

Qualimap Analysis Results

BAM QC analysis

Generated by Qualimap v.2.2.1

2016/10/23 12:05:36

1. Input data & parameters

1.1. QualiMap command line

```
qualimap bamqc -bam
/home/vdp5/data/cambodia_samples/sequences_bam/OM032.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/OM032-BiooBarcode7_ATCACG_R1.fastq.gz /home/vdp5/data/cambodia_samples/sequences_gz/OM032-BiooBarcode7_ATCACG_R2.fastq.gz
Draw chromosome limits:	no
Analyze overlapping paired-end reads:	no
Program:	bwa (0.7.15-r1140)
Analysis date:	Sun Oct 23 12:05:35 EDT 2016
Size of a homopolymer:	3
Skip duplicate alignments:	no
Number of windows:	400
BAM file:	/home/vdp5/data/cambodia_samples/sequences_bam/OM032.sorted.bam.bam

2. Summary

2.1. Globals

Reference size	23,958,997
Number of reads	16,169,831
Mapped reads	8,355,931 / 51.68%
Unmapped reads	7,813,900 / 48.32%
Mapped paired reads	8,355,931 / 51.68%
Mapped reads, first in pair	4,183,560 / 25.87%
Mapped reads, second in pair	4,172,371 / 25.8%
Mapped reads, both in pair	8,244,754 / 50.99%
Mapped reads, singletons	111,177 / 0.69%
Read min/max/mean length	30 / 100 / 99.91
Duplicated reads (estimated)	1,921,087 / 11.88%
Duplication rate	19.83%
Clipped reads	879,642 / 5.44%

2.2. ACGT Content

Number/percentage of A's	239,818,410 / 29.7%
Number/percentage of C's	163,699,307 / 20.28%
Number/percentage of T's	240,492,555 / 29.79%
Number/percentage of G's	163,326,442 / 20.23%
Number/percentage of N's	71,906 / 0.01%
GC Percentage	40.51%

2.3. Coverage

Mean	33.7318
Standard Deviation	27.1323

2.4. Mapping Quality

Mean Mapping Quality	58.67
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2.5. Insert size

Mean	551.72
Standard Deviation	22,208.5
P25/Median/P75	172 / 187 / 204

2.6. Mismatches and indels

General error rate	1.34%
Mismatches	10,255,065
Insertions	251,303
Mapped reads with at least one insertion	2.85%
Deletions	283,154
Mapped reads with at least one deletion	3.2%
Homopolymer indels	64.07%

2.7. Chromosome stats

Name	Length	Mapped bases	Mean coverage	Standard deviation

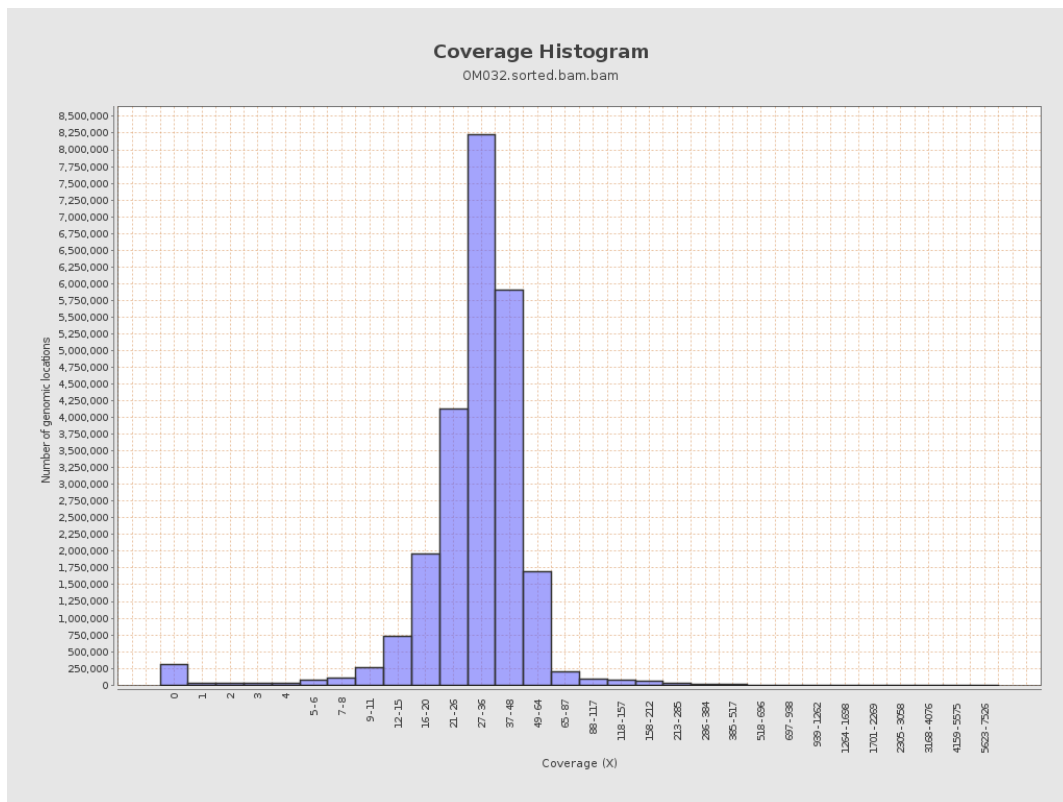
gi 1074120478 emb LT615256.1	977217	30085154	30.7866	13.1919
gi 1074120682 emb LT615257.1	860454	26934225	31.3023	20.096
gi 1074120865 emb LT615258.1	989719	37779563	38.172	46.6673
gi 1074121086 emb LT615259.1	935450	34913765	37.323	47.4536
gi 1074121301 emb LT615260.1	1432239	50335332	35.1445	29.2409
gi 1074121615 emb LT615261.1	1080962	36620130	33.8774	23.1503
gi 1074121871 emb LT615262.1	1545099	50506230	32.688	12.8407
gi 1074122235 emb LT615263.1	1585108	52839653	33.335	20.3209
gi 1074122590 emb LT615264.1	2122358	70265832	33.1074	16.9892
gi 1074123050 emb LT615265.1	1754192	61778102	35.2174	29.3067
gi 1074123421 emb LT615	2150147	75851905	35.2775	50.9489

266.1				
gi 107412389 8 emb LT615 267.1	3031036	99283966	32.7558	13.1918
gi 107412458 8 emb LT615 268.1	2359348	74199545	31.4492	24.5708
gi 107412506 5 emb LT615 269.1	3135668	106786462	34.0554	11.5434

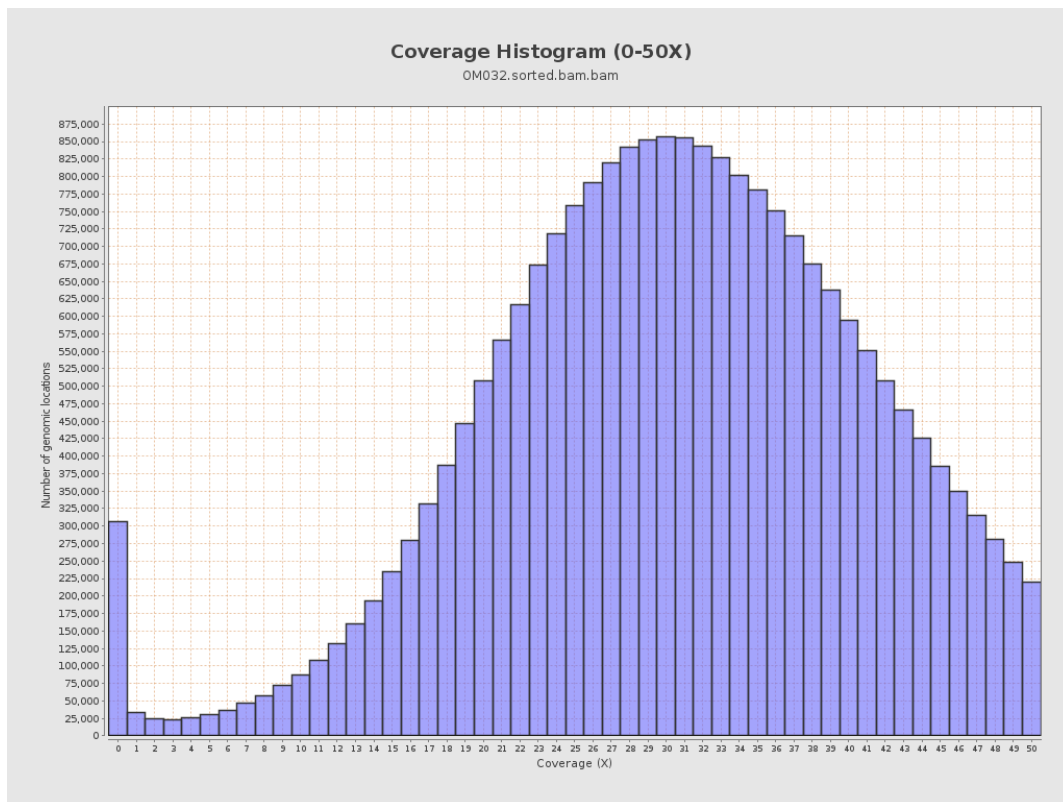
3. Results : Coverage across reference



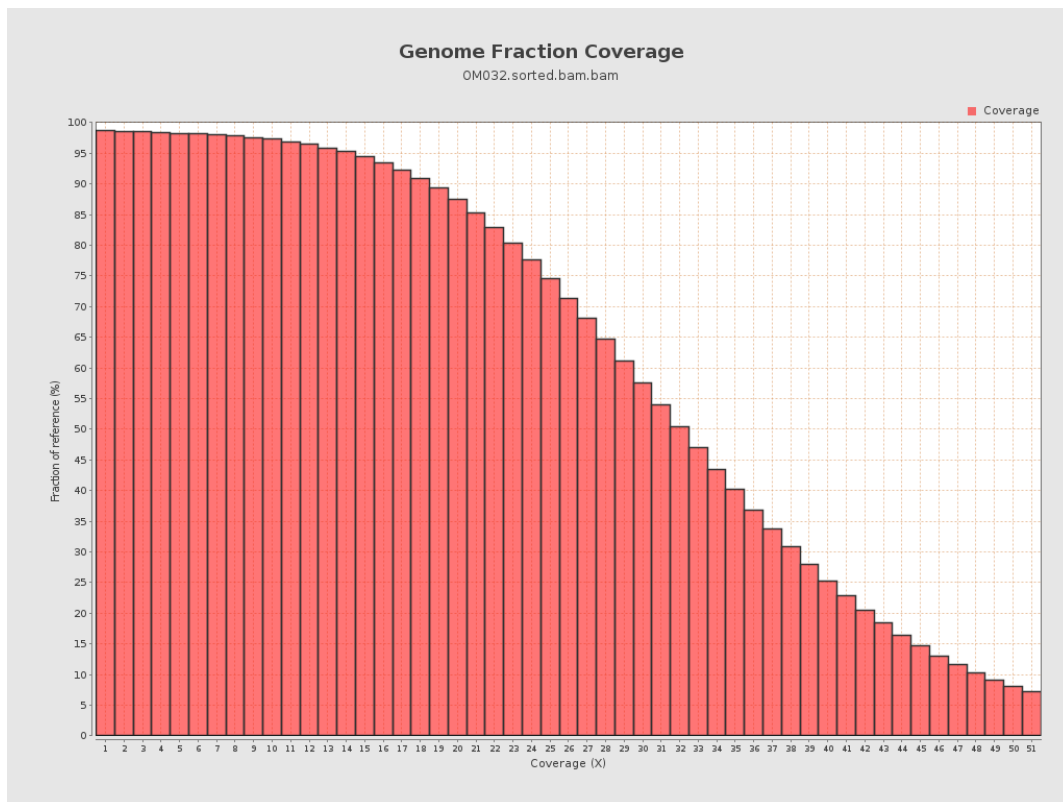
4. Results : Coverage Histogram



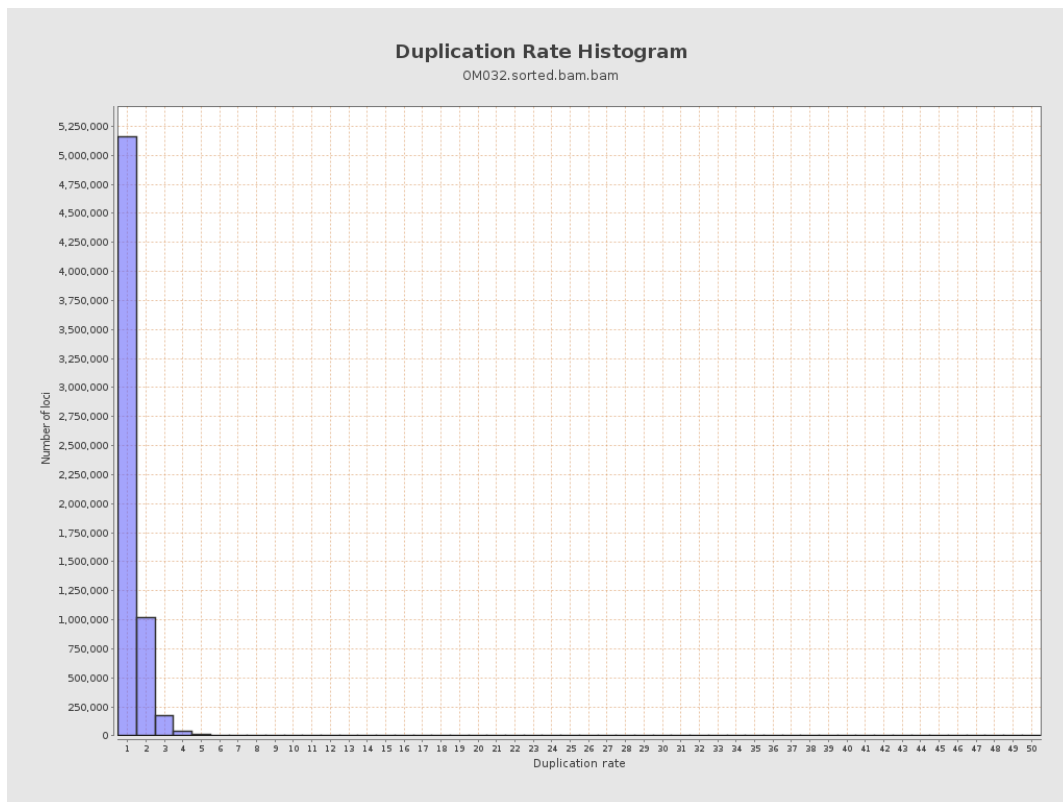
5. Results : Coverage Histogram (0-50X)



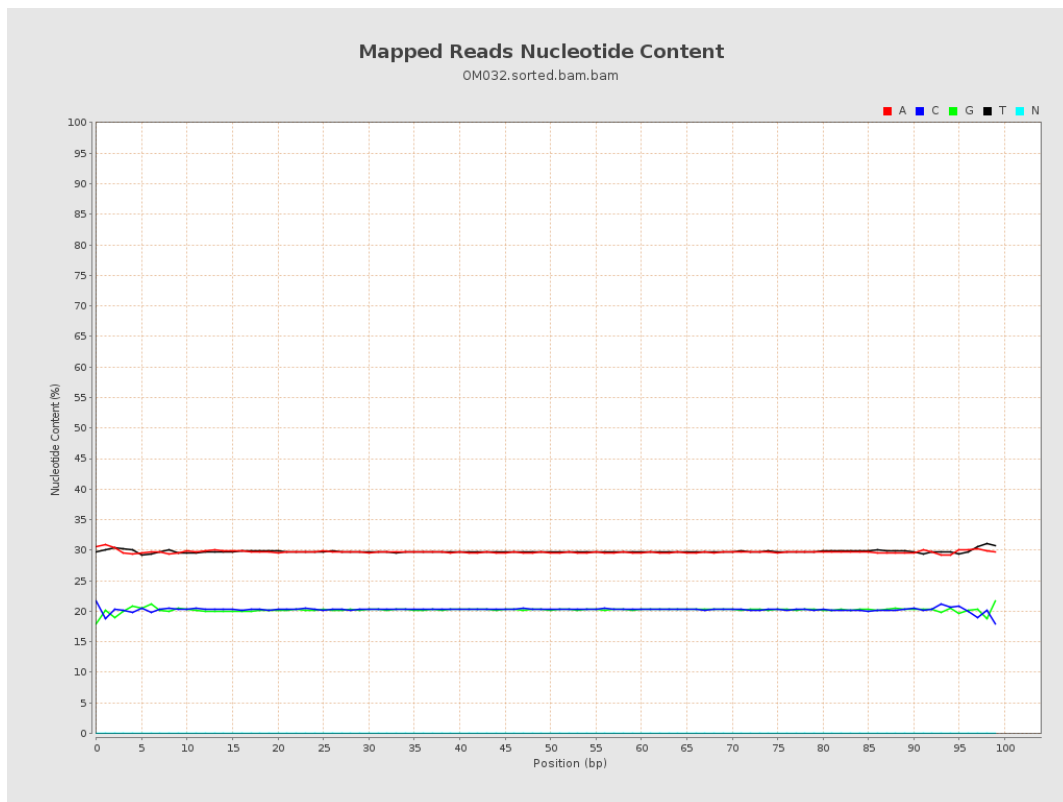
6. Results : Genome Fraction Coverage



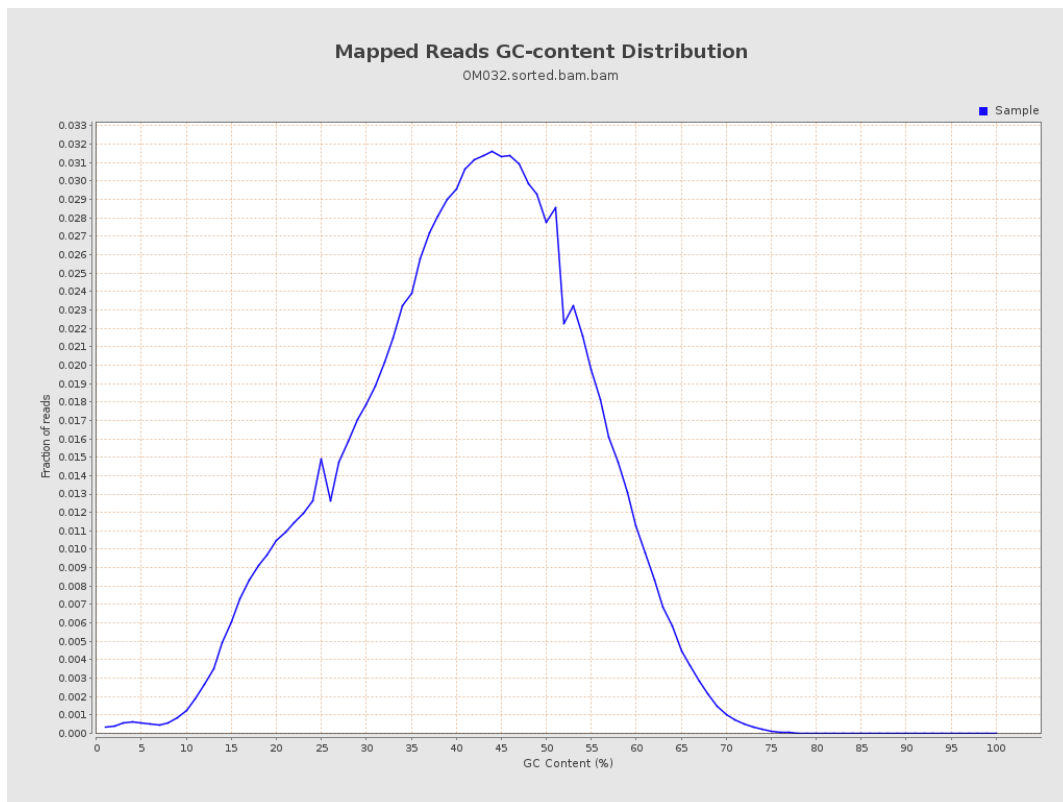
7. Results : Duplication Rate Histogram



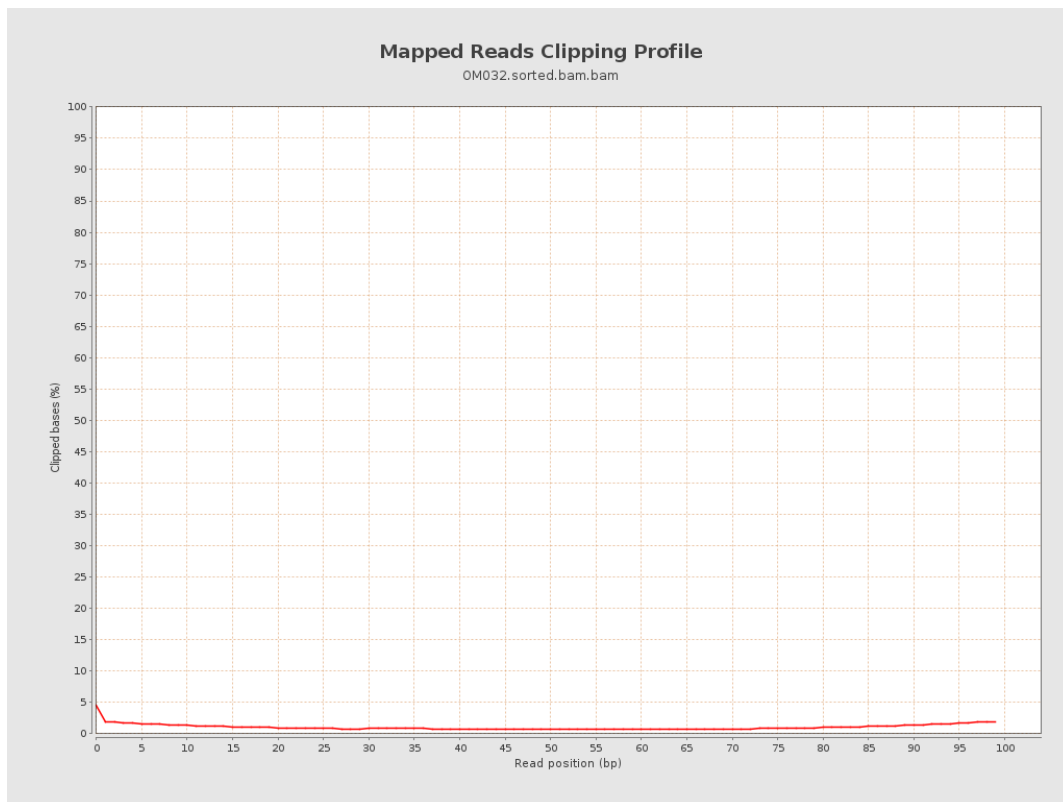
8. Results : Mapped Reads Nucleotide Content



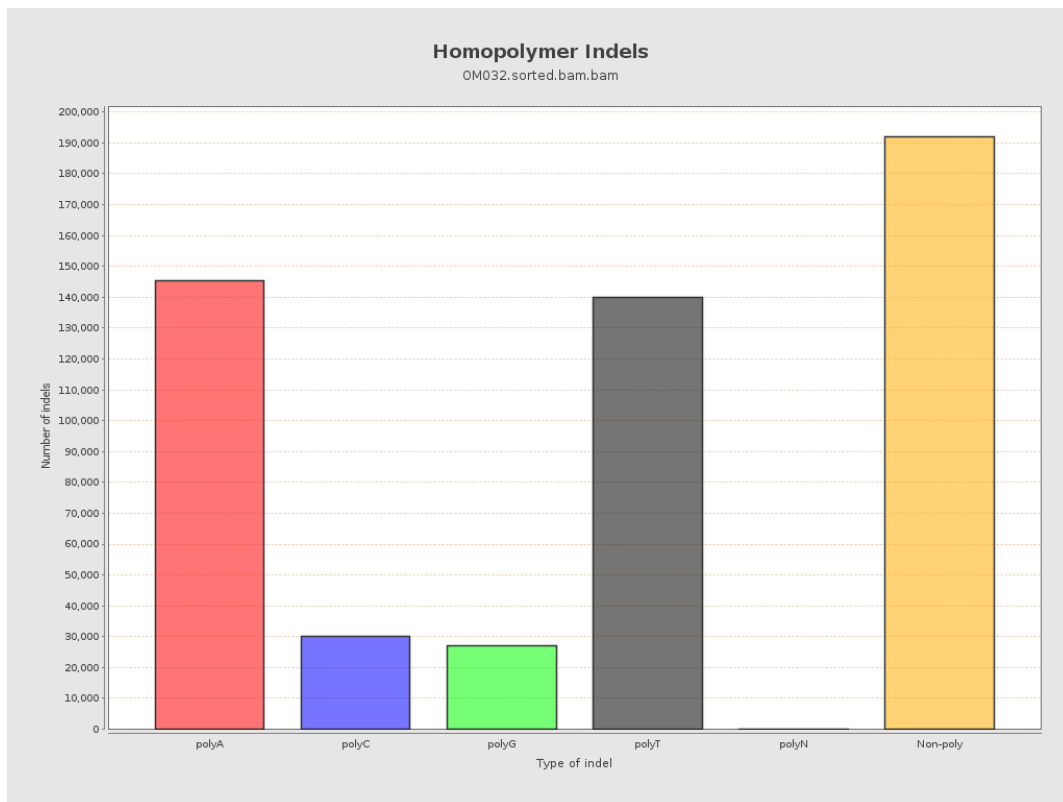
9. Results : Mapped Reads GC-content Distribution



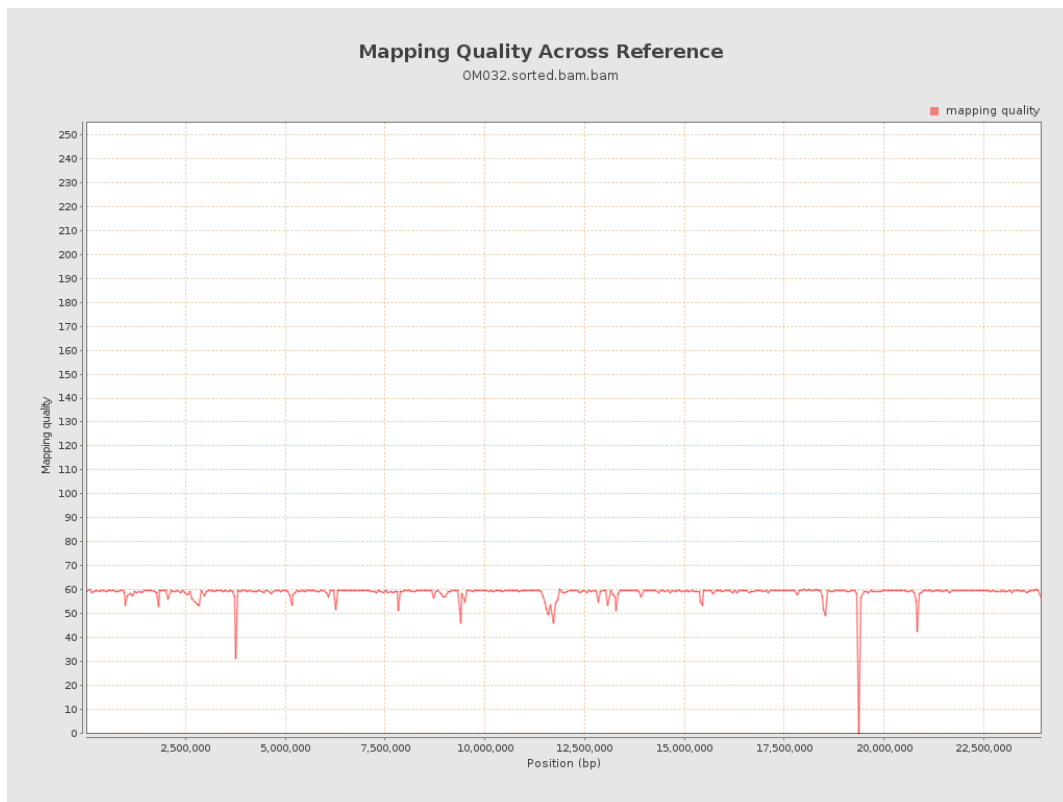
10. Results : Mapped Reads Clipping Profile



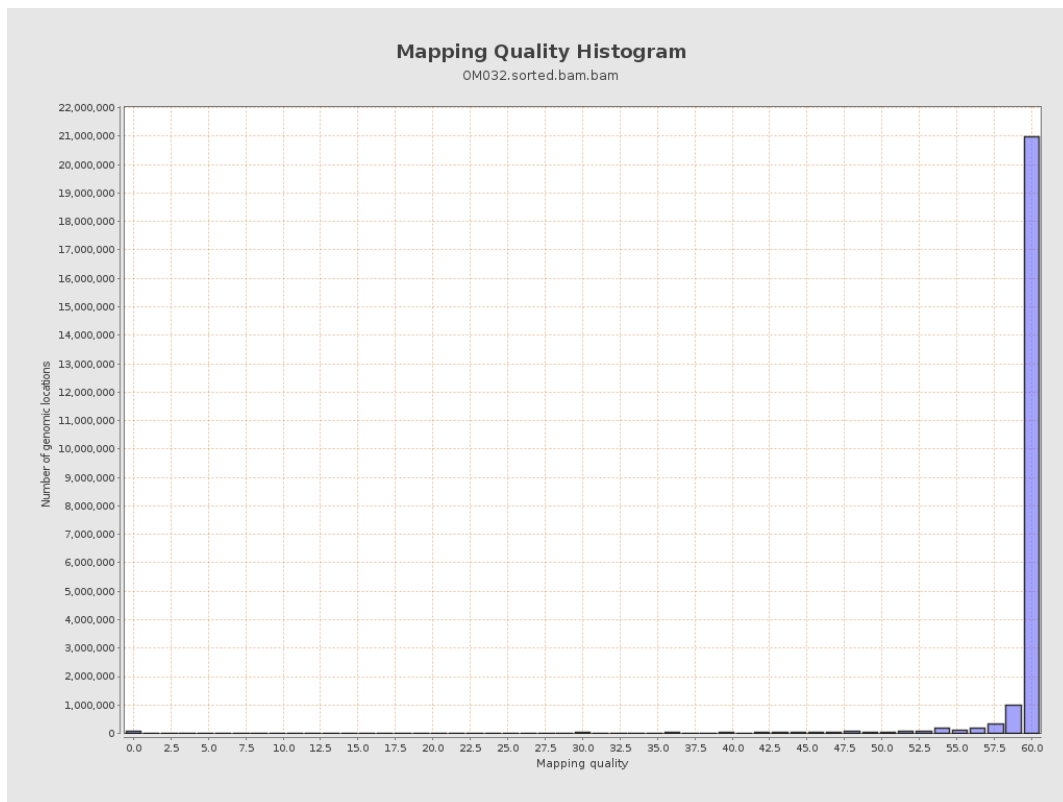
11. Results : Homopolymer Indels



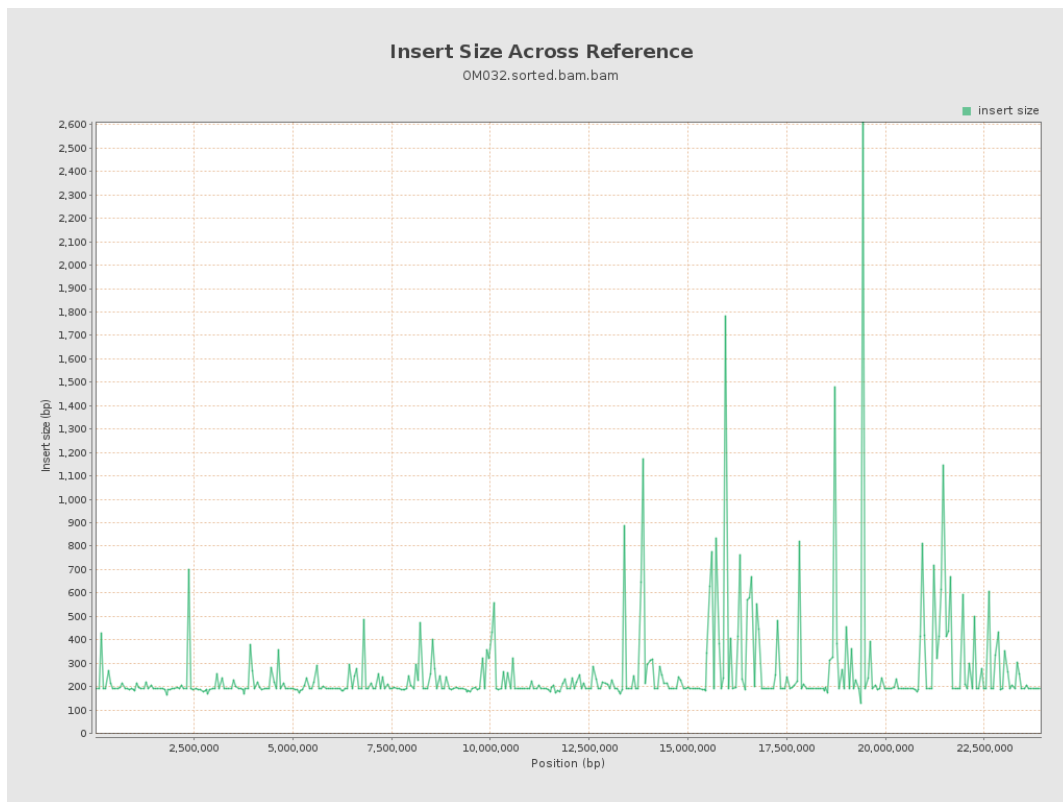
12. Results : Mapping Quality Across Reference



13. Results : Mapping Quality Histogram



14. Results : Insert Size Across Reference



15. Results : Insert Size Histogram

