Package ‘voteogram’

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Type Package
Title United States House and Senate Voting Cartogram Generators
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Description ‘ProPublica’ <https://projects.propublica.org/represent/> makes United States Congress member votes available and has developed their own unique cartogram to visually represent this data. Tools are provided to retrieve voting data, prepare voting data for plotting with ‘ggplot2’, create vote cartograms and theme them.

URL https://github.com/hrbrmstr/voteogram

BugReports https://github.com/hrbrmstr/voteogram/issues

Encoding UTF-8
License AGPL

Suggests testthat, covr, knitr, rmarkdown
Depends R (>= 3.2.0)
Imports ggplot2, dplyr, scales, jsonlite, utils
RoxygenNote 6.0.1.9000
VignetteBuilder knitr

NeedsCompilation no

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ProPublica [cph] (Cartogram SVGs used to make the plot data.frames),
GovTrack [cph] (Cartogram SVG used to make the plot data.frame)

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### fortify.pprc

*Fortify a roll_call() (pprc) object*

**Description**

Fortify a `roll_call()` (pprc) object

**Usage**

```r
## S3 method for class 'pprc'
fortify(model, data)
```

**Arguments**

- `model`: a `roll_call()` (pprc) object
- `data`: unused

### house_carto

*Produce a ProPublica- or GovTrack-style House roll call vote cartogram*

**Description**

Produce a ProPublica- or GovTrack-style House roll call vote cartogram

**Usage**

```r
house_carto(vote_tally, style = c("pp", "gt", "propublica", "govtrack"),
             pp_square = FALSE)
```
Arguments

vote_tally either a pprc object (the result of a call to roll_call()) or a data.frame of vote tallies for the house. It expects 3 columns. state_abbrev: the 2-letter U.S. state abbreviation; district: either 1 or 2 to distinguish between each representative; party: R, D or ID; position: yes, no, present, none for how the representative voted.

style either ProPublica-ish (pp or propublica) or GovTrack-ish (gt or govtrack)

pp_square if TRUE then no "state borders" will be drawn, but distinct Representative squares. If FALSE then the cartogram will be very close to the ProPublica cartograms.

Value

a ggplot2 object that you can further customize with scales, labels, etc.

Note

No "themeing" is applied to the returned ggplot2 object. You can use theme_voteogram() if you need a base theme. Also, GovTrack-style cartograms will have coord_equal() applied by default.

Examples

## not run:
# what you'd normally do
rep <- roll_call("house", 115, 1, 256)

## End(Not run)

# using a saved object
rep <- readRDS(system.file("extdata", "rep.rds", package="voteogram"))

house_carto(rep, pp_square=TRUE)

print.pprc Better default print function for roll_call() (pprc) objects

Description

Better default print function for roll_call() (pprc) objects

Usage

## S3 method for class 'pprc'
print(x, ...)

Arguments

x a roll_call() (pprc) object

... ignored
roll_call  Get Voting Record for House or Senate By Number, Session & Roll Call Number

Description

Get Voting Record for House or Senate By Number, Session & Roll Call Number

Usage

roll_call(critter = c("house", "senate"), number, session = c(1L, 2L), rcall)

Arguments

critter  one of ‘house’ or ‘senate’
number   valid congress number. ProPublica seems to have data going back to the 101st Congress, so valid values are ‘101’-present Congress number (‘115’ as of the creation date of the package).
session  a valid session number (i.e. ‘1’ or ‘2’ and valid for current year)
rcall    roll call vote number

Value

a ‘list’, one component of which is a ‘votes’ ‘data.frame’

Note

Try to cache this data if at all possible. ProPublica is a non-profit organization and this data comes from their Amazon S3 buckets. Every access in a given month ticks down the "free" counter.

Examples

## Not run:
# these make API calls so they aren't run in the examples
rep <- roll_call("house", 115, 1, 256)
sen <- roll_call("senate", 115, 1, 110)

## End(Not run)
Description

Produce a Senate cartogram

Usage

```
senate_carto(vote_tally)
```

Arguments

- `vote_tally`: either a `pprc` object (the result of a call to `roll_call()`) or a data frame of vote tallies for the senate. It expects 3 columns: `state_abbrev`: the 2-letter U.S. state abbreviation; `district`: either 1 or 2 to distinguish between each senator; `party`: R, D or ID; `position`: yes, no, present, none for how the senator voted.

Value

A `ggplot2` object that you can further customize with scales, labels, etc.

Note

No "themeing" is applied to the returned `ggplot2` object. You can use `theme_voteogram()` if you need a base theme.

Examples

```r
## Not run:
# what you'd normally do
sen <- roll_call("senate", 115, 1, 110)

## End(Not run)

# Using a saved object
sen <- readRDS(system.file("extdata", "sen.rds", package="voteogram"))

senate_carto(sen)
```
theme_voteogram  voteogram ggplot2 theme

Description

Provides a very basic theme with no background, grid, axis text or axis ticks and an easy way to turn the legend on or off.

Usage

theme_voteogram(legend = TRUE)

Arguments

legend  if 'FALSE' no legend is shown

Examples

## not run:
# what you'd normally do
sen <- roll_call("senate", 115, 1, 110)

## End(not run)

# using a saved object
sen <- readRDS(system.file("extdata","sen.rds", package="voteogram"))

senate_carto(sen) +
theme_voteogram()

voteogram  U.S. House and Senate Voting Cartogram Generators

Description

ProPublica' <https://projects.propublica.org/represent/> makes United States Congress member votes available and has developed their own unique cartogram to visually represent this data. Tools are provided to retrieve voting data, prepare voting data for plotting with 'ggplot2', create vote cartograms and theme them.

Author(s)

Bob Rudis (bob@rud.is)
Description

Manual color scales fill and color scale values (in the event you need to use them) outside the main plotting functions.

Usage

vote_carto_fill
vote_carto_color

Format

An object of class character of length 13.

Description

The following functions are imported and then re-exported from the voteogram package to enable use of the magrittr pipe operator with no additional library calls.
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