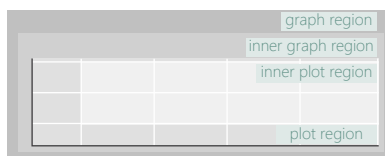


Plotting in Stata

Customizing Appearance

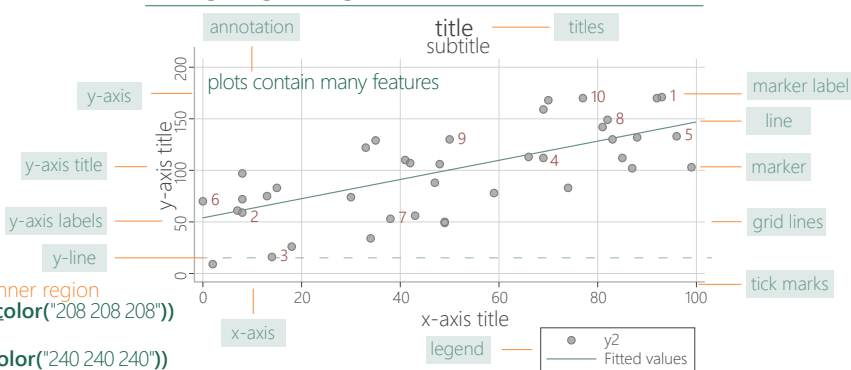
For more info, see Stata's reference manual ([stata.com](http://www.stata.com))



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:

● O	◆ D	▲ T	■ S
● o	◆ d	▲ t	■ s
○ Oh	◇ Dh	△ Th	□ Sh
○ oh	◇ dh	△ th	□ sh
+	×	·	p none i

jitter(#) **jitterseed**(#)
randomly displace the markers set seed

LINES / BORDERS

line
<line options>
xline(...) yline(...)
marker
<marker options>
legend
legend(region(...))
axes
xscale(...) yscale(...)
tick marks
grid lines
xlabel(...) ylabel(...)

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

mlcolor("145 168 208")
tlcolor("145 168 208")
glcolor("145 168 208")
marker
tick marks
grid lines

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

vvthick	medthin
vthick	thin
vthick	vthin
thick	vvthin
medthick	medium
medium	none

line **axes** **lpattern**(dash) **glpattern**(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>
annotation
text(...)
titles
title(...) subtitle(...) xtitle(...) ytitle(...)
axis labels
xlabel(...) ylabel(...)
legend
legend(...)

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

marker label **mlabcolor**("145 168 208")
axis labels **labcolor**("145 168 208")
adjust transparency by adding %#
mcolor("145 168 208 %20")

size(medsmall) specify the size of the text:

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

Text
vhuge **Text** medsmall
huge **Text** small
vlarge **Text** vsml
large **Text** tiny
medlarge **Text** half_tiny
medium **Text** third_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

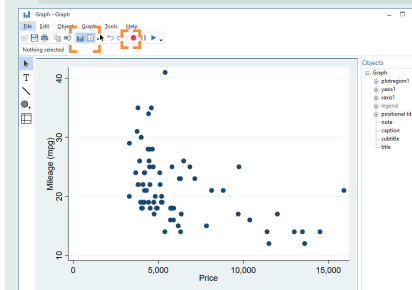
adopath ++ "~/<location>/StataThemes"
set path of the folder (StataThemes) where custom .scheme files are saved

set scheme customTheme, **permanent**
change the theme set as default scheme

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

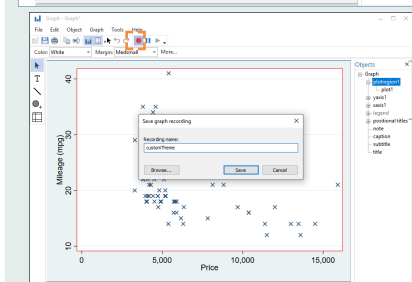
USING THE GRAPH EDITOR

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