

# **STATA QUICK REFERENCE AND INDEX**

## **RELEASE 12**



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# Combined subject table of contents

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[GSM]	<i>Getting Started with Stata for Mac</i>	.....	
[GSU]	<i>Getting Started with Stata for Unix</i>	.....	
[GSW]	<i>Getting Started with Stata for Windows</i>	.....	
[U]	Chapter 3	.....	Resources for learning and using Stata
[U]	Chapter 4	.....	Stata's help and search facilities
[R]	help	.....	Display online help
[R]	search	.....	Search Stata documentation

## Data manipulation and management

### Basic data commands

[D]	codebook	.....	Describe data contents
[D]	data management	.....	Introduction to data-management commands
[D]	data types	.....	Quick reference for data types
[D]	datetime	.....	Date and time values and variables
[D]	describe	.....	Describe data in memory or in file
[D]	edit	.....	Browse or edit data with Data Editor
[D]	format	.....	Set variables' output format
[D]	inspect	.....	Display simple summary of data's attributes
[D]	label	.....	Manipulate labels
[D]	list	.....	List values of variables
[D]	missing values	.....	Quick reference for missing values
[D]	rename	.....	Rename variable
[D]	save	.....	Save Stata dataset
[D]	sort	.....	Sort data
[D]	use	.....	Load Stata dataset
[D]	varmanage	.....	Manage variable labels, formats, and other properties

### Creating and dropping variables

[D]	clear	.....	Clear memory
[D]	compress	.....	Compress data in memory
[D]	drop	.....	Eliminate variables or observations
[D]	egen	.....	Extensions to generate
[D]	functions	.....	Functions
[D]	generate	.....	Create or change contents of variable

### Functions and expressions

[U]	Chapter 13	.....	Functions and expressions
[D]	egen	.....	Extensions to generate
[D]	functions	.....	Functions

## Dates and times

[U]	<a href="#">Section 12.5.3</a>	Date and time formats
[U]	<a href="#">Chapter 24</a>	Working with dates and times
[D]	<a href="#">bcal</a>	Business calendar file manipulation
[D]	<a href="#">datetime</a>	Date and time values and variables
[D]	<a href="#">datetime business calendars</a>	Business calendars
[D]	<a href="#">datetime business calendars creation</a>	Business calendars creation
[D]	<a href="#">datetime display formats</a>	Display formats for dates and times
[D]	<a href="#">datetime translation</a>	String to numeric date translation functions

## Loading, saving, importing, and exporting data

[GS]	<a href="#">Chapter 6 (GSM, GSU, GSW)</a>	Using the Data Editor
[U]	<a href="#">Chapter 21</a>	Inputting and importing data
[D]	<a href="#">edit</a>	Browse or edit data with Data Editor
[D]	<a href="#">export</a>	Overview of exporting data from Stata
[TS]	<a href="#">haver</a>	Load data from Haver Analytics database
[D]	<a href="#">import</a>	Overview of importing data into Stata
[D]	<a href="#">import excel</a>	Import and export Excel files
[D]	<a href="#">import sasxport</a>	Import and export datasets in SAS XPORT format
[D]	<a href="#">infile (fixed format)</a>	Read text data in fixed format with a dictionary
[D]	<a href="#">infile (free format)</a>	Read unformatted text data
[D]	<a href="#">infix (fixed format)</a>	Read text data in fixed format
[D]	<a href="#">input</a>	Enter data from keyboard
[D]	<a href="#">insheet</a>	Read text data created by a spreadsheet
[D]	<a href="#">odbc</a>	Load, write, or view data from ODBC sources
[D]	<a href="#">outfile</a>	Export dataset in text format
[D]	<a href="#">outsheet</a>	Write spreadsheet-style dataset
[D]	<a href="#">save</a>	Save Stata dataset
[D]	<a href="#">sysuse</a>	Use shipped dataset
[D]	<a href="#">use</a>	Load Stata dataset
[D]	<a href="#">webuse</a>	Use dataset from Stata website
[D]	<a href="#">xmlsave</a>	Export or import dataset in XML format

## Combining data

[U]	<a href="#">Chapter 22</a>	Combining datasets
[D]	<a href="#">append</a>	Append datasets
[MI]	<a href="#">mi append</a>	Append mi data
[D]	<a href="#">cross</a>	Form every pairwise combination of two datasets
[D]	<a href="#">joinby</a>	Form all pairwise combinations within groups
[D]	<a href="#">merge</a>	Merge datasets
[MI]	<a href="#">mi merge</a>	Merge mi data

## Reshaping datasets

[D]	<a href="#">collapse</a>	Make dataset of summary statistics
[D]	<a href="#">contract</a>	Make dataset of frequencies and percentages
[D]	<a href="#">expand</a>	Duplicate observations
[D]	<a href="#">expandcl</a>	Duplicate clustered observations
[D]	<a href="#">fillin</a>	Rectangularize dataset
[D]	<a href="#">obs</a>	Increase the number of observations in a dataset
[D]	<a href="#">reshape</a>	Convert data from wide to long form and vice versa

[MI]	<a href="#">mi reshape</a>	Reshape mi data
[TS]	<a href="#">rolling</a>	Rolling-window and recursive estimation
[D]	<a href="#">separate</a>	Create separate variables
[SEM]	<a href="#">ssd</a>	Making summary statistics data
[D]	<a href="#">stack</a>	Stack data
[D]	<a href="#">statsby</a>	Collect statistics for a command across a by list
[D]	<a href="#">xpose</a>	Interchange observations and variables

## Labeling, display formats, and notes

[GS]	Chapter 7 ( <a href="#">GSM</a> , <a href="#">GSU</a> , <a href="#">GSW</a> )	Using the Variables Manager
[U]	<a href="#">Section 12.5</a>	Formats: Controlling how data are displayed
[U]	<a href="#">Section 12.6</a>	Dataset, variable, and value labels
[D]	<a href="#">format</a>	Set variables' output format
[D]	<a href="#">label</a>	Manipulate labels
[D]	<a href="#">label language</a>	Labels for variables and values in multiple languages
[D]	<a href="#">labelbook</a>	Label utilities
[D]	<a href="#">notes</a>	Place notes in data
[D]	<a href="#">varmanage</a>	Manage variable labels, formats, and other properties

## Changing and renaming variables

[GS]	Chapter 7 ( <a href="#">GSM</a> , <a href="#">GSU</a> , <a href="#">GSW</a> )	Using the Variables Manager
[U]	<a href="#">Chapter 25</a>	Working with categorical data and factor variables
[D]	<a href="#">clonevar</a>	Clone existing variable
[D]	<a href="#">destring</a>	Convert string variables to numeric variables and vice versa
[D]	<a href="#">encode</a>	Encode string into numeric and vice versa
[D]	<a href="#">generate</a>	Create or change contents of variable
[D]	<a href="#">mvencode</a>	Change missing values to numeric values and vice versa
[D]	<a href="#">order</a>	Reorder variables in dataset
[D]	<a href="#">recode</a>	Recode categorical variables
[D]	<a href="#">rename</a>	Rename variable
[D]	<a href="#">rename group</a>	Rename groups of variables
[D]	<a href="#">split</a>	Split string variables into parts
[D]	<a href="#">varmanage</a>	Manage variable labels, formats, and other properties

## Examining data

[GS]	Chapter 6 ( <a href="#">GSM</a> , <a href="#">GSU</a> , <a href="#">GSW</a> )	Using the Data Editor
[D]	<a href="#">cf</a>	Compare two datasets
[D]	<a href="#">codebook</a>	Describe data contents
[D]	<a href="#">compare</a>	Compare two variables
[D]	<a href="#">count</a>	Count observations satisfying specified conditions
[D]	<a href="#">describe</a>	Describe data in memory or in file
[D]	<a href="#">ds</a>	List variables matching name patterns or other characteristics
[D]	<a href="#">duplicates</a>	Report, tag, or drop duplicate observations
[D]	<a href="#">edit</a>	Browse or edit data with Data Editor
[D]	<a href="#">gsort</a>	Ascending and descending sort
[D]	<a href="#">inspect</a>	Display simple summary of data's attributes
[D]	<a href="#">isid</a>	Check for unique identifiers
[D]	<a href="#">lookfor</a>	Search for string in variable names and labels
[R]	<a href="#">misstable</a>	Tabulate missing values
[MI]	<a href="#">mi describe</a>	Describe mi data
[MI]	<a href="#">mi misstable</a>	Tabulate pattern of missing values

[D]	<code>pctile</code>	Create variable containing percentiles
[ST]	<code>stdescribe</code>	Describe survival-time data
[R]	<code>summarize</code>	Summary statistics
[SVY]	<code>svy: tabulate oneway</code>	One-way tables for survey data
[SVY]	<code>svy: tabulate twoway</code>	Two-way tables for survey data
[P]	<code>tabdisp</code>	Display tables
[R]	<code>table</code>	Tables of summary statistics
[R]	<code>tabstat</code>	Display table of summary statistics
[R]	<code>tabulate oneway</code>	One-way tables of frequencies
[R]	<code>tabulate twoway</code>	Two-way tables of frequencies
[R]	<code>tabulate, summarize()</code>	One- and two-way tables of summary statistics
[XT]	<code>xtdescribe</code>	Describe pattern of xt data

## File manipulation

[D]	<code>cd</code>	Change directory
[D]	<code>cf</code>	Compare two datasets
[D]	<code>changeeol</code>	Convert end-of-line characters of text file
[D]	<code>checksum</code>	Calculate checksum of file
[D]	<code>copy</code>	Copy file from disk or URL
[D]	<code>dir</code>	Display filenames
[D]	<code>erase</code>	Erase a disk file
[D]	<code>filefilter</code>	Convert text or binary patterns in a file
[D]	<code>mkdir</code>	Create directory
[D]	<code>rmdir</code>	Remove directory
[D]	<code>type</code>	Display contents of a file
[D]	<code>zipfile</code>	Compress and uncompress files and directories in zip archive format

## Miscellaneous data commands

[D]	<code>corr2data</code>	Create dataset with specified correlation structure
[D]	<code>drawnorm</code>	Draw sample from multivariate normal distribution
[R]	<code>dydx</code>	Calculate numeric derivatives and integrals
[D]	<code>icd9</code>	ICD-9-CM diagnostic and procedure codes
[D]	<code>ipolate</code>	Linearly interpolate (extrapolate) values
[D]	<code>range</code>	Generate numerical range
[D]	<code>sample</code>	Draw random sample

## Multiple imputation

[MI]	<code>mi add</code>	Add imputations from another mi dataset
[MI]	<code>mi append</code>	Append mi data
[MI]	<code>mi convert</code>	Change style of mi data
[MI]	<code>mi copy</code>	Copy mi flongsep data
[MI]	<code>mi describe</code>	Describe mi data
[MI]	<code>mi erase</code>	Erase mi datasets
[MI]	<code>mi expand</code>	Expand mi data
[MI]	<code>mi export</code>	Export mi data
[MI]	<code>mi export ice</code>	Export mi data to ice format
[MI]	<code>mi export nhanes1</code>	Export mi data to NHANES format
[MI]	<code>mi extract</code>	Extract original or imputed data from mi data
[MI]	<code>mi import</code>	Import data into mi
[MI]	<code>mi import flong</code>	Import flong-like data into mi
[MI]	<code>mi import flongsep</code>	Import flongsep-like data into mi

[MI]	<a href="#">mi import ice</a>	Import ice-format data into mi
[MI]	<a href="#">mi import nhanes1</a>	Import NHANES-format data into mi
[MI]	<a href="#">mi import wide</a>	Import wide-like data into mi
[MI]	<a href="#">mi merge</a>	Merge mi data
[MI]	<a href="#">mi misstable</a>	Tabulate pattern of missing values
[MI]	<a href="#">mi passive</a>	Generate/replace and register passive variables
[MI]	<a href="#">mi ptrace</a>	Load parameter-trace file into Stata
[MI]	<a href="#">mi rename</a>	Rename variable
[MI]	<a href="#">mi replace0</a>	Replace original data
[MI]	<a href="#">mi reset</a>	Reset imputed or passive variables
[MI]	<a href="#">mi reshape</a>	Reshape mi data
[MI]	<a href="#">mi set</a>	Declare multiple-imputation data
[MI]	<a href="#">mi stsplit</a>	Stsplit and stjoin mi data
[MI]	<a href="#">mi update</a>	Ensure that mi data are consistent
[MI]	<a href="#">mi varying</a>	Identify variables that vary across imputations
[MI]	<a href="#">mi xeq</a>	Execute command(s) on individual imputations
[MI]	<a href="#">mi XXXset</a>	Declare mi data to be svy, st, ts, xt, etc.
[MI]	<a href="#">noupdate option</a>	The noupdate option
[MI]	<a href="#">styles</a>	Dataset styles
[MI]	<a href="#">workflow</a>	Suggested workflow

## Utilities

### Basic utilities

[GS]	<a href="#">Chapter 13 (GSM, GSU, GSW)</a>	Using the Do-file Editor—automating Stata
[U]	<a href="#">Chapter 4</a>	Stata's help and search facilities
[U]	<a href="#">Chapter 15</a>	Saving and printing output—log files
[U]	<a href="#">Chapter 16</a>	Do-files
[R]	<a href="#">about</a>	Display information about your Stata
[D]	<a href="#">by</a>	Repeat Stata command on subsets of the data
[R]	<a href="#">copyright</a>	Display copyright information
[R]	<a href="#">do</a>	Execute commands from a file
[R]	<a href="#">doedit</a>	Edit do-files and other text files
[R]	<a href="#">exit</a>	Exit Stata
[R]	<a href="#">help</a>	Display online help
[R]	<a href="#">hsearch</a>	Search help files
[R]	<a href="#">level</a>	Set default confidence level
[R]	<a href="#">log</a>	Echo copy of session to file
[D]	<a href="#">obs</a>	Increase the number of observations in a dataset
[R]	<a href="#">#review</a>	Review previous commands
[R]	<a href="#">search</a>	Search Stata documentation
[R]	<a href="#">translate</a>	Print and translate logs
[R]	<a href="#">view</a>	View files and logs
[D]	<a href="#">zipfile</a>	Compress and uncompress files and directories in zip archive format

### Error messages

[U]	<a href="#">Chapter 8</a>	Error messages and return codes
[P]	<a href="#">error</a>	Display generic error message and exit
[R]	<a href="#">error messages</a>	Error messages and return codes
[P]	<a href="#">rmmsg</a>	Return messages

## Saved results

[U]	Section 13.5	Accessing coefficients and standard errors
[U]	Section 18.8	Accessing results calculated by other programs
[U]	Section 18.9	Accessing results calculated by estimation commands
[U]	Section 18.10	Saving results
[P]	creturn	Return c-class values
[P]	ereturn	Post the estimation results
[R]	estimates	Save and manipulate estimation results
[R]	estimates describe	Describe estimation results
[R]	estimates for	Repeat postestimation command across models
[R]	estimates notes	Add notes to estimation results
[R]	estimates replay	Redisplay estimation results
[R]	estimates save	Save and use estimation results
[R]	estimates stats	Model statistics
[R]	estimates store	Store and restore estimation results
[R]	estimates table	Compare estimation results
[R]	estimates title	Set title for estimation results
[P]	_return	Preserve saved results
[P]	return	Return saved results
[R]	saved results	Saved results

## Internet

[U]	Chapter 28	Using the Internet to keep up to date
[R]	adoupdate	Update user-written ado-files
[D]	checksum	Calculate checksum of file
[D]	copy	Copy file from disk or URL
[R]	net	Install and manage user-written additions from the Internet
[R]	net search	Search the Internet for installable packages
[R]	netio	Control Internet connections
[R]	news	Report Stata news
[R]	sj	Stata Journal and STB installation instructions
[R]	ssc	Install and uninstall packages from SSC
[R]	update	Update Stata
[D]	use	Load Stata dataset

## Data types and memory

[U]	Chapter 6	Managing memory
[U]	Section 12.2.2	Numeric storage types
[U]	Section 12.4.4	String storage types
[U]	Section 13.11	Precision and problems therein
[U]	Chapter 23	Working with strings
[D]	compress	Compress data in memory
[D]	data types	Quick reference for data types
[R]	matsize	Set the maximum number of variables in a model
[D]	memory	Memory management
[D]	missing values	Quick reference for missing values
[D]	recast	Change storage type of variable

## Advanced utilities

[D]	<code>assert</code>	Verify truth of claim
[D]	<code>cd</code>	Change directory
[D]	<code>changeool</code>	Convert end-of-line characters of text file
[D]	<code>checksum</code>	Calculate checksum of file
[D]	<code>copy</code>	Copy file from disk or URL
[P]	<code>_datasignature</code>	Determine whether data have changed
[D]	<code>datasignature</code>	Determine whether data have changed
[R]	<code>db</code>	Launch dialog
[P]	<code>dialog programming</code>	Dialog programming
[D]	<code>dir</code>	Display filenames
[P]	<code>discard</code>	Drop automatically loaded programs
[D]	<code>erase</code>	Erase a disk file
[P]	<code>file</code>	Read and write ASCII text and binary files
[D]	<code>filefilter</code>	Convert text or binary patterns in a file
[D]	<code>hexdump</code>	Display hexadecimal report on file
[D]	<code>mkdir</code>	Create directory
[R]	<code>more</code>	The —more— message
[R]	<code>query</code>	Display system parameters
[P]	<code>quietly</code>	Quietly and noisily perform Stata command
[D]	<code>rmdir</code>	Remove directory
[R]	<code>set</code>	Overview of system parameters
[R]	<code>set cformat</code>	Format settings for coefficient tables
[R]	<code>set_defaults</code>	Reset system parameters to original Stata defaults
[R]	<code>set emptycells</code>	Set what to do with empty cells in interactions
[R]	<code>set seed</code>	Specify initial value of random-number seed
[R]	<code>set showbaselevels</code>	Display settings for coefficient tables
[D]	<code>shell</code>	Temporarily invoke operating system
[P]	<code>signestimationsample</code>	Determine whether the estimation sample has changed
[P]	<code>smcl</code>	Stata Markup and Control Language
[P]	<code>sysdir</code>	Query and set system directories
[D]	<code>type</code>	Display contents of a file
[R]	<code>which</code>	Display location and version for an ado-file

## Graphics

### Common graphs

[G-2]	<code>graph</code>	The graph command
[G-2]	<code>graph bar</code>	Bar charts
[G-2]	<code>graph box</code>	Box plots
[G-2]	<code>graph combine</code>	Combine multiple graphs
[G-2]	<code>graph copy</code>	Copy graph in memory
[G-2]	<code>graph describe</code>	Describe contents of graph in memory or on disk
[G-2]	<code>graph dir</code>	List names of graphs in memory and on disk
[G-2]	<code>graph display</code>	Display graph stored in memory
[G-2]	<code>graph dot</code>	Dot charts (summary statistics)
[G-2]	<code>graph drop</code>	Drop graphs from memory
[G-2]	<code>graph export</code>	Export current graph
[G-2]	<code>graph manipulation</code>	Graph manipulation commands
[G-2]	<code>graph matrix</code>	Matrix graphs

[G-2]	<code>graph other</code>	Other graphics commands
[G-2]	<code>graph pie</code>	Pie charts
[G-2]	<code>graph play</code>	Apply edits from a recording on current graph
[G-2]	<code>graph print</code>	Print a graph
[G-2]	<code>graph query</code>	List available schemes and styles
[G-2]	<code>graph rename</code>	Rename graph in memory
[G-2]	<code>graph save</code>	Save graph to disk
[G-2]	<code>graph set</code>	Set graphics options
[G-2]	<code>graph twoway</code>	Twoway graphs
[G-2]	<code>graph twoway area</code>	Twoway line plot with area shading
[G-2]	<code>graph twoway bar</code>	Twoway bar plots
[G-2]	<code>graph twoway connected</code>	Twoway connected plots
[G-2]	<code>graph twoway contour</code>	Twoway contour plot with area shading
[G-2]	<code>graph twoway contourline</code>	Twoway contour-line plot
[G-2]	<code>graph twoway dot</code>	Twoway dot plots
[G-2]	<code>graph twoway dropline</code>	Twoway dropped-line plots
[G-2]	<code>graph twoway fpfit</code>	Twoway fractional-polynomial prediction plots
[G-2]	<code>graph twoway fpfitci</code>	Twoway fractional-polynomial prediction plots with CIs
[G-2]	<code>graph twoway function</code>	Twoway line plot of function
[G-2]	<code>graph twoway histogram</code>	Histogram plots
[G-2]	<code>graph twoway kdensity</code>	Kernel density plots
[G-2]	<code>graph twoway lfit</code>	Twoway linear prediction plots
[G-2]	<code>graph twoway lfitci</code>	Twoway linear prediction plots with CIs
[G-2]	<code>graph twoway line</code>	Twoway line plots
[G-2]	<code>graph twoway lowess</code>	Local linear smooth plots
[G-2]	<code>graph twoway lpoly</code>	Local polynomial smooth plots
[G-2]	<code>graph twoway lpolyci</code>	Local polynomial smooth plots with CIs
[G-2]	<code>graph twoway mband</code>	Twoway median-band plots
[G-2]	<code>graph twoway mspline</code>	Twoway median-spline plots
[G-2]	<code>graph twoway pcarrow</code>	Paired-coordinate plot with arrows
[G-2]	<code>graph twoway pcarrowi</code>	Twoway pcarrow with immediate arguments
[G-2]	<code>graph twoway pccapsym</code>	Paired-coordinate plot with spikes and marker symbols
[G-2]	<code>graph twoway pci</code>	Twoway paired-coordinate plot with immediate arguments
[G-2]	<code>graph twoway pcscatter</code>	Paired-coordinate plot with markers
[G-2]	<code>graph twoway pcspike</code>	Paired-coordinate plot with spikes
[G-2]	<code>graph twoway qfit</code>	Twoway quadratic prediction plots
[G-2]	<code>graph twoway qfitci</code>	Twoway quadratic prediction plots with CIs
[G-2]	<code>graph twoway rarea</code>	Range plot with area shading
[G-2]	<code>graph twoway rbar</code>	Range plot with bars
[G-2]	<code>graph twoway rcap</code>	Range plot with capped spikes
[G-2]	<code>graph twoway rcapsym</code>	Range plot with spikes capped with marker symbols
[G-2]	<code>graph twoway rconnected</code>	Range plot with connected lines
[G-2]	<code>graph twoway rline</code>	Range plot with lines
[G-2]	<code>graph twoway rscatter</code>	Range plot with markers
[G-2]	<code>graph twoway rspike</code>	Range plot with spikes
[G-2]	<code>graph twoway scatter</code>	Twoway scatterplots
[G-2]	<code>graph twoway scatteri</code>	Scatter with immediate arguments
[G-2]	<code>graph twoway spike</code>	Twoway spike plots
[G-2]	<code>graph twoway tsline</code>	Twoway line plots
[G-2]	<code>graph use</code>	Display graph stored on disk
[R]	<code>histogram</code>	Histograms for continuous and categorical variables



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[R]	<a href="#">marginsplot</a>	Graph results from margins (profile plots, etc.)
[G-2]	<a href="#">palette</a>	Display palettes of available selections

## Distributional graphs

[R]	<a href="#">cumul</a>	Cumulative distribution
[R]	<a href="#">diagnostic plots</a>	Distributional diagnostic plots
[R]	<a href="#">ladder</a>	Ladder of powers
[R]	<a href="#">spikeplot</a>	Spike plots and rootograms

## Multivariate graphs

[MV]	<a href="#">biplot</a>	Biplots
[MV]	<a href="#">ca postestimation</a>	Postestimation tools for ca and camat
[MV]	<a href="#">cluster dendrogram</a>	Dendrograms for hierarchical cluster analysis
[MV]	<a href="#">mca postestimation</a>	Postestimation tools for mca
[MV]	<a href="#">mds postestimation</a>	Postestimation tools for mds, mdsmat, and mdslong
[MV]	<a href="#">scoreplot</a>	Score and loading plots
[MV]	<a href="#">screplot</a>	Scree plot

## Quality control

[R]	<a href="#">cusum</a>	Graph cumulative spectral distribution
[R]	<a href="#">qc</a>	Quality control charts
[R]	<a href="#">serrbar</a>	Graph standard error bar chart

## Regression diagnostic plots

[R]	<a href="#">regress postestimation</a>	Postestimation tools for regress
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## ROC analysis

[R]	<a href="#">logistic postestimation</a>	Postestimation tools for logistic
[R]	<a href="#">roccomp</a>	Tests of equality of ROC areas
[R]	<a href="#">rocfit postestimation</a>	Postestimation tools for rocfit
[R]	<a href="#">rocregplot</a>	Plot marginal and covariate-specific ROC curves after rocreg
[R]	<a href="#">roctab</a>	Nonparametric ROC analysis

## Smoothing and densities

[R]	<a href="#">kdensity</a>	Univariate kernel density estimation
[R]	<a href="#">lowess</a>	Lowess smoothing
[R]	<a href="#">lpoly</a>	Kernel-weighted local polynomial smoothing
[R]	<a href="#">sunflower</a>	Density-distribution sunflower plots

## Survival-analysis graphs

[ST]	<a href="#">ltable</a>	Life tables for survival data
[ST]	<a href="#">stci</a>	Confidence intervals for means and percentiles of survival time
[ST]	<a href="#">stcox PH-assumption tests</a>	Tests of proportional-hazards assumption
[ST]	<a href="#">stcurve</a>	Plot survivor, hazard, cumulative hazard, or cumulative incidence function
[ST]	<a href="#">strate</a>	Tabulate failure rates and rate ratios
[ST]	<a href="#">sts graph</a>	Graph the survivor and cumulative hazard functions

## Time-series graphs

[TS]	<a href="#">corrgram</a>	.....	Tabulate and graph autocorrelations
[TS]	<a href="#">cumsp</a>	.....	Cumulative spectral distribution
[TS]	<a href="#">fcast graph</a>	.....	Graph forecasts of variables computed by fcast compute
[TS]	<a href="#">irf cgraph</a>	.....	Combine graphs of IRFs, dynamic-multiplier functions, and FEVDs
[TS]	<a href="#">irf graph</a>	.....	Graph IRFs, dynamic-multiplier functions, and FEVDs
[TS]	<a href="#">irf ograph</a>	.....	Graph overlaid IRFs, dynamic-multiplier functions, and FEVDs
[TS]	<a href="#">pergram</a>	.....	Periodogram
[TS]	<a href="#">tsline</a>	.....	Plot time-series data
[TS]	<a href="#">varstable</a>	.....	Check the stability condition of VAR or SVAR estimates
[TS]	<a href="#">vecstable</a>	.....	Check the stability condition of VECM estimates
[TS]	<a href="#">wntestb</a>	.....	Bartlett's periodogram-based test for white noise
[TS]	<a href="#">xcorr</a>	.....	Cross-correlogram for bivariate time series

## More statistical graphs

[R]	<a href="#">dotplot</a>	.....	Comparative scatterplots
[ST]	<a href="#">epitab</a>	.....	Tables for epidemiologists
[R]	<a href="#">fracpoly postestimation</a>	.....	Postestimation tools for fracpoly
[R]	<a href="#">grmeanby</a>	.....	Graph means and medians by categorical variables
[R]	<a href="#">pkexamine</a>	.....	Calculate pharmacokinetic measures
[R]	<a href="#">pksumm</a>	.....	Summarize pharmacokinetic data
[R]	<a href="#">stem</a>	.....	Stem-and-leaf displays
[XT]	<a href="#">xtline</a>	.....	Panel-data line plots

## Editing

[G-1]	<a href="#">graph editor</a>	.....	Graph Editor
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## Graph utilities

[G-2]	<a href="#">set graphics</a>	.....	Set whether graphs are displayed
[G-2]	<a href="#">set printcolor</a>	.....	Set how colors are treated when graphs are printed
[G-2]	<a href="#">set scheme</a>	.....	Set default scheme

## Graph schemes

[G-4]	<a href="#">schemes intro</a>	.....	Introduction to schemes
[G-4]	<a href="#">scheme economist</a>	.....	Scheme description: economist
[G-4]	<a href="#">scheme s1</a>	.....	Scheme description: s1 family
[G-4]	<a href="#">scheme s2</a>	.....	Scheme description: s2 family
[G-4]	<a href="#">scheme sj</a>	.....	Scheme description: sj

## Graph concepts

[G-4]	<a href="#">concept: gph files</a>	.....	Using gph files
[G-4]	<a href="#">concept: lines</a>	.....	Using lines
[G-4]	<a href="#">concept: repeated options</a>	.....	Interpretation of repeated options
[G-4]	<a href="#">text</a>	.....	Text in graphs

# Statistics

## ANOVA and related

[U]	<a href="#">Chapter 26</a>	Overview of Stata estimation commands
[R]	<a href="#">anova</a>	Analysis of variance and covariance
[R]	<a href="#">contrast</a>	Contrasts and linear hypothesis tests after estimation
[R]	<a href="#">loneq</a>	Large one-way ANOVA, random effects, and reliability
[MV]	<a href="#">manova</a>	Multivariate analysis of variance and covariance
[R]	<a href="#">oneway</a>	One-way analysis of variance
[R]	<a href="#">pkcross</a>	Analyze crossover experiments
[R]	<a href="#">pkshape</a>	Reshape (pharmacokinetic) Latin-square data
[R]	<a href="#">pwcompare</a>	Pairwise comparisons
[R]	<a href="#">regress</a>	Linear regression
[XT]	<a href="#">xtmixed</a>	Multilevel mixed-effects linear regression
[XT]	<a href="#">xtreg</a>	Fixed-, between-, and random-effects and population-averaged linear models

## Basic statistics

[R]	<a href="#">anova</a>	Analysis of variance and covariance
[R]	<a href="#">bitest</a>	Binomial probability test
[R]	<a href="#">ci</a>	Confidence intervals for means, proportions, and counts
[R]	<a href="#">correlate</a>	Correlations (covariances) of variables or coefficients
[D]	<a href="#">egen</a>	Extensions to generate
[R]	<a href="#">mean</a>	Estimate means
[R]	<a href="#">misstable</a>	Tabulate missing values
[MV]	<a href="#">mvtest</a>	Multivariate tests
[R]	<a href="#">oneway</a>	One-way analysis of variance
[R]	<a href="#">proportion</a>	Estimate proportions
[R]	<a href="#">prtest</a>	One- and two-sample tests of proportions
[R]	<a href="#">pwmean</a>	Pairwise comparisons of means
[R]	<a href="#">ranksum</a>	Equality tests on unmatched data
[R]	<a href="#">ratio</a>	Estimate ratios
[R]	<a href="#">regress</a>	Linear regression
[R]	<a href="#">sampsi</a>	Sample size and power for means and proportions
[R]	<a href="#">sdtest</a>	Variance-comparison tests
[R]	<a href="#">signrank</a>	Equality tests on matched data
[D]	<a href="#">statsby</a>	Collect statistics for a command across a by list
[R]	<a href="#">summarize</a>	Summary statistics
[R]	<a href="#">table</a>	Tables of summary statistics
[R]	<a href="#">tabstat</a>	Display table of summary statistics
[R]	<a href="#">tabulate oneway</a>	One-way tables of frequencies
[R]	<a href="#">tabulate twoway</a>	Two-way tables of frequencies
[R]	<a href="#">tabulate, summarize()</a>	One- and two-way tables of summary statistics
[R]	<a href="#">total</a>	Estimate totals
[R]	<a href="#">ttest</a>	Mean-comparison tests

## Binary outcomes

[U]	<a href="#">Chapter 20</a>	Estimation and postestimation commands
[U]	<a href="#">Section 26.6</a>	Binary-outcome qualitative dependent-variable models
[R]	<a href="#">binreg</a>	Generalized linear models: Extensions to the binomial family
[R]	<a href="#">biprobit</a>	Bivariate probit regression

[R]	<a href="#">cloglog</a>	Complementary log-log regression
[R]	<a href="#">exlogistic</a>	Exact logistic regression
[R]	<a href="#">glm</a>	Generalized linear models
[R]	<a href="#">glogit</a>	Logit and probit regression for grouped data
[R]	<a href="#">heckprob</a>	Probit model with sample selection
[R]	<a href="#">hetprob</a>	Heteroskedastic probit model
[R]	<a href="#">ivprobit</a>	Probit model with continuous endogenous regressors
[R]	<a href="#">logistic</a>	Logistic regression, reporting odds ratios
[R]	<a href="#">logit</a>	Logistic regression, reporting coefficients
[R]	<a href="#">probit</a>	Probit regression
[R]	<a href="#">rocfits</a>	Parametric ROC models
[R]	<a href="#">roclog</a>	Receiver operating characteristic (ROC) regression
[R]	<a href="#">scobit</a>	Skewed logistic regression
[XT]	<a href="#">xtcloglog</a>	Random-effects and population-averaged cloglog models
[XT]	<a href="#">xtlogit</a>	Fixed-effects, random-effects, and population-averaged logit models
[XT]	<a href="#">xtmelogit</a>	Multilevel mixed-effects logistic regression
[XT]	<a href="#">xtprobit</a>	Random-effects and population-averaged probit models

## Categorical outcomes

[U]	<a href="#">Chapter 20</a>	Estimation and postestimation commands
[U]	<a href="#">Section 26.9</a>	Multiple-outcome qualitative dependent-variable models
[R]	<a href="#">asclogit</a>	Alternative-specific conditional logit (McFadden's choice) model
[R]	<a href="#">asmprobit</a>	Alternative-specific multinomial probit regression
[R]	<a href="#">clogit</a>	Conditional (fixed-effects) logistic regression
[R]	<a href="#">mlogit</a>	Multinomial (polytomous) logistic regression
[R]	<a href="#">mprobit</a>	Multinomial probit regression
[R]	<a href="#">nlogit</a>	Nested logit regression
[R]	<a href="#">slogit</a>	Stereotype logistic regression

## Cluster analysis

[U]	<a href="#">Section 26.23</a>	Multivariate and cluster analysis
[MV]	<a href="#">cluster</a>	Introduction to cluster-analysis commands
[MV]	<a href="#">cluster dendrogram</a>	Dendrograms for hierarchical cluster analysis
[MV]	<a href="#">cluster generate</a>	Generate summary or grouping variables from a cluster analysis
[MV]	<a href="#">cluster kmeans and kmedians</a>	Kmeans and kmedians cluster analysis
[MV]	<a href="#">cluster linkage</a>	Hierarchical cluster analysis
[MV]	<a href="#">cluster notes</a>	Place notes in cluster analysis
[MV]	<a href="#">cluster programming subroutines</a>	Add cluster-analysis routines
[MV]	<a href="#">cluster programming utilities</a>	Cluster-analysis programming utilities
[MV]	<a href="#">cluster stop</a>	Cluster-analysis stopping rules
[MV]	<a href="#">cluster utility</a>	List, rename, use, and drop cluster analyses
[MV]	<a href="#">clustermat</a>	Introduction to clustermat commands
[MV]	<a href="#">matrix dissimilarity</a>	Compute similarity or dissimilarity measures
[MV]	<a href="#">measure_option</a>	Option for similarity and dissimilarity measures
[MV]	<a href="#">multivariate</a>	Introduction to multivariate commands

## Correspondence analysis

[MV]	<a href="#">ca</a>	Simple correspondence analysis
[MV]	<a href="#">mca</a>	Multiple and joint correspondence analysis

## Count outcomes

[U]	<a href="#">Chapter 20</a>	Estimation and postestimation commands
[U]	<a href="#">Section 26.10</a>	Count dependent-variable models
[U]	<a href="#">Section 26.17.5</a>	Count dependent-variable models with panel data
[R]	<a href="#">expoisson</a>	Exact Poisson regression
[R]	<a href="#">nbgreg</a>	Negative binomial regression
[R]	<a href="#">poisson</a>	Poisson regression
[R]	<a href="#">tnbgreg</a>	Truncated negative binomial regression
[R]	<a href="#">tpoisson</a>	Truncated Poisson regression
[XT]	<a href="#">xtmepoisson</a>	Multilevel mixed-effects Poisson regression
[XT]	<a href="#">xtnbreg</a>	Fixed-effects, random-effects, & population-averaged negative binomial models
[XT]	<a href="#">xtpoisson</a>	Fixed-effects, random-effects, and population-averaged Poisson models
[R]	<a href="#">zinb</a>	Zero-inflated negative binomial regression
[R]	<a href="#">zip</a>	Zero-inflated Poisson regression

## Discriminant analysis

[MV]	<a href="#">candisc</a>	Canonical linear discriminant analysis
[MV]	<a href="#">discrim</a>	Discriminant analysis
[MV]	<a href="#">discrim estat</a>	Postestimation tools for discrim
[MV]	<a href="#">discrim knn</a>	kth-nearest-neighbor discriminant analysis
[MV]	<a href="#">discrim lda</a>	Linear discriminant analysis
[MV]	<a href="#">discrim logistic</a>	Logistic discriminant analysis
[MV]	<a href="#">discrim qda</a>	Quadratic discriminant analysis
[MV]	<a href="#">scoreplot</a>	Score and loading plots
[MV]	<a href="#">screeplot</a>	Scree plot

## Do-it-yourself generalized method of moments

[U]	<a href="#">Section 26.19</a>	Generalized method of moments (GMM)
[R]	<a href="#">gmm</a>	Generalized method of moments estimation
[P]	<a href="#">matrix</a>	Introduction to matrix commands

## Do-it-yourself maximum likelihood estimation

[P]	<a href="#">matrix</a>	Introduction to matrix commands
[R]	<a href="#">ml</a>	Maximum likelihood estimation

## Endogenous covariates

[U]	<a href="#">Chapter 20</a>	Estimation and postestimation commands
[U]	<a href="#">Chapter 26</a>	Overview of Stata estimation commands
[R]	<a href="#">gmm</a>	Generalized method of moments estimation
[R]	<a href="#">ivprobit</a>	Probit model with continuous endogenous regressors
[R]	<a href="#">ivregress</a>	Single-equation instrumental-variables regression
[R]	<a href="#">ivtobit</a>	Tobit model with continuous endogenous regressors
[R]	<a href="#">reg3</a>	Three-stage estimation for systems of simultaneous equations
[R]	<a href="#">treatreg</a>	Treatment-effects model
[XT]	<a href="#">xtdpd</a>	Linear dynamic panel-data estimation
[XT]	<a href="#">xtdpdsys</a>	Arellano–Bover/Blundell–Bond linear dynamic panel-data estimation
[XT]	<a href="#">xhtaylor</a>	Hausman–Taylor estimator for error-components models
[XT]	<a href="#">xtivreg</a>	Instrumental variables and two-stage least squares for panel-data models

## Epidemiology and related

[R]	<code>binreg</code>	Generalized linear models: Extensions to the binomial family
[R]	<code>brier</code>	Brier score decomposition
[R]	<code>dstdize</code>	Direct and indirect standardization
[ST]	<code>epitab</code>	Tables for epidemiologists
[R]	<code>exlogistic</code>	Exact logistic regression
[D]	<code>icd9</code>	ICD-9-CM diagnostic and procedure codes
[R]	<code>kappa</code>	Interrater agreement
[R]	<code>logistic</code>	Logistic regression, reporting odds ratios
[R]	<code>pk</code>	Pharmacokinetic (biopharmaceutical) data
[R]	<code>pkcollapse</code>	Generate pharmacokinetic measurement dataset
[R]	<code>pkcross</code>	Analyze crossover experiments
[R]	<code>pkequiv</code>	Perform bioequivalence tests
[R]	<code>pkexamine</code>	Calculate pharmacokinetic measures
[R]	<code>pkshape</code>	Reshape (pharmacokinetic) Latin-square data
[R]	<code>pksumm</code>	Summarize pharmacokinetic data
[R]	<code>roc</code>	Receiver operating characteristic (ROC) analysis
[R]	<code>roccomp</code>	Tests of equality of ROC areas
[R]	<code>rocf</code>	Parametric ROC models
[R]	<code>rocreg</code>	Receiver operating characteristic (ROC) regression
[R]	<code>roctab</code>	Nonparametric ROC analysis
[R]	<code>symmetry</code>	Symmetry and marginal homogeneity tests
[R]	<code>tabulate twoway</code>	Two-way tables of frequencies

## Estimation related

[R]	<code>BIC note</code>	Calculating and interpreting BIC
[R]	<code>constraint</code>	Define and list constraints
[R]	<code>eform_option</code>	Displaying exponentiated coefficients
[R]	<code>estimation options</code>	Estimation options
[R]	<code>fracpoly</code>	Fractional polynomial regression
[R]	<code>maximize</code>	Details of iterative maximization
[R]	<code>mfp</code>	Multivariable fractional polynomial models
[R]	<code>mkspline</code>	Linear and restricted cubic spline construction
[R]	<code>stepwise</code>	Stepwise estimation
[R]	<code>vce_option</code>	Variance estimators
[XT]	<code>vce_options</code>	Variance estimators

## Exact statistics

[U]	<code>Section 26.11</code>	Exact estimators
[R]	<code>bitest</code>	Binomial probability test
[R]	<code>centile</code>	Report centile and confidence interval
[R]	<code>ci</code>	Confidence intervals for means, proportions, and counts
[R]	<code>dstdize</code>	Direct and indirect standardization
[ST]	<code>epitab</code>	Tables for epidemiologists
[R]	<code>exlogistic</code>	Exact logistic regression
[R]	<code>expoisson</code>	Exact Poisson regression
[R]	<code>ksmirnov</code>	Kolmogorov–Smirnov equality-of-distributions test
[R]	<code>loneway</code>	Large one-way ANOVA, random effects, and reliability
[R]	<code>ranksum</code>	Equality tests on unmatched data
[R]	<code>roctab</code>	Nonparametric ROC analysis

[R]	<a href="#">symmetry</a>	Symmetry and marginal homogeneity tests
[R]	<a href="#">tabulate twoway</a>	Two-way tables of frequencies
[R]	<a href="#">tetrachoric</a>	Tetrachoric correlations for binary variables

## Factor analysis and principal components

[R]	<a href="#">alpha</a>	Compute interitem correlations (covariances) and Cronbach's alpha
[MV]	<a href="#">canon</a>	Canonical correlations
[MV]	<a href="#">factor</a>	Factor analysis
[MV]	<a href="#">pca</a>	Principal component analysis
[MV]	<a href="#">rotate</a>	Orthogonal and oblique rotations after factor and pca
[MV]	<a href="#">rotatemat</a>	Orthogonal and oblique rotations of a Stata matrix
[MV]	<a href="#">scoreplot</a>	Score and loading plots
[MV]	<a href="#">screeplot</a>	Scree plot
[R]	<a href="#">tetrachoric</a>	Tetrachoric correlations for binary variables

## Generalized linear models

[U]	<a href="#">Chapter 20</a>	Estimation and postestimation commands
[U]	<a href="#">Section 26.5</a>	Generalized linear models
[R]	<a href="#">binreg</a>	Generalized linear models: Extensions to the binomial family
[R]	<a href="#">glm</a>	Generalized linear models
[XT]	<a href="#">xtgee</a>	Fit population-averaged panel-data models by using GEE

## Indicator and categorical variables

[U]	<a href="#">Section 11.4.3</a>	Factor variables
[U]	<a href="#">Chapter 25</a>	Working with categorical data and factor variables
[R]	<a href="#">fvset</a>	Declare factor-variable settings

## Linear regression and related

[U]	<a href="#">Chapter 20</a>	Estimation and postestimation commands
[U]	<a href="#">Chapter 26</a>	Overview of Stata estimation commands
[R]	<a href="#">areg</a>	Linear regression with a large dummy-variable set
[R]	<a href="#">cnsreg</a>	Constrained linear regression
[R]	<a href="#">constraint</a>	Define and list constraints
[R]	<a href="#">eivreg</a>	Errors-in-variables regression
[I]	<a href="#">estimation commands</a>	Quick reference for estimation commands
[R]	<a href="#">fracpoly</a>	Fractional polynomial regression
[R]	<a href="#">frontier</a>	Stochastic frontier models
[R]	<a href="#">glm</a>	Generalized linear models
[R]	<a href="#">gmm</a>	Generalized method of moments estimation
[R]	<a href="#">heckman</a>	Heckman selection model
[R]	<a href="#">intreg</a>	Interval regression
[R]	<a href="#">ivregress</a>	Single-equation instrumental-variables regression
[R]	<a href="#">ivtobit</a>	Tobit model with continuous endogenous regressors
[R]	<a href="#">logit</a>	Logistic regression, reporting coefficients
[R]	<a href="#">lpoly</a>	Kernel-weighted local polynomial smoothing
[R]	<a href="#">mfp</a>	Multivariable fractional polynomial models
[R]	<a href="#">mvreg</a>	Multivariate regression
[R]	<a href="#">nbreg</a>	Negative binomial regression
[R]	<a href="#">nestreg</a>	Nested model statistics
[TS]	<a href="#">newey</a>	Regression with Newey–West standard errors
[R]	<a href="#">nl</a>	Nonlinear least-squares estimation

[R]	<a href="#">nlsur</a>	Estimation of nonlinear systems of equations
[R]	<a href="#">orthog</a>	Orthogonalize variables and compute orthogonal polynomials
[R]	<a href="#">poisson</a>	Poisson regression
[TS]	<a href="#">prais</a>	Prais–Winsten and Cochrane–Orcutt regression
[R]	<a href="#">qreg</a>	Quantile regression
[R]	<a href="#">reg3</a>	Three-stage estimation for systems of simultaneous equations
[R]	<a href="#">regress</a>	Linear regression
[R]	<a href="#">rocfits</a>	Parametric ROC models
[R]	<a href="#">rreg</a>	Robust regression
[ST]	<a href="#">stcox</a>	Cox proportional hazards model
[ST]	<a href="#">sterreg</a>	Competing-risks regression
[R]	<a href="#">stepwise</a>	Stepwise estimation
[ST]	<a href="#">streg</a>	Parametric survival models
[R]	<a href="#">sureg</a>	Zellner’s seemingly unrelated regression
[R]	<a href="#">tnbreg</a>	Truncated negative binomial regression
[R]	<a href="#">tobit</a>	Tobit regression
[R]	<a href="#">tpoisson</a>	Truncated Poisson regression
[R]	<a href="#">treatreg</a>	Treatment-effects model
[R]	<a href="#">truncreg</a>	Truncated regression
[R]	<a href="#">vwls</a>	Variance-weighted least squares
[XT]	<a href="#">xtabond</a>	Arellano–Bond linear dynamic panel-data estimation
[XT]	<a href="#">xtcloglog</a>	Random-effects and population-averaged cloglog models
[XT]	<a href="#">xtdpd</a>	Linear dynamic panel-data estimation
[XT]	<a href="#">xtdpdsys</a>	Arellano–Bover/Blundell–Bond linear dynamic panel-data estimation
[XT]	<a href="#">xtfrontier</a>	Stochastic frontier models for panel data
[XT]	<a href="#">xtgee</a>	Fit population-averaged panel-data models by using GEE
[XT]	<a href="#">xtgls</a>	Fit panel-data models by using GLS
[XT]	<a href="#">xthtaylor</a>	Hausman–Taylor estimator for error-components models
[XT]	<a href="#">xtintreg</a>	Random-effects interval-data regression models
[XT]	<a href="#">xtivreg</a>	Instrumental variables and two-stage least squares for panel-data models
[XT]	<a href="#">xtlogit</a>	Fixed-effects, random-effects, and population-averaged logit models
[XT]	<a href="#">xtmelogit</a>	Multilevel mixed-effects logistic regression
[XT]	<a href="#">xtmepoisson</a>	Multilevel mixed-effects Poisson regression
[XT]	<a href="#">xtmixed</a>	Multilevel mixed-effects linear regression
[XT]	<a href="#">xtnbreg</a>	Fixed-effects, random-effects, & population-averaged negative binomial models
[XT]	<a href="#">xtpcse</a>	Linear regression with panel-corrected standard errors
[XT]	<a href="#">xtpoisson</a>	Fixed-effects, random-effects, and population-averaged Poisson models
[XT]	<a href="#">xtprobit</a>	Random-effects and population-averaged probit models
[XT]	<a href="#">xtre</a>	Random-coefficients model
[XT]	<a href="#">xtreg</a>	Fixed-, between-, and random-effects and population-averaged linear models
[XT]	<a href="#">xtregar</a>	Fixed- and random-effects linear models with an AR(1) disturbance
[XT]	<a href="#">xttobit</a>	Random-effects tobit models
[R]	<a href="#">zinb</a>	Zero-inflated negative binomial regression
[R]	<a href="#">zip</a>	Zero-inflated Poisson regression

## Logistic and probit regression

[U]	<a href="#">Chapter 20</a>	Estimation and postestimation commands
[U]	<a href="#">Chapter 26</a>	Overview of Stata estimation commands
[R]	<a href="#">asclogit</a>	Alternative-specific conditional logit (McFadden’s choice) model
[R]	<a href="#">asmprobit</a>	Alternative-specific multinomial probit regression
[R]	<a href="#">asprobit</a>	Alternative-specific rank-ordered probit regression



[R]	<a href="#">biprobit</a>	Bivariate probit regression
[R]	<a href="#">clogit</a>	Conditional (fixed-effects) logistic regression
[R]	<a href="#">cloglog</a>	Complementary log-log regression
[R]	<a href="#">exlogistic</a>	Exact logistic regression
[R]	<a href="#">glogit</a>	Logit and probit regression for grouped data
[R]	<a href="#">heckprob</a>	Probit model with sample selection
[R]	<a href="#">hetprob</a>	Heteroskedastic probit model
[R]	<a href="#">ivprobit</a>	Probit model with continuous endogenous regressors
[R]	<a href="#">logistic</a>	Logistic regression, reporting odds ratios
[R]	<a href="#">logit</a>	Logistic regression, reporting coefficients
[R]	<a href="#">mlogit</a>	Multinomial (polytomous) logistic regression
[R]	<a href="#">mprobit</a>	Multinomial probit regression
[R]	<a href="#">nlogit</a>	Nested logit regression
[R]	<a href="#">ologit</a>	Ordered logistic regression
[R]	<a href="#">oprobit</a>	Ordered probit regression
[R]	<a href="#">probit</a>	Probit regression
[R]	<a href="#">rologit</a>	Rank-ordered logistic regression
[R]	<a href="#">scobit</a>	Skewed logistic regression
[R]	<a href="#">slogit</a>	Stereotype logistic regression
[XT]	<a href="#">xtcloglog</a>	Random-effects and population-averaged cloglog models
[XT]	<a href="#">xtgee</a>	Fit population-averaged panel-data models by using GEE
[XT]	<a href="#">xtlogit</a>	Fixed-effects, random-effects, and population-averaged logit models
[XT]	<a href="#">xtmelogit</a>	Multilevel mixed-effects logistic regression
[XT]	<a href="#">xtprobit</a>	Random-effects and population-averaged probit models

## Longitudinal data/panel data

[U]	<a href="#">Chapter 20</a>	Estimation and postestimation commands
[U]	<a href="#">Section 26.17</a>	Panel-data models
[XT]	<a href="#">quadchk</a>	Check sensitivity of quadrature approximation
[XT]	<a href="#">xt</a>	Introduction to xt commands
[XT]	<a href="#">xtabond</a>	Arellano–Bond linear dynamic panel-data estimation
[XT]	<a href="#">xtcloglog</a>	Random-effects and population-averaged cloglog models
[XT]	<a href="#">xtdata</a>	Faster specification searches with xt data
[XT]	<a href="#">xtdescribe</a>	Describe pattern of xt data
[XT]	<a href="#">xtdpd</a>	Linear dynamic panel-data estimation
[XT]	<a href="#">xtdpdsys</a>	Arellano–Bover/Blundell–Bond linear dynamic panel-data estimation
[XT]	<a href="#">xtfrontier</a>	Stochastic frontier models for panel data
[XT]	<a href="#">xtgee</a>	Fit population-averaged panel-data models by using GEE
[XT]	<a href="#">xtgls</a>	Fit panel-data models by using GLS
[XT]	<a href="#">xhtaylor</a>	Hausman–Taylor estimator for error-components models
[XT]	<a href="#">xtintreg</a>	Random-effects interval-data regression models
[XT]	<a href="#">xtivreg</a>	Instrumental variables and two-stage least squares for panel-data models
[XT]	<a href="#">xtline</a>	Panel-data line plots
[XT]	<a href="#">xtlogit</a>	Fixed-effects, random-effects, and population-averaged logit models
[XT]	<a href="#">xtmelogit</a>	Multilevel mixed-effects logistic regression
[XT]	<a href="#">xtmepoisson</a>	Multilevel mixed-effects Poisson regression
[XT]	<a href="#">xtmixed</a>	Multilevel mixed-effects linear regression
[XT]	<a href="#">xtnbreg</a>	Fixed-effects, random-effects, & population-averaged negative binomial models
[XT]	<a href="#">xtpcse</a>	Linear regression with panel-corrected standard errors
[XT]	<a href="#">xtpoisson</a>	Fixed-effects, random-effects, and population-averaged Poisson models
[XT]	<a href="#">xtprobit</a>	Random-effects and population-averaged probit models

[XT]	<a href="#">xtrc</a>	Random-coefficients model
[XT]	<a href="#">xtreg</a>	Fixed-, between-, and random-effects and population-averaged linear models
[XT]	<a href="#">xtregar</a>	Fixed- and random-effects linear models with an AR(1) disturbance
[XT]	<a href="#">xtset</a>	Declare data to be panel data
[XT]	<a href="#">xtsum</a>	Summarize xt data
[XT]	<a href="#">xttab</a>	Tabulate xt data
[XT]	<a href="#">xttobit</a>	Random-effects tobit models
[XT]	<a href="#">xtunitroot</a>	Panel-data unit-root tests

## Mixed models

[U]	<a href="#">Chapter 20</a>	Estimation and postestimation commands
[R]	<a href="#">anova</a>	Analysis of variance and covariance
[MV]	<a href="#">manova</a>	Multivariate analysis of variance and covariance
[XT]	<a href="#">xtcloglog</a>	Random-effects and population-averaged cloglog models
[XT]	<a href="#">xtintreg</a>	Random-effects interval-data regression models
[XT]	<a href="#">xtlogit</a>	Fixed-effects, random-effects, and population-averaged logit models
[XT]	<a href="#">xtmelogit</a>	Multilevel mixed-effects logistic regression
[XT]	<a href="#">xtmepoisson</a>	Multilevel mixed-effects Poisson regression
[XT]	<a href="#">xtmixed</a>	Multilevel mixed-effects linear regression
[XT]	<a href="#">xtprobit</a>	Random-effects and population-averaged probit models
[XT]	<a href="#">xtrc</a>	Random-coefficients model
[XT]	<a href="#">xtreg</a>	Fixed-, between-, and random-effects and population-averaged linear models
[XT]	<a href="#">xttobit</a>	Random-effects tobit models

## Multidimensional scaling and biplots

[MV]	<a href="#">biplot</a>	Biplots
[MV]	<a href="#">mds</a>	Multidimensional scaling for two-way data
[MV]	<a href="#">mdslong</a>	Multidimensional scaling of proximity data in long format
[MV]	<a href="#">mdsmat</a>	Multidimensional scaling of proximity data in a matrix
[MV]	<a href="#">measure_option</a>	Option for similarity and dissimilarity measures

## Multilevel/hierarchical models

[XT]	<a href="#">xtmelogit</a>	Multilevel mixed-effects logistic regression
[XT]	<a href="#">xtmepoisson</a>	Multilevel mixed-effects Poisson regression
[XT]	<a href="#">xtmixed</a>	Multilevel mixed-effects linear regression

## Multiple imputation

[U]	<a href="#">Section 26.22</a>	Multiple imputation
[MI]	<a href="#">estimation</a>	Estimation commands for use with mi estimate
[MI]	<a href="#">intro substantive</a>	Introduction to multiple-imputation analysis
[MI]	<a href="#">mi estimate</a>	Estimation using multiple imputations
[MI]	<a href="#">mi estimate using</a>	Estimation using previously saved estimation results
[MI]	<a href="#">mi estimate postestimation</a>	Postestimation tools for mi estimate
[MI]	<a href="#">mi impute</a>	Impute missing values
[MI]	<a href="#">mi impute chained</a>	Impute missing values using chained equations
[MI]	<a href="#">mi impute intreg</a>	Impute using interval regression
[MI]	<a href="#">mi impute logit</a>	Impute using logistic regression
[MI]	<a href="#">mi impute mlogit</a>	Impute using multinomial logistic regression
[MI]	<a href="#">mi impute monotone</a>	Impute missing values in monotone data
[MI]	<a href="#">mi impute mvn</a>	Impute using multivariate normal regression

[MI]	<a href="#">mi impute nbreg</a>	Impute using negative binomial regression
[MI]	<a href="#">mi impute ologit</a>	Impute using ordered logistic regression
[MI]	<a href="#">mi impute pmm</a>	Impute using predictive mean matching
[MI]	<a href="#">mi impute poisson</a>	Impute using Poisson regression
[MI]	<a href="#">mi impute regress</a>	Impute using linear regression
[MI]	<a href="#">mi impute truncreg</a>	Impute using truncated regression
[MI]	<a href="#">mi predict</a>	Obtain multiple-imputation predictions
[MI]	<a href="#">mi test</a>	Test hypotheses after mi estimate

## Multivariate analysis of variance and related techniques

[U]	<a href="#">Section 26.23</a>	Multivariate and cluster analysis
[MV]	<a href="#">canon</a>	Canonical correlations
[MV]	<a href="#">hotelling</a>	Hotelling's T-squared generalized means test
[MV]	<a href="#">manova</a>	Multivariate analysis of variance and covariance
[R]	<a href="#">mvreg</a>	Multivariate regression
[MV]	<a href="#">mvtest covariances</a>	Multivariate tests of covariances
[MV]	<a href="#">mvtest means</a>	Multivariate tests of means

## Nonparametric statistics

[R]	<a href="#">bittest</a>	Binomial probability test
[R]	<a href="#">bootstrap</a>	Bootstrap sampling and estimation
[R]	<a href="#">bsample</a>	Sampling with replacement
[R]	<a href="#">bstat</a>	Report bootstrap results
[R]	<a href="#">centile</a>	Report centile and confidence interval
[R]	<a href="#">cusum</a>	Graph cumulative spectral distribution
[R]	<a href="#">kdensity</a>	Univariate kernel density estimation
[R]	<a href="#">ksmirnov</a>	Kolmogorov–Smirnov equality-of-distributions test
[R]	<a href="#">kwallis</a>	Kruskal–Wallis equality-of-populations rank test
[R]	<a href="#">lowess</a>	Lowess smoothing
[R]	<a href="#">lpoly</a>	Kernel-weighted local polynomial smoothing
[R]	<a href="#">nptrend</a>	Test for trend across ordered groups
[R]	<a href="#">prtest</a>	One- and two-sample tests of proportions
[R]	<a href="#">qreg</a>	Quantile regression
[R]	<a href="#">ranksum</a>	Equality tests on unmatched data
[R]	<a href="#">roc</a>	Receiver operating characteristic (ROC) analysis
[R]	<a href="#">roccomp</a>	Tests of equality of ROC areas
[R]	<a href="#">rocreg</a>	Receiver operating characteristic (ROC) regression
[R]	<a href="#">rocregplot</a>	Plot marginal and covariate-specific ROC curves after rocreg
[R]	<a href="#">roctab</a>	Nonparametric ROC analysis
[R]	<a href="#">runtest</a>	Test for random order
[R]	<a href="#">signrank</a>	Equality tests on matched data
[R]	<a href="#">simulate</a>	Monte Carlo simulations
[R]	<a href="#">smooth</a>	Robust nonlinear smoother
[R]	<a href="#">spearman</a>	Spearman's and Kendall's correlations
[R]	<a href="#">symmetry</a>	Symmetry and marginal homogeneity tests
[R]	<a href="#">tabulate twoway</a>	Two-way tables of frequencies

## Ordinal outcomes

[U]	<a href="#">Chapter 20</a>	Estimation and postestimation commands
[R]	<a href="#">asroprobit</a>	Alternative-specific rank-ordered probit regression

[R]	<a href="#">ologit</a>	Ordered logistic regression
[R]	<a href="#">oprobit</a>	Ordered probit regression
[R]	<a href="#">rologit</a>	Rank-ordered logistic regression

**Other statistics**

[R]	<a href="#">alpha</a>	Compute interitem correlations (covariances) and Cronbach's alpha
[R]	<a href="#">ameans</a>	Arithmetic, geometric, and harmonic means
[R]	<a href="#">brier</a>	Brier score decomposition
[R]	<a href="#">centile</a>	Report centile and confidence interval
[R]	<a href="#">kappa</a>	Interrater agreement
[MV]	<a href="#">mvtest correlations</a>	Multivariate tests of correlations
[R]	<a href="#">pcorr</a>	Partial and semipartial correlation coefficients
[D]	<a href="#">pctile</a>	Create variable containing percentiles
[D]	<a href="#">range</a>	Generate numerical range

**Pharmacokinetic statistics**

[U]	<a href="#">Section 26.24</a>	Pharmacokinetic data
[R]	<a href="#">pk</a>	Pharmacokinetic (biopharmaceutical) data
[R]	<a href="#">pkcollapse</a>	Generate pharmacokinetic measurement dataset
[R]	<a href="#">pkcross</a>	Analyze crossover experiments
[R]	<a href="#">pkequiv</a>	Perform bioequivalence tests
[R]	<a href="#">pkexamine</a>	Calculate pharmacokinetic measures
[R]	<a href="#">pkshape</a>	Reshape (pharmacokinetic) Latin-square data
[R]	<a href="#">pksummm</a>	Summarize pharmacokinetic data

**Power and sample size**

[R]	<a href="#">sampsi</a>	Sample size and power for means and proportions
[ST]	<a href="#">stpover</a>	Sample-size, power, and effect-size determination for survival analysis
[ST]	<a href="#">stpover cox</a>	Sample size, power, and effect size for the Cox proportional hazards model
[ST]	<a href="#">stpover exponential</a>	Sample size and power for the exponential test
[ST]	<a href="#">stpover logrank</a>	Sample size, power, and effect size for the log-rank test

**Quality control**

[R]	<a href="#">cusum</a>	Graph cumulative spectral distribution
[R]	<a href="#">qc</a>	Quality control charts
[R]	<a href="#">serrbar</a>	Graph standard error bar chart

**ROC analysis**

[U]	<a href="#">Section 26.7</a>	ROC analysis
[R]	<a href="#">roc</a>	Receiver operating characteristic (ROC) analysis
[R]	<a href="#">roccomp</a>	Tests of equality of ROC areas
[R]	<a href="#">rocfite</a>	Parametric ROC models
[R]	<a href="#">rocfite postestimation</a>	Postestimation tools for rocfite
[R]	<a href="#">rocereg</a>	Receiver operating characteristic (ROC) regression
[R]	<a href="#">rocereg postestimation</a>	Postestimation tools for rocereg
[R]	<a href="#">roceregplot</a>	Plot marginal and covariate-specific ROC curves after rocereg
[R]	<a href="#">roctab</a>	Nonparametric ROC analysis

## Rotation

[MV]	<a href="#">procrustes</a>	Procrustes transformation
[MV]	<a href="#">rotate</a>	Orthogonal and oblique rotations after factor and pca
[MV]	<a href="#">rotatemat</a>	Orthogonal and oblique rotations of a Stata matrix

## Sample selection models

[U]	<a href="#">Chapter 20</a>	Estimation and postestimation commands
[U]	<a href="#">Section 26.15</a>	Models with endogenous sample selection
[R]	<a href="#">heckman</a>	Heckman selection model
[R]	<a href="#">heckprob</a>	Probit model with sample selection
[R]	<a href="#">treatreg</a>	Treatment-effects model

## Simulation/resampling

[R]	<a href="#">bootstrap</a>	Bootstrap sampling and estimation
[R]	<a href="#">bsample</a>	Sampling with replacement
[R]	<a href="#">jackknife</a>	Jackknife estimation
[R]	<a href="#">permute</a>	Monte Carlo permutation tests
[R]	<a href="#">simulate</a>	Monte Carlo simulations

## Standard postestimation tests, tables, and other analyses

[U]	<a href="#">Section 13.5</a>	Accessing coefficients and standard errors
[U]	<a href="#">Chapter 20</a>	Estimation and postestimation commands
[R]	<a href="#">contrast</a>	Contrasts and linear hypothesis tests after estimation
[R]	<a href="#">correlate</a>	Correlations (covariances) of variables or coefficients
[R]	<a href="#">estat</a>	Postestimation statistics
[R]	<a href="#">estimates</a>	Save and manipulate estimation results
[R]	<a href="#">estimates describe</a>	Describe estimation results
[R]	<a href="#">estimates for</a>	Repeat postestimation command across models
[R]	<a href="#">estimates notes</a>	Add notes to estimation results
[R]	<a href="#">estimates replay</a>	Redisplay estimation results
[R]	<a href="#">estimates save</a>	Save and use estimation results
[R]	<a href="#">estimates stats</a>	Model statistics
[R]	<a href="#">estimates store</a>	Store and restore estimation results
[R]	<a href="#">estimates table</a>	Compare estimation results
[R]	<a href="#">estimates title</a>	Set title for estimation results
[R]	<a href="#">hausman</a>	Hausman specification test
[R]	<a href="#">lincom</a>	Linear combinations of estimators
[R]	<a href="#">linktest</a>	Specification link test for single-equation models
[R]	<a href="#">lrtest</a>	Likelihood-ratio test after estimation
[R]	<a href="#">margins</a>	Marginal means, predictive margins, and marginal effects
[R]	<a href="#">margins, contrast</a>	Contrasts of margins
[R]	<a href="#">margins, pwcompare</a>	Pairwise comparisons of margins
[R]	<a href="#">marginsplot</a>	Graph results from margins (profile plots, etc.)
[MV]	<a href="#">mvtest</a>	Multivariate tests
[R]	<a href="#">nlcom</a>	Nonlinear combinations of estimators
[R]	<a href="#">predict</a>	Obtain predictions, residuals, etc., after estimation
[R]	<a href="#">predictnl</a>	Obtain nonlinear predictions, standard errors, etc., after estimation
[R]	<a href="#">pwcompare</a>	Pairwise comparisons
[R]	<a href="#">suest</a>	Seemingly unrelated estimation

[R]	<code>test</code>	Test linear hypotheses after estimation
[R]	<code>testnl</code>	Test nonlinear hypotheses after estimation

## Structural equation modeling

[U]	Section 26.3	Structural equation modeling (SEM)
[SEM]	<code>estat eqgof</code>	Equation-level goodness-of-fit statistics
[SEM]	<code>estat eqtest</code>	Equation-level test that all coefficients are zero
[SEM]	<code>estat framework</code>	Display estimation results in modeling framework
[SEM]	<code>estat ggof</code>	Group-level goodness-of-fit statistics
[SEM]	<code>estat ginvariant</code>	Tests for invariance of parameters across groups
[SEM]	<code>estat gof</code>	Goodness-of-fit statistics
[SEM]	<code>estat mindices</code>	Modification indices
[SEM]	<code>estat residuals</code>	Display mean and covariance residuals
[SEM]	<code>estat scoretests</code>	Score tests
[SEM]	<code>estat stable</code>	Check stability of nonrecursive system
[SEM]	<code>estat stdize</code>	Test standardized parameters
[SEM]	<code>estat summarize</code>	Report summary statistics for estimation sample
[SEM]	<code>estat teffects</code>	Decomposition of effects into total, direct, and indirect
[SEM]	<code>example 1</code>	Single-factor measurement model
[SEM]	<code>example 2</code>	Creating a dataset from published covariances
[SEM]	<code>example 3</code>	Two-factor measurement model
[SEM]	<code>example 4</code>	Goodness-of-fit statistics
[SEM]	<code>example 5</code>	Modification indices
[SEM]	<code>example 6</code>	Linear regression
[SEM]	<code>example 7</code>	Nonrecursive structural model
[SEM]	<code>example 8</code>	Testing that coefficients are equal, and constraining them
[SEM]	<code>example 9</code>	Structural model with measurement component
[SEM]	<code>example 10</code>	MIMIC model
[SEM]	<code>example 11</code>	<code>estat framework</code>
[SEM]	<code>example 12</code>	Seemingly unrelated regression
[SEM]	<code>example 13</code>	Equation-level Wald test
[SEM]	<code>example 14</code>	Predicted values
[SEM]	<code>example 15</code>	Higher-order CFA
[SEM]	<code>example 16</code>	Correlation
[SEM]	<code>example 17</code>	Correlated uniqueness model
[SEM]	<code>example 18</code>	Latent growth model
[SEM]	<code>example 19</code>	Creating multiple-group summary statistics data
[SEM]	<code>example 20</code>	Two-factor measurement model by group
[SEM]	<code>example 21</code>	Group-level goodness of fit
[SEM]	<code>example 22</code>	Testing parameter equality across groups
[SEM]	<code>example 23</code>	Specifying parameter constraints across groups
[SEM]	<code>example 24</code>	Reliability
[SEM]	<code>example 25</code>	Creating summary statistics data from raw data
[SEM]	<code>example 26</code>	Fitting a model using data missing at random
[SEM]	<code>GUI</code>	Graphical user interface
[SEM]	<code>intro 1</code>	Introduction
[SEM]	<code>intro 2</code>	Learning the language: Path diagrams and command language
[SEM]	<code>intro 3</code>	Substantive concepts
[SEM]	<code>intro 4</code>	Tour of models
[SEM]	<code>intro 5</code>	Comparing groups
[SEM]	<code>intro 6</code>	Postestimation tests and predictions

[SEM]	<a href="#">intro 7</a>	Robust and clustered standard errors
[SEM]	<a href="#">intro 8</a>	Standard errors, the full story
[SEM]	<a href="#">intro 9</a>	Fitting models using survey data
[SEM]	<a href="#">intro 10</a>	Fitting models using summary statistics data
[SEM]	<a href="#">lincom</a>	Linear combinations of parameters
[SEM]	<a href="#">lrtest</a>	Likelihood-ratio test of linear hypotheses
[SEM]	<a href="#">methods and formulas</a>	Methods and formulas
[SEM]	<a href="#">nlcom</a>	Nonlinear combinations of parameters
[SEM]	<a href="#">predict</a>	Factor scores, linear predictions, etc.
[SEM]	<a href="#">sem</a>	Structural equation model estimation command
[SEM]	<a href="#">sem estimation options</a>	Options affecting estimation
[SEM]	<a href="#">sem group options</a>	Fitting models on different groups
[SEM]	<a href="#">sem model description options</a>	Model description options
[SEM]	<a href="#">sem option constraints()</a>	Specifying constraints
[SEM]	<a href="#">sem option covstructure()</a>	Specifying covariance restrictions
[SEM]	<a href="#">sem option from()</a>	Specifying starting values
[SEM]	<a href="#">sem option method()</a>	Specifying method and calculation of VCE
[SEM]	<a href="#">sem option noxconditional</a>	Computing means, etc. of observed exogenous variables
[SEM]	<a href="#">sem option reliability()</a>	Fraction of variance not due to measurement error
[SEM]	<a href="#">sem option select()</a>	Using sem with summary statistics data
[SEM]	<a href="#">sem path notation</a>	Command syntax for path diagrams
[SEM]	<a href="#">sem postestimation</a>	Postestimation tools for sem
[SEM]	<a href="#">sem reporting options</a>	Options affecting reporting of results
[SEM]	<a href="#">sem ssd options</a>	Options for use with summary statistics data
[SEM]	<a href="#">sem syntax options</a>	Options affecting interpretation of syntax
[SEM]	<a href="#">ssd</a>	Making summary statistics data
[SEM]	<a href="#">test</a>	Wald test of linear hypotheses
[SEM]	<a href="#">testnl</a>	Wald test of nonlinear hypotheses

## Survey data

[U]	<a href="#">Chapter 20</a>	Estimation and postestimation commands
[U]	<a href="#">Section 26.21</a>	Survey data
[SVY]	<a href="#">survey</a>	Introduction to survey commands
[SVY]	<a href="#">bootstrap_options</a>	More options for bootstrap variance estimation
[SVY]	<a href="#">brr_options</a>	More options for BRR variance estimation
[SVY]	<a href="#">direct standardization</a>	Direct standardization of means, proportions, and ratios
[SVY]	<a href="#">estat</a>	Postestimation statistics for survey data
[SVY]	<a href="#">jackknife_options</a>	More options for jackknife variance estimation
[SVY]	<a href="#">ml for svy</a>	Maximum pseudolikelihood estimation for survey data
[SVY]	<a href="#">poststratification</a>	Poststratification for survey data
[P]	<a href="#">_robust</a>	Robust variance estimates
[SVY]	<a href="#">sdr_options</a>	More options for SDR variance estimation
[SVY]	<a href="#">subpopulation estimation</a>	Subpopulation estimation for survey data
[SVY]	<a href="#">svy</a>	The survey prefix command
[SVY]	<a href="#">svy bootstrap</a>	Bootstrap for survey data
[SVY]	<a href="#">svy brr</a>	Balanced repeated replication for survey data
[SVY]	<a href="#">svy estimation</a>	Estimation commands for survey data
[SVY]	<a href="#">svy jackknife</a>	Jackknife estimation for survey data
[SVY]	<a href="#">svy postestimation</a>	Postestimation tools for svy
[SVY]	<a href="#">svy sdr</a>	Successive difference replication for survey data
[SVY]	<a href="#">svy: tabulate oneway</a>	One-way tables for survey data



[SVY]	<code>svy: tabulate twoway</code> .....	Two-way tables for survey data
[SVY]	<code>svydescribe</code> .....	Describe survey data
[SVY]	<code>svymarkout</code> ...	Mark observations for exclusion on the basis of survey characteristics
[SVY]	<code>svyset</code> .....	Declare survey design for dataset
[MI]	<code>mi XXXset</code> .....	Declare mi data to be svy, st, ts, xt, etc.
[SVY]	<code>variance estimation</code> .....	Variance estimation for survey data

## Survival analysis

[U]	<code>Chapter 20</code> .....	Estimation and postestimation commands
[U]	<code>Section 26.18</code> .....	Survival-time (failure-time) models
[ST]	<code>survival analysis</code>	Introduction to survival analysis & epidemiological tables commands
[ST]	<code>ct</code> .....	Count-time data
[ST]	<code>ctset</code> .....	Declare data to be count-time data
[ST]	<code>cttost</code> .....	Convert count-time data to survival-time data
[ST]	<code>discrete</code> .....	Discrete-time survival analysis
[ST]	<code>ltable</code> .....	Life tables for survival data
[ST]	<code>snapshot</code> .....	Convert snapshot data to time-span data
[ST]	<code>st</code> .....	Survival-time data
[ST]	<code>st_is</code> .....	Survival analysis subroutines for programmers
[ST]	<code>stbase</code> .....	Form baseline dataset
[ST]	<code>stci</code> .....	Confidence intervals for means and percentiles of survival time
[ST]	<code>stcox</code> .....	Cox proportional hazards model
[ST]	<code>stcox PH-assumption tests</code> .....	Tests of proportional-hazards assumption
[ST]	<code>stcrreg</code> .....	Competing-risks regression
[ST]	<code>stcurve</code> ...	Plot survivor, hazard, cumulative hazard, or cumulative incidence function
[ST]	<code>stdescribe</code> .....	Describe survival-time data
[R]	<code>stepwise</code> .....	Stepwise estimation
[ST]	<code>stfill</code> .....	Fill in by carrying forward values of covariates
[ST]	<code>stgen</code> .....	Generate variables reflecting entire histories
[ST]	<code>stir</code> .....	Report incidence-rate comparison
[ST]	<code>stpower</code> .....	Sample-size, power, and effect-size determination for survival analysis
[ST]	<code>stpower cox</code>	Sample size, power, and effect size for the Cox proportional hazards model
[ST]	<code>stpower exponential</code> .....	Sample size and power for the exponential test
[ST]	<code>stpower logrank</code> .....	Sample size, power, and effect size for the log-rank test
[ST]	<code>stptime</code> .....	Calculate person-time, incidence rates, and SMR
[ST]	<code>strate</code> .....	Tabulate failure rates and rate ratios
[ST]	<code>streg</code> .....	Parametric survival models
[ST]	<code>sts</code> .....	Generate, graph, list, and test the survivor and cumulative hazard functions
[ST]	<code>sts generate</code> .....	Create variables containing survivor and related functions
[ST]	<code>sts graph</code> .....	Graph the survivor and cumulative hazard functions
[ST]	<code>sts list</code> .....	List the survivor or cumulative hazard function
[ST]	<code>sts test</code> .....	Test equality of survivor functions
[ST]	<code>stset</code> .....	Declare data to be survival-time data
[MI]	<code>mi XXXset</code> .....	Declare mi data to be svy, st, ts, xt, etc.
[ST]	<code>stsplit</code> .....	Split and join time-span records
[MI]	<code>mi stsplit</code> .....	Stsplit and stjoin mi data
[ST]	<code>stsum</code> .....	Summarize survival-time data
[ST]	<code>sttocc</code> .....	Convert survival-time data to case-control data
[ST]	<code>sttoct</code> .....	Convert survival-time data to count-time data
[ST]	<code>stvary</code> .....	Report whether variables vary over time



## Time series, multivariate

[U]	Section 11.4.4	Time-series varlists
[U]	Section 13.9	Time-series operators
[U]	Chapter 20	Estimation and postestimation commands
[U]	Section 26.16	Models with time-series data
[TS]	time series	Introduction to time-series commands
[TS]	dfactor	Dynamic-factor models
[TS]	fcast compute	Compute dynamic forecasts of dependent variables after var, svar, or vec
[TS]	fcast graph	Graph forecasts of variables computed by fcast compute
[TS]	haver	Load data from Haver Analytics database
[TS]	irf	Create and analyze IRFs, dynamic-multiplier functions, and FEVDs
[TS]	irf add	Add results from an IRF file to the active IRF file
[TS]	irf cgraph	Combine graphs of IRFs, dynamic-multiplier functions, and FEVDs
[TS]	irf create	Obtain IRFs, dynamic-multiplier functions, and FEVDs
[TS]	irf ctable	Combine tables of IRFs, dynamic-multiplier functions, and FEVDs
[TS]	irf describe	Describe an IRF file
[TS]	irf drop	Drop IRF results from the active IRF file
[TS]	irf graph	Graph IRFs, dynamic-multiplier functions, and FEVDs
[TS]	irf ograph	Graph overlaid IRFs, dynamic-multiplier functions, and FEVDs
[TS]	irf rename	Rename an IRF result in an IRF file
[TS]	irf set	Set the active IRF file
[TS]	irf table	Create tables of IRFs, dynamic-multiplier functions, and FEVDs
[TS]	mgarch	Multivariate GARCH models
[TS]	mgarch ccc	Constant conditional correlation multivariate GARCH models
[TS]	mgarch dcc	Dynamic conditional correlation multivariate GARCH models
[TS]	mgarch dvech	Diagonal vech multivariate GARCH models
[TS]	mgarch vcc	Varying conditional correlation multivariate GARCH models
[TS]	psdensity	Parametric spectral density estimation after arima, arfima, and ucm
[TS]	rolling	Rolling-window and recursive estimation
[TS]	sspace	State-space models
[TS]	tsappend	Add observations to a time-series dataset
[TS]	tsfill	Fill in gaps in time variable
[TS]	tsline	Plot time-series data
[TS]	tsreport	Report time-series aspects of a dataset or estimation sample
[TS]	tsrevar	Time-series operator programming command
[TS]	tsset	Declare data to be time-series data
[TS]	var intro	Introduction to vector autoregressive models
[TS]	var svar	Structural vector autoregressive models
[TS]	var	Vector autoregressive models
[TS]	varbasic	Fit a simple VAR and graph IRFs or FEVDs
[TS]	vargranger	Perform pairwise Granger causality tests after var or svar
[TS]	varlmar	Perform LM test for residual autocorrelation after var or svar
[TS]	varnorm	Test for normally distributed disturbances after var or svar
[TS]	varsoc	Obtain lag-order selection statistics for VARs and VECMs
[TS]	varstable	Check the stability condition of VAR or SVAR estimates
[TS]	varwle	Obtain Wald lag-exclusion statistics after var or svar
[TS]	vec intro	Introduction to vector error-correction models
[TS]	vec	Vector error-correction models
[TS]	veclmar	Perform LM test for residual autocorrelation after vec
[TS]	vecnorm	Test for normally distributed disturbances after vec
[TS]	vecrank	Estimate the cointegrating rank of a VECM

[TS]	<a href="#">vecstable</a>	Check the stability condition of VECM estimates
[TS]	<a href="#">xcorr</a>	Cross-correlogram for bivariate time series

### Time series, univariate

[U]	<a href="#">Section 11.4.4</a>	Time-series varlists
[U]	<a href="#">Section 13.9</a>	Time-series operators
[U]	<a href="#">Chapter 20</a>	Estimation and postestimation commands
[U]	<a href="#">Section 26.16</a>	Models with time-series data
[TS]	<a href="#">time series</a>	Introduction to time-series commands
[TS]	<a href="#">arch</a>	Autoregressive conditional heteroskedasticity (ARCH) family of estimators
[TS]	<a href="#">arfima</a>	Autoregressive fractionally integrated moving-average models
[TS]	<a href="#">arima</a>	ARIMA, ARMAX, and other dynamic regression models
[TS]	<a href="#">corrgram</a>	Tabulate and graph autocorrelations
[TS]	<a href="#">cumsp</a>	Cumulative spectral distribution
[TS]	<a href="#">dfgl</a>	DF-GLS unit-root test
[TS]	<a href="#">dfuller</a>	Augmented Dickey–Fuller unit-root test
[TS]	<a href="#">haver</a>	Load data from Haver Analytics database
[TS]	<a href="#">newey</a>	Regression with Newey–West standard errors
[TS]	<a href="#">pergram</a>	Periodogram
[TS]	<a href="#">pperron</a>	Phillips–Perron unit-root test
[TS]	<a href="#">prais</a>	Prais–Winsten and Cochrane–Orcutt regression
[TS]	<a href="#">rolling</a>	Rolling-window and recursive estimation
[TS]	<a href="#">tsappend</a>	Add observations to a time-series dataset
[TS]	<a href="#">tsfill</a>	Fill in gaps in time variable
[TS]	<a href="#">tsfilter</a>	Filter a time-series, keeping only selected periodicities
[TS]	<a href="#">tsfilter bk</a>	Baxter–King time-series filter
[TS]	<a href="#">tsfilter bw</a>	Butterworth time-series filter
[TS]	<a href="#">tsfilter cf</a>	Christiano–Fitzgerald time-series filter
[TS]	<a href="#">tsfilter hp</a>	Hodrick–Prescott time-series filter
[TS]	<a href="#">tsline</a>	Plot time-series data
[TS]	<a href="#">tsreport</a>	Report time-series aspects of a dataset or estimation sample
[TS]	<a href="#">tsrevar</a>	Time-series operator programming command
[TS]	<a href="#">tsset</a>	Declare data to be time-series data
[TS]	<a href="#">tssmooth</a>	Smooth and forecast univariate time-series data
[TS]	<a href="#">tssmooth dexponential</a>	Double-exponential smoothing
[TS]	<a href="#">tssmooth exponential</a>	Single-exponential smoothing
[TS]	<a href="#">tssmooth hwinters</a>	Holt–Winters nonseasonal smoothing
[TS]	<a href="#">tssmooth ma</a>	Moving-average filter
[TS]	<a href="#">tssmooth nl</a>	Nonlinear filter
[TS]	<a href="#">tssmooth shwinters</a>	Holt–Winters seasonal smoothing
[TS]	<a href="#">ucm</a>	Unobserved-components model
[TS]	<a href="#">wntestb</a>	Bartlett’s periodogram-based test for white noise
[TS]	<a href="#">wntestq</a>	Portmanteau (Q) test for white noise
[TS]	<a href="#">xcorr</a>	Cross-correlogram for bivariate time series

### Transforms and normality tests

[R]	<a href="#">boxcox</a>	Box–Cox regression models
[R]	<a href="#">fracpoly</a>	Fractional polynomial regression
[R]	<a href="#">ladder</a>	Ladder of powers
[R]	<a href="#">lnskew0</a>	Find zero-skewness log or Box–Cox transform
[R]	<a href="#">mfp</a>	Multivariable fractional polynomial models

[MV]	<a href="#">mvtest normality</a>	Multivariate normality tests
[R]	<a href="#">sktest</a>	Skewness and kurtosis test for normality
[R]	<a href="#">swilk</a>	Shapiro–Wilk and Shapiro–Francia tests for normality

## Matrix commands

### Basics

[U]	<a href="#">Chapter 14</a>	Matrix expressions
[P]	<a href="#">matlist</a>	Display a matrix and control its format
[P]	<a href="#">matrix</a>	Introduction to matrix commands
[P]	<a href="#">matrix define</a>	Matrix definition, operators, and functions
[P]	<a href="#">matrix utility</a>	List, rename, and drop matrices

### Programming

[P]	<a href="#">ereturn</a>	Post the estimation results
[P]	<a href="#">matrix accum</a>	Form cross-product matrices
[P]	<a href="#">matrix rownames</a>	Name rows and columns
[P]	<a href="#">matrix score</a>	Score data from coefficient vectors
[R]	<a href="#">ml</a>	Maximum likelihood estimation
[M]	<a href="#">Mata Reference Manual</a>	

### Other

[P]	<a href="#">makecns</a>	Constrained estimation
[P]	<a href="#">matrix dissimilarity</a>	Compute similarity or dissimilarity measures
[P]	<a href="#">matrix eigenvalues</a>	Eigenvalues of nonsymmetric matrices
[P]	<a href="#">matrix get</a>	Access system matrices
[P]	<a href="#">matrix mkmat</a>	Convert variables to matrix and vice versa
[P]	<a href="#">matrix svd</a>	Singular value decomposition
[P]	<a href="#">matrix symeigen</a>	Eigenvalues and eigenvectors of symmetric matrices

### Mata

[D]	<a href="#">putmata</a>	Put Stata variables into Mata and vice versa
[M]	<a href="#">Mata Reference Manual</a>	

## Programming

### Basics

[U]	<a href="#">Chapter 18</a>	Programming Stata
[U]	<a href="#">Section 18.3</a>	Macros
[U]	<a href="#">Section 18.11</a>	Ado-files
[P]	<a href="#">comments</a>	Add comments to programs
[P]	<a href="#">fvexpand</a>	Expand factor varlists
[P]	<a href="#">macro</a>	Macro definition and manipulation
[P]	<a href="#">program</a>	Define and manipulate programs
[P]	<a href="#">return</a>	Return saved results

## Program control

[U]	<a href="#">Section 18.11.1</a>	Version
[P]	<a href="#">capture</a>	Capture return code
[P]	<a href="#">continue</a>	Break out of loops
[P]	<a href="#">error</a>	Display generic error message and exit
[P]	<a href="#">foreach</a>	Loop over items
[P]	<a href="#">forvalues</a>	Loop over consecutive values
[P]	<a href="#">if</a>	if programming command
[P]	<a href="#">version</a>	Version control
[P]	<a href="#">while</a>	Looping

## Parsing and program arguments

[U]	<a href="#">Section 18.4</a>	Program arguments
[P]	<a href="#">confirm</a>	Argument verification
[P]	<a href="#">gettoken</a>	Low-level parsing
[P]	<a href="#">levelsof</a>	Levels of variable
[P]	<a href="#">numlist</a>	Parse numeric lists
[P]	<a href="#">syntax</a>	Parse Stata syntax
[P]	<a href="#">tokenize</a>	Divide strings into tokens

## Console output

[P]	<a href="#">dialog programming</a>	Dialog programming
[P]	<a href="#">display</a>	Display strings and values of scalar expressions
[P]	<a href="#">smcl</a>	Stata Markup and Control Language
[P]	<a href="#">tabdisp</a>	Display tables

## Commonly used programming commands

[P]	<a href="#">byable</a>	Make programs byable
[P]	<a href="#">#delimit</a>	Change delimiter
[P]	<a href="#">exit</a>	Exit from a program or do-file
[R]	<a href="#">fvvar</a>	Factor-variables operator programming command
[P]	<a href="#">mark</a>	Mark observations for inclusion
[P]	<a href="#">matrix</a>	Introduction to matrix commands
[P]	<a href="#">more</a>	Pause until key is pressed
[P]	<a href="#">nopreserve option</a>	nopreserve option
[P]	<a href="#">preserve</a>	Preserve and restore data
[P]	<a href="#">quietly</a>	Quietly and noisily perform Stata command
[P]	<a href="#">scalar</a>	Scalar variables
[P]	<a href="#">smcl</a>	Stata Markup and Control Language
[P]	<a href="#">sortpreserve</a>	Sort within programs
[P]	<a href="#">timer</a>	Time sections of code by recording and reporting time spent
[TS]	<a href="#">tsrevar</a>	Time-series operator programming command

## Debugging

[P]	<a href="#">pause</a>	Program debugging command
[P]	<a href="#">timer</a>	Time sections of code by recording and reporting time spent
[P]	<a href="#">trace</a>	Debug Stata programs

## Advanced programming commands

[P]	<a href="#">automation</a>	Automation
[P]	<a href="#">break</a>	Suppress Break key
[P]	<a href="#">char</a>	Characteristics
[M-2]	<a href="#">class</a>	Object-oriented programming (classes)
[P]	<a href="#">class</a>	Class programming
[P]	<a href="#">class exit</a>	Exit class-member program and return result
[P]	<a href="#">classutil</a>	Class programming utility
[P]	<a href="#">estat programming</a>	Controlling estat after user-written commands
[P]	<a href="#">_estimates</a>	Manage estimation results
[P]	<a href="#">file</a>	Read and write ASCII text and binary files
[P]	<a href="#">findfile</a>	Find file in path
[P]	<a href="#">include</a>	Include commands from file
[P]	<a href="#">macro</a>	Macro definition and manipulation
[P]	<a href="#">macro lists</a>	Manipulate lists
[R]	<a href="#">ml</a>	Maximum likelihood estimation
[M-5]	<a href="#">moptimize()</a>	Model optimization
[M-5]	<a href="#">optimize()</a>	Function optimization
[P]	<a href="#">plugin</a>	Load a plugin
[P]	<a href="#">postfile</a>	Save results in Stata dataset
[P]	<a href="#">_predict</a>	Obtain predictions, residuals, etc., after estimation programming command
[P]	<a href="#">program properties</a>	Properties of user-defined programs
[D]	<a href="#">putmata</a>	Put Stata variables into Mata and vice versa
[P]	<a href="#">_return</a>	Preserve saved results
[P]	<a href="#">_rmcoll</a>	Remove collinear variables
[P]	<a href="#">_robust</a>	Robust variance estimates
[P]	<a href="#">sersset</a>	Create and manipulate sersets
[D]	<a href="#">snapshot</a>	Save and restore data snapshots
[P]	<a href="#">unab</a>	Unabbreviate variable list
[P]	<a href="#">unabcmd</a>	Unabbreviate command name
[P]	<a href="#">varabbrev</a>	Control variable abbreviation
[P]	<a href="#">viewsource</a>	View source code

## Special-interest programming commands

[R]	<a href="#">bstat</a>	Report bootstrap results
[MV]	<a href="#">cluster programming subroutines</a>	Add cluster-analysis routines
[MV]	<a href="#">cluster programming utilities</a>	Cluster-analysis programming utilities
[R]	<a href="#">fvrevar</a>	Factor-variables operator programming command
[P]	<a href="#">matrix dissimilarity</a>	Compute similarity or dissimilarity measures
[MI]	<a href="#">mi select</a>	Programmer's alternative to mi extract
[ST]	<a href="#">st_is</a>	Survival analysis subroutines for programmers
[SVY]	<a href="#">svymarkout</a>	Mark observations for exclusion on the basis of survey characteristics
[MI]	<a href="#">technical</a>	Details for programmers
[TS]	<a href="#">tsrevar</a>	Time-series operator programming command

## File formats

[P]	<a href="#">file formats .dta</a>	Description of .dta file format
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## Mata

[M]	<a href="#">Mata Reference Manual</a>	
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Interface features

[GS] Chapter 1 (GSM, GSU, GSW) ..... Introducing Stata—sample session

[GS] Chapter 2 (GSM, GSU, GSW) ..... The Stata user interface

[GS] Chapter 3 (GSM, GSU, GSW) ..... Using the Viewer

[GS] Chapter 6 (GSM, GSU, GSW) ..... Using the Data Editor

[GS] Chapter 7 (GSM, GSU, GSW) ..... Using the Variables Manager

[GS] Chapter 13 (GSM, GSU, GSW) ..... Using the Do-file Editor—automating Stata

[GS] Chapter 15 (GSM, GSU, GSW) ..... Editing graphs

[P] [dialog programming](#) ..... Dialog programming

[R] [doedit](#) ..... Edit do-files and other text files

[D] [edit](#) ..... Browse or edit data with Data Editor

[P] [sleep](#) ..... Pause for a specified time

[P] [smcl](#) ..... Stata Markup and Control Language

[D] [varmanage](#) ..... Manage variable labels, formats, and other properties

[P] [viewsource](#) ..... View source code

[P] [window programming](#) ..... Programming menus and windows

Description

This entry provides a quick reference for data types allowed by Stata. See [U] 12 Data for details.

Storage type	Minimum	Maximum	Closest to 0 without being 0	bytes
byte	−127	100	±1	1
int	−32,767	32,740	±1	2
long	−2,147,483,647	2,147,483,620	±1	4
float	$-1.70141173319 \times 10^{38}$	$1.70141173319 \times 10^{38}$	$\pm 10^{-38}$	4
double	$-8.9884656743 \times 10^{307}$	$8.9884656743 \times 10^{307}$	$\pm 10^{-323}$	8

Precision for float is  $3.795 \times 10^{-8}$   
Precision for double is  $1.414 \times 10^{-16}$

String storage type	Maximum length	Bytes
str1	1	1
str2	2	2
...	.	.
...	.	.
...	.	.
str244	244	244

Also see

- [D] **compress** — Compress data in memory
- [D] **destring** — Convert string variables to numeric variables and vice versa
- [D] **encode** — Encode string into numeric and vice versa
- [D] **format** — Set variables’ output format
- [D] **recast** — Change storage type of variable
- [U] 12.2.2 Numeric storage types
- [U] 12.4.4 String storage types
- [U] 12.5 Formats: Controlling how data are displayed
- [U] 13.11 Precision and problems therein

## Description

This entry provides a quick reference for Stata’s estimation commands. Because enhancements to Stata are continually being made, type `search estimation commands` for possible additions to this list; see [\[R\] search](#).

For a discussion of properties shared by all estimation commands, see [\[U\] 20 Estimation and postestimation commands](#).

For a list of prefix commands that can be used with many of these estimation commands, see [\[U\] 11.1.10 Prefix commands](#).

Command	Description	See
<code>anova</code>	Analysis of variance and covariance	<a href="#">[R] anova</a>
<code>arch</code>	ARCH family of estimators	<a href="#">[TS] arch</a>
<code>areg</code>	Linear regression with a large dummy-variable set	<a href="#">[R] areg</a>
<code>arfima</code>	Autoregressive fractionally integrated moving-average models	<a href="#">[TS] arfima</a>
<code>arima</code>	ARIMA, ARMAX, and other dynamic regression models	<a href="#">[TS] arima</a>
<code>asclogit</code>	Alternative-specific conditional logit (McFadden’s choice) model	<a href="#">[R] asclogit</a>
<code>asmprobit</code>	Alternative-specific multinomial probit regression	<a href="#">[R] asmprobit</a>
<code>asroprobit</code>	Alternative-specific rank-ordered probit regression	<a href="#">[R] asroprobit</a>
<code>binreg</code>	Generalized linear models: Extensions to the binomial family	<a href="#">[R] binreg</a>
<code>biprobit</code>	Bivariate probit regression	<a href="#">[R] biprobit</a>
<code>blogit</code>	Logistic regression for grouped data	<a href="#">[R] glogit</a>
<code>boxcox</code>	Box–Cox regression models	<a href="#">[R] boxcox</a>
<code>bprobit</code>	Probit regression for grouped data	<a href="#">[R] glogit</a>
<code>bsqreg</code>	Bootstrapped quantile regression	<a href="#">[R] qreg</a>
<code>ca</code>	Simple correspondence analysis	<a href="#">[MV] ca</a>
<code>camat</code>	Simple correspondence analysis of a matrix	<a href="#">[MV] ca</a>
<code>candisc</code>	Canonical linear discriminant analysis	<a href="#">[MV] candisc</a>
<code>canon</code>	Canonical correlations	<a href="#">[MV] canon</a>
<code>clogit</code>	Conditional (fixed-effects) logistic regression	<a href="#">[R] clogit</a>
<code>cloglog</code>	Complementary log-log regression	<a href="#">[R] cloglog</a>
<code>cnsreg</code>	Constrained linear regression	<a href="#">[R] cnsreg</a>
<code>contrast, post</code>	Post contrasts as estimation results	<a href="#">[R] contrast</a>
<code>dfactor</code>	Dynamic-factor models	<a href="#">[TS] dfactor</a>
<code>discrim knn</code>	kth-nearest-neighbor discriminant analysis	<a href="#">[MV] discrim knn</a>
<code>discrim lda</code>	Linear discriminant analysis	<a href="#">[MV] discrim lda</a>
<code>discrim logistic</code>	Logistic discriminant analysis	<a href="#">[MV] discrim logistic</a>
<code>discrim qda</code>	Quadratic discriminant analysis	<a href="#">[MV] discrim qda</a>



Command	Description	See
<code>eivreg</code>	Errors-in-variables regression	[R] <a href="#">eivreg</a>
<code>exlogistic</code>	Exact logistic regression	[R] <a href="#">exlogistic</a>
<code>expoisson</code>	Exact Poisson regression	[R] <a href="#">exlogistic</a>
<code>factor</code>	Factor analysis	[MV] <a href="#">factor</a>
<code>factormat</code>	Factor analysis of a correlation matrix	[MV] <a href="#">factor</a>
<code>frontier</code>	Stochastic frontier models	[R] <a href="#">frontier</a>
<code>glm</code>	Generalized linear models	[R] <a href="#">glm</a>
<code>glogit</code>	Weighted least-squares logistic regression for grouped data	[R] <a href="#">glogit</a>
<code>gmm</code>	Generalized method of moments estimation	[R] <a href="#">gmm</a>
<code>gnbreg</code>	Generalized negative binomial model	[R] <a href="#">nbreg</a>
<code>gprobit</code>	Weighted least-squares probit regression for grouped data	[R] <a href="#">glogit</a>
<code>heckman</code>	Heckman selection model	[R] <a href="#">heckman</a>
<code>heckprob</code>	Probit model with selection	[R] <a href="#">heckprob</a>
<code>hetprob</code>	Heteroskedastic probit model	[R] <a href="#">hetprob</a>
<code>intreg</code>	Interval regression	[R] <a href="#">intreg</a>
<code>iqreg</code>	Interquantile range regression	[R] <a href="#">qreg</a>
<code>ivprobit</code>	Probit model with endogenous regressors	[R] <a href="#">ivprobit</a>
<code>ivregress</code>	Single-equation instrumental-variables estimation	[R] <a href="#">ivregress</a>
<code>ivtobit</code>	Tobit model with endogenous regressors	[R] <a href="#">ivtobit</a>
<code>logistic</code>	Logistic regression, reporting odds ratios	[R] <a href="#">logistic</a>
<code>logit</code>	Logistic regression, reporting coefficients	[R] <a href="#">logit</a>
<code>manova</code>	Multivariate analysis of variance and covariance	[MV] <a href="#">manova</a>
<code>margins, post</code>	Post margins as estimation results	[R] <a href="#">margins</a>
<code>mca</code>	Multiple and joint correspondence analysis	[MV] <a href="#">mca</a>
<code>mds</code>	Multidimensional scaling for two-way data	[MV] <a href="#">mds</a>
<code>mdslong</code>	Multidimensional scaling of proximity data in long format	[MV] <a href="#">mdslong</a>
<code>mdsmat</code>	Multidimensional scaling of proximity data in a matrix	[MV] <a href="#">mdsmat</a>
<code>mean</code>	Estimate means	[R] <a href="#">mean</a>
<code>mgarch ccc</code>	Constant conditional correlation multivariate GARCH model	[TS] <a href="#">mgarch ccc</a>
<code>mgarch dcc</code>	Dynamic conditional correlation multivariate GARCH model	[TS] <a href="#">mgarch dcc</a>
<code>mgarch dvech</code>	Diagonal vech multivariate GARCH model	[TS] <a href="#">mgarch dvech</a>
<code>mgarch vcc</code>	Varying conditional correlation multivariate GARCH model	[TS] <a href="#">mgarch vcc</a>
<code>mlogit</code>	Multinomial (polytomous) logistic regression	[R] <a href="#">mlogit</a>
<code>mprobit</code>	Multinomial probit regression	[R] <a href="#">mprobit</a>
<code>mvreg</code>	Multivariate regression	[R] <a href="#">mvreg</a>
<code>nbreg</code>	Negative binomial regression	[R] <a href="#">nbreg</a>
<code>newey</code>	Regression with Newey–West standard errors	[TS] <a href="#">newey</a>
<code>nl</code>	Nonlinear least-squares estimation	[R] <a href="#">nl</a>
<code>nlogit</code>	Nested logit regression (RUM-consistent and nonnormalized)	[R] <a href="#">nlogit</a>
<code>nlsur</code>	Systems of nonlinear equations	[R] <a href="#">nlsur</a>
<code>ologit</code>	Ordered logistic regression	[R] <a href="#">ologit</a>
<code>oprobit</code>	Ordered probit regression	[R] <a href="#">oprobit</a>

Command	Description	See
<code>pca</code>	Principal component analysis	[MV] <a href="#">pca</a>
<code>pcamat</code>	Principal component analysis of a correlation or covariance matrix	[MV] <a href="#">pca</a>
<code>poisson</code>	Poisson regression	[R] <a href="#">poisson</a>
<code>prais</code>	Prais–Winsten and Cochrane–Orcutt regression	[TS] <a href="#">prais</a>
<code>probit</code>	Probit regression	[R] <a href="#">probit</a>
<code>procrustes</code>	Procrustes transformation	[MV] <a href="#">procrustes</a>
<code>proportion</code>	Estimate proportions	[R] <a href="#">proportion</a>
<code>pwcompare, post</code>	Post pairwise comparisons as estimation results	[R] <a href="#">pwcompare</a>
<code>pwmean</code>	Perform pairwise comparisons of means	[R] <a href="#">pwmean</a>
<code>_qreg</code>	Internal estimation command for quantile regression	[R] <a href="#">qreg</a>
<code>qreg</code>	Quantile regression	[R] <a href="#">qreg</a>
<code>ratio</code>	Estimate ratios	[R] <a href="#">ratio</a>
<code>reg3</code>	Three-stage estimation for systems of simultaneous equations	[R] <a href="#">reg3</a>
<code>regress</code>	Linear regression	[R] <a href="#">regress</a>
<code>rocfits</code>	Parametric ROC models	[R] <a href="#">rocfits</a>
<code>roclog</code>	Parametric and nonparametric ROC regression	[R] <a href="#">roclog</a>
<code>rologit</code>	Rank-ordered logistic regression	[R] <a href="#">rologit</a>
<code>rreg</code>	Robust regression	[R] <a href="#">rreg</a>
<code>scobit</code>	Skewed logistic regression	[R] <a href="#">scobit</a>
<code>sem</code>	Structural equation models	[SEM] <a href="#">sem</a>
<code>slogit</code>	Stereotype logistic regression	[R] <a href="#">slogit</a>
<code>sqreg</code>	Simultaneous-quantile regression	[R] <a href="#">qreg</a>
<code>sspace</code>	State-space models	[TS] <a href="#">sspace</a>
<code>stcox</code>	Cox proportional hazards model	[ST] <a href="#">stcox</a>
<code>stcrreg</code>	Competing-risks regression	[ST] <a href="#">stcrreg</a>
<code>streg</code>	Parametric survival models	[ST] <a href="#">streg</a>
<code>sureg</code>	Zellner’s seemingly unrelated regression	[R] <a href="#">sureg</a>
<code>svy: command*</code>	Estimation commands for survey data	[SVY] <a href="#">svy estimation</a>
<code>svy: tabulate oneway</code>	One-way tables for survey data	[SVY] <a href="#">svy: tabulate oneway</a>
<code>svy: tabulate twoway</code>	Two-way tables for survey data	[SVY] <a href="#">svy: tabulate twoway</a>
<code>tnbreg</code>	Truncated negative binomial regression	[R] <a href="#">tnbreg</a>
<code>tobit</code>	Tobit regression	[R] <a href="#">tobit</a>
<code>total</code>	Estimate totals	[R] <a href="#">total</a>
<code>tpoisson</code>	Truncated Poisson regression	[R] <a href="#">tpoisson</a>
<code>treatreg</code>	Treatment-effects model	[R] <a href="#">treatreg</a>
<code>truncreg</code>	Truncated regression	[R] <a href="#">truncreg</a>
<code>ucm</code>	Unobserved-components model	[TS] <a href="#">ucm</a>

\*See the table below for a list of commands that support the `svy` prefix.

Command	Description	See
<code>var</code>	Vector autoregressive models	[TS] <a href="#">var</a>
<code>var svar</code>	Structural vector autoregressive models	[TS] <a href="#">var svar</a>
<code>varbasic</code>	Fit a simple VAR and graph IRFs or FEVDs	[TS] <a href="#">varbasic</a>
<code>vec</code>	Vector error-correction models	[TS] <a href="#">vec</a>
<code>vwlsl</code>	Variance-weighted least squares	[R] <a href="#">vwlsl</a>
<code>xtabond</code>	Arellano–Bond linear dynamic panel-data estimation	[XT] <a href="#">xtabond</a>
<code>xtcloglog</code>	Random-effects and population-averaged cloglog models	[XT] <a href="#">xtcloglog</a>
<code>xtdpd</code>	Linear dynamic panel-data estimation	[XT] <a href="#">xtdpd</a>
<code>xtdpdsys</code>	Arellano–Bond/Blundell–Bond estimation	[XT] <a href="#">xtdpdsys</a>
<code>xtfrontier</code>	Stochastic frontier models for panel data	[XT] <a href="#">xtfrontier</a>
<code>xtgee</code>	Fit population-averaged panel-data models using GEE	[XT] <a href="#">xtgee</a>
<code>xtgls</code>	Fit panel-data models using GLS	[XT] <a href="#">xtgls</a>
<code>xthtaylor</code>	Hausman–Taylor estimator for error-components models	[XT] <a href="#">xthtaylor</a>
<code>xtintreg</code>	Random-effects interval data regression models	[XT] <a href="#">xtintreg</a>
<code>xtivreg</code>	Instrumental variables and two-stage least squares for panel-data models	[XT] <a href="#">xtivreg</a>
<code>xtlogit</code>	Fixed-effects, random-effects, and population-averaged logit models	[XT] <a href="#">xtlogit</a>
<code>xtmelogit</code>	Multilevel mixed-effects logistic regression	[XT] <a href="#">xtmelogit</a>
<code>xtmepoisson</code>	Multilevel mixed-effects Poisson regression	[XT] <a href="#">xtmepoisson</a>
<code>xtmixed</code>	Multilevel mixed-effects linear regression	[XT] <a href="#">xtmixed</a>
<code>xtnbreg</code>	Fixed-effects, random-effects, and population-averaged negative binomial models	[XT] <a href="#">xtnbreg</a>
<code>xtpcse</code>	OLS or Prais–Winsten models with panel-corrected standard errors	[XT] <a href="#">xtpcse</a>
<code>xtpoisson</code>	Fixed-effects, random-effects, and population-averaged Poisson models	[XT] <a href="#">xtpoisson</a>
<code>xtprobit</code>	Random-effects and population-averaged probit models	[XT] <a href="#">xtprobit</a>
<code>xtrc</code>	Random-coefficients models	[XT] <a href="#">xtrc</a>
<code>xtreg</code>	Fixed-, between-, and random-effects, and population-averaged linear models	[XT] <a href="#">xtreg</a>
<code>xtregar</code>	Fixed- and random-effects linear models with an AR(1) disturbance	[XT] <a href="#">xtregar</a>
<code>xttobit</code>	Random-effects tobit models	[XT] <a href="#">xttobit</a>
<code>zinb</code>	Zero-inflated negative binomial regression	[R] <a href="#">zinb</a>
<code>zip</code>	Zero-inflated Poisson regression	[R] <a href="#">zip</a>

The following estimation commands support the `mi estimate` prefix.

Command	Description	See
Linear regression models		
<code>regress</code>	Linear regression	[R] <a href="#">regress</a>
<code>cnsreg</code>	Constrained linear regression	[R] <a href="#">cnsreg</a>
<code>mvreg</code>	Multivariate regression	[R] <a href="#">mvreg</a>
Binary-response regression models		
<code>logistic</code>	Logistic regression, reporting odds ratios	[R] <a href="#">logistic</a>
<code>logit</code>	Logistic regression, reporting coefficients	[R] <a href="#">logit</a>
<code>probit</code>	Probit regression	[R] <a href="#">probit</a>
<code>cloglog</code>	Complementary log-log regression	[R] <a href="#">cloglog</a>
<code>binreg</code>	GLM for the binomial family	[R] <a href="#">binreg</a>
Count-response regression models		
<code>poisson</code>	Poisson regression	[R] <a href="#">poisson</a>
<code>nbreg</code>	Negative binomial regression	[R] <a href="#">nbreg</a>
<code>gnbreg</code>	Generalized negative binomial regression	[R] <a href="#">nbreg</a>
Ordinal-response regression models		
<code>ologit</code>	Ordered logistic regression	[R] <a href="#">ologit</a>
<code>oprobit</code>	Ordered probit regression	[R] <a href="#">oprobit</a>
Categorical-response regression models		
<code>mlogit</code>	Multinomial (polytomous) logistic regression	[R] <a href="#">mlogit</a>
<code>mprobit</code>	Multinomial probit regression	[R] <a href="#">mprobit</a>
<code>clogit</code>	Conditional (fixed-effects) logistic regression	[R] <a href="#">clogit</a>
Quantile regression models		
<code>qreg</code>	Quantile regression	[R] <a href="#">qreg</a>
<code>iqreg</code>	Interquantile range regression	[R] <a href="#">qreg</a>
<code>sqreg</code>	Simultaneous-quantile regression	[R] <a href="#">qreg</a>
<code>bsqreg</code>	quantile regression	[R] <a href="#">qreg</a>
Survival regression models		
<code>stcox</code>	Cox proportional hazards model	[ST] <a href="#">stcox</a>
<code>streg</code>	Parametric survival models	[ST] <a href="#">streg</a>
<code>stcrreg</code>	Competing-risks regression	[ST] <a href="#">stcrreg</a>
Other regression models		
<code>glm</code>	Generalized linear models	[R] <a href="#">glm</a>
<code>areg</code>	Linear regression with a large dummy-variable set	[R] <a href="#">areg</a>
<code>rreg</code>	Robust regression	[R] <a href="#">rreg</a>
<code>truncreg</code>	Truncated regression	[R] <a href="#">truncreg</a>
Descriptive statistics		
<code>mean</code>	Estimate means	[R] <a href="#">mean</a>
<code>proportion</code>	Estimate proportions	[R] <a href="#">proportion</a>
<code>ratio</code>	Estimate ratios	[R] <a href="#">ratio</a>

Command	Description	See
Panel-data models		
<b>xtreg</b>	Fixed-, between- and random-effects, and population-averaged linear models	[XT] <b>xtreg</b>
<b>xtmixed</b>	Multilevel mixed-effects linear regression	[XT] <b>xtmixed</b>
<b>xtrc</b>	Random-coefficients regression	[XT] <b>xtrc</b>
<b>xtlogit</b>	Fixed-effects, random-effects, and population-averaged logit models	[XT] <b>xtlogit</b>
<b>xtprobit</b>	Random-effects and population-averaged probit models	[XT] <b>xtprobit</b>
<b>xtcloglog</b>	Random-effects and population-averaged cloglog models	[XT] <b>xtcloglog</b>
<b>xtpoisson</b>	Fixed-effects, random-effects, and population-averaged Poisson models	[XT] <b>xtcloglog</b>
<b>xtnbreg</b>	Fixed-effects, random-effects, and population-averaged negative binomial models	[XT] <b>xtnbreg</b>
<b>xtmelogit</b>	Multilevel mixed-effects logistic regression	[XT] <b>xtmelogit</b>
<b>xtmepoisson</b>	Multilevel mixed-effects Poisson regression	[XT] <b>xtmepoisson</b>
<b>xtgee</b>	Fit population-averaged panel-data models by using GEE	[XT] <b>xtgee</b>
Survey regression models		
<b>svy:</b>	Estimation commands for survey data (excluding commands that are not listed above)	[SVY] <b>svy</b>

The following estimation commands support the **svy** prefix.

Command	Description	See
Descriptive statistics		
<b>mean</b>	Estimate means	[R] <b>mean</b>
<b>proportion</b>	Estimate proportions	[R] <b>proportion</b>
<b>ratio</b>	Estimate ratios	[R] <b>ratio</b>
<b>total</b>	Estimate totals	[R] <b>total</b>
Linear regression models		
<b>cnsreg</b>	Constrained linear regression	[R] <b>cnsreg</b>
<b>glm</b>	Generalized linear models	[R] <b>glm</b>
<b>intreg</b>	Interval regression	[R] <b>intreg</b>
<b>nl</b>	Nonlinear least-squares estimation	[R] <b>nl</b>
<b>regress</b>	Linear regression	[R] <b>regress</b>
<b>sem</b>	Structural equation models	[SEM] <b>sem</b>
<b>tobit</b>	Tobit regression	[R] <b>tobit</b>
<b>treatreg</b>	Treatment-effects model	[R] <b>treatreg</b>
<b>truncreg</b>	Truncated regression	[R] <b>truncreg</b>
Survival-data regression models		
<b>stcox</b>	Cox proportional hazards model	[ST] <b>stcox</b>
<b>streg</b>	Parametric survival model	[ST] <b>streg</b>

Command	Description	See
Binary-response regression models		
<code>biprobit</code>	Bivariate probit regression	[R] <a href="#">biprobit</a>
<code>cloglog</code>	Complementary log-log regression	[R] <a href="#">cloglog</a>
<code>hetprob</code>	Heteroskedastic probit model	[R] <a href="#">hetprob</a>
<code>logistic</code>	Logistic regression, reporting odds ratios	[R] <a href="#">logistic</a>
<code>logit</code>	Logistic regression, reporting coefficients	[R] <a href="#">logit</a>
<code>probit</code>	Probit regression	[R] <a href="#">probit</a>
<code>scobit</code>	Skewed logistic regression	[R] <a href="#">scobit</a>
Discrete-response regression models		
<code>clogit</code>	Conditional (fixed-effects) logistic regression	[R] <a href="#">clogit</a>
<code>mlogit</code>	Multinomial (polytomous) logistic regression	[R] <a href="#">mlogit</a>
<code>mprobit</code>	Multinomial probit regression	[R] <a href="#">mprobit</a>
<code>ologit</code>	Ordered logistic regression	[R] <a href="#">ologit</a>
<code>oprobit</code>	Ordered probit regression	[R] <a href="#">oprobit</a>
<code>slogit</code>	Stereotype logistic regression	[R] <a href="#">slogit</a>
Poisson regression models		
<code>gnbreg</code>	Generalized negative binomial regression	[R] <a href="#">nbreg</a>
<code>nbreg</code>	Negative binomial regression	[R] <a href="#">nbreg</a>
<code>poisson</code>	Poisson regression	[R] <a href="#">poisson</a>
<code>tnbreg</code>	Truncated negative binomial regression	[R] <a href="#">tnbreg</a>
<code>tpoisson</code>	Truncated Poisson regression	[R] <a href="#">tpoisson</a>
<code>zinb</code>	Zero-inflated negative binomial regression	[R] <a href="#">zinb</a>
<code>zip</code>	Zero-inflated Poisson regression	[R] <a href="#">zip</a>
Instrumental-variables regression models		
<code>ivprobit</code>	Probit model with continuous endogenous regressors	[R] <a href="#">ivprobit</a>
<code>ivregress</code>	Single-equation instrumental-variables regression	[R] <a href="#">ivregress</a>
<code>ivtobit</code>	Tobit model with continuous endogenous regressors	[R] <a href="#">ivtobit</a>
Regression models with selection		
<code>heckman</code>	Heckman selection model	[R] <a href="#">heckman</a>
<code>heckprob</code>	Probit model with sample selection	[R] <a href="#">heckprob</a>

\* The `xtmixed` command for fitting linear multilevel models supports survey data, including allowing sampling weights and robust-cluster standard errors. Because sampling weights are handled differently by `xtmixed` than by other commands, `xtmixed` does not work with the `svy:` prefix. See [Survey data](#) in [XT] [xtmixed](#) for details.

Also see

[U] [20 Estimation and postestimation commands](#)

## Description

This entry provides a quick reference for default file extensions that are used by various commands.

Extension	Reference	Description
.ado	[U] <a href="#">17 Ado-files</a>	automatically loaded do-files
.dct	[D] <a href="#">infile (fixed format)</a>	ASCII data dictionary
.do	[U] <a href="#">16 Do-files</a>	do-file
.dta	[D] <a href="#">save</a> , [D] <a href="#">use</a>	Stata-format dataset
.dtasig	[D] <a href="#">datasignature</a>	<a href="#">datasignature</a> file
.gph	[G-2] <a href="#">graph save</a> , [G-2] <a href="#">graph use</a>	<a href="#">graph</a>
.grec	[G-1] <a href="#">graph editor</a>	Graph Editor recording (ASCII format)
.irf	[TS] <a href="#">irf set</a>	impulse–response function datasets
.log	[R] <a href="#">log</a>	log file in text format
.mata	[M-1] <a href="#">source</a>	Mata source code
.mlib	[M-3] <a href="#">mata mlib</a>	Mata library
.mmat	[M-3] <a href="#">mata matsave</a>	Mata matrix
.mo	[M-3] <a href="#">mata mosave</a>	Mata object file
.out	[D] <a href="#">outsheet</a>	file saved by <a href="#">outsheet</a>
.raw	[D] <a href="#">infile (free format)</a> , [D] <a href="#">insheet</a>	ASCII-format dataset
.smcl	[R] <a href="#">log</a>	log file in SMCL format
.ster	[R] <a href="#">estimates save</a>	saved estimates
.stbcal	[D] <a href="#">datetime business calendars</a>	business calendars
.sthlp	[P] <a href="#">smcl</a>	help files
.stptrace	[MI] <a href="#">mi ptrace</a>	parameter-trace file
.sum	[D] <a href="#">checksum</a>	checksum files to verify network transfer
.zip	[D] <a href="#">zipfile</a>	zip file

The following files are of interest only to advanced programmers or are for Stata’s internal use.

Extension	Reference	Description
.class	[P] <a href="#">class</a>	class file for object-oriented programming
.dlg	[P] <a href="#">dialog programming</a>	dialog resource file
.idlg	[P] <a href="#">dialog programming</a>	dialog resource include file
.ihlp	[P] <a href="#">smcl</a>	help include file
.key	[R] <a href="#">search</a>	<a href="#">search</a> ’s keyword database file
.maint		maintenance file (for Stata’s internal use only)
.mnu		menu file (for Stata’s internal use only)
.pkg	[R] <a href="#">net</a>	user-site package file
.plugin	[P] <a href="#">plugin</a>	compiled addition (DLL)
.scheme	[G-4] <a href="#">schemes intro</a>	control file for a graph scheme
.style	[G-2] <a href="#">graph query</a>	graph style file
.toc	[U] <a href="#">28.5 Making your own download site</a>	user-site description file

# Title

format — Quick reference for numeric and string display formats

## Description

This entry provides a quick reference for display formats.

## Remarks

The default formats for each of the numeric variable types are

```
byte      %8.0g
int       %8.0g
long      %12.0g
float     %9.0g
double    %10.0g
```

To change the display format for variable `myvar` to `%9.2f`, type

```
format myvar %9.2f
```

or

```
format %9.2f myvar
```

Stata will understand either statement.

### Four values displayed in different numeric display formats

%9.0g	%9.0gc	%9.2f	%9.2fc	%-9.0g	%09.2f	%9.2e
12345	12,345	12345.00	12,345.00	12345	012345.00	1.23e+04
37.916	37.916	37.92	37.92	37.916	000037.92	3.79e+01
3567890	3567890	3.57e+06	3.57e+06	3567890	3.57e+06	3.57e+06
.9165	.9165	0.92	0.92	.9165	000000.92	9.16e-01

### Left-aligned and right-aligned string display formats

%-17s	%17s
AMC Concord	AMC Concord
AMC Pacer	AMC Pacer
AMC Spirit	AMC Spirit
Buick Century	Buick Century
Buick Opel	Buick Opel

## Also see

[U] [12.5 Formats: Controlling how data are displayed](#)



Description

An *immediate* command is a command that obtains data not from the data stored in memory, but from numbers types as arguments.

Command	Reference	Description
<code>bitesti</code>	[R] <a href="#">bitest</a>	Binomial probability test
<code>cci</code> <code>csi</code> <code>iri</code> <code>mcci</code>	[ST] <a href="#">epitab</a>	Tables for epidemiologists
<code>cii</code>	[R] <a href="#">ci</a>	Confidence intervals for means, proportions, and counts
<code>prtesti</code>	[R] <a href="#">prtest</a>	One- and two-sample tests of proportions
<code>sampsi</code>	[R] <a href="#">sampsi</a>	Sample size and power for means and proportions
<code>sdtesti</code>	[R] <a href="#">sdtest</a>	Variance comparison tests
<code>symmi</code>	[R] <a href="#">symmetry</a>	Symmetry and marginal homogeneity tests
<code>tabi</code>	[R] <a href="#">tabulate twoway</a>	Two-way tables of frequencies
<code>ttesti</code>	[R] <a href="#">ttest</a>	Mean comparison tests
<code>twoway pci</code>	[G-2] <a href="#">graph twoway pci</a>	Paired-coordinate plot with spikes or lines
<code>twoway pcarrowi</code>	[G-2] <a href="#">graph twoway pcarrowi</a>	Paired-coordinate plot with arrows
<code>twoway scatteri</code>	[G-2] <a href="#">graph twoway scatteri</a>	Twoway scatterplot

Also see

[U] [19 Immediate commands](#)

# Title

missing values — Quick reference for missing values

## Description

This entry provides a quick reference for Stata's missing values.

## Remarks

Stata has 27 numeric missing values:

`.`, the default, which is called the *system missing value* or `sysmiss`

and

`.a`, `.b`, `.c`, ..., `.z`, which are called the *extended missing values*.

Numeric missing values are represented by “large positive values”. The ordering is

$$\text{all nonmissing numbers} < . < .a < .b < \dots < .z$$

Thus the expression

$$\text{age} > 60$$

is true if variable `age` is greater than 60 or missing.

To exclude missing values, ask whether the value is less than `'.'`.

```
. list if age > 60 & age < .
```

To specify missing values, ask whether the value is greater than or equal to `'.'`. For instance,

```
. list if age >=.
```

Stata has one string missing value, which is denoted by `""` (blank).

## Also see

[U] [12.2.1 Missing values](#)

Description

This entry provides a quick reference for Stata’s postestimation commands. Because enhancements to Stata are continually being made, type `search postestimation commands` for possible additions to this list; see [\[R\] search](#).

Available after most estimation commands

Command	Description
<code>contrast</code>	contrasts and ANOVA-style joint tests of estimates
<code>estat ic</code>	AIC and BIC
<code>estat summarize</code>	estimation sample summary
<code>estat vce</code>	VCE
<code>estimates</code>	cataloging estimation results
<code>hausman</code>	Hausman’s specification test
<code>lincom</code>	point estimates, standard errors, testing, and inference for linear combinations of coefficients
<code>linktest</code>	link test for model specification for single-equation models
<code>lrtest</code>	likelihood-ratio test
<code>margins</code>	marginal means, predictive margins, marginal effects, and average marginal
<code>marginsplot</code>	graph the results from margins (profile plots, interaction plots, etc.) effects
<code>nlcom</code>	point estimates, standard errors, testing, and inference for nonlinear combinations of coefficients
<code>predict</code>	predictions, residuals, influence statistics, and other diagnostic measures
<code>predictnl</code>	point estimates, standard errors, testing, and inference for generalized predictions
<code>pwcompare</code>	pairwise comparisons of estimates
<code>suest</code>	seemingly unrelated estimation
<code>test</code>	Wald tests of simple and composite linear hypotheses
<code>testnl</code>	Wald tests of nonlinear hypotheses

**Special-interest postestimation commands**

Command	Description
<hr/>	
anova	
dfbeta	DFBETA influence statistics
estat hettest	tests for heteroskedasticity
estat imtest	information matrix test
estat ovtest	Ramsey regression specification-error test for omitted variables
estat szroeter	Szroeter's rank test for heteroskedasticity
estat vif	variance inflation factors for the independent variables
acprplot	augmented component-plus-residual plot
avplot	added-variable plot
avplots	all added-variables plots in one image
cprplot	component-plus-residual plot
lvr2plot	leverage-versus-squared-residual plot
rvfplot	residual-versus-fitted plot
rvpplot	residual-versus-predictor plot
arfima	
psdensity	estimate the spectral density
arima	
psdensity	estimate the spectral density
asclogit	
estat alternatives	alternative summary statistics
estat mfx	marginal effects
asmprobit and asroprobit	
estat alternatives	alternative summary statistics
estat covariance	covariance matrix of the latent-variable errors for the alternatives
estat correlation	correlation matrix of the latent-variable errors for the alternatives
estat facweights	covariance factor weights matrix
estat mfx	marginal effects
bootstrap	
estat bootstrap	percentile-based and bias-corrected CI tables

---

Command	Description
<hr/>	
ca and camat	
cabipplot	biplot of row and column points
caprojection	CA dimension projection plot
estat coordinates	display row and column coordinates
estat distances	display $\chi^2$ distances between row and column profiles
estat inertia	display inertia contributions of the individual cells
estat loadings	display correlations of profiles and axes
estat profiles	display row and column profiles
<sup>†</sup> estat summarize	estimation sample summary
estat table	display fitted correspondence table
screepplot	plot singular values
candisc	
estat anova	ANOVA summaries table
estat canontest	tests of the canonical discriminant functions
estat classfunctions	classification functions
estat classtable	classification table
estat correlations	correlation matrices and <i>p</i> -values
estat covariance	covariance matrices
estat errorrate	classification error-rate estimation
estat grdistances	Mahalanobis and generalized squared distances between the group means
estat grmeans	group means and variously standardized or transformed means
estat grsummarize	group summaries
estat list	classification listing
estat loadings	canonical discriminant-function coefficients (loadings)
estat manova	MANOVA table
estat structure	canonical structure matrix
estat summarize	estimation sample summary
loadingplot	plot standardized discriminant-function loadings
scoreplot	plot discriminant-function scores
screepplot	plot eigenvalues
canon	
estat correlations	show correlation matrices
estat loadings	show loading matrices
estat rotate	rotate raw coefficients, standard coefficients, or loading matrices
estat rotatecompare	compare rotated and unrotated coefficients or loadings
screepplot	plot canonical correlations

---

<sup>†</sup> estat summarize is not available after camat.

Command	Description
discrim knn and discrim logistic	
estat classtable	classification table
estat errorrate	classification error-rate estimation
estat grsummarize	group summaries
estat list	classification listing
estat summarize	estimation sample summary
discrim lda	
estat anova	ANOVA summaries table
estat canontest	tests of the canonical discriminant functions
estat classfunctions	classification functions
estat classtable	classification table
estat correlations	correlation matrices and <i>p</i> -values
estat covariance	covariance matrices
estat errorrate	classification error-rate estimation
estat grdistances	Mahalanobis and generalized squared distances between the group means
estat grmeans	group means and variously standardized or transformed means
estat grsummarize	group summaries
estat list	classification listing
estat loadings	canonical discriminant-function coefficients (loadings)
estat manova	MANOVA table
estat structure	canonical structure matrix
estat summarize	estimation sample summary
loadingplot	plot standardized discriminant-function loadings
scoreplot	plot discriminant-function scores
screepplot	plot eigenvalues
discrim qda	
estat classtable	classification table
estat correlations	group correlation matrices and <i>p</i> -values
estat covariance	group covariance matrices
estat errorrate	classification error-rate estimation
estat grdistances	Mahalanobis and generalized squared distances between the group means
estat grsummarize	group summaries
estat list	classification listing
estat summarize	estimation sample summary
exlogistic	
estat predict	single-observation prediction
estat se	report ORs or coefficients and their asymptotic standard errors
expoisson	
estat se	report coefficients or IRRs and their asymptotic standard errors

---

Command	Description
factor and factormat	
estat anti	anti-image correlation and covariance matrices
estat common	correlation matrix of the common factors
estat factors	AIC and BIC model-selection criteria for different numbers of factors
estat kmo	Kaiser–Meyer–Olkin measure of sampling adequacy
estat residuals	matrix of correlation residuals
estat rotatecompare	compare rotated and unrotated loadings
estat smc	squared multiple correlations between each variable and the rest
estat structure	correlations between variables and common factors
† estat summarize	estimation sample summary
loadingplot	plot factor loadings
rotate	rotate factor loadings
scoreplot	plot score variables
screepplot	plot eigenvalues
fracpoly	
fracplot	plot data and fit from most recently fit fractional polynomial model
fracpred	create variable containing prediction, deviance residuals, or SEs of fitted values
gmm	
estat overid	perform test of overidentifying restrictions
ivprobit	
estat classification	report various summary statistics, including the classification table
lroc	compute area under ROC curve and graph the curve
lsens	graph sensitivity and specificity versus probability cutoff
ivregress	
estat endogenous	perform tests of endogeneity
estat firststage	report “first-stage” regression statistics
estat overid	perform tests of overidentifying restrictions
logistic and logit	
estat classification	report various summary statistics, including the classification table
estat gof	Pearson or Hosmer–Lemeshow goodness-of-fit test
lroc	compute area under ROC curve and graph the curve
lsens	graph sensitivity and specificity versus probability cutoff
manova	
manovatest	multivariate tests after manova
screepplot	plot eigenvalues

† estat summarize is not available after factormat.

Command	Description
<hr/>	
mca	
mcaplot	plot of category coordinates
mcaprojection	MCA dimension projection plot
estat coordinates	display of category coordinates
estat subinertia	matrix of inertias of the active variables (after JCA only)
estat summarize	estimation sample summary
screeplot	plot principal inertias (eigenvalues)
mds, mdslong, and mdsmat	
estat config	coordinates of the approximating configuration
estat correlations	correlations between dissimilarities and approximating distances
estat pairwise	pairwise dissimilarities, approximating distances, and raw residuals
estat quantiles	quantiles of the residuals per object
estat stress	Kruskal stress (loss) measure (only after classical MDS)
<sup>†</sup> estat summarize	estimation sample summary
mdsconfig	plot of approximating configuration
mdsshepard	Shepard diagram
screeplot	plot eigenvalues (only after classical MDS)
mfp	
fracplot	plot data and fit from most recently fit fractional polynomial model
fracpred	create variable containing prediction, deviance residuals, or SEs of fitted values
mi estimate and mi estimate using	
mi test	tests on coefficients
mi testtransform	tests on transformed coefficients
mi predict	linear predictions
mi predictnl	nonlinear predictions
nlogit	
estat alternatives	alternative summary statistics
<hr/>	



Command	Description
pca and pcamat	
estat anti	anti-image correlation and covariance matrices
estat kmo	Kaiser–Meyer–Olkin measure of sampling adequacy
estat loadings	component-loading matrix in one of several normalizations
estat residuals	matrix of correlation or covariance residuals
estat rotatecompare	compare rotated and unrotated components
estat smc	squared multiple correlations between each variable and the rest
<sup>†</sup> estat summarize	estimation sample summary
loadingplot	plot component loadings
rotate	rotate component loadings
scoreplot	plot score variables
screeplot	plot eigenvalues
poisson	
estat gof	goodness-of-fit test
probit	
estat classification	report various summary statistics, including the classification table
estat gof	Pearson or Hosmer–Lemeshow goodness-of-fit test
lroc	compute area under ROC curve and graph the curve
lsens	graph sensitivity and specificity versus probability cutoff
procrustes	
estat compare	fit statistics for orthogonal, oblique, and unrestricted transformations
estat mvreg	display multivariate regression resembling unrestricted transformation
estat summarize	display summary statistics over the estimation sample
procoverlay	produce a Procrustes overlay graph
regress	
dfbeta	DFBETA influence statistics
estat hettest	tests for heteroskedasticity
estat imtest	information matrix test
estat ovtest	Ramsey regression specification-error test for omitted variables
estat szroeter	Szroeter’s rank test for heteroskedasticity
estat vif	variance inflation factors for the independent variables
acprplot	augmented component-plus-residual plot
avplot	added-variable plot
avplots	all added-variables plots in one image
cprplot	component-plus-residual plot
lvr2plot	leverage-versus-squared-residual plot
rvfplot	residual-versus-fitted plot
rvpplot	residual-versus-predictor plot

<sup>†</sup> estat summarize is not available after mdsmat or pcamat.

Command	Description
<b>regress</b> <b>postestimation</b> <b>time series</b>	
<b>estat archlm</b>	test for ARCH effects in the residuals
<b>estat bgodfrey</b>	Breusch–Godfrey test for higher-order serial correlation
<b>estat durbinalt</b>	Durbin’s alternative test for serial correlation
<b>estat dwatson</b>	Durbin–Watson $d$ statistic to test for first-order serial correlation
<b>rocf</b>	
<b>rocplot</b>	plot the fitted ROC curve and simultaneous confidence bands
<b>rocreg</b>	
<b>estat nproc</b>	nonparametric ROC curve estimation, keeping fit information from <b>rocreg</b>
<b>rocregplot</b>	plot marginal and covariate-specific ROC curves
<b>sem</b>	
<b>estat eqgof</b>	equation-level goodness of fit
<b>estat eqtest</b>	equation-level Wald tests
<b>estat framework</b>	display results in modeling framework
<b>estat ggof</b>	group-level goodness of fit
<b>estat ginvariant</b>	test of invariance of parameters across groups
<b>estat gof</b>	overall goodness of fit
<b>estat mindices</b>	modification indices
<b>estat residuals</b>	matrices of residuals
<b>estat scoretests</b>	score tests
<b>estat stable</b>	assess stability of nonrecursive systems
<b>estat stdize:</b>	tests standardized parameters
<b>estat teffects</b>	decomposition of effects
<b>stcox</b>	
<b>estat concordance</b>	compute the concordance probability
<b>estat phtest</b>	test proportional-hazards assumption based on Schoenfeld residuals
<b>stcurve</b>	plot the survivor, hazard, and cumulative hazard functions
<b>stcorreg</b>	
<b>stcurve</b>	plot the cumulative subhazard and cumulative incidence functions
<b>streg</b>	
<b>stcurve</b>	plot the survivor, hazard, and cumulative hazard functions

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Command	Description
<hr/>	
svar, var, and varbasic	
<code>fcast compute</code>	obtain dynamic forecasts
<code>fcast graph</code>	graph dynamic forecasts obtained from <code>fcast compute</code>
<code>irf</code>	create and analyze IRFs and FEVDs
<code>vargranger</code>	Granger causality tests
<code>varlmar</code>	LM test for autocorrelation in residuals
<code>varnorm</code>	test for normally distributed residuals
<code>varsoc</code>	lag-order selection criteria
<code>varstable</code>	check stability condition of estimates
<code>varwle</code>	Wald lag-exclusion statistics
ucm	
<code>estat period</code>	display cycle periods in time units
<code>psdensity</code>	estimate the spectral density
vec	
<code>fcast compute</code>	obtain dynamic forecasts
<code>fcast graph</code>	graph dynamic forecasts obtained from <code>fcast compute</code>
<code>irf</code>	create and analyze IRFs and FEVDs
<code>veclmar</code>	LM test for autocorrelation in residuals
<code>vecnorm</code>	test for normally distributed residuals
<code>vecstable</code>	check stability condition of estimates
xtabond, xtdpd, and xtdpdsys	
<code>estat abond</code>	test for autocorrelation
<code>estat sargan</code>	Sargan test of overidentifying restrictions
xtgee	
<code>estat wcorrelation</code>	estimated matrix of the within-group correlations
xtmelogit, xtmepoisson, and xtmixed	
<code>estat group</code>	summarize the composition of the nested groups
<code>estat recovariance</code>	display the estimated random-effects covariance matrix
xtreg	
<code>xttest0</code>	Breusch and Pagan LM test for random effects
<hr/>	

## Also see

- [R] **contrast** — Contrasts and linear hypothesis tests after estimation
- [R] **estat** — Postestimation statistics
- [R] **estimates** — Save and manipulate estimation results
- [R] **hausman** — Hausman specification test
- [R] **lincom** — Linear combinations of estimators
- [R] **linktest** — Specification link test for single-equation models
- [R] **lrtest** — Likelihood-ratio test after estimation
- [R] **margins** — Marginal means, predictive margins, and marginal effects
- [R] **marginsplot** — Graph results from margins (profile plots, etc.)
- [R] **nlcom** — Nonlinear combinations of estimators
- [R] **predict** — Obtain predictions, residuals, etc., after estimation
- [R] **predictnl** — Obtain nonlinear predictions, standard errors, etc., after estimation
- [R] **pwcompare** — Pairwise comparisons
- [R] **suest** — Seemingly unrelated estimation
- [R] **test** — Test linear hypotheses after estimation
- [R] **testnl** — Test nonlinear hypotheses after estimation
- [U] **20 Estimation and postestimation commands**

## Description

Prefix commands operate on other Stata commands. They modify the input, modify the output, and repeat execution of the other Stata command.

Command	Reference	Description
<code>by</code>	[D] <a href="#">by</a>	run command on subsets of data
<code>statsby</code>	[D] <a href="#">statsby</a>	same as <code>by</code> , but collect statistics from each run
<code>rolling</code>	[TS] <a href="#">rolling</a>	run command on moving subsets and collect statistics
<code>bootstrap</code>	[R] <a href="#">bootstrap</a>	run command on bootstrap samples
<code>jackknife</code>	[R] <a href="#">jackknife</a>	run command on jackknife subsets of data
<code>permute</code>	[R] <a href="#">permute</a>	run command on random permutations
<code>simulate</code>	[R] <a href="#">simulate</a>	run command on manufactured data
<code>svy</code>	[SVY] <a href="#">svy</a>	run command and adjust results for survey sampling
<code>mi estimate</code>	[MI] <a href="#">mi estimate</a>	run command on multiply imputed data and adjust results for multiple imputation (MI)
<code>nestreg</code>	[R] <a href="#">nestreg</a>	run command with accumulated blocks of regressors, and report nested model comparison tests
<code>stepwise</code>	[R] <a href="#">stepwise</a>	run command with stepwise variable inclusion/exclusion
<code>xi</code>	[R] <a href="#">xi</a>	run command after expanding factor variables and interactions; for most commands, using <code>factor variables</code> is preferred to using <code>xi</code> (see [U] <a href="#">11.4.3 Factor variables</a> )
<code>fracpoly</code>	[R] <a href="#">fracpoly</a>	run command with fractional polynomials of one regressor
<code>mfp</code>	[R] <a href="#">mfp</a>	run command with multiple fractional polynomial regressors
<code>capture</code>	[P] <a href="#">capture</a>	run command and capture its return code
<code>noisily</code>	[P] <a href="#">quietly</a>	run command and show the output
<code>quietly</code>	[P] <a href="#">quietly</a>	run command and suppress the output
<code>version</code>	[P] <a href="#">version</a>	run command under specified version

The last group—`capture`, `noisily`, `quietly`, and `version`—have to do with programming Stata, and for historical reasons, `capture`, `noisily`, and `quietly` allow you to omit the colon.

## Also see

[U] [11.1.10 Prefix commands](#)

# Title

import and export data — Quick reference for importing and exporting data

## Description

This entry provides a quick reference for determining which method to use for reading non-Stata data into memory and for exporting Stata data from memory to other formats. See [\[U\] 21 Inputting and importing data](#) for more details on reading non-Stata data into memory.

## Remarks

Remarks are presented under the following headings:

*Summary of the different import methods*  
*import excel*  
*insheet*  
*odbc*  
*infile (free format)—infile without a dictionary*  
*infix (fixed format)*  
*infile (fixed format)—infile with a dictionary*  
*import sasxport*  
*haver (Windows only)*  
*xmluse*  
*Summary of the different export methods*  
*export excel*  
*outsheet*  
*odbc*  
*outfile*  
*export sasxport*  
*xmlsave*

## Summary of the different import methods

### import excel

- `import excel` reads worksheets from Microsoft Excel (`.xls` and `.xlsx`) files.
- Entire worksheets can be read, or custom cell ranges can be read.
- See [\[D\] import excel](#).

### insheet

- `insheet` reads text files created by a spreadsheet or a database program.
- The data must be tab-separated or comma-separated, but not both simultaneously. A custom delimiter may also be specified.
- An observation must be on only one line.
- The first line in the file can optionally contain the names of the variables.
- See [\[D\] insheet](#).

**odbc**

- ODBC, an acronym for Open DataBase Connectivity, is a standard for exchanging data between programs. Stata supports the ODBC standard for importing data via the `odbc` command and can read from any ODBC data source on your computer.
- See [D] [odbc](#).

**infile (free format)—infile without a dictionary**

- The data can be space-separated, tab-separated, or comma-separated.
- Strings with embedded spaces or commas must be enclosed in quotes (even if tab- or comma-separated).
- An observation can be on more than one line, or there can even be multiple observations per line.
- See [D] [infile \(free format\)](#).

**infix (fixed format)**

- The data must be in fixed-column format.
- An observation can be on more than one line.
- `infix` has simpler syntax than `infile` (fixed format).
- See [D] [infix \(fixed format\)](#).

**infile (fixed format)—infile with a dictionary**

- The data may be in fixed-column format.
- An observation can be on more than one line.
- ASCII or EBCDIC data can be read.
- `infile` (fixed format) has the most capabilities for reading data.
- See [D] [infile \(fixed format\)](#).

**import sasxport**

- `import sasxport` reads SAS XPORT Transport format files.
- `import sasxport` will also read value label information from a `formats.xpf` XPORT file, if available.
- See [D] [import sasxport](#).

**haver (Windows only)**

- `haver` reads Haver Analytics (<http://www.haver.com/>) database files.
- `haver` is available only for Windows and requires a corresponding DLL (`DLXAPI32.DLL`) available from Haver Analytics.
- See [TS] [haver](#).



## **xmluse**

- `xmluse` reads extensible markup language (XML) files—highly adaptable text-format files derived from the standard generalized markup language (SGML).
- `xmluse` can read either an Excel-format XML or a Stata-format XML file into Stata.
- See [\[D\]](#) `xmlsave`.

## **Summary of the different export methods**

### **export excel**

- `export excel` creates Microsoft Excel worksheets in `.xls` and `.xlsx` files.
- Entire worksheets can be exported, or custom cell ranges can be overwritten.
- See [\[D\]](#) `import excel`.

### **outsheet**

- `outsheet` creates comma-separated (CSV) or tab-delimited files that many other programs can read.
- A custom delimiter may also be specified.
- The first line of the file can optionally contain the names of the variables.
- See [\[D\]](#) `outsheet`.

### **odbc**

- ODBC, an acronym for Open DataBase Connectivity, is a standard for exchanging data between programs. Stata supports the ODBC standard for exporting data via the `odbc` command and can write to any ODBC data source on your computer.
- See [\[D\]](#) `odbc`.

### **outfile**

- `outfile` creates text-format datasets.
- The data can be written in space-separated or comma-separated format.
- Alternatively, the data can be written in fixed-column format.
- See [\[D\]](#) `outfile`.

### **export sasxport**

- `export sasxport` saves SAS XPORT Transport format files.
- `export sasxport` can also write value label information to a `formats.xpf` XPORT file.
- See [\[D\]](#) `import sasxport`.

**xmlsave**

- **xmlsave** writes extensible markup language (XML) files—highly adaptable text-format files derived from the standard generalized markup language (SGML).
- **xmlsave** can write either an Excel-format XML or a Stata-format XML file.
- See [D] **xmlsave**.

**Also see**

- [D] **edit** — Browse or edit data with Data Editor
- [D] **import** — Overview of importing data into Stata
- [D] **export** — Overview of exporting data from Stata
- [D] **infile (fixed format)** — Read text data in fixed format with a dictionary
- [D] **infile (free format)** — Read unformatted text data
- [D] **infix (fixed format)** — Read text data in fixed format
- [D] **input** — Enter data from keyboard
- [D] **insheet** — Read text data created by a spreadsheet
- [D] **import excel** — Import and export Excel files
- [D] **import sasxport** — Import and export datasets in SAS XPORT format
- [D] **odbc** — Load, write, or view data from ODBC sources
- [D] **outfile** — Export dataset in text format
- [D] **outsheet** — Write spreadsheet-style dataset
- [D] **xmlsave** — Export or import dataset in XML format
- [TS] **haver** — Load data from Haver Analytics database
- [U] **21 Inputting and importing data**

Acronym glossary

2SIV	two-step instrumental variables
2SLS	two-stage least squares
3SLS	three-stage least squares
ADF	asymptotic distribution free
AF	attributable fraction for the population
AFE	attributable fraction among the exposed
AFT	accelerated failure time
AIC	Akaike information criterion
AIDS	almost ideal demand system
ANCOVA	analysis of covariance
ANOVA	analysis of variance
APE	average partial effects
AR	autoregressive
AR(1)	first-order autoregressive
ARCH	autoregressive conditional heteroskedasticity
ARFIMA	autoregressive fractionally integrated moving average
ARIMA	autoregressive integrated moving average
ARMA	autoregressive moving average
ARMAX	autoregressive moving-average exogenous
ASE	asymptotic standard error
ASL	achieved significance level
AUC	area under the time-versus-concentration curve
BC	bias corrected
BCa	bias-corrected and accelerated
BE	between effects
BFGS	Broyden–Fletcher–Goldfarb–Shanno
BHHH	Berndt–Hall–Hall–Hausman
BIC	Bayesian information criterion
BLUP	best linear unbiased prediction
BRR	balanced repeated replication
CA	correspondence analysis
CCI	conservative confidence interval
CD	coefficient of determination
CDC	Centers for Disease Control and Prevention
CDF	cumulative distribution function
CES	constant elasticity of substitution
CFA	confirmatory factor analysis
CFI	comparative fit index
CI	confidence interval

CIF	cumulative incidence function
CMLE	conditional maximum likelihood estimates
ct	count time
cusum	cumulative sum
c.v.	coefficient of variation
DA	data augmentation
DEFF	design effect
DEFT	design effect (standard deviation metric)
DF	dynamic factor
df / d.f.	degree(s) of freedom
DFAR	dynamic factors with vector autoregressive errors
DFP	Davidon–Fletcher–Powell
DPD	dynamic panel data
EBCDIC	extended binary coded decimal interchange code
EGARCH	exponential GARCH
EGLS	estimated generalized least squares
EIM	expected information matrix
EM	expectation maximization
EPS	Encapsulated PostScript
ESS	error sum of squares
FCS	fully conditional specification
FD	first-differenced estimator
FDA	Food and Drug Administration
FE	fixed effects
FEVD	forecast-error variance decomposition
FGLS	feasible generalized least squares
FGNLS	feasible generalized nonlinear least squares
FIVE estimator	full-information instrumental-variables efficient estimator
FIML	full information maximum likelihood
flong	full long
flongsep	full long and separate
FMI	fraction of missing information
FP	fractional polynomial
FPC	finite population correction
GARCH	generalized autoregressive conditional heteroskedasticity
GEE	generalized estimating equations
GEV	generalized extreme value
GHK	Geweke–Hajivassiliou–Keane
GLIM	generalized linear interactive modeling
GLLAMM	generalized linear latent and mixed models

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GLM	generalized linear models
GLS	generalized least squares
GMM	generalized method of moments
GUI	graphical user interface
HAC	heteroskedasticity- and autocorrelation-consistent
HR	hazard ratio
HRF	human readable form
IC	information criteria
ICD-9	International Classification of Diseases, Ninth Revision
IIA	independence of irrelevant alternatives
i.i.d.	independent and identically distributed
IQR	interquartile range
IR	incidence rate
IRF	impulse–response function
IRLS	iterated, reweighted least squares
IRR	incidence-rate ratio
IV	instrumental variables
JCA	joint correspondence analysis
LAPACK	linear algebra package
LAV	least absolute value
LDA	linear discriminant analysis
LIML	limited-information maximum likelihood
LM	Lagrange multiplier
LOO	leave one out
LOWESS	locally weighted scatterplot smoothing
LR	likelihood ratio
LSB	least-significant byte
MA	moving average
MAD	median absolute deviation
MANCOVA	multivariate analysis of covariance
MANOVA	multivariate analysis of variance
MAR	missing at random
MCA	multiple correspondence analysis
MCAR	missing completely at random
MCE	Monte Carlo error
MCMC	Markov chain Monte Carlo
MDS	multidimensional scaling
ME	multiple equation

MEFF	misspecification effect
MEFT	misspecification effect (standard deviation metric)
MFP	multivariable fractional polynomial
MI	multiple imputation
mi	multiple imputation
midp	mid- $p$ -value
MIMIC	multiple indicators and multiple causes
MINQUE	minimum norm quadratic unbiased estimation
MIVQUE	minimum variance quadratic unbiased estimation
ML	maximum likelihood
MLE	maximum likelihood estimate
MLMV	maximum likelihood with missing values
mlong	marginal long
MM	method of moments
MNAR	missing not at random
MNP	multinomial probit
MPL	modified profile likelihood
MS	mean square
MSB	most-significant byte
MSE	mean squared error
MSL	maximum simulated likelihood
MSS	model sum of squares
MUE	median unbiased estimates
MVN	multivariate normal
MVREG	multivariate regression
NARCH	nonlinear ARCH
NHANES	National Health and Nutrition Examination Survey
NLS	nonlinear least squares
NPARCH	nonlinear power ARCH
NR	Newton–Raphson
ODBC	Open DataBase Connectivity
OIM	observed information matrix
OIRF	orthogonalized impulse–response function
OLE	Object Linking and Embedding (Microsoft product)
OLS	ordinary least squares
OPG	outer product of the gradient
OR	odds ratio
PA	population averaged
PARCH	power ARCH
PCA	principal component analysis
PCSE	panel-corrected standard error
p.d.f.	probability density function

PF	prevented fraction for the population
PFE	prevented fraction among the exposed
PH	proportional hazards
pk	pharmacokinetic data
PMM	predictive mean matching
PNG	Portable Network Graphics
PSU	primary sampling unit
QDA	quadratic discriminant analysis
QML	quasimaximum likelihood
rc	return code
RCT	randomized controlled trial
RE	random effects
REML	restricted (or residual) maximum likelihood
RESET	regression specification-error test
RMSE	root mean squared error
RMSEA	root mean squared error of approximation
ROC	receiver operating characteristic
ROP	rank-ordered probit
ROT	rule of thumb
RR	relative risk
RRR	relative-risk ratio
RSS	residual sum of squares
RUM	random utility maximization
RVI	relative variance increase
SAARCH	simple asymmetric ARCH
SARIMA	seasonal ARIMA
s.d.	standard deviation
SE / s.e.	standard error
SEM	structural equation modeling
SF	static factor
SFAR	static factors with vector autoregressive errors
SIF	Stata internal form
SIR	standardized incidence ratio
SJ	Stata Journal
SMCL	Stata Markup and Control Language
SMR	standardized mortality/morbidity ratio
SMSA	standard metropolitan statistical area
SOR	standardized odds ratio
SQL	Structured Query Language
SRD	standardized rate difference
SRMR	standardized root mean squared residual

SRR	standardized risk ratio
SRS	simple random sample/sampling
SRSWR	SRS with replacement
SSC	Statistical Software Components
SSCP	sum of squares and cross products
SSD	summary statistics data
SSU	secondary sampling unit
st	survival time
STB	Stata Technical Bulletin
STS	structural time series
SUR	seemingly unrelated regression
SURE	seemingly unrelated regression estimation
SVAR	structural vector autoregressive model
SVD	singular value decomposition
TARCH	threshold ARCH
TDT	transmission/disequilibrium test
TIFF	tagged image file format
TLI	Tucker–Lewis index
TSS	total sum of squares
UCM	unobserved-components model
VAR	vector autoregressive model
VAR(1)	first-order vector autoregressive
VARMA	vector autoregressive moving average
VARMA(1,1)	first-order vector autoregressive moving average
VCE	variance–covariance estimate
VECM	vector error-correction model
VIF	variance inflation factor
WLC	worst linear combination
WLF	worst linear function
WLS	weighted least squares
XML	Extensible Markup Language
ZINB	zero-inflated negative binomial
ZIP	zero-inflated Poisson
ZTNB	zero-truncated negative binomial
ZTP	zero-truncated Poisson



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- Johnston, J., [XT] **xtrc**
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- Jolliffe, I. T., [MV] **biplot**, [MV] **pca**, [R] **brier**
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[R] **ivregress postestimation**, [R] **logit**,  
[R] **probit**, [R] **regress postestimation**, [R] **test**,  
[TS] **arch**, [TS] **prais**, [XT] **xtgls**, [XT] **xtpcse**,  
[XT] **xtrec**, [XT] **xtreg**

Judkins, D. R., [SVY] **svy brr**, [SVY] **svyset**,  
[SVY] **variance estimation**

Judson, D. H., [R] **poisson**, [R] **tabulate twoway**,  
[R] **tpoisson**

Jung, B. C., [XT] **xtmixed**

Juul, S., [R] **dstdize**, [R] **roccomp**, [R] **roctab**

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Kadane, J. B., [XT] **xtmelogit**, [XT] **xtmepoisson**

Kahn, H. A., [R] **dstdize**, [ST] **epitab**, [ST] **ltable**,  
[ST] **stcox**

Kaiser, H. F., [MV] **factor postestimation**, [MV] **pca postestimation**, [MV] **rotate**, [MV] **rotatemat**, [MV] **Glossary**

Kaiser, J., [R] **ksmirnov**, [R] **permute**, [R] **signrank**

Kalbfleisch, J. D., [ST] **ltable**, [ST] **stcox**, [ST] **stcox PH-assumption tests**, [ST] **stcox postestimation**, [ST] **streg**, [ST] **sts**, [ST] **sts test**, [ST] **stset**, [XT] **xtcloglog**, [XT] **xtlogit**, [XT] **xtprobit**

Kalman, R. E., [TS] **arima**

Kalmijn, M., [R] **tetrachoric**

Kantor, D., [D] **cf**, [D] **functions**

Kaplan, E. L., [ST] **sterreg**, [ST] **sterreg postestimation**, [ST] **sts**

Katz, J. N., [XT] **xtgls**, [XT] **xtpcse**

Kaufman, L.,  
[MV] **cluster**, [MV] **clustermat**, [MV] **matrix dissimilarity**, [MV] **measure\_option**, [P] **matrix dissimilarity**

Keane, M. P., [R] **asmprob**

Keeler, E. B., [R] **brier**

Keiding, N., [ST] **sterreg**, [ST] **stspl**

Kemp, A. W., [D] **functions**, [R] **nbreg**, [R] **poisson**

Kemp, C. D., [D] **functions**

Kemphorne, P. J., [R] **regress postestimation**

Kendall, D. G., [MV] **mds**

Kendall, M. G., [MV] **measure\_option**, [R] **centile**, [R] **spearman**, [R] **tabulate twoway**, [R] **tobit**

Kennedy, W. J., Jr., [P] **\_robust**, [R] **anova**, [R] **nl**, [R] **regress**, [R] **stepwise**, [SVY] **svy: tabulate twoway**

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Kent, J. T., [MI] **mi impute mvn**, [MV] **discrim**, [MV] **discrim lda**, [MV] **factor**, [MV] **manova**, [MV] **matrix dissimilarity**, [MV] **mds**, [MV] **mds postestimation**, [MV] **mdslong**, [MV] **mdsmat**, [MV] **mvtest**, [MV] **mvtest means**, [MV] **mvtest normality**, [MV] **pca**, [MV] **procrustes**, [P] **matrix dissimilarity**, [P] **\_robust**, [U] **20.24 References**

Kenward, M. G., [MI] **intro substantive**, [MI] **mi impute**

Kettenring, J. R., [R] **diagnostic plots**

Keynes, J. M., [R] **ameans**

Khan, M. R., [ST] **epitab**

Khandker, S. R., [R] **inequality**

Khanti-Akom, S., [XT] **xhtaylor**

Khare, M., [MI] **intro substantive**

Kiernan, M., [R] **kappa**

Kim, I.-M., [TS] **vec intro**, [TS] **vec**, [TS] **vecrank**

Kim, J. O., [MV] **factor**

Kimber, A. C., [ST] **streg**

Kimbrough, J. W., [MV] **discrim knn**

Kinderman, A. J., [D] **functions**

King, M. L., [TS] **prais**

King, R. G., [TS] **tsfilter**, [TS] **tsfilter bk**, [TS] **tsfilter cf**, [TS] **tsfilter hp**, [TS] **vecrank**

Kirkwood, B. R., [R] **dstdize**, [R] **summarize**

Kish, L., [P] **\_robust**, [R] **loneway**, [SVY] **survey**, [SVY] **estat**, [SVY] **variance estimation**, [U] **20.24 References**

Kitagawa, G., [R] **BIC note**

Kiviet, J. F., [XT] **xtabond**

Klar, J., [R] **logistic postestimation**

Klecka, W. R., [MV] **discrim**, [MV] **discrim lda**

Kleiber, C., [R] **inequality**

Klein, J. P., [ST] **stci**, [ST] **stcox**, [ST] **stcox postestimation**, [ST] **stcrreg**, [ST] **stpower**, [ST] **stpower cox**, [ST] **streg**, [ST] **sts**, [ST] **sts graph**, [ST] **sts test**

Klein, L. R., [R] **reg3**, [R] **regress postestimation time series**

Klein, M., [R] **binreg**, [R] **clogit**, [R] **logistic**, [R] **lrtest**, [R] **mlogit**, [R] **ologit**, [XT] **xtgee**

Kleinbaum, D. G., [R] **binreg**, [R] **clogit**, [R] **logistic**, [R] **lrtest**, [R] **mlogit**, [R] **ologit**, [ST] **epitab**, [XT] **xtgee**

Kleiner, B., [G-2] **graph box**, [G-2] **graph matrix**, [G-3] **by\_option**, [R] **diagnostic plots**, [R] **lowess**, [U] **1.4 References**

Kleinman, K. P., [MI] **intro substantive**

Klema, V. C., [P] **matrix symeigen**

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Kmenta, J., [R] **eivreg**, [R] **ivregress**, [R] **regress**, [TS] **arch**, [TS] **prais**, [TS] **rolling**, [XT] **xtpcse**

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Knuth, D., [D] **functions**

Koch, G. G., [R] **anova**, [R] **kappa**, [R] **vwls**, [SVY] **svy: tabulate twoway**

Koehler, A. B., [TS] **tssmooth**, [TS] **tssmooth dexponential**, [TS] **tssmooth exponential**, [TS] **tssmooth hwinters**, [TS] **tssmooth shwinters**

Koehler, K. J., [R] **diagnostic plots**

Koenker, R., [R] **qreg**, [R] **regress postestimation**

Kohler, U., [D] **input**, [G-2] **graph twoway rbar**, [MV] **biplot**, [R] **kdensity**, [R] **regress**, [R] **regress postestimation**



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- Lange, K., [R] **qreg**
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[XT] **xtrc**, [XT] **xtreg**
- Lee, W. C., [R] **roctab**
- Leese, M., [MV] **cluster**, [MV] **cluster stop**
- Legendre, A.-M., [R] **regress**
- Lehmann, E. L., [R] **oneway**
- Leisenring, W., [ST] **stcrreg**
- Lemeshow, S., [R] **clogit**, [R] **clogit postestimation**, [R] **glm**, [R] **glogit**, [R] **lincom**, [R] **logistic**, [R] **logistic postestimation**, [R] **logit**, [R] **logit postestimation**, [R] **lrtest**, [R] **mlogit**, [R] **predictnl**, [R] **stepwise**, [ST] **stcox**, [ST] **stpower**, [ST] **stpower cox**, [ST] **streg**, [SVY] **survey**, [SVY] **estat**, [SVY] **poststratification**, [XT] **xtgee**
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- LeSage, G., [ST] **stcrreg**
- Leser, C. E. V., [TS] **tsfilter**, [TS] **tsfilter hp**
- Levene, H., [R] **sdtest**
- Levin, A., [XT] **xtunitroot**
- Levin, B., [R] **dstdize**, [R] **kappa**, [R] **sampsi**, [ST] **epitab**
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- Levinsohn, J., [R] **frontier**
- Levy, D., [R] **sunflower**
- Levy, M., [MI] **intro substantive**, [MI] **mi impute**
- Levy, P. S., [SVY] **survey**, [SVY] **poststratification**
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- Lewis, I. G., [R] **binreg**
- Lewis, J. D., [R] **fracpoly**
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- Leyland, A. H., [XT] **xtmlogit**, [XT] **xtmepoisson**
- Li, G., [R] **rreg**
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- Li, N., [MI] **intro substantive**
- Li, Q., [XT] **xtivreg**, [XT] **xtreg postestimation**, [XT] **xtregar**
- Li, W., [R] **pkcross**, [R] **pkequiv**, [R] **pkshape**
- Liang, K.-Y., [XT] **xtcloglog**, [XT] **xtgee**, [XT] **xtlogit**, [XT] **xtmlogit**, [XT] **xtmepoisson**, [XT] **xtmixed**, [XT] **xtnbreg**, [XT] **xtpoisson**, [XT] **xtprobit**
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- Likert, R. A., [R] **alpha**
- Lilien, D. M., [TS] **arch**
- Lilienfeld, D. E., [ST] **epitab**
- Lim, G. C., [R] **cnsreg**, [R] **regress**, [R] **regress postestimation**, [TS] **arch**
- Lin, C.-F., [XT] **xtunitroot**
- Lin, D. Y., [P] **\_robust**, [ST] **stcox**, [ST] **stcrreg**, [SVY] **svy estimation**, [U] **20.24 References**
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- Linde-Zwirble, W., [D] **functions**
- Lindelow, M., [SVY] **svy estimation**, [SVY] **svyset**
- Lindley, D. V., [R] **ci**
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- Littell, R. C., [XT] **xtmlogit**
- Little, R. J. A., [MI] **intro substantive**, [MI] **mi impute mvn**, [MI] **mi impute pmm**
- Liu, J.-P., [R] **pk**, [R] **pkcross**, [R] **pkequiv**, [R] **pkexamine**, [R] **pkshape**, [ST] **stpower**
- Liu, Q., [XT] **xtcloglog**, [XT] **xtintreg**, [XT] **xtlogit**, [XT] **xtmlogit**, [XT] **xtmepoisson**, [XT] **xtpoisson**, [XT] **xtprobit**, [XT] **xttobit**
- Liu, T.-P., [SVY] **svy bootstrap**, [SVY] **variance estimation**
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- Locke, C. S., [R] **pkequiv**
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- López-Vizcaíno, M. E., [ST] **epitab**
- Lorenz, M. O., [R] **inequality**
- Louis, T. A., [R] **tabulate twoway**
- Lovell, C. A. K., [R] **frontier**, [XT] **xtfrontier**
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- Lucas, H. L., [R] **pkcross**
- Luce, R. D., [R] **rologit**

Luckman, B., [MV] **screeplot**  
 Ludwig, J., [ST] **stcrreg**  
 Lumley, T. S., [MV] **factor**, [MV] **pca**, [R] **anova**,  
 [R] **dstdize**, [R] **oneway**, [ST] **epitab**  
 Luniak, M., [MV] **biplot**  
 Lunn, M., [ST] **stcrreg**  
 Lunt, M., [R] **ologit**, [R] **slogit**  
 Lurie, M. B., [MV] **manova**  
 Lütkepohl, H., [M-5] **Dmatrix()**, [M-5] **Kmatrix()**,  
 [M-5] **Lmatrix()**, [R] **estat**, [R] **glogit**,  
 [R] **ivregress**, [R] **ivregress postestimation**,  
 [R] **logit**, [R] **probit**, [R] **regress postestimation**,  
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 [TS] **vec intro**, [TS] **vecnorm**, [TS] **vecrank**,  
 [TS] **vecstable**, [XT] **xtgls**, [XT] **xtpcse**,  
 [XT] **xtrc**, [XT] **xtrreg**

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 Machin, D., [R] **ci**, [R] **kappa**, [R] **tabulate twoway**,  
 [ST] **stpower**, [ST] **stpower cox**, [ST] **stpower**  
**logrank**  
 Mack, T. M., [R] **symmetry**  
 MacKinnon, J. G., [P] **\_robust**, [R] **boxcox**, [R] **cnsreg**,  
 [R] **gmm**, [R] **intreg**, [R] **ivregress**, [R] **ivregress**  
**postestimation**, [R] **mlogit**, [R] **nl**, [R] **nlstur**,  
 [R] **reg3**, [R] **regress**, [R] **regress postestimation**  
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 [TS] **arima**, [TS] **dfuller**, [TS] **pperron**,  
 [TS] **prais**, [TS] **sspace**, [TS] **varlmar**,  
 [TS] **Glossary**, [U] **20.24 References**, [XT] **xtgls**,  
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 MacLaren, M. D., [D] **functions**  
 MacMahon, B., [ST] **epitab**  
 MacRae, K. D., [R] **binreg**  
 MaCurdy, T. E., [XT] **xthtaylor**  
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 [MV] **discrim lda**, [MV] **factor**, [MV] **manova**,  
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- McNemar, Q., [ST] **epitab**
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- Meier, P., [ST] **sterreg**, [ST] **sterreg postestimation**, [ST] **sts**
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- Melly, B., [R] **qreg**
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- Michener, C. D., [MV] **measure\_option**
- Mickey, M. R., [MV] **discrim estat**
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- Miettinen, O. S., [ST] **epitab**
- Milan, L., [MV] **ca**, [MV] **factor**, [MV] **mca**, [MV] **pca**
- Miller, A. B., [R] **kappa**
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- Miller, J. I., [TS] **sspace**
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- Milliken, G. A., [MV] **manova**, [R] **anova**, [R] **contrast**, [R] **margins**, [R] **pwcompare**, [XT] **xtmelogit**
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- Mitchell, M. N., [D] **data management**, [D] **by**, [D] **egen**, [D] **reshape**, [G-1] **graph intro**, [R] **logistic**, [R] **logistic postestimation**, [R] **logit**, [R] **marginsplot**, [U] **11.7 References**, [U] **13.12 References**, [U] **22.1 References**
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- Moeschberger, M. L., [ST] **stci**, [ST] **stcox**, [ST] **stcox postestimation**, [ST] **sterreg**, [ST] **stpower**, [ST] **stpower cox**, [ST] **streg**, [ST] **sts**, [ST] **sts graph**, [ST] **sts test**
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- Monshouwer, K., [MV] **mvtest**
- Monson, R. R., [R] **bitest**, [ST] **epitab**, [ST] **epitab**

- Montgomery, D. C., [TS] **tssmooth**, [TS] **tssmooth dexpontential**, [TS] **tssmooth exponential**, [TS] **tssmooth hwinters**, [TS] **tssmooth shwinters**
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- Mood, A. M., [R] **centile**
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- Morrison, D. F., [MV] **clustermat**, [MV] **discrim lda**, [MV] **discrim logistic**, [MV] **discrim logistic postestimation**, [MV] **manova**
- Morrow, A., [ST] **epitab**
- Mortimore, P., [MI] **mi estimate**
- Mosier, C. I., [MV] **procrustes**
- Moskowitz, M., [R] **kappa**
- Mosteller, F., [R] **jackknife**, [R] **regress**, [R] **regress postestimation**, [R] **rreg**
- Moulton, L. H., [R] **permute**
- Muellbauer, J., [R] **nlshr**
- Mueller, C. W., [MV] **factor**
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- Muirhead, R. J., [MV] **pca**
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- Müller, H.-G., [R] **lpoly**, [ST] **sts graph**
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- Munnell, A., [XT] **xtmixed**
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- Murphy, A. H., [R] **brier**
- Murphy, J. L., [XT] **xtprobit**
- Murphy, R. S., [SVY] **survey**, [SVY] **svy estimation**
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- Murray-Lyon, I. M., [R] **binreg**
- Murrill, W. A., [MV] **discrim knn**
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- Mussolino, M. E., [SVY] **survey**, [SVY] **svy estimation**
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- Muñoz, J., [R] **exlogistic**
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- Nagler, J., [R] **scobit**
- Naiman, D. Q., [R] **greg**
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- Neely, S. T., [R] **rocreg**, [R] **rocreg postestimation**, [R] **rocregplot**
- Neff, R. K., [ST] **epitab**
- Neimann, H., [MV] **mdsmat**
- Nel, D. G., [MV] **mvtest**, [MV] **mvtest means**
- Nelder, J. A., [M-5] **optimize()**, [R] **binreg**, [R] **binreg postestimation**, [R] **glm**, [R] **glm postestimation**, [R] **margins**, [R] **ologit**, [XT] **vce\_options**, [XT] **xtgee**, [XT] **xtmelogit postestimation**, [XT] **xtmepoisson postestimation**, [XT] **xtpoisson**
- Nelson, C. R., [R] **ivregress postestimation**
- Nelson, D. B., [TS] **arch**, [TS] **arima**, [TS] **mgarch**
- Nelson, E. C., [MV] **factor**, [MV] **factor postestimation**, [R] **alpha**, [R] **lincom**, [R] **mlogit**, [R] **mprobit**, [R] **mprobit postestimation**, [R] **predictnl**, [R] **slogit**
- Nelson, F. D., [R] **logit**, [R] **probit**
- Nelson, W., [ST] **sterreg postestimation**, [ST] **sts**
- Nelson, W. C., [MV] **mvtest correlations**
- Neter, J., [R] **pkcross**, [R] **pkequiv**, [R] **pkshape**, [R] **regress postestimation**
- Neudecker, H., [TS] **var svar**
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- Nevels, K., [MV] **procrustes**
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- Newton, H. J., [R] **kdensity**, [TS] **arima**, [TS] **corrgram**, [TS] **cumsp**, [TS] **dfuller**, [TS] **pergram**, [TS] **wntestb**, [TS] **xcorr**, [XT] **xtgee**
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 [R] **predictnl**, [R] **regress postestimation**  
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 [P] **intro**, [P] **\_robust**, [R] **frontier**, [R] **lpoly**,  
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 [SVY] **ml for svy**, [XT] **xtfrontier**  
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 [R] **summarize**, [R] **ttest**  
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 [P] **intro**, [P] **\_robust**, [R] **bootstrap**, [R] **bstat**,  
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**postestimation**, [R] **maximize**, [R] **ml**, [R] **nl**,  
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 [TS] **tsfilter bw**, [TS] **tsfilter cf**, [TS] **tsfilter hp**  
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 [R] **logistic postestimation**, [R] **logit**, [R] **logit**  
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 [R] **gllamm**, [R] **glm**, [R] **heckprob**,  
 [R] **ivprobit**, [R] **ivtobit**, [R] **logistic**,  
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 [R] **poisson**, [R] **probit**, [XT] **xtcloglog**,  
 [XT] **xtgee**, [XT] **xtintreg**, [XT] **xtlogit**,  
 [XT] **xtmelogit**, [XT] **xtmelogit postestimation**,  
 [XT] **xtmepoisson**, [XT] **xtmepoisson**  
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 [XT] **xtprobit**, [XT] **xtreg**, [XT] **xttobit**  
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**mlogit**, [MI] **mi impute monotone**, [MI] **mi**  
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- Slone, D., [ST] **epitab**
- Smans, M., [XT] **xtmepoisson**
- Smeeton, N. C., [R] **ranksum**, [R] **signrank**
- Smirnov, N. V., [R] **ksmirnov**
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- Smith, C. A. B., [MV] **discrim estat**, [MV] **discrim qda**
- Smith, H., [MV] **manova**, [R] **eivreg**, [R] **oneway**, [R] **regress**, [R] **stepwise**
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- Smith, R. J., [R] **ivprobit**
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- Smith-Vikos, T., [MV] **discrim knn**
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- Smythe, B., [ST] **sts**
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- Sosa-Escudero, W., [XT] **xtreg**, [XT] **xtreg postestimation**, [XT] **xtregar**
- Sotoca, S., [TS] **sspace**
- Sowell, F., [TS] **arfima**
- Spanier, J., [D] **functions**
- Späth, H., [MV] **cluster**
- Spearman, C., [MV] **factor**, [R] **spearman**
- Speed, F. M., [R] **margins**
- Speed, T., [R] **diagnostic plots**
- Spence, I., [G-2] **graph pie**
- Sperling, R., [TS] **arch**, [TS] **arima**, [TS] **dfgls**, [TS] **wnstestq**

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 [SVY] **svy: tabulate twoway**, [SVY] **svydescribe**  
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 Startz, R., [R] **ivregress postestimation**  
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 Stoll, L., [MI] **mi estimate**  
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 [R] **roccregplot**  
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**impute**, [MI] **mi impute pmm**, [MI] **mi impute**  
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- Thiele, T. N., [R] **summarize**
- Thomas, D. C., [ST] **sttoce**
- Thomas, D. G., [ST] **epitab**
- Thomas, D. R., [SVY] **svy: tabulate twoway**
- Thompson, B., [MV] **canon postestimation**
- Thompson, J. C., [R] **diagnostic plots**
- Thompson, J. R., [R] **kdensity**, [R] **poisson**, [ST] **stptime**
- Thompson, M. L., [R] **rocreg**
- Thompson, S. K., [SVY] **survey**
- Thompson, W. A., Jr., [XT] **xtmixed**
- Thomson, G. H., [MV] **factor postestimation**, [MV] **Glossary**
- Thorndike, F., [R] **poisson**
- Thurstone, L. L., [MV] **rotate**, [R] **rologit**
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- Tilford, J. M., [R] **logistic postestimation**
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- Touloumi, G., [XT] **xtmixed**
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- Utts, J. M., [R] **ci**
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- Væth, M., [ST] **stpower**, [ST] **stpower cox**
- Vail, S. C., [XT] **xtmepoisson**
- Valliant, R., [SVY] **survey**
- Valman, H. B., [R] **fracpoly**
- Valsecchi, M. G., [ST] **sterreg**, [ST] **stpower**, [ST] **stpower logrank**, [ST] **sts test**
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- van den Broeck, J., [R] **frontier**, [XT] **xtfrontier**
- van der Ende, J., [MV] **mvtest**
- Van der Heijden, P. G. M., [MV] **ca postestimation**

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 Van Hoewyk, J., [MI] **intro substantive**, [MI] **mi impute**, [MI] **mi impute chained**, [MI] **mi impute logit**, [MI] **mi impute mlogit**, [MI] **mi impute monotone**, [MI] **mi impute ologit**, [MI] **mi impute poisson**, [MI] **mi impute truncreg**  
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 Van Mechelen, I., [MI] **intro substantive**, [MI] **mi impute**  
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 Velleman, P. F., [R] **regress postestimation**, [R] **smooth**  
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