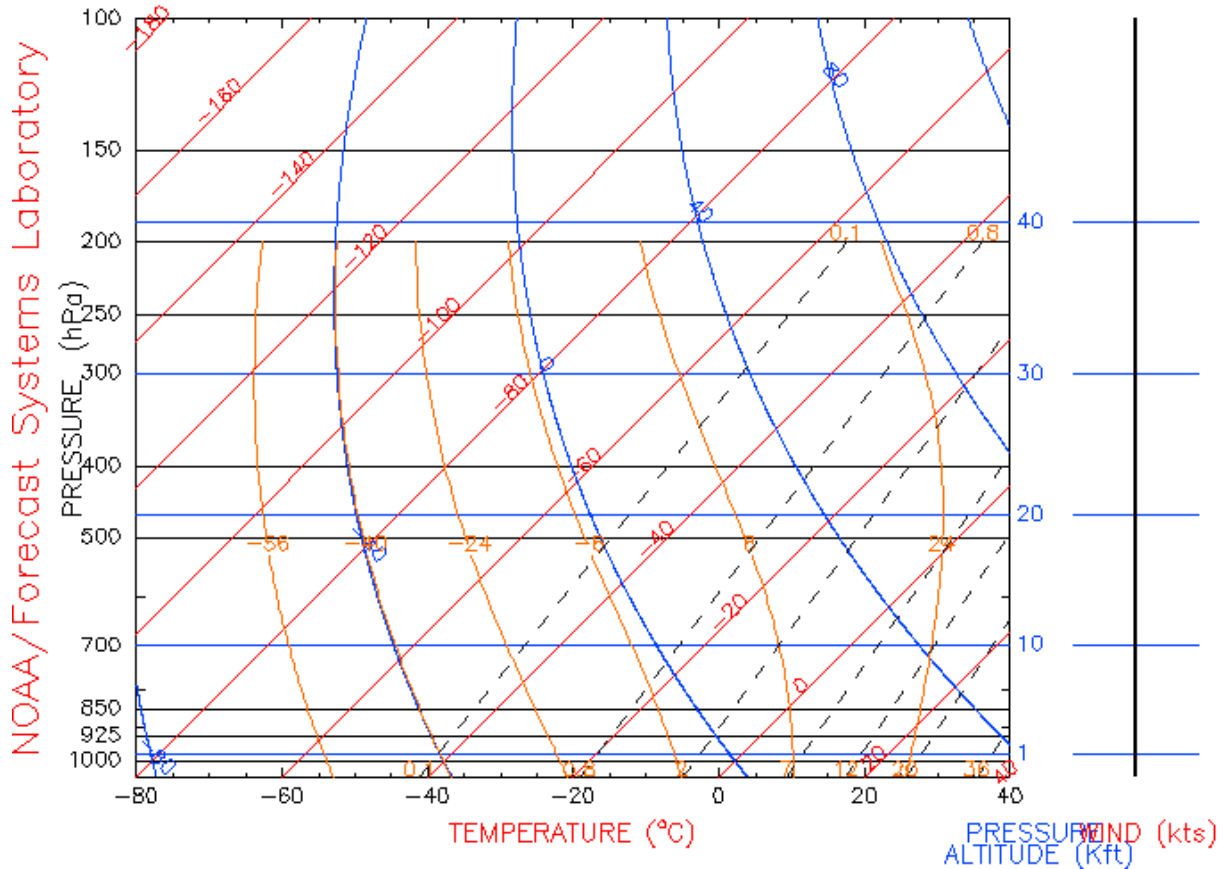


## Sounding for DNR, 12 UTC, 16-NOV-2007



For this project I wanted to make a time laps of the Front Range. I chose to take my photos on the west side of flagstaff around 1pm. A front was moving in around this time and the shelf that this made over Boulder was huge. At sunset this shelf lit up with spectacular clarity. I had to work during the afternoon each day this occurred so I took shots of what was making the shelf. I wanted to make a movie out of tiff files but they where too large for my storage device. I ended up making the movie out of jpg files which brought the quality of the images down significantly.

To take these shots I used a tripod and my hand. My camera does not have an automatic time laps functions so I set the camera and took a picture every ten seconds. In these photos there are many different types of clouds. From the skew-T plot it is clear that the atmosphere was very stable over Denver, but over the mountains where my clouds where the atmosphere was very different. The mountains cause their own weather and alter wind patterns; this interaction with the atmosphere effects how the

clouds form around them. In my movie there are three types of cloud formations that are easily picked out. In the center of the shot is a mountain wave cloud. This cloud is a cumulonimbus laticularis cloud and is traveling from south to north but is rolling toward the camera. The next cloud that is easily seen is the altocumulus cloud that is directly above the cumulonimbus cloud. This cloud appears to be stationary and behind the rest of the clouds in the sky. In-between these two clouds is an altostratus cloud that appears to evaporate.

There where no fancy lighting techniques used for these pictures. I just went out in the afternoon around 1pm and took shot is the sun. As I shot the pictures clouds ran in front of the sun. This can be seen in the movie as the light dims.

The field of view for these images is almost out to infinity. I would guess that I was around 50-100 miles from the clouds. For these images I used a Nikon D70 with a 50 mm lens utilizing a UV haze filter and a polarizer. The focal length of the lens was set to infinity, the exposure was set to 0.0, the aperture was at a f stop of 16, the shutter speed was around 1/125 of a second, and the ISO was at 200. The image size was 3039 by 2014 pixels. There where no alterations to these images. I simply imported them into Quick Time Pro and exported the sequence as a video clip.

I am very satisfied with movie I made. However, I am disappointed that there where two spots in my photos and that the wind was blowing hard enough to bounce my camera. Also given another chance I would convert all my RAW files to tiff files and convert the tiff files into a movie.