

How to Open Multiple Images, Scale and Blink using LT Image

You may wish to compare multiple images of the same object taken at different times. LT Image allows this to be done very easily, and allows you to rapidly flick, or blink, through up to 4 images.

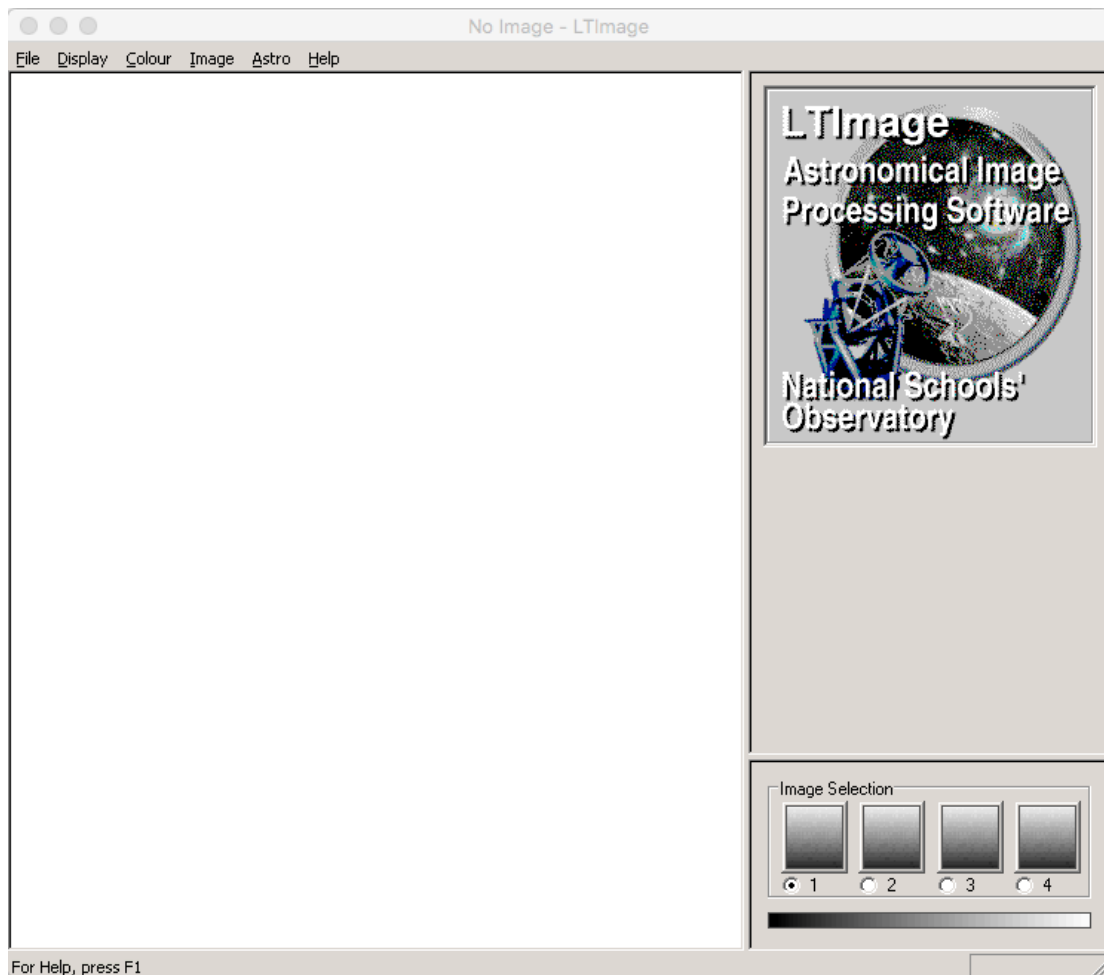
Stages:

1. Load the images
2. Go to the scaling option
3. Adjust the maximum control
4. Blink through your images

1. Loading The Images

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.

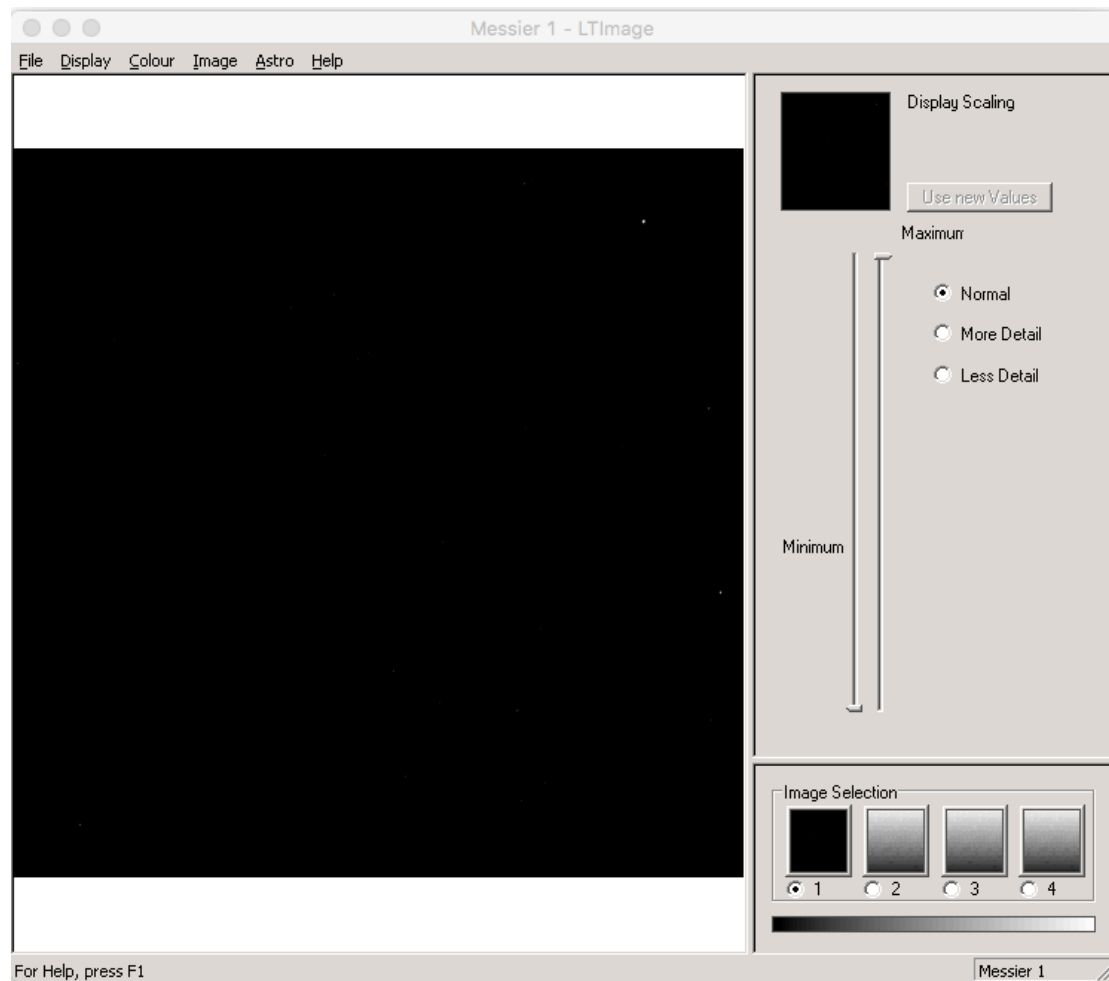
To load a second image click the second box in the 'Image Selection' area, which is in the bottom right of the screen. Then simply repeat the above process to load your second image.

If you require a third and fourth image repeat the process with the third and fourth boxes in the 'Image Selection' box.

2. Go To The Scaling Option

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

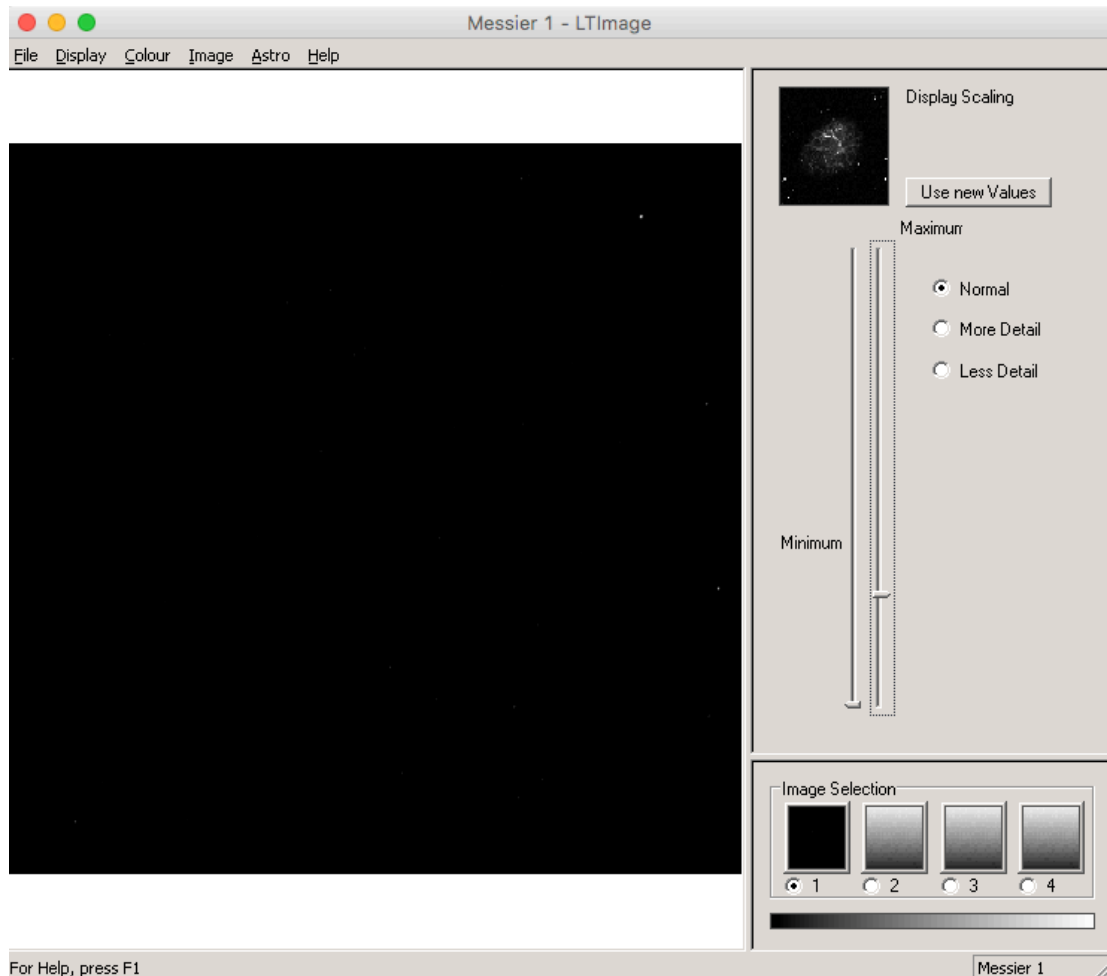
Begin by selecting your first image from the 'Image Selection' box in the bottom right of the LT Image window. Then, from the options at the top of the window, select 'Display' then 'Scaling' and you will notice that two sider bars have appeared on the right hand side of the window:



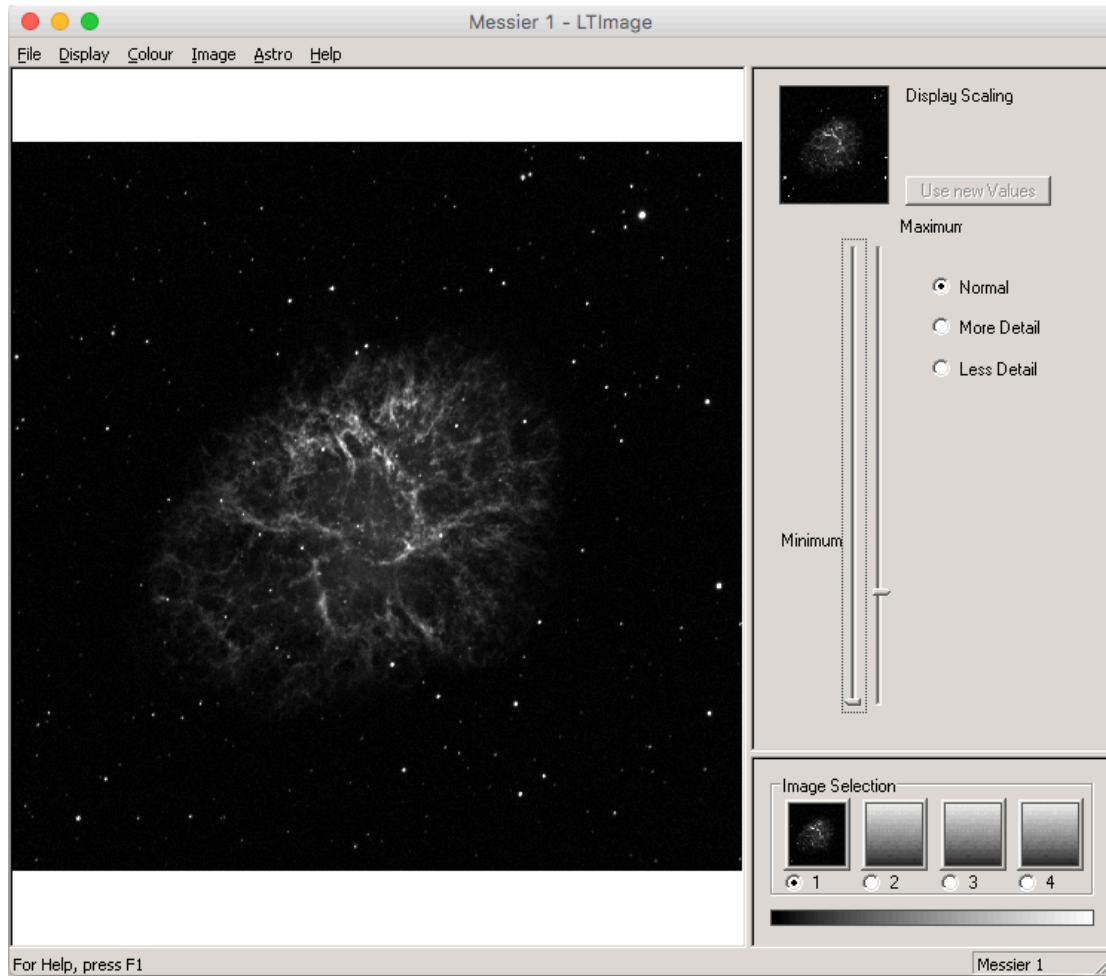
3. Adjust The Maximum Control

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'.



Repeat steps 2 and 3 for each image, ensuring they are all approximately scaled to the same level.

4. Blink Through Your Images

You can now look at each image in turn by selecting them from the 'Image Selection' box. By quickly selecting one image followed by another, it is easy to notice any differences between them.

This can be made much easier (and faster) by clicking the first image in the 'Image Selection' box then using the left or right arrow key to blink between the images. You can even hold the arrow key to make it blink extremely quickly, perfecting for hunting asteroids!