FLIGHT CANCELLATIONS

CLASSIFICATION

**About Dataset**

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.

**From Kaggle:** [**https://www.kaggle.com/datasets/usdot/flight-delays?select=flights.csv**](https://www.kaggle.com/datasets/usdot/flight-delays?select=flights.csv)

**Content (5.8m Row X 31 Feature)**

**YEAR**: Year of the Flight Trip  
**MONTH**: Month of the Flight Trip  
**DAY**: Day of the Flight Trip  
**DAY\_OF\_WEEK**: Day of week of the Flight Trip  
**AIRLINE**: Airline Identifier  
**FLIGHT\_NUMBER**: Flight Identifier  
**TAIL\_NUMBER**: Aircraft Identifier  
**ORIGIN\_AIRPORT**: Starting Airport  
**DESTINATION\_AIRPORT**: Destination Airport  
**SCHEDULED\_DEPARTURE**: Planned Departure Time  
**DEPARTURE\_TIME**: WHEEL\_OFF - TAXI\_OUT  
**DEPARTURE\_DELAY**: Total Delay on Departure  
**TAXI\_OUT**: The time duration elapsed between departure from the origin airport gate and wheels off  
**WHEELS\_OFF**: The time point that the aircraft's wheels leave the ground  
**SCHEDULED\_TIME**: Planned time amount needed for the flight trip  
**ELAPSED\_TIME**: AIR\_TIME + TAXI\_IN + TAXI\_OUT  
**AIR\_TIME**: The time duration between wheels\_off and wheels\_on time  
**DISTANCE**: Distance between two airports  
**WHEELS\_ON**: The time point that the aircraft's wheels touch on the ground  
**TAXI\_IN**: The time duration elapsed between wheels-on and gate arrival at the destination airport  
**SCHEDULED\_ARRIVAL**: Planned arrival time  
**ARRIVAL\_TIME**: WHEELS\_ON + TAXI\_IN  
**ARRIVAL\_DELAY**: ARRIVAL\_TIME - SCHEDULED\_ARRIVAL  
**DIVERTED**: Aircraft landed on airport that out of schedule  
**CANCELLED**: Flight Cancelled (1 = cancelled)  
**CANCELLATION\_REASON**: Reason for Cancellation of flight: A - Airline/Carrier; B - Weather; C - National Air System; D - Security  
**AIR\_SYSTEM\_DELAY**: Delay caused by air system  
**SECURITY\_DELAY**: Delay caused by security  
**AIRLINE\_DELAY**: Delay caused by the airline  
**LATE\_AIRCRAFT\_DELAY**: Delay caused by aircraft  
**WEATHER\_DELAY**: Delay caused by weather

Questions

1. The months with the most frequent flights ?
2. The main reasons for delay flights ?
3. The main reasons for canceling flights ?
4. Most airlines cancel flights ?
5. Most of the cities where flying flights are cancelled ?
6. The effect of flight distance on cancellation ?