400138679 - suitorj - 4AX3 - A1

Q1

$$P(B \mid A_{x8}) = \frac{P(B \cap A_{x8})}{P(A_{x8})}$$

$$P(A_{x8}) = 0.51^{8} = 0.457679$$

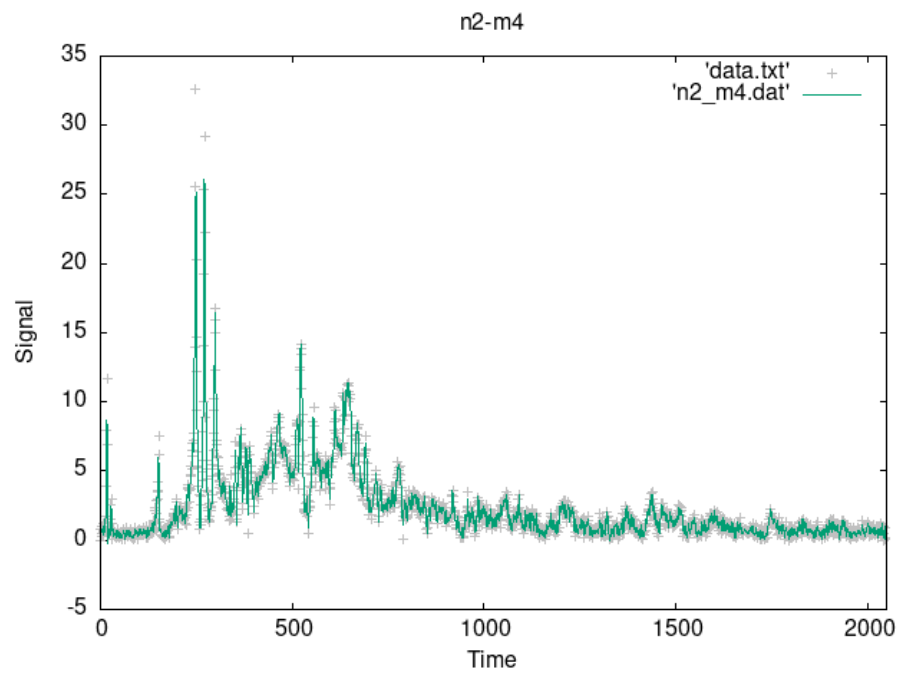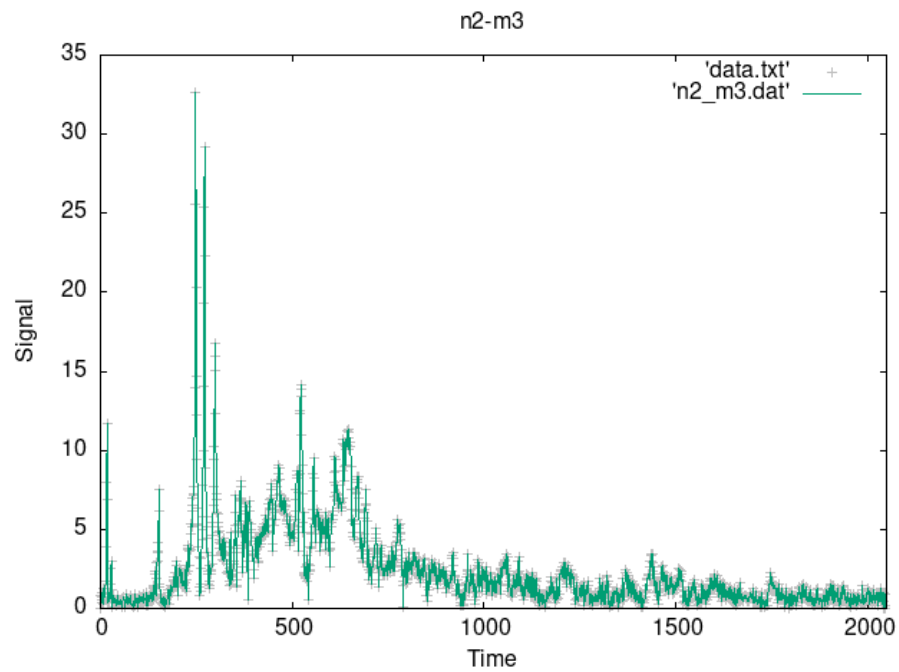$$P(B \cap A_{x8}) = 0.51^{8} \cdot 0.49$$

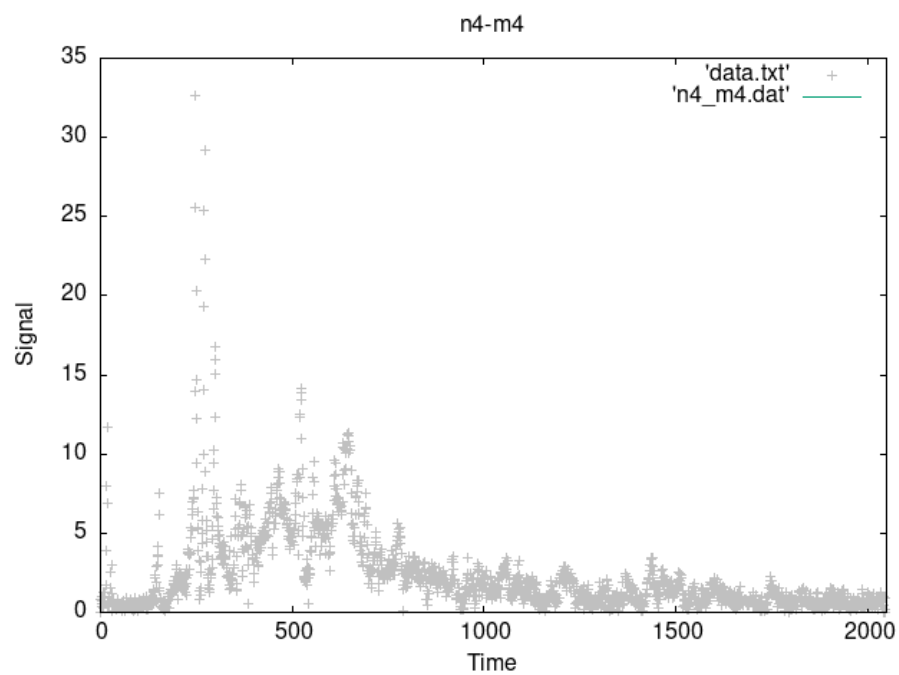$$P(B \mid A_{x8}) = \frac{0.51^{8} \cdot 0.49}{0.51^{8}}$$

$$= 0.49$$

1

Q2

$$4A \times 3 : A1$$

1. Use Vandermode matrix and LLS to get convolution coefficient matrix

2. Extend data with Prefix and suffix vectors based on window size.

3. Calculate smoothed value based on values in window

See the included .dat files for the output values used in these graphs.

n2-m3

n2-m4

n4-m4

This fails because the degree is not less than the number of points.

n4-m5

n4-m64