

MAXIMUM PLOT

PURPOSE

Generates a subsample maximum versus subsample index plot.

DESCRIPTION

The subsample maximum is the largest data value in the subsample. The maximum plot is used to answer the question: "Does the subsample variation change over different subsamples?" The plot consists of:

Vertical axis = subsample maximum;

Horizontal axis = subsample index.

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

SYNTAX

MAXIMUM 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

MAXIMUM PLOT Y X

MAXIMUM PLOT Y X SUBSET X = 2 TO 12

DEFAULT

None

SYNONYMS

MAX PLOT

RELATED COMMANDS

| | | |
|-------------------------|---|---|
| CHARACTERS | = | Sets the type for plot characters. |
| LINES | = | Sets the type for plot lines. |
| MINIMUM PLOT | = | Generates a minimum plot. |
| RANGE PLOT | = | Generates a range plot. |
| EXTREME PLOT | = | Generates an extreme 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 maximum 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 MAXIMUM
X1LABEL GROUP ID
TITLE AUTOMATIC
MAXIMUM PLOT WV MONTH
```

