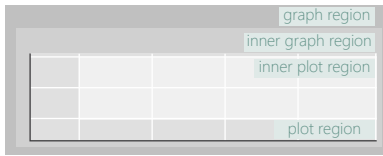


Plotting in Stata

Customizing Appearance

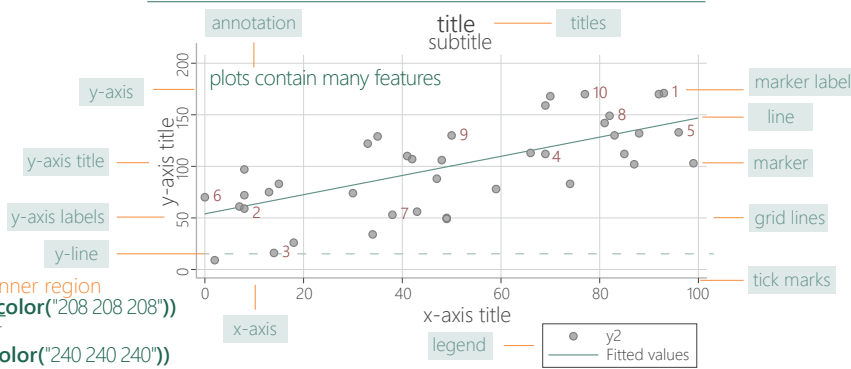
For more info, see Stata's reference manual (stata.com)



scatter price mpg, **graphregion**(fcolor("192 192 192") ifcolor("208 208 208"))
specify the fill of the background in RGB or with a Stata color

scatter price mpg, **plotregion**(fcolor("224 224 224") ifcolor("240 240 240"))
specify the fill of the plot background in RGB or with a Stata color

ANATOMY OF A PLOT



SYMBOLS

marker arguments for the plot objects (in green) go in the options portion of these commands (in orange)
for example:
`scatter price mpg, xline(20, width(vthick))`

mccolor("145 168 208") **mc**color(none)
specify the fill and stroke of the marker in RGB or with a Stata color

mfcolor("145 168 208") **mf**color(none)
specify the fill of the marker

msize(medium) specify the marker size:

	ehuge		medlarge
	vhuge		medsmall
	huge		small
	vlarge		tiny
	large		vtiny

msymbol(Dh) specify the marker symbol:

	O		D		T		S
	o		d		t		s
	Oh		Dh		Th		Sh
	oh		dh		th		sh
	+		X		p		none
							i

jitter(#) randomly displace the markers

jitterseed(#) set seed

LINES / BORDERS

line **marker** **axes** **tick marks**
<line options> <marker options> xscale(...) yscale(...)
xline(...) yline(...)
legend legend(region(...))

lcolor("145 168 208") **l**color(none)
specify the stroke color of the line or border

mlcolor("145 168 208")
tlcolor("145 168 208")
glcolor("145 168 208")

width(medthick) **marker** **mlwidth**(thin)
specify the thickness (stroke) of a line: tick marks **tlwidth**(thin) grid lines **glwidth**(thin)

	vwthick		medthick
	vthick		thin
	vthick		vthin
	thick		vvthin
	medthick		none
	medium		

line **axes** **l**pattern(dash) **specify the line pattern**
grid lines **gl**pattern(dash)

	solid		longdash		longdash_dot
	dash		shortdash		shortdash_dot
	dot		dash_dot		blank

axes **n**oline **axes** **o**ff no axis/labels
tick marks **n**oticks **tick marks** **l**ength(2)
grid lines **n**ogrid **n**ogmin **n**ogmax

tick marks **x**label(#10, **t**position(crossing))
number of tick marks, position (outside | crossing | inside)

TEXT

marker label **titles** **axis labels**
<marker options> title(...) subtitle(...)
annotation xtitle(...) ytitle(...)
text(...) legend legend(...)

color("145 168 208") **color**(none)
specify the color of the text

mlabcolor("145 168 208")
labcolor("145 168 208")
adjust transparency by adding %#
mcolor("145 168 208 %20")

size(medsmall) specify the size of the text:
marker label **ml**absize(medsmall)
axis labels **lab**size(medsmall)

Text **vhuge** **Text** **medsmall**
Text **huge** **Text** **small**
Text **vlarge** **Text** **vsmall**
Text **large** **Text** **tiny**
Text **medlarge** **Text** **half_tiny**
Text **medium** **Text** **third_tiny**
Text **minuscule**

marker label **ml**label(foreign)
label the points with the values of the foreign variable

axis labels **n**olabels
no axis labels

axis labels **f**ormat(%12.2f)
change the format of the axis labels

legend **o**ff
turn off legend

legend **l**abel("# label")
change legend label text

marker label **ml**abposition(5)
label location relative to marker (clock position: 0 – 12)

Apply themes

Schemes are sets of graphical parameters, so you don't have to specify the look of the graphs every time.

USING A SAVED THEME

`twoway scatter mpg price, scheme(customTheme)`

help scheme entries Create custom themes by saving options in a .scheme file
see all options for setting scheme properties

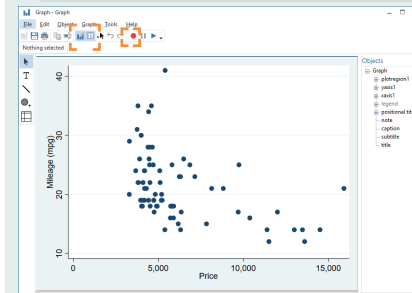
adopath ++ "~/<location>/StataThemes"
set path of the folder (StataThemes) where custom .scheme files are saved

set scheme customTheme, **p**ermanently
change the theme

net inst brewscheme, from("https://wbuchanan.github.io/brewscheme/") replace
install William Buchanan's package to generate custom schemes and color palettes (including ColorBrewer)

USING THE GRAPH EDITOR

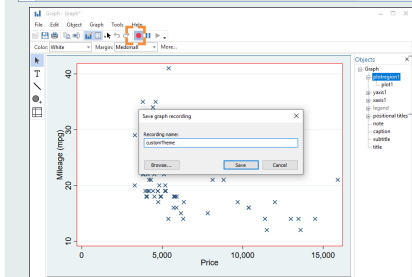
`twoway scatter mpg price, play(graphEditorTheme)`



Select the Graph Editor



Click Record



Double-click on symbols and areas on plot, or regions on sidebar to customize

Unclick Record



Save theme as a .grec file

Save plots

graph twoway scatter y x, saving("myPlot.gph") replace
save the graph when drawing

graph save "myPlot.gph", replace
save current graph to disk

graph combine plot1.gph plot2.gph...
combine two or more saved graphs into a single plot

graph export "myPlot.pdf", as(.pdf)
export the current graph as an image file
see options to set size and resolution