

Cloud Image Report

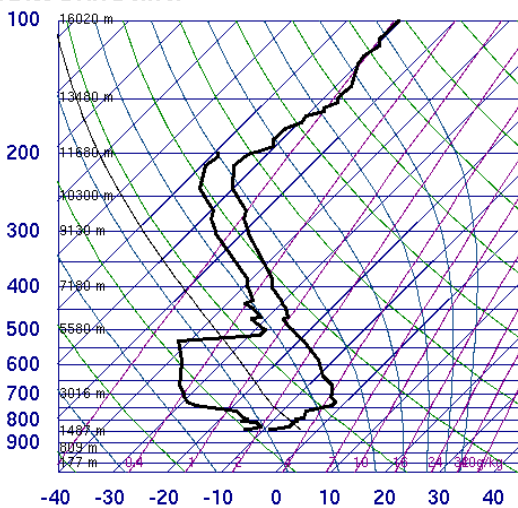
Lindsey Yarnell



The purpose of this image was to capture and analyze the flow of the atmosphere. For this image I wanted to do something unique so I decided to take a picture of clouds at night. Cloud pictures are definitely harder to take than other pictures, because you can't set up a cloud picture. The clouds are what the clouds are. I lucked out because I happened to go out on a night that had really cool cloud cover.

I took this picture on Tuesday the 19th of February at about 12:30 am. It was taken from my backyard in Louisville, Colorado facing west, as visible by the mountains in the image. The camera was pointed pretty much directly west with no tilt up or down.

72469 DNR Denver



SLAT	39.75
SLON	-104.87
SELV	1625.
SHOW	-9999
LIFT	14.11
LFTV	14.18
SWET	-9999
KINX	-9999
CTOT	-9999
VTOT	-9999
TOTL	-9999
CAPE	0.00
CAPV	0.00
CINS	0.00
CINV	0.00
EGLV	-9999
EGTV	-9999
LFCT	-9999
LFCV	-9999
BRCH	0.00
BRCV	0.00
LCLT	258.2
LCLP	719.9
MLTH	283.6
MLMR	1.69
THCK	5403.
PWAT	2.97

12Z 19 Feb 2013

University of Wyoming

the background of the image.

I believe the clouds in this image are altostratus clouds because a finite thickness is visible. The CAPE value on the skew-T is 0, which tells you that the atmosphere is stable. According to WeatherSpark the moon was in the waxing gibbous phase and at an elevation of 20.5 degrees above the horizon. The sky was very clear other than the cloud front in the picture. This is visible in the picture due to the fact that you are able to see the stars in

The camera I used to take this picture was a Nikon D200 with a pixel area of 3507 x 2148. I used a Nikkor 18-200 mm lens, a really awesome lens that gives you the ability to take close up images all the way to wide-angle images. I took this image with a 22 mm focal length, so a pretty wide field of view. I had my f-stop set at f/3.8 to be able to get a large depth of field. It was relatively dark out so I had a long shutter speed of 14 seconds and I also increased the ISO to 200. I did do some editing to the final image mainly cropping and increasing the contrast. I also touched up a few spots, you can see where in the original image to the left.



My favorite thing about this picture is that you are able to see the stars in the background. I think it's really cool that the big dipper is almost framing the moon, which happened partly by accident and good timing. One thing that I think could use improvement is the cropping and editing. The bright ground at the very bottom of the picture is somewhat distracting. The editing I did to get the house out of the picture is still somewhat visible and I think it could use a little more work. I think this picture shows the cloud very well. The backlighting from the moon helps distinguish the thickness of the clouds, with the thinner cloud near the top and thicker cloud lower down. One thing I would maybe like to attempt would be a star-trail cloud picture. It would be really cool to show clouds moving in the night sky and see the stars rotating in the background.

Sources:
Weather Spark