Weather Trends: Comparing the average global temperature to the local temperature in Munich

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Methodology: Getting the data with SQL

- To download the data as a csv file, I used a simple SQL command to get the file with all required data:

```sql
/* Download both information in one file joined by the year */
SELECT m.year AS munich_year,
       g.year AS global_year,
       m.city,
       m.avg_temp AS munich_avg_temp,
       g.avg_temp AS global_avg_temp
FROM city_data m
JOIN global_data g
ON m.year = g.year
WHERE m.city = 'Munich'
ORDER BY g.year
```

Good to know:

All the changes have been committed to a repository in GitHub:
https://github.com/JuanGarcia10/Weather-trends-in-Duesseldorf-Germany

Methodology: Preparing and Analyzing the Data with Excel
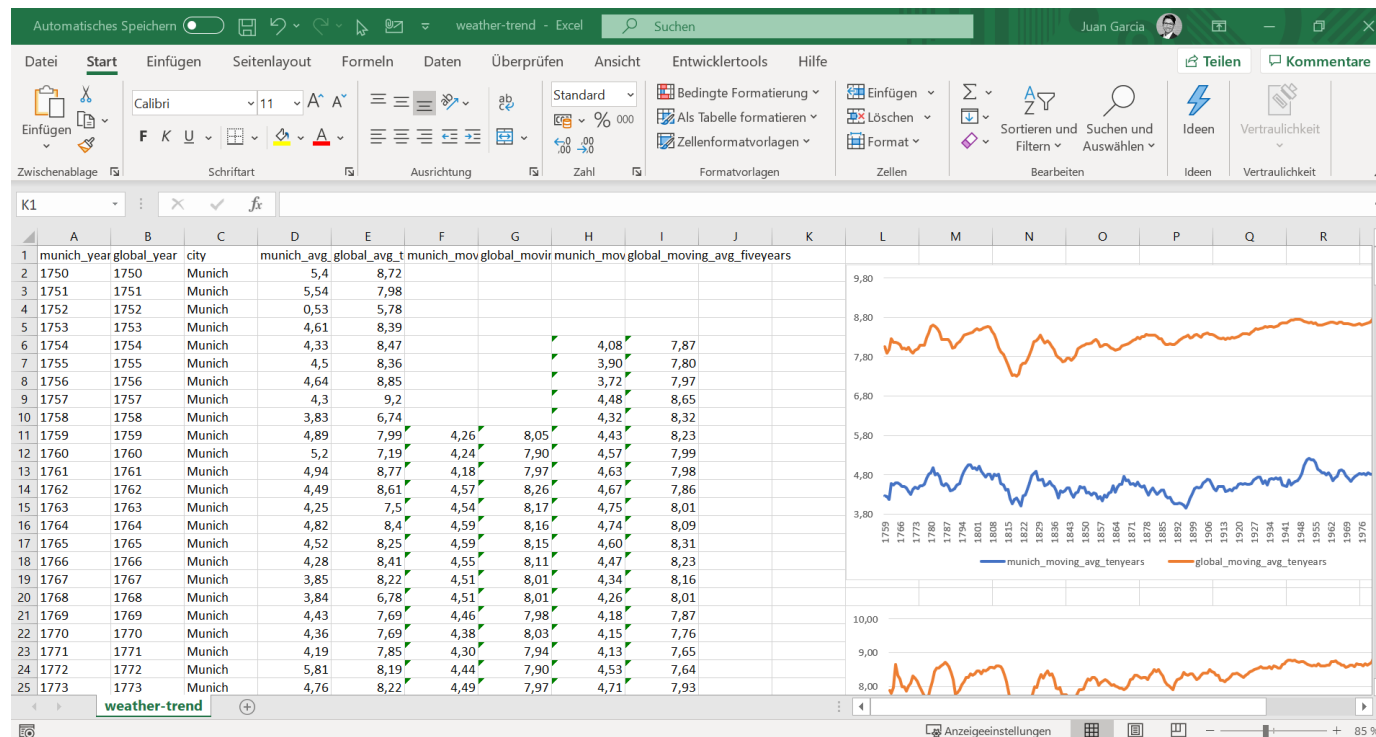
- For the analysis of the csv file I used a spreadsheet in Excel. For this I calculated the moving averages (10 and 5 years). Finally I decided to use the 10 year period, since the line was smoother and the detailed level was enough

- To create the charts I used the graphic tool

- I needed to do further small adjustments to the standard graph of excel:
  - New Values for the vertical axis, so that the changes in temperature are easier to see

Results: Munich's Temperature Development is Historically below the Global Development. However, the same Trend is Observed

munich_moving_avg_tenyears   global_moving_avg_tenyears
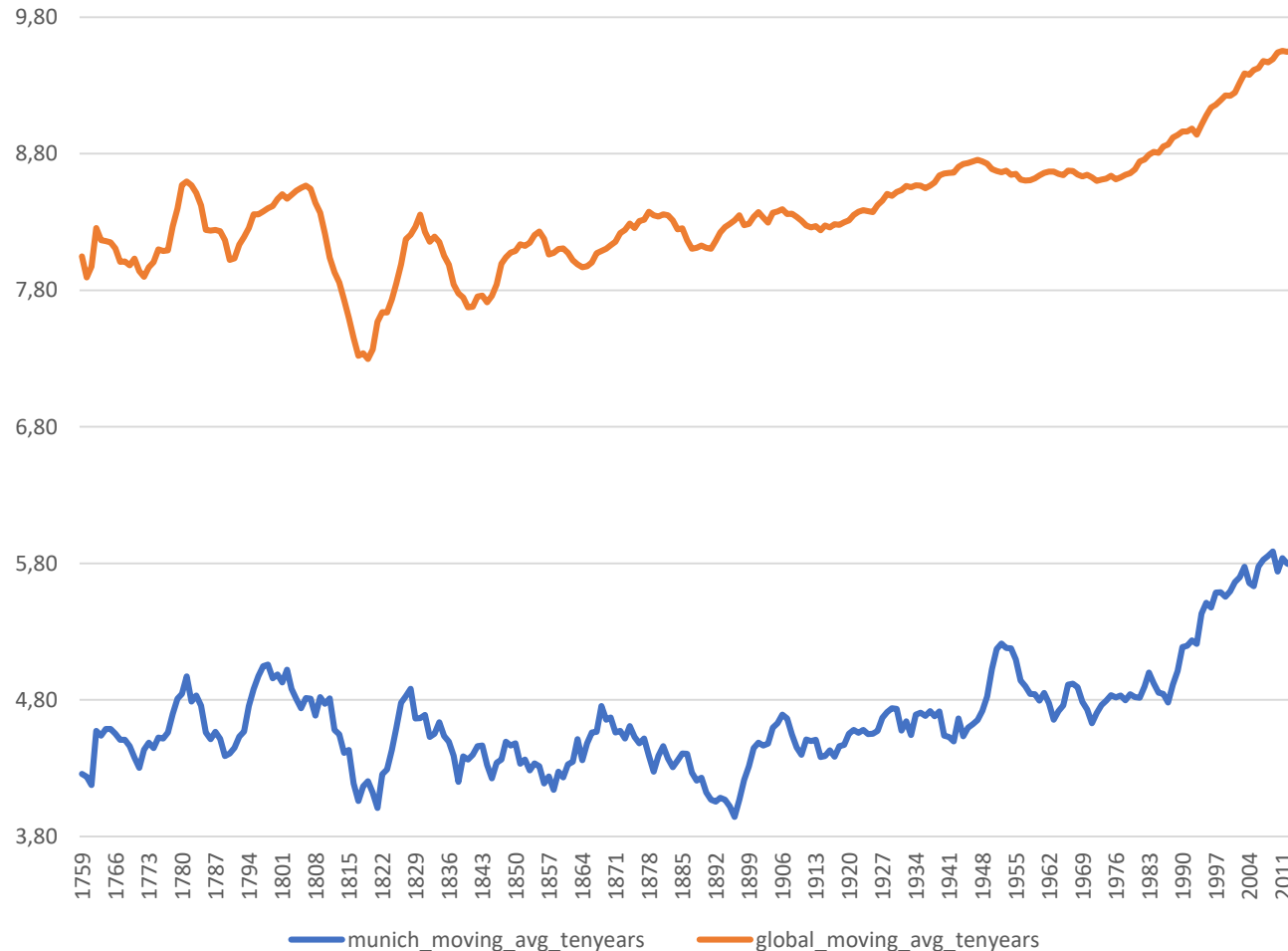
- The temperature in Munich is on average almost 4 degrees below global temperature over time

- The fluctuations in the global temperature and Munich's temperature are very similar

- In both cases the temperature has been increasing over the years

- The temperature records of Munich are much more volatile than the global development which is (as expected) smoother.