US Flights in 2008

In this project, I have analyzed some data comes from [RITA](). I have downloaded the data for 2008 to analyze the situation of this year.

List of findings from exploration

- Around 7 million flights are registrered in this dataset for 2008. This corresponds to approximately 580 000 flights per month.
- Bigger months are July, March and August.
- Lower months are November, September and October.
- There are 20 carriers in the dataset for 2008.
- WN has a larg majority of flights with 17% of the air fleet.
- The average duration is about 104 minutes, with a normale distribution.
- The average delay is 8 minutes.
- The best carrier (on an average delay point of view) is AQ with 2 minutes advance.
- The worst carrier (on an average delay point of view) is 11 with 12 minutes delay.
- 1 621 000 flights are not on-time (= with a lower delay than 15 minutes), which corresponds to 23% of all flights.
- There is a high correlation between Arrival and Departure Delay (r = 0,93)
- Main delays reasons: Late Aircraft Delay, NAS Delay, Carrier Delay, Weather Delay.
- Main cancellation reasons: Weather & Carrier, then NAS.

Selection of findings which were chosen to be included in the presentation

In 2008, most than 7 million flights were planned. Almost 23% were delayed and 2% were cancelled.
These 23% of delayed flights corresponds mainly to Late Aircraft Delay, NAS delay and Carrier Delay.
Concerning the 2% of cancelled flights, there are mainly due to Weather and Carrier.