#1. Explore Weather Trend

[Outline]
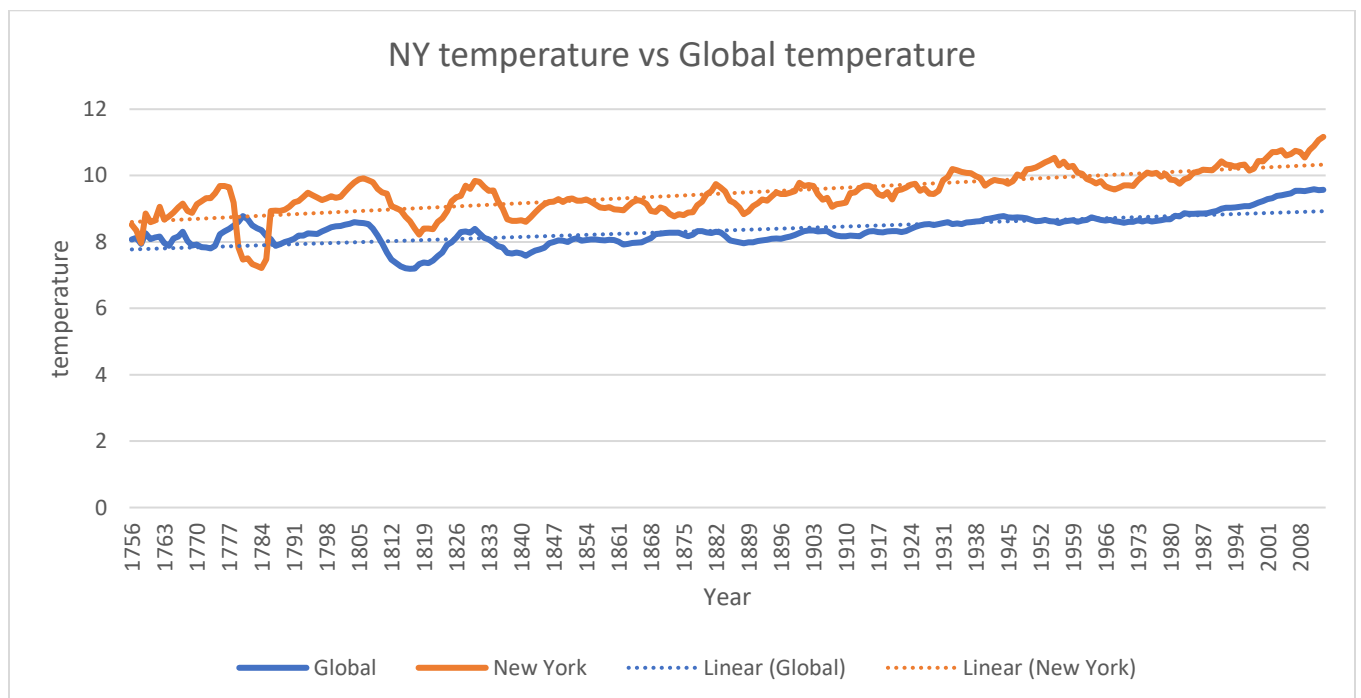I used SQL for data extraction, and excel for data visualization.
I calculated moving average based upon recent 7 years temperature data.
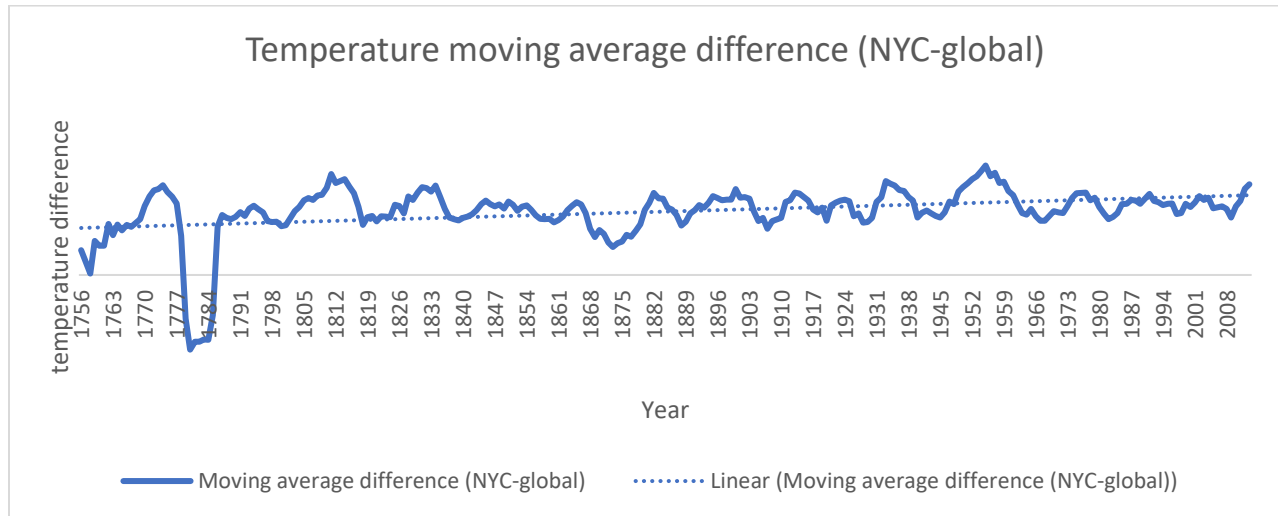Due to data fluctuation, I tried to show overall data trend with trade line.

1) New York temperature is hotter than global average temperature.

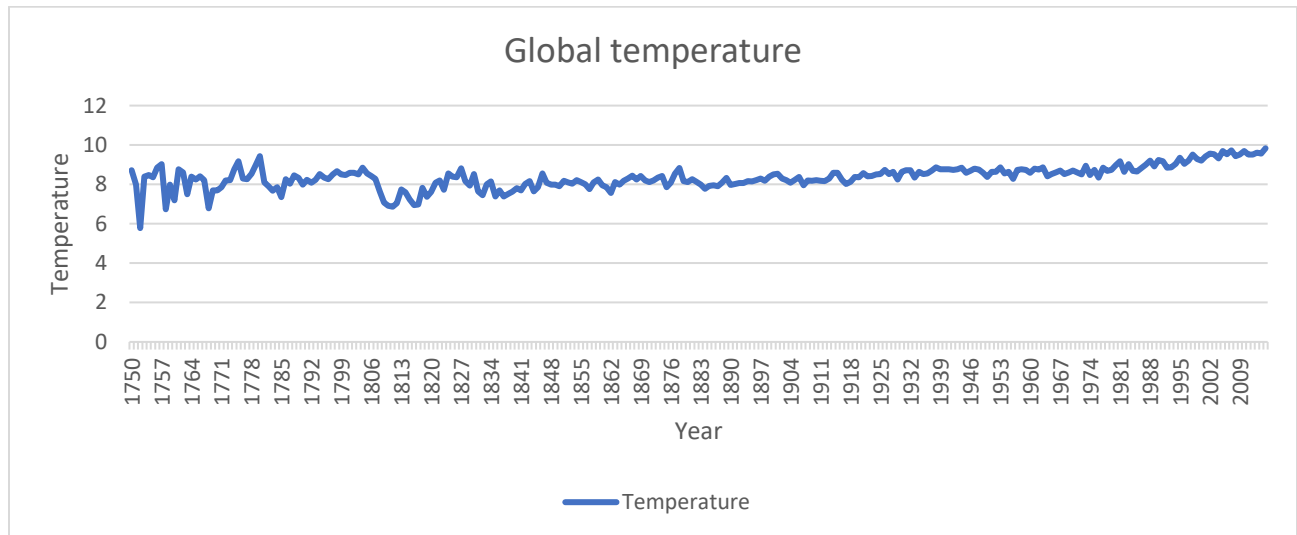| average	New York	Global	Difference
7 years moving average	9.47	8.35	1.11
average	9.52	8.37	1.15

2) The difference between New York and Global temperature is not identical over time. However, after 1786 the difference shows similar pattern. 7 day moving average temperature of NY is higher than Global, and average difference is 1.1.

3) Both New York and Global temperature shows increase pattern, but New York temperature increased more than Global temperature. Moving average difference graph shows that the difference between New York and Global temperature has increase pattern.

Temperature moving average difference (NYC-global)

4) The world is getting hotter, and this trend is more obvious over the last hundred years.

Global temperature

[SQL Query]

select year, avg_temp from city_data

where city='New York'

select year, avg_temp

from global_data