

# THE STATA NEWS

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www.stata.com

## Seminars on Stata

Join us in Washington, D.C., at the Waterview Conference Center on Thursday, April 8, 2010, for *Seminars on Stata*—a series of high-level seminars on Stata and statistics. Learn how to work more efficiently and take advantage of Stata's unique features for various types of data, including panel and complex survey, as well as data that contain missing values.

The meeting will run from 9:30 AM to 3:30 PM, and lunch will be provided. Registration begins at 8:45 AM with a continental breakfast.

The speakers are

Roberto G. Gutierrez, *Director of Statistics*  
Bill Rising, *Director of Educational Services*



### Program

#### Easy automation and reproducible analysis

Learn how to use both script files and the Stata GUI (menus, dialog boxes, Variables Manager, Data Editor, and Do-file Editor) to perform reproducible analyses with both result and command logging.

#### Panel/longitudinal data and multilevel mixed-effects modeling

We will briefly cover the wide range of commands in Stata for estimating models of continuous, count, and binary outcomes with fixed effects and random effects. We will then extend random-effects estimation to intercepts and coefficients at multiple levels. These multilevel models are estimated by `xtmixed` for continuous outcomes, `xtmelogit` for binary outcomes, and `xtmepoisson` for count outcomes. All three commands share a similar syntax for model specification and for postestimation analysis.

#### Survey data

Most of Stata's estimation commands are equipped to automatically handle data from complex surveys. So long as we declare the

survey aspects of our data, the estimates and their standard errors are adjusted for pre- and poststratification, multilevel sampling (clustering), and weighted sampling. We will cover declaring survey data and estimation, as well as the three primary survey variance estimators—linearization, balanced repeated replication, and jackknife.

#### Multiple imputation for missing data

Multiple imputation provides a unified framework for handling missing data that is missing at random (MAR) or missing completely at random (MCAR). We will introduce Stata's suite of `mi` commands for imputation, estimation, and data management.

#### Special topics

We will cover a number of topics: 1) how the division of estimation and postestimation (estimates, tests and confidence intervals of linear and nonlinear combinations, marginal effects, linear and nonlinear predictions, etc.) provides a common and powerful framework for performing analyses, 2) Stata's extensibility and its relation to the active Stata user community, and 3) graphics, graphics editing, and creating custom graph profiles. We will also briefly discuss how what we have learned earlier applies to other estimation areas, such as survival analysis, univariate and multivariate time series, and multivariate methods.

Date: April 8, 2010

Venue: Waterview Conference Center  
1919 North Lynn Street  
Arlington, VA 22209

Price: \$195

Information: [www.stata.com/meeting/dcsem10/](http://www.stata.com/meeting/dcsem10/)

#### Logistics organizers

- Sarah Marrs ([smarrs@stata.com](mailto:smarrs@stata.com))
- Karen Strope ([kstrope@stata.com](mailto:kstrope@stata.com))

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THE STATA NEWS is published four times a year and is free to all registered users of Stata.

## Stata Journal indexed

Starting with the first quarter 2010 issue, the *Stata Journal* will be indexed in Thomson Scientific's citation indexes—Social Sciences Citation Index and Current Contents/Social and Behavioral Sciences—joining the Citation Index Expanded and the CompuMath Citation Index, which began indexing the *Journal* in 2005.

Articles in the third quarter 2009 issue include

Confirmatory factor analysis using **confa**  
S. Kolenikov

Graphical representation of multivariate data using Chernoff faces  
R. Raciborski

Improved degrees of freedom for multivariate significance tests obtained from multiply imputed, small-sample data  
Y. V. Marchenko and J. P. Reiter

Implementing weak-instrument robust tests for a general class of instrumental-variables models  
K. Finlay and L. M. Magnusson

A seasonal unit-root test with Stata  
D. Depalo

Robust regression in Stata  
V. Verardi and C. Croux

Nonparametric testing of distributions—the Epps–Singleton two-sample test using the empirical characteristic function  
S. J. Goerg and J. Kaiser

Multiple imputation of missing values: Further update of **ice**, with an emphasis on categorical variables  
P. Royston

In addition to these refereed articles, the third quarter issue also includes

Speaking Stata: Creating and varying box plots  
N. J. Cox

Stata tip 77: (Re)using macros in multiple do-files  
J. Herrin

Stata tip 78: Going gray gracefully: Highlighting subsets and downplaying substrates  
N. J. Cox

Stata tip 79: Optional arguments to options  
N. J. Cox

Other columns often included are Mata Matters column by W. Gould, illustrating how to use the powerful Mata matrix programming language and reviews on books.

For more information, including how to subscribe, visit

[www.stata.com/bookstore/sj.html](http://www.stata.com/bookstore/sj.html).



## Public training courses

### Multilevel/Mixed Models Using Stata

This two-day course is an introduction to using Stata to fit multilevel/mixed models. Mixed models contain both fixed effects analogous to the coefficients in standard regression models and random effects not directly estimated but instead summarized through the unique elements of their variance–covariance matrix. Mixed models may contain more than one level of nested random effects, and hence these models are also referred to as multilevel or hierarchical models, particularly in the social sciences. Stata's approach to linear mixed models is to assign random effects to independent panels where a hierarchy of nested panels can be defined for handling nested random effects.

#### Washington, D.C.

**Date:** May 6–7, 2010

**Location:** MicroTek

**Instructor:** Roberto G. Gutierrez, StataCorp

**Cost:** \$1,295

**Register:** [www.stata.com/training/enroll.html](http://www.stata.com/training/enroll.html)

**Enrollment is limited to 24 participants.**

#### Course topics include

##### ◆ Part I

- What constitutes a linear mixed model?
- The random-intercept model
- The within estimator versus the GLS estimator; the Hausman test
- Maximum likelihood and restricted maximum likelihood
- Using **xtmixed** and **xtreg** for the random-intercept model

##### ◆ Part II

- Adding random coefficients
- Specifying models hierarchically
- Covariance structures for random effects
- Growth curves
- Linear transformations of covariates in a random-effects setting
- Likelihood ratio (LR) tests

##### ◆ Part III

- Multiple-level models
- Crossed-effects models
- Using Stata's "R." factor notation for mixed models
- Complex and grouped constraints on variance components
- Heteroskedastic residual errors
- Alternate residual-error structures

##### ◆ Part IV

- Best linear unbiased predictions (BLUPs)
- Residuals
- Fit diagnostics
- Diagnostic plots
- Cataloging and comparing mixed-models results in Stata

##### ◆ Part V

- Binary and count responses
- Estimation via adaptive Gaussian quadrature
- Model building using the Laplacian approximation
- Predictions and other postestimation tasks

For more information, go to [www.stata.com/training/mixed.html](http://www.stata.com/training/mixed.html).

## Using Stata Effectively: Data Management, Analysis, and Graphics Fundamentals

Become intimately familiar with all three components of Stata: data management, analysis, and graphics. This two-day course is aimed at both new Stata users and those who would like to optimize their workflow and to pick up tips for efficient day-to-day usage of Stata. Upon completion of the course, you will be able to use Stata efficiently for basic analyses and graphics. You will be able to do this in a reproducible manner, making collaborative changes and follow-up analyses much simpler. Finally, you will be able to make your datasets self-explanatory to your co-workers and your future self.

### Washington, D.C.

**Date:** February 03–04, 2010  
**Location:** MicroTek  
**Instructor:** Bill Rising, StataCorp  
**Cost:** \$950  
**Register:** [www.stata.com/training/enroll.html](http://www.stata.com/training/enroll.html)  
 Enrollment is limited to 24 participants.

### New York

**Date:** March 09–10, 2010  
**Location:** MicroTek  
**Instructor:** Bill Rising, StataCorp  
**Cost:** \$950  
**Register:** [www.stata.com/training/enroll.html](http://www.stata.com/training/enroll.html)  
 Enrollment is limited to 24 participants.

### Boston

**Date:** May 19–20, 2010  
**Location:** CompuWorks  
**Instructor:** Bill Rising, StataCorp  
**Cost:** \$950  
**Register:** [www.stata.com/training/enroll.html](http://www.stata.com/training/enroll.html)  
 Enrollment is limited to 20 participants.

Whether you currently own Stata 11 or you are considering an upgrade or new purchase, this course will unquestionably make you more proficient with Stata's wide-ranging capabilities.

### Course topics include

- ◆ Stata basics
  - Keeping organized
  - Knowing how Stata treats data
  - Using dialog boxes efficiently
  - Using the Command window
  - Saving time and effort while working
- ◆ Data management
  - Reading in datasets of various standard formats (such as those from spreadsheets or databases)
  - Labeling variables and setting up encoded variables
  - Generating new variables in an efficient fashion, including leading, lagging, generating statistics within groups, and working across variables

- Combining datasets, both by adding observations and by adding variables
- Reshaping datasets for repeated measurements

### ◆ Workflow

- Using both menus and the Command window to work quickly
- Setting up Stata to one's liking
- Keeping complete records of what is done inside Stata
- Creating a reproducible analysis, which is completely documented
- Finding, installing, and removing user-written extensions to Stata
- Customizing how Stata starts up and where it looks for files

### ◆ Analysis

- Using basic statistical commands
- Reusing results of Stata commands
- Using common postestimation commands, such as testing hypotheses about linear or nonlinear combinations of coefficients, generating fitted values, or looking at marginal effects

### ◆ Graphics

- Making common, simple graphs
- Building complex graphs
- Using the Graph Editor

For more information, see [www.stata.com/training/eff\\_stata.html](http://www.stata.com/training/eff_stata.html).

## Learn the New Features of Stata 11

### Washington, D.C.

**Date:** February 05, 2010  
**Location:** MicroTek  
**Instructor:** Bill Rising, StataCorp  
**Cost:** \$395  
**Register:** [www.stata.com/training/enroll.html](http://www.stata.com/training/enroll.html)  
 Enrollment is limited to 24 participants.

Learn what is new in Stata 11. This one-day course is aimed at users of Stata 10 and earlier who are interested in learning the new features in Stata 11. You will learn about diverse topics such as efficient reproducible data management using point-and-click tools, extended and unified marginal analysis using the `margins` command and Stata's new factor variables, and simpler do-file development using the new Do-file Editor. We will also introduce Stata's new multiple-imputation tools. Finally, we will briefly cover some new additions and extensions to Stata's estimation and programming tools.

This promises to be an intense session where you can quickly learn many of Stata 11's new tools.

### Course topics include

- ◆ Small gems
  - Getting better help
  - Spicing up text in graphs
  - Using Stata's random-number generators
  - Exploring missing data using `misstable`

- ◆ Workflow improvements
  - Using the Data Editor and Variables Manager for data management
  - Exploiting the new Do-file Editor
- ◆ Factor variables and marginal analysis
  - Using factor variables
  - Performing marginal analyses—extensions and unification of marginal effects and adjustment
- ◆ Multiple imputation
  - Understanding missing values and imputation
  - Working with Stata's implementation of multiple imputation
- ◆ Brief overviews of extensions and additions to existing analysis tools
  - Additions to Stata's time-series capabilities
  - Additions to Stata's survival analysis capabilities
  - Additions to Stata's panel-data capabilities
- ◆ Brief overviews of new advanced techniques
  - Fitting your own models using GMM
  - Using new additions to Mata
- ◆ Questions and answers
  - Your chance to ask about the new release

For more information, see [www.stata.com/training/newstata11.html](http://www.stata.com/training/newstata11.html).

Enrollment in public training courses is limited. Computers with Stata 11 installed are provided at all public training sessions. A continental breakfast, lunch, and an afternoon snack will also be provided. All training courses run from 8:30 AM to 4:30 PM each day. Participants are encouraged to bring a USB flash drive to all public training sessions; this is the safest and simplest way to save your work from the session.

For a complete schedule of upcoming training courses, visit [www.stata.com/training/public.html](http://www.stata.com/training/public.html).

## Stata Conference Boston 2010

**Dates:** July 15–16, 2010

**Venue:** Omni Parker House, Boston  
60 School Street  
Boston, MA 02108

**Cost:** Single day \$125, students \$50  
Both days \$195, students \$75

**Information:** [www.stata.com/meeting/boston10/](http://www.stata.com/meeting/boston10/)

Rooms at the Omni Parker House hotel are available at the discounted rate of \$179 per night. To receive the discounted rate, mention that you are with the Stata Conference.

Be sure to check our website and the next issue of the *Stata News* for more information as it becomes available.



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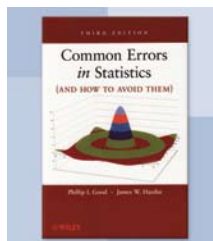


Title: *Seventy-six Stata Tips, 2nd Edition*  
Editors: H. Joseph Newton and Nicholas J. Cox  
Publisher: Stata Press  
Copyright: 2009  
Pages: 177; paperback  
ISBN-10: 1-59718-071-8  
ISBN-13: 978-1-59718-071-9  
Price: \$29.00

Since 2003, the *Stata Journal* has included Stata Tips on topics in data analysis with Stata. Now *Seventy-six Stata Tips, 2nd Edition* compiles these useful guides into a compact tome for ease of reference. In keeping with the Stata spirit, Tips are from Stata users and StataCorp employees alike and will serve as guideposts for both new and experienced users. *Seventy-six Stata Tips* includes the first 33 tips of the series, previously published in the book *Thirty-three Stata Tips*.

You can find the table of contents and online ordering information at [www.stata-press.com/books/tips2.html](http://www.stata-press.com/books/tips2.html).

## From the Stata Bookstore



Title: *Common Errors in Statistics (and How to Avoid Them), 3rd Edition*  
Authors: Phillip I. Good and James W. Hardin  
Publisher: Wiley  
Copyright: 2009  
Pages: 273; paperback  
ISBN-10: 0-470-45798-8  
ISBN-13: 978-0-470-45798-6  
Price: \$48.75

*Common Errors in Statistics (and How to Avoid Them), Third Edition*, by Phillip I. Good and James W. Hardin, contains common sense, minimally technical advice about how to improve experimental design, analyze data, and present results. Good and Hardin provide a guide for experienced scientists, as well as for students learning to design and complete experiments and statistical analysis.

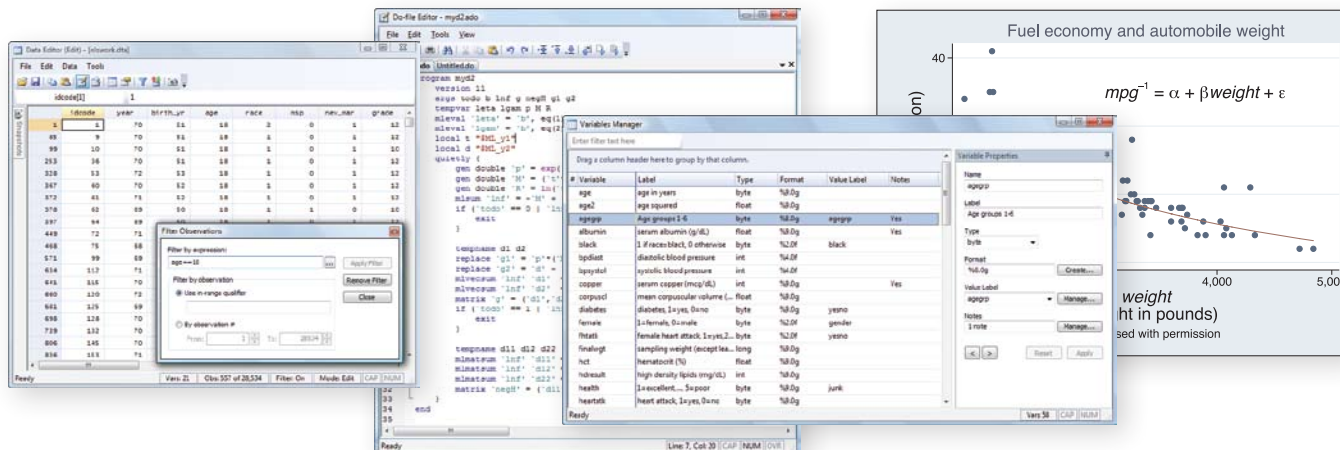
The text begins with a discussion of foundations that covers sources of error, hypotheses, and data collection. The second section, on hypothesis testing and parameter estimation, takes a harder look at statistical evaluation of the data, including the strengths and limitations of various statistical procedures. The third section provides guidelines for reporting results, from what information to include to how to create an informative and easy-to-understand graph. The final section covers building a model, with topics on univariate and multivariable regression, as well as validation of the model chosen.

You can find the table of contents and online ordering information at [www.stata.com/bookstore/ceis.html](http://www.stata.com/bookstore/ceis.html).

## Stata 11 now shipping

Are you using Stata 11? Stata 11 is chock full of features, including

- Multiple imputation
- Factor variables
- Marginal analysis
- Competing-risks regression
- PDF documentation
- Fonts in graphics
- State-space models
- Multivariate GARCH
- GMM



To upgrade, visit [www.stata.com/order/upgrade.html](http://www.stata.com/order/upgrade.html).

## 2010 Mexican Stata Users Group meeting

**Date:** Thursday, April 29, 2010

**Venue:** Universidad Iberoamericana, Mexico City campus  
Prolongación Paseo de la Reforma 880, Lomas de Santa Fe, México C.P. 01219, Distrito Federal, México

**Cost:** Professionals: 1,160 pesos\*  
Students: 580 pesos\*

\*Cost includes VAT, temporary license of Stata, coffee, refreshments, and lunch.

Contact the scientific committee if you have questions regarding the suitability of a potential contribution. For all other matters, contact the logistics organizer. The deadline for submissions is February 1, 2010. The program will be announced by the first week of March.

### Registration

MultiON Consulting generously sponsors registration fee waivers for presenters (one fee waiver per presentation, regardless of the number of authors involved).

### Organizers

#### Scientific committee

Alfonso Miranda (chair)  
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University of London  
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#### Logistics organizer

MultiON Consulting S.A. de C.V. is the distributor of Stata in Mexico and Central America. Visit the MultiON Consulting web site at [www.multion.com.mx](http://www.multion.com.mx).

Joaquín Maury (main director)  
MultiON Consulting S.A. de C.V.  
[jmaury@multion.com.mx](mailto:jmaury@multion.com.mx)

### First announcement and call for papers

Organized by MultiON Consulting S.A. de C.V., distributor of Stata in Mexico and Central America, the second Stata Users Group meeting in Mexico will be held on Thursday, April 29, 2010, at the Universidad Iberoamericana in Mexico City. StataCorp will be represented.

Please email a member of the scientific committee if you are interested in presenting, indicating whether you wish to give

- a 20-minute talk (followed by a 10-minute discussion),
- a 15-minute talk (followed by a 5-minute discussion), or
- a longer review or tutorial.

Presentation topics might include the following:

- discussion of user-written Stata programs
- case studies of research or teaching using Stata
- discussions of data-management problems
- reviews of analytical issues
- surveys or critiques of Stata facilities in specific fields

## NetCourse™ schedule

Enroll by visiting [www.stata.com/netcourse/](http://www.stata.com/netcourse/).

### NC101: Introduction to Stata

Content: An introduction to using Stata interactively  
 Prerequisites: Stata 11  
 Course leaders: Kerry Kammire and Jennifer Rolfes  
 Course length: 6 weeks (4 lectures)  
 Dates: January 22–March 5, 2010  
 Enrollment deadline: January 21, 2010  
 Price: \$95  
 Course syllabus: [www.stata.com/netcourse/nc101.html](http://www.stata.com/netcourse/nc101.html)

### NC151: Introduction to Stata Programming

Content: An introduction to Stata programming dealing with what most statistical software users mean by programming, namely, the careful performance of reproducible analyses  
 Prerequisites: Stata 11; basic knowledge of using Stata interactively  
 Course leaders: Kerry Kammire and Jennifer Rolfes  
 Course length: 6 weeks (4 lectures)  
 Dates: January 22–March 5, 2010  
 Enrollment deadline: January 21, 2010  
 Price: \$125  
 Course syllabus: [www.stata.com/netcourse/nc151.html](http://www.stata.com/netcourse/nc151.html)

### NC152: Advanced Stata Programming

Content: This course teaches you how to create and debug new commands that are indistinguishable from those of official Stata. It is assumed that you know why and when to program and, to some extent, how. You will learn how to parse both standard and nonstandard Stata syntax by using the intuitive `syntax` command, how to manage and process saved results, how to process by-groups, and more.  
 Prerequisites: Stata 11; course content of NetCourse 151 or equivalent knowledge  
 Course leaders: Kerry Kammire and Jennifer Rolfes  
 Course length: 7 weeks (5 lectures)  
 Dates: January 22–March 12, 2010  
 Enrollment deadline: January 21, 2010  
 Price: \$150  
 Course syllabus: [www.stata.com/netcourse/nc152.html](http://www.stata.com/netcourse/nc152.html)

### NC461: Introduction to Univariate Time Series with Stata

Content: This course introduces univariate time-series analysis, emphasizing the practical aspects most needed by practitioners and applied researchers. The course is written to appeal to a broad array of users, including economists, forecasters, financial analysts, managers, and anyone who encounters time-series data.  
 Prerequisites: Stata 11; course content of NetCourse 101 or equivalent knowledge; familiarity with basic cross-sectional summary statistics and linear regression  
 Course leaders: Brian Poi and Gustavo Sanchez  
 Course length: 7 weeks (4 lectures plus an overview of multivariate methods)  
 Dates: January 22–March 12, 2010  
 Enrollment deadline: January 21, 2010  
 Price: \$295  
 Course syllabus: [www.stata.com/netcourse/nc461.html](http://www.stata.com/netcourse/nc461.html)

To locate a Stata international distributor near you, visit

[www.stata.com/worldwide/](http://www.stata.com/worldwide/).

### How to reach us

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Please include your Stata serial number with all correspondence.



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