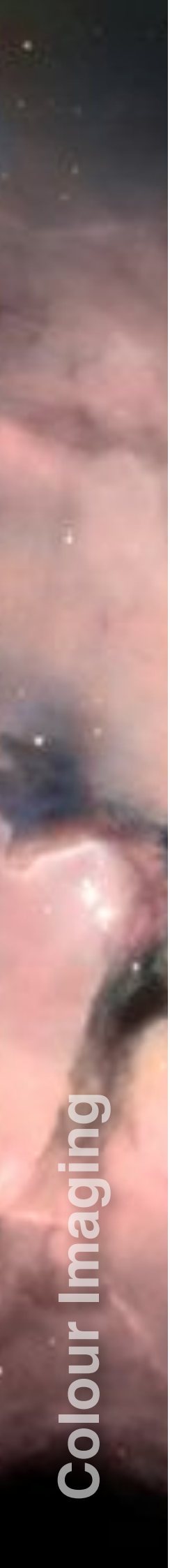

FAULKES TELESCOPE

Colour Imaging

Making a colour image with SalsaJ

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Making colour images with SalsaJ

Introduction

These instructions will show you how to produce colour images from the FITS files obtained from the Faulkes Telescopes.

You will need to download a plugin for SalsaJ called '**Align RBG**' which can be found on the Faulkes Telescope Software page or EU-HOU website.

1. Open SalsaJ - you will see two windows appear. One is the main SalsaJ menu bar. Most of the options you will use are found here.

The other window is a Command Window, you will not use it but do not close it. If you do, SalsaJ will shutdown and you will lose any unsaved work.

2. Open your FITS files by selecting **File>Open**

In the dialog box that opens, find where you have saved your FITS files. Then, using the **Ctrl** key, select the images you want to open, then click the **open** button.

Each image will be loaded into SalsaJ in individual windows. The Information Bar of each image will read **16-bit greyscale.**

In order to make working with these images easier, you can tile them by clicking on **Window>Tile**.

3. Adjust the brightness of your image so your object is visible, by selecting **Operations>Single Image Operations>Log**

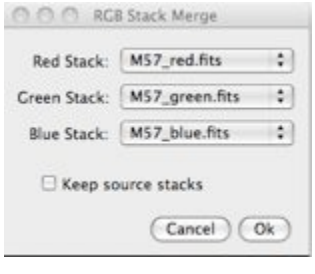
4. Next, you can adjust the brightness and contrast of the image to make the overall image darker or lighter. Click on **Image>Adjust>Brightness/Contrast**

5. Repeat this procedure for your other two images.

6. Now convert the greyscale images to RGB images - click on **Image>RGB Colour.** Repeat this for all 3 images.

7. To create your colour image from the 3 files, go to **Image>Colour>RGB Merge...**

A window will appear from which you should select which images correspond to each colour. Click **Ok** to produce your colour image.



Aligning

If your images are not aligned, follow steps 8-9. If they are aligned, then go to step 11.

8. Go to **Plugins>Align RGB Planes**. The **Align RGB** box will appear.

9. Using the zoom tool, zoom into a single star in the image. This will help when aligning your image.

10. In the **Align RGB** box go to the **Plane** drop down menu and select the colour layer you wish to move. Click on the Up, Down, Left and Right buttons to move the selected layer until all 3 layers are aligned.

Cosmetics

There are more adjustments you can make towards your image.

11. You can adjust the **Colour Balance** by going to **Image>Adjust>Colour Balance**.

Select the colour layer you wish to adjust from the drop down menu at the bottom of the window. Then use the sliders to adjust the properties of the layer. You must click the **Apply** button for each change to remain.

You can also adjust the image as a whole by selecting **R/V/B** from the drop down menu.

Saving Your Image

12. Finally, you can save your image by going to **File>Save As**. From this menu you will be given several formats to save your image in. **TIFF** and **JPEG** are common formats for images, with JPEGs often being smaller and more convenient for sharing on the Internet.

Navigate to a location on your computer where you want to save your image and click **Save.**