

Qualimap Analysis Results

BAM QC analysis

Generated by Qualimap v.2.2.1

2016/10/23 13:12:57

1. Input data & parameters

1.1. QualiMap command line

```
qualimap bamqc -bam
/home/vdp5/data/cambodia_samples/sequences_bam/OM118.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/OM118-BiooBarcode15_ATGTCA_R2.fastq.gz /home/vdp5/data/cambodia_samples/sequences_gz/OM118-BiooBarcode15_ATGTCA_R1.fastq.gz
Draw chromosome limits:	no
Analyze overlapping paired-end reads:	no
Program:	bwa (0.7.15-r1140)
Analysis date:	Sun Oct 23 13:12:56 EDT 2016
Size of a homopolymer:	3
Skip duplicate alignments:	no
Number of windows:	400
BAM file:	/home/vdp5/data/cambodia_samples/sequences_bam/OM118.sorted.bam.

	bam
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2. Summary

2.1. Globals

Reference size	23,958,997
Number of reads	31,125,160
Mapped reads	5,132,280 / 16.49%
Unmapped reads	25,992,880 / 83.51%
Mapped paired reads	5,132,280 / 16.49%
Mapped reads, first in pair	2,560,817 / 8.23%
Mapped reads, second in pair	2,571,463 / 8.26%
Mapped reads, both in pair	4,908,146 / 15.77%
Mapped reads, singletons	224,134 / 0.72%
Read min/max/mean length	30 / 100 / 99.97
Duplicated reads (estimated)	1,074,627 / 3.45%
Duplication rate	16.32%
Clipped reads	654,687 / 2.1%

2.2. ACGT Content

Number/percentage of A's	144,940,099 / 29.68%
Number/percentage of C's	98,691,681 / 20.21%
Number/percentage of T's	146,117,840 / 29.93%
Number/percentage of G's	98,522,362 / 20.18%
Number/percentage of N's	41,573 / 0.01%
GC Percentage	40.39%

2.3. Coverage

Mean	20.4008
Standard Deviation	30.0294

2.4. Mapping Quality

Mean Mapping Quality	58.06
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2.5. Insert size

Mean	775.14
Standard Deviation	27,221.87
P25/Median/P75	251 / 262 / 272

2.6. Mismatches and indels

General error rate	1.37%
Mismatches	6,300,596
Insertions	155,827
Mapped reads with at least one insertion	2.87%
Deletions	175,872
Mapped reads with at least one deletion	3.2%
Homopolymer indels	62.79%

2.7. Chromosome stats

Name	Length	Mapped bases	Mean coverage	Standard deviation

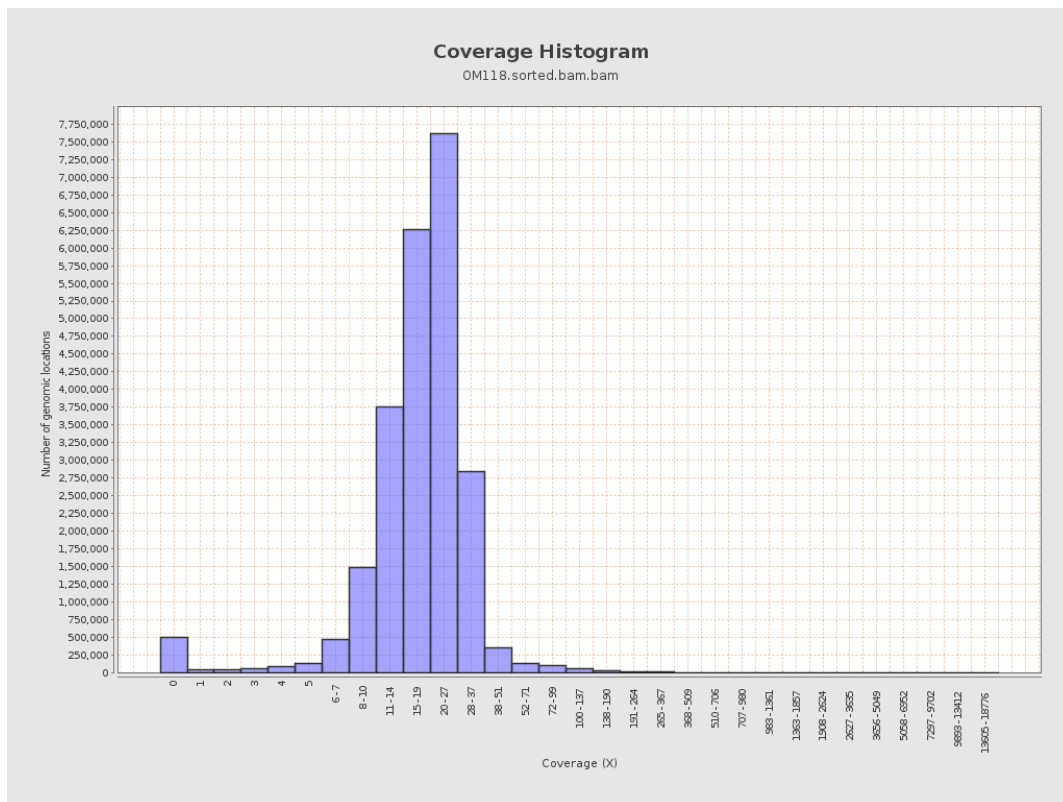
gi 1074120478 emb LT615256.1	977217	18212432	18.637	10.6897
gi 1074120682 emb LT615257.1	860454	15977716	18.5689	16.0591
gi 1074120865 emb LT615258.1	989719	23071162	23.3108	28.9755
gi 1074121086 emb LT615259.1	935450	21285002	22.7538	24.5495
gi 1074121301 emb LT615260.1	1432239	30476579	21.279	21.0573
gi 1074121615 emb LT615261.1	1080962	21545341	19.9316	16.8892
gi 1074121871 emb LT615262.1	1545099	30284837	19.6006	10.4602
gi 1074122235 emb LT615263.1	1585108	32063571	20.228	42.3083
gi 1074122590 emb LT615264.1	2122358	42022994	19.8001	10.9625
gi 1074123050 emb LT615265.1	1754192	36183272	20.6267	81.0438
gi 1074123421 emb LT615	2150147	45910646	21.3523	28.2012

266.1				
gi 107412389 8 emb LT615 267.1	3031036	60675501	20.0181	21.8389
gi 107412458 8 emb LT615 268.1	2359348	46002049	19.4978	16.7924
gi 107412506 5 emb LT615 269.1	3135668	65071846	20.7521	9.8188

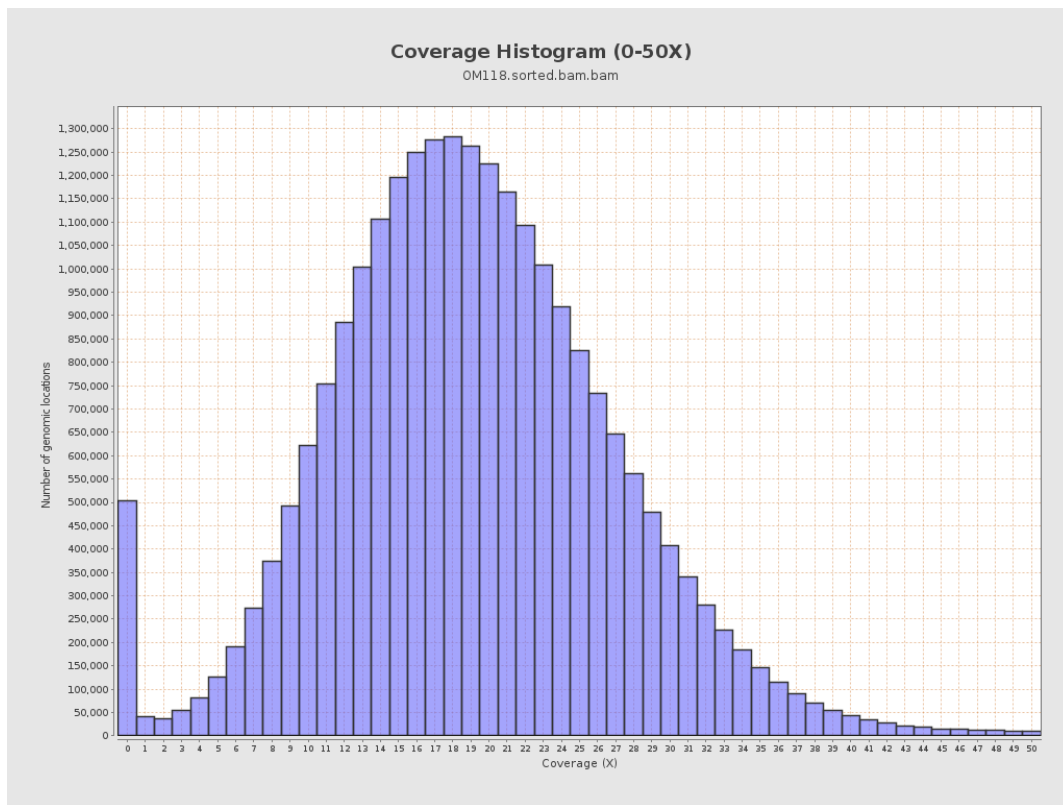
3. Results : Coverage across reference



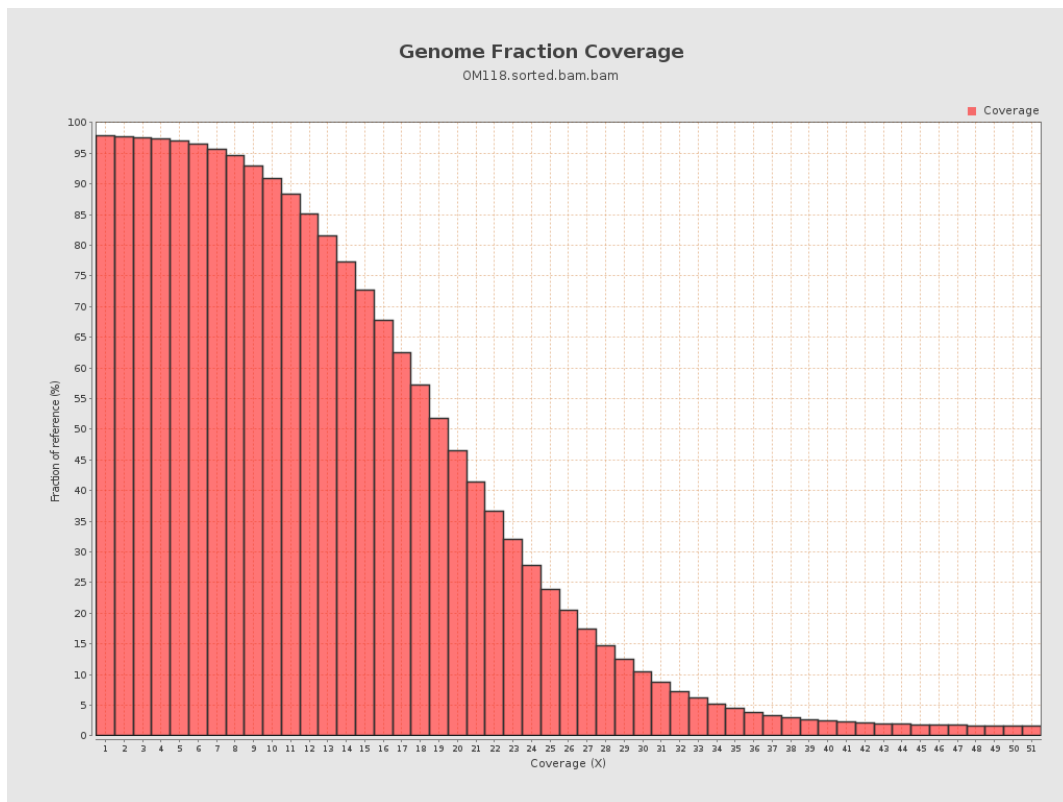
4. Results : Coverage Histogram



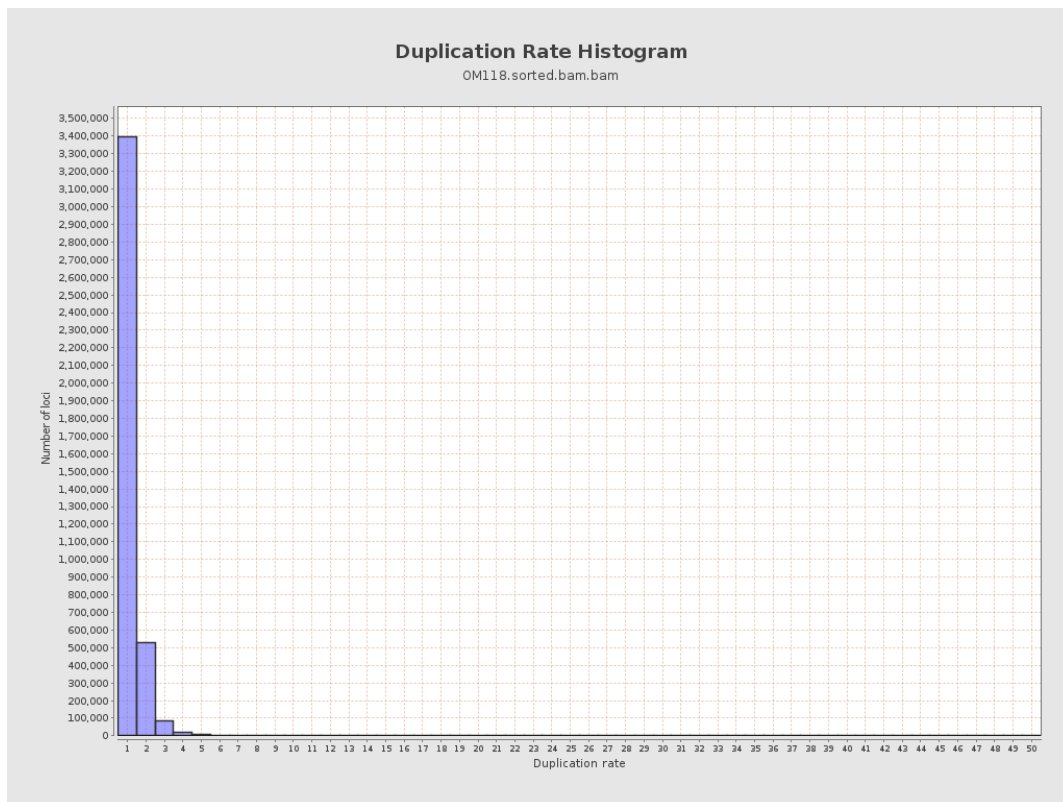
5. Results : Coverage Histogram (0-50X)



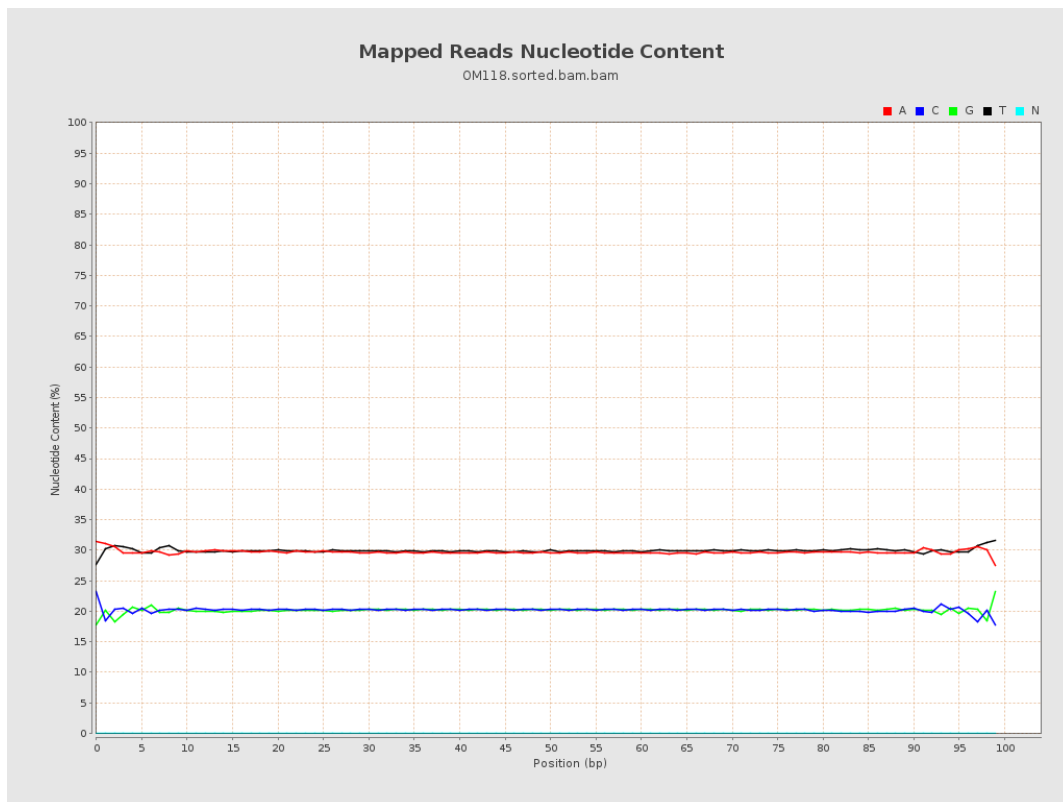
6. Results : Genome Fraction Coverage



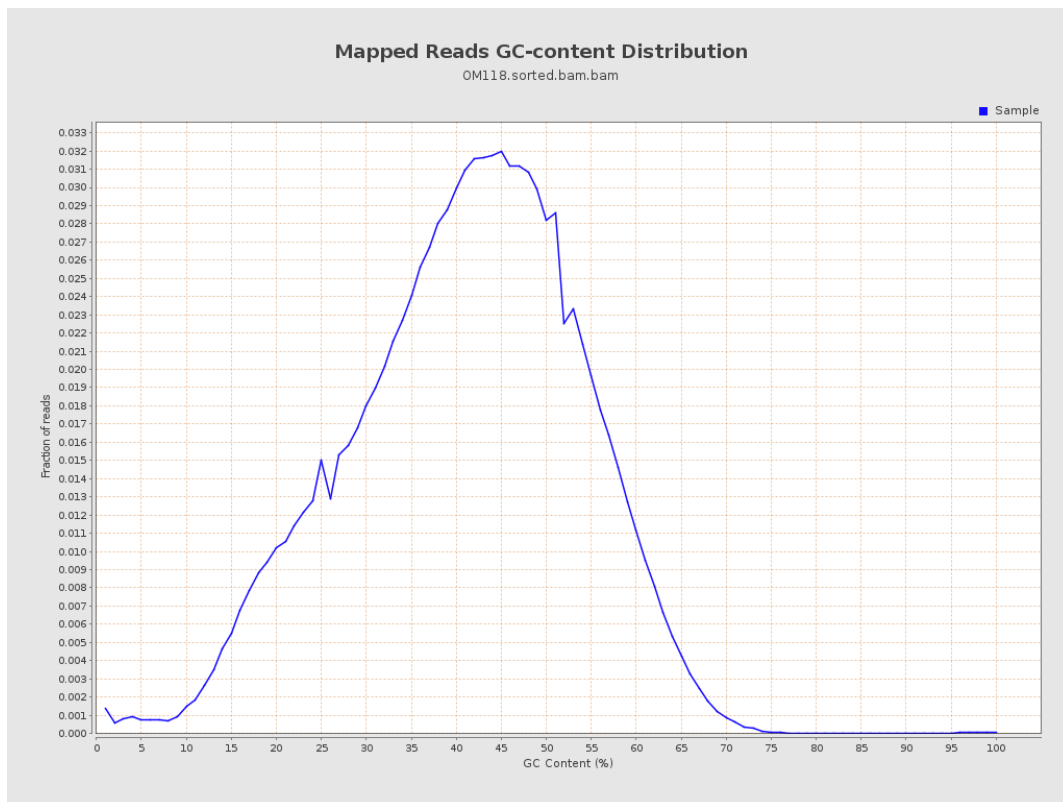
7. Results : Duplication Rate Histogram



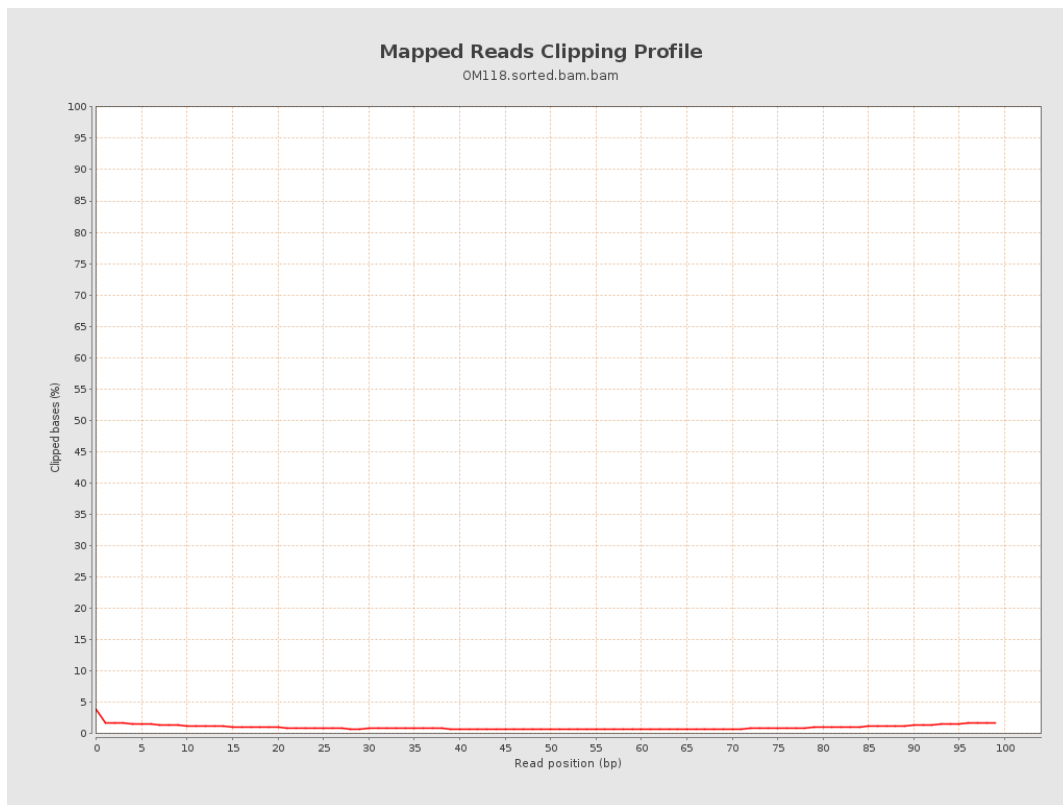
8. Results : Mapped Reads Nucleotide Content



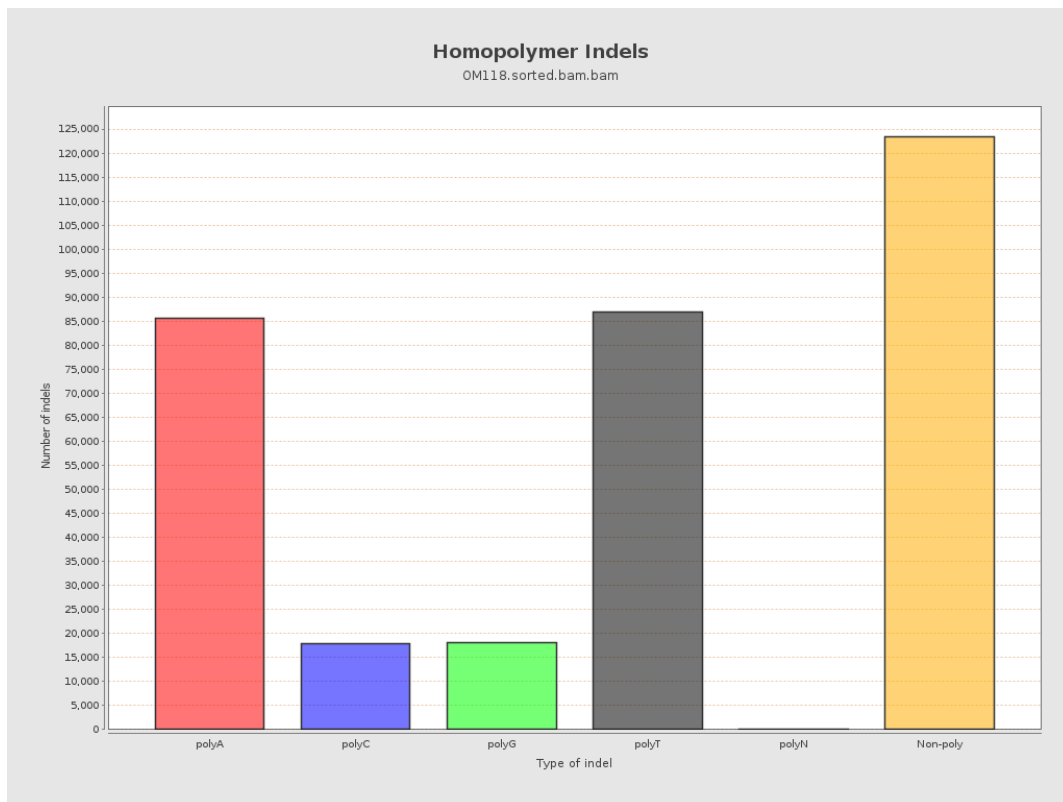
9. Results : Mapped Reads GC-content Distribution



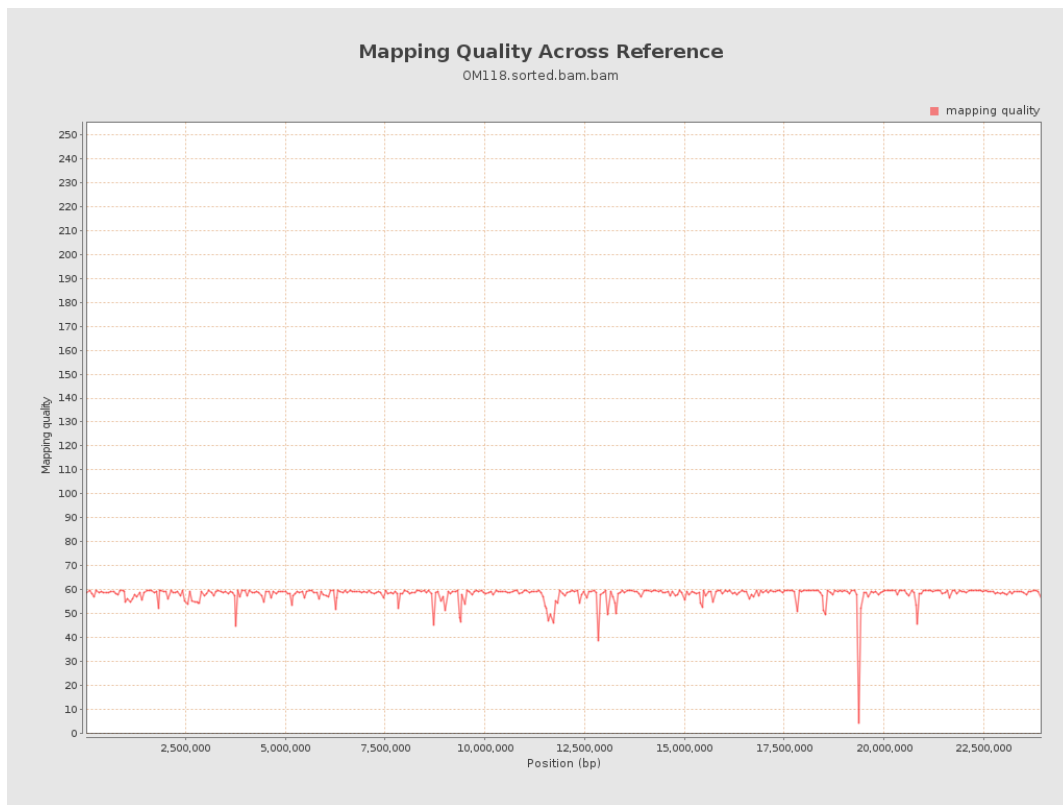
10. Results : Mapped Reads Clipping Profile



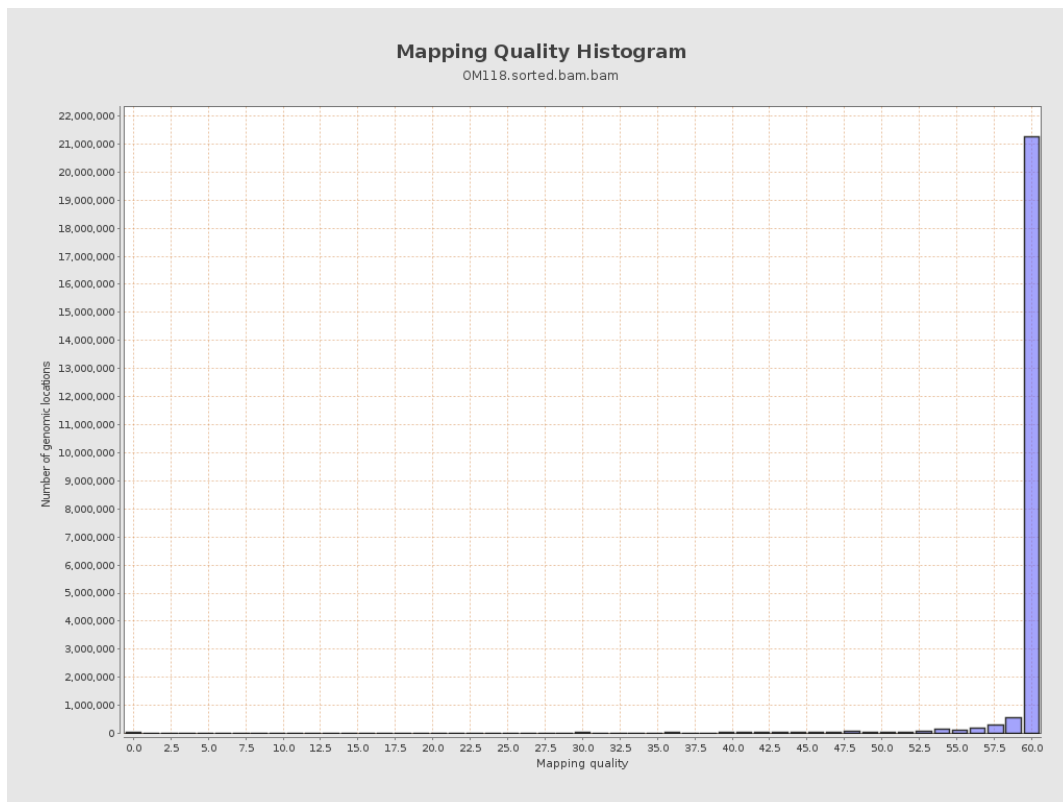
11. Results : Homopolymer Indels



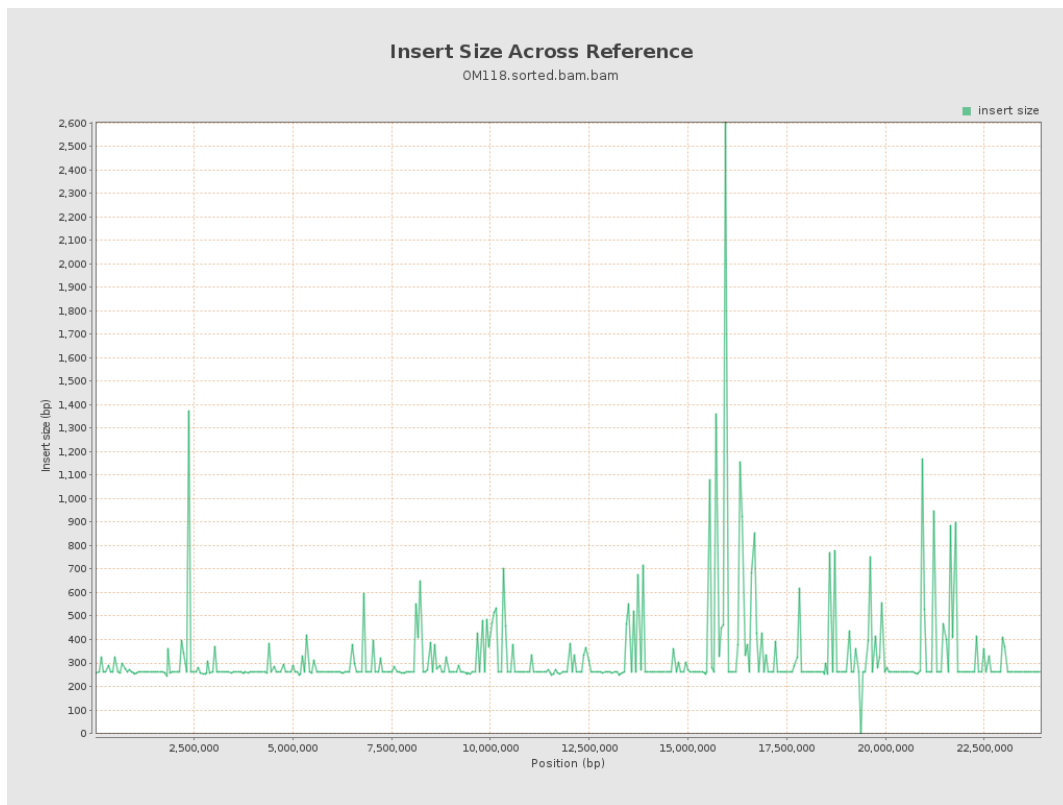
12. Results : Mapping Quality Across Reference



13. Results : Mapping Quality Histogram



14. Results : Insert Size Across Reference



15. Results : Insert Size Histogram

