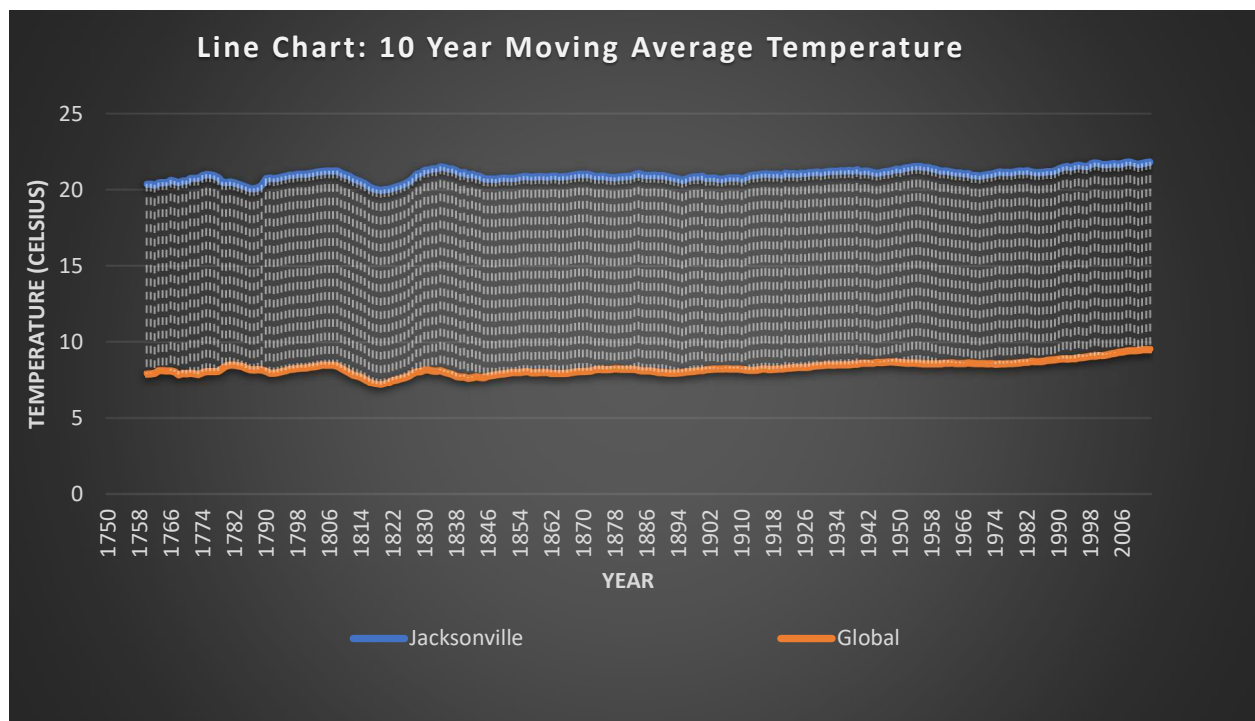


Project 1 – Exploring Weather Trends – Tarin Casadonte-pg1

- **Outline** of steps taken to prepare the data to be visualized in the chart, such as:
 - SQL was used to extract the data:

```
SELECT cd.year,
        cd.avg_temp AS Jacksonville_avg_temp,
        gd.avg_temp AS global_avg_temp
FROM city_list cl
JOIN city_data cd
ON cl.city = cd.city
JOIN global_data gd
ON cd.year = gd.year
WHERE cl.city = 'Jacksonville'
```
 - Excel was used to calculate the 10 year moving averages by adding 2 columns, 10yr_Jacksonville_moving_avg and 10yr_global_moving_avg
 - In the respective column representing the 10th year of complete data (1760) for both city and global and an average was calculated for the previous 10 years (=AVERAGE(1750:1760))
 - The average was filled down for each of these columns
 - To create the visualization the appropriate data was highlighted (**year, 10yr_Jacksonville_moving_avg and 10yr_global_moving_avg**) and a line chart was selected
 - Colors were adjusted for comfortable viewing (dark background) and for the ability to trace and compare the movement of each line
 - Axis titles (**Degrees Celsius, Year**) and a Chart title (**10 Year Moving Average Temperature Comparison Jacksonville v Global**) were selected to explain what was being viewed
 - What were your key considerations when deciding how to visualize the trends?
- **Line chart** with local and global temperature trends



Project 1 – Exploring Weather Trends – Tarin Casadonte-pg2

- At least **four observations** about the similarities and/or differences in the trends
 - The plot indicates that in Jacksonville, the trend from the early 1790s for the next 70 years is consistently about 12 degrees warmer than the global average
 - Overall the trend of the Jacksonville and global 10 year moving average temperatures are very similar. There are some exceptions, for example:
 - From mid 1780s-early1790s Jacksonville's temperature was climbing while the global average was declining
 - From the mid 1950s until 1974 Jacksonville saw a sharper decline in temperatures while the global temperatures were nearly flat or increasing slightly
 - From 1974 until present day the global average temperature was consistently climbing while Jacksonville's temperature were climbing overall but fluctuating