



The intent of this image was to illustrate several types of cloud formations. Mid-level altocumulus clouds can be seen behind low-level cumulus clouds and a developing cumulonimbus cloud. The artistic intent was to frame the blue sky and altocumulus clouds near the center of the image with the line of cumulus clouds that forms a line parallel to the horizon.

The image was taken on Monday, October 3rd at approximately 3:30 in the afternoon. I saw well-defined cumulus clouds to the east as I was leaving school, but the view was obscured by various buildings. This picture was taken from the west side of the community gardens in North Boulder (near Iris and 14th streets), where the houses are far enough away that they do not interfere much with the view of the low clouds near the horizon. The image was taken facing directly east.

The weather on October 3rd was mostly clear in the morning, turning cloudy in the afternoon. Shortly after this image was taken, it rained lightly for a short period of time, however, the rain was not from these clouds.

Fair weather cumulus clouds have flat bases and distinct outlines, seen in this image. Their lifetimes are from 5-40 minutes, and with proper conditions they can develop into cumulonimbus clouds (1). The cloud on the right side of the image appears

to be a developing cumulonimbus. Altocumulus, seen above the cumulus clouds near the center of the image, are formed by convection in an unstable layer which may be caused by an advancing cold front (2).

The camera used was a Canon A70 digital camera. The focal length used was 5.4mm. The A70's automatic setting for shutter speed was used in aperture priority mode. The aperture was set to F-8 (the largest allowed with the A-70) and the focusing distance was set to infinity.

The image was processed using Adobe photoshop. The brightness was decreased by -50 and the contrast was increased by 45 in order to show the highlights and shadows in the forward clouds. The image was also cropped. The final image size is 2048 by 450 pixels.

I feel that this image effectively shows several different types of clouds. The level of ambient light was low due to the incoming rainstorm, so the clouds in the foreground had to be cropped because they were too dark after the brightness/contrast adjustments were made. Additionally, the dark trees in the foreground are distracting and they partially obscure the low cumulus clouds. Unfortunately, the few times I got far enough from town to not have buildings and trees obscuring the image, the clouds had moved on by the time I got there, so some landscape in the photograph seems unavoidable when taking pictures of clouds near the horizon.

1. [http://ww2010.atmos.uiuc.edu/\(Gh\)/wwhlpr/fair_cumulus.rxml?hret=/guides/mtr/cld/cldtyp/home.rxml](http://ww2010.atmos.uiuc.edu/(Gh)/wwhlpr/fair_cumulus.rxml?hret=/guides/mtr/cld/cldtyp/home.rxml)

2. [http://ww2010.atmos.uiuc.edu/\(Gh\)/wwhlpr/altocumulus.rxml?hret=/guides/mtr/cld/cldtyp/home.rxml](http://ww2010.atmos.uiuc.edu/(Gh)/wwhlpr/altocumulus.rxml?hret=/guides/mtr/cld/cldtyp/home.rxml)

