Package 'betacal'

October 12, 2022

Type Package

Title Beta Calibration

Version 0.1.0

Author Telmo M Silva Filho and Meelis Kull

Maintainer Telmo M Silva Filho <tmfilho@gmail.com>

Description Fit beta calibration models and obtain calibrated probabilities from them.

License MIT + file LICENSE

Encoding UTF-8

LazyData true

NeedsCompilation no

Repository CRAN

Date/Publication 2017-02-25 01:03:32

R topics documented:

---

beta_calibration   *Beta Calibration*

Description

Builds a beta calibration model on probability vector p and label vector y, fitting the parameters chosen by the user, with possible values being "abm", "ab" and "am". Returns the calibration model, the calibration map and the chosen parameters.

1

Usage

```
beta_calibration(p, y, parameters="abm")
```

Arguments

p	A vector of probabilities that will be used to train the calibration model.
y	A vector of labels that will be used to train the calibration model.
parameters	The parameters that will be fitted by the model.

See Also

[beta_predict](#).

Examples

```
## Creating a vector of probabilities
p <- seq(0.01,0.99,0.01)

## Creating a label vector based on the probability vector
y <- rbinom(99,1,p)

## Fitting beta calibration with three parameters
calib <- beta_calibration(p, y, "abm")

## Fitting beta calibration with two shape parameters
calib <- beta_calibration(p, y, "ab")

## Fitting beta calibration with one shape parameter and one location parameter
calib <- beta_calibration(p, y, "am")
```

---

beta_predict	*Predict Calibrated Probabilities*

Description

Returns calibrated probabilities from calib$model, where calib is obtained by calling the `beta_calibration` function.

Usage

```
beta_predict(p, calib)
```

Arguments

p	A vector of probabilities that the model will calibrate.
calib	A list containing a calibration map, a calibration model and the fitted parameters, obtained by calling the `beta_calibration` function.

See Also

[beta_predict](.).

Examples

```
## Creating a vector of probabilities
p <- seq(0.01,0.99,0.01)

## Creating a label vector based on the probability vector
y <- rbinom(99,1,p)

## Fitting beta calibration with three parameters
calib <- beta_calibration(p, y, "abm")

## Obtaining calibrated probabilities
probas <- beta_predict(p, calib)
```

Index