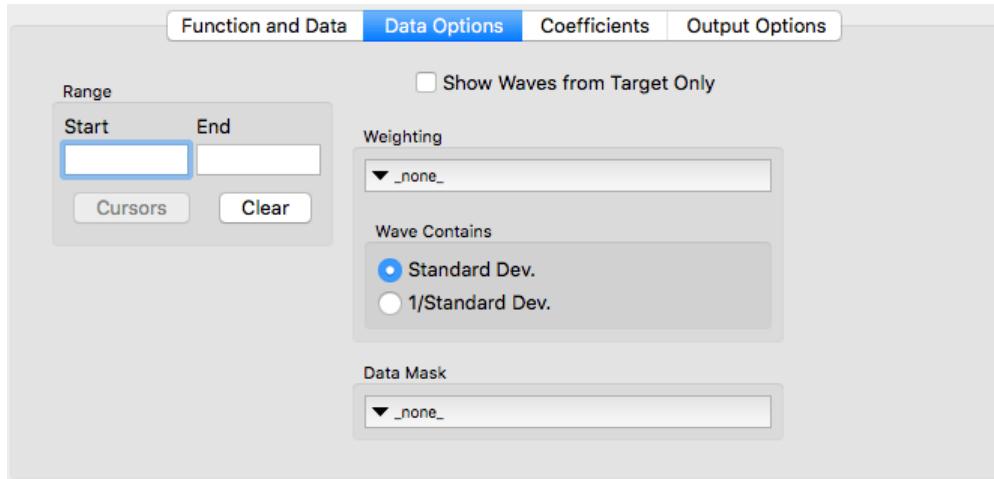


Chapter III-8 — Curve Fitting

Data Options Tab



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: