**CHARACTER OFFSET**

**PURPOSE**
Specifies the offset (i.e., displacement) of the characters to appear at the plot points of each trace on subsequent plots.

**DESCRIPTION**
Positive values for the horizontal offset move the plot character to the right while negative values move them to the left. Positive values for the vertical offset move the plot character up while negative values move it down. Offsets are given in DATAPLOT 0 to 100 units. Vertical offsets are based on the vertical size of the graphics device while horizontal offsets are based on the horizontal size of the graphics device.

**SYNTAX**
```
CHARACTER OFFSET <x offset> <y offset> etc.
```
where `<x offset>` is a decimal number or parameter in the range -100 to 100 that specifies the horizontal offset; and `<y offset>` is a decimal number or parameter in the range -100 to 100 that specifies the vertical offset.

Up to 100 pairs of offsets can be specified.

**EXAMPLES**
```
CHARACTER OFFSET 2.0 2.0 3.0 3.0
CHARACTER OFFSET 2.0 3.0 2.0 3.0 2.0 3.0
CHARACTER OFFSET ALL 2.0 3.0
CHARACTERS OFFSET
```

**NOTE 1**
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 2**
The CHARACTER OFFSET command with no arguments sets the character offsets to default for all traces. The CHARACTER OFFSET command with the word ALL before or after the specified offsets assigns those offsets to the characters on all traces. Thus CHARACTER OFFSET 2.0 3.0 ALL or CHARACTER OFFSET ALL 2.0 3.0 plots characters 2.0 units to the right and 3.0 units above their normal position for the characters on all traces.

**DEFAULT**
Characters are plotted with an offset of 0 in both the horizontal and vertical direction.

**SYNONYMS**
None

**RELATED COMMANDS**
- **PLOT** = Generates a data or function plot.
- **CHARACTER** = Sets the types for plot characters.
- **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 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
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
CHARACTERS APOL SUN HP DEC SYM SG IBM DG TI XER
CHARACTER OFFSET 2 6 ALL
YMAX 600
XMAX 12
TITLE DEMONSTRATE CHARACTER OFFSET
TITLE SIZE 5
PLOT Y X X

DEMONSTRATE CHARACTER OFFSET

[Graph showing demonstration of character offsets]