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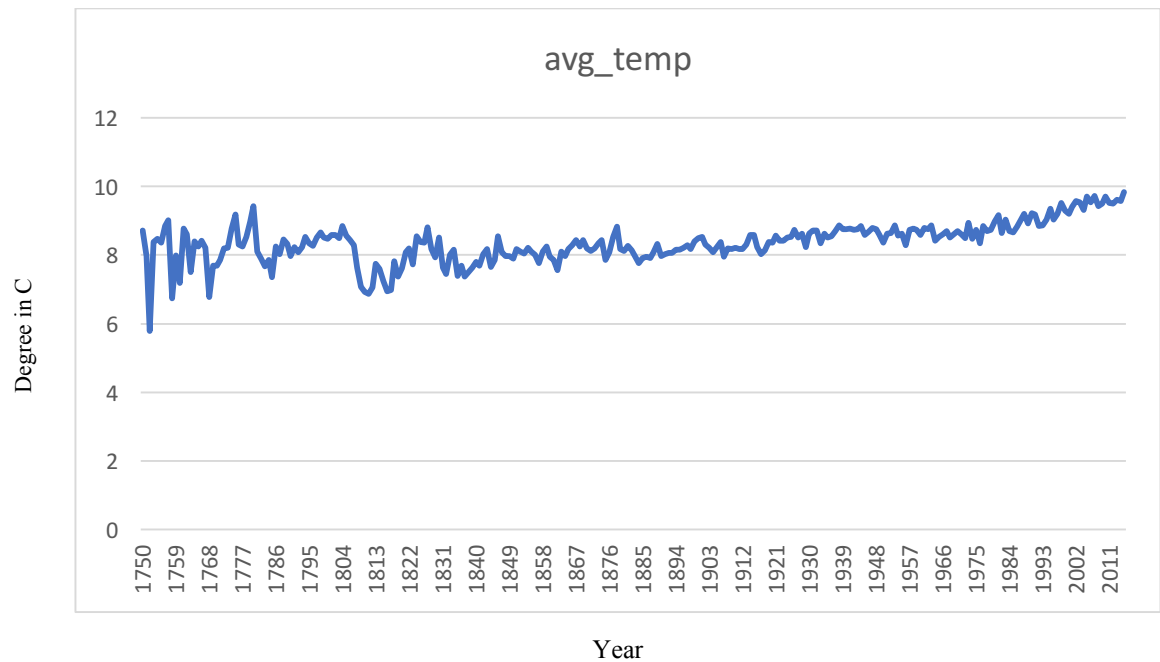
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Project 1

Weather Trends

P1: Weather Trends

Global average temperature line chart, from 1750 – 2014 (Avg temp: 8.36):

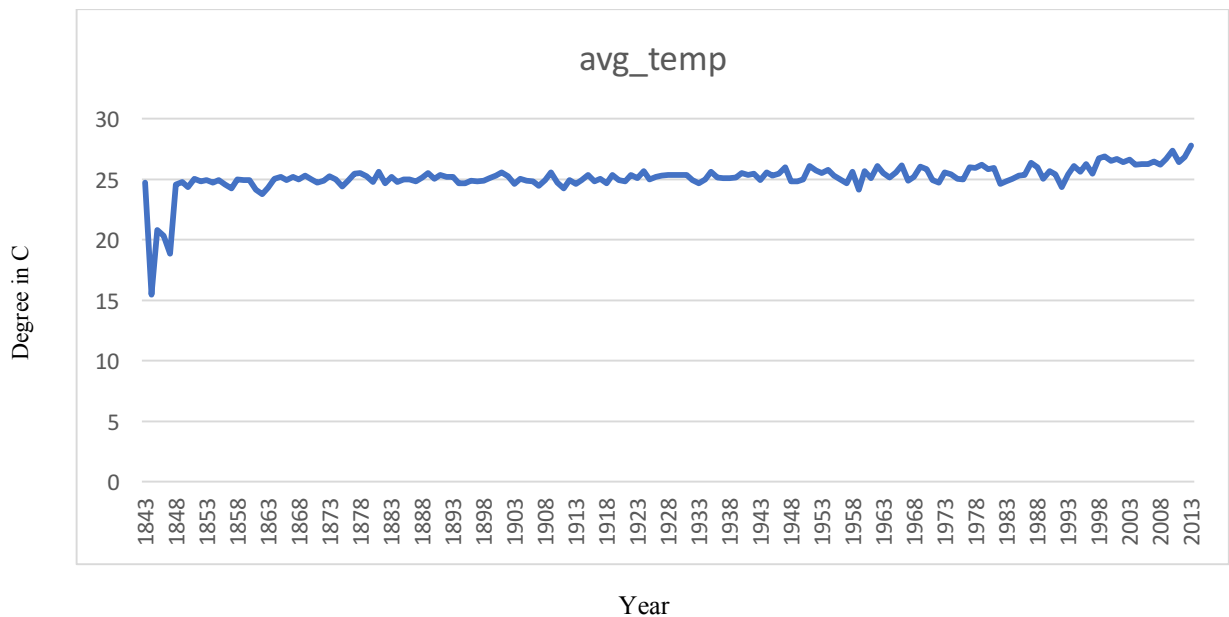


* average global temperatures by year in (°C).

My city (Riyadh, Saudi Arabia) temperature data information:

Average: 25.21 (from 1843 to 2013)

- Riyadh temperature data from 1843 – 2013:



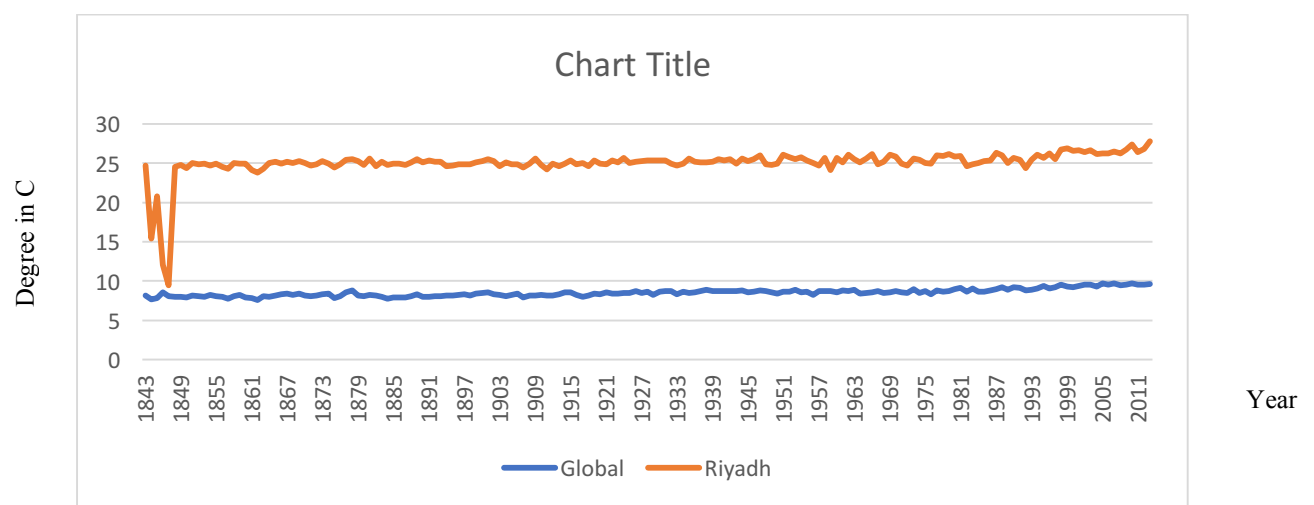
* average global temperatures by year in (°C).

Moving averages:

| <div> <div>AVERAGE</div> <div>✖ ✔ <i>fx</i></div> <div>=AVERAGE(B2:B8)</div> </div> | | | | | |
|-------------------------------------------------------------------------------------|------|----------|----------------------------------|--|--|
| | A | B | AVERAGE(number1, [number2], ...) | | |
| 1 | year | avg_temp | 7-year Moving Avg | | |
| 2 | 1850 | 24.34 | | | |
| 3 | 1851 | 25.03 | | | |
| 4 | 1852 | 24.85 | | | |
| 5 | 1853 | 24.93 | | | |
| 6 | 1854 | 24.72 | | | |
| 7 | 1855 | 24.92 | | | |
| 8 | 1856 | 24.57 | =AVERAGE(B2:B8) | | |
| 9 | 1857 | 24.26 | | | |
| 10 | 1858 | 25.01 | | | |
| 11 | 1859 | 24.95 | | | |
| 12 | 1860 | 24.94 | | | |
| 13 | 1861 | 24.13 | | | |
| 14 | 1862 | 23.77 | | | |
| 15 | 1863 | 24.22 | | | |

Observations:

- My city is hotter on average when we compare it to the global average, and the difference is not consistent over time



- For the changes in my city temperature over time compared to the changes in the global, based on the above chart line, it's on parallel
- For the overall trend in the chart line, the world getting hotter. and the trend doesn't been consistent over the last few hundred years
- The trends for other cities on my country are around the average on my cities. For example, Mecca Avg is : 25.27 and my city (Riyadh) is: 25.21

The steps for preparing the data:

- extract the data using SQL and download it with CSV format, queries:
 - select * from city_list
 - select * from city_data
 - select * from global_data
- Used Excel to prepare the data and visualized in the chart
- Calculate the moving average by using the Average Function in Excel
- My key considerations when I deciding to visualize the data are logic, the way to present the data, make sure the chart is helpful to make a decision and the compared
