

Austin Ruppert

Clouds Assignment #1

Photo taken 1-21-09

## Cloud Image Report

This image was captured for the first cloud image assignment. This was an ongoing assignment and was one of many cloud images taken over the several week assignment span. There was no particular cloud phenomenon being looked for. Pictures were just taken at various moments when clouds produced interesting trends.

The image was taken at 6:12 pm on 1-21-09 in the Goss Grove Circle area of Boulder, Colorado. It was taken from a roof top balcony at a 90 degree upward facing angle directly beneath the cloud.

The image consists of cumulus and cumulus fractus clouds. The fractus clouds are formed when cumulus clouds are broken apart by strong winds. The sky had a large cloud cluster and the sun was just setting behind the flatirons. In figure 1 is a skew-t plot provided on the UWYO website from the day of the image around 6pm from the Denver location.

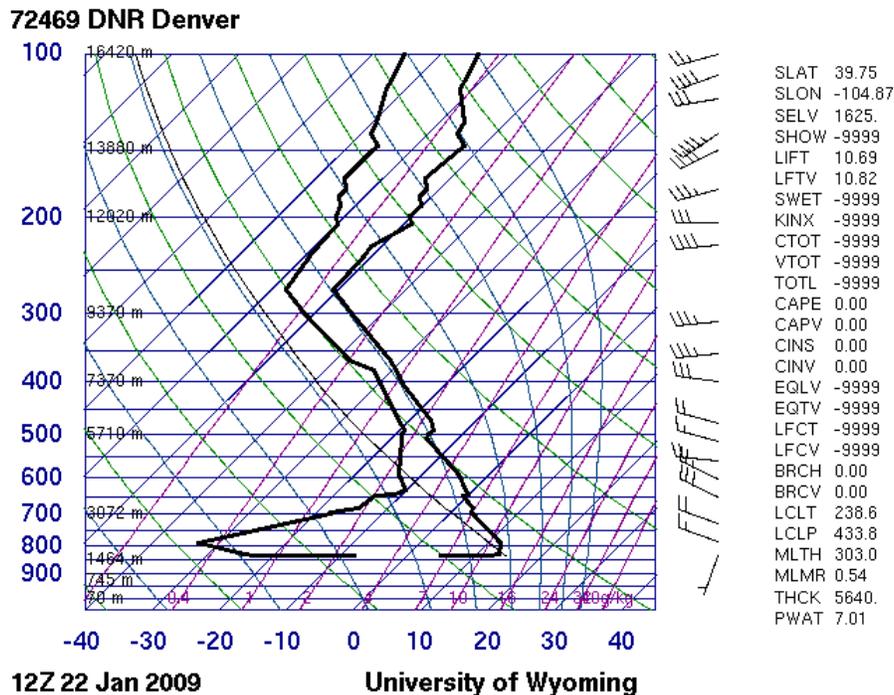


Figure 1: Skew-T plot for 1-21-09

The atmosphere shows relative salability (CAPE = 0) with likely cloud formation at 3000 m. The ground wind was minimal but significant enough at altitude to break apart the cumulus clouds providing a very dynamic environment with lots of cloud movement.

The image capture information is provided below. The clouds were not very high as shown by the skew-t plot and thus the image field of view could be several hundred meters and the distance to the image was about 2000 meters.

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FocalLength: 79/10  
MaxApertureValue: 48/16  
FNumber: 28/10  
ExposureTime: 10/3200  
ExposureBiasValue: 0/10  
ExifVersion: 0220  
ExposureProgram: 2  
ProgramMode: 2  
WhiteBalance: 0  
DateTimeOriginal: 2009-01-22T01:12:33Z  
MeteringMode: 5  
LightSource: 0  
Flash  
ISOSpeedRatings (seq container)  
ISOSpeed: 100  
Contrast: 0  
Sharpness: 0  
FlashpixVersion: 0100  
ColorSpace: 1  
ComponentsConfiguration (seq container)  
CompressedBitsPerPixel: 8/1  
PixelXDimension: 2304  
PixelYDimension: 3072  
DateTimeDigitized: 2009-01-21T18:12:33-07:00

I like the perspective the image offers under the cloud. So many images have been taken from clouds in the distance and on the horizon and different perspectives are enjoyable to me. The colors are really striking and provide a nice color spectrum within the image as well. I wish I had been able to obtain an image of the cloud from far away and from other angles to more fully characterize what is being looked at in the image but overall I am satisfied with it.