

Package ‘shutterplot’

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Type Package

Title The R Shutter Plot Package

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Description Shows the scatter plot along with the fitted regression lines. It depicts min, max, the three quartiles, mean, and sd for each variable. It also depicts sd-line, sd-box, r, r-square, prediction boundaries, and regression outliers.

License GPL-3

Encoding UTF-8

LazyData true

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`shutterplot`*Shutter Plot*

Description

This function depicts the elements of a simple linear regression model.

Usage

```
shutterplot(  
  x,  
  y,  
  main = "Shutter Plot",  
  regbound = TRUE,  
  wspace = 0.1,  
  alpha = 0.05,  
  locationOfnStar = 1,  
  nprint = TRUE,  
  colOfPoints = "grey68",  
  xlab = "x",  
  ylab = "y",  
  regOutliers = TRUE,  
  pch = 20,  
  cex = 0.7,  
  las = 1  
)
```

Arguments

<code>x</code>	data for the explanatory/independent variable.
<code>y</code>	data for the response/dependent variable.
<code>main</code>	the title for the shutter plot.
<code>regbound</code>	logical: TRUE (Default), if you want the prediction boundaries; FALSE, otherwise.
<code>wspace</code>	white space to the left and the right of the plot. The default is 0.1 (10 percent of the range of <code>x</code>).
<code>alpha</code>	level of significance for prediction boundaries. The default value is 0.05 (97.5 percentile of a T-distribution with $df = n-2$).
<code>locationOfnStar</code>	binary: -1 for left; 1 (Default) for right.
<code>nprint</code>	logical: TRUE (Default), to print the sample size; FALSE, otherwise.
<code>colOfPoints</code>	The default is "grey68". Choose any color.
<code>xlab</code>	name of the <code>x</code> variable.
<code>ylab</code>	name of the <code>y</code> variable.

regOutliers	logical: TRUE (Default), to circle the regression outliers; FALSE, to skip.
pch	Either an integer specifying a symbol or a single character to be used as the default in plotting points. See points for possible values and their interpretation. Note that only integers and single-character strings can be set as a graphics parameter (and not NA nor NULL). The default value is 20.
cex	A numerical value giving the amount by which plotting text and symbols should be magnified relative to the default 0.7.
las	numeric in 0,1,2,3; the style of axis labels.' 0: always parallel to the axis [default], 1:always horizontal, 2:always perpendicular to the axis, 3:always vertical.

Value

Draws the shutter plot.

Examples

```
data1<- rnorm(90,10,10)
data2<- data1+rnorm(90,20,10)
shutterplot(data1,data2,regbound = TRUE,
  wspace = 0.1, alpha = 0.05,
  locationOfnStar = 1, nprint = TRUE, colOfPoints ="grey68",
  xlab = "data1", ylab = "data2", regOutliers = TRUE)
shutterplot(data1,100-data2)
```

shutterplotssummary *Numerical Summaries of a Shutter Plot*

Description

displays numerical summaries of a shutter plot.

Usage

```
shutterplotssummary(x, y, getValue = FALSE)
```

Arguments

x	data for the explanatory/independent variable.
y	data for the response/dependent variable.
getValue	logical:FALSE (DEFAULT); to access the summary statistics of the shutter plot.

Value

Prints the numerical summaries in the console.

Examples

```
data1 <- rnorm(90,10,10)
data2 <- data1 + rnorm(90,20,10)
shutterplotsummary(data1,data2)
```

summary7

Numerical values of seven-number-summary.

Description

prints the numerical summaries in the console.

Usage

```
summary7(x)
```

Arguments

x value(s) of a variable.

Value

prints the seven-number-summary in the console.

Examples

```
data <- rnorm(90,90,10)
summary7(data)
```

summary7plot

seven-number-summary

Description

displays the seven-number-summary for a variable.

Usage

```
summary7plot(x)
```

Arguments

x value(s) of a variable.

Value

depicts the seven-number-summary.

Examples

```
data<- rnorm(90,90,10)  
summary7plot(data)
```

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