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PCSE 503

Dr. Brash

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Assignment 1

Question 1)

1. See notebook
2. See notebook
3. The data follows a linear curve until 2000, where the sparsification size goes way up. If you manipulate the graphs you can tell it is not an outlier and there is a significant portion of data. After 5000 no more points are needed because the modified algorithm splits the time step in half.
4. The separate function “generator\_function” allows for editing of polynomials.

Question 2)

1. See text / csv file
2. See notebook
3. A = 1.35 +/- 0.11

B = -0.0001456 +/- 0.0000045

C = 0.0013 +/- 0.0014

1. Taking a logarithmic approach yields a better result.