

Package: certeplo2 (via r-universe)

September 11, 2024

Title A Certe R Package for Convenient Plotting

Version 2.0.1

Description A Certe R Package for fast and convenient plotting based on 'plot2', by providing wrappers around 'tidyverse' packages such as 'ggplot2', while also providing plotting in the Certe organisational style. This package is part of the 'certedata' universe.

URL <https://certe-medical-epidemiology.github.io/certeplo2>,
<https://github.com/certe-medical-epidemiology/certeplo2>

Depends R (>= 4.1.0), plot2 (>= 1.25.0)

Imports certestyle, AMR (>= 2.0.0), dplyr (>= 1.0.0), ggplot2 (>= 3.5.1), tidyr (>= 1.0.0), yaml (>= 2.2.0)

Suggests certegis, certestats, sf (>= 1.0.0), testthat (>= 2.0.0)

License GPL-2

Encoding UTF-8

LazyData true

Roxygen list(markdown = TRUE)

RoxygenNote 7.3.2

Config/testthat/edition 2

Repository <https://certe-medical-epidemiology.r-universe.dev>

RemoteUrl <https://github.com/certe-medical-epidemiology/certeplo2>

RemoteRef HEAD

RemoteSha a3f5217cf83566af7fc8394726d729bd7d7d81b4

Contents

plot2-extensions	2
scale_certe	26

Index	30
--------------	-----------

Description

These are the implemented methods for different S3 classes to be used in `plot2()`. Since they have an extensive list of arguments, they are placed here on a separate manual page.

Usage

```
## S3 method for class 'bug_drug_combinations'
plot2(
  .data,
  x = ab,
  y = value,
  category = name,
  facet = mo,
  type = "column",
  x.title = FALSE,
  y.title = FALSE,
  category.title = NULL,
  title = NULL,
  subtitle = NULL,
  caption = NULL,
  tag = NULL,
  title.linlength = 60,
  title.colour = getOption("plot2.colour_font_primary", "black"),
  subtitle.linlength = 60,
  subtitle.colour = getOption("plot2.colour_font_secondary", "grey35"),
  na.replace = "",
  na.rm = FALSE,
  facet.position = "top",
  facet.fill = NULL,
  facet.bold = TRUE,
  facet.italic = FALSE,
  facet.size = 10,
  facet.margin = 8,
  facet.repeat_lbls_x = TRUE,
  facet.repeat_lbls_y = TRUE,
  facet.fixed_y = NULL,
  facet.fixed_x = TRUE,
  facet.drop = FALSE,
  facet.nrow = NULL,
  facet.relative = FALSE,
  x.date_breaks = NULL,
  x.date_labels = NULL,
  x.date_remove_years = NULL,
```

```
category.focus = NULL,  
colour = get_colour("certe_sir2", 7),  
colour_fill = NULL,  
colour_opacity = 0,  
x.lbl_angle = ifelse(horizontal, 0, 90),  
x.lbl_align = NULL,  
x.lbl_italic = FALSE,  
x.lbl_taxonomy = TRUE,  
x.remove = FALSE,  
x.position = "bottom",  
x.max_items = Inf,  
x.max_txt = "(rest, x%n)",  
category.max_items = Inf,  
category.max_txt = "(rest, x%n)",  
facet.max_items = Inf,  
facet.max_txt = "(rest, x%n)",  
x.breaks = NULL,  
x.n_breaks = NULL,  
x.transform = "identity",  
x.expand = NULL,  
x.limits = NULL,  
x.labels = NULL,  
x.character = NULL,  
x.drop = FALSE,  
x.mic = FALSE,  
x.zoom = FALSE,  
y.remove = FALSE,  
y.24h = FALSE,  
y.age = FALSE,  
y.scientific = NULL,  
y.percent = FALSE,  
y.percent_break = 0.1,  
y.breaks = NULL,  
y.n_breaks = NULL,  
y.limits = NULL,  
y.labels = NULL,  
y.expand = NULL,  
y.transform = "identity",  
y.position = "left",  
y.zoom = FALSE,  
y_secondary = NULL,  
y_secondary.type = type,  
y_secondary.title = TRUE,  
y_secondary.colour = "certeroze",  
y_secondary.colour_fill = "certeroze6",  
y_secondary.scientific = NULL,  
y_secondary.percent = FALSE,  
y_secondary.labels = NULL,
```

```
category.labels = NULL,  
category.percent = FALSE,  
category.breaks = NULL,  
category.limits = NULL,  
category.expand = 0,  
category.midpoint = NULL,  
category.transform = "identity",  
category.date_breaks = NULL,  
category.date_labels = NULL,  
category.character = NULL,  
x.sort = NULL,  
category.sort = FALSE,  
facet.sort = TRUE,  
x.complete = NULL,  
category.complete = NULL,  
facet.complete = NULL,  
datalabels = TRUE,  
datalabels.round = ifelse(y.percent, 2, 1),  
datalabels.format = "%n",  
datalabels.colour = "grey25",  
datalabels.colour_fill = NULL,  
datalabels.size = (3 * text_factor),  
datalabels.angle = 0,  
datalabels.lineheight = 1,  
decimal.mark = dec_mark(),  
big.mark = big_mark(),  
summarise_function = base::sum,  
stacked = FALSE,  
stackedpercent = TRUE,  
horizontal = TRUE,  
reverse = TRUE,  
smooth = NULL,  
smooth.method = NULL,  
smooth.formula = NULL,  
smooth.se = TRUE,  
smooth.level = 0.95,  
smooth.alpha = 0.25,  
smooth.linewidth = 0.75,  
smooth.linetype = 3,  
smooth.colour = NULL,  
size = NULL,  
linetype = 1,  
linewidth = NULL,  
binwidth = NULL,  
width = NULL,  
jitter_seed = NA,  
violin_scale = "count",  
legend.position = NULL,
```

```
    legend.title = NULL,
    legend.reverse = TRUE,
    legend.barheight = 6,
    legend.barwidth = 1.5,
    legend.nbin = 300,
    legend.italic = FALSE,
    sankey.node_width = 0.15,
    sankey.node_whitespace = 0.03,
    sankey.alpha = 0.5,
    sankey.remove_axes = NULL,
    zoom = FALSE,
    sep = " / ",
    print = FALSE,
    text_factor = 1,
    font = getOption("plot2.font"),
    theme = getOption("plot2.theme", "theme_minimal2"),
    background = getOption("plot2.colour_background", "white"),
    markdown = TRUE,
    data = NULL,
    minimum = 30,
    remove_intrinsic_resistant = TRUE,
    language = "nl",
    ...
)

## S3 method for class 'antibiogram'
plot2(
  .data,
  x = NULL,
  y = NULL,
  category = NULL,
  facet = NULL,
  type = NULL,
  x.title = NULL,
  y.title = NULL,
  category.title = NULL,
  title = NULL,
  subtitle = NULL,
  caption = NULL,
  tag = NULL,
  title.linlength = 60,
  title.colour = getOption("plot2.colour_font_primary", "black"),
  subtitle.linlength = 60,
  subtitle.colour = getOption("plot2.colour_font_secondary", "grey35"),
  na.replace = "",
  na.rm = FALSE,
  facet.position = "top",
  facet.fill = NULL,
```

```
facet.bold = TRUE,
facet.italic = FALSE,
facet.size = 10,
facet.margin = 8,
facet.repeat_lbls_x = TRUE,
facet.repeat_lbls_y = TRUE,
facet.fixed_y = NULL,
facet.fixed_x = TRUE,
facet.drop = FALSE,
facet.nrow = NULL,
facet.relative = FALSE,
x.date_breaks = NULL,
x.date_labels = NULL,
x.date_remove_years = NULL,
category.focus = NULL,
colour = getOption("plot2.colour", "ggplot2"),
colour_fill = NULL,
colour_opacity = 0,
x.lbl_angle = 0,
x.lbl_align = NULL,
x.lbl_italic = FALSE,
x.lbl_taxonomy = FALSE,
x.remove = FALSE,
x.position = "bottom",
x.max_items = Inf,
x.max_txt = "(rest, x%n)",
category.max_items = Inf,
category.max_txt = "(rest, x%n)",
facet.max_items = Inf,
facet.max_txt = "(rest, x%n)",
x.breaks = NULL,
x.n_breaks = NULL,
x.transform = "identity",
x.expand = NULL,
x.limits = NULL,
x.labels = NULL,
x.character = NULL,
x.drop = FALSE,
x.mic = FALSE,
x.zoom = FALSE,
y.remove = FALSE,
y.24h = FALSE,
y.age = FALSE,
y.scientific = NULL,
y.percent = FALSE,
y.percent_break = 0.1,
y.breaks = NULL,
y.n_breaks = NULL,
```

```
y.limits = NULL,  
y.labels = NULL,  
y.expand = NULL,  
y.transform = "identity",  
y.position = "left",  
y.zoom = FALSE,  
y_secondary = NULL,  
y_secondary.type = type,  
y_secondary.title = TRUE,  
y_secondary.colour = "certeroze",  
y_secondary.colour_fill = "certeroze6",  
y_secondary.scientific = NULL,  
y_secondary.percent = FALSE,  
y_secondary.labels = NULL,  
category.labels = NULL,  
category.percent = FALSE,  
category.breaks = NULL,  
category.limits = NULL,  
category.expand = 0,  
category.midpoint = NULL,  
category.transform = "identity",  
category.date_breaks = NULL,  
category.date_labels = NULL,  
category.character = NULL,  
x.sort = NULL,  
category.sort = TRUE,  
facet.sort = TRUE,  
x.complete = NULL,  
category.complete = NULL,  
facet.complete = NULL,  
datalabels = TRUE,  
datalabels.round = ifelse(y.percent, 2, 1),  
datalabels.format = "%n",  
datalabels.colour = "grey25",  
datalabels.colour_fill = NULL,  
datalabels.size = (3 * text_factor),  
datalabels.angle = 0,  
datalabels.lineheight = 1,  
decimal.mark = dec_mark(),  
big.mark = big_mark(),  
summarise_function = base::sum,  
stacked = FALSE,  
stackedpercent = FALSE,  
horizontal = FALSE,  
reverse = horizontal,  
smooth = NULL,  
smooth.method = NULL,  
smooth.formula = NULL,
```

```

smooth.se = TRUE,
smooth.level = 0.95,
smooth.alpha = 0.25,
smooth.linewidth = 0.75,
smooth.linetype = 3,
smooth.colour = NULL,
size = NULL,
linetype = 1,
linewidth = NULL,
binwidth = NULL,
width = NULL,
jitter_seed = NA,
violin_scale = "count",
legend.position = NULL,
legend.title = NULL,
legend.reverse = FALSE,
legend.barheight = 6,
legend.barwidth = 1.5,
legend.nbin = 300,
legend.italic = FALSE,
sankey.node_width = 0.15,
sankey.node_whitespace = 0.03,
sankey.alpha = 0.5,
sankey.remove_axes = NULL,
zoom = FALSE,
sep = " / ",
print = FALSE,
text_factor = 1,
font = getOption("plot2.font"),
theme = getOption("plot2.theme", "theme_minimal2"),
background = getOption("plot2.colour_background", "white"),
markdown = TRUE,
data = NULL,
...
)

## S3 method for class 'sir_df'
plot2(
  .data,
  x = NULL,
  y = isolates,
  category = interpretation,
  facet = antibiotic,
  type = "column",
  x.title = TRUE,
  y.title = FALSE,
  category.title = NULL,
  title = FALSE,

```



```
subtitle = NULL,
caption = NULL,
tag = NULL,
title.linlength = 60,
title.colour = getOption("plot2.colour_font_primary", "black"),
subtitle.linlength = 60,
subtitle.colour = getOption("plot2.colour_font_secondary", "grey35"),
na.replace = "",
na.rm = FALSE,
facet.position = "top",
facet.fill = NULL,
facet.bold = TRUE,
facet.italic = FALSE,
facet.size = 10,
facet.margin = 8,
facet.repeat_lbls_x = TRUE,
facet.repeat_lbls_y = TRUE,
facet.fixed_y = NULL,
facet.fixed_x = TRUE,
facet.drop = FALSE,
facet.nrow = NULL,
facet.relative = FALSE,
x.date_breaks = NULL,
x.date_labels = NULL,
x.date_remove_years = NULL,
category.focus = NULL,
colour = get_colour("certe_sir2", 5),
colour_fill = NULL,
colour_opacity = 0,
x.lbl_angle = 0,
x.lbl_align = NULL,
x.lbl_italic = FALSE,
x.lbl_taxonomy = TRUE,
x.remove = FALSE,
x.position = "bottom",
x.max_items = Inf,
x.max_txt = "(rest, x%n)",
category.max_items = Inf,
category.max_txt = "(rest, x%n)",
facet.max_items = Inf,
facet.max_txt = "(rest, x%n)",
x.breaks = NULL,
x.n_breaks = NULL,
x.transform = "identity",
x.expand = NULL,
x.limits = NULL,
x.labels = NULL,
x.character = NULL,
```

```
x.drop = FALSE,
x.mic = FALSE,
x.zoom = FALSE,
y.remove = FALSE,
y.24h = FALSE,
y.age = FALSE,
y.scientific = NULL,
y.percent = FALSE,
y.percent_break = 0.1,
y.breaks = NULL,
y.n_breaks = NULL,
y.limits = NULL,
y.labels = NULL,
y.expand = NULL,
y.transform = "identity",
y.position = "left",
y.zoom = FALSE,
y_secondary = NULL,
y_secondary.type = type,
y_secondary.title = TRUE,
y_secondary.colour = "certeroze",
y_secondary.colour_fill = "certeroze6",
y_secondary.scientific = NULL,
y_secondary.percent = FALSE,
y_secondary.labels = NULL,
category.labels = NULL,
category.percent = FALSE,
category.breaks = NULL,
category.limits = NULL,
category.expand = 0,
category.midpoint = NULL,
category.transform = "identity",
category.date_breaks = NULL,
category.date_labels = NULL,
category.character = NULL,
x.sort = NULL,
category.sort = FALSE,
facet.sort = TRUE,
x.complete = NULL,
category.complete = NULL,
facet.complete = NULL,
datalabels = TRUE,
datalabels.round = ifelse(y.percent, 2, 1),
datalabels.format = "%n",
datalabels.colour = "grey25",
datalabels.colour_fill = NULL,
datalabels.size = (3 * text_factor),
datalabels.angle = 0,
```

```
    datalabels.lineheight = 1,  
    decimal.mark = dec_mark(),  
    big.mark = big_mark(),  
    summarise_function = base::sum,  
    stacked = FALSE,  
    stackedpercent = TRUE,  
    horizontal = FALSE,  
    reverse = TRUE,  
    smooth = NULL,  
    smooth.method = NULL,  
    smooth.formula = NULL,  
    smooth.se = TRUE,  
    smooth.level = 0.95,  
    smooth.alpha = 0.25,  
    smooth.linewidth = 0.75,  
    smooth.linetype = 3,  
    smooth.colour = NULL,  
    size = NULL,  
    linetype = 1,  
    linewidth = NULL,  
    binwidth = NULL,  
    width = NULL,  
    jitter_seed = NA,  
    violin_scale = "count",  
    legend.position = NULL,  
    legend.title = NULL,  
    legend.reverse = FALSE,  
    legend.barheight = 6,  
    legend.barwidth = 1.5,  
    legend.nbin = 300,  
    legend.italic = FALSE,  
    sankey.node_width = 0.15,  
    sankey.node_whitespace = 0.03,  
    sankey.alpha = 0.5,  
    sankey.remove_axes = NULL,  
    zoom = FALSE,  
    sep = " / ",  
    print = FALSE,  
    text_factor = 1,  
    font = getOption("plot2.font"),  
    theme = getOption("plot2.theme", "theme_minimal2"),  
    background = getOption("plot2.colour_background", "white"),  
    markdown = TRUE,  
    data = NULL,  
    ...  
  )  
  
## S3 method for class 'qc_test'
```

```

plot2(
  .data,
  x = x,
  y = y,
  category = rule,
  facet = NULL,
  type = "point",
  x.title = "Index",
  y.title = "Value",
  category.title = NULL,
  title = paste0("QC Chart (", attributes(.data)$guideline, ")"),
  subtitle = NULL,
  caption = NULL,
  tag = NULL,
  title.linlength = 60,
  title.colour = getOption("plot2.colour_font_primary", "black"),
  subtitle.linlength = 60,
  subtitle.colour = getOption("plot2.colour_font_secondary", "grey35"),
  na.replace = "",
  na.rm = FALSE,
  facet.position = "top",
  facet.fill = NULL,
  facet.bold = TRUE,
  facet.italic = FALSE,
  facet.size = 10,
  facet.margin = 8,
  facet.repeat_lbls_x = TRUE,
  facet.repeat_lbls_y = TRUE,
  facet.fixed_y = NULL,
  facet.fixed_x = TRUE,
  facet.drop = FALSE,
  facet.nrow = NULL,
  facet.relative = FALSE,
  x.date_breaks = NULL,
  x.date_labels = NULL,
  x.date_remove_years = NULL,
  category.focus = NULL,
  colour = get_colour(c(Observation = "grey75", `Rule 1` = "certeblauw", `Rule 2` =
    "certegroen", `Rule 3` = "certeroze", `Rule 4` = "certegeel", `Rule 5` = "certelila",
    `Rule 6` = "certebruin", `Rule 7` = "certeblauw2", `Rule 8` = "certegroen2")),
  colour_fill = NULL,
  colour_opacity = 0,
  x.lbl_angle = 0,
  x.lbl_align = NULL,
  x.lbl_italic = FALSE,
  x.lbl_taxonomy = FALSE,
  x.remove = FALSE,
  x.position = "bottom",

```

```
x.max_items = Inf,  
x.max_txt = "(rest, x%n)",  
category.max_items = Inf,  
category.max_txt = "(rest, x%n)",  
facet.max_items = Inf,  
facet.max_txt = "(rest, x%n)",  
x.breaks = NULL,  
x.n_breaks = NULL,  
x.transform = "identity",  
x.expand = NULL,  
x.limits = NULL,  
x.labels = NULL,  
x.character = NULL,  
x.drop = FALSE,  
x.mic = FALSE,  
x.zoom = TRUE,  
y.remove = FALSE,  
y.24h = FALSE,  
y.age = FALSE,  
y.scientific = NULL,  
y.percent = FALSE,  
y.percent_break = 0.1,  
y.breaks = NULL,  
y.n_breaks = NULL,  
y.limits = NULL,  
y.labels = NULL,  
y.expand = NULL,  
y.transform = "identity",  
y.position = "left",  
y.zoom = TRUE,  
y_secondary = NULL,  
y_secondary.type = type,  
y_secondary.title = TRUE,  
y_secondary.colour = "certeroze",  
y_secondary.colour_fill = "certeroze6",  
y_secondary.scientific = NULL,  
y_secondary.percent = FALSE,  
y_secondary.labels = NULL,  
category.labels = NULL,  
category.percent = FALSE,  
category.breaks = NULL,  
category.limits = NULL,  
category.expand = 0,  
category.midpoint = NULL,  
category.transform = "identity",  
category.date_breaks = NULL,  
category.date_labels = NULL,  
category.character = NULL,
```

```
x.sort = NULL,  
category.sort = TRUE,  
facet.sort = TRUE,  
x.complete = NULL,  
category.complete = NULL,  
facet.complete = NULL,  
datalabels = TRUE,  
datalabels.round = ifelse(y.percent, 2, 1),  
datalabels.format = "%n",  
datalabels.colour = "grey25",  
datalabels.colour_fill = NULL,  
datalabels.size = (3 * text_factor),  
datalabels.angle = 0,  
datalabels.lineheight = 1,  
decimal.mark = dec_mark(),  
big.mark = big_mark(),  
summarise_function = base::sum,  
stacked = FALSE,  
stackedpercent = FALSE,  
horizontal = FALSE,  
reverse = horizontal,  
smooth = NULL,  
smooth.method = NULL,  
smooth.formula = NULL,  
smooth.se = TRUE,  
smooth.level = 0.95,  
smooth.alpha = 0.25,  
smooth.linewidth = 0.75,  
smooth.linetype = 3,  
smooth.colour = NULL,  
size = 2,  
linetype = 1,  
linewidth = NULL,  
binwidth = NULL,  
width = NULL,  
jitter_seed = NA,  
violin_scale = "count",  
legend.position = "right",  
legend.title = NULL,  
legend.reverse = FALSE,  
legend.barheight = 6,  
legend.barwidth = 1.5,  
legend.nbin = 300,  
legend.italic = FALSE,  
sankey.node_width = 0.15,  
sankey.node_whitespace = 0.03,  
sankey.alpha = 0.5,  
sankey.remove_axes = NULL,
```

```

zoom = TRUE,
sep = " / ",
print = FALSE,
text_factor = 1,
font = getOption("plot2.font"),
theme = getOption("plot2.theme", "theme_minimal2"),
background = getOption("plot2.colour_background", "white"),
markdown = TRUE,
data = NULL,
...
)

## S3 method for class 'early_warning_cluster'
plot2(
  .data,
  x = NULL,
  y = NULL,
  category = NULL,
  facet = NULL,
  type = "line",
  x.title = ifelse(attributes(.data)$period_length_months == 12, "Maand in periode",
    "Week in periode"),
  y.title = paste0("Cases (", attributes(.data)$moving_average_days,
    "-daags zwevend gemiddelde)"),
  category.title = "Periode",
  title = paste0(n_distinct(.data$clusters$cluster), " cluster",
    ifelse(n_distinct(.data$clusters$cluster) != 1, "s", "")),
  subtitle = NULL,
  caption = paste0("0.b.v. uitbijter-vrije geschiedenis (coeff = ",
    format2(attributes(.data)$remove_outliers_coefficient), ") met pct = ",
    format2(attributes(.data)$threshold_percentile)),
  tag = NULL,
  title.linlength = 60,
  title.colour = getOption("plot2.colour_font_primary", "black"),
  subtitle.linlength = 60,
  subtitle.colour = getOption("plot2.colour_font_secondary", "grey35"),
  na.replace = "",
  na.rm = FALSE,
  facet.position = "top",
  facet.fill = NULL,
  facet.bold = TRUE,
  facet.italic = FALSE,
  facet.size = 10,
  facet.margin = 8,
  facet.repeat_lbls_x = TRUE,
  facet.repeat_lbls_y = TRUE,
  facet.fixed_y = NULL,
  facet.fixed_x = TRUE,

```

```
facet.drop = FALSE,
facet.nrow = NULL,
facet.relative = FALSE,
x.date_breaks = "1 month",
x.date_labels = "mmm",
x.date_remove_years = FALSE,
category.focus = NULL,
colour = getOption("plot2.colour", "ggplot2"),
colour_fill = NULL,
colour_opacity = 0,
x.lbl_angle = 0,
x.lbl_align = NULL,
x.lbl_italic = FALSE,
x.lbl_taxonomy = FALSE,
x.remove = FALSE,
x.position = "bottom",
x.max_items = Inf,
x.max_txt = "(rest, x%n)",
category.max_items = Inf,
category.max_txt = "(rest, x%n)",
facet.max_items = Inf,
facet.max_txt = "(rest, x%n)",
x.breaks = seq(0, 9999, 14),
x.n_breaks = NULL,
x.transform = "identity",
x.expand = NULL,
x.limits = NULL,
x.labels = function(x) x/7,
x.character = NULL,
x.drop = FALSE,
x.mic = FALSE,
x.zoom = FALSE,
y.remove = FALSE,
y.24h = FALSE,
y.age = FALSE,
y.scientific = NULL,
y.percent = FALSE,
y.percent_break = 0.1,
y.breaks = NULL,
y.n_breaks = NULL,
y.limits = NULL,
y.labels = NULL,
y.expand = NULL,
y.transform = "identity",
y.position = "left",
y.zoom = FALSE,
y_secondary = NULL,
y_secondary.type = type,
```



```
y_secondary.title = TRUE,  
y_secondary.colour = "certeroze",  
y_secondary.colour_fill = "certeroze6",  
y_secondary.scientific = NULL,  
y_secondary.percent = FALSE,  
y_secondary.labels = NULL,  
category.labels = md_to_expression,  
category.percent = FALSE,  
category.breaks = NULL,  
category.limits = NULL,  
category.expand = 0,  
category.midpoint = NULL,  
category.transform = "identity",  
category.date_breaks = NULL,  
category.date_labels = NULL,  
category.character = TRUE,  
x.sort = NULL,  
category.sort = "asc",  
facet.sort = TRUE,  
x.complete = NULL,  
category.complete = NULL,  
facet.complete = NULL,  
datalabels = TRUE,  
datalabels.round = ifelse(y.percent, 2, 1),  
datalabels.format = "%n",  
datalabels.colour = "grey25",  
datalabels.colour_fill = NULL,  
datalabels.size = (2.5 * text_factor),  
datalabels.angle = 0,  
datalabels.lineheight = 1,  
decimal.mark = dec_mark(),  
big.mark = big_mark(),  
summarise_function = base::sum,  
stacked = FALSE,  
stackedpercent = FALSE,  
horizontal = FALSE,  
reverse = horizontal,  
smooth = NULL,  
smooth.method = NULL,  
smooth.formula = NULL,  
smooth.se = TRUE,  
smooth.level = 0.95,  
smooth.alpha = 0.25,  
smooth.linewidth = 0.75,  
smooth.linetype = 3,  
smooth.colour = NULL,  
size = NULL,  
linetype = 1,
```

```

linewidth = NULL,
binwidth = NULL,
width = NULL,
jitter_seed = NA,
violin_scale = "count",
legend.position = "right",
legend.title = NULL,
legend.reverse = FALSE,
legend.barheight = 6,
legend.barwidth = 1.5,
legend.nbin = 300,
legend.italic = FALSE,
sankey.node_width = 0.15,
sankey.node_whitespace = 0.03,
sankey.alpha = 0.5,
sankey.remove_axes = NULL,
zoom = FALSE,
sep = " / ",
print = FALSE,
text_factor = 1,
font = getOption("plot2.font"),
theme = getOption("plot2.theme", "theme_minimal2"),
background = getOption("plot2.colour_background", "white"),
markdown = TRUE,
data = NULL,
...
)

```

Arguments

.data, data	data to plot
x	plotting 'direction' for the x axis. This can be: <ul style="list-style-type: none"> A single variable from .data, such as <code>x = column1</code> A function to calculate over one or more variables from .data, such as <code>x = format(column1, "%Y")</code>, or <code>x = ifelse(column1 == "A", "Group A", "Other")</code> Multiple variables from .data, such as <code>x = c(column1, column2, column2)</code>, or using selection helpers such as <code>x = where(is.character)</code> or <code>x = starts_with("var_")</code> (<i>only allowed and required for Sankey plots using type = "sankey"</i>)
y	values to use for plotting along the y axis. This can be: <ul style="list-style-type: none"> A single variable from .data, such as <code>y = column1</code> Multiple variables from .data, such as <code>y = c(column1, column2)</code> or <code>y = c(name1 = column1, "name 2" = column2)</code>, or using selection helpers such as <code>y = where(is.double)</code> or <code>y = starts_with("var_")</code> (<i>multiple variables only allowed if category is not set</i>) A function to calculate over .data returning a single value, such as <code>y = n()</code> for the row count, or based on other variables such as <code>y = n_distinct(person_id)</code>, <code>y = max(column1)</code>, or <code>y = median(column2) / column3</code>

- A [function](#) to calculate over `.data` returning multiple values, such as `y = quantile(column1, c(0.25, 0.75))` or `y = range(age)` (*multiple values only allowed if category is not set*)

category, facet plotting 'direction' (category is called 'fill' and 'colour' in ggplot2). This can be:

- A single variable from `.data`, such as `category = column1`
- A [function](#) to calculate over one or more variables from `.data`, such as `category = median(column2) / column3`, or `facet = ifelse(column1 == "A", "Group A", "Other")`
- Multiple variables from `.data`, such as `facet = c(column1, column2)` (use `sep` to control the separator character)
- One or more variables from `.data` using [selection helpers](#), such as `category = where(is.double)` or `facet = starts_with("var_")`

The category can also be a date or date/time (class `Date` or `POSIXt`).

type, y_secondary.type

type of visualisation to use. This can be:

- A ggplot2 geom name or their abbreviation such as "col" and "point". All geoms are supported (including [geom_blank\(\)](#)). Full function names can be used (e.g., "geom_histogram"), but they can also be abbreviated (e.g., "h", "hist"). The following geoms can be abbreviated by their first character: area ("a"), boxplot ("b"), column ("c"), histogram ("h"), jitter ("j"), line ("l"), point ("p"), ribbon ("r"), and violin ("v").
Please note: in ggplot2, 'bars' and 'columns' are equal, while it is common to many people that 'bars' are oriented horizontally and 'columns' are oriented vertically since Microsoft Excel has been using these terms this way for many years. For this reason, `type = "bar"` will set `type = "col"` and `horizontal = TRUE`.
- One of these additional types:
 - "barpercent" (short: "bp"), which is effectively a shortcut to set `type = "col"` and `horizontal = TRUE` and `x.max_items = 10` and `x.sort = "freq-desc"` and `datalabels.format = "%n (%p)"`.
 - "linedot" (short: "ld"), which sets `type = "line"` and adds two point geoms using [add_point\(\)](#); one with large white dots and one with smaller dots using the colours set in `colour`. This is essentially equal to base R `plot(..., type = "b")` but with closed shapes.
 - "dumbbell" (short: "d"), which sets `type = "point"` and `horizontal = TRUE`, and adds a line between the points (using [geom_segment\(\)](#)). The line colour cannot be changed. This plot type is only possible when the category has two distinct values.
 - "sankey" (short: "s") creates a Sankey plots using category for the flows and requires `x` to contain multiple variables from `.data`. At default, it also sets `x.expand = c(0.05, 0.05)` and `y.limits = c(NA, NA)` and `y.expand = c(0.01, 0.01)`. The so-called 'nodes' (the 'blocks' with text) are considered the datalabels, so you can set the text size and colour of the nodes using `datalabels.size`, `datalabels.colour`,

and `datalabels.colour_fill`. The transparency of the flows can be set using `sankey.alpha`, and the width of the nodes can be set using `sankey.node_width`. Sankey plots can also be flipped using `horizontal = TRUE`.

- Left blank. In this case, the type will be determined automatically: "boxplot" if there is no x axis or if the length of unique values per x axis item is at least 3, "point" if both the y and x axes are numeric, and the `option` "plot2.default_type" otherwise (which defaults to "col"). Use `type = "blank"` or `type = "geom_blank"` to *not* add a geom.

`title`, `subtitle`, `caption`, `tag`, `x.title`, `y.title`, `category.title`,
`legend.title`, `y_secondary.title`

a title to use. This can be:

- A `character`, which supports markdown by using `md_to_expression()` internally if `markdown = TRUE` (which is the default)
- A `function` to calculate over `.data`, such as `title = paste("Based on n =", n_distinct(person_id), " individuals")` or `subtitle = paste("Total rows:", n())`, see *Examples*
- An `expression`, e.g. using `parse(text = "...")`

The `category.title` defaults to `TRUE` if the legend items are numeric.

`title.linlength`

maximum number of characters per line in the title, before a linebreak occurs

`title.colour` text colour of the title

`subtitle.linlength`

maximum number of characters per line in the subtitle, before a linebreak occurs

`subtitle.colour`

text colour of the subtitle

`na.replace` character to put in place of NA values if `na.rm = FALSE`

`na.rm` remove NA values from showing in the plot

`facet.position`, `facet.fill`, `facet.bold`, `facet.italic`, `facet.size`,
`facet.margin`, `facet.repeat_lbls_x`, `facet.repeat_lbls_y`, `facet.drop`,
`facet.nrow`, `facet.relative`

additional settings for the plotting direction facet

`facet.fixed_y` a `logical` to indicate whether all y scales should have the same limits. Defaults to `TRUE` only if the coefficient of variation (standard deviation divided by mean) of the maximum values of y is less than 25%.

`facet.fixed_x` a `logical` to indicate whether all x scales should have the same breaks. This acts like the inverse of `x.drop`.

`x.date_breaks` breaks to use when the x axis contains dates, will be determined automatically if left blank. This accepts values such as "1 day" and "2 years".

`x.date_labels` labels to use when the x axis contains dates, will be determined automatically if left blank. This accepts 'Excel' date-language such as "d mmmm yyyy".

`x.date_remove_years`

a `logical` to indicate whether the years of all x values must be unified. This will set the years of all x values to 1970 if the data does not contain a leap year, and

	to 1972 otherwise. This allows to plot years on the category while maintaining a date range on x. The default is FALSE, unless category contains all years present in x.
category.focus	a value of category that should be highlighted, meaning that all other values in category will be greyed out. This can also be a numeric value between 1 and the length of unique values of category, e.g. category.focus = 2 to focus on the second legend item.
colour	get_colour(s) to set, will be evaluated with <code>get_colour()</code> if set. This can also be one of the viridis colours with automatic implementation for any plot: "viridis", "magma", "inferno", "plasma", "cividis", "rocket", "mako" or "turbo". Also, this can also be a named vector to match values of category, see <i>Examples</i> . Using a named vector can also be used to manually sort the values of category.
colour_fill	get_colour(s) to be used for filling, will be determined automatically if left blank and will be evaluated with <code>get_colour()</code>
colour_opacity	amount of opacity for colour/colour_fill (0 = solid, 1 = transparent)
x.lbl_angle	angle to use for the x axis in a counter-clockwise direction (i.e., a value of 90 will orient the axis labels from bottom to top, a value of 270 will orient the axis labels from top to bottom)
x.lbl_align	alignment for the x axis between 0 (left aligned) and 1 (right aligned)
x.lbl_italic	logical to indicate whether the x labels should in in <i>italics</i>
x.lbl_taxonomy	a logical to transform all words of the x labels into italics that are in the <code>microorganisms</code> data set of the AMR package. This uses <code>md_to_expression()</code> internally and will set x.labels to parse expressions.
x.remove, y.remove	a logical to indicate whether the axis labels and title should be removed
x.position, y.position	position of the axis
x.max_items, category.max_items, facet.max_items	number of maximum items to use, defaults to infinite. All other values will be grouped and summarised using the <code>summarise_function</code> function. Please note: the sorting will be applied first, allowing to e.g. plot the top <i>n</i> most frequent values of the x axis by combining <code>x.sort = "freq-desc"</code> with <code>x.max_items = n</code> .
x.max_txt, category.max_txt, facet.max_txt	the text to use of values not included number of <code>*.max_items</code> . The placeholder <code>%n</code> will be replaced with the outcome of the <code>summarise_function</code> function, the placeholder <code>%p</code> will be replaced with the percentage.
x.breaks, y.breaks	a breaks function or numeric vector to use for the axis
x.n_breaks, y.n_breaks	number of breaks, only useful if x.breaks cq. y.breaks is NULL
x.transform, y.transform, category.transform	a transformation function to use, e.g. "log2". This can be: "asinh", "asn", "atanh", "boxcox", "compose", "date", "exp", "hms", "identity", "log", "log10", "log1p", "log2", "logit", "modulus", "probability", "probit", "pseudo_log", "reciprocal", "reverse", "sqrt", "time", "timespan", "yj".

<code>x.expand, y.expand</code>	<code>expansion</code> to use for the axis, can be length 1 or 2. <code>x.expand</code> defaults to 0.5 and <code>y.expand</code> defaults to 0.25, except for sf objects (then both default to 0).
<code>x.limits, y.limits</code>	limits to use for the axis, can be length 1 or 2. Use NA for the highest or lowest value in the data, e.g. <code>y.limits = c(0, NA)</code> to have the y scale start at zero.
<code>x.labels, y.labels, y_secondary.labels</code>	a labels function or character vector to use for the axis
<code>x.character</code>	a <code>logical</code> to indicate whether the values of the x axis should be forced to <code>character</code> . The default is FALSE, except for years (values between 2000 and 2050) and months (values from 1 to 12).
<code>x.drop</code>	<code>logical</code> to indicate whether factor levels should be dropped
<code>x.mic</code>	<code>logical</code> to indicate whether the x axis should be formatted as <code>MIC values</code> , by dropping all factor levels and adding missing factors of 2
<code>x.zoom, y.zoom</code>	a <code>logical</code> to indicate if the axis should be zoomed on the data, by setting <code>x.limits = c(NA, NA)</code> and <code>x.expand = 0</code> for the x axis, or <code>y.limits = c(NA, NA)</code> and <code>y.expand = 0</code> for the y axis
<code>y.24h</code>	a <code>logical</code> to indicate whether the y labels and breaks should be formatted as 24-hour sequences
<code>y.age</code>	a <code>logical</code> to indicate whether the y labels and breaks should be formatted as ages in years
<code>y.scientific, y_secondary.scientific</code>	a <code>logical</code> to indicate whether the y labels should be formatted in scientific notation. Defaults to TRUE only if the range of the y values spans more than $10e5$.
<code>y.percent, y_secondary.percent</code>	a <code>logical</code> to indicate whether the y labels should be formatted as percentages
<code>y.percent_break</code>	a value on which the y axis should have breaks
<code>y_secondary</code>	values to use for plotting along the secondary y axis. This functionality is poorly supported by ggplot2 and might give unexpected results. Setting the secondary y axis will set the colour to the axis titles.
<code>y_secondary.colour, y_secondary.colour_fill</code>	colours to set for the secondary y axis, will be evaluated with <code>get_colour()</code>
<code>category.labels, category.percent, category.breaks, category.expand, category.midpoint</code>	settings for the plotting direction category.
<code>category.limits</code>	limits to use for a numeric category, can be length 1 or 2. Use NA for the highest or lowest value in the data, e.g. <code>category.limits = c(0, NA)</code> to have the scale start at zero.
<code>category.date_breaks</code>	breaks to use when the category contains dates, will be determined automatically if left blank. This will be passed on to <code>seq.Date(by = ...)</code> and thus can be: a number, taken to be in days, or a character string containing one of "day", "week", "month", "quarter" or "year" (optionally preceded by an integer and a space, and/or followed by "s").

- `category.date_labels`
labels to use when the category contains dates, will be determined automatically if left blank. This accepts 'Excel' date-language such as "d mmm yyyy".
- `category.character`
a **logical** to indicate whether the values of the category should be forced to **character**. The default is FALSE, except for years (values between 2000 and 2050) and months (values from 1 to 12).
- `x.sort, category.sort, facet.sort`
sorting of the plotting direction, defaults to TRUE, except for continuous values on the x axis (such as dates and numbers). Applying one of the sorting methods will transform the values to an ordered **factor**, which ggplot2 uses to orient the data. Valid values are:
- A manual vector of values
 - TRUE: sort **factors** on their levels, otherwise sort ascending on alphabet, while maintaining numbers in the text (*numeric* sort)
 - FALSE: sort according to the order in the data
 - NULL: do not sort/transform at all
 - "asc" or "alpha": sort as TRUE
 - "desc": sort **factors** on their **reversed** levels, otherwise sort descending on alphabet, while maintaining numbers in the text (*numeric* sort)
 - "order" or "inorder": sort as FALSE
 - "freq" or "freq-desc": sort descending according to the frequencies of y computed by `summarise_function` (highest value first)
 - "freq-asc": sort ascending according to the frequencies of y computed by `summarise_function` (lowest value first)
- `x.complete, category.complete, facet.complete`
a value to complete the data. This makes use of `tidyr::full_seq()` and `tidyr::complete()`. For example, using `x.complete = 0` will apply `data |> complete(full_seq(x, ...), fill = list(x = 0))`. Using value TRUE (e.g., `x.complete = TRUE`) is identical to using value 0.
- `datalabels`
values to show as datalabels, see also `datalabels.format`. This can be:
- Left blank. This will default to the values of y in column-type plots, or when plotting spatial 'sf' data, the values of the first column. It will print a maximum of 25 labels unless `datalabels = TRUE`.
 - TRUE or FALSE to force or remove datalabels
 - A function to calculate over `.data`, such as `datalabels = paste(round(column1), "\n", column2)`
- `datalabels.round`
number of digits to round the datalabels, applies to both "%n" and "%p" for replacement (see `datalabels.format`)
- `datalabels.format`
format to use for datalabels. This can be a function (such as `euros()`) or a text. For the text, "%n" will be replaced by the count number, and "%p" will be replaced by the percentage of the total count. Use `datalabels.format = NULL` to *not* transform the datalabels.

datalabels.colour, datalabels.colour_fill, datalabels.size, datalabels.angle, datalabels.lineheight	settings for the datalabels
decimal.mark	decimal mark, defaults to <code>dec_mark()</code>
big.mark	thousands separator, defaults to <code>big_mark()</code>
summarise_function	a function to use if the data has to be summarised, see <i>Examples</i> . This can also be NULL, which will be converted to <code>function(x) x</code> .
stacked	a logical to indicate that values must be stacked
stackedpercent	a logical to indicate that values must be 100% stacked
horizontal	a logical to turn the plot 90 degrees using <code>coord_flip()</code> . This option also updates some theme options, so that e.g., <code>x.lbl_italic</code> will still apply to the original x axis.
reverse	a logical to reverse the <i>values</i> of category. Use <code>legend.reverse</code> to reverse the <i>legend</i> of category.
smooth	a logical to add a smooth. In histograms, this will add the density count as an overlaying line (default: TRUE). In all other cases, a smooth will be added using <code>geom_smooth()</code> (default: FALSE).
smooth.method, smooth.formula, smooth.se, smooth.level, smooth.alpha, smooth.linewidth, smooth.linetype, smooth.colour	settings for smooth
size	size of the geom. Defaults to 2 for geoms <code>point</code> and <code>jitter</code> , 5 for a dumbbell plots (using <code>type = "dumbbell"</code>), and to 0.75 otherwise.
linetype	linetype of the geom, only suitable for geoms that draw lines. Defaults to 1.
linewidth	linewidth of the geom, only suitable for geoms that draw lines. Defaults to: <ul style="list-style-type: none"> • 0.5 for geoms that have no area (such as <code>line</code>), and for geoms <code>boxplot/violin</code> • 0.1 for <code>sf</code> • 0.25 for geoms that are continuous and have fills (such as <code>area</code>) • 1.0 for dumbbell plots (using <code>type = "dumbbell"</code>) • 0.5 otherwise (such as <code>histogram</code> and <code>area</code>)
binwidth	width of bins (only useful for <code>geom = "histogram"</code>), can be specified as a numeric value or as a function that calculates width from <code>x</code> , see <code>geom_histogram()</code> . It defaults to <code>approx.diff(range(x))</code> divided by 12 to 22 based on the data.
width	width of the geom. Defaults to 0.75 for geoms <code>boxplot</code> , <code>violin</code> and <code>jitter</code> , and to 0.5 otherwise.
jitter_seed	seed (randomisation factor) to be set when using <code>type = "jitter"</code>
violin_scale	scale to be set when using <code>type = "violin"</code> , can also be set to "area"
legend.position	position of the legend, must be "top", "right", "bottom", "left" or "none" (or NA or NULL), can be abbreviated. Defaults to "right" for numeric category values and 'sf' plots, and "top" otherwise.
legend.reverse, legend.barheight, legend.barwidth, legend.nbin, legend.italic	other settings for the legend

<code>sankey.node_width</code>	width of the vertical nodes in a Sankey plot (i.e., when <code>type = "sankey"</code>)
<code>sankey.node_whitespace</code>	whitespace between the nodes
<code>sankey.alpha</code>	alpha of the flows in a Sankey plot (i.e., when <code>type = "sankey"</code>)
<code>sankey.remove_axes</code>	logical to indicate whether all axes must be removed in a Sankey plot (i.e., when <code>type = "sankey"</code>)
<code>zoom</code>	a logical to indicate if the plot should be scaled to the data, i.e., not having the x and y axes to start at 0. This will set <code>x.zoom = TRUE</code> and <code>y.zoom = TRUE</code> .
<code>sep</code>	separator character to use if multiple columns are given to either of the three directions: x, category and facet, e.g. <code>facet = c(column1, column2)</code>
<code>print</code>	a logical to indicate if the result should be printed instead of just returned
<code>text_factor</code>	text factor to use, which will apply to all texts shown in the plot
<code>font</code>	font (family) to use, can be set with <code>options(plot2.font = "...")</code> . Can be any installed system font or any of the > 1400 font names from Google Fonts . When using custom fonts in R Markdown, be sure to set the chunk option <code>fig.showtext = TRUE</code> , otherwise an informative error will be generated.
<code>theme</code>	a valid ggplot2 theme to apply, or NULL to use the default <code>theme_grey()</code> . This argument accepts themes (e.g., <code>theme_bw()</code>), functions (e.g., <code>theme_bw</code>) and characters themes (e.g., <code>"theme_bw"</code>). The default is <code>theme_minimal2()</code> , but can be set with <code>options(plot2.theme = "...")</code> .
<code>background</code>	the background colour of the entire plot, can also be NA to remove it. Will be evaluated with <code>get_colour()</code> . Only applies when theme is not NULL.
<code>markdown</code>	a logical to turn all labels and titles into plotmath expressions, by converting common markdown language using the <code>md_to_expression()</code> function (defaults to TRUE)
<code>minimum</code>	minimum number of results, defaults to 30
<code>remove_intrinsic_resistant</code>	a logical to indicate that rows with 100% resistance must be removed from the data set before plotting
<code>language</code>	language to be used for antibiotic names
<code>...</code>	any argument to give to the geom. This will override automatically-set settings for the geom.

Details

For antimicrobial resistance (AMR) data analysis, use the `bug_drug_combinations()` or the `sir_df()` function from the AMR package on a data set with antibiograms. The result can be used as input for `plot2()`.

The QC-test can be acquired with `certestats::qc_test()`. It applies the Nelson QC rules for a vector of values.

The detection of **disease clusters** can be done using `certestats::early_warning_cluster()`. Use `size` to alter the size of the triangles that indicate clusters.

Examples

```

# AMR DATA ANALYSIS -----
if (require("AMR")) {
  example_isolates[, c("mo", "AMX", "AMC", "ward")] |>
    antibiogram(mo_transform = "gramstain",
                language = "nl") |>
  plot2()
}

if (require("AMR")) {
  example_isolates[, c("mo", "AMX", "AMC", "ward")] |>
    antibiogram(mo_transform = "gramstain",
                language = "nl",
                syndromic_group = "ward") |>
  plot2()
}

# DISEASE CLUSTERS -----
cases <- data.frame(date = sample(seq(as.Date("2015-01-01"),
                                   as.Date("2022-12-31"),
                                   "1 day"),
                               size = 300),
                   patient = sample(LETTERS, size = 300, replace = TRUE))
check <- certestats::early_warning_cluster(cases,
                                           minimum_cases = 1,
                                           threshold_percentile = 0.75)

check |> plot2()

```

scale_certe

Certe Scales for Aesthetics

Description

These scales apply the colours of Certe, using the 'certestyle' package.

Usage

```

scale_colour_certe_c(
  ...,
  values = NULL,
  space = "Lab",
  na.value = "grey50",
  guide = "colourbar",
  aesthetics = "colour"
)

scale_color_certe_c(
  ...,

```

```

    values = NULL,
    space = "Lab",
    na.value = "grey50",
    guide = "colourbar",
    aesthetics = "colour"
  )

scale_fill_certe_c(
  ...,
  values = NULL,
  space = "Lab",
  na.value = "grey50",
  guide = "colourbar",
  aesthetics = "fill"
)

scale_colour_certe_d(colour = "certe")

scale_color_certe_d(colour = "certe")

scale_fill_certe_d(colour = "certe")

```

Arguments

... Arguments passed on to [continuous_scale](#)

scale_name **[Deprecated]** The name of the scale that should be used for error messages associated with this scale.

palette A palette function that when called with a numeric vector with values between 0 and 1 returns the corresponding output values (e.g., [scales::pal_area\(\)](#)).

breaks One of:

- NULL for no breaks
- [waiver\(\)](#) for the default breaks computed by the [transformation object](#)
- A numeric vector of positions
- A function that takes the limits as input and returns breaks as output (e.g., a function returned by [scales::extended_breaks\(\)](#)). Note that for position scales, limits are provided after scale expansion. Also accepts rlang [lambda](#) function notation.

minor_breaks One of:

- NULL for no minor breaks
- [waiver\(\)](#) for the default breaks (one minor break between each major break)
- A numeric vector of positions
- A function that given the limits returns a vector of minor breaks. Also accepts rlang [lambda](#) function notation. When the function has two arguments, it will be given the limits and major breaks.

n.breaks An integer guiding the number of major breaks. The algorithm may choose a slightly different number to ensure nice break labels. Will only

have an effect if `breaks = waiver()`. Use `NULL` to use the default number of breaks given by the transformation.

labels One of:

- `NULL` for no labels
- `waiver()` for the default labels computed by the transformation object
- A character vector giving labels (must be same length as `breaks`)
- An expression vector (must be the same length as `breaks`). See `?plot-math` for details.
- A function that takes the `breaks` as input and returns labels as output. Also accepts rlang `lambda` function notation.

limits One of:

- `NULL` to use the default scale range
- A numeric vector of length two providing limits of the scale. Use `NA` to refer to the existing minimum or maximum
- A function that accepts the existing (automatic) limits and returns new limits. Also accepts rlang `lambda` function notation. Note that setting limits on positional scales will **remove** data outside of the limits. If the purpose is to zoom, use the `limit` argument in the coordinate system (see `coord_cartesian()`).

rescaler A function used to scale the input values to the range `[0, 1]`. This is always `scales::rescale()`, except for diverging and `n` colour gradients (i.e., `scale_colour_gradient2()`, `scale_colour_gradientn()`). The rescaler is ignored by position scales, which always use `scales::rescale()`. Also accepts rlang `lambda` function notation.

oob One of:

- Function that handles limits outside of the scale limits (out of bounds). Also accepts rlang `lambda` function notation.
- The default (`scales::censor()`) replaces out of bounds values with `NA`.
- `scales::squish()` for squishing out of bounds values into range.
- `scales::squish_infinite()` for squishing infinite values into range.

trans **[Deprecated]** Deprecated in favour of `transform`.

call The call used to construct the scale for reporting messages.

super The super class to use for the constructed scale

values	if colours should not be evenly positioned along the gradient this vector gives the position (between 0 and 1) for each colour in the <code>colours</code> vector. See <code>rescale()</code> for a convenience function to map an arbitrary range to between 0 and 1.
space	colour space in which to calculate gradient. Must be "Lab" - other values are deprecated.
na.value	Colour to use for missing values
guide	Type of legend. Use "colourbar" for continuous colour bar, or "legend" for discrete colour legend.

aesthetics	Character string or vector of character strings listing the name(s) of the aesthetic(s) that this scale works with. This can be useful, for example, to apply colour settings to the colour and fill aesthetics at the same time, via <code>aesthetics = c("colour", "fill")</code> .
colour	a Certe colour set: "certe", "certe2", "certe3", etc. Will be evaluated with get_colour() .

Index

`add_point()`, 19
`area`, 24

`big_mark()`, 24
`boxplot`, 24
`bug_drug_combinations()`, 25

`certestats::early_warning_cluster()`, 25
`certestats::qc_test()`, 25
`character`, 20, 22, 23
`continuous_scale`, 27
`coord_cartesian()`, 28
`coord_flip()`, 24

`dec_mark()`, 24

`euros()`, 23
`expansion`, 22
`expression`, 20

`factor`, 23
`function`, 18–20, 24

`geom_blank()`, 19
`geom_histogram()`, 24
`geom_segment()`, 19
`geom_smooth()`, 24
`get_colour()`, 21, 22, 25, 29

`histogram`, 24

`jitter`, 24

`lambda`, 27, 28
`line`, 24
`logical`, 20–25

`md_to_expression()`, 20, 21, 25
MIC values, 22
microorganisms, 21

`option`, 20

`plot2()`, 2, 25
`plot2-extensions`, 2
`plot2.antibiogram(plot2-extensions)`, 2
`plot2.bug_drug_combinations(plot2-extensions)`, 2
`plot2.early_warning_cluster(plot2-extensions)`, 2
`plot2.qc_test(plot2-extensions)`, 2
`plot2.sir_df(plot2-extensions)`, 2
`plotmath`, 25
`point`, 24
`printed`, 25

`rescale()`, 28
`reversed`, 23

`scale_certe`, 26
`scale_color_certe_c(scale_certe)`, 26
`scale_color_certe_d(scale_certe)`, 26
`scale_colour_certe_c(scale_certe)`, 26
`scale_colour_certe_d(scale_certe)`, 26
`scale_colour_gradient2()`, 28
`scale_colour_gradientn()`, 28
`scale_fill_certe_c(scale_certe)`, 26
`scale_fill_certe_d(scale_certe)`, 26
`scales::: censor()`, 28
`scales::: extended_breaks()`, 27
`scales::: pal_area()`, 27
`scales::: rescale()`, 28
`scales::: squish()`, 28
`scales::: squish_infinite()`, 28
selection helpers, 18, 19
`sf`, 24
`sir_df()`, 25

`theme`, 25
`theme_grey()`, 25
`theme_minimal2()`, 25

`tidyr::complete()`, [23](#)
`tidyr::full_seq()`, [23](#)
transformation object, [27](#)
violin, [24](#)