**Conclusions from WeatherPy Analysis:**

There are 1,265 cities in the final dataset, and all cities contain no missing data. The data set is a snapshot of the current weather conditions at these cities. The API request to Open Weather was performed 06/26/2019 between 5:30 PM PST – 5:52 PM PST.

1. From the temperature versus latitude graph we can conclude that our hypothesis is correct, that temperatures increase as one approaches the equator from either the north or the south. Cities closest to the equator, between and including -10 to +10 degrees in latitude, experience a temperature average of 74.45° F (± 1 std = 6.74 ° F ). 75% of cities that fall most closest to the equator have temperatures ranging from 75.00-89.60 ° F. The highest temperatures, greater than 90 ° F, are experienced between 11.27 to 39.51 degrees north with respect to the equator, at 0 degrees. This increase as one travels north could be due to geographical regions experiencing a summer time season. Cities 30 to 40 degrees north of the equator have the greatest temperature range, with temperatures ranging between 27.44° F to 99.26° F. The mean temperatures drop as one travels even further north from the equator. Latitudes 40 to 70 degrees north of the equator have an average temperature of 62.08° F (± 1 std = 11.29 ° F ), and the temperature range is 33.92-84.79° F. Similarly, as one travels further south from the equator the mean temperatures are lower than they are compared to the equator. Latitudes between -10 and -30 have a mean temperature of 62.60 ° F (± 1 std = 10.88 ° F ), and have a temperature range of 31.94-87.39° F. Latitudes between -30 and -60 degrees have an average temperature of 50.84 ° F. (± 1 std = 7.68 ° F ) and a temperature range of 28.17-62.51° F.
2. With respect to humidity vs latitude: 75% of cities most closest to the equator (between -10 and +10 degrees), have humidity percentages between 75% to 100%, and have an average humidity of 82.38% (± 1 std = 12.96 %). The further south and the further north one moves from the equator, the more variation and the range in humidity can be observed amongst cities. The northern hemisphere experiences the widest range humidity from 0 – 100 %, between 15 to 45 degrees north of the equator.
3. No correlation can be concluded with respect to % Cloudiness and Windspeed, as one approaches the equator.

With respect to % of cloud cover the average cloud coverage is 44.67 % for all cities at all latitudes in this data set (± 1 std = 38.29%). Cloudiness % appears to be evenly disturbed across all latitudes in this dataset (between -54.81 degrees and 78.22 degrees), with the minimum cloud coverage for cities at 0.00% and the max cloud coverage for cities at 100 %. 75% percent of cities across all latitudes in this dataset have a cloud coverage between 0.00% to 80.00 %.

With respect to windspeed: the average windspeed across all latitudes in this dataset (between -54.81 degrees and 78.22 degrees) is 7.63 MPH, and 75% of the cities across all latitudes experience windspeeds ranging from 0.34 MPH to 10.29 MPH. Less than one percent of cities have windspeeds higher than 25 MPH. The max windspeed in the dataset was 34.45 MPH (City: Karasjok, Country: Norway, Latitude: 69.47).