

Python API - Weather Py : Observable trends

Temperature vs Latitude

- Higher temperatures are recorded closer to the Equator (Latitude = 0) as it receives abundant sunlight. Temperature decreases as we go further North or South from the Equator. At the time of writing, summer season is in the northern hemisphere so the temperatures to the right of 0 degrees Latitude is the bulk of the highest temperature values. Similarly, in the southern hemisphere, temperatures are lower due to winter season.

Humidity vs Latitude

- No clear trends can be seen in this plot which may indicate Latitude may not have a significant effect on humidity. Presence or absence of a waterbody, greenbelt cover (higher water vapor) in addition to geocoordinates may explain higher or lower humidity percent.

Cloud Cover vs Latitude

- Just like the previous case, for clouds to form, enough humidity needs to be present in the atmosphere (also greenbelt cover and waterbodies). The graph has bunch of plots in straight line across the latitudes range which makes it difficult to draw conclusions.

Wind Speed vs Latitude

- The latitudes farther away from the Equator seem to have winds with higher speeds. Further, the winter season in the southern hemisphere is contributing to the higher wind speeds when compared to the northern hemisphere. I would expect to see faster wind speeds near the North and South poles.