# Clouds Second Report

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Flow Visualization

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This cloud image was taken on October 31, 2019 at approximately 11:30am in Boulder, Colorado. The image was taken more specifically near the Idea Forge. The day consisted of bright blue skies with cold

temperatures of 40 degrees Fahrenheit. The clouds here were extremely visible with no obstruction of viewing them. I personally chose this picture out of the other ones that I took due to the interesting shape and formation of the clouds at the time. I also liked how these clouds were more opaque compared to usual clouds.

The image was captured with an iPhone 7. The iPhone 7 does not have too much capability in adjusting camera settings manually. The automatic settings that were used to capture the image are as follows: aperture was f/1.8, focal length 3.99mm, ISO 20, and a shutter speed of 1/4366s. The iPhone 7 does not automatically display the metadata of an image. I used an app called "Exif Metadata" to pull the previously mentioned camera settings. The ISO is so low due to being outside with plenty of sunlight when taking the image.

When looking at other cloud photos, I noticed that a majority had the approach of minimal post-processing. I personally wanted to practice my photo editing skills, so I opted for a less realistic aesthetic when producing the final image. When editing the original image, I brought the contrast down to darken the color of the sky in the background.

**Figure 1.** Original/Unedited cloud picture

I believe that the clouds captured are lenticular clouds. Lenticular clouds usually appear over mountain ranges. The mountains shown are the Flat Irons. These clouds are higher than the mountains themselves. When examining a Skew-T diagram for the Denver area for this day, the atmosphere was stable. This is shown by the CAPE value of 0 in the diagram below.

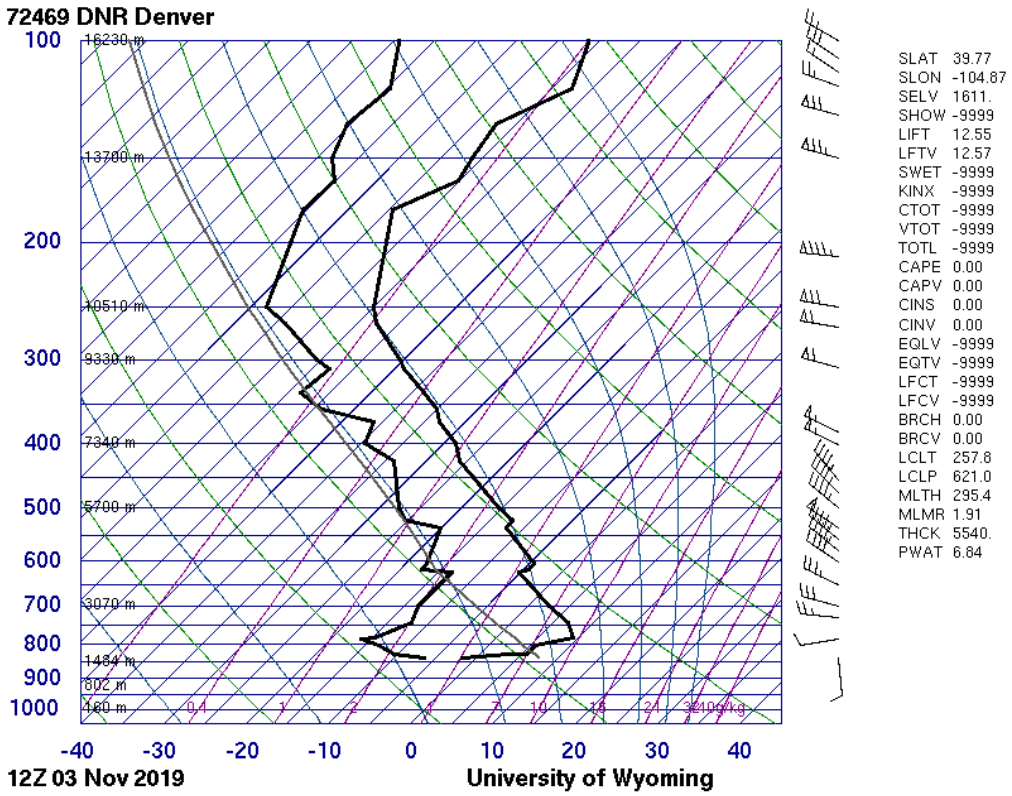


**Figure 2.** Skew-T diagram for October 31st, 2019 in the Denver area

I personally like this cloud image due to the unrealistic approach that I took. It reminds me of artwork that would appear in a fantasy novel. If I were to recapture a similar image of this kind of cloud, I would possibly center the clouds a little bit more. I feel like the blue sky is a slight distraction from the overall intended subject in the image.

**References**

Lenticular Clouds Information

https://en.wikipedia.org/wiki/Lenticular_cloud

Skew-T Diagram

http://weather.uwyo.edu/upperair/sounding.html