Package 'nycflights13'

January 27, 2015

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Title Data about flights departing NYC in 2013.
Version 0.1
Description Airline on-time data for all flights departing NYC in 2013. Also includes useful metadata on airlines, airports, weather, and planes.
Depends R (>= $3.1.0$)
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LazyData true
Suggests dplyr
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R topics documented:
airlines
airports
flights
planes
weather
Index 6

2 airports

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

http://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.

flights 3

Source

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

Examples

```
if (require("dplyr")) {
  airports

airports %>% mutate(dest = faa) %>% semi_join(flights)
  flights %>% anti_join(airports %>% mutate(dest = faa))
  airports %>% mutate(origin = faa) %>% semi_join(flights)
}
```

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 Departure and arrival times, local tz.

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

hour,minute Time of departure broken in to hour and minutes

carrier Two letter carrier abbreviation. See airlines to get name

tailnum Plane tail number

flight Flight number

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

air_time Amount of time spent in the air

distance Distance flown

Source

```
RITA, \ Bureau \ of \ transportation \ statistics, \ http://www.transtats.bts.gov/DL\_SelectFields.asp?Table\_ID=236
```

4 planes

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 (e.g. http://www.flyerguide.com/Tail_Numbers_(AA)) 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

```
if (require("dplyr")) {
planes

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

weather 5

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 faciliate 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 Preciptation, in inches

pressure Sea level pressure in millibars

visib Visibility in miles

Source

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

Index

```
*Topic datasets
    airlines, 2
    airports, 2
    flights, 3
    planes, 4
    weather, 5

airlines, 2, 3
airports, 2, 3
flights, 3, 5
planes, 4
weather, 5
```