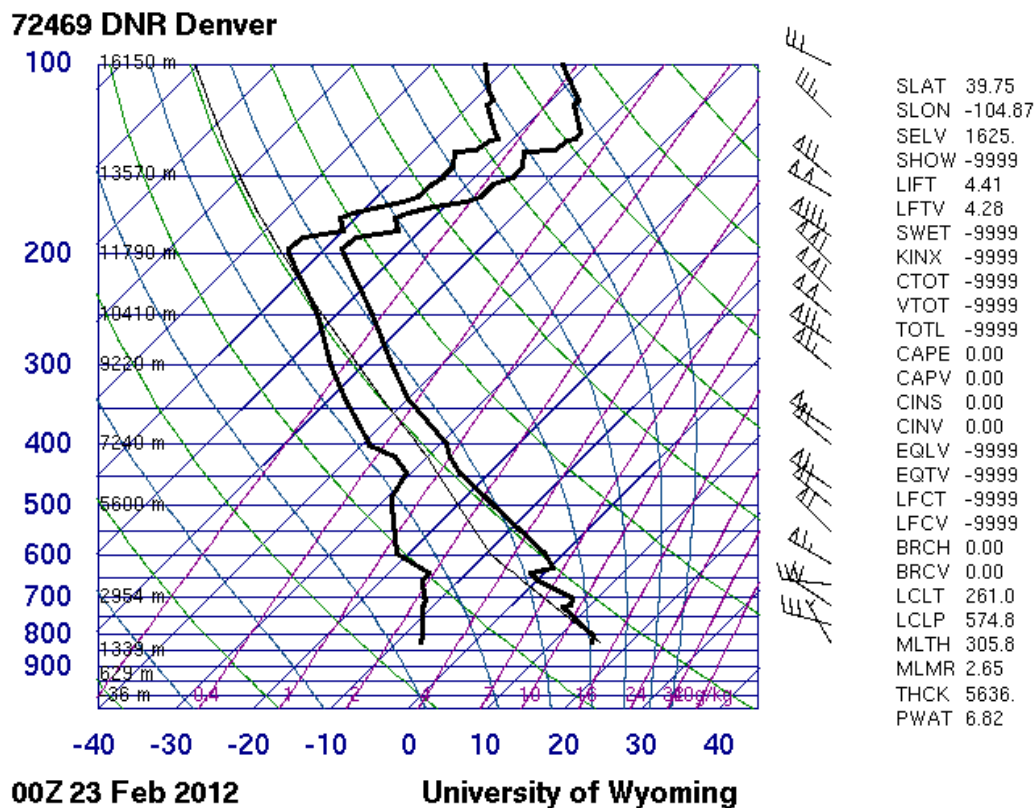


Cloud Image 1

Clouds are something we see almost every day. They are unique and interesting because they change daily. There are several types of clouds in our atmosphere. Cloud types depend on altitude and whether or not we have a stable or unstable atmosphere that day. The intent of this project was to cloud watch and look for a cloud or clouds that were interesting and then to describe the phenomena we captured. With this project the first thing I wanted to do was to capture a sunset in Boulder, CO. I have always loved how the sun reflects off mountain wave clouds and I really wanted to take a photograph of these clouds during this process. In the winter time it was hard to tell when this was going to happen and I didn't always have my camera at hand. I then decided to change my focus and try to capture cirrus or cirrostratus clouds because I enjoy the wispy look they entail. In Boulder we get very windy days in January and February and I thought these would be the best days to try and capture these types of clouds. Once one of the days finally came around I brought out the camera and was cloud watching all day. I didn't capture a cirrus or cirrostratus cloud, however I did see a different phenomenon that I felt was very interesting.

Since it was an extremely windy day clouds were coming and going very rapidly. The cloud that I took a picture of was an altostratus cloud. I took the picture at 4:00pm on February 22<sup>nd</sup> 2012. I was facing north and I was at the junction of Baseline Rd and Route 36 in Boulder CO. I was facing up at the sky at about a 60° angle and the cloud was about 3 miles in elevation. There was not a storm front coming or going. It was a sunny day with many of clouds in the sky. The atmosphere was stable with a CAPE of 0. Here is a Skew-T plot from the day I took the picture.



The cloud that I took a picture of had a lot of parallel lines with different thicknesses in it. It also had wispieness to it at the edge, which is what I wanted to try and capture originally. These features helped me depict that it was an Altostratus Cloud. Here is a picture of my image.



The camera I used was an Olympus E-PL1. The lens I used was an Olympus DIGITAL 40-150mm 1:4-5,6. The shutter speed on the image was 1/500 sec with an F-stop of F10. The focal length was 40mm with an ISO of 200. The original image was 4032x3024 pixels and I cropped it down to 3504x2208 pixels. I did not alter the image in Photoshop because I liked how bright the blue sky was and the depth that was captured within the cloud. Approximating the cloud height at about 3 miles above the ground and taking the picture at a 60° angle, the cloud was roughly 3.5 miles from my cameras lens. The field of view was approximately 300ft x 200ft.

I really like the parallel lines shown in the photo and how at the end of the lines become wispy and kind of twirl. This is because of the very windy day and how the wind was hitting the cloud. I wish I used my other lens to get a larger field of view to see more of the entire cloud. I could have altered the contrast a little bit but I did not want to take away from the cloud too much. I would have liked to capture my original intent but I feel this ended up being a really special image overall.