Contigs determination and analysis: Xenopus laevis

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Objective

The objective was to determine the contigs elmination point with the Xenopus laevis genome data.

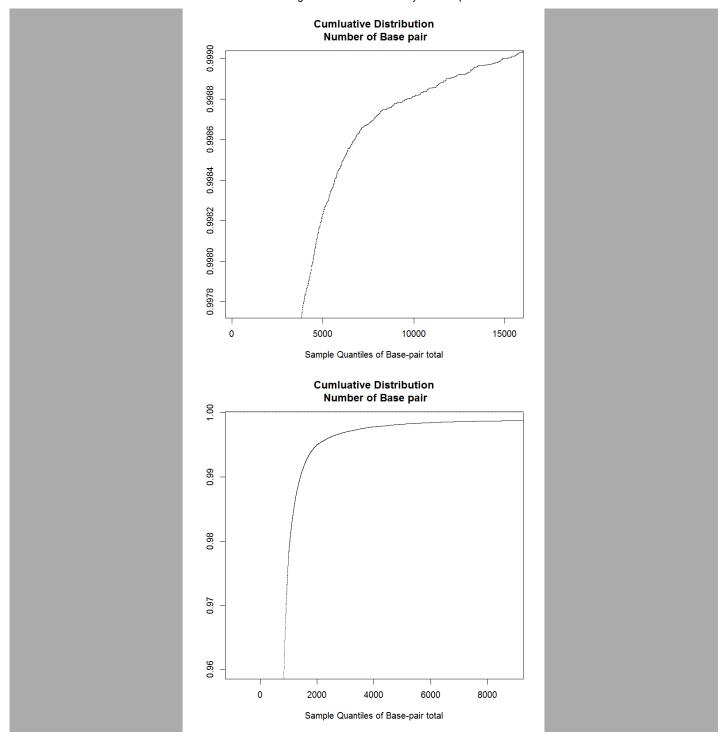
Packages used

- 1. data.table
- 2. zoom for interactive visualisation of plot

Methodology

- Raw Data file of base pairs of Xenopus laevis was cleaned and tabulated as Scaffold names and Number of base pairs identified from the file fasta.R
- 2. Then the output's cumulative distribution function was plotted. Sample quantiles of base-pairs, to determine the lowest base pair cut in the file **distribution.R**

zoomed in plots:



From the plots it was determined that we remove contigs below 5000, 10000 base pairs this calculation was done in the file **ques.R**

Result

If base pairs below 10,000 was removed, we would loose 862 genes or 3.56% of total genes If base pairs below 5,000 was removed, we would loose 835 genes or 3.47% of total genes If base paird below 1,000 was removed, we would loose 580 genes or 3.01% of total genes