

Qualimap Analysis Results

BAM QC analysis

Generated by Qualimap v.2.2.1

2016/10/23 13:01:51

1. Input data & parameters

1.1. QualiMap command line

```
qualimap bamqc -bam
/home/vdp5/data/cambodia_samples/sequences_bam/OM108.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/OM-108_GCCAAT_R2.fastq.gz /home/vdp5/data/cambodia_samples/sequences_gz/OM-108_GCCAAT_R1.fastq.gz
Draw chromosome limits:	no
Analyze overlapping paired-end reads:	no
Program:	bwa (0.7.15-r1140)
Analysis date:	Sun Oct 23 13:01:50 EDT 2016
Size of a homopolymer:	3
Skip duplicate alignments:	no
Number of windows:	400
BAM file:	/home/vdp5/data/cambodia_samples/sequences_bam/OM108.sorted.bam.bam

2. Summary

2.1. Globals

Reference size	23,958,997
Number of reads	78,828,230
Mapped reads	1,876,860 / 2.38%
Unmapped reads	76,951,370 / 97.62%
Mapped paired reads	1,876,860 / 2.38%
Mapped reads, first in pair	941,918 / 1.19%
Mapped reads, second in pair	934,942 / 1.19%
Mapped reads, both in pair	1,291,826 / 1.64%
Mapped reads, singletons	585,034 / 0.74%
Read min/max/mean length	30 / 100 / 99.98
Duplicated reads (estimated)	715,516 / 0.91%
Duplication rate	12.67%
Clipped reads	746,296 / 0.95%

2.2. ACGT Content

Number/percentage of A's	44,270,467 / 30.28%
Number/percentage of C's	27,631,874 / 18.9%
Number/percentage of T's	46,467,550 / 31.78%
Number/percentage of G's	27,841,556 / 19.04%
Number/percentage of N's	4,209 / 0%
GC Percentage	37.94%

2.3. Coverage

Mean	6.1119
Standard Deviation	96.4121

2.4. Mapping Quality

Mean Mapping Quality	51.71
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2.5. Insert size

Mean	1,860.47
Standard Deviation	43,072.33
P25/Median/P75	219 / 230 / 242

2.6. Mismatches and indels

General error rate	1.37%
Mismatches	1,797,965
Insertions	80,611
Mapped reads with at least one insertion	3.86%
Deletions	92,564
Mapped reads with at least one deletion	3.77%
Homopolymer indels	56.26%

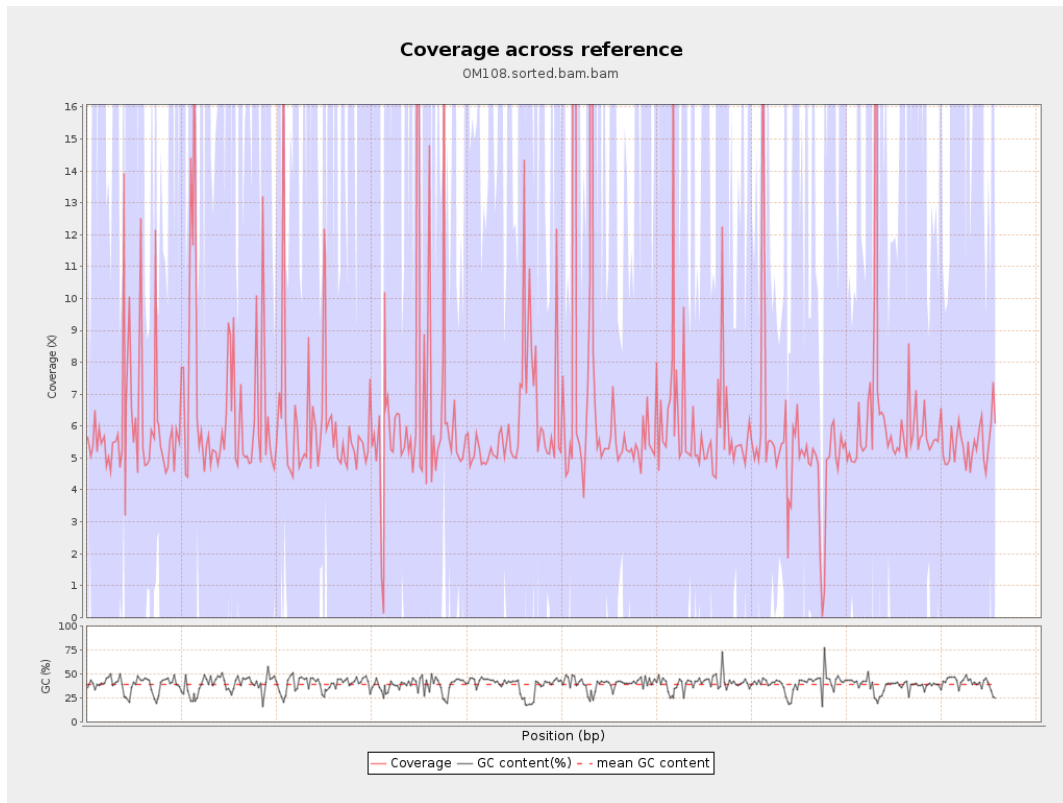
2.7. Chromosome stats

Name	Length	Mapped bases	Mean coverage	Standard deviation

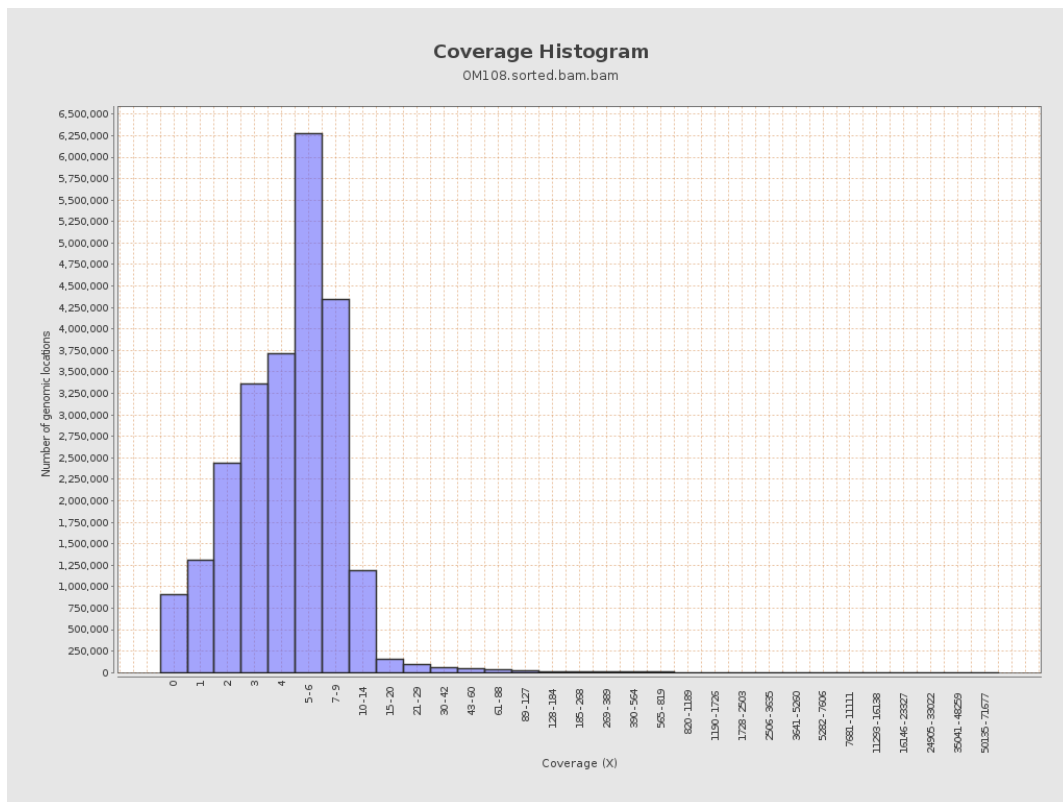
gi 1074120478 emb LT615256.1	977217	5401417	5.5273	21.2711
gi 1074120682 emb LT615257.1	860454	5634994	6.5489	41.7758
gi 1074120865 emb LT615258.1	989719	6541698	6.6097	41.2706
gi 1074121086 emb LT615259.1	935450	5729923	6.1253	16.4185
gi 1074121301 emb LT615260.1	1432239	9464704	6.6083	46.8998
gi 1074121615 emb LT615261.1	1080962	6422153	5.9411	36.7577
gi 1074121871 emb LT615262.1	1545099	8178713	5.2933	22.9646
gi 1074122235 emb LT615263.1	1585108	11075903	6.9875	129.0799
gi 1074122590 emb LT615264.1	2122358	11803997	5.5617	15.4189
gi 1074123050 emb LT615265.1	1754192	14045890	8.007	307.7926
gi 1074123421 emb LT615	2150147	13160201	6.1206	28.5527

266.1				
gi 107412389 8 emb LT615 267.1	3031036	18236943	6.0167	72.8454
gi 107412458 8 emb LT615 268.1	2359348	12988684	5.5052	21.3587
gi 107412506 5 emb LT615 269.1	3135668	17750798	5.6609	20.9245

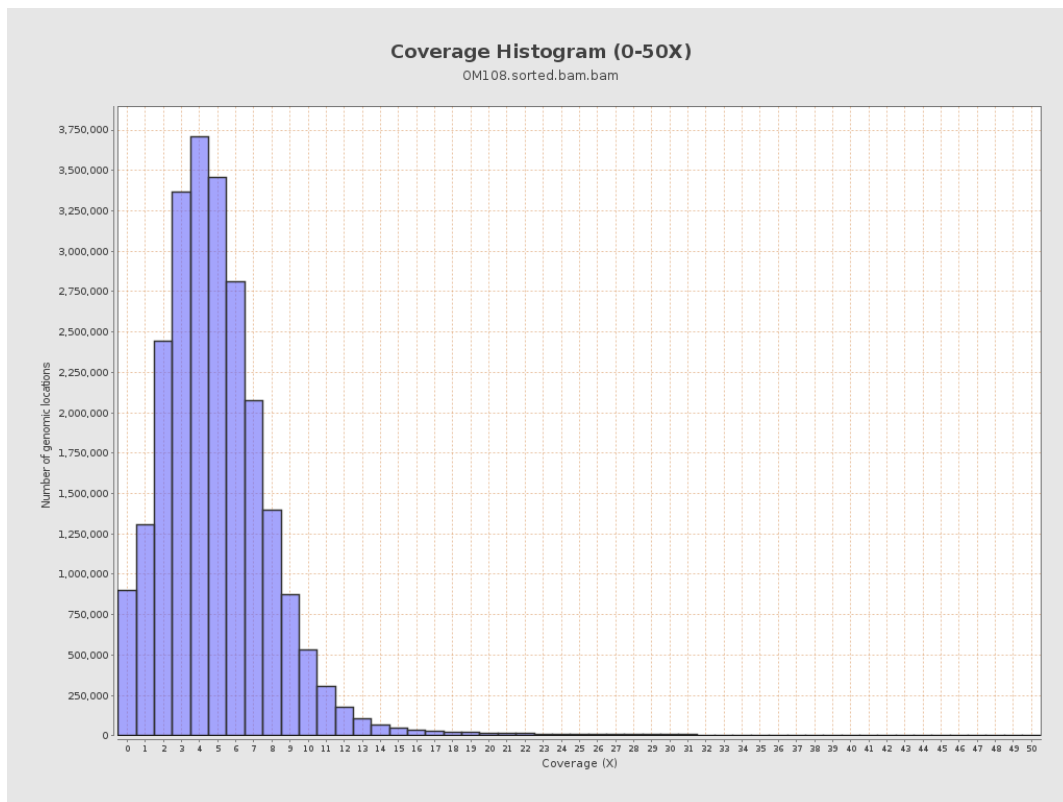
3. Results : Coverage across reference



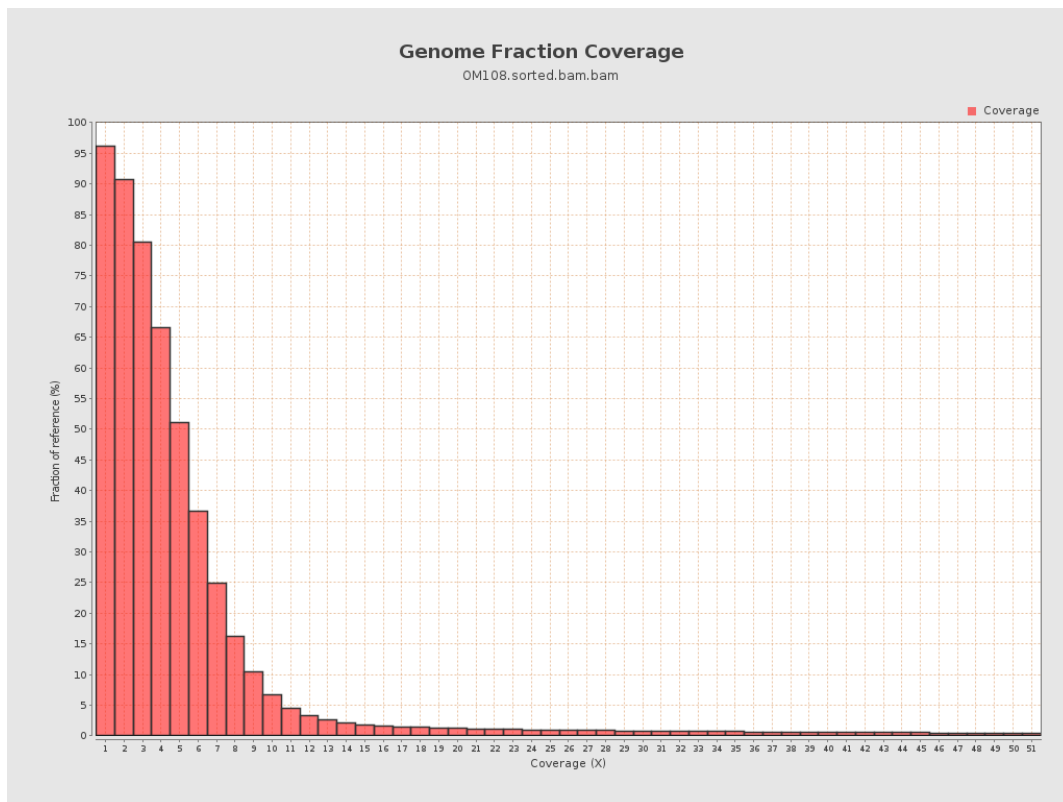
4. Results : Coverage Histogram



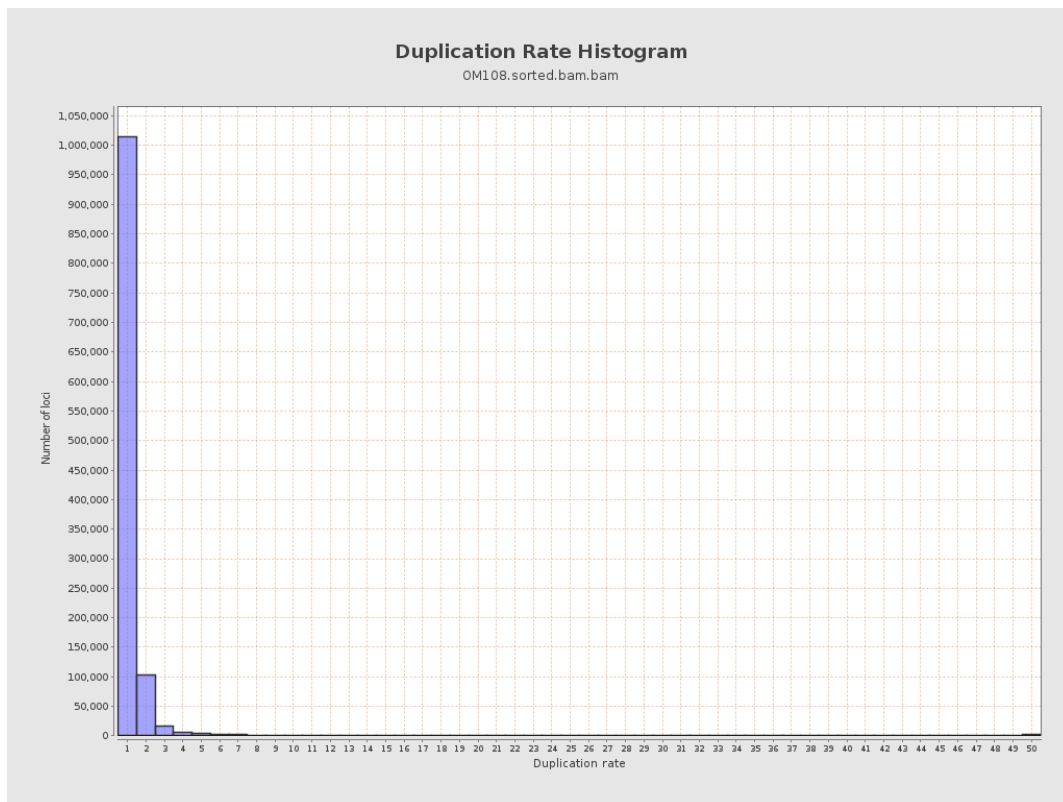
5. Results : Coverage Histogram (0-50X)



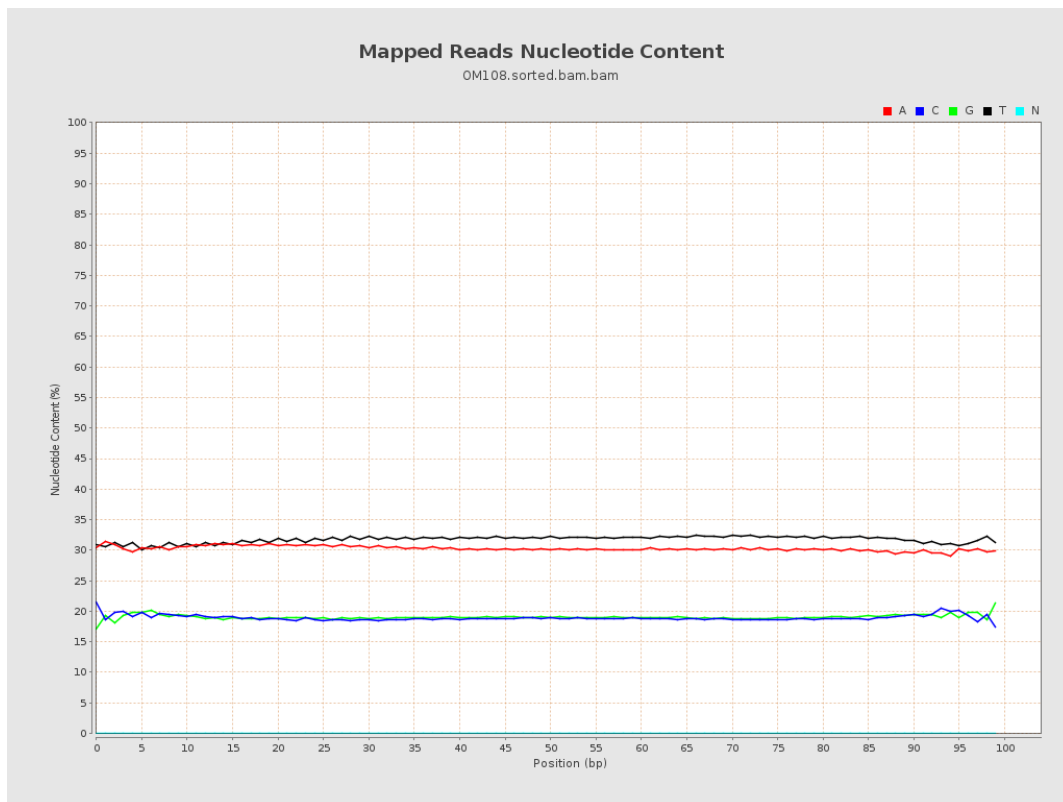
6. Results : Genome Fraction Coverage



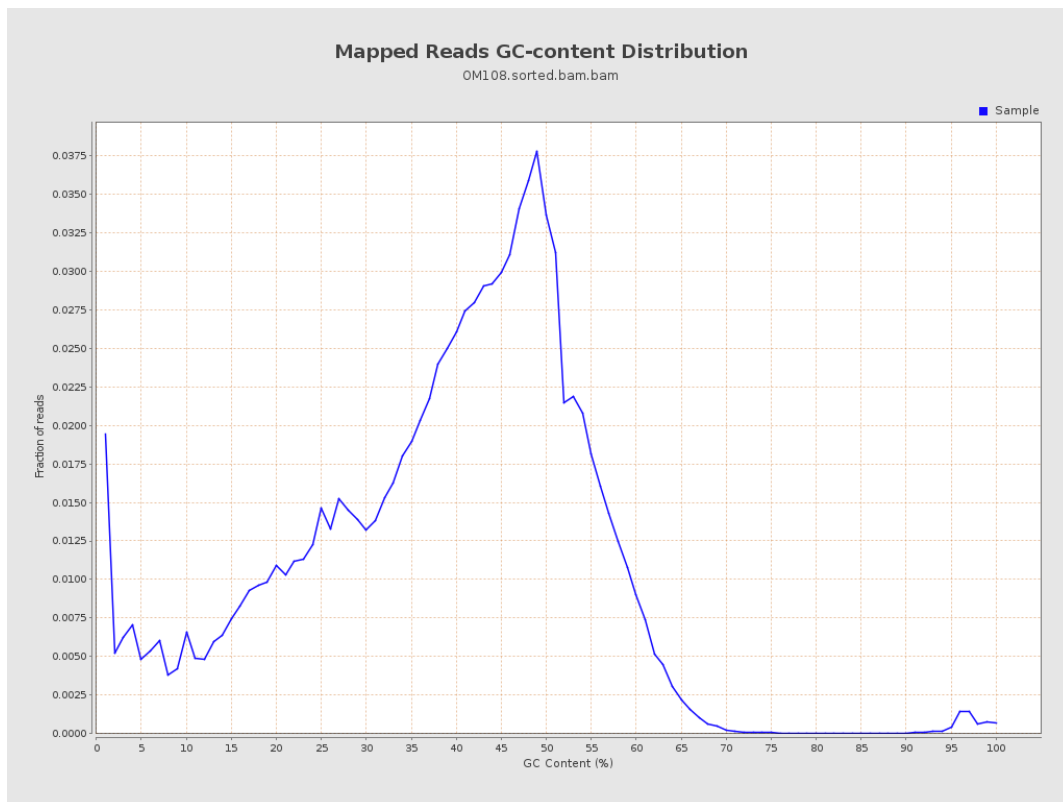
7. Results : Duplication Rate Histogram



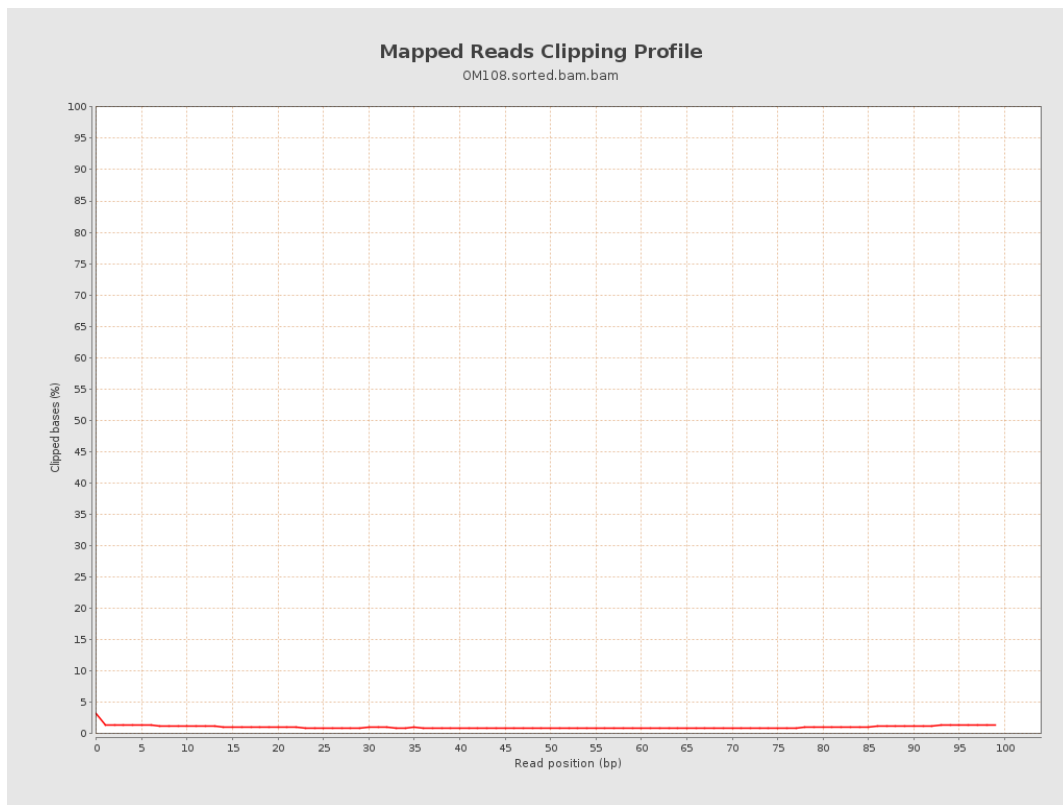
8. Results : Mapped Reads Nucleotide Content



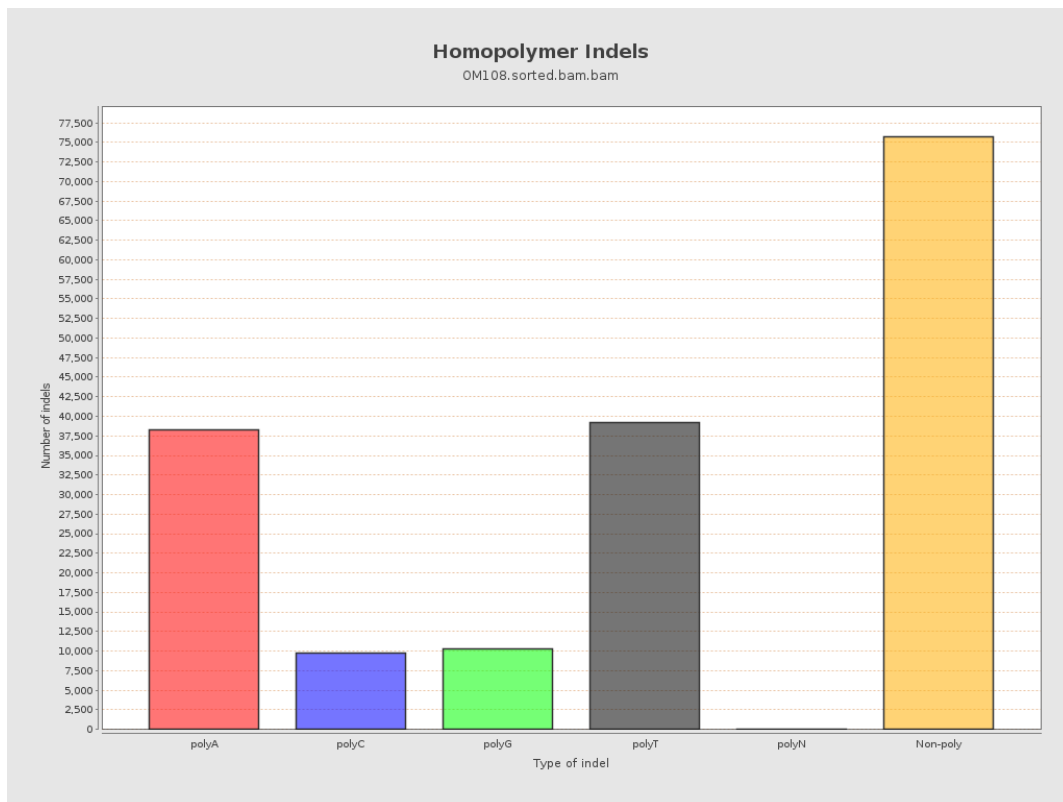
9. Results : Mapped Reads GC-content Distribution



10. Results : Mapped Reads Clipping Profile



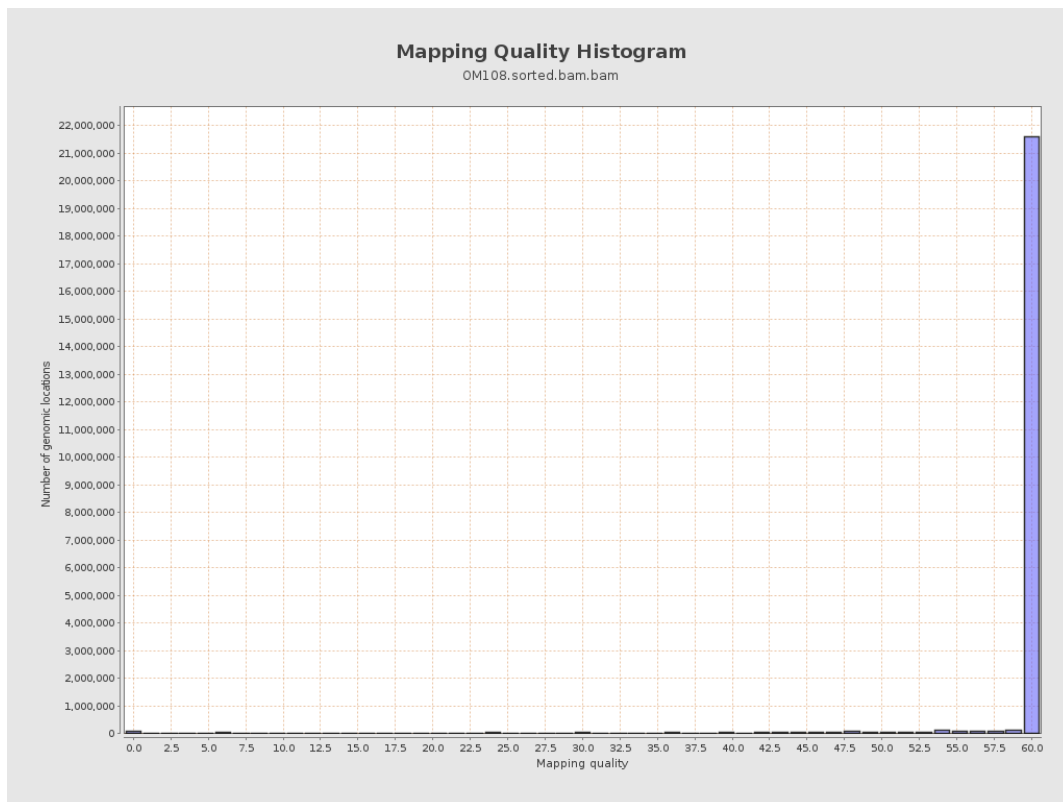
11. Results : Homopolymer Indels



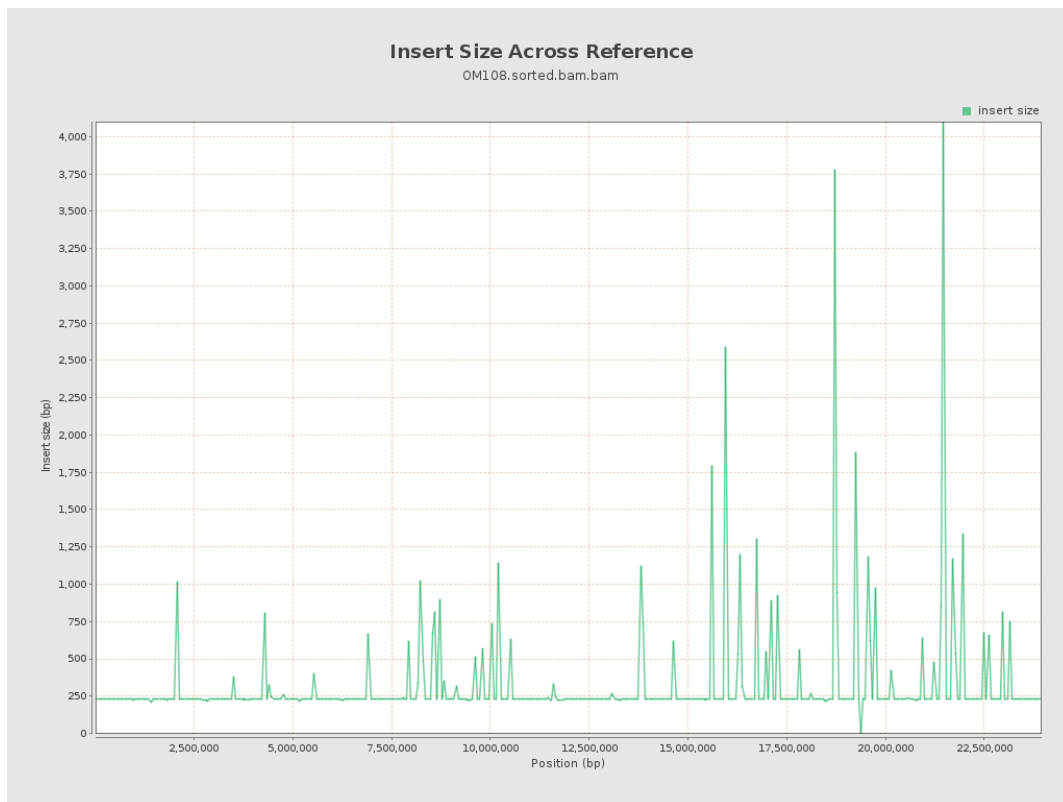
12. Results : Mapping Quality Across Reference



13. Results : Mapping Quality Histogram



14. Results : Insert Size Across Reference



15. Results : Insert Size Histogram

