1. Outline

First, I used SQL to extract the data. I live in Tokyo, Japan so I evaluated the data in Tokyo and global one. I evaluated following commands.

SELECT \* FROM city\_list

SELECT \* FROM city\_data WHERE city='Tokyo'

SELECT \* FROM global\_data

Then, I imported the evaluated CSV file to Excel. I calculated the 5-year moving average using AVERAGE function for each year.

I plotted the two data in one chart to make it easier to compare when I visualized them on the line chart. In this data, the number of plots is so many and I predicted the markers adversely affect readability, so I didn’t use markers.

1. Observation
2. After around 1900, the temperature has slowly been increasing in both data.
3. Before around 1900, the temperature had macroscopically almost stayed at a constant but microscopically we can see the fine changes.
4. Tokyo tends to be colder than the global temperature in recent years.
5. The increasing speed in Tokyo is slowest of the two.