

added_line_options — Options for adding lines to twoway graphs

Syntax Reference	Description Also see	Options	Remarks and examples
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Syntax

<i>added_line_options</i>	Description
<u>y</u> line(<i>linearg</i>)	add horizontal lines at specified <i>y</i> values
<u>x</u> line(<i>linearg</i>)	add vertical lines at specified <i>x</i> values
<u>t</u> line(<i>time_linearg</i>)	add vertical lines at specified <i>t</i> values

`yline()`, `xline()`, and `tline()` are *merged-implicit*; see [G-4] **concept: repeated options** and see *Interpretation of repeated options* below.

where *linearg* is

numlist [, *suboptions*]

For a description of *numlist*, see [U] **11.1.8 numlist**.

and where *time_linearg* is

datelist [, *suboptions*]

For a description of *datelist*, see [U] **11.1.9 datelist**.

<i>suboptions</i>	Description
<u>a</u> xis(#)	which axis to use, $1 \leq \# \leq 9$
<u>s</u> tyle(<i>addedlinestyle</i>)	overall style of added line
<u>[no]</u> extend	extend line through plot region's margins
<u>l</u> style(<i>linestyle</i>)	overall style of line
<u>l</u> pattern(<i>linepatternstyle</i>)	line patter (solid, dashed, etc.)
<u>l</u> width(<i>linewidthstyle</i>)	thickness of line
<u>l</u> color(<i>colorstyle</i>)	color of line

See [G-4] *addedlinestyle*, [G-4] *linestyle*, [G-4] *linepatternstyle*, [G-4] *linewidthstyle*, and [G-4] *colorstyle*.

Description

`yline()`, `xline()`, and `tline()` are used with `twoway` to add lines to the plot region. `tline()` is an extension to `xline()`; see [TS] **tline** for examples using `tline()`.

Options

`yline(linearg)`, `xline(linearg)`, and `tline(time_linearg)` specify the y , x , and t (time) values where lines should be added to the plot.

Suboptions

`axis(#)` is for use only when multiple y , x , or t axes are being used (see [G-3] *axis_choice_options*). `axis()` specifies to which axis the `yline()`, `xline()`, or `tline()` is to be applied.

`style(addedlinestyle)` specifies the overall style of the added line, which includes `[no]extend` and `lstyle(linestyle)` documented below. See [G-4] *addedlinestyle*. The `[no]extend` and `lstyle()` options allow you to change the added line's attributes individually, but `style()` is the starting point.

You need not specify `style()` just because there is something that you want to change, and in fact, most people seldom specify the `style()` option. You specify `style()` when another style exists that is exactly what you desire or when another style would allow you to specify fewer changes to obtain what you want.

`extend` and `noextend` specify whether the line should extend through the plot region's margin and touch the axis; see [G-3] *region_options*. Usually `noextend` is the default, and `extend` is the option, but that is determined by the overall `style()` and, of course, the scheme; see [G-4] *schemes intro*.

`lstyle(linestyle)`, `lpattern(linepatternstyle)`, `lwidth(linewidthstyle)`, and `lcolor(colorstyle)` specify the look of the line; see [G-2] *graph twoway line*. `lstyle()` can be of particular use:

To create a line with the same look as the lines used to draw axes, specify `lstyle(foreground)`.

To create a line with the same look as the lines used to draw grid lines, specify `lstyle(grid)`.

Remarks and examples

[stata.com](http://www.stata.com)

`yline()` and `xline()` add lines where specified. If, however, your interest is in obtaining grid lines, see the `grid` option in [G-3] *axis_label_options*.

Remarks are presented under the following headings:

Typical use

Interpretation of repeated options

Typical use

`yline()` or `xline()` are typically used to add reference values:

```
. scatter yvar xvar, yline(10)
. scatter yvar year, xline(1944 1989)
```

To give the line in the first example the same look as used to draw an axis, we could specify

```
. scatter yvar xvar, yline(10, lstyle(foreground))
```

If we wanted to give the lines used in the second example the same look as used to draw grids, we could specify

```
. scatter yvar year, xline(1944 1989, lstyle(grid))
```

Interpretation of repeated options

Options `yline()` and `xline()` may be repeated, and each is executed separately. Thus different styles can be used for different lines on the same graph:

```
. scatter yvar year, xline(1944) xline(1989, lwidth(3))
```

Reference

Cox, N. J. 2009. [Stata tip 82: Grounds for grids on graphs](#). *Stata Journal* 9: 648–651.

Also see

[G-4] [*addedlinestyle*](#) — Choices for overall look of added lines

[G-4] [*colorstyle*](#) — Choices for color

[G-4] [*linepatternstyle*](#) — Choices for whether lines are solid, dashed, etc.

[G-4] [*linestyle*](#) — Choices for overall look of lines

[G-4] [*linewidthstyle*](#) — Choices for thickness of lines