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**Example sf object of the New Zealand coastline.**

**Description**

Example sf object of the New Zealand coastline used to demonstrate adding borders to maps.

**Usage**

```r
element_borders
```
Format
   An sf object.

Examples
   gg_sf_col(example_point, col_var = trend_category, borders = example_borders)

example_point       Example sf point object.

Description
   Example sf point object.

Usage
   example_point

Format
   An sf object.

Examples
   gg_sf_col(example_point, col_var = trend_category, borders = example_borders)

example_polygon      Example sf polygon object.

Description
   Example sf polygon object.

Usage
   example_polygon

Format
   An sf object.

Examples
   gg_sf_col(example_polygon, col_var = density, borders = example_borders)
`example_stars`  

**Example stars object.**

**Description**

Example stars object.

**Usage**

`example_stars`

**Format**

A `stars` object.

**Examples**

```r
library(stars)
gg_stars_col(example_stars, col_var = nitrate, borders = example_borders)
```

---

`gg_bar`  

*DEPRECATED. Bar ggplot.*

**Description**

DEPRECATED. Bar ggplot that is not coloured and not facetted.

**Usage**

```r
gg_bar(
  data,
  x_var,
  y_var,
  text_var = NULL,
  pal = pal_viridis_mix(1),
  alpha_fill = 1,
  alpha_line = 1,
  size_line = 0.5,
  width = NULL,
  title = NULL,
  title_wrap = 80,
  subtitle = NULL,
  subtitle_wrap = 80,
  x_zero_mid = FALSE,
  x_expand = NULL,
  x_labels = NULL,
)```
x_na_rm = FALSE,
x_breaks_n = 5,
x_reorder = FALSE,
x_rev = FALSE,
x_title = NULL,
x_title_wrap = 50,
x_zero = FALSE,
x_zero_line = NULL,

y_zero_mid = FALSE,
y_breaks_n = 5,
y_expand = c(0, 0),
y_labels = scales::label_comma(),
y_na_rm = FALSE,
y_title = NULL,
y_title_wrap = 50,
y_zero = TRUE,
y_zero_line = NULL,
caption = NULL,
caption_wrap = 80,
theme = gg_theme(y_grid = TRUE),
mobile = FALSE
)

Arguments

- **data**: A data frame in a structure to be plotted untransformed. Required input.
- **x_var**: Unquoted variable to be on the x scale (i.e. character, factor, logical, numeric, date or datetime). If numeric, date or datetime, variable values are bins that are mutually exclusive and equidistant. Required input.
- **y_var**: Unquoted numeric variable to be on the y scale. Required input.
- **text_var**: Unquoted variable to be used as a customised tooltip in combination with plotly::ggplotly(plot, tooltip = "text"). Defaults to NULL.
- **pal**: Character vector of hex codes.
- **alpha_fill**: The opacity of the fill. Defaults to 1.
- **alpha_line**: The opacity of the outline. Defaults to 1.
- **size_line**: The size of the outlines of bars.
- **width**: Width of bars. Defaults to 0.75.
- **title**: Title string.
- **title_wrap**: Number of characters to wrap the title to. Defaults to 75.
- **subtitle**: Subtitle string.
- **subtitle_wrap**: Number of characters to wrap the subtitle to. Defaults to 100.
- **x_zero_mid**: For a numeric x variable, add balance to the x scale so that zero is in the centre. Defaults to FALSE.
- **x_expand**: A vector of range expansion constants used to add padding to the x scale, as per the ggplot2 expand argument in ggplot2 scales functions.
gg_bar

x_labels
A function or named vector to modify x scale labels. If NULL, categorical variable labels are converted to sentence case. Use function(x) x to keep labels untransformed.

x_na_rm
TRUE or FALSE of whether to include x_var NA values. Defaults to FALSE.

x_breaks_n
For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 5.

x_reorder
For a categorical x variable, TRUE or FALSE of whether the x variable variable is to be reordered by the x variable. Defaults to FALSE.

x_rev
For a categorical variable, TRUE or FALSE of whether the x variable variable is reversed. Defaults to FALSE.

x_title
X scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.

x_title_wrap
Number of characters to wrap the x title to. Defaults to 50.

x_zero
For a numeric x variable, TRUE or FALSE of whether the minimum of the x scale is zero. Defaults to FALSE.

x_zero_line
For a numeric x variable, TRUE or FALSE of whether to add a zero reference line to the x scale. Defaults to TRUE if there are positive and negative values in x_var. Otherwise defaults to FALSE.

y_zero_mid
For a numeric y variable, add balance to the y scale so that zero is in the centre of the y scale.

y_breaks_n
For a numeric or date y variable, the desired number of intervals on the y scale, as calculated by the pretty algorithm. Defaults to 5.

y_expand
A vector of range expansion constants used to add padding to the y scale, as per the ggplot2 expand argument in ggplot2 scales functions.

y_labels
A function or named vector to modify y scale labels. Use function(x) x to keep labels untransformed.

y_na_rm
TRUE or FALSE of whether to include y_var NA values. Defaults to FALSE.

y_title
y scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.

y_title_wrap
Number of characters to wrap the y title to. Defaults to 50.

y_zero
For a numeric y variable, TRUE or FALSE of whether the minimum of the y scale is zero. Defaults to TRUE.

y_zero_line
For a numeric y variable, TRUE or FALSE whether to add a zero reference line to the y scale. Defaults to TRUE if there are positive and negative values in y_var. Otherwise defaults to FALSE.

caption
Caption title string.

caption_wrap
Number of characters to wrap the caption to. Defaults to 80.

theme
A ggplot2 theme.

mobile
Whether the plot is to be displayed on a mobile device. Defaults to FALSE.

Value
A ggplot object.
Examples

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

plot_data <- penguins %>%
  group_by(species) %>%
  summarise(body_mass_g = mean(body_mass_g, na.rm = TRUE))

gg_bar(plot_data,
       x_var = species,
       y_var = body_mass_g)
```

**gg_bar_col**  
**DEPRECATED. Bar ggplot that is coloured.**

**Description**  
DEPRECATED. Bar ggplot that is coloured, but not faceted.

**Usage**

```r
gg_bar_col(
  data,
  x_var,
  y_var,
  col_var,
  text_var = NULL,
  stack = FALSE,
  pal = NULL,
  pal_na = "#7F7F7F",
  pal_rev = FALSE,
  alpha_fill = 1,
  alpha_line = 1,
  size_line = 0.5,
  width = NULL,
  title = NULL,
  title_wrap = 80,
  subtitle = NULL,
  subtitle_wrap = 80,
  x_zero_mid = FALSE,
  x_expand = NULL,
  x_labels = NULL,
  x_na_rm = FALSE,
  x_breaks_n = 5,
  x_rev = FALSE)
```


gg_bar_col

```
x_title = NULL,
x_title_wrap = 50,
x_zero = FALSE,
x_zero_line = NULL,
y_zero_mid = FALSE,
y_expand = c(0, 0),
y_labels = scales::label_comma(),
y_na_rm = FALSE,
y_breaks_n = 5,
y_title = NULL,
y_title_wrap = 50,
y_zero = TRUE,
y_zero_line = NULL,
col_breaks_n = 4,
col_cuts = NULL,
col_intervals_left = TRUE,
col_labels = NULL,
col_legend_none = FALSE,
col_method = NULL,
col_na_rm = FALSE,
col_rev = FALSE,
col_title = NULL,
col_title_wrap = 25,
caption = NULL,
caption_wrap = 80,
theme = gg_theme(y_grid = TRUE),
mobile = FALSE
```

Arguments

**data**
A data frame in a structure to be plotted untransformed. Required input.

**x_var**
Unquoted variable to be on the x scale (i.e. character, factor, logical, numeric, date or datetime). If numeric, date or datetime, variable values are bins that are mutually exclusive and equidistant. Required input.

**y_var**
Unquoted numeric variable to be on the y scale. Required input.

**col_var**
Unquoted categorical or numeric variable to colour the bars. Required input.

**text_var**
Unquoted variable to be used as a customised tooltip in combination with plotly::ggplotly(plot, tooltip = "text"). Defaults to NULL.

**stack**
TRUE or FALSE of whether bars are to be positioned by "stack". Defaults to FALSE, which positions by "dodge".

**pal**
Character vector of hex codes.

**pal_na**
The hex code or name of the NA colour to be used.

**pal_rev**
Reverses the palette. Defaults to FALSE.

**alpha_fill**
The opacity of the fill. Defaults to 1.

**alpha_line**
The opacity of the outline. Defaults to 1.
<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>size_line</td>
<td>The size of the outlines of bars.</td>
</tr>
<tr>
<td>width</td>
<td>Width of bars. Defaults to 0.75.</td>
</tr>
<tr>
<td>title</td>
<td>Title string.</td>
</tr>
<tr>
<td>title_wrap</td>
<td>Number of characters to wrap the title to. Defaults to 75.</td>
</tr>
<tr>
<td>subtitle</td>
<td>Subtitle string.</td>
</tr>
<tr>
<td>subtitle_wrap</td>
<td>Number of characters to wrap the subtitle to. Defaults to 100.</td>
</tr>
<tr>
<td>x_zero_mid</td>
<td>For a numeric x variable, add balance to the x scale so that zero is in the centre. Defaults to FALSE.</td>
</tr>
<tr>
<td>x_expand</td>
<td>A vector of range expansion constants used to add padding to the x scale, as per the ggplot2 expand argument in ggplot2 scales functions.</td>
</tr>
<tr>
<td>x_labels</td>
<td>A function or named vector to modify x scale labels. If NULL, categorical variable labels are converted to sentence case. Use function(x) x to keep labels untransformed.</td>
</tr>
<tr>
<td>x_na_rm</td>
<td>TRUE or FALSE of whether to include x_var NA values. Defaults to FALSE.</td>
</tr>
<tr>
<td>x_breaks_n</td>
<td>For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 5.</td>
</tr>
<tr>
<td>x_rev</td>
<td>For a categorical variable, TRUE or FALSE of whether the x variable variable is reversed. Defaults to FALSE.</td>
</tr>
<tr>
<td>x_title</td>
<td>X scale title string. Defaults to NULL, which converts to sentence case with spaces. Use &quot;&quot; if you would like no title.</td>
</tr>
<tr>
<td>x_title_wrap</td>
<td>Number of characters to wrap the x title to. Defaults to 50.</td>
</tr>
<tr>
<td>x_zero</td>
<td>For a numeric x variable, TRUE or FALSE of whether the minimum of the x scale is zero. Defaults to FALSE.</td>
</tr>
<tr>
<td>x_zero_line</td>
<td>For a numeric x variable, TRUE or FALSE of whether to add a zero reference line to the x scale. Defaults to TRUE if there are positive and negative values in x_var. Otherwise defaults to FALSE.</td>
</tr>
<tr>
<td>y_zero_mid</td>
<td>For a numeric y variable, add balance to the y scale so that zero is in the centre of the y scale.</td>
</tr>
<tr>
<td>y_expand</td>
<td>A vector of range expansion constants used to add padding to the y scale, as per the ggplot2 expand argument in ggplot2 scales functions.</td>
</tr>
<tr>
<td>y_labels</td>
<td>A function or named vector to modify y scale labels. Use function(x) x to keep labels untransformed.</td>
</tr>
<tr>
<td>y_na_rm</td>
<td>TRUE or FALSE of whether to include y_var NA values. Defaults to FALSE.</td>
</tr>
<tr>
<td>y_breaks_n</td>
<td>For a numeric or date y variable, the desired number of intervals on the y scale, as calculated by the pretty algorithm. Defaults to 5.</td>
</tr>
<tr>
<td>y_title</td>
<td>y scale title string. Defaults to NULL, which converts to sentence case with spaces. Use &quot;&quot; if you would like no title.</td>
</tr>
<tr>
<td>y_title_wrap</td>
<td>Number of characters to wrap the y title to. Defaults to 50.</td>
</tr>
<tr>
<td>y_zero</td>
<td>For a numeric y variable, TRUE or FALSE of whether the minimum of the y scale is zero. Defaults to TRUE.</td>
</tr>
</tbody>
</table>
For a numeric y variable, TRUE or FALSE whether to add a zero reference line to the y scale. Defaults to TRUE if there are positive and negative values in y_var. Otherwise defaults to FALSE.

col_breaks_n
For a numeric colour variable, the desired number of intervals on the colour scale.

col_cuts
A vector of cuts to colour a numeric variable. If "bin" is selected, the first number in the vector should be either -Inf or 0, and the final number Inf. If "quantile" is selected, the first number in the vector should be 0 and the final number should be 1. Defaults to quartiles.

col_intervals_left
For a numeric colour variable, TRUE or FALSE of whether bins or quantiles are to be cut left-closed. Defaults to TRUE.

col_labels
A function or named vector to modify colour scale labels. Defaults to snake_case::to_sentence_case for categorical colour variables and scales::label_comma() for numeric. Use function(x) x to keep labels untransformed.

col_legend_none
TRUE or FALSE of whether to remove the legend.

col_method
The method of colouring features, either "bin", "quantile", "continuous", or "category." If numeric, defaults to "bin".

col_na_rm
TRUE or FALSE of whether to include col_var NA values. Defaults to FALSE.

col_rev
TRUE or FALSE of whether the colour scale is reversed. Defaults to FALSE.

col_title
Colour title string for the legend. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.

col_title_wrap
Number of characters to wrap the colour title to. Defaults to 25. Not applicable where mobile equals TRUE.

caption
Caption title string.

caption_wrap
Number of characters to wrap the caption to. Defaults to 80.

theme
A ggplot2 theme.

mobile
Whether the plot is to be displayed on a mobile device. Defaults to FALSE.

Value
A ggplot object.

Examples

library(dplyr)
library(simplevis)
library(palmerpenguins)

plot_data <- penguins %>%
  group_by(species, sex) %>%
  summarise(body_mass_g = mean(body_mass_g, na.rm = TRUE))

gg_bar_col(plot_data,
  x_var = species,
gg_bar_col_facet

DEPRECATED. Bar ggplot that is coloured and faceted.

Description

DEPRECATED. Bar ggplot that is coloured and faceted.

Usage

gg_bar_col_facet(
  data,  
  x_var,  
  y_var,  
  col_var,  
  facet_var,  
  text_var = NULL,  
  stack = FALSE,  
  pal = NULL,  
  pal_na = "#7F7F7F",  
  pal_rev = FALSE,  
  alpha_fill = 1,  
  alpha_line = 1,  
  size_line = 0.5,  
  width = NULL,  
  title = NULL,  
  title_wrap = 80,  
  subtitle = NULL,  
  subtitle_wrap = 80,  
  x_zero_mid = FALSE,  
  x_breaks_n = 2,  
  x_expand = NULL,  
  x_labels = NULL,  
  x_na_rm = FALSE,  
  x_rev = FALSE,  
  x_title = NULL,  
  col_var = sex,  
  col_na_rm = TRUE)
Arguments

data A data frame in a structure to be plotted untransformed. Required input.
x_var Unquoted variable to be on the x scale (i.e. character, factor, logical, numeric, date or datetime). If numeric, date or datetime, variable values are bins that are mutually exclusive and equidistant. Required input.
y_var Unquoted numeric variable to be on the y scale. Required input.
col_var Unquoted categorical or numeric variable to colour the bars. Required input.
facet_var Unquoted categorical variable to facet the data by. Required input.
text_var Unquoted variable to be used as a customised tooltip in combination with plotly::ggplotly(plot, tooltip = "text"). Defaults to NULL.
stack TRUE or FALSE of whether bars are to be positioned by "stack". Defaults to FALSE.
pal Character vector of hex codes.
<table>
<thead>
<tr>
<th>Argument</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>pal_na</code></td>
<td>The hex code or name of the NA colour to be used.</td>
</tr>
<tr>
<td><code>pal_rev</code></td>
<td>Reverses the palette. Defaults to <code>FALSE</code>.</td>
</tr>
<tr>
<td><code>alpha_fill</code></td>
<td>The opacity of the fill. Defaults to 1.</td>
</tr>
<tr>
<td><code>alpha_line</code></td>
<td>The opacity of the outline. Defaults to 1.</td>
</tr>
<tr>
<td><code>size_line</code></td>
<td>The size of the outlines of bars.</td>
</tr>
<tr>
<td><code>width</code></td>
<td>Width of bars. Defaults to 0.75.</td>
</tr>
<tr>
<td><code>title</code></td>
<td>Title string.</td>
</tr>
<tr>
<td><code>title_wrap</code></td>
<td>Number of characters to wrap the title to. Defaults to 75.</td>
</tr>
<tr>
<td><code>subtitle</code></td>
<td>Subtitle string.</td>
</tr>
<tr>
<td><code>subtitle_wrap</code></td>
<td>Number of characters to wrap the subtitle to. Defaults to 100.</td>
</tr>
<tr>
<td><code>x_zero_mid</code></td>
<td>For a numeric x variable, add balance to the x scale so that zero is in the centre. Defaults to <code>FALSE</code>.</td>
</tr>
<tr>
<td><code>x_breaks_n</code></td>
<td>For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 2.</td>
</tr>
<tr>
<td><code>x_expand</code></td>
<td>A vector of range expansion constants used to add padding to the x scale, as per the ggplot2 expand argument in ggplot2 scales functions.</td>
</tr>
<tr>
<td><code>x_labels</code></td>
<td>A function or named vector to modify x scale labels. If NULL, categorical variable labels are converted to sentence case. Use function(x) x to keep labels untransformed.</td>
</tr>
<tr>
<td><code>x_na_rm</code></td>
<td>TRUE or FALSE of whether to include x_var NA values. Defaults to <code>FALSE</code>.</td>
</tr>
<tr>
<td><code>x_rev</code></td>
<td>For a categorical variable, TRUE or FALSE of whether the x variable variable is reversed. Defaults to <code>FALSE</code>.</td>
</tr>
<tr>
<td><code>x_title</code></td>
<td>X scale title string. Defaults to NULL, which converts to sentence case with spaces. Use &quot;&quot; if you would like no title.</td>
</tr>
<tr>
<td><code>x_title_wrap</code></td>
<td>Number of characters to wrap the x title to. Defaults to 50.</td>
</tr>
<tr>
<td><code>x_zero</code></td>
<td>For a numeric x variable, TRUE or FALSE of whether the minimum of the x scale is zero. Defaults to <code>FALSE</code>.</td>
</tr>
<tr>
<td><code>x_zero_line</code></td>
<td>For a numeric x variable, TRUE or FALSE of whether to add a zero reference line to the x scale. Defaults to <code>TRUE</code> if there are positive and negative values in x_var. Otherwise defaults to <code>FALSE</code>.</td>
</tr>
<tr>
<td><code>y_zero_mid</code></td>
<td>For a numeric y variable, add balance to the y scale so that zero is in the centre of the y scale.</td>
</tr>
<tr>
<td><code>y_breaks_n</code></td>
<td>For a numeric or date y variable, the desired number of intervals on the y scale, as calculated by the pretty algorithm. Defaults to 4.</td>
</tr>
<tr>
<td><code>y_expand</code></td>
<td>A vector of range expansion constants used to add padding to the y scale, as per the ggplot2 expand argument in ggplot2 scales functions.</td>
</tr>
<tr>
<td><code>y_labels</code></td>
<td>A function or named vector to modify y scale labels. Use function(x) x to keep labels untransformed.</td>
</tr>
<tr>
<td><code>y_na_rm</code></td>
<td>TRUE or FALSE of whether to include y_var NA values. Defaults to <code>FALSE</code>.</td>
</tr>
<tr>
<td><code>y_title</code></td>
<td>y scale title string. Defaults to NULL, which converts to sentence case with spaces. Use &quot;&quot; if you would like no title.</td>
</tr>
</tbody>
</table>
### `gg_bar_col_facet`

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>y_title_wrap</code></td>
<td>Number of characters to wrap the y title to. Defaults to 50.</td>
</tr>
<tr>
<td><code>y_zero</code></td>
<td>For a numeric y variable, TRUE or FALSE of whether the minimum of the y scale is zero. Defaults to TRUE.</td>
</tr>
<tr>
<td><code>y_zero_line</code></td>
<td>For a numeric y variable, TRUE or FALSE whether to add a zero reference line to the y scale. Defaults to TRUE if there are positive and negative values in y_var. Otherwise defaults to FALSE.</td>
</tr>
<tr>
<td><code>col_breaks_n</code></td>
<td>For a numeric colour variable, the desired number of intervals on the colour scale.</td>
</tr>
<tr>
<td><code>col_cuts</code></td>
<td>A vector of cuts to colour a numeric variable. If &quot;bin&quot; is selected, the first number in the vector should be either -Inf or 0, and the final number Inf. If &quot;quantile&quot; is selected, the first number in the vector should be 0 and the final number should be 1. Defaults to quartiles.</td>
</tr>
<tr>
<td><code>col_labels</code></td>
<td>A function or named vector to modify colour scale labels. Defaults to snake-case::to_sentence_case for categorical colour variables and scales::label_comma() for numeric. Use function(x) x to keep labels untransformed.</td>
</tr>
<tr>
<td><code>col_intervals_left</code></td>
<td>For a numeric colour variable, TRUE or FALSE of whether bins or quantiles are to be cut left-closed. Defaults to TRUE.</td>
</tr>
<tr>
<td><code>col_legend_none</code></td>
<td>TRUE or FALSE of whether to remove the legend.</td>
</tr>
<tr>
<td><code>col_method</code></td>
<td>The method of colouring features, either &quot;bin&quot;, &quot;quantile&quot;, &quot;continuous&quot;, or &quot;category.&quot; If numeric, defaults to &quot;bin&quot;.</td>
</tr>
<tr>
<td><code>col_na_rm</code></td>
<td>TRUE or FALSE of whether to include col_var NA values. Defaults to FALSE.</td>
</tr>
<tr>
<td><code>col_rev</code></td>
<td>Colour title string for the legend. Defaults to NULL, which converts to sentence case with spaces. Use &quot;&quot; if you would like no title.</td>
</tr>
<tr>
<td><code>col_title_wrap</code></td>
<td>Number of characters to wrap the colour title to. Defaults to 25. Not applicable where mobile equals TRUE.</td>
</tr>
<tr>
<td><code>facet_labels</code></td>
<td>A function or named vector to modify facet scale labels. Defaults to converting labels to sentence case. Use function(x) x to keep labels untransformed.</td>
</tr>
<tr>
<td><code>facet_na_rm</code></td>
<td>TRUE or FALSE of whether to include facet_var NA values. Defaults to FALSE.</td>
</tr>
<tr>
<td><code>facet_ncol</code></td>
<td>The number of columns of facetted plots.</td>
</tr>
<tr>
<td><code>facet_nrow</code></td>
<td>The number of rows of facetted plots.</td>
</tr>
<tr>
<td><code>facet_rev</code></td>
<td>TRUE or FALSE of whether the facet variable variable is reversed. Defaults to FALSE.</td>
</tr>
<tr>
<td><code>facet_scales</code></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><code>caption</code></td>
<td>Caption title string.</td>
</tr>
<tr>
<td><code>caption_wrap</code></td>
<td>Number of characters to wrap the caption to. Defaults to 80.</td>
</tr>
<tr>
<td><code>theme</code></td>
<td>A ggplot2 theme.</td>
</tr>
</tbody>
</table>

### Value

A ggplot object.
Examples

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

plot_data <- penguins %>%
  group_by(species, sex, island) %>%
  summarise(body_mass_g = mean(body_mass_g, na.rm = TRUE))

gg_bar_col_facet(plot_data,
  x_var = species,
  y_var = body_mass_g,
  col_var = island,
  facet_var = sex)
```

---

gg_bar_facet

**DEPRECATED. Bar ggplot that is faceted.**

Description

DEPRECATED. Bar ggplot that is faceted, but not coloured.

Usage

```r
gg_bar_facet(
  data,
  x_var,  
  y_var,  
  facet_var,  
  text_var = NULL,
  pal = pal_viridis_mix(1),
  alpha_fill = 1,
  alpha_line = 1,
  size_line = 0.5,
  width = NULL,
  title = NULL,
  title_wrap = 80,
  subtitle = NULL,
  subtitle_wrap = 80,
  x_zero_mid = FALSE,
  x_breaks_n = 2,
  x_expand = NULL,
  x_labels = NULL,
  x_na_rm = FALSE,
  x_rev = FALSE,
  x_title = NULL,
  x_title_wrap = 50,
```


Arguments

data
A data frame in a structure to be plotted untransformed. Required input.

x_var
Unquoted variable to be on the x scale (i.e. character, factor, logical, numeric, date or datetime). If numeric, date or datetime, variable values are bins that are mutually exclusive and equidistant. Required input.

y_var
Unquoted numeric variable to be on the y scale. Required input.

facet_var
Unquoted categorical variable to facet the data by. Required input.

text_var
Unquoted variable to be used as a customised tooltip in combination with plotly::ggplotly(plot, tooltip = "text"). Defaults to NULL.

pal
Character vector of hex codes.

alpha_fill
The opacity of the fill. Defaults to 1.

alpha_line
The opacity of the outline. Defaults to 1.

size_line
The size of the outlines of bars.

width
Width of bars. Defaults to 0.75.

title
Title string.

title_wrap
Number of characters to wrap the title to. Defaults to 75.

subtitle
Subtitle string.

subtitle_wrap
Number of characters to wrap the subtitle to. Defaults to 100.

x_zero_mid
For a numeric x variable, add balance to the x scale so that zero is in the centre. Defaults to FALSE.

x_breaks_n
For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 2.
<table>
<thead>
<tr>
<th>Variable</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>x_expand</td>
<td>A vector of range expansion constants used to add padding to the x scale, as per the ggplot2 expand argument in ggplot2 scales functions.</td>
</tr>
<tr>
<td>x_labels</td>
<td>A function or named vector to modify x scale labels. If NULL, categorical variable labels are converted to sentence case. Use function(x) x to keep labels untransformed.</td>
</tr>
<tr>
<td>x_na_rm</td>
<td>TRUE or FALSE of whether to include x_var NA values. Defaults to FALSE.</td>
</tr>
<tr>
<td>x_rev</td>
<td>For a categorical variable, TRUE or FALSE of whether the x variable variable is reversed. Defaults to FALSE.</td>
</tr>
<tr>
<td>x_title</td>
<td>X scale title string. Defaults to NULL, which converts to sentence case with spaces. Use &quot;&quot; if you would like no title.</td>
</tr>
<tr>
<td>x_title_wrap</td>
<td>Number of characters to wrap the x title to. Defaults to 50.</td>
</tr>
<tr>
<td>x_zero</td>
<td>For a numeric x variable, TRUE or FALSE of whether the minimum of the x scale is zero. Defaults to FALSE.</td>
</tr>
<tr>
<td>x_zero_line</td>
<td>For a numeric x variable, TRUE or FALSE of whether to add a zero reference line to the x scale. Defaults to TRUE if there are positive and negative values in x_var. Otherwise defaults to FALSE.</td>
</tr>
<tr>
<td>y_zero_mid</td>
<td>For a numeric y variable, add balance to the y scale so that zero is in the centre of the y scale.</td>
</tr>
<tr>
<td>y_expand</td>
<td>A vector of range expansion constants used to add padding to the y scale, as per the ggplot2 expand argument in ggplot2 scales functions.</td>
</tr>
<tr>
<td>y_breaks_n</td>
<td>For a numeric or date y variable, the desired number of intervals on the y scale, as calculated by the pretty algorithm. Defaults to 4.</td>
</tr>
<tr>
<td>y_labels</td>
<td>A function or named vector to modify y scale labels. Use function(x) x to keep labels untransformed.</td>
</tr>
<tr>
<td>y_na_rm</td>
<td>TRUE or FALSE of whether to include y_var NA values. Defaults to FALSE.</td>
</tr>
<tr>
<td>y_title</td>
<td>y scale title string. Defaults to NULL, which converts to sentence case with spaces. Use &quot;&quot; if you would like no title.</td>
</tr>
<tr>
<td>y_title_wrap</td>
<td>Number of characters to wrap the y title to. Defaults to 50.</td>
</tr>
<tr>
<td>y_zero</td>
<td>For a numeric y variable, TRUE or FALSE of whether the minimum of the y scale is zero. Defaults to TRUE.</td>
</tr>
<tr>
<td>y_zero_line</td>
<td>For a numeric y variable, TRUE or FALSE whether to add a zero reference line to the y scale. Defaults to TRUE if there are positive and negative values in y_var. Otherwise defaults to FALSE.</td>
</tr>
<tr>
<td>facet_labels</td>
<td>A function or named vector to modify facet scale labels. Defaults to converting labels to sentence case. Use function(x) x to keep labels untransformed.</td>
</tr>
<tr>
<td>facet_na_rm</td>
<td>TRUE or FALSE of whether to include facet_var NA values. Defaults to FALSE.</td>
</tr>
<tr>
<td>facet_ncol</td>
<td>The number of columns of facetted plots.</td>
</tr>
<tr>
<td>facet_nrow</td>
<td>The number of rows of facetted plots.</td>
</tr>
<tr>
<td>facet_rev</td>
<td>TRUE or FALSE of whether the facet variable variable is reversed. Defaults to FALSE.</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>
</tbody>
</table>
caption
Caption title string.
caption_wrap
Number of characters to wrap the caption to. Defaults to 80.
theme
A ggplot2 theme.

Value
A ggplot object.

Examples
library(dplyr)
library(simplevis)
library(palmerpenguins)

plot_data <- penguins %>%
  group_by(species, sex) %>%
  summarise(body_mass_g = mean(body_mass_g, na.rm = TRUE))

gg_bar_facet(plot_data,
  x_var = sex,
  y_var = body_mass_g,
  facet_var = species)

---

gg_boxplot

DEPRECATED. Boxplot ggplot.

Description
DEPRECATED. Boxplot ggplot that is not coloured and not faceted.

Usage
gg_boxplot(
  data,
  x_var,
  y_var = NULL,
  pal = pal_viridis_mix(1),
  alpha_fill = 0.5,
  alpha_line = 1,
  alpha_point = 1,
  size_line = 0.5,
  size_point = 1.5,
  width = 0.5,
  title = NULL,
  title_wrap = 80,
  subtitle = NULL,
  subtitle_wrap = 80,
gg_boxplot

x_expand = ggplot2::waiver(),
x_labels = snakecase::to_sentence_case,
x_na_rm = FALSE,
x_rev = FALSE,
x_title = NULL,
x_title_wrap = 50,
y_zero_mid = FALSE,
y_breaks_n = 5,
y_expand = c(0, 0),
y_labels = scales::label_comma(),
y_title = NULL,
y_title_wrap = 50,
y_zero = FALSE,
y_zero_line = NULL,
caption = NULL,
caption_wrap = 80,
stat = "boxplot",
ymin_var = NULL,
lower_var = NULL,
middle_var = NULL,
upper_var = NULL,
max_var = NULL,
theme = gg_theme(y_grid = TRUE),
mobile = FALSE)

Arguments

data A data frame generally in a structure to be transformed to boxplot statistics (or alternatively in a structure of summary boxplot statistics). Required input.

x_var Unquoted categorical variable to be on the x scale (i.e. character, factor, logical). Required input.

y_var Unquoted numeric variable to be on the y scale for when stat = "boxplot" is selected.

pal Character vector of hex codes.

alpha_fill The opacity of the fill. Defaults to 0.5.

alpha_line The opacity of the outline. Defaults to 1.

alpha_point The opacity of the outlier points. Defaults to 1.

size_line The size of the outlines of boxplots. Defaults to 0.5.

size_point The size of the outlier points. Defaults to 1.5.

width Width of boxes. Defaults to 0.5.

title Title string.

title_wrap Number of characters to wrap the title to. Defaults to 75.

subtitle Subtitle string.

subtitle_wrap Number of characters to wrap the subtitle to. Defaults to 75.
gg_boxplot

x_expand
A vector of range expansion constants used to add padding to the x scale, as per
the ggplot2 expand argument in ggplot2 scales functions.

x_labels
A function or named vector to modify x scale labels. If NULL, categorical
variable labels are converted to sentence case. Use ggplot2::waiver() to keep x
labels untransformed.

x_na_rm
TRUE or FALSE of whether to include x_var NA values. Defaults to FALSE.

x_rev
For a categorical x variable, TRUE or FALSE of whether the x variable variable
is reversed. Defaults to FALSE.

x_title
x scale title string. Defaults to NULL, which converts to sentence case with
spaces. Use "" if you would like no title.

x_title_wrap
Number of characters to wrap the x title to. Defaults to 50.

y_zero_mid
For a numeric y variable, add balance to the y scale so that zero is in the centre
of the y scale.

y_breaks_n
For a numeric or date x variable, the desired number of intervals on the x scale,
as calculated by the pretty algorithm. Defaults to 5.

y_expand
A vector of range expansion constants used to add padding to the y scale, as per
the ggplot2 expand argument in ggplot2 scales functions.

y_labels
A function or named vector to modify y scale labels. Use ggplot2::waiver() to
keep y labels untransformed.

y_title
y scale title string. Defaults to NULL, which converts to sentence case with
spaces. Use "" if you would like no title.

y_title_wrap
Number of characters to wrap the y title to. Defaults to 50.

y_zero
For a numeric y variable, TRUE or FALSE of whether the minimum of the y
scale is zero. Defaults to TRUE.

y_zero_line
For a numeric y variable, TRUE or FALSE whether to add a zero reference line
to the y scale. Defaults to TRUE if there are positive and negative values in
y_var. Otherwise defaults to FALSE.

caption
Caption title string.

caption_wrap
Number of characters to wrap the caption to. Defaults to 80.

stat
String of "boxplot" or "identity". Defaults to "boxplot".

ymin_var
Unquoted numeric variable for minimum of whisker on the y scale for when stat = "identity" is selected.

ylower_var
Unquoted numeric variable for minimum of box on the y scale for when stat = "identity" is selected.

ymiddle_var
Unquoted numeric variable for middle of box on the y scale for when stat = "identity" is selected.

yupper_var
Unquoted numeric variable for maximum of box on the y scale for when stat = "identity" is selected.

ymax_var
Unquoted numeric variable for maximum of whisker on the y scale for when stat = "identity" is selected.

theme
A ggplot2 theme.

mobile
Whether the plot is to be displayed on a mobile device. Defaults to FALSE.
Value

A ggplot object.

Examples

library(dplyr)
library(simplevis)
library(palmerpenguins)

gg_boxplot(penguins,
  x_var = species,
  y_var = body_mass_g)

plot_data <- penguins %>%
  group_by(species) %>%
  summarise_boxplot_stats(body_mass_g)

outliers <- penguins %>%
  group_by(species) %>%
  summarise_boxplot_outliers(body_mass_g)

gg_boxplot(plot_data,
  x_var = species,
  ymin_var = min,
  ylower_var = lower,
  ymiddle_var = middle,
  yupper_var = upper,
  ymax_var = max,
  stat = "identity",
  y_title = "Body mass g",
  y_breaks_n = 4) +
ggplot2::geom_point(ggplot2::aes(x = species, y = body_mass_g),
  size = 0.75, col = pal_viridis_mix(1),
  data = outliers)

DEPRECATED. Boxplot ggplot that is coloured.

Description

DEPRECATED. Boxplot ggplot that is coloured, but not facetted.

Usage

gg_boxplot_col(
  data,
  x_var,
  y_var = NULL,
col_var,
pal = NULL,
pal_na = "#F7F7F7",
pal_rev = FALSE,
alpha_fill = 0.5,
alpha_line = 1,
alpha_point = 1,
size_line = 0.5,
size_point = 1.5,
width = 0.5,
title = NULL,
title_wrap = 80,
subtitle = NULL,
subtitle_wrap = 80,
x_expand = ggplot2::waiver(),
x_labels = snakecase::to_sentence_case,
x_na_rm = FALSE,
x_rev = FALSE,
x_title = NULL,
x_title_wrap = 50,
y_zero_mid = FALSE,
y_expand = c(0, 0),
y_labels = scales::label_comma(),
y_breaks_n = 5,
y_title = NULL,
y_title_wrap = 50,
y_zero = FALSE,
y_zero_line = NULL,
col_labels = snakecase::to_sentence_case,
col_legend_none = FALSE,
col_na_rm = FALSE,
col_rev = FALSE,
col_title = NULL,
col_title_wrap = 25,
caption = NULL,
caption_wrap = 80,
theme = gg_theme(y_grid = TRUE),
stat = "boxplot",
ymin_var = NULL,
ylower_var = NULL,
ymiddle_var = NULL,
yupper_var = NULL,
ymax_var = NULL,
mobile = FALSE)
**Arguments**

- **data**
  A data frame generally in a structure to be transformed to boxplot statistics (or alternatively in a structure of summary boxplot statistics). Required input.

- **x_var**
  Unquoted categorical variable to be on the x scale (i.e. character, factor, logical). Required input.

- **y_var**
  Unquoted numeric variable to be on the y scale for when stat = "boxplot" is selected.

- **col_var**
  Unquoted categorical variable to colour the fill of the boxes. Required input.

- **pal**
  Character vector of hex codes.

- **pal_na**
  The hex code or name of the NA colour to be used.

- **pal_rev**
  Reverses the palette. Defaults to FALSE.

- **alpha_fill**
  The opacity of the fill. Defaults to 0.5.

- **alpha_line**
  The opacity of the outline. Defaults to 1.

- **alpha_point**
  The opacity of the outlier points. Defaults to 1.

- **size_line**
  The size of the outlines of boxplots. Defaults to 0.5.

- **size_point**
  The size of the outlier points. Defaults to 1.5.

- **width**
  Width of boxes. Defaults to 0.5.

- **title**
  Title string.

- **title_wrap**
  Number of characters to wrap the title to. Defaults to 75.

- **subtitle**
  Subtitle string.

- **subtitle_wrap**
  Number of characters to wrap the subtitle to. Defaults to 75.

- **x_expand**
  A vector of range expansion constants used to add padding to the x scale, as per the ggplot2 expand argument in ggplot2 scales functions.

- **x_labels**
  A function or named vector to modify x scale labels. If NULL, categorical variable labels are converted to sentence case. Use ggplot2::waiver() to keep x labels untransformed.

- **x_na_rm**
  TRUE or FALSE of whether to include x_var NA values. Defaults to FALSE.

- **x_rev**
  For a categorical x variable, TRUE or FALSE of whether the x variable variable is reversed. Defaults to FALSE.

- **x_title**
  x scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.

- **x_title_wrap**
  Number of characters to wrap the x title to. Defaults to 50.

- **y_zero_mid**
  For a numeric y variable, add balance to the y scale so that zero is in the centre of the y scale.

- **y_expand**
  A vector of range expansion constants used to add padding to the y scale, as per the ggplot2 expand argument in ggplot2 scales functions.

- **y_labels**
  A function or named vector to modify y scale labels. Use ggplot2::waiver() to keep y labels untransformed.

- **y_breaks_n**
  For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 5.
y_title y scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.

y_title_wrap Number of characters to wrap the y title to. Defaults to 50.

y_zero For a numeric y variable, TRUE or FALSE of whether the minimum of the y scale is zero. Defaults to TRUE.

y_zero_line For a numeric y variable, TRUE or FALSE whether to add a zero reference line to the y scale. Defaults to TRUE if there are positive and negative values in y_var. Otherwise defaults to FALSE.

col_labels A function or named vector to modify colour scale labels. Defaults to snake-case::to_sentence_case. Use ggplot2::waiver() to keep colour labels untransformed.

col_legend_none TRUE or FALSE of whether to remove the legend.

col_na_rm TRUE or FALSE of whether to include col_var NA values. Defaults to FALSE.

col_rev TRUE or FALSE of whether the colour scale is reversed. Defaults to FALSE.

col_title Colour title string for the legend. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.

col_title_wrap Number of characters to wrap the colour title to. Defaults to 25. Not applicable where mobile equals TRUE.

caption Caption title string.

caption_wrap Number of characters to wrap the caption to. Defaults to 80.

theme A ggplot2 theme.

stat String of "boxplot" or "identity". Defaults to "boxplot".

ymin_var Unquoted numeric variable for minimum of whisker on the y scale for when stat = "identity" is selected.

ylower_var Unquoted numeric variable for minimum of box on the y scale for when stat = "identity" is selected.

ymiddle_var Unquoted numeric variable for middle of box on the y scale for when stat = "identity" is selected.

yupper_var Unquoted numeric variable for maximum of box on the y scale for when stat = "identity" is selected.

ymax_var Unquoted numeric variable for maximum of whisker on the y scale for when stat = "identity" is selected.

mobile Whether the plot is to be displayed on a mobile device. Defaults to FALSE.

**Value**

A ggplot object.
Examples

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

gg_boxplot_col(penguins,
   x_var = species,
   y_var = body_mass_g,
   col_var = sex,
   col_na_rm = TRUE)

#For ggplotly, pipe in plotly::layout(boxmode = "group") layer

plot_data <- penguins %>%
   group_by(species, sex) %>%
   summarise_boxplot_stats(body_mass_g)

outliers <- penguins %>%
   group_by(species, sex) %>%
   summarise_boxplot_outliers(body_mass_g)

width <- 0.5

gg_boxplot_col(plot_data,
   x_var = species,
   ymin_var = min,
   ylower_var = lower,
   ymiddle_var = middle,
   yupper_var = upper,
   ymax_var = max,
   col_var = sex,
   width = width,
   stat = "identity",
   y_title = "Body mass g",
   y_breaks_n = 4,
   col_na_rm = TRUE) +
   ggplot2::geom_point(ggplot2::aes(x = species, y = body_mass_g, col = sex),
   size = 0.75,
   position = ggplot2::position_dodge(width = width),
   data = outliers)
```

---

**gg_boxplot_col_facet**  
*DEPRECATED. Boxplot ggplot that is coloured and facettted.*

**Description**

*DEPRECATED. Boxplot ggplot that is coloured and facettted.*
Usage

```r
gg_boxplot_col_facet(
  data,
  x_var,
  y_var = NULL,
  col_var,
  facet_var,
  pal = NULL,
  pal_na = "#7F7F7F",
  pal_rev = FALSE,
  alpha_fill = 0.5,
  alpha_line = 1,
  alpha_point = 1,
  size_line = 0.5,
  size_point = 1.5,
  width = 0.5,
  title = NULL,
  title_wrap = 80,
  subtitle = NULL,
  subtitle_wrap = 80,
  x_expand = ggplot2::waiver(),
  x_labels = snakecase::to_sentence_case,
  x_na_rm = FALSE,
  x_rev = FALSE,
  x_title = NULL,
  x_title_wrap = 50,
  y_zero_mid = FALSE,
  y_breaks_n = 3,
  y_expand = c(0, 0),
  y_labels = scales::label_comma(),
  y_title = NULL,
  y_title_wrap = 50,
  y_zero = FALSE,
  y_zero_line = NULL,
  col_labels = snakecase::to_sentence_case,
  col_legend_none = FALSE,
  col_na_rm = FALSE,
  col_rev = FALSE,
  col_title = NULL,
  col_title_wrap = 25,
  facet_labels = snakecase::to_sentence_case,
  facet_na_rm = FALSE,
  facet_ncol = NULL,
  facet_nrow = NULL,
  facet_rev = FALSE,
  facet_scales = "fixed",
  caption = NULL,
  caption_wrap = 80,
)```
theme = gg_theme(y_grid = TRUE),
stat = "boxplot",
 ymin_var = NULL,
 ylower_var = NULL,
 ymiddle_var = NULL,
 yupper_var = NULL,
 ymax_var = NULL
)

Arguments

data  A data frame generally in a structure to be transformed to boxplot statistics (or alternatively in a structure of summary boxplot statistics). Required input.

x_var  Unquoted categorical variable to be on the x scale (i.e. character, factor, logical). Required input.

y_var  Unquoted numeric variable to be on the y scale for when stat = "boxplot" is selected.

col_var  Unquoted categorical variable to colour the fill of the boxes. Required input.

facet_var  Unquoted categorical variable to facet the data by. Required input.

pal  Character vector of hex codes.

pal_na  The hex code or name of the NA colour to be used.

pal_rev  Reverses the palette. Defaults to FALSE.

alpha_fill  The opacity of the fill. Defaults to 0.5.

alpha_line  The opacity of the outline. Defaults to 1.

alpha_point  The opacity of the outlier points. Defaults to 1.

size_line  The size of the outlines of boxplots. Defaults to 0.5.

size_point  The size of the outlier points. Defaults to 1.5.

width  Width of boxes. Defaults to 0.5.

title  Title string.

title_wrap  Number of characters to wrap the title to. Defaults to 75.

subtitle  Subtitle string.

subtitle_wrap  Number of characters to wrap the subtitle to. Defaults to 75.

x_expand  A vector of range expansion constants used to add padding to the x scale, as per the ggplot2 expand argument in ggplot2 scales functions.

x_labels  A function or named vector to modify x scale labels. If NULL, categorical variable labels are converted to sentence case. Use ggplot2::waiver() to keep x labels untransformed.

x_na_rm  TRUE or FALSE of whether to include x_var NA values. Defaults to FALSE.

x_rev  For a categorical x variable, TRUE or FALSE of whether the x variable variable is reversed. Defaults to FALSE.

x_title  x scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
x_title_wrap  Number of characters to wrap the x title to. Defaults to 50.
y_zero_mid  For a numeric y variable, add balance to the y scale so that zero is in the centre of the y scale.
y_breaks_n  For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 4.
y_expand  A vector of range expansion constants used to add padding to the y scale, as per the ggplot2 expand argument in ggplot2 scales functions.
y_labels  A function or named vector to modify y scale labels. Use ggplot2::waiver() to keep y labels untransformed.
y_title  y scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
y_title_wrap  Number of characters to wrap the y title to. Defaults to 50.
y_zero  For a numeric y variable, TRUE or FALSE of whether the minimum of the y scale is zero. Defaults to TRUE.
y_zero_line  For a numeric y variable, TRUE or FALSE whether to add a zero reference line to the y scale. Defaults to TRUE if there are positive and negative values in y_var. Otherwise defaults to FALSE.
col_labels  A function or named vector to modify colour scale labels. Defaults to snake-case::to_sentence_case. Use ggplot2::waiver() to keep colour labels untransformed.
col_legend_none  TRUE or FALSE of whether to remove the legend.
col_na_rm  TRUE or FALSE of whether to include col_var NA values. Defaults to FALSE.
col_rev  TRUE or FALSE of whether the colour scale is reversed. Defaults to FALSE.
col_title  Colour title string for the legend. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
col_title_wrap  Number of characters to wrap the colour title to. Defaults to 25. Not applicable where mobile equals TRUE.
facet_labels  A function or named vector to modify facet scale labels. Defaults to converting labels to sentence case. Use ggplot2::waiver() to keep facet labels untransformed.
facet_na_rm  TRUE or FALSE of whether to include facet_var NA values. Defaults to FALSE.
facet_ncol  The number of columns of facetted plots.
facet_nrow  The number of rows of facetted plots.
facet_rev  TRUE or FALSE of whether the facet variable variable is reversed. Defaults to FALSE.
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".
caption  Caption title string.
caption_wrap  Number of characters to wrap the caption to. Defaults to 80.
theme  A ggplot2 theme.
gg_boxplot_facet

stat
String of "boxplot" or "identity". Defaults to "boxplot".

ymin_var
Unquoted numeric variable for minimum of whisker on the y scale for when stat = "identity" is selected.

ylower_var
Unquoted numeric variable for minimum of box on the y scale for when stat = "identity" is selected.

ymiddle_var
Unquoted numeric variable for middle of box on the y scale for when stat = "identity" is selected.

yupper_var
Unquoted numeric variable for maximum of box on the y scale for when stat = "identity" is selected.

ymax_var
Unquoted numeric variable for maximum of whisker on the y scale for when stat = "identity" is selected.

Value
A ggplot object.

Examples

library(simplevis)
library(palmerpenguins)
penguins %>%
  dplyr::mutate(year = as.character(year)) %>%
gg_boxplot_col_facet(x_var = year,
  y_var = body_mass_g,
  col_var = sex,
  facet_var = species,
  col_na_rm = TRUE,
  x_labels = function(x) stringr::str_sub(x, 3, 4))

#For ggplotly, pipe in plotly::layout(boxmode = "group") layer

---

gg_boxplot_facet  DEPRECATED. Boxplot ggplot that is faceted.

Description
DEPRECATED. Boxplot ggplot that is faceted, but not coloured.

Usage

gg_boxplot_facet(
data,
x_var,
y_var = NULL,
facet_var,
Arguments

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>data</td>
<td>A data frame generally in a structure to be transformed to boxplot statistics (or alternatively in a structure of summary boxplot statistics). Required input.</td>
</tr>
<tr>
<td>x_var</td>
<td>Unquoted categorical variable to be on the x scale (i.e. character, factor, logical). Required input.</td>
</tr>
<tr>
<td>Variable</td>
<td>Description</td>
</tr>
<tr>
<td>------------</td>
<td>----------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>y_var</td>
<td>Unquoted numeric variable to be on the y scale for when stat = &quot;boxplot&quot; is selected.</td>
</tr>
<tr>
<td>facet_var</td>
<td>Unquoted categorical variable to facet the data by. Required input.</td>
</tr>
<tr>
<td>pal</td>
<td>Character vector of hex codes.</td>
</tr>
<tr>
<td>alpha_fill</td>
<td>The opacity of the fill. Defaults to 0.5.</td>
</tr>
<tr>
<td>alpha_line</td>
<td>The opacity of the outline. Defaults to 1.</td>
</tr>
<tr>
<td>alpha_point</td>
<td>The opacity of the outlier points. Defaults to 1.</td>
</tr>
<tr>
<td>size_line</td>
<td>The size of the outlines of boxplots. Defaults to 0.5.</td>
</tr>
<tr>
<td>size_point</td>
<td>The size of the outlier points. Defaults to 1.5.</td>
</tr>
<tr>
<td>width</td>
<td>Width of boxes. Defaults to 0.5.</td>
</tr>
<tr>
<td>title</td>
<td>Title string.</td>
</tr>
<tr>
<td>title_wrap</td>
<td>Number of characters to wrap the title to. Defaults to 75.</td>
</tr>
<tr>
<td>subtitle</td>
<td>Subtitle string.</td>
</tr>
<tr>
<td>subtitle_wrap</td>
<td>Number of characters to wrap the subtitle to. Defaults to 75.</td>
</tr>
<tr>
<td>x_expand</td>
<td>A vector of range expansion constants used to add padding to the x scale, as per the ggplot2 expand argument in ggplot2 scales functions.</td>
</tr>
<tr>
<td>x_labels</td>
<td>A function or named vector to modify x scale labels. If NULL, categorical variable labels are converted to sentence case. Use ggplot2::waiver() to keep x labels untransformed.</td>
</tr>
<tr>
<td>x_na_rm</td>
<td>TRUE or FALSE of whether to include x_var NA values. Defaults to FALSE.</td>
</tr>
<tr>
<td>x_rev</td>
<td>For a categorical x variable, TRUE or FALSE of whether the x variable variable is reversed. Defaults to FALSE.</td>
</tr>
<tr>
<td>x_title</td>
<td>x scale title string. Defaults to NULL, which converts to sentence case with spaces. Use &quot;&quot; if you would like no title.</td>
</tr>
<tr>
<td>x_title_wrap</td>
<td>Number of characters to wrap the x title to. Defaults to 50.</td>
</tr>
<tr>
<td>y_zero_mid</td>
<td>For a numeric y variable, add balance to the y scale so that zero is in the centre of the y scale.</td>
</tr>
<tr>
<td>y_breaks_n</td>
<td>For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 4.</td>
</tr>
<tr>
<td>y_expand</td>
<td>A vector of range expansion constants used to add padding to the y scale, as per the ggplot2 expand argument in ggplot2 scales functions.</td>
</tr>
<tr>
<td>y_labels</td>
<td>A function or named vector to modify y scale labels. Use ggplot2::waiver() to keep y labels untransformed.</td>
</tr>
<tr>
<td>y_title</td>
<td>y scale title string. Defaults to NULL, which converts to sentence case with spaces. Use &quot;&quot; if you would like no title.</td>
</tr>
<tr>
<td>y_title_wrap</td>
<td>Number of characters to wrap the y title to. Defaults to 50.</td>
</tr>
<tr>
<td>y_zero</td>
<td>For a numeric y variable, TRUE or FALSE of whether the minimum of the y scale is zero. Defaults to TRUE.</td>
</tr>
<tr>
<td>y_zero_line</td>
<td>For a numeric y variable, TRUE or FALSE whether to add a zero reference line to the y scale. Defaults to TRUE if there are positive and negative values in y_var. Otherwise defaults to FALSE.</td>
</tr>
</tbody>
</table>
### gg_boxplot_facet

**facet_labels**
A function or named vector to modify facet scale labels. Defaults to converting labels to sentence case. Use `ggplot2::waiver()` to keep facet labels untransformed.

**facet_na_rm**
TRUE or FALSE of whether to include facet_var NA values. Defaults to FALSE.

**facet_ncol**
The number of columns of facetted plots.

**facet_nrow**
The number of rows of facetted plots.

**facet_rev**
TRUE or FALSE of whether the facet variable variable is reversed. Defaults to FALSE.

**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".

**caption**
Caption title string.

**caption_wrap**
Number of characters to wrap the caption to. Defaults to 80.

**theme**
A ggplot2 theme.

**stat**
String of "boxplot" or "identity". Defaults to "boxplot".

**ymin_var**
Unquoted numeric variable for minimum of whisker on the y scale for when stat = "identity" is selected.

**ylower_var**
Unquoted numeric variable for minimum of box on the y scale for when stat = "identity" is selected.

**ymiddle_var**
Unquoted numeric variable for middle of box on the y scale for when stat = "identity" is selected.

**yupper_var**
Unquoted numeric variable for maximum of box on the y scale for when stat = "identity" is selected.

**ymax_var**
Unquoted numeric variable for maximum of whisker on the y scale for when stat = "identity" is selected.

---

**Value**
A ggplot object.

---

**Examples**

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

gg_boxplot_facet(penguins,
    x_var = sex,
    y_var = body_mass_g,
    facet_var = species)
```
**Description**

DEPRECATED. Density ggplot that is not coloured and not faceted.

**Usage**

```r
gg_density(
  data,
  x_var,
  pal = pal_viridis_mix(1),
  alpha_fill = 0.5,
  alpha_line = 1,
  size_line = 0.5,
  title = NULL,
  title_wrap = 80,
  subtitle = NULL,
  subtitle_wrap = 80,
  x_zero_mid = FALSE,
  x_breaks_n = 5,
  x_expand = c(0, 0),
  x_labels = scales::label_comma(),
  x_title = NULL,
  x_title_wrap = 50,
  x_zero = FALSE,
  x_zero_line = NULL,
  y_breaks_n = 5,
  y_expand = c(0, 0),
  y_labels = scales::label_comma(),
  y_title = NULL,
  y_title_wrap = 50,
  caption = NULL,
  caption_wrap = 80,
  theme = gg_theme(y_grid = TRUE),
  model_bw = "nrd0",
  model_adjust = 1,
  model_kernel = "gaussian",
  model_n = 512,
  model_trim = FALSE,
  mobile = FALSE
)
```

**Arguments**

- `data` A data frame in a structure to be transformed to density statistics. Required input.
x_var  Unquoted numeric variable to be on the x scale. Required input.
pal    Character vector of hex codes.
alpha_fill  The opacity of the fill. Defaults to 0.5.
alpha_line  The opacity of the outline. Defaults to 1.
size_line  The size of the outlines of density areas.
title  Title string.
title_wrap  Number of characters to wrap the title to. Defaults to 75.
subtitle  Subtitle string.
subtitle_wrap  Number of characters to wrap the subtitle to. Defaults to 75.
x_zero_mid  For a numeric x variable, add balance to the x scale so that zero is in the centre.
            Defaults to FALSE.
x_breaks_n  For a numeric x variable, the desired number of intervals on the x scale, as
            calculated by the
x_expand  A vector of range expansion constants used to add padding to the x scale, as per
            the ggplot2 expand argument in ggplot2 scales functions.
x_labels  A function or named vector to modify x scale labels. If NULL, categorical
            variable labels are converted to sentence case. Use ggplot2::waiver() to keep x
            labels untransformed.
x_title  X scale title string. Defaults to NULL, which converts to sentence case with
            spaces. Use "" if you would like no title.
x_title_wrap  Number of characters to wrap the x title to. Defaults to 50.
x_zero  For a numeric x variable, TRUE or FALSE of whether the minimum of the x
         scale is zero. Defaults to FALSE.
x_zero_line  For a numeric x variable, TRUE or FALSE of whether to add a zero reference
            line to the x scale. Defaults to TRUE if there are positive and negative values in
            x_var. Otherwise defaults to FALSE.
y_breaks_n  For a numeric y variable, the desired number of intervals on the y scale, as
            calculated by the pretty algorithm. Defaults to 5.
y_expand  A vector of range expansion constants used to add padding to the y scale, as per
            the ggplot2 expand argument in ggplot2 scales functions.
y_labels  A function or named vector to modify y scale labels. Use ggplot2::waiver() to
            keep y labels untransformed.
y_title  y scale title string. Defaults to NULL, which converts to sentence case with
            spaces. Use "" if you would like no title.
y_title_wrap  Number of characters to wrap the y title to. Defaults to 50.
caption  Caption title string.
caption_wrap  Number of characters to wrap the caption to. Defaults to 80.
tHEME  A ggplot2 theme.
model_bw  The bw argument of the stats::density function. Defaults to "nrd0".
model_adjust  The adjust argument of the stats::density function. Defaults to 1.
The kernel argument of the stats::density function. Defaults to "gaussian".

The n argument of the stats::density function. Defaults to 512.

TRUE or FALSE of whether to trim the tails. Defaults to FALSE.

Whether the plot is to be displayed on a mobile device. Defaults to FALSE.

Value

A ggplot object.

Examples

library(simplevis)
library(palmerpenguins)

gg_density(penguins,
    x_var = body_mass_g)

DEPRECATED. Density ggplot that is coloured.

Description

DEPRECATED. Density ggplot that is coloured, but not facetted.

Usage

gg_density_col(
    data,
    x_var,
    col_var,
    pal = NULL,
    pal_na = "#7F7F7F",
    pal_rev = FALSE,
    alpha_fill = 0.5,
    alpha_line = 1,
    size_line = 0.5,
    title = NULL,
    title_wrap = 80,
    subtitle = NULL,
    subtitle_wrap = 80,
    x_zero_mid = FALSE,
    x_breaks_n = 5,
    x_expand = c(0, 0),
    x_labels = scales::label_comma(),
    x_title = NULL,
    x_title_wrap = 50,
Arguments

- **data**: A data frame in a structure to be transformed to density statistics. Required input.
- **x_var**: Unquoted numeric variable to be on the x scale. Required input.
- **col_var**: Unquoted categorical variable to colour density areas. Required input.
- **pal**: Character vector of hex codes.
- **pal_na**: The hex code or name of the NA colour to be used.
- **pal_rev**: Reverses the palette. Defaults to FALSE.
- **alpha_fill**: The opacity of the fill. Defaults to 0.5.
- **alpha_line**: The opacity of the outline. Defaults to 1.
- **size_line**: The size of the outlines of density areas.
- **title**: Title string.
- **title_wrap**: Number of characters to wrap the title to. Defaults to 75.
- **subtitle**: Subtitle string.
- **subtitle_wrap**: Number of characters to wrap the subtitle to. Defaults to 75.
- **x_zero_mid**: For a numeric x variable, add balance to the x scale so that zero is in the centre. Defaults to FALSE.
- **x_breaks_n**: For a numeric x variable, the desired number of intervals on the x scale, as calculated by the
- **x_expand**: A vector of range expansion constants used to add padding to the x scale, as per the ggplot2 expand argument in ggplot2 scales functions.
x_labels A function or named vector to modify x scale labels. If NULL, categorical variable labels are converted to sentence case. Use ggplot2::waiver() to keep x labels untransformed.

x_title X scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.

x_title_wrap Number of characters to wrap the x title to. Defaults to 50.

x_zero For a numeric x variable, TRUE or FALSE of whether the minimum of the x scale is zero. Defaults to FALSE.

x_zero_line For a numeric x variable, TRUE or FALSE of whether to add a zero reference line to the x scale. Defaults to TRUE if there are positive and negative values in x_var. Otherwise defaults to FALSE.

y_breaks_n For a numeric y variable, the desired number of intervals on the y scale, as calculated by the pretty algorithm. Defaults to 5.

y_expand A vector of range expansion constants used to add padding to the y scale, as per the ggplot2 expand argument in ggplot2 scales functions.

y_labels A function or named vector to modify y scale labels. Use ggplot2::waiver() to keep y labels untransformed.

y_title y scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.

y_title_wrap Number of characters to wrap the y title to. Defaults to 50.

col_labels A function or named vector to modify colour scale labels. Use ggplot2::waiver() to keep colour labels untransformed.

col_legend_none TRUE or FALSE of whether to remove the legend.

col_na_rm TRUE or FALSE of whether to include col_var NA values. Defaults to FALSE.

col_title Colour title string for the legend. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.

col_title_wrap Number of characters to wrap the colour title to. Defaults to 25.

caption Caption title string.

caption_wrap Number of characters to wrap the caption to. Defaults to 80.

theme A ggplot2 theme.

model_bw The bw argument of the stats::density function. Defaults to "nrd0".

model_adjust The adjust argument of the stats::density function. Defaults to 1.

model_kernel The kernel argument of the stats::density function. Defaults to "gaussian".

model_n The n argument of the stats::density function. Defaults to 512.

model_trim TRUE or FALSE of whether to trim the tails. Defaults to FALSE.

mobile Whether the plot is to be displayed on a mobile device. Defaults to FALSE.

Value

A ggplot object.
gg_density_col_facet

Examples

library(simplevis)
library(palmerpenguins)

gg_density_col(penguins,
    x_var = body_mass_g,
    col_var = sex,
    col_na_rm = TRUE)

---

gg_density_col_facet  DEPRECATED. Density ggplot that is coloured and facetted.

Description

DEPRECATED. Density ggplot that is coloured and facetted.

Usage

gg_density_col_facet(
    data,
    x_var,
    col_var,
    facet_var,
    pal = NULL,
    pal_na = "#7F7F7F",
    pal_rev = FALSE,
    alpha_fill = 0.5,
    alpha_line = 1,
    size_line = 0.5,
    title = NULL,
    title_wrap = 80,
    subtitle = NULL,
    subtitle_wrap = 80,
    x_breaks_n = 2,
    x_zero_mid = FALSE,
    x_expand = c(0, 0),
    x_labels = scales::label_comma(),
    x_title = NULL,
    x_title_wrap = 50,
    x_zero = FALSE,
    x_zero_line = NULL,
    y_breaks_n = 3,
    y_expand = c(0, 0),
    y_labels = scales::label_comma(),
    y_title = NULL,
    y_title_wrap = 50,
Arguments

data          A data frame in a structure to be transformed to density statistics. Required input.
x_var         Unquoted numeric variable to be on the x scale. Required input.
col_var       Unquoted categorical variable to colour density areas. Required input.
facet_var     Unquoted categorical variable to facet the data by. Required input.
pal           Character vector of hex codes.
pal_na        The hex code or name of the NA colour to be used.
pal_rev       Reverses the palette. Defaults to FALSE.
alpha_fill    The opacity of the fill. Defaults to 0.5.
alpha_line    The opacity of the outline. Defaults to 1.
size_line     The size of the outlines of density areas.
title         Title string.
title_wrap    Number of characters to wrap the title to. Defaults to 75.
subtitle      Subtitle string.
subtitle_wrap Number of characters to wrap the subtitle to. Defaults to 75.
x_breaks_n    For a numeric x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 2.
x_zero_mid    For a numeric x variable, add balance to the x scale so that zero is in the centre. Defaults to FALSE.
x_expand      A vector of range expansion constants used to add padding to the x scale, as per the ggplot2 expand argument in ggplot2 scales functions.
x_labels  A function or named vector to modify x scale labels. If NULL, categorical variable labels are converted to sentence case. Use ggplot2::waiver() to keep x labels untransformed.

x_title  X scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.

x_title_wrap  Number of characters to wrap the x title to. Defaults to 50.

x_zero  For a numeric x variable, TRUE or FALSE of whether the minimum of the x scale is zero. Defaults to FALSE.

x_zero_line  For a numeric x variable, TRUE or FALSE of whether to add a zero reference line to the x scale. Defaults to TRUE if there are positive and negative values in x_var. Otherwise defaults to FALSE.

y_breaks_n  For a numeric y variable, the desired number of intervals on the y scale, as calculated by the pretty algorithm. Defaults to 4.

y_expand  A vector of range expansion constants used to add padding to the y scale, as per the ggplot2 expand argument in ggplot2 scales functions.

y_labels  A function or named vector to modify y scale labels. Use ggplot2::waiver() to keep y labels untransformed.

y_title  y scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.

y_title_wrap  Number of characters to wrap the y title to. Defaults to 50.

col_labels  A function or named vector to modify colour scale labels. Use ggplot2::waiver() to keep colour labels untransformed.

col_legend_none  TRUE or FALSE of whether to remove the legend.

col_na_rm  TRUE or FALSE of whether to include col_var NA values. Defaults to FALSE.

col_title  Colour title string for the legend. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.

col_title_wrap  Number of characters to wrap the colour title to. Defaults to 25.

facet_labels  A function or named vector to modify facet scale labels. Defaults to converting labels to sentence case. Use ggplot2::waiver() to keep facet labels untransformed.

facet_na_rm  TRUE or FALSE of whether to include facet_var NA values. Defaults to FALSE.

facet_ncol  The number of columns of facetted plots.

facet_nrow  The number of rows of facetted plots.

facet_rev  TRUE or FALSE of whether the facet variable variable is reversed. Defaults to FALSE.

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".

caption  Caption title string.

caption_wrap  Number of characters to wrap the caption to. Defaults to 80.

theme  A ggplot2 theme.
model_bw
The bw argument of the stats::density function. Defaults to "nrd0".

model_adjust
The adjust argument of the stats::density function. Defaults to 1.

model_kernel
The kernel argument of the stats::density function. Defaults to "gaussian".

model_n
The n argument of the stats::density function. Defaults to 512.

model_trim
TRUE or FALSE of whether to trim the tails. Defaults to FALSE.

Value
A ggplot object.

Examples
library(simplevis)
library(palmerpenguins)

gg_density_col_facet(penguins,
  x_var = body_mass_g,
  col_var = sex,
  facet_var = species,
  col_na_rm = TRUE)

Description
DEPRECATED. Density ggplot that is faceted, but not coloured.

Usage

gg_density_facet(
  data, x_var, facet_var, pal = pal_viridis_mix(1),
  alpha_fill = 0.5, alpha_line = 1, size_line = 0.5,
  title = NULL, title_wrap = 80,
  subtitle = NULL, subtitle_wrap = 80,
  x_zero_mid = FALSE,
  x_breaks_n = 2,
  x_expand = c(0, 0), x_labels = scales::label_comma(),
gg_density_facet

x_title = NULL,
x_title_wrap = 50,
x_zero = FALSE,
x_zero_line = NULL,
y_breaks_n = 3,
y_expand = c(0, 0),
y_labels = scales::label_comma(),
y_title = NULL,
y_title_wrap = 50,
facet_labels = snakecase::to_sentence_case,
facet_na_rm = FALSE,
facet_ncol = NULL,
facet_nrow = NULL,
facet_rev = FALSE,
facet_scales = "fixed",
caption = NULL,
caption_wrap = 80,
theme = gg_theme(y_grid = TRUE),
model_bw = "nrd0",
model_adjust = 1,
model_kernel = "gaussian",
model_n = 512,
model_trim = FALSE

Arguments

data A data frame in a structure to be transformed to density statistics. Required input.
x_var Unquoted numeric variable to be on the x scale. Required input.
facet_var Unquoted categorical variable to facet the data by. Required input.
pal Character vector of hex codes.
alpha_fill The opacity of the fill. Defaults to 0.5.
alpha_line The opacity of the outline. Defaults to 1.
size_line The size of the outlines of density areas.
title Title string.
title_wrap Number of characters to wrap the title to. Defaults to 75.
subtitle Subtitle string.
subtitle_wrap Number of characters to wrap the subtitle to. Defaults to 75.
x_zero_mid For a numeric x variable, add balance to the x scale so that zero is in the centre. Defaults to FALSE.
x_breaks_n For a numeric x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 2.
x_expand A vector of range expansion constants used to add padding to the x scale, as per ggplot2 expand argument in ggplot2 scales functions.
x_labels  A function or named vector to modify x scale labels. If NULL, categorical variable labels are converted to sentence case. Use ggplot2::waiver() to keep x labels untransformed.
x_title  X scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
x_title_wrap  Number of characters to wrap the x title to. Defaults to 50.
x_zero  For a numeric x variable, TRUE or FALSE of whether the minimum of the x scale is zero. Defaults to FALSE.
x_zero_line  For a numeric x variable, TRUE or FALSE of whether to add a zero reference line to the x scale. Defaults to TRUE if there are positive and negative values in x_var. Otherwise defaults to FALSE.
y_breaks_n  For a numeric y variable, the desired number of intervals on the y scale, as calculated by the pretty algorithm. Defaults to 4.
y_expand  A vector of range expansion constants used to add padding to the y scale, as per the ggplot2 expand argument in ggplot2 scales functions.
y_labels  A function or named vector to modify y scale labels. Use ggplot2::waiver() to keep y labels untransformed.
y_title  y scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
y_title_wrap  Number of characters to wrap the y title to. Defaults to 50.
facet_labels  A function or named vector to modify facet scale labels. Defaults to converting labels to sentence case. Use ggplot2::waiver() to keep facet labels untransformed.
facet_na_rm  TRUE or FALSE of whether to include facet_var NA values. Defaults to FALSE.
facet_ncol  The number of columns of facetted plots.
facet_nrow  The number of rows of facetted plots.
facet_rev  TRUE or FALSE of whether the facet variable variable is reversed. Defaults to FALSE.
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".
caption  Caption title string.
caption_wrap  Number of characters to wrap the caption to. Defaults to 80.
theme  A ggplot2 theme.
model_bw  The bw argument of the stats::density function. Defaults to "nrd0".
model_adjust  The adjust argument of the stats::density function. Defaults to 1.
model_kernel  The kernel argument of the stats::density function. Defaults to "gaussian".
model_n  The n argument of the stats::density function. Defaults to 512.
model_trim  TRUE or FALSE of whether to trim the tails. Defaults to FALSE.

Value
A ggplot object.
Examples

```r
library(simplevis)
library(palmerpenguins)

gg_density_facet(penguins,
  x_var = body_mass_g,
  facet_var = species)
```

---

**gg_hbar**  
**DEPRECATED. Horizontal bar ggplot.**

Description

DEPRECATED. Horizontal bar ggplot that is not coloured and not facetted.

Usage

```r
gg_hbar(
  data,
  x_var,
  y_var,
  text_var = NULL,
  pal = pal_viridis_mix(1),
  alpha_fill = 1,
  alpha_line = 1,
  size_line = 0.5,
  width = NULL,
  title = NULL,
  title_wrap = 75,
  subtitle = NULL,
  subtitle_wrap = 75,
  x_zero_mid = FALSE,
  x_breaks_n = 5,
  x_expand = c(0, 0),
  x_labels = scales::label_comma(),
  x_na_rm = FALSE,
  x_title = NULL,
  x_title_wrap = 50,
  x_zero = TRUE,
  x_zero_line = NULL,
  y_zero_mid = FALSE,
  y_breaks_n = 5,
  y_expand = NULL,
  y_labels = NULL,
  y_na_rm = FALSE,
  y_reorder = FALSE,
)```
Arguments

data: An ungrouped summarised tibble or data frame in a structure to be plotted untransformed. Required input.

x_var: Unquoted numeric variable to be on the x scale. Required input.

y_var: Unquoted variable to be on the y scale (i.e. character, factor, logical, numeric, date or datetime). If numeric, date or datetime, variable values are bins that are mutually exclusive and equidistant. Required input.

text_var: Unquoted variable to be used as a customised tooltip in combination with plotly::ggplotly(plot, tooltip = "text"). Defaults to NULL.

pal: Character vector of hex codes.

alpha_fill: The opacity of the fill. Defaults to 1.

alpha_line: The opacity of the outline. Defaults to 1.

size_line: The size of the outlines of bars.

width: Width of bars. Defaults to 0.75.

title: Title string.

title_wrap: Number of characters to wrap the title to. Defaults to 60.

subtitle: Subtitle string.

subtitle_wrap: Number of characters to wrap the subtitle to. Defaults to 60.

x_zero_mid: For a numeric x variable, add balance to the x scale so that zero is in the centre of the x scale.

x_breaks_n: For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 5.

x_expand: A vector of range expansion constants used to add padding to the x scale, as per the ggplot2 expand argument in ggplot2 scales functions.

x_labels: A function or named vector to modify x scale labels. Use function(x) x to keep labels untransformed.

x_na_rm: TRUE or FALSE of whether to include x_var NA values. Defaults to FALSE.

x_title: X scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.

x_title_wrap: Number of characters to wrap the x title to. Defaults to 50.
x_zero  For a numeric x variable, TRUE or FALSE of whether the minimum of the x scale is zero. Defaults to TRUE.
x_zero_line  For a numeric x variable, TRUE or FALSE whether to add a zero reference line to the x scale. Defaults to TRUE if there are positive and negative values in x_var. Otherwise defaults to FALSE.
y_zero_mid  For a numeric y variable, add balance to the y scale so that zero is in the centre. Defaults to FALSE.
y_breaks_n  For a numeric or date y variable, the desired number of intervals on the y scale, as calculated by the pretty algorithm. Defaults to 5.
y_expand  A vector of range expansion constants used to add padding to the y scale, as per the ggplot2 expand argument in ggplot2 scales functions.
y_labels  A function or named vector to modify y scale labels. If NULL, categorical variable labels are converted to sentence case. Use function(x) x to keep labels untransformed.
y_na_rm  TRUE or FALSE of whether to include y_var NA values. Defaults to FALSE.
y_reorder  For a categorical y variable, TRUE or FALSE of whether the y variable variable is to be reordered by the y variable. Defaults to FALSE.
y_rev  For a categorical variable, TRUE or FALSE of whether the y variable variable is reversed. Defaults to FALSE.
y_title  y scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
y_title_wrap  Number of characters to wrap the y title to. Defaults to 50.
y_zero  For a numeric y variable, TRUE or FALSE of whether the minimum of the y scale is zero. Defaults to FALSE.
y_zero_line  For a numeric y variable, TRUE or FALSE of whether to add a zero reference line to the y scale. Defaults to TRUE if there are positive and negative values in y_var. Otherwise defaults to FALSE.
caption  Caption title string.
caption_wrap  Number of characters to wrap the caption to. Defaults to 75.
theme  A ggplot2 theme.
mobile  Whether the plot is to be displayed on a mobile device. Defaults to FALSE.

Value

A ggplot object.

Examples

library(dplyr)
library(simplevis)
library(palmerpenguins)

plot_data <- penguins %>%
group_by(species) %>%
summarise(body_mass_g = mean(body_mass_g, na.rm = TRUE))
DEPRECATED. Horizontal bar ggplot that is coloured.

**Description**

DEPRECATED. Horizontal bar ggplot that is coloured, but not facetted.

**Usage**

```r
gg_hbar_col(
data,  
  x_var,  
  y_var,  
  col_var,  
  x_var = NULL,  
  stack = FALSE,  
  pal = NULL,  
  pal_na = "#7F7F7F",  
  pal_rev = FALSE,  
  alpha_fill = 1,  
  alpha_line = 1,  
  size_line = 0.5,  
  width = NULL,  
  title = NULL,  
  title_wrap = 75,  
  subtitle = NULL,  
  subtitle_wrap = 75,  
  x_zero_mid = FALSE,  
  x_breaks_n = 5,  
  x_expand = c(0, 0),  
  x_labels = scales::label_comma(),  
  x_na_rm = FALSE,  
  x_title = NULL,  
  x_title_wrap = 50,  
  x_zero = TRUE,  
  x_zero_line = NULL,  
  y_zero_mid = FALSE,  
  y_breaks_n = 5,  
  y_expand = NULL,  
  y_labels = NULL,  
  y_na_rm = FALSE,
)```
Arguments

- **data**: An ungrouped summarised tibble or data frame in a structure to be plotted untransformed. Required input.
- **x_var**: Unquoted numeric variable to be on the x scale. Required input.
- **y_var**: Unquoted variable to be on the y scale (i.e. character, factor, logical, numeric, date or datetime). If numeric, date or datetime, variable values are bins that are mutually exclusive and equidistant. Required input.
- **col_var**: Unquoted categorical or numeric variable to colour the bars. Required input.
- **text_var**: Unquoted variable to be used as a customised tooltip in combination with plotly::ggplotly(plot, tooltip = "text"). Defaults to NULL.
- **stack**: TRUE or FALSE of whether bars are to be positioned by "stack". Defaults to FALSE, which positions by "dodge".
- **pal**: Character vector of hex codes.
- **pal_na**: The hex code or name of the NA colour to be used.
- **pal_rev**: Reverses the palette. Defaults to FALSE.
- **alpha_fill**: The opacity of the fill. Defaults to 1.
- **alpha_line**: The opacity of the outline. Defaults to 1.
- **size_line**: The size of the outlines of bars.
- **width**: Width of bars. Defaults to 0.75.
- **title**: Title string.
- **title_wrap**: Number of characters to wrap the title to. Defaults to 60.
- **subtitle**: Subtitle string.
**subtitle_wrap**  
Number of characters to wrap the subtitle to. Defaults to 60.

**x_zero_mid**  
For a numeric x variable, add balance to the x scale so that zero is in the centre of the x scale.

**x_breaks_n**  
For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 2.

**x_expand**  
A vector of range expansion constants used to add padding to the x scale, as per the ggplot2 expand argument in ggplot2 scales functions.

**x_labels**  
A function or named vector to modify x scale labels. Use function(x) x to keep labels untransformed.

**x_na_rm**  
TRUE or FALSE of whether to include x_var NA values. Defaults to FALSE.

**x_title**  
X scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.

**x_title_wrap**  
Number of characters to wrap the x title to. Defaults to 50.

**x_zero**  
For a numeric x variable, TRUE or FALSE of whether the minimum of the x scale is zero. Defaults to TRUE.

**x_zero_line**  
For a numeric x variable, TRUE or FALSE whether to add a zero reference line to the x scale. Defaults to TRUE if there are positive and negative values in x_var. Otherwise defaults to FALSE.

**y_zero_mid**  
For a numeric y variable, add balance to the y scale so that zero is in the centre. Defaults to FALSE.

**y_breaks_n**  
For a numeric or date y variable, the desired number of intervals on the y scale, as calculated by the pretty algorithm. Defaults to 4.

**y_expand**  
A vector of range expansion constants used to add padding to the y scale, as per the ggplot2 expand argument in ggplot2 scales functions.

**y_labels**  
A function or named vector to modify y scale labels. If NULL, categorical variable labels are converted to sentence case. Use function(x) x to keep labels untransformed.

**y_na_rm**  
TRUE or FALSE of whether to include y_var NA values. Defaults to FALSE.

**y_rev**  
For a categorical variable, TRUE or FALSE of whether the y variable variable is reversed. Defaults to FALSE.

**y_title**  
y scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.

**y_title_wrap**  
Number of characters to wrap the y title to. Defaults to 50.

**y_zero**  
For a numeric y variable, TRUE or FALSE of whether the minimum of the y scale is zero. Defaults to FALSE.

**y_zero_line**  
For a numeric y variable, TRUE or FALSE of whether to add a zero reference line to the y scale. Defaults to TRUE if there are positive and negative values in y_var. Otherwise defaults to FALSE.

**col_breaks_n**  
For a numeric colour variable, the desired number of intervals on the colour scale.

**col_cuts**  
A vector of cuts to colour a numeric variable. If "bin" is selected, the first number in the vector should be either -Inf or 0, and the final number Inf. If "quantile" is selected, the first number in the vector should be 0 and the final number should be 1. Defaults to quartiles.
The `gg_hbar_col` function

- `col_intervals_left` is a boolean indicating whether bins or quantiles are to be cut left-closed. The default is `TRUE`.

- `col_labels` is a function or named vector to modify colour scale labels. Defaults to `snakecase::to_sentence_case` for categorical colour variables and `scales::label_comma()` for numeric. Use `function(x) x` to keep labels untransformed.

- `col_legend_none` is a boolean indicating whether to remove the legend. The default is `FALSE`.

- `col_method` is the method of colouring features, either "bin", "quantile", "continuous", or "category." If numeric, defaults to "bin".

- `col_na_rm` is a boolean indicating whether to include `col_var` NA values. Defaults to `FALSE`.

- `col_rev` is a boolean indicating whether the colour scale is reversed. Defaults to `FALSE`.

- `col_title` is a colour title string for the legend. Defaults to `NULL`, which converts to sentence case with spaces. Use "" if you would like no title.

- `col_title_wrap` is the number of characters to wrap the colour title to. Defaults to 25. Not applicable where `mobile` equals `TRUE`.

- `caption` is a caption title string.

- `caption_wrap` is the number of characters to wrap the caption to. Defaults to 75.

- `theme` is a ggplot2 theme.

- `mobile` is a boolean indicating whether the plot is to be displayed on a mobile device. Defaults to `FALSE`.

**Value**

A ggplot object.

**Examples**

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

plot_data <- penguins %>%
  group_by(species, sex) %>%
  summarise(body_mass_g = mean(body_mass_g, na.rm = TRUE))

gg_hbar_col(plot_data,
            x_var = body_mass_g,
            y_var = species,
            col_var = sex,
            col_na_rm = TRUE)

gg_hbar_col(plot_data,
            x_var = body_mass_g,
            y_var = species,
            col_var = sex,
            col_na_rm = TRUE,
            stack = TRUE,
            width = 0.5)
```
DEPRECATED. Horizontal bar ggplot that is coloured and faceted.

Description

DEPRECATED. Horizontal bar ggplot that is coloured and faceted.

Usage

```r
gg_hbar_col_facet(
  data,
  x_var,
  y_var,
  col_var,
  facet_var,
  text_var = NULL,
  stack = FALSE,
  pal = NULL,
  pal_na = "#7F7F7F",
  pal_rev = FALSE,
  alpha_fill = 1,
  alpha_line = 1,
  size_line = 0.5,
  width = NULL,
  title = NULL,
  title_wrap = 75,
  subtitle = NULL,
  subtitle_wrap = 75,
  x_breaks_n = 2,
  x_zero_mid = FALSE,
  x_expand = c(0, 0),
  x_labels = scales::label_comma(),
  x_na_rm = FALSE,
  x_title = NULL,
  x_title_wrap = 50,
  x_zero = TRUE,
  x_zero_line = NULL,
  y_zero_mid = FALSE,
  y_breaks_n = 3,
  y_expand = NULL,
  y_labels = NULL,
  y_na_rm = FALSE,
  y_rev = FALSE,
  y_title = NULL,
  y_title_wrap = 50,
  y_zero = FALSE,
  y_zero_line = NULL,
)```
gg_hbar_col_facet

col_breaks_n = 4,
col_cuts = NULL,
col_intervals_left = TRUE,
col_labels = NULL,
col_legend_none = FALSE,
col_method = NULL,
col_na_rm = FALSE,
col_rev = FALSE,

col_title = NULL,
col_title_wrap = 25,
facet_labels = snakecase::to_sentence_case,
facet_na_rm = FALSE,
facet_ncol = NULL,
facet_nrow = NULL,
facet_rev = FALSE,
facet_scales = "fixed",
caption = NULL,
caption_wrap = 75,
theme = gg_theme(x_grid = TRUE)

Arguments

data An ungrouped summarised tibble or data frame in a structure to be plotted untransformed. Required input.
x_var Unquoted numeric variable to be on the x scale. Required input.
y_var Unquoted variable to be on the y scale (i.e. character, factor, logical, numeric, date or datetime). If numeric, date or datetime, variable values are bins that are mutually exclusive and equidistant. Required input.
col_var Unquoted categorical or numeric variable to colour the bars. Required input.
facet_var Unquoted categorical variable to facet the data by. Required input.
text_var Unquoted variable to be used as a customised tooltip in combination with plotly::ggplotly(plot, tooltip = "text"). Defaults to NULL.
stack TRUE or FALSE of whether bars are to be positioned by "stack". Defaults to FALSE, which positions by "dodge".
pal Character vector of hex codes.
pal_na The hex code or name of the NA colour to be used.
pal_rev TRUE or FALSE of whether to reverse the pal.
alpha_fill The opacity of the fill. Defaults to 1.
alpha_line The opacity of the outline. Defaults to 1.
size_line The size of the outlines of bars.
width Width of bars. Defaults to 0.75.
title Title string.
title_wrap Number of characters to wrap the title to. Defaults to 60.
subtitle
subtitle_wrap
x_breaks_n
x_zero_mid
x_expand
x_labels
x_na_rm
x_title
x_title_wrap
x_zero
x_zero_line
y_zero_mid
y_breaks_n
y_expand
y_labels
y_na_rm
y_rev
y_title
y_title_wrap
y_zero
y_zero_line
col_breaks_n

tSubtitle string.

Number of characters to wrap the subtitle to. Defaults to 60.

For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 5.

For a numeric x variable, add balance to the x scale so that zero is in the centre of the x scale.

A vector of range expansion constants used to add padding to the x scale, as per the ggplot2 expand argument in ggplot2 scales functions.

A function or named vector to modify x scale labels. Use function(x) x to keep labels untransformed.

TRUE or FALSE of whether to include x_var NA values. Defaults to FALSE.

X scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.

Number of characters to wrap the x title to. Defaults to 50.

For a numeric x variable, TRUE or FALSE of whether the minimum of the x scale is zero. Defaults to TRUE.

For a numeric x variable, TRUE or FALSE whether to add a zero reference line to the x scale. Defaults to TRUE if there are positive and negative values in x_var. Otherwise defaults to FALSE.

For a numeric y variable, add balance to the y scale so that zero is in the centre. Defaults to FALSE.

For a numeric or date y variable, the desired number of intervals on the y scale, as calculated by the pretty algorithm. Defaults to 5.

A vector of range expansion constants used to add padding to the y scale, as per the ggplot2 expand argument in ggplot2 scales functions.

A function or named vector to modify y scale labels. If NULL, categorical variable labels are converted to sentence case. Use function(x) x to keep labels untransformed.

TRUE or FALSE of whether to include y_var NA values. Defaults to FALSE.

For a categorical variable, TRUE or FALSE of whether the y variable variable is reversed. Defaults to FALSE.

y scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.

Number of characters to wrap the y title to. Defaults to 50.

For a numeric y variable, TRUE or FALSE of whether the minimum of the y scale is zero. Defaults to FALSE.

For a numeric y variable, TRUE or FALSE of whether to add a zero reference line to the y scale. Defaults to TRUE if there are positive and negative values in y_var. Otherwise defaults to FALSE.

For a numeric colour variable, the desired number of intervals on the colour scale.
<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>col_cuts</td>
<td>A vector of cuts to colour a numeric variable. If &quot;bin&quot; is selected, the first number in the vector should be either -Inf or 0, and the final number Inf. If &quot;quantile&quot; is selected, the first number in the vector should be 0 and the final number should be 1. Defaults to quartiles.</td>
</tr>
<tr>
<td>col_intervals_left</td>
<td>For a numeric colour variable, TRUE or FALSE of whether bins or quantiles are to be cut left-closed. Defaults to TRUE.</td>
</tr>
<tr>
<td>col_labels</td>
<td>A function or named vector to modify colour scale labels. Defaults to snake-case::to_sentence_case for categorical colour variables and scales::label_comma() for numeric. Use function(x) x to keep labels untransformed.</td>
</tr>
<tr>
<td>col_legend_none</td>
<td>TRUE or FALSE of whether to remove the legend.</td>
</tr>
<tr>
<td>col_method</td>
<td>The method of colouring features, either &quot;bin&quot;, &quot;quantile&quot;, &quot;continuous&quot;, or &quot;category.&quot; If numeric, defaults to &quot;bin&quot;.</td>
</tr>
<tr>
<td>col_na_rm</td>
<td>TRUE or FALSE of whether to include col_var NA values. Defaults to FALSE.</td>
</tr>
<tr>
<td>col_rev</td>
<td>TRUE or FALSE of whether the colour scale is reversed. Defaults to FALSE.</td>
</tr>
<tr>
<td>col_title</td>
<td>Colour title string for the legend. Defaults to NULL, which converts to sentence case with spaces. Use &quot;&quot; if you would like no title.</td>
</tr>
<tr>
<td>col_title_wrap</td>
<td>Number of characters to wrap the colour title to. Defaults to 25. Not applicable where mobile equals TRUE.</td>
</tr>
<tr>
<td>facet_labels</td>
<td>A function or named vector to modify facet scale labels. Defaults to converting labels to sentence case. Use function(x) x to keep labels untransformed.</td>
</tr>
<tr>
<td>facet_na_rm</td>
<td>TRUE or FALSE of whether to include facet_var NA values. Defaults to FALSE.</td>
</tr>
<tr>
<td>facet_ncol</td>
<td>The number of columns of facetted plots.</td>
</tr>
<tr>
<td>facet_nrow</td>
<td>The number of rows of facetted plots.</td>
</tr>
<tr>
<td>facet_rev</td>
<td>TRUE or FALSE of whether the facet variable variable is reversed. Defaults to FALSE.</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>caption</td>
<td>Caption title string.</td>
</tr>
<tr>
<td>caption_wrap</td>
<td>Number of characters to wrap the caption to. Defaults to 75.</td>
</tr>
<tr>
<td>theme</td>
<td>A ggplot2 theme.</td>
</tr>
</tbody>
</table>

## Value

A ggplot object.

## Examples

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

plot_data <- penguins %>%
```
group_by(species, sex, island) %>%
summarise(body_mass_g = mean(body_mass_g, na.rm = TRUE))

gg_hbar_col_facet(plot_data,
x_var = body_mass_g,
y_var = species,
col_var = island,
facet_var = sex)

---

**Description**

DEPRECATED. Horizontal bar ggplot that is faceted, but not coloured.

**Usage**

```r
gg_hbar_facet(
data,
x_var,  
y_var,  
facet_var,  
text_var = NULL,  
pal = pal_viridis_mix(1),  
alpha_fill = 1,  
alpha_line = 1,  
size_line = 0.5,  
width = NULL,  
title = NULL,  
title_wrap = 75,  
subtitle = NULL,  
subtitle_wrap = 75,  
x_zero_mid = FALSE,  
x_breaks_n = 2,  
x_expand = c(0, 0),  
x_labels = scales::label_comma(),  
x_na_rm = FALSE,  
x_title = NULL,  
x_title_wrap = 50,  
x_zero = TRUE,  
x_zero_line = NULL,  
y_zero_mid = FALSE,  
y_breaks_n = 3,  
y_expand = NULL,  
y_labels = NULL,  
y_na_rm = FALSE,
```

Arguments

- `data` An ungrouped summarised tibble or data frame in a structure to be plotted untransformed. Required input.
- `x_var` Unquoted numeric variable to be on the x scale. Required input.
- `y_var` Unquoted variable to be on the y scale (i.e. character, factor, logical, numeric, date or datetime). If numeric, date or datetime, variable values are bins that are mutually exclusive and equidistant. Required input.
- `facet_var` Unquoted categorical variable to facet the data by. Required input.
- `text_var` Unquoted variable to be used as a customised tooltip in combination with plotly::ggplotly(plot, tooltip = "text"). Defaults to NULL.
- `pal` Character vector of hex codes.
- `alpha_fill` The opacity of the fill. Defaults to 1.
- `alpha_line` The opacity of the outline. Defaults to 1.
- `size_line` The size of the outlines of bars.
- `width` Width of bars. Defaults to 0.75.
- `title` Title string.
- `title_wrap` Number of characters to wrap the title to. Defaults to 60.
- `subtitle` Subtitle string.
- `subtitle_wrap` Number of characters to wrap the subtitle to. Defaults to 60.
- `x_zero_mid` For a numeric x variable, add balance to the x scale so that zero is in the centre of the x scale.
- `x_breaks_n` For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 2.
- `x_expand` A vector of range expansion constants used to add padding to the x scale, as per the ggplot2 expand argument in ggplot2 scales functions.
- `x_labels` A function or named vector to modify x scale labels. Use function(x) x to keep labels untransformed.
x_na_rm: TRUE or FALSE of whether to include x_var NA values. Defaults to FALSE.

x_title: X scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.

x_title_wrap: Number of characters to wrap the x title to. Defaults to 50.

x_zero: For a numeric x variable, TRUE or FALSE of whether the minimum of the x scale is zero. Defaults to TRUE.

x_zero_line: For a numeric x variable, TRUE or FALSE whether to add a zero reference line to the x scale. Defaults to TRUE if there are positive and negative values in x_var. Otherwise defaults to FALSE.

y_zero_mid: For a numeric y variable, add balance to the y scale so that zero is in the centre. Defaults to FALSE.

y_breaks_n: For a numeric or date y variable, the desired number of intervals on the y scale, as calculated by the pretty algorithm. Defaults to 4.

y_expand: A vector of range expansion constants used to add padding to the y scale, as per the ggplot2 expand argument in ggplot2 scales functions.

y_labels: A function or named vector to modify y scale labels. If NULL, categorical variable labels are converted to sentence case. Use function(x) x to keep labels untransformed.

y_na_rm: TRUE or FALSE of whether to include y_var NA values. Defaults to FALSE.

y_rev: For a categorical variable, TRUE or FALSE of whether the y variable variable is reversed. Defaults to FALSE.

y_title: y scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.

y_title_wrap: Number of characters to wrap the y title to. Defaults to 50.

y_zero: For a numeric y variable, TRUE or FALSE of whether the minimum of the y scale is zero. Defaults to FALSE.

y_zero_line: For a numeric y variable, TRUE or FALSE of whether to add a zero reference line to the y scale. Defaults to TRUE if there are positive and negative values in y_var. Otherwise defaults to FALSE.

facet_labels: A function or named vector to modify facet scale labels. Defaults to converting labels to sentence case. Use function(x) x to keep labels untransformed.

facet_na_rm: TRUE or FALSE of whether to include facet_var NA values. Defaults to FALSE.

facet_ncol: The number of columns of facetted plots.

facet_nrow: The number of rows of facetted plots.

facet_rev: TRUE or FALSE of whether the facet variable variable is reversed. Defaults to FALSE.

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".

caption: Caption title string.

caption_wrap: Number of characters to wrap the caption to. Defaults to 75.

theme: A ggplot2 theme.
Value

A ggplot object.

Examples

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

plot_data <- penguins %>%
  group_by(species, sex) %>%
  summarise(body_mass_g = mean(body_mass_g, na.rm = TRUE))

gg_hbar_facet(plot_data,
  x_var = body_mass_g,
  y_var = sex,
  facet_var = species)
```

---

**gg_hboxplot**

DEPRECATED. Horizontal boxplot ggplot.

Description

DEPRECATED. Horizontal boxplot ggplot that is not coloured and not facetted.

Usage

```r
gg_hboxplot(
  data, 
  x_var = NULL, 
  y_var, 
  pal = pal_viridis_mix(1), 
  alpha_fill = 0.5, 
  alpha_line = 1, 
  alpha_point = 1, 
  size_line = 0.5, 
  size_point = 1.5, 
  width = 0.5, 
  title = NULL, 
  title_wrap = 75, 
  subtitle = NULL, 
  subtitle_wrap = 75, 
  x_zero_mid = FALSE, 
  x_breaks_n = 5, 
  xExpand = c(0, 0), 
  x_labels = scales::label_comma(), 
  x_title = NULL,
)```
Arguments

data An ungrouped summarised tibble or data frame generally in a structure to be transformed to boxplot statistics (or alternatively in a structure of summary boxplot statistics). Required input.

x_var Unquoted numeric variable to be on the x scale for when stat = "boxplot" is selected.

y_var Unquoted categorical variable to be on the y scale (i.e. character, factor, or logical). Required input.

pal Character vector of hex codes.

alpha_fill The opacity of the fill. Defaults to 0.5.

alpha_line The opacity of the outline. Defaults to 1.

alpha_point The opacity of the outlier points. Defaults to 1.

size_line The size of the outlines of boxplots. Defaults to 0.5.

size_point The size of the outlier points. Defaults to 1.5.

width Width of boxes. Defaults to 0.5.

title Title string.

title_wrap Number of characters to wrap the title to. Defaults to 60.

subtitle Subtitle string.

subtitle_wrap Number of characters to wrap the subtitle to. Defaults to 60.

x_zero_mid For a numeric x variable, add balance to the x scale so that zero is in the centre of the x scale.

x_breaks_n For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 5.
xexpand A vector of range expansion constants used to add padding to the x scale, as per the ggplot2 expand argument in ggplot2 scales functions.
xlabels A function or named vector to modify x scale labels. Use ggplot2::waiver() to keep x labels untransformed.
xtitle X scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
xtitle_wrap Number of characters to wrap the x title to. Defaults to 50.
xzero For a numeric x variable, TRUE or FALSE of whether the minimum of the x scale is zero. Defaults to FALSE.
xzero_line For a numeric x variable, TRUE or FALSE whether to add a zero reference line to the x scale. Defaults to TRUE if there are positive and negative values in x_var. Otherwise defaults to FALSE.
yexpand A vector of range expansion constants used to add padding to the y scale, as per the ggplot2 expand argument in ggplot2 scales functions.
ylabels A function or named vector to modify y scale labels. If NULL, categorical variable labels are converted to sentence case. Use ggplot2::waiver() to keep y labels untransformed.
yna_rm TRUE or FALSE of whether to include y_var NA values. Defaults to FALSE.
yrev For a categorical variable, TRUE or FALSE of whether the y variable variable is reversed. Defaults to FALSE.
ytitle y scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
ytitle_wrap Number of characters to wrap the y title to. Defaults to 50.
caption Caption title string.
caption_wrap Number of characters to wrap the caption to. Defaults to 75.
theme A ggplot2 theme.
stat String of "boxplot" or "identity". Defaults to "boxplot".
xmin_var Unquoted numeric variable for minimum of whisker on the x scale for when stat = "identity" is selected.
xlower_var Unquoted numeric variable for minimum of box on the x scale for when stat = "identity" is selected.
xmiddle_var Unquoted numeric variable for middle of box on the x scale for when stat = "identity" is selected.
xupper_var Unquoted numeric variable for maximum of box on the x scale for when stat = "identity" is selected.
xmax_var Unquoted numeric variable for maximum of whisker on the x scale for when stat = "identity" is selected.
mobile Whether the plot is to be displayed on a mobile device. Defaults to FALSE.

Value A ggplot object.
Examples

library(simplevis)
library(dplyr)
library(palmerpenguins)

gg_hboxplot(penguins,
            x_var = body_mass_g,
            y_var = species)

plot_data <- penguins %>%
              group_by(species) %>%
              summarise_boxplot_stats(body_mass_g)

outliers <- penguins %>%
            group_by(species) %>%
            summarise_boxplot_outliers(body_mass_g)

gg_hboxplot(plot_data,
            xmin_var = min,
            xlower_var = lower,
            xmiddle_var = middle,
            xupper_var = upper,
            xmax_var = max,
            y_var = species,
            stat = "identity",
            x_title = "Body mass g",
            x_breaks_n = 4) +
  ggplot2::geom_point(ggplot2::aes(x = species, y = body_mass_g),
                      size = 0.75, col = pal_viridis_mix(1),
                      data = outliers)

---

Description

DEPRECATED. Horizontal boxplot ggplot that is coloured.

Usage

gg_hboxplot_col(
    data,
    x_var = NULL,
    y_var,
    col_var,
    pal = NULL,
    pal_na = "#F7F7F7",
    pal_rev = FALSE,
Arguments

**data**
An ungrouped summarised tibble or data frame generally in a structure to be transformed to boxplot statistics (or alternatively in a structure of summary boxplot statistics). Required input.

**x_var**
Unquoted numeric variable to be on the x scale for when stat = "boxplot" is
selected.

**y_var**
Unquoted categorical variable to be on the y scale (i.e. character, factor, or logical). Required input.

**col_var**
Unquoted categorical or numeric variable to colour the boxplots. Required input.

**pal**
Character vector of hex codes.

**pal_na**
The hex code or name of the NA colour to be used.

**pal_rev**
Reverses the palette. Defaults to FALSE.

**alpha_fill**
The opacity of the fill. Defaults to 0.5.

**alpha_line**
The opacity of the outline. Defaults to 1.

**alpha_point**
The opacity of the outlier points. Defaults to 1.

**size_line**
The size of the outlines of boxplots. Defaults to 0.5.

**size_point**
The size of the outlier points. Defaults to 1.5.

**width**
Width of boxes. Defaults to 0.5.

**title**
Title string.

**title_wrap**
Number of characters to wrap the title to. Defaults to 60.

**subtitle**
Subtitle string.

**subtitle_wrap**
Number of characters to wrap the subtitle to. Defaults to 60.

**x_zero_mid**
For a numeric x variable, add balance to the x scale so that zero is in the centre of the x scale.

**x_breaks_n**
For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 2.

**x_expand**
A vector of range expansion constants used to add padding to the x scale, as per the ggplot2 expand argument in ggplot2 scales functions.

**x_labels**
A function or named vector to modify x scale labels. Use ggplot2::waiver() to keep x labels untransformed.

**x_title**
X scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.

**x_title_wrap**
Number of characters to wrap the x title to. Defaults to 50.

**x_zero**
For a numeric x variable, TRUE or FALSE of whether the minimum of the x scale is zero. Defaults to FALSE.

**x_zero_line**
For a numeric x variable, TRUE or FALSE whether to add a zero reference line to the x scale. Defaults to TRUE if there are positive and negative values in x_var. Otherwise defaults to FALSE.

**y_expand**
A vector of range expansion constants used to add padding to the y scale, as per the ggplot2 expand argument in ggplot2 scales functions.

**y_labels**
A function or named vector to modify y scale labels. If NULL, categorical variable labels are converted to sentence case. Use ggplot2::waiver() to keep y labels untransformed.

**y_na_rm**
TRUE or FALSE of whether to include y_var NA values. Defaults to FALSE.
For a categorical variable, TRUE or FALSE of whether the y variable variable is reversed. Defaults to FALSE.

y scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.

Number of characters to wrap the y title to. Defaults to 50.

A function or named vector to modify colour scale labels. Defaults to snake-case::to_sentence_case for categorical colour variables and scales::number for numeric colour variables. Use ggplot2::waiver() to keep colour labels untransformed.

TRUE or FALSE of whether to remove the legend.

TRUE or FALSE of whether to include col_var NA values. Defaults to FALSE.

TRUE or FALSE of whether the colour scale is reversed. Defaults to FALSE.

Colour title string for the legend. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.

Number of characters to wrap the colour title to. Defaults to 25. Not applicable where mobile equals TRUE.

Caption title string.

Number of characters to wrap the caption to. Defaults to 75.

A ggplot2 theme.

String of "boxplot" or "identity". Defaults to "boxplot".

Unquoted numeric variable for minimum of whisker on the x scale for when stat = "identity" is selected.

Unquoted numeric variable for minimum of box on the x scale for when stat = "identity" is selected.

Unquoted numeric variable for middle of box on the x scale for when stat = "identity" is selected.

Unquoted numeric variable for maximum of box on the x scale for when stat = "identity" is selected.

Unquoted numeric variable for maximum of whisker on the x scale for when stat = "identity" is selected.

Whether the plot is to be displayed on a mobile device. Defaults to FALSE.

A ggplot object.

library(simplevis)
library(dplyr)
library(palmerpenguins)
gg_hboxplot_col(penguins,
gg_hboxplot_col_facet

DEPRECATED. Horizontal boxplot ggplot that is coloured and facettted.

Description

DEPRECATED. Horizontal boxplot ggplot that is coloured and facettted.

Usage

gg_hboxplot_col_facet(
  data,
  x_var = NULL,
  y_var,
gg_hboxplot_col_facet

col_var,
facet_var,
pal = NULL,
pal_na = "#7F7F7F",
pal_rev = FALSE,
alpha_fill = 0.5,
alpha_line = 1,
alpha_point = 1,
size_line = 0.5,
size_point = 1.5,
width = 0.5,
title = NULL,
title_wrap = 75,
subtitle = NULL,
subtitle_wrap = 75,
x_breaks_n = 2,
x_zero_mid = FALSE,
x_expand = c(0, 0),
x_labels = scales::label_comma(),
x_title = NULL,
x_title_wrap = 50,
x_zero = FALSE,
x_zero_line = NULL,
y_expand = ggplot2::waiver(),
y_labels = snakecase::to_sentence_case,
y_na_rm = FALSE,
y_rev = FALSE,
y_title = NULL,
y_title_wrap = 50,
col_labels = stringr::str_to_sentence,
col_legend_none = FALSE,
col_na_rm = FALSE,
col_rev = FALSE,
col_title = NULL,
col_title_wrap = 25,
facet_labels = snakecase::to_sentence_case,
facet_na_rm = FALSE,
facet_ncol = NULL,
facet_nrow = NULL,
facet_rev = FALSE,
facet_scales = "fixed",
caption = NULL,
caption_wrap = 75,
theme = gg_theme(x_grid = TRUE),
stat = "boxplot",
xmin_var = NULL,
xlower_var = NULL,
xmiddle_var = NULL,
Arguments

data An ungrouped summarised tibble or data frame generally in a structure to be transformed to boxplot statistics (or alternatively in a structure of summary boxplot statistics). Required input.
x_var Unquoted numeric variable to be on the x scale for when stat = "boxplot" is selected.
y_var Unquoted categorical variable to be on the y scale (i.e. character, factor, or logical). Required input.
col_var Unquoted categorical or numeric variable to colour the boxplots. Required input.
facet_var Unquoted categorical variable to facet the data by. Required input.
pal Character vector of hex codes.
pal_na The hex code or name of the NA colour to be used.
pal_rev TRUE or FALSE of whether to reverse the pal.
alpha_fill The opacity of the fill. Defaults to 0.5.
alpha_line The opacity of the outline. Defaults to 1.
alpha_point The opacity of the outlier points. Defaults to 1.
size_line The size of the outlines of boxplots. Defaults to 0.5.
size_point The size of the outlier points. Defaults to 1.5.
width Width of boxes. Defaults to 0.5.
title Title string.
title_wrap Number of characters to wrap the title to. Defaults to 60.
subtitle Subtitle string.
subtitle_wrap Number of characters to wrap the subtitle to. Defaults to 60.
x_breaks_n For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 5.
x_zero_mid For a numeric x variable, add balance to the x scale so that zero is in the centre of the x scale.
x_expand A vector of range expansion constants used to add padding to the x scale, as per the ggplot2 expand argument in ggplot2 scales functions.
x_labels A function or named vector to modify x scale labels. Use ggplot2::waiver() to keep x labels untransformed.
x_title X scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
x_title_wrap Number of characters to wrap the x title to. Defaults to 50.
x_zero For a numeric x variable, TRUE or FALSE of whether the minimum of the x scale is zero. Defaults to FALSE.
<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>x_zero_line</td>
<td>For a numeric x variable, TRUE or FALSE whether to add a zero reference line</td>
<td>TRUE or FALSE</td>
</tr>
<tr>
<td></td>
<td>to the x scale. Defaults to TRUE if there are positive and negative values</td>
<td></td>
</tr>
<tr>
<td></td>
<td>in x_var. Otherwise defaults to FALSE.</td>
<td></td>
</tr>
<tr>
<td>y_expand</td>
<td>A vector of range expansion constants used to add padding to the y scale,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>as per the ggplot2 expand argument in ggplot2 scales functions.</td>
<td></td>
</tr>
<tr>
<td>y_labels</td>
<td>A function or named vector to modify y scale labels. If NULL, categorical</td>
<td></td>
</tr>
<tr>
<td></td>
<td>variable labels are converted to sentence case. Use ggplot2::waiver() to</td>
<td></td>
</tr>
<tr>
<td></td>
<td>keep y labels untransformed.</td>
<td></td>
</tr>
<tr>
<td>y_na_rm</td>
<td>TRUE or FALSE of whether to include y_var NA values. Defaults to FALSE.</td>
<td></td>
</tr>
<tr>
<td>y_rev</td>
<td>For a categorical variable, TRUE or FALSE of whether the y variable variable</td>
<td></td>
</tr>
<tr>
<td></td>
<td>is reversed. Defaults to FALSE.</td>
<td></td>
</tr>
<tr>
<td>y_title</td>
<td>y scale title string. Defaults to NULL, which converts to sentence case with</td>
<td></td>
</tr>
<tr>
<td></td>
<td>spaces. Use &quot;&quot; if you would like no title.</td>
<td></td>
</tr>
<tr>
<td>y_title_wrap</td>
<td>Number of characters to wrap the y title to. Defaults to 50.</td>
<td></td>
</tr>
<tr>
<td>col_labels</td>
<td>A function or named vector to modify colour scale labels. Defaults to snake-</td>
<td></td>
</tr>
<tr>
<td></td>
<td>case::to_sentence_case for categorical colour variables and scales::number</td>
<td></td>
</tr>
<tr>
<td></td>
<td>for numeric colour variables. Use ggplot2::waiver() to keep colour labels</td>
<td></td>
</tr>
<tr>
<td></td>
<td>untransformed.</td>
<td></td>
</tr>
<tr>
<td>col_legend_none</td>
<td>TRUE or FALSE of whether to remove the legend.</td>
<td></td>
</tr>
<tr>
<td>col_na_rm</td>
<td>TRUE or FALSE of whether to include col_var NA values. Defaults to FALSE.</td>
<td></td>
</tr>
<tr>
<td>col_rev</td>
<td>TRUE or FALSE of whether the colour scale is reversed. Defaults to FALSE.</td>
<td></td>
</tr>
<tr>
<td>col_title</td>
<td>Colour title string for the legend. Defaults to NULL, which converts to</td>
<td></td>
</tr>
<tr>
<td></td>
<td>sentence case with spaces. Use &quot;&quot; if you would like no title.</td>
<td></td>
</tr>
<tr>
<td>col_title_wrap</td>
<td>Number of characters to wrap the colour title to. Defaults to 25. Not</td>
<td></td>
</tr>
<tr>
<td></td>
<td>applicable where mobile equals TRUE.</td>
<td></td>
</tr>
<tr>
<td>facet_labels</td>
<td>A function or named vector to modify facet scale labels. Defaults to</td>
<td></td>
</tr>
<tr>
<td></td>
<td>converting labels to sentence case. Use ggplot2::waiver() to keep facet</td>
<td></td>
</tr>
<tr>
<td></td>
<td>labels untransformed.</td>
<td></td>
</tr>
<tr>
<td>facet_na_rm</td>
<td>TRUE or FALSE of whether to include facet_var NA values. Defaults to FALSE.</td>
<td></td>
</tr>
<tr>
<td>facet_ncol</td>
<td>The number of columns of facetted plots.</td>
<td></td>
</tr>
<tr>
<td>facet_nrow</td>
<td>The number of rows of facetted plots.</td>
<td></td>
</tr>
<tr>
<td>facet_rev</td>
<td>TRUE or FALSE of whether the facet variable variable is reversed. Defaults to</td>
<td></td>
</tr>
<tr>
<td></td>
<td>FALSE.</td>
<td></td>
</tr>
<tr>
<td>facet_scales</td>
<td>Whether facet_scales should be &quot;fixed&quot; across facets, &quot;free&quot; in both</td>
<td></td>
</tr>
<tr>
<td></td>
<td>directions, or free in just one direction (i.e. &quot;free_x&quot; or &quot;free_y&quot;).</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Defaults to &quot;fixed&quot;.</td>
<td></td>
</tr>
<tr>
<td>caption</td>
<td>Caption title string.</td>
<td></td>
</tr>
<tr>
<td>caption_wrap</td>
<td>Number of characters to wrap the caption to. Defaults to 75.</td>
<td></td>
</tr>
<tr>
<td>theme</td>
<td>A ggplot2 theme.</td>
<td></td>
</tr>
<tr>
<td>stat</td>
<td>String of &quot;boxplot&quot; or &quot;identity&quot;. Defaults to &quot;boxplot&quot;.</td>
<td></td>
</tr>
<tr>
<td>xmin_var</td>
<td>Unquoted numeric variable for minimum of whisker on the x scale for when</td>
<td></td>
</tr>
<tr>
<td></td>
<td>stat = &quot;identity&quot; is selected.</td>
<td></td>
</tr>
</tbody>
</table>
**gg_hboxplot_facet**

xlower_var  Unquoted numeric variable for minimum of box on the x scale for when stat = "identity" is selected.

xmiddle_var Unquoted numeric variable for middle of box on the x scale for when stat = "identity" is selected.

xupper_var  Unquoted numeric variable for maximum of box on the x scale for when stat = "identity" is selected.

xmax_var    Unquoted numeric variable for maximum of whisker on the x scale for when stat = "identity" is selected.

**Value**

A ggplot object.

**Examples**

```r
library(simplevis)
library(palmerpenguins)

penguins %>%
  dplyr::mutate(year = as.character(year)) %>%
  gg_hboxplot_col_facet(x_var = body_mass_g,
                        y_var = year,
                        col_var = sex,
                        facet_var = species,
                        col_na_rm = TRUE)

#For ggplotly, pipe in plotly::layout(boxmode = "group") layer
```

**Description**

DEPRECATED. Horizontal boxplot ggplot that is faceted, but not coloured.

**Usage**

```r
gg_hboxplot_facet(
  data,
  x_var = NULL,
  y_var,
  facet_var,
  pal = pal_viridis_mix(1),
  alpha_fill = 0.5,
  alpha_line = 1,
  alpha_point = 1,
```
Arguments

data  An ungrouped summarised tibble or data frame generally in a structure to be transformed to boxplot statistics (or alternatively in a structure of summary boxplot statistics). Required input.

x_var  Unquoted numeric variable to be on the x scale for when stat = "boxplot" is selected.

y_var  Unquoted categorical variable to be on the y scale (i.e. character, factor, or logical). Required input.

facet_var  Unquoted categorical variable to facet the data by. Required input.
Character vector of hex codes.

The opacity of the fill. Defaults to 0.5.

The opacity of the outline. Defaults to 1.

The opacity of the outlier points. Defaults to 1.

The size of the outlines of boxplots. Defaults to 0.5.

The size of the outlier points. Defaults to 1.5.

Width of boxes. Defaults to 0.5.

Title string.

Number of characters to wrap the title to. Defaults to 60.

Subtitle string.

Number of characters to wrap the subtitle to. Defaults to 60.

For a numeric x variable, add balance to the x scale so that zero is in the centre of the x scale.

For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 2.

A vector of range expansion constants used to add padding to the x scale, as per the ggplot2 expand argument in ggplot2 scales functions.

A function or named vector to modify x scale labels. Use ggplot2::waiver() to keep x labels untransformed.

X scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.

Number of characters to wrap the x title to. Defaults to 50.

For a numeric x variable, TRUE or FALSE of whether the minimum of the x scale is zero. Defaults to FALSE.

For a numeric x variable, TRUE or FALSE whether to add a zero reference line to the x scale. Defaults to TRUE if there are positive and negative values in x_var. Otherwise defaults to FALSE.

A vector of range expansion constants used to add padding to the y scale, as per the ggplot2 expand argument in ggplot2 scales functions.

A function or named vector to modify y scale labels. If NULL, categorical variable labels are converted to sentence case. Use ggplot2::waiver() to keep y labels untransformed.

TRUE or FALSE of whether to include y_var NA values. Defaults to FALSE.

For a categorical variable, TRUE or FALSE of whether the y variable variable is reversed. Defaults to FALSE.

y scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.

Number of characters to wrap the y title to. Defaults to 50.

A function or named vector to modify facet scale labels. Defaults to converting labels to sentence case. Use ggplot2::waiver() to keep facet labels untransformed.
gg_hboxplot_facet

facet_na_rm  TRUE or FALSE of whether to include facet_var NA values. Defaults to FALSE.
facet_ncol  The number of columns of facetted plots.
facet_nrow  The number of rows of facetted plots.
facet_rev  TRUE or FALSE of whether the facet variable variable is reversed. Defaults to FALSE.
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".
caption  Caption title string.
caption_wrap  Number of characters to wrap the caption to. Defaults to 75.
theme  A ggplot2 theme.
stat  String of "boxplot" or "identity". Defaults to "boxplot".
xmin_var  Unquoted numeric variable for minimum of whisker on the x scale for when stat = "identity" is selected.
xlower_var  Unquoted numeric variable for minimum of box on the x scale for when stat = "identity" is selected.
xmiddle_var  Unquoted numeric variable for middle of box on the x scale for when stat = "identity" is selected.
xupper_var  Unquoted numeric variable for maximum of box on the x scale for when stat = "identity" is selected.
xmax_var  Unquoted numeric variable for maximum of whisker on the x scale for when stat = "identity" is selected.

Value

A ggplot object.

Examples

library(simplevis)
library(palmerpenguins)

gg_hboxplot_facet(penguins,
                 x_var = body_mass_g,
                 y_var = sex,
                 facet_var = species,
                 y_na_rm = TRUE)
Description

DEPRECATED. Histogram ggplot that is not coloured and not faceted.

Usage

```r
gg_histogram(
data,
x_var,
pal = pal_viridis_mix(1),
alpha_fill = 0.5,
alpha_line = 1,
size_line = 0.5,
title = NULL,
title_wrap = 80,
subtitle = NULL,
subtitle_wrap = 80,
x_bins_n = 30,
x_breaks_n = 5,
x_expand = c(0, 0),
x_labels = scales::label_comma(),
x_title = NULL,
x_title_wrap = 50,
y_breaks_n = 5,
y_expand = c(0, 0),
y_labels = scales::label_comma(),
y_title = NULL,
y_title_wrap = 50,
caption = NULL,
caption_wrap = 80,
theme = gg_theme(y_grid = TRUE),
mobile = FALSE)
```

Arguments

- **data**: A data frame in a structure to be transformed to histogram statistics. Required input.
- **x_var**: Unquoted numeric variable to be on the x scale. Required input.
- **pal**: Character vector of hex codes.
- **alpha_fill**: The opacity of the fill. Defaults to 0.5.
- **alpha_line**: The opacity of the outline. Defaults to 1.
**gg_histogram**  

<table>
<thead>
<tr>
<th>Arguments</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>size_line</strong></td>
<td>The size of the outlines of histogram areas.</td>
</tr>
<tr>
<td><strong>title</strong></td>
<td>Title string.</td>
</tr>
<tr>
<td><strong>title_wrap</strong></td>
<td>Number of characters to wrap the title to. Defaults to 75.</td>
</tr>
<tr>
<td><strong>subtitle</strong></td>
<td>Subtitle string.</td>
</tr>
<tr>
<td><strong>subtitle_wrap</strong></td>
<td>Number of characters to wrap the subtitle to. Defaults to 75.</td>
</tr>
<tr>
<td><strong>x_bins_n</strong></td>
<td>Number of bins to aim for. Defaults to 30.</td>
</tr>
<tr>
<td><strong>x_breaks_n</strong></td>
<td>For a numeric x variable, the desired number of intervals on the x scale, as calculated by the</td>
</tr>
<tr>
<td><strong>x_expand</strong></td>
<td>A vector of range expansion constants used to add padding to the x scale, as per the ggplot2 expand argument in ggplot2 scales functions.</td>
</tr>
<tr>
<td><strong>x_labels</strong></td>
<td>A function or named vector to modify x scale labels. If NULL, categorical variable labels are converted to sentence case. Use ggplot2::waiver() to keep x labels untransformed.</td>
</tr>
<tr>
<td><strong>x_title</strong></td>
<td>X scale title string. Defaults to NULL, which converts to sentence case with spaces. Use &quot;&quot; if you would like no title.</td>
</tr>
<tr>
<td><strong>x_title_wrap</strong></td>
<td>Number of characters to wrap the x title to. Defaults to 50.</td>
</tr>
<tr>
<td><strong>y_breaks_n</strong></td>
<td>For a numeric y variable, the desired number of intervals on the y scale, as calculated by the pretty algorithm. Defaults to 5.</td>
</tr>
<tr>
<td><strong>y_expand</strong></td>
<td>A vector of range expansion constants used to add padding to the y scale, as per the ggplot2 expand argument in ggplot2 scales functions.</td>
</tr>
<tr>
<td><strong>y_labels</strong></td>
<td>A function or named vector to modify y scale labels. Use ggplot2::waiver() to keep y labels untransformed.</td>
</tr>
<tr>
<td><strong>y_title</strong></td>
<td>Y scale title string. Defaults to NULL, which converts to sentence case with spaces. Use &quot;&quot; if you would like no title.</td>
</tr>
<tr>
<td><strong>y_title_wrap</strong></td>
<td>Number of characters to wrap the y title to. Defaults to 50.</td>
</tr>
<tr>
<td><strong>caption</strong></td>
<td>Caption title string.</td>
</tr>
<tr>
<td><strong>caption_wrap</strong></td>
<td>Number of characters to wrap the caption to. Defaults to 80.</td>
</tr>
<tr>
<td><strong>theme</strong></td>
<td>A ggplot2 theme.</td>
</tr>
<tr>
<td><strong>mobile</strong></td>
<td>Whether the plot is to be displayed on a mobile device. Defaults to FALSE.</td>
</tr>
</tbody>
</table>

**Value**

A ggplot object.

**Examples**

```r
library(simplevis)
library(palmerpenguins)

gg_histogram(penguins,  
  x_var = body_mass_g)
```
DEPRECATED. Histogram ggplot that is coloured.

Description

DEPRECATED. Histogram ggplot that is coloured, but not faceted.

Usage

```r
gg_histogram_col(
  data,
  x_var,
  col_var,
  pal = NULL,
  pal_na = "#7F7F7F",
  pal_rev = FALSE,
  alpha_fill = 0.5,
  alpha_line = 1,
  size_line = 0.5,
  title = NULL,
  title_wrap = 80,
  subtitle = NULL,
  subtitle_wrap = 80,
  x_bins_n = 30,
  x_breaks_n = 5,
  x_expand = c(0, 0),
  x_labels = scales::label_comma(),
  x_title = NULL,
  x_title_wrap = 50,
  y_breaks_n = 5,
  y_expand = c(0, 0),
  y_labels = scales::label_comma(),
  y_title = NULL,
  y_title_wrap = 50,
  col_labels = snakecase::to_sentence_case,
  col_legend_none = FALSE,
  col_na_rm = FALSE,
  col_title = NULL,
  col_title_wrap = 25,
  caption = NULL,
  caption_wrap = 80,
  theme = gg_theme(y_grid = TRUE),
  mobile = FALSE
)`
Arguments

data  A data frame in a structure to be transformed to histogram statistics. Required input.
x_var  Unquoted numeric variable to be on the x scale. Required input.
col_var  Unquoted categorical variable to colour histogram areas. Required input.
pal  Character vector of hex codes.
pal_na  The hex code or name of the NA colour to be used.
pal_rev  Reverses the palette. Defaults to FALSE.
alpha_fill  The opacity of the fill. Defaults to 0.5.
alpha_line  The opacity of the outline. Defaults to 1.
size_line  The size of the outlines of histogram areas.
title  Title string.
title_wrap  Number of characters to wrap the title to. Defaults to 75.
subtitle  Subtitle string.
subtitle_wrap  Number of characters to wrap the subtitle to. Defaults to 75.
x_bins_n  Number of bins to aim for. Defaults to 30.
x_breaks_n  For a numeric x variable, the desired number of intervals on the x scale, as calculated by the
x_expand  A vector of range expansion constants used to add padding to the x scale, as per the ggplot2 expand argument in ggplot2 scales functions.
x_labels  A function or named vector to modify x scale labels. If NULL, categorical variable labels are converted to sentence case. Use ggplot2::waiver() to keep x labels untransformed.
x_title  X scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
x_title_wrap  Number of characters to wrap the x title to. Defaults to 50.
y_breaks_n  For a numeric y variable, the desired number of intervals on the y scale, as calculated by the pretty algorithm. Defaults to 5.
y_expand  A vector of range expansion constants used to add padding to the y scale, as per the ggplot2 expand argument in ggplot2 scales functions.
y_labels  A function or named vector to modify y scale labels. Use ggplot2::waiver() to keep y labels untransformed.
y_title  y scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
y_title_wrap  Number of characters to wrap the y title to. Defaults to 50.
col_labels  A function or named vector to modify colour scale labels. Use ggplot2::waiver() to keep colour labels untransformed.
col_legend_none  TRUE or FALSE of whether to remove the legend.
col_na_rm  TRUE or FALSE of whether to include col_var NA values. Defaults to FALSE.
### gg_histogram_col_facet

**DEPRECATED. Histogram ggplot that is coloured and facetted.**

**Description**

DEPRECATED. Histogram ggplot that is coloured and facetted.

**Usage**

```r
gg_histogram_col_facet(
  data,
  x_var,
  col_var,
  facet_var,
  pal = NULL,
  pal_na = "#7F7F7F",
  pal_rev = FALSE,
  alpha_fill = 0.5,
  alpha_line = 1,
  size_line = 0.5,
  title = NULL,
  title_wrap = 80,
)```
gg_histogram_col_facet

subtitle = NULL,
subtitle_wrap = 80,
x_bins_n = 30,
x_breaks_n = 2,
x_expand = c(0, 0),
x_labels = scales::label_comma(),
x_title = NULL,
x_title_wrap = 50,
y_breaks_n = 3,
y_expand = c(0, 0),
y_labels = scales::label_comma(),
y_title = NULL,
y_title_wrap = 50,
col_labels = snakecase::to_sentence_case,
col_legend_none = FALSE,
col_na_rm = FALSE,
col_title = NULL,
col_title_wrap = 25,
col_title_wrap = 25,
facet_labels = snakecase::to_sentence_case,
facet_na_rm = FALSE,
facet_ncol = NULL,
facet_nrow = NULL,
facet_rev = FALSE,
facet_scales = "fixed",
caption = NULL,
caption_wrap = 80,
theme = gg_theme(y_grid = TRUE)
)

Arguments

data A data frame in a structure to be transformed to histogram statistics. Required input.
x_var Unquoted numeric variable to be on the x scale. Required input.
col_var Unquoted categorical variable to colour histogram areas. Required input.
facet_var Unquoted categorical variable to facet the data by. Required input.
pal Character vector of hex codes.
pal_na The hex code or name of the NA colour to be used.
pal_rev Reverses the palette. Defaults to FALSE.
alpha_fill The opacity of the fill. Defaults to 0.5.
alpha_line The opacity of the outline. Defaults to 1.
size_line The size of the outlines of histogram areas.
title Title string.
title_wrap Number of characters to wrap the title to. Defaults to 75.
subtitle Subtitle string.
**subtitle_wrap**  Number of characters to wrap the subtitle to. Defaults to 75.

**x_bins_n**  Number of bins to aim for. Defaults to 30.

**x_breaks_n**  For a numeric x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 2.

**x_expand**  A vector of range expansion constants used to add padding to the x scale, as per the ggplot2 expand argument in ggplot2 scales functions.

**x_labels**  A function or named vector to modify x scale labels. If NULL, categorical variable labels are converted to sentence case. Use ggplot2::waiver() to keep x labels untransformed.

**x_title**  X scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.

**x_title_wrap**  Number of characters to wrap the x title to. Defaults to 50.

**y_breaks_n**  For a numeric y variable, the desired number of intervals on the y scale, as calculated by the pretty algorithm. Defaults to 4.

**y_expand**  A vector of range expansion constants used to add padding to the y scale, as per the ggplot2 expand argument in ggplot2 scales functions.

**y_labels**  A function or named vector to modify y scale labels. Use ggplot2::waiver() to keep y labels untransformed.

**y_title**  y scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.

**y_title_wrap**  Number of characters to wrap the y title to. Defaults to 50.

**col_labels**  A function or named vector to modify colour scale labels. Use ggplot2::waiver() to keep colour labels untransformed.

**col_legend_none**  TRUE or FALSE of whether to remove the legend.

**col_na_rm**  TRUE or FALSE of whether to include col_var NA values. Defaults to FALSE.

**col_title**  Colour title string for the legend. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.

**col_title_wrap**  Number of characters to wrap the colour title to. Defaults to 25.

**facet_labels**  A function or named vector to modify facet scale labels. Defaults to converting labels to sentence case. Use ggplot2::waiver() to keep facet labels untransformed.

**facet_na_rm**  TRUE or FALSE of whether to include facet_var NA values. Defaults to FALSE.

**facet_ncol**  The number of columns of facetted plots.

**facet_nrow**  The number of rows of facetted plots.

**facet_rev**  TRUE or FALSE of whether the facet variable variable is reversed. Defaults to FALSE.

**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".

**caption**  Caption title string.

**caption_wrap**  Number of characters to wrap the caption to. Defaults to 80.

**theme**  A ggplot2 theme.
**gg_histogram_facet**

**Value**

A ggplot object.

**Examples**

```r
library(simplevis)
library(palmerpenguins)

gg_histogram_col_facet(penguins,
  x_var = body_mass_g,
  col_var = sex,
  facet_var = species,
  col_na_rm = TRUE)
```

---

**gg_histogram_facet**  
**DEPRECATED.** Histogram ggplot that is faceted.

---

**Description**

DEPRECATED. Histogram ggplot that is faceted, but not coloured.

**Usage**

```r
gg_histogram_facet(
  data,
  x_var,
  facet_var,
  pal = pal_viridis_mix(1),
  alpha_fill = 0.5,
  alpha_line = 1,
  size_line = 0.5,
  title = NULL,
  title_wrap = 80,
  subtitle = NULL,
  subtitle_wrap = 80,
  x_bins_n = 30,
  x_breaks_n = 2,
  x_expand = c(0, 0),
  x_labels = scales::label_comma(),
  x_title = NULL,
  x_title_wrap = 50,
  y_breaks_n = 3,
  y_expand = c(0, 0),
  y_labels = scales::label_comma(),
  y_title = NULL,
  y_title_wrap = 50,
)```
```r
facet_labels = snakecase::to_sentence_case,
facet_na_rm = FALSE,
facet_ncol = NULL,
facet_nrow = NULL,
facet_rev = FALSE,
facet_scales = "fixed",
caption = NULL,
caption_wrap = 80,
theme = gg_theme(y_grid = TRUE)
)

Arguments

data A data frame in a structure to be transformed to histogram statistics. Required input.
x_var Unquoted numeric variable to be on the x scale. Required input.
facet_var Unquoted categorical variable to facet the data by. Required input.
pal Character vector of hex codes.
alpha_fill The opacity of the fill. Defaults to 0.5.
alpha_line The opacity of the outline. Defaults to 1.
size_line The size of the outlines of histogram areas.
title Title string.
title_wrap Number of characters to wrap the title to. Defaults to 75.
subtitle Subtitle string.
subtitle_wrap Number of characters to wrap the subtitle to. Defaults to 75.
x_bins_n Number of bins to aim for. Defaults to 30.
x_breaks_n For a numeric x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 2.
x_expand A vector of range expansion constants used to add padding to the x scale, as per the ggplot2 expand argument in ggplot2 scales functions.
x_labels A function or named vector to modify x scale labels. If NULL, categorical variable labels are converted to sentence case. Use ggplot2::waiver() to keep x labels untransformed.
x_title X scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
x_title_wrap Number of characters to wrap the x title to. Defaults to 50.
y_breaks_n For a numeric y variable, the desired number of intervals on the y scale, as calculated by the pretty algorithm. Defaults to 4.
y_expand A vector of range expansion constants used to add padding to the y scale, as per the ggplot2 expand argument in ggplot2 scales functions.
y_labels A function or named vector to modify y scale labels. Use ggplot2::waiver() to keep y labels untransformed.
**gg_hpointrange**

DEPRECATED. Horizontal pointrange ggplot.

**Description**

DEPRECATED. Horizontal pointrange ggplot that is not coloured and not facetted.

**Usage**

```r
gg_hpointrange(
  data,
  x_var,
  xmin_var,
  xmax_var,
)```
Arguments

data

A data frame in a structure to be plotted untransformed. Required input.

x_var

Unquoted numeric variable for the point on the x scale. Required input.

xmin_var

Unquoted numeric variable to be the minimum of the x vertical line. Required input.

xmax_var

Unquoted numeric variable to be the maximum of the x vertical line. Required input.

y_var

Unquoted variable to be on the y scale (i.e. character, factor, logical, numeric, date or datetime). If numeric, date or datetime, variable values are bins that are mutually exclusive and equidistant. Required input.
<table>
<thead>
<tr>
<th>Argument</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>text_var</code></td>
<td>Unquoted variable to be used as a customised tooltip in combination with plotly::ggplotly(plot, tooltip = &quot;text&quot;). Defaults to NULL.</td>
</tr>
<tr>
<td><code>pal</code></td>
<td>Character vector of hex codes.</td>
</tr>
<tr>
<td><code>alpha_line</code></td>
<td>The opacity of the line. Defaults to 1.</td>
</tr>
<tr>
<td><code>alpha_point</code></td>
<td>The opacity of the points.</td>
</tr>
<tr>
<td><code>size_point</code></td>
<td>Size of points. Defaults to 1.5.</td>
</tr>
<tr>
<td><code>size_line</code></td>
<td>Size of lines. Defaults to 0.5.</td>
</tr>
<tr>
<td><code>title</code></td>
<td>Title string.</td>
</tr>
<tr>
<td><code>title_wrap</code></td>
<td>Number of characters to wrap the title to. Defaults to 60.</td>
</tr>
<tr>
<td><code>subtitle</code></td>
<td>Subtitle string.</td>
</tr>
<tr>
<td><code>subtitle_wrap</code></td>
<td>Number of characters to wrap the subtitle to. Defaults to 60.</td>
</tr>
<tr>
<td><code>x_zero_mid</code></td>
<td>For a numeric x variable, add balance to the x scale so that zero is in the centre of the x scale.</td>
</tr>
<tr>
<td><code>x_breaks_n</code></td>
<td>For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 5.</td>
</tr>
<tr>
<td><code>x_expand</code></td>
<td>A vector of range expansion constants used to add padding to the x scale, as per the ggplot2 expand argument in ggplot2 scales functions.</td>
</tr>
<tr>
<td><code>x_labels</code></td>
<td>A function or named vector to modify x scale labels. Use function(x) x to keep labels untransformed.</td>
</tr>
<tr>
<td><code>x_na_rm</code></td>
<td>TRUE or FALSE of whether to include x_var NA values. Defaults to FALSE.</td>
</tr>
<tr>
<td><code>x_title</code></td>
<td>X scale title string. Defaults to &quot;&quot;.</td>
</tr>
<tr>
<td><code>x_title_wrap</code></td>
<td>Number of characters to wrap the x title to. Defaults to 50.</td>
</tr>
<tr>
<td><code>x_zero</code></td>
<td>For a numeric x variable, TRUE or FALSE of whether the minimum of the x scale is zero. Defaults to FALSE.</td>
</tr>
<tr>
<td><code>x_zero_line</code></td>
<td>For a numeric x variable, TRUE or FALSE whether to add a zero reference line to the x scale. Defaults to TRUE if there are positive and negative values in x_var. Otherwise defaults to FALSE.</td>
</tr>
<tr>
<td><code>y_zero_mid</code></td>
<td>For a numeric y variable, add balance to the y scale so that zero is in the centre. Defaults to FALSE.</td>
</tr>
<tr>
<td><code>y_breaks_n</code></td>
<td>For a numeric or date y variable, the desired number of intervals on the y scale, as calculated by the pretty algorithm. Defaults to 5.</td>
</tr>
<tr>
<td><code>y_expand</code></td>
<td>A vector of range expansion constants used to add padding to the y scale, as per the ggplot2 expand argument in ggplot2 scales functions.</td>
</tr>
<tr>
<td><code>y_labels</code></td>
<td>A function or named vector to modify y scale labels. If NULL, categorical variable labels are converted to sentence case. Use function(x) x to keep labels untransformed.</td>
</tr>
<tr>
<td><code>y_na_rm</code></td>
<td>TRUE or FALSE of whether to include y_var NA values. Defaults to FALSE.</td>
</tr>
<tr>
<td><code>y_rev</code></td>
<td>For a categorical variable, TRUE or FALSE of whether the y variable variable is reversed. Defaults to FALSE.</td>
</tr>
<tr>
<td><code>y_title</code></td>
<td>Y scale title string. Defaults to NULL, which converts to sentence case with spaces. Use &quot;&quot; if you would like no title.</td>
</tr>
</tbody>
</table>
y_title_wrap  Number of characters to wrap the y title to. Defaults to 50.

y_zero  For a numeric y variable, TRUE or FALSE of whether the minimum of the y scale is zero. Defaults to FALSE.

y_zero_line  For a numeric y variable, TRUE or FALSE of whether to add a zero reference line to the y scale. Defaults to TRUE if there are positive and negative values in y_var. Otherwise defaults to FALSE.

caption  Caption title string.

caption_wrap  Number of characters to wrap the caption to. Defaults to 75.

theme  A ggplot2 theme.

mobile  Whether the plot is to be displayed on a mobile device. Defaults to FALSE.

Value

A ggplot object.

Examples

library(dplyr)
library(simplevis)
library(palmerpenguins)

plot_data <- penguins %>%
  group_by(sex) %>%
  summarise(middle = median(body_mass_g, na.rm = TRUE),
            lower = quantile(body_mass_g, probs = 0.25, na.rm = TRUE),
            upper = quantile(body_mass_g, probs = 0.75, na.rm = TRUE))

gg_hpointrange(
  plot_data,
  x_var = middle,
  xmin_var = lower,
  xmax_var = upper,
  y_var = sex,
  x_title = "Body mass g",
  y_na_rm = TRUE)

---

gg_hpointrange_col  DEPRECATED. Horizontal pointrange ggplot that is coloured.

Description

DEPRECATED. Horizontal pointrange ggplot that is coloured, but not faceted.
Usage

```r
gg_hpointrange_col(
  data,
  x_var,
  xmin_var,
  xmax_var,
  y_var,
  col_var,
  text_var = NULL,
  pal = NULL,
  pal_na = "#7F7F7F",
  pal_rev = FALSE,
  alpha_line = 1,
  alpha_point = 1,
  size_point = 1.5,
  size_line = 0.5,
  title = NULL,
  title_wrap = 75,
  subtitle = NULL,
  subtitle_wrap = 75,
  x_zero_mid = FALSE,
  x_breaks_n = 5,
  x_expand = c(0, 0),
  x_labels = scales::label_comma(),
  x_na_rm = FALSE,
  x_title = NULL,
  x_title_wrap = 50,
  x_zero = FALSE,
  x_zero_line = NULL,
  y_zero_mid = FALSE,
  y_breaks_n = 5,
  y_dodge = 0,
  y_expand = NULL,
  y_labels = NULL,
  y_na_rm = FALSE,
  y_rev = FALSE,
  y_title = NULL,
  y_title_wrap = 50,
  y_zero = FALSE,
  y_zero_line = NULL,
  col_breaks_n = 4,
  col_cuts = NULL,
  col_intervals_left = TRUE,
  col_labels = NULL,
  col_legend_none = FALSE,
  col_method = NULL,
  col_na_rm = FALSE,
  col_rev = FALSE,
)```


col_title = NULL,
col_title_wrap = 25,
caption = NULL,
caption_wrap = 75,
theme = gg_theme(x_grid = TRUE),
mobile = FALSE
)

Arguments

data A data frame in a structure to be plotted untransformed. Required input.
x_var Unquoted numeric variable for the point on the x scale. Required input.
xmin_var Unquoted numeric variable to be the minimum of the x vertical line. Required input.
xmax_var Unquoted numeric variable to be the maximum of the x vertical line. Required input.
y_var Unquoted variable to be on the y scale (i.e. character, factor, logical, numeric, date or datetime). If numeric, date or datetime, variable values are bins that are mutually exclusive and equidistant. Required input.
col_var Unquoted categorical or numeric variable to colour the pointranges. Required input.
text_var Unquoted variable to be used as a customised tooltip in combination with plotly::ggplotly(plot, tooltip = "text"). Defaults to NULL.
pal Character vector of hex codes.
pal_na The hex code or name of the NA colour to be used.
pal_rev Reverses the palette. Defaults to FALSE.
alpha_line The opacity of the line. Defaults to 1.
alpha_point The opacity of the points.
size_point Size of points. Defaults to 1.5.
size_line Size of lines. Defaults to 0.5.
title Title string.
title_wrap Number of characters to wrap the title to. Defaults to 60.
subtitle Subtitle string.
subtitle_wrap Number of characters to wrap the subtitle to. Defaults to 60.
x_zero_mid For a numeric x variable, add balance to the x scale so that zero is in the centre of the x scale.
x_breaks_n For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 2.
x_expand A vector of range expansion constants used to add padding to the x scale, as per the ggplot2 expand argument in ggplot2 scales functions.
x_labels A function or named vector to modify x scale labels. Use function(x) x to keep labels untransformed.
x_na_rm TRUE or FALSE of whether to include x_var NA values. Defaults to FALSE.
x_title X scale title string. Defaults to "".
x_title_wrap Number of characters to wrap the x title to. Defaults to 50.
x_zero For a numeric x variable, TRUE or FALSE of whether the minimum of the x scale is zero. Defaults to FALSE.
x_zero_line For a numeric x variable, TRUE or FALSE whether to add a zero reference line to the x scale. Defaults to TRUE if there are positive and negative values in x_var. Otherwise defaults to FALSE.
y_zero_mid For a numeric y variable, add balance to the y scale so that zero is in the centre. Defaults to FALSE.
y_breaks_n For a numeric or date y variable, the desired number of intervals on the y scale, as calculated by the pretty algorithm. Defaults to 4.
y_dodge The amount to dodge pointranges by along the y axis. Defaults to 0 (i.e. identity).
y_expand A vector of range expansion constants used to add padding to the y scale, as per the ggplot2 expand argument in ggplot2 scales functions.
y_labels A function or named vector to modify y scale labels. If NULL, categorical variable labels are converted to sentence case. Use function(x) x to keep labels untransformed.
y_na_rm TRUE or FALSE of whether to include y_var NA values. Defaults to FALSE.
y_rev For a categorical variable, TRUE or FALSE of whether the y variable variable is reversed. Defaults to FALSE.
y_title y scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
y_title_wrap Number of characters to wrap the y title to. Defaults to 50.
y_zero For a numeric y variable, TRUE or FALSE of whether the minimum of the y scale is zero. Defaults to FALSE.
y_zero_line For a numeric y variable, TRUE or FALSE of whether to add a zero reference line to the y scale. Defaults to TRUE if there are positive and negative values in y_var. Otherwise defaults to FALSE.
col_breaks_n For a numeric colour variable, the desired number of intervals on the colour scale.
col_cuts A vector of cuts to colour a numeric variable. If "bin" is selected, the first number in the vector should be either -Inf or 0, and the final number Inf. If "quantile" is selected, the first number in the vector should be 0 and the final number should be 1. Defaults to quartiles.
col_intervals_left For a numeric colour variable, TRUE or FALSE of whether bins or quantiles are to be cut left-closed. Defaults to TRUE.
col_labels A function or named vector to modify colour scale labels. Defaults to snake-case::to_sentence_case for categorical colour variables and scales::label_comma() for numeric. Use function(x) x to keep labels untransformed.
**gg_hpointrange_col**

- **col_legend_none** TRUE or FALSE of whether to remove the legend.
- **col_method** The method of colouring features, either "bin", "quantile", "continuous", or "category." If numeric, defaults to "bin".
- **col_na_rm** TRUE or FALSE of whether to include col_var NA values. Defaults to FALSE.
- **col_rev** TRUE or FALSE of whether the colour scale is reversed. Defaults to FALSE.
- **col_title** Colour title string for the legend. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
- **col_title_wrap** Number of characters to wrap the colour title to. Defaults to 25. Not applicable where mobile equals TRUE.
- **caption** Caption title string.
- **caption_wrap** Number of characters to wrap the caption to. Defaults to 75.
- **theme** A ggplot2 theme.
- **mobile** Whether the plot is to be displayed on a mobile device. Defaults to FALSE.

**Value**

A ggplot object.

**Examples**

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

plot_data <- penguins %>%
  group_by(sex, species) %>%
  summarise(middle = median(body_mass_g, na.rm = TRUE),
    lower = quantile(body_mass_g, probs = 0.25, na.rm = TRUE),
    upper = quantile(body_mass_g, probs = 0.75, na.rm = TRUE))

gg_hpointrange_col(
  plot_data,
  x_var = middle,
  xmin_var = lower,
  xmax_var = upper,
  y_var = species,
  col_var = sex,
  col_na_rm = TRUE,
  x_title = "Body mass g",
  y_dodge = 0.2)
```
DEPRECATED. Horizontal pointrange ggplot that is coloured and facetted.

```r
gg_hpointrange_col_facet(data, x_var, xmin_var, xmax_var, y_var, col_var, facet_var, text_var = NULL, pal = NULL, pal_na = "#7F7F7F", pal_rev = FALSE, alpha_line = 1, alpha_point = 1, size_point = 1.5, size_line = 0.5, title = NULL, title_wrap = 75, subtitle = NULL, subtitle_wrap = 75, x_breaks_n = 2, x_zero_mid = FALSE, x_expand = c(0, 0), x_labels = scales::label_comma(), x_na_rm = FALSE, x_title = NULL, x_title_wrap = 50, x_zero = FALSE, x_zero_line = NULL, y_breaks_n = 3, y_dodge = 0, y_expand = NULL, y_labels = NULL, y_na_rm = FALSE, y_rev = FALSE)
```
y_title = NULL,
y_title_wrap = 50,
y_zero = FALSE,
y_zero_line = NULL,
col_breaks_n = 4,
col_cuts = NULL,
col_intervals_left = TRUE,
col_labels = NULL,
col_legend_none = FALSE,
col_method = NULL,
col_na_rm = FALSE,
col_rev = FALSE,
col_title = NULL,
col_title_wrap = 25,
facet_labels = snakecase::to_sentence_case,
facet_na_rm = FALSE,
facet_ncol = NULL,
facet_nrow = NULL,
facet_rev = FALSE,
facet_scales = "fixed",
caption = NULL,
caption_wrap = 75,
theme = gg_theme(x_grid = TRUE)
)

Arguments

data A data frame in a structure to be plotted untransformed. Required input.
x_var Unquoted numeric variable for the point on the x scale. Required input.
xmin_var Unquoted numeric variable to be the minimum of the x vertical line. Required input.
xmax_var Unquoted numeric variable to be the maximum of the x vertical line. Required input.
y_var Unquoted variable to be on the y scale (i.e. character, factor, logical, numeric, date or datetime). If numeric, date or datetime, variable values are bins that are mutually exclusive and equidistant. Required input.
col_var Unquoted categorical or numeric variable to colour the pointranges. Required input.
facet_var Unquoted categorical variable to facet the data by. Required input.
text_var Unquoted variable to be used as a customised tooltip in combination with plotly::ggplotly(plot, tooltip = "text"). Defaults to NULL.
pal Character vector of hex codes.
pal_na The hex code or name of the NA colour to be used.
pal_rev TRUE or FALSE of whether to reverse the pal.
alpha_line The opacity of the line. Defaults to 1.
alpha_point  The opacity of the points.
size_point   Size of points. Defaults to 1.5.
size_line    Size of lines. Defaults to 0.5.
title        Title string.
title_wrap   Number of characters to wrap the title to. Defaults to 60.
subtitle     Subtitle string.
subtitle_wrap Number of characters to wrap the subtitle to. Defaults to 60.
x_breaks_n   For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 5.
x_zero_mid   For a numeric x variable, add balance to the x scale so that zero is in the centre of the x scale.
x_expand     A vector of range expansion constants used to add padding to the x scale, as per the ggplot2 expand argument in ggplot2 scales functions.
x_labels     A function or named vector to modify x scale labels. Use function(x) x to keep labels untransformed.
x_na_rm      TRUE or FALSE of whether to include x_var NA values. Defaults to FALSE.
x_title      X scale title string. Defaults to "".
x_title_wrap Number of characters to wrap the x title to. Defaults to 50.
x_zero       For a numeric x variable, TRUE or FALSE of whether the minimum of the x scale is zero. Defaults to FALSE.
x_zero_line  For a numeric x variable, TRUE or FALSE whether to add a zero reference line to the x scale. Defaults to TRUE if there are positive and negative values in x_var. Otherwise defaults to FALSE.
y_zero_mid   For a numeric y variable, add balance to the y scale so that zero is in the centre. Defaults to FALSE.
y_breaks_n   For a numeric or date y variable, the desired number of intervals on the y scale, as calculated by the pretty algorithm. Defaults to 5.
y_dodge      The amount to dodge pointranges by along the y axis. Defaults to 0 (i.e. identity).
y_expand     A vector of range expansion constants used to add padding to the y scale, as per the ggplot2 expand argument in ggplot2 scales functions.
y_labels     A function or named vector to modify y scale labels. If NULL, categorical variable labels are converted to sentence case. Use function(x) x to keep labels untransformed.
y_na_rm      TRUE or FALSE of whether to include y_var NA values. Defaults to FALSE.
y_rev        For a categorical variable, TRUE or FALSE of whether the y variable variable is reversed. Defaults to FALSE.
y_title      y scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
y_title_wrap Number of characters to wrap the y title to. Defaults to 50.
For a numeric y variable, TRUE or FALSE of whether the minimum of the y scale is zero. Defaults to FALSE.

For a numeric y variable, TRUE or FALSE of whether to add a zero reference line to the y scale. Defaults to TRUE if there are positive and negative values in y_var. Otherwise defaults to FALSE.

For a numeric colour variable, the desired number of intervals on the colour scale.

A vector of cuts to colour a numeric variable. If "bin" is selected, the first number in the vector should be either -Inf or 0, and the final number Inf. If "quantile" is selected, the first number in the vector should be 0 and the final number should be 1. Defaults to quartiles.

For a numeric colour variable, TRUE or FALSE of whether bins or quantiles are to be cut left-closed. Defaults to TRUE.

A function or named vector to modify colour scale labels. Defaults to snake-case::to_sentence_case for categorical colour variables and scales::label_comma() for numeric. Use function(x) x to keep labels untransformed.

TRUE or FALSE of whether to remove the legend.

The method of colouring features, either "bin", "quantile", "continuous", or "category." If numeric, defaults to "bin".

TRUE or FALSE of whether to include col_var NA values. Defaults to FALSE.

TRUE or FALSE of whether the colour scale is reversed. Defaults to FALSE.

Colour title string for the legend. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.

Number of characters to wrap the colour title to. Defaults to 25. Not applicable where mobile equals TRUE.

A function or named vector to modify facet scale labels. Defaults to converting labels to sentence case. Use function(x) x to keep labels untransformed.

TRUE or FALSE of whether to include facet_var NA values. Defaults to FALSE.

The number of columns of facetted plots.

The number of rows of facetted plots.

TRUE or FALSE of whether the facet variable variable is reversed. Defaults to FALSE.

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".

Caption title string.

Number of characters to wrap the caption to. Defaults to 75.

A ggplot2 theme.

A ggplot object.
Examples

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

plot_data <- penguins %>%
    mutate(year = as.character(year)) %>%
    group_by(year, sex, species) %>%
    summarise(middle = median(body_mass_g, na.rm = TRUE),
              lower = quantile(body_mass_g, probs = 0.25, na.rm = TRUE),
              upper = quantile(body_mass_g, probs = 0.75, na.rm = TRUE))

gg_hpointrange_col_facet(
    plot_data,
    y_var = year,
    x_var = middle,
    xmin_var = lower,
    xmax_var = upper,
    col_var = sex,
    facet_var = species,
    col_na_rm = TRUE,
    x_title = "Body mass g",
    y_labels = function(x) stringr::str_sub(x, 3, 4),
    y_dodge = 0.2)
```

---

**gg_hpointrange_facet**  DEPRECATED. Horizontal pointrange ggplot that is facetted.

**Description**

DEPRECATED. Horizontal pointrange ggplot that is facetted, but not coloured.

**Usage**

```r
gg_hpointrange_facet(
    data,
    x_var,
    xmin_var,
    xmax_var,
    y_var,
    facet_var,
    text_var = NULL,
    pal = pal_viridis_mix(1),
    alpha_line = 1,
    alpha_point = 1,
    size_point = 1.5,
    size_line = 0.5,
```
title = NULL,
title_wrap = 75,
subtitle = NULL,
subtitle_wrap = 75,
x_zero_mid = FALSE,
x_breaks_n = 2,
x_expand = c(0, 0),
x_labels = scales::label_comma(),
x_na_rm = FALSE,
x_title = NULL,
x_title_wrap = 50,
x_zero = FALSE,
x_zero_line = NULL,
y_zero_mid = FALSE,
y_breaks_n = 3,
y_expand = NULL,
y_labels = NULL,
y_na_rm = FALSE,
y_rev = FALSE,
y_title = NULL,
y_title_wrap = 50,
y_zero = FALSE,
y_zero_line = NULL,
facet_labels = snakecase::to_sentence_case,
facet_na_rm = FALSE,
facet_ncol = NULL,
facet_nrow = NULL,
facet_rev = FALSE,
facet_scales = "fixed",
caption = NULL,
caption_wrap = 75,
theme = gg_theme(x_grid = TRUE)
)

Arguments

data A data frame in a structure to be plotted untransformed. Required input.
x_var Unquoted numeric variable for the point on the x scale. Required input.
xmin_var Unquoted numeric variable to be the minimum of the x vertical line. Required input.
xmax_var Unquoted numeric variable to be the maximum of the x vertical line. Required input.
y_var Unquoted variable to be on the y scale (i.e. character, factor, logical, numeric, date or datetime). If numeric, date or datetime, variable values are bins that are mutually exclusive and equidistant. Required input.
facet_var Unquoted categorical variable to facet the data by. Required input.
text_var Unquoted variable to be used as a customised tooltip in combination with plotly::ggplotly(plot, tooltip = "text"). Defaults to NULL.
pal Character vector of hex codes.
alpha_line The opacity of the line. Defaults to 1.
alpha_point The opacity of the points.
size_point Size of points. Defaults to 1.5.
size_line Size of lines. Defaults to 0.5.
title Title string.
title_wrap Number of characters to wrap the title to. Defaults to 60.
subtitle Subtitle string.
subtitle_wrap Number of characters to wrap the subtitle to. Defaults to 60.
x_zero_mid For a numeric x variable, add balance to the x scale so that zero is in the centre of the x scale.
x_breaks_n For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 2.
x_expand A vector of range expansion constants used to add padding to the x scale, as per the ggplot2 expand argument in ggplot2 scales functions.
x_labels A function or named vector to modify x scale labels. Use function(x) x to keep labels untransformed.
x_na_rm TRUE or FALSE of whether to include x_var NA values. Defaults to FALSE.
x_title X scale title string. Defaults to "".
x_title_wrap Number of characters to wrap the x title to. Defaults to 50.
x_zero For a numeric x variable, TRUE or FALSE of whether the minimum of the x scale is zero. Defaults to FALSE.
x_zero_line For a numeric x variable, TRUE or FALSE whether to add a zero reference line to the x scale. Defaults to TRUE if there are positive and negative values in x_var. Otherwise defaults to FALSE.
y_zero_mid For a numeric y variable, add balance to the y scale so that zero is in the centre. Defaults to FALSE.
y_breaks_n For a numeric or date y variable, the desired number of intervals on the y scale, as calculated by the pretty algorithm. Defaults to 4.
y_expand A vector of range expansion constants used to add padding to the y scale, as per the ggplot2 expand argument in ggplot2 scales functions.
y_labels A function or named vector to modify y scale labels. If NULL, categorical variable labels are converted to sentence case. Use function(x) x to keep labels untransformed.
y_na_rm TRUE or FALSE of whether to include y_var NA values. Defaults to FALSE.
y_rev For a categorical variable, TRUE or FALSE of whether the y variable variable is reversed. Defaults to FALSE.
y_title y scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
y_title_wrap Number of characters to wrap the y title to. Defaults to 50.
For a numeric y variable, TRUE or FALSE of whether the minimum of the y scale is zero. Defaults to FALSE.

For a numeric y variable, TRUE or FALSE of whether to add a zero reference line to the y scale. Defaults to TRUE if there are positive and negative values in y_var. Otherwise defaults to FALSE.

A function or named vector to modify facet scale labels. Defaults to converting labels to sentence case. Use function(x) x to keep labels untransformed.

TRUE or FALSE of whether to include facet_var NA values. Defaults to FALSE.

The number of columns of facetted plots.

The number of rows of facetted plots.

TRUE or FALSE of whether the facet variable variable is reversed. Defaults to FALSE.

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".

Caption title string.

Number of characters to wrap the caption to. Defaults to 75.

A ggplot2 theme.

**Value**

A ggplot object.

**Examples**

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

plot_data <- penguins %>%
  group_by(sex, species) %>%
  summarise(middle = median(body_mass_g, na.rm = TRUE),
             lower = quantile(body_mass_g, probs = 0.25, na.rm = TRUE),
             upper = quantile(body_mass_g, probs = 0.75, na.rm = TRUE))

gg_hpointrange_facet(
  plot_data,
  y_var = species,
  x_var = middle,
  xmin_var = lower,
  xmax_var = upper,
  facet_var = sex,
  facet_na_rm = TRUE,
  x_title = "Body mass g")
```
gg_hviolin

DEPRECATED. Horizontal violin ggplot.

Description

DEPRECATED. Horizontal violin ggplot that is not coloured and not faceted.

Usage

```r
gg_hviolin(
  data,
  x_var = NULL,
  y_var,
  pal = pal_viridis_mix(1),
  alpha_fill = 1,
  alpha_line = 1,
  size_line = 0.5,
  width = 0.75,
  title = NULL,
  title_wrap = 75,
  subtitle = NULL,
  subtitle_wrap = 75,
  x_zero_mid = FALSE,
  x_breaks_n = 5,
  x_expand = c(0, 0),
  x_labels = scales::label_comma(),
  x_title = NULL,
  x_title_wrap = 50,
  x_zero = FALSE,
  x_zero_line = NULL,
  y_expand = ggplot2::waiver(),
  y_labels = snakecase::to_sentence_case,
  y_na_rm = FALSE,
  y_rev = FALSE,
  y_title = NULL,
  y_title_wrap = 50,
  caption = NULL,
  caption_wrap = 75,
  theme = gg_theme(x_grid = TRUE),
  model_scale = "area",
  model_bw = "nrd0",
  model_adjust = 1,
  model_kernel = "gaussian",
  model_trim = TRUE,
  mobile = FALSE
)
```
Arguments

data
A data frame in a structure to be transformed to density statistics. Required input.
x_var
Generally an unquoted numeric variable to be on the x scale. However if stat = "identity" is selected, a list-column with min, lower, middle, upper, and max variable names.
y_var
Unquoted categorical variable to be on the y scale (i.e. character, factor, or logical). Required input.
pal
Character vector of hex codes.
alpha_fill
The opacity of the fill. Defaults to 1.
alpha_line
The opacity of the outline. Defaults to 1.
size_line
The size of the outlines of violins. Defaults to 0.5.
width
Width of boxes. Defaults to 0.75.
title
Title string.
title_wrap
Number of characters to wrap the title to. Defaults to 60.
subtitle
Subtitle string.
subtitle_wrap
Number of characters to wrap the subtitle to. Defaults to 60.
x_zero_mid
For a numeric x variable, add balance to the x scale so that zero is in the centre of the x scale.
x_breaks_n
For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 5.
x_expand
A vector of range expansion constants used to add padding to the x scale, as per the ggplot2 expand argument in ggplot2 scales functions.
x_labels
A function or named vector to modify x scale labels. Use ggplot2::waiver() to keep x labels untransformed.
x_title
X scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
x_title_wrap
Number of characters to wrap the x title to. Defaults to 50.
x_zero
For a numeric x variable, TRUE or FALSE of whether the minimum of the x scale is zero. Defaults to FALSE.
x_zero_line
For a numeric x variable, TRUE or FALSE whether to add a zero reference line to the x scale. Defaults to TRUE if there are positive and negative values in x_var. Otherwise defaults to FALSE.
y_expand
A vector of range expansion constants used to add padding to the y scale, as per the ggplot2 expand argument in ggplot2 scales functions.
y_labels
A function or named vector to modify y scale labels. If NULL, categorical variable labels are converted to sentence case. Use ggplot2::waiver() to keep y labels untransformed.
y_na_rm
TRUE or FALSE of whether to include y_var NA values. Defaults to FALSE.
y_rev
For a categorical variable, TRUE or FALSE of whether the y variable variable is reversed. Defaults to FALSE.
gg_hviolin_col

DEPRECATED. Horizontal violin ggplot that is coloured.

Description

DEPRECATED. Horizontal violin ggplot that is coloured, but not faceted.

Usage

```r
gg_hviolin_col(
  data,
  x_var = NULL,
  y_var,
  col_var,
  pal = NULL,
  pal_na = "#7F7F7F",

  y_title = NULL,
  y_title_wrap = 50,
  caption = NULL,
  caption_wrap = 75,
  theme = NULL,
  model_scale = "area",
  model_bw = "nrd0",
  model_adjust = 1,
  model_kernel = "gaussian",
  model_trim = FALSE,
  mobile = FALSE,
)
```
gg_hviolin_col

Arguments

**data**
A data frame in a structure to be transformed to density statistics. Required input.

**x_var**
Generally an unquoted numeric variable to be on the x scale. However if stat = "identity" is selected, a list-column with min, lower, middle, upper, and max variable names.

**y_var**
Unquoted categorical variable to be on the y scale (i.e. character, factor, or
logical). Required input.

col_var Unquoted categorical or numeric variable to colour the boxplots. Required input.

pal Character vector of hex codes.
pal_na The hex code or name of the NA colour to be used.
pal_rev Reverses the palette. Defaults to FALSE.
apl_fill The opacity of the fill. Defaults to 1.
apl_line The opacity of the outline. Defaults to 1.
size_line The size of the outlines of violins. Defaults to 0.5.
width Width of boxes. Defaults to 0.75.
title Title string.
title_wrap Number of characters to wrap the title to. Defaults to 60.
subtitle Subtitle string.
subtitle_wrap Number of characters to wrap the subtitle to. Defaults to 60.
x_zero_mid For a numeric x variable, add balance to the x scale so that zero is in the centre of the x scale.
x_breaks_n For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 2.
x_expand A vector of range expansion constants used to add padding to the x scale, as per the ggplot2 expand argument in ggplot2 scales functions.
x_labels A function or named vector to modify x scale labels. Use ggplot2::waiver() to keep x labels untransformed.
x_title X scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
x_title_wrap Number of characters to wrap the x title to. Defaults to 50.
x_zero For a numeric x variable, TRUE or FALSE of whether the minimum of the x scale is zero. Defaults to FALSE.
x_zero_line For a numeric x variable, TRUE or FALSE whether to add a zero reference line to the x scale. Defaults to TRUE if there are positive and negative values in x_var. Otherwise defaults to FALSE.
y_expand A vector of range expansion constants used to add padding to the y scale, as per the ggplot2 expand argument in ggplot2 scales functions.
y_labels A function or named vector to modify y scale labels. If NULL, categorical variable labels are converted to sentence case. Use ggplot2::waiver() to keep y labels untransformed.
y_na_rm TRUE or FALSE of whether to include y_var NA values. Defaults to FALSE.
y_rev For a categorical variable, TRUE or FALSE of whether the y variable variable is reversed. Defaults to FALSE.
y_title y scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
y_title_wrap  Number of characters to wrap the y title to. Defaults to 50.
col_labels  A function or named vector to modify colour scale labels. Defaults to snake-case::to_sentence_case for categorical colour variables and scales::number for numeric colour variables. Use ggplot2::waiver() to keep colour labels untransformed.
col_legend_none  TRUE or FALSE of whether to remove the legend.
col_na_rm  TRUE or FALSE of whether to include col_var NA values. Defaults to FALSE.
col_rev  TRUE or FALSE of whether the colour scale is reversed. Defaults to FALSE.
col_title  Colour title string for the legend. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
col_title_wrap  Number of characters to wrap the colour title to. Defaults to 25. Not applicable where mobile equals TRUE.
caption  Caption title string.
caption_wrap  Number of characters to wrap the caption to. Defaults to 75.
theme  A ggplot2 theme.
model_scale  Per ggplot2::geom_violin, if "area" (default), all violins have the same area (before trimming the tails). If "count", areas are scaled proportionally to the number of observations. If "width", all violins have the same maximum width.
model_bw  The bw argument of the stats::density function. Defaults to "nrd0".
model_adjust  The adjust argument of the stats::density function. Defaults to 1.
model_kernel  The kernel argument of the stats::density function. Defaults to "gaussian".
model_trim  TRUE or FALSE of whether to trim the tails. Defaults to FALSE.
mobile  Whether the plot is to be displayed on a mobile device. Defaults to FALSE.

Value

A ggplot object.

Examples

library(simplevis)
library(palmerpenguins)

gg_hviolin_col(penguins,
  x_var = body_mass_g,
  y_var = species,
  col_var = sex,
  col_na_rm = TRUE)
**gg_hviolin_col_facet**

DEPRECATED. Horizontal violin ggplot that is coloured and faceted.

**Description**

DEPRECATED. Horizontal violin ggplot that is coloured and faceted.

**Usage**

```r
gg_hviolin_col_facet(
  data,
  x_var = NULL,
  y_var,
  col_var,
  facet_var,
  pal = NULL,
  pal_na = "#7F7F7F",
  pal_rev = FALSE,
  alpha_fill = 1,
  alpha_line = 1,
  size_line = 0.5,
  width = 0.75,
  title = NULL,
  title_wrap = 75,
  subtitle = NULL,
  subtitle_wrap = 75,
  x_breaks_n = 2,
  x_zero_mid = FALSE,
  x_expand = c(0, 0),
  x_labels = scales::label_comma(),
  x_title = NULL,
  x_title_wrap = 50,
  x_zero = FALSE,
  x_zero_line = NULL,
  y_expand = ggplot2::waiver(),
  y_labels = snakecase::to_sentence_case,
  y_na_rm = FALSE,
  y_rev = FALSE,
  y_title = NULL,
  y_title_wrap = 50,
  col_labels = stringr::str_to_sentence,
  col_legend_none = FALSE,
  col_na_rm = FALSE,
  col_rev = FALSE,
  col_title = NULL,
  col_title_wrap = 25,
  facet_labels = snakecase::to_sentence_case,
)```
gg_hviolin_col_facet

```r
facet_na_rm = FALSE,
facet_ncol = NULL,
facet_nrow = NULL,
facet_rev = FALSE,
nfacet_scales = "fixed",
caption = NULL,
caption_wrap = 75,
theme = gg_theme(x_grid = TRUE),
model_scale = "area",
model_bw = "nrd0",
model_adjust = 1,
model_kernel = "gaussian",
model_trim = TRUE
)
```

**Arguments**

- `data` A data frame in a structure to be transformed to density statistics. Required input.
- `x_var` Generally an unquoted numeric variable to be on the x scale. However if stat = "identity" is selected, a list-column with min, lower, middle, upper, and max variable names.
- `y_var` Unquoted categorical variable to be on the y scale (i.e. character, factor, or logical). Required input.
- `col_var` Unquoted categorical or numeric variable to colour the boxplots. Required input.
- `facet_var` Unquoted categorical variable to facet the data by. Required input.
- `pal` Character vector of hex codes.
- `pal_na` The hex code or name of the NA colour to be used.
- `pal_rev` TRUE or FALSE of whether to reverse the pal.
- `alpha_fill` The opacity of the fill. Defaults to 1.
- `alpha_line` The opacity of the outline. Defaults to 1.
- `size_line` The size of the outlines of violins. Defaults to 0.5.
- `width` Width of boxes. Defaults to 0.75.
- `title` Title string.
- `title_wrap` Number of characters to wrap the title to. Defaults to 60.
- `subtitle` Subtitle string.
- `subtitle_wrap` Number of characters to wrap the subtitle to. Defaults to 60.
- `x_breaks_n` For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 5.
- `x_zero_mid` For a numeric x variable, add balance to the x scale so that zero is in the centre of the x scale.
- `x_expand` A vector of range expansion constants used to add padding to the x scale, as per the ggplot2 expand argument in ggplot2 scales functions.
x_labels A function or named vector to modify x scale labels. Use ggplot2::waiver() to keep x labels untransformed.

x_title X scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.

x_title_wrap Number of characters to wrap the x title to. Defaults to 50.

x_zero For a numeric x variable, TRUE or FALSE of whether the minimum of the x scale is zero. Defaults to FALSE.

x_zero_line For a numeric x variable, TRUE or FALSE whether to add a zero reference line to the x scale. Defaults to TRUE if there are positive and negative values in x_var. Otherwise defaults to FALSE.

y_expand A vector of range expansion constants used to add padding to the y scale, as per the ggplot2 expand argument in ggplot2 scales functions.

y_labels A function or named vector to modify y scale labels. If NULL, categorical variable labels are converted to sentence case. Use ggplot2::waiver() to keep y labels untransformed.

y_na_rm TRUE or FALSE of whether to include y_var NA values. Defaults to FALSE.

y_rev For a categorical variable, TRUE or FALSE of whether the y variable variable is reversed. Defaults to FALSE.

y_title y scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.

y_title_wrap Number of characters to wrap the y title to. Defaults to 50.

col_labels A function or named vector to modify colour scale labels. Defaults to snake-case::to_sentence_case for categorical colour variables and scales::number for numeric colour variables. Use ggplot2::waiver() to keep colour labels untransformed.

col_legend_none TRUE or FALSE of whether to remove the legend.

col_na_rm TRUE or FALSE of whether to include col_var NA values. Defaults to FALSE.

col_rev TRUE or FALSE of whether the colour scale is reversed. Defaults to FALSE.

col_title Colour title string for the legend. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.

col_title_wrap Number of characters to wrap the colour title to. Defaults to 25. Not applicable where mobile equals TRUE.

facet_labels A function or named vector to modify facet scale labels. Defaults to converting labels to sentence case. Use ggplot2::waiver() to keep facet labels untransformed.

facet_na_rm TRUE or FALSE of whether to include facet_var NA values. Defaults to FALSE.

facet_ncol The number of columns of facetted plots.

facet_nrow The number of rows of facetted plots.

facet_rev TRUE or FALSE of whether the facet variable variable is reversed. Defaults to FALSE.
gg_hviolin_facet

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".
caption     Caption title string.
caption_wrap Number of characters to wrap the caption to. Defaults to 75.
theme       A ggplot2 theme.
model_scale Per ggplot2::geom_violin, if "area" (default), all violins have the same area (before trimming the tails). If "count", areas are scaled proportionally to the number of observations. If "width", all violins have the same maximum width.
model_bw   The bw argument of the stats::density function. Defaults to "nrd0".
model_adjust The adjust argument of the stats::density function. Defaults to 1.
model_kernel The kernel argument of the stats::density function. Defaults to "gaussian".
model_trim TRUE or FALSE of whether to trim the tails. Defaults to FALSE.

Value
A ggplot object.

Examples
library(simplevis)
library(palmerpenguins)
penguins %>%
dplyr::mutate(year = as.character(year)) %>%
gg_hviolin_col_facet(x_var = body_mass_g, y_var = year, col_var = sex, facet_var = species, col_na_rm = TRUE)

---

**gg_hviolin_facet**

**DEPRECATED. Horizontal violin ggplot that is faceted.**

**Description**

DEPRECATED. Horizontal violin ggplot that is faceted, but not coloured.

**Usage**

    gg_hviolin_facet(
        data, 
        x_var = NULL, 
        y_var, 
        facet_var, 
        pal = pal_viridis_mix(1), 
    )
gg_hviolin_facet

alpha_fill = 1,
alpha_line = 1,
size_line = 0.5,
width = 0.75,
title = NULL,
title_wrap = 75,
subtitle = NULL,
subtitle_wrap = 75,
x_zero_mid = FALSE,
x_breaks_n = 2,
x_expand = c(0, 0),
x_labels = scales::label_comma(),
x_title = NULL,
x_title_wrap = 50,
x_zero = FALSE,
x_zero_line = NULL,
y_expand = ggplot2::waiver(),
y_labels = snakecase::to_sentence_case,
y_na_rm = FALSE,
y_rev = FALSE,
y_title = NULL,
y_title_wrap = 50,
facet_labels = snakecase::to_sentence_case,
facet_na_rm = FALSE,
facet_ncol = NULL,
facet_nrow = NULL,
facet_rev = FALSE,
facet_scales = "fixed",
caption = NULL,
caption_wrap = 75,
theme = gg_theme(x_grid = TRUE),
model_scale = "area",
model_bw = "nrd0",
model_adjust = 1,
model_kernel = "gaussian",
model_trim = TRUE
)

Arguments

data
A data frame in a structure to be transformed to density statistics. Required input.

x_var
Generally an unquoted numeric variable to be on the x scale. However if stat = "identity" is selected, a list-column with min, lower, middle, upper, and max variable names.

y_var
Unquoted categorical variable to be on the y scale (i.e. character, factor, or logical). Required input.

facet_var
Unquoted categorical variable to facet the data by. Required input.
pal
Character vector of hex codes.

alpha_fill
The opacity of the fill. Defaults to 1.

alpha_line
The opacity of the outline. Defaults to 1.

size_line
The size of the outlines of violins. Defaults to 0.5.

width
Width of boxes. Defaults to 0.75.

title
Title string.

title_wrap
Number of characters to wrap the title to. Defaults to 60.

subtitle
Subtitle string.

subtitle_wrap
Number of characters to wrap the subtitle to. Defaults to 60.

x_zero_mid
For a numeric x variable, add balance to the x scale so that zero is in the centre of the x scale.

x_breaks_n
For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 2.

x_expand
A vector of range expansion constants used to add padding to the x scale, as per the ggplot2 expand argument in ggplot2 scales functions.

x_labels
A function or named vector to modify x scale labels. Use ggplot2::waiver() to keep x labels untransformed.

x_title
X scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.

x_title_wrap
Number of characters to wrap the x title to. Defaults to 50.

x_zero
For a numeric x variable, TRUE or FALSE of whether the minimum of the x scale is zero. Defaults to FALSE.

x_zero_line
For a numeric x variable, TRUE or FALSE whether to add a zero reference line to the x scale. Defaults to TRUE if there are positive and negative values in x_var. Otherwise defaults to FALSE.

y_expand
A vector of range expansion constants used to add padding to the y scale, as per the ggplot2 expand argument in ggplot2 scales functions.

y_labels
A function or named vector to modify y scale labels. If NULL, categorical variable labels are converted to sentence case. Use ggplot2::waiver() to keep y labels untransformed.

y_na_rm
TRUE or FALSE of whether to include y_var NA values. Defaults to FALSE.

y_rev
For a categorical variable, TRUE or FALSE of whether the y variable variable is reversed. Defaults to FALSE.

y_title
y scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.

y_title_wrap
Number of characters to wrap the y title to. Defaults to 50.

facet_labels
A function or named vector to modify facet scale labels. Defaults to converting labels to sentence case. Use ggplot2::waiver() to keep facet labels untransformed.

facet_na_rm
TRUE or FALSE of whether to include facet_var NA values. Defaults to FALSE.

facet_ncol
The number of columns of facetted plots.
**gg_line**  
*DEPRECATED. Line ggplot.*

<table>
<thead>
<tr>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>facet_nrow</td>
<td>The number of rows of faceted plots.</td>
</tr>
<tr>
<td>facet_rev</td>
<td>TRUE or FALSE of whether the facet variable variable is reversed. Defaults to FALSE.</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>caption</td>
<td>Caption title string.</td>
</tr>
<tr>
<td>caption_wrap</td>
<td>Number of characters to wrap the caption to. Defaults to 75.</td>
</tr>
<tr>
<td>theme</td>
<td>A ggplot2 theme.</td>
</tr>
<tr>
<td>model_scale</td>
<td>Per ggplot2::geom_violin, if &quot;area&quot; (default), all violins have the same area (before trimming the tails). If &quot;count&quot;, areas are scaled proportionally to the number of observations. If &quot;width&quot;, all violins have the same maximum width.</td>
</tr>
<tr>
<td>model_bw</td>
<td>The bw argument of the stats::density function. Defaults to &quot;nrd0&quot;.</td>
</tr>
<tr>
<td>model_adjust</td>
<td>The adjust argument of the stats::density function. Defaults to 1.</td>
</tr>
<tr>
<td>model_kernel</td>
<td>The kernel argument of the stats::density function. Defaults to &quot;gaussian&quot;.</td>
</tr>
<tr>
<td>model_trim</td>
<td>TRUE or FALSE of whether to trim the tails. Defaults to FALSE.</td>
</tr>
</tbody>
</table>

**Examples**

```r
library(simplevis)
library(palmerpenguins)

gg_hviolin_facet(penguins,
  x_var = body_mass_g,
  y_var = sex,
  facet_var = species,
  y_na_rm = TRUE)
```

**Description**

*DEPRECATED. Line ggplot that is not coloured and not faceted.*
gg_line

Usage

```r
gg_line(
  data,
  x_var,
  y_var,
  text_var = NULL,
  pal = pal_viridis_mix(1),
  alpha_line = 1,
  alpha_point = 1,
  size_point = 1.5,
  size_line = 0.5,
  title = NULL,
  title_wrap = 80,
  subtitle = NULL,
  subtitle_wrap = 80,
  x_zero_mid = FALSE,
  x_breaks_n = 5,
  x_expand = NULL,
  x_labels = NULL,
  x_na_rm = FALSE,
  x_rev = FALSE,
  x_title = NULL,
  x_title_wrap = 50,
  x_zero = FALSE,
  x_zero_line = NULL,
  y_zero_mid = FALSE,
  y_breaks_n = 5,
  y_expand = c(0, 0),
  y_labels = scales::label_comma(),
  y_na_rm = FALSE,
  y_title = NULL,
  y_title_wrap = 50,
  y_zero = FALSE,
  y_zero_line = NULL,
  caption = NULL,
  caption_wrap = 80,
  theme = gg_theme(y_grid = TRUE),
  mobile = FALSE
)
```

Arguments

- **data**: A data frame in a structure to be plotted untransformed. Required input.
- **x_var**: Unquoted variable to be on the x scale (i.e. character, factor, logical, numeric, date or datetime). Required input.
- **y_var**: Unquoted numeric variable to be on the y scale. Required input.
- **text_var**: Unquoted variable to be used as a customised tooltip in combination with plotly::ggplotly(plot, tooltip = "text"). Defaults to NULL.
pal: Character vector of hex codes.
alpha_line: The opacity of the line. Defaults to 1.
alpha_point: The opacity of the points.
size_point: Size of points. Defaults to 1.5.
size_line: Size of lines. Defaults to 0.5.
title: Title string.
title_wrap: Number of characters to wrap the title to. Defaults to 75.
subtitle: Subtitle string.
subtitle_wrap: Number of characters to wrap the subtitle to. Defaults to 100. Not applicable where mobile equals TRUE.
x_zero_mid: For a numeric x variable, add balance to the x scale so that zero is in the centre. Defaults to FALSE.
x_breaks_n: For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 5.
x_expand: A vector of range expansion constants used to add padding to the x scale, as per the ggplot2 expand argument in ggplot2 scales functions.
x_labels: A function or named vector to modify x scale labels. If NULL, categorical variable labels are converted to sentence case. Use ggplot2::waiver() to keep x labels untransformed.
x_na_rm: TRUE or FALSE of whether to include x_var NA values. Defaults to FALSE.
x_rev: For a categorical x variable, TRUE or FALSE of whether the x variable variable is reversed. Defaults to FALSE.
x_title: X scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
x_title_wrap: Number of characters to wrap the x title to. Defaults to 50.
x_zero: For a numeric x variable, TRUE or FALSE of whether the minimum of the x scale is zero. Defaults to FALSE.
x_zero_line: For a numeric x variable, TRUE or FALSE of whether to add a zero reference line to the x scale. Defaults to TRUE if there are positive and negative values in x_var. Otherwise defaults to FALSE.
y_zero_mid: For a numeric y variable, add balance to the y scale so that zero is in the centre of the y scale.
y_breaks_n: For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 5.
y_expand: A vector of range expansion constants used to add padding to the y scale, as per the ggplot2 expand argument in ggplot2 scales functions.
y_labels: A function or named vector to modify y scale labels. Use ggplot2::waiver() to keep y labels untransformed.
y_na_rm: TRUE or FALSE of whether to include y_var NA values. Defaults to FALSE.
y_title: y scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
gg_line_col

**gg_line_col**  
DEPRECATED. Line ggplot that is coloured.

**Description**  
DEPRECATED. Line ggplot that is coloured, but not facetted.

**Usage**  
```r
gg_line_col(
  data,
  x_var,
  y_var,
  col_var,
  text_var = NULL,
  pal = NULL,
  pal_na = "#7F7F7F",
)```
Arguments

data A data frame in a structure to be plotted untransformed. Required input.
x_var Unquoted variable to be on the x scale (i.e. character, factor, logical, numeric, date or datetime). Required input.
y_var Unquoted numeric variable to be on the y scale. Required input.
col_var Unquoted categorical variable for lines and points to be coloured by. Required input.
Unquoted variable to be used as a customised tooltip in combination with plotly::ggplotly(plot, tooltip = "text"). Defaults to NULL.

The hex code or name of the NA colour to be used.

Reverses the palette. Defaults to FALSE.

The opacity of the line. Defaults to 1.

The opacity of the points.

Size of points. Defaults to 1.5.

Size of lines. Defaults to 0.5.

Title string.

Number of characters to wrap the title to. Defaults to 75.

Subtitle string.

Number of characters to wrap the subtitle to. Defaults to 100. Not applicable where mobile equals TRUE.

For a numeric x variable, add balance to the x scale so that zero is in the centre. Defaults to FALSE.

For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 5.

A vector of range expansion constants used to add padding to the x scale, as per the ggplot2 expand argument in ggplot2 scales functions.

A function or named vector to modify x scale labels. If NULL, categorical variable labels are converted to sentence case. Use ggplot2::waiver() to keep x labels untransformed.

TRUE or FALSE of whether to include x_var NA values. Defaults to FALSE.

For a categorical x variable, TRUE or FALSE of whether the x variable variable is reversed. Defaults to FALSE.

X scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.

Number of characters to wrap the x title to. Defaults to 50.

For a numeric x variable, TRUE or FALSE of whether the minimum of the x scale is zero. Defaults to FALSE.

For a numeric x variable, TRUE or FALSE of whether to add a zero reference line to the x scale. Defaults to TRUE if there are positive and negative values in x_var. Otherwise defaults to FALSE.

For a numeric y variable, add balance to the y scale so that zero is in the centre of the y scale.

For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 5.

A vector of range expansion constants used to add padding to the y scale, as per the ggplot2 expand argument in ggplot2 scales functions.
gg_line_col

y_labels
A function or named vector to modify y scale labels. Use ggplot2::waiver() to keep y labels untransformed.

y_na_rm
TRUE or FALSE of whether to include y_var NA values. Defaults to FALSE.

y_title
y scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.

y_title_wrap
Number of characters to wrap the y title to. Defaults to 50.

y_zero
For a numeric y variable, TRUE or FALSE of whether the minimum of the y scale is zero. Defaults to TRUE.

y_zero_line
For a numeric y variable, TRUE or FALSE whether to add a zero reference line to the y scale. Defaults to TRUE if there are positive and negative values in y_var. Otherwise defaults to FALSE.

col_labels
A function or named vector to modify colour scale labels. Use ggplot2::waiver() to keep colour labels untransformed.

col_legend_none
TRUE or FALSE of whether to remove the legend.

col_na_rm
TRUE or FALSE of whether to include col_var NA values. Defaults to FALSE.

col_title
Colour title string for the legend. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.

col_title_wrap
Number of characters to wrap the colour title to. Defaults to 25. Not applicable where mobile equals TRUE.

caption
Caption title string.

caption_wrap
Number of characters to wrap the caption to. Defaults to 80.

theme
A ggplot2 theme.

mobile
Whether the plot is to be displayed on a mobile device. Defaults to FALSE.

Value
A ggplot object.

Examples

library(simplevis)
library(dplyr)

plot_data <- storms %>%
  group_by(year, status) %>%
  summarise(wind = mean(wind))

gg_line_col(plot_data,
  x_var = year,
  y_var = wind,
  col_var = status)
**Description**

DEPRECATED. Line ggplot that is coloured and faceted.

**Usage**

```r
gg_line_col_facet(
data,
x_var,
y_var,
col_var,
facet_var,
text_var = NULL,
pal = NULL,
pal_na = "#7F7F7F",
pal_rev = FALSE,
alpha_line = 1,
alpha_point = 1,
size_point = 1.5,
size_line = 0.5,
title = NULL,
title_wrap = 80,
subtitle = NULL,
subtitle_wrap = 80,
x_zero_mid = FALSE,
x_breaks_n = 2,
x_expand = NULL,
x_labels = NULL,
x_na.rm = FALSE,
x_rev = FALSE,
x_title = NULL,
x_title_wrap = 50,
x_zero = FALSE,
x_zero_line = NULL,
y_zero_mid = FALSE,
y_breaks_n = 3,
y_expand = c(0, 0),
y_labels = scales::label_comma(),
y_na.rm = FALSE,
y_title = NULL,
y_title_wrap = 50,
y_zero = FALSE,
y_zero_line = NULL,
col_labels = snakecase::to_sentence_case,
)```
Arguments

data
A data frame in a structure to be plotted untransformed. Required input.
x_var
Unquoted variable to be on the x scale (i.e. character, factor, logical, numeric, date or datetime). Required input.
y_var
Unquoted numeric variable to be on the y scale. Required input.
col_var
Unquoted categorical variable for lines and points to be coloured by. Required input.
facet_var
Unquoted categorical variable to facet the data by. Required input.
text_var
Unquoted variable to be used as a customised tooltip in combination with plotly::ggplotly(plot, tooltip = "text"). Defaults to NULL.
pal
Character vector of hex codes.
pal_na
The hex code or name of the NA colour to be used.
pal_rev
Reverses the palette. Defaults to FALSE.
alpha_line
The opacity of the line. Defaults to 1.
alpha_point
The opacity of the points.
size_point
Size of points. Defaults to 1.5.
size_line
Size of lines. Defaults to 0.5.
title
Title string.
title_wrap
Number of characters to wrap the title to. Defaults to 100.
subtitle
Subtitle string.
subtitle_wrap
Number of characters to wrap the subtitle to. Defaults to 100.
x_zero_mid
For a numeric x variable, add balance to the x scale so that zero is in the centre. Defaults to FALSE.
x_breaks_n
For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 2.
x_expand
A vector of range expansion constants used to add padding to the x scale, as per the ggplot2 expand argument in ggplot2 scales functions.
**x_labels**
A function or named vector to modify x scale labels. If NULL, categorical variable labels are converted to sentence case. Use ggplot2::waiver() to keep x labels untransformed.

**x_na_rm**
TRUE or FALSE of whether to include x_var NA values. Defaults to FALSE.

**x_rev**
For a categorical x variable, TRUE or FALSE of whether the x variable variable is reversed. Defaults to FALSE.

**x_title**
X scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.

**x_title_wrap**
Number of characters to wrap the x title to. Defaults to 50.

**x_zero**
For a numeric x variable, TRUE or FALSE of whether the minimum of the x scale is zero. Defaults to FALSE.

**x_zero_line**
For a numeric x variable, TRUE or FALSE of whether to add a zero reference line to the x scale. Defaults to TRUE if there are positive and negative values in x_var. Otherwise defaults to FALSE.

**y_zero_mid**
For a numeric y variable, add balance to the y scale so that zero is in the centre of the y scale.

**y_breaks_n**
For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 4.

**y_expand**
A vector of range expansion constants used to add padding to the y scale, as per the ggplot2 expand argument in ggplot2 scales functions.

**y_labels**
A function or named vector to modify y scale labels. Use ggplot2::waiver() to keep y labels untransformed.

**y_na_rm**
TRUE or FALSE of whether to include y_var NA values. Defaults to FALSE.

**y_title**
Y scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.

**y_title_wrap**
Number of characters to wrap the y title to. Defaults to 50.

**y_zero**
For a numeric y variable, TRUE or FALSE of whether the minimum of the y scale is zero. Defaults to TRUE.

**y_zero_line**
For a numeric y variable, TRUE or FALSE whether to add a zero reference line to the y scale. Defaults to TRUE if there are positive and negative values in y_var. Otherwise defaults to FALSE.

**col_labels**
A function or named vector to modify colour scale labels. Use ggplot2::waiver() to keep colour labels untransformed.

**col_legend_none**
TRUE or FALSE of whether to remove the legend.

**col_na_rm**
TRUE or FALSE of whether to include col_var NA values. Defaults to FALSE.

**col_title**
Colour title string for the legend. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.

**col_title_wrap**
Number of characters to wrap the colour title to. Defaults to 25.

**facet_labels**
A function or named vector to modify facet scale labels. Defaults to converting labels to sentence case. Use ggplot2::waiver() to keep facet labels untransformed.
**gg_line_facet**

DEPRECATED. Line ggplot that is faceted.

**Description**

DEPRECATED. Line ggplot that is faceted, but not coloured.

**Usage**

```r
gg_line_facet(
  data,
  x_var,
  y_var,
  facet_var,
  text_var = NULL,
)```

**facet_na_rm**  TRUE or FALSE of whether to include facet_var NA values. Defaults to FALSE.

**facet_ncol**  The number of columns of facetted plots.

**facet_nrow**  The number of rows of facetted plots.

**facet_rev**  TRUE or FALSE of whether the facet variable variable is reversed. Defaults to FALSE.

**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".

**caption**  Caption title string.

**caption_wrap**  Number of characters to wrap the caption to. Defaults to 80.

**theme**  A ggplot2 theme.

---

```
library(simplevis)
library(dplyr)

plot_data <- storms %>%
  group_by(year, status) %>%
  summarise(wind = mean(wind))

gg_line_col_facet(plot_data,
  x_var = year,
  y_var = wind,
  col_var = status,
  facet_var = status)
```
gg_line_facet

```r
pal = pal_viridis_mix(1),
alpha_line = 1,
alpha_point = 1,
size_point = 1.5,
size_line = 0.5,
title = NULL,
title_wrap = 80,
subtitle = NULL,
subtitle_wrap = 80,
x_zero_mid = FALSE,
x_breaks_n = 2,
x_expand = NULL,
x_labels = NULL,
x_na_rm = FALSE,
x_rev = FALSE,
x_title = NULL,
x_title_wrap = 50,
x_zero = FALSE,
x_zero_line = NULL,
y_zero_mid = FALSE,
y_breaks_n = 3,
y_expand = c(0, 0),
y_labels = scales::label_comma(),
y_na_rm = FALSE,
y_title = NULL,
y_title_wrap = 50,
y_zero = FALSE,
y_zero_line = NULL,
facet_labels = snakecase::to_sentence_case,
facet_na_rm = FALSE,
facet_ncol = NULL,
facet_nrow = NULL,
facet_rev = FALSE,
facet_scales = "fixed",
caption = NULL,
caption_wrap = 80,
theme = gg_theme(y_grid = TRUE)
)
```

**Arguments**

- **data**
  A data frame in a structure to be plotted untransformed. Required input.

- **x_var**
  Unquoted variable to be on the x scale (i.e. character, factor, logical, numeric, date or datetime). Required input.

- **y_var**
  Unquoted numeric variable to be on the y scale. Required input.

- **facet_var**
  Unquoted categorical variable to facet the data by. Required input.

- **text_var**
  Unquoted variable to be used as a customised tooltip in combination with plotly::ggplotly(plot, tooltip = "text"). Defaults to NULL.
pal          Character vector of hex codes.
alpha_line   The opacity of the line. Defaults to 1.
alpha_point  The opacity of the points.
size_point   Size of points. Defaults to 1.5.
size_line    Size of lines. Defaults to 0.5.
title        Title string.
title_wrap   Number of characters to wrap the title to. Defaults to 100.
subtitle     Subtitle string.
subtitle_wrap Number of characters to wrap the subtitle to. Defaults to 100.
xis_mided    For a numeric x variable, add balance to the x scale so that zero is in the centre. Defaults to FALSE.
x_breaks_n   For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 2.
x_expand     A vector of range expansion constants used to add padding to the x scale, as per the ggplot2 expand argument in ggplot2 scales functions.
x_labels     A function or named vector to modify x scale labels. If NULL, categorical variable labels are converted to sentence case. Use ggplot2::waiver() to keep x labels untransformed.
x_na_rm      TRUE or FALSE of whether to include x_var NA values. Defaults to FALSE.
x_rev        For a categorical x variable, TRUE or FALSE of whether the x variable variable is reversed. Defaults to FALSE.
x_title      X scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
x_title_wrap Number of characters to wrap the x title to. Defaults to 50.
x_zero       For a numeric x variable, TRUE or FALSE of whether the minimum of the x scale is zero. Defaults to FALSE.
x_zero_line  For a numeric x variable, TRUE or FALSE of whether to add a zero reference line to the x scale. Defaults to TRUE if there are positive and negative values in x_var. Otherwise defaults to FALSE.
y_zero_mided For a numeric y variable, add balance to the y scale so that zero is in the centre of the y scale.
y_breaks_n   For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 4.
y_expand     A vector of range expansion constants used to add padding to the y scale, as per the ggplot2 expand argument in ggplot2 scales functions.
y_labels     A function or named vector to modify y scale labels. Use ggplot2::waiver() to keep y labels untransformed.
y_na_rm      TRUE or FALSE of whether to include y_var NA values. Defaults to FALSE.
y_title      y scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
y_title_wrap Number of characters to wrap the y title to. Defaults to 50.
**y_zero**  
For a numeric y variable, TRUE or FALSE of whether the minimum of the y scale is zero. Defaults to TRUE.

**y_zero_line**  
For a numeric y variable, TRUE or FALSE whether to add a zero reference line to the y scale. Defaults to TRUE if there are positive and negative values in y_var. Otherwise defaults to FALSE.

**facet_labels**  
A function or named vector to modify facet scale labels. Defaults to converting labels to sentence case. Use ggplot2::waiver() to keep facet labels untransformed.

**facet_na_rm**  
TRUE or FALSE of whether to include facet_var NA values. Defaults to FALSE.

**facet_ncol**  
The number of columns of facetted plots.

**facet_nrow**  
The number of rows of facetted plots.

**facet_rev**  
TRUE or FALSE of whether the facet variable variable is reversed. Defaults to FALSE.

**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".

**caption**  
Caption title string.

**caption_wrap**  
Number of characters to wrap the caption to. Defaults to 80.

**theme**  
A ggplot2 theme.

### Value

A ggplot object.

### Examples

```r
library(simplevis)
library(dplyr)

plot_data <- storms %>%
  group_by(year, status) %>%
  summarise(wind = mean(wind))

gg_line_facet(plot_data,
  x_var = year,
  y_var = wind,
  facet_var = status)
```

### Description

DEPRECATED. Point ggplot that is not coloured and not facetted.
Usage

```r
gg_point(
data,  
x_var,  
y_var,  
text_var = NULL,  
pal = pal_viridis_mix(1),  
alpha_point = 1,  
size_point = 1.5,  
title = NULL,  
title_wrap = 80,  
subtitle = NULL,  
subtitle_wrap = 80,  
x_zero_mid = FALSE,  
x_breaks_n = 5,  
x_expand = NULL,  
x_jitter = 0,  
x_labels = NULL,  
x_rev = FALSE,  
x_title = NULL,  
x_title_wrap = 50,  
x_zero = FALSE,  
x_zero_line = NULL,  
y_zero_mid = FALSE,  
y_breaks_n = 5,  
y_expand = c(0, 0),  
y_jitter = 0,  
y_labels = scales::label_comma(),  
y_title = NULL,  
y_title_wrap = 50,  
y_zero = FALSE,  
y_zero_line = NULL,  
caption = NULL,  
caption_wrap = 80,  
theme = gg_theme(y_grid = TRUE, x_grid = TRUE),  
mobile = FALSE
)
```

Arguments

data A data frame in a structure to be plotted untransformed. Required input.

x_var Unquoted variable to be on the x scale (i.e. character, factor, logical, numeric, date or POSIXt). Required input.

y_var Unquoted numeric variable to be on the y scale. Required input.

text_var Unquoted variable to be used as a customised tooltip in combination with plotly::ggplotly(plot, tooltip = "text"). Defaults to NULL.

pal Character vector of hex codes.
alpha_point The opacity of the points.
size_point Size of points. Defaults to 1.5.
title Title string.
title_wrap Number of characters to wrap the title to. Defaults to 75.
subtitle Subtitle string.
subtitle_wrap Number of characters to wrap the subtitle to. Defaults to 100. Not applicable
where mobile equals TRUE.
x_zero_mid For a numeric x variable, add balance to the x scale so that zero is in the centre. Defaults to FALSE.
x_breaks_n For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 5.
x_expand A vector of range expansion constants used to add padding to the x scale, as per the ggplot2 expand argument in ggplot2 scales functions.
x_jitter Amount of horizontal jitter to be added in positive and negative directions. Defaults to 0. See ggplot2::position_jitter for further information.
x_labels A function or named vector to modify x scale labels. Use function(x) x to keep labels untransformed.
x_rev For a categorical x variable, TRUE or FALSE of whether the x variable variable is reversed. Defaults to FALSE.
x_title X scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
x_title_wrap Number of characters to wrap the x title to. Defaults to 50.
x_zero For a numeric x variable, TRUE or FALSE of whether the minimum of the x scale is zero. Defaults to FALSE.
x_zero_line For a numeric x variable, TRUE or FALSE of whether to add a zero reference line to the x scale. Defaults to TRUE if there are positive and negative values in x_var. Otherwise defaults to FALSE.
y_zero_mid For a numeric y variable, add balance to the y scale so that zero is in the centre of the y scale.
y_breaks_n For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 5.
y_expand A vector of range expansion constants used to add padding to the y scale, as per the ggplot2 expand argument in ggplot2 scales functions.
y_jitter Amount of vertical jitter to be added in positive and negative directions. Defaults to 0.See ggplot2::position_jitter for further information.
y_labels A function or named vector to modify y scale labels. Use function(x) x to keep labels untransformed.
y_title y scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
y_title_wrap Number of characters to wrap the y title to. Defaults to 50.
y_zero For a numeric y variable, TRUE or FALSE of whether the minimum of the y scale is zero. Defaults to TRUE.
For a numeric y variable, TRUE or FALSE whether to add a zero reference line to the y scale. Defaults to TRUE if there are positive and negative values in y_var. Otherwise defaults to FALSE.

caption: Caption title string.

caption_wrap: Number of characters to wrap the caption to. Defaults to 80.

theme: A ggplot2 theme.

mobile: Whether the plot is to be displayed on a mobile device. Defaults to FALSE.

Value

A ggplot object.

Examples

library(simplevis)
library(palmerpenguins)

gg_point(penguins,
  x_var = bill_length_mm,
  y_var = body_mass_g)

---

DEPRECATED. Pointrange ggplot.

Description

DEPRECATED. Pointrange ggplot that is not coloured and not facettered.

Usage

gg_pointrange(
  data,
  x_var,
  y_var,
  ymin_var,
  ymax_var,
  text_var = NULL,
  pal = pal_viridis_mix(1),
  alpha_line = 1,
  alpha_point = 1,
  size_point = 1.5,
  size_line = 0.5,
  title = NULL,
  title_wrap = 80,
  subtitle = NULL,
  subtitle_wrap = 80,
Arguments

data A data frame in a structure to be plotted untransformed. Required input.
x_var Unquoted variable to be on the x scale (i.e. character, factor, logical, numeric, date or datetime). Required input.
y_var Unquoted numeric variable for the point on the y scale. Required input.
ymin_var Unquoted numeric variable to be the minimum of the y vertical line. Required input.
ymax_var Unquoted numeric variable to be the maximum of the y vertical line. Required input.
text_var Unquoted variable to be used as a customised tooltip in combination with plotly::ggplotly(plot, tooltip = "text"). Defaults to NULL.
pal Character vector of hex codes.
alpha_line The opacity of the line. Defaults to 1.
alpha_point The opacity of the points.
size_point Size of points. Defaults to 1.5.
size_line Size of lines. Defaults to 0.5.
title Title string.
title_wrap Number of characters to wrap the title to. Defaults to 75.
subtitle Subtitle string.
<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>subtitle_wrap</td>
<td>Number of characters to wrap the subtitle to. Defaults to 100. Not applicable where mobile equals TRUE.</td>
</tr>
<tr>
<td>x_zero_mid</td>
<td>For a numeric x variable, add balance to the x scale so that zero is in the centre. Defaults to FALSE.</td>
</tr>
<tr>
<td>x_breaks_n</td>
<td>For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 5.</td>
</tr>
<tr>
<td>x_expand</td>
<td>A vector of range expansion constants used to add padding to the x scale, as per the ggplot2 expand argument in ggplot2 scales functions.</td>
</tr>
<tr>
<td>x_labels</td>
<td>A function or named vector to modify x scale labels. If NULL, categorical variable labels are converted to sentence case. Use ggplot2::waiver() to keep x labels untransformed.</td>
</tr>
<tr>
<td>x_na_rm</td>
<td>TRUE or FALSE of whether to include x_var NA values. Defaults to FALSE.</td>
</tr>
<tr>
<td>x_rev</td>
<td>For a categorical x variable, TRUE or FALSE of whether the x variable variable is reversed. Defaults to FALSE.</td>
</tr>
<tr>
<td>x_title</td>
<td>X scale title string. Defaults to NULL, which converts to sentence case with spaces. Use &quot;&quot; if you would like no title.</td>
</tr>
<tr>
<td>x_title_wrap</td>
<td>Number of characters to wrap the x title to. Defaults to 50.</td>
</tr>
<tr>
<td>x_zero</td>
<td>For a numeric x variable, TRUE or FALSE of whether the minimum of the x scale is zero. Defaults to FALSE.</td>
</tr>
<tr>
<td>x_zero_line</td>
<td>For a numeric x variable, TRUE or FALSE of whether to add a zero reference line to the x scale. Defaults to TRUE if there are positive and negative values in x_var. Otherwise defaults to FALSE.</td>
</tr>
<tr>
<td>y_zero_mid</td>
<td>For a numeric y variable, add balance to the y scale so that zero is in the centre of the y scale.</td>
</tr>
<tr>
<td>y_breaks_n</td>
<td>For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 5.</td>
</tr>
<tr>
<td>y_expand</td>
<td>A vector of range expansion constants used to add padding to the y scale, as per the ggplot2 expand argument in ggplot2 scales functions.</td>
</tr>
<tr>
<td>y_labels</td>
<td>A function or named vector to modify y scale labels. Use ggplot2::waiver() to keep y labels untransformed.</td>
</tr>
<tr>
<td>y_na_rm</td>
<td>TRUE or FALSE of whether to include y_var NA values. Defaults to FALSE.</td>
</tr>
<tr>
<td>y_title</td>
<td>y scale title string. Defaults to &quot;.&quot;</td>
</tr>
<tr>
<td>y_title_wrap</td>
<td>Number of characters to wrap the y title to. Defaults to 50.</td>
</tr>
<tr>
<td>y_zero</td>
<td>For a numeric y variable, TRUE or FALSE of whether the minimum of the y scale is zero. Defaults to TRUE.</td>
</tr>
<tr>
<td>y_zero_line</td>
<td>For a numeric y variable, TRUE or FALSE whether to add a zero reference line to the y scale. Defaults to TRUE if there are positive and negative values in y_var. Otherwise defaults to FALSE.</td>
</tr>
<tr>
<td>caption</td>
<td>Caption title string.</td>
</tr>
<tr>
<td>caption_wrap</td>
<td>Number of characters to wrap the caption to. Defaults to 80.</td>
</tr>
<tr>
<td>theme</td>
<td>A ggplot2 theme.</td>
</tr>
<tr>
<td>mobile</td>
<td>Whether the plot is to be displayed on a mobile device. Defaults to FALSE.</td>
</tr>
</tbody>
</table>
Value

A ggplot object.

Examples

library(dplyr)
library(simplevis)
library(palmerpenguins)

plot_data <- penguins %>%
  group_by(sex) %>%
  summarise(middle = median(body_mass_g, na.rm = TRUE),
    lower = quantile(body_mass_g, probs = 0.25, na.rm = TRUE),
    upper = quantile(body_mass_g, probs = 0.75, na.rm = TRUE))

gg_pointrange(
  plot_data,
  x_var = sex,
  y_var = middle,
  ymin_var = lower,
  ymax_var = upper,
  y_title = "Body mass g")

---

**gg_pointrange_col**  
DEPRECATED. Pointrange ggplot that is coloured.

Description

DEPRECATED. Pointrange ggplot that is coloured, but not facetted.

Usage

```r
gg_pointrange_col(
  data,
  x_var,
  y_var,
  ymin_var,
  ymax_var,
  col_var,
  text_var = NULL,
  pal = NULL,
  pal_na = "#7F7F7F",
  pal_rev = FALSE,
  alpha_line = 1,
  alpha_point = 1,
  size_point = 1.5,
  size_line = 0.5,
```
title = NULL,
title_wrap = 80,
subtitle = NULL,
subtitle_wrap = 80,
x_zero_mid = FALSE,
x_breaks_n = 5,
x_dodge = 0,
x_expand = NULL,
x_labels = NULL,
x_na_rm = FALSE,
x_rev = FALSE,
x_title = NULL,
x_title_wrap = 50,
x_zero = FALSE,
x_zero_line = NULL,
y_zero_mid = FALSE,
y_breaks_n = 5,
y_expand = c(0, 0),
y_labels = scales::label_comma(),
y_na_rm = FALSE,
y_title = NULL,
y_title_wrap = 50,
y_zero = FALSE,
y_zero_line = NULL,
col_breaks_n = 4,
col_cuts = NULL,
col_labels = NULL,
col_legend_none = FALSE,
col_method = NULL,
col_intervals_left = TRUE,
col_na_rm = FALSE,
col_rev = FALSE,
col_title = NULL,
col_title_wrap = 25,
caption = NULL,
caption_wrap = 80,
theme = gg_theme(y_grid = TRUE),
mobile = FALSE
)

Arguments

data A data frame in a structure to be plotted untransformed. Required input.

x_var Unquoted variable to be on the x scale (i.e. character, factor, logical, numeric, date or datetime). Required input.

y_var Unquoted numeric variable for the point on the y scale. Required input.

ymin_var Unquoted numeric variable to be the minimum of the y vertical line. Required input.
ymax_var  Unquoted numeric variable to be the maximum of the y vertical line. Required input.
col_var  Unquoted categorical variable for lines and points to be coloured by. Required input.
text_var  Unquoted variable to be used as a customised tooltip in combination with plotly::ggplotly(plot, tooltip = "text"). Defaults to NULL.
pal  Character vector of hex codes.
pal_na  The hex code or name of the NA colour to be used.
pal_rev  Reverses the palette. Defaults to FALSE.
alpha_line  The opacity of the line. Defaults to 1.
alpha_point  The opacity of the points.
size_point  Size of points. Defaults to 1.5.
size_line  Size of lines. Defaults to 0.5.
title  Title string.
title_wrap  Number of characters to wrap the title to. Defaults to 75.
subtitle  Subtitle string.
subtitle_wrap  Number of characters to wrap the subtitle to. Defaults to 100. Not applicable where mobile equals TRUE.
x_zero_mid  For a numeric x variable, add balance to the x scale so that zero is in the centre. Defaults to FALSE.
x_breaks_n  For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 5.
x_dodge  The amount to dodge pointranges by along the x axis. Defaults to 0 (i.e. identity).
x_expand  A vector of range expansion constants used to add padding to the x scale, as per the ggplot2 expand argument in ggplot2 scales functions.
x_labels  A function or named vector to modify x scale labels. If NULL, categorical variable labels are converted to sentence case. Use ggplot2::waiver() to keep x labels untransformed.
x_na_rm  TRUE or FALSE of whether to include x_var NA values. Defaults to FALSE.
x_rev  For a categorical x variable, TRUE or FALSE of whether the x variable variable is reversed. Defaults to FALSE.
x_title  X scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
x_title_wrap  Number of characters to wrap the x title to. Defaults to 50.
x_zero  For a numeric x variable, TRUE or FALSE of whether the minimum of the x scale is zero. Defaults to FALSE.
x_zero_line  For a numeric x variable, TRUE or FALSE of whether to add a zero reference line to the x scale. Defaults to TRUE if there are positive and negative values in x_var. Otherwise defaults to FALSE.
For a numeric y variable, add balance to the y scale so that zero is in the centre of the y scale.

For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 5.

A vector of range expansion constants used to add padding to the y scale, as per the ggplot2 expand argument in ggplot2 scales functions.

A function or named vector to modify y scale labels. Use ggplot2::waiver() to keep y labels untransformed.

TRUE or FALSE of whether to include y_var NA values. Defaults to FALSE.

y_title

y scale title string. Defaults to "".

Number of characters to wrap the y title to. Defaults to 50.

For a numeric y variable, TRUE or FALSE of whether the minimum of the y scale is zero. Defaults to TRUE.

For a numeric y variable, TRUE or FALSE whether to add a zero reference line to the y scale. Defaults to TRUE if there are positive and negative values in y_var. Otherwise defaults to FALSE.

For a numeric colour variable, the desired number of intervals on the colour scale.

A vector of cuts to colour a numeric variable. If "bin" is selected, the first number in the vector should be either -Inf or 0, and the final number Inf. If "quantile" is selected, the first number in the vector should be 0 and the final number should be 1. Defaults to quartiles.

A function or named vector to modify colour scale labels. Defaults to snake-case::to_sentence_case for categorical colour variables and scales::label_comma() for numeric. Use function(x) x to keep labels untransformed.

TRUE or FALSE of whether to remove the legend.

The method of colouring features, either "bin", "quantile", "continuous", or "category." If numeric, defaults to "bin".

For a numeric colour variable, TRUE or FALSE of whether bins or quantiles are to be cut left-closed. Defaults to TRUE.

TRUE or FALSE of whether to include col_var NA values. Defaults to FALSE.

TRUE or FALSE of whether the colour scale is reversed. Defaults to FALSE.

Colour title string for the legend. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.

Number of characters to wrap the colour title to. Defaults to 25. Not applicable where mobile equals TRUE.

Caption title string.

Number of characters to wrap the caption to. Defaults to 80.

A ggplot2 theme.

Whether the plot is to be displayed on a mobile device. Defaults to FALSE.
gg_pointrange_col_facet

**Value**

A ggplot object.

**Examples**

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

plot_data <- penguins %>%
  group_by(sex, species) %>%
  summarise(middle = median(body_mass_g, na.rm = TRUE),
             lower = quantile(body_mass_g, probs = 0.25, na.rm = TRUE),
             upper = quantile(body_mass_g, probs = 0.75, na.rm = TRUE))

gg_pointrange_col(
  plot_data,
  x_var = species,
  y_var = middle,
  ymin_var = lower,
  ymax_var = upper,
  col_var = sex,
  col_na_rm = TRUE,
  y_title = "Body mass g",
  x_dodge = 0.2)
```

gg_pointrange_col_facet

**Description**

DEPRECATED. Pointrange ggplot that is coloured and facetted.

**Usage**

```r
gg_pointrange_col_facet(
  data,
  x_var,
  y_var,
  ymin_var,
  ymax_var,
  col_var,
  facet_var,
  text_var = NULL,
  pal = NULL,
  pal_na = "#7F7F7F",
```

pal_rev = FALSE,
alpha_line = 1,
alpha_point = 1,
size_point = 1.5,
size_line = 0.5,
title = NULL,
title_wrap = 80,
subtitle = NULL,
subtitle_wrap = 80,
x_zero_mid = FALSE,
x_breaks_n = 2,
x_dodge = 0,
x_expand = NULL,
x_labels = NULL,
x_na_rm = FALSE,
x_rev = FALSE,
x_title = NULL,
x_title_wrap = 50,
x_zero = FALSE,
x_zero_line = NULL,
y_zero_mid = FALSE,
y_breaks_n = 3,
y_expand = c(0, 0),
y_labels = scales::label_comma(),
y_na_rm = FALSE,
y_title = NULL,
y_title_wrap = 50,
y_zero = FALSE,
y_zero_line = NULL,
col_breaks_n = 4,
col_cuts = NULL,
col_labels = NULL,
col_legend_none = FALSE,
col_method = NULL,
col_intervals_left = TRUE,
col_na_rm = FALSE,
col_rev = FALSE,
col_title = NULL,
col_title_wrap = 25,
facet_labels = snakecase::to_sentence_case,
facet_na_rm = FALSE,
facet_ncol = NULL,
facet_nrow = NULL,
facet_rev = FALSE,
facet_scales = "fixed",
caption = NULL,
caption_wrap = 80,
theme = gg_theme(y_grid = TRUE)
Arguments

data A data frame in a structure to be plotted untransformed. Required input.

x_var Unquoted variable to be on the x scale (i.e. character, factor, logical, numeric, date or datetime). Required input.

y_var Unquoted numeric variable for the point on the y scale. Required input.

ymin_var Unquoted numeric variable to be the minimum of the y vertical line. Required input.

ymax_var Unquoted numeric variable to be the maximum of the y vertical line. Required input.

col_var Unquoted categorical variable for lines and points to be coloured by. Required input.

facet_var Unquoted categorical variable to facet the data by. Required input.

text_var Unquoted variable to be used as a customised tooltip in combination with plotly::ggplotly(plot, tooltip = "text"). Defaults to NULL.

pal Character vector of hex codes.

pal_na The hex code or name of the NA colour to be used.

pal_rev Reverses the palette. Defaults to FALSE.

alpha_line The opacity of the line. Defaults to 1.

alpha_point The opacity of the points.

size_point Size of points. Defaults to 1.5.

size_line Size of lines. Defaults to 0.5.

title Title string.

title_wrap Number of characters to wrap the title to. Defaults to 100.

subtitle Subtitle string.

subtitle_wrap Number of characters to wrap the subtitle to. Defaults to 100.

x_zero_mid For a numeric x variable, add balance to the x scale so that zero is in the centre. Defaults to FALSE.

x_breaks_n For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 2.

x_dodge The amount to dodge pointranges by along the x axis. Defaults to 0 (i.e. identity).

x_expand A vector of range expansion constants used to add padding to the x scale, as per the ggplot2 expand argument in ggplot2 scales functions.

x_labels A function or named vector to modify x scale labels. If NULL, categorical variable labels are converted to sentence case. Use ggplot2::waiver() to keep x labels untransformed.

x_na_rm TRUE or FALSE of whether to include x_var NA values. Defaults to FALSE.
For a categorical x variable, TRUE or FALSE of whether the x variable is reversed. Defaults to FALSE.

x_title

X scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.

x_title_wrap

Number of characters to wrap the x title to. Defaults to 50.

x_zero

For a numeric x variable, TRUE or FALSE of whether the minimum of the x scale is zero. Defaults to FALSE.

x_zero_line

For a numeric x variable, TRUE or FALSE of whether to add a zero reference line to the x scale. Defaults to TRUE if there are positive and negative values in x_var. Otherwise defaults to FALSE.

y_zero_mid

For a numeric y variable, add balance to the y scale so that zero is in the centre of the y scale.

y_breaks_n

For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 4.

y_expand

A vector of range expansion constants used to add padding to the y scale, as per the ggplot2 expand argument in ggplot2 scales functions.

y_labels

A function or named vector to modify y scale labels. Use ggplot2::waiver() to keep y labels untransformed.

y_na_rm

TRUE or FALSE of whether to include y_var NA values. Defaults to FALSE.

y_title

y scale title string. Defaults to "".

y_title_wrap

Number of characters to wrap the y title to. Defaults to 50.

y_zero

For a numeric y variable, TRUE or FALSE of whether the minimum of the y scale is zero. Defaults to TRUE.

y_zero_line

For a numeric y variable, TRUE or FALSE whether to add a zero reference line to the y scale. Defaults to TRUE if there are positive and negative values in y_var. Otherwise defaults to FALSE.

col_breaks_n

For a numeric colour variable, the desired number of intervals on the colour scale.

col_cuts

A vector of cuts to colour a numeric variable. If "bin" is selected, the first number in the vector should be either -Inf or 0, and the final number Inf. If "quantile" is selected, the first number in the vector should be 0 and the final number should be 1. Defaults to quartiles.

col_labels

A function or named vector to modify colour scale labels. Defaults to snake-case::to_sentence_case for categorical colour variables and scales::label_comma() for numeric. Use function(x) x to keep labels untransformed.

col_legend_none

TRUE or FALSE of whether to remove the legend.

col_method

The method of colouring features, either "bin", "quantile", "continuous", or "category." If numeric, defaults to "bin".

col_intervals_left

For a numeric colour variable, TRUE or FALSE of whether bins or quantiles are to be cut left-closed. Defaults to TRUE.

col_na_rm

TRUE or FALSE of whether to include col_var NA values. Defaults to FALSE.
col_rev  TRUE or FALSE of whether the colour scale is reversed. Defaults to FALSE.
col_title Colour title string for the legend. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
col_title_wrap Number of characters to wrap the colour title to. Defaults to 25. Not applicable where mobile equals TRUE.
facet_labels A function or named vector to modify facet scale labels. Defaults to converting labels to sentence case. Use ggplot2::waiver() to keep facet labels untransformed.
facet_na_rm TRUE or FALSE of whether to include facet_var NA values. Defaults to FALSE.
facet_ncol The number of columns of facetted plots.
facet_nrow The number of rows of facetted plots.
facet_rev TRUE or FALSE of whether the facet variable variable is reversed. Defaults to FALSE.
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".
caption Caption title string.
caption_wrap Number of characters to wrap the caption to. Defaults to 80.
theme A ggplot2 theme.

Value
A ggplot object.

Examples
library(dplyr)
library(simplevis)
library(palmerpenguins)

plot_data <- penguins %>%
  mutate(year = as.character(year)) %>%
  group_by(year, sex, species) %>%
  summarise(middle = median(body_mass_g, na.rm = TRUE),
            lower = quantile(body_mass_g, probs = 0.25, na.rm = TRUE),
            upper = quantile(body_mass_g, probs = 0.75, na.rm = TRUE))

gg_pointrange_col_facet(
  plot_data,
  x_var = year,
  y_var = middle,
  ymin_var = lower,
  ymax_var = upper,
  col_var = sex,
  facet_var = species,
  col_na_rm = TRUE,
  y_title = "Body mass g",
  x_labels = function(x) stringr::str_sub(x, 3, 4),
  x_dodge = 0.2)
**Description**

DEPRECATED. Pointrange ggplot that is faceted, but not coloured.

**Usage**

```r
gg_pointrange_facet(
  data,
  x_var,
  y_var,
  ymin_var,
  ymax_var,
  facet_var,
  text_var = NULL,
  pal = pal_viridis_mix(1),
  alpha_line = 1,
  alpha_point = 1,
  size_point = 1.5,
  size_line = 0.5,
  title = NULL,
  title_wrap = 80,
  subtitle = NULL,
  subtitle_wrap = 80,
  x_zero_mid = FALSE,
  x_breaks_n = 2,
  x_expand = NULL,
  x_labels = NULL,
  x_na_rm = FALSE,
  x_rev = FALSE,
  x_title = NULL,
  x_title_wrap = 50,
  x_zero = FALSE,
  x_zero_line = NULL,
  y_zero_mid = FALSE,
  y_breaks_n = 3,
  y_expand = c(0, 0),
  y_labels = scales::label_comma(),
  y_na_rm = FALSE,
  y_title = NULL,
  y_title_wrap = 50,
  y_zero = FALSE,
  y_zero_line = NULL,
  facet_labels = snakecase::to_sentence_case,
  facet_na_rm = FALSE,
)
```


```r
facet_ncol = NULL,
facet_nrow = NULL,
facet_rev = FALSE,
facet_scales = "fixed",
caption = NULL,
caption_wrap = 80,
theme = gg_theme(y_grid = TRUE)
)
```

### Arguments

- **data**
  A data frame in a structure to be plotted untransformed. Required input.
- **x_var**
  Unquoted variable to be on the x scale (i.e. character, factor, logical, numeric, date or datetime). Required input.
- **y_var**
  Unquoted numeric variable for the point on the y scale. Required input.
- **ymin_var**
  Unquoted numeric variable to be the minimum of the y vertical line. Required input.
- **ymax_var**
  Unquoted numeric variable to be the maximum of the y vertical line. Required input.
- **facet_var**
  Unquoted categorical variable to facet the data by. Required input.
- **text_var**
  Unquoted variable to be used as a customised tooltip in combination with plotly::ggplotly(plot, tooltip = "text"). Defaults to NULL.
- **pal**
  Character vector of hex codes.
- **alpha_line**
  The opacity of the line. Defaults to 1.
- **alpha_point**
  The opacity of the points.
- **size_point**
  Size of points. Defaults to 1.5.
- **size_line**
  Size of lines. Defaults to 0.5.
- **title**
  Title string.
- **title_wrap**
  Number of characters to wrap the title to. Defaults to 100.
- **subtitle**
  Subtitle string.
- **subtitle_wrap**
  Number of characters to wrap the subtitle to. Defaults to 100.
- **x_zero_mid**
  For a numeric x variable, add balance to the x scale so that zero is in the centre. Defaults to FALSE.
- **x_breaks_n**
  For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 2.
- **x_expand**
  A vector of range expansion constants used to add padding to the x scale, as per the ggplot2 expand argument in ggplot2 scales functions.
- **x_labels**
  A function or named vector to modify x scale labels. If NULL, categorical variable labels are converted to sentence case. Use ggplot2::waiver() to keep x labels untransformed.
- **x_na_rm**
  TRUE or FALSE of whether to include x_var NA values. Defaults to FALSE.
- **x_rev**
  For a categorical x variable, TRUE or FALSE of whether the x variable variable is reversed. Defaults to FALSE.
x_title  X scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.

x_title_wrap  Number of characters to wrap the x title to. Defaults to 50.

x_zero  For a numeric x variable, TRUE or FALSE of whether the minimum of the x scale is zero. Defaults to FALSE.

x_zero_line  For a numeric x variable, TRUE or FALSE of whether to add a zero reference line to the x scale. Defaults to TRUE if there are positive and negative values in x_var. Otherwise defaults to FALSE.

y_zero_mid  For a numeric y variable, add balance to the y scale so that zero is in the centre of the y scale.

y_breaks_n  For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 4.

y_expand  A vector of range expansion constants used to add padding to the y scale, as per the ggplot2 expand argument in ggplot2 scales functions.

y_labels  A function or named vector to modify y scale labels. Use ggplot2::waiver() to keep y labels untransformed.

y_na_rm  TRUE or FALSE of whether to include y_var NA values. Defaults to FALSE.

y_title  y scale title string. Defaults to "".

y_title_wrap  Number of characters to wrap the y title to. Defaults to 50.

y_zero  For a numeric y variable, TRUE or FALSE of whether the minimum of the y scale is zero. Defaults to TRUE.

y_zero_line  For a numeric y variable, TRUE or FALSE whether to add a zero reference line to the y scale. Defaults to TRUE if there are positive and negative values in y_var. Otherwise defaults to FALSE.

facet_labels  A function or named vector to modify facet scale labels. Defaults to converting labels to sentence case. Use ggplot2::waiver() to keep facet labels untransformed.

facet_na_rm  TRUE or FALSE of whether to include facet_var NA values. Defaults to FALSE.

facet_ncol  The number of columns of facetted plots.

facet_nrow  The number of rows of facetted plots.

facet_rev  TRUE or FALSE of whether the facet variable variable is reversed. Defaults to FALSE.

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".

caption  Caption title string.

caption_wrap  Number of characters to wrap the caption to. Defaults to 80.

theme  A ggplot2 theme.

Value

A ggplot object.
Examples

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

plot_data <- penguins %>%
group_by(sex, species) %>%
summarise(middle = median(body_mass_g, na.rm = TRUE),
          lower = quantile(body_mass_g, probs = 0.25, na.rm = TRUE),
          upper = quantile(body_mass_g, probs = 0.75, na.rm = TRUE))

gg_pointrange_facet(
  plot_data,
  x_var = species,
  y_var = middle,
  ymin_var = lower,
  ymax_var = upper,
  facet_var = sex,
  facet_na_rm = TRUE,
  y_title = "Body mass g")
```

**gg_point_col**  
DEPRECATED. Point ggplot that is coloured.

Description  
DEPRECATED. Point ggplot that is coloured, but not facetted.

Usage  
```r
gg_point_col(
  data,
  x_var,
  y_var,
  col_var,
  text_var = NULL,
  pal = NULL,
  pal_na = "#7F7F7F",
  pal_rev = FALSE,
  alpha_point = 1,
  size_point = 1.5,
  title = NULL,
  title_wrap = 80,
  subtitle = NULL,
  subtitle_wrap = 80,
  x_zero_mid = FALSE,
  x_breaks_n = 5,
)```
gg_point_col

x_expand = NULL,
x_jitter = 0,
x_labels = NULL,
x_rev = FALSE,
x_title = NULL,
x_title_wrap = 50,
x_zero = FALSE,
x_zero_line = NULL,
y_zero_mid = FALSE,
y_breaks_n = 5,
y_expand = c(0, 0),
y_jitter = 0,
y_labels = scales::label_comma(),
y_title = NULL,
y_title_wrap = 50,
y_zero = FALSE,
y_zero_line = NULL,
col_breaks_n = 4,
col_cuts = NULL,
col_labels = NULL,
col_legend_none = FALSE,
col_method = NULL,
col_intervals_left = TRUE,
col_na_rm = FALSE,
col_rev = FALSE,
col_title = NULL,
col_title_wrap = 25,
caption = NULL,
caption_wrap = 80,
theme = gg_theme(y_grid = TRUE, x_grid = TRUE),
mobile = FALSE
)

Arguments

data A data frame in a structure to be plotted untransformed. Required input.
x_var Unquoted variable to be on the x scale (i.e. character, factor, logical, numeric, date or POSIXt). Required input.
y_var Unquoted numeric variable to be on the y scale. Required input.
col_var Unquoted variable for points to be coloured by. Required input.
text_var Unquoted variable to be used as a customised tooltip in combination with plotly::ggplotly(plot, tooltip = "text"). Defaults to NULL.
pal Character vector of hex codes.
pal_na The hex code or name of the NA colour to be used.
pal_rev Reverses the palette. Defaults to FALSE.
alpha_point The opacity of the points.
**size_point**  
Size of points. Defaults to 1.5.

**title**  
Title string.

**title_wrap**  
Number of characters to wrap the title to. Defaults to 75.

**subtitle**  
Subtitle string.

**subtitle_wrap**  
Number of characters to wrap the subtitle to. Defaults to 100. Not applicable where mobile equals TRUE.

**x_zero_mid**  
For a numeric x variable, add balance to the x scale so that zero is in the centre. Defaults to FALSE.

**x_breaks_n**  
For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 5.

**x_expand**  
A vector of range expansion constants used to add padding to the x scale, as per the `ggplot2` expand argument in `ggplot2` scales functions.

**x_jitter**  
Amount of horizontal jitter to be added in positive and negative directions. Defaults to 0. See `ggplot2::position_jitter` for further information.

**x_labels**  
A function or named vector to modify x scale labels. Use `function(x) x` to keep labels untransformed.

**x_rev**  
For a categorical x variable, TRUE or FALSE of whether the x variable variable is reversed. Defaults to FALSE.

**x_title**  
X scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.

**x_title_wrap**  
Number of characters to wrap the x title to. Defaults to 50.

**x_zero**  
For a numeric x variable, TRUE or FALSE of whether the minimum of the x scale is zero. Defaults to FALSE.

**x_zero_line**  
For a numeric x variable, TRUE or FALSE of whether to add a zero reference line to the x scale. Defaults to TRUE if there are positive and negative values in `x_var`. Otherwise defaults to FALSE.

**y_zero_mid**  
For a numeric y variable, add balance to the y scale so that zero is in the centre of the y scale.

**y_breaks_n**  
For a numeric or date y variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 5.

**y_expand**  
A vector of range expansion constants used to add padding to the y scale, as per the `ggplot2` expand argument in `ggplot2` scales functions.

**y_jitter**  
Amount of vertical jitter to be added in positive and negative directions. Defaults to 0. See `ggplot2::position_jitter` for further information.

**y_labels**  
A function or named vector to modify y scale labels. Use `function(x) x` to keep labels untransformed.

**y_title**  
y scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.

**y_title_wrap**  
Number of characters to wrap the y title to. Defaults to 50.

**y_zero**  
For a numeric y variable, TRUE or FALSE of whether the minimum of the y scale is zero. Defaults to TRUE.
gg_point_col

y_zero_line For a numeric y variable, TRUE or FALSE whether to add a zero reference line to the y scale. Defaults to TRUE if there are positive and negative values in y_var. Otherwise defaults to FALSE.

col_breaks_n For a numeric colour variable. If "bin" col_method, the intervals on the colour scale for the pretty algorithm to aim for. If "quantile" col_method, the number of equal quantiles. Defaults to 4.

col_cuts A vector of cuts to colour a numeric variable. If "bin" is selected, the first number in the vector should be either -Inf or 0, and the final number Inf. If "quantile" is selected, the first number in the vector should be 0 and the final number should be 1. Defaults to quartiles.

col_labels A function or named vector to modify the colour scale labels. Defaults to stringr::str_to_sentence if categorical, and scales::label_comma() if numeric.

col_legend_none TRUE or FALSE of whether to remove the legend.

col_method The method of colouring features, either "bin", "quantile", "continuous", or "category." If numeric, defaults to "bin".

col_intervals_left For a numeric colour variable, TRUE or FALSE of whether bins or quantiles are to be cut left-closed. Defaults to TRUE.

col_na_rm TRUE or FALSE of whether to include col_var NA values. Defaults to FALSE.

col_rev TRUE or FALSE of whether the colour scale is reversed. Defaults to FALSE.

col_title Colour title string for the legend. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.

col_title_wrap Number of characters to wrap the colour title to. Defaults to 25. Not applicable where mobile equals TRUE.

caption Caption title string.

caption_wrap Number of characters to wrap the caption to. Defaults to 80.

theme A ggplot2 theme.

mobile Whether the plot is to be displayed on a mobile device. Defaults to FALSE.

Value

A ggplot object.

Examples

library(simplevis)
library(palmerpenguins)

gg_point_col(penguins,  
  x_var = bill_length_mm,  
  y_var = body_mass_g,  
  col_var = species)
 gg_point_col_facet  

DEPRECATED. Point ggplot that is coloured and faceted.

Description

DEPRECATED. Point ggplot that is coloured and faceted.

Usage

```r
gg_point_col_facet(
  data,
  x_var,
  y_var,
  col_var,
  facet_var,
  text_var = NULL,
  pal = NULL,
  pal_na = "#7F7F7F",
  pal_rev = FALSE,
  alpha_point = 1,
  size_point = 1.5,
  title = NULL,
  title_wrap = 80,
  subtitle = NULL,
  subtitle_wrap = 80,
  x_zero_mid = FALSE,
  x_breaks_n = 2,
  x_expand = NULL,
  x_jitter = 0,
  x_labels = NULL,
  x_rev = FALSE,
  x_title = NULL,
  x_title_wrap = 50,
  x_zero = FALSE,
  x_zero_line = NULL,
  y_zero_mid = FALSE,
  y_breaks_n = 3,
  y_expand = c(0, 0),
  y_jitter = 0,
  y_labels = scales::label_comma(),
  y_title = NULL,
  y_title_wrap = 50,
  y_zero = FALSE,
  y_zero_line = NULL,
  col_breaks_n = 4,
  col_cuts = NULL,
  col_intervals_left = TRUE,
)```

Arguments

data A data frame in a structure to be plotted untransformed. Required input.
x_var Unquoted variable to be on the x scale (i.e. character, factor, logical, numeric, date or POSIXt). Required input.
y_var Unquoted numeric variable to be on the y scale. Required input.
col_var Unquoted variable for points to be coloured by. Required input.
facet_var Unquoted categorical variable to facet the data by. Required input.
text_var Unquoted variable to be used as a customised tooltip in combination with plotly::ggplotly(plot, tooltip = "text"). Defaults to NULL.
pal Character vector of hex codes.
pal_na The hex code or name of the NA colour to be used.
pal_rev Reverses the palette. Defaults to FALSE.
alpha_point The opacity of the points.
size_point Size of points. Defaults to 1.5.
title Title string.
title_wrap Number of characters to wrap the title to. Defaults to 100.
subtitle Subtitle string.
subtitle_wrap Number of characters to wrap the subtitle to. Defaults to 100.
x_zero_mid For a numeric x variable, add balance to the x scale so that zero is in the centre. Defaults to FALSE.
x_breaks_n For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 2.
x_expand A vector of range expansion constants used to add padding to the x scale, as per the ggplot2 expand argument in ggplot2 scales functions.
| **x_jitter** | Amount of horizontal jitter to be added in positive and negative directions. Defaults to 0. See ggplot2::position_jitter for further information. |
| **x_labels** | A function or named vector to modify x scale labels. Use function(x) x to keep labels untransformed. |
| **x_rev** | For a categorical x variable, TRUE or FALSE of whether the x variable variable is reversed. Defaults to FALSE. |
| **x_title** | X scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title. |
| **x_title_wrap** | Number of characters to wrap the x title to. Defaults to 50. |
| **x_zero** | For a numeric x variable, TRUE or FALSE of whether the minimum of the x scale is zero. Defaults to FALSE. |
| **x_zero_line** | For a numeric x variable, TRUE or FALSE of whether to add a zero reference line to the x scale. Defaults to TRUE if there are positive and negative values in x_var. Otherwise defaults to FALSE. |
| **y_zero_mid** | For a numeric y variable, add balance to the y scale so that zero is in the centre of the y scale. |
| **y_breaks_n** | For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 4. |
| **y_expand** | A vector of range expansion constants used to add padding to the y scale, as per the ggplot2 expand argument in ggplot2 scales functions. |
| **y_jitter** | Amount of vertical jitter to be added in positive and negative directions. Defaults to 0. See ggplot2::position_jitter for further information. |
| **y_labels** | A function or named vector to modify y scale labels. Use function(x) x to keep labels untransformed. |
| **y_title** | y scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title. |
| **y_title_wrap** | Number of characters to wrap the y title to. Defaults to 50. |
| **y_zero** | For a numeric y variable, TRUE or FALSE of whether the minimum of the y scale is zero. Defaults to TRUE. |
| **y_zero_line** | For a numeric y variable, TRUE or FALSE whether to add a zero reference line to the y scale. Defaults to TRUE if there are positive and negative values in y_var. Otherwise defaults to FALSE. |
| **col_breaks_n** | For a numeric colour variable, the desired number of intervals on the colour scale. |
| **col_cuts** | A vector of cuts to colour a numeric variable. If "bin" is selected, the first number in the vector should be either -Inf or 0, and the final number Inf. If "quantile" is selected, the first number in the vector should be 0 and the final number should be 1. Defaults to quartiles. |
| **col_intervals_left** | For a numeric colour variable, TRUE or FALSE of whether bins or quantiles are to be cut left-closed. Defaults to TRUE. |
| **col_labels** | A function or named vector to modify colour scale labels. Defaults to snake-case::to_sentence_case for categorical colour variables and scales::label_comma() for numeric. Use function(x) x to keep labels untransformed. |
gg_point_col_facet

- **col_legend_none**: TRUE or FALSE of whether to remove the legend.
- **col_method**: The method of colouring features, either "bin", "quantile", "continuous", or "category." If numeric, defaults to "bin".
- **col_na_rm**: TRUE or FALSE of whether to include col_var NA values. Defaults to FALSE.
- **col_rev**: TRUE or FALSE of whether the colour scale is reversed. Defaults to FALSE.
- **col_title**: Colour title string for the legend. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
- **col_title_wrap**: Number of characters to wrap the colour title to. Defaults to 25.
- **facet_labels**: A function or named vector to modify facet scale labels. Defaults to converting labels to sentence case. Use function(x) x to keep labels untransformed.
- **facet_na_rm**: TRUE or FALSE of whether to include facet_var NA values. Defaults to FALSE.
- **facet_ncol**: The number of columns of facetted plots.
- **facet_nrow**: The number of rows of facetted plots.
- **facet_rev**: TRUE or FALSE of whether the facet variable variable is reversed. Defaults to FALSE.
- **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".
- **caption**: Caption title string.
- **caption_wrap**: Number of characters to wrap the caption to. Defaults to 80.
- **theme**: A ggplot2 theme.

**Value**

A ggplot object.

**Examples**

```r
library(simplevis)
library(palmerpenguins)

gg_point_col_facet(penguins,
  x_var = bill_length_mm,
  y_var = body_mass_g,
  col_var = sex,
  facet_var = species)
```
DEPRECATED. Point ggplot that is faceted.

Description

DEPRECATED. Point ggplot that is faceted, but not coloured.

Usage

```r
gg_point_facet(
  data,
  x_var,
  y_var,
  facet_var,
  text_var = NULL,
  pal = pal_viridis_mix(1),
  alpha_point = 1,
  size_point = 1.5,
  title = NULL,
  title_wrap = 80,
  subtitle = NULL,
  subtitle_wrap = 80,
  x_zero_mid = FALSE,
  x_breaks_n = 2,
  x_expand = NULL,
  x_jitter = 0,
  x_labels = NULL,
  x_rev = FALSE,
  x_title = NULL,
  x_title_wrap = 50,
  x_zero = FALSE,
  x_zero_line = NULL,
  y_zero_mid = FALSE,
  y_breaks_n = 3,
  y_expand = c(0, 0),
  y_jitter = 0,
  y_labels = scales::label_comma(),
  y_title = NULL,
  y_title_wrap = 50,
  y_zero = FALSE,
  y_zero_line = NULL,
  facet_labels = snakecase::to_sentence_case,
  facet_na_rm = FALSE,
  facet_ncol = NULL,
  facet_nrow = NULL,
  facet_rev = FALSE,
  facet_scales = "fixed",
)```
caption = NULL,
caption_wrap = 80,
theme = gg_theme(y_grid = TRUE, x_grid = TRUE)
)

Arguments

Arguments:

data A data frame in a structure to be plotted untransformed. Required input.

x_var Unquoted variable to be on the x scale (i.e. character, factor, logical, numeric, date or POSIXt). Required input.

y_var Unquoted numeric variable to be on the y scale. Required input.

facet_var Unquoted categorical variable to facet the data by. Required input.

text_var Unquoted variable to be used as a customised tooltip in combination with plotly::ggplotly(plot, tooltip = "text"). Defaults to NULL.

pal Character vector of hex codes.

alpha_point The opacity of the points.

size_point Size of points. Defaults to 1.5.

title Title string.

title_wrap Number of characters to wrap the title to. Defaults to 100.

subtitle Subtitle string.

subtitle_wrap Number of characters to wrap the subtitle to. Defaults to 100.

x_zero_mid For a numeric x variable, add balance to the x scale so that zero is in the centre. Defaults to FALSE.

x_breaks_n For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 2.

x_expand A vector of range expansion constants used to add padding to the x scale, as per the ggplot2 expand argument in ggplot2 scales functions.

x_jitter Amount of horizontal jitter to be added in positive and negative directions. Defaults to 0. See ggplot2::position_jitter for further information.

x_labels A function or named vector to modify x scale labels. Use function(x) x to keep labels untransformed.

x_rev For a categorical x variable, TRUE or FALSE of whether the x variable variable is reversed. Defaults to FALSE.

x_title X scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.

x_title_wrap Number of characters to wrap the x title to. Defaults to 50.

x_zero For a numeric x variable, TRUE or FALSE of whether the minimum of the x scale is zero. Defaults to FALSE.

x_zero_line For a numeric x variable, TRUE or FALSE of whether to add a zero reference line to the x scale. Defaults to TRUE if there are positive and negative values in x_var. Otherwise defaults to FALSE.
For a numeric y variable, add balance to the y scale so that zero is in the centre of the y scale.

For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 4.

A vector of range expansion constants used to add padding to the y scale, as per the ggplot2 expand argument in ggplot2 scales functions.

Amount of vertical jitter to be added in positive and negative directions. Defaults to 0. See ggplot2::position_jitter for further information.

A function or named vector to modify y scale labels. Use function(x) x to keep labels untransformed.

y scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.

Number of characters to wrap the y title to. Defaults to 50.

For a numeric y variable, TRUE or FALSE of whether the minimum of the y scale is zero. Defaults to TRUE.

For a numeric y variable, TRUE or FALSE whether to add a zero reference line to the y scale. Defaults to TRUE if there are positive and negative values in y_var. Otherwise defaults to FALSE.

A function or named vector to modify facet scale labels. Defaults to converting labels to sentence case. Use function(x) x to keep labels untransformed.

TRUE or FALSE of whether to include facet_var NA values. Defaults to FALSE.

The number of columns of facetted plots.

The number of rows of facetted plots.

TRUE or FALSE of whether the facet variable variable is reversed. Defaults to FALSE.

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".

Caption title string.

Number of characters to wrap the caption to. Defaults to 80.

A ggplot2 theme.

A ggplot object.

library(simplevis)
library(palmerpenguins)

gg_point_facet(penguins,
  x_var = bill_length_mm,
  y_var = body_mass_g,
  facet_var = species)
**Description**

Map of simple features in ggplot that is not coloured and not facetted.

**Usage**

```r
gg_sf(
  data,
  text_var = NULL,
  borders = NULL,
  borders_on_top = NULL,
  pal = pal_viridis_mix(1),
  pal_borders = "#7F7F7F",
  alpha_fill = NULL,
  alpha_line = 1,
  alpha_point = 1,
  alpha_borders = 0.5,
  size_line = 0.5,
  size_point = 1.5,
  size_borders = 0.2,
  title = NULL,
  title_wrap = 80,
  subtitle = NULL,
  subtitle_wrap = 80,
  caption = NULL,
  caption_wrap = 80,
  theme = gg_theme(void = TRUE),
  mobile = FALSE
)
```

**Arguments**

- `data` A sf object with defined coordinate reference system in a structure to be plotted untransformed. Required input.
- `text_var` Unquoted variable to be used as a customised tooltip in combination with plotly::ggplotly(plot, tooltip = "text"). Defaults to NULL.
- `borders` A sf object as administrative boundaries (or coastlines). Defaults to no boundaries added. The rnaturalearth package is a useful source of country and state boundaries.
- `borders_on_top` TRUE or FALSE as to whether the borders are on top of the sf object supplied to the data argument. Defaults to TRUE for points and lines, but FALSE for polygons.
- `pal` Character vector of hex codes.
gg_sf_col

- pal_borders: Colour of the borders. Defaults to "#7F7F7F".
- alpha_fill: The opacity of the fill.
- alpha_line: The alpha of lines and outlines.
- alpha_point: The alpha of points.
- alpha_borders: Opacity of the borders. Defaults to 0.5.
- size_line: Size of lines. Defaults to 0.5.
- size_point: Size of points. Defaults to 1.5.
- size_borders: Size of the borders. Defaults to 0.2.
- title: Title string.
- title_wrap: Number of characters to wrap the title to. Defaults to 75.
- subtitle: Subtitle string.
- subtitle_wrap: Number of characters to wrap the subtitle to. Defaults to 100. Not applicable where mobile equals TRUE.
- caption: Caption title string.
- caption_wrap: Number of characters to wrap the caption to. Defaults to 80.
- theme: A ggplot2 theme.
- mobile: Whether the plot is to be displayed on a mobile device. Defaults to FALSE.

**Value**

A ggplot object.

**Examples**

```r
gg_sf(example_point,
      borders = example_borders)
```

---

**Description**

Map of simple features in ggplot that is coloured, but not faceted.

**DEPRECATED. Simple feature ggplot map that is coloured.**
Usage

```
gg_sf_col(
  data,
  col_var,
  text_var = NULL,
  borders = NULL,
  borders_on_top = NULL,
  pal = NULL,
  pal_na = "#7F7F7F",
  pal_rev = FALSE,
  palBorders = "#7F7F7F",
  alpha_fill = NULL,
  alpha_line = 1,
  alpha_point = 1,
  alpha_borders = 0.5,
  size_line = 0.5,
  size_point = 1.5,
  size_borders = 0.2,
  title = NULL,
  title_wrap = 80,
  subtitle = NULL,
  subtitle_wrap = 80,
  col_breaks_n = 4,
  col_cuts = NULL,
  col_intervals_left = TRUE,
  col_labels = NULL,
  col_legend_none = FALSE,
  col_na_rm = FALSE,
  col_method = NULL,
  col_title = NULL,
  col_title_wrap = 25,
  caption = NULL,
  caption_wrap = 80,
  theme = gg_theme(void = TRUE),
  mobile = FALSE
)
```

Arguments

- **data**: A sf object with defined coordinate reference system in a structure to be plotted untransformed. Required input.
- **col_var**: Unquoted variable for points to be coloured by. Required input.
- **text_var**: Unquoted variable to be used as a customised tooltip in combination with plotly::ggplotly(plot, tooltip = "text"). Defaults to NULL.
- **borders**: A sf object as administrative boundaries (or coastlines). Defaults to no boundaries added. The maturaleza package is a useful source of country and state boundaries.
borders_on_top  TRUE or FALSE as to whether the borders are on top of the sf object supplied to the data argument. Defaults to TRUE for points and lines, but FALSE for polygons.

pal  Character vector of hex codes. Defaults to NULL, which selects the colorbrewer Set1 or viridis.

pal_na  The hex code or name of the NA colour to be used.

pal_rev  Reverses the palette. Defaults to FALSE.

palBorders  Colour of the borders. Defaults to "#F7F7F7".

alpha_fill  The opacity of the fill.

alpha_line  The alpha of lines and outlines.

alpha_point  The alpha of points.

alpha_borders  Opacity of the borders. Defaults to 0.5.

size_line  Size of lines. Defaults to 0.5.

size_point  Size of points. Defaults to 1.5.

size_borders  Size of the borders. Defaults to 0.2.

title  Title string.

title_wrap  Number of characters to wrap the title to. Defaults to 75.

subtitle  Subtitle string.

subtitle_wrap  Number of characters to wrap the subtitle to. Defaults to 100. Not applicable where mobile equals TRUE.

col_breaks_n  For a numeric colour variable, the desired number of intervals on the colour scale.

col_cuts  A vector of cuts to colour a numeric variable. If "bin" is selected, the first number in the vector should be either -Inf or 0, and the final number Inf. If "quantile" is selected, the first number in the vector should be 0 and the final number should be 1. Defaults to quartiles.

col_intervals_left  For a numeric colour variable, TRUE or FALSE of whether bins or quantiles are to be cut left-closed. Defaults to TRUE.

col_labels  A function or named vector to modify colour scale labels. Defaults to snake_case::to_sentence_case for categorical colour variables and scales::comma for numeric colour variables. Use ggplot2::waiver() to keep colour labels untransformed.

col_legend_none  TRUE or FALSE of whether to remove the legend.

col_na_rm  TRUE or FALSE of whether to include col_var NA values. Defaults to FALSE.

col_method  The method of colouring features, either "bin", "quantile", "continuous", or "category." If numeric, defaults to "bin".

col_title  Colour title string for the legend. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.

col_title_wrap  Number of characters to wrap the colour title to. Defaults to 25. Not applicable where mobile equals TRUE.
caption                      Caption title string.
caption_wrap                Number of characters to wrap the caption to. Defaults to 80.
theme                      A ggplot2 theme.
mobile                     Whether the plot is to be displayed on a mobile device. Defaults to FALSE.

Value
A ggplot object.

Examples

gg_sf_col(example_point,
    col_var = trend_category,
    borders = example_borders)

gg_sf_col(example_polygon,
    col_var = density,
    borders = example_borders)

gg_sf_col(example_polygon,
    col_var = density,
    col_method = "bin",
    col_breaks_n = 5,
    borders = example_borders)

gg_sf_col(example_polygon,
    col_var = density,
    col_method = "bin",
    col_cuts = c(0, 10, 50, 100, 150, 200, Inf),
    borders = example_borders)

gg_sf_col(example_polygon,
    col_var = density,
    col_method = "quantile",
    col_breaks_n = 4,
    borders = example_borders)

gg_sf_col(example_polygon,
    col_var = density,
    col_method = "quantile",
    col_cuts = c(0, 0.25, 0.5, 0.75, 0.95, 1),
    borders = example_borders)

---

**gg_sf_col_facet**

DEPRECATED. Simple feature ggplot map that is coloured and facetted.
**gg_sf_col_facet**

**Description**

Map of simple features in ggplot that is coloured and facetted.

**Usage**

```r
gg_sf_col_facet(
  data,
  col_var,
  facet_var,
  text_var = NULL,
  borders = NULL,
  borders_on_top = NULL,
  pal = NULL,
  pal_na = "#7F7F7F",
  pal_rev = FALSE,
  pal_borders = "#7F7F7F",
  alpha_fill = NULL,
  alpha_line = 1,
  alpha_point = 1,
  alpha_borders = 0.5,
  size_line = 0.5,
  size_point = 1.5,
  size_borders = 0.2,
  title = NULL,
  title_wrap = 80,
  subtitle = NULL,
  subtitle_wrap = 80,
  col_breaks_n = 4,
  col_cuts = NULL,
  col_intervals_left = TRUE,
  col_labels = NULL,
  col_legend_none = FALSE,
  col_method = NULL,
  col_na_rm = FALSE,
  col_title = NULL,
  col_title_wrap = 25,
  facet_labels = snakecase::to_sentence_case,
  facet_na_rm = FALSE,
  facet_ncol = NULL,
  facet_nrow = NULL,
  facet_rev = FALSE,
  caption = NULL,
  caption_wrap = 80,
  theme = gg_theme( void = TRUE)
)
```
Arguments

data A sf object with defined coordinate reference system in a structure to be plotted untransformed. Required input.

col_var Unquoted variable for points to be coloured by. Required input.

facet_var Unquoted categorical variable to facet the data by. Required input.

text_var Unquoted variable to be used as a customised tooltip in combination with plotly::ggplotly(plot, tooltip = "text"). Defaults to NULL.

borders A sf object as administrative boundaries (or coastlines). Defaults to no boundaries added. The maturalearth package is a useful source of country and state boundaries.

borders_on_top TRUE or FALSE as to whether the borders are on top of the sf object supplied to the data argument. Defaults to TRUE for points and lines, but FALSE for polygons.

pal Character vector of hex codes. Defaults to NULL, which selects the colorbrewer Set1 or viridis.

pal_na The hex code or name of the NA colour to be used.

pal_rev Reverses the palette. Defaults to FALSE.

palBorders Colour of the borders. Defaults to "#7F7F7F".

alpha_fill The opacity of the fill.

alpha_line The alpha of lines and outlines.

alpha_point The alpha of points.

alphaBorders Opacity of the borders. Defaults to 0.5.

size_line Size of lines. Defaults to 0.5.

size_point Size of points. Defaults to 1.5.

sizeBorders Size of the borders. Defaults to 0.2.

title Title string.

subtitle Subtitle string.

subtitle_wrap Number of characters to wrap the subtitle to. Defaults to 100.

col_breaks_n For a numeric colour variable. If "bin" col_method, the intervals on the colour scale for the pretty algorithm to aim for. If "quantile" col_method, the number of equal quantiles. Defaults to 4.

col_cuts A vector of cuts to colour a numeric variable. If "bin" is selected, the first number in the vector should be either -Inf or 0, and the final number Inf. If "quantile" is selected, the first number in the vector should be 0 and the final number should be 1. Defaults to quartiles.

col_intervals_left For a numeric colour variable, TRUE or FALSE of whether bins or quantiles are to be cut left-closed. Defaults to TRUE.
**gg_sf_facet**

**Value**

A ggplot object.

**Examples**

```r
gg_sf_col_facet(example_point,
    col_var = trend_category,
    facet_var = trend_category,
    borders = example_borders)
```

**Description**

Map of simple features in ggplot that is facetted, but not coloured.
Usage

```r
gg_sf_facet(
  data, 
  facet_var, 
  text_var = NULL, 
  pal = pal_viridis_mix(1), 
  pal_borders = "#7F7F7F", 
  borders = NULL, 
  borders_on_top = NULL, 
  alpha_fill = NULL, 
  alpha_line = 1, 
  alpha_point = 1, 
  alpha_borders = 0.5, 
  size_line = 0.5, 
  size_point = 1.5, 
  size_borders = 0.2, 
  facet_labels = snakecase::to_sentence_case, 
  facet_na_rm = FALSE, 
  facet_ncol = NULL, 
  facet_nrow = NULL, 
  facet_rev = FALSE, 
  title = NULL, 
  title_wrap = 80, 
  subtitle = NULL, 
  subtitle_wrap = 80, 
  caption = NULL, 
  caption_wrap = 80, 
  theme = gg_theme(void = TRUE)
)
```

Arguments

data A sf object with defined coordinate reference system in a structure to be plotted untransformed. Required input.

facet_var Unquoted categorical variable to facet the data by. Required input.

text_var Unquoted variable to be used as a customised tooltip in combination with plotly::ggplotly(plot, tooltip = "text"). Defaults to NULL.

pal Character vector of hex codes.

pal_borders Colour of the borders. Defaults to "#7F7F7F".

borders A sf object as administrative boundaries (or coastlines). Defaults to no boundaries added. The naturalearth package is a useful source of country and state boundaries.

borders_on_top TRUE or FALSE as to whether the borders are on top of the sf object supplied to the data argument. Defaults to TRUE for points and lines, but FALSE for polygons.

alpha_fill The opacity of the fill.
The alpha of lines and outlines.
alpha_point The alpha of points.
alpha_borders Opacity of the borders. Defaults to 0.5.
size_line Size of lines. Defaults to 0.5.
size_point Size of points. Defaults to 1.5.
size_borders Size of the borders. Defaults to 0.2.
facet_labels A function or named vector to modify facet scale labels. Defaults to converting labels to sentence case. Use ggplot2::waiver() to keep facet labels untransformed.
facet_na_rm TRUE or FALSE of whether to include facet_var NA values. Defaults to FALSE.
facet_ncol The number of columns of facetted plots.
facet_nrow The number of rows of facetted plots.
facet_rev TRUE or FALSE of whether the facet variable variable is reversed. Defaults to FALSE.
title Title string.
title_wrap Number of characters to wrap the title to. Defaults to 100.
subtitle Subtitle string.
subtitle_wrap Number of characters to wrap the subtitle to. Defaults to 100.
caption Caption title string.
caption_wrap Number of characters to wrap the caption to. Defaults to 80.
theme A ggplot2 theme.

Value

A ggplot object.

Examples

```r
gg_sf_facet(example_point,
            facet_var = trend_category,
            borders = example_borders)
```

**Description**

DEPRECATED. Smoothed ggplot that is not coloured and not facetted.
Usage

```r
gg_smooth(
  data,
  x_var,
  y_var,
  pal = pal_viridis_mix(1),
  alpha_fill = 0.5,
  alpha_line = 1,
  alpha_point = 1,
  size_line = 0.5,
  size_point = 1.5,
  title = NULL,
  title_wrap = 80,
  subtitle = NULL,
  subtitle_wrap = 80,
  x_zero_mid = FALSE,
  x_breaks_n = 5,
  x_expand = NULL,
  x_labels = scales::label_comma(),
  x_title = NULL,
  x_title_wrap = 50,
  x_zero = FALSE,
  x_zero_line = NULL,
  y_zero_mid = FALSE,
  y_breaks_n = 5,
  y_expand = c(0, 0),
  y_labels = scales::label_comma(),
  y_title = NULL,
  y_title_wrap = 50,
  y_zero = FALSE,
  y_zero_line = NULL,
  caption = NULL,
  caption_wrap = 80,
  theme = gg_theme(y_grid = TRUE, x_grid = TRUE),
  model_method = NULL,
  model_formula = NULL,
  model_se = TRUE,
  model_level = 0.95,
  model_span = 0.75,
  model_n = 80,
  mobile = FALSE
)
```

Arguments

- **data** A data frame in a structure for points to be plotted untransformed, and a modelled line and ribbon to plotted based on this data. Required input.
- **x_var** Unquoted numeric variable to be on the x scale. Required input.
y_var  Unquoted numeric variable to be on the y scale. Required input.
pal  Character vector of hex codes.
alpha_fill  The opacity of the fill. Defaults to 0.5.
alpha_line  The opacity of the line. Defaults to 1.
alpha_point  The opacity of the points. Defaults to 1.5.
size_line  Size of lines. Defaults to 0.5.
size_point  Size of points. Defaults to 1.5.
title  Title string.
title_wrap  Number of characters to wrap the title to. Defaults to 75.
subtitle  Subtitle string.
subtitle_wrap  Number of characters to wrap the subtitle to. Defaults to 100. Not applicable where mobile equals TRUE.
x_zero_mid  For a numeric x variable, add balance to the x scale so that zero is in the centre. Defaults to FALSE.
x_breaks_n  For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 5.
x_expand  A vector of range expansion constants used to add padding to the x scale, as per the ggplot2 expand argument in ggplot2 scales functions.
x_labels  A function or named vector to modify x scale labels. Use ggplot2::waiver() to keep x labels untransformed.
x_title  X scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
x_title_wrap  Number of characters to wrap the x title to. Defaults to 50.
x_zero  For a numeric x variable, TRUE or FALSE of whether the minimum of the x scale is zero. Defaults to FALSE.
x_zero_line  For a numeric x variable, TRUE or FALSE of whether to add a zero reference line to the x scale. Defaults to TRUE if there are positive and negative values in x_var. Otherwise defaults to FALSE.
y_zero_mid  For a numeric y variable, add balance to the y scale so that zero is in the centre of the y scale.
y_breaks_n  For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 5.
y_expand  A vector of range expansion constants used to add padding to the y scale, as per the ggplot2 expand argument in ggplot2 scales functions.
y_labels  A function or named vector to modify y scale labels. Use ggplot2::waiver() to keep y labels untransformed.
y_title  y scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
y_title_wrap  Number of characters to wrap the y title to. Defaults to 50.
y_zero  For a numeric y variable, TRUE or FALSE of whether the minimum of the y scale is zero. Defaults to TRUE.
y_zero_line  For a numeric y variable, TRUE or FALSE whether to add a zero reference line to the y scale. Defaults to TRUE if there are positive and negative values in y_var. Otherwise defaults to FALSE.

caption  Caption title string.
caption_wrap  Number of characters to wrap the caption to. Defaults to 80.
theme  A ggplot2 theme.
model_method  Smoothing algorithm to use. See ggplot2::geom_smooth for further details.
model_formula  Formula to use in smoothing function. See ggplot2::geom_smooth for further details.
model_se  TRUE or FALSE of whether to show confidence as a ribbon.
model_level  The level of confidence to calculate for the ribbon.
model_span  Controls the amount of smoothing for the default loess smoother. See ggplot2::geom_smooth for further details.
model_n  Number of points at which to evaluate smoother.
mobile  Whether the plot is to be displayed on a mobile device. Defaults to FALSE.

Value
A ggplot object.

Examples

library(simplevis)
library(palmerpenguins)

gg_smooth(penguins,
  x_var = bill_length_mm,
  y_var = body_mass_g)

---

**gg_smooth_col**  DEPRECATED. Smoothed ggplot that is coloured.

Description
DEPRECATED. Smoothed ggplot that is coloured, but not facetted.

Usage

```r
gg_smooth_col(
  data,
  x_var,
  y_var,
  col_var,
  pal = NULL,
```
Arguments

data A data frame in a structure for points to be plotted untransformed, and a modelled line and ribbon to plotted based on this data. Required input.
<table>
<thead>
<tr>
<th></th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>x_var</td>
<td>Unquoted numeric variable to be on the x scale. Required input.</td>
</tr>
<tr>
<td>y_var</td>
<td>Unquoted numeric variable to be on the y scale. Required input.</td>
</tr>
<tr>
<td>col_var</td>
<td>Unquoted categorical variable for points to be coloured by. Required input.</td>
</tr>
<tr>
<td>pal</td>
<td>Character vector of hex codes.</td>
</tr>
<tr>
<td>pal_na</td>
<td>The hex code or name of the NA colour to be used.</td>
</tr>
<tr>
<td>pal_rev</td>
<td>Reverses the palette. Defaults to FALSE.</td>
</tr>
<tr>
<td>alpha_fill</td>
<td>The opacity of the fill. Defaults to 0.5.</td>
</tr>
<tr>
<td>alpha_line</td>
<td>The opacity of the line. Defaults to 1.</td>
</tr>
<tr>
<td>alpha_point</td>
<td>The opacity of the points. Defaults to 1.5.</td>
</tr>
<tr>
<td>size_line</td>
<td>Size of lines. Defaults to 0.5.</td>
</tr>
<tr>
<td>size_point</td>
<td>Size of points. Defaults to 1.5.</td>
</tr>
<tr>
<td>title</td>
<td>Title string.</td>
</tr>
<tr>
<td>title_wrap</td>
<td>Number of characters to wrap the title to. Defaults to 75.</td>
</tr>
<tr>
<td>subtitle</td>
<td>Subtitle string.</td>
</tr>
<tr>
<td>subtitle_wrap</td>
<td>Number of characters to wrap the subtitle to. Defaults to 100. Not applicable where mobile equals TRUE.</td>
</tr>
<tr>
<td>x_zero_mid</td>
<td>For a numeric x variable, add balance to the x scale so that zero is in the centre. Defaults to FALSE.</td>
</tr>
<tr>
<td>x_breaks_n</td>
<td>For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 5.</td>
</tr>
<tr>
<td>x_expand</td>
<td>A vector of range expansion constants used to add padding to the x scale, as per the ggplot2 expand argument in ggplot2 scales functions.</td>
</tr>
<tr>
<td>x_labels</td>
<td>A function or named vector to modify x scale labels. Use ggplot2::waiver() to keep x labels untransformed.</td>
</tr>
<tr>
<td>x_title</td>
<td>X scale title string. Defaults to NULL, which converts to sentence case with spaces. Use &quot;&quot; if you would like no title.</td>
</tr>
<tr>
<td>x_title_wrap</td>
<td>Number of characters to wrap the x title to. Defaults to 50.</td>
</tr>
<tr>
<td>x_zero</td>
<td>For a numeric x variable, TRUE or FALSE of whether the minimum of the x scale is zero. Defaults to FALSE.</td>
</tr>
<tr>
<td>x_zero_line</td>
<td>For a numeric x variable, TRUE or FALSE of whether to add a zero reference line to the x scale. Defaults to TRUE if there are positive and negative values in x_var. Otherwise defaults to FALSE.</td>
</tr>
<tr>
<td>y_zero_mid</td>
<td>For a numeric y variable, add balance to the y scale so that zero is in the centre of the y scale.</td>
</tr>
<tr>
<td>y_breaks_n</td>
<td>For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 5.</td>
</tr>
<tr>
<td>y_expand</td>
<td>A vector of range expansion constants used to add padding to the y scale, as per the ggplot2 expand argument in ggplot2 scales functions.</td>
</tr>
<tr>
<td>y_labels</td>
<td>A function or named vector to modify y scale labels. Use ggplot2::waiver() to keep y labels untransformed.</td>
</tr>
</tbody>
</table>
y_title          y scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.

y_title_wrap    Number of characters to wrap the y title to. Defaults to 50.

y_zero          For a numeric y variable, TRUE or FALSE of whether the minimum of the y scale is zero. Defaults to TRUE.

y_zero_line     For a numeric y variable, TRUE or FALSE whether to add a zero reference line to the y scale. Defaults to TRUE if there are positive and negative values in y_var. Otherwise defaults to FALSE.

col_labels      A function or named vector to modify colour scale labels. Use ggplot2::waiver() to keep colour labels untransformed.

col_legend_none TRUE or FALSE of whether to remove the legend.

col_na_rm       TRUE or FALSE of whether to include col_var NA values. Defaults to FALSE.

col_title       Colour title string for the legend. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.

col_title_wrap  Number of characters to wrap the colour title to. Defaults to 25. Not applicable where mobile equals TRUE.

caption         Caption title string.

caption_wrap    Number of characters to wrap the caption to. Defaults to 80.

theme           A ggplot2 theme.

model_method    Smoothing algorithm to use. See ggplot2::geom_smooth for further details.

model_formula   Formula to use in smoothing function. See ggplot2::geom_smooth for further details.

model_se        TRUE or FALSE of whether to show confidence as a ribbon.

model_level     The level of confidence to calculate for the ribbon.

model_span      Controls the amount of smoothing for the default loess smoother. See ggplot2::geom_smooth for further details.

model_n         Number of points at which to evaluate smoother.

mobile          Whether the plot is to be displayed on a mobile device. Defaults to FALSE.

Value

A ggplot object.

Examples

library(simplevis)
library(palmerpenguins)

gg_smooth_col(penguins,  
  x_var = bill_length_mm,  
  y_var = body_mass_g,  
  col_var = species)
Description

DEPRECATED. Smoothed ggplot that is coloured and faceted.

Usage

gg_smooth_col_facet(
  data,
  x_var,
  y_var,
  col_var,
  facet_var,
  pal = NULL,
  pal_na = "#7F7F7F",
  pal_rev = FALSE,
  alpha_fill = 0.5,
  alpha_line = 1,
  alpha_point = 1,
  size_line = 0.5,
  size_point = 1.5,
  title = NULL,
  title_wrap = 80,
  subtitle = NULL,
  subtitle_wrap = 80,
  x_zero_mid = FALSE,
  x_breaks_n = 2,
  x_expand = NULL,
  x_labels = scales::label_comma(),
  x_title = NULL,
  x_title_wrap = 50,
  x_zero = FALSE,
  x_zero_line = NULL,
  y_zero_mid = FALSE,
  y_breaks_n = 3,
  y_expand = c(0, 0),
  y_labels = scales::label_comma(),
  y_title = NULL,
  y_title_wrap = 50,
  y_zero = FALSE,
  y_zero_line = NULL,
  col_labels = snakecase::to_sentence_case,
  col_legend_none = FALSE,
  col_na_rm = FALSE,
  col_title = NULL,
col_title_wrap = 25,
facet_labels = snakecase::to_sentence_case,
facet_na_rm = FALSE,
facet_ncol = NULL,
facet_nrow = NULL,
facet_rev = FALSE,
facet_scales = "fixed",
caption = NULL,
caption_wrap = 80,
theme = gg_theme(y_grid = TRUE, x_grid = TRUE),
model_method = NULL,
model_formula = NULL,
model_se = TRUE,
model_level = 0.95,
model_span = 0.75,
model_n = 80,
)

Arguments

data A data frame in a structure for points to be plotted untransformed, and a modelled line and ribbon to plotted based on this data. Required input.

x_var Unquoted numeric variable to be on the x scale. Required input.

y_var Unquoted numeric variable to be on the y scale. Required input.

col_var Unquoted categorical variable for points to be coloured by. Required input.

facet_var Unquoted categorical variable to facet the data by. Required input.

col_title_wrap = 25,
facet_labels = snakecase::to_sentence_case,
facet_na_rm = FALSE,
facet_ncol = NULL,
facet_nrow = NULL,
facet_rev = FALSE,
facet_scales = "fixed",
caption = NULL,
caption_wrap = 80,
theme = gg_theme(y_grid = TRUE, x_grid = TRUE),
model_method = NULL,
model_formula = NULL,
model_se = TRUE,
model_level = 0.95,
model_span = 0.75,
model_n = 80,
}

Arguments

data A data frame in a structure for points to be plotted untransformed, and a modelled line and ribbon to plotted based on this data. Required input.

x_var Unquoted numeric variable to be on the x scale. Required input.

y_var Unquoted numeric variable to be on the y scale. Required input.

col_var Unquoted categorical variable for points to be coloured by. Required input.

facet_var Unquoted categorical variable to facet the data by. Required input.

col_title_wrap = 25,
facet_labels = snakecase::to_sentence_case,
facet_na_rm = FALSE,
facet_ncol = NULL,
facet_nrow = NULL,
facet_rev = FALSE,
facet_scales = "fixed",
caption = NULL,
caption_wrap = 80,
theme = gg_theme(y_grid = TRUE, x_grid = TRUE),
model_method = NULL,
model_formula = NULL,
model_se = TRUE,
model_level = 0.95,
model_span = 0.75,
model_n = 80,
)

Arguments

data A data frame in a structure for points to be plotted untransformed, and a modelled line and ribbon to plotted based on this data. Required input.

x_var Unquoted numeric variable to be on the x scale. Required input.

y_var Unquoted numeric variable to be on the y scale. Required input.

col_var Unquoted categorical variable for points to be coloured by. Required input.

facet_var Unquoted categorical variable to facet the data by. Required input.

col_title_wrap = 25,
facet_labels = snakecase::to_sentence_case,
facet_na_rm = FALSE,
facet_ncol = NULL,
facet_nrow = NULL,
facet_rev = FALSE,
facet_scales = "fixed",
caption = NULL,
caption_wrap = 80,
theme = gg_theme(y_grid = TRUE, x_grid = TRUE),
model_method = NULL,
model_formula = NULL,
model_se = TRUE,
model_level = 0.95,
model_span = 0.75,
model_n = 80,
)

Arguments

data A data frame in a structure for points to be plotted untransformed, and a modelled line and ribbon to plotted based on this data. Required input.

x_var Unquoted numeric variable to be on the x scale. Required input.

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facet_var Unquoted categorical variable to facet the data by. Required input.

col_title_wrap = 25,
facet_labels = snakecase::to_sentence_case,
facet_na_rm = FALSE,
facet_ncol = NULL,
facet_nrow = NULL,
facet_rev = FALSE,
facet_scales = "fixed",
caption = NULL,
caption_wrap = 80,
theme = gg_theme(y_grid = TRUE, x_grid = TRUE),
model_method = NULL,
model_formula = NULL,
model_se = TRUE,
model_level = 0.95,
model_span = 0.75,
model_n = 80,
)

Arguments

data A data frame in a structure for points to be plotted untransformed, and a modelled line and ribbon to plotted based on this data. Required input.

x_var Unquoted numeric variable to be on the x scale. Required input.

y_var Unquoted numeric variable to be on the y scale. Required input.

col_var Unquoted categorical variable for points to be coloured by. Required input.

facet_var Unquoted categorical variable to facet the data by. Required input.

col_title_wrap = 25,
facet_labels = snakecase::to_sentence_case,
x_expand  A vector of range expansion constants used to add padding to the x scale, as per the ggplot2 expand argument in ggplot2 scales functions.

x_labels  A function or named vector to modify x scale labels. Use ggplot2::waiver() to keep x labels untransformed.

x_title  X scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.

x_title_wrap  Number of characters to wrap the x title to. Defaults to 50.

x_zero  For a numeric x variable, TRUE or FALSE of whether the minimum of the x scale is zero. Defaults to FALSE.

x_zero_line  For a numeric x variable, TRUE or FALSE of whether to add a zero reference line to the x scale. Defaults to TRUE if there are positive and negative values in x_var. Otherwise defaults to FALSE.

y_zero_mid  For a numeric y variable, add balance to the y scale so that zero is in the centre of the y scale.

y_breaks_n  For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 4.

y_expand  A vector of range expansion constants used to add padding to the y scale, as per the ggplot2 expand argument in ggplot2 scales functions.

y_labels  A function or named vector to modify y scale labels. Use ggplot2::waiver() to keep y labels untransformed.

y_title  y scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.

y_title_wrap  Number of characters to wrap the y title to. Defaults to 50.

y_zero  For a numeric y variable, TRUE or FALSE of whether the minimum of the y scale is zero. Defaults to TRUE.

y_zero_line  For a numeric y variable, TRUE or FALSE whether to add a zero reference line to the y scale. Defaults to TRUE if there are positive and negative values in y_var. Otherwise defaults to FALSE.

col_labels  A function or named vector to modify colour scale labels. Use ggplot2::waiver() to keep colour labels untransformed.

col_legend_none  TRUE or FALSE of whether to remove the legend.

col_na_rm  TRUE or FALSE of whether to include col_var NA values. Defaults to FALSE.

col_title  Colour title string for the legend. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.

col_title_wrap  Number of characters to wrap the colour title to. Defaults to 25. Not applicable where mobile equals TRUE.

facet_labels  A function or named vector to modify facet scale labels. Defaults to converting labels to sentence case. Use ggplot2::waiver() to keep facet labels untransformed.

facet_na_rm  TRUE or FALSE of whether to include facet_var NA values. Defaults to FALSE.

facet_ncol  The number of columns of faceted plots.
### gg_smooth_facet

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>facet_nrow</td>
<td>The number of rows of facetted plots.</td>
</tr>
<tr>
<td>facet_rev</td>
<td>TRUE or FALSE of whether the facet variable variable is reversed. Defaults to FALSE.</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>caption</td>
<td>Caption title string.</td>
</tr>
<tr>
<td>caption_wrap</td>
<td>Number of characters to wrap the caption to. Defaults to 80.</td>
</tr>
<tr>
<td>theme</td>
<td>A ggplot2 theme.</td>
</tr>
<tr>
<td>model_method</td>
<td>Smoothing algorithm to use. See ggplot2::geom_smooth for further details.</td>
</tr>
<tr>
<td>model_formula</td>
<td>Formula to use in smoothing function. See ggplot2::geom_smooth for further details.</td>
</tr>
<tr>
<td>model_se</td>
<td>TRUE or FALSE of whether to show confidence as a ribbon.</td>
</tr>
<tr>
<td>model_level</td>
<td>The level of confidence to calculate for the ribbon.</td>
</tr>
<tr>
<td>model_span</td>
<td>Controls the amount of smoothing for the default loess smoother. See ggplot2::geom_smooth for further details.</td>
</tr>
<tr>
<td>model_n</td>
<td>Number of points at which to evaluate smoother.</td>
</tr>
</tbody>
</table>

**Value**

A ggplot object.

**Examples**

```r
gg_smooth_col_facet(penguins, 
  x_var = bill_length_mm, 
  y_var = body_mass_g, 
  col_var = sex, 
  facet_var = species, 
  col_na_rm = TRUE)
```

---

**Description**

DEPRECATED. Smoothed ggplot that is faceted, but not coloured.
Usage

```r
gg_smooth_facet(
  data,
  x_var,
  y_var,
  facet_var,
  pal = pal_viridis_mix(1),
  alpha_fill = 0.5,
  alpha_line = 1,
  alpha_point = 1,
  size_line = 0.5,
  size_point = 1.5,
  title = NULL,
  title_wrap = 80,
  subtitle = NULL,
  subtitle_wrap = 80,
  x_zero_mid = FALSE,
  x_breaks_n = 2,
  x_expand = NULL,
  x_labels = scales::label_comma(),
  x_title = NULL,
  x_title_wrap = 50,
  x_zero = FALSE,
  x_zero_line = NULL,
  y_zero_mid = FALSE,
  y_breaks_n = 3,
  y_expand = c(0, 0),
  y_labels = scales::label_comma(),
  y_title = NULL,
  y_title_wrap = 50,
  y_zero = FALSE,
  y_zero_line = NULL,
  facet_labels = snakecase::to_sentence_case,
  facet_na_rm = FALSE,
  facet_ncol = NULL,
  facet_nrow = NULL,
  facet_rev = FALSE,
  facet_scales = "fixed",
  caption = NULL,
  caption_wrap = 80,
  theme = gg_theme(y_grid = TRUE, x_grid = TRUE),
  model_method = NULL,
  model_formula = NULL,
  model_se = TRUE,
  model_level = 0.95,
  model_span = 0.75,
  model_n = 80
)
```
Arguments

data  A data frame in a structure for points to be plotted untransformed, and a modelled line and ribbon to plotted based on this data. Required input.
x_var  Unquoted numeric variable to be on the x scale. Required input.
y_var  Unquoted numeric variable to be on the y scale. Required input.
facet_var  Unquoted categorical variable to facet the data by. Required input.
pal  Character vector of hex codes.
alpha_fill  The opacity of the fill. Defaults to 0.5.
alpha_line  The opacity of the line. Defaults to 1.
alpha_point  The opacity of the points. Defaults to 1.5.
size_line  Size of lines. Defaults to 0.5.
size_point  Size of points. Defaults to 1.5.
title  Title string.
title_wrap  Number of characters to wrap the title to. Defaults to 100.
subtitle  Subtitle string.
subtitle_wrap  Number of characters to wrap the subtitle to. Defaults to 100.
x_zero_mid  For a numeric x variable, add balance to the x scale so that zero is in the centre. Defaults to FALSE.
x_breaks_n  For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 2.
x_expand  A vector of range expansion constants used to add padding to the x scale, as per the ggplot2 expand argument in ggplot2 scales functions.
x_labels  A function or named vector to modify x scale labels. Use ggplot2::waiver() to keep x labels untransformed.
x_title  X scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
x_title_wrap  Number of characters to wrap the x title to. Defaults to 50.
x_zero  For a numeric x variable, TRUE or FALSE of whether the minimum of the x scale is zero. Defaults to FALSE.
x_zero_line  For a numeric x variable, TRUE or FALSE of whether to add a zero reference line to the x scale. Defaults to TRUE if there are positive and negative values in x_var. Otherwise defaults to FALSE.
y_zero_mid  For a numeric y variable, add balance to the y scale so that zero is in the centre of the y scale.
y_breaks_n  For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 4.
y_expand  A vector of range expansion constants used to add padding to the y scale, as per the ggplot2 expand argument in ggplot2 scales functions.
y_labels  A function or named vector to modify y scale labels. Use ggplot2::waiver() to keep y labels untransformed.
y_title

y scale title string. Defaults to NULL, which converts to sentence case with
spaces. Use "" if you would like no title.

y_title_wrap

Number of characters to wrap the y title to. Defaults to 50.

y_zero

For a numeric y variable, TRUE or FALSE of whether the minimum of the y
scale is zero. Defaults to TRUE.

y_zero_line

For a numeric y variable, TRUE or FALSE whether to add a zero reference line
to the y scale. Defaults to TRUE if there are positive and negative values in
y_var. Otherwise defaults to FALSE.

facet_labels

A function or named vector to modify facet scale labels. Defaults to converting
labels to sentence case. Use ggplot2::waiver() to keep facet labels untrans-
formed.

facet_na_rm

TRUE or FALSE of whether to include facet_var NA values. Defaults to FALSE.

facet_ncol

The number of columns of facetted plots.

facet_nrow

The number of rows of facetted plots.

facet_rev

TRUE or FALSE of whether the facet variable variable is reversed. Defaults to
FALSE.

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".

caption

Caption title string.

caption_wrap

Number of characters to wrap the caption to. Defaults to 80.

theme

A ggplot2 theme.

model_method

Smoothing algorithm to use. See ggplot2::geom_smooth for further details.

model_formula

Formula to use in smoothing function. See ggplot2::geom_smooth for further
details.

model_se

TRUE or FALSE of whether to show confidence as a ribbon.

model_level

The level of confidence to calculate for the ribbon.

model_span

Controls the amount of smoothing for the default loess smoother. See gg-
plot2::geom_smooth for further details.

model_n

Number of points at which to evaluate smoother.

Value

A ggplot object.

Examples

library(simplevis)
library(palmerpenguins)

gg_smooth_facet(penguins,
x_var = bill_length_mm,
y_var = body_mass_g,
facet_var = species)
gg_stars

Stars ggplot map.

Description

Map of an array in ggplot that is not coloured and not facetted.

Usage

```r
gg_stars(
  data,
  borders = NULL,
  borders_on_top = TRUE,
  downsample = 0,
  pal = pal_viridis_mix(1),
  pal_borders = "#323232",
  alpha_fill = 0.5,
  alpha_borders = 0.5,
  size_borders = 0.2,
  title = NULL,
  title_wrap = 80,
  subtitle = NULL,
  subtitle_wrap = 80,
  caption = NULL,
  caption_wrap = 80,
  theme = gg_theme(void = TRUE),
  mobile = FALSE
)
```

Arguments

data A stars object with defined coordinate reference system in a structure to be plotted untransformed. Note, it cannot be a stars_proxy object. Required input.

borders A sf object as administrative boundaries (or coastlines). Defaults to no boundaries added. The rnaturalearth package is a useful source of country and state boundaries.

borders_on_top TRUE or FALSE as to whether the borders are on top of the stars array. Defaults to TRUE.

downsample downsampling rate: e.g. 3 keeps rows and cols 1, 4, 7, 10 etc. A value of 0 does not downsample. It can be specified for each dimension. E.g. c(5,5,0) to downsample the first two dimensions but not the third.

pal Character vector of hex codes.

pal_borders Colour of the borders. Defaults to "#323232".

alpha_fill The opacity of the fill. Defaults to 0.5.

alpha_borders Opacity of the borders. Defaults to 0.5.
**gg_stars_col**

Stars ggplot map that is coloured.

Description

Map of an array in ggplot that is coloured, but not facetted.

Usage

```r
gg_stars_col(
  data,
  col_var,
  borders = NULL,
  borders_on_top = TRUE,
  downsample = 0,
  pal = NULL,
  pal_na = "#7F7F7F",
  pal_rev = FALSE,
  pal_borders = "#7F7F7F",
  alpha_fill = 1,
  alpha_borders = 0.5,
  size_borders = 0.2,
)```

Value

A ggplot object.

Examples

```r
library(simplevis)

gg_stars(example_stars,
  borders = example_borders)
```
Arguments

data  A stars object with defined coordinate reference system in a structure to be plotted untransformed. Note, it cannot be a stars_proxy object. Required input.
col_var Unquoted variable for points to be coloured by. Required input.
borders A sf object as administrative boundaries (or coastlines). Defaults to no boundaries added. The maturalearth package is a useful source of country and state boundaries.
borders_on_top TRUE or FALSE as to whether the borders are on top of the stars array. Defaults to TRUE.
downsample downsampling rate: e.g. 3 keeps rows and cols 1, 4, 7, 10 etc. A value of 0 does not downsample. It can be specified for each dimension. E.g. c(5,5,0) to downsample the first two dimensions but not the third.
pal Character vector of hex codes. Defaults to NULL, which selects the colorbrewer Set1 or viridis.
pal_na The hex code or name of the NA colour to be used.
pal_rev Reverses the palette. Defaults to FALSE.
palBorders Colour of the borders. Defaults to "#7F7F7F".
alpha_fill The opacity of the fill. Defaults to 1.
alpha_borders Opacity of the borders. Defaults to 0.5.
size_borders Size of the borders. Defaults to 0.2.
title Title string.
title_wrap Number of characters to wrap the title to. Defaults to 75.
subtitle Subtitle string.
subtitle_wrap Number of characters to wrap the subtitle to. Defaults to 100. Not applicable where mobile equals TRUE.
For a numeric colour variable, the desired number of intervals on the colour scale.

A vector of cuts to colour a numeric variable. If "bin" is selected, the first number in the vector should be either -Inf or 0, and the final number Inf. If "quantile" is selected, the first number in the vector should be 0 and the final number should be 1. Defaults to quartiles.

For a numeric colour variable, TRUE or FALSE of whether bins or quantiles are to be cut left-closed. Defaults to TRUE.

A function or named vector to modify colour scale labels. Defaults to snake-case::to_sentence_case for categorical colour variables and scales::comma for numeric colour variables. Use ggplot2::waiver() to keep colour labels untransformed.

TRUE or FALSE of whether to remove the legend.

TRUE or FALSE of whether to visualise col_var NA values. Defaults to FALSE.

The method of colouring features, either "bin", "quantile", "continuous", or "category." If numeric, defaults to "bin".

Colour title string for the legend. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.

Number of characters to wrap the colour title to. Defaults to 25. Not applicable where mobile equals TRUE.

Caption title string.

Number of characters to wrap the caption to. Defaults to 80.

A ggplot2 theme.

Whether the plot is to be displayed on a mobile device. Defaults to FALSE.

A ggplot object.

library(simplevis)

gg_stars_col(example_stars,
  col_var = nitrate,
  col_na_rm = TRUE,
  borders = example_borders)
gg_theme

DEPRECATED Quick theme for a ggplot.

Description

DEPRECATED Quick theme for a ggplot visualisation.

Usage

```r
gg_theme(
  font = "", 
  font_title = NULL, 
  font_subtitle = NULL, 
  font_body = NULL, 
  size_title = 11, 
  size_subtitle = 10, 
  size_body = 10, 
  size_axis = 0.3, 
  size_ticks = 0.3, 
  size_grid = 0.2, 
  style_title = "bold", 
  style_subtitle = "plain", 
  style_body = "plain", 
  pal_title = "#000000", 
  pal_subtitle = "#323232", 
  pal_body = "#323232", 
  pal_axis = "#323232", 
  pal_ticks = "#323232", 
  pal_background = c("#ffffff", "#ffffff"), 
  pal_grid = "#D3D3D3", 
  y_grid = FALSE, 
  x_grid = FALSE, 
  gridlines_v = NULL, 
  gridlines_h = NULL, 
  void = FALSE
)
```

Arguments

- `font`: The font for all text to use. Defaults to "".
- `font_title`: The font for the title. If NULL, inherits from font argument.
- `font_subtitle`: The font for the subtitle. If NULL, inherits from font argument.
- `font_body`: The font for the subtitle. If NULL, inherits from font argument.
- `size_title`: The size of the title font. Defaults to 11.
- `size_subtitle`: The size of the subtitle font. Defaults to 10.
**gg_tile_col**  
DEPRECATED. Tile ggplot that is coloured.

**Description**  
DEPRECATED. Tile ggplot that is coloured, but not facetted.

**Usage**

```r
gg_tile_col(  
data,  
x_var,  
y_var,  
col_var,  
label_var = NULL,  
text_var = NULL,  
)```
Arguments

data A data frame in a structure to be plotted untransformed. Required input.

x_var Unquoted variable to be on the x scale (i.e. character, factor, logical, numeric, date or datetime). If numeric, date or datetime, variable values are bins that are mutually exclusive and equidistant. Required input.

y_var Unquoted numeric variable to be on the y scale. Required input.
<table>
<thead>
<tr>
<th>Variable</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>col_var</td>
<td>Unquoted categorical variable to colour the tiles. Required input.</td>
</tr>
<tr>
<td>label_var</td>
<td>Unquoted variable to label the tiles.</td>
</tr>
<tr>
<td>text_var</td>
<td>Unquoted variable to be used as a customised tooltip in combination with <code>plotly::ggplotly(plot, tooltip = &quot;text&quot;)</code>. Defaults to NULL.</td>
</tr>
<tr>
<td>pal</td>
<td>Character vector of hex codes.</td>
</tr>
<tr>
<td>pal_label</td>
<td>Hex code for the label font colour. Defaults to &quot;#323232&quot;.</td>
</tr>
<tr>
<td>pal_na</td>
<td>The hex code or name of the NA colour to be used.</td>
</tr>
<tr>
<td>pal_rev</td>
<td>Reverses the palette. Defaults to FALSE.</td>
</tr>
<tr>
<td>alpha_fill</td>
<td>The opacity of the fill. Defaults to 1.</td>
</tr>
<tr>
<td>alpha_line</td>
<td>The opacity of the outline. Defaults to 1.</td>
</tr>
<tr>
<td>size_line</td>
<td>The size of the outlines of bars.</td>
</tr>
<tr>
<td>size_label</td>
<td>The size of the labels. Defaults to 3.5.</td>
</tr>
<tr>
<td>size_height</td>
<td>Height of tiles. Defaults to 1.</td>
</tr>
<tr>
<td>width</td>
<td>Width of tiles. Defaults to 1.</td>
</tr>
<tr>
<td>title</td>
<td>Title string.</td>
</tr>
<tr>
<td>title_wrap</td>
<td>Number of characters to wrap the title to. Defaults to 60.</td>
</tr>
<tr>
<td>subtitle</td>
<td>Subtitle string.</td>
</tr>
<tr>
<td>subtitle_wrap</td>
<td>Number of characters to wrap the subtitle to. Defaults to 60.</td>
</tr>
<tr>
<td>x_expand</td>
<td>A vector of range expansion constants used to add padding to the x scale, as per the <code>ggplot2</code> <code>expand</code> argument in <code>ggplot2</code> scales functions.</td>
</tr>
<tr>
<td>x_labels</td>
<td>A function or named vector to modify x scale labels. If NULL, categorical variable labels are converted to sentence case. Use <code>function(x) x</code> to keep labels untransformed.</td>
</tr>
<tr>
<td>x_na_rm</td>
<td>TRUE or FALSE of whether to include x_var NA values. Defaults to FALSE.</td>
</tr>
<tr>
<td>x_rev</td>
<td>TRUE or FALSE of whether the x variable variable is reversed. Defaults to FALSE.</td>
</tr>
<tr>
<td>x_title</td>
<td>x scale title string. Defaults to NULL, which converts to sentence case with spaces. Use &quot;&quot; if you would like no title.</td>
</tr>
<tr>
<td>x_title_wrap</td>
<td>Number of characters to wrap the x title to. Defaults to 50.</td>
</tr>
<tr>
<td>y_expand</td>
<td>A vector of range expansion constants used to add padding to the y scale, as per the <code>ggplot2</code> <code>expand</code> argument in <code>ggplot2</code> scales functions.</td>
</tr>
<tr>
<td>y_labels</td>
<td>A function or named vector to modify y scale labels. If NULL, categorical variable labels are converted to sentence case. Use <code>function(x) x</code> to keep labels untransformed.</td>
</tr>
<tr>
<td>y_na_rm</td>
<td>TRUE or FALSE of whether to include y_var NA values. Defaults to FALSE.</td>
</tr>
<tr>
<td>y_rev</td>
<td>TRUE or FALSE of whether the y variable variable is reversed. Defaults to FALSE.</td>
</tr>
<tr>
<td>y_title</td>
<td>y scale title string. Defaults to NULL, which converts to sentence case with spaces. Use &quot;&quot; if you would like no title.</td>
</tr>
<tr>
<td>y_title_wrap</td>
<td>Number of characters to wrap the y title to. Defaults to 50.</td>
</tr>
</tbody>
</table>
col_cuts  A vector of cuts to colour a numeric variable. If "bin" is selected, the first number in the vector should be either -Inf or 0, and the final number Inf. If "quantile" is selected, the first number in the vector should be 0 and the final number should be 1. Defaults to quartiles.

col_intervals_left  For a numeric colour variable, TRUE or FALSE of whether bins or quantiles are to be cut left-closed. Defaults to TRUE.

col_labels  A function or named vector to modify colour scale labels. Defaults to snake-case::to_sentence_case for categorical colour variables and scales::label_comma() for numeric. Use function(x) x to keep labels untransformed.

col_legend_none  TRUE or FALSE of whether to remove the legend.

col_method  The method of colouring features, either "bin", "quantile", "continuous", or "category." If numeric, defaults to "bin".

col_na_rm  TRUE or FALSE of whether to include col_var NA values. Defaults to FALSE.

col_breaks_n  For a numeric colour variable, the desired number of intervals on the colour scale.

col_title  Colour title string for the legend. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.

col_title_wrap  Number of characters to wrap the colour title to. Defaults to 25. Not applicable where mobile equals TRUE.

caption  Caption title string.

caption_wrap  Number of characters to wrap the caption to. Defaults to 75.

theme  A ggplot2 theme.

mobile  Whether the plot is to be displayed on a mobile device. Defaults to FALSE.

Value

A ggplot object.

Examples

library(simplevis)
library(dplyr)
library(palmerpenguins)

plot_data <- penguins %>%
group_by(species, sex) %>%
summarise(bill_length_mm = round(mean(bill_length_mm, na.rm = TRUE), 1))

gg_tile_col(plot_data,
x_var = sex,
y_var = species,
col_var = bill_length_mm,
label_var = bill_length_mm)
gg_tile_col_facet

DEPRECATED. Tile ggplot that is coloured and faceted.

Description

DEPRECATED. Tile ggplot that is coloured and faceted.

Usage

```r
gg_tile_col_facet(
  data,
  x_var,
  y_var,
  col_var,
  facet_var,
  label_var = NULL,
  text_var = NULL,
  pal = NULL,
  pal_label = "#323232",
  pal_na = "#7F7F7F",
  pal_rev = FALSE,
  alpha_fill = 1,
  alpha_line = 1,
  size_line = 0.5,
  size_label = 3.5,
  size_height = 1,
  width = 1,
  title = NULL,
  title_wrap = 75,
  subtitle = NULL,
  subtitle_wrap = 75,
  x_expand = c(0, 0),
  x_labels = snakecase::to_sentence_case,
  x_na_rm = FALSE,
  x_rev = FALSE,
  x_title = NULL,
  x_title_wrap = 50,
  y_expand = c(0, 0),
  y_labels = snakecase::to_sentence_case,
  y_na_rm = FALSE,
  y_rev = FALSE,
  y_title = NULL,
  y_title_wrap = 50,
  col_breaks_n = 4,
  col_cuts = NULL,
  col_intervals_left = TRUE,
  col_labels = NULL,
)```
Arguments

- **data**
  A data frame in a structure to be plotted untransformed. Required input.

- **x_var**
  Unquoted variable to be on the x scale (i.e. character, factor, logical, numeric, date or datetime). If numeric, date or datetime, variable values are bins that are mutually exclusive and equidistant. Required input.

- **y_var**
  Unquoted numeric variable to be on the y scale. Required input.

- **col_var**
  Unquoted categorical variable to colour the tiles. Required input.

- **facet_var**
  Unquoted categorical variable to facet the data by. Required input.

- **label_var**
  Unquoted variable to label the tiles.

- **text_var**
  Unquoted variable to be used as a customised tooltip in combination with plotly::ggplotly(plot, tooltip = "text"). Defaults to NULL.

- **pal**
  Character vector of hex codes.

- **pal_label**
  Hex code for the label font colour. Defaults to "#323232".

- **pal_na**
  The hex code or name of the NA colour to be used.

- **pal_rev**
  Reverses the palette. Defaults to FALSE.

- **alpha_fill**
  The opacity of the fill. Defaults to 1.

- **alpha_line**
  The opacity of the outline. Defaults to 1.

- **size_line**
  The size of the outlines of bars.

- **size_label**
  The size of the of labels. Defaults to 3.5.

- **size_height**
  Height of tiles. Defaults to 1.

- **width**
  Width of tiles. Defaults to 1.

- **title**
  Title string.

- **title_wrap**
  Number of characters to wrap the title to. Defaults to 60.

- **subtitle**
  Subtitle string.

- **subtitle_wrap**
  Number of characters to wrap the subtitle to. Defaults to 60.
x_expand  A vector of range expansion constants used to add padding to the x scale, as per
the ggplot2 expand argument in ggplot2 scales functions.

x_labels  A function or named vector to modify x scale labels. If NULL, categorical
variable labels are converted to sentence case. Use function(x) x to keep labels
untransformed.

x_na_rm  TRUE or FALSE of whether to include x_var NA values. Defaults to FALSE.

x_rev  TRUE or FALSE of whether the x variable variable is reversed. Defaults to
FALSE.

x_title  X scale title string. Defaults to NULL, which converts to sentence case with
spaces. Use "" if you would like no title.

x_title_wrap  Number of characters to wrap the x title to. Defaults to 50.

y_expand  A vector of range expansion constants used to add padding to the y scale, as per
the ggplot2 expand argument in ggplot2 scales functions.

y_labels  A function or named vector to modify y scale labels. If NULL, categorical
variable labels are converted to sentence case. Use function(x) x to keep labels
untransformed.

y_na_rm  TRUE or FALSE of whether to include y_var NA values. Defaults to FALSE.

y_rev  TRUE or FALSE of whether the y variable variable is reversed. Defaults to
FALSE.

y_title  y scale title string. Defaults to NULL, which converts to sentence case with
spaces. Use "" if you would like no title.

y_title_wrap  Number of characters to wrap the y title to. Defaults to 50.

col_breaks_n  For a numeric colour variable, the desired number of intervals on the colour
scale.

col_cuts  A vector of cuts to colour a numeric variable. If "bin" is selected, the first
number in the vector should be either -Inf or 0, and the final number Inf. If
"quantile" is selected, the first number in the vector should be 0 and the final
number should be 1. Defaults to quartiles.

col_intervals_left  For a numeric colour variable, TRUE or FALSE of whether bins or quantiles are
to be cut left-closed. Defaults to TRUE.

col_labels  A function or named vector to modify colour scale labels. Defaults to snake-
case::to_sentence_case for categorical colour variables and scales::label_comma()
for numeric. Use function(x) x to keep labels untransformed.

col_legend_none  TRUE or FALSE of whether to remove the legend.

col_method  The method of colouring features, either "bin", "quantile", "continuous", or "cat-
egory." If numeric, defaults to "bin".

col_na_rm  TRUE or FALSE of whether to include col_var NA values. Defaults to FALSE.

col_title  Colour title string for the legend. Defaults to NULL, which converts to sentence
case with spaces. Use "" if you would like no title.

col_title_wrap  Number of characters to wrap the colour title to. Defaults to 25. Not applicable
where mobile equals TRUE.
facet_labels  A function or named vector to modify facet scale labels. Defaults to converting labels to sentence case. Use function(x) x to keep labels untransformed.

facet_na_rm  TRUE or FALSE of whether to include facet_var NA values. Defaults to FALSE.

facet_ncol  The number of columns of facetted plots.

facet_nrow  The number of rows of facetted plots.

facet_rev  TRUE or FALSE of whether the facet variable variable is reversed. Defaults to FALSE.

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".

caption  Caption title string.

caption_wrap  Number of characters to wrap the caption to. Defaults to 75.

theme  A ggplot2 theme.

Value

A ggplot object.

Examples

library(simplevis)
library(dplyr)
library(palmerpenguins)

plot_data <- penguins %>%
  group_by(species, sex, island) %>%
  summarise(bill_length_mm = round(mean(bill_length_mm, na.rm = TRUE), 1))

gg_tile_col_facet(plot_data,
  x_var = sex,
  y_var = island,
  col_var = bill_length_mm,
  facet_var = species,
  label_var = bill_length_mm)

---

**gg_violin**  
**DEPREVATED. Violin ggplot.**

Description

DEPREVATED. Violin ggplot that is not coloured and not facetted.
Usage

```r
gg_violin(
  data,
  x_var,
  y_var = NULL,
  pal = pal_viridis_mix(1),
  alpha_fill = 1,
  alpha_line = 1,
  size_line = 0.5,
  width = 0.75,
  title = NULL,
  title_wrap = 80,
  subtitle = NULL,
  subtitle_wrap = 80,
  x_expand = ggplot2::waiver(),
  x_labels = snakecase::to_sentence_case,
  x_na_rm = FALSE,
  x_rev = FALSE,
  x_title = NULL,
  x_title_wrap = 50,
  y_zero_mid = FALSE,
  y_breaks_n = 5,
  y_expand = c(0, 0),
  y_labels = scales::label_comma(),
  y_title = NULL,
  y_title_wrap = 50,
  y_zero = FALSE,
  y_zero_line = NULL,
  caption = NULL,
  caption_wrap = 80,
  theme = gg_theme(y_grid = TRUE),
  model_scale = "area",
  model_bw = "nrd0",
  model_adjust = 1,
  model_kernel = "gaussian",
  model_trim = TRUE,
  mobile = FALSE
)
```

Arguments

- **data**: A data frame in a structure to be transformed to density statistics. Required input.
- **x_var**: Unquoted categorical variable to be on the x scale (i.e. character, factor, logical). Required input.
- **y_var**: Generally an unquoted numeric variable to be on the y scale.
- **pal**: Character vector of hex codes.
alpha_fill  The opacity of the fill. Defaults to 1.
alpha_line   The opacity of the outline. Defaults to 1.
size_line   The size of the outlines of violins. Defaults to 0.5.
width      Width of boxes. Defaults to 0.75.
title      Title string.
title_wrap Number of characters to wrap the title to. Defaults to 75.
subtitle   Subtitle string.
subtitle_wrap Number of characters to wrap the subtitle to. Defaults to 75.
x_expand   A vector of range expansion constants used to add padding to the x scale, as per the ggplot2 expand argument in ggplot2 scales functions.
x_labels  A function or named vector to modify x scale labels. If NULL, categorical variable labels are converted to sentence case. Use ggplot2::waiver() to keep x labels untransformed.
x_na_rm    TRUE or FALSE of whether to include x_var NA values. Defaults to FALSE.
x_rev      For a categorical x variable, TRUE or FALSE of whether the x variable variable is reversed. Defaults to FALSE.
x_title   X scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
x_title_wrap Number of characters to wrap the x title to. Defaults to 50.
y_zero_mid For a numeric y variable, add balance to the y scale so that zero is in the centre of the y scale.
y_breaks_n For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 5.
y_expand   A vector of range expansion constants used to add padding to the y scale, as per the ggplot2 expand argument in ggplot2 scales functions.
y_labels  A function or named vector to modify y scale labels. Use ggplot2::waiver() to keep y labels untransformed.
y_title   y scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
y_title_wrap Number of characters to wrap the y title to. Defaults to 50.
y_zero    For a numeric y variable, TRUE or FALSE of whether the minimum of the y scale is zero. Defaults to TRUE.
y_zero_line For a numeric y variable, TRUE or FALSE whether to add a zero reference line to the y scale. Defaults to TRUE if there are positive and negative values in y_var. Otherwise defaults to FALSE.
caption   Caption title string.
caption_wrap Number of characters to wrap the caption to. Defaults to 80.
theme     A ggplot2 theme.
model_scale Per ggplot2::geom_violin, if "area" (default), all violins have the same area (before trimming the tails). If "count", areas are scaled proportionally to the number of observations. If "width", all violins have the same maximum width.
The bw argument of the stats::density function. Defaults to "nrd0".

The adjust argument of the stats::density function. Defaults to 1.

The kernel argument of the stats::density function. Defaults to "gaussian".

TRUE or FALSE of whether to trim the tails. Defaults to FALSE.

Whether the plot is to be displayed on a mobile device. Defaults to FALSE.

A ggplot object.

library(simplevis)
library(palmerpenguins)

gg_violin(penguins,
    x_var = species,
    y_var = body_mass_g)

DEPREVATED. Violin ggplot that is coloured.

DEPREVATED. Violin ggplot that is coloured, but not facetted.

Usage

gg_violin_col(
    data,
    x_var,
    y_var = NULL,
    col_var,
    pal = NULL,
    pal_na = "#7F7F7F",
    pal_rev = FALSE,
    alpha_fill = 1,
    alpha_line = 1,
    size_line = 0.5,
    width = 0.75,
    title = NULL,
    title_wrap = 80,
    subtitle = NULL,
    subtitle_wrap = 80,
    x_expand = ggplot2::waiver(),
    x_labels = snakecase::to_sentence_case,
Arguments

data A data frame in a structure to be transformed to density statistics. Required input.
x_var Unquoted categorical variable to be on the x scale (i.e. character, factor, logical). Required input.
y_var Generally an unquoted numeric variable to be on the y scale.
col_var Unquoted categorical variable to colour the fill of the boxes. Required input.
pal Character vector of hex codes.
pal_na The hex code or name of the NA colour to be used.
pal_rev Reverses the palette. Defaults to FALSE.
alpha_fill The opacity of the fill. Defaults to 1.
alpha_line The opacity of the outline. Defaults to 1.
size_line The size of the outlines of violins. Defaults to 0.5.
width Width of boxes. Defaults to 0.75.
title Title string.
title_wrap Number of characters to wrap the title to. Defaults to 75.
subtitle Subtitle string.
subtitle_wrap Number of characters to wrap the subtitle to. Defaults to 75.
x_expand A vector of range expansion constants used to add padding to the x scale, as per the ggplot2 expand argument in ggplot2 scales functions.
x_labels A function or named vector to modify x scale labels. If NULL, categorical variable labels are converted to sentence case. Use ggplot2::waiver() to keep x labels untransformed.
x_na_rm TRUE or FALSE of whether to include x_var NA values. Defaults to FALSE.
x_rev For a categorical x variable, TRUE or FALSE of whether the x variable variable is reversed. Defaults to FALSE.
x_title X scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
x_title_wrap Number of characters to wrap the x title to. Defaults to 50.
y_zero_mid For a numeric y variable, add balance to the y scale so that zero is in the centre of the y scale.
y_expand A vector of range expansion constants used to add padding to the y scale, as per the ggplot2 expand argument in ggplot2 scales functions.
y_labels A function or named vector to modify y scale labels. Use ggplot2::waiver() to keep y labels untransformed.
y_breaks_n For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 5.
y_title y scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
y_title_wrap Number of characters to wrap the y title to. Defaults to 50.
y_zero For a numeric y variable, TRUE or FALSE of whether the minimum of the y scale is zero. Defaults to TRUE.
y_zero_line For a numeric y variable, TRUE or FALSE whether to add a zero reference line to the y scale. Defaults to TRUE if there are positive and negative values in y_var. Otherwise defaults to FALSE.
col_labels A function or named vector to modify colour scale labels. Defaults to snake-case::to_sentence_case. Use ggplot2::waiver() to keep colour labels untransformed.
col_legend_none TRUE or FALSE of whether to remove the legend.
col_na_rm TRUE or FALSE of whether to include col_var NA values. Defaults to FALSE.
col_rev TRUE or FALSE of whether the colour scale is reversed. Defaults to FALSE.
col_title Colour title string for the legend. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
col_title_wrap Number of characters to wrap the colour title to. Defaults to 25. Not applicable where mobile equals TRUE.
caption Caption title string.
gg_violin_col_facet

DEPRECATED. Violin ggplot that is coloured and faceted.

Description

DEPRECATED. Violin ggplot that is coloured and faceted.

Usage

```r
gg_violin_col_facet(
  data,
  x_var,
  y_var = NULL,
  col_var,
  facet_var,
  pal = NULL,
  pal_na = "#7F7F7F",
  pal_rev = FALSE,
  alpha_fill = 1,
)```

caption_wrap Number of characters to wrap the caption to. Defaults to 80.

theme A ggplot2 theme.

model_scale Per ggplot2::geom_violin, if "area" (default), all violins have the same area (before trimming the tails). If "count", areas are scaled proportionally to the number of observations. If "width", all violins have the same maximum width.

model_bw The bw argument of the stats::density function. Defaults to "nrd0".

model_adjust The adjust argument of the stats::density function. Defaults to 1.

model_kernel The kernel argument of the stats::density function. Defaults to "gaussian".

model_trim TRUE or FALSE of whether to trim the tails. Defaults to FALSE.

mobile Whether the plot is to be displayed on a mobile device. Defaults to FALSE.

Value

A ggplot object.

Examples

```r
library(simplevis)
library(palmerpenguins)

gg_violin_col(penguins,
  x_var = species,
  y_var = body_mass_g,
  col_var = sex,
  col_na_rm = TRUE)
```
Arguments

data A data frame in a structure to be transformed to density statistics. Required input.

x_var Unquoted categorical variable to be on the x scale (i.e. character, factor, logical).
gg_violin_col_facet

Required input.

**y_var**
Generally an unquoted numeric variable to be on the y scale.

**col_var**
Unquoted categorical variable to colour the fill of the boxes. Required input.

**facet_var**
Unquoted categorical variable to facet the data by. Required input.

**pal**
Character vector of hex codes.

**pal_na**
The hex code or name of the NA colour to be used.

**pal_rev**
Reverses the palette. Defaults to FALSE.

**alpha_fill**
The opacity of the fill. Defaults to 1.

**alpha_line**
The opacity of the outline. Defaults to 1.

**size_line**
The size of the outlines of violins. Defaults to 0.5.

**width**
Width of boxes. Defaults to 0.75.

**title**
Title string.

**title_wrap**
Number of characters to wrap the title to. Defaults to 75.

**subtitle**
Subtitle string.

**subtitle_wrap**
Number of characters to wrap the subtitle to. Defaults to 75.

**x_expand**
A vector of range expansion constants used to add padding to the x scale, as per the ggplot2 expand argument in ggplot2 scales functions.

**x_labels**
A function or named vector to modify x scale labels. If NULL, categorical variable labels are converted to sentence case. Use ggplot2::waiver() to keep x labels untransformed.

**x_na_rm**
TRUE or FALSE of whether to include x_var NA values. Defaults to FALSE.

**x_rev**
For a categorical x variable, TRUE or FALSE of whether the x variable variable is reversed. Defaults to FALSE.

**x_title**
X scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.

**x_title_wrap**
Number of characters to wrap the x title to. Defaults to 50.

**y_zero_mid**
For a numeric y variable, add balance to the y scale so that zero is in the centre of the y scale.

**y_breaks_n**
For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 4.

**y_expand**
A vector of range expansion constants used to add padding to the y scale, as per the ggplot2 expand argument in ggplot2 scales functions.

**y_labels**
A function or named vector to modify y scale labels. Use ggplot2::waiver() to keep y labels untransformed.

**y_title**
y scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.

**y_title_wrap**
Number of characters to wrap the y title to. Defaults to 50.

**y_zero**
For a numeric y variable, TRUE or FALSE of whether the minimum of the y scale is zero. Defaults to TRUE.
For a numeric y variable, TRUE or FALSE whether to add a zero reference line to the y scale. Defaults to TRUE if there are positive and negative values in y_var. Otherwise defaults to FALSE.

col_labels
A function or named vector to modify colour scale labels. Defaults to snake-case::to_sentence_case. Use ggplot2::waiver() to keep colour labels untransformed.

col_legend_none
TRUE or FALSE of whether to remove the legend.

col_na.rm
TRUE or FALSE of whether to include col_var NA values. Defaults to FALSE.

col_rev
TRUE or FALSE of whether the colour scale is reversed. Defaults to FALSE.

col_title
Colour title string for the legend. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.

col_title_wrap
Number of characters to wrap the colour title to. Defaults to 25. Not applicable where mobile equals TRUE.

facet_labels
A function or named vector to modify facet scale labels. Defaults to converting labels to sentence case. Use ggplot2::waiver() to keep facet labels untransformed.

facet_na.rm
TRUE or FALSE of whether to include facet_var NA values. Defaults to FALSE.

facet_ncol
The number of columns of facetted plots.

facet_nrow
The number of rows of facetted plots.

facet_rev
TRUE or FALSE of whether the facet variable variable is reversed. Defaults to FALSE.

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".

caption
Caption title string.

caption_wrap
Number of characters to wrap the caption to. Defaults to 80.

theme
A ggplot2 theme.

model_scale
Per ggplot2::geom_violin, if "area" (default), all violins have the same area (before trimming the tails). If "count", areas are scaled proportionally to the number of observations. If "width", all violins have the same maximum width.

model_bw
The bw argument of the stats::density function. Defaults to "nrd0".

model_adjust
The adjust argument of the stats::density function. Defaults to 1.

model_kernel
The kernel argument of the stats::density function. Defaults to "gaussian".

model_trim
TRUE or FALSE of whether to trim the tails. Defaults to FALSE.

Value
A ggplot object.
Examples

```r
library(simplevis)
library(palmerpenguins)

penguins %>%
dplyr::mutate(year = as.character(year)) %>%
gg_violin_col_facet(x_var = year,
y_var = body_mass_g,
col_var = sex,
facet_var = species,
col_na_rm = TRUE,
x_labels = function(x) stringr::str_sub(x, 3, 4))
```

Description

DEPRECATED. Violin ggplot that is faceted, but not coloured.

Usage

```r
gg_violin_facet(
data,
x_var,
y_var = NULL,
facet_var,
pal = pal_viridis_mix(1),
alpha_fill = 1,
alpha_line = 1,
size_line = 0.5,
width = 0.75,
title = NULL,
title_wrap = 80,
subtitle = NULL,
subtitle_wrap = 80,
x_expand = ggplot2::waiver(),
x_labels = snakecase::to_sentence_case,
x_na_rm = FALSE,
x_rev = FALSE,
x_title = NULL,
x_title_wrap = 50,
y_zero_mid = FALSE,
y_breaks_n = 3,
y_expand = c(0, 0),
y_labels = scales::label_comma(),
```
Arguments

- **data**: An tibble or data frame. Required input.
- **x_var**: Unquoted categorical variable to be on the x scale (i.e. character, factor, logical). Required input.
- **y_var**: Generally an unquoted numeric variable to be on the y scale.
- **facet_var**: Unquoted categorical variable to facet the data by. Required input.
- **pal**: Character vector of hex codes.
- **alpha_fill**: The opacity of the fill. Defaults to 1.
- **alpha_line**: The opacity of the outline. Defaults to 1.
- **size_line**: The size of the outlines of violins. Defaults to 0.5.
- **width**: Width of boxes. Defaults to 0.75.
- **title**: Title string.
- **title_wrap**: Number of characters to wrap the title to. Defaults to 75.
- **subtitle**: Subtitle string.
- **subtitle_wrap**: Number of characters to wrap the subtitle to. Defaults to 75.
- **x_expand**: A vector of range expansion constants used to add padding to the x scale, as per the ggplot2 expand argument in ggplot2 scales functions.
- **x_labels**: A function or named vector to modify x scale labels. If NULL, categorical variable labels are converted to sentence case. Use ggplot2::waiver() to keep x labels untransformed.
- **x_na_rm**: TRUE or FALSE of whether to include x_var NA values. Defaults to FALSE.
- **x_rev**: For a categorical x variable, TRUE or FALSE of whether the x variable variable is reversed. Defaults to FALSE.
x_title X scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.
x_title_wrap Number of characters to wrap the x title to. Defaults to 50.

y_zero_mid For a numeric y variable, add balance to the y scale so that zero is in the centre of the y scale.

y_breaks_n For a numeric or date x variable, the desired number of intervals on the x scale, as calculated by the pretty algorithm. Defaults to 4.

y_expand A vector of range expansion constants used to add padding to the y scale, as per the ggplot2::expand argument in ggplot2 scales functions.

y_labels A function or named vector to modify y scale labels. Use ggplot2::waiver() to keep y labels untransformed.

y_title y scale title string. Defaults to NULL, which converts to sentence case with spaces. Use "" if you would like no title.

y_title_wrap Number of characters to wrap the y title to. Defaults to 50.

y_zero For a numeric y variable, TRUE or FALSE of whether the minimum of the y scale is zero. Defaults to TRUE.

y_zero_line For a numeric y variable, TRUE or FALSE whether to add a zero reference line to the y scale. Defaults to TRUE if there are positive and negative values in y_var. Otherwise defaults to FALSE.

facet_labels A function or named vector to modify facet scale labels. Defaults to converting labels to sentence case. Use ggplot2::waiver() to keep facet labels untransformed.

facet_na_rm TRUE or FALSE of whether to include facet_var NA values. Defaults to FALSE.

facet_ncol The number of columns of facetted plots.

facet_nrow The number of rows of facetted plots.

facet_rev TRUE or FALSE of whether the facet variable variable is reversed. Defaults to FALSE.

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".

caption Caption title string.
caption_wrap Number of characters to wrap the caption to. Defaults to 80. #'

theme A ggplot2 theme.

model_scale Per ggplot2::geom_violin, if "area" (default), all violins have the same area (before trimming the tails). If "count", areas are scaled proportionally to the number of observations. If "width", all violins have the same maximum width.

model_bw The bw argument of the stats::density function. Defaults to "nrd0".

model_adjust The adjust argument of the stats::density function. Defaults to 1.

model_kernel The kernel argument of the stats::density function. Defaults to "gaussian".

model_trim TRUE or FALSE of whether to trim the tails. Defaults to FALSE.

Value

A ggplot object.
Examples

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

gg_violin_facet(penguins,
               x_var = sex,
               y_var = body_mass_g,
               facet_var = species,
               x_na_rm = TRUE)
```

---

leaf_basemap  

**Basemap stack in leaflet.**

Description

Make a stack of leaflet baselayers for use in shiny apps.

Usage

```r
leaf_basemap(bounds = NULL, basemap = "light")
```

Arguments

- `bounds`: A bbox object or numeric vector of length four, with xmin, ymin, xmax and ymax values in WGS84 (epsg 4326).
- `basemap`: The first layer to start in the basemap stack. Either "light", "dark", "street", "satellite", or "ocean". Defaults to "light".

Value

A leaflet object.

Examples

```r
leaf_basemap(basemap = "dark")
leaf_basemap(bounds = c(166.70047, -34.45676, 178.52966, -47.06345))
```
leaf_clear

In shiny, clear all features, images and legends.

Description

In shiny, clear all features, images and legends.

Usage

leaf_clear(map_id = "leaf")

Arguments

map_id

The map id for a leaflet map. Defaults to "leaf".

Value

A map object.

leaf_sf

Simple feature leaflet map.

Description

Map of simple features in leaflet that is not coloured.

Usage

leaf_sf(
  data,
  popup = TRUE,
  popup_vctr = NULL,
  popup_numeric_format = function(x) prettyNum(x, big.mark = "", scientific = FALSE),
  popup_vvars_rename = snakecase::to_sentence_case,
  pal = pal_viridis_mix(1),
  size_point = 2,
  size_line = 2,
  alpha_point = NULL,
  alpha_line = NULL,
  alpha_fill = NULL,
  basemap = "light",
  layer_id_var = NULL,
  group_id = NULL,
  map_id = "leaf"
)
**Arguments**

- **data**
  An sf object of geometry type point/multipoint, linestring/multilinestring or polygon/multipolygon geometry type. Required input.

- **popup**
  TRUE or FALSE of whether to have a popup.

- **popup_vars_vctr**
  Vector of quoted variable names to include in the popup. If NULL, defaults to making a leafpop::popupTable of all columns.

- **popup_numeric_format**
  A function to format all numeric variables within the popup column. Defaults to non-scientific. Use function(x) x to leave as is.

- **popup_vars_rename**
  Function to rename column names for the popup. Defaults to snakecase::to_sentence_case. Use function(x) x to leave column names untransformed.

- **pal**
  Character vector of hex codes.

- **size_point**
  Size of points (i.e. radius). Defaults to 2.

- **size_line**
  Size of lines around features (i.e. weight). Defaults to 2.

- **alpha_point**
  The opacity of the points.

- **alpha_line**
  The opacity of the outline.

- **alpha_fill**
  The opacity of the fill.

- **basemap**
  The underlying basemap. Either "light", "dark", "satellite", "street", or "ocean". Defaults to "light". Only applicable where shiny equals FALSE.

- **layer_id_var**
  Unquoted variable to be used in shiny, so that in the event where a feature is clicked on, the value of this is returned for that feature (e.g. input$map_marker_click$id).

- **group_id**
  The id name for the sf group.

- **map_id**
  The map id for the leaflet map. Defaults to "leaf".

**Value**

A leaflet object.

**Examples**

```r
## Not run:
leaf_sf(example_point)

leaf_sf(example_polygon)

## End(Not run)
```
leaf_sf_col

Simple feature leaflet map that is coloured.

Description

Map of simple features in leaflet that is coloured.

Usage

leaf_sf_col(
    data,
    col_var,
    label_var = NULL,
    popup = TRUE,
    popup_vars_vctr = NULL,
    popup_numeric_format = function(x) prettyNum(x, big.mark = "", scientific = FALSE),
    popup_vars_rename = snakecase::to_sentence_case,
    pal = NULL,
    pal_na = "#7F7F7F",
    pal_rev = FALSE,
    alpha_point = NULL,
    alpha_line = NULL,
    alpha_fill = NULL,
    size_point = 2,
    size_line = 2,
    basemap = "light",
    col_breaks_n = 4,
    col_cuts = NULL,
    col_intervals_left = TRUE,
    col_labels = NULL,
    col_legends_none = FALSE,
    col_method = NULL,
    col_na_rm = FALSE,
    col_title = NULL,
    label_numeric_format = function(x) prettyNum(x, big.mark = ",", scientific = FALSE),
    layer_id_var = NULL,
    group_id = NULL,
    legend_id = NULL,
    map_id = "leaf"
)

Arguments

data An sf object of geometry type point/multipoint, linestring/multilinestring or polygon/multipolygon geometry type. Required input.

col_var Unquoted variable to colour the features by. Required input.
**leaf_sf_col**

- **label_var**: Unquoted variable to label the features by. If NULL, defaults to using the colour variable.

- **popup**: TRUE or FALSE of whether to have a popup.

- **popup_vars_vctr**: Vector of quoted variable names to include in the popup. If NULL, defaults to making a leafpop::popupTable of all columns.

- **popup_numeric_format**: A function to format all numeric variables within the popup column. Defaults to non-scientific. Use function(x) x to leave as is.

- **popup_vars_rename**: Function to rename column names for the popup. Defaults to snakecase::to_sentence_case. Use function(x) x to leave column names untransformed.

- **pal**: Character vector of hex codes.

- **pal_na**: The hex code or name of the NA colour to be used.

- **pal_rev**: Reverses the palette. Defaults to FALSE.

- **alpha_point**: The opacity of the points.

- **alpha_line**: The opacity of the outline.

- **alpha_fill**: The opacity of the fill.

- **size_point**: Size of points (i.e. radius). Defaults to 2.

- **size_line**: Size of lines around features (i.e. weight). Defaults to 2.

- **basemap**: The underlying basemap. Either "light", "dark", "satellite", "street", or "ocean". Defaults to "light". Only applicable where shiny equals FALSE.

- **col_breaks_n**: For a numeric colour variable, the desired number of intervals on the colour scale.

- **col_cuts**: A vector of cuts to colour a numeric variable. If "bin" is selected, the first number in the vector should be either -Inf or 0, and the final number Inf. If "quantile" is selected, the first number in the vector should be 0 and the final number should be 1. Defaults to quartiles.

- **col_intervals_left**: For a numeric colour variable, TRUE or FALSE of whether bins or quantiles are to be cut left-closed. Defaults to TRUE.

- **col_labels**: A function or named vector to modify the colour scale labels. Defaults to snakecase::to_sentence_case if categorical, and scales::label_comma() if numeric. Use function(x) x to keep labels untransformed.

- **col_legend_none**: TRUE or FALSE of whether to remove the legend.

- **col_method**: The method of colouring features, either "bin", "quantile", "continuous", or "category." If numeric, defaults to "bin".

- **col_na_rm**: TRUE or FALSE of whether to include col_var NA values. Defaults to FALSE.

- **col_title**: A title string that will be wrapped into the legend.

- **label_numeric_format**: A function to format the numeric labels. Defaults to adding a comma seperator. Use function(x) x to leave as is.
Unquoted variable to be used in shiny, so that in the event where a feature is clicked on, the value of this is returned for that feature (e.g. input$map_marker_click$id).

The id name for the sf group.

The id name for the layerId of the legend.

The map id for the leaflet map. Defaults to "leaf".

A leaflet object.

```r
## Not run:
leaf_sf_col(example_point,
    col_var = trend_category)

leaf_sf_col(example_polygon,
    col_var = density)

leaf_sf_col(example_polygon,
    col_var = density,
    col_method = "bin",
    col_breaks_n = 5)

leaf_sf_col(example_polygon,
    col_var = density,
    col_method = "bin",
    col_cuts = c(0, 10, 50, 100, 150, 200, Inf))

leaf_sf_col(example_polygon,
    col_var = density,
    col_method = "quantile",
    col_breaks_n = 4)

leaf_sf_col(example_polygon,
    col_var = density,
    col_method = "quantile",
    col_cuts = c(0, 0.25, 0.5, 0.75, 0.95, 1))

## End(Not run)
```

Stars leaflet map.

Map of stars in leaflet that is not coloured.
Usage

    leaf_stars(
        data,
        pal = pal_viridis_mix(1),
        alpha_fill = 0.5,
        basemap = "light",
        group_id = NULL,
        map_id = "map"
    )

Arguments

data       A stars object. Required input.
pal        Character vector of hex codes.
alpha_fill  The opacity of the fill. Defaults to 0.5.
basemap     The underlying basemap. Either "light", "dark", "satellite", "street", or "ocean". Defaults to "light". Only applicable where shiny equals FALSE.
group_id    The id name for the stars group.
map_id      The map id for the leaflet map. Defaults to "map".

Value

A leaflet object.

Examples

    ## Not run:
    library(simplevis)
    leaf_stars(example_stars)
    ## End(Not run)

leaf_stars_col  Stars leaflet map that is coloured.

Description

Map of stars in leaflet that is coloured.
Usage

leaf_stars_col(
  data,
  col_var,
  pal = NULL,
  pal_na = "#7F7F7F",
  pal_rev = FALSE,
  alpha_fill = 1,
  basemap = "light",
  col_breaks_n = 4,
  col_cuts = NULL,
  col_intervals_left = TRUE,
  col_labels = NULL,
  col_legend_none = FALSE,
  col_method = NULL,
  col_na_rm = FALSE,
  col_title = NULL,
  group_id = NULL,
  legend_id = NULL,
  map_id = "map"
)

Arguments

data               A stars object. Required input.
col_var            Unquoted attribute to colour the features by. Required input.
pal                Character vector of hex codes.
pal_na             The hex code or name of the NA colour to be used.
pal_rev            Reverses the palette. Defaults to FALSE.
alpha_fill         The opacity of the fill. Defaults to 1.
basemap            The underlying basemap. Either "light", "dark", "satellite", "street", or "ocean". Defaults to "light". Only applicable where shiny equals FALSE.
col_breaks_n       For a numeric colour variable, the desired number of intervals on the colour scale.
col_cuts           A vector of cuts to colour a numeric variable. If "bin" is selected, the first number in the vector should be either -Inf or 0, and the final number Inf. If "quantile" is selected, the first number in the vector should be 0 and the final number should be 1. Defaults to quartiles.
col_intervals_left For a numeric colour variable, TRUE or FALSE of whether bins or quantiles are to be cut left-closed. Defaults to TRUE.
col_labels         A function or named vector to modify the colour scale labels. Defaults to stringr::str_to_sentence if categorical, and scales::label_comma if numeric. Use function(x) x to keep labels untransformed.
col_legend_none    TRUE or FALSE of whether to remove the legend.
`mutate_text` Add 'HTML' strings column of variable names and values.

Description
Add 'HTML' strings' column of variable names and values.

Usage

```r
mutate_text(
  data,
  vars_vctr = NULL,
  numeric_format = function(x) prettyNum(x, big.mark = "", scientific = FALSE),
  name = "text"
)
```

Arguments

- **data**: A data frame. Required input.
- **vars_vctr**: A vector of quoted variables to include in the tooltip. Defaults to NULL, which adds all variables in.
- **numeric_format**: A function to format all numeric variables within the tooltip text column. Defaults to non-scientific. Use function(x) x to leave as is.
- **name**: name of the tooltip text column to be created. Defaults to "text".
Value

A data frame with an extra column called text.

Examples

```r
library(simplevis)
library(dplyr)

plot_data <- slice_sample(ggplot2::diamonds, prop = 0.05) %>%
  mutate_text(vars_vctr = c("carat", "price"))

plot <- gg_point(data = plot_data,
  x_var = carat,
  y_var = price,
  text_var = text,
  title = "Diamond price by carat",
  x_title = "Carat",
  y_title = "Price ($US thousands)"
)

plotly::ggplotly(plot, tooltip = "text")
```

---

pal_d3_mix  

D3 palette reordered.

Description

A function to retrieve a vector of hex codes for a non-numeric (or non-ordererd) variable.

Usage

```r
pal_d3_mix(n)
```

Arguments

- `n`  
The number of colours (excluding an NA colour).

Value

A character vector of hex codes.

Examples

```r
scales::show_col(pal_d3_mix(9))
```
Description

A function to retrieve a hex code for a colour to use for NA values.

Usage

pal_na(pal = "#7F7F7F")

Arguments

pal
The hex code or name of the NA colour. Defaults to "#7F7F7FFF".

Value

A character vector.

Examples

scales::show_col(pal_na())

---

Description

A function to retrieve a vector of hex codes for a numeric (or ordered) variable.

Usage

pal_viridis_mix(n)

Arguments

n
The number of colours (excluding an NA colour).

Value

A character vector of hex codes.

Examples

scales::show_col(pal_viridis_mix(9))
plotly_camera  
Remove plotly buttons from the mode bar, other than the camera.

Description
Remove plotly buttons from the mode bar, other than the camera and plotly logo.

Usage
plotly_camera(plotly, logo = FALSE)

Arguments
plotly A plotly object. Required input.
logo TRUE or FALSE of whether to display the plotly logo. Defaults to FALSE.

Examples
plot_data <- dplyr::sample_frac(ggplot2::diamonds, 0.05)

plot <- gg_point(data = plot_data,
                 x_var = carat,
                 y_var = price)

plotly::ggplotly(plot) %>%
  plotly_camera()

plotly_col_legend  
Change colour legend elements order.

Description
Change colour legend elements order.

Usage
plotly_colLegend(plotly, rev = FALSE, order = NULL)

Arguments
plotly A plotly object. Required input.
rev TRUE or FALSE of whether to reverse the order of elements.
order A numeric vector specifying the order of elements.
### `summarise_boxplot_outliers`

**Summarise outliers in a dataset or tibble.**

#### Description

Summarise outliers in a dataset or tibble.

#### Usage

```
summarise_boxplot_outliers(data, var, ...
```

#### Arguments

- `data`       
  A data frame. Required input. Group the dataset as appropriate prior.
- `var`        
  Unquoted variable from which to calculate outliers. Required input.
- `...`        
  Passed to `boxplot.stats`

#### Value

A data frame.

#### Examples

```
library(simplevis)
library(dplyr)
library(palmerpenguins)

penguins %>%
group_by(species) %>%
summarise_boxplot_outliers(body_mass_g)
```
summarise_boxplot_stats

Summarise boxplot stats.

Description
Summarise boxplot stats.

Usage

summarise_boxplot_stats(
  data,
  var,
  names_vctr = c("min", "lower", "middle", "upper", "max"),
  ...)

Arguments

data A data frame. Required input. Group the dataset as appropriate prior.
var Unquoted variable from which to calculate boxplot stats. Required input.
names_vctr A vector of names for the boxplot stats.
... Passed to boxplot.stats

Value
A data frame.

Examples

library(simplevis)
library(dplyr)
library(palmerpenguins)

penguins %>%
  group_by(species) %>%
  summarise_boxplot_stats(body_mass_g)

penguins %>%
  group_by(sex, species) %>%
  summarise_boxplot_stats(body_mass_g, names_vctr = LETTERS[1:5])
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