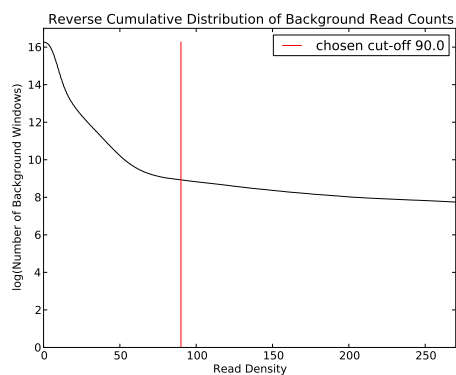# ZNF143: Filtering of Background Read Counts:

0.1

Used BG cut−off: 90
7553 of 11580142 input windows were filtered out (0.0652237252358 percent).

Reverse Cumulative Distribution of Background Read Counts

Fitting Background Noise Distribution:

0.2

Fitted parameters:
        −sigma: 0.190781207245557
        −rho: 0.0114600971854321
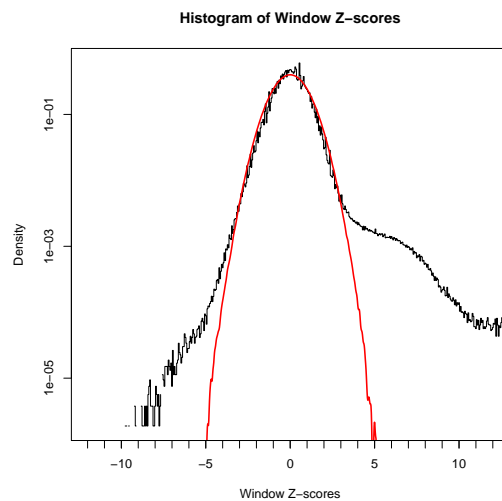   −mu: −0.181795610234849

Histogram of Window Z−scores

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: 3.46
Number of windows above Z value cut−off: 80008
Number of regions above Z value cut−off: 40519
```
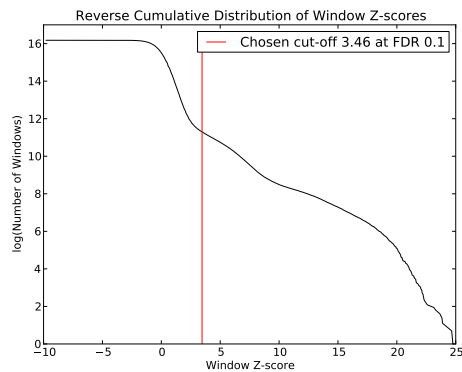

Figure 2: Reverse Cumulative Distribution of Window Z-values.

Refining Peaks (Gaussian Mixture Modelling):

0.3

```
About 40550 input regions.
Found mean fragment length 101.0. Constrained sigma to 30.314−87.314
```
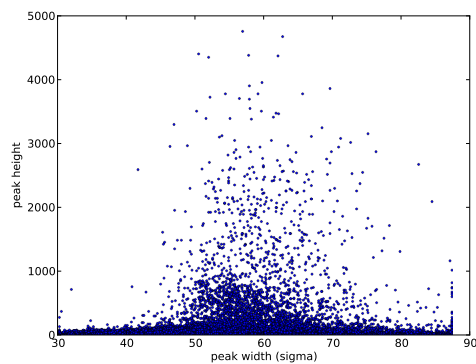

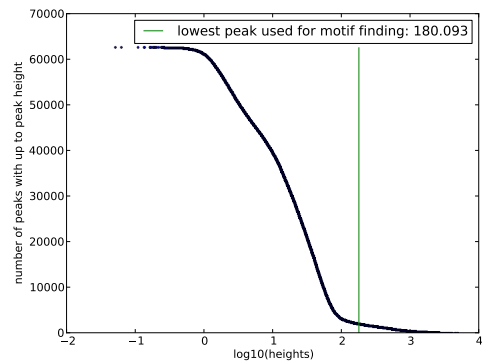Figure 3: Scatter plot of peak height versus peak width

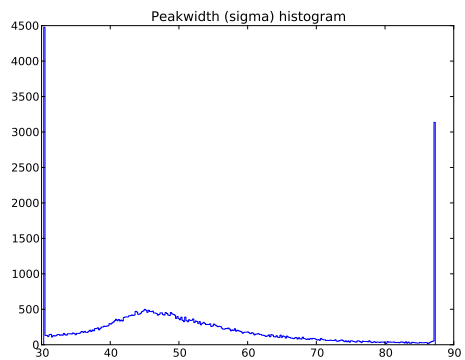Figure 4: Reverse cumulative distribution of peak heights

Figure 5: Histogram of peak widths (sigmas)

Computing Z-scores of Refined Peaks:

0.4

```
Total number of peaks: 62513
Number of peaks above Z-score of 3.46: 36955
```
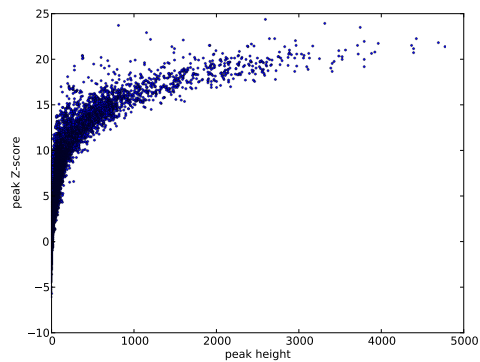
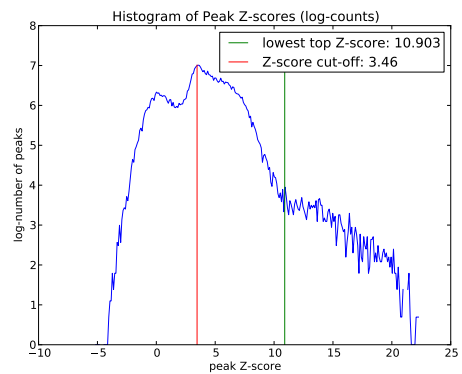Figure 6: Scatter plot of peak height versus peak Z-score
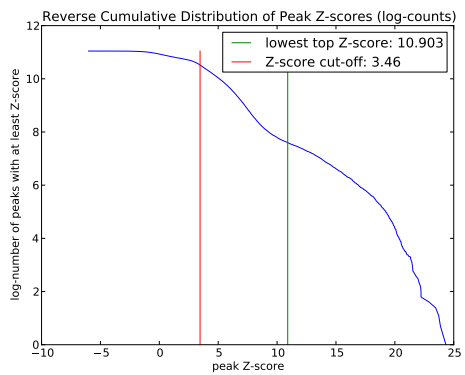

Figure 7: Histogram of peak Z-scores

Figure 8: Reverse cumulative of peak Z-scores

Annotating Refined Peaks:

0.5

459 peaks were not annotated out of 36955 peaks.