Stata Journal: special issue

The second-quarter *Stata Journal* is a special issue devoted to maximum simulated likelihood (MSL). MSL is a technique used to evaluate likelihood functions that depend on high-dimensional integrals, such as multivariate distribution functions. MSL is used in a broad array of applications. This issue of the Journal features articles on the following topics:

- Calculating multivariate normal probabilities, which frequently appear in nonlinear panel-data models
- Multinomial logit with unobserved heterogeneity, an extension of the familiar multinomial choice model to work with panel data
- Count data models with endogenous multinomial treatment, to model how a treatment chosen from a set of alternatives affects a nonnegative integer-valued outcome
- Dynamic random-effects probit with autocorrelation, for use when an outcome in one period depends on the outcome in the previous period

Regular issues of the *Stata Journal* appeal to Stata users of all disciplines and include refereed articles about statistics, data analysis, teaching methods, and effective use of Stata’s language. Each issue also includes editor Nick Cox’s “Speaking Stata” column, which concentrates on Stata’s programming language; Bill Gould’s “Mata Matters” column on Stata’s matrix programming language; and user-contributed “Stata Tips”, concise notes about Stata commands, features, or tricks.

For more details or to order a copy of the special issue, visit [http://www.stata-journal.com/current.html](http://www.stata-journal.com/current.html), or to subscribe to the Stata Journal, visit [http://www.stata.com/bookstore/sj.html](http://www.stata.com/bookstore/sj.html).

New platform supported

Stata/MP is now available for Solaris (x86-64).

To order, visit [http://www.stata.com/order/](http://www.stata.com/order/) or call 800-782-8272 or 979-696-4600.

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

Latest developments

Recently added features to Stata include the following:

- Stata’s `irf` command now lets you obtain dynamic multipliers after fitting dynamic simultaneous equation models. Dynamic multipliers let you see how shocks to exogenous variables affect your system’s equilibrium.

- Stata now lets you assign a data signature to a dataset, allowing you to detect whether the data have changed since you last signed them:
  - Prepare your dataset for analysis and then type `datasignature`
  - Record the data signature in a log file or attach it as a note in your dataset before your analysis.
  - When you or a colleague returns to the dataset later, type `datasignature` again. If the data signatures match, your data are intact. If not, someone changed the data.

- New command `xtset` simplifies the declaration of panel data, just like `tsset` and `stset` for time-series and survival time datasets.

- Mata now supports structures, giving advanced programmers the ability to create sets of variables as a single unit and simplifying argument passing among functions and subroutines.

These new features are freely available to Stata 9 users. Just select “Official Updates” from the Help menu or type `update all`. To find out more about the new features, type `help whatsnew` after updating and click on whatever you find interesting.
Philip Pollock’s *A Stata Companion to Political Analysis* can guide you whether you are teaching or taking your first political science course. The book will teach you how to control Stata with either the command line or the graphical user interface—whichever mode fits the task. Pollock also surveys the statistical methods that professional political scientists use. His treatment of research methods deftly incorporates data management, graphical analysis, and statistics into the political science domain.

The book assumes no prior experience with Stata and begins with basics such as using `describe`, using the help system, working with log files, and using notes. The next several chapters discuss descriptive statistics like means, proportions, and one- and two-way tables; creating indicator and percentile variables; and bar charts and histograms. Many of the datasets encountered in political science contain categorical and interval variables, and the book emphasizes the tools needed to analyze them.

Chapters 6 and 7 introduce statistical tests, including *t* tests of sample means and *χ*² tests of association. Correlation and linear regression are covered in chapter 8, and because of the prevalence of discrete variables in political science, chapter 9 is devoted to using dummy variables and interaction effects in linear regression. Chapter 10 explores logistic regression.

The final chapter is particularly relevant to students of political science. Titled “Doing Your Own Political Analysis”, it presents several topics that can be explored using the techniques covered in the book, such as the relationship between economic performance and election outcomes and the determinants of electoral turnout. The chapter also explains how to find appropriate datasets and how to structure a research paper.

Pollock’s *A Stata Companion to Political Analysis* will be useful to students who have never used Stata and are new to analyzing political science datasets, and it is a useful guide to more experienced political scientists looking for an introduction to Stata.

The table of contents and online ordering information can be found at [http://www.stata.com/bookstore/scpa.htm](http://www.stata.com/bookstore/scpa.htm). You can also order using the enclosed bookstore order form.

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**Have you heard about Stata/MP?**

Stata/MP runs on multiprocessor machines, including dual-core PCs and multiprocessor servers. Using Stata/MP, you can analyze data in as little as half the time of Stata/SE on inexpensive dual-core desktops—and faster still on multicore machines. For larger computers, Stata/MP supports as many as 32 processors and is available for Windows, Macintosh, Linux, and Solaris. To purchase or learn more, visit [http://www.stata.com/statamp/](http://www.stata.com/statamp/).

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**From the Stata Bookstore**

**Title:** *A Stata Companion to Political Analysis*  
**Author:** Philip H. Pollock III  
**Publisher:** CQ Press  
**Copyright:** 2006  
**Pages:** 217; paperback  
**ISBN-10:** 0-87289-305-7  
**ISBN-13:** 978-0-87289-305-4  
**Price:** $34.75

Philip Pollock’s *A Stata Companion to Political Analysis* can guide you whether you are teaching or taking your first political science course. The book will teach you how to control Stata with either the command line or the graphical user interface—whichever mode fits the task. Pollock also surveys the statistical methods that professional political scientists use. His treatment of research methods deftly incorporates data management, graphical analysis, and statistics into the political science domain.

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**New Introduction to Multiple Time Series Analysis**

**Author:** Helmut Lütkepohl  
**Publisher:** Springer  
**Copyright:** 2006  
**Pages:** 764; paperback  
**ISBN-10:** 3-540-26239-3  
**ISBN-13:** 978-3-540-26239-8  
**Price:** $68.75

Helmut Lütkepohl’s *New Introduction to Multiple Time Series Analysis* expands on and updates his seminal *Introduction to Multiple Time Series Analysis* to create what is sure to become the standard reference on multivariate time series.

Like its predecessor, this book provides the most complete coverage of stationary vector autoregressive (VAR) and vector autoregressive moving average (VARMA) models of any book. For each model, Lütkepohl discusses the estimators and their properties, forecasting, impulse–response analysis, forecast error variance decompositions, specification testing and model selection, and inference.

Incorporating more than six chapters of new material, *New Introduction to Multiple Time Series Analysis* also provides extensive coverage of more recent developments in time series, including the vector error-correction model (VECM) for cointegrated processes, structural VARs, structural VECMs, cointegrated VARMA processes, and multivariate models for conditionally heteroskedastic processes.

Written in a rigorous yet lucid style, this book can serve as a graduate-level textbook on multivariate time series as well as an accessible reference for the seasoned practitioner. It is also an excellent companion to Stata’s *Time-Series Reference Manual*.

The table of contents and online ordering information can be found at [http://www.stata.com/bookstore/imtsa.htm](http://www.stata.com/bookstore/imtsa.htm). You can also order using the enclosed bookstore order form.
Occupational epidemiology concerns illnesses and injuries related to the workplace environment rather than those from nutritional, environmental, or pharmacological sources. Although all branches of epidemiology use the same basic statistical principles, occupational epidemiology focuses more on hazard identification, accurate exposure measurement, the effects of measurement error in exposure assessment, and public policy development. As such, Research Methods in Occupational Epidemiology, Second Edition, focuses on these areas while working through the standard statistical methods. Each chapter ends with an extensive bibliography, making the book an excellent desk reference for practicing epidemiologists, occupational or otherwise.

The first two chapters frame the discussion by defining the scope of occupational epidemiology and describing the concept of exposure in workplace environments. The next several chapters cover various study designs, including case–control, cohort, and repeated-measure studies, along with an examination of assessing the precision and validity of those studies. The final chapters present alternative methods of analyzing the collected data, such as summary measures of exposure, the dosimetric model, induction time analysis, and the multistage cancer model.

Research Methods in Occupational Epidemiology will appeal to a spectrum of users, including students, academics, and practitioners.

The table of contents and online ordering information can be found at http://www.stata.com/bookstore/rmoe.html. You can also order using the enclosed bookstore order form.

A Short Introduction to Stata for Biostatistics bridges the information in the Getting Started manual and the Reference manuals by providing a more detailed introduction to the most often used analytic methods in biomedical research. Although it is written specifically for biostatisticians, epidemiologists, and health professionals new to Stata, the book is useful for more experienced users wanting more in-depth knowledge of Stata commands and biostatistical issues. The book is hands on, intended to be used while working with Stata, and includes a CD-ROM containing the datasets and several author-written programs.

This edition incorporates updates for Stata 9.1. New content includes enhanced material on dialog boxes, Nelson–Aalen plots of cumulative rate, metric exposure on a log scale, and time-updated exposures.

The first four chapters provide an overview of data entry and management commands, including those used to create, label, and drop variables and to sort observations. After two chapters on graphics, the bulk of the book details methods used in data description and analysis. Beginning with commands used to create frequency tables and summary statistics, the book proceeds to describe commands used for univariate and multivariate analyses, including linear regression, Poisson regression, logistic regression, and survival data analysis. Included among the final chapters is a useful tutorial for writing your own Stata programs.

The table of contents and online ordering information can be found at http://www.stata.com/bookstore/sisb.html. You can also order using the enclosed bookstore order form.
The 12th London meeting, organized by Nicholas J. Cox (Durham University) and Patrick Royston (MRC Clinical Trials Unit, London), features a strong cast of speakers from across the spectrum of the Stata community, including visitors from Australia, Hungary, Italy, The Netherlands, and the United States. Representing StataCorp, David Drukker and Vince Wiggins will give three extended tutorials. The meeting will close with the usual “Report to Users” and “Wishes and Grumbles” sessions.

**Preliminary program**

- **Another extension of the Blinder–Oaxaca decomposition technique to nonlinear models**
  Tamás Bartus, Institute of Sociology and Social Policy, Corvinus University, Budapest

- **Time-series filtering techniques in Stata**
  Kit Baum, Department of Economics, Boston College

- **Consistency checking with assertk**
  Krishnan Bhaskaran, Hannah Green, MRC Clinical Trials Unit, London

- **A comparison analysis of dynamic panel data estimators in the presence of endogenous regressors**
  Giovanni S. F. Bruno, Istituto di Economia Politica, Università Bocconi, Milan

- **Modeling for response variables that are proportions**
  Maarten L. Buis, Department of Social Research Methodology, Vrije Universiteit Amsterdam

- **Statistics for the paranormal**
  Nicholas J. Cox, Durham University

- **Econometric analysis of panel data using Stata**
  David M. Drukker, StataCorp, College Station, TX

- **A brief introduction to Mata**
  David M. Drukker, StataCorp, College Station, TX

- **Automatic generation of documents**
  Rosa Gini and Jacopo Pasquini, Regional Agency for Public Health of Tuscany

- **Automating the production of large reports from Stata**
  Ross Harris, Department of Social Medicine, University of Bristol

- **Estimating and modeling the proportion cured of disease in population-based cancer studies**
  Paul C. Lambert, Centre for Biostatistics and Genetic Epidemiology, University of Leicester

- **On the central role of Somers’ D**
  Roger Newson, National Heart and Lung Institute, Imperial College London

- **Two postestimation commands for assessing confounding effects in medical and epidemiological studies**
  Zhiqiang Wang, Centre for Chronic Diseases, School of Medicine, University of Queensland

- **Problems with infinite solutions in logistic regression**
  Ian White, MRC Biostatistics Unit, Cambridge

- **Scheming your way to consistent graphs**
  Vincent L. Wiggins, StataCorp, College Station, TX

**Registration and information**

- **Web:** [http://www.stata.com/meeting/12uk/](http://www.stata.com/meeting/12uk/)
- **Email:** info@timberlake.co.uk
- **Tel:** +44 020 8 697 3377
- **Fax:** +44 020 8 697 3388

Timberlake Consultants can also help you find accommodations in London.
The meeting’s goal is to bring together a wide range of users to discuss statistical analysis, data management, and graphics using Stata. We encourage speakers to present their experiences with the package, whether using standard commands, writing new programs, or exploiting the graphics facilities.

Notes on the program
The first day of the meeting will showcase user presentations. Possible topics include, but are not limited to, the following:

- Using Stata for statistical analysis
- Importing and managing data in Stata
- Teaching Stata
- Using Stata in specific fields
- User-written Stata programs
- Using Stata for graphics
- Teaching statistics with Stata

The second day features a workshop on mixed models in Stata, led by Roberto Gutierrez of StataCorp. This workshop will be a hands-on opportunity to learn about mixed models (often called random-effects models) and their implementation in Stata. The application of these models includes variance-components analysis, longitudinal (panel) data analysis, and hierarchical (multilevel) regression. The workshop will focus on continuous-scale dependent variables but will also cover categorical dependent variables.

Bring your own laptop if possible, although a few laptops will be available for early birds.

Registration and information
Web: http://www.stata.com/meeting/2australia/
Email: irene.thavarajah@adm.monash.edu.au
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Philip Ryan, University of Adelaide
Lyn Watson, LaTrobe University

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Blackburn North, Victoria 3130
Australia

The third Italian Stata Users Group meeting will give Stata users working in different research areas the opportunity to exchange ideas, experiences, and information on new applications of the software.

Notes on the program
The meeting will be organized in four sessions. Each session will include three presentations of approximately 20 minutes, followed by 10–15 minutes of discussion. The first session will be reserved for an invited speaker. Topics include the following:

- Developing new commands or procedures
- Using Stata in previously unpublished empirical research
- Other applications of Stata for solving problems of general interest, for example, data management

Two training sessions on analyzing survey data and panel data in Stata will be offered on the second day of the meeting. Analysis of Survey Data in Stata, led by Jeff Pitblado of StataCorp, discusses Stata’s features for analyzing survey and correlated data and will explain how and when to use the three major variance estimators for survey and correlated data: the linearization estimator, balanced repeated replications, and the clustered jackknife (the last two having been added in Stata 9). The talk will also discuss sampling designs and stratification, including Stata’s new features for estimation with data from multistage designs and for applying poststratification. A theme of the seminar will be how you can make inferences with correct coverage from data collected by single-stage or multistage surveys or from data with inherent correlation, such as data from longitudinal studies.

Details on the Analysis of Panel Data in Stata session are forthcoming.

Registration and information
Web: http://www.stata.com/meeting/3italian/
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Program committee
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### NC101. Introduction to Stata
- **Content:** An introduction to using Stata interactively
- **Prerequisites:** Stata 9
- **Course leaders:** Kevin Crow, Kerry Kammire, and Derek Wagner
- **Course length:** 6 weeks (4 lectures)
- **Dates:** September 8–October 20, 2006
- **Enrollment deadline:** September 7, 2006
- **Cost:** $95
- **Course syllabus:** [http://www.stata.com/netcourse/nc101.html](http://www.stata.com/netcourse/nc101.html)

### NC115. Introduction to Stata Programming
- **Content:** An introduction to using Stata programming dealing with what most statistical software users mean by programming, namely, the careful performance of reproducible analyses
- **Prerequisites:** Stata 9; basic knowledge of using Stata interactively
- **Course leaders:** Kevin Crow, Kerry Kammire, and Derek Wagner
- **Course length:** 6 weeks (4 lectures)
- **Dates:** September 8–October 20, 2006
- **Enrollment deadline:** September 7, 2006
- **Cost:** $125
- **Course syllabus:** [http://www.stata.com/netcourse/nc115.html](http://www.stata.com/netcourse/nc115.html)

### NC152. Advanced Stata Programming
- **Content:** Advanced issues of programming in the Stata language, focusing on writing commands for general use
- **Prerequisites:** Stata 9; NC115 or equivalent knowledge
- **Course leaders:** Kevin Crow, Kerry Kammire, and Derek Wagner
- **Course length:** 7 weeks (5 lectures)
- **Dates:** October 6–November 24, 2006
- **Enrollment deadline:** October 5, 2006
- **Cost:** $150
- **Course syllabus:** [http://www.stata.com/netcourse/nc152.html](http://www.stata.com/netcourse/nc152.html)

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