Clouds 2 Report

This photo was taken on the go. Outside my apartment facing east is the highway, so the buildings and trees part for me to take great sky photos. I've taken many cloud photos here, but I think this is my favorite. The clouds look delicious like cotton candy and I enjoy the shifting saturation in the blue sky.

This semester has been very wet. As I recall, April 12th was a halfcloudy day with patches of rain. This shot was taken in the early afternoon, on the way to my 1 o'clock class. These puffballs are young cumulus clouds that haven't consolidated into one water vapor mass. I believe that makes them **cumulus fractus** clouds, before they turn into a cumulonimbus cloud.

Since I was on the go, I used my iPhone to capture this, which means the parameters were automated. The wide lens with no zoom gives this shot a huge depth of field. Both the clouds and the



tree are in focus. I'm grateful, because I aimed the camera up while taking this, and afterward I found it hard to judge the clouds' elevation without many visual cues. These clouds were flying low, consistent with cumulus cloud behaviour.

Since I took the photo just before 1, I chose to follow the 6 pm Skew-T graph more closely than the 6 am. The cloud temperature line and the dew point line immediately touch; there must have been precipitation at this point.

From here, the adiabatic line starts. The cloud line parts from adiabatic, and then tapers in toward it again. These clouds were close to unstable, but the CAPE number remains at 0.00.

As I remember, there was some rain or sleet a few hours after taking the picture, but it must have stopped by the time the 6 pm soundings were recorded.



Sources:

- <u>http://weather.uwyo.edu/cgi-bin/sounding?region=naconf&TYPE=GIF%3ASKEWT&YEAR=2013&MONTH=04&FROM=1212&TO=1300&STNM=72469</u>
- http://www.crh.noaa.gov/lmk/?n=cloud_classification
- http://www.colorado.edu/MCEN/flowvis/course/Lecture2013/08.Clouds2.pdf