

Flow Visualization



Second Cloud Image

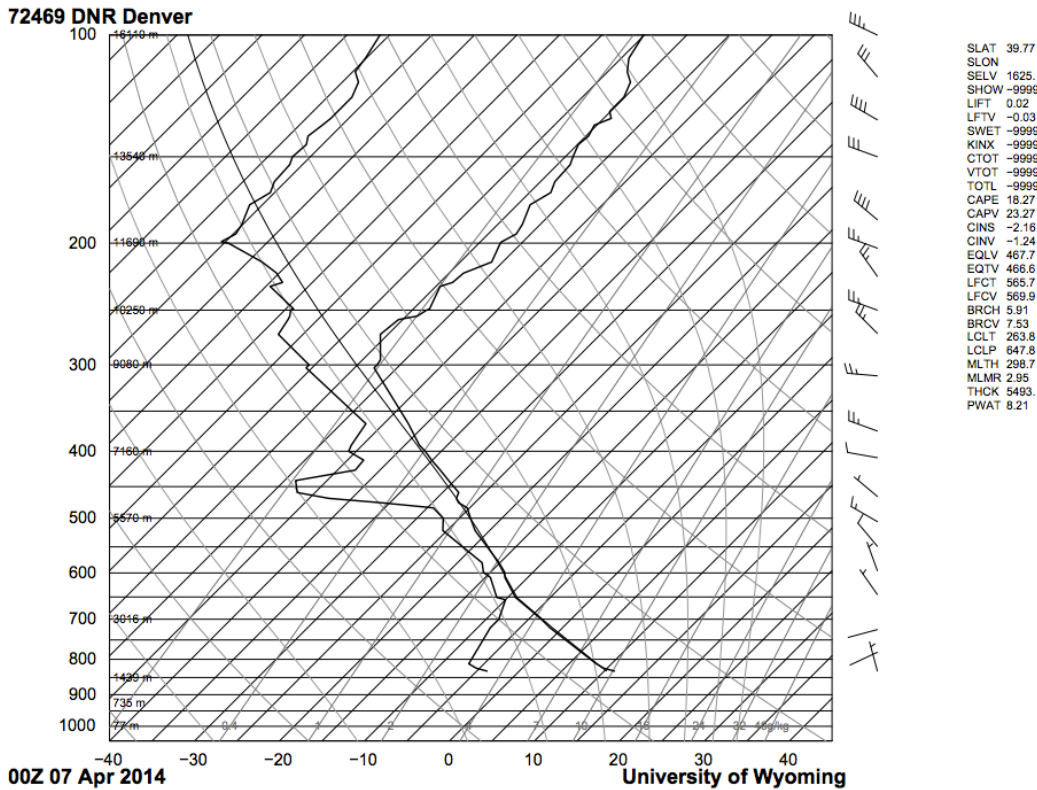
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This image was captured in Boulder, Colorado looking away from the Rocky Mountains to the east. The camera was handheld and was set to landscape mode. The image shown above was cropped in order to eliminate some of the man-made objects originally present, such as chimneys and electrical wires. This resulted in a more natural look with just the sky, clouds, and tree branches. I think that art excels when it is just nature being captured, other things tend to distract from the focus of the image. The focus for this image was of course the extraordinarily puffy and slightly ominous cloud.

This cloud is a cumulus cloud with stratus clouds in the background. Cumulus comes from the Latin word meaning pile or heap. This makes sense because this cloud is so puffy that it almost looks like a pile of cotton balls. Stratus clouds are much higher up in the sky. I think they help add a nice background texture in this case. The cumulus cloud appears to resemble a rain cloud, it was not raining at the time however. Most of the reason it appears like a rain cloud is because of the dark bottom which was the result of my post processing. Therefore, this was most likely not precipitating at the time the image was taken.

I would estimate that this cloud had an elevation of 5000m. This approximation comes from the Skew-T diagram, shown below. The elevation which corresponds to the bend in the dew point line (the line on the left) is where the atmosphere was unstable and most likely to have clouds.



Skew-T graph

This image was taken with my Canon EOS Digital Rebel in landscape mode. No lighting was used other than the natural lighting from the sun. The focus was automatic and there was no filter or zoom used. The cloud appeared to be 10 km away from my vantage point. The specifics are shown in the table below.

Dimensions:	2924 × 1716
Device make:	Canon
Device model:	Canon EOS DIGITAL REBEL
Color space:	RGB
Color profile:	Camera RGB Profile
Focal length:	50
Alpha channel:	No
Red eye:	No
F number:	8
Exposure time:	1/800

Camera Specifics

I used iPhoto to edit this image. This included adding the black and white effect and darkening certain areas with the lighting curves. The areas that are artificially darkened are the bottom of the cloud, tree branches, and some of the backdrop of stratus clouds. I liked the darker look because it added power to the image. The cloud appears much more intimidating in a darker shade. The branches also look more like a silhouette with a darker shade which I enjoyed.

With the post processing finished I was able to study the image and discover what it now revealed. I think that it shows how alive and powerful nature is. The cloud seems to be more alive than the tree branches, and definitely more dynamic. This makes me feel small given the scale of the cloud. I would have liked to capture more of the right side of the cloud but couldn't because it was blocked out by trees. This would have helped show the full geometry of the cloud. I like that I was able to add the branch in the top left of the image because it helps ground the image and give a good sense of scale.

References

- 1) http://en.wikipedia.org/wiki/Cumulus_cloud
- 2) <http://weather.uwyo.edu/upperair/sounding.html>