Stacked plots (SP)

A stacked plot of 2D data or "arrayed" 1D data can be displayed. The spectra must first exist as a 2D data file in NUTS. (This is included in 1D versions of NUTS.) <u>See below</u> for instructions on creating a 2D file from separate 1D data.

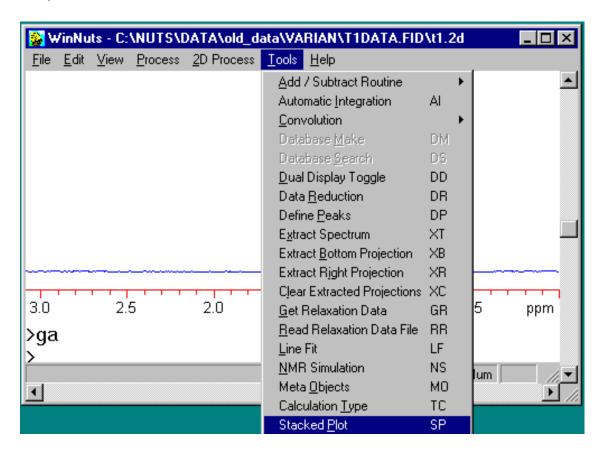
To display just 2 spectra together, see also <u>Dual Display</u>. To display multiple spectra with differing spectrometer frequency, spectral width and/or number of data points, see <u>Buffers</u> subroutine.

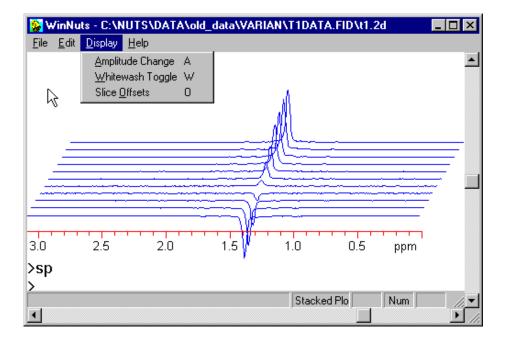
Note that stacked plots are not included in NUTS Lite.

Open the 2D data file. The first slice only is displayed.

Execute a Set Scale operation (keyboard command SS or from the 2D Process menu) which looks at all slices to find the tallest peak so that the display can be scaled appropriately.

Now, choose Stacked Plot from the Tools menu.



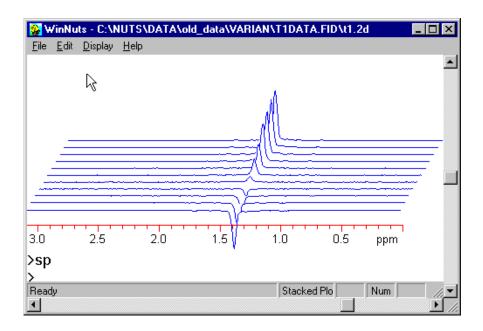


All slices are displayed and scaled to be on screen.

The default offsets are set in the <u>Nuts.ini</u> file, but can be edited by choosing Slice Offsets from the Display menu. The values used here are

X-Offset = 10% Y-Offset = 1 (on a scale of 1 to 10)

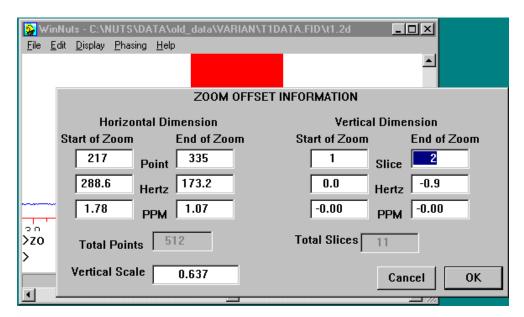
The vertical scale of all slices can be changed in the same way as 1D data.



The option of a "whitewashed" plot is available from the Display menu. In this mode, lines which are behind peaks are not displayed.

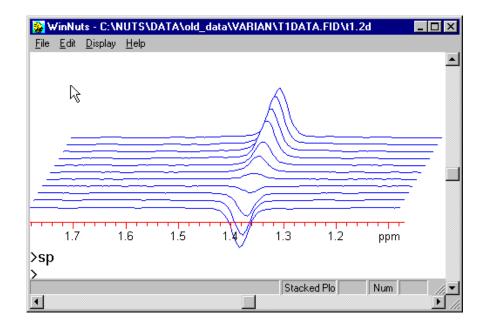
Compare this to the previous figure.

It is possible to construct a stacked plot of only a part of the total data set. The plot limits can be set in either of 2 ways:

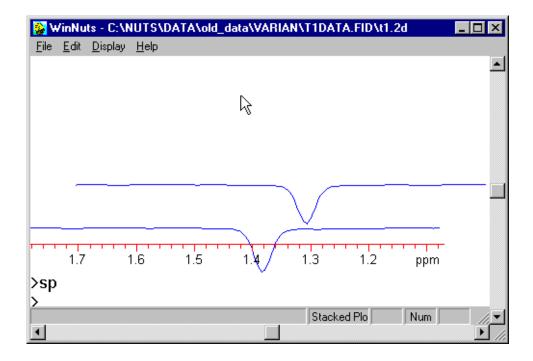


For an actual 2D data set, display an <u>intensity or contour plot</u> and use 2D Zoom to select the region. Exit the contour plot and display the stacked plot.

Alternatively, the plot limits can be set explicitly using the <u>Zoom</u> subcommand **F**. (You must exit from the Stacked Plot display, with <Enter>, to enter Zoom.) The critical point to understand is that you <u>must</u> explicitly set the range of slices to be displayed on the right hand side of the screen (Vertical Dimension). Click on OK, then execute a Ctrl-E command to implement the chosen range.



The desired expanded region is displayed.



Failure to set the desired range of slices will result in display of only 2 slices, rather than the entire data set.

To build a 2D file from separate 1D spectra, the individual spectra must have sequential file extensions. Start by opening the first of the 1D files. A 2D data set can be created by running the following

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NUTS will first ask for the name of the first file to open, and then for a name for the 2D file to be created. When the link has finished, open the 2D file.