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PLOT (A4, DASH, DEVICE=*name of printer*, FILE=*name of file*, HEIGHT=*height of characters*,
HIRES, LANDSCAP, MIN=*y axis minimum*, MAX=*y axis maximum*,
ORIGIN, PORTRAIT, PREVIEW, TITLE='*text string to be used as title*', WIDTH) ;

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Function:

PLOT produces a plot of one or more series versus the observation number (usually in units of time). The series are plotted on the vertical axis and time on the horizontal axis. The plot may be printed as well as displayed if a hardcopy device such as a Laserjet or dot matrix printer is available. This section describes the graphics version of PLOT, which is available only for DOS/Win and Macintosh versions or TSP. For other versions, see the non-graphics PLOT command.

Usage:

PLOT is followed by a single series name, or a list of series names. On the plot, the series will be differentiated by colors or the style of the lines used to plot them. Parameters to control the appearance and printing of the plot may be included in parentheses following the word PLOT.

The graph will be displayed on the screen; if a DEVICE= is specified, a prompt is also displayed which instructs you to type "P" if you wish to print the graph. If you type anything else, the graph will not be printed; this is useful if you decide you do not like its appearance after you have seen the screen.

If there are any observations with missing data, there will be breaks in the plotted lines.

Options:

(DOS/Win only) A4/**NOA4** specifies A4 paper size. Available for DEVICE=LJ3 or POSTSCRIPT only.

DASH/**NODASH** specifies whether the lines for different series on the screen are to be distinguished by using different dash patterns (of which there are seven). The default is no dashes (just color) on the screen and dashes on printed output.

(DOS/Win only) **DEVICE**=CHAR or EPSON or LJ2 or LJ3 or LJET or LJPLUS or LJR75 or LJR100 or LJR150 or LJR300 or POSTSCRI or PS specifies the hardcopy device to be used for printer output. LJ means HP LaserJet or compatible, EPSON is EPSON dot matrix or compatible, POSTSCRI and PS are Postcript output, and CHAR is the old line printer output (characters instead of graphics). The LJ suffixes specify models of the printer and the LJR suffixes specify the resolution of the LaserJet printer directly, rather than giving the printer type. The default resolutions for the LJET, LJPLUS, and LJ2 printers are 100, 150, and 300 respectively. Note that larger resolutions imply larger file sizes and printing times.

(DOS/Win only) **FILE**=the name of a file to which the graphics image is to be written. This file can be printed later; for example, if you are running under DOS and your printer device is LPT1, print the plot with the command

        copy/b file LPT1:

(DOS/Win only) **HEIGHT**= letter height in inches. The default* is .25. Values in the range (0,1] are valid.

(DOS/Win only) HIRES/**NOHIRES** controls how graphs are printed in batch mode (when PREVIEW is not being used). Normally (NOHIRES), graphs are printed in character mode to the batch output file. When the HIRES option is used, the patched DEVICE= and FILE= will be used; usually this will send a page to LPT1 for each graph.

(DOS/Win only) **LANDSCAP**/PORTRAIT specifies the orientation of the plot. On the Mac, specify this option in the dialog box.

MIN= minimum value for the y-axis. This value must be less than or equal to the minimum value in the data.

MAX= maximum value for the y-axis. This value must be greater than or equal to the maximum value in the data.

ORIGIN/**NOORIGIN** causes a horizontal line to be drawn starting at zero on the vertical axis.

PREVIEW/NOPREVIE specifies whether the graph is to be shown on the screen before printing or saving. The default is **PREVIEW** for interactive use and **NOPREVIE** for batch use.

TITLE='a string which will be printed across the top of the graph'.

(MAC only) WIDTH/**NOWIDTH** specifies whether varying width sizes are to be used to distinguish the lines corresponding to different series on the graph.

* For convenience, the DEVICE=, FILE= AND HEIGHT= options of PLOT that you set are retained in the next PLOT(s) or GRAPH(s) until they are overriden explicitly. They may also be set in a LOGIN.TSP file by not specifying any series to plot. For example:

```
PLOT (DEV=LJ3, HEIGHT=.2) ;
```

Example:

The following example plots the graph shown on the following page:

```
OPTIONS CRT NODATE;
NAME ALMONS;  ? ALMON AND SHILLER LAGS
FREQ Q;
SMPL 53:1 67:4;
LOAD;
PLOT(PORT,PREV,DEV=LJ3,FILE='ALMON.PLT',TITLE='ALMON DATA') EXPEND APPROP;
END;
NOPRINT;
LOAD expend approp;  ? ORIGINAL ALMON DATA FROM MADDALA, P. 370
2072 1660 2077 1926 2078 2181 2043 1897 2062 1695 2067 1705 1964 1731 1981 2151
...
5715 5412 5637 5465 5383 5550 5467 5465;
```

Output:

In the high resolution screen mode, PLOT puts time (the observations index) on the horizontal axis and differentiates the series by a line type (dashes in the DOS/Win version, line width in the PC/MAC version). On a color monitor, the lines will have different colors. Check your installation disk for more Graphics documentation.

Almon data