Package 'flightsbr'

October 22, 2024

Type Package

Title Download Flight and Airport Data from Brazil

Version 1.0.0

Description Download flight and airport data from Brazil's Civil Aviation Agency
(ANAC) <https://www.gov.br/anac/pt-br>. The data covers detailed
information on aircraft, airports, and airport operations registered
with ANAC. It also includes data on airfares, all international
flights to and from Brazil, and domestic flights within the country.

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

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

Depends R (>= 2.10)

Imports archive, curl (>= 5.0.0), data.table (>= 1.14.0), fs, parzer,
pbapply, janitor, rvest

Suggests dplyr, ggplot2 (>= 3.3.1), rmarkdown (>= 2.6), knitr,
testthat

VignetteBuilder knitr

Encoding UTF-8

NeedsCompilation yes

RoxygenNote 7.3.2

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Repository CRAN

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flightsbr   *flightsbr: Download Flight and Airport Data from Brazil*

Description

Download flight and airport data from Brazil's Civil Aviation Agency (ANAC) `https://www.gov.br/anac/pt-br`. The data includes detailed information on all aircrafts, aerodromes, airports, and airport movements registered in ANAC, and on every international flight to and from Brazil, as well as domestic flights within the country.

Usage

Please check the vignettes and data documentation on the website.

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- Ipea - Institute for Applied Economic Research [copyright holder, funder]

See Also

Useful links:

- `https://github.com/ipeaGIT/flightsbr`

- Report bugs at `https://github.com/ipeaGIT/flightsbr/issues`

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latest_airfares_date   *Check the date of the latest airfare data available*

Description

Check the date of the latest airfare data available

Usage

```
latest_airfares_date(dom = TRUE)
```

Arguments

dom   Logical. Defaults to TRUE download airfares of domestic flights. If FALSE, the
               function downloads airfares of international flights.

Value

A numeric date in the format yyyymm.

See Also

Other support function: [latest_flights_date](#)()

Examples

```
## Not run:  if (interactive()) {

latest_date <- latest_airfares_date()

}
## End(Not run)
```

---

latest_flights_date   *Check the date of the latest flight data available*

Description

Check the date of the latest flight data available

Usage

```
latest_flights_date()
```

Value

A numeric date in the format yyyymm.

See Also

Other support function: latest_airfares_date()

Examples

```
## Not run:  if (interactive()) {

latest_date <- latest_flights_date()

}
## End(Not run)
```

---

read_aircrafts   *Download aircrafts data from Brazil*

Description

Download data of all aircrafts registered in the Brazilian Aeronautical Registry (Registro Aeronáu-
tico Brasileiro - RAB), organized by the Brazilian Civil Aviation Agency (ANAC). A description
of all variables included in the data is available at https://www.gov.br/anac/pt-br/sistemas/
rab.

Usage

```
read_aircrafts(date = 202001, showProgress = TRUE, cache = TRUE)
```

Arguments

date	Numeric. Date of the data in the format yyyymm. Defaults to 202001. To down-load the data for all months in a year, the user can pass a 4-digit year input yyyy. The function also accepts a vector of dates, like c(202201, 202301) or c(2022, 2024).
showProgress	Logical. Defaults to TRUE display progress.
cache	Logical. Whether the function should read cached data downloaded previously. Defaults to TRUE. If FALSE, the function will always download the data and over-write cached data.

Value

A "data.table" "data.frame" object. All columns are returned with class of type "character".

See Also

Other download flight data: read_flights()

Examples

```
## Not run:  if (interactive()) {
# Read aircrafts data
aircrafts <- read_aircrafts(date = 202001,
                            showProgress = TRUE)


}
## End(Not run)
```

---

read_airfares   *Download data on airfares flights in Brazil*

Description

Download data on air fares of domestic and international flights in Brazil. The data is collected by
Brazil's Civil Aviation Agency (ANAC). A description of all variables included in the data for do-
mestic airfares is available at https://www.anac.gov.br/acesso-a-informacao/dados-abertos/
areas-de-atuacao/voos-e-operacoes-aereas/tarifas-aereas-domesticas/46-tarifas-aereas-domesticas.
A description of all variables included in the data for international airfares is available at https://
www.gov.br/anac/pt-br/assuntos/dados-e-estatisticas/microdados-de-tarifas-aereas-comercializadas.

Usage

```
read_airfares(
  date = 202001,
  domestic = TRUE,
  showProgress = TRUE,
  select = NULL,
  cache = TRUE
)
```

Arguments

date	Numeric. Date of the data in the format yyyymm. Defaults to 202001. To down-load the data for all months in a year, the user can pass a 4-digit year input yyyy. The function also accepts a vector of dates, like c(202201, 202301) or c(2022, 2024).
domestic	Logical. Defaults to TRUE download airfares of domestic flights. If FALSE, the function downloads airfares of international flights.
showProgress	Logical. Defaults to TRUE display progress.
select	A vector of column names or positions to keep. The rest of the columns are not read. The order that the columns passed determines the order of the columns in the result.
cache	Logical. Whether the function should read cached data downloaded previously. Defaults to TRUE. If FALSE, the function will always download the data and over-write cached data.

Value

A "data.table" "data.frame" object. All columns are returned with class of type "character".

Examples

```
## Not run:  if (interactive()) {
# Read air fare data
af_201506 <- read_airfares(date = 201506, domestic = TRUE)

af_2015 <- read_airfares(date = 2015, domestic = TRUE)
}
## End(Not run)
```

---

read_airports   *Download airports data from Brazil*

Description

Download data of all airports and aerodromes registered in Brazil's Civil Aviation Agency (ANAC).
Data source: https://www.gov.br/anac/pt-br/acesso-a-informacao/dados-abertos/areas-de-atuacao/
aerodromos. The data dictionary for public airports can be found at https://www.anac.gov.br/
acesso-a-informacao/dados-abertos/areas-de-atuacao/aerodromos/lista-de-aerodromos-publicos-v2/
70-lista-de-aerodromos-publicos-v2. The data dictionary for private airports can be found at
https://www.anac.gov.br/acesso-a-informacao/dados-abertos/areas-de-atuacao/aerodromos/
lista-de-aerodromos-privados-v2.

Usage

```
read_airports(type = "all", showProgress = TRUE, cache = TRUE)
```

Arguments

type	String. Whether the function should download data on all, public or private airports. Defaults to all, returning fewer columns. Downloading public and private airports separately will return the full set of columns available for each of those data sets.
showProgress	Logical. Defaults to TRUE display progress.
cache	Logical. Whether the function should read cached data downloaded previously. Defaults to TRUE. If FALSE, the function will always download the data and over-write cached data.

Value

A "data.table" "data.frame" object.

Examples

```
## Not run:  if (interactive()) {
# Read airports data
all_airports <- read_airports(type = 'all')

public_airports <- read_airports(type = 'public')

private_airports <- read_airports(type = 'private')
}
## End(Not run)
```

---

read_airport_movements

Download airport movement data from Brazil

Description

Download airport movements data from Brazil's Civil Aviation Agency (ANAC). The data covers all passenger, aircraft, cargo and mail movement data from airports regulated by ANAC. Data only available from Jan 2019 onwards. A description of all variables included in the data is available at https://www.anac.gov.br/acesso-a-informacao/dados-abertos/areas-de-atuacao/operador-aeroportuario/dados-de-movimentacao-aeroportuaria/60-dados-de-movimentacao-aeroportuaria.

Usage

```
read_airport_movements(date = 202001, showProgress = TRUE, cache = TRUE)
```

Arguments

date
: Numeric. Date of the data in the format yyyymm. Defaults to 202001. To download the data for all months in a year, the user can pass a 4-digit year input yyyy. The function also accepts a vector of dates, like c(202201, 202301) or c(2022, 2024).

showProgress
: Logical. Defaults to TRUE display progress.

cache
: Logical. Whether the function should read cached data downloaded previously. Defaults to TRUE. If FALSE, the function will always download the data and over-write cached data.

Value

A "data.table" "data.frame" object. All columns are returned with class of type "character".

Examples

```
## Not run:  if (interactive()) {
# Read airport movement data
amov202006 <- read_airport_movements(date = 202006)

amov2020 <- read_airport_movements(date = 2020)
}
## End(Not run)
```

---

read_flights   *Download flight data from Brazil*

Description

Download flight data from Brazil's Civil Aviation Agency (ANAC). The data includes detailed information on every international flight to and from Brazil, as well as domestic flights within the country. The data include flight-level information of airports of origin and destination, flight duration, aircraft type, payload, and the number of passengers, and several other variables. A description of all variables included in the data is available at https://www.gov.br/anac/pt-br/assuntos/regulados/empresas-aereas/Instrucoes-para-a-elaboracao-e-apresentacao-das-demonstracoes-contabeis/descricao-de-variaveis.

Usage

```
read_flights(
  date = 202001,
  type = "basica",
  showProgress = TRUE,
  select = NULL,
  cache = TRUE
)
```

Arguments

date	Numeric. Date of the data in the format yyyymm. Defaults to 202001. To download the data for all months in a year, the user can pass a 4-digit year input yyyy. The parameter also accepts a vector of dates such as c(202001, 202006, 202012).
type	String. Whether the data set should be of the type basica (flight stage, the default) or combinada (On flight origin and destination - OFOD).
showProgress	Logical. Defaults to TRUE display progress.
select	A vector of column names or positions to keep. The rest of the columns are not read. The order that the columns passed determines the order of the columns in the result.
cache	Logical. Whether the function should read cached data downloaded previously. Defaults to TRUE. If FALSE, the function will always download the data and overwrite cached data.

Value

A "data.table" "data.frame" object. All columns are returned with class of type "character".

See Also

Other download flight data: read_aircrafts()

Examples

```
## Not run:  if (interactive()) {
# Read flights data
f201506 <- read_flights(date = 201506)

f2015 <- read_flights(date = 2015)
}
## End(Not run)
```

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