

Clouds

Purpose:

The purpose of this project is to capture an image of clouds in the Colorado sky. My image shows the accumulation of cumulus clouds in the early morning eastern sky. I wanted color in my image so I choose the sunrise because I wanted to capture more orange, yellow and red and there seems to be more of this in morning sunrise than the sunset, which seems to hold pinker and blues.

Photograph:

The photograph is taken on 02/24/2009 up on flagstaff viewpoint in Boulder, Colorado. It is a picture of the sunrise so it was early in the morning right when the sun was showing itself on the eastern horizon approximately around 6:25 am. The picture was taken at an angle pointing to the South Eastern sky where the clouds had formed in the sky. The camera was hand held, not on a tripod.

The clouds in the image to me look like cumulus clouds. The altitudes of these clouds are typically 2,000-6,500ft. The rest of the sky is very clear, going from an orange glow down on the ground because the glow of our sun and then rising from the ground forming a light blue going upward into a darker blue as you keep rising.

The Skew T plot closest to the photo time of day is given in Figure 1. Clouds are most likely forming at about 4,000 ft above the ground, where the dew point skews closer to the air temperature. Air tends to grow colder with height, but when air grows warmer or stays fixed at a certain temperature it forms these types of clouds. As weak thermal currents rise as far as a temperature inversion it spreads sideways making these types of clouds form at an altitude between 2,000-6,000ft. Since this was taken photograph was taken earlier in the morning the temperature is still cool and hasn't warmed up. Most likely in the clouds current location the atmosphere is stable as temperature rises from the sun the dew point and actual temperature will begin

separating. This will cause the cloud to separate and probably not survive for very long in the sky.

QuickTime™ and a
decompressor
are needed to see this picture.

The estimated size of view is right around 15 to 20 miles long. The photograph was captured with a digital Nikon D-50 using a 28-80mm lens. The lens was at 28mm so I could capture as much of the sky as possible. The camera was set at an f-stop of 10.0 and the aperture was f/3.4. The pixel dimensions are X: 6016 and Y: 4000. The image reveals clouds that form in the early morning temperature that might eventually disappear once the temperature starts to rise. I like the colors in my image how they vary so much and how bright and vivid they are. I also like the composition of the picture, I like how the sun is in the left quarter of the picture it makes your eye move through the picture. Another aspect I like about my photograph is that I capture the reflection of the lake in the left side, it looks sort of like sliver of mirror, reflecting the sun.

I fulfilled what I was trying to do and that was capture clouds in the early morning sky. I would like to develop this idea further by making a panoramic of the whole horizon shot from this point of view. I would like to capture the whole sky as the sun rises and all the different colors that are created.