



Cloud First Report

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MCEN 5151: Flow Visualization

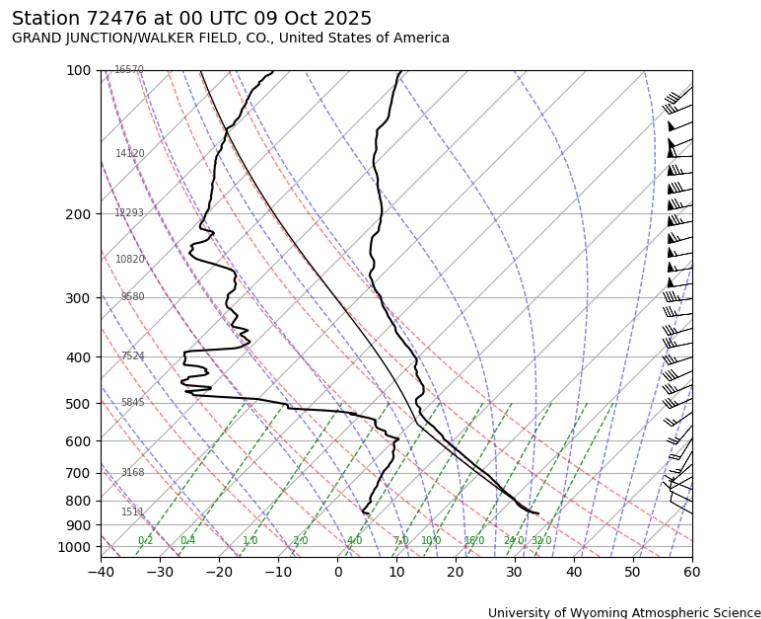
Prof. Laura Sunberg

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This is the first Cloud Assignment in our Flow Visualization course. The intent of the image is to photograph natural flow phenomena in the atmosphere. Clouds are simply condensed water and dust particles and react to the flow of air high above.

This image was taken on October 8th around 6:30pm heading south from Estes Park back to Boulder. The clouds were just over Boulder and the photograph was taken from an elevation of around 6 thousand feet. The image was taken maybe 5 degrees above the horizon.

These clouds are altostratus clouds. We can tell this because they are midlevel clouds about 5km above the ground, are formed linearly, and are chunky but not individual. This was the only cloud in the sky and the entire day had been empty of clouds too. What is notable about these particular clouds are the virga coming off the bottom. Virga is falling precipitation that evaporates before it reaches the ground. This is a sign of high instability in a localized region.



The photographic technique used for this picture was quite simple. I used an iPhone 16 Pro. This image was shot @ 120mm f/2.8 ISO 250 and 1/99s. The original image is 4032 x 3024 pixels. There was minor editing done to the image.

This image reveals a lone cloud in the sky, dumping water but never reaching the ground. I love this image because there had not been any clouds in the sky for the entire day until this one moment. It's like one little area came out to dump some water just to disappear again after. I love taking images of clouds, and for the second cloud assignment I am going to try to find the most interesting cloud I can. I am also going to carry my camera around instead so I won't have to use a phone camera.