

ADAS415: Display spectral filter file

The code displays a numerical filter transmission function from a filter file of type *adf35* created by the code ADAS414 or by other means.

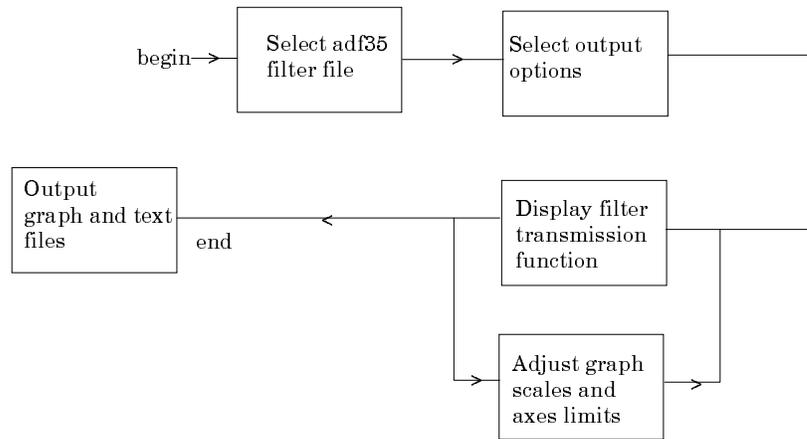
Background theory:

The theory and nomenclature follows that given in the description of the code ADAS414.

Program steps:

These are summarised in figure 5.15.

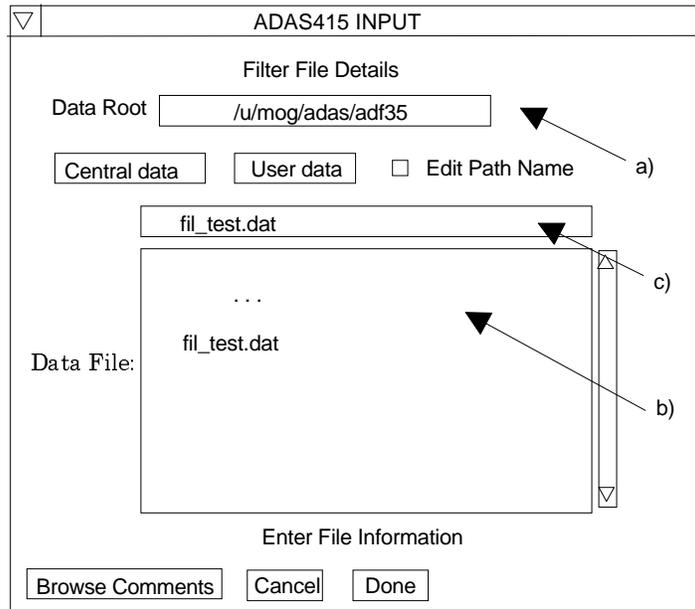
Figure 5.15



Interactive parameter comments:

The **file selection window** has the appearance shown below

1. Data root a) shows the full pathway to the appropriate data subdirectories of type *adf35*. Click the *Central Data* button to insert the default central ADAS pathway to the correct data type. Click the *User Data* button to insert the pathway to your own data. Note that your data must be held in a similar file structure to central ADAS, but with your identifier replacing the first *adas*, to use this facility.



2. The Data root can be edited directly. Click the *Edit Path Name* button first to permit editing.
3. Available sub-directories are shown in the large file display window b). Scroll bars appear if the number of entries exceed the file display window size.
4. Click on a name to select it. The selected name appears in the smaller selection window c) above the file display window. Then its sub-directories in turn are displayed in the file display window. Ultimately the individual datafiles are presented for selection. Datafiles all have the termination *.dat*. Note the notation used for radiative recombination data file names, that is, *<ion>ls* with *<ion>* the recombining ion. *ls* indicates that the radiative recombination data is at LS-resolution.
5. Once a data file is selected, the set of buttons at the bottom of the main window become active.
6. Clicking on the *Browse Comments* button displays any information stored with the selected datafile.
7. Clicking the *Done* button moves you forward to the next window. Clicking the *Cancel* button takes you back to the previous window.

There is no processing options window.

The **output options window** appearance is shown below

8. As in the previous window, the full pathway to the file being analysed is shown for information at a). Also the *Browse comments* button is available.

ADAS415 OUTPUT OPTIONS

Data File Name : /u/mog/adas/adf34/fil_test.dat

Browse Comments

Graphical Output

Graph Title

Select Device

Post script

HP-PCL

HP-GL

Explicit scaling

X-min X-max

Y-min Y-max

Enable Hard Copy Replace

File Name :

Text Output Replace

File Name :

Cancel Done

9. Graphical display is activated by the *Graphical Output* button at b). This will cause a graph to be displayed following completion of this window. When graphical display is active, an arbitrary title may be entered which appears on the top line of the displayed graph.

10. By default, graph scaling is adjusted to match the required outputs. Press the *Explicit Scaling* button at b) to allow explicit minima and maxima for the graph axes to be inserted. Activating this button makes the minimum and maximum boxes editable.
11. Hard copy is activated by the *Enable Hard Copy* button at c). The File name box then becomes editable. If the output graphic file already exists and the *Replace* button has not been activated, a 'pop-up' window issues a warning.
12. A choice of output graph plotting devices is given in the Device list window to the right. Clicking on the required device selects it. It appears in the selection window above the Device list window.
13. At d) output of the tabular record of the interrogation may be enabled. This is usually called *paper.txt* and it is created in the directory from which ADAS was launched.
14. At the base of the window, the icon for *Exit to Menu* is present. This quits the program and returns you to the ADAS series 4 menu. Remember that *Done* takes you forward to the next screen while *Cancel* takes you back to the previous screen.

The **Graphical Output window** appearance is shown below.

15. Click the *Adjust* button to alter the plotting style (logarithmic or linear) and the maxima and minima for the axes. This is achieved by a pop-up widget as described of the code ADAS414.
16. Click *Done* to return to the Output Options window or the *Exit to Menu* to return to the series 4 menu.

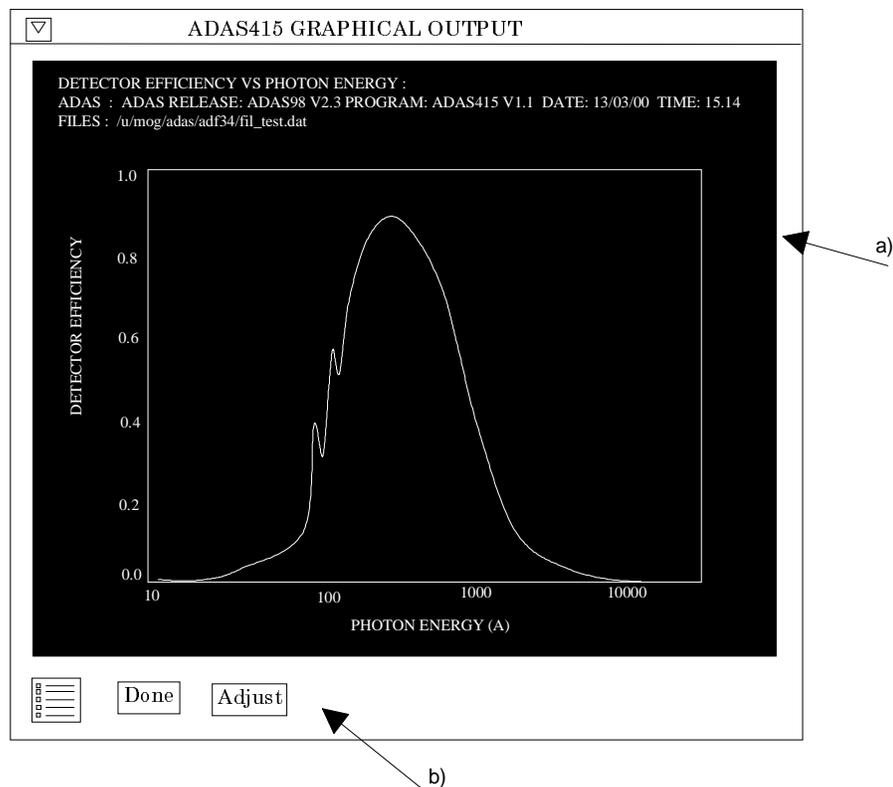


Illustration:

There is no separate illustration.

Notes: