Package 'yasegfit'

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Type Package

Title Yet another segfit

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Description Yet another segfit

Depends R (>= 2.15.0)

License GPL (>= 2)

NeedsCompilation yes

RoxygenNote 6.0.1

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`fitted.yasegfit` *Extract the fitted values from a yasegfit object*

Description

Extract the fitted values from a yasegfit object

Usage

```
## S3 method for class 'yasegfit'
fitted(sf, concat = TRUE)
```

Arguments

sf	The yasegfit object
concat	Whether the fitted values of different segments will be concatenated.

Details

Extract the fitted values from a yasegfit object

Value

If concat==TRUE, the fitted values of different segments will be concatenated into one vector. Otherwise, the returned value will be a list of fitted values of each segment.

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plot.yasegfit *Plot a segfit object*

Description

Plot a yasegfit object

Usage

```
## S3 method for class 'yasegfit'
plot(x, y = "", col.data = "black", col.seg = "red",
  legend.pos = "topleft")
```

Arguments

x	If x is a segfit object, input y is ignored.
y	A yasegfit object, If not provided, x must be a yasegfit object.
col.data	color of data
col.seg	color of segments
legend.pos	legend positions

Details

Plot a yasegfit object

residuals.yasegfit *Extract the residuals from a yasegfit object*

Description

Extract the residuals from a yasegfit object

Usage

```
## S3 method for class 'yasegfit'
residuals(sf, concat = TRUE)
```

Arguments

sf	The yasegfit object
concat	Whether the residuals of different segments will be concatenated.

Details

Extract the residuals from a yasegfit object

Value

If concat==TRUE, the residuals of different segments will be concatenated into one vector. Otherwise, the returned value will be a list of residuals of each segment.

summary.yasegfit *Summarise a yasegfit object*

Description

Summarise a yasegfit object

Usage

```
## S3 method for class 'yasegfit'
summary(sf)
```

Arguments

sf	The yasegfit object to summarise

Details

Summarise a yasegfit object

`yasegfit` *Segfit a series*

Description

Segfit a series

Usage

```
yasegfit(data, seg.alg = "dp", fit.alg = "abline", smp = 2.3, nseg = 3)
```

Arguments

`data`	The input series to be segfitted.
`seg.alg`	Segmentation algorithm, possible values: c("topdown", "dp")
`fit.alg`	Fitting algorithm for each segment, possible values: c("abline", "powerabc", "const")
`smp`	Controlling the number of segments when seg.alg="fit"
`nseg`	The exact number of segments when seg.alg="topdown"

Details

Segfit a series

Value

A yasegfit object containing various kinds of information. For each segment, it contains the head index (hi), tail index (ei), parameter a (a) parameter b (b), parameter c (c), fitting order (order), fitted values (fit), and fitting residuals (residual). It also has a attribute "data" for the original data; A attribute "seg.alg" for dp algorithm used; A attribute "fit.alg" for fitting algorithm used for each segment; A attribute "smp" for the smp used in "dp" algorithm; A attribute "nseg" for number of segments.

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