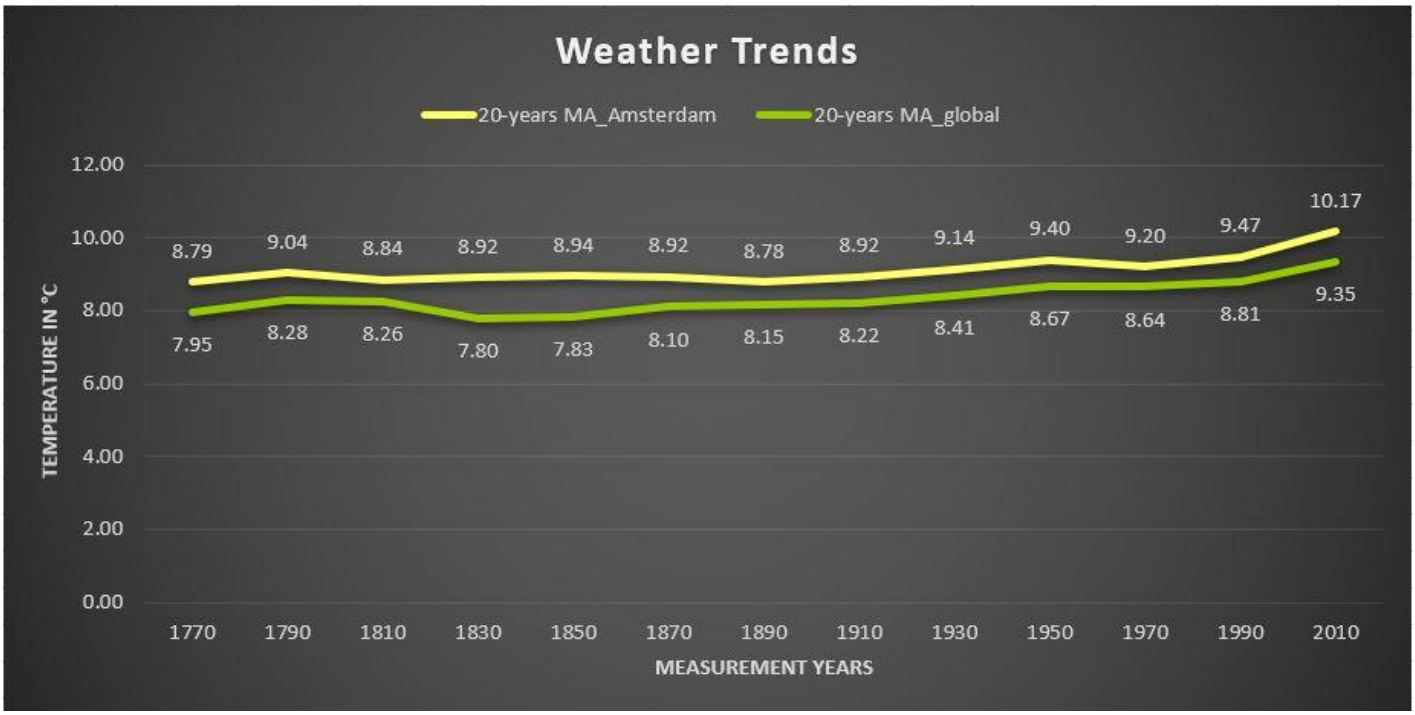
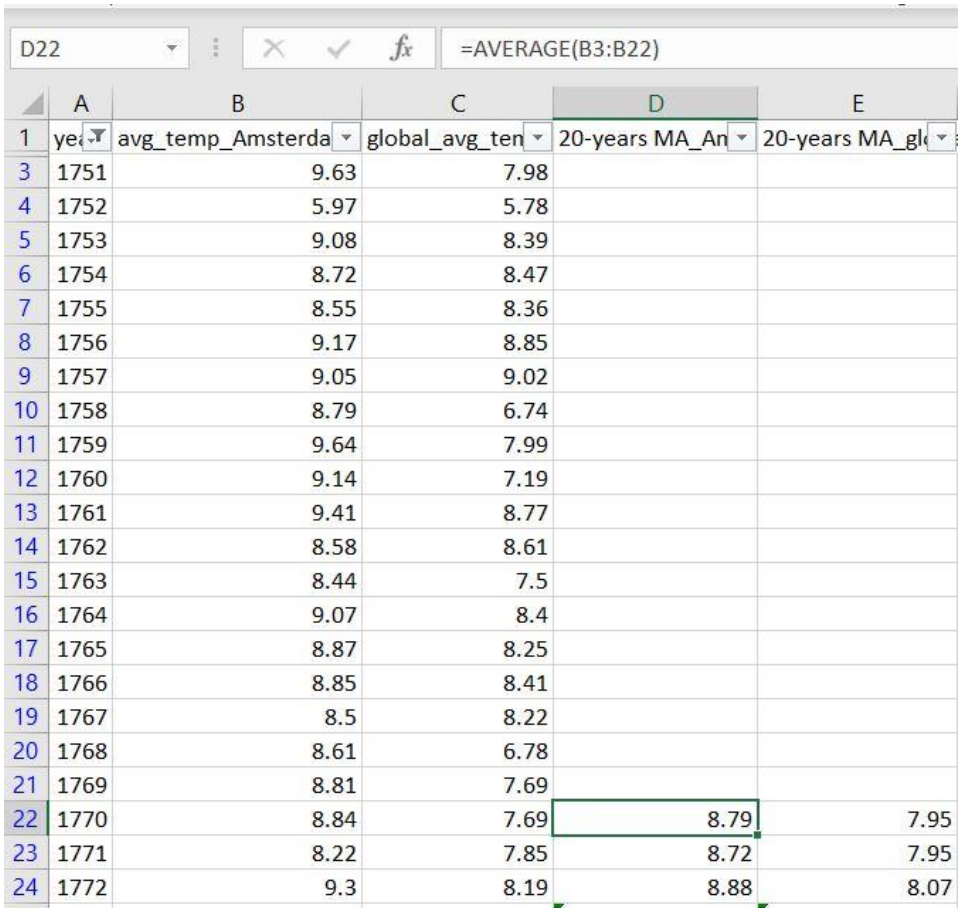


To compare the average temperature between the city of Amsterdam and the world, I used a moving average with 20-year steps. The graph shows that:

- Average temperatures, both global and in Amsterdam, rose between 1751 and 2010, but without sharp fluctuations.
- On average, the temperature in Amsterdam is higher than global by 0.77 °C during the analyzed period. For information accuracy, variances have been calculated for the average temperature in Amsterdam (0.58) and the average global temperature (0.32). There we also see a slight difference of 0.27 °C between them.
- Over the entire period of the study, the average temperature in Amsterdam never dropped to the world average or lower.
- In the last 20 years of measurements, the upward trend in temperature has been more noticable. While in 1770 the average world temperature was 7.95 °C, in the last year of measurement, in 2010, the average temperature was 9.35 °C. Also, in Amsterdam, at the beginning of the analyzed graph, we see that the average temperature was 8.79 °C, and the last indicator, in 2010, is already 10.17 °C. Based on this, we can conclude that the general trend of global warming has become more active, although not yet critical.

Stages of the assignment:

1. I used SQL queries to download data from a sample database. (SELECT * FROM city_list; SELECT * FROM city_data WHERE city = 'Amsterdam'; SELECT * FROM global_data;)
2. I opened the saved csv files in Excel. I chose Excel because I find this program simple and yet powerful for data visualization.
3. I combined the data I needed from 2 files (year, avg_temp_Amsterdam, global_avg_temp) on one sheet.
4. Based on the available data, I calculated moving averages (20-year MA_A Amsterdam, 20-year MA global) using the AVERAGE function in 20-year increments.



	A	B	C	D	E
1	ye	avg_temp_Amsterda	global_avg_ten	20-years MA_An	20-years MA_gl
3	1751	9.63	7.98		
4	1752	5.97	5.78		
5	1753	9.08	8.39		
6	1754	8.72	8.47		
7	1755	8.55	8.36		
8	1756	9.17	8.85		
9	1757	9.05	9.02		
10	1758	8.79	6.74		
11	1759	9.64	7.99		
12	1760	9.14	7.19		
13	1761	9.41	8.77		
14	1762	8.58	8.61		
15	1763	8.44	7.5		
16	1764	9.07	8.4		
17	1765	8.87	8.25		
18	1766	8.85	8.41		
19	1767	8.5	8.22		
20	1768	8.61	6.78		
21	1769	8.81	7.69		
22	1770	8.84	7.69	8.79	7.95
23	1771	8.22	7.85	8.72	7.95
24	1772	9.3	8.19	8.88	8.07

5. I applied the filter to the year column, leaving only years in steps of 20 years.
6. I created a line chart based on the resulting data.