

Clouds Second 2016

MCEN 4151: Flow Visualization

University of Colorado Boulder



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Clouds. This semester has been very interesting. Learning about how clouds are formed and how seasonal they are. I had no idea that certain clouds are not able to be formed in certain parts of the year because it is much more likely that the atmosphere will be stable. You can still get very interesting clouds with a stable atmosphere but they are much different towns. In this case we were in Morrison on a hike that has a beautiful view and the clouds were very impressive. We were facing west and the sun was behind the clouds so it gave some really nice contrast.

To take this photo I was literally on the side of the mountain taking images but finding the right exposure was slightly difficult. My camera is a Canon Rebel t5 with a 18-55 mm lens. I can't tell how much the lens was actually zoomed but the other information is readily available. It was a bright day so I set the ISO at 100. The f-stop was 3.5 and the shutter speed was 1/1600. All of these settings show that it was extremely bright outside this day. These pictures are quite a bit easier to take than darker images in my opinion. It seems like no matter how much I change the settings on my camera sometimes in certain light settings the picture never turns out well.

You can learn a lot about the clouds you are taking pictures of by looking at a few simple plots from the University of Wyoming's weather site. You pick your location and it gives you a plot with a lot of different information. The main number we look at is the cape number. This picture was taken facing east from Morrison Colorado which is just slightly south of Boulder Colorado. The cape number on my date, November 5th 2016, is 0.00 which is indicative of a stable atmosphere. Stable atmospheres don't let cumulus clouds appear because the rising of the lower density condensation is not possible. In this case it looks like the clouds are coming over the mountains and creating some waves. It looks like some sort of gravity waves that are really thick but it was a slightly warm day and it seems like it has some slight instability even though the cape was 0.00.

Overall, I was taught a lot in this assignment. Knowledge about clouds, the fact that cumulus clouds don't appear in the winter, to where to go if you want information about weather patterns and information on atmospheric data. I very much enjoyed going out on trips with friends from class and taking pictures of clouds and just finding random times in between to take pictures. I really like combining aspects of my personal life with photography. I really enjoy trying to capture the thing that I see with my eyes in a photo. It really gives you appreciation for how well your eyes work in so many different situations. Our eyes are incredible pieces of equipment. In conclusion, this assignment taught me very much and the opportunity to take pictures and learn how I can make them better is very much appreciated.