Syntax

twoway dot yvar xvar [if] [in] [ , options ]

options Description

vertical vertical bar plot; the default
horizontal horizontal bar plot
dotextend(yes | no) dots extend beyond point
base(#) value to drop to if dotextend(no)
ndots(#) # of dots in full span of y or x
dstyle(markerstyle) overall marker style of dots
dsymbol(symbolstyle) marker symbol for dots
dcolor(colorstyle) fill and outline color for dots
dfcolor(colorstyle) fill color for dots
dsize(markersizestyle) size of dots
dlstyle(linestyle) overall outline style of dots
dlcolor(colorstyle) outline color for dots
dlwidth(linewidthstyle) thickness of outline for dots

scatter_options any options other than connect_options documented in
[G-2] graph twoway scatter


All options are rightmost, except vertical and horizontal, which are unique; see

Menu

Graphics Twoway graph (scatter, line, etc.)

Description

twoway dot displays numeric (y,x) data as dot plots. Also see [G-2] graph dot to create dot plots
of categorical variables. twoway dot is useful in programming contexts.
Options

vertical and horizontal specify either a vertical or a horizontal dot plot. vertical is the default. If horizontal is specified, the values recorded in yvar are treated as x values, and the values recorded in xvar are treated as y values. That is, to make horizontal plots, do not switch the order of the two variables specified.

In the vertical case, dots are drawn at the specified xvar values and extend up and down.

In the horizontal case, lines are drawn at the specified xvar values and extend left and right.

dotextend(yes | no) determines whether the dots extend beyond the y value (or x value if horizontal is specified). dotextend(yes) is the default.

base(#) is relevant only if dotextend(no) is also specified. base() specifies the value from which the dots are to extend. The default is base(0).

ndots(#) specifies the number of dots across a line; ndots(75) is the default. Depending on printer/screen resolution, using fewer or more dots can make the graph look better.

dstyle(markerstyle) specifies the overall look of the markers used to create the dots, including their shape and color. The other options listed below allow you to change their attributes, but dstyle() provides the starting point.

You need not specify dstyle() just because there is something you want to change. You specify dstyle() 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.

See [G-4] markerstyle for a list of available marker styles.

dsymbol(symbolstyle) specifies the shape of the marker used for the dot. See [G-4] symbolstyle for a list of symbol choices, although it really makes little sense to change the shape of dots; else why would it be called a dot plot?

dcolor(colorstyle) specifies the color of the symbol used for the dot. See [G-4] colorstyle for a list of color choices.

dfcolor(colorstyle), dsize(markersizestyle), dlstyle(linestyle), dlcolor(colorstyle), and dlwidth(linewidthstyle) are rarely (never) specified options. They control, respectively, the fill color, size, outline style, outline color, outline width, and, if you are really using dots, dots are affected by none of these things. For these options to be useful, you must also specify dsymbol(); as we said earlier, why then would it be called a dot plot? In any case, see [G-4] colorstyle, [G-4] markersizestyle, [G-4] linestyle, and [G-4] linewidthstyle for a list of choices.

scatter_options refer to any of the options allowed by scatter, and most especially the marker_options, which control how the marker (not the dot) appears. connect_options, even if specified, are ignored. See [G-2] graph twoway scatter.

Remarks and examples

Two way dot is of little, if any use. We cannot think of a use for it, but perhaps someday, somewhere, someone will. We have nothing against the dot plot used with categorical data—see [G-2] graph dot for a useful command—but using the dot plot in a twoway context would be bizarre. It is nonetheless included for logical completeness.

In [G-2] graph twoway bar, we graphed the change in the value for the S&P 500. Here are a few of that data graphed as a dot plot:
. use http://www.stata-press.com/data/r13/sp500
(S&P 500)
. twoway dot change date in 1/45

Dot plots are usually presented horizontally,

. twoway dot change date in 1/45, horizontal

and below we specify the dotextend(n) option to prevent the dots from extending across the range of $x$: 
. twoway dot change date in 1/45, horizontal dotext(n)

Reference


Also see

[G-2] `graph twoway scatter` — Twoway scatterplots
[G-2] `graph dot` — Dot charts (summary statistics)