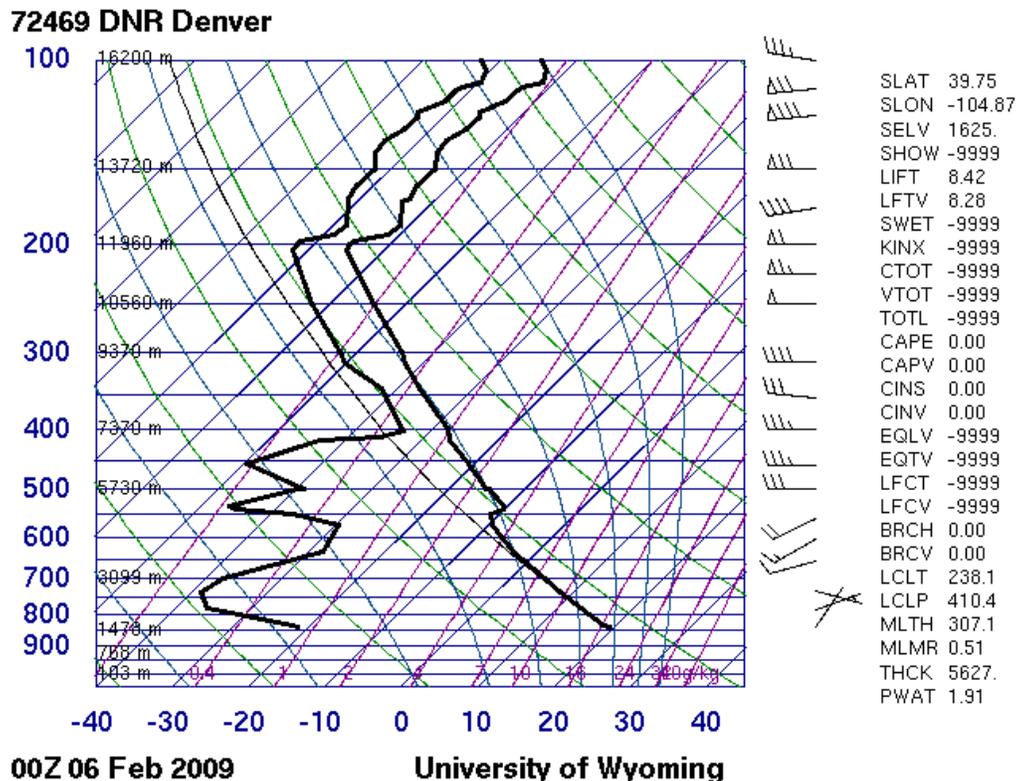


This image was taken Saturday February 6<sup>th</sup> 2009. I was headed down to Denver, and decided to go via Gross Reservoir to see if I could get any cloud shots. It was a relatively cloudless day, and I got lucky with this one cloud over the reservoir. The cloud happened to be passing in front of the sun giving me a good shot of the sun peaking out from behind.

My position was at the picnic area overlooking Gross Reservoir. I was facing west, and the camera was angled up ~40 degrees from the horizon. My elevation was around 2,280 meters, and the cloud was above me at maybe 5,700 meters. This image was taken at 4:41PM in beautiful conditions with the temperature around 50 degrees.

The cloud featured in the image is a cumulus fractus cloud. The rest of the sky was clear with some other fractus cumulus spread around here and there. As I stood watching the cloud it was rapidly changing, and breaking up due to strong winds.



**Figure 1: Skew-T for Denver International Airport at 6PM on February 6<sup>th</sup>, 2009<sup>1</sup>**

The closest Skew-T is from Denver International Airport (DIA) and indicates a stable atmosphere. With the dew point line distant from the neighbor line, it indicates a low relative humidity. I believe the cloud is at approximately 5,700 meters, because it was being blown to the south in strong winds. The Skew-T indicates high speed winds at that

<sup>1</sup> - <http://weather.uwyo.edu/upperair/sounding.html>

elevation. However in a different direction, which could be due to the fact that the image was taken in the mountains where atmospheric conditions are rapidly changing and not quite the same as at DIA on the plains.

This image was taken with a Canon Rebel XSi using a 18-55mm f/3.5-5.6 lens. Aperture priority was used to control the aperture value, which was 5.0. The shutter speed was then 1/4000<sup>th</sup> of a second, the focal length was 45 mm, and ISO set at 100. The cloud appears to be hanging over east Boulder approximately 7 km from where I was standing. The camera is digital with an APS sized sensor. The original image width and height are 4272 pixels by 2848 pixels, and the final image width and height are 4272 pixels by 2774 pixels. The tip of a tree was cropped out in the final image. Also I converted the image to monochrome and slightly adjusted the curves (14 to 255 instead of 0 to 255) for greater contrast.

This image shows whimsical nature of a cumulus cloud. Small ragged pieces of cloud are coming out at every angle. As characteristic of cumulus fractus clouds, this cloud is getting torn apart by strong winds with a piece coming off on the left hand side of the image. This image fulfills my intent of capturing this cloud, and having the sun highlight the cloud works nicely.

<sup>1</sup> - <http://weather.uwyo.edu/upperair/sounding.html>