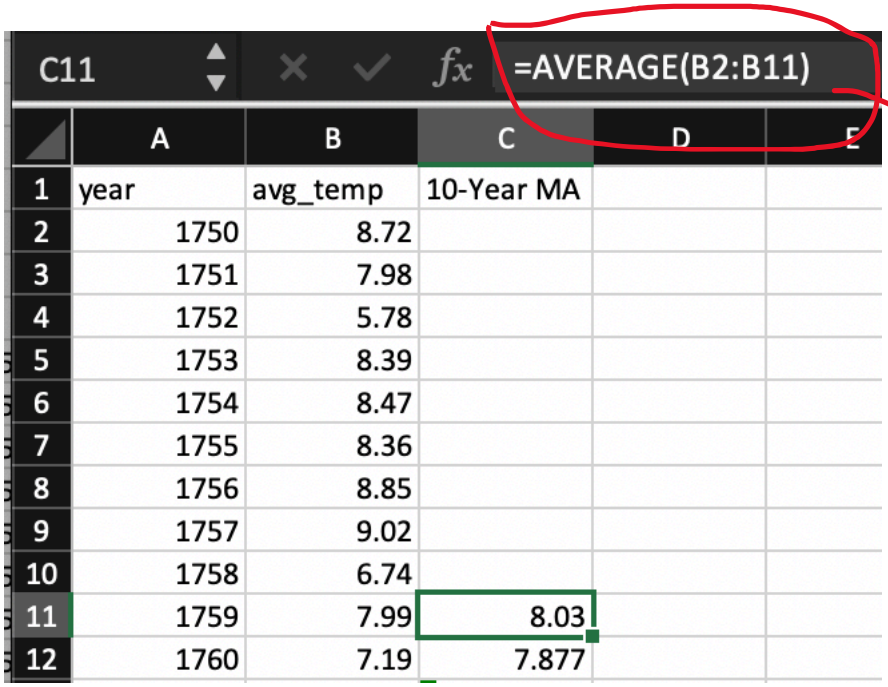
Project: Temperature Trends by Alba Gomez

1- To extract the data from the database I used the following queries in SQL:
   - Check which cities were in the table city_list, in order to find my city:
     SELECT * FROM city_list;

   - Information about my city, Barcelona in Spain:
     SELECT * FROM city_data WHERE city = 'Barcelona' AND country = 'Spain';

   - Extract the data from the global_data table to have the information about average global temperatures:
     SELECT * FROM global_data;

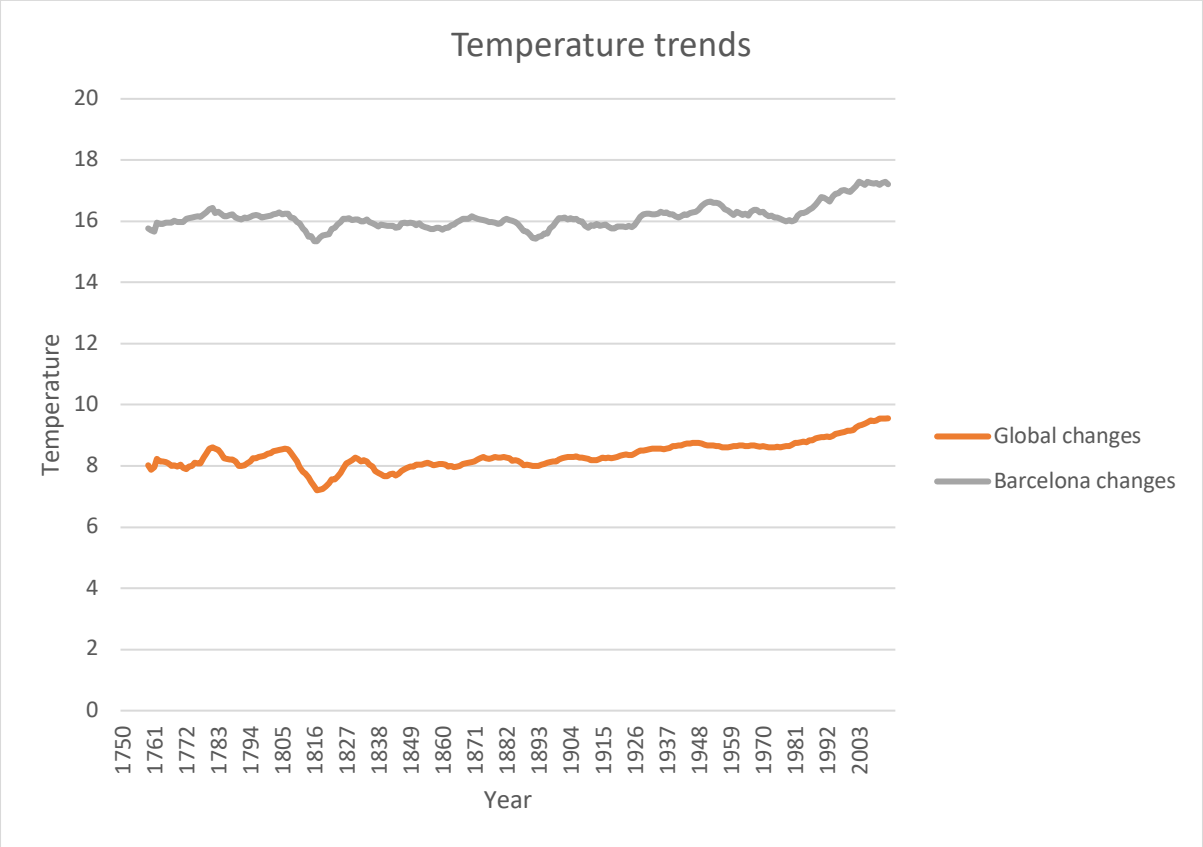
2- I calculate the moving average temperatures by decades (10 years), this will give as a better overview about the temperatures changes the last 300 years.



	A	B	C	D	E
1	year	avg_temp	10-Year MA		
2	1750	8.72			
3	1751	7.98			
4	1752	5.78			
5	1753	8.39			
6	1754	8.47			
7	1755	8.36			
8	1756	8.85			
9	1757	9.02			
10	1758	6.74			
11	1759	7.99	8.03		
12	1760	7.19	7.877		

I calculate the moving average using the AVERAGE function in Excel

3- I create the line chart using Excel:



4- Conclusions:

- In general, there are similar fluctuations in both lines over the years.
- Barcelona has an average temperature above the global average of 8 degrees more or less.
- Both lines seem to be in concordance about ups and down until the last century.
- There was a big drop down of the temperatures around 1820, a big abnormality. Eg: 1816 was the 'Year without a summer'
- In the Barcelona line there have been an increase of the temperatures since 1980 that breaks the previous fluctuations.
- In the global line there is this tendency of increasing as well but from the beginning of the 20th century, maybe related with the industrial revolution or the 1st and the 2nd World Wars.