

Explore Weather Trends

Step to Explore Weather Trends:

❖ Extract data:

- My country (Riyadh) data

The screenshot shows the 'Accessing Data With SQL' interface. On the left, a schema list includes 'city_data', 'year', 'city', 'country', and 'avg_temp'. The SQL query in the center is:

```
1 select * from city_data
2 where city='Riyadh'
```

. A green 'Success!' message and an 'EVALUATE' button are visible. Below the query, the 'Output' section shows 171 results. The first few rows of the table are:

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	

- Global data

The screenshot shows the 'Accessing Data With SQL' interface. On the left, a schema list includes 'city_data', 'city_list', and 'global_data'. The SQL query in the center is:

```
1 select * from global_data
2
```

. A green 'Success!' message and an 'EVALUATE' button are visible. Below the query, the 'Output' section shows 266 results. The first few rows of the table are:

year	avg_temp
1750	8.72
1751	7.98
1752	5.78

❖ open the data using excel.

❖ I found that my country starts from 1843 and the global data starts from 1750 so I remove the extra data from the global data.

❖ I calculate 20 years moving average

- My country

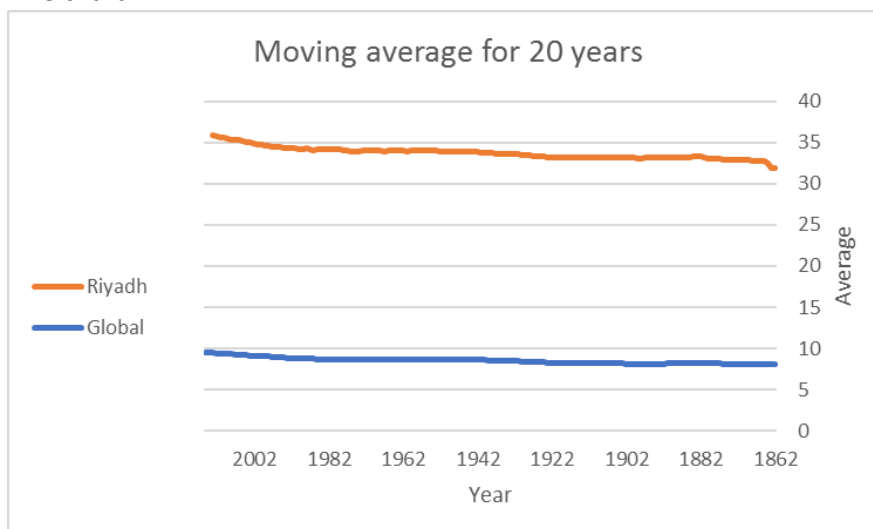
DATE					
=AVERAGE(D2:D21)					
year	city	country	avg. temp	20_yea	
1843	Riyadh	Saudi Arabia	24.74		
1844	Riyadh	Saudi Arabia	15.45		
1845	Riyadh	Saudi Arabia	20.82		
1846	Riyadh	Saudi Arabia			
1847	Riyadh	Saudi Arabia			
1848	Riyadh	Saudi Arabia	24.56		
1849	Riyadh	Saudi Arabia	24.8		
1850	Riyadh	Saudi Arabia	24.34		
1851	Riyadh	Saudi Arabia	25.03		
1852	Riyadh	Saudi Arabia	24.85		
1853	Riyadh	Saudi Arabia	24.93		
1854	Riyadh	Saudi Arabia	24.72		
1855	Riyadh	Saudi Arabia	24.92		
1856	Riyadh	Saudi Arabia	24.57		
1857	Riyadh	Saudi Arabia	24.26		
1858	Riyadh	Saudi Arabia	25.01		
1859	Riyadh	Saudi Arabia	24.95		
1860	Riyadh	Saudi Arabia	24.94		
1861	Riyadh	Saudi Arabia	24.13		
1862	Riyadh	Saudi Arabia	23.77	D11)	

- Global data

DATE					
=AVERAGE(B2:B21)					
year	avg. temp	Column			
1843	8.17				
1844	7.65				
1845	7.85				
1846	8.55				
1847	8.09				
1848	7.98				
1849	7.98				
1850	7.9				
1851	8.18				
1852	8.1				
1853	8.04				
1854	8.21				
1855	8.11				
1856	8				
1857	7.76				
1858	8.1				
1859	8.25				
1860	7.96				
1861	7.85				
1862	7.56	E(81:B11)			

❖ I decide using line chart because I want to compare the average between my country and global records.

❖ Line chart:



My observations

1. I see that my country has high average.
2. The graph show that my country has increase rate more than global in future.
3. The graph show that my country hotter than global.
4. Both data show increasing on temperature average in future.