

## Cloud Project 2

### Introduction

The purpose of Cloud Project 2 is to capture another captivating, aesthetically pleasing picture of a cloud formation. It is intended that the focus not only be on the cloud, but also on the earth below. A different perspective is gained by photographing the cloud from a high altitude.

### Flow Apparatus

There was no real apparatus needed to photograph the picture found in **Figure 1**. It was simply taken near the summit of Pikes Peak on a warm summer day with a Canon Digital Camera.



**Figure 1**

## **Cloud Classification**

The type of cloud found in **Figure 1** is most likely a fair weather cumulus cloud. Some important features include a cotton-like appearance, a flat base, slight vertical growth, and defined edges. Also, the sunlight brings out the vibrant white color of the upper portion while the base of the cloud has more of a darker gray hue. As seen in **Figure 1**, the cloud seems to be relatively low in the atmosphere, which would suggest that it is located in the troposphere. It is important to note that, under the right conditions, a towering cumulonimbus cloud can develop from this cloud formation. Thunderstorm conditions are associated with cumulonimbi.

## **Visualization Technique**

There was no real visualization technique due to the fact that the cloud was so well lit by the mid-day sunshine. It is simply a recorded observation of the unstable conditions in the atmosphere.

## **Photographic Technique**

- Size of field of view ~ 5 miles
- Distance from object to lens – > 1000 ft
  - Lens focal length & other lens specs – 7.8 mm
- Type of camera – Canon PowerShot A80 (4.0 megapixel)
- Exposure specs –
  - F-Stop – 8.0

## **Photographic Technique (continued)**

Aperture – 6.0

Shutter speed – 1/318 second

Focal Plane X Resolution – 8114.286 inches

Focal Plane Y Resolution – 8114.286 inches

Exposure Time – 1/320 second

Film type – NA, saved on a 256MB flash card and transferred for editing

- Processing – the resolution was adjusted from 180 to 300 pixels/inch in

Adobe Photoshop

## **Conclusion**

The image gives a sort of birds' eye view of a large, fair-weather cloud formation. On the positive side, the picture is time resolved in addition to being very interesting to look at. A downside of the picture is the fact that the area underneath the cloud formation seems to be foggy and is not clearly defined. A simple question regarding this particular cloud formation would be to ask if the given classification is accurate. My intent after completing Cloud Project 1 was to get a more breathtaking picture with more foreground elements to add depth. In that sense I have fulfilled my intent, but I think maybe the foreground overpowers the cloud, making it seem less significant. To improve these types of pictures I would focus on trying to find a balance when incorporating foreground elements. Overall I am pretty pleased with my final picture.