

Cloud Image 1 Report

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Flow Visualization



I. Purpose

This assignment was taken as the first cloud image in Flow Visualization, Film 4515. I was attempting to photograph a cloud and showcase the type of cloud along with the general beauty of the cloud.

II. Circumstances

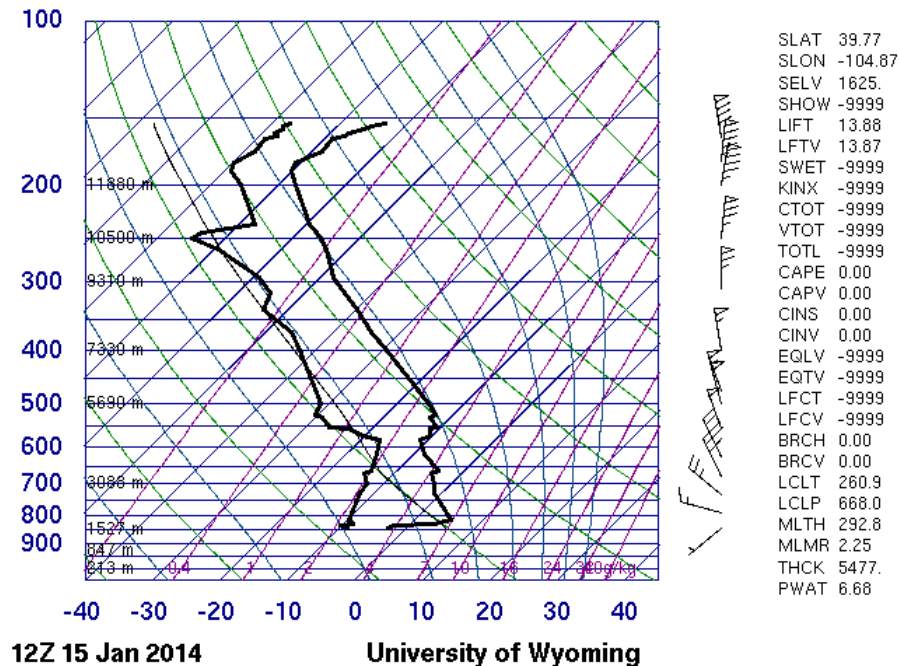
This image was taken on Highway 93 outside of Golden Colorado. The exact location was an intersection where Highway 93 turns into US-6. The camera was pointing west towards Lookout Mountain at an angle of maybe 5 degrees. This image was taken at approximately 4:45PM on January 15<sup>th</sup>.

III. Statement

The clouds photographed are Stratocumulus. This can be assumed based on how low they were in the air and the fact that the upward buildup is visible on the edge of the cloud. While it is not quite as obvious, the cloud expanded out across the sky as it approached the mountains going from East to West. It covered the majority of the sky. At the time it was warm and the temperature remained warm in the region however the previous night there was snowfall. The temperature of the day was at about 7 degrees Celsius with a dew point at -9 degrees Celsius. The closeness in the temperature of the dew point and the actual temperature signify large amounts of humidity in the air. This means that clouds would have formed relatively low in the sky on that particular day. The barometric pressure registered at approximately 1019 hPa. The wind averaged 23 Km/h. Stratocumulus clouds signify little to no precipitation and no precipitation was seen for almost a week.

Figure 1

72469 DNR Denver

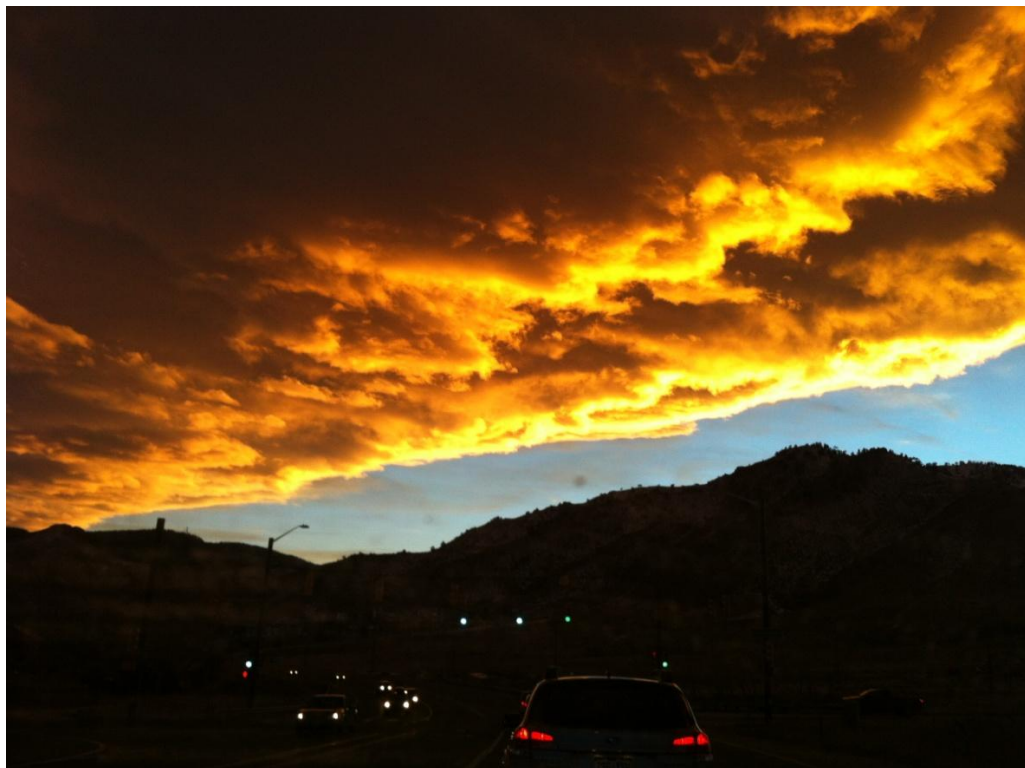


There was no weather data available from around the time of the actual event. However, given the fact that the weather, wind levels, and temperatures remained similar throughout the days I inserted a weather plot from 6AM on January 15<sup>th</sup> to give a general idea of what the atmospheric data would have been like at the time.

#### IV. Photographic Technique

This photo was taken using the camera on an I-phone 4. The focus and exposure were set to the center of the clouds which was about the mid range between the brightest and darkest portion of the picture. The original image size was 2592X1936 pixels. The exposure time was 1/120<sup>th</sup> of a second with an ISO of 80. The focal length was 4mm and the F-stop was set to 2.8. When the image was edited the size was changed to 2583X1641 pixels. When editing I increased the color saturation. It was increased minimally, just enough to bring out the red tones naturally occurring in the sun-set. The contrast was also edited but as with the saturation, it was a minimal amount. I made sure to bring out the blacks so the mountains would appear in complete shadow. A few lights were blended into the black to eliminate them from the image once cropping was finished.

Figure 2-The original image taken before editing



#### V. Conclusion

The image reveals information on the atmosphere and the weather for that particular day. It showcases a stratocumulus cloud as it is fast approaching the mountains. I fulfilled my

intent by imaging a cloud, as was the requirements of the assignment. I also was able to capture a cloud being illuminated by the Sunset, which was another goal of mine. I would like to use a different camera in the future if possible, such as a DSLR. The section which is overexposed on the image is a result of a poor exposure range on the part of the phone. I would like to find more stratocumulus clouds, which I find to be fascinating, and photograph them at different times of the day. I think it would be interesting to see them at sunrise, mid-afternoon, sunset, and really any time throughout the day as the lighting and circumstance changes.