

# Digital Workflow Secrets

How To Rapidly Create High Quality Images

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How To Rapidly Create High Quality Images

- Slideshow
- Run Through Workflow
- More Examples
- Recap

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# About My Images

- I'm a professional nature photographer
- Most sales through a stock agent
- The capture is the score and the image is the performance
- Process images to achieve what my eye and mind saw

# Digital Files And Images

- Nikon Coolscan 4000 ED to scan 35mm slides, December 2001
- Wildlife Photography Photoshop Workshop
  - Joe and Mary Ann McDonald, March 2004
- Crafting a Fine Digital Print
  - Joseph Holmes, Sante Fe Workshops, April 2004
- Started shooting digital
  - Canon EOS 1D Mk II in September 2004
  - Canon EOS 1Ds Mk II in December 2004
- Digital Printing for the Fine Art Photographer
  - Charles Cramer and Bill Atkinson, August 2005
- B&W luminosity layer for color images
  - Inspired by Darwin Wiggett, September 2011
- Realistic HDR using Lightroom
  - Matt Kloskowski via Jan Forseth, November 2012

# I Live Full-Time In An RV

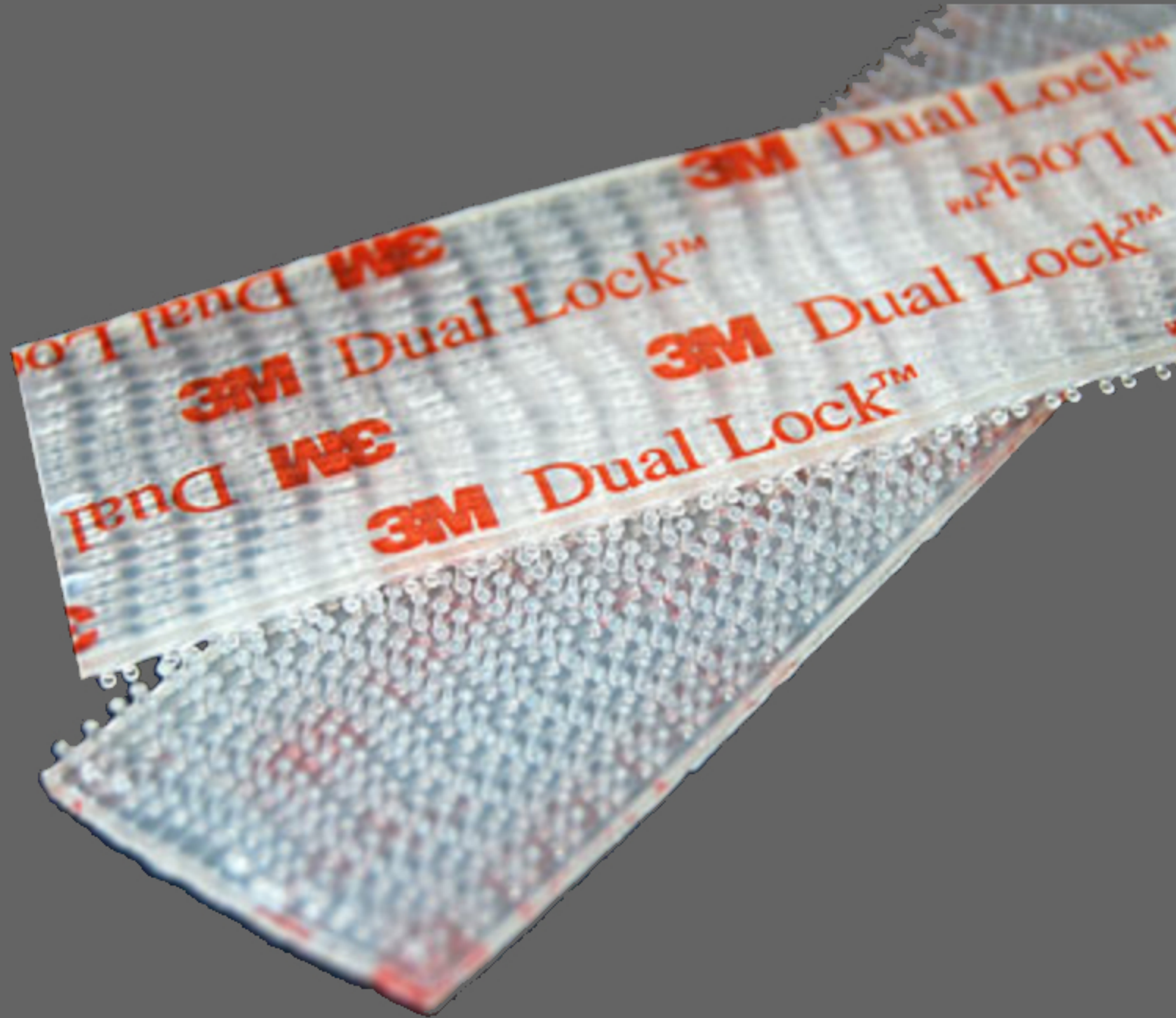
Spend about 9 months of the year off the grid



# My Workspace



# Items Secured With Dual Lock



# I Shoot A Lot

## Yearly Information

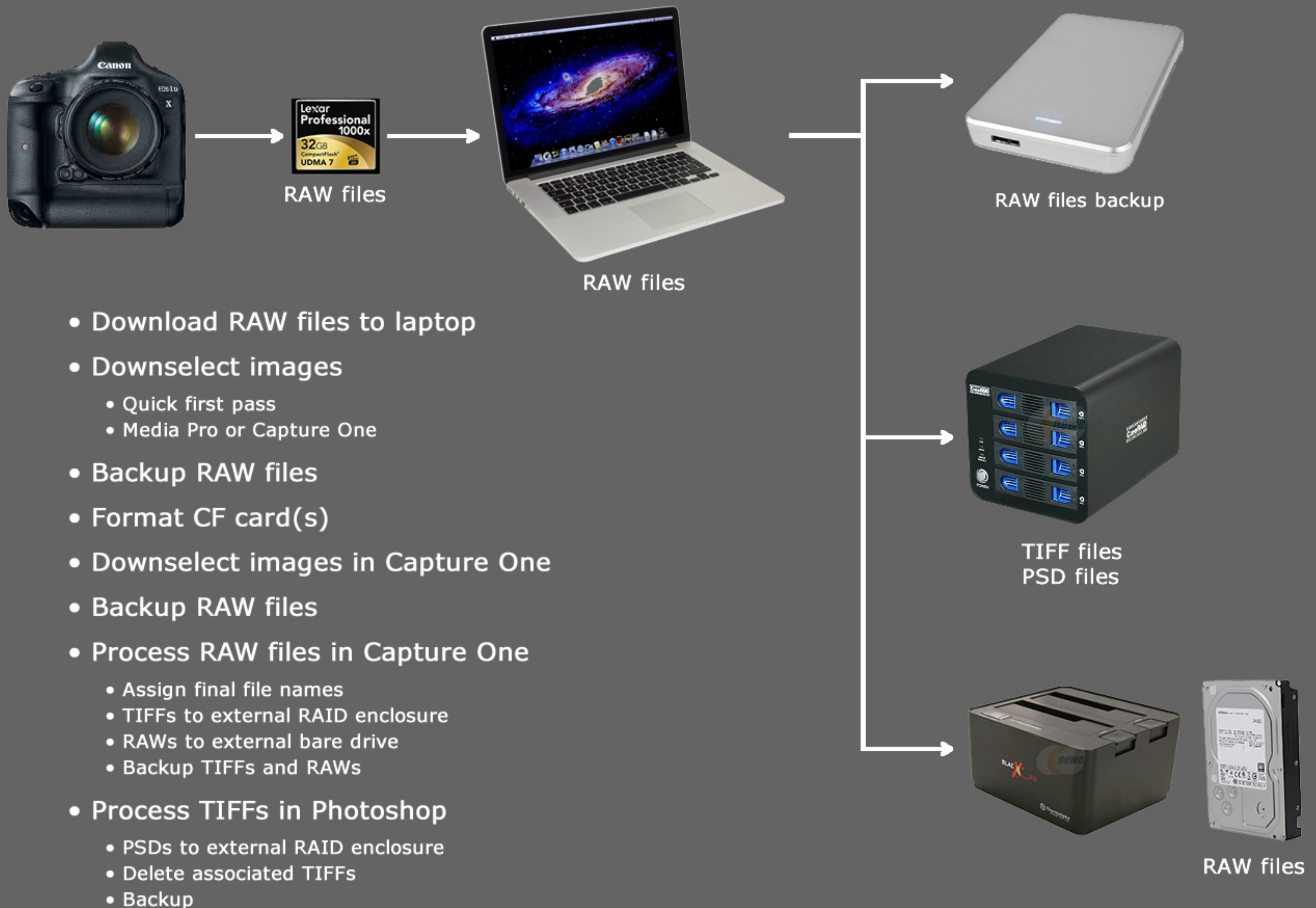
Year	Days Photographed	Images Captured	Images Kept (#)	Images Kept (%)
2011	176	94,749	3500	3.7
2012	157	41,697	1401	3.4
2013	187	117,609	3173	2.7
Ave	173	84,685	2691	3.3

## Daily Images Captured

Year	Max	Ave	Min
2011	1916	554	4
2012	1541	267	12
2013	3000	643	9
Ave	2152	488	8



# Workflow Overview



# Downselecting Images

## Media Pro

- Fast for a large number of images
- Operates on the embedded JPEG image
- I only delete for:
  - Poor composition (chopped off body part)
  - Obvious focus problem or blur
  - Eye closed or nictitating membrane

## Capture One

- Slower so use for a smaller number of images
- Operates on the RAW data
- Zoom into the pixel level to check critical sharpness
- Compare multiple zoomed images

# Processing Images

## Capture One – RAW Conversion

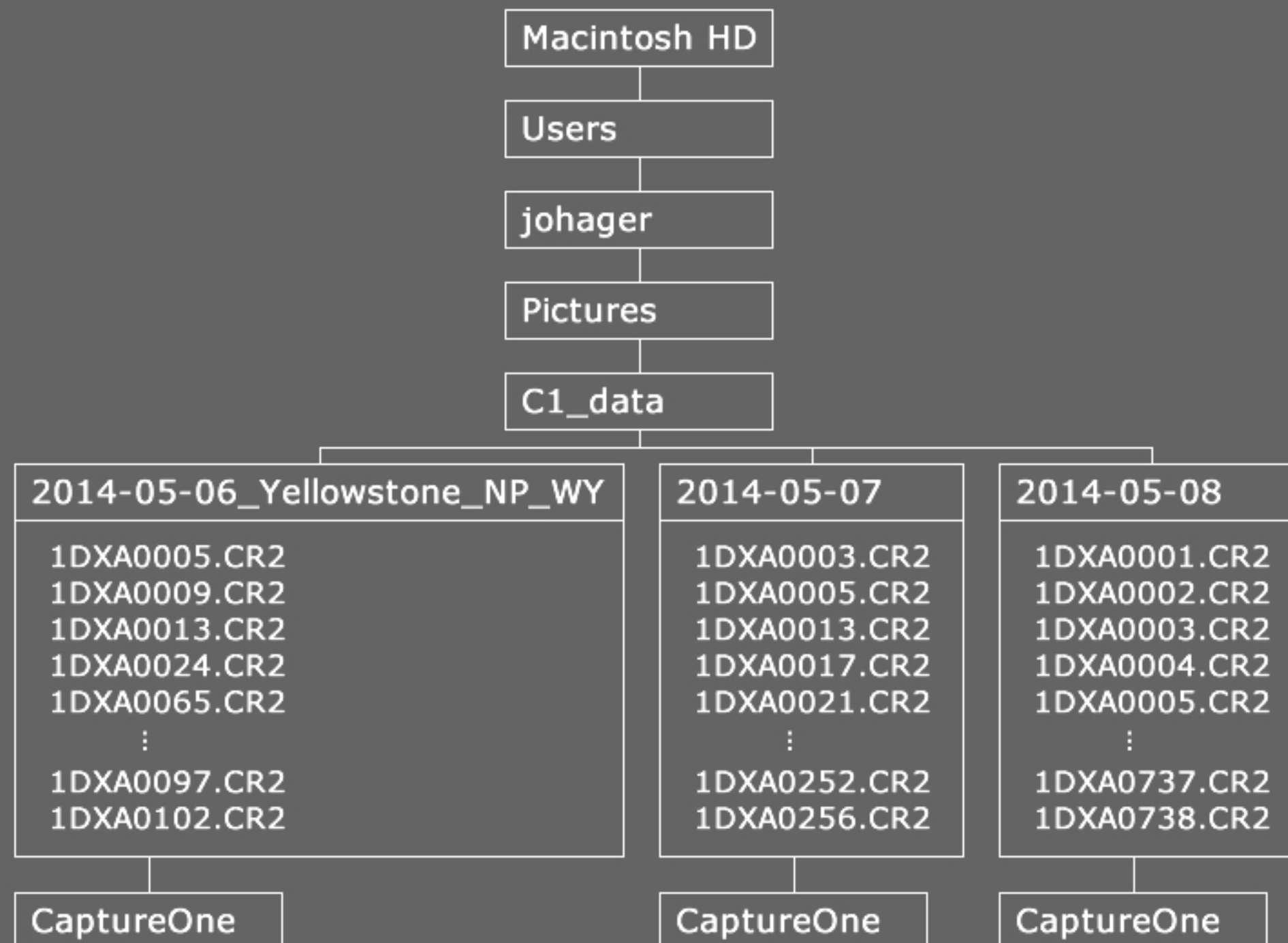
- White balance
- Exposure
- Saturation
- Highlight recovery (almost always)
- Shadow recovery (rarely)
- Contrast via histogram (almost always)

## Photoshop

- Combine various exposures (if necessary)
- Remove dust (always look)
- Digital Basics
  - Curves layer for Color Balance (rarely)
  - Curves layer for S-curve: Luminosity mode
  - Hue/Saturation layer for Saturation
  - Curves layer for Sudden-K: increase blacks similar to Velvia, Luminosity mode
  - Curves layer for Open Shadows: Screen mode, custom mask
  - Curves layer for Highlight Detail: Multiply mode, custom mask
  - Curves layer for Increase brightness and contrast: Luminosity mode
- Radial Gradient: very slight vignetting
- Local brightness adjustment: Curves layer, Luminosity mode, custom mask
- Silver Efex Pro layer in Luminosity mode
- Remove odd objects or man-made objects

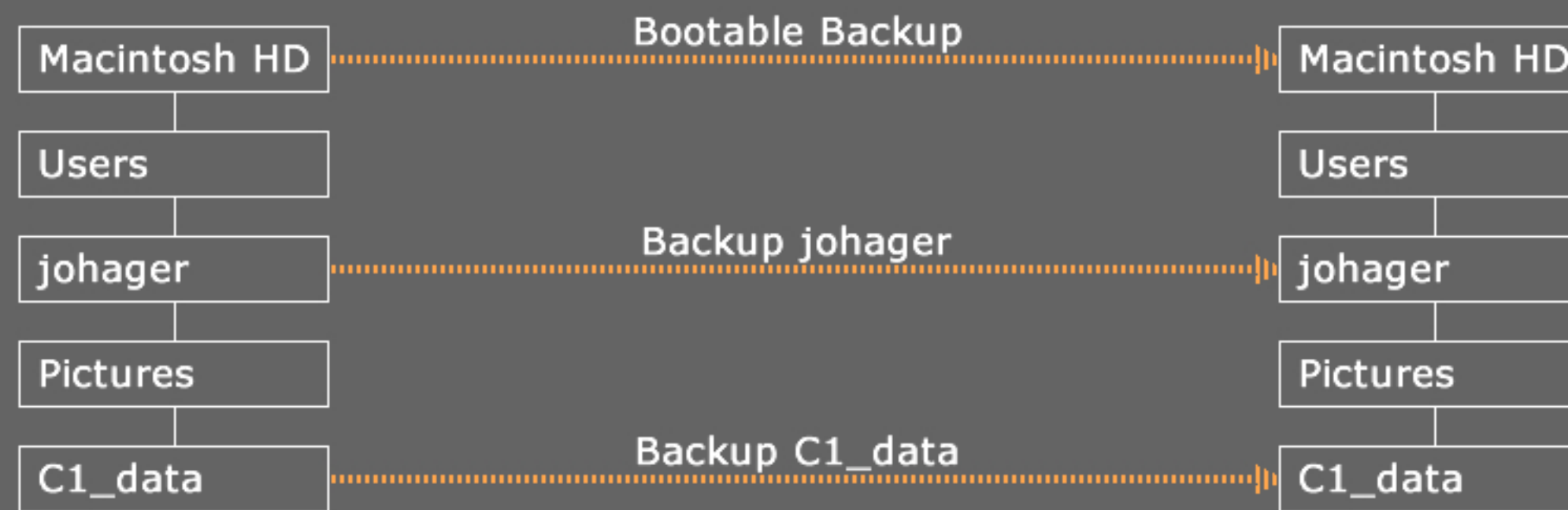
# File Naming And Storage

## Initial RAW File Storage



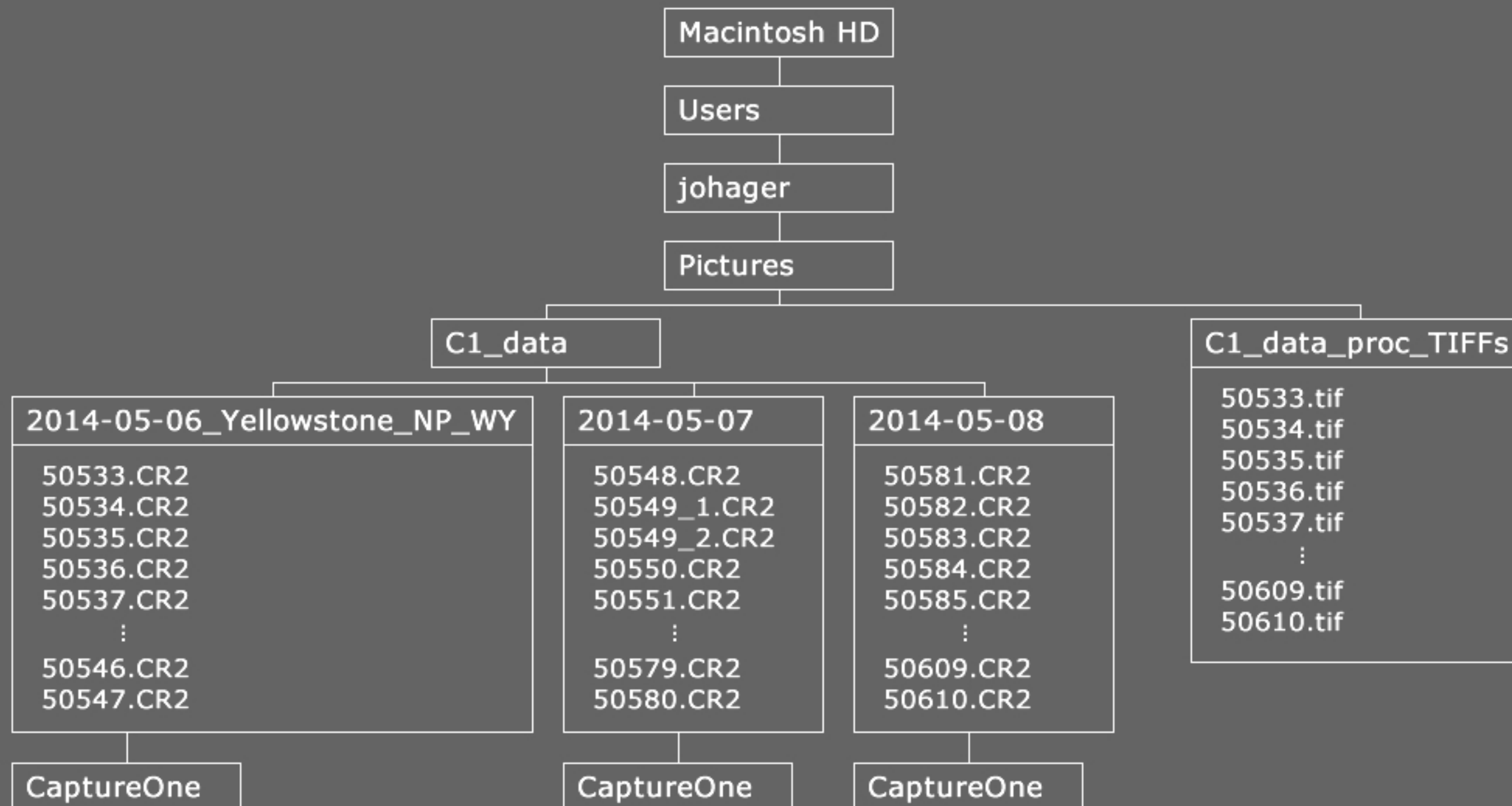
# File Naming And Storage

## Backing Up Laptop With Synchronize! Pro X



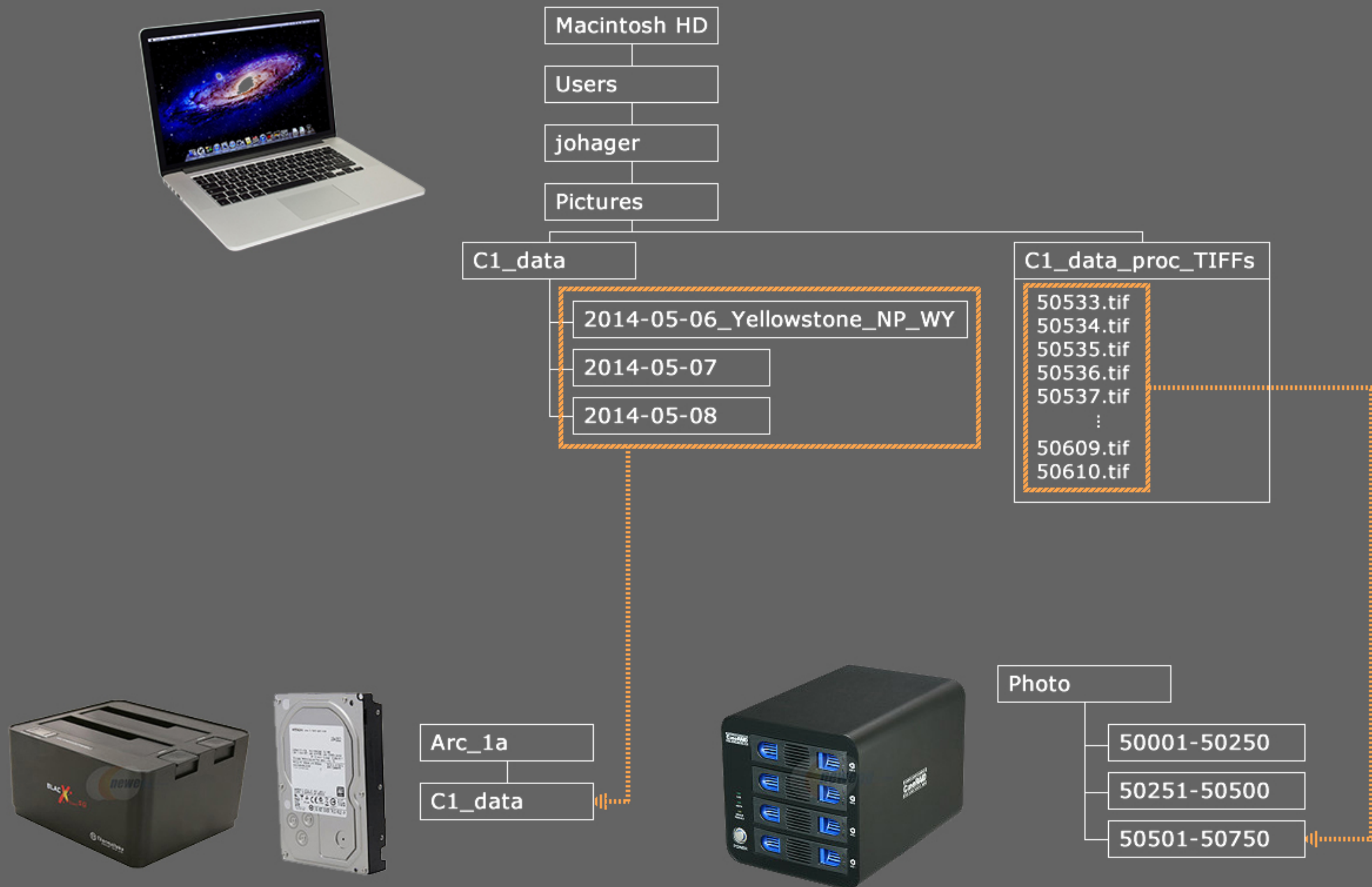
# File Naming And Storage

## Final RAW File Names And Capture One TIFF Output



# File Naming And Storage

## RAW Files And TIFFs To Permanent Storage



# File Naming And Storage

## Backing Up With Synchronize! Pro X



Macintosh HD



Arc\_1a



Photo



MBPa



In RV



Arc\_1b



Photo\_2b



MBPb

In Jeep or Storage

Arc\_1c

Photo\_2c

MBPc

In Storage or Jeep

Arc\_1d

Photo\_2d

# Bare Hard Drive Storage



Centurian C2000  
Anti Static Mailer



Ozark Trail 6-Can  
Expandable Soft-Sided Cooler

# File Naming For Processed Images

## Processed RAW files from Capture One

nnnnn.tif ..... Single capture  
nnnnn.tif, nnnnn 1.tif, ... ..... Single capture, multiple process  
nnnnn\_1.tif, nnnnn\_2.tif, ... ..... Multiple captures

## Final processed files from Photoshop

nnnnn\_work.psd ..... Fully-processed, full-frame  
nnnnn\_work\_crop.psd ..... 4x5 crop, full extent of shorter dimension  
nnnnn\_work\_crop2.psd ..... 4x5 crop, all sides shortened  
nnnnn\_work\_crop2b.psd ..... 4x5 crop, alternate, usually more aggressive  
nnnnn\_work\_trim46.psd ..... 4x6 crop, longest side greater than 5150 pixels  
nnnnn\_work\_crop46.psd ..... 4x6 crop, longest side less than 5150 pixels  
nnnnn\_work\_crop46b.psd ..... 4x6 crop, alternate, usually more aggressive  
nnnnn\_work\_rotcrop46.psd ..... Fully-processed, Rotated, "full-frame"  
nnnnn\_work2.psd ..... Fully-processed version 2, full-frame

# Running Capture One For Downselecting



# Running Capture One For RAW Processing



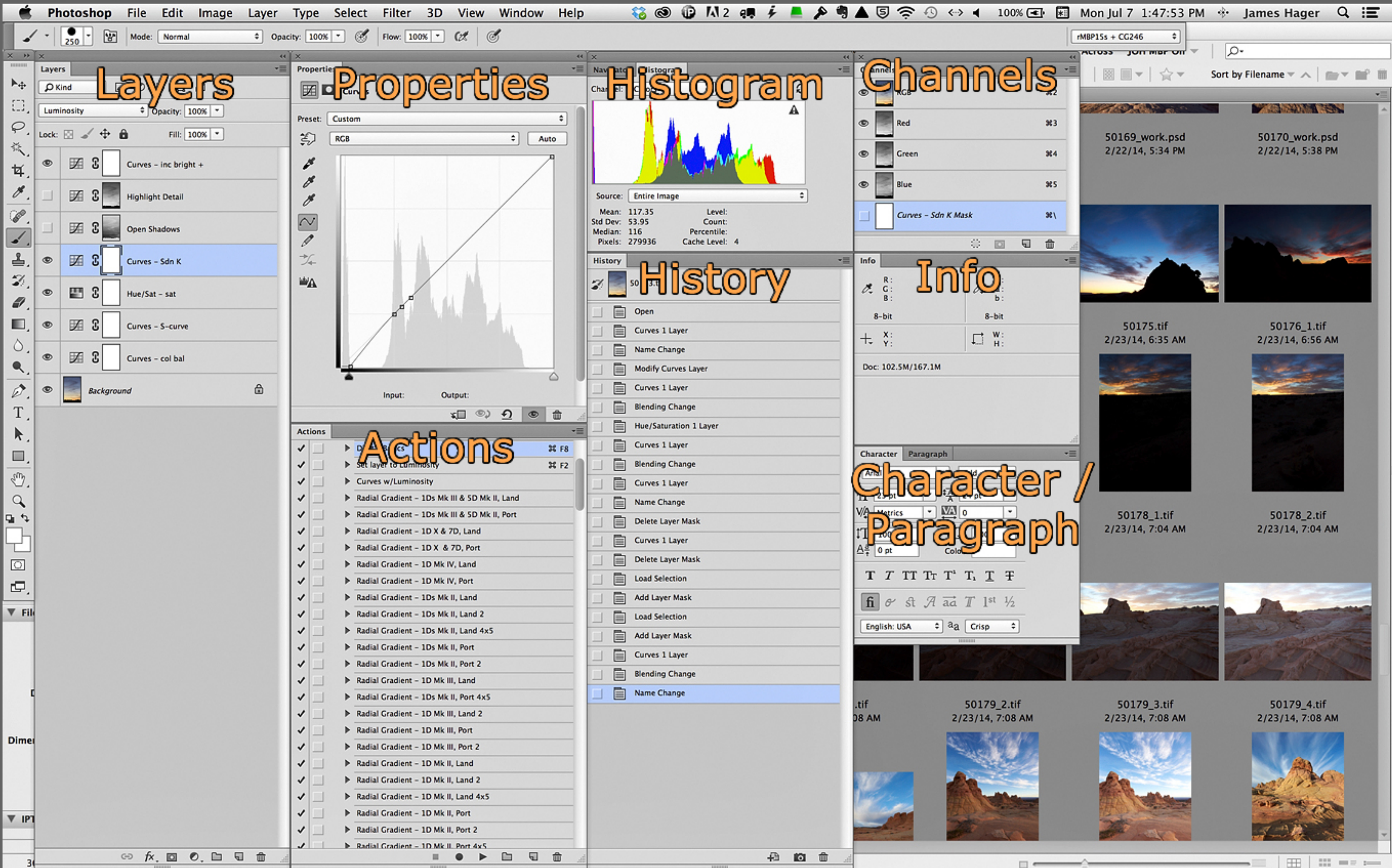
# Running Bridge



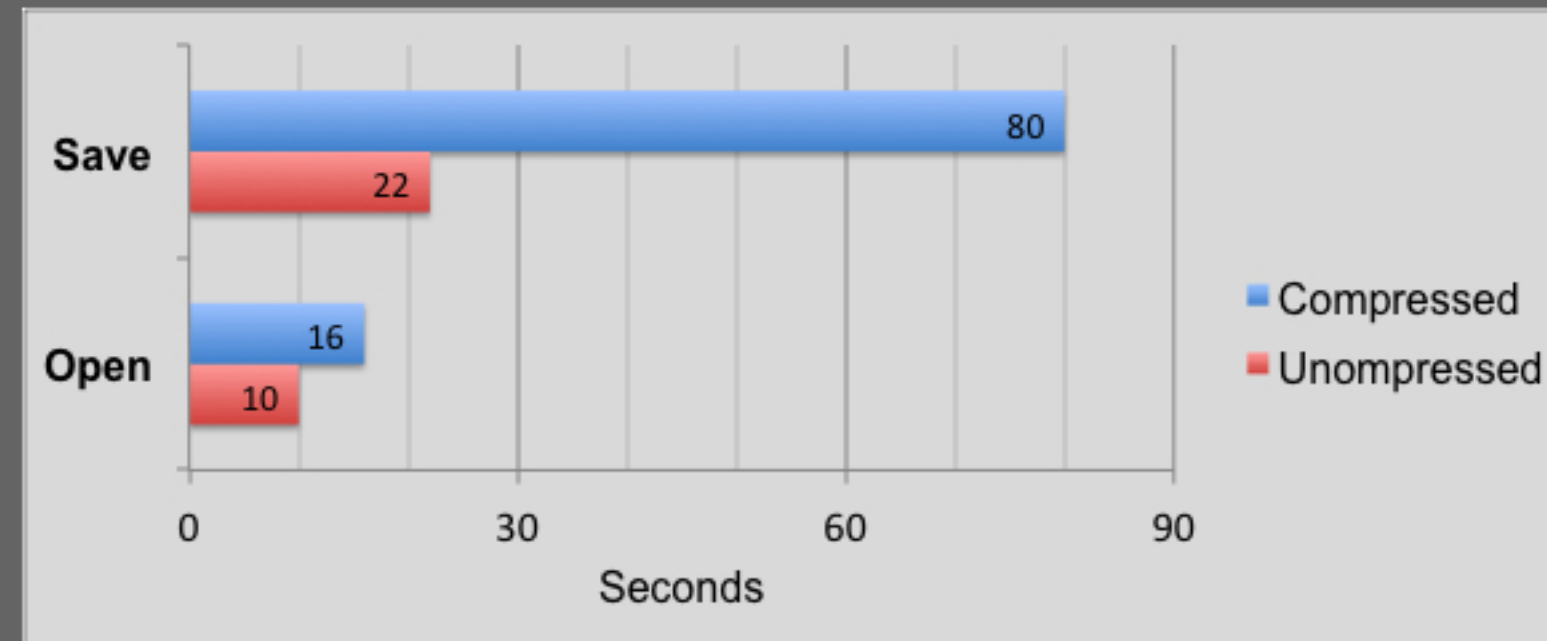
# Running Photoshop



# Photoshop Panels



# Photoshop File Compression



- MacBook Pro, mid 2010, 17-inch, 2.8 GHz Intel Core i7
- Internal 240GB OWC Mercury Electra 3G SSD
- Adobe Photoshop CS6
- 21MP file, 4 layers of image data, my regular adjustment layers including a Silver Efex Pro layer
  - 587.9 MB compressed
  - 1.66 GB uncompressed: 2.8 times bigger

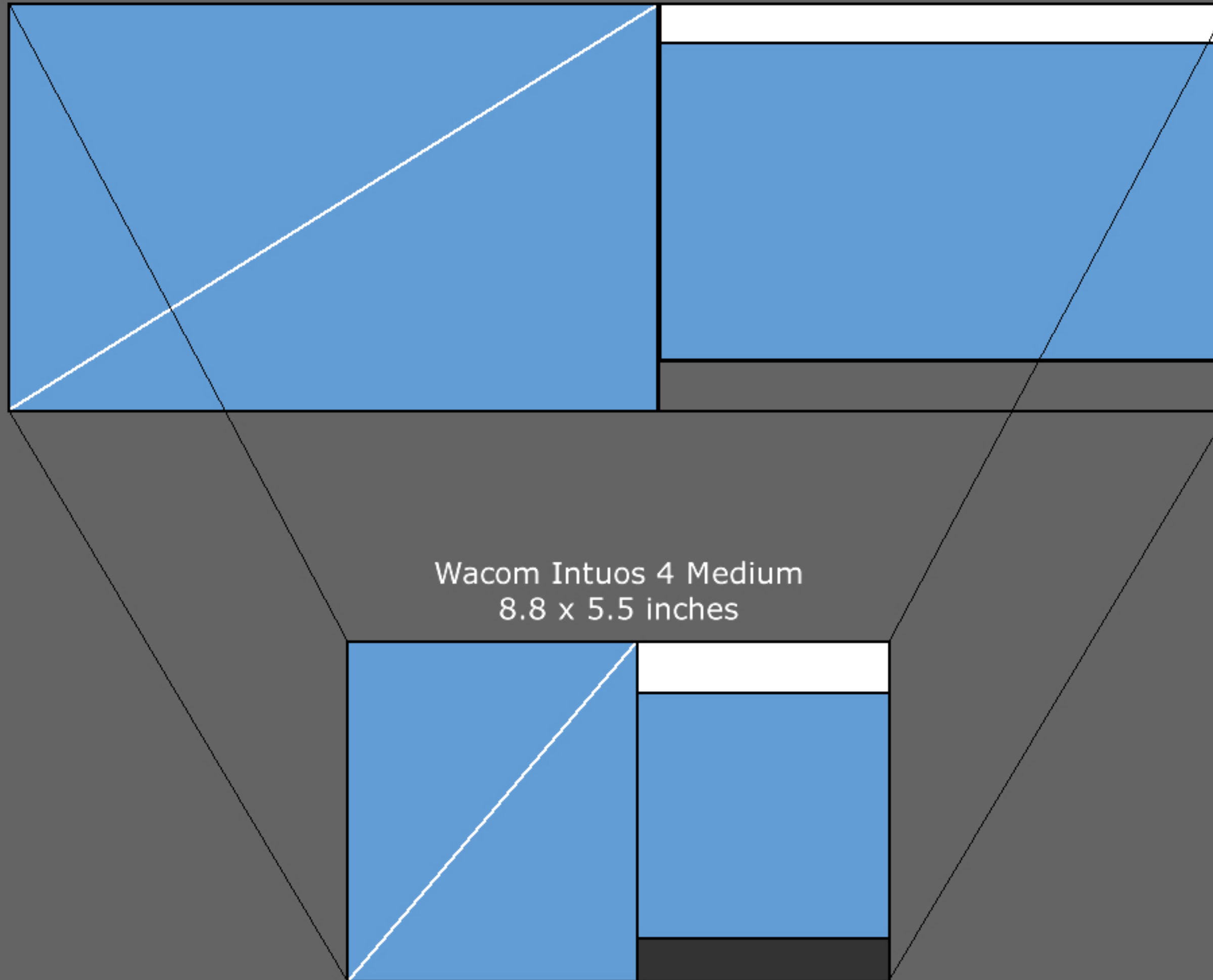
Turn off Compression which is on by default

- Preferences > File Handling, then check Disable Compression of PSD and PSB Files

# Wacom Tablet "Problem" When Using Two Displays

Eizo CG246  
3840 x 2400 pixels

15" Retina MacBook Pro  
(slightly scaled)  
3360 x 2100 pixels



Wacom Intuos 4 Medium  
8.8 x 5.5 inches

# Wacom Tablet Pros

- Button on stylus for "Undo"
- Scroll wheel for large brush size changes
- Pressure sensitivity for small brush size changes
- Started using keyboard shortcuts to select Photoshop tools
  - b: Brush
  - c: Crop
  - g: Gradient
  - v: Move

# Running Silver Efex Pro in Photoshop



# Running Lightroom



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# Workflow Recap

- Download RAW files to laptop
- Downselect images
  - Quick first pass
  - Media Pro or Capture One
- Backup RAW files
- Format CF card(s)
- Downselect images in Capture One
- Backup RAW files
- Process RAW files in Capture One
  - Assign final file names
  - TIFFs to external RAID enclosure
  - RAWs to external bare drive
  - Backup TIFFs and RAWs
- Process TIFFs in Photoshop
  - PSDs to external RAID enclosure
  - Delete associated TIFFs
  - Backup

# Things To Remember

- Backup often and store in several locations
- Downselect ruthlessly
- Turn off Compression in Photoshop
- Perform dust removal at 100% with an extreme S-curve
- Clone at 100% with extreme S-curve and check full-screen w/o S-curve
- Use a B&W layer in Luminosity mode to add punch
- Create realistic HDR images by processing a 32-bit image in Lightroom
- Use actions and keyboard shortcuts in Photoshop
- Use iKey scripts to automate tasks even further

# Hardware And Software

## Hardware

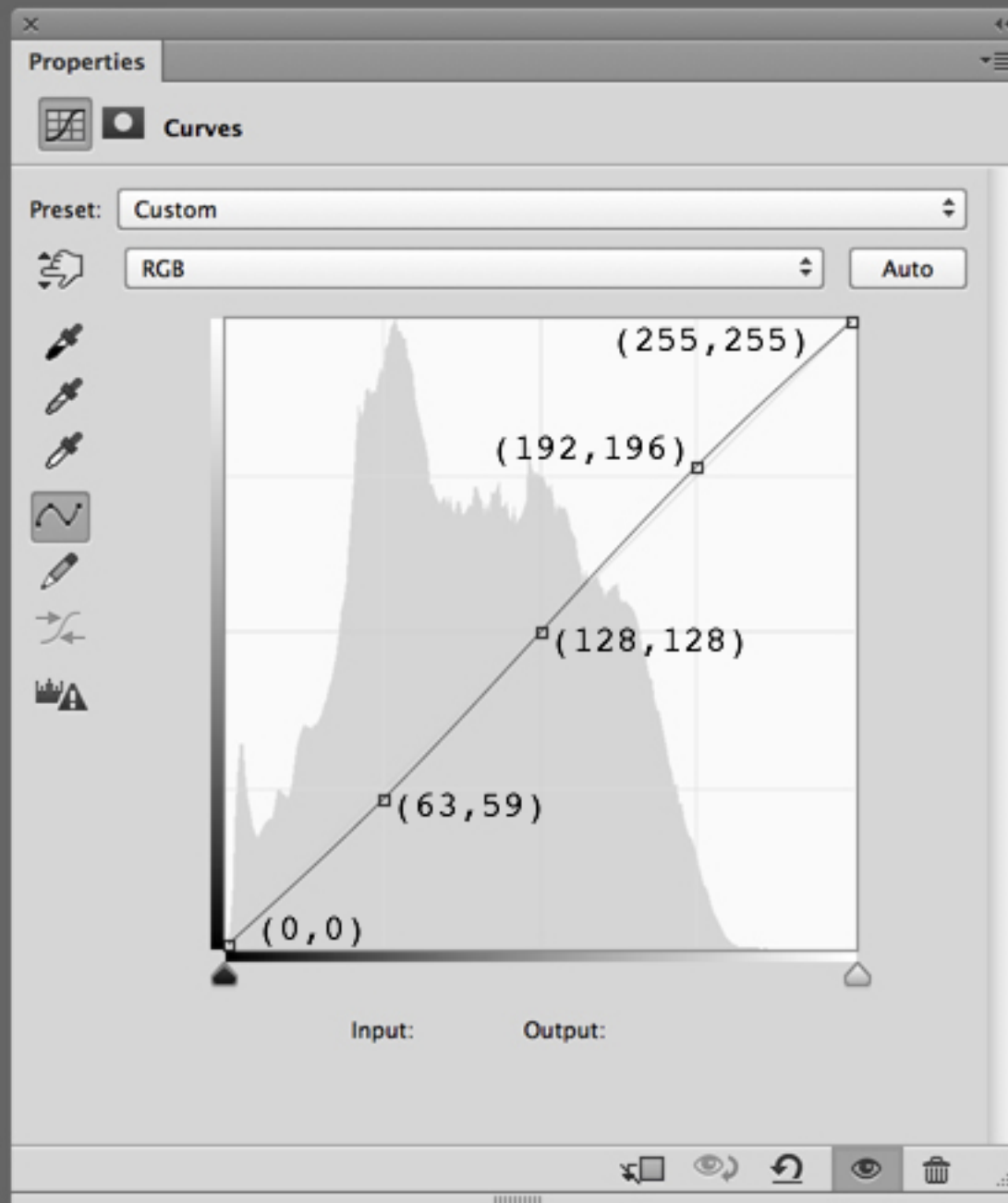
- Apple MacBook Pro, Retina, 15-inch, Late 2013, 2.6 GHz Intel Core i7, 16GB RAM, 1TB SSD
- Apple Extended Keyboard
- Apple Magic Mouse
- Eizo ColorEdge CG246
- CineRAID CR-H458 4-bay 3.5" hard drive enclosure, RAID(0) with 4x 1TB WD Red WD10EFRX 5400 rpm
- Thermaltake BlacX Duet ST0022U 2-bay 3.5" hard drive docking station
  - 1TB Hitachi 7K1000.B 0A38016 7200 rpm to backup MacBook Pro
  - 4TB HGST Deskstar 7K4000 0S03664 7200 rpm for Arc\_1 and Photo
- OWC Express 2.5" Portable USB 3.0 Enclosure with 1TB Hitachi GST Travelstar 0S03563 7200 rpm
- Wacom Intuos 4 tablet, medium
- Radtech ScreenSavrz
- Hoodman USB 3 CF card reader

## Software

- Adobe Photoshop CC (and CC 2014)
- Adobe Bridge CC
- Adobe Lightroom
- NIK (Google) Silver Efex Pro 2
- Phase One Capture One Pro
- Phase One Media Pro
- FileMaker FileMaker Pro
- Plum Amazing iKey
- Qdea Synchronize! Pro X
- Microsoft Excel

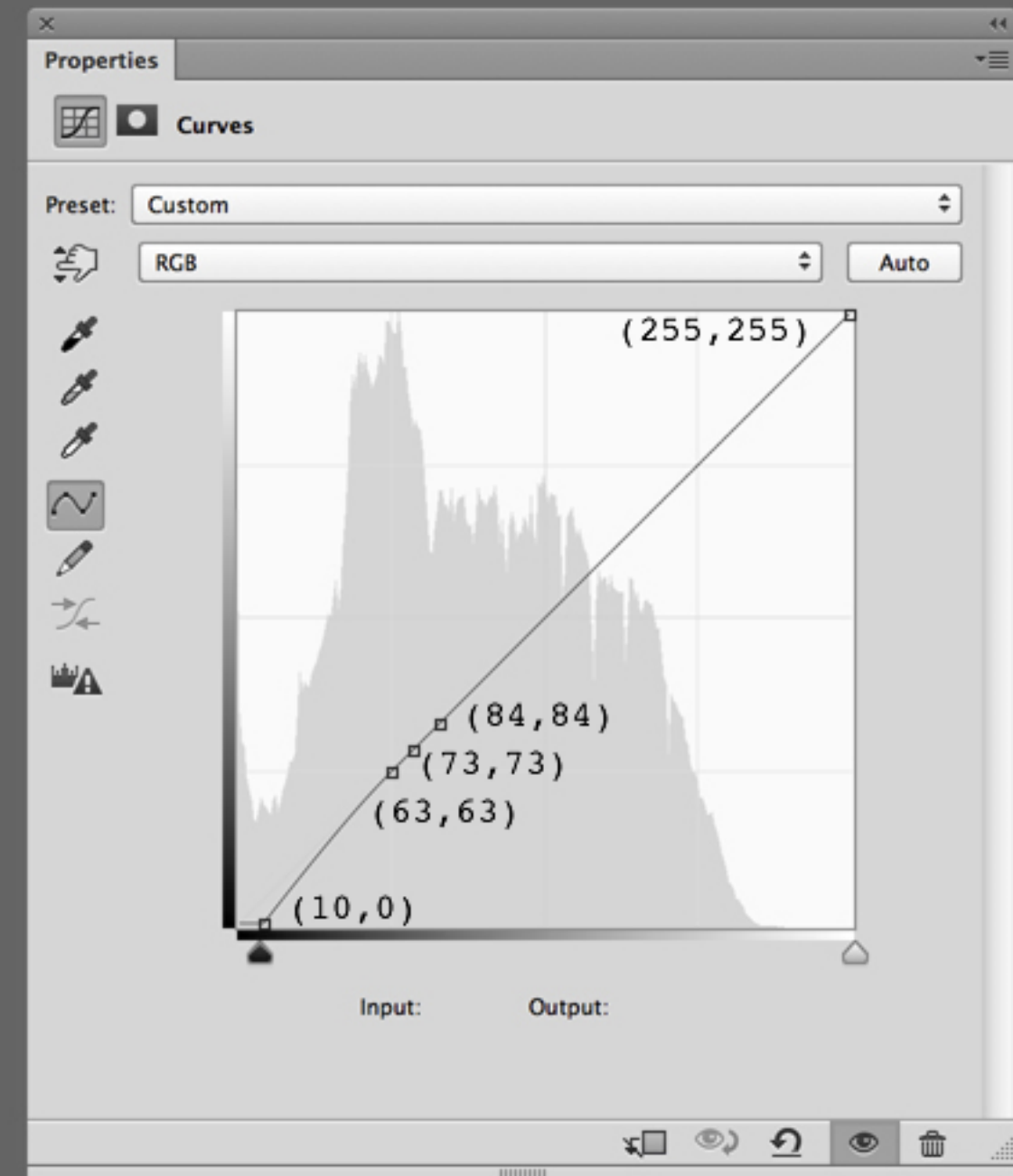
# Curve Layer Specifications

## S-Curve



- Luminosity mode
- No special mask

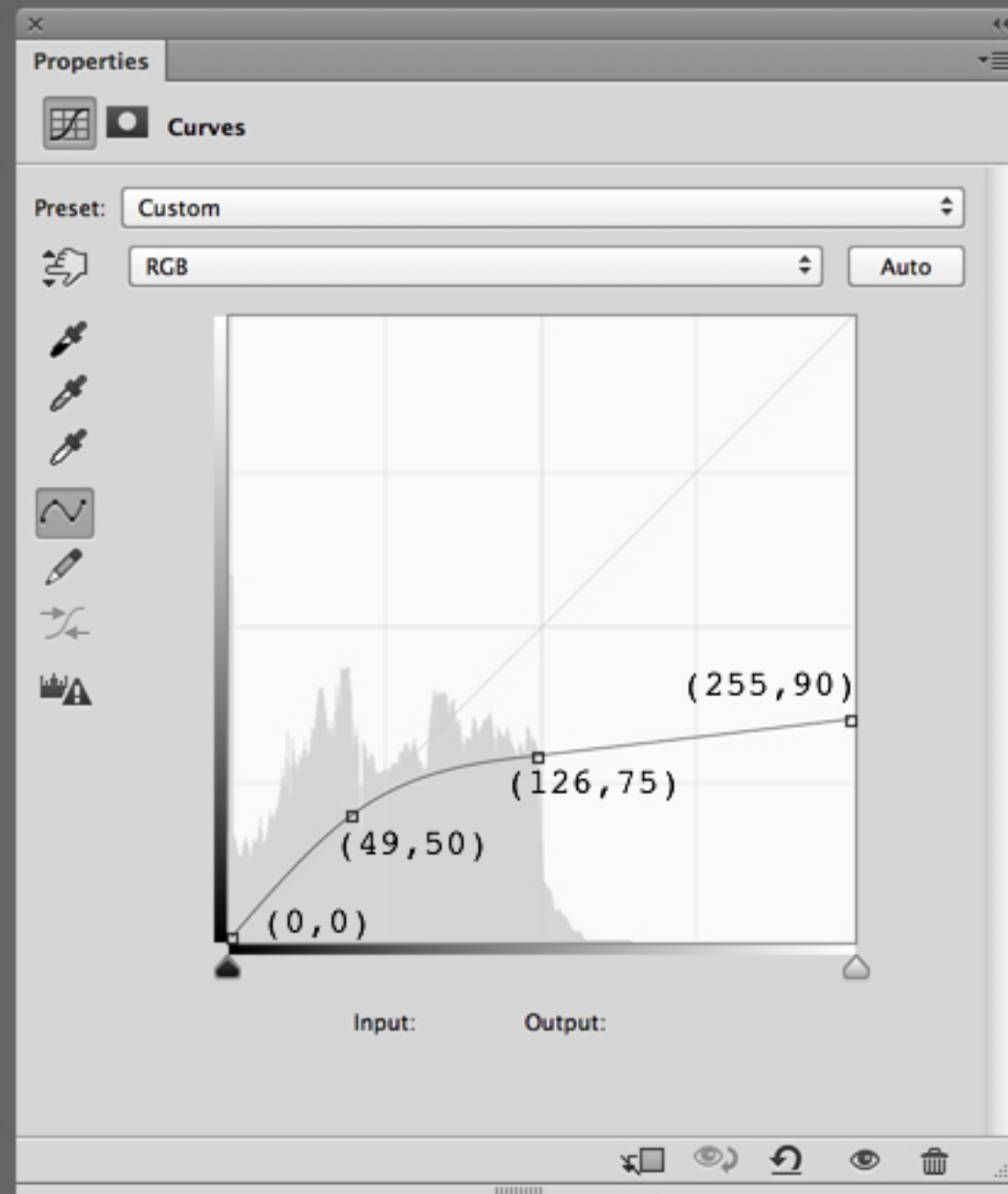
## Sudden-K



- Luminosity mode
- No special mask

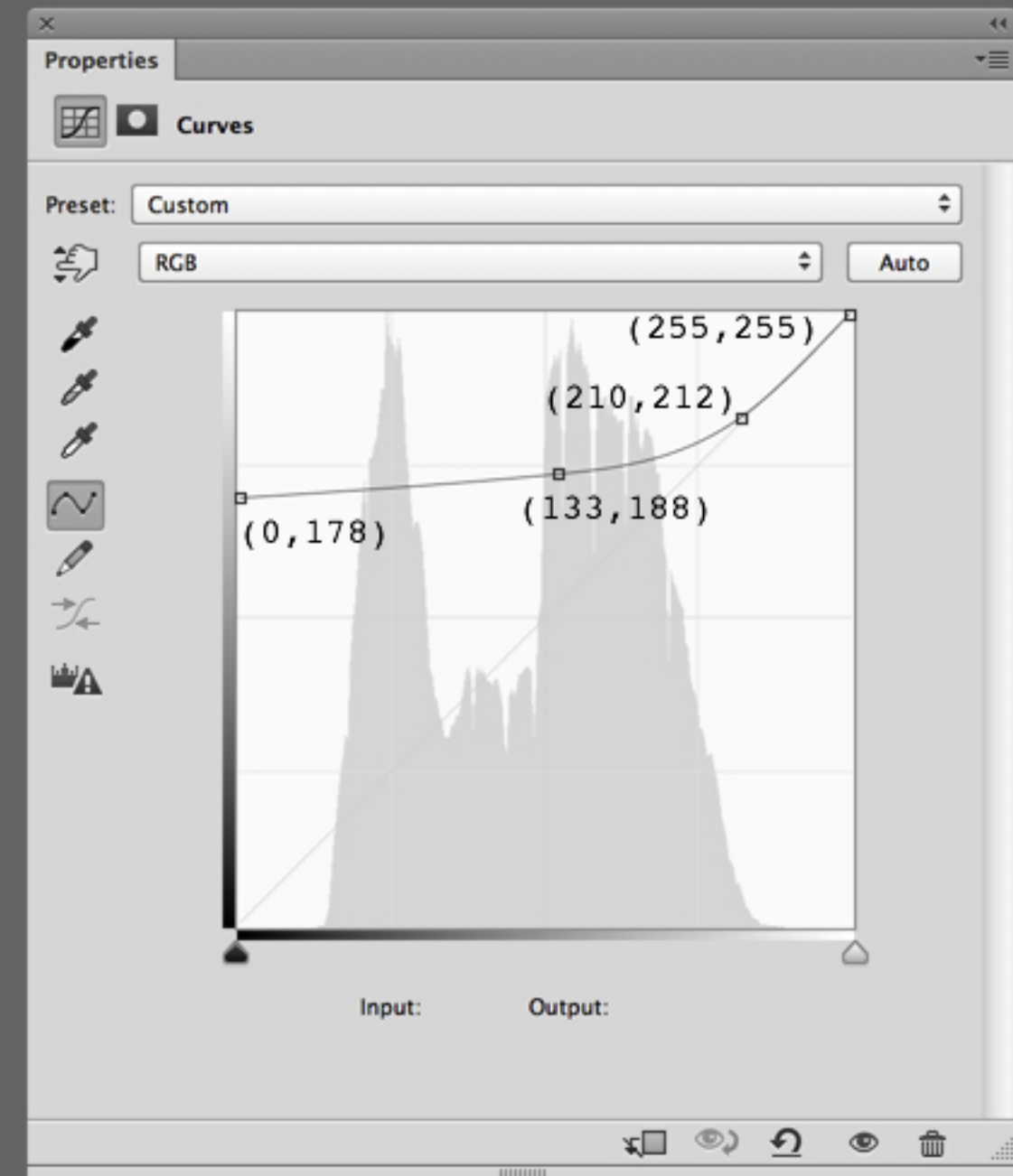
# Curve Layer Specifications

## Open Shadows



- Screen mode
- Custom mask
  - Initially Red channel inverse

## Highlight Detail



- Multiply mode
- Custom mask
  - Initially Red channel

# Lightroom HDR Technique

## When Lightroom Is Your Primary Software

- Set up Lightroom to do external editing in Photoshop using TIFF files
  - Preferences... > External Editing (tab)
- Import the bracketed photo series RAW files into Lightroom
- Select the bracketed photo series RAW files then select
  - Photo > Edit in > Merge to HDR Pro in Photoshop...
- Wait for the images to load into Photoshop
- Click "Remove Ghosts" box, set the mode to "32 Bit", then click "Go"
- Wait for Photoshop to create the 32-bit file
- Select File > Save and the file will automatically be put into the Lightroom catalog
- In Lightroom, select the 32-bit file then go to the Develop module
- Use the Exposure, Highlights, and Shadows sliders to develop the file
- Be amazed by the natural-looking results

# Lightroom HDR Technique

## When Photoshop Is Your Primary Software

- Set up Lightroom to do external editing in Photoshop using TIFF files
  - Preferences... > External Editing (tab)
- In Bridge, select the bracketed photo series RAW files or already-processed TIFF files, then select
  - Tools > Photoshop > Merge to HDR Pro...
- Wait for the images to load into Photoshop
- Click "Remove Ghosts" box, set the mode to "32 Bit", then click "Go"
- Wait for Photoshop to create the 32-bit file
- Select File > Save As... and save a 32-bit TIFF file
- Import the 32-bit file into Lightroom
- Select the 32-bit file then go to the Develop module
- Use the Exposure, Highlights, and Shadows sliders to develop the file
- Be amazed by the natural-looking results
- Export the image to Photoshop by selecting
  - Photo > Edit in > Edit in Photoshop CC...