Data Analyst Project 1

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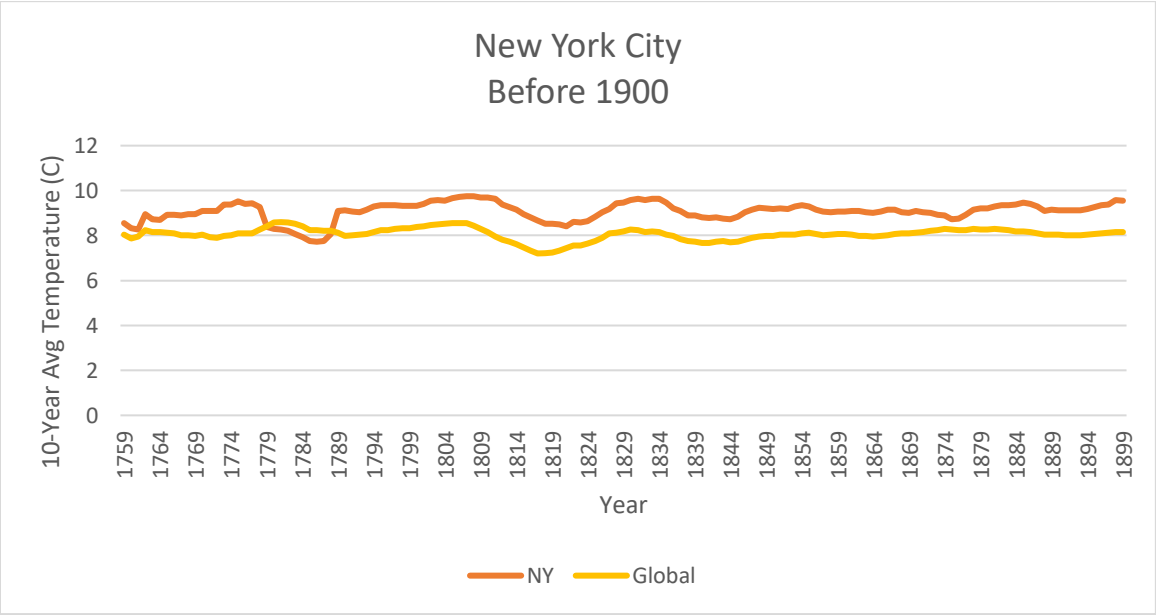

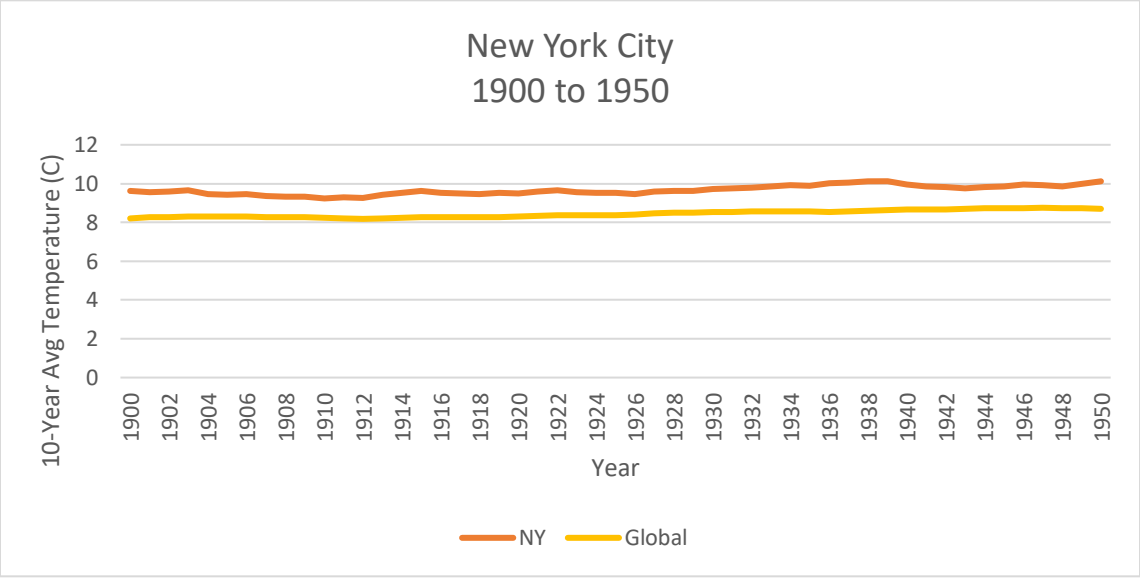

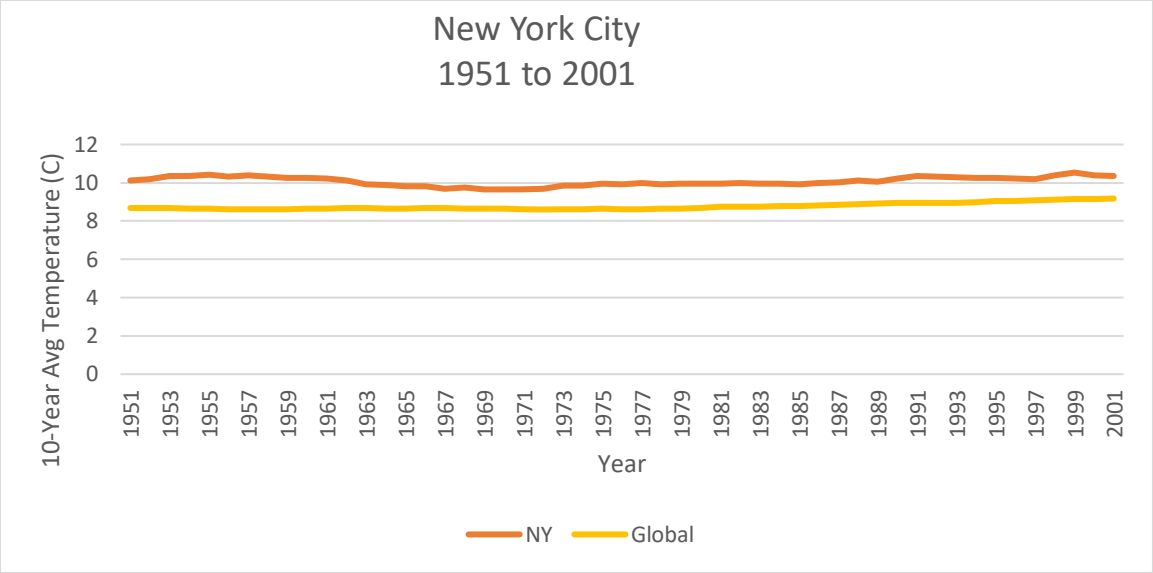

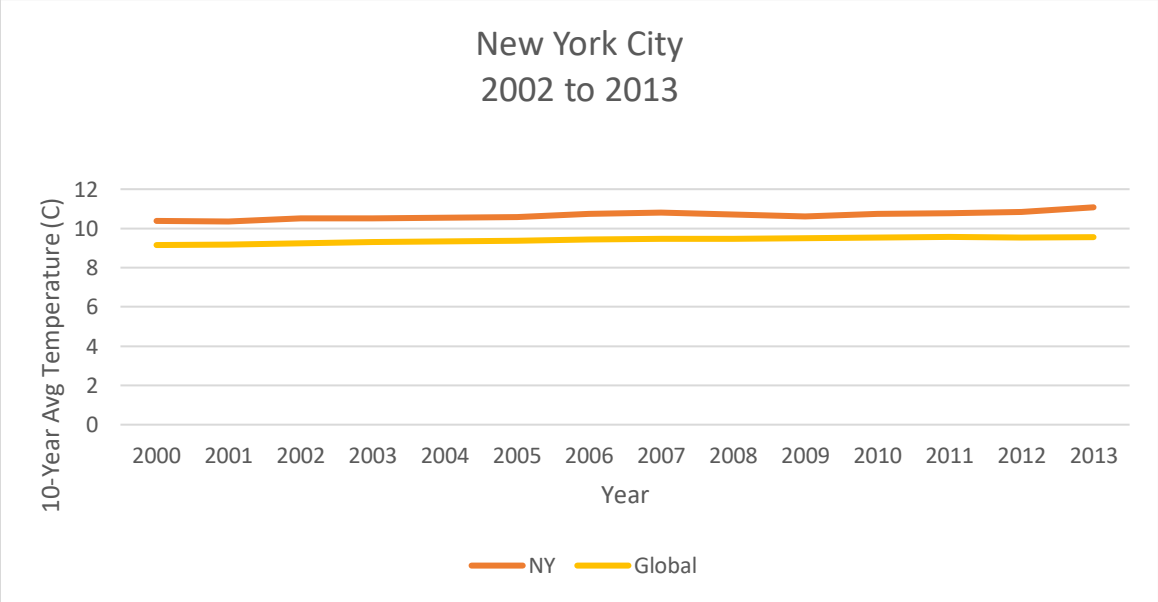

Observation 1:

In the 1900 to 1950 line chart, the New York 10-year averages are below 10 with the exception of 1937 to 1939. The global temperatures are near 8 degrees Celsius. On the 1951 to 2001 chart, the global 10-year averages are higher and consistently above 8.5. In the same time period, the New York 10-year average temperatures are at 10 or above with the exception of the early 1970s, 1970 to 1974.

Then in 2000 to 2013, both New York and the global 10-year averages are higher than the 1900 to 1950 chart with the New York 10-year average temperatures rising above 10 degrees Celsius. The global 10-year average temperatures in the same time period are consistently above 8 and nearing 9 degrees Celsius

So, from these three charts we see a gradual increase in both the New York and global 10-year average temperatures. It is clear that since 1900, New York city and global temperatures are gradually rising.

Observation 2:

The “Before 1900” chart shows that New York and global 10-year averages have more fluctuation. But the 10-year averages for New York are below 10 and the global 10-year average temperatures are mostly 8 or below. This period is much different as it represents a period of early industrialization with factories, and steam trains before the car was invented. It is difficult to compare the 10-year average temperatures from before 1900 to later periods for this reason.

Observation 3:

In the first half of the 20th century, 1900 to 1950, New York is warmer than the average global temperatures during same time period. New York city is at least 1 degree Celsius higher than the global averages in the same time period. The same trend holds true from the late 17th century, 1770 through 2013 where New York's 10-year average temperatures are higher than the global 10-year average temperatures for the same time periods.

Observation 4:

From 1800 to 1860, the New York 10-year average temperature was 9.16, while the global 10-year average temperature is 7.95 for the same time period. From 1860 to 1910, the New York 10-year average temperature was 9.22, the global 10-year average was 8.15. New Yorker is still warmer than the global average by more than 1 degrees Celsius.

From 1949 to 1960, The New York 10-year average temperature reaches above 10 but goes back down after 1961. But after 1985, the NY 10-year avg temperature jumps to over 10 degrees C. We do not see the global 10-year average temperature increase until 1995, 10 years later, when it rises above 9 degrees Celsius. Thereafter, the global 10-year average temperature remains above 9 degrees Celsius. Before 1995, the global 10-year average temperature fluctuates between 7 to 8 degrees Celsius dating back to the 18th century. It seems that the New York 10-year average temperature increased 10 years sooner than the global 10-year average.