

Qualimap Analysis Results

BAM QC analysis

Generated by Qualimap v.2.2.1

2016/10/23 12:03:11

1. Input data & parameters

1.1. QualiMap command line

```
qualimap bamqc -bam
/home/vdp5/data/cambodia_samples/sequences_bam/OM015.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/OM015-BiooBarcode5_CAGATC_R2.fastq.gz /home/vdp5/data/cambodia_samples/sequences_gz/OM015-BiooBarcode5_CAGATC_R1.fastq.gz
Draw chromosome limits:	no
Analyze overlapping paired-end reads:	no
Program:	bwa (0.7.15-r1140)
Analysis date:	Sun Oct 23 12:03:10 EDT 2016
Size of a homopolymer:	3
Skip duplicate alignments:	no
Number of windows:	400
BAM file:	/home/vdp5/data/cambodia_samples/sequences_bam/OM015.sorted.bam.bam

2. Summary

2.1. Globals

Reference size	23,958,997
Number of reads	65,302,351
Mapped reads	15,350,362 / 23.51%
Unmapped reads	49,951,989 / 76.49%
Mapped paired reads	15,350,362 / 23.51%
Mapped reads, first in pair	7,660,200 / 11.73%
Mapped reads, second in pair	7,690,162 / 11.78%
Mapped reads, both in pair	14,856,696 / 22.75%
Mapped reads, singletons	493,666 / 0.76%
Read min/max/mean length	30 / 100 / 99.96
Duplicated reads (estimated)	5,772,048 / 8.84%
Duplication rate	33.91%
Clipped reads	1,853,245 / 2.84%

2.2. ACGT Content

Number/percentage of A's	437,298,509 / 29.76%
Number/percentage of C's	296,437,177 / 20.18%
Number/percentage of T's	439,787,328 / 29.93%
Number/percentage of G's	295,664,017 / 20.12%
Number/percentage of N's	128,114 / 0.01%
GC Percentage	40.3%

2.3. Coverage

Mean	61.3871
Standard Deviation	69.127

2.4. Mapping Quality

Mean Mapping Quality	58.21
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2.5. Insert size

Mean	754.83
Standard Deviation	27,293.58
P25/Median/P75	238 / 249 / 261

2.6. Mismatches and indels

General error rate	1.42%
Mismatches	19,685,901
Insertions	468,930
Mapped reads with at least one insertion	2.89%
Deletions	536,945
Mapped reads with at least one deletion	3.28%
Homopolymer indels	62.87%

2.7. Chromosome stats

Name	Length	Mapped bases	Mean coverage	Standard deviation

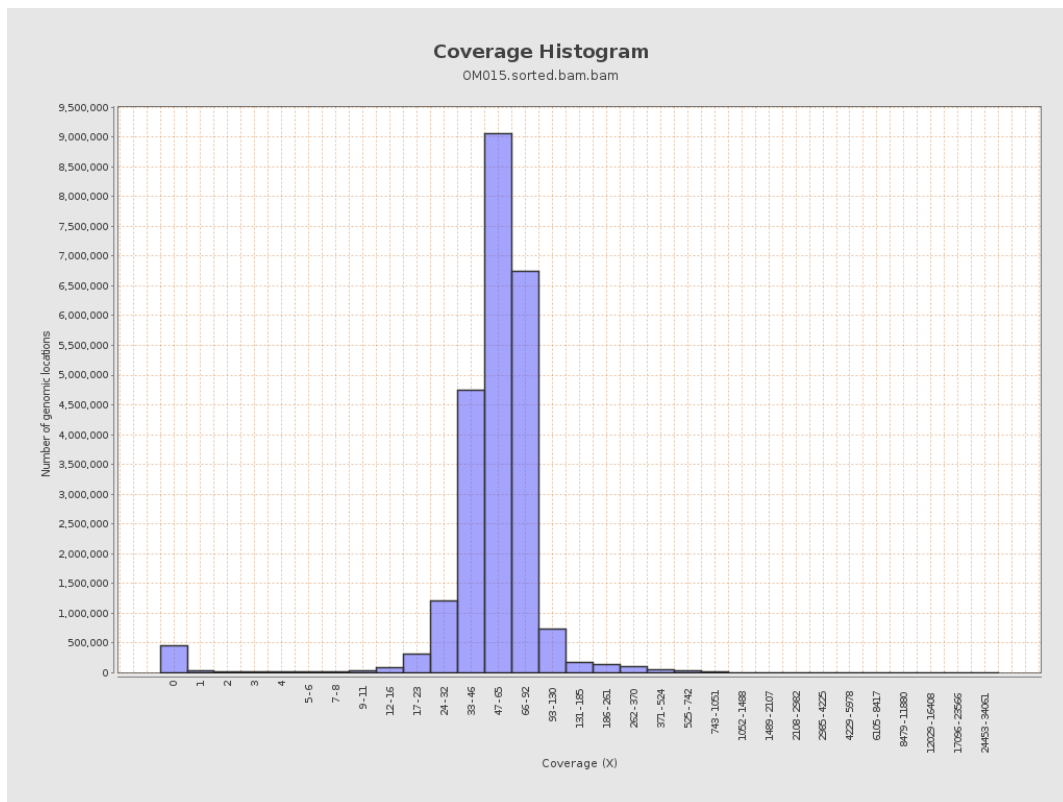
gi 1074120478 emb LT615256.1	977217	53705940	54.958	23.6545
gi 1074120682 emb LT615257.1	860454	57870008	67.2552	58.8071
gi 1074120865 emb LT615258.1	989719	69315319	70.0354	82.8778
gi 1074121086 emb LT615259.1	935450	59759536	63.8832	84.4565
gi 1074121301 emb LT615260.1	1432239	90113377	62.9178	58.8941
gi 1074121615 emb LT615261.1	1080962	68294615	63.1795	63.3917
gi 1074121871 emb LT615262.1	1545099	89531029	57.9452	23.92
gi 1074122235 emb LT615263.1	1585108	97103387	61.2598	82.5582
gi 1074122590 emb LT615264.1	2122358	122131794	57.5453	27.2045
gi 1074123050 emb LT615265.1	1754192	114804679	65.4459	152.8651
gi 1074123421 emb LT615	2150147	139742064	64.9919	97.1235

266.1				
gi 107412389 8 emb LT615 267.1	3031036	179776263	59.3118	42.7864
gi 107412458 8 emb LT615 268.1	2359348	136128912	57.6977	51.2065
gi 107412506 5 emb LT615 269.1	3135668	192496817	61.3894	22.6629

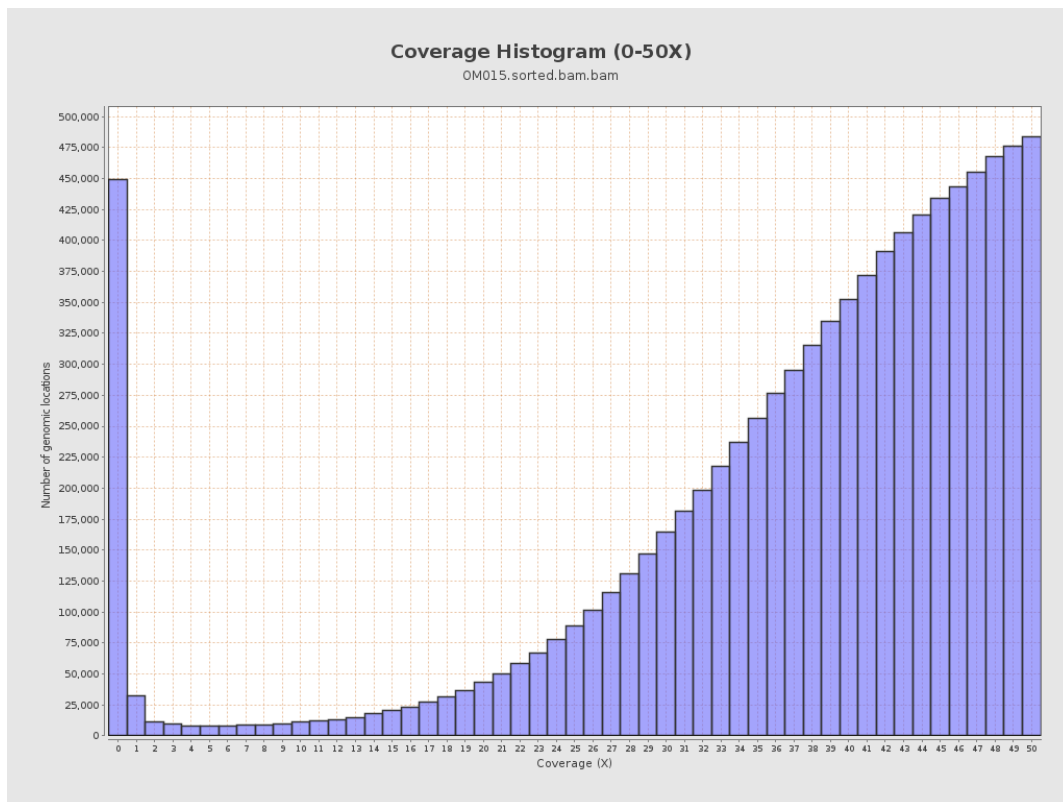
3. Results : Coverage across reference



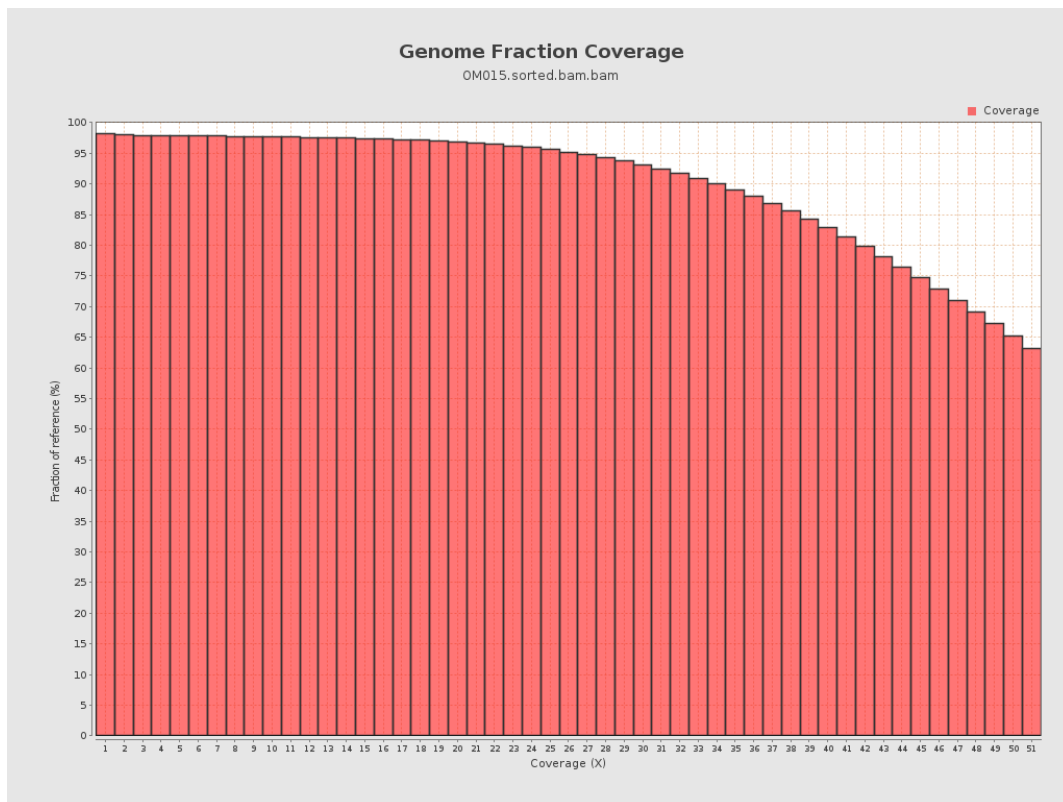
4. Results : Coverage Histogram



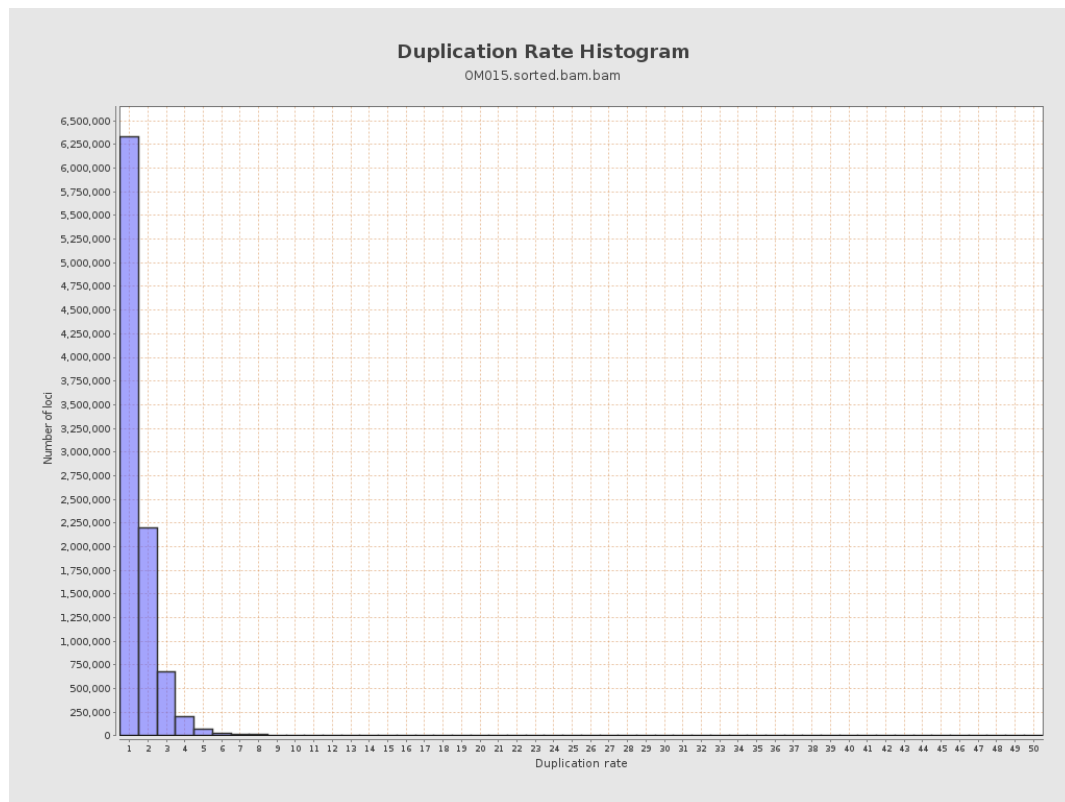
5. Results : Coverage Histogram (0-50X)



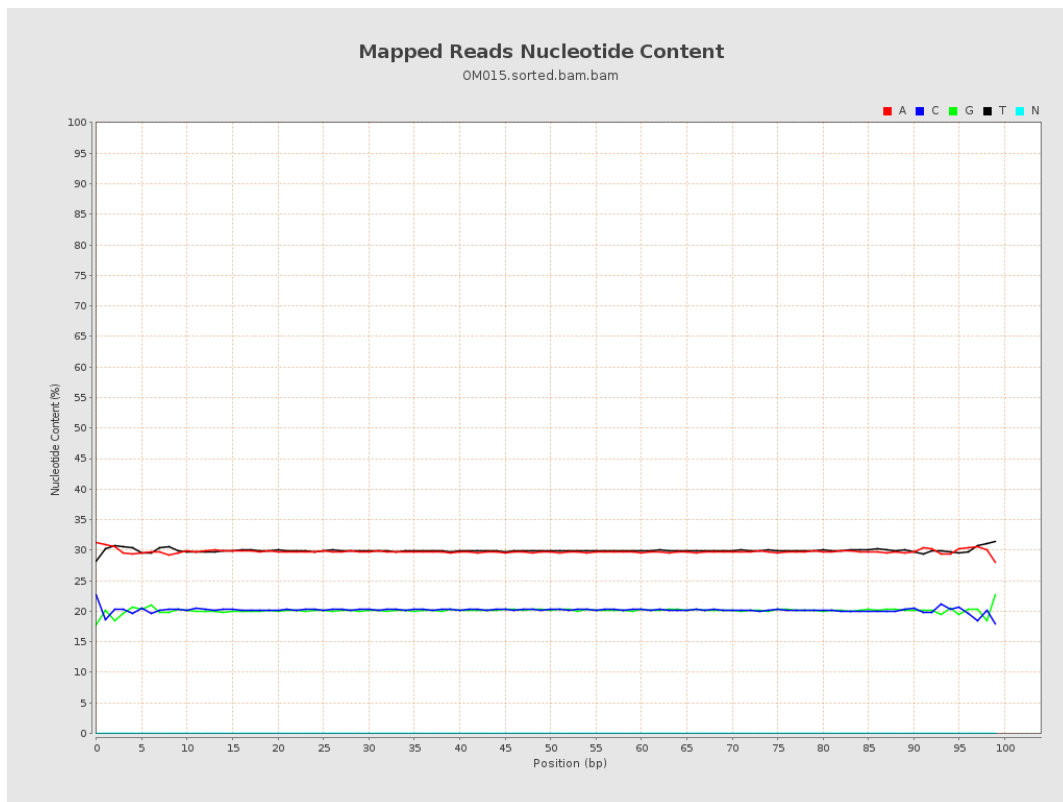
6. Results : Genome Fraction Coverage



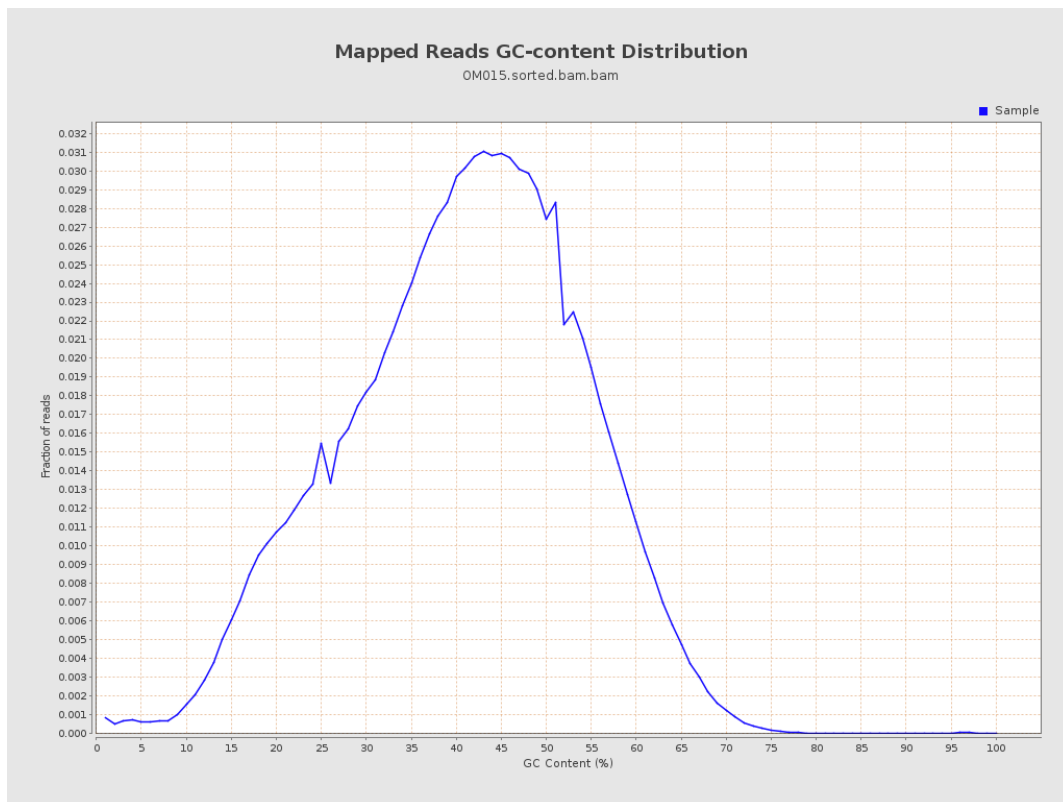
7. Results : Duplication Rate Histogram



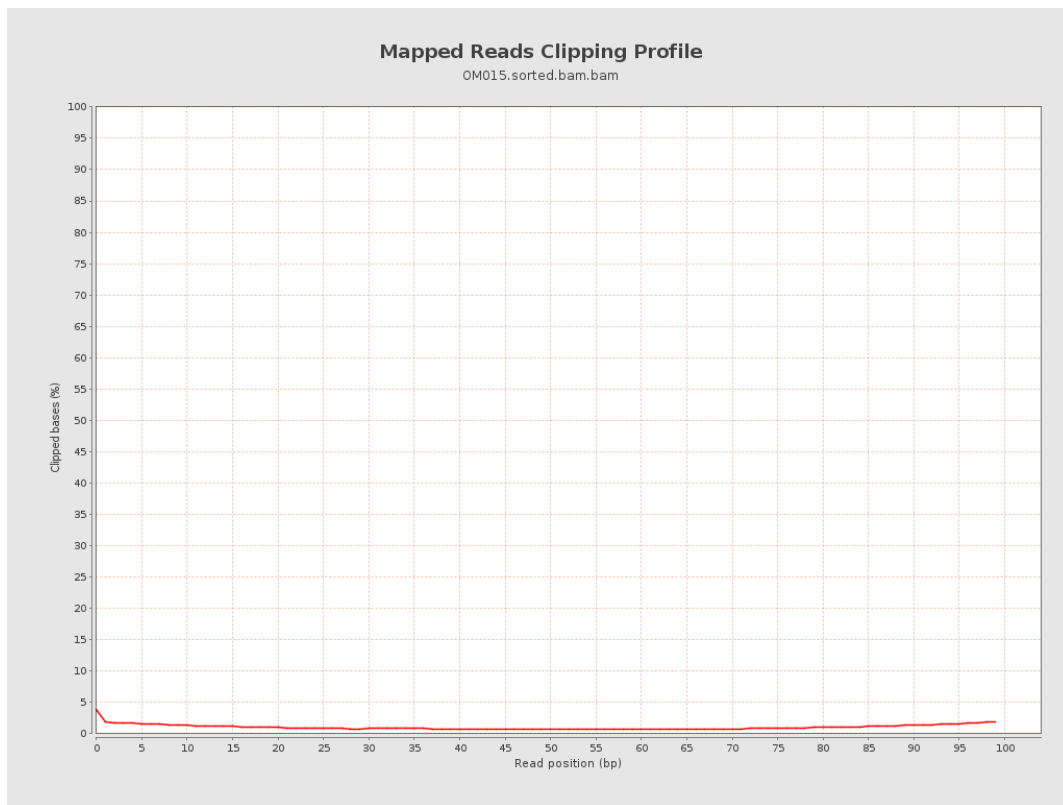
8. Results : Mapped Reads Nucleotide Content



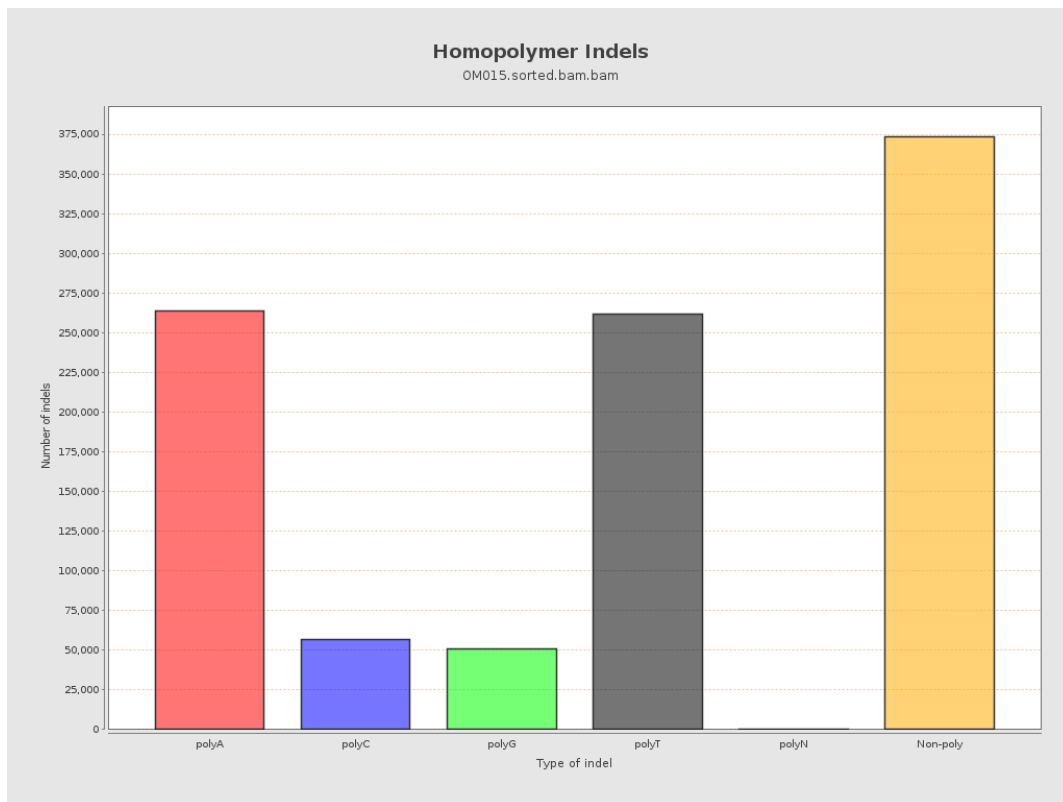
9. Results : Mapped Reads GC-content Distribution



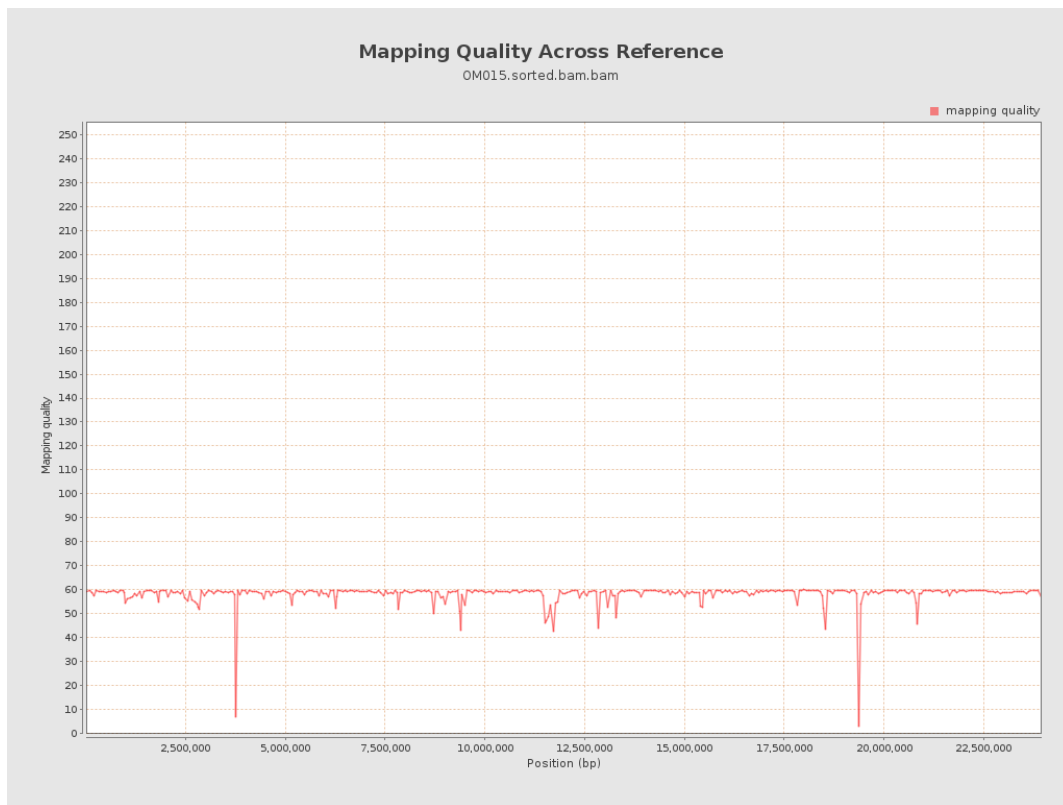
10. Results : Mapped Reads Clipping Profile



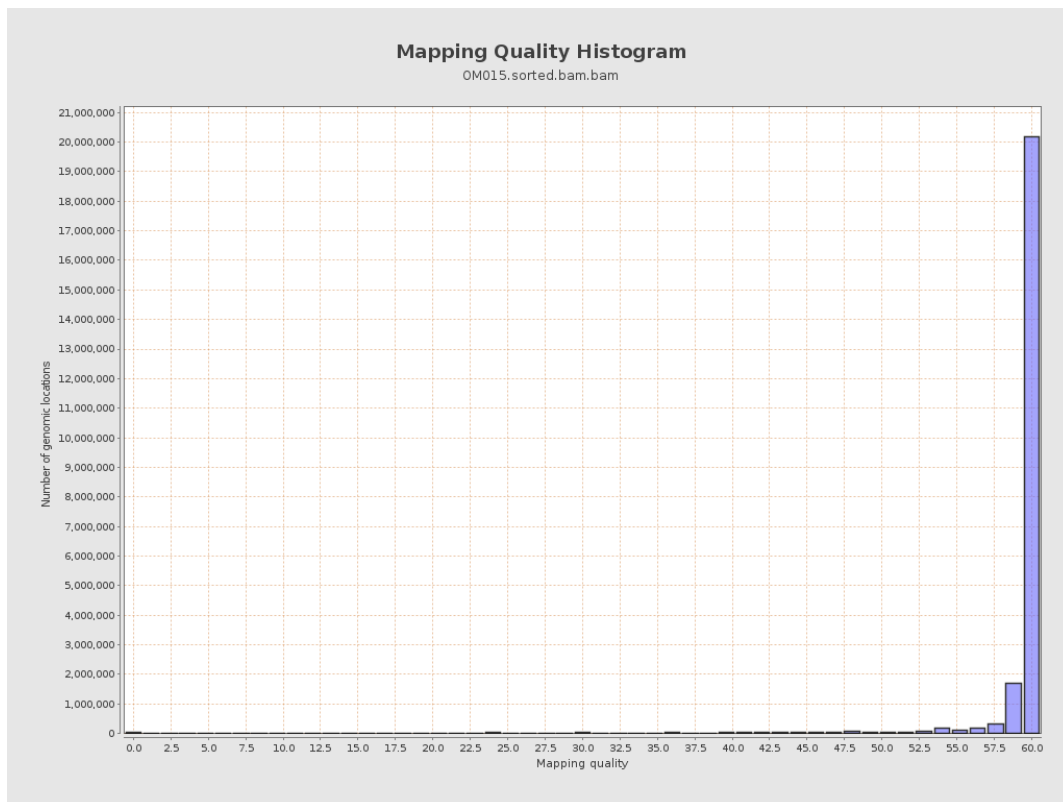
11. Results : Homopolymer Indels



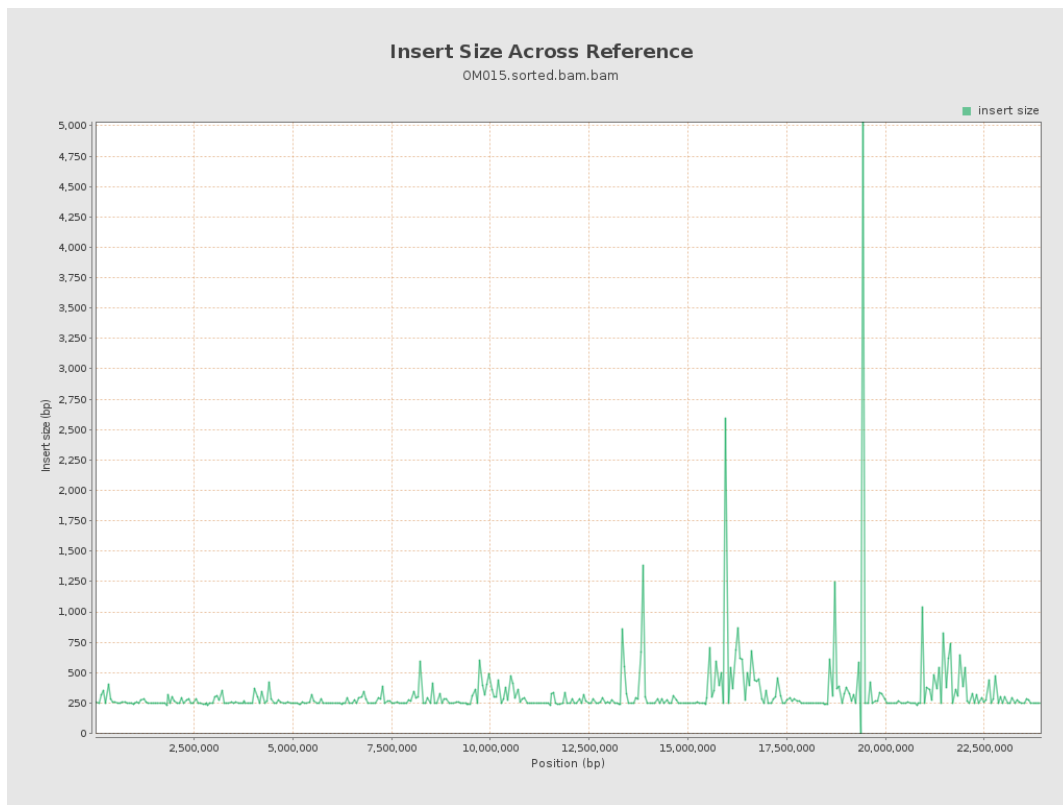
12. Results : Mapping Quality Across Reference



13. Results : Mapping Quality Histogram



14. Results : Insert Size Across Reference



15. Results : Insert Size Histogram

