# Schéma: nycflights

nycflights, R-project, relationnel, pattes de corbeau, crowfoot

#### 2024-09-20

A Présentation du schéma nycflights, pour l'entrainement à PostGres.

- L3 MIASHS/Ingémath
- Université Paris Cité
- Année 2024-2025
- Course Homepage
- Moodle



Ce jeu de données est construit à partir du package **Q** nycflights13.

The nycflights13 package contains information about all flights that departed from NYC (e.g. EWR, JFK and LGA) to destinations in the United States, Puerto Rico, and the American Virgin Islands) in 2013: 336,776 flights in total. To help understand what causes delays, it also includes a number of other useful datasets.

This package provides the following data tables.

- ?flights: all flights that departed from NYC in 2013
- ?weather: hourly meterological data for each airport
- ?planes : construction information about each plane
- ?airports : airport names and locations
- ?airlines : translation between two letter carrier codes and names

This is a layout. You can create multiple layouts with the same or different tables. Double-click the table headers to edit.

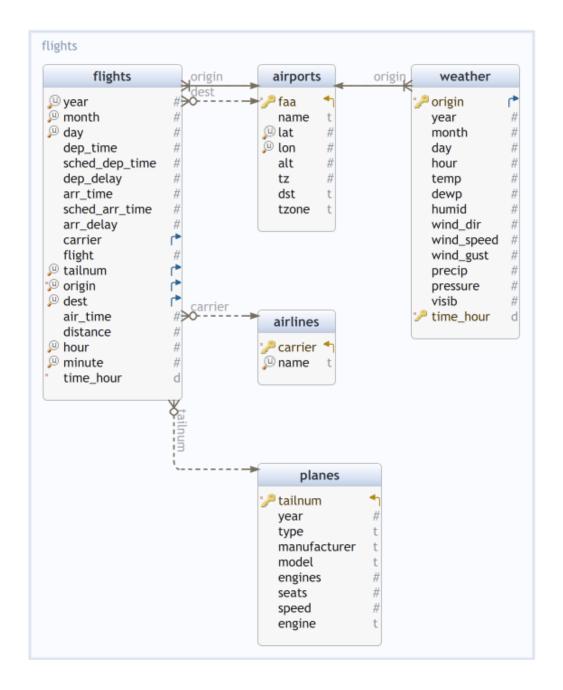


Fig. 1: Schema nycflights Generated using DbSchema

#### Table nycflights.airlines

$\overline{\mathrm{Idx}}$	Name	Data Type
*	carrier name	text text

#### Table nycflights.airports

Idx	Name	Data Type
*	faa	text
	name	text
	lat	double precision
	lon	double precision
	alt	double precision
	tz	double precision
	$\operatorname{dst}$	text
	tzone	text

## Table nycflights.flights

$\operatorname{Idx}$	Name	Data Type
	year	integer
	month	integer
	day	integer
	$dep\_time$	integer
	$sched\_dep\_time$	integer
	$dep\_delay$	double precision
	$\operatorname{arr\_time}$	integer
	$sched\_arr\_time$	integer
	$\operatorname{arr\_delay}$	double precision
	carrier	text
	$\operatorname{flight}$	integer
	tailnum	text
*	origin	text
	dest	text
	$air\_time$	double precision
	distance	double precision
	hour	double precision
	minute	double precision
*	time_hour	timestamptz

- distance est la distance orthodromique (earth distance) entre origin et dest en miles (pas en miles nautiques). On peut le vérifier avec les fonctions de l'extension earthdistance.
- dep\_time, sched\_dep\_time, arr\_time, sched\_arr\_time sont construits de la façon

#### Foreign Keys

Type	Name	On
	$flights\_fk$	( carrier ) ref nycflights.airlines (carrier)
	$flights\_fk\_planes$	(tailnum) ref nycflights.planes (tailnum)
	$flights\_fk\_origin$	( origin ) ref nycflights.airports (faa)

Туре	Name	On
	flights_fk_dest	( dest ) ref nycflights.airports (faa)

## Table nycflights.planes

Idx	Name	Data Type
*	tailnum	text
	year	integer
	type	text
	manufacturer	text
	model	text
	engines	integer
	seats	integer
	$\operatorname{speed}$	integer
	engine	text

# Table nycflights.weather

$\operatorname{Idx}$	Name	Data Type
*	origin	text
	year	integer
	$\operatorname{month}$	integer
	day	integer
	hour	integer
	$_{\mathrm{temp}}$	double precision
	$\operatorname{dewp}$	double precision
	humid	double precision
	$\operatorname{wind}_{\operatorname{dir}}$	double precision
	$wind\_speed$	double precision
	$wind\_gust$	double precision
	precip	double precision
	pressure	double precision
	visib	double precision
*	$time\_hour$	timestamptz

## Foreign Keys

Type	Name	On
	weather_fk	( origin ) ref nycflights.airports
		(faa)