

# Package ‘nycflights13’

February 20, 2015

**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)

**License** CC0

**LazyData** true

**Suggests** dplyr

**URL** <http://github.com/hadley/nycflights13>

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**NeedsCompilation** no

**Repository** CRAN

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airlines	<i>Airline names.</i>
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**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](http://www.transtats.bts.gov/DL_SelectFields.asp?Table_ID=236)

**Examples**

```
airlines
```

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airports	<i>Airport metadata</i>
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**Description**

Useful metadata about airports.

**Usage**

```
airports
```

**Format**

A data frame with columns:

**faa** FAA airport code

**name** Usual name of the airport

**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.

**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*


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**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](http://www.transtats.bts.gov/DL_SelectFields.asp?Table_ID=236)

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planes

*Plane metadata.*


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## 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\\_\(AA\)](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/](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")

}
```

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weather

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*Hourly weather data*

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**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>.

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