The relationship between temperature and latitude is n shaped. The farther away from the equator, the colder it gets and vice versa. Northern hemisphere has a clear inverse relationship with temperature because starting from the 0 latitude which is peak temperature, the further you move from the equator leading to an inverse relationship and positive correlation for the southern hemisphere because you start from further out and move closer to the equator.

Cloudiness does not have a high correlation with Latitude as location is not a significant factor in those categories. Closeness to water bodies will be more significant to these weather categories.

Wind Speed does not have a high correlation but has a more positive correlation as Latitude increases, you clearly see the higher values of the Wind Speed are solely in higher latitude regions but mid level wind speed values are scattered across latitude at a fairly even rate.