Analyzing Weather Data Relating to Latitude Closer to the Equator

Here we observe the weather patterns at different latitudes as we get closer to the equator. The weather patterns we are observing are maximum temperatures, humidity, cloudiness and wind speed. Using citipy, we get no less than 500 cities and their latitude and longitude levels. Then using the cities, we perform API calls against the Open Weather API and verify that each city is a part of the API calls. If there is information on a given city, we add the city and pertinent information to a Pandas Data Frame where we create the needed graphs.

While it is general knowledge that cities at latitudes closer to the equator tend to be hotter in terms of maximum temperatures. From the scatter plot, we can see that this is indeed the case. The points are mostly concentrated at the equator or even a few degrees south or a few degrees north of the equator. But as we can see from the other scatter plots, there is little relationship to the latitude for humidity, cloudiness or wind speed. Generally, the humidity, cloudiness or wind speed tend to be constant to the latitude. Humidity, cloudiness and wind speed are no higher at the equator.