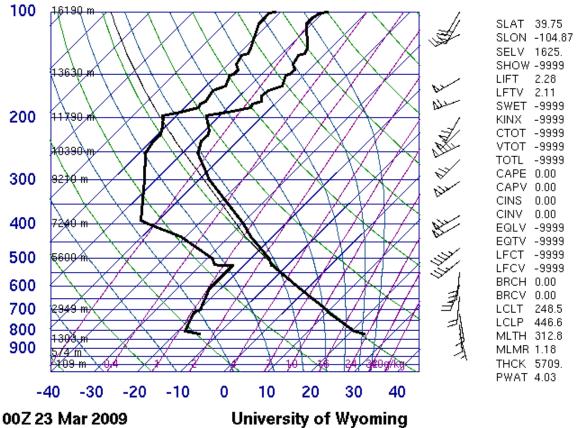
Clouds 2 Report by: Lucy Dean Flow Visualization April 15, 2009

This image was taken for the second cloud assignment. The intent of the image was to capture the clouds from an above. Clouds are often viewed from the ground, so just the bottom of them is normally seen; this image was trying to give an alternate prespective.

The image was taken from a 737. The seat it was taken from was on the left side of the air craft about 5 rows behind the wing. It was taken at 2:40 pm on Sunday, March 22, 2009.

The clouds captured in this image are Cumulus. The whole sky, at least on this side of the plane, was covered in Cumulus clouds. The image was taken within 20 minutes of take off out of DIA, so the Denver Skew-T plot was used.

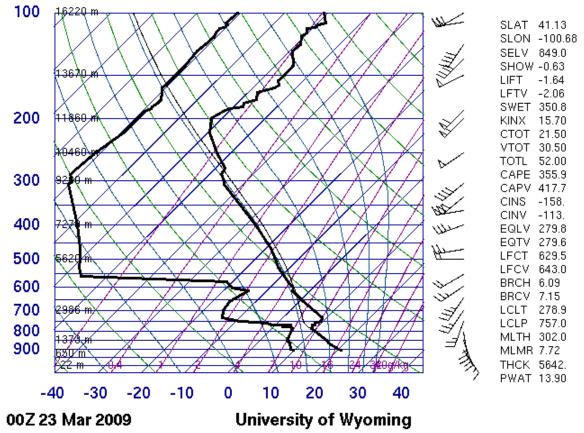


72469 DNR Denver

Figure 1: The Skew-T plot for 6 pm on Mar 22 in Denver, Colorado

The Skew-T plot shows the atmosphere as semi-stable to stable. The clouds appear to be at an altitude of about 6,000 m or about 2.75 miles above the ground. The plane was

heading to Minneapolis St Paul airport, so the Skew-T plot for North Plate, NE was also obtained.



72562 LBF North Platte

This shows a semi stable to stable atmosphere until about 1800 m and than the atmosphere gets a little unstable until about 3500 m than back to a semi stable condition. These conditions explain Cumulus clouds a little better. If the weather had been more like this when the picture was taken, than the clouds may have been lower, around 4000 meters.

This photograph has a field of view of approximately a half mile by three miles. The clouds were probably about two miles away. The image was taken on a Canon EOS Digital Rebel XS. The focal length of the lens was 27 mm, the image size was 3888 x 2592 pixels. The aperture was set at 25 and the shutter speed was 1/2500 seconds. The ISO was 1600. Curves was used in Photoshop to enhance the colors of the image, lighten the highlights a bit.

This image shows cumulus clouds from above. I like it because it is a perspective I don't get to see very often, because I don't fly very often. And even if I am flying, I don't always have a window seat, or there aren't any clouds that day in that spot. I like the little bit of window in the corner because it reminds me where I was when I took it. I like having the ground as the back drop instead of the normal blue sky. I am not happy that the image looks a little grainy. I think this is from the windows through which the image was taken.