Package

June 20, 2019

Type Package

Title Loads shapefiles of the Brazilian Institute of Geography and Statistics (IBGE)

Version 0.02

Date 2019-06-13

URL https://github.com/ipeaGIT/geobr

BugReports https://github.com/ipeaGIT/geobr/issues

Description geobr provides easy access to shapefiles of the Brazilian
Institute of Geography and Statistics (IBGE) and loads into R as 'sf' objects.
It includes a wide set of geographic datasets availabe at various geographic scales and for various years.

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Encoding UTF-8

LazyData TRUE

Depends R (>= 3.4.0)

Suggests dplyr,
ggplot2,
mapview,
knitr,
rmarkdown

Imports httr,
readr,
sf

RoxygenNote 6.1.1

VignetteBuilder knitr

R topics documented:

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brazil_2010   *Spatial dataset sf with codes for Brazilian municipalities in 2010*

Description

Built-in dataset to speed up access to data of the year 2010. To access the data directly, issue the command data("brazil_2010"). Map of Brazil at scale 1:250,000, using Geodetic reference system "SIRGAS2000" and CRS(4674). More info at «ftp://geoftp.ibge.gov.br/organizacao_do_territorio/malhas_territoriais and «https://ww2.ibge.gov.br/english/geociencias/geodesia/pmrg/faq.shtm

- cod_muni: IBGE code of municipality (7-digit, numeric)

- name_muni: Title-case name of municipality (character)

- cod_micro: IBGE code of micro region (5-digit, numeric)

- name_micro: Title-case name of micro region (character)

- cod_meso: IBGE code of meso region (4-digit, numeric)

- name_meso: Title-case name of meso region (character)

- cod_state: IBGE code of State (2-digit, numeric)

- name_state: Title-case name of state (character)

- abbrev_state: UPPER CASE abbreviation of state name (2 letters, character)

- cod_region: IBGE code of region (1-digit, numeric)

- name_region: Title-case name of region (character)

- geometry: geometry info in "sfc_GEOMETRY" "sfc"

Usage

```
data(brazil_2010)
```

Format

A data frame sf with 5,565 rows and 12 columns

Details

Spatial dataset sf with codes for Brazilian municipalities, states and regions in 2010

Note

Last updated 2019-06-17

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read_census_tract	*Download shape files of census sectors of the Brazilian Population Census*

Description

Download shape files of census sectors of the Brazilian Population Census

Usage

```
read_census_tract(CODE, year = NULL, zone = "urban")
```

Arguments

CODE   One can either pass the 7-digit code of a Municipality or the 2-digit code of a
                State.If CODE="all", all census sectors of the country are loaded.

year   the year of the data download (defaults to 2010)

zone   "urban" or "rural" for separation in the year 2000

See Also

Other general area functions: read_meso_region, read_micro_region, read_municipality,
read_state, read_statistical_grid, read_weighting_area

Examples

```
## Not run:
# Exemplos
dados <- read_census_tract(year=2010)
dados <- read_census_tract(123,2010)
dados <- read_census_tract("df",2010)
dados <- read_census_tract(1302603,2010)
dados <- read_census_tract(35)
dados <- read_census_tract(14,2010)
dados <- read_census_tract()

# mapa
library(mapview)
mapview(dados)

## End(Not run)
```

read_meso_region   *Download shape files of meso region.*

Description

Download shape files of meso region.

Usage

```
read_meso_region(code_meso, year = NULL)
```

Arguments

code_meso   The 4-digit code of a meso region. If a two-digit code of a state is passed, the
                function will load all meso regions of that state. If code_meso="all", all meso
                regions of the country are loaded.

year   Year of the data (defaults to 2010)

See Also

Other general area functions: read_census_tract, read_micro_region, read_municipality,
read_state, read_statistical_grid, read_weighting_area

Examples

```
## Not run:

library(geobr)

# Read all meso regions of a state at a given year
  meso <- read_meso_region(code_meso=12, year=2017)

# Read all meso regions of the country at a given year
  meso <- read_meso_region(code_meso="all", year=2010)

## End(Not run)
```

read_micro_region   *Download shape files of micro region.*

Description

Download shape files of micro region.

Usage

```
read_micro_region(code_micro, year = NULL)
```

Arguments

code_micro	5-digit code of a micro region. If the two-digit code of a state is passed, the function will load all micro regions of that state. If code_micro="all", all micro regions of the country are loaded.
year	Year of the data (defaults to 2010)

See Also

Other general area functions: read_census_tract, read_meso_region, read_municipality, read_state, read_statistical_grid, read_weighting_area

Examples

```
## Not run:

library(geobr)

# Read all micro regions of a state at a given year
  micro <- read_micro_region(code_micro=12, year=2017)

# Read all micro regions at a given year
  micro <- read_micro_region(code_micro="all", year=2010)

## End(Not run)
```

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read_municipality   *Download sf files of Brazilian municipalities*

Description

Download sf files of Brazilian municipalities

Usage

```
read_municipality(code_muni, year = NULL)
```

Arguments

code_muni	The 7-digit code of a municipality. If the two-digit code of a state is used, the function will load all municipalities of that state. If code_muni="all", all municipalities will be loaded.
year	Year of the data (defaults to 2010)

See Also

Other general area functions: read_census_tract, read_meso_region, read_micro_region, read_state, read_statistical_grid, read_weighting_area

Examples

```
## Not run:

library(geobr)

# Read specific municipality at a given year
  mun <- read_municipality(code_muni=1200179, year=2017)

# Read all municipalities of a state at a given year
  mun <- read_municipality(code_muni=12, year=2010)


## End(Not run)
```

---

read_state   *Download shape files of Brazilian states*

Description

Download shape files of Brazilian states

Usage

```
read_state(code_state, year = NULL)
```

Arguments

code_state	The two-digit code of a state. If code_state="all", all states will be loaded.
year	Year of the data (defaults to 2010)

See Also

Other general area functions: read_census_tract, read_meso_region, read_micro_region, read_municipality, read_statistical_grid, read_weighting_area

Examples

```
## Not run:

library(geobr)

# Read specific municipality at a given year
  uf <- read_state(code_state=12, year=2017)

# Read all states at a given year
  ufs <- read_state(code_state="all", year=2010)


## End(Not run)
```

---

read_statistical_grid   *Download shape files of IBGE's statistical grid (200 x 200 meters)*

Description

Download shape files of IBGE's statistical grid (200 x 200 meters)

Usage

```
read_statistical_grid(code_grid, year = NULL)
```

Arguments

code_grid   The 7-digit code of a grid quadrant If the two-letter abbreviation of a state is
                used, the function will load all grid gradrants that intersect with that state. If
                code_grid="all", the grid of the whole country will be loaded.

year   Year of the data (defaults to 2010). The only year available thus far is 2010.

See Also

Other general area functions: read_census_tract, read_meso_region, read_micro_region,
read_municipality, read_state, read_weighting_area

Examples

```
## Not run:

library(geobr)

# Read specific municipality at a given year
  grid <- read_statistical_grid(code_grid = 45, year=2010)

# Read all municipalities of a state at a given year
  state_grid <- read_statistical_grid(code_grid = "RJ")


## End(Not run)
```

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read_weighting_area   *Download shape files of Census Weighting Areas (área de ponder-*
                       ação) of the Brazilian Population Census

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Description

Download shape files of Census Weighting Areas (área de ponderação) of the Brazilian Population
Census

Usage

```
read_weighting_area(code_weighting, year = NULL)
```

Arguments

year	the year of the data download (defaults to 2010)
CODE	One can either pass the 7-digit code of a Municipality or the 2-digit code of a State. The function will load the shape files of all weighting areas in the specified geography

See Also

Other general area functions: read_census_tract, read_meso_region, read_micro_region, read_municipality, read_state, read_statistical_grid

Examples

```
## Not run:

library(geobr)

dados <- read_weighting_area(year=2010)
dados <- read_weighting_area(3500000,2010)
dados <- read_weighting_area(123,2010)
dados <- read_weighting_area("df",2010)
dados <- read_weighting_area(1302603,2010)
dados <- read_weighting_area(35)
dados <- read_weighting_area(14,2010)
dados <- read_weighting_area("all")

# map it
library(mapview)
mapview(dados)

## End(Not run)
```

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