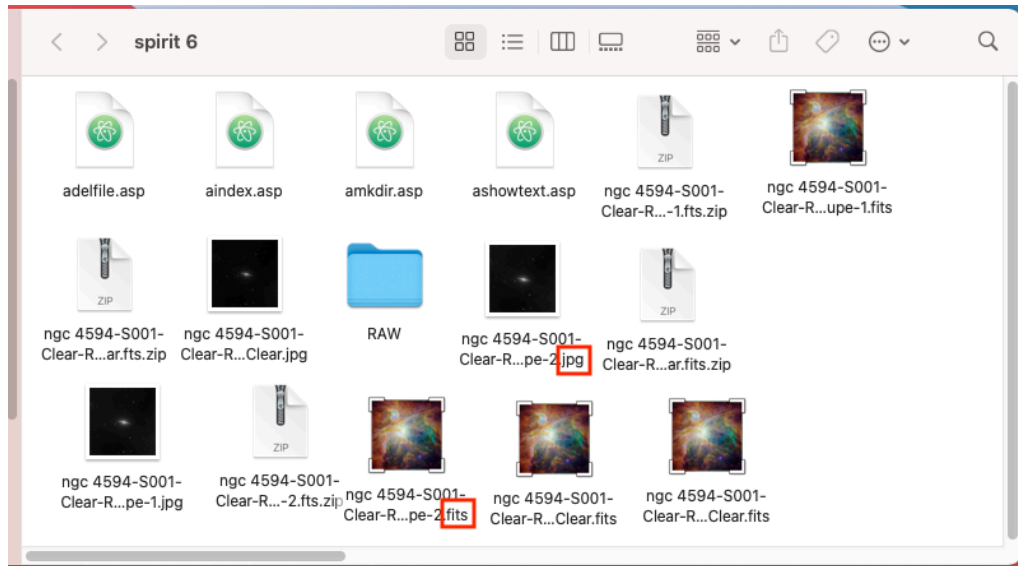# Using FITS Liberator to access high quality images from SPIRIT

When you download your pictures from the FTP server, you will have your picture in two formats: .jpg and .fits. You will have to unzip your .fits files to use them.
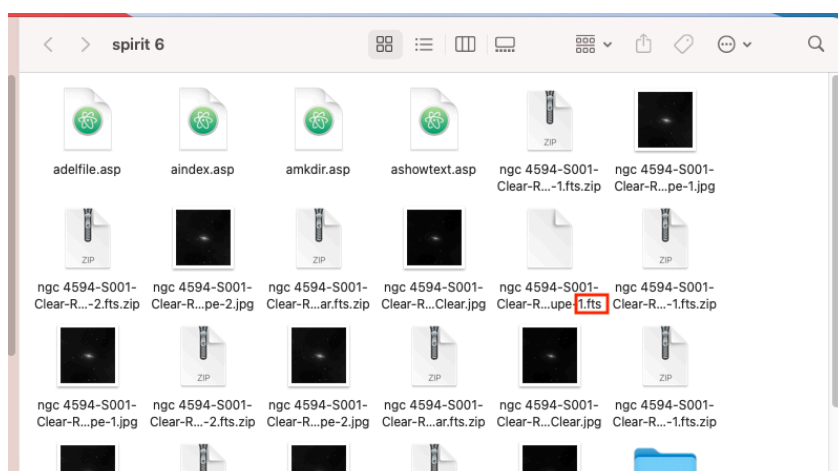

FITS Liberator is software that allows astronomical FITS format images to be viewed and modified. FITS images are used predominantly for science but can also be used in astrophotography. Unlike JPEG versions of *SPIRIT* images, FITS versions contain the original uncompressed data, and should be used when creating high quality images.

The ESA/ESO/NASA FITS liberator application can be downloaded from:

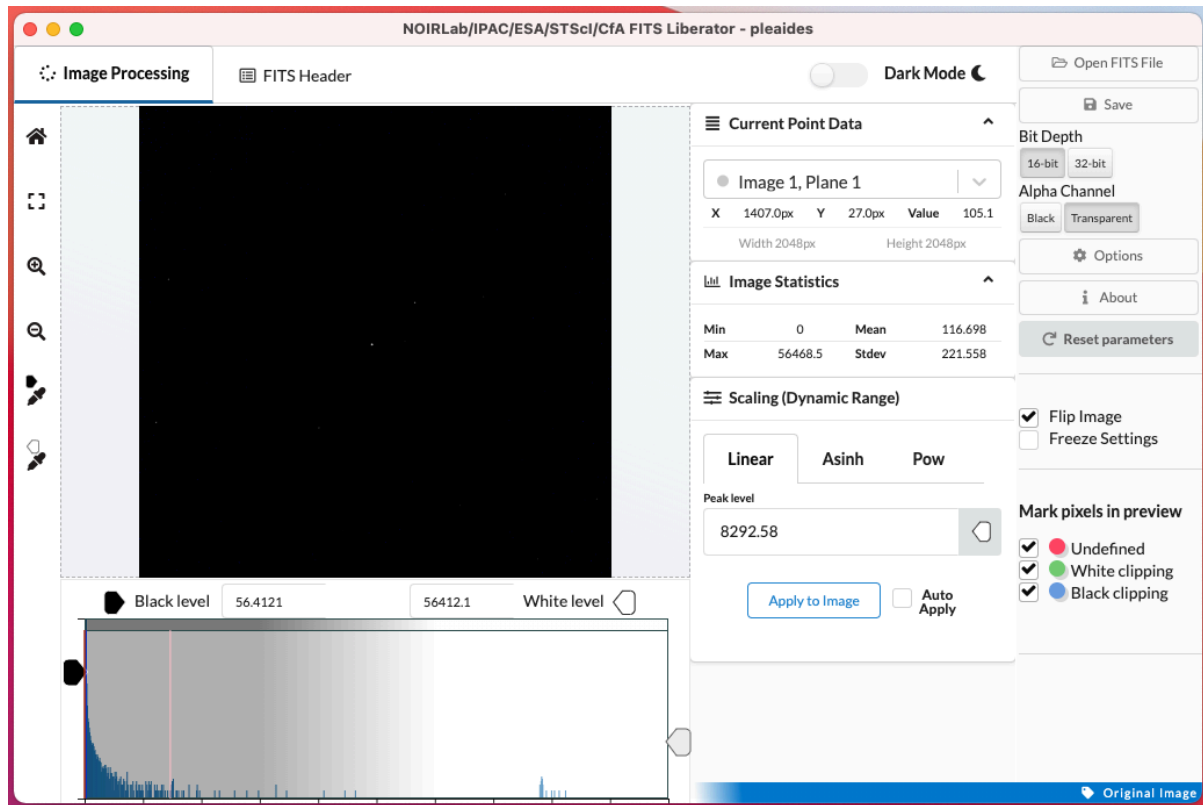https://noirlab.edu/public/products/fitsliberator/

If you are having trouble opening your fits files, they may be named as .fts files. If this is the case, rename them to end in .fits and they should open.

Running FITS Liberator

FITS Liberator is used to convert FITS files into TIFF files, so that they can be processed using applications such as Adobe Photoshop.
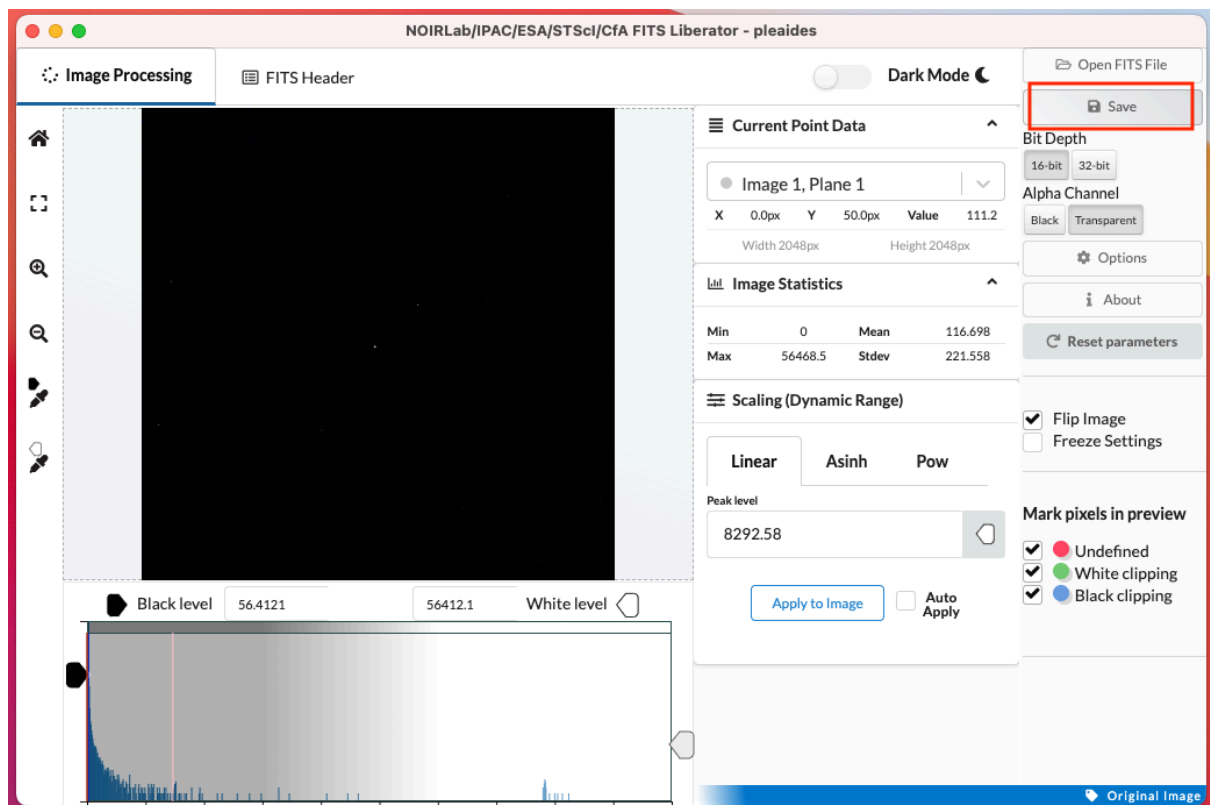
Start the application and select your FITS file for viewing. The **Processing** tab provides a view of your image together with a number of other values.

FITS liberator may scale your image automatically. Before saving as a TIFF file, it is important to reset the histogram so that no data is lost. This is achieved by 'dragging' the white and black points to the extreme ends of each graph.

With the histogram set to include the entire range, select **Save** to save as a TIFF file.

FITS liberator can also be used to examine the FITS header in your images. This provides a useful way to check target and exposure details.