

Note: The following presentation demonstrates how to use a free program, Fusion-HDR, that is no longer available.

Here is a list of five free alternative HDR programs that are still available.

easyHDR

<https://www.easyhdr.com/>

Luminance HDR

<https://sourceforge.net/projects/qtpfsgui/>

FDRTools

http://www.fdrtools.com/downloads_e.php

Picturenaut 3

<http://www.hdrlabs.com/picturenaut/>

Photomatix

<https://www.hdrsoft.com/>

fusion-hdr.com

High-Dynamic-Range (HDR) is a technique used in photography to reproduce a greater dynamic range of luminosity than is possible with standard digital photographic techniques. The aim is to present a similar range of luminance to that of the human eye. Our eyes have a wider range of luminance than digital camera sensors. Non-HDR cameras take photographs with a limited exposure range, referred to as LDR, resulting in the loss of detail in bright or dark areas.

HDR photographs are generally achieved by capturing multiple standard-exposure images, using exposure bracketing, and then later merging them into a single HDR image using photo software.

However even single photos will gain detail by the proper use of HDR software.

In order to see what HDR can do, here are several examples, first the original photo followed by the same photo that has been processed with free fusion-hdr software.

**ORIGINAL
PHOTO**



**PROCESSED
WITH
FUSION HDR**



ORIGINAL
PHOTO



PROCESSED WITH FUSION HDR



**ORIGINAL
PHOTO**



**PROCESSED WITH
FUSION HDR**



ORIGINAL
PHOTO



PROCESSED WITH
FUSION HDR





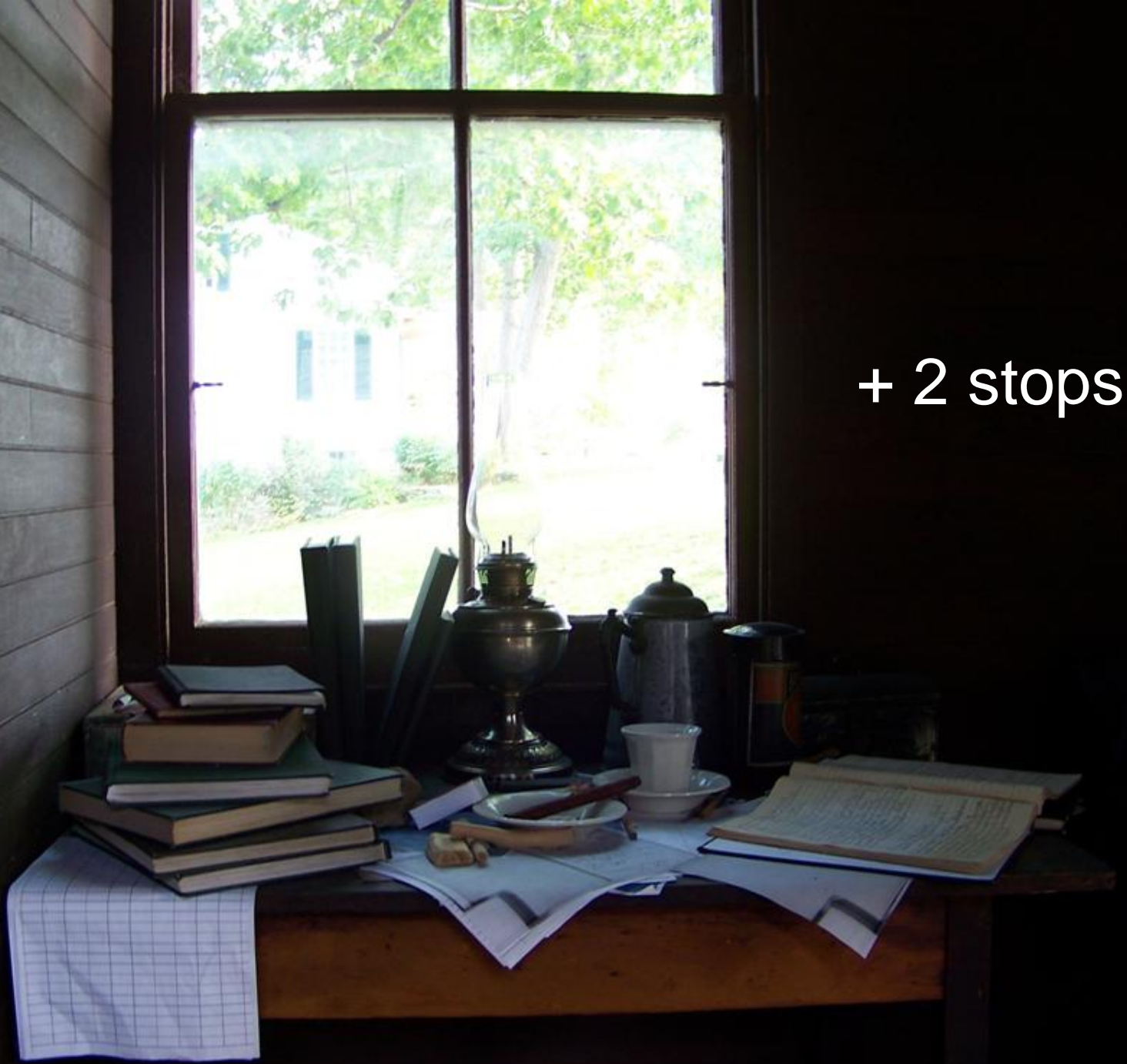
3 photo
bracketing

- 2 stops

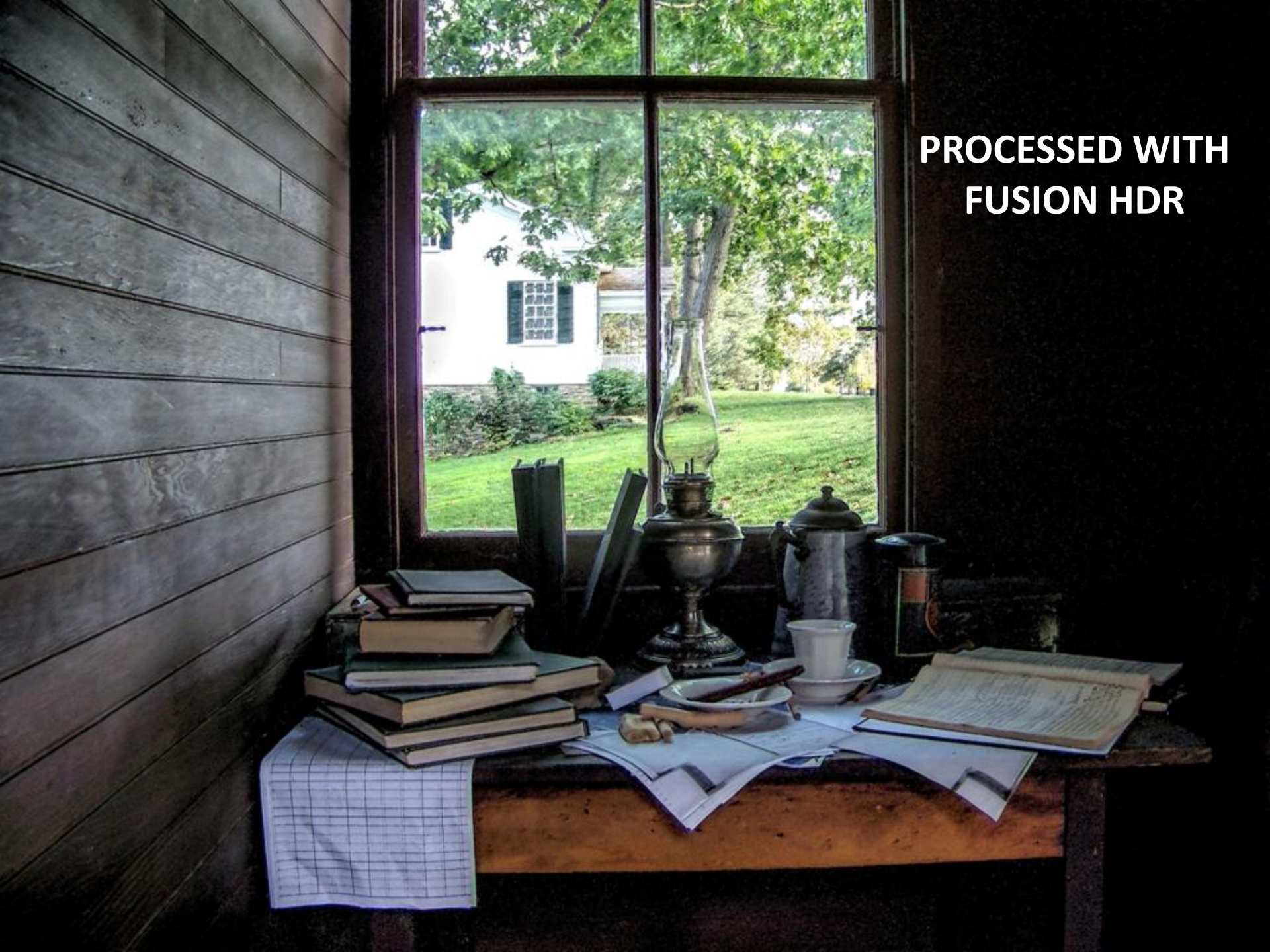


0 stops
(Normal Exposure)

+ 2 stops



**PROCESSED WITH
FUSION HDR**



3 photo
bracketing

- 2 stops



0 stops
(Normal Exposure)



+ 2 stops



**PROCESSED WITH
FUSION HDR**



fusion-hdr.com

There are several HDR software programs on the market. Fusion-hdr offers a totally free version and a \$25 version with a few more perks and is available for Windows computers only. I would recommend starting with the free version and see how you like it. I won't be giving detailed instructions on how to use it, but will give a few basics to get you started.

The next screen shows you what the download page looks like at <http://fusion-hdr.com/>



Fusion

The program allows to enhance the details and increase local contrast in digital photos. The best result can be achieved when you process multiple images of the same scene taken at different exposures. The program also allows processing of single photos in RAW, TIFF or JPEG formats. Merging of exposures and processing can be done by one of the operators: HDR or Summation. Batch processing allows to process series of photos in an automatic mode by applying the same parameters to each merge.

Key features: Automatic alignment of photos; Summation operator (two exposure fusion modes); HDR operator (five tonemapping modes); Batch processing; Postprocessing tools (horizon level, crop, resize).



Exposure Fusion, mode 1; 9 exposures; tripod



Download

Version: Fusion 2.9.3 (Price: \$25.00)

Date of updating: November 27, 2016

What's new in version 2.9.3:

- improved HDR Tone Mapping, mode 2

OS: Windows

Setup package: [efsetup.zip](#) (8,26MB)

Free version: Fusion F.3

Date of updating: January 7, 2016

Fusion F.3 is restricted version produced from Fusion 2.8.8

Restriction list: only one processing mode in summation operator; only one tone mapping mode in HDR operator; there is no postprocessing tools; there is not batch processing operator; save result image only in jpeg format; there is not 64-bit version, only 32-bit.

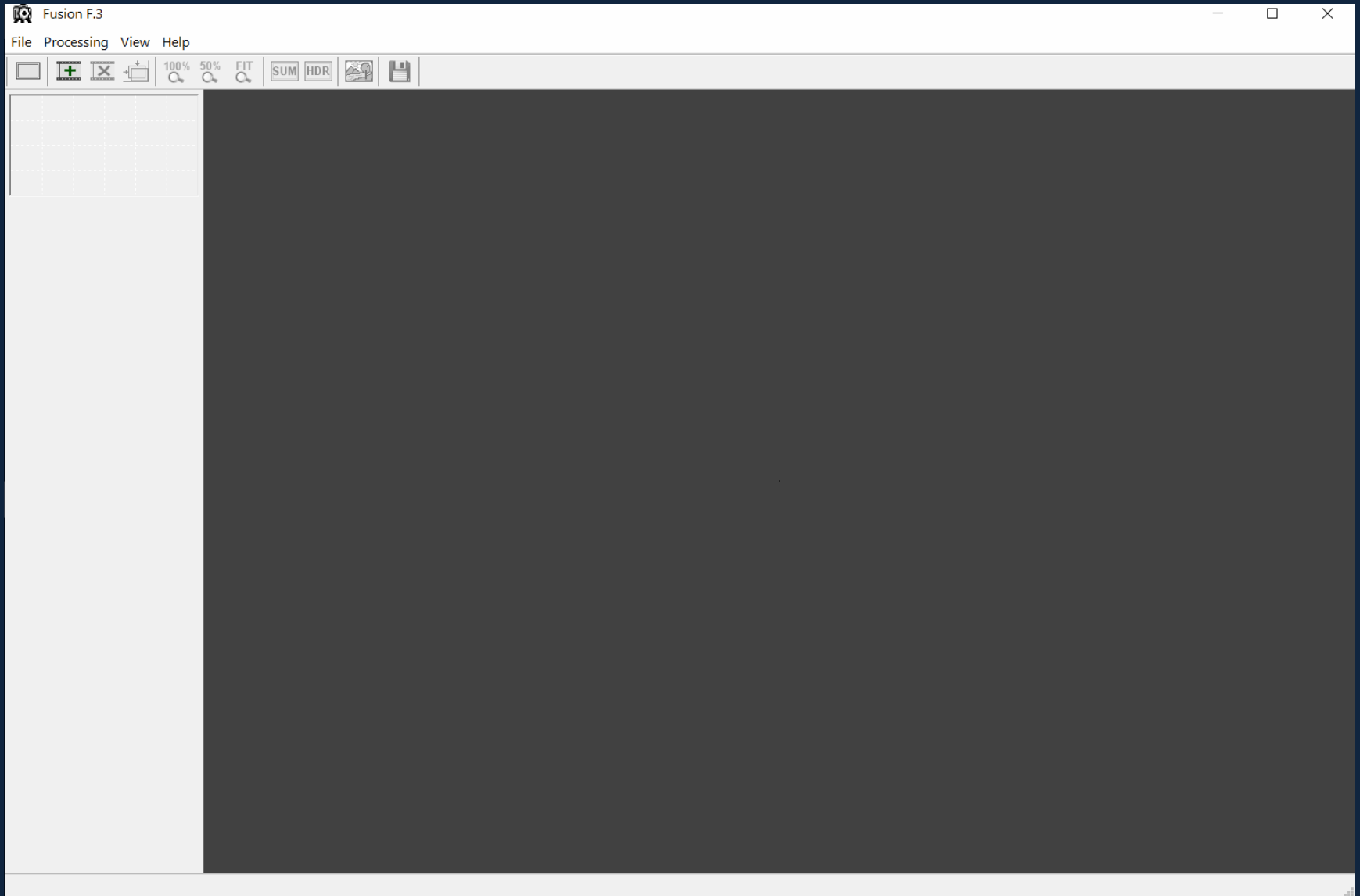
OS: Windows

Portable package: [fusion_free.zip](#) (8,00MB)

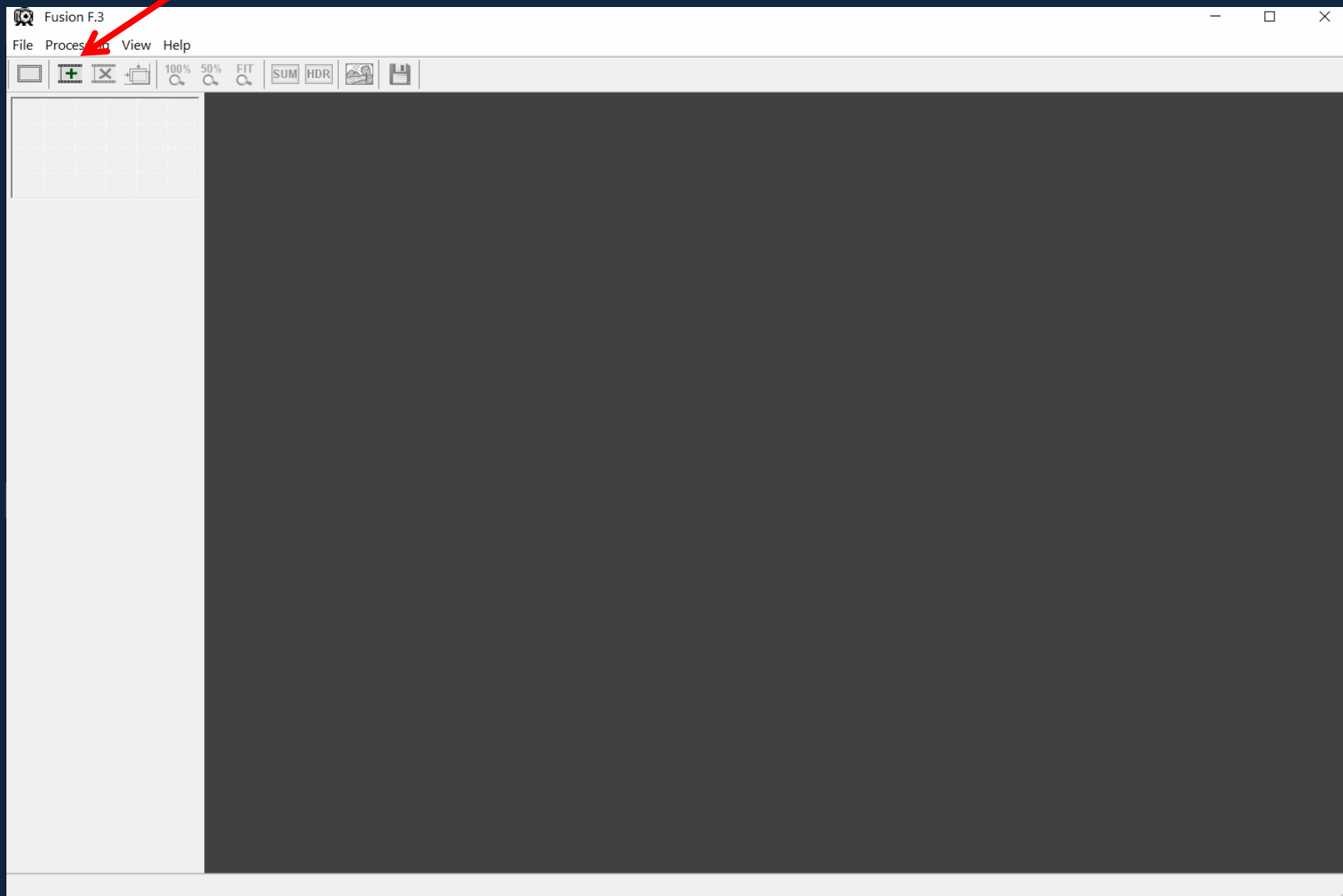
**Download
Fusion 2.9.3**

**Fusion F.3
Free**

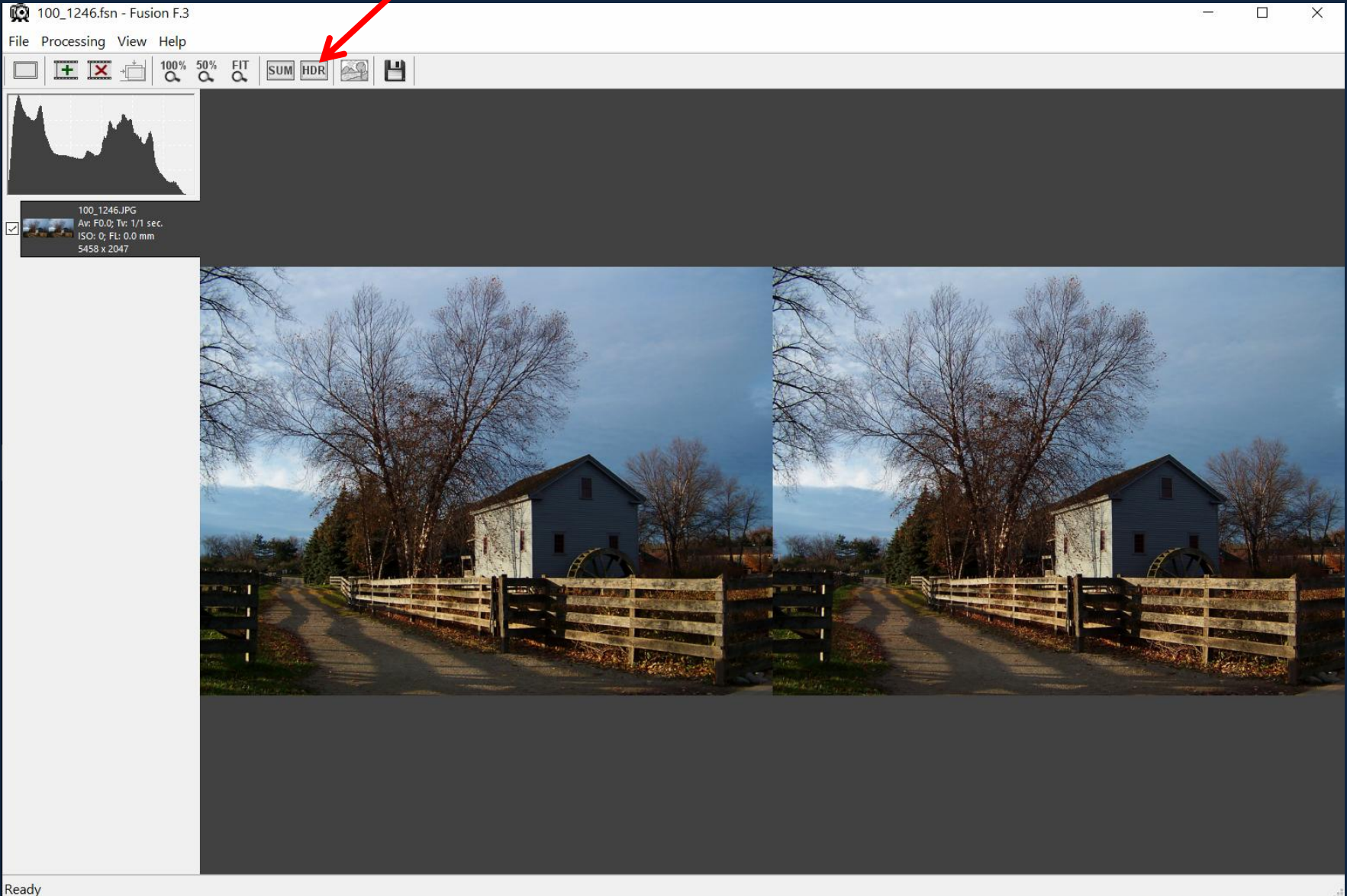
After you download and click on the Fusion icon, this is what the opening screen looks like.



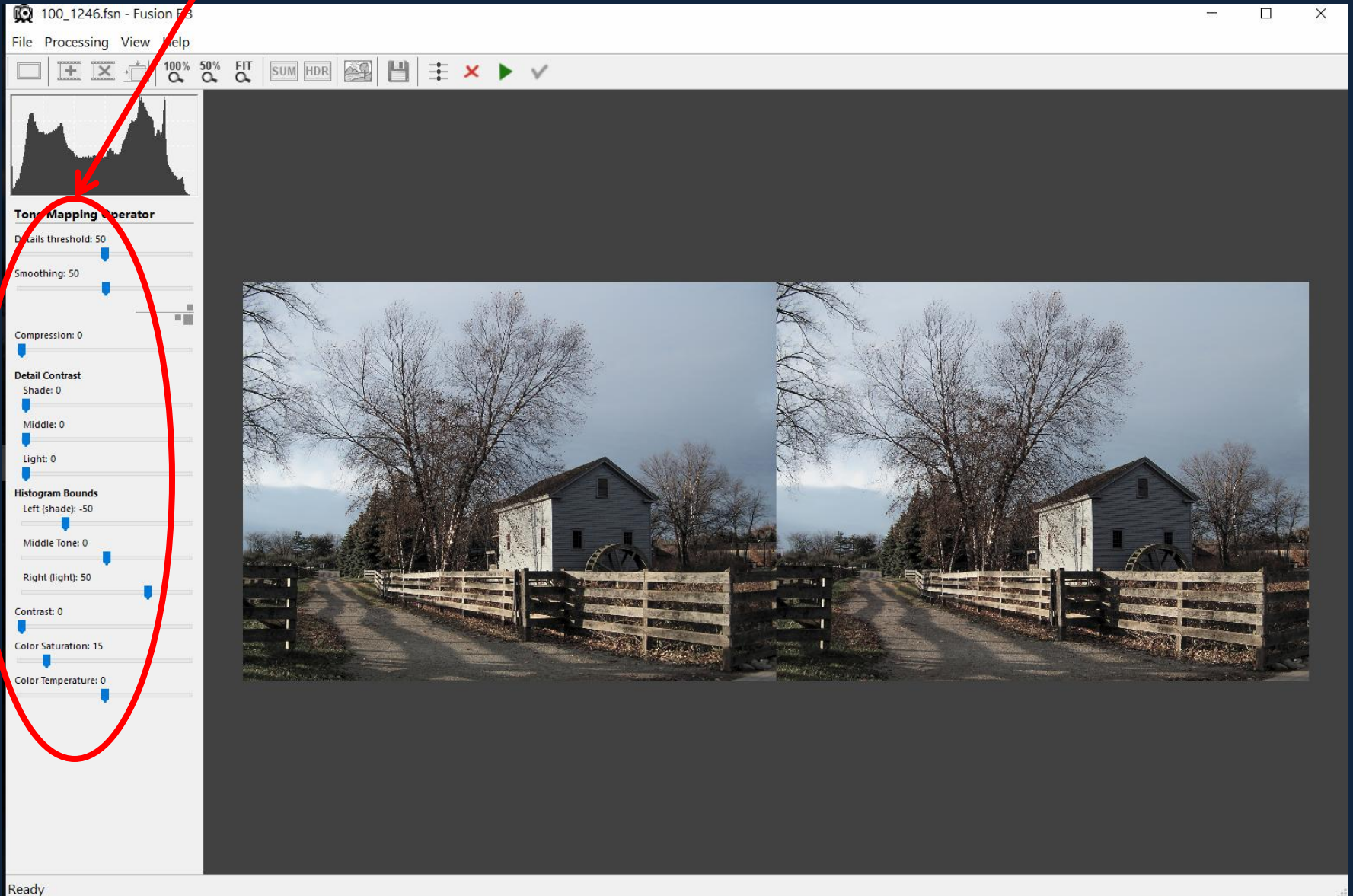
Click on the + icon and open a photo located on your computer.



Next, click on the HDR icon



The controls will appear on the left



As a starting point, adjust the
3 Detail controls to 20 and Color Saturation to 30

The screenshot displays the Fusion F.3 software interface. The main window shows a landscape image of a barn and trees. The left sidebar contains the 'Tone Mapping Operator' panel with the following settings:

- Details threshold: 50
- Smoothing: 50
- Compression: 0
- Detail Contrast: Shade: 21
- Middle: 20
- Light: 20
- Histogram Bounds: Left (shade): -50
- Middle Tone: 0
- Right (light): 50
- Contrast: 0
- Color Saturation: 30
- Color Temperature: 0

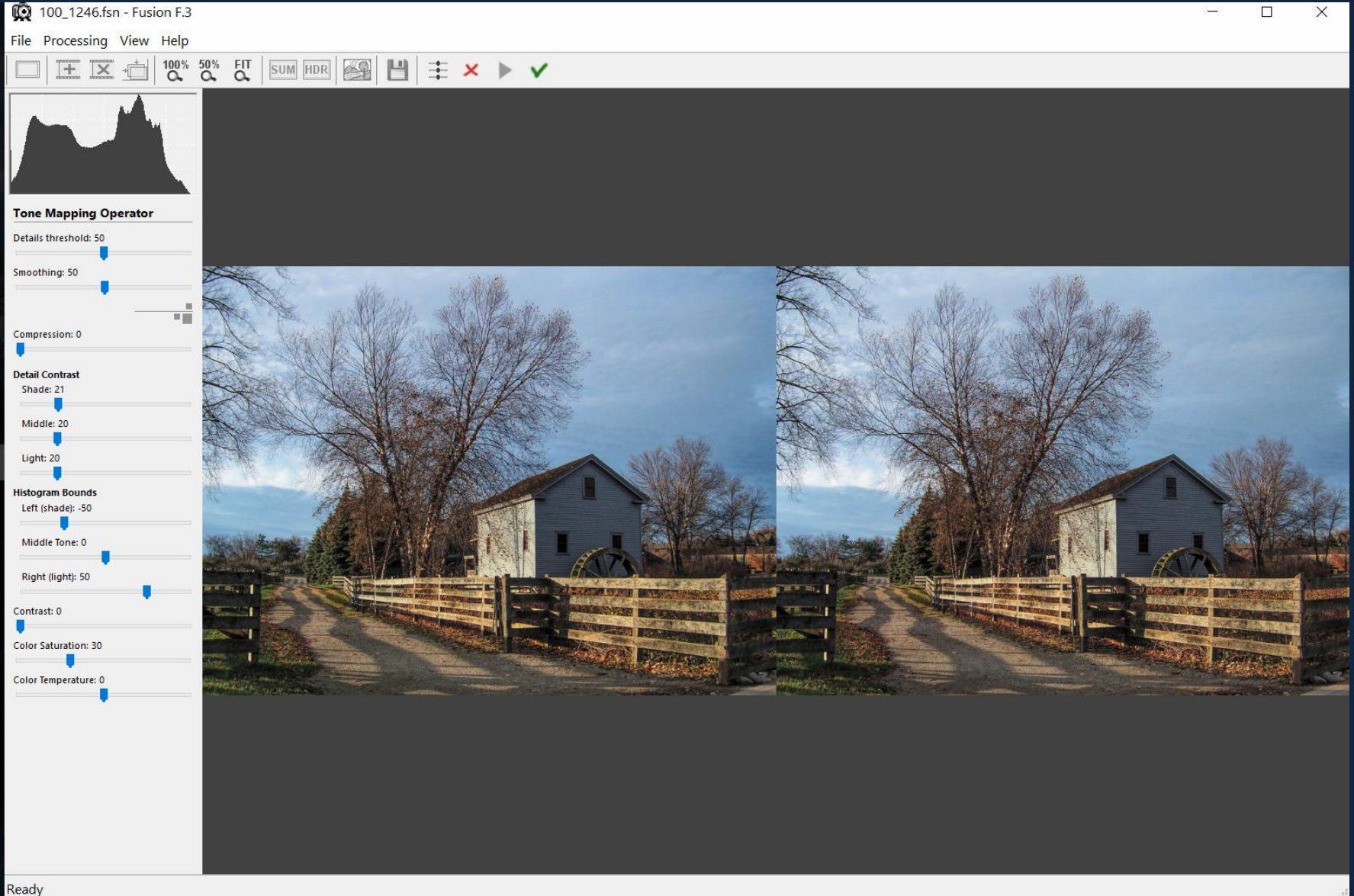
Two red arrows point from the text above to the 'Detail Contrast' and 'Color Saturation' sliders, which are circled in red. The 'Detail Contrast' slider is set to 21, and the 'Color Saturation' slider is set to 30. The 'Middle' and 'Light' sliders are also set to 20. The 'Histogram Bounds' section shows 'Left (shade)' at -50 and 'Right (light)' at 50. The 'Contrast' slider is at 0, and 'Color Temperature' is at 0. The top toolbar includes icons for zooming, fitting, and other image processing functions. The status bar at the bottom left shows 'Ready'.

Experiment with all the sliders and see how they affect the photo.

100_1246.fsn - Fusion F.3

File Processing View Help

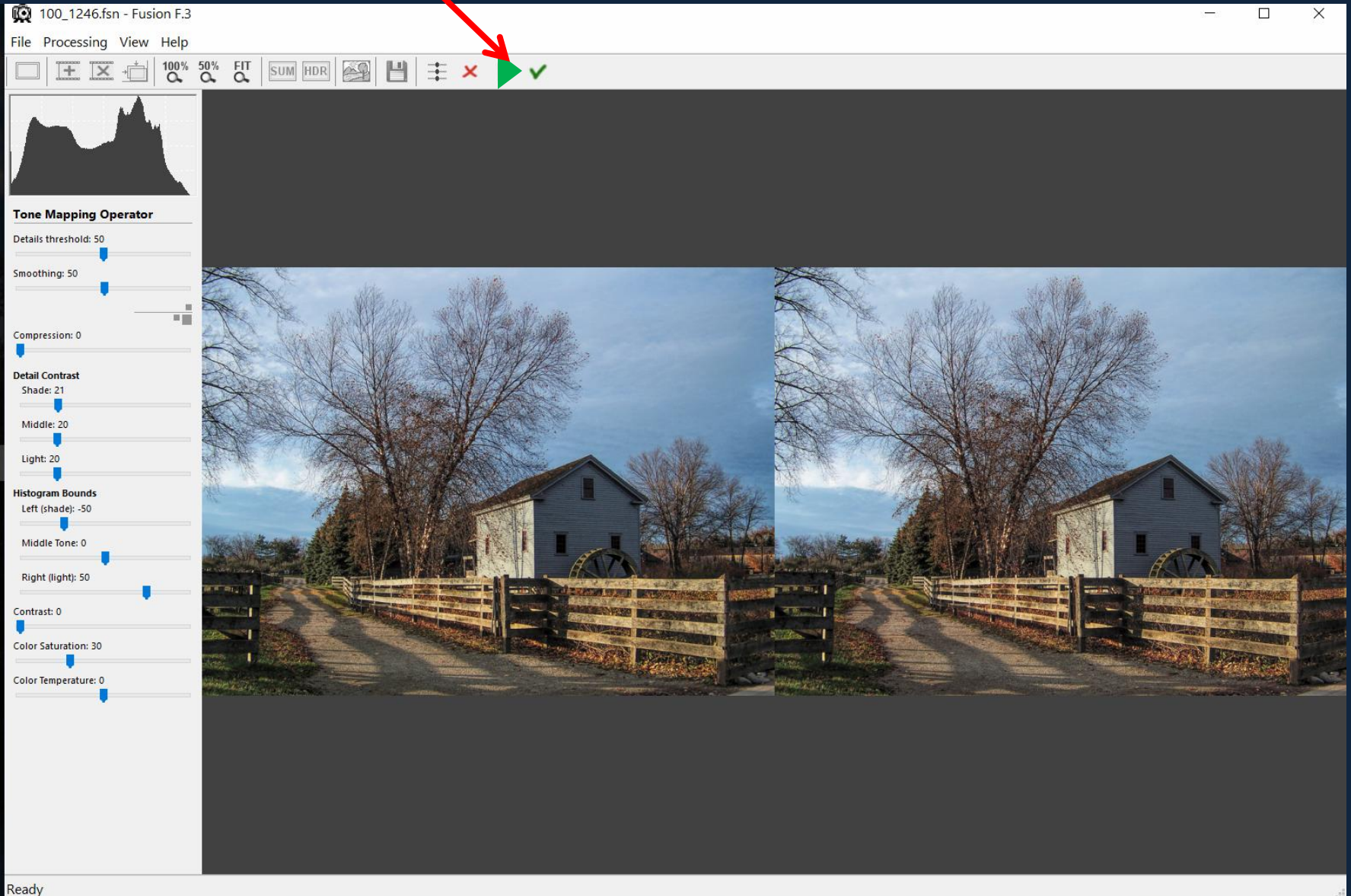
100% 50% FIT SUM HDR



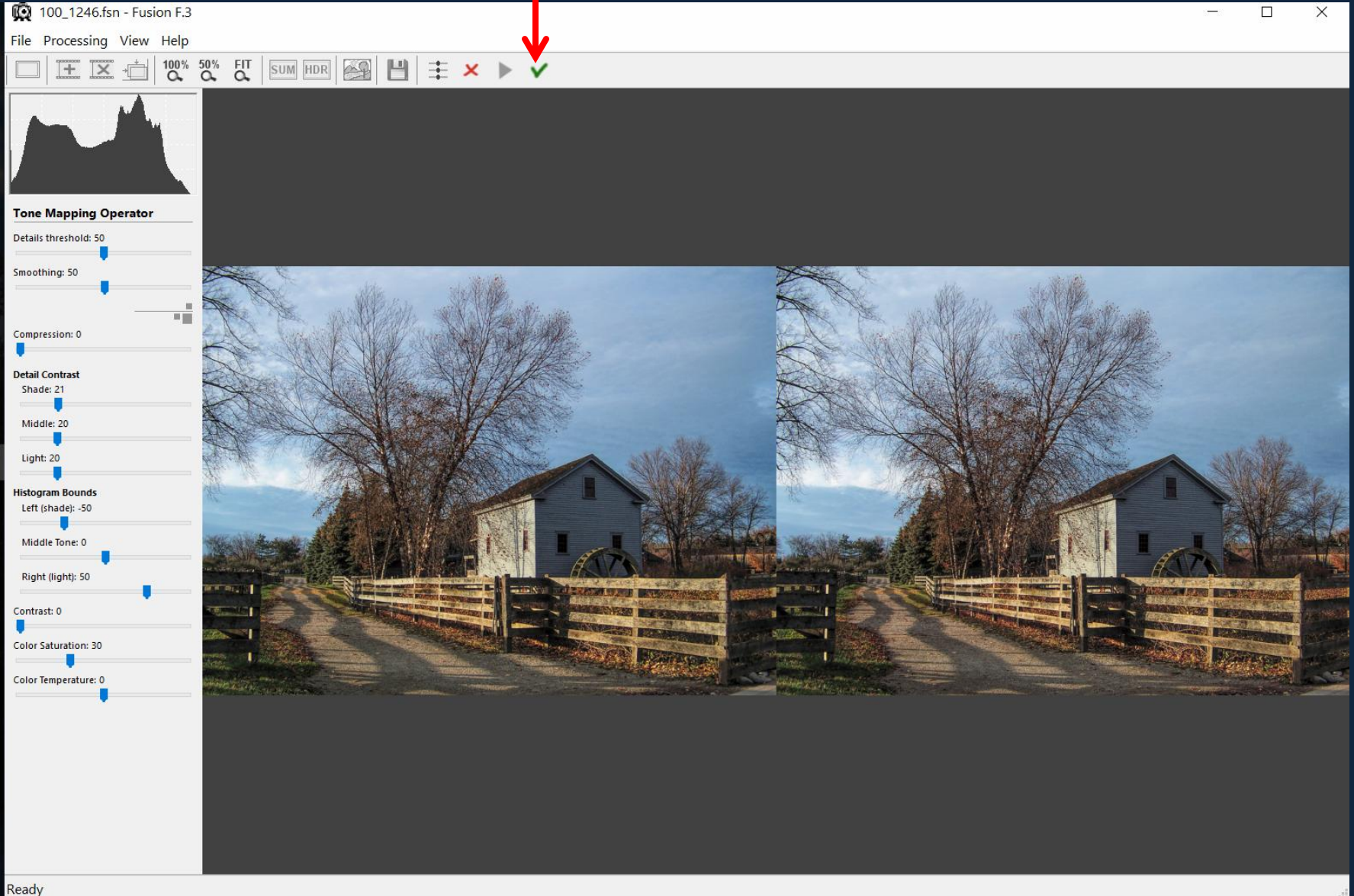
The screenshot displays the Fusion F.3 software interface. On the left, a histogram shows the tonal distribution of the image. Below it, the 'Tone Mapping Operator' panel contains several sliders: 'Details threshold' (50), 'Smoothing' (50), 'Compression' (0), 'Detail Contrast' (Shade: 21, Middle: 20, Light: 20), 'Histogram Bounds' (Left (shade): -50, Middle Tone: 0, Right (light): 50), 'Contrast' (0), 'Color Saturation' (30), and 'Color Temperature' (0). The main workspace shows a side-by-side comparison of a photograph of a white barn with a wooden fence and trees. The left image is the original, and the right image is the result of applying the current settings.

Ready

When you are ready to save your photo,
click on the green process button



Next, click on the green check mark



Finally, click on the save button (floppy disk icon). The new file will contain the original name followed by `_hdr_mode_1.jpg`

