**twoway_options — Options for twoway graphs**

### Description

The above options are allowed with all *plottypes* (*scatter*, *line*, etc.) allowed by *graph twoway*; see [G-2] *graph twoway*.

### Syntax

The *twoway_options* allowed with all *twoway* graphs are:

<table>
<thead>
<tr>
<th>twoway_options</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>added_line_options</strong></td>
<td>draw lines at specified <em>y</em> or <em>x</em> values</td>
</tr>
<tr>
<td><strong>added_text_options</strong></td>
<td>display text at specified <em>(y,x)</em> value</td>
</tr>
<tr>
<td><strong>axis_options</strong></td>
<td>labels, ticks, grids, log scales</td>
</tr>
<tr>
<td><strong>title_options</strong></td>
<td>titles, subtitles, notes, captions</td>
</tr>
<tr>
<td><strong>legend_options</strong></td>
<td>legend explaining what means what</td>
</tr>
<tr>
<td><strong>scale(#)</strong></td>
<td>resize text, markers, line widths</td>
</tr>
<tr>
<td><strong>region_options</strong></td>
<td>outlining, shading, graph size</td>
</tr>
<tr>
<td><strong>aspect_option</strong></td>
<td>constrain aspect ratio of plot region</td>
</tr>
<tr>
<td><strong>scheme(schemename)</strong></td>
<td>overall look</td>
</tr>
<tr>
<td><strong>play(recordingname)</strong></td>
<td>play edits from <em>recordingname</em></td>
</tr>
<tr>
<td><strong>by(varlist,...)</strong></td>
<td>repeat for subgroups</td>
</tr>
<tr>
<td><strong>nodraw</strong></td>
<td>suppress display of graph</td>
</tr>
<tr>
<td><strong>name(name,...)</strong></td>
<td>specify name for graph</td>
</tr>
<tr>
<td><strong>saving(filename,...)</strong></td>
<td>save graph in file</td>
</tr>
<tr>
<td><strong>advanced_options</strong></td>
<td>difficult to explain</td>
</tr>
</tbody>
</table>

### Options

*added_line_options* specify that horizontal or vertical lines be drawn on the graph; see [G-3] *added_line_options*. If your interest is in drawing grid lines through the plot region, see *axis_options* below.

*added_text_options* specifies text to be displayed on the graph (inside the plot region); see [G-3] *added_text_options*.

*axis_options* specify how the axes are to look, including values to be labeled or ticked on the axes. These options also allow you to obtain logarithmic scales and grid lines. See [G-3] *axis_options*.
**title_options** allow you to specify titles, subtitles, notes, and captions to be placed on the graph; see [G-3] `title_options`.

**legend_options** specifies whether a legend is to appear and allows you to modify the legend’s contents. See [G-3] `legend_options`.

**scale(#)** specifies a multiplier that affects the size of all text, markers, and line widths in a graph. `scale(1)` is the default, and `scale(1.2)` would make all text, markers, and line widths 20% larger. See [G-3] `scale_option`.

**region_options** allow outlining the plot region (such as placing or suppressing a border around the graph), specifying a background shading for the region, and controlling the graph size. See [G-3] `region_options`.

**aspect_option** allows you to control the relationship between the height and width of a graph’s plot region; see [G-3] `aspect_option`.

**scheme(schemename)** specifies the overall look of the graph; see [G-3] `scheme_option`.

**play(recordingname)** applies the edits from `recordingname` to the graph, where `recordingname` is the name under which edits previously made in the Graph Editor have been recorded and stored. See `Graph Recorder` in [G-1] `Graph Editor`.

**by(varlist, . . .)** specifies that the plot be repeated for each set of values of `varlist`; see [G-3] `by_option`.

**nodraw** causes the graph to be constructed but not displayed; see [G-3] `nodraw_option`.

**name(name[, replace])** specifies the name of the graph. `name(Graph, replace)` is the default. See [G-3] `name_option`.

**saving(filename[, asis replace])** specifies that the graph be saved as `filename`. If `filename` is specified without an extension, `.gph` is assumed. `asis` specifies that the graph be saved just as it is. `replace` specifies that, if the file already exists, it is okay to replace it. See [G-3] `saving_option`.

**advanced_options** are not so much advanced as they are difficult to explain and are rarely used. They are also invaluable when you need them; see [G-3] `advanced_options`.

**Remarks and examples**

The above options may be used with any of the `twoway` plottypes—see [G-2] `graph twoway`—for instance,

```
. twoway scatter mpg weight, by(foreign)
. twoway line le year, xlabel(,grid) saving(myfile, replace)
```

The above options are options of `twoway`, meaning that they affect the entire twoway graph and not just one or the other of the plots on it. For instance, in

```
. twoway lfitci mpg weight, stdf ||
   scatter mpg weight, ms(O) by(foreign, total row(1))
```

the `by()` option applies to the entire graph, and in theory you should type

```
. twoway lfitci mpg weight, stdf ||
   scatter mpg weight, ms(O) ||, by(foreign, total row(1))
```

or

```
. twoway (lfitci mpg weight, stdf)
   (scatter mpg weight, ms(O)), by(foreign, total row(1))
```
to demonstrate your understanding of that fact. You need not do that, however, and in fact it does not matter to which plot you attach the `twoway_options`. You could even type

```plaintext
twoway lfitci mpg weight, stdf by(foreign, total row(1)) ||
   scatter mpg weight, ms(O)
```

and, when specifying multiple `twoway_options`, you could even attach some to one plot and the others to another:

```plaintext
twoway lfitci mpg weight, stdf by(foreign, total row(1)) ||
   scatter mpg weight, ms(O) saving(myfile)
```

Also see

[G-2] `graph twoway` — Twoway graphs
[G-3] `advanced_options` — Rarely specified options for use with `graph twoway`
[G-3] `axis_options` — Options for specifying numeric axes
[G-3] `by_option` — Option for repeating graph command
[G-3] `legend_options` — Options for specifying legends
[G-3] `name_option` — Option for naming graph in memory
[G-3] `nodraw_option` — Option for suppressing display of graph
[G-3] `region_options` — Options for shading and outlining regions and controlling graph size
[G-3] `saving_option` — Option for saving graph to disk
[G-3] `scale_option` — Option for resizing text, markers, and line widths
[G-3] `scheme_option` — Option for specifying scheme
[G-3] `title_options` — Options for specifying titles