/TUK — Perform a Tukey-type (Nemenyi) multiple comparison test using the difference between the rank sums. This is the default that is performed if you do not specify any of the test flags. This test requires equal numbers of points in all waves; use /DHW for unequal sizes.

Output is to the M_NPMCTukeyResults wave in the current data folder. The output column contents are: the first contains the difference between the rank sums, the second contains the SE values, the third contains the statistic q, the fourth contains the critical value for this specific alpha and the number of groups; and the last contains a conclusion flag with 0 indicating a rejection of H_0 and 1 indicating acceptance. H_0 postulates that the paired means are the same.

/WSTR=*waveListString*

Specifies a string containing a semicolon-separated list of waves that contain sample data. Use *waveListString* instead of listing each wave after the flags.

/Z — Ignores errors.

Details

Inputs to StatsNPMCTest are two or more 1D numerical waves (one wave for each group of samples) containing two or more valid entries. The waves must have the same number of points for the use /SNK and /TUK tests, otherwise, for waves of differing lengths you must use the Dunn-Hollander-Wolfe test (/DHW).

V_flag will be set to zero for no execution errors. Individual tests may fail if, for example, there are different number of samples in the input waves for a test that requires an equal number of points. StatsNPMCTest skips failed tests and V_flag will be a binary combination identifying the failed test(s):

`V_flag & 1` — Tukey method failed (/TUK).

`V_flag & 2` — Student-Newman-Keuls failed (/SNK).

V_flag will be set to -1 for any other errors.

See Also

Chapter III-12, **Statistics** for a function and operation overview; **StatsANOVA1Test** and **StatsKWTest**.

For multiple comparisons in parametric tests see: **StatsDunnettTest** and **StatsScheffeTest**.

StatsNPNominalSRTest

StatsNPNominalSRTest [***flags***] [***srcWave***]

The StatsNPNominalSRTest operation performs a nonparametric serial randomness test for nominal data consisting of two types. The null hypothesis is that the data are randomly distributed. Output is to the W_StatsNPSRTest wave in the current data folder.

Flags

/ALPH = *val* — Sets the significance level (default *val*=0.05).

/Q — No results printed in the history area.

/P={*m*,*n*,*u*} — Provides a summary of the data instead of providing the nominal series. *m* is the number of elements of the first type, *n* is the number of elements of the second type, and *u* is the number of runs or contiguous sequences of each type. Do not use *srcWave* with /P.

/T=*k* — Displays results in a table. *k* specifies the table behavior when it is closed.

- *k*=0: Normal with dialog (default).
- *k*=1: Kills with no dialog.
- *k*=2: Disables killing.

/Z — Ignores errors.