Andrei Molchanov Flow Vis 4/17/14 Cloud 2 Report

The purpose of the image was to capture pink clouds during a sunset with ground level objects silhouetted in the foreground. I was trying to get photograph the clouds during a very small window when they are rich in color.

This image was taken in Morrison Alley between 9<sup>th</sup> and 10<sup>th</sup> streets in Boulder facing west. The camera was pointed up 30 degrees from the horizon. The photo was taken at 7:19pm on March, 19<sup>th</sup>.

Based on the nearest Skew T (Denver), the ceilometer and the cloud identification guide, I judged the clouds to be of the altostratus classification at an altitude of approximately 18,000 feet. But, according to Dr. Hertzberg at the University of Colorado, the clouds in the photo are mountain wave clouds. The rest of the sky looked very much like the portion of the sky in my photo. According to WeatherSpark it was 55°F on March 19<sup>th</sup> but dropped to freezing temperatures during the day on March 22<sup>nd</sup>. There was no precipitation until the 22<sup>nd</sup>. Wind speeds reached 21.9 mph on the evening of the 19th.

The foreground field of view is approximately 40 feet wide and 30 feet tall. The objects are about 40 feet from the lens. The lens was set to 30mm. The camera is a Canon T5i. The photo is 5184 x 3456 pixels. The photo was shot at an F stop of 7.1 at 1/80 of a second at an ISO of 800. Those settings were chosen in order to get a nice silhouette out of the foreground objects. Photoshop was used on the final image in order to bring out the colors in the sunset.

The image reveals the stark contrast between the natural world in the trees and clouds against the artificial world in the power lines. This is all set to the stunning

backdrop of mountain wave clouds during a sunset. The fluid physics are shown well as a result of the mountains being in the photo; it is easy to discern that they are mountain wave clouds. My intent was certainly fulfilled. I wouldn't really like to improve anything. I could try a time lapse during sunset next time to see the clouds forming and dissipating.



