

## Homework 6

1. The file hw06.mat contains 1 year of tide data from the Battery in New York City. It defines two variables, time in days and sea height in meters.

A. Do a standard “look at the data” and convince yourself it makes sense.

B. Determine the sampling interval and verify that the data are sampled at equal increment of time.

C. Compute and plot the power spectral density.

D. Make a table of all the frequencies (in cycles per day) and periods (in days) where you feel tidal data has periodicities.

2. EDAWM 6.2