Audrey Pasnello

Weather Trends

Methodology:

1. Query data from the database provided, pulling the full set of global records and all records for New York.

   To select the nearest city from city_list:

   ```
   select *
   from city_list;
   ```

   To pull the annual data for New York from city_data:

   ```
   select *
   from city_data
   where city like 'New York';
   ```

   To select the enter dataset of annual temperatures from global_data:

   ```
   select *
   from global_data;
   ```

2. After opening the .csv export, using a VLOOKUP to combine the data at a year level, eliminating the years prior to 1750 where there was missing data.
3. Calculate moving average by calculating the average of a rolling three year period and plot data on a line chart.

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Results:
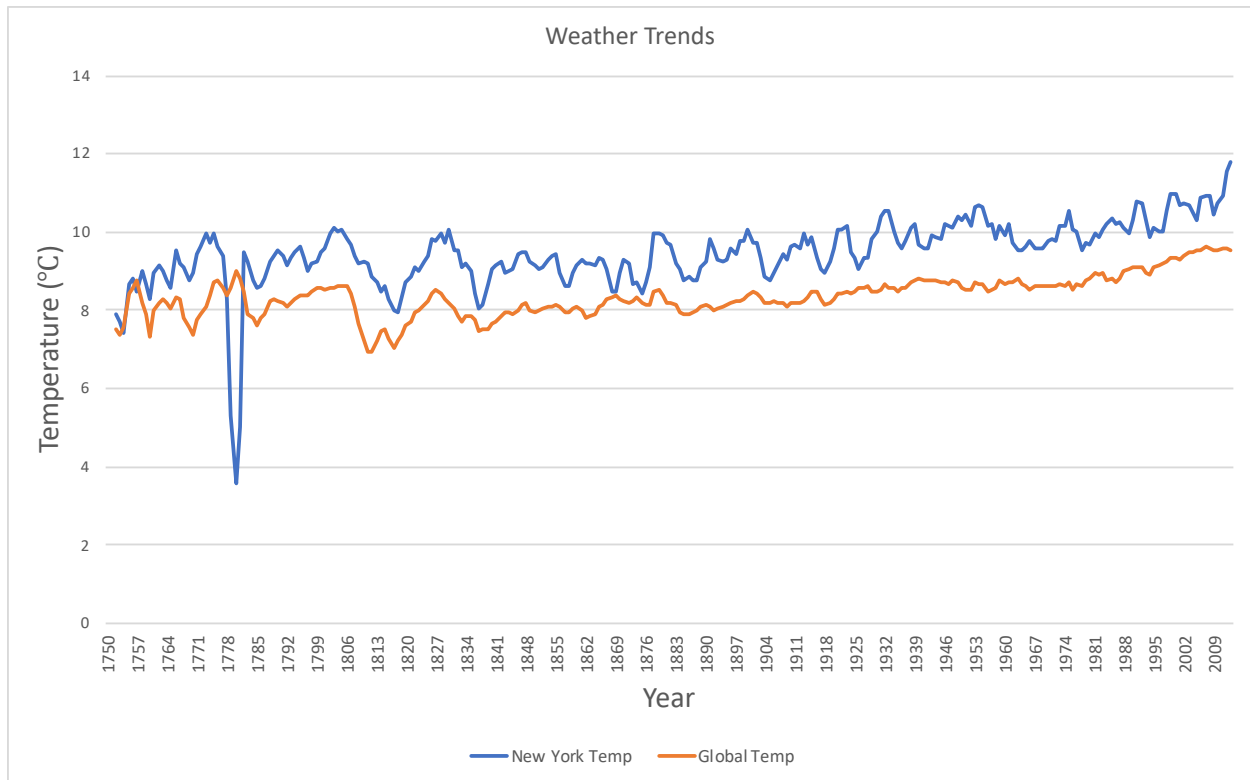
Over the past 250 years, the global temperature has gradually increased for a total of 2°C. Similarly, New York City temperatures gradually increased and were approximately 1°C higher than the global temperature each year, on average. The highest temperatures of 12.2°C in New York and 9.7°C globally were recorded in 2013 and 2007, respectively.

Overall, the temperature trend in New York reflects the global trend, continually increasing over the past centuries. The average annual change in temperature in New York from 1750 to 2013 was +0.01°C, double the global average annual increase.

The sudden drop in annual temperature in beginning in 1778 is due to a year of missing data for New York City, which affects the moving average of the data through 1780, after which the data is complete.