

Clouds 2 Image Report



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I. Introduction

This image was taken for Flow Visualization class, for the Second clouds image assignment. The goal is to take a picture of cool clouds, so we can study and understand them. Also, to take a picture of beautiful cloud formation.

II. Image Circumstances

This image was taken in Paragon Estates: October 19th, 2021, at 9:21 am on a beautiful day. I used a phone camera to capture this image. The phone was pointed at about 45-50 degrees from horizontal.

III. Cloud Description

These clouds in figure 1 show stratocumulus clouds because they were forming a layer of puffy clouds [1]. These clouds are low-level. We can notice that from the Skew T diagram in figure 2, where the point line gets closer around 5700 meters high. From the Skew T diagram, we can see that the atmosphere was unstable on that day because the CAPE value is 209.9, which is above the zero. Also, I remember that day was a normal day with some clouds.

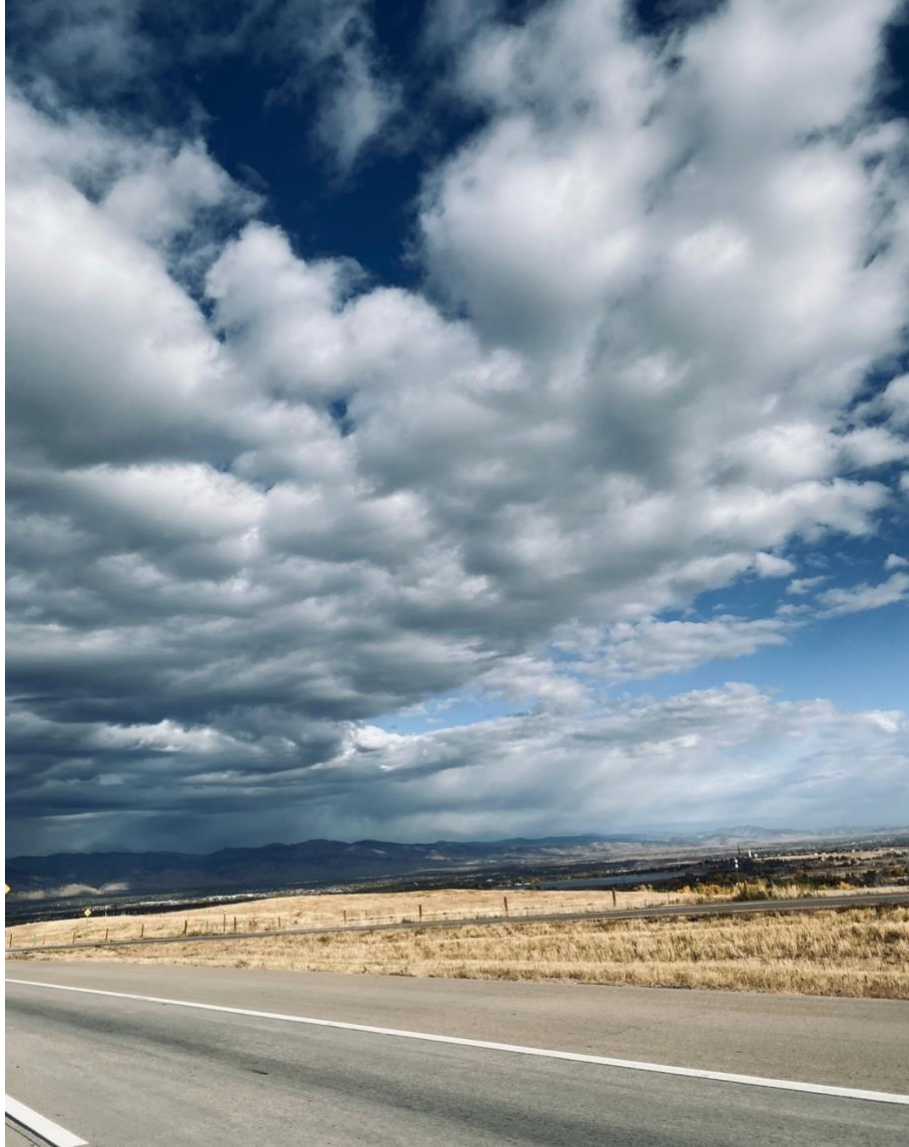


Fig 1. Final image.

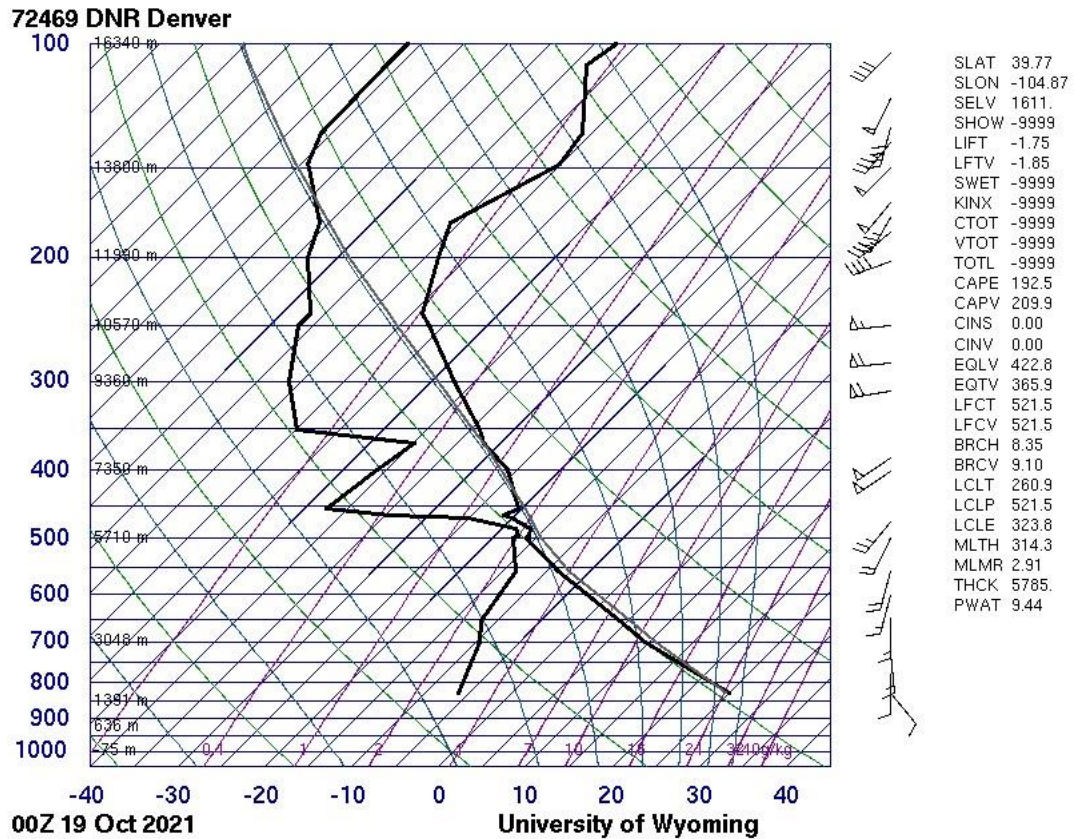


Fig 2. Skew T graph

I took the picture in Paragon Estates. since there is no skew T graph for Paragon Estates, I used the Skew T graph for Denver. The Skew T graph in figure 2 for October 09, 2021. At 00z which it is sunrise around 6:00 A.M for that day. Also, as I mentioned before the height of clouds is about 5700 meters, where the black lines are getting close to each other.

IV. Photographic Technique

To capture this image, I used my iPhone 11 pro camera. The lens ratio was 1x zoom. I used the default setting on my phone to capture this photo. The size of the original picture is about 4032 x 3024 pixels. I used a little bit of iPhone editing to make the image lighter and to edit the colors.



Figure 3. original picture

V. Final Results

This image shows a beautiful day with few clouds. I like how this image is simple, and I am happy with the final result. I noticed these clouds are stratocumulus, and they are low clouds.

For the next time, I will try to write some notes on the weather surrounding. Finally, I would like to learn more about clouds and how they affect the environment.

References

[1] *Learn about stratocumulus clouds: Low, puffy layer.* whatsthiscloud. (n.d.). Retrieved October 26, 2021, from <https://whatsthiscloud.com/cloud-types/stratocumulus/>.

[2] Website for animated Skew T diagram: [72469 DNR Denver Observations at 12Z 30 Aug 2021 - 00Z 31 Aug 2021 \(uwyo.edu\)](#)