`Write last measurements to log`
: Write measured quantities (the information displayed in the status line) to the CDSLOG, an editable text widget. The contents of the log may be saved to a log file.

`Zooming in on part of the display`
: Displays a zoomed image from the selected exposure. New areas can be selected by moving the cursor and clicking the button again. Zoom in and out by clicking the right/left mouse buttons inside the zoom window. More details can be found in Section 5.5.

`Plot int/vel/fwhm`
: This option produces calculates line fits of a *single* Gaussian at each position along the slit, and plots the resulting intensity, velocity and line width in a separate window. The rest wavelength is taken from the *name* of the line window. Note that the results should only be taken as a very rough estimate. Various types of line fitting are available. The descriptions ending with `:PS` has the possibility of making a postscript plot of the results.

5.4.3 Full detector view (NIS version)

This program (`DSPSPEC`) shows the full NIS spectrum for a given exposure, as an image, with the data from the line windows put into their proper positions along the detector X axis. You may move around in the raster inspecting different exposures by moving the slider called `XIX` (or `TIX` for a time-series raster).

To pop up a widget displaying a help text, press `Help`. To exit the application, press `Exit`, to produce a hardcopy, press `Hardcopy`, to display the field of view of this raster on top of a solar image, press `Image_Tool`.

To modify the color table used to display the data, use the `Select color table` menu, the `Reverse colors` button or click and drag the mouse buttons on the color bar to control the TOP, GAMMA and BOTTOM parameters.

The effect of pressing any of the mouse buttons is shown by the text on a series of 3 pulldown menus under the heading `Editable mouse buttons`, in the top left corner of the window.

To change the action tied to a given mouse button, select a new action from the corresponding pulldown menu. The label of the button will be updated. The available actions are:

`Measuring intensities/positions`
: Use a mouse button tied to this action to measure the current cursor position and the corresponding wavelength, intensity, exposure number etc. The values are displayed in the status line.

`Write last measurements to log`
: Write measured quantities (the information displayed in the status line) to the CDSLOG, and editable text widget. The contents of the log may be saved to a log file.

`Zooming in on part of the display`
: Display a zoomed image of a selected region of the displayed spectrum. New areas can be selected by moving the cursor and clicking the button again. Zoom in and out by clicking the right/left mouse buttons inside the zoom window. More details can be found in Section 5.5.

`Drawing profiles from the display`
: Extract and plot profiles (horizontal or vertical) from the displayed spectrum. New areas can be selected by moving the cursor and clicking the button again. The width and the height of the selected

area are controlled by widget sliders. The output can be saved to a postscript file or printed directly to a printer. See also Section 5.5.

`Identification of lines`
: Line identification is possible using the extensive line list published by Kelly (1987). By pointing at selected lines the information from Kelly, such as laboratory wavelengths, element, energy levels, and configuration are displayed. The "unreadable" atomic configuration listed in the electronic version of Kelly is decoded into the standard format used in the printed version. The routine `pick_line` can be used to access the Kelly line list in command mode.

5.4.4 Full detector view (GIS version)

This program (`DSPSPEC`) shows the full GIS spectrum for a given exposure as four plots, with the data from the line windows put into their proper positions along the detector. You may move around in the raster by moving the sliders called `X index` and `Y index` (or possibly `Time index` for a time-series raster).

To pop up a widget displaying a help text, press `Help`. To exit this application, press `Done`, to produce a hardcopy, press `PostScript`. To view only one of the four detectors, select from the pulldown menu called `Display detector:...`. To switch between observed/dummy spectra, select from the `Observed/Dummy` pulldown menu.

The mouse buttons do essentially the same things as the mouse buttons do in the NIS version of this program, except the options are all tied to the left mouse button. And, some of the options in the NIS version are not available.