

Exploring Weather Trends

In this project I analyze local and global temperature data. I compare the temperature trends from **Barcelona, Spain** to overall global temperature trends.

1. Extract the data

1.1 Write a SQL query to extract the city level data.

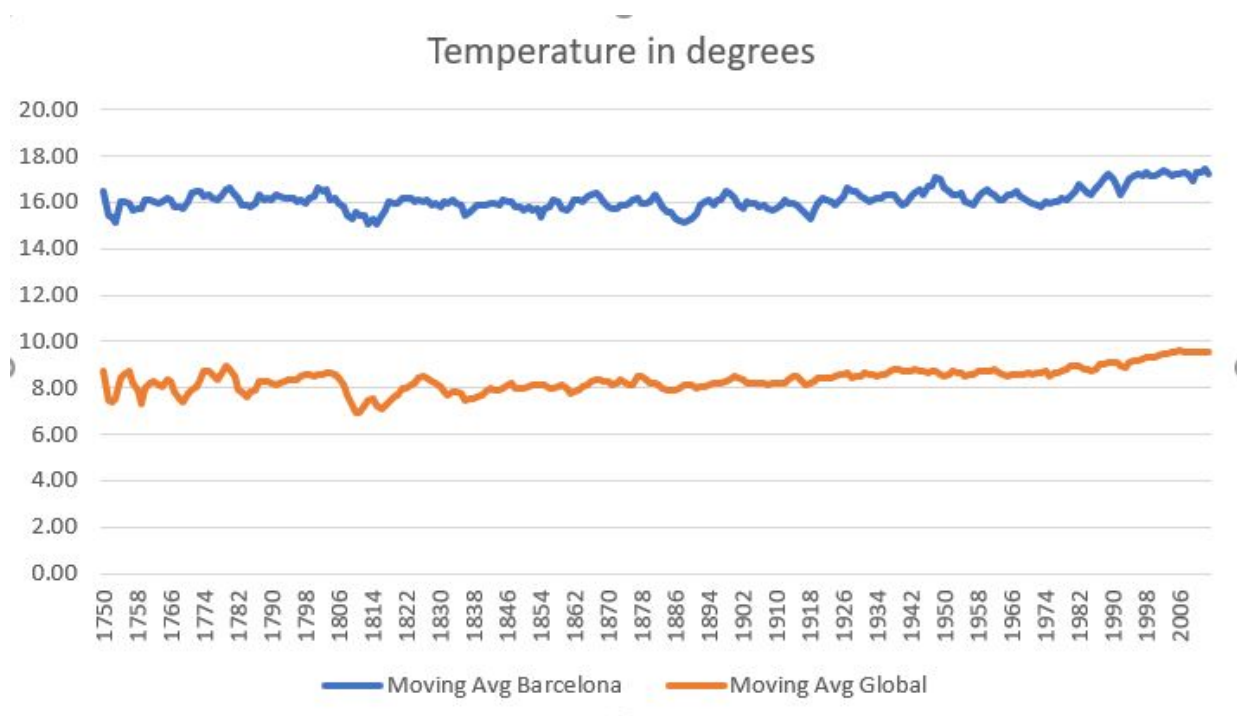
```
select * from city_data where
  city in (select city from city_list where city in( 'Barcelona' ))
and
  country in ( select country from city_list where country = 'Spain')
```

1.2 Write a SQL query to extract the global data.

```
select * from global_data
```

2. Create a line chart

We create a union of both data files in order to create the chart. We calculate the moving using excel analysis tools addon.



2. Create a line chart

2.1 Is your city hotter or cooler on average compared to the global average? Has the difference been consistent over time?

As we can see in the graph above, the city of Barcelona is clearly hotter than the global average. On average 8 degrees centigrade above

2.2 “How do the changes in your city’s temperatures over time compare to the changes in the global average?”

As we can see in the graph above, if we put both lines of the graph on top of each other we see that they both follow the same trend and react in a very similar way. It can be said that Barcelona follows the same evolution as the world.

2.3 What does the overall trend look like? Is the world getting hotter or cooler? Has the trend been consistent over the last few hundred years?

Although we can observe disparate movements between 1750 and 1830, the upward trend continues, which means that both global and Barcelona temperatures are rising

2.4 Which is the lowest temperature for both, global and barcelona? And when was it?

The lowest temperatures found for Global (7.3 deg C) around 1820, whereas for Barcelona (13.09 deg C) around 1752.