

# Qualimap Analysis Results

*BAM QC analysis*

*Generated by Qualimap v.2.2.1*

*2016/10/23 13:57:17*

# 1. Input data & parameters

## 1.1. QualiMap command line

```
qualimap bamqc -bam
/home/vdp5/data/cambodia_samples/sequences_bam/OM271.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/OM271-BiooBarcode25_ACTGAT_R1.fastq.gz /home/vdp5/data/cambodia_samples/sequences_gz/OM271-BiooBarcode25_ACTGAT_R2.fastq.gz
Draw chromosome limits:	no
Analyze overlapping paired-end reads:	no
Program:	bwa (0.7.15-r1140)
Analysis date:	Sun Oct 23 13:57:16 EDT 2016
Size of a homopolymer:	3
Skip duplicate alignments:	no
Number of windows:	400
BAM file:	/home/vdp5/data/cambodia_samples/sequences_bam/OM271.sorted.bam.

	bam
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## 2. Summary

### 2.1. Globals

Reference size	23,958,997
Number of reads	37,130,391
Mapped reads	11,624,416 / 31.31%
Unmapped reads	25,505,975 / 68.69%
Mapped paired reads	11,624,416 / 31.31%
Mapped reads, first in pair	5,819,684 / 15.67%
Mapped reads, second in pair	5,804,732 / 15.63%
Mapped reads, both in pair	11,325,561 / 30.5%
Mapped reads, singletons	298,855 / 0.8%
Read min/max/mean length	30 / 100 / 99.94
Duplicated reads (estimated)	3,454,480 / 9.3%
Duplication rate	26.45%
Clipped reads	1,224,497 / 3.3%

### 2.2. ACGT Content

Number/percentage of A's	330,005,780 / 29.45%
Number/percentage of C's	229,726,815 / 20.5%
Number/percentage of T's	331,681,816 / 29.6%
Number/percentage of G's	229,089,914 / 20.45%
Number/percentage of N's	60,185 / 0.01%
GC Percentage	40.95%

## 2.3. Coverage

Mean	46.815
Standard Deviation	44.1522

## 2.4. Mapping Quality

Mean Mapping Quality	58.38
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## 2.5. Insert size

Mean	732.34
Standard Deviation	26,619.56
P25/Median/P75	193 / 201 / 210

## 2.6. Mismatches and indels

General error rate	1.18%
Mismatches	12,352,720
Insertions	341,794
Mapped reads with at least one insertion	2.78%
Deletions	388,976
Mapped reads with at least one deletion	3.14%
Homopolymer indels	63.84%

## 2.7. Chromosome stats

Name	Length	Mapped bases	Mean coverage	Standard deviation

gi 1074120478 emb LT615256.1	977217	41553285	42.5221	15.3632
gi 1074120682 emb LT615257.1	860454	41342178	48.0469	34.9429
gi 1074120865 emb LT615258.1	989719	52292630	52.8358	52.8014
gi 1074121086 emb LT615259.1	935450	47718503	51.0113	62.2459
gi 1074121301 emb LT615260.1	1432239	67288950	46.9816	38.8663
gi 1074121615 emb LT615261.1	1080962	53040641	49.068	39.784
gi 1074121871 emb LT615262.1	1545099	68920907	44.6061	16.0632
gi 1074122235 emb LT615263.1	1585108	73707278	46.4998	47.6225
gi 1074122590 emb LT615264.1	2122358	96351867	45.3985	19.3386
gi 1074123050 emb LT615265.1	1754192	81659906	46.5513	89.6551
gi 1074123421 emb LT615	2150147	104800458	48.7411	63.2027

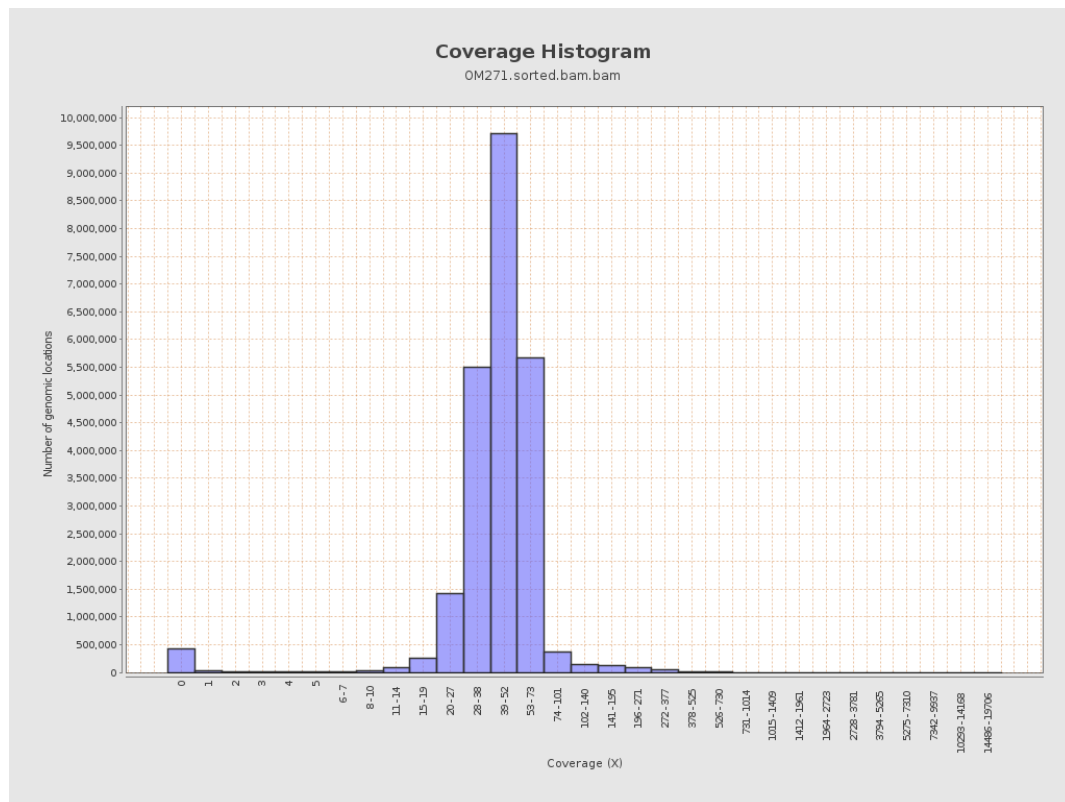
266.1				
gi 107412389 8 emb LT615 267.1	3031036	138619639	45.7334	30.7659
gi 107412458 8 emb LT615 268.1	2359348	107976342	45.7653	41.1091
gi 107412506 5 emb LT615 269.1	3135668	146368663	46.6786	15.272

### 3. Results : Coverage across reference

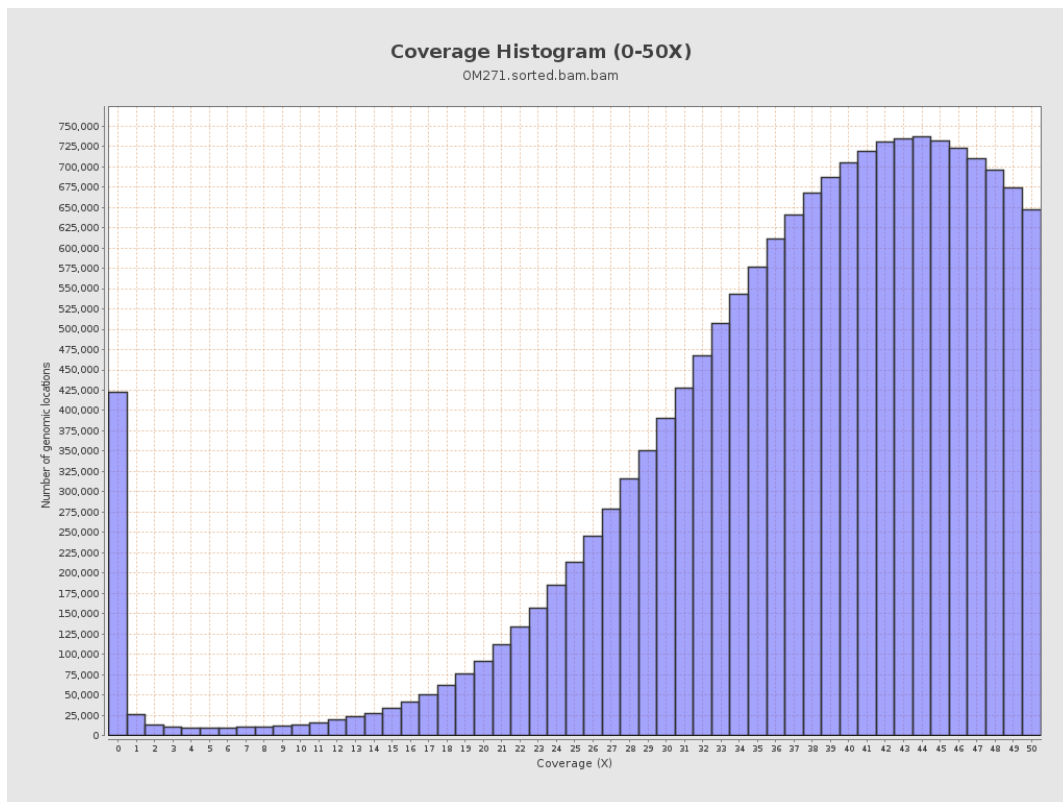




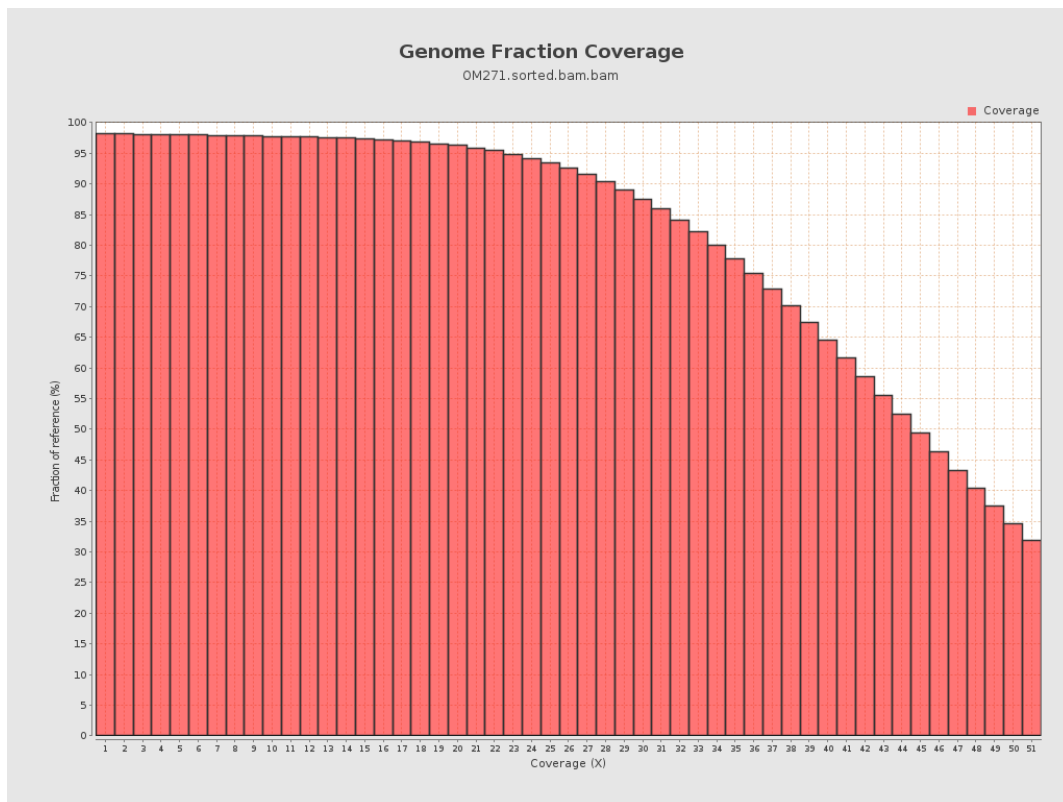
## 4. Results : Coverage Histogram



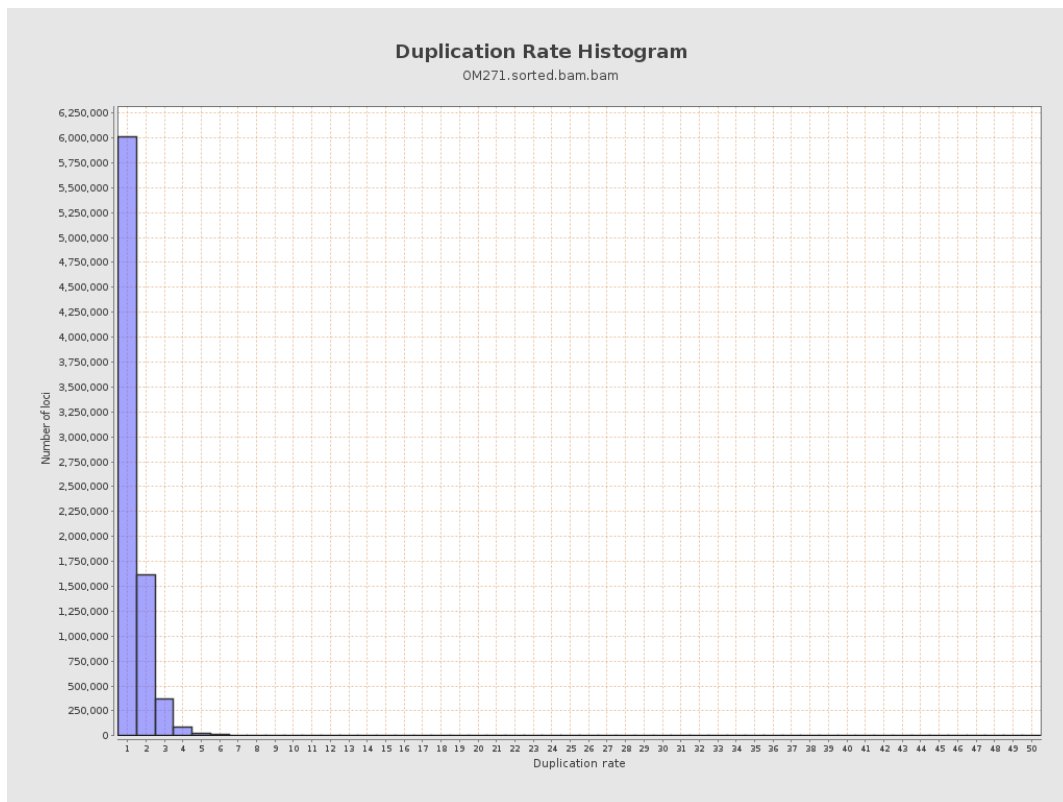
## 5. Results : Coverage Histogram (0-50X)



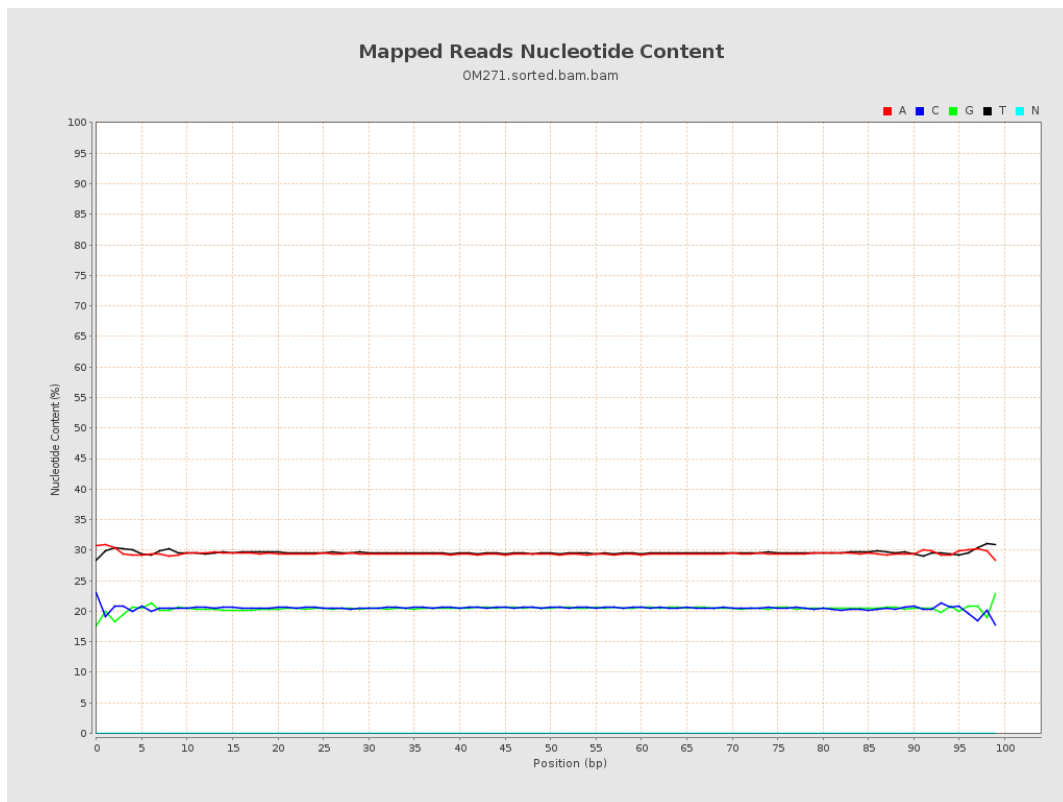
## 6. Results : Genome Fraction Coverage



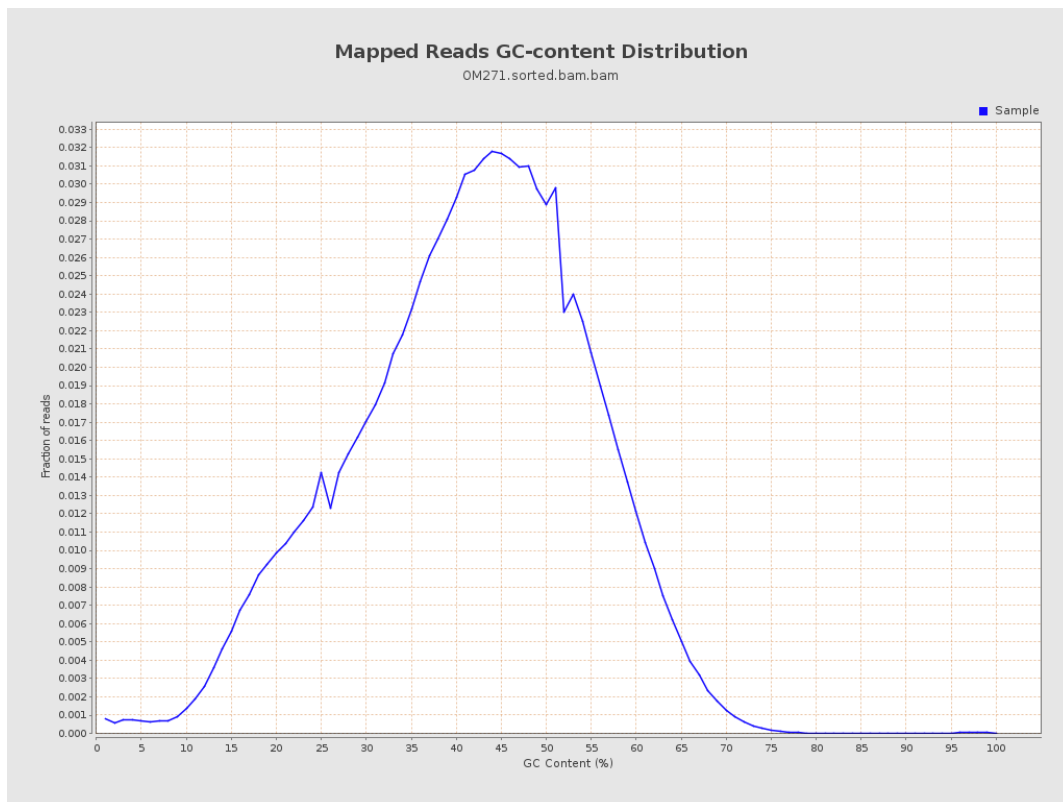
## 7. Results : Duplication Rate Histogram



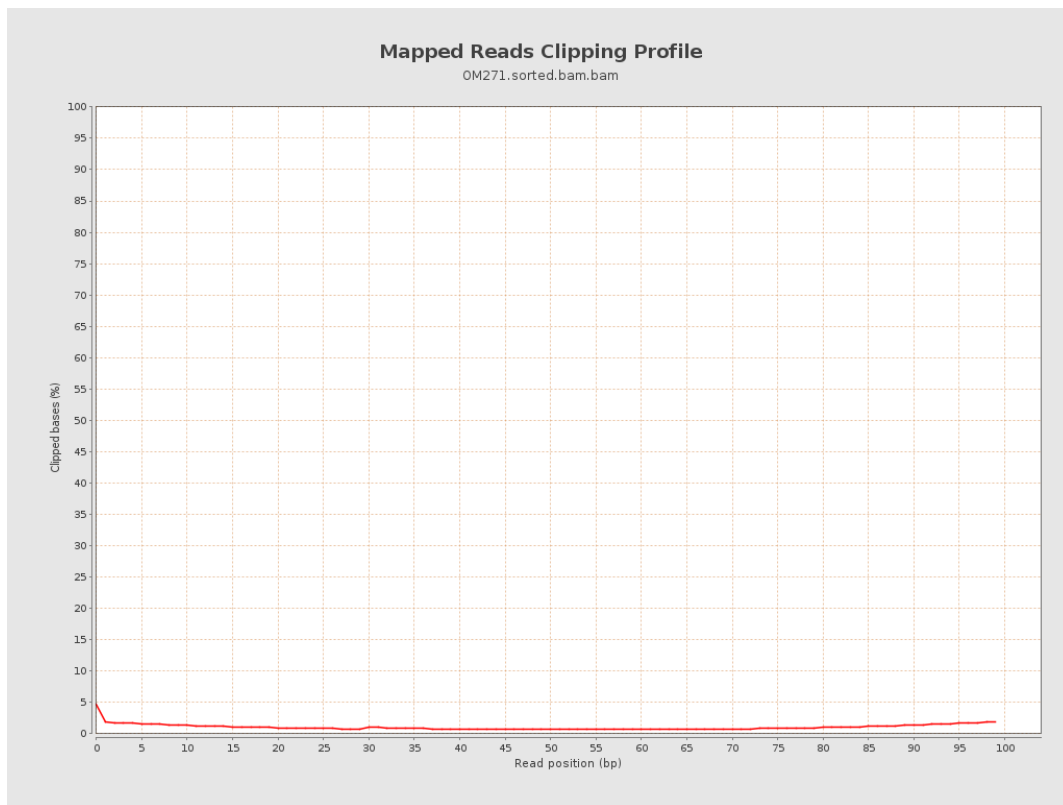
## 8. Results : Mapped Reads Nucleotide Content



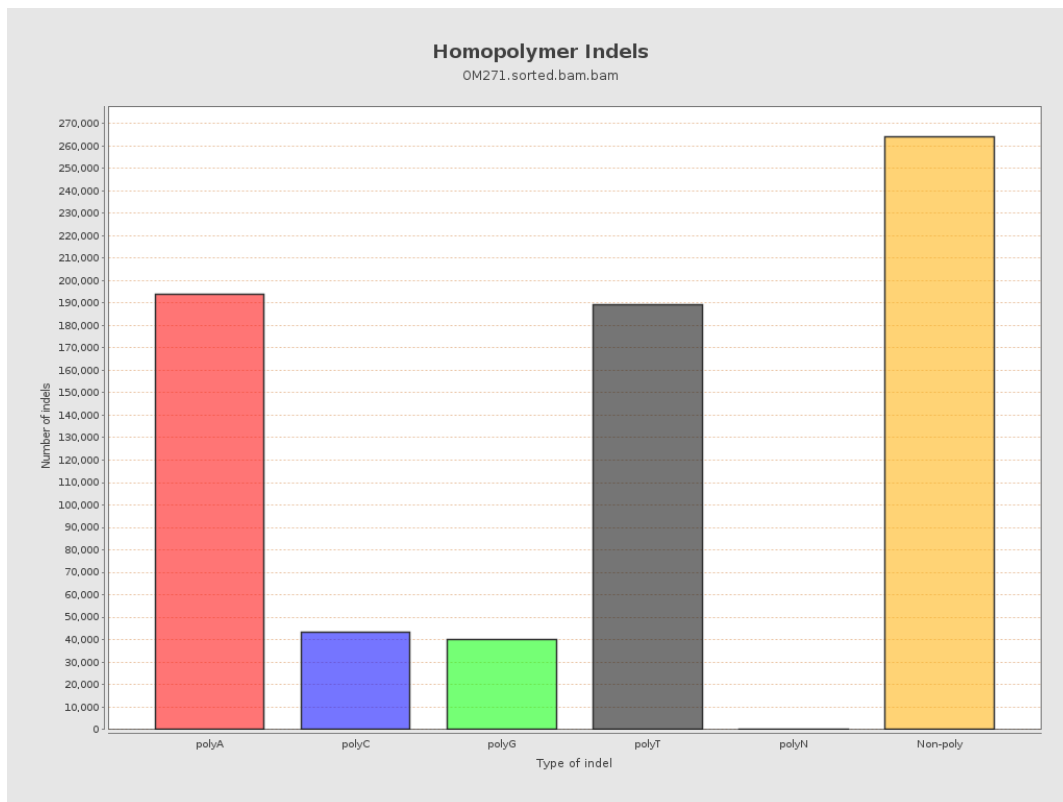
## 9. Results : Mapped Reads GC-content Distribution



## 10. Results : Mapped Reads Clipping Profile

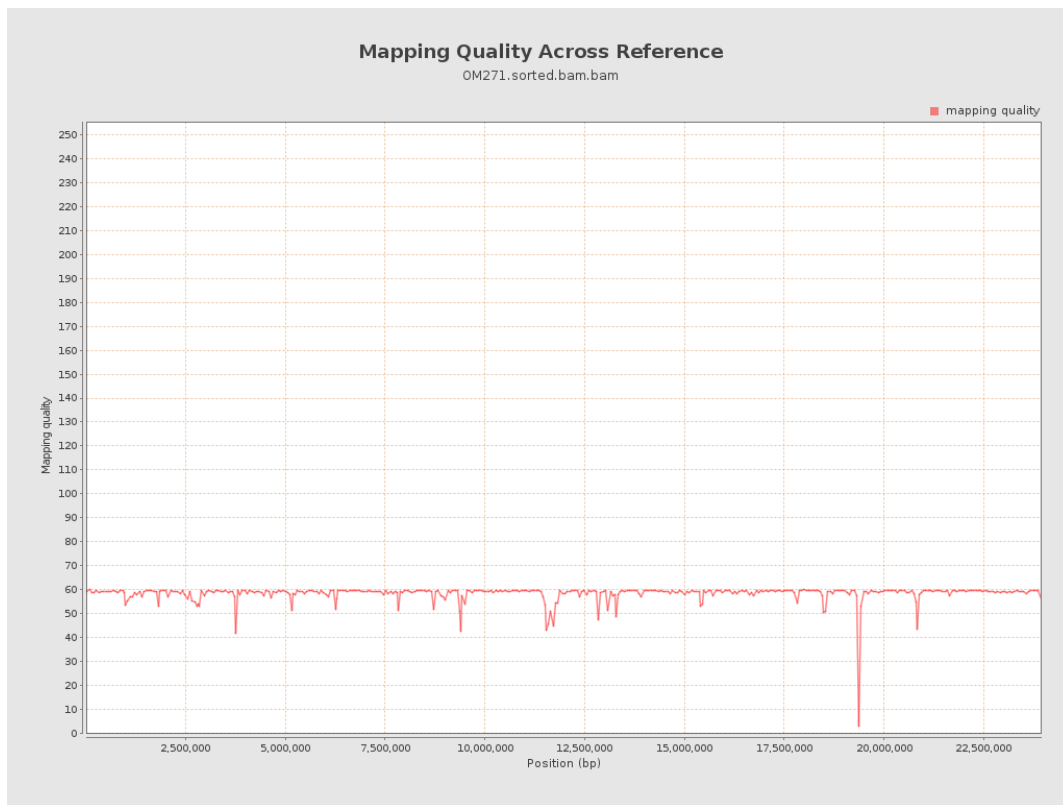


## 11. Results : Homopolymer Indels

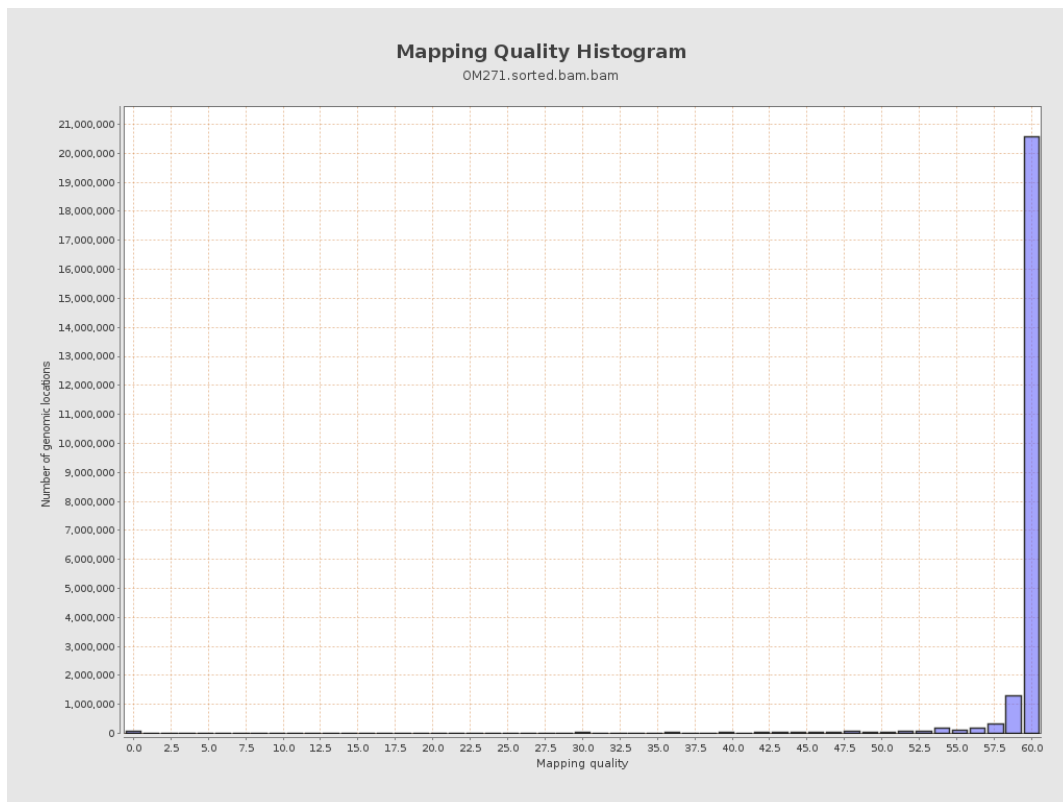




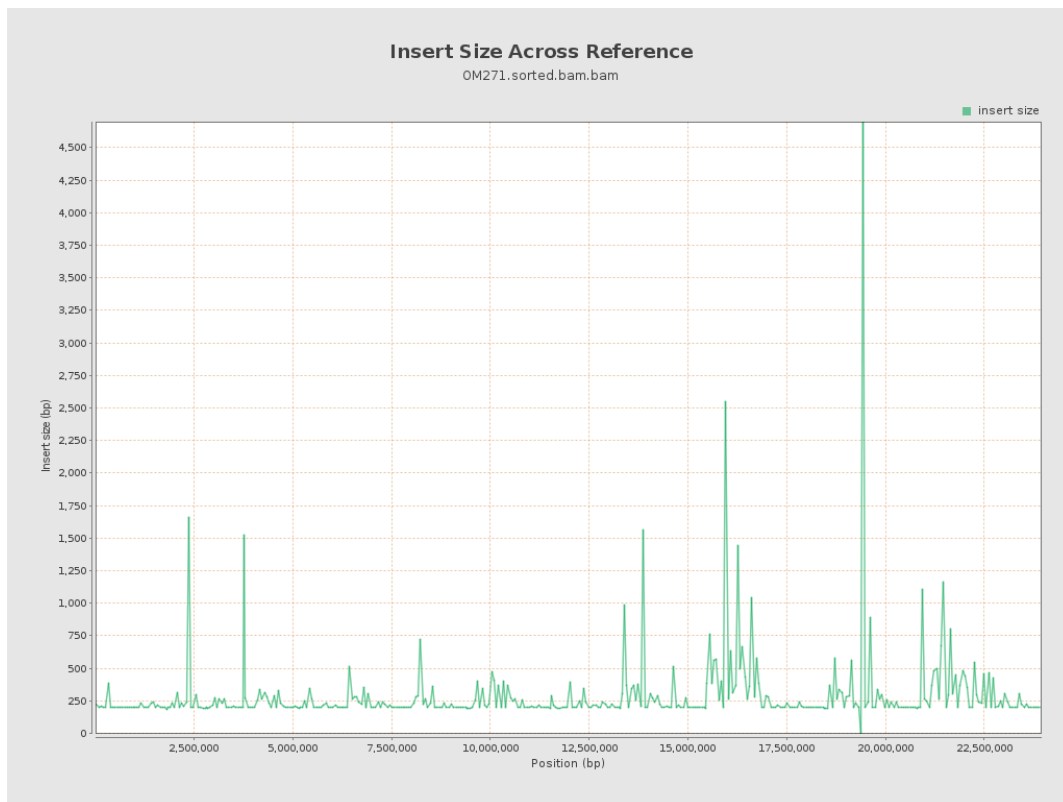
## 12. Results : Mapping Quality Across Reference



## 13. Results : Mapping Quality Histogram



## 14. Results : Insert Size Across Reference



## 15. Results : Insert Size Histogram

