

Taylor Ellis

Cloud II Report

CINE 42000

December 7th, 2020



For the second cloud assignment, I captured a cirrus cloud around 11am on November 3rd. This image is representative of the clouds that day in Boulder, Colorado as captured from the Mesa Trail. My intent was to capture this cloud formation that seemed to interact with the shape and curves of the Flatirons and the skyline. The image was taken looking South West as the cloud seemingly whirled around the second Flatiron.

These clouds can be classified as cirrus, a cloud that can occur between 5,000 m and 13,700 m [2]. Cirrus clouds are typically associated with thin and wispy characteristics. The nearest station to Boulder is located in Denver, and the following skew-t diagram is based on data collected from this station. Based on the information presented by the skew-t diagram for that morning (Figure 1), there is a slight “pinch” in the black lines indicating the presence of clouds around 6000m. This information aligns with the altitude at which cirrus clouds form. A cape value of zero indicates a stable atmosphere, and the skew-t diagram indicates north-western winds.

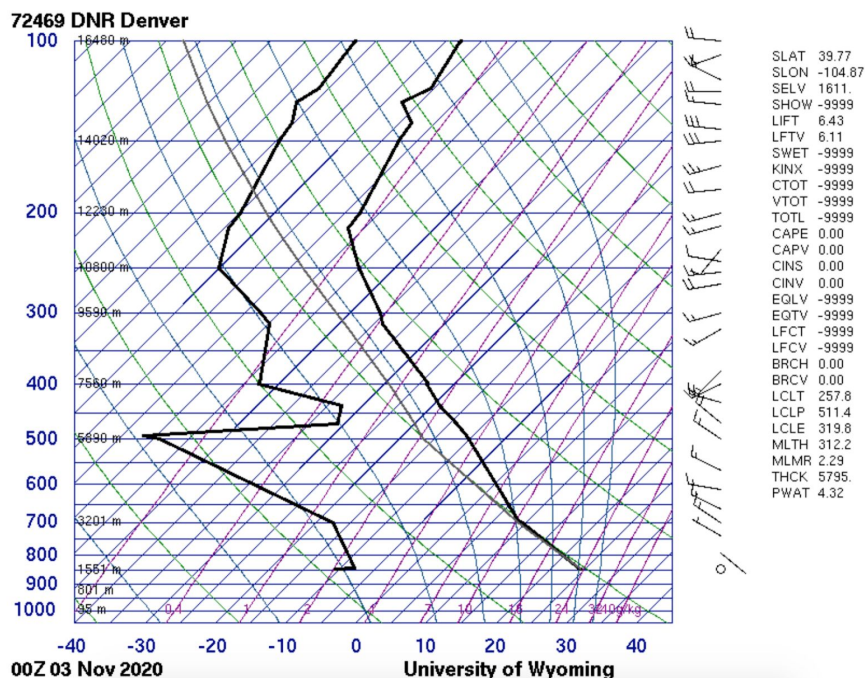


Figure 1: Skew-t diagram from Denver, Colorado [1]

I used my Iphone SE to capture this 4032 x 3024 image. The minimal post-processing I did with Darktable includes the utilization of the haze removal module, crop and rotate, and minor adjustments of the RGB curve. As seen in Figure 2, this helped me achieve more clarity and a lighter sky. I also cropped out the bottom portion of the image to put more emphasis on the clouds.



Figure 2: Before and After

This cloud image reveals an interaction of clouds and the mountains local to us here in Boulder. I like how I was able to reduce distractions via post-processing and introduce clarity to the “wispy” aspects of this cloud. Going forward, I would like to experiment with different post-processing techniques and try to get better colors out of the image.

Citations:

[1] "Atmospheric Sounding Data." *Atmospheric Soundings*,
weather.uwyo.edu/upperair/sounding.html.

[2] Cirrus Clouds, <https://typesofclouds.net/cirrus-clouds/>