

STATA QUICK REFERENCE AND INDEX

RELEASE 11



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Combined subject table of contents

This is the complete contents for all the Reference manuals except the *Mata Reference Manual*.

Every estimation command has a postestimation entry; however, the postestimation entries are not listed in the subject table of contents.

Getting Started

[GSM]	Getting Started with Stata for Mac	.....
[GSU]	Getting Started with Stata for Unix	.....
[GSW]	Getting Started with Stata for Windows	.....
[U]	Chapter 3	 Resources for learning and using Stata
[R]	help	 Display online help

Data manipulation and management

Basic data commands

[D]	clear	 Clear memory
[D]	clonevar	 Clone existing variable
[D]	codebook	 Describe data contents
[D]	compress	 Compress data in memory
[D]	data management	 Introduction to data-management commands
[D]	describe	 Describe data in memory or in file
[R]	display	 Substitute for a hand calculator
[D]	drop	 Eliminate variables or observations
[D]	edit	 Browse or edit data with Data Editor
[D]	egen	 Extensions to generate
[D]	generate	 Create or change contents of variable
[D]	list	 List values of variables
[D]	lookfor	 Search for string in variable names and labels
[D]	memory	 Memory size considerations
[D]	obs	 Increase the number of observations in a dataset
[D]	sort	 Sort data
[D]	varmanage	 Manage variable labels, formats, and other properties

Functions and expressions

[U]	Chapter 13	 Functions and expressions
[D]	dates and times	 Date and time (%t) values and variables
[D]	egen	 Extensions to generate
[D]	functions	 Functions

Dates and times

[U]	Section 12.5.3	 Date and time formats
[U]	Chapter 24	 Working with dates and times
[D]	dates and times	 Date and time (%t) values and variables
[D]	functions	 Functions

Inputting and saving data

[GS]	Chapter 6 (GSM , GSU , GSW)	Using the Data Editor
[U]	Chapter 21	Inputting data
[D]	edit	Browse or edit data with Data Editor
[D]	fdasave	Save and use datasets in FDA (SAS XPORT) format
[TS]	haver	Load data from Haver Analytics database
[D]	infile	Overview of reading data into Stata
[D]	infile (fixed format)	Read ASCII (text) data in fixed format with a dictionary
[D]	infile (free format)	Read unformatted ASCII (text) data
[D]	infix (fixed format)	Read ASCII (text) data in fixed format
[D]	input	Enter data from keyboard
[D]	insheet	Read ASCII (text) data created by a spreadsheet
[D]	odbc	Load, write, or view data from ODBC sources
[D]	outfile	Write ASCII-format dataset
[D]	outsheet	Write spreadsheet-style dataset
[D]	save	Save datasets
[D]	sysuse	Use shipped dataset
[D]	use	Use Stata dataset
[D]	webuse	Use dataset from Stata web site
[D]	xmlsave	Save and use datasets in XML format

Combining data

[U]	Chapter 22	Combining datasets
[D]	append	Append datasets
[MI]	mi append	Append mi data
[D]	cross	Form every pairwise combination of two datasets
[D]	joinby	Form all pairwise combinations within groups
[D]	merge	Merge datasets
[MI]	mi merge	Merge mi data

Reshaping datasets

[D]	collapse	Make dataset of summary statistics
[D]	contract	Make dataset of frequencies and percentages
[D]	expand	Duplicate observations
[D]	expandcl	Duplicate clustered observations
[D]	fillin	Rectangularize dataset
[D]	obs	Increase the number of observations in a dataset
[D]	reshape	Convert data from wide to long form and vice versa
[MI]	mi reshape	Reshape mi data
[TS]	rolling	Rolling-window and recursive estimation
[D]	separate	Create separate variables
[D]	stack	Stack data
[D]	statsby	Collect statistics for a command across a by list
[D]	xpose	Interchange observations and variables

Labeling, display formats, and notes

[GS]	Chapter 7 (GSM , GSU , GSW)	Using the Variables Manager
[U]	Section 12.5	Formats: Controlling how data are displayed
[U]	Section 12.6	Dataset, variable, and value labels
[D]	format	Set variables' output format

[D]	<code>label</code>	Manipulate labels
[D]	<code>label language</code>	Labels for variables and values in multiple languages
[D]	<code>labelbook</code>	Label utilities
[D]	<code>notes</code>	Place notes in data
[D]	<code>varmanage</code>	Manage variable labels, formats, and other properties

Changing and renaming variables

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

Examining data

[GS]	Chapter 6 (<code>GSM</code> , <code>GSU</code> , <code>GSW</code>)	Using the Data Editor
[D]	<code>cf</code>	Compare two datasets
[D]	<code>codebook</code>	Describe data contents
[D]	<code>compare</code>	Compare two variables
[D]	<code>count</code>	Count observations satisfying specified conditions
[D]	<code>describe</code>	Describe data in memory or in file
[D]	<code>duplicates</code>	Report, tag, or drop duplicate observations
[D]	<code>edit</code>	Browse or edit data with Data Editor
[D]	<code>gsort</code>	Ascending and descending sort
[D]	<code>inspect</code>	Display simple summary of data's attributes
[D]	<code>isid</code>	Check for unique identifiers
[R]	<code>misstable</code>	Tabulate missing values
[MI]	<code>mi describe</code>	Describe mi data
[MI]	<code>mi misstable</code>	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]	changeool	Convert end-of-line characters of text file
[D]	checksum	Calculate checksum of file
[D]	copy	Copy file from disk or URL
[D]	dir	Display filenames
[D]	erase	Erase a disk file
[D]	filefilter	Convert ASCII text or binary patterns in a file
[D]	mkdir	Create directory
[D]	rmdir	Remove directory
[D]	type	Display contents of a file

Miscellaneous data commands

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

Multiple imputation

[MI]	mi add	Add imputations from another mi dataset
[MI]	mi append	Append mi data
[MI]	mi convert	Change style of mi data
[MI]	mi copy	Copy mi flongsep data
[MI]	mi describe	Describe mi data
[MI]	mi erase	Erase mi datasets
[MI]	mi expand	Expand mi data
[MI]	mi export	Export mi data
[MI]	mi export ice	Export mi data to ice format
[MI]	mi export nhanes1	Export mi data to NHANES format
[MI]	mi extract	Extract original or imputed data from mi data
[MI]	mi import	Import data into mi
[MI]	mi import flong	Import flong-like data into mi
[MI]	mi import flongsep	Import flongsep-like data into mi
[MI]	mi import ice	Import ice-format data into mi
[MI]	mi import nhanes1	Import NHANES-format data into mi
[MI]	mi import wide	Import wide-like data into mi
[MI]	mi merge	Merge mi data
[MI]	mi misstable	Tabulate pattern of missing values
[MI]	mi passive	Generate/replace and register passive variables
[MI]	mi ptrace	Load parameter-trace file into Stata
[MI]	mi rename	Rename variable
[MI]	mi replace0	Replace original data
[MI]	mi reset	Reset imputed or passive variables
[MI]	mi reshape	Reshape mi data
[MI]	mi set	Declare multiple-imputation data
[MI]	mi stsplit	Stsplit and stjoin mi data
[MI]	mi update	Ensure that mi data are consistent
[MI]	mi varying	Identify variables that vary across imputations
[MI]	mi xeq	Execute command(s) on individual imputations
[MI]	mi XXXset	Declare mi data to be svy, st, ts, xt, etc.

[MI]	noupdate option	The noupdate option
[MI]	styles	Dataset styles
[MI]	workflow	Suggested workflow

Utilities

Basic utilities

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

Error messages

[U]	Chapter 8	Error messages and return codes
[P]	error	Display generic error message and exit
[R]	error messages	Error messages and return codes
[P]	rmsg	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	Use Stata dataset

Data types and memory

[U]	Chapter 6	Setting the size of 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 size considerations
[D]	missing values	Quick reference for missing values
[D]	recast	Change storage type of variable

Advanced utilities

[D]	assert	Verify truth of claim
[D]	cd	Change directory
[D]	changeeol	Convert end-of-line characters of text file
[D]	checksum	Calculate checksum of file
[D]	copy	Copy file from disk or URL
[P]	_datasignature	Determine whether data have changed
[D]	datasignature	Determine whether data have changed
[R]	db	Launch dialog
[P]	dialog programming	Dialog programming
[D]	dir	Display filenames
[P]	discard	Drop automatically loaded programs
[D]	erase	Erase a disk file
[P]	file	Read and write ASCII text and binary files
[D]	filefilter	Convert ASCII text or binary patterns in a file
[D]	hexdump	Display hexadecimal report on file
[D]	mkdir	Create directory
[R]	more	The —more— message
[R]	query	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_defaults</code>	.....	Reset system parameters to original Stata defaults
[R]	<code>set emptycells</code>	.....	Set what to do with empty cells in interactions
[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]	<code>graph</code>	.....	The graph command
[G]	<code>graph bar</code>	.....	Bar charts
[G]	<code>graph box</code>	.....	Box plots
[G]	<code>graph combine</code>	.....	Combine multiple graphs
[G]	<code>graph copy</code>	.....	Copy graph in memory
[G]	<code>graph describe</code>	.....	Describe contents of graph in memory or on disk
[G]	<code>graph dir</code>	.....	List names of graphs in memory and on disk
[G]	<code>graph display</code>	.....	Display graph stored in memory
[G]	<code>graph dot</code>	.....	Dot charts (summary statistics)
[G]	<code>graph drop</code>	.....	Drop graphs from memory
[G]	<code>graph export</code>	.....	Export current graph
[G]	<code>graph manipulation</code>	.....	Graph manipulation commands
[G]	<code>graph matrix</code>	.....	Matrix graphs
[G]	<code>graph other</code>	.....	Other graphics commands
[G]	<code>graph pie</code>	.....	Pie charts
[G]	<code>graph play</code>	.....	Apply edits from a recording on current graph
[G]	<code>graph print</code>	.....	Print a graph
[G]	<code>graph query</code>	.....	List available schemes and styles
[G]	<code>graph rename</code>	.....	Rename graph in memory
[G]	<code>graph save</code>	.....	Save graph to disk
[G]	<code>graph set</code>	.....	Set graphics options
[G]	<code>graph twoway</code>	.....	Twoway graphs
[G]	<code>graph twoway area</code>	.....	Twoway line plot with area shading
[G]	<code>graph twoway bar</code>	.....	Twoway bar plots
[G]	<code>graph twoway connected</code>	.....	Twoway connected plots
[G]	<code>graph twoway dot</code>	.....	Twoway dot plots
[G]	<code>graph twoway dropline</code>	.....	Twoway dropped-line plots
[G]	<code>graph twoway ffit</code>	.....	Twoway fractional-polynomial prediction plots
[G]	<code>graph twoway ffitci</code>	.....	Twoway fractional-polynomial prediction plots with CIs
[G]	<code>graph twoway function</code>	.....	Twoway line plot of function
[G]	<code>graph twoway histogram</code>	.....	Histogram plots
[G]	<code>graph twoway kdensity</code>	.....	Kernel density plots
[G]	<code>graph twoway lfit</code>	.....	Twoway linear prediction plots
[G]	<code>graph twoway lfitci</code>	.....	Twoway linear prediction plots with CIs
[G]	<code>graph twoway line</code>	.....	Twoway line plots

[G]	graph twoway lowess	Local linear smooth plots
[G]	graph twoway lpoly	Local polynomial smooth plots
[G]	graph twoway lpolyci	Local polynomial smooth plots with CIs
[G]	graph twoway mband	Twoway median-band plots
[G]	graph twoway mspline	Twoway median-spline plots
[G]	graph twoway pcarrow	Paired-coordinate plot with arrows
[G]	graph twoway pcarrowi	Twoway pcarrow with immediate arguments
[G]	graph twoway pccapsym	Paired-coordinate plot with spikes and marker symbols
[G]	graph twoway pci	Twoway paired-coordinate plot with immediate arguments
[G]	graph twoway pscatter	Paired-coordinate plot with markers
[G]	graph twoway pcspike	Paired-coordinate plot with spikes
[G]	graph twoway qfit	Twoway quadratic prediction plots
[G]	graph twoway qfitci	Twoway quadratic prediction plots with CIs
[G]	graph twoway rarea	Range plot with area shading
[G]	graph twoway rbar	Range plot with bars
[G]	graph twoway rcap	Range plot with capped spikes
[G]	graph twoway rcapsym	Range plot with spikes capped with marker symbols
[G]	graph twoway rconnected	Range plot with connected lines
[G]	graph twoway rline	Range plot with lines
[G]	graph twoway rscatter	Range plot with markers
[G]	graph twoway rspike	Range plot with spikes
[G]	graph twoway scatter	Twoway scatterplots
[G]	graph twoway scatteri	Scatter with immediate arguments
[G]	graph twoway spike	Twoway spike plots
[G]	graph twoway tsline	Twoway line plots
[G]	graph use	Display graph stored on disk
[R]	histogram	Histograms for continuous and categorical variables
[G]	palette	Display palettes of available selections

Distributional graphs

[R]	diagnostic plots	Distributional diagnostic plots
[R]	ladder	Ladder of powers
[R]	spikeplot	Spike plots and rootograms

Multivariate graphs

[MV]	biplot	Biplots
[MV]	ca postestimation	Postestimation tools for ca and camat
[MV]	cluster dendrogram	Dendrograms for hierarchical cluster analysis
[MV]	mca postestimation	Postestimation tools for mca
[MV]	mds postestimation	Postestimation tools for mds, mdsmat, and mdslong
[MV]	scoreplot	Score and loading plots
[MV]	screplot	Scree plot

Quality control

[R]	cusum	Graph cumulative spectral distribution
[R]	qc	Quality control charts
[R]	serrbar	Graph standard error bar chart

Regression diagnostic plots

[R]	regress postestimation	Postestimation tools for regress
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ROC analysis

[R]	logistic postestimation	Postestimation tools for logistic
[R]	roc	Receiver operating characteristic (ROC) analysis
[R]	rocfits postestimation	Postestimation tools for rocfits

Smoothing and densities

[R]	kdensity	Univariate kernel density estimation
[R]	lowess	Lowess smoothing
[R]	lpoly	Kernel-weighted local polynomial smoothing
[R]	sunflower	Density-distribution sunflower plots

Survival-analysis graphs

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

Time-series graphs

[TS]	corrgram	Tabulate and graph autocorrelations
[TS]	cumsp	Cumulative spectral distribution
[TS]	fcast graph	Graph forecasts of variables computed by fcast compute
[TS]	irf cgraph	Combine graphs of IRFs, dynamic-multiplier functions, and FEVDs
[TS]	irf graph	Graph IRFs, dynamic-multiplier functions, and FEVDs
[TS]	irf ograph	Graph overlaid IRFs, dynamic-multiplier functions, and FEVDs
[TS]	pergram	Periodogram
[TS]	tsline	Plot time-series data
[TS]	wntestb	Bartlett's periodogram-based test for white noise
[TS]	xcorr	Cross-correlogram for bivariate time series

More statistical graphs

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

Editing

[G]	graph editor	Graph Editor
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Graph utilities

[G]	set graphics	Set whether graphs are displayed
[G]	set printcolor	Set how colors are treated when graphs are printed
[G]	set scheme	Set default scheme

Graph schemes

[G]	schemes intro	Introduction to schemes
[G]	scheme economist	Scheme description: economist
[G]	scheme s1	Scheme description: s1 family
[G]	scheme s2	Scheme description: s2 family
[G]	scheme sj	Scheme description: sj

Graph concepts

[G]	concept: gph files	Using gph files
[G]	concept: lines	Using lines
[G]	concept: repeated options	Interpretation of repeated options
[G]	text	Text in graphs

Statistics

ANOVA and related

[U]	Chapter 26	Overview of Stata estimation commands
[R]	anova	Analysis of variance and covariance
[R]	loneaway	Large one-way ANOVA, random effects, and reliability
[MV]	manova	Multivariate analysis of variance and covariance
[R]	oneway	One-way analysis of variance
[R]	pkcross	Analyze crossover experiments
[R]	pkshape	Reshape (pharmacokinetic) Latin-square data
[R]	regress	Linear regression
[XT]	xtmixed	Multilevel mixed-effects linear regression
[XT]	xtreg	Fixed-, between-, and random-effects, and population-averaged linear models

Basic statistics

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

[R]	tabulate oneway	One-way tables of frequencies
[R]	tabulate twoway	Two-way tables of frequencies
[R]	tabulate, summarize()	One- and two-way tables of summary statistics
[R]	total	Estimate totals
[R]	ttest	Mean-comparison tests

Binary outcomes

[U]	Chapter 20	Estimation and postestimation commands
[U]	Section 26.5	Binary-outcome qualitative dependent-variable models
[R]	binreg	Generalized linear models: Extensions to the binomial family
[R]	biprobit	Bivariate probit regression
[R]	cloglog	Complementary log-log regression
[R]	exlogistic	Exact logistic regression
[R]	glogit	Logit and probit regression for grouped data
[R]	heckprob	Probit model with sample selection
[R]	hetprob	Heteroskedastic probit model
[R]	ivprobit	Probit model with continuous endogenous regressors
[R]	logistic	Logistic regression, reporting odds ratios
[R]	logit	Logistic regression, reporting coefficients
[R]	probit	Probit regression
[R]	scobit	Skewed logistic regression
[XT]	xtcloglog	Random-effects and population-averaged cloglog models
[XT]	xtlogit	Fixed-effects, random-effects, and population-averaged logit models
[XT]	xtmelogit	Multilevel mixed-effects logistic regression
[XT]	xtprobit	Random-effects and population-averaged probit models

Categorical outcomes

[U]	Chapter 20	Estimation and postestimation commands
[U]	Section 26.7	Multiple-outcome qualitative dependent-variable models
[R]	asclogit	Alternative-specific conditional logit (McFadden's choice) model
[R]	asmprobit	Alternative-specific multinomial probit regression
[R]	clogit	Conditional (fixed-effects) logistic regression
[R]	mlogit	Multinomial (polytomous) logistic regression
[R]	mprobit	Multinomial probit regression
[R]	nlogit	Nested logit regression
[R]	slogit	Stereotype logistic regression

Cluster analysis

[U]	Section 26.21	Multivariate and cluster analysis
[MV]	cluster	Introduction to cluster-analysis commands
[MV]	cluster dendrogram	Dendrograms for hierarchical cluster analysis
[MV]	cluster generate	Generate summary or grouping variables from a cluster analysis
[MV]	cluster kmeans and kmedians	Kmeans and kmedians cluster analysis
[MV]	cluster linkage	Hierarchical cluster analysis
[MV]	cluster notes	Place notes in cluster analysis
[MV]	cluster programming subroutines	Add cluster-analysis routines
[MV]	cluster programming utilities	Cluster-analysis programming utilities
[MV]	cluster stop	Cluster-analysis stopping rules
[MV]	cluster utility	List, rename, use, and drop cluster analyses

[MV]	clustermat	.....	Introduction to clustermat commands
[MV]	matrix dissimilarity	.....	Compute similarity or dissimilarity measures
[MV]	measure_option	.....	Option for similarity and dissimilarity measures
[MV]	multivariate	.....	Introduction to multivariate commands

Correspondence analysis

[MV]	ca	.....	Simple correspondence analysis
[MV]	mca	.....	Multiple and joint correspondence analysis

Count outcomes

[U]	Chapter 20	.....	Estimation and postestimation commands
[U]	Section 26.8	.....	Count dependent-variable models
[U]	Section 26.15.5	.....	Count dependent-variable models with panel data
[R]	expoisson	.....	Exact Poisson regression
[R]	nbreg	.....	Negative binomial regression
[R]	poisson	.....	Poisson regression
[XT]	xtmepoisson	.....	Multilevel mixed-effects Poisson regression
[XT]	xtnbreg	Fixed-effects, random-effects, & population-averaged negative binomial models	
[XT]	xtpoisson	.....	Fixed-effects, random-effects, and population-averaged Poisson models
[R]	zinb	.....	Zero-inflated negative binomial regression
[R]	zip	.....	Zero-inflated Poisson regression
[R]	ztnb	.....	Zero-truncated negative binomial regression
[R]	ztp	.....	Zero-truncated Poisson regression

Discriminant analysis

[MV]	candisc	.....	Canonical linear discriminant analysis
[MV]	discrim	.....	Discriminant analysis
[MV]	discrim estat	.....	Postestimation tools for discrim
[MV]	discrim knn	.....	kth-nearest-neighbor discriminant analysis
[MV]	discrim lda	.....	Linear discriminant analysis
[MV]	discrim logistic	.....	Logistic discriminant analysis
[MV]	discrim qda	.....	Quadratic discriminant analysis
[MV]	scoreplot	.....	Score and loading plots
[MV]	screeplot	.....	Scree plot

Do-it-yourself generalized method of moments

[R]	gmm	.....	Generalized method of moments estimation
[P]	matrix	.....	Introduction to matrix commands

Do-it-yourself maximum likelihood estimation

[P]	matrix	.....	Introduction to matrix commands
[R]	ml	.....	Maximum likelihood estimation

Endogenous covariates

[U]	Chapter 20	.....	Estimation and postestimation commands
[U]	Chapter 26	.....	Overview of Stata estimation commands
[R]	gmm	.....	Generalized method of moments estimation
[R]	ivprobit	.....	Probit model with continuous endogenous regressors
[R]	ivregress	.....	Single-equation instrumental-variables regression
[R]	ivtobit	.....	Tobit model with continuous endogenous regressors

[R]	<code>reg3</code>	Three-stage estimation for systems of simultaneous equations
[XT]	<code>xthtaylor</code>	Hausman–Taylor estimator for error-components models
[XT]	<code>xtivreg</code>	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>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>logistic</code>	Logistic regression, reporting odds ratios
[R]	<code>roc</code>	Receiver operating characteristic (ROC) analysis
[R]	<code>rocfit</code>	Fit ROC models
[ST]	<code>st</code>	Survival-time data
[R]	<code>symmetry</code>	Symmetry and marginal homogeneity tests
[R]	<code>tabulate oneway</code>	One-way tables of frequencies
[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

Exact statistics

[R]	<code>bitest</code>	Binomial probability test
[R]	<code>centile</code>	Report centile and confidence interval
[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>symmetry</code>	Symmetry and marginal homogeneity tests
[R]	<code>tabulate twoway</code>	Two-way tables of frequencies
[R]	<code>tetrachoric</code>	Tetrachoric correlations for binary variables

Factor analysis and principal components

[R]	<code>alpha</code>	Compute interitem correlations (covariances) and Cronbach's alpha
[MV]	<code>canon</code>	Canonical correlations
[MV]	<code>factor</code>	Factor analysis
[MV]	<code>pca</code>	Principal component analysis
[MV]	<code>rotate</code>	Orthogonal and oblique rotations after factor and pca
[MV]	<code>rotatemat</code>	Orthogonal and oblique rotations of a Stata matrix

[MV]	scoreplot	Score and loading plots
[MV]	screepplot	Scree plot
[R]	tetrachoric	Tetrachoric correlations for binary variables

Generalized linear models

[U]	Chapter 20	Estimation and postestimation commands
[U]	Section 26.4	Generalized linear models
[R]	binreg	Generalized linear models: Extensions to the binomial family
[R]	glm	Generalized linear models
[XT]	xtgee	Fit population-averaged panel-data models by using GEE

Indicator and categorical variables

[U]	Section 11.4.3	Factor variables
[U]	Chapter 25	Working with categorical data and factor variables
[R]	fvset	Declare factor-variable settings

Linear regression and related

[U]	Chapter 20	Estimation and postestimation commands
[U]	Chapter 26	Overview of Stata estimation commands
[R]	areg	Linear regression with a large dummy-variable set
[R]	cnsreg	Constrained linear regression
[R]	constraint	Define and list constraints
[R]	eivreg	Errors-in-variables regression
[I]	estimation commands	Quick reference for estimation commands
[R]	fracpoly	Fractional polynomial regression
[R]	frontier	Stochastic frontier models
[R]	glm	Generalized linear models
[R]	gmm	Generalized method of moments estimation
[R]	heckman	Heckman selection model
[R]	intreg	Interval regression
[R]	ivregress	Single-equation instrumental-variables regression
[R]	ivtobit	Tobit model with continuous endogenous regressors
[R]	logit	Logistic regression, reporting coefficients
[R]	lpoly	Kernel-weighted local polynomial smoothing
[R]	mfp	Multivariable fractional polynomial models
[R]	mvreg	Multivariate regression
[R]	nbreg	Negative binomial regression
[R]	nestreg	Nested model statistics
[TS]	newey	Regression with Newey–West standard errors
[R]	nl	Nonlinear least-squares estimation
[R]	nlsur	Estimation of nonlinear systems of equations
[R]	orthog	Orthogonalize variables and compute orthogonal polynomials
[R]	poisson	Poisson regression
[TS]	prais	Prais–Winsten and Cochrane–Orcutt regression
[R]	qreg	Quantile regression
[R]	reg3	Three-stage estimation for systems of simultaneous equations
[R]	regress	Linear regression
[R]	rocfits	Fit ROC models
[R]	rreg	Robust regression
[ST]	stcox	Cox proportional hazards model
[ST]	sterreg	Competing-risks regression

[R]	<code>stepwise</code>	Stepwise estimation
[ST]	<code>streg</code>	Parametric survival models
[R]	<code>sureg</code>	Zellner's seemingly unrelated regression
[R]	<code>tobit</code>	Tobit regression
[R]	<code>treatreg</code>	Treatment-effects model
[R]	<code>truncreg</code>	Truncated regression
[R]	<code>vwls</code>	Variance-weighted least squares
[XT]	<code>xtabond</code>	Arellano–Bond linear dynamic panel-data estimation
[XT]	<code>xtcloglog</code>	Random-effects and population-averaged cloglog models
[XT]	<code>xtdpd</code>	Linear dynamic panel-data estimation
[XT]	<code>xtdpdsys</code>	Arellano–Bover/Blundell–Bond linear dynamic panel-data estimation
[XT]	<code>xtfrontier</code>	Stochastic frontier models for panel data
[XT]	<code>xtgee</code>	Fit population-averaged panel-data models by using GEE
[XT]	<code>xtgls</code>	Fit panel-data models by using GLS
[XT]	<code>xthtaylor</code>	Hausman–Taylor estimator for error-components models
[XT]	<code>xtintreg</code>	Random-effects interval-data regression models
[XT]	<code>xtivreg</code>	Instrumental variables and two-stage least squares for panel-data models
[XT]	<code>xtlogit</code>	Fixed-effects, random-effects, and population-averaged logit models
[XT]	<code>xtmelogit</code>	Multilevel mixed-effects logistic regression
[XT]	<code>xtmepoisson</code>	Multilevel mixed-effects Poisson regression
[XT]	<code>xtmixed</code>	Multilevel mixed-effects linear regression
[XT]	<code>xtnbreg</code>	Fixed-effects, random-effects, & population-averaged negative binomial models
[XT]	<code>xtpcse</code>	Linear regression with panel-corrected standard errors
[XT]	<code>xtpoisson</code>	Fixed-effects, random-effects, and population-averaged Poisson models
[XT]	<code>xtprobit</code>	Random-effects and population-averaged probit models
[XT]	<code>xtrc</code>	Random-coefficients models
[XT]	<code>xtnbreg</code>	Fixed-, between-, and random-effects, and population-averaged linear models
[XT]	<code>xtregar</code>	Fixed- and random-effects linear models with an AR(1) disturbance
[XT]	<code>xttobit</code>	Random-effects tobit models
[R]	<code>zinb</code>	Zero-inflated negative binomial regression
[R]	<code>zip</code>	Zero-inflated Poisson regression
[R]	<code>ztnb</code>	Zero-truncated negative binomial regression
[R]	<code>ztp</code>	Zero-truncated Poisson regression

Logistic and probit regression

[U]	Chapter 20	Estimation and postestimation commands
[U]	Chapter 26	Overview of Stata estimation commands
[R]	<code>asclogit</code>	Alternative-specific conditional logit (McFadden's choice) model
[R]	<code>asmprobit</code>	Alternative-specific multinomial probit regression
[R]	<code>asroprobit</code>	Alternative-specific rank-ordered probit regression
[R]	<code>biprobit</code>	Bivariate probit regression
[R]	<code>clogit</code>	Conditional (fixed-effects) logistic regression
[R]	<code>cloglog</code>	Complementary log-log regression
[R]	<code>exlogistic</code>	Exact logistic regression
[R]	<code>glogit</code>	Logit and probit regression for grouped data
[R]	<code>heckprob</code>	Probit model with sample selection
[R]	<code>hetprob</code>	Heteroskedastic probit model
[R]	<code>ivprobit</code>	Probit model with continuous endogenous regressors
[R]	<code>logistic</code>	Logistic regression, reporting odds ratios
[R]	<code>logit</code>	Logistic regression, reporting coefficients
[R]	<code>mlogit</code>	Multinomial (polytomous) logistic regression

[R]	<code>mprobit</code>	Multinomial probit regression
[R]	<code>nlogit</code>	Nested logit regression
[R]	<code>ologit</code>	Ordered logistic regression
[R]	<code>oprobit</code>	Ordered probit regression
[R]	<code>probit</code>	Probit regression
[R]	<code>rologit</code>	Rank-ordered logistic regression
[R]	<code>scobit</code>	Skewed logistic regression
[R]	<code>slogit</code>	Stereotype logistic regression
[XT]	<code>xtcloglog</code>	Random-effects and population-averaged cloglog models
[XT]	<code>xtgee</code>	Fit population-averaged panel-data models by using GEE
[XT]	<code>xtlogit</code>	Fixed-effects, random-effects, and population-averaged logit models
[XT]	<code>xtmelogit</code>	Multilevel mixed-effects logistic regression
[XT]	<code>xtprobit</code>	Random-effects and population-averaged probit models

Longitudinal data/panel data

[U]	Chapter 20	Estimation and postestimation commands
[U]	Section 26.15	Panel-data models
[XT]	<code>quadchk</code>	Check sensitivity of quadrature approximation
[XT]	<code>xt</code>	Introduction to xt commands
[XT]	<code>xtabond</code>	Arellano–Bond linear dynamic panel-data estimation
[XT]	<code>xtcloglog</code>	Random-effects and population-averaged cloglog models
[XT]	<code>xtdata</code>	Faster specification searches with xt data
[XT]	<code>xtdescribe</code>	Describe pattern of xt data
[XT]	<code>xtdpd</code>	Linear dynamic panel-data estimation
[XT]	<code>xtdpdsys</code>	Arellano–Bover/Blundell–Bond linear dynamic panel-data estimation
[XT]	<code>xtfrontier</code>	Stochastic frontier models for panel data
[XT]	<code>xtgee</code>	Fit population-averaged panel-data models by using GEE
[XT]	<code>xtgls</code>	Fit panel-data models by using GLS
[XT]	<code>xthtaylor</code>	Hausman–Taylor estimator for error-components models
[XT]	<code>xtintreg</code>	Random-effects interval-data regression models
[XT]	<code>xtivreg</code>	Instrumental variables and two-stage least squares for panel-data models
[XT]	<code>xtline</code>	Panel-data line plots
[XT]	<code>xtlogit</code>	Fixed-effects, random-effects, and population-averaged logit models
[XT]	<code>xtmelogit</code>	Multilevel mixed-effects logistic regression
[XT]	<code>xtmepoisson</code>	Multilevel mixed-effects Poisson regression
[XT]	<code>xtmixed</code>	Multilevel mixed-effects linear regression
[XT]	<code>xtnbreg</code>	Fixed-effects, random-effects, & population-averaged negative binomial models
[XT]	<code>xtpcse</code>	Linear regression with panel-corrected standard errors
[XT]	<code>xtpoisson</code>	Fixed-effects, random-effects, and population-averaged Poisson models
[XT]	<code>xtprobit</code>	Random-effects and population-averaged probit models
[XT]	<code>xtrc</code>	Random-coefficients model
[XT]	<code>xtreg</code>	Fixed-, between-, and random-effects, and population-averaged linear models
[XT]	<code>xtregar</code>	Fixed- and random-effects linear models with an AR(1) disturbance
[XT]	<code>xtset</code>	Declare data to be panel data
[XT]	<code>xtsum</code>	Summarize xt data
[XT]	<code>xttab</code>	Tabulate xt data
[XT]	<code>xttobit</code>	Random-effects tobit models
[XT]	<code>xtunitroot</code>	Panel-data unit-root tests

Mixed models

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

Multidimensional scaling and biplots

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

Multilevel/hierarchical models

[XT]	xtmelogit	Multilevel mixed-effects logistic regression
[XT]	xtmepoisson	Multilevel mixed-effects Poisson regression
[XT]	xtmixed	Multilevel mixed-effects linear regression

Multiple imputation

[U]	Section 26.20	Multiple imputation
[MI]	estimation	Estimation commands for use with mi estimate
[MI]	intro substantive	Introduction to multiple-imputation analysis
[MI]	mi estimate	Estimation using multiple imputations
[MI]	mi estimate using	Estimation using previously saved estimation results
[MI]	mi estimate postestimation	Postestimation tools for mi estimate
[MI]	mi impute	Impute missing values
[MI]	mi impute logit	Impute using logistic regression
[MI]	mi impute mlogit	Impute using multinomial logistic regression
[MI]	mi impute monotone	Impute missing values in monotone data
[MI]	mi impute mvn	Impute using multivariate normal regression
[MI]	mi impute ologit	Impute using ordered logistic regression
[MI]	mi impute pmm	Impute using predictive mean matching
[MI]	mi impute regress	Impute using linear regression

Multivariate analysis of variance and related techniques

[U]	Section 26.21	Multivariate and cluster analysis
[MV]	canon	Canonical correlations
[MV]	hotelling	Hotelling's T-squared generalized means test
[MV]	manova	Multivariate analysis of variance and covariance
[R]	mvreg	Multivariate regression
[MV]	mvtest covariances	Multivariate tests of covariances
[MV]	mvtest means	Multivariate tests of means

Nonparametric statistics

[R]	kdensity	Univariate kernel density estimation
[R]	ksmirnov	Kolmogorov–Smirnov equality-of-distributions test
[R]	kwallis	Kruskal–Wallis equality-of-populations rank test
[R]	lowess	Lowess smoothing
[R]	lpoly	Kernel-weighted local polynomial smoothing
[R]	lv	Letter-value displays
[R]	nptrend	Test for trend across ordered groups
[R]	qreg	Quantile regression
[R]	ranksum	Equality tests on unmatched data
[R]	roc	Receiver operating characteristic (ROC) analysis
[R]	runttest	Test for random order
[R]	signrank	Equality tests on matched data
[R]	smooth	Robust nonlinear smoother
[R]	spearman	Spearman’s and Kendall’s correlations
[R]	symmetry	Symmetry and marginal homogeneity tests

Ordinal outcomes

[U]	Chapter 20	Estimation and postestimation commands
[R]	asprobit	Alternative-specific rank-ordered probit regression
[R]	ologit	Ordered logistic regression
[R]	oprobit	Ordered probit regression
[R]	rologit	Rank-ordered logistic regression

Other statistics

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

Pharmacokinetic statistics

[U]	Section 26.22	Pharmacokinetic data
[R]	pk	Pharmacokinetic (biopharmaceutical) data
[R]	pkcollapse	Generate pharmacokinetic measurement dataset
[R]	pkcross	Analyze crossover experiments
[R]	pkequiv	Perform bioequivalence tests
[R]	pkexamine	Calculate pharmacokinetic measures
[R]	pkshape	Reshape (pharmacokinetic) Latin-square data
[R]	pksumm	Summarize pharmacokinetic data

Power and sample size

[R]	sampsi	Sample size and power determination
[ST]	stpover	Sample-size, power, and effect-size determination for survival analysis

[ST]	stpower cox	Sample size, power, and effect size for the Cox proportional hazards model
[ST]	stpower exponential	Sample size and power for the exponential test
[ST]	stpower logrank	Sample size, power, and effect size for the log-rank test

Quality control

[R]	cusum	Graph cumulative spectral distribution
[R]	qc	Quality control charts
[R]	serrbar	Graph standard error bar chart

Rotation

[MV]	procrustes	Procrustes transformation
[MV]	rotate	Orthogonal and oblique rotations after factor and pca
[MV]	rotatemat	Orthogonal and oblique rotations of a Stata matrix

Sample selection models

[U]	Chapter 20	Estimation and postestimation commands
[U]	Section 26.13	Models with endogenous sample selection
[R]	heckman	Heckman selection model
[R]	heckprob	Probit model with sample selection
[R]	treatreg	Treatment-effects model

Simulation/resampling

[R]	bootstrap	Bootstrap sampling and estimation
[R]	bsample	Sampling with replacement
[R]	jackknife	Jackknife estimation
[R]	permute	Monte Carlo permutation tests
[R]	simulate	Monte Carlo simulations

Standard postestimation tests, tables, and other analyses

[U]	Section 13.5	Accessing coefficients and standard errors
[U]	Chapter 20	Estimation and postestimation commands
[R]	correlate	Correlations (covariances) of variables or coefficients
[R]	estat	Postestimation statistics
[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
[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
[MV]	mvtest	Multivariate tests
[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]	suest	Seemingly unrelated estimation
[R]	test	Test linear hypotheses after estimation
[R]	testnl	Test nonlinear hypotheses after estimation

Survey data

[U]	Chapter 20	Estimation and postestimation commands
[U]	Section 26.19	Survey data
[SVY]	brr_options	More options for BRR variance estimation
[SVY]	direct standardization	Direct standardization of means, proportions, and ratios
[SVY]	estat	Postestimation statistics for survey data
[SVY]	jackknife_options	More options for jackknife variance estimation
[SVY]	ml for svy	Maximum pseudolikelihood estimation for survey data
[SVY]	poststratification	Poststratification for survey data
[P]	_robust	Robust variance estimates
[SVY]	subpopulation estimation	Subpopulation estimation for survey data
[SVY]	survey	Introduction to survey commands
[SVY]	svy	The survey prefix command
[SVY]	svy brr	Balanced repeated replication for survey data
[SVY]	svy estimation	Estimation commands for survey data
[SVY]	svy jackknife	Jackknife estimation for survey data
[SVY]	svy postestimation	Postestimation tools for svy
[SVY]	svy: tabulate oneway	One-way tables for survey data
[SVY]	svy: tabulate twoway	Two-way tables for survey data
[SVY]	svydescribe	Describe survey data
[SVY]	svymarkout	Mark observations for exclusion on the basis of survey characteristics
[SVY]	svyset	Declare survey design for dataset
[MI]	mi XXXset	Declare mi data to be svy, st, ts, xt, etc.
[SVY]	variance estimation	Variance estimation for survey data

Survival analysis

[U]	Chapter 20	Estimation and postestimation commands
[U]	Section 26.16	Survival-time (failure-time) models
[ST]	ct	Count-time data
[ST]	ctset	Declare data to be count-time data
[ST]	cttost	Convert count-time data to survival-time data
[ST]	discrete	Discrete-time survival analysis
[ST]	ltable	Life tables for survival data
[ST]	snapspan	Convert snapshot data to time-span data
[ST]	st	Survival-time data
[ST]	st_is	Survival analysis subroutines for programmers
[ST]	stbase	Form baseline dataset
[ST]	stci	Confidence intervals for means and percentiles of survival time
[ST]	stcox	Cox proportional hazards model
[ST]	stcox PH-assumption tests	Tests of proportional-hazards assumption
[ST]	sterreg	Competing-risks regression
[ST]	stcurve	Plot survivor, hazard, cumulative hazard, or cumulative incidence function
[ST]	stdescribe	Describe survival-time data
[R]	stepwise	Stepwise estimation
[ST]	stfill	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
[ST]	<code>survival analysis</code>	Introduction to survival analysis & epidemiological tables commands

Time series, multivariate

[U]	<code>Section 11.4.4</code>	Time-series varlists
[U]	<code>Section 13.9</code>	Time-series operators
[U]	<code>Section 26.14</code>	Models with time-series data
[TS]	<code>dfactor</code>	Dynamic-factor models
[TS]	<code>dvech</code>	Diagonal vech multivariate GARCH models
[TS]	<code>fcast compute</code>	Compute dynamic forecasts of dependent variables after var, svar, or vec
[TS]	<code>fcast graph</code>	Graph forecasts of variables computed by fcast compute
[TS]	<code>haver</code>	Load data from Haver Analytics database
[TS]	<code>irf</code>	Create and analyze IRFs, dynamic-multiplier functions, and FEVDs
[TS]	<code>irf add</code>	Add results from an IRF file to the active IRF file
[TS]	<code>irf cgraph</code>	Combine graphs of IRFs, dynamic-multiplier functions, and FEVDs
[TS]	<code>irf create</code>	Obtain IRFs, dynamic-multiplier functions, and FEVDs
[TS]	<code>irf ctable</code>	Combine tables of IRFs, dynamic-multiplier functions, and FEVDs
[TS]	<code>irf describe</code>	Describe an IRF file
[TS]	<code>irf drop</code>	Drop IRF results from the active IRF file
[TS]	<code>irf graph</code>	Graph IRFs, dynamic-multiplier functions, and FEVDs
[TS]	<code>irf ograph</code>	Graph overlaid IRFs, dynamic-multiplier functions, and FEVDs
[TS]	<code>irf rename</code>	Rename an IRF result in an IRF file
[TS]	<code>irf set</code>	Set the active IRF file
[TS]	<code>irf table</code>	Create tables of IRFs, dynamic-multiplier functions, and FEVDs
[TS]	<code>rolling</code>	Rolling-window and recursive estimation
[TS]	<code>sspace</code>	State-space models
[TS]	<code>time series</code>	Introduction to time-series commands
[TS]	<code>tsappend</code>	Add observations to a time-series dataset
[TS]	<code>tsfill</code>	Fill in gaps in time variable
[TS]	<code>tsline</code>	Plot time-series data

[TS]	<code>tsreport</code>	Report time-series aspects of a dataset or estimation sample
[TS]	<code>tsrevar</code>	Time-series operator programming command
[TS]	<code>tsset</code>	Declare data to be time-series data
[TS]	<code>var intro</code>	Introduction to vector autoregressive models
[TS]	<code>var svar</code>	Structural vector autoregressive models
[TS]	<code>var</code>	Vector autoregressive models
[TS]	<code>varbasic</code>	Fit a simple VAR and graph IRFS or FEVDs
[TS]	<code>vargranger</code>	Perform pairwise Granger causality tests after <code>var</code> or <code>svar</code>
[TS]	<code>varlmar</code>	Perform LM test for residual autocorrelation after <code>var</code> or <code>svar</code>
[TS]	<code>varnorm</code>	Test for normally distributed disturbances after <code>var</code> or <code>svar</code>
[TS]	<code>varsoc</code>	Obtain lag-order selection statistics for VARs and VECMs
[TS]	<code>varstable</code>	Check the stability condition of VAR or SVAR estimates
[TS]	<code>varwle</code>	Obtain Wald lag-exclusion statistics after <code>var</code> or <code>svar</code>
[TS]	<code>vec intro</code>	Introduction to vector error-correction models
[TS]	<code>vec</code>	Vector error-correction models
[TS]	<code>veclmar</code>	Perform LM test for residual autocorrelation after <code>vec</code>
[TS]	<code>vecnorm</code>	Test for normally distributed disturbances after <code>vec</code>
[TS]	<code>vecrank</code>	Estimate the cointegrating rank of a VECM
[TS]	<code>vecstable</code>	Check the stability condition of VECM estimates
[TS]	<code>xcorr</code>	Cross-correlogram for bivariate time series

Time series, univariate

[U]	Section 11.4.4	Time-series varlists
[U]	Section 13.9	Time-series operators
[U]	Section 26.14	Models with time-series data
[TS]	<code>arch</code>	Autoregressive conditional heteroskedasticity (ARCH) family of estimators
[TS]	<code>arima</code>	ARIMA, ARMAX, and other dynamic regression models
[TS]	<code>corrgram</code>	Tabulate and graph autocorrelations
[TS]	<code>cumsp</code>	Cumulative spectral distribution
[TS]	<code>dfgls</code>	DF-GLS unit-root test
[TS]	<code>dfuller</code>	Augmented Dickey–Fuller unit-root test
[TS]	<code>haver</code>	Load data from Haver Analytics database
[TS]	<code>newey</code>	Regression with Newey–West standard errors
[TS]	<code>pergram</code>	Periodogram
[TS]	<code>pperron</code>	Phillips–Perron unit-root test
[TS]	<code>prais</code>	Prais–Winsten and Cochrane–Orcutt regression
[TS]	<code>rolling</code>	Rolling-window and recursive estimation
[TS]	<code>time series</code>	Introduction to time-series commands
[TS]	<code>tsappend</code>	Add observations to a time-series dataset
[TS]	<code>tsfill</code>	Fill in gaps in time variable
[TS]	<code>tsline</code>	Plot time-series data
[TS]	<code>tsreport</code>	Report time-series aspects of a dataset or estimation sample
[TS]	<code>tsrevar</code>	Time-series operator programming command
[TS]	<code>tsset</code>	Declare data to be time-series data
[TS]	<code>tssmooth</code>	Smooth and forecast univariate time-series data
[TS]	<code>tssmooth dexp</code>	Double-exponential smoothing
[TS]	<code>tssmooth exp</code>	Single-exponential smoothing
[TS]	<code>tssmooth hwinters</code>	Holt–Winters nonseasonal smoothing
[TS]	<code>tssmooth ma</code>	Moving-average filter
[TS]	<code>tssmooth nl</code>	Nonlinear filter
[TS]	<code>tssmooth shwinters</code>	Holt–Winters seasonal smoothing

[TS]	wntestb	.....	Bartlett's periodogram-based test for white noise
[TS]	wntestq	.....	Portmanteau (Q) test for white noise
[TS]	xcorr	.....	Cross-correlogram for bivariate time series

Transforms and normality tests

[R]	boxcox	.....	Box–Cox regression models
[R]	fracpoly	.....	Fractional polynomial regression
[R]	ladder	.....	Ladder of powers
[R]	lnskew0	.....	Find zero-skewness log or Box–Cox transform
[R]	mfp	.....	Multivariable fractional polynomial models
[MV]	mvtest normality	.....	Multivariate normality tests
[R]	sktest	.....	Skewness and kurtosis test for normality
[R]	swilk	.....	Shapiro–Wilk and Shapiro–Francia tests for normality

Matrix commands

Basics

[U]	Chapter 14	.....	Matrix expressions
[P]	matlist	.....	Display a matrix and control its format
[P]	matrix	.....	Introduction to matrix commands
[P]	matrix define	.....	Matrix definition, operators, and functions
[P]	matrix utility	.....	List, rename, and drop matrices

Programming

[P]	ereturn	.....	Post the estimation results
[P]	matrix accum	.....	Form cross-product matrices
[P]	matrix rownames	.....	Name rows and columns
[P]	matrix score	.....	Score data from coefficient vectors
[R]	ml	.....	Maximum likelihood estimation

Other

[P]	makecns	.....	Constrained estimation
[P]	matrix dissimilarity	.....	Compute similarity or dissimilarity measures
[P]	matrix eigenvalues	.....	Eigenvalues of nonsymmetric matrices
[P]	matrix get	.....	Access system matrices
[P]	matrix mkmat	.....	Convert variables to matrix and vice versa
[P]	matrix svd	.....	Singular value decomposition
[P]	matrix symeigen		Eigenvalues and eigenvectors of symmetric matrices

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[M]	Mata Reference Manual		
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Programming

Basics

[U]	Chapter 18		Programming Stata
[U]	Section 18.3		Macros
[U]	Section 18.11		Ado-files
[P]	comments	.....	Add comments to programs

[P]	fvexpand	Expand factor varlists
[P]	macro	Macro definition and manipulation
[P]	program	Define and manipulate programs
[P]	return	Return saved results

Program control

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

Parsing and program arguments

[U]	Section 18.4	Program arguments
[P]	confirm	Argument verification
[P]	gettoken	Low-level parsing
[P]	levelsof	Levels of variable
[P]	numlist	Parse numeric lists
[P]	syntax	Parse Stata syntax
[P]	tokenize	Divide strings into tokens

Console output

[P]	dialog programming	Dialog programming
[P]	display	Display strings and values of scalar expressions
[P]	smcl	Stata Markup and Control Language
[P]	tabdisp	Display tables

Commonly used programming commands

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

Debugging

[P]	pause	Program debugging command
[P]	timer	Time sections of code by recording and reporting time spent
[P]	trace	Debug Stata programs

Advanced programming commands

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

Special-interest programming commands

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

File formats

[P]	file formats .dta	Description of .dta file format
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[M] *Mata Reference Manual*

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 3.795×10^{-8}
Precision for double is 1.414×10^{-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	[R] anova
<code>arch</code>	ARCH family of estimators	[TS] arch
<code>areg</code>	Linear regression with a large dummy-variable set	[R] areg
<code>arima</code>	ARIMA, ARMAX, and other dynamic regression models	[TS] arima
<code>asclogit</code>	Alternative-specific conditional logit (McFadden’s choice) model	[R] asclogit
<code>asmprobit</code>	Alternative-specific multinomial probit regression	[R] asmprobit
<code>asroprobit</code>	Alternative-specific rank-ordered probit regression	[R] asroprobit
<code>binreg</code>	Generalized linear models: Extensions to the binomial family	[R] binreg
<code>biprobit</code>	Bivariate probit regression	[R] biprobit
<code>blogit</code>	Logistic regression for grouped data	[R] glogit
<code>boxcox</code>	Box–Cox regression models	[R] boxcox
<code>bprobit</code>	Probit regression for grouped data	[R] glogit
<code>bsqreg</code>	Quantile regression with bootstrap standard errors	[R] qreg
<code>ca</code>	Simple correspondence analysis	[MV] ca
<code>camat</code>	Simple correspondence analysis of a matrix	[MV] ca
<code>candisc</code>	Canonical linear discriminant analysis	[MV] candisc
<code>canon</code>	Canonical correlations	[MV] canon
<code>clogit</code>	Conditional (fixed-effects) logistic regression	[R] clogit
<code>cloglog</code>	Complementary log-log regression	[R] cloglog
<code>cnsreg</code>	Constrained linear regression	[R] cnsreg
<code>dfactor</code>	Dynamic-factor models	[TS] dfactor
<code>discrim knn</code>	kth-nearest-neighbor discriminant analysis	[MV] discrim knn
<code>discrim lda</code>	Linear discriminant analysis	[MV] discrim lda
<code>discrim logistic</code>	Logistic discriminant analysis	[MV] discrim logistic
<code>discrim qda</code>	Quadratic discriminant analysis	[MV] discrim qda
<code>dvech</code>	Diagonal vech GARCH models	[TS] dvech

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

Command	Description	See
<code>poisson</code>	Poisson regression	[R] poisson
<code>prais</code>	Prais–Winsten and Cochrane–Orcutt regression	[TS] prais
<code>probit</code>	Probit regression	[R] probit
<code>procrustes</code>	Procrustes transformation	[MV] procrustes
<code>proportion</code>	Estimate proportions	[R] proportion
<code>_qreg</code>	Internal estimation command for quantile regression	[R] qreg
<code>qreg</code>	Quantile regression	[R] qreg
<code>ratio</code>	Estimate ratios	[R] ratio
<code>reg3</code>	Three-stage estimation for systems of simultaneous equations	[R] reg3
<code>regress</code>	Linear regression	[R] regress
<code>rocfits</code>	Fit ROC models	[R] rocfits
<code>rologit</code>	Rank-ordered logistic regression	[R] rologit
<code>rreg</code>	Robust regression	[R] rreg
<code>scobit</code>	Skewed logistic regression	[R] scobit
<code>slogit</code>	Stereotype logistic regression	[R] slogit
<code>sqreg</code>	Simultaneous-quantile regression	[R] qreg
<code>sspace</code>	State-space models	[TS] sspace
<code>stcox</code>	Cox proportional hazards model	[ST] stcox
<code>stcrreg</code>	Competing-risks regression	[ST] stcrreg
<code>streg</code>	Parametric survival models	[ST] streg
<code>sureg</code>	Zellner’s seemingly unrelated regression	[R] sureg
<code>svy: command*</code>	Estimation commands for survey data	[SVY] svy estimation
<code>svy: tabulate oneway</code>	One-way tables for survey data	[SVY] svy: tabulate oneway
<code>svy: tabulate twoway</code>	Two-way tables for survey data	[SVY] svy: tabulate twoway
<code>tobit</code>	Tobit regression	[R] tobit
<code>total</code>	Estimate totals	[R] total
<code>treatreg</code>	Treatment-effects model	[R] treatreg
<code>truncreg</code>	Truncated regression	[R] truncreg
<code>var</code>	Vector autoregressive models	[TS] var
<code>var svar</code>	Structural vector autoregressive models	[TS] var svar
<code>varbasic</code>	Fit a simple VAR and graph IRFs or FEVDs	[TS] varbasic
<code>vec</code>	Vector error-correction models	[TS] vec
<code>vwls</code>	Variance-weighted least squares	[R] vwls

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

Command	Description	See
<code>xtabond</code>	Arellano–Bond linear dynamic panel-data estimation	[XT] xtabond
<code>xtcloglog</code>	Random-effects and population-averaged cloglog models	[XT] xtcloglog
<code>xtdpd</code>	Linear dynamic panel-data estimation	[XT] xtdpd
<code>xtdpdsys</code>	Arellano–Bond/Blundell–Bond estimation	[XT] xtdpdsys
<code>xtfrontier</code>	Stochastic frontier models for panel data	[XT] xtfrontier
<code>xtgee</code>	Fit population-averaged panel-data models using GEE	[XT] xtgee
<code>xtgls</code>	Fit panel-data models using GLS	[XT] xtgls
<code>xthtaylor</code>	Hausman–Taylor estimator for error-components models	[XT] xthtaylor
<code>xtintreg</code>	Random-effects interval data regression models	[XT] xtintreg
<code>xtivreg</code>	Instrumental variables and two-stage least squares for panel-data models	[XT] xtivreg
<code>xtlogit</code>	Fixed-effects, random-effects, and population-averaged logit models	[XT] xtlogit
<code>xtmelogit</code>	Multilevel mixed-effects logistic regression	[XT] xtmelogit
<code>xtmepoisson</code>	Multilevel mixed-effects Poisson regression	[XT] xtmepoisson
<code>xtmixed</code>	Multilevel mixed-effects linear regression	[XT] xtmixed
<code>xtnbreg</code>	Fixed-effects, random-effects, and population-averaged negative binomial models	[XT] xtnbreg
<code>xtpcse</code>	OLS or Prais–Winsten models with panel-corrected standard errors	[XT] xtpcse
<code>xtpoisson</code>	Fixed-effects, random-effects, and population-averaged Poisson models	[XT] xtpoisson
<code>xtprobit</code>	Random-effects and population-averaged probit models	[XT] xtprobit
<code>xtrc</code>	Random-coefficients models	[XT] xtrc
<code>xtreg</code>	Fixed-, between-, and random-effects, and population-averaged linear models	[XT] xtreg
<code>xtregar</code>	Fixed- and random-effects linear models with an AR(1) disturbance	[XT] xtregar
<code>xttobit</code>	Random-effects tobit models	[XT] xttobit
<code>zinb</code>	Zero-inflated negative binomial regression	[R] zinb
<code>zip</code>	Zero-inflated Poisson regression	[R] zip
<code>ztnb</code>	Zero-truncated negative binomial regression	[R] ztnb
<code>ztp</code>	Zero-truncated Poisson regression	[R] ztp

The following estimation commands support the `mi` prefix.

Linear regression

`regress` [R] [regress](#) — Linear regression
`cnsreg` [R] [cnsreg](#) — Constrained linear regression
`mvreg` [R] [mvreg](#) — Multivariate regression

Binary-response regression models

`logistic` [R] **logistic** — Logistic regression, reporting odds ratios
`logit` [R] **logit** — Logistic regression, reporting coefficients
`probit` [R] **probit** — Probit regression
`cloglog` [R] **cloglog** — Complementary log-log regression
`binreg` [R] **binreg** — Generalized linear models: Extensions to the binomial family

Count-response regression models

`poisson` [R] **poisson** — Poisson regression
`nbreg` [R] **nbreg** — Negative binomial regression
`gnbreg` [R] **nbreg** — Negative binomial regression

Ordinal-response regression models

`ologit` [R] **ologit** — Ordered logistic regression
`oprobit` [R] **oprobit** — Ordered probit regression

Categorical-response regression models

`mlogit` [R] **mlogit** — Multinomial (polytomous) logistic regression
`mprobit` [R] **mprobit** — Multinomial probit regression
`clogit` [R] **clogit** — Conditional (fixed-effects) logistic regression

Quantile regression models

`qreg` [R] **qreg** — Quantile regression
`iqreg` [R] **qreg** — Quantile regression
`sqreg` [R] **qreg** — Quantile regression
`bsqreg` [R] **qreg** — Quantile regression

Survival regression models

`stcox` [ST] **stcox** — Cox proportional hazards model
`streg` [ST] **streg** — Parametric survival models
`stcrreg` [ST] **stcrreg** — Competing-risks regression

Other regression models

`glm` [R] **glm** — Generalized linear models
`rreg` [R] **rreg** — Robust regression
`truncreg` [R] **truncreg** — Truncated regression
`areg` [R] **areg** — Linear regression with a large dummy-variable set

Basic statistics

`mean` [R] **mean** — Estimate means
`proportion` [R] **proportion** — Estimate proportions
`ratio` [R] **ratio** — Estimate ratios

The following estimation commands support the `svy` prefix.

Descriptive statistics

<code>mean</code>	[R] mean — Estimate means
<code>proportion</code>	[R] proportion — Estimate proportions
<code>ratio</code>	[R] ratio — Estimate ratios
<code>total</code>	[R] total — Estimate totals

Linear regression models

<code>cnsreg</code>	[R] cnsreg — Constrained linear regression
<code>glm</code>	[R] glm — Generalized linear models
<code>intreg</code>	[R] intreg — Interval regression
<code>nl</code>	[R] nl — Nonlinear least-squares estimation
<code>regress</code>	[R] regress — Linear regression
<code>tobit</code>	[R] tobit — Tobit regression
<code>treatreg</code>	[R] treatreg — Treatment-effects model
<code>truncreg</code>	[R] truncreg — Truncated regression

Survival-data regression models

<code>stcox</code>	[ST] stcox — Cox proportional hazards model
<code>streg</code>	[ST] streg — Parametric survival models

Binary-response regression models

<code>biprobit</code>	[R] biprobit — Bivariate probit regression
<code>cloglog</code>	[R] cloglog — Complementary log-log regression
<code>hetprob</code>	[R] hetprob — Heteroskedastic probit model
<code>logistic</code>	[R] logistic — Logistic regression, reporting odds ratios
<code>logit</code>	[R] logit — Logistic regression, reporting coefficients
<code>probit</code>	[R] probit — Probit regression
<code>scobit</code>	[R] scobit — Skewed logistic regression

Discrete-response regression models

<code>clogit</code>	[R] clogit — Conditional (fixed-effects) logistic regression
<code>mlogit</code>	[R] mlogit — Multinomial (polytomous) logistic regression
<code>mprobit</code>	[R] mprobit — Multinomial probit regression
<code>ologit</code>	[R] ologit — Ordered logistic regression
<code>oprobit</code>	[R] oprobit — Ordered probit regression
<code>slogit</code>	[R] slogit — Stereotype logistic regression

(Continued on next page)

Poisson regression models

<code>gnbreg</code>	Generalized negative binomial regression in [R] nbreg
<code>nbreg</code>	[R] nbreg — Negative binomial regression
<code>poisson</code>	[R] poisson — Poisson regression
<code>zinb</code>	[R] zinb — Zero-inflated negative binomial regression
<code>zip</code>	[R] zip — Zero-inflated Poisson regression
<code>ztnb</code>	[R] ztnb — Zero-truncated negative binomial regression
<code>ztp</code>	[R] ztp — Zero-truncated Poisson regression

Instrumental-variables regression models

<code>ivprobit</code>	[R] ivprobit — Probit model with continuous endogenous regressors
<code>ivregress</code>	[R] ivregress — Single-equation instrumental-variables regression
<code>ivtobit</code>	[R] ivtobit — Tobit model with continuous endogenous regressors

Regression models with selection

<code>heckman</code>	[R] heckman — Heckman selection model
<code>heckprob</code>	[R] heckprob — Probit model with sample selection

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

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

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

Title

immediate commands — Quick reference for immediate commands

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] bitest	Binomial probability test
<code>cci</code>	[ST] epitab	Tables for epidemiologists
<code>csi</code>		
<code>iri</code>		
<code>mcci</code>		
<code>cii</code>	[R] ci	Confidence intervals for means, proportions, and counts
<code>prtesti</code>	[R] prtest	One- and two-sample tests of proportions
<code>sampsi</code>	[R] sampsi	Sample size and power determination
<code>sdtesti</code>	[R] sdtest	Variance comparison tests
<code>symmi</code>	[R] symmetry	Symmetry and marginal homogeneity tests
<code>tabi</code>	[R] tabulate twoway	Two-way tables of frequencies
<code>ttesti</code>	[R] ttest	Mean comparison tests
<code>twoway pci</code>	[G] graph twoway pci	Paired-coordinate plot with spikes or lines
<code>twoway pcarrowi</code>	[G] graph twoway pcarrowi	Paired-coordinate plot with arrows
<code>twoway scatteri</code>	[G] graph twoway scatteri	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>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 effects marginal means, predictive margins, marginal effects, and average marginal 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>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
anova	
acprplot	augmented component-plus-residual plot
avplot	added-variable plot
avplots	all added-variables plots in a single image
cprplot	component-plus-residual plot
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
lvr2plot	leverage-versus-squared-residual plot
rvfplot	residual-versus-fitted plot
rvpplot	residual-versus-predictor plot
asclogit	
estat alternatives	alternative summary statistics
estat mfx	marginal effects
asmprobbit and asprobit	
estat alternatives	alternative summary statistics
estat covariance	variance–covariance matrix of the alternatives
estat correlation	correlation matrix of the alternatives
estat facweights	covariance factor weights matrix
estat mfx	marginal effects
bootstrap	
estat bootstrap	table of confidence intervals for each statistic
ca and camat	
cabiplot	biplot of row and column points
caprojection	CA dimension projection plot
estat coordinates	display row and column coordinates
estat distances	display χ^2 distances between row and column profiles
estat inertia	display inertia contributions of the individual cells
estat loadings	display correlations of profiles and axes (<i>loadings</i>)
estat profiles	display row and column profiles
[†] estat summarize	estimation sample summary
estat table	display fitted correspondence table
screeplot	plot singular values

[†] estat summarize is not available after camat.

Command	Description
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 p -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
screeplot	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
screeplot	plot canonical correlations
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

Command	Description
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 p -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	correlation matrices and p -values
estat covariance	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 odds ratio or coefficient asymptotic standard errors
expoisson	
estat se	report coefficient asymptotic standard errors

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

[†] `estat summarize` is not available after `factormat`.

Command	Description
mca	
<code>mcaplot</code>	plot of category coordinates
<code>mcaprojection</code>	MCA dimension projection plot
<code>estat coordinates</code>	display of category coordinates
<code>estat subinertia</code>	matrix of inertias of the active variables (after JCA only)
<code>estat summarize</code>	estimation sample summary
<code>screepplot</code>	plot principal inertias (eigenvalues)
mds, mdslong, and mdsmat	
<code>estat config</code>	coordinates of the approximating configuration
<code>estat correlations</code>	correlations between disparities and distances
<code>estat pairwise</code>	pairwise disparities, approximating distances, and residuals
<code>estat quantiles</code>	quantiles of the residuals per object
<code>estat stress</code>	Kruskal stress (loss) measure (only after classical MDS)
[†] <code>estat summarize</code>	estimation sample summary
<code>mdsconfig</code>	plot of approximating configuration
<code>mdsshepard</code>	Shepard diagram
<code>screepplot</code>	plot eigenvalues (only after classical MDS)
mfp	
<code>fracplot</code>	plot data and fit from most recently fitted fractional polynomial model
<code>fracpred</code>	create variable containing prediction, deviance residuals, or SEs of fitted values
nlogit	
<code>estat alternatives</code>	alternative summary statistics
pca and pcamat	
<code>estat anti</code>	anti-image correlation and covariance matrices
<code>estat kmo</code>	Kaiser–Meyer–Olkin measure of sampling adequacy
<code>estat loadings</code>	component-loading matrix in one of several normalizations
<code>estat residuals</code>	matrix of correlation or covariance residuals
<code>estat rotatecompare</code>	compare rotated and unrotated components
<code>estat smc</code>	squared multiple correlations between each variable and the rest
[†] <code>estat summarize</code>	estimation sample summary
<code>loadingplot</code>	plot component loadings
<code>rotate</code>	rotate component loadings
<code>scoreplot</code>	plot score variables
<code>screepplot</code>	plot eigenvalues
poisson	
<code>estat gof</code>	goodness-of-fit test

[†] `estat summarize` is not available after `mdsmat` or `pcamat`.

Command	Description
probit	
<code>estat classification</code>	reports various summary statistics, including the classification table
<code>estat gof</code>	Pearson or Hosmer–Lemeshow goodness-of-fit test
<code>lroc</code>	graphs the ROC curve and calculates the area under the curve
<code>lsens</code>	graphs sensitivity and specificity versus probability cutoff
procrustes	
<code>estat compare</code>	fit statistics for orthogonal, oblique, and unrestricted transformations
<code>estat mvreg</code>	display multivariate regression resembling unrestricted transformation
<code>estat summarize</code>	display summary statistics over the estimation sample
<code>procoverlay</code>	produce a Procrustes overlay graph
regress	
<code>dfbeta</code>	DFBETA influence statistics
<code>estat hettest</code>	tests for heteroskedasticity
<code>estat imtest</code>	information matrix test
<code>estat ovtest</code>	Ramsey regression specification-error test for omitted variables
<code>estat szroeter</code>	Szroeter’s rank test for heteroskedasticity
<code>estat vif</code>	variance inflation factors for the independent variables
<code>acprplot</code>	augmented component-plus-residual plot
<code>avplot</code>	added-variable plot
<code>avplots</code>	all added-variables plots in a single image
<code>cprplot</code>	component-plus-residual plot
<code>lvr2plot</code>	leverage-versus-squared-residual plot
<code>rvfplot</code>	residual-versus-fitted plot
<code>rvpplot</code>	residual-versus-predictor plot
regress postestimation time series	
<code>estat archlm</code>	test for ARCH effects in the residuals
<code>estat bgodfrey</code>	Breusch–Godfrey test for higher-order serial correlation
<code>estat durbinalt</code>	Durbin’s alternative test for serial correlation
<code>estat dwatson</code>	Durbin–Watson d statistic to test for first-order serial correlation
rocfit	
<code>rocplot</code>	plot the fitted ROC curve and simultaneous confidence bands
stcox	
<code>estat concordance</code>	Harrell’s C
<code>estat phtest</code>	test proportional-hazards assumption based on Schoenfeld residuals
<code>stcurve</code>	plot the survivor, hazard, and cumulative hazard functions

Command	Description
stcrreg	
stcurve	plot the cumulative subhazard and cumulative incidence functions
streg	
stcurve	plot the survivor, hazard, and cumulative hazard functions
svar, var, and varbasic	
fcast compute	obtain dynamic forecasts
fcast graph	graph dynamic forecasts obtained from fcast compute
irf	create and analyze IRFs and FEVDs
vargranger	Granger causality tests
varlmar	LM test for autocorrelation in residuals
varnorm	test for normally distributed residuals
varsoc	lag-order selection criteria
varstable	check stability condition of estimates
varwle	Wald lag-exclusion statistics
vec	
fcast compute	obtain dynamic forecasts
fcast graph	graph dynamic forecasts obtained from fcast compute
irf	create and analyze IRFs and FEVDs
veclmar	LM test for autocorrelation in residuals
vecnorm	test for normally distributed residuals
vecstable	check stability condition of estimates
xtabond, xtdpd, and xtdpdsys	
estat abond	test for autocorrelation
estat sargan	Sargan test of overidentifying restrictions
xtgee	
estat wcorrelation	estimated matrix of the within-group correlations
xtnlogit, xtmepoisson, and xtmixed	
estat group	summarize the composition of the nested groups
estat recovariance	display the estimated random-effects covariance matrix (or matrices)
xtreg	
xttest0	Breusch and Pagan LM test for random effects

Also see

- [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] **nlcom** — Nonlinear combinations of estimators
- [R] **predict** — Obtain predictions, residuals, etc., after estimation
- [R] **predictnl** — Obtain nonlinear predictions, standard errors, etc., after estimation
- [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] by	run command on subsets of data
<code>statsby</code>	[D] statsby	same as <code>by</code> , but collect statistics from each run
<code>rolling</code>	[TS] rolling	run command on moving subsets and collect statistics
<code>bootstrap</code>	[R] bootstrap	run command on bootstrap samples
<code>jackknife</code>	[R] jackknife	run command on jackknife subsets of data
<code>permute</code>	[R] permute	run command on random permutations
<code>simulate</code>	[R] simulate	run command on manufactured data
<code>svy</code>	[SVY] svy	run command and adjust results for survey sampling
<code>mi estimate</code>	[MI] mi estimate	run command on multiply imputed data and adjust results for multiple imputation (MI)
<code>nestreg</code>	[R] nestreg	run command with accumulated blocks of regressors, and report nested model comparison tests
<code>stepwise</code>	[R] stepwise	run command with stepwise variable inclusion/exclusion
<code>xi</code>	[R] xi	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] 11.4.3 Factor variables)
<code>fracpoly</code>	[R] fracpoly	run command with fractional polynomials of one regressor
<code>mfp</code>	[R] mfp	run command with multiple fractional polynomial regressors
<code>capture</code>	[P] capture	run command and capture its return code
<code>noisily</code>	[P] quietly	run command and show the output
<code>quietly</code>	[P] quietly	run command and suppress the output
<code>version</code>	[P] version	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

reading data — Quick reference for reading non-Stata data into memory

Description

This entry provides a quick reference for determining which method to use for reading non-Stata data into memory.

Remarks

insheet

- **insheet** reads text (ASCII) files created by a spreadsheet or a database program.
- The data must be tab separated or comma separated, but not both simultaneously, and cannot be space separated.
- 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](#) for additional information.

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 \(free format\)](#) for additional information.

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 \(fixed format\)](#) for additional information.

infile (fixed format)—infile with a dictionary

- The data may be in fixed-column format.
- An observation can be on more than one line.
- **infile** (fixed format) has the most capabilities for reading data.

See [\[D\] infile \(fixed format\)](#) for additional information.

fdause

- **fdause** reads SAS XPORT Transport format files—the file format required by the U.S. Food and Drug Administration (FDA).
- **fdause** will also read value label information from a **formats.xpf** XPORT file, if available.

See [D] **fdasave** for additional information.

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** for additional information.

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**.

xmluse

- **xmluse** reads extensible markup language (XML) files—highly adaptable text-format files derived from ground station markup language (GSML).
- **xmluse** can read either an Excel-format XML or a Stata-format XML file into Stata.

See [D] **xmlsave** for additional information.

Also see

[D] **insheet** — Read ASCII (text) data created by a spreadsheet

[D] **infile (free format)** — Read unformatted ASCII (text) data

[D] **infile (fixed format)** — Read ASCII (text) data in fixed format with a dictionary

[D] **infix (fixed format)** — Read ASCII (text) data in fixed format

[D] **infile (fixed format)** — Read ASCII (text) data in fixed format with a dictionary

[D] **fdasave** — Save and use datasets in FDA (SAS XPORT) format

[TS] **haver** — Load data from Haver Analytics database

[D] **odbc** — Load, write, or view data from ODBC sources

[D] **xmlsave** — Save and use datasets in XML format

[U] **21 Inputting data**

Acronym glossary

2SIV	two-step instrumental variables
2SLS	two-stage least squares
3SLS	three-stage least squares
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
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
CDC	Centers for Disease Control and Prevention
CDF	cumulative distribution function
CES	constant elasticity of substitution
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
EGARCH	exponential GARCH
EGLS	estimated generalized least squares
EIM	expected information matrix
EM	expectation maximization
EPS	Encapsulated PostScript
ESS	error sum of squares
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
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
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

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
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

MINQUE	minimum norm quadratic unbiased estimation
MIVQUE	minimum variance quadratic unbiased estimation
ML	maximum likelihood
MLE	maximum likelihood estimate
mlong	marginal long
MM	method of moments
MNAR	missing not at random
MNP	multinomial probit
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	quasi maximum likelihood
rc	return code
RCT	randomized controlled trial
RE	random effects
REML	restricted (or residual) maximum likelihood
RESET	regression specification-error test
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
SF	static factor
SFAR	static factors with vector autoregressive errors
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
SRR	standardized risk ratio
SRS	simple random sample/sampling
SRSWR	SRS with replacement
SSC	Statistical Software Components
SSCP	sum of squares and cross products
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
TSS	total sum of squares
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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- Barnett, A. G., [R] **glm**
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- Chao, E. C., [XT] **xtmelogit**, [XT] **xtmelogit postestimation**, [XT] **xtmepoisson**, [XT] **xtmepoisson postestimation**
- Charlett, A., [R] **fracpoly**
- Chatfield, C., [TS] **arima**, [TS] **corrgram**, [TS] **Glossary**, [TS] **pergram**, [TS] **tssmooth**, [TS] **tssmooth dexpontential**, [TS] **tssmooth exponential**, [TS] **tssmooth hwinters**, [TS] **tssmooth ma**, [TS] **tssmooth shwinters**
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- Daniel, C., [R] **diagnostic plots**, [R] **oneway**
- Danuso, F., [R] **nl**
- Das, S., [XT] **xtunitroot**
- DasGupta, A., [R] **ci**
- Davey Smith, G., [R] **meta**
- David, H. A., [D] **egen**, [R] **spearman**, [R] **summarize**
- David, J. S., [TS] **arima**
- Davidon, W. C., [M-5] **optimize()**
- Davidson, R., [R] **boxcox**, [R] **cnsgreg**, [R] **gmm**,
[R] **intreg**, [R] **ivregress**, [R] **ivregress
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[TS] **arima**, [TS] **Glossary**, [TS] **prais**,
[TS] **sspace**, [TS] **varlmar**, [XT] **xtgls**,
[XT] **xtpcse**
- Davis, R. A., [TS] **corrgram**, [TS] **sspace**
- Davison, A. C., [R] **bootstrap**
- Day, N. E., [R] **clogit**, [R] **dstdize**, [R] **symmetry**,
[ST] **epitab**
- Day, W. H. E., [MV] **cluster**
- De Hoyos, R. E., [XT] **xreg**
- de Irala-Estévez, J., [R] **logistic**
- De Jong, P., [TS] **dfactor**, [TS] **sspace**, [TS] **sspace
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- de Leeuw, J., [MV] **ca postestimation**
- De Luca, G., [R] **biprob**, [R] **heckprob**, [R] **probit**
- De Stavola, B. L., [ST] **stcox**, [ST] **stset**
- de Wolf, I., [R] **rologit**
- Deaton, A., [R] **nlshr**, [U] **20.20 References**
- Deb, P., [R] **nbreg**
- DeGroot, M. H., [TS] **arima**
- Deistler, M., [TS] **sspace**
- DeLong, D. M., [R] **roc**
- DeLong, E. R., [R] **roc**
- DeMaris, A., [R] **regress postestimation**
- Demidenko, E., [XT] **xtmixed**
- Demmel, J., [M-1] **LAPACK**, [M-5] **lapack()**,
[P] **matrix eigenvalues**
- Demnati, A., [SVY] **direct standardization**,
[SVY] **poststratification**, [SVY] **variance
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Dempster, A. P., [MI] **intro substantive**, [MI] **mi impute mvn**, [XT] **xtmixed**

Denis, D., [G] **graph twoway scatter**

Desu, M. M., [ST] **stpower**, [ST] **stpower exponential**

Deville, J.-C., [SVY] **direct standardization**, [SVY] **poststratification**, [SVY] **variance estimation**

Devroye, L., [D] **functions**

Dewey, M. E., [R] **correlate**

Dice, L. R., [MV] **measure_option**

Dickens, R., [TS] **prais**

Dickey, D. A., [TS] **dfuller**, [TS] **Glossary**, [TS] **pperron**

Dickson, E. R., [ST] **sterreg**

Diebold, F. X., [TS] **arch**

Dieter, U., [D] **functions**

Digby, P. G. N., [R] **tetrachoric**

Diggle, P. J., [TS] **arima**, [TS] **wntestq**, [XT] **xtmixed**

Dijksterhuis, G. B., [MV] **procrustes**

DiNardo, J., [XT] **xtrc**

Ding, Z., [TS] **arch**

Dixon, W. J., [R] **ttest**

Dobbin, K., [ST] **stpower**

Dobson, A. J., [R] **glm**

Dohoo, I., [R] **regress**, [ST] **epitab**

Doll, R., [R] **poisson**, [ST] **epitab**

Donald, S. G., [R] **ivregress postestimation**

Dongarra, J. J., [M-1] **LAPACK**, [M-5] **lapack()**, [P] **matrix eigenvalues**, [P] **matrix symeigen**

Donner, A., [R] **loneway**

Donoho, D. L., [R] **lpoly**

Doornik, J. A., [MV] **mvtest**, [MV] **mvtest normality**, [TS] **vec**

Dore, C. J., [R] **fracpoly**

Dorfman, D. D., [R] **rocfit**

Draper, N., [R] **eivreg**, [R] **oneway**, [R] **regress**, [R] **stepwise**

Driver, H. E., [MV] **measure_option**

Drukker, D. M., [R] **asmprobit**, [R] **boxcox**, [R] **frontier**, [R] **lrtest**, [R] **nbreg**, [R] **tobit**, [R] **treatreg**, [R] **ztnb**, [ST] **stcox**, [ST] **streg**, [TS] **sspace**, [TS] **vec**, [XT] **xt**, [XT] **xtmelogit**, [XT] **xtmepoisson**, [XT] **xtmixed**, [XT] **xtnreg**

Du Croz, J., [M-1] **LAPACK**, [M-5] **lapack()**, [P] **matrix eigenvalues**

Duan, N., [R] **heckman**

Dubes, R. C., [MV] **cluster**

Duda, R. O., [MV] **cluster**, [MV] **cluster stop**

Duncan, A. J., [R] **qc**

Dunlop, D. D., [R] **sampsi**

Dunn, G., [MV] **discrim**, [MV] **discrim qda postestimation**, [MV] **mca**, [R] **kappa**

Dunnett, C. W., [R] **mprobit**

Dunnington, G. W., [R] **regress**

Dupont, W. D., [R] **logistic**, [R] **mkspline**, [R] **sunflower**, [ST] **epitab**, [ST] **stcox**, [ST] **stir**, [ST] **sts**

Durbin, J., [R] **ivregress postestimation**, [R] **regress postestimation time series**, [TS] **Glossary**, [TS] **prais**

Durlauf, S. N., [TS] **vec**, [TS] **vec intro**, [TS] **vecrank**

Duval, R. D., [R] **bootstrap**, [R] **jackknife**

Dwyer, J. H., [XT] **xtnreg**

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Edelsbrunner, H., [MV] **cluster**

Ederer, F., [ST] **ltable**

Edgington, E. S., [R] **runtest**

Edwards, A. L., [R] **anova**

Edwards, A. W. F., [R] **tetrachoric**

Edwards, J. H., [R] **tetrachoric**

Efron, B., [R] **bootstrap**, [R] **qreg**

Efroymson, M. A., [R] **stepwise**

Egger, M., [R] **meta**

Eichenbaum, M., [TS] **irf create**, [TS] **var svar**

Eisenhart, C., [R] **correlate**, [R] **runtest**

Elliott, G., [TS] **dflgs**, [TS] **Glossary**

Ellis, C. D., [R] **poisson**

Eltinge, J. L., [R] **test**, [SVY] **estat**, [SVY] **survey**, [SVY] **svy postestimation**, [SVY] **svydescribe**, [SVY] **variance estimation**

Emerson, J. D., [R] **lv**, [R] **stem**

Enas, G. G., [MV] **discrim knn**

Ender, P. B., [MV] **canon**

Enders, W., [TS] **arch**, [TS] **arima**, [TS] **corrgram**

Engel, A., [SVY] **estat**, [SVY] **subpopulation estimation**, [SVY] **survey**, [SVY] **svy**, [SVY] **svy brr**, [SVY] **svy estimation**, [SVY] **svy jackknife**, [SVY] **svy postestimation**, [SVY] **svy: tabulate oneway**, [SVY] **svy: tabulate twoway**, [SVY] **svydescribe**

Engle, R. F., [R] **regress postestimation time series**, [TS] **arch**, [TS] **arima**, [TS] **dfactor**, [TS] **dvech**, [TS] **vec**, [TS] **vec intro**, [TS] **vecrank**

Erdreich, L. S., [R] **roc**, [R] **rocfit**

Esman, R. M., [D] **egen**

Eubank, R. L., [R] **lpoly**

Evans, C. L., [TS] **irf create**, [TS] **var svar**

Evans, M. A., [R] **pk**, [R] **pkcross**

Everitt, B. S., [MV] **cluster**, [MV] **cluster stop**, [MV] **discrim**, [MV] **discrim qda postestimation**, [MV] **mca**, [MV] **pca**, [MV] **screeplot**, [R] **anova**, [R] **gllamm**, [R] **glm**, [U] **1.4 References**

Ewens, W. J., [R] **symmetry**

Ezekiel, M., [R] **regress postestimation**

Ezzati-Rice, T. M., [MI] **intro substantive**

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Fan, J., [R] **lpoly**

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Fang, K.-T., [R] **asmprobit**

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 [ST] **stpower**
 Feldman, J. J., [SVY] **survey**, [SVY] **svy estimation**
 Feldt, L. S., [R] **anova**
 Feller, W., [TS] **wntestb**
 Feltbower, R., [ST] **epitab**
 Ferguson, G. A., [MV] **Glossary**, [MV] **rotate**,
 [MV] **rotatemat**
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 Filon, L. N. G., [R] **correlate**
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 [R] **dstdize**, [R] **oneway**, [ST] **epitab**
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 [XT] **xtintreg**, [XT] **xtlogit**, [XT] **xtprobit**,
 [XT] **xttobit**
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 [MV] **discrim estat**, [MV] **discrim lda**,
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 Fix, E., [MV] **discrim knn**
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 [R] **dydx**, [R] **vpls**, [TS] **arch**, [TS] **arima**
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 [ST] **stpower exponential**, [U] **1.4 References**
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 [R] **logistic**, [R] **logit**, [R] **mlogit**, [R] **mprobit**,
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 [R] **spearman**, [SVY] **svy: tabulate**
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 [XT] **xtintreg**, [XT] **xtlogit**, [XT] **xtprobit**,
 [XT] **xttobit**
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- George, S. L., [ST] *stpower*, [ST] *stpower exponential*
- Gerkins, V. R., [R] *symmetry*
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- Gichangi, A., [ST] *stcrreg*
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- Gifi, A., [MV] *mds*
- Gijbels, I., [R] *lpoly*
- Gilbert, G. K., [MV] *measure_option*
- Giles, D. E. A., [TS] *prais*
- Gill, R. D., [ST] *stcrreg*
- Gillham, N. W., [R] *regress*
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- Gini, R., [R] *vwls*, [ST] *epitab*
- Ginther, O. J., [XT] *xtmixed*
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- Glass, R. I., [ST] *epitab*
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[R] *diagnostic plots*
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- Goldfarb, D., [M-5] *optimize()*
- Goldman, N., [XT] *xtmelogit*
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[R] *ranksum*, [R] *regress postestimation*,
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[R] *symmetry*, [R] *tabulate twoway*
- Goodall, C., [R] *lowess*, [R] *rreg*
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- Gooley, T. A., [ST] *stcrreg*
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[MV] *cluster stop*, [MV] *measure_option*
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[ST] *stcox*, [ST] *stcrreg*, [ST] *stdescribe*,
[ST] *streg*, [ST] *stset*, [ST] *stsplit*, [ST] *stvary*,
[ST] *survival analysis*, [SVY] *ml for svy*, [SVY] *survey*, [XT] *xtfrontier*,
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[TS] *arima*
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- Graham, J. W., [MI] *intro substantive*, [MI] *mi impute*
- Grambsch, P. M., [ST] *stcox*, [ST] *stcox PH-assumption tests*, [ST] *stcox postestimation*,
[ST] *stcrreg*
- Granger, C. W. J., [TS] *arch*, [TS] *vargranger*,
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- Graybill, F. A., [R] *centile*
- Green, B. F., [MV] *discrim lda*, [MV] *procrustes*
- Green, D. M., [R] *logistic postestimation*

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- Mickey, M. R., [MV] **discrim estat**
- Midthune, D., [SVY] **svy estimation**
- Mielke, P., [R] **brier**
- Miettinen, O. S., [ST] **epitab**
- Milan, L., [MV] **ca**, [MV] **factor**, [MV] **mca**,
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- Miller, A. B., [R] **kappa**
- Miller, H. W., [SVY] **survey**, [SVY] **svy estimation**
- Miller, J. I., [TS] **sspace**
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- Milliken, G. A., [MV] **anova**, [R] **anova**,
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- Mitchell, M. N., [G] **graph intro**, [R] **logistic**,
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- Molenberghs, G., [XT] **xtmixed**
- Moler, C. B., [P] **matrix symeigen**
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- Monson, R. R., [R] **bitest**, [ST] **epitab**
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- Moon, H. R., [XT] **xtunitroot**
- Mooney, C. Z., [R] **bootstrap**, [R] **jackknife**
- Moore, E. H., [M-5] **pinv()**
- Moore, J. B., [TS] **sspace**
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- Moran, J. L., [R] **dstdize**
- Morgenstern, H., [ST] **epitab**
- Mori, M., [ST] **stcrreg**
- Morris, C., [R] **bootstrap**
- Morris, J. N., [ST] **stsplit**
- Morris, N. F., [R] **binreg**
- Morrison, D. F., [MV] **clustermat**, [MV] **discrim lda**,
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- Morrow, A., [ST] **epitab**
- Mosier, C. I., [MV] **procrustes**
- Moskowitz, M., [R] **kappa**
- Mosteller, F., [R] **jackknife**, [R] **regress**, [R] **regress**
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- Moulton, L. H., [R] **permute**
- Muellbauer, J., [R] **nlshr**
- Mueller, C. W., [MV] **factor**
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 [R] **predictnl**, [R] **regress postestimation time**
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