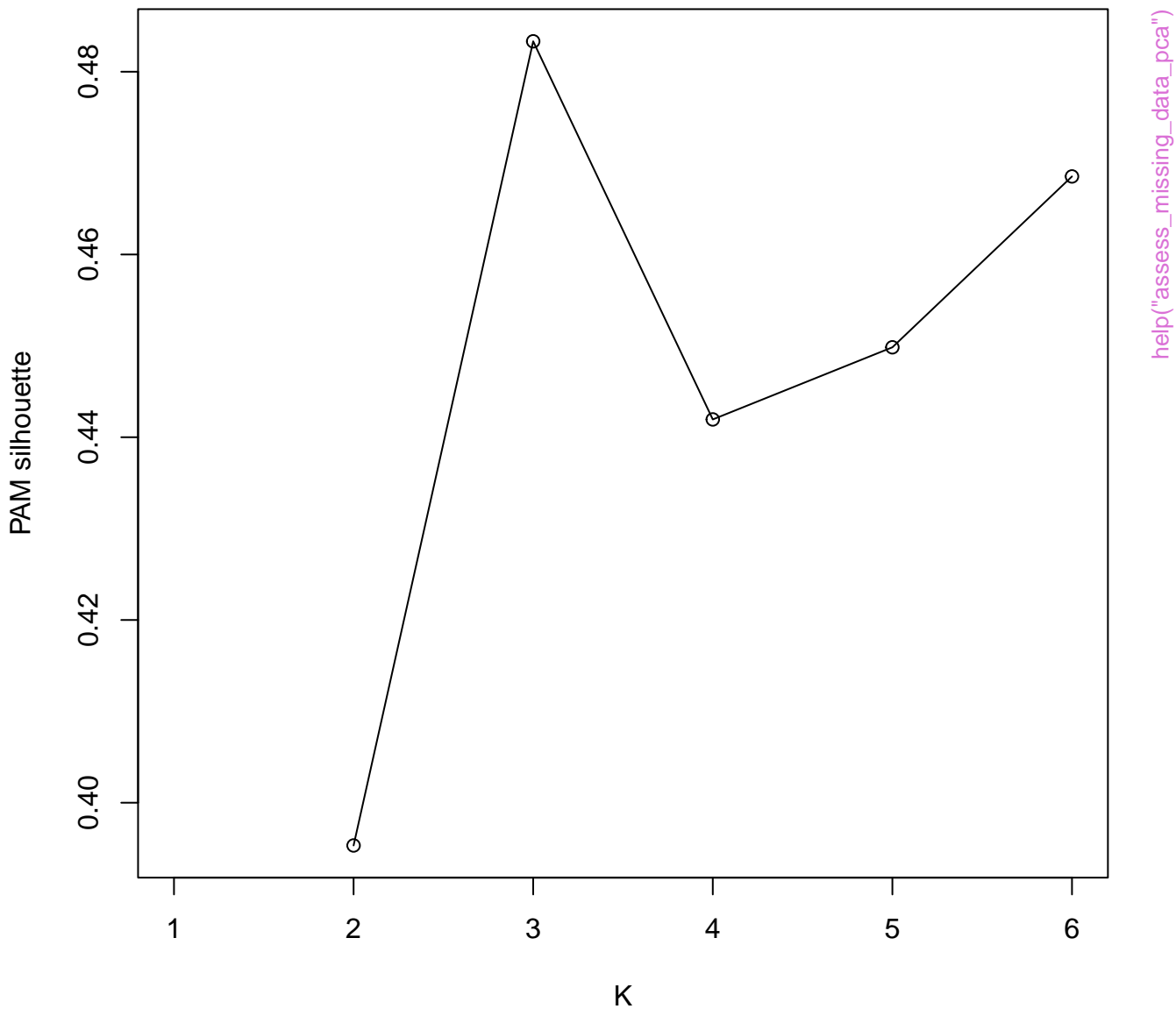
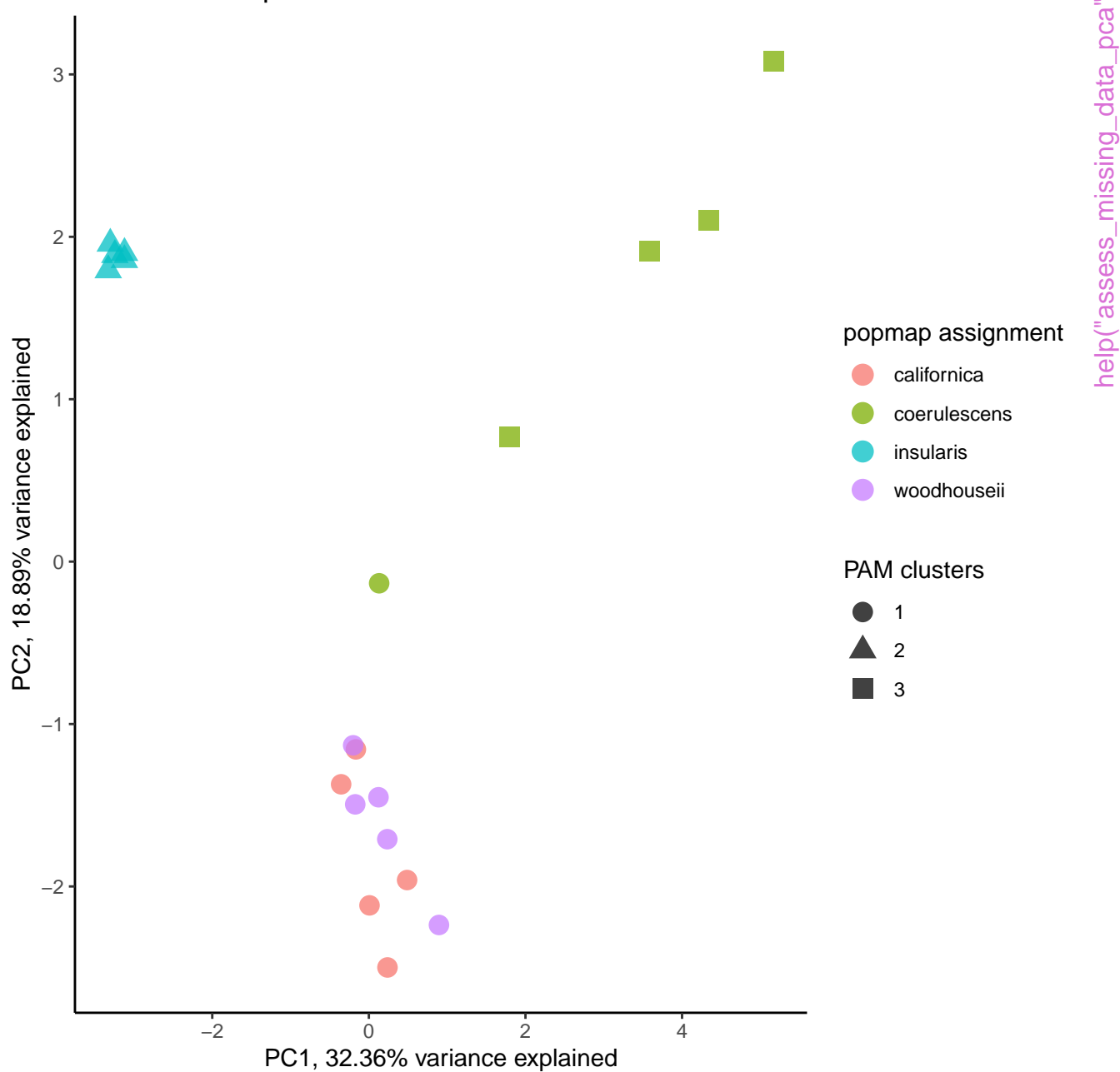


## 60% SNP completeness cutoff PAM clustering results



## 60% SNP completeness cutoff PCA



60% SNP completeness cutoff PCA

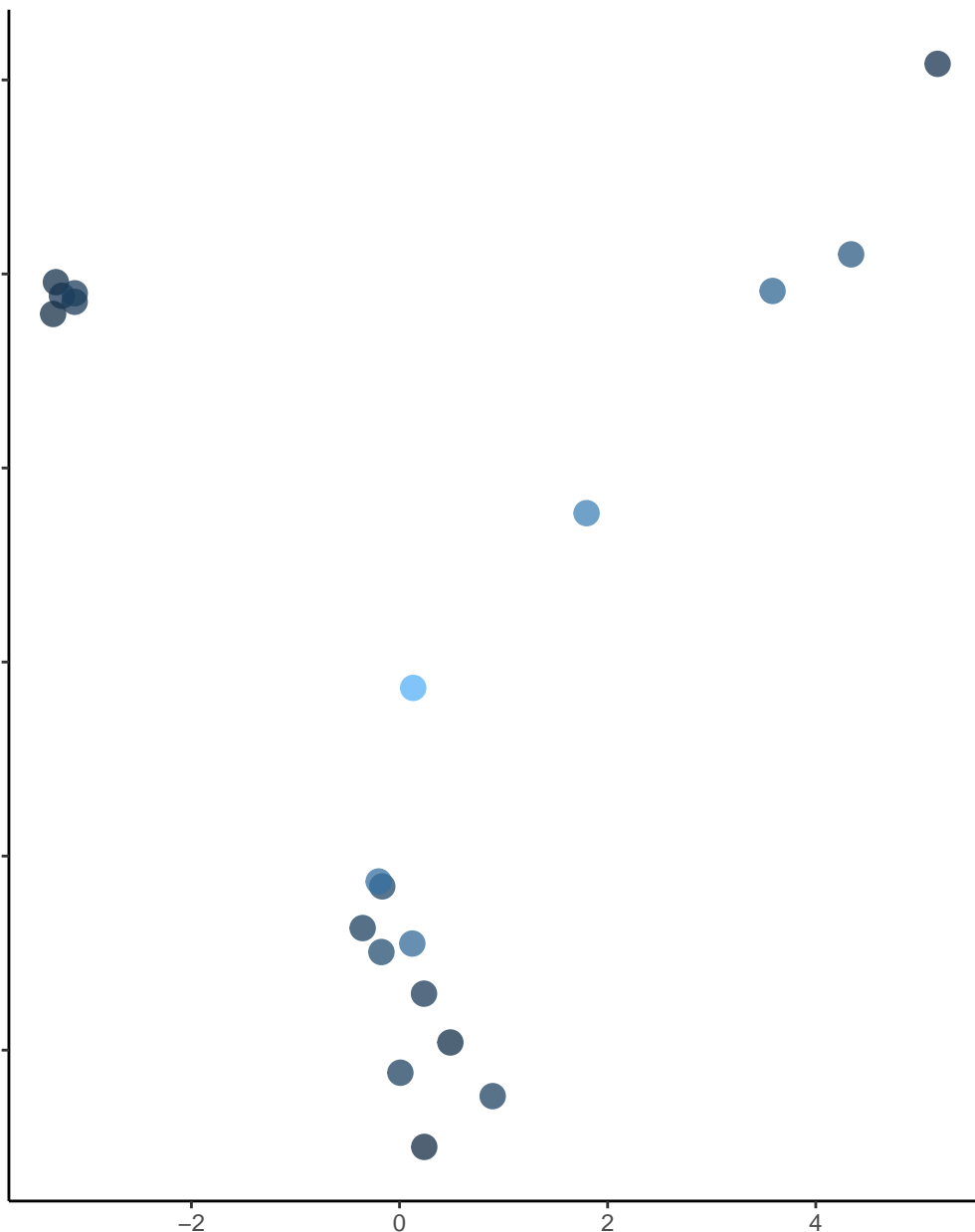
PC2, 18.89% variance explained

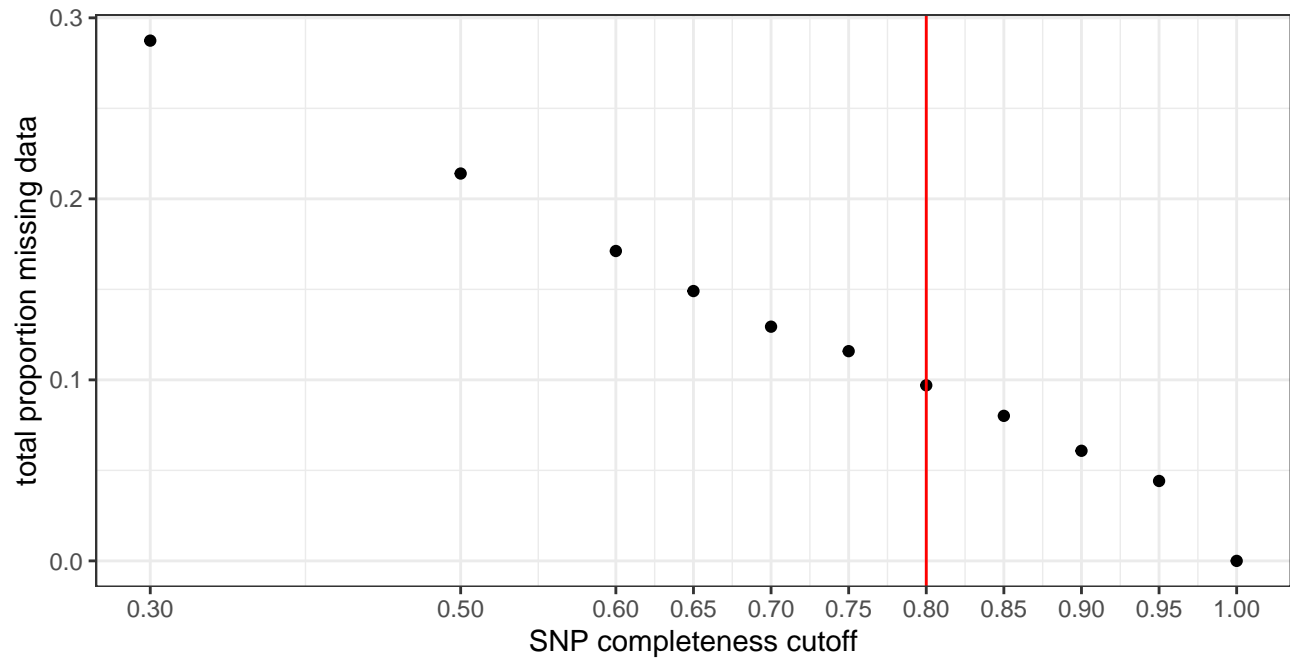
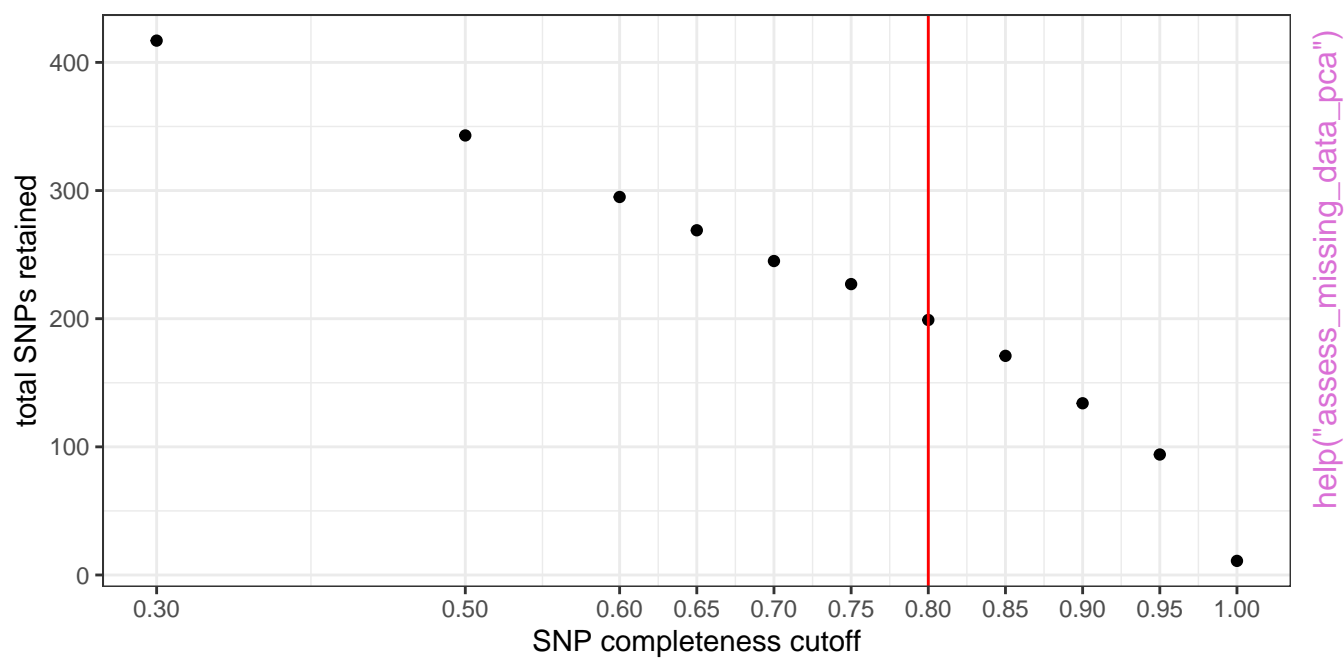
PC1, 32.36% variance explained

proportion  
missing data

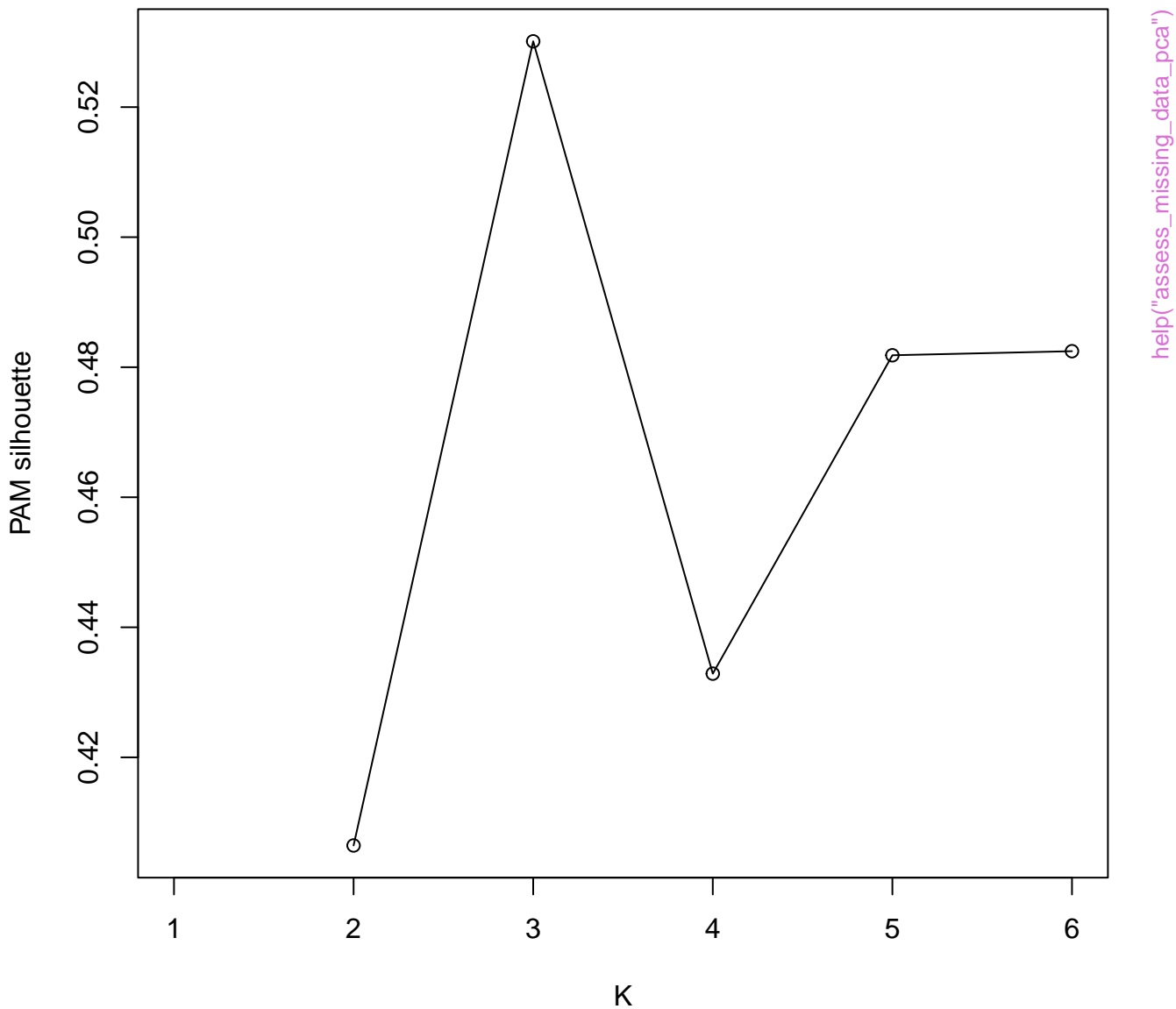
0.8  
0.6  
0.4  
0.2

help("assess\_missing\_data\_pca")





# 80% SNP completeness cutoff PAM clustering results



# 80% SNP completeness cutoff PCA

PC2, 19.1% variance explained

PC1, 37.5% variance explained

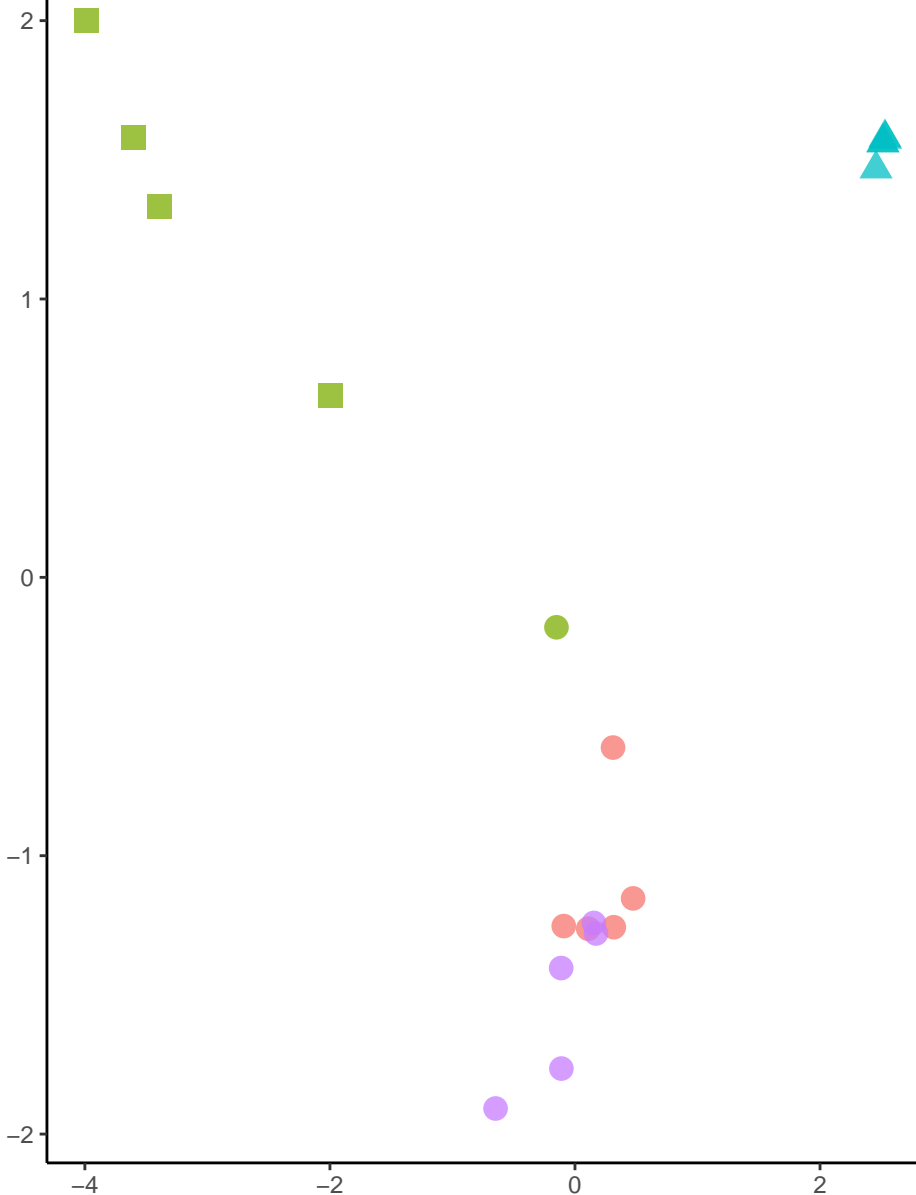
popmap assignment

- californica
- coerulescens
- insularis
- woodhouseii

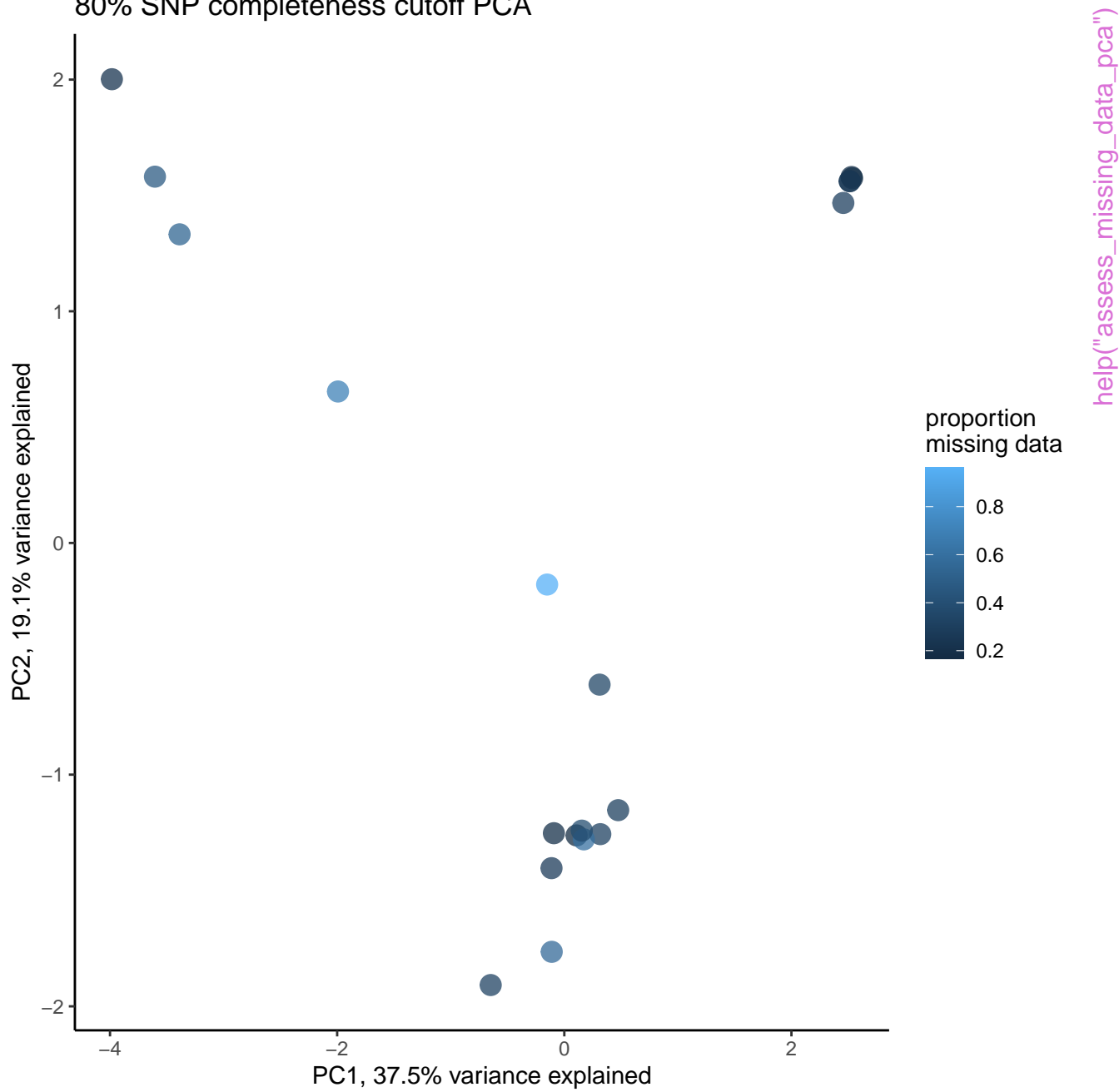
PAM clusters

- 1
- 2
- 3

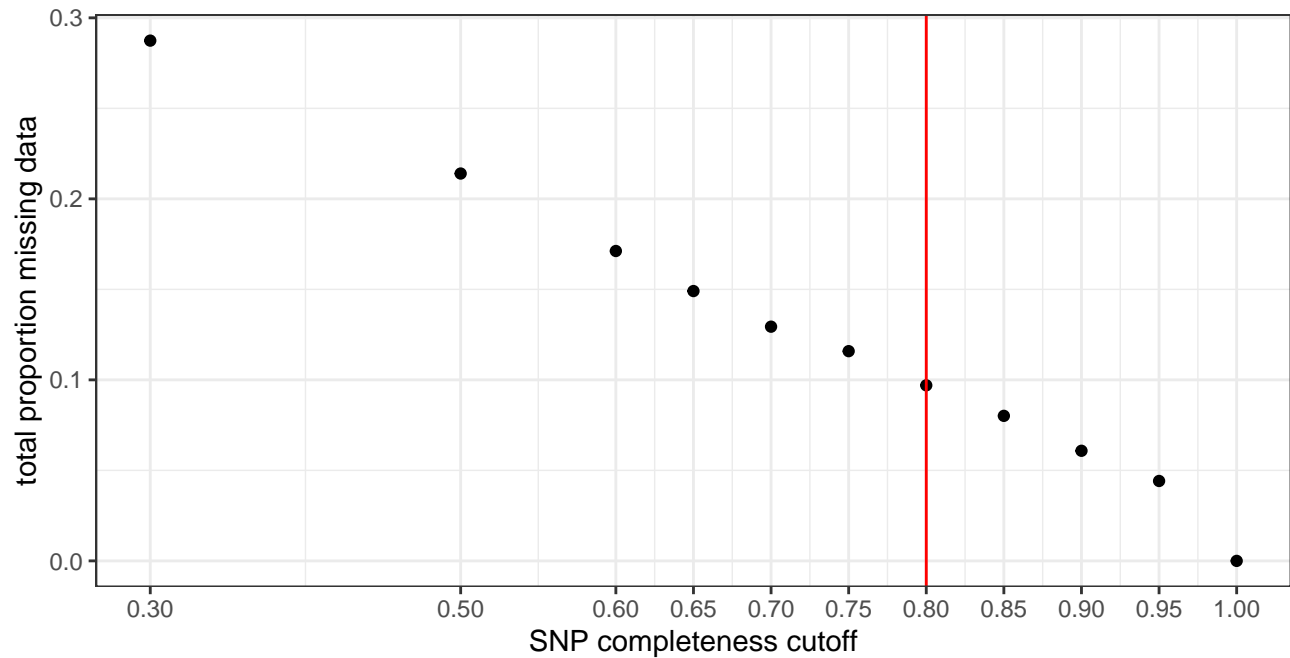
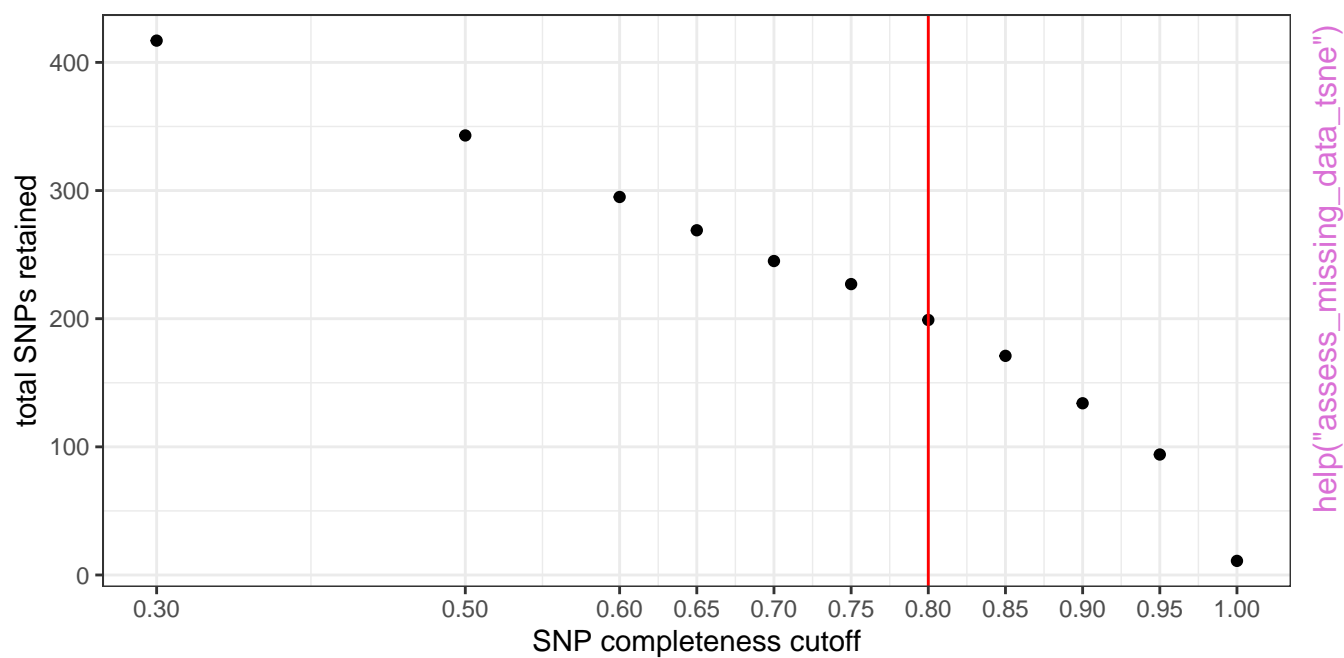
help("assess\_missing\_data\_pca")



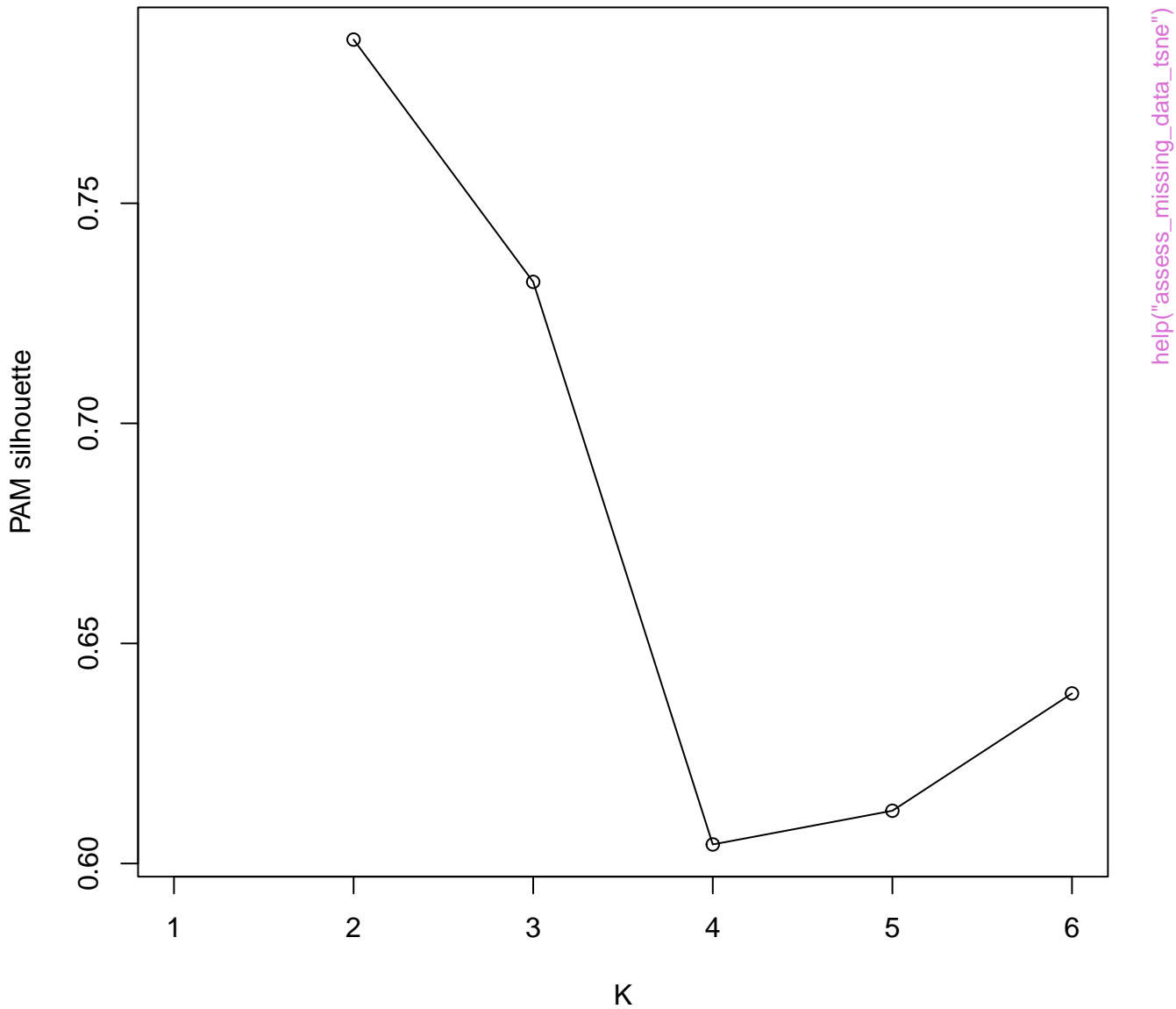
80% SNP completeness cutoff PCA



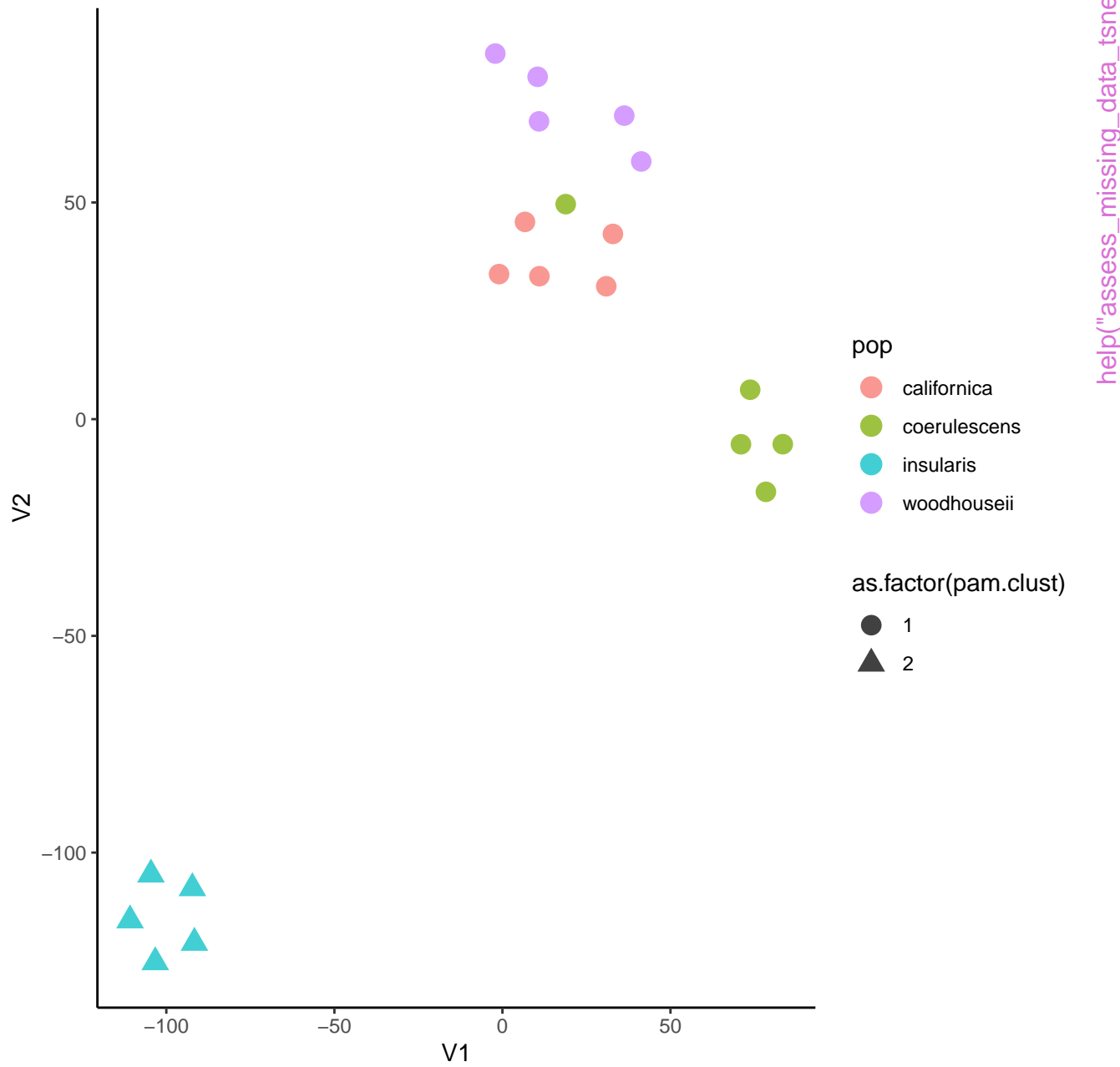




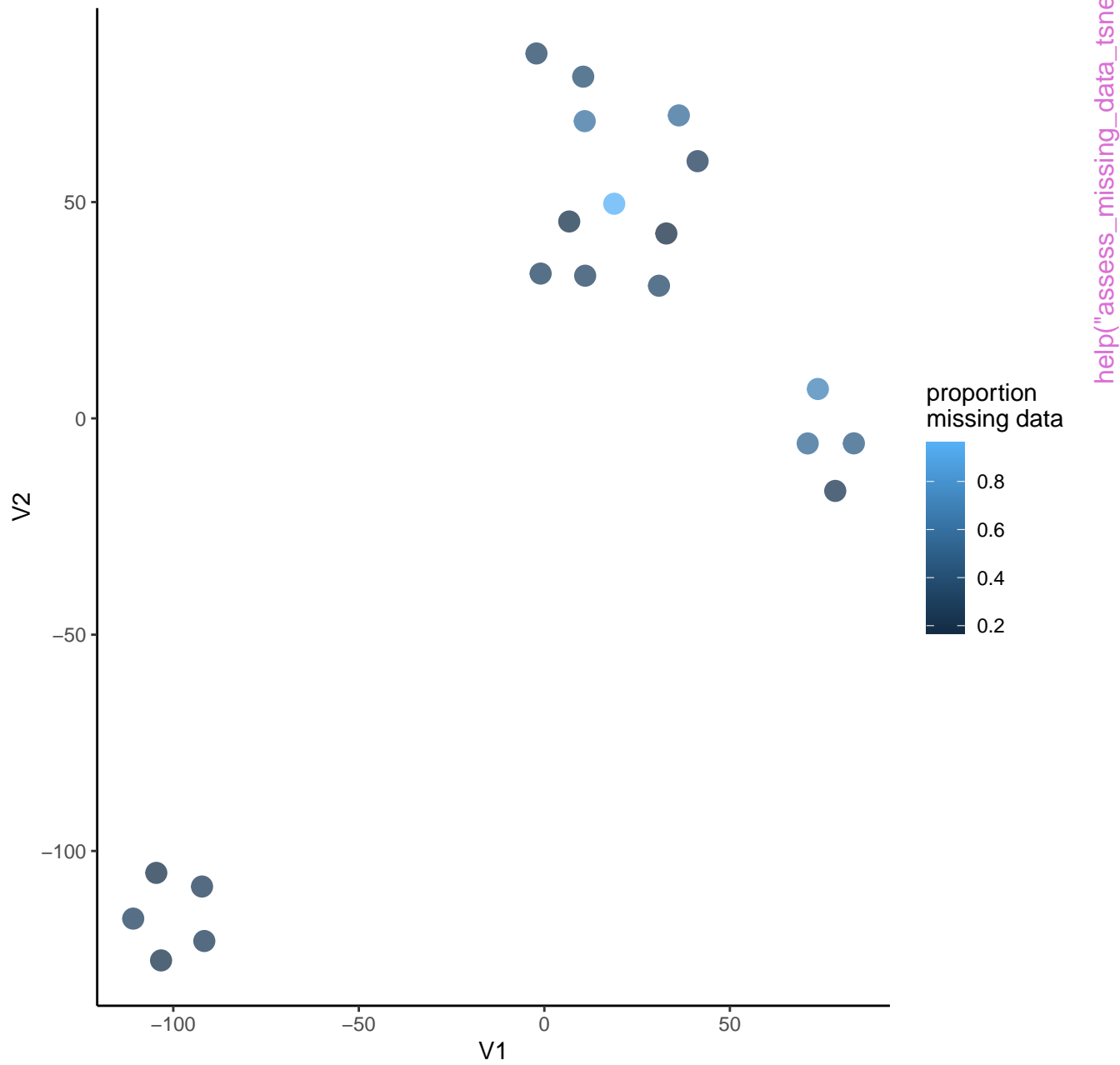
# t-SNE 80% SNP completeness cutoff PAM clustering



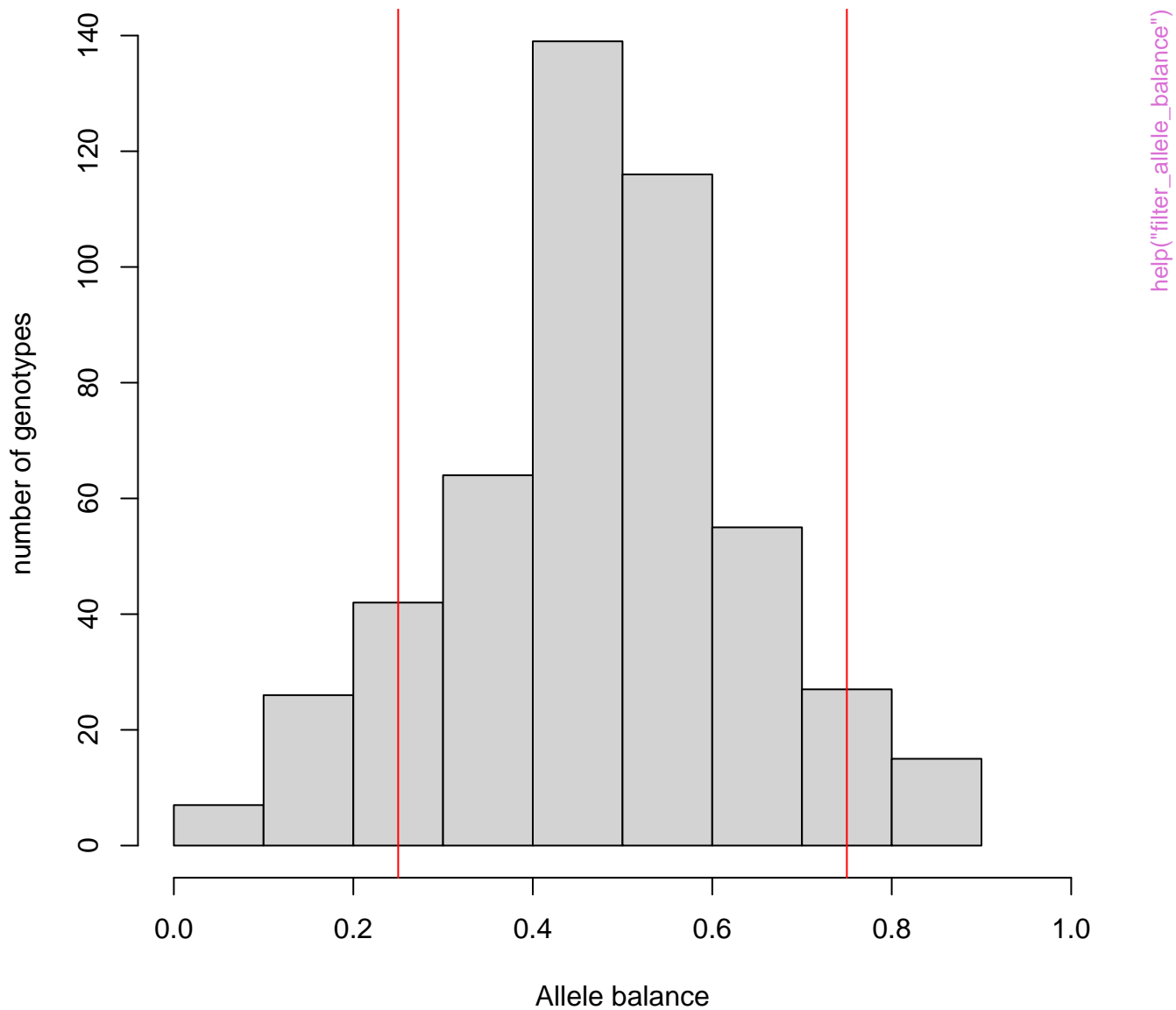
# t-SNE clustering analysis 80% SNP completeness cutoff



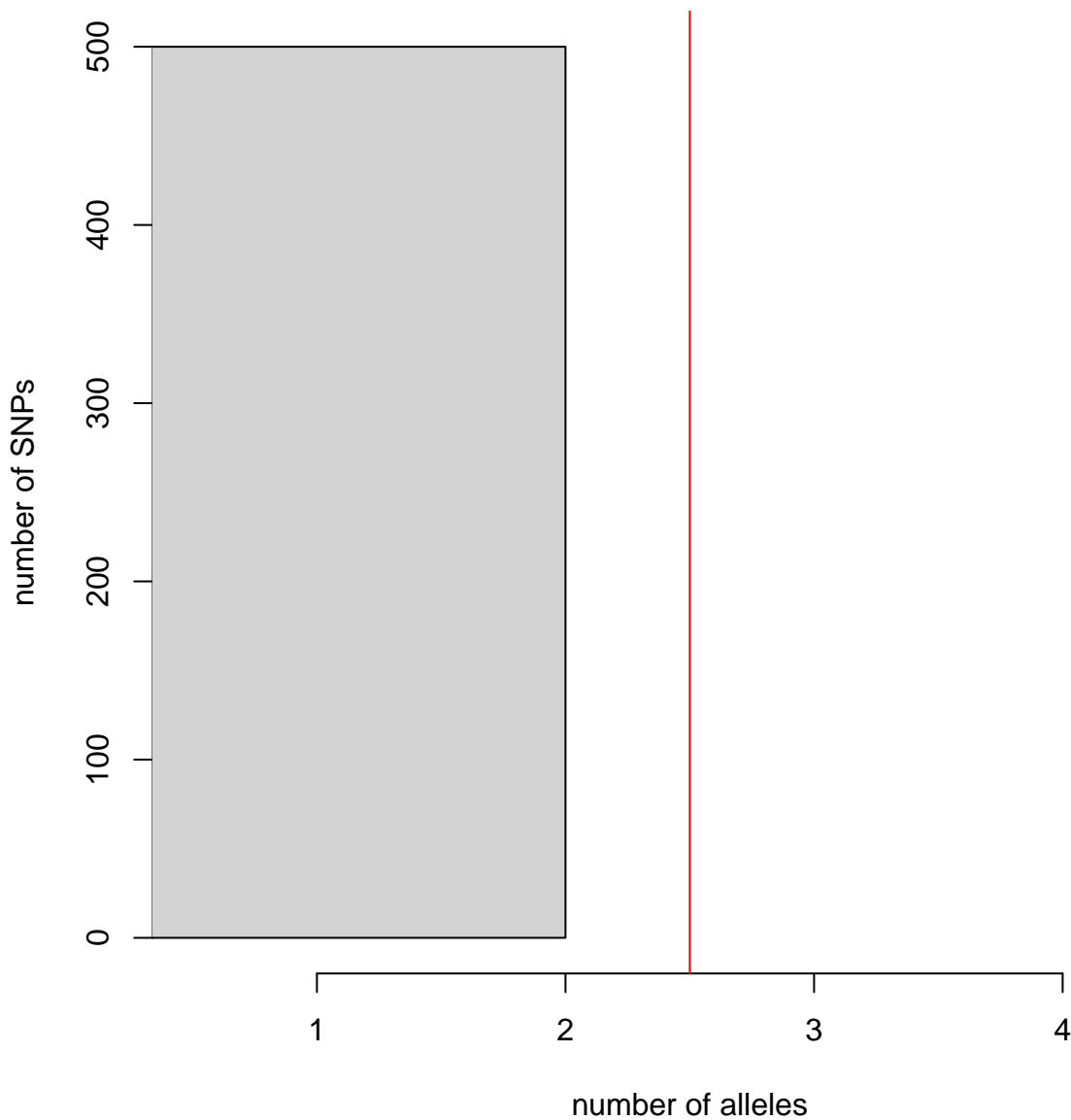
t-SNE clustering analysis 80% SNP completeness cutoff



# allele balance distribution

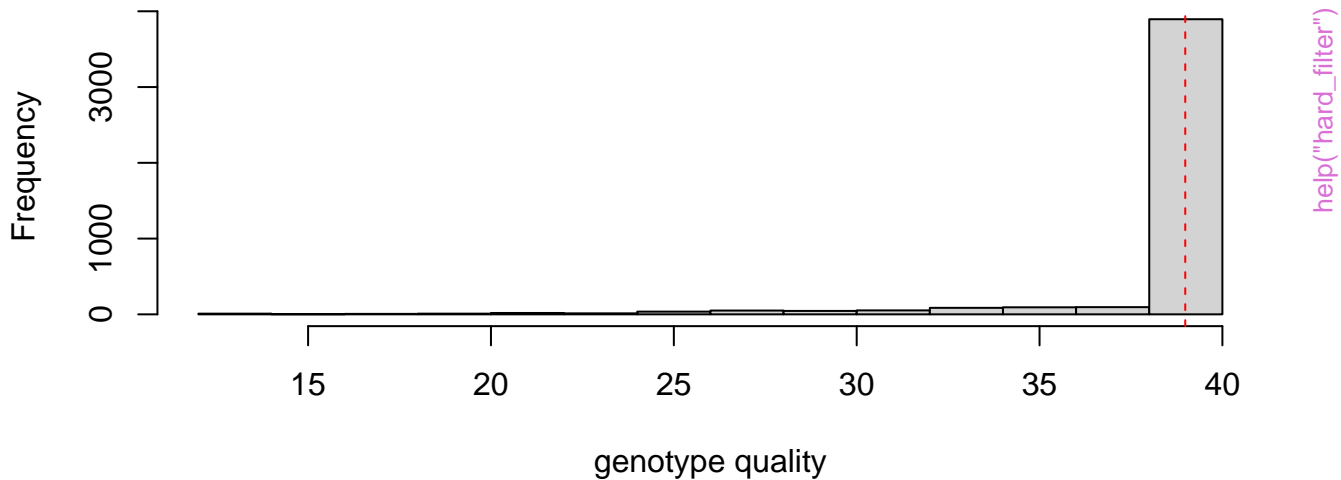


# distribution of alleles present in vcf

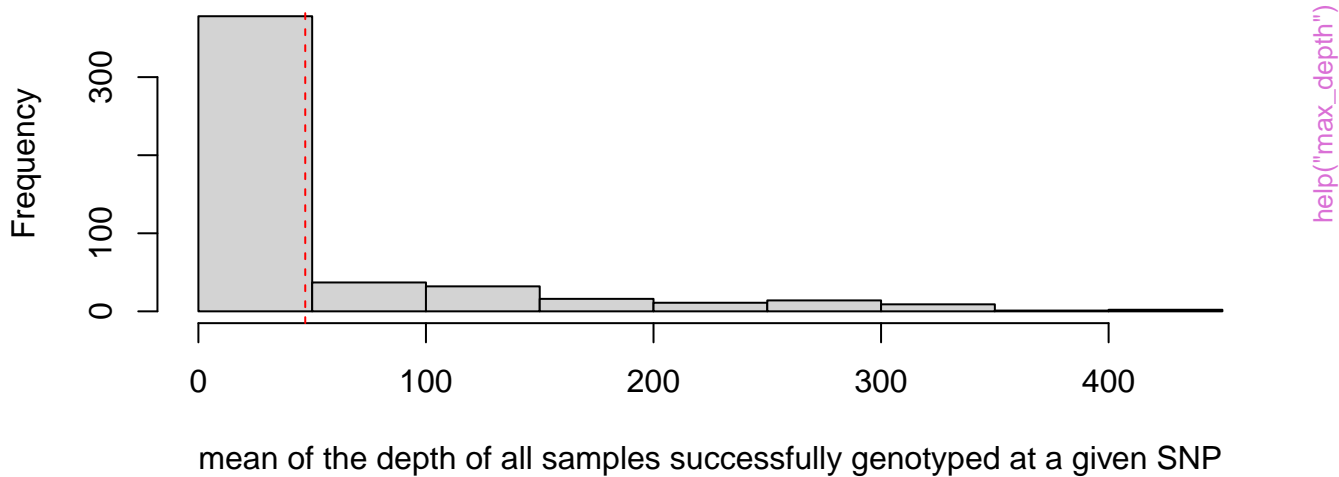


help("fiter\_biallelic")

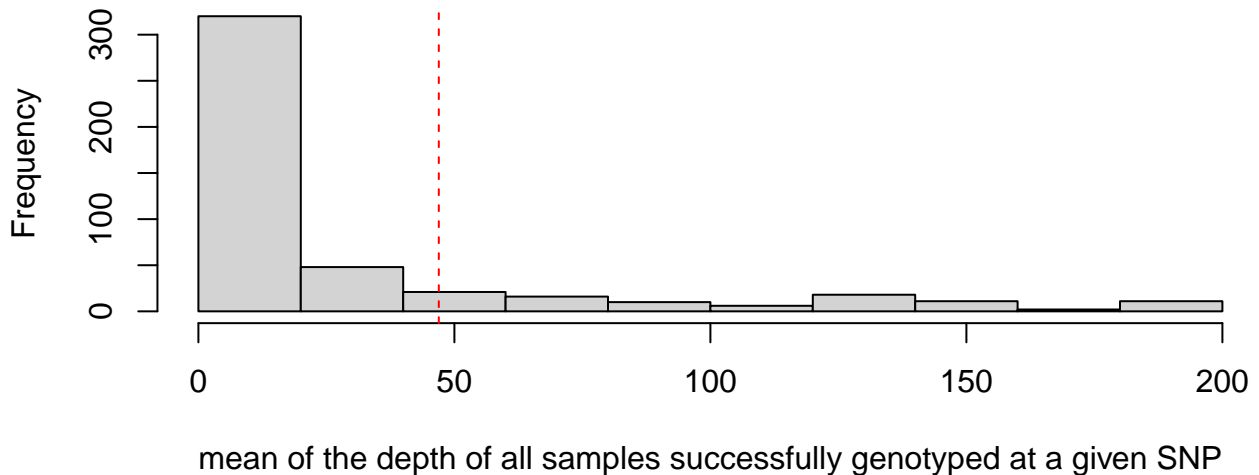
# Histogram of gq.matrix



**histogram showing the depth of all called SNPs**

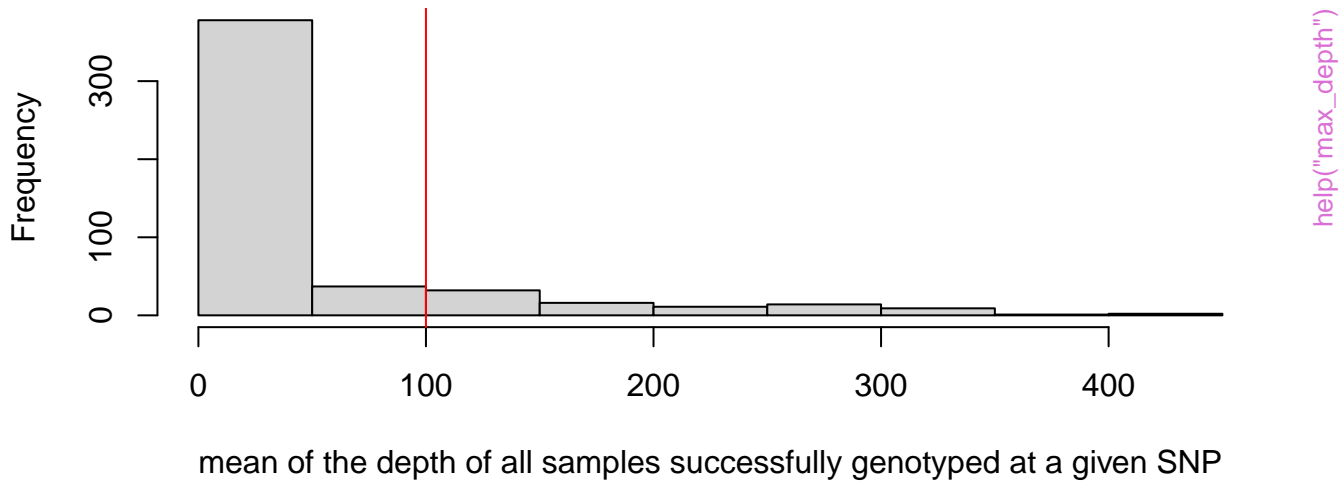


**distribution of SNPs below a depth of 200**

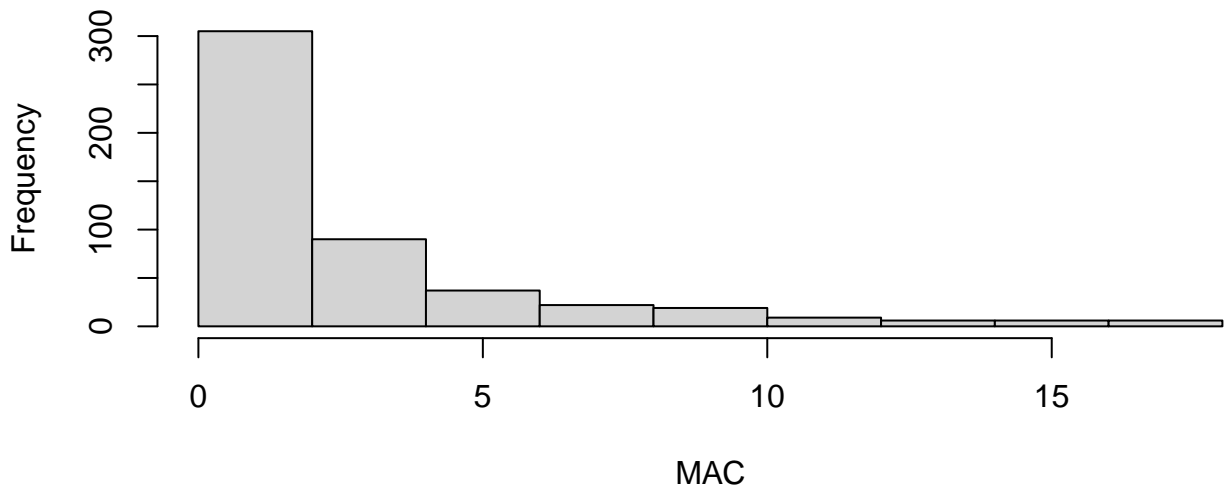




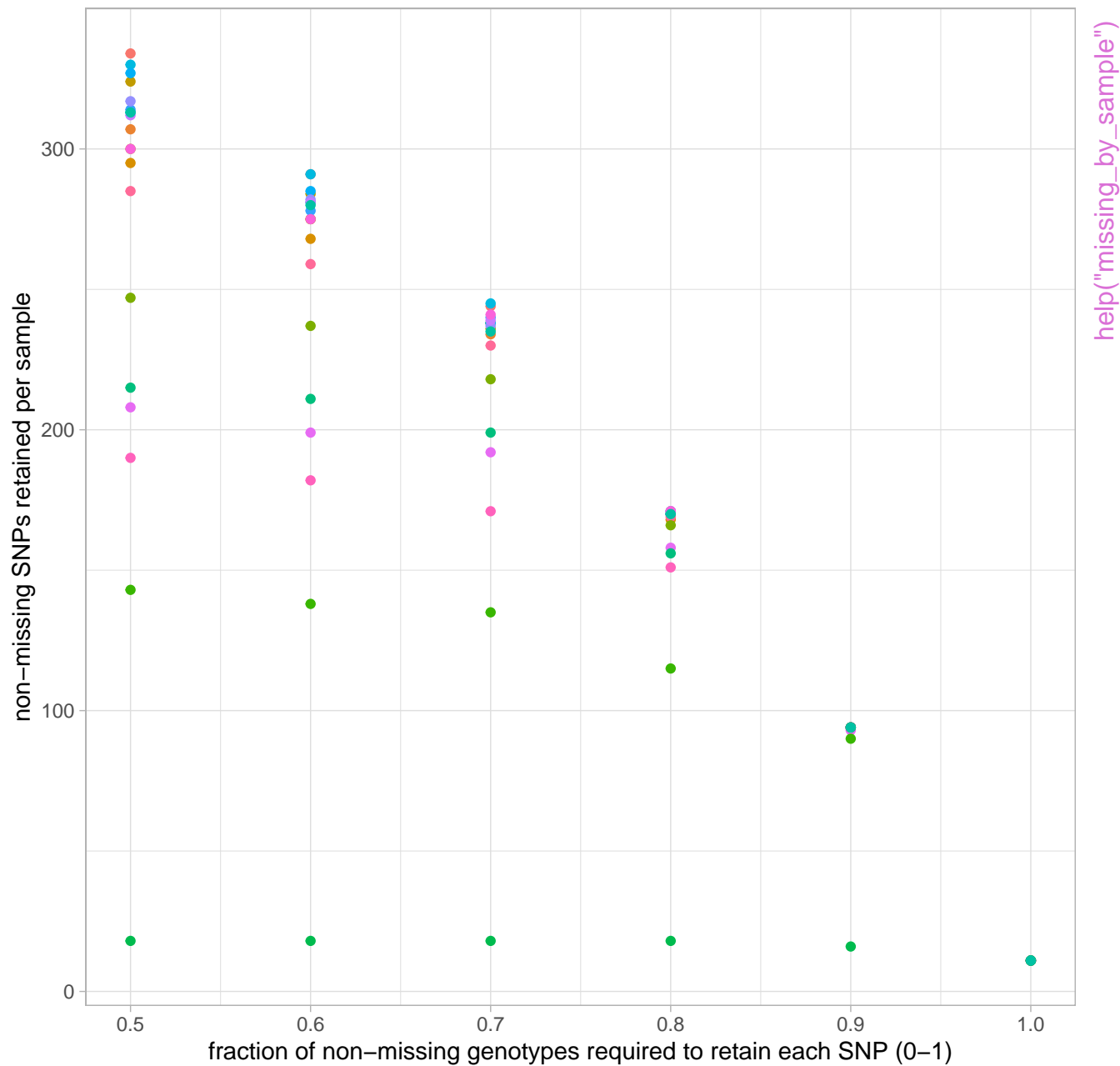
## max depth cutoff



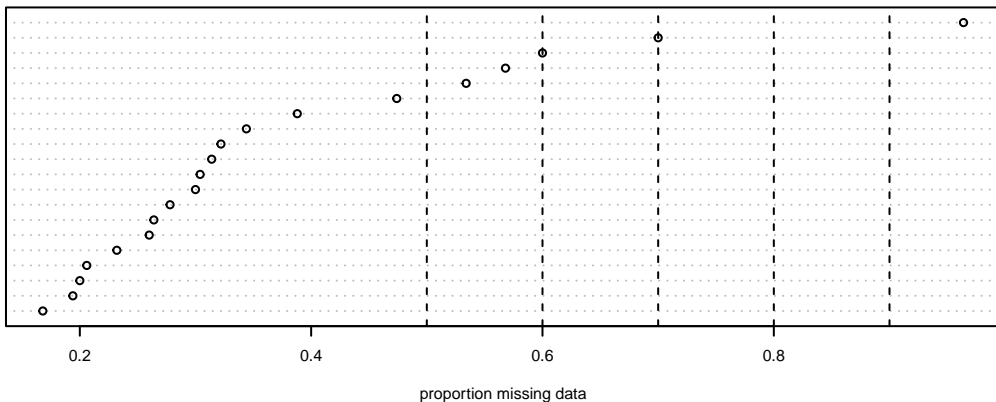
## folded SFS



SNPs retained by filtering scheme



A\_coerulescens\_396262  
 A\_coerulescens\_396259  
 A\_woodhouseii\_334148  
 A\_woodhouseii\_334134  
 A\_coerulescens\_396263  
 A\_coerulescens\_396256  
 A\_woodhouseii\_334153  
 A\_californica\_333855  
 A\_woodhouseii\_334142  
 A\_californica\_333860  
 A\_californica\_333854  
 A\_insularis\_334037  
 A\_woodhouseii\_334133  
 A\_insularis\_334031  
 A\_insularis\_334034  
 A\_coerulescens\_396264  
 A\_insularis\_334033  
 A\_californica\_333857  
 A\_insularis\_334032  
 A\_californica\_333849



help("missing\_by\_sample")

A\_coerulescens\_396262  
 A\_coerulescens\_396259  
 A\_woodhouseii\_334148  
 A\_woodhouseii\_334134  
 A\_coerulescens\_396263  
 A\_coerulescens\_396256  
 A\_woodhouseii\_334153  
 A\_californica\_333855  
 A\_woodhouseii\_334142  
 A\_californica\_333860  
 A\_californica\_333854  
 A\_insularis\_334037  
 A\_woodhouseii\_334133  
 A\_insularis\_334031  
 A\_insularis\_334034  
 A\_coerulescens\_396264  
 A\_insularis\_334033  
 A\_californica\_333857  
 A\_insularis\_334032  
 A\_californica\_333849

