

Exploring Weather Trends

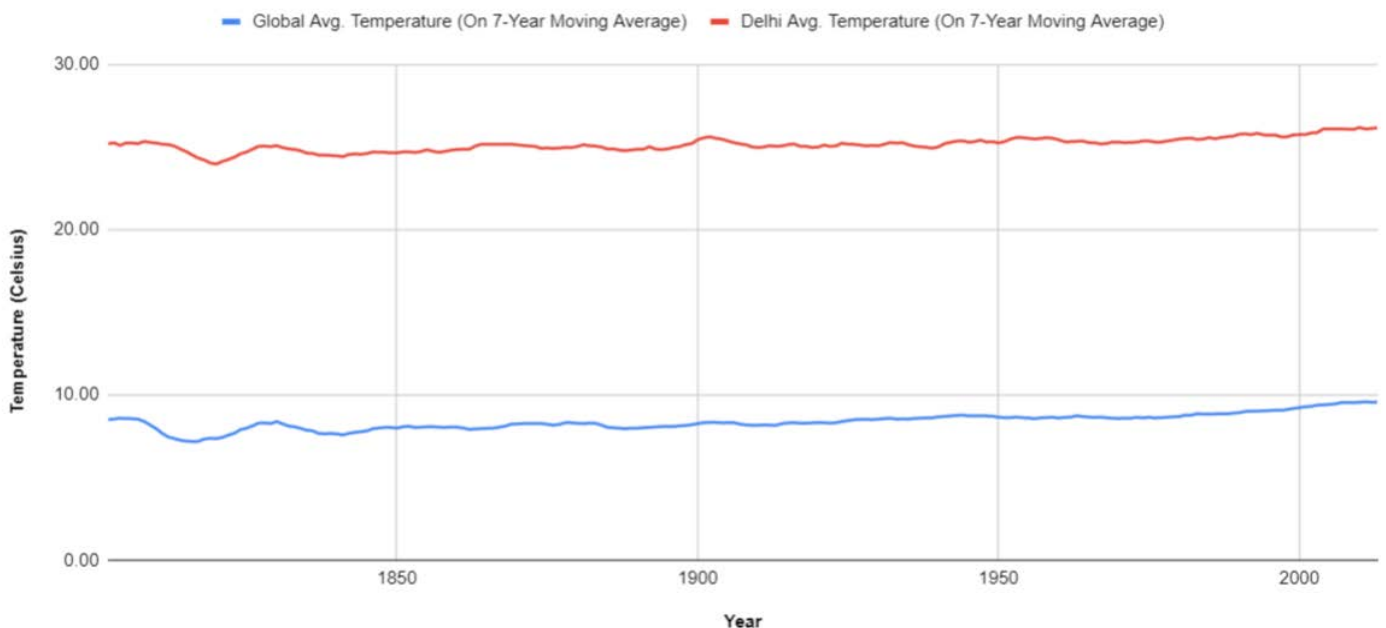
- I live in Delhi, India. I have extracted the temperature data from the SQL database for my city and the global temperature data as well.
- SQL queries used to extract the data:

```
select * from city_data  
where country='India' and city='Delhi'
```

```
select * from global_data
```

- I've noticed that, for some years temperature values are missing for my city (Delhi). I have replaced those missing values with the average temperature of all years, such as my analysis doesn't get biased.
- Then, I have calculated 7 - year moving average of temperatures of both my city and the global using the function AVERAGE. For any year the avg. temperature plotted is of the last 7 years.
- For a more useful comparison, the chart includes only those years which are in global data as well as in city data. (Chart is prepared with Google Spreadsheets)

Exploring Weather Trends - Global Vs Delhi



- My city is hotter on average (25.15°C) compared to the global average (8.39°C) and the difference has been almost consistent over time.
- Temperature changes in my city on average are nearly constant over time except around the year 2000 after which a slight increase of 1°C can be seen.
- The above is true for the global average as well which is showing upward trend after the year 2000.
- Temperature trend is consistent for last few hundred years, however, the overall trend of the global average can be seen uprising after late 90's.
- World has gone hotter at least by 1°C after the year 2000.