We looked at relationship between Latitude versus maximum temperature, humidity (%), cloudiness (%), and wind speed (mph) for 548 cities. There is a negative relationship between maximum temperature and latitude. As latitude rises, temperature falls down. There is no relationship between latitude and humidity as well as latitude and wind speed. Cloud coverage is more in higher altitude than in lower altitudes.

We then divide the data by northern and southern hemispheres and ran linear regression analysis. For the northern hemisphere, there is a negative relationship between latitude and maximum temperature while in southern hemisphere, we found a positive relationship with negativewhich does not make sense. We found very weak positive relationship between latitude, humidity, wind speed and cloudiness with respective of .27, .23 and .22.

In the southern hemisphere, there was a moderate relationship between maximum temperature and latitude with of .59, and weak relationship between latitude, humidity and cloudiness with respective of .29 and .37. But we could not find meaningful relationship for windspeed and latitude as it was demonstrated in the previous scatter plots.