

Flights Dataset

Description:

The U.S. Department of Transportation's (DOT) Bureau of Transportation Statistics tracks the on-time performance of domestic flights operated by large air carriers. Summary information on the number of on-time, delayed, canceled, and diverted flights is published in DOT's monthly Air Travel Consumer Report and in this dataset of 2015 flight delays and cancellations.

Schema:

Column Name	Description	Type
year	Year of the flight Trip	Numerical
month	Month of the flight Trip	Numerical
day	Day of the flight Trip	Numerical
day_of_week	Day of week of the flight trip. 1-7 means Monday-Sunday.	Numerical
airline_code	The IATA code of the airline identifier	Categorical
flight_number	Flight Identifier	Numerical
tail_number	Aircraft Identifier	Categorical
origin_airport_code	The IATA code of the starting airport	Categorical
destination_airport_code	The IATA code of the destination airport	Categorical
scheduled_departure	planned departure time	Numerical
departure_time	wheels_off - taxi_out	Numerical

departure_delay	Total delay on departure	Numerical
taxi_out	The time duration elapsed between departure from the origin airport gate and wheels off	Numerical
wheels_off	The time point that the aircraft's wheels leave the ground	Numerical
scheduled_time	Planned time amount needed for the flight trip	Numerical
elapsed_time	$\text{air_time} + \text{taxi_in} + \text{taxi_out}$	Numerical
air_time	The time duration between wheels_off and wheels_on time	Numerical
distance	Distance between two airports	Numerical
wheels_on	The time point that the aircraft's wheels touch on the ground	Numerical
taxi_in	The time duration elapsed between wheels-on and gate arrival at the destination airport	Numerical
scheduled_arrival	Planned arrival time	Numerical
arrival_time	$\text{Wheels_on} + \text{taxi_in}$	Numerical
arrival_delay	$\text{arrival_time} - \text{scheduled_arrival}$	Numerical
diverted	Aircraft landed on airport that out of schedule	Numerical

cancelled	Flight cancelled (1 = cancelled)	Numerical
cancellation_reason	Reason for cancellation of flight: A - Airline/Carrier; B - Weather; C - National Air System; D - Security	Categorical
air_system_delay	Delay caused by air system	Numerical
security_delay	Delay caused by security	Numerical
airline_delay	Delay caused by the airline	Numerical
late_aircraft_delay	Delay caused by aircraft	Numerical
weather_delay	Delay caused by weather	Numerical