Package ‘ozmaps’

April 2, 2020

Version 0.3.6

Title Australia Maps

Description Maps of Australian coastline and administrative regions. Data can be drawn or accessed directly as simple features objects. Includes simple functions for country or state maps of Australia and in-built data sets of administrative regions from the Australian Bureau of Statistics <https://www.abs.gov.au/>. Layers include electoral divisions and local government areas, simplified from the original sources but with sufficient detail to allow mapping of a local municipality.

License GPL-3

Encoding UTF-8

LazyData true

ByteCompile true

Depends R (>= 3.3.0)

Imports oz, tibble, sf

Suggests paletteer (>= 0.2.1), testthat, covr, knitr, rmarkdown

RoxygenNote 7.1.0

URL https://github.com/mdsumner/ozmaps

BugReports https://github.com/mdsumner/ozmaps/issues

VignetteBuilder knitr

NeedsCompilation no

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Repository CRAN

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Description

These data sets are simplifications of the formal statistical areas and regions published by the ABS in 2016.

Format

Simple features data frame with

NAME   Area name

geometry Geometry column in 'sfc' format

Details

Each layer was read from the source file with 'sf' package and attributes were removed, leaving a single 'NAME' column from the year-specific column names. The geometry has been simplified using 'rmapshaper::ms_simplify' with default arguments (0.05 detail).

Several layers are not included from the total available.

The entire nation layer 'AUST' is not included as it is the union of the State and Territory layer.
Statistical Areas Level 1 is not included as it is very large (56Mb after simplification).

The mesh blocks are not included, nor Greater Capital City Statistical Areas, Indigenous Regions, Remoteness Structure, Statistical Areas (L2, L3, L4), State Electoral Divisions. See 'ozmaps.data' for these.

Data layers

abs_ced  Commonwealth Electoral Divisions
abs_lga  Local Government Areas
abs_ste  State and Territory

See Also

The script to create the data set: data-raw/abs-inbuilt.R
Examples

```r
ozmap("abs_st")

ozmap("abs_lga", col = sample(rainbow(nrow(abs_lga), alpha = .4)))
pal <- rainbow(12, alpha = 0.6) ## boring! install paletteer for ochRe palettes

if (isTRUE(requireNamespace("paletteer", quietly = TRUE))) {
  if (utils::packageVersion("paletteer") < '1.0.0') {
    pal <- paletteer::paletteer_d(package = "ochRe", palette = "namatjira_qual")
  } else {
    pal <- paletteer::paletteer_d(palette = "ochRe::namatjira_qual")
  }
} else {
  pal <- paletteer::paletteer_d(palette = "ochRe::namatjira_qual")
}
opal <- colorRampPalette(pal)
ozmap("abs_ced", col = opal(30))
```

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**oz**  
*The oz function*

Description

The classic oz package `oz::oz()` function.

Usage

```r
oz_data(data = "states", ...)
```

Arguments

- `data` character string. "states" provides state level else country level
- `...` passed to `oz::ozRegion()`

Details

This function calls `oz::oz()` to draw a basic outline. Use `oz_data()` to obtain the data in native form.

See `oz::ozRegion()` for more details. Here data is treated as an identifier, but only "states" or any other value is accepted. If not "states", then country level is returned. Further arguments to `oz::ozRegion()` can be passed in via dots.

Value

`oz` class list of coordinates
**ozmap**

<table>
<thead>
<tr>
<th>ozmap</th>
<th>Australia map</th>
</tr>
</thead>
</table>

**Description**

Draw a map of Australia, with or without states.

**Usage**

```r
ozmap(x = "states", ..., add = FALSE)
```

**Arguments**

- `x` name of data set to use, default is `ozmap_country`
- `...` arguments passed to ...
- `add` add to existing plot, FALSE by default

**Details**

outline data is purely in longitude-latitude form, see `ozmap_data()` to obtain the data itself.

See `abs_ste` for more detailed versions from the Australian Bureau of Statistics. An example is `abs_ste` which means 'State and Territory', and so is a more detailed version of 'states'.

`ozmap()` uses the sf package to plot, but does so by only plotting the geometry rather than every column, and leaves the plot region ready for overplotting with other data.

**Value**

the data set used, in 'sf' format

**See Also**

`ozmap_data`

**Examples**

```r
ozmap()
ozmap("country", lwd = 6)
ozmap("abs_ced", add = TRUE, border = "firebrick") # commonwealth (national) electoral divisions
```
ozmap_data

Australia map data

Description
Return simple features data frames of various Australian map layers.

Usage
ozmap_data(data = "states", quiet = FALSE, ...)

Arguments
data
name of layer to return, see details
quiet
set to TRUE to suppress messages
... unused

Details
Available layers are
- states ozmap_states state and territories (low resolution)
- country ozmap_country entire country (low resolution)
- abs_ced abs_ced country level electoral divisions
- abs_lga abs_lga local government areas
- abs_ste abs_ste state and territories

Value
sf data frame with 'NAME' and 'geometry' columns

Examples

```
country_sf <- ozmap_data("country")

## can take time to print out
lga_sf <- ozmap_data("abs_lga")
lga_sf[1:6,]
```
ozmap_states  Australian map data

Description

Australian coastline and boundaries data, including states and territories

Details

In-built data set of Australian coastline and provinces (states and territories) simplified from the Australian Bureau of Statistics layer abs_steb.
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