

Qualimap Analysis Results

BAM QC analysis

Generated by Qualimap v.2.2.1

2023/05/29 21:32:08

1. Input data & parameters

1.1. QualiMap command line

```
qualimap bamqc -bam
/proj/uppstore2018210/Aalpina/working/Kate/Working/F2/MarkDuplicates/611
.nodup.bam -nw 400 -hm 3
```

1.2. Alignment

| | |
|---------------------------------------|---|
| BAM file: | /proj/uppstore2018210/Aalpina/worki ng/Kate/Working/F2/MarkDuplicates/ 611 .nodup.bam |
| Program: | bwa (0.7.17-r1188) |
| Analyze overlapping paired-end reads: | no |
| Command line: | bwa mem -M -t 8 -R @RG\tID:\$unit\tPL:Illumina\tLB:LibA\t SM:\$sample /proj/uppstore2018210/Aalpina/data/r eference/GCA_900128785.1_MPIPZ. v5_genomic.fa /proj/uppstore2018210/Aalpina/data/r awdata/P26207/P26207_208/02- FASTQ/220902_A00621_0737_BHM GCVDSX3/P26207_208_S289_L003 _R1_001.fastq.gz /proj/uppstore2018210/Aalpina/data/r awdata/P26207/P26207_208/02- FASTQ/220902_A00621_0737_BHM GCVDSX3/P26207_208_S289_L003 _R2_001.fastq.gz |
| Size of a homopolymer: | 3 |
| Number of windows: | 400 |

| | |
|----------------------------|-------------------------------|
| Analysis date: | Mon May 29 21:32:07 CEST 2023 |
| Draw chromosome limits: | no |
| Skip duplicate alignments: | no |

2. Summary

2.1. Globals

| | |
|------------------------------|---------------------|
| Reference size | 311,642,060 |
| Number of reads | 70,683,741 |
| Mapped reads | 65,275,368 / 92.35% |
| Unmapped reads | 5,408,373 / 7.65% |
| Mapped paired reads | 65,275,368 / 92.35% |
| Mapped reads, first in pair | 32,677,152 / 46.23% |
| Mapped reads, second in pair | 32,598,216 / 46.12% |
| Mapped reads, both in pair | 63,581,588 / 89.95% |
| Mapped reads, singletons | 1,693,780 / 2.4% |
| Read min/max/mean length | 30 / 151 / 148.16 |
| Duplicated reads (flagged) | 10,338,621 / 14.63% |
| Clipped reads | 15,169,680 / 21.46% |

2.2. ACGT Content

| | |
|--------------------------|------------------------|
| Number/percentage of A's | 2,767,528,386 / 30.78% |
| Number/percentage of C's | 1,729,498,743 / 19.23% |
| Number/percentage of T's | 2,773,434,331 / 30.85% |
| Number/percentage of G's | 1,721,044,829 / 19.14% |
| Number/percentage of N's | 33,258 / 0% |
| GC Percentage | 38.38% |

2.3. Coverage

| | |
|--------------------|----------|
| Mean | 28.9253 |
| Standard Deviation | 256.3191 |

2.4. Mapping Quality

| | |
|----------------------|-------|
| Mean Mapping Quality | 44.35 |
|----------------------|-------|

2.5. Insert size

| | |
|--------------------|-----------------|
| Mean | 234,099.1 |
| Standard Deviation | 2,320,155.48 |
| P25/Median/P75 | 305 / 400 / 522 |

2.6. Mismatches and indels

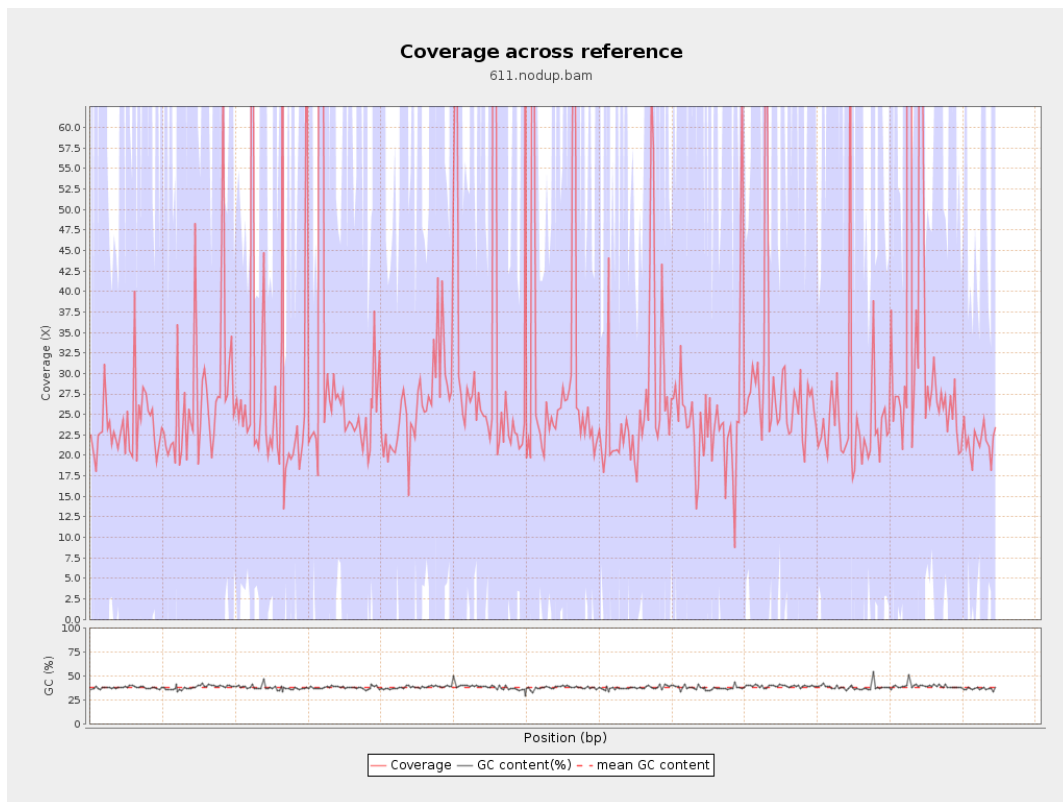
| | |
|--|-------------|
| General error rate | 2.34% |
| Mismatches | 192,937,090 |
| Insertions | 6,341,279 |
| Mapped reads with at least one insertion | 8.69% |
| Deletions | 6,122,533 |
| Mapped reads with at least one deletion | 8.32% |
| Homopolymer indels | 57% |

2.7. Chromosome stats

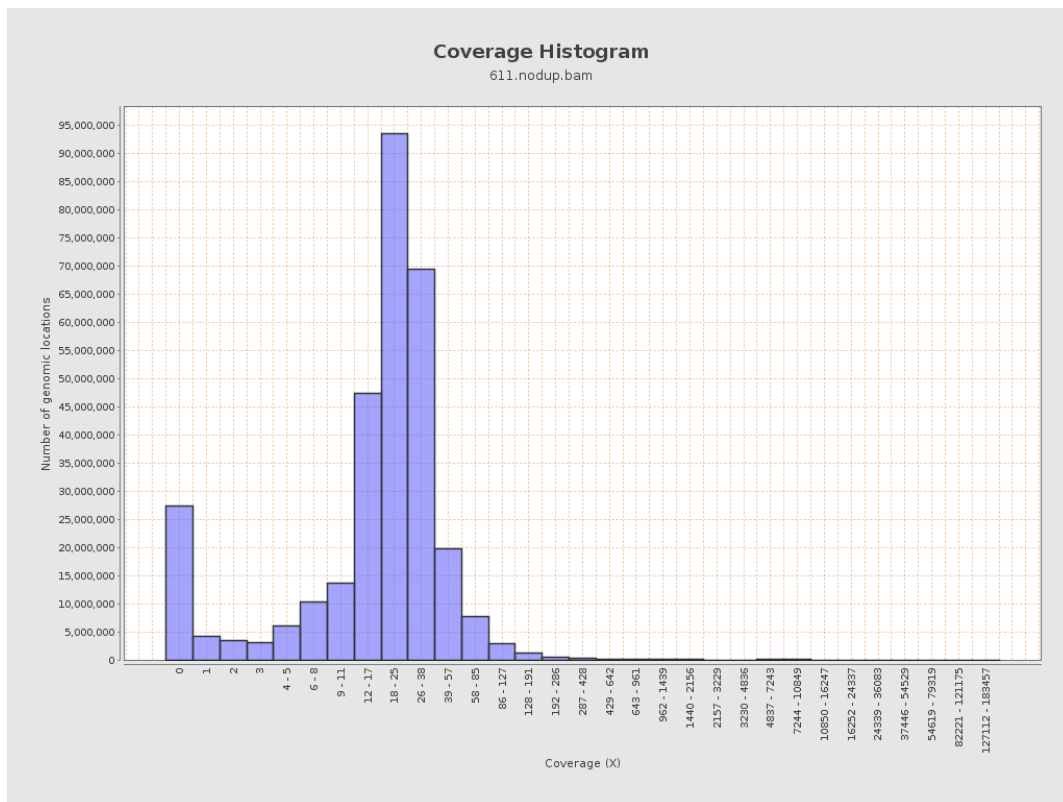
| Name | Length | Mapped bases | Mean coverage | Standard deviation |
|------------|----------|--------------|---------------|--------------------|
| LT669788.1 | 29724344 | 689362832 | 23.1919 | 95.0648 |

| | | | | |
|------------|----------|------------|---------|----------|
| LT669789.1 | 36598175 | 1057597983 | 28.8976 | 275.4027 |
| LT669790.1 | 30422129 | 1021855213 | 33.5892 | 341.606 |
| LT669791.1 | 52758100 | 1522211601 | 28.8527 | 264.3576 |
| LT669792.1 | 28376109 | 817406794 | 28.8062 | 281.0262 |
| LT669793.1 | 33388210 | 860302315 | 25.7666 | 131.7052 |
| LT669794.1 | 50579949 | 1373121854 | 27.1476 | 210.5486 |
| LT669795.1 | 49795044 | 1672492883 | 33.5875 | 320.8935 |

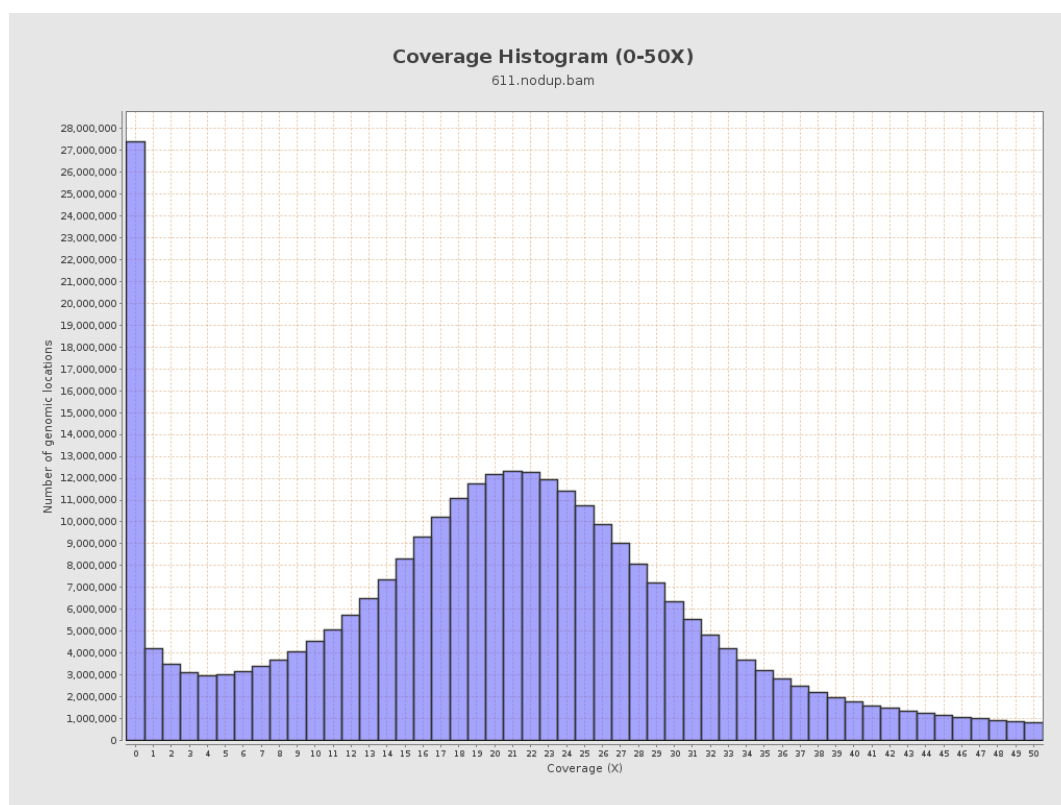
3. Results : Coverage across reference



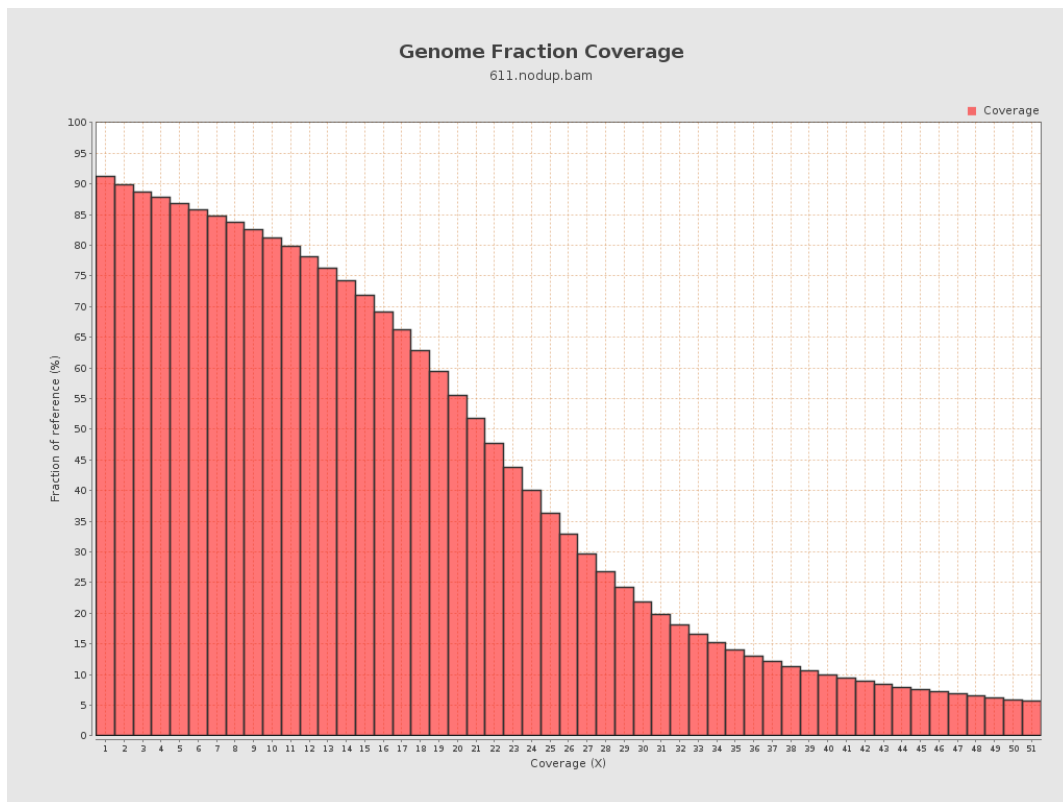
4. Results : Coverage Histogram



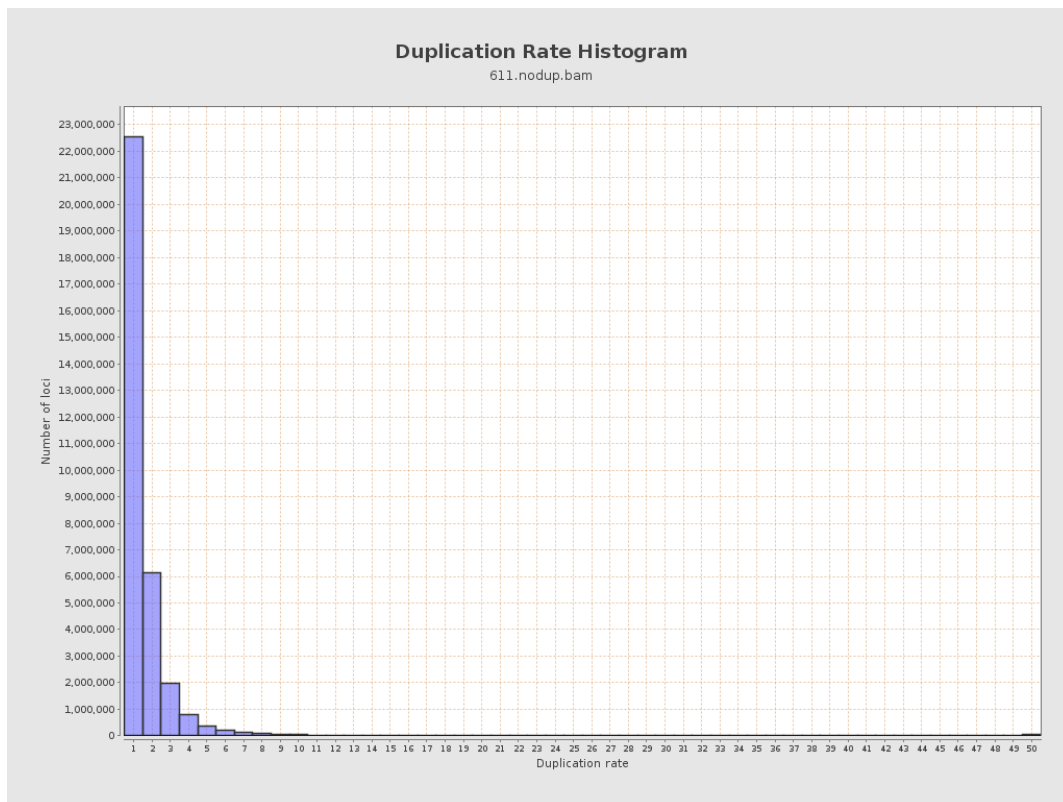
5. Results : Coverage Histogram (0-50X)



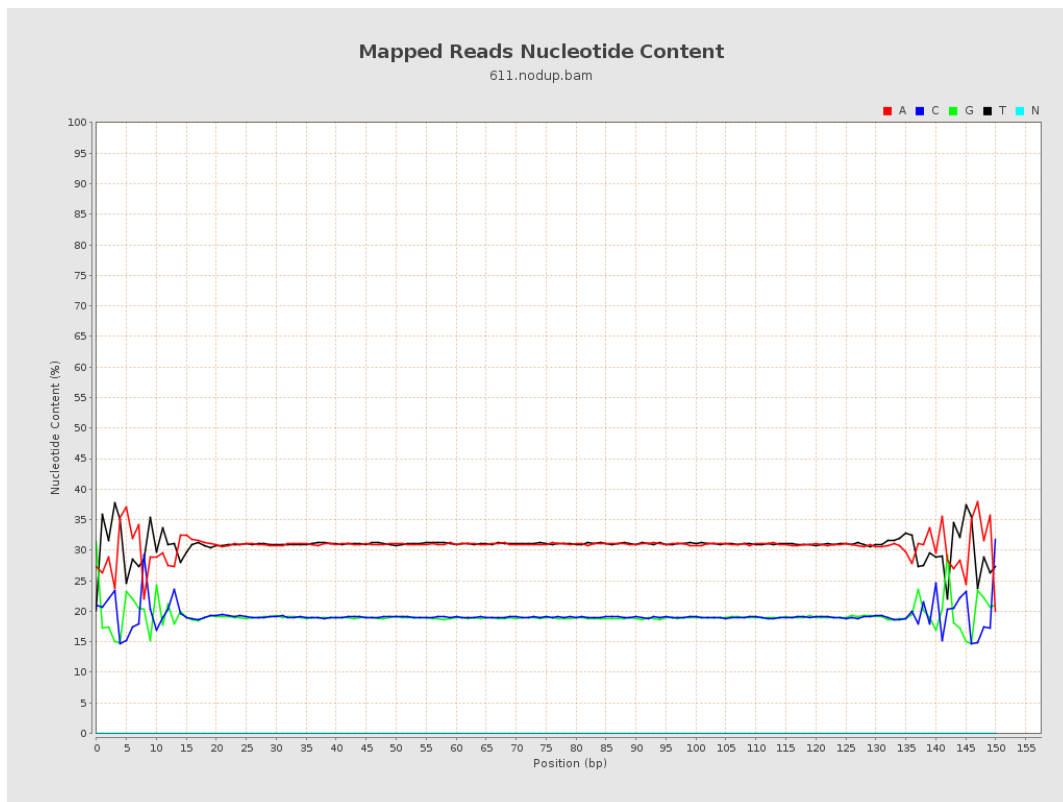
6. Results : Genome Fraction Coverage



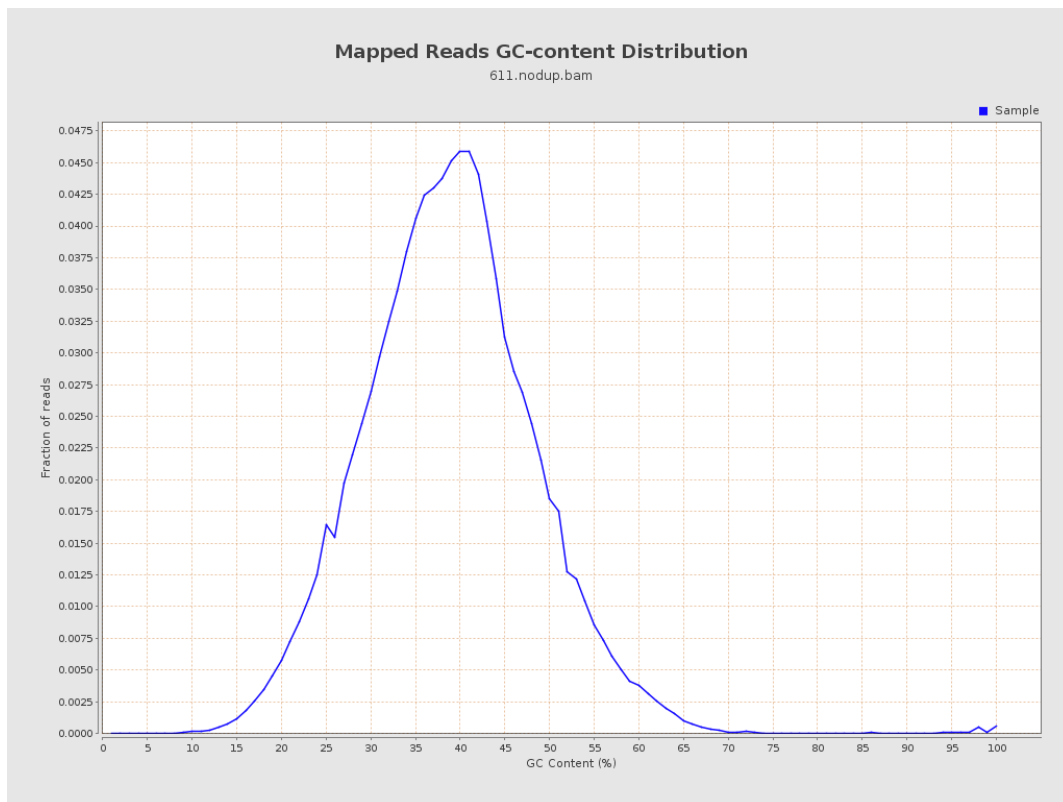
7. Results : Duplication Rate Histogram



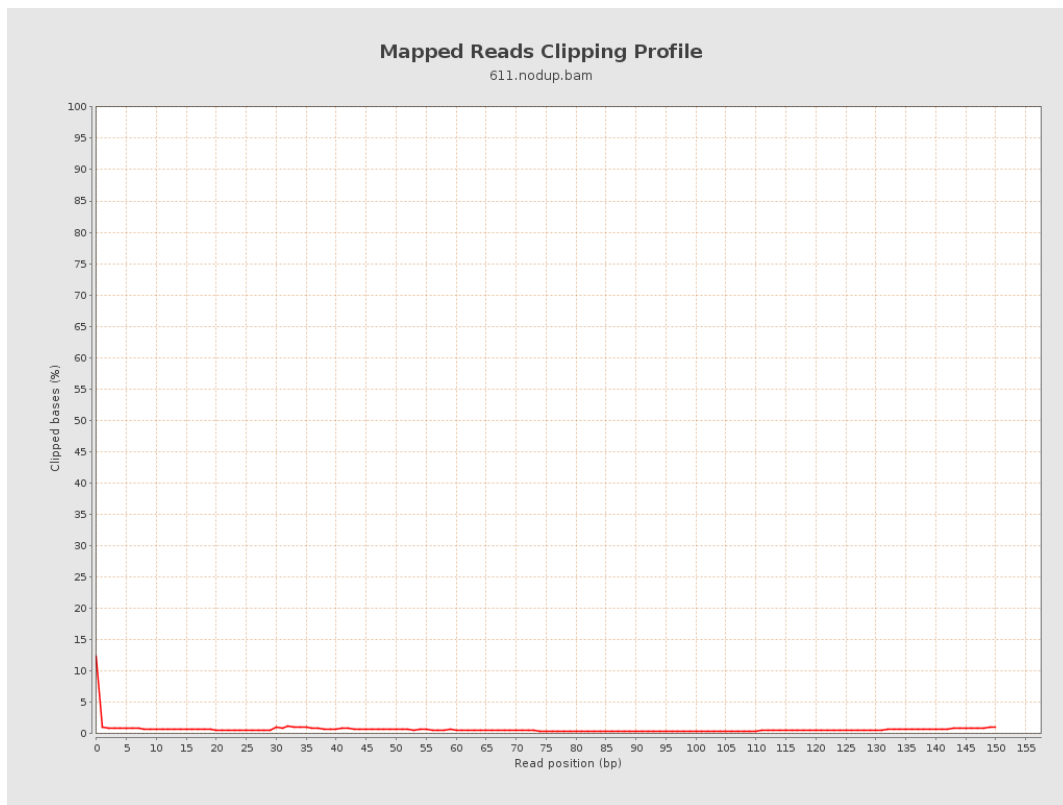
8. Results : Mapped Reads Nucleotide Content



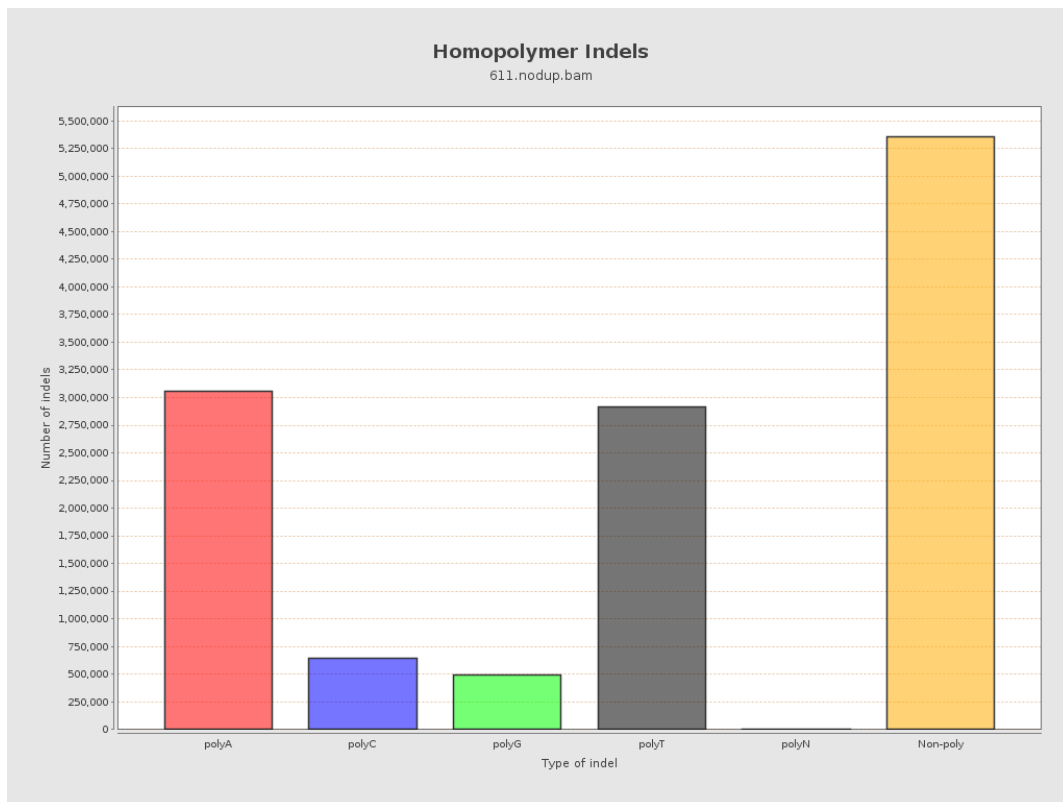
9. Results : Mapped Reads GC-content Distribution



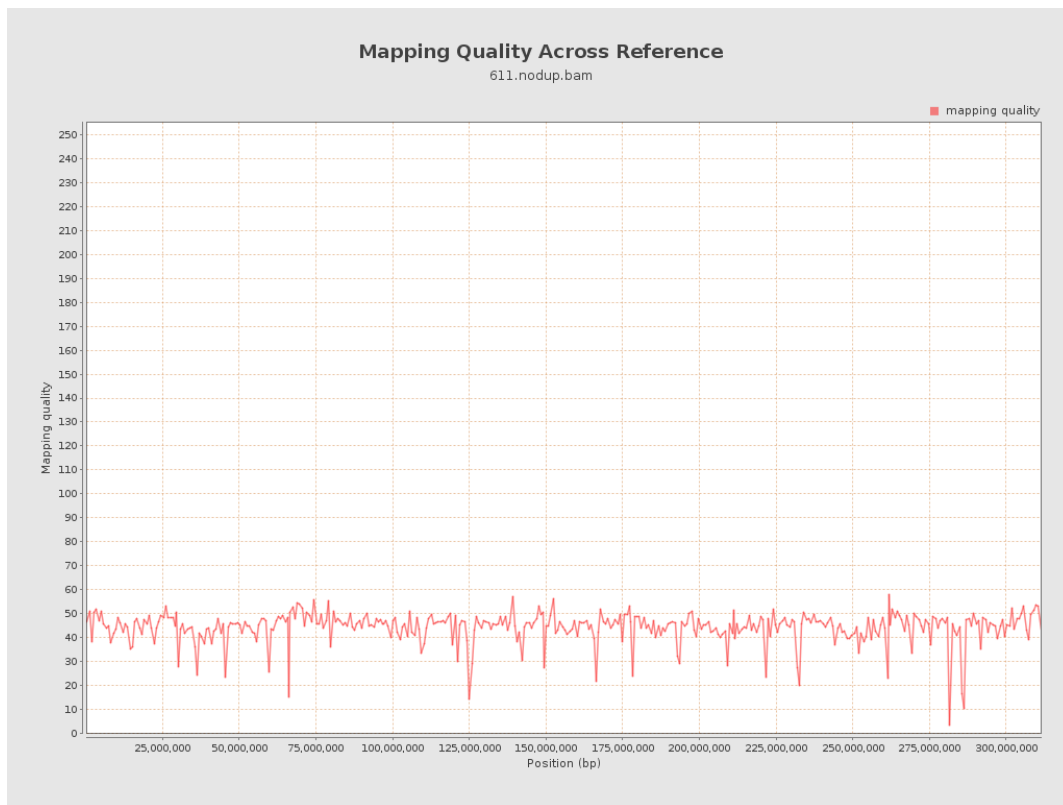
10. Results : Mapped Reads Clipping Profile



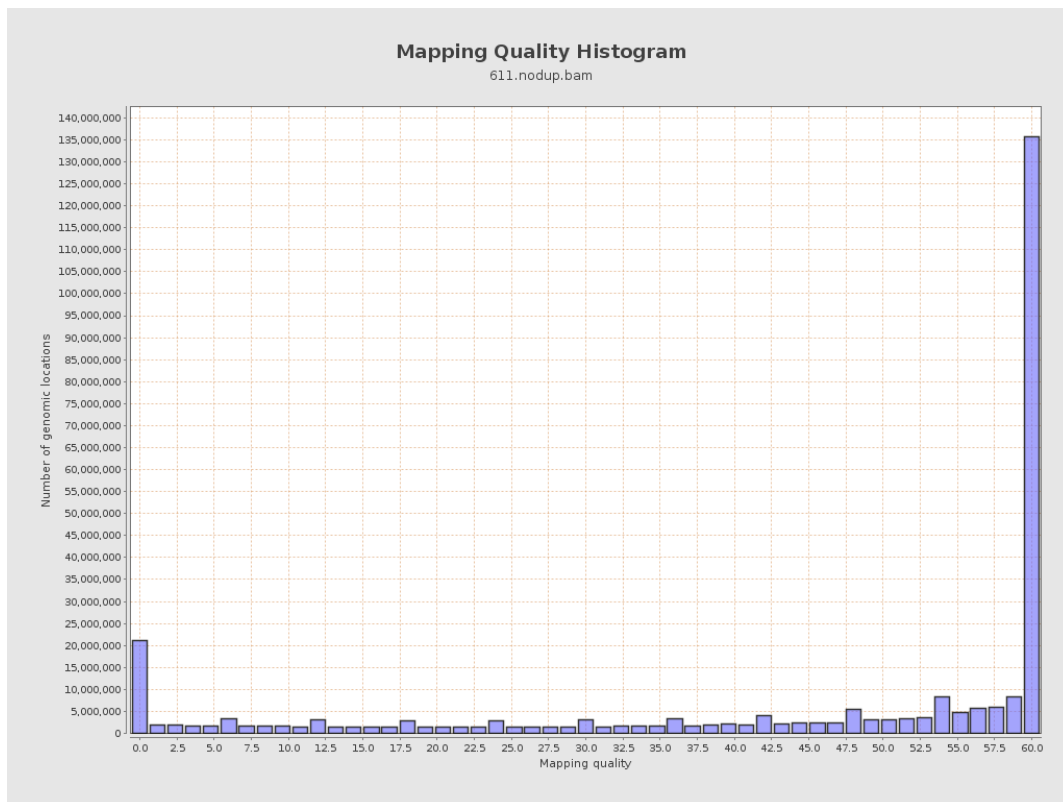
11. Results : Homopolymer Indels



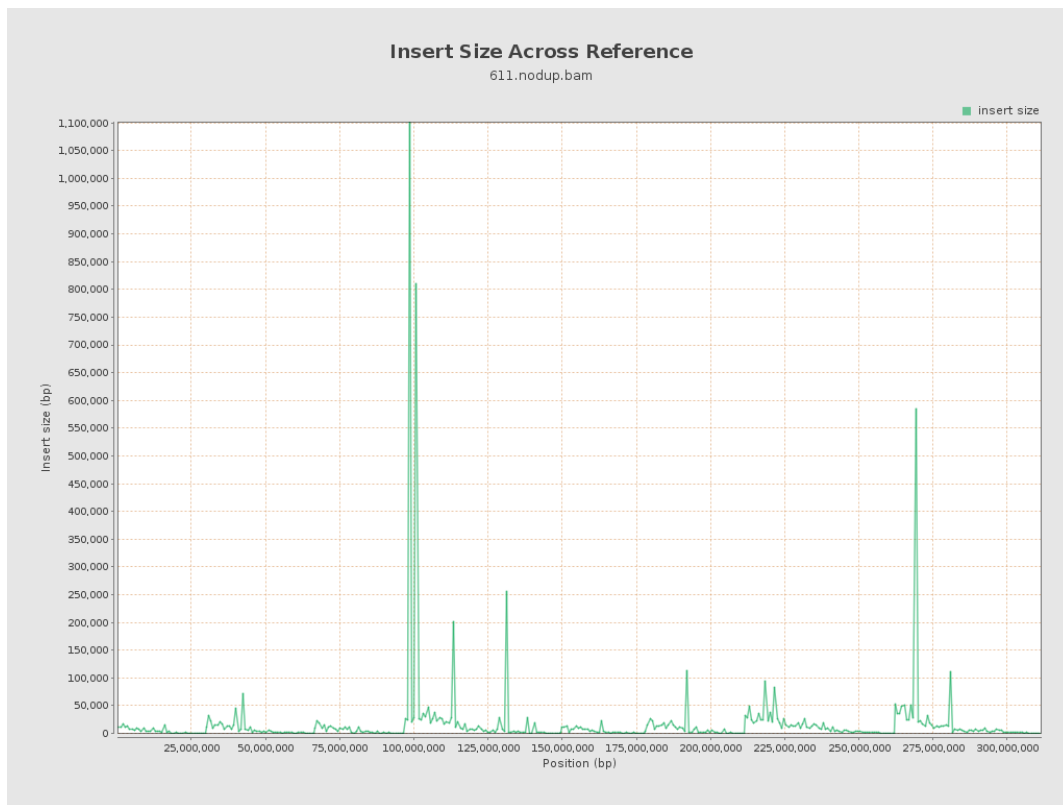
12. Results : Mapping Quality Across Reference



13. Results : Mapping Quality Histogram



14. Results : Insert Size Across Reference



15. Results : Insert Size Histogram

