# Package: ColombiAPI (via r-universe)

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Type Package

Title Access Colombia's Public Data via API-Colombia

Version 0.1.0

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Description ColombiAPI provides a seamless interface to access diverse public data about Colombia through the API Colombia, a RESTful API. The package enables users to explore various aspects of Colombia, including general information, geography, and cultural insights. It includes five API-related functions to retrieve data on topics such as Colombia's general information, airports, departments, regions, and presidents. Additionally, ColombiAPI offers a built-in function to view the datasets available within the package. The package also includes curated datasets covering Bogota air stations, business and holiday dates, public schools, Colombian coffee exports, cannabis licenses, Medellin rainfall, and malls in Bogota, making it a comprehensive tool for exploring Colombia's data.

License GPL-3

URL https://github.com/lightbluetitan/colombiapi

BugReports https://github.com/lightbluetitan/colombiapi/issues

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Imports httr, jsonlite, dplyr, magrittr

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Bogota\_airstations\_df Bogota Air Stations Coordinates

# **Description**

This dataset, Bogota\_airstations\_df, is a data frame containing the coordinates of air quality measurement stations in Bogota, Colombia.

# Usage

data(Bogota\_airstations\_df)

## **Format**

A data frame with 10 observations and 3 variables:

**ESTACION** Character string representing the name of the station.

- **X** Numeric value representing the X coordinate of the station.
- Y Numeric value representing the Y coordinate of the station.

#### **Details**

The dataset name has been kept as Bogota\_airstations\_df to avoid confusion with other datasets in the R ecosystem. This naming convention helps distinguish this dataset as part of the ColombiAPI package and assists users in identifying its specific characteristics. The suffix '\_df' indicates that the dataset is a data frame. The original content has not been modified in any way.

#### **Source**

Originally taken from the SpatFD package version 0.0.1. Data provided by the Secretaria de Ambiente de Bogotá: Monitor network of air quality of Bogota http://rmcab.ambientebogota.gov.co

Bogota\_business\_Date Bogota Business Dates

## **Description**

This dataset, Bogota\_business\_Date, is a Date object containing the business dates for Bogota, Colombia.

# Usage

data(Bogota\_business\_Date)

## **Format**

A Date object with 27,173 observations:

**Bogota\_business\_Date** Date object representing the business dates in Bogota, Colombia, ranging between "1990-01-02" and "2100-12-31".

## **Details**

The dataset name has been kept as Bogota\_business\_Date to avoid confusion with other datasets in the R ecosystem. This naming convention helps distinguish this dataset as part of the ColombiAPI package and assists users in identifying its specific characteristics. The suffix '\_Date' indicates that the dataset is an object of the Date class. The original content has not been modified in any way.

# Source

Originally taken from the quantdates package version 2.0.4.

Bogota\_holidays\_Date Bogota Holidays Dates

## **Description**

This dataset, Bogota\_holidays\_Date, is a Date object containing the official holidays of Bogota, Colombia.

# Usage

```
data(Bogota_holidays_Date)
```

## **Format**

A Date object with 1787 observations:

**Bogota\_holidays\_Date** Date object representing the official holidays in Bogota, Colombia, ranging between "1990-01-01" and "2100-12-08".

## **Details**

The dataset name has been kept as Bogota\_holidays\_Date to avoid confusion with other datasets in the R ecosystem. This naming convention helps distinguish this dataset as part of the ColombiAPI package and assists users in identifying its specific characteristics. The suffix '\_Date' indicates that the dataset is an object of the Date class. The original content has not been modified in any way.

#### **Source**

Originally taken from the quantdates package version 2.0.4. Holidays were created using the bizdays package.

Bogota\_malls\_tbl\_df Bogota Malls Information

## **Description**

This dataset, Bogota\_malls\_tbl\_df, is a tibble containing detailed information about shopping malls located in Bogota, Colombia. It includes the mall names, physical addresses, web URLs, geographical coordinates, and the locality to which each mall belongs.

# Usage

```
data(Bogota_malls_tbl_df)
```

#### **Format**

A tibble with 42 observations and 6 variables:

**NAME** Character string representing the name of the shopping mall.

ADDRESS Character string representing the physical address of the mall.

URL Character string representing the web URL of the mall.

**LATITUD** Numeric value representing the latitude of the mall.

**LONGITUD** Numeric value representing the longitude of the mall.

**LOCALIDAD** Character string representing the locality the mall belongs to.

#### **Details**

The dataset name has been kept as Bogota\_malls\_tbl\_df to avoid confusion with other datasets in the R ecosystem. This naming convention helps distinguish this dataset as part of the ColombiAPI package and assists users in identifying its specific characteristics. The suffix 'tbl\_df' indicates that the dataset is a tibble. The original content has not been modified in any way.

#### **Source**

Originally taken from Kaggle, url: https://www.kaggle.com/datasets/erik172/bogota-shopping-malls.

Cannabis\_Licenses\_tbl\_df

Cannabis Licenses Information

## Description

This dataset, Cannabis\_Licenses\_tbl\_df, is a tibble containing detailed information about cannabis-related licenses issued by the Ministry of Justice and Law in Colombia. It includes data on the number of received, denied, archived, modified, and granted licenses for cannabis cultivation, as well as the licenses issued for both psychoactive and non-psychoactive cannabis plants.

# Usage

```
data(Cannabis_Licenses_tbl_df)
```

## **Format**

A tibble with 92 observations and 10 variables:

Mes Character string representing the month in which the data was recorded.

**Solicitudes de licencias recibidas** Numeric value representing the number of license requests received.

Solicitudes Negadas Numeric value representing the number of denied license requests.

Solicitudes Archivadas Numeric value representing the number of archived license requests.

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Solicitudes Modificadas Numeric value representing the number of modified license requests.

Licencias Otorgadas Numeric value representing the number of licenses granted.

**Licencias expedidas de semillas para siembra** Numeric value representing the number of seed cultivation licenses issued.

**Licencias expedidas de plantas cannabis psicoactivo** Numeric value representing the number of psychoactive cannabis plant cultivation licenses issued.

**Licencias expedidas de plantas cannabis no psicoactivo** Numeric value representing the number of non-psychoactive cannabis plant cultivation licenses issued.

**Año** Numeric value representing the year in which the data was recorded.

#### **Details**

The dataset name has been kept as Cannabis\_Licenses\_tbl\_df to avoid confusion with other datasets in the R ecosystem. This naming convention helps distinguish this dataset as part of the ColombiAPI package and assists users in identifying its specific characteristics. The suffix 'tbl\_df' indicates that the dataset is a tibble. The original content has not been modified in any way.

#### **Source**

Originally taken from Kaggle, url: https://www.kaggle.com/datasets/josetroyatoscano/licencias-cannabis-colombia-full-dataset-feb-2024

ColombiAPI

ColombiAPI: Access Colombia's Public Data via API-Colombia

## Description

This package provides access to information about Colombia through the API-Colombia, a public RESTful API that enables users to obtain a variety of public information about Colombia, including general information, geography, and cultural insights.

#### **Details**

ColombiAPI: Access Colombia's Public Data via API-Colombia

Access Colombia's Public Data via API-Colombia.

## Author(s)

Maintainer: Renzo Caceres Rossi <arenzocaceresrossi@gmail.com>

## See Also

Useful links:

• https://github.com/lightbluetitan/colombiapi

Colombia\_coffee\_tbl\_df

Colombian Coffee 2016 Export/Import

#### **Description**

This dataset, Colombia\_coffee\_tbl\_df, is a tibble containing detailed information about Colombian coffee exports and imports in 2016. It includes data on various factors such as trade flow, commodity codes, trade value, weight in kilograms, and information about the countries involved in the trade. The dataset is sourced from Kaggle and provides a comprehensive analysis of the foreign trade of Colombian coffee.

## Usage

```
data(Colombia_coffee_tbl_df)
```

#### **Format**

A tibble with 106 observations and 35 variables:

Classification Character string representing the classification of the coffee product.

**Year** Numeric value representing the year of the data entry.

**Period** Numeric value representing the period of the trade.

**Period Desc.** Numeric value representing the period description.

Aggregate Level Numeric value representing the aggregate level of the trade data.

Is Leaf Code Numeric value indicating whether the trade involves a leaf product.

**Trade Flow Code** Numeric value representing the trade flow code.

**Trade Flow** Character string representing the flow of the trade, either export or import.

**Reporter Code** Numeric value representing the code of the reporting country.

**Reporter** Character string representing the reporting country.

Reporter ISO Character string representing the ISO code of the reporting country.

**Partner Code** Numeric value representing the code of the partner country.

**Partner** Character string representing the partner country.

**Partner ISO** Character string representing the ISO code of the partner country.

2nd Partner Code Logical value indicating if there is a second partner country involved in the trade.

**2nd Partner** Logical value indicating if there is a second partner country.

2nd Partner ISO Logical value indicating if there is a second partner country's ISO code.

Customs Proc. Code Logical value representing the customs procedure code.

**Customs** Logical value indicating whether customs procedure information is available.

**Mode of Transport Code** Logical value representing the mode of transport code.

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Mode of Transport Logical value indicating the mode of transport used in the trade.

**Commodity Code** Character string representing the commodity code for coffee.

**Commodity** Character string representing the commodity (coffee).

Qty Unit Code Numeric value representing the quantity unit code.

**Qty Unit** Character string representing the unit of quantity for the trade.

**Qty** Logical value representing the quantity of coffee in the trade.

Alt Qty Unit Code Logical value representing an alternative quantity unit code.

Alt Qty Unit Numeric value representing an alternative quantity unit for the trade.

Alt Qty Logical value representing an alternative quantity for the trade.

Netweight (kg) Numeric value representing the net weight of the coffee in kilograms.

Gross weight (kg) Logical value indicating the gross weight of the coffee in kilograms.

Trade Value (US) Numeric value representing the trade value in US dollars.

CIF Trade Value (US) Logical value representing the CIF trade value in US dollars.

FOB Trade Value (US) Logical value representing the FOB trade value in US dollars.

Flag Numeric value representing a flag for the dataset entry.

#### **Details**

The dataset name has been kept as Colombia\_coffee\_tbl\_df to avoid confusion with other datasets in the R ecosystem. This naming convention helps distinguish this dataset as part of the ColombiAPI package and assists users in identifying its specific characteristics. The suffix 'tbl\_df' indicates that the dataset is a tibble. The original content has not been modified in any way.

## Source

Originally taken from Kaggle, url: https://www.kaggle.com/datasets/carlosbeltranv/colombian-coffee-2016

get\_airports\_list

Get the List of Airports in Colombia

## **Description**

This function retrieves a list of airports in Colombia from the public API "https://api-colombia.com/api/v1/Airport" and returns a data frame containing selected information about each airport, ordered by airport name in alphabetical order.

## Usage

get\_airports\_list()

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#### **Details**

This function sends a GET request to the API, processes the JSON response, and converts it into a structured data frame. The data is filtered and formatted to include only relevant columns, and it is ordered by the name column in alphabetical order (A to Z).

If the API returns a status code of 400, the function issues a warning message to inform the user of the error. Any other unexpected API response is not explicitly handled and may cause the function to fail.

#### Value

A data frame with the following columns:

- id: The unique identifier of the airport.
- name: The name of the airport.
- iataCode: The IATA code of the airport (if available).
- oaciCode: The OACI code of the airport (if available).
- type: The type of airport (e.g., commercial, private).
- longitude: The geographical longitude of the airport.
- latitude: The geographical latitude of the airport.

#### Note

Ensure you have an active internet connection to access the API. If the API structure changes or the API becomes unavailable, the function may need modifications.

This function relies on the following packages: httr, jsonlite, dplyr, and magrittr. The %>% operator, used for chaining commands, is provided by the magrittr package.

# See Also

```
GET, fromJSON, select, arrange
```

```
## Not run:
# Retrieve the list of airports
airports <- get_airports_list()

# Print the data frame
print(airports)

# View the data in a spreadsheet-like interface
View(airports)

# Select airports located in a specific city (e.g., Bogotá)
bogota_airports <- airports %>%
    filter(grepl("Bogotá", name))
print(bogota_airports)
```

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```
## End(Not run)
```

get\_Colombia\_info

Get Information About Colombia

## **Description**

This function makes an API call https://api-colombia.com/api/v1/Country/Colombia to retrieve information about Colombia, such as its name, surface area, population, time zone, currency, and region. It processes the API response and returns the data in a structured data.frame.

## Usage

```
get_Colombia_info()
```

#### **Details**

The function sends a GET request to the API at https://api-colombia.com/api/v1/Country/Colombia. If the API returns a successful response (status code 200), the data is parsed and returned. If the response is unsuccessful or the structure is not as expected, the function will return NULL.

## Value

A 'data.frame' with the following columns:

- name: Name of the country.
- surface: The surface area of the country in square kilometers.
- population: The population of the country.
- timeZone: The time zone of the country.
- currency: The currency used in the country.
- currencySymbol: The currency symbol.
- region: The region of the country in the world.

## Note

Ensure you have an active internet connection to access the API. If the API structure changes or the API becomes unavailable, the function may need modifications.

This function relies on the following packages: httr and jsonlite. These packages are used for making HTTP requests and processing JSON responses, respectively.

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## **Examples**

# Description

This function retrieves a list of departments in Colombia from the public API "https://api-colombia.com/api/v1/Department" and returns a data frame containing selected information about each department, ordered by department name in alphabetical order.

## Usage

```
get_departments_list()
```

#### Details

This function sends a GET request to the API, processes the JSON response, and converts it into a structured data frame. The data is filtered and formatted to include only relevant columns (id, name, surface, population), and it is ordered by the name column in alphabetical order (A to Z).

If the API returns a status code other than 200, the function issues a message with the status code received and returns NULL.

# Value

A data frame with the following columns:

- id: The unique identifier of the department.
- name: The name of the department.
- surface: The surface area of the department in square kilometers.
- population: The population of the department.

#### Note

Ensure you have an active internet connection to access the API. If the API structure changes or the API becomes unavailable, the function may need modifications.

This function relies on the following packages: httr, jsonlite, dplyr, and magrittr. The %>% operator, used for chaining commands, is provided by the magrittr package.

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## See Also

```
GET, fromJSON, select, arrange
```

## **Examples**

```
## Not run:
# Retrieve the list of departments
departments <- get_departments_list()

# Print the data frame
print(departments)

# View the data in a spreadsheet-like interface
View(departments)

# Select departments with a specific population range
large_departments <- departments %>%
    filter(population > 1000000)
print(large_departments)

## End(Not run)
```

get\_presidents\_list Get the List of Presidents of Colombia

# **Description**

This function retrieves the list of presidents of Colombia from the public API "https://api-colombia.com/api/v1/President" and returns a data frame containing selected information about each president, ordered by their start period date in descending order (most recent first).

# Usage

```
get_presidents_list()
```

#### **Details**

This function sends a GET request to the API, processes the JSON response, and converts it into a structured data frame. The data is filtered and formatted to include only relevant columns, and it is ordered by the startPeriodDate column in descending order.

If the API returns a status code of 400, the function issues a warning message to inform the user of the error. Any other unexpected API response is not explicitly handled and may cause the function to fail.

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## Value

A data frame with the following columns:

- id: The unique identifier of the president.
- name: The first name of the president.
- lastName: The last name of the president.
- startPeriodDate: The start date of the presidential period (in ISO 8601 format).
- endPeriodDate: The end date of the presidential period (in ISO 8601 format).
- politicalParty: The political party of the president.

# Note

Ensure you have an active internet connection to access the API. If the API structure changes or the API becomes unavailable, the function may need modifications.

This function relies on the following packages: httr, jsonlite, dplyr, and magrittr. The %>% operator, used for chaining commands, is provided by the magrittr package.

#### See Also

```
GET, fromJSON, select, arrange
```

```
## Not run:
# Retrieve the list of presidents
presidents <- get_president_list()

# Print the data frame
print(presidents)

# View the data in a spreadsheet-like interface
View(presidents)

# Select presidents from a specific political party
library(dplyr)
liberal_presidents <- presidents %>%
    filter(politicalParty == "Liberal")
print(liberal_presidents)

## End(Not run)
```

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get\_regions\_list

Get the List of Regions in Colombia

#### **Description**

This function retrieves a list of regions in Colombia from the public API "https://api-colombia.com/api/v1/Region" and returns a data frame containing selected information about each region, ordered by region name in alphabetical order.

## Usage

```
get_regions_list()
```

## **Details**

This function sends a GET request to the API, processes the JSON response, and converts it into a structured data frame. The data is filtered and formatted to include only relevant columns (id and name), and it is ordered by the name column in alphabetical order (A to Z).

If the API returns a status code other than 200, the function issues a message with the status code received and returns NULL.

#### Value

A data frame with the following columns:

- id: The unique identifier of the region.
- name: The name of the region.

# Note

Ensure you have an active internet connection to access the API. If the API structure changes or the API becomes unavailable, the function may need modifications.

This function relies on the following packages: httr, jsonlite, dplyr, and magrittr. The %>% operator, used for chaining commands, is provided by the magrittr package.

#### See Also

```
GET, fromJSON, select, arrange
```

```
## Not run:
# Retrieve the list of regions
regions <- get_regions_list()
# Print the data frame
print(regions)</pre>
```

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```
# View the data in a spreadsheet-like interface
View(regions)

# Select regions with specific characteristics (e.g., starting with "Atlántico")
atlantic_regions <- regions %>%
  filter(grepl("^Atlántico", name))
print(atlantic_regions)

## End(Not run)
```

#### **Description**

This dataset, Medellin\_rain\_tbl\_df, is a tibble containing information about rainfall measurements in Medellin, Colombia, including station identifiers, geographical coordinates, date of observation, and rainfall values.

#### Usage

```
data(Medellin_rain_tbl_df)
```

#### Format

A tibble with 185,705 observations and 8 variables:

station\_id Numeric identifier for the rain observation station.

**lat** Numeric value representing the latitude of the station.

lon Numeric value representing the longitude of the station.

date Date of the rainfall observation.

year Numeric year of the observation.

month Numeric month of the observation.

day Numeric day of the observation.

rainfall Numeric value representing the amount of rainfall in millimeters.

#### **Details**

The dataset name has been kept as Medellin\_rain\_tbl\_df to avoid confusion with other datasets in the R ecosystem. This naming convention helps distinguish this dataset as part of the ColombiAPI package and assists users in identifying its specific characteristics. The suffix 'tbl\_df' indicates that the dataset is a tibble. The original content has not been modified in any way.

## Source

Originally taken from the tidychangepoint package version 0.0.1.

Tulua\_Public\_Schools\_tbl\_df

Tulua Public Schools Information

## **Description**

This dataset, Tulua\_Public\_Schools\_tbl\_df, is a tibble containing detailed information about public schools located in the municipality of Tulua, Valle del Cauca, Colombia. It includes the name, location, contact information, and the geographical coordinates of each institution, as well as specific details about each school and its facilities.

# Usage

data(Tulua\_Public\_Schools\_tbl\_df)

#### **Format**

A tibble with 105 observations and 8 variables:

**COD\_DANE\_INS** Numeric code representing the educational institution's DANE code.

**INSTITUCION** Character string representing the name of the public school.

**SEDE** Character string representing the name of the specific school location or branch.

**COD\_DANE\_SEDE** Numeric code representing the DANE code of the specific school branch.

**TELEFONO** Character string representing the phone number of the school.

**CORREOS** Character string representing the email addresses of the school.

**DIRECCIÓN** Character string representing the physical address of the school.

**CORDE\_GEO** Character string representing the geographical coordinates of the school.

#### **Details**

The dataset name has been kept as Tulua\_Public\_Schools\_tbl\_df to avoid confusion with other datasets in the R ecosystem. This naming convention helps distinguish this dataset as part of the ColombiAPI package and assists users in identifying its specific characteristics. The suffix 'tbl\_df' indicates that the dataset is a tibble. The original content has not been modified in any way.

#### Source

Originally taken from GOV.CO, url: https://www.datos.gov.co/Educaci-n/Listado-de-colegios-p-blicos-del-municipio-de-Tulu/scz9-f8ud/about\_data

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view\_datasets

List of Datasets in the ColombiAPI Package

# Description

This function lists all the datasets available in the ColombiAPI package. It returns a character vector with the names of the datasets included in the package.

# Usage

```
view_datasets()
```

## Value

A character vector containing the names of the datasets available in the ColombiAPI package.

```
# List the datasets available in the ColombiAPI package
view_datasets()
```

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