date2secs

date2secs(*year*, *month*, *day*)

The date2secs function returns the number of seconds from midnight on 1/1/1904 to the specified date.

The month and day parameters are one-based, so these series start at one.

Date2Secs is limited to the range -32768-01-01 to 32767-12-31. For dates outside that range, it returns NaN. It also returns NaN if the year is 0 because Igor uses the Gregorian calendar in which there is no year 0.

If *year*, *month*, and *day* are all -1 then date2secs returns the offset in seconds from the local time to the UTC (Universal Time Coordinate) time.

Examples

```
Print Secs2Date(date2secs(1993,3,15),1)        // Ides of March, 1993
```

Prints the following, depending on your system's date settings, in the history area:

```
  Monday, March 15, 1993
```

This next example sets the X scaling of a wave to 1 day per point, starting January 1, 1993:

```
Make/N=125 myData = 100 + gnoise(50)
SetScale/P x,date2secs(1993,1,1),24*60*60,"dat",myData
Display myData;ModifyGraph mode=5
```

See Also

For further discussion of how Igor represents dates, see **Date/Time Waves** on page II-85.

The **Secs2Date**, **Secs2Time**, and **time** functions.

DateTime

DateTime

The DateTime function returns number of seconds from 1/1/1904 to current local date and time.

To get the UTC date and time, subtract Date2Secs(-1,-1,-1) from the value returned by DateTime.

Unlike most Igor functions, DateTime is used without parentheses.

Examples

```
Variable localNow = DateTime
```

See Also

The **Secs2Date**, **Secs2Time** and **time** functions.

dawson

dawson(*x*)

The dawson function returns the value of the Dawson integral:

$$F(x) = \exp\left(-x^2\right)\int_0^x \exp\left(t^2\right)dt.$$

If x is real, dawson returns a real result. If x is complex, dawson returns a complex result.

References

Abramowitz, M., and I.A. Stegun, *Handbook of Mathematical Functions*, 298 pp., Dover, New York, 1972.

The code used to implement the Dawson integral was written by Steven G. Johnson of MIT. See http://ab-initio.mit.edu/Faddeva

Debugger

Debugger

The Debugger operation breaks into the debugger if it is enabled.

See Also

The Debugger on page IV-212 and the **DebuggerOptions** operation.