

Exploring Weather Trends

Data Analyst Nanodegree Project 1

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Tools : Google Sheets

- **Extract Data from SQL**

Query SQL from table city_data to find which is closest to where I live (Semarang, Indonesia). Result : 189 row data (year : 1823-2013)

Input		HISTORY ▾	MENU ▾
SCHEMA	↻	<pre> 1 select * from city_data 2 where country like '%Indone%' 3 and city like '%Semar%' 4 order by year asc 5 --limit 10 </pre>	
city_data	▾		
city_list	▾		
global_data	▾		
		Success!	EVALUATE
Output		189 results	Download CSV
year	city	country	avg_temp
1825	Semarang	Indonesia	26.03
1826	Semarang	Indonesia	
1827	Semarang	Indonesia	
1828	Semarang	Indonesia	

Query SQL from table global data. Result 266 row data (year : 1750-2015)

Input		HISTORY ▾	MENU ▾
SCHEMA	↻	<pre> 1 select * from global_data 2 order by year </pre>	
city_data	▾		
city_list	▾		
global_data	▾		
		Success!	EVALUATE
Output		266 results	Download CSV
year	avg_temp		
1750	8.72		
1751	7.98		

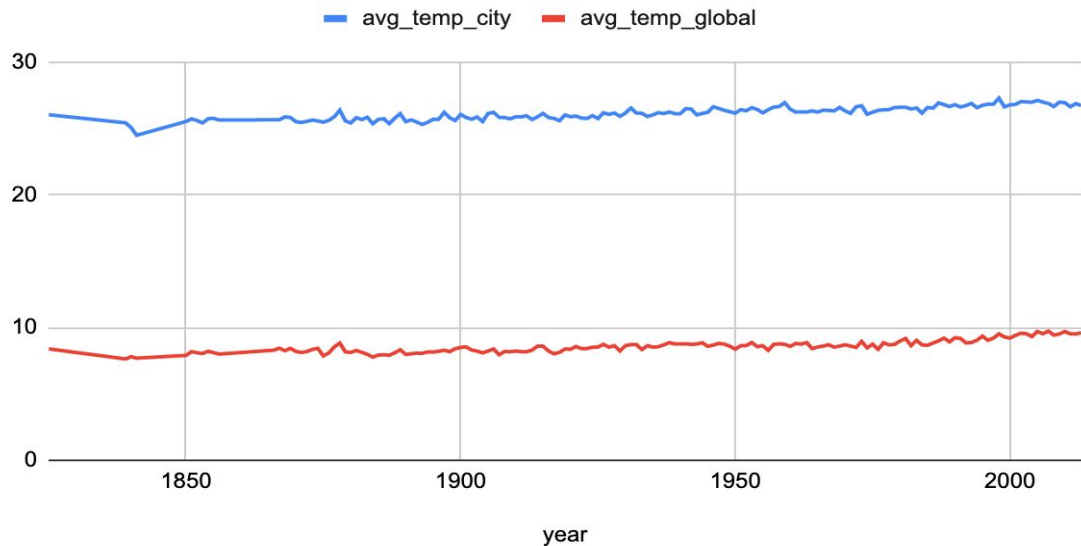
- **Open up the CSV**

Open csv data with tools Google Sheets

- **Create a line chart**

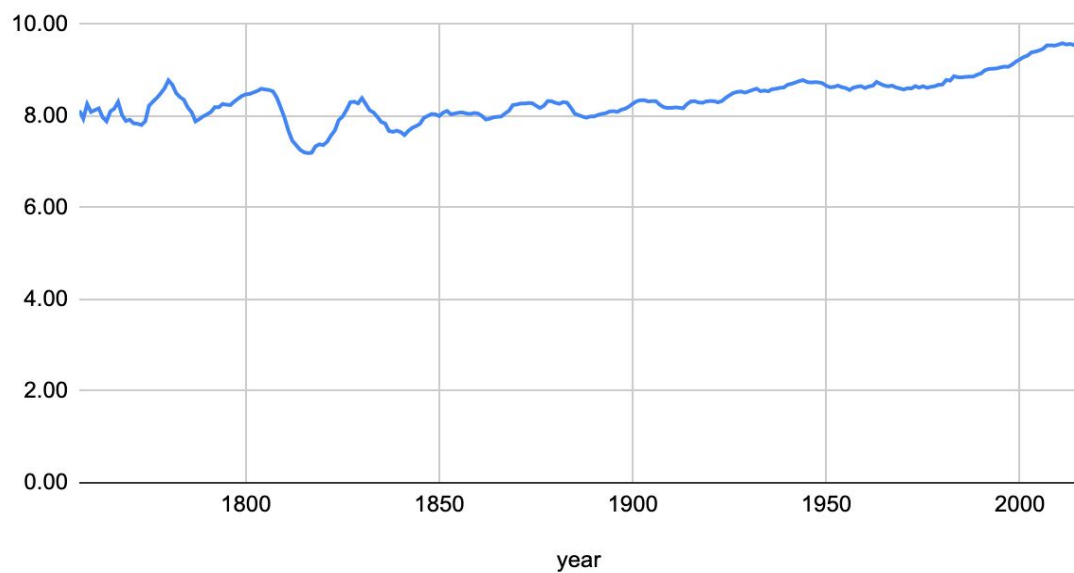
Create a line chart to compare between city_data (Semarang, Indonesia) and global data. Delete row from city_data where the row is null.

avg_temp City(Semarang) Vs Global



Define Moving-Average with 7-years and create column 7-years MA for global_city. create a line chart from column 7-years MA.

avg_temp and 7-years MA Global



- **Make observations**

1. Average temperature Our City (Semarang, Indonesia) weather is hotter than global average temperature and the difference has been consistent over time.
2. Semarang's temperature and global temperature is gradually increasing over time.
3. Trend global temperature is gradually increasing to hot over time. The trend been consistent over the last few hundred years.