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Clouds First
Flow Visualization 4151-003
October 23, 2024
Image taken by William's Village in Boulder, CO at 4:30 PM, October 10, 2024
Stratocumulus

Clouds on Film

I took this image for my "Clouds First" project for Flow Visualization. I wanted to experiment with how clouds would look on film, and I was surprised to learn that they are fairly easy to expose and get in focus. I didn't have a single image on my film roll that was dark or blurry, but the one I chose was my favorite. The stratocumulus clouds are fairly common to see outside my apartment in Boulder, but I thought that the little spots of blue sky poking out from the seemingly ominous gray void that surrounds them made for a particularly interesting shot. At first, the image looks like a brewing storm, but the blue sky gives an optimism to the viewer for what is to come.

To take my image, I stepped outside onto the sidewalk by my apartment, which is in Boulder. I pointed my camera west and pointed it up at an angle of about 60º. This was on October 10, 2024 at around 4:30 PM, Mountain Daylight Time. Because I was pointed west, the sun was very close to where my camera was aimed. I believe this is why the blue sky is so clear in the photo. I also took several images in different locations, but I didn't think they were as interesting.

The clouds in the image are stratocumulus. This is supported by the Cloud Appreciation Society's description of a stratocumulus cloud, which is "a low layer, or patch of cloud that has a well-defined, clumpy base" (Cloud Appreciation Society). The rest of the sky had similar clouds and was clear towards the south. There was no rain that day, which is typical with stratocumulus clouds (Met Office). It was not at all windy, in fact, the wind was at its lowest for the entire week (Weather Underground). There had also been no precipitation all week (Weather Underground). The existence of the stratocumulus clouds indicates that the atmosphere was most likely shallow conditionally unstable or absolutely unstable (Thomson Higher Education, 12). Clouds could be expected at around 5800 meters which is about where I think the clouds in my image were. All the clouds on October 10 appeared to be at about the same height.

Stratocumulus clouds are generally produced by the “mixing of a moist air layer near the surface” (Thomson Higher Education, 12).

I would estimate that the field of view of my image is around 500 feet and that the cloud was around 60000 feet from my camera. I was using a Canon AE-1 film camera with a 50 mm lens. The image is 1228 pixels wide by 1818 pixels tall, which is the highest resolution that I could get my film developed at. The image is not edited at all. I chose to not edit it because I felt that the colors that were visible on film were better than anything I could bring out in Lightroom. The image has a certain rawness to it that I didn’t feel I could improve. I exposed at an aperture of of 4 with a shutter speed of 1/500 of a second. The film was Portra 400, so the ISO is 400 by

The image reveals that clouds can be exposed very easily on film if the photographer has had enough practice. Fluid physics are shown well with the relatively calm weather and the existence of a stratocumulus cloud. I fulfilled my intent, but I would like to take some more interesting cloud photos at some point. I think I’ll shoot film again, but I’d like to start taking my film camera with me, so I can shoot any cloud that I see.

Works Cited

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