MEDIAN PLOT

PURPOSE
Generates a subsample median versus subsample index plot.

DESCRIPTION
The subsample median is the middle of the ordered data from the subsample. The median plot is used to answer the question: “Does the subsample location change over different subsamples?” The plot consists of:

- Vertical axis = subsample median;
- Horizontal axis = subsample index.

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

SYNTAX
MEDIAN PLOT <y> <x> <SUBSET/EXCEPT/FOR qualification>
where <y> is the response (= dependent) variable;
<y> is the subsample identifier variable (this variable appears on the horizontal axis);
and where the <SUBSET/EXCEPT/FOR qualification> is optional.

EXAMPLES
MEDIAN PLOT Y X
MEDIAN PLOT Y X SUBSET X > 1

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.
- MIDMEAN PLOT = Generates a midmean plot.
- MIDRANGE PLOT = Generates a midrange 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 MEDIAN
    X1LABEL SAMPLE ID
    TITLE AUTOMATIC
    MEDIAN PLOT Y X