

CLOUDS ON CLOUDS: REPORT

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Context

My first cloud image for flow visualization. I took the image because I really liked the way the larger altostratus clouds acted as a background for the smaller cumulus clouds in the foreground. Both when taking the image and during post processing I focussed on accentuating this aspect of the image.

Setting

The image was taken on september 16 2022 around 5:52pm. It was taken in Boulder, Colorado at 40.000668, -105.266118, with an elevation of 5420ft. The camera was facing almost directly north, angled about 30deg up, so the cumulus clouds in the image are almost directly over boulder.

Cloud Conditions

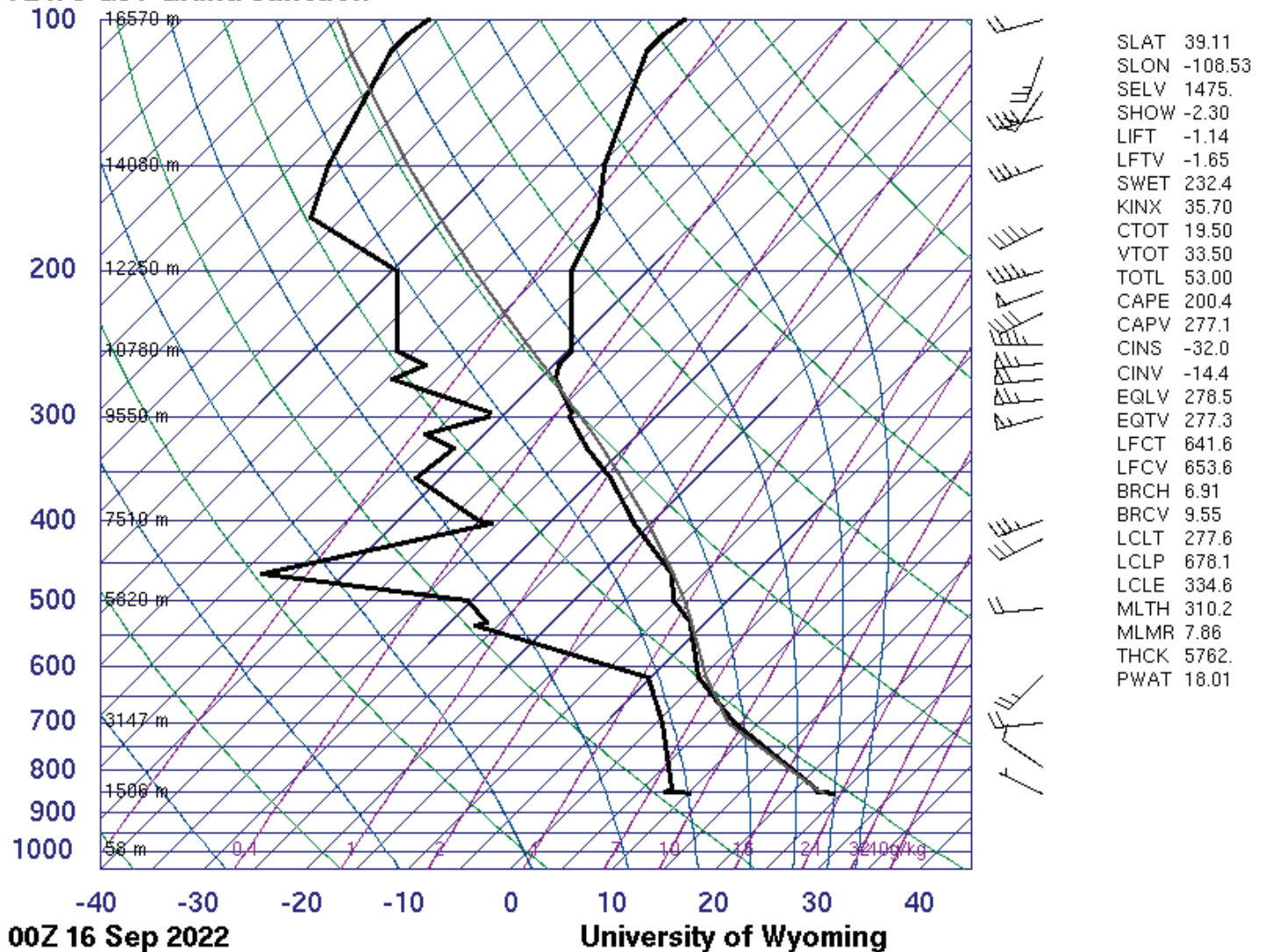
As mentioned, the clouds in the image are made up of a background of high altitude altostratus clouds and a few cumulus clouds in the foreground. The altitude and shape of the clouds in the background lead me to believe that they are altostratus, which normally appear as large flat clouds around 15,000 ft. The altostratus clouds in the image may have been slightly lower than this but they are close, and can be seen to be much much higher than the flatirons in some images taken around the same time.

I believe the smaller clouds in the foreground are cumulus clouds due their smaller size, lower altitude, and fluffy appearance. The formation of cumulus clouds suggests the altitude is unstable at this lower altitude. This is interesting because the altostratus clouds higher up suggest the atmosphere is stable at higher altitudes. The air this day was relatively still, with the lower cumulus clouds moving slightly more than the higher clouds. It did not rain, but the air was relatively humid.

Clouds over the mountains:



72476 GJT Grand Junction



Photographic Technique

This image was taken with a Cannon Rebel T7. The setting for the original photo were: ISO: 100, focal length: 55mm, F stop: f / 5.6, Shutter speed: 1/13 sec. The original image was also 6000 x 4000 px and the cropped version was 6000 x 3375 px.

For post processing I primarily focused on extenuating the clouds in the foreground. While doing this I noticed that the clouds in the background were slightly darker than those in the foreground. This made it really easy to make darks darker and lights lighter, increasing the contrast of the image and the contrast between the two cloud formations. The darkening of the altostratus clouds also made some of the washed out colors in the original image pop a little more. After seeing this effect I decided to accentuate it more and slightly increased the saturation and vibrance of the image. Lastly I cropped out some distracting trees from the foreground of the image.

Unedited



Edited



Reflection

I'm really happy with the final image, it shows exactly what I found so cool about the cloud formation originally. It's also cool that it shows how different cloud formations can exist in the same place and time, even when one is stable and one is unstable.