

# Clouds First Spring 2018

Altostratus clouds outside Boulder on Highway 36 at 5:37 PM on 3/3/18

MCEN 4151

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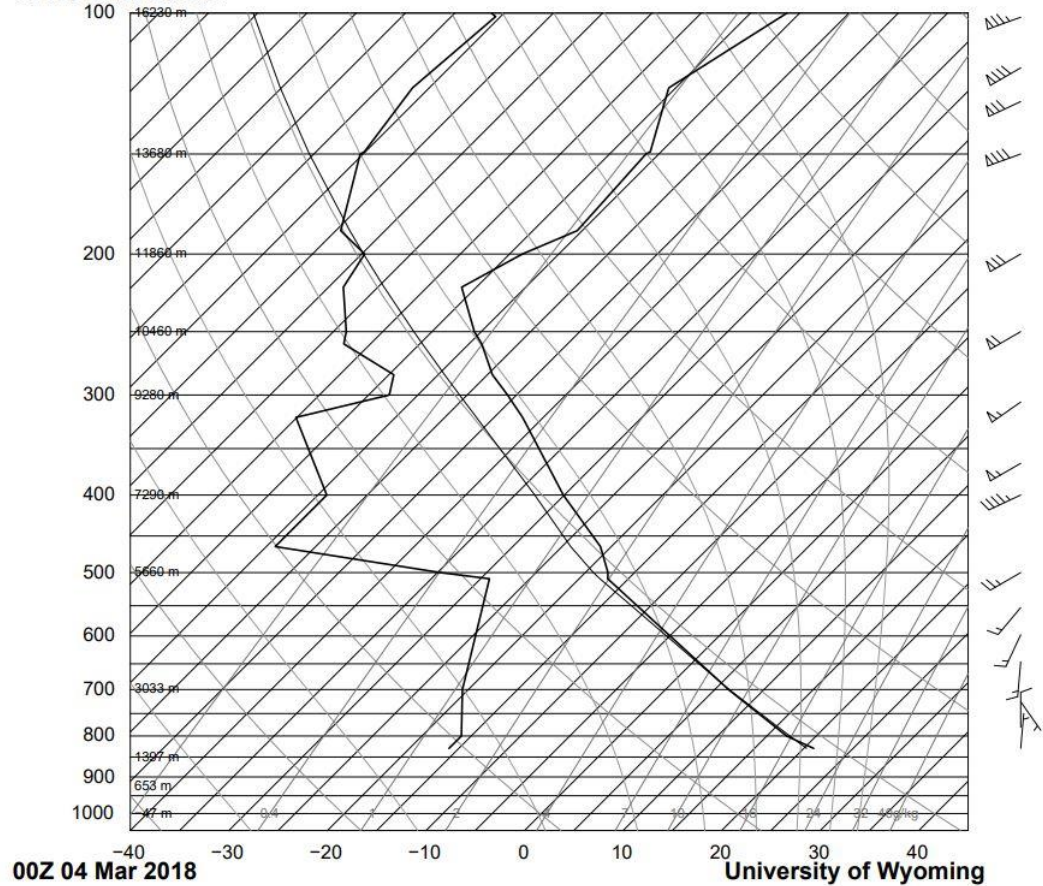
3/18/18

I found the perfect subject for my first cloud image when I was riding in a car on the way to Denver from Boulder. I liked the contrast between the fluffiness of the clouds and the hard lines of the mountains in the background. In post processing I decided to increase the aforementioned contrast by converting the image to greyscale. This resulted in a silhouette of the mountains against the white clouds. The final image highlights the contrast in color and in texture between the mountains and the clouds.

The image was taken out of the window of a car on Highway 36; possibly five miles outside of Boulder. The camera was facing south west or south-south west when taking the image and was about 10 degrees above horizontal. The image was taken on Saturday March 3, 2018 at 5:37 PM

The clouds in the image are altostratus. This is due to the shape of the clouds and how they appear in a layer. Also, according to ceilometer data found at <http://skywatch.colorado.edu>, cloud height at its lowest point on March 3, 2018 was about four kilometers above ground. Four kilometers is approximately 13,000 feet, which falls within the height range of altostratus clouds of 6,500 to 23,000 feet. The previous day had similar cloud formations but at a slightly higher altitude. Ceilometer data for March 2, 2018 shows minimum cloud height of around 16,000 feet. No weather phenomenon such as rain or snow was happening on March 3<sup>rd</sup>. Also, the wind on March 3<sup>rd</sup> at around cloud height of 13,000 feet was blowing from south-south west at a speed of 15 knots. From the below skew-T plot, it can be seen that the atmosphere was stable that day.

# 72469 DNR Denver



The camera used is an iPhone 6s several miles away from the subject. The original image was shot in a JPG format and was 4032 x 3024 pixels, the final image was converted to PNG at the same size. The exposure was 1/1026s at f/2.2 with an ISO of 25. The focal length was 4 mm. The image was manipulated in Adobe Photoshop. The only adjustment made was converting the image to greyscale using the black and white function. The original image is shown below:



I'm not sure my image does an excellent job revealing cloud physics. However, I enjoy how it turned out. I really like the contrast the photo provides, especially in its final black and white form.