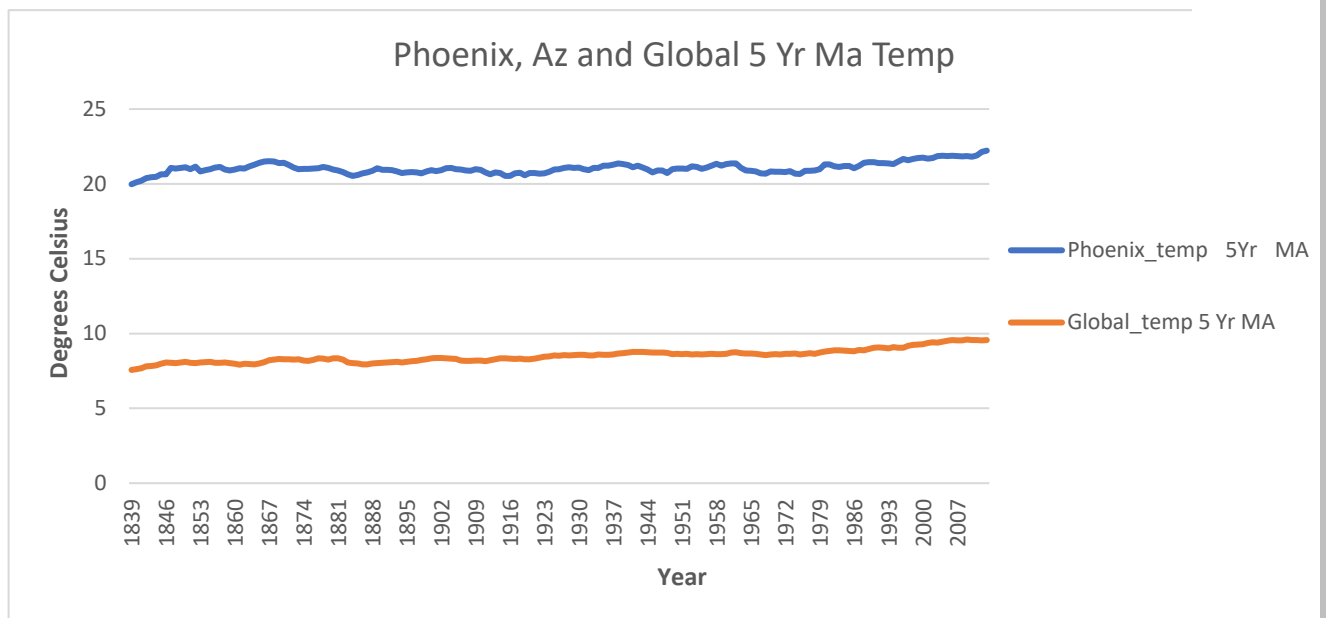


Udacity Weather Trends Project

SQL Query

```
SELECT city_data.city, city_data.year, city_data.country,city_data.avg_temp city_temp, global_data.avg_temp
FROM city_data
JOIN city_list
ON city_data.city = city_list.city
JOIN global_data
ON global_data.year = city_data.year
Where city_data.city= 'Phoenix'
```

Udacity Weather Trends Project



Udacity Weather Trends Project

Data Observations

1. There is an increase in temperature in Phoenix, AZ and globally that occurs around the year 1990
2. The temperature in Phoenix is hotter compare to the global average
3. There is an upward trend in both data sets
4. The difference from the last year to the first year of data collected from Phoenix is 2.24 degrees C
5. The difference from the last year to the first year of global data collected is 2 degrees C

Udacity Weather Trends Project

Steps Taken to Produce Data and Chart

1. SQL was used to produce the data from Phoenix and Globally
2. The data produced by SQL was downloaded to a CSV
3. Excel was used to analyze the data and produce the chart
4. A line chart in Excel was used to visualize the data
5. 5 Year moving averages were used to smooth out the lines in the chart
6. The moving averages were produced using a formula for averages in Excel
7. Legend and axis were added to enhance the chart