Package ‘betacal’

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Type Package
Title Beta Calibration
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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.
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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.
beta_predict

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

```r
## 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)
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