Package 'nycflights13'

September 16, 2019

Title Flights that Departed NYC in 2013

Version 1.0.1

Description Airline on-time data for all flights departing NYC in 2013. Also includes useful 'metadata' on airlines, airports, weather, and planes.

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URL http://github.com/hadley/nycflights13

BugReports https://github.com/hadley/nycflights13/issues

Depends R (>= 3.2)

Imports tibble

Suggests dplyr

Encoding UTF-8

LazyData true

RoxygenNote 6.1.1

NeedsCompilation no

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Repository CRAN

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R topics documented:

airlines *Airline names.*

Description

Look up airline names from their carrier codes.

Usage

```
airlines
```

Format

Data frame with columns

carrier Two letter abbreviation.

name Full name.

Source

https://www.transtats.bts.gov/DL_SelectFields.asp?Table_ID=236

Examples

```
airlines
```

airports *Airport metadata*

Description

Useful metadata about airports.

Usage

```
airports
```

Format

A data frame with columns:

faa FAA airport code.

name Usual name of the aiport.

lat, lon Location of airport.

alt Altitude, in feet.

tz Timezone offset from GMT.

dst Daylight savings time zone. A = Standard US DST: starts on the second Sunday of March, ends on the first Sunday of November. U = unknown. N = no dst.

tzone IANA time zone, as determined by GeoNames webservice.

Source

http://openflights.org/data.html, downloaded 2014-06-27

Examples

```
airports

if (require("dplyr")) {

airports %>% rename(dest = faa) %>% semi_join(flights)
flights %>% anti_join(airports %>% rename(dest = faa))
airports %>% rename(origin = faa) %>% semi_join(flights)

}
```

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flights *Flights data*

Description

On-time data for all flights that departed NYC (i.e. JFK, LGA or EWR) in 2013.

Usage

```
flights
```

Format

Data frame with columns

year, month, day Date of departure.

dep_time, arr_time Actual departure and arrival times (format HHMM or HMM), local tz.

sched_dep_time, sched_arr_time Scheduled departure and arrival times (format HHMM or HMM), local tz.

dep_delay, arr_delay Departure and arrival delays, in minutes. Negative times represent early departures/arrivals.

carrier Two letter carrier abbreviation. See `airlines` to get name.

flight Flight number.

tailnum Plane tail number. See `planes` for additional metadata.

origin, dest Origin and destination. See `airports` for additional metadata.

air_time Amount of time spent in the air, in minutes.

distance Distance between airports, in miles.

hour, minute Time of scheduled departure broken into hour and minutes.

time_hour Scheduled date and hour of the flight as a `POSIXct` date. Along with `origin`, can be used to join flights data to `weather` data.

Source

RITA, Bureau of transportation statistics, https://www.transtats.bts.gov/DL_SelectFields.asp?Table_ID=236

`planes` *Plane metadata.*

Description

Plane metadata for all plane tailnumbers found in the FAA aircraft registry. American Airways (AA) and Envoy Air (MQ) report fleet numbers rather than tail numbers so can't be matched.

Usage

```
planes
```

Format

A data frame with columns:

tailnum Tail number.

year Year manufactured.

type Type of plane.

manufacturer, model Manufacturer and model.

engines, seats Number of engines and seats.

speed Average cruising speed in mph.

engine Type of engine.

Source

FAA Aircraft registry, http://www.faa.gov/licenses_certificates/aircraft_certification/aircraft_registry/releasable_aircraft_download/

Examples

```
planes

if (require("dplyr")) {

# Flights that don't have plane metadata
flights %>% anti_join(planes, "tailnum")

}
```

`weather` *Hourly weather data*

Description

Hourly meterological data for LGA, JFK and EWR.

Usage

```
weather
```

Format

A data frame with columns

origin Weather station. Named `origin` to facilitate merging with `flights` data.

year, month, day, hour Time of recording.

temp, dewp Temperature and dewpoint in F.

humid Relative humidity.

wind_dir, wind_speed, wind_gust Wind direction (in degrees), speed and gust speed (in mph).

precip Precipitation, in inches.

pressure Sea level pressure in millibars.

visib Visibility in miles.

time_hour Date and hour of the recording as a `POSIXct` date.

Source

ASOS download from Iowa Environmental Mesonet, https://mesonet.agron.iastate.edu/request/download.phtml.

Index