

Package: WorldMapR (via r-universe)

November 14, 2024

Type Package

Title Worldwide or Coordinates-Based Heat Maps

Version 0.1.3

Description Easily plot heat maps of the world, based on continuous or categorical data. Country labels can also be added to the map.

License GPL-3

URL <https://github.com/Luigi-Annic/WorldMapR/>

BugReports <https://github.com/Luigi-Annic/WorldMapR/issues>

Encoding UTF-8

Depends R (>= 4.3.0)

Imports ggplot2 (>= 3.4.4), dplyr (>= 1.1.4), rnatualearth (>= 1.0.1), sf (>= 1.0-14), countrycode (>= 1.5.0), utils (>= 4.3.0), ggfx (>= 1.0.1)

LazyData true

RoxygenNote 7.2.3

Suggests knitr, rmarkdown, testthat (>= 3.0.0), rnatualearthdata (>= 1.0.0)

VignetteBuilder knitr

Config/testthat/edition 3

NeedsCompilation no

Author Luigi Annicchiarico [cre, aut]

Maintainer Luigi Annicchiarico <luigi.annic@gmail.com>

Repository CRAN

Date/Publication 2024-11-13 11:10:03 UTC

Config/pak/sysreqs libfontconfig1-dev libfreetype6-dev libfribidi-dev libgdal-dev gdal-bin libgeos-dev libharfbuzz-dev libmagick++-dev gsfontr libjpeg-dev libpng-dev libtiff-dev libssl-dev libproj-dev libsqlite3-dev libudunits2-dev

Contents

geometries_data	2
testdata1	3
testdata1b	3
testdata1c	4
worldplot	4
worldplotCat	6
Index	8

geometries_data	<i>geometries_data</i>
-----------------	------------------------

Description

This function generates a data frame with information about geometries and centroid coordinates of countries. You can choose whether to keep all the countries or only a subset.

Usage

```
geometries_data(exclude.iso.na = TRUE, countries.list = NULL)
```

Arguments

`exclude.iso.na` if TRUE (default), countries that do not have a ISO 3166 code are excluded from the table.

`countries.list` List of the ISO 3166-1 alpha-2 codes of countries that are to be included. By default it is set to NULL and all countries are included.

Value

an object of class `data.frame` and `sf`.

Examples

```
geometries_data(countries.list = c("IT", "FR", "US"))
```

`testdata1`*Simulated data set 1*

Description

Data from a random simulation with continuous data.

Usage

```
data(testdata1)
```

Format

An object of class `data.frame`

Examples

```
data(testdata1)
head(testdata1)
```

`testdata1b`*Simulated data set 1b*

Description

Data from a random simulation with continuous and categorical data.

Usage

```
data(testdata1b)
```

Format

An object of class `data.frame`

Examples

```
data(testdata1b)
head(testdata1b)
```

testdata1c

Simulated data set 1c

Description

Data from a random simulation with continuous and categorical data. This data set contains information about 237 countries (countries without unique ISO 3166 code are excluded).

Usage

```
data(testdata1c)
```

Format

An object of class `data.frame`

Examples

```
data(testdata1c)
head(testdata1c)
```

worldplot

worldplot

Description

Plot a world heat map based on a continuous variable.

Usage

```
worldplot(
  data,
  ColName,
  CountryName,
  CountryNameType = "isoa2",
  rangeVal,
  longitude = c(-180, 180),
  latitude = c(-90, 90),
  crs = 4326,
  title = "",
  legendTitle = as.character(ColName),
  annote = FALSE,
  div = 1,
  palette_option = "D"
)
```

Arguments

<code>data</code>	Data set containing the list of nations and the variable that we want to plot.
<code>ColName</code>	Character variable with the name of the variable of interest.
<code>CountryName</code>	Character variable with the name of the country names column.
<code>CountryNameType</code>	Character variable with the coding for <code>CountryName</code> . One of <code>isoa2</code> (default, standing for ISO 3166-1 alpha-2 code), <code>isoa3</code> , or <code>name</code> .
<code>rangeVal</code>	Limit values that are to be defined for the map.
<code>longitude</code>	Longitude limits. Default is <code>c(-180, 180)</code> (whole world with crs as EPSG::4326).
<code>latitude</code>	Latitude limits. Default is <code>c(-90, 90)</code> (whole world with crs as EPSG::4326).
<code>crs</code>	Coordinate reference system (EPSG). By default the value is 4326, which corresponds to EPSG::4326 (WGS84)
<code>title</code>	Title of the plot. Default is no title.
<code>legendTitle</code>	Title of the legend. Default is the name of the filling variable.
<code>annotate</code>	Do you want to plot country labels (ISO 3166-1 alpha-2 code) on the map? Default is set to FALSE.
<code>div</code>	Parameter for modifying the elements dimensions in the map. Usually, it does not need to be modified. Default value is 1.
<code>palette_option</code>	Character string indicating the palette to be used. Available options range between "A" and "H".

Value

a map

Examples

```
data(testdata1b)
worldplot(data = testdata1b,
          div = 1,
          ColName = "VNum",
          CountryName = "Cshort",
          CountryNameType = "isoa2",
          rangeVal = c(0,50),
          annotate = FALSE)
```

worldplotCat	<i>worldplotCat</i>
--------------	---------------------

Description

Plot a world heat map based on a categorical variable.

Usage

```
worldplotCat(
  data,
  ColName,
  CountryName,
  CountryNameType,
  longitude = c(-180, 180),
  latitude = c(-90, 90),
  crs = 4326,
  title = "",
  legendTitle = as.character(ColName),
  Categories = levels(factor(map_df$MapFiller)),
  na.as.category = TRUE,
  annotate = FALSE,
  div = 1,
  palette_option = "D"
)
```

Arguments

data	Data set containing the list of nations and the variable that we want to plot.
ColName	Character variable with the name of the variable of interest.
CountryName	Character variable with the name of the country names column.
CountryNameType	Character variable with the coding for CountryName. One of <code>isoa2</code> (default, standing for ISO 3166-1 alpha-2 code), <code>isoa3</code> , or <code>name</code> .
longitude	Longitude limits. Default is <code>c(-180, 180)</code> (whole world with crs as EPSG::4326).
latitude	Latitude limits. Default is <code>c(-90, 90)</code> (whole world with crs as EPSG::4326).
crs	Coordinate reference system (EPSG). By default the value is 4326, which corresponds to EPSG::4326 (WGS84)
title	Title of the plot. Default is no title.
legendTitle	Title of the legend. Default is the name of the filling variable.
Categories	categories labels to be plotted in the legend.
na.as.category	Treat NA as a separate category? If 'TRUE, NA will also appear in the legend as one of the categories.

<code>annotate</code>	Do you want to plot country labels (ISO 3166-1 alpha-2 code) on the map? Default is set to FALSE.
<code>div</code>	Parameter for modifying the elements dimensions in the map. Usually, it does not need to be modified. Default value is 1.
<code>palette_option</code>	Character string indicating the palette to be used. Available options range between "A" and "H". You can also enter a string with a colour for each category

Value

a map

Examples

```
data(testdata1b)
worldplotCat(data = testdata1b,
             div = 1,
             ColName = "VCat",
             CountryName = "Cshort",
             CountryNameType = "isoa2",
             annotate = FALSE)
```

Index

* datasets

testdata1, 3

testdata1b, 3

testdata1c, 4

geometries_data, 2

testdata1, 3

testdata1b, 3

testdata1c, 4

worldplot, 4

worldplotCat, 6