## LINEAR INTERCEPT PLOT

## PURPOSE

Generates a subsample linear intercept versus subsample index plot.

## DESCRIPTION

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

Vertical axis $=$ subsample intercept from linear fit;
Horizontal axis $=$ subsample index.
In addition, a horizontal line is drawn representing the full sample linear intercept. The appearance of the 2 traces is controlled by the first 2 settings of the LINES, CHARACTERS, SPIKES, BARS, and similar attributes.

## SYNTAX

LINEAR INTERCEPT PLOT <y1> <y2> <x> <SUBSET/EXCEPT/FOR qualification>
where $\langle y 1\rangle$ is a response (= dependent variable in the linear fit) variable;
<y2> is another response (= independent variable in the linear fit) variable;
$<\mathrm{x}>$ is the subsample identifier variable (this variable appears on the horizontal axis); and where the <SUBSET/EXCEPT/FOR qualification> is optional.

## EXAMPLES

LINEAR INTERCEPT PLOT PRES TEMP DAY
LINEAR INTERCEPT PLOT CONC YEAR MONTH SUBSET MONTH = 2 TO 11
DEFAULT
None
SYNONYMS
None
RELATED COMMANDS
LINEAR SLOPE PLOT $=\quad$ Generates a linear slope plot.

LINEAR CORRELATION PLOT $=\quad$ Generates a linear correlation plot.
LINEAR RESSD PLOT $\quad=\quad$ Generates a linear residual standard deviation plot.
CHARACTERS $=\quad$ Sets the type for plot characters.
LINES
$=\quad$ Sets the type for plot lines.
FIT
$=\quad$ 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
    Y1LABEL INTERCEPT
    X1LABEL SAMPLE ID
    TITLE AUTOMATIC
    XTIC OFFSET 0.2 0.2
    LINEAR INTERCEPT PLOT Y X BATCH
```



