Clear Skies Ahead! Claire M.

Imagine you are sitting on dry crippled grass, an icy cold breeze pressing on your face and coat, and yet the sun is shining and not a single cloud in the sky, this is what our class recently experienced when we were doing cloud observations. It was Dec, 12 2023 at 10:33am, our class was sitting outside at Corpus Christi Catholic School in the North field At 38.958° latitude and 95.358° longitude, the temperature was 4°c the precipitation was 1% the humidity was 58% and the wind was traveling at 13kl. We sat on very dry grass that was a burnt umber, when I was fingering at the grass I noticed it smelled of saw dust and salad. The wind was softly brushing against the trees, most of which lost their leaves except for the meek and lofty Evergreens. As we perceived the stunning sun I distinguished that it was shining fairly dull but overall it was sufficiently bright. There was not a single cloud in the sky, only three chalky short-lived contrails which we suspected because, before we went outside we looked on Flight Radar 24 and saw one small plane, one helicopter, and a jet passing overhead. From the field I heard children playing and bellowing on the playground south of us, I also heard birds chirping and flapping their wings gracefully like a ballerina crossing the stage, as well as cars racing and bolting down the road.

When were observing the sky I wondered if humidity affected the clouds since the percentage was so low (1%), so I researched and found out that humidity is basically one of the measurements of the amount of water air can hold, so if the humidity is at 100% there is enough water the make rain and snow. Humidity can also change a lot throughout the day because a change in the temperature causes a change in the pressure, so if it was a 100% and the temperature went down the air squeezes together and pushes out water, our rain and snow. There is also relative humidity (a measure of the actual water vapor in the air compared with the total amount of vapor that can exist in the air at its current temperature) if it reaches 100% the cooling

results in condensation and cloud formation and just enough water condensates to

keep the relative humidity at 100%. So the humidity and relative humidity does affect clouds in different ways depending on the temperature.

images



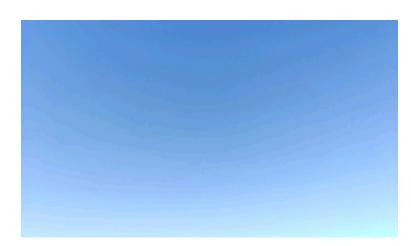
<u>North</u> <u>East</u>





<u>South</u> <u>West</u>





Resources

Flight Radar 24

Windows to the Universe

Stack Exchange

National Weather Service