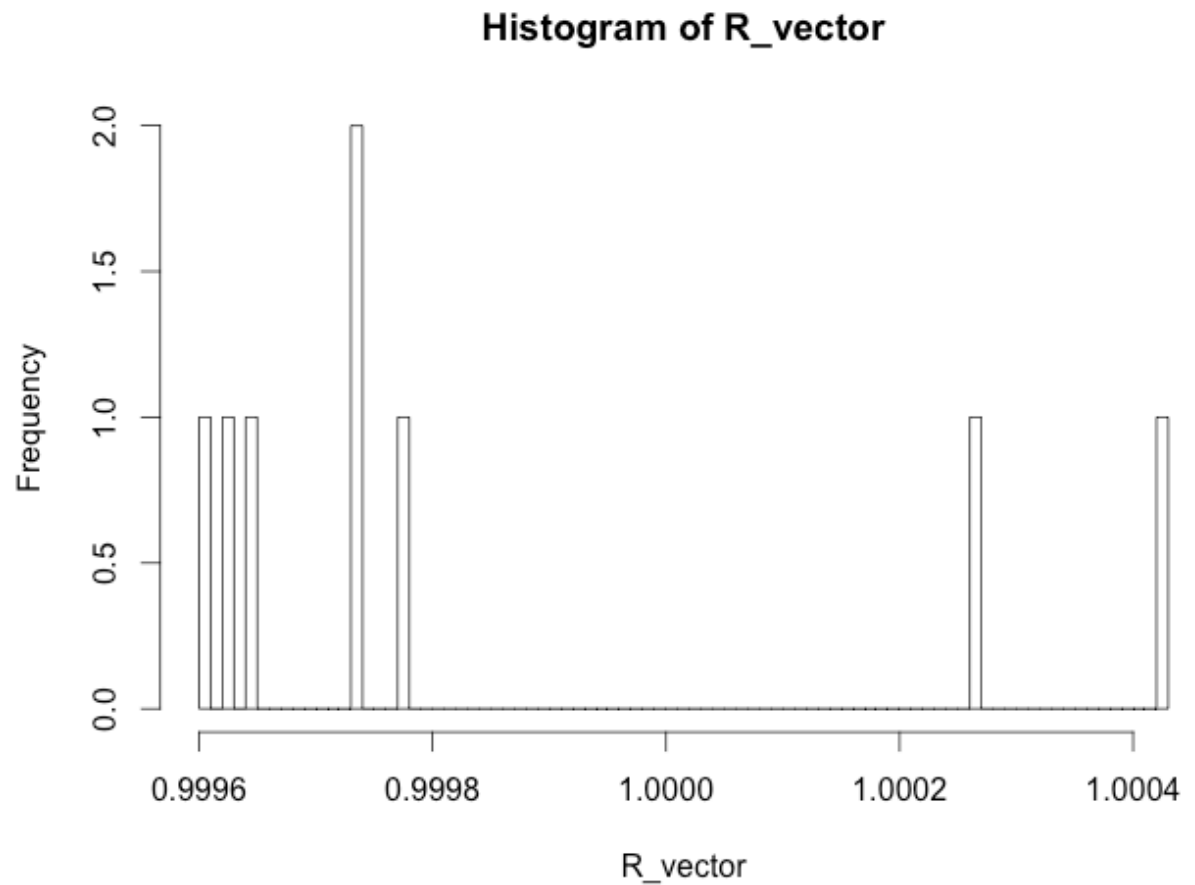


## Supplementary Materials

### H1N1

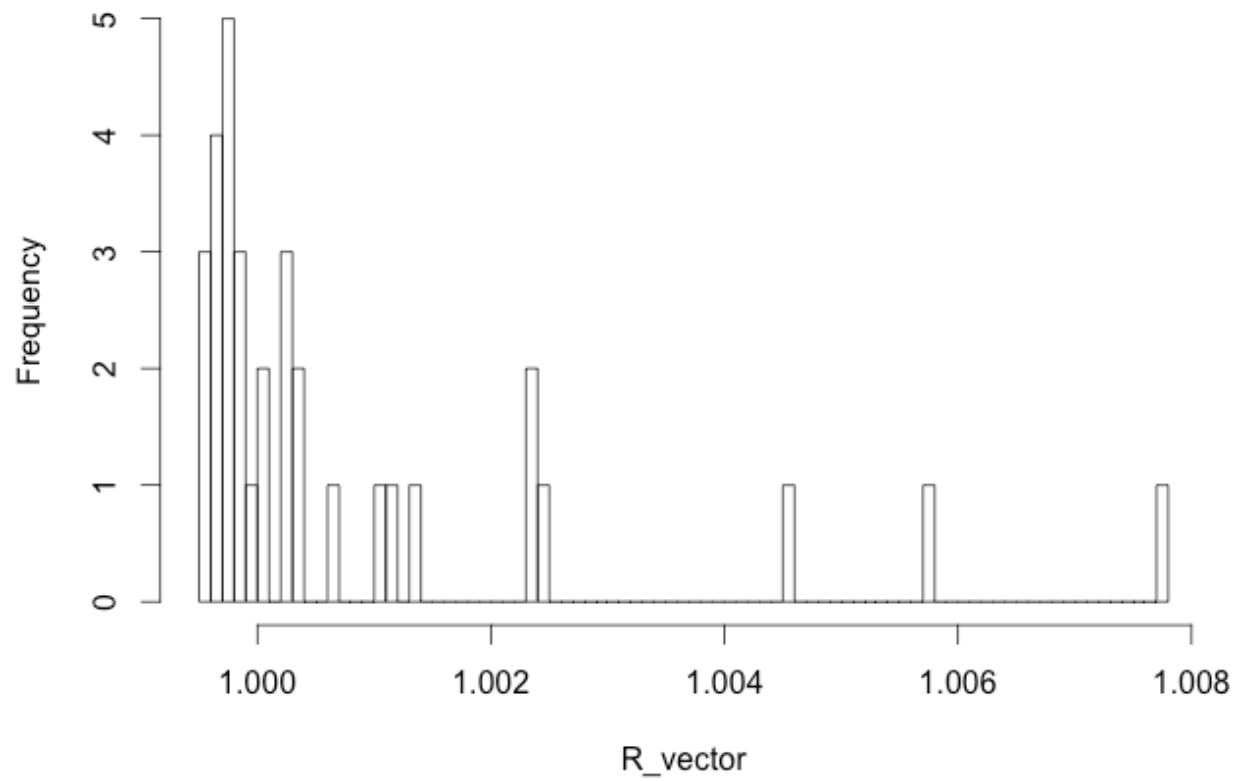
/Users/charles/Documents/research/antigenic/GenoPheno/driver/clustering/analysisManuscript2-12-2015/H1N1/concordance/GelmanRubinStat\_2runs\_mds0\_1\_with\_ponGT0\_1\_in\_rep1.png



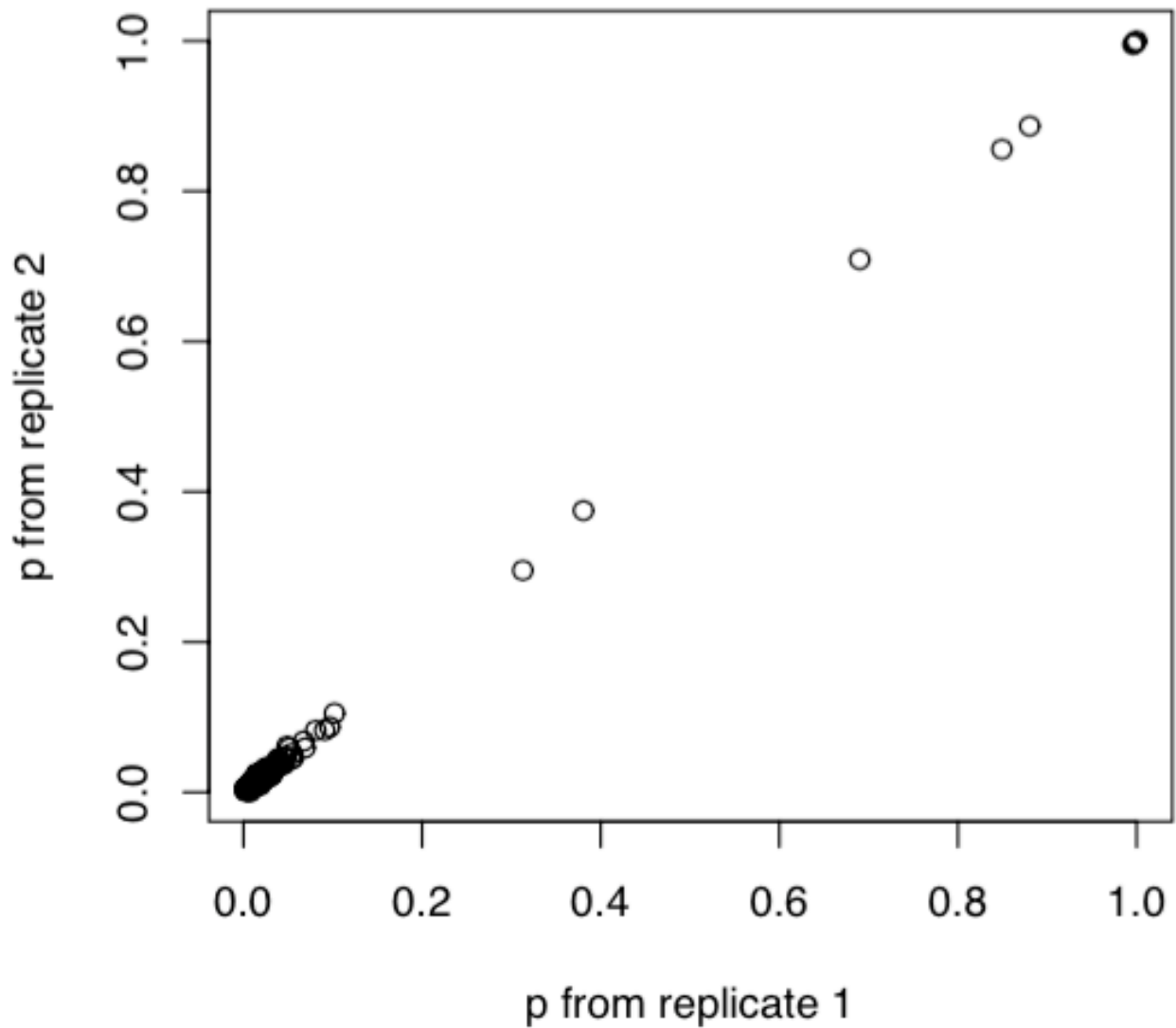
Distribution of Gelman-Rubin statistics of the estimated  $\rho_i$  on  $R^2$  from 2 replicates for A/H1N1 at  $\kappa = 0.1$ .

/Users/charles/Documents/research/antigenic/GenoPheno/driver/clustering/analysisManuscript2-12-2015/H1N1/concordance/GelmanRubinStat\_2runs\_mds0\_3\_with\_ponGT0\_1\_in\_rep1.png

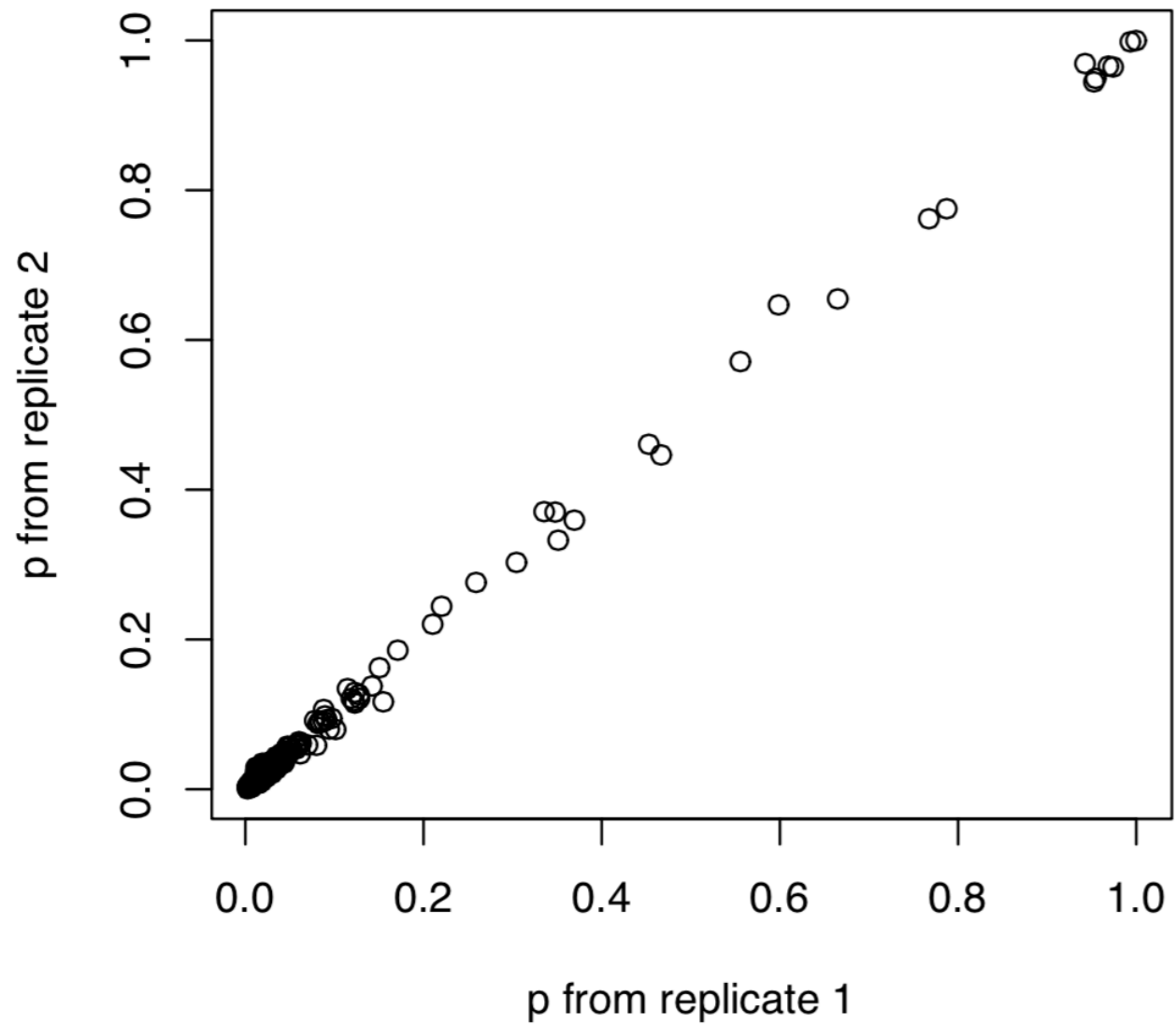
### Histogram of R\_vector



Distribution of Gelman-Rubin statistics of the estimated  $p_i$  on  $R^2$  from 2 replicates for A/H1N1 at  $\kappa = 0.3$ .

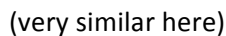


Scatterplot of the estimated  $p_i$  comparing replicate 1 and 2 for A/H1N1 at  $\kappa = 0.1$  ( $R^2 = \#$ ).

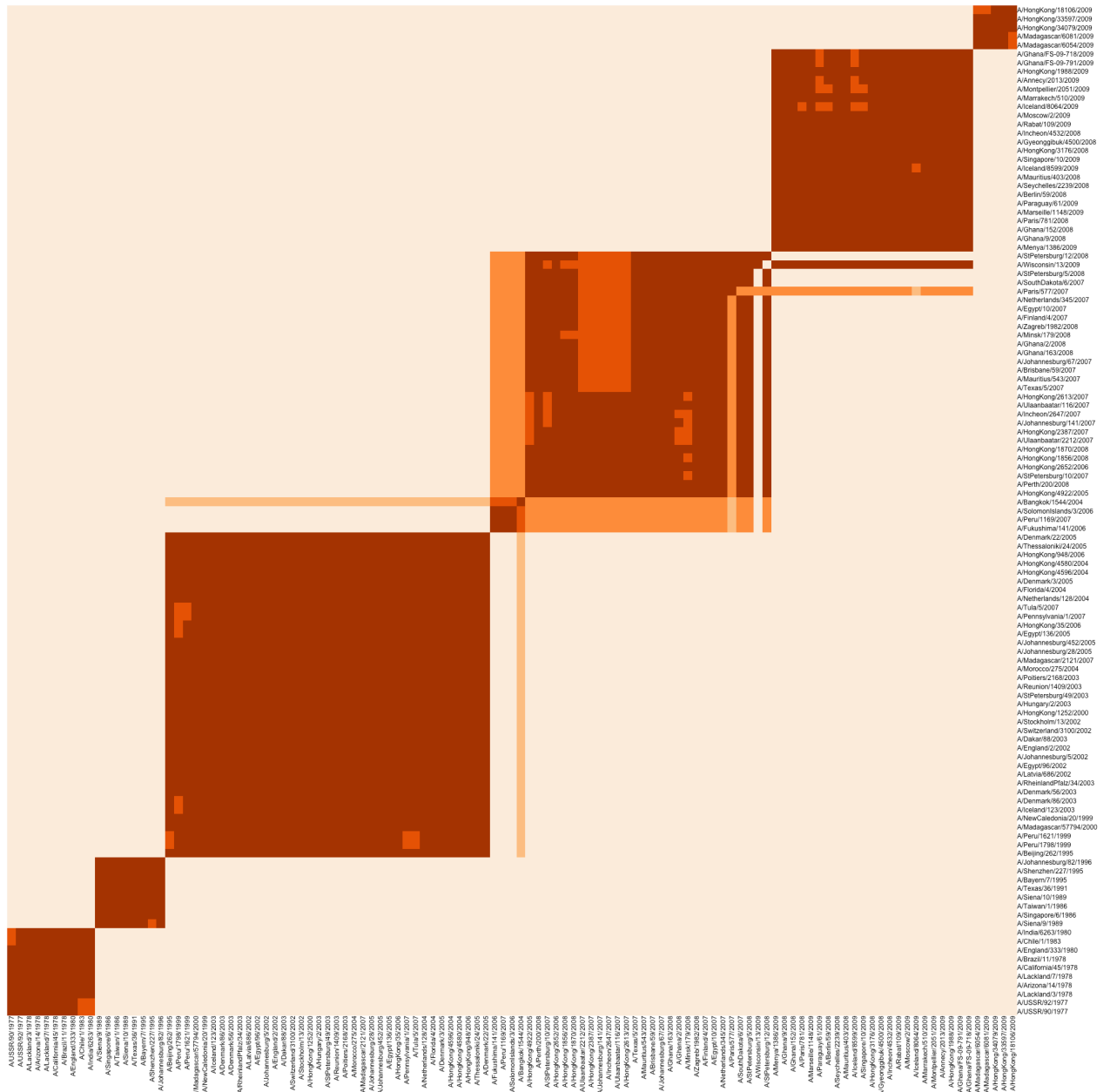


Scatterplot of the estimated  $p_i$  comparing replicate 1 and 2 for A/H1N1 at  $\kappa = 0.3$  ( $R^2 = \#$ ).

/Users/charles/Documents/research/antigenic/GenoPheno/driver/clustering/analysisManuscript1-21-2015/H1N1/heatmap/H1N1-C3b-mds0\_1\_vsS2-ordered.png



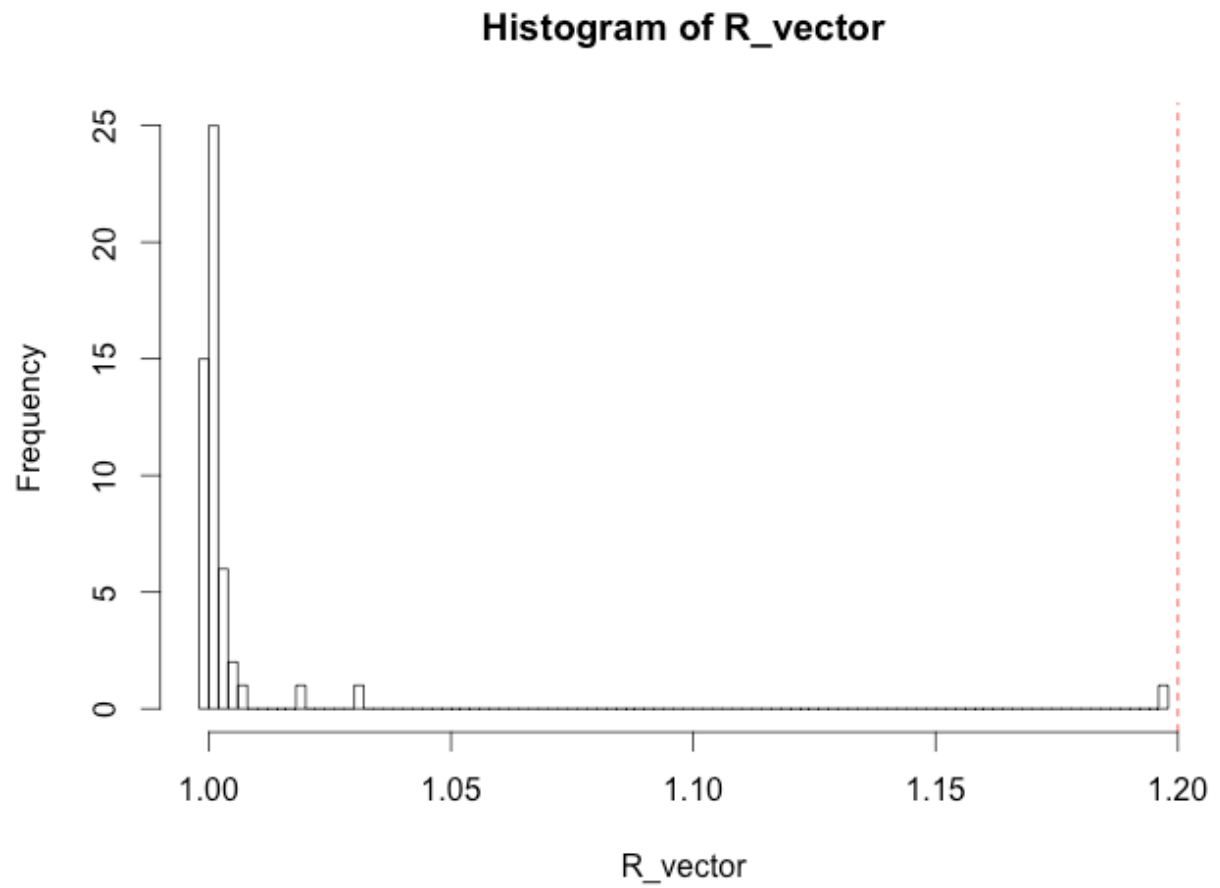
see the dropbox folder for more..



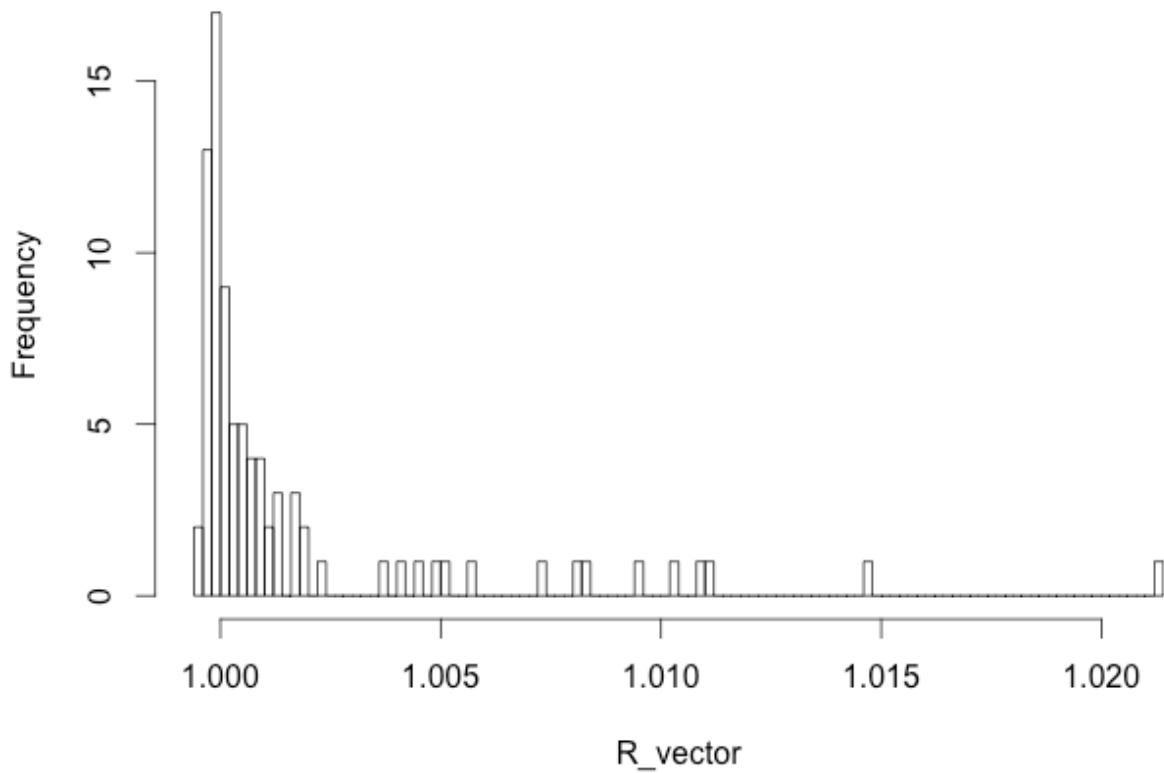
# H3N2

MCMC convergence diagnostics:

/Users/charles/Documents/research/antigenic/GenoPheno/driver/clustering/analysisManuscript2-12-2015/H3N2/concordance/GelmanRubinStat\_mds0\_1\_with\_ponGT0\_1\_in\_rep1.png

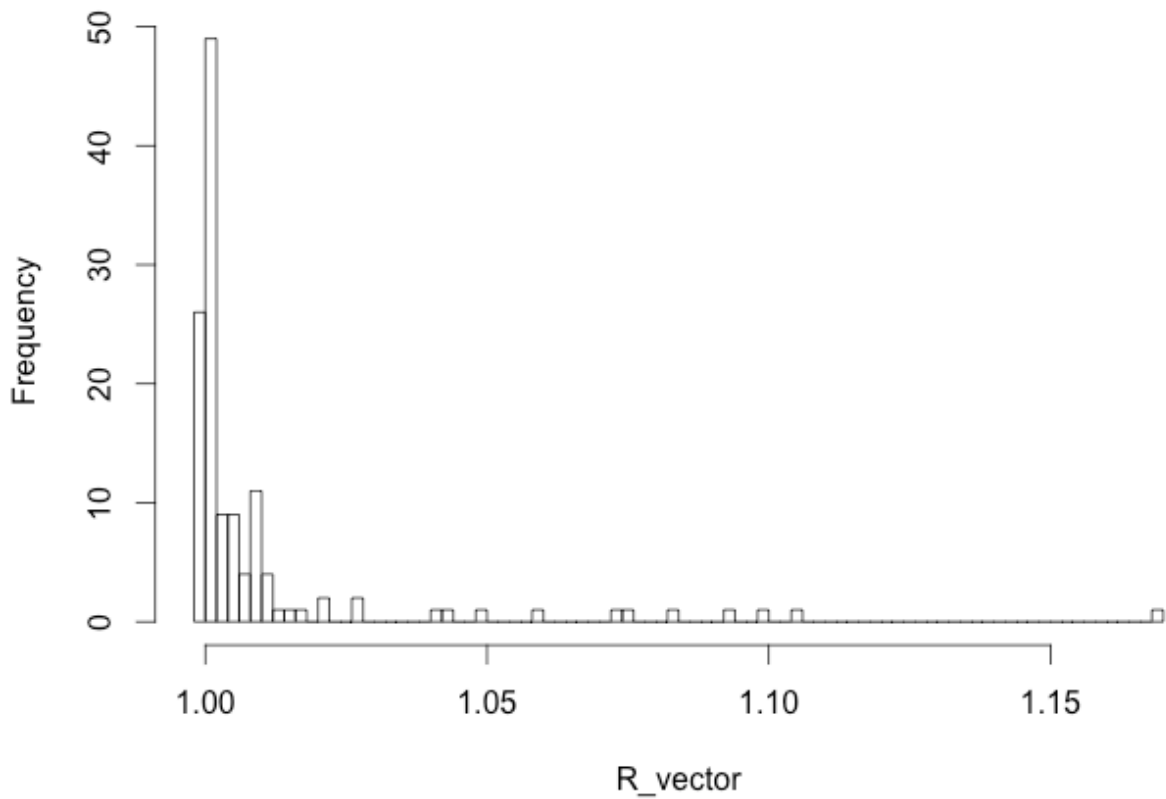


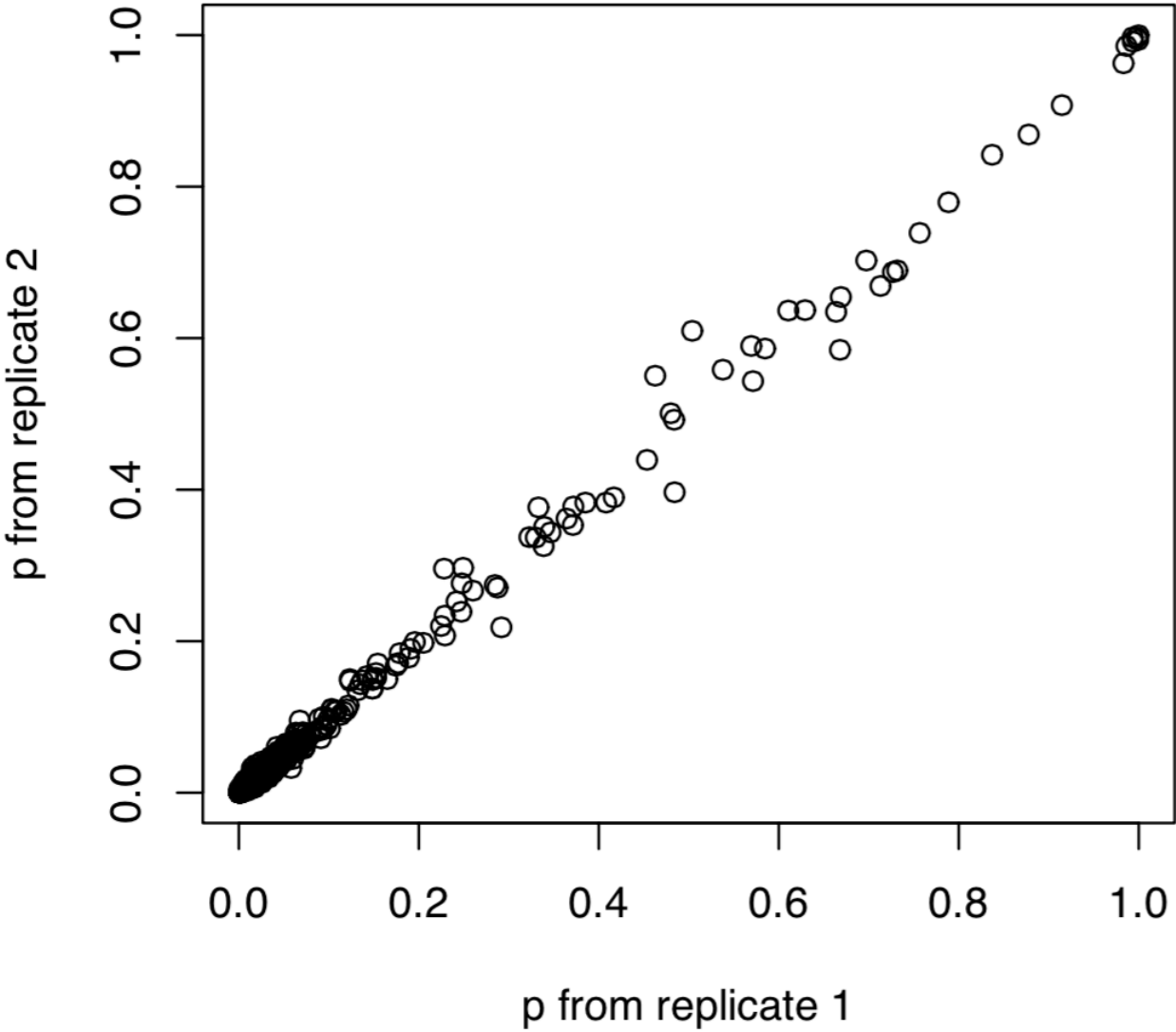
Histogram of R\_vector

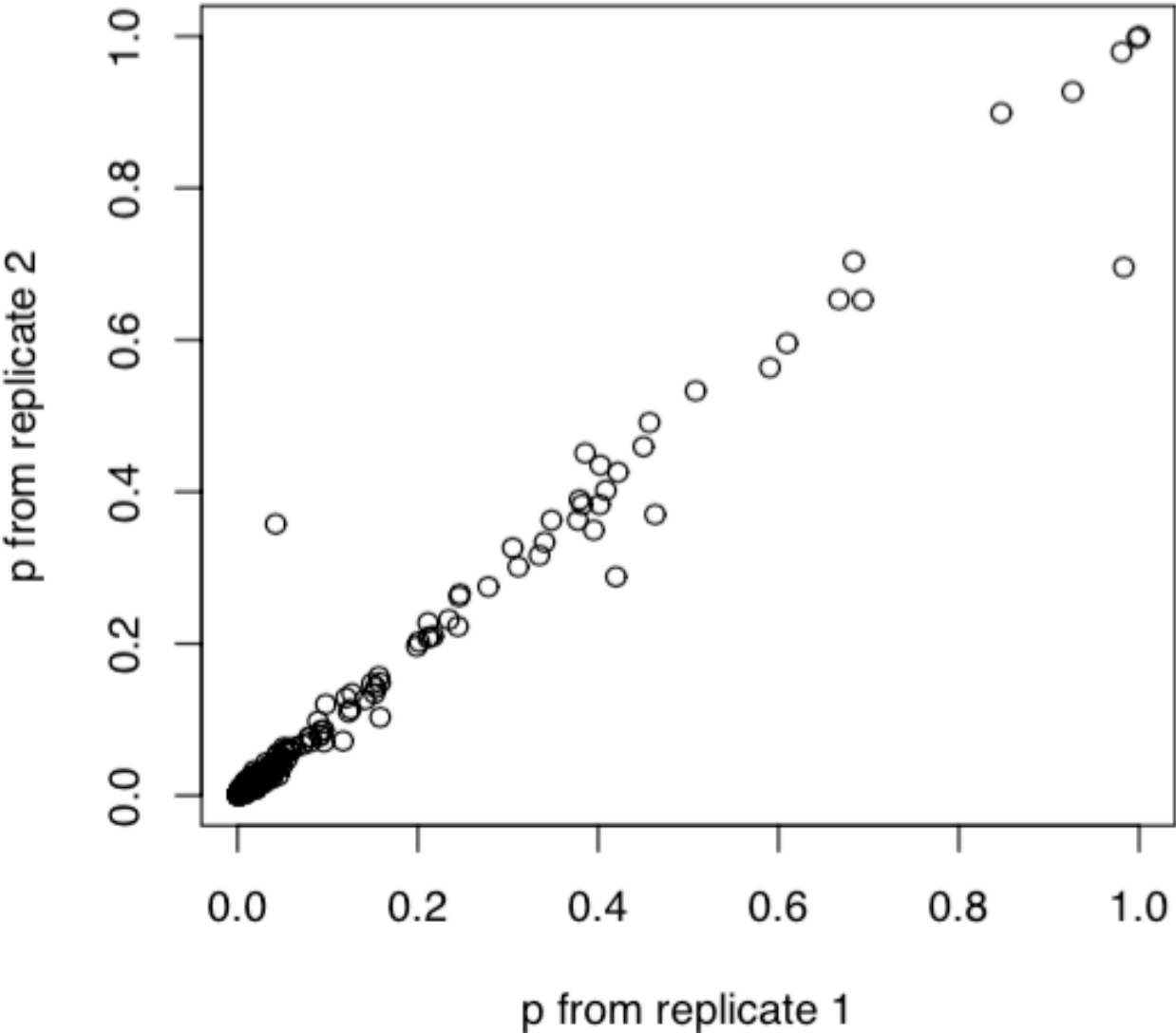


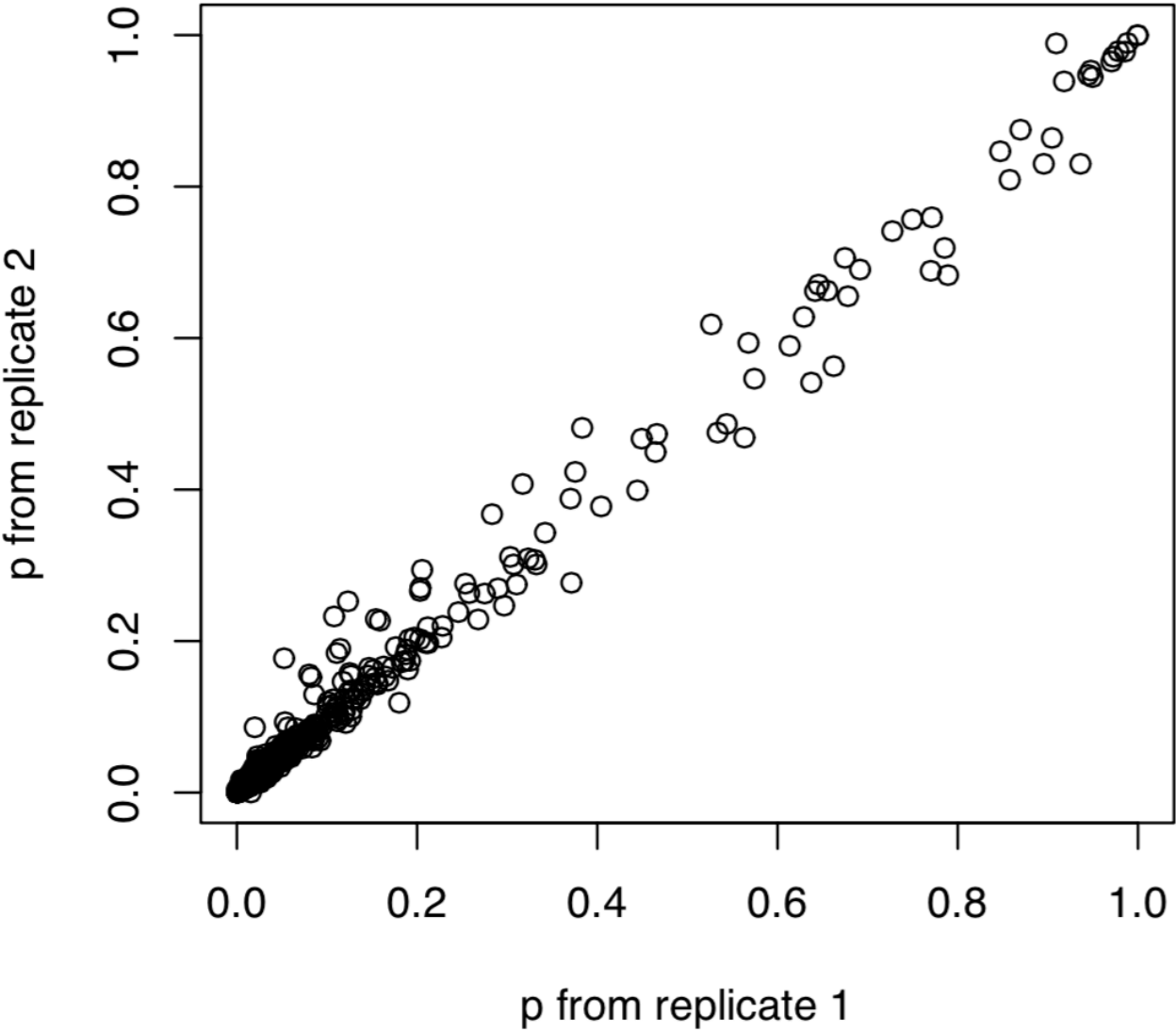


Histogram of R\_vector

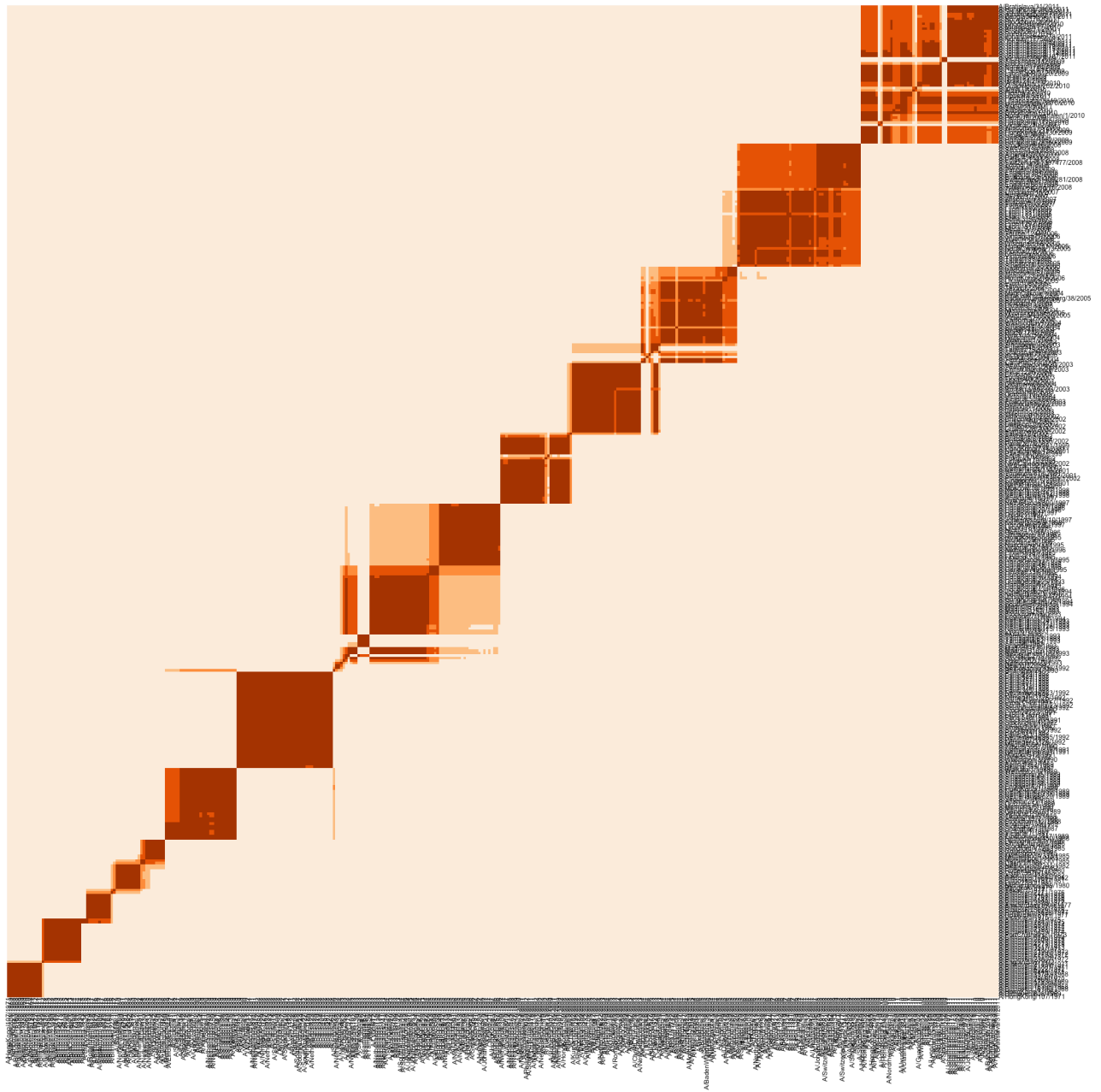




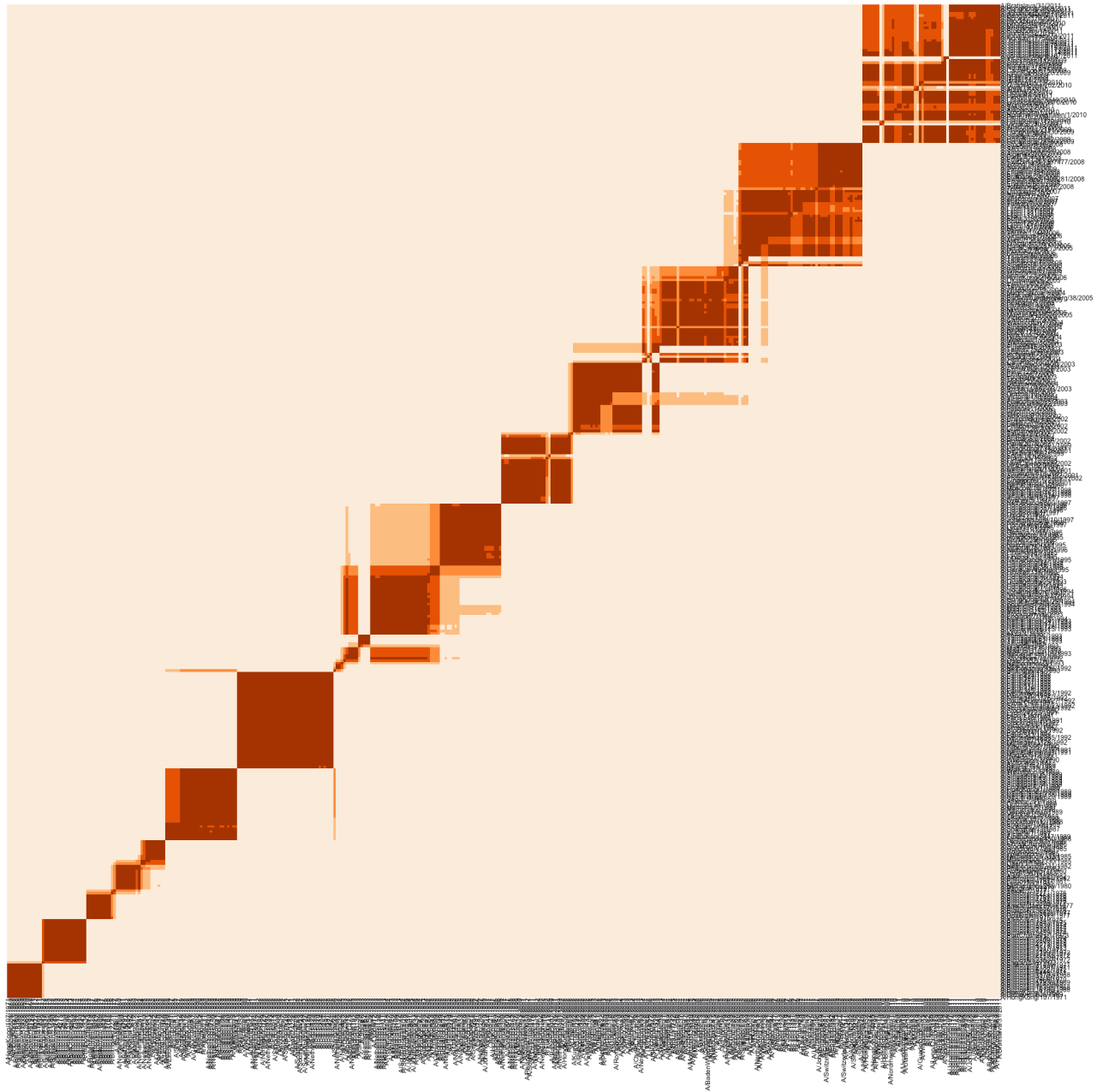




Eg.



vs. S6: I see more difference - eg. The middle light shading is partially gone



see dropbox for other samples