SKEWNESS PLOT

PURPOSE
Generates a subsample skewness versus subsample index plot.

DESCRIPTION
The subsample skewness is the cube root of the standardized third central moment of the data in the subsample. The skewness plot is used to answer the question: “Does the subsample skewness change over different subsamples?” It consists of:

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

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

SYNTAX
SKEWNESS 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
SKEWNESS PLOT Y X
SKEWNESS PLOT Y X SUBSET X > 2

DEFAULT
None

SYNONYMS
None

RELATED COMMANDS
- CHARACTERS = Sets the type for plot characters.
- LINES = Sets the type for plot lines.
- KURTOSIS PLOT = Generates a kurtosis plot.
- VARIANCE PLOT = Generates a variance plot.
- STANDARD DEVIATION PLOT = Generates a standard deviation plot.
- RANGE PLOT = Generates a range plot.
- MEAN PLOT = Generates a mean plot.
- MEDIAN PLOT = Generates a median plot.
- BOX PLOT = Generates a box plot.
- 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
  Y1LABEL SKEWNESS
  X1LABEL SAMPLE ID
  TITLE AUTOMATIC
  SKEWNESS PLOT Y X