

Qualimap Analysis Results

BAM QC analysis

Generated by Qualimap v.2.2.1

2016/10/23 11:55:58

1. Input data & parameters

1.1. QualiMap command line

```
qualimap bamqc -bam
/home/vdp5/data/cambodia_samples/sequences_bam/KP076.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/KP076-BiooBarcode_30_CACCGG_R1.fastq.gz /home/vdp5/data/cambodia_samples/sequences_gz/KP076-BiooBarcode_30_CACCGG_R2.fastq.gz
Draw chromosome limits:	no
Analyze overlapping paired-end reads:	no
Program:	bwa (0.7.15-r1140)
Analysis date:	Sun Oct 23 11:55:57 EDT 2016
Size of a homopolymer:	3
Skip duplicate alignments:	no
Number of windows:	400
BAM file:	/home/vdp5/data/cambodia_samples/sequences_bam/KP076.sorted.bam.b

am

2. Summary

2.1. Globals

Reference size	23,958,997
Number of reads	21,557,260
Mapped reads	9,907,308 / 45.96%
Unmapped reads	11,649,952 / 54.04%
Mapped paired reads	9,907,308 / 45.96%
Mapped reads, first in pair	4,981,208 / 23.11%
Mapped reads, second in pair	4,926,100 / 22.85%
Mapped reads, both in pair	9,695,753 / 44.98%
Mapped reads, singletons	211,555 / 0.98%
Read min/max/mean length	30 / 100 / 99.9
Duplicated reads (estimated)	4,333,661 / 20.1%
Duplication rate	44.31%
Clipped reads	859,006 / 3.98%

2.2. ACGT Content

Number/percentage of A's	263,839,654 / 27.49%
Number/percentage of C's	215,898,102 / 22.49%
Number/percentage of T's	264,804,389 / 27.59%
Number/percentage of G's	215,271,773 / 22.43%
Number/percentage of N's	81,248 / 0.01%
GC Percentage	44.92%

2.3. Coverage

Mean	40.1015
Standard Deviation	33.9921

2.4. Mapping Quality

Mean Mapping Quality	58.48
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2.5. Insert size

Mean	873.72
Standard Deviation	25,800.7
P25/Median/P75	261 / 344 / 426

2.6. Mismatches and indels

General error rate	0.74%
Mismatches	6,526,202
Insertions	190,391
Mapped reads with at least one insertion	1.83%
Deletions	260,641
Mapped reads with at least one deletion	2.52%
Homopolymer indels	71.77%

2.7. Chromosome stats

Name	Length	Mapped bases	Mean coverage	Standard deviation

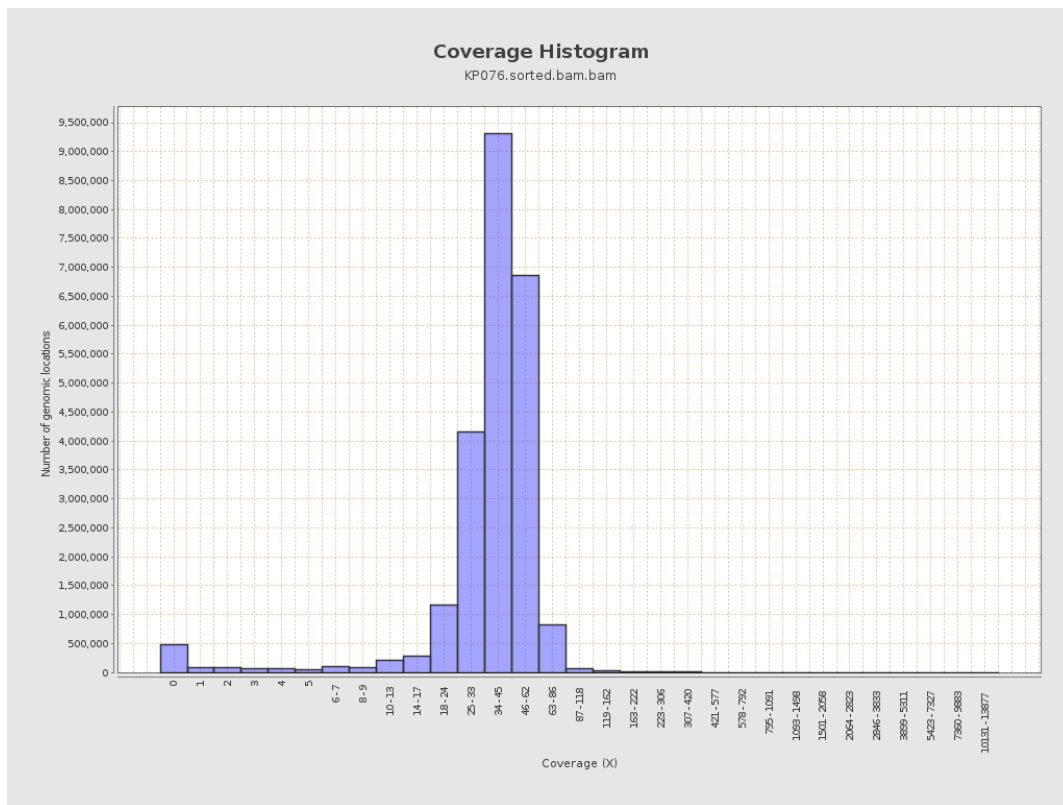
gi 1074120478 emb LT615256.1	977217	41124313	42.0831	13.2129
gi 1074120682 emb LT615257.1	860454	31333704	36.4153	17.9207
gi 1074120865 emb LT615258.1	989719	39145515	39.5522	23.1805
gi 1074121086 emb LT615259.1	935450	37852820	40.4648	28.6125
gi 1074121301 emb LT615260.1	1432239	57334925	40.0317	23.553
gi 1074121615 emb LT615261.1	1080962	43691961	40.4195	16.1646
gi 1074121871 emb LT615262.1	1545099	66272854	42.8923	13.1827
gi 1074122235 emb LT615263.1	1585108	65445712	41.2879	23.3446
gi 1074122590 emb LT615264.1	2122358	84570821	39.8476	41.03
gi 1074123050 emb LT615265.1	1754192	63267378	36.0664	43.1475
gi 1074123421 emb LT615	2150147	91309637	42.4667	80.6905

266.1				
gi 107412389 8 emb LT615 267.1	3031036	125955002	41.5551	21.0535
gi 107412458 8 emb LT615 268.1	2359348	88510353	37.5148	20.3862
gi 107412506 5 emb LT615 269.1	3135668	124977782	39.8568	12.2997

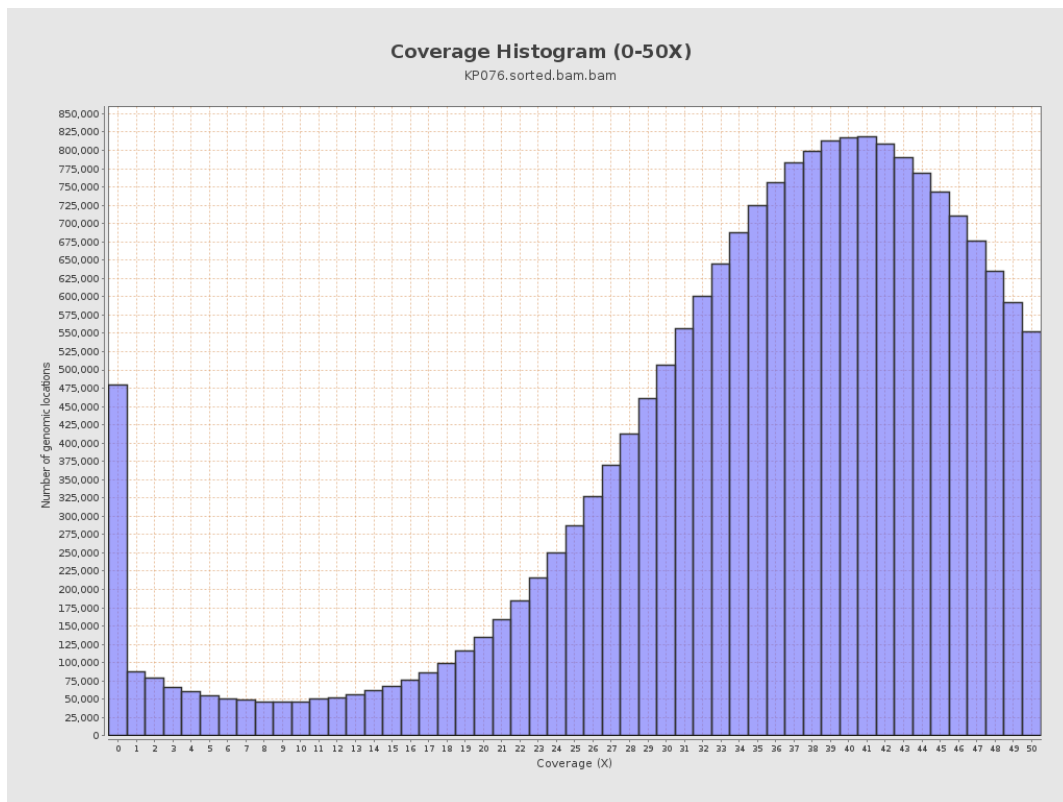
3. Results : Coverage across reference



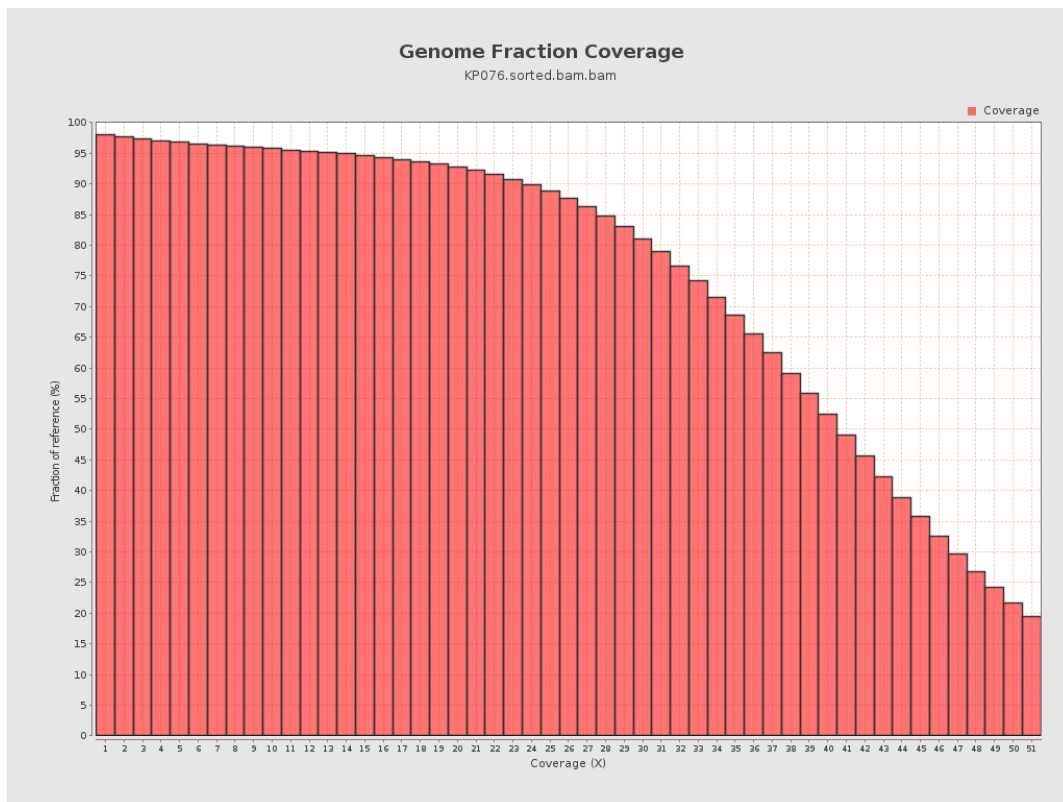
4. Results : Coverage Histogram



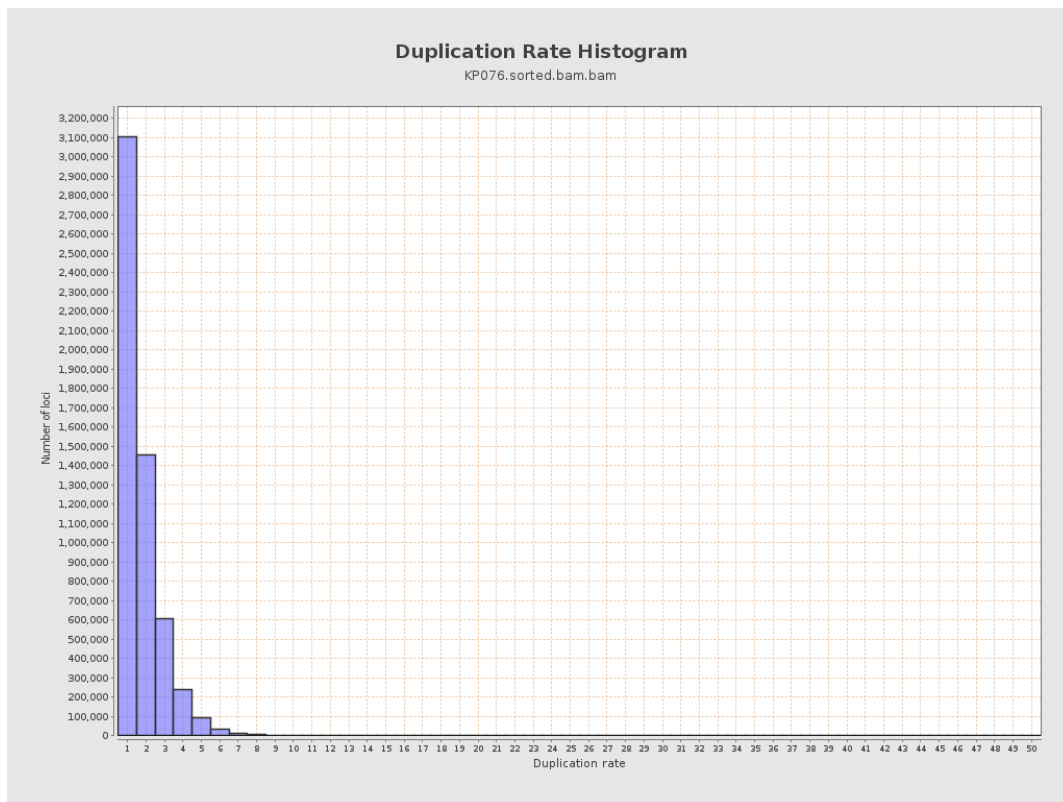
5. Results : Coverage Histogram (0-50X)



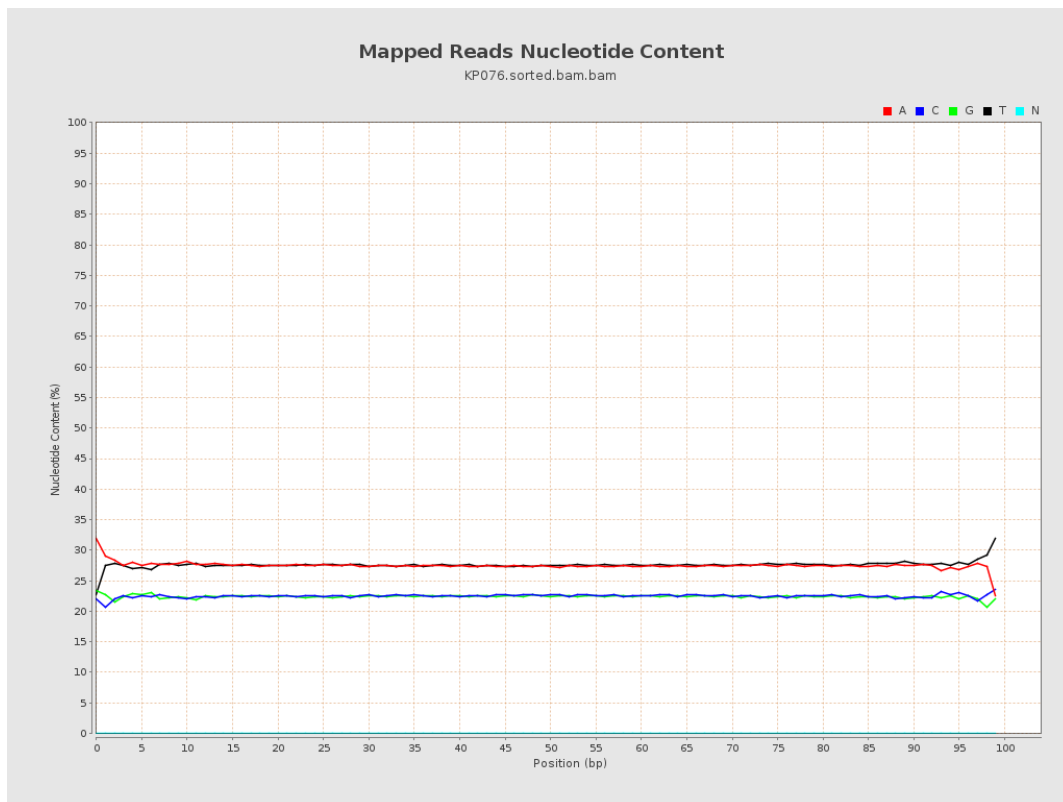
6. Results : Genome Fraction Coverage



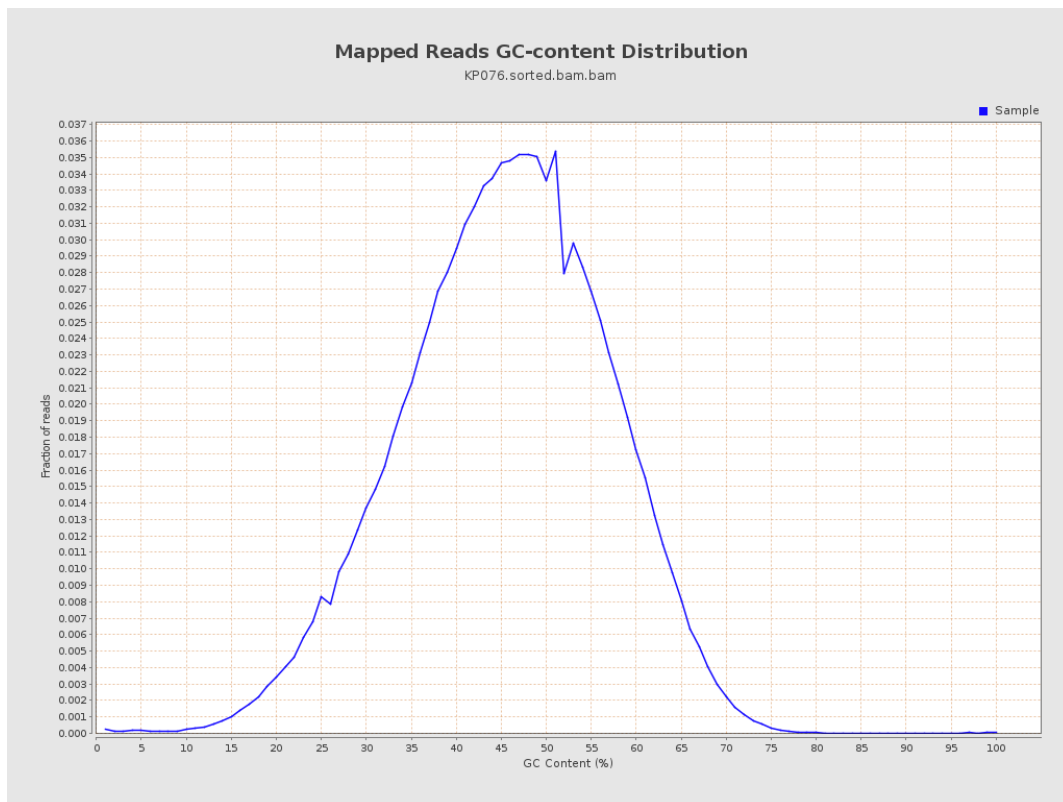
7. Results : Duplication Rate Histogram



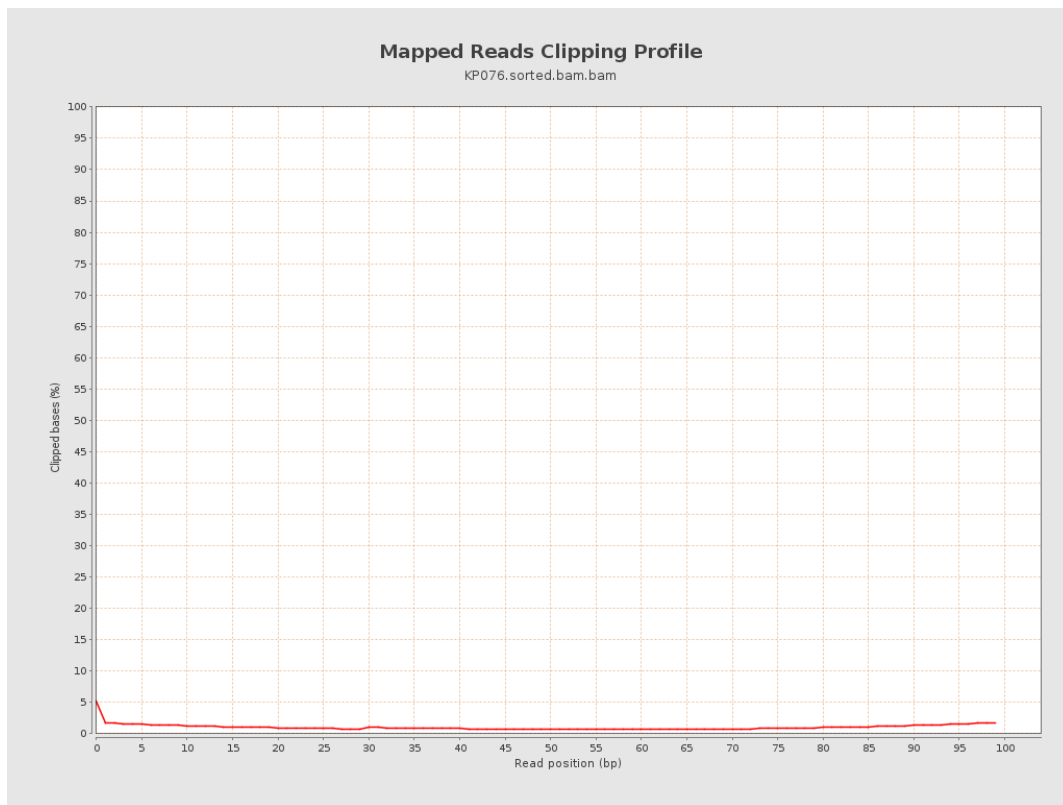
8. Results : Mapped Reads Nucleotide Content



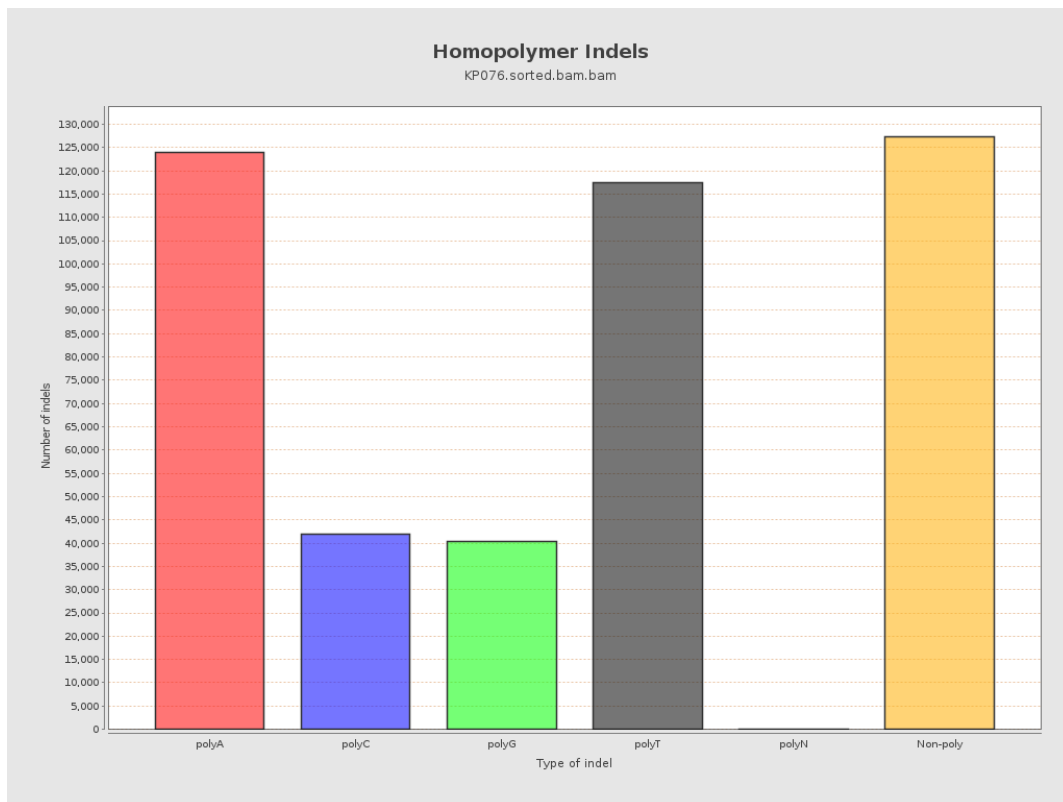
9. Results : Mapped Reads GC-content Distribution



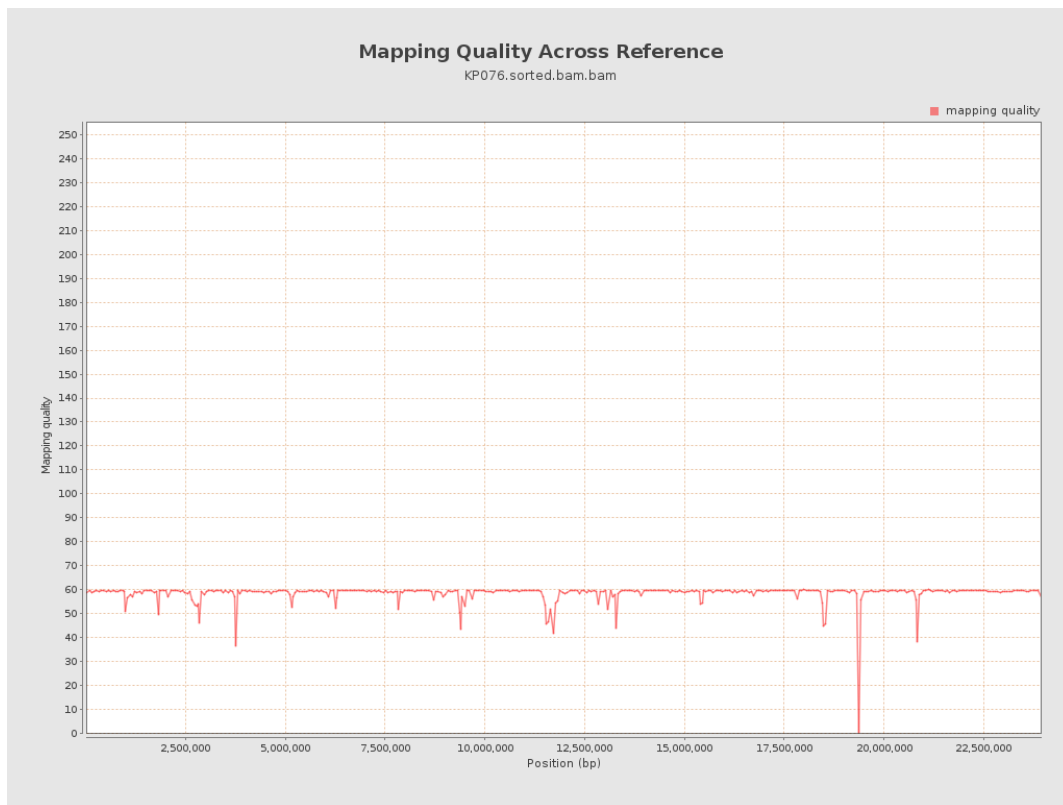
10. Results : Mapped Reads Clipping Profile



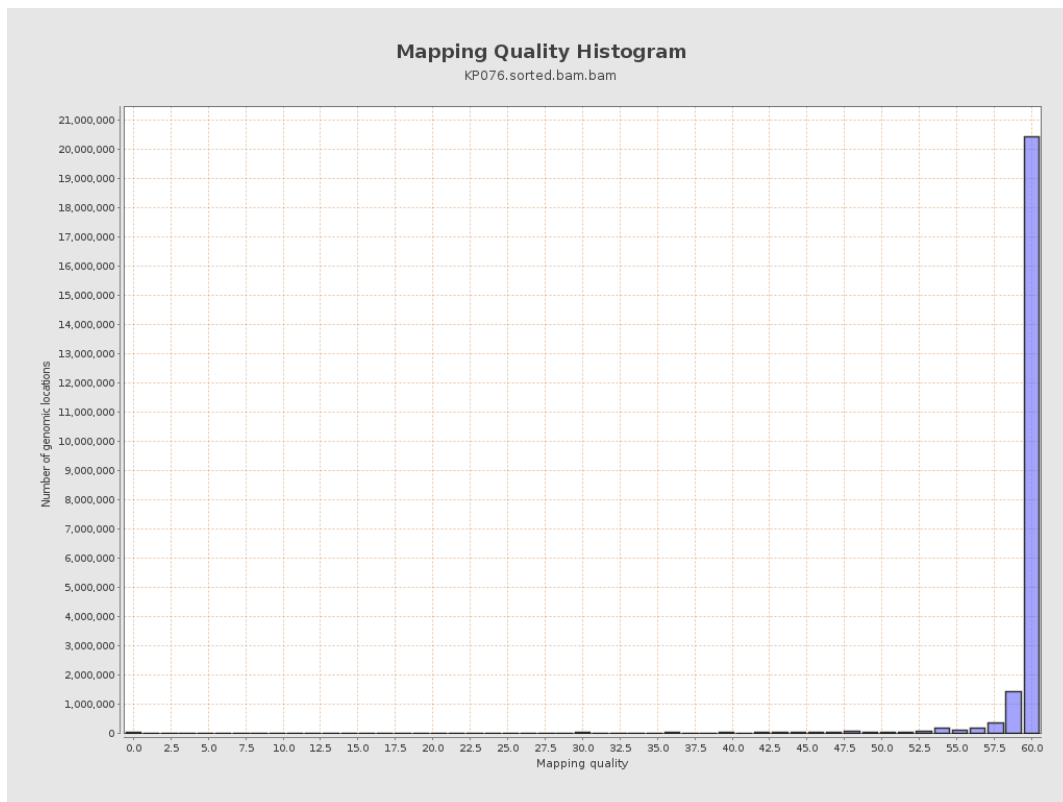
11. Results : Homopolymer Indels



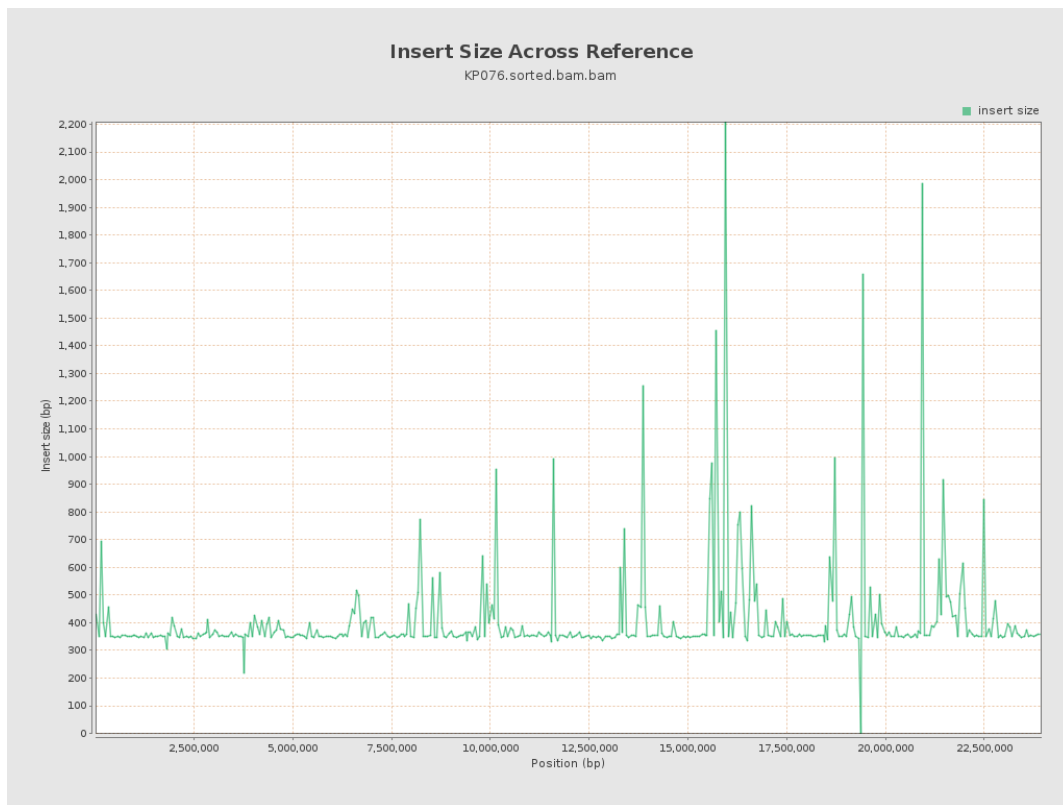
12. Results : Mapping Quality Across Reference



13. Results : Mapping Quality Histogram



14. Results : Insert Size Across Reference



15. Results : Insert Size Histogram

