

darktable - Camera Support #11200

Nikon D3000 noise profiles, poor fit

10/06/2016 10:53 PM - Rory Gamble

Status:	Fixed	Start date:	10/06/2016
Priority:	Low	Due date:	
Assignee:		% Done:	100%
Category:		Estimated time:	0.00 hour
Target version:	2.4.0		
Affected Version:	2.0.6		

Description

I attach my first attempt at noise calibration of a Nikon D3000. The plots for higher isos (800-3200, see e.g. second page of DSC_0006.pdf) don't look very good at all. Any advice you can give on improving the re-taking the pictures and/or improving the fit would be appreciated.

Associated revisions

Revision fe8985c2 - 06/06/2017 09:12 PM - Stefan Schöfegger

noise profile: Add Nikon D3000, fixes #11200

Revision da37372e - 06/06/2017 10:50 PM - Roman Lebedev

Merge pull request #1502 from schenlap/noise_nikon_d3000

noise profile: Add Nikon D3000, fixes #11200

History

#1 - 10/07/2016 11:31 AM - Rory Gamble

I attach my first attempt at noise calibration of a Nikon D3000. The plots for higher isos (800-3200, see e.g. second page of DSC_0006.pdf) don't look very good at all. Any advice you can give on re-taking the pictures and/or improving the fit would be appreciated.

#2 - 10/31/2016 09:13 PM - Stefan Schöfegger

Yes, you are right, 800-3200 does not look good. Can you do some brighter shots? Your shots motly contain under- and overexposed areas, less in between.

#3 - 10/31/2016 09:14 PM - Roman Lebedev

- Status changed from New to Incomplete

- % Done changed from 0 to 20

#4 - 10/31/2016 09:31 PM - Rory Gamble

Thanks for the reply. Following the guide here:

<http://www.darktable.org/2012/12/profiling-sensor-and-photon-noise/>

I struggled to make them "have a widespread histogram, i.e. be over- and underexposed at the same time" so I probably put too much emphasis on that. I will make another attempt and post the results here. Suggestions on a good subject for the photos would be welcome.

#5 - 11/01/2016 11:45 AM - Stefan Schöfegger

That's right you need under and overexposed areas. Try to make these areas smaller.

I don't have much experience with noise profile, I only had done some testimages for it until now. I got the best result pointing a flashlight to the camera and illuminate the foreground with it. Have a dark background behind the scene to get an underexposed area.

#6 - 12/22/2016 12:28 AM - Caleb Gregory

- File DSC_0672.NEF added
- File DSC_0675.NEF added
- File DSC_0674.NEF added
- File DSC_0673.NEF added
- File DSC_0671.NEF added
- File DSC_0670.NEF added

Here are a few test images from my D3000. There are one of each of the iso settings. (100, 200, 400, 800, 1600, and Hi1 (3200))

#7 - 02/04/2017 01:34 PM - Rory Gamble

- File dt-noiseprofile-20170204.tar.gz added

I ran Caleb Gregory's NEF files through the calibration script. It only took me 5 months to get around to it! The results look a lot better. I attach the .tar.gz file. Would appreciate a more experienced person having a look at the fitted curves. Thanks!

#8 - 06/06/2017 09:14 PM - Stefan Schöfegger

Yes, result look much better now. I create a pullrequest for it.

#9 - 06/06/2017 11:17 PM - Stefan Schöfegger

- Status changed from Incomplete to Fixed
- % Done changed from 20 to 100

Applied in changeset [darktable|fe8985c29aa8ee6a84b8bc332de634459b982e8b.](#)

#10 - 06/06/2017 11:58 PM - Roman Lebedev

- Target version set to 2.4.0

Files

dt-noiseprofile-20161006.tar.gz	1.89 MB	10/06/2016	Rory Gamble
DSC_0670.NEF	6.95 MB	12/21/2016	Caleb Gregory
DSC_0671.NEF	7.35 MB	12/21/2016	Caleb Gregory
DSC_0672.NEF	7.74 MB	12/21/2016	Caleb Gregory
DSC_0673.NEF	7.98 MB	12/21/2016	Caleb Gregory
DSC_0674.NEF	8.49 MB	12/21/2016	Caleb Gregory
DSC_0675.NEF	8.99 MB	12/21/2016	Caleb Gregory
dt-noiseprofile-20170204.tar.gz	1.74 MB	02/04/2017	Rory Gamble