

WEIBULL ADJUSTED RANKS**PURPOSE**

Compute the Weibull adjusted ranks in preparation for a Weibull plot.

SYNTAX 1

LET <resp> = WEIBULL ADJUSTED RANKS <y1> <SUBSET/EXCEPT/FOR qualification>

where <y1> is a response variable;

<resp> is a variable where the adjusted Weibull ranks are saved;

and where the <SUBSET/EXCEPT/FOR qualification> is optional.

SYNTAX 2

LET <resp> = WEIBULL ADJUSTED RANKS <y1> <tag> <SUBSET/EXCEPT/FOR qualification>

where <y1> is a response variable;

<tag> is a variable containing 1's (the data point is included in the analysis) and 0's (the data point is excluded from the analysis);

<resp> is a variable where the adjusted Weibull ranks are saved;

and where the <SUBSET/EXCEPT/FOR qualification> is optional.

EXAMPLES

LET Y3 = WEIBULL ADJUSTED RANKS Y1

LET WRANK = WEIBULL ADJUSTED RANKS Y TAG

NOTE

A tag variable (syntax 2) is used to indicate censored items. Values not equal to 1 are considered censored.

DEFAULT

None

SYNONYMS

None

RELATED COMMANDS

WEIBULL PLOT = Generates a Weibull plot.

NORMAL PLOT = Generates a Normal plot.

REFERENCE

"Weibull Analysis Handbook," Abernathy, et. al., pages 20-21.

APPLICATIONS

Reliability

IMPLEMENTATION DATE

Pre-1987

PROGRAM

LET TIME = DATA 90 96 100 30 49 45 10 82

LET FAILMODE = DATA 1 1 0 1 1 0 0 1

LET X = WEIBULL ADJUSTED RANKS TIME FAILMODE

PRINT X