

## Flight Delays and Cancellations

Based this data from a Kaggle dataset. Here we will focus about the performance of US domestic flights operated by large air carriers in 2015. So, to analysis these data we first need to put many of questions and try to answer them.

First question: which airlines or airports have the worst delays and which their destinations?

Visual (1):

<https://cutt.us/sZsze>.

I used horizontal bar to appears the worst airport and it is Hartsfield-Jackson Atlanta International Airport and its destination to ATL. But there are many airports that do not have inside their records any late flights such as: Golden Triangle Regional Airport and Ford Airport. Also, the hierarchies' property was created to merge fields AIRPORT and AIRLINE. Generally, we founded we can't determine the worst airline; because it depends on airports such as: the worst airline inside Hartsfield-Jackson Atlanta International Airport is (Delta Airlines).

Second question: Do the reasons for flight delays differ based on time or state?

Visual (2):

<https://cutt.us/BP8wN>.

By using some of advantages of Tableau like: I put months inside filter and put the reasons inside colors. I interested to choose the colors for colorblind people. So; this map appears by controlling the time reasons of delate for each estate such as: MT estate the reason of delate is B (weather) and SD estate is C (National Air System).

Visual (3):

<https://cutt.us/fec2e>

Third question: **Is flight delay a constant or variable factor over time?**

By using line plot it appears the line of flight delay is changing. At first the value was low until it rose to the highest value in month six, then it went down to the lowest value in month nine, but it began to rise again.

Dashboard:

<https://cutt.us/UTcRZ>

The dashboard helps person to analysis many of things in the same time. We can study and answering the questions easily. Based on the previous results, we can say that recently late flights have been increased, and the causes of them differ from state to another state. So, it is necessary to follow the best airports and airlines without delay and study the reasons for increasing delays and how to eliminate them.