

0.1 Zelig-package: Everyone's Statistical Software

Description

Zelig is an easy-to-use program that can estimate, and help interpret the results of, an enormous range of statistical models. It literally is “everyone’s statistical software” because Zelig’s simple unified framework incorporates everyone else’s (R) code. We also hope it will become “everyone’s statistical software” for applications and teaching, and so have designed Zelig so that anyone can easily use it or add their programs to it. Zelig also comes with infrastructure that facilitates the use of any existing method, such as by allowing multiply imputed data for any model, and mimicking the program Clarify (for Stata) that takes the raw output of existing statistical procedures and translates them into quantities of direct interest.

Details

Package: Zelig
Version: 3.1-0
Date: 2007-06-12
Depends: R ($\geq 2.5.0$), MASS, boot
Suggests: VGAM ($\geq 0.7-1$), MCMCpack ($\geq 0.7-4$), mvtnorm, survival, sandwich ($\geq 2.0-0$), zoo ($\geq 1.2-6$)
License: GPL version 2 or newer
URL: <http://gking.harvard.edu/zelig>
Packaged: Wed May 30 16:14:15 2007; falimadh
Built: R 2.6.0; ; 2007-11-30 13:37:37; unix

Index:

approval	U.S. Presidential Approval Data
bivariate	Sample data for bivariate probit regression
coalition	Coalition Dissolution in Parliamentary Democracies
coalition2	Coalition Dissolution in Parliamentary Democracies, Modified Version
current.packages	Find all packages in a dependency chain
dims	Return Dimensions of Vectors, Arrays, and Data Frames
eidat	Simulation Data for Ecological Inference
free1	Freedom of Speech Data
free2	Freedom of Speech Data
friendship	Simulated Example of Schoolchildren Friendship Network
grunfeld	Simulation Data for model Seemingly Unrelated

	Regression (sur) that corresponds to method SUR of systemfit
gsource	Read Data As a Space-Delimited Table
help.zelig	HTML Help for Zelig Commands and Models
hoff	Social Security Expenditure Data
homerun	Sample Data on Home Runs Hit By Mark McGwire and Sammy Sosa in 1998.
immigration	Individual Preferences Over Immigration Policy
klein	Simulation Data for model Two-Stage Least Square (twosls) that corresponds to method 2SLS of systemfit
kmenta	Simulation Data for model Three-Stage Least Square (threesls) that corresponds to method 3SLS of systemfit
macro	Macroeconomic Data
match.data	Output matched data sets
MatchIt.url	Table of links for Zelig
mexico	Voting Data from the 1988 Mexican Presidential Election
mi	Bundle multiply imputed data sets as a list
mid	Militarized Interstate Disputes
model.end	Cleaning up after optimization
model.frame.multiple	Extracting the "environment" of a model formula
model.matrix.multiple	Design matrix for multivariate models
network	Format matrices into a data frame for social network analysis
newpainters	The Discretized Painter's Data of de Piles
parse.formula	Parsing user-input formulas into multiple syntax
parse.par	Select and reshape parameter vectors
PErisk	Political Economic Risk Data from 62 Countries in 1987
plot.ci	Plotting Vertical confidence Intervals
plot.zelig	Graphing Quantities of Interest
put.start	Set specific starting values for certain parameters
repl	Replicating Analyses
rocplot	Receiver Operator Characteristic Plots
sanction	Multilateral Economic Sanctions
set.start	Set starting values for all parameters
setx	Setting Explanatory Variable Values
sim	Simulating Quantities of Interest

sna.ex	Simulated Example of Social Network Data
summary.zelig	Summary of Simulated Quantities of Interest
SupremeCourt	U.S. Supreme Court Vote Matrix
swiss	Swiss Fertility and Socioeconomic Indicators (1888) Data
ternaryplot	Ternary diagram
ternarypoints	Adding Points to Ternary Diagrams
tobin	Tobin's Tobit Data
turnout	Turnout Data Set from the National Election Survey
user.prompt	Pause in demo files
voteincome	Sample Turnout and Demographic Data from the 2000 Current Population Survey
Weimar	1932 Weimar election data
zelig	Estimating a Statistical Model
zeligDepStatus	Zelig Dependencies Packages Client Status
zeligDepUpdate	Download Zelig Dependencies Packages
zeligDescribeModelXML	Zelig interface functions
Zelig-package	Zelig: Everyone's Statistical Software
Zelig.url	Table of links for Zelig

Further information is available in the following vignettes:

aov	Fit an Analysis of Variance Model (source)
arima	ARIMA Models for Time Series Data (source)
blogit	Bivariate Logistic Regression for Two Dichotomous Dependent Variables (source)
bprobit	Bivariate Probit Regression for Dichotomous Dependent Variables (source)
chopit	Compound Hierarchical Ordered Probit for Survey Vignettes (source)
cloglog.net	Social Network Complementary Log Log Regression for Dichotomous Dependent Variables (source)
coxph	Cox Proportional Hazards Regression for Duration Dependent Variables (source)
ei.RxC	Hierarchical Multinomial-Dirichlet Ecological Inference Model (source)
ei.dynamic	Quinn's Dynamic Ecological Inference (source)
ei.hier	Hierarchical Ecological Inference Model for 2x2 tables (source)
exp	Exponential Regression for Duration Dependent Variables (source)
factor.bayes	Bayesian Factor Analysis (source)
factor.mix	Mixed Data Factor Analysis (source)
factor.ord	Ordinal Data Factor Analysis (source)
gamma	Gamma Regression for Continuous, Positive Dependent Variables (source)
gamma.gee	Generalized Estimating Equation for Gamma Regression (source)
gamma.mixed	Gamma mixed effects linear regression (source)
gamma.net	Network Gamma Regression for Continuous, Positive Proximity Matrix Dependent Variables (source)
irt1d	One Dimensional Item Response Model (source)
irtkd	K-Dimensional Item Response Model (source)

<code>logit</code>	Logistic Regression for Dichotomous Dependent Variables (source)
<code>logit.bayes</code>	Bayesian Logistic Regression for Dichotomous Dependent Variables (source)
<code>logit.gam</code>	Generalized Additive Model for Dichotomous Dependent Variables (source)
<code>logit.gee</code>	Generalized Estimating Equation for Logistic Regression (source)
<code>logit.mixed</code>	Mixed effects linear regression (source)
<code>logit.net</code>	Network Logistic Regression for Dichotomous Proximity Matrix Dependent Variables (source)
<code>lognorm</code>	Log-Normal Regression for Duration Dependent Variables (source)
<code>ls</code>	Least Squares Regression for Continuous Dependent Variables (source)
<code>ls.mixed</code>	Mixed effects linear regression (source)
<code>ls.net</code>	Network Least Squares Regression for Continuous Proximity Matrix Dependent Variables (source)
<code>mlogit</code>	Multinomial Logistic Regression for Dependent Variables with Unordered Categorical Variables (source)
<code>mlogit.bayes</code>	Bayesian Multinomial Logistic Regression for Dependent Variables with Unordered Categorical Variables (source)
<code>mloglm</code>	Multinomial Log-Linear Regression for Contingency Table Models (source)
<code>negbin</code>	Negative Binomial Regression for Event Count Dependent Variables (source)
<code>normal</code>	Normal Regression for Continuous Dependent Variables (source)
<code>normal.bayes</code>	Bayesian Normal Linear Regression (source)
<code>normal.gam</code>	Generalized Additive Model for Continuous Dependent Variables (source)
<code>normal.gee</code>	Generalized Estimating Equation for Normal Regression (source)
<code>normal.net</code>	Network Normal Regression for Continuous Proximity Matrix Dependent Variables (source)
<code>ologit</code>	Ordinal Logistic Regression for Ordered Categorical Dependent Variables (source)
<code>oprobit</code>	Ordinal Probit Regression for Ordered Categorical Dependent Variables (source)
<code>oprobit.bayes</code>	Bayesian Ordered Probit Regression (source)
<code>poisson</code>	Poisson Regression for Event Count Dependent Variables (source)
<code>poisson.bayes</code>	Bayesian Poisson Regression (source)
<code>poisson.gam</code>	Generalized Additive Model for Count Dependent Variables (source)
<code>poisson.gee</code>	Generalized Estimating Equation for Poisson Regression (source)
<code>poisson.mixed</code>	Mixed effects poisson regression (source)
<code>poisson.net</code>	Network Poisson Regression for Event Count Proximity Matrix Dependent Variables (source)
<code>probit</code>	Probit Regression for Dichotomous Dependent Variables (source)
<code>probit.bayes</code>	Bayesian Probit Regression for Dichotomous Dependent Variable (source)
<code>probit.gam</code>	Generalized Additive Model for Dichotomous Dependent Variables (source)
<code>probit.gee</code>	Generalized Estimating Equation for Probit Regression (source)
<code>probit.mixed</code>	Mixed effects probit regression (source)
<code>probit.net</code>	Network Probit Regression for Dichotomous Proximity Matrix Dependent Variables (source)
<code>relogit</code>	Rare Events Logistic Regression for Dichotomous Dependent Variables (source)
<code>sur</code>	Seemingly Unrelated Regression (source)
<code>threesls</code>	Three Stage Least Squares (source)
<code>tobit</code>	Linear regression for Left-Censored Dependent Variable (source)
<code>tobit.bayes</code>	Bayesian Linear Regression for a Censored Dependent Variable (source)
<code>twosls</code>	Two Stage Least Squares (source)
<code>weibull</code>	Weibull Regression for Duration Dependent Variables (source)

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