

I went to the Colorado Sand Dunes to take pictures and video. My friends are in the center. The clouds were moving fast under constant wind. Sand everywhere made filming a huge pain. The relatively clear sky quickly became the density shown here. I believe these puffy, low-flying clouds are cumulus of various sizes, with stratus and strato cumulus clouds in the far back near the mountain range. The clouds eventually clumped into huge, expansive rain clouds. Soon after, we were under light rain during our drive home.

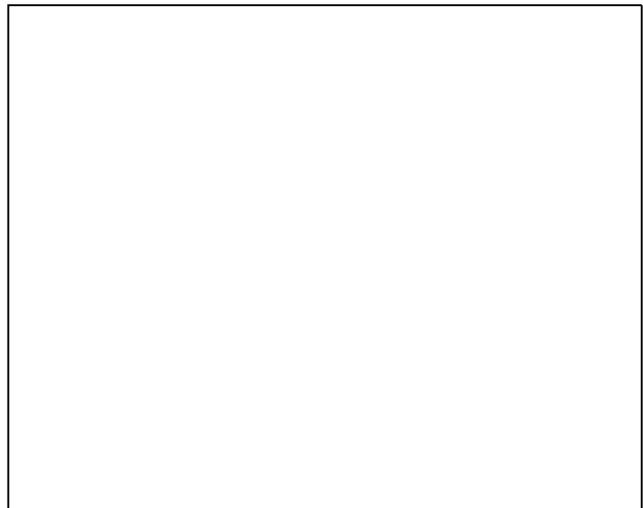


*Figure 1: Cumulus clouds over Colorado Sand Dunes National Park*

This photo was taken early in our shoot, around noon on March 29<sup>th</sup> 2013. Picking a SKEW-T graph was difficult, since the Sand Dunes are nearly

equidistant to Denver and Grand Junction. I chose to use information from the Denver station, from the morning and afternoon. The morning SKEW-T graph, there are clearly clouds – perhaps even precipitation – at approximately 4000 meters in elevation. These low-fliers must be the cumulus clouds that populated the sky.

*Figures 2 & 3: AM & PM SKEW-T graphs from Denver, on Mar 29, 2013*



According to the evening SKEW-T, the condensation moved up in elevation. The cumulus clouds merged into stratus, and slowly lifted. This is enforced by the CAPE numbers on both graphs. Both 0.00 CAPE values tell me the clouds that day were stable.

Visualization was not difficult. Despite the extra gear and equipment we brought, the iPhone captured a beautiful image. The iPhone offers a huge depth of field for the landscape and sky. I was able to capture extremely far-away clouds in good definition.

### **References**

[http://www.crh.noaa.gov/lmk/?n=cloud\\_classification](http://www.crh.noaa.gov/lmk/?n=cloud_classification)

<http://www.theweatherprediction.com/thermo/skewt/>

<http://weather.uwyo.edu/upperair/sounding.html>