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.
- WINDORIZED 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