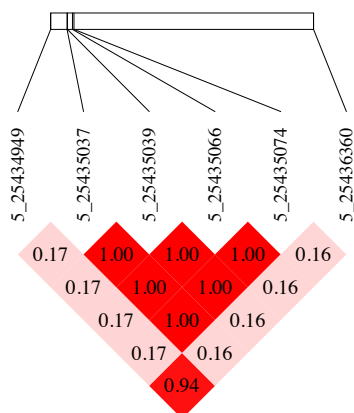
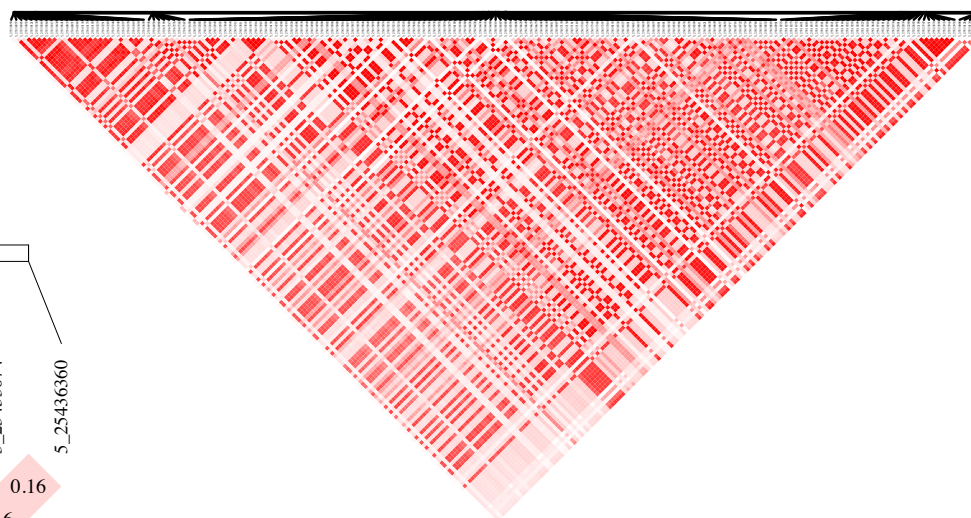


GWAS, eQTL and eCAVIAR results at *por2* for Σ TT3

A

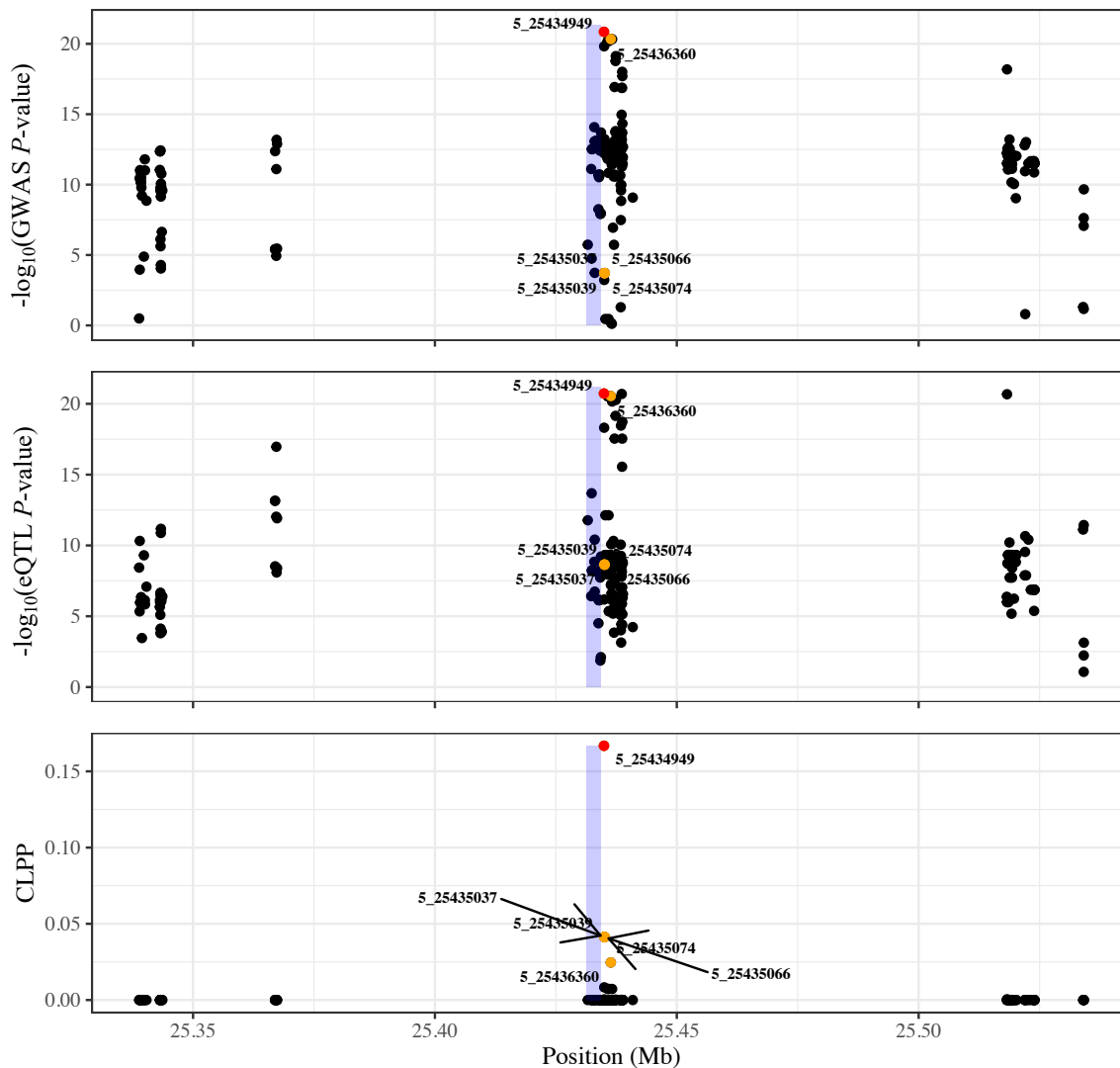


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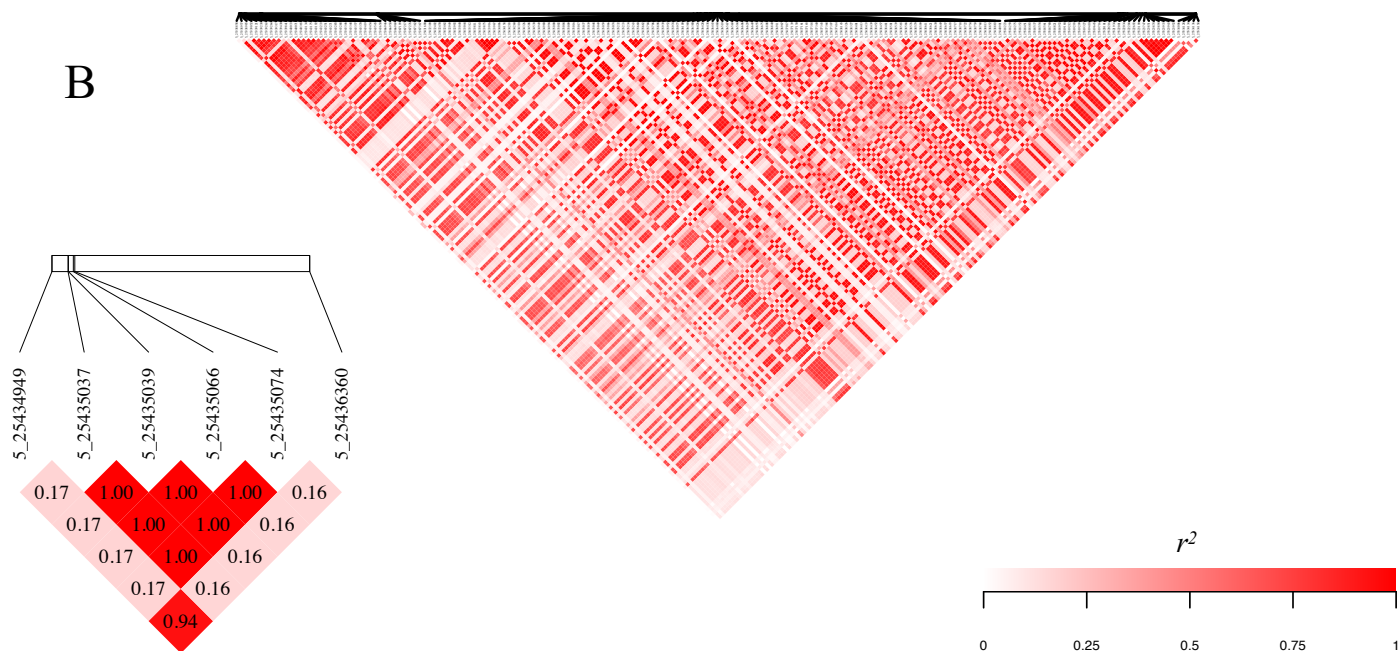


GWAS, eQTL and eCAVIAR results at *por2* for ΣT

A

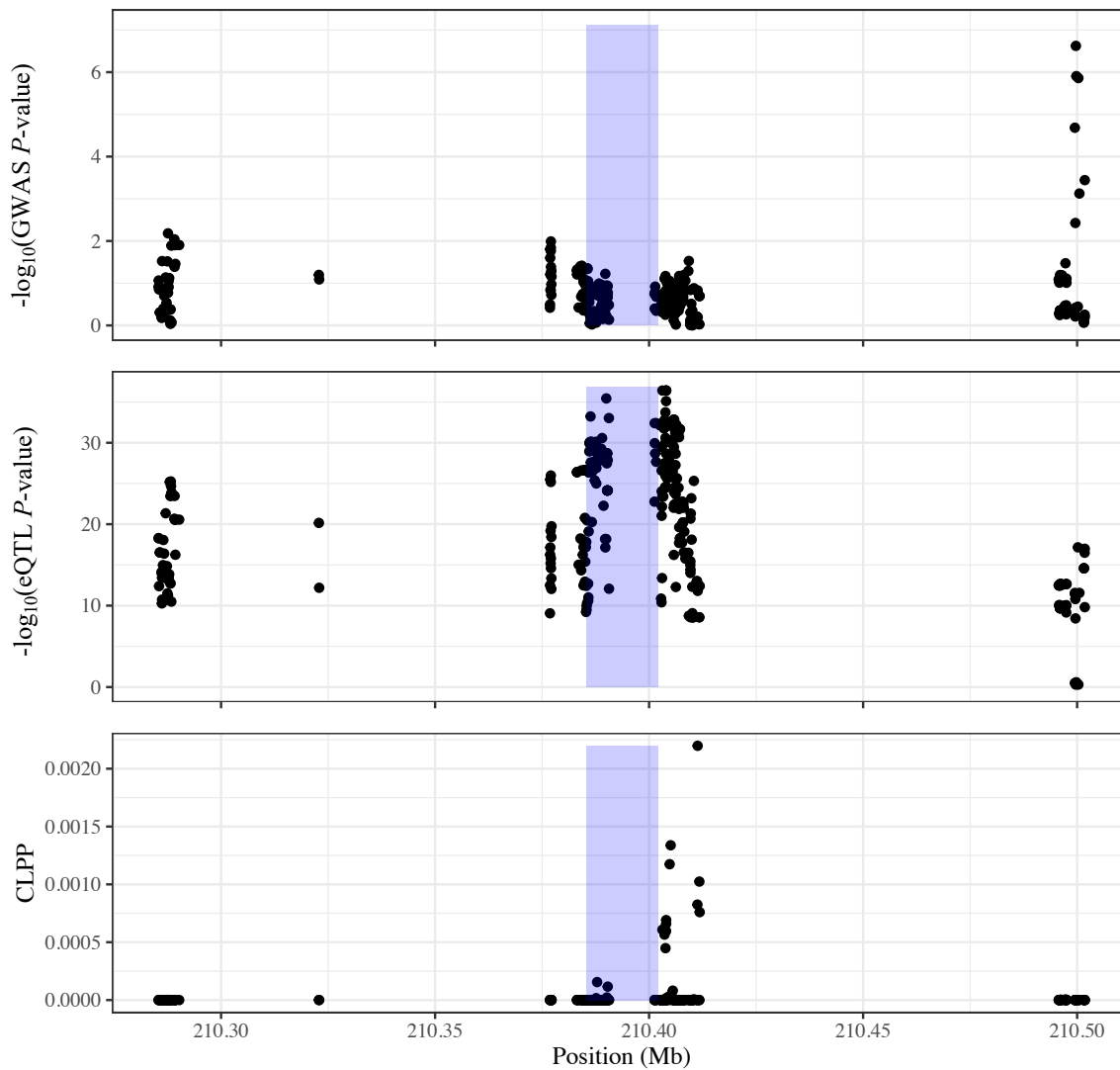


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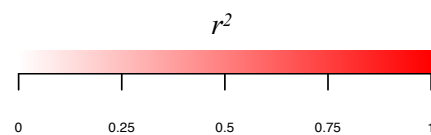
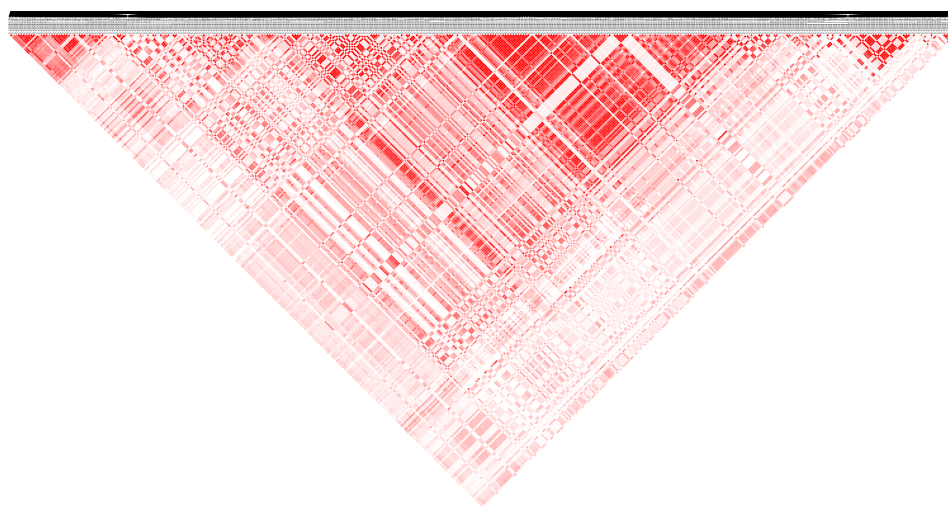


GWAS, eQTL and eCAVIAR results at *samt1* for α T3

A

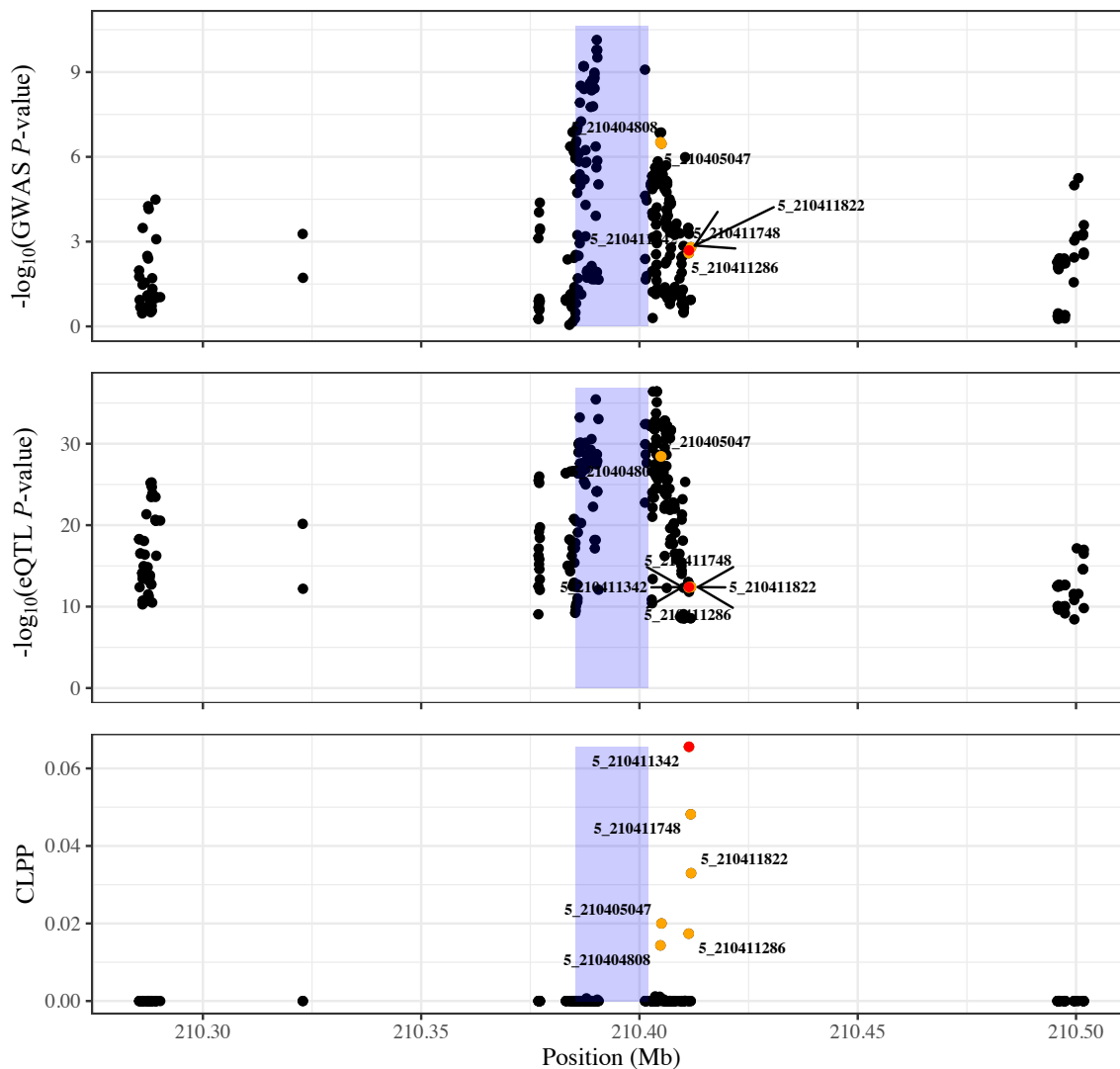


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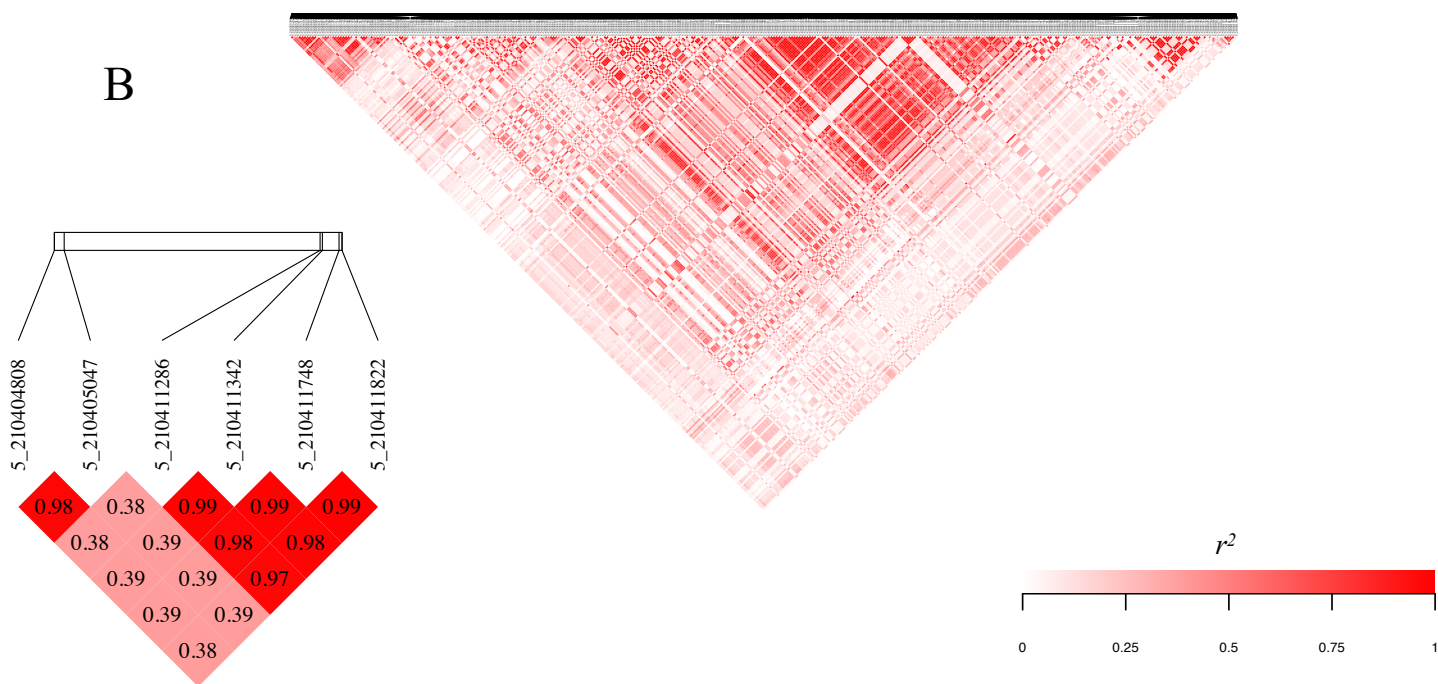


GWAS, eQTL and eCAVIAR results at *samt1* for δT

A

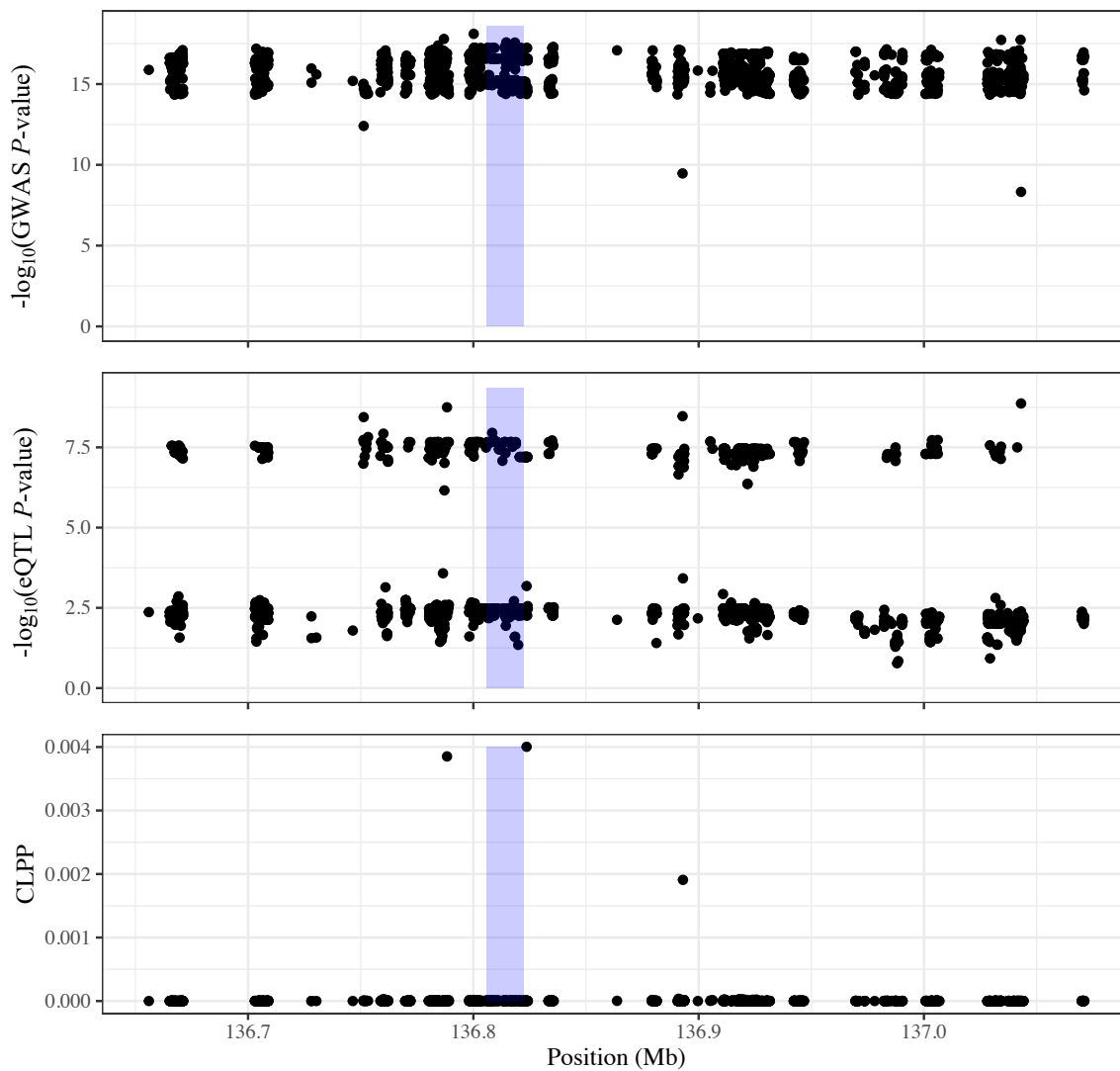


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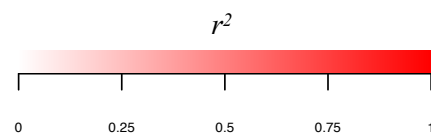
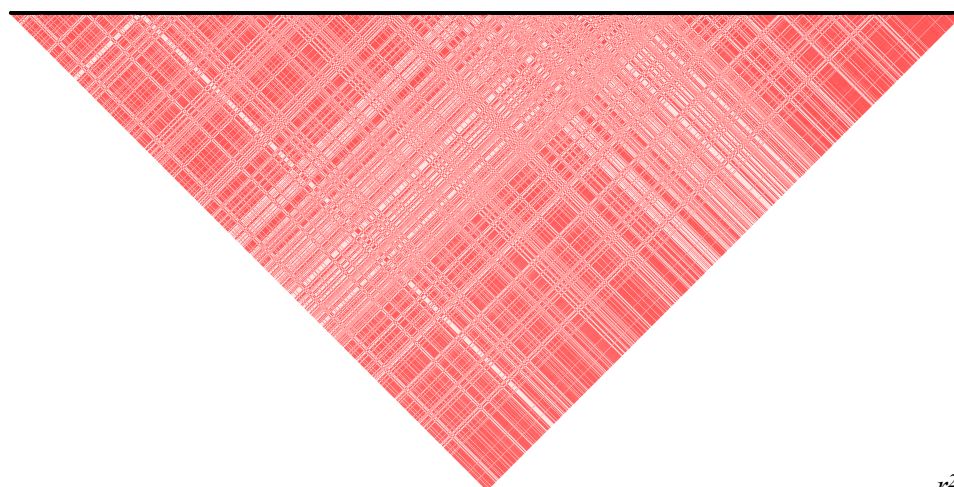


GWAS, eQTL and eCAVIAR results at *vte1* for $\delta T3$

A

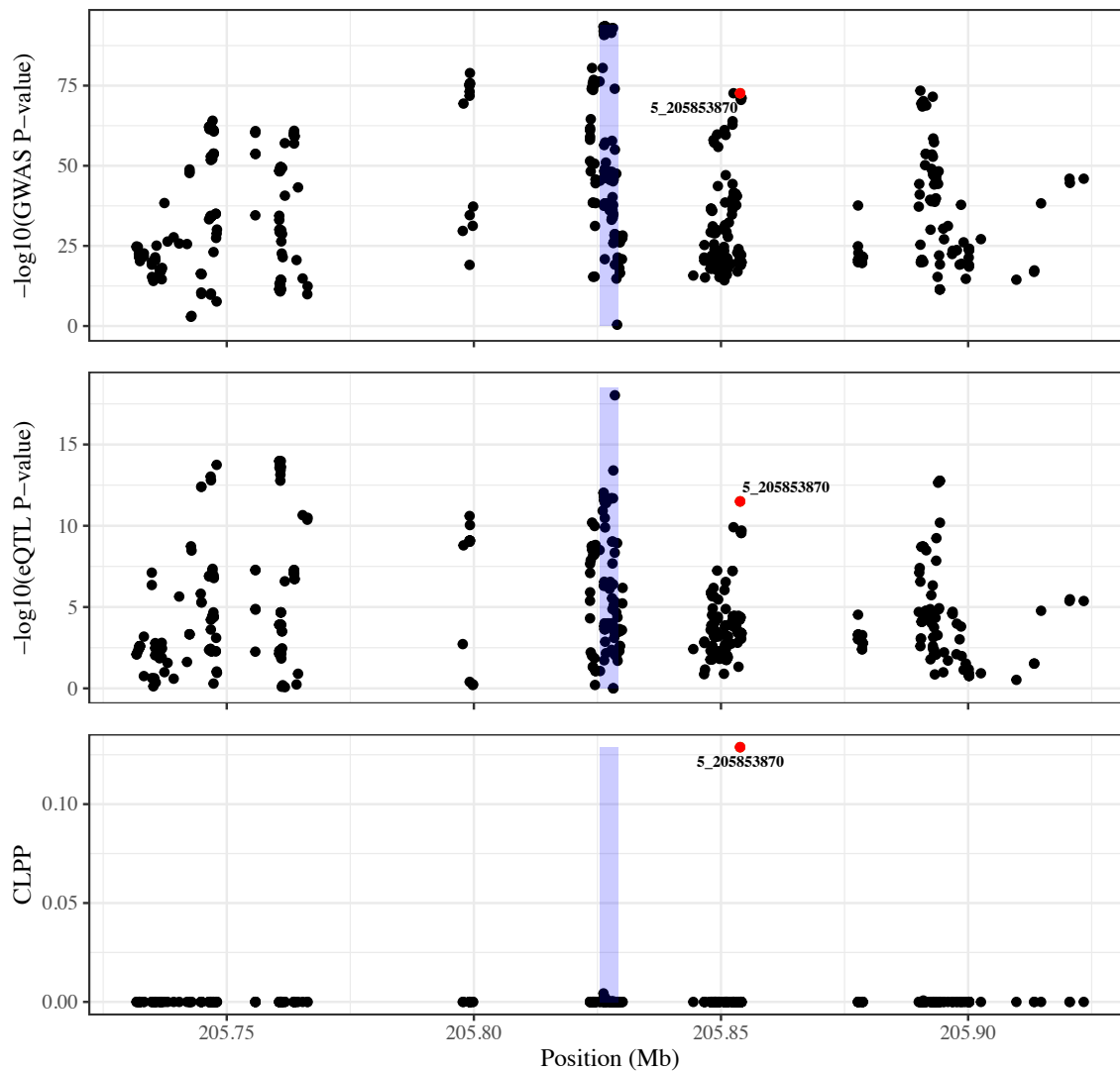


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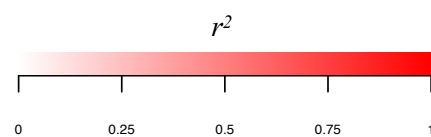
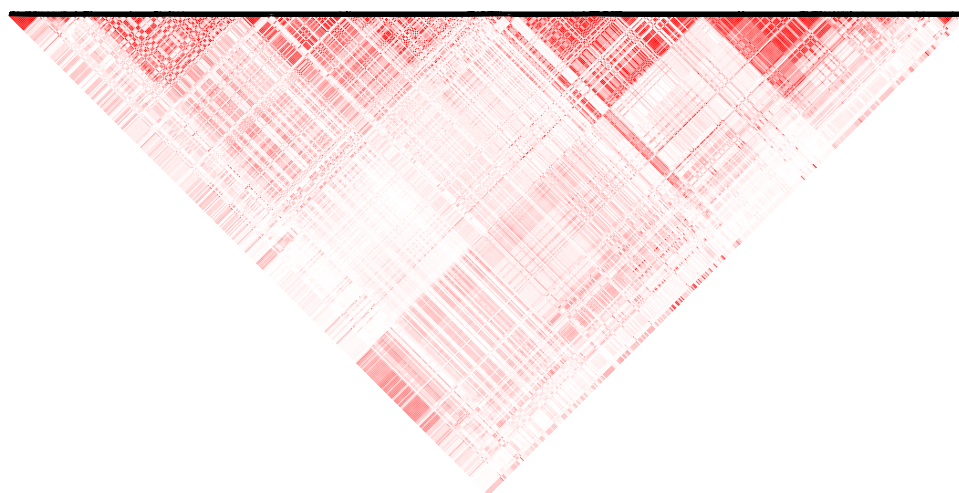


GWAS, eQTL and eCAVIAR results at *vte4* for α T

A

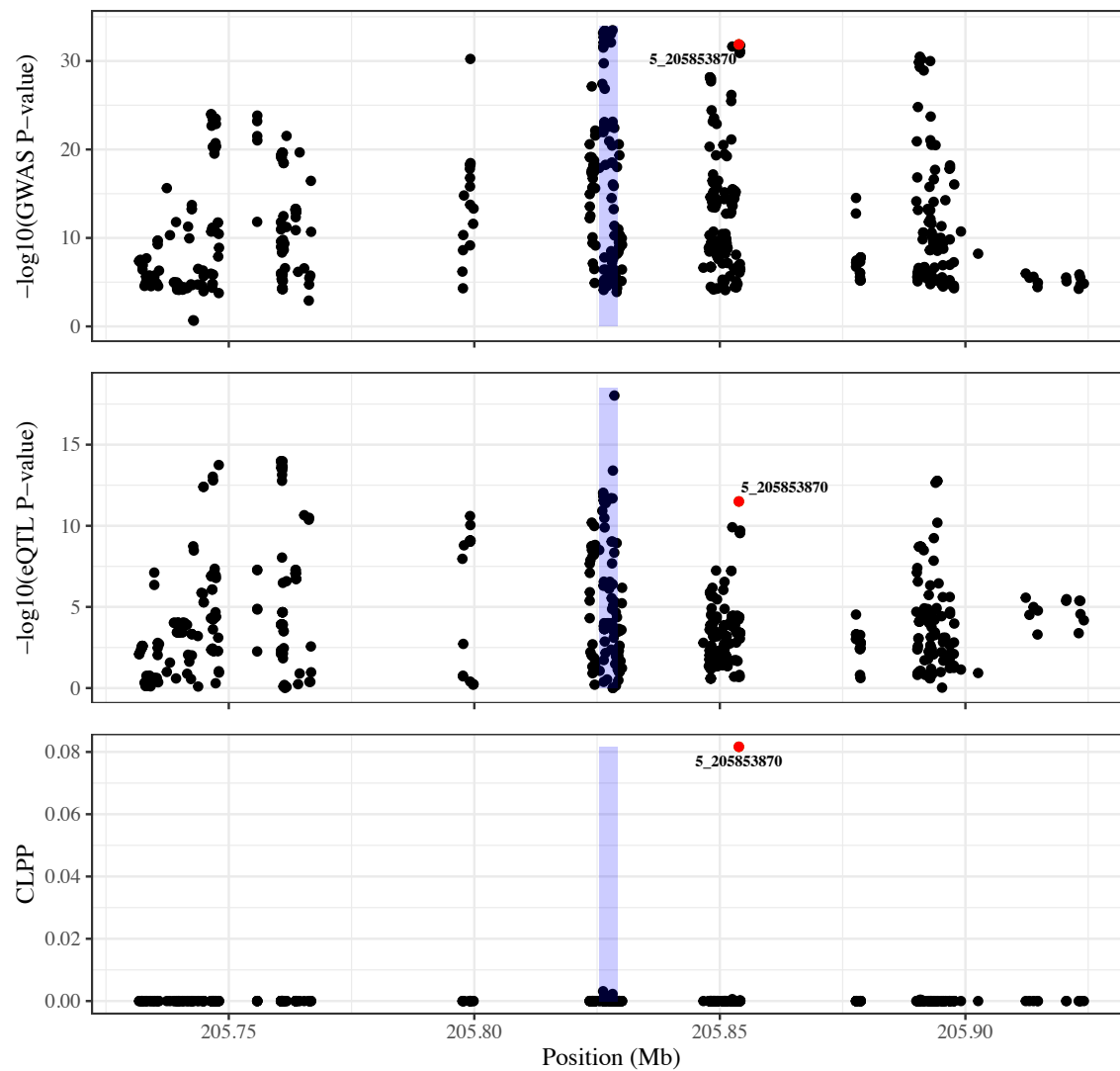


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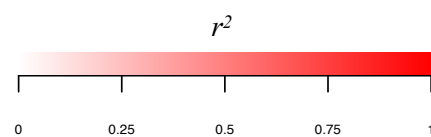
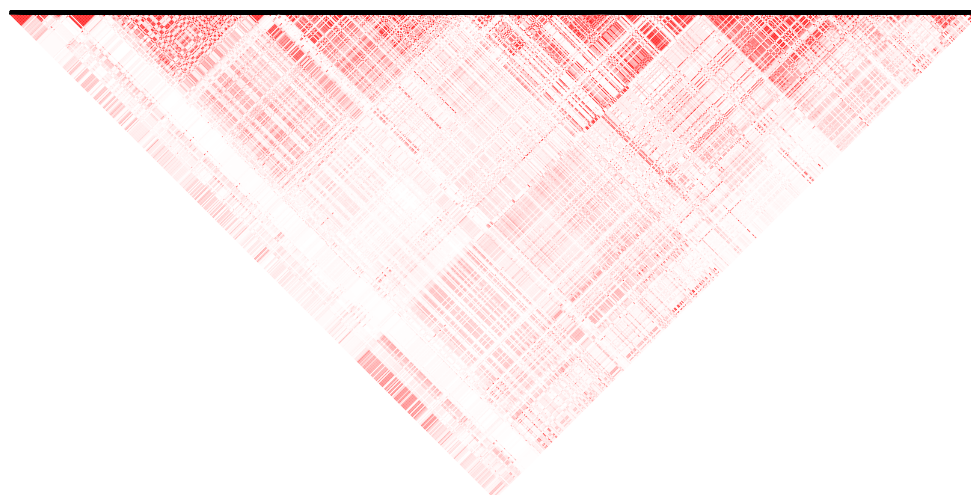


GWAS, eQTL and eCAVIAR results at *vte4* for α T3

A

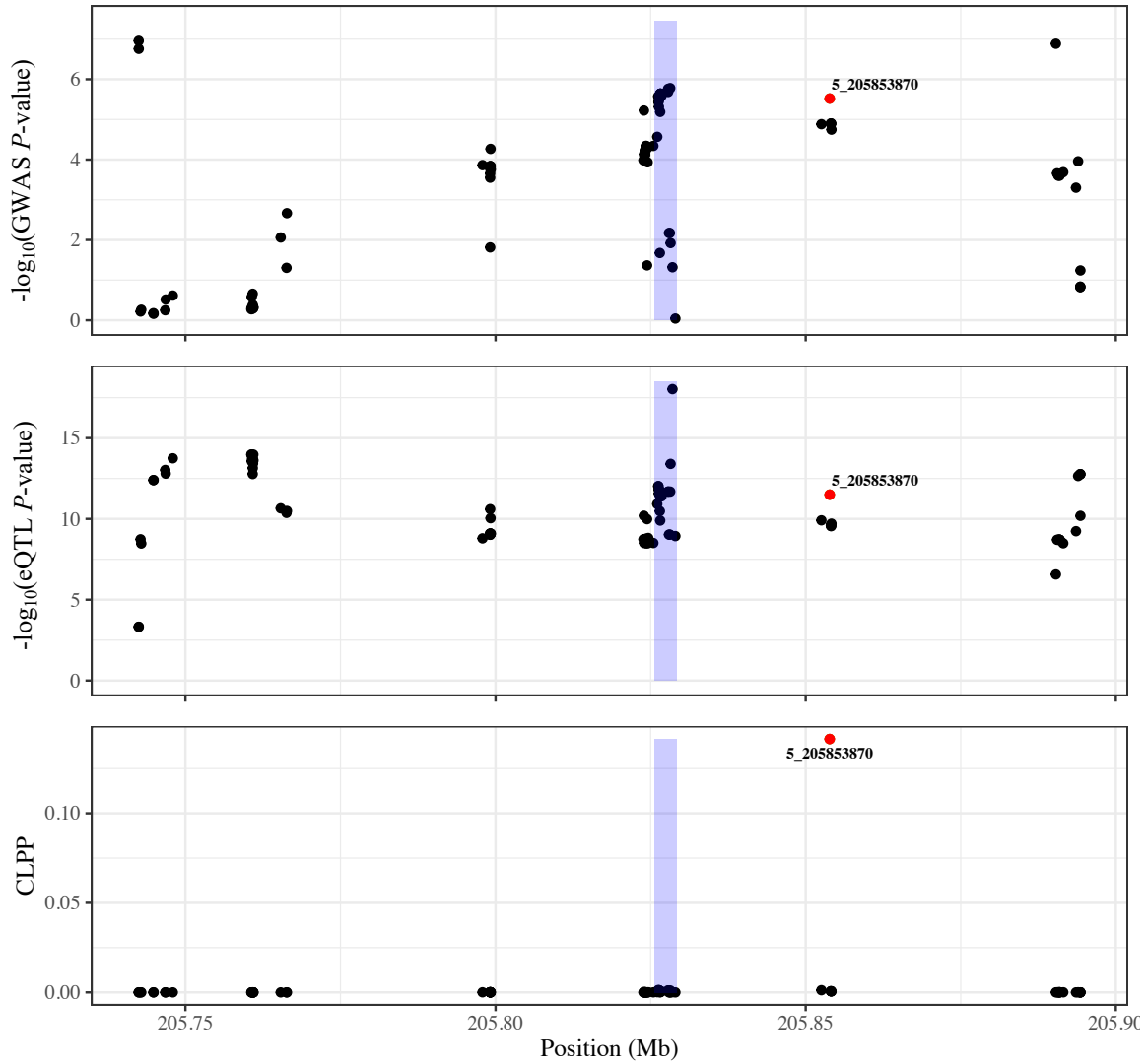


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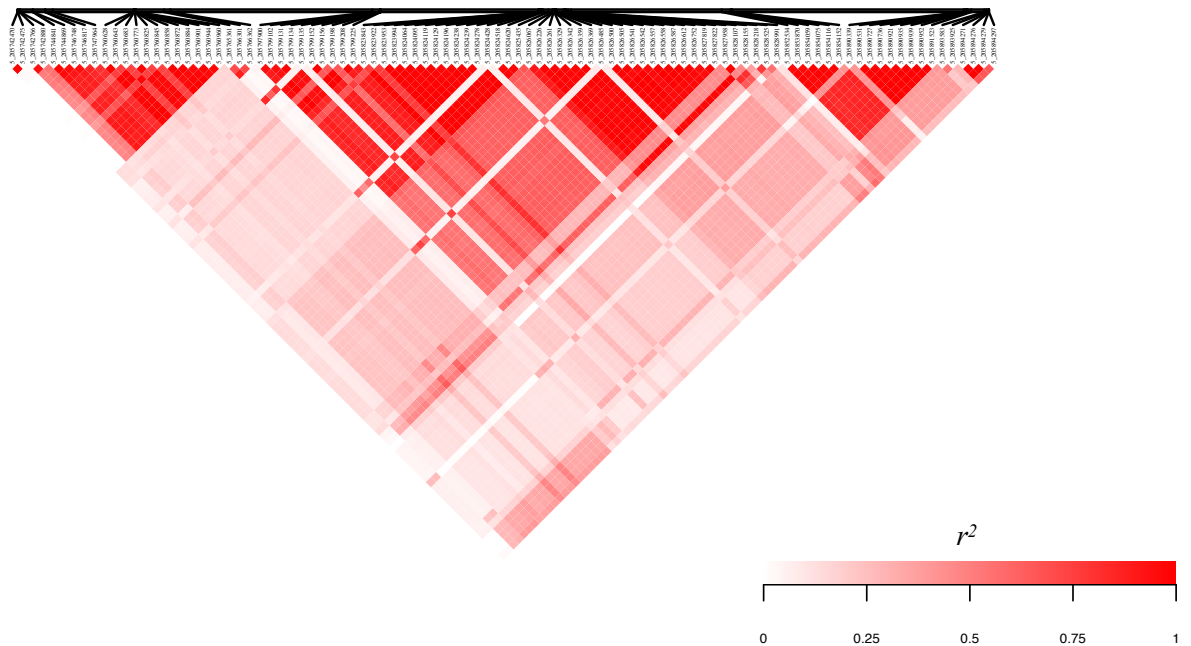


GWAS, eQTL and eCAVIAR results at *vte4* for δT

A

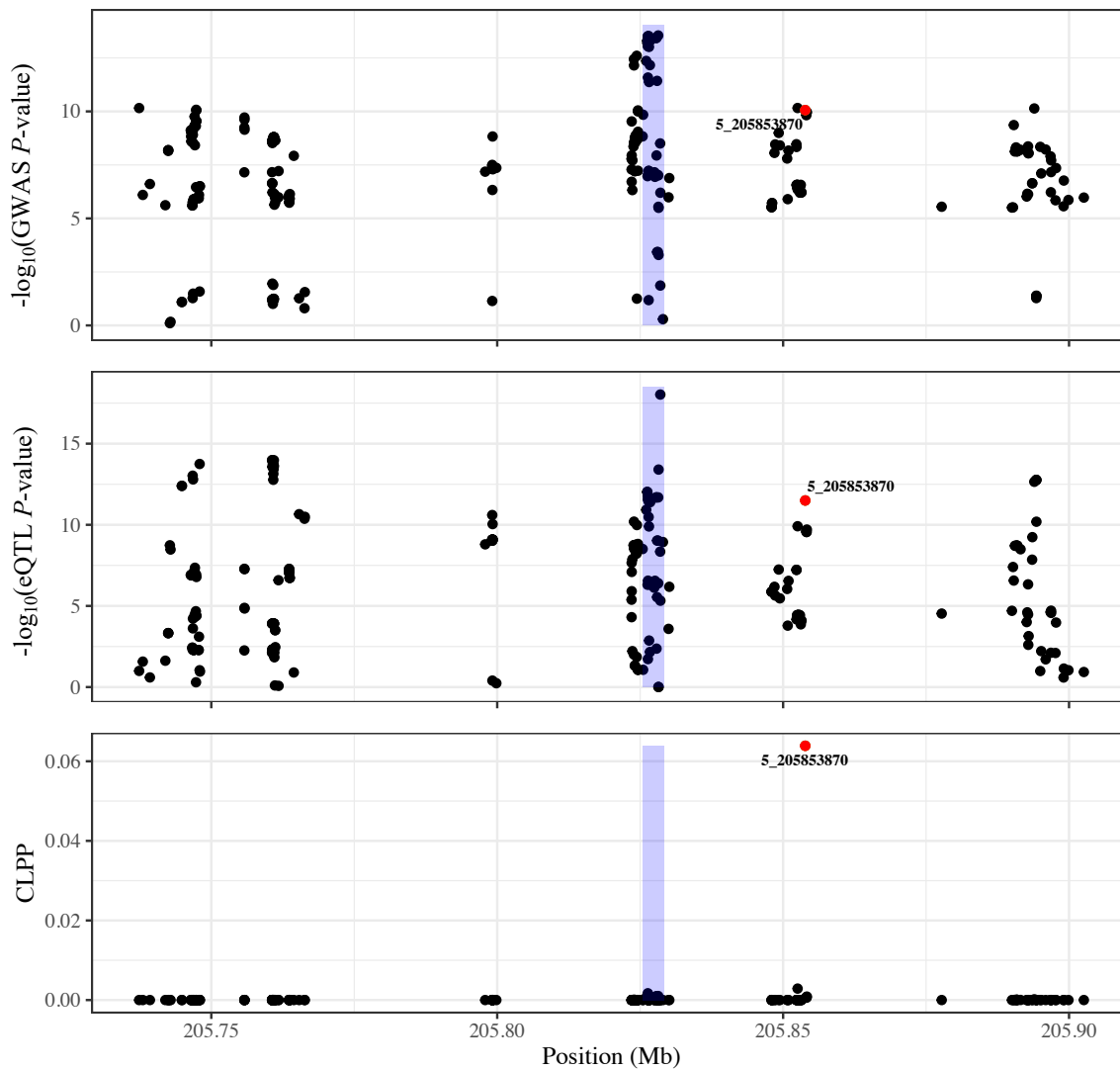


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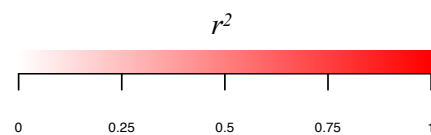
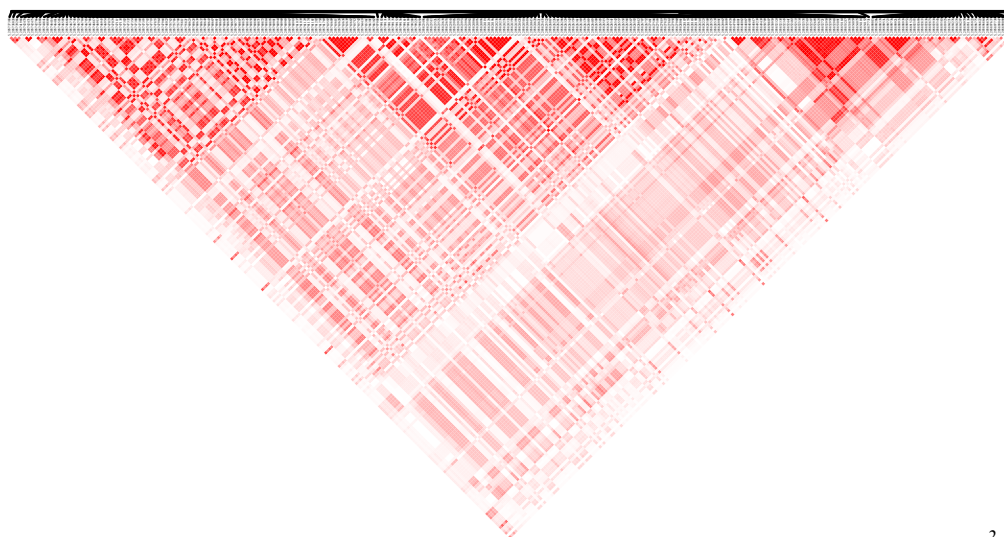


GWAS, eQTL and eCAVIAR results at *vte4* for γ T

A

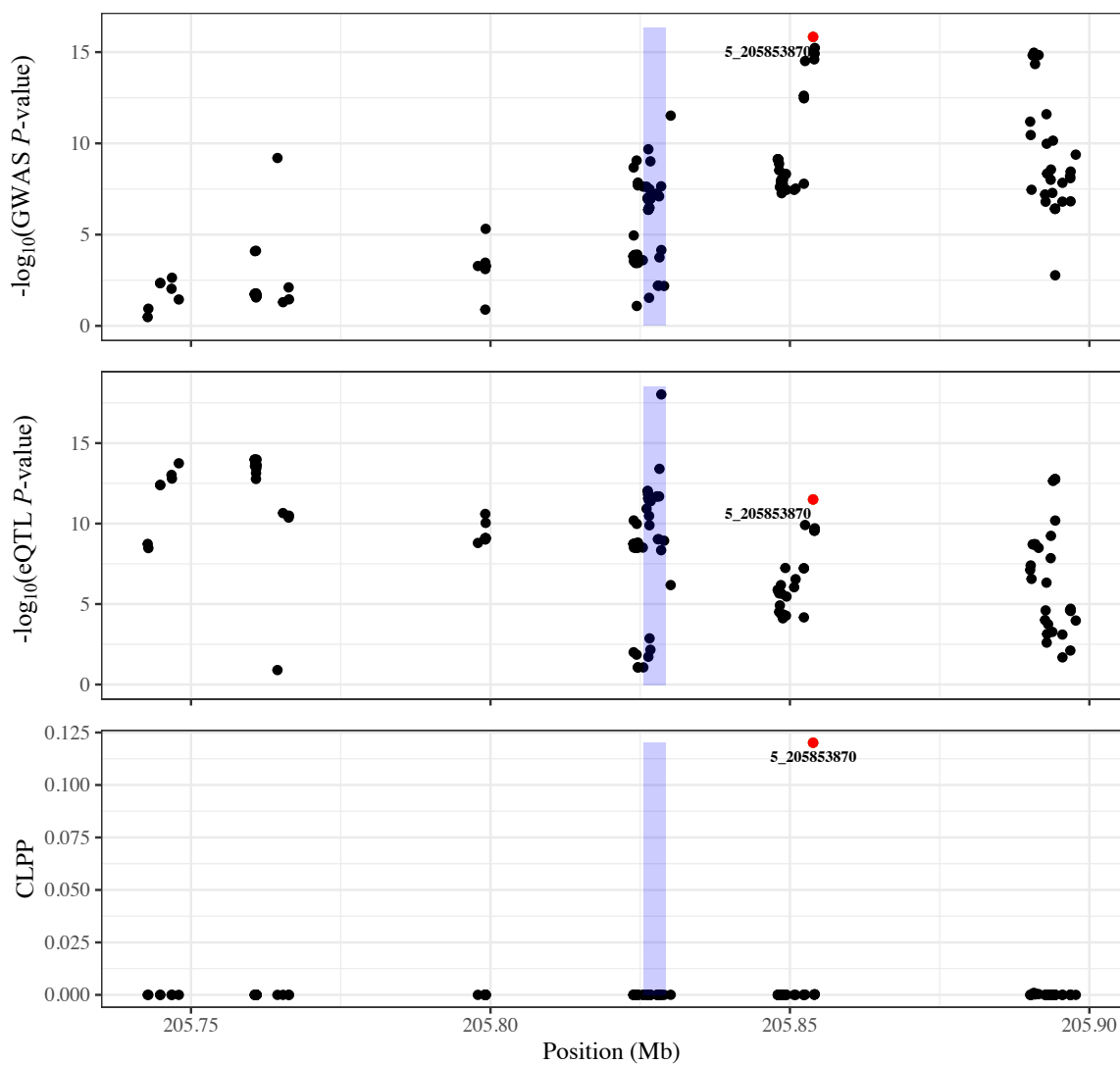


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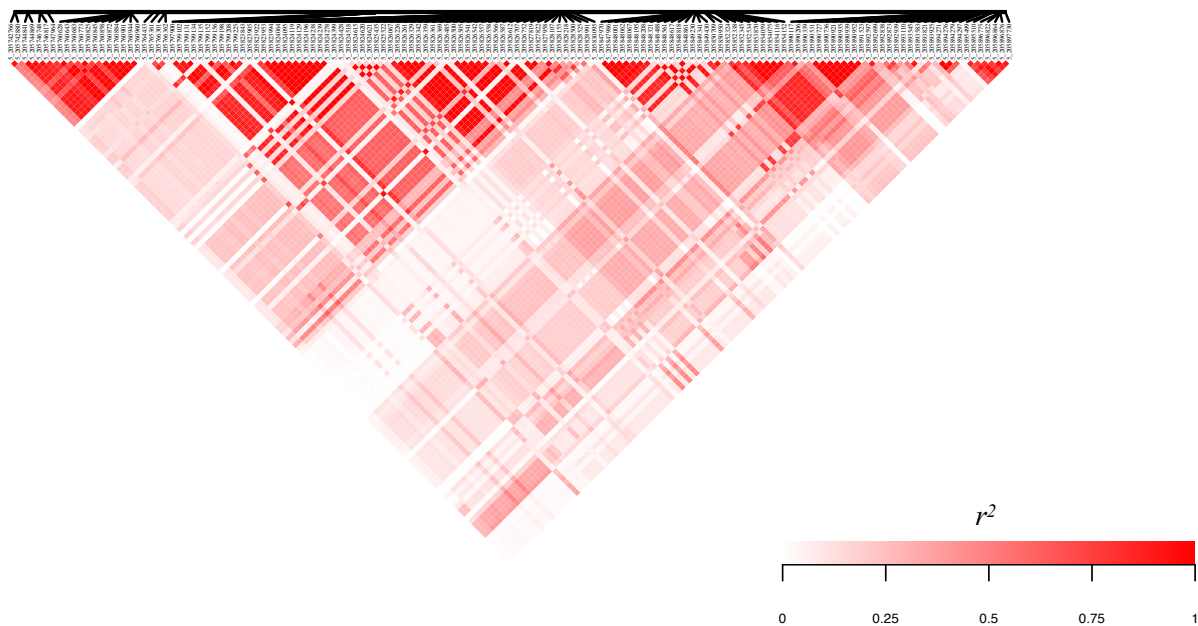


GWAS, eQTL and eCAVIAR results at *vte4* for γ T3

A

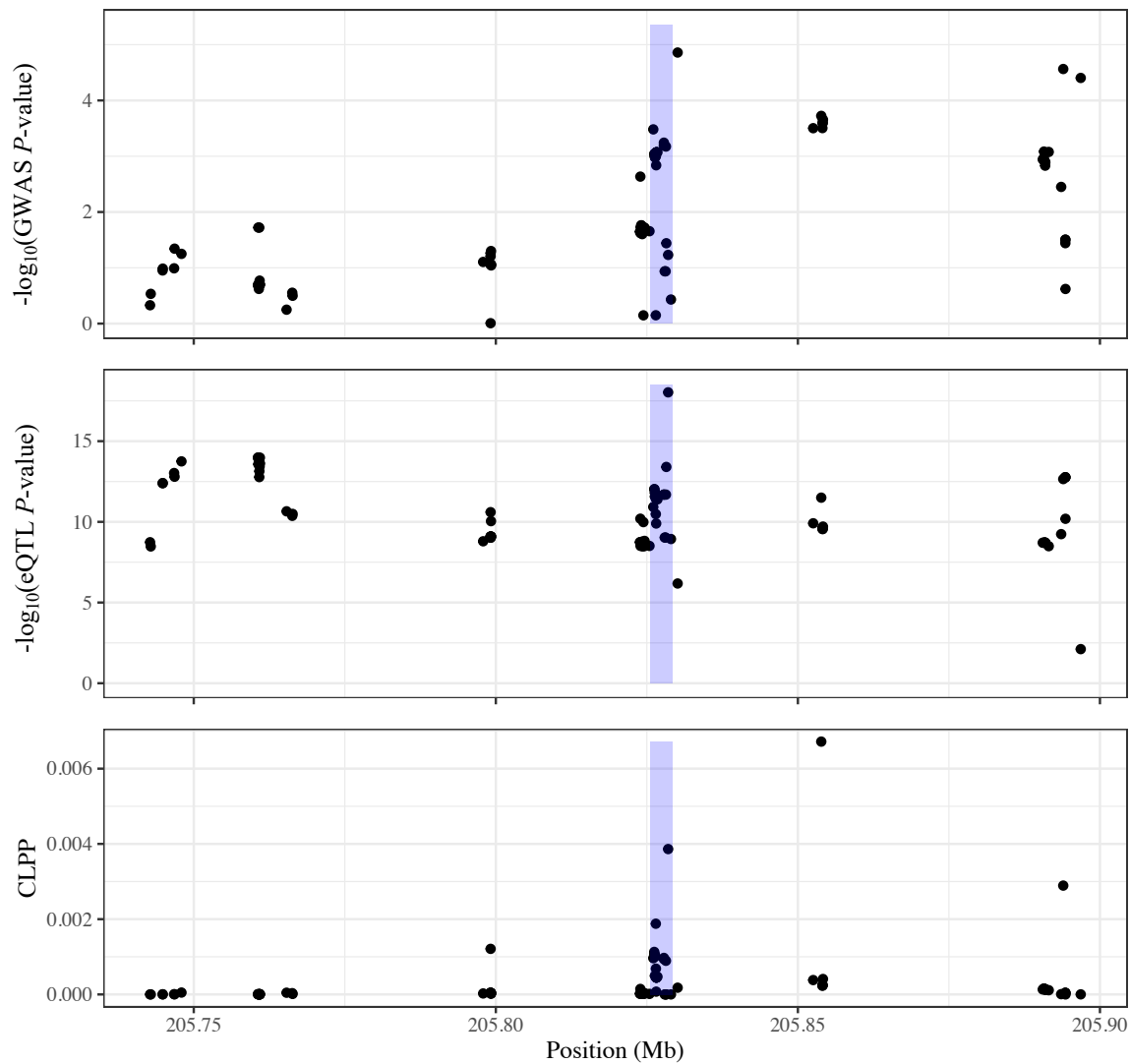


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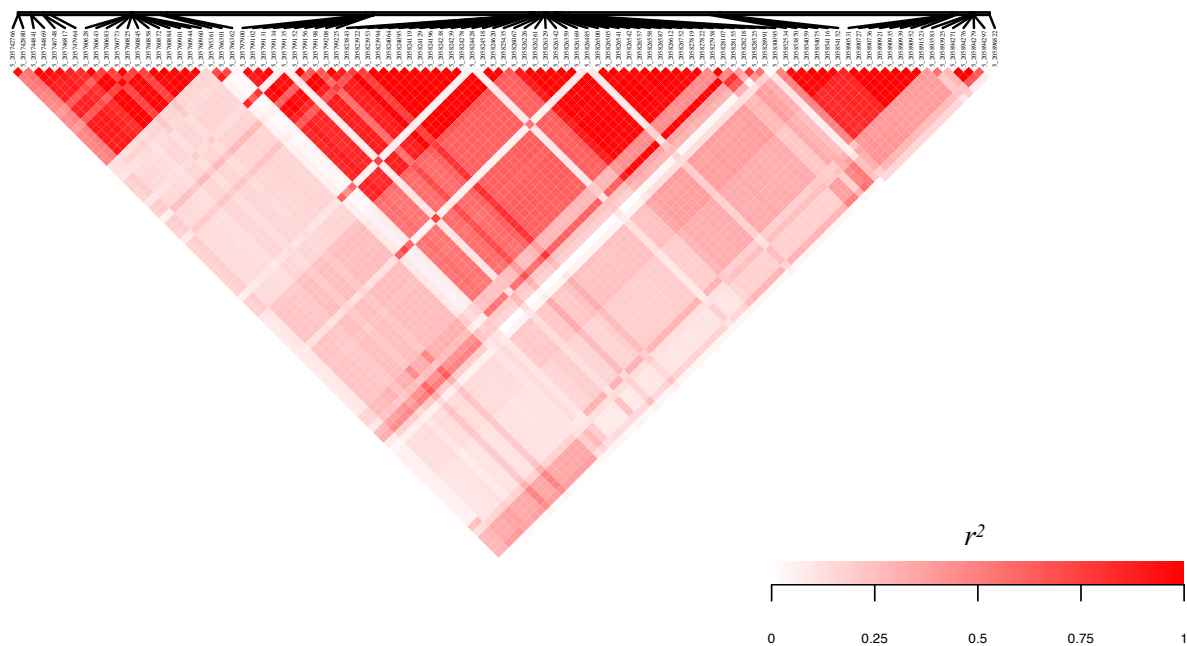


GWAS, eQTL and eCAVIAR results at *vte4* for $\Sigma T3$

A

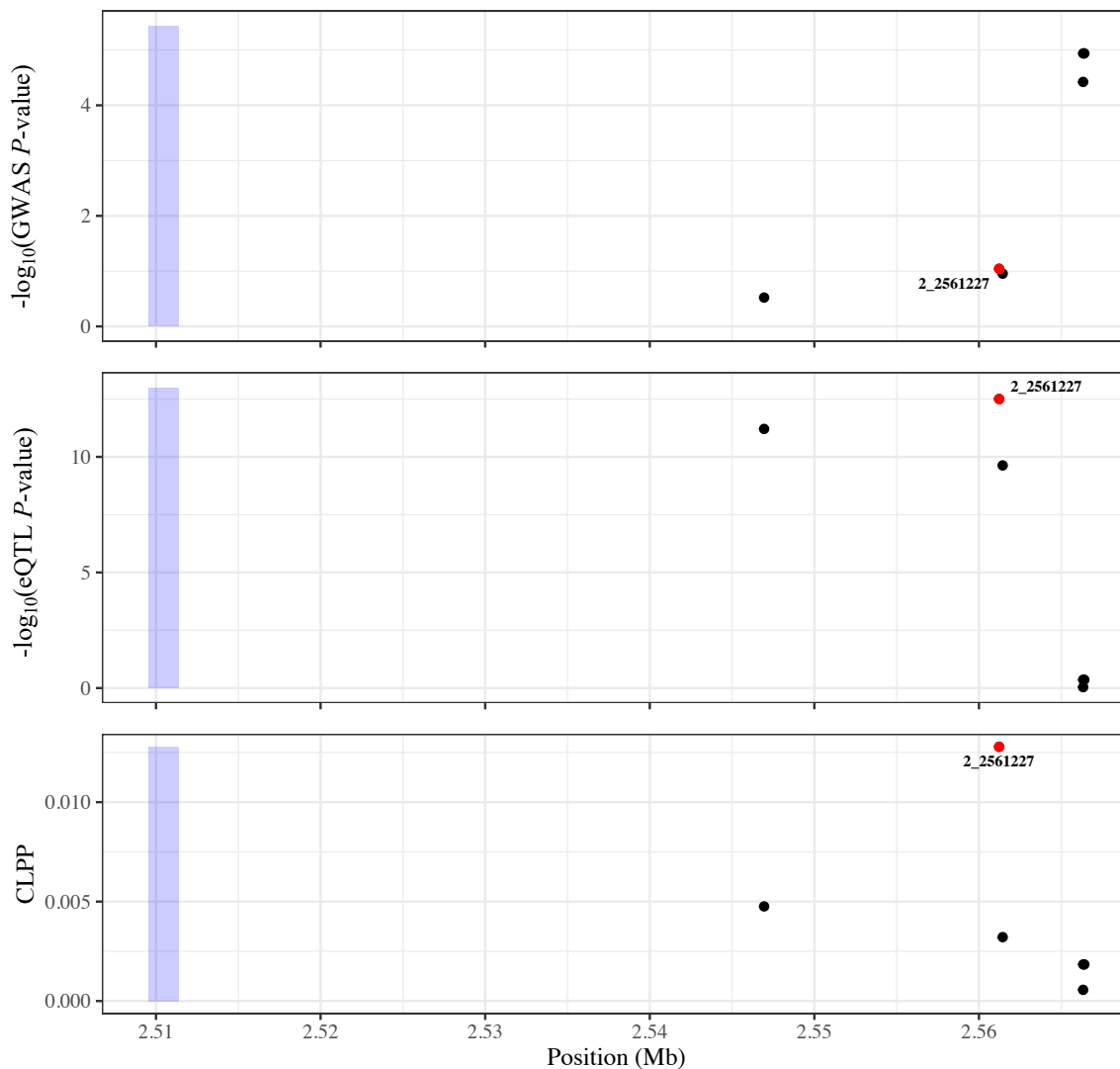


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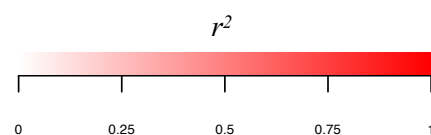
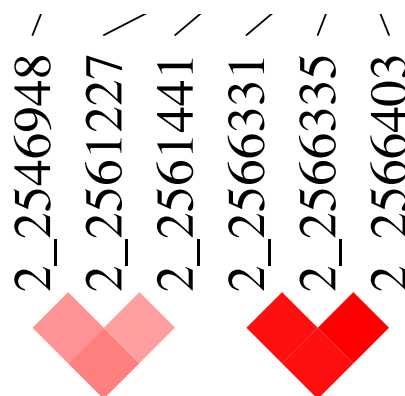


GWAS, eQTL and eCAVIAR results at *vte5* for $\Sigma T T 3$

A

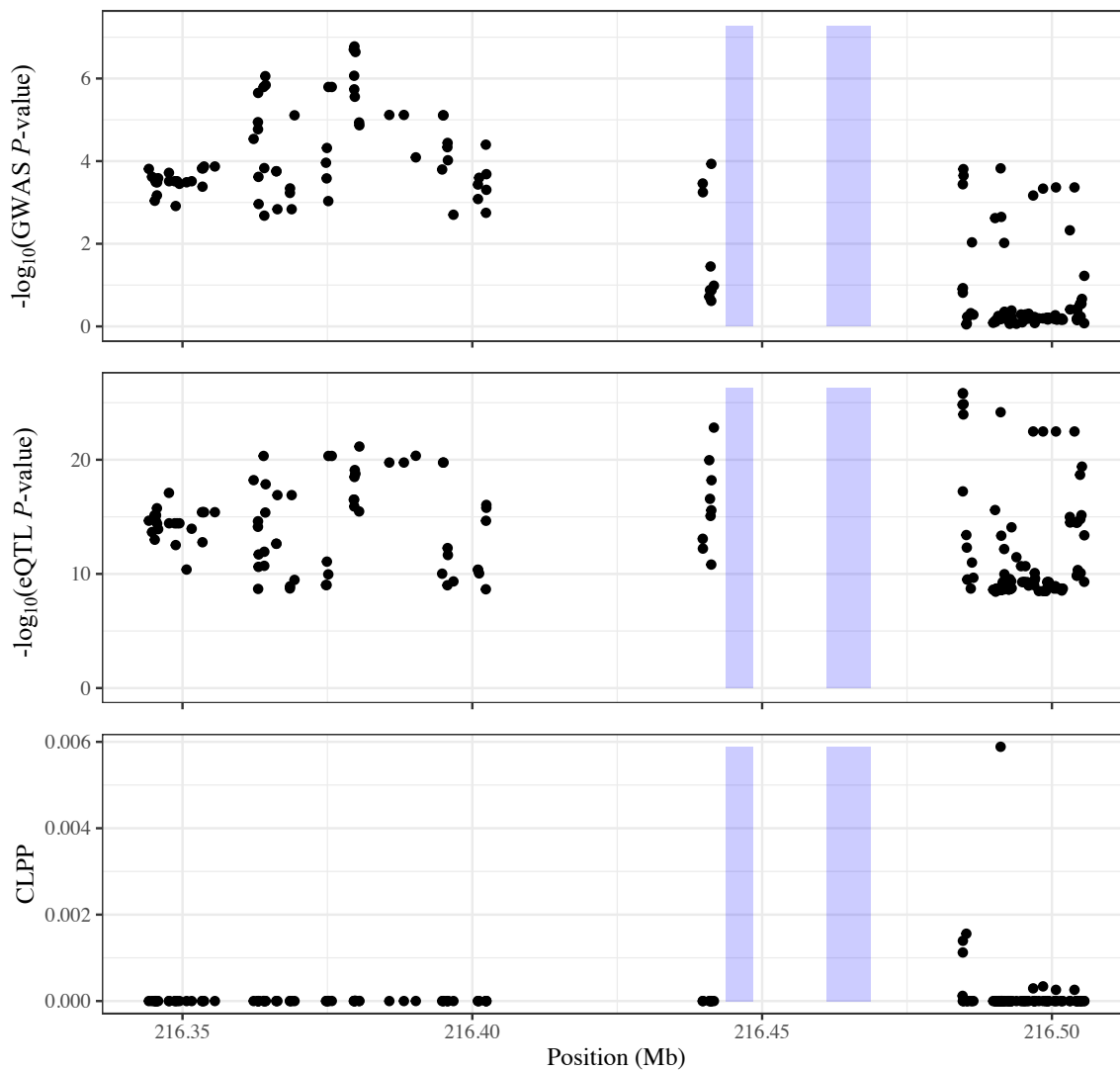


B



GWAS, eQTL and eCAVIAR results at *vte7* for δT

A



B

