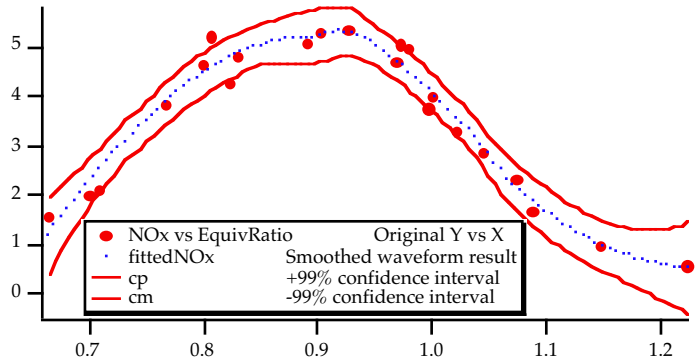
```
SetScale/I x, V_Min, V_max, "", fittedNOx
Loess/CONF={0.99,cp,cm}/DEST=fittedNOx/DFCT/SMTH=(2/3) srcWave=NOx,factors={EquivRatio}

// Display the fit (smoothed results) and confidence intervals
AppendtoGraph fittedNOx, cp,cm
ModifyGraph rgb(fittedNOx)=(0,0,65535)
ModifyGraph mode(fittedNOx)=2,lsize(fittedNOx)=2
Legend
```



Loess is memory intensive, especially when generating confidence intervals. Read the **Memory Details** section of the **Loess** operation (see page V-515) if you use confidence intervals.

Custom Smoothing Coefficients

You can smooth data with your own set of smoothing coefficients by selecting the Custom Coefs algorithm. Use this option when you have low-pass filter (smoothing) coefficients created by another program or by the Igor Filter Design Laboratory.

Choose the wave that contains your coefficients from the pop-up menu that appears. Igor will convolve these coefficients with the input wave using the **FilterFIR** operation (see page V-230). You should use FilterFIR when convolving a short wave with a much longer one. Use the **Convolve** operation (see page V-101) when convolving two waves with similar number of points; it's faster.

All the values in the coefficients wave are used. FilterFIR presumes that the middle point of the coefficient wave corresponds to the delay = 0 point. This is usually the case when the coefficient wave contains the two-sided impulse response of a filter, which has an odd number of points. (For a coefficient wave with an even number of points, the "middle" point is `numpnts(coefs)/2-1`, but this introduces a usually unwanted delay in the smoothed data).

In the following example, the coefs wave smooths the data by a simple 7 point Bartlett (triangle) window (omitting the first and last Bartlett window values which are 0):

```
// This example shows a unit step signal smoothed
//   by a 7-point Bartlett window
Make/O/N=10 beforeWave = (p>=5)          // unit step at p == 5
Make/O coefs={1/3,2/3,1,2/3,1/3}         // 7 point Bartlett window
WaveStats/Q coefs
coefs/= V_Sum
Duplicate/O beforeWave,afterWave
FilterFIR/E=3/COEF=coefs afterWave
Display beforeWave,afterWave
```