

2015 Flight Delays and Cancellations

Introduction:

The Bureau of Transportation Statistics of the U.S. Department of Transportation (DOT) keeps tabs on how well big airlines do in terms of on-time domestic flights. DOT's monthly Air Travel Consumer Report and this dataset of flight delays and cancellations from 2015 provide summary data on the number of flights that were on time, delayed, canceled, and diverted.

Data resource:

<https://www.kaggle.com/datasets/usdot/flight-delays>

overview:

data contains 3 files:

- 1) Flights: 5819078 rows, 31 columns
- 2) Airports: 322 rows, 7 columns
- 3) Airlines: 14 rows, 2 columns

Analysis questions:

- ✚ Which airport has the most delayed flights?
- ✚ What is the average delay time for delayed flights?
- ✚ Which state has the highest number of total flights?
- ✚ What are the minimum and maximum delay times observed across all states?
- ✚ Are there specific days of the week with higher rates of flight disruptions?
- ✚ Which state has the highest number of airports?
- ✚ Total number of flights per state?
- ✚ Which specific airports within each state experience the highest rates of delays, cancellations, or diversions?