# Cloud 1st Report

Brian Gomez | Flow Visualization (MCEN 4151-001) | 10/28/2019

This picture was taken for our fall 2019 first cloud image assignment for the Flow visualization class. The intent of this photograph was to visualize the physics of fluids the natural world around us.

This photo was taken near the south side of the business building on the CU Boulder campus at about 3:00pm, about six hours before a snowstorm moved into the area. The image captures an interesting lighting effect known as lens flare, which is caused by light reflecting between internal surfaces in the camera diaphragm. I used this image because I thought the lens flare added a nice effect to the picture as it exaggerated my view of the sun peeking through the clouds.

The clouds in the image are classified as stratocumulus. They are relatively flat and low in the sky. According to the Skew-T chart below, there was a stable atmosphere around this time which further justifies the cloud type of stratocumulus.
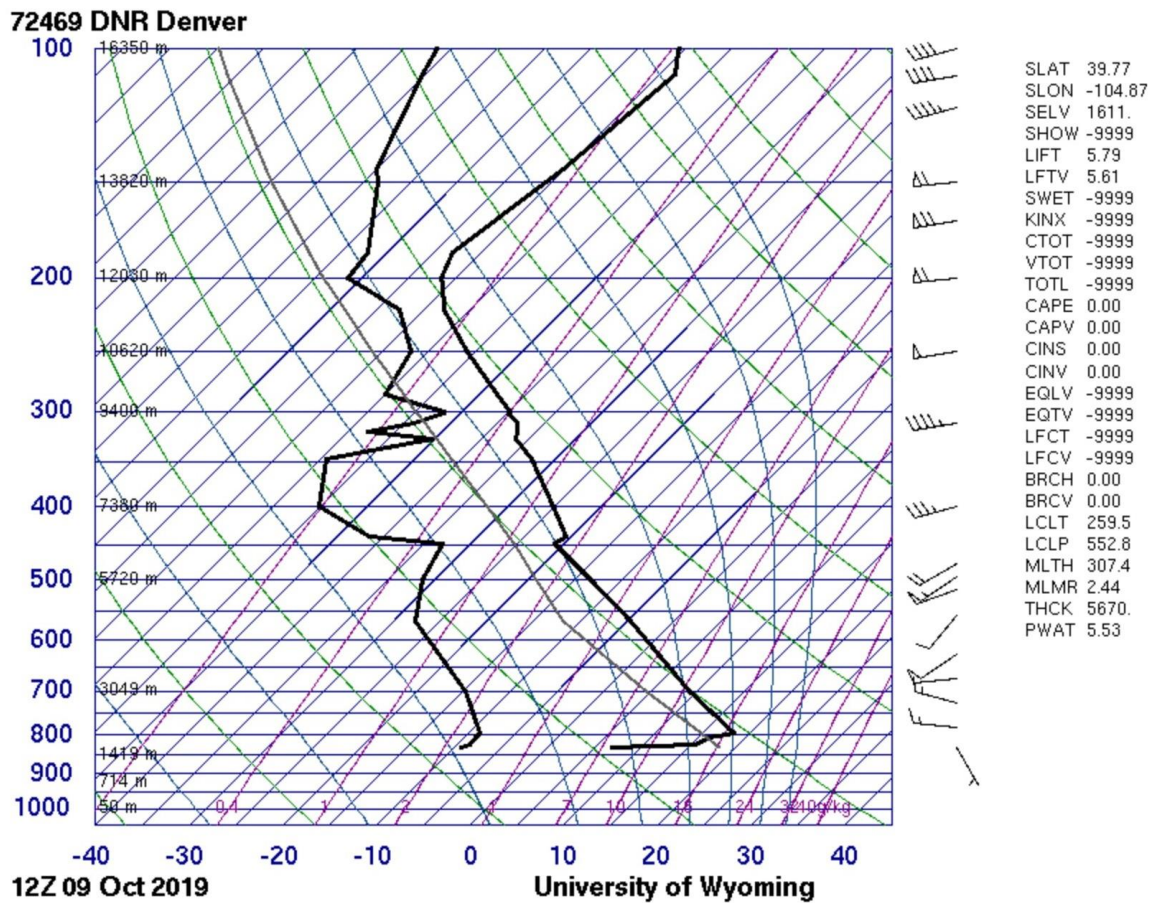
I used my iPhone XR camera to capture this image. I used an F-stop of f/1.8 and my camera automatically set the shutter speed to 1/10526 sec. I used Adobe Lightroom to edit the image. I didn't like the alternating blue and white in the lens flare in the original image, so I used a color brush to increase the bright white in these rays. I also found that the blue in the sky appeared less vibrant in the picture than what I was able to see with my eyes, so I slightly increased the intensity of the blue color of the sky while maintaining realistic colors. The original and edited images can be compared below.