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Project 1 – Comparing Weather Trends

Outline

- What tools did you use for each step? (Python, SQL, Excel, etc)
    - I used SQL in the Udacity database environment to extract the global and Chicago temperature data into an excel file.

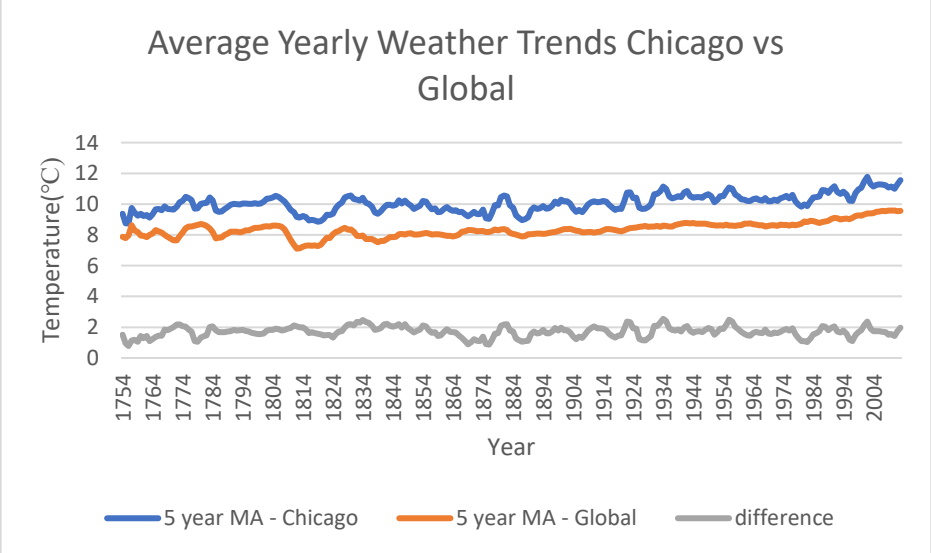
      Chicago SQL Code:
      select city, year, avg_temp
      from city_data
      where city = 'Chicago'

      Global SQL Code:
      *select **
      from global_data

    - I used Excel to calculate moving averages and to create the line chart.
- How did you calculate the moving average?
    - I took the average of the last 5 years and applied to all the following years. Then used the moving average data starting at year 1754
- What were your key considerations when deciding how to visualize the trends?

  -I used the recommended graph feature. The line graph allows you to see the trends of Chicago and global very easily and clearly.

Line chart



Observations

- Is your city hotter or cooler on average compared to the global average? Has the difference been consistent over time?

  -Chicago is hotter on average compared to the global average. The difference has been fairly consistence between 1-2 degrees every year.

- "How do the changes in your city's temperatures over time compare to the changes in the global average?"

  -Changes between Global and Chicago from 1754 and 1835 look similar. From 1836 and on Global averages have been very steady, whereas Chicago's weather is always more volatile.

- What does the overall trend look like? Is the world getting hotter or cooler? Has the trend been consistent over the last few hundred years?

  -The over trend seems to be an increase in temperature. It seems that the increase is more noticeable starting around 1889.