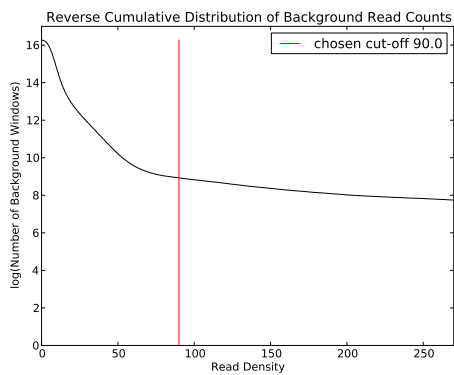


Filtering of Background Read Counts:

0.1

Used BG cut-off: 90

7553 of 11580948 input windows were filtered out (0.0652191858559 percent).



Fitting Background Noise Distribution:

0.2

Fitted parameters:

-sigma: 0.262144934244121

-rho: 0.0103036125954596

-mu: 0.0360921283884808

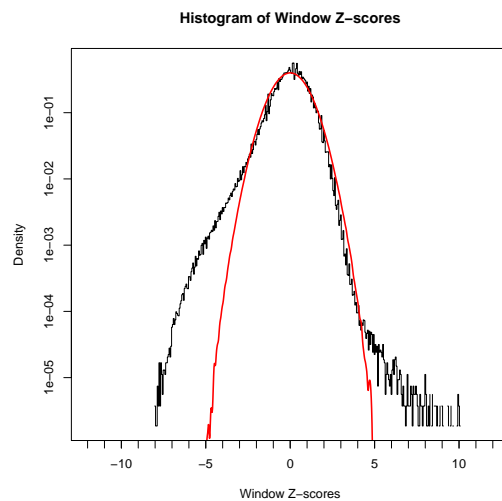


Figure 1: Distribution of Window Z-values with Fitted Gaussian.

Determining Z-value Cut-off and Mergeing Windows:

Bin Reads Log

Z value cut-off: 3.74

Number of windows above Z value cut-off: 1344

Number of regions above Z value cut-off: 840

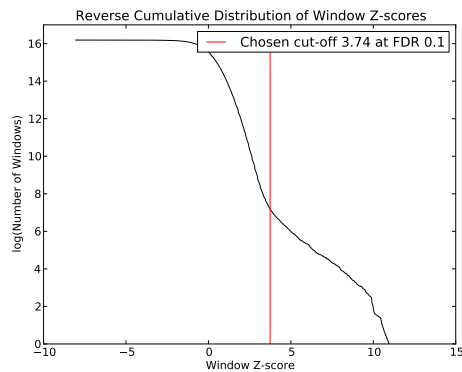


Figure 2: Reverse Cumulative Distribution of Window Z-values.

Refining Peaks (Gaussian Mixture Modelling):

0.3

About 850 input regions.

Found mean fragment length 107.0. Constrained sigma to 32.798–89.798

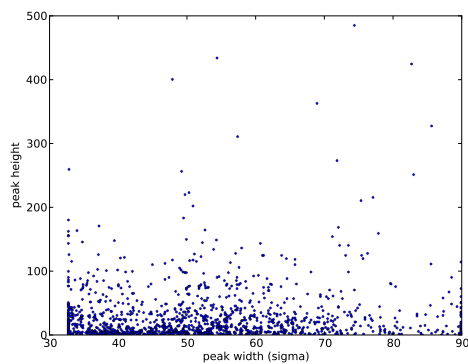


Figure 3: Scatter plot of peak height versus peak width

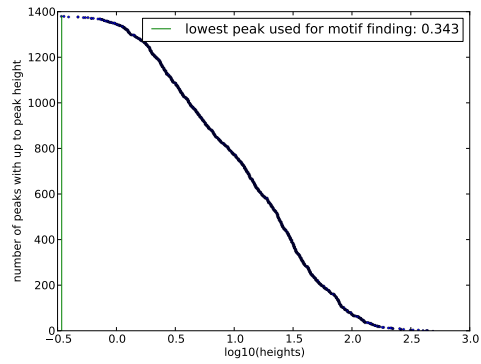


Figure 4: Reverse cumulative distribution of peak heights

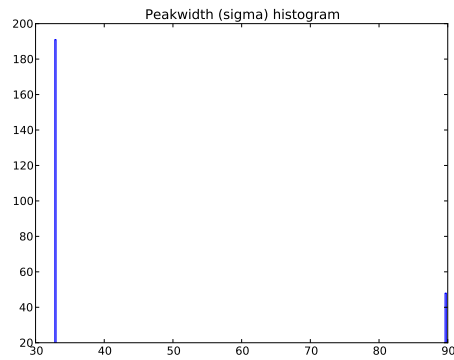


Figure 5: Histogram of peak widths (sigmas)

Computing Z-scores of Refined Peaks:

0.4

Total number of peaks: 1380

Number of peaks above Z-score of 3.74: 533

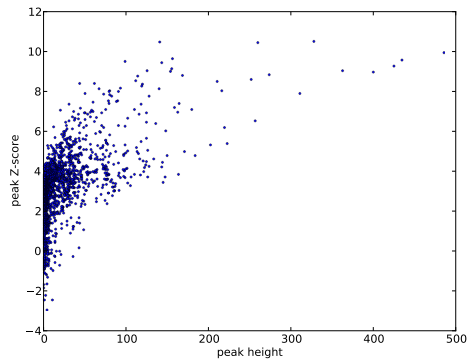


Figure 6: Scatter plot of peak height versus peak Z-score

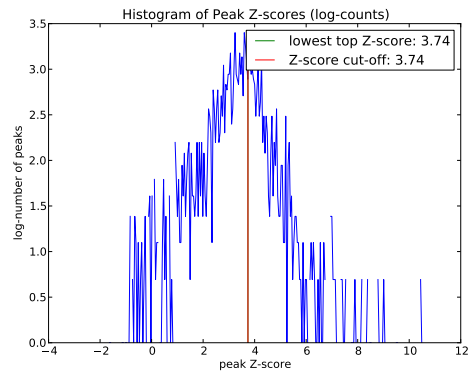


Figure 7: Histogram of peak Z-scores

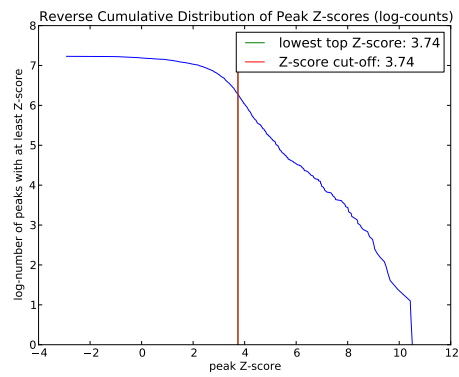


Figure 8: Reverse cumulative of peak Z-scores

Annotating Refined Peaks:

0.5

10 peaks were not annotated out of 533 peaks.