

Qualimap Analysis Results

BAM QC analysis

Generated by Qualimap v.2.2.1

2016/10/23 13:41:38

1. Input data & parameters

1.1. QualiMap command line

```
qualimap bamqc -bam
/home/vdp5/data/cambodia_samples/sequences_bam/OM192.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/OM192-BiooBarcode2_TGACCA_R1.fastq.gz /home/vdp5/data/cambodia_samples/sequences_gz/OM192-BiooBarcode2_TGACCA_R2.fastq.gz |
| Draw chromosome limits: | no |
| Analyze overlapping paired-end reads: | no |
| Program: | bwa (0.7.15-r1140) |
| Analysis date: | Sun Oct 23 13:41:37 EDT 2016 |
| Size of a homopolymer: | 3 |
| Skip duplicate alignments: | no |
| Number of windows: | 400 |
| BAM file: | /home/vdp5/data/cambodia_samples/sequences_bam/OM192.sorted.bam.bam |

2. Summary

2.1. Globals

| | |
|------------------------------|--------------------|
| Reference size | 23,958,997 |
| Number of reads | 8,270,103 |
| Mapped reads | 2,019,064 / 24.41% |
| Unmapped reads | 6,251,039 / 75.59% |
| Mapped paired reads | 2,019,064 / 24.41% |
| Mapped reads, first in pair | 1,011,896 / 12.24% |
| Mapped reads, second in pair | 1,007,168 / 12.18% |
| Mapped reads, both in pair | 1,948,402 / 23.56% |
| Mapped reads, singletons | 70,662 / 0.85% |
| Read min/max/mean length | 30 / 100 / 99.95 |
| Duplicated reads (estimated) | 236,655 / 2.86% |
| Duplication rate | 8.27% |
| Clipped reads | 257,338 / 3.11% |

2.2. ACGT Content

| | |
|--------------------------|---------------------|
| Number/percentage of A's | 58,140,934 / 30.13% |
| Number/percentage of C's | 38,225,946 / 19.81% |
| Number/percentage of T's | 58,459,233 / 30.29% |
| Number/percentage of G's | 38,147,734 / 19.77% |
| Number/percentage of N's | 16,397 / 0.01% |
| GC Percentage | 39.58% |

2.3. Coverage

| | |
|--------------------|--------|
| Mean | 8.0631 |
| Standard Deviation | 9.6485 |

2.4. Mapping Quality

| | |
|----------------------|-------|
| Mean Mapping Quality | 58.31 |
|----------------------|-------|

2.5. Insert size

| | |
|--------------------|-----------------|
| Mean | 755.67 |
| Standard Deviation | 23,522.12 |
| P25/Median/P75 | 294 / 306 / 316 |

2.6. Mismatches and indels

| | |
|--|-----------|
| General error rate | 1.56% |
| Mismatches | 2,859,875 |
| Insertions | 66,043 |
| Mapped reads with at least one insertion | 3.09% |
| Deletions | 75,673 |
| Mapped reads with at least one deletion | 3.51% |
| Homopolymer indels | 62.49% |

2.7. Chromosome stats

| Name | Length | Mapped bases | Mean coverage | Standard deviation |
|------|--------|--------------|---------------|--------------------|
| | | | | |

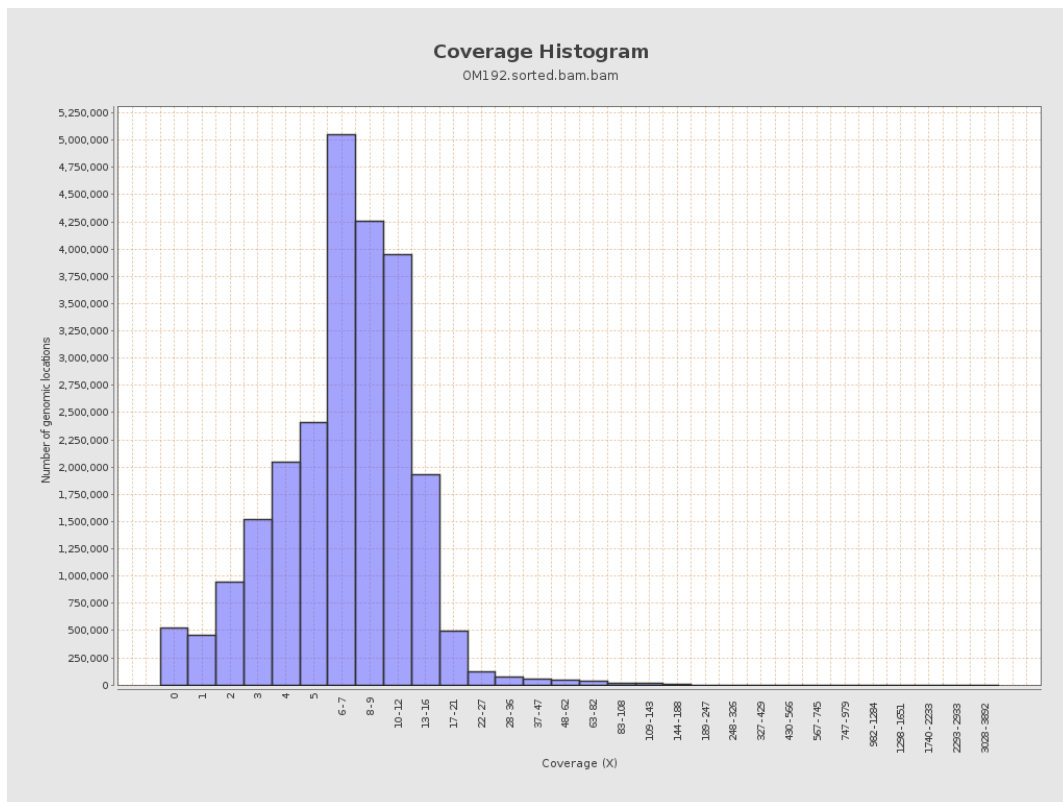
| | | | | |
|------------------------------|---------|----------|--------|---------|
| gi 1074120478 emb LT615256.1 | 977217 | 7013586 | 7.1771 | 4.8466 |
| gi 1074120682 emb LT615257.1 | 860454 | 6824711 | 7.9315 | 7.0772 |
| gi 1074120865 emb LT615258.1 | 989719 | 9464912 | 9.5632 | 14.964 |
| gi 1074121086 emb LT615259.1 | 935450 | 8460694 | 9.0445 | 13.5941 |
| gi 1074121301 emb LT615260.1 | 1432239 | 12307380 | 8.5931 | 9.2805 |
| gi 1074121615 emb LT615261.1 | 1080962 | 8842424 | 8.1801 | 8.6174 |
| gi 1074121871 emb LT615262.1 | 1545099 | 11522441 | 7.4574 | 4.1472 |
| gi 1074122235 emb LT615263.1 | 1585108 | 12600256 | 7.9491 | 11.0106 |
| gi 1074122590 emb LT615264.1 | 2122358 | 16679572 | 7.859 | 5.598 |
| gi 1074123050 emb LT615265.1 | 1754192 | 14318267 | 8.1623 | 17.8608 |
| gi 1074123421 emb LT615 | 2150147 | 18034811 | 8.3877 | 12.1323 |

| | | | | |
|--------------------------------------|---------|----------|--------|--------|
| 266.1 | | | | |
| gi 107412389 8 emb LT615 267.1 | 3031036 | 23396003 | 7.7188 | 6.9845 |
| gi 107412458 8 emb LT615 268.1 | 2359348 | 18439000 | 7.8153 | 9.1759 |
| gi 107412506 5 emb LT615 269.1 | 3135668 | 25280319 | 8.0622 | 4.1004 |

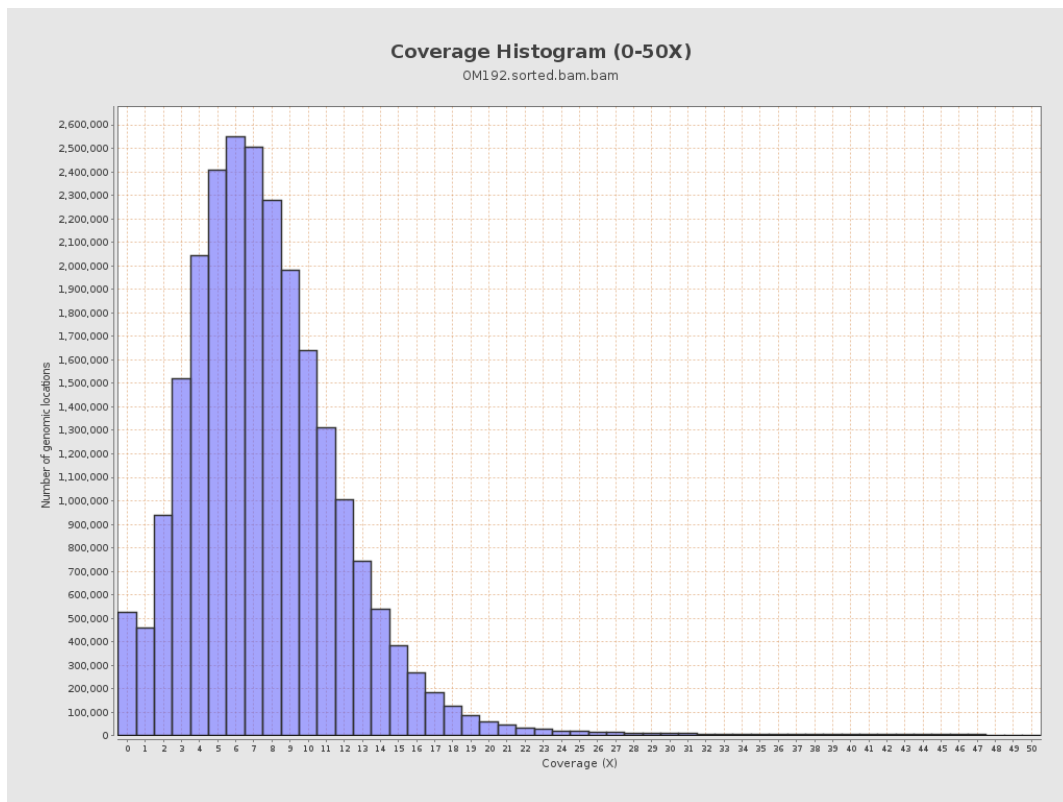
3. Results : Coverage across reference



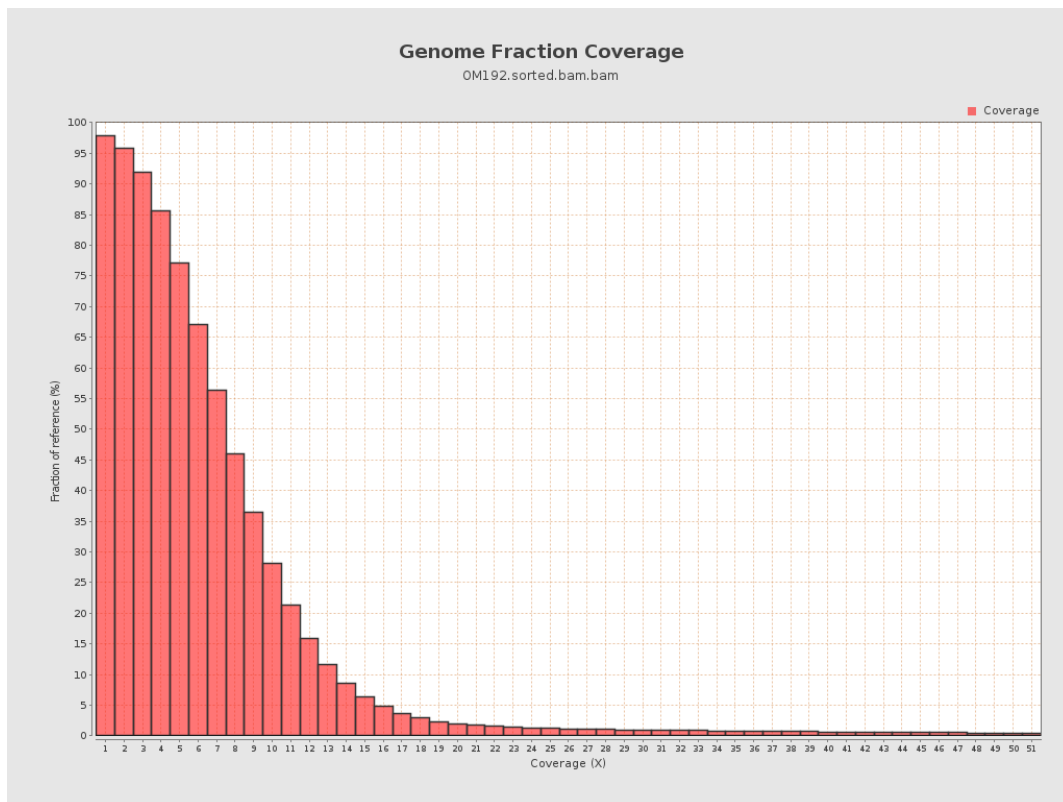
4. Results : Coverage Histogram



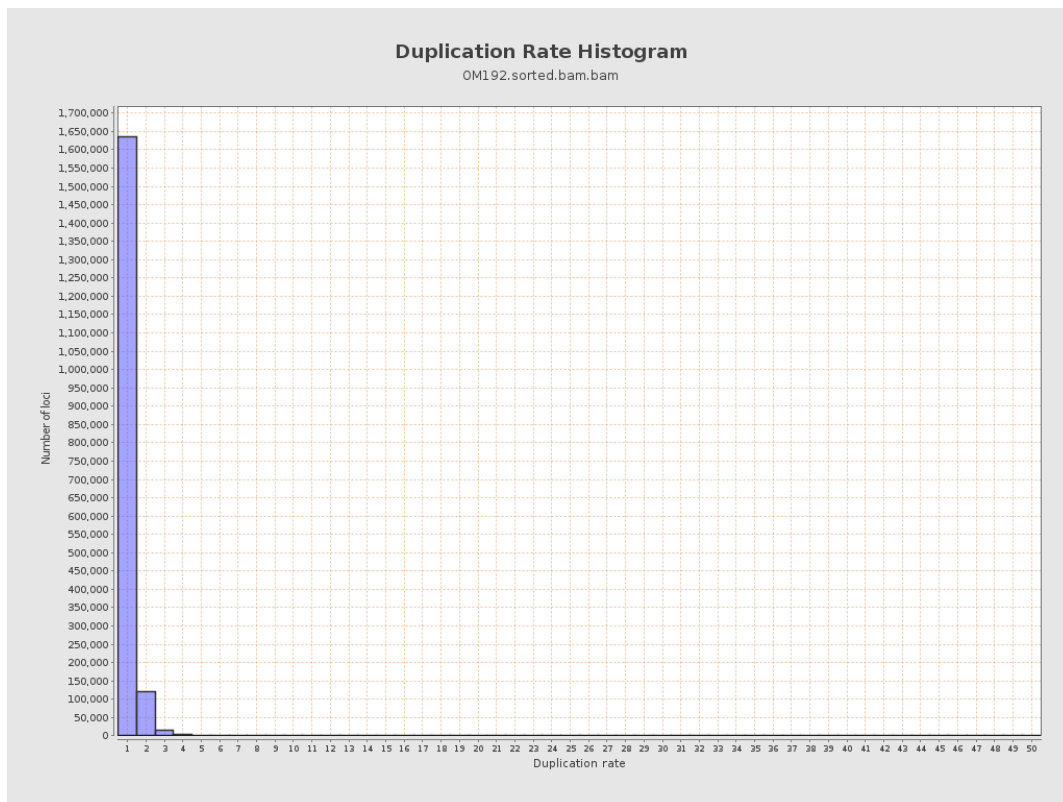
5. Results : Coverage Histogram (0-50X)



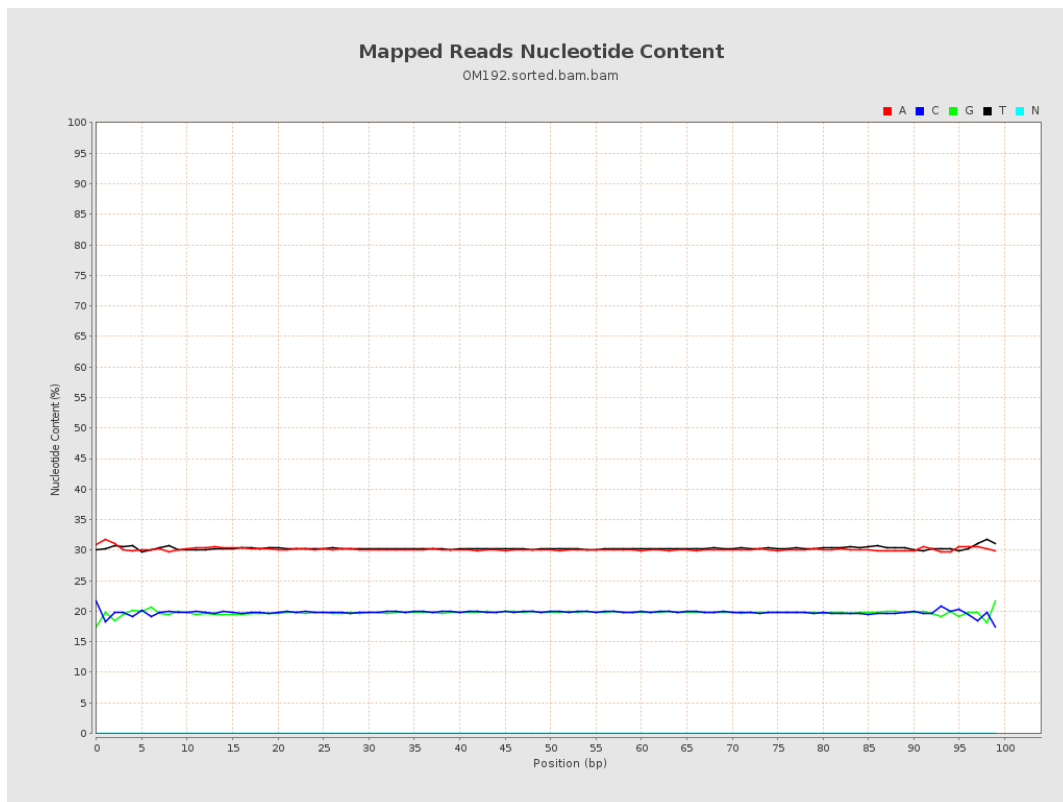
6. Results : Genome Fraction Coverage



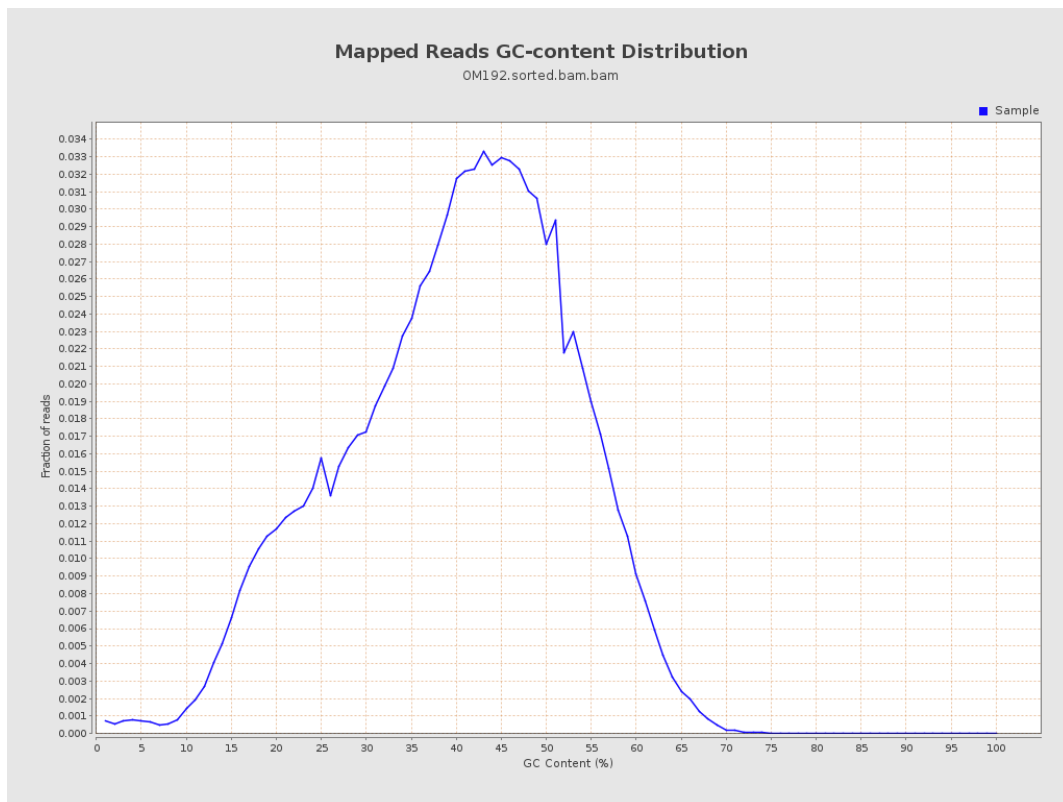
7. Results : Duplication Rate Histogram



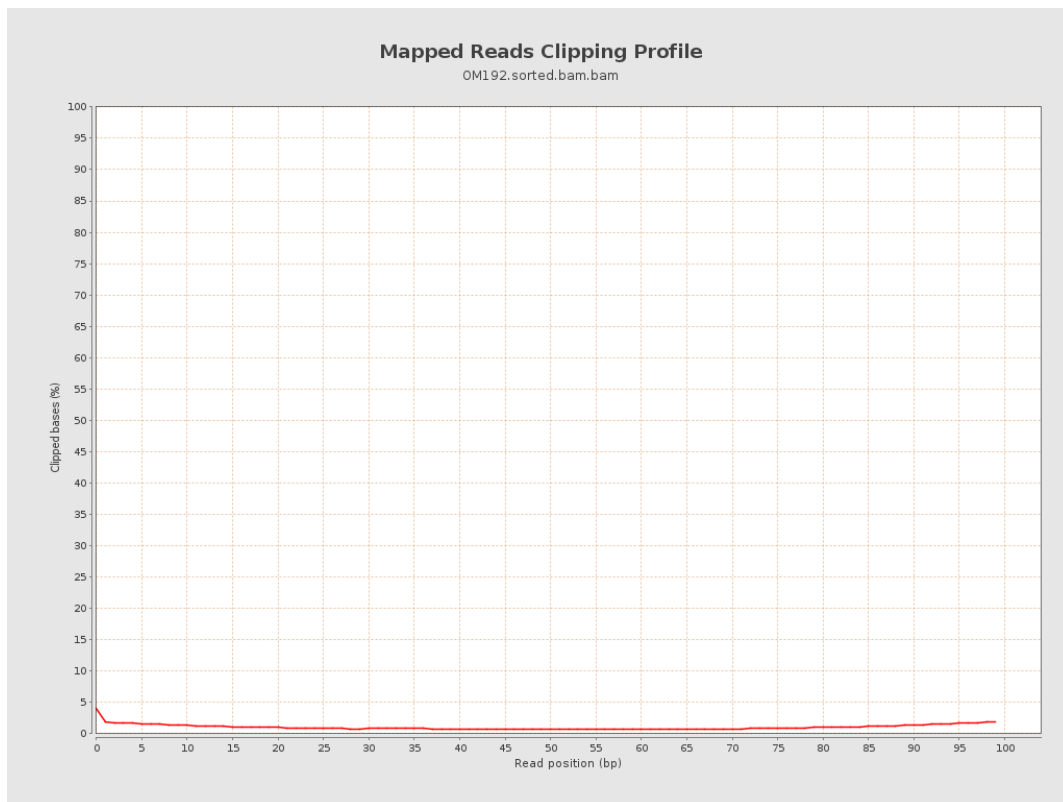
8. Results : Mapped Reads Nucleotide Content



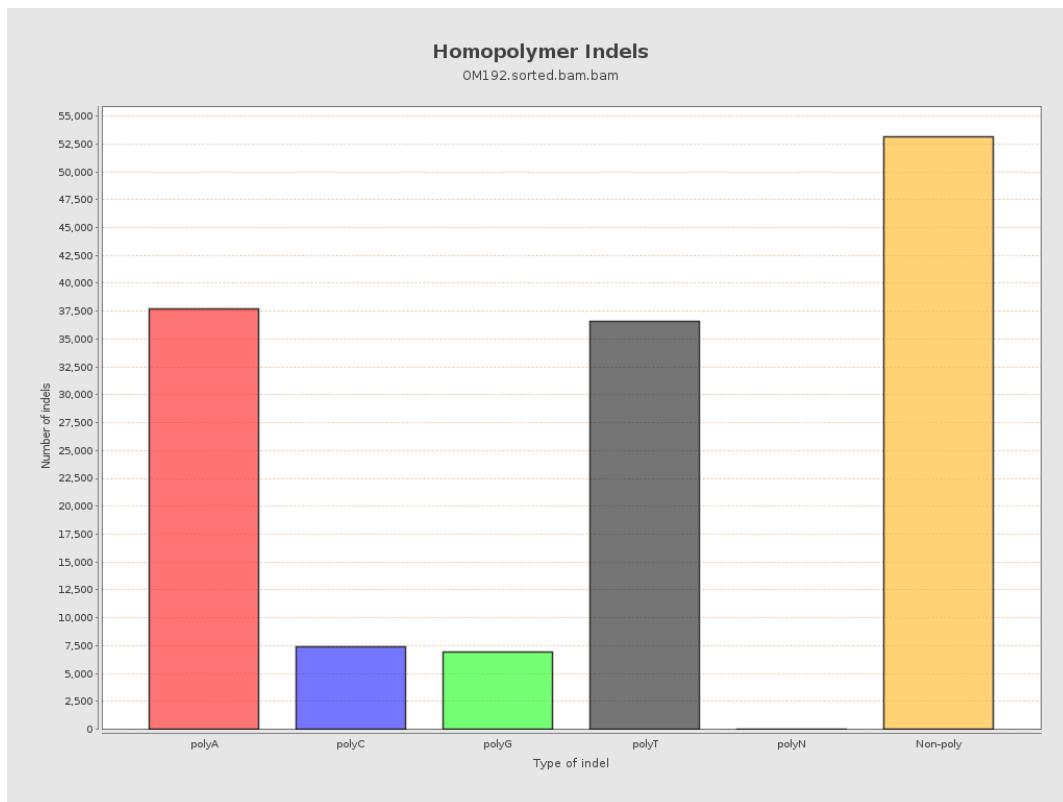
9. Results : Mapped Reads GC-content Distribution



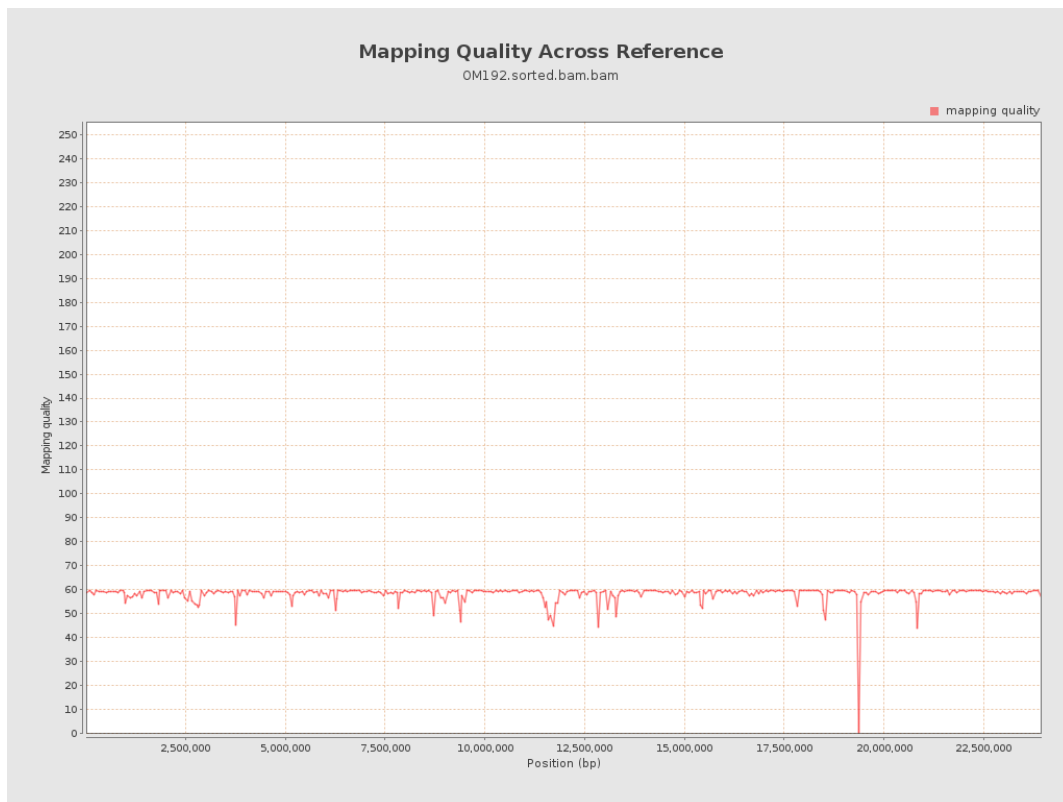
10. Results : Mapped Reads Clipping Profile



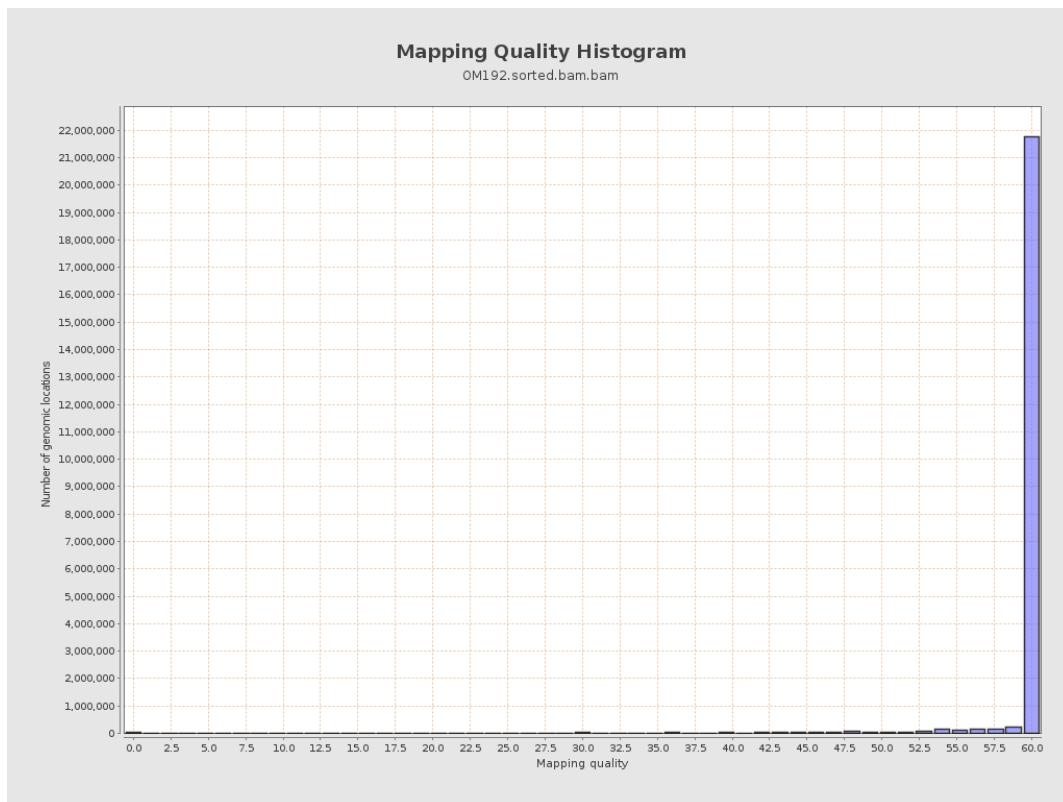
11. Results : Homopolymer Indels



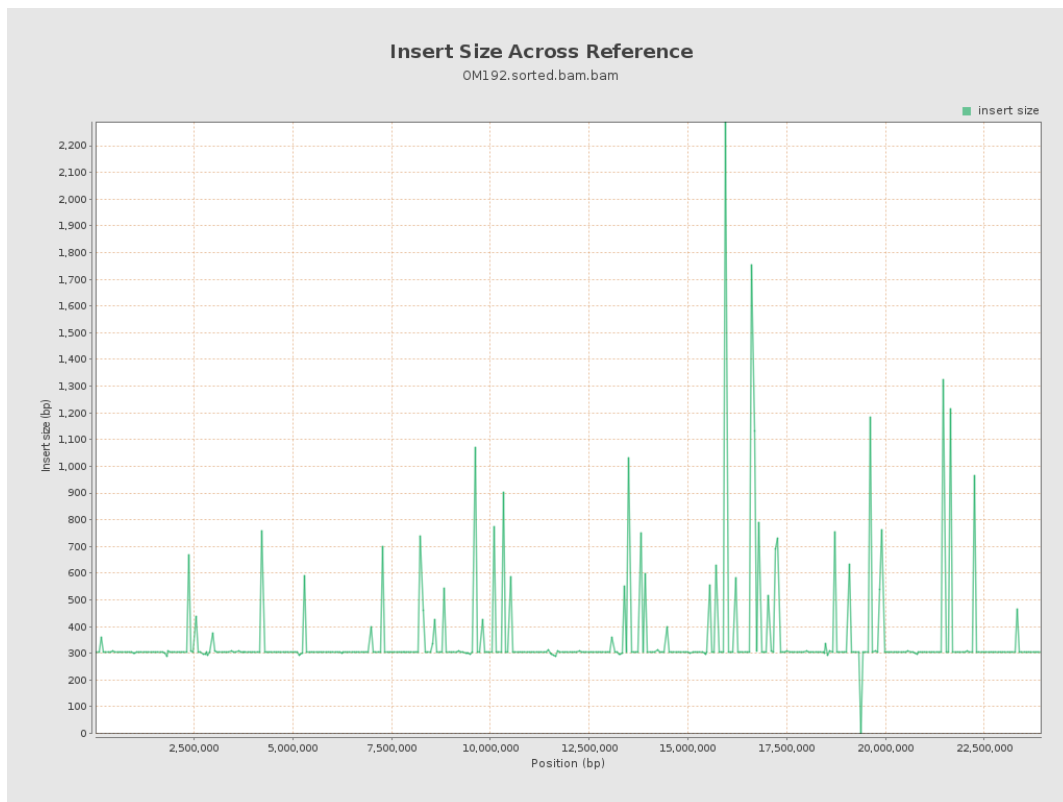
12. Results : Mapping Quality Across Reference



13. Results : Mapping Quality Histogram



14. Results : Insert Size Across Reference



15. Results : Insert Size Histogram

