

CHARACTERS

PURPOSE

Specifies the character types (A, B, ..., Z, 1, 2, 3, ..., circle, square, triangle, diamond, star, etc.) to appear at the plot points of each trace on subsequent plots.

DESCRIPTION

Plot symbols fall into the following categories:

1. common plotting characters (e.g., circle, square);
2. any ASCII keyboard character;
3. Greek symbols;
4. mathematics symbols;
5. miscellaneous symbols.

See the Graphics Attributes chapter for a complete list of available symbols in each of these categories. Characters are specified by trace. All characters belonging to the same trace are plotted with the same plot symbol.

SYNTAX

CHARACTERS <type> <type> <type> etc.

where <type> is a string that specifies the desired character symbol. Up to 100 character symbols can be listed.

EXAMPLES

```
CHARACTERS X BLANK STAR
CHARACTERS A B C D E
CHARACTERS STAR CIRCLE SQUARE DIAMOND
CHARACTERS STAR ALL
CHARACTERS ALL STAR
CHARACTERS
```

NOTE 1

The CHARACTER, LINE, BAR, and SPIKE switches all work independently of each other. That is, a plot point can be a line, a character, a spike, a bar, or any combination of these.

NOTE 2

There are approximately 10 commands for controlling the attributes of the plotted character. See the RELATED COMMANDS section below.

NOTE 3

Users sometimes wish to draw a plot symbol at every N points on a trace. This is handled in DATAPLOT through the creation of a tag variable. For example, to plot a symbol at every fifth point do something like the following:

```
LET NINC = 5
LET N = SIZE Y
LET TAG = SEQUENCE 1 1 N
LET TAG = MOD(TAG,NINC)
LINE BLANK SOLID
CHARACTER CIRCLE BLANK
PLOT Y X SUBSET TAG = 1 AND
PLOT Y X
```

More complex patterns are also possible (all values with the same value for the tag variable are plotted with the same character attributes).

NOTE 4

The CHARACTERS command with no arguments sets the character type to blank for all traces. The CHARACTERS command with the word ALL before or after the specified type assigns that character type to all traces. Thus CHARACTER X ALL or CHARACTER ALL X assigns the character X to all traces.

DEFAULT

All characters are blank.

SYNONYMS

None

RELATED COMMANDS

PLOT	=	Generates a data or function plot.
CHARACTER ANGLE	=	Sets the angles for plot characters.
CHARACTER AUTOMATIC	=	Specifies a variable to be used as the arguments to the CHARACTER command.
CHARACTER CASE	=	Sets the cases for plot characters.
CHARACTER COLOR	=	Sets the colors for plot characters.
CHARACTER FILL	=	Sets the fill switches for plot characters.
CHARACTER FONT	=	Sets the fonts for plot characters.
CHARACTER HW	=	Sets the heights and widths for plot characters.
CHARACTER JUSTIFICATION	=	Sets the justifications for plot characters.
CHARACTER OFFSET	=	Sets the offsets for plot characters.
CHARACTER SIZES	=	Sets the sizes for plot characters.
CHARACTER THICKNESS	=	Sets the thicknesses for plot characters.
CHARACTER WIDTH	=	Sets the widths for plot characters.
LINES	=	Sets the types for plot lines.
SPIKES	=	Sets the on/off switches for plot spikes.
BARS	=	Sets the on/off switches for plot bars.

APPLICATIONS

Presentation graphics

IMPLEMENTATION DATE

Pre-1987

PROGRAM

```

. POLLUTION SOURCE ANALYSIS, LLOYD CURRIE, DATE--1990
. SUBSET OF CURRIE.DAT REFERENCE FILE
LET ID2 = DATA 1 1 1 1 1 2 2 2 2 2 2 2 2 2 2 2
LET LEAD = DATA ...
    164 426 59 98 312 263 607 497 213 54 160 262 547 325 419 94 70
LET POT = DATA ...
    106 175 61 79 94 121 424 328 107 218 140 179 246 231 245 339 99
.
CHARACTER X1 X2 Y1 Y2
LINE BLANK ALL
LEGEND 1 X - POTASSIUM
LEGEND 2 Y - LEAD
.
TITLE DEMONSTRATE CHARACTER COMMAND
TITLE SIZE 5
LET X = SEQUENCE 1 1 17
PLOT POT X ID2 AND
PLOT LEAD X ID2
    
```

