Package ‘ggblanket’

May 26, 2023

Title  Simplify ‘ggplot2’ Visualisation
Version 2.0.0
Description Simplify ‘ggplot2’ visualisation with ‘ggblanket’ wrapper functions.
License MIT + file LICENSE
URL https://davidhodge931.github.io/ggblanket/,
         https://github.com/davidhodge931/ggblanket/
Encoding UTF-8
RoxygenNote 7.2.3
Imports dplyr, forcats, ggplot2 (>= 3.4.0), hms, lubridate, magrittr,
         purrr, rlang, scales, snakecase, stringr, tidyr, tidyselect,
         viridis
Suggests hexbin, knitr, palmerpenguins, patchwork, RColorBrewer,
        rmarkdown, sf, tibble
VignetteBuilder knitr
NeedsCompilation no
Author David Hodge [aut, cre, cph] (<https://orcid.org/0000-0002-3868-7501>),
     Nik Mitchell [ctb] (<https://orcid.org/0009-0002-8126-7745>)
Maintainer David Hodge <davidhodge931@gmail.com>
Repository CRAN
Date/Publication 2023-05-26 08:00:02 UTC

R topics documented:

  gg_area .............................................................. 2
  gg_bar .............................................................. 6
  gg_bin2d ............................................................ 10
  gg_blank ........................................................... 14
  gg_boxplot .......................................................... 19
  gg_col ............................................................. 24
  gg_crossbar ........................................................ 28
Description

Create an area ggplot with a wrapper around the ggplot2::geom_area function.

Usage

```r
gg_area(
  data = NULL,
  x = NULL,
  y = NULL,
  col = NULL,
  facet = NULL,
  facet2 = NULL,
)```
gg_area

```r
group = NULL,
stat = "align",
position = "stack",
coord = ggplot2::coord_cartesian(clip = "off"),
pal = NULL,
pal_na = pal_grey,
alpha = 0.9,
...
title = NULL,
subtitle = NULL,
x_breaks = NULL,
x_expand = NULL,
x_grid = NULL,
x_include = NULL,
x_labels = NULL,
x_limits = NULL,
x_oob = scales::oob_censor,
x_sec_axis = ggplot2::waiver(),
x_title = NULL,
x_trans = "identity",
y_breaks = NULL,
y_expand = NULL,
y_grid = NULL,
y_include = NULL,
y_labels = NULL,
y_limits = NULL,
y_oob = scales::oob_censor,
y_sec_axis = ggplot2::waiver(),
y_title = NULL,
y_trans = "identity",
col_breaks = NULL,
col_continuous = "gradient",
col_include = NULL,
col_labels = NULL,
col_legend_place = NULL,
col_legend_ncol = NULL,
col_legend_nrow = NULL,
col_legend_rev = FALSE,
col_limits = NULL,
col_oob = scales::oob_censor,
col_rescale = NULL,
col_title = NULL,
col_trans = "identity",
facet_labels = NULL,
facet_ncol = NULL,
facet_nrow = NULL,
facet_scales = "fixed",
facet_space = "fixed",
```


```
gg_area

  facet_layout = NULL,
  caption = NULL,
  titles = snakecase::to_sentence_case,
  theme = gg_theme(),
  void = FALSE
)

Arguments

data A data frame or tibble.

x Unquoted x aesthetic variable.

y Unquoted y aesthetic variable.

col Unquoted col and fill aesthetic variable.

facet Unquoted facet aesthetic variable.

facet2 Unquoted second facet variable.

group Unquoted group aesthetic variable.

stat Statistical transformation. A character string (e.g. "identity").

position Position adjustment. Either a character string (e.g. "identity"), or a function (e.g. ggplot2::position_identity()).

coord A coordinate function from ggplot2 (e.g. ggplot2::coord_cartesian()).

pal Colours to use. A character vector of hex codes (or names).

pal_na Colour to use for NA values. A character vector of a hex code (or name).

alpha Opacity. A number between 0 and 1.

... Other arguments passed to the ggplot2::geom_area function.
title Title string.

subtitle Subtitle string.

x_breaks A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.

x_expand Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).

x_grid TRUE or FALSE for vertical x gridlines. NULL guesses based on the classes of the x and y.

x_include For a numeric or date variable, any values that the scale should include (e.g. 0).

x_labels A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.

x_limits A vector of length 2 to determine the limits of the axis.

x_oob A scales::oob_* function that handles values outside of limits for continuous scales. Defaults to scales::oob_censor.

x_sec_axis A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.

x_title Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.
```
x_trans For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").

y_breaks A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.

y_expand Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).

y_grid TRUE or FALSE of horizontal y gridlines. NULL guesses based on the classes of the x and y.

y_include For a numeric or date variable, any values that the scale should include (e.g. 0).

y_labels A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.

y_limits A vector of length 2 to determine the limits of the axis.

y_oob A scales::oob_* function that handles values outside of limits for continuous scales. Defaults to scales::oob_censor.

y_sec_axis A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.

y_title Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.

y_trans For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").

col_breaks A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.

col_continuous Type of colouring for a continuous variable. Either "gradient" or "steps". Defaults to "steps" - or just the first letter of these e.g. "g".

col_include For a numeric or date variable, any values that the scale should include (e.g. 0).

col_labels A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels. Note this does not affect where col_intervals is not NULL.

col_legend_place The place for the legend. Either "bottom", "right", "top" or "left" - or just the first letter of these e.g. "b".

col_legend_ncol The number of columns for the legend elements.

col_legend_nrow The number of rows for the legend elements.

col_legend_rev Reverse the elements of the legend. Defaults to FALSE.

col_limits A vector to determine the limits of the colour scale.

col_oob A scales::oob_* function that handles values outside of limits for continuous scales. Defaults to scales::oob_censor.

col_rescale For a continuous col variable, a vector to rescale the pal non-linearly.

col_title Legend title string. Defaults to converting to sentence case with spaces. Use "" for no title.

col_trans For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").

facet_labels A function that takes the breaks as inputs (e.g. scales::label_comma()), or a named vector of labels (e.g. c("value" = "label", ...)).
gg_bar

Bar ggplot

Description

Create a bar ggplot with a wrapper around the ggplot2::geom_bar function.

Usage

```r
gg_bar(
  data = NULL,
  x = NULL,
  y = NULL,
  col = NULL,
  facet_ncol = NULL,
  facet_nrow = NULL,
  facet_scales = "fixed",
  facet_space = "fixed",
  facet_layout = NULL,
  caption = NULL,
  titles = title::to_sentence_case,
  theme = theme::base
)
```
facet = NULL,
facet2 = NULL,
group = NULL,
st = "count",
position = "stack",
coord = ggplot2::coord_cartesian(clip = "off"),
pal = NULL,
pal_na = pal_grey,
alpha = 0.9,
...
title = NULL,
subtitle = NULL,
x_breaks = NULL,
x_expand = NULL,
x_grid = NULL,
x_include = NULL,
x_labels = NULL,
x_limits = NULL,
x_oob = scales::oob_censor,
x_sec_axis = ggplot2::waiver(),
x_title = NULL,
x_trans = "identity",
y_breaks = NULL,
y_expand = NULL,
y_grid = NULL,
y_include = NULL,
y_labels = NULL,
y_limits = NULL,
y_oob = scales::oob_censor,
y_sec_axis = ggplot2::waiver(),
y_title = NULL,
y_trans = "identity",
col_breaks = NULL,
col_continuous = "gradient",
col_include = NULL,
col_labels = NULL,
col_legend_place = NULL,
col_legend_ncol = NULL,
col_legend_nrow = NULL,
col_legend_rev = FALSE,
col_limits = NULL,
col_oob = scales::oob_censor,
col_rescale = NULL,
col_title = NULL,
col_trans = "identity",
facet_labels = NULL,
facet_ncol = NULL,
facet_nrow = NULL,
facetscales = "fixed",
facetspace = "fixed",
facetlayout = NULL,
caption = NULL,
titles = snakecase::to_sentence_case,
theme = gg_theme(),
void = FALSE)

Arguments

data A data frame or tibble.
x Unquoted x aesthetic variable.
y Unquoted y aesthetic variable.
col Unquoted col and fill aesthetic variable.
facet Unquoted facet aesthetic variable.
facet2 Unquoted second facet variable.
group Unquoted group aesthetic variable.
stat Statistical transformation. A character string (e.g. "identity").
position Position adjustment. Either a character string (e.g.
coord A coordinate function from ggplot2 (e.g. ggplot2::coord_cartesian()).
pal Colours to use. A character vector of hex codes (or names).
pal_na Colour to use for NA values. A character vector of a hex code (or name).
alpha Opacity. A number between 0 and 1.
... Other arguments passed to the ggplot2::geom_bar function.
title Title string.
subtitle Subtitle string.
x_breaks A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
x_expand Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).
x_grid TRUE or FALSE for vertical x gridlines. NULL guesses based on the classes of the x and y.
x_include For a numeric or date variable, any values that the scale should include (e.g. 0).
x_labels A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.
x_limits A vector of length 2 to determine the limits of the axis.
x_oob A scales::oob_* function that handles values outside of limits for continuous scales. Defaults to scales::oob_censor.
x_sec_axis A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.
x_title Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.
### gg_bar

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>x_trans</td>
<td>For a numeric variable, a transformation object (e.g. &quot;log10&quot;, &quot;sqrt&quot; or &quot;reverse&quot;).</td>
</tr>
<tr>
<td>y_breaks</td>
<td>A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.</td>
</tr>
<tr>
<td>y_expand</td>
<td>Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).</td>
</tr>
<tr>
<td>y_grid</td>
<td>TRUE or FALSE of horizontal y gridlines. NULL guesses based on the classes of the x and y.</td>
</tr>
<tr>
<td>y_include</td>
<td>For a numeric or date variable, any values that the scale should include (e.g. 0).</td>
</tr>
<tr>
<td>y_labels</td>
<td>A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.</td>
</tr>
<tr>
<td>y_limits</td>
<td>A vector of length 2 to determine the limits of the axis.</td>
</tr>
<tr>
<td>y_oob</td>
<td>A scales::oob_* function that handles values outside of limits for continuous scales.</td>
</tr>
<tr>
<td>y_sec_axis</td>
<td>A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.</td>
</tr>
<tr>
<td>y_title</td>
<td>Axis title string. Defaults to converting to sentence case with spaces. Use &quot;&quot; for no title.</td>
</tr>
<tr>
<td>y_trans</td>
<td>For a numeric variable, a transformation object (e.g. &quot;log10&quot;, &quot;sqrt&quot; or &quot;reverse&quot;).</td>
</tr>
<tr>
<td>col_breaks</td>
<td>A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.</td>
</tr>
<tr>
<td>col_continuous</td>
<td>Type of colouring for a continuous variable. Either &quot;gradient&quot; or &quot;steps&quot;. Defaults to &quot;steps&quot; - or just the first letter of these e.g. &quot;g&quot;.</td>
</tr>
<tr>
<td>col_include</td>
<td>For a numeric or date variable, any values that the scale should include (e.g. 0).</td>
</tr>
<tr>
<td>col_labels</td>
<td>A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels. Note this does not affect where col_intervals is not NULL.</td>
</tr>
<tr>
<td>col_legend_place</td>
<td>The place for the legend. Either &quot;bottom&quot;, &quot;right&quot;, &quot;top&quot; or &quot;left&quot; - or just the first letter of these e.g. &quot;b&quot;.</td>
</tr>
<tr>
<td>col_legend_ncol</td>
<td>The number of columns for the legend elements.</td>
</tr>
<tr>
<td>col_legend_nrow</td>
<td>The number of rows for the legend elements.</td>
</tr>
<tr>
<td>col_legend_rev</td>
<td>Reverse the elements of the legend. Defaults to FALSE.</td>
</tr>
<tr>
<td>col_limits</td>
<td>A vector to determine the limits of the colour scale.</td>
</tr>
<tr>
<td>col_oob</td>
<td>A scales::oob_* function that handles values outside of limits for continuous scales.</td>
</tr>
<tr>
<td>col_rescale</td>
<td>For a continuous col variable, a vector to rescale the pal non-linearly.</td>
</tr>
<tr>
<td>col_title</td>
<td>Legend title string. Defaults to converting to sentence case with spaces. Use &quot;&quot; for no title.</td>
</tr>
<tr>
<td>col_trans</td>
<td>For a numeric variable, a transformation object (e.g. &quot;log10&quot;, &quot;sqrt&quot; or &quot;reverse&quot;).</td>
</tr>
<tr>
<td>facet_labels</td>
<td>A function that takes the breaks as inputs (e.g. scales::label_comma()), or a named vector of labels (e.g. c(&quot;value&quot; = &quot;label&quot;, ...)).</td>
</tr>
</tbody>
</table>
gg_bin2d

Describe

Create a bin2d ggplot with a wrapper around the ggplot2::geom_bin2d function.
Usage

gg_bin2d(
  data = NULL,
  x = NULL,
  y = NULL,
  facet = NULL,
  facet2 = NULL,
  group = NULL,
  stat = "bin2d",
  position = "identity",
  coord = ggplot2::coord_cartesian(clip = "off"),
  pal = NULL,
  pal_na = pal_grey,
  alpha = 1,
  ..., 
  title = NULL,
  subtitle = NULL,
  x_breaks = NULL,
  x_expand = NULL,
  x_grid = NULL,
  x_include = NULL,
  x_labels = NULL,
  x_limits = NULL,
  x_oob = scales::oob_censor,
  x_sec_axis = ggplot2::waiver(),
  x_title = NULL,
  x_trans = "identity",
  y_breaks = NULL,
  y_expand = NULL,
  y_grid = NULL,
  y_include = NULL,
  y_labels = NULL,
  y_limits = NULL,
  y_oob = scales::oob_censor,
  y_sec_axis = ggplot2::waiver(),
  y_title = NULL,
  y_trans = "identity",
  col_breaks = NULL,
  col_continuous = "gradient",
  col_include = NULL,
  col_labels = NULL,
  col_legend_place = NULL,
  col_legend_ncol = NULL,
  col_legend_nrow = NULL,
  col_legend_rev = FALSE,
  col_limits = NULL,
  col_oob = scales::oob_censor,
  col_rescale = NULL,
col_title = NULL,
col_trans = "identity",
facet_labels = NULL,
facet_ncol = NULL,
facet_nrow = NULL,
facet_scales = "fixed",
facet_space = "fixed",
facet_layout = NULL,
caption = NULL,
titles = snakecase::to_sentence_case,
theme = gg_theme(),
void = FALSE
)

Arguments

data A data frame or tibble.
x Unquoted x aesthetic variable.
y Unquoted y aesthetic variable.
facet Unquoted facet aesthetic variable.
facet2 Unquoted second facet variable.
group Unquoted group aesthetic variable.
stat Statistical transformation. A character string (e.g. "identity").
position Position adjustment. Either a character string (e.g. "identity"), or a function (e.g. ggplot2::position_identity()).
coord A coordinate function from ggplot2 (e.g. ggplot2::coord_cartesian()).
pal Colours to use. A character vector of hex codes (or names).
pal_na Colour to use for NA values. A character vector of a hex code (or name).
alpha Opacity. A number between 0 and 1.
... Other arguments passed to the ggplot2::geom_bin2d function.
title Title string.
subtitle Subtitle string.
x_breaks A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
x_expand Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).
x_grid TRUE or FALSE for vertical x gridlines. NULL guesses based on the classes of the x and y.
x_include For a numeric or date variable, any values that the scale should include (e.g. 0).
x_labels A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.
x_limits A vector of length 2 to determine the limits of the axis.
x_oob A scales::oob_* function that handles values outside of limits for continuous scales. Defaults to scales::oob_censor.
<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>x_sec_axis</code></td>
<td>A secondary axis using the <code>ggplot2::sec_axis</code> or <code>ggplot2::dup_axis</code> function.</td>
</tr>
<tr>
<td><code>x_title</code></td>
<td>Axis title string. Defaults to converting to sentence case with spaces. Use &quot;&quot; for no title.</td>
</tr>
<tr>
<td><code>x_trans</code></td>
<td>For a numeric variable, a transformation object (e.g. &quot;log10&quot;, &quot;sqrt&quot; or &quot;reverse&quot;).</td>
</tr>
<tr>
<td><code>y_breaks</code></td>
<td>A function on the limits (e.g. <code>scales::breaks_pretty()</code>), or a vector of breaks.</td>
</tr>
<tr>
<td><code>y_expand</code></td>
<td>Padding to the limits with the <code>ggplot2::expansion</code> function, or a vector of length 2 (e.g. <code>c(0, 0)</code>).</td>
</tr>
<tr>
<td><code>y_grid</code></td>
<td>TRUE or FALSE of horizontal y gridlines. NULL guesses based on the classes of the x and y.</td>
</tr>
<tr>
<td><code>y_include</code></td>
<td>For a numeric or date variable, any values that the scale should include (e.g. 0).</td>
</tr>
<tr>
<td><code>y_labels</code></td>
<td>A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a vector of labels.</td>
</tr>
<tr>
<td><code>y_limits</code></td>
<td>A vector of length 2 to determine the limits of the axis.</td>
</tr>
<tr>
<td><code>y_oob</code></td>
<td>A <code>scales::oob_*</code> function that handles values outside of limits for continuous scales. Defaults to <code>scales::oob_censor</code>.</td>
</tr>
<tr>
<td><code>y_sec_axis</code></td>
<td>A secondary axis using the <code>ggplot2::sec_axis</code> or <code>ggplot2::dup_axis</code> function.</td>
</tr>
<tr>
<td><code>y_title</code></td>
<td>Axis title string. Defaults to converting to sentence case with spaces. Use &quot;&quot; for no title.</td>
</tr>
<tr>
<td><code>y_trans</code></td>
<td>For a numeric variable, a transformation object (e.g. &quot;log10&quot;, &quot;sqrt&quot; or &quot;reverse&quot;).</td>
</tr>
<tr>
<td><code>col_breaks</code></td>
<td>A function on the limits (e.g. <code>scales::breaks_pretty()</code>), or a vector of breaks.</td>
</tr>
<tr>
<td><code>col_continuous</code></td>
<td>Type of colouring for a continuous variable. Either &quot;gradient&quot; or &quot;steps&quot;. Defaults to &quot;steps&quot; - or just the first letter of these e.g. &quot;g&quot;.</td>
</tr>
<tr>
<td><code>col_include</code></td>
<td>For a numeric or date variable, any values that the scale should include (e.g. 0).</td>
</tr>
<tr>
<td><code>col_labels</code></td>
<td>A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a vector of labels. Note this does not affect where <code>col_intervals</code> is not NULL.</td>
</tr>
<tr>
<td><code>col_legend_place</code></td>
<td>The place for the legend. Either &quot;bottom&quot;, &quot;right&quot;, &quot;top&quot; or &quot;left&quot; - or just the first letter of these e.g. &quot;b&quot;.</td>
</tr>
<tr>
<td><code>col_legend_ncol</code></td>
<td>The number of columns for the legend elements.</td>
</tr>
<tr>
<td><code>col_legend_nrow</code></td>
<td>The number of rows for the legend elements.</td>
</tr>
<tr>
<td><code>col_legend_rev</code></td>
<td>Reverse the elements of the legend. Defaults to FALSE.</td>
</tr>
<tr>
<td><code>col_limits</code></td>
<td>A vector to determine the limits of the colour scale.</td>
</tr>
<tr>
<td><code>col_oob</code></td>
<td>A <code>scales::oob_*</code> function that handles values outside of limits for continuous scales. Defaults to <code>scales::oob_censor</code>.</td>
</tr>
<tr>
<td><code>col_rescale</code></td>
<td>For a continuous col variable, a vector to rescale the pal non-linearly.</td>
</tr>
<tr>
<td><code>col_title</code></td>
<td>Legend title string. Defaults to converting to sentence case with spaces. Use &quot;&quot; for no title.</td>
</tr>
<tr>
<td>Argument</td>
<td>Description</td>
</tr>
<tr>
<td>-------------</td>
<td>-------------</td>
</tr>
<tr>
<td>col_trans</td>
<td>For a numeric variable, a transformation object (e.g. &quot;log10&quot;, &quot;sqrt&quot; or &quot;reverse&quot;).</td>
</tr>
<tr>
<td>facet_labels</td>
<td>A function that takes the breaks as inputs (e.g. scales::label_comma()), or a named vector of labels (e.g. c(&quot;value&quot; = &quot;label&quot;, ...)).</td>
</tr>
<tr>
<td>facet_ncol</td>
<td>The number of columns of facets. Only applies to a facet layout of &quot;wrap&quot;.</td>
</tr>
<tr>
<td>facet_nrow</td>
<td>The number of rows of facets. Only applies to a facet layout of &quot;wrap&quot;.</td>
</tr>
<tr>
<td>facet_scales</td>
<td>Whether facet scales should be &quot;fixed&quot; across facets, &quot;free&quot; in both directions, or free in just one direction (i.e. &quot;free_x&quot; or &quot;free_y&quot;). Defaults to &quot;fixed&quot;.</td>
</tr>
<tr>
<td>facet_space</td>
<td>Whether facet space should be &quot;fixed&quot; across facets, &quot;free&quot; to be proportional in both directions, or free to be proportional in just one direction (i.e. &quot;free_x&quot; or &quot;free_y&quot;). Defaults to &quot;fixed&quot;. Only applies where the facet layout is &quot;grid&quot; and facet scales are not &quot;fixed&quot;.</td>
</tr>
<tr>
<td>facet_layout</td>
<td>Whether the layout is to be &quot;wrap&quot; or &quot;grid&quot;. If NULL and a single facet (or facet2) argument is provided, then defaults to &quot;wrap&quot;. If NULL and both facet and facet2 arguments are provided, defaults to &quot;grid&quot;.</td>
</tr>
<tr>
<td>caption</td>
<td>Caption title string.</td>
</tr>
<tr>
<td>titles</td>
<td>A function to format the x, y and col titles. Defaults to snakecase::to_sentence_case.</td>
</tr>
<tr>
<td>theme</td>
<td>A ggplot2 theme.</td>
</tr>
<tr>
<td>void</td>
<td>TRUE or FALSE of whether to remove axis lines, ticks and x and y titles and labels.</td>
</tr>
</tbody>
</table>

**Value**

A `ggplot` object.

**Examples**

```r
ggplot2::diamonds |> 
  gg_bin2d(
    x = carat,
    y = price,
    pal = viridis::cividis(9)
  )
```

---

### gg_blank

**Blank ggplot**

**Description**

Create a blank `ggplot` with a wrapper around the `ggplot2::geom_blank` function.
Usage

gg_blank(
  data = NULL,
  x = NULL,
  y = NULL,
  col = NULL,
  facet = NULL,
  facet2 = NULL,
  group = NULL,
  xmin = NULL,
  xmax = NULL,
  xend = NULL,
  xlower = NULL,
  xupper = NULL,
  xmiddle = NULL,
  ymin = NULL,
  ymax = NULL,
  yend = NULL,
  ylower = NULL,
  yuppper = NULL,
  ymiddle = NULL,
  sample = NULL,
  label = NULL,
  subgroup = NULL,
  stat = "identity",
  position = "identity",
  coord = ggplot2::coord_cartesian(clip = "off"),
  pal = NULL,
  pal_na = pal_grey,
  ...,  
  title = NULL,
  subtitle = NULL,
  x_breaks = NULL,
  x_expand = NULL,
  x_grid = NULL,
  x_include = NULL,
  x_labels = NULL,
  x_limits = NULL,
  x_oob = scales::oob_censor,
  x_sec_axis = ggplot2::waiver(),
  x_title = NULL,
  x_trans = "identity",
  y_breaks = NULL,
  y_expand = NULL,
  y_grid = NULL,
  y_include = NULL,
  y_labels = NULL,
  y_limits = NULL,
y_oob = scales::oob_censor,
y_sec_axis = ggplot2:: waiver(),
y_title = NULL,
y_trans = "identity",
col_breaks = NULL,
col_continuous = "gradient",
col_include = NULL,
col_labels = NULL,
col_legend_place = NULL,
col_legend_ncol = NULL,
col_legend_nrow = NULL,
col_legend_rev = FALSE,
col_limits = NULL,
col_oob = scales::oob_censor,
col_rescale = NULL,
col_title = NULL,
col_trans = "identity",
facet_labels = NULL,
facet_ncol = NULL,
facet_nrow = NULL,
facet_scales = "fixed",
facet_space = "fixed",
facet_layout = NULL,
caption = NULL,
titles = snakecase::to_sentence_case,
theme = gg::theme(),
void = FALSE
)

Arguments

data A data frame or tibble.
x Unquoted x aesthetic variable.
y Unquoted y aesthetic variable.
col Unquoted col and fill aesthetic variable.
facet Unquoted facet aesthetic variable.
facet2 Unquoted second facet variable.
group Unquoted group aesthetic variable.
xmin Unquoted xmin aesthetic variable.
xmax Unquoted xmax aesthetic variable.
xend Unquoted xend aesthetic variable.
xlower Unquoted xlower aesthetic variable.
xupper Unquoted xupper aesthetic variable.
xmiddle Unquoted xmiddle aesthetic variable.
ymin Unquoted ymin aesthetic variable.
**gg_blank**

- **ymax** Unquoted ymax aesthetic variable.
- **yend** Unquoted yend aesthetic variable.
- **ylower** Unquoted ylower aesthetic variable.
- **yupper** Unquoted yupper aesthetic variable.
- **ymiddle** Unquoted ymiddle aesthetic variable.
- **sample** Unquoted sample aesthetic variable.
- **label** Unquoted label aesthetic variable.
- **subgroup** Unquoted subgroup aesthetic variable.
- **stat** Statistical transformation. A character string (e.g. "identity").
- **position** Position adjustment. Either a character string (e.g."identity"), or a function (e.g. ggplot2::position_identity()).
- **coord** A coordinate function from ggplot2 (e.g. ggplot2::coord_cartesian()).
- **pal** Colours to use. A character vector of hex codes (or names).
- **pal_na** Colour to use for NA values. A character vector of a hex code (or name).
- **...** Other arguments passed to the ggplot2::geom_blank function.
- **title** Title string.
- **subtitle** Subtitle string.
- **x_breaks** A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
- **x_expand** Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).
- **x_grid** TRUE or FALSE for vertical x gridlines. NULL guesses based on the classes of the x and y.
- **x_include** For a numeric or date variable, any values that the scale should include (e.g. 0).
- **x_labels** A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.
- **x_limits** A vector of length 2 to determine the limits of the axis.
- **x_oob** A scales::oob_* function that handles values outside of limits for continuous scales. Defaults to scales::oob_censor.
- **x_sec_axis** A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.
- **x_title** Axis title string. Defaults to converting to sentence case with spaces. Use **"** for no title.
- **x_trans** For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
- **y_breaks** A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
- **y_expand** Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).
- **y_grid** TRUE or FALSE of horizontal y gridlines. NULL guesses based on the classes of the x and y.
- **y_include** For a numeric or date variable, any values that the scale should include (e.g. 0).
y_labels A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.

y_limits A vector of length 2 to determine the limits of the axis.

y_oob A scales::oob_* function that handles values outside of limits for continuous scales. Defaults to scales::oob_censor.

y_sec_axis A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.

y_title Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.

y_trans For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").

col_breaks A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.

col_continuous Type of colouring for a continuous variable. Either "gradient" or "steps". Defaults to "steps" - or just the first letter of these e.g. "g".

col_include For a numeric or date variable, any values that the scale should include (e.g. 0).

col_labels A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels. Note this does not affect where col_intervals is not NULL.

col_legend_place The place for the legend. Either "bottom", "right", "top" or "left" - or just the first letter of these e.g. "b".

col_legend_ncol The number of columns for the legend elements.

col_legend_nrow The number of rows for the legend elements.

col_legend_rev Reverse the elements of the legend. Defaults to FALSE.

col_limits A vector to determine the limits of the colour scale.

col_oob A scales::oob_* function that handles values outside of limits for continuous scales. Defaults to scales::oob_censor.

col_rescale For a continuous col variable, a vector to rescale the pal non-linearly.

col_title Legend title string. Defaults to converting to sentence case with spaces. Use "" for no title.

col_trans For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").

facet_labels A function that takes the breaks as inputs (e.g. scales::label_comma()), or a named vector of labels (e.g. c("value" = "label", ...)）.

facet_ncol The number of columns of facets. Only applies to a facet layout of "wrap".

facet_nrow The number of rows of facets. Only applies to a facet layout of "wrap".

facet_scales Whether facet scales should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".

facet_space Whether facet space should be "fixed" across facets, "free" to be proportional in both directions, or free to be proportional in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed". Only applies where the facet layout is "grid" and facet scales are not "fixed".
**gg_boxplot**

Boxplot ggplot

**Description**
Create a boxplot ggplot with a wrapper around the ggplot2::geom_boxplot function.

**Usage**

```r
gg_boxplot(
  data = NULL,
  x = NULL,
  y = NULL,
  col = NULL,
  facet = NULL,
  facet2 = NULL,
  group = NULL,
  xmin = NULL,
  facet_layout = NULL,
  caption = NULL,
  titles = NULL,
  theme = NULL,
  void = NULL
)
```

**facet_layout**
Whether the layout is to be "wrap" or "grid". If NULL and a single facet (or facet2) argument is provided, then defaults to "wrap". If NULL and both facet and facet2 arguments are provided, defaults to "grid".

**caption**
Caption title string.

**titles**
A function to format the x, y and col titles. Defaults to snakecase::to_sentence_case.

**theme**
A ggplot2 theme.

**void**
TRUE or FALSE of whether to remove axis lines, ticks and x and y titles and labels.

**Value**
A ggplot object.

**Examples**

```r
library(dplyr)
library(palmerpenguins)

penguins |>
  gg_blank(
    x = flipper_length_mm,
    y = body_mass_g,
    col = sex,
    facet = species,
    col_labels = stringr::str_to_sentence,
    pal = c("#1B9E77", "#9E361B")
  )
```

xlower = NULL,
xmiddle = NULL,
xupper = NULL,
xmax = NULL,
ymin = NULL,
ylower = NULL,
ymiddle = NULL,
yupper = NULL,
ymax = NULL,
stat = "boxplot",
position = "dodge2",
coord = ggplot2::coord_cartesian(clip = "off"),
pal = NULL,
pal_na = pal_grey,
alpha = 0.5,
...

title = NULL,
subtitle = NULL,
x_breaks = NULL,
x_expand = NULL,
x_grid = NULL,
x_include = NULL,
x_labels = NULL,
x_limits = NULL,
x_oob = scales::oob_censor,
x_sec_axis = ggplot2::waiver(),
x_title = NULL,
x_trans = "identity",
y_breaks = NULL,
y_expand = NULL,
y_grid = NULL,
y_include = NULL,
y_labels = NULL,
y_limits = NULL,
y_oob = scales::oob_censor,
y_sec_axis = ggplot2::waiver(),
y_title = NULL,
y_trans = "identity",
col_breaks = NULL,
col_continuous = "gradient",
col_include = NULL,
col_labels = NULL,
col_legend_place = NULL,
col_legend_ncol = NULL,
col_legend_nrow = NULL,
col_legend_rev = FALSE,
col_limits = NULL,
col_oob = scales::oob_censor,
col_rescale = NULL,
col_title = NULL,
col_trans = "identity",
facet_labels = NULL,
facet_ncol = NULL,
facet_nrow = NULL,
facet_scales = "fixed",
facet_space = "fixed",
facet_layout = NULL,
caption = NULL,
titles = snakecase::to_sentence_case,
theme = gg_theme(),
void = FALSE
)

**Arguments**

- **data** A data frame or tibble.
- **x** Unquoted x aesthetic variable.
- **y** Unquoted y aesthetic variable.
- **col** Unquoted col and fill aesthetic variable.
- **facet** Unquoted facet aesthetic variable.
- **facet2** Unquoted second facet variable.
- **group** Unquoted group aesthetic variable.
- **xmin** Unquoted xmin aesthetic variable.
- **xlower** Unquoted xlower aesthetic variable.
- **xmiddle** Unquoted xmiddle aesthetic variable.
- **xupper** Unquoted xupper aesthetic variable.
- **xmax** Unquoted xmax aesthetic variable.
- **ymin** Unquoted ymin aesthetic variable.
- **ylower** Unquoted ylower aesthetic variable.
- **ymiddle** Unquoted ymiddle aesthetic variable.
- **yupper** Unquoted yupper aesthetic variable.
- **ymax** Unquoted ymax aesthetic variable.
- **stat** Statistical transformation. A character string (e.g. "identity").
- **position** Position adjustment. Either a character string (e.g."identity"), or a function (e.g. ggplot2::position_identity()).
- **coord** A coordinate function from ggplot2 (e.g. ggplot2::coord_cartesian()).
- **pal** Colours to use. A character vector of hex codes (or names).
- **pal_na** Colour to use for NA values. A character vector of a hex code (or name).
- **alpha** Opacity. A number between 0 and 1.
- **...** Other arguments passed to the ggplot2::geom_boxplot function.
title
subtitle
x_breaks
x_expand
x_grid
x_include
x_labels
x_limits
x_oob
x_sec_axis
x_title
x_trans
y_breaks
y_expand
y_grid
y_include
y_labels
y_limits
y_oob
y_sec_axis
y_title
y_trans
col_breaks
col_continuous
col_include
col_labels

Title string.
Subtitle string.
A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).
TRUE or FALSE for vertical x gridlines. NULL guesses based on the classes of the x and y.
For a numeric or date variable, any values that the scale should include (e.g. 0).
A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.
A vector of length 2 to determine the limits of the axis.
A scales::oob_* function that handles values outside of limits for continuous scales. Defaults to scales::oob_censor.
A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.
Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.
For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).
TRUE or FALSE of horizontal y gridlines. NULL guesses based on the classes of the x and y.
For a numeric or date variable, any values that the scale should include (e.g. 0).
A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.
A vector of length 2 to determine the limits of the axis.
A scales::oob_* function that handles values outside of limits for continuous scales. Defaults to scales::oob_censor.
A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.
Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.
For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
Type of colouring for a continuous variable. Either "gradient" or "steps". Defaults to "steps" - or just the first letter of these e.g. "g".
For a numeric or date variable, any values that the scale should include (e.g. 0).
A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels. Note this does not affect where col_intervals is not NULL.
col_legend_place
   The place for the legend. Either "bottom", "right", "top" or "left" - or just the
   first letter of these e.g. "b".

col_legend_ncol
   The number of columns for the legend elements.

col_legend_nrow
   The number of rows for the legend elements.

col_legend_rev
   Reverse the elements of the legend. Defaults to FALSE.

col_limits
   A vector to determine the limits of the colour scale.

col_oob
   A scales::oob_* function that handles values outside of limits for continuous
   scales. Defaults to scales::oob_censor.

col_rescale
   For a continuous col variable, a vector to rescale the pal non-linearly.

col_title
   Legend title string. Defaults to converting to sentence case with spaces. Use ""
   for no title.

col_trans
   For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "re-
   verse").

facet_labels
   A function that takes the breaks as inputs (e.g. scales::label_comma()), or a
   named vector of labels (e.g. c("value" = "label", ...)).

facet_ncol
   The number of columns of facets. Only applies to a facet layout of "wrap".

facet_nrow
   The number of rows of facets. Only applies to a facet layout of "wrap".

facet_scales
   Whether facet scales should be "fixed" across facets, "free" in both directions,
   or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".

facet_space
   Whether facet space should be "fixed" across facets, "free" to be proportional in
   both directions, or free to be proportional in just one direction (i.e. "free_x" or
   "free_y"). Defaults to "fixed". Only applies where the facet layout is "grid" and
   facet scales are not "fixed".

facet_layout
   Whether the layout is to be "wrap" or "grid". If NULL and a single facet (or
   facet2) argument is provided, then defaults to "wrap". If NULL and both facet
   and facet2 arguments are provided, defaults to "grid".

caption
   Caption title string.

titles
   A function to format the x, y and col titles. Defaults to snakecase::to_sentence_case.

theme
   A ggplot2 theme.

void
   TRUE or FALSE of whether to remove axis lines, ticks and x and y titles and
   labels.

Value

A ggplot object.

Examples

library(dplyr)
library(palmerpenguins)
penguins |>
gg_boxplot(
  x = sex,
  y = body_mass_g,
  col = sex,
  facet = species,
  x_labels = snakecase::to_sentence_case,
  pal = c("#1B9E77", "#9E361B")
)

---

**gg_col**

**Col ggplot**

**Description**

Create a col ggplot with a wrapper around the ggplot2::geom_col function (i.e geom_bar(stat = "identity", ...).

**Usage**

```r
gg_col(
  data = NULL,
  x = NULL,
  y = NULL,
  col = NULL,
  facet = NULL,
  facet2 = NULL,
  group = NULL,
  stat = "identity",
  position = "stack",
  coord = ggplot2::coord_cartesian(clip = "off"),
  pal = NULL,
  pal_na = pal_grey,
  alpha = 0.9,
  ...
  title = NULL,
  subtitle = NULL,
  x_breaks = NULL,
  x_expand = NULL,
  x_grid = NULL,
  x_include = NULL,
  x_labels = NULL,
  x_limits = NULL,
  x_oob = scales::oob_censor,
  x_sec_axis = ggplot2::waiver(),
  x_title = NULL,
  x_trans = "identity",
```
Arguments

data A data frame or tibble.
x Unquoted x aesthetic variable.
y Unquoted y aesthetic variable.
col Unquoted col and fill aesthetic variable.
facet Unquoted facet aesthetic variable.
facet2 Unquoted second facet variable.
group Unquoted group aesthetic variable.
stat Statistical transformation. A character string (e.g. "identity").
position Position adjustment. Either a character string (e.g."identity"), or a function (e.g. ggplot2::position_identity()).
coord
pal
pal_na
alpha
...
title
subtitle
x_breaks
x_expand
x_grid
x_include
x_labels
x_limits
x_oob
x_sec_axis
x_title
x_trans
y_breaks
y_expand
y_grid
y_include
y_labels
y_limits
y_oob
y_sec_axis
y_title
y_trans
col_breaks
A coordinate function from ggplot2 (e.g. ggplot2::coord_cartesian()).

Colours to use. A character vector of hex codes (or names).

Colour to use for NA values. A character vector of a hex code (or name).

Opacity. A number between 0 and 1.

Other arguments passed to the ggplot2::geom_col function.

Title string.

Subtitle string.

A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.

Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).

TRUE or FALSE for vertical x gridlines. NULL guesses based on the classes of the x and y.

For a numeric or date variable, any values that the scale should include (e.g. 0).

A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.

A vector of length 2 to determine the limits of the axis.

A scales::oob_* function that handles values outside of limits for continuous scales. Defaults to scales::oob_censor.

A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.

Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.

For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").

A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.

Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).

TRUE or FALSE of horizontal y gridlines. NULL guesses based on the classes of the x and y.

For a numeric or date variable, any values that the scale should include (e.g. 0).

A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.

A vector of length 2 to determine the limits of the axis.

A scales::oob_* function that handles values outside of limits for continuous scales. Defaults to scales::oob_censor.

A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.

Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.

For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").

A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>col_continuous</td>
<td>Type of colouring for a continuous variable. Either &quot;gradient&quot; or &quot;steps&quot;.</td>
</tr>
<tr>
<td>col_include</td>
<td>For a numeric or date variable, any values that the scale should include (e.g. 0).</td>
</tr>
<tr>
<td>col_labels</td>
<td>A function that takes the breaks as inputs (e.g. scales::label_comma()), or a</td>
</tr>
<tr>
<td></td>
<td>vector of labels. Note this does not affect where col_intervals is not NULL.</td>
</tr>
<tr>
<td>col_legend_place</td>
<td>The place for the legend. Either &quot;bottom&quot;, &quot;right&quot;, &quot;top&quot; or &quot;left&quot; - or just</td>
</tr>
<tr>
<td></td>
<td>the first letter of these e.g. &quot;b&quot;.</td>
</tr>
<tr>
<td>col_legend_ncol</td>
<td>The number of columns for the legend elements.</td>
</tr>
<tr>
<td>col_legend_nrow</td>
<td>The number of rows for the legend elements.</td>
</tr>
<tr>
<td>col_legend_rev</td>
<td>Reverse the elements of the legend. Defaults to FALSE.</td>
</tr>
<tr>
<td>col_limits</td>
<td>A vector to determine the limits of the colour scale.</td>
</tr>
<tr>
<td>col_oob</td>
<td>A scales::oob_* function that handles values outside of limits for continuous</td>
</tr>
<tr>
<td></td>
<td>scales. Defaults to scales::oob_censor.</td>
</tr>
<tr>
<td>col_rescale</td>
<td>For a continuous col variable, a vector to rescale the pal non-linearly.</td>
</tr>
<tr>
<td>col_title</td>
<td>Legend title string. Defaults to converting to sentence case with spaces.</td>
</tr>
<tr>
<td></td>
<td>Use &quot;&quot; for no title.</td>
</tr>
<tr>
<td>col_trans</td>
<td>For a numeric variable, a transformation object (e.g. &quot;log10&quot;, &quot;sqrt&quot; or &quot;re-</td>
</tr>
<tr>
<td></td>
<td>verse&quot;).</td>
</tr>
<tr>
<td>facet_labels</td>
<td>A function that takes the breaks as inputs (e.g. scales::label_comma()), or a</td>
</tr>
<tr>
<td></td>
<td>named vector of labels (e.g. c(&quot;value&quot; = &quot;label&quot;, ...)).</td>
</tr>
<tr>
<td>facet_ncol</td>
<td>The number of columns of facets. Only applies to a facet layout of &quot;wrap&quot;.</td>
</tr>
<tr>
<td>facet_nrow</td>
<td>The number of rows of facets. Only applies to a facet layout of &quot;wrap&quot;.</td>
</tr>
<tr>
<td>facet_scales</td>
<td>Whether facet scales should be &quot;fixed&quot; across facets, &quot;free&quot; in both directions,</td>
</tr>
<tr>
<td></td>
<td>or free in just one direction (i.e. &quot;free_x&quot; or &quot;free_y&quot;). Defaults to &quot;fixed&quot;.</td>
</tr>
<tr>
<td>facet_space</td>
<td>Whether facet space should be &quot;fixed&quot; across facets, &quot;free&quot; to be proportional in both directions, or free to be proportional in just one direction (i.e. &quot;free_x&quot; or &quot;free_y&quot;). Defaults to &quot;fixed&quot;. Only applies where the facet layout is &quot;grid&quot; and facet scales are not &quot;fixed&quot;.</td>
</tr>
<tr>
<td>facet_layout</td>
<td>Whether the layout is to be &quot;wrap&quot; or &quot;grid&quot;. If NULL and a single facet (or facet2) argument is provided, then defaults to &quot;wrap&quot;. If NULL and both facet and facet2 arguments are provided, defaults to &quot;grid&quot;.</td>
</tr>
<tr>
<td>caption</td>
<td>Caption title string.</td>
</tr>
<tr>
<td>titles</td>
<td>A function to format the x, y and col titles. Defaults to snakecase::to_sentence_case.</td>
</tr>
<tr>
<td>theme</td>
<td>A ggplot2 theme.</td>
</tr>
<tr>
<td>void</td>
<td>TRUE or FALSE of whether to remove axis lines, ticks and x and y titles and labels.</td>
</tr>
</tbody>
</table>

**Value**

A ggplot object.
Examples

```r
library(dplyr)
library(palmerpenguins)

penguins |>
  group_by(sex, species) |>
  summarise(flipper_length_mm = mean(flipper_length_mm, na.rm = TRUE)) |>
  tidyr::drop_na(sex) |>
  gg_col(
    x = flipper_length_mm,
    y = species,
    col = sex,
    width = 0.75,
    y_labels = stringr::str_to_sentence,
    position = "dodge",
    pal = c("#1B9E77", "#9E361B"),
    col_labels = stringr::str_to_sentence
  )
```

---

**gg_crossbar**

**Crossbar ggplot**

**Description**

Create a crossbar ggplot with a wrapper around the `ggplot2::geom_crossbar` function.

**Usage**

```r
gg_crossbar(
  data = NULL,
  x = NULL,
  xmin = NULL,
  xmax = NULL,
  y = NULL,
  ymin = NULL,
  ymax = NULL,
  col = NULL,
  facet = NULL,
  facet2 = NULL,
  group = NULL,
  stat = "identity",
  position = "identity",
  coord = ggplot2::coord_cartesian(clip = "off"),
  pal = NULL,
  pal_na = pal_grey,
  alpha = 0.5,
  ...
)```

title = NULL,
subtitle = NULL,
x_breaks = NULL,
x_expand = NULL,
x_grid = NULL,
x_include = NULL,
x_labels = NULL,
x_limits = NULL,
x_oob = scales::oob_censor,
x_sec_axis = ggplot2::waiver(),
x_title = NULL,
x_trans = "identity",
y_breaks = NULL,
y_expand = NULL,
y_grid = NULL,
y_include = NULL,
y_labels = NULL,
y_limits = NULL,
y_oob = scales::oob_censor,
y_sec_axis = ggplot2::waiver(),
y_title = NULL,
y_trans = "identity",
col_breaks = NULL,
col_continuous = "gradient",
col_include = NULL,
col_labels = NULL,
col_legends = NULL,
col_legends_ncol = NULL,
col_legends_nrow = NULL,
col_legends_rev = FALSE,
col_limits = NULL,
col_oob = scales::oob_censor,
col_rescale = NULL,
col_title = NULL,
col_trans = "identity",
facet_labels = NULL,
facet_ncol = NULL,
facet_nrow = NULL,
facet_scales = "fixed",
facet_space = "fixed",
facet_layout = NULL,
caption = NULL,
titles = snakecase::to_sentence_case,
theme = gg_theme(),
void = FALSE)

Arguments

data
A data frame or tibble.

x
Unquoted x aesthetic variable.

xmin
Unquoted xmin aesthetic variable.

xmax
Unquoted xmax aesthetic variable.

y
Unquoted y aesthetic variable.

ymin
Unquoted ymin aesthetic variable.

ymax
Unquoted ymax aesthetic variable.

col
Unquoted col and fill aesthetic variable.

facet
Unquoted facet aesthetic variable.

facet2
Unquoted second facet variable.

group
Unquoted group aesthetic variable.

stat
Statistical transformation. A character string (e.g. "identity").

position
Position adjustment. Either a character string (e.g. "identity"), or a function (e.g. ggplot2::position_identity()).

coord
A coordinate function from ggplot2 (e.g. ggplot2::coord_cartesian()).

pal
Colours to use. A character vector of hex codes (or names).

pal_na
Colour to use for NA values. A character vector of a hex code (or name).

alpha
Opacity. A number between 0 and 1.

...
Other arguments passed to the ggplot2::geom_crossbar function.

title
Title string.

subtitle
Subtitle string.

x_breaks
A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.

xexpand
Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).

x_grid
TRUE or FALSE for vertical x gridlines. NULL guesses based on the classes of the x and y.

x_include
For a numeric or date variable, any values that the scale should include (e.g. 0).

x_labels
A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.

x_limits
A vector of length 2 to determine the limits of the axis.

x_oob
A scales::oob_* function that handles values outside of limits for continuous scales. Defaults to scales::oob_censor.

x_sec_axis
A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.

title
Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.

x_trans
For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").

y_breaks
A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
Padding to the limits with the `ggplot2::expansion` function, or a vector of length 2 (e.g. c(0, 0)).

TRUE or FALSE of horizontal y gridlines. NULL guesses based on the classes of the x and y.

For a numeric or date variable, any values that the scale should include (e.g. 0).

A function that takes the breaks as inputs (e.g. `scales::label_comma()`), or a vector of labels.

A vector of length 2 to determine the limits of the axis.

A scales::oob_* function that handles values outside of limits for continuous scales. Defaults to scales::oob_censor.

A secondary axis using the `ggplot2::sec_axis` or `ggplot2::dup_axis` function.

Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.

For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").

A function on the limits (e.g. `scales::breaks_pretty()`), or a vector of breaks.

Type of colouring for a continuous variable. Either "gradient" or "steps". Defaults to "steps" - or just the first letter of these e.g. "g".

For a numeric or date variable, any values that the scale should include (e.g. 0).

A function that takes the breaks as inputs (e.g. `scales::label_comma()`), or a vector of labels. Note this does not affect where col_intervals is not NULL.

The place for the legend. Either "bottom", "right", "top" or "left" - or just the first letter of these e.g. "b".

The number of columns for the legend elements.

The number of rows for the legend elements.

Reverse the elements of the legend. Defaults to FALSE.

A vector to determine the limits of the colour scale.

A scales::oob_* function that handles values outside of limits for continuous scales. Defaults to scales::oob_censor.

For a continuous col variable, a vector to rescale the pal non-linearly.

Legend title string. Defaults to converting to sentence case with spaces. Use "" for no title.

For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").

A function that takes the breaks as inputs (e.g. `scales::label_comma()`), or a named vector of labels (e.g. c("value" = "label", ...)).

The number of columns of facets. Only applies to a facet layout of "wrap".

The number of rows of facets. Only applies to a facet layout of "wrap".
facet_scales  Whether facet scales should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".

facet_space  Whether facet space should be "fixed" across facets, "free" to be proportional in both directions, or free to be proportional in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed". Only applies where the facet layout is "grid" and facet scales are not "fixed".

facet_layout  Whether the layout is to be "wrap" or "grid". If NULL and a single facet (or facet2) argument is provided, then defaults to "wrap". If NULL and both facet and facet2 arguments are provided, defaults to "grid".

caption  Caption title string.
titles  A function to format the x, y and col titles. Defaults to snakecase::to_sentence_case.
theme  A ggplot2 theme.
void  TRUE or FALSE of whether to remove axis lines, ticks and x and y titles and labels.

Value

A ggplot object.

Examples

```r
library(dplyr)
library(palmerpenguins)

data.frame(
  trt = factor(c(1, 1, 2, 2)),
  resp = c(1, 5, 3, 4),
  group = factor(c(1, 2, 1, 2)),
  upper = c(1.1, 5.3, 3.3, 4.2),
  lower = c(0.8, 4.6, 2.4, 3.6)
) |
  gg_crossbar(
    x = trt,
    y = resp,
    ymin = lower,
    ymax = upper,
    col = group,
    width = 0.5,
    x_title = "Treatment",
    y_title = "Response",
    pal = c("#1B9E77", "#9E361B")
  )
```
Description

Create a density ggplot with a wrapper around the ggplot2::geom_density function.

Usage

```r
gg_density(
  data = NULL,
  x = NULL,
  y = NULL,
  col = NULL,
  facet = NULL,
  facet2 = NULL,
  group = NULL,
  stat = "density",
  position = "identity",
  coord = ggplot2::coord_cartesian(clip = "off"),
  pal = NULL,
  pal_na = pal_grey,
  alpha = 0.5,
  ...,
  title = NULL,
  subtitle = NULL,
  x_breaks = NULL,
  x_expand = NULL,
  x_grid = NULL,
  x_include = NULL,
  x_labels = NULL,
  x_limits = NULL,
  x_oob = scales::oob_censor,
  x_sec_axis = ggplot2::waiver(),
  x_title = NULL,
  x_trans = "identity",
  y_breaks = NULL,
  y_expand = NULL,
  y_grid = NULL,
  y_include = NULL,
  y_labels = NULL,
  y_limits = NULL,
  y_oob = scales::oob_censor,
  y_sec_axis = ggplot2::waiver(),
  y_title = NULL,
  y_trans = "identity",
  col_breaks = NULL,
)```

col_continuous = "gradient",
col_include = NULL,
col_labels = NULL,
col_legend_place = NULL,
col_legend_ncol = NULL,
col_legend_nrow = NULL,
col_legend_rev = FALSE,
col_limits = NULL,
col_oob = scales::oob_censor,
col_rescale = NULL,
col_title = NULL,
col_trans = "identity",
facet_labels = NULL,
facet_ncol = NULL,
facet_nrow = NULL,
facet_scales = "fixed",
facet_space = "fixed",
facet_layout = NULL,
caption = NULL,
titles = snakecase::to_sentence_case,
theme = gg_theme(),
void = FALSE
)

Arguments

data A data frame or tibble.
x Unquoted x aesthetic variable.
y Unquoted y aesthetic variable.
col Unquoted col and fill aesthetic variable.
facet Unquoted facet aesthetic variable.
facet2 Unquoted second facet variable.
group Unquoted group aesthetic variable.
stat Statistical transformation. A character string (e.g. "identity").
position Position adjustment. Either a character string (e.g."identity"), or a function (e.g. ggplot2::position_identity()).
coord A coordinate function from ggplot2 (e.g. ggplot2::coord_cartesian()).
pal Colours to use. A character vector of hex codes (or names).
pal_na Colour to use for NA values. A character vector of a hex code (or name).
alpha Opacity. A number between 0 and 1.
... Other arguments passed to the ggplot2::geom_density function.
title Title string.
subtitle Subtitle string.
x_breaks A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
<table>
<thead>
<tr>
<th><strong>gg_density</strong></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>xexpand</strong></td>
<td>Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).</td>
<td></td>
</tr>
<tr>
<td><strong>xgrid</strong></td>
<td>TRUE or FALSE for vertical x gridlines. NULL guesses based on the classes of the x and y.</td>
<td></td>
</tr>
<tr>
<td><strong>xinclude</strong></td>
<td>For a numeric or date variable, any values that the scale should include (e.g. 0).</td>
<td></td>
</tr>
<tr>
<td><strong>xlabel</strong></td>
<td>A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.</td>
<td></td>
</tr>
<tr>
<td><strong>xlims</strong></td>
<td>A vector of length 2 to determine the limits of the axis.</td>
<td></td>
</tr>
<tr>
<td><strong>xoo</strong></td>
<td>A scales::oob_* function that handles values outside of limits for continuous scales. Defaults to scales::oob_censor.</td>
<td></td>
</tr>
<tr>
<td><strong>xsecaxis</strong></td>
<td>A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.</td>
<td></td>
</tr>
<tr>
<td><strong>xtitle</strong></td>
<td>Axis title string. Defaults to converting to sentence case with spaces. Use &quot;&quot; for no title.</td>
<td></td>
</tr>
<tr>
<td><strong>xtrans</strong></td>
<td>For a numeric variable, a transformation object (e.g. &quot;log10&quot;, &quot;sqrt&quot; or &quot;reverse&quot;).</td>
<td></td>
</tr>
<tr>
<td><strong>ybreaks</strong></td>
<td>A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.</td>
<td></td>
</tr>
<tr>
<td><strong>yexpand</strong></td>
<td>Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).</td>
<td></td>
</tr>
<tr>
<td><strong>ygrid</strong></td>
<td>TRUE or FALSE of horizontal y gridlines. NULL guesses based on the classes of the x and y.</td>
<td></td>
</tr>
<tr>
<td><strong>yinclude</strong></td>
<td>For a numeric or date variable, any values that the scale should include (e.g. 0).</td>
<td></td>
</tr>
<tr>
<td><strong>ylabel</strong></td>
<td>A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.</td>
<td></td>
</tr>
<tr>
<td><strong>ylims</strong></td>
<td>A vector of length 2 to determine the limits of the axis.</td>
<td></td>
</tr>
<tr>
<td><strong>yoo</strong></td>
<td>A scales::oob_* function that handles values outside of limits for continuous scales. Defaults to scales::oob_censor.</td>
<td></td>
</tr>
<tr>
<td><strong>ysecaxis</strong></td>
<td>A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.</td>
<td></td>
</tr>
<tr>
<td><strong>ytitle</strong></td>
<td>Axis title string. Defaults to converting to sentence case with spaces. Use &quot;&quot; for no title.</td>
<td></td>
</tr>
<tr>
<td><strong>ytrans</strong></td>
<td>For a numeric variable, a transformation object (e.g. &quot;log10&quot;, &quot;sqrt&quot; or &quot;reverse&quot;).</td>
<td></td>
</tr>
<tr>
<td><strong>colbreaks</strong></td>
<td>A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.</td>
<td></td>
</tr>
<tr>
<td><strong>colcontinuous</strong></td>
<td>Type of colouring for a continuous variable. Either &quot;gradient&quot; or &quot;steps&quot;. Defaults to &quot;steps&quot; - or just the first letter of these e.g. &quot;g&quot;.</td>
<td></td>
</tr>
<tr>
<td><strong>colinclude</strong></td>
<td>For a numeric or date variable, any values that the scale should include (e.g. 0).</td>
<td></td>
</tr>
<tr>
<td><strong>collabel</strong></td>
<td>A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels. Note this does not affect where col_intervals is not NULL.</td>
<td></td>
</tr>
<tr>
<td><strong>colllegendplace</strong></td>
<td>The place for the legend. Either &quot;bottom&quot;, &quot;right&quot;, &quot;top&quot; or &quot;left&quot; - or just the first letter of these e.g. &quot;b&quot;.</td>
<td></td>
</tr>
<tr>
<td><strong>colllegendncol</strong></td>
<td>The number of columns for the legend elements.</td>
<td></td>
</tr>
</tbody>
</table>
col_legend_nrow
  The number of rows for the legend elements.

col_legend_rev
  Reverse the elements of the legend. Defaults to FALSE.

col_limits
  A vector to determine the limits of the colour scale.

col_oob
  A scales::oob_* function that handles values outside of limits for continuous scales. Defaults to scales::oob_censor.

col_rescale
  For a continuous col variable, a vector to rescale the pal non-linearly.

col_title
  Legend title string. Defaults to converting to sentence case with spaces. Use "" for no title.

col_trans
  For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").

facet_labels
  A function that takes the breaks as inputs (e.g. scales::label_comma()), or a named vector of labels (e.g. c("value" = "label", ...)).

facet_ncol
  The number of columns of facets. Only applies to a facet layout of "wrap".

facet_nrow
  The number of rows of facets. Only applies to a facet layout of "wrap".

facet_scales
  Whether facet scales should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".

facet_space
  Whether facet space should be "fixed" across facets, "free" to be proportional in both directions, or free to be proportional in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed". Only applies where the facet layout is "grid" and facet scales are not "fixed".

facet_layout
  Whether the layout is to be "wrap" or "grid". If NULL and a single facet (or facet2) argument is provided, then defaults to "wrap". If NULL and both facet and facet2 arguments are provided, defaults to "grid".

caption
  Caption title string.

titles
  A function to format the x, y and col titles. Defaults to snakecase::to_sentence_case.

theme
  A ggplot2 theme.

void
  TRUE or FALSE of whether to remove axis lines, ticks and x and y titles and labels.

Value

A ggplot object.

Examples

library(dplyr)
library(palmerpenguins)
penguins |>
tidyr::drop_na(sex) |>
  gg_density(
    x = flipper_length_mm,
    col = sex,
    facet = species,)
Description

Create a errorbar ggplot with a wrapper around the ggplot2::geom_errorbar function.

Usage

```r
gg_errorbar(
  data = NULL,
  x = NULL,
  xmin = NULL,
  xmax = NULL,
  y = NULL,
  ymin = NULL,
  ymax = NULL,
  col = NULL,
  facet = NULL,
  facet2 = NULL,
  group = NULL,
  stat = "identity",
  position = "identity",
  coord = ggplot2::coord_cartesian(clip = "off"),
  pal = NULL,
  pal_na = pal_grey,
  alpha = 1,
  
  title = NULL,
  subtitle = NULL,
  x_breaks = NULL,
  x_expand = NULL,
  x_grid = NULL,
  x_include = NULL,
  x_labels = NULL,
  x_limits = NULL,
  x_oob = scales::oob_censor,
  x_sec_axis = ggplot2::waiver(),
  x_title = NULL,
  x_trans = "identity",
  y_breaks = NULL,
  y_expand = NULL,
)```
y_grid = NULL,
y_include = NULL,
y_labels = NULL,
y_limits = NULL,
y_oob = scales::oob_censor,
y_sec_axis = ggplot2::waiver(),
y_title = NULL,
y_trans = "identity",
col_breaks = NULL,
col_continuous = "gradient",
col_include = NULL,
col_labels = NULL,
col_legend_place = NULL,
col_legend_ncol = NULL,
col_legend_nrow = NULL,
col_legend_rev = FALSE,
col_limits = NULL,
col_oob = scales::oob_censor,
col_rescale = NULL,
col_title = NULL,
col_trans = "identity",
facet_labels = NULL,
facet_ncol = NULL,
facet_nrow = NULL,
facet_scales = "fixed",
facet_space = "fixed",
facet_layout = NULL,
caption = NULL,
titles = snakecase::to_sentence_case,
theme = gg_theme(),
void = FALSE
)

Arguments

data
A data frame or tibble.
x
Unquoted x aesthetic variable.
xmin
Unquoted xmin aesthetic variable.
xmax
Unquoted xmax aesthetic variable.
y
Unquoted y aesthetic variable.
ymin
Unquoted ymin aesthetic variable.
ymax
Unquoted ymax aesthetic variable.
col
Unquoted col and fill aesthetic variable.
facet
Unquoted facet aesthetic variable.
facet2
Unquoted second facet variable.
group
Unquoted group aesthetic variable.
**gg_errorbar**

- **stat**: Statistical transformation. A character string (e.g. "identity").
- **position**: Position adjustment. Either a character string (e.g. "identity"), or a function (e.g. `ggplot2::position_identity()`).
- **coord**: A coordinate function from ggplot2 (e.g. `ggplot2::coord_cartesian()`).
- **pal**: Colours to use. A character vector of hex codes (or names).
- **pal_na**: Colour to use for NA values. A character vector of a hex code (or name).
- **alpha**: Opacity. A number between 0 and 1.
- **...**: Other arguments passed to the `ggplot2::geom_errorbar` function.
- **title**: Title string.
- **subtitle**: Subtitle string.
- **x_breaks**: A function on the limits (e.g. `scales::breaks_pretty()`), or a vector of breaks.
- **x_expand**: Padding to the limits with the `ggplot2::expansion` function, or a vector of length 2 (e.g. `c(0, 0)`).
- **x_grid**: TRUE or FALSE for vertical x gridlines. NULL guesses based on the classes of the x and y.
- **x_include**: For a numeric or date variable, any values that the scale should include (e.g. 0).
- **x_labels**: A function that takes the breaks as inputs (e.g. `scales::label_comma()`), or a vector of labels.
- **x_limits**: A vector of length 2 to determine the limits of the axis.
- **x_oob**: A `scales::oob_*` function that handles values outside of limits for continuous scales. Defaults to `scales::oob_censor`.
- **x_sec_axis**: A secondary axis using the `ggplot2::sec_axis` or `ggplot2::dup_axis` function.
- **x_title**: Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.
- **x_trans**: For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
- **y_breaks**: A function on the limits (e.g. `scales::breaks_pretty()`), or a vector of breaks.
- **y_expand**: Padding to the limits with the `ggplot2::expansion` function, or a vector of length 2 (e.g. `c(0, 0)`).
- **y_grid**: TRUE or FALSE of horizontal y gridlines. NULL guesses based on the classes of the x and y.
- **y_include**: For a numeric or date variable, any values that the scale should include (e.g. 0).
- **y_labels**: A function that takes the breaks as inputs (e.g. `scales::label_comma()`), or a vector of labels.
- **y_limits**: A vector of length 2 to determine the limits of the axis.
- **y_oob**: A `scales::oob_*` function that handles values outside of limits for continuous scales. Defaults to `scales::oob_censor`.
- **y_sec_axis**: A secondary axis using the `ggplot2::sec_axis` or `ggplot2::dup_axis` function.
- **y_title**: Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.
<table>
<thead>
<tr>
<th>Variable</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>y_trans</td>
<td>For a numeric variable, a transformation object (e.g. &quot;log10&quot;, &quot;sqrt&quot; or &quot;reverse&quot;).</td>
</tr>
<tr>
<td>col_breaks</td>
<td>A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.</td>
</tr>
<tr>
<td>col_continuous</td>
<td>Type of colouring for a continuous variable. Either &quot;gradient&quot; or &quot;steps&quot;. Defaults to &quot;steps&quot; - or just the first letter of these e.g. &quot;g&quot;.</td>
</tr>
<tr>
<td>col_include</td>
<td>For a numeric or date variable, any values that the scale should include (e.g. 0).</td>
</tr>
<tr>
<td>col_labels</td>
<td>A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels. Note this does not affect where col_intervals is not NULL.</td>
</tr>
<tr>
<td>col_legend_place</td>
<td>The place for the legend. Either &quot;bottom&quot;, &quot;right&quot;, &quot;top&quot; or &quot;left&quot; - or just the first letter of these e.g. &quot;b&quot;.</td>
</tr>
<tr>
<td>col_legend_ncol</td>
<td>The number of columns for the legend elements.</td>
</tr>
<tr>
<td>col_legend_nrow</td>
<td>The number of rows for the legend elements.</td>
</tr>
<tr>
<td>col_legend_rev</td>
<td>Reverse the elements of the legend. Defaults to FALSE.</td>
</tr>
<tr>
<td>col_limits</td>
<td>A vector to determine the limits of the colour scale.</td>
</tr>
<tr>
<td>col_oob</td>
<td>A scales::oob_* function that handles values outside of limits for continuous scales. Defaults to scales::oob_censor.</td>
</tr>
<tr>
<td>col_rescale</td>
<td>For a continuous col variable, a vector to rescale the pal non-linearly.</td>
</tr>
<tr>
<td>col_title</td>
<td>Legend title string. Defaults to converting to sentence case with spaces. Use &quot;&quot; for no title.</td>
</tr>
<tr>
<td>col_trans</td>
<td>For a numeric variable, a transformation object (e.g. &quot;log10&quot;, &quot;sqrt&quot; or &quot;reverse&quot;).</td>
</tr>
<tr>
<td>facet_labels</td>
<td>A function that takes the breaks as inputs (e.g. scales::label_comma()), or a named vector of labels (e.g. c(&quot;value&quot; = &quot;label&quot;, ...)).</td>
</tr>
<tr>
<td>facet_ncol</td>
<td>The number of columns of facets. Only applies to a facet layout of &quot;wrap&quot;.</td>
</tr>
<tr>
<td>facet_nrow</td>
<td>The number of rows of facets. Only applies to a facet layout of &quot;wrap&quot;.</td>
</tr>
<tr>
<td>facet_scales</td>
<td>Whether facet scales should be &quot;fixed&quot; across facets, &quot;free&quot; in both directions, or free in just one direction (i.e. &quot;free_x&quot; or &quot;free_y&quot;). Defaults to &quot;fixed&quot;.</td>
</tr>
<tr>
<td>facet_space</td>
<td>Whether facet space should be &quot;fixed&quot; across facets, &quot;free&quot; to be proportional in both directions, or free to be proportional in just one direction (i.e. &quot;free_x&quot; or &quot;free_y&quot;). Defaults to &quot;fixed&quot;. Only applies where the facet layout is &quot;grid&quot; and facet scales are not &quot;fixed&quot;.</td>
</tr>
<tr>
<td>facet_layout</td>
<td>Whether the layout is to be &quot;wrap&quot; or &quot;grid&quot;. If NULL and a single facet (or facet2) argument is provided, then defaults to &quot;wrap&quot;. If NULL and both facet and facet2 arguments are provided, defaults to &quot;grid&quot;.</td>
</tr>
<tr>
<td>caption</td>
<td>Caption title string.</td>
</tr>
<tr>
<td>titles</td>
<td>A function to format the x, y and col titles. Defaults to snakecase::to_sentence_case.</td>
</tr>
<tr>
<td>theme</td>
<td>A ggplot2 theme.</td>
</tr>
<tr>
<td>void</td>
<td>TRUE or FALSE of whether to remove axis lines, ticks and x and y titles and labels.</td>
</tr>
</tbody>
</table>
Value

A ggplot object.

Examples

data.frame(
  trt = factor(c(1, 1, 2, 2)),
  resp = c(1, 5, 3, 4),
  group = factor(c(1, 2, 1, 2)),
  upper = c(1.1, 5.3, 3.3, 4.2),
  lower = c(0.8, 4.6, 2.4, 3.6)
) |>
  gg_errorbar(
    x = trt,
    ymin = lower,
    ymax = upper,
    col = group,
    width = 0.1,
    pal = c("#1B9E77", "#9E361B"),
    x_title = "Treatment",
    y_title = "Response",
    position = ggplot2::position_dodge(0.2)
  )

---

Description

Create a freqpoly ggplot with a wrapper around the ggplot2::geom_freqpoly function.

Usage

gg_freqpoly(
  data = NULL,
  x = NULL,
  y = NULL,
  col = NULL,
  facet = NULL,
  facet2 = NULL,
  group = NULL,
  stat = "bin",
  position = "identity",
  coord = ggplot2::coord_cartesian(clip = "off"),
  pal = NULL,
  pal_na = pal_grey,
  alpha = 1,
...,

title = NULL,
subtitle = NULL,
x_breaks = NULL,
x_expand = NULL,
x_grid = NULL,
x_include = NULL,
x_labels = NULL,
x_limits = NULL,
x_oob = scales::oob_censor,
x_sec_axis = ggplot2::waiver(),
x_title = NULL,
x_trans = "identity",
y_breaks = NULL,
y_expand = NULL,
y_grid = NULL,
y_include = NULL,
y_labels = NULL,
y_limits = NULL,
y_oob = scales::oob_censor,
y_sec_axis = ggplot2::waiver(),
y_title = NULL,
y_trans = "identity",
col_breaks = NULL,
col_continuous = "gradient",
col_include = NULL,
col_labels = NULL,
col_legend_place = NULL,
col_legend_ncol = NULL,
col_legend_nrow = NULL,
col_legend_rev = FALSE,
col_limits = NULL,
col_oob = scales::oob_censor,
col_rescale = NULL,
col_title = NULL,
col_trans = "identity",
facet_labels = NULL,
facet_ncol = NULL,
facet_nrow = NULL,
facet_scales = "fixed",
facet_space = "fixed",
facet_layout = NULL,
caption = NULL,
titles = snakecase::to_sentence_case,
theme = gg_theme(),
void = FALSE
)


Arguments

data  A data frame or tibble.
x  Unquoted x aesthetic variable.
y  Unquoted y aesthetic variable.
col  Unquoted col and fill aesthetic variable.
facet  Unquoted facet aesthetic variable.
facet2  Unquoted second facet variable.
group  Unquoted group aesthetic variable.
stat  Statistical transformation. A character string (e.g. "identity").
position  Position adjustment. Either a character string (e.g. "identity"), or a function (e.g. ggplot2::position_identity()).
coord  A coordinate function from ggplot2 (e.g. ggplot2::coord_cartesian()).
pal  Colours to use. A character vector of hex codes (or names).
pal_na  Colour to use for NA values. A character vector of a hex code (or name).
alpha  Opacity. A number between 0 and 1.
...  Other arguments passed to the ggplot2::geom_freqpoly function.
title  Title string.
subtitle  Subtitle string.
x_breaks  A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
x_expand  Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).
x_grid  TRUE or FALSE for vertical x gridlines. NULL guesses based on the classes of the x and y.
x_include  For a numeric or date variable, any values that the scale should include (e.g. 0).
x_labels  A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.
x_limits  A vector of length 2 to determine the limits of the axis.
x_oob  A scales::oob_* function that handles values outside of limits for continuous scales. Defaults to scales::oob_censor.
x_sec_axis  A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.
x_title  Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.
x_trans  For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
y_breaks  A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
y_expand  Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).
y_grid  TRUE or FALSE of horizontal y gridlines. NULL guesses based on the classes of the x and y.
y_include For a numeric or date variable, any values that the scale should include (e.g. 0).
y_labels A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.
y_limits A vector of length 2 to determine the limits of the axis.
y_oob A scales::oob_* function that handles values outside of limits for continuous scales. Defaults to scales::oob_censor.
y_sec_axis A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.
y_title Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.
y_trans For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
col_breaks A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
col_continuous Type of colouring for a continuous variable. Either "gradient" or "steps". Defaults to "steps" - or just the first letter of these e.g. "g".
col_include For a numeric or date variable, any values that the scale should include (e.g. 0).
col_labels A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels. Note this does not affect where col_intervals is not NULL.
col_legend_place The place for the legend. Either "bottom", "right", "top" or "left" - or just the first letter of these e.g. "b".
col_legend_ncol The number of columns for the legend elements.
col_legend_nrow The number of rows for the legend elements.
col_legend_rev Reverse the elements of the legend. Defaults to FALSE.
col_limits A vector to determine the limits of the colour scale.
col_oob A scales::oob_* function that handles values outside of limits for continuous scales. Defaults to scales::oob_censor.
col_rescale For a continuous col variable, a vector to rescale the pal non-linearly.
col_title Legend title string. Defaults to converting to sentence case with spaces. Use "" for no title.
col_trans For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
facet_labels A function that takes the breaks as inputs (e.g. scales::label_comma()), or a named vector of labels (e.g. c("value" = "label", ...)).
facet_ncol The number of columns of facets. Only applies to a facet layout of "wrap".
facet_nrow The number of rows of facets. Only applies to a facet layout of "wrap".
facet_scales Whether facet scales should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".
facet_space Whether facet space should be "fixed" across facets, "free" to be proportional in both directions, or free to be proportional in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed". Only applies where the facet layout is "grid" and facet scales are not "fixed".
**facet_layout**
Whether the layout is to be "wrap" or "grid". If NULL and a single facet (or facet2) argument is provided, then defaults to "wrap". If NULL and both facet and facet2 arguments are provided, defaults to "grid".

**caption**
Caption title string.

**titles**
A function to format the x, y and col titles. Defaults to snakecase::to_sentence_case.

**theme**
A ggplot2 theme.

**void**
TRUE or FALSE of whether to remove axis lines, ticks and x and y titles and labels.

**Value**
A ggplot object.

**Examples**
```r
library(dplyr)
library(palmerpenguins)

penguins |> tidyr::drop_na(sex) |> gg_freqpoly(
  x = flipper_length_mm,
  col = sex,
  facet = species,
  pal = c("#1B9E77", "#9E361B"),
  col_labels = stringr::str_to_sentence
)
```

---

**gg_function**

**Function ggplot**

Create a function ggplot with a wrapper around the ggplot2::geom_function function.

**Usage**
```r
gg_function(
  data = NULL,
  x = NULL,
  y = NULL,
  col = NULL,
  facet = NULL,
  facet2 = NULL,
  group = NULL,
  stat = "function",
)```
gg_function

position = "identity",
coord = ggplot2::coord_cartesian(clip = "off"),
pal = NULL,
pal_na = pal_grey,
alpha = 1,
..., 
title = NULL,
subtitle = NULL,
x_breaks = NULL,
x_expand = NULL,
x_grid = NULL,
x_include = NULL,
x_labels = NULL,
x_limits = NULL,
x_oob = scales::oob_censor,
x_sec_axis = ggplot2::waiver(),
x_title = NULL,
x_trans = "identity",
y_breaks = NULL,
y_expand = NULL,
y_grid = NULL,
y_include = NULL,
y_labels = NULL,
y_limits = NULL,
y_oob = scales::oob_censor,
y_sec_axis = ggplot2::waiver(),
y_title = NULL,
y_trans = "identity",
col_breaks = NULL,
col_continuous = "gradient",
col_include = NULL,
col_labels = NULL,
col_legend_place = NULL,
col_legend_ncol = NULL,
col_legend_nrow = NULL,
col_legend_rev = FALSE,
col_limits = NULL,
col_oob = scales::oob_censor,
col_rescale = NULL,
col_title = NULL,
col_trans = "identity",
facet_labels = NULL,
facet_ncol = NULL,
facet_nrow = NULL,
facet_scales = "fixed",
facet_space = "fixed",
facet_layout = NULL,
caption = NULL,
titles = snakecase::to_sentence_case,
theme = gg_theme(),
void = FALSE
)

Arguments

data A data frame or tibble.
x Unquoted x aesthetic variable.
y Unquoted y aesthetic variable.
col Unquoted col and fill aesthetic variable.
facet Unquoted facet aesthetic variable.
facet2 Unquoted second facet variable.
group Unquoted group aesthetic variable.
stat Statistical transformation. A character string (e.g. "identity").
position Position adjustment. Either a character string (e.g."identity"), or a function (e.g.
  ggplot2::position_identity()).
coord A coordinate function from ggplot2 (e.g. ggplot2::coord_cartesian()).
pal Colours to use. A character vector of hex codes (or names).
pal_na Colour to use for NA values. A character vector of a hex code (or name).
alpha Opacity. A number between 0 and 1.
... Other arguments passed to the ggplot2::geom_function function.
title Title string.
subtitle Subtitle string.
x_breaks A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
x_expand Padding to the limits with the ggplot2::expansion function, or a vector of length
  2 (e.g. c(0, 0)).
x_grid TRUE or FALSE for vertical x gridlines. NULL guesses based on the classes of
  the x and y.
x_include For a numeric or date variable, any values that the scale should include (e.g. 0).
x_labels A function that takes the breaks as inputs (e.g. scales::label_comma()), or a
  vector of labels.
x_limits A vector of length 2 to determine the limits of the axis.
x_oob A scales::oob_* function that handles values outside of limits for continuous
  scales. Defaults to scales::oob_censor.
x_sec_axis A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.
x_title Axis title string. Defaults to converting to sentence case with spaces. Use "" for
  no title.
x_trans For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "re-
  verse").
y_breaks A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).

TRUE or FALSE of horizontal y gridlines. NULL guesses based on the classes of the x and y.

For a numeric or date variable, any values that the scale should include (e.g. 0).

A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.

A vector of length 2 to determine the limits of the axis.

A scales::oob_* function that handles values outside of limits for continuous scales. Defaults to scales::oob_censor.

A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.

Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.

For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").

A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.

Type of colouring for a continuous variable. Either "gradient" or "steps". Defaults to "steps" - or just the first letter of these e.g. "g".

For a numeric or date variable, any values that the scale should include (e.g. 0).

A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels. Note this does not affect where col_intervals is not NULL.

The place for the legend. Either "bottom", "right", "top" or "left" - or just the first letter of these e.g. "b".

The number of columns for the legend elements.

The number of rows for the legend elements.

Reverse the elements of the legend. Defaults to FALSE.

A vector to determine the limits of the colour scale.

A scales::oob_* function that handles values outside of limits for continuous scales. Defaults to scales::oob_censor.

For a continuous col variable, a vector to rescale the pal non-linearly.

Legend title string. Defaults to converting to sentence case with spaces. Use "" for no title.

For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").

A function that takes the breaks as inputs (e.g. scales::label_comma()), or a named vector of labels (e.g. c("value" = "label", ...)).

The number of columns of facets. Only applies to a facet layout of "wrap".

The number of rows of facets. Only applies to a facet layout of "wrap".
### gg_hex

**Description**

Create a hex ggplot with a wrapper around the ggplot2::geom_hex function.

**Usage**

```r
gg_hex(
  data = NULL,
  x = NULL,
  y = NULL,
  facets = NULL,
  facet2 = NULL,
  group = NULL,
  facet_scales = "fixed",  # Whether facet scales should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".
  facet_space = "fixed",  # Whether facet space should be "fixed" across facets, "free" to be proportional in both directions, or free to be proportional in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed". Only applies where the facet layout is "grid" and facet scales are not "fixed".
  facet_layout = "grid",  # Whether the layout is to be "wrap" or "grid". If NULL and a single facet (or facet2) argument is provided, then defaults to "wrap". If NULL and both facet and facet2 arguments are provided, defaults to "grid".
  caption = "",  # Caption title string.
  titles = \(x\) dnorm\(x\),  # A function to format the x, y and col titles. Defaults to snakecase::to_sentence_case.
  theme = "",  # A ggplot2 theme.
  void = TRUE,  # TRUE or FALSE of whether to remove axis lines, ticks and x and y titles and labels.
)
```

**Examples**

```r
data.frame(x = rnorm(100)) |> gg_function(x = x, fun = \(x\) dnorm(x), pal = "#1B9E77", x_limits = c(-3, 3))
```
stat = "binhex",
position = "identity",
coord = ggplot2::coord_cartesian(clip = "off"),
pal = NULL,
pal_na = pal_grey,
alpha = 1,
..., 
title = NULL,
subtitle = NULL,
x_breaks = NULL,
x_expand = NULL,
x_grid = NULL,
x_include = NULL,
x_labels = NULL,
x_limits = NULL,
x_oob = scales::oob_censor,
x_sec_axis = ggplot2::waiver(),
x_title = NULL,
x_trans = "identity",
y_breaks = NULL,
y_expand = NULL,
y_grid = NULL,
y_include = NULL,
y_labels = NULL,
y_limits = NULL,
y_oob = scales::oob_censor,
y_sec_axis = ggplot2::waiver(),
y_title = NULL,
y_trans = "identity",
col_breaks = NULL,
col_continuous = "gradient",
col_include = NULL,
col_labels = NULL,
col_limits = NULL,
col_oob = scales::oob_censor,
col_rescale = NULL,
col_title = NULL,
col_trans = "identity",
facet_labels = NULL,
facet_ncol = NULL,
facet_nrow = NULL,
facet_scales = "fixed",
facet_space = "fixed",
facet_layout = NULL,
gg_hex

caption = NULL,
titles = snakecase::to_sentence_case,
theme = gg_theme(),
void = FALSE
)

Arguments

data A data frame or tibble.
x Unquoted x aesthetic variable.
y Unquoted y aesthetic variable.
facet Unquoted facet aesthetic variable.
facet2 Unquoted second facet variable.
group Unquoted group aesthetic variable.
stat Statistical transformation. A character string (e.g. "identity").
position Position adjustment. Either a character string (e.g. "identity"), or a function (e.g. ggplot2::position_identity()).
coord A coordinate function from ggplot2 (e.g. ggplot2::coord_cartesian()).
pal Colours to use. A character vector of hex codes (or names).
pal_na Colour to use for NA values. A character vector of a hex code (or name).
alpha Opacity. A number between 0 and 1.
... Other arguments passed to the ggplot2::geom_hex function.
title Title string.
subtitle Subtitle string.
x_breaks A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
x_expand Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).
x_grid TRUE or FALSE for vertical x gridlines. NULL guesses based on the classes of the x and y.
x_include For a numeric or date variable, any values that the scale should include (e.g. 0).
x_labels A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.
x_limits A vector of length 2 to determine the limits of the axis.
x_oob A scales::oob_* function that handles values outside of limits for continuous scales. Defaults to scales::oob_censor.
x_sec_axis A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.
x_title Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.
x_trans For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
y_breaks A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>y_expand</code></td>
<td>Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. <code>c(0, 0)</code>).</td>
</tr>
<tr>
<td><code>y_grid</code></td>
<td>TRUE or FALSE of horizontal y gridlines. NULL guesses based on the classes of the x and y.</td>
</tr>
<tr>
<td><code>y_include</code></td>
<td>For a numeric or date variable, any values that the scale should include (e.g. 0).</td>
</tr>
<tr>
<td><code>y_labels</code></td>
<td>A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.</td>
</tr>
<tr>
<td><code>y_limits</code></td>
<td>A vector of length 2 to determine the limits of the axis.</td>
</tr>
<tr>
<td><code>y_oob</code></td>
<td>A scales::oob_* function that handles values outside of limits for continuous scales. Defaults to scales::oob_censor.</td>
</tr>
<tr>
<td><code>y_sec_axis</code></td>
<td>A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.</td>
</tr>
<tr>
<td><code>y_title</code></td>
<td>Axis title string. Defaults to converting to sentence case with spaces. Use &quot;&quot; for no title.</td>
</tr>
<tr>
<td><code>y_trans</code></td>
<td>For a numeric variable, a transformation object (e.g. &quot;log10&quot;, &quot;sqrt&quot; or &quot;reverse&quot;).</td>
</tr>
<tr>
<td><code>col_breaks</code></td>
<td>A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.</td>
</tr>
<tr>
<td><code>col_continuous</code></td>
<td>Type of colouring for a continuous variable. Either &quot;gradient&quot; or &quot;steps&quot;. Defaults to &quot;steps&quot; - or just the first letter of these e.g. &quot;g&quot;.</td>
</tr>
<tr>
<td><code>col_include</code></td>
<td>For a numeric or date variable, any values that the scale should include (e.g. 0).</td>
</tr>
<tr>
<td><code>col_labels</code></td>
<td>A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels. Note this does not affect where col_intervals is not NULL.</td>
</tr>
<tr>
<td><code>col_legend_place</code></td>
<td>The place for the legend. Either &quot;bottom&quot;, &quot;right&quot;, &quot;top&quot; or &quot;left&quot; - or just the first letter of these e.g. &quot;b&quot;.</td>
</tr>
<tr>
<td><code>col_legend_ncol</code></td>
<td>The number of columns for the legend elements.</td>
</tr>
<tr>
<td><code>col_legend_nrow</code></td>
<td>The number of rows for the legend elements.</td>
</tr>
<tr>
<td><code>col_legend_rev</code></td>
<td>Reverse the elements of the legend. Defaults to FALSE.</td>
</tr>
<tr>
<td><code>col_limits</code></td>
<td>A vector to determine the limits of the colour scale.</td>
</tr>
<tr>
<td><code>col_oob</code></td>
<td>A scales::oob_* function that handles values outside of limits for continuous scales. Defaults to scales::oob_censor.</td>
</tr>
<tr>
<td><code>col_rescale</code></td>
<td>For a continuous col variable, a vector to rescale the pal non-linearly.</td>
</tr>
<tr>
<td><code>col_title</code></td>
<td>Legend title string. Defaults to converting to sentence case with spaces. Use &quot;&quot; for no title.</td>
</tr>
<tr>
<td><code>col_trans</code></td>
<td>For a numeric variable, a transformation object (e.g. &quot;log10&quot;, &quot;sqrt&quot; or &quot;reverse&quot;).</td>
</tr>
<tr>
<td><code>facet_labels</code></td>
<td>A function that takes the breaks as inputs (e.g. scales::label_comma()), or a named vector of labels (e.g. c(&quot;value&quot; = &quot;label&quot;, ...)).</td>
</tr>
<tr>
<td><code>facet_ncol</code></td>
<td>The number of columns of facets. Only applies to a facet layout of &quot;wrap&quot;.</td>
</tr>
<tr>
<td><code>facet_nrow</code></td>
<td>The number of rows of facets. Only applies to a facet layout of &quot;wrap&quot;.</td>
</tr>
</tbody>
</table>
## gg_histogram

Create a histogram ggplot with a wrapper around the ggplot2::geom_histogram function.

### Usage

```r
gg_histogram(
  data = NULL,
  x = NULL,
  y = NULL,
  col = NULL,
  facet = NULL,
  facet2 = NULL,
  group = NULL,
  facet_scales = "fixed",
  facet_space = "fixed",
  facet_layout = "grid",
  caption = "",
  titles = "snakecase::to_sentence_case",
  theme = "",
  void = FALSE
)
```

### Description

Create a histogram ggplot with a wrapper around the ggplot2::geom_histogram function.

### Examples

```r
ggplot2::diamonds |>
  gg_hex(
    x = carat,
    y = price,
    pal = viridis::cividis(9)
  )
```

### Value

A ggplot object.
gg_histogram

stat = "bin",
position = "stack",
coord = ggplot2::coord_cartesian(clip = "off"),
pal = NULL,
pal_na = pal_grey,
alpha = 0.9,
...

title = NULL,
subtitle = NULL,
breaks = NULL,
expand = NULL,
grid = NULL,
include = NULL,
labels = NULL,
limits = NULL,
oob = scales::oob_censor,
sec_axis = ggplot2::waiver(),
title = NULL,
trans = "identity",
breaks = NULL,
expand = NULL,
grid = NULL,
include = NULL,
labels = NULL,
limits = NULL,
oob = scales::oob_censor,
sec_axis = ggplot2::waiver(),
title = NULL,
trans = "identity",
breaks = NULL,
continuous = "gradient",
include = NULL,
labels = NULL,
legend_place = NULL,
legend_ncol = NULL,
legend_nrow = NULL,
legend_rev = FALSE,
limits = NULL,
oob = scales::oob_censor,
rescale = NULL,
title = NULL,
trans = "identity",
labels = NULL,
ncol = NULL,
ncol = NULL,
scales = "fixed",
space = "fixed",
layout = NULL,
gg_histogram

caption = NULL,
titles = snakecase::to_sentence_case,
theme = gg_theme(),
void = FALSE
)

Arguments

data A data frame or tibble.
x Unquoted x aesthetic variable.
y Unquoted y aesthetic variable.
col Unquoted col and fill aesthetic variable.
facet Unquoted facet aesthetic variable.
facet2 Unquoted second facet variable.
group Unquoted group aesthetic variable.
stat Statistical transformation. A character string (e.g. "identity").
position Position adjustment. Either a character string (e.g."identity"), or a function (e.g. ggplot2::position_identity()).
coord A coordinate function from ggplot2 (e.g. ggplot2::coord_cartesian()).
pal Colours to use. A character vector of hex codes (or names).
pal_na Colour to use for NA values. A character vector of a hex code (or name).
alpha Opacity. A number between 0 and 1.
... Other arguments passed to the ggplot2::geom_histogram function.
title Title string.
subtitle Subtitle string.
x_breaks A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
x_expand Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).
x_grid TRUE or FALSE for vertical x gridlines. NULL guesses based on the classes of the x and y.
x_include For a numeric or date variable, any values that the scale should include (e.g. 0).
x_labels A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.
x_limits A vector of length 2 to determine the limits of the axis.
x_oob A scales::oob_* function that handles values outside of limits for continuous scales. Defaults to scales::oob_censor.
x_sec_axis A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.
x_title Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.
x_trans For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>y_breaks</td>
<td>A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.</td>
</tr>
<tr>
<td>y_expand</td>
<td>Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).</td>
</tr>
<tr>
<td>y_grid</td>
<td>TRUE or FALSE of horizontal y gridlines. NULL guesses based on the classes of the x and y.</td>
</tr>
<tr>
<td>y_include</td>
<td>For a numeric or date variable, any values that the scale should include (e.g. 0).</td>
</tr>
<tr>
<td>y_labels</td>
<td>A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.</td>
</tr>
<tr>
<td>y_limits</td>
<td>A vector of length 2 to determine the limits of the axis.</td>
</tr>
<tr>
<td>y_oob</td>
<td>A scales::oob_* function that handles values outside of limits for continuous scales. Defaults to scales::oob_censor.</td>
</tr>
<tr>
<td>y_sec_axis</td>
<td>A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.</td>
</tr>
<tr>
<td>y_title</td>
<td>Axis title string. Defaults to converting to sentence case with spaces. Use &quot;&quot; for no title.</td>
</tr>
<tr>
<td>y_trans</td>
<td>For a numeric variable, a transformation object (e.g. &quot;log10&quot;, &quot;sqrt&quot; or &quot;reverse&quot;).</td>
</tr>
<tr>
<td>col_breaks</td>
<td>A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.</td>
</tr>
<tr>
<td>col_continuous</td>
<td>Type of colouring for a continuous variable. Either &quot;gradient&quot; or &quot;steps&quot;. Defaults to &quot;steps&quot; - or just the first letter of these e.g. &quot;g&quot;.</td>
</tr>
<tr>
<td>col_include</td>
<td>For a numeric or date variable, any values that the scale should include (e.g. 0).</td>
</tr>
<tr>
<td>col_labels</td>
<td>A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels. Note this does not affect where col_intervals is not NULL.</td>
</tr>
<tr>
<td>col_legend_place</td>
<td>The place for the legend. Either &quot;bottom&quot;, &quot;right&quot;, &quot;top&quot; or &quot;left&quot; - or just the first letter of these e.g. &quot;b&quot;.</td>
</tr>
<tr>
<td>col_legend_ncol</td>
<td>The number of columns for the legend elements.</td>
</tr>
<tr>
<td>col_legend_nrow</td>
<td>The number of rows for the legend elements.</td>
</tr>
<tr>
<td>col_legend_rev</td>
<td>Reverse the elements of the legend. Defaults to FALSE.</td>
</tr>
<tr>
<td>col_limits</td>
<td>A vector to determine the limits of the colour scale.</td>
</tr>
<tr>
<td>col_oob</td>
<td>A scales::oob_* function that handles values outside of limits for continuous scales. Defaults to scales::oob_censor.</td>
</tr>
<tr>
<td>col_rescale</td>
<td>For a continuous col variable, a vector to rescale the pal non-linearly.</td>
</tr>
<tr>
<td>col_title</td>
<td>Legend title string. Defaults to converting to sentence case with spaces. Use &quot;&quot; for no title.</td>
</tr>
<tr>
<td>col_trans</td>
<td>For a numeric variable, a transformation object (e.g. &quot;log10&quot;, &quot;sqrt&quot; or &quot;reverse&quot;).</td>
</tr>
<tr>
<td>facet_labels</td>
<td>A function that takes the breaks as inputs (e.g. scales::label_comma()), or a named vector of labels (e.g. c(&quot;value&quot; = &quot;label&quot;, ...)).</td>
</tr>
<tr>
<td>facet_ncol</td>
<td>The number of columns of facets. Only applies to a facet layout of &quot;wrap&quot;.</td>
</tr>
</tbody>
</table>
### gg_jitter

<table>
<thead>
<tr>
<th>Facet Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>facet_nrow</td>
<td>The number of rows of facets. Only applies to a facet layout of &quot;wrap&quot;.</td>
</tr>
<tr>
<td>facet_scales</td>
<td>Whether facet scales should be &quot;fixed&quot; across facets, &quot;free&quot; in both directions, or free in just one direction (i.e. &quot;free_x&quot; or &quot;free_y&quot;). Defaults to &quot;fixed&quot;.</td>
</tr>
<tr>
<td>facet_space</td>
<td>Whether facet space should be &quot;fixed&quot; across facets, &quot;free&quot; to be proportional in both directions, or free to be proportional in just one direction (i.e. &quot;free_x&quot; or &quot;free_y&quot;). Defaults to &quot;fixed&quot;. Only applies where the facet layout is &quot;grid&quot; and facet scales are not &quot;fixed&quot;.</td>
</tr>
<tr>
<td>facet_layout</td>
<td>Whether the layout is to be &quot;wrap&quot; or &quot;grid&quot;. If NULL and a single facet (or facet2) argument is provided, then defaults to &quot;wrap&quot;. If NULL and both facet and facet2 arguments are provided, defaults to &quot;grid&quot;.</td>
</tr>
<tr>
<td>caption</td>
<td>Caption title string.</td>
</tr>
<tr>
<td>titles</td>
<td>A function to format the x, y and col titles. Defaults to snakecase::to_sentence_case.</td>
</tr>
<tr>
<td>theme</td>
<td>A ggplot2 theme.</td>
</tr>
<tr>
<td>void</td>
<td>TRUE or FALSE of whether to remove axis lines, ticks and x and y titles and labels.</td>
</tr>
</tbody>
</table>

### Value

A ggplot object.

### Examples

```r
library(dplyr)
library(palmerpenguins)
penguins |> tidyr::drop_na(sex) |> gg_histogram(
  x = flipper_length_mm,
  col = sex,
  facet = species,
  bins = 50,
  pal = c("#1B9E77", "#9E361B"),
  col_labels = stringr::str_to_sentence
)
```

---

### Description

Create a jitter ggplot with a wrapper around the ggplot2::geom_jitter function.
Usage

```
gg_jitter(
  data = NULL,
  x = NULL,
  y = NULL,
  col = NULL,
  facet = NULL,
  facet2 = NULL,
  group = NULL,
  stat = "identity",
  position = "jitter",
  coord = ggplot2::coord_cartesian(clip = "off"),
  pal = NULL,
  pal_na = pal_grey,
  alpha = 1,
  ..., 
  title = NULL,
  subtitle = NULL,
  x_breaks = NULL,
  x_expand = NULL,
  x_grid = NULL,
  x_include = NULL,
  x_labels = NULL,
  x_limits = NULL,
  x_oob = scales::oob_censor,
  x_sec_axis = ggplot2::waiver(),
  x_title = NULL,
  x_trans = "identity",
  y_breaks = NULL,
  y_expand = NULL,
  y_grid = NULL,
  y_include = NULL,
  y_labels = NULL,
  y_limits = NULL,
  y_oob = scales::oob_censor,
  y_sec_axis = ggplot2::waiver(),
  y_title = NULL,
  y_trans = "identity",
  col_breaks = NULL,
  col_continuous = "gradient",
  col_include = NULL,
  col_labels = NULL,
  col_legend_place = NULL,
  col_legend_ncol = NULL,
  col_legend_nrow = NULL,
  col_legend_rev = FALSE,
  col_limits = NULL,
  col_oob = scales::oob_censor,
)```
gg_jitter

```r
col_rescale = NULL,
col_title = NULL,
col_trans = "identity",
facet_labels = NULL,
facet_ncol = NULL,
facet_nrow = NULL,
facet_scales = "fixed",
facet_space = "fixed",
facet_layout = NULL,
caption = NULL,
titles = snakecase::to_sentence_case,
theme = gg_theme(),
void = FALSE
```

**Arguments**

- `data` A data frame or tibble.
- `x` Unquoted x aesthetic variable.
- `y` Unquoted y aesthetic variable.
- `col` Unquoted col and fill aesthetic variable.
- `facet` Unquoted facet aesthetic variable.
- `facet2` Unquoted second facet variable.
- `group` Unquoted group aesthetic variable.
- `stat` Statistical transformation. A character string (e.g. "identity").
- `position` Position adjustment. Either a character string (e.g. "identity"), or a function (e.g. ggplot2::position_identity()).
- `coord` A coordinate function from ggplot2 (e.g. ggplot2::coord_cartesian()).
- `pal` Colours to use. A character vector of hex codes (or names).
- `pal_na` Colour to use for NA values. A character vector of a hex code (or name).
- `alpha` Opacity. A number between 0 and 1.
- `...` Other arguments passed to the ggplot2::geom_jitter function.
- `title` Title string.
- `subtitle` Subtitle string.
- `x_breaks` A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
- `x_expand` Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).
- `x_grid` TRUE or FALSE for vertical x gridlines. NULL guesses based on the classes of the x and y.
- `x_include` For a numeric or date variable, any values that the scale should include (e.g. 0).
- `x_labels` A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.
<table>
<thead>
<tr>
<th>Variable</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>x_limits</td>
<td>A vector of length 2 to determine the limits of the axis.</td>
</tr>
<tr>
<td>x_oob</td>
<td>A scales::oob_* function that handles values outside of limits for continuous scales. Defaults to scales::oob_censor.</td>
</tr>
<tr>
<td>x_sec_axis</td>
<td>A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.</td>
</tr>
<tr>
<td>x_title</td>
<td>Axis title string. Defaults to converting to sentence case with spaces. Use &quot;&quot; for no title.</td>
</tr>
<tr>
<td>x_trans</td>
<td>For a numeric variable, a transformation object (e.g. &quot;log10&quot;, &quot;sqrt&quot; or &quot;reverse&quot;).</td>
</tr>
<tr>
<td>y_breaks</td>
<td>A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.</td>
</tr>
<tr>
<td>y_expand</td>
<td>Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).</td>
</tr>
<tr>
<td>y_grid</td>
<td>TRUE or FALSE of horizontal y gridlines. NULL guesses based on the classes of the x and y.</td>
</tr>
<tr>
<td>y_include</td>
<td>For a numeric or date variable, any values that the scale should include (e.g. 0).</td>
</tr>
<tr>
<td>y_labels</td>
<td>A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.</td>
</tr>
<tr>
<td>y_limits</td>
<td>A vector of length 2 to determine the limits of the axis.</td>
</tr>
<tr>
<td>y_oob</td>
<td>A scales::oob_* function that handles values outside of limits for continuous scales. Defaults to scales::oob_censor.</td>
</tr>
<tr>
<td>y_sec_axis</td>
<td>A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.</td>
</tr>
<tr>
<td>y_title</td>
<td>Axis title string. Defaults to converting to sentence case with spaces. Use &quot;&quot; for no title.</td>
</tr>
<tr>
<td>y_trans</td>
<td>For a numeric variable, a transformation object (e.g. &quot;log10&quot;, &quot;sqrt&quot; or &quot;reverse&quot;).</td>
</tr>
<tr>
<td>col_breaks</td>
<td>A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.</td>
</tr>
<tr>
<td>col_continuous</td>
<td>Type of colouring for a continuous variable. Either &quot;gradient&quot; or &quot;steps&quot;. Defaults to &quot;steps&quot; - or just the first letter of these e.g. &quot;g&quot;.</td>
</tr>
<tr>
<td>col_include</td>
<td>For a numeric or date variable, any values that the scale should include (e.g. 0).</td>
</tr>
<tr>
<td>col_labels</td>
<td>A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels. Note this does not affect where col_intervals is not NULL.</td>
</tr>
<tr>
<td>col_legend_place</td>
<td>The place for the legend. Either &quot;bottom&quot;, &quot;right&quot;, &quot;top&quot; or &quot;left&quot; - or just the first letter of these e.g. &quot;b&quot;.</td>
</tr>
<tr>
<td>col_legend_ncol</td>
<td>The number of columns for the legend elements.</td>
</tr>
<tr>
<td>col_legend_nrow</td>
<td>The number of rows for the legend elements.</td>
</tr>
<tr>
<td>col_legend_rev</td>
<td>Reverse the elements of the legend. Defaults to FALSE.</td>
</tr>
<tr>
<td>col_limits</td>
<td>A vector to determine the limits of the colour scale.</td>
</tr>
<tr>
<td>col_oob</td>
<td>A scales::oob_* function that handles values outside of limits for continuous scales. Defaults to scales::oob_censor.</td>
</tr>
</tbody>
</table>
**gg_jitter**

- **col_rescale** For a continuous col variable, a vector to rescale the pal non-linearly.
- **col_title** Legend title string. Defaults to converting to sentence case with spaces. Use "" for no title.
- **col_trans** For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
- **facet_labels** A function that takes the breaks as inputs (e.g. scales::label_comma()), or a named vector of labels (e.g. c("value" = "label", ...)).
- **facet_ncol** The number of columns of facets. Only applies to a facet layout of "wrap".
- **facet_nrow** The number of rows of facets. Only applies to a facet layout of "wrap".
- **facet_scales** Whether facet scales should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".
- **facet_space** Whether facet space should be "fixed" across facets, "free" to be proportional in both directions, or free to be proportional in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed". Only applies where the facet layout is "grid" and facet scales are not "fixed".
- **facet_layout** Whether the layout is to be "wrap" or "grid". If NULL and a single facet (or facet2) argument is provided, then defaults to "wrap". If NULL and both facet and facet2 arguments are provided, defaults to "grid".

- **caption** Caption title string.
- **titles** A function to format the x, y and col titles. Defaults to snakecase::to_sentence_case.
- **theme** A ggplot2 theme.
- **void** TRUE or FALSE of whether to remove axis lines, ticks and x and y titles and labels.

**Value**

A ggplot object.

**Examples**

```r
library(palmerpenguins)
penguins |>
gg_jitter(
  x = species,
  y = body_mass_g,
  col = flipper_length_mm,
  col_continuous = "steps",
  y_include = 0,
  position = ggplot2::position_jitter(height = 0)
)
```
gg_label

Description

Create a label ggplot with a wrapper around the ggplot2::geom_label function.

Usage

```r
gg_label(
  data = NULL,
  x = NULL,
  y = NULL,
  col = NULL,
  facet = NULL,
  facet2 = NULL,
  group = NULL,
  label = NULL,
  stat = "identity",
  position = "identity",
  coord = ggplot2::coord_cartesian(clip = "off"),
  pal = NULL,
  pal_na = pal_grey,
  alpha = 0,
  ...
  title = NULL,
  subtitle = NULL,
  x_breaks = NULL,
  x_expand = NULL,
  x_grid = NULL,
  x_include = NULL,
  x_labels = NULL,
  x_limits = NULL,
  x_oob = scales::oob_censor,
  x_sec_axis = ggplot2::waiver(),
  x_title = NULL,
  x_trans = "identity",
  y_breaks = NULL,
  y_expand = NULL,
  y_grid = NULL,
  y_include = NULL,
  y_labels = NULL,
  y_limits = NULL,
  y_oob = scales::oob_censor,
  y_sec_axis = ggplot2::waiver(),
  y_title = NULL,
  y_trans = "identity",
)"
gg_label

```r

Arguments

data        A data frame or tibble.
x           Unquoted x aesthetic variable.
y           Unquoted y aesthetic variable.
col         Unquoted col and fill aesthetic variable.
facet       Unquoted facet aesthetic variable.
facet2      Unquoted second facet variable.
group       Unquoted group aesthetic variable.
label       Unquoted label aesthetic variable.
stat        Statistical transformation. A character string (e.g. "identity").
position    Position adjustment. Either a character string (e.g."identity"), or a function (e.g. ggplot2::position_identity()).
coord       A coordinate function from ggplot2 (e.g. ggplot2::coord_cartesian()).
pal         Colours to use. A character vector of hex codes (or names).
pal_na      Colour to use for NA values. A character vector of a hex code (or name).
alpha       Opacity. A number between 0 and 1.
...         Other arguments passed to the ggplot2::geom_label function.
title       Title string.
```

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>subtitle</td>
<td>Subtitle string.</td>
</tr>
<tr>
<td>x_breaks</td>
<td>A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.</td>
</tr>
<tr>
<td>x_expand</td>
<td>Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).</td>
</tr>
<tr>
<td>x_grid</td>
<td>TRUE or FALSE for vertical x gridlines. NULL guesses based on the classes of the x and y.</td>
</tr>
<tr>
<td>x_include</td>
<td>For a numeric or date variable, any values that the scale should include (e.g. 0).</td>
</tr>
<tr>
<td>x_labels</td>
<td>A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.</td>
</tr>
<tr>
<td>x_limits</td>
<td>A vector of length 2 to determine the limits of the axis.</td>
</tr>
<tr>
<td>x_oob</td>
<td>A scales::oob_* function that handles values outside of limits for continuous scales. Defaults to scales::oob_censor.</td>
</tr>
<tr>
<td>x_sec_axis</td>
<td>A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.</td>
</tr>
<tr>
<td>x_title</td>
<td>Axis title string. Defaults to converting to sentence case with spaces. Use &quot;&quot; for no title.</td>
</tr>
<tr>
<td>x_trans</td>
<td>For a numeric variable, a transformation object (e.g. &quot;log10&quot;, &quot;sqrt&quot; or &quot;re-verse&quot;).</td>
</tr>
<tr>
<td>y_breaks</td>
<td>A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.</td>
</tr>
<tr>
<td>y_expand</td>
<td>Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).</td>
</tr>
<tr>
<td>y_grid</td>
<td>TRUE or FALSE of horizontal y gridlines. NULL guesses based on the classes of the x and y.</td>
</tr>
<tr>
<td>y_include</td>
<td>For a numeric or date variable, any values that the scale should include (e.g. 0).</td>
</tr>
<tr>
<td>y_labels</td>
<td>A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.</td>
</tr>
<tr>
<td>y_limits</td>
<td>A vector of length 2 to determine the limits of the axis.</td>
</tr>
<tr>
<td>y_oob</td>
<td>A scales::oob_* function that handles values outside of limits for continuous scales. Defaults to scales::oob_censor.</td>
</tr>
<tr>
<td>y_sec_axis</td>
<td>A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.</td>
</tr>
<tr>
<td>y_title</td>
<td>Axis title string. Defaults to converting to sentence case with spaces. Use &quot;&quot; for no title.</td>
</tr>
<tr>
<td>y_trans</td>
<td>For a numeric variable, a transformation object (e.g. &quot;log10&quot;, &quot;sqrt&quot; or &quot;re-verse&quot;).</td>
</tr>
<tr>
<td>col_breaks</td>
<td>A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.</td>
</tr>
<tr>
<td>col_continuous</td>
<td>Type of colouring for a continuous variable. Either &quot;gradient&quot; or &quot;steps&quot;. Defaults to &quot;steps&quot; - or just the first letter of these e.g. &quot;g&quot;.</td>
</tr>
<tr>
<td>col_include</td>
<td>For a numeric or date variable, any values that the scale should include (e.g. 0).</td>
</tr>
<tr>
<td>col_labels</td>
<td>A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels. Note this does not affect where col_intervals is not NULL.</td>
</tr>
<tr>
<td>col_legend_place</td>
<td>The place for the legend. Either &quot;bottom&quot;, &quot;right&quot;, &quot;top&quot; or &quot;left&quot; - or just the first letter of these e.g. &quot;b&quot;.</td>
</tr>
</tbody>
</table>
col_legend_ncol

The number of columns for the legend elements.

col_legend_nrow

The number of rows for the legend elements.

col_legend_rev

Reverse the elements of the legend. Defaults to FALSE.

col_limits

A vector to determine the limits of the colour scale.

col_oob

A scales::oob_* function that handles values outside of limits for continuous scales. Defaults to scales::oob_censor.

col_rescale

For a continuous col variable, a vector to rescale the pal non-linearly.

col_title

Legend title string. Defaults to converting to sentence case with spaces. Use "" for no title.

col_trans

For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").

facet_labels

A function that takes the breaks as inputs (e.g. scales::label_comma()), or a named vector of labels (e.g. c("value" = "label", ...)).

facet_ncol

The number of columns of facets. Only applies to a facet layout of "wrap".

facet_nrow

The number of rows of facets. Only applies to a facet layout of "wrap".

facet_scales

Whether facet scales should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".

facet_space

Whether facet space should be "fixed" across facets, "free" to be proportional in both directions, or free to be proportional in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed". Only applies where the facet layout is "grid" and facet scales are not "fixed".

facet_layout

Whether the layout is to be "wrap" or "grid". If NULL and a single facet (or facet2) argument is provided, then defaults to "wrap". If NULL and both facet and facet2 arguments are provided, defaults to "grid".

caption

Caption title string.

titles

A function to format the x, y and col titles. Defaults to snakecase::to_sentence_case.

theme

A ggplot2 theme.

void

TRUE or FALSE of whether to remove axis lines, ticks and x and y titles and labels.

Value

A ggplot object.

Examples

library(dplyr)

bind_rows(
    mtcars %>% slice_min(order_by = mpg),
    mtcars %>% slice_max(order_by = mpg)
) %>%
tibble::rownames_to_column(var = "model") %>%
gg_line

Description

Create a line ggplot with a wrapper around the ggplot2::geom_line function.

Usage

```
gg_line(
  data = NULL,
  x = NULL,
  y = NULL,
  col = NULL,
  facet = NULL,
  facet2 = NULL,
  group = NULL,
  stat = "identity",
  position = "identity",
  coord = ggplot2::coord_cartesian(clip = "off"),
  pal = NULL,
  pal_na = pal_grey,
  alpha = 1,
  ...
)
```
Arguments

- **data**
  A data frame or tibble.
- **x**
  Unquoted x aesthetic variable.
- **y**
  Unquoted y aesthetic variable.
- **col**
  Unquoted col and fill aesthetic variable.
- **facet**
  Unquoted facet aesthetic variable.
- **facet2**
  Unquoted second facet variable.
- **group**
  Unquoted group aesthetic variable.
- **stat**
  Statistical transformation. A character string (e.g. "identity").
- **position**
  Position adjustment. Either a character string (e.g. "identity"), or a function (e.g. `ggplot2::position_identity()`).
<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>coord</td>
<td>A coordinate function from ggplot2 (e.g. ggplot2::coord_cartesian()).</td>
</tr>
<tr>
<td>pal</td>
<td>Colours to use. A character vector of hex codes (or names).</td>
</tr>
<tr>
<td>pal_na</td>
<td>Colour to use for NA values. A character vector of a hex code (or name).</td>
</tr>
<tr>
<td>alpha</td>
<td>Opacity. A number between 0 and 1.</td>
</tr>
<tr>
<td>title</td>
<td>Title string.</td>
</tr>
<tr>
<td>subtitle</td>
<td>Subtitle string.</td>
</tr>
<tr>
<td>x_breaks</td>
<td>A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.</td>
</tr>
<tr>
<td>x_expand</td>
<td>Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).</td>
</tr>
<tr>
<td>x_grid</td>
<td>TRUE or FALSE for vertical x gridlines. NULL guesses based on the classes of the x and y.</td>
</tr>
<tr>
<td>x_include</td>
<td>For a numeric or date variable, any values that the scale should include (e.g. 0).</td>
</tr>
<tr>
<td>x_labels</td>
<td>A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.</td>
</tr>
<tr>
<td>x_limits</td>
<td>A vector of length 2 to determine the limits of the axis.</td>
</tr>
<tr>
<td>x_oob</td>
<td>A scales::oob_* function that handles values outside of limits for continuous scales. Defaults to scales::oob_censor.</td>
</tr>
<tr>
<td>x_sec_axis</td>
<td>A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.</td>
</tr>
<tr>
<td>x_title</td>
<td>Axis title string. Defaults to converting to sentence case with spaces. Use &quot;&quot; for no title.</td>
</tr>
<tr>
<td>x_trans</td>
<td>For a numeric variable, a transformation object (e.g. &quot;log10&quot;, &quot;sqrt&quot; or &quot;reverse&quot;).</td>
</tr>
<tr>
<td>y_breaks</td>
<td>A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.</td>
</tr>
<tr>
<td>y_expand</td>
<td>Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).</td>
</tr>
<tr>
<td>y_grid</td>
<td>TRUE or FALSE of horizontal y gridlines. NULL guesses based on the classes of the x and y.</td>
</tr>
<tr>
<td>y_include</td>
<td>For a numeric or date variable, any values that the scale should include (e.g. 0).</td>
</tr>
<tr>
<td>y_labels</td>
<td>A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.</td>
</tr>
<tr>
<td>y_limits</td>
<td>A vector of length 2 to determine the limits of the axis.</td>
</tr>
<tr>
<td>y_oob</td>
<td>A scales::oob_* function that handles values outside of limits for continuous scales. Defaults to scales::oob_censor.</td>
</tr>
<tr>
<td>y_sec_axis</td>
<td>A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.</td>
</tr>
<tr>
<td>y_title</td>
<td>Axis title string. Defaults to converting to sentence case with spaces. Use &quot;&quot; for no title.</td>
</tr>
<tr>
<td>y_trans</td>
<td>For a numeric variable, a transformation object (e.g. &quot;log10&quot;, &quot;sqrt&quot; or &quot;reverse&quot;).</td>
</tr>
<tr>
<td>col_breaks</td>
<td>A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.</td>
</tr>
</tbody>
</table>
col_continuous Type of colouring for a continuous variable. Either "gradient" or "steps". Defaults to "steps" - or just the first letter of these e.g. "g".

col_include For a numeric or date variable, any values that the scale should include (e.g. 0).

col_labels A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels. Note this does not affect where col_intervals is not NULL.

col_legend_place The place for the legend. Either "bottom", "right", "top" or "left" - or just the first letter of these e.g. "b".

col_legend_ncol The number of columns for the legend elements.

col_legend_nrow The number of rows for the legend elements.

col_legend_rev Reverse the elements of the legend. Defaults to FALSE.

col_limits A vector to determine the limits of the colour scale.

col_oob A scales::oob_* function that handles values outside of limits for continuous scales. Defaults to scales::oob_censor.

col_rescale For a continuous col variable, a vector to rescale the pal non-linearly.

col_title Legend title string. Defaults to converting to sentence case with spaces. Use "" for no title.

col_trans For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").

facet_labels A function that takes the breaks as inputs (e.g. scales::label_comma()), or a named vector of labels (e.g. c("value" = "label", ...)).

facet_ncol The number of columns of facets. Only applies to a facet layout of "wrap".

facet_nrow The number of rows of facets. Only applies to a facet layout of "wrap".

facet_scales Whether facet scales should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".

facet_space Whether facet space should be "fixed" across facets, "free" to be proportional in both directions, or free to be proportional in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed". Only applies where the facet layout is "grid" and facet scales are not "fixed".

facet_layout Whether the layout is to be "wrap" or "grid". If NULL and a single facet (or facet2) argument is provided, then defaults to "wrap". If NULL and both facet and facet2 arguments are provided, defaults to "grid".

caption Caption title string.

titles A function to format the x, y and col titles. Defaults to snakecase::to_sentence_case.

theme A ggplot2 theme.

void TRUE or FALSE of whether to remove axis lines, ticks and x and y titles and labels.

Value

A ggplot object.
Examples

```r
ggplot2::economics |> gg_line(
  x = date,
  y = unemploy,
  y_title = "Unemployment",
  pal = "#9E361B"
)
```

---

### gg_linerange

**Linerange ggplot**

**Description**

Create a linerange ggplot with a wrapper around the `ggplot2::geom_linerange` function.

**Usage**

```r
gg_linerange(
  data = NULL,
  x = NULL,
  xmin = NULL,
  xmax = NULL,
  y = NULL,
  ymin = NULL,
  ymax = NULL,
  col = NULL,
  facet = NULL,
  facet2 = NULL,
  group = NULL,
  stat = "identity",
  position = "identity",
  coord = ggplot2::coord_cartesian(clip = "off"),
  pal = NULL,
  pal_na = pal_grey,
  alpha = 1,
  ...,
  title = NULL,
  subtitle = NULL,
  x_breaks = NULL,
  x_expand = NULL,
  x_grid = NULL,
  x_include = NULL,
  x_labels = NULL,
  x_limits = NULL,
  x_oob = scales::oob_censor,
)```
Arguments

data A data frame or tibble.
x Unquoted x aesthetic variable.
xmin Unquoted xmin aesthetic variable.
xmax Unquoted xmax aesthetic variable.
y Unquoted y aesthetic variable.
ymin Unquoted ymin aesthetic variable.
ymax Unquoted ymax aesthetic variable.
<table>
<thead>
<tr>
<th>Argument</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>col</strong></td>
<td>Unquoted col and fill aesthetic variable.</td>
</tr>
<tr>
<td><strong>facet</strong></td>
<td>Unquoted facet aesthetic variable.</td>
</tr>
<tr>
<td><strong>facet2</strong></td>
<td>Unquoted second facet variable.</td>
</tr>
<tr>
<td><strong>group</strong></td>
<td>Unquoted group aesthetic variable.</td>
</tr>
<tr>
<td><strong>stat</strong></td>
<td>Statistical transformation. A character string (e.g. &quot;identity&quot;).</td>
</tr>
<tr>
<td><strong>position</strong></td>
<td>Position adjustment. Either a character string (e.g.&quot;identity&quot;), or a function (e.g. ggplot2::position_identity()).</td>
</tr>
<tr>
<td><strong>coord</strong></td>
<td>A coordinate function from ggplot2 (e.g. ggplot2::coord_cartesian()).</td>
</tr>
<tr>
<td><strong>pal</strong></td>
<td>Colours to use. A character vector of hex codes (or names).</td>
</tr>
<tr>
<td><strong>pal_na</strong></td>
<td>Colour to use for NA values. A character vector of a hex code (or name).</td>
</tr>
<tr>
<td><strong>alpha</strong></td>
<td>Opacity. A number between 0 and 1.</td>
</tr>
<tr>
<td><strong>...</strong></td>
<td>Other arguments passed to the ggplot2::geom_linerange function.</td>
</tr>
<tr>
<td><strong>title</strong></td>
<td>Title string.</td>
</tr>
<tr>
<td><strong>subtitle</strong></td>
<td>Subtitle string.</td>
</tr>
<tr>
<td><strong>x_breaks</strong></td>
<td>A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.</td>
</tr>
<tr>
<td><strong>x_expand</strong></td>
<td>Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).</td>
</tr>
<tr>
<td><strong>x_grid</strong></td>
<td>TRUE or FALSE for vertical x gridlines. NULL guesses based on the classes of the x and y.</td>
</tr>
<tr>
<td><strong>x_include</strong></td>
<td>For a numeric or date variable, any values that the scale should include (e.g. 0).</td>
</tr>
<tr>
<td><strong>x_labels</strong></td>
<td>A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.</td>
</tr>
<tr>
<td><strong>x_limits</strong></td>
<td>A vector of length 2 to determine the limits of the axis.</td>
</tr>
<tr>
<td><strong>x_oob</strong></td>
<td>A scales::oob_* function that handles values outside of limits for continuous scales. Defaults to scales::oob_censor.</td>
</tr>
<tr>
<td><strong>x_sec_axis</strong></td>
<td>A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.</td>
</tr>
<tr>
<td><strong>x_title</strong></td>
<td>Axis title string. Defaults to converting to sentence case with spaces. Use &quot;&quot; for no title.</td>
</tr>
<tr>
<td><strong>x_trans</strong></td>
<td>For a numeric variable, a transformation object (e.g. &quot;log10&quot;, &quot;sqrt&quot; or &quot;reverse&quot;).</td>
</tr>
<tr>
<td><strong>y_breaks</strong></td>
<td>A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.</td>
</tr>
<tr>
<td><strong>y_expand</strong></td>
<td>Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).</td>
</tr>
<tr>
<td><strong>y_grid</strong></td>
<td>TRUE or FALSE of horizontal y gridlines. NULL guesses based on the classes of the x and y.</td>
</tr>
<tr>
<td><strong>y_include</strong></td>
<td>For a numeric or date variable, any values that the scale should include (e.g. 0).</td>
</tr>
<tr>
<td><strong>y_labels</strong></td>
<td>A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.</td>
</tr>
<tr>
<td><strong>y_limits</strong></td>
<td>A vector of length 2 to determine the limits of the axis.</td>
</tr>
</tbody>
</table>
y_oob  A scales::oob_* function that handles values outside of limits for continuous scales. Defaults to scales::oob_censor.
y_sec_axis  A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.
y_title  Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.
y_trans  For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
col_breaks  A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
col_continuous  Type of colouring for a continuous variable. Either "gradient" or "steps". Defaults to "steps" - or just the first letter of these e.g. "g".
col_include  For a numeric or date variable, any values that the scale should include (e.g. 0).
col_labels  A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels. Note this does not affect where col_intervals is not NULL.
col_legend_place  The place for the legend. Either "bottom", "right", "top" or "left" - or just the first letter of these e.g. "b".
col_legend_ncol  The number of columns for the legend elements.
col_legend_nrow  The number of rows for the legend elements.
col_legend_rev  Reverse the elements of the legend. Defaults to FALSE.
col_limits  A vector to determine the limits of the colour scale.
col_oob  A scales::oob_* function that handles values outside of limits for continuous scales. Defaults to scales::oob_censor.
col_rescale  For a continuous col variable, a vector to rescale the pal non-linearly.
col_title  Legend title string. Defaults to converting to sentence case with spaces. Use "" for no title.
col_trans  For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
facet_labels  A function that takes the breaks as inputs (e.g. scales::label_comma()), or a named vector of labels (e.g. c("value" = "label", ...)).
facet_ncol  The number of columns of facets. Only applies to a facet layout of "wrap".
facet_nrow  The number of rows of facets. Only applies to a facet layout of "wrap".
facet_scales  Whether facet scales should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".
facet_space  Whether facet space should be "fixed" across facets, "free" to be proportional in both directions, or free to be proportional in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed". Only applies where the facet layout is "grid" and facet scales are not "fixed".
facet_layout  Whether the layout is to be "wrap" or "grid". If NULL and a single facet (or facet2) argument is provided, then defaults to "wrap". If NULL and both facet and facet2 arguments are provided, defaults to "grid".
caption  
Content title string.

titles  
A function to format the x, y and col titles. Defaults to snakecase::to_sentence_case.

theme  
A ggplot2 theme.

void  
TRUE or FALSE of whether to remove axis lines, ticks and x and y titles and labels.

Value  
A ggplot object.

Examples  

data.frame(  
  trt = factor(c(1, 1, 2, 2)),  
  resp = c(1, 5, 3, 4),  
  group = factor(c(1, 2, 1, 2)),  
  upper = c(1.1, 5.3, 3.3, 4.2),  
  lower = c(0.8, 4.6, 2.4, 3.6)  
) |>

  gg_linerange(  
    x = trt,  
    ymin = lower,  
    ymax = upper,  
    col = group,  
    position = ggplot2::position_dodge(width = 0.2),  
    x_title = "Treatment",  
    y_title = "Response"  
  )

Description  
Create a path ggplot with a wrapper around the ggplot2::geom_path function.

Usage  

gg_path(  
  data = NULL,  
  x = NULL,  
  y = NULL,  
  col = NULL,  
  facet = NULL,  
  facet2 = NULL,  
  group = NULL,  
  stat = "identity",  
)
position = "identity",
coord = ggplot2::coord_cartesian(clip = "off"),
pal = NULL,
pal_na = pal_grey,
alpha = 1,
...

title = NULL,
subtitle = NULL,
x_breaks = NULL,
x_expand = NULL,
x_grid = NULL,
x_include = NULL,
x_labels = NULL,
x_limits = NULL,
x_oob = scales::oob_censor,
x_sec_axis = ggplot2::waiver(),
x_title = NULL,
x_trans = "identity",
y_breaks = NULL,
y_expand = NULL,
y_grid = NULL,
y_include = NULL,
y_labels = NULL,
y_limits = NULL,
y_oob = scales::oob_censor,
y_sec_axis = ggplot2::waiver(),
y_title = NULL,
y_trans = "identity",
col_breaks = NULL,
col_continuous = "gradient",
col_include = NULL,
col_labels = NULL,
col_legend_place = NULL,
col_legend_ncol = NULL,
col_legend_nrow = NULL,
col_legend_rev = FALSE,
col_limits = NULL,
col_oob = scales::oob_censor,
col_rescale = NULL,
col_title = NULL,
col_trans = "identity",
facet_labels = NULL,
facet_ncol = NULL,
facet_nrow = NULL,
facet_scales = "fixed",
facet_space = "fixed",
facet_layout = NULL,
caption = NULL,
titles = snakecase::to_sentence_case,
theme = gg_theme(),
void = FALSE
)

Arguments

data A data frame or tibble.
x Unquoted x aesthetic variable.
y Unquoted y aesthetic variable.
col Unquoted col and fill aesthetic variable.
facet Unquoted facet aesthetic variable.
facet2 Unquoted second facet variable.
group Unquoted group aesthetic variable.
stat Statistical transformation. A character string (e.g. "identity").
position Position adjustment. Either a character string (e.g. "identity"), or a function (e.g. ggplot2::position_identity()).
coord A coordinate function from ggplot2 (e.g. ggplot2::coord_cartesian()).
pal Colours to use. A character vector of hex codes (or names).
pal_na Colour to use for NA values. A character vector of a hex code (or name).
alpha Opacity. A number between 0 and 1.
... Other arguments passed to the ggplot2::geom_path function.
title Title string.
subtitle Subtitle string.
x_breaks A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
x_expand Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).
x_grid TRUE or FALSE for vertical x gridlines. NULL guesses based on the classes of the x and y.
x_include For a numeric or date variable, any values that the scale should include (e.g. 0).
x_labels A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.
x_limits A vector of length 2 to determine the limits of the axis.
x_oob A scales::oob_* function that handles values outside of limits for continuous scales. Defaults to scales::oob_censor.
x_sec_axis A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.
x_title Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.
x_trans For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
y_breaks A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).

TRUE or FALSE of horizontal y gridlines. NULL guesses based on the classes of the x and y.

For a numeric or date variable, any values that the scale should include (e.g. 0).

A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.

A vector of length 2 to determine the limits of the axis.

A scales::oob_* function that handles values outside of limits for continuous scales. Defaults to scales::oob_censor.

A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.

Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.

For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").

A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.

Type of colouring for a continuous variable. Either "gradient" or "steps". Defaults to "steps" - or just the first letter of these e.g. "g".

For a numeric or date variable, any values that the scale should include (e.g. 0).

A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels. Note this does not affect where col_intervals is not NULL.

The place for the legend. Either "bottom", "right", "top" or "left" - or just the first letter of these e.g. "b".

The number of columns for the legend elements.

The number of rows for the legend elements.

Reverse the elements of the legend. Defaults to FALSE.

A vector to determine the limits of the colour scale.

A scales::oob_* function that handles values outside of limits for continuous scales. Defaults to scales::oob_censor.

For a continuous col variable, a vector to rescale the pal non-linearly.

Legend title string. Defaults to converting to sentence case with spaces. Use "" for no title.

For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").

A function that takes the breaks as inputs (e.g. scales::label_comma()), or a named vector of labels (e.g. c("value" = "label", ...)).

The number of columns of facets. Only applies to a facet layout of "wrap".

The number of rows of facets. Only applies to a facet layout of "wrap".
facet_scales  Whether facet scales should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".

facet_space  Whether facet space should be "fixed" across facets, "free" to be proportional in both directions, or free to be proportional in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed". Only applies where the facet layout is "grid" and facet scales are not "fixed".

facet_layout  Whether the layout is to be "wrap" or "grid". If NULL and a single facet (or facet2) argument is provided, then defaults to "wrap". If NULL and both facet and facet2 arguments are provided, defaults to "grid".

caption  Caption title string.

titles  A function to format the x, y and col titles. Defaults to snakecase::to_sentence_case.

theme  A ggplot2 theme.

void  TRUE or FALSE of whether to remove axis lines, ticks and x and y titles and labels.

Value

A ggplot object.

Examples

library(dplyr)

ggplot2::economics %>%
  mutate(unemploy_rate = unemploy / pop) %>%
  gg_path(
    x = unemploy_rate,
    y = psavert,
    x_title = "Unemployment rate",
    y_title = "Personal savings rate"
  )

---

gg_point  Point ggplot

Description

Create a point ggplot with a wrapper around the ggplot2::geom_point function.

Usage

gg_point(
  data = NULL,
  x = NULL,
  y = NULL,
)
gg_point

col = NULL,
facet = NULL,
facet2 = NULL,
group = NULL,
stat = "identity",
position = "identity",
coord = ggplot2::coord_cartesian(clip = "off"),
pal = NULL,
pal_na = pal_grey,
alpha = 1,
...
title = NULL,
subtitle = NULL,
x_breaks = NULL,
x_expand = NULL,
x_grid = NULL,
x_include = NULL,
x_labels = NULL,
x_limits = NULL,
x_oob = scales::oob_censor,
x_sec_axis = ggplot2::waiver(),
x_title = NULL,
x_trans = "identity",
y_breaks = NULL,
y_expand = NULL,
y_grid = NULL,
y_include = NULL,
y_labels = NULL,
y_limits = NULL,
y_oob = scales::oob_censor,
y_sec_axis = ggplot2::waiver(),
y_title = NULL,
y_trans = "identity",
col_breaks = NULL,
col_continuous = "gradient",
col_include = NULL,
col_labels = NULL,
col_legend_place = NULL,
col_legend_ncol = NULL,
col_legend_nrow = NULL,
col_legend_rev = FALSE,
col_limits = NULL,
col_oob = scales::oob_censor,
col_rescale = NULL,
col_title = NULL,
col_trans = "identity",
facet_labels = NULL,
facet_ncol = NULL,
facet_nrow = NULL,
facet_scales = "fixed",
facet_space = "fixed",
facet_layout = NULL,
caption = NULL,
titles = snakecase::to_sentence_case,
theme = gg_theme(),
void = FALSE
)

Arguments

data A data frame or tibble.
x Unquoted x aesthetic variable.
y Unquoted y aesthetic variable.
col Unquoted col and fill aesthetic variable.
facet Unquoted facet aesthetic variable.
facet2 Unquoted second facet variable.
group Unquoted group aesthetic variable.
stat Statistical transformation. A character string (e.g. "identity").
position Position adjustment. Either a character string (e.g. "identity"), or a function (e.g. ggplot2::position_identity()).
coord A coordinate function from ggplot2 (e.g. ggplot2::coord_cartesian()).
pal Colours to use. A character vector of hex codes (or names).
pal_na Colour to use for NA values. A character vector of a hex code (or name).
alpha Opacity. A number between 0 and 1.
... Other arguments passed to the ggplot2::geom_point function.
title Title string.
subtitle Subtitle string.
x_breaks A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
x_expand Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).
x_grid TRUE or FALSE for vertical x gridlines. NULL guesses based on the classes of the x and y.
x_include For a numeric or date variable, any values that the scale should include (e.g. 0).
x_labels A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.
x_limits A vector of length 2 to determine the limits of the axis.
x_oob A scales::oob_* function that handles values outside of limits for continuous scales. Defaults to scales::oob_censor.
x_sec_axis A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.
<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>x_title</code></td>
<td>Axis title string. Defaults to converting to sentence case with spaces. Use &quot;&quot; for no title.</td>
</tr>
<tr>
<td><code>x_trans</code></td>
<td>For a numeric variable, a transformation object (e.g. &quot;log10&quot;, &quot;sqrt&quot; or &quot;reverse&quot;).</td>
</tr>
<tr>
<td><code>y_breaks</code></td>
<td>A function on the limits (e.g. <code>scales::breaks_pretty()</code>), or a vector of breaks.</td>
</tr>
<tr>
<td><code>y_expand</code></td>
<td>Padding to the limits with the <code>ggplot2::expansion</code> function, or a vector of length 2 (e.g. c(0, 0)).</td>
</tr>
<tr>
<td><code>y_grid</code></td>
<td>TRUE or FALSE of horizontal y gridlines. NULL guesses based on the classes of the x and y.</td>
</tr>
<tr>
<td><code>y_include</code></td>
<td>For a numeric or date variable, any values that the scale should include (e.g. 0).</td>
</tr>
<tr>
<td><code>y_labels</code></td>
<td>A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a vector of labels.</td>
</tr>
<tr>
<td><code>y_limits</code></td>
<td>A vector of length 2 to determine the limits of the axis.</td>
</tr>
<tr>
<td><code>y_oob</code></td>
<td>A <code>scales::oob_*</code> function that handles values outside of limits for continuous scales. Defaults to <code>scales::oob_censor</code>.</td>
</tr>
<tr>
<td><code>y_sec_axis</code></td>
<td>A secondary axis using the <code>ggplot2::sec_axis</code> or <code>ggplot2::dup_axis</code> function.</td>
</tr>
<tr>
<td><code>y_title</code></td>
<td>Axis title string. Defaults to converting to sentence case with spaces. Use &quot;&quot; for no title.</td>
</tr>
<tr>
<td><code>y_trans</code></td>
<td>For a numeric variable, a transformation object (e.g. &quot;log10&quot;, &quot;sqrt&quot; or &quot;reverse&quot;).</td>
</tr>
<tr>
<td><code>col_breaks</code></td>
<td>A function on the limits (e.g. <code>scales::breaks_pretty()</code>), or a vector of breaks.</td>
</tr>
<tr>
<td><code>col_continuous</code></td>
<td>Type of colouring for a continuous variable. Either &quot;gradient&quot; or &quot;steps&quot;. Defaults to &quot;steps&quot; - or just the first letter of these e.g. &quot;g&quot;.</td>
</tr>
<tr>
<td><code>col_include</code></td>
<td>For a numeric or date variable, any values that the scale should include (e.g. 0).</td>
</tr>
<tr>
<td><code>col_labels</code></td>
<td>A function that takes the breaks as inputs (e.g. <code>scales::label_comma()</code>), or a vector of labels. Note this does not affect where <code>col_intervals</code> is not NULL.</td>
</tr>
<tr>
<td><code>col_legend_place</code></td>
<td>The place for the legend. Either &quot;bottom&quot;, &quot;right&quot;, &quot;top&quot; or &quot;left&quot; - or just the first letter of these e.g. &quot;b&quot;.</td>
</tr>
<tr>
<td><code>col_legend_ncol</code></td>
<td>The number of columns for the legend elements.</td>
</tr>
<tr>
<td><code>col_legend_nrow</code></td>
<td>The number of rows for the legend elements.</td>
</tr>
<tr>
<td><code>col_legend_rev</code></td>
<td>Reverse the elements of the legend. Defaults to FALSE.</td>
</tr>
<tr>
<td><code>col_limits</code></td>
<td>A vector to determine the limits of the colour scale.</td>
</tr>
<tr>
<td><code>col_oob</code></td>
<td>A <code>scales::oob_*</code> function that handles values outside of limits for continuous scales. Defaults to <code>scales::oob_censor</code>.</td>
</tr>
<tr>
<td><code>col_rescale</code></td>
<td>For a continuous col variable, a vector to rescale the pal non-linearly.</td>
</tr>
<tr>
<td><code>col_title</code></td>
<td>Legend title string. Defaults to converting to sentence case with spaces. Use &quot;&quot; for no title.</td>
</tr>
<tr>
<td><code>col_trans</code></td>
<td>For a numeric variable, a transformation object (e.g. &quot;log10&quot;, &quot;sqrt&quot; or &quot;reverse&quot;).</td>
</tr>
</tbody>
</table>
facet_labels  
A function that takes the breaks as inputs (e.g. scales::label_comma()), or a named vector of labels (e.g. c("value" = "label", ...)).

facet_ncol  
The number of columns of facets. Only applies to a facet layout of "wrap".

facet_nrow  
The number of rows of facets. Only applies to a facet layout of "wrap".

facet_scales  
Whether facet scales should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".

facet_space  
Whether facet space should be "fixed" across facets, "free" to be proportional in both directions, or free to be proportional in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed". Only applies where the facet layout is "grid" and facet scales are not "fixed".

facet_layout  
Whether the layout is to be "wrap" or "grid". If NULL and a single facet (or facet2) argument is provided, then defaults to "wrap". If NULL and both facet and facet2 arguments are provided, defaults to "grid".

caption  
Caption title string.

titles  
A function to format the x, y and col titles. Defaults to snakecase::to_sentence_case.

theme  
A ggplot2 theme.

void  
TRUE or FALSE of whether to remove axis lines, ticks and x and y titles and labels.

Value  
A ggplot object.

Examples

library(palmerpenguins)
penguins |>
gg_point(
    x = flipper_length_mm,
    y = body_mass_g,
    col = sex,
    facet = species,
    col_labels = stringr::str_to_sentence,
    pal = c("#1B9E77", "#9E361B")
)

---

**gg_pointrange**  
*Pointrange ggplot*

**Description**

Create a pointrange ggplot with a wrapper around the ggplot2::geom_pointrange function.
Usage

gg_pointrange(
    data = NULL,
    x = NULL,
    xmin = NULL,
    xmax = NULL,
    y = NULL,
    ymin = NULL,
    ymax = NULL,
    col = NULL,
    facet = NULL,
    facet2 = NULL,
    group = NULL,
    stat = "identity",
    position = "identity",
    coord = ggplot2::coord_cartesian(clip = "off"),
    pal = NULL,
    pal_na = pal_grey,
    alpha = 1,
    ...
    title = NULL,
    subtitle = NULL,
    x_breaks = NULL,
    x_expand = NULL,
    x_grid = NULL,
    x_include = NULL,
    x_labels = NULL,
    x_limits = NULL,
    x_oob = scales::oob_censor,
    x_sec_axis = ggplot2::waiver(),
    x_title = NULL,
    x_trans = "identity",
    y_breaks = NULL,
    y_expand = NULL,
    y_grid = NULL,
    y_include = NULL,
    y_labels = NULL,
    y_limits = NULL,
    y_oob = scales::oob_censor,
    y_sec_axis = ggplot2::waiver(),
    y_title = NULL,
    y_trans = "identity",
    col_breaks = NULL,
    col_continuous = "gradient",
    col_include = NULL,
    col_labels = NULL,
    col_legend_place = NULL,
    col_legend_ncol = NULL,
Arguments

data A data frame or tibble.
x Unquoted x aesthetic variable.
xmin Unquoted xmin aesthetic variable.
xmax Unquoted xmax aesthetic variable.
y Unquoted y aesthetic variable.
ymin Unquoted ymin aesthetic variable.
ymax Unquoted ymax aesthetic variable.
col Unquoted col and fill aesthetic variable.
facet Unquoted facet aesthetic variable.
facet2 Unquoted second facet variable.
group Unquoted group aesthetic variable.
stat Statistical transformation. A character string (e.g. "identity").
position Position adjustment. Either a character string (e.g. "identity"), or a function (e.g. ggplot2::position_identity()).
coord A coordinate function from ggplot2 (e.g. ggplot2::coord_cartesian()).
pal Colours to use. A character vector of hex codes (or names).
pal_na Colour to use for NA values. A character vector of a hex code (or name).
alpha Opacity. A number between 0 and 1.
... Other arguments passed to the ggplot2::geom_pointrange function.
title Title string.
subtitle Subtitle string.
x_breaks A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).

TRUE or FALSE for vertical x gridlines. NULL guesses based on the classes of the x and y.

For a numeric or date variable, any values that the scale should include (e.g. 0).

A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.

A vector of length 2 to determine the limits of the axis.

A scales::oob_* function that handles values outside of limits for continuous scales. Defaults to scales::oob_censor.

A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.

Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.

For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "re-verse").

A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.

Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).

TRUE or FALSE of horizontal y gridlines. NULL guesses based on the classes of the x and y.

For a numeric or date variable, any values that the scale should include (e.g. 0).

A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.

A vector of length 2 to determine the limits of the axis.

A scales::oob_* function that handles values outside of limits for continuous scales. Defaults to scales::oob_censor.

A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.

Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.

For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "re-verse").

A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.

Type of colouring for a continuous variable. Either "gradient" or "steps". Defaults to "steps" - or just the first letter of these e.g. "g".

For a numeric or date variable, any values that the scale should include (e.g. 0).

A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels. Note this does not affect where col_intervals is not NULL.

The place for the legend. Either "bottom", "right", "top" or "left" - or just the first letter of these e.g. "b".

The number of columns for the legend elements.
col_legend_nrow  The number of rows for the legend elements.
col_legend_rev  Reverse the elements of the legend. Defaults to FALSE.
col_limits  A vector to determine the limits of the colour scale.
col_oob  A scales::oob_* function that handles values outside of limits for continuous scales. Defaults to scales::oob_censor.
col_rescale  For a continuous col variable, a vector to rescale the pal non-linearly.
col_title  Legend title string. Defaults to converting to sentence case with spaces. Use "" for no title.
col_trans  For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
facet_labels  A function that takes the breaks as inputs (e.g. scales::label_comma()), or a named vector of labels (e.g. c("value" = "label", ...)).
facet_ncol  The number of columns of facets. Only applies to a facet layout of "wrap".
facet_nrow  The number of rows of facets. Only applies to a facet layout of "wrap".
facet_scales  Whether facet scales should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".
facet_space  Whether facet space should be "fixed" across facets, "free" to be proportional in both directions, or free to be proportional in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed". Only applies where the facet layout is "grid" and facet scales are not "fixed".
facet_layout  Whether the layout is to be "wrap" or "grid". If NULL and a single facet (or facet2) argument is provided, then defaults to "wrap". If NULL and both facet and facet2 arguments are provided, defaults to "grid".
caption  Caption title string.
titles  A function to format the x, y and col titles. Defaults to snakecase::to_sentence_case.
theme  A ggplot2 theme.
void  TRUE or FALSE of whether to remove axis lines, ticks and x and y titles and labels.

Value

A ggplot object.

Examples

data.frame(
  trt = factor(c(1, 1, 2, 2)),
  resp = c(1, 5, 3, 4),
  group = factor(c(1, 2, 1, 2)),
  upper = c(1.1, 5.3, 3.3, 4.2),
  lower = c(0.8, 4.6, 2.4, 3.6)
) |> 
gg_pointrange(
  x = trt,
gg_polygon

```r
y = resp,
col = group,
ymin = lower,
ymax = upper,
position = ggplot2::position_dodge(width = 0.2),
size = 0.2,
pal = c("#1B9E77", "#9E361B"),
x_title = "Treatment",
y_title = "Response"
)
```

### Description

Create a polygon ggplot with a wrapper around the ggplot2::geom_polygon function.

### Usage

```r
gg_polygon(
  data = NULL,
  x = NULL,
  y = NULL,
  col = NULL,
  facet = NULL,
  facet2 = NULL,
  group = NULL,
  subgroup = NULL,
  stat = "identity",
  position = "identity",
  coord = ggplot2::coord_cartesian(clip = "off"),
  pal = NULL,
  pal_na = pal_grey,
  alpha = 0.9,
  ...
)```

---

**gg_polygon** | **Polygon ggplot**

---

**Description**

Create a polygon ggplot with a wrapper around the ggplot2::geom_polygon function.

**Usage**

```r
gg_polygon(
  data = NULL,
  x = NULL,
  y = NULL,
  col = NULL,
  facet = NULL,
  facet2 = NULL,
  group = NULL,
  subgroup = NULL,
  stat = "identity",
  position = "identity",
  coord = ggplot2::coord_cartesian(clip = "off"),
  pal = NULL,
  pal_na = pal_grey,
  alpha = 0.9,
  ...
)```
Arguments

data  A data frame or tibble.
x     Unquoted x aesthetic variable.
y     Unquoted y aesthetic variable.
col   Unquoted col and fill aesthetic variable.
facet Unquoted facet aesthetic variable.
facet2 Unquoted second facet variable.
group Unquoted group aesthetic variable.
subgroup Unquoted subgroup aesthetic variable.
gg_polygon

stat  Statistical transformation. A character string (e.g. "identity").
position  Position adjustment. Either a character string (e.g. "identity"), or a function (e.g. ggplot2::position_identity()).
coord  A coordinate function from ggplot2 (e.g. ggplot2::coord_cartesian()).
pal  Colours to use. A character vector of hex codes (or names).
pal_na  Colour to use for NA values. A character vector of a hex code (or name).
alpha  Opacity. A number between 0 and 1.
...  Other arguments passed to the ggplot2::geom_polygon function.
title  Title string.
subtitle  Subtitle string.
x_breaks  A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
x_expand  Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).
x_grid  TRUE or FALSE for vertical x gridlines. NULL guesses based on the classes of the x and y.
x_include  For a numeric or date variable, any values that the scale should include (e.g. 0).
x_labels  A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.
x_limits  A vector of length 2 to determine the limits of the axis.
x_oob  A scales::oob_* function that handles values outside of limits for continuous scales. Defaults to scales::oob_censor.
x_sec_axis  A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.
x_title  Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.
x_trans  For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
y_breaks  A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
y_expand  Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).
y_grid  TRUE or FALSE of horizontal y gridlines. NULL guesses based on the classes of the x and y.
y_include  For a numeric or date variable, any values that the scale should include (e.g. 0).
y_labels  A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.
y_limits  A vector of length 2 to determine the limits of the axis.
y_oob  A scales::oob_* function that handles values outside of limits for continuous scales. Defaults to scales::oob_censor.
y_sec_axis  A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.
y_title  Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.
y_trans  For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
col_breaks A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
col_continuous Type of colouring for a continuous variable. Either "gradient" or "steps". Defaults to "steps" - or just the first letter of these e.g. "g".
col_include For a numeric or date variable, any values that the scale should include (e.g. 0).
col_labels A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels. Note this does not affect where col_intervals is not NULL.
col_legend_place The place for the legend. Either "bottom", "right", "top" or "left" - or just the first letter of these e.g. "b".
col_legend_ncol The number of columns for the legend elements.
col_legend_nrow The number of rows for the legend elements.
col_legend_rev Reverse the elements of the legend. Defaults to FALSE.
col_limits A vector to determine the limits of the colour scale.
col_oob A scales::oob_* function that handles values outside of limits for continuous scales. Defaults to scales::oob_censor.
col_rescale For a continuous col variable, a vector to rescale the pal non-linearly.
col_title Legend title string. Defaults to converting to sentence case with spaces. Use "" for no title.
col_trans For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
facet_labels A function that takes the breaks as inputs (e.g. scales::label_comma()), or a named vector of labels (e.g. c("value" = "label", ...)).
facet_ncol The number of columns of facets. Only applies to a facet layout of "wrap".
facet_nrow The number of rows of facets. Only applies to a facet layout of "wrap".
facet_scales Whether facet scales should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".
facet_space Whether facet space should be "fixed" across facets, "free" to be proportional in both directions, or free to be proportional in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed". Only applies where the facet layout is "grid" and facet scales are not "fixed".
facet_layout Whether the layout is to be "wrap" or "grid". If NULL and a single facet (or facet2) argument is provided, then defaults to "wrap". If NULL and both facet and facet2 arguments are provided, defaults to "grid".
caption Caption title string.
titles A function to format the x, y and col titles. Defaults to snakecase::to_sentence_case.
theme A ggplot2 theme.
void TRUE or FALSE of whether to remove axis lines, ticks and x and y titles and labels.
Value

A ggplot object.

Examples

```r
ids <- factor(c("1.1", "2.1", "1.2", "2.2", "1.3", "2.3"))

values <- data.frame(
id = ids,
value = c(3, 3.1, 3.1, 3.2, 3.15, 3.5)
)

positions <- data.frame(
id = rep(ids, each = 4),
x = c(2, 1, 1.1, 2.2, 1, 0, 0.3, 1.1, 2.2, 1.1, 1.2, 2.5, 1.1, 0.3, 0.5, 1.2, 2.5, 1.2, 1.3, 2.7, 1.2, 0.5, 0.6, 1.3),
y = c(-0.5, 0, 1, 0.5, 0, 0.5, 1.5, 1, 0.5, 1, 2.1, 1.7, 1, 1.5, 2.2, 2.1, 1.7, 2.1, 3.2, 2.8, 2.1, 2.2, 3.3, 3.2)
)

datapoly <- merge(values, positions, by = c("id"))

datapoly %>%
gg_polygon(
  x = x,
  y = y,
  col = value,
  group = id,
  pal = viridis::cividis(9)
)
```

Description

Create a qq ggplot with a wrapper around the ggplot2::geom_qq function.

Usage

```r
gg_qq(
data = NULL,
sample = NULL,
col = NULL,
facet = NULL,
facet2 = NULL,
group = NULL,
x = NULL,
```
y = NULL,
stat = "qq",
position = "identity",
coord = ggplot2::coord_cartesian(clip = "off"),
pal = NULL,
pal_na = pal_grey,
alpha = 1,
....
title = NULL,
subtitle = NULL,
x_breaks = NULL,
x_expand = NULL,
x_grid = NULL,
x_include = NULL,
x_labels = NULL,
x_limits = NULL,
x_oob = scales::oob_censor,
x_sec_axis = ggplot2::waiver(),
x_title = NULL,
x_trans = "identity",
y_breaks = NULL,
y_expand = NULL,
y_grid = NULL,
y_include = NULL,
y_labels = NULL,
y_limits = NULL,
y_oob = scales::oob_censor,
y_sec_axis = ggplot2::waiver(),
y_title = NULL,
y_trans = "identity",
col_breaks = NULL,
col_continuous = "gradient",
col_include = NULL,
col_labels = NULL,
col_legend_place = NULL,
col_legend_ncol = NULL,
col_legend_nrow = NULL,
col_legend_rev = FALSE,
col_limits = NULL,
col_oob = scales::oob_censor,
col_rescale = NULL,
col_title = NULL,
col_trans = "identity",
facet_labels = NULL,
facet_ncol = NULL,
facet_nrow = NULL,
facet_scales = "fixed",
facet_space = "fixed",
facet_layout = NULL,
caption = NULL,
titles = snakecase::to_sentence_case,
theme = gg_theme(),
void = FALSE)

Arguments

data A data frame or tibble.
sample Unquoted sample aesthetic variable.
col Unquoted col and fill aesthetic variable.
facet Unquoted facet aesthetic variable.
facet2 Unquoted second facet variable.
group Unquoted group aesthetic variable.
x Unquoted x aesthetic variable.
y Unquoted y aesthetic variable.
stat Statistical transformation. A character string (e.g. "identity").
position Position adjustment. Either a character string (e.g."identity"), or a function (e.g. ggplot2::position_identity()).
coord A coordinate function from ggplot2 (e.g. ggplot2::coord_cartesian()).
pal Colours to use. A character vector of hex codes (or names).
pal_na Colour to use for NA values. A character vector of a hex code (or name).
alpha Opacity. A number between 0 and 1.
... Other arguments passed to the ggplot2::geom_qq function.
title Title string.
subtitle Subtitle string.
x_breaks A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
x_expand Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).
x_grid TRUE or FALSE for vertical x gridlines. NULL guesses based on the classes of the x and y.
x_include For a numeric or date variable, any values that the scale should include (e.g. 0).
x_labels A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.
x_limits A vector of length 2 to determine the limits of the axis.
x_oob A scales::oob_* function that handles values outside of limits for continuous scales. Defaults to scales::oob_censor.
x_sec_axis A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.
x_title Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.
<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>x_trans</td>
<td>For a numeric variable, a transformation object (e.g. &quot;log10&quot;, &quot;sqrt&quot; or &quot;reverse&quot;).</td>
</tr>
<tr>
<td>y_breaks</td>
<td>A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.</td>
</tr>
<tr>
<td>y_expand</td>
<td>Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).</td>
</tr>
<tr>
<td>y_grid</td>
<td>TRUE or FALSE of horizontal y gridlines. NULL guesses based on the classes of the x and y.</td>
</tr>
<tr>
<td>y_include</td>
<td>For a numeric or date variable, any values that the scale should include (e.g. 0).</td>
</tr>
<tr>
<td>y_labels</td>
<td>A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.</td>
</tr>
<tr>
<td>y_limits</td>
<td>A vector of length 2 to determine the limits of the axis.</td>
</tr>
<tr>
<td>y_oob</td>
<td>A scales::oob_* function that handles values outside of limits for continuous scales. Defaults to scales::oob_censor.</td>
</tr>
<tr>
<td>y_sec_axis</td>
<td>A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.</td>
</tr>
<tr>
<td>y_title</td>
<td>Axis title string. Defaults to converting to sentence case with spaces. Use &quot;&quot; for no title.</td>
</tr>
<tr>
<td>y_trans</td>
<td>For a numeric variable, a transformation object (e.g. &quot;log10&quot;, &quot;sqrt&quot; or &quot;reverse&quot;).</td>
</tr>
<tr>
<td>col_breaks</td>
<td>A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.</td>
</tr>
<tr>
<td>col_continuous</td>
<td>Type of colouring for a continuous variable. Either &quot;gradient&quot; or &quot;steps&quot;. Defaults to &quot;steps&quot; - or just the first letter of these e.g. &quot;g&quot;.</td>
</tr>
<tr>
<td>col_include</td>
<td>For a numeric or date variable, any values that the scale should include (e.g. 0).</td>
</tr>
<tr>
<td>col_labels</td>
<td>A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels. Note this does not affect where col_intervals is not NULL.</td>
</tr>
<tr>
<td>col_legend_place</td>
<td>The place for the legend. Either &quot;bottom&quot;, &quot;right&quot;, &quot;top&quot; or &quot;left&quot; - or just the first letter of these e.g. &quot;b&quot;.</td>
</tr>
<tr>
<td>col_legend_ncol</td>
<td>The number of columns for the legend elements.</td>
</tr>
<tr>
<td>col_legend_nrow</td>
<td>The number of rows for the legend elements.</td>
</tr>
<tr>
<td>col_legend_rev</td>
<td>Reverse the elements of the legend. Defaults to FALSE.</td>
</tr>
<tr>
<td>col_limits</td>
<td>A vector to determine the limits of the colour scale.</td>
</tr>
<tr>
<td>col_oob</td>
<td>A scales::oob_* function that handles values outside of limits for continuous scales. Defaults to scales::oob_censor.</td>
</tr>
<tr>
<td>col_rescale</td>
<td>For a continuous col variable, a vector to rescale the pal non-linearly.</td>
</tr>
<tr>
<td>col_title</td>
<td>Legend title string. Defaults to converting to sentence case with spaces. Use &quot;&quot; for no title.</td>
</tr>
<tr>
<td>col_trans</td>
<td>For a numeric variable, a transformation object (e.g. &quot;log10&quot;, &quot;sqrt&quot; or &quot;reverse&quot;).</td>
</tr>
<tr>
<td>facet_labels</td>
<td>A function that takes the breaks as inputs (e.g. scales::label_comma()), or a named vector of labels (e.g. c(&quot;value&quot; = &quot;label&quot;, ...)).</td>
</tr>
</tbody>
</table>
facet_ncol  The number of columns of facets. Only applies to a facet layout of "wrap".
facet_nrow  The number of rows of facets. Only applies to a facet layout of "wrap".
facet_scales  Whether facet scales should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".
facet_space  Whether facet space should be "fixed" across facets, "free" to be proportional in both directions, or free to be proportional in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed". Only applies where the facet layout is "grid" and facet scales are not "fixed".
facet_layout  Whether the layout is to be "wrap" or "grid". If NULL and a single facet (or facet2) argument is provided, then defaults to "wrap". If NULL and both facet and facet2 arguments are provided, defaults to "grid".
caption  Caption title string.
titles  A function to format the x, y and col titles. Defaults to snakecase::to_sentence_case.
theme  A ggplot2 theme.
void  TRUE or FALSE of whether to remove axis lines, ticks and x and y titles and labels.

Value
A ggplot object.

Examples
library(palmerpenguins)
penguins |> gg_qq(
  sample = body_mass_g,
  facet = species,
  pal = "#1B9E77"
) +
  ggplot2::geom_qq_line(alpha = 0.5)

Description
Create a raster ggplot with a wrapper around the ggplot2::geom_raster function.
Usage

gg_raster(
  data = NULL,
  x = NULL,
  y = NULL,
  col = NULL,
  facet = NULL,
  facet2 = NULL,
  group = NULL,
  stat = "identity",
  position = "identity",
  coord = ggplot2::coord_cartesian(clip = "off"),
  pal = NULL,
  pal_na = pal_grey,
  alpha = 1,
  ..., 
  title = NULL,
  subtitle = NULL,
  x_breaks = NULL,
  x_expand = c(0, 0),
  x_grid = NULL,
  x_include = NULL,
  x_labels = NULL,
  x_limits = c(NA, NA),
  x_oob = scales::oob_censor,
  x_sec_axis = ggplot2::waiver(),
  x_title = NULL,
  x_trans = "identity",
  y_breaks = NULL,
  y_expand = c(0, 0),
  y_grid = NULL,
  y_include = NULL,
  y_labels = NULL,
  y_limits = c(NA, NA),
  y_oob = scales::oob_censor,
  y_sec_axis = ggplot2::waiver(),
  y_title = NULL,
  y_trans = "identity",
  col_breaks = NULL,
  col_continuous = "gradient",
  col_include = NULL,
  col_labels = NULL,
  col_limits = NULL,
  col_oob = scales::oob_censor,
Arguments

data A data frame or tibble.
x Unquoted x aesthetic variable.
y Unquoted y aesthetic variable.
col Unquoted col and fill aesthetic variable.
facet Unquoted facet aesthetic variable.
facet2 Unquoted second facet variable.
group Unquoted group aesthetic variable.
stat Statistical transformation. A character string (e.g. "identity").
position Position adjustment. Either a character string (e.g. "identity"), or a function (e.g. ggplot2::position_identity()).
coord A coordinate function from ggplot2 (e.g. ggplot2::coord_cartesian()).
pal Colours to use. A character vector of hex codes (or names).
pal_na Colour to use for NA values. A character vector of a hex code (or name).
alpha Opacity. A number between 0 and 1.
... Other arguments passed to the ggplot2::geom_raster function.
title Title string.
subtitle Subtitle string.
x_breaks A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
x_expand Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).
x_grid TRUE or FALSE for vertical x gridlines. NULL guesses based on the classes of the x and y.
x_include For a numeric or date variable, any values that the scale should include (e.g. 0).
x_labels A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.
x_limits A vector of length 2 to determine the limits of the axis.
x_oob A scales::oob_* function that handles values outside of limits for continuous scales. Defaults to scales::oob_censor.
x_sec_axis A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.
x_title Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.
x_trans For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
y_breaks A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
y_expand Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).
y_grid TRUE or FALSE of horizontal y gridlines. NULL guesses based on the classes of the x and y.
y_include For a numeric or date variable, any values that the scale should include (e.g. 0).
y_labels A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.
y_limits A vector of length 2 to determine the limits of the axis.
y_oob A scales::oob_* function that handles values outside of limits for continuous scales. Defaults to scales::oob_censor.
y_sec_axis A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.
y_title Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.
y_trans For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
col_breaks A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
col_continuous Type of colouring for a continuous variable. Either "gradient" or "steps". Defaults to "steps" - or just the first letter of these e.g. "g".
col_include For a numeric or date variable, any values that the scale should include (e.g. 0).
col_labels A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels. Note this does not affect where col_intervals is not NULL.
col_legend_place The place for the legend. Either "bottom", "right", "top" or "left" - or just the first letter of these e.g. "b".
col_legend_ncol The number of columns for the legend elements.
col_legend_nrow The number of rows for the legend elements.
col_legned_rev Reverse the elements of the legend. Defaults to FALSE.
col_limits A vector to determine the limits of the colour scale.
col_oob A scales::oob_* function that handles values outside of limits for continuous scales. Defaults to scales::oob_censor.
For a continuous col variable, a vector to rescale the pal non-linearly.

Legend title string. Defaults to converting to sentence case with spaces. Use "" for no title.

For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").

A function that takes the breaks as inputs (e.g. scales::label_comma()), or a named vector of labels (e.g. c("value" = "label", ...)).

The number of columns of facets. Only applies to a facet layout of "wrap".

The number of rows of facets. Only applies to a facet layout of "wrap".

Whether facet scales should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "free".

Whether facet space should be "fixed" across facets, "free" to be proportional in both directions, or free to be proportional in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed". Only applies where the facet layout is "grid" and facet scales are not "fixed".

Whether the layout is to be "wrap" or "grid". If NULL and a single facet (or facet2) argument is provided, then defaults to "wrap". If NULL and both facet and facet2 arguments are provided, defaults to "grid".

Caption title string.

A function to format the x, y and col titles. Defaults to snakecase::to_sentence_case.

A ggplot2 theme.

TRUE or FALSE of whether to remove axis lines, ticks and x and y titles and labels.

A ggplot object.

Examples

ggplot2::faithfuld |>
gg_raster(
    x = waiting,
    y = eruptions,
    col = density,
    pal = viridis::cividis(9)
)
**gg_rect**  
*Rect ggplot*

**Description**

Create a rect ggplot with a wrapper around the ggplot2::geom_rect function.

**Usage**

```r
gg_rect(  
data = NULL,  
xmin = NULL,  
xmax = NULL,  
ymin = NULL,  
ymax = NULL,  
col = NULL,  
facet = NULL,  
facet2 = NULL,  
group = NULL,  
x = NULL,  
y = NULL,  
stat = "identity",  
position = "identity",  
coord = ggplot2::coord_cartesian(clip = "off"),  
pal = NULL,  
pal_na = pal_grey,  
alpha = 0.9,  
...,  
title = NULL,  
subtitle = NULL,  
x_breaks = NULL,  
x_expand = NULL,  
x_grid = NULL,  
x_include = NULL,  
x_labels = NULL,  
x_limits = NULL,  
x_oob = scales::oob_censor,  
x_sec_axis = ggplot2::waiver(),  
x_title = NULL,  
x_trans = "identity",  
y_breaks = NULL,  
y_expand = NULL,  
y_grid = NULL,  
y_include = NULL,  
y_labels = NULL,  
y_limits = NULL,  
y_oob = scales::oob_censor,)
```
Arguments

data A data frame or tibble.
xmin Unquoted xmin aesthetic variable.
xmax Unquoted xmax aesthetic variable.
ymin Unquoted ymin aesthetic variable.
ymax Unquoted ymax aesthetic variable.
col Unquoted col and fill aesthetic variable.
facet Unquoted facet aesthetic variable.
facet2 Unquoted second facet variable.
group Unquoted group aesthetic variable.
x Unquoted x aesthetic variable.
y Unquoted y aesthetic variable.
stat Statistical transformation. A character string (e.g. "identity").
position Position adjustment. Either a character string (e.g."identity"), or a function (e.g. ggplot2::position_identity()).
coord A coordinate function from ggplot2 (e.g. ggplot2::coord_cartesian()).
pal
Colours to use. A character vector of hex codes (or names).
pal_na
Colour to use for NA values. A character vector of a hex code (or name).
alpha
Opacity. A number between 0 and 1.
...
Other arguments passed to the ggplot2::geom_rect function.
title
Title string.
subtitle
Subtitle string.
x_breaks
A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
x_expand
Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).
x_grid
TRUE or FALSE for vertical x gridlines. NULL guesses based on the classes of the x and y.
x_include
For a numeric or date variable, any values that the scale should include (e.g. 0).
x_labels
A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.
x_limits
A vector of length 2 to determine the limits of the axis.
x_oob
A scales::oob_* function that handles values outside of limits for continuous scales. Defaults to scales::oob_censor.
x_sec_axis
A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.
x_title
Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.
x_trans
For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
y_breaks
A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
y_expand
Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).
y_grid
TRUE or FALSE of horizontal y gridlines. NULL guesses based on the classes of the x and y.
y_include
For a numeric or date variable, any values that the scale should include (e.g. 0).
y_labels
A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.
y_limits
A vector of length 2 to determine the limits of the axis.
y_oob
A scales::oob_* function that handles values outside of limits for continuous scales. Defaults to scales::oob_censor.
y_sec_axis
A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.
y_title
Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.
y_trans
For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
col_breaks
A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
col_continuous
Type of colouring for a continuous variable. Either "gradient" or "steps". Defaults to "steps" - or just the first letter of these e.g. "g".
gg_rect

<table>
<thead>
<tr>
<th>Argument</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>col_include</td>
<td>For a numeric or date variable, any values that the scale should include (e.g. 0).</td>
</tr>
<tr>
<td>col_labels</td>
<td>A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels. Note this does not affect where col_intervals is not NULL.</td>
</tr>
<tr>
<td>col_legend_place</td>
<td>The place for the legend. Either &quot;bottom&quot;, &quot;right&quot;, &quot;top&quot; or &quot;left&quot; - or just the first letter of these e.g. &quot;b&quot;.</td>
</tr>
<tr>
<td>col_legend_ncol</td>
<td>The number of columns for the legend elements.</td>
</tr>
<tr>
<td>col_legend_nrow</td>
<td>The number of rows for the legend elements.</td>
</tr>
<tr>
<td>col_limits_rev</td>
<td>Reverse the elements of the legend. Defaults to FALSE.</td>
</tr>
<tr>
<td>col_limits</td>
<td>A vector to determine the limits of the colour scale.</td>
</tr>
<tr>
<td>col_oob</td>
<td>A scales::oob_* function that handles values outside of limits for continuous scales. Defaults to scales::oob_censor.</td>
</tr>
<tr>
<td>col_rescale</td>
<td>For a continuous col variable, a vector to rescale the pal non-linearly.</td>
</tr>
<tr>
<td>col_title</td>
<td>Legend title string. Defaults to converting to sentence case with spaces. Use &quot;&quot; for no title.</td>
</tr>
<tr>
<td>col_trans</td>
<td>For a numeric variable, a transformation object (e.g. &quot;log10&quot;, &quot;sqrt&quot; or &quot;reverse&quot;).</td>
</tr>
<tr>
<td>facet_labels</td>
<td>A function that takes the breaks as inputs (e.g. scales::label_comma()), or a named vector of labels (e.g. c(&quot;value&quot; = &quot;label&quot;, ...)).</td>
</tr>
<tr>
<td>facet_ncol</td>
<td>The number of columns of facets. Only applies to a facet layout of &quot;wrap&quot;.</td>
</tr>
<tr>
<td>facet_nrow</td>
<td>The number of rows of facets. Only applies to a facet layout of &quot;wrap&quot;.</td>
</tr>
<tr>
<td>facet_scales</td>
<td>Whether facet scales should be &quot;fixed&quot; across facets, &quot;free&quot; in both directions, or free in just one direction (i.e. &quot;free_x&quot; or &quot;free_y&quot;). Defaults to &quot;fixed&quot;.</td>
</tr>
<tr>
<td>facet_space</td>
<td>Whether facet space should be &quot;fixed&quot; across facets, &quot;free&quot; to be proportional in both directions, or free to be proportional in just one direction (i.e. &quot;free_x&quot; or &quot;free_y&quot;). Defaults to &quot;fixed&quot;. Only applies where the facet layout is &quot;grid&quot; and facet scales are not &quot;fixed&quot;.</td>
</tr>
<tr>
<td>facet_layout</td>
<td>Whether the layout is to be &quot;wrap&quot; or &quot;grid&quot;. If NULL and a single facet (or facet2) argument is provided, then defaults to &quot;wrap&quot;. If NULL and both facet and facet2 arguments are provided, defaults to &quot;grid&quot;.</td>
</tr>
<tr>
<td>caption</td>
<td>Caption title string.</td>
</tr>
<tr>
<td>titles</td>
<td>A function to format the x, y and col titles. Defaults to snakecase::to_sentence_case.</td>
</tr>
<tr>
<td>theme</td>
<td>A ggplot2 theme.</td>
</tr>
<tr>
<td>void</td>
<td>TRUE or FALSE of whether to remove axis lines, ticks and x and y titles and labels.</td>
</tr>
</tbody>
</table>

Value

A ggplot object.
Examples

data.frame(
  x = rep(c(2, 5, 7, 9, 12), 2),
  y = rep(c(1, 2), each = 5),
  z = factor(rep(1:5, each = 2)),
  w = rep(diff(c(0, 4, 6, 8, 10, 14)), 2)
) %>%
dplyr::mutate(
  xmin = x - w / 2,
  xmax = x + w / 2,
  ymin = y,
  ymax = y + 1
) %>%
gg_rect(
  xmin = xmin,
  xmax = xmax,
  ymin = ymin,
  ymax = ymax,
  col = z
)

Description

Create a ribbon ggplot with a wrapper around the ggplot2::geom_ribbon function.

Usage

`gg_ribbon(`
  data = NULL,
  x = NULL,
  y = NULL,
  col = NULL,
  facet = NULL,
  facet2 = NULL,
  group = NULL,
  xmin = NULL,
  xmax = NULL,
  ymin = NULL,
  ymax = NULL,
  stat = "identity",
  position = "identity",
  coord = ggplot2::coord_cartesian(clip = "off"),
  pal = NULL,
  pal_na = pal_grey,
)
alpha = 0.5,
..., title = NULL,
subtitle = NULL,
x_breaks = NULL,
x_expand = NULL,
x_grid = NULL,
x_include = NULL,
x_labels = NULL,
x_limits = NULL,
x_oob = scales::oob_censor,
x_sec_axis = ggplot2::waiver(),
x_title = NULL,
x_trans = "identity",
y_breaks = NULL,
y_expand = NULL,
y_grid = NULL,
y_include = NULL,
y_labels = NULL,
y_limits = NULL,
y_oob = scales::oob_censor,
y_sec_axis = ggplot2::waiver(),
y_title = NULL,
y_trans = "identity",
col_breaks = NULL,
col_continuous = "gradient",
col_include = NULL,
col_labels = NULL,
col_legend_place = NULL,
col_legend_ncol = NULL,
col_legend_nrow = NULL,
col_legend_rev = FALSE,
col_limits = NULL,
col_oob = scales::oob_censor,
col_rescale = NULL,
col_title = NULL,
col_trans = "identity",
facet_labels = NULL,
facet_ncol = NULL,
facet_nrow = NULL,
facet_scales = "fixed",
facet_space = "fixed",
facet_layout = NULL,
caption = NULL,
titles = snakecase::to_sentence_case,
theme = gg_theme(),
void = FALSE)
Arguments

data  A data frame or tibble.
x    Unquoted x aesthetic variable.
y    Unquoted y aesthetic variable.
col   Unquoted col and fill aesthetic variable.
facet Unquoted facet aesthetic variable.
facet2 Unquoted second facet variable.
group Unquoted group aesthetic variable.
xmin  Unquoted xmin aesthetic variable.
xmax  Unquoted xmax aesthetic variable.
ymin  Unquoted ymin aesthetic variable.
ymax  Unquoted ymax aesthetic variable.
stat  Statistical transformation. A character string (e.g. "identity").
position Position adjustment. Either a character string (e.g. "identity"), or a function (e.g. ggplot2::position_identity()).
coord  A coordinate function from ggplot2 (e.g. ggplot2::coord_cartesian()).
pal    Colours to use. A character vector of hex codes (or names).
pal_na Colour to use for NA values. A character vector of a hex code (or name).
alpha  Opacity. A number between 0 and 1.
...  Other arguments passed to the ggplot2::geom_ribbon function.
title  Title string.
subtitle Subtitle string.
x_breaks A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
x_expand Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).
x_grid TRUE or FALSE for vertical x gridlines. NULL guesses based on the classes of the x and y.
x_include For a numeric or date variable, any values that the scale should include (e.g. 0).
x_labels A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.
x_limits A vector of length 2 to determine the limits of the axis.
x_oob A scales::oob_* function that handles values outside of limits for continuous scales. Defaults to scales::oob_censor.
x_sec_axis A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.
x_title Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.
x_trans For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
y_breaks A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
y_expand  Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).
y_grid  TRUE or FALSE of horizontal y gridlines. NULL guesses based on the classes of the x and y.
y_include  For a numeric or date variable, any values that the scale should include (e.g. 0).
y_labels  A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.
y_limits  A vector of length 2 to determine the limits of the axis.
y_oob  A scales::oob_* function that handles values outside of limits for continuous scales. Defaults to scales::oob_censor.
y_sec_axis  A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.
y_title  Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.
y_trans  For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
col_breaks  A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
col_continuous  Type of colouring for a continuous variable. Either "gradient" or "steps". Defaults to "steps" - or just the first letter of these e.g. "g".
col_include  For a numeric or date variable, any values that the scale should include (e.g. 0).
col_labels  A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels. Note this does not affect where col_intervals is not NULL.
col_legend_place  The place for the legend. Either "bottom", "right", "top" or "left" - or just the first letter of these e.g. "b".
col_legend_ncol  The number of columns for the legend elements.
col_legend_nrow  The number of rows for the legend elements.
col_legend_rev  Reverse the elements of the legend. Defaults to FALSE.
col_limits  A vector to determine the limits of the colour scale.
col_oob  A scales::oob_* function that handles values outside of limits for continuous scales. Defaults to scales::oob_censor.
col_rescale  For a continuous col variable, a vector to rescale the pal non-linearly.
col_title  Legend title string. Defaults to converting to sentence case with spaces. Use "" for no title.
col_trans  For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
facet_labels  A function that takes the breaks as inputs (e.g. scales::label_comma()), or a named vector of labels (e.g. c("value" = "label", ...)).
facet_ncol  The number of columns of facets. Only applies to a facet layout of "wrap".
facet_nrow  The number of rows of facets. Only applies to a facet layout of "wrap".
facet_scales  Whether facet scales should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".

facet_space  Whether facet space should be "fixed" across facets, "free" to be proportional in both directions, or free to be proportional in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed". Only applies where the facet layout is "grid" and facet scales are not "fixed".

facet_layout  Whether the layout is to be "wrap" or "grid". If NULL and a single facet (or facet2) argument is provided, then defaults to "wrap". If NULL and both facet and facet2 arguments are provided, defaults to "grid".

caption  Caption title string.
titles  A function to format the x, y and col titles. Defaults to snakecase::to_sentence_case.
theme  A ggplot2 theme.
void  TRUE or FALSE of whether to remove axis lines, ticks and x and y titles and labels.

Value

A ggplot object.

Examples

library(dplyr)
library(ggplot2)

data.frame(year = 1875:1972, level = as.vector(LakeHuron)) |>
  mutate(level_min = level - 1, level_max = level + 1) |>
gg_ribbon(
  x = year,
  ymin = level_min,
  ymax = level_max,
  pal = scales::alpha("#1B9E77", 0),
  y_title = "Level"
) +
geom_line(aes(x = year, y = level), col = "#1B9E77")

Description

Create a segment ggplot with a wrapper around the ggplot2::geom_segment function.
Usage

```r
gg_segment(
  data = NULL,
  x = NULL,
  xend = NULL,
  y = NULL,
  yend = NULL,
  col = NULL,
  facet = NULL,
  facet2 = NULL,
  group = NULL,
  stat = "identity",
  position = "identity",
  coord = ggplot2::coord_cartesian(clip = "off"),
  pal = NULL,
  pal_na = pal_grey,
  alpha = 1,
  
  title = NULL,
  subtitle = NULL,
  x_breaks = NULL,
  x_expand = NULL,
  x_grid = NULL,
  x_include = NULL,
  x_labels = NULL,
  x_limits = NULL,
  x_oob = scales::oob_censor,
  x_sec_axis = ggplot2::waiver(),
  x_title = NULL,
  x_trans = "identity",
  y_breaks = NULL,
  y_expand = NULL,
  y_grid = NULL,
  y_include = NULL,
  y_labels = NULL,
  y_limits = NULL,
  y_oob = scales::oob_censor,
  y_sec_axis = ggplot2::waiver(),
  y_title = NULL,
  y_trans = "identity",
  col_breaks = NULL,
  col_continuous = "gradient",
  col_include = NULL,
  col_labels = NULL,
  col_legend_place = NULL,
  col_legend_ncol = NULL,
  col_legend_nrow = NULL,
  col_legend_rev = FALSE,
)```
col_limits = NULL,
col_oob = scales::oob_censor,
col_rescale = NULL,
col_title = NULL,
col_trans = "identity",
facet_labels = NULL,
facet_ncol = NULL,
facet_nrow = NULL,
facet_scales = "fixed",
facet_space = "fixed",
facet_layout = NULL,
caption = NULL,
titles = snakecase::to_sentence_case,
theme = gg_theme(),
void = FALSE)

Arguments

data A data frame or tibble.
x Unquoted x aesthetic variable.
xend Unquoted xend aesthetic variable.
y Unquoted y aesthetic variable.
yend Unquoted xend aesthetic variable.
col Unquoted col and fill aesthetic variable.
facet Unquoted facet aesthetic variable.
facet2 Unquoted second facet variable.
group Unquoted group aesthetic variable.
stat Statistical transformation. A character string (e.g. "identity").
position Position adjustment. Either a character string (e.g. "identity"), or a function (e.g. ggplot2::position_identity()).
coord A coordinate function from ggplot2 (e.g. ggplot2::coord_cartesian()).
pal Colours to use. A character vector of hex codes (or names).
pal_na Colour to use for NA values. A character vector of a hex code (or name).
alpha Opacity. A number between 0 and 1.
... Other arguments passed to the ggplot2::geom_segment function.
title Title string.
subtitle Subtitle string.
x_breaks A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
x_expand Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).
x_grid TRUE or FALSE for vertical x gridlines. NULL guesses based on the classes of the x and y.
x_include
For a numeric or date variable, any values that the scale should include (e.g. 0).

x_labels
A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.

x_limits
A vector of length 2 to determine the limits of the axis.

x_oob
A scales::oob_* function that handles values outside of limits for continuous scales. Defaults to scales::oob_censor.

x_sec_axis
A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.

x_title
Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.

x_trans
For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").

y_breaks
A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.

y_expand
Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).

y_grid
TRUE or FALSE of horizontal y gridlines. NULL guesses based on the classes of the x and y.

y_include
For a numeric or date variable, any values that the scale should include (e.g. 0).

y_labels
A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.

y_limits
A vector of length 2 to determine the limits of the axis.

y_oob
A scales::oob_* function that handles values outside of limits for continuous scales. Defaults to scales::oob_censor.

y_sec_axis
A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.

y_title
Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.

y_trans
For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").

col_breaks
A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.

col_continuous
Type of colouring for a continuous variable. Either "gradient" or "steps". Defaults to "steps" - or just the first letter of these e.g. "g".

col_include
For a numeric or date variable, any values that the scale should include (e.g. 0).

col_labels
A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels. Note this does not affect where col_intervals is not NULL.

col_legend_place
The place for the legend. Either "bottom", "right", "top" or "left" - or just the first letter of these e.g. "b".

col_legend_ncol
The number of columns for the legend elements.

col_legend_nrow
The number of rows for the legend elements.

col_legend_rev
Reverse the elements of the legend. Defaults to FALSE.
col_limits  A vector to determine the limits of the colour scale.
col_oob    A scales::oob_* function that handles values outside of limits for continuous scales. Defaults to scales::oob_censor.
col_rescale  For a continuous col variable, a vector to rescale the pal non-linearly.
col_title  Legend title string. Defaults to converting to sentence case with spaces. Use "" for no title.
col_trans  For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
facet_labels  A function that takes the breaks as inputs (e.g. scales::label_comma()), or a named vector of labels (e.g. c("value" = "label", ...)).
facet_ncol  The number of columns of facets. Only applies to a facet layout of "wrap".
facet_nrow  The number of rows of facets. Only applies to a facet layout of "wrap".
facet_scales  Whether facet scales should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".
facet_space  Whether facet space should be "fixed" across facets, "free" to be proportional in both directions, or free to be proportional in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed". Only applies where the facet layout is "grid" and facet scales are not "fixed".
facet_layout  Whether the layout is to be "wrap" or "grid". If NULL and a single facet (or facet2) argument is provided, then defaults to "wrap". If NULL and both facet and facet2 arguments are provided, defaults to "grid".
caption  Caption title string.
titles  A function to format the x, y and col titles. Defaults to snakecase::to_sentence_case.
theme  A ggplot2 theme.
void  TRUE or FALSE of whether to remove axis lines, ticks and x and y titles and labels.

Value
A ggplot object.

Examples

data.frame(x1 = 2.62, x2 = 3.57, y1 = 21.0, y2 = 15.0) |>
gg_segment(
  x = x1,
  xend = x2,
  y = y1,
  yend = y2,
  pal = "#1B9E77"
)
**gg_sf**

 departure

**Sf ggplot**

Description

Create a blank ggplot with a wrapper around the ggplot2::geom_sf function.

Usage

```r
gg_sf(
  data = NULL,
  col = NULL,
  facet = NULL,
  facet2 = NULL,
  group = NULL,
  position = "identity",
  stat = "sf",
  coord = ggplot2::coord_sf(clip = "off"),
  pal = NULL,
  pal_na = pal_grey,
  ..., 
  title = NULL,
  subtitle = NULL,
  x_grid = FALSE,
  x_title = NULL,
  y_grid = FALSE,
  y_title = NULL,
  col_breaks = NULL,
  col_continuous = "gradient",
  col_include = NULL,
  col_labels = NULL,
  col_legend_place = NULL,
  col_legend_nrow = NULL,
  col_legend_ncol = NULL,
  col_legend_rev = FALSE,
  col_limits = NULL,
  col_oob = scales::oob_censor,
  col_rescale = NULL,
  col_title = NULL,
  col_trans = "identity",
  facet_labels = NULL,
  facet_ncol = NULL,
  facet_nrow = NULL,
  facet_scales = "fixed",
  facet_space = "fixed",
  facet_layout = NULL,
  caption = NULL,
)```
titles = snakecase::to_sentence_case,
theme = gg_theme(),
void = TRUE
)

Arguments

data A data frame or tibble.
col Unquoted col and fill aesthetic variable.
facet Unquoted facet aesthetic variable.
facet2 Unquoted second facet variable.
group Unquoted group aesthetic variable.
position Position adjustment. Either a character string (e.g."identity"), or a function (e.g. 
ggplot2::position_identity()).
stat Statistical transformation. A character string (e.g. "identity").
coord A coordinate function from ggplot2 (e.g. ggplot2::coord_cartesian()).
pal Colours to use. A character vector of hex codes (or names).
pal_na Colour to use for NA values. A character vector of a hex code (or name).
... Other arguments passed to the ggplot2::geom_sf function.
title Title string.
subtitle Subtitle string.
x_grid TRUE or FALSE for vertical x gridlines. NULL guesses based on the classes of 
the x and y.
x_title Axis title string. Defaults to converting to sentence case with spaces. Use "" for 
no title.
y_grid TRUE or FALSE of horizontal y gridlines. NULL guesses based on the classes 
of the x and y.
y_title Axis title string. Defaults to converting to sentence case with spaces. Use "" for 
no title.
col_breaks A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
col_continuous Type of colouring for a continuous variable. Either "gradient" or "steps". De-
defaults to "steps" - or just the first letter of these e.g. "g".
col_include For a numeric or date variable, any values that the scale should include (e.g. 0).
col_labels A function that takes the breaks as inputs (e.g. scales::label_comma()), or a 
vector of labels. Note this does not affect where col_intervals is not NULL.
col_legend_place The place for the legend. Either "bottom", "right", "top" or "left" - or just the 
first letter of these e.g. "b".
col_legend_ncol The number of columns for the legend elements.
col_legend_nrow The number of rows for the legend elements.
gg_sf

- **col_legend_rev**: Reverse the elements of the legend. Defaults to FALSE.
- **col_limits**: A vector to determine the limits of the colour scale.
- **col_oob**: A scales::oob_* function that handles values outside of limits for continuous scales. Defaults to scales::oob_censor.
- **col_rescale**: For a continuous col variable, a vector to rescale the pal non-linearly.
- **col_title**: Legend title string. Defaults to converting to sentence case with spaces. Use "" for no title.
- **col_trans**: For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
- **facet_labels**: A function that takes the breaks as inputs (e.g. scales::label_comma()), or a named vector of labels (e.g. c("value" = "label", ...)).
- **facet_ncol**: The number of columns of facets. Only applies to a facet layout of "wrap".
- **facet_nrow**: The number of rows of facets. Only applies to a facet layout of "wrap".
- **facet_scales**: Whether facet scales should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".
- **facet_space**: Whether facet space should be "fixed" across facets, "free" to be proportional in both directions, or free to be proportional in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed". Only applies where the facet layout is "grid" and facet scales are not "fixed".
- **facet_layout**: Whether the layout is to be "wrap" or "grid". If NULL and a single facet (or facet2) argument is provided, then defaults to "wrap". If NULL and both facet and facet2 arguments are provided, defaults to "grid".
- **caption**: Caption title string.
- **titles**: A function to format the x, y and col titles. Defaults to snakecase::to_sentence_case.
- **theme**: A ggplot2 theme.
- **void**: TRUE or FALSE of whether to remove axis lines, ticks and x and y titles and labels.

**Value**

A ggplot object.

**Examples**

```r
if (requireNamespace("sf", quietly = TRUE)) {
  nc <- sf::st_read(system.file("shape/nc.shp", package = "sf"), quiet = TRUE)

  nc |>  
  gg_sf(  
     col = AREA,  
     pal = viridis::cividis(9))
}
```
gg_smooth

Smooth ggplot

Description

Create a smooth ggplot with a wrapper around the ggplot2::geom_smooth function.

Usage

```r
gg_smooth(
  data = NULL,
  x = NULL,
  y = NULL,
  col = NULL,
  facet = NULL,
  facet2 = NULL,
  group = NULL,
  stat = "smooth",
  position = "identity",
  coord = ggplot2::coord_cartesian(clip = "off"),
  pal = NULL,
  pal_na = pal_grey,
  alpha = 0.5,
  ...
)
```

...,
  title = NULL,
  subtitle = NULL,
  x_breaks = NULL,
  x_expand = NULL,
  x_grid = NULL,
  x_include = NULL,
  x_labels = NULL,
  x_limits = NULL,
  x_oob = scales::oob_censor,
  x_sec_axis = ggplot2::waiver(),
  x_title = NULL,
  x_trans = "identity",
  y_breaks = NULL,
  y_expand = NULL,
  y_grid = NULL,
  y_include = NULL,
  y_labels = NULL,
  y_limits = NULL,
  y_oob = scales::oob_censor,
  y_sec_axis = ggplot2::waiver(),
  y_title = NULL,
  y_trans = "identity",
  col_breaks = NULL,
```
Arguments

data A data frame or tibble.
x Unquoted x aesthetic variable.
y Unquoted y aesthetic variable.
col Unquoted col and fill aesthetic variable.
facet Unquoted facet aesthetic variable.
facet2 Unquoted second facet variable.
group Unquoted group aesthetic variable.
stat Statistical transformation. A character string (e.g. "identity").
position Position adjustment. Either a character string (e.g. "identity"), or a function (e.g. ggplot2::position_identity()).
coord A coordinate function from ggplot2 (e.g. ggplot2::coord_cartesian()).
pal Colours to use. A character vector of hex codes (or names).
pal_na Colour to use for NA values. A character vector of a hex code (or name).
alpha Opacity. A number between 0 and 1.
... Other arguments passed to the ggplot2::geom_smooth function.
title Title string.
subtitle Subtitle string.
x_breaks A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
x_expand Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).
x_grid TRUE or FALSE for vertical x gridlines. NULL guesses based on the classes of the x and y.
x_include For a numeric or date variable, any values that the scale should include (e.g. 0).
x_labels A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.
x_limits A vector of length 2 to determine the limits of the axis.
x_oob A scales::oob_* function that handles values outside of limits for continuous scales. Defaults to scales::oob_censor.
x_sec_axis A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.
x_title Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.
x_trans For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse"). y_breaks A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
y_expand Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).
y_grid TRUE or FALSE of horizontal y gridlines. NULL guesses based on the classes of the x and y.
y_include For a numeric or date variable, any values that the scale should include (e.g. 0).
y_labels A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.
y_limits A vector of length 2 to determine the limits of the axis.
y_oob A scales::oob_* function that handles values outside of limits for continuous scales. Defaults to scales::oob_censor.
y_sec_axis A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.
y_title Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.
y_trans For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
col_breaks A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
col_continuous Type of colouring for a continuous variable. Either "gradient" or "steps". Defaults to "steps" - or just the first letter of these e.g. "g".
col_include For a numeric or date variable, any values that the scale should include (e.g. 0).
col_labels A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels. Note this does not affect where col_intervals is not NULL.
col_legend_place The place for the legend. Either "bottom", "right", "top" or "left" - or just the first letter of these e.g. "b".
col_legend_ncol The number of columns for the legend elements.
col_legend_nrow  The number of rows for the legend elements.
col_legend_rev  Reverse the elements of the legend. Defaults to FALSE.
col_limits  A vector to determine the limits of the colour scale.
col_oob  A scales::oob_* function that handles values outside of limits for continuous scales. Defaults to scales::oob_censor.
col_rescale  For a continuous col variable, a vector to rescale the pal non-linearly.
col_title  Legend title string. Defaults to converting to sentence case with spaces. Use "" for no title.
col_trans  For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").
facet_labels  A function that takes the breaks as inputs (e.g. scales::label_comma()), or a named vector of labels (e.g. c("value" = "label", ...)).
facet_ncol  The number of columns of facets. Only applies to a facet layout of "wrap".
facet_nrow  The number of rows of facets. Only applies to a facet layout of "wrap".
facet_scales  Whether facet scales should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".
facet_space  Whether facet space should be "fixed" across facets, "free" to be proportional in both directions, or free to be proportional in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed". Only applies where the facet layout is "grid" and facet scales are not "fixed".
facet_layout  Whether the layout is to be "wrap" or "grid". If NULL and a single facet (or facet2) argument is provided, then defaults to "wrap". If NULL and both facet and facet2 arguments are provided, defaults to "grid".
caption  Caption title string.
titles  A function to format the x, y and col titles. Defaults to snakecase::to_sentence_case.
theme  A ggplot2 theme.
void  TRUE or FALSE of whether to remove axis lines, ticks and x and y titles and labels.

Value  
A ggplot object.

Examples  
library(palmerpenguins)
penguins |>
tidyrr::drop_na(sex) |>
gg_smooth(
  x = flipper_length_mm,
  y = body_mass_g,
  facet = species
)
Description

Create a step plot with a wrapper around the ggplot2::geom_step function.

Usage

```r
gg_step(
  data = NULL,
  x = NULL,
  y = NULL,
  col = NULL,
  facet = NULL,
  facet2 = NULL,
  group = NULL,
  stat = "identity",
  position = "identity",
  coord = ggplot2::coord_cartesian(clip = "off"),
  pal = NULL,
  pal_na = pal_grey,
  alpha = 1,
  ...
)
```

Arguments

data A data frame or tibble.
x Unquoted x aesthetic variable.
y Unquoted y aesthetic variable.
col Unquoted col and fill aesthetic variable.
facet Unquoted facet aesthetic variable.
facet2 Unquoted second facet variable for a facet grid of facet by facet2 variables.
group Unquoted group aesthetic variable.
stat Statistical transformation. A character string (e.g. "identity").
position Position adjustment. Either a character string (e.g."identity"), or a function (e.g. ggplot2::position_identity()).
coord A coordinate function from ggplot2 (e.g. ggplot2::coord_cartesian()).
pal Colours to use. A character vector of hex codes (or names).
pal_na Colour to use for NA values. A character vector of a hex code (or name).
alpha Opacity. A number between 0 and 1.
... Other arguments passed to the ggplot2::geom_step function.
title Title string.
subtitle Subtitle string.
x_breaks A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
<table>
<thead>
<tr>
<th>Variable</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>xexpand</td>
<td>Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).</td>
</tr>
<tr>
<td>xgrid</td>
<td>TRUE or FALSE for vertical x gridlines. NULL guesses based on the classes of the x and y.</td>
</tr>
<tr>
<td>xinclude</td>
<td>For a numeric or date variable, any values that the scale should include (e.g. 0).</td>
</tr>
<tr>
<td>xlabels</td>
<td>A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.</td>
</tr>
<tr>
<td>xlimits</td>
<td>A vector of length 2 to determine the limits of the axis.</td>
</tr>
<tr>
<td>xoob</td>
<td>A scales::oob_* function that handles values outside of limits for continuous scales. Defaults to scales::oob_censor.</td>
</tr>
<tr>
<td>xsec_axis</td>
<td>A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.</td>
</tr>
<tr>
<td>xtitle</td>
<td>Axis title string. Defaults to converting to sentence case with spaces. Use &quot;&quot; for no title.</td>
</tr>
<tr>
<td>xtrans</td>
<td>For a numeric variable, a transformation object (e.g. &quot;log10&quot;, &quot;sqrt&quot; or &quot;reverse&quot;).</td>
</tr>
<tr>
<td>ybreaks</td>
<td>A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.</td>
</tr>
<tr>
<td>yexpand</td>
<td>Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).</td>
</tr>
<tr>
<td>ygrid</td>
<td>TRUE or FALSE of horizontal y gridlines. NULL guesses based on the classes of the x and y.</td>
</tr>
<tr>
<td>yinclude</td>
<td>For a numeric or date variable, any values that the scale should include (e.g. 0).</td>
</tr>
<tr>
<td>ylabels</td>
<td>A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.</td>
</tr>
<tr>
<td>ylimits</td>
<td>A vector of length 2 to determine the limits of the axis.</td>
</tr>
<tr>
<td>yoob</td>
<td>A scales::oob_* function that handles values outside of limits for continuous scales. Defaults to scales::oob_censor.</td>
</tr>
<tr>
<td>ysec_axis</td>
<td>A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.</td>
</tr>
<tr>
<td>ytitle</td>
<td>Axis title string. Defaults to converting to sentence case with spaces. Use &quot;&quot; for no title.</td>
</tr>
<tr>
<td>ytrans</td>
<td>For a numeric variable, a transformation object (e.g. &quot;log10&quot;, &quot;sqrt&quot; or &quot;reverse&quot;).</td>
</tr>
<tr>
<td>colbreaks</td>
<td>A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.</td>
</tr>
<tr>
<td>colcontinuous</td>
<td>Type of colouring for a continuous variable. Either &quot;gradient&quot; or &quot;steps&quot;. Defaults to &quot;steps&quot; - or just the first letter of these e.g. &quot;g&quot;.</td>
</tr>
<tr>
<td>colinclude</td>
<td>For a numeric or date variable, any values that the scale should include (e.g. 0).</td>
</tr>
<tr>
<td>collabels</td>
<td>A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels. Note this does not affect where col_intervals is not NULL.</td>
</tr>
<tr>
<td>collegendplace</td>
<td>The place for the legend. Either &quot;bottom&quot;, &quot;right&quot;, &quot;top&quot; or &quot;left&quot; - or just the first letter of these e.g. &quot;b&quot;.</td>
</tr>
<tr>
<td>collegendncol</td>
<td>The number of columns for the legend elements.</td>
</tr>
</tbody>
</table>
col_legend_nrow

The number of rows for the legend elements.

col_legend_rev

Reverse the elements of the legend. Defaults to FALSE.

col_limits

A vector to determine the limits of the colour scale.

col_oob

A scales::oob_* function that handles values outside of limits for continuous scales. Defaults to scales::oob_censor.

col_rescale

For a continuous col variable, a vector to rescale the pal non-linearly.

col_title

Legend title string. Defaults to converting to sentence case with spaces. Use "" for no title.

col_trans

For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").

facet_labels

A function that takes the breaks as inputs (e.g. scales::label_comma()), or a named vector of labels (e.g. c("value" = "label", ...)).

facet_ncol

The number of columns of facets. Only applies to a facet layout of "wrap".

facet_nrow

The number of rows of facets. Only applies to a facet layout of "wrap".

facet_scales

Whether facet scales should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".

facet_space

Whether facet space should be "fixed" across facets, "free" to be proportional in both directions, or free to be proportional in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed". Only applies where the facet layout is "grid" and facet scales are not "fixed".

facet_layout

Whether the layout is to be "wrap" or "grid". If NULL and a single facet (or facet2) argument is provided, then defaults to "wrap". If NULL and both facet and facet2 arguments are provided, defaults to "grid".

caption

Caption title string.

titles

A function to format the x, y and col titles. Defaults to snakecase::to_sentence_case.

theme

A ggplot2 theme.

void

TRUE or FALSE of whether to remove axis lines, ticks and x and y titles and labels.

Value

A ggplot object.

Examples

ggplot2::economics |>
  gg_step(
    x = date,
    y = unemploy,
    y_title = "Unemployment",
    pal = "#1B9E77",
    x_limits = c(lubridate::ymd("2010-01-01"), lubridate::NA_Date_)
  )
Description

Create a text plot with a wrapper around the `ggplot2::geom_text` function.

Usage

```r
 gg_text(
   data = NULL,
   x = NULL,
   y = NULL,
   col = NULL,
   facet = NULL,
   facet2 = NULL,
   group = NULL,
   label = NULL,
   stat = "identity",
   position = "identity",
   coord = ggplot2::coord_cartesian(clip = "off"),
   pal = NULL,
   pal_na = pal_grey,
   alpha = 1,
   ...
   title = NULL,
   subtitle = NULL,
   x_breaks = NULL,
   x_expand = NULL,
   x_grid = NULL,
   x_include = NULL,
   x_labels = NULL,
   x_limits = NULL,
   x_oob = scales::oob_censor,
   x_sec_axis = ggplot2::waiver(),
   x_title = NULL,
   x_trans = "identity",
   y_breaks = NULL,
   y_expand = NULL,
   y_grid = NULL,
   y_include = NULL,
   y_labels = NULL,
   y_limits = NULL,
   y_oob = scales::oob_censor,
   y_sec_axis = ggplot2::waiver(),
   y_title = NULL,
   y_trans = "identity",
)```
Arguments

data A data frame or tibble.
x Unquoted x aesthetic variable.
y Unquoted y aesthetic variable.
col Unquoted col and fill aesthetic variable.
facet Unquoted facet aesthetic variable.
facet2 Unquoted second facet variable for a facet grid of facet by facet2 variables.
group Unquoted group aesthetic variable.
label Unquoted label aesthetic variable.
stat Statistical transformation. A character string (e.g. "identity").
position Position adjustment. Either a character string (e.g."identity"), or a function (e.g. ggplot2::position_identity()).
coord A coordinate function from ggplot2 (e.g. ggplot2::coord_cartesian()).
pal Colours to use. A character vector of hex codes (or names).
pal_na Colour to use for NA values. A character vector of a hex code (or name).
alpha Opacity. A number between 0 and 1.
... Other arguments passed to the ggplot2::geom_text function.
title Title string.
| **subtitle** | Subtitle string. |
| **x_breaks** | A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks. |
| **x_expand** | Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)). |
| **x_grid** | TRUE or FALSE for vertical x gridlines. NULL guesses based on the classes of the x and y. |
| **x_include** | For a numeric or date variable, any values that the scale should include (e.g. 0). |
| **x_labels** | A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels. |
| **x_limits** | A vector of length 2 to determine the limits of the axis. |
| **x_oob** | A scales::oob_* function that handles values outside of limits for continuous scales. Defaults to scales::oob_censor. |
| **x_sec_axis** | A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function. |
| **x_title** | Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title. |
| **x_trans** | For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse"). |
| **y_breaks** | A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks. |
| **y_expand** | Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)). |
| **y_grid** | TRUE or FALSE of horizontal y gridlines. NULL guesses based on the classes of the x and y. |
| **y_include** | For a numeric or date variable, any values that the scale should include (e.g. 0). |
| **y_labels** | A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels. |
| **y_limits** | A vector of length 2 to determine the limits of the axis. |
| **y_oob** | A scales::oob_* function that handles values outside of limits for continuous scales. Defaults to scales::oob_censor. |
| **y_sec_axis** | A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function. |
| **y_title** | Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title. |
| **y_trans** | For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse"). |
| **col_breaks** | A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks. |
| **col_continuous** | Type of colouring for a continuous variable. Either "gradient" or "steps". Defaults to "steps" - or just the first letter of these e.g. "g". |
| **col_include** | For a numeric or date variable, any values that the scale should include (e.g. 0). |
| **col_labels** | A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels. Note this does not affect where col_intervals is not NULL. |
| **col_legend_place** | The place for the legend. Either "bottom", "right", "top" or "left" - or just the first letter of these e.g. "b". |
col_legend_ncol
  The number of columns for the legend elements.

col_legend_nrow
  The number of rows for the legend elements.

col_legend_rev
  Reverse the elements of the legend. Defaults to FALSE.

col_limits
  A vector to determine the limits of the colour scale.

col_oob
  A scales::oob_* function that handles values outside of limits for continuous scales. Defaults to scales::oob_censor.

col_rescale
  For a continuous col variable, a vector to rescale the pal non-linearly.

col_title
  Legend title string. Defaults to converting to sentence case with spaces. Use "" for no title.

col_trans
  For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").

facet_labels
  A function that takes the breaks as inputs (e.g. scales::label_comma()), or a named vector of labels (e.g. c("value" = "label", ...)).

facet_ncol
  The number of columns of facets. Only applies to a facet layout of "wrap".

facet_nrow
  The number of rows of facets. Only applies to a facet layout of "wrap".

facet_scales
  Whether facet scales should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".

facet_space
  Whether facet space should be "fixed" across facets, "free" to be proportional in both directions, or free to be proportional in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed". Only applies where the facet layout is "grid" and facet scales are not "fixed".

facet_layout
  Whether the layout is to be "wrap" or "grid". If NULL and a single facet (or facet2) argument is provided, then defaults to "wrap". If NULL and both facet and facet2 arguments are provided, defaults to "grid".

caption
  Caption title string.

titles
  A function to format the x, y and col titles. Defaults to snakecase::to_sentence_case.

theme
  A ggplot2 theme.

void
  TRUE or FALSE of whether to remove axis lines, ticks and x and y titles and labels.

Value
  A ggplot object.

Examples

library(dplyr)
bind_rows(
  mtcars %>% slice_min(order_by = mpg),
  mtcars %>% slice_max(order_by = mpg)
) %>%
tibble::rownames_to_column(var = "model") %>%
```r
gg_text(
  x = model,
  y = mpg,
  col = mpg,
  label = model,
  y.include = c(min(.$mpg) * 0.95, max(.$mpg) * 1.05),
  pal = RColorBrewer::brewer.pal(9, "RdBu"),
  y.title = "Miles per gallon"
)
```

---

**gg_theme**

Quick theme for a ggplot

**Description**

Quick theme for a ggplot visualisation.

**Usage**

```r
gg_theme(
  text_family = "",  # Font family
  text_size = 10,  # Default text size
  text_pal = "#323232",  # Default text color
  text_face = "plain",  # Default text face
  title_size = text_size + 1,  # Title size
  title_pal = "#000000",  # Title color
  title_face = "bold",  # Title face
  title_vjust = text_size * 0.2,  # Title vertical justification
  title_margin = ggplot2::margin(t = text_size * -0.5, b = text_size * 1.25),
  subtitle_size = text_size,  # Subtitle size
  subtitle_pal = "#323232",  # Subtitle color
  subtitle_face = "plain",  # Subtitle face
  subtitle_vjust = text_size * 0.4,  # Subtitle vertical justification
  subtitle_margin = ggplot2::margin(t = text_size * -0.5, b = text_size),
  caption_size = text_size - 1,  # Caption size
  caption_pal = "#88837D",  # Caption color
  caption_face = "plain",  # Caption face
  caption_hjust = 0,  # Caption horizontal justification
  axis_line_linewidth = 0.125,  # Axis line width
  axis_line_pal = "#323232",  # Axis line color
  axis_ticks_linewidth = NULL,  # Axis tick width
  axis_ticks_pal = NULL,  # Axis tick color
  legend_key_pal = NULL,  # Legend key color
  panel_background_pal = "#FEFEFE",  # Panel background color
  panel_grid_linewidth = 0.1,  # Panel grid line width
  panel_grid_pal = "#D3D3D3",  # Panel grid color
  panel_spacing_lines = 1.25,  # Panel spacing lines
)```
gg_theme

plot_background_pal = "#F1F3F5"

Arguments

text_family  The font family for all text to use. Defaults to "".
text_size    The size of all text other than the title, subtitle and caption. Defaults to 10.
text_pal     The colour for all text other than the title, subtitle or caption. Defaults to "#323232".
text_face    The font style of all text other than the title, subtitle or caption. Defaults to "plain".
title_size   The size of the title text_family. Defaults to 11.
title_pal    The colour for the title text_family. Defaults to "#000000".
title_face   The font style of the title text_family. Defaults to "bold".
title_vjust  The vertical adjustment for the title.
title_margin The margin for the title.
subtitle_size The size of the subtitle text_family. Defaults to 10.
subtitle_pal The colour for the subtitle text_family. Defaults to "#323232".
subtitle_face The font style of the subtitle text_family. Defaults to "plain".
subtitle_vjust The vertical adjustment for the subtitle.
subtitle_margin The margin for the title.
caption_size The size of the caption. Defaults to 9.
caption_pal  The colour for the caption. Defaults to "#88837D".
caption_face The font style of the caption. Defaults to "plain".
caption_hjust The horizontal adjustment for the caption.
axis_line_linewidth The linwidth of the axis. Defaults to 0.125.
axis_line_pal The colour for the axis. Defaults to "#323232".
axis_ticks_linewidth The linwidth of the ticks. Defaults to that of the axis_line_linewidth argument.
axis_ticks_pal The colour for the ticks. Defaults to "#323232".
legend_key_pal The colour for the legend key. Defaults to the plot_background_pal.
panel_background_pal The colour for the panel background colour. Defaults to "#F1F3F5".
panel_grid_linewidth The linwidth of the vertical major gridlines. Defaults to 0.1.
panel_grid_pal The colour for the vertical major gridlines. Defaults to "#D3D3D3".
panel_spacing_lines The size of the spacing between facet panels in units of "lines". Defaults to 1.25.
plot_background_pal The colour for the plot background colour. Defaults to "#F1F3F5".
Value

A ggplot theme.

Description

Create a tile plot with a wrapper around the ggplot2::geom_tile function.

Usage

```r
gg_tile(
  data = NULL,
  x = NULL,
  y = NULL,
  col = NULL,
  facet = NULL,
  facet2 = NULL,
  group = NULL,
  stat = "identity",
  position = "identity",
  coord = ggplot2::coord_cartesian(clip = "off"),
  pal = NULL,
  pal_na = pal_grey,
  alpha = 0.9,
  ...
  title = NULL,
  subtitle = NULL,
  x_breaks = NULL,
  x_expand = NULL,
  x_grid = NULL,
  x_include = NULL,
  x_labels = NULL,
  x_limits = NULL,
  x_oob = scales::oob_censor,
  x_sec_axis = ggplot2::waiver(),
  x_title = NULL,
  x_trans = "identity",
  y_breaks = NULL,
  y_expand = NULL,
  y_grid = NULL,
  y_include = NULL,
  y_labels = NULL,
  y_limits = NULL,
  y_oob = scales::oob_censor,
```
Arguments

data A data frame or tibble.
x Unquoted x aesthetic variable.
y Unquoted y aesthetic variable.
col Unquoted col and fill aesthetic variable.
facet Unquoted facet aesthetic variable.
facet2 Unquoted second facet variable for a facet grid of facet by facet2 variables.
group Unquoted group aesthetic variable.
stat Statistical transformation. A character string (e.g. "identity").
position Position adjustment. Either a character string (e.g. "identity"), or a function (e.g. ggplot2::position_identity()).
coord A coordinate function from ggplot2 (e.g. ggplot2::coord_cartesian()).
pal Colours to use. A character vector of hex codes (or names).
pal_na Colour to use for NA values. A character vector of a hex code (or name).
alpha Opacity. A number between 0 and 1.
... Other arguments passed to the ggplot2::geom_tile function.
<table>
<thead>
<tr>
<th>Variable</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>title</td>
<td>Title string.</td>
</tr>
<tr>
<td>subtitle</td>
<td>Subtitle string.</td>
</tr>
<tr>
<td>x_breaks</td>
<td>A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.</td>
</tr>
<tr>
<td>x_expand</td>
<td>Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).</td>
</tr>
<tr>
<td>x_grid</td>
<td>TRUE or FALSE for vertical x gridlines. NULL guesses based on the classes of the x and y.</td>
</tr>
<tr>
<td>x_include</td>
<td>For a numeric or date variable, any values that the scale should include (e.g. 0).</td>
</tr>
<tr>
<td>x_labels</td>
<td>A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.</td>
</tr>
<tr>
<td>x_limits</td>
<td>A vector of length 2 to determine the limits of the axis.</td>
</tr>
<tr>
<td>x_oob</td>
<td>A scales::oob_* function that handles values outside of limits for continuous scales. Defaults to scales::oob_censor.</td>
</tr>
<tr>
<td>x_sec_axis</td>
<td>A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.</td>
</tr>
<tr>
<td>x_title</td>
<td>Axis title string. Defaults to converting to sentence case with spaces. Use &quot;&quot; for no title.</td>
</tr>
<tr>
<td>x_trans</td>
<td>For a numeric variable, a transformation object (e.g. &quot;log10&quot;, &quot;sqrt&quot; or &quot;reverse&quot;).</td>
</tr>
<tr>
<td>y_breaks</td>
<td>A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.</td>
</tr>
<tr>
<td>y_expand</td>
<td>Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).</td>
</tr>
<tr>
<td>y_grid</td>
<td>TRUE or FALSE of horizontal y gridlines. NULL guesses based on the classes of the x and y.</td>
</tr>
<tr>
<td>y_include</td>
<td>For a numeric or date variable, any values that the scale should include (e.g. 0).</td>
</tr>
<tr>
<td>y_labels</td>
<td>A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.</td>
</tr>
<tr>
<td>y_limits</td>
<td>A vector of length 2 to determine the limits of the axis.</td>
</tr>
<tr>
<td>y_oob</td>
<td>A scales::oob_* function that handles values outside of limits for continuous scales. Defaults to scales::oob_censor.</td>
</tr>
<tr>
<td>y_sec_axis</td>
<td>A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.</td>
</tr>
<tr>
<td>y_title</td>
<td>Axis title string. Defaults to converting to sentence case with spaces. Use &quot;&quot; for no title.</td>
</tr>
<tr>
<td>y_trans</td>
<td>For a numeric variable, a transformation object (e.g. &quot;log10&quot;, &quot;sqrt&quot; or &quot;reverse&quot;).</td>
</tr>
<tr>
<td>col_breaks</td>
<td>A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.</td>
</tr>
<tr>
<td>col_continuous</td>
<td>Type of colouring for a continuous variable. Either &quot;gradient&quot; or &quot;steps&quot;. Defaults to &quot;steps&quot; - or just the first letter of these e.g. &quot;g&quot;.</td>
</tr>
<tr>
<td>col_include</td>
<td>For a numeric or date variable, any values that the scale should include (e.g. 0).</td>
</tr>
<tr>
<td>col_labels</td>
<td>A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels. Note this does not affect where col_intervals is not NULL.</td>
</tr>
</tbody>
</table>
gg_tile

col_legend_place
The place for the legend. Either "bottom", "right", "top" or "left" - or just the first letter of these e.g. "b".

col_legend_ncol
The number of columns for the legend elements.

col_legend_nrow
The number of rows for the legend elements.

col_legend_rev
Reverse the elements of the legend. Defaults to FALSE.

col_limits
A vector to determine the limits of the colour scale.

col_oob
A scales::oob_* function that handles values outside of limits for continuous scales. Defaults to scales::oob_censor.

col_rescale
For a continuous col variable, a vector to rescale the pal non-linearly.

col_title
Legend title string. Defaults to converting to sentence case with spaces. Use "" for no title.

col_trans
For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").

facet_labels
A function that takes the breaks as inputs (e.g. scales::label_comma()), or a named vector of labels (e.g. c("value" = "label", ...)).

facet_ncol
The number of columns of facets. Only applies to a facet layout of "wrap".

facet_nrow
The number of rows of facets. Only applies to a facet layout of "wrap".

facet_scales
Whether facet scales should be "fixed" across facets, "free" in both directions, or free in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed".

facet_space
Whether facet space should be "fixed" across facets, "free" to be proportional in both directions, or free to be proportional in just one direction (i.e. "free_x" or "free_y"). Defaults to "fixed". Only applies where the facet layout is "grid" and facet scales are not "fixed".

facet_layout
Whether the layout is to be "wrap" or "grid". If NULL and a single facet (or facet2) argument is provided, then defaults to "wrap". If NULL and both facet and facet2 arguments are provided, defaults to "grid".

caption
Caption title string.

titles
A function to format the x, y and col titles. Defaults to snakecase::to_sentence_case.

theme
A ggplot2 theme.

void
TRUE or FALSE of whether to remove axis lines, ticks and x and y titles and labels.

Value
A ggplot object.

Examples

library(ggplot2)
df <- data.frame(
gg_violin

Description

Create a violin plot with a wrapper around the ggplot2::geom_violin function.

Usage

```r
gg_violin(
  data = NULL,
  x = NULL,
  y = NULL,
  col = NULL,
  facet = NULL,
  facet2 = NULL,
  group = NULL,
  stat = "ydensity",
  position = "dodge",
  coord = ggplot2::coord_cartesian(clip = "off"),
  pal = NULL,
  pal_na = pal_grey,
  alpha = 0.9,
  ...,
  title = NULL,
  subtitle = NULL,
  x_breaks = NULL,
  x_expand = NULL,
  x_grid = NULL,
  x_include = NULL,
  x_labels = NULL,
  x_limits = NULL,
  x_oob = scales::oob_censor,
  x_sec_axis = ggplot2::waiver(),
  x_title = NULL,
  x_trans = "identity",
  y_breaks = NULL,
  y_breaks = NULL,
  y_expand = NULL,
  y_grid = NULL,
  y_include = NULL,
  y_labels = NULL,
  y_limits = NULL,
  y_oob = scales::oob_censor,
  y_title = NULL,
  y_trans = "identity",
  panel = NULL
)
```

```r
dx = rep(c(2, 5, 7, 9, 12), 2),
y = rep(c(1, 2), each = 5),
z = factor(rep(1:5, each = 2)),
w = rep(diff(c(0, 4, 6, 8, 10, 14)), 2)

df %>%
gg_tile(x = x, y = y, col = z,
  height = 0.9, width = 0.9)
```
Arguments

data A data frame or tibble.

x Unquoted x aesthetic variable.

y Unquoted y aesthetic variable.

col Unquoted col and fill aesthetic variable.

facet Unquoted facet aesthetic variable.

facet2 Unquoted second facet variable for a facet grid of facet by facet2 variables.

group Unquoted group aesthetic variable.

stat Statistical transformation. A character string (e.g. "identity").

position Position adjustment. Either a character string (e.g."identity"), or a function (e.g. ggplot2::position_identity()).
coord  A coordinate function from ggplot2 (e.g. ggplot2::coord_cartesian()).

pal   Colours to use. A character vector of hex codes (or names).

pal_na Colour to use for NA values. A character vector of a hex code (or name).

alpha Opacity. A number between 0 and 1.

... Other arguments passed to the ggplot2::geom_violin function.

title Title string.

subtitle Subtitle string.

x_breaks A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.

x_expand Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).

x_grid TRUE or FALSE for vertical x gridlines. NULL guesses based on the classes of the x and y.

x_include For a numeric or date variable, any values that the scale should include (e.g. 0).

x_labels A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.

x_limits A vector of length 2 to determine the limits of the axis.

x_oob A scales::oob_* function that handles values outside of limits for continuous scales. Defaults to scales::oob_censor.

x_sec_axis A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.

x_title Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.

x_trans For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").

y_breaks A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.

y_expand Padding to the limits with the ggplot2::expansion function, or a vector of length 2 (e.g. c(0, 0)).

y_grid TRUE or FALSE of horizontal y gridlines. NULL guesses based on the classes of the x and y.

y_include For a numeric or date variable, any values that the scale should include (e.g. 0).

y_labels A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels.

y_limits A vector of length 2 to determine the limits of the axis.

y_oob A scales::oob_* function that handles values outside of limits for continuous scales. Defaults to scales::oob_censor.

y_sec_axis A secondary axis using the ggplot2::sec_axis or ggplot2::dup_axis function.

y_title Axis title string. Defaults to converting to sentence case with spaces. Use "" for no title.

y_trans For a numeric variable, a transformation object (e.g. "log10", "sqrt" or "reverse").

col_breaks A function on the limits (e.g. scales::breaks_pretty()), or a vector of breaks.
<table>
<thead>
<tr>
<th>Argument</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>col_continuous</td>
<td>Type of colouring for a continuous variable. Either &quot;gradient&quot; or &quot;steps&quot;. Defaults to &quot;steps&quot; - or just the first letter of these e.g. &quot;g&quot;.</td>
</tr>
<tr>
<td>col_include</td>
<td>For a numeric or date variable, any values that the scale should include (e.g. 0).</td>
</tr>
<tr>
<td>col_labels</td>
<td>A function that takes the breaks as inputs (e.g. scales::label_comma()), or a vector of labels. Note this does not affect where col_intervals is not NULL.</td>
</tr>
<tr>
<td>col_legend_place</td>
<td>The place for the legend. Either &quot;bottom&quot;, &quot;right&quot;, &quot;top&quot; or &quot;left&quot; - or just the first letter of these e.g. &quot;b&quot;.</td>
</tr>
<tr>
<td>col_legend_ncol</td>
<td>The number of columns for the legend elements.</td>
</tr>
<tr>
<td>col_legend_nrow</td>
<td>The number of rows for the legend elements.</td>
</tr>
<tr>
<td>col_limits</td>
<td>A vector to determine the limits of the colour scale.</td>
</tr>
<tr>
<td>col_oob</td>
<td>A scales::oob_* function that handles values outside of limits for continuous scales. Defaults to scales::oob_censor.</td>
</tr>
<tr>
<td>col_rescale</td>
<td>For a continuous col variable, a vector to rescale the pal non-linearly.</td>
</tr>
<tr>
<td>col_title</td>
<td>Legend title string. Defaults to converting to sentence case with spaces. Use &quot;&quot; for no title.</td>
</tr>
<tr>
<td>col_trans</td>
<td>For a numeric variable, a transformation object (e.g. &quot;log10&quot;, &quot;sqrt&quot; or &quot;reverse&quot;).</td>
</tr>
<tr>
<td>facet_labels</td>
<td>A function that takes the breaks as inputs (e.g. scales::label_comma()), or a named vector of labels (e.g. c(&quot;value&quot; = &quot;label&quot;, ...)).</td>
</tr>
<tr>
<td>facet_ncol</td>
<td>The number of columns of facets. Only applies to a facet layout of &quot;wrap&quot;.</td>
</tr>
<tr>
<td>facet_nrow</td>
<td>The number of rows of facets. Only applies to a facet layout of &quot;wrap&quot;.</td>
</tr>
<tr>
<td>facet_scales</td>
<td>Whether facet scales should be &quot;fixed&quot; across facets, &quot;free&quot; in both directions, or free in just one direction (i.e. &quot;free_x&quot; or &quot;free_y&quot;). Defaults to &quot;fixed&quot;.</td>
</tr>
<tr>
<td>facet_space</td>
<td>Whether facet space should be &quot;fixed&quot; across facets, &quot;free&quot; to be proportional in both directions, or free to be proportional in just one direction (i.e. &quot;free_x&quot; or &quot;free_y&quot;). Defaults to &quot;fixed&quot;. Only applies where the facet layout is &quot;grid&quot; and facet scales are not &quot;fixed&quot;.</td>
</tr>
<tr>
<td>facet_layout</td>
<td>Whether the layout is to be &quot;wrap&quot; or &quot;grid&quot;. If NULL and a single facet (or facet2) argument is provided, then defaults to &quot;wrap&quot;. If NULL and both facet and facet2 arguments are provided, defaults to &quot;grid&quot;.</td>
</tr>
<tr>
<td>caption</td>
<td>Caption title string.</td>
</tr>
<tr>
<td>titles</td>
<td>A function to format the x, y and col titles. Defaults to snakecase::to_sentence_case.</td>
</tr>
<tr>
<td>theme</td>
<td>A ggplot2 theme.</td>
</tr>
<tr>
<td>void</td>
<td>TRUE or FALSE of whether to remove axis lines, ticks and x and y titles and labels.</td>
</tr>
</tbody>
</table>

**Value**

A ggplot object.
Examples

```r
library(dplyr)
library(palmerpenguins)

penguins |>
  group_by(species, sex) |>
  summarise(flipper_length_mm = mean(flipper_length_mm, na.rm = TRUE)) |>
  gg_tile(
    x = sex,
    y = species,
    col = flipper_length_mm,
    pal = RColorBrewer::brewer_pal(9, "Blues"),
    col_labels = stringr::str_to_sentence
  )
```

Description

A hex code of the ggblanket blue colour used for where there is no colour aesthetic.

Usage

`pal_blue`

Format

An object of class character of length 1.

Value

A character vector.

References

https://blog.datawrapper.de/colors-for-data-vis-style-guides/
pal_grey

Description
A hex code of the ggblanket grey colour used for NA values.

Usage
pal_grey

Format
An object of class character of length 1.

Value
A character vector.

References
https://blog.datawrapper.de/colors-for-data-vis-style-guides/

pal_hue

Description
A vector of hex codes of the ggblanket hue palette.

Usage
pal_hue

Format
An object of class character of length 7.

Value
A character vector of hex codes.

References
https://blog.datawrapper.de/colors-for-data-vis-style-guides/
Index

* datasets
  pal_blue, 138
  pal_grey, 139
  pal_hue, 139

gg_area, 2
gg_bar, 6
gg_bin2d, 10
gg_blank, 14
gg_boxplot, 19
gg_col, 24
gg_crossbar, 28
gg_density, 33
gg_errorbar, 37
gg_freqpoly, 41
gg_function, 45
gg_hex, 49
gg_histogram, 53
gg_jitter, 57
gg_label, 62
gg_line, 66
gg_linerange, 70
gg_path, 74
gg_point, 78
gg_pointrange, 82
gg_polygon, 87
gg_qq, 91
gg_raster, 95
gg_rect, 100
gg_ribbon, 104
gg_segment, 108
gg_sf, 113
gg_smooth, 116
gg_step, 120
gg_text, 124
gg_theme, 128
gg_tile, 130
gg_violin, 134
pal_blue, 138
pal_grey, 139
pal_hue, 139