



Flight Delay EDA

Fay AlOmair

Airlines Delay Cost (USA)



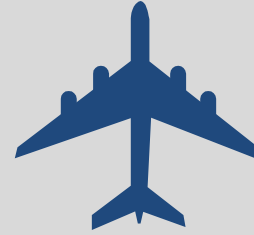
2016

\$ 23.7 B



2017

\$ 26.6 B



2018

\$ 30.2 B



2019

\$ 33.0 B

Data

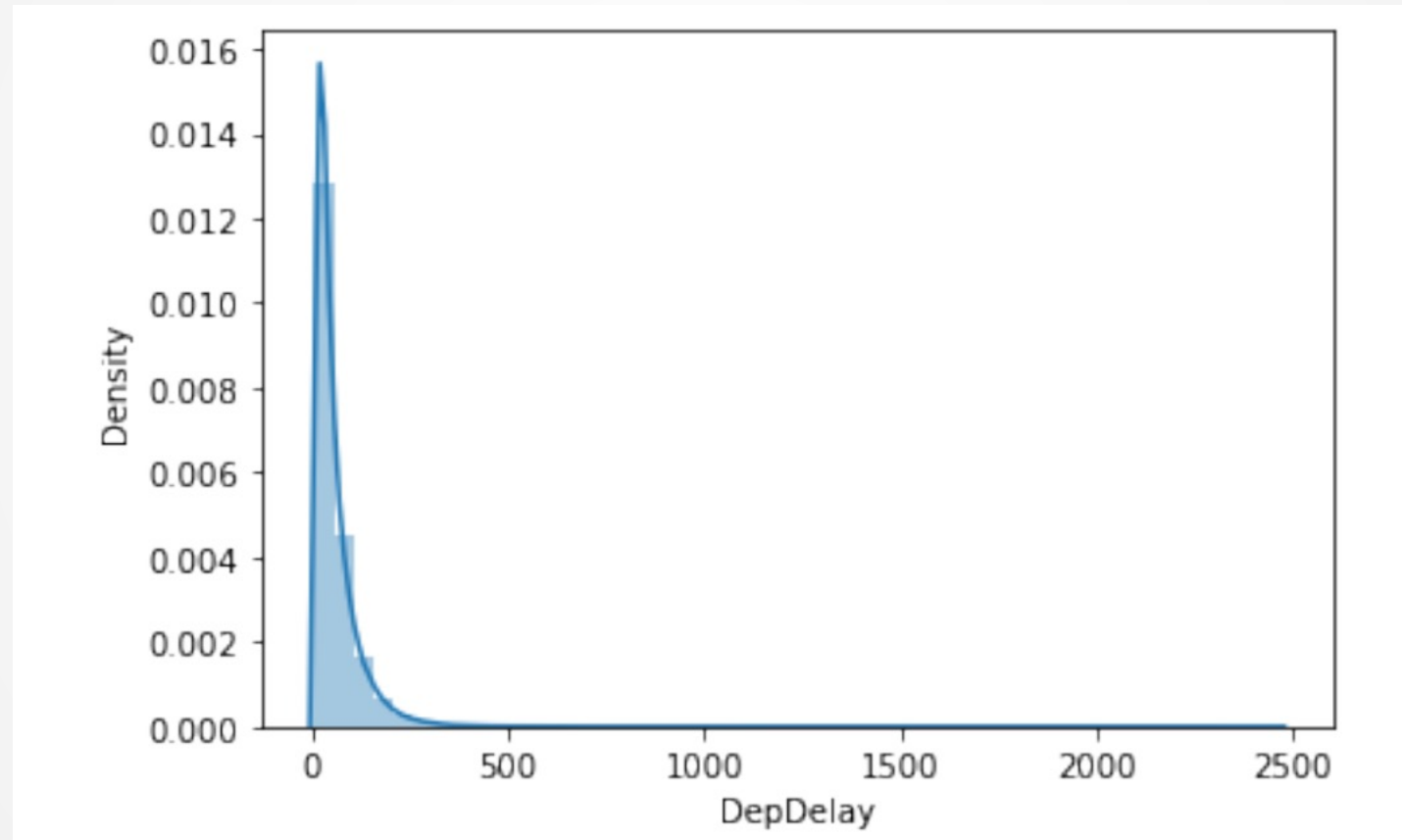
Data

This project aims to conduct exploratory data analysis to analyze US airlines delay data set published by The U.S. Department of Transportation's (DOT) Bureau of Transportation Statistics (BTS) to have a high level understanding on the delay causes.

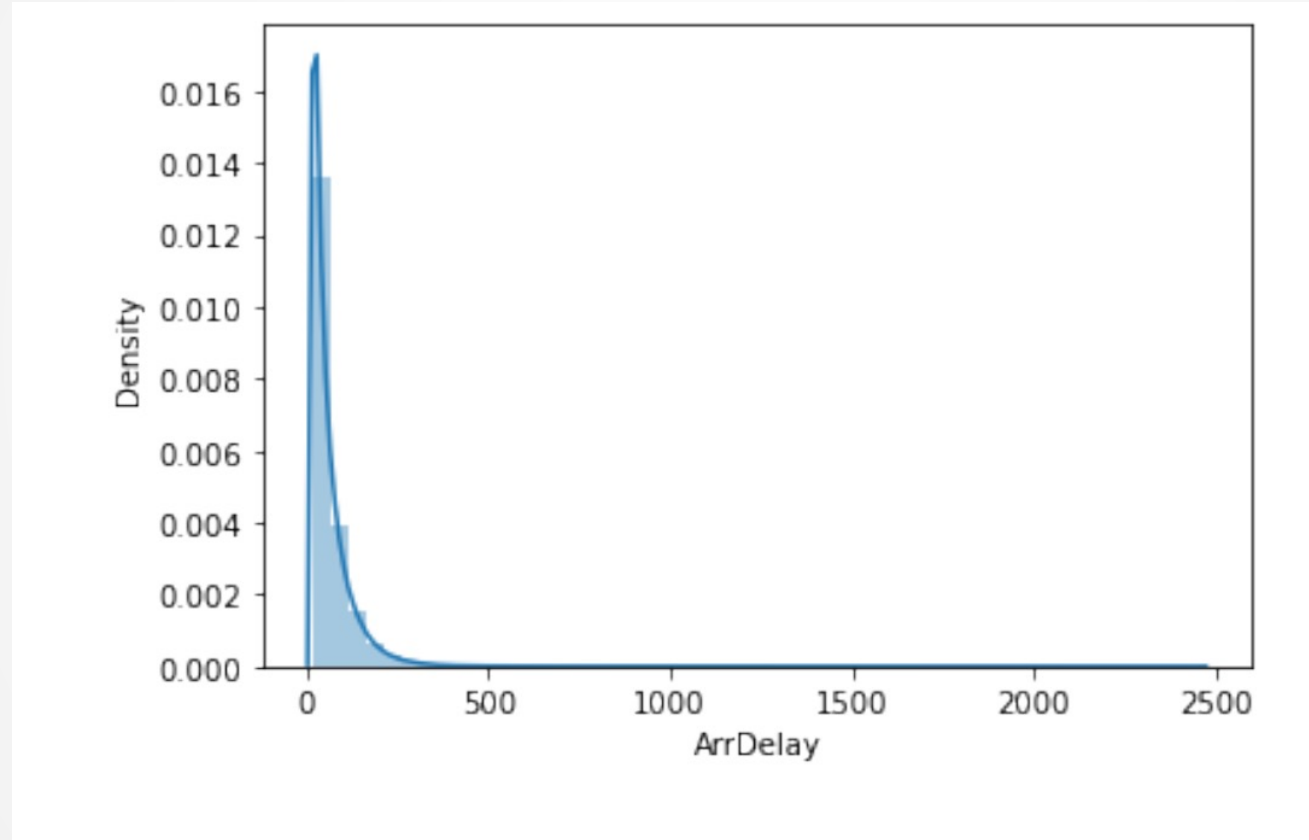
1,936,758 flights data



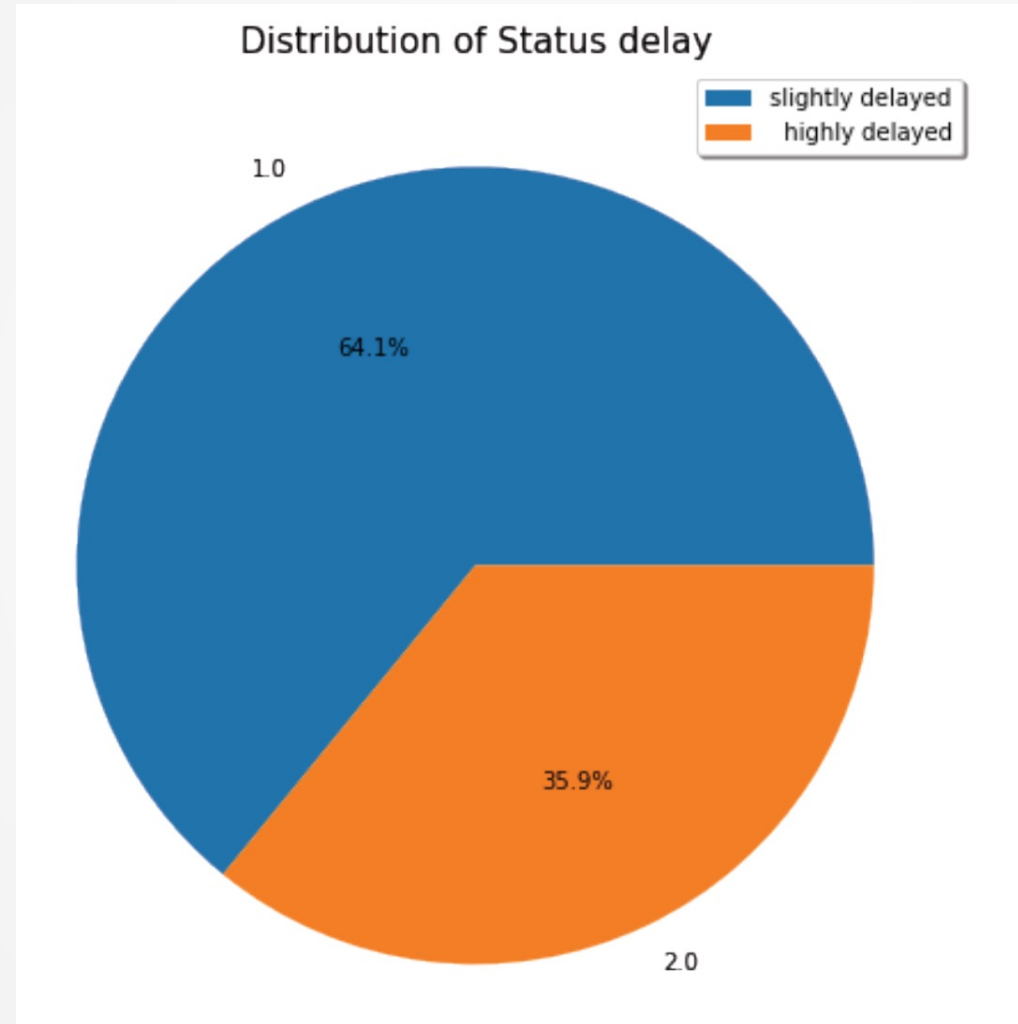
Departure Delay Status



Arrival Delay Status



Delay Status



Delay Reasons

Weather Delay

Weather delay is caused by extreme or hazardous weather conditions that are forecasted or manifest themselves on point of departure, enroute, or on point of arrival.

Carrier Delay

Carrier delay is within the control of the air carrier. Examples : aircraft cleaning, aircraft damage, awaiting the arrival of connecting passengers or crew cargo loading ,fueling

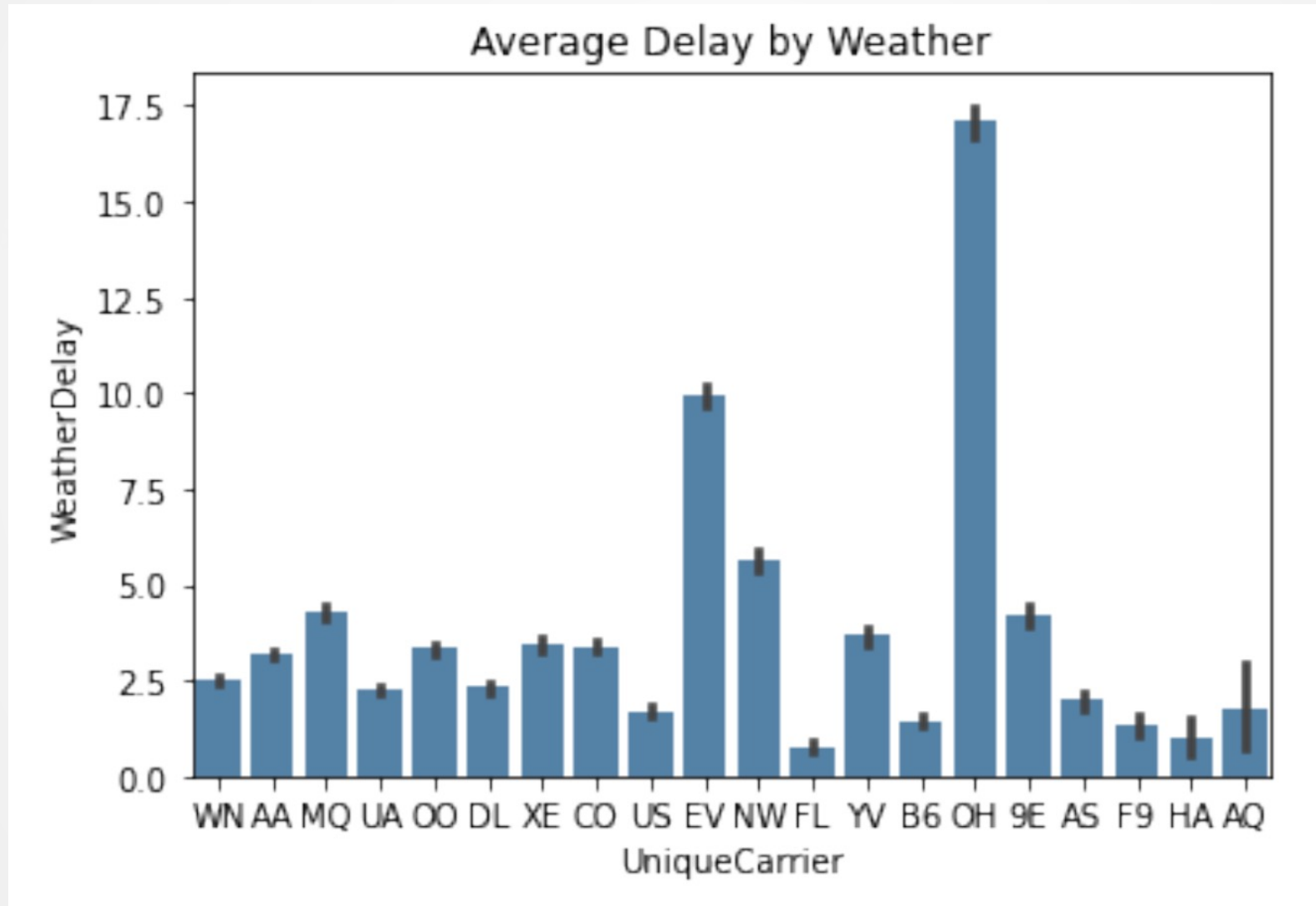
NAS Delay

That is within the control of the National Airspace System (NAS) may include: non-extreme weather conditions, airport operations, heavy traffic volume, air traffic control

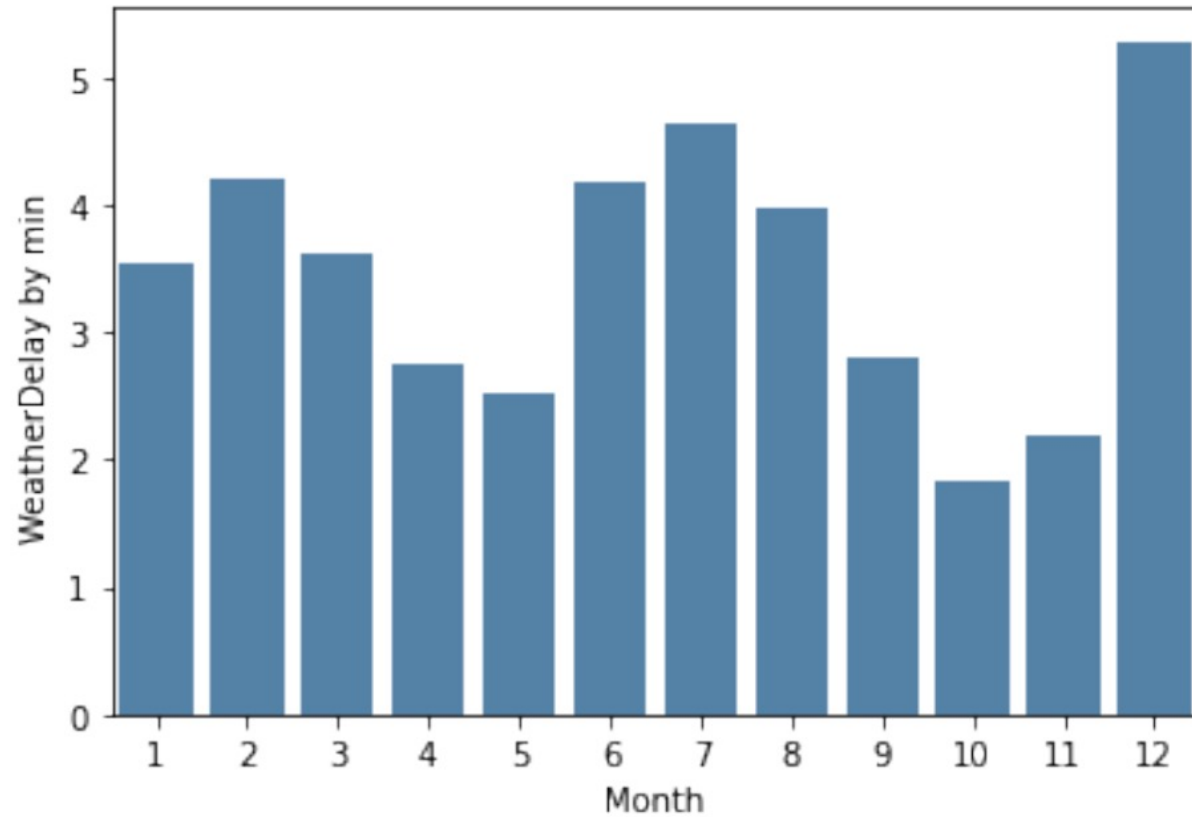
Late Plane Delay

Arrival delay at an airport due to the late arrival of the same aircraft at a previous airport. The ripple effect of an earlier delay at downstream airports is referred to as delay propagation.

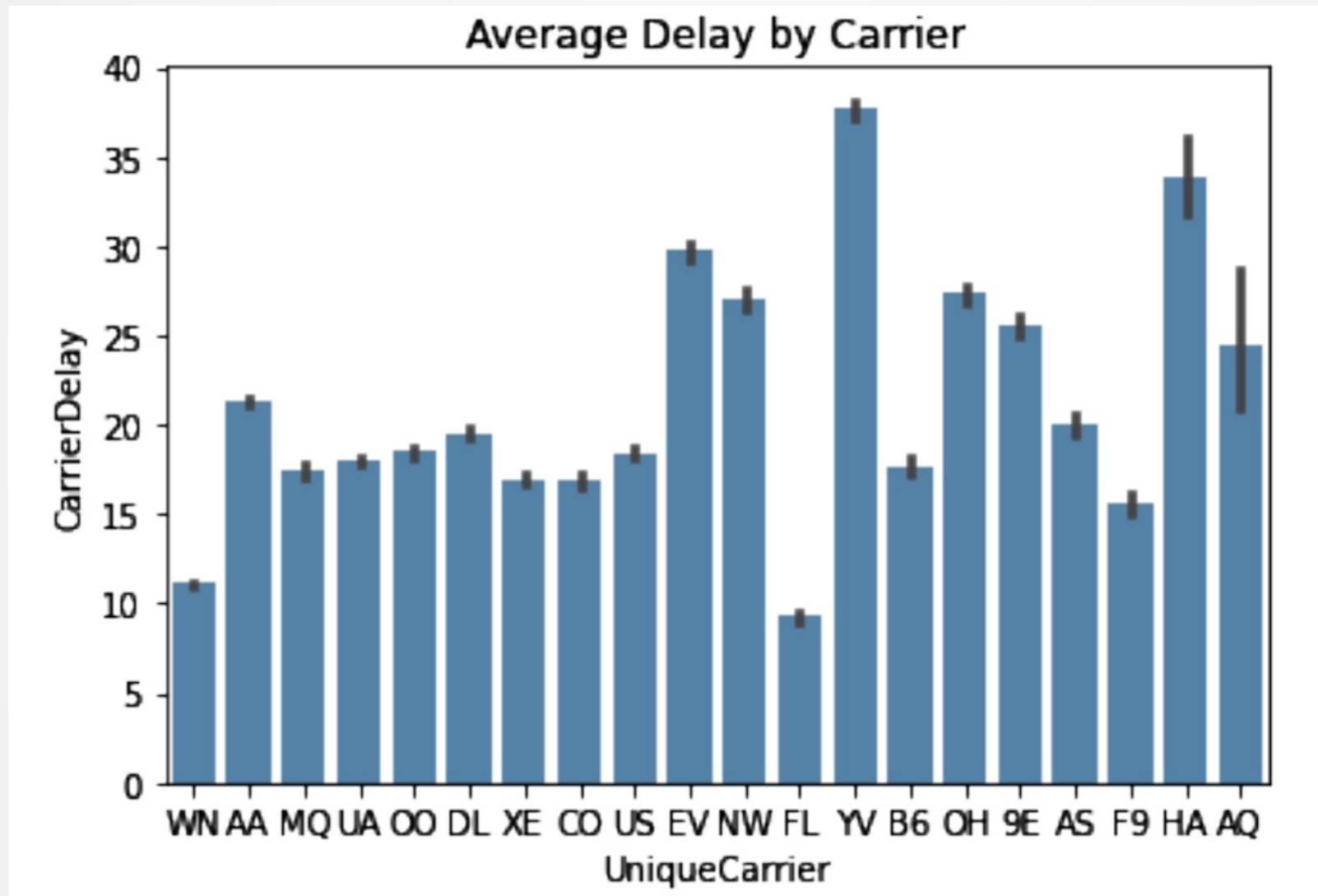
Average Delay by Weather per carrier



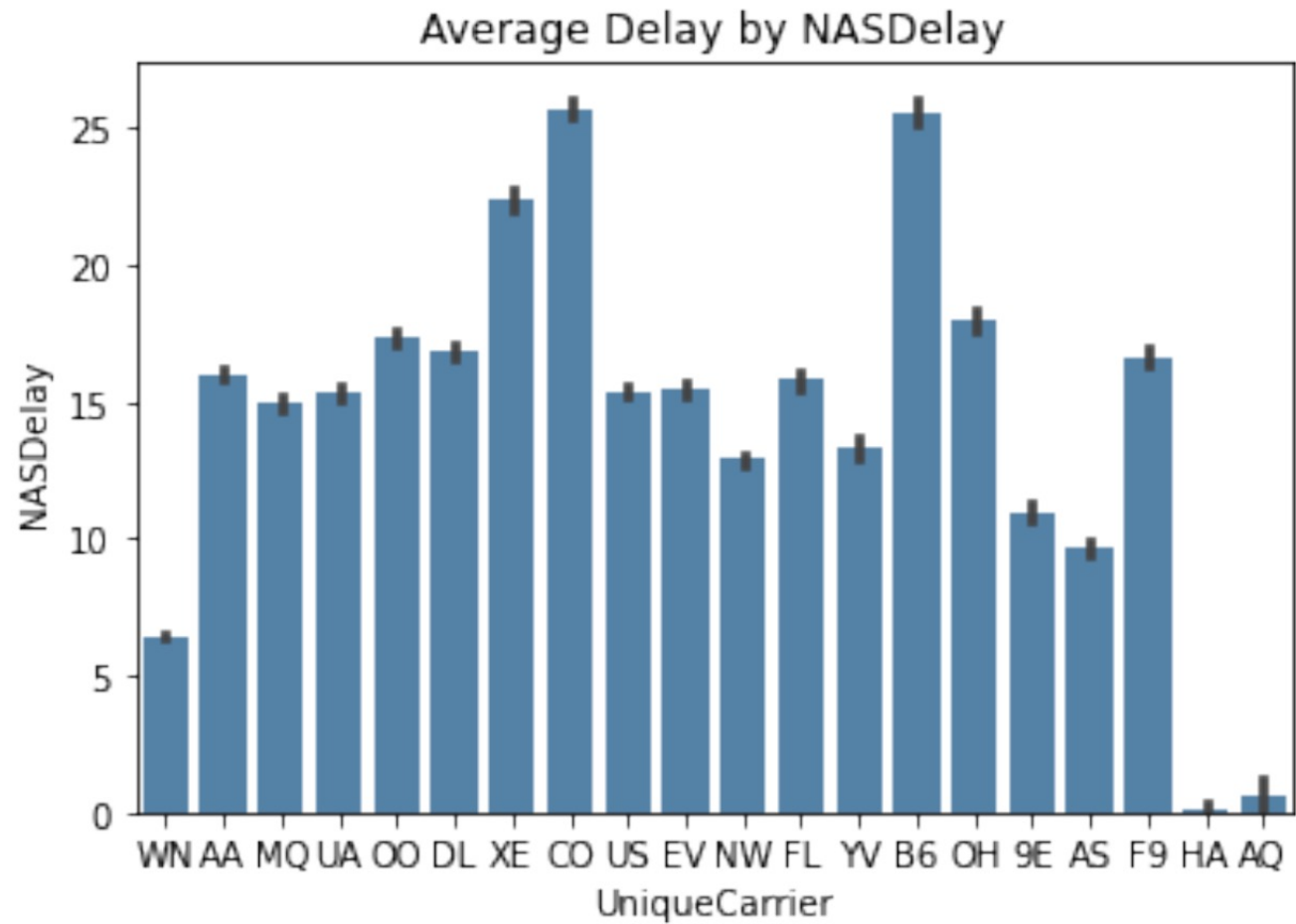
Average Delay by Weather per month



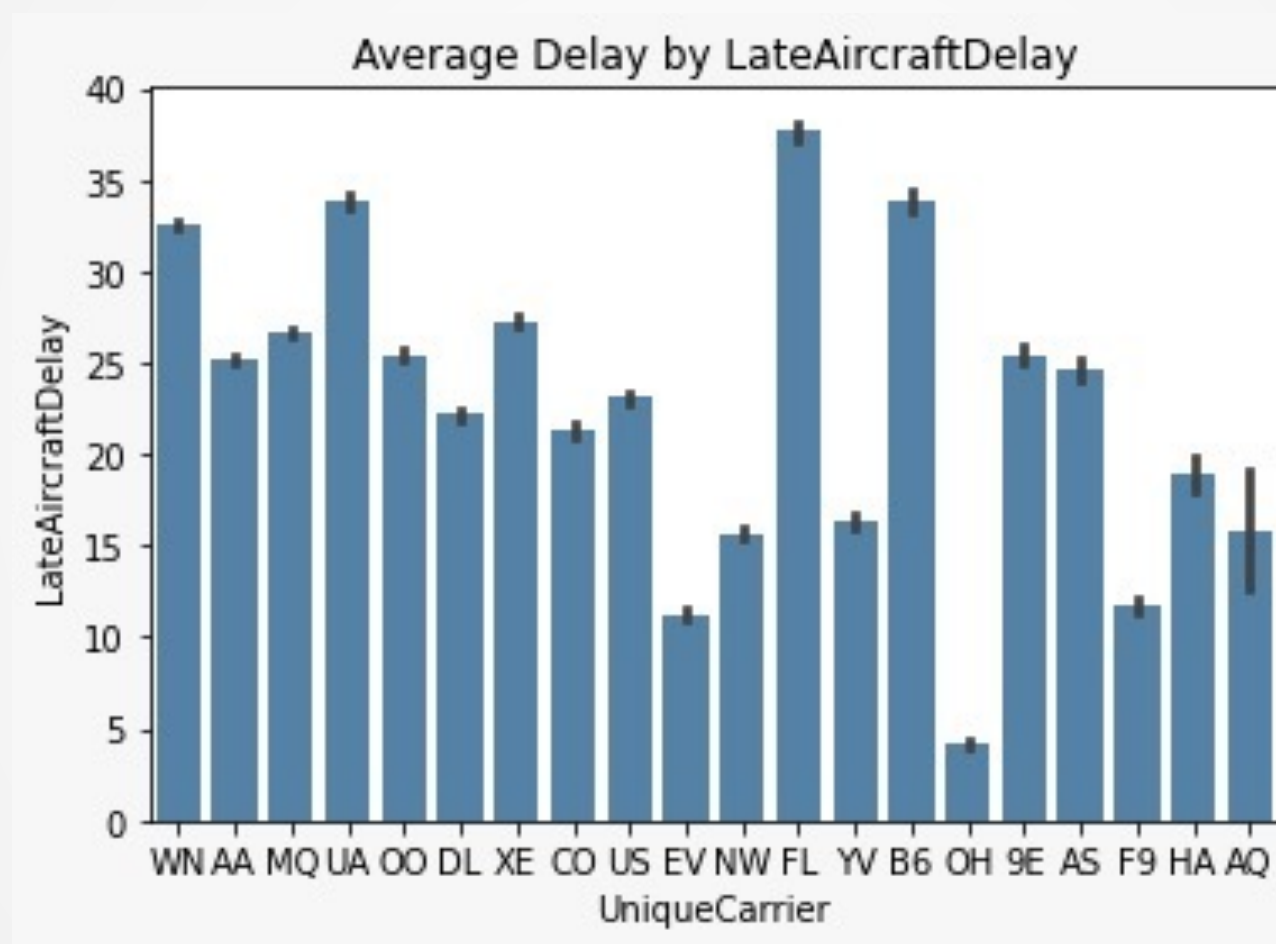
Average Delay by Carrier



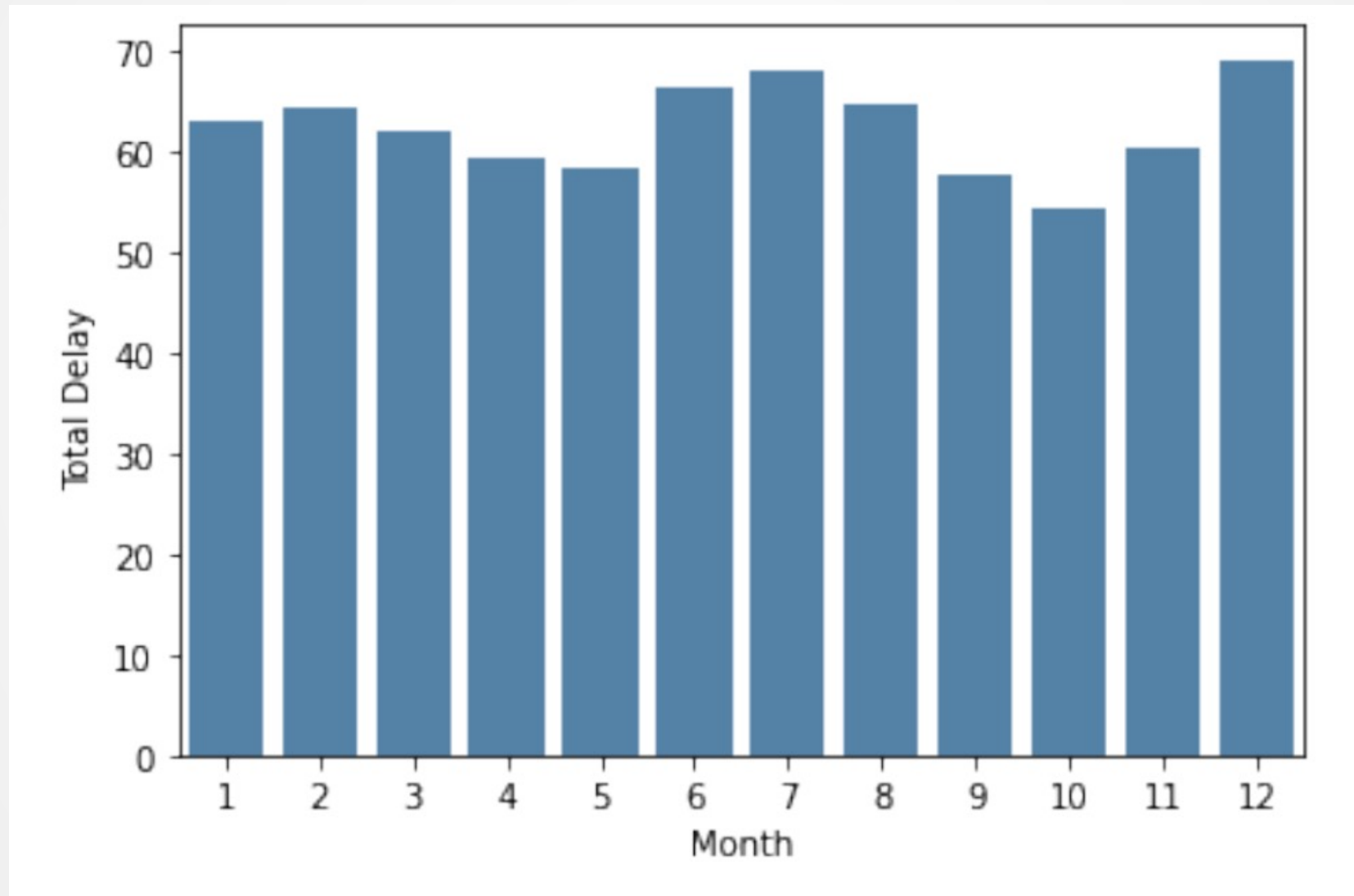
Average Delay by NASDelay



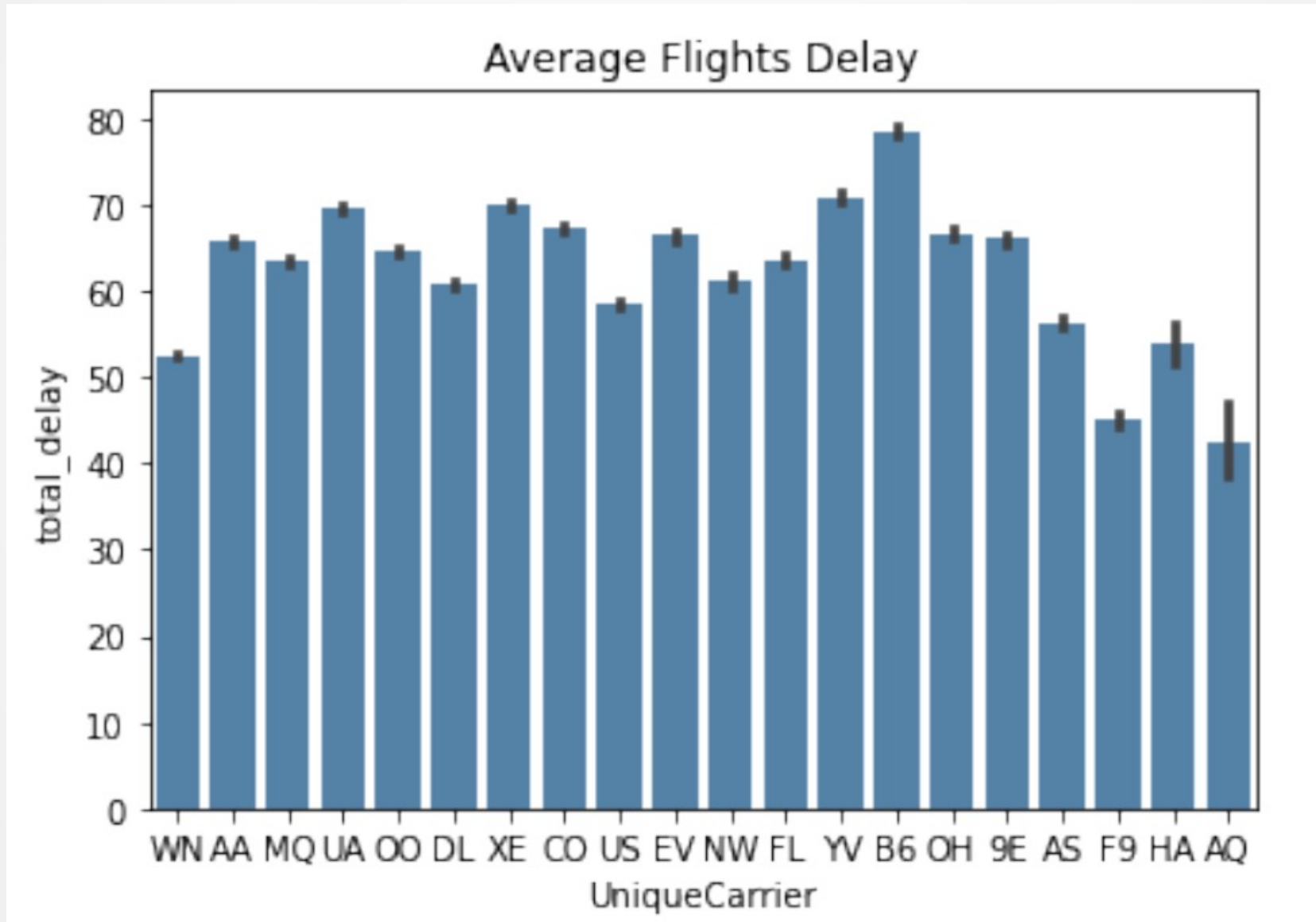
Average Delay by Late Plane



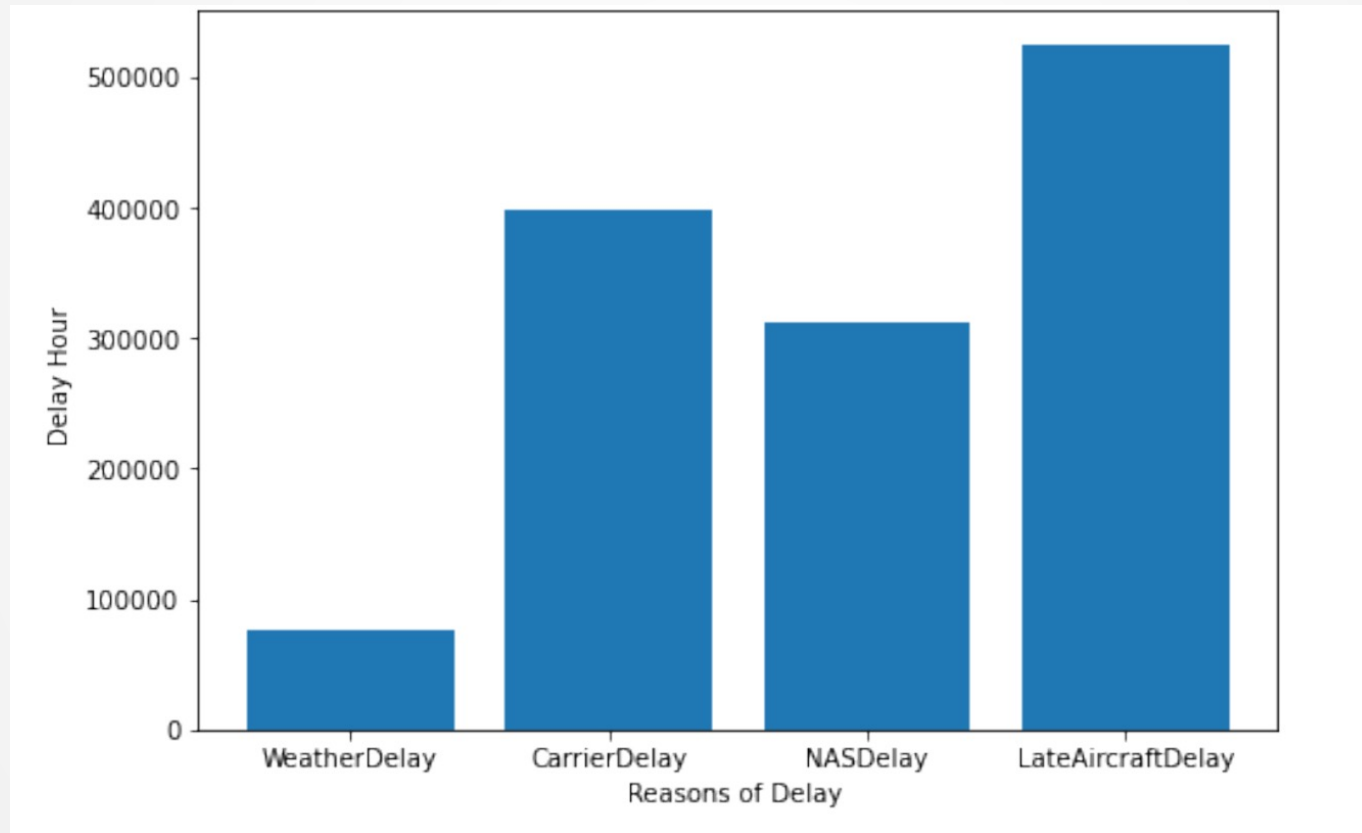
Total Delay (Monthly)



Total Delay (Per carrier)



Reasons of Delay



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Thank You

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