# How Badly is Global Warming Affecting Greensboro, NC?

Jung Hwan Lim

#### **Motive**

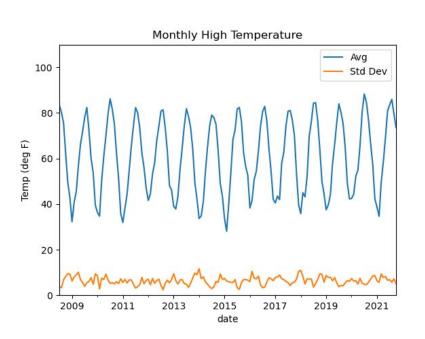
 Media always talks about how global warming is causing current weather to break new records such as temperature and precipitation

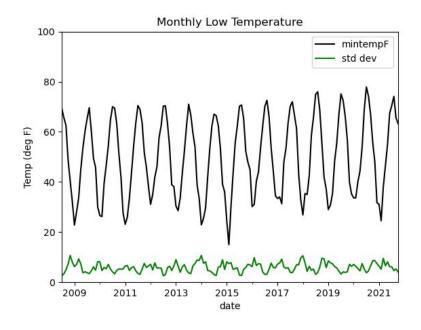
- I wanted to see how much global warming has affected the weather in the past 10+ years in Greensboro.

# Why is this important?

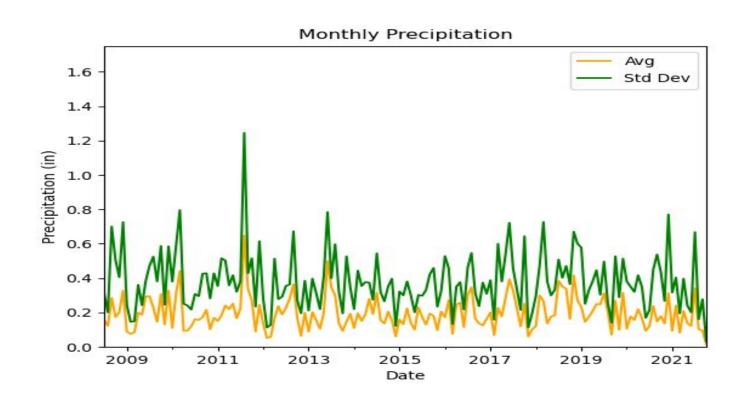
- This concerns with everyone's daily lives. Weather affects how we all go about our day.
- Current and historical weather analysis is necessary for forecasting weather.
- This can potentially change how we place our trust in mainstream media:
  - From distrusting the media to having a little more faith
  - From trusting the media to being a little more skeptical

#### **Monthly Average Temperatures Over Time**

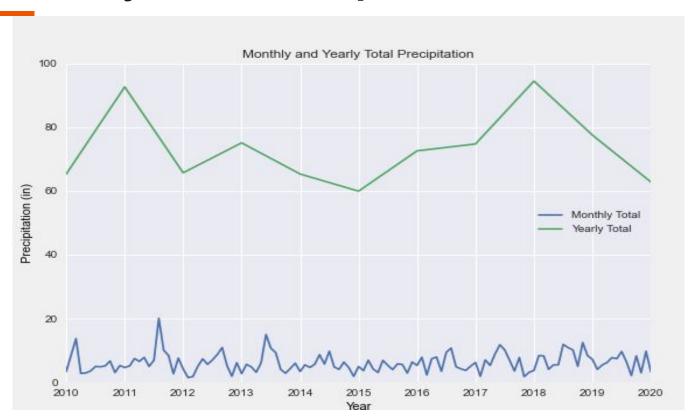




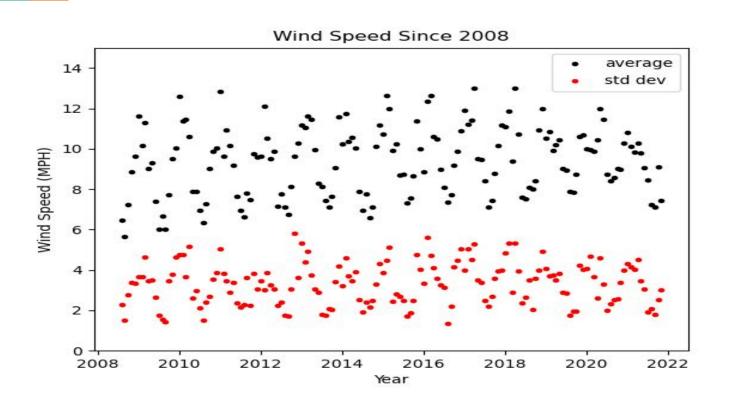
#### **Monthly Avg Precipitation over Time**



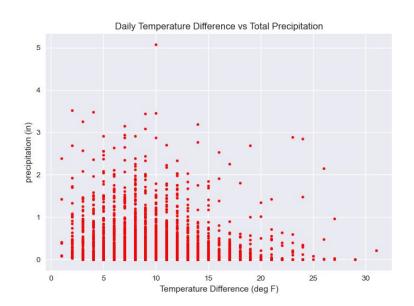
## **Monthly Total Precipitation Over Time**

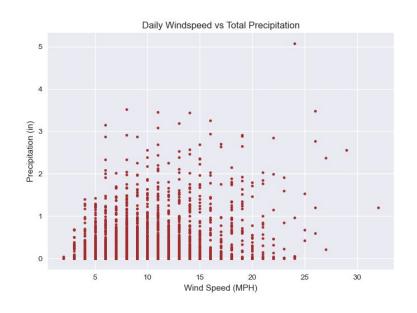


## Wind Speed Over Time



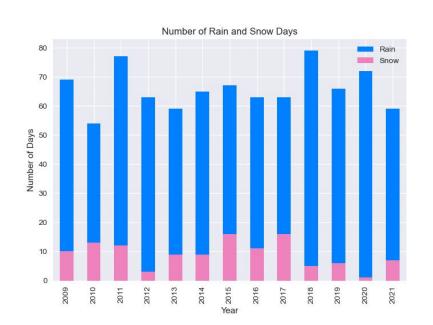
## **Comparing Different Features to Precipitation**

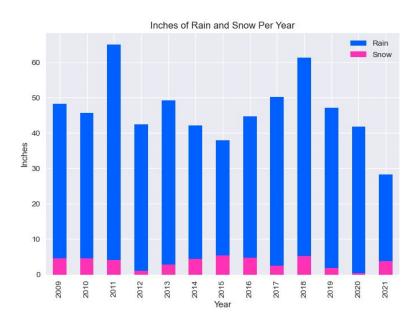




These graphs show little correlations. It only shows that whenever it rained the temperature range was mainly within 5 - 15 deg F and wind speed was mainly 5 - 15 mph.

# **Analyzing Rain and Snow**





There is no clear downward or upward trend with the amount of rain and snow that falls in a year, and the same can be said about the number of occurrences.

#### Conclusion

- weather has not changed much over the last decade
- temperature and precipitation has been pretty much consistent including the amount of rain and snow
- no clear correlation between temperature difference and precipitation
- no correlation between difference of wind speed and gust and precipitation

#### **Future Work**

- Similar analysis can be done for different cities and states and see if global warming has affected those locations differently.
- Potentially use the dataset to create algorithms to predict future weather.
- Potentially combine the used data table with other data tables with other useful features to find positive correlations.