

Photoshop (& Elements)  
Camera Raw

# RAW files

- A raw file is a data file containing every piece of information captured by the exposure in a byte form.
- All major producers have their own raw format
- Photoshop and other editors can read the raw files and translate them into images
- Until they are processed they look very flat
- RAW files are 'non lossy'
- Most 'serious user' cameras allow the user to shoot in RAW & JPG at the same time.

# RAW : JPG

- RAW

- Highest quality available
- Very manipulable in editor
  - Able to work easily on different characteristics of shot. e.g. Highlights
- Non destructive file info
  - Changes are stored in a sub file or a file unique to the editor e.g.PSD file
- Large files
  - Will fill the buffer memory quickly if shooting in continuous shutter mode

- JPG

- Universal format
- Lossy format
  - Gets rid of redundant pixels
  - Reduces image quality
  - Fine for most images up to A4 if maximum pixel quality is used
  - Low resolution is great for web based images, allows rapid access
- Great for most people but not for serious photographers
- Allows lots more images in camera buffer when shooting continuous shutter mode

JPG image  
straight from  
camera

Some sparkle  
added by the  
JPG algorithm



# RAW

Un-processed

Flat &  
uninteresting

All the detail is  
there



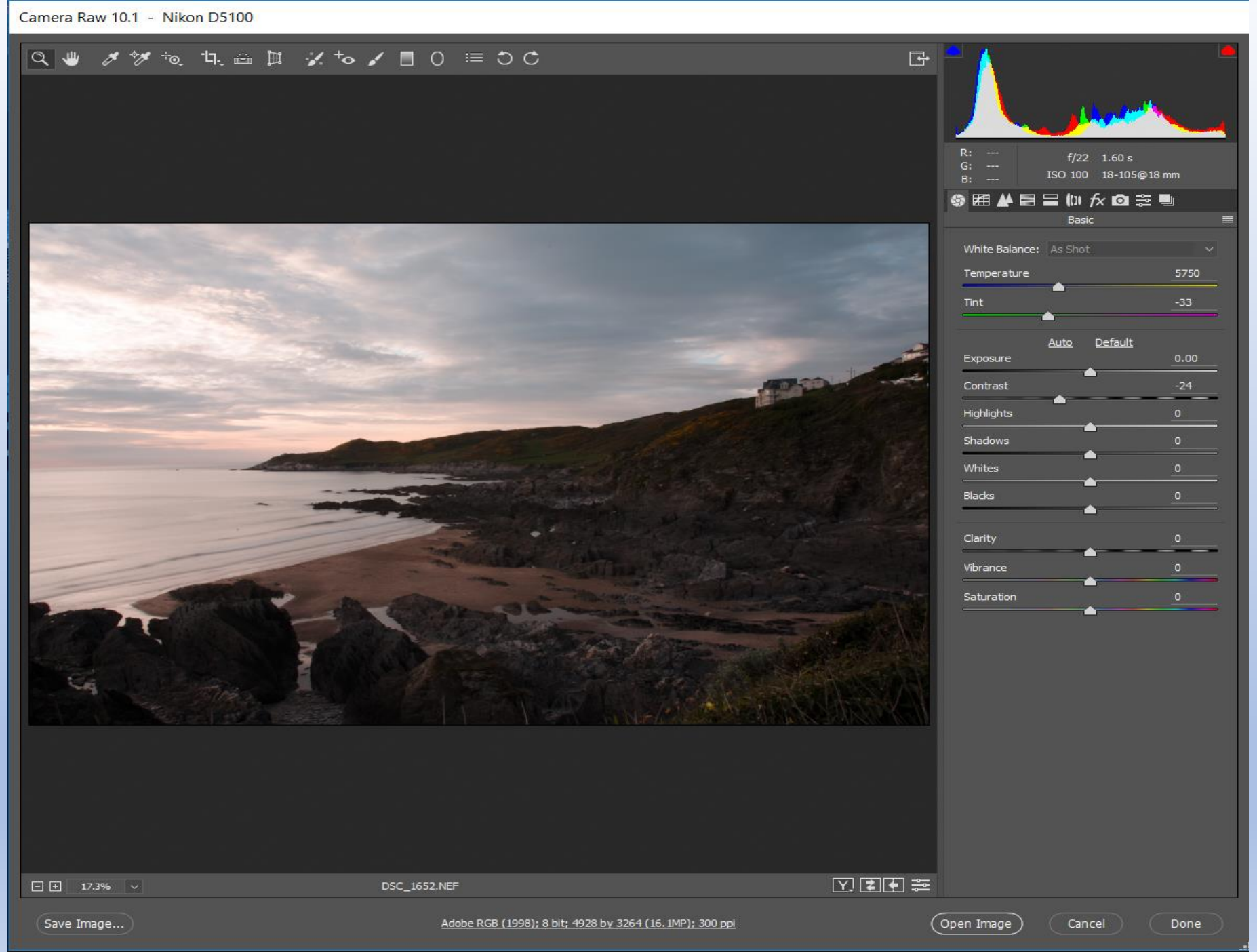
TIF  
(Tagged  
Image  
File)

RAW file  
processed  
in Camera  
Raw

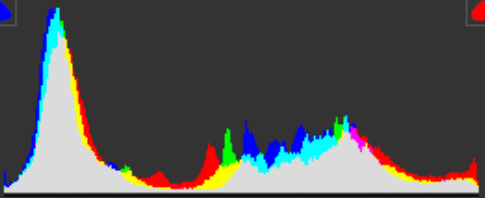


# Camera Raw

- Opens RAW file from flat data
- Allows in depth manipulation of parts of image.



### Basic



R: --- f/22 1.60 s  
G: --- ISO 100 18-105@18 mm  
B: ---

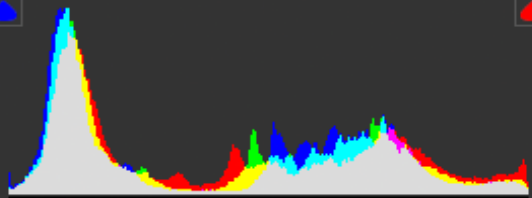
Basic

White Balance: As Shot

Temperature 5750  
Tint -33

Auto Default  
Exposure 0.00  
Contrast -24  
Highlights 0  
Shadows 0  
Whites 0  
Blacks 0  
Clarity 0  
Vibrance 0  
Saturation 0

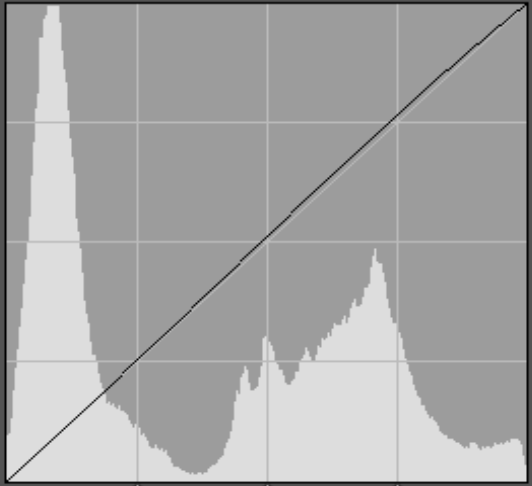
### Tone Curve



R: --- f/22 1.60 s  
G: --- ISO 100 18-105@18 mm  
B: ---

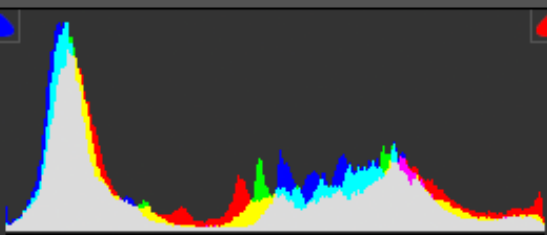
Tone Curve

Parametric Point



Highlights 0  
Lights +5  
Darks 0  
Shadows 0

### Sharpening



R: --- f/22 1.60 s  
G: --- ISO 100 18-105@18 mm  
B: ---

Detail

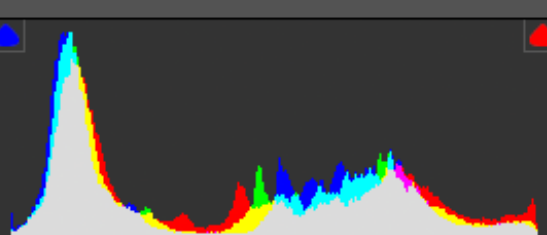
Sharpening

Amount 25  
Radius 1.0  
Detail 25  
Masking 0

Noise Reduction

Luminance 0  
Luminance Detail  
Luminance Contrast  
Color 25  
Color Detail 50  
Color Smoothness 50

### HSL/Grayscale



R: --- f/22 1.60 s  
G: --- ISO 100 18-105@18 mm  
B: ---

HSL / Grayscale

Convert to Grayscale

Hue Saturation Luminance

Default

Reds 0  
Oranges 0  
Yellows 0  
Greens 0  
Aquas 0  
Blues 0  
Purples 0  
Magentas 0



## Split Toning

R: --- f/22 1.60 s  
G: --- ISO 100 18-105@18 mm  
B: ---

Split Toning

Highlights

Hue 0  
Saturation 0

Balance 0

Shadows

Hue 0  
Saturation 0

## Lens Correction

R: --- f/22 1.60 s  
G: --- ISO 100 18-105@18 mm  
B: ---

Lens Corrections

Profile Manual

Remove Chromatic Aberration  
 Enable Profile Corrections

Setup: Default

Lens Profile

Make: Nikon  
Model: Nikon AF-S DX NIKKOR 18-10...  
Profile: Adobe (Nikon AF-S DX NIKKO...)

Correction Amount

Distortion 100  
Vignetting 100

## Effects

R: --- f/22 1.60 s  
G: --- ISO 100 18-105@18 mm  
B: ---

Effects

Dehaze

Amount 0

Grain

Amount 0  
Size  
Roughness

Post Crop Vignetting

Style:  
Amount 0  
Midpoint  
Roundness  
Feather  
Highlights

## Camera Calibration (Don't Ask)

R: --- f/22 1.60 s  
G: --- ISO 100 18-105@18 mm  
B: ---

Camera Calibration

Process: Version 4 (Current)

Camera Profile

Name: Adobe Standard

Shadows

Tint 0

Red Primary

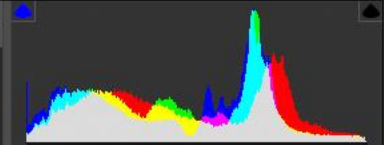
Hue 0  
Saturation 0

Green Primary

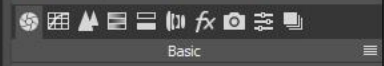
Hue 0  
Saturation 0

Blue Primary

Hue 0  
Saturation 0



R: --- f/22 1.60 s  
G: --- ISO 100 18-105@18 mm  
B: ---



Basic

White Balance: As Shot

Temperature 5750

Tint -33

Auto Default

Exposure +1.35

Contrast +22

Highlights -75

Shadows +34

Whites -100

Blacks -11

Clarity +13

Vibrance +20

Saturation +4

25%

Nikon D5100 - DSC\_1652.NEF



Save Image...

Adobe RGB (1998); 8 bit; 4928 by 3264 (16.1MP); 300 ppi

Open Image Cancel Done



Flat Image

Processed image



JPG  
untouched

Back to Photoshop – Save as PSD - Further adjustment – Size image and use 300dpi - Save as TIF (For highest quality)

