Astrophotography post-processing

November 2023 Jeonghwa Kim

UCSB

Image preparation

- .fz -> .fits decompression instructions here (https://lco.global/education/observing/fpack/)
- Images with suffix -e00 are raw, and -e91 are calibrated with the LCO BANZAI pipeline(<u>https://lco.global/documentation/data/BANZAIpipeline/</u>). Typically you would want to use the calibrated images.
- Important note: the following steps are primarily focused in making pretty pictures, NOT for quantitative analysis. You cannot use post-processed images for photometry.



Dim.X = 9576 Dim.Y = 6388 RAM = 245 Mb Field = 117.2' × 78.2'



Click on the 'Histogram stretch' menu

AstroArt automatically adjusts the histogram, which is not ideal.

We will set all the images to be linear in 16 bit. Eile Edit Yiew Image Filters Arithmetic ⊆olor Mask Iools Macro Plug-in Window Help

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Using the options, change the range to 16 BIT and curve to LIN.

Adjust the top and bottom sliders to be at 0 and the 65536 (maximum for 16 bit).

Press Apply and continue

Repeat the process for all images. They will look black, but it's fine.

Dim.X = 9576 Dim.Y = 6388 RAM = 245 Mb Field = 117.3' x 78.3

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Ps

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