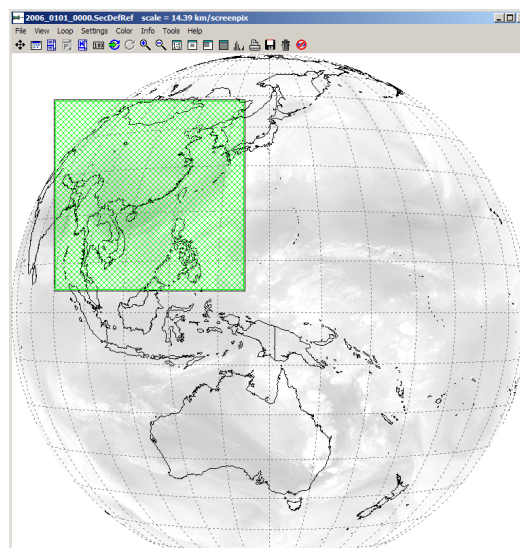


A new way of defining sectors has been introduced. Now the Sector Definition Files (with new .SDF file extension) that are used by DSIG can be edited directly with Megaview 3. This should be less confusing than the former method in which a database of sectors was edited with Megaview and then a separate file was created for use by DSIG. Now there is only one file for each set of sector definitions. Also, included in this new way of defining sectors is the ability to specify the Satellite Longitude for each sector definition record instead of specifying only the satellite name or number. The Satellite Longitude is now used to determine if a satellite scan or product is to have a sector cut from it. This all became desirable because some satellites were being moved and new satellites were being placed on line. The old sector definitions would not work in these cases. A method of creating new .SDF files from old .dat files is provided in Megaview 3. However, just starting over with new sector definitions may be used since the whole process is hopefully much easier and quicker.

1. Run Megaview3 (newer updated version).
2. Open window and select image showing area of interest. You can use currently ingested images or you can use one of the references images (in Megaview97 > Reference_images directory). Images with a file extension .SecDefRef are treated in an important special manner (see below). One Full Disk image like this is available for download and will be included in future full installs of Megaview. Or, you can make your own by renaming an image.
3. In that image window select the Settings > Sector Definitions Direct Edit (New) menu item. A dialog box window will appear showing sector definition records, one per line. It is a good idea to make the image window only half of screen. Then you can move the Sector Ingest Dialog box window to other half of screen. For the special case of .SecDefRef images the map/grid drawn on the image will change to center the longitude for the SatLon specified in the Sector Definition record that is selected for edit. This is useful working with sector definition files for data streams that include a number of different satellites.

#	FileExten	Sat.#	SatLon	Chan	Scan	Res	W/d	Ht	X-Cent	Y-Cent	Format
0	MT_FDI1	134	140	2	1	10.835	1024	1024	0	0	NVB
1	MT_FDI2	134	140	3	1	10.835	1024	1024	0	2	NVB
2	MT_FDWW	134	140	4	1	10.835	494	376	-2271	-834	NVB
3	MT_FDVS	134	140	1	1	10.835	1024	1024	0	2	NVB
4	MT_IP1	134	140	2	1	5	800	800	-407	-3296	NVB
5	MT_IP2	134	140	3	1	5	800	800	-407	-3296	NVB
6	MT_IPWW	134	140	4	1	5	800	800	-407	-3296	NVB
7	MT_IPVS	134	140	1	1	5	800	800	-407	-3296	NVB
8	MT_CH1	134	140	2	1	5	800	800	-2532	-2476	NVB
9	MT_CH2	134	140	3	1	5	800	800	-2532	-2476	NVB
10	MT_CHWW	134	140	4	1	5	800	800	-2532	-2476	NVB
11	MT_CHVS	134	140	1	1	5	800	800	-2532	-2476	NVB
12	MT_PH1	134	140	2	1	5	1024	768	-2271	-834	NVB
13	MT_PH2	134	140	3	1	5	1024	768	-2271	-834	NVB
14	MT_PHWW	134	140	4	1	5	1024	768	-2271	-834	NVB
15	MT_PHVS	134	140	1	1	5	1024	768	-2271	-834	NVB
16	MT_AU1	134	140	2	1	5	1280	1024	-261	1796	NVB
17	MT_AU2	134	140	3	1	5	1280	1024	-261	1796	NVB
18	MT_AUWW	134	140	4	1	5	1280	1024	-261	1796	NVB
19	MT_AUVS	134	140	1	1	5	1280	1024	-261	1796	NVB



4. Make sure area of interest is viewable in image window (automatic with .SecDefRef images). As you scroll thru sector record entries you will see a cross hatched rectangle superimposed on image corresponding to that given sector. You can move the sector location by clicking and dragging or by changing the X-center and Y-center numbers for the record. You can change the size by changing the wid and ht numbers for the record. You can zoom the image in or out to get a better view.
5. You can insert new sectors, duplicate current sectors or delete sectors by using the edit menu or using the hot keys (ctrl-I, ctrl-D, or ctrl-Del respectively) while a certain sector record is selected. Resize and move as desired.
6. Set the File name extension by typing into the appropriate box (should be unique to this sector).

7. Highlighting the SatLon column for a sector record will show a [...] button. Clicking on this will bring up a Satellite Number & Longitude popup menu. Select the desired Longitude from this menu. Remember it is the Longitude number which is used by DSIG during ingest (the satellite name/number is only used for display purposes, not for deciding on sector validity). You can type in the Longitude if preferred (0 = prime meridian, neg = west, pos = east).

Satellite	Longitude
GOES 10 =	- 135 °
GOES 12 =	- 75 °
MSG 2 =	- 6.0 °
MSG 1 =	0.0 °
MIET 7 =	0.0 °
MIET 5 =	+ 63 °
FY-2C =	+ 105 °
MTSAT =	+ 140 °

8. Highlighting the Channel column for a sector record will show a [...] button. Clicking on this button will bring up a Channel Selection popup menu. There are many choices for each type of satellite.

GOES	MSG
1 - VIS	6 - VIS006 (0.6u)
2 - IR2 (3.9u)	8 - VIS009 (0.9u)
3 - WV (6.7u or 7.0u)	15 - IR_015 (1.5u)
4 - IR4 (10.7u)	39 - IR_039 (3.9u)
5 - IR5 (12.0u)	62 - WV_062 (6.2u)
6 - IR6 (13.3u)	73 - WV_073 (7.3u)
MTSAT (HRIT, HRSD, LRIT)	87 - IR_087 (8.7u)
1 - VIS	97 - IR_097 (9.7u)
2 - IR1 (11.0u)	108 - IR_108 (10.8u)
3 - IR2 (12.0u)	120 - IR_120 (12.0u)
4 - IR3 (6.3u) WV	124 - IR_124 (12.4u)
5 - IR4 (3.7u)	255 - HRV (broadband vis)
FY-2	
1 - VIS	
2 - IR1 (10.8u)	
3 - IR2 (12.0u)	
4 - IR3 (6.8u) WV	
5 - IR4 (3.8u)	
MTSAT 9-7	
1 - VIS	
2 - IR	
3 - WV	
4 - HRV Vis	

9. Set the Scan Type (or Product) from which the sector is to be cut.

- Use 1 for Full Disk Scans
- Use 2 for GOES North Hemisphere Scans
- Use 3 for GOES South Hemisphere Scans
- Use 4 for GOES CONUS scans
- Use 5 for ANY scan. Use this if uncertain, it will cause sector to be cut from any scan (if it contains any area of sector).
- Use any other number to disable (no sector cut for this record).

10. Set the desired Pixel Resolution by typing in the number. DSIG will resample the scan to make sectors of any desired resolution. (Note that choosing a resolution finer than the scan resolution will not smooth out an image.). Check the appropriate satellite Scan Type or Scan Info guide to determine finest resolution for a particular scan/product. It may be best not to exceed this number for sector cut from that scan/product.

11. Set the file format to NV8 if you want to view with Megaview.

12. When finished creating, editing sectors, use the Save or Save As menu entries (File Menu). It is usual to save the sector definition files in the DSIG > SECTOR_DEFS (but the user may choose another). The file will be save in the new format and with a .SDF filename extension.

13. Make sure to specify the desired .SDF file in the "Use this Sector Definition File" box in the DSIG program Sectors Tab Page or XRIT Tab Page.