STANDARD (FITS) OUTPUT

The RGBA data file contains information to reconstruct the brightness map in the final image. The pixel values are described from 3 colour (red, green and blue) indexes. Here, the opacity (alpha) index does not play a role, and it is used the equation:

$$\text{pixel value} = \text{red} + 256 \times \text{green} + 256 \times 256 \times \text{blue} \qquad (1) \quad .$$

After displaying the RGBA file on your screen, save it in PNG format, e.g., image.png. Open your DS9 viewer, and select Frame/New Frame RGB and File/Import/PNG... Then you should import the file of interest (image.png). In the RGB panel of DS9, select Current/Red and save the corresponding FITS file, i.e., File/Save/red.fits. Then select Current/Green and save green.fits, and also select Current/Blue and save a third file called blue.fits.

Now you need to combine the three FITS files to obtain a final FITS image. This task can be done in an IRAF environment. Taking the Eq. (1) into account, the IRAF commands are:

```
cl> imar green * 256 green
cl> imar blue * 65536 blue
cl> imar red + green rg
cl> imar rg + blue image
```

The final product (image.fits) is ready to be analysed in detail.