

Preliminary LD results and VCF contents of master VCF file

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1 Summary

1.1 Discussed

- about half the SNP LD comparisons for scaffold0 had one of the SNPs with MAF of 0.
- Andrea thought she filtered these out but SOME seem to still be there obviously.
- tracked one down in the VCF file (tsetseFINAL_14Oct2014_f2_53.recode.renamed_scaffolds.vcf). See also the “*Example VCF line*”.
 - ref was C alt was A but not a single individual had the alt allele.
 - this should not be in this file.

1.2 Resolution

- I collected a few lines from the VCF into a test file to send to Andrea
- Andrea will send this file along with a question to the developers (VCFtools? PLINK?) with the options she used for the filter to get an explanation.

1.3 Follow up

2015-01-05

- Andrea got back to me and it turns out that the --min-allele/--max-allele filter settings apply not to individuals' genotype but to the definition of the SNP at large and Scaffold0-23159-C/A WAS multi-allelic in the original data set.

- To filter snps that have no CURRENT individuals representing the alt allele other settings should be used and some but not all of her analyses will need to be re-run.

– *correct filter*: --maf 0.00001

- I can/will run the filter with the new settings on my version of the file myself.

2 Example VCF line

```
Scaffold0 23159 . C A 15.5 . . GT:PL:DP:SP:GQ 0/0:0,108,255:36:0:99 \
0/0:0,54,255:18:0:72 0/0:0,48,255:16:0:66 0/0:0,102,255:34:0:99 \
0/0:0,255,255:121:0:99 0/0:0,90,255:30:0:99 0/0:0,253,255:84:0:99 \
0/0:0,48,255:16:0:66 0/0:0,126,255:42:0:99 0/0:0,132,255:44:0:99 \
0/0:0,36,255:12:0:54 0/0:0,72,255:24:0:90 0/0:0,151,255:50:0:99 \
0/0:0,220,255:75:0:99 0/0:0,255,255:163:0:99 0/0:0,120,255:40:0:99 \
0/0:0,108,255:36:0:99 0/0:0,169,255:56:0:99 0/0:0,255,255:97:0:99 \
0/0:0,208,255:69:0:99 0/0:0,157,255:52:0:99 0/0:0,169,255:56:0:99 \
0/0:0,57,255:19:0:75 0/0:0,48,255:16:0:66 0/0:0,87,255:29:0:99 \
0/0:0,60,255:20:0:78 0/0:0,81,255:27:0:99 0/0:0,217,255:72:0:99 \
0/0:0,54,255:18:0:72 0/0:0,205,255:68:0:99 0/0:0,144,255:48:0:99 \
0/0:0,255,255:97:0:99 0/0:0,90,255:30:0:99 0/0:0,205,255:68:0:99 \
0/0:0,48,255:16:0:66 0/0:0,96,255:32:0:99 0/0:0,54,255:18:0:72 \
0/0:0,54,255:18:0:72 0/0:0,255,255:86:0:99 0/0:0,255,255:116:0:99 \
0/0:0,108,255:36:0:99 0/0:0,126,255:42:0:99 0/0:0,114,255:38:0:99 \
0/0:0,160,255:53:0:99 0/0:0,81,255:27:0:99 0/0:0,48,255:16:0:66 \
0/0:0,172,255:57:0:99 0/0:0,141,255:47:0:99 0/0:0,126,255:42:0:99 \
0/0:0,163,255:54:0:99 0/0:0,126,255:42:0:99 0/0:0,51,255:17:0:69 \
0/0:0,151,255:50:0:99
```