

- In order to obtain data from Database I used two SQL queries as follows:

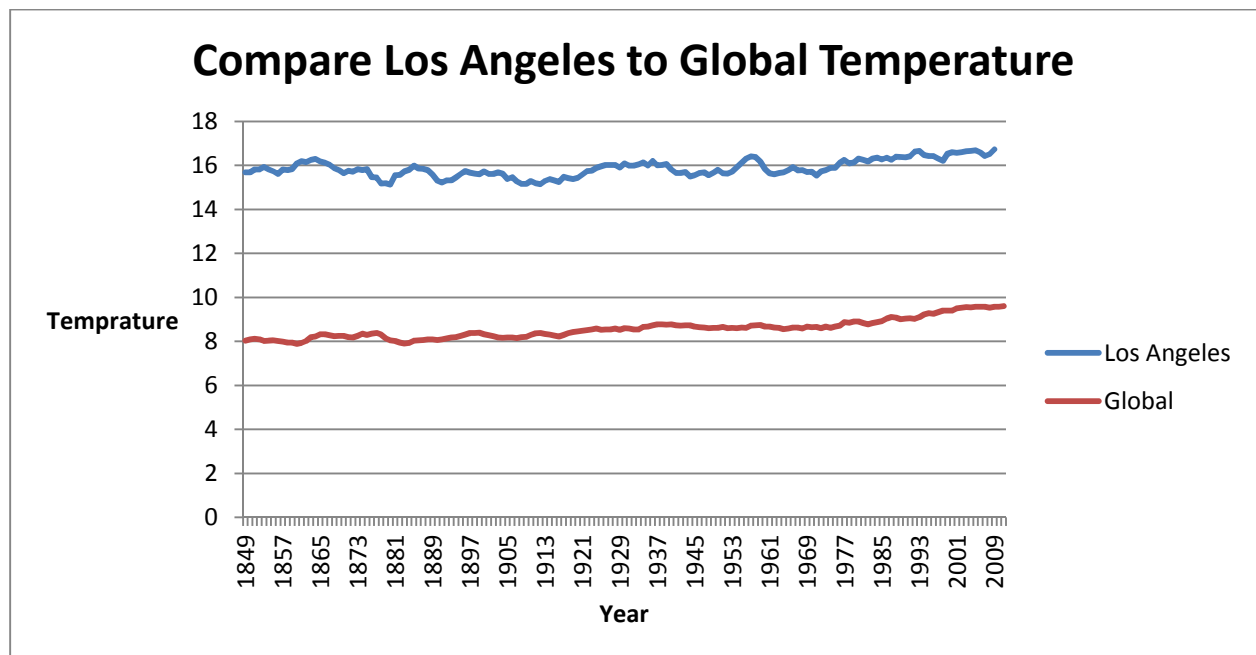
First SQL Query to get global temperature data:

```
SELECT year, avg_temp AS "Global Temp"
FROM global_data
WHERE year >= 1849
ORDER BY year;
```

Second SQL Query to get Los Angeles Temperature data:

```
SELECT year, avg_temp AS "Los Angeles Temp"
FROM city_data
WHERE city IN ('Los Angeles') and country IN ('United States')
ORDER BY year;
```

- The results from SQL Queries are saved in a CSV file. To have a smoother graph and an easier observation I calculated moving average for “GLOBAL TEMP” and “Los Angeles Temp” for every 5 years by using AVERAGE () function in excel. New columns (Moving average for LA and Global temperature) have been used in my Line chart on horizontal axis.



- **Observations:**

Los Angeles has been always hotter than world average. Although there was periods of time that LA had a fluctuation in temperature change, but in the last 50 years both LA and the world are getting hotter.

Global Temperature has almost two degrees increase over the last 170 years, but it looks like the change for LA temperature was almost one degree over the same period of time.

Based on the temperature data of the last 170 years we can see that there was a consistent trend in climate change and the world is getting hotter and the trend has been faster in the recent years.