

Package ‘gggap’

October 13, 2022

Type Package

Title Streamlined Creation of Segments on the Y-Axis of 'ggplot2' Plots

Version 1.0.1

Description The function gggap() streamlines the creation of segments on the y-axis of 'ggplot2' plots which is otherwise not a trivial task to accomplish.

Imports ggplot2, cowplot, grid

License GPL-3

Encoding UTF-8

LazyData true

RoxygenNote 6.1.1

URL <https://github.com/cmoralesmx/gggap>

BugReports <https://github.com/cmoralesmx/gggap/issues>

NeedsCompilation no

Author Carlos Morales [aut, cre],
Jiacheng Lou [aut],
Jing Zhang [aut],
Yizhu Lvy [aut],
Zhi Jin [aut]

Maintainer Carlos Morales <carlosmorales777@gmail.com>

Repository CRAN

Date/Publication 2020-11-20 09:20:02 UTC

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gggap *Define Segments in y-Axis for 'ggplot2'*

Description

Easy-to-define segments in y-axis for 'ggplot2'.

Usage

```
gggap(plot, ylim, segments, tick_width, rel_heights, vjust = 0,
      margin = c(top = 1, right = 2, bottom = 1, left = 1), ...)
```

Arguments

plot	A 'ggplot2' plot.
ylim	The y-axis limits.
segments	The interval of a segment. If more than one intervals are given, please use list() to concatenate them.
tick_width	One or more numbers for each segmented y-axis.
rel_heights	Numerical vector of relative segmented y-axis and segments heights, default is 1 and 0.
vjust	Vertical justification. Default = 0 (baseline at y).
margin	Margins around the text.
...	Arguments will be handed to plot_grid() in 'cowplot'.

Value

A segmented picture.

Examples

```
data(mtcars)
library(ggplot2)
p <- ggplot(data = mtcars, aes(x = gear, fill = gear)) +
  geom_bar() +
  ggtitle("Number of Cars by Gears") +
  xlab("Gears")

# single segments and missing tick_width
gggap(
  plot = p,
  segments = c(5, 10),
  ylim = c(0, 50)
)

# tick_width can be one or more numbers
```

```

gggap(
  plot = p,
  segments = c(5, 10),
  tick_width = c(1, 10),
  ylim = c(0, 50)
)

# segments list contains more than one number vectors
gggap(
  plot = p,
  segments = list(c(2.5, 4), c(5, 10)),
  tick_width = c(1, 0.5, 10),
  ylim = c(0, 50)
)

# rel_heights can set the relative height for segments and segmented y-axis
gggap(
  plot = p,
  segments = list(c(2.5, 4), c(5, 10)),
  tick_width = c(1, 0.5, 10),
  rel_heights = c(0.2, 0, 0.2, 0, 1),
  ylim = c(0, 50)
)

# reversed y-axis
p <- ggplot(
  data = mtcars,
  aes(x = gear, fill = gear)) +
  geom_bar() +
  ggtitle("Number of Cars by Gears") +
  xlab("Gears")+
  scale_y_continuous(trans = 'reverse')

#single segments and missing tick_width
gggap(
  plot = p,
  segments = c(10, 5),
  ylim = c(15, 0))

```

gggap_legend

*Add Legend to gggap()***Description**

Add a legend to a ‘ggplot2’ plot modified by gggap().

Usage

```
gggap_legend(plot, margin = c(top = 200, right = 200, bottom = 200, left = 200))
```

Arguments

- plot A 'ggplot2' plot.
margin Margins around the text.

Value

A legend-added picture

Examples

```
library(ggplot2)
mtcars$gear <- factor(mtcars$gear)
bp <- ggplot(
  data = mtcars,
  aes(x = gear, fill = gear)
) +
  geom_bar() +
  ggtitle("Number of Cars by Gears") +
  xlab("Gears")
gggap(
  plot = bp,
  ylim = c(0, 16),
  segments = c(6, 8)
)
gggap_legend(
  plot = bp,
  margin = c(top = 1, right = 1, bottom = 1, left = 460)
)
```

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