

WINSORIZED MEAN**PURPOSE**

Compute the Winsorized mean for a variable.

DESCRIPTION

The mean is the sum of the observations divided by the number of observations. The mean can be heavily influenced by extreme values in the tails of a variable. The Winsorized mean compensates for this by setting the tail values equal to a certain percentile value. For example, for a 90% Winsorized mean, the bottom 5% of the values are set equal to the value corresponding to the 5th percentile while the upper 5% of the values are set equal to the value corresponding to the 95th percentile.

SYNTAX

```
LET <par> = WINSORIZED MEAN <y>           <SUBSET/EXCEPT/FOR qualification>
```

where <y> is the response variable;
 <par> is a parameter where the computed Winsorized mean is stored;
 and where the <SUBSET/EXCEPT/FOR qualification> is optional.

EXAMPLES

```
LET A = WINSORIZED MEAN Y1
LET A = WINSORIZED MEAN Y1 SUBSET TAG > 2
```

NOTE

The analyst must specify the percentages to Winsorize in each tail. This is done by defining the internal variables P1 (the lower tail) and P2 (the upper tail). For example, to Winsorize 10% off each tail, do the following:

```
LET P1 = 10
LET P2 = 10
LET A = WINSORIZED MEAN Y
```

DEFAULT

None

SYNONYMS

None

RELATED COMMANDS

WINSORIZED MEAN PLOT	=	Generate a Winsorized mean versus subset plot.
MEAN	=	Compute the mean of a variable.
TRIMMED MEAN	=	Compute the trimmed mean of a variable.
MEDIAN	=	Compute the median of a variable.
STANDARD DEVIATION	=	Compute the standard deviation of a variable.

APPLICATIONS

Data Analysis

IMPLEMENTATION DATE

Pre-1987

PROGRAM

```
LET Y1 = CAUCHY RANDOM NUMBERS FOR I = 1 1 100
LET P1 = 10
LET P2 = 10
LET A1 = WINSORIZED MEAN Y1
```