

Renel Garces

## Explore Weather Trends Project

### Project Steps Taken

- 3 SQL queries were conducted to gather all relevant information out of the database. The first SQL query was "SELECT \* FROM city\_list WHERE name LIKE 'Sacramento'; ". This query was to confirm that the closest biggest city to my location had data stored in the city data table. The second query was "SELECT \* FROM city\_data WHERE name = 'Sacramento'; ". The third query was "SELECT \* FROM global\_data; ".
- The data was transferred to the program "Numbers" where all the information was formatted into a new table. The new table contained the columns; year, Sac\_Temp, Global\_temp, Sac\_5yr\_MA, and Global\_5yr\_MA.
- 5-year moving average calculations pertaining to the yearly Sacramento and Global temperatures were created to utilize in making a smooth line chart comparing the yearly temperatures between Sacramento and global. To calculate the 5-year moving averages, the average function in the Numbers program was used.

### Observations

- The first most noticeable observation made from the data was Sacramento's significantly higher average temperature relative to the average global temperature.
- The second most noticeable observation is Sacramento's yearly temperature has more significant fluctuations year to year relative to the average global temperature.
- The third observation is that both the Sacramento and global average temperatures have an increasing trend over time.
- The fourth observation is that the temperature changes of Sacramento and the global average were more erratic between the years 1849-1920 compared to 1920-2015.

