Error Ellipse Example

This example illustrates the use of error ellipses:

```
Function ErrorEllipseDemo()
   Make/O/N=5 data = 5*sin(x)
   Display data
   ModifyGraph mode=3, marker=19    // Markers mode, solid circle marker

   Make/O/N=(5,3) ellipseData       // Error ellipse parameters

   // Column 0: Standard deviation in X
   ellipseData[0][0]={0.944527,1.19611,0.32858,1.64494,1.71742}

   // Column 1: Standard deviation in Y
   ellipseData[0][1]={0.357613,0.680198,0.665561,0.581878,0.948245}

   // Column 2: Correlation in X and Y. Must be in the range [-1, 1].
   ellipseData[0][2]={0.562396,0.707809,0.396551,-0.516456,0.554322}

   ErrorBars data, ELLIPSE={0, .95, .3*65535}, ewave=ellipseData

   // Make point 2 blue
   ModifyGraph rgb(data[2])=(0,0,65535)
End
```

Customize at Point

You can customize the appearance of individual points on a trace in a graph displayed in bar, marker, dot and lines to zero modes. To do this interactively, right-click the desired point on a trace and choose Customize at Point→Customize at Point from the contextual menu. The Modify Trace dialog appears with an entry in the trace list shown with the point number in square brackets. When such an entry is selected, only those properties that can be customized are shown in the dialog.

You can remove customizations for a single point by right-clicking on the point and selecting Customize at Point→Remove Customization Here. You can remove all customizations from a trace by right-clicking on the trace and choosing Customize at Point→Remove Customizations from Trace.

Modifying Axes

You can modify the style of presentation of each axis in a graph by choosing Graph→Modify Axis or by double-clicking an axis. This displays the Modify Axis dialog.

The dialog has tabs for various aspects of axis appearance, plus a few controls outside the tabs. These global controls include the standard Igor dialog controls: Do It, To Cmd Line, To Clip, Help and Cancel buttons, plus a box to display the commands generated by the dialog. At the top are the Axis pop-up menu and the Live Update checkbox.

The Axis pop-up menu shows all axes that are in use in the top graph. Choose the axis that you want to change from the Axis menu, or choose Multiple Selection if you want to affect more than one axis. Below the Multiple Selection item are items that provide shortcuts for selecting certain classes of axes.

You select the appropriate tab for the types of changes you want to make. The dialog provides these tabs:

Axis Tab	**Auto/Man Ticks Tab**	**Ticks and Grids Tab**
Tick Options Tab	**Axis Label Tab**	**Label Options Tab**
Axis Range Tab		