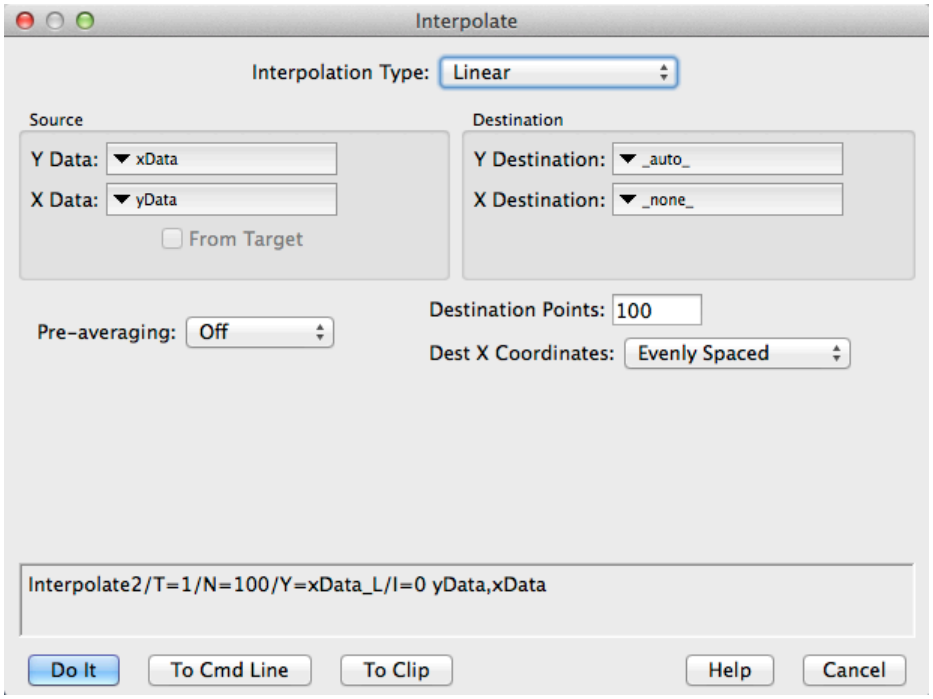

Choosing "_auto_" for Y Destination auto-names the destination wave by appending "_L" to the name of the input "Y data" wave. Choosing "_none_" as the "X destination" creates a waveform from the input XY pair rather than a new XY pair.

Here is a rewrite of the XYToWave1 function that uses the Interpolate2 operation rather than the interp function.

```
Function XYToWave2(xWave, yWave, wWaveName, numPoints)
   Wave xWave                  // X wave in the XY pair
   Wave yWave                  // Y wave in the XY pair
   String wWaveName            // Name to use for new waveform wave
   Variable numPoints          // Number of points for waveform

   Interpolate2/T=1/N=(numPoints)/E=2/Y=$wWaveName xWave, yWave
End
```

Blanks in the input data are ignored.

For details on Interpolate2, see **The Interpolate2 Operation** on page III-115.

Dealing with Missing Values

A missing value is represented in Igor by the value NaN which means "Not a Number". A missing value is also called a "blank", because it appears as a blank cell in a table.

When a NaN is combined arithmetically with any value, the result is NaN. To see this, execute the command:

```
Print 3+NaN, NaN/5, sin(NaN)
```

By definition, a NaN is not equal to anything. Consequently, the condition in this statement:

```
if (myValue == NaN)
```

is always false.

The workaround is to use the **numtype** function:

```
if (NumType(myValue) == 2)        // Is it a NaN?
```