

Using SQL Queries to extract the data for the global and local “chose Riyadh city because it’s the big nearest city to me” average temperature as first step; the following illustration shows the steps was followed

Input

SCHEMA

city\_data

city\_list

global\_data

1 SELECT \*

2 FROM city\_data

3 WHERE city = 'Riyadh'

4

5

6

Success!

EVALUATE

Output

171 results

Download CSV

year	city	country	avg_temp
1843	Riyadh	Saudi Arabia	24.74
1844	Riyadh	Saudi Arabia	15.45
1845	Riyadh	Saudi Arabia	20.82
1846	Riyadh	Saudi Arabia	
1847	Riyadh	Saudi Arabia	
1848	Riyadh	Saudi Arabia	24.56
1849	Riyadh	Saudi Arabia	24.80
1850	Riyadh	Saudi Arabia	24.34

Input

SCHEMA

city\_data

city\_list

global\_data

1 SELECT \*

2 FROM global\_data

3

4

5

Success!

EVALUATE

Output 266 results

Download CSV

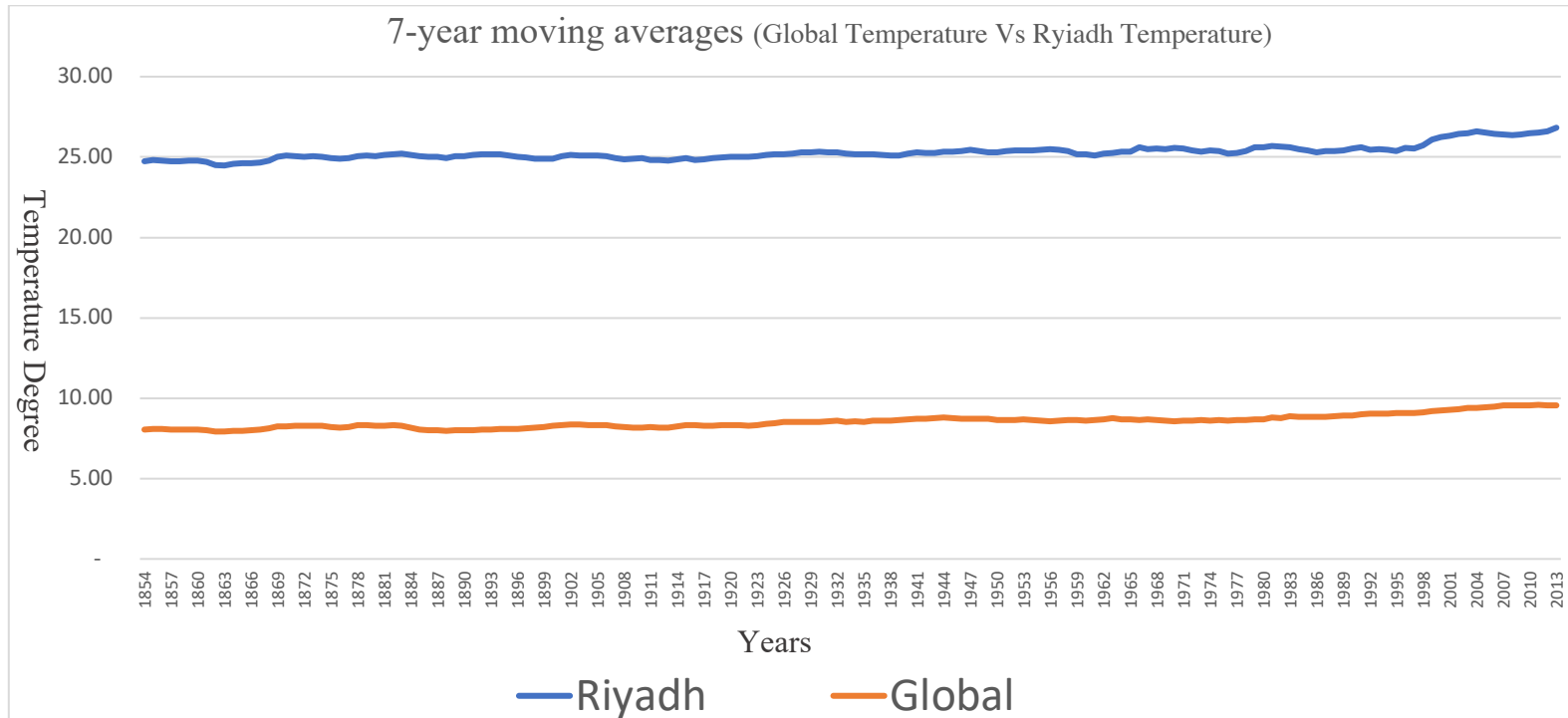
year	avg_temp
1750	8.72
1751	7.98
1752	5.78
1753	8.39
1754	8.47
1755	8.36
1756	8.85
1757	9.02

First: used the excel sheet to smooth the data and compare by using the 7-years MA “moving average method” to calculate the average temperature for both global and local.

Second: display it in line chart diagram

- What were your key considerations when deciding how to visualize the trends?  
Data can be shown as visual and easily understood also it can represent the data changing over time in basic way with using both global and local temperatures.

- **Line chart** with local and global temperature trends



- **four observations about the similarities and/or differences in the trends :**
  - 1- My city "Riyadh" is much hotter than the average global city, 25 degree and below 10 degree respectively, and the relationship has been consistent over time.
  - 2- For Riyadh city the temperatures are consistent over time excepted the last few years it has increased over time.
  - 3- Based on the last few hundred years, the trend started to be inconsistent and is slowly increasing in the chart, showing that the world is becoming hotter.
  - 4- There's a big different gap between the global and Riyadh weather, where the global is much colder, almost 10-degree difference.
  - 5- There is a similarity that both in the past years were consistent but in the few past year it started to increase slowly.