Details

When the number of points in *srcWave* does not divide evenly into the bin size entry from *binSizeWave*, the last bin will have a smaller number of data points. In order not to skew the results the values corresponding to the last bin will be dropped. If your data set is small compared to the bin size you might want to pad *srcWave* with additional values (e.g., duplicate values from the beginning of the wave).

This operation does not support NaNs. If you get a NaN as an entry in the output wave then there is either a NaN in *srcWave* or something is wrong with the calculation for that entry.

WaveMin

WaveMin(*waveName* [, *x1*, *x2*])

The WaveMin function returns the minimum value in the wave for points between x=*x1* to x=*x2*, inclusive.

Details

If *x1* and *x2* are not specified, they default to -inf and +inf, respectively.

The X scaling of the wave is used only to locate the points nearest to x=*x1* and x=*x2*. To use point indexing, replace *x1* with `pnt2x(waveName,pointNumber1)`, and a similar expression for *x2*.

If the points nearest to *x1* or *x2* are not within the point range of 0 to numpnts(*waveName*)-1, WaveMin limits them to the nearest of point 0 or point numpnts(*waveName*)-1.

NaN values in the wave are ignored.

See Also

WaveMax, **WaveMinAndMax**, **WaveStats**

WaveMinAndMax

WaveMinAndMax(wave [, *x1*, *x2*])

The WaveMinAndMax function returns the minimum and maximum values in the wave for points between x=*x1* to x=*x2*, inclusive.

WaveMinAndMax must be called from a function, not from the command line, because it uses multiple return syntax as shown in the example below.

WaveMinAndMax was added in Igor Pro 9.00.

Details

If x1 and *x2* are omitted, they default to -inf and +inf.

The X scaling of the wave is used only to locate the points nearest to x=*x1* and x=*x2*. To use point indexing, replace *x1* with "pnt2x(wave,pointNumber1)", and a similar expression for *x2*. The resulting point numbers are clipped to the range 0..n where n is the numpnts(wave)-1.

NaN values in the wave are ignored.

Example

```
Function DemoWaveMinAndMax()
   Make/FREE wave0 = p
   wave0[0] = NaN                          // NaN values are ignored
   SetScale/P x, 0, 0.1, "s", wave0
   double minValue, maxValue

   [minValue, maxValue] = WaveMinAndMax(wave0)
   Printf "Entire wave: min=%g, max=%g\r", minValue, maxValue

   [minValue, maxValue] = WaveMinAndMax(wave0, 5, 10)
   Printf "From x=5 to x=10: min=%g, max=%g\r", minValue, maxValue
End
```

See Also

WaveMin, **WaveMax**, **WaveStats**