

An outline:

What tools did you use for each step? I used SQL and Excel.

To Extract the data:

- A SQL query to find the city nearest

Select City

From city_list

Where City= 'Riyadh';

- A SQL query to extract the city level data:

Select *

From city_data

where city = 'Riyadh';

- A SQL query to extract the global data:

Select *

From global_data ;

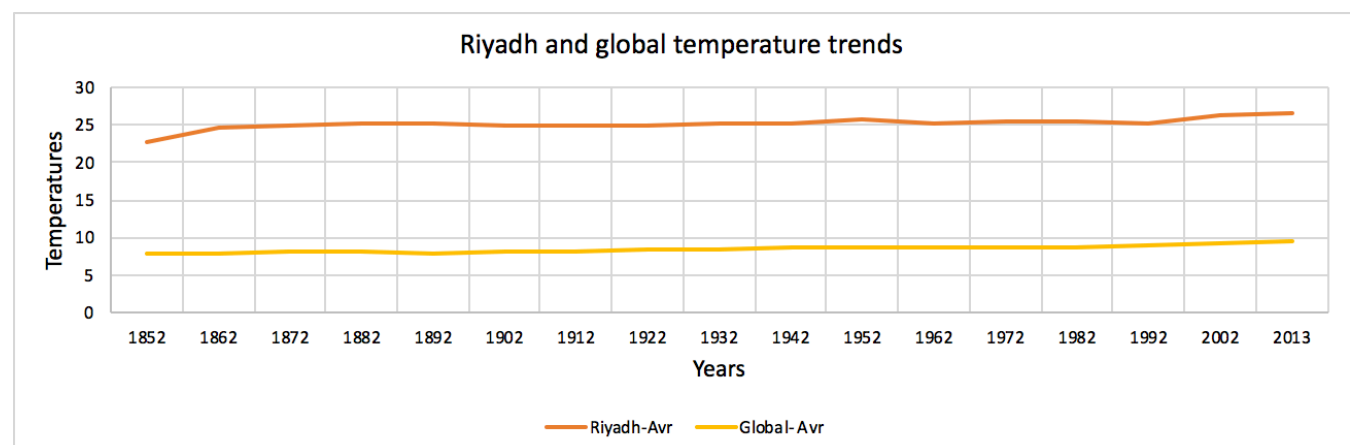
How did you calculate the moving average? with average Function in Excel.

Calculate Moving Averages:

I first used the AVERAGE function to calculate 10 years moving average on the B2 to B11 cells (AVERAGE (B12:B21)).

C21				=AVERAGE(B12:B21)
	A	B	C	
1	year	Riyadh	Riyadh-Avr	
2	1843	24.74		
3	1844	15.45		
4	1845	20.82		
5	1846	21.5		
6	1847	23.5		
7	1848	24.56		
8	1849	24.8		
9	1850	24.34		
10	1851	25.03		
11	1852	24.85	22.74888889	
12	1853	24.93		
13	1854	24.72		
14	1855	24.92		
15	1856	24.57		
16	1857	24.26		
17	1858	25.01		
18	1859	24.95		
19	1860	24.94		
20	1861	24.13		
21	1862	23.77		24.62

A line chart:



Observations:

- Riyadh is hotter average compared to the global average.
- Globe is cooler average compared to the Riyadh average.
- The difference was consistent between Riyadh average and global average.
- The overall trends been consistent over the last few hundred years.