

# Qualimap Analysis Results

*BAM QC analysis*

*Generated by Qualimap v.2.2.1*

*2016/10/23 13:58:21*

# 1. Input data & parameters

## 1.1. QualiMap command line

```
qualimap bamqc -bam
/home/vdp5/data/cambodia_samples/sequences_bam/OM275.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/OM275-BiooBarcode27_ATTCTT_R2.fastq.gz /home/vdp5/data/cambodia_samples/sequences_gz/OM275-BiooBarcode27_ATTCTT_R1.fastq.gz
Draw chromosome limits:	no
Analyze overlapping paired-end reads:	no
Program:	bwa (0.7.15-r1140)
Analysis date:	Sun Oct 23 13:58:20 EDT 2016
Size of a homopolymer:	3
Skip duplicate alignments:	no
Number of windows:	400
BAM file:	/home/vdp5/data/cambodia_samples/sequences_bam/OM275.sorted.bam.

	bam
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## 2. Summary

### 2.1. Globals

Reference size	23,958,997
Number of reads	2,629,578
Mapped reads	1,555,746 / 59.16%
Unmapped reads	1,073,832 / 40.84%
Mapped paired reads	1,555,746 / 59.16%
Mapped reads, first in pair	776,190 / 29.52%
Mapped reads, second in pair	779,556 / 29.65%
Mapped reads, both in pair	1,526,527 / 58.05%
Mapped reads, singletons	29,219 / 1.11%
Read min/max/mean length	30 / 100 / 99.9
Duplicated reads (estimated)	159,986 / 6.08%
Duplication rate	7.53%
Clipped reads	177,389 / 6.75%

### 2.2. ACGT Content

Number/percentage of A's	44,826,148 / 29.85%
Number/percentage of C's	30,238,847 / 20.13%
Number/percentage of T's	45,021,759 / 29.98%
Number/percentage of G's	30,095,208 / 20.04%
Number/percentage of N's	12,569 / 0.01%
GC Percentage	40.17%

## 2.3. Coverage

Mean	6.2754
Standard Deviation	7.4448

## 2.4. Mapping Quality

Mean Mapping Quality	58.69
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## 2.5. Insert size

Mean	740.14
Standard Deviation	25,527.97
P25/Median/P75	268 / 281 / 291

## 2.6. Mismatches and indels

General error rate	1.55%
Mismatches	2,213,599
Insertions	51,906
Mapped reads with at least one insertion	3.16%
Deletions	58,844
Mapped reads with at least one deletion	3.56%
Homopolymer indels	62.93%

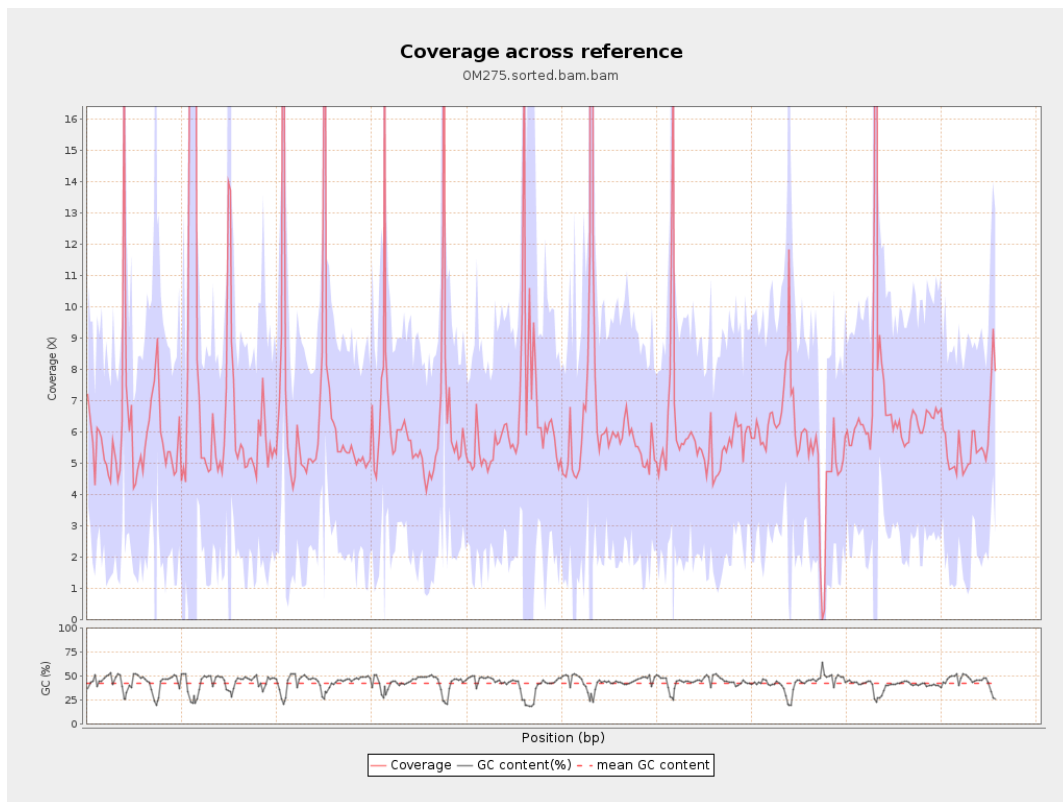
## 2.7. Chromosome stats

Name	Length	Mapped bases	Mean coverage	Standard deviation

gi 1074120478 emb LT615256.1	977217	5532755	5.6617	3.7679
gi 1074120682 emb LT615257.1	860454	5342162	6.2085	5.0458
gi 1074120865 emb LT615258.1	989719	7549221	7.6276	11.7604
gi 1074121086 emb LT615259.1	935450	6878995	7.3537	12.6656
gi 1074121301 emb LT615260.1	1432239	9596948	6.7007	7.6027
gi 1074121615 emb LT615261.1	1080962	6730009	6.2259	5.8919
gi 1074121871 emb LT615262.1	1545099	9087549	5.8815	3.5281
gi 1074122235 emb LT615263.1	1585108	9756243	6.1549	4.9969
gi 1074122590 emb LT615264.1	2122358	12655288	5.9628	4.3554
gi 1074123050 emb LT615265.1	1754192	11092836	6.3236	5.9607
gi 1074123421 emb LT615	2150147	14266703	6.6352	14.836

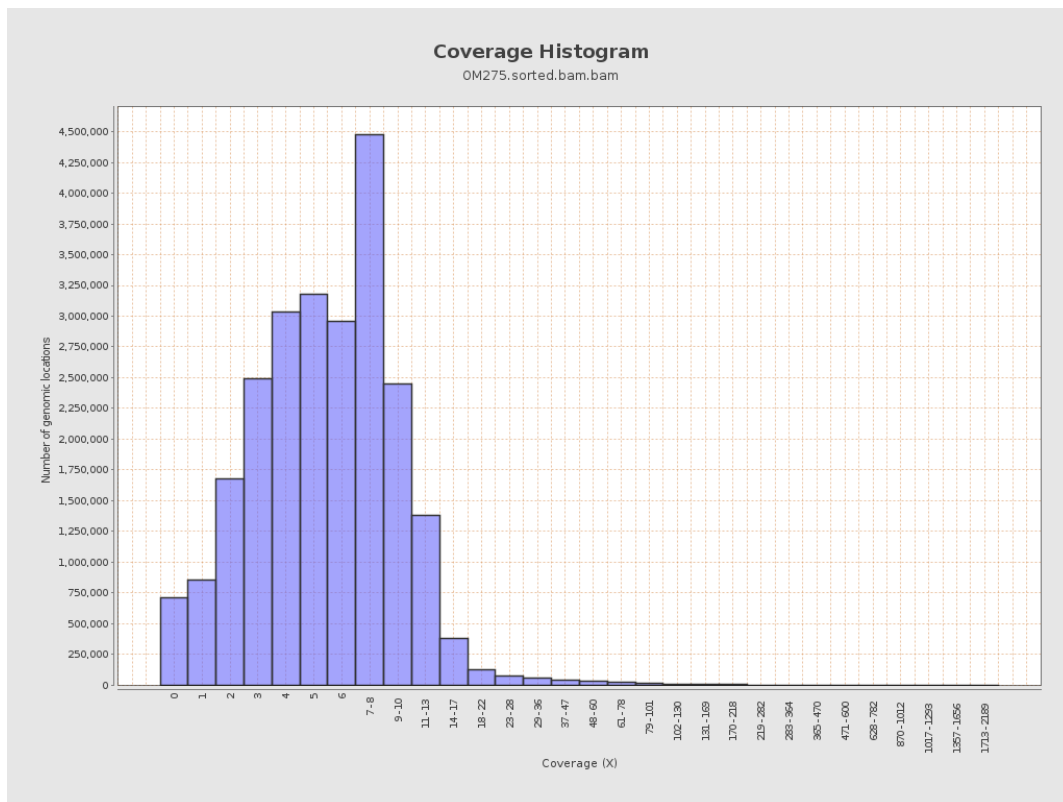
266.1				
gi 107412389 8 emb LT615 267.1	3031036	17943365	5.9199	3.4987
gi 107412458 8 emb LT615 268.1	2359348	14674541	6.2197	8.7016
gi 107412506 5 emb LT615 269.1	3135668	19244949	6.1374	3.0821

### 3. Results : Coverage across reference

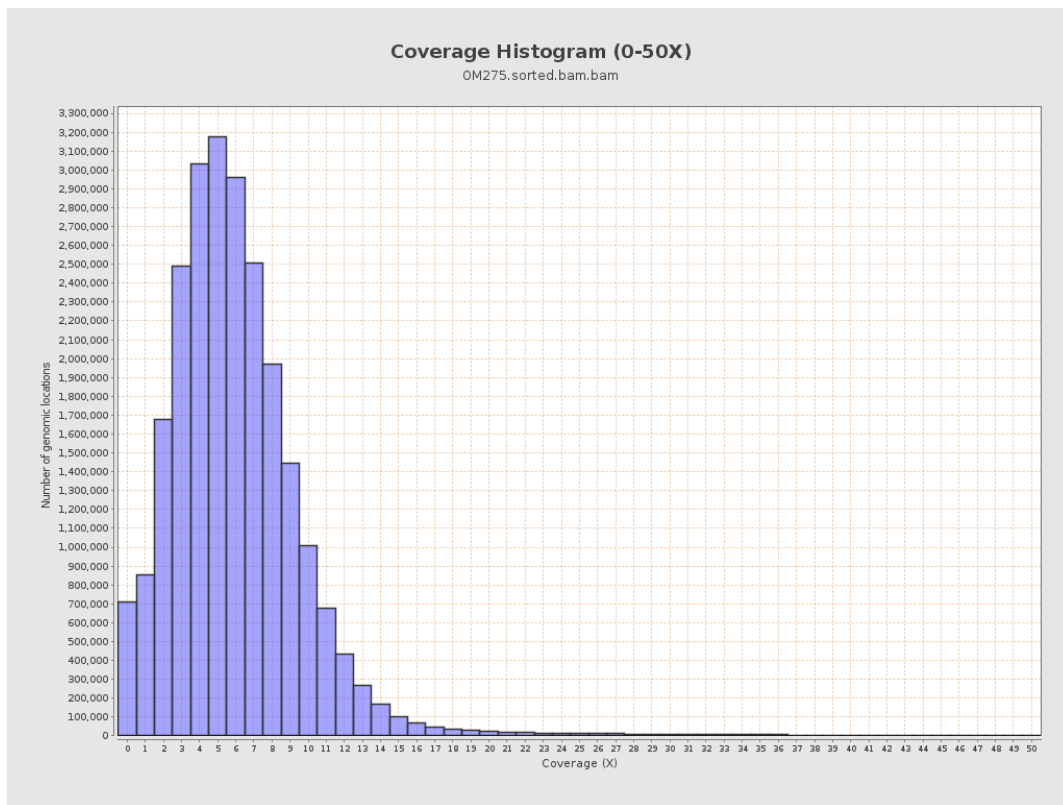




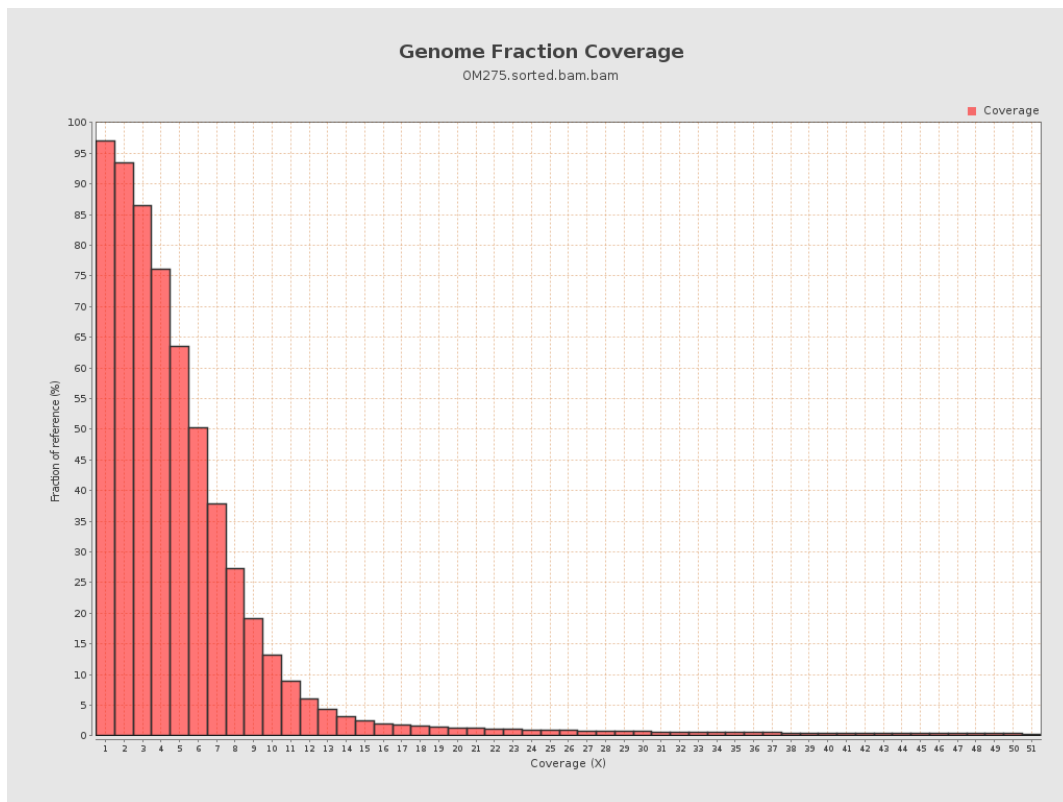
## 4. Results : Coverage Histogram



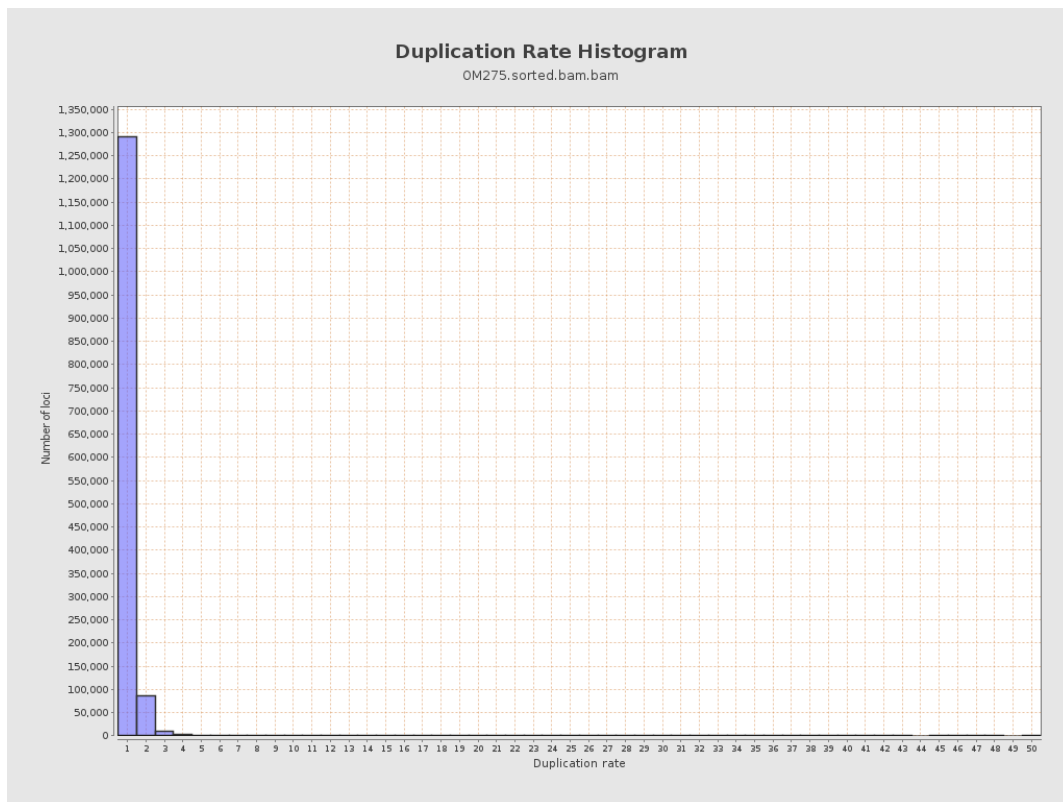
## 5. Results : Coverage Histogram (0-50X)



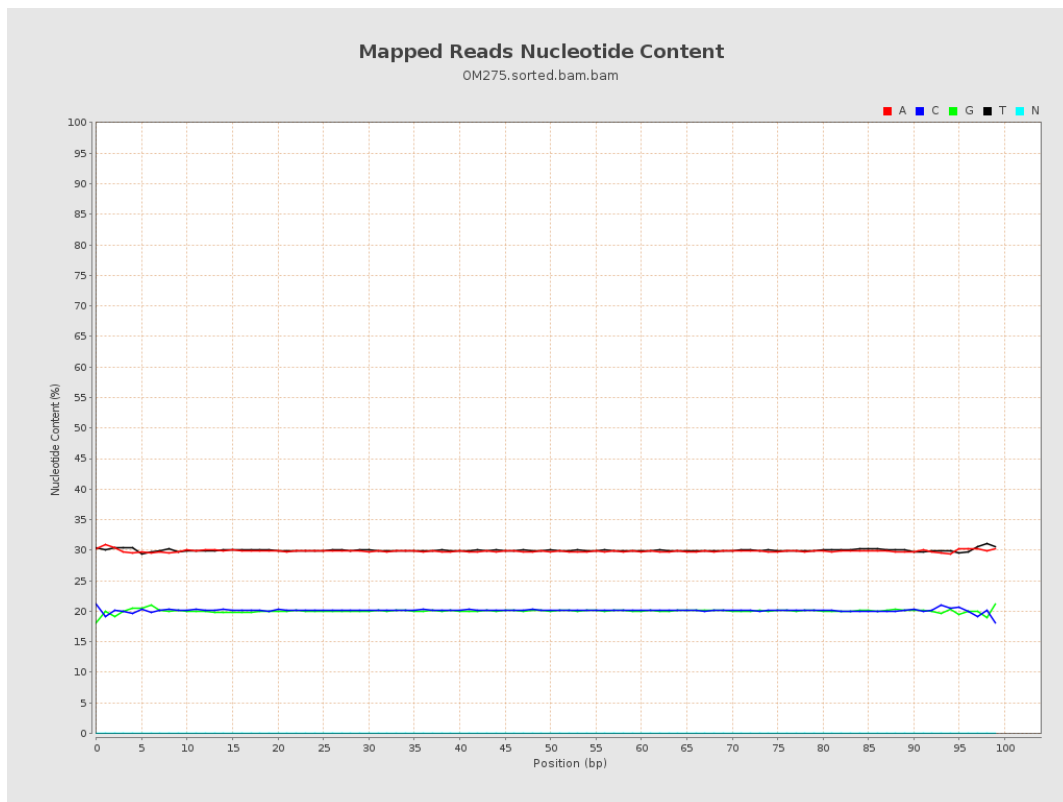
## 6. Results : Genome Fraction Coverage



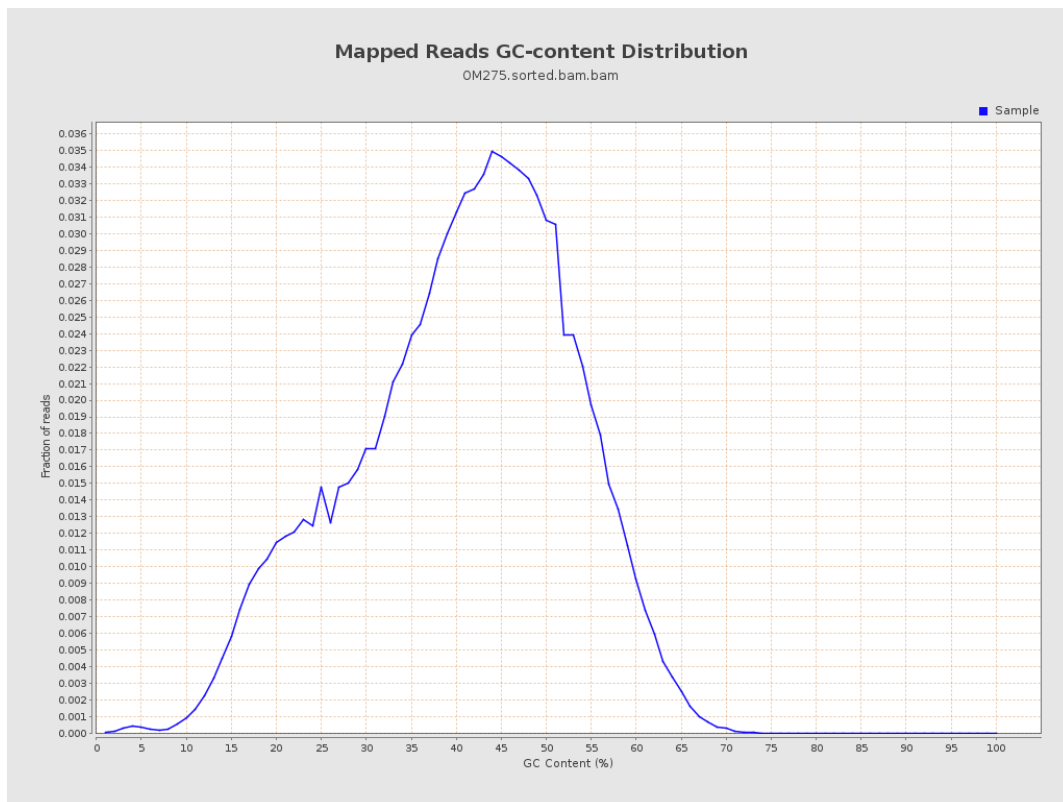
## 7. Results : Duplication Rate Histogram



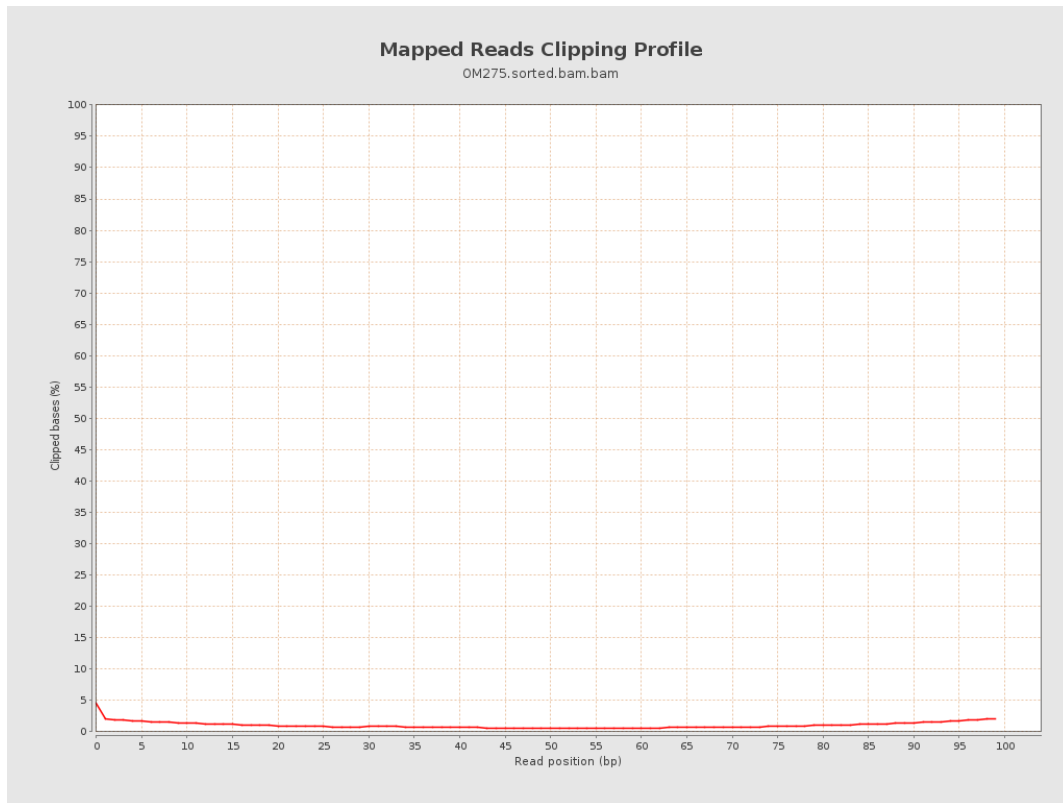
## 8. Results : Mapped Reads Nucleotide Content



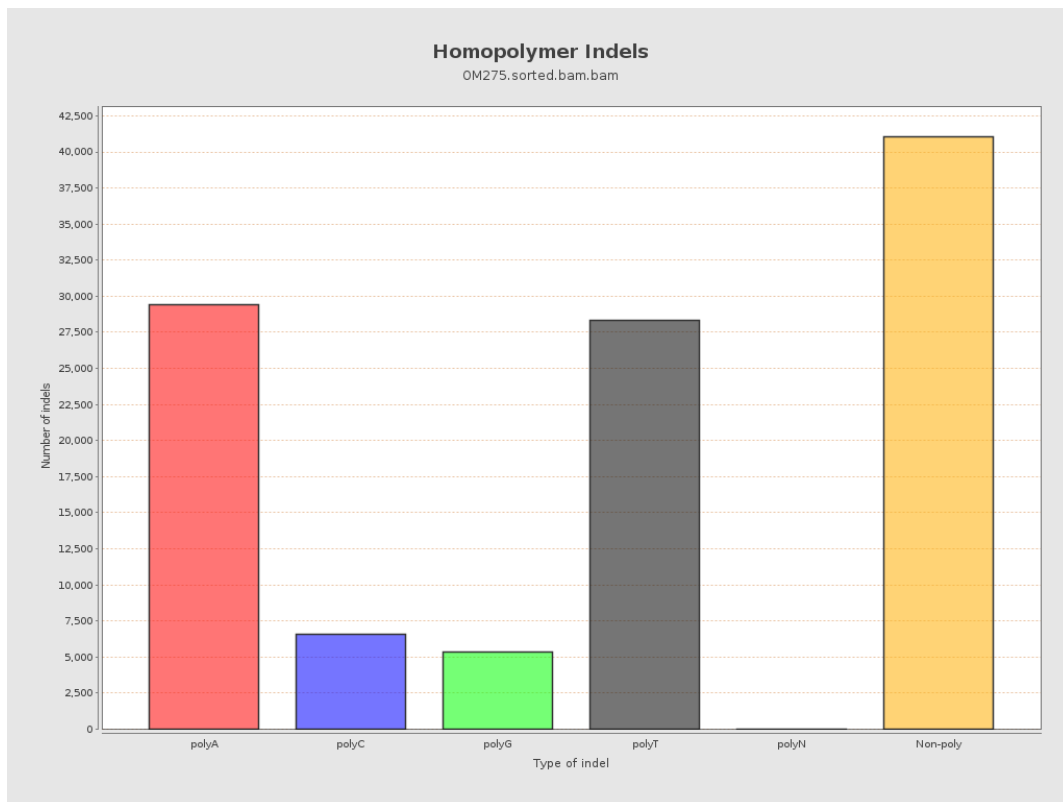
## 9. Results : Mapped Reads GC-content Distribution



## 10. Results : Mapped Reads Clipping Profile

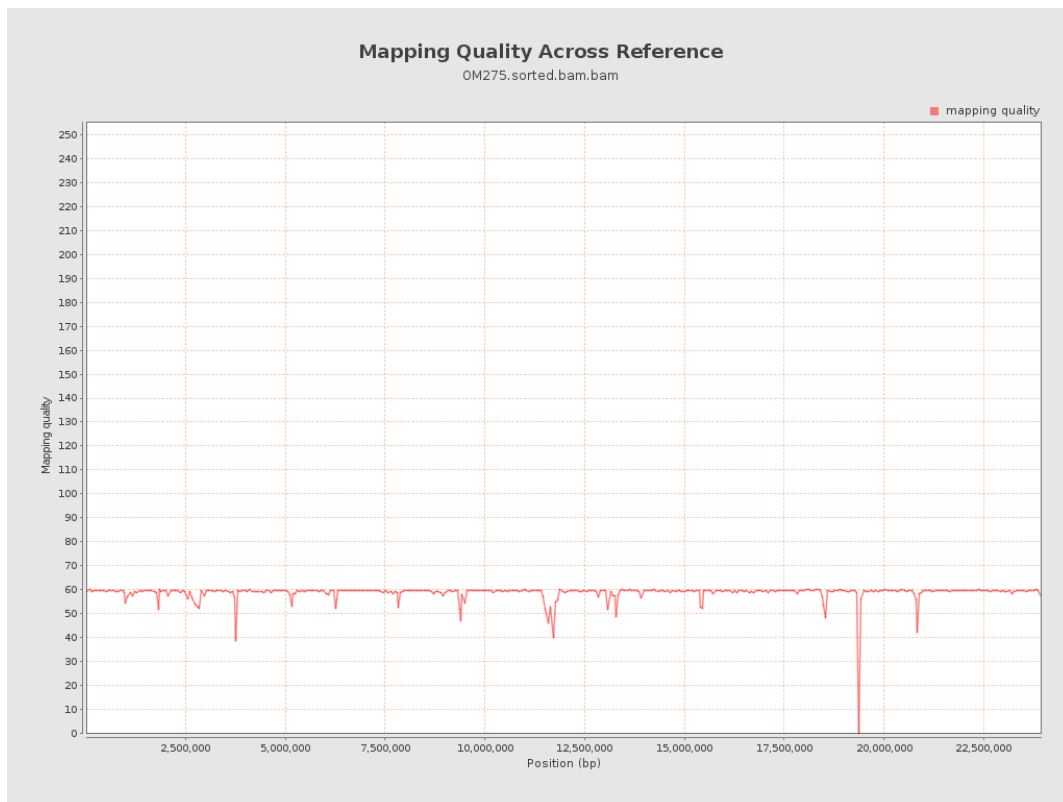


## 11. Results : Homopolymer Indels

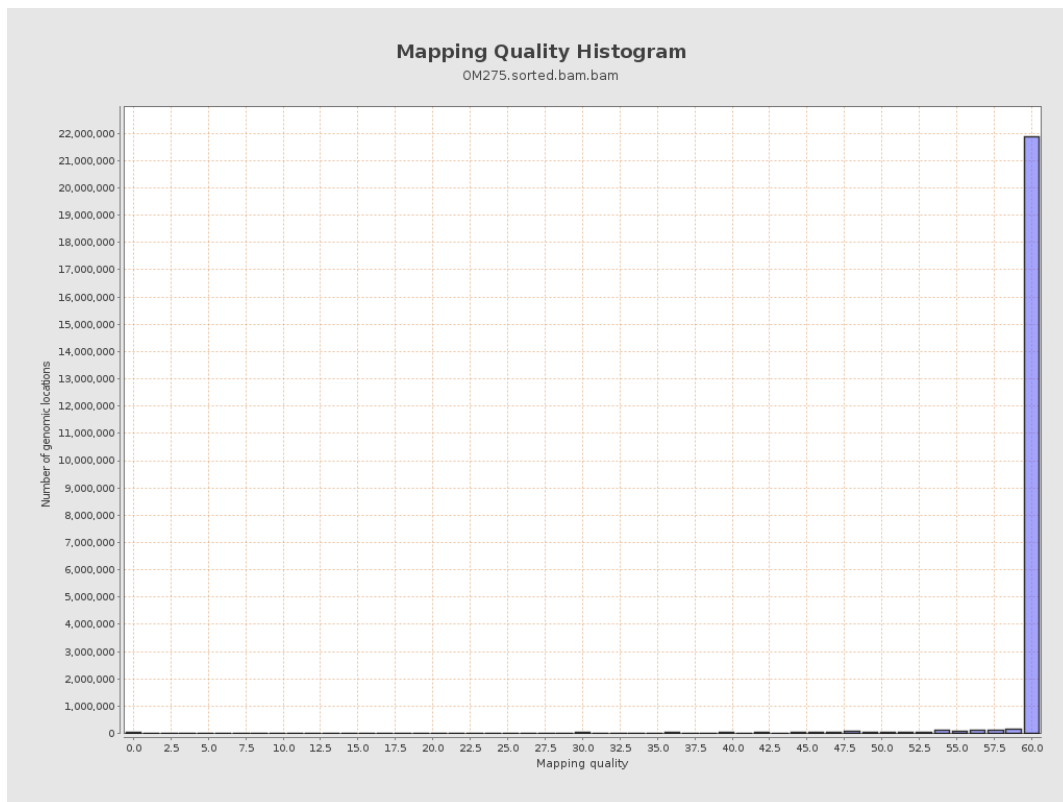




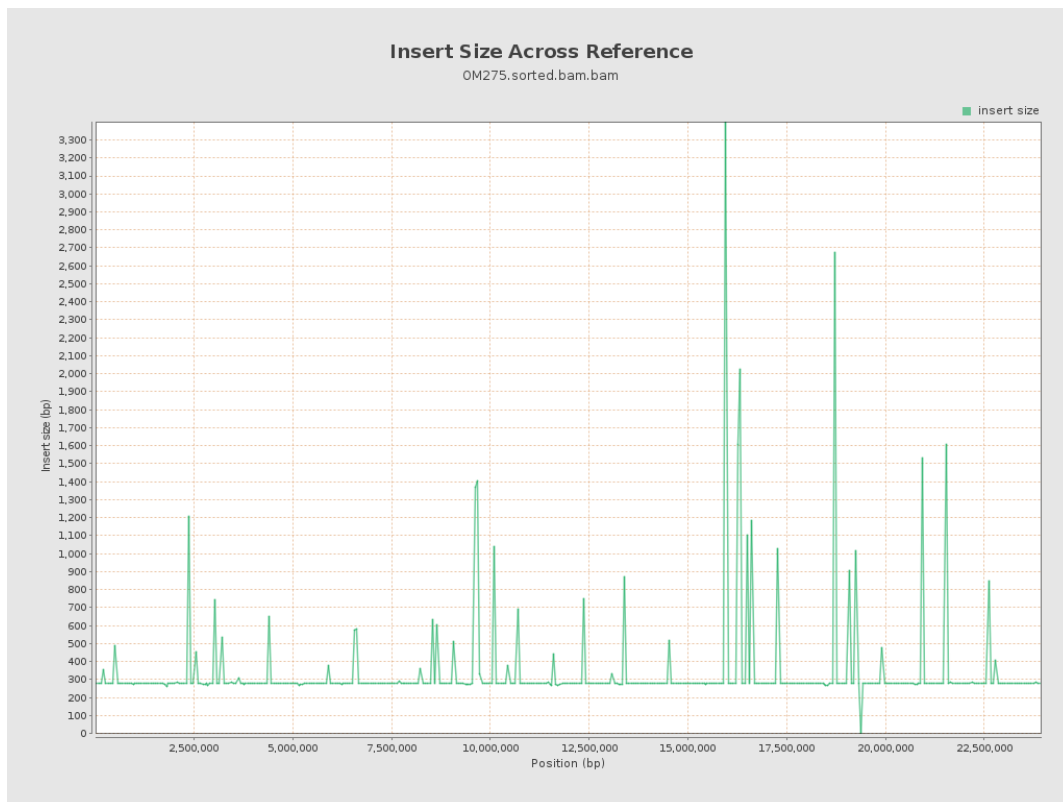
## 12. Results : Mapping Quality Across Reference



## 13. Results : Mapping Quality Histogram



## 14. Results : Insert Size Across Reference



## 15. Results : Insert Size Histogram

