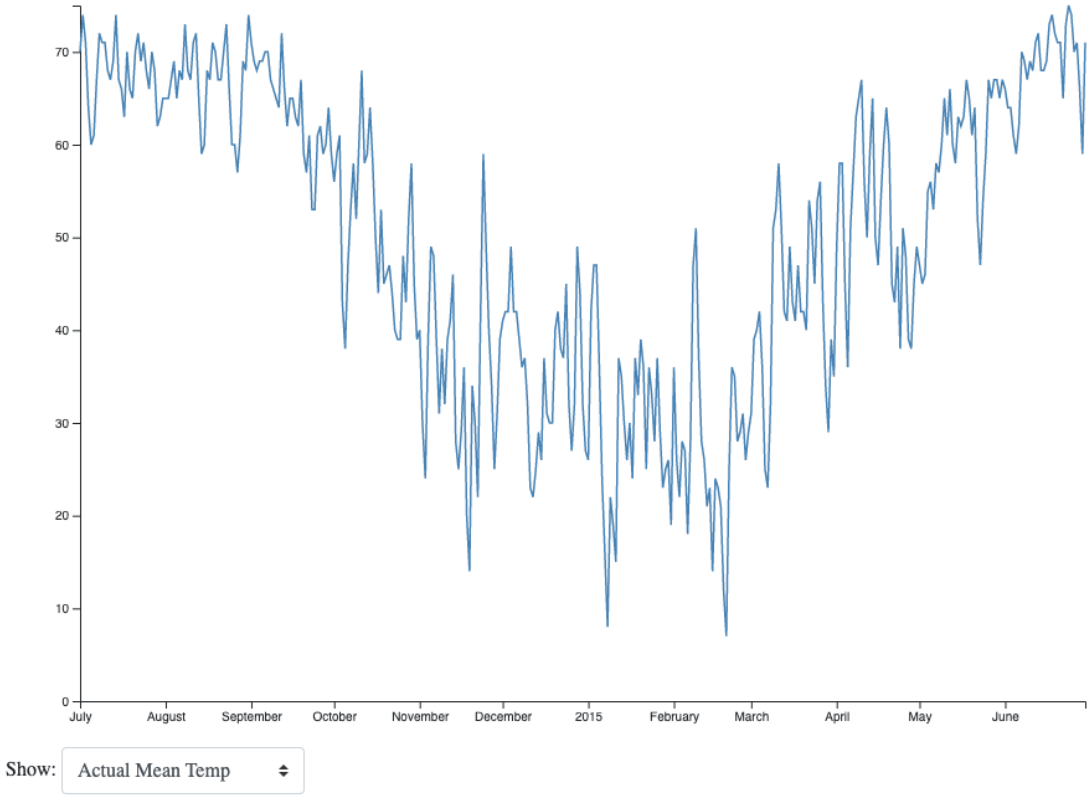
The final project involves creating a line graph of daily weather data for a year with various variables such as average mean temperature, maximum and minimum temperature recorded, average precipitation, and record minimum and maximum precipitation. The visualization allows users to view different data by changing variables in the drop-down menu.



The line graph supports several user tasks such as exploring weather trends and patterns over time, comparing weather conditions for different locations, and identifying extreme weather events. By selecting different variables and locations, users can also investigate the relationships between temperature and precipitation.

The design objective of the visualization is to enable users to gain insights into weather patterns, and how they relate to various factors such as, seasonality, and climate change. The

graph provides a visual representation of the data that is easy to read and understand, with clear labels and annotations. The analytical questions that the visualization aims to answer include: how do temperature and precipitation vary over time, and what factors contribute to these variations? What are the extreme weather events that occur in regions, and how do they affect local communities?

One aspect of the interface that may need explanation is the drop-down menu, which allows users to select different variables and locations. The menu could be made more intuitive by including brief descriptions of each option, or by providing a tooltip that appears when the user hovers over each selection. Additionally, it may be helpful to provide a legend or key that explains the different colors and symbols used in the graph to represent different variables.