Submission Weather project

What tools did I used ?

I used SQL querrries to extract datas and then I exported it to google sheets.

//Select datas from my city

```
WITH d1 AS (SELECT *
FROM city_list
WHERE country = 'France')

SELECT avg_temp, year
FROM d1
JOIN city_data cd
ON d1.city = cd.city
```

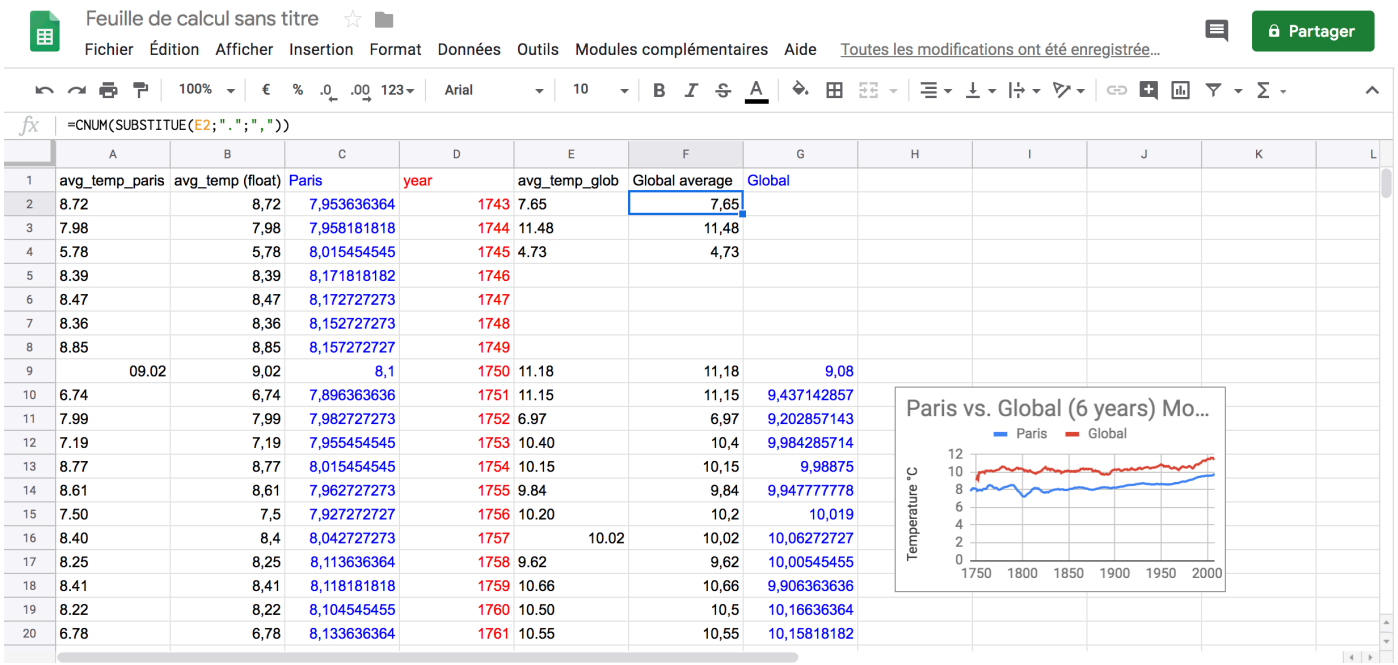
//slect datas form the world

```
SELECT *
FROM global_data
ORDER BY year
```

How did I calculate the moving average ?

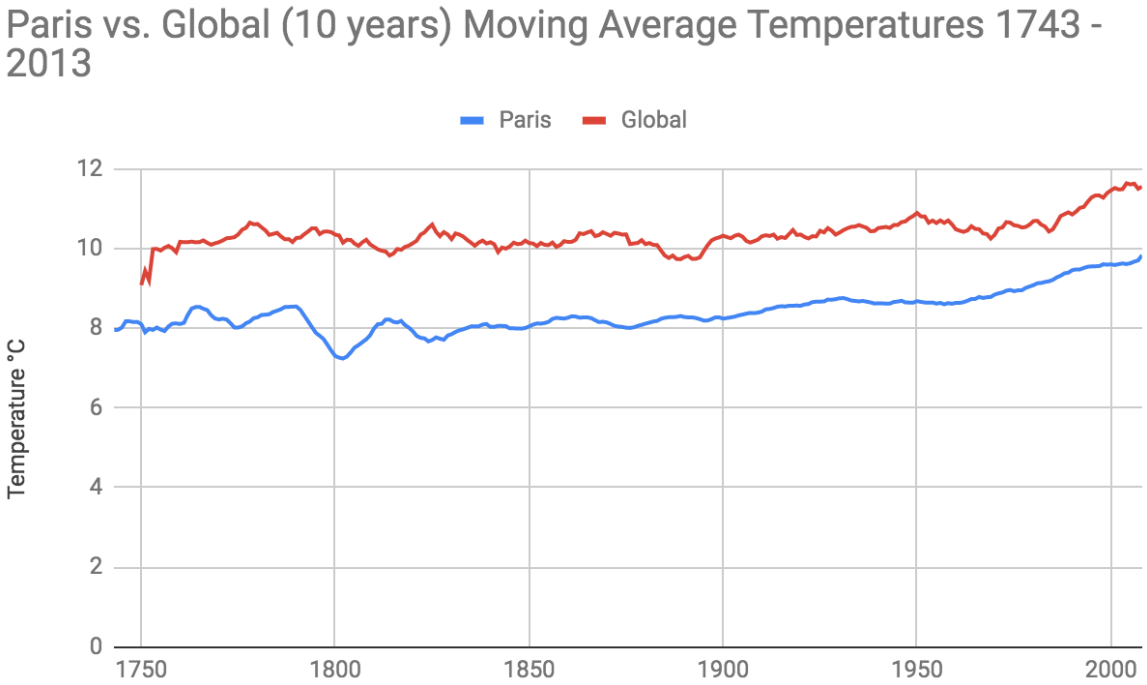
=AVERAGE(B2:B6)
I did a moving average on 6 consecutive years.
I failed to get rid of NaN values on excel. So my global average shut down at a moment cause of NaN values.

To visualize the tends I wanted to see two superposed curves from my city and the global evaluating over the years.



	A	B	C	D	E	F	G
1	avg_temp_paris	avg_temp (float)	Paris	year	avg_temp_glob	Global average	Global
2	8.72	8,72	7,953636364	1743	7.65	7,65	
3	7.98	7,98	7,958181818	1744	11.48	11,48	
4	5.78	5,78	8,015454545	1745	4.73	4,73	
5	8.39	8,39	8,171818182	1746			
6	8.47	8,47	8,172727273	1747			
7	8.36	8,36	8,152727273	1748			
8	8.85	8,85	8,157272727	1749			
9	09.02	9,02	8,1	1750	11.18	11,18	9,08
10	6.74	6,74	7,896363636	1751	11.15	11,15	9,437142857
11	7.99	7,99	7,982727273	1752	6.97	6,97	9,202857143
12	7.19	7,19	7,955454545	1753	10.40	10,4	9,984285714
13	8.77	8,77	8,015454545	1754	10.15	10,15	9,98875
14	8.61	8,61	7,962727273	1755	9.84	9,84	9,947777778
15	7.50	7,5	7,927272727	1756	10.20	10,2	10,019
16	8.40	8,4	8,042727273	1757	10.02	10,02	10,06272727
17	8.25	8,25	8,113636364	1758	9.62	9,62	10,00545455
18	8.41	8,41	8,118181818	1759	10.66	10,66	9,906363636
19	8.22	8,22	8,104545455	1760	10.50	10,5	10,16636364
20	6.78	6,78	8,133636364	1761	10.55	10,55	10,15818182

1) I imported avg_temp_paris and avg_temp_global
2) I transformed colomns to actual numbers => =CNUM(SUBSTITUTE(B2;”.”;”,”))
3) I did a ten years moving average => =AVERAGE(B2:B12) & AVERAGE(F2:F12)
4) I noticed that global datas started in 1750 so pushed down the G colomn
5) I did the graph



6)

Observations

-My city (Paris) is really cold and fall 2 degrees behind the global average

-It tends on the last years >2000 to get warmer: for paris and the entire world. It's an augmentation of 1 to 1,5 degrees.

-Paris had a cold period in 1800 where the temperatures fall to 7 degrees.

-Paris tends to have few rises and falling in comparison to the rest of the word. Maybe it's caused by a lack of datas.