

Taylor Simonson  
April 18<sup>th</sup>, 2006  
Flow Visualization

## Cloud Project 2

The purpose of the current assignment was to record an image of a cloud formation in the sky. The scientific goal was to discover the atmospheric phenomenon that is responsible for creating the cloud. My personal goal was to photograph a visually calming cloud formation that can be found on any day as opposed to a rare cloud formed by a storm or uncommon atmospheric condition.

My image was taken on April 18th, 2006 at 5:34pm. I took this picture in Boulder, Colorado from my apartment balcony. I was facing north and took five pictures. I was unable to try different exposure levels but the sun set about three hours after the picture was taken. The temperature was 55° Fahrenheit with a dew point of 6.8°F and an average humidity of 20%. The wind speed was 6 mph and the visibility was 50 miles.

I used a six-mega pixel Nikon Coolpix 5600 digital camera without the flash. I used the auto setting on my camera for landscape photography. The aperture was set at 6.9 and the shutter speed was taken at 1/263.9 sec. The focal length was 13mm. My picture features a cumulus humilis cloud, or what is often referred to as “fair weather cumulus”. The cloud in my photograph is at an average height of 500 to 1000 meters altitude. As the name indicated, this type of cloud indicated fair weather and slight warming in the lower atmosphere (Wikipedia.com). As opposed to cumulus with vertical growth, cumulus humilis clouds feature no vertical growth meaning that the atmosphere above the cloud either stays the same with altitude or drops slightly. If you

see these clouds in the sky, it is a good indication that the weather should be fair and steady for the next few hours. Humulus clouds sometimes disappear a few minutes after they form and “forms just after a rising thermal reaches the condensation level” ([www.weather-photography.com](http://www.weather-photography.com)). The following image is a skew-t for the time and day that I took the picture. I had some trouble reading it but I included it for interpretation.

QuickTime?and a  
TIFF (Uncompressed) decompressor  
are needed to see this picture.

Reference:

[www.weather-photography.com](http://www.weather-photography.com)

[www.wikipedia.com](http://www.wikipedia.com)

[http://weather.unisys.com/upper\\_air/skew/details.html](http://weather.unisys.com/upper_air/skew/details.html)