Package 'repmod'

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Type Package

Title Create Report Table from Different Objects

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coefplot

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Plot of the coefficients of a model

Description

Creates a plot of the coefficients of a model.

```
coefplot(
  coefs,
  lwr.int = coefs,
  upper.int = coefs,
  offset = 0,
  coefnames = names(coefs),
  abline.pos = 0,
  sorted = FALSE,
  reverse = FALSE,
  pch = 16,
  xlim = c(min(lwr.int, na.rm = TRUE), max(upper.int, na.rm = TRUE)),
  ylim = c(1, length(coefs)),
  color = "black",
  ...
)
```

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Arguments

coefs A vector with each coefficient lwr.int A vector with the lower end of the CI upper.int A vector with the upper end of the CI offset Y-axis offset for the coefficients coefnames Name for each variable Position for the vertical reference line abline.pos Should the coefficients be sorted from highest to lowest? sorted Should the order be reversed? reverse pch Type of point Limits of the X-axis xlim Limits of the Y-axis ylim color Color for the points

... Further arguments passed to axis()

Value

A plot of the coefficients with their CI

Examples

```
lm1 <- lm(Petal.Length ~ Sepal.Width + Species, data=iris)
a<-report(lm1)
oldpar <- par()
par(mar=c(4, 10, 3, 2))
#Coefplot calling plot.reportmodel
plot(a)
par(mar=oldpar$mar) #Restore old margin values
#Manual coefplot
coefplot(coefs=c(1, 2, 3), lwr.int=c(0, 1, 2), upper.int=c(5, 6, 7), coefnames=c("A", "B", "C"))</pre>
```

make_csv_table

Export a table to excel

Description

Exports a table to Excel.

```
make_csv_table(x, file, info)
```

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Arguments

x A data.frame objectfile Name of the fileinfo Footer for the table

Value

Creates a .csv file with the table

make_latex_table

Export a table to latex

Description

Exports a table to latex.

Usage

```
make_latex_table(x, file)
```

Arguments

x A data.frame objectfile Name of the file

Value

Creates a .txt file with latex code for the table

make_table

Make a table from report

Description

Auxiliary function to create tables.

```
make_table(x, file, type, info = NULL, ...)
```

make_word_table 5

Arguments

X	A data.frame object
file	Name of the file
type	Type of file
info	Footer for the table
	Additional parameters passed to make_word_table

Value

Creates a file with the table

Description

Exports a table to Word.

Usage

```
make_word_table(x, file, info = NULL, use.rownames = TRUE)
```

Arguments

X	A data.frame object
file	Name of the file
info	Footer for the table
use.rownames	Should row names be added to the output?

Value

Creates a word file with the table

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matrixPaste

Auxiliary matrix paste function

Description

Internal function for report.table

Usage

```
matrixPaste(..., sep = rep(" ", length(list(...)) - 1))
```

Arguments

... Matrices to paste

sep Separator for the paste function

Value

Returns a matrix with the different matrices used as input pasted together

plot.reportmodel

Coefplot for reportmodel objects

Description

Creates a coefplot from the reportmodel object.

Usage

```
## S3 method for class 'reportmodel'
plot(x, ...)
```

Arguments

x A reportmodel object

... Further arguments passed to coefplot

Value

Returns a plot of each coefficient in the model with its 95

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Examples

```
lm1 <- lm(Petal.Length ~ Sepal.Width + Species, data=iris)
a<-report(lm1)
oldpar <- par()
par(mar=c(4, 10, 3, 2))
plot(a)  #Coefplot calling plot.reportmodel
par(mar=oldpar$mar)</pre>
```

report

Generic function for creating reporting tables

Description

Generic function for creating reporting tables.

Usage

```
report(x, ...)
```

Arguments

x An compatible object that can be summarized... further arguments passed to make_table

Value

A data frame with the report table

Examples

```
report(iris) #Report of descriptive statistics
lm1 <- lm(Petal.Length ~ Sepal.Width + Species, data=iris)
report(lm1) #Report of model</pre>
```

report.betareg

Report from beta regression model

Description

Creates a report table from a beta regression model.

8 report.brmsfit

Usage

```
## S3 method for class 'betareg'
report(
    x,
    file = NULL,
    type = "word",
    digits = 3,
    digitspvals = 3,
    info = TRUE,
    print = TRUE,
    ...
)
```

Arguments

x	A betareg model object
file	Name of the file to export the table
type	Format of the file
digits	Number of decimals
digitspvals	Number of decimals for p-values
info	If TRUE, include call in the exported table
print	Should the report table be printed on screen?
	Further arguments passed to make_table

Value

A data frame with the report table

report.brmsfit Report models from brms package

Description

Creates a report table from model fitted by brms.

```
## S3 method for class 'brmsfit'
report(
    x,
    file = NULL,
    type = "word",
    digits = 3,
    info = TRUE,
    print = TRUE,
    ...
)
```

report.clm 9

Arguments

Х	A brms model object
file	Name of the file to export the table
type	Format of the file
digits	Number of decimals
info	If TRUE, include call in the exported table
print	Should the report table be printed on screen?
	Further arguments passed to make_table

Value

A data frame with the report table

report.clm

Report from ordinal model

Description

Creates a report table from an ordinal model.

Usage

```
## S3 method for class 'clm'
report(
    x,
    file = NULL,
    type = "word",
    digits = 3,
    digitspvals = 3,
    info = TRUE,
    print = TRUE,
    ...
)
```

Arguments

X	An ordinal model object
file	Name of the file to export the table
type	Format of the file
digits	Number of decimals
digitspvals	Number of decimals for p-values
info	If TRUE, include call in the exported table
print	Should the report table be printed on screen?
• • •	Further arguments passed to make_table

10 report.clmm

Value

A data frame with the report table

report.clmm

Report from ordinal mixed model

Description

Creates a report table from an ordinal mixed model.

Usage

```
## $3 method for class 'clmm'
report(
    x,
    file = NULL,
    type = "word",
    digits = 3,
    digitspvals = 3,
    info = TRUE,
    print = TRUE,
    ...
)
```

Arguments

Х

file	Name of the file to export the table
type	Format of the file
digits	Number of decimals
digitspvals	Number of decimals for p-values
info	If TRUE, include call in the exported table
print	Should the report table be printed on screen?
	Further arguments passed to make_table

An ordinal model object

Value

report.coxph 11

report.coxph

Report from cox regression model

Description

Creates a report table from a cox model.

Usage

```
## S3 method for class 'coxph'
report(
    x,
    file = NULL,
    type = "word",
    digits = 3,
    digitspvals = 3,
    info = TRUE,
    print = TRUE,
    ...
)
```

Arguments

x	A cox model object
file	Name of the file to export the table
type	Format of the file
digits	Number of decimals
digitspvals	Number of decimals for p-values
info	If TRUE, include call in the exported table
print	Should the report table be printed on screen?
	Further arguments passed to make_table

Value

12 report.data.frame

report.data.frame

Report tables of summary data

Description

Creates a report table ready for publication.

Usage

```
## $3 method for class 'data.frame'
report(
    x,
    by = NULL,
    file = NULL,
    type = "word",
    digits = 2,
    digitscat = digits,
    print = TRUE,
    ...
)
```

Arguments

X	A data.frame object
by	Grouping variable for the report
file	Name of the file to export the table
type	Format of the file
digits	Number of decimal places
digitscat	Number of decimal places for categorical variables (if different to digits)
print	Should the report table be printed on screen?
	further arguments passed to make_table()

Value

Returns a summary table of the data in publication-friendly format

Examples

```
report(iris)
(reporTable<-report(iris, by="Species"))
class(reporTable)</pre>
```

report.default 13

report.default

Default function for report

Description

This is a default function for calling summary (x) on non-implemented classes.

Usage

```
## Default S3 method:
report(x, ...)
```

Arguments

x Any object without specific report function

... further arguments passed to summary

Value

A summary of the object

report.factor

Report from categorical variable

Description

Creates a report table.

Usage

```
## S3 method for class 'factor'
report(x, ...)
```

Arguments

x A categorical variable

... Further arguments passed to make_table

Value

14 report.glm

report.glm

Report from generalized linear model

Description

Creates a report table from a generalized linear model.

Usage

```
## S3 method for class 'glm'
report(
    x,
    file = NULL,
    type = "word",
    digits = 3,
    digitspvals = 3,
    info = TRUE,
    print = TRUE,
    ...
)
```

Arguments

X	A generalized linear model object
file	Name of the file to export the table
type	Format of the file
digits	Number of decimals
digitspvals	Number of decimals for p-values
info	If TRUE, include call in the exported table
print	Should the report table be printed on screen?
	Further arguments passed to make_table

Value

report.glmerMod 15

report.glmerMod

Report from generalized linear mixed model

Description

Creates a report table from a generalized linear mixed model.

Usage

```
## S3 method for class 'glmerMod'
report(
    x,
    file = NULL,
    type = "word",
    digits = 3,
    digitspvals = 3,
    info = TRUE,
    print = TRUE,
    ...
)
```

Arguments

X	A generalized linear mixed model object
file	Name of the file to export the table
type	Format of the file
digits	Number of decimals
digitspvals	Number of decimals for p-values
info	If TRUE, include call in the exported table
print	Should the report table be printed on screen?
	Further arguments passed to make_table

Value

16 report.glmmadmb

 ${\tt report.glmmadmb}$

 $Report\, from\,\, generalized\,\, linear\,\, mixed\,\, model\, from\,\, ADMB$

Description

Creates a report table from a glmmadmb model.

Usage

```
## S3 method for class 'glmmadmb'
report(
    x,
    file = NULL,
    type = "word",
    digits = 3,
    digitspvals = 3,
    info = TRUE,
    print = TRUE,
    ...
)
```

Arguments

X	A generalized linear mixed model object (glmmabmb)
file	Name of the file to export the table
type	Format of the file
digits	Number of decimals
digitspvals	Number of decimals for p-values
info	If TRUE, include call in the exported table
print	Should the report table be printed on screen?
	Further arguments passed to make_table

Value

report.glmnet 17

report.glmnet

Report models from glmnet package

Description

Creates a report table from models fitted by glmnet.

Usage

```
## S3 method for class 'glmnet'
report(
    x,
    s,
    gamma = 1,
    drop.zero = TRUE,
    file = NULL,
    type = "word",
    digits = 3,
    info = TRUE,
    print = TRUE,
    ...
)
```

Arguments

X	A glmnet model object
S	Value of lambda for estimating the coefficients
gamma	Value of gamma for estimating the coefficients (only used in relaxed fits)
drop.zero	Should zero coefficients be dropped?
file	Name of the file to export the table
type	Format of the file
digits	Number of decimals
info	If TRUE, include call in the exported table
print	Should the report table be printed on screen?
	Further arguments passed to make_table

Value

18 report.lm

report.lm

Report from linear model

Description

Creates a report table from a linear model.

Usage

```
## S3 method for class 'lm'
report(
    x,
    file = NULL,
    type = "word",
    digits = 3,
    digitspvals = 3,
    info = TRUE,
    print = TRUE,
    ...
)
```

Arguments

X	A linear model object
file	Name of the file to export the table
type	Format of the file
digits	Number of decimals
digitspvals	Number of decimals for p-values
info	If TRUE, include call in the exported table
print	Should the report table be printed on screen?
	Further arguments passed to make_table

Value

report.lmerMod 19

report.lmerMod

Report from linear mixed model

Description

Creates a report table from a linear mixed model.

Usage

```
## S3 method for class 'lmerMod'
report(
    x,
    file = NULL,
    type = "word",
    digits = 3,
    digitspvals = 3,
    info = TRUE,
    print = TRUE,
    ...
)
```

Arguments

x	A linear mixed model object
file	Name of the file to export the table
type	Format of the file
digits	Number of decimals
digitspvals	Number of decimals for p-values
info	If TRUE, include call in the exported table
print	Should the report table be printed on screen?
• • •	Further arguments passed to make_table

Value

20 report.lqmm

report.lqmm

Report from quantile mixed model

Description

Creates a report table from a quantile mixed model.

Usage

```
## S3 method for class 'lqmm'
report(
    x,
    file = NULL,
    type = "word",
    digits = 3,
    digitspvals = 3,
    info = TRUE,
    print = TRUE,
    ...
)
```

Arguments

x	A quantile model object
file	Name of the file to export the table
type	Format of the file
digits	Number of decimals
digitspvals	Number of decimals for p-values
info	If TRUE, include call in the exported table
print	Should the report table be printed on screen?
• • •	Further arguments passed to make_table

Value

 ${\tt report.merModLmerTest} \ \ \textit{Report from linear mixed model with pvalues}$

Description

Creates a report table from a linear mixed model.

Usage

```
## S3 method for class 'merModLmerTest'
report(
    x,
    file = NULL,
    type = "word",
    digits = 3,
    digitspvals = 3,
    info = TRUE,
    print = TRUE,
    ...
)
```

Arguments

x	A linear mixed model object
file	Name of the file to export the table
type	Format of the file
digits	Number of decimals
digitspvals	Number of decimals for p-values
info	If TRUE, include call in the exported table
print	Should the report table be printed on screen?
• • •	Further arguments passed to make_table

Value

22 report.rlm

report.numeric

Report from numeric variable

Description

Creates a report table.

Usage

```
## S3 method for class 'numeric'
report(x, ...)
```

Arguments

x A numeric variable

... Further arguments passed to make_table

Value

A data frame with the report table

report.rlm

Report from robust linear model (rlm)

Description

Creates a report table from a robust linear model.

```
## S3 method for class 'rlm'
report(
    x,
    file = NULL,
    type = "word",
    digits = 3,
    digitspvals = 3,
    info = TRUE,
    print = TRUE,
    ...
)
```

report.rq 23

Arguments

X	A rlm object
file	Name of the file to export the table
type	Format of the file
digits	Number of decimals
digitspvals	Number of decimals for p-values
info	If TRUE, include call in the exported table
print	Should the report table be printed on screen?
	Further arguments passed to make_table

Value

A data frame with the report table

report.rq

Report from quantile regression model

Description

Creates a report table from a quantile regression model.

Usage

```
## $3 method for class 'rq'
report(
    x,
    file = NULL,
    type = "word",
    digits = 3,
    digitspvals = 3,
    info = TRUE,
    print = TRUE,
    ...
)
```

Arguments

Х	A quantreg model object
file	Name of the file to export the table
type	Format of the file
digits	Number of decimals
digitspvals	Number of decimals for p-values
info	If TRUE, include call in the exported table
print	Should the report table be printed on screen?
	Further arguments passed to make_table

24 rob.pvals

Value

A data frame with the report table

rob.ci

Function to compute bootstrap confidence intervals for robust linear regression models

Description

Estimates confidence intervals for rlm models.

Usage

```
rob.ci(x, level = 0.95, maxit = 200, R = 2000)
```

Arguments

x A rlm object

level Confidence level for the interval

maxit Maximum number of iterations per fit

R Number of boostrap samples

Value

A matrix with bootstrap confidence intervals for each variable in the model

rob.pvals

Function to compute p-values for robust linear regression models

Description

Estimates p-values for rlm models.

Usage

```
rob.pvals(x)
```

Arguments

A rlm object

Value

A vector of p-values

set_noms 25

 $\operatorname{set_noms}$

Set header names for word tables

Description

Internal function for make_word_table.

Usage

```
set_noms(x, args)
```

Arguments

x A flextable object

args A names list with the header names

Value

A flextable object with assigned header names

VarCorr

Generic VarCorr function

Description

Extract Variance-Covariance Matrix.

Usage

```
VarCorr(x, sigma = 1, ...)
```

Arguments

x A model object

sigma Optional value used as a multiplier for the standard deviations

. . . Further arguments passed to VarrCorr methods

Value

A Variance-Covariance Matrix

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