

... TIC MARK OFFSET

PURPOSE

Specifies the offset of the first and last tic marks on subsequent plots.

DESCRIPTION

The offset is the distance between the tic mark and the end of the frame. By default, DATAPLOT draws the first and last tics at the frame boundaries. The TIC OFFSET command allows the analyst to override this default. The command applies to linear and log scales. However, it is ignored for normal and Weibull scales (which are currently only used for the NORMAL PLOT and WEIBULL PLOT commands respectively). In conjunction with the MAJOR TIC MARK NUMBER and LIMITS command, it is useful for generating "neat" tic intervals.

SYNTAX

<prefix>TIC OFFSET <lower> <upper>

where <prefix> is one of the following:

X1	refers to the bottom horizontal side;
X2	refers to the top horizontal side;
X	refers to both horizontal sides;
Y1	refers to the left vertical side;
Y2	refers to the right vertical side;
Y	refers to both vertical sides;
no prefix	refers to all 4 sides;

<lower> is the distance from the frame boundary to the first tic mark (i.e., the bottom for the Y axis and the left for the X axis); and <upper> is the distance from the frame boundary to the last tic mark (i.e., the top for the Y axis and the right for the X axis).

To set the first tic offset only, simply enter one value for the command. To set only the last offset, enter the first as a zero (e.g., TIC OFFSET 0 5).

EXAMPLES

```
TIC OFFSET 5 10
YTIC OFFSET 0 10
X2TIC OFFSET 5
```

NOTE 1

Tic offsets can be specified in either data units (the default) or DATAPLOT screen coordinates (0 to 100). This is controlled with the TIC OFFSET UNITS command.

NOTE 2

Tic offsets are added to the current limits. That is, entering XLIMITS 1 10 and XTIC OFFSET 0.5 0.5 sets the frame from 0.5 to 10.5.

NOTE 3

Minor tics are extended to the end of the frame. However, they are limited to one cycle (i.e., all minor tics are drawn until the end of the frame is reached or to where the next major tic mark would occur).

NOTE 4

The TIC OFFSET command is useful for log scales where the data do not fill a full cycle. For example, if your data range between 1 and 1002, DATAPLOT uses limits of 1 and 10,000 (log scales always set the limit to a power of 10 regardless of the LIMITS command). Use the TIC OFFSET command as follows:

```
YLOG ON
YLIMITS 1 1000
YTIC OFFSET 0 10
```

This draws the last tic at 1,000 rather than 10,000 and leaves a little room for the 1002 value.

NOTE 5

A ...TIC OFFSET command with no arguments reverts the setting to default; thus X1TIC OFFSET with no arguments reverts the offsets to zero. A ...TIC OFFSET command with no prefix refers to all 4 sides; thus TIC OFFSET 2 3 sets tic mark offsets to 2 and 3 for all 4 frame lines. TIC OFFSET with no prefix and no arguments reverts the tic offset settings on all 4 sides to default.

DEFAULT

All tic offsets are zero.

SYNONYMS

TIC OFFSET, TICS OFFSET, and TICS MARK OFFSET are synonyms for TIC MARK OFFSET, as in TIC OFFSET 5 and X2TIC OFFSET 2 3.

RELATED COMMANDS

- TIC MARK = Specifies whether or not tics are drawn.
- MAJOR TIC MARK NUMBER = Specify the number of major tic marks.
- LIMITS = Specify the axis limits.
- TIC OFFSET UNITS = Sets data or screen units for tic offsets.

APPLICATIONS

Presentation Graphics

IMPLEMENTATION DATE

90/5

PROGRAM

```
SKIP 25
READ GEAR.DAT Y X
LINE BLANK DASH; CHARACTER X BLANK
XLIMITS 1 10; XTIC OFFSET 0.5 0.5
YILABEL MEAN; XILABEL SAMPLE ID
YLIMITS 0.992 1.000
YTIC OFFSET 0.002 0.002
MAJOR YTIC MARK NUMBER 5
MINOR YTIC MARK NUMBER 1
TITLE AUTOMATIC; TITLE SIZE 5
MEAN PLOT Y X
```

