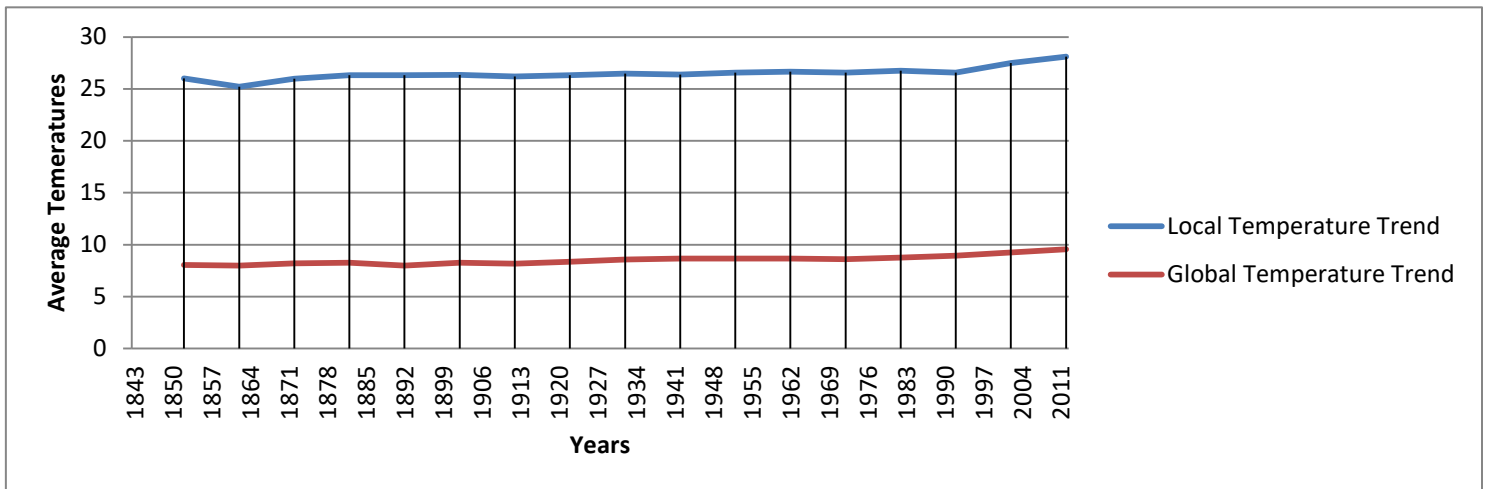


Explore Weather Trends P0



1. Extract the data with **SQL language**.

Query of the Local Temperature Trend

```
SELECT year , avg_temp  
FROM city_data  
WHERE city = 'Abu Dhabi'
```

Query of the Global Temperature Trend

```
SELECT year , avg_temp  
FROM global_data
```

2. Working with data in the **Excel**.

3. The way to Calculate the **Moving Average**:

- Adding a new column for Calculating the temperature average every 10 years.
- Each 10 years we select the final cell in the new column and write “ = AVG(B2:B11)” .then repeat the Calculating.

4. For create a line chart we need two variables the input is **Years** and the output is **temperatures** for the global and the local.

5. Observations from the line chart:

- Abu Dhabi city is hotter on the average then the global average .
- The changes in Abu Dhabi city temperatures is very small over time like the changes in the global average.
- The world from the line chart is getting hotter over time.
- the trend in the global and local was consistent over the last hundred years.
- The heat over time will increase, it will effect the earth in a bad way.
- The type of correlation coefficient is **Positive Correlation**.
- (The average temperature of Abu Dhabi) = $3 \times$ (the global average temperature).