Installing and Using the SSWPEG Graph Scheme

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Introduction

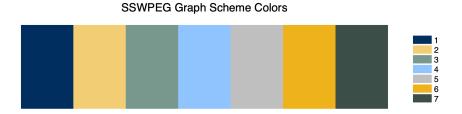


Figure 1: Colors in SSWPEG Scheme

Stata provides the use of graph schemes that improve the overall look of graphs.

See help scheme.

The SSWPEG graph scheme makes use of colors often used by the School of Social Work Program Evaluation (SSWPEG) group.

Installation

Use of the SSWPEG graph scheme depends on installation of the lean2 graph scheme developed by Svend Juul.

Type findit lean2 and click through on the install links to install lean2.

Then type net from https://agrogan1.github.io/Stata and click the links to install.

Example Data

We are going to use the famous "iris" data collected by Edgar Anderson.

- . clear all
- . use "iris.dta", clear
- . summarize

Variable	0bs	Mean	Std. dev.	Min	Max
Sepal_Length	150	5.843333	.8280661	4.3	7.9
Sepal_Width	150	3.057333	.4358663	2	4.4
Petal_Length	150	3.758	1.765298	1	6.9
Petal_Width	150	1.199333	.7622377	. 1	2.5
Species	150	2	.8192319	1	3

Histogram

. histogram Petal_Length, scheme(SSWPEG) (bin=12, start=1, width=.49166667)

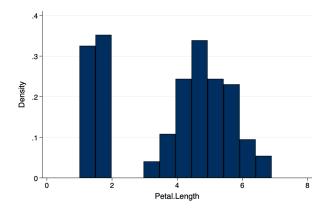


Figure 2: Histogram Using SSWPEG Scheme

Histogram With Transparency

. histogram Petal_Length, fcolor(%50) scheme(SSWPEG)
(bin=12, start=1, width=.49166667)

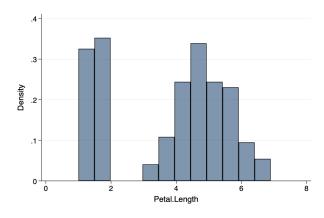


Figure 3: Histogram Using SSWPEG Scheme And Slightly Transparent Bars

Bar Graph

We graph over species of irises. The unintuitively named asyvars option ensures that the bars of the graph are different colors rather than all the same color.

. graph bar Petal_Length, over(Species) scheme(SSWPEG) asyvars

Bar Graph With Transparency

. graph bar Petal_Length, over(Species) intensity(70) scheme(SSWPEG) asyvars

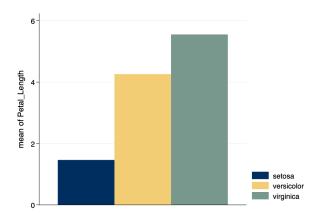


Figure 4: Bar Graph Using SSWPEG Scheme

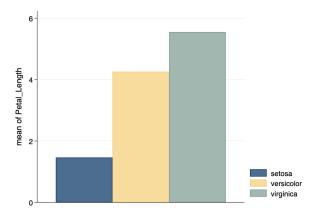


Figure 5: Bar Graph Using SSWPEG Scheme and Slightly Transparent Bars

Scatterplot

- . twoway (scatter Petal_Length Petal_Width) ///
- > (lfit Petal_Length Petal_Width), ///
- > scheme(SSWPEG)

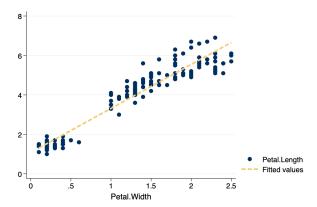


Figure 6: Scatterplot Using SSWPEG Scheme

Scatterplot With Transparency

- . twoway (scatter Petal_Length Petal_Width, mcolor(%30)) /// markers have 30% transparency
- > (lfit Petal_Length Petal_Width), ///
- > scheme(SSWPEG)

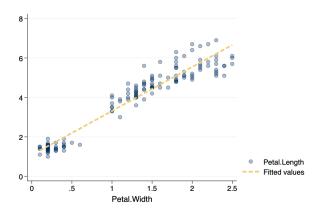


Figure 7: Scatterplot Using SSWPEG Scheme And Slightly Transparent Markers

Legend Placement

Sometimes you may wish to have the legend of the graph placed at the *bottom* of the graph. The pos(6) suboption inside the legend option will place the legend at the bottom, while you can manually control the number of legend rows with the rows suboption.

. graph bar Petal_Length, over(Species) scheme(SSWPEG) asyvars legend(pos(6) rows(1))

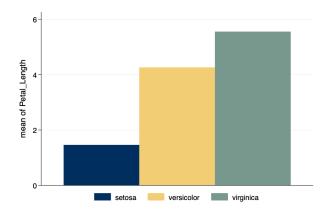


Figure 8: Bar Graph Using SSWPEG Scheme and Modified Legend

Individual SSWPEG Colors

Individual University of Michigan colors are listed below.

(Color RGI	B Hex	
Blue	0 46 95		≠002e5f
Pale Yellov	v 243 205	116 #	≠f3cd8d
Teal	$120 \ 152$	141 #	≠78988d
Light Blue	$143 \ 196$	255 #	≠8fc4ff
Gray	$191 \ 191$	191	
Dark Gold	$238\ 178$	27 #	≠EEB21B
Dark Teal	60 78 72	2	

Stata can use RGB codes for colors. As an example.

- . twoway (scatter Petal_Length Petal_Width, mcolor("120 152 141 %50")) /// markers are Teal with 50
- > % transparency
- > (lfit Petal_Length Petal_Width, lcolor("238 178 27")), /// Dark Gold line
- > scheme(SSWPEG)

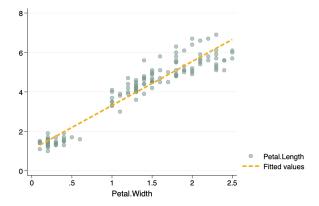


Figure 9: Scatterplot Using SSWPEG Scheme, Selected Colors, And Slightly Transparent Markers