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
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**China administrative 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_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**


**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))`

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**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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