/TAIL=*tail* *tail* is a bitwise parameter that specifies the tails tested.

Bit 0: Lower tail.

Bit 1: Upper tail (default).

Bit 2: Two tail.

See **Setting Bit Parameters** on page IV-12 for details about bit settings.

The P value corresponding to the last tail calculated will be entered in the table.

/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. V_flag will be set to -1 for any error and to zero otherwise.

Details

The inputs for StatsAngularDistanceTest are two or more waves each corresponding to individual sample. The waves must be single or double precision expressing the angles in radians. There is no restriction on the number of points or dimensionality of the waves but the data should not contain NaNs or INFs. We recommend that you use double precision waves, especially if there are ties in the data. The reference directions should also be in radians. For two samples, StatsAngularDistanceTest computes the angular distances between the input data and the reference directions and then uses the Mann-Whitney-Wilcoxon test (**StatsWilcoxonRankTest**). Results are stored in the W_WilcoxonTest wave and in the corresponding table. For more than two samples, StatsAngularDistanceTest uses the Kruskal-Wallis test, storing results in the wave W_KWTestResults wave in the current data folder.

V_flag will be set to -1 for any error and to zero otherwise.

References

See, in particular, Chapter 27 of:

Zar, J.H., *Biostatistical Analysis*, 4th ed., 929 pp., Prentice Hall, Englewood Cliffs, New Jersey, 1999.

See Also

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

Examples:Statistics:Circular Statistics:AngularDistanceTest.pxp.

StatsANOVA1Test

StatsANOVA1Test [***flags***] [***wave1, wave2,*** … ***wave100***]

The StatsANOVA1Test operation performs a one-way ANOVA test (fixed-effect model). The standard ANOVA test results are stored in the M_ANOVA1 wave in the current data folder.

Flags

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

/BF Performs the Brown and Forsythe test computing F'' and degrees of freedom. The W_ANOVA1BnF wave in the current data folder contains the output.

/Q No results printed in the history area.

/T=*k* Displays results in a table; additional tables are created with /BF and /W.

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.

/W Performs the Welch test F' and computes degrees of freedom. The W_ANOVA1Welch wave in the current data folder contains the output.