

Cloud Image Report

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CU Flow Vis

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Project Description

This photo was taken to satisfy the second Cloud Image assignment. The intent of the image was to capture the cumulus cloud formation that collected around central/eastern Boulder. Approximately 50 images were taken from various

The photos were taken during the day so there was sufficient light to use a fast shutter speed, which allowed the camera to be handheld. I would estimate the field of view to be ~2miles. I would estimate the distance to the center of the cloud to be 2-3 miles.

The lens used is a 50mm Panasonic f/4-f/32. The photo was shot at f/5.6, ISO 200, and shutter speed of 800. The camera is a Panasonic G5. It is a micro 4/3, aka a mirror-less DSLR. The original image is 4608 x 3456 pixels. The edited image is 4608 x 3456 pixels.

In photoshop, to boost contrast, the blue and cyan values were increased via the selective color tool.

Before:



Personal Opinion

I like the outcome of the final image. It doesn't show fluid movement terribly well, but I enjoy the contrast of the white clouds against darker mountains.

Appendix:

1. http://kiwi.atmos.colostate.edu/group/todd/Extras_files/Skew-T-Manual.pdf
2. <http://nenes.eas.gatech.edu/Cloud/Clouds.pdf>

Self -Assessment

Assignment:

Date:

Scale: +, ! = excellent √ = meets expectations; good. ~ = Ok, could be better. X = needs work. NA = not applicable

Art	Your assessment	Comments
Intent was realized	√	
Effective	√	
Impact	√	
Interesting	√	
Beautiful	√	
Dramatic	√	
Feel/texture	√	
No distracting elements	√	
Framing/cropping enhances image	√	

Flow	Your assessment	Comments
Clearly illustrates phenomena	~	
Flow is understandable	√	
Physics revealed	√	
Details visible	~	
Flow is reproducible	√	It's difficult to reproduce nature
Flow is controlled	√	
Creative flow or technique	√	
Publishable quality	√	

Photographic/video technique	Your assessment	Comments
Exposure: highlights detailed	√	
Exposure: shadows detailed	√	
Full contrast range	√	
Focus	√	Image is in focus
Depth of field	√	Very little DOF with infinite focus
Time resolved	√	
Spatially resolved	√	
Photoshop/ post-processing enhances intent	√	
Photoshop/ post-processing does not decrease important information	√	

Report	Your assessment	Comments
Collaborators acknowledged	√	No collaborators

Describes intent	Artistic		
	Scientific		
Describes fluid phenomena			
Estimates appropriate scales	Reynolds number etc.		
Calculation of time resolution etc.	How far did flow move during exposure?		
References:	Web level		
	Refereed journal level		
Clearly written		√	
Information is organized		√	
Good spelling and grammar		√	
Professional language (publishable)		√	
Provides information needed for reproducing flow	Fluid data, flow rates		
	geometry		
	timing		
Provides information needed for reproducing vis technique	Method		
	dilution		
	injection speed		
	settings		
lighting type	(strobe/tungsten, watts, number)		
	light position, distance		
Provides information for reproducing image	Camera type and model	√	
	Camera-subject distance	√	
	Field of view	√	
	Focal length	√	
	aperture	√	
	shutter speed	√	
	Frame rate, playback rate	√	
	ISO setting	√	
	# pixels (width X ht)	√	
	Photoshop and post-processing techniques	√	
	"before" Photoshop image	√	