

Package ‘webr’

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Type Package

Title Data and Functions for Web-Based Analysis

Version 0.1.0

Imports moonBook, ggplot2, stringr

URL <https://github.com/cardiomoon/webr>

BugReports <https://github.com/cardiomoon/webr/issues>

Description Several analysis-related functions for the book entitled
“Web-based Analysis without R in Your Computer”(written in Korean, ISBN 978-89-5566-185-9)
by Keon-Woong Moon. The main function plot.htest() shows the distribution of statistic for the object of class 'htest'.

Depends R(>= 2.10)

License GPL-3

Encoding UTF-8

LazyData true

RoxygenNote 6.0.1

VignetteBuilder knitr

Suggests testthat, knitr

NeedsCompilation no

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Repository CRAN

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cox.stuart.test	<i>Cox-Stuart test for trend analysis The Cox-Stuart test is defined as a little powerful test (power equal to 0.78), but very robust for the trend analysis. It is therefore applicable to a wide variety of situations, to get an idea of the evolution of values obtained. The proposed method is based on the binomial distribution. This function was written by Tommaso Martino<todoslogos@gmail.com> (See 'References')</i>
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Description

Cox-Stuart test for trend analysis The Cox-Stuart test is defined as a little powerful test (power equal to 0.78), but very robust for the trend analysis. It is therefore applicable to a wide variety of situations, to get an idea of the evolution of values obtained. The proposed method is based on the binomial distribution. This function was written by Tommaso Martino<todoslogos@gmail.com> (See 'References')

Usage

```
cox.stuart.test(x)
```

Arguments

x A numeric vector

Value

A list with class "htest"

References

Original code: <http://statistic-on-air.blogspot.kr/2009/08/trend-analysis-with-cox-stuart-test-in.html>

Examples

```
customers = c(5, 9, 12, 18, 17, 16, 19, 20, 4, 3, 18, 16, 17, 15, 14)
cox.stuart.test(customers)
```

makeSub	<i>Make subtitle</i>
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Description

Make subtitle

Usage

```
makeSub(x)
```

Arguments

x An object of class "htest"

plot.htest	<i>Plotting distribution of statistic for object "htest"</i>
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Description

Plotting distribution of statistic for object "htest"

Usage

```
## S3 method for class 'htest'  
plot(x, ...)
```

Arguments

x object of class "htest"
... further arguments to ggplot

Value

a ggplot or NULL

Examples

```
require(moonBook)  
require(webr)  
## chi-square test  
x=chisq.test(table(mtcars$am,mtcars$cyl))  
plot(x)  
  
#Welch Two Sample t-test  
x=t.test(mpg~am,data=mtcars)
```

```

plot(x)

x=t.test(BMI~sex,data=acs)
plot(x)

# F test to compare two variances
x=var.test(age~sex,data=acs,alternative="less")
plot(x)

# Paired t-test
x=t.test(iris$Sepal.Length,iris$Sepal.Width,paired=TRUE)
plot(x)

# One sample t-test
plot(t.test(acs$age,mu=63))

# Two sample t-test
x=t.test(age~sex, data=acs,conf.level=0.99,alternative="greater",var.equal=TRUE)
plot(x)

```

runs.test

Runs test for randomness

Description

Runs test for randomness

Usage

```
runs.test(y, plot.it = FALSE, alternative = c("two.sided",
      "positive.correlated", "negative.correlated"))
```

Arguments

y	A vector
plot.it	A logical. whether or not draw a plot
alternative	a character string specifying the alternative hypothesis, must be one of "two.sided" (default), "greater" or "less".

Value

A list with class "htest" containing the following components: statistic,p-value,method and data.name

Examples

```

y=c(1,2,2,1,1,2,1,2)
runs.test(y)
y=c("A","B","B","A","A","B","A","B")
runs.test(y,alternative="p")

```

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