

Qualimap Analysis Results

BAM QC analysis

Generated by Qualimap v.2.2.1

2016/10/23 13:45:13

1. Input data & parameters

1.1. QualiMap command line

```
qualimap bamqc -bam
/home/vdp5/data/cambodia_samples/sequences_bam/OM214.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/OM214-BiooBarcode3_ACAGTG_R2.fastq.gz /home/vdp5/data/cambodia_samples/sequences_gz/OM214-BiooBarcode3_ACAGTG_R1.fastq.gz
Draw chromosome limits:	no
Analyze overlapping paired-end reads:	no
Program:	bwa (0.7.15-r1140)
Analysis date:	Sun Oct 23 13:45:12 EDT 2016
Size of a homopolymer:	3
Skip duplicate alignments:	no
Number of windows:	400
BAM file:	/home/vdp5/data/cambodia_samples/sequences_bam/OM214.sorted.bam.bam

2. Summary

2.1. Globals

Reference size	23,958,997
Number of reads	8,642,274
Mapped reads	1,976,802 / 22.87%
Unmapped reads	6,665,472 / 77.13%
Mapped paired reads	1,976,802 / 22.87%
Mapped reads, first in pair	985,539 / 11.4%
Mapped reads, second in pair	991,263 / 11.47%
Mapped reads, both in pair	1,906,941 / 22.07%
Mapped reads, singletons	69,861 / 0.81%
Read min/max/mean length	30 / 100 / 99.96
Duplicated reads (estimated)	219,687 / 2.54%
Duplication rate	7.85%
Clipped reads	247,760 / 2.87%

2.2. ACGT Content

Number/percentage of A's	56,518,027 / 29.92%
Number/percentage of C's	37,777,169 / 20%
Number/percentage of T's	56,905,884 / 30.13%
Number/percentage of G's	37,683,794 / 19.95%
Number/percentage of N's	16,483 / 0.01%
GC Percentage	39.95%

2.3. Coverage

Mean	7.8921
Standard Deviation	9.2259

2.4. Mapping Quality

Mean Mapping Quality	58.24
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2.5. Insert size

Mean	819.73
Standard Deviation	27,128.41
P25/Median/P75	294 / 307 / 320

2.6. Mismatches and indels

General error rate	1.48%
Mismatches	2,651,007
Insertions	61,780
Mapped reads with at least one insertion	2.96%
Deletions	70,037
Mapped reads with at least one deletion	3.34%
Homopolymer indels	63.22%

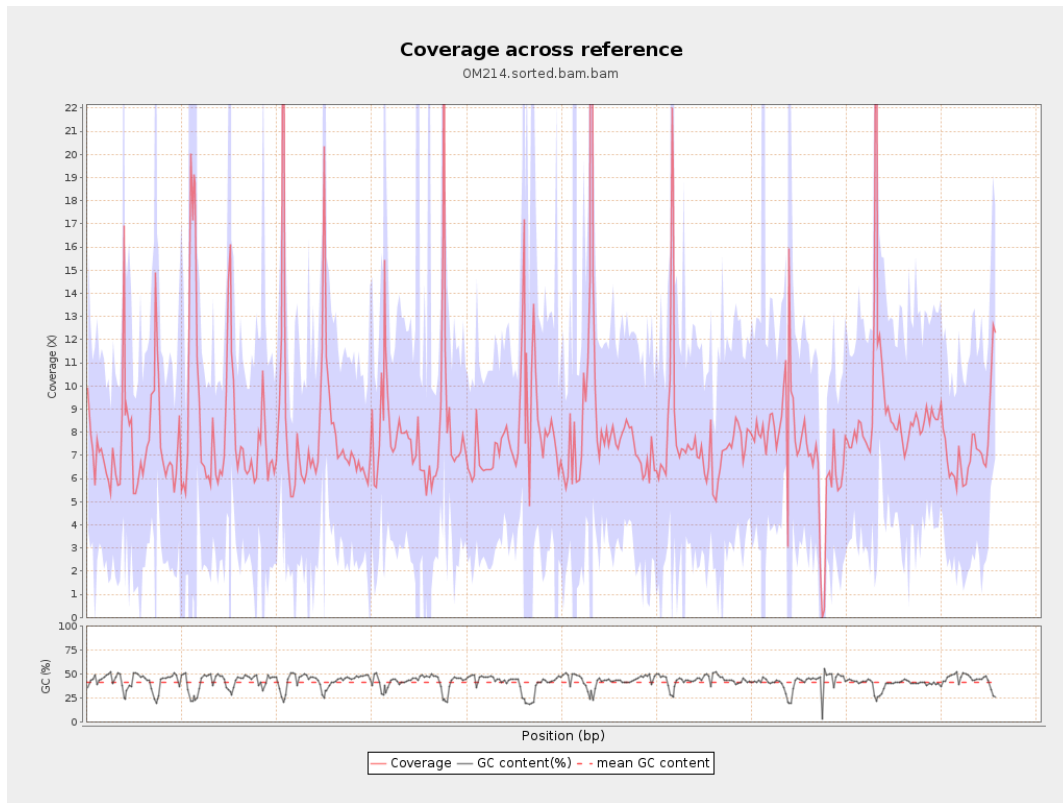
2.7. Chromosome stats

Name	Length	Mapped bases	Mean coverage	Standard deviation

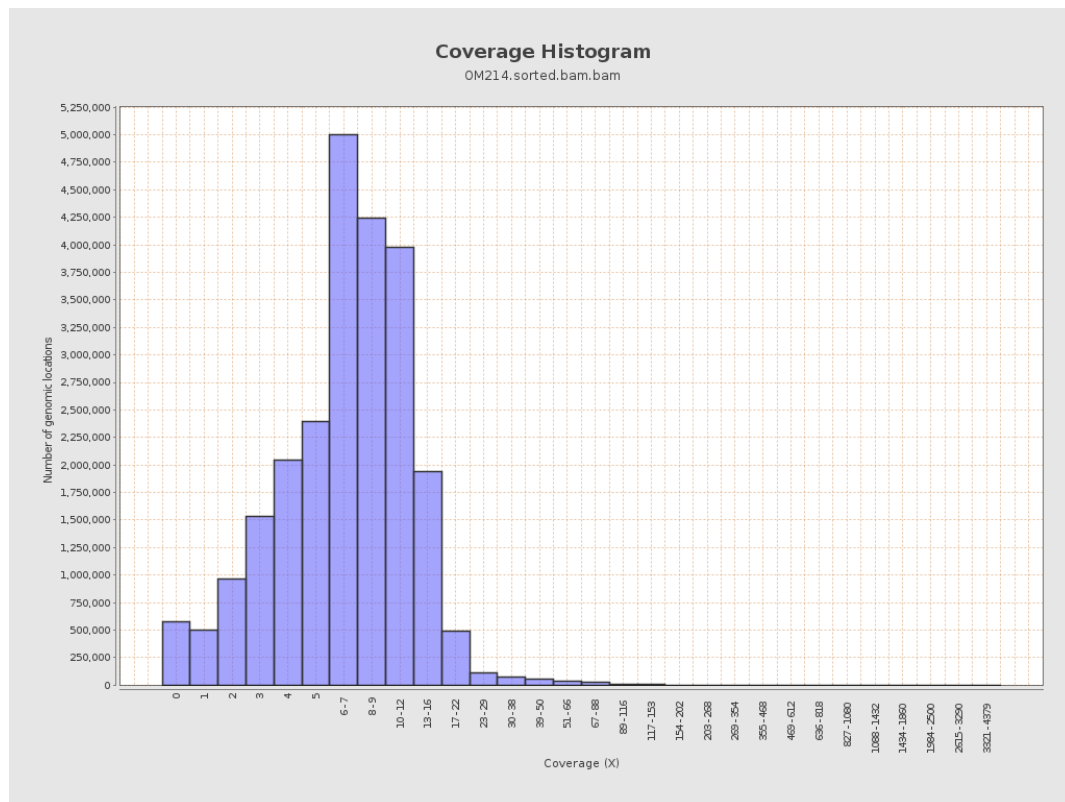
gi 1074120478 emb LT615256.1	977217	6935903	7.0976	4.4625
gi 1074120682 emb LT615257.1	860454	6748606	7.8431	6.3781
gi 1074120865 emb LT615258.1	989719	8346203	8.4329	10.2585
gi 1074121086 emb LT615259.1	935450	7688541	8.2191	9.6418
gi 1074121301 emb LT615260.1	1432239	12182382	8.5058	9.4388
gi 1074121615 emb LT615261.1	1080962	8281865	7.6616	6.9871
gi 1074121871 emb LT615262.1	1545099	11498966	7.4422	4.2048
gi 1074122235 emb LT615263.1	1585108	12545697	7.9147	11.2743
gi 1074122590 emb LT615264.1	2122358	16087368	7.58	4.6866
gi 1074123050 emb LT615265.1	1754192	14363603	8.1882	19.7308
gi 1074123421 emb LT615	2150147	17725164	8.2437	11.8348

266.1				
gi 107412389 8 emb LT615 267.1	3031036	23158904	7.6406	7.1091
gi 107412458 8 emb LT615 268.1	2359348	18046466	7.6489	7.7466
gi 107412506 5 emb LT615 269.1	3135668	25478215	8.1253	4.229

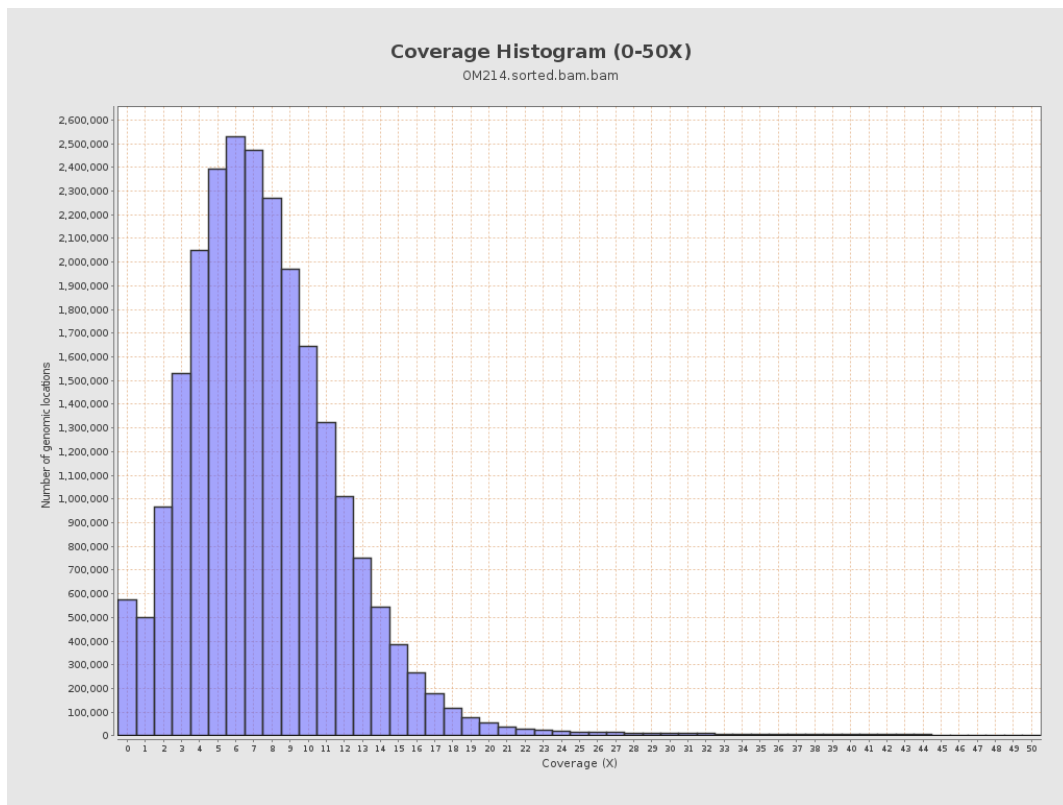
3. Results : Coverage across reference



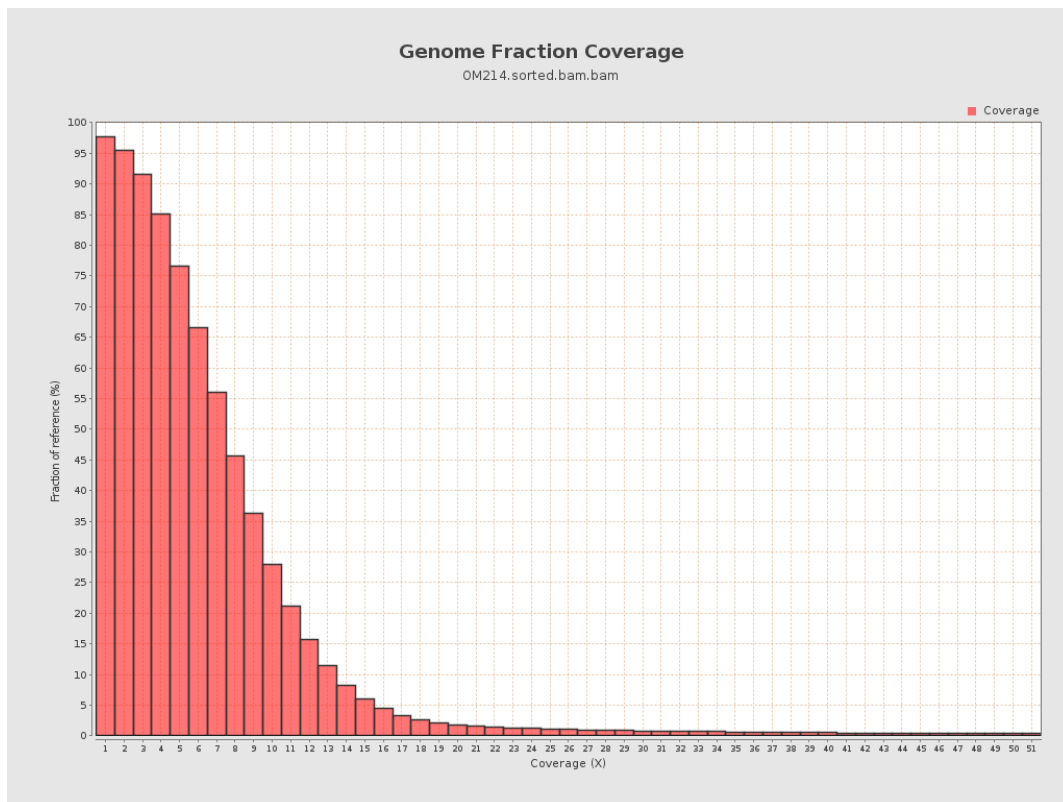
4. Results : Coverage Histogram



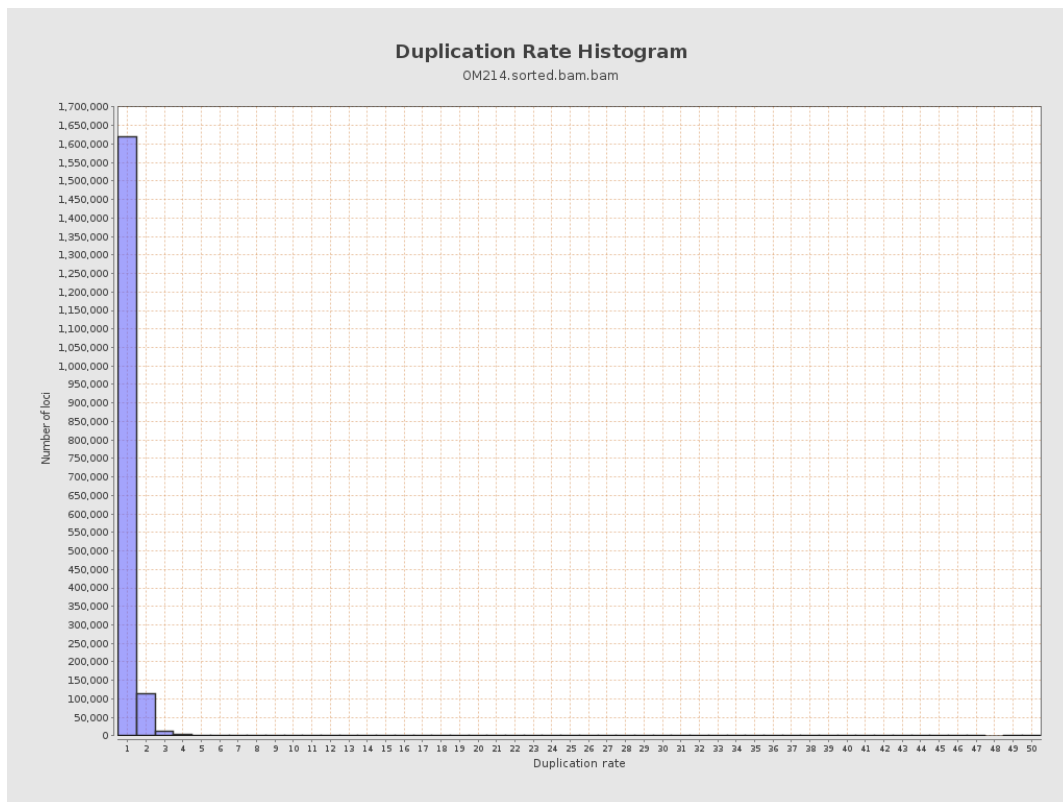
5. Results : Coverage Histogram (0-50X)



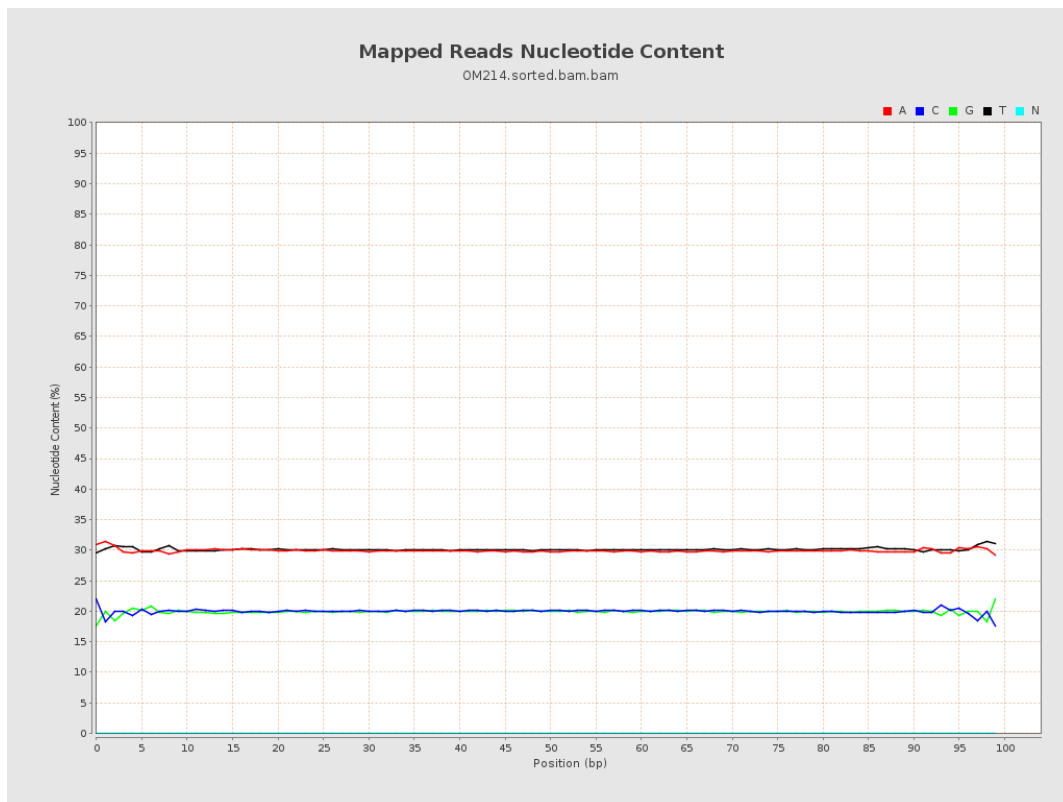
6. Results : Genome Fraction Coverage



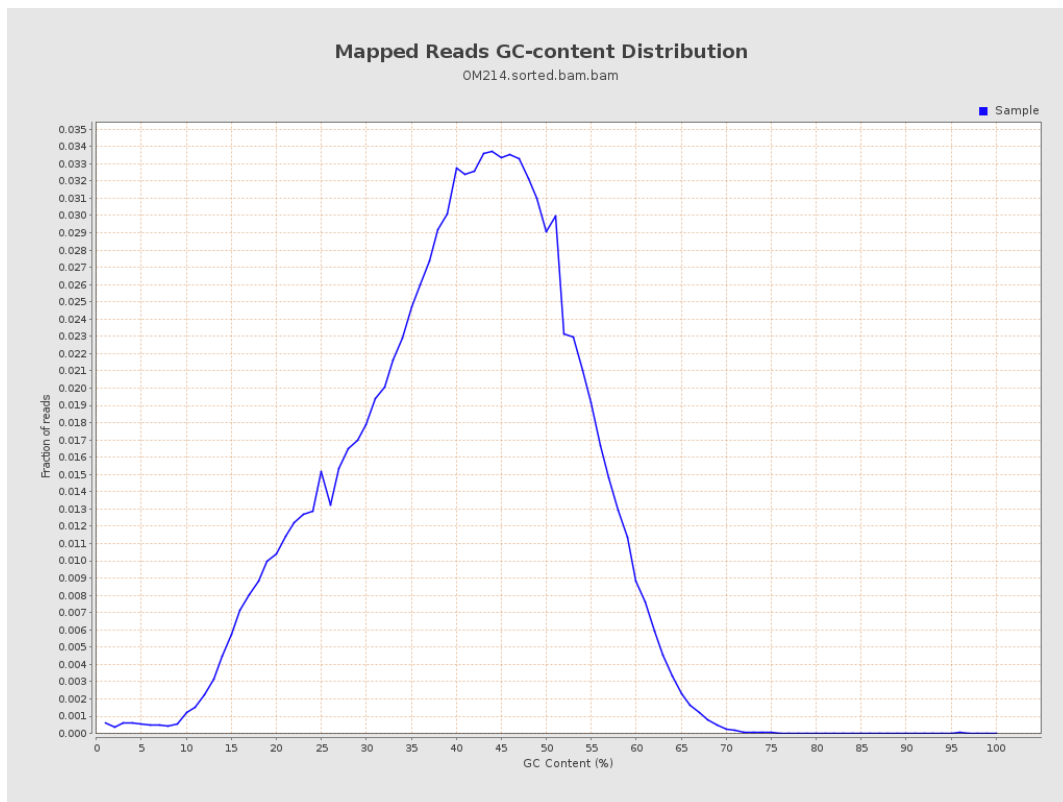
7. Results : Duplication Rate Histogram



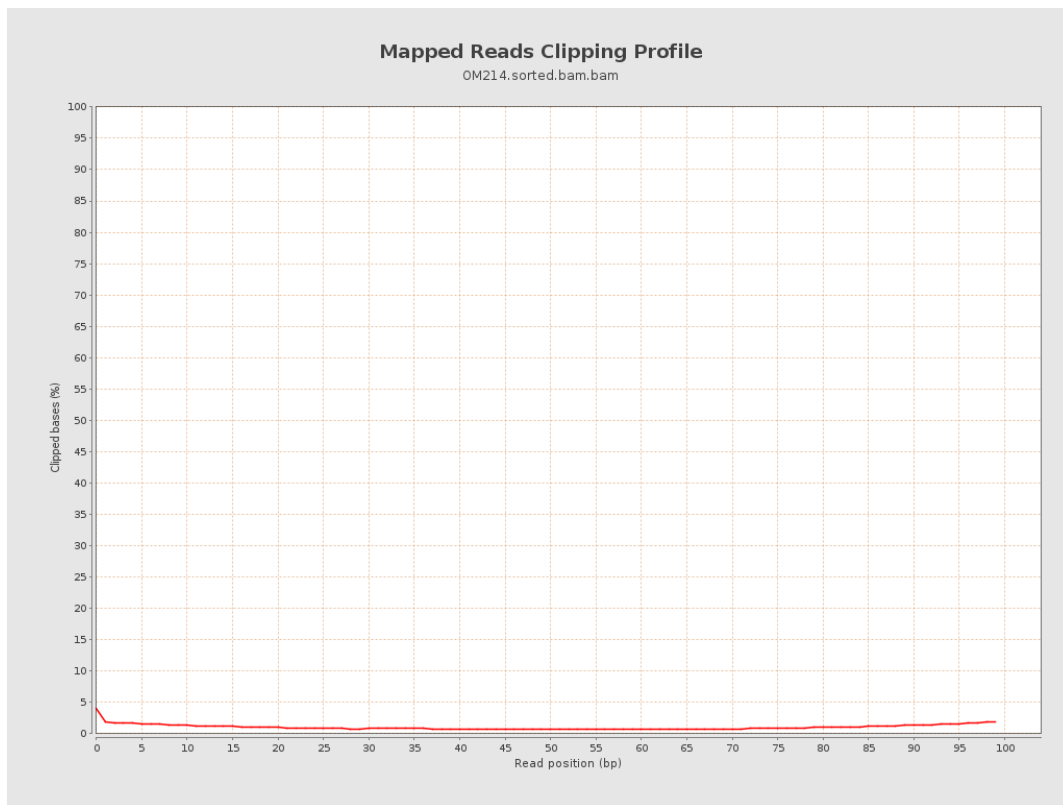
8. Results : Mapped Reads Nucleotide Content



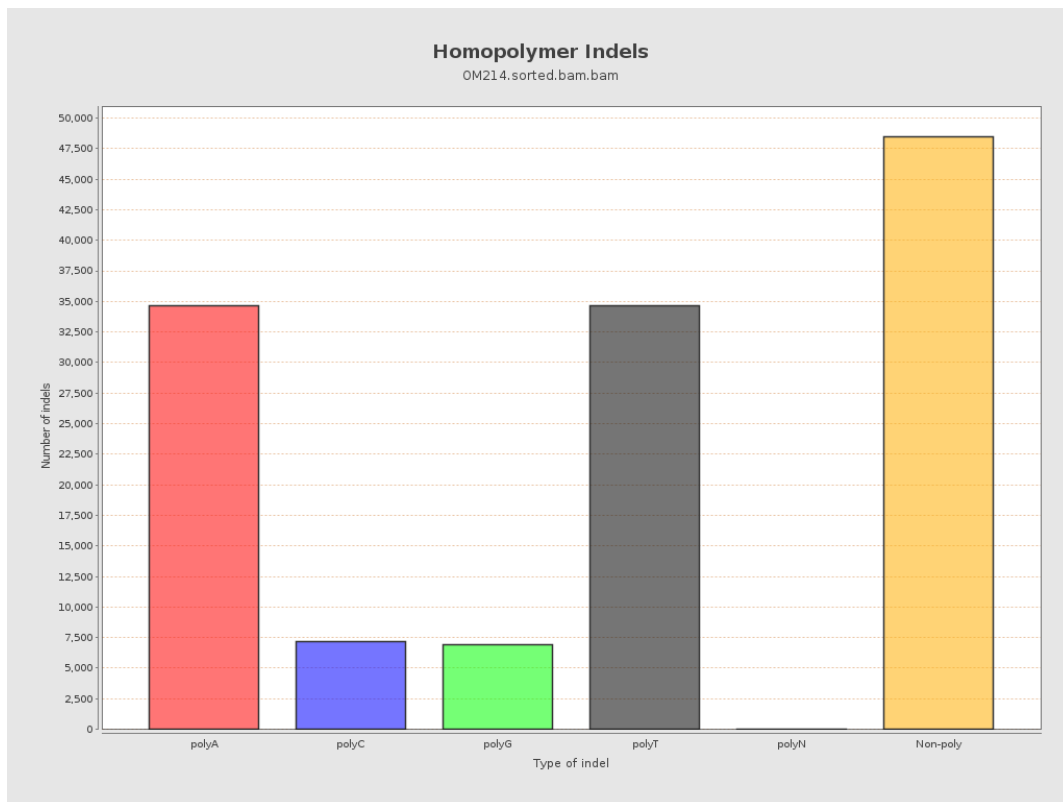
9. Results : Mapped Reads GC-content Distribution



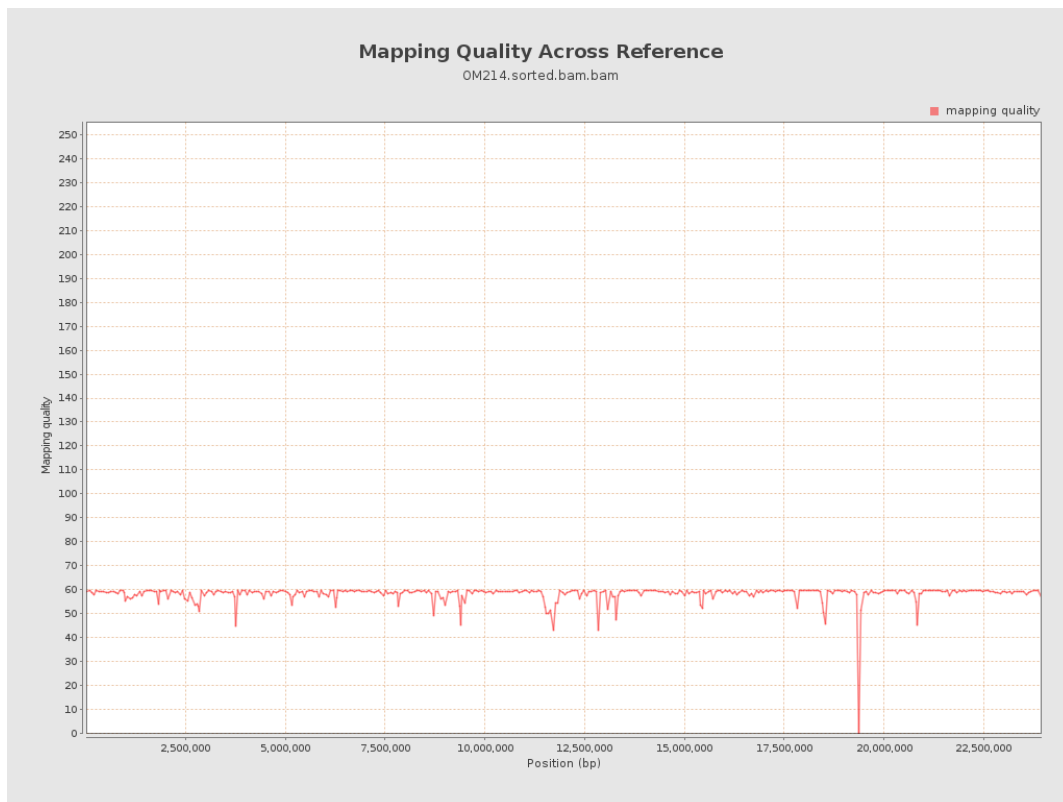
10. Results : Mapped Reads Clipping Profile



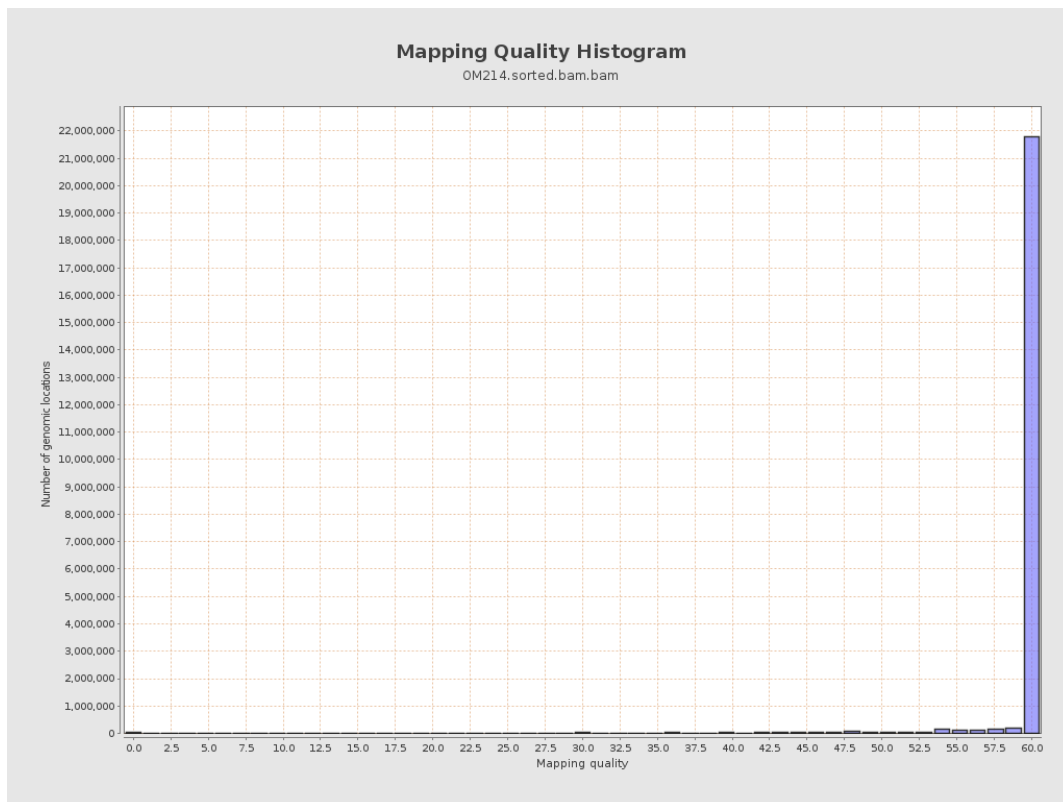
11. Results : Homopolymer Indels



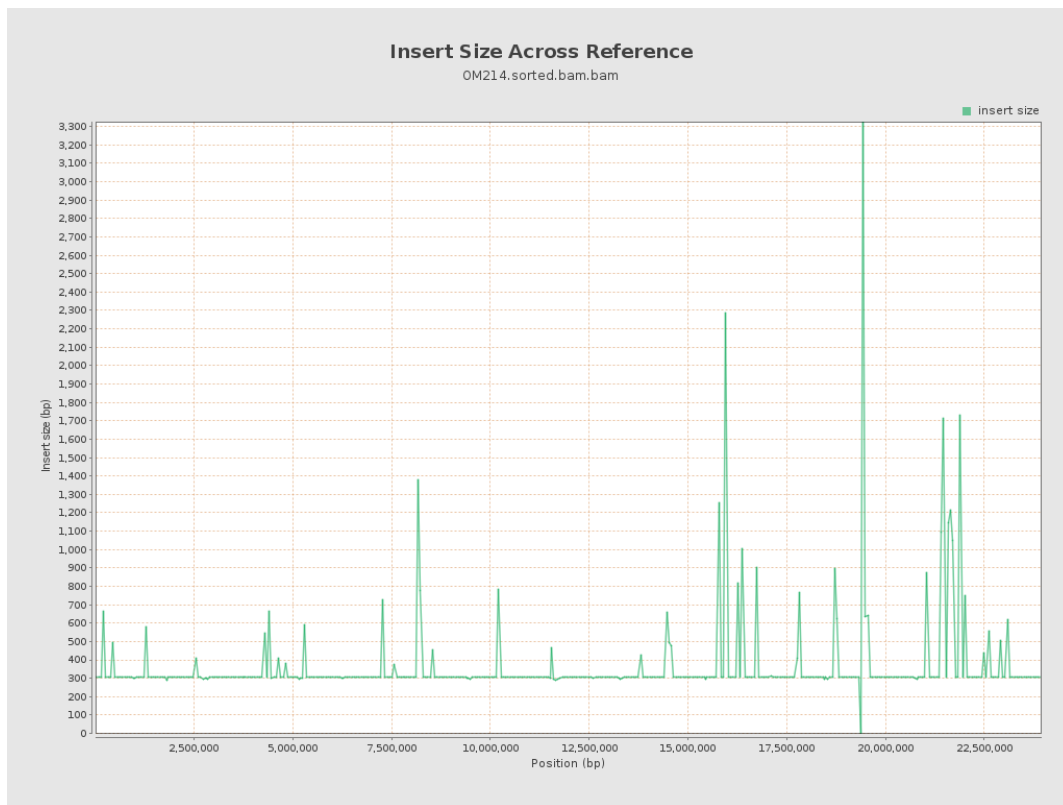
12. Results : Mapping Quality Across Reference



13. Results : Mapping Quality Histogram



14. Results : Insert Size Across Reference



15. Results : Insert Size Histogram

