Package ‘mapchina’

October 13, 2022

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

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Repository CRAN

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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 prefecture-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 prefecture-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))

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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