

Schéma : nycflights

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

2024-09-20

⚠ Présentation du schéma `nycflights`, pour l'entraînement à PostGres.

- **L3 MIASHS/Ingémath**
- **Université Paris Cité**
- Année 2024-2025
- [Course Homepage](#)
- [Moodle](#)



Ce jeu de données est construit à partir du package  `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 meteorological 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.

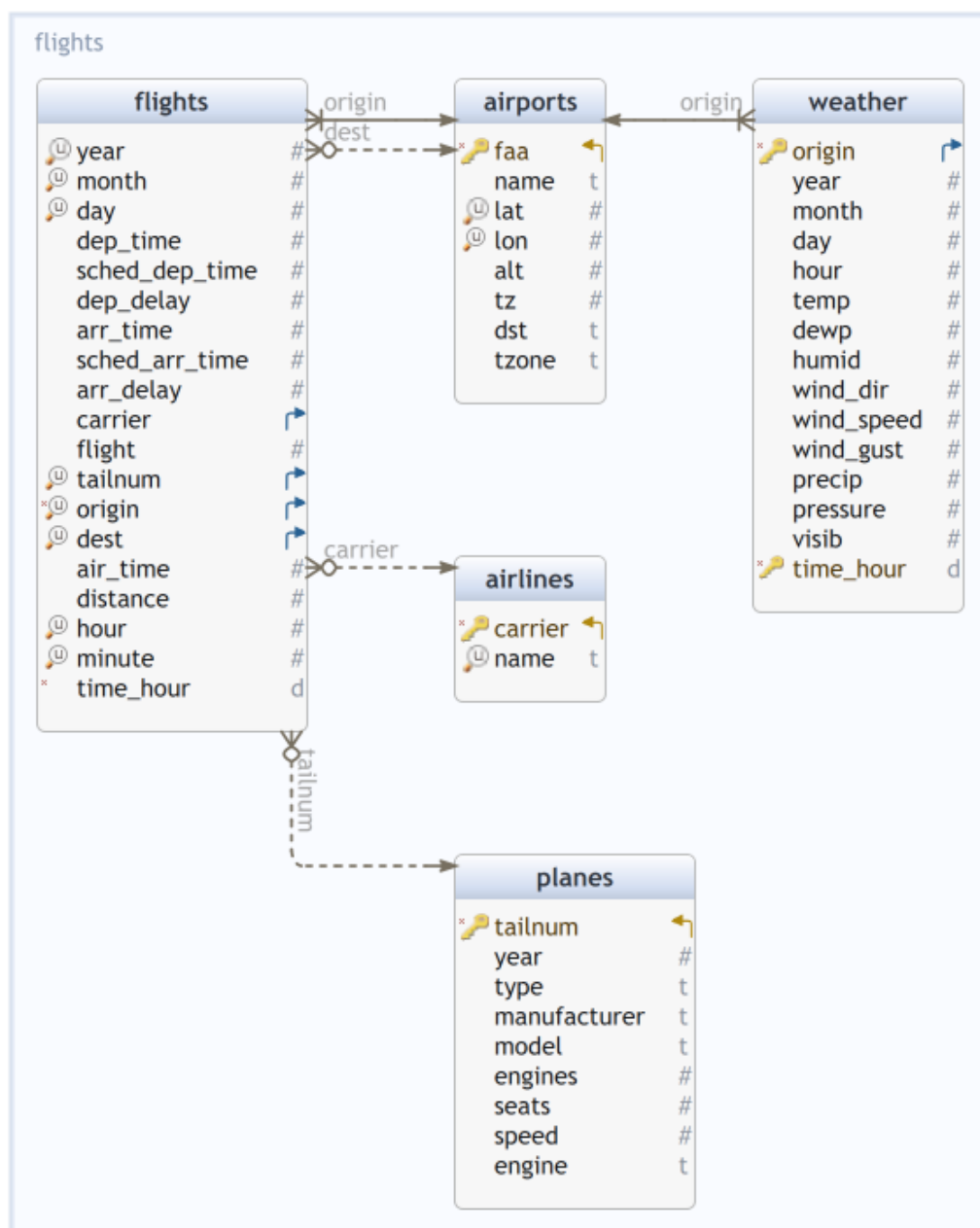


FIG. 1 : Schema nycflights Generated using [DbSchema](#)

Table nycflights.airlines

| Idx | Name | Data Type |
|-----|---------|-----------|
| * | carrier | text |
| | name | text |

Table nycflights.airports

| Idx | Name | Data Type |
|-----|-------|------------------|
| * | faa | text |
| | name | text |
| | lat | double precision |
| | lon | double precision |
| | alt | double precision |
| | tz | double precision |
| | dst | text |
| | tzone | text |

Table nycflights.flights

| Idx | Name | Data Type |
|-----|----------------|------------------|
| | year | integer |
| | month | integer |
| | day | integer |
| | dep_time | integer |
| | sched_dep_time | integer |
| | dep_delay | double precision |
| | arr_time | integer |
| | sched_arr_time | integer |
| | arr_delay | double precision |
| | carrier | text |
| | flight | integer |
| | tailnum | text |
| * | origin | text |
| | dest | text |
| | air_time | double precision |
| | distance | double precision |
| | hour | double precision |
| | minute | double precision |
| * | time_hour | timestampz |

✚ **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**.

✚ le vol est effectué si **dep_time** n'est pas NULL

✚ **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) |

| Type | 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 |
| | speed | integer |
| | engine | text |

Table nycflights.weather

| Idx | Name | Data Type |
|-----|------------|------------------|
| * | origin | text |
| | year | integer |
| | month | integer |
| | day | integer |
| | hour | integer |
| | temp | double precision |
| | dewp | double precision |
| | humid | double precision |
| | wind_dir | double precision |
| | wind_speed | double precision |
| | wind_gust | double precision |
| | precip | double precision |
| | pressure | double precision |
| | visib | double precision |
| * | time_hour | timestampz |

Foreign Keys

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