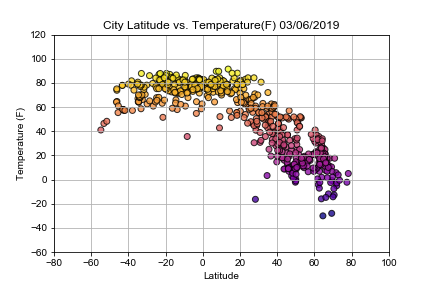
Analysis of findings through the use of Python scripts to visualize the weather of 500+ cities across the world in broken down in the following sections. For this assignment, I used [Python library- Citypy](https://pypi.python.org/pypi/citipy), and the [OpenWeatherMap API](https://openweathermap.org/api).

I also used Matplotlib with a series of scatter plots to visualize the following relationships:

* **Temperature (F) vs. Latitude**

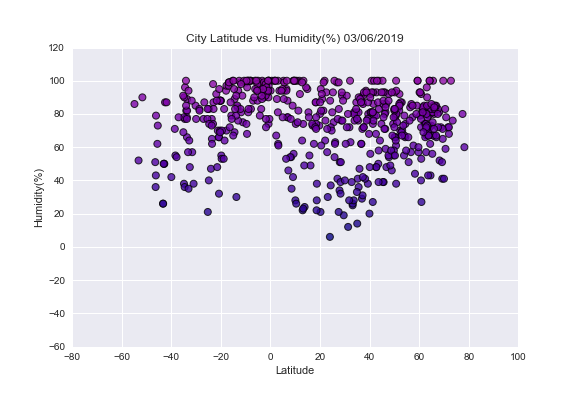
The analysis of the latitude versus the temperature occurred on March 6, 2019. During this time of year, the Northern hemisphere (latitude > 0°) is cooler than the Southern hemisphere (latitude < 0°). Thus, it is not surprising that the cities with the greatest temperature are those closer to the equator.



* **Humidity (%) vs. Latitude**

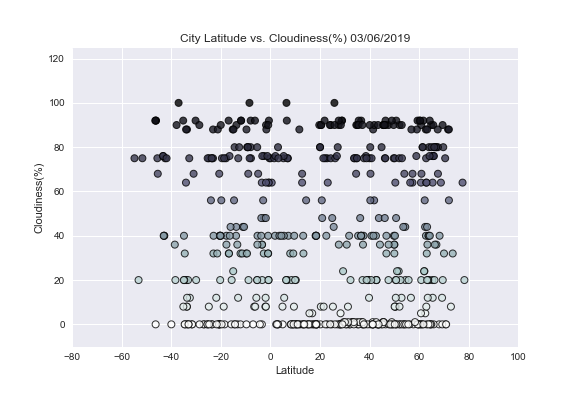
The analysis of the latitude versus the temperature occurred on March 6, 2019. Humidity is the measure of water vapor in the air. When the humidity is 100% then the air can't hold any more water vapor. An increase in humidity can lead to additional warming of the land masses and sea.

Analysis of the data shows that latitude does not an impact on the percentage of humidity across various degrees of latitude. However, most of the cities generated from the analysis had humidity of greater than 60%. Since, most of the Earth (71%) is covered by water, could there be the potential that most of the randomly generated latitudes and longitudes are over a body of water? If this is the case, then this makes the nearest city to those latitudes and longitudes along coastlines and other bodies of water. One more result to consider is that humidity is dependent upon temperature and cloudiness. Further analysis of the how many cities had temperatures above 60° F may provide additional insights on why most of the cities had high levels of humidity.



* **Cloudiness (%) vs. Latitude**

The analysis of the latitude versus the temperature occurred on March 6, 2019. The data show that there is no relationship between latitude and cloudiness. However, further analysis of the data can help determine if there is a relationship between the cities with low amounts of clouds and humidity and/or temperature.



* **Wind Speed (mph) vs. Latitude**

The analysis of the latitude versus the temperature occurred on March 6, 2019. The data showed that most of the randomly generated cities had wind speeds <15-20 mph. Factors to consider that contribute to wind speed include, hurricanes and monsoons. Hurricane season was over and so was the Northern monsoon season. However, the Southern monsoon season, which is October through April, is currently in progress.

