

MIDRANGE PLOT

PURPOSE

Generates a subsample midrange versus subsample index plot.

DESCRIPTION

The midrange is the arithmetic average of the minimum and the maximum points. The midrange plot is used to answer the question: "Does the subsample location change over different subsamples?" The plot consists of:

Vertical axis = subsample midrange;
Horizontal axis = subsample index.

In addition, a horizontal line is drawn representing the full sample midrange. The appearance of the 2 traces is controlled by the first 2 settings of the LINES, CHARACTERS, SPIKES, BARS, and similar attributes.

SYNTAX

MIDRANGE PLOT <y> <x> <SUBSET/EXCEPT/FOR qualification>

where <y> is the response (= dependent) variable;

<x> is the subsample identifier variable (this variable appears on the horizontal axis);

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

EXAMPLES

MIDRANGE PLOT Y X

MIDRANGE PLOT Y X SUBSET X < 19

DEFAULT

None

SYNONYMS

None

RELATED COMMANDS

CHARACTERS	=	Sets the type for plot characters.
LINES	=	Sets the type for plot lines.
MEAN PLOT	=	Generates a mean plot.
MEDIAN PLOT	=	Generates a median plot.
MIDMEAN PLOT	=	Generates a midmean plot.
TRIMMED MEAN PLOT	=	Generates a trimmed mean plot.
WINDSORIZED MEAN PLOT	=	Generates a Windsorized mean plot.
SD PLOT	=	Generates a standard deviation plot.
BOX PLOT	=	Generates a box plot.
XBAR CHART	=	Generates an xbar control chart.
PLOT	=	Generates a data or function plot.

APPLICATIONS

Quality Control

IMPLEMENTATION DATE

88/2

PROGRAM

```
SKIP 25
READ GEAR.DAT Y X
LINE BLANK DASH
CHARACTER X BLANK
XTIC OFFSET 0.2 0.2
Y1LABEL MIDRANGE
X1LABEL SAMPLE ID
TITLE AUTOMATIC
MIDRANGE PLOT Y X
```

