MINIMUM PLOT

PURPOSE
Generates a subsample minimum versus subsample index plot.

DESCRIPTION
The subsample minimum is the smallest data value in the subsample. The minimum plot is used to answer the question: “Does the subsample variation change over different subsamples?” The plot consists of:

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

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

SYNTAX
MINIMUM 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
MINIMUM PLOT Y X
MINIMUM PLOT Y X SUBSET X = 1 TO 10

DEFAULT
None

SYNONYMS
MIN PLOT

RELATED COMMANDS
- CHARACTERS = Sets the type for plot characters.
- LINES = Sets the type for plot lines.
- MAXIMUM PLOT = Generates a maximum plot.
- RANGE PLOT = Generates a range plot.
- LOWER QUARTILE PLOT = Generates a lower quartile plot.
- UPPER QUARTILE PLOT = Generates a upper quartile plot.
- LOWER HINGE PLOT = Generates a lower hinge plot.
- UPPER HINGE PLOT = Generates a upper hinge plot.
- DECILE PLOT = Generates a decile plot.
- STANDARD DEVIATION PLOT = Generates a stand deviation plot.
- VARIANCE PLOT = Generates a variance plot.
- MEAN PLOT = Generates a mean plot.
- MEDIAN PLOT = Generates a median plot.
- BOX PLOT = Generates a box plot.
- RANGE CHART = Generates a range control chart.
- S CHART = Generates a standard deviation control chart.
- PLOT = Generates a data or function plot.

APPLICATIONS
Quality Control

IMPLEMENTATION DATE
88/2
PROGRAM
SKIP 50
SET READ FORMAT 3F4.0,F5.0,F6.0,F3.0,2F9.0
READ PBF11.DAT YEAR DAY BOT SD F11 FLAG WV CO2
.
RETAIN YEAR DAY BOT SD F11 WV CO2 FLAG SUBSET FLAG 0
LET MONTH=INT(DAY/30.25)+1
LINE BLANK DASH
CHARACTER X BLANK
XLIMITS 0 15
Y1LABEL MINIMUM
X1LABEL GROUP ID
TITLE AUTOMATIC
MINIMUM PLOT WV MONTH