

Clouds

Kelly Sikora

Cloud 1

MCEN 4151-001

10/25/2021



I. Image Context

Clouds are something I often look up at and admire, so initially I thought this assignment would be particularly easy for me. However, I found whenever I saw the coolest clouds I did not have my Nikon camera on me. I also found it a challenge to find a sky that was not blocked by buildings, trees, or mountains.

I took this image from the business field on campus when I was walking home from class one day. What captured my eye was the rays of sunshine shining through them, as well as the evident contrast between the dark centers and glowing edges.

II. Fluid Dynamics

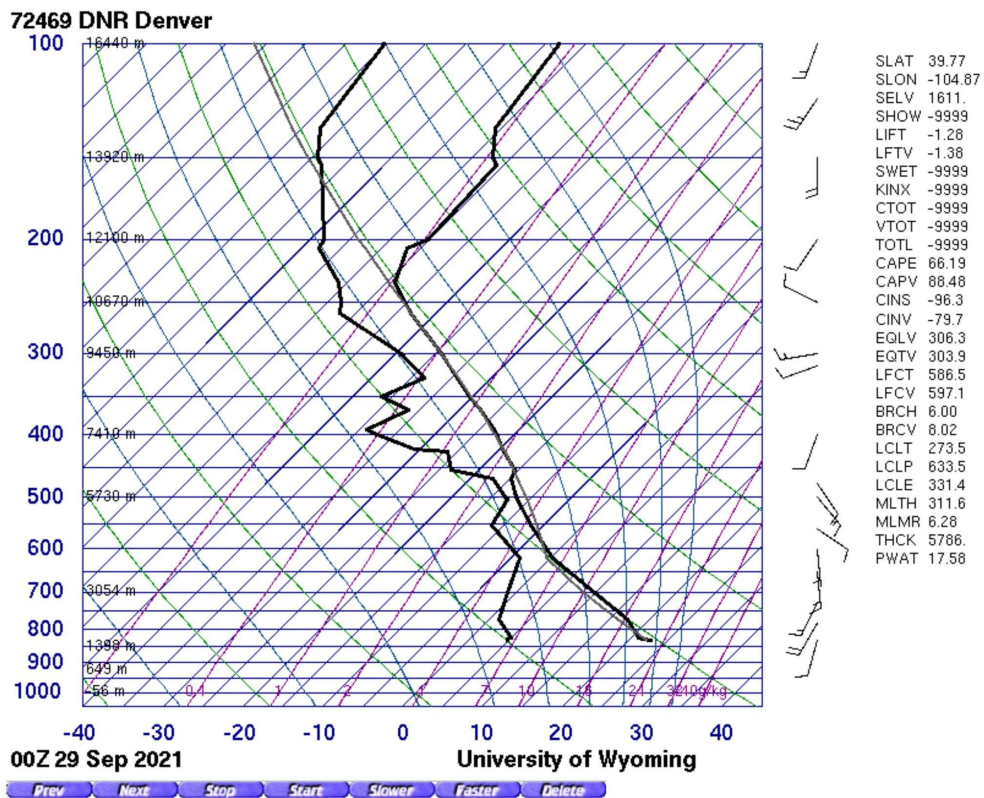


Figure 1. Skew T of the day the picture was taken [1].

When looking at the skew-T (Figure 1) diagram it is apparent that the clouds were highly unstable that day. The CAPE number is 66.19, which is well above 0.00. Also, the wind switch directions at about 5730 m, which is the altitude where the clouds appear to be forming. The clouds at this level appear to be cumulus. In the image it appears there are more clouds at a higher altitude which, from the diagram, I would estimate to be a little below 9450 m since that is the next spot the two lines come closer together.

III. Visualization Technique

My main visualization technique was trying to capture a frame with the least amount of objects impeding on it. This was difficult to accomplish, considering the fact that I was trying to also get the most amount of rays in the clouds. I ended up with the roof of a building in one corner and a tree in the other.

IV. Photographic Technique

The field of view was determined through the visualization technique. I used my iPhone 12 Plus in the 1 to 1 lens setting. Lastly, I edited the image. I upped the contrast of the image to emphasize the dark centers and glowing edges the caught my eye. I then lowered the brightness of the image because it was a bit over exposed. I then increased the saturation to make the sky bluer.



Figure 2. Left: Raw image. Right: Final edited image.

V. Image Overview

Overall, I do like how this image turned out. The main thing I would change is if I could frame the image without the buildings and trees. I also could have done without the mountains, but I do not think they took away from the image at all. I also wish I had been able to take it with my camera, however the iPhone camera captured what I wanted to get pretty well.

References

- [1] *Atmospheric soundings. (n.d.). Retrieved October 25, 2021, from <http://weather.uwyo.edu/upperair/sounding.html>.*