

XPLOT

PURPOSE

An internal variable into which the horizontal coordinates of the most recent plot are stored.

DESCRIPTION

Whenever DATAPLOT generates a plot, it saves the horizontal and vertical coordinates of each point plotted in the internal variables XPLOT and YPLOT. For 3d plots, it stores the second horizontal axis coordinates in the variable X2PLOT. The coordinates are saved in the units of the data, not in the DATAPLOT 0 to 100 coordinates. These variables can be used in any way that a user created variable can.

SYNTAX

None

EXAMPLES

```
BOOTSTRAP PLOT Y
LET Y2 = YPLOT
HISTOGRAM Y2
. Generate a frequency table
HISTOGRAM Y
SET WRITE DECIMALS 3
PRINT XPLOT YPLOT
. Generate a table of medians
MEDIAN PLOT Y GROUP
SET WRITE DECIMALS 3
PRINT XPLOT YPLOT
. Generate a spectral density plot from a periodogram
PERIODOGRAM Y
LET A = VARIANCE Y
LET Y2 = YPLOT/A
LET X = XPLOT
TITLE SPECTRAL DENSITY PLOT
PLOT Y2 X
```

DEFAULT

None

SYNONYMS

None

RELATED COMMANDS

TAGPLOT	=	An internal variable that contains the trace identifier of the points from the most recent plot.
YPLOT	=	An internal variable that contains the vertical coordinates from the most recent plot.
X2PLOT	=	An internal variable that contains the coordinates from the second horizontal axis from the most recent 3d plot.
PLOT	=	Generate a data of function plot.

APPLICATIONS

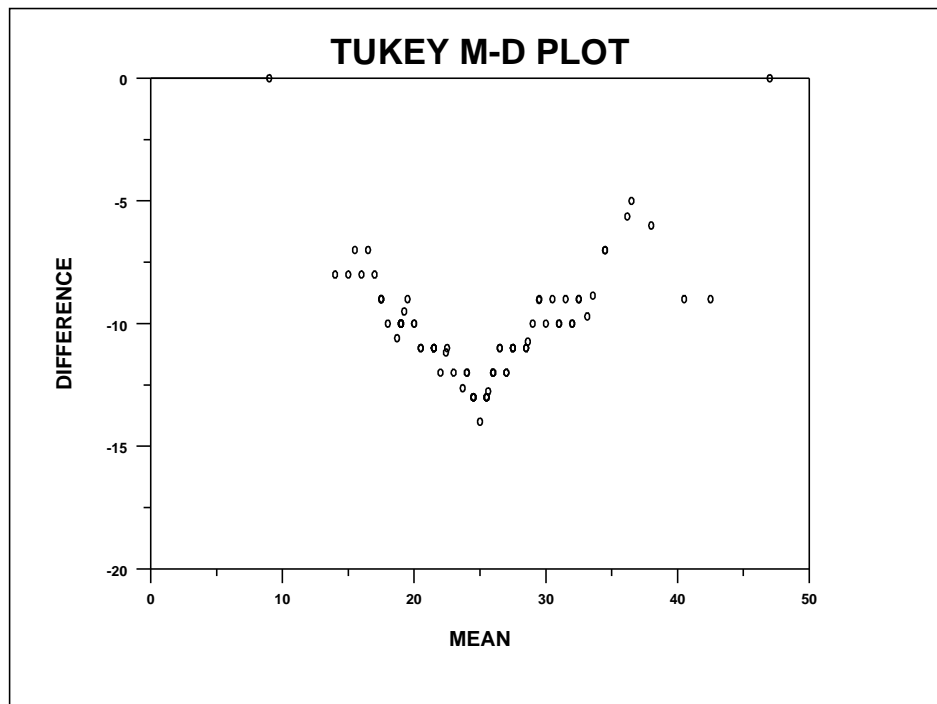
Plotting

IMPLEMENTATION DATE

Pre-1987

PROGRAM 1

```
. Generate a Tukey mean-difference plot
SKIP 25
READ AUTO83B.DAT Y1 Y2
DELETE Y2 SUBSET Y2 < 0
.
QUANTILE-QUANTILE PLOT Y1 Y2
LET YMEAN = (YPLOT+XPLOT)/2
LET YDIFF = YPLOT - XPLOT
LET AMIN = MINIMUM YMEAN
LET AMAX = MAXIMUM YDIFF
LET XZERO = DATA AMIN AMAX
LET YZERO = DATA 0 0
LINE BLANK SOLID
CHARACTER CIRCLE BLANK
CHARACTER SIZE 1.0
TITLE TUKEY M-D PLOT
XILABEL MEAN
YILABEL DIFFERENCE
PLOT YDIFF YMEAN AND
PLOT YZERO XZERO
```



PROGRAM 2

```
. THIS DEMONSTRATES A RELATIVELY IMPORTANT SPECTRAL ANALYSIS EXAMPLE
SKIP 25
READ LEW.DAT Y
.
MULTIPLY 2 1; MULTIPLY CORNER COORDINATES 0 0 100 100
SPIKE ON
LINE BLANK
TITLE AUTOMATIC
XILABEL FREQUENCY
SPECTRUM Y
.
LET PERIOD = 1/XPLOT
XILABEL PERIOD
PLOT YPLOT PERIOD
```

