

Data Options Tab

The screenshot shows the 'Data Options' tab of a software interface. At the top, there are four tabs: 'Function and Data', 'Data Options' (which is selected and highlighted in blue), 'Coefficients', and 'Output Options'. Below the tabs, the interface is divided into several sections. On the left, there is a 'Range' section with 'Start' and 'End' input boxes, a 'Cursors' button, and a 'Clear' button. To the right of the 'Range' section is a checkbox labeled 'Show Waves from Target Only'. Below this is a 'Weighting' section with a dropdown menu currently showing '_none_'. Underneath the 'Weighting' section is a 'Wave Contains' section with two radio buttons: 'Standard Dev.' (which is selected) and '1/Standard Dev.'. At the bottom is a 'Data Mask' section with a dropdown menu also showing '_none_'.

Range: Enter point numbers for starting and ending points when fitting to a subset of the Y data.

Historical Note: These boxes used to require X values, they now require point numbers.

Cursors: Available when the top window is a graph displaying the Y data and the graph has the graph cursors on the Y data trace. Click this button to enter text in the Start and End range boxes that will restrict fitting to the data between the graph cursors.

Note: If the data use both a Y wave and an X wave, and the X values are in random order, you won't get the expected result.

Clear: Click this button to remove text from the Start and End range boxes.

The **range** box changes if you have selected a multivariate function and multidimensional Y wave. The dialog presents Start and End range boxes for each dimension of the Y wave.

Weighting: select a wave that contains weighting values. Only waves that match the Y wave in number of points and dimensions are shown in this menu. See **Weighting** on page III-199 for details.

Wave Contains: select Standard Deviation if the weighting wave contains values of standard deviation for each Y data point. A larger value decreases the influence of a point on the fit.

Select 1/Standard Deviation if your weighting wave contains values of the reciprocal of the standard deviation. A larger value increases the influence of the point on the fit.

Data Mask: select a wave that contains ones and zeroes or NaN's indicating which Y Data points should be included in the fit. Only waves that match the Y wave in number of points and dimensions are shown in this menu. A one indicates a data point that should be included, a zero or NaN (Not a Number or blank in a table) indicates a point that should be excluded.

Coefficients Tab

The coefficients tab is quite complex. It is completely explained in the various sections on how to do a fit. See **Two Useful Additions: Holding a Coefficient and Generating Residuals** on page III-184, **Automatic Guesses Didn't Work** on page III-187, **Coefficients Tab for a User-Defined Function** on page III-192, and **The Coefficient Wave** on page III-195.

Output Options Tab

The output options tab has settings that control the reporting and display of fit results: