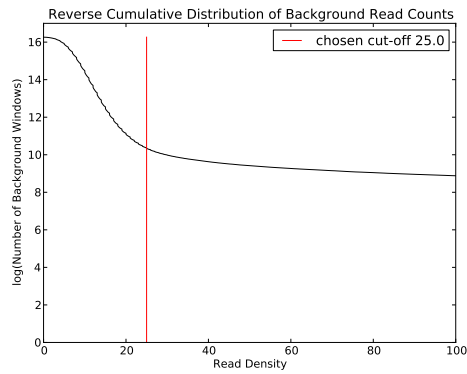


Filtering of Background Read Counts:

0.1

Used BG cut-off: 25

31731 of 11578291 input windows were filtered out (0.274055989783 percent).



Fitting Background Noise Distribution:

0.2

Fitted parameters:

—sigma: 0.152004133587925

—rho: 0.00653533559456595

—mu: -0.0328983828027215

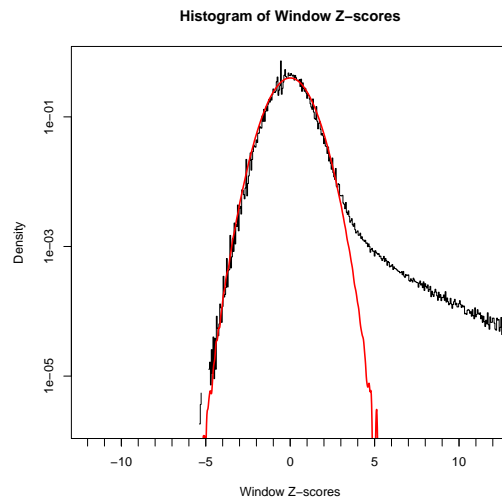


Figure 1: Distribution of Window Z-values with Fitted Gaussian.

Determining Z-value Cut-off and Mergeing Windows:

Bin Reads Log

Z value cut-off: 3.71

Number of windows above Z value cut-off: 40628

Number of regions above Z value cut-off: 20267

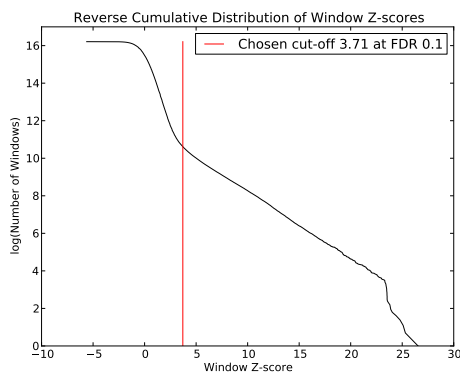


Figure 2: Reverse Cumulative Distribution of Window Z-values.

Refining Peaks (Gaussian Mixture Modelling):

0.3

About 20300 input regions.

Found mean fragment length 107.5. Constrained sigma to 33.005–90.005

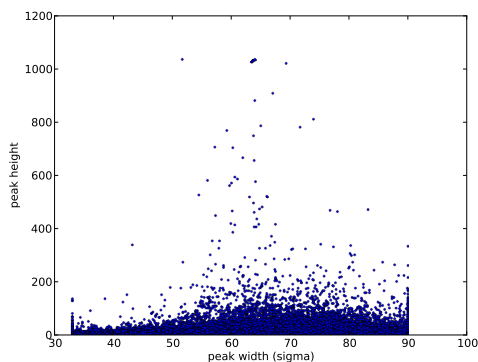


Figure 3: Scatter plot of peak height versus peak width

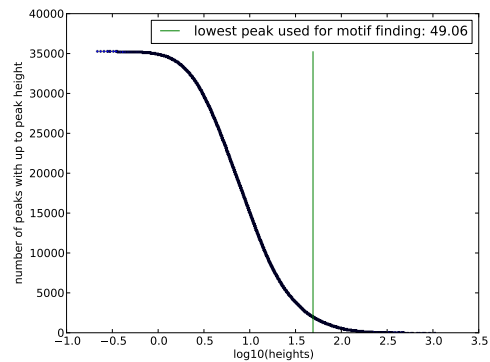


Figure 4: Reverse cumulative distribution of peak heights

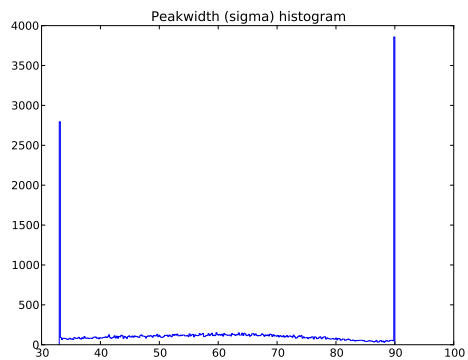


Figure 5: Histogram of peak widths (sigmas)

Computing Z-scores of Refined Peaks:

0.4

Total number of peaks: 35220

Number of peaks above Z-score of 3.71: 18267

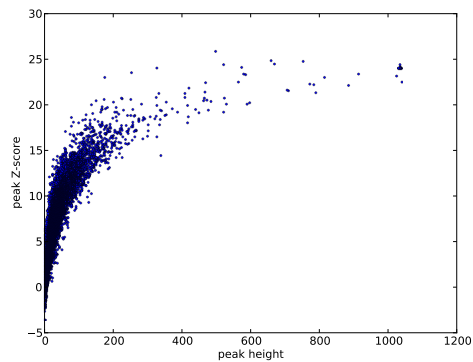


Figure 6: Scatter plot of peak height versus peak Z-score

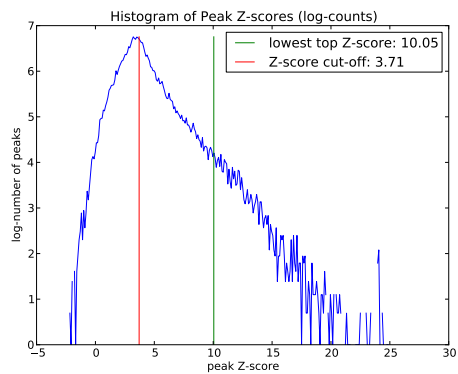


Figure 7: Histogram of peak Z-scores

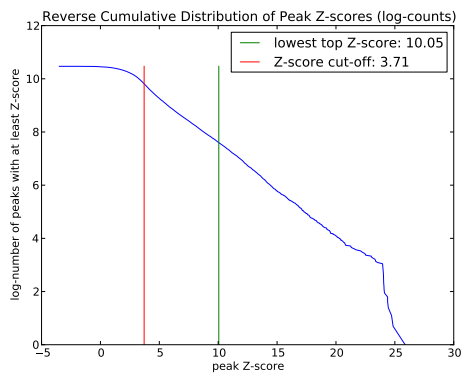


Figure 8: Reverse cumulative of peak Z-scores

Annotating Refined Peaks:

0.5

122 peaks were not annotated out of 18267 peaks.