Conclusions

A close up of text on a white background

Description automatically generated

1. So the question we are trying to answer is how does temperature behave as we approach the equator. The equator is the closest point to the sun, so our hypothesis will clearly be that the closest we get to Lat 0 the higher the temperature will be. Well, we need to prove this. In this screenshot we indeed can see that Max Temp reaches its highest points at Lat 0, we were kind of expecting that. What we weren’t expecting at all was that there would be such a huge different between both poles. For instance, if we go 60 points north the equator Max Temp could vary between 0 and -40 degrees, at the same time if we go 60 points south the equator, Max Temp remain pretty warm around 10 degrees, which could be even -400% more than the numbers in the north.
2. Along the latitude, there might be other factors affecting the temperature. In this particular exercise we studied humidity, wind speed and cloudiness. For instance, cloudiness factor seems not to variate too much along all the latitude points, so we don’t really believe it’ll affect the temperature either. With the humidity factor we can appreciate that whenever we go north humidity will increase and whenever we go south humidity will drop, both represent a positive correlation, but not a really strong one, r-square values are 0.31 and 0.46 respectively to prove that latitude affects somehow the humidity.

A screenshot of a cell phone

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1. On the Wind speed plot, we can see that most data points don’t vary at all, unless we get really north the equator, such as 60 points northern, which is exactly where Map Temp drops the most too as we saw in the first screenshot. It’s true that factors such as humidity gave us best r-squares, for both northern and southern poles, but I think that model would help us if we are working on not so extreme latitude conditions up to 40 points both northern and southern the equator. On the other hand, on my point of view wind speed would probably represent better those extreme latitude points.