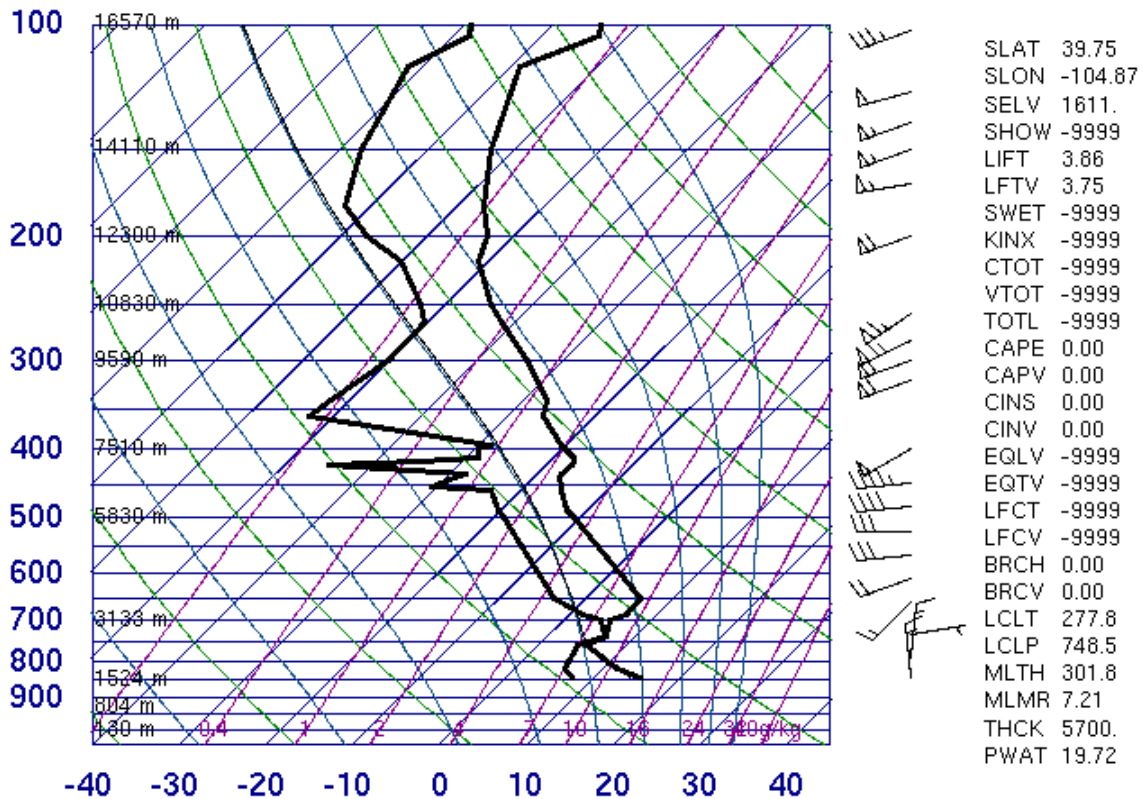


Clouds 1

The purpose of this image was to capture a decent photograph of cloud dynamics. This picture was taken at the lookout point off of US 36 West on 09/09/2007 at about 6:30 pm. My intent was to capture a beautiful and scientific image. Before taking this picture I had an urge to take a panorama, which I did successfully.

I believe the clouds in the picture can be classified as cumulus fractus and stratocumulus. The stratocumulus clouds are on the right of the picture and are at a lower altitude than the cumulus fractus. While taking the picture there was a fairly strong wind from the west coming over the mountains. The clouds pictured are at relatively low altitude, approximately 2500 m from sea level, so a little less than 1 km above boulder. This can be seen graphically in the Skew-T plot where the bold left line (dew point) meets with the bold right line (actual temp).

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Looking at the skew-T plot, there is an approximate shear layer at 7200m but it is not visible in the picture due to the lower dew point. Near the ground the wind is blowing rather erratically but at relatively slower speeds. During the evening of the

photograph there was a cold front moving in, causing the cumulus to be broken up by strong winds, creating the cumulus fractus clouds.

The picture is a series of 6 pictures with the camera on a tripod. The pictures were taken consecutively in very close timing of each other. This series of pictures were all taken with the same camera settings. They were then taken into Photoshop CS3 and were put together using the auto-align and auto-blend tools. The technical specs of the set of photographs are as follows:

Size of field of view: Approx: 5-7 miles wide

Distance to object from lens: Average of 7 miles to clouds

Lens focal length: 55.0mm per picture

Type of camera: Canon Digital Rebel XT, 3456 x 2304 pixels per picture; compiled picture is 9139 x 2208 pixels

Exposure specs: f/20 aperture, 1/1250 sec. shutter speed, 1600 ISO, circular polarizing and UV filter.

My picture shows the phenomena of two totally different cloud structures in relatively close vicinity to each other. I enjoy that my picture has fairly good color depth going from light to dark. I tried to make the photograph this way by keeping my camera settings the same so that some pictures were underexposed while some were over exposed. I dislike the fact that I had particles on my sensor during this series of shots and thus there are some imperfections in the picture. If I were to do this over, I would lower my ISO so I wouldn't have such a grainy photograph and maybe try to get an even larger panorama.