

Stat153 Project

**(proposal due on Wednesday, November 3, via email,
report due at 5pm on Friday, December 3, in Evans 399)**

The project will involve analyzing time series data, and writing a brief report.

First, you will need to choose a suitable time series. Choose a time series that

1. interests you,
2. is approximately stationary, or can easily be made approximately stationary,
3. is not too small—it should have around 100 observations or more,
4. is a different time series from those chosen by everyone else in the class.

Write a paragraph describing the time series data that you have chosen, and what questions you intend to address, and to email this proposal to **bartlett at stat** by Wednesday, November 3. This means I can make suggestions before you spend too much time on the analysis.

The report should contain

1. A description of the data: what it is and where it came from.
2. What questions you are addressing.
3. A plot of the data.
4. An estimated ACF and PACF.
5. An estimated spectral density.
6. An ARMA model and some analysis of residuals.
7. A brief discussion of the results.

Try to keep the report brief (less than five pages). It is due at 5pm on Friday, December 3, in Evans 399. For course assessment, this project will count for 10%.