

Package: plotrr (via r-universe)

October 1, 2026

Type Package

Title Making Visual Exploratory Data Analysis with Nested Data Easier

Version 1.0.2

Description Provides tools for visual exploratory data analysis with nested data. Includes functions for creating bivariate plots, dot plots, histograms, and violin plots for each group or unit in nested data. Methods are described in Crabtree and Nelson (2017) ``Plotrr: Functions for making visual exploratory data analysis with nested data easier" <doi:10.21105/joss.00190>.

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Encoding UTF-8

Imports ggplot2

RoxygenNote 7.3.3

Suggests knitr, rmarkdown

VignetteBuilder knitr

URL <https://lobsterbush.github.io/plotrr/>,
<https://github.com/lobsterbush/plotrr>

BugReports <https://github.com/lobsterbush/plotrr/issues>

Repository <https://lobsterbush.r-universe.dev>

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bivarplots	<i>Plot two variables within each group</i>
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Description

Draws a scatterplot with a smooth curve for each group. Use it to see how the relationship varies across groups.

Usage

```
bivarplots(x, y, group, data)
```

Arguments

- x The name of the x column, as a string.
- y The name of the y column, as a string.
- group The name of the grouping column, as a string.
- data A data frame.

Value

Prints one plot per group. The function returns NULL invisibly.

Author(s)

Charles Crabtree <charles.crabtree@monash.edu>

Examples

```
a <- runif(1000, min = 0, max = 1)
b <- a + rnorm(1000, mean = 0, sd = 1)
c <- rep(c(1:10), times = 100)
data <- data.frame(a, b, c)
bivarplots("a", "b", "c", data)
```

bivarrugplot	<i>Draw a scatterplot with marginal rugs</i>
--------------	--

Description

Draws a scatterplot and adds marks along each axis at the observed values.

Usage

```
bivarrugplot(x, y, data)
```

Arguments

x	The name of the x column, as a string.
y	The name of the y column, as a string.
data	A data frame.

Value

Prints the plot and returns the ggplot object invisibly.

Author(s)

Charles Crabtree <charles.crabtree@monash.edu>

Examples

```
a <- runif(1000, min = 0, max = 1)
b <- a + rnorm(1000, mean = 0, sd = 1)
data <- data.frame(a, b)
bivarrugplot("a", "b", data)
```

clear	<i>Clear the console display</i>
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Description

Prints a form-feed character. Whether this clears the display depends on your console.

Usage

```
clear(...)
```

Arguments

...	An unused argument.
-----	---------------------

Value

No return value (called for side effect of printing a form feed character to the console, which visually clears the R terminal). Returns NULL invisibly.

Author(s)

Charles Crabtree <charles.crabtree@monash.edu>

Examples

```
clear()
```

dotplots

Draw a dot plot for each group

Description

Draws the distribution of x separately for each group.

Usage

```
dotplots(x, y, group, data, n)
```

Arguments

x	The name of the x column, as a string.
y	Kept for compatibility; this function doesn't use it.
group	The name of the grouping column, as a string.
data	A data frame.
n	Sets the bin width to 1/n. Try a few values to find a useful level of detail.

Value

Prints one dot plot per group. The function returns NULL invisibly.

Author(s)

Charles Crabtree <charles.crabtree@monash.edu>

Examples

```
a <- runif(1000, min = 0, max = 1)
b <- a + rnorm(1000, mean = 0, sd = 1)
c <- rep(c(1:10), times = 100)
data <- data.frame(a, b, c)
dotplots("a", "b", "c", data, 20)
```

histplots	<i>Draw a histogram for each group</i>
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Description

Draws the distribution of x separately for each group.

Usage

```
histplots(x, y, group, data, n)
```

Arguments

x	The name of the x column, as a string.
y	Kept for compatibility; this function doesn't use it.
group	The name of the grouping column, as a string.
data	A data frame.
n	The number of bins.

Value

Prints one histogram per group. The function returns NULL invisibly.

Author(s)

Charles Crabtree <charles.crabtree@monash.edu>

Examples

```
a <- runif(1000, min = 0, max = 1)
b <- a + rnorm(1000, mean = 0, sd = 1)
c <- rep(c(1:10), times = 100)
data <- data.frame(a, b, c)
histplots("a", "b", "c", data, 5)
```

lengthunique	<i>Count distinct non-missing values</i>
--------------	--

Description

Count distinct non-missing values.

Usage

```
lengthunique(x)
```

Arguments

x A vector.

Value

The number of distinct values after removing missing values.

Author(s)

Charles Crabtree <charles.crabtree@monash.edu>

Examples

```
x <- rep(c(1:10), 10)
lengthunique(x)
```

makefacnum

Convert numeric factor labels to numbers

Description

Convert numeric factor labels to numbers.

Usage

```
makefacnum(x)
```

Arguments

x A vector.

Value

A numeric vector.

Author(s)

Charles Crabtree <charles.crabtree@monash.edu>

Examples

```
x <- c("1", "2", "3")
x <- as.factor(x)
x
x <- makefacnum(x)
x
is.numeric(x)
```

violinplots	<i>Draw violin plots within each group</i>
-------------	--

Description

Draws the distribution of y across values of x, separately for each group.

Usage

```
violinplots(x, y, group, data)
```

Arguments

x	The name of the x column, as a string.
y	The name of the y column, as a string.
group	The name of the grouping column, as a string.
data	A data frame.

Value

Prints one plot per group. The function returns NULL invisibly.

Author(s)

Charles Crabtree <charles.crabtree@monash.edu>

Examples

```
a <- runif(1000, min = 0, max = 1)
b <- a + rnorm(1000, mean = 0, sd = 1)
c <- rep(c(1:10), times = 100)
data <- data.frame(a, b, c)
violinplots("a", "b", "c", data)
```

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