



# How Badly is Global Warming Affecting Greensboro, NC?

Jung Hwan Lim

# Motive



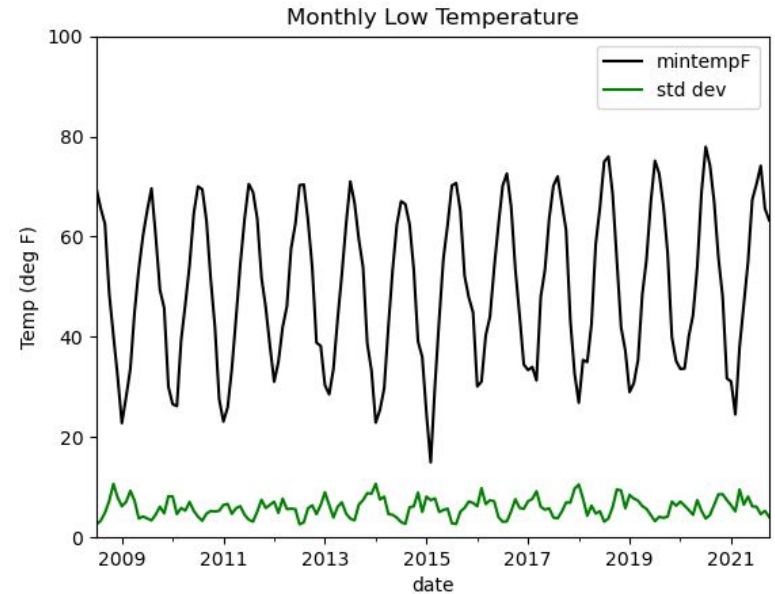
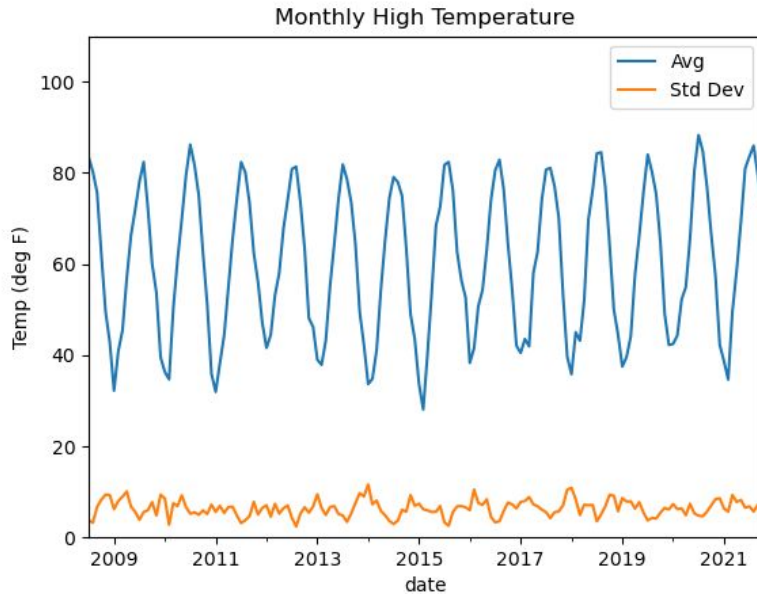
- Media always talks about how global warming is causing current weather to break new records such as temperature and precipitation
- I wanted to see how much global warming has affected the weather in the past 10+ years in Greensboro.

# Why is this important?

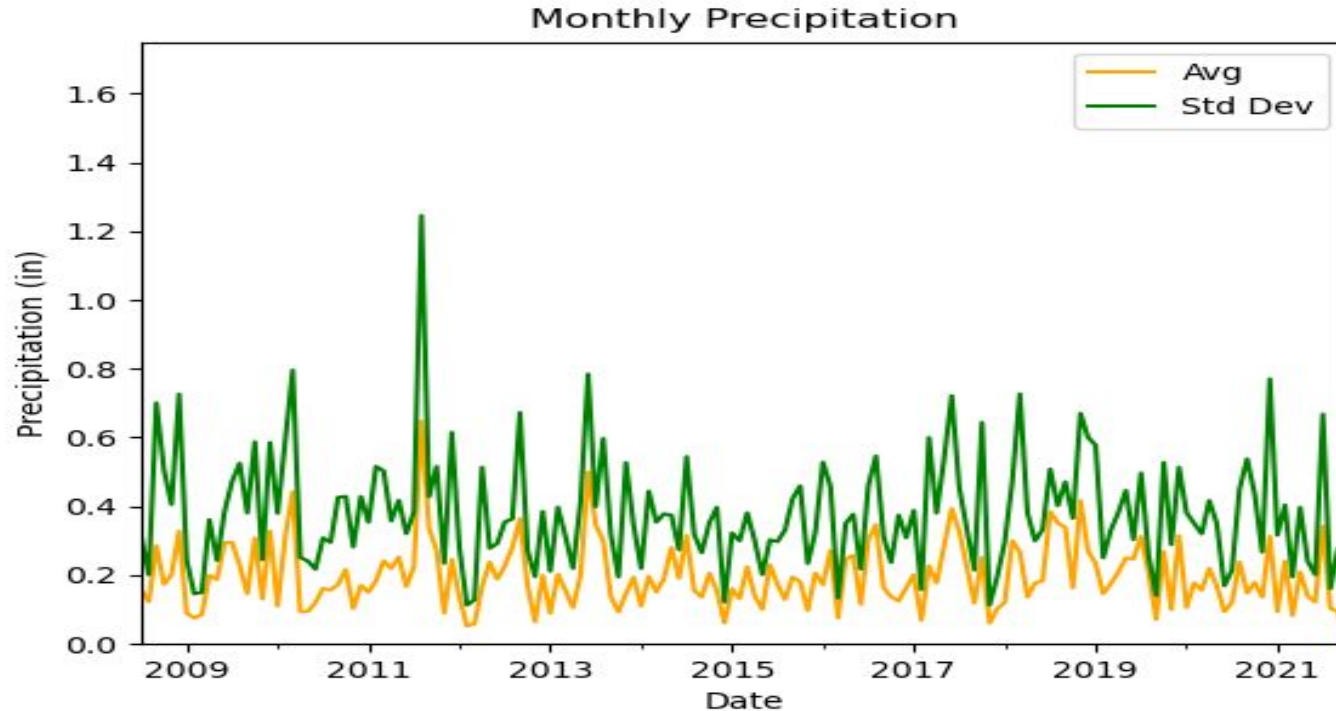


- This concerns with everyone's daily lives. Weather affects how we all go about our day.
- Current and historical weather analysis is necessary for forecasting weather.
- This can potentially change how we place our trust in mainstream media:
  - From distrusting the media to having a little more faith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

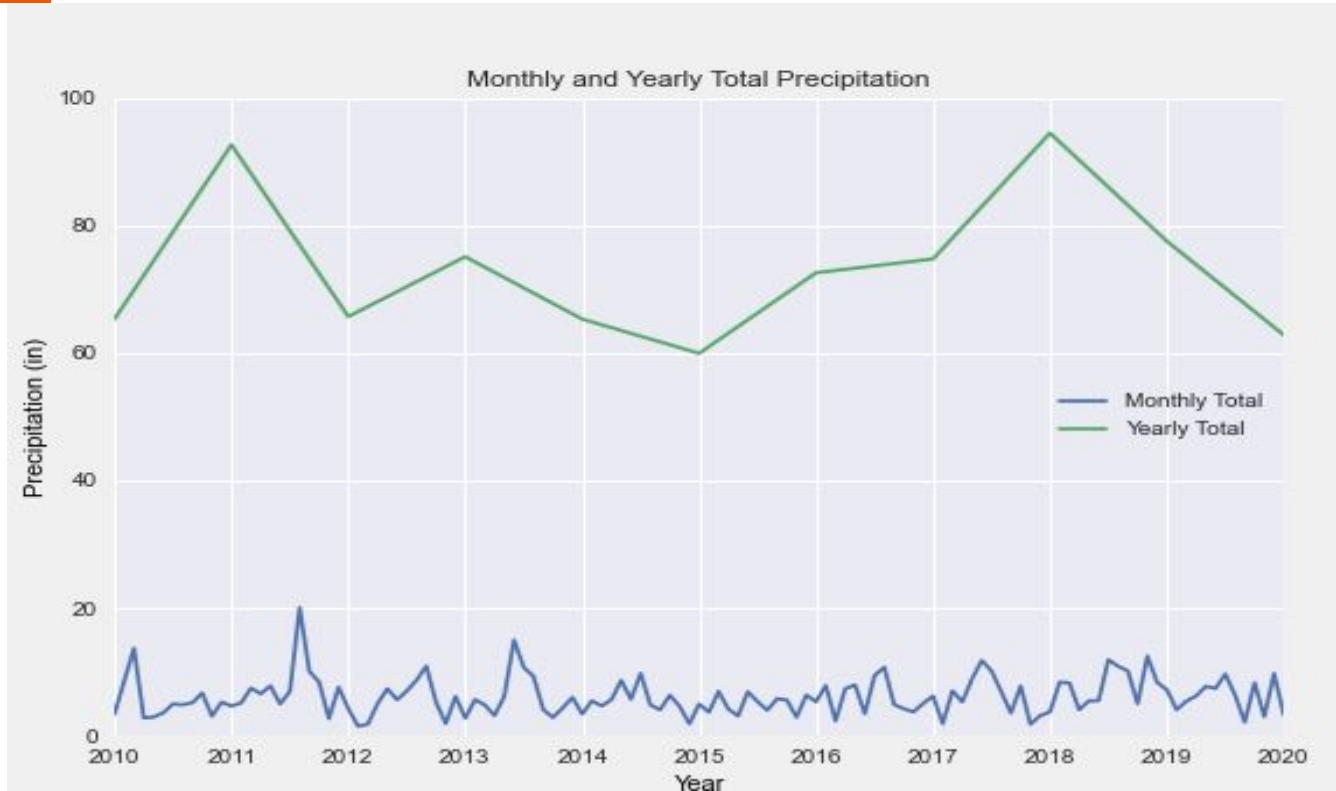
# Monthly Average Temperatures Over Time



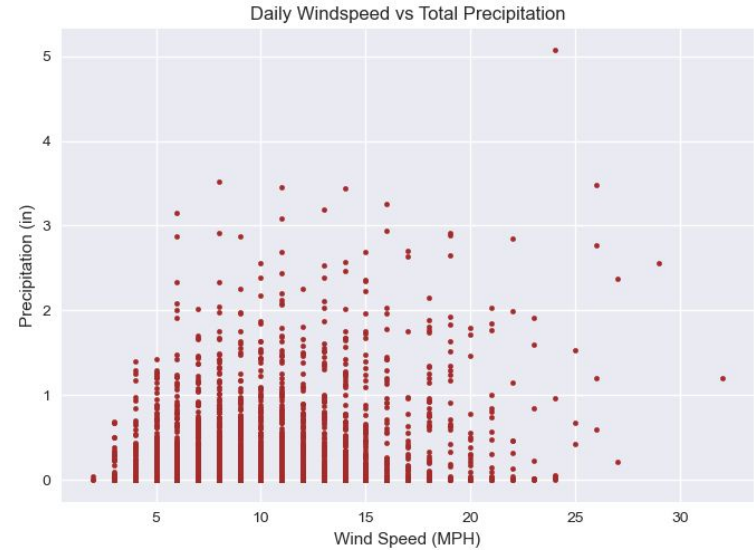
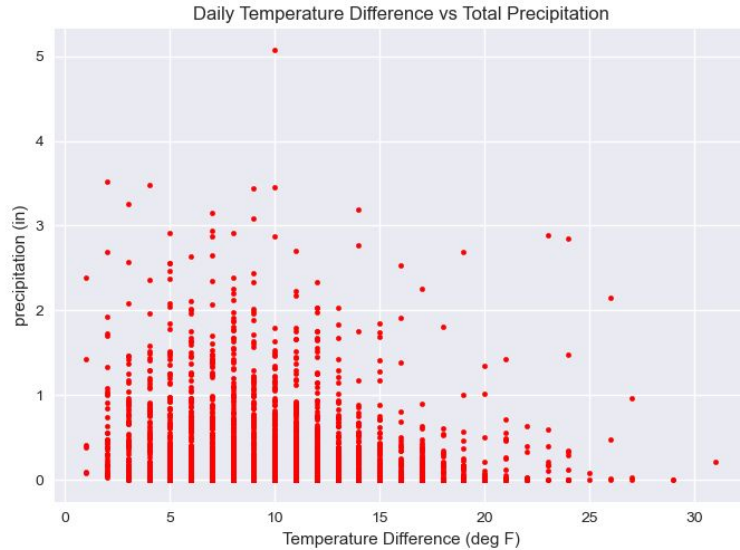
# Monthly Avg Precipitation over Time



# Monthly Total Precipitation Over Time

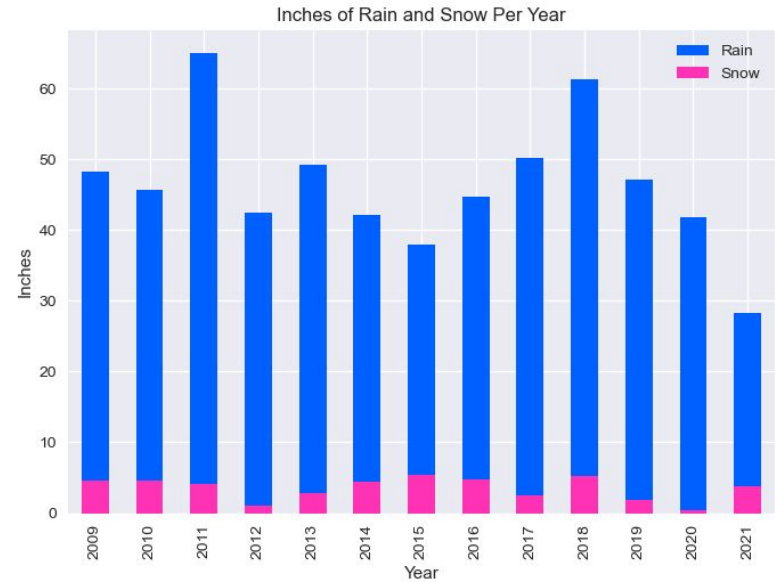
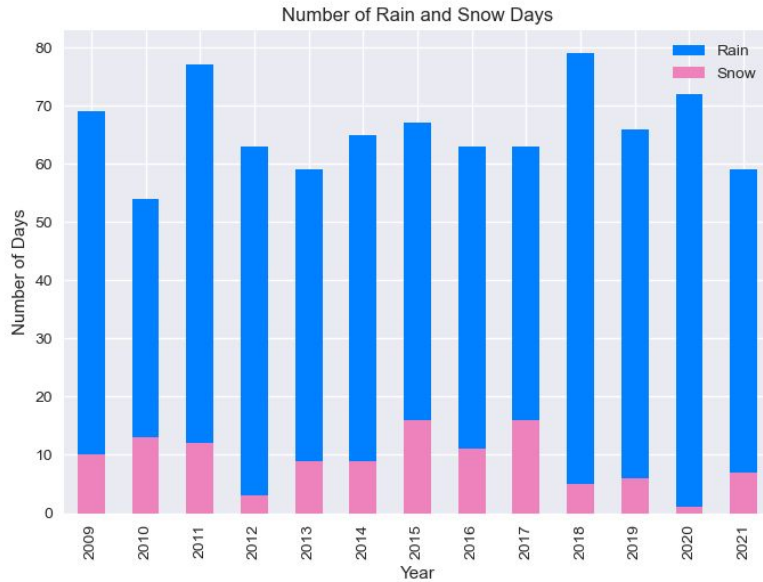


# Comparing Different Features to Precipitation



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.