

Project 1: Explore Weather Trends

- Write a SQL query to look through city_list in order to find the city nearest to me, which is Wuhan.

```
SELECT *  
FROM city_list  
WHERE country = 'China'
```

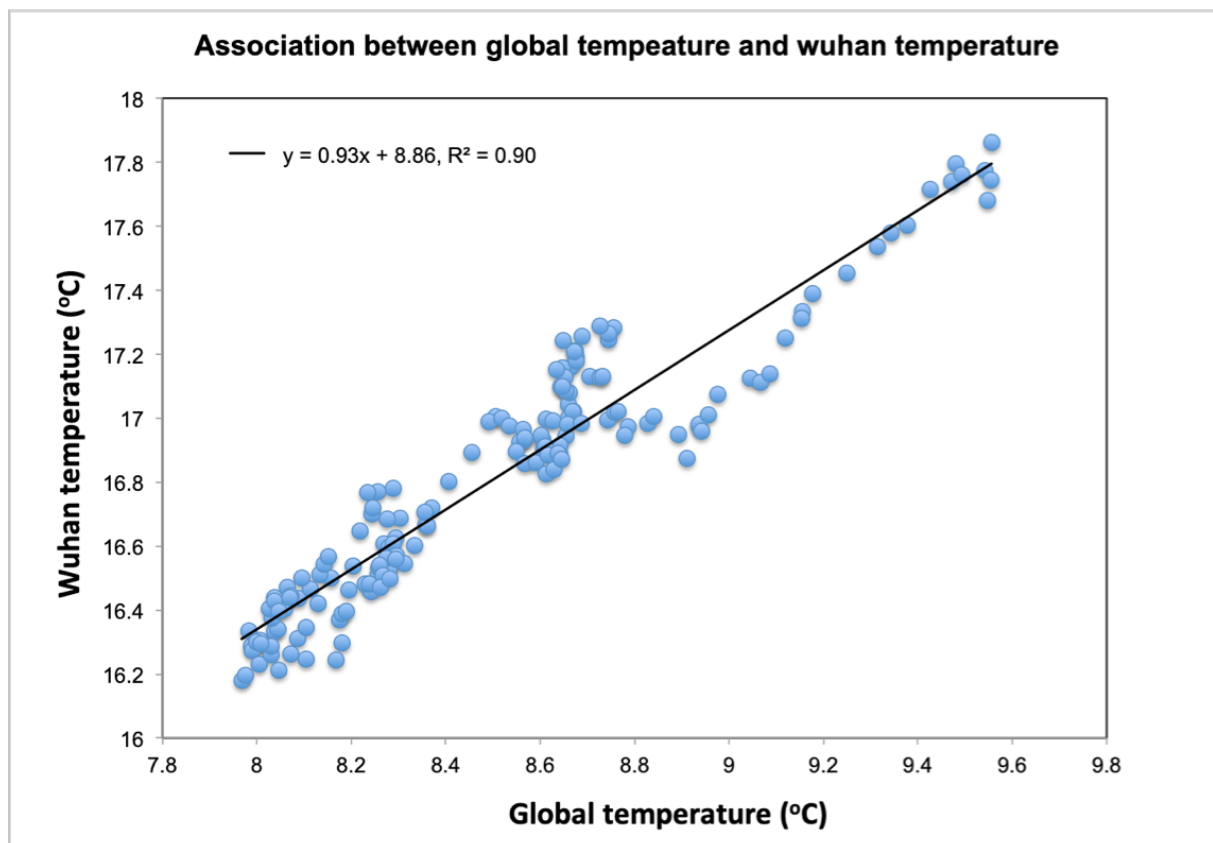
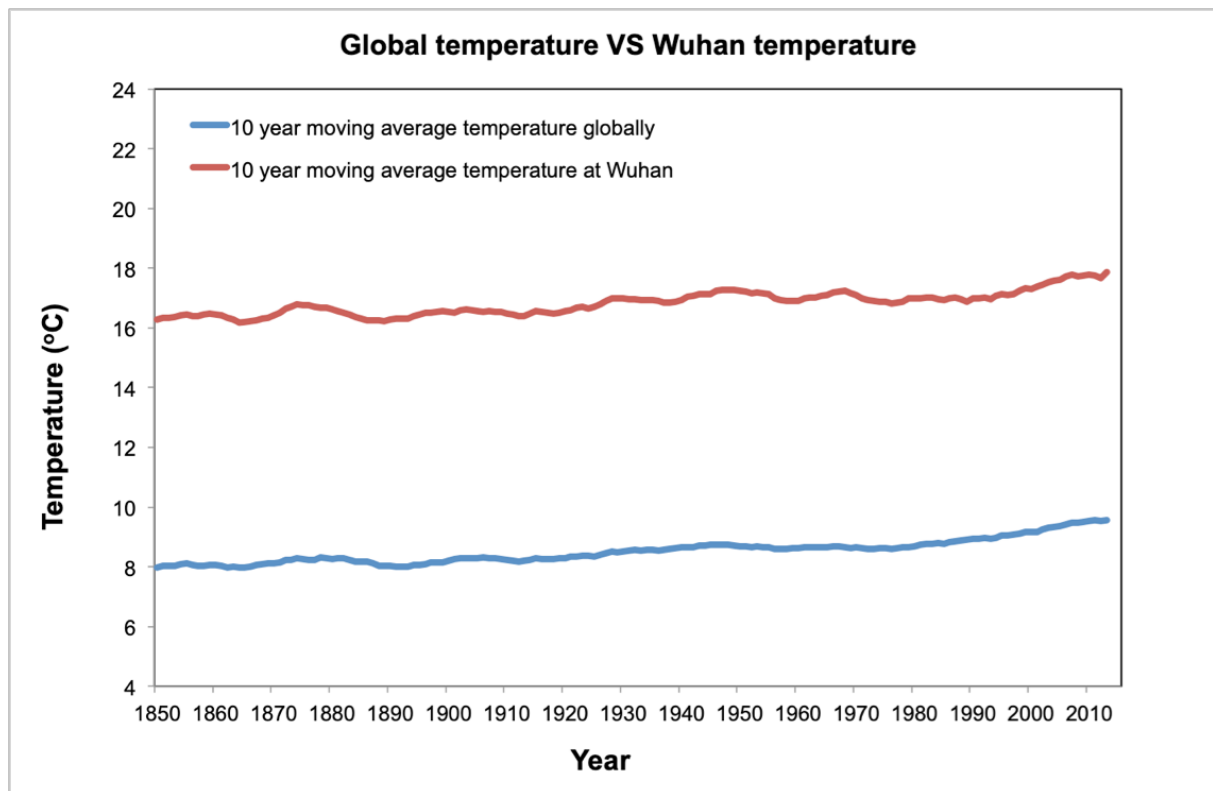
- Write a SQL query to extract the city level data. Export to CSV.

```
SELECT *  
FROM city_data  
WHERE city = 'Wuhan' AND country = 'China'
```

- Write a SQL query to extract the global data. Export to CSV.

```
SELECT *  
FROM global_data
```

- Open CSV data with EXCEL
- Calculate 10 year moving average temperature using AVERAGE function in EXCEL
- Draw figures in EXCEL with local (Wuhan) and global temperature trends



- Observations
 - Wuhan temperatures were higher than the global temperatures, with an average yearly difference (1850 to 2013) of 8.3 Celsius.
 - The temperature changes varied year by year. But, overall, both Wuhan and global temperature show an increase trend from 1850 to 2013, which indicates that both the

city and the world was getting warmer.

- The temperature increase from 1850 to 2013 at Wuhan (1.573 Celsius) was slightly higher than the temperature increase globally (1.568 Celsius) .
- Wuhan temperatures and global temperatures are linearly correlated with correlation coefficient of 0.90.