# Package 'nycflights13'

May 9, 2026

**Title** Flights that Departed NYC in 2013

**Version** 1.0.2

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

**License** CC0

**URL** https://github.com/hadley/nycflights13

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

**Depends** R (>= 3.2)

**Imports** tibble

**Suggests** dplyr

**Encoding** UTF-8

**LazyData** true

**LazyDataCompression** bzip2

**RoxygenNote** 7.1.1

**NeedsCompilation** no

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**Repository** CRAN

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## Contents

## 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

https://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)

}
```

---

# 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

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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 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, https://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.

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