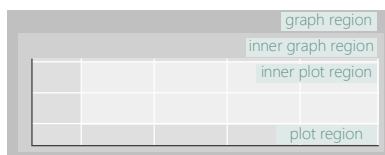


Plotting in Stata

Customizing Appearance

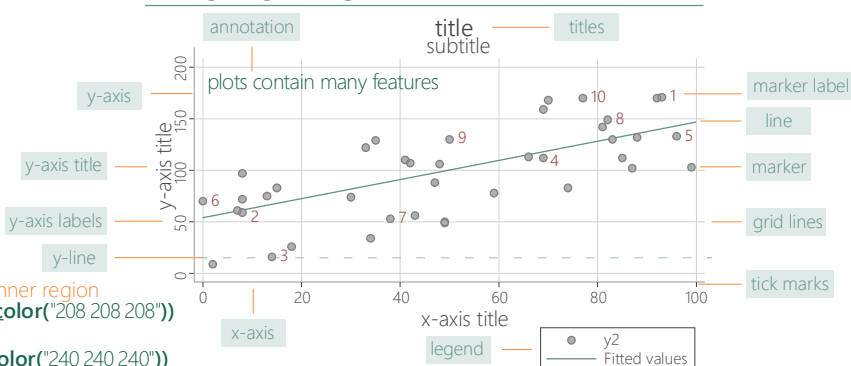
For more info, see Stata's reference manual ([stata.com](http://www.stata.com))



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
<marker options>
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))

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

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

msize(medium) specify the marker size:

ehuge	medlarge
vhuge	medium
huge	medsmall
vlarge	small
large	vsml
	tiny
	vtiny

msymbol(Dh) specify the marker symbol:

●	○	◆	◇	▲	△	■	□
●	○	◆	◇	▲	△	■	□
○	Oh	◇	Dh	△	Th	■	Sh
○	oh	◇	dh	△	th	■	sh
+	+	×	X	·	p	none	i

jitter(#)
randomly displace the markers

jitterseed(#)
set seed

LINE / BORDERS

line
<line options>
xline(...)
yline(...)
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))

marker
<marker options>
xscale(...)
yscale(...)
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))

legend
legend(region(...))

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

mlcolor("145 168 208")
tlcolor("145 168 208")
specify the fill and stroke of the marker in RGB or with a Stata color

glcolor("145 168 208")
specify the fill of the marker

lwidth(medthick) **lwidth**(thin)
specify the thickness (stroke) of a line:

ehuge	medlarge
vhuge	medium
huge	medsmall
vlarge	small
large	vsml
	tiny
	vtiny

line **axes** **lpattern**(dash) **lpattern**(dash)
specify the line pattern

—	solid	- - -	longdash	- . - .	longdash_dot
- - -	dash	· · · · ·	shortdash	- . - .	shortdash_dot
· · ·	dot	· · ·	dash_dot		blank

axes **noline** **axes** **off** no axis/labels

tick marks **noticks** **tick marks** **length**(2)

grid lines **nogrid** **nogmin** **nogmax**

tick marks **xlabel**(#10, **tposition**(crossing))
number of tick marks, position (outside | crossing | inside)

TEXT

marker label
<marker options>
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))

titles
title(...)
subtitle(...)
xtitle(...)
ytitle(...)
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))

axis labels
xlabel(...)
ylabel(...)
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))

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

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

mlcolor("145 168 208 %20")

size(medsmall) specify the size of the text:

marker label **mlabsize**(medsmall)
axis labels **labsize**(medsmall)

Text
ehuge
huge
vlarge
large
medlarge
medium

Text
medsmall
small
vsml
tiny
half_tiny
third_tiny
quarter_tiny
minuscule

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

axis labels **no labels**
no axis labels

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

legend **off**
turn off legend

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

marker label **mlabposition**(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

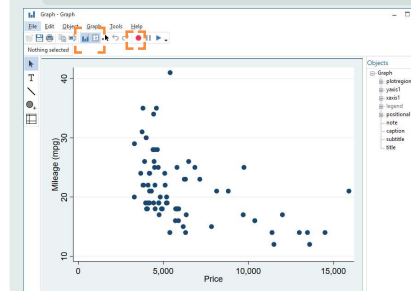
adopath ++ "~/<location>/StataThemes"
set path of the folder (StataThemes) where custom .scheme files are saved

set scheme customTheme, **permanent**
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)

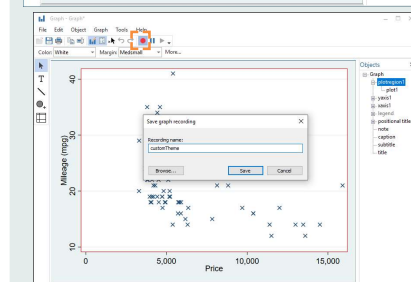
USING THE GRAPH EDITOR

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

Undlick 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