

Report

- **What tools did you use for each step?**

Google Sheets

- **How did you calculate the moving average?**

For example, in the eighth row I calculate the moving average by adding all the previous 7 average temperature and then dividing by 7; Then, in the ninth row, I do calculation by the same way and so on.

- **What were your key considerations when deciding how to visualize the trends?**

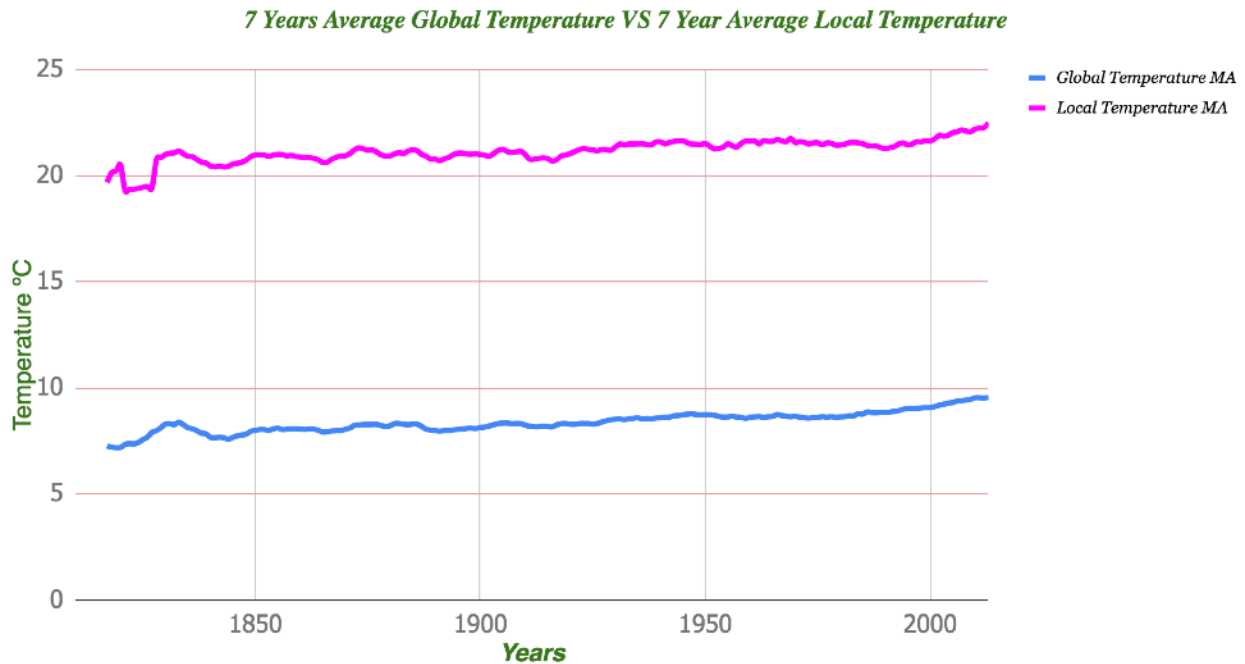
My attempt is to compare the moving average (Y-axis) ,of average temperature/year, over 7 years between the temperature in my local city, Cairo, with the global temperature over years (X-axis).

SQL :

1.

```
SELECT *  
FROM global_data  
WHERE year >= 1808
```
2.

```
SELECT city, country , avg_temp  
FROM city_data  
WHERE country = 'Egypt' AND city = 'Cairo'
```



Observations

- Similarities:

- At almost year 1830, They came from a bad declination in temperature to an increase.
- Since 1850, They are both increasing but with few declination in between.

- Differences:

- Since 1850, The noise in the local temperature is much more than global temperature. (I mean by the noise the increasing and decreasing of temperature).
- From 1805 to 2013, the increasing in temperature in global temperature is pretty mote the increasing in local one since in global it has increased from 6 to 10, by approximation, while in local it has increased from 20 to 22.