Package 'RcmdrPlugin.NMBU'

January 20, 2025

Type Package

Title R Commander Plug-in for University Level Applied Statistics

Version 1.8.15

Date 2024-03-11

Author Kristian Hovde Liland [aut, cre],
Solve Sæbø [aut]

Maintainer Kristian Hovde Liland <kristian.liland@nmbu.no>

Encoding UTF-8

URL https://github.com/khliland/RcmdrPlugin.NMBU/

BugReports https://github.com/khliland/RcmdrPlugin.NMBU/issues/

Depends R (>= 3.0.0), mixlm (>= 1.2.3), MASS, pls, xtable, phia

Imports Rcmdr (>= 2.1-7), tcltk, car

Suggests lme4, leaps, mvtnorm, gmodels, abind, lattice, pbkrtest, vcd, multcomp, e1071, nnet

Description An R Commander ``plug-in'' extending functionality of linear models and providing an interface to Partial Least Squares Regression and Linear and Quadratic Discriminant analysis. Several statistical summaries are extended, predictions are offered for additional types of analyses, and extra plots, tests and mixed models are available.

License GPL (>= 2)

LazyLoad yes

RcmdrModels mvr, lda, qda, prcomp, mer, rsm, lmm

RoxygenNote 7.3.1

NeedsCompilation no

Repository CRAN

Date/Publication 2024-03-11 14:00:10 UTC

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`RcmdrPlugin.NMBU-package`
R Commander Plug-in for University Level Applied Statistics

Description

This package provides an Rcmdr "plug-in" extending some functions of linear models and providing new and extended interfaces to PCA, PLS, LDA, QDA, clustering of variables, tests, plots, etc.

Details

Package:	RcmdrPlugin.NMBU
License:	GPL version 2 or newer
LazyLoad:	yes

Run the plugin using the code `library(RcmdrPlugin.NMBU)` or `library(umb)`.
Statistical and summary functions included:

- `dummy(y)`
- `PRESS(object=NULL)` (default is current model)
- `PRESS.res(object=NULL)` (default is current model)
- `R2_pred(object=NULL)` (default is current model)
- `forward(model, alpha=0.2, full=FALSE)`
- `backward(model, alpha=0.2, full=FALSE)`
- `stepWise(model, alpha.enter=0.15, alpha.remove=0.15, full=FALSE)`
- `stepWiseBack(model, alpha.remove=0.15, alpha.enter=0.15, full=FALSE)`
- `best.subsets(model, nbest=5, nvmax)`
- `confint.mvr(object, parm, level=0.95, ...)`
- `confusion(true, predicted)`
- `DA.scores(object=NULL)` (default is current model)
- `plotDA(DAobject=NULL, regions=TRUE, contours=FALSE, resolution=100)`
- `hclust.merge(object)` (default is last clustering)
- `mixed.model(formula, random.effects=NULL, data, restrictedModel=FALSE, subset="")`

- summary.extra(object)
- anova_reg(lm.object)
- predict_CI_PI(model, data, level)
- prop.test.ordinary(x, n, p = NULL, alternative = c("two.sided", "less", "greater"), conf.level = 0.95, correct = TRUE)
- rmsep(object) (default is current model)

Utility functions included:

- aovP()
- clustP()
- daP()
- mixP()
- pcaP()
- plsP()
- variablesP()
- DA.coef()
- hclust.list()
- listHclustSolutions(envir=.GlobalEnv, ...)
- make.colours(object)
- confint.mvr(object, parm, level=0.95, ...)
- dummy(y)
- dummify(y,n,name)
- Dummify(data, main.effects, response)
- fparse(f)
- if.R()

GUI Functions included:

- anova_reg_GUI()
- backwardDrop()
- backwardForward()
- bestSubsets()
- coefNMBU()
- contrastGUI()
- contrastGUI2()
- covarianceMatrix()
- createSequence()
- discriminantAnalysis()
- discriminantPlot()

- dotplotGUI()
- enterTableNMBU()
- fittedLinePlot()
- wideForwardAdd()
- forwardAdd()
- forwardBackward()
- hierarchicalClusterVariable()
- linearModelANOVA()
- meanCenter()
- mixtureGUI()
- plsRegressionModel()
- postHocGUI()
- predictRegressionModel()
- PRESS.GUI()
- principalComponentPlots()
- principalComponentsStat()
- proportionTest()
- sortData()
- twoSamplesTTest()
- twoWayTableNMBU()

Graphical Functions included:

- CIplot()
- dotPlot()
- dots()
- mixture.contour()
- panel.ci.plot()
- plotDA()

Author(s)

Kristian Hovde Liland <kristian.liland@nmbu.no>

Examples

```
## Not run:
## This example shows alternative ways of starting
## package using the official plugin or an unofficial wrapper.
library(RcmdrPlugin.NMBU) # Starts up the R Commander including this plugin.
library(nmbu) # Simpler startup with automatic update hosted by NMBU (when available).

## End(Not run)
```

extend.colnames *Extended summary from multinom*

Description

Extended summary from multinom

Usage

```
extend.colnames(object, the.name)
```

Arguments

object	object fitted with multinom.
the.name	name to be added to column names.

Value

Returns object with new colnames.

Author(s)

Kristian Hovde Liland

summaryMultinom *Extended summary from multinom*

Description

Extends the summary function of multinom object from nnet.

Usage

```
summaryMultinom(object)
```

Arguments

object	Object fitted by multinom.

Value

Only printing is performed, nothing is returned.

Author(s)

Kristian Hovde Liland

`summaryOrdinal` *Extended summary from ordinal regression*

Description

Extended summary from ordinal regression.

Usage

```
summaryOrdinal(object, digits = max(3, .Options$digits - 3), correlation = FALSE, ...)
```

Arguments

`object`	fitted ordinal regression.
`digits`	number of digits in output.
`correlation`	use correlation.
`...`	additional arguments to pass on.

Value

Only printing is performed, nothing is returned.

Author(s)

Kristian Hovde Liland

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