Cursors as Input Device

You can use the cursors on a trace in a graph to identify the data to be processed.

The examples shown above using PauseForUser are modal - the user adjusts the cursors in the middle of procedure execution and can do nothing else. This technique is non-modal — the user is expected to adjust the cursors before invoking the procedure.

This function does a straight-line curve fit through the data between cursor A (the round cursor) and cursor B (the square cursor). This example is written to handle both waveform and XY data.

```
Function FitLineBetweenCursors()
   Variable isXY

   // Make sure both cursors are on the same wave.
   WAVE wA = CsrWaveRef(A)
   WAVE wB = CsrWaveRef(B)
   String dfA = GetWavesDataFolder(wA, 2)
   String dfB = GetWavesDataFolder(wB, 2)
   if (CmpStr(dfA, dfB) != 0)
      Abort "Both cursors must be on the same wave."
      return -1
   endif

   // Find the wave that the cursors are on.
   WAVE yWave = CsrWaveRef(A)

   // Decide if this is an XY pair.
   WAVE xWave = CsrXWaveRef(A)
   isXY = WaveExists(xWave)

   if (isXY)
      CurveFit line yWave(xcsr(A),xcsr(B)) /X=xWave /D
   else
      CurveFit line yWave(xcsr(A),xcsr(B)) /D
   endif
End
```

This technique is demonstrated in the **Fit Line Between Cursors** example experiment in the "Examples:Curve Fitting" folder.

Advanced programmers can set things up so that a hook function is called whenever the user adjusts the position of a cursor. For details, see **Cursors — Moving Cursor Calls Function** on page IV-339.

Marquee Menu as Input Device

A marquee is the dashed-line rectangle that you get when you click and drag diagonally in a graph or page layout. It is used for expanding and shrinking the range of axes, for selecting a rectangular section of an image, and for specifying an area of a layout. You can use the marquee as an input device for your procedures. This is a relatively advanced technique.

This menu definition adds a user-defined item to the graph marquee menu:

```
Menu "GraphMarquee"
   "Print Marquee Coordinates", PrintMarqueeCoords()
End
```

To add an item to the layout marquee menu, use LayoutMarquee instead of GraphMarquee.