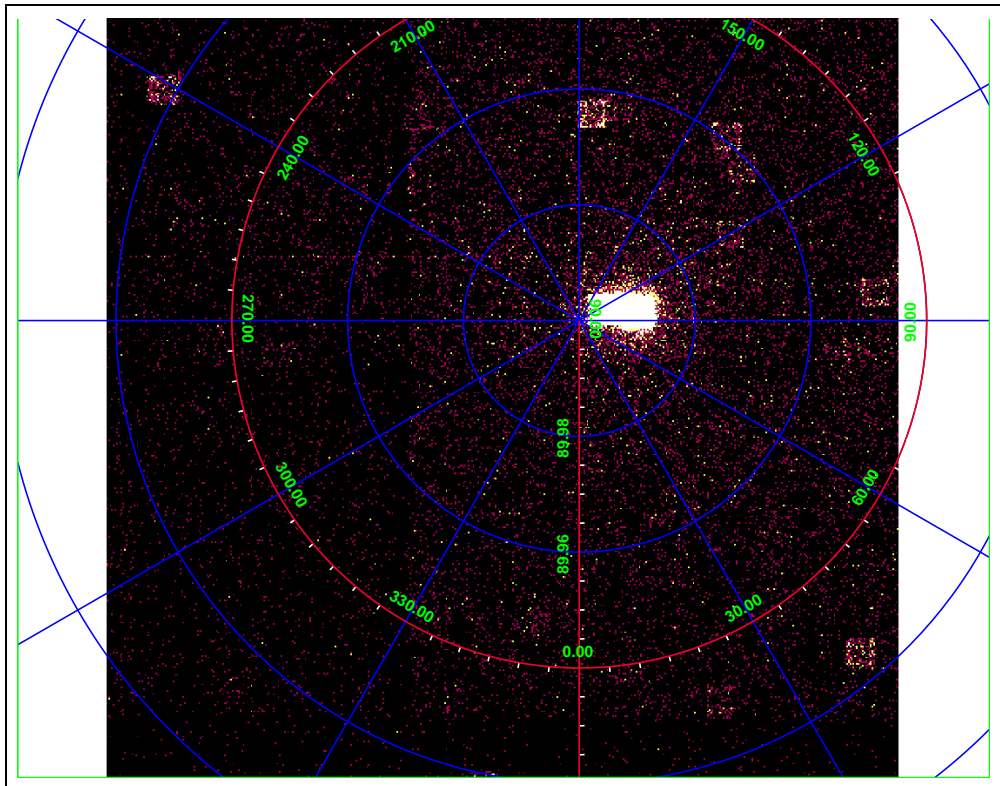


DM Examples 1: Detector Image

Imaging on multiple coordinate systems: first, let's look at a region in detector coordinates, filtered on energy and time.

```
dmcopy "merge3e.fits[energy=500:2000,  
      time=:63940080,63940180:][bin detx=3500:4500:2,  
      dety=3500:4500:2]" det.img
```



DM Examples 2: Sky Image

Now look at the same photons but in sky coordinates

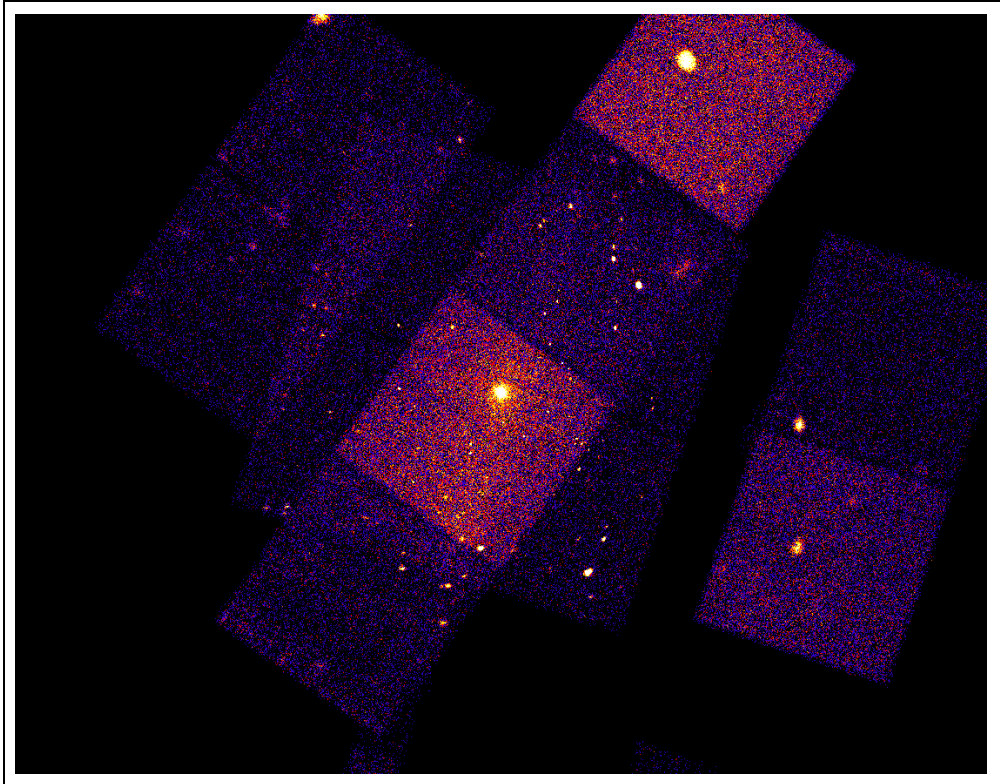
```
dmcopy "merge3e.fits [energy=500:2000,time=:63940080,63940180:,  
        detx=3500:4500,dety=3500:4500]  
        [bin x=3200:4800:2,dety=3200:4800:2]" sky.img
```



DM Examples 3: Merged sky image

The whole field was created by merging three separate observations.

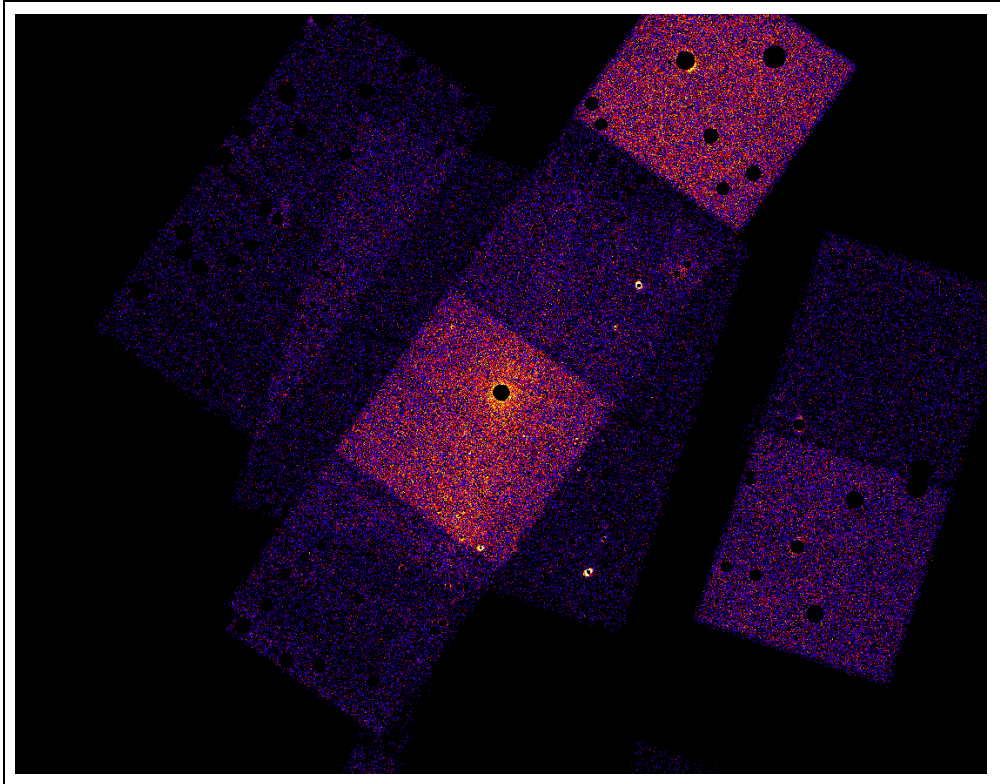
```
dmmerge "786.fits,787.fits,1730.fits" outfile=merge3e.fits
```



DM Examples 4: Removing sources

We can generate a background image by removing sources found by the automatic source detection program.

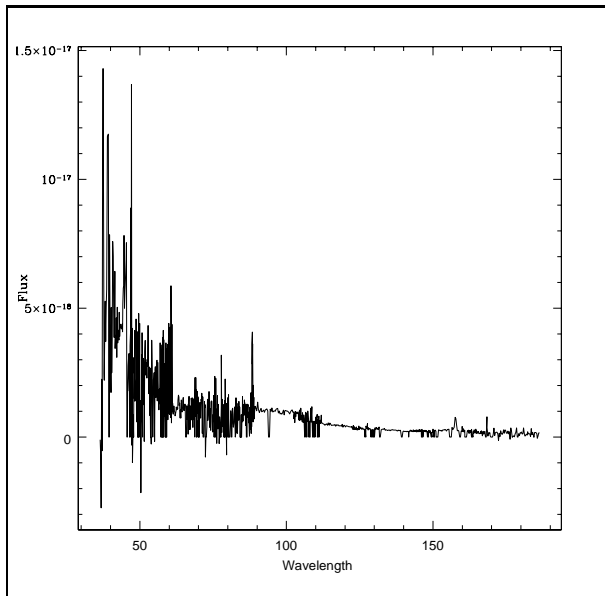
```
dmcopy "merge3e.fits[exclude sky=region(gg.reg)]" exclude.fits
```



DM Examples 5: Infrared spectroscopy data

- ISO data: LWS LSAN file. This is a very simple file but wavelength and flux for the different detectors and scans are mixed together. We can use the DM tools to isolate a single scan and dump wavelength versus flux for it.

```
dmcopy "lsan59901083.fits[lsanscnt=4][cols lsanwav,lsanflx]"  
      subset.fits  
dmlist "lsan59901083.fits[lsanscnt=4][cols lsanwav,lsanflx]"  
      data,raw outfile=lis.asc
```



- The dmimg2jpg tool is useful for comparing images in different energy bands

```
dmimg2jpg dss.fits "merge3e.fits[energy=400:1500]"  
"merge3e.fits[energy=1500:6500]" ha2.jpg clob+ maxred=3
```

