

## WaveModCount

### WaveModCount (*wave*)

The WaveModCount function returns a value that can be used to tell if a global wave has been changed between one call to WaveModCount and another.

WaveModCount was added in Igor Pro 8.00.

The exact value returned by WaveModCount has no significance. The only use for it is to compare the values returned by two calls to WaveModCount. If they are the different, the wave was changed in the interim.

The wave mod count for free and thread-local waves is undefined, so WaveModCount should only be used with global waves in the data hierarchy of the main thread.

A wave's mod count changes when the wave's data or properties, such as scaling, note, and dimensionality, are set. The mod count changes even if the new data or property values are the same as the old. For example, executing:

```
wave1 += 0
```

causes the mod count to change even though the data itself was not actually changed.

### Examples

```
Make/O wave1 = 5
Variable waveModCount1, waveModCount2
waveModCount1 = WaveModCount(wave1);
wave1 += 1 // Modify wave1
waveModCount2 = WaveModCount(wave1);
if (waveModCount2 != waveModCount1)
    Print "Wave has changed"
endif
```

### See Also

WaveInfo, ModDate

## WaveName

### WaveName (*winNameStr*, *index*, *type*)

The WaveName function returns a string containing the name of the *index*th wave of the specified *type* in the named window or subwindow.

### Parameters

*winNameStr* can be "" to refer to the top graph or table.

When identifying a subwindow with *winNameStr*, see **Subwindow Syntax** on page III-92 for details on forming the window hierarchy.

### Details

WaveName works on waves displayed in a graph, in a table or on the list of waves in the current data folder. If the window is a table, WaveName returns the column name (e.g., "wave0.d"), rather than the name of the wave itself (e.g., "wave0").

For most uses, we recommend that you use **WaveRefIndexed** or **WaveRefIndexedDFR** instead of WaveName. WaveName returns a string containing the wave name only, with no data folder path qualifying it. Thus, you may get erroneous results if the wave referred to in the graph has the same name as a different wave in the current data folder. Likewise, if the named wave resides in a data folder that is not the current data folder, you will not be able to refer to the named wave. Use **WaveRefIndexedDFR** instead.

*winNameStr* is a string expression containing the name of a graph or table or an empty string (""). If the string is empty and *type* is 4 then WaveName works on the list of all waves in the current data folder. If the string is empty and the type parameter is not 4 then WaveName works on the top graph or table.

*index* starts from zero.

*type* is a number from 1 to 4. When type is 4 and *winNameStr* is "", WaveName works on the list of all waves in the current data folder.

For graph windows, *type* is 1 for y waves, 2 for x waves, 3 for either y or x waves.