

# How to Add False Colour using LT Image

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Adding false colour to your image might make it easier to highlight features or areas that you're interested in. This can be done using LT Image.

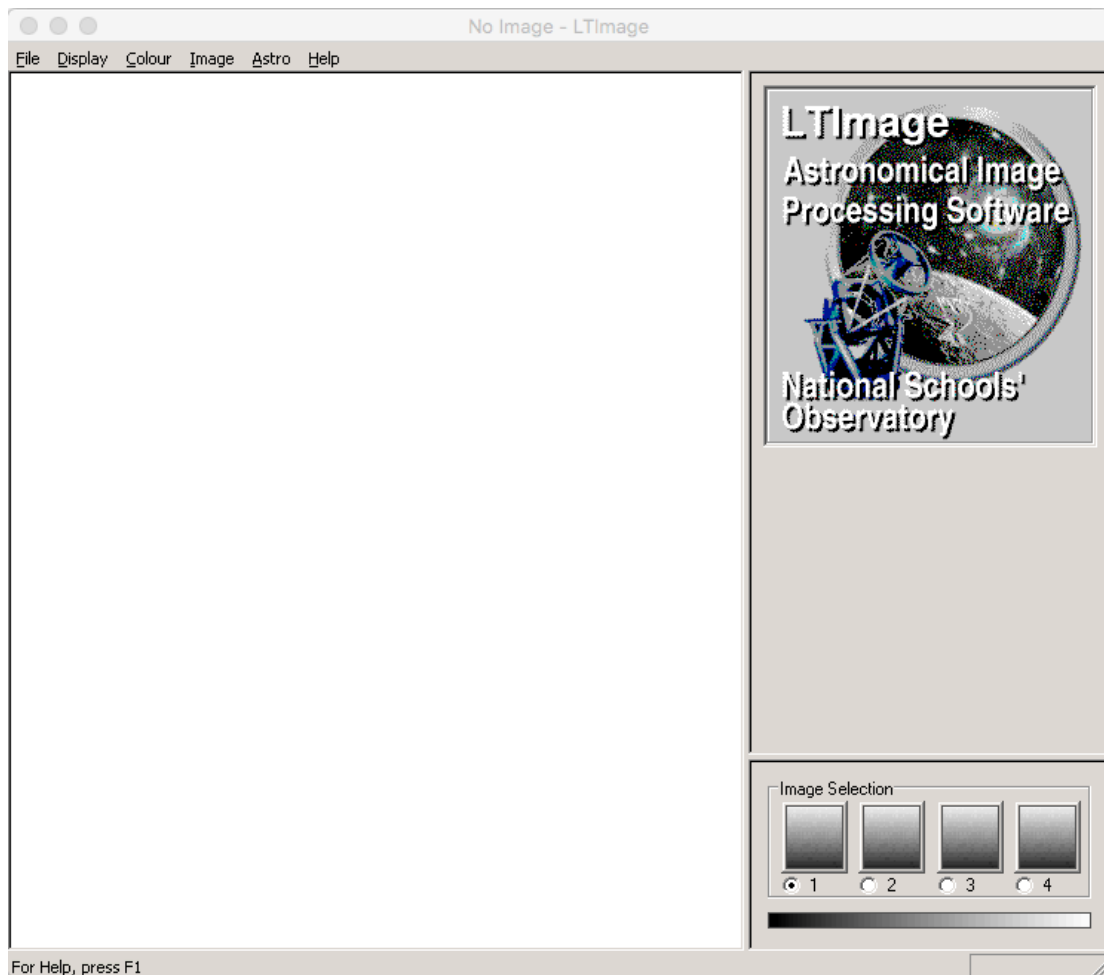
## Stages:

1. Load the image
2. Scale image
3. Choose a colour scheme
4. Adjust your colour scheme
5. Save your colour scheme
6. Save your image

## 1. Load The Image

Once the telescope has taken your observation you will be able to download the file from the 'My Observations' section of the website. This file will be a .fits file. We can then view this using LT Image which can be downloaded from the NSO website.

Upon opening LT Image you will see several options at the top of the window:

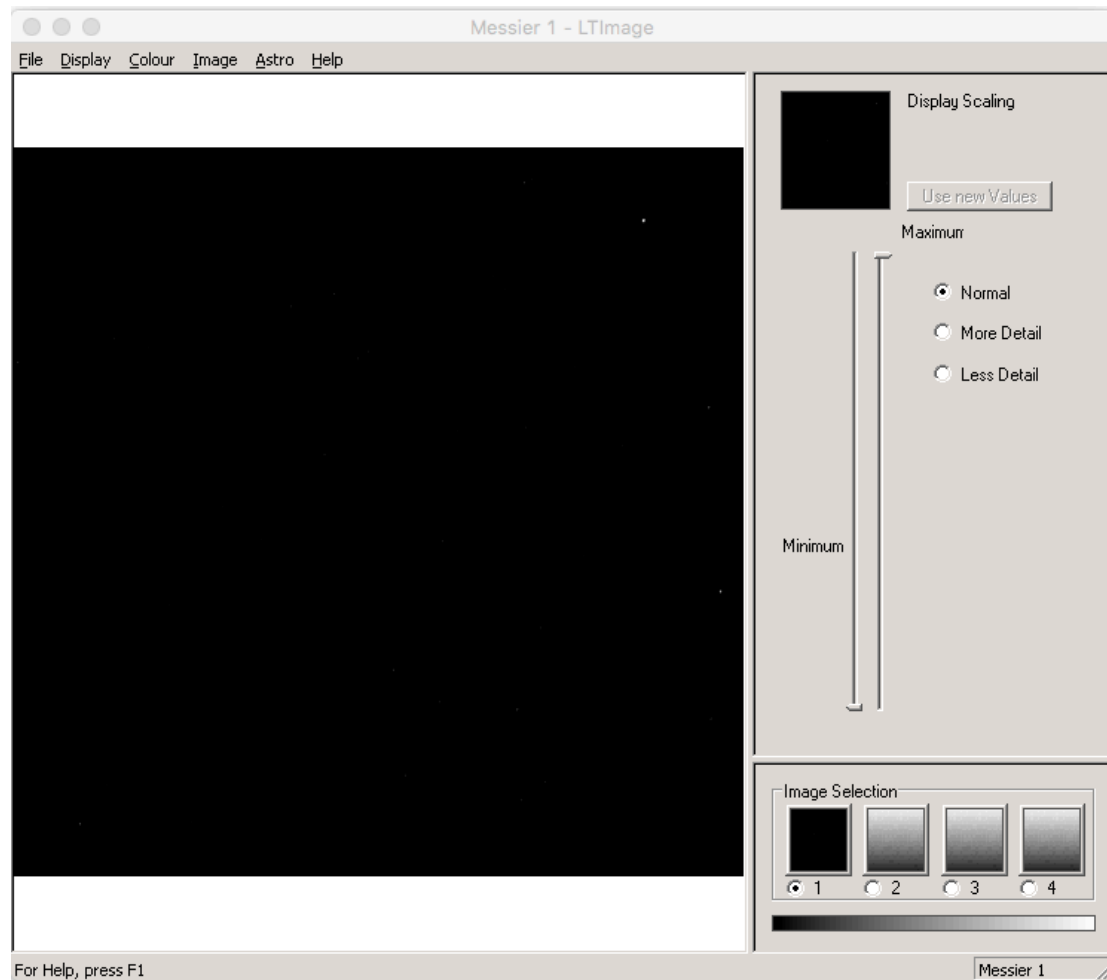


Click 'File' and select 'Open Data Image' and then select the .fits file you wish to work with.

## 2. Go To The Scaling Option

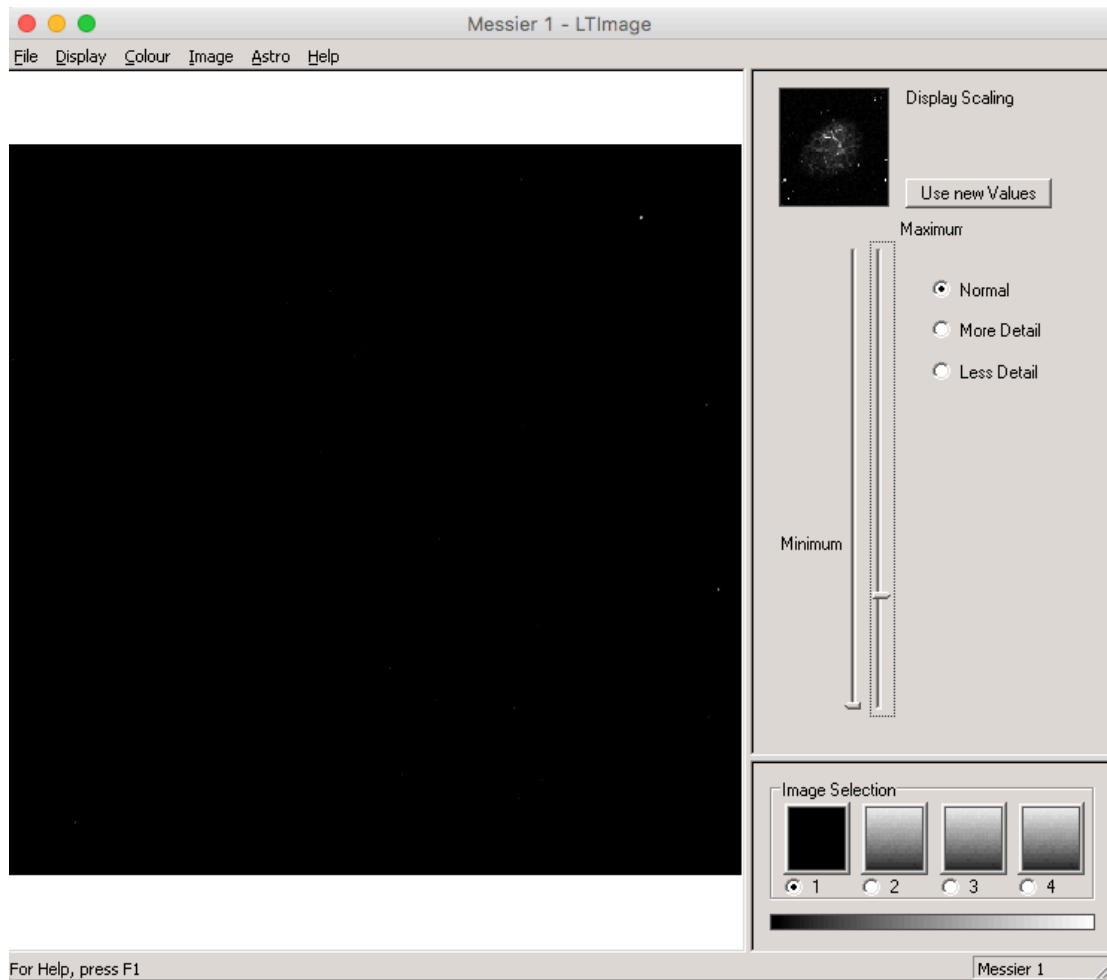
Once you have opened your image you will see a very black image with perhaps just a few white stars visible. We need to use LT Image to process the image, by scaling it.

From the options at the top of the window, select 'Display', then 'Scaling' and you will notice that two slider bars have appeared on the right hand side of the window:

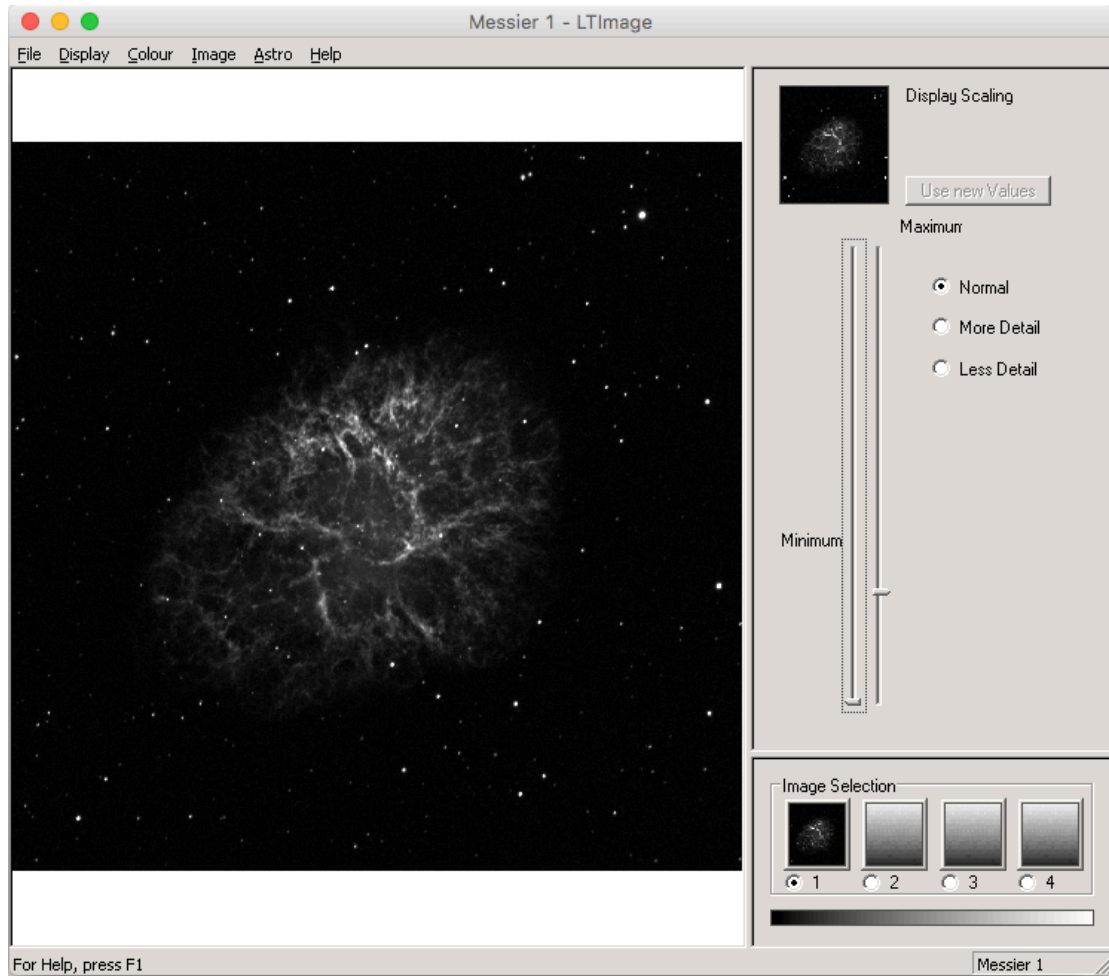


Adjusting the controls that have appeared will adjust how your image is displayed on the screen. The minimum slider will adjust how dark the dark areas are, whilst the maximum slider will adjust how bright the bright areas are.

In this case we are only interested in making the bright areas brighter so we slide the maximum bar downwards. In doing so you'll notice that our image has not yet changed, although the smaller preview box has.

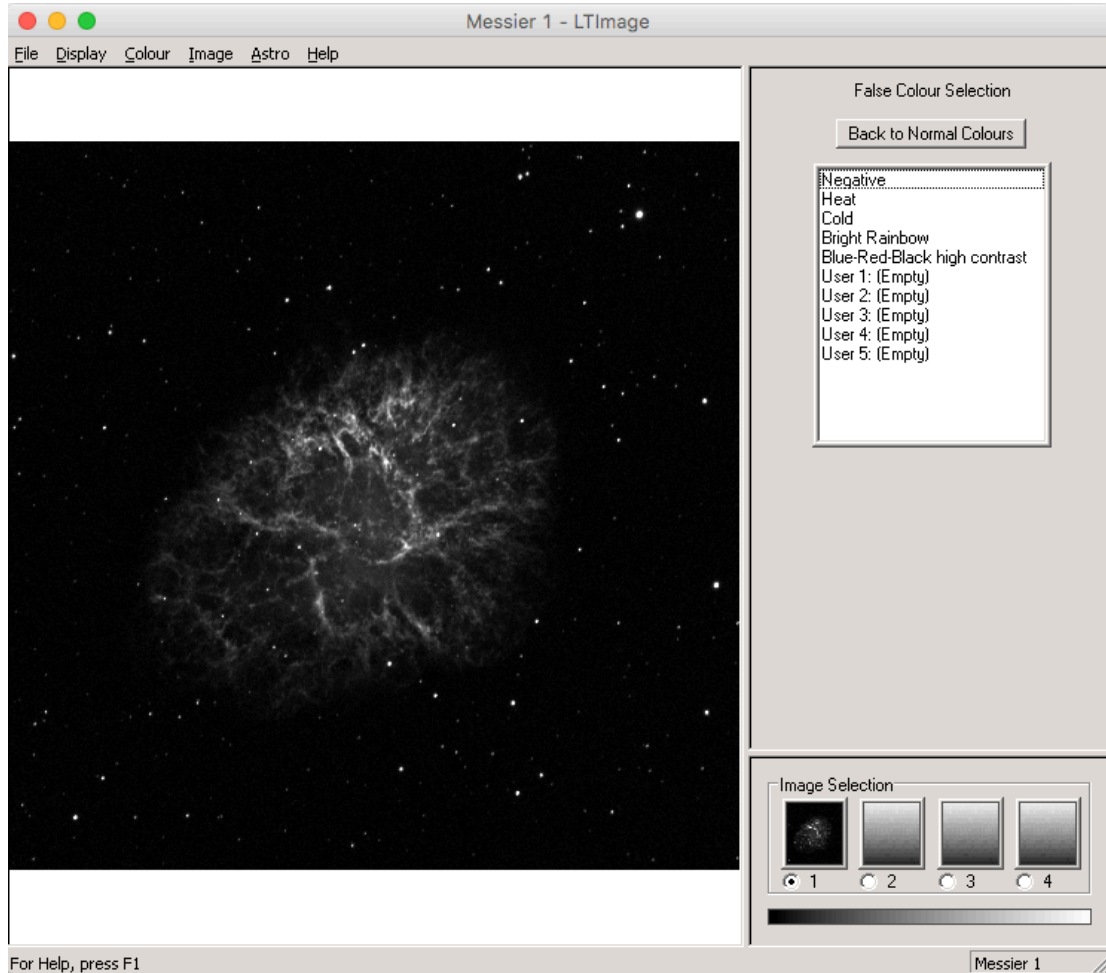


This preview box shows what our adjustments would do to our image, but if we want to go ahead and accept these changes we need to click the button labelled 'Use new values'.

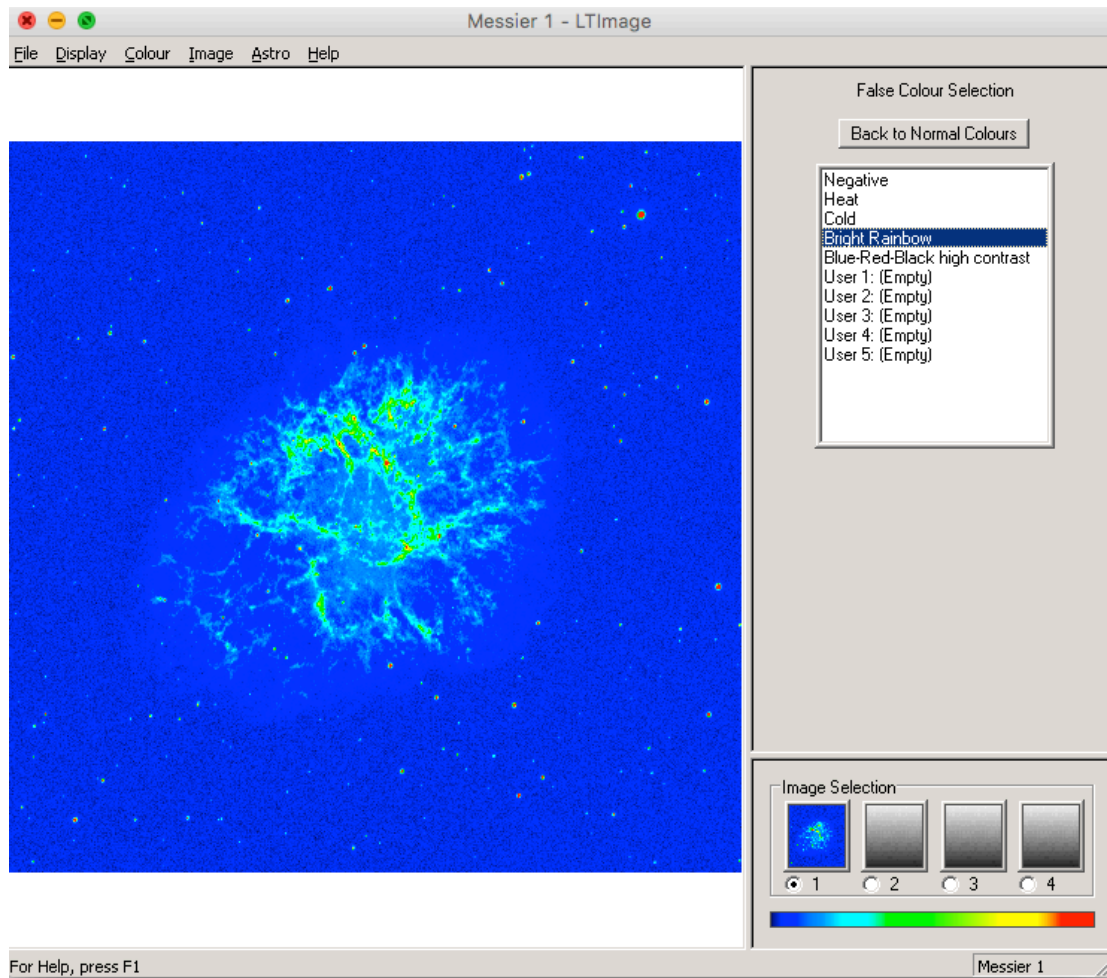


### 3. Choose a Colour Scheme

Select 'Colour' from the options at the top of the window, then 'Colour Select'. This will give a range of colour scheme options on the right hand side.

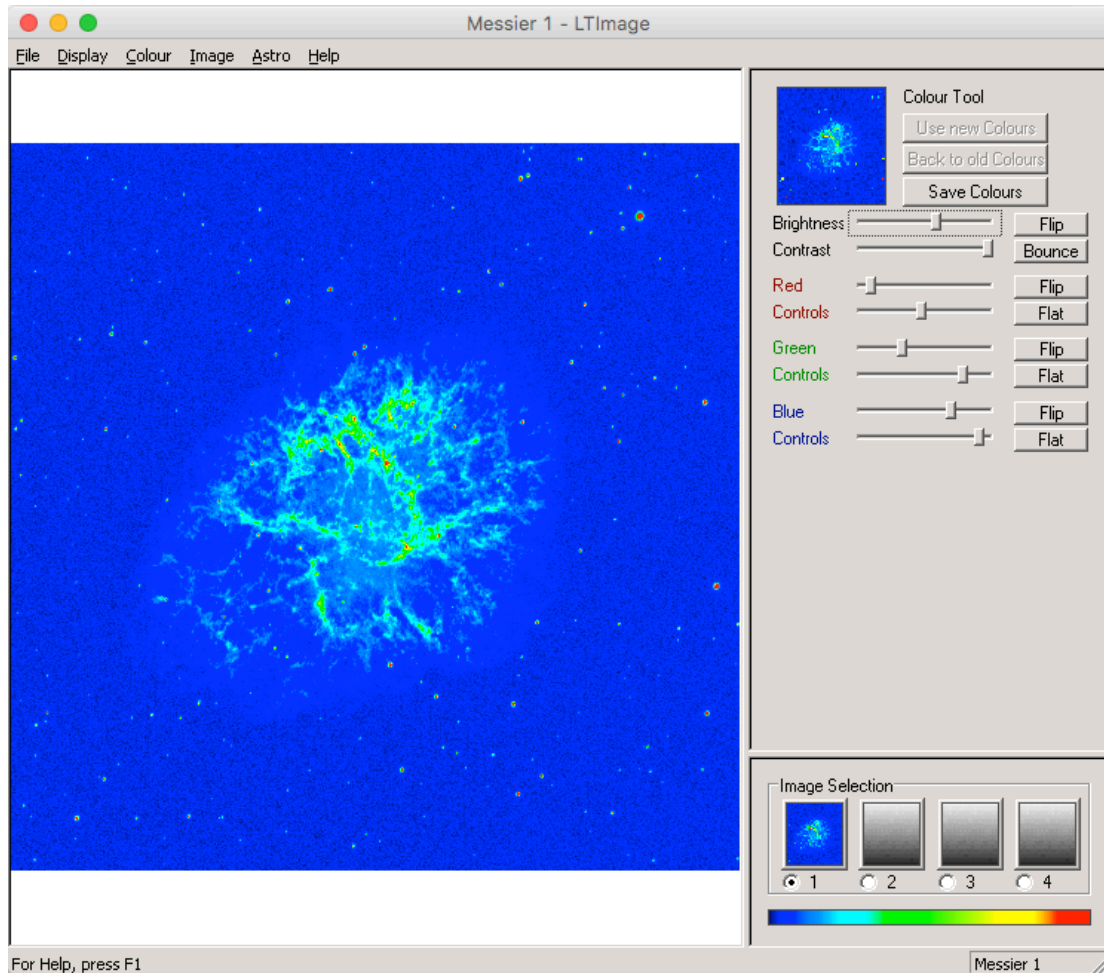


By selecting one of these colour schemes LT Image will add false colour to your image.



#### 4. Adjust Your Colour Scheme

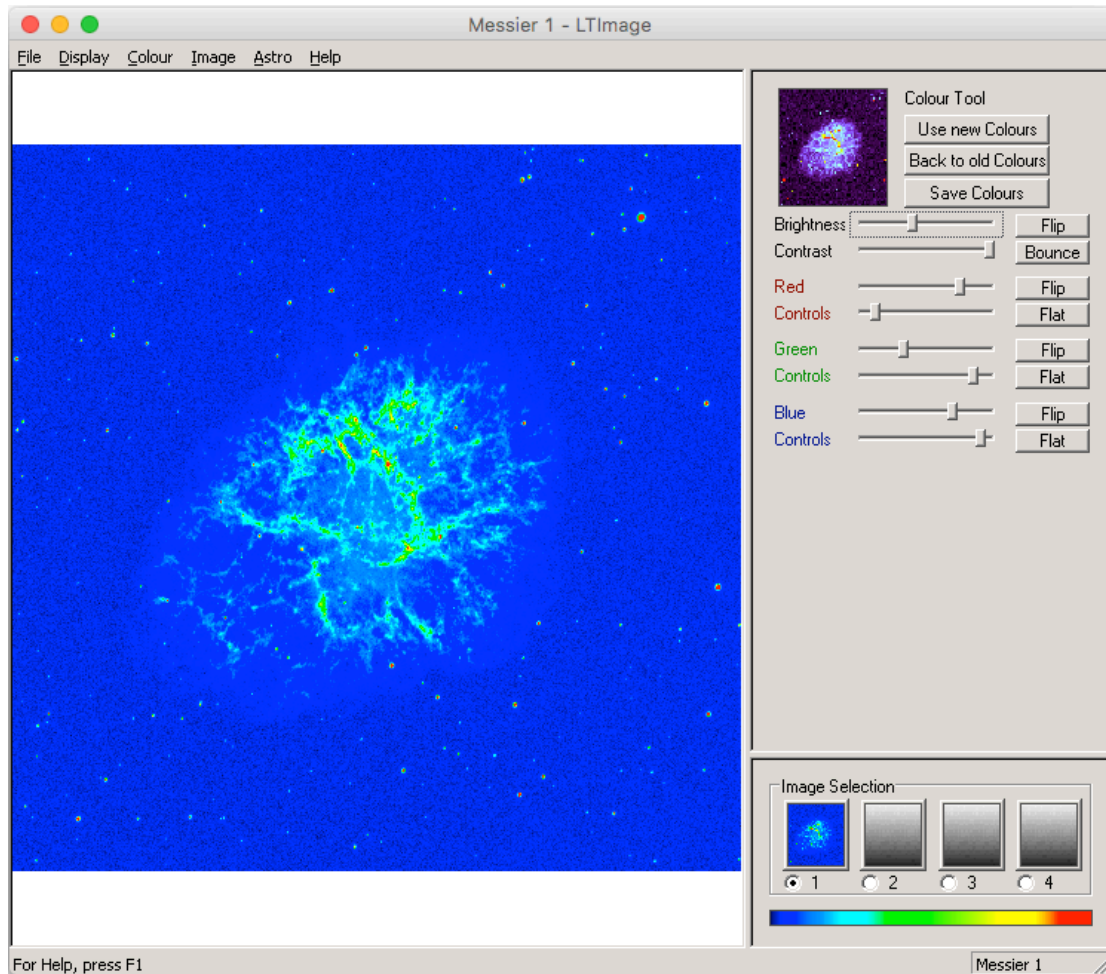
LT Image allows you to adjust and personalise your chosen colour scheme. Select 'Colour' from the options at the top of the window and then select 'Colour Tool'.



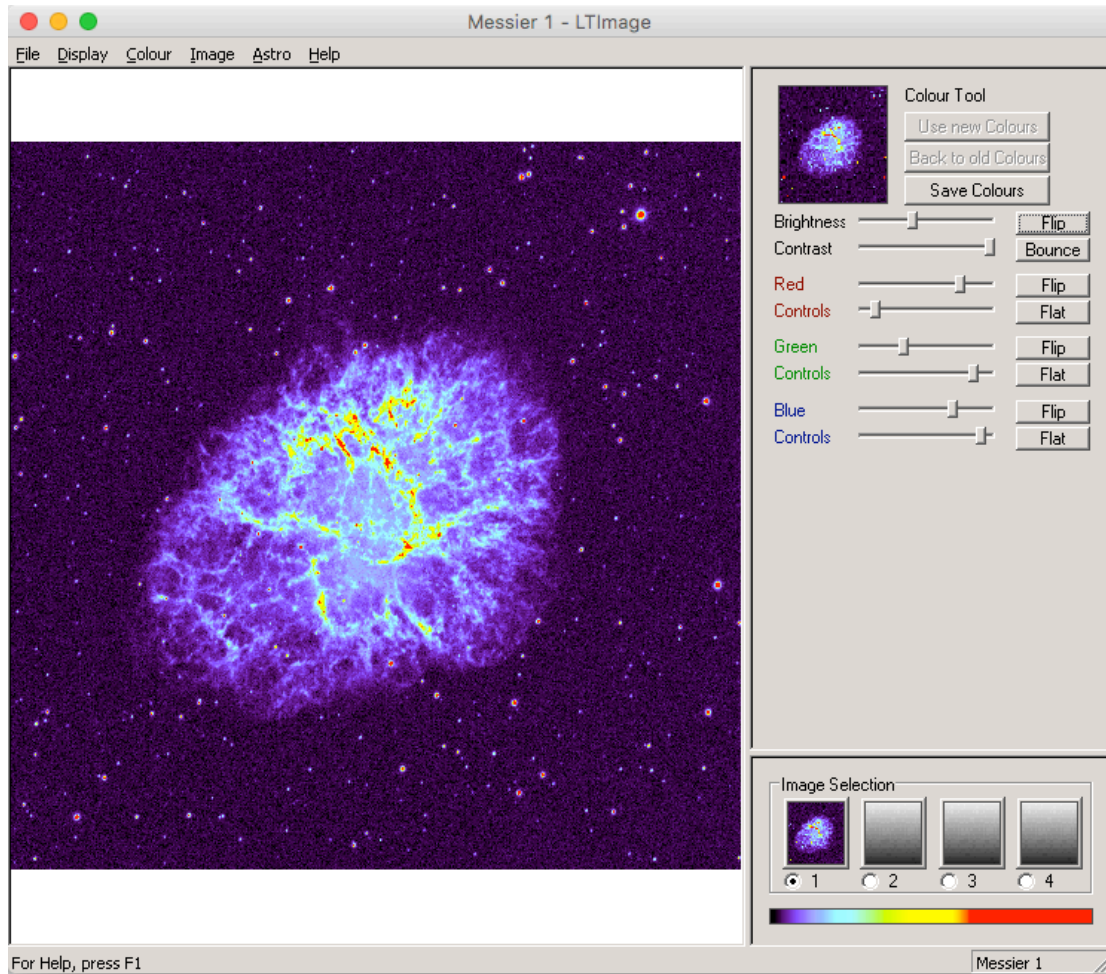
This will cause a number of slider bars to appear on the right hand side.

However, adjusting these slider bars will not make any adjustments to your image, it will only change the image displayed in the preview window in the top right. If you make changes you're not happy with you can click the box labelled 'Back to old colours' to undo the changes you have made.



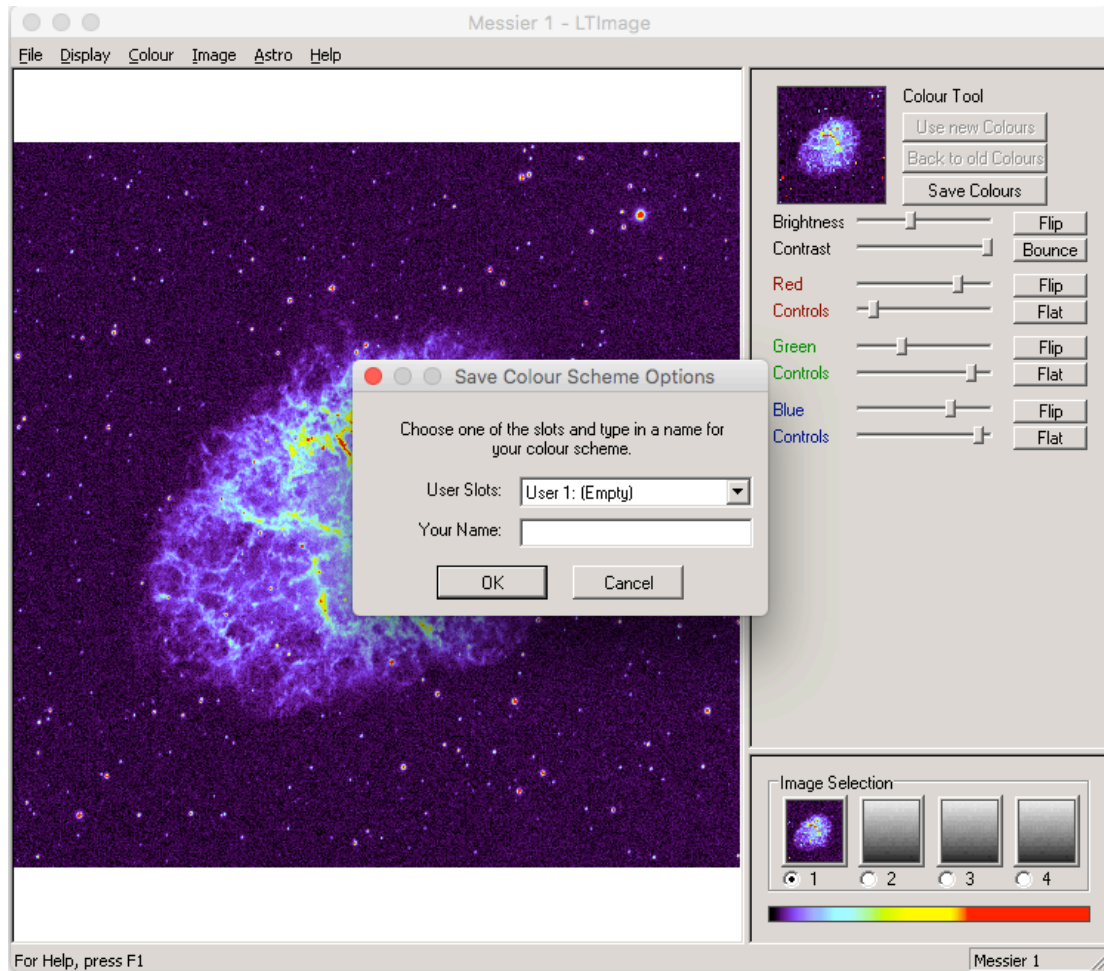


Once you're satisfied with how the preview window looks, click the box labelled 'Use new colours' and you will see you image has now changed to match that of the preview window.



## 5. Save Your Colour Scheme

You may wish to save your colour scheme, so you can apply it to another image. This can be done by clicking the 'Save colours' box on the right hand side. A dialogue box will now appear.

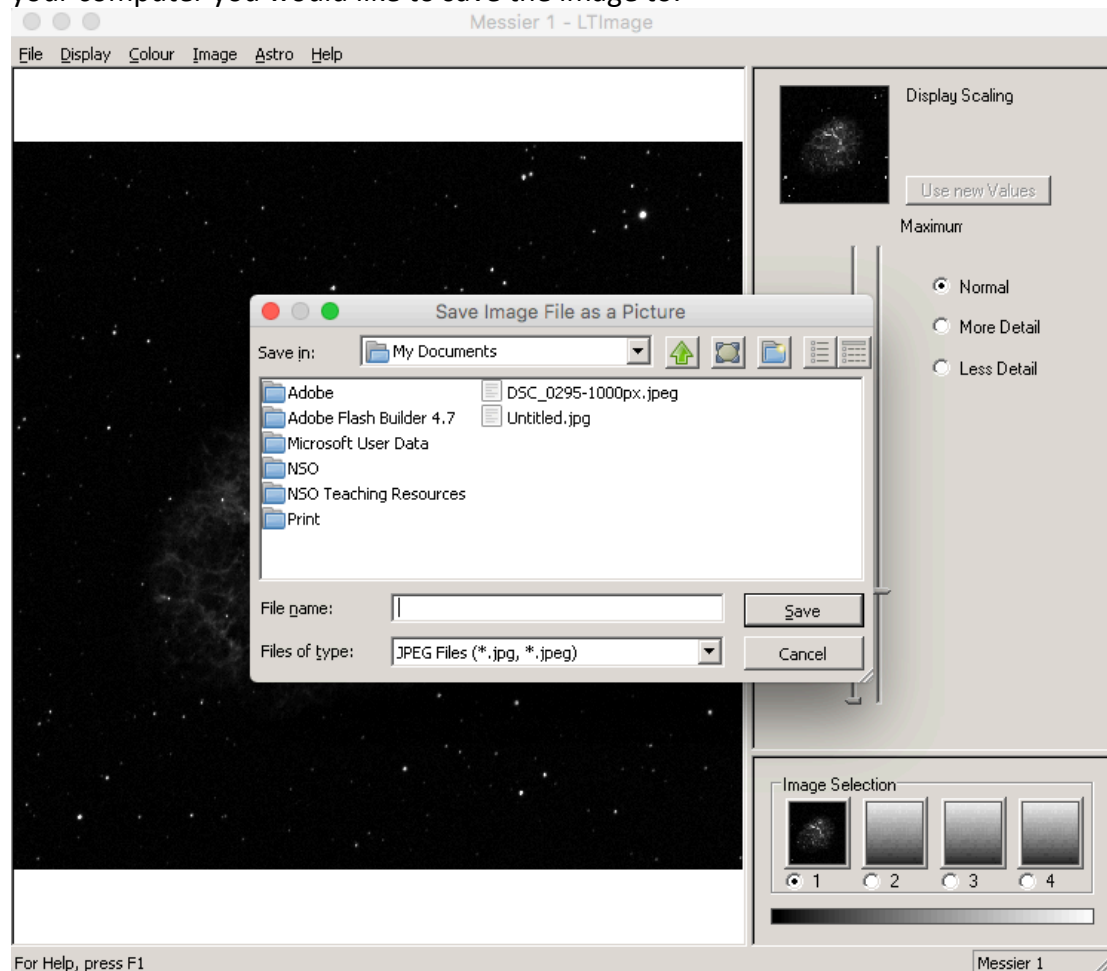


Select one of the user slots and then give your colour scheme a name and click OK. Your saved scheme will then appear the next time you go to 'Colour Select' allowing you to easily apply it to other images.

## 6. Save Your Image

Once you are happy with how your image looks you may wish to save it in a format that allows you to print or email it. This is done by selecting 'File' from the options at the top of the window, followed by 'Save Picture'.

This will open a dialogue box allowing you to name your picture and select where on your computer you would like to save the image to.



As you can see, this is saving the file as a JPG, which can be opened in other computer programs, printed or emailed.