FASTSTONE Overview

Prepared for
OLLI Personal Computer User Group (OPCUG)
&
Potomac Area Technology and Computer Society (PATACES)

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By
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What We'll Cover

- **What is Faststone & What it is NOT**
- Interface Overview
- Downloading Pictures from ~~Camera~~ Card
- Suggested File Structure for Photographs
- Save the original files – Work on Duplicates only
- The Faststone Views (Browser, Windowed, Full Screen)
- File types / Histograms / Tagging images etc.
- Reading the metadata (info), Comparing images
- Resizing & renaming the images,
- Editing
  - Red Eye correction (what causes it & how to fix it)
  - Straighten / Crop the photo
  - Adjusting the exposure
  - Adding jpg notes
- Making a stand-alone slide show
- It is not a replacement for Photoshop and/or LightRoom

May fill all digital photo needs of many people

An Image Browser, Converter, and editor for the Point and shoot folks

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Download Free (for home use)
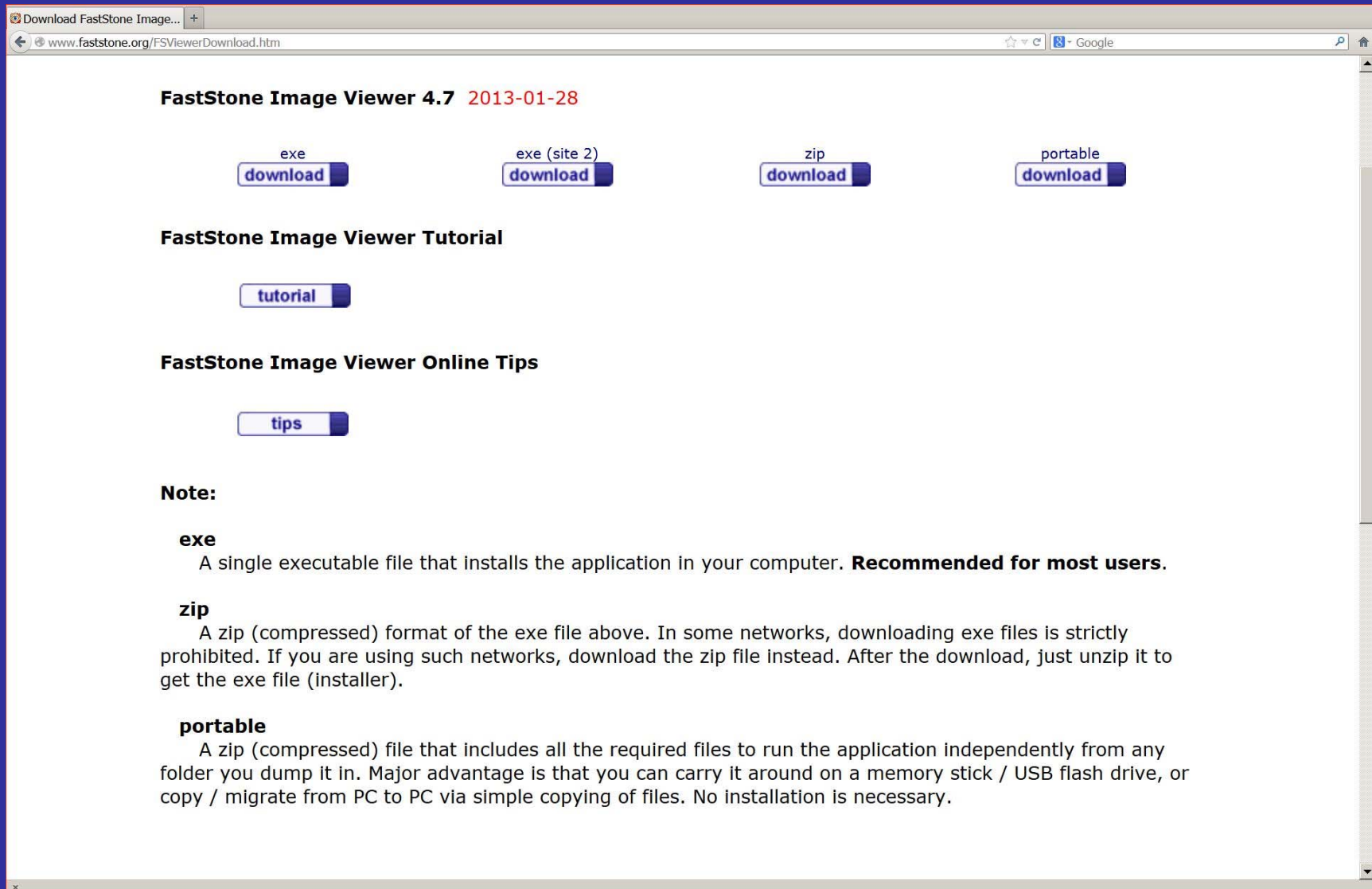

CNET editors' rating: ★★★★★

FastStone Image Viewer is a fast, stable, user-friendly image browser, converter and editor. It has a nice array of features that include image viewing, management, comparison, red-eye removal, emailing, resizing, cropping, retouching and color adjustments. Its innovative but intuitive full-screen mode provides quick access to EXIF information, thumbnail browser and major functionalities via hidden toolbars that pop up when your mouse touches the four edges of the screen. Other features include a high quality magnifier and a musical slideshow with 150+ transitional effects, as well as lossless JPEG transitions, drop shadow effects, image annotation, scanner support, histogram and much more. It supports all major graphic formats (BMP, JPEG, JPEG 2000, animated GIF, PNG, PCX, PSD, EPS, TIFF, WMF, ICO and TGA) and popular digital camera RAW formats (CRW, CR2, NEF, PEF, RAF, MRW, ORF, SRF, ARW, SR2, RW2 and DNG).

No Adware No Spyware
Free for Home Users

Version 4.7 [download] 2013-01-28

What's New

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Download Free (for home use)

FastStone Image Viewer 4.7 2013-01-28

exe
[download]

exe (site 2)
[download]

zip
[download]

portable
[download]

FastStone Image Viewer Tutorial

[tutorial]

FastStone Image Viewer Online Tips

[tips]

Note:

exe
   A single executable file that installs the application in your computer. **Recommended for most users**.

zip
   A zip (compressed) format of the exe file above. In some networks, downloading exe files is strictly prohibited. If you are using such networks, download the zip file instead. After the download, just unzip it to get the exe file (installer).

portable
   A zip (compressed) file that includes all the required files to run the application independently from any folder you dump it in. Major advantage is that you can carry it around on a memory stick / USB flash drive, or copy / migrate from PC to PC via simple copying of files. No installation is necessary.

What is it (& IS NOT)

- Not a replacement for Photo shop caliber editor

- Not a replacement for Lightroom

- It is an excellent tool for looking at your photos and making minor "post-production" adjustments

  - It will read "RAW" images (Explorer will not)

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A suggested File Structure

- By YEAR_# MONTH_DAY (01,02….31) etc.

Suggest a subfolder for photo edits

Don't edit your original files

UNLESS YOU ARE POSITIVE YOU WILL NEVER NEED THE ORIGINALS AGAIN !

Download via Card Reader

- Downloading directly from camera isn't suggested
  - USE A Card Reader

If you want to Download from Camera

- Install camera's device driver of your computer

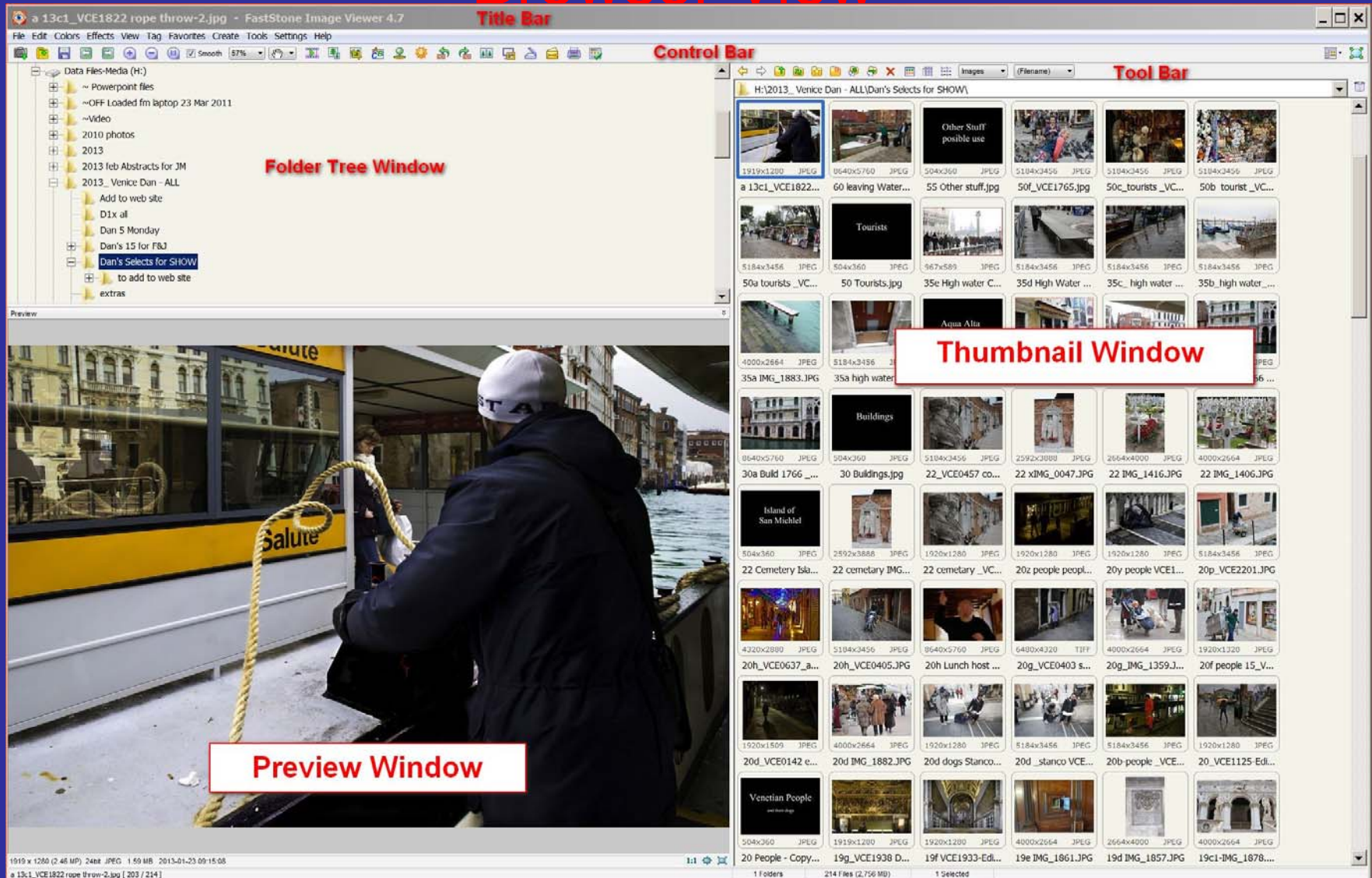- Camera must be turned on and attached to computer

Remember
- Loss of camera power during transfer could result in lost photos.
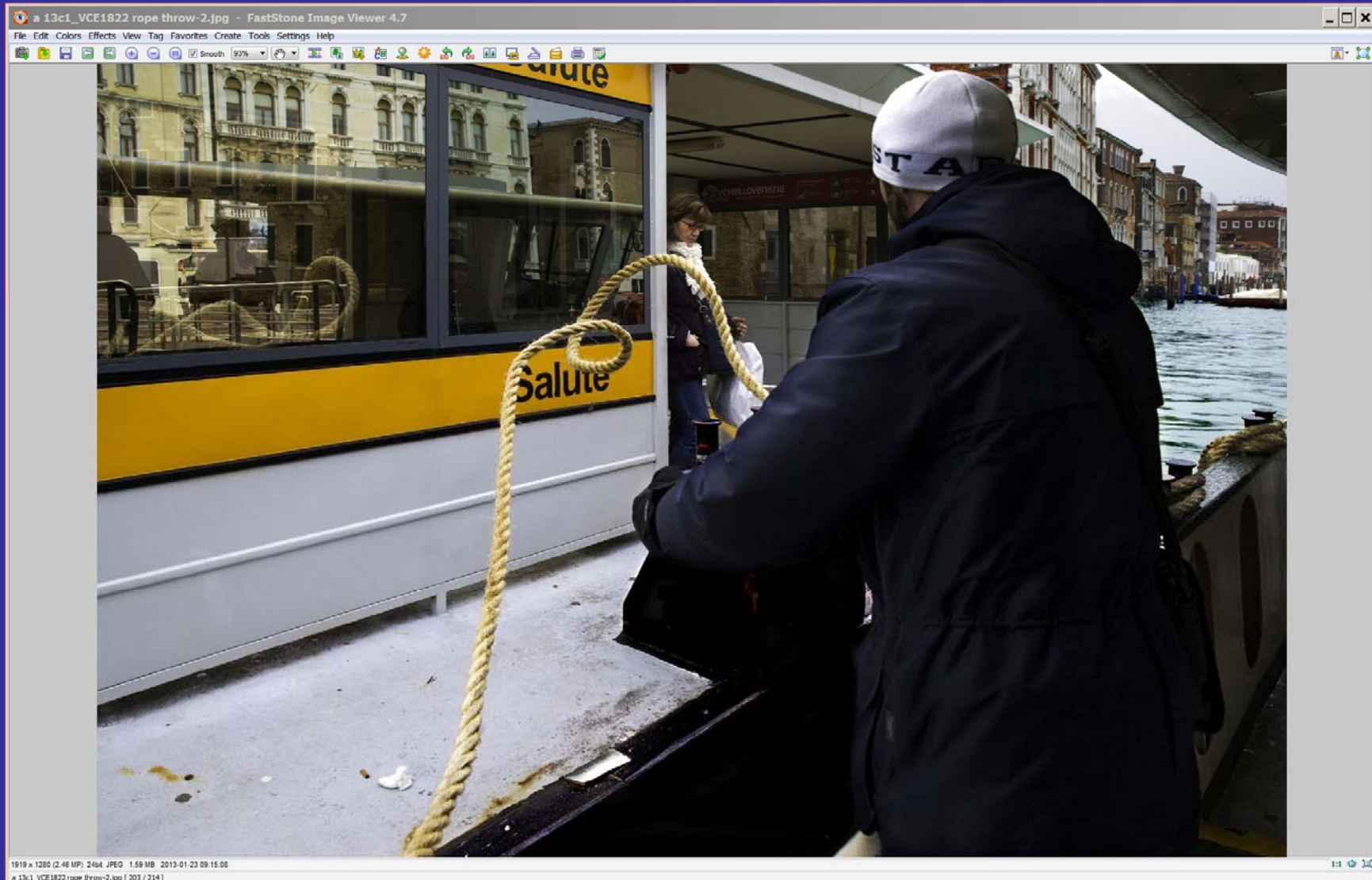
Save / Archive card or Reformat in Camera

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Three Primary Views
Browser View

Three Primary Views
Windowed View

Three Primary Views
Full Screen View

Some Essential Understanding

- Image Properties = data about data

- Histogram

- Pixel Size / ratio

- Color: Hue - Saturation   Value (Brightness)

- Noise / Grain

- Pixel Size / ratio

- File Types

File Types /size

Name ▲	Date modified	Type	Size
00 gpa location Adjust Lighting DJF0891 copy - ...	3/13/2013 2:11 PM	JPEG image	10,993 KB
00 GPS Location IMG_1878.JPG	7/26/2012 2:42 PM	JPEG image	4,160 KB
01 straighten & crop IMG_0578.JPG	7/27/2012 7:26 PM	JPEG image	599 KB
02 Correct Red Eye IMG_0612.JPG	7/29/2012 9:36 PM	JPEG image	2,181 KB
02a correct redeye IMG_0575.JPG	7/27/2012 7:25 PM	JPEG image	488 KB
03 crop 16x9 ratio Vienna v Nats 058 by Dan 19...	6/20/2009 11:47 AM	JPEG image	4,384 KB
04a Levels _Chincoteaque Morning MG_0431.jpg	3/13/2013 1:51 PM	JPEG image	5,808 KB
04b levels Great FAlls _MG_0009.jpg	3/13/2013 1:55 PM	JPEG image	5,192 KB
04c Levels fiddler on bridge L1001674.jpg	3/13/2013 2:06 PM	JPEG image	4,183 KB
05 adj saturation etc_DJF0891 copy.jpg	3/13/2013 2:11 PM	JPEG image	10,993 KB
06 Heal dirt on lens IMG_0165.jpg	3/13/2013 2:48 PM	JPEG image	9,273 KB
07 clone IMG_0336 - Copy.JPG	12/4/2011 9:32 AM	JPEG image	2,153 KB
08 Local adjustment Boats ambulance_VCE014...	2/5/2013 4:41 PM	TIF File	105,012 KB
10 Noise _VCE0719.CR2	1/14/2013 10:58 AM	CR2 File	23,007 KB
IMG_0584.JPG	7/28/2012 4:10 PM	JPEG image	509 KB
test slide show.exe	3/11/2013 4:17 PM	Application	8,373 KB
this is a test.exe	3/11/2013 4:23 PM	Application	9,214 KB
WM- DJF Photographs.png	3/12/2013 9:46 AM	PNG image	4 KB
Burke Lake Nov1_2012-35.CR2	11/1/2012 8:12 AM	CR2 File	23,742 KB

Explorer Won't Read Raw Files

FastStone will read RAW files

Image File types

Open Images of type:	Save Images to type:
JPEG	JPEG
BMP	BMP
GIF	GIF
PNG	PNG
TIFF	TIFF
PCX	PCX
TGA	TGA
JPEG2000	JPEG2000
PSD	PDF
EPS	
WMF	
CUR	
ICO	

Digital Camera Support

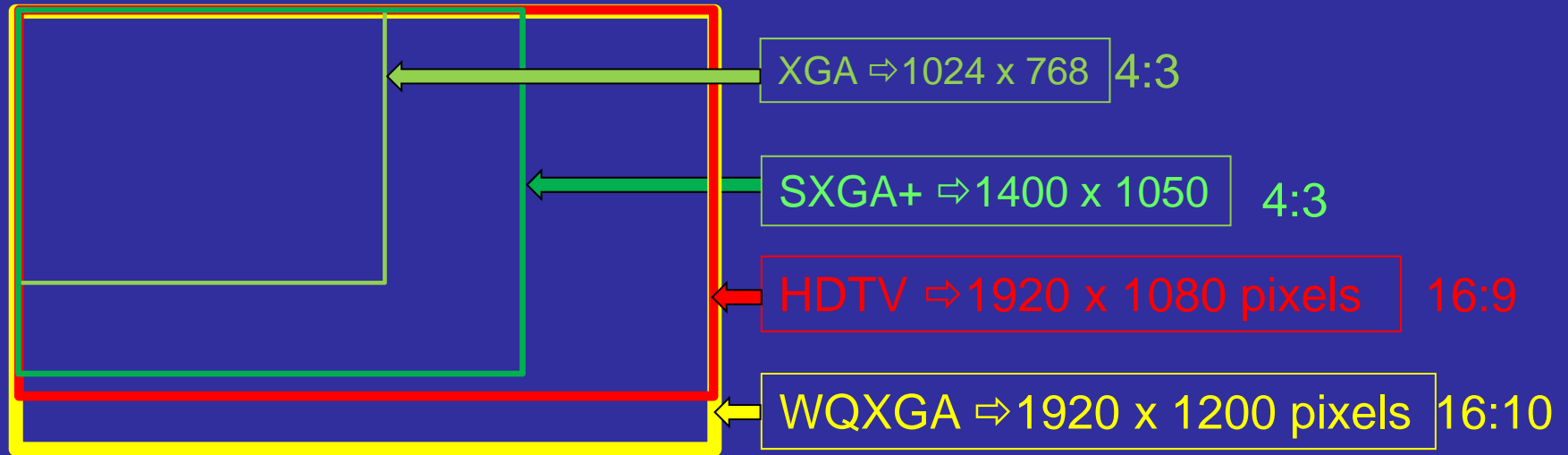| Company	Open RAW Images:
Canon	CRW, CR2
Nikon	NEF
Pentax	PEF
Fuji	RAF
Minolta	MRW
Olympus	ORF
Sony	SRF, SR2, ARW
Panasonic	RW2
Adobe	DNG

Some downloaded photos from my camera

_JF_3080.CR2	2/15/2013 6:49 PM	CR2 File	20,269 KB
_JF_3080.JPG	2/15/2013 6:49 PM	JPEG image	7,015 KB
_JF_3081.CR2	2/15/2013 6:49 PM	CR2 File	21,451 KB
_JF_3081.JPG	2/15/2013 6:49 PM	JPEG image	9,644 KB
_JF_3082.CR2	2/15/2013 6:50 PM	CR2 File	20,138 KB
_JF_3082.JPG	2/15/2013 6:50 PM	JPEG image	6,825 KB

Note File size
CR2 (RAW) vs JPG

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Common Display Resolutions
Video Display

XGA ⇨ 1024 x 768 | 4:3

SXGA+ ⇨ 1400 x 1050 | 4:3

HDTV ⇨ 1920 x 1080 pixels | 16:9

WQXGA ⇨ 1920 x 1200 pixels | 16:10

Some Common Photo Paper Sizes

4x6	13 x 19
5 x 7	17 x 22
8 x 10	
8½ x 11	

Some Common Frame Sizes

5x7	11x17
8x10	12 x 18
8½ x 11	16 x 20
8x12	18 x 24
	24 x 30

Pixel Size / Ratio for Computer Screen

- OK for most Computer monitors: 1024 x 768
- For WEB: 800x600 often recommended

- For digital projector:

  0.78mp 1024 x 768 (XGA) $
  1.02mp 1280 x 800 (WXGA) $$
  1.47mp 1400 x 1050 (SXGA+) $$$ (Hatachi CPSX 635)
  2.3mp 1920 x 1200 (WUXGA) $$$$

- Faststone > tools >batch resize > advanced options

Advanced Options ✕

| Resize | Rotate | Crop | Canvas | Color Depth | Adjustments | DPI | Text | Watermark | Border |

☑ Resize

● In Pixels   ○ In Percentage   ○ Resize based on one side

New Width: 1024   <Pick a Standard Size>
New Height: 768

Filter: Lanczos3 (Default)

☐ Switch Width and Height to match long sides
☑ Preserve Aspect Ratio
☐ Smart-Cropping (Result in exact width and height)
☐ Do not resize when original size is less than the new one

| Reset all | Load Options from File | Save Options to File | 🔍 | OK | Cancel |

Monitor pxls & usage

mp	Width	Height	% of Internet Users
	1024	768	22.63
1	1366	768	15.63
	1280	800	14.55
	1280	1024	7.96
	1440	900	6.92
	1680	1050	3.75
	1920	1080	3.70
	1600	900	3.12
	1360	768	2.65
	1024	600	2.37
	1152	864	1.91
	1280	768	1.84
	1280	720	1.66
	800	600	1.44
2.3	1920	1200	1.04
4	2560	1600	

Source: Wikipedia

Image Properties
EXIF Metadata Histogram JPG comments

Image Properties

EXIF Metadata Histogram JPG comments

Understanding Histogram (1)

- Each pixel in the image can have a brightness Value ranging from 0 to 255 (bit depth of 8)
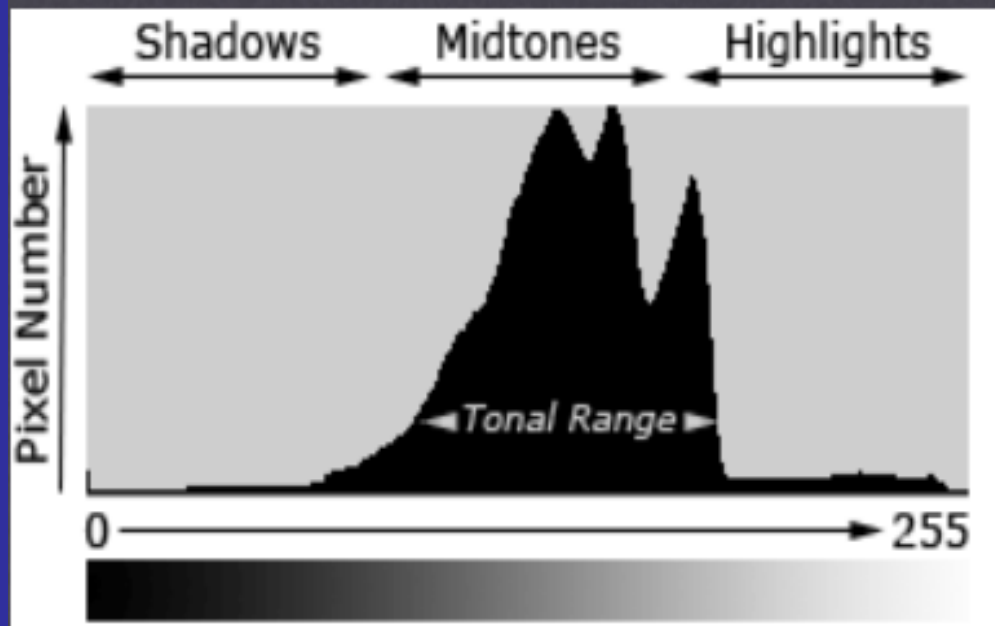 - The computer scans through the brightness values and counts how are many at each of the levels
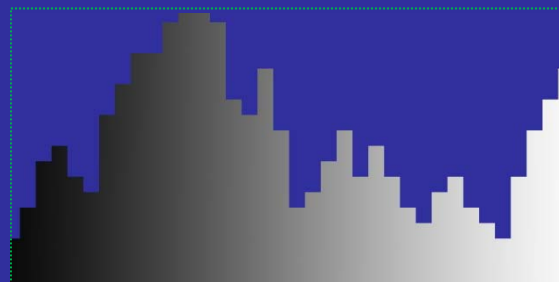
Image Capture (Dynamic Range)

A Simplified Understanding

Consider an imaginary scene that might contain tones from the blackest black to the bright white

- For this example consider only several dozen levels of brightness

- We make a graph by stacking pixels of the same intensity level in the scene

Our eyes can discern perhaps this range of dark to bright

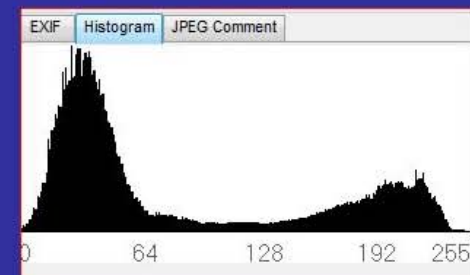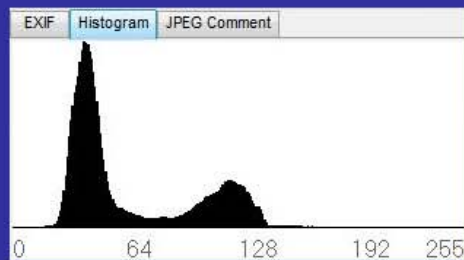A camera sensor may only capture this range of intensity
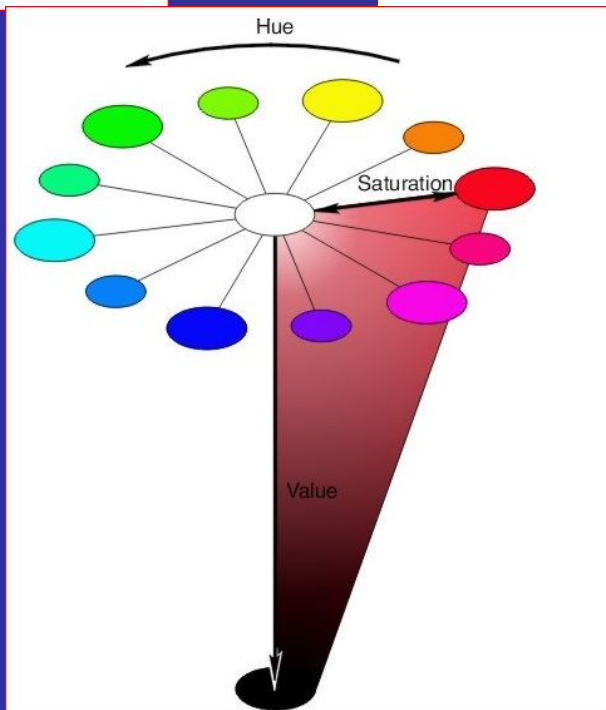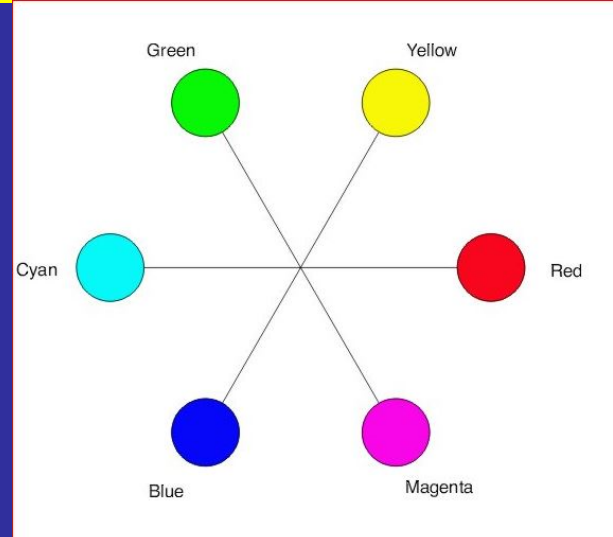
But is selectable
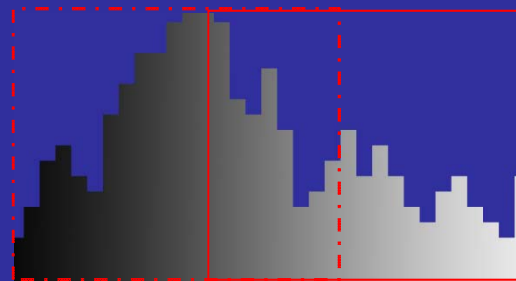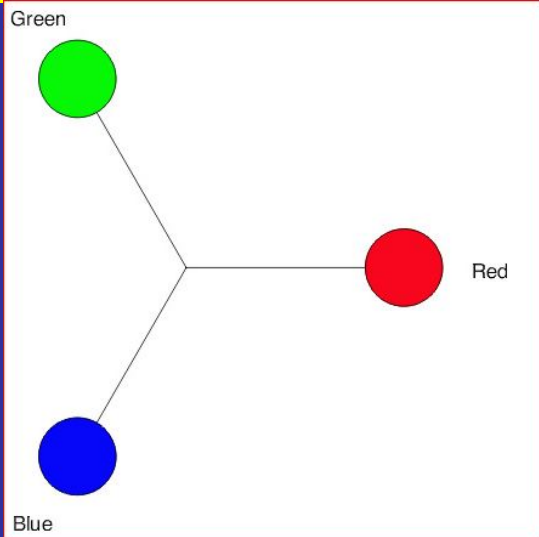
"Blown Out No detail"

Software can not recover blown out highlights!!!
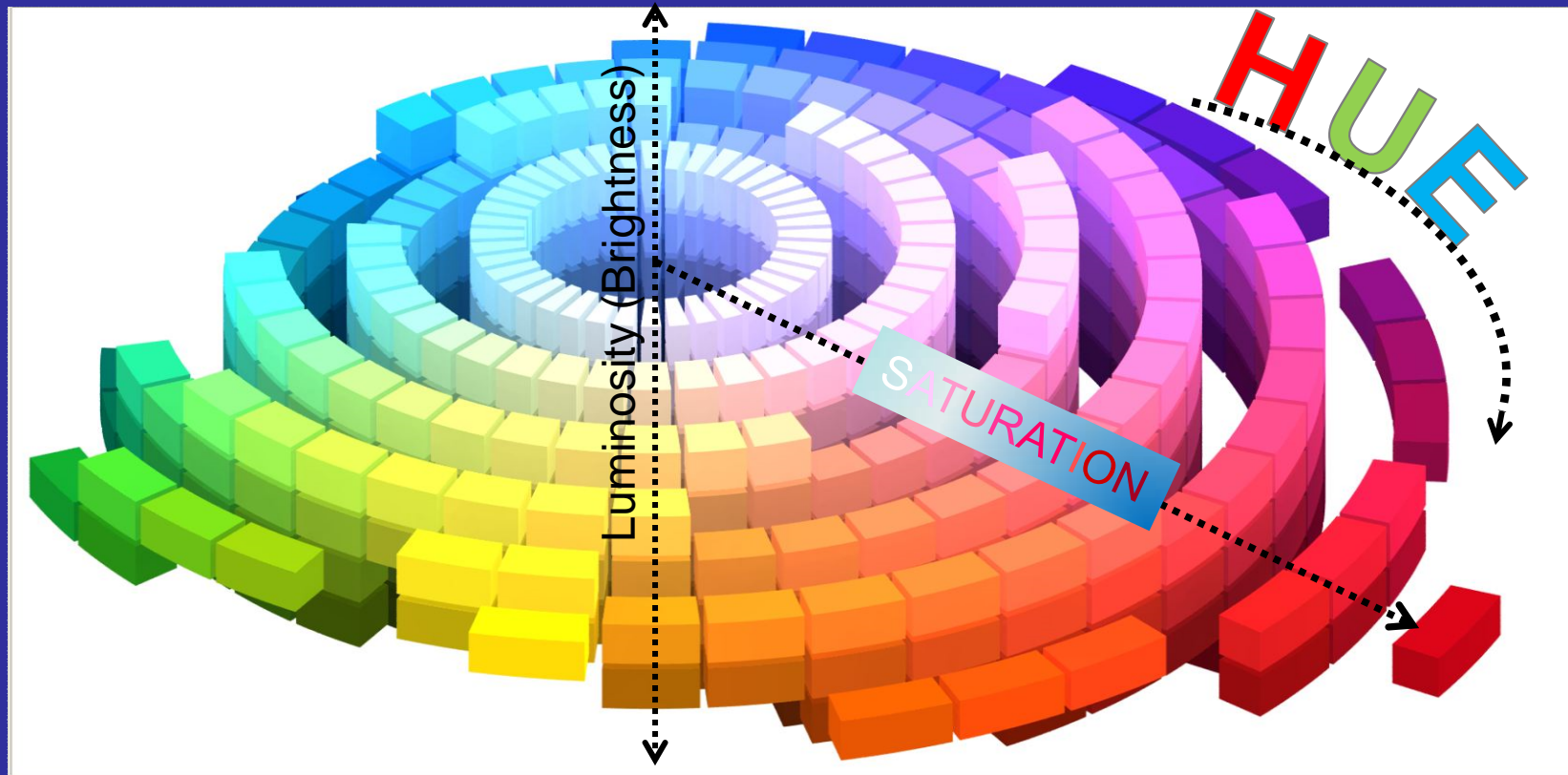
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Understanding Histogram (2)

- Spreading out the data may improve the picture

Color Components
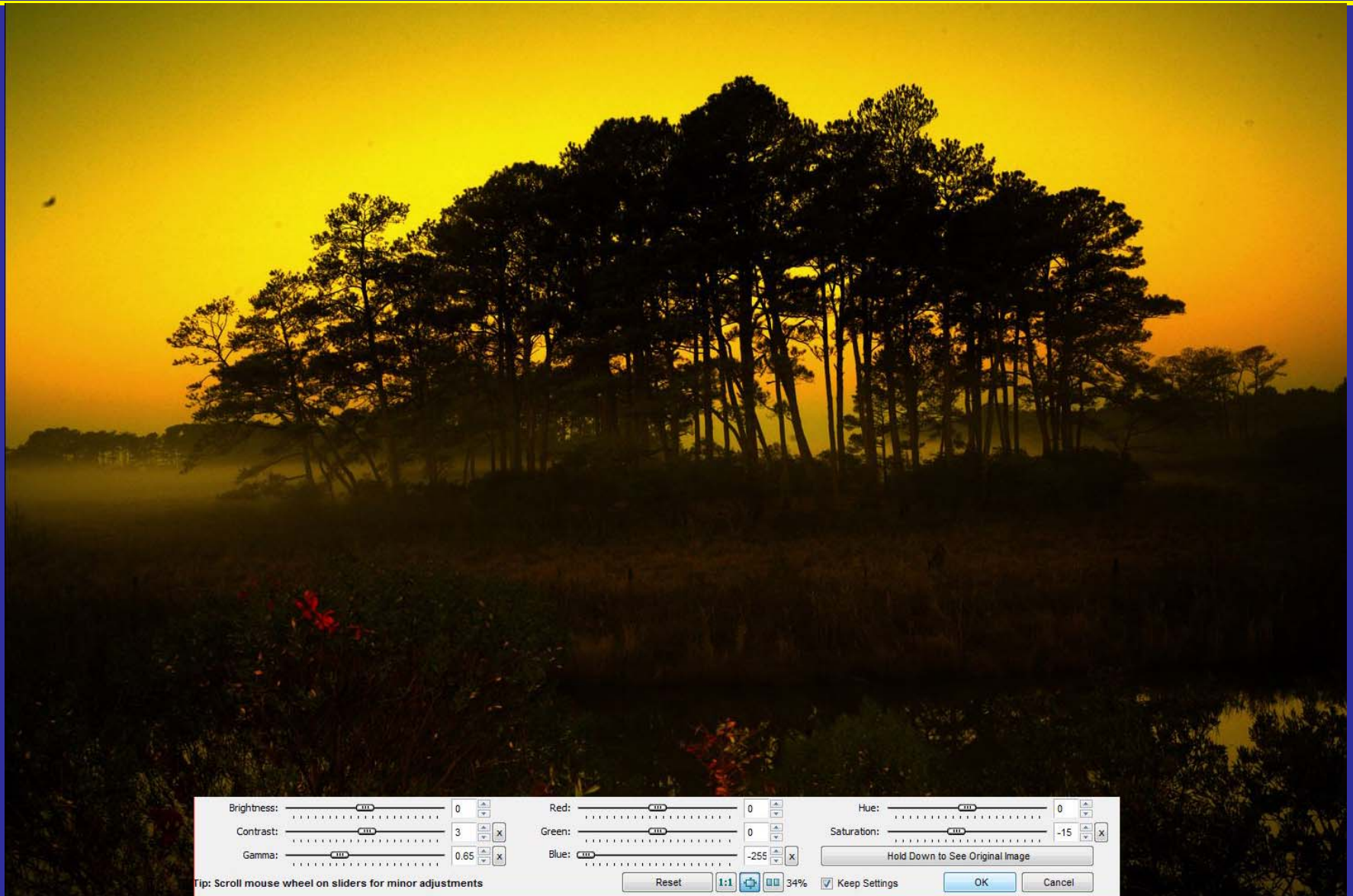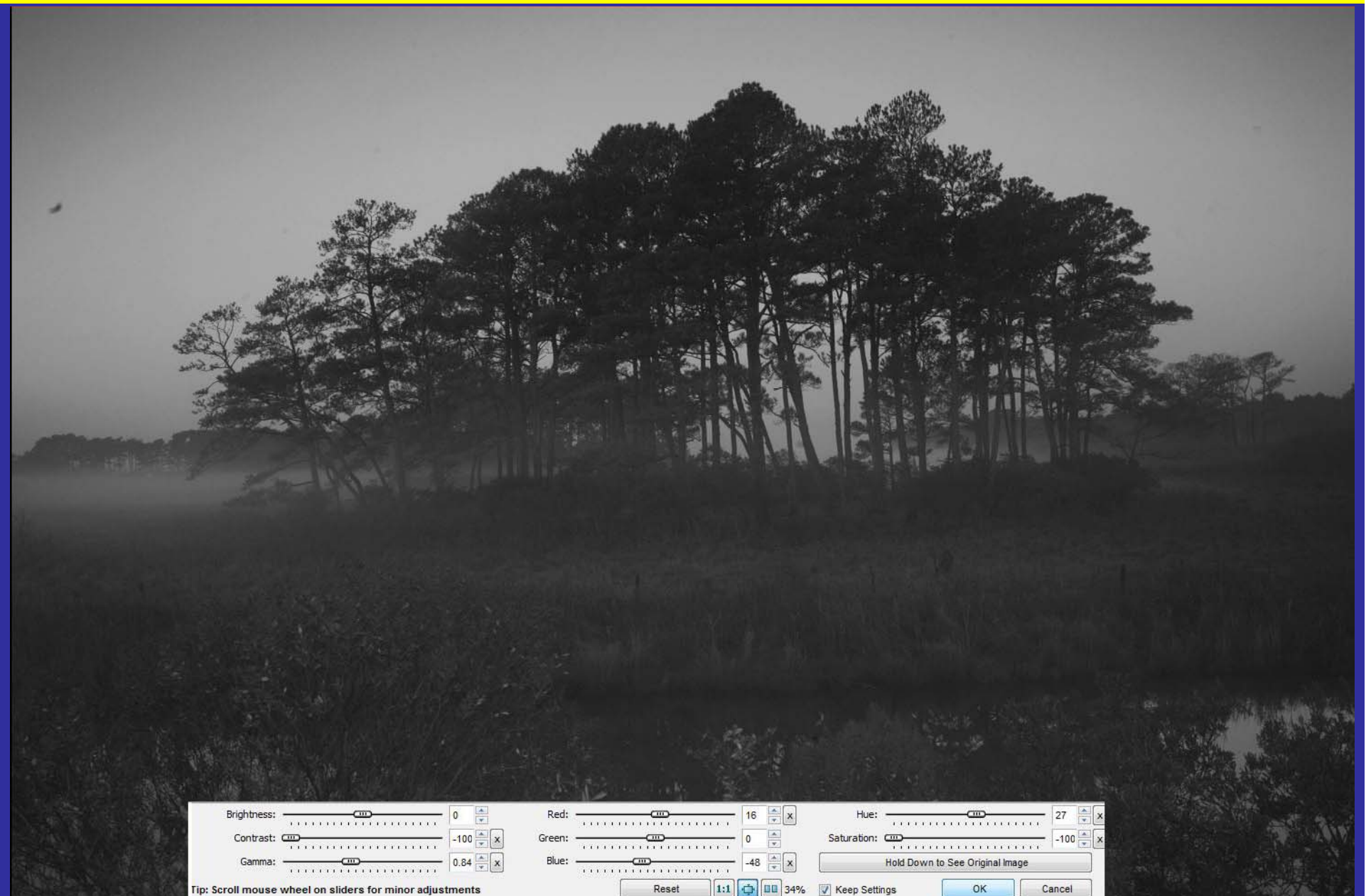
Color Components

Color Adjustments (1)

Color Adjustments (2)

Look Closely at Noise

As Shot RAW (.CR2) File - not adjusted

ZOOM In on As Shot RAW (.CR2) File - not adjusted
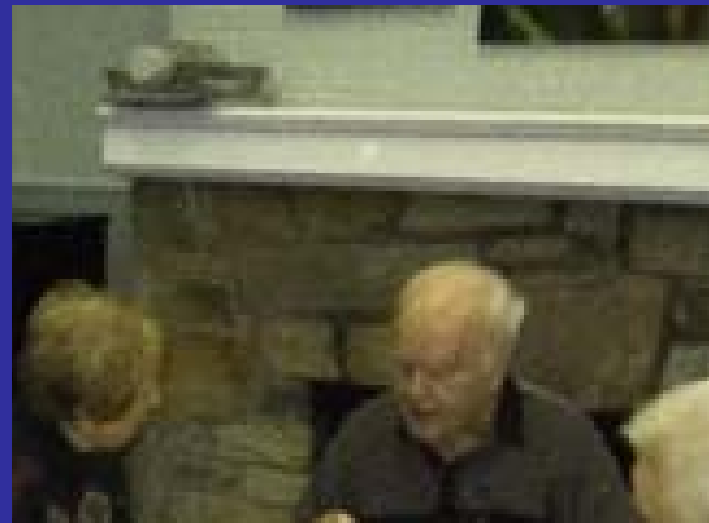
Camera Adjusted (.jpg) File

Zoom In on Camera adjusted (.jpg) File

Download via Card Reader

- Downloading directly from camera isn't suggested
  - USE A Card Reader

If you want to Download from Camera
- Install camera's device driver of your computer

- Camera must be turned on and attached to computer

Remember
- Loss of camera power during transfer could result in lost photos.

Save / Archive card or Reformat in Camera

We'll use the FastStone application for the rest of the presentation

Dan Feighery