In this project I decide to study Mecca city temperature comparing to the global temperature between 1843 to 2015. Wanted to see temperate behavior to shown how the factories and our modern life style effected to weather temperature locally and globally in all of these years.

a) First of all, I extract Mecca city average temperature data using this SQL query:

SELECT year, avg\_temp FROM city\_data

WHERE city = 'Mecca'

Then global average temperature data using this SQL query:

SELECT \* FROM global\_data

b) After I save it as CSV file, I used Google sheet to calculate moving average for 10 years and shows line chart for it.

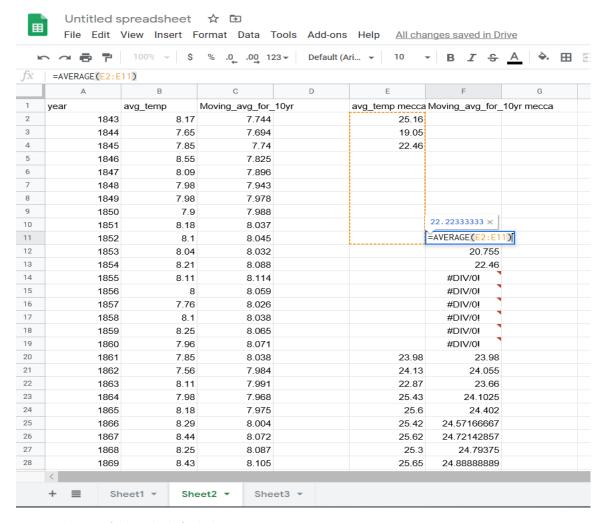


Figure 1 showing of the method of calculating 10ys Moving average

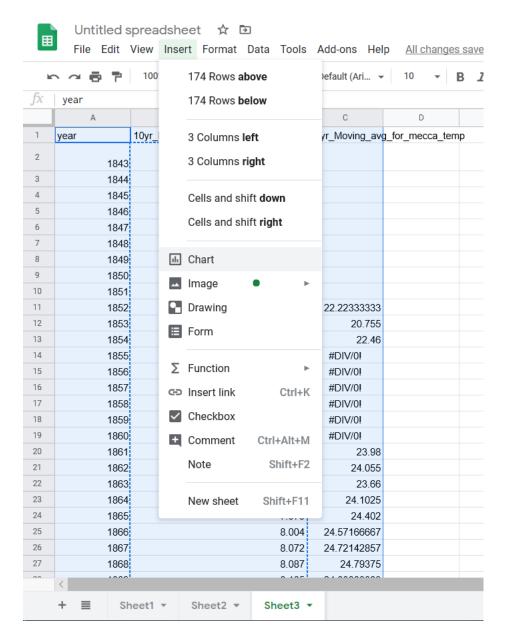


Figure 2 create line chart

## Temperature Trend using 10 years moving average

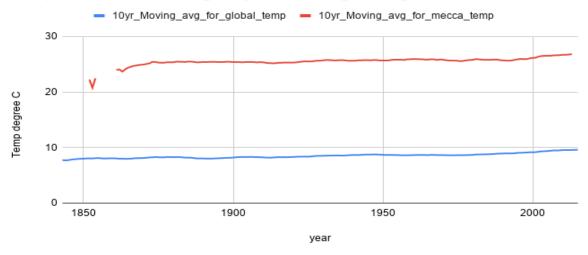


Figure 3 Line chart

## As we see in Line chart:

- 1) Mecca is more higher than global temp ( $\approx +17 \text{ C}$ )
- 2) Global and Mecca temperature are both have slightly increment in their temperature during these years.
- 3) In Mecca line there are missing data between 1846 to 1860.
- 4) In the first years in Mecca the moving average not accurate because we are missing data before 1843.
- 5) The highest degree C in Mecca was in 2013 with 26.8 C.