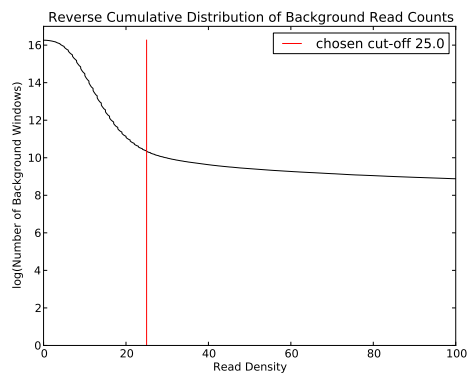


Filtering of Background Read Counts:

0.1

Used BG cut-off: 25

31731 of 11578668 input windows were filtered out (0.274047066554 percent).



Fitting Background Noise Distribution:

0.2

Fitted parameters:

-sigma: 0.172073154467965

-rho: 0.00572579214537199

-mu: -0.0214707396872926

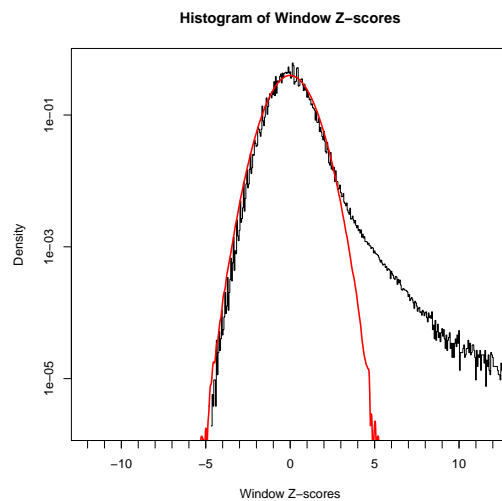


Figure 1: Distribution of Window Z-values with Fitted Gaussian.

Determining Z-value Cut-off and Mergeing Windows:

Bin Reads Log

Z value cut-off: 3.83

Number of windows above Z value cut-off: 29700

Number of regions above Z value cut-off: 15719

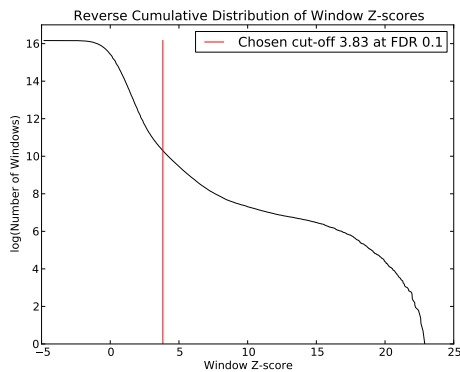


Figure 2: Reverse Cumulative Distribution of Window Z-values.

Refining Peaks (Gaussian Mixture Modelling):

0.3

About 15750 input regions.

Found mean fragment length 130.5. Constrained sigma to 42.527–99.527

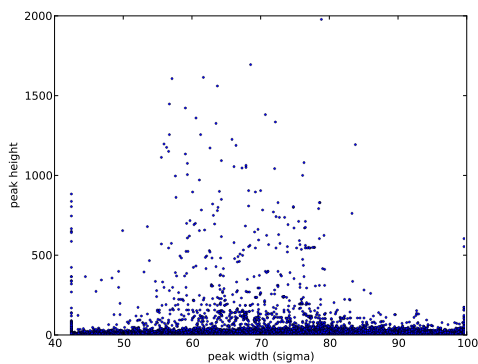


Figure 3: Scatter plot of peak height versus peak width

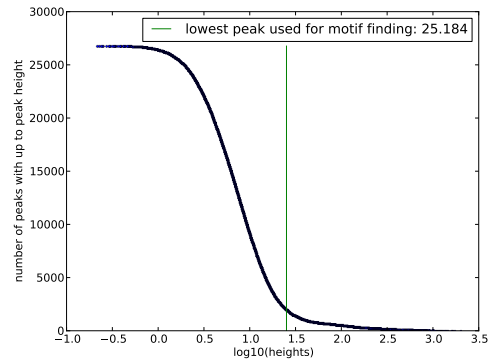


Figure 4: Reverse cumulative distribution of peak heights

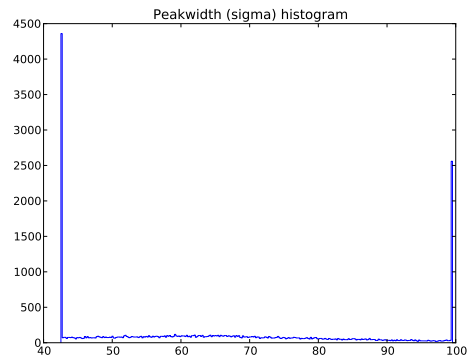


Figure 5: Histogram of peak widths (sigmas)

Computing Z-scores of Refined Peaks:

0.4

Total number of peaks: 26763

Number of peaks above Z-score of 3.83: 12571

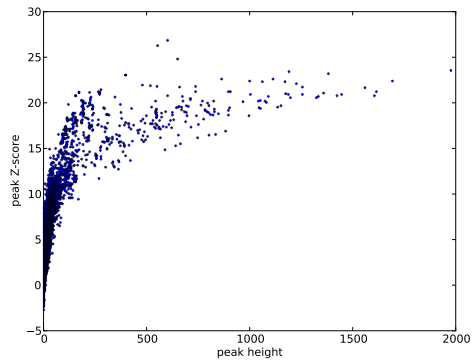


Figure 6: Scatter plot of peak height versus peak Z-score

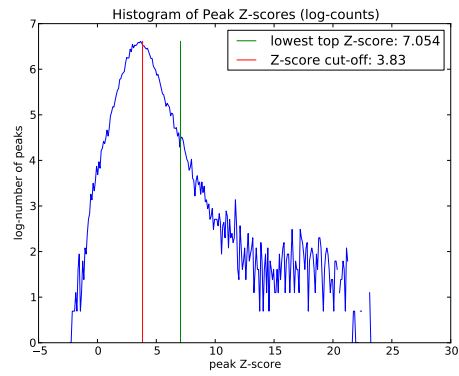


Figure 7: Histogram of peak Z-scores

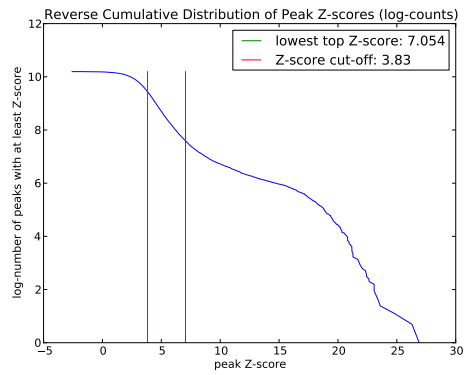


Figure 8: Reverse cumulative of peak Z-scores

Annotating Refined Peaks:

0.5

298 peaks were not annotated out of 12571 peaks.