

Qualimap Analysis Results

BAM QC analysis

Generated by Qualimap v.2.2.1

2016/10/23 13:38:57

1. Input data & parameters

1.1. QualiMap command line

```
qualimap bamqc -bam
/home/vdp5/data/cambodia_samples/sequences_bam/OM146.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-146_TTAGGC_R1.fastq.gz /home/vdp5/data/cambodia_samples/sequences_gz/OM-146_TTAGGC_R2.fastq.gz
Draw chromosome limits:	no
Analyze overlapping paired-end reads:	no
Program:	bwa (0.7.15-r1140)
Analysis date:	Sun Oct 23 13:38:57 EDT 2016
Size of a homopolymer:	3
Skip duplicate alignments:	no
Number of windows:	400
BAM file:	/home/vdp5/data/cambodia_samples/sequences_bam/OM146.sorted.bam.bam

2. Summary

2.1. Globals

Reference size	23,958,997
Number of reads	41,639,451
Mapped reads	5,074,862 / 12.19%
Unmapped reads	36,564,589 / 87.81%
Mapped paired reads	5,074,862 / 12.19%
Mapped reads, first in pair	2,536,658 / 6.09%
Mapped reads, second in pair	2,538,204 / 6.1%
Mapped reads, both in pair	4,759,672 / 11.43%
Mapped reads, singletons	315,190 / 0.76%
Read min/max/mean length	30 / 100 / 99.96
Duplicated reads (estimated)	1,168,599 / 2.81%
Duplication rate	16.36%
Clipped reads	754,213 / 1.81%

2.2. ACGT Content

Number/percentage of A's	139,992,003 / 29.46%
Number/percentage of C's	97,004,046 / 20.42%
Number/percentage of T's	141,398,198 / 29.76%
Number/percentage of G's	96,762,081 / 20.36%
Number/percentage of N's	14,883 / 0%
GC Percentage	40.78%

2.3. Coverage

Mean	19.8537
Standard Deviation	47.5692

2.4. Mapping Quality

Mean Mapping Quality	57.43
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2.5. Insert size

Mean	760.6
Standard Deviation	24,302.17
P25/Median/P75	198 / 211 / 224

2.6. Mismatches and indels

General error rate	1.17%
Mismatches	5,116,565
Insertions	168,066
Mapped reads with at least one insertion	3.09%
Deletions	184,918
Mapped reads with at least one deletion	3.3%
Homopolymer indels	63.73%

2.7. Chromosome stats

Name	Length	Mapped bases	Mean coverage	Standard deviation

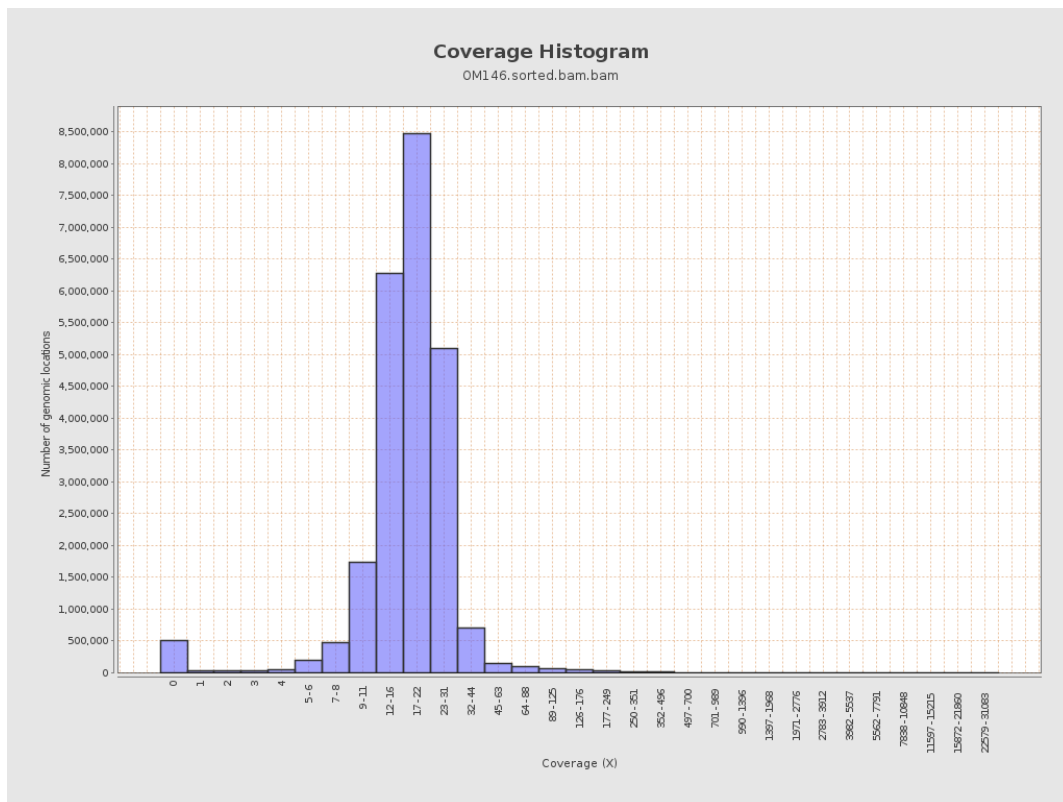
gi 1074120478 emb LT615256.1	977217	17835321	18.2511	13.0386
gi 1074120682 emb LT615257.1	860454	16284181	18.9251	22.7944
gi 1074120865 emb LT615258.1	989719	23267719	23.5094	33.9349
gi 1074121086 emb LT615259.1	935450	19936750	21.3125	28.5523
gi 1074121301 emb LT615260.1	1432239	29306311	20.4619	33.7049
gi 1074121615 emb LT615261.1	1080962	22025610	20.3759	23.1558
gi 1074121871 emb LT615262.1	1545099	29234419	18.9207	13.2477
gi 1074122235 emb LT615263.1	1585108	31911128	20.1318	67.7802
gi 1074122590 emb LT615264.1	2122358	40097413	18.8929	10.8634
gi 1074123050 emb LT615265.1	1754192	36438044	20.772	134.652
gi 1074123421 emb LT615	2150147	43929527	20.4309	38.7482

266.1				
gi 107412389 8 emb LT615 267.1	3031036	59063713	19.4863	39.845
gi 107412458 8 emb LT615 268.1	2359348	44820717	18.9971	23.7923
gi 107412506 5 emb LT615 269.1	3135668	61524266	19.6208	12.3795

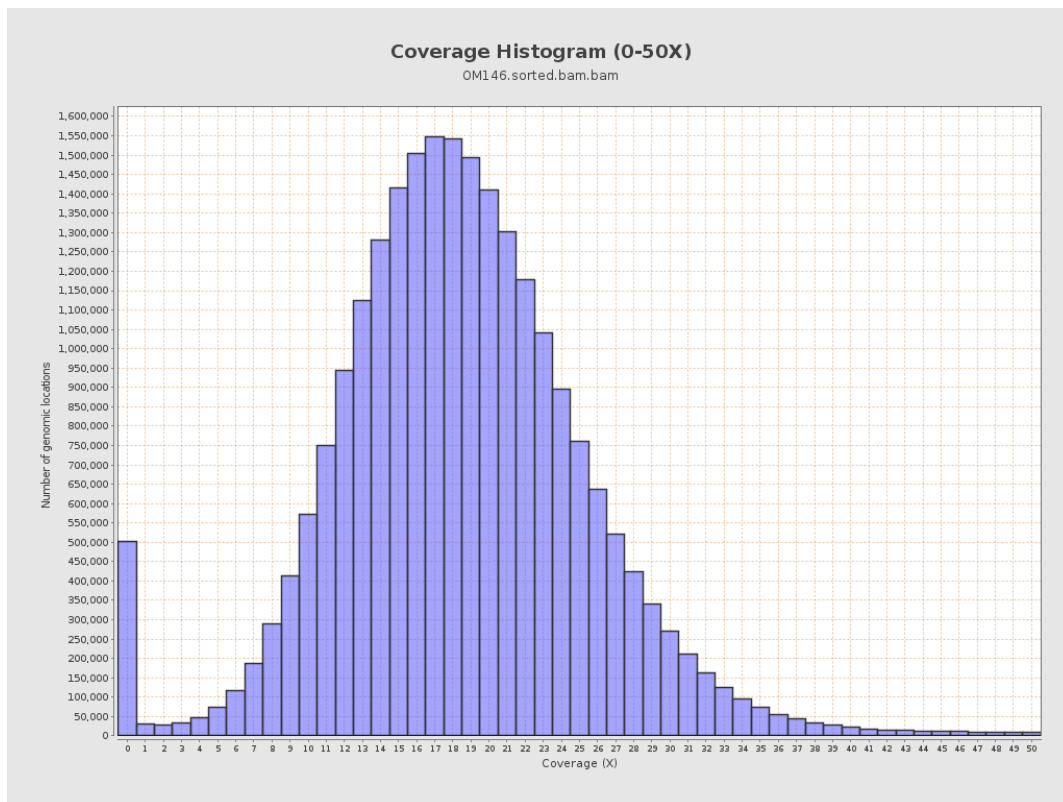
3. Results : Coverage across reference



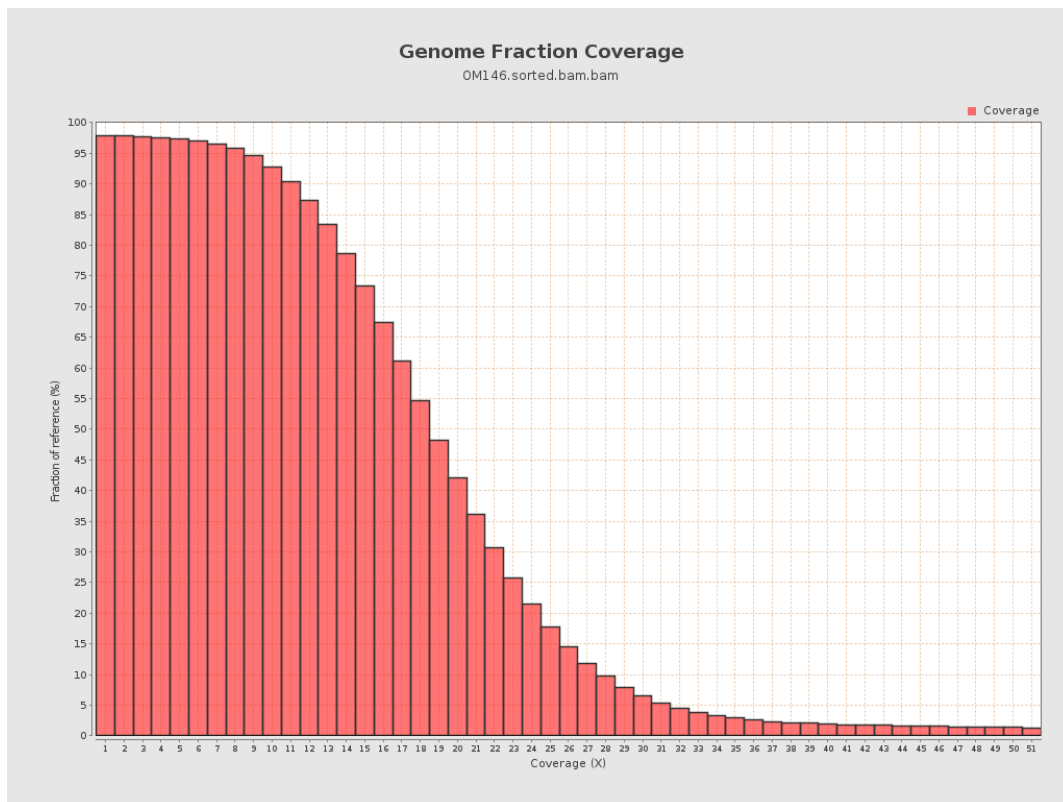
4. Results : Coverage Histogram



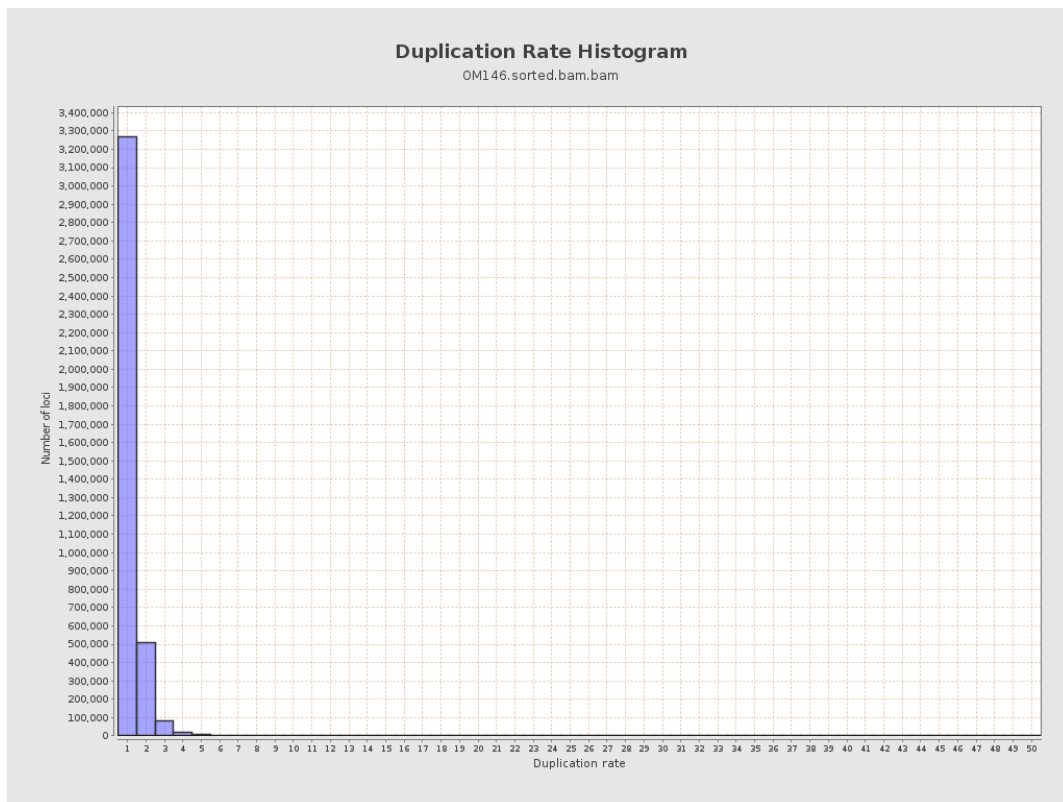
5. Results : Coverage Histogram (0-50X)



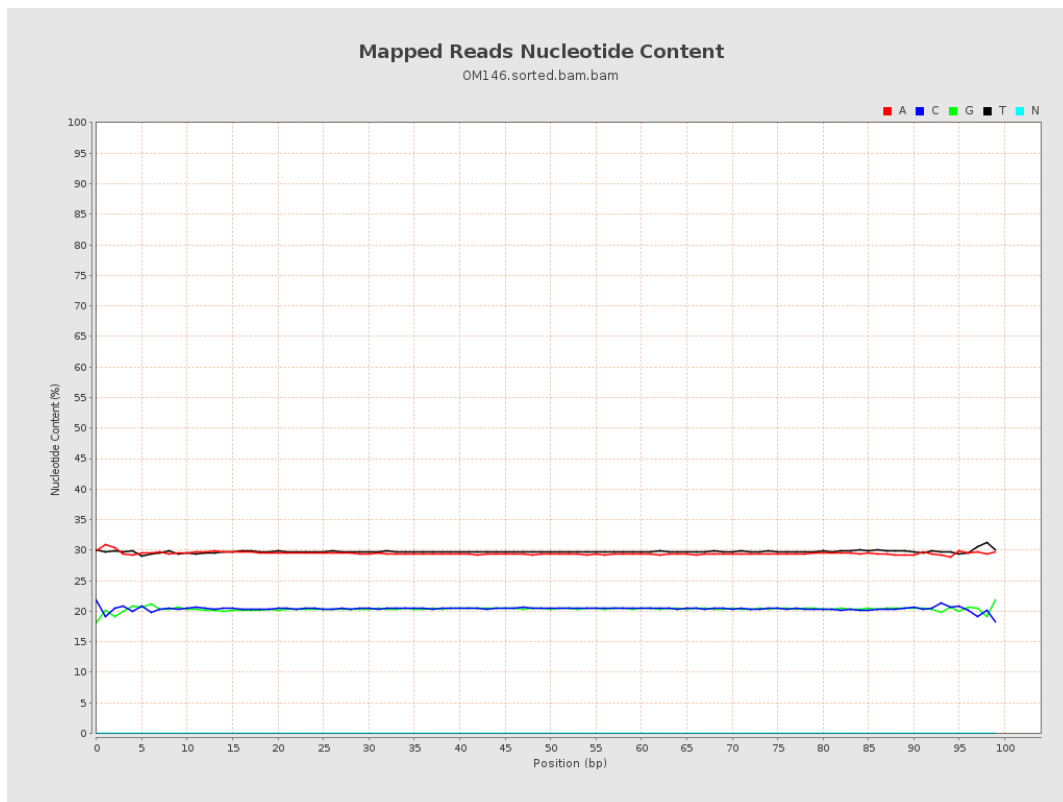
6. Results : Genome Fraction Coverage



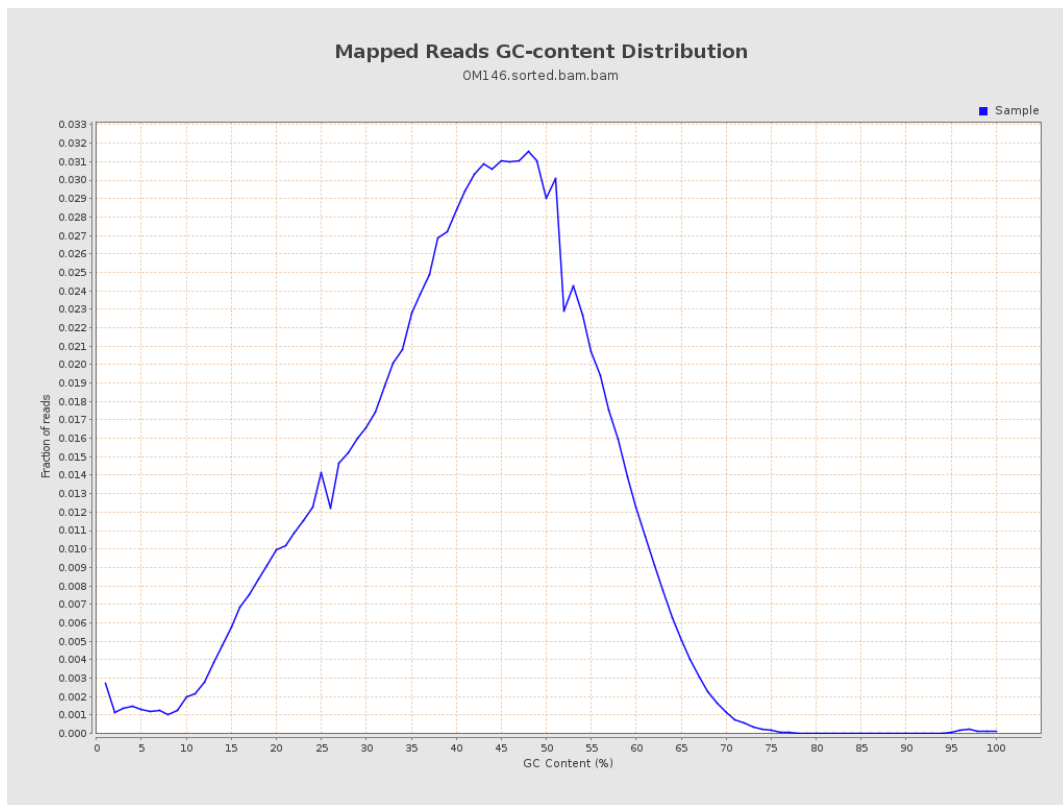
7. Results : Duplication Rate Histogram



8. Results : Mapped Reads Nucleotide Content



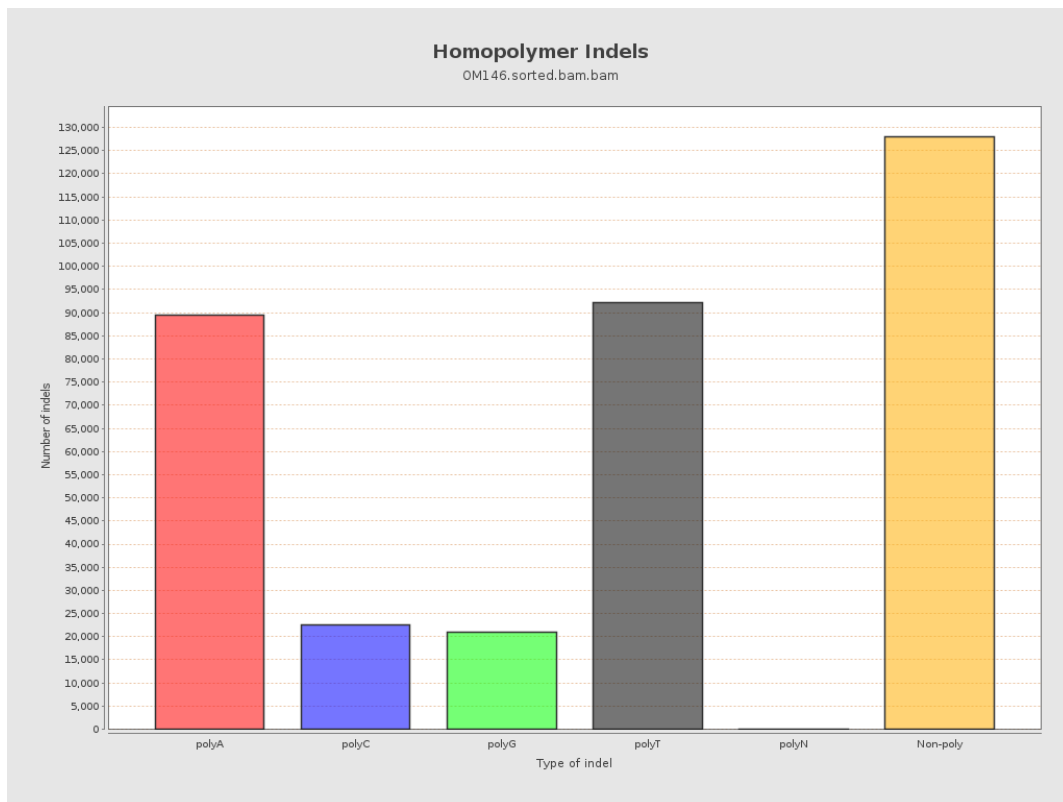
9. Results : Mapped Reads GC-content Distribution



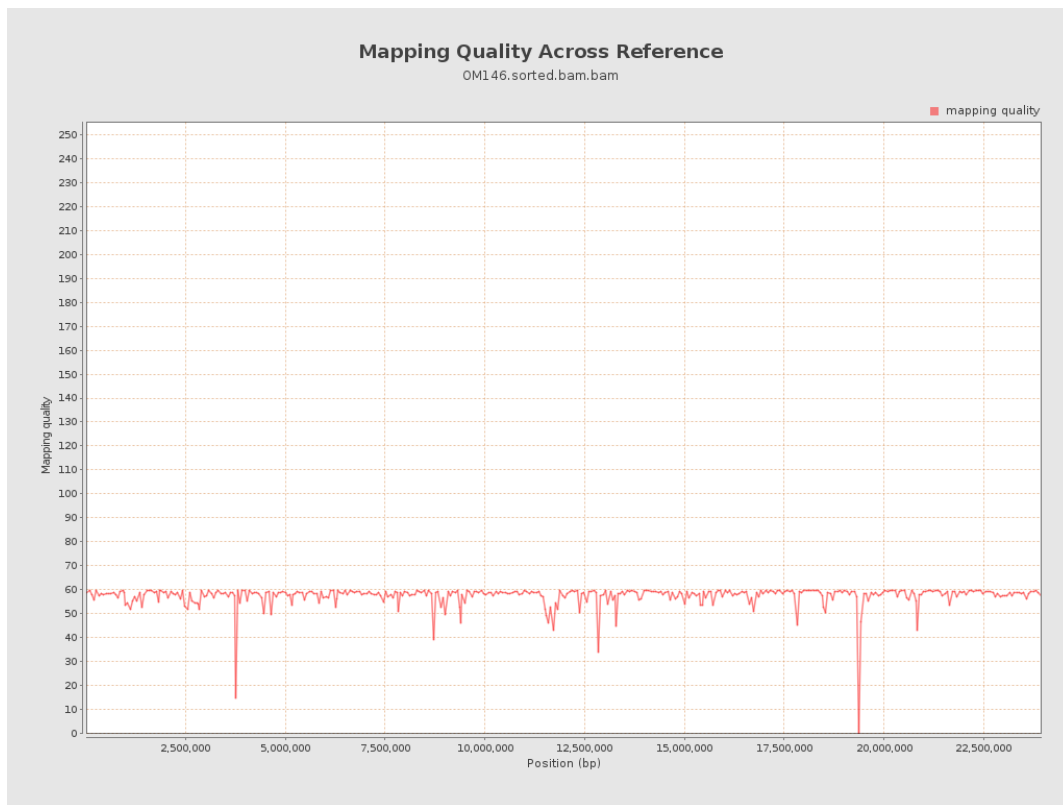
10. Results : Mapped Reads Clipping Profile



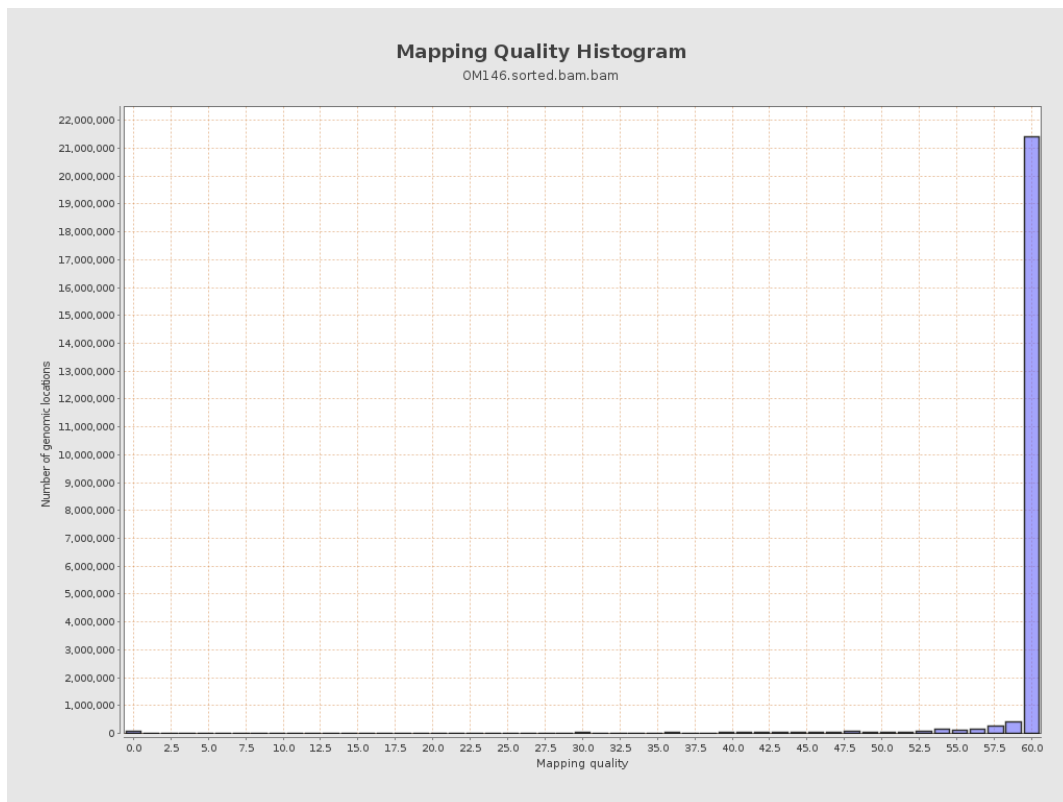
11. Results : Homopolymer Indels



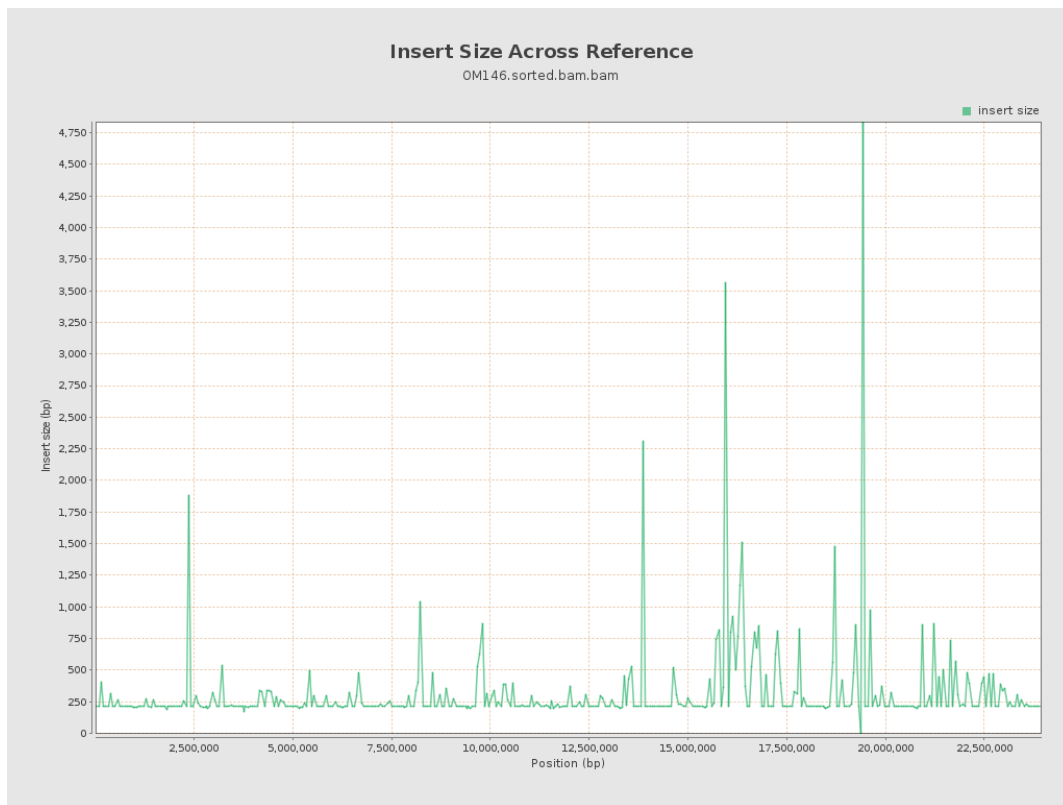
12. Results : Mapping Quality Across Reference



13. Results : Mapping Quality Histogram



14. Results : Insert Size Across Reference



15. Results : Insert Size Histogram

