

Package ‘statebins’

August 27, 2014

Type Package

Title statebins is an alternative to choropleth maps for USA States

Version 1.0

Date 2014-08-26

Author Bob Rudis (@hrbrmstr)

Maintainer Bob Rudis <bob@rudis.net>

Description statebins is an alternative to choropleth maps for USA States and is based on work by the Washington Post graphics department in their report on “The states most threatened by trade”. statebins preserves as much of the geographic placement of the states as possible but has the look and feel of a traditional heatmap. Functions are provided that allow for use of both a binned, discrete scale and continuous scale depending on what is needed for the underlying data.

URL <http://github.com/hrbrmstr/statebins>

BugReports <https://github.com/hrbrmstr/statebins/issues>

License MIT + file LICENSE

Suggests testthat

Depends R (>= 3.0.0), ggplot2, grid, scales, gridExtra, RColorBrewer

NeedsCompilation no

Repository CRAN

Date/Publication 2014-08-27 16:35:46

R topics documented:

statebins-package	2
statebins	2
statebins_continuous	3

Index	6
--------------	----------

statebins-package	<i>statebins is an alternative to choropleth maps for US States</i>
-------------------	---

Description

statebins is an alternative to choropleth maps for US States

Author(s)

Bob Rudis (@hrbrmstr)

statebins	<i>Create a new ggplot-based "statebin" chart for USA states (discrete scale)</i>
-----------	---

Description

statebins() creates "statebin" charts in the style of <http://bit.ly/statebins>

Usage

```
statebins(state_data, state_col = "state", value_col = "value",
  text_color = "black", font_size = 3, state_border_col = "white",
  breaks = 5, labels = 1:5, legend_title = "Legend",
  legend_position = "top", brewer_pal = "PuBu", plot_title = "",
  title_position = "bottom")
```

Arguments

state_data	data frame of states and values to plot
state_col	column name in state_data that has the states. no duplicates and can be names (e.g. "Maine") or abbreviations (e.g. "ME")
value_col	column name in state_data that holds the values to be plotted
text_color	default "black"
font_size	font size (default = 3)
state_border_col	default "white" - this creates the "spaces" between boxes
breaks	a single number (greater than or equal to 2) giving the number of intervals into which data values are to be cut.
labels	labels for the levels breaks
legend_title	title for the legend
legend_position	"none", "top", "left", "right" or "bottom" (defaults to "top")

Usage

```
statebins_continuous(state_data, state_col = "state", value_col = "value",
  text_color = "black", font_size = 3, state_border_col = "white",
  legend_title = "Legend", legend_position = "top", brewer_pal = "PuBu",
  plot_title = "", title_position = "bottom")
```

Arguments

state_data	data frame of states and values to plot
state_col	column name in state_data that has the states. no duplicates and can be names (e.g. "Maine") or abbreviations (e.g. "ME")
value_col	column name in state_data that holds the values to be plotted
text_color	default "black"
font_size	font size (default = 3)
state_border_col	default "white" - this creates the "spaces" between boxes
legend_title	title for the legend
legend_position	"none", "top", "left", "right" or "bottom" (defaults to "top")
brewer_pal	which named RColorBrewer palette to use (defaults to "PuBu")
plot_title	title for the plot
title_position	where to put the title ("bottom" or "top" or "" for none); if "bottom", you get back a grob vs a ggplot object

Details

This version uses a continuous scale based on [RColorBrewer](#) scales (passing in a 6 element RColorBrewer palette to [scale_fill_gradientn](#)).

The function minimally expects the caller to pass in a data frame that:

- has one column of all state abbreviations (all caps, including DC) or a column of state names (standard capitalization) named state
- has another column of values named value

Doing so will create a "statebin" chart with 5 breaks and return a [ggplot2](#) object.

You can use a different column for the state names and values by changing state_col and value_col accordingly.

To add a title, change plot_title to anything but an empty atomic string vector (i.e. "") and set title_position to "top" or "bottom". Choosing "bottom" will cause statebins to use [arrange-Grob](#) to position the title via sub and return a frame grob instead of a ggplot2 object.

Value

ggplot2 object or grob

Examples

```
## Not run:  
data(USArrests)  
USArrests$state <- rownames(USArrests)  
statebins_continuous(USArrests, value_col="Murder", text_color="black", font_size=3,  
                    legend_title = "Murder", legend_position="bottom")  
  
## End(Not run)
```

Index

[arrangeGrob](#), [3](#), [4](#)

[ggplot2](#), [3](#), [4](#)

[RColorBrewer](#), [3](#), [4](#)

[scale_fill_gradientn](#), [4](#)

[statebins](#), [2](#)

[statebins-package](#), [2](#)

[statebins_continuous](#), [3](#)