The most recent update to Stata was released on August 11. Stata 10.1 includes several enhancements.

The first enhancement is of particular interest to anyone performing simulations or parametric bootstraps. Stata 10.1 adds a suite of functions for drawing random variates from common statistical distributions.

<table>
<thead>
<tr>
<th>Function</th>
<th>Distribution</th>
</tr>
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<tbody>
<tr>
<td>rbeta( )</td>
<td>beta</td>
</tr>
<tr>
<td>rbinomial( )</td>
<td>binomial</td>
</tr>
<tr>
<td>rchi2( )</td>
<td>chi-squared</td>
</tr>
<tr>
<td>rgamma( )</td>
<td>gamma</td>
</tr>
<tr>
<td>rhypergeometric( )</td>
<td>hypergeometric</td>
</tr>
<tr>
<td>rnbinomial( )</td>
<td>negative binomial</td>
</tr>
<tr>
<td>rnormal( )</td>
<td>normal</td>
</tr>
<tr>
<td>rpoisson( )</td>
<td>Poisson</td>
</tr>
<tr>
<td>rt( )</td>
<td>Student’s t</td>
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</tbody>
</table>

These functions are available in both Stata and Stata’s matrix programming language, Mata.

To complement these random-variate generators, three new distribution and probability mass functions have been added to the existing suite of such functions: hypergeometric, negative binomial, and Poisson. These too are available in both Stata and Mata.

The second set of enhancements will appeal to those analyzing choice data or analyzing other types of categorical or rank-ordered outcomes. Multinomial probit (asmprobit) and rank-ordered probit (asroprobit) have a new factor covariance structure for parameterizing the structure of the latent disturbances. The factor covariance structure provides a concise representation of the disturbance structure when the complete structure is based on a smaller set of underlying factors. The factor weights for the covariance structure can be displayed after estimation with the new postestimation statistics command estat facweights. asmprobit and asroprobit also have new options to favor either speed or space when iteratively solving for the solution and options to improve convergence.

Other enhancements include

- The ability to reorder the individual plots (scatters, lines, range bars, etc.) using the new “bubble” tool available in the twoway graph dialog box.
- The reshape command now preserving all variable labels when reshaping data from wide form to long form and back to wide form.
- A set of Mata functions for handling associative arrays (also known as containers, maps, dictionaries, indices, and hash tables). These will be of interest to Stata programmers developing large systems in Mata.

The update to Stata 10.1 is free for Stata 10 users. If you have Stata 10, select Help>Official Updates from the Stata menu, or type update query and follow the directions.

Meet with Stata’s director of statistics at APHA

The American Public Health Association (APHA) will have its annual meeting and exposition in San Diego, CA, on October 25–29, 2008. For more information, please visit www.apha.org/meetings.

Stata developer Roberto G. Gutierrez, director of statistics, will be available at the Stata booth (#1906) to answer your questions about all things Stata. Also attending will be Bill Rising, Stata’s director of educational services. Stop by and visit with the people who write the software.

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Alan Acok’s *A Gentle Introduction to Stata, Second Edition* is aimed at new Stata users who want to become proficient in Stata. After reading this introductory text, new users will not only be able to use Stata well but also learn new aspects of Stata easily.

Acok assumes that the user is not familiar with any statistical software. This assumption of a blank slate is central to the structure and contents of the book. Acok starts with the basics; for example, the portion of the book that deals with data management begins with a careful and detailed example of turning survey data on paper into a Stata-ready dataset on the computer. When explaining how to go about basic exploratory statistical procedures, Acok includes notes that should help the reader develop good work habits. This mixture of explaining good Stata habits and good statistical habits continues throughout the book.

Acok is quite careful to teach the reader all aspects of using Stata. He covers data management, good work habits (including the use of basic do-files), basic exploratory statistics (including graphical displays), and analyses using the standard array of basic statistical tools (correlation, linear and logistic regression, and parametric and nonparametric tests of location and dispersion). Acok teaches Stata commands by using the menus and dialog boxes while still stressing the value of do-files. In this way, he ensures that all types of users can build good work habits. Each chapter has exercises that the motivated reader can use to reinforce the material.

The tone of the book is friendly and conversational without ever being glib or condescending. Important asides and notes about terminology are set off in boxes, which makes the text easy to read without any convoluted twists or forward-referencing. Rather than splitting topics by their Stata implementation, Acok chose to arrange the topics as they would be in a basic statistics textbook; graphics and postestimation are woven into the material in a natural fashion. Real datasets, such as the General Social Surveys from 2002 and 2006, are used throughout the book.

The focus of the book is especially helpful for those in psychology and the social sciences, because the presentation of basic statistical modeling is supplemented with discussions of effect sizes and standardized coefficients. Various selection criteria, such as semipartial correlations, are discussed for model selection.

The second edition of the book has been updated to reflect new features in Stata 10 and includes a new chapter on the use of factor analysis to develop valid, reliable scale measures.

You can find the table of contents and online ordering information at [www.stata-press.com/books/acock2.html](http://www.stata-press.com/books/acock2.html). You can also order by using the enclosed Bookstore Order Form.

Svend Juul’s *An Introduction to Stata for Health Researchers, Second Edition* is distinguished in its careful attention to detail.

The book is based on the assumption that the reader has some basic knowledge of statistics but no knowledge of Stata. It builds the reader’s abilities as a builder would build a house, laying a firm foundation in Stata, framing a general structure in which good work can be accomplished, and finally filling in details that are particular to various types of statistical analysis.

Juul starts by teaching the reader to understand how to communicate with Stata, not just through its unified syntax, but also by demonstrating how Stata thinks about its basic building blocks. Juul shows how Stata views data and graphics, allowing the reader to see the variety of possible data structures. He also shows how to manipulate the data to create a dataset that is well documented and how to create carefully crafted graphs. This approach makes the book easy to use as a learning tool and easy to refer back to for useful techniques independent of the reader’s statistical field.

Once he frames the environment for the new Stata user, Juul fills in the details for performing analysis in Stata. As would be expected from a book addressing health researchers in its title, Juul demonstrates mostly the statistical techniques common in biostatistics and epidemiology: case-control and matched case-control data analysis, stratified or not; linear and generalized linear models, including logistic, Poisson, and binomial regression; survival analysis with both life tables and proportional hazards; and classification using receiver operating characteristic curves.

While teaching Stata implementation, Juul reinforces habits that allow reproducible research and graceful backtracking in case of errors. Early in the book, he introduces how to use do-files for creating and log files for tracking analyses. At the end of the book, Juul introduces some useful programming techniques, such as loops and branching, that simplify repetitive tasks.

You can find the table of contents and online ordering information at [www.stata-press.com/books/ishr2.html](http://www.stata-press.com/books/ishr2.html). You can also order by using the enclosed Bookstore Order Form.
TStat S.r.l., the certified Stata distributor in Italy, announces the fourth Italian Stata Users Group meeting, to be held in Milan on October 20–21, 2008, at the Jolly Machiavelli Hotel.

The first day of the meeting is organized into five sessions. Each session will include three presentations of approximately 20 minutes each, followed by 10 to 15 minutes of discussion. The second day consists of two extended sessions.

### Monday, October 20, 2008

**Session I. Invited speaker (chair: Marcello Pagano)**

Latent variable and other methods for cohort and other cross-sample/cross-measure comparisons  
Andrew Pickles, Health Methodology Research Group, University of Manchester

**Session II. User-written commands (chair: Una-Louise Bell)**

Confidence bands for the survival function  
Enzo Coviello, Azienda USL BA/1

New wine in new bottles: Visualizing the progression over time of the epidemics of tobacco smoking and obesity through the use of modified population pyramids  
Giovanni Capelli, Università di Cassino  
Bruno Federico, Università di Cassino  
Giuseppe Costa, Università di Torino

Ordered probit models with anchoring vignettes  
Claudio Rossetti, Università di Roma “Tor Vergata”

**Session III. (chair: Rino Bellocco)**

Reproducible research: Weaving with Stata  
Bill Rising, StataCorp

**Session IV. User-written commands (chair: Rino Bellocco)**

Parametric and semiparametric estimation of ordered response models with sample selection and individual-specific thresholds  
Giuseppe de Luca, ISFOL  
Valeria Perotti, ISFOL  
Claudio Rossetti, Università di Roma “Tor Vergata”

A simulation-based sensitivity analysis for matching estimators  
Tommaso Nannicini, Universidad Carlos III de Madrid

Estimating and testing multiway error-components models with correlated effects in Stata  
Giovanni Bruno, Università Bocconi

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### Tuesday, October 21, 2008

**These two courses will run simultaneously beginning at 9:00 AM.**

**Multilevel modeling in Stata (9:00 AM–5:00 PM)**  
Andrew Pickles, Health Methodology Research Group, University of Manchester

This course provides an introduction to multilevel modeling in Stata using the `xt` suite of commands.

- Fixed- and random-effect estimates
- Nonindependent sampling, matching, and assumptions about confounding
- Within and between estimators
- Random-intercept models
- `xtreg`, `xtmixed`, and `gllamm`
- Panel-data, random-coefficient, and multilevel models
- Change score, ANCOVA, and growth-curve models
- Trajectory classes
- Models with multiple levels
- Generalized linear mixed modeling
  - Generalized linear models
  - Subject-specific and population-averaged models
  - The `xt` suite
- Extension to latent variables
  - Introducing correlation among equations—generalized instrumental-variables model
  - Two-parameter item-response (IRT) models
- Multilevel factor models

**Introduction to Mata (9:00 AM–1:00 PM)**  
Alan Riley, StataCorp  
Bill Rising, StataCorp

This course is an introduction to programming Mata, Stata’s fast, compiled matrix-programming language. The course will cover the basics of Mata, including types, operators, functions, and structures. The use of Mata both interactively and programatically from Stata do-files and ado-files will be illustrated. Mata’s power and speed as a programming tool for data management and statistics will be demonstrated.

- Introduction to Mata
- Types, operators, functions, and structures
- Calling Mata from do- and ado-files
- Data and file management
- Performing statistical analysis

---

**Registration and information**

Contact: Paola di Rienzo at TStat S.r.l.

Web: www.stata.com/meeting/italy08

Email: paola@tstat.it

Tel: +39-0864-210101

Fax: +39-0864-206014
The 2008 Fall North American Stata Users Group meeting will be held November 13–14 at the Handlery Union Square Hotel in downtown San Francisco.

Stata Users Group meetings started in Britain in 1995 and have been spreading to more and more countries, including Italy, Sweden, Germany, the Netherlands, Spain, Australia, Poland, and the United States. Talks are intended for a general audience with mixed levels of expertise in Stata and statistics. Stata developers will also attend the meeting, both to present and to take notes during the popular “Wishes and grumbles” session. We hope you will consider joining us in November, as a presenter or an attendee.

Submission information

We encourage submissions on any topic highlighting the use of Stata in research, teaching, or any other field, such as the following topics:

• Using Stata for modeling and analysis
• User-written Stata programs
• Case studies of research or teaching using Stata
• Using Stata to import and manage data
• Teaching Stata
• Teaching statistics with Stata
• Surveys or critiques of Stata facilities in specific fields
• Software comparisons

You may choose to give

• a 10-minute talk (followed by a 5-minute discussion),
• a 20-minute talk (followed by a 5-minute discussion), or
• a 45-minute review or tutorial (followed by a 5-minute discussion).

Please submit an abstract and contact information (your name, affiliation, postal address, email address, and fax and phone numbers) online at repec.org/fnasug08/fnasug1.php by September 30, 2008. The abstract should be no longer than 200 words. Please also indicate how long your talk will be. Members of the scientific organizing committee will review abstracts. Conference fees will be waived for presenters.

Presenters will be asked to provide materials related to their talk (slides and programs/datasets, where applicable) in electronic form, preferably before the meeting, to the organizing committee so that the materials can be posted on our web site and in the Stata Users Group RePEc archive.

Accommodations

A block of rooms has been reserved for StataCorp at the Handlery Union Square Hotel for November 12–14, 2008. The discounted group rate is $135.00 per night; tax is an additional 14%. The last day to reserve a room at the discounted rate is October 20, 2008. Details are available at www.stata.com/meeting/fnasug08.

Scientific organizers

• Xiao Chen (cochair), UCLA
• Phil Ender, UCLA
• Estie Hudes, UCSF
• Tony Lachenbruch, Oregon State
• Bill Mason, UCLA
• Sophia Rabe-Hesketh (cochair), UC–Berkeley
• Doug Steigerwald, UC–Berkeley

Logistics organizers

Chris Farrar, StataCorp LP
Gretchen Farrar, StataCorp LP

Registration and information

Web: www.stata.com/meeting/fnasug08
Email: service@stata.com
Tel: 979-696-4600 or 800-782-8272
Fax: 979-696-4601

From the Stata Bookstore

Title: Multivariable Model-Building: A Pragmatic Approach to Regression Analysis Based on Fractional Polynomials for Modelling Continuous Variables
Authors: Patrick Royston and Willi Sauerbrei
Publisher: Wiley
Copyright: 2008
Pages: 322; hardcover
ISBN-10: 0-470-02842-4
Price: $99.00

Selecting the appropriate model from among a large class of candidate models is a difficult process: one must balance the (sometimes contradictory) goals of model interpretability, parsimony, good prediction properties, robustness to minor variations in the data, and applicability to other data. Multivariable Model-Building, by Patrick Royston and Willi Sauerbrei, presents a well-rounded, practical approach to model selection, with its bulk devoted to general variable selection through the use of stepwise procedures (or otherwise) and the selection of functional forms for continuous variables. Regarding
the selection of functional forms, the authors pay much attention to fractional polynomials and splines, drawing on their vast research in these areas. In particular, those looking for a tutorial on the use of fractional polynomials will find this text very useful. The methods prescribed can be applied widely, yet the examples used are primarily from the health sciences, with the typically used models being logistic regression, Cox regression, and generalized linear models.

You can find the table of contents and online ordering information at [www.stata.com/bookstore/mmb.html](http://www.stata.com/bookstore/mmb.html). You can also order by using the enclosed Bookstore Order Form.

*Quantile Regression*, by Lingxin Hao and Daniel Q. Naiman, provides an excellent introduction to quantile-regression methods. The intuitive explanations and many examples make this book easy to read and understand. An appendix provides Stata commands to replicate the examples.

After showing the advantages that quantile regression has over least squares, the authors discuss the estimation technique, the statistical inference, and how to interpret the results. The final section of the monograph applies the techniques to changes in U.S. income equality between 1991 and 2001. This application illustrates both how to use the methods and how to interpret the results.

You can find the table of contents and online ordering information at [www.stata.com/bookstore/qr.html](http://www.stata.com/bookstore/qr.html). You can also order by using the enclosed Bookstore Order Form.

If you need to know how to perform estimation and inference on panel data from an econometric standpoint, then *Econometric Analysis of Panel Data, 4th Edition*, by Badi H. Baltagi, is the book to read. Aside from being a leading graduate textbook, this book is the standard reference, containing all the details you need to understand and implement the standard models. It also provides a very good introduction to the newer and more advanced techniques.

This book provides an excellent introduction for the student or the applied researcher because of its attention to detail and its use of examples, many of which use Stata. The detail is especially useful in the many sections that grow out of Baltagi’s own work. In these sections, readers gain a deep enough understanding of the models to implement them in a programming language like Stata. In other sections, such as the chapter on limited dependent variables, Baltagi combines a good introduction to the mechanics with an excellent introduction to the literature, allowing readers the opportunity to follow up for more details.

This fourth edition updates the coverage of recent theoretical developments. There is a new section on count panel data that links a detailed but intuitive theoretical discussion with examples using the Stata commands *xtpoisson* and *xtnbreg*. Baltagi has also considerably expanded the section on dynamic panel-data methods and has included Stata examples.

You can find the table of contents and online ordering information at [www.stata.com/bookstore/eapd.html](http://www.stata.com/bookstore/eapd.html). You can also order by using the enclosed Bookstore Order Form.

### NetCourse™ schedule

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<th>Course Name</th>
<th>Content</th>
<th>Prerequisites</th>
<th>Course Leaders</th>
<th>Course Length</th>
<th>Dates</th>
<th>Enrollment Deadline</th>
<th>Next dates</th>
<th>Enrollment Deadline</th>
<th>Price</th>
</tr>
</thead>
<tbody>
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<td>NC101</td>
<td>Introduction to Stata</td>
<td>An introduction to using Stata interactively</td>
<td>Stata 10</td>
<td>Theresa Boswell, Kevin Crow, Kerry Kammire</td>
<td>6 weeks (4 lectures)</td>
<td>September 12–October 24, 2008</td>
<td>September 11, 2008</td>
<td>October 17–November 28, 2008</td>
<td>October 16, 2008</td>
<td>$95</td>
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<tr>
<td>NC151</td>
<td>Introduction to Stata Programming</td>
<td>An introduction to Stata programming dealing with what most statistical software users mean by programming, namely, the careful performance of reproducible analyses</td>
<td>Stata 10; basic knowledge of using Stata interactively</td>
<td>Theresa Boswell, Kevin Crow, Kerry Kammire</td>
<td>6 weeks (4 lectures)</td>
<td>September 12–October 24, 2008</td>
<td>September 11, 2008</td>
<td>October 17–November 28, 2008</td>
<td>October 16, 2008</td>
<td>$125</td>
</tr>
</tbody>
</table>
NC152: Advanced Stata Programming
Content: This course teaches you how to create and debug new commands that are indistinguishable from those of official Stata. The course assumes 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 10; course content of NetCourse 151 or equivalent knowledge
Course leaders: Theresa Boswell, Kevin Crow, Kerry Kammire
Course dates: October 10–November 28, 2008
Enrollment deadline: October 9, 2008
Price: $150
Course syllabus: 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 10; course content of NetCourse 101 or equivalent knowledge; familiarity with basic cross-sectional summary statistics and linear regression
Course leaders: Brian Poi, Gustavo Sanchez
Course dates: October 10–November 28, 2008
Enrollment deadline: October 9, 2008
Price: $295
Course syllabus: www.stata.com/netcourse/nc461.html

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