Observable trends:

City Latitude vs Max temp

As I would have expected, as a city gets further away from the equator (0 degrees) , the colder a city gets. There is some what of a bell curve to this data, where the equator has the highest temperatures and the tend to taper off the further you get from 0 degrees. I was surprised to find that none of the cities in my list had temperatures below zero. My API calls checked the current weather(5-26-19) so this isn’t all too surprising. Very few of the world’s population centers fall very close to the artic circle. The northern hemisphere would also be in the summer/spring season. The southern hemisphere may be in their winter season, but most of those centers fall relatively close to the equator. Also, cities close to the poles tend to be sparsely inhabited if inhabited at all.

City latitude vs Humidity

This graph does not appear to have any clear tends as opposed to the prior graph.

It does appear that most cities for which data was gathered show over 50% humidity.

It appears less than half of the cities show that humidity is less than 50%.

None of the cities appear to have 0% humidity. 0 degrees latitude does clearly show a positive correlation with high humidity as none of the cities have less than 50% humidity at this lat. Surprisingly, as you get further away from the equator, there does not appear to be any real pattern. I would suspect that since humidity has to do with waters relative concentration in the air that cities closer to bodies of water or oceans would have higher humidity.

City latitude vs cloudiness

The cloudiness % tends to group around even numbers. A large portion of the cities group around 0,20,40 or 100 % cloudiness. Perhaps this is a feature of the API and rounds up or down based on certain parameters. There does appear to be large groups at either end of cloudiness when considering high lat cities. Cities above 60 degrees lat seem to cluster either very low or very high on the cloudiness

City Latitude vs windspeed.

The vast majority of cities for which data is available have windspeeds of less than 30mph.

This makes sense as virtually all instances of speeds greater than this are due to either

A: climatic events such as storms or hurricanes

B: high altitude.

There is a strong group around the equator with very low wind speed. I would suspect

That since most cities around the equator tend to be tropical, elevation would be lower on average. Lower elevation would probably correlate to lower windspeed all other things equal.