

Flow Visualization

# Cloudy with a Chance of Stratocumulus

Flow Vis Cloud Report 1

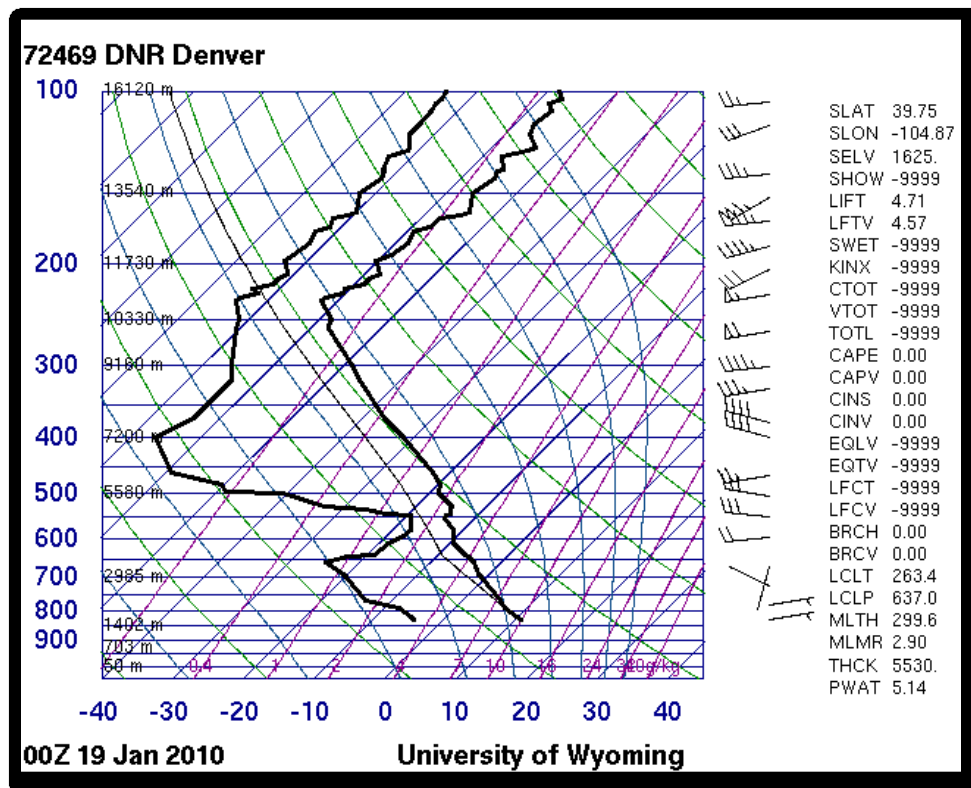


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## Cloudy with a Chance of Stratocumulus

The thing I liked most about this photo was how it had a sort of color gradient due to the sunset. I made sure to take several exposure settings because cloudy sunsets tend to make very dramatic HDR images, which is what this one is. At first glance, the photo gives me a feeling of clashing or opposing forces. There is the strong warm tones on the upper half of the photo, and brilliant cool tones on the lower. To complete the effect, there is a very dark cloud separating the two colors.

This cloud is a stratocumulus; these kinds of clouds are typically characterized by having a large 'sheet' of cloud layer across the sky with 'puff' like characteristics. Though it is not shown in the photo, the clouds continue for several miles in each direction except in the direction the photo was taken. The skew-T plot from that day shows that the atmosphere is unstable right at where stratocumulus normally form (2000 - 3000m).



Below are some specifics about how the photo was taken.

<b>Date and Time of Photo</b>	<b>January 19, 2010 @ 4:58 p.m.</b>
<b>Location</b>	Louisville (McCaslin Rd.)
<b>Direction Facing</b>	West
<b>ISO</b>	400
<b>Shutter speed</b>	1/340 s
<b>Aperture</b>	f/7.1
<b>Focal Length</b>	9.3 mm
<b>Camera Make and Model</b>	Fujifilm FinePix s1000fd

The main photographic technique used in this image was HDR, stands for High Dynamic Range. Most cameras can only capture a limited range of light intensity in a single photo. Our eyes, however, are able to pick up a vast range of light intensities in vivid clarity. HDR attempts to recreate what the eye sees in reality, and put in into a photo. The basic concept is to take several photos of the same object at different exposure settings and combine them to create an image that shows the highlights, mid-levels, and shadows without overexposing or underexposing the image. The program I used to do this specific HDR was Photomatix, however, there are several others that do the same thing.