**Weather Patterns in Relation to Latitude**

**Goal:**

The goal of this project was to compare weather patterns in relation to latitude. For this project a set of over 500 cities names was comprised by creating a list of randomly generated coordinates and retrieving the location name from CityPy. Next, real-time weather attributes were retrieved using Open Weather API.

**Observations:**

1. A scatter plot of temperature vs. latitude shows that temperatures today were highest near the equator.
2. A broad range of humidity levels were found across latitudes. However, for the cities queried which were within about 10 degrees of the equator, all had humidities over about sixty percent.
3. No strong correlation was found between latitude and cloudiness nor wind speed. However, cities with the highest wind speed tended to be further from the equator.

**Limitations and next steps:**

The data collected shows one below shows weather details for randomly selected cities at one point in time only. It does not take into account other key geological features such as altitude. In addition, a large meteorological event, such as a tropical storm, was not considered and could skew this data. To strengthen this analysis, weather could be monitored over time and comparisons made between results over days, months, and years.