# MIDMEAN PLOT

## PURPOSE

Generates a subsample midmean versus subsample index plot.

## DESCRIPTION

The subsample midmean is the mean of the middle 50% of the ordered data in the subsample. The midmean plot is used to answer the question: "Does the subsample location change over different subsamples?" The plot consists of:

       Vertical      axis   =    subsample midmean;

       Horizontal  axis   =    subsample index.

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

## SYNTAX

MIDMEAN PLOT &lt;y&gt; &lt;x&gt;                              &lt;SUBSET/EXCEPT/FOR qualification&gt;

where &lt;y&gt; is the response (= dependent) variable;

     &lt;x&gt; is the subsample identifier variable (this variable appears on the horizontal axis);

and where the &lt;SUBSET/EXCEPT/FOR qualification&gt; is optional.

## EXAMPLES

MIDMEAN PLOT Y X

MIDMEAN 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. |
| MEDIAN PLOT | = | Generates a median 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 MIDMEAN
        X1LABEL SAMPLE ID
        TITLE AUTOMATIC
        MIDMEAN PLOT Y X