Package ‘base.rms’

October 12, 2022

**Title** Convert Regression Between Base Function and 'rms' Package

**Version** 1.0

**Description** We perform linear, logistic, and cox regression using the base functions `lm()`, `glm()`, and `coxph()` in the R software and the 'survival' package. Likewise, we can use `ols()`, `lrm()` and `cph()` from the 'rms' package for the same functionality. Each of these two sets of commands has a different focus. In many cases, we need to use both sets of commands in the same situation, e.g. we need to filter the full subset model using AIC, and we need to build a visualization graph for the final model. 'base.rms' package can help you to switch between the two sets of commands easily.

**License** GPL-3

**Encoding** UTF-8

**LazyData** true

**RoxygenNote** 7.1.1

**Imports** rms, survival, do, splines, stats

**Suggests** knitr, rmarkdown

**VignetteBuilder** knitr

**NeedsCompilation** no

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**Repository** CRAN

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**R topics documented:**

- `coxph2cph` ................................................................. 2
- `cph2coxph` ................................................................. 2
- `lm2ols` ................................................................. 3
- `logit2lrm` ................................................................. 3
- `lrm2logit` ................................................................. 4
- `ols2lm` ................................................................. 4
Index

**coxph2cph**

*Convert results of cox regression from coxph() to cph()*

**Description**

Convert results of cox regression from coxph() in 'survival' package to cph() in 'rms' package.

**Usage**

`coxph2cph(fit)`

**Arguments**

- `fit` cox regression results of coxph()

**Value**

results of coxph()

**Examples**

```r
library(survival)
fit <- coxph(Surv(mpg, vs) ~ am + gear + carb, data = mtcars)
coxph2cph(fit)
```

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**cph2coxph**

*Convert results of cox regression from cph() to coxph()*

**Description**

Convert results of cox regression from cph() in 'rms' package to coxph() in 'stats' package.

**Usage**

`cph2coxph(fit)`

**Arguments**

- `fit` cox regression results of cph()

**Value**

results of coxph()
### Examples

```r
library(rms)
fit <- cph(formula = Surv(mpg, vs) ~ am + gear + carb, data = mtcars)
cph2coxph(fit)
```

### Description

Convert results of `lm()` from 'stats' package to `ols()` from 'rms' package.

### Usage

```r
lm2ols(fit)
```

### Arguments

- `fit`: results of `lm()`

### Value

results of `ols()`

### Examples

```r
fit <- lm(mpg ~ disp, data = mtcars)
lm2ols(fit)
```

### logit2lrm

Convert results of logistic regression from `glm()` to `lrm()`

### Description

Convert results of logistic regression from `glm()` in 'stats' package to `lrm()` in 'rms' package.

### Usage

```r
logit2lrm(fit)
```

### Arguments

- `fit`: logistic regression results of `glm()`

### Value

results of `lrm()`
Examples

```r
fit <- glm(vs~mpg+cyl, data=mtcars, family = binomial(link = 'logit'))
logit2lrm(fit)
```

### lrm2logit

*Convert results of logistic regression from lrm() to glm()*

#### Description

Convert results of logistic regression from lrm() in 'rms' package to glm() in 'stats' package.

#### Usage

```r
lrm2logit(fit)
```

#### Arguments

- `fit`: logistic regression results of lrm()

#### Value

results of glm()

#### Examples

```r
library(rms)
fit <- lrm(vs ~ mpg + cyl, data = mtcars)
lrm2logit(fit)
```

### ols2lm

*Convert results of ols() to lm()*

#### Description

Convert results of ols() from 'rms' package to lm() from 'stats' package.

#### Usage

```r
ols2lm(fit)
```

#### Arguments

- `fit`: results of ols()

#### Value

results of lm()
Examples

```r
library(rms)
fit <- ols(mpg ~ disp^2, data = mtcars)
ols2lm(fit)
```
Index

coxph2cph, 2
cph2coxph, 2

lm2ols, 3
logit2lrm, 3
lrm2logit, 4

ols2lm, 4