

Get Started with darktable

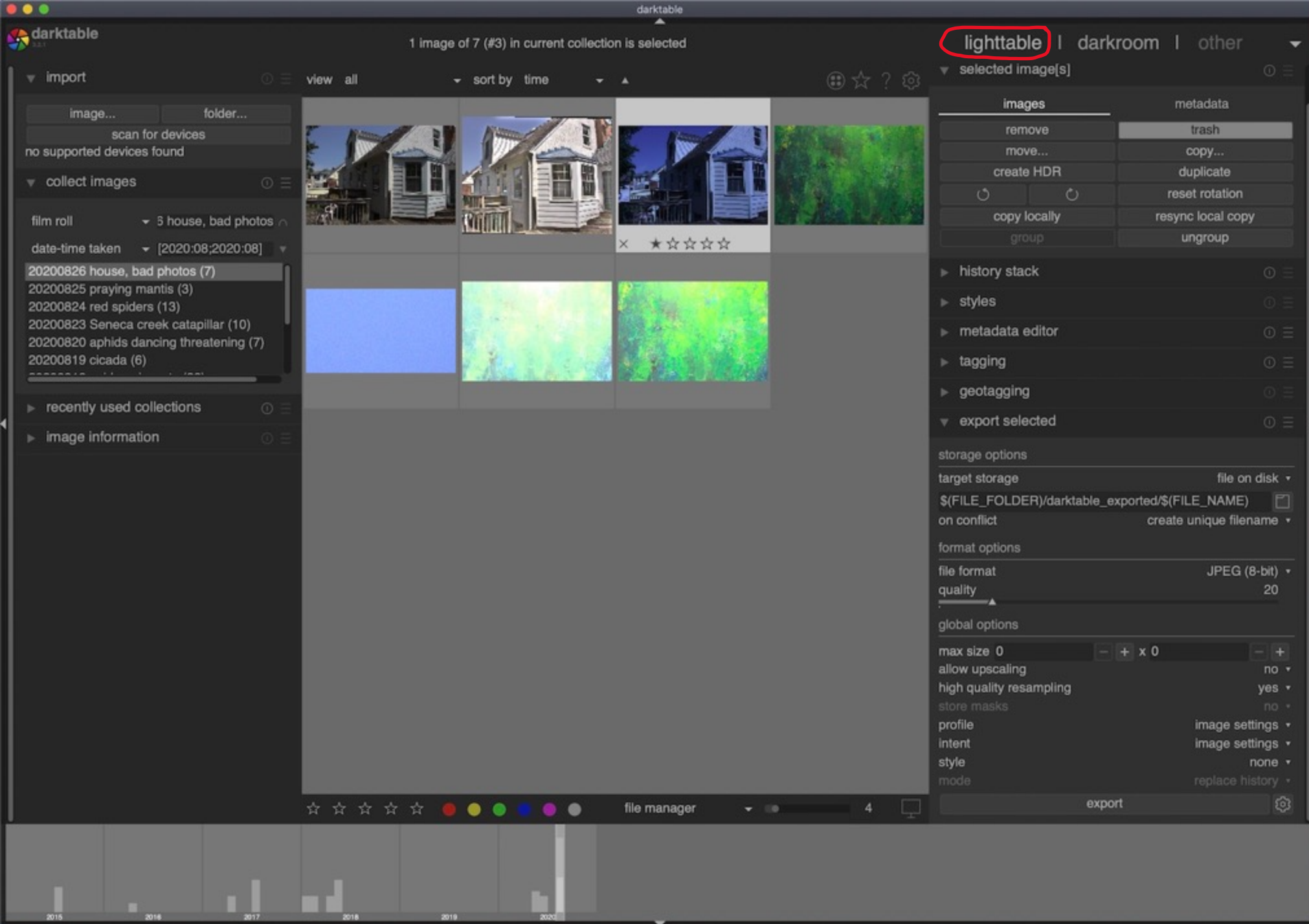


darktable is a powerful, free open software alternative to Light Room

Tanya Riseman, 2020

Getting Started with darktable

- Basic layout
- Modules in darktable that are equivalent to Light Room
- Some advanced modules and options in darktable but not in Light Room

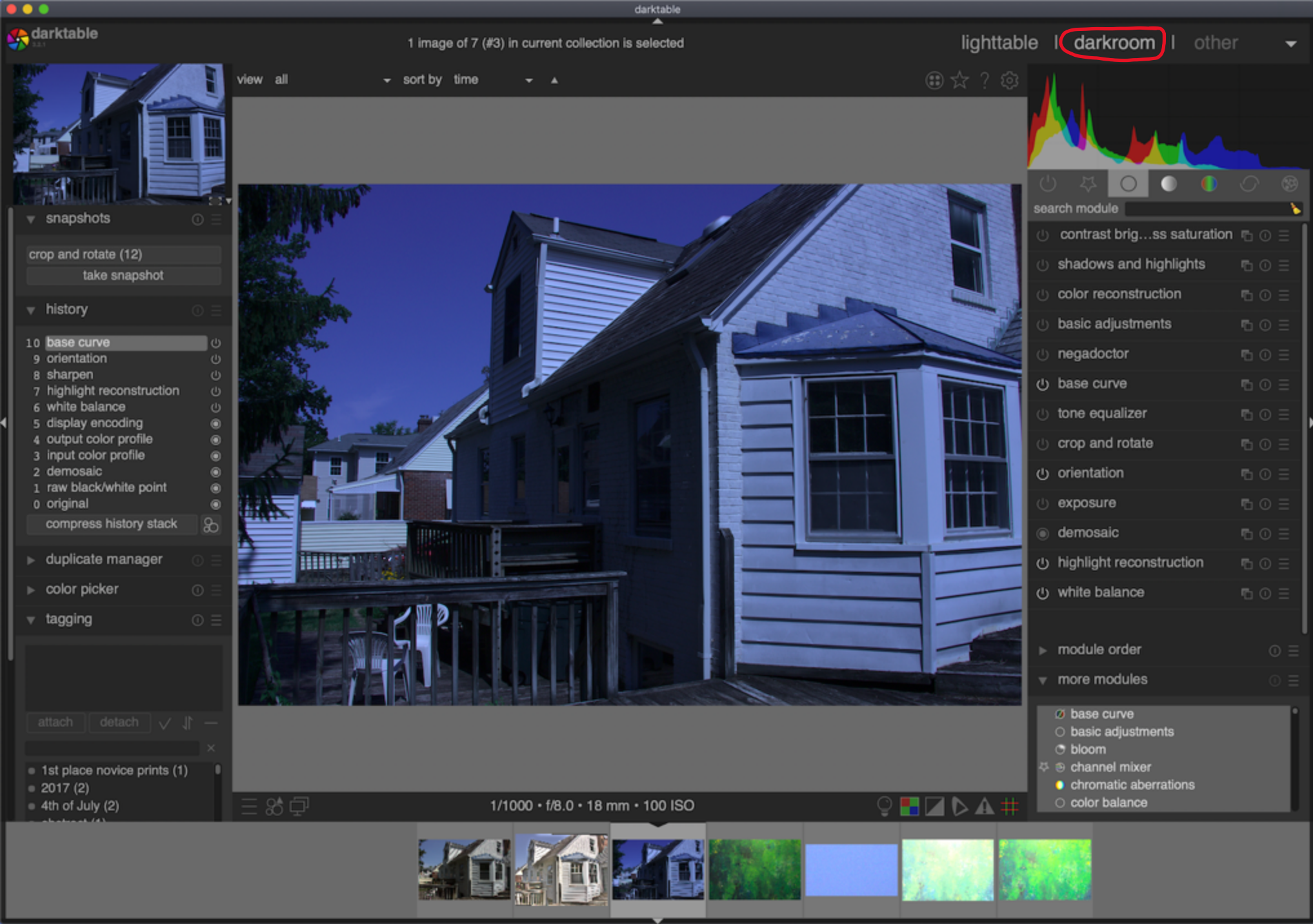


lighttable is like Library in Light Room.

darktable will make sidecar <filename>.<raw>.xmp. No conflict with LR files.

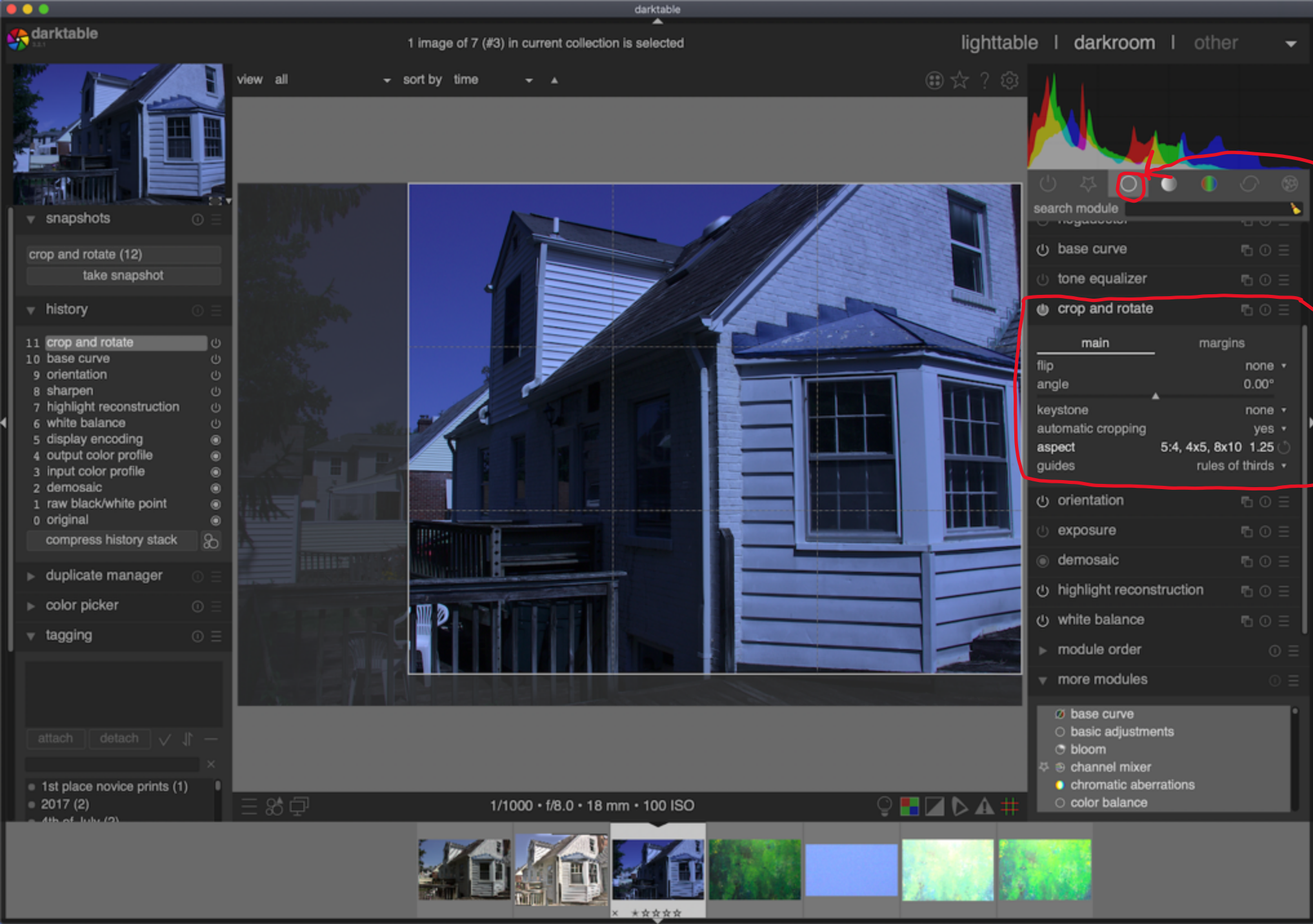
Simple LR edits are transferred to darktable if LR sidecar file is available.

feature	Light Room	darktable
Image/file management	Library	lighttable
file and directory management	yes	no (use Image Capture)
ratings/keywords/hierarchical keywords/filters	yes	yes
collections	yes	no



darkroom is like Develop in Light Room.

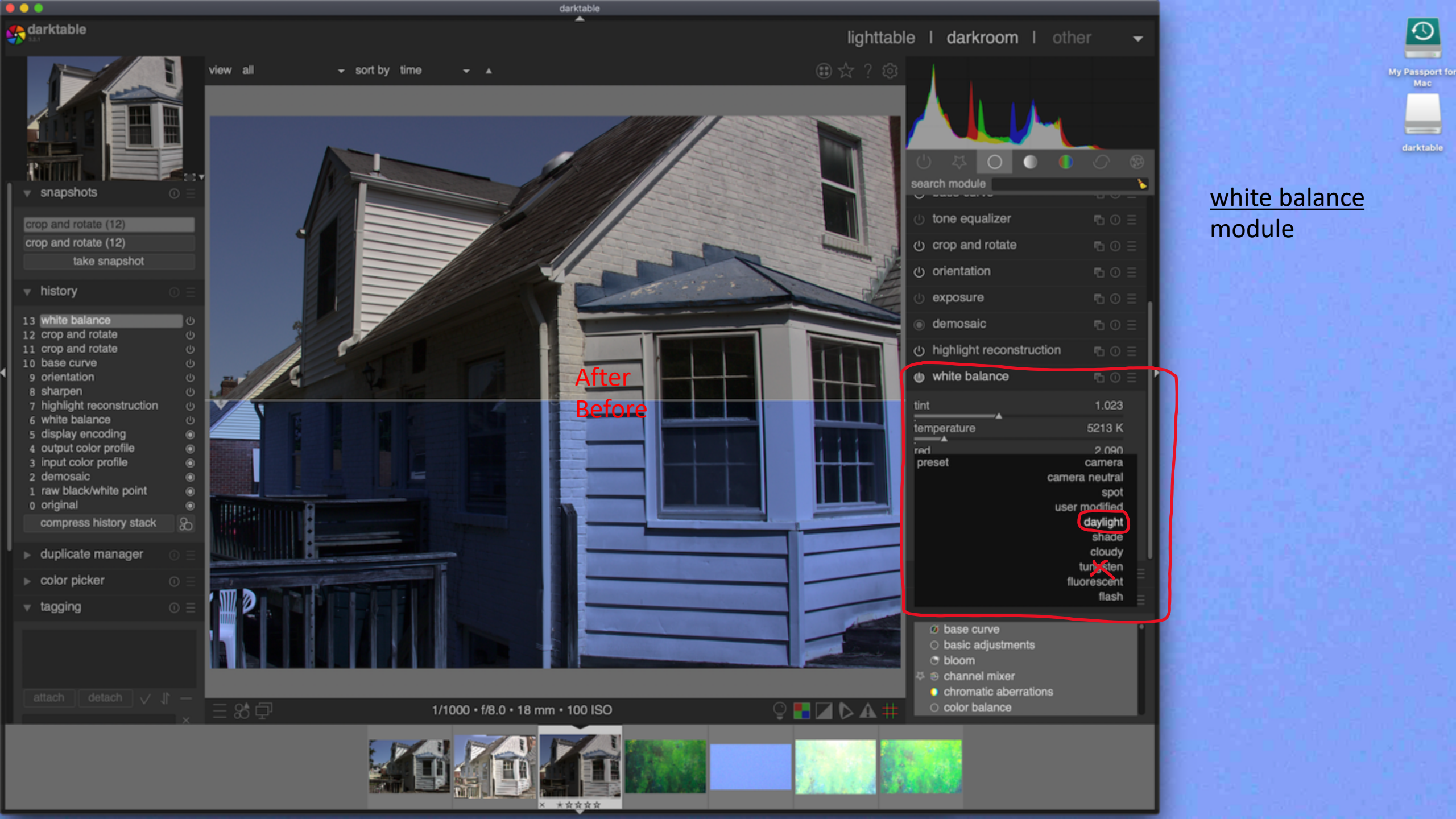
feature	Light Room	darktable
Editing images	Develop	darkroom
non-destructive editing	yes	yes
quickie filters and special effects (like on cell phones)	no	no
global changes (exposure, highlights/shadows, color, etc.)	yes	yes
brush/shapes/etc. masks for local changes	yes	yes (more choices)
adjustment brush with auto mask in LR and camera raw	yes (awesome)	sort of
advanced selection of algorithms	no	yes (lots of choices)
layers	no	no



Collection of basic modules

crop and rotate module





After
Before

white balance
module

white balance

tint 1.023

temperature 5213 K

red 2.090

presets

- camera
- camera neutral
- spot
- user modified
- daylight**
- shade
- cloudy
- tungsten
- fluorescent
- flash

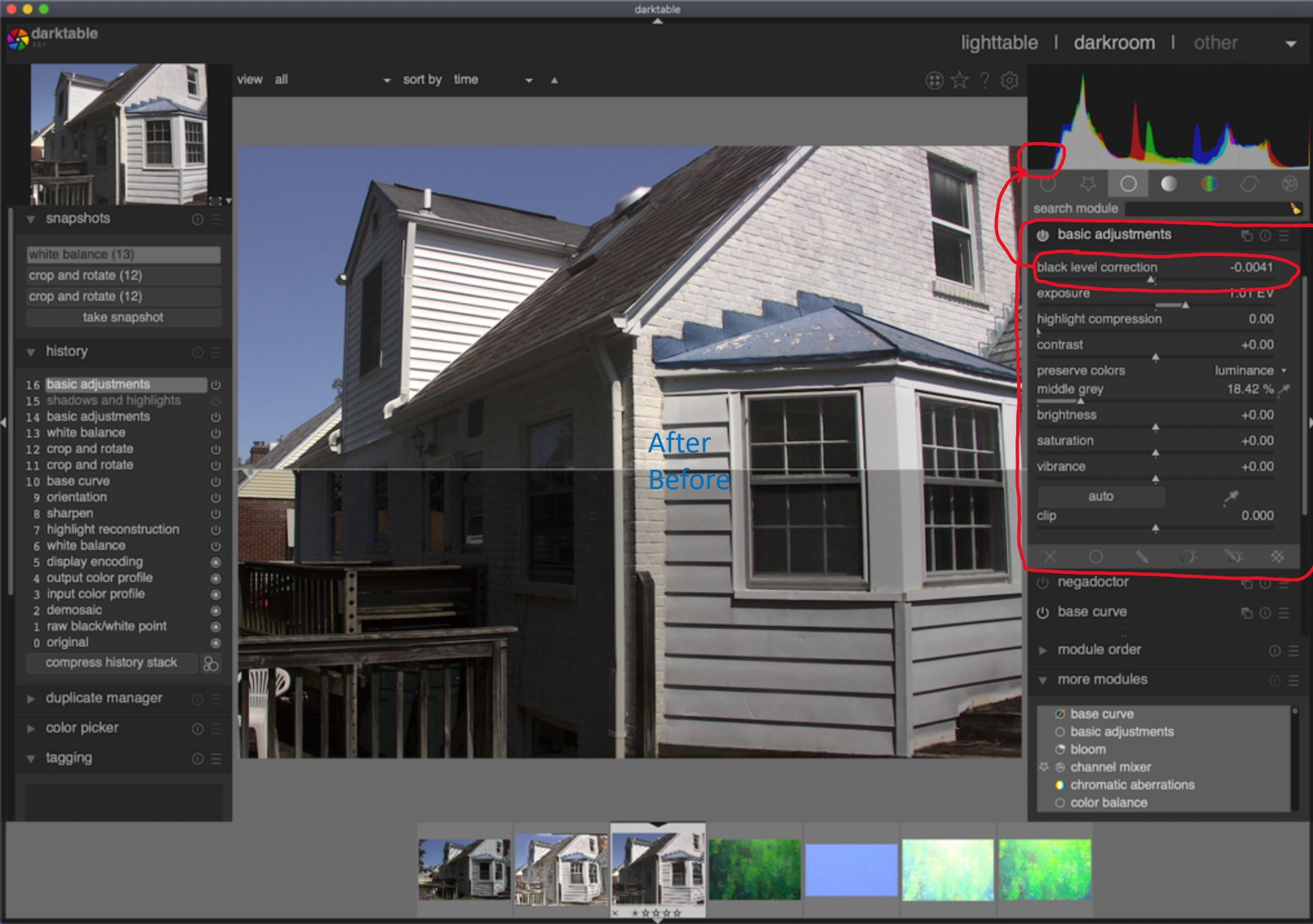


basic adjustments
module

Exposure

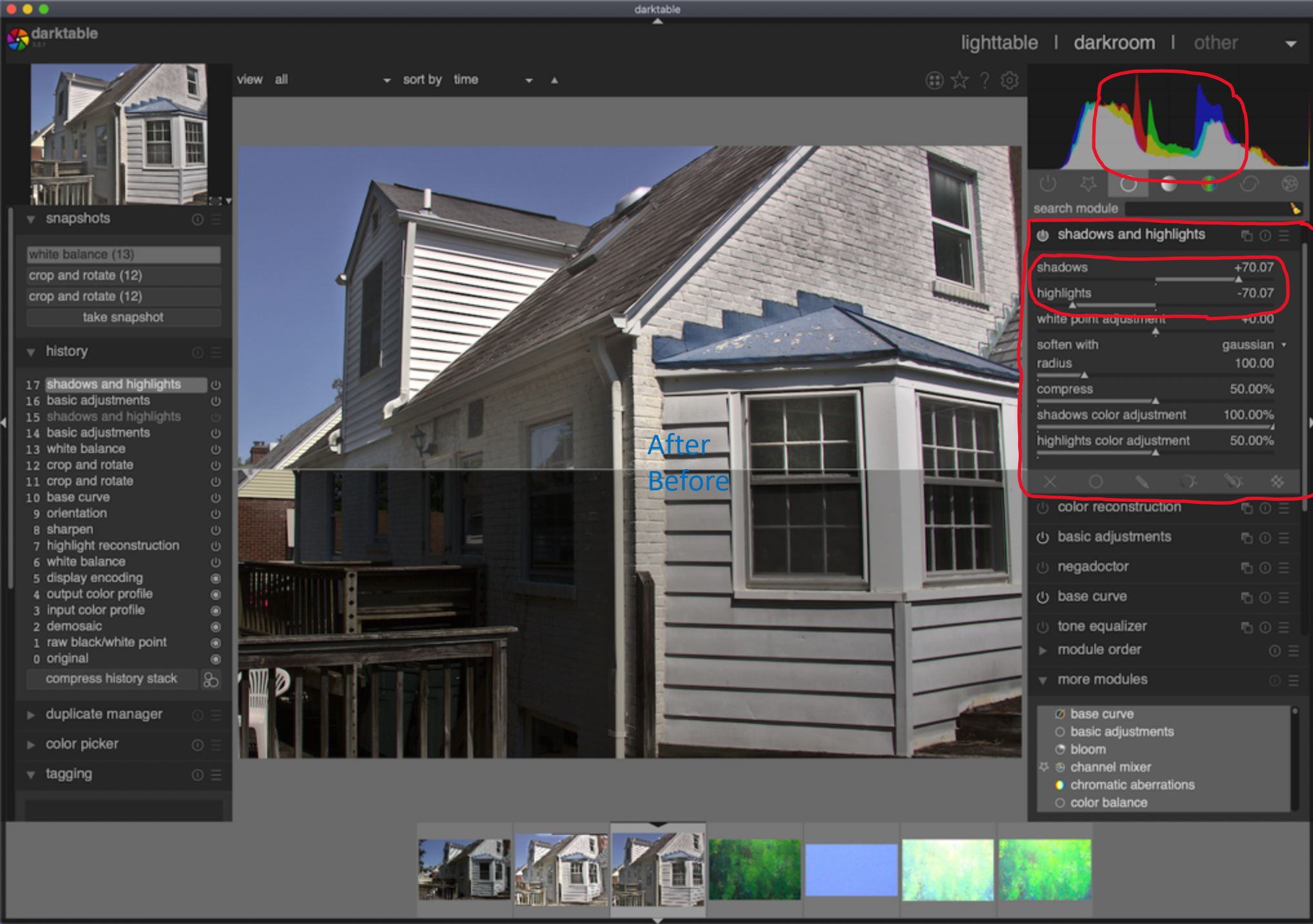
Masks available in most modules, when they make sense.

Opposite to Light Room's approach of masks only available in Adjustment Brush, which pragmatically limits the number of sliders possible.



basic adjustments
module

black level
correction

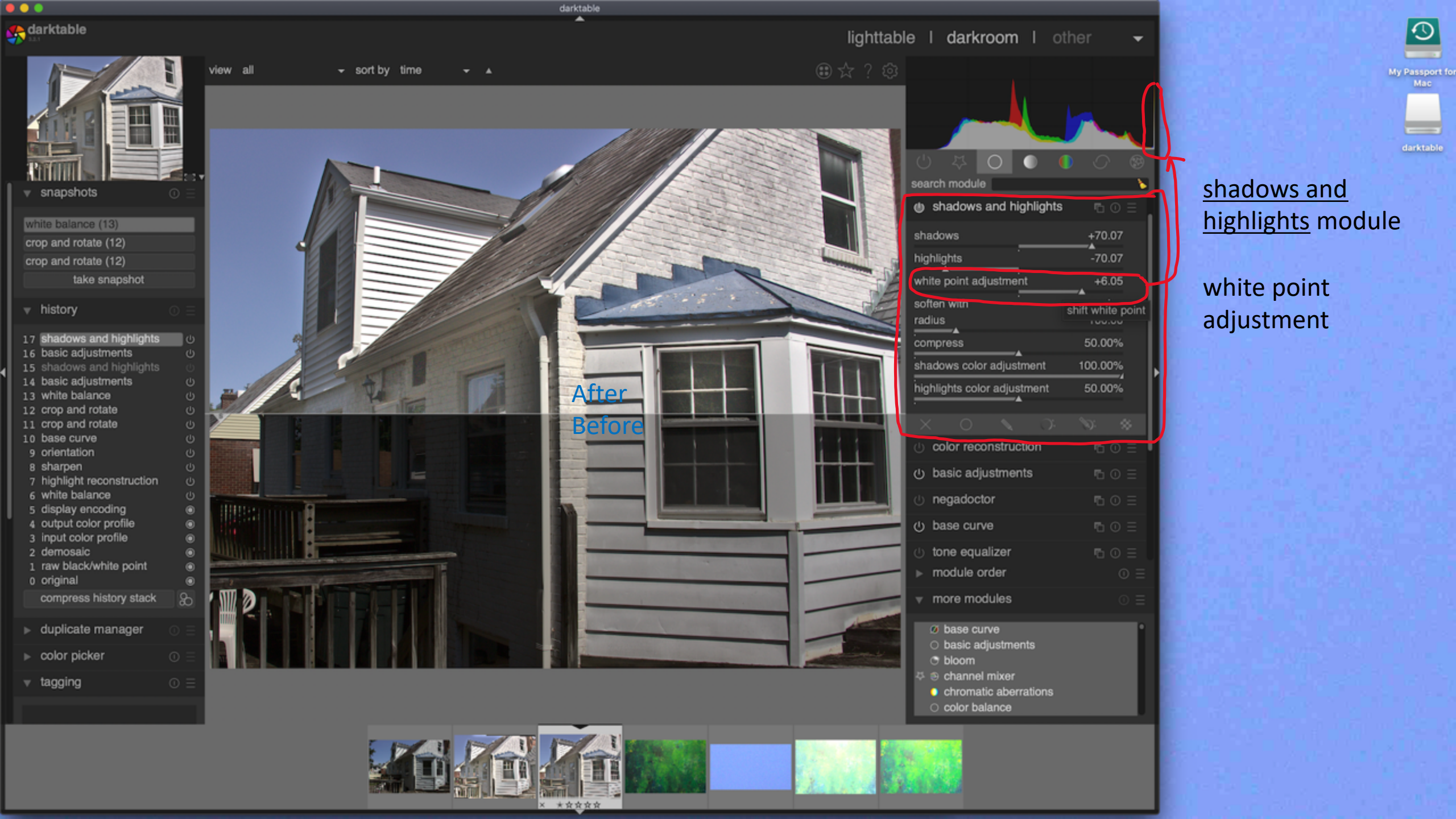


shadows and highlights module

shadows

highlights

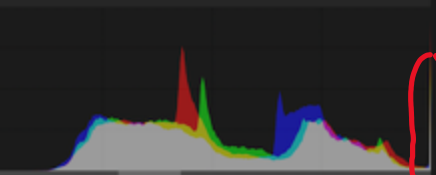




lighttable | darkroom | other

view all

sort by time



search module

- shadows and highlights
 - shadows +70.07
 - highlights -70.07
 - white point adjustment +6.05
 - soften with radius shift white point
 - compress 50.00%
 - shadows color adjustment 100.00%
 - highlights color adjustment 50.00%

shadows and highlights module

white point adjustment

After
Before

darktable 3.5.1

snapshots

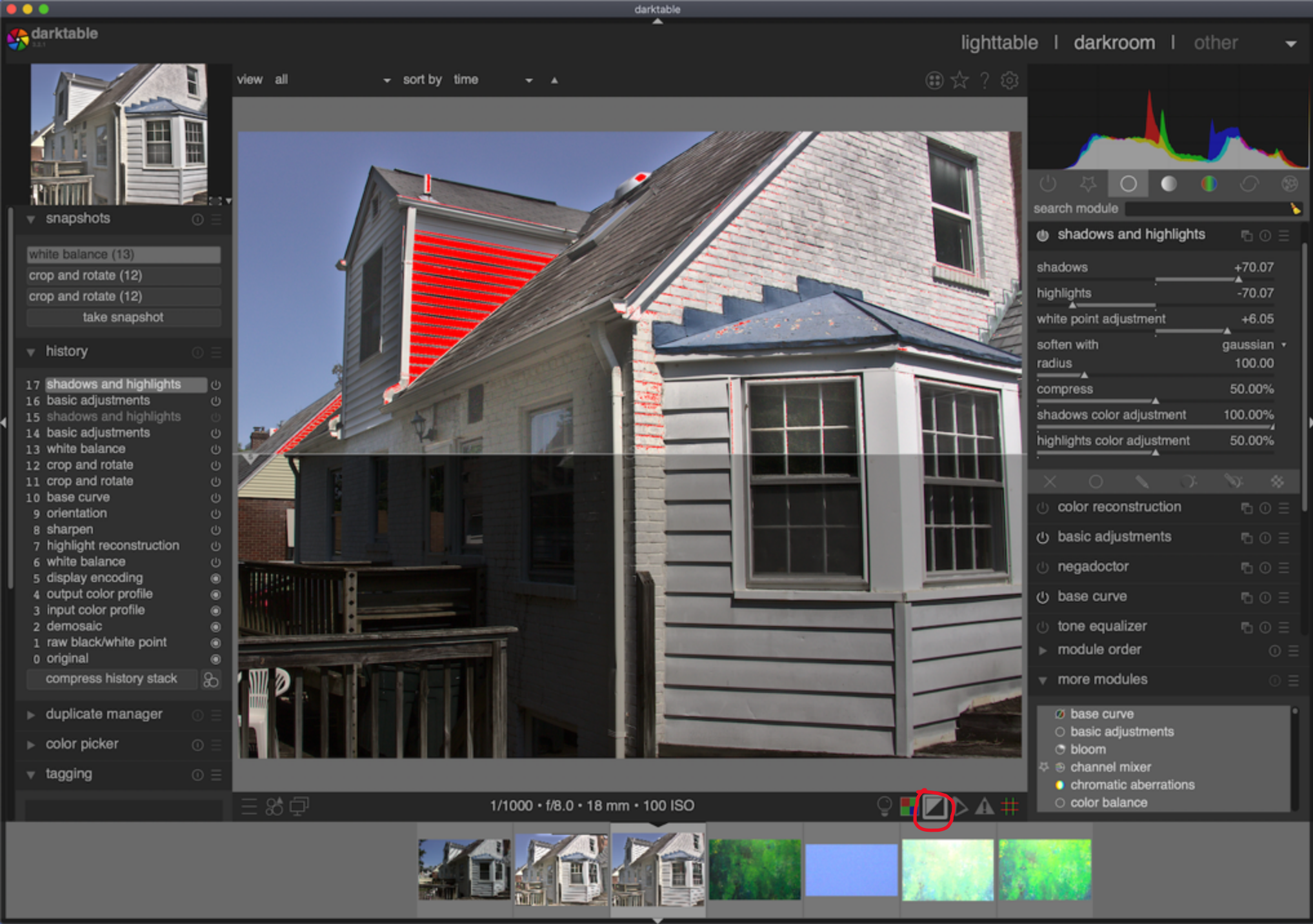
- white balance (13)
- crop and rotate (12)
- crop and rotate (12)
- take snapshot

history

- 17 shadows and highlights
- 16 basic adjustments
- 15 shadows and highlights
- 14 basic adjustments
- 13 white balance
- 12 crop and rotate
- 11 crop and rotate
- 10 base curve
- 9 orientation
- 8 sharpen
- 7 highlight reconstruction
- 6 white balance
- 5 display encoding
- 4 output color profile
- 3 input color profile
- 2 demosaic
- 1 raw black/white point
- 0 original
- compress history stack

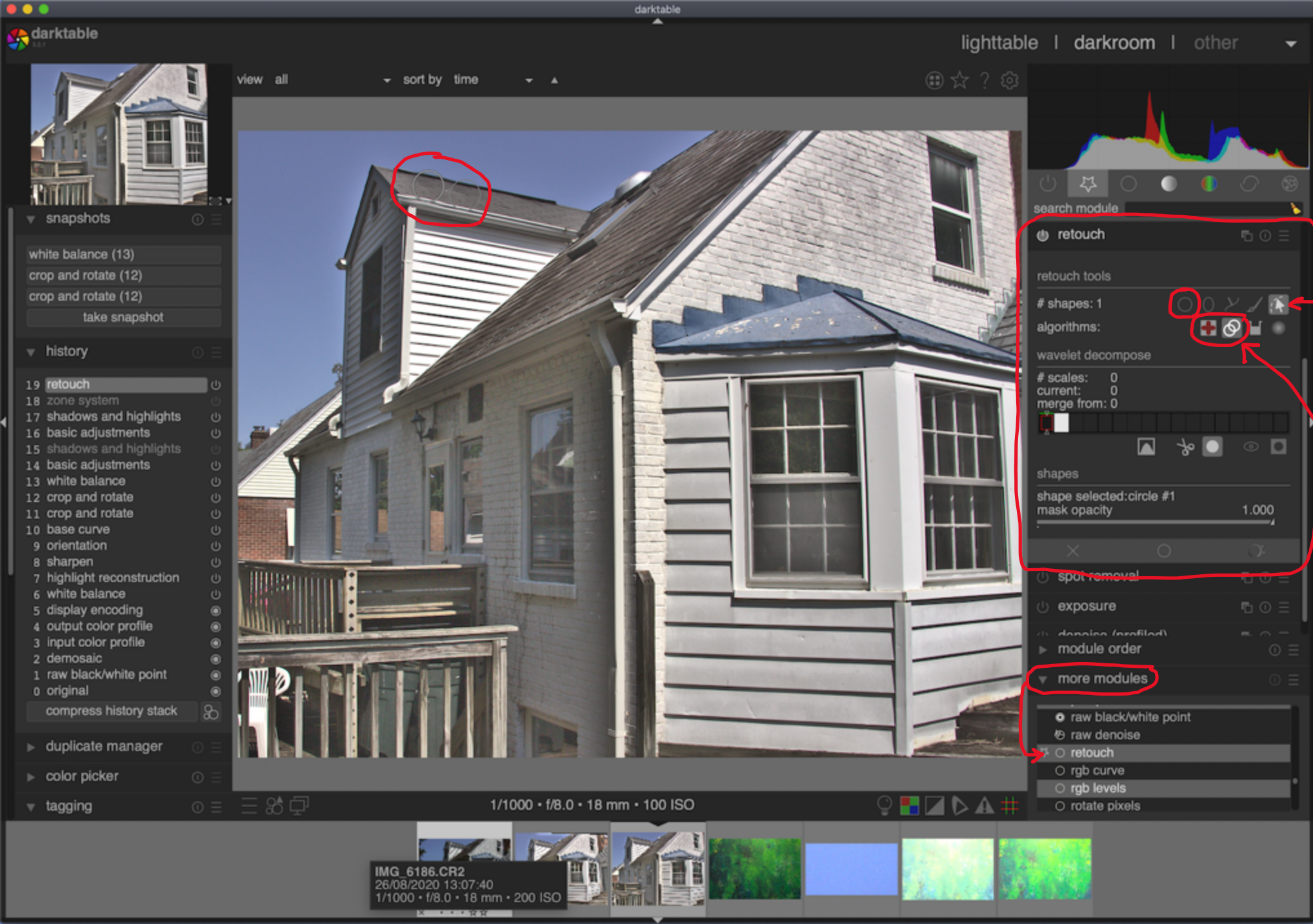
- duplicate manager
- color picker
- tagging





Toggle
under (blue) and
over (red)
exposure

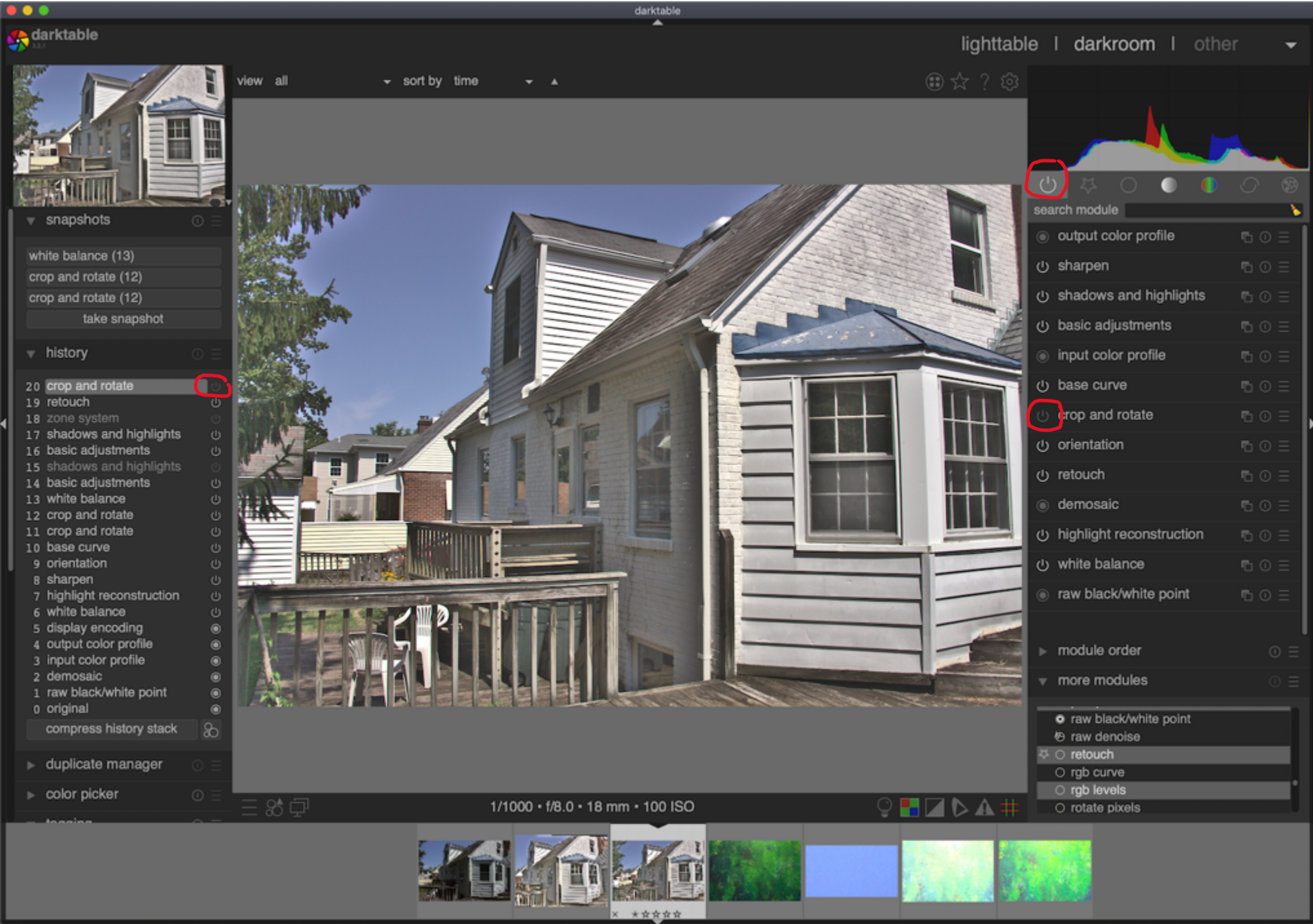




retouch module is like spot removal in Light Room.

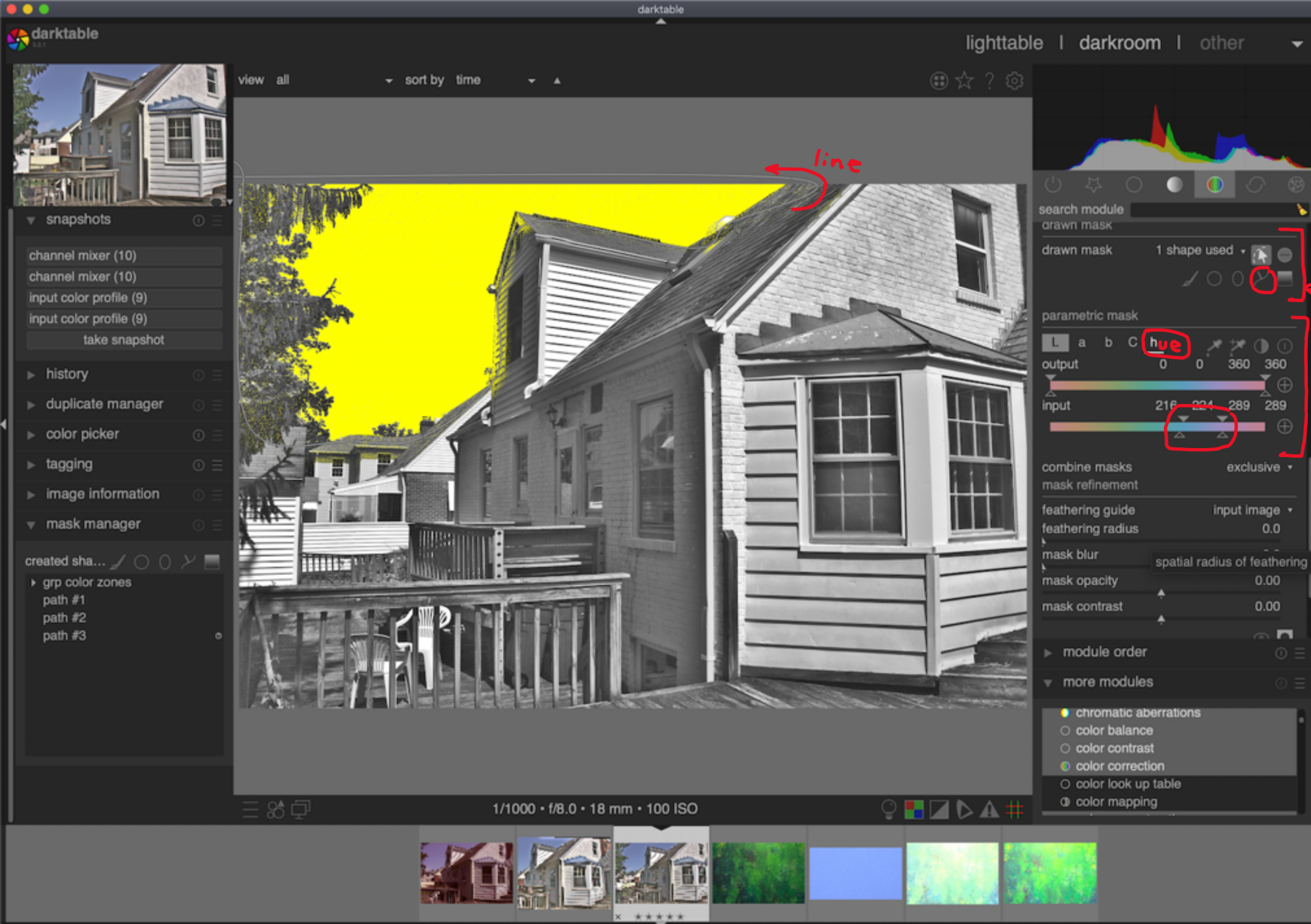
Choice of shapes or brush, with feathering.

Heal or clone.



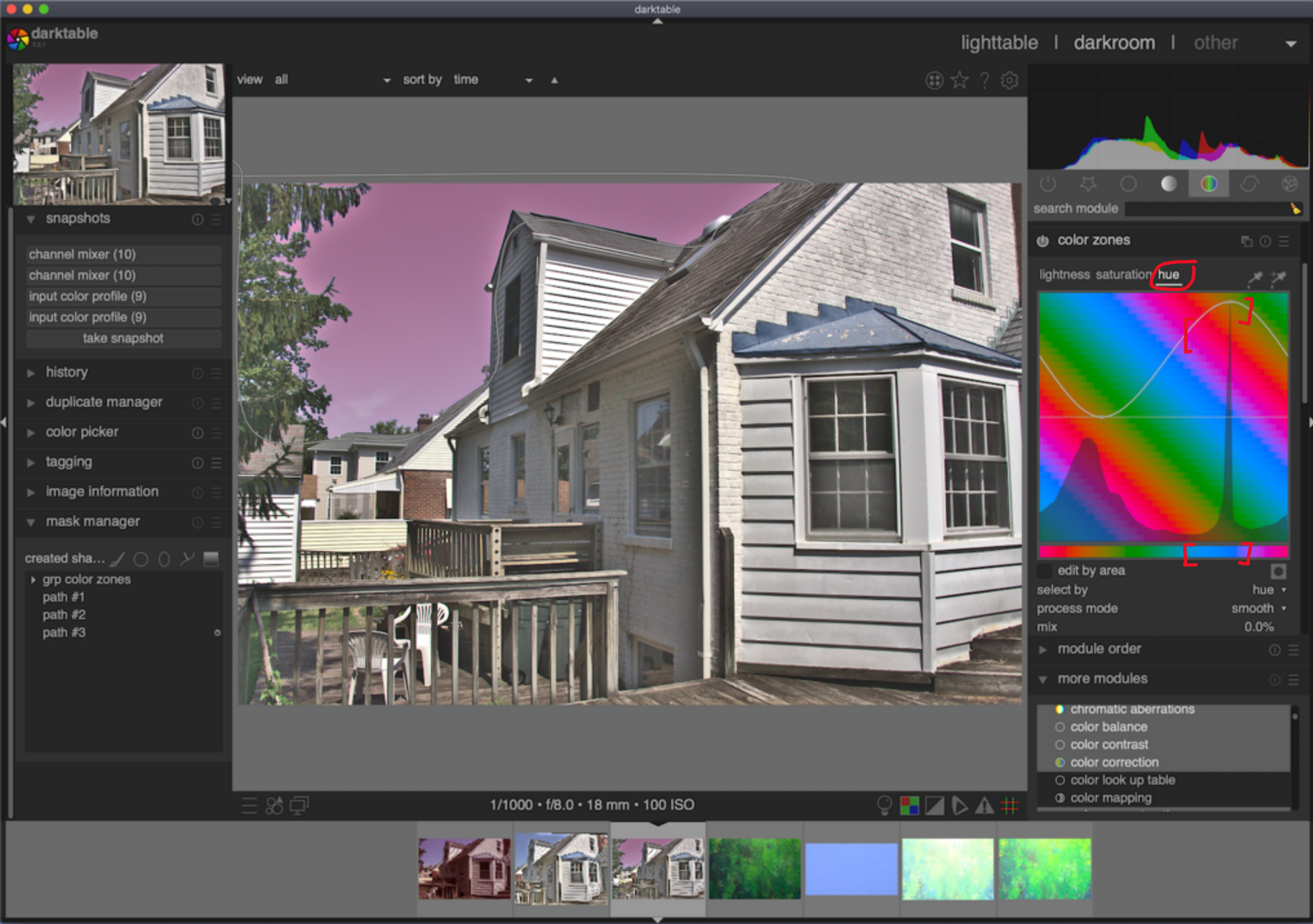
Can turn off any module(s) to see what difference they make.

Here, crop and rotate is turned off.



Module color zones and many other modules contain "drawn mask" (white line) and "parametric mask" (select limited range of hue or luminance, etc.)

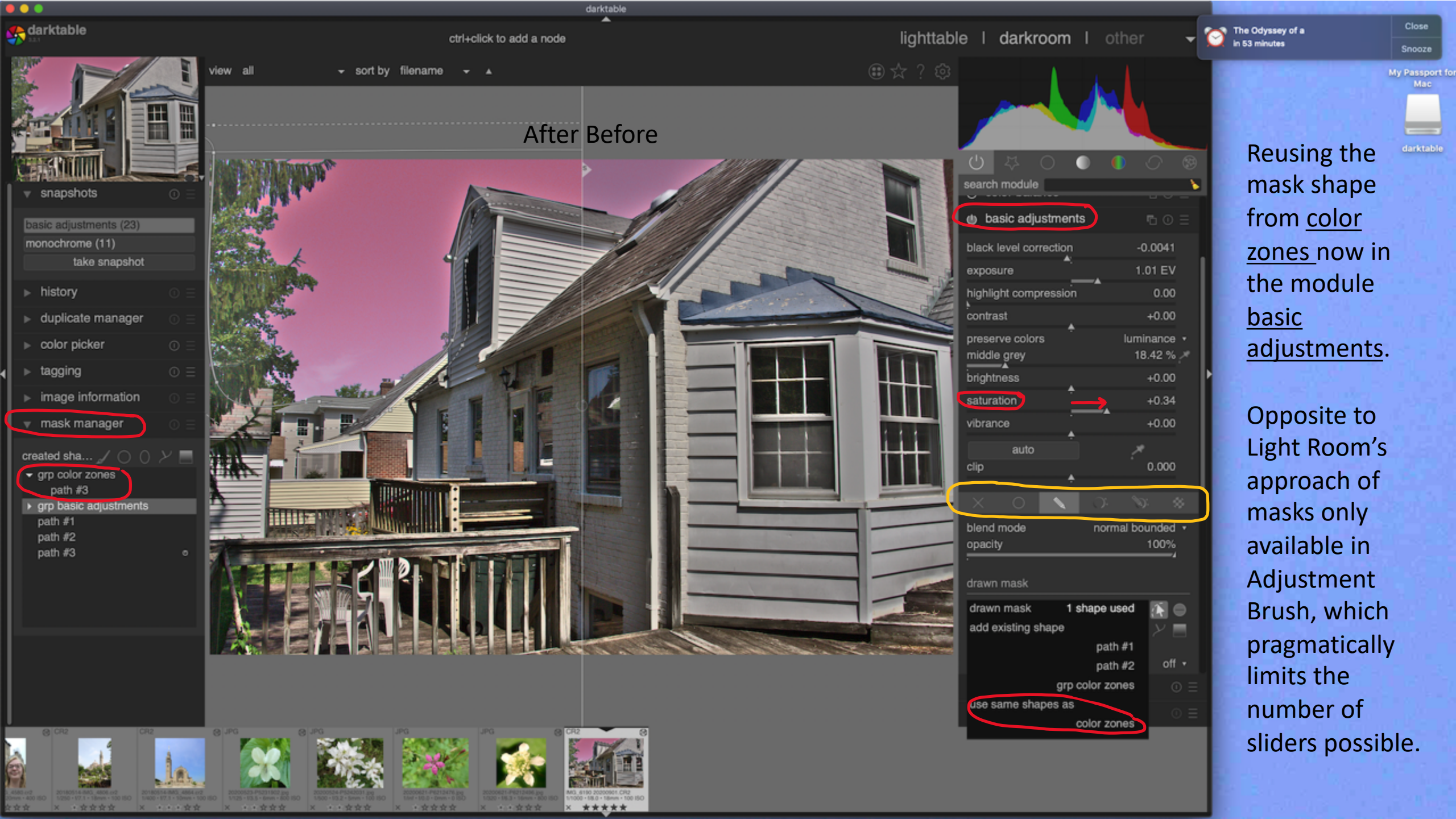
Can be used both at the same time.



After masking, select new color purple for the sky using module color zones.

← Straight line is no change.

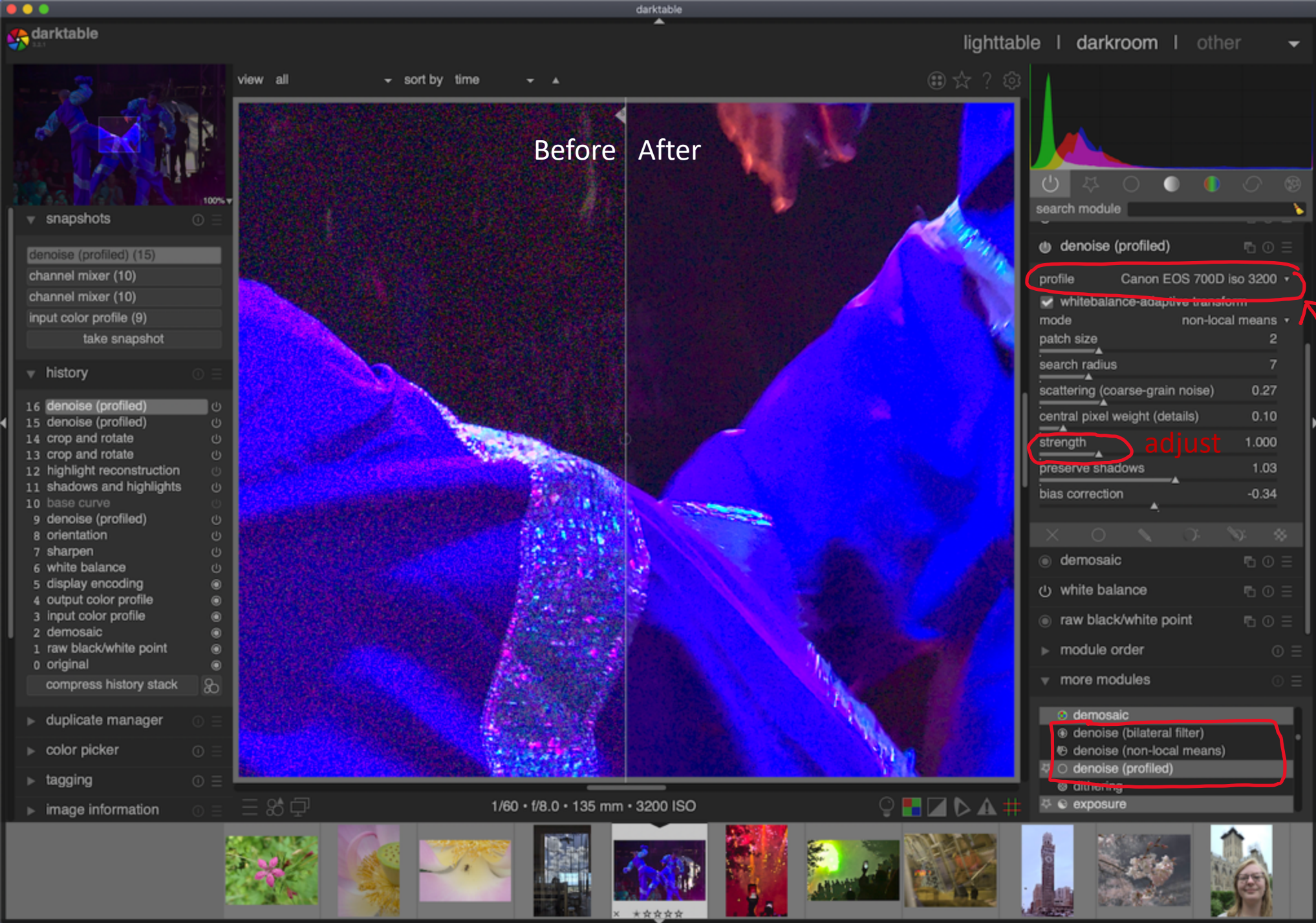
Result like adjustment brush in Light Room.



After Before

Reusing the mask shape from color zones now in the module basic adjustments.

Opposite to Light Room's approach of masks only available in Adjustment Brush, which pragmatically limits the number of sliders possible.



Before After

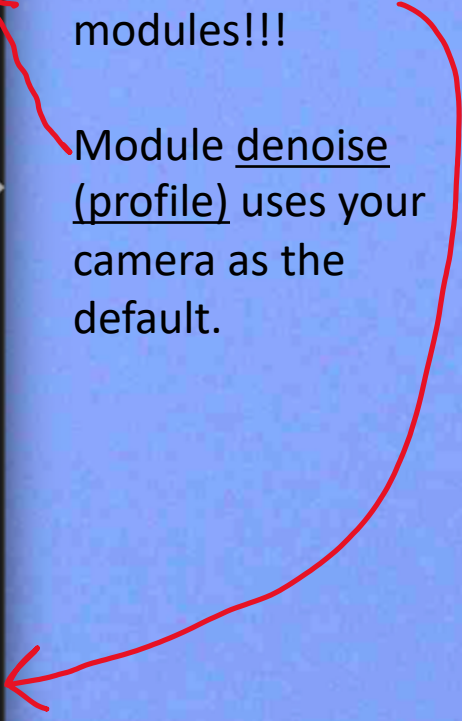
profile Canon EOS 700D iso 3200

strength adjust 1.000

Tons of choices!

Three denoising modules!!!

Module denoise (profiled) uses your camera as the default.



Summary of popular Light Room-like edits in darktable

- crop and rotate
- white balance
- basic adjustments for exposure and black level
- shadows and highlights for shadows, highlights, and white point.
- retouch using circle/brush for Spot Removal
- Combined use of drawn and parametric masks for LR's Adjustment Brush with auto mask.
- denoise (profile) for Noise Reduction

Next: Some things you can do in darktable but not in Light Room



darktable has lots of advanced features, beyond Light Room.

For example, Ansel Adam's zone system.

Adjusting grey boxes to make blacks "inky."

More sophisticated than Whites, Highlights, Shadows, Blacks.

darktable 3.8.1

scroll over image to change tone exposure
 shift+scroll to change in large steps
 ctrl+scroll to change in small steps

lighttable | darkroom | other

view all sort by filename

Before After

snapshots

- base curve (10)
- basic adjustments (23)
- monochrome (11)
- take snapshot

history

- 15 tone equalizer
- 14 color balance
- 13 color correction
- 12 color balance
- 11 color correction
- 10 base curve
- 9 orientation
- 8 sharpen
- 7 highlight reconstruction
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- 4 output color profile
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- 1 raw black/white point
- 0 original

compress history stack

duplicate manager

color picker

tagging

image information

mask manager

tone equalizer

simple advanced masking

-8 -7 -6 -5 -4 -3 -2 -1 +0 +2

curve smoothing 0.00

display exposure mask

crop and rotate

orientation

exposure

demosaic

highlight reconstruction

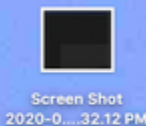
module order

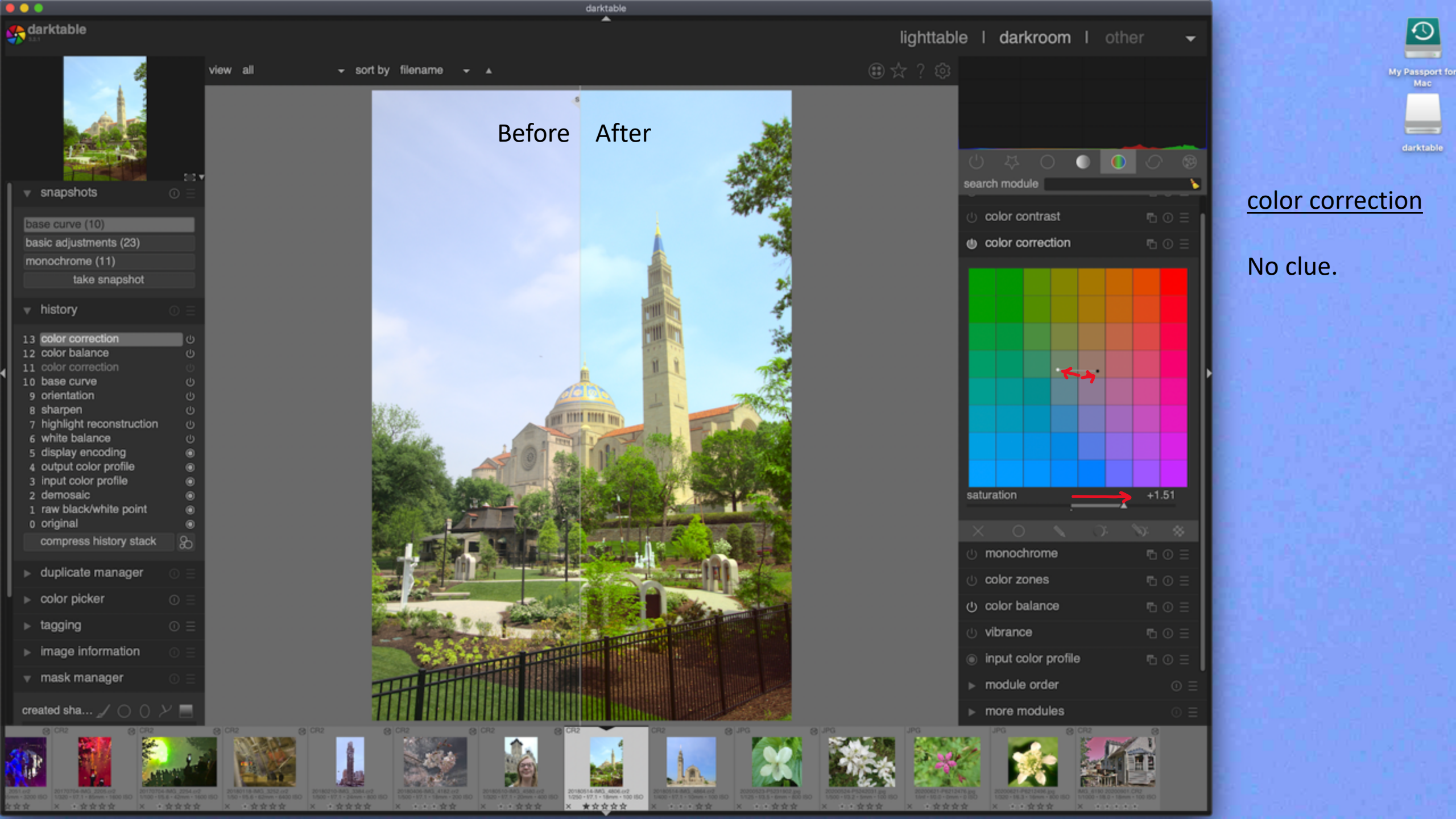
more modules

Tone equalizer

More sophisticated than Whites, Highlights, Shadows, Blacks

Easier than Tone Curve

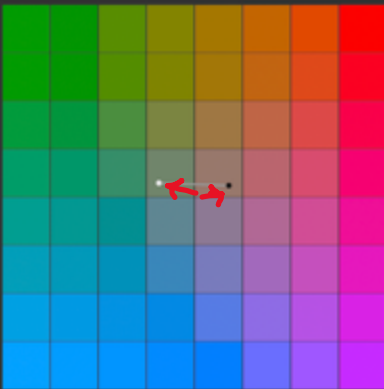




Before After

search module

- color contrast
- color correction



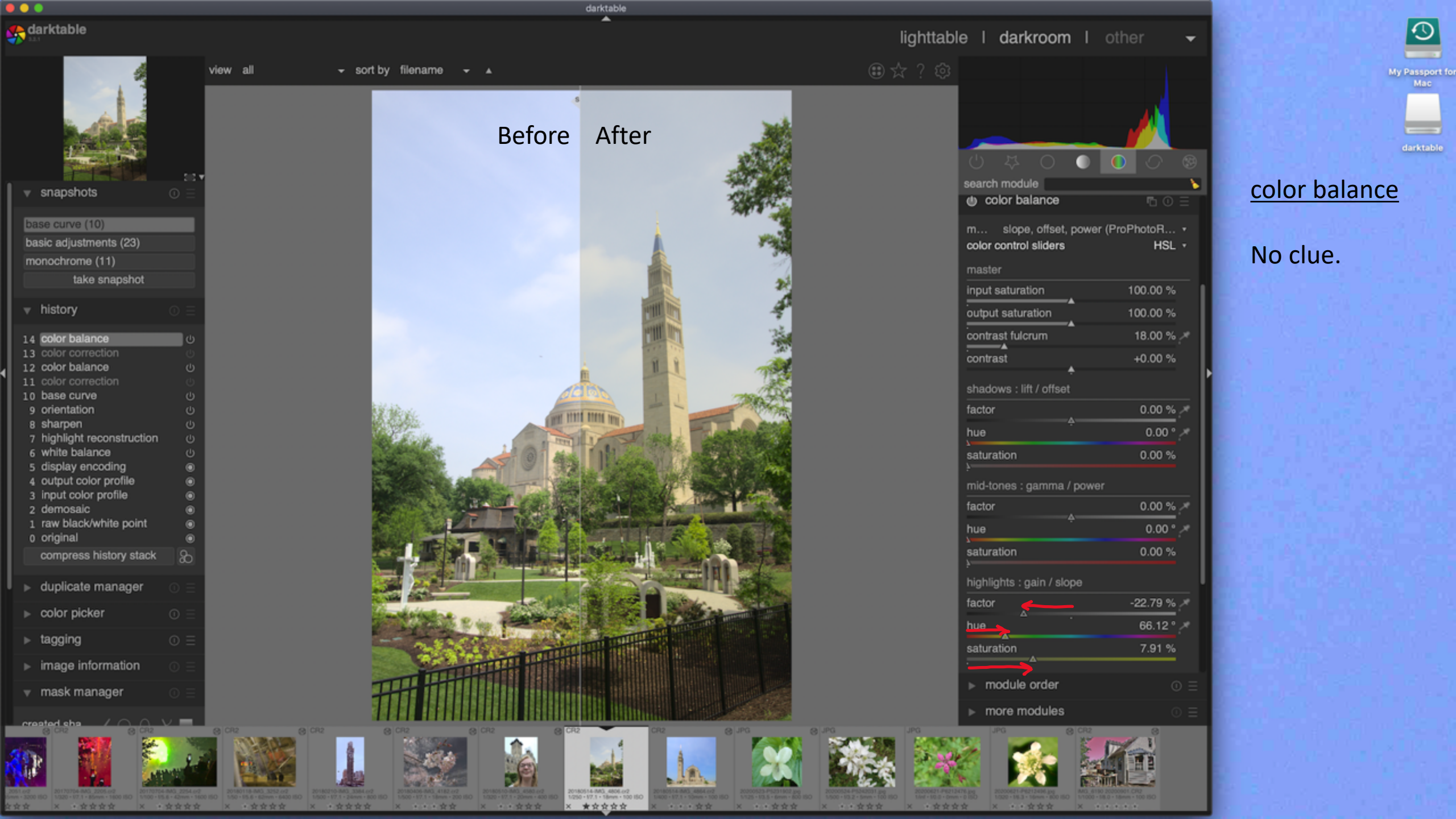
saturation → +1.51

- monochrome
- color zones
- color balance
- vibrance
- input color profile
- module order
- more modules

color correction

No clue.





Before After

color balance

No clue.

search module

color balance

m... slope, offset, power (ProPhotoR...
color control sliders HSL

master

input saturation 100.00 %
output saturation 100.00 %
contrast fulcrum 18.00 %
contrast +0.00 %

shadows : lift / offset

factor 0.00 %
hue 0.00 °
saturation 0.00 %

mid-tones : gamma / power

factor 0.00 %
hue 0.00 °
saturation 0.00 %

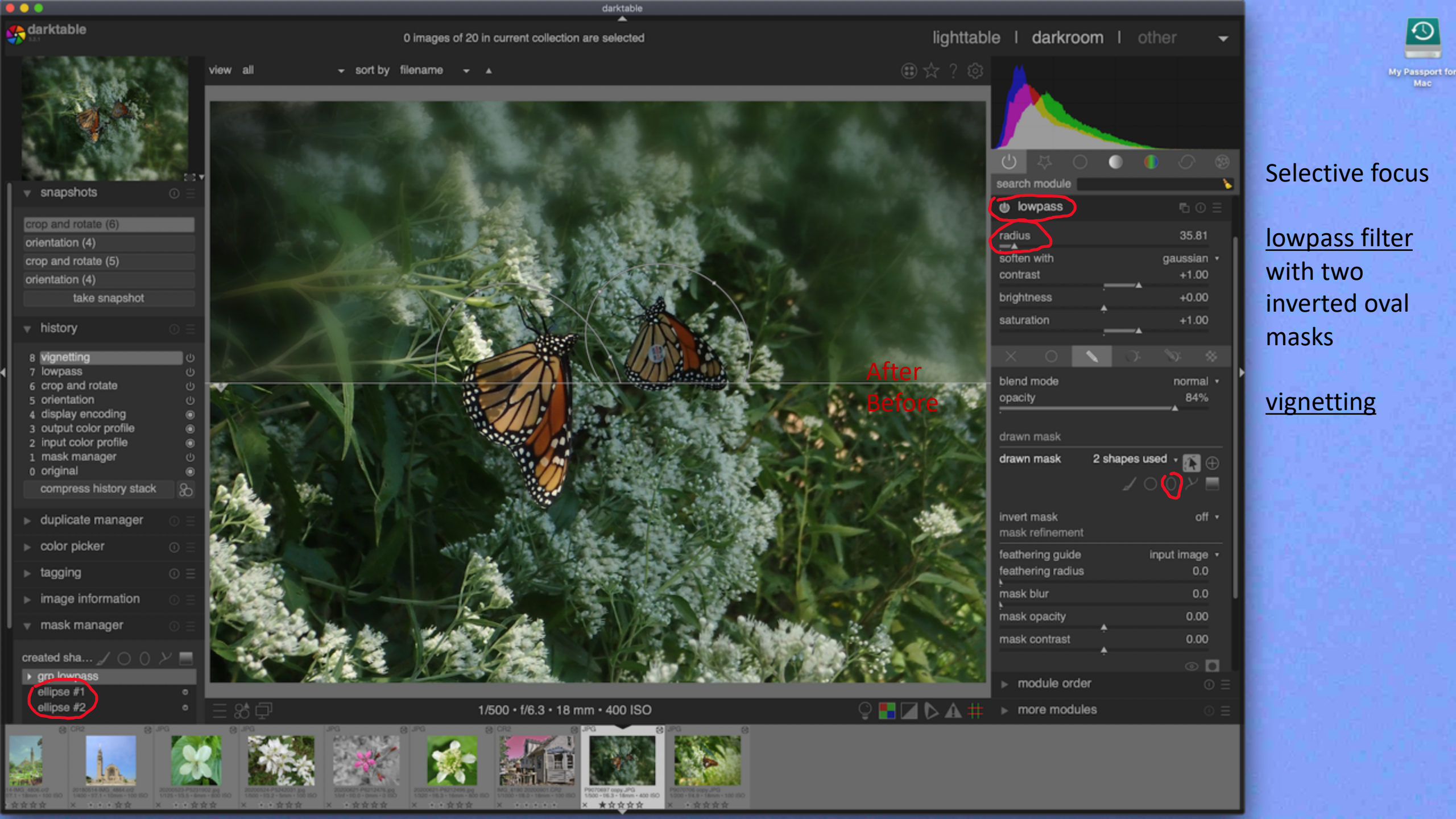
highlights : gain / slope

factor -22.79 %
hue 66.12 °
saturation 7.91 %

module order

more modules





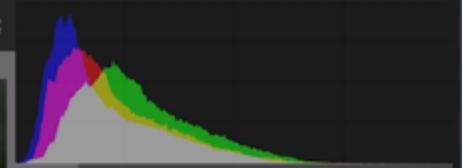
Selective focus

lowpass filter
with two
inverted oval
masks

vignetting

After
Before

- snapshots
- crop and rotate (6)
- orientation (4)
- crop and rotate (5)
- orientation (4)
- take snapshot
- history
- 8 vignetting
- 7 lowpass
- 6 crop and rotate
- 5 orientation
- 4 display encoding
- 3 output color profile
- 2 input color profile
- 1 mask manager
- 0 original
- compress history stack
- duplicate manager
- color picker
- tagging
- image information
- mask manager
- created sha...
- grn lowpass
- ellipse #1
- ellipse #2



search module

lowpass

radius 35.81

soften with gaussian

contrast +1.00

brightness +0.00

saturation +1.00

blend mode normal

opacity 84%

drawn mask

drawn mask 2 shapes used

invert mask off

mask refinement

feathering guide input image

feathering radius 0.0

mask blur 0.0

mask opacity 0.00

mask contrast 0.00

module order

more modules



feature	Light Room	darktable
Overall		
memory leak, need to restart for some users	yes	no
learning curve	steep	steeper
organization of features	good	middling due to many options
speed and screen refresh	good	slower
bugs	none except leak	some
after cancellation, access to images/export/printing but no editing	no longer	Open source/free so no restriction

darktable Version 3.2

A Free Alternative to Light Room

Thank you! tanya.riseman@gmail.com

Manual for version 3.0 <https://darktable.gitlab.io/doc/en/>

Videos by Rico Richardson

<https://www.youtube.com/c/RicosStory/videos>

Videos by Bruce Williams Photography

<https://www.youtube.com/user/audio2u/videos>

<https://mathiashueber.com/migrate-from-lightroom-to-open-source-alternative/>
<https://mathiashueber.com/darktable-settings-for-lightroom-user/>

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Image/file management	Library	lighttable
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collections	yes	no
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At present, darktable is able to deal with the following metadata of Lightroom generated sidecar files during the import phase:

- tags and hierarchical tags
- color labels
- ratings
- GPS information

At present, darktable is able to deal with the following development steps from Lightroom-generated XMP files (with the corresponding darktable module in parentheses):

- crop and rotate (*crop and rotate*)
- black level (*exposure*)
- exposure(*exposure*)
- vignette(*vignette*)
- clarity (*local contrast*)
- tone curve (*tone curve*)
- HSL (*color zones*)
- split-toning(*split-toning*)
- grain(*grain*)
- spot removal (*spot removal*)

It's just meant to help you recover part of the work you have invested into your image in case you migrate to darktable. **It is very important to understand that this import process will never give identical results.**