

Project 1 - Explore Weather Trends

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Tools Used

- Used Pages to view CSV files and create line chart of moving averages

Steps Taken

- SQL query to extract global data:

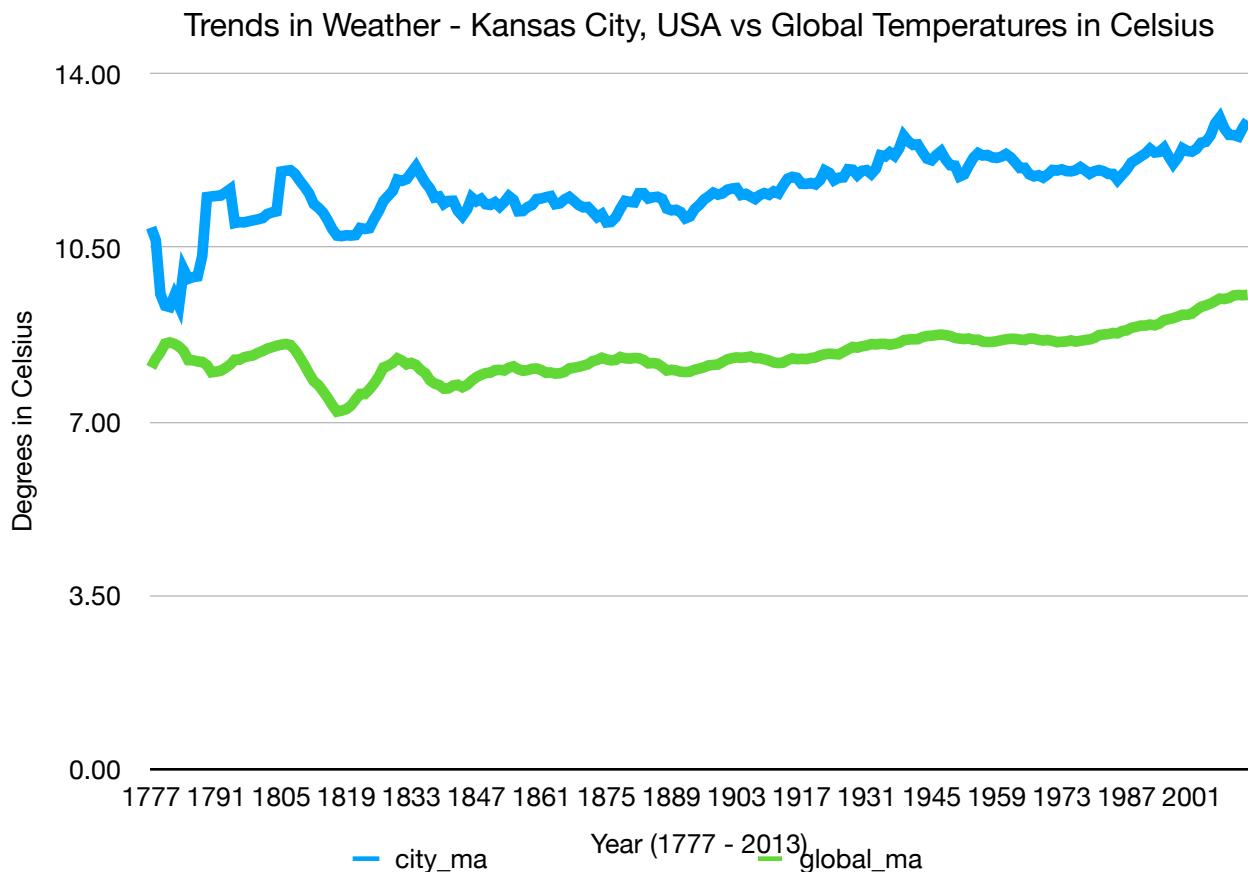
```
SELECT *  
FROM global_data;
```

- SQL query to extract city data:

```
SELECT *  
FROM city_data  
WHERE city = 'Kansas City';
```

- Used 10-year segments to create a moving average over the period of a decade using the built-in average function

- Chose to segment the data from 1777-2013 because there were no missing values in this duration for either the city or global data



Observations

1. Kansas City has been consistently hotter than the global temperature average.
2. The average difference was Kansas City being 3.32 degrees Celsius hotter than the global temperature, with a minimum increase of 0.71 degrees Celsius and a maximum increase of 4.12 degrees Celsius hotter.
3. At no point did the Kansas City moving average decrease below the global average between 1777 and 2013.
4. Kansas City's trend of increasing temperatures does match closely with the global temperature, however Kansas City appears to have had more prominent fluctuations in temperature, likely due to being in a climate with distinct seasons that influence the yearly average.
5. The data shows a marked increase in global temperature over the last 250 years (approximately) with a noticeable rise in temperatures since the mid-1980s.