

B8

## Shiny Proposal for Group B8

Revise

Group name: Blue Cookie

Title: The Climate of Boston over Time

Need more information

### Purpose

We would like to explore how the climate and temperature change in a given location over the years. Perhaps we could add more locations for comparisons. For example, we could analyze at Boston with questions such as: Is there a trend in temperature increasing? If so, how visible is the change? Or how much does the temperature vary over the year in an East Coast location vs a location on the West Coast? We can also look at other variables such as precipitation and weather conditions.

### Data

There are many government sites that contain information about the temperature and past temperatures. For example, the National Oceanic and Atmospheric Administration in accordance with the National Centers for Environmental Information contains a record of information that can be used. We will most likely be using downloading ".csv" files because the files with a large amount of information tend to be in this format. Any difficulties with wrangling are most likely going to be due to the large number of observations in the dataset and/or combining multiple datasets.

→ Give specifics what aspect is challenging?  
Are you combining files from several sources?

### Shiny app

Most likely, we would do plots over time to show how our variable of interest changes over time. For example, if we do something with the temperature, we could have an interactive scatterplot where we can change the response variables. Additionally, we could look into comparisons between different cities where a user can input multiple cities and visualize the differences in a variable such as precipitation.



↳ from a list? Facet?

Revise → you need @ least 2 "tabs"

what is on each? For scatterplot what are variables? Is time always x? What are the interactive components? Need more detail