

Clouds 1

Waking up at 6:00 am was not what I wanted to do, but I needed a sunrise panorama for a series of panoramas I was making from the same location. Driving up Flagstaff Mountain, I got very excited looking at the clouds warming up as the sun approached the horizon. Realizing that there wasn't enough time to hike to my specific location, the photos were taken from the panorama overlook. At 6:45 am I shot the 21 photos (bracketing exposure for 7 final photos) that were used to create the featured section of a larger panorama. The final panorama has a horizontal field of view of 142 degrees (vertical f.o.v. is 86 degrees). My Nikon D50 was set to an f-number of 4.5 with a focal length of 28 mm. The exposure times were bracketed and the most successful images were between 1/500 and 1/640th of a second.

Skew-T results show a stable air system in the lower atmosphere, however around 4000 meters high the adiabatic line shifts and the system becomes unstable. At 7530 meters the adiabatic line crosses the dew point line. This would indicate that the clouds begin at that height. The adiabatic line follows back and forth along the dew point line until around 11,000 meters. Wind was coming out of the West-Northwest at all altitudes (with no shear present). These clouds appear to be Stratocumulus clouds; they are low to middle water clouds. Stratocumulus clouds indicate that there will be little to no chance of rain in the next 20 hours (which there wasn't).