

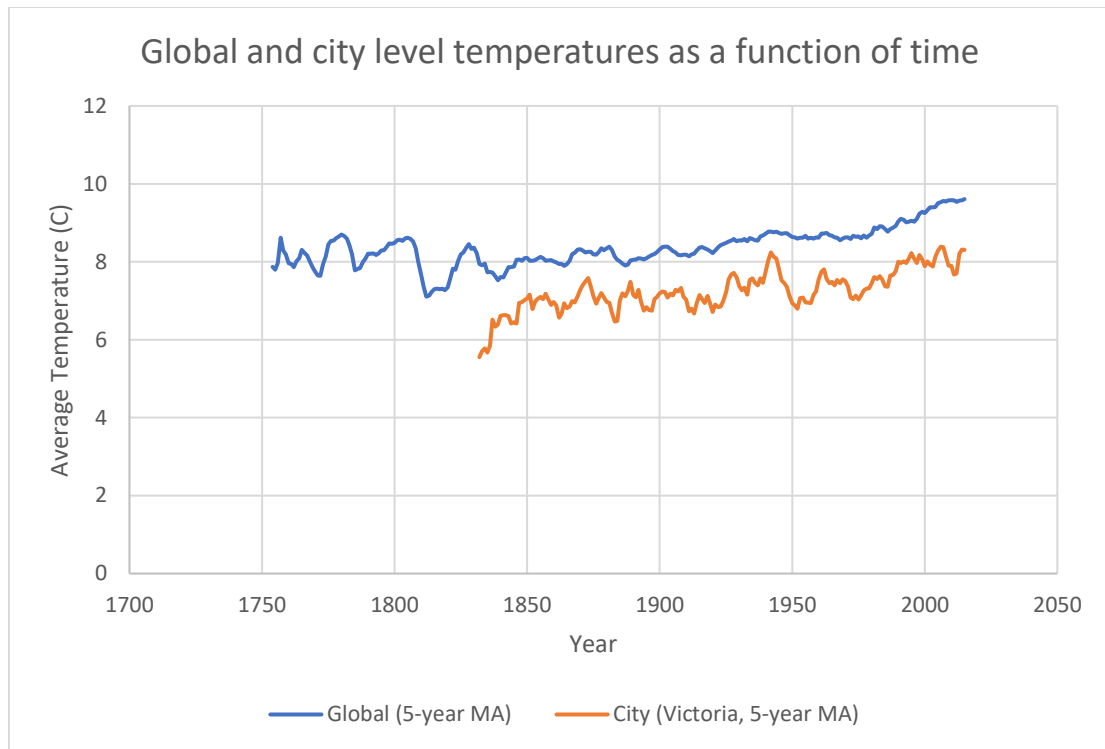
Assignment 1 – Local and Global Temperatures Over Time

Steps Taken

1. Query data using MySQL client.
 - a. Query available cities in Canada.
 - b. Choose a city in Canada which is somewhat close to Calgary (Victoria).
 - c. Query year and temperature data for Victoria
 - d. Query global year and temperature data.

```
1      # City temp data
2 •    SELECT year AS year_city,
3          avg_temp AS avg_temp_city
4      FROM temperatures.city_data
5      WHERE city = 'Victoria'
6      ORDER BY year;
7
8      # Global temp data
9 •    SELECT year AS year_global,
10         avg_temp AS avg_temp_global
11      FROM temperatures.global_data;
12
13     # Relevant cities
14 •    SELECT city
15         FROM temperatures.city_list
16     WHERE country = 'Canada';
```

2. Export data to excel files and combine into single excel spreadsheet.
3. Use Excel functions to calculate a 5-year moving average for global and city level temperature data in new columns.
4. Plot 5-year moving averages for global and city level in a graph.



Observations

1. Average global temperatures are consistently higher than Victoria city's temperatures.
2. Victoria city's temperatures are more volatile than global temperatures.
3. There is a distinct upward trend in global and Victoria city's temperatures over time starting around the year 1830.
4. The data suggests that global and Victoria city's temperatures are increasing at a similar rate.