

Clouds 2

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Introduction:

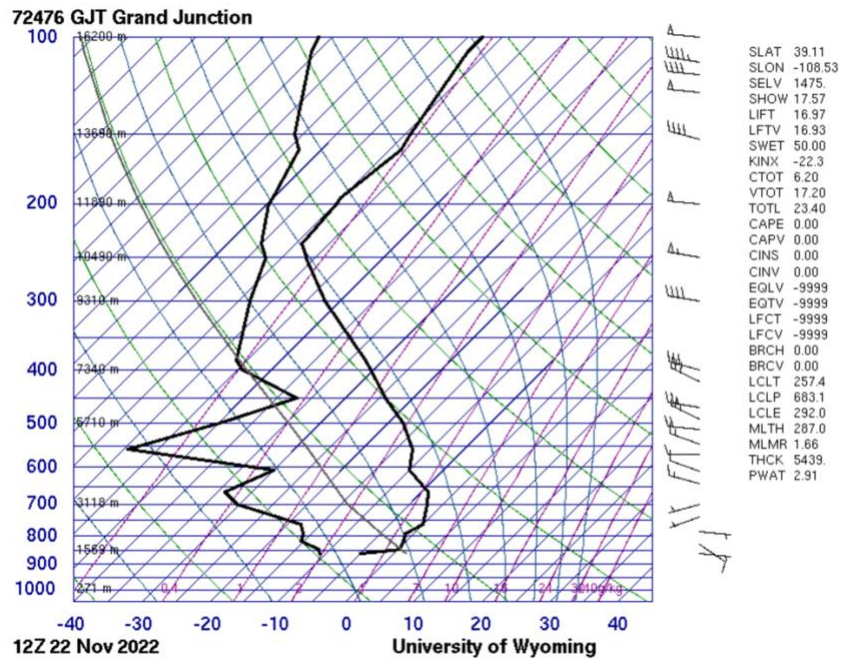
Anyone who lives in Boulder knows that every once in a while, we get an absolutely stunning sunset. On November 22, 2022 I was walking out of Movement Climbing at Fitness at about 5 pm and looked up and saw the above sunset. Movements parking lot is horrible and people were waiting to get a spot so I couldn't spend too much time taking pictures but thankfully the sunset was stunning enough that I was able to capture it very quickly with my phone. This is a small stratus cloud hanging over boulder illuminated by the sunset.

Circumstances:

This was taken in central Boulder at 4:49pm on November 22nd. It was a very cold day with a high of 52°F and a low of 30°F. At approximately the time this was taken it was 36°F with a 7.8mph westward wind and a humidity of 51%.

Cloud Data:

The closest available skew-T diagram location for this image is from Grand Junction Colorado, a city about 200 miles West of Boulder. The Skew-T diagram shows the atmospheric conditions at a range of temperatures. It can be used to guess cloud height by noting where the left and right black lines get close to each other. Based on the diagram below it would make sense that the cloud in the image is near the 1600m mark. This makes sense as it looked like the cloud was just above the Flatirons which are around 2000 ft. From this Skew-T it seems like there might be some clouds at around 6000m although they didn't appear visible in this image. Because the cape number is 0 this is probably a stable atmosphere.



The height, cape, and aspects of this cloud lead me to believe it is a stratus cloud. It is wispy, low, and stable.

Photographic Techniques:

This was taken on an Iphone 11 using the wide camera. It had a focal length of 26mm, an f-stop of 1.6, an ISO of 40, and a shutter speed of 1/121s. The original image was 4032x3024 pixels. All of this was automatically selected by the Iphone. The post processing includes some color correction to increase the contrast seen in the clouds and cropping to remove unneeded information. After reviewing with the class they said I should change the cropping to the following image and I kind of agree.



When I was originally editing the image, I wanted to focus on the cloud itself and cut out other information. After talking with the class though, I agree that including the top of the gas station adds some geometry and reference points to the image which enhances it.

Artistic Techniques:

The goal of this image was to capture the stunning sunset reflecting off the clouds. When you see a sunset this good in Boulder it was hard not to take a picture and the ability to study the cloud that was in the image makes it even more fun. I really like that I was also able to edit the colors from the original image to look more like what it looked like in real life. I'm always disappointed that colors don't show up the same on the phone and playing with color correction allowed me to change that.

Bibliography

University of Wyoming. (2022, August 24). *Grand Junction Skew T*. Retrieved from University of Wyoming Weather: <http://weather.uwyo.edu/cgi-bin/sounding?region=naconf&TYPE=GIF%3ASKEWT&YEAR=2022&MONTH=08&FROM=2412&TO=1400&STNM=72376>