

RANGE PLOT

PURPOSE

Generates a subsample range versus subsample index plot.

DESCRIPTION

The subsample range is the difference between the maximum and minimum of the data in the subsample. The range plot is used to answer the question: "Does the subsample variation change over different subsamples?" It consists of:

Vertical axis = subsample range;

Horizontal axis = subsample index.

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

SYNTAX

RANGE 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

RANGE PLOT Y X

RANGE PLOT Y X SUBSET X = 2 TO 10

DEFAULT

None

SYNONYMS

R PLOT

RELATED COMMANDS

CHARACTERS	=	Sets the type for plot characters.
LINES	=	Sets the type for plot lines.
STANDARD DEVIATION PLOT	=	Generates a standard 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 25
READ GEAR.DAT Y X
LINE BLANK DASH
CHARACTER X BLANK
XTIC OFFSET 0.2 0.2
YILABEL RANGE
XILABEL SAMPLE ID
TITLE AUTOMATIC
RANGE PLOT Y X
```

