Clouds Second Spring 2018

Alto-Cumulus clouds in Boulder at 1:41 PM on 3/21/18

MCEN 4151

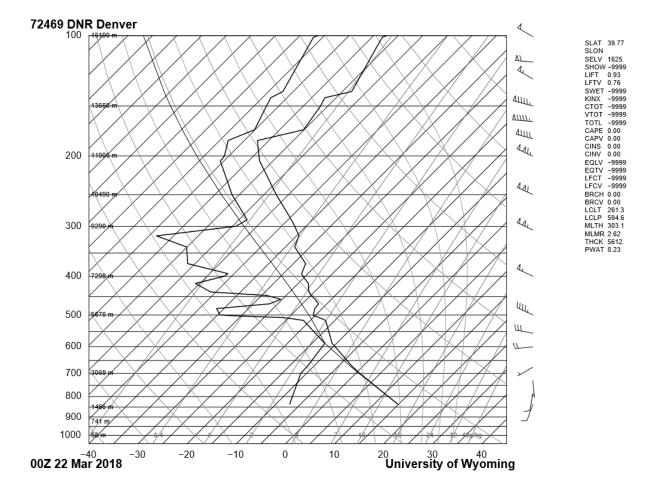
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I was standing outside my apartment building, looked up, and saw an interesting cloud formation. The clouds were simultaneously dark and light, thick and wispy. I loved the balance of opposites the clouds exhibited.

The image was taken in Boulder at Baseline and 30^{th} street. The camera was facing south west when taking the image and was about 80 degrees above horizontal. The image was taken on Wednesday March 21, 2018 at 1:41 PM

The clouds in the image are alto-cumulus. This is due to how the clouds appear very thick and fluffy. Also, according to ceilometer data found at http://skywatch.colorado.edu, cloud height at its lowest point on March 21, 2018 was about three kilometers above ground. The range for alto height clouds are from two to six kilometers above the ground. The clouds on March 21^{st} easily fall into this category. The day before there were similar clouds. However, on March 20^{th} the clouds were about two kilometers above the ground. No weather phenomenon such as rain or snow was happening on March 21^{st} . Also, the wind on March 21^{st} at around cloud height of three kilometers above ground was blowing from the west at a speed of 30 knots. From the below skew-T plot, it can be seen that the atmosphere was stable that day.



The camera used is an iPhone 6s several miles away from the subject. The original image was shot in a JPG format and was 4032 x 3024 pixels, the final image was converted to PNG at the same size. The exposure was 1/25641s at f/2.2 with an ISO of 32. The focal length was 4 mm. The image was manipulated in Adobe Photoshop. The only adjustment made was raising the contrast level. The original image is shown below:



I'm not sure my image does an excellent job revealing cloud physics. However, I enjoy how it turned out. I really like the balance between light and dark, and thick and thin.