

## Extracting Ha & OIII files and combining with R, G, B files using an OSC and Optolong L-eNhanche filter.

### RGB Integration

1. Stack and integrate the color files as you normally would but do no post processing on it yet.
2. Clear the input files out of APP (or close and restart it) and load in the stacked integrated color file as a light file.
3. Click on the Calibrate tab (tab 2) and scroll to near the bottom and check the "Split Channels" and click on Save Calibrated Frames. This will then split your composite color image into 3 RGB images that have all been preprocessed. These are the three files you will combining with the NB files

### Ha and OIII Integration

4. Now for the narrowband images. Clear everything out of APP and on Tab 0 (Raw/Fits), click on your correct debayer pattern (mine is RGGB).
5. For the algorithm, select Ha-OIII extract Ha.
6. Click on Load (tab 2) and enter your lights, etc. for your L-eNhanche frames and appropriate calibration frames.
7. Click on Register (tab 4) and select Use Dynamic Distortion Correction.
8. Click on Integrate (tab 6) use the automatic parameters. Click on Integrate.
9. Once the integration is complete for the Ha file, clear the data once more, go to tab 0 and select the Ha-OIII extract OIII algorithm. Reload the same data, but now for the OIII signal. Click integrate in tab 6 and this will integrate your OIII data.
10. When the OIII is complete you now have 5 files: R, G, B, Ha, and OIII. Now the files must be registered and normalized together so that you can combine them.

### R, G, B, Ha, OIII Registration/Normalization

11. Restart APP and in the Load tab (tab 1) load in the R, G, B, Ha, and OIII files.
12. Click on Analyze stars (tab 3) and click on the Analyze Stars button.

13. When Analyze stars is complete, Click on Register (tab 4) and then click on Start Registration.

14. When registration is complete, click on Normalize (tab 5), click on Normalize lights. When complete, click on Save Normalized Frames.

#### Combining R, G, B, Ha and OIII

15. Click on Tools (tab 9) and select Combine RGB.

16. Add each file, one at a time. R for Red, G for Green, B for Blue, Ha for Red, OIII for Green and OIII again for Blue. At this point you have 6 files designated.

17. Go ahead and click on Calculate and get a starting image.

18. Tune the top slider for each frame as desired. I usually start with something like Ha slider 2.0, OIII Green 1.0, OIII Blue 1.5, Red 2.5, Green 1.0, Blue 1.5 and then go from there. Keep in mind, you do not want to overpower your image with Ha and OIII or you will destroy your natural star color.

19 When you have finished tweaking your color, click create and then cancel. This takes you out of the Combine tool.

#### Final Tweaks

20. Select the combined fits file you just saved. Now you are ready for your initial crop, light pollution reduction, Star Color and HSL Color. Then you can adjust your saturation, contrast and sharpening.

21. Do any final cropping and/or rotating and save your Tiffs and JPEGs as desired.