

SQL QUERY USED TO EXTRACT DATA

- City Data

SELECT *

FROM city_data

WHERE name LIKE '%Lagos%' AND name LIKE '%Nigeria%';

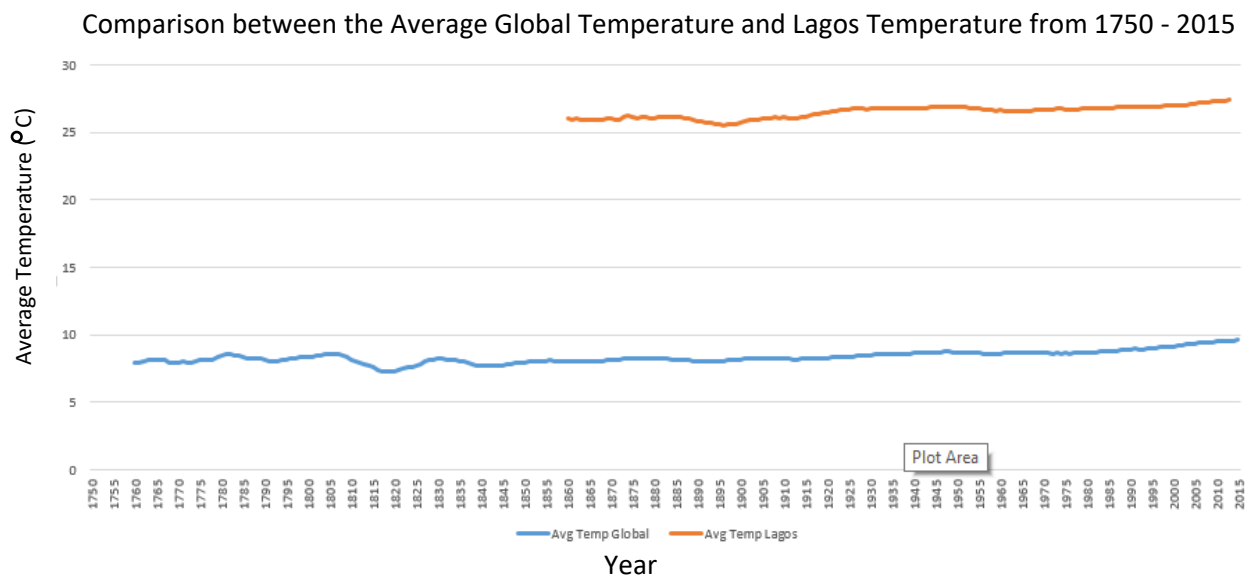
- Global Data

SELECT *

FROM global_data

IMPORT TO EXCEL AND MOVING AVERAGE CALCULATION

- The data was downloaded from the SQL workspace provided (in the CSV format)
- I opened the files on Excel Spreadsheet and copied the city_data to a separate sheet on the global_data Spreadsheet (workbook).
- I created a second column and called Ave Temp Global, which is where the moving average field where stored.
- I went down to the tenth year on the global data (1760) and used the AVERAGE() function to calculate the average temperature for the first ten years.
- I Clicked and dragged the formula down to the last year on the column.
- The Averages were calculated and I did the above to calculate the Moving Average for my local city from city_data and named it Avg Temp Lagos.
- I copied the "Avg Temp Lagos" column and pasted it side by side with the Avg Temp Global and Year according to their dates. The Data for Global Temperatures starts at 1750 and that for Lagos starts at 1860. Hence Average Temperature for Lagos starts at 1860.
- I used the Insert tool and clicked on "Recommended charts" after I had highlighted the tables I needed.
- I picked the Line Chart and it automatically plotted the variable with a legend to simplify the chart. I gave it an appropriate title and gave units to both X and Y axis.



INSIGHTS

- The average temperature of Lagos is higher than that of the Average Global Temperature and might suggest that Lagos city is hotter when compared to the Global Average.
- Between 1892 – 1899, Lagos records its lowest average temperature throughout the duration of average temperature measurements even if at that point, the Average Global Temperature is on a steady rise.
- Although Average Global Temperature has been fluctuating from 1760 – 1850, it records the lowest between 1810 and 1815.
- In general, the normal trend is upwards for both plots which means the temperature are rising and we have a responsibility to our planet to take care of it.