

All statistics are based on contigs of size  $\geq$  5000 bp, unless otherwise noted  
(e.g. "# contigs ( $\geq$  0 bp)" and "Total length ( $\geq$  0 bp)" include all contigs)

## Misassemblies report

|  | r10_1bin_1_MP | r10_1bin_1_MP_helen | r10_1bin_1_r1_medaka | r10_1bin_1_r2_medaka | r10_1bin_1_racon_r1 | r10_1bin_1_racon_r2 | r10_1bin_1_raw | r10_1bin_2_MP | r10_1bin_2_MP_helen | r10_1bin_2_r1_medaka | r10_1bin_2_racon_r1 | r10_1bin_2_racon_r2 | r10_1bin_2_raw | r10_1bin_3_MP | r10_1bin_3_MP_helen | r10_1bin_3_r1_medaka | r10_1bin_3_r2_medaka | r10_1bin_3_racon_r1 | r10_1bin_3_racon_r2 | r10_1bin_3_raw |         |
|--|---------------|---------------------|----------------------|----------------------|---------------------|---------------------|----------------|---------------|---------------------|----------------------|---------------------|---------------------|----------------|---------------|---------------------|----------------------|----------------------|---------------------|---------------------|----------------|---------|
| # misassemblies                                | 13            | 13                  | 13                   | 13                   | 13                  | 13                  | 14             | 13            | 13                  | 13                   | 13                  | 13                  | 13             | 13            | 13                  | 13                   | 13                   | 13                  | 13                  | 15             |         |
| # contig misassemblies                         | 13            | 13                  | 13                   | 13                   | 13                  | 13                  | 14             | 13            | 13                  | 13                   | 13                  | 13                  | 13             | 13            | 13                  | 13                   | 13                   | 13                  | 13                  | 15             |         |
| # c. relocations                               | 0             | 0                   | 0                    | 0                    | 0                   | 0                   | 0              | 0             | 0                   | 0                    | 0                   | 0                   | 0              | 0             | 0                   | 0                    | 0                    | 0                   | 0                   | 0              |         |
| # c. translocations                            | 13            | 13                  | 13                   | 13                   | 13                  | 13                  | 14             | 13            | 13                  | 13                   | 13                  | 13                  | 13             | 13            | 13                  | 13                   | 13                   | 13                  | 13                  | 15             |         |
| # c. inversions                                | 0             | 0                   | 0                    | 0                    | 0                   | 0                   | 0              | 0             | 0                   | 0                    | 0                   | 0                   | 0              | 0             | 0                   | 0                    | 0                    | 0                   | 0                   | 0              |         |
| # scaffold misassemblies                       | 0             | 0                   | 0                    | 0                    | 0                   | 0                   | 0              | 0             | 0                   | 0                    | 0                   | 0                   | 0              | 0             | 0                   | 0                    | 0                    | 0                   | 0                   | 0              |         |
| # s. relocations                               | 0             | 0                   | 0                    | 0                    | 0                   | 0                   | 0              | 0             | 0                   | 0                    | 0                   | 0                   | 0              | 0             | 0                   | 0                    | 0                    | 0                   | 0                   | 0              |         |
| # s. translocations                            | 0             | 0                   | 0                    | 0                    | 0                   | 0                   | 0              | 0             | 0                   | 0                    | 0                   | 0                   | 0              | 0             | 0                   | 0                    | 0                    | 0                   | 0                   | 0              |         |
| # s. inversions                                | 0             | 0                   | 0                    | 0                    | 0                   | 0                   | 0              | 0             | 0                   | 0                    | 0                   | 0                   | 0              | 0             | 0                   | 0                    | 0                    | 0                   | 0                   | 0              |         |
| # misassembled contigs                         | 1             | 1                   | 1                    | 1                    | 1                   | 1                   | 1              | 1             | 1                   | 1                    | 1                   | 1                   | 1              | 1             | 1                   | 1                    | 1                    | 1                   | 1                   | 1              |         |
| Misassembled contigs length                    | 2719717       | 2717967             | 2719596              | 2719631              | 2720606             | 2720621             | 2718836        | 2719580       | 2717932             | 2719533              | 2719556             | 2720595             | 2720631        | 2718436       | 2719746             | 2717979              | 2719620              | 2719614             | 2720627             | 2720623        | 2718867 |
| # possibly misassembled contigs                | 1             | 1                   | 1                    | 1                    | 1                   | 1                   | 1              | 1             | 1                   | 1                    | 1                   | 1                   | 1              | 1             | 1                   | 1                    | 1                    | 1                   | 1                   | 1              |         |
| # possible misassemblies                       | 10            | 10                  | 10                   | 10                   | 10                  | 10                  | 10             | 10            | 10                  | 10                   | 10                  | 10                  | 10             | 10            | 10                  | 10                   | 10                   | 10                  | 10                  | 20             |         |
| # local misassemblies                          | 9             | 9                   | 10                   | 10                   | 10                  | 9                   | 21             | 9             | 9                   | 9                    | 9                   | 10                  | 9              | 20            | 10                  | 10                   | 10                   | 10                  | 10                  | 19             |         |
| # scaffold gap ext. mis.                       | 0             | 0                   | 0                    | 0                    | 0                   | 0                   | 0              | 0             | 0                   | 0                    | 0                   | 0                   | 0              | 0             | 0                   | 0                    | 0                    | 0                   | 0                   | 0              |         |
| # scaffold gap loc. mis.                       | 0             | 0                   | 0                    | 0                    | 0                   | 0                   | 0              | 0             | 0                   | 0                    | 0                   | 0                   | 0              | 0             | 0                   | 0                    | 0                    | 0                   | 0                   | 0              |         |
| # misassemblies caused by fragmented reference | 26            | 26                  | 26                   | 26                   | 26                  | 26                  | 21             | 26            | 26                  | 26                   | 26                  | 26                  | 26             | 25            | 26                  | 26                   | 26                   | 26                  | 26                  | 22             |         |
| # unaligned mis. contigs                       | 6             | 6                   | 6                    | 6                    | 6                   | 6                   | 5              | 6             | 6                   | 6                    | 6                   | 6                   | 6              | 5             | 6                   | 6                    | 6                    | 6                   | 6                   | 4              |         |
| # mismatches                                   | 7702          | 6887                | 7677                 | 7751                 | 7781                | 7979                | 6740           | 7673          | 6751                | 7835                 | 7825                | 7683                | 8146           | 6614          | 7716                | 6886                 | 7690                 | 7727                | 7744                | 7811           | 6835    |
| # indels                                       | 2999          | 1135                | 2019                 | 2082                 | 3059                | 3100                | 4418           | 2960          | 1149                | 2001                 | 2030                | 2952                | 3032           | 4248          | 3006                | 1139                 | 2041                 | 2063                | 3050                | 3052           | 4445    |
| # indels (<= 5 bp)                             | 2928          | 1069                | 1968                 | 2031                 | 3004                | 3047                | 4361           | 2886          | 1084                | 1950                 | 1979                | 2897                | 2980           | 4187          | 2938                | 1076                 | 1990                 | 2012                | 2996                | 3000           | 4390    |
| # indels (> 5 bp)                              | 71            | 66                  | 51                   | 51                   | 55                  | 53                  | 57             | 74            | 65                  | 51                   | 55                  | 52                  | 61             | 68            | 63                  | 51                   | 51                   | 54                  | 52                  | 55             |         |
| Indels length                                  | 6908          | 4925                | 5356                 | 5426                 | 6824                | 6843                | 8505           | 6922          | 4937                | 5336                 | 5367                | 6744                | 6762           | 8365          | 6889                | 4913                 | 5369                 | 5389                | 6821                | 6739           | 8527    |

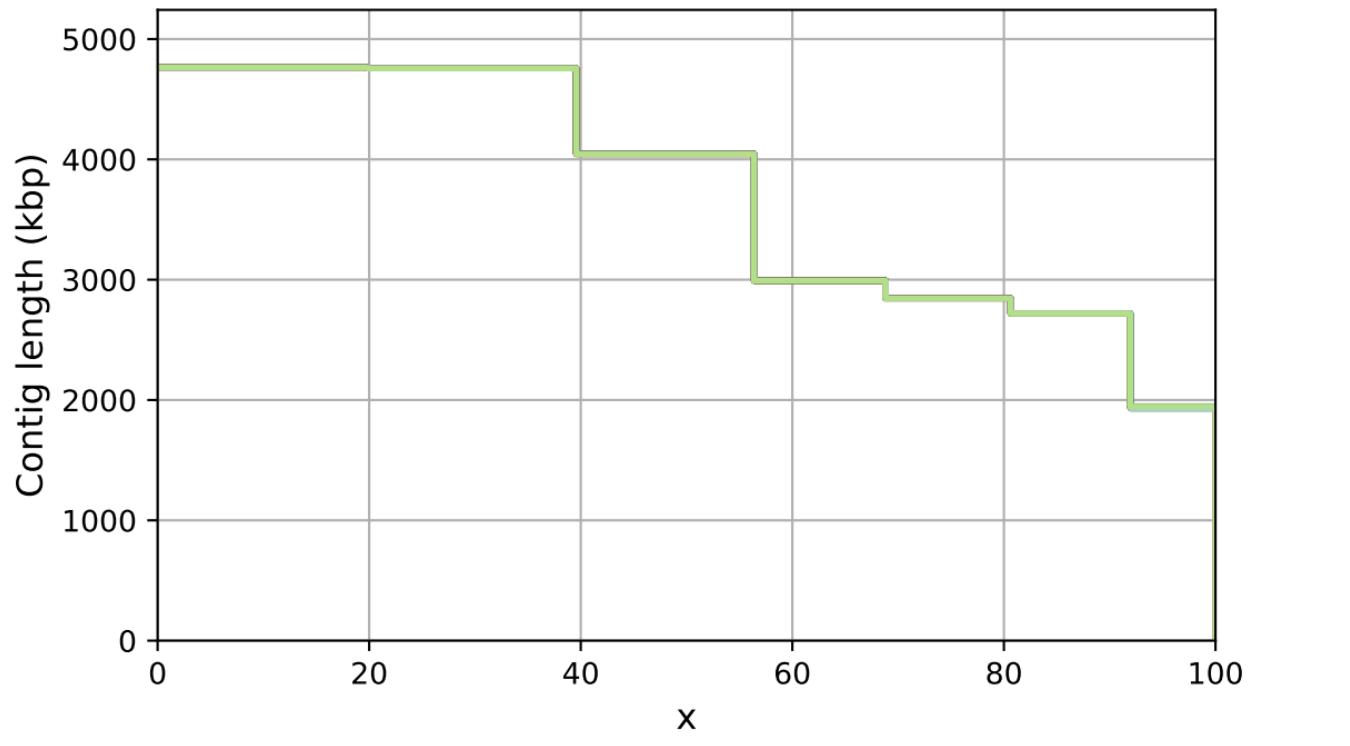
All statistics are based on contigs of size  $\geq 5000$  bp, unless otherwise noted  
(e.g., "# contigs ( $\geq 0$  bp)" and "Total length ( $\geq 0$  bp)" include all contigs).

## Unaligned report

|                               | r10_1bin_1_MP | r10_1bin_1_MP_helen | r10_1bin_1_r1_medaka | r10_1bin_1_r2_medaka | r10_1bin_1_racon_r1 | r10_1bin_1_racon_r2 | r10_1bin_1_raw | r10_1bin_2_MP | r10_1bin_2_MP_helen | r10_1bin_2_r1_medaka | r10_1bin_2_r2_medaka | r10_1bin_2_racon_r1 | r10_1bin_2_racon_r2 | r10_1bin_2_raw | r10_1bin_3_MP | r10_1bin_3_MP_helen | r10_1bin_3_r1_medaka | r10_1bin_3_r2_medaka | r10_1bin_3_racon_r1 | r10_1bin_3_racon_r2 | r10_1bin_3_raw |
|-------------------------------|---------------|---------------------|----------------------|----------------------|---------------------|---------------------|----------------|---------------|---------------------|----------------------|----------------------|---------------------|---------------------|----------------|---------------|---------------------|----------------------|----------------------|---------------------|---------------------|----------------|
| # fully unaligned contigs     | 0             | 0                   | 0                    | 0                    | 0                   | 0                   | 0              | 0             | 0                   | 0                    | 0                    | 0                   | 0                   | 0              | 0             | 0                   | 0                    | 0                    | 0                   | 0                   | 0              |
| Fully unaligned length        | 0             | 0                   | 0                    | 0                    | 0                   | 0                   | 0              | 0             | 0                   | 0                    | 0                    | 0                   | 0                   | 0              | 0             | 0                   | 0                    | 0                    | 0                   | 0                   | 0              |
| # partially unaligned contigs | 7             | 7                   | 7                    | 7                    | 7                   | 7                   | 7              | 7             | 7                   | 7                    | 7                    | 7                   | 7                   | 7              | 7             | 7                   | 7                    | 7                    | 7                   | 7                   | 7              |
| Partially unaligned length    | 21274945      | 21272394            | 21273393             | 21264885             | 21262974            | 21256165            | 21321354       | 21274720      | 21273304            | 21273244             | 21261562             | 21263785            | 21255162            | 21320856       | 21275235      | 21270684            | 21273194             | 21265762             | 21262104            | 21257623            | 21320346       |
| # N's                         | 0             | 0                   | 0                    | 0                    | 0                   | 0                   | 0              | 0             | 10                  | 0                    | 0                    | 0                   | 0                   | 0              | 0             | 0                   | 0                    | 0                    | 0                   | 0                   | 0              |

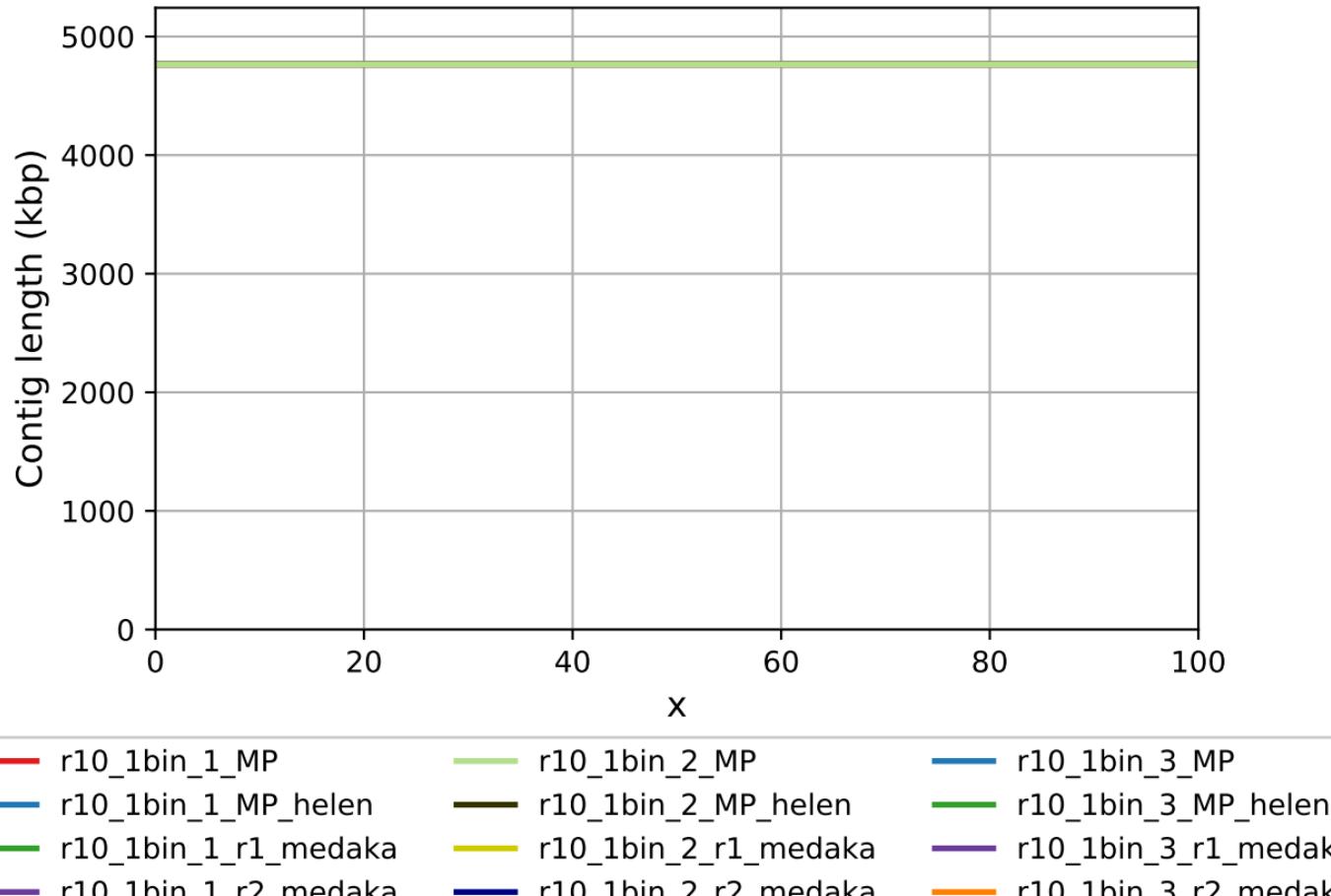
All statistics are based on contigs of size  $\geq 5000$  bp, unless otherwise noted  
(e.g., "# contigs ( $\geq 0$  bp)" and "Total length ( $\geq 0$  bp)" include all contigs).

Nx

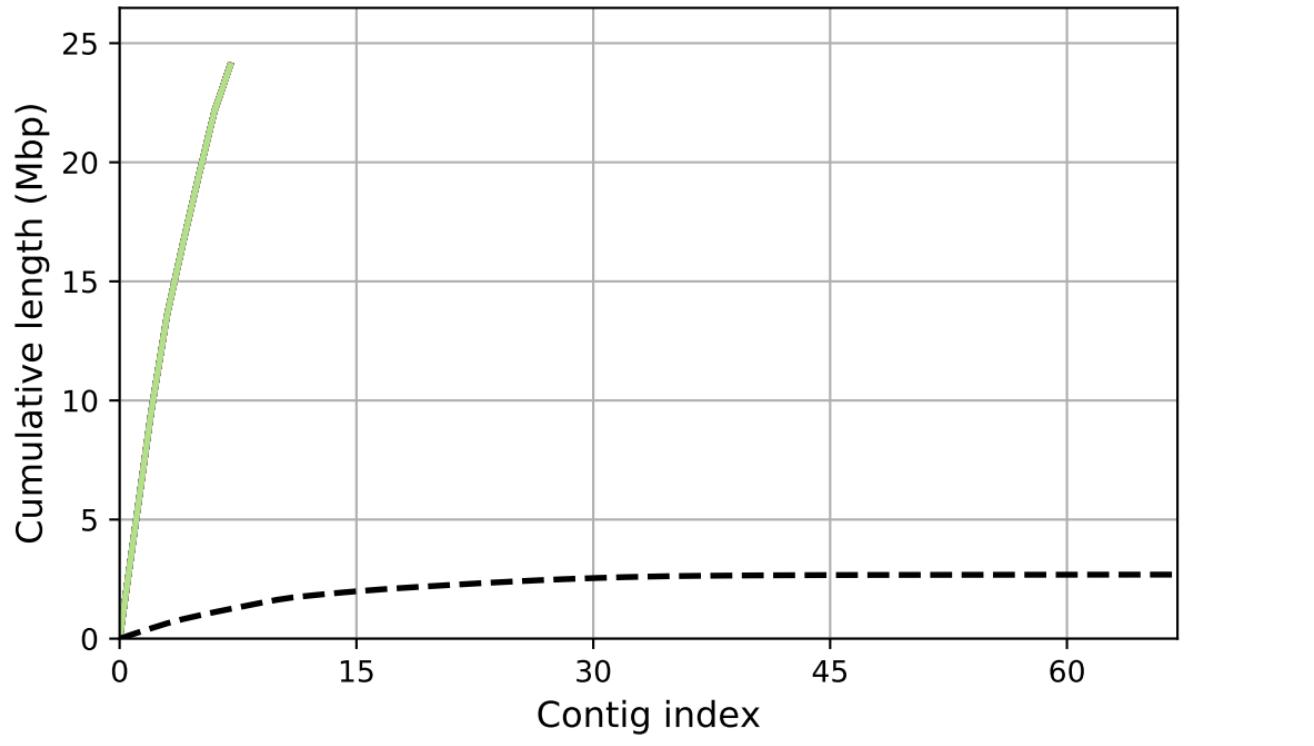


- r10\_1bin\_1\_MP
- r10\_1bin\_1\_MP\_helen
- r10\_1bin\_1\_r1\_medaka
- r10\_1bin\_1\_r2\_medaka
- r10\_1bin\_2\_MP
- r10\_1bin\_2\_MP\_helen
- r10\_1bin\_2\_r1\_medaka
- r10\_1bin\_2\_r2\_medaka
- r10\_1bin\_3\_MP
- r10\_1bin\_3\_MP\_helen
- r10\_1bin\_3\_r1\_medaka
- r10\_1bin\_3\_r2\_medaka

# NGx

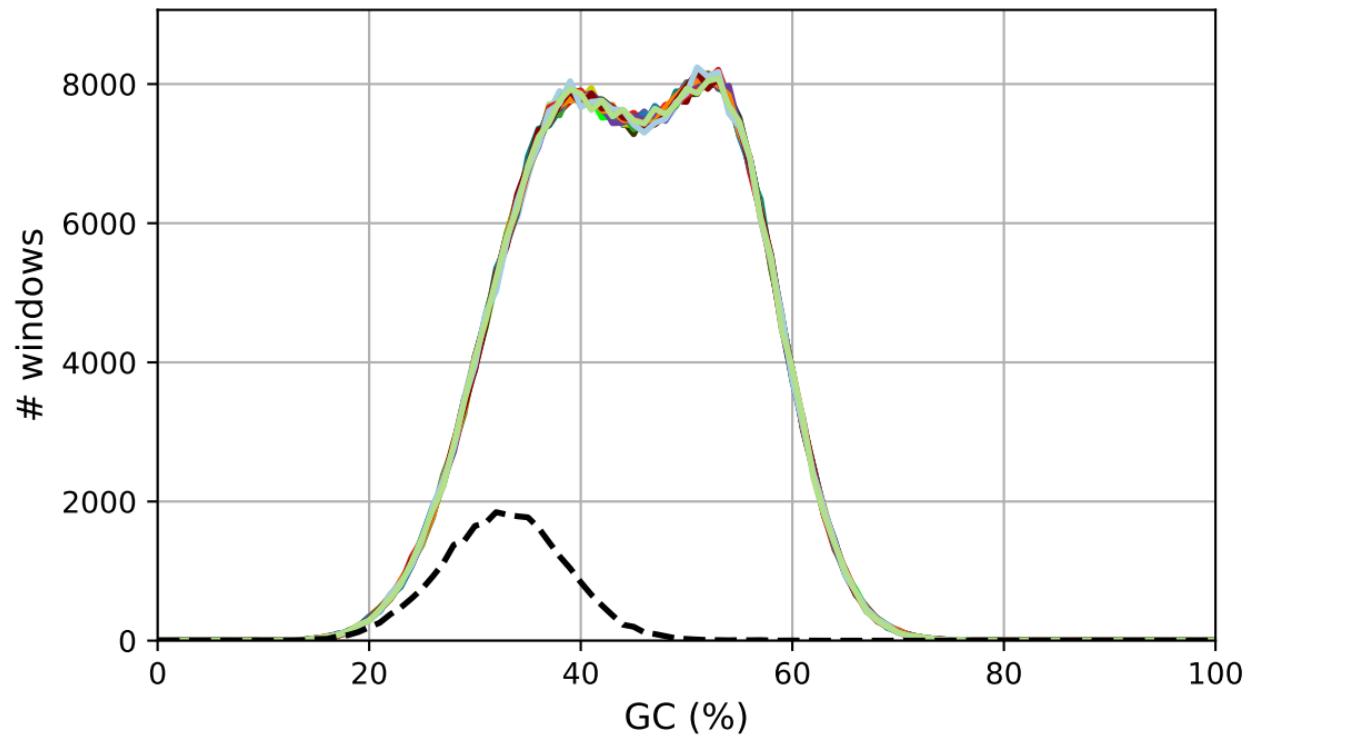


Cumulative length



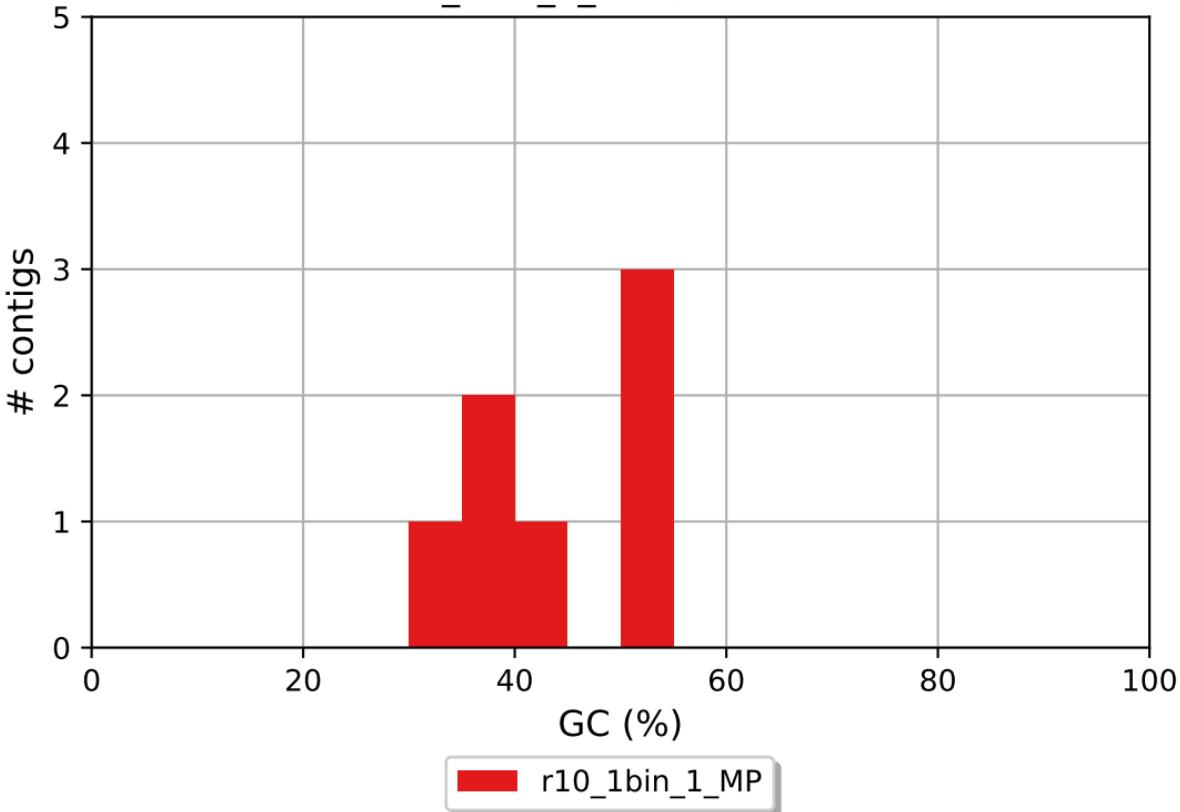
— r10\_1bin\_1\_MP  
— r10\_1bin\_1\_MP\_helen  
— r10\_1bin\_1\_r1\_medaka  
— r10\_1bin\_1\_r2\_medaka  
— r10\_1bin\_2\_MP\_helen  
— r10\_1bin\_2\_r1\_medaka  
— r10\_1bin\_2\_r2\_medaka  
— r10\_1bin\_2\_racoon\_r1  
— r10\_1bin\_3\_MP\_helen  
— r10\_1bin\_3\_r1\_medaka  
— r10\_1bin\_3\_r2\_medaka  
— r10\_1bin\_3\_racoon\_r1

## GC content

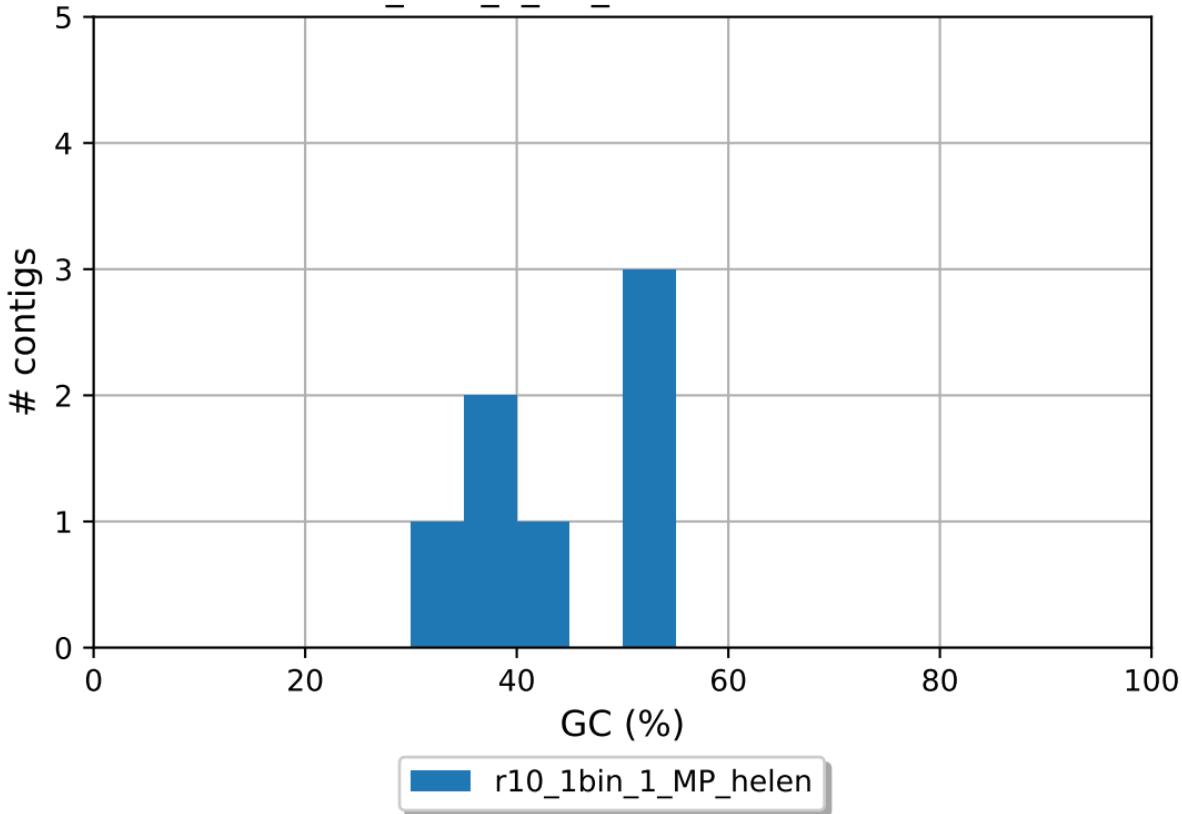


- r10\_1bin\_1\_MP
- r10\_1bin\_1\_MP\_helen
- r10\_1bin\_1\_r1\_medaka
- r10\_1bin\_1\_r2\_medaka
- r10\_1bin\_2\_MP\_helen
- r10\_1bin\_2\_r1\_medaka
- r10\_1bin\_2\_r2\_medaka
- r10\_1bin\_2\_racoon\_r1
- r10\_1bin\_3\_MP\_helen
- r10\_1bin\_3\_r1\_medaka
- r10\_1bin\_3\_r2\_medaka
- r10\_1bin\_3\_racoon\_r1

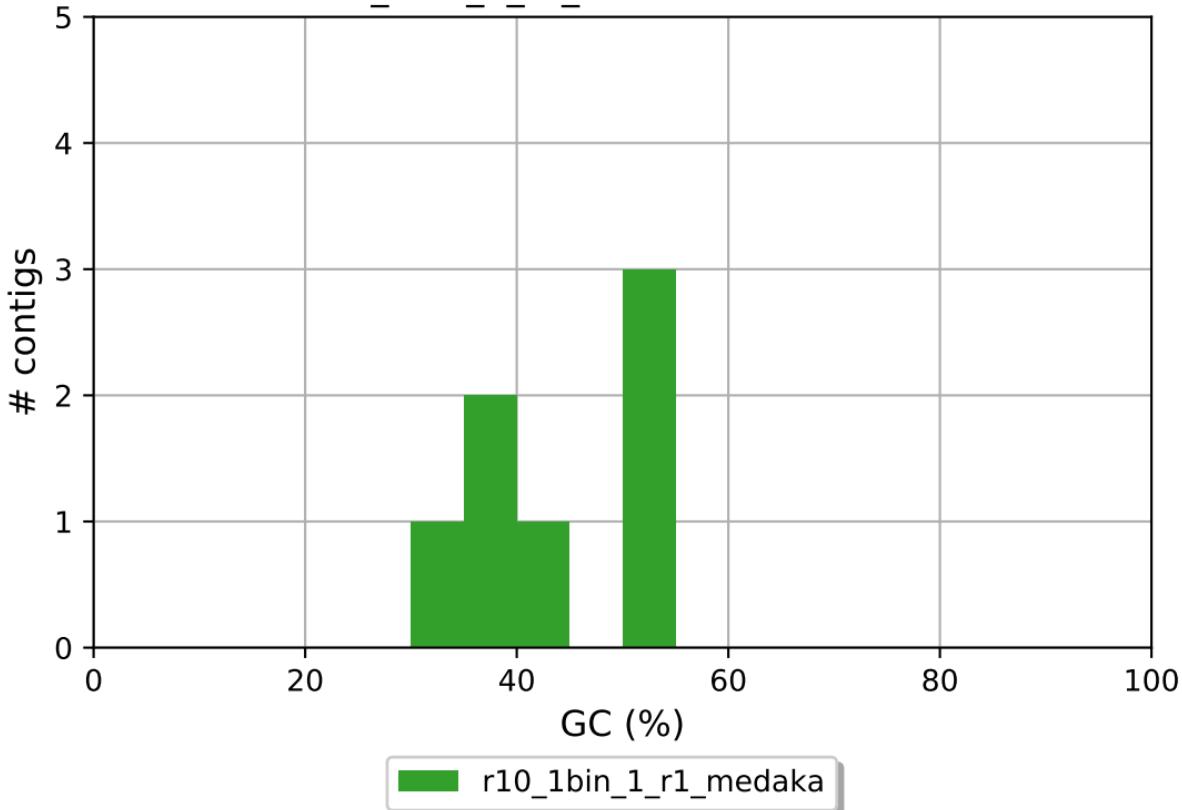
r10\_1bin\_1\_MP GC content



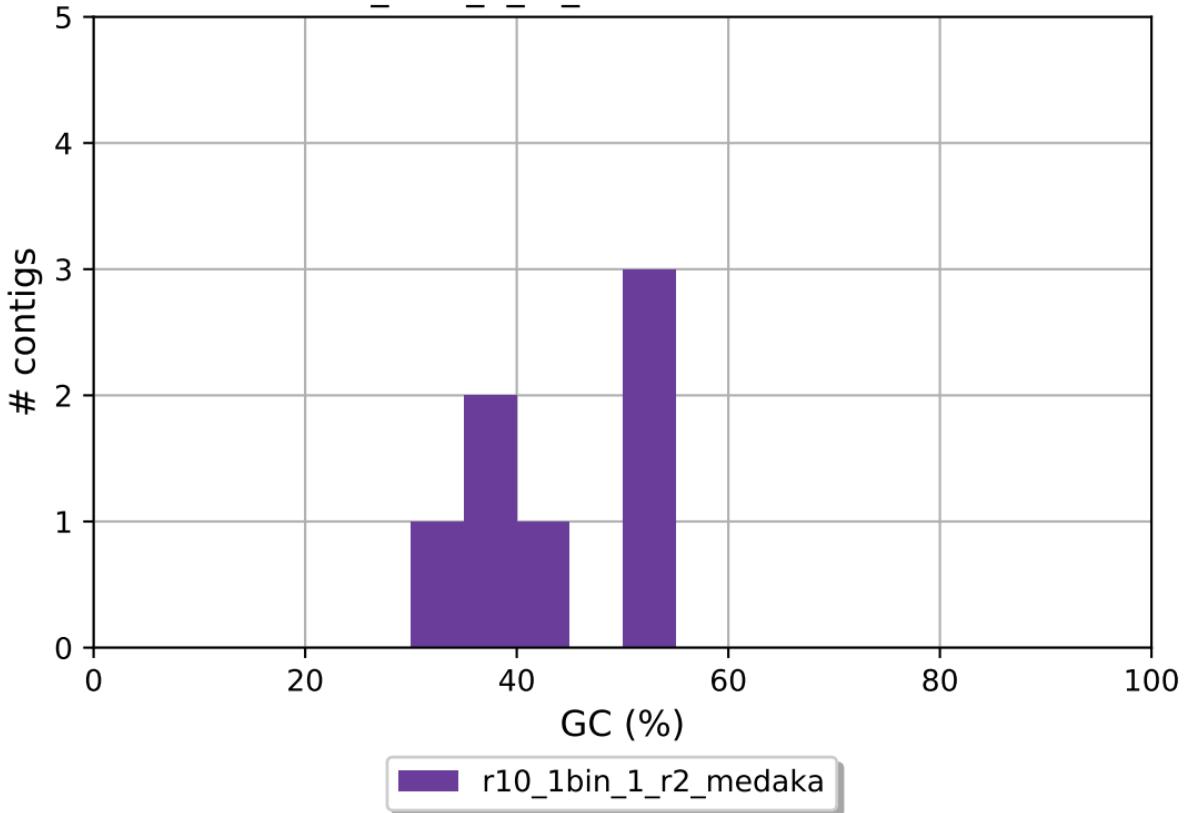
r10\_1bin\_1\_MP\_helen GC content



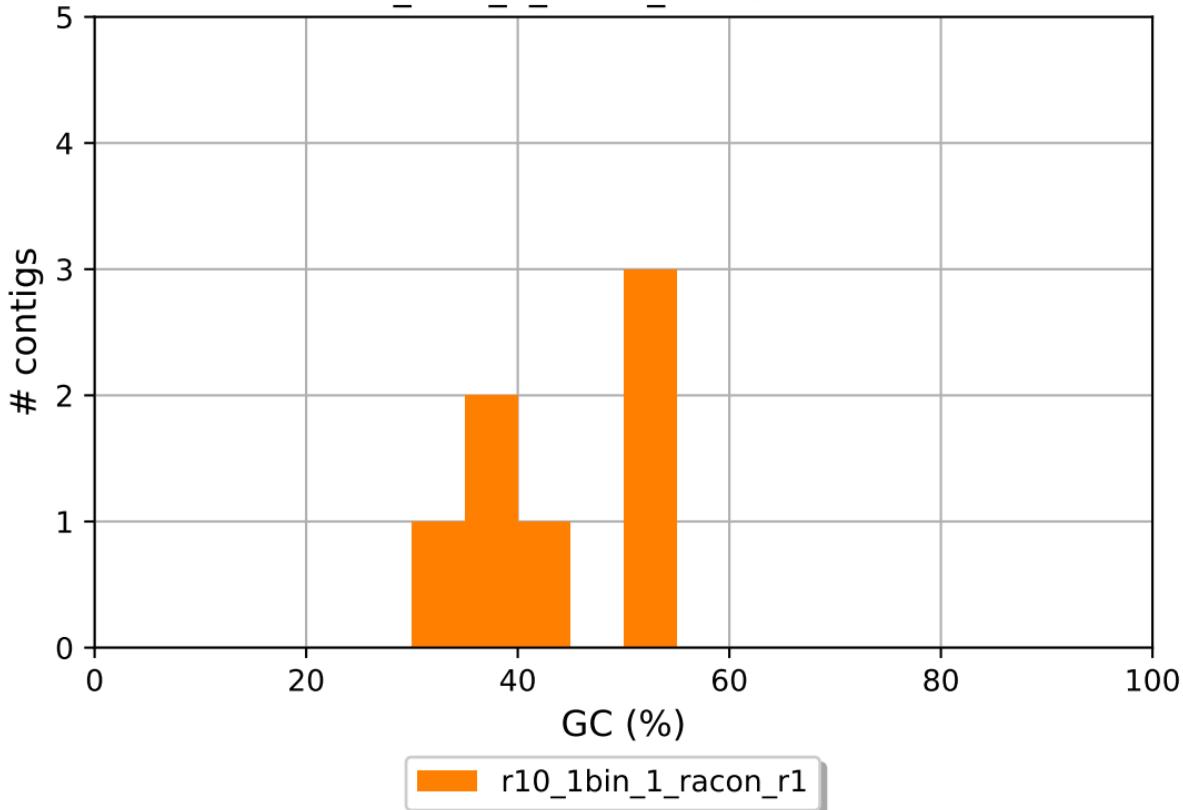
r10\_1bin\_1\_r1\_medaka GC content



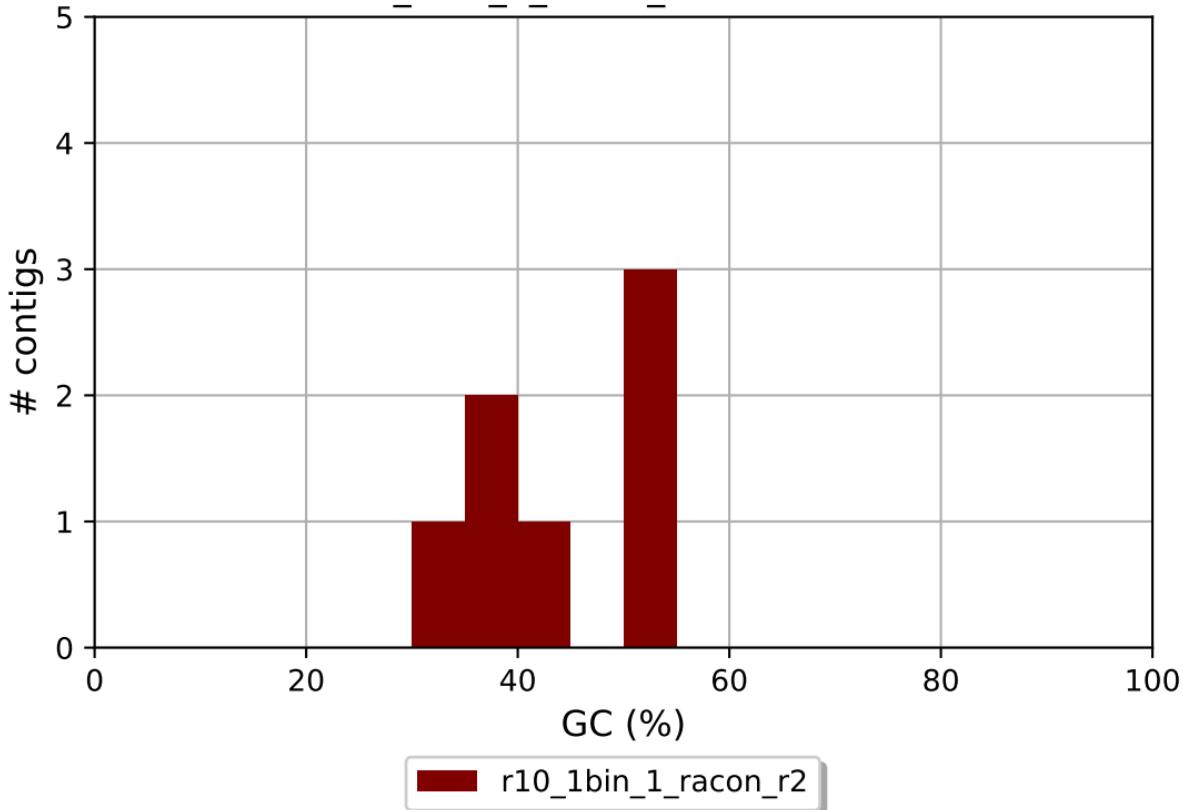
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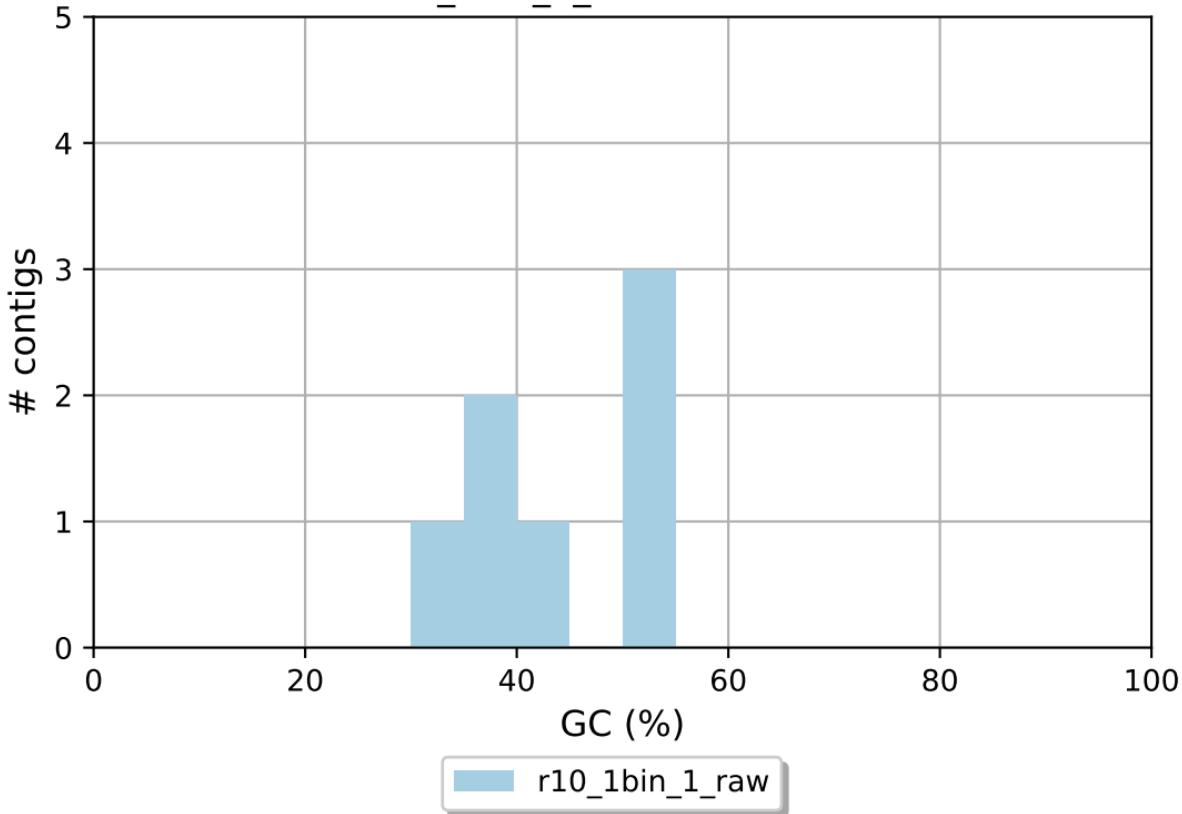
r10\_1bin\_1\_racon\_r1 GC content



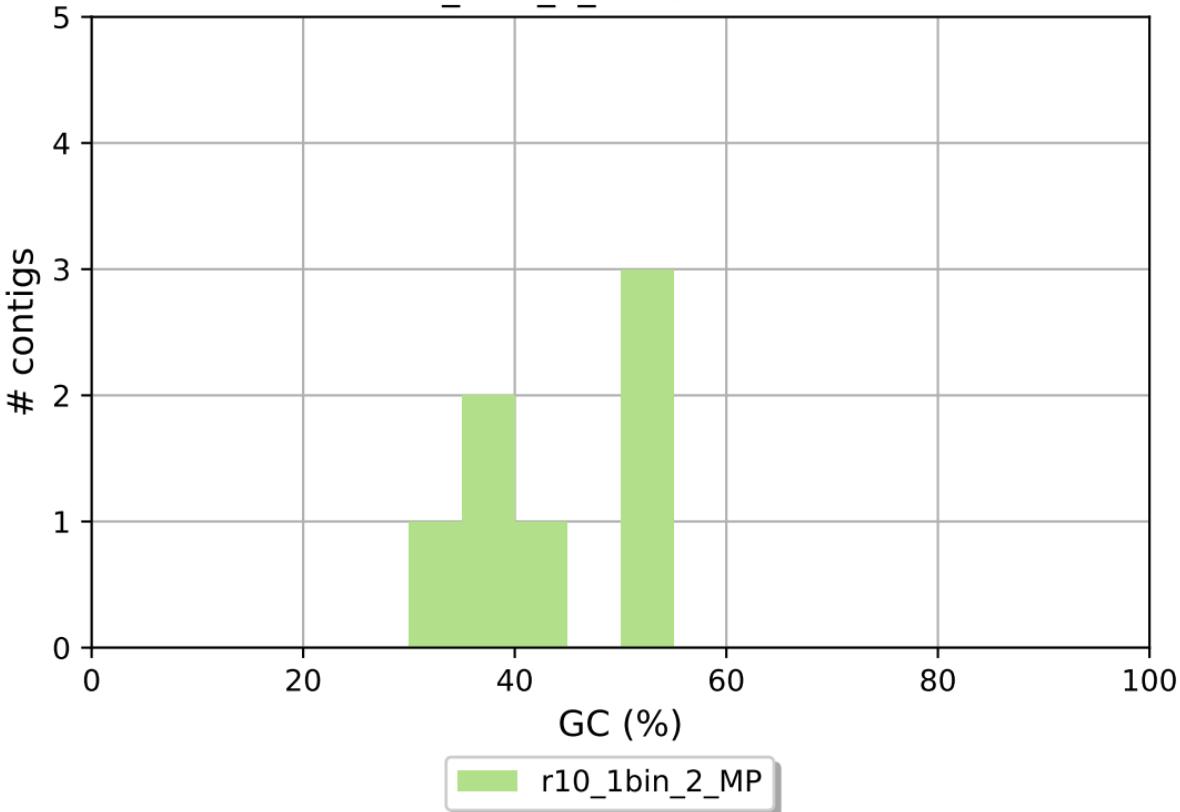
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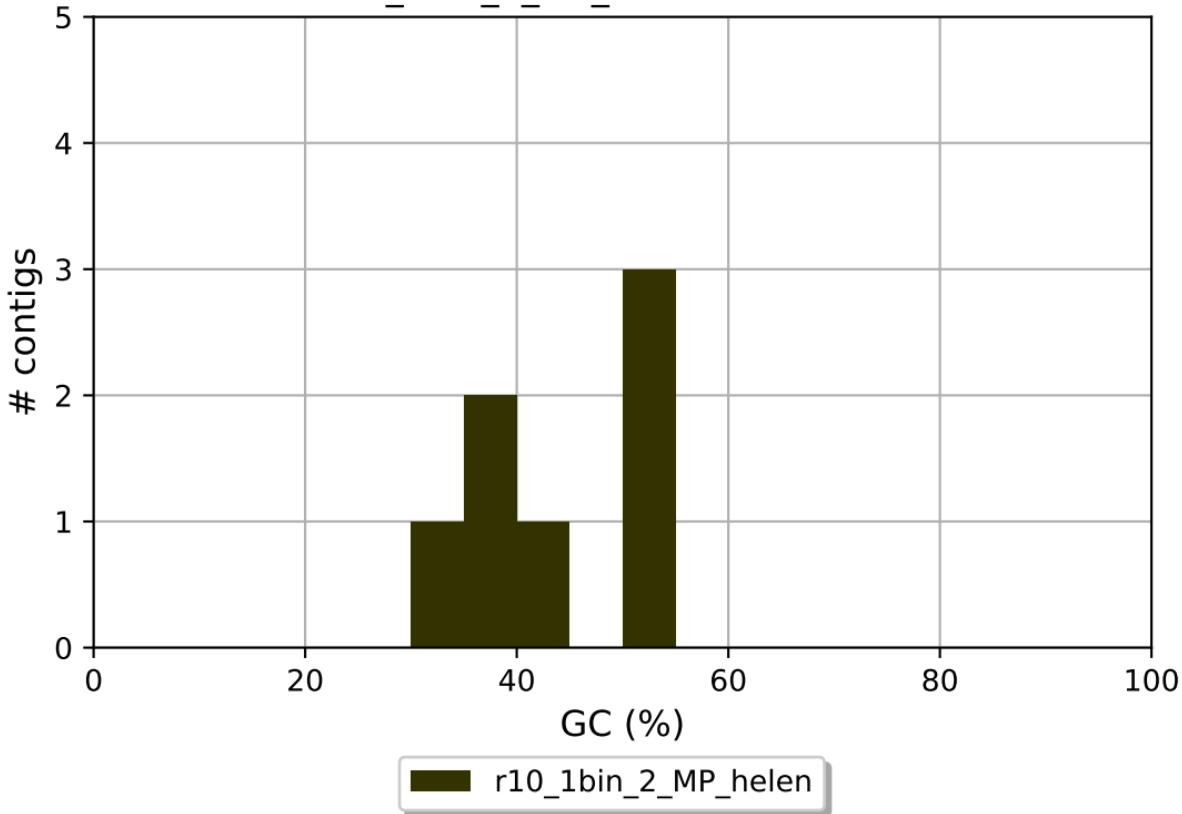
r10\_1bin\_1\_raw GC content



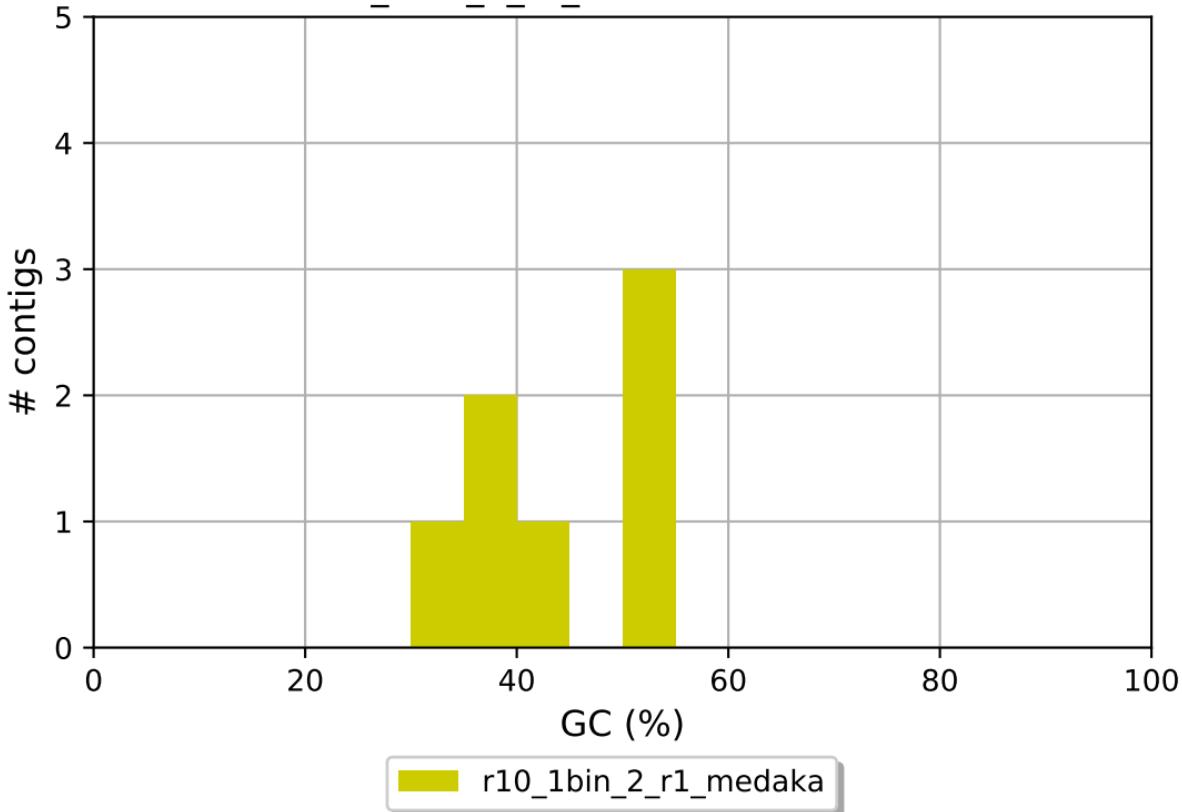
r10\_1bin\_2\_MP GC content



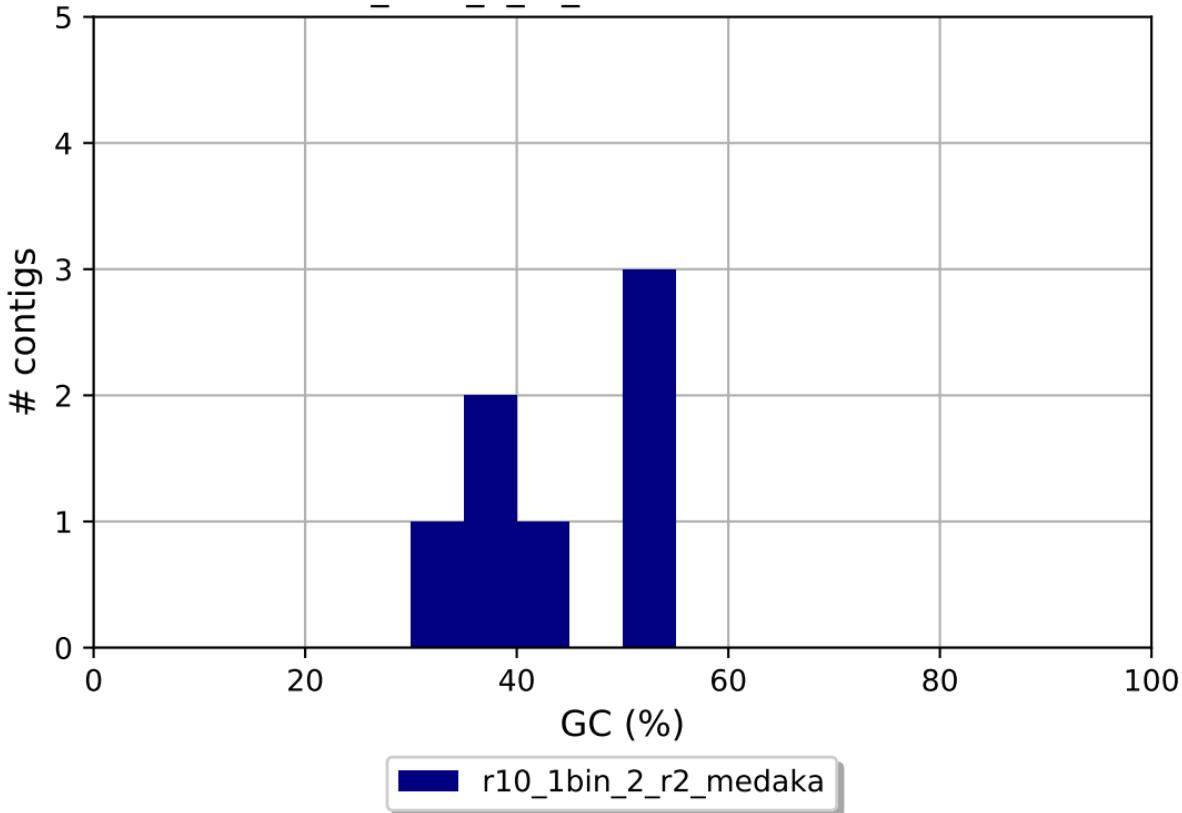
r10\_1bin\_2\_MP\_helen GC content



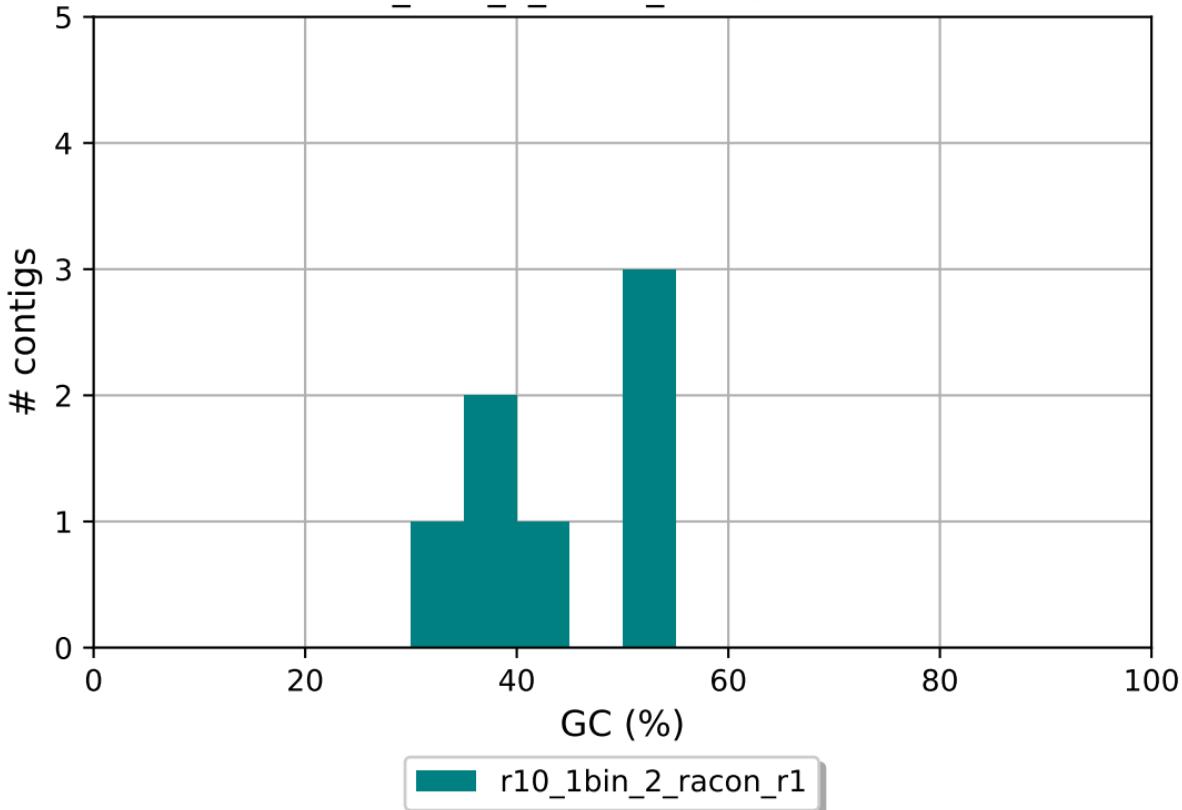
r10\_1bin\_2\_r1\_medaka GC content



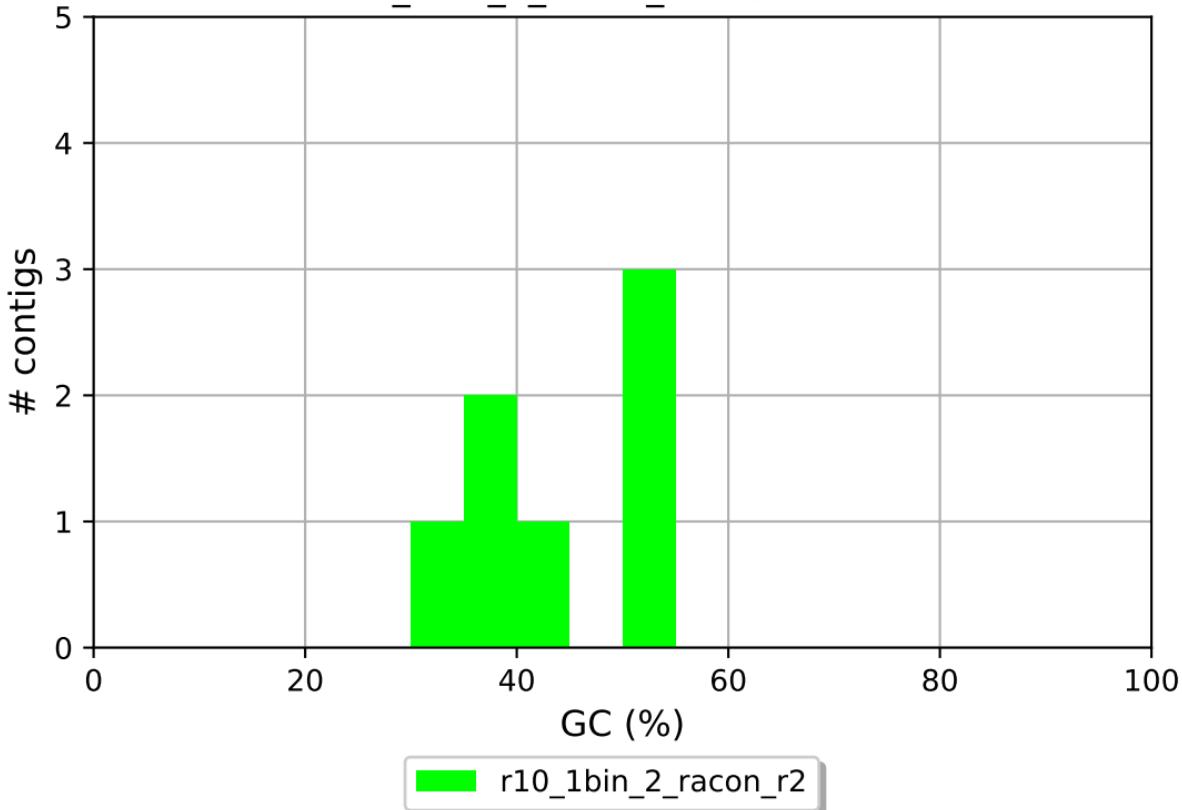
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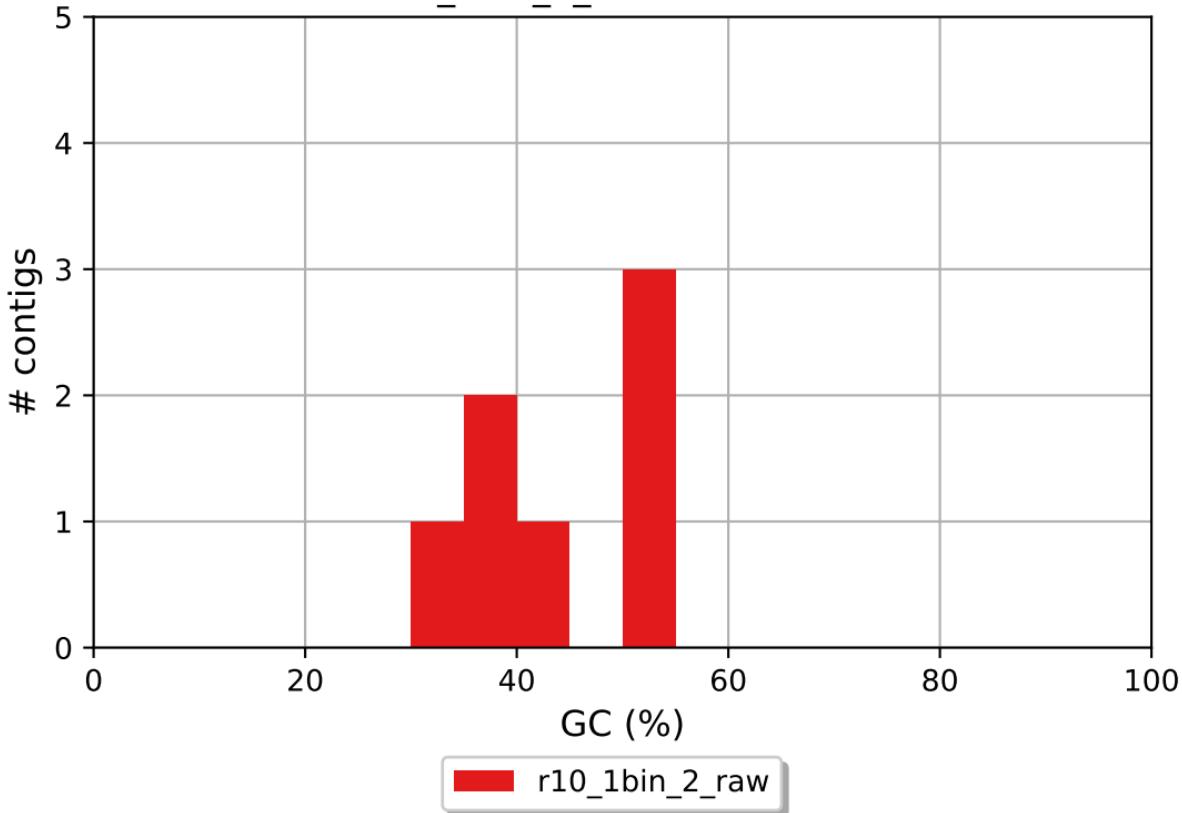
r10\_1bin\_2\_racon\_r1 GC content



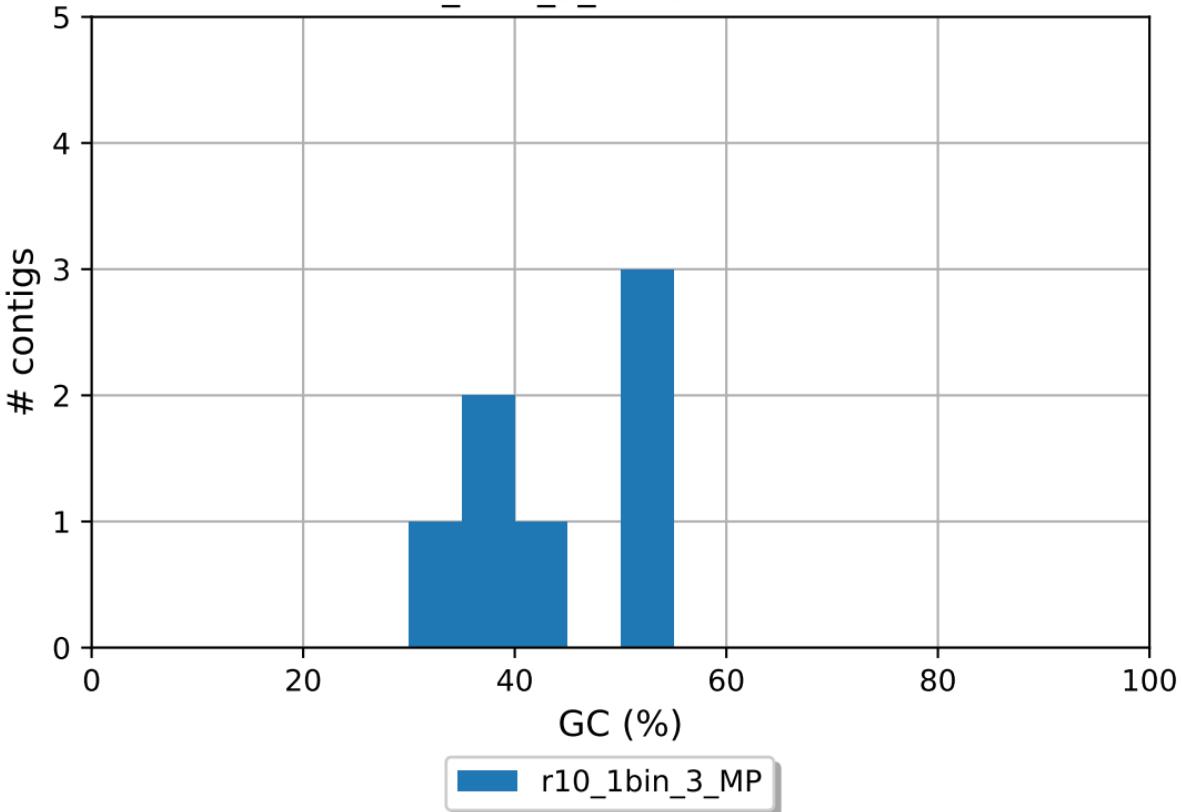
r10\_1bin\_2\_racon\_r2 GC content



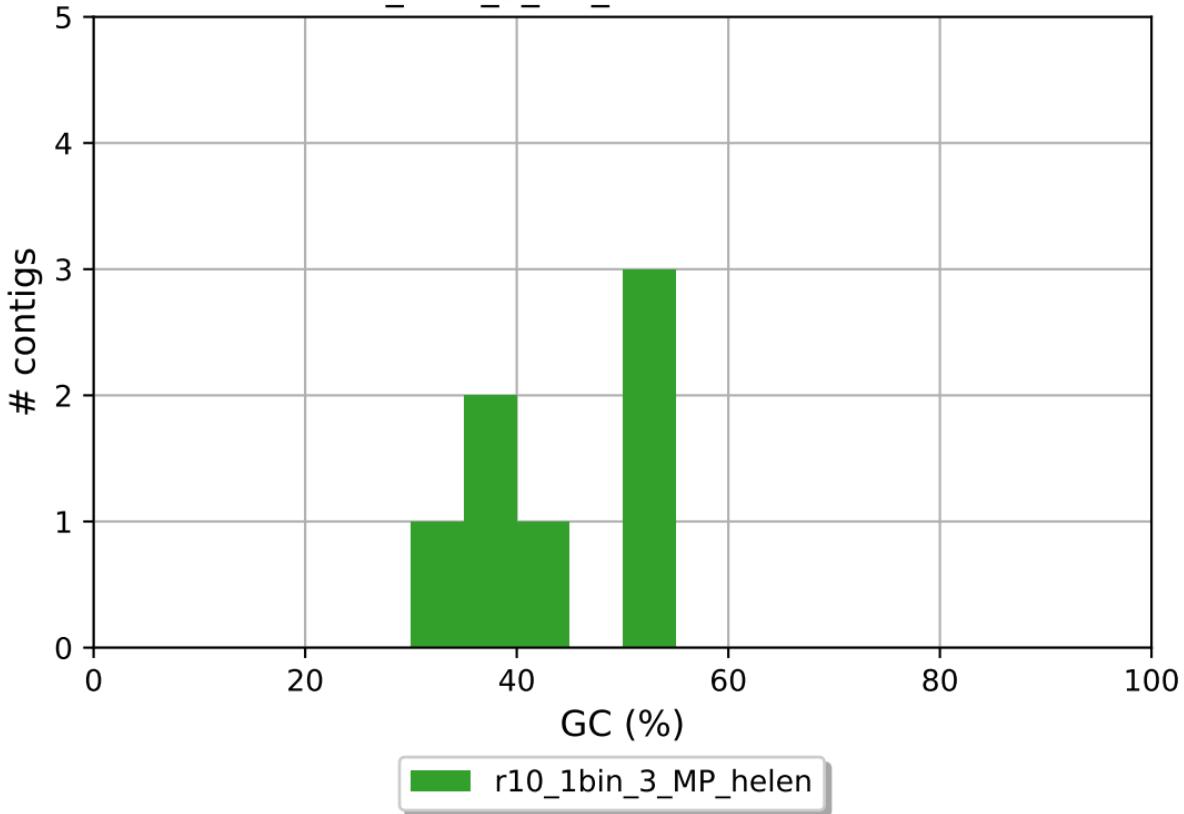
r10\_1bin\_2\_raw GC content



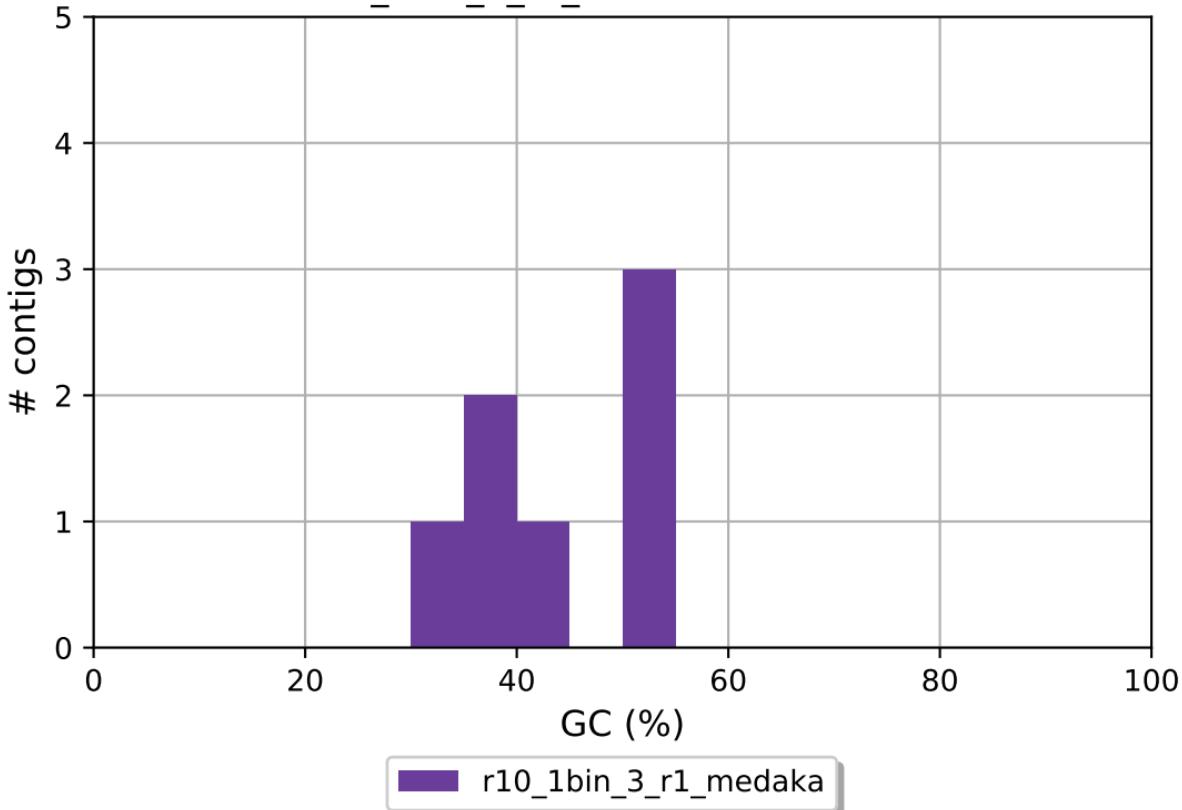
r10\_1bin\_3\_MP GC content



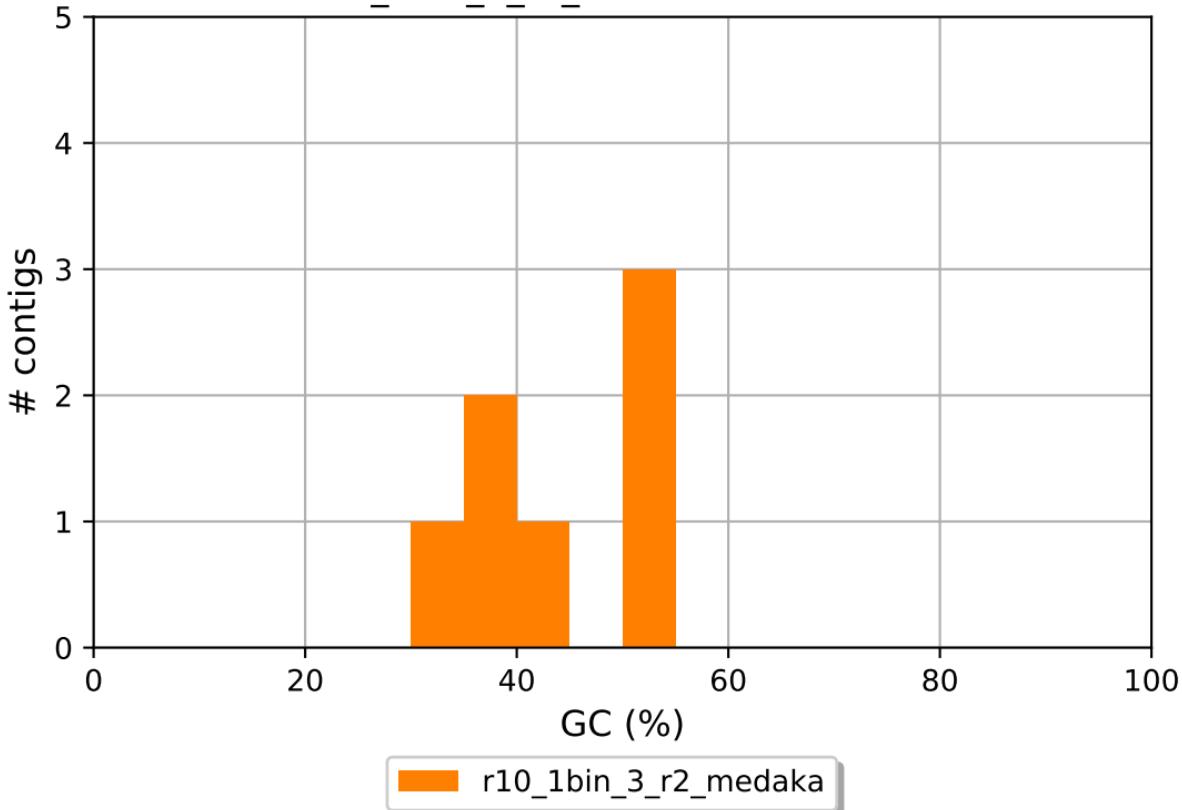
r10\_1bin\_3\_MP\_helen GC content



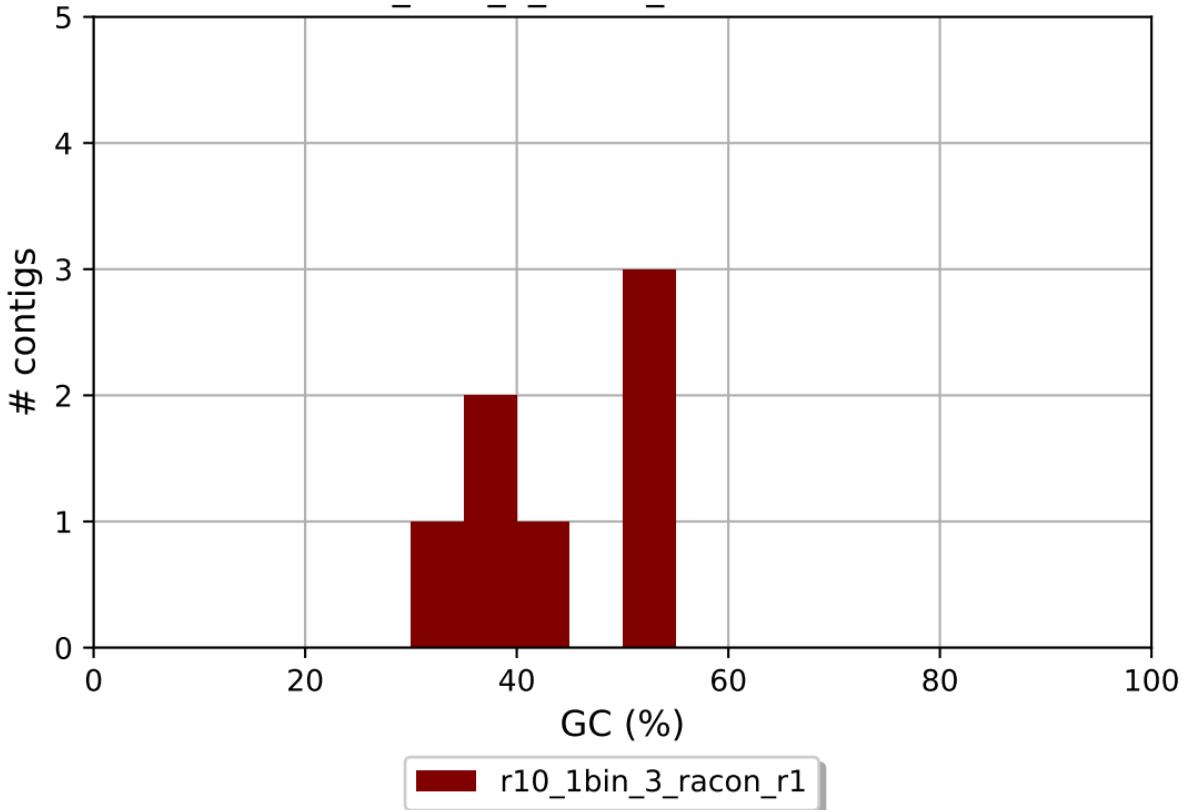
r10\_1bin\_3\_r1\_medaka GC content



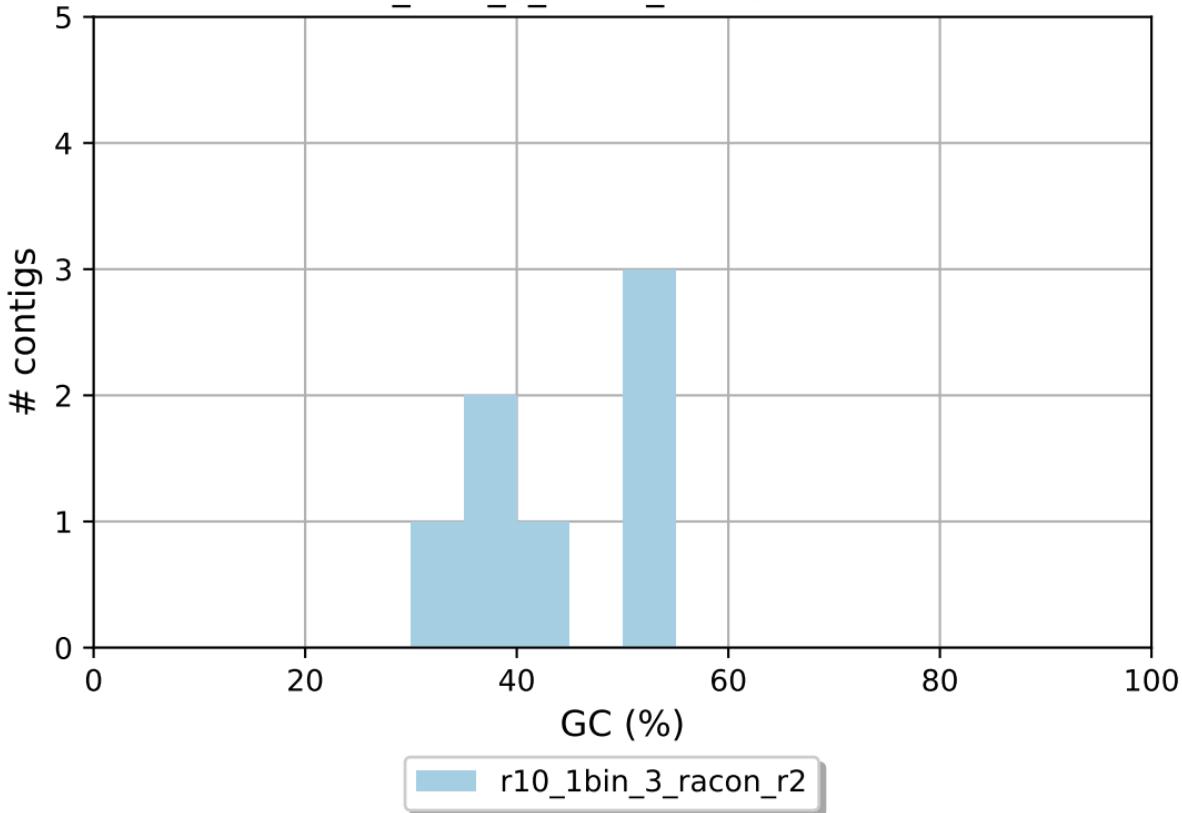
r10\_1bin\_3\_r2\_medaka GC content



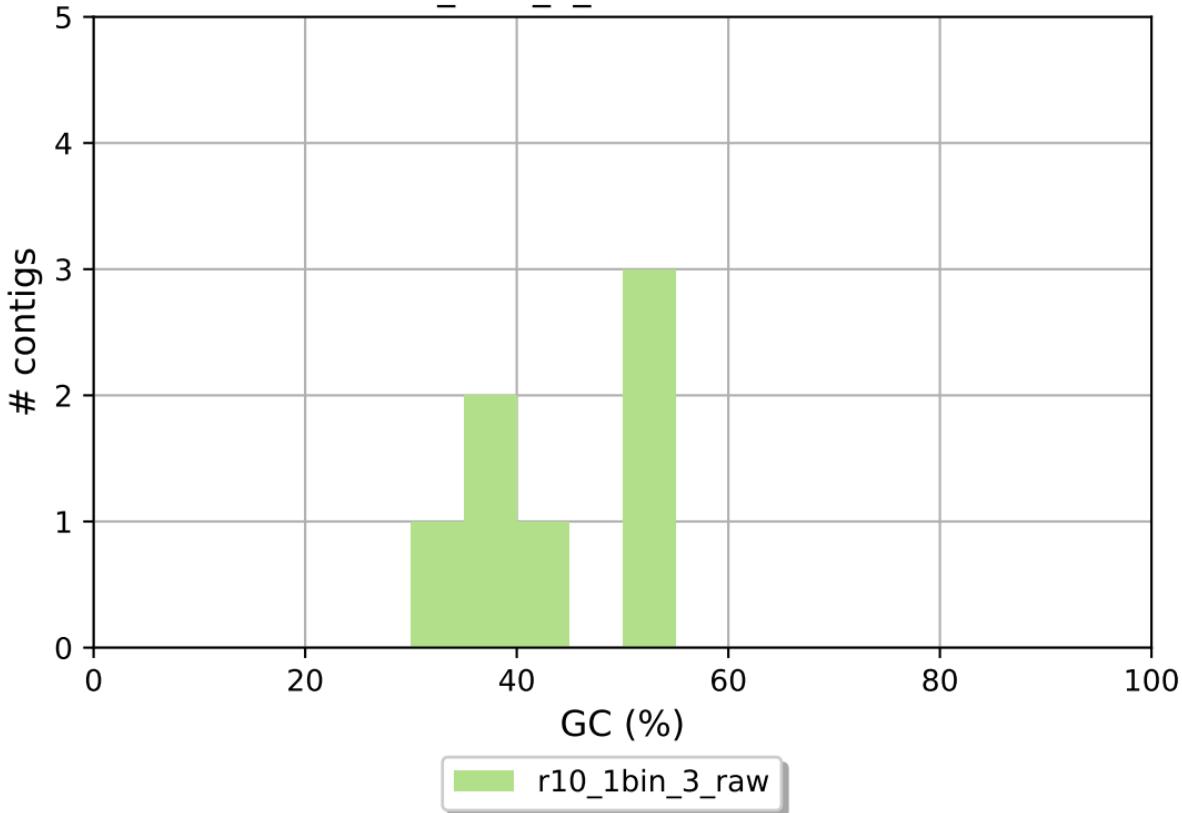
r10\_1bin\_3\_racon\_r1 GC content



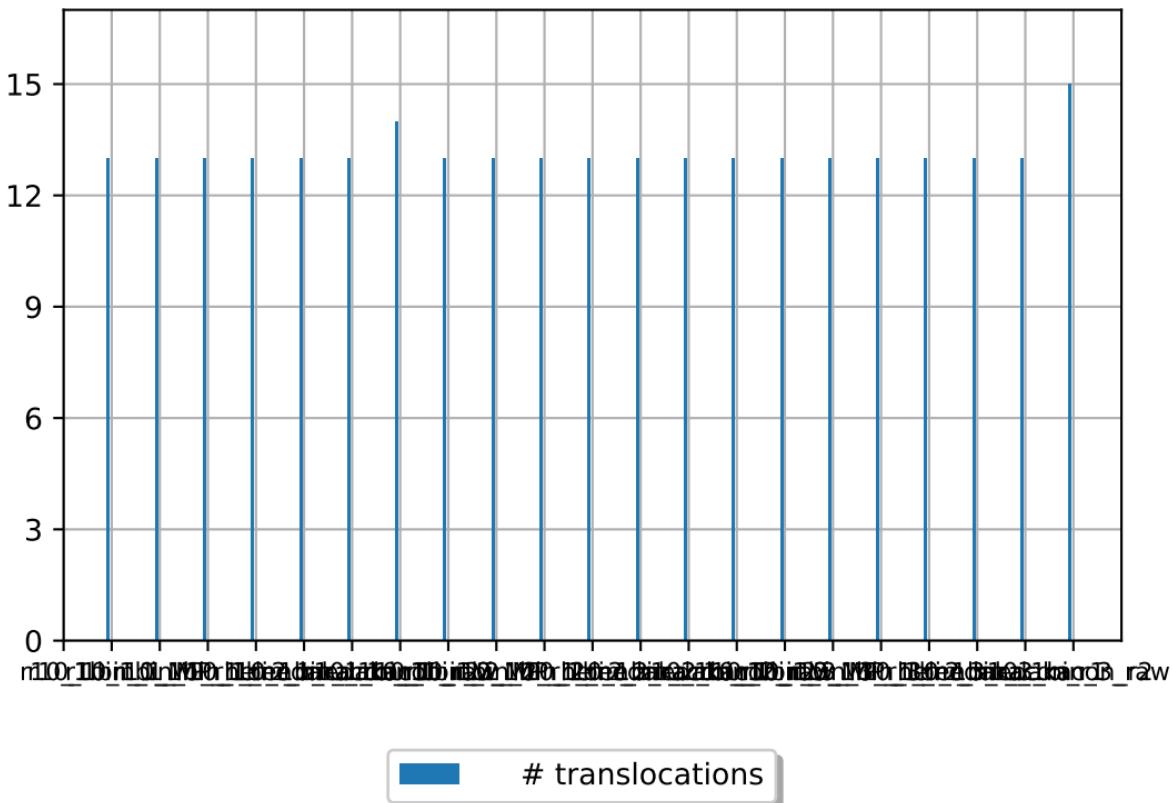
r10\_1bin\_3\_racon\_r2 GC content



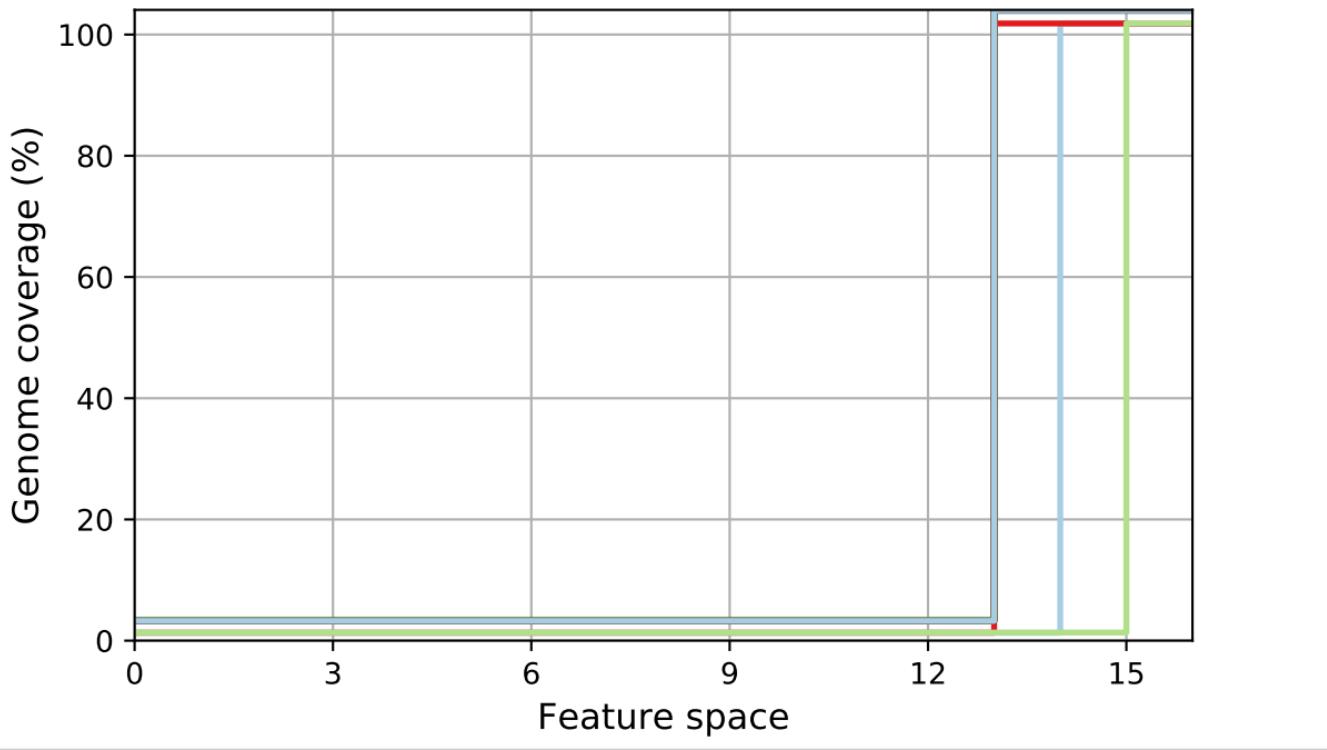
r10\_1bin\_3\_raw GC content



## Misassemblies



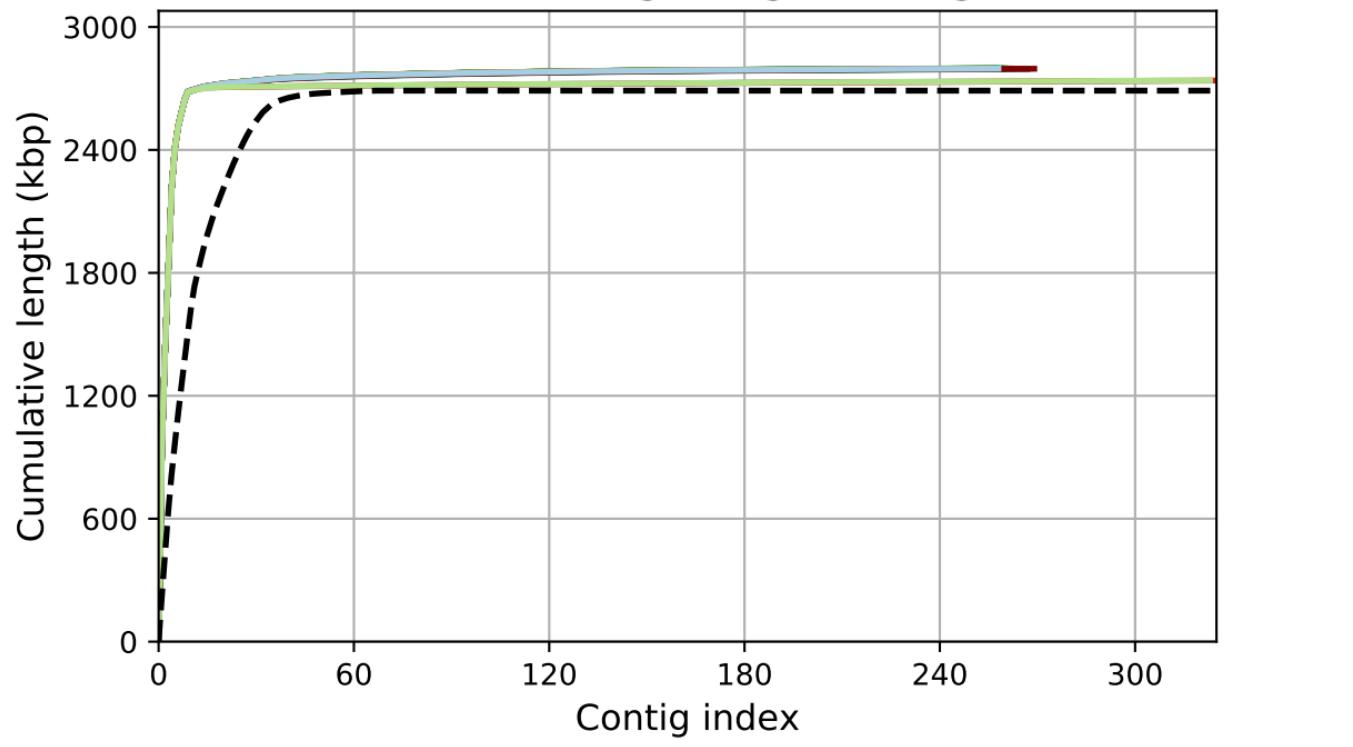
### FRCurve (misassemblies)



Legend:

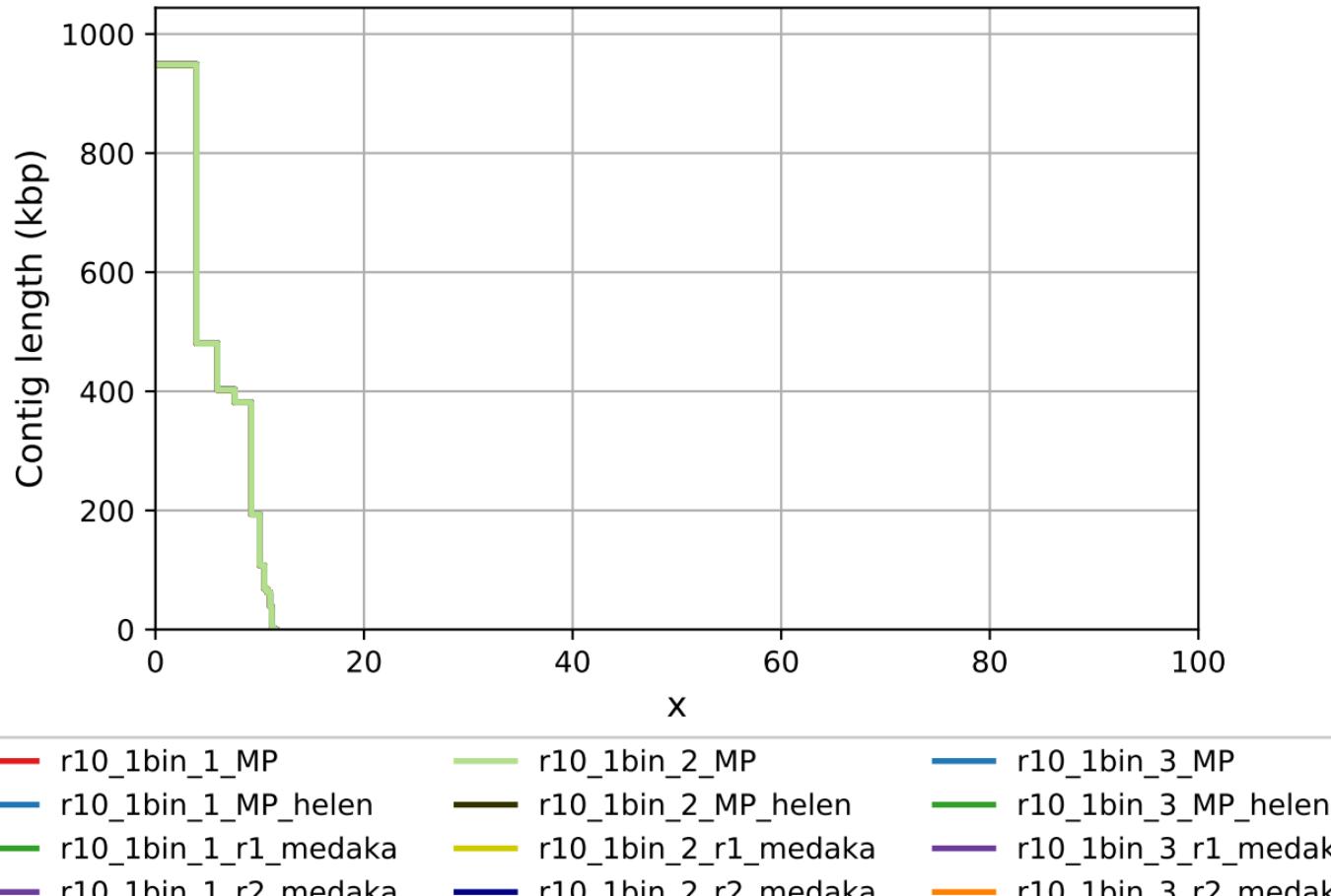
- r10\_1bin\_1\_MP
- r10\_1bin\_1\_MP\_helen
- r10\_1bin\_1\_r1\_medaka
- r10\_1bin\_1\_r2\_medaka
- r10\_1bin\_2\_MP
- r10\_1bin\_2\_MP\_helen
- r10\_1bin\_2\_r1\_medaka
- r10\_1bin\_2\_r2\_medaka
- r10\_1bin\_3\_MP
- r10\_1bin\_3\_MP\_helen
- r10\_1bin\_3\_r1\_medaka
- r10\_1bin\_3\_r2\_medaka

### Cumulative length (aligned contigs)

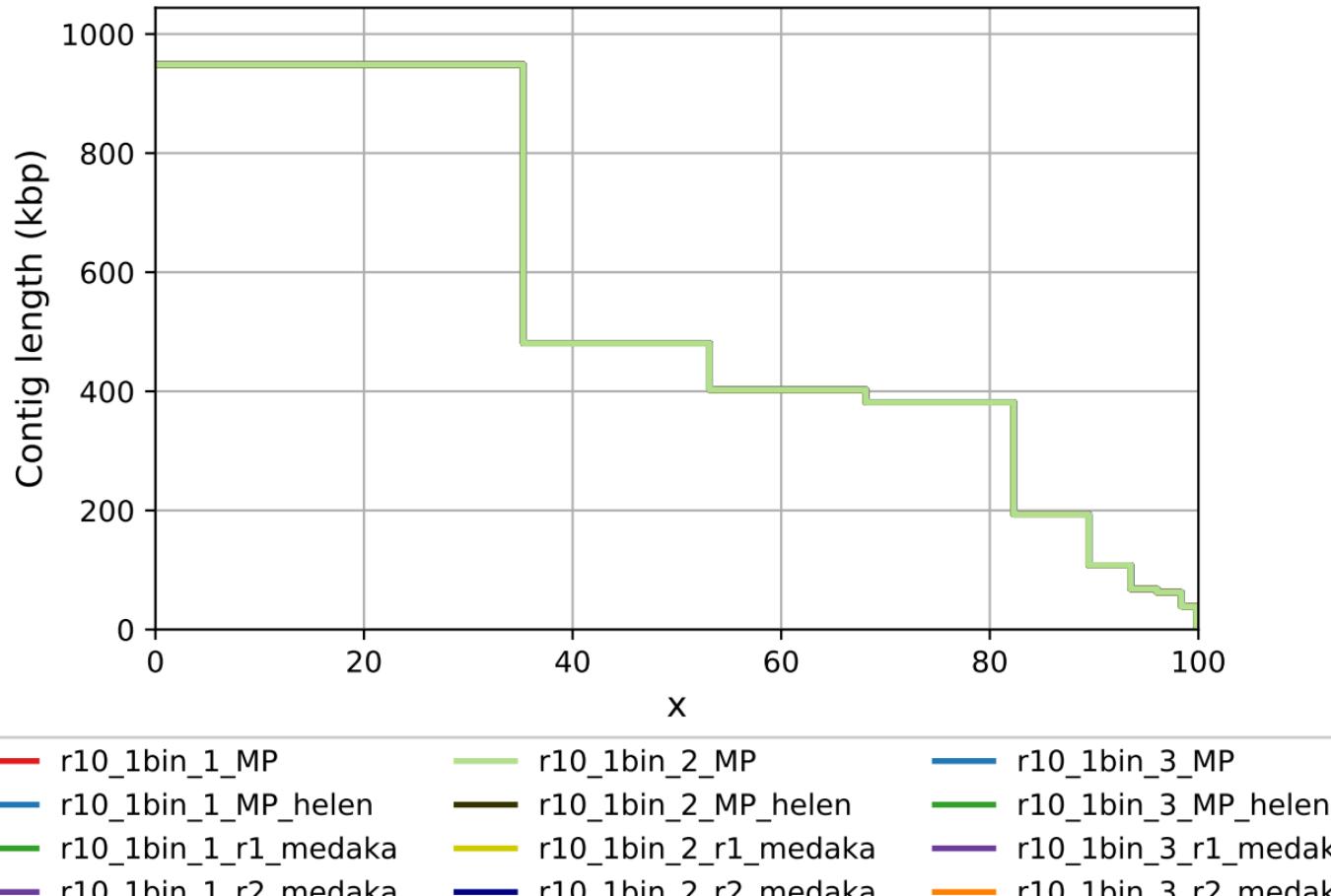


- r10\_1bin\_1\_MP
- r10\_1bin\_1\_MP\_helen
- r10\_1bin\_1\_r1\_medaka
- r10\_1bin\_1\_r2\_medaka
- r10\_1bin\_2\_MP\_helen
- r10\_1bin\_2\_r1\_medaka
- r10\_1bin\_2\_r2\_medaka
- r10\_1bin\_3\_MP\_helen
- r10\_1bin\_3\_r1\_medaka
- r10\_1bin\_3\_r2\_medaka
- r10\_1bin\_3\_racoon\_r1

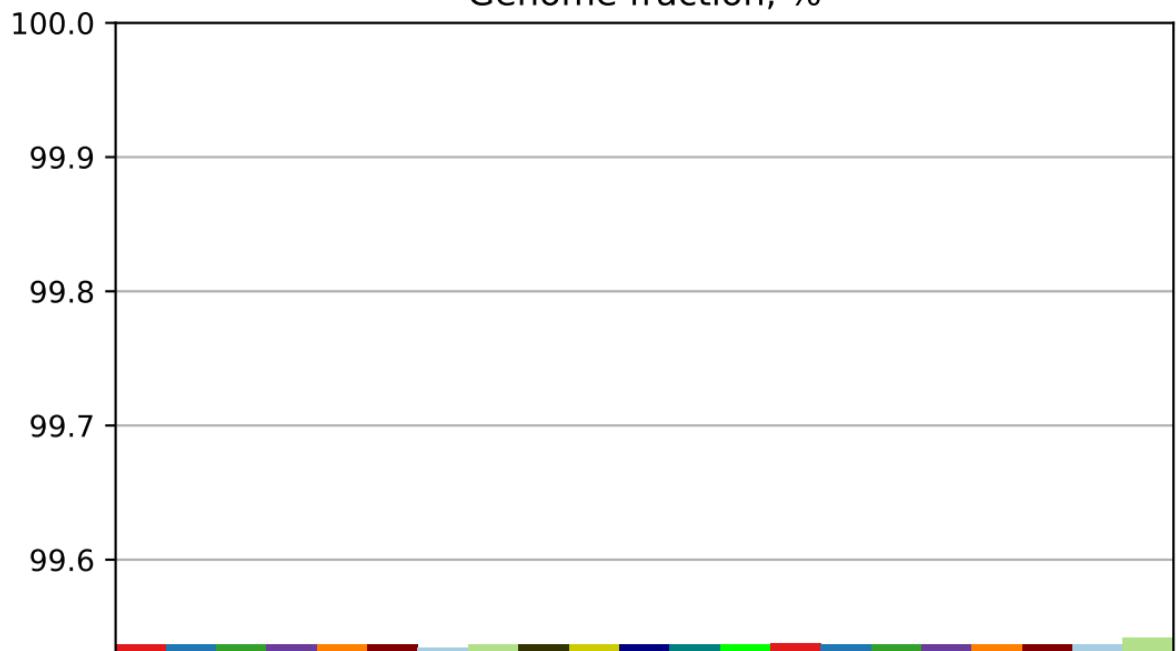
# NAx



# NGAx



Genome fraction, %



r10\_1bin\_1\_MP

r10\_1bin\_1\_MP\_helen

r10\_1bin\_1\_r1\_medaka

r10\_1bin\_1\_r2\_medaka

r10\_1bin\_2\_MP

r10\_1bin\_2\_MP\_helen

r10\_1bin\_2\_r1\_medaka

r10\_1bin\_2\_r2\_medaka

r10\_1bin\_3\_MP

r10\_1bin\_3\_MP\_helen

r10\_1bin\_3\_r1\_medaka

r10\_1bin\_3\_r2\_medaka