STAT 485 PROJECT PROPOSAL

Background

Global warming is a long-term increase in the average temperature of the Earth's climate system, which has been occurring for more than a century, the main cause of which is human activity. The effects of global warming include rising sea levels, regional changes in precipitation, more frequent extreme weather events such as heat waves, and expanding deserts. Global warming is already a compelling topic of concern. More and more scientists are using sophisticated models to predict future trends in the Earth's climate.

Goal

Our goal is to first determine the correlation between the four parameters in the dataset and fitting a time series model. Also apply this semester's knowledge to check whether the time series model is stationary. Finally, based on our results we try to predict the change of climate in the future period.

The Data

This dataset has been collected from Weather Undergroud API. This dataset provides data from 1st January 2013 to 24th April 2017 in the city of Delhi, India. The 4 parameters here are mean temperature, humidity, wind speed, mean pressure.