Package 'Regrans'

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Title Segmented Linear Regression Models

Version 0.0.1

Description This package fits segmented linear regression models.

Depends R (>= 3.2.2)

License GPL-3

LazyData true

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NeedsCompilation no

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R topics documented:

`Regrans-package` *Fits Segmented Linear Regression Models*

Description

Fits Segmented Linear Regression Models.

plot.regrans *Plot of Segmented Linear Regression for an* regrans *Object*

Description

Segmented linear regression plot for visualization of the transition point (or allometric inflection point) identified by interactive regrans routine.

Usage

```
## S3 method for class 'regrans'
plot(obj, col.lines = c("red", "blue"),
  lty.lines = c("solid", "solid"), lwd.lines = c(1, 1), ...)
```

Arguments

obj	regrans object, result of regrans function.
col.lines	a vector with length 2 containing the names of colors that will be drawing the lines of both linear models (left and right).
lty.lines	a vector with length 2 containing the names of line types that will be drawing the lines of both linear models (left and right).
lwd.lines	a vector with length 2 containing the names of line widths that will be drawing the lines of both linear models (left and right).
...	further arguments passed to or from other methods to plot.

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regrans *Interactive Routine for Fit Segmented Linear Regression Models*

Description

Fit segmented linear models

Usage

```
regrans(x, y, n.min = 5)
```

Arguments

x	a numeric vector.
y	a numeric vector.
n.min	minimum number of points (x,y) to be considered in a linear model.

Value

a data frame containing the results of each model fitted.

Author(s)

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`regranslm` *Fits Segmented Linear Regression Models*

Description

Fit segmented linear models

Usage

```
regranslm(x, y, n.min = 5)
```

Arguments

`x`	a numeric vector.
`y`	a numeric vector.
`n.min`	minimum number of points (x,y) to be considered in a linear model.

Value

a data frame containing the results of each model fitted.

Author(s)

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`simdata` *Simulated data*

Description

Simulated data just for example

Format

a data frame with 50 rows and 2 columns:

- x: explanatory variable.
- y: response variable.

summary.regrans *Summarizing Segmented Linear Regression Fits*

Description

"summary" method for class regrans.

Usage

```
## S3 method for class 'regrans'
summary(object, correlation = FALSE, symbolic.cor = FALSE,
  ...)
```

Arguments

object	an object of class regrans, usually, a result of a call to regrans function.
correlation	logical; if 'TRUE', the correlation matrix of the estimated parameters is returned and printed.
symbolic.cor	logical. If 'TRUE', print the correlations in a symbolic form (see 'symnum') rather than as numbers.
...	further arguments passed to or from other methods.

Value

The function 'summary.regrans' computes and returns a list of summaries statistics of both (left and right lm) fitted segmented regression given in 'object'. For more details see also the help of summary.lm.

Author(s)

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