Justine Neville

BAE 590

Project Proposal

**General questions driving your analysis:**

What is the empirical threshold that defines a saltwater intrusion event? What happens when different types of episodic saltwater intrusion events (drought, wind tides, storm surge) overlap?

**Data to be analyzed:**

Data to be used to answer the above questions consist of: time series specific conductance, water level, wind speed, wind direction, precipitation, relative humidity, and solar radiation. I will use these data sets from multiple sites across the Albemarle-Pamlico Peninsula to evaluate and visualize different types of saltwater intrusion events across different temporal scales.

**Statistical analysis to be used:**

As of right now, I have yet to determine the specific statistical analysis I wish to use. However, this dataset is quite large and messy. I envision much of my time being allotted to cleaning and visualizing my data. If possible, I’d like to meet or chat to discuss what kind of statistical analysis may be appropriate for said work. All of this analysis and visualization will be work towards my AGU talk in December.