

THE STATA NEWS

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www.stata.com

Stata/MP now shipping

Stata/MP is a new version of Stata/SE that runs on multiprocessor computers. Stata/MP provides the most extensive support for multiple-processor computers and dual-core computers of any statistics and data-management package.

Stata/SE continues to be the top-of-the-line product for single-processor computers.

The exciting thing about Stata/MP, and the only difference between Stata/MP and Stata/SE, is that Stata/MP runs faster—much faster. Stata/MP lets you analyze data in one-half to two-thirds of the time of Stata/SE on inexpensive, dual-core desktops. Stata/MP runs even faster on industrial-grade multiprocessor servers and supports up to 32 processors.

Stata/SE 9 users may upgrade to Stata/MP for two processors (dual core or multiple CPU) for \$400 (academic) and \$835 (industry/government). To order, visit <http://www.stata.com/order/> or call 800-782-8272 (U.S.) or 979-696-4600 (worldwide).

Figure 1 summarizes the performance differences between Stata/SE and Stata/MP.

In a perfect world, software would run twice as fast on two processors, three times as fast on three processors, and so on. Stata/MP achieves 72% efficiency. It runs 1.4 times faster on two processors, 1.75 times faster on three processors, and 2 times faster on four processors. These values are median speed improvements.

Half the commands run even faster, and a few even achieve performance beyond what might be considered theoretically possible (more than twice as fast on two processors, etc.) because multiprocessor systems have multiple caches, too.

On the other side of the distribution, a few commands are not sped up at all, either because they are inherently sequential (time-series commands) or because no effort was made to parallelize them (graphics, `xtmixed`).

We worked hard to make sure that the performance gains of commands that take longer to run would be greater. Stata's estimation commands achieve 88% efficiency. Estimation commands run 1.7 times as fast on two CPUs, 2.3 times as fast on three CPUs, and 2.8 times as fast on four CPUs. Stata/MP supports up to 32 CPUs.

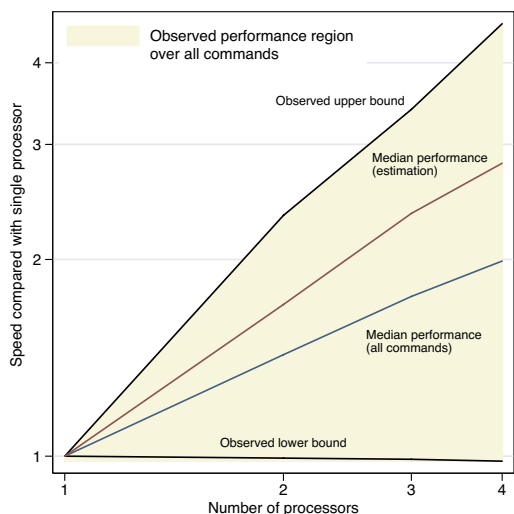
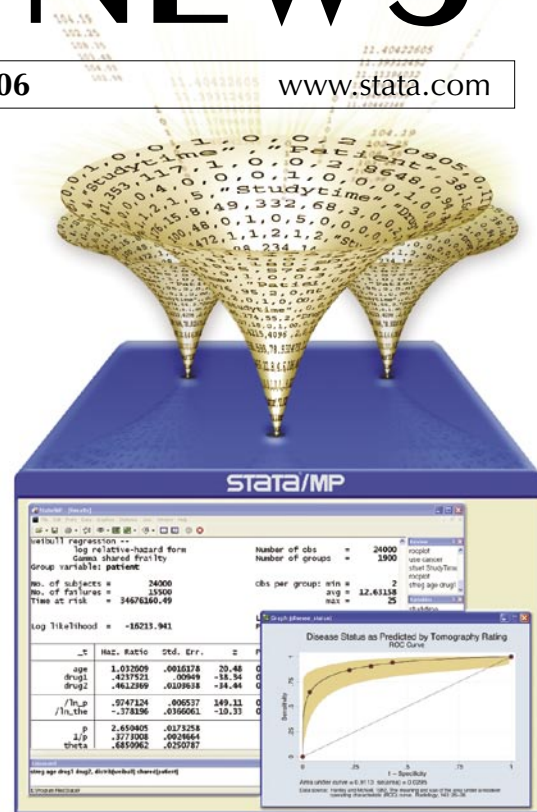


Figure 1: Performance of Stata/MP. Speed on multiple processors relative to speed on a single processor.

For a complete assessment of Stata/MP's performance, including command-by-command statistics, see the white paper *Stata/MP Performance Report* at <http://www.stata.com/statamp/report.pdf>. Also see <http://www.stata.com/statamp/>.

Stata/MP is 100% compatible with Stata. Analyses do not have to be reformulated or modified in any way to obtain Stata/MP's speed improvements.

Stata/MP is available for the following operating systems:

- Windows (32- and 64-bit processors)
- Macintosh OS X (Intel processors)
- Linux (32- and 64-bit processors)
- Solaris (64-bit SPARC)

To run Stata/MP, you can use a desktop computer with a dual-core processor or a server with multiple processors. Whether a computer has two separate processors or one dual-core makes no difference. More processors or cores means that Stata/MP will run faster.

See <http://www.stata.com/products/opsysmp.html> for more advice on hardware.

New Time-Series NetCourse™ announced

NetCourse 461, Introduction to Univariate Time Series Using Stata, explains the concepts of univariate time series and illustrates how to use Stata to perform descriptive analyses, regression modeling, and forecasting. Written for people who are already familiar with basic cross-sectional statistical methods, the course addresses potential pitfalls that may arise when using cross-sectional techniques with time-series data and presents alternative methods. The course assumes that students have prior basic experience with Stata at the level of NetCourse 101 or its equivalent.

The first lecture begins with an overview of manipulating time-series data, such as using `tsset`, using time-series operators, and graphing time-series data. The lecture also covers basic smoothing and forecasting techniques such as moving averages, exponential smoothers, and the Holt–Winters methods.

The second lecture is all about describing the properties of time-series data and covers stationarity, autoregressive and moving-average processes, the sample autocorrelation and partial autocorrelation functions, and the periodogram.

The third lecture covers ARIMA models as forecasting tools. Topics include model selection, seasonality, and intervention analysis.

The fourth lecture shows how to do regression analysis and statistical inference with time-series data, with an emphasis on how techniques suitable for cross-sectional data must be modified to account for properties typically encountered with time-series data such as autocorrelation and ARCH.

Lest anyone get the impression that Stata does only univariate time-series analysis, a bonus fifth lecture will introduce students to Stata's suite of commands for vector autoregressions (VARs), structural VARs, and cointegration models.

Upcoming NetCourse™ schedule

Enroll by visiting <http://www.stata.com/netcourse/> or use the enclosed order form.

NC461. Introduction to Univariate Time Series Using Stata

Prerequisites: Stata 9; NC101 or equivalent knowledge

Course leader: Brian Poi

Course length: 7 weeks (4 lectures + overview of multivariate methods)

Dates: June 16–August 4, 2006

Enrollment deadline: June 15, 2006

Cost: \$295

Course syllabus: <http://www.stata.com/netcourse/nc461.html>

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: June 16–July 28, 2006

Enrollment deadline: June 15, 2006

Cost: \$95

Course syllabus: <http://www.stata.com/netcourse/nc101.html>

NC151. 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: June 16–July 28, 2006

Enrollment deadline: June 15, 2006

Cost: \$125

Course syllabus: <http://www.stata.com/netcourse/nc151.html>

NC152. Advanced Stata Programming

Content: Advanced issues of programming in the Stata language, focusing on writing commands for general use

Prerequisites: Stata 9; NC151 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>

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NEW BOOK FROM STATA PRESS



Title: *An Introduction to Stata for Health Researchers*

Authors: Svend Juul

Publisher: Stata Press

Copyright: 2006

ISBN: 1-59718-010-6

Pages: 326; paperback

Price: \$47.75

Stata contains powerful tools for performing data management, statistical analysis, and graphics. Writing an introductory text that covers all three of those subjects is no easy feat. *An Introduction to Stata for Health Researchers*, by Svend Juul, manages to accomplish that task by focusing on those topics that are most useful to those involved in medical research.

The first two chapters show you how to install and update Stata, introduce you to the various components of the Stata GUI, and demonstrate how to learn more from Stata's help files, as well as from the wealth of online information available through commands such as `search` and `findit`.

The next several chapters deal with essential topics like loading your first dataset into Stata; creating and manipulating variables; working with missing values; documenting your work by attaching labels to values, variables, and datasets; and exchanging data with other packages. Throughout this section, the author does a great job of putting himself in the shoes of the new user, covering all key information.

Chapter 10 is devoted to summary statistics, tables, and simple tests, like one-way ANOVAs and *t* tests. Chapter 11 provides a remarkable introduction to Stata's graphics system, covering in just 57 pages virtually all aspects that a user typically encounters in day-to-day work. The chapter is replete with examples, and Juul explains new features and options as they appear.

Although the book is billed as a Stata introduction, experienced Stata users will have much to gain from the biostatistical discussion of chapters 12–15. This section covers the usual topics for health researchers: analysis of stratified data via `epitab` and regression models; linear, logistic, and Poisson regression; and survival analysis including Cox regression, standardized rates, and correlation/ROC analysis of measurements—just to name a few. In discussing these methods, the author does an excellent job of showing how they relate to each other, such as the analysis of a stratified case–control study using both `mhodds` and `logistic`. Sometimes the methods agree exactly and sometimes they don't, and the text explains the change in model assumptions leading to the differences.

The text concludes with some supplementary material on advanced topics, such as sample-size calculations, simulation, some Stata programming concepts, and tips on caring for your data and maintaining reproducibility.

An Introduction to Stata for Health Researchers is an excellent resource to help you become productive with Stata as quickly as possible, and the chapters on data management, graphics, and statistics are superb references even for the experienced user.

The table of contents, as well as online ordering information, can be found at <http://www.stata-press.com/books/ishr.html>. You may also order by using the enclosed bookstore order form.

Fifth North American Stata Users Group meeting Announcement and registration

Date: July 24–25, 2006

**Venue: Longwood Galleria Conference Center
342 Longwood Avenue
Boston, MA 02115-5745**

The first day of the fifth North American Stata Users Group meeting will showcase user presentations on a broad variety of topics—for example:

- Using Stata for modeling and analysis
- User-written Stata programs
- Using Stata to import and manage data
- Using Stata for graphics
- Teaching Stata
- Teaching statistics with Stata
- Surveys or critiques of Stata facilities in specific fields
- Software comparisons

The user presentations are being organized by Kit Baum, Liz Allred, and Rich Goldstein. The second day will include several lectures by the following invited speakers:

Matching Methods for Estimating Treatment Effects Using Stata

Guido W. Imbens

Department of Economics, University of California–Berkeley

Econometric Analysis of Time-Series Data Using Stata

David M. Drukker

Director of Econometrics, StataCorp

Group Comparisons and Other Issues in Interpreting Models for Categorical Outcomes Using Stata

J. Scott Long

Department of Sociology, Indiana University

Estimation and Interpretation of Inequality Measures Using Stata

Stephen P. Jenkins

Institute for Social and Economic Research, University of Essex

Submissions

If you are interested in presenting a paper, please submit an abstract (200 words maximum, ASCII text, no math symbols) by May 15 to <http://repec.org/nasug2006/nasug1.php>.

Please contact the organizers with questions or to discuss ideas for presentations.



Conference facilities and accommodations

The North American Stata Users Group meeting has been held in Boston since the meeting originated in 2001. The conference center is part of the Best Western Inn at Longwood. A block of rooms has been reserved for July 23–25. The discounted group rate is \$159.00 per night, plus 12.45% tax for one to four people. The last day to make a reservation at the discounted rate is June 30.

To reserve a room, call the Best Western Inn at Longwood (617-731-4700 or 800-468-2378) and ask for in-house reservations. Please refer to the StataCorp North American Stata Users Group meeting.

Registration and information

Web: <http://www.stata.com/meeting/5nasug/>

Email: stata@stata.com

Tel: 979-696-4600 or toll-free 800-782-8272

Fax: 979-696-4601

Event	Price	Student price
Day 1: Users Group meeting	\$85	\$35
Day 2: Invited presentations	\$100	\$35
Both days: Users Group meeting and invited presentations	\$150	\$55
Day 1: Optional dinner Restaurant TBA	\$35	\$35

Register online at <http://www.stata.com/meeting/5nasug/register.html> or use the enclosed registration form. The registration deadline is July 17, 2006.

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