

# The Main Display and its Menus

The main display window allows the user to view the work area. The work area may be arbitrarily large depending on the size of the loaded images. This area should always be large enough to include the entire extent of all displayed images. When the required image area must be quite large the user may redefine the display to be scrolled. See Main Screen Size description below.

At the bottom of the display the X,Y cursor position readout and image value is displayed. At the top of the display the reference image file name, the image orientation angle (if known) and an optional readout of the world coordinates (right ascension and declination in sexagesimal or floating degree notation based on cursor position) is reported.

## Main Screen Size

The user may set the size of the main display window in the static preferences file or with the Resize Display Widget from the Adjust Menu. If the images are quite large the user may set the window to scroll with the scroll size set to accommodate the minimum area of interest at one time and the display size to the size of the image, itself. The entire image may be viewed by scrolling the display in X and Y.

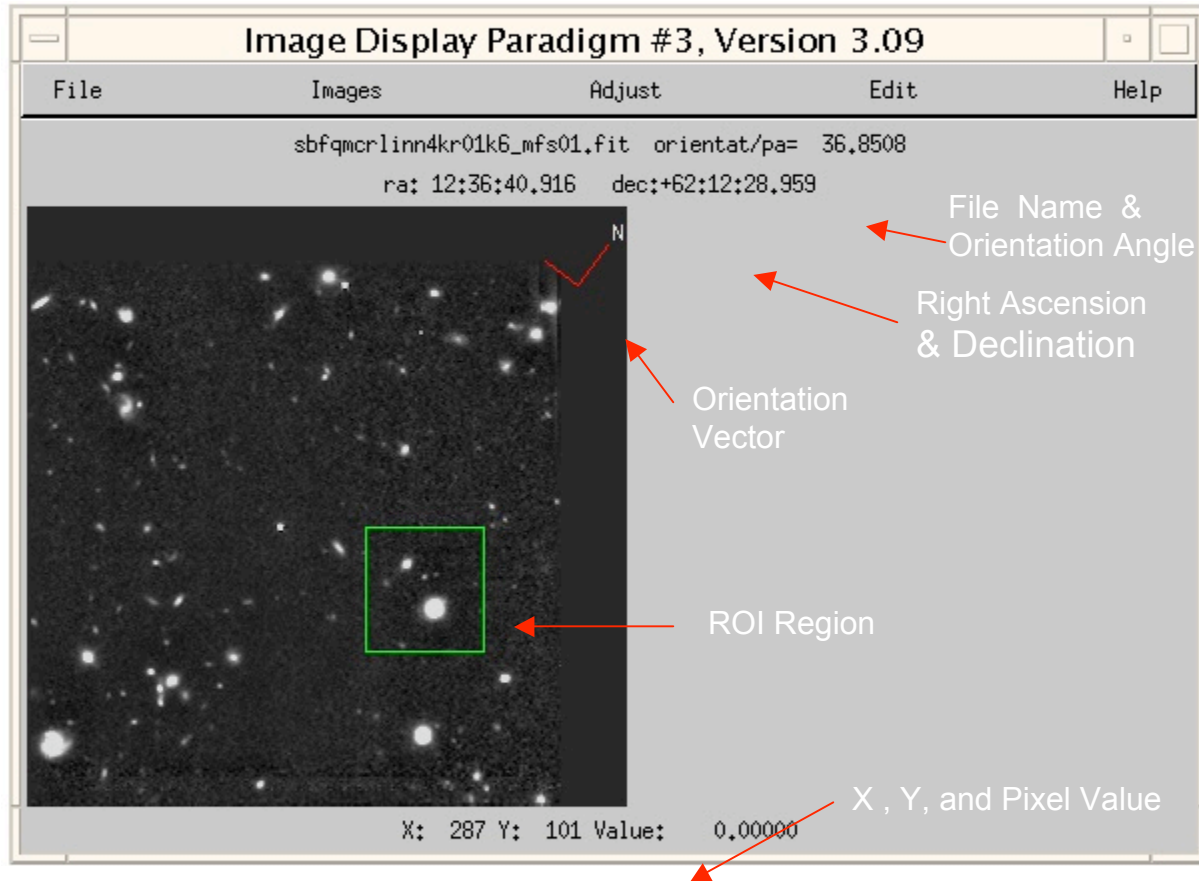
In earlier versions of IDP3 the resizing of the main display window was accomplished by stretching the window. The user stretched the window by pressing the left mouse button at the corner of the window and dragging to the desired size. The graphics window, embedded in the Main Widget, will automatically resize itself. This method will not work if the display is defined to be scrolled and is strongly discouraged in any case.

## Main Screen Offset

If the main screen size is smaller than the work area (and the display is not scrolled), the work area may be panned under the main display window by clicking and dragging the right mouse button with the cursor in the graphics area. Panning creates non-zero X and Y main screen offsets. The screen X and Y offsets may be viewed and altered by using the Adjust Display Widget in the Main Display Adjust Menu. It is preferable to create a scrollable Main Display when the image is larger than the graphics display size.

## Starting IDP3

To start IDP3 type `idp3` from the IDL prompt. Once an image is loaded (see instructions from the Load Images Menu) a window similar to the one shown below should appear.



The orientation vector is determined in order of precedence: presence of the **REORIENT**, **ORIENTAT**, or **PA** keywords in image header or computed from the World Coordinate information in the image header. If none of the information above is present in the header no orientation vector will be plotted. The file name displayed at the top of the widget always refers to the current reference image.

### The Region of Interest (ROI)

The user may extract a region-of-interest from the Main Display by pressing and dragging the left mouse button from one corner diagonally to another. An alternate method is to mark the ROI center with the left mouse button and a box region of the pixel size, **roi\_box\_size**, centered about the chosen point will be selected. The ROI Widget will be created with the desired region displayed in its graphics window. The ROI rectangle is fixed to the main display screen and the images move around under it. The ROI display is updated whenever the data are redisplayed.

# Main Window Functions

## File Menu

### Load Images

**Load Image.** Displays the **Dialog\_Pickfile** widget for selecting the desired image and loads the header and data of the selected image file. The first three characters of the file name extension are extracted to identify the file type. A case-insensitive comparison is made to **‘.fit’**, **‘.pic’**, and **‘.tif’**. If the string does not match any of the above the file is assumed to be in HDF format. When an image is loaded the **Show Images** widget is automatically updated.

**Load List.** Displays the **Dialog\_Pickfile** widget for selecting the desired list file, loads all images in the selected text list file. All formats described above also apply and may be mixed in the list file. Each file name is echoed to the terminal window as it is loaded. The **Show Images** Widget will automatically update when the loading is completed.

Load MultiAccum. Displays the **Dialog\_Pickfile** widget for selecting the desired NICMOS multi-accum file