City Selected: Toronto

Outline:

* Tool SQL(extract data) and Excel analyze data
* Moving average is calculated in both 10 year and 5 year average but 5 year average is selected because the trends are more observable.
* The key consideration includes general trend vs trend in specific period when comparing the city and global temperature.

SQL Query for data extract:

select a.city, a.country,b.year,b.avg\_temp,c.avg\_temp as globtemp from city\_list a left join city\_data b on a.city=b.city and a.country=b.country left join global\_data c on b.year=c.year where a.city='Toronto' order by a. country, a.city,b.year

EXCEL CSV as attached.

Line graph, using 5 year average.

Observation:

There is a temperature drop from the year 1808 to 1817 both global and Toronto. Both Toronto and global temperature increased after from period 1827 to 1826 back to base temperature at 1808. During 1871 to 1880, the temperature in Toronto significantly increased but the trend in global temperature is not obvious. Temperature in Toronto is on average 2 – 4 degrees below global average. Both global and Toronto temperature are generally increased after year 1844.