

Cloud Second

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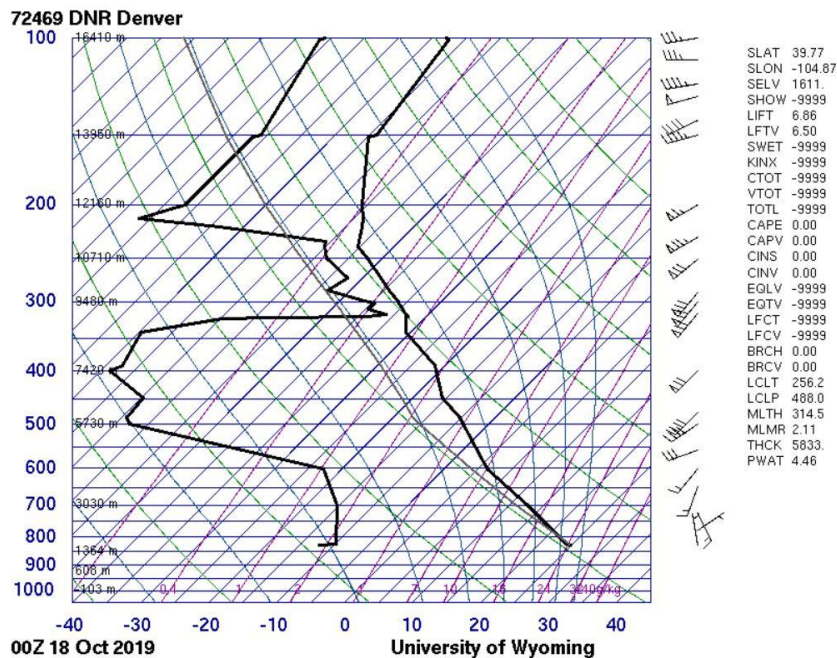
MCEN 4151-001 Flow Visualization, Fall 2019

I. Context and Purpose

Having already completed the first Cloud assignment, I now have a better knowledge of clouds, atmospheric physics, and an appreciation for the beauty that gently looms over our heads, if we only look up. This image and assignment capture the second Cloud image, taken later in the autumn, almost in the early winter. As the season changes, so does the weather and the clouds. I constantly scanned the sky for this special image amidst overcast weather, snow storms, and as the days got shorter. This image presented new and fun challenges compared to the first cloud image.

II. Surroundings and Description of Physical Phenomena

On October 17th, I took this image walking home from class. This image was taken facing south-east at approximately 6:20pm. The Skew-T diagram is shown below. This cloud was a mountain wave cloud and altostratus. The atmosphere was stable, given that the CAPE value is zero.



III. Visualization and Lighting

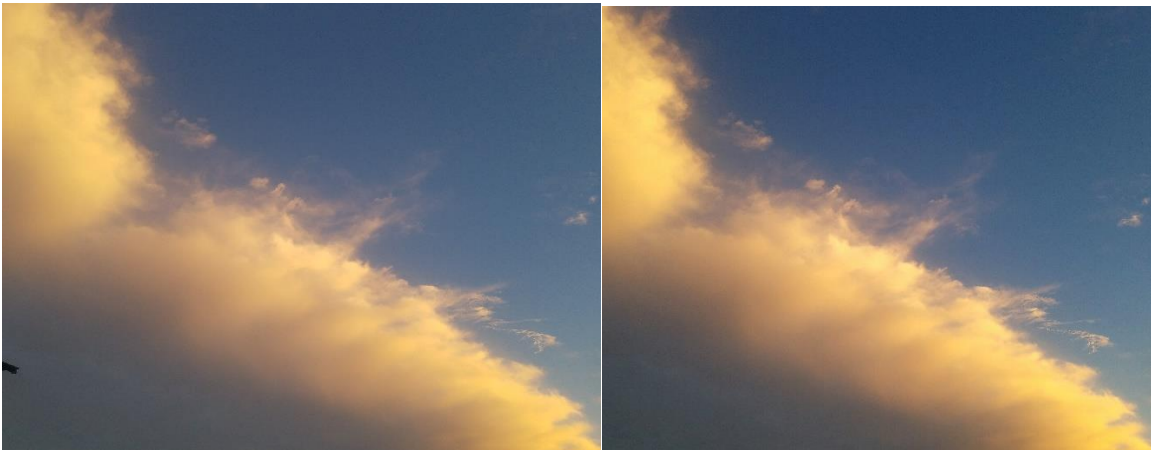
I captured this cloud around sunset, which provided the stunning golden coloring. The day was otherwise clear and warm. I had my back facing the sunset and the mountains when I

took this image. I really like the soft glow the altostratus clouds have and the way they capture the light.

IV. Photographic Technique

I used my Galaxy S7 to take this photograph since it was already in my pocket! This image was taken with F-Stop of f/1.7, exposure of 1/215 second, ISO 50, a focal length of 4 mm, and 1.53 aperture. My image was 4032 pixels by 3024 pixels, which is standard for my phone camera.

I did very minimal post processing. I did a little cropping and bumped the contrast very slightly. I wanted to reflect exactly what I saw with my eyes, and the lighting conditions allowed my camera to capture just that. The original and edited images are shown below, respectively.



V. Final Thoughts and Future Improvements

This was a fun project. I took many more cloud pictures on a lot of different days and for various atmospheres and weather conditions. I chose this image because the wispy nature of the cloud was unique. I also really liked the strong diagonal that this image presents, almost like a yin-yang. I think the balance of this image is very calming, both with color and symmetry. In the future, I think it would be incredible to also take a panoramic image to show the entire sky and cloud, not just a portion.

VI. References

[1] weather.uwyo.edu