

ROI = region of Interest

For large images a ROI selection is required. A DoAll button
is to apply adjustments to the whole frame.

For small images ROI is only optional. You can force ROI however.

Just click on 'force ROI' (remember this is optional)

Ex: to process faster or to process only a part of frame.

You can draw another ROI instantly (when ROI mode is setted)

Do a Reset (to clear previous parameters?) then:

A: adjust a size for HF (small details): 0 to 35

B: and its strength: HF 99 to 0 (try to start at 99 and reduce)

C: remove noise with Noise Pre-Filter 0 to 3.0 Loop on (ABC) to find an optimal adjustment

When found a good compromise (ABC), you can:

1: add sharpen for large details in Wavelets LF: Most of time there is a very low amount of LF or probably nothing to do here.

2: add a Deconvolution (2 adjustments) but only for very sharp images! You have to readjust HF and compensate by Deconvolution to reach a fine result. Deconvolution works with Wavelets HF and not alone!

 $HF = high\ fréquencies = small\ details$ $LF = low\ frequencies = large\ details$ Noise-prefilter is to reduce noise and artefacts. Avoid using the noise filter at the bottom

Both sliders Offset and Gain are to adjust intensity levels of image avoiding a saturation.

For color images in the tab RGB, we can align channels, adjust color Gain and Offset, color Saturation, and reduce color noise. These methods are avalaible outside the dialog.

Most of adjustments have a preview check box and have small buttons +/- for a fine tuning.

There is a also a main Preview check box for all operations. (if at least one is done)

At any time you cas do a Save As to save a version of your job (but change the name for file output).

Ok will close the dialog and open image for further work.

To record parameters sets, use buttons SaveP and LoadP at the top.

When dialog is open last parameters are realoaded automatically.

Wavelets-Deconvolution 16 bits Main RGB RGB Open File Apply RGB adjustments Load P Ok force ROI - Do All Save P Reset Only optional! Cancel < > 0 Noise prefilter : pix Preview 0 0.5 1.0 1.5 2.0 2.5 3.0 0 0 Offset ADU Gain 1 1.08 -Iterations : Deconvolution RLucy Wavelets HF

9

- 0 Size Strength

90
- 0 Reduce Noise: use prefilter! ● N1 ○ N2 ○ X1 ○ X2

Open a file

Pre-filter (very important)

Offset and Gain

Deconvolution: works with HF

HF

Reduce noise : avoid it!

On the web site http://astrosurface.com many files are waiting to be processed.