EXPLORE WEATHER TRENDS

OUTLINE OF STEPS TAKEN TO PREPARE THE DATA AND VISUALIZATION

- What tools did you use for each step?

SQL was used to extract data from database and excel was used to calculate the moving average and to make the line chart.
SQL query used are:-

1. SELECT *
   FROM global_data;

2. SELECT city
   FROM city_list
   WHERE country = 'India';

3. SELECT year, avg_temp
   FROM city_data
   WHERE country = 'India' and city = 'Delhi';

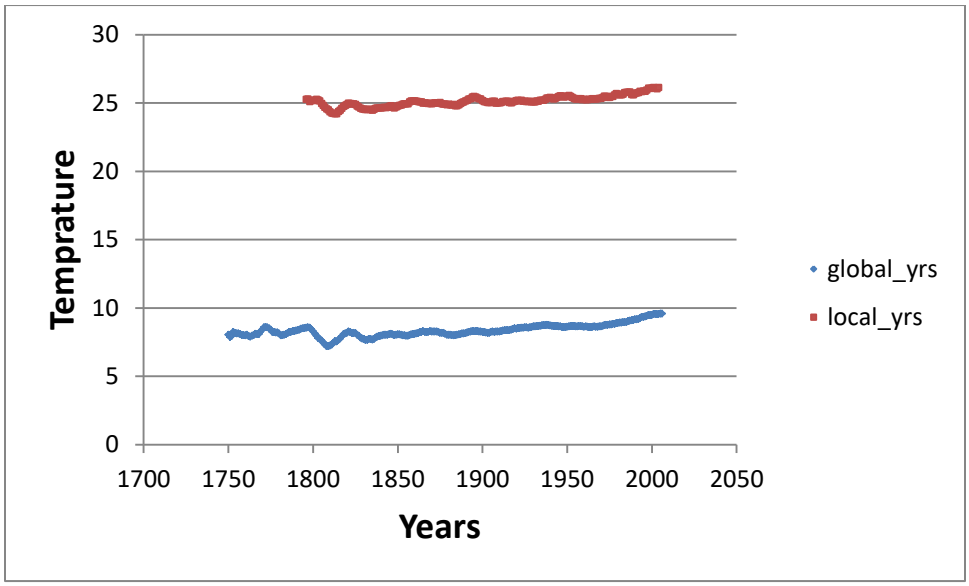
- How did you calculate moving average?

I calculated the moving average of 11 years by using the command =average(cell2:cell12) and then dragging down till the last value.

- What were your key considerations when deciding how to visualize the trends ?

My key consideration was to observe an increase or decrease in moving average temperature.

There was some missing data in local temperature. I filled that data by calculating mean of the values of the whole column, and then copying that mean to missing cells.



OBSERVATIONS:-

Here are some similarities and differences observed between the global and local moving average temperature data:-

SIMILARITIES:-

1. On the short term, both lines are volatile, but on the long term, both display a slow increase trend.
2. Both graphs shows increase in average temperature with time, which means earth is getting hotter.

DIFFERENCES:-

1. Local average temperature is observed to be hotter than the global average temperature.
2. Global moving average temperature is increasing at faster rate in comparison to local moving average temperature.