

# Qualimap Analysis Results

*BAM QC analysis*

*Generated by Qualimap v.2.2.1*

*2016/10/23 13:46:42*

# 1. Input data & parameters

## 1.1. QualiMap command line

```
qualimap bamqc -bam
/home/vdp5/data/cambodia_samples/sequences_bam/OM236.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/OM236-BiooBarcode21_GTTTCG_R1.fastq.gz /home/vdp5/data/cambodia_samples/sequences_gz/OM236-BiooBarcode21_GTTTCG_R2.fastq.gz
Draw chromosome limits:	no
Analyze overlapping paired-end reads:	no
Program:	bwa (0.7.15-r1140)
Analysis date:	Sun Oct 23 13:46:42 EDT 2016
Size of a homopolymer:	3
Skip duplicate alignments:	no
Number of windows:	400
BAM file:	/home/vdp5/data/cambodia_samples/sequences_bam/OM236.sorted.bam.

	bam
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## 2. Summary

### 2.1. Globals

Reference size	23,958,997
Number of reads	2,121,301
Mapped reads	874,077 / 41.2%
Unmapped reads	1,247,224 / 58.8%
Mapped paired reads	874,077 / 41.2%
Mapped reads, first in pair	438,175 / 20.66%
Mapped reads, second in pair	435,902 / 20.55%
Mapped reads, both in pair	854,014 / 40.26%
Mapped reads, singletons	20,063 / 0.95%
Read min/max/mean length	30 / 100 / 99.93
Duplicated reads (estimated)	56,211 / 2.65%
Duplication rate	4.85%
Clipped reads	96,218 / 4.54%

### 2.2. ACGT Content

Number/percentage of A's	25,081,449 / 29.73%
Number/percentage of C's	17,092,577 / 20.26%
Number/percentage of T's	25,099,918 / 29.75%
Number/percentage of G's	17,085,565 / 20.25%
Number/percentage of N's	6,878 / 0.01%
GC Percentage	40.51%

## 2.3. Coverage

Mean	3.5246
Standard Deviation	3.7986

## 2.4. Mapping Quality

Mean Mapping Quality	58.53
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## 2.5. Insert size

Mean	773.76
Standard Deviation	25,190.66
P25/Median/P75	308 / 323 / 331

## 2.6. Mismatches and indels

General error rate	1.48%
Mismatches	1,180,868
Insertions	26,731
Mapped reads with at least one insertion	2.9%
Deletions	29,614
Mapped reads with at least one deletion	3.2%
Homopolymer indels	64.1%

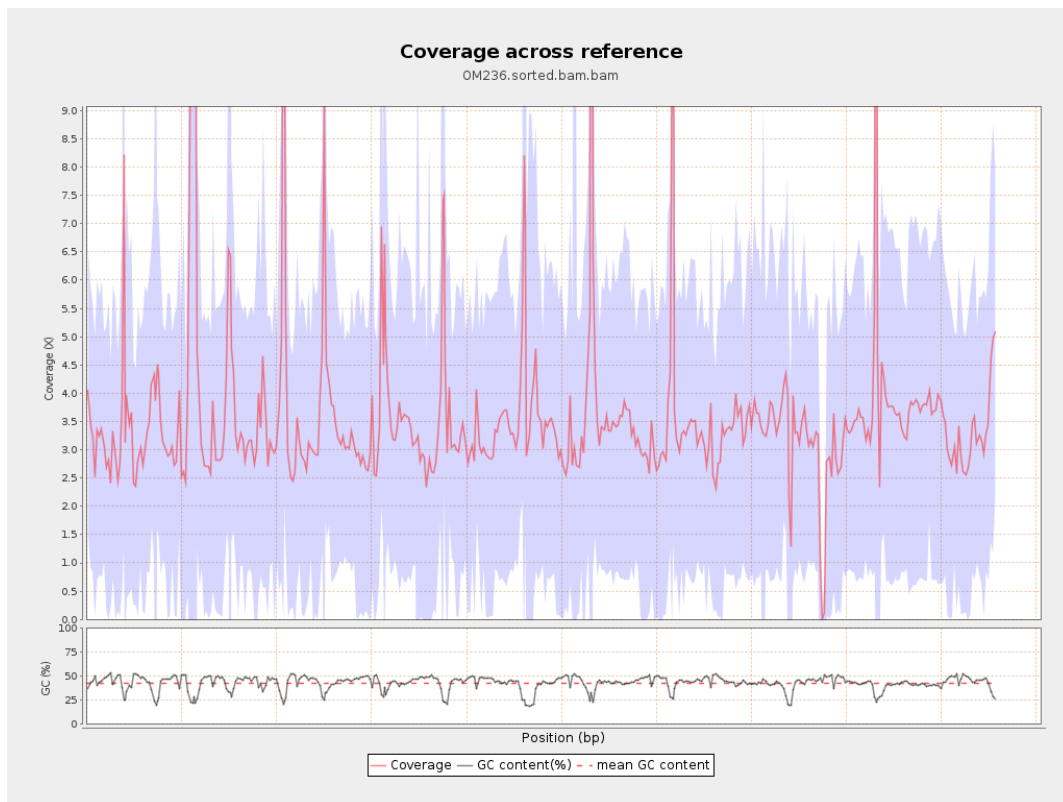
## 2.7. Chromosome stats

Name	Length	Mapped bases	Mean coverage	Standard deviation

gi 1074120478 emb LT615256.1	977217	3115152	3.1878	2.3663
gi 1074120682 emb LT615257.1	860454	2844115	3.3054	2.7734
gi 1074120865 emb LT615258.1	989719	4135602	4.1786	5.9672
gi 1074121086 emb LT615259.1	935450	3671582	3.9249	6.1186
gi 1074121301 emb LT615260.1	1432239	5424992	3.7878	4.0555
gi 1074121615 emb LT615261.1	1080962	3874625	3.5844	3.5778
gi 1074121871 emb LT615262.1	1545099	5262318	3.4058	2.3181
gi 1074122235 emb LT615263.1	1585108	5566444	3.5117	3.2918
gi 1074122590 emb LT615264.1	2122358	7200616	3.3927	2.4057
gi 1074123050 emb LT615265.1	1754192	6053623	3.4509	4.0666
gi 1074123421 emb LT615	2150147	7979558	3.7112	6.4135

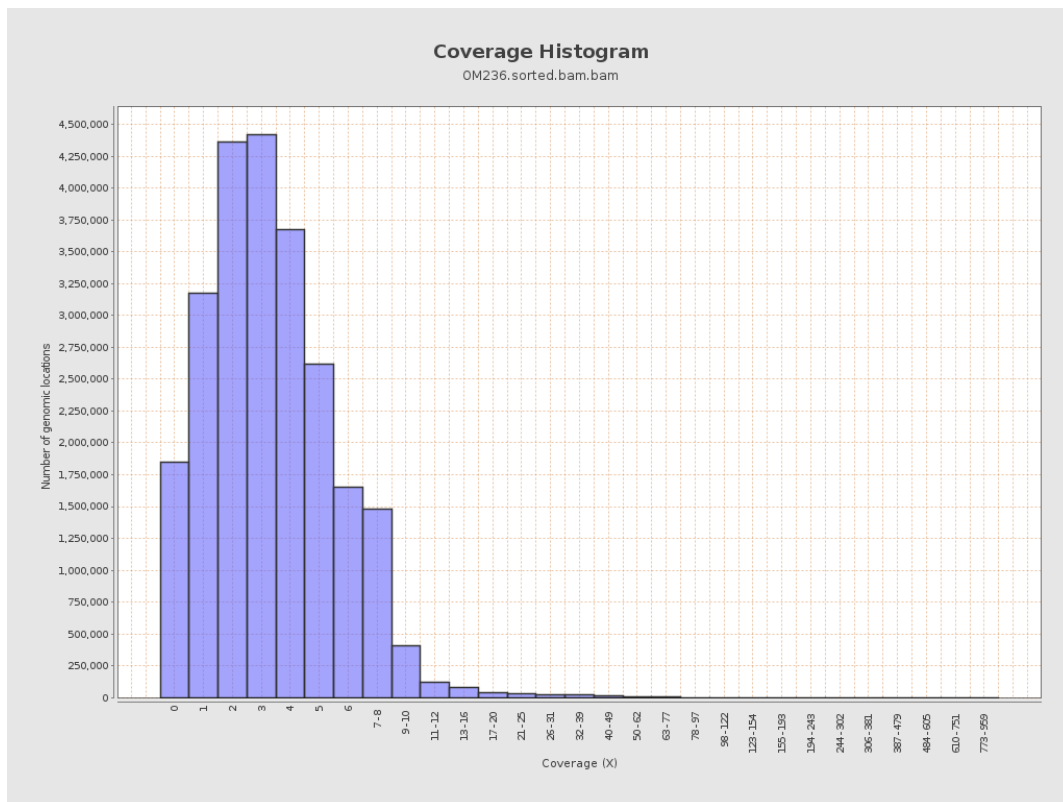
266.1				
gi 107412389 8 emb LT615 267.1	3031036	10538001	3.4767	2.6249
gi 107412458 8 emb LT615 268.1	2359348	7693644	3.2609	3.7575
gi 107412506 5 emb LT615 269.1	3135668	11086530	3.5356	2.2179

### 3. Results : Coverage across reference

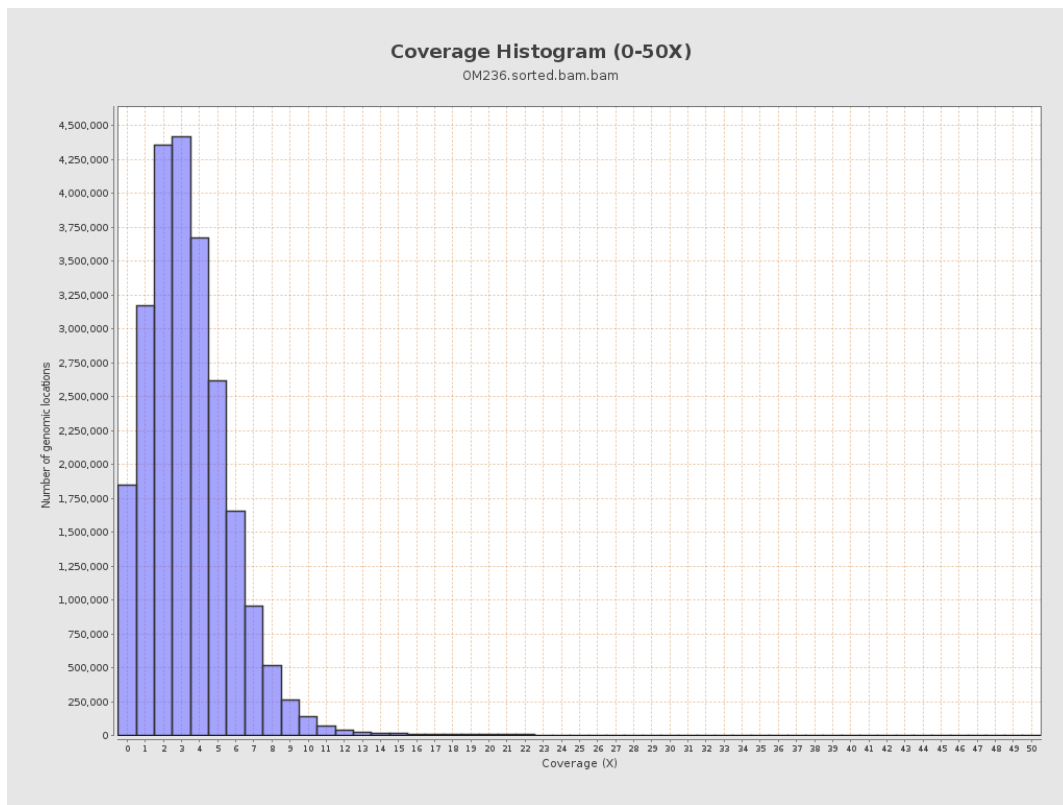




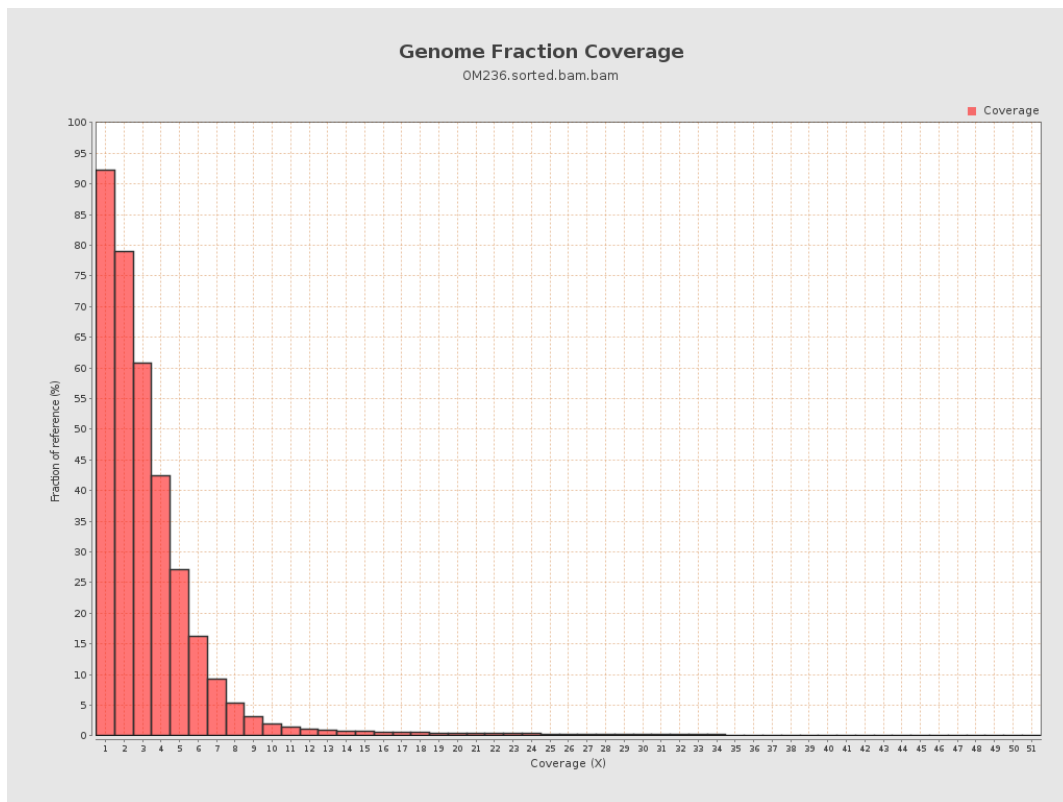
## 4. Results : Coverage Histogram



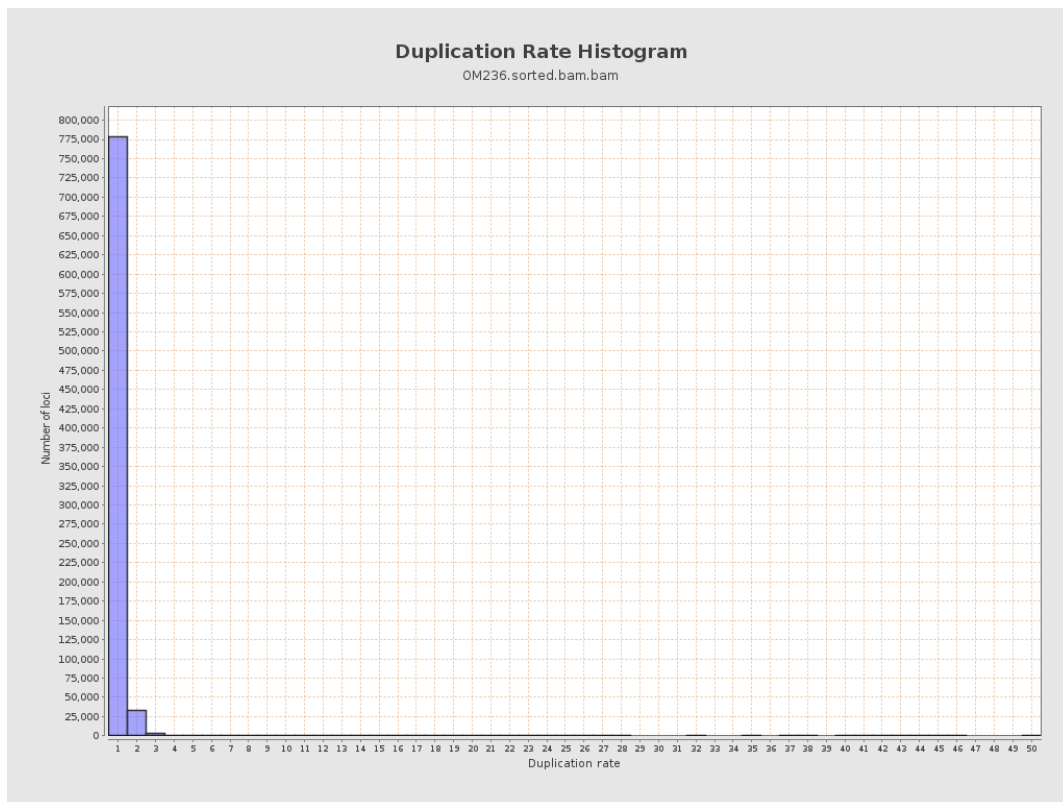
## 5. Results : Coverage Histogram (0-50X)



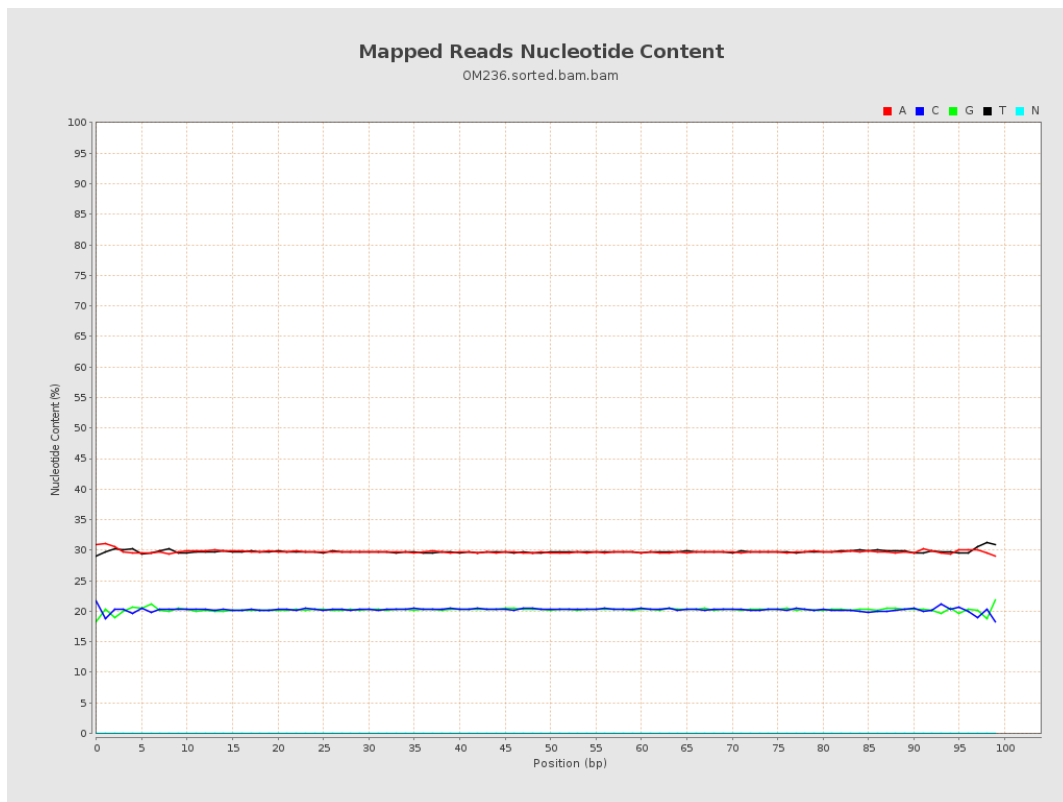
## 6. Results : Genome Fraction Coverage



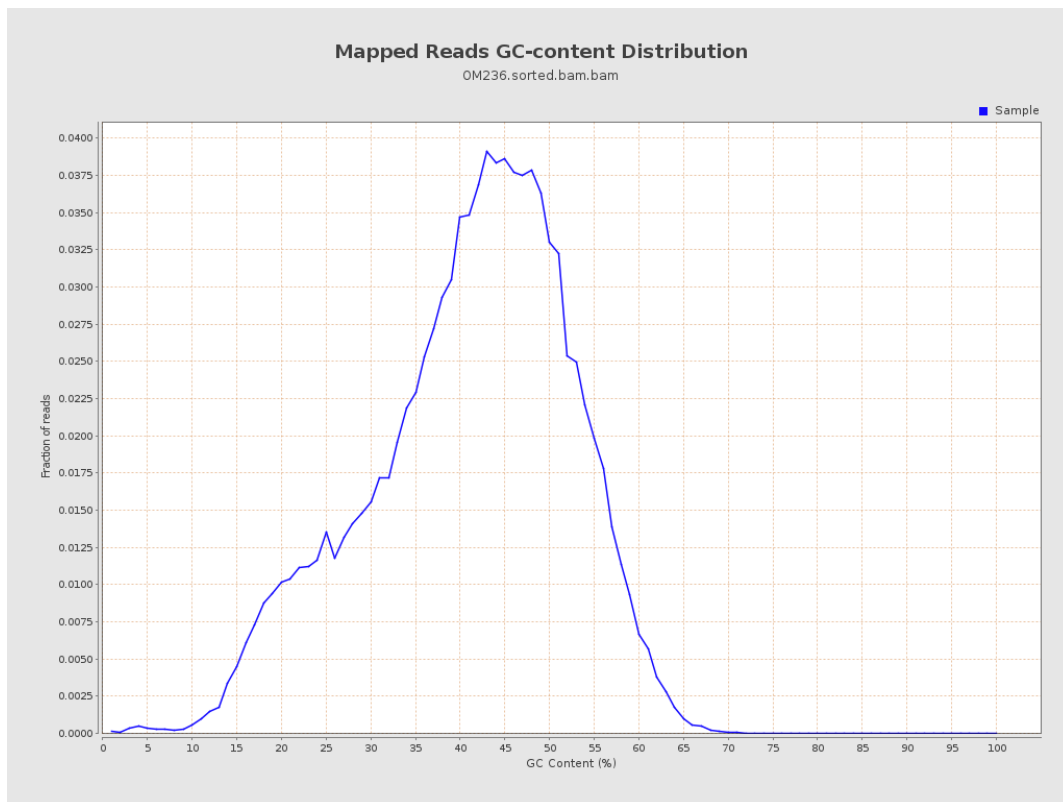
## 7. Results : Duplication Rate Histogram



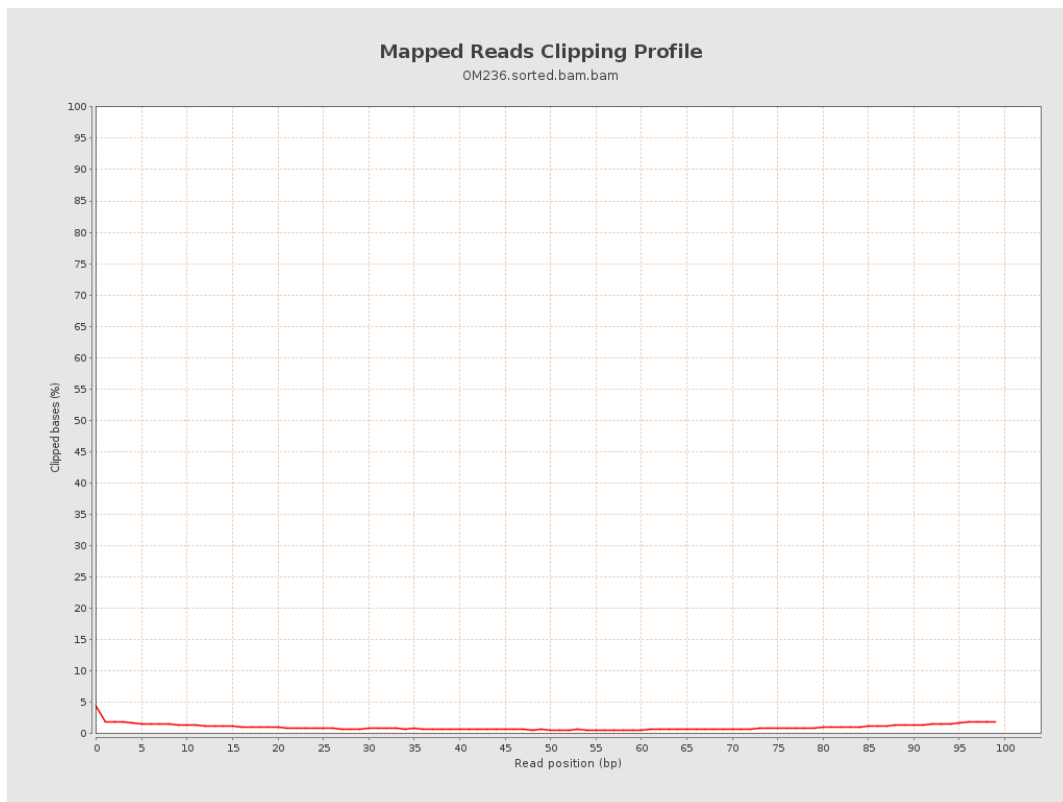
## 8. Results : Mapped Reads Nucleotide Content



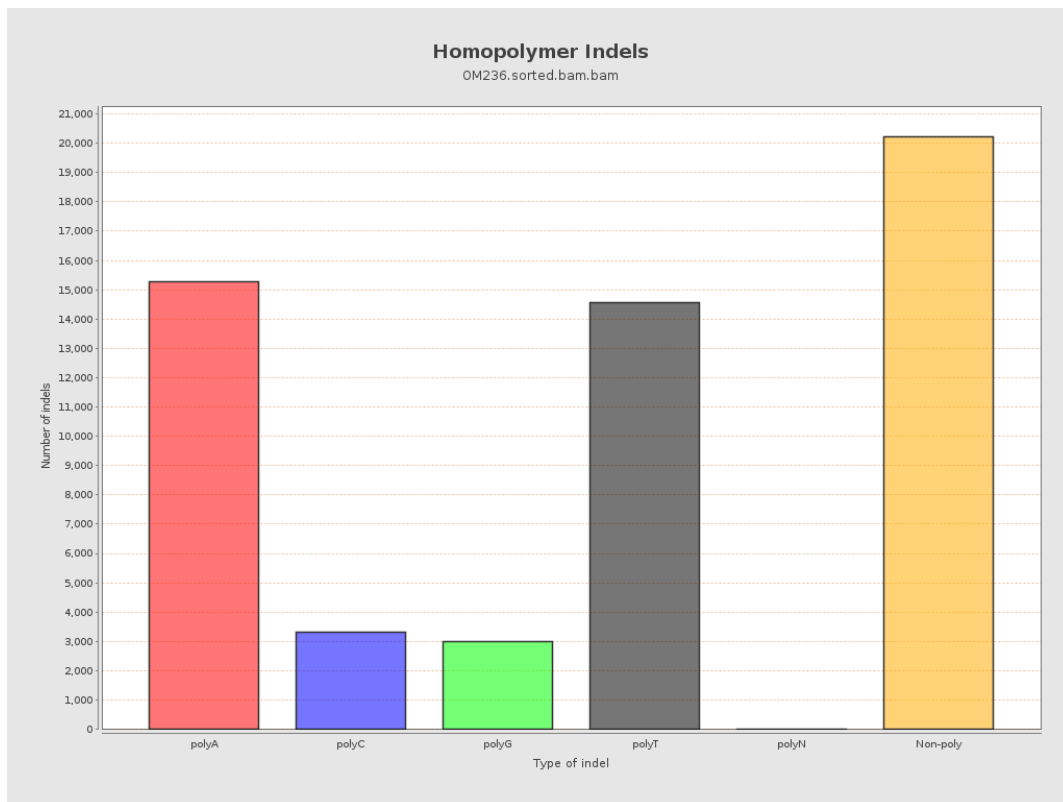
## 9. Results : Mapped Reads GC-content Distribution



## 10. Results : Mapped Reads Clipping Profile

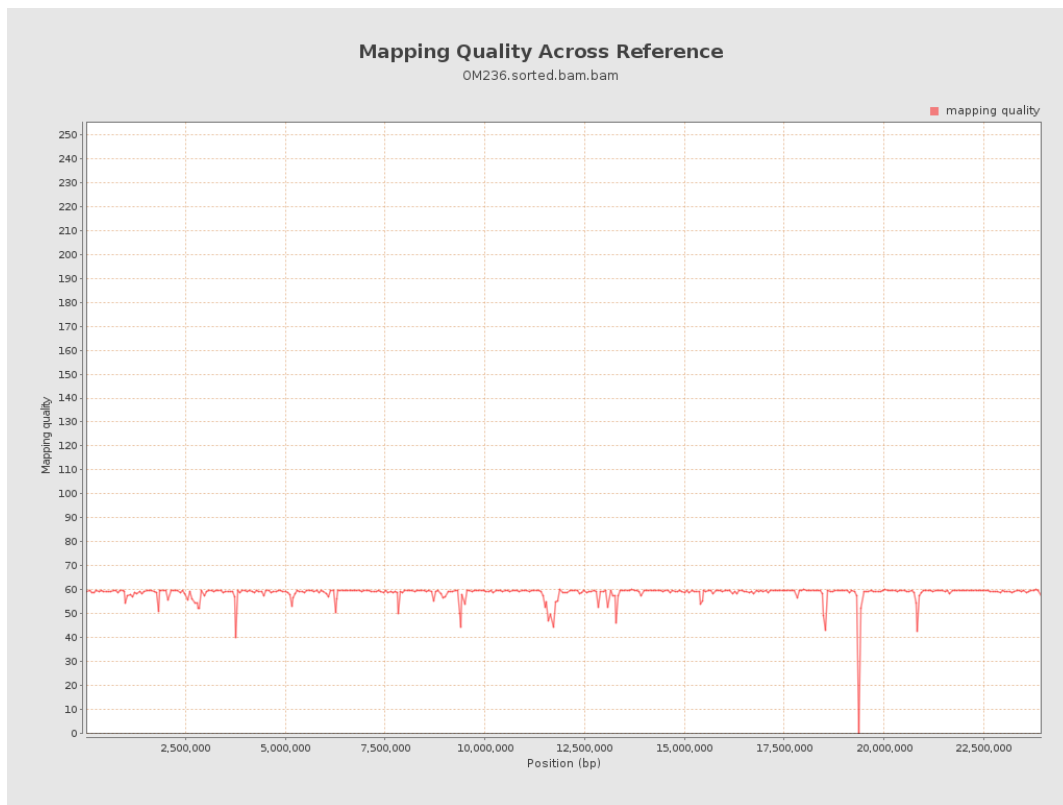


## 11. Results : Homopolymer Indels

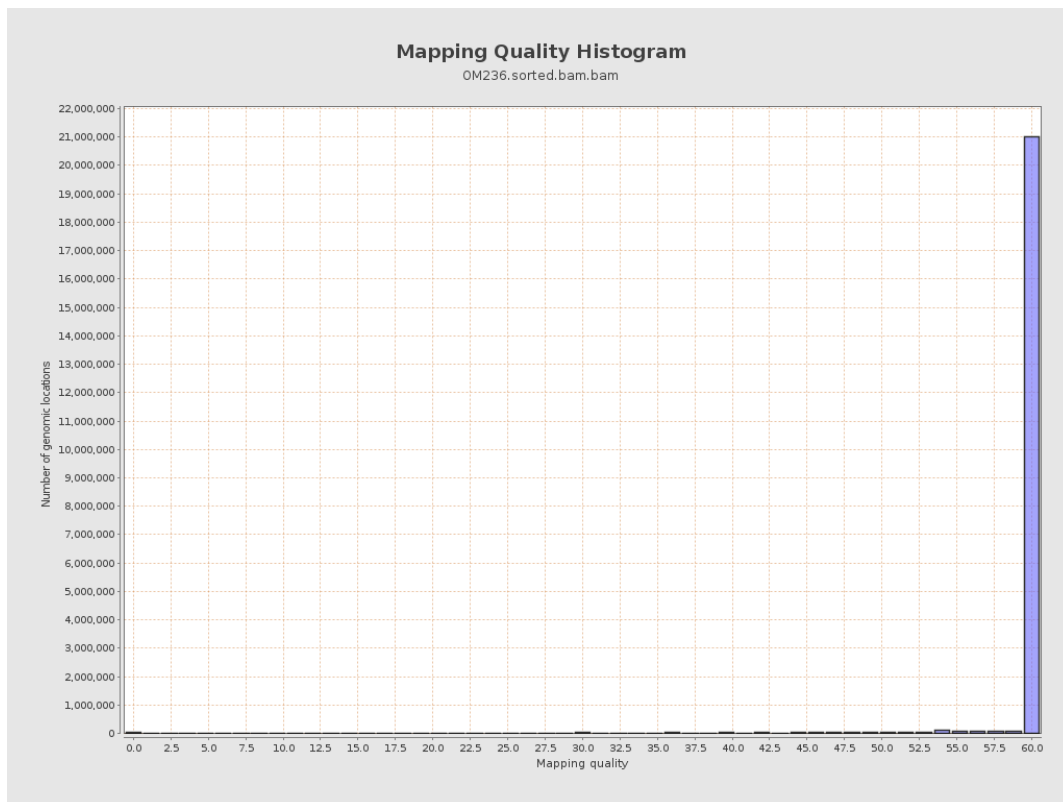




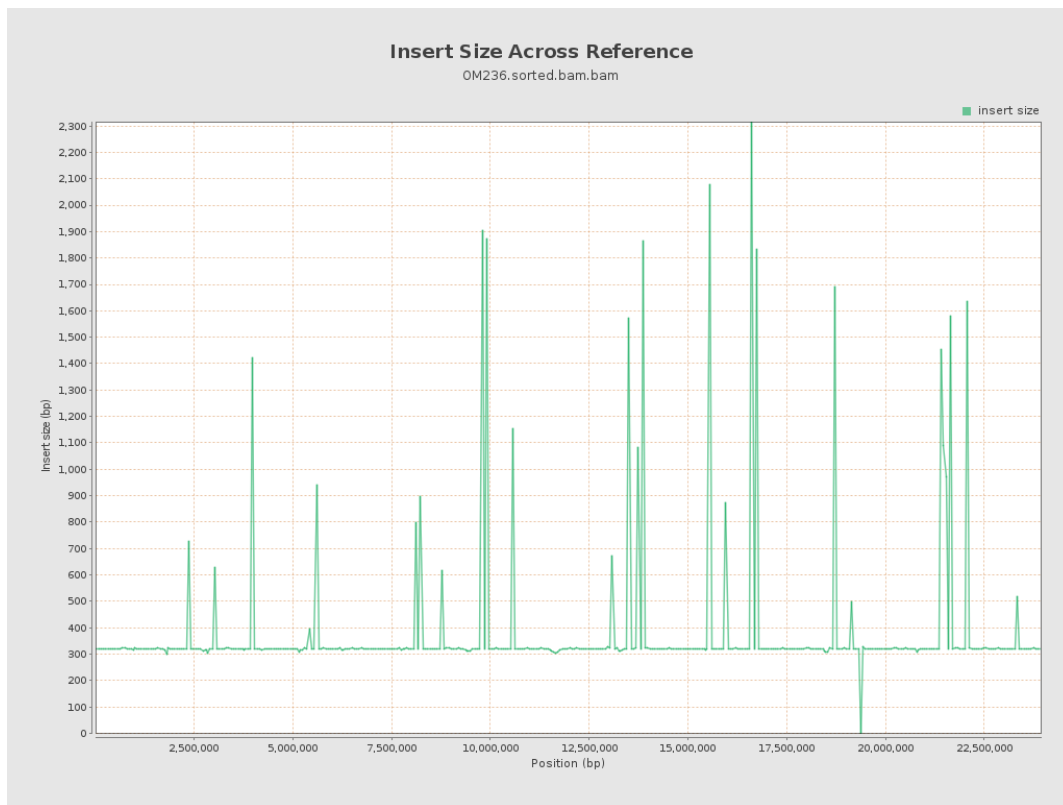
## 12. Results : Mapping Quality Across Reference



## 13. Results : Mapping Quality Histogram



## 14. Results : Insert Size Across Reference



## 15. Results : Insert Size Histogram

