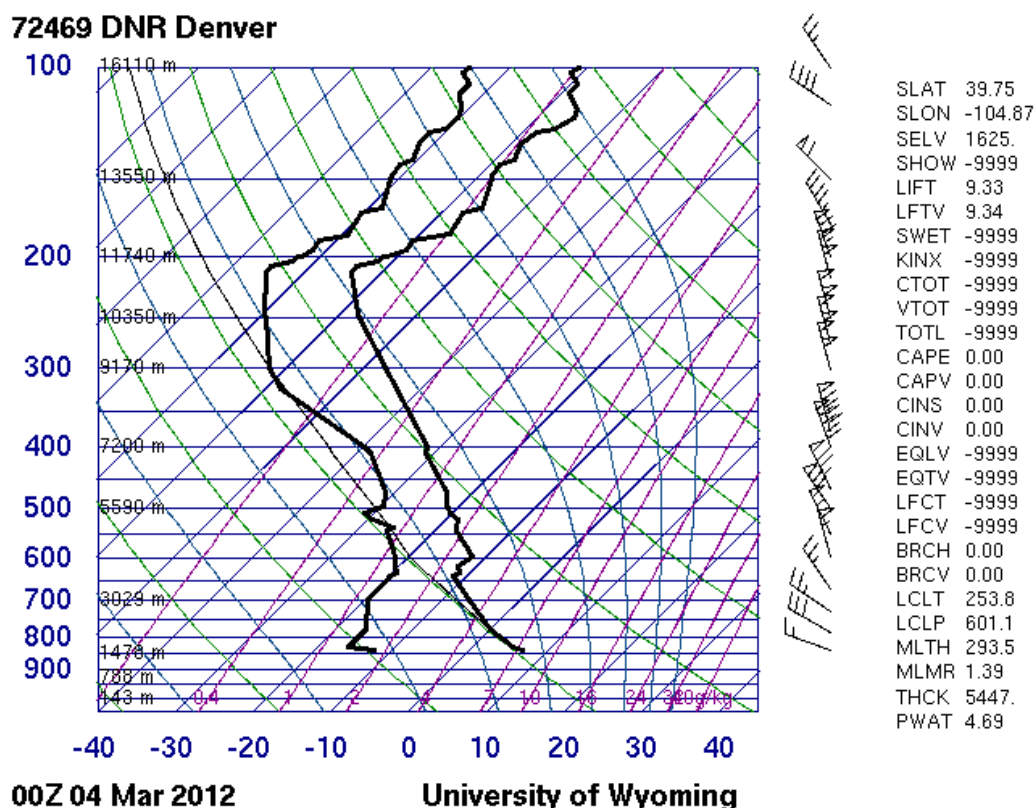


Cloud Image 2

Clouds 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. It wasn't until one day that I was caught unexpectedly by a beautiful sunset. I was driving down the highway about to go to dinner and I just had to pull over and take a second to capture these amazing clouds. The colors coming off the cloud were very vibrant and gave great depth to them. Unfortunately I didn't have my camera and all I had was my iPhone. The picture ended up being very vibrant and clear for a camera phone.

It was a relatively calm, sunny day and there was not any extreme weather the previous day. The cloud that I took a picture of was an altostratus cloud. I took the picture at 6:00pm on March 3<sup>rd</sup> 2012. I was facing southwest and I was just off of Route 36 near the Westminster exit heading west towards Denver. I was facing up at the sky at about a 20° angle and the cloud was about 3 miles in elevation. 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 ran across the entire sky and had some nice parallel lines. The colors of the cloud gave great depth to the cloud. There were also some clouds in the image that were very wispy. These features helped me depict that it was an Altostratus Cloud. Here is my image.



The camera I used was on an iPhone. The camera is an 8 megapixel camera with the option of HDVR mode. I choose not to use this mode as it blended the colors together and I lost the vibrant colors captured in the cloud. The shutter speed on the image was 1/60 sec with an F-stop of F2.4. The focal length was 4.3mm with an ISO of 64. The original image was 3264x2448 pixels and I decided not to crop the image down. I did alter the image a little bit in Corel Paintshop Photo Pro X3. I altered the curves so the darker area turned black creating an outline of the trees at the bottom of the image. This assists the viewer to focus mainly on the clouds. I also used the clone stamp to remove three light post that were in picture. I felt they were a little bit distracting. Approximating the cloud height at about 3 miles above the ground and taking the picture at a 20° angle, the cloud was roughly 8.8 miles from my cameras lens. The field of view was approximately 1mile x 3/4 miles.

I was really glad to have captured this beautiful sunset. The colors within the clouds are very vibrant and give a lot depth to the clouds. I really wish I would have had my camera handy that day so I could have possibly got a larger field of view and a little more clarity. I also wish I took the time to have taken two pictures side by side so I could have stitched them together for a panoramic shot which would have given me a larger field of view. Overall I am very happy with how the picture came out. I really like the trees lining the bottom of the image and brightness of the clouds.