# 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 <a href="https://www.abs.gov.au/">https://www.abs.gov.au/</a>. 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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abs-data

Australian Bureau of Statistics (ABS) map data

#### 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

# ΟZ

#### Examples

```
ozmap("abs_ste")
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")
    }
}
opal <- colorRampPalette(pal)
ozmap("abs_ced", col = opal(30))
```

οz

#### The oz function

#### Description

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

#### Usage

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

#### Description

Draw a map of Australia, with or without states.

#### Usage

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

#### Arguments

x	name of data set to use, default is ${\tt ozmap\_country}$
	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 colum, and leaves the plot region ready for overplotting with other data.

#### Value

the data set used, in 'sf' format

#### See Also

ozmap\_data

#### Examples

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

ozmap\_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")</pre>
```

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

ozmap\_states

## 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\_ste.

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