

Qualimap Analysis Results

BAM QC analysis

Generated by Qualimap v.2.2.1

2016/10/23 11:39:14

1. Input data & parameters

1.1. QualiMap command line

```
qualimap bamqc -bam
/home/vdp5/data/cambodia_samples/sequences_bam/BB034.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/BB034-BiooBarcode_38_CTAGCT_R2.fastq.gz /home/vdp5/data/cambodia_samples/sequences_gz/BB034-BiooBarcode_38_CTAGCT_R1.fastq.gz
Draw chromosome limits:	no
Analyze overlapping paired-end reads:	no
Program:	bwa (0.7.15-r1140)
Analysis date:	Sun Oct 23 11:39:14 EDT 2016
Size of a homopolymer:	3
Skip duplicate alignments:	no
Number of windows:	400
BAM file:	/home/vdp5/data/cambodia_samples/sequences_bam/BB034.sorted.bam.b

am

2. Summary

2.1. Globals

Reference size	23,958,997
Number of reads	20,206,430
Mapped reads	12,821,917 / 63.45%
Unmapped reads	7,384,513 / 36.55%
Mapped paired reads	12,821,917 / 63.45%
Mapped reads, first in pair	6,390,527 / 31.63%
Mapped reads, second in pair	6,431,390 / 31.83%
Mapped reads, both in pair	12,576,528 / 62.24%
Mapped reads, singletons	245,389 / 1.21%
Read min/max/mean length	30 / 100 / 99.87
Duplicated reads (estimated)	4,719,648 / 23.36%
Duplication rate	35.64%
Clipped reads	1,069,317 / 5.29%

2.2. ACGT Content

Number/percentage of A's	351,894,871 / 28.19%
Number/percentage of C's	271,999,540 / 21.79%
Number/percentage of T's	352,889,794 / 28.27%
Number/percentage of G's	271,342,092 / 21.74%
Number/percentage of N's	104,421 / 0.01%
GC Percentage	43.53%

2.3. Coverage

Mean	52.1477
Standard Deviation	36.156

2.4. Mapping Quality

Mean Mapping Quality	58.79
----------------------	-------

2.5. Insert size

Mean	955.97
Standard Deviation	28,376.44
P25/Median/P75	303 / 341 / 380

2.6. Mismatches and indels

General error rate	0.92%
Mismatches	10,596,677
Insertions	289,085
Mapped reads with at least one insertion	2.15%
Deletions	377,822
Mapped reads with at least one deletion	2.82%
Homopolymer indels	68.01%

2.7. Chromosome stats

Name	Length	Mapped bases	Mean coverage	Standard deviation

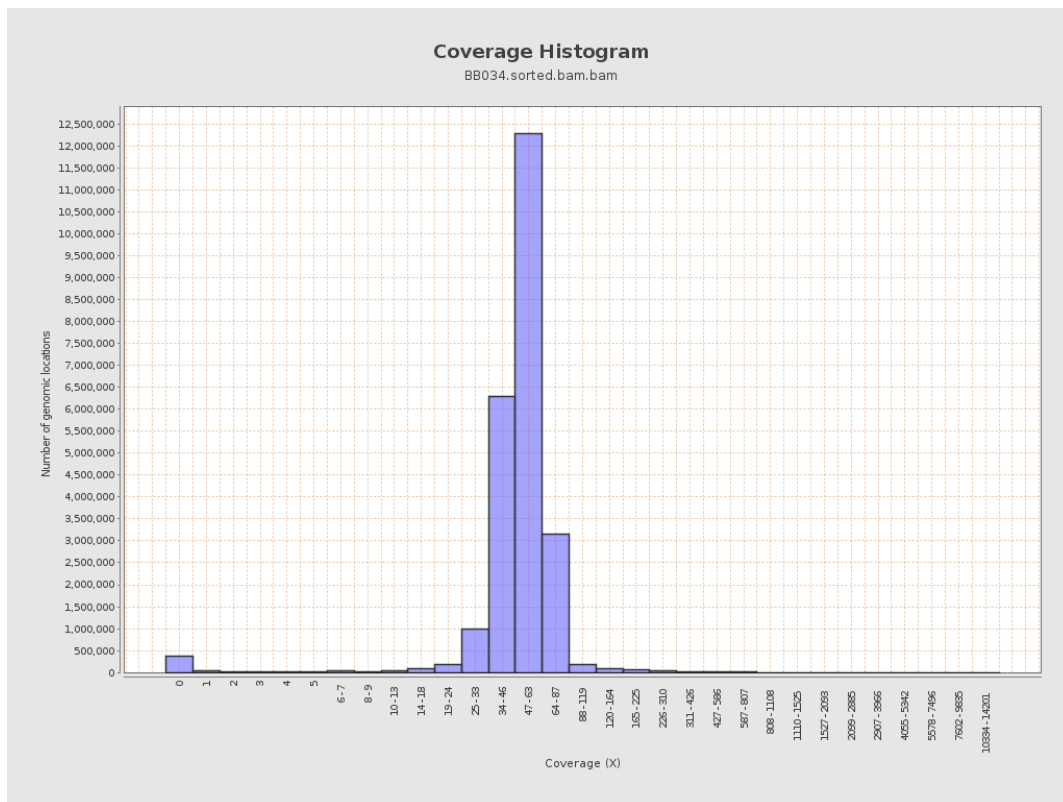
gi 1074120478 emb LT615256.1	977217	51185967	52.3793	16.6278
gi 1074120682 emb LT615257.1	860454	42548809	49.4493	20.6095
gi 1074120865 emb LT615258.1	989719	55923002	56.5039	52.8618
gi 1074121086 emb LT615259.1	935450	52445426	56.0644	53.2393
gi 1074121301 emb LT615260.1	1432239	76026511	53.0823	32.3086
gi 1074121615 emb LT615261.1	1080962	55486188	51.3304	21.8807
gi 1074121871 emb LT615262.1	1545099	82103651	53.1381	15.0394
gi 1074122235 emb LT615263.1	1585108	82637357	52.1336	19.2801
gi 1074122590 emb LT615264.1	2122358	108331467	51.043	17.3621
gi 1074123050 emb LT615265.1	1754192	87307526	49.7708	29.466
gi 1074123421 emb LT615	2150147	118018283	54.8885	87.0011

266.1				
gi 107412389 8 emb LT615 267.1	3031036	158375411	52.2512	17.4781
gi 107412458 8 emb LT615 268.1	2359348	117938927	49.9879	32.0189
gi 107412506 5 emb LT615 269.1	3135668	161077281	51.3694	11.9819

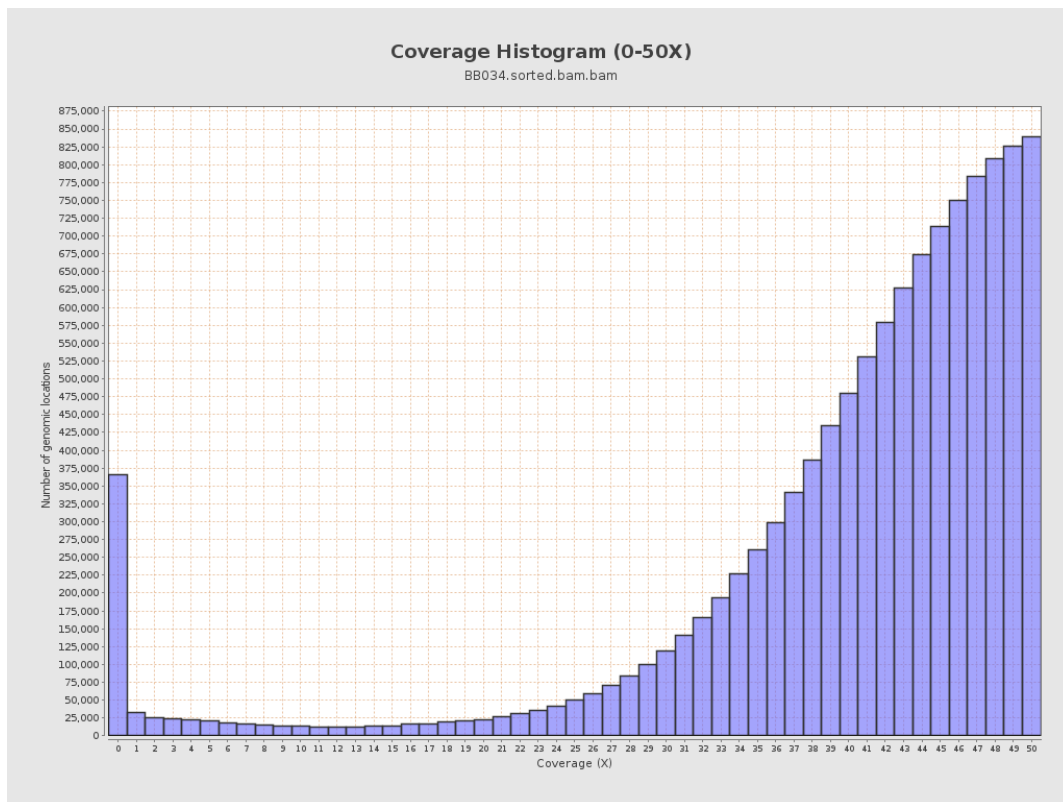
3. Results : Coverage across reference



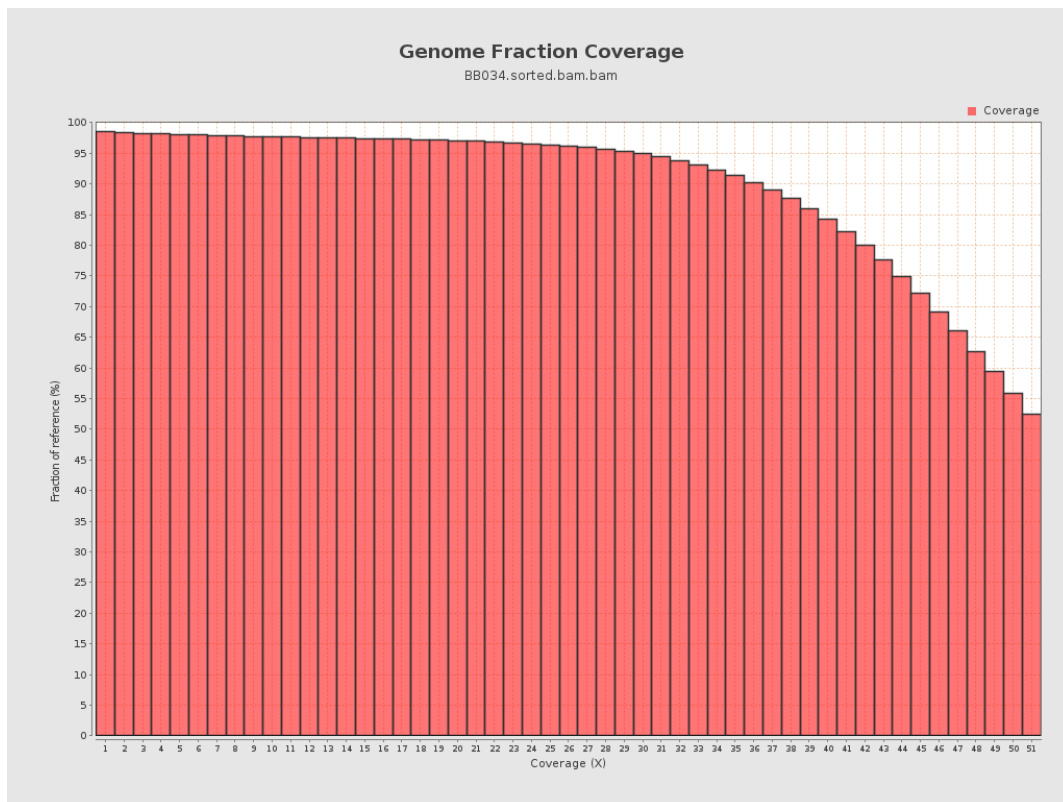
4. Results : Coverage Histogram



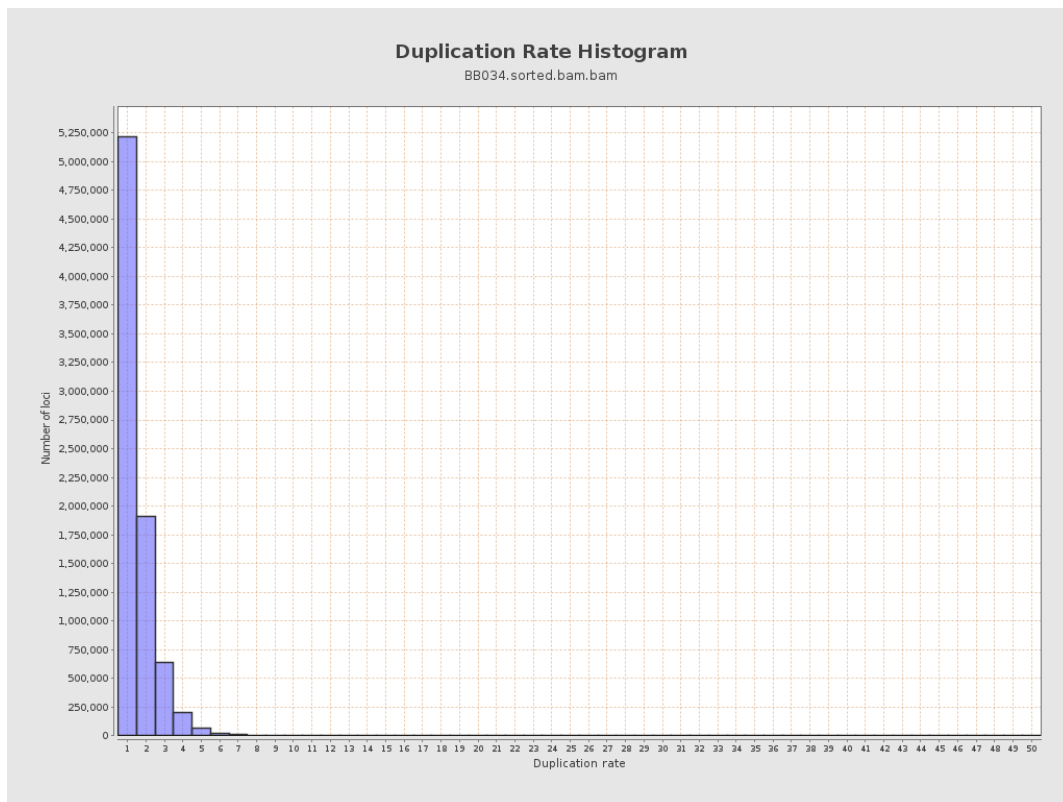
5. Results : Coverage Histogram (0-50X)



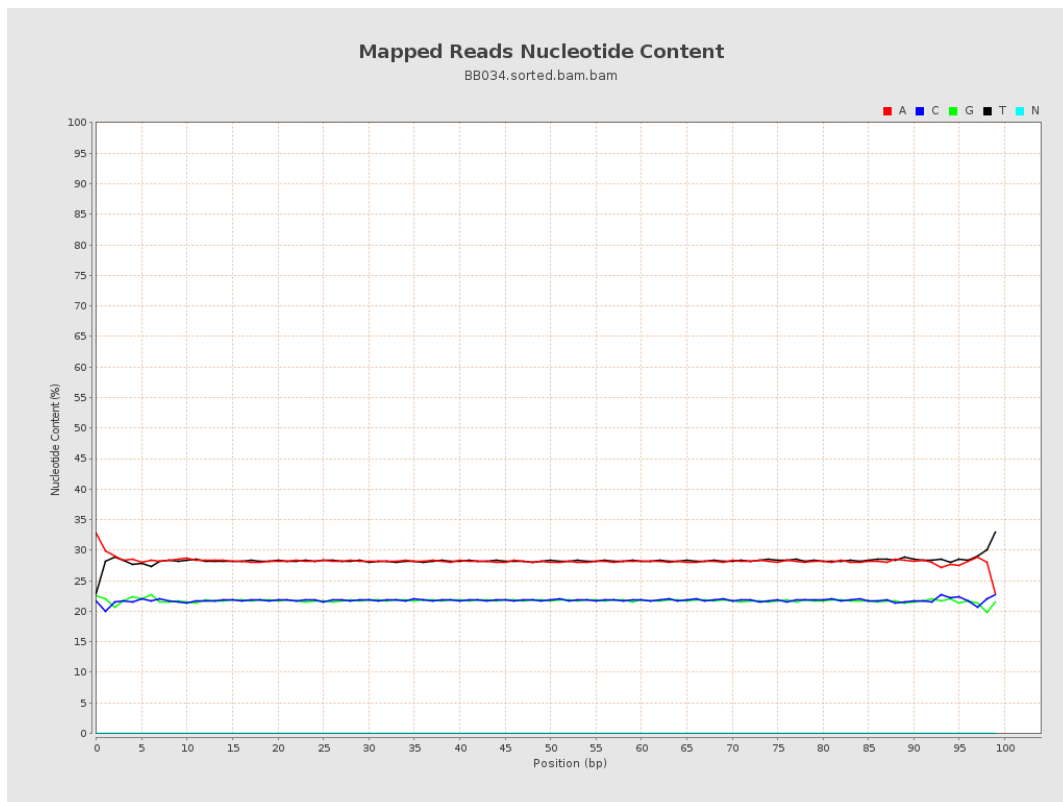
6. Results : Genome Fraction Coverage



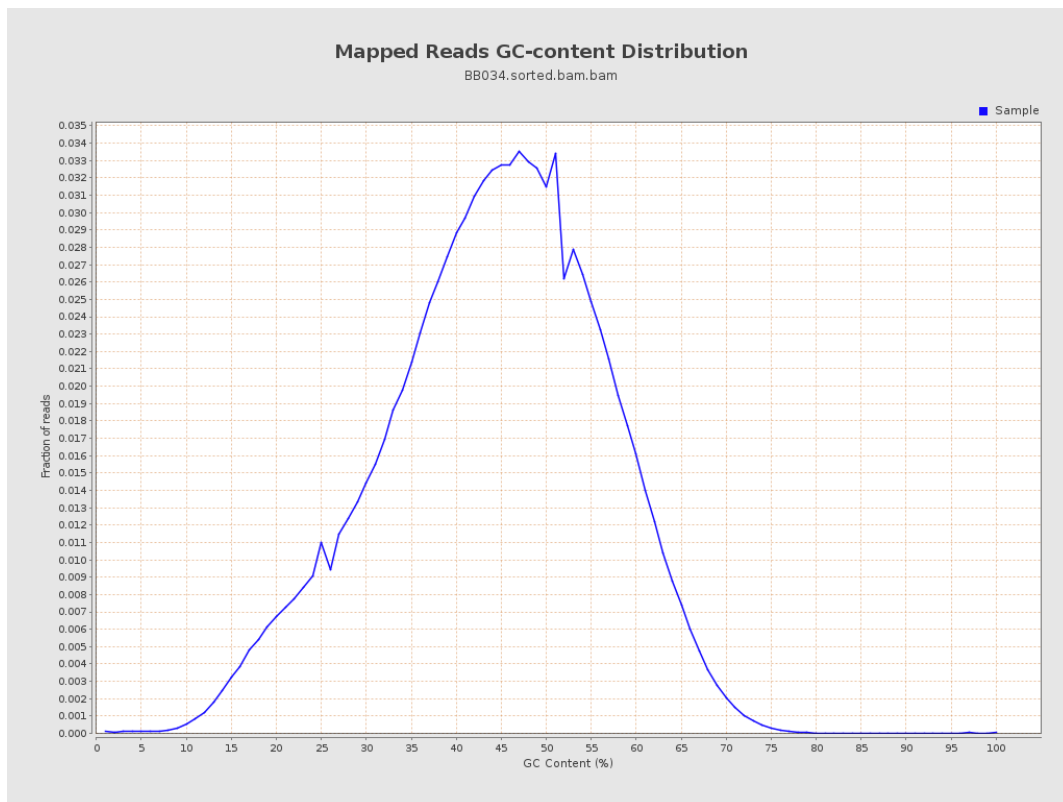
7. Results : Duplication Rate Histogram



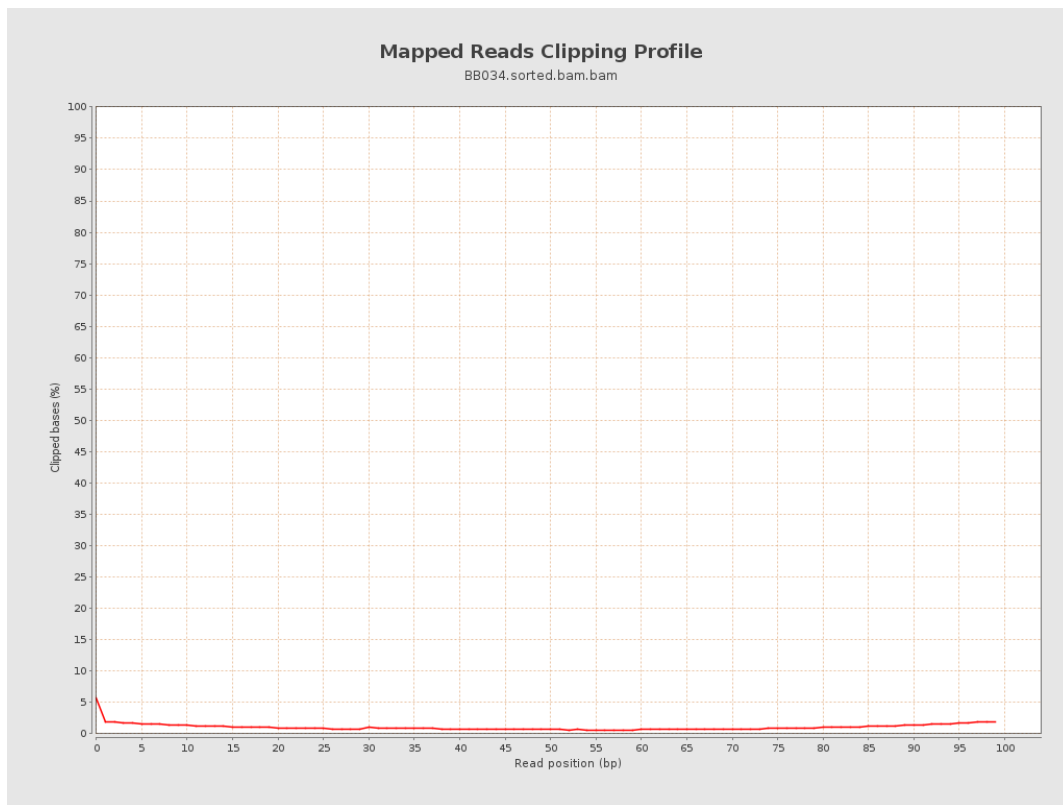
8. Results : Mapped Reads Nucleotide Content



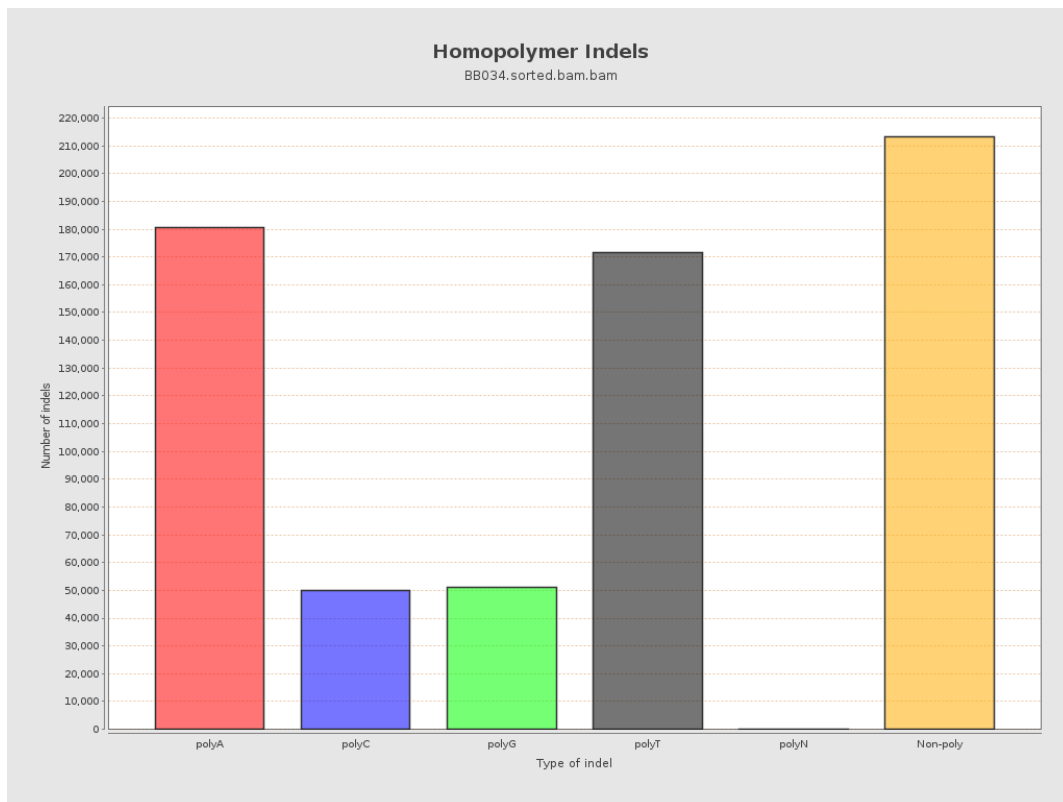
9. Results : Mapped Reads GC-content Distribution



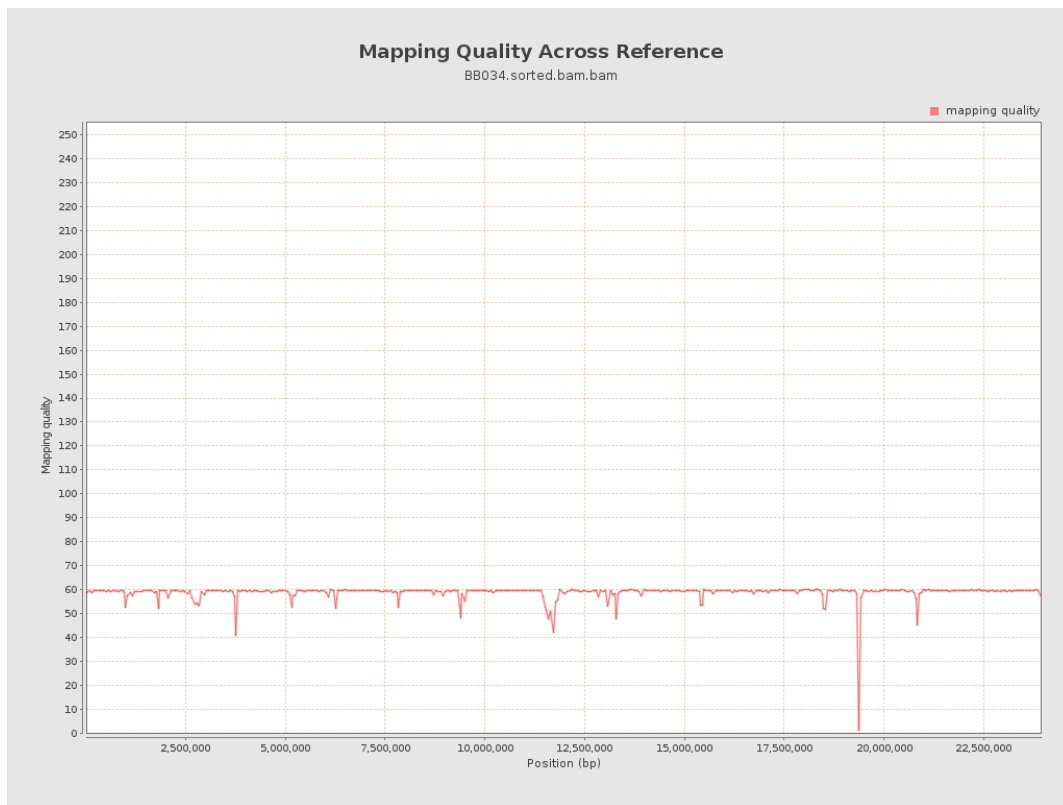
10. Results : Mapped Reads Clipping Profile



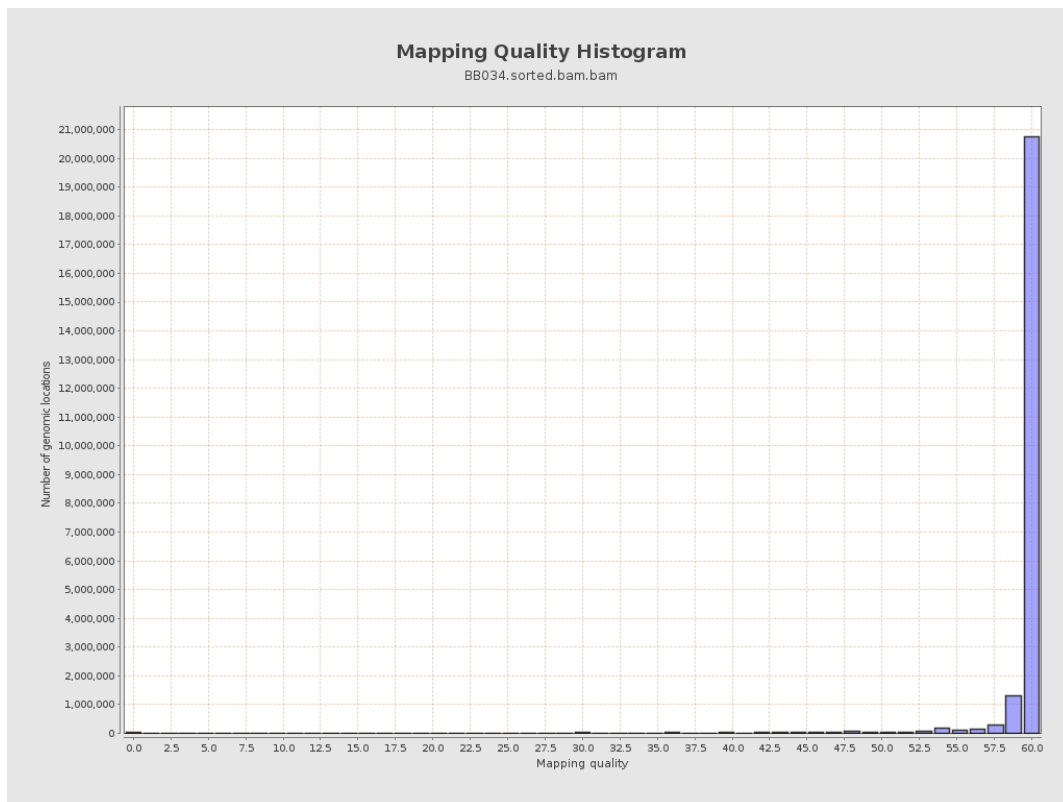
11. Results : Homopolymer Indels



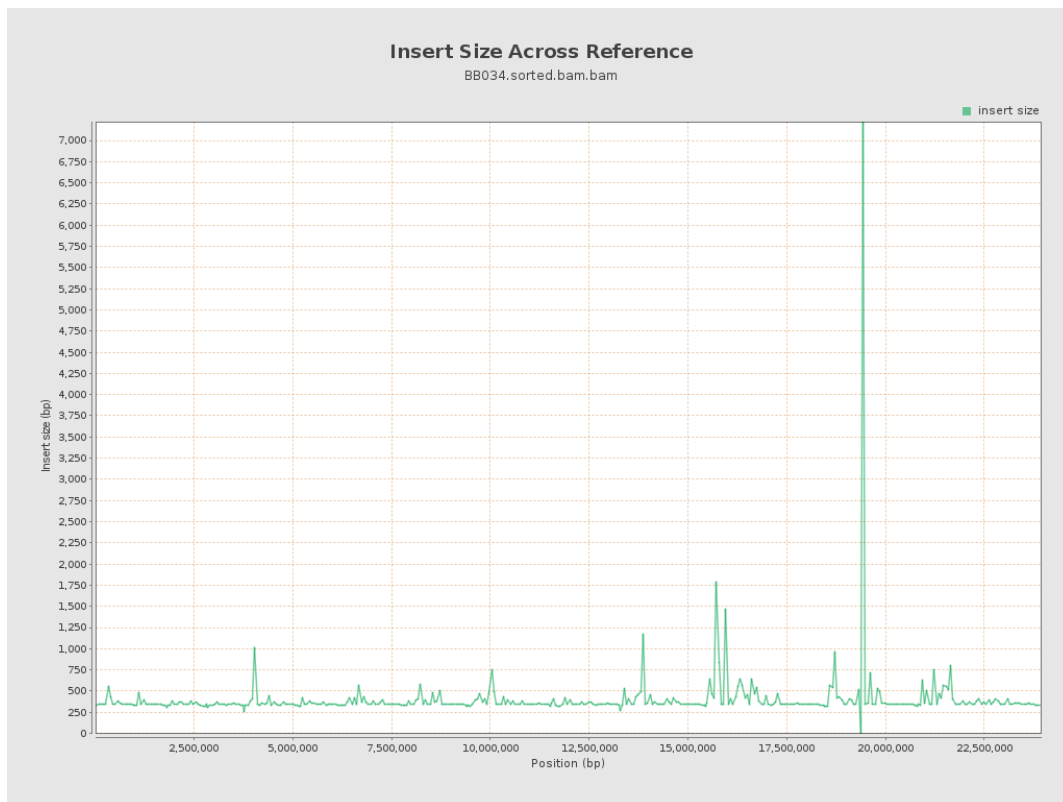
12. Results : Mapping Quality Across Reference



13. Results : Mapping Quality Histogram



14. Results : Insert Size Across Reference



15. Results : Insert Size Histogram

