CHARACTER ANGLE

PURPOSE

Specifies the angle of the characters to appear at the plot points of each trace on subsequent plots.

DESCRIPTION

Plot symbols are not normally drawn at an angle. This command is typically used with the CHARACTER OFFSET command when the CHARACTER command is used to label one or more points on the plot.

The angle is specified in degree units. There is no way to specify radian units (the ANGLE UNITS does not apply to this command).

SYNTAX

CHARACTER ANGLES <angle> <angle> <angle> etc.
where <angle> is a number or parameter that specifies the desired angles. Up to 100 angles can be specified.

EXAMPLES

CHARACTER ANGLES 45. 90. 50.
CHARACTER ANGLES 0. 90. 90. 45.
CHARACTER ANGLES ALL 45.

NOTE 1

This command is typically used with either the FONT or CHARACTER FONT command since hardware characters can only be drawn with an angle of 0 or 90 (i.e., horizontal or vertical). Software fonts can draw the character at any arbitrary angle.

NOTE 2

Although the CHARACTER command can be used to label plot points, be aware that it has some serious limitations in this regard. The most important limitation is that character labels are limited to 4 characters. If you need more than 4 characters, you have to use the TEXT or LEGEND commands to specify the labels. However, this is more difficult since the coordinates for the TEXT and LEGEND coordinates are given in DATAPLOT 0 to 100 screen units rather than the data units. The MOVEDATA command can be used with the TEXT command (MOVEDATA is an alternate version of MOVE that uses the coordinates of the most recent plot).

NOTE 3

The CHARACTER ANGLE command with no arguments sets the character angle to default for all traces. The CHARACTER ANGLE command with the word ALL before or after the specified angle assigns that angle to the characters on all traces. Thus CHARACTER ANGLE 45. ALL or CHARACTER ANGLE ALL 45. assigns the angle 45. to the characters on all traces.

DEFAULT

All plot characters are plotted with an angle of 0.0 (i.e., horizontal characters).

SYNONYMS

None

RELATED COMMANDS

<table>
<thead>
<tr>
<th>Command</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PLOT</td>
<td>Generates a data or function plot.</td>
</tr>
<tr>
<td>CHARACTER</td>
<td>Sets the types for plot characters.</td>
</tr>
<tr>
<td>CHARACTER AUTOMATIC</td>
<td>Specifies a variable to be used as the arguments to the CHARACTER command.</td>
</tr>
<tr>
<td>CHARACTER CASE</td>
<td>Sets the cases for plot characters.</td>
</tr>
<tr>
<td>CHARACTER COLOR</td>
<td>Sets the colors for plot characters.</td>
</tr>
<tr>
<td>CHARACTER FILL</td>
<td>Sets the fill switches for plot characters.</td>
</tr>
<tr>
<td>CHARACTER FONT</td>
<td>Sets the fonts for plot characters.</td>
</tr>
<tr>
<td>CHARACTER HW</td>
<td>Sets the heights and widths for plot characters.</td>
</tr>
<tr>
<td>CHARACTER JUSTIFICATION</td>
<td>Sets the justifications for plot characters.</td>
</tr>
<tr>
<td>CHARACTER OFFSET</td>
<td>Sets the offsets for plot characters.</td>
</tr>
<tr>
<td>CHARACTER SIZES</td>
<td>Sets the sizes for plot characters.</td>
</tr>
<tr>
<td>CHARACTER THICKNESS</td>
<td>Sets the thicknesses for plot characters.</td>
</tr>
<tr>
<td>CHARACTER WIDTH</td>
<td>Sets the widths for plot characters.</td>
</tr>
<tr>
<td>LINES</td>
<td>Sets the types for plot lines.</td>
</tr>
<tr>
<td>SPIKES</td>
<td>Sets the on/off switches for plot spikes.</td>
</tr>
<tr>
<td>BARS</td>
<td>Sets the on/off switches for plot bars.</td>
</tr>
</tbody>
</table>
ANGLE = Sets the angle for plotting characters with the TEXT command.

APPLICATIONS
Presentation Graphics

IMPLEMENTATION DATE
Pre-1987

PROGRAM
LEGEND 1 PRESENTATION GRAPHICS
LEGEND 2 3-D BAR HISTOGRAM
LET Y = DATA 392 341 307 203 115 59 38 32 29 28
LET N = NUMBER Y
LET X = SEQUENCE 1 1 N
.
LINES BLANK ALL
BAR ON ALL
BAR WIDTH .5 ALL
BAR DIMENSION 3 ALL
BAR FILL ONTS ALL
CHARACTER FONT DUPLEX ALL
CHARACTERS APOL SUN HP DEC SYM SG IBM DG TI XER
CHARACTER ANGLE 45 ALL
CHARACTER OFFSET 4 9 ALL
CHARACTER SIZE 3.5 ALL
YMAX 600
XMAX 12
TITLE DEMONSTRATE CHARACTER ANGLE
TITLE SIZE 5
PLOT Y X X

DEMONSTRATE CHARACTER ANGLE

PRESENTATION GRAPHICS
3-D BAR HISTOGRAM