Homework 3: Tools of the Trade - Data processing and Performance Evaluation

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Contents

1 Tools of the Trade - Data processing and Performance Evaluation

1.1 For the links 5, 14 and 35, for channels 36, 64 and 165, plot the following:
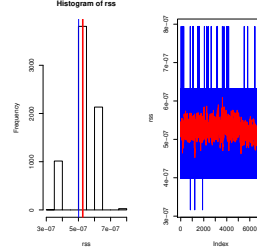
[1]
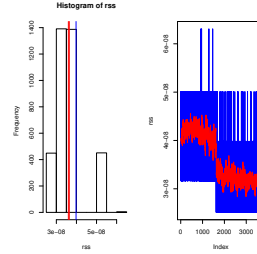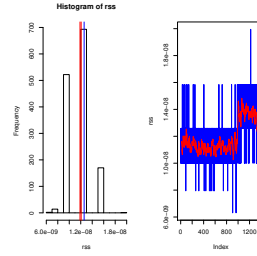

Figure 1: Dataset

Figure 2: Dataset

Figure 3: Dataset

1.2 For each combination of link and channel (yes, that means 1014 combinations, 78 links and 13 channels), compute the MAC frame delivery ratio and the median RSS.

1.3 Plot

channel versus all corresponding delivery ratios, i.e., you have the channel number on x-axis and delivery ratios on the y-axis.
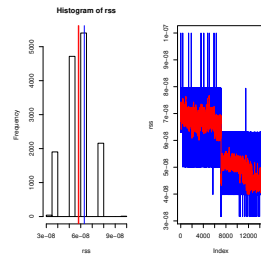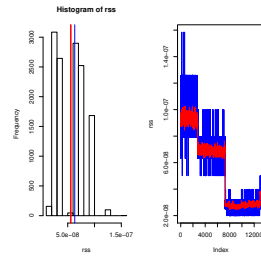
Figure 4: Dataset
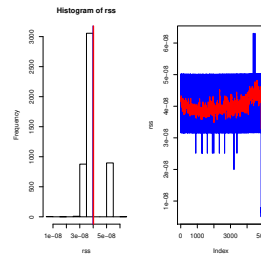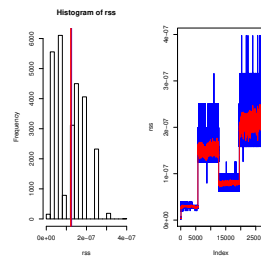

Figure 5: Dataset

Figure 6: Dataset

Figure 7: Dataset
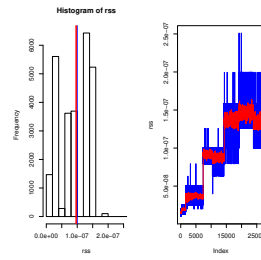
fdr vs link
Chanel vs RSS
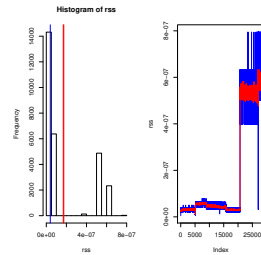Link vs RSS

Figure 8: Dataset

Figure 9: Dataset

1.4 Consider the data for the links 1 and 17. Plot the ECDFs for all the RSS values of both links (i.e., two lines into a single plot). What do you observe?

References

[1] Jochen Schiller. *Mobile Communications*. Addison-Wesley, 2003. ISBN: 0 321 12381 6.
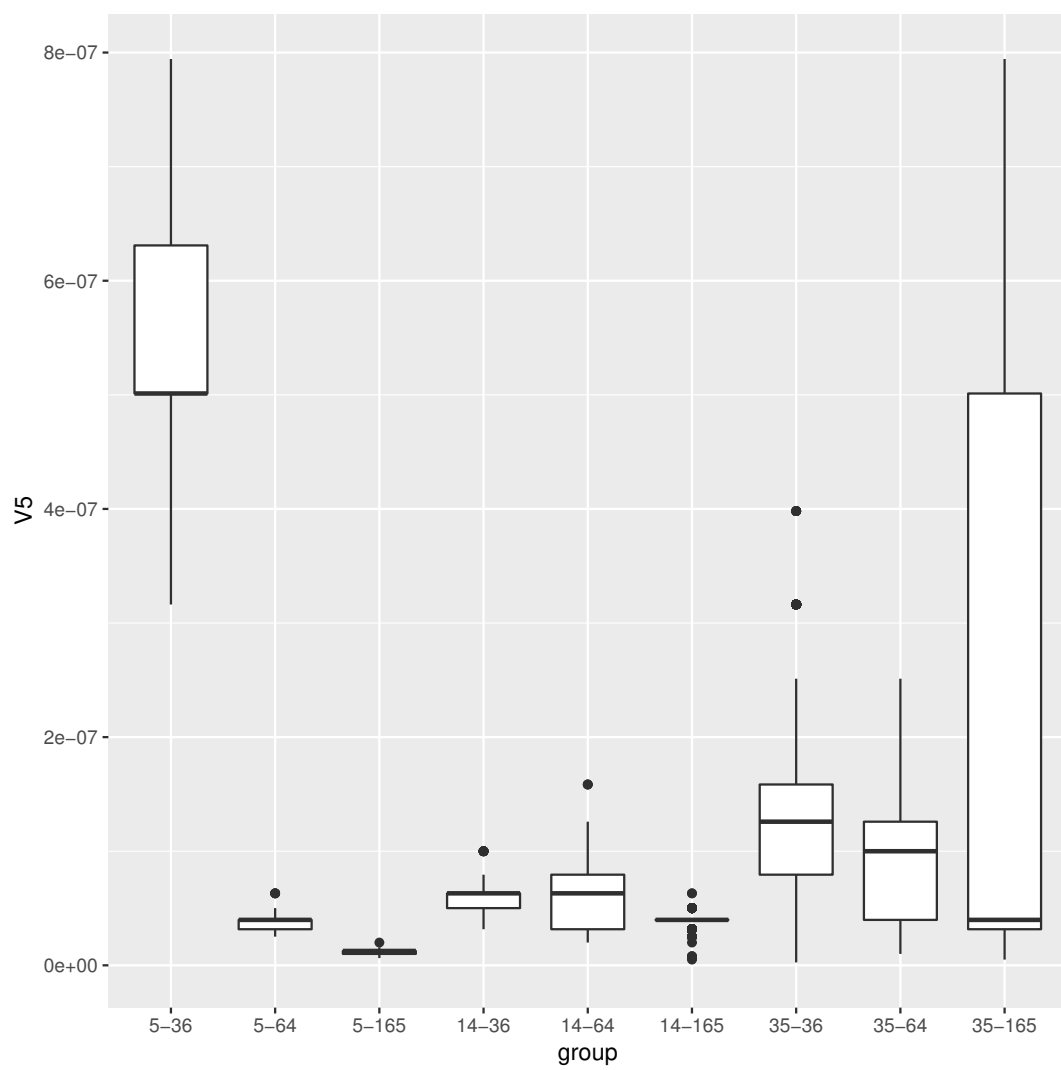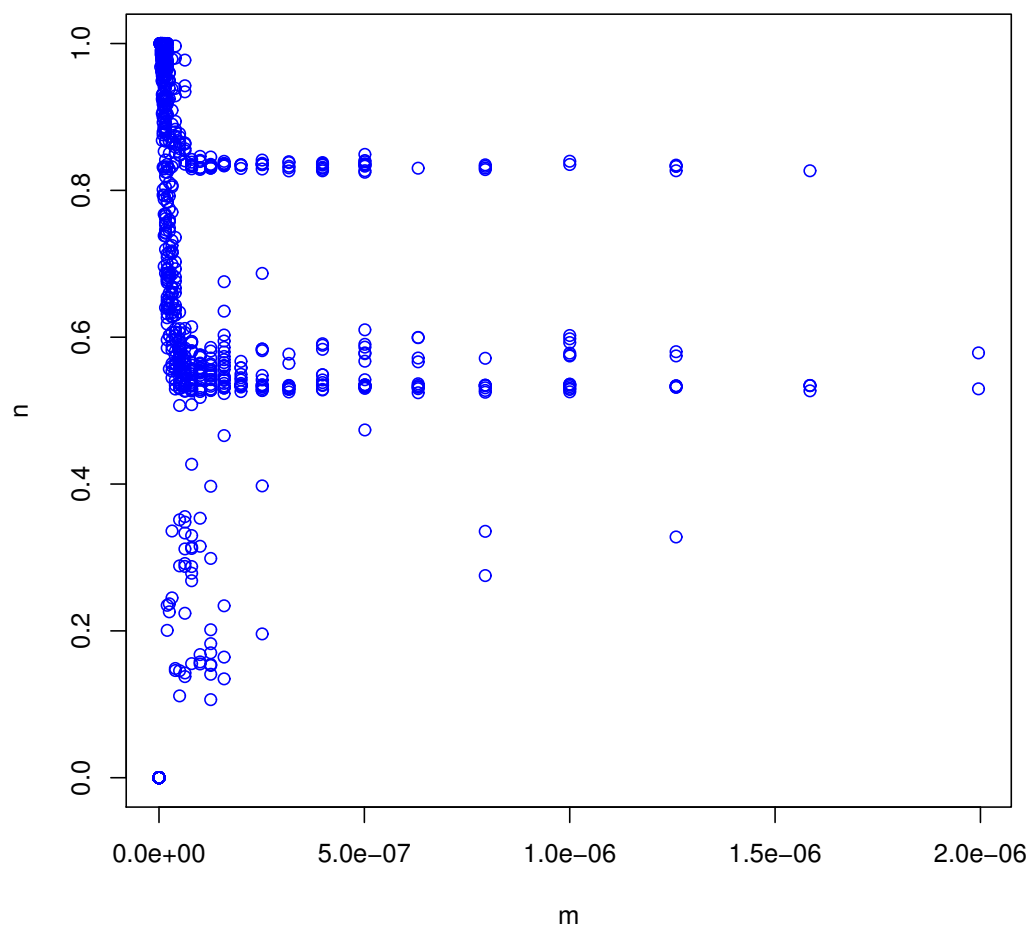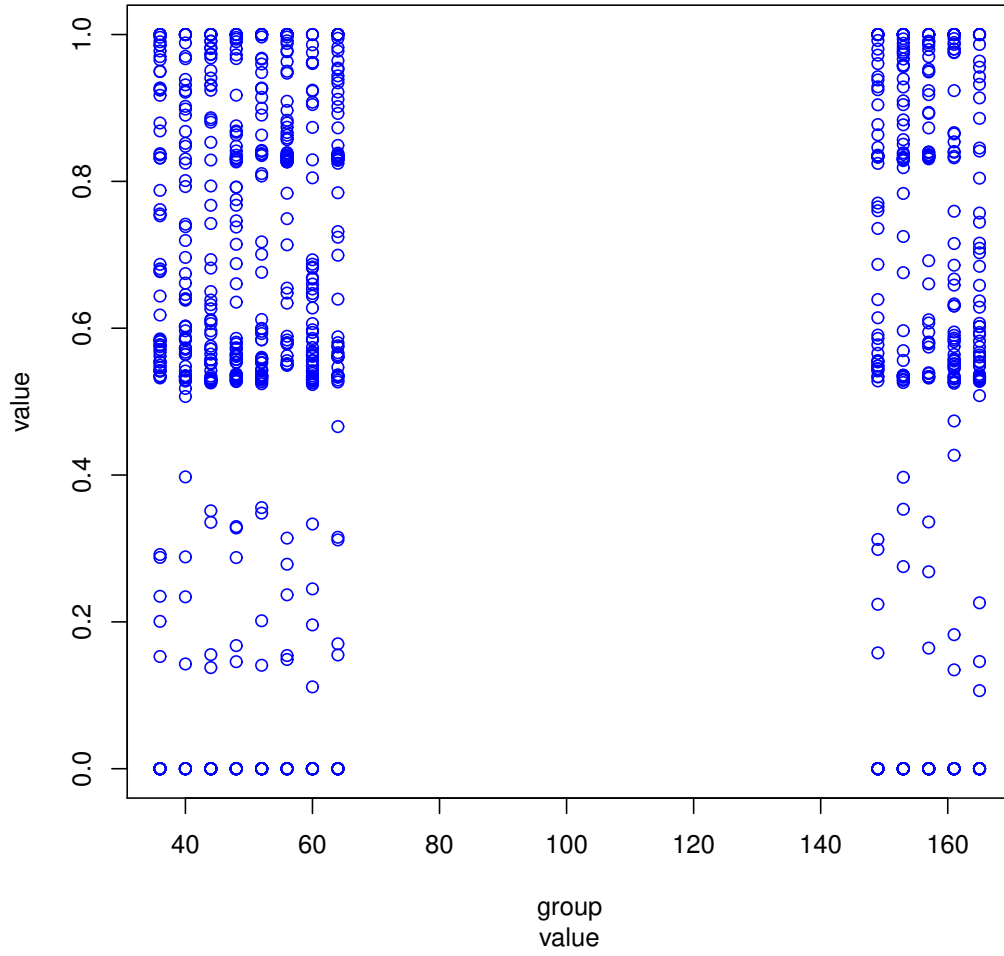
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Figure 10: Dataset

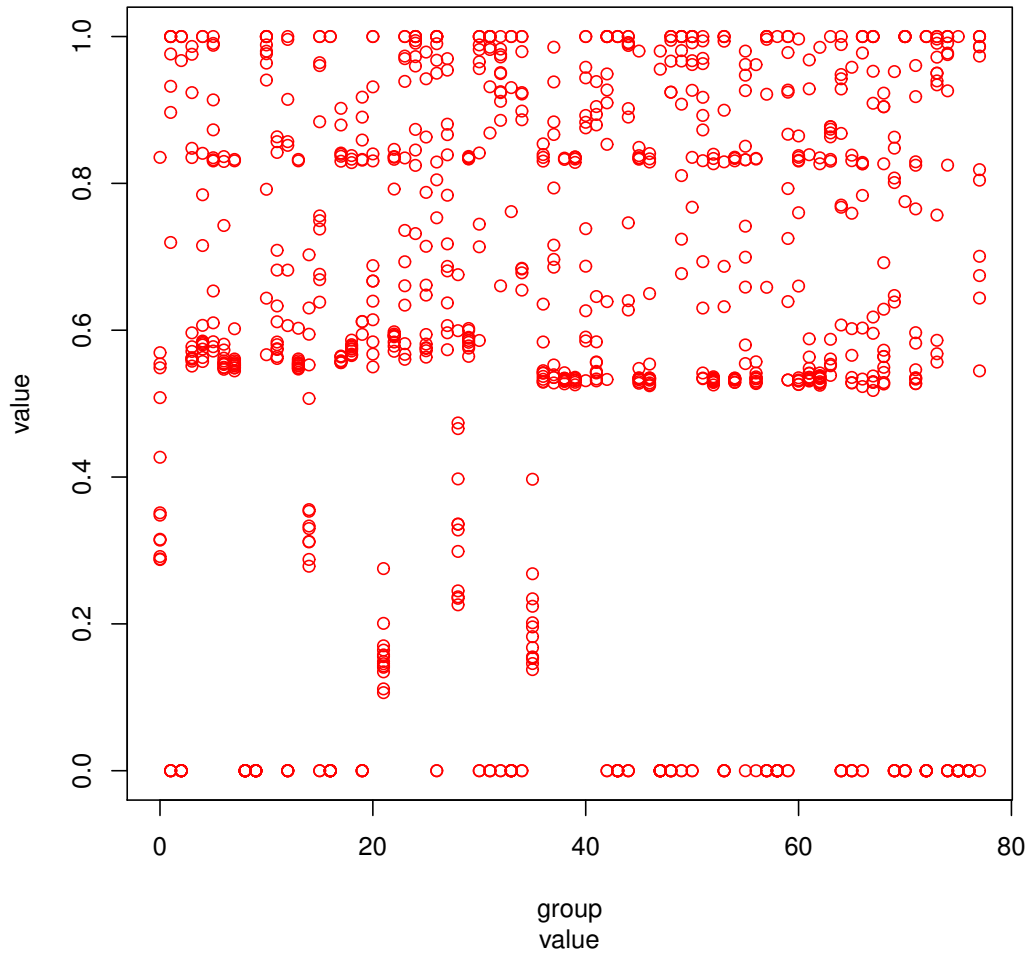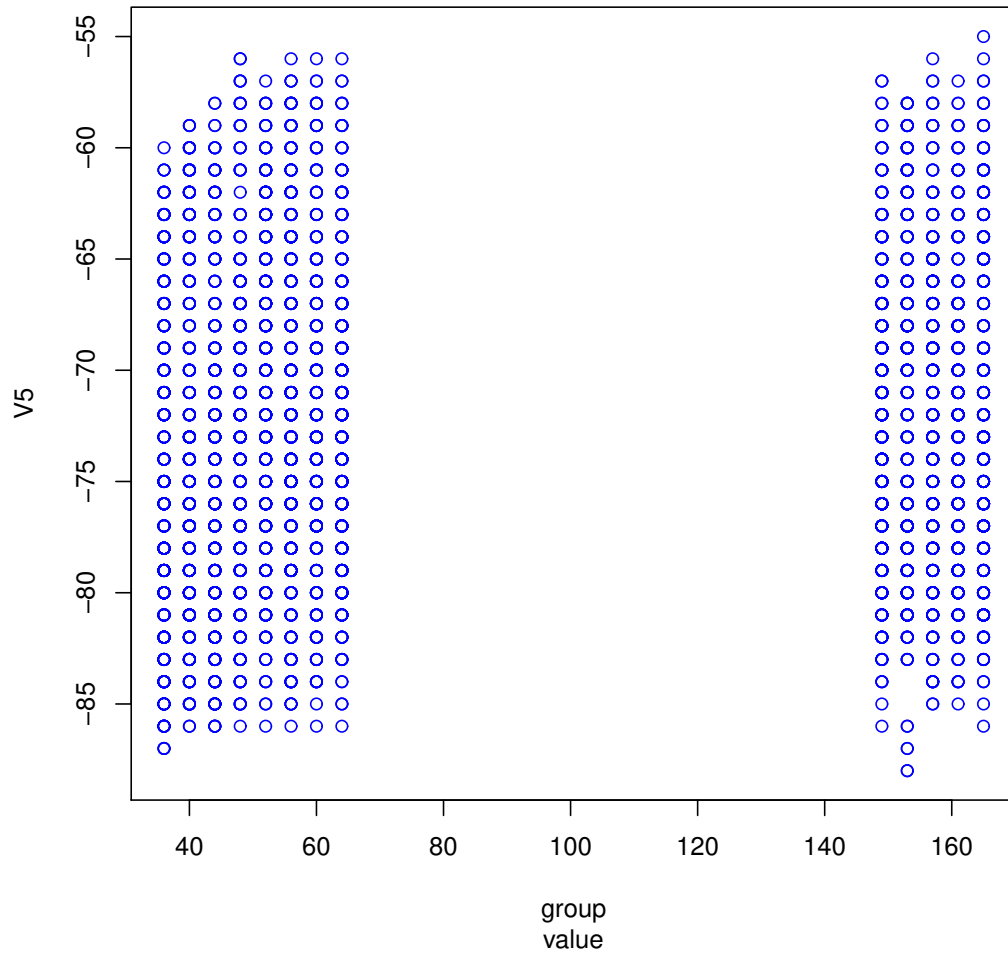Figure 11: Dataset

Figure 12: FDR vs Chanel

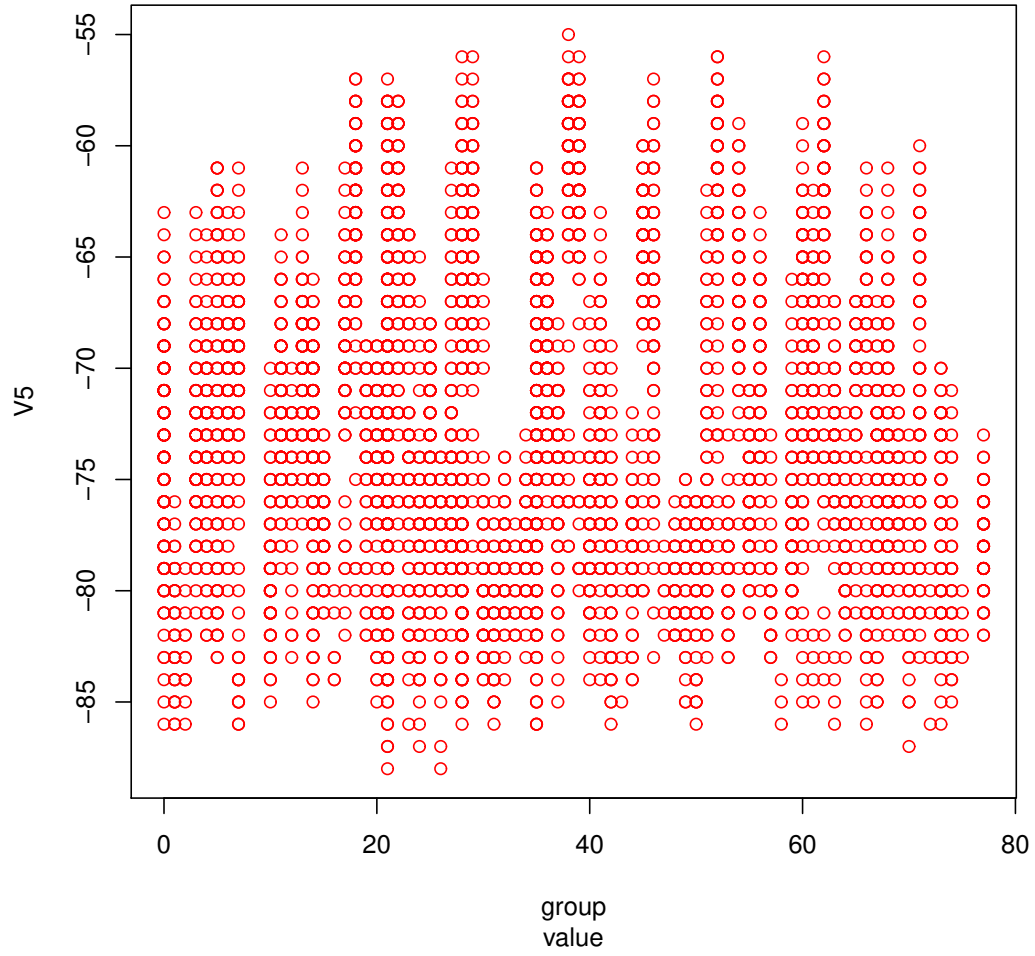Figure 13: FDR vs Links

Figure 14: RSS vs Chanel

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Figure 15: RSS vs Link