graph twoway rconnected — Range plot with connected lines

Description

A range plot has two $y$ variables, such as high and low daily stock prices or upper and lower 95% confidence limits.

twoway rconnected plots the upper and lower ranges by using connected lines.

Quick start

Range plot with connected lines sorted on $x$

twoway rconnected $y_1$ $y_2$ $x$, sort

As above, but displayed as a horizontal plot

twoway rconnected $y_1$ $y_2$ $x$, sort horizontal

Specify large Xs as the marker symbol

twoway rconnected $y_1$ $y_2$ $x$, sort msymbol(lgx)

Specify a dashed line connecting markers

twoway rconnected $y_1$ $y_2$ $x$, sort lpattern(dash)

Specify points are connected as a flat line segment followed by a vertical segment

twoway rconnected $y_1$ $y_2$ $x$, sort connect(stairstep)

Menu

Graphics > Twoway graph (scatter, line, etc.)
Syntax

```
twoway rconnected y1var y2var xvar [if] [in] [, options]
```

<table>
<thead>
<tr>
<th>options</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>vertical</code></td>
<td>vertical plot; the default</td>
</tr>
<tr>
<td><code>horizontal</code></td>
<td>horizontal plot</td>
</tr>
<tr>
<td><code>connect_options</code></td>
<td>change rendition of lines connecting points</td>
</tr>
<tr>
<td><code>marker_options</code></td>
<td>change look of markers (color, size, etc.)</td>
</tr>
<tr>
<td><code>marker_label_options</code></td>
<td>add marker labels; change look or position</td>
</tr>
<tr>
<td><code>axis_choice_options</code></td>
<td>associate plot with alternative axis</td>
</tr>
<tr>
<td><code>twoway_options</code></td>
<td>titles, legends, axes, added lines and text, by, regions, name, aspect ratio, etc.</td>
</tr>
</tbody>
</table>

All explicit options are rightmost, except `vertical` and `horizontal`, which are unique; see [G-4] concept: repeated options.

Options

- `vertical` and `horizontal` specify whether the high and low $y$ values are to be presented vertically (the default) or horizontally.

  In the default `vertical` case, `y1var` and `y2var` record the minimum and maximum (or maximum and minimum) $y$ values to be graphed against each `xvar` value.

  If `horizontal` is specified, the values recorded in `y1var` and `y2var` are plotted in the $x$ direction and `xvar` is treated as the $y$ value.

- `connect_options` change the rendition of the lines connecting the plotted points, including sorting, handling missing observations, and the look of the line—line thickness, pattern, and color. For details, see [G-3] `connect_options`.

- `marker_options` specify how the markers look, including shape, size, color, and outline; see [G-3] `marker_options`. The same symbol is used for both lines.

- `marker_label_options` specify if and how the markers are to be labeled. Because the same marker label would be used to label both lines, these options are of limited use here. See [G-3] `marker_label_options`.

- `axis_choice_options` associate the plot with a particular $y$ or $x$ axis on the graph; see [G-3] `axis_choice_options`.

- `twoway_options` are a set of common options supported by all `twoway` graphs. These options allow you to title graphs, name graphs, control axes and legends, add lines and text, set aspect ratios, create graphs over `by()` groups, and change some advanced settings. See [G-3] `twoway_options`. 
Remarks and examples

Visually, there is no difference between

```
    . twoway rconnected y1var y2var xvar
```

and

```
    . twoway connected y1var xvar || connected y2var xvar, pstyle(p1)
```

The two connected lines are presented in the same overall style, meaning symbol selection and color and line color, thickness, and pattern.

Also see

[G-2] graph twoway rarea — Range plot with area shading
[G-2] graph twoway rbar — Range plot with bars
[G-2] graph twoway rcap — Range plot with capped spikes
[G-2] graph twoway rcapsym — Range plot with spikes capped with marker symbols
[G-2] graph twoway rline — Range plot with lines
[G-2] graph twoway rscatter — Range plot with markers
[G-2] graph twoway rspike — Range plot with spikes