Python API's Homework

Zohaib Syed

September 23rd, 2018

Three Observable Trends:

Trend 1: From the Temperature vs Latitude graph, its easy to see there is a pretty heavy correlation between higher temperatures and being closer to the equator. This of course, is not very surprising, but this is made very clear from Figure 1.

Trend 2: From the Humidity vs Latitude graph, we see a correlation as well. This correlation appears to be much weaker than the correlation with temperature however. In fact, the correlation is so weak, it is only easily observable if you focus on how there are no strikingly low humidity values within 15 degrees or so of the equator.

I believe the correlation should be further analyzed in a case such as this since its too weak to the naked eye to be very meaningful.

Trend 3: Another observable trend involving the Humidity vs Latitude graph is that the lowest values of humidity appear to be clustered near the 40 degree mark. To consider this in terms of the United States, this theoretically implies that the driest areas could occur roughly along the middle of the United States (think Indiana, Colorado, Kansas, etc.)

Additional Observation: The last two figures (windspeed and cloudiness) appear to be near useless. If we look at the data, it looks way too dispersed to even consider a correlation with the latitude (Okay so I admit there might be a couple outliers in windspeed, overall they appear far too insignificant to be worth reading into when it comes to generalizing to the whole set.)

Future considerations: Although figures 3 and 4 appear to lack meaning in the current context, I believe if we were to analyze the weather in more interesting times (ex: during an el-nino) we could find more use for figures 3 and 4.