

Creating an RGB Image with JS9-4L

GOAL: To create a 3-color image using telescope images taken with red, green, and blue filters

Before you start:

Close the Lagoon Nebula image that automatically opens in the JS9 Window

("My List" \rightarrow click on the X)



1. Open 3 images of same object — one taken with Red filter, one with Green, one with Blue (in the archived Image list, typically the 1st 3 images of any object are in the order R-G-B)



2. Enhance each black and white image to show as much detail as possible

a. - click Scale —> Log

b. - set Low Brightness Limit at Pixel Value of the left-lower corner of image (dark sky) - usually around 300

c. - slide "High Brightness Limit" down to value that looks good to you

d. - use "stretch" and "shift" to make fine adjustments

e. - repeat for each of 3 images, using "My List" to switch between them

JS9-4L:astronomical image display



3. Make sure you know which image is R, G, and B (check "Image —> Display FITS Header")



<u>a. Set the "Color" map</u> for the Red filter image to Red, Green filter image to Green, Blue to Blue
<u>b. Click on "Color" -> RGB Mode</u> To see All 3 images added together

4. If needed, use "Tool" -->
"Shift" to align images with each
other

5. Use "Region" - > "Text" to label
your image

6. Save as PNG!



