

Project: Explore Weather Trends

Udacity Data Analyst Nanodegree Project 1

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While I didn't finish the project to the degree to which I'd like, I'd rather move on and continue learning about Python rather than spending time looking up charting resources myself, as I believe I'll be learning more about those momentarily. That being said, I found the 'Explore Weather Trends' project to be a good mix of challenging and interesting.

To complete this project, I primarily used two tools: SQL and LibreOffice Calc. I used SQL to extract two CSVs(global_results and kunming_results) and Calc to view and modify the data, as well as develop the chart comparing the two locations.

To access the global_data with SQL, I used

1. SELECT *
2. FROM global_data

and downloaded the CSV file. To find the city I wanted, I accessed city list using

1. SELECT *
2. FROM city_list

and downloaded the CSV file. To access the city_data I

1. SELECT *
2. FROM city_data
3. WHERE city = 'Kunming'

and downloaded the CSV file.

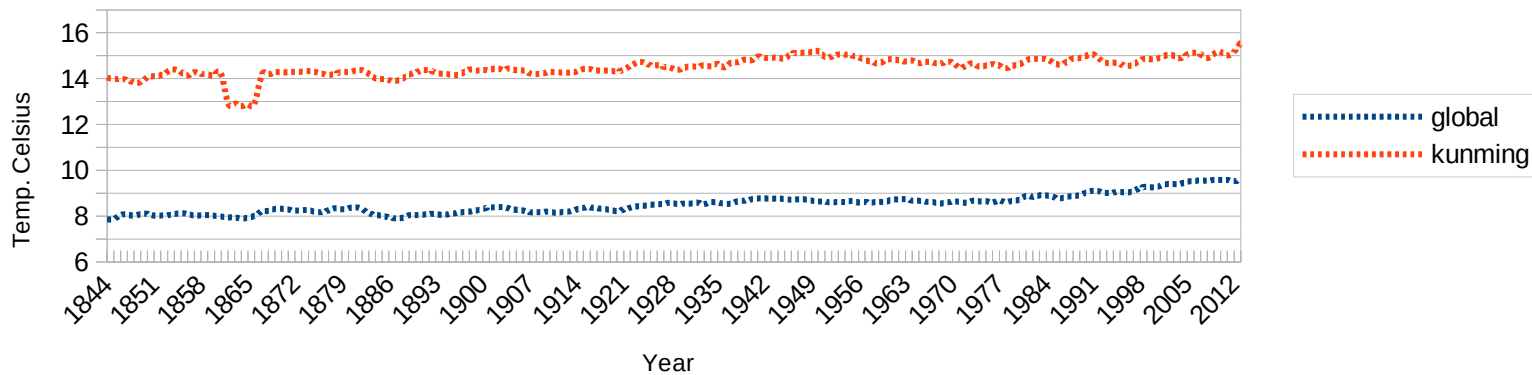
To calculate the moving averages, I went for a five year moving average(i.e. temps from years 1890,'91,'92,'93,'94, and divided by five.

My key consideration in deciding how to visualize the data was simplicity and

functions available in Calc. I'm not terribly familiar with charting and I found it difficult to use the google drive option. I also don't have a Microsoft Office account at the moment, so I was limited to either Python or Calc.

Global Average Temp. vs Kunming Average Temp

Shown with a five year moving average



I currently live in Beijing, China, but Beijing wasn't part of our data-set so I went with Kunming instead, a quiet provincial capital in the mountains of south-west China. Some of my findings include:

1. Located at roughly the same elevation as Denver, Kunming is nestled in the mountains and has an on average higher temperature year round than the global average.
2. In the late 1850s, early 1860s Kunming had a significant drop in average temperature. This could either be from the type of equipment or recording devices used or some other local climate issue.
3. Overall, the two averages follow the same general up-trend, with ~1.5 degree increase over the recorded time frames.
4. Kunming was lacking a fair bit of data so I excluded everything and didn't start charting the information until there was a solid 5 year moving average to count.