## Package: nycflights23 (via r-universe)

September 12, 2024

Title Flights and Other Useful Metadata for NYC Outbound Flights in 2023

Version 0.1.0

**Description** Updating the now 10-year-old 'nycflights13' data package. It contains information about all flights that departed from the three main New York City airports in 2023 and metadata on airlines, airports, weather, and planes.

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URL https://moderndive.github.io/nycflights23/,

https://github.com/moderndive/nycflights23/

BugReports https://github.com/moderndive/nycflights23/issues/

Depends R (>= 3.5.0) Suggests anyflights Encoding UTF-8 LazyData true LazyDataCompression bzip2 Roxygen list(markdown = TRUE) RoxygenNote 7.3.1 Repository https://moderndive.r-universe.dev RemoteUrl https://github.com/moderndive/nycflights23 RemoteRef HEAD RemoteSha fa47fddbce4babbffc4874c7fb273148500289b2

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#### airports

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airlines

Airline names.

#### Description

Look up airline names from their carrier codes.

#### Format

A data frame with columns:

carrier Two letter abbreviation.

name Full name.

#### Source

https://www.transtats.bts.gov/DL\_SelectFields.asp?Table\_ID=236

airports

Airport metadata

#### Description

Useful metadata about 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/UTC.
- **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/

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flights

#### Description

On-time data for all flights that departed from the given airports.

#### Format

A data frame with columns:

year, month, day Date of departure.

dep\_time, arr\_time Actual departure and arrival times, UTC.

sched\_dep\_time, sched\_arr\_time Scheduled departure and arrival times, UTC.

**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 get\_airlines to get the full name.

tailnum Plane tail number.

flight Flight number.

origin, dest Origin and destination airport. See get\_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 tail numbers 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.

weather

#### 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

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

Hourly weather data

#### Description

Hourly meteorological data.

#### Format

A data frame with columns

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

year, month, day, hour Time of recording, UTC.

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, UTC.

#### Source

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

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