

# Package ‘ggbreak’

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**Title** Set Axis Break for 'ggplot2'

**Version** 0.1.7

**Description** An implementation of scale functions for setting axis breaks of a 'gg' plot (S Xu (2021) <[doi:10.3389/fgene.2021.774846](https://doi.org/10.3389/fgene.2021.774846)>).

**Imports** ggfun (>= 0.1.1), grid, ggplot2, ggplotify (>= 0.0.7), aplot (>= 0.1.5), rlang, stats, yulab.utils (>= 0.1.9)

**Suggests** cowplot, ggimage, knitr, patchwork, pillar, prettydoc, rmarkdown, testthat

**VignetteBuilder** knitr

**License** Artistic-2.0

**Encoding** UTF-8

**URL** <https://github.com/YuLab-SMU/ggbreak>

**BugReports** <https://github.com/YuLab-SMU/ggbreak/issues>

**RoxygenNote** 7.3.3

**NeedsCompilation** no

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**Repository** CRAN

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scale\_wrap

*scale-wrap*

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**Description**

This scale function wraps a 'gg' plot over multiple rows to make plots with long x axes easier to read.

**Usage**

```
scale_wrap(n)
```

**Arguments**

`n` the number of subplot pieces.

**Value**

gg object

**Examples**

```
library(ggplot2)
library(ggbreak)
p <- ggplot(economics, aes(x=date, y = unemploy, colour = uempmed)) +
  geom_line()
p + scale_wrap(n=4)
```

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scale\_x\_break*scale\_x\_break*

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**Description**

Set an axis break point for a 'gg' plot

**Usage**

```
scale_x_break(
  breaks,
  scales = "fixed",
  ticklabels = NULL,
  expand = TRUE,
  space = 0.1,
  symbol = NULL
)
```

```

scale_y_break(
  breaks,
  scales = "fixed",
  ticklabels = NULL,
  expand = TRUE,
  space = 0.1,
  symbol = NULL
)

```

### Arguments

breaks	break point
scales	relative width or height of subplots, default is "fixed". If scale is 'free', all subplots have equal width or height. It also can be any number to set relative width or height compare to first subplot.
ticklabels	the axis labels to subplot, default is NULL.
expand	default is TRUE, logical or a vector of range expansion constants used to add some padding around the data to ensure that they are placed some distance away from the axes. Use the convenience function <code>expansion()</code> of <code>ggplot2</code> to generate the values for the <code>expand</code> argument. The defaults are to expand the scale by 5% on each side for continuous variables. If it is logical, the TRUE means the default of <code>ggplot2</code> (foregoing statement), and FALSE means no expand for the plot.
space	the blank space among the subplots after break, default is 0.1 (cm).
symbol	the break symbol, default is NULL, could be 'slash'.

### Details

This scale function set an axis break point for a 'gg' plot. Either 'x' and 'y' axes are supported. The result is still a 'gg' object and user can progressively add layers to it.

### Value

gg object

### Author(s)

Guangchuang Yu

### Examples

```

require(ggplot2 )
set.seed(2019-01-19)
d <- data.frame(
  x = 1:20,
  y = c(rnorm(5) + 4, rnorm(5) + 20, rnorm(5) + 5, rnorm(5) + 22)
)

p <- ggplot(d, aes(x, y)) + geom_col()

```

```
x <- p+scale_y_break(c(7, 17 ) )
print(x)
```

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scale\_x\_cut

*scale\_x\_cut*

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## Description

scale\_x\_cut

scale\_y\_cut

## Usage

```
scale_x_cut(breaks, which = NULL, scales = NULL, expand = FALSE, space = 0.1)
```

```
scale_y_cut(breaks, which = NULL, scales = NULL, expand = FALSE, space = 0.1)
```

## Arguments

breaks	a numeric or numeric vector, the points to be divided
which	integer, the position of subplots to scales, started from left to right or top to bottom.
scales	numeric, relative width or height of subplots.
expand	default is FALSE, logical a vector of range expansion constants used to add some padding around the data to ensure that they are placed some distance away from the axes. Use the convenience function <code>expansion()</code> of <code>ggplot2</code> to generate the values for the <code>expand</code> argument. The defaults are to expand the scale by 5% on each side for continuous variables. If it is logical, the TRUE means the default of <code>ggplot2</code> (foregoing statement), and FALSE means no expand for the plot.
space	the blank space among the subplots after cut, default is 0.1 (cm).

## Value

gg object

## Examples

```
library(ggplot2)
library(ggbreak)
set.seed(2019-01-19)
d <- data.frame(
  x = 1:20,
  y = c(rnorm(5) + 4, rnorm(5) + 20, rnorm(5) + 5, rnorm(5) + 22)
)
p <- ggplot(d, aes(x, y)) + geom_col()
p + scale_y_cut(breaks=c(7, 18), which=c(1, 3), scales=c(3, 0.5))
```

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