EXTREME PLOT

PURPOSE
Generates a subsample extreme versus subsample index plot.

DESCRIPTION
The subsample extreme is the data value with the largest absolute value in the subsample. The extreme plot is used to answer the question: “Does the subsample variation change over different subsamples?” The plot consists of:
- Vertical axis = subsample extreme;
- Horizontal axis = subsample index.

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

SYNTAX
EXTREME 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
EXTREME PLOT Y X
EXTREME PLOT Y X1 SUBSET X1 > 3

DEFAULT
None

SYNONYMS
None

RELATED COMMANDS
- CHARACTERS = Sets the type for plot characters.
- LINES = Sets the type for plot lines.
- MINIMUM PLOT = Generates a minimum plot.
- MAXIMUM PLOT = Generates a minimum plot.
- RANGE PLOT = Generates a range plot.
- DECILE PLOT = Generates a decile plot.
- STANDARD DEVIATION PLOT = Generates a stand deviation plot.
- MEAN PLOT = Generates a mean 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
LET A = MEAN WV
LET WV = WV - A
.
LINE BLANK DASH
CHARACTER X BLANK
XLIMITS 0 15
Y1LABEL ABSOLUTE VALUE FROM MEAN
X1LABEL GROUP ID
TITLE AUTOMATIC
EXTREME PLOT WV MONTH