Package 'shutterplot'

October 14, 2022

Date 2021-02-04

Type Package

Title The R Shutter Plot Package

Version 0.1.0

Author Siddhanta Phuyal <siddhantaphuyal7159@gmail.com>
Jyotirmoy Sarkar <jsarkar@iupui.edu>
Mamunur Rashid <mrashid@depauw.edu>

Maintainer Siddhanta Phuyal <siddhantaphuyal7159@gmail.com>

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

RoxygenNote 7.1.1

Depends R (>= 3.1.0)

NeedsCompilation no

Repository CRAN

Date/Publication 2021-02-12 09:50:06 UTC

R topics documented:

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

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

---

shutterplotsummary *Numerical Summaries of a Shutter Plot*

Description

displays numerical summaries of a shutter plot.

Usage

```
shutterplotsummary(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)
```

Index