

Qualimap Analysis Results

BAM QC analysis

Generated by Qualimap v.2.2.1

2016/10/23 12:36:46

1. Input data & parameters

1.1. QualiMap command line

```
qualimap bamqc -bam
/home/vdp5/data/cambodia_samples/sequences_bam/OM093.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-093_CGATGT_R1.fastq.gz /home/vdp5/data/cambodia_samples/sequences_gz/OM-093_CGATGT_R2.fastq.gz
Draw chromosome limits:	no
Analyze overlapping paired-end reads:	no
Program:	bwa (0.7.15-r1140)
Analysis date:	Sun Oct 23 12:36:45 EDT 2016
Size of a homopolymer:	3
Skip duplicate alignments:	no
Number of windows:	400
BAM file:	/home/vdp5/data/cambodia_samples/sequences_bam/OM093.sorted.bam.bam

2. Summary

2.1. Globals

Reference size	23,958,997
Number of reads	86,172,059
Mapped reads	3,955,334 / 4.59%
Unmapped reads	82,216,725 / 95.41%
Mapped paired reads	3,955,334 / 4.59%
Mapped reads, first in pair	1,975,276 / 2.29%
Mapped reads, second in pair	1,980,058 / 2.3%
Mapped reads, both in pair	3,328,219 / 3.86%
Mapped reads, singletons	627,115 / 0.73%
Read min/max/mean length	30 / 100 / 99.98
Duplicated reads (estimated)	1,279,245 / 1.48%
Duplication rate	17.56%
Clipped reads	1,045,245 / 1.21%

2.2. ACGT Content

Number/percentage of A's	100,240,551 / 29.45%
Number/percentage of C's	68,336,805 / 20.08%
Number/percentage of T's	103,315,793 / 30.36%
Number/percentage of G's	68,432,554 / 20.11%
Number/percentage of N's	10,914 / 0%
GC Percentage	40.19%

2.3. Coverage

Mean	14.2232
Standard Deviation	113.9469

2.4. Mapping Quality

Mean Mapping Quality	55.12
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2.5. Insert size

Mean	1,511.28
Standard Deviation	41,734.45
P25/Median/P75	183 / 198 / 228

2.6. Mismatches and indels

General error rate	1.19%
Mismatches	3,653,198
Insertions	153,421
Mapped reads with at least one insertion	3.48%
Deletions	169,643
Mapped reads with at least one deletion	3.49%
Homopolymer indels	58.21%

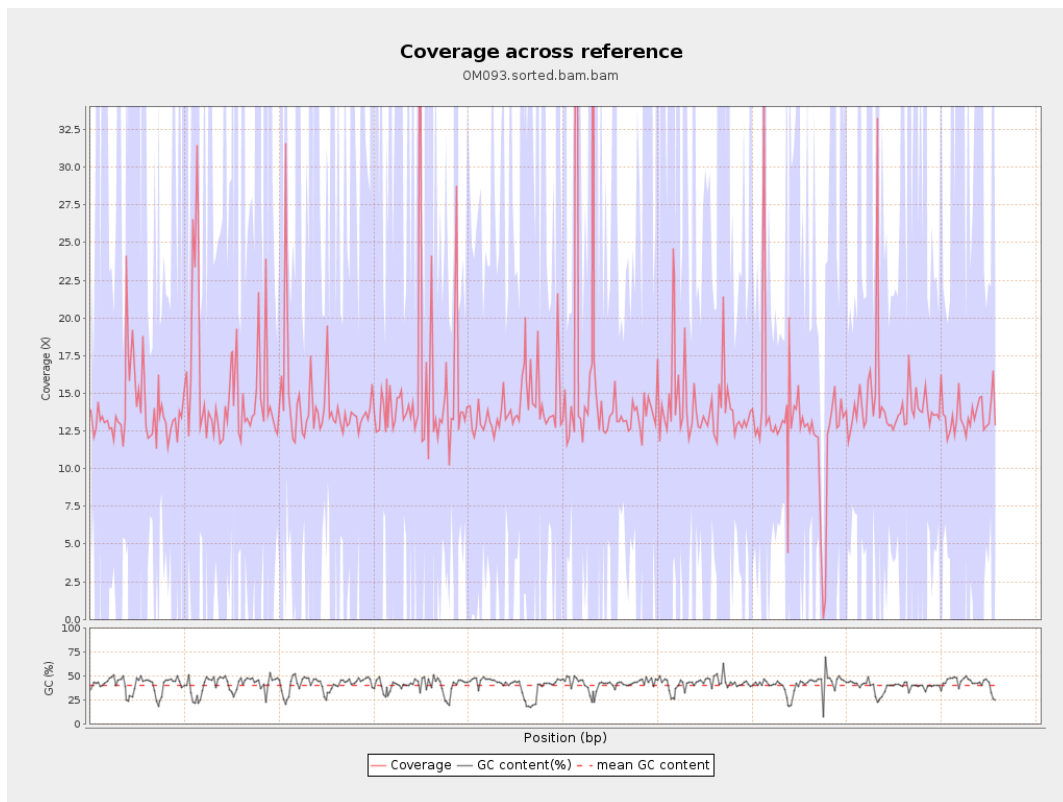
2.7. Chromosome stats

Name	Length	Mapped bases	Mean coverage	Standard deviation

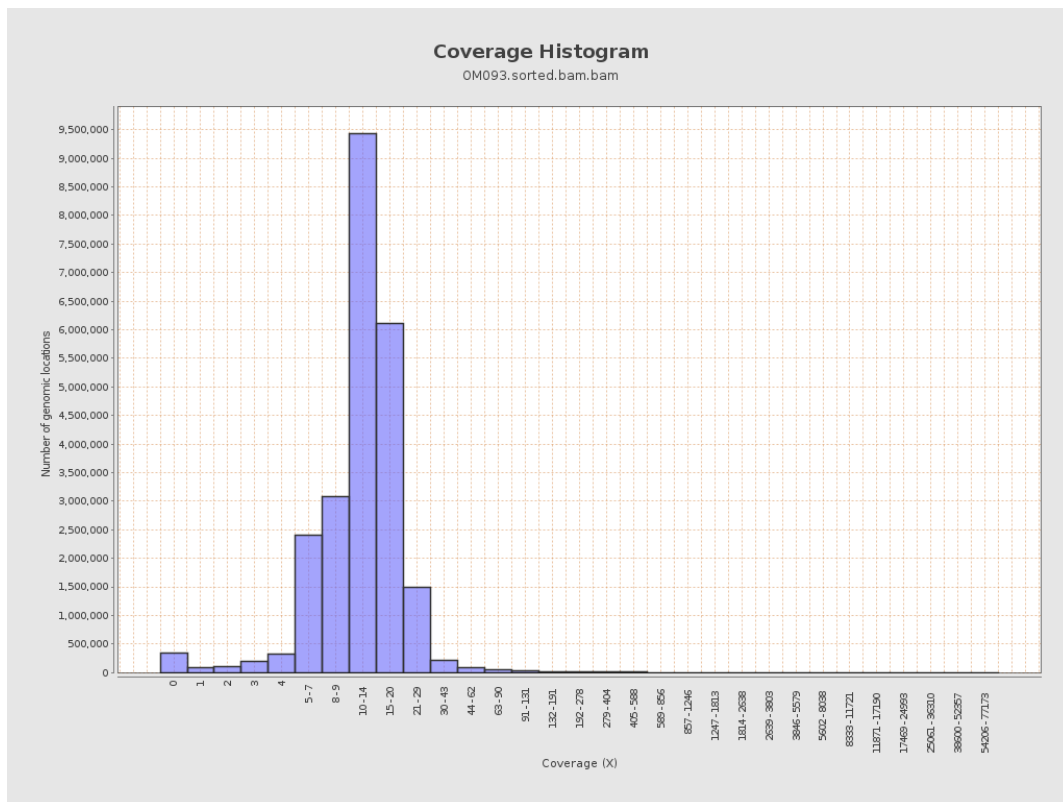
gi 1074120478 emb LT615256.1	977217	12878812	13.1791	23.9902
gi 1074120682 emb LT615257.1	860454	12650609	14.7022	45.5146
gi 1074120865 emb LT615258.1	989719	15022501	15.1786	46.443
gi 1074121086 emb LT615259.1	935450	13228104	14.1409	19.5123
gi 1074121301 emb LT615260.1	1432239	21826414	15.2394	60.9312
gi 1074121615 emb LT615261.1	1080962	14981524	13.8594	40.0556
gi 1074121871 emb LT615262.1	1545099	20870313	13.5074	26.0677
gi 1074122235 emb LT615263.1	1585108	24114744	15.2133	173.7475
gi 1074122590 emb LT615264.1	2122358	29736178	14.0109	78.9938
gi 1074123050 emb LT615265.1	1754192	28137924	16.0404	333.7621
gi 1074123421 emb LT615	2150147	30767206	14.3094	37.8777

266.1				
gi 107412389 8 emb LT615 267.1	3031036	42616673	14.0601	107.1199
gi 107412458 8 emb LT615 268.1	2359348	30914054	13.1028	25.9041
gi 107412506 5 emb LT615 269.1	3135668	43027448	13.7219	26.3244

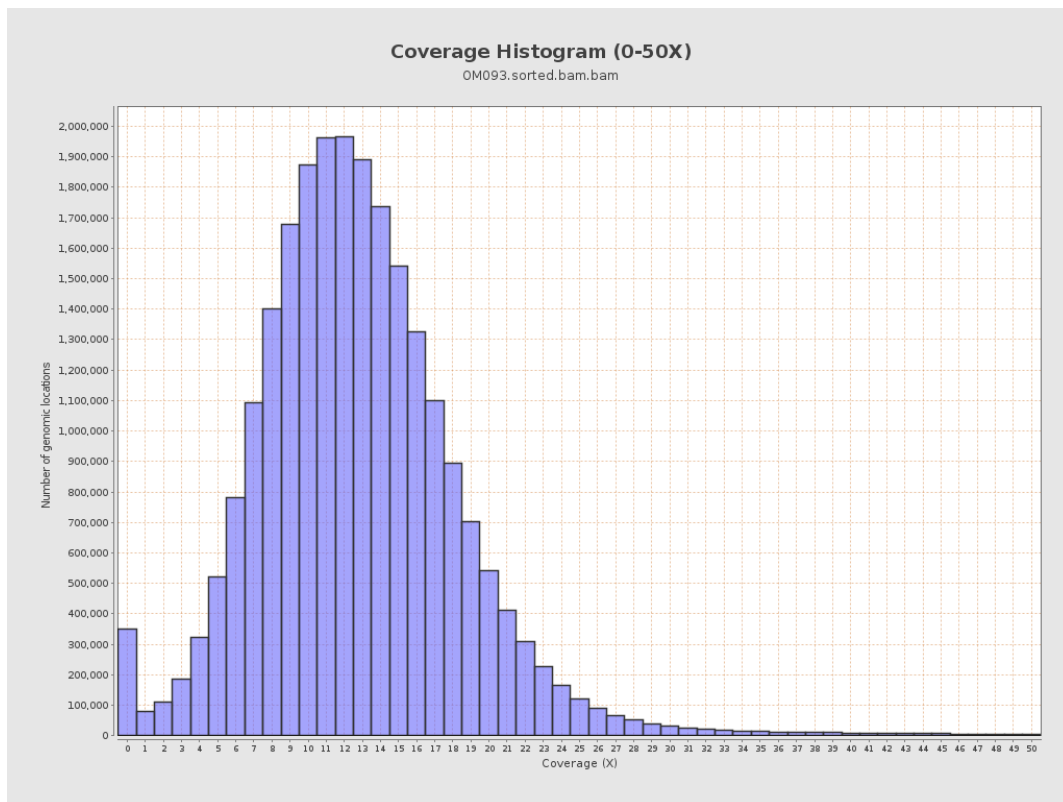
3. Results : Coverage across reference



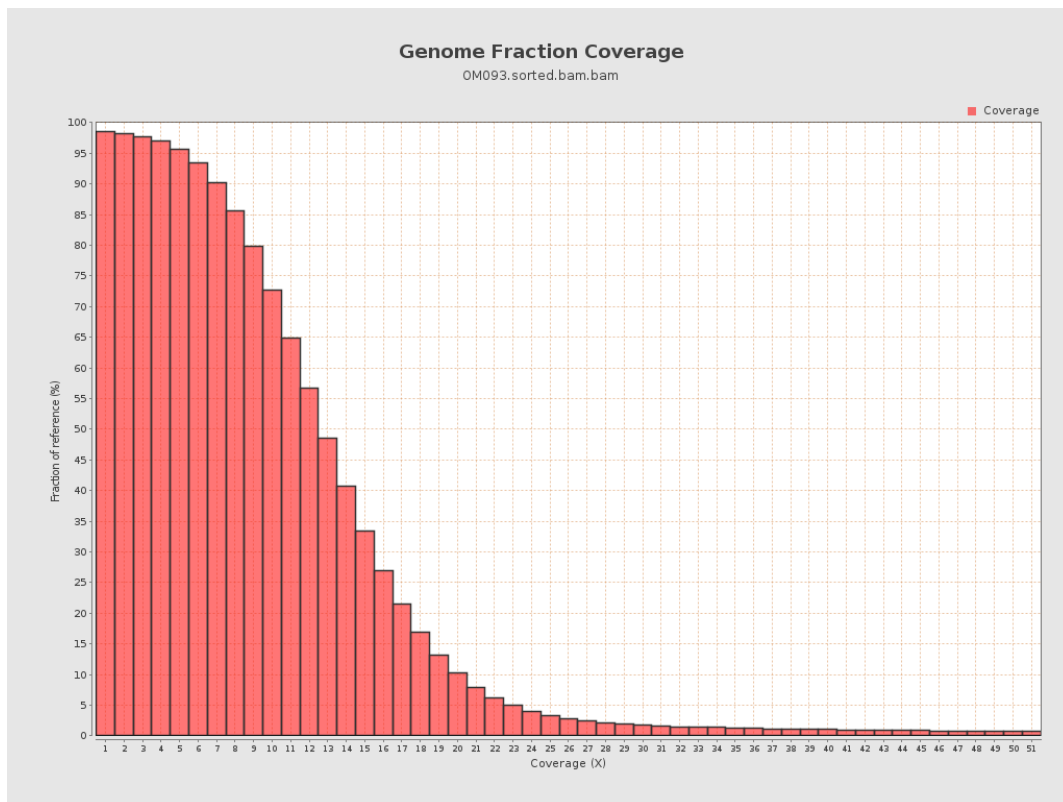
4. Results : Coverage Histogram



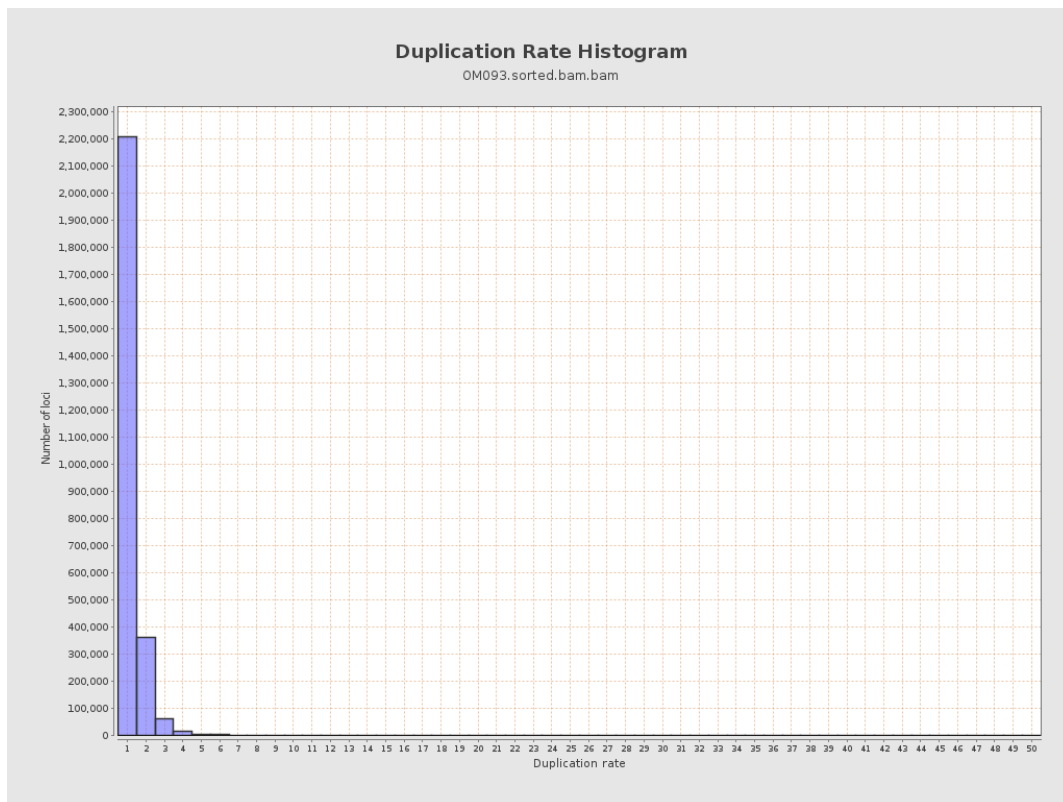
5. Results : Coverage Histogram (0-50X)



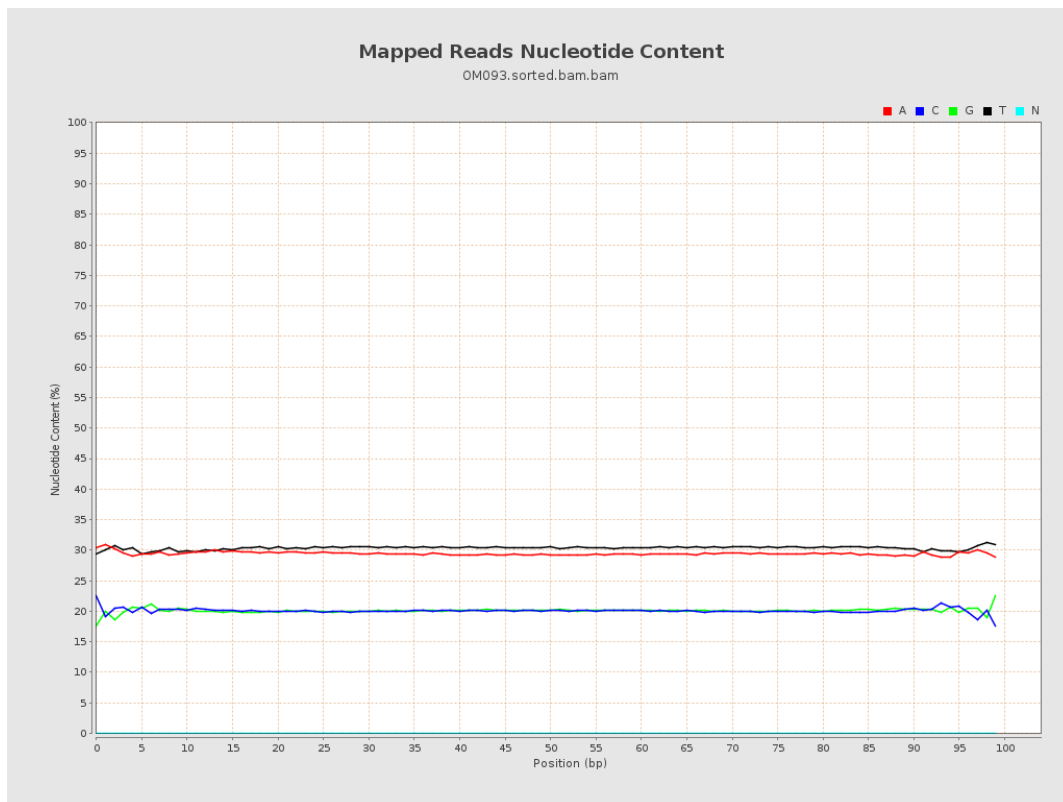
6. Results : Genome Fraction Coverage



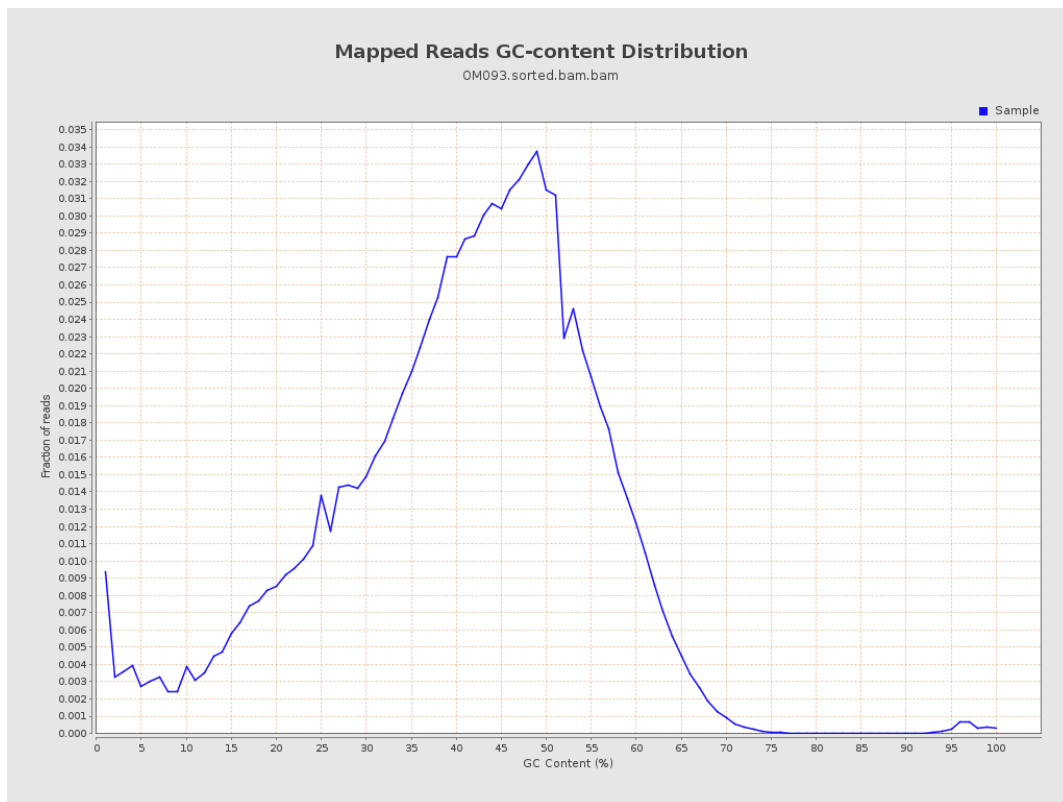
7. Results : Duplication Rate Histogram



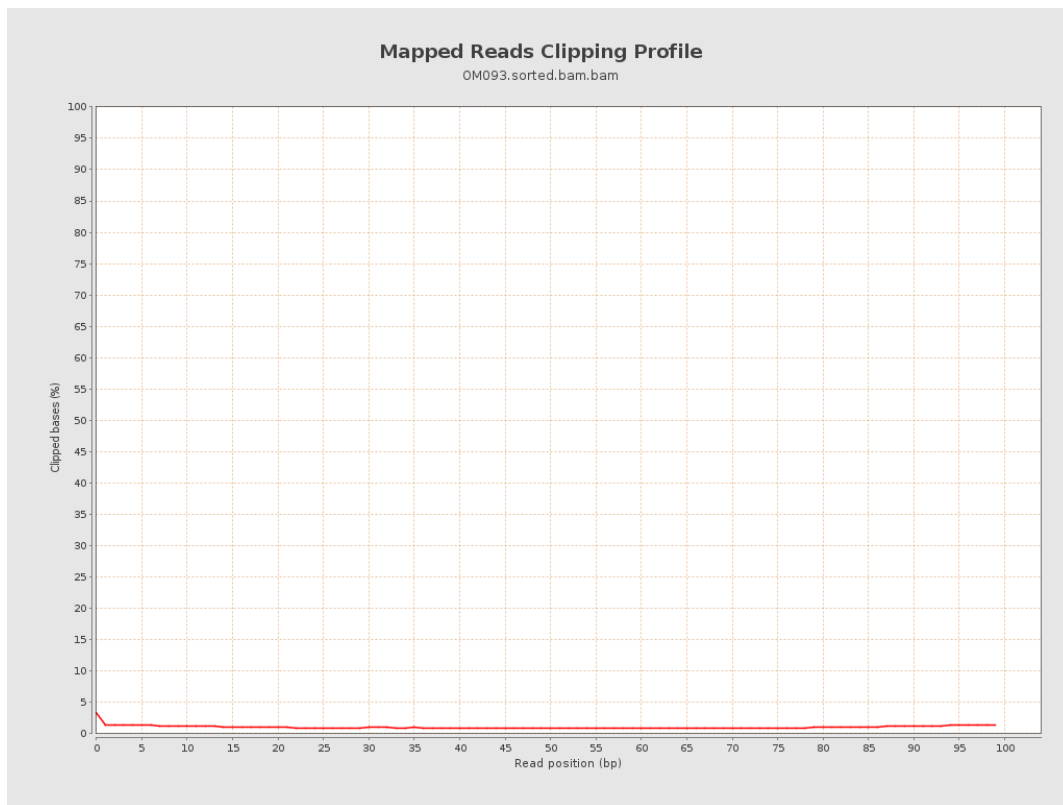
8. Results : Mapped Reads Nucleotide Content



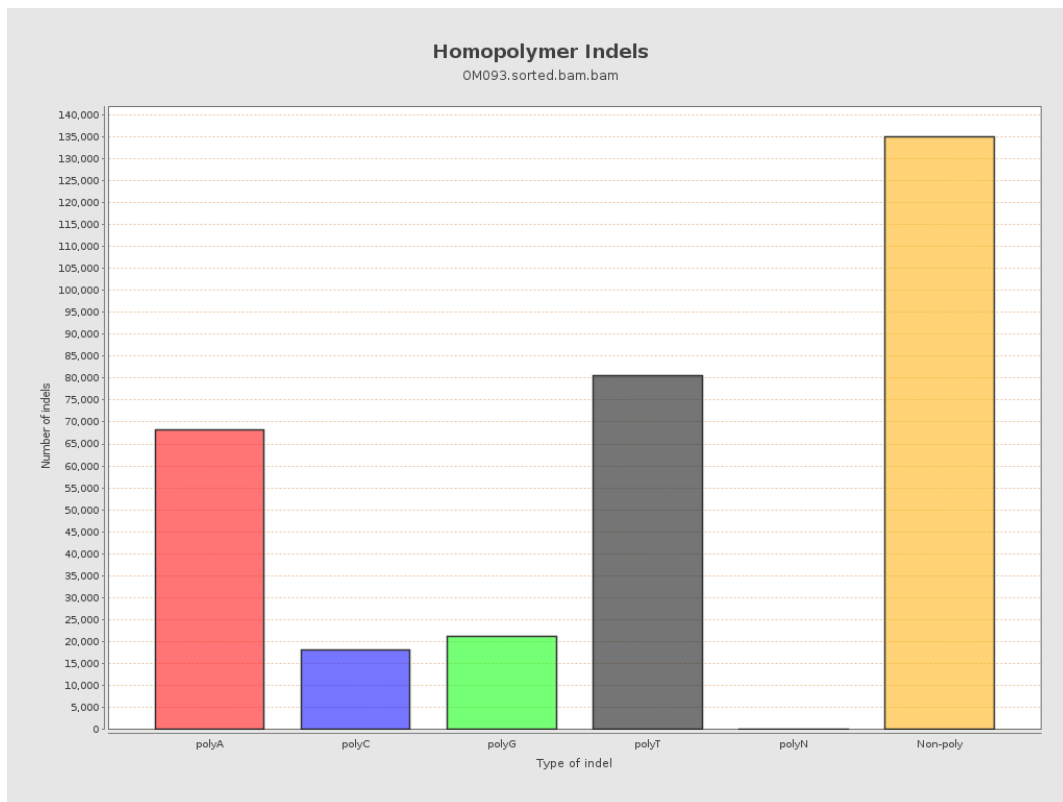
9. Results : Mapped Reads GC-content Distribution



10. Results : Mapped Reads Clipping Profile



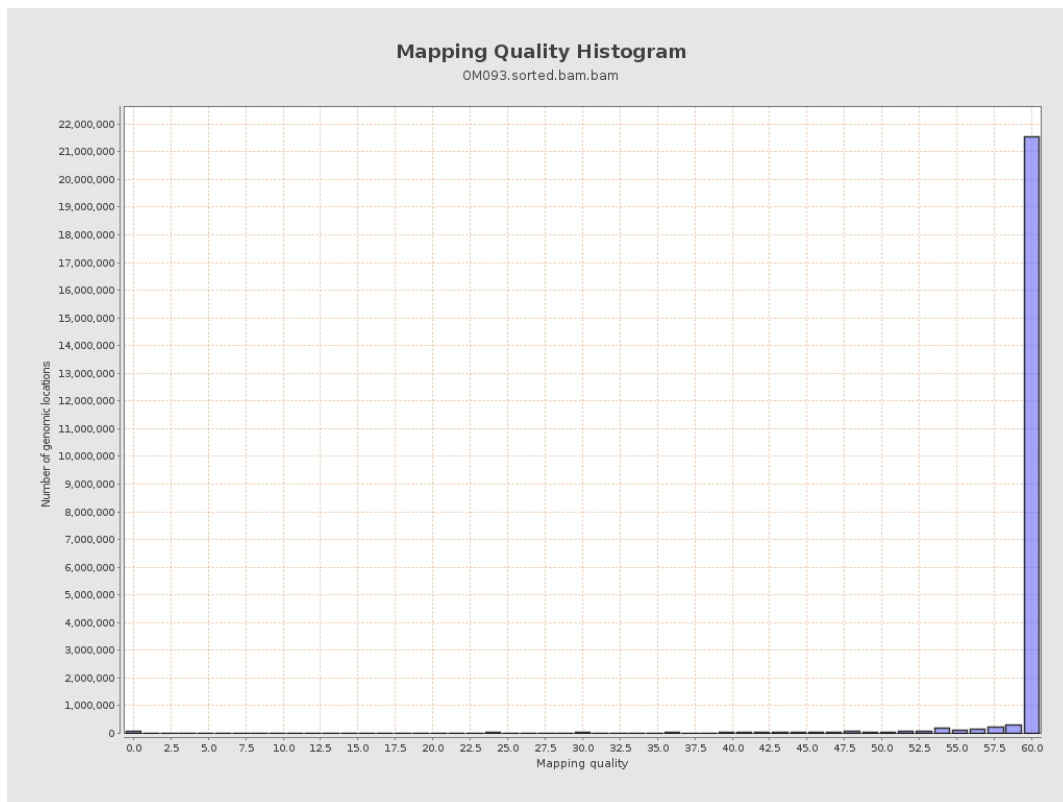
11. Results : Homopolymer Indels



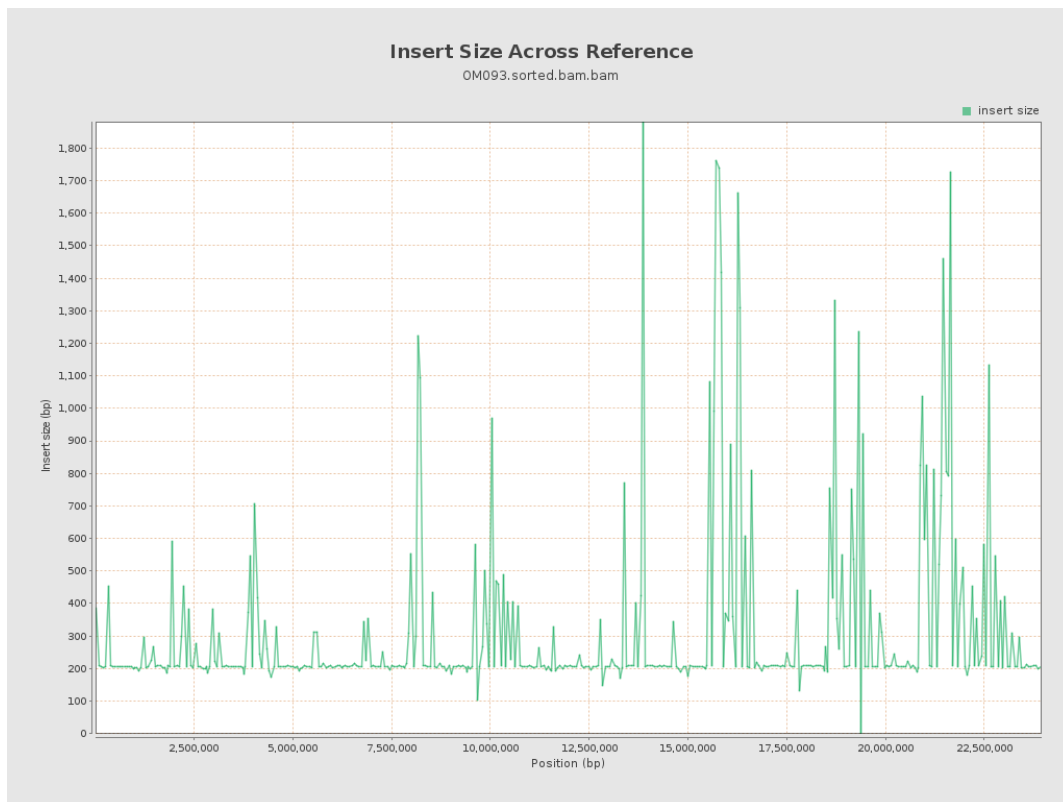
12. Results : Mapping Quality Across Reference



13. Results : Mapping Quality Histogram



14. Results : Insert Size Across Reference



15. Results : Insert Size Histogram

