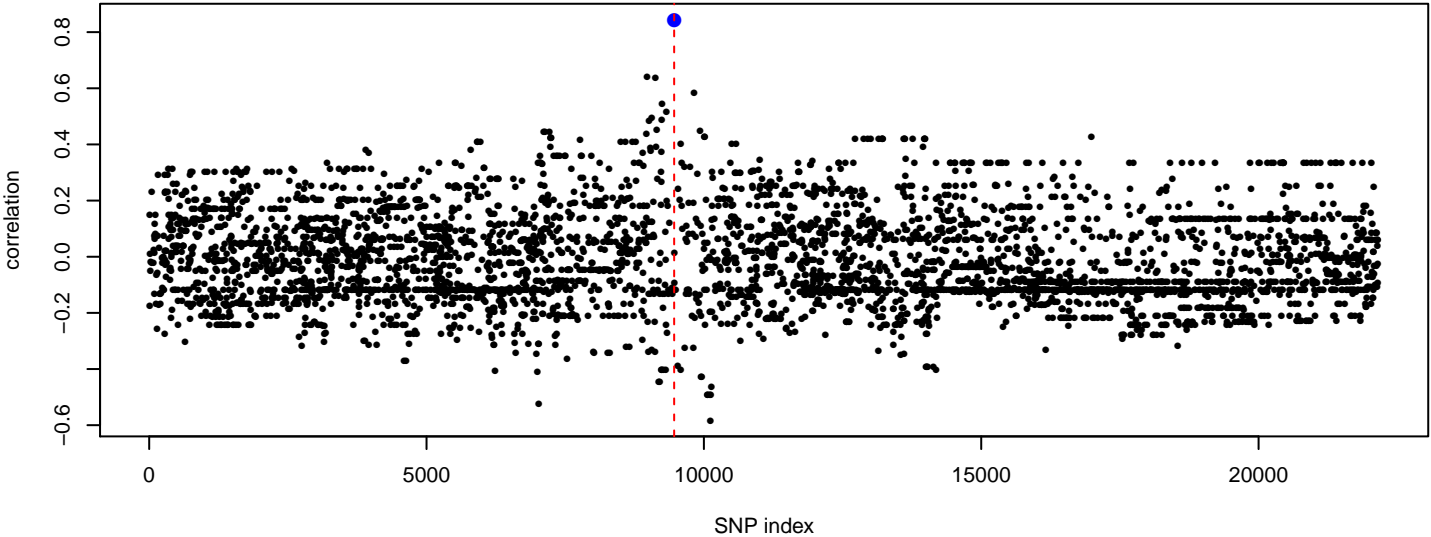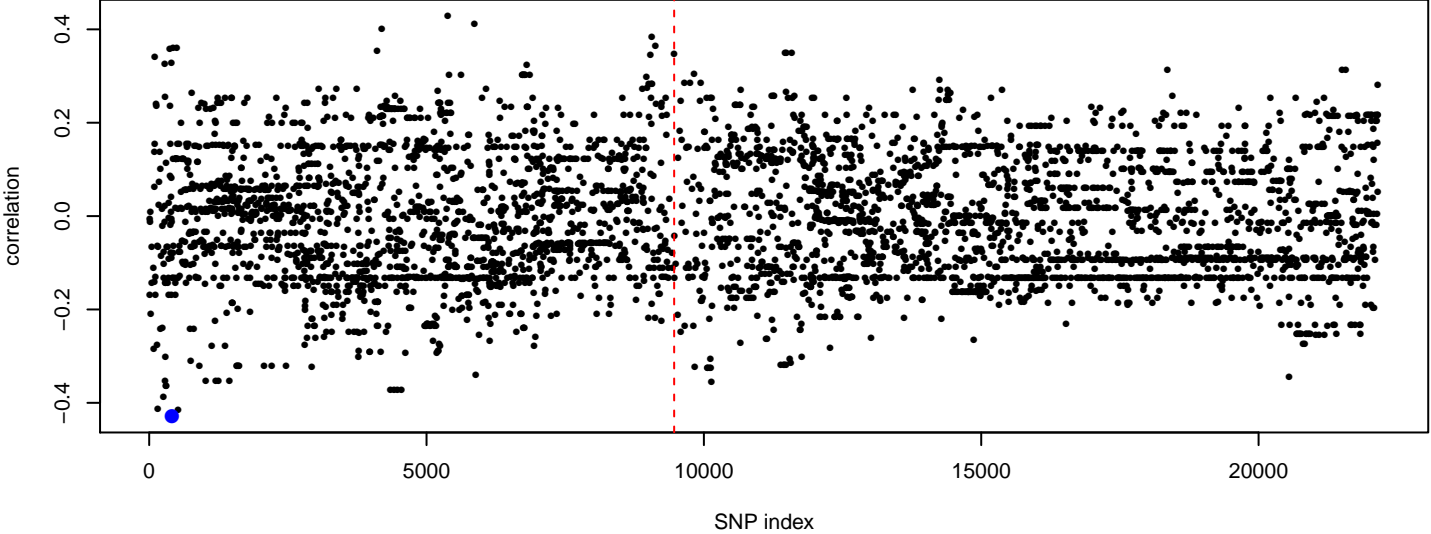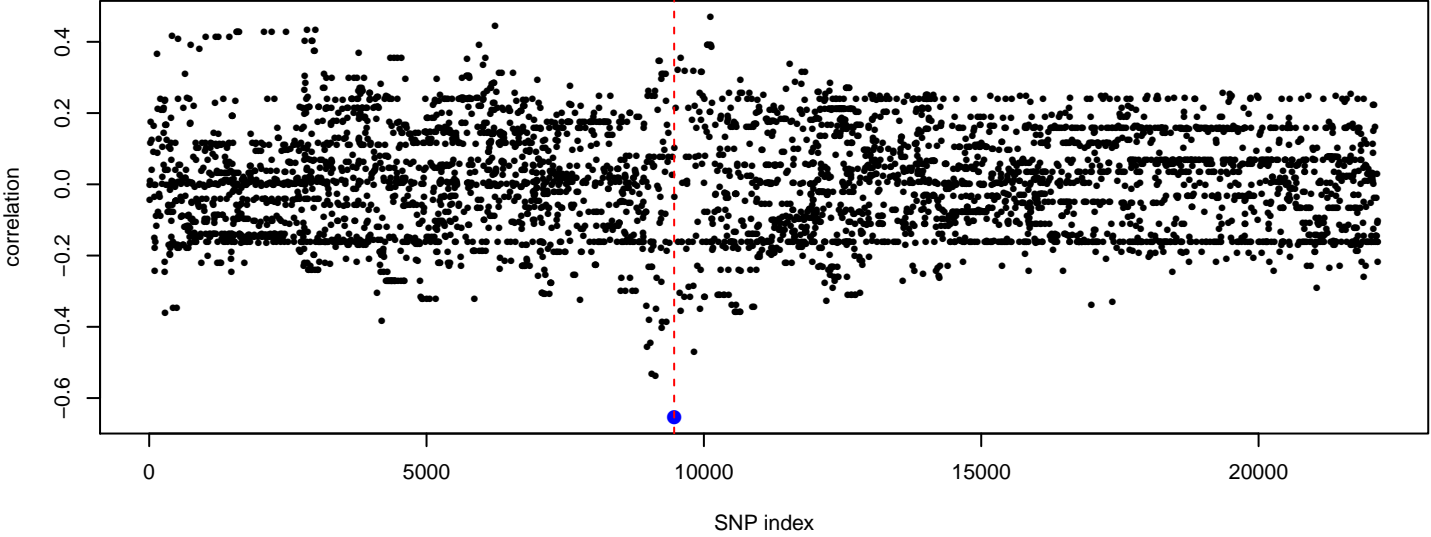**correlation between cluster memberships and genotypes for the green cluster**

correlation between cluster memberships and genotypes for the red cluster

correlation between cluster memberships and genotypes for the blue cluster

correlation between cluster memberships and genotypes for the cyan cluster