Package 'mapchina'

September 29, 2020

Type Package

Title China Administrative Divisions Geospatial Shapefile Data

Version 0.1.0

Description Geospatial shapefile data of China administrative divisions to the county/district-level.

Depends R (>= 3.6)

License GPL-3

LazyData TRUE

Imports sf

Suggests dplyr, ggplot2, RColorBrewer, showtext

Collate ``data.R'' ``globals.R'' ``helpers.R''

URL https://github.com/xmc811/mapchina

BugReports https://github.com/xmc811/mapchina/issues

RoxygenNote 7.1.1

Encoding UTF-8

NeedsCompilation no

Author Mingchu Xu [aut, cre]

Maintainer Mingchu Xu <mxu.china@gmail.com>

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china *China administraive division shapefile data*

Description

A simple feature dataframe of China administrative divisions. The data was originally queried from OpenStreetMap and manually corrected for errors in QGIS

Usage

```
china
```

Format

A simple feature dataframe of China administrative divisions

Code_County Code of county-level administrative division.

Code_Perfecture Code of perfecture-level administrative division.

Code_Province Code of province-level administrative division.

Name_Province Chinese name of province-level administrative division.

Name_Perfecture Chinese name of perfecture-level administrative division.

Name_County Chinese name of county-level administrative division.

Pinyin Chinese Pinyin.

Pop_2000 Population in Year 2000.

Pop_2010 Population in Year 2010.

Pop_2017 Estimated population in Year 2017.

Pop_2018 Estimated population in Year 2018.

Area Land area in square km.

Density Population density in every square km.

Geometry vector geometry of the administrative division.

Source

<https://www.openstreetmap.org/> <http://www.mca.gov.cn/article/sj/xzqh/1980/2019/202002281436.html>

Examples

```
head(china)
```

generate_map_colors *Generate map colors by greedy coloring algorithm so that bordering features are colored differently*

Description

Generate map colors by greedy coloring algorithm so that bordering features are colored differently

Usage

```
generate_map_colors(sf)
```

Arguments

sf	An simple feature dataframe - the shapefile of investigation

Value

An integer vector - the indices of map colors

Examples

```
generate_map_colors(head(china, 10))
```

get_mex *Get the mex number of a vector*

Description

Get the mex number of a vector

Usage

```
get_mex(v, colors, idx)
```

Arguments

v	An logical vector - the intersection vector
colors	An integer vector - the color assignment vector
idx	An integer - the index

Value

An integer

Examples

```
get_mex(c(TRUE,TRUE,FALSE,FALSE,TRUE), 1:5, 4)
```

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