Package 'nycflights13'

June 26, 2018

Title Flights that Departed NYC in 2013

Version 1.0.0

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 (>= 2.10)

Imports tibble

Suggests dplyr

LazyData true

RoxygenNote 6.0.1

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

```
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 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.

hour,minute Time of scheduled departure broken into 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, in minutes

distance Distance between airports, in miles

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

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

# 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 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 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.

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