Clouds 2

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This is the second of two cloud assignment photographs. The intent of this image was to capture an interesting and beautiful image of clouds. To this end, most attempts of photographing clouds occurred at sunrise and sunset in order to capture the unique colors only visible at those times. However, the final image was taken around Noon on April 2, 2009.

The final image was photographed from a balcony on the eight floor of the Engineering Center Office Tower in Boulder, CO. Facing North-Northwest, the picture was taken shortly after 1200 MST. The camera was elevated no more than 20 degrees above the horizon for this photograph. Folsom Field and the foothills in the background give some perspective on the size of the clouds in the image.

The two figures below show the skew-T plot for Denver at 0600 MST and 1800 MST.

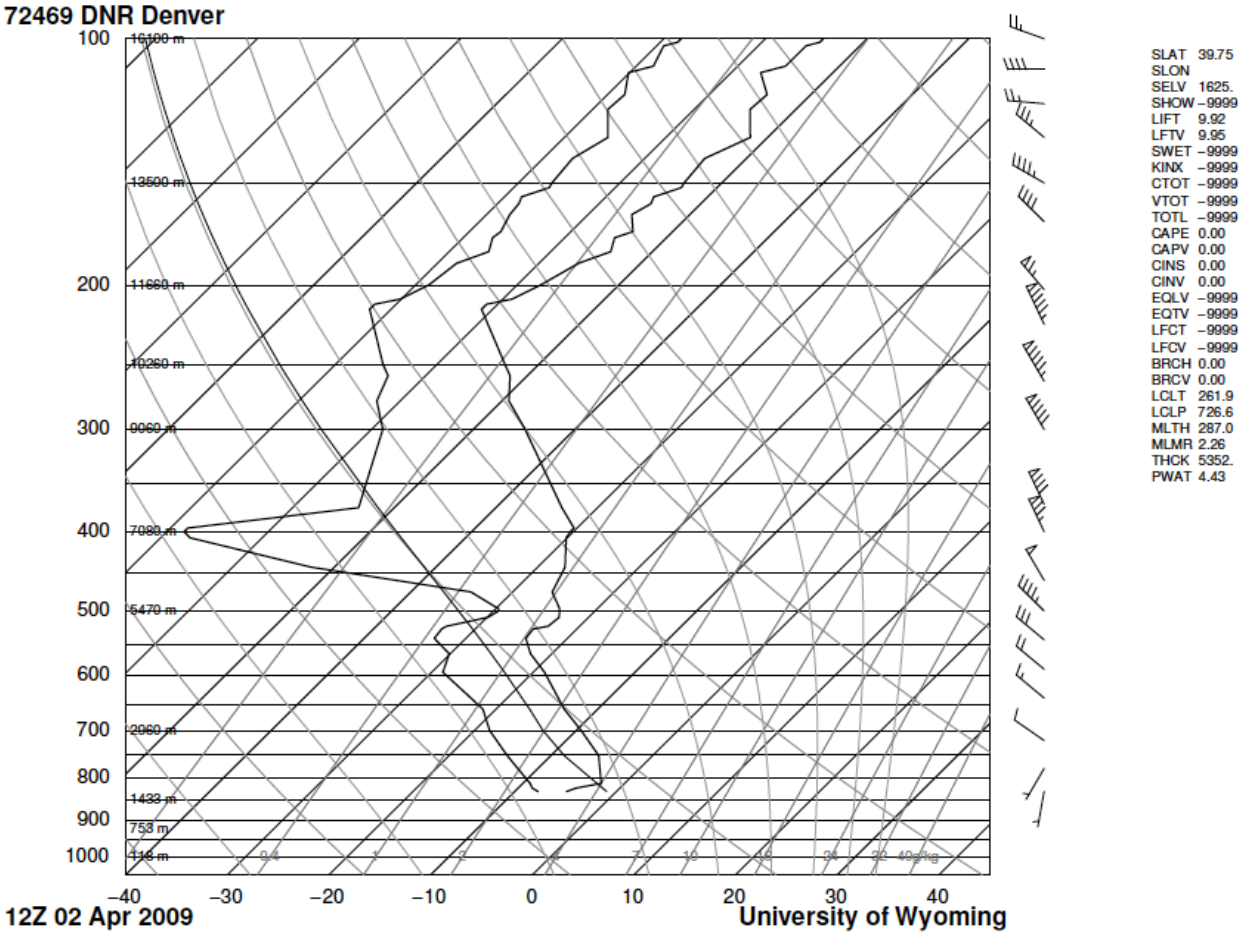

Figure 1: Skew-T Plot 02 APR 2009, 1200Z

Figure 2 below is the Skew-T plot for April 3, 2009 0000Z.

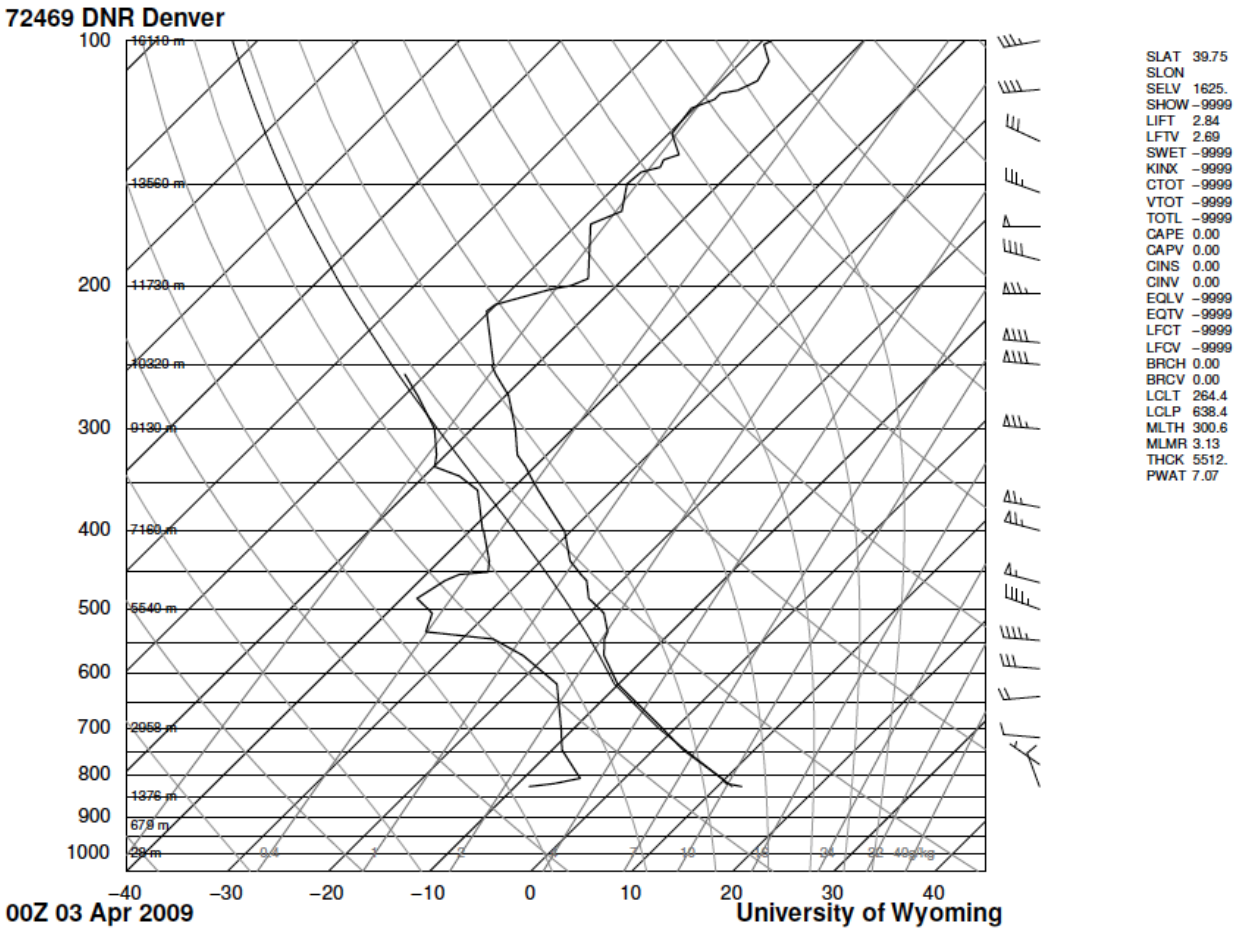

Figure 2: Skew-T Plot for Denver, 3 APR 2009 0000Z

From Figure 1 and Figure 2, it can be seen that the atmosphere is moderately stable up to about 5000m ASL. The winds aloft are out of the west from 20 to 70 knots depending on altitude. The clouds in this photograph are at an elevation of approximately 5000 m above sea-level. The clouds in this image are altocumulus. The clouds in the distance can also be classified as lenticularis. This can be confirmed by the moderately stable atmosphere.

This photo was captured using a Cannon Digital Rebel XT with at 28-200mm lens. The focal length was 28mm. The F-stop value was 10 as was the aperture. The shutter speed was 1/250 sec and the ISO was set to 100. The post processing of this image involved using the 'curves' tool in Photoshop to adjust the contrast. The healing brush tool was also used to remove the power-lines dust on the lens. The dimensions of the final image are 3033 x 1521 pixels.

What I really enjoy about this image is the contrast between two classifications of altocumulus clouds. The smooth lenticular clouds provide an excellent background to the “rougher” altocumulus clouds in the foreground.

References

http://weather.uwyo.edu/cgi-bin/sounding?region=naconf&TYPE=PDF%3ASKEWT&YEAR=2009&MONTH=04&FROM=0212&TO=0300&STNM=72469

http://www.google.com/imgres?imgurl=http://www.wildlandschool.net/proj/clouds/altocumulusII.jpeg&imgrefurl=http://www.wildlandschool.net/proj/clouds/weatherandclouds.htm&h=660&w=583&sz=82&tbnid=TP3-WPUKw7iFFM::&tbnh=138&tbnw=122&prev=/images%3Fq%3Dlenticularis&usg=__LKoW61jTe_m8Gbd0-FwMC3lIAck=&ei=knPlSfShK4fCswO72eiZBA&sa=X&oi=image_result&resnum=1&ct=image