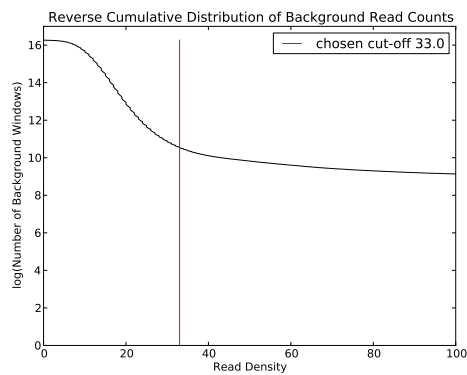


RAD21: Filtering of Background Read Counts:

0.1

Used BG cut-off: 33

38747 of 11579310 input windows were filtered out (0.334622702044 percent).



Fitting Background Noise Distribution:

0.2

Fitted parameters:

-sigma: 0.0973134594779933

-rho: 0.0165491225748815

-mu: -0.113973323030798

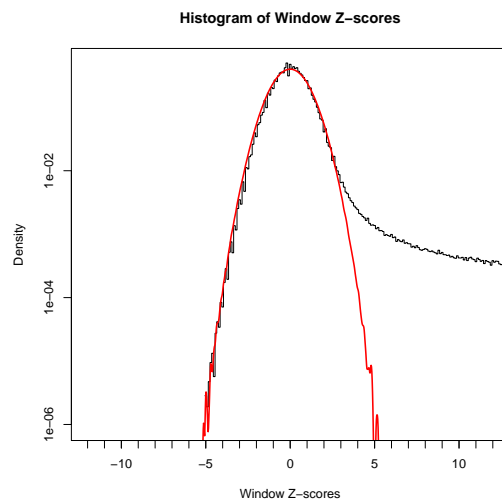


Figure 1: Distribution of Window Z-values with Fitted Gaussian.

Determining Z-value Cut-off and Merging Windows:

Bin Reads Log

Z value cut-off: 3.28

Number of windows above Z value cut-off: 112043

Number of regions above Z value cut-off: 53085

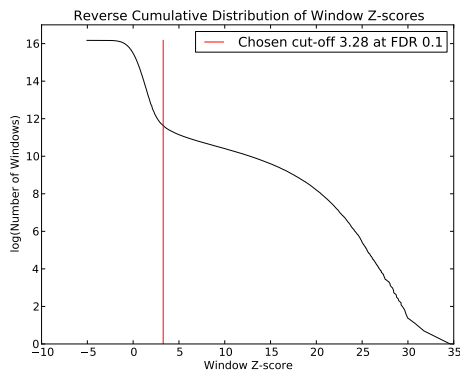


Figure 2: Reverse Cumulative Distribution of Window Z-values.

Refining Peaks (Gaussian Mixture Modelling):

0.3

About 53100 input regions.

Found mean fragment length 113.0. Constrained sigma to 35.282–92.282

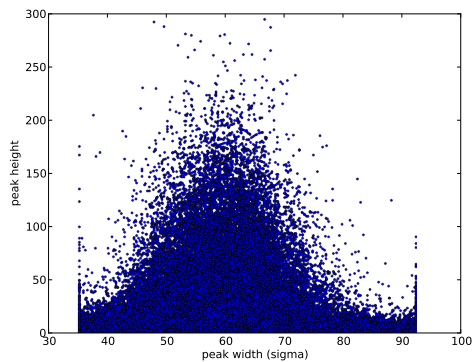


Figure 3: Scatter plot of peak height versus peak width

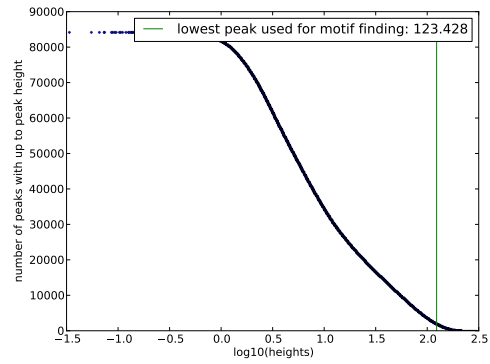


Figure 4: Reverse cumulative distribution of peak heights

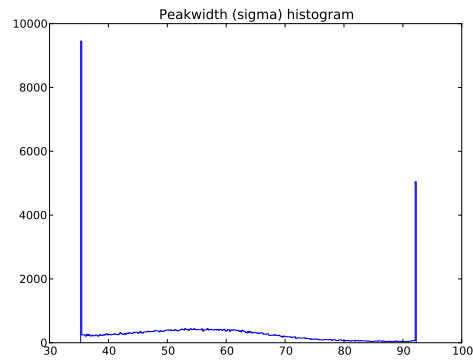


Figure 5: Histogram of peak widths (sigmas)

Computing Z-scores of Refined Peaks:

0.4

Total number of peaks: 84166

Number of peaks above Z-score of 3.28: 48373

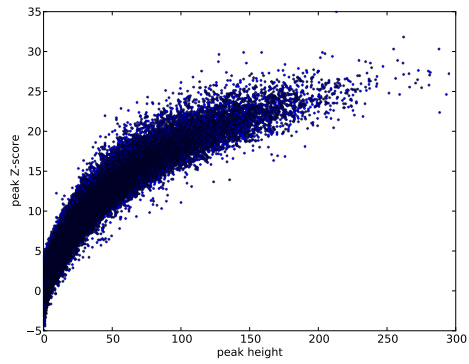


Figure 6: Scatter plot of peak height versus peak Z-score

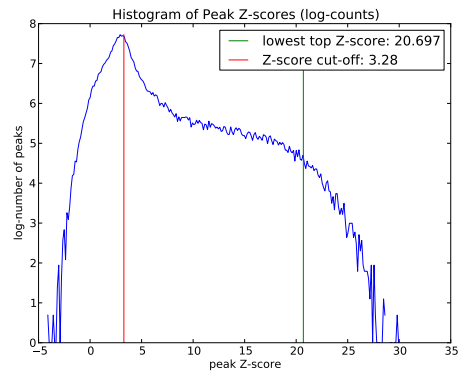


Figure 7: Histogram of peak Z-scores

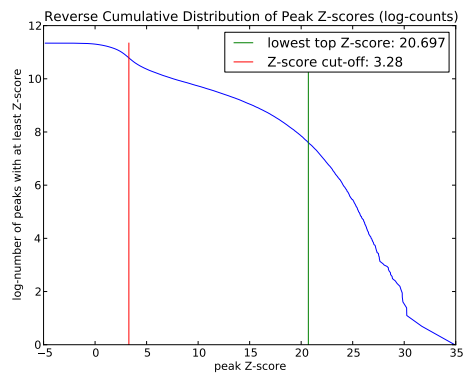


Figure 8: Reverse cumulative of peak Z-scores

Annotating Refined Peaks:

0.5

542 peaks were not annotated out of 48373 peaks.