

## CHARACTER MAPPING

### PURPOSE

When a tag variable is used to identify traces, specify whether the index into the CHARACTER setting is based on the rank or the exact value of the tag variable.

### DESCRIPTION

Given the following DATAPLOT commands:

```
LET X = DATA 1 1 2 2 3 3
LET Y = DATA 1 2 3 4 5 6
LET TAG = DATA 1 1 3 3 5 5
CHARACTER 1 2 3 4 5
LINE BLANK ALL
PLOT Y X TAG
```

The resulting plot would show the 3 traces labeled with the plot symbols 1, 2, and 3. The index into the CHARACTER settings is based on the rank of the tag variable. That is, the smallest value of the tag variable yields the first setting from the CHARACTER command, the second smallest value of the tag variable yields the second setting from the CHARACTER command, and so on. However, if the command

```
CHARACTER MAPPING EXACT
```

is entered before the PLOT command, then the resulting plot would show the 3 traces labeled with the plot symbols 1, 3, and 5. The index into the CHARACTER settings is based on the exact value, rounded to an integer, of the tag variable. In the above example, where the tag variable is 1, the first setting of the CHARACTER command is used. Where the tag variable is 2, the second setting of the CHARACTER command is used. Where the tag variable is 5, the fifth setting of the CHARACTER command is used.

### SYNTAX

```
CHARACTER MAPPING <RANK/EXACT>
```

where <RANK> bases the index into the CHARACTER setting on the rank of the tag variable and <EXACT> bases the index on the exact value of the tag variable.

### EXAMPLES

```
CHARACTER MAPPING RANK
CHARACTER MAPPING EXACT
```

### NOTE 1

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

### NOTE 2

The CHARACTER command allows up to 100 settings. If CHARACTER MAPPING EXACT is used, the values of the tag variable should be integers in the range 1 to 100. Real values are rounded to the nearest integer (.5 is rounded up). Values outside the range 1 to 100 result in no character being plotted.

### DEFAULT

Character mapping by rank is used.

### SYNONYMS

```
CHARACTER MAP
```

### RELATED COMMANDS

PLOT	=	Generates a data or function plot.
CHARACTERS	=	Sets the types 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.
CHARACTERS COLORS	=	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 JUST = Sets the justifications for plot characters.  
 CHARACTER OFFSET = Sets the offsets for plot characters.  
 CHARACTERS SIZES = Sets the sizes for plot characters.  
 CHARACTER THICKNESS = Sets the thicknesses for plot characters.  
 CHARACTER WIDTH = Sets the widths for plot characters.

APPLICATIONS

Youden plots

IMPLEMENTATION DATE

94/12

PROGRAM

```

SKIP 25
READ UGIANSKY.DAT Y1 Y2 LAB
.
CHARACTER 1 2 3 4 5 6 7
LINES BLANK ALL
CHARACTER SIZE 3 ALL
TITLE SIZE 5
MULTIPLY 2 2; MULTIPLY CORNER COORDINATES 0 0 100 100
TITLE THIS PLOT IS WITH ALL THE LABS--IT IS CORRECT
PLOT Y1 Y2 LAB
TITLE THIS IS A SUBSET PLOT--IT IS NOT CORRECT
PLOT Y1 Y2 LAB SUBSET LAB 3 TO 7
TITLE THIS IS A SUBSET PLOT--IT IS CORRECT
CHARACTER MAPPING EXACT
PLOT Y1 Y2 LAB SUBSET LAB 3 TO 7
END OF MULTIPLY
    
```

