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

twoway rscatter plots the upper and lower ranges as scatters.

**Quick start**

Range plot with markers

```
twoway rscatter y1 y2 x
```

Horizontal range plot with markers

```
twoway rscatter y1 y2 x, horizontal
```

Specify the size of points is determined using the frequency weight variable $wvar$

```
twoway rscatter y1 y2 x [fweight = wvar]
```

As above, but with hollow circles as markers

```
twoway rscatter y1 y2 x [fweight=wvar], msymbol(circle_hollow)
```

Use small navy squares as markers

```
twoway rscatter y1 y2 x, msymbol(smsquare) mcolor(navy)
```

Specify a log scale for the $x$ axis

```
twoway rscatter y1 y2 x, xscale(log)
```

Add the title “My Title” to the graph

```
twoway rscatter y1 y2 x, xscale(log) title("My Title")
```

**Menu**

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

\[
\text{twoway rscatter y1var y2var xvar [if] [in] [ , options]}
\]

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

All explicit options are *rightmost*; 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.

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

- **marker_label_options** specify if and how the markers are to be labeled. Because the same marker label would be used to label both points, these options are of limited use in this case. 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

\[
\text{. twoway rscatter y1var y2var xvar}
\]

and

\[
\text{. twoway scatter y1var xvar} \ |\ | \text{scatter y2var xvar}, \text{pstyle(p1)}
\]

The two scatters are presented in the same overall style, meaning that the markers (symbol shape and color) are the same.
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 rconnected — Range plot with connected lines

[G-2] graph twoway rline — Range plot with lines

[G-2] graph twoway rspike — Range plot with spikes