graph other — Other graphics commands

Description Syntax Remarks and examples Reference Also see

Description

In addition to `graph`, there are many other commands that draw graphs. They are listed below.

Syntax

Distributional diagnostic plots:

Command	Description
`histogram`	histograms
`symplot`	symmetry plots
`quantile`	quantile plots
`qnorm`	quantile–normal plots
`pnorm`	normal probability plots, standardized
`qchi`	χ^2 quantile plots
`pchi`	χ^2 probability plots
`qqplot`	quantile–quantile plots
`gladder`	ladder-of-powers plots
`qladder`	ladder-of-powers quantiles
`spikeplot`	spike plots and rootograms
`dotplot`	means or medians by group
`sunflower`	density-distribution sunflower plots

Smoothing and densities:

Command	Description
`kdensity`	kernel density estimation, univariate
`lowess`	lowess smoothing
`lpoly`	local polynomial smoothing

Regression diagnostics:

Command	Description
`avplot`	added-variable (leverage) plots
`cprplot`	component-plus-residual plots
`lvr2plot`	L-R (leverage-versus-squared-residual) plots
`rvfplot`	residual-versus-fitted plots
`rvpplot`	residual-versus-predictor plots

Time series:

Command	Description
ac	correlograms
pac	partial correlograms
pergram	periodograms
cumsp	spectral distribution plots, cumulative
xcorr	cross-correlograms for bivariate time series
wntestb	Bartlett's periodogram-based white-noise test
estat acplot	parametric autocorrelation and autocovariance functions after arima and arfima
estat aroots	eigenvalues of the companion matrices after arima
estat sbcusum	cumulative sum test for parameter stability

Vector autoregressive (VAR, SVAR, VEC) models:

Command	Description
fcast graph	var, svar, and vec forecasts
varstable	eigenvalues of the companion matrix after var and svar
vecstable	eigenvalues of the companion matrix after vec
irf graph	impulse–response functions (IRFs) and forecast-error variance decompositions (FEVDs)
irf ograph	overlaid IRFs and FEVDs
irf cgraph	combined IRFs and FEVDs
bayesfcast graph	bayes: var forecasts
bayesvarstable	eigenvalues of the companion matrix after bayes: var
bayesirf graph	Bayesian impulse–response functions (IRFs) and forecast-error variance decompositions (FEVDs)
bayesirf ograph	overlaid Bayesian IRFs and FEVDs
bayesirf cgraph	combined Bayesian IRFs and FEVDs

Longitudinal data/panel data:

Command	Description
xtline	panel-data line plots

Survival analysis:

Command	Description
sts graph	survivor, failure, hazard, or cumulative-hazard functions
strate	failure rates and cumulative hazard comparisons
ltable	life tables
stci	means and percentiles of survival time, with CIs
stphplot	log–log plots after stcox
stintphplot	log–log plots after stintcox
stcoxkm	Kaplan–Meier observed survival curves
stintcoxnp	nonparametric and Cox predicted survival plots
estat phtest	verify proportional-hazards assumption
stcurve	survivor, failure, hazard, or cumulative hazard function
estat gofplot	assess goodness of fit after streg, stcox, stintreg, or stintcox

Meta-analysis:

Command	Description
meta forestplot	forest plots
meta funnelplot	funnel plots
meta galbraithplot	Galbraith plots
meta labbeplot	L'Abbé plots
estat bubbleplot	bubble plots

ROC analysis:

Command	Description
roctab	ROC curve
rocplot	parametric ROC curve
roccomp	multiple ROC curves, compared
rocregplot	marginal and covariate-specific ROC curves
lroc	ROC curve after logistic, logit, probit, and ivprobit
lsens	sensitivity and specificity versus probability cutoff

Causal inference and treatment effects:

Command	Description
teoverlap	overlap plots
tebalance box	box plot to check balance
estat effectsplot	effects plot after mediate
estat trendplots	graphical diagnostics for parallel trends after didregress and xtdidregress
estat grangerplot	time-specific treatment effects after didregress and xtdidregress
estat bdecomp	treatment-effect components from ATET decomposition after didregress and xtdidregress
estat atetplot	plot the coefficients of ATET for each cohort after hdidregress and xthdidregress
estat aggregation	aggregate the ATETs to characterize the heterogeneity of treatment effects after hdidregress and xthdidregress
estat series	fit a nonparametric series regression of the IATE estimates on variables after cate
categraph histogram	histogram of the IATE predictions after cate
categraph gateplot	plot of the group average treatment effect (GATE) or sorted GATE (GATES) estimates after cate
categraph iateplot	plot of the IATE function estimates after cate

Lasso:

Command	Description
bicplot	Bayesian information criterion function
coefpath	path of coefficients
cvplot	cross-validation function
stcurve	survivor, failure, hazard, or cumulative hazard function

Bayesian analysis:

Command	Description
bayesgraph diagnostics	multiple diagnostics in compact form
bayesgraph trace	trace plots
bayesgraph ac	autocorrelation plots
bayesgraph histogram	histograms
bayesgraph kdensity	density plots
bayesgraph cusum	cumulative sum plots
bayesgraph matrix	scatterplot matrix

Bayesian model averaging:

Command	Description
bmagraph pmp	model-probability plots
bmagraph msize	model-size distribution plots
bmagraph varmap	variable-inclusion maps
bmagraph coefdensity	coefficient posterior density plots

Item response theory:

Command	Description
irtgraph icc	item characteristic curve plot
irtgraph tcc	test characteristic curve plot
irtgraph iif	item information function plot
irtgraph tif	test information function plot

Multivariate analysis:

Command	Description
biplot	biplot
cluster dendrogram	dendrograms for hierarchical cluster analysis
screeplot	scree plot of eigenvalues
scoreplot	factor or component score plot
loadingplot	factor or component loading plot
procoverlay	Procrustes overlay plot
cabiplot	correspondence analysis biplot
caprojection	correspondence analysis dimension projection plot
mcaplot	plot of category coordinates
mcaprojection	MCA dimension projection plot
mdsconfig	multidimensional scaling configuration plot
mdsshepard	multidimensional scaling Shepard plot

Power, precision, and sample-size graphs:

Command	Description
power, graph	graph of results from power
ciwidth, graph	graph of results from ciwidth
gsbounds, graphbounds	graph of results from gsbounds
gsdesign, graphbounds	graph of results from gsdesign

Quality-control charts:

Command	Description
cusum	cusum plots
cchart	c (control) charts
pchart	p (fraction-defective) charts
rchart	R (range or dispersion) charts
xchart	$\overline{X}$ (control line) charts
shewhart	$\overline{X}$ and R charts, vertically aligned
serrbar	standard error bar charts

H2O machine learning graphs:

Command	Description
h2omlgraph ice	individual conditional expectation plot
h2omlgraph pdp	partial dependence plot
h2omlgraph prcurve	precision–recall curve plot
h2omlgraph roc	ROC curve plot
h2omlgraph scorehistory	score history plot
h2omlgraph shapsummary	SHAP beeswarm plot
h2omlgraph shapvalues	SHAP values plot for individual observations
h2omlgraph varimp	variable importance plot
h2omltree	decision tree DOT file and display rule set

Other statistical graphs:

Command	Description
marginsplot	graph of results from margins (profile plots, etc.)
tabodds	odds-of-failure versus categories
npgraph	conditional mean function
estat coefplot	plot coefficients and their confidence intervals at different quantiles after ivqregress and sqreg
estat waldplot	plot Wald statistics corresponding to each grid point after ivqregress
fp plot	component-plus-residual plot from most recently fit fractional polynomial model
fracplot	plot data and fit from most recently fit fractional polynomial model
grmap	visualization of spatial data
pkexamine	summarize pharmacokinetic data

Remarks and examples

The other graph commands are implemented in terms of `graph`, which provides the following capabilities:

Command	Description
`graph bar`	bar charts
`graph pie`	pie charts
`graph dot`	dot charts
`graph matrix`	scatterplot matrices
`graph twoway`	twoway (y–x) graphs, including
`graph twoway scatter`	scatterplots
`graph twoway line`	line plots
`graph twoway function`	function plots
`graph twoway histogram`	histograms
`graph twoway *`	more

Reference

Buscha, F. 2025. *Graphs Everyone Should Know and How to Create Them in Stata*. College Station, TX: Stata Press.

Also see

[G-1] **Graph intro** — Introduction to graphics