

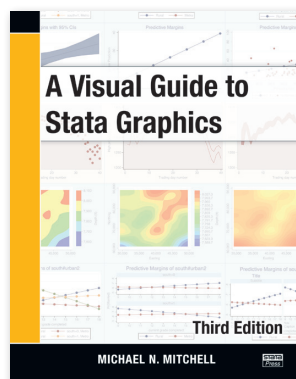
## Brief contents

- 1 Introduction
- 2 Editor
- 3 Twoway graphs
- 4 Scatterplot matrix graphs
- 5 Bar graphs
- 6 Box plots
- 7 Dot plots
- 8 Pie charts
- 9 Options available for most graphs
- 10 Standard options available for all graphs
- 11 Styles for changing the look of graphs

## What's new in the third edition

New in this edition are treatments of contour plots, margins plots, and font handling. Mitchell dedicates a new subsection to contour plots—showing you how to control the number of levels, how to change the colors used, and how to produce effective legends. Over 30 graphs are used to demonstrate what you can accomplish with the new `marginplot` command—graphs of estimated means and marginal means (with confidence intervals), interaction graphs, comparisons of groups, and more. Mitchell also adds a section that shows you how to get bold text, italic text, subscripts, superscripts, and Greek letters into your titles, axes, labels, and other text.

## A Visual Guide to Stata Graphics, Third Edition



By Michael N. Mitchell

Publisher: Stata Press

Copyright: 2012

ISBN-13: 978-1-59718-106-8

Pages: 499; paperback

Price: **\$62.00**

For more details or to order, visit us online at  
[stata-press.com/books/visual-guide-to-stata-graphics](http://stata-press.com/books/visual-guide-to-stata-graphics).



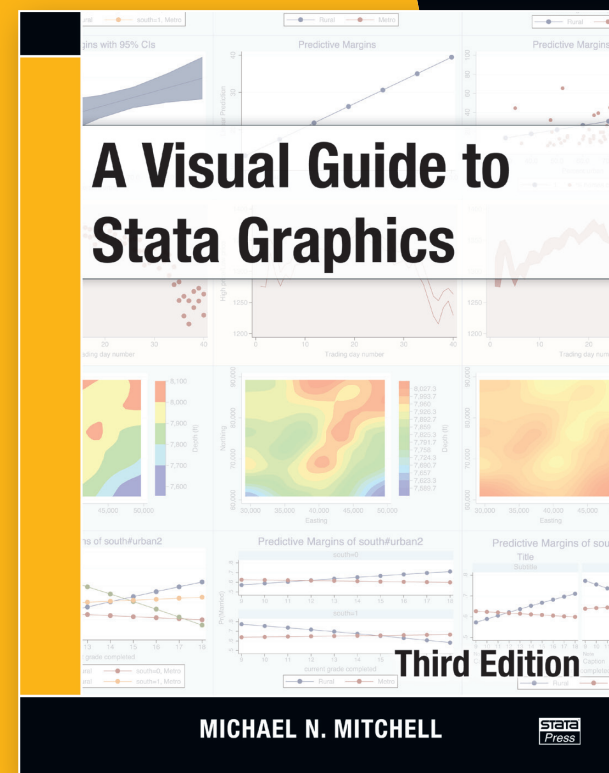
## How to contact us

Stata Press  
4905 Lakeway Drive  
College Station, TX 77845  
USA

800-782-8272 (USA)  
800-248-8272 (Canada)  
979-696-4600 (Worldwide)

[service@stata-press.com](mailto:service@stata-press.com)  
[stata-press.com](http://stata-press.com)

# Stata Press presents



## About the author

Michael Mitchell is a senior statistician in disaster preparedness and response. He is the author of *Data Management Using Stata*, *Interpreting and Visualizing Regression Models Using Stata*, and *A Visual Guide to Stata Graphics, Third Edition*. Previously, he worked for 12 years as a statistical consultant and manager of the UCLA ATS Statistical Consulting Group. There, he envisioned the UCLA Statistical Consulting Resources website and wrote hundreds of webpages about Stata.

## About the book

In its third edition, Michael Mitchell's *A Visual Guide to Stata Graphics* retains all the features that made the first two editions so useful:

- A complete guide to Stata's `graph` command and Graph Editor
- Exhaustive examples of customized graphs using both command options and the Graph Editor
- Visual indexing of features—just look for a picture that matches what you want to do

The book retains its visual style, featuring a color-coded, visual table of contents that runs along the right edge of every page. You can see the color-coded chapter tabs without opening the book, providing quick visual access to each chapter.

The heart of each chapter is a series of entries that shows a graph command, the resulting graph, a description of what is being done, the dataset and scheme used, and a section showing how to produce the result by using the Graph Editor. Because every feature, option, and edit is demonstrated with a graph or screen capture, you can often flip through a section of the book to find exactly the effect you are seeking.

*An exemplar of accessibility for readers of any skill level, this book assumes only rudimentary knowledge of Stata. It is densely packed with masterful advice and thorough examples.*

— Vivian Lew, University of California, Los Angeles  
*The American Statistician*, November 2009, Vol. 63, No. 4

## Comment from the Stata technical group

Michael Mitchell's *A Visual Guide to Stata Graphics, Third Edition* remains the essential introduction and reference for Stata graphics. In it, Mitchell discusses how to use the book, the types of Stata graphs, how to use schemes to control the overall appearance of graphs, how to use options to make specific modifications, and how to build graphs using the `graph` command.

After an introductory chapter, Mitchell delves into Stata's Graph Editor. With color graphics, screen captures, and words, Mitchell shows how to change the color, size, or placement of any titles, markers, annotations, or other objects on your graph by using just a few mouse clicks, and much more. In short, he exposes all the Graph Editor's tools, from the simplest to the most powerful. Mitchell does not stop there; almost every example in the book shows how to accomplish the desired graph or effect not only by using a command or command-line option but also by using the Graph Editor.

Mitchell goes on to discuss how to create twoway graphs such as scatterplots, line plots, area plots, bar plots, range plots, contour plots, regression fits, and smooths. He also introduces graphing across groups of data, and options for adding and controlling titles, notes, legends, and so forth. Beyond the basics, Mitchell shows how to easily overlay plots to obtain graphs such as regression fits with error contours and observed data scatters, local polynomial smooths with scatters of their underlying data, histograms with density smooths, and more. Because Stata's `graph` command will let you customize any aspect of the graph, Mitchell spends ample time showing you the most valuable options for obtaining the look you want.

Over several chapters, Mitchell covers scatterplot matrices, bar graphs, box plots, dot plots, and pie charts. As with twoway graphs, he shows how to create each of these graphs and how to adjust every aspect of the graph to your taste (or to a publisher's required form).

Mitchell then undertakes an in-depth presentation of the options that are available across almost all graph types—options that add and change the look of titles, notes, and such; control the number of ticks on axes; control the content and appearance of the numbers and labels on axes; control legends; add and change the look of annotations; graph over subgroups; change the look

of markers and their labels; apply schemes to control the look of the graph; change the look of graph regions; size graphs and their elements; and more.

To complete the graphical journey, Mitchell discusses and demonstrates the 12 styles that unite and control the appearance of the myriad graph objects. These styles are angles, colors, clock positions, compass directions, connecting points, line patterns, line widths, margins, marker sizes, orientations, marker symbols, and text sizes.

In the appendix, Mitchell first gives a quick overview of the dozens of statistical graph commands that are not strictly the subject of the book but can be executed similarly to those he does discuss. Then, Mitchell takes readers on a tour of the new `marginsplot` command. After that, he addresses combining graphs—showing how to create complex and multipart images from previously created graphs.

In a crucial section entitled “Putting it all together”, Mitchell shows how to do just that. He details more about overlaying twoway plots, and he shows how to combine data management and graphics to create plots such as bar charts of rates with capped confidence intervals, scatterplots with range-finder confidence intervals in both dimensions, and population pyramids.

Mitchell then warns about mistakes that can be made when typing graph commands and how to correct them. He even shows how to create personalized scheme files, which allow you to control every aspect of how your graphs look without having to specify options. As with the rest of the book, this section includes cross-references to the *Stata Graphics Reference Manual* to provide more depth on the subject. Finally, Mitchell reviews all datasets, schemes, and other online supplements available for the book.

The third edition of *A Visual Guide to Stata Graphics* is a complete guide to Stata's `graph` command and the associated Graph Editor. Whether you want to tame the Stata `graph` command, quickly find out how to produce a graphical effect, master the Stata Graph Editor, or learn approaches that can be used to construct custom graphs, this is the book to read.