Package: controlcharts (via r-universe)

June 8, 2026

Title Interactive Plotting for Funnel and Statistical Process Control Charts

Version 0.0.13

Description Generate fully interactive and dynamic funnel plots and statistical process control (SPC) charts. All data manipulation, calculation, and plotting is done in JavaScript, allowing for completely dynamic charts without the need for a Shiny server.

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Encoding UTF-8

Roxygen list(markdown = TRUE)

Imports htmlwidgets, htmltools, crosstalk, QuickJSR, jsutils

Suggests rsvg, zlib, knitr, rmarkdown

VignetteBuilder knitr

URL https://aus-doh-safety-and-quality.github.io/controlcharts/

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RemoteUrl https://github.com/AUS-DOH-Safety-and-Quality/controlcharts

RemoteRef main

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Contents

`funnel` *Generate interactive Funnel chart*

Description

Generate interactive Funnel chart

Usage

```
funnel(
  data,
  keys,
  numerators,
  denominators,
  tooltips,
  labels,
 aggregations = list(numerators = "sum", denominators = "sum", tooltips = "first",
    labels = "first"),
  title = NULL,
  canvas_settings = NULL,
  funnel_settings = NULL,
  outlier_settings = NULL,
  scatter_settings = NULL,
  line_settings = NULL,
  x_axis_settings = NULL,
  y_axis_settings = NULL,
  label_settings = NULL,
  tooltip_settings = NULL,
  width = NULL,
  height = NULL,
  elementId = NULL,
  return_objs = c("html_plot", "static_plot", "limits")
)
```

Arguments

`data`	A data frame containing the data for the chart.
`keys`	A vector or column name representing the categories of the chart.
`numerators`	A numeric vector or column name representing the numerators for each category.
`denominators`	A numeric vector or column name representing the denominators for each category.
`tooltips`	A vector or column name representing the tooltips for each category.
`labels`	A vector or column name representing the labels for each category.

aggregations A list of aggregation function names for each field if multiple values are provided for each key. Valid options are:

- "first": returns the first value
- "last": returns the last value
- "sum": returns the sum of values
- "mean": returns the mean of values
- "min": returns the minimum value
- "max": returns the maximum value
- "median": returns the median value
- "count": returns the count of values

title Optional title to be added to the top of the chart. It can be a character string for the title text only, or a list with the following options:

- text: Title text (default: NULL)
- font_size: Font size of the title (default: "16px")
- font_weight: Font weight of the title (default: "bold")
- font_family: Font family of the title (default: "'Arial', sans-serif")
- x: Horizontal (x) position of the title as a percentage (default: "50%")
- y: Vertical (y) position of the title in pixels (default: 5)
- text_anchor: Text anchor of the title (default: "middle")
- dominant_baseline: Dominant baseline of the title (default: "hanging")

canvas_settings
Optional list of settings for the canvas, see funnel_default_settings('canvas') for valid options.

funnel_settings
Optional list of settings for the Funnel chart, see funnel_default_settings("funnel") for valid options.

outlier_settings
Optional list of settings for outliers, see funnel_default_settings('outliers') for valid options.

scatter_settings
Optional list of settings for scatter points, see funnel_default_settings('scatter') for valid options.

line_settings Optional list of settings for lines, see funnel_default_settings('lines') for valid options.

x_axis_settings
Optional list of settings for the x-axis, see funnel_default_settings('x_axis') for valid options.

y_axis_settings
Optional list of settings for the y-axis, see funnel_default_settings('y_axis') for valid options.

label_settings Optional list of settings for labels, see funnel_default_settings('labels') for valid options.

`tooltip_settings`
: Optional list of settings for tooltips, see `funnel_default_settings('tooltips')` for valid options.

`width`
: Optional width of the chart in pixels. If NULL (default), the chart will fill the width of its container.

`height`
: Optional height of the chart in pixels. If NULL (default), the chart will fill the height of its container.

`elementId`
: Optional HTML element ID for the chart.

`return_objs`
: Character vector of object types to return. Valid values are:

- `"html_plot"`: Interactive `htmlwidgets` plot
- `"static_plot"`: Non-interactive SVG plot
- `"limits"`: Calculated control limits

Value

An object of class `controlchart` containing the interactive plot, static plot, limits data frame, raw data, and a function to save the plot.

`funnel-shiny` *Shiny bindings for wrapper*

Description

Output and render functions for using wrapper within Shiny applications and interactive Rmd documents.

Usage

```
funnelOutput(outputId, width = "100%", height = "400px")

renderfunnel(expr, env = parent.frame(), quoted = FALSE)
```

Arguments

`outputId`
: output variable to read from

`width, height`
: Must be a valid CSS unit (like `'100%'`, `'400px'`, `'auto'`) or a number, which will be coerced to a string and have `'px'` appended.

`expr`
: An expression that generates a wrapper

`env`
: The environment in which to evaluate `expr`.

`quoted`
: Is `expr` a quoted expression (with `quote()`)? This is useful if you want to save an expression in a variable.

funnel_default_settings *Get default settings for Funnel charts Retrieve the default settings for Funnel charts or a specific settings group.*

Description

Get default settings for Funnel charts Retrieve the default settings for Funnel charts or a specific settings group.

Usage

```
funnel_default_settings(group = NULL)
```

Arguments

group	Optional. A specific settings group to retrieve. If NULL, all settings groups are returned.

Value

A list of default settings for Funnel charts or the specified settings group.

Examples

```
#' # Get all default settings for Funnel charts
funnel_default_settings()
# # Get default settings for a specific group
funnel_default_settings("x_axis")
```

spc *Generate interactive SPC chart*

Description

Generate interactive SPC chart

Usage

```
spc(
  data,
  keys,
  numerators,
  denominators,
  groupings,
  xbar_sds,
```

```
  tooltips,
  labels,
 aggregations = list(numerators = "sum", denominators = "sum", groupings = "first",
    xbar_sds = "first", tooltips = "first", labels = "first"),
  title = NULL,
  canvas_settings = NULL,
  spc_settings = NULL,
  outlier_settings = NULL,
  nhs_icon_settings = NULL,
  scatter_settings = NULL,
  line_settings = NULL,
  x_axis_settings = NULL,
  y_axis_settings = NULL,
  date_settings = NULL,
  label_settings = NULL,
  tooltip_settings = NULL,
  width = NULL,
  height = NULL,
  elementId = NULL,
  return_objs = c("html_plot", "static_plot", "limits")
)
```

Arguments

`data`	A data frame containing the data for the chart.
`keys`	A vector or column name representing the categories (x-axis) of the chart.
`numerators`	A numeric vector or column name representing the numerators for each category.
`denominators`	A numeric vector or column name representing the denominators for each category.
`groupings`	A vector or column name representing the grouping for each category.
`xbar_sds`	A numeric vector or column name representing the x-bar and standard deviation values for each category.
`tooltips`	A vector or column name representing the tooltips for each category.
`labels`	A vector or column name representing the labels for each category.
`aggregations`	A list of aggregation function names for each field if multiple values are provided for each key. Valid options are: • `"first"`: returns the first value • `"last"`: returns the last value • `"sum"`: returns the sum of values • `"mean"`: returns the mean of values • `"min"`: returns the minimum value • `"max"`: returns the maximum value • `"median"`: returns the median value • `"count"`: returns the count of values

`title` Optional title to be added to the top of the chart. It can be a character string for the title text only, or a list with the following options:

- `text`: Title text (default: NULL)
- `font_size`: Font size of the title (default: "16px")
- `font_weight`: Font weight of the title (default: "bold")
- `font_family`: Font family of the title (default: "'Arial', sans-serif")
- `x`: Horizontal (x) position of the title as a percentage (default: "50%")
- `y`: Vertical (y) position of the title in pixels (default: 5)
- `text_anchor`: Text anchor of the title (default: "middle")
- `dominant_baseline`: Dominant baseline of the title (default: "hanging")

`canvas_settings` Optional list of settings for the canvas, see `spc_default_settings('canvas')` for valid options.

`spc_settings` Optional list of settings for the SPC chart, see `spc_default_settings('spc')` for valid options.

`outlier_settings` Optional list of settings for outliers, see `spc_default_settings('outliers')` for valid options.

`nhs_icon_settings` Optional list of settings for NHS icons, see `spc_default_settings('nhs_icons')` for valid options.

`scatter_settings` Optional list of settings for scatter points, see `spc_default_settings('scatter')` for valid options.

`line_settings` Optional list of settings for lines, see `spc_default_settings('lines')` for valid options.

`x_axis_settings` Optional list of settings for the x-axis, see `spc_default_settings('x_axis')` for valid options.

`y_axis_settings` Optional list of settings for the y-axis, see `spc_default_settings('y_axis')` for valid options.

`date_settings` Optional list of settings for dates, see `spc_default_settings('dates')` for valid options.

`label_settings` Optional list of settings for labels, see `spc_default_settings('labels')` for valid options.

`tooltip_settings` Optional list of settings for tooltips, see `spc_default_settings('tooltips')` for valid options.

`width` Optional width of the chart in pixels. If NULL (default), the chart will fill the width of its container.

`height` Optional height of the chart in pixels. If NULL (default), the chart will fill the height of its container.

`elementId` Optional HTML element ID for the chart.

`return_objs` Character vector of object types to return. Valid values are:

- `"html_plot"`: Interactive `htmlwidgets` plot
- `"static_plot"`: Non-interactive SVG plot
- `"limits"`: Calculated control limits

Value

An object of class `controlchart` containing the interactive plot, static plot, limits data frame, and a function to save the plot.

`spc-shiny` *Shiny bindings for wrapper*

Description

Output and render functions for using wrapper within Shiny applications and interactive Rmd documents.

Usage

```
spcOutput(outputId, width = "100%", height = "400px")

renderSpc(expr, env = parent.frame(), quoted = FALSE)
```

Arguments

`outputId`	output variable to read from
`width, height`	Must be a valid CSS unit (like `'100%'`, `'400px'`, `'auto'`) or a number, which will be coerced to a string and have `'px'` appended.
`expr`	An expression that generates a wrapper
`env`	The environment in which to evaluate `expr`.
`quoted`	Is `expr` a quoted expression (with `quote()`)? This is useful if you want to save an expression in a variable.

spc_default_settings *Get default settings for SPC charts*

Description

Retrieve the default settings for SPC charts or a specific settings group.

Usage

```
spc_default_settings(group = NULL)
```

Arguments

group	Optional. A specific settings group to retrieve. If NULL, all settings groups are returned.

Value

A list of default settings for SPC charts or the specified settings group.

Examples

```
#' # Get all default settings for SPC charts
spc_default_settings()
# # Get default settings for a specific group
spc_default_settings("x_axis")
```

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