

Output Variables

DuplicateDataFolder sets the following output variable:

V_flag 0 if the operation succeeded, -1 if the destination data folder already existed, or a non-zero error code. The V_flag output variable was added in Igor Pro 8.00.

Examples

```
DuplicateDataFolder root:DF0, root:DF0Copy // Create a copy of DF0 named DF0Copy
```

See Also

MoveDataFolder, **Data Folders** on page II-107, **Data Folder References** on page IV-78, **Free Data Folders** on page IV-96

DWT

DWT [*flags*] *srcWaveName*, *destWaveName*

The DWT operation performs discrete wavelet transform on the input wave *srcWaveName*. The operation works on one or more dimensions only as long as the number of elements in each dimension is a power of 2 or when the /P flag is specified

Flags

/D Denoises the source wave. Performs the specified wavelet transform in the forward direction. It then zeros all transform coefficients whose magnitude fall below a given percentage (specified by the /V flag) of the maximum magnitude of the transform. It then performs the inverse transform placing the result in *destWaveName*. The /I flag is incompatible with the /D flag.

/I Perform the inverse wavelet transform. The /S and /D flags are incompatible with the /I flag.

/N=num Specifies the number of wavelet coefficients. See /T flag for supported combinations.

/P=num Controls padding:

num=1: Adds zero padding to the end of the dimension up to nearest power of 2 when the number of data elements in a given dimension of *srcWaveName* is not a power of 2.

num=2: Uses zero padding to compute the transform, but the resulting wave is truncated to the length of the input wave.

/S Smooths the source wave. This performs the specified wavelet transform in the forward direction. It then zeros all transform coefficients except those between 0 and the cut-off value (specified in % by /V flag). It then performs the inverse transform placing the result in *destWaveName*. The /I flag is incompatible with the /S flag.

/T=type Performs the wavelet transform specified by *type*. The following table gives the transform name with the *type* code for the transform and the allowed values of the *num* parameter used with the /N flag. "NA" means that the /N flag is not applicable to the corresponding transform.

Wavelet Transform	<i>type</i>	<i>num</i>
Daubechies	1 (default)	4, 6, 8, 10, 12, 20
Haar	2	NA
Battle-Lemarie	4	NA
Burt-Adelson	8	NA
Coifman	16	2, 4, 6
Pseudo-Coifman	32	NA
splines	64	1 (2-2), 2 (2-4), 3 (3-3), 4 (3-7)

/V=value Specifies the degree of smoothing with the /S and /D flags only.

For /S, *value* gives the cutoff as a percentage of data points above which coefficients are set to zero. For /D, *value* specifies the percentage of the maximum magnitude of the transform such that coefficients smaller than this value are set to zero.