# LINEAR SLOPE PLOT

## PURPOSE
Generates a subsample linear slope versus subsample index plot.

## DESCRIPTION
The subsample slope is the slope resulting from a least squares linear fit (between 2 user-specified variables) of the data in the subsample. The linear slope plot is used to answer the question: "Does the slope of a fitted line between 2 variables change from one subsample to the next?" The plot consists of:

      Vertical      axis   =   subsample slope from linear fit;
      Horizontal  axis   =   subsample index.

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

## SYNTAX
LINEAR SLOPE PLOT <y1> <y2> <x>                     <SUBSET/EXCEPT/FOR qualification>
where <y1> is a response (= dependent variable in the fit) variable;
      <y2> is another response (= independent variable in the fit) variable;
      <x> is the subsample identifier variable (this variable appears on horizontal axis);
and where the <SUBSET/EXCEPT/FOR qualification> is optional.

## EXAMPLES
LINEAR SLOPE PLOT PRES TEMP DAY
LINEAR SLOPE PLOT CONC YEAR MONTH SUBSET MONTH > 1

## DEFAULT
None

## SYNONYMS
None

## RELATED COMMANDS
| | | |
|---|---|---|
| LINEAR CORRELATION PLOT | = | Generates a linear correlation plot. |
| LINEAR INTERCEPT PLOT | = | Generates a linear intercept plot. |
| LINEAR RESSD PLOT | = | Generates a linear residual standard deviation plot. |
| CHARACTERS | = | Sets the type for plot characters. |
| LINES | = | Sets the type for plot lines. |
| FIT | = | Carries out a least squares fit. |

## APPLICATIONS
Exploratory Data Analysis

## IMPLEMENTATION DATE
88/3

PROGRAM
        SKIP 25
        READ BERGER1.DAT Y X BATCH
        LINE BLANK DASH
        CHARACTER X BLANK
        XTIC OFFSET 0.2 0.2
        Y1LABEL SLOPE
        X1LABEL SAMPLE ID
        TITLE AUTOMATIC
        LINEAR SLOPE PLOT Y X BATCH