Clouds Second Kelsie Kerr ATLS (CINE) 4151 9 December 2022

Photo taken between Grand Junction and Palisade, CO 3:55 PM, October 2st, 2022 Cloud Types: Cumulus and Cirrostratus

1: Introduction

This cloud photo was taken for the second cloud assignment for Flow Visualization. It was taken with the intention to capture the clouds surrounding Mt. Garfield, the mountain that is to the left of the image.



Figure 1: Edited Cloud Image

2: Circumstances of the Image

This cloud photo was taken facing Northeast on Interstate 70 between Grand Junction and Palisade, Colorado. It was taken at 3:55 PM on October 2st, 2022, and the mountain in the photo is Mount Garfield. The elevation of where the image is being taken is about 4,583 feet, and the peak is 6,765 feet. The clouds that are being photographed appear to be cumulus and cirrostratus.

3: Visualization Techniques

The clouds that are in the image appear to be cumulus and cirrostratus. According to the Skew-T chart out of Grand Junction on the day that the photo was taken, the atmosphere captured was very unstable. The Grand Junction Regional Airport is only about four miles to the Northwest of where this image was taken, making the Skew-T incredibly accurate.

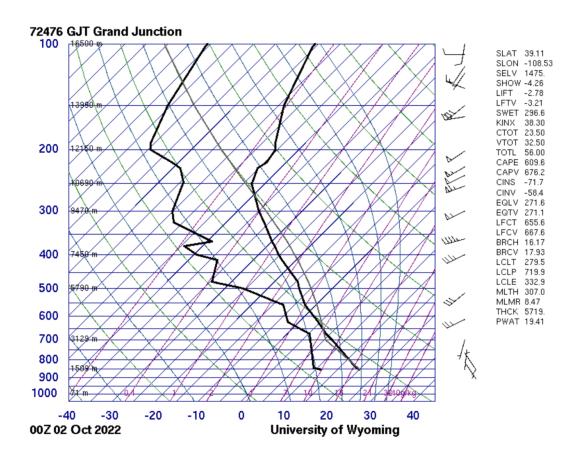


Figure 2: Skew-T Plot (Grand Junction, CO)

It was bright and sunny in Grand Junction on the day that this photo was taken. It wasn't too windy at the time the photo was taken. Cumulus and cirrostratus clouds both make sense for the stability of the atmosphere but also for the weather conditions, as they were

quite fair. It looks like the clouds were at about 4,950 feet behind Mount Garfield and higher.

4: Photographic Technique and Choices

This image was shot on an iPhone 11 Pro Max. The f/ stop was f/1.8, the shutter speed was 1/3846, and the ISO was 32. The focal length was 26mm. The original image was 4032×3024 pixels, and the final image is 3399×2549 pixels. Mount Garfield is 1.7 miles away from the portion of I-70 where the photo was taken. For editing, all that was done was adjustments in saturation and highlights, and an adjustment to make the photo more level.



Figure 3: Unedited Cloud Image

5: Final Thoughts

I think that image turned out incredibly well. The timing worked out in my favor, and it captures the cloud formations well. Grand Junction always has such interesting clouds, and it is really neat to see how they compare to the Skew-T chart since the airport is so close to where the image was taken. It would be incredibly interesting to see how these clouds changed over time and see how they interact with their environment. Overall, I am very happy with this image.