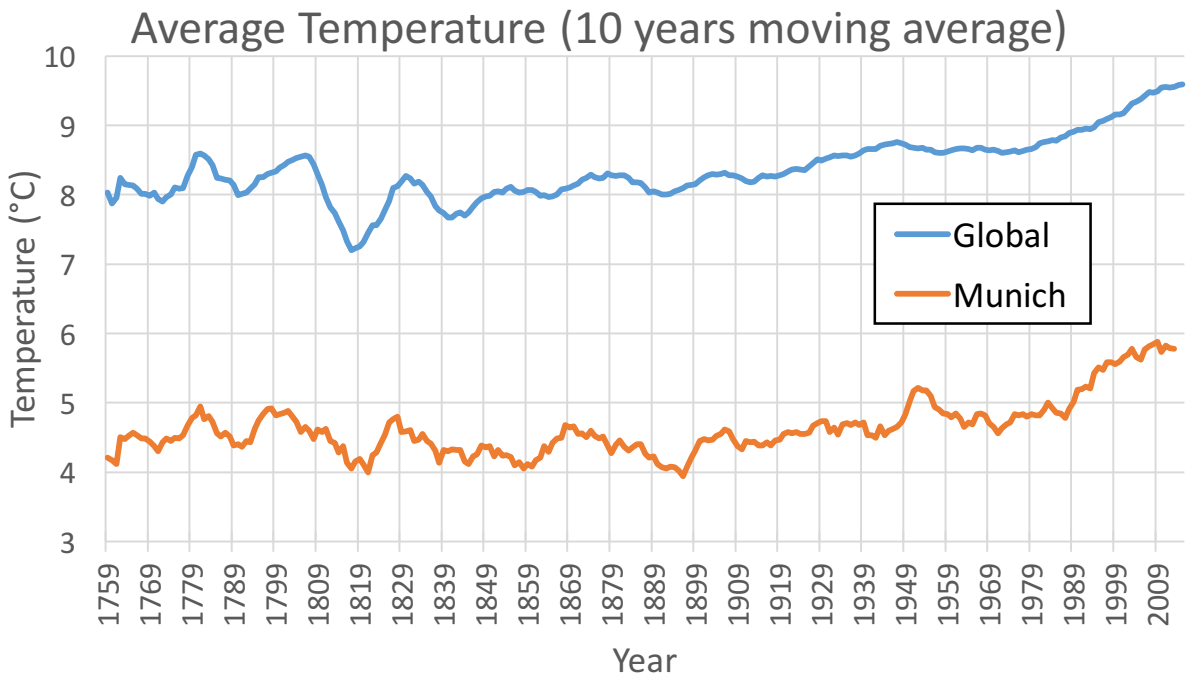
Projekt: Explore Weather Trends

(Christian Gorges)

Outline

1. Extract data with SQL using the following commands:
   SELECT year, avg_temp FROM global_data ORDER BY year
   and
   SELECT year, avg_temp FROM city_data WHERE city = 'Munich' ORDER BY year
1. Export the data to *.csv
2. Import the data to Excel
3. Join the data using the years-column in Excel
4. Calculating the 10-years moving average in Excel like you showed us (taking the average of the last 10 years, including the current year)
5. Drawing the line charts with both global and city moving average temperature data



Conclusions

The global average temperature is higher than the average temperature in Munich. The global average temperature is 3-4 °C higher than in Munich. Both the global and the local temperature increase since the beginning of the 20th century. It looks like the world is getting hotter. The difference between the local and global average temperature seems consistent over time. The correlation coefficient between the global and local average temperature is r=0.87, which indicates a high linear correlation.