Title

intro — Introduction to graphics manual

Description

This entry describes this manual and what has changed since Stata 9. See the next entry, [G] **graph intro**, for an introduction to Stata's graphics capabilities.

Remarks

This manual documents Stata's `graph` commands and is referred to as [G] in references.

Following this entry, [G] **graph intro** provides an overview of Stata's `graph` command, and [G] **graph editor** describes the Stata Graph Editor. The remaining manual is divided into three sections:

Commands	This section is arranged alphabetically by `graph` subcommand and documents all the families of graphs (e.g., twoway, bar, or box) and the graph management commands (e.g., `graph drop` or `graph use`). All references to this section appear in the text as bolded command names, for example, [G] **graph twoway**.
Options	This section is arranged alphabetically by option type (e.g., *marker_options* or *legend_options*) and documents the options available to `graph`. All references to this section appear in the text as bolded, italicized option names with *_options* appended, for example, [G] ***axis_label_options***.
Styles and concepts	This section is arranged alphabetically by style name and documents the valid arguments for graph options; for example, *colorstyle* shows all the valid arguments for options that take a color. Almost all references to this section appear in the text as bolded, italicized style names with *style* appended, for example, [G] ***linestyle***. Concept entries are the exception; these references appear in the text as bold text, such as [G] **concept: lines** or [G] **schemes intro**.

Only the `graph` command is documented in this manual, though the statistical graph commands documented in [MV], [R], [ST], [TS], and [XT] often refer to the *Options* and *Styles and concepts* sections of this manual.

When using this manual as documentation for the `graph` command and its families, you will typically begin in the *Commands* section and be referred to the *Options* and *Styles and concepts* sections as needed. If you are an experienced user, you might sometimes refer directly to the *Options* section for entries such as *legend_option*, where the 35 options for controlling where a legend appears and how it looks are documented. Similarly, you may jump directly to entries such as *colorstyle* in *Styles and concepts* to determine the valid arguments to an option specifying the color of a graph object. If you are new to Stata's graphics, see [G] **graph intro** for a suggested reading order.

Stata is continually being updated, and Stata users are continually writing new commands. To ensure that you have the latest features, you should install the most recent official update; see [R] **update**.

What's new

This section is intended for previous Stata users. If you are new to Stata, you may as well skip it.

1. Stata 10 has an interactive, point-and-click editor for your graphs. You do not need to type anything; you just right-click within the Graph window and select **Start Graph Editor**. You can do that any time, either when the graph is drawn or when you have `graph use`d it from disk. You can add text, lines, markers, titles, and annotations, outside the plot region or inside; you can move axes, titles, legends, etc.; you can change colors and sizes, number of tick marks, etc.; and you can even change scatters to lines or bars, or vice versa. See [G] **graph editor**.
2. New command `graph twoway lpoly` plots a local polynomial smooth; see [G] **graph twoway lpoly**. New command `graph twoway lpolyci` plots a local polynomial smooth along with a confidence interval; see [G] **graph twoway lpolyci**.
3. Concerning command `graph twoway`,
    a. `graph twoway` now allows more than 100 variables to be plotted.
    b. New suboption `custom` of *axis_label_options* allows you to create custom axis ticks and labels that have a different color, size, tick length, etc., from the standard ticks and labels on the axis. Such custom ticks can be used to emphasize points in the scale, such as important dates, physical constants, or other special values. See the `custom` suboption in [G] ***axis_label_options***.
    c. New suboption `norescale` of *axis_label_options* specifies that added ticks and labels be placed directly on the graph without rescaling the axis or associated plot region for the new values; see [G] ***axis_label_options***.
    d. New advanced options `yoverhangs` and `xoverhangs` adjust the graph region margins to prevent long labels on the y or x axis from extending off the edges of the graphs; see [G] ***advanced_options***.
4. `graph twoway pcarrow` and `graph twoway pcbarrow` may now be drawn on plot regions with log scales or reversed scales; see [G] **graph twoway pcarrow**.
5. `graph bar` and `graph dot` no longer require user-provided names when a variable is repeated with more than one statistic; see [G] **graph bar** and [G] **graph dot**.
6. `graph twoway lfit` and `graph twoway qfit` now use value labels to annotate the x axis when using the existing suboption `valuelabel` of `xmlabel()`; see [G] ***axis_label_options***.
7. `graph export` has new options `width(#)` and `height(#)` that specify the width and height of the graph when exporting to PNG or TIFF, thus allowing the resolution to be greater than screen resolution; see [G] ***png_options*** and [G] ***tif_options***.
8. `graph twoway area` and `graph twoway rarea` now allow option `cmissing()` to control whether missing values produce breaks in the areas or are ignored; see [G] **graph twoway area** and [G] **graph twoway rarea**.
9. Typing `help graph` *option* now displays the help file for the specified option of the `graph` command. See [R] **help**.

For a complete list of all the new features in Stata 10, see [U] **1.3 What's new**.

Also See

[U] **1.3 What's new**

[R] **intro** — Introduction to base reference manual