### VCFstat

#### Michael Hall

#### 4/14/2022

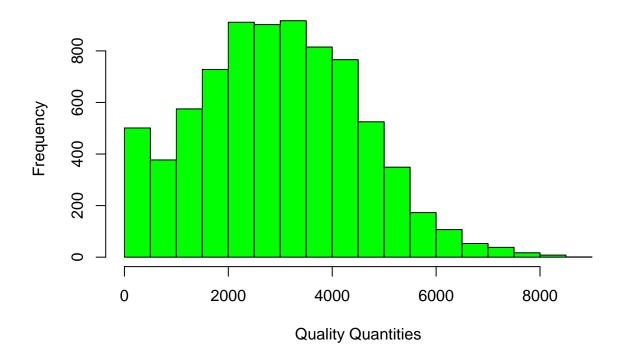
```
devtools::install_github("PBGLMichaelHall/VCFStat",force = TRUE)

library(VCFstat)
library(vcfR)
library(data.table)
library(QTLseqr)
library(ggplot2)

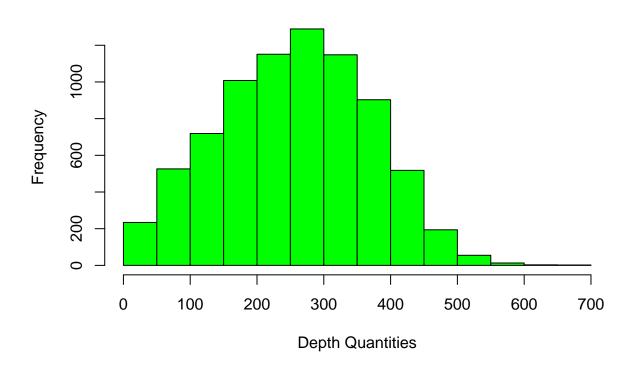
setwd("/home/michael/Desktop/QTLseqr/extdata/")
chromlist <- c("Chr01","Chr02","Chr03","Chr04","Chr05","Chr06","Chr07","Chr08","Chr09","Chr10")

VCFstat::ChromQual(vcf = "freebayes_D2.filtered.vcf.gz", chromlist = chromlist,windowSize = 1e+05, binw</pre>
```

### histogram of Quality Quantities

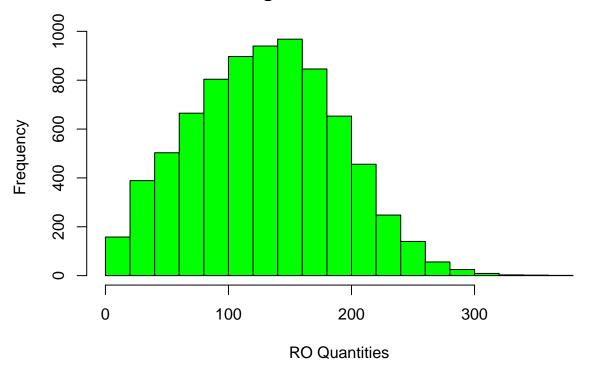


## histogram of Depth Quantities



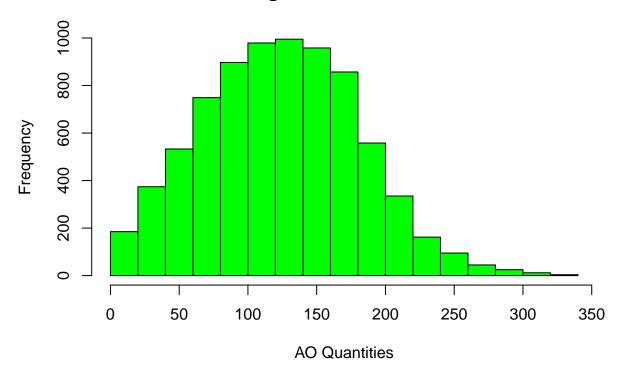
VCFstat::ChromRO(vcf = "freebayes\_D2.filtered.vcf.gz", chromlist = chromlist, windowSize = 1e+05, binwid

## histogram of RO Quantities



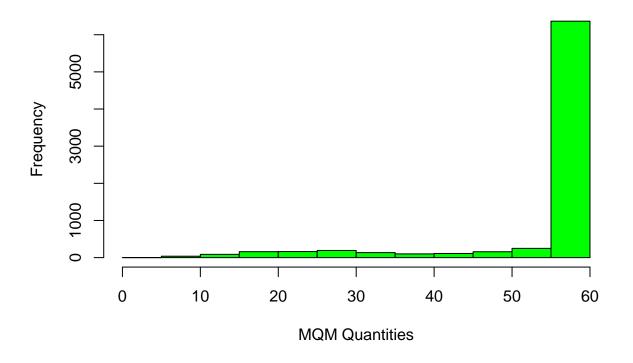
VCFstat::ChromAO(vcf = "freebayes\_D2.filtered.vcf.gz", chromlist = chromlist, windowSize = 1e+05, binwid

## histogram of AO Quantities

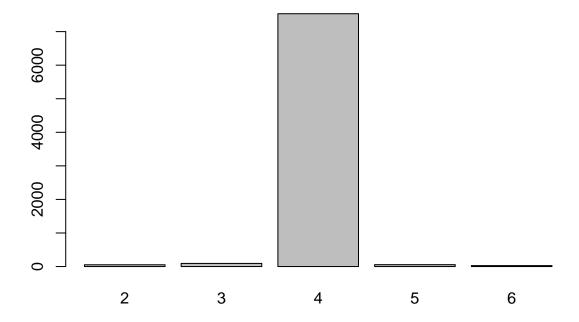


VCFstat::ChromMQM(vcf = "freebayes\_D2.filtered.vcf.gz", chromlist = chromlist, windowSize = 1e+05, binwi

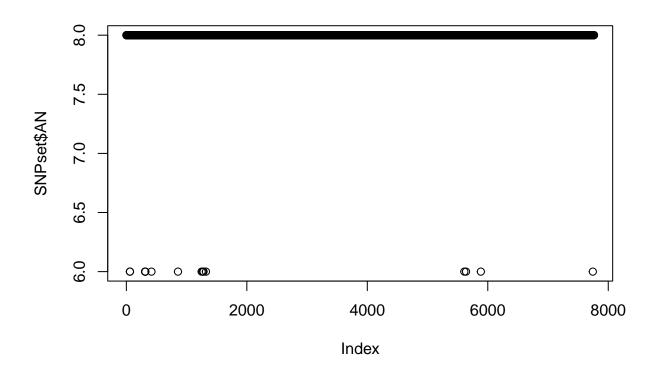
## histogram of MQM Quantities



VCFstat::ChromAC(vcf = "freebayes\_D2.filtered.vcf.gz", chromlist = chromlist, windowSize = 1e+05, binwid

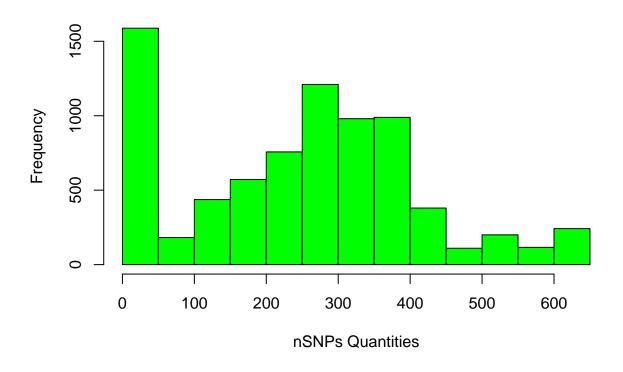


VCFstat::ChromAN(vcf = "freebayes\_D2.filtered.vcf.gz", chromlist = chromlist, windowSize = 1e+05, binwid

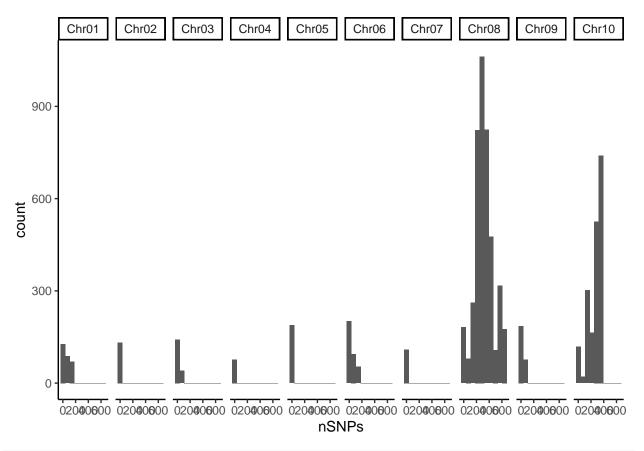


VCFstat::ChromnSNPs(vcf = "freebayes\_D2.filtered.vcf.gz", chromlist = chromlist, windowSize = 1e+05, bin

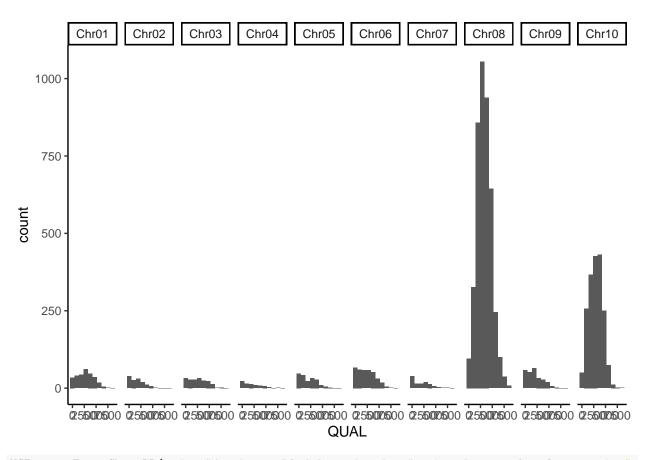
# histogram of nSNPs Quantities



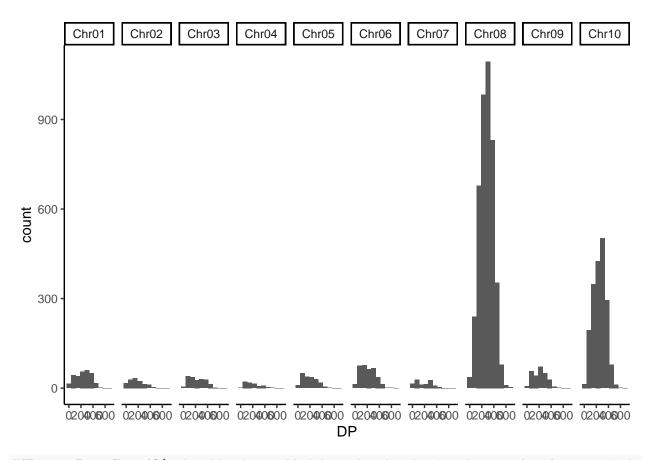
VCFstat::FacetChromnSNPs(vcf = "freebayes\_D2.filtered.vcf.gz", chromlist = chromlist, windowSize = 1e+05

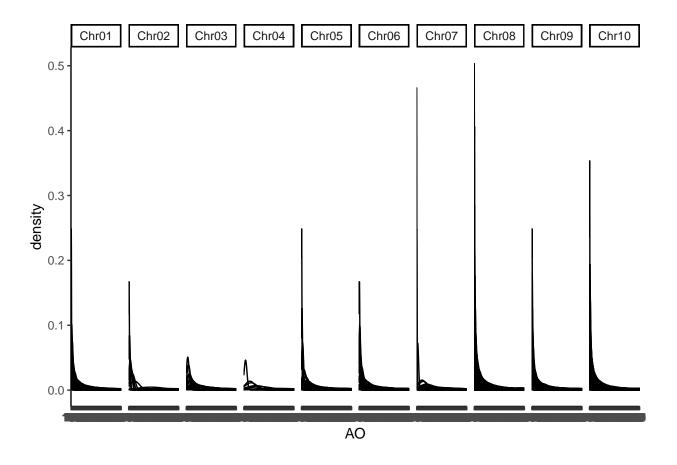


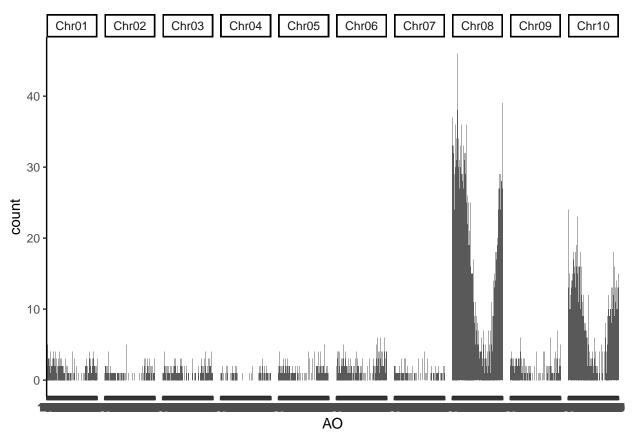
VCFstat::FacetChromQual(vcf = "freebayes\_D2.filtered.vcf.gz", chromlist = chromlist, windowSize = 1e+05,



VCFstat::FacetChromDP(vcf = "freebayes\_D2.filtered.vcf.gz", chromlist = chromlist, windowSize = 1e+05, n

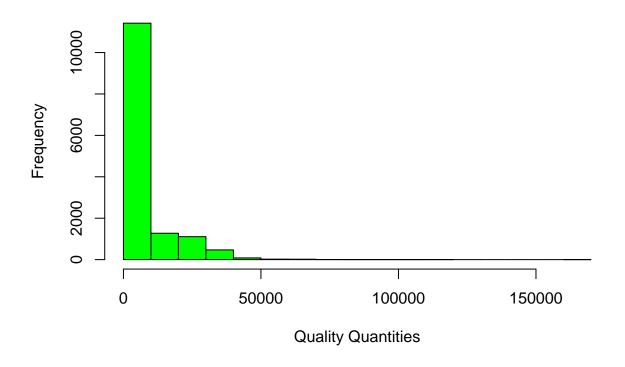






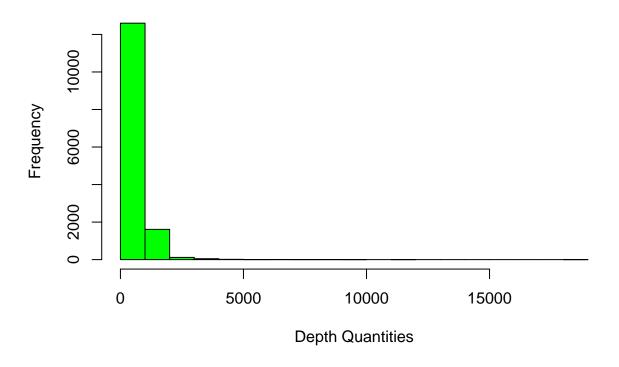
```
setwd("/home/michael/Desktop/Variants/Decompressed/")
chromlist <- c("NC_016131.3","NC_016132.3","NC_016133.3","NC_016134.3","NC_016135.3")
VCFstat::ChromQual(vcf = "freebayes~bwa~GCF_000005505.3_Brachypodium_distachyon_v3.0~all_samples~filter</pre>
```

## histogram of Quality Quantities



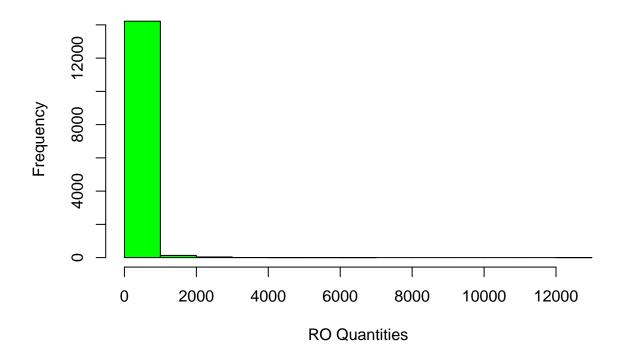
 $\label{local_condition} \mbox{VCFstat::ChromDP(vcf = "freebayes~bwa~GCF\_000005505.3\_Brachypodium\_distachyon\_v3.0~all\_samples~filtered).} \label{local_condition}$ 

## histogram of Depth Quantities



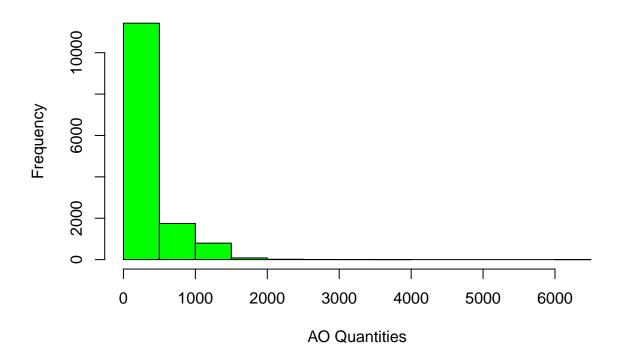
VCFstat::ChromRO(vcf = "freebayes~bwa~GCF\_000005505.3\_Brachypodium\_distachyon\_v3.0~all\_samples~filtered

## histogram of RO Quantities



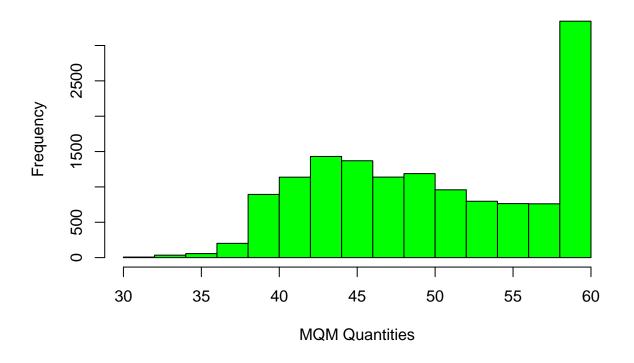
VCFstat::ChromAO(vcf = "freebayes~bwa~GCF\_000005505.3\_Brachypodium\_distachyon\_v3.0~all\_samples~filtered

## histogram of AO Quantities

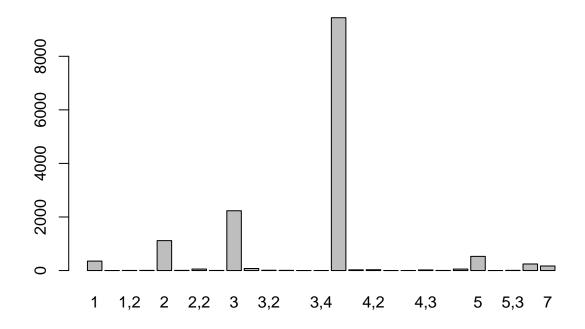


 $\label{local_vcf} VCF stat:: ChromMQM (vcf = "freebayes~bwa~GCF\_000005505.3\_Brachypodium\_distachyon\_v3.0~all\_samples~filtered to the control of the contro$ 

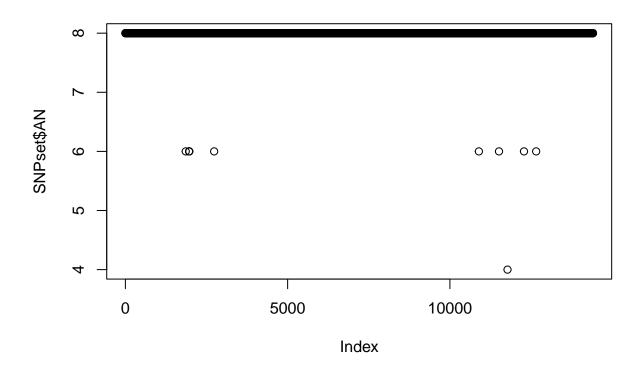
# histogram of MQM Quantities



VCFstat::ChromAC(vcf = "freebayes~bwa~GCF\_000005505.3\_Brachypodium\_distachyon\_v3.0~all\_samples~filtered

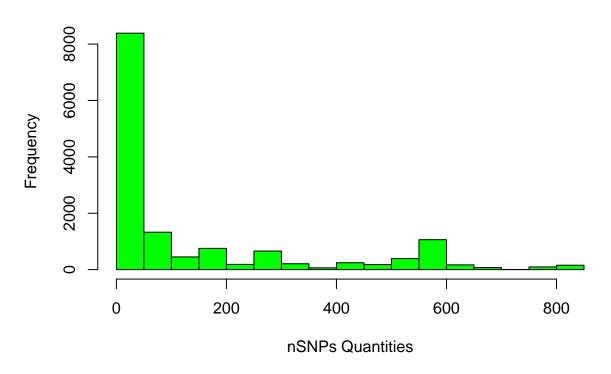


 $\label{local_vcf} \begin{tabular}{ll} VCFstat::ChromAN(vcf = "freebayes~bwa~GCF\_000005505.3\_Brachypodium\_distachyon\_v3.0~all\_samples~filtered for the control of the cont$ 

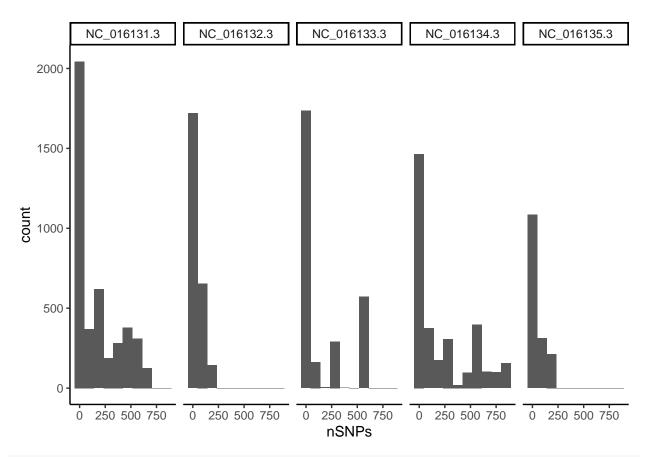


 $\label{local_vcf} VCF stat:: ChromnSNPs (vcf = "freebayes~bwa~GCF\_000005505.3\_Brachypodium\_distachyon\_v3.0~all\_samples~filter (vcf) = (vcf)$ 

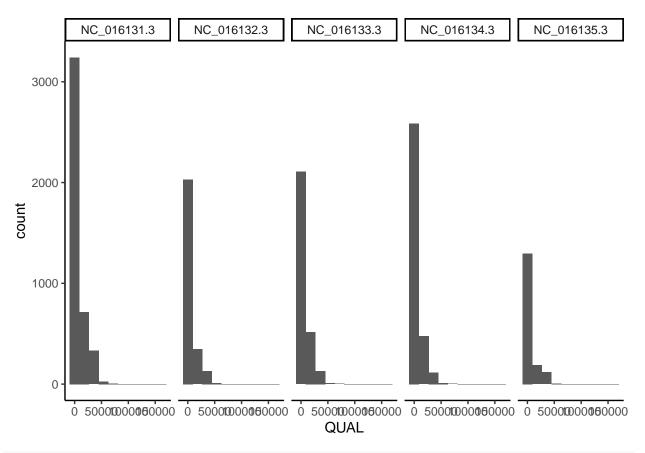
## histogram of nSNPs Quantities



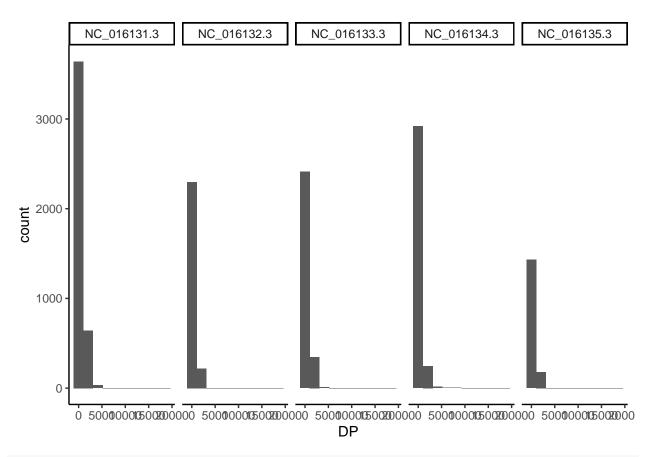
VCFstat::FacetChromnSNPs(vcf = "freebayes~bwa~GCF\_000005505.3\_Brachypodium\_distachyon\_v3.0~all\_samples~



VCFstat::FacetChromQual(vcf = "freebayes~bwa~GCF\_000005505.3\_Brachypodium\_distachyon\_v3.0~all\_samples~f



VCFstat::FacetChromDP(vcf = "freebayes~bwa~GCF\_000005505.3\_Brachypodium\_distachyon\_v3.0~all\_samples~file



VCFstat::FacetChromAO(vcf = "freebayes~bwa~GCF\_000005505.3\_Brachypodium\_distachyon\_v3.0~all\_samples~file

