

# Qualimap Analysis Results

*BAM QC analysis*

*Generated by Qualimap v.2.2.1*

*2016/10/23 13:59:02*

# 1. Input data & parameters

## 1.1. QualiMap command line

```
qualimap bamqc -bam
/home/vdp5/data/cambodia_samples/sequences_bam/OM283.sorted.bam.ba
m -nw 400 -hm 3
```

## 1.2. Alignment

Command line:	bwa mem -M /home/vdp5/data/salvador_vivax_asia_2016/first-SAMEA2376790/pvivax_sal1_SAMEA2376790.fasta /home/vdp5/data/cambodia_samples/sequences_gz/OM283-BiooBarcode29_CAACTA_R2.fastq.gz /home/vdp5/data/cambodia_samples/sequences_gz/OM283-BiooBarcode29_CAACTA_R1.fastq.gz
Draw chromosome limits:	no
Analyze overlapping paired-end reads:	no
Program:	bwa (0.7.15-r1140)
Analysis date:	Sun Oct 23 13:59:01 EDT 2016
Size of a homopolymer:	3
Skip duplicate alignments:	no
Number of windows:	400
BAM file:	/home/vdp5/data/cambodia_samples/sequences_bam/OM283.sorted.bam.

	bam
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## 2. Summary

### 2.1. Globals

Reference size	23,958,997
Number of reads	2,399,618
Mapped reads	1,339,299 / 55.81%
Unmapped reads	1,060,319 / 44.19%
Mapped paired reads	1,339,299 / 55.81%
Mapped reads, first in pair	666,830 / 27.79%
Mapped reads, second in pair	672,469 / 28.02%
Mapped reads, both in pair	1,308,754 / 54.54%
Mapped reads, singletons	30,545 / 1.27%
Read min/max/mean length	30 / 100 / 99.91
Duplicated reads (estimated)	108,148 / 4.51%
Duplication rate	6.01%
Clipped reads	149,870 / 6.25%

### 2.2. ACGT Content

Number/percentage of A's	38,699,677 / 29.91%
Number/percentage of C's	25,993,092 / 20.09%
Number/percentage of T's	38,764,379 / 29.96%
Number/percentage of G's	25,948,734 / 20.05%
Number/percentage of N's	10,589 / 0.01%
GC Percentage	40.14%

## 2.3. Coverage

Mean	5.407
Standard Deviation	5.6057

## 2.4. Mapping Quality

Mean Mapping Quality	58.6
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## 2.5. Insert size

Mean	855.66
Standard Deviation	26,548.54
P25/Median/P75	307 / 319 / 328

## 2.6. Mismatches and indels

General error rate	1.57%
Mismatches	1,934,507
Insertions	42,386
Mapped reads with at least one insertion	3.01%
Deletions	48,277
Mapped reads with at least one deletion	3.4%
Homopolymer indels	63.71%

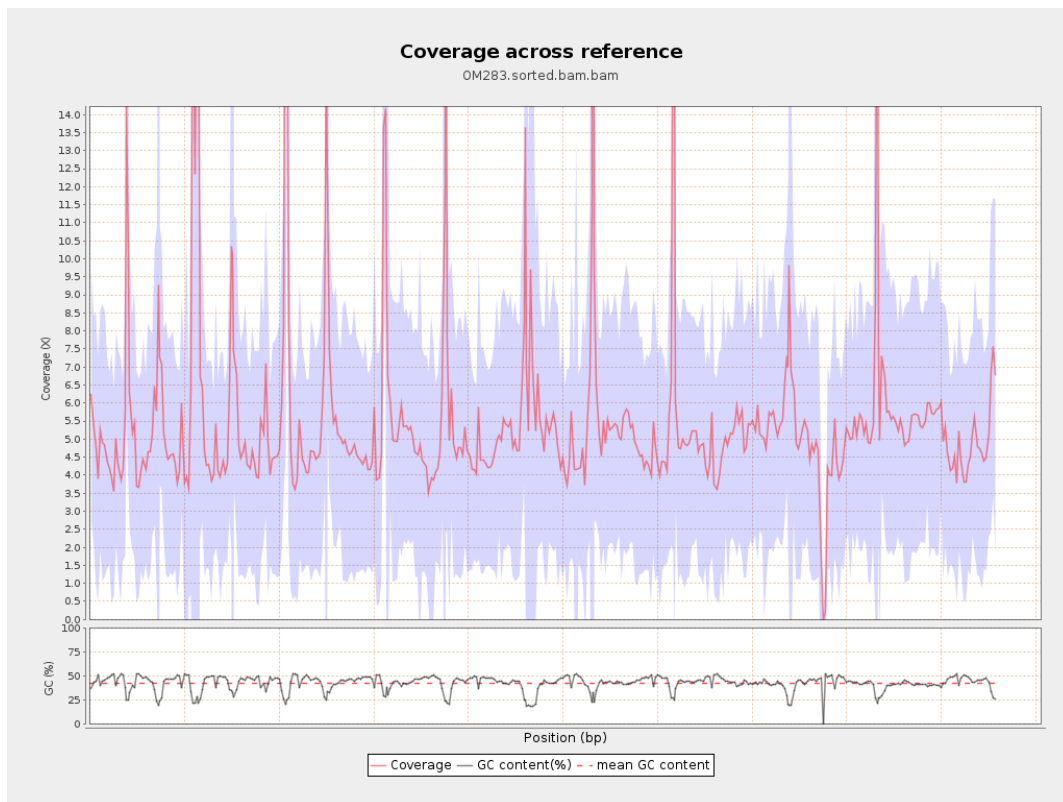
## 2.7. Chromosome stats

Name	Length	Mapped bases	Mean coverage	Standard deviation

gi 1074120478 emb LT615256.1	977217	4727327	4.8375	3.1775
gi 1074120682 emb LT615257.1	860454	4609235	5.3567	4.4012
gi 1074120865 emb LT615258.1	989719	6305001	6.3705	9.5726
gi 1074121086 emb LT615259.1	935450	5498751	5.8782	8.6015
gi 1074121301 emb LT615260.1	1432239	8183017	5.7134	6.0625
gi 1074121615 emb LT615261.1	1080962	6072405	5.6176	6.3169
gi 1074121871 emb LT615262.1	1545099	8463203	5.4775	3.6928
gi 1074122235 emb LT615263.1	1585108	8361859	5.2753	4.6252
gi 1074122590 emb LT615264.1	2122358	10950486	5.1596	3.3427
gi 1074123050 emb LT615265.1	1754192	9458399	5.3919	5.4465
gi 1074123421 emb LT615	2150147	12273791	5.7083	9.9729

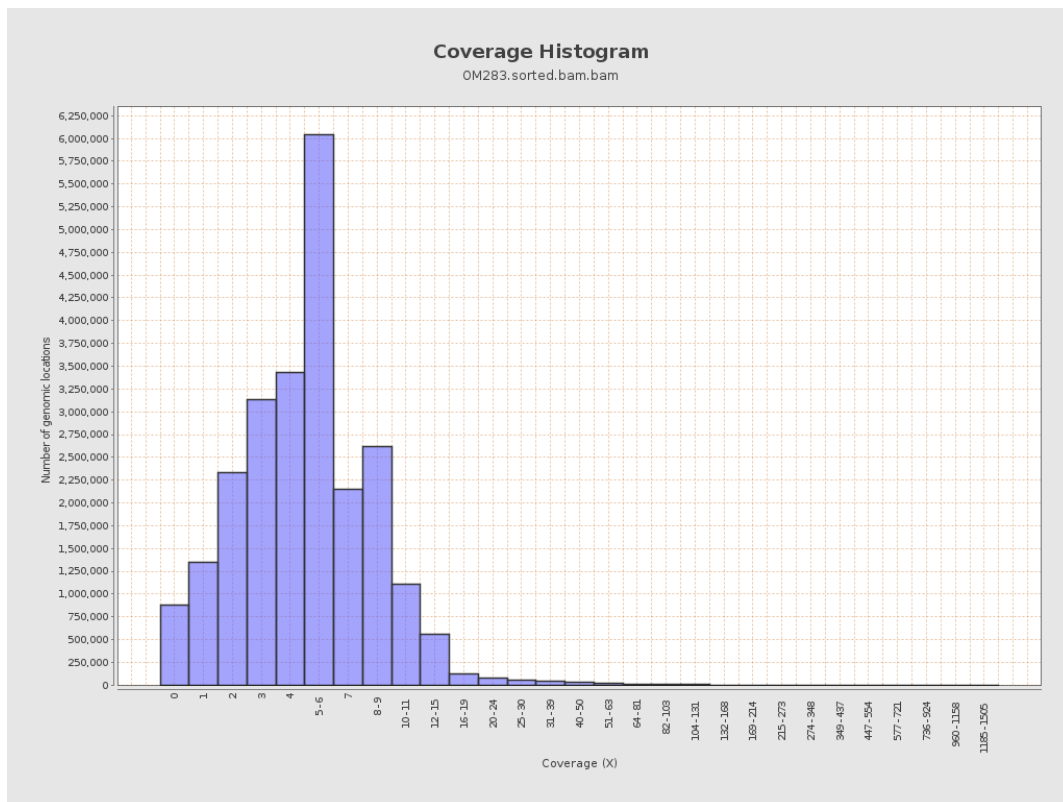
266.1				
gi 107412389 8 emb LT615 267.1	3031036	15821815	5.2199	3.3219
gi 107412458 8 emb LT615 268.1	2359348	12143784	5.1471	5.2486
gi 107412506 5 emb LT615 269.1	3135668	16676404	5.3183	2.8462

### 3. Results : Coverage across reference

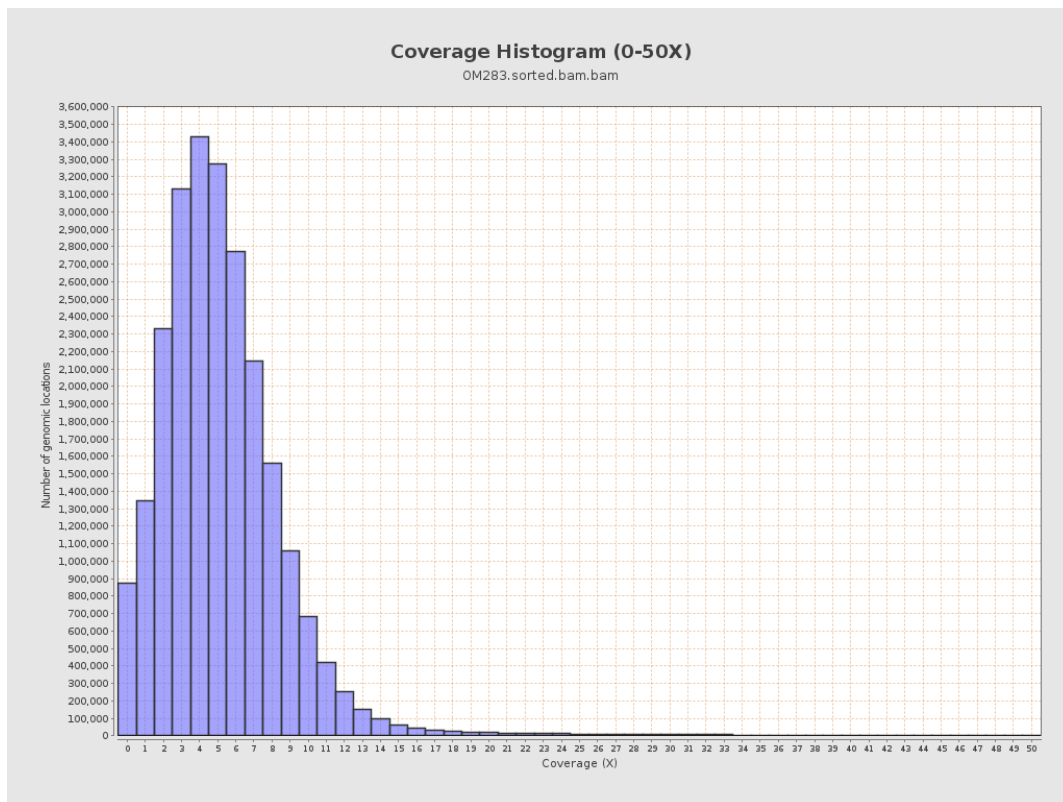




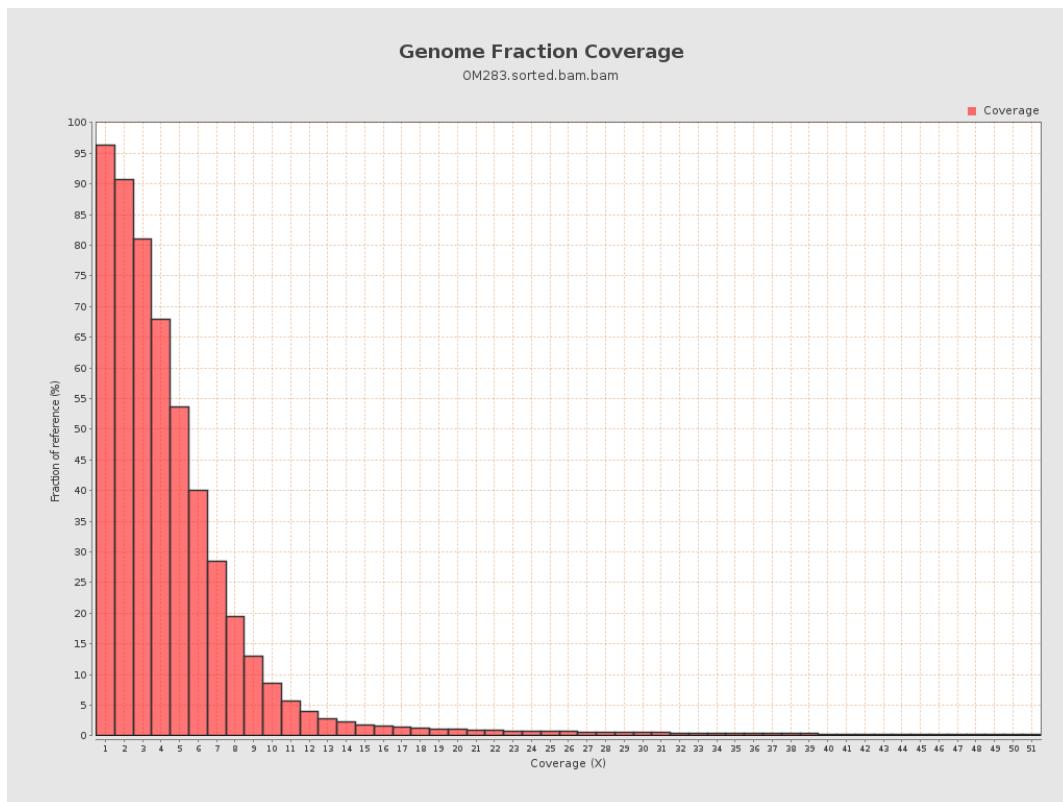
## 4. Results : Coverage Histogram



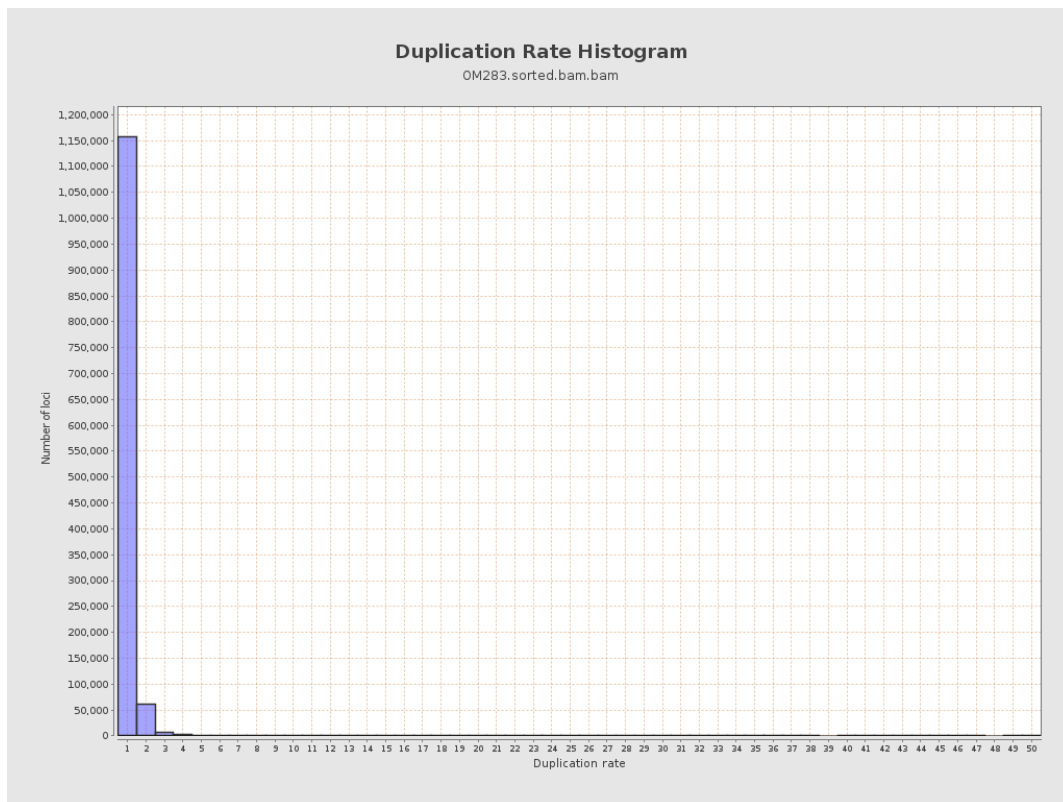
## 5. Results : Coverage Histogram (0-50X)



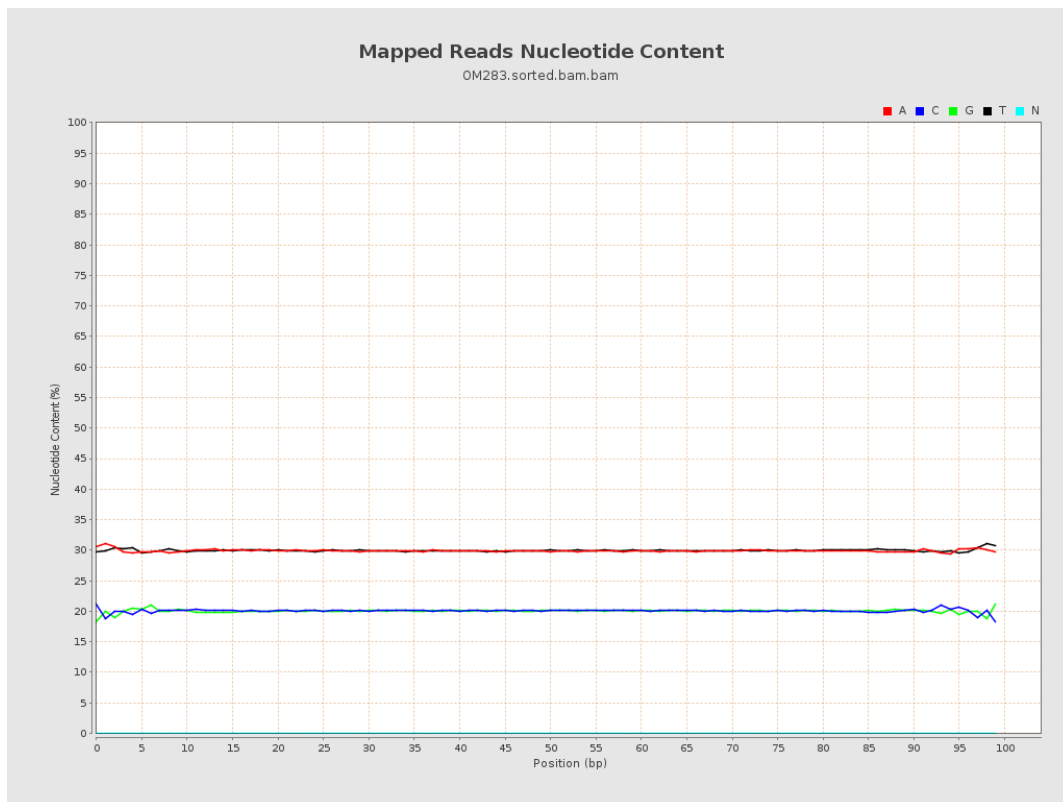
## 6. Results : Genome Fraction Coverage



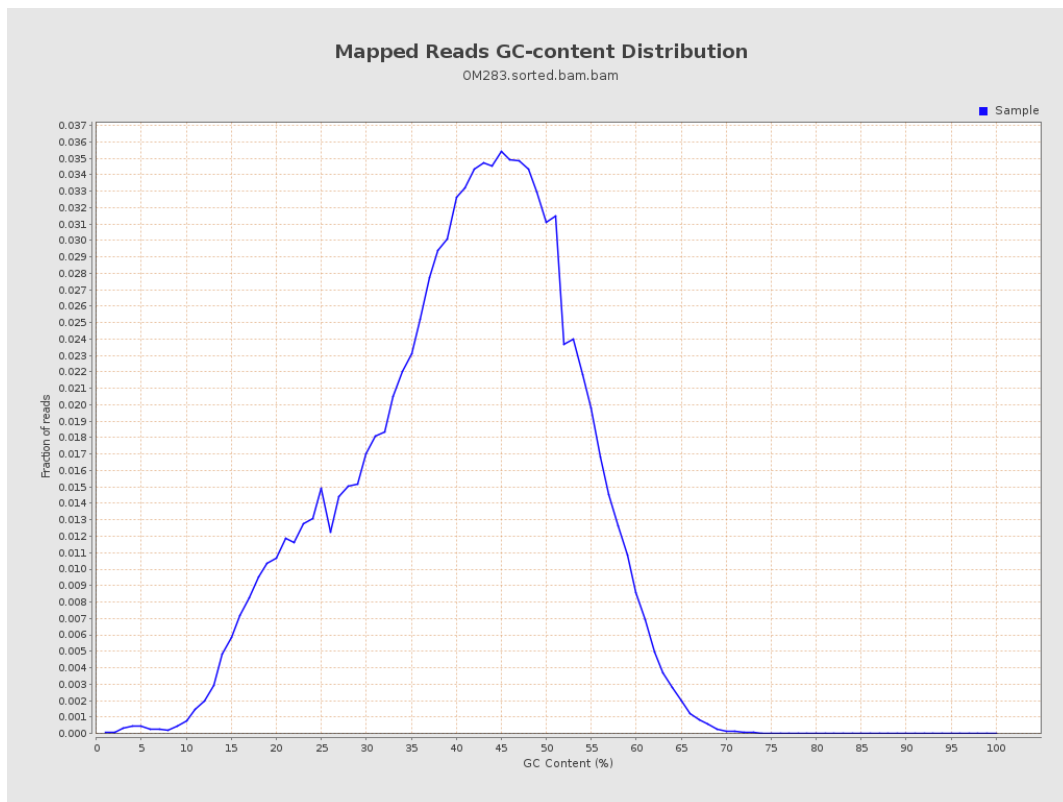
## 7. Results : Duplication Rate Histogram



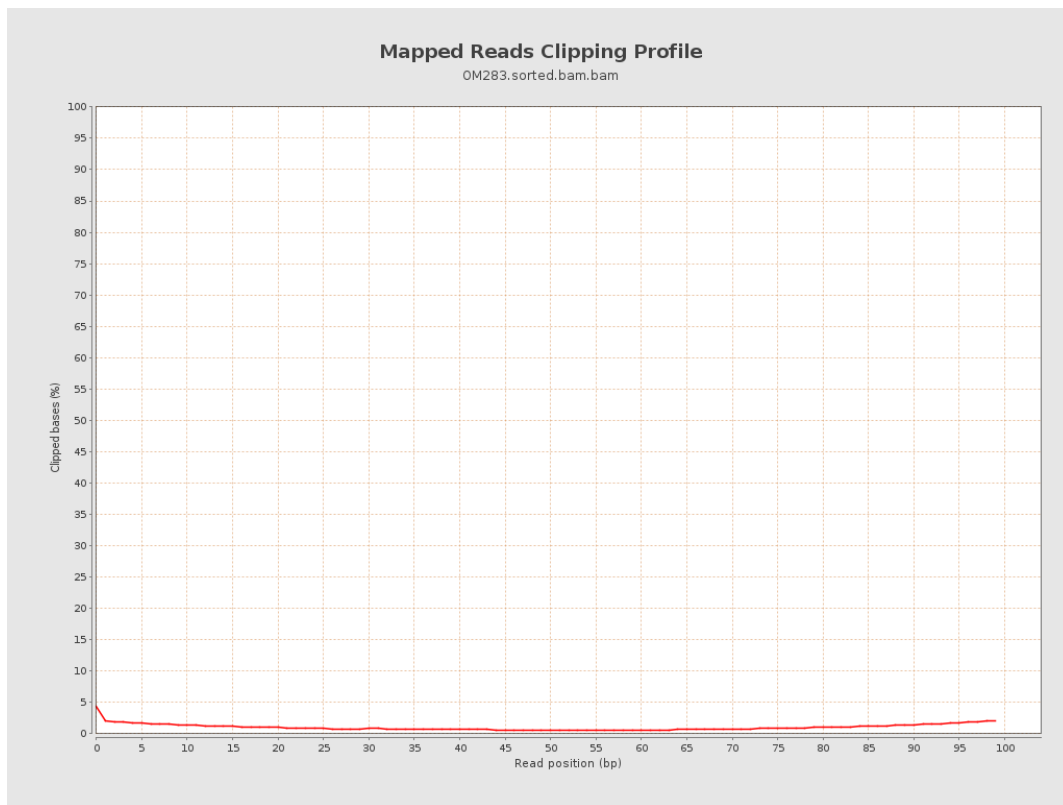
## 8. Results : Mapped Reads Nucleotide Content



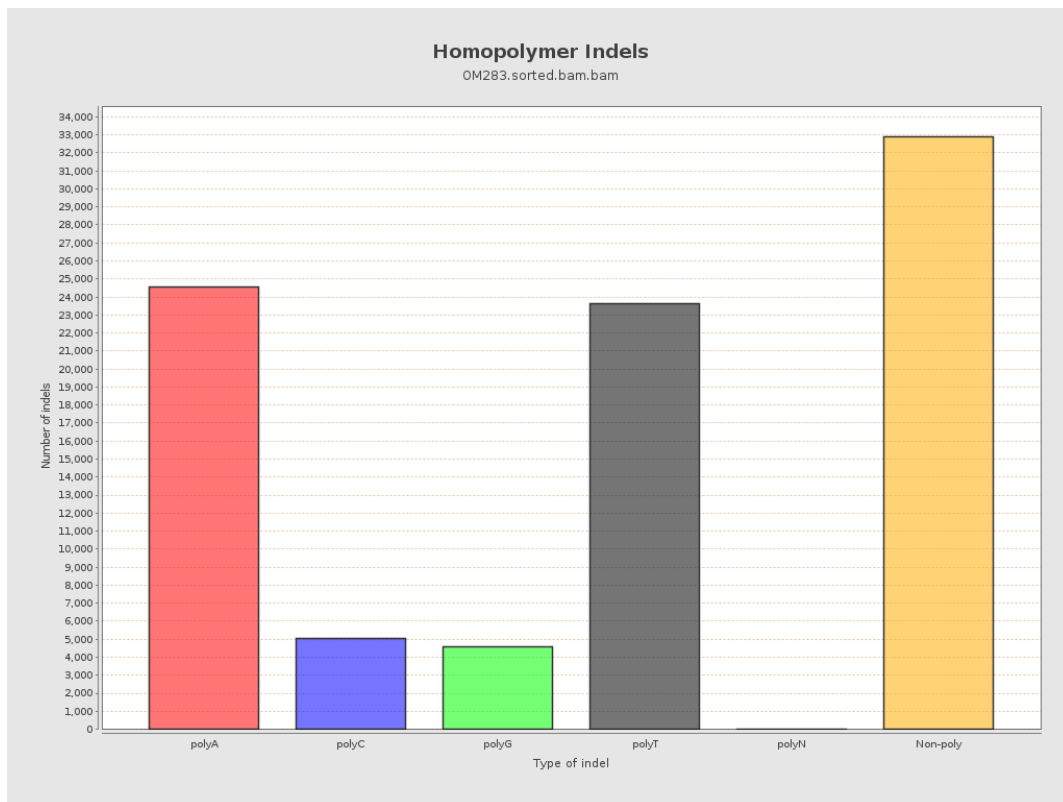
## 9. Results : Mapped Reads GC-content Distribution



## 10. Results : Mapped Reads Clipping Profile

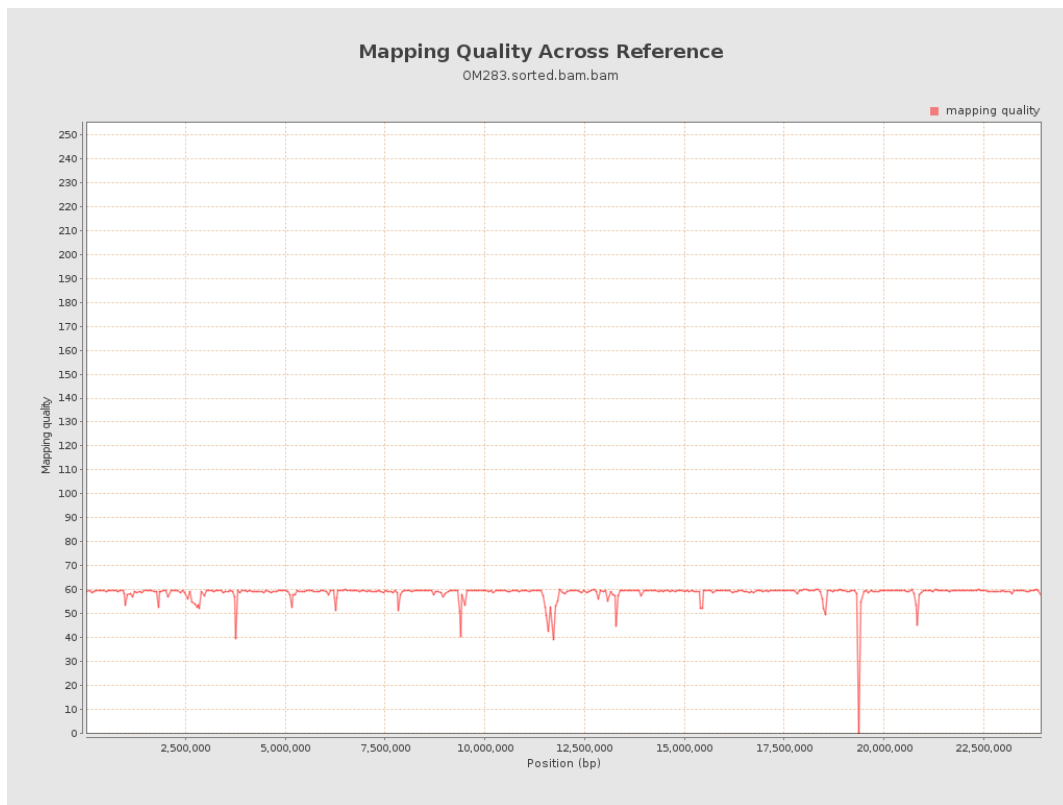


## 11. Results : Homopolymer Indels

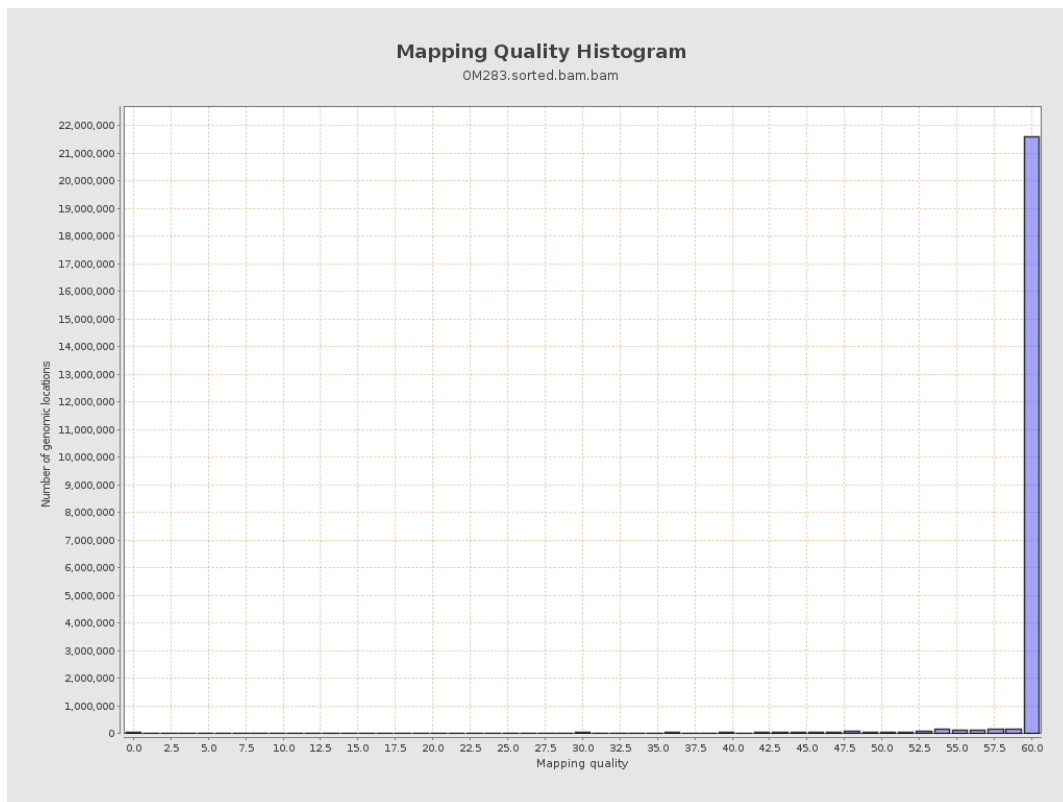




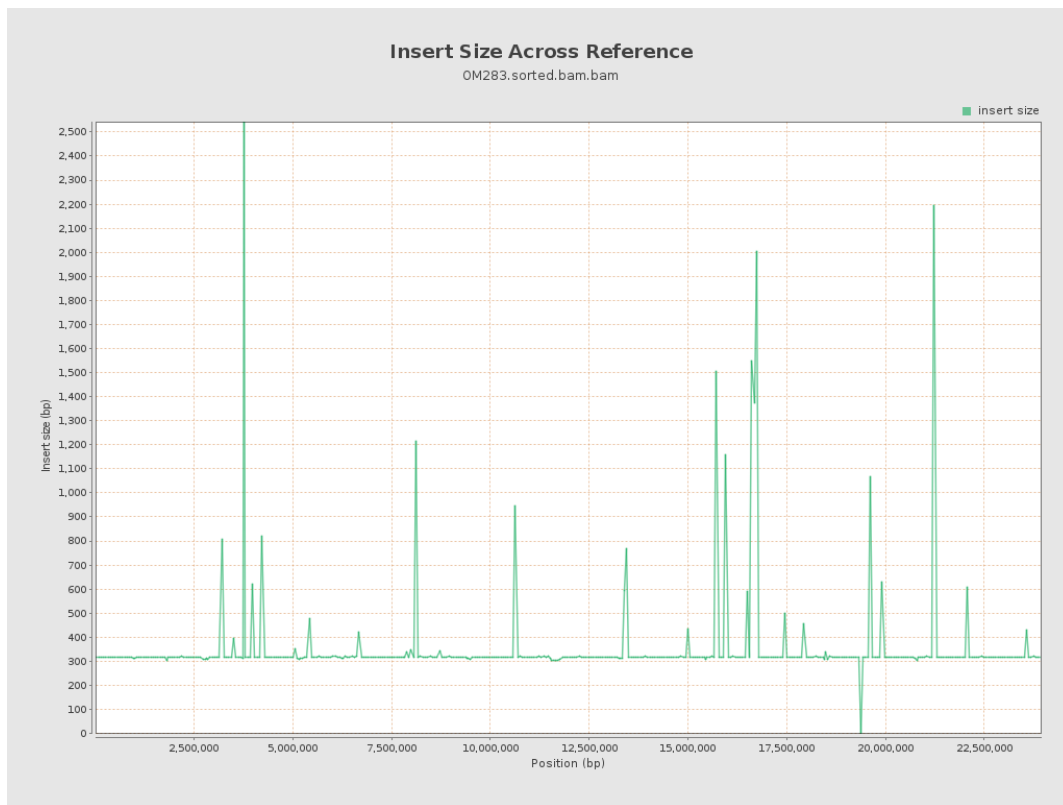
## 12. Results : Mapping Quality Across Reference



## 13. Results : Mapping Quality Histogram



## 14. Results : Insert Size Across Reference



## 15. Results : Insert Size Histogram

