Package ‘ggstream’

May 6, 2021

Title Create Streamplots in 'ggplot2'

Version 0.1.0

Description Make smoothed stacked area charts in 'ggplot2'. Stream plots are useful to show magnitude trends over time.

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Encoding UTF-8

LazyData true

Depends R (>= 3.6.0)

Imports ggplot2, purrr, dplyr, stats, magrittr, tidyr, forcats

RoxygenNote 7.1.1

Suggests testthat (>= 2.1.0)

NeedsCompilation no

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**blockbusters**  
*Worldwide Blockbusters 2019-1977*

**Description**


**Usage**

blockbusters

**Format**

A data frame with 430 rows and 4 variables:

- **year**  release year of blockbuster
- **genre**  genre of blockbuster title
- **box_office**  Sum of box office per genre and year, billion real dollars

**Source**


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**geom_stream**  
*geom to create stream plots*

**Description**

geom_stream

geom to create stream plots

**Usage**

geom_stream(
  mapping = NULL,  
data = NULL,  
geom = "polygon",  
position = "identity",  
show.legend = NA,  
inherit.aes = TRUE,  
na.rm = TRUE,  
bw = 0.75,  
extra_span = 0.01,  
n_grid = 1000,  
...)
method = c("new_wiggle"),
center_fun = NULL,
type = c("mirror", "ridge", "proportional"),
true_range = c("both", "min_x", "max_x", "none"),
sorting = c("none", "onset", "inside_out"),
...}

Arguments

mapping provide you own mapping. both x and y need to be numeric.
data provide you own data
geom change geom
position change position
show.legend show legend in plot
inherit.aes should the geom inherits aesthetics
na.rm remove missing values
bw bandwidth of kernel density estimation
extra_span How many extra range should be used in estimation? Percent of x range added to min and max.
n_grid number of x points that should be calculated. The higher the more smooth plot.
method Only 'new wiggle' is implemented so far.
center_fun a function that returns the y center for each possible x in range of x.
type one of 'mirror' which stacks symmetrically around the x axis, or 'ridge' which stacks from the x-axis, or 'proportional'
true_range should the true data range be used or the estimation range?
sorting Should the groups be sorted. Either the default 'none', 'onset' or 'inside_out'
...
other arguments to be passed to the geom

Value

a 'ggplot' layer

Examples

library(ggplot2)
set.seed(123)
df <- data.frame(x = rep(1:10, 3),
y = rpois(30, 2),
    group = sort(rep(c("A", "B", "C"), 10)))
ggplot(df, aes(x, y, fill = group, label = group)) +
    geom_stream()
geom_stream_label

geom_stream_label geom to create labels to a geom_stream plot

Description

geom_stream_label

geom to create labels to a geom_stream plot

Usage

geom_stream_label(
  mapping = NULL,
  data = NULL,
  geom = "text",
  position = "identity",
  show.legend = NA,
  inherit.aes = TRUE,
  na.rm = TRUE,
  bw = 0.75,
  extra_span = 0.01,
  n_grid = 100,
  method = c("new_wiggle"),
  center_fun = NULL,
  type = c("mirror", "ridge", "proportional"),
  true_range = c("both", "min_x", "max_x", "none"),
  sorting = c("none", "onset", "inside_out"),
  ...
)

Arguments

mapping provide own mapping. both x and y need to be numeric.
data provide own data
geom change geom
position change position
show.legend show legend in plot
inherit.aes should the geom inherits aesthetics
na.rm remove missing values
bw bandwidth of kernel density estimation
extra_span How many extra range should be used in estimation? Percent of x range added to min and max.
n_grid number of x points that should be calculated. The higher the more smooth plot.
method Only 'new wiggle' is implemented so far.
**geom_stream_label**

- **center_fun**: a function that returns the y center for each possible x in range of x.
- **type**: one of 'mirror' which stacks symmetrically around the x axis, or 'ridge' which stacks from the x-axis, or 'proportional'.
- **true_range**: should the true data range be used or the estimation range?
- **sorting**: Should the groups be sorted. Either the default 'none', 'onset' or 'inside_out'
- **...**: other arguments to be passed to the geom

**Value**

A 'ggplot' layer

**Examples**

```r
library(ggplot2)
set.seed(123)
df <- data.frame(x = rep(1:10, 3),
        y = rpois(30, 2),
        group = sort(rep(c("A", "B", "C"), 10)))
ggplot(df, aes(x, y, fill = group, label = group)) +
  geom_stream() +
  geom_stream_label(n_grid = 100)
```
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