

Dana Stoeckenius

Project 1: Explore the Weather Trends

SQL Queries Used:

Input

HISTORY

MENU

SCHEMA

city_data

city_list

global_data

1 select *

2 from global_data

Success!

EVALUATE

Input

HISTORY

MENU

SCHEMA

city_data

city_list

global_data

1 select *

2 from city_data

3 where city='Seattle'

Success!

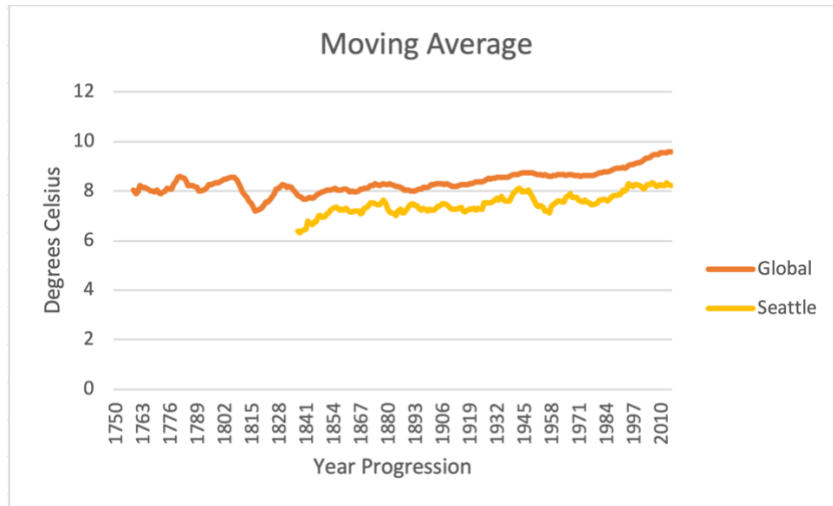
EVALUATE

Moving average calculation:

In order to calculate the moving average for a 10 year span I used the formula =average() and inputted the first 10 year selection and continued the formula for the rest of the table. This was done for both the global average and the city average.

year	avg_global_temp	10yr_MA_Global	avg_Seattle_temp	10yr_MA_Seattle	Average Difference
1750	8.72				
1751	7.98				
1752	5.78				
1753	8.39				
1754	8.47				
1755	8.36				
1756	8.85				
1757	9.02				
1758	6.74				
1759	7.99	=AVERAGE(B2:B11)			
1760	7.19	7.88			
1761	8.77	7.96			
1762	8.61	8.24			
1763	7.5	8.15			
1764	8.4	8.14			
1765	8.25	8.13			
1766	8.41	8.09			
1767	8.22	8.01			
1768	6.78	8.01			
1769	7.69	7.98			
1770	7.69	8.03			
1771	7.85	7.94			
1772	8.19	7.90			
1773	8.22	7.97			
1774	8.77	8.01			
1775	9.18	8.10			
1776	8.3	8.09			
1777	8.26	8.09			
1778	8.54	8.27			
1779	8.98	8.40			
1780	9.43	8.57			
1781	8.1	8.60			
1782	7.9	8.57			
1783	7.68	8.51			
1784	7.86	8.42			
1785	7.36	8.24			
1786	8.26	8.24			
1787	8.03	8.21			
1788	8.45	8.21			
1789	8.33	8.14			
1790	7.98	8.00			
1791	8.23	8.01			
1792	8.09	8.03			
1793	8.23	8.08			
1794	8.53	8.15			
1795	8.35	8.25			
1796	8.27	8.25			
1797	8.51	8.30			
1798	8.67	8.32			
1799	8.54	8.34			

Line chart with chart title and axes titles:



Observations:

1. Seattle temperatures are on average lower than global temperatures by .87 degrees Celsius.
2. Global temperatures appear more stable than Seattle temperatures.
3. There is a strong positive correlation between global average and city average with a correlation coefficient of .62.
4. Average temperatures in Seattle are increasing faster than average global temperatures.