ANOP PLOT

PURPOSE
Generates an analysis of proportions plot.

DESCRIPTION
An analysis of proportions plot performs a graphical analysis of proportions. In an analysis of proportions, the values that a response variable can have are divided into two mutually exclusive groups (commonly called "successes" and "failures"). The response variable is generated for various levels of a factor variable (i.e., the factor variable identifies groups). The analysis of proportions plot is formed as follows:

Horizontal axis   =   distinct values (i.e., levels) of the factor variable;

Vertical axis   =   for each distinct value of horizontal axis, calculate the proportion of the first response variable falling within some user defined limits (i.e., the proportion of successes).

In addition, a horizontal line is drawn representing the proportion of successes for the entire response variable.

SYNTAX
ANOP PLOT <y1> <tag>   <SUBSET/EXCEPT/FOR qualification>

where <y1> is a response variable;

      <tag> is a factor variable;

and where the <SUBSET/EXCEPT/FOR qualification> is optional.

EXAMPLES
ANOP PLOT Y1 TAG

ANOP PLOT Y1 TAG SUBSET TAG > 3

NOTE 1
The ANOP LIMITS command is used to define the lower and upper limits for calculating the proportion.

NOTE 2
The proportion is plotted as a percentage (i.e., 0 to 100 scale rather than 0 to 1 scale).

NOTE 3
By default, the proportions are drawn as a connected line segment. Some users may prefer to draw them as distinct points. This is demonstrated in the PROGRAM section below.

NOTE 4
The ANOP PLOT only supports one factor variable at this time.

DEFAULT
None

SYNONYMS
PROPORTION PLOT

RELATED COMMANDS
ANOP LIMITS	=	Sets the limits for calculating the proportion.
LINE	=	Sets the line types.
CHARACTER	=	Sets the plot characters.
PLOT	=	Generates a data or function plot.

APPLICATION
Analysis of Proportions

IMPLEMENTATION DATE
87/6

PROGRAM

        SKIP 25
        READ GEAR.DAT Y1 TAG
        ANOP LIMITS 0.99 1.01
        CHARACTER CIRCLE BLANK
        LINE BLANK SOLID
        X1LABEL LEVELS OF FACTOR VARIABLE
        Y1LABEL PERCENTAGE OF SUCCESSES
        XTIC OFFSET 0.5 0.5
        YTIC OFFSET 0.5 0.5
        ANOP PLOT Y1 TAG