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 (>= 3.4.1), dplyr, scales, jsonlite, tibble, utils

RoxygenNote 7.2.1

VignetteBuilder knitr

NeedsCompilation no

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ProPublica [cph] (Cartogram SVGs used to make the plot dataframes),
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 'quotesingle.Var'
fortify(model, data, ...)
```

### Arguments
- **model**  
a `roll_call()` (pprc) object
- **data**  
unused
- **...**  
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, district, party, position.
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

```r
## 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

```r
## 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

```r
## 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)
```
senate_carto

Produce a Senate cartogram

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

## 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**

```r
theme_voteogram(legend = TRUE)
```

**Arguments**

- `legend`
  - if `FALSE` no legend is shown

**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()
```

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**Description**

ProPublica’ [https://projects.propublica.org/represent/](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.
An object of class character of length 13.

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**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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