If you use /SQ the operation sets V_Median, V_Q25, V_Q75, V_IQR, V_min, and V_max.

If you use /WS the operation sets V_min, V_max, V_numNaNs, V_numINFs, V_avg, V_sdev, V_rms, V_adev, V_skew, V_kurt, and V_Sum.

See Also

Chapter III-12, **Statistics** for a function and operation overview; **StatsSample**, **WaveStats** and **StatsQuantiles**.

StatsSample

StatsSample /N=*numPoints* [*flags*] *srcWave*

StatsSample creates a random, non-repeating sample from *srcWave*.

It samples *srcWave* by drawing without replacement *numPoints* values from *srcWave* and storing them in the output wave W_Sampled or M_Sampled if /MC or /MR are used.

The /N flag is required.

Flags

/ACMB	Creates a wave containing all unique combinations of *numPoints* values from srcWave. It is assumed that *srcWave* is a 1D numeric wave containing more than *numPoints* elements. The results are stored in the wave M_Combinations in the current data folder. Each row in the result wave corresponds to a unique combination of samples. Added in Igor Pro 7.00.
/CMPL	Stores all data elements from srcWave that were excluded from the random sample in the wave W_CompWave or M_CompWave in the current data folder. /CMPL was added in Igor Pro 8.00.
/N=*numPoints*	Specifies the number of points sampled from *srcWave*. When combined with /MC, *numPoints* is the number of sampled rows and when combined with /MR, it is the number of sampled columns.
/MC	Use /MC (multi-column) to randomly sample full rows from *srcWave*, i.e., the output consists of all columns of each selected row. /MC and /MR are mutually exclusive flags.
/MR	Use /MR (multi-row) to randomly sample full columns from *srcWave*, i.e., the output consists of all rows of each of the selected columns. /MC and /MR are mutually exclusive flags.
/Z	Ignores errors.

Details

If you omit /MC and /MR, the output is a 1D wave named W_Sampled where the samples are chosen from *srcWave* without regard to its dimensionality.

If you use either /MC or /MR the output is a 2D wave named M_Sampled which will have either the same number of columns (/MC) as *srcWave* or the same number of rows (/MR) as *srcWave*.

See Also

Chapter III-12, **Statistics**, **StatsResample**

StatsRunsCDF

StatsRunsCDF(*n*, *r*)

The StatsRunsCDF function returns the cumulative distribution function for the up and down runs distribution for total number of runs *r* in a random linear arrangement of *n* unequal elements. There is no closed form expression. It is computed numerically from the recursion of the probability density