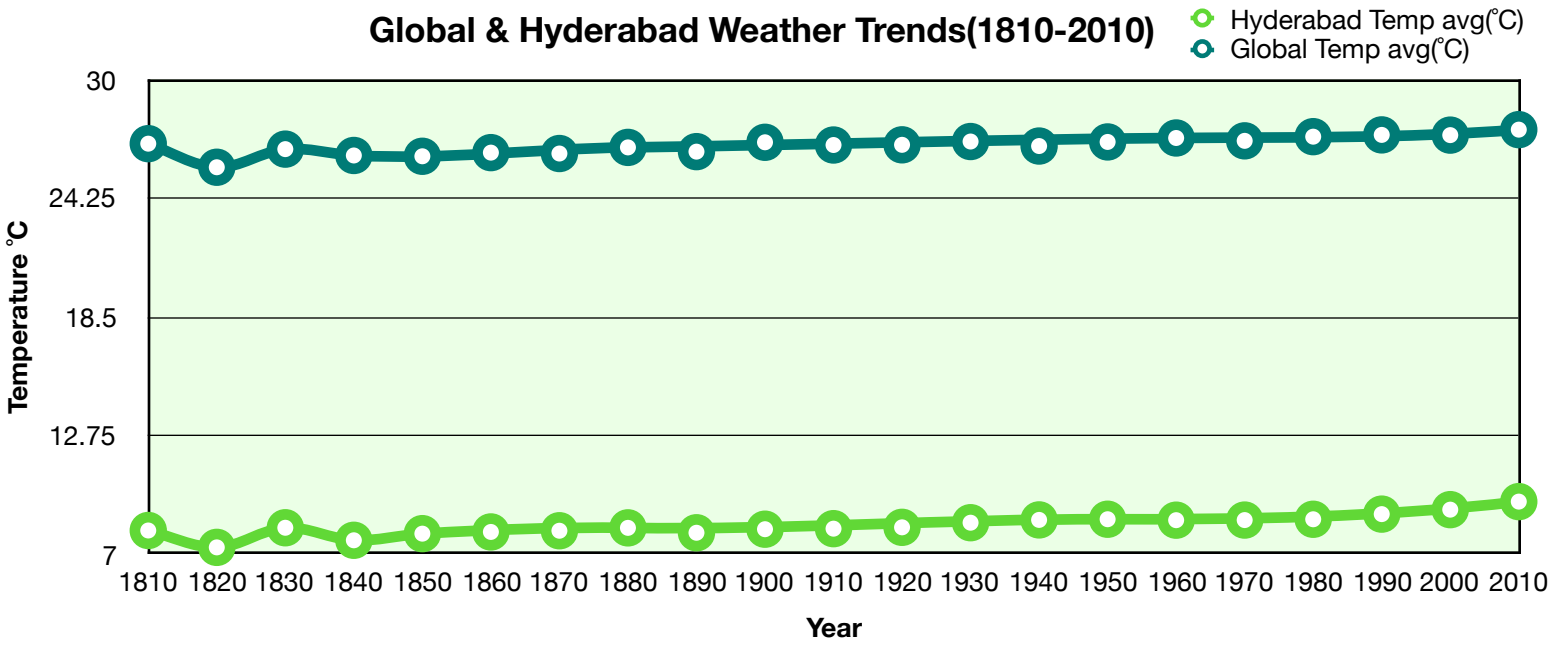
Weather Trends Analysis

Data taken from database using below queries for Global data and Hyderabad(India) data :

SELECT year, avg_temp FROM city_data WHERE city='Hyderabad' AND country='India';
SELECT year, avg_temp FROM global_data;



Numbers & Pages applications are used for creating moving averages ,line chart and creating pdf. For calculating moving averages years considered are 1810-2010 to make a linear line chart and moving average span of 10 years is used for calculating both Global and Hyderabad Temperatures.

Following Observations are found after analyzing chart data:

- Main similarities between Global data and Hyderabad data are both observed lowest temperature around 1820.
- Highest temperature is observed in 2010 for both Global and Hyderabad .

- Global temperature is on rise from 1960 onwards whereas Hyderabad temperature is on rise from 2000.
- Global temperature has increased by 17.22% from 1810 to 2010
- Hyderabad temperature increased by 2.52% from 1810 to 2010
- Global temperature rise is 6 times more than Hyderabad temperature rise.
- Global and Hyderabad Data suggests that 2020 average temperature is going to be more than 2010 .
- Below Formula is used for calculating increase in temperature :

  ((**2010 Temp** -**1810 Temp**)/**1810 Temp**)*100

where **2010 Temp** is Temperature in year 2010 and **1810 Temp** is Temperature in year 1810

- Global temperature rise may be due to many reasons like melting of polar regions, increase in carbon footprint ,exploiting natural resources etc.
- In Hyderabad the main reason for temperature rise may be due to industrialization . It increased the usage of fuel both for industrial and non-industrial purposes and caused ecological imbalance which resulted in increase of temperature.