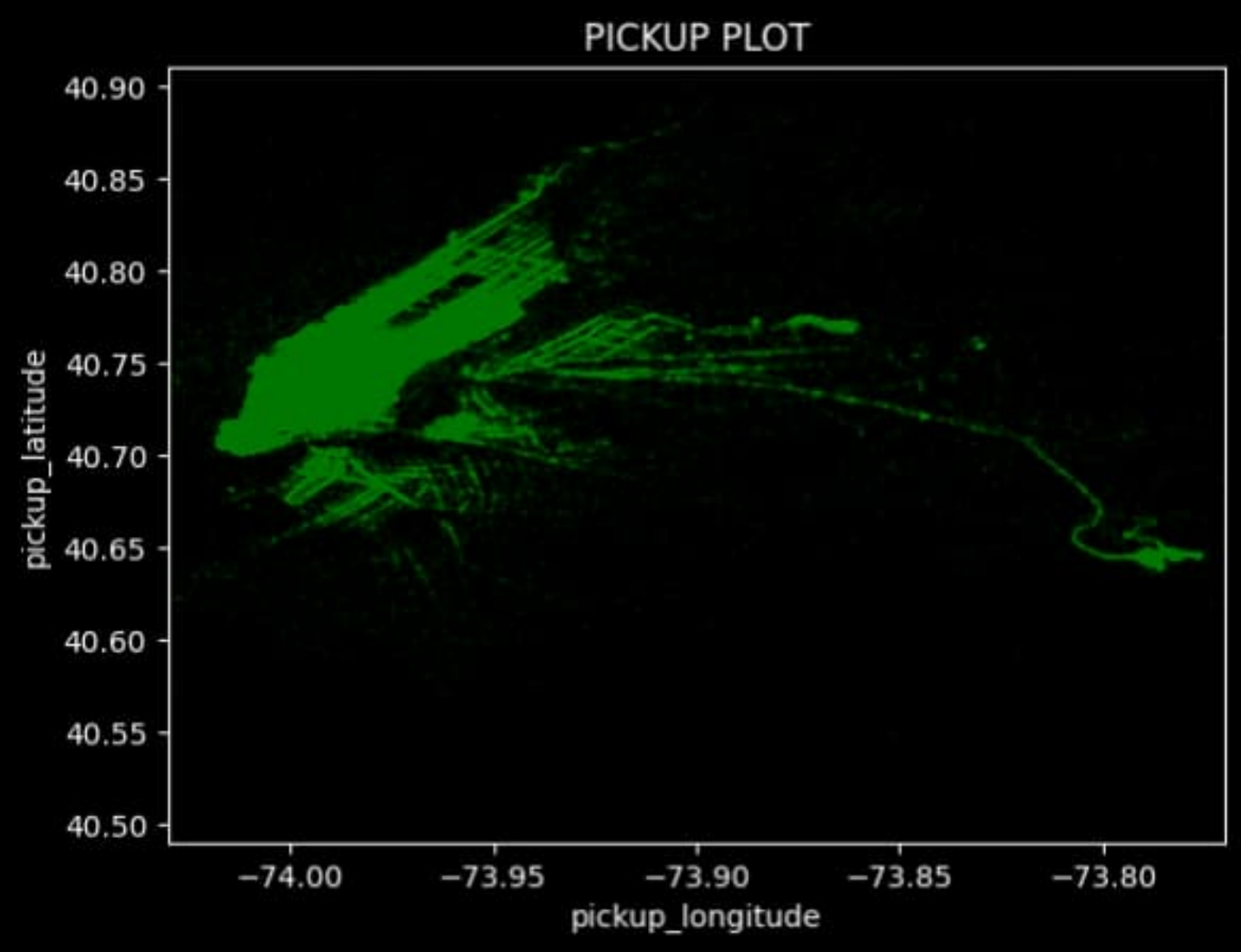
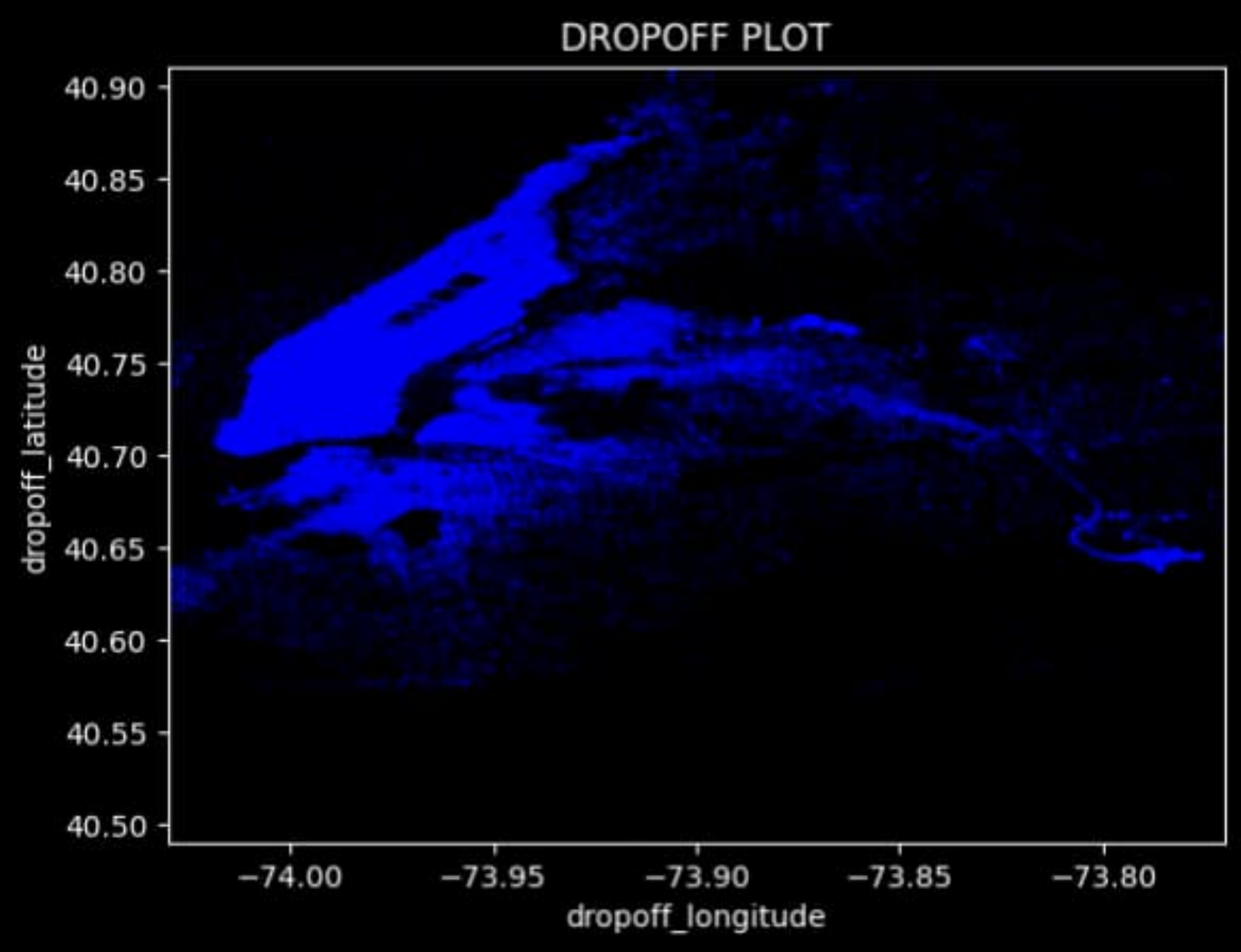
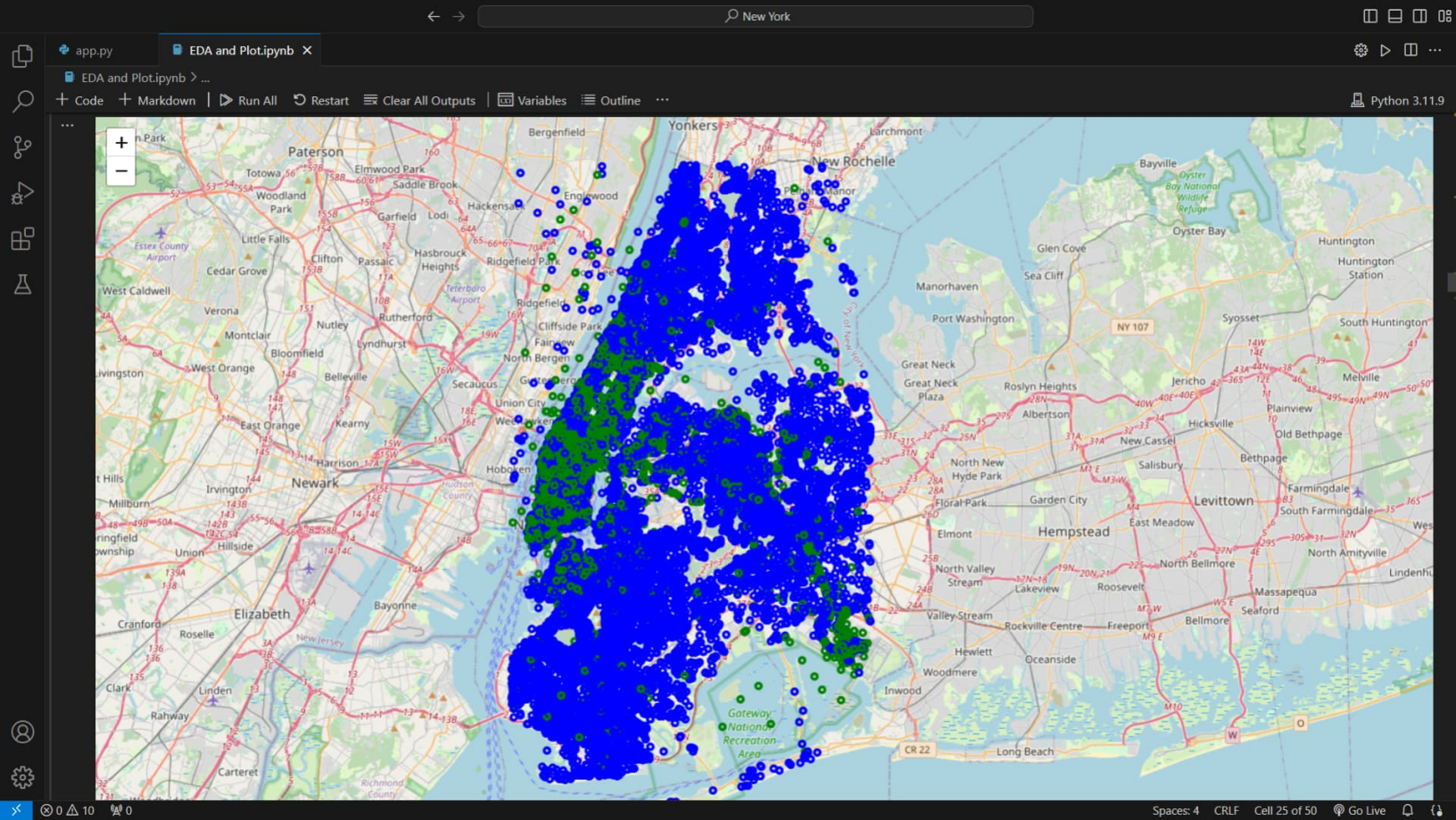
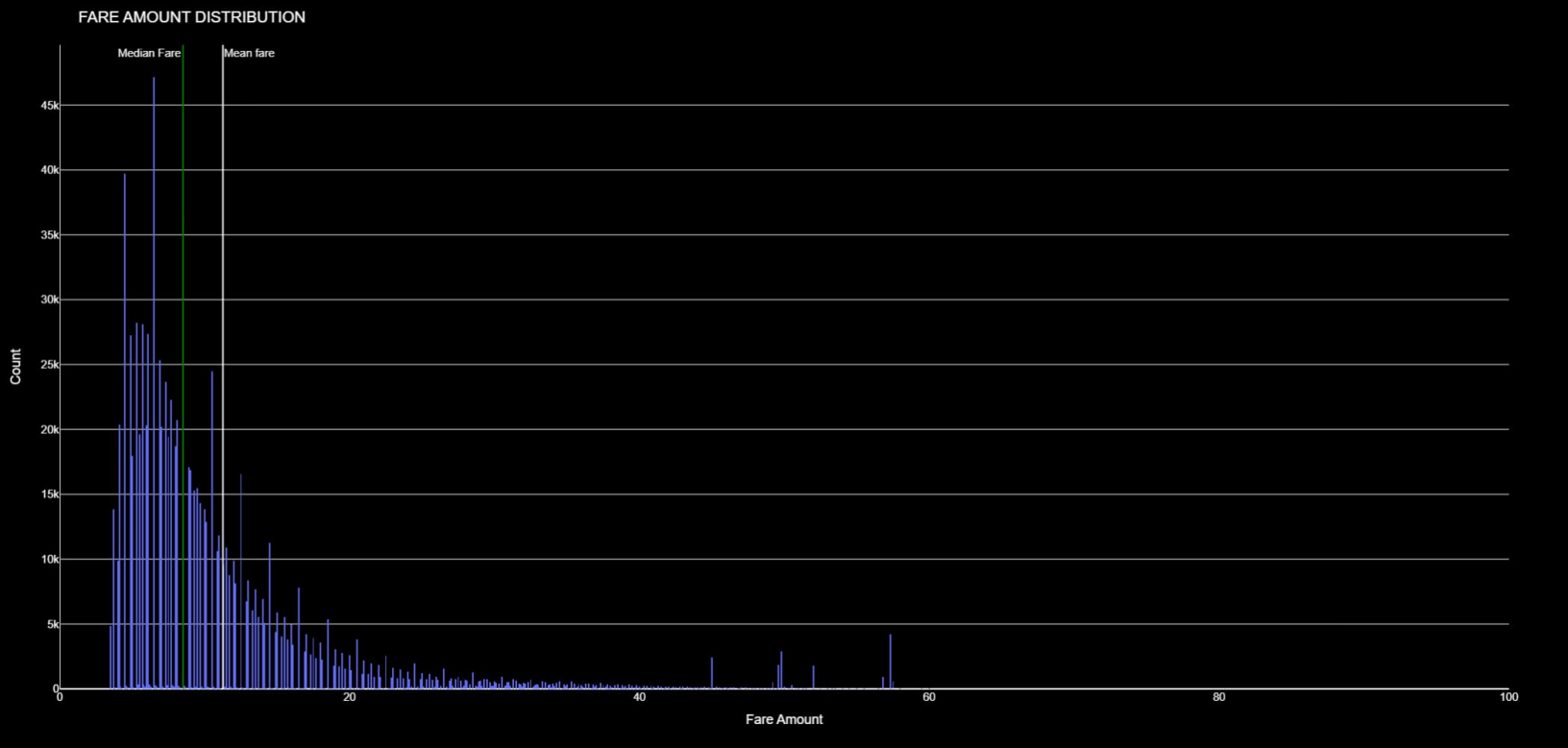
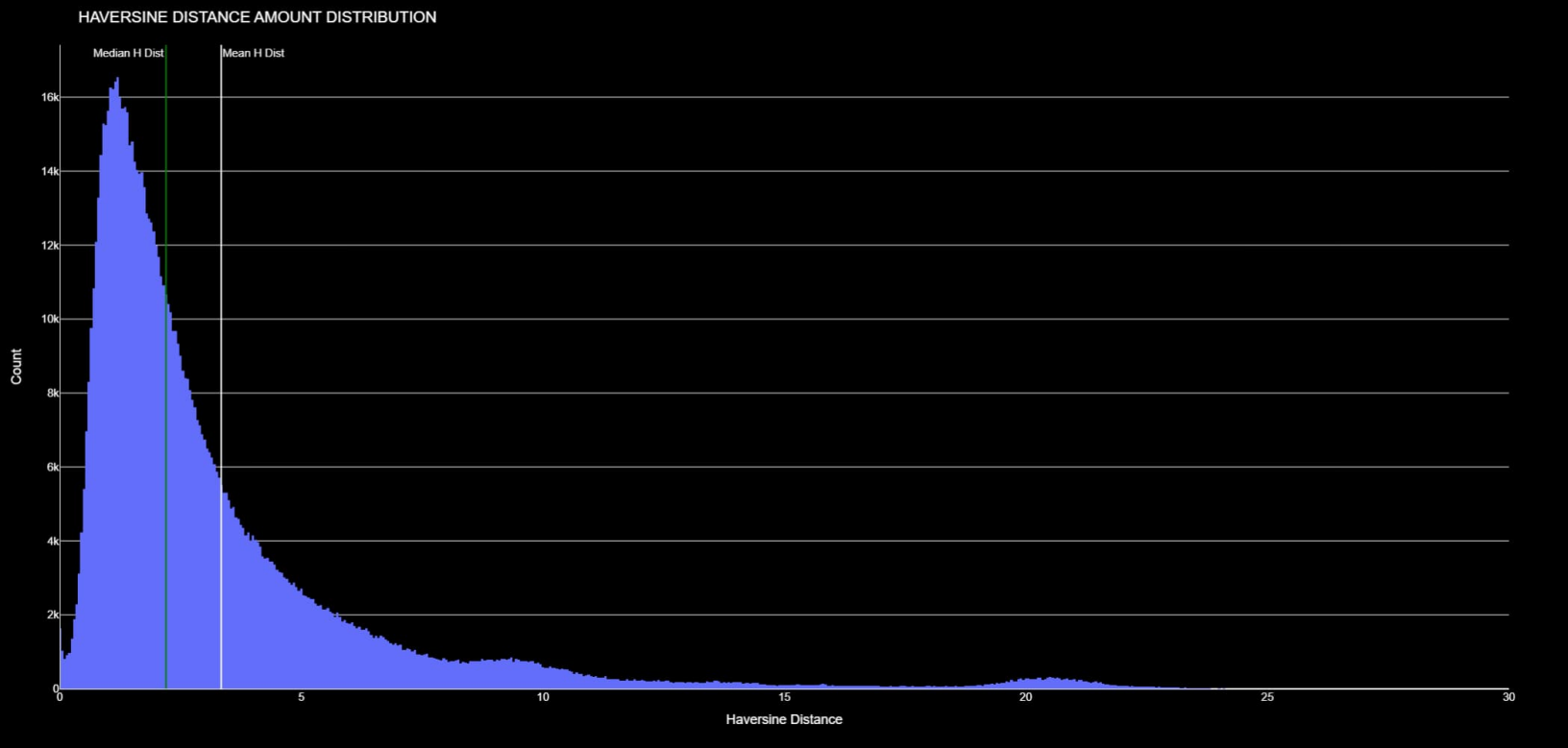
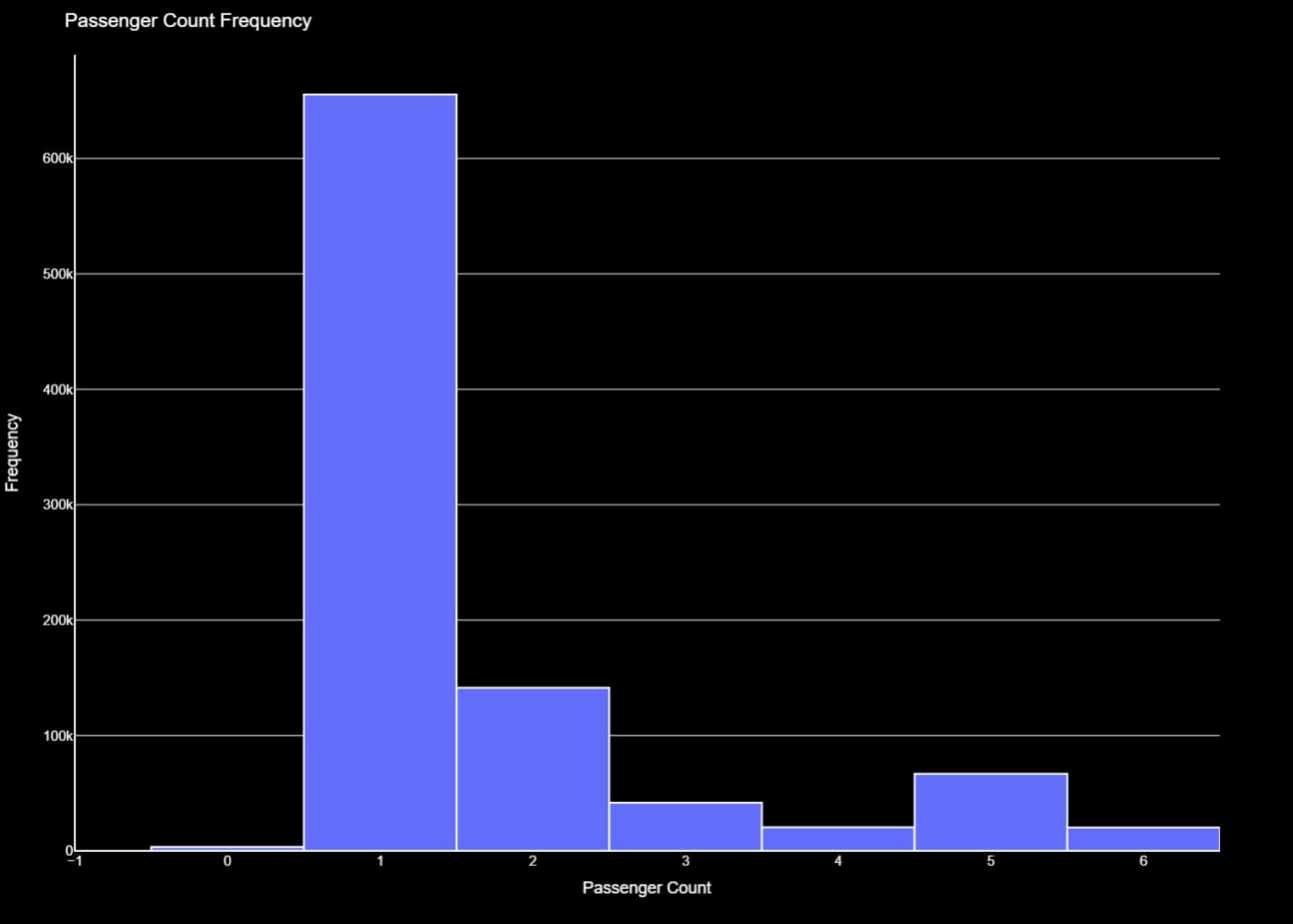

PICKUP PLOT
40.90
40.85
40.80
40.75
40.70
40.65
40.60
40.55
40.50
pickup_latitude
−74.00
−73.95
−73.90
−73.85
−73.80
pickup_longitude

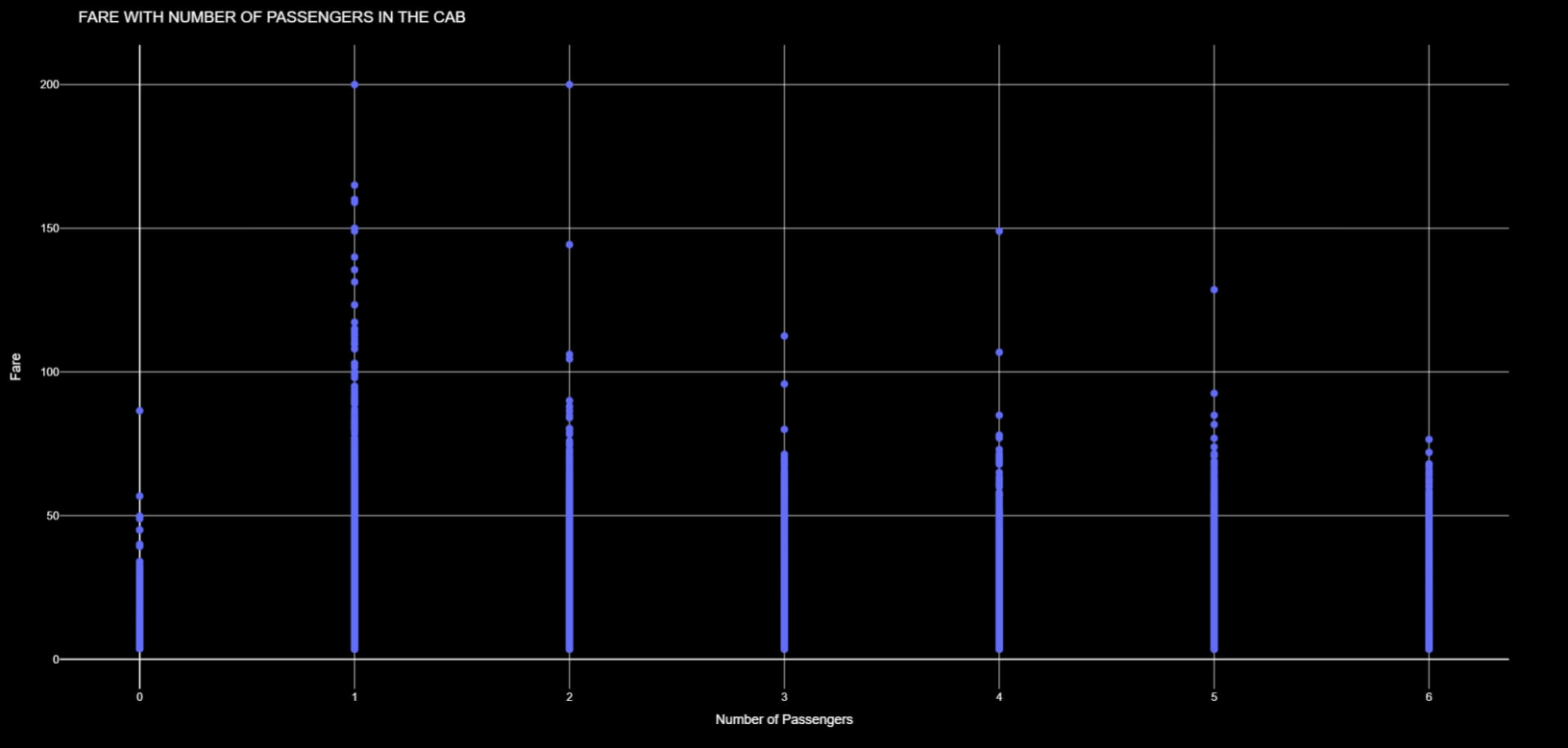

DROPOFF PLOT
40.90
40.85
40.80
40.75
40.70
40.65
40.60
40.55
40.50
dropoff_latitude
−74.00
−73.95
−73.90
−73.85
−73.80
dropoff_longitude

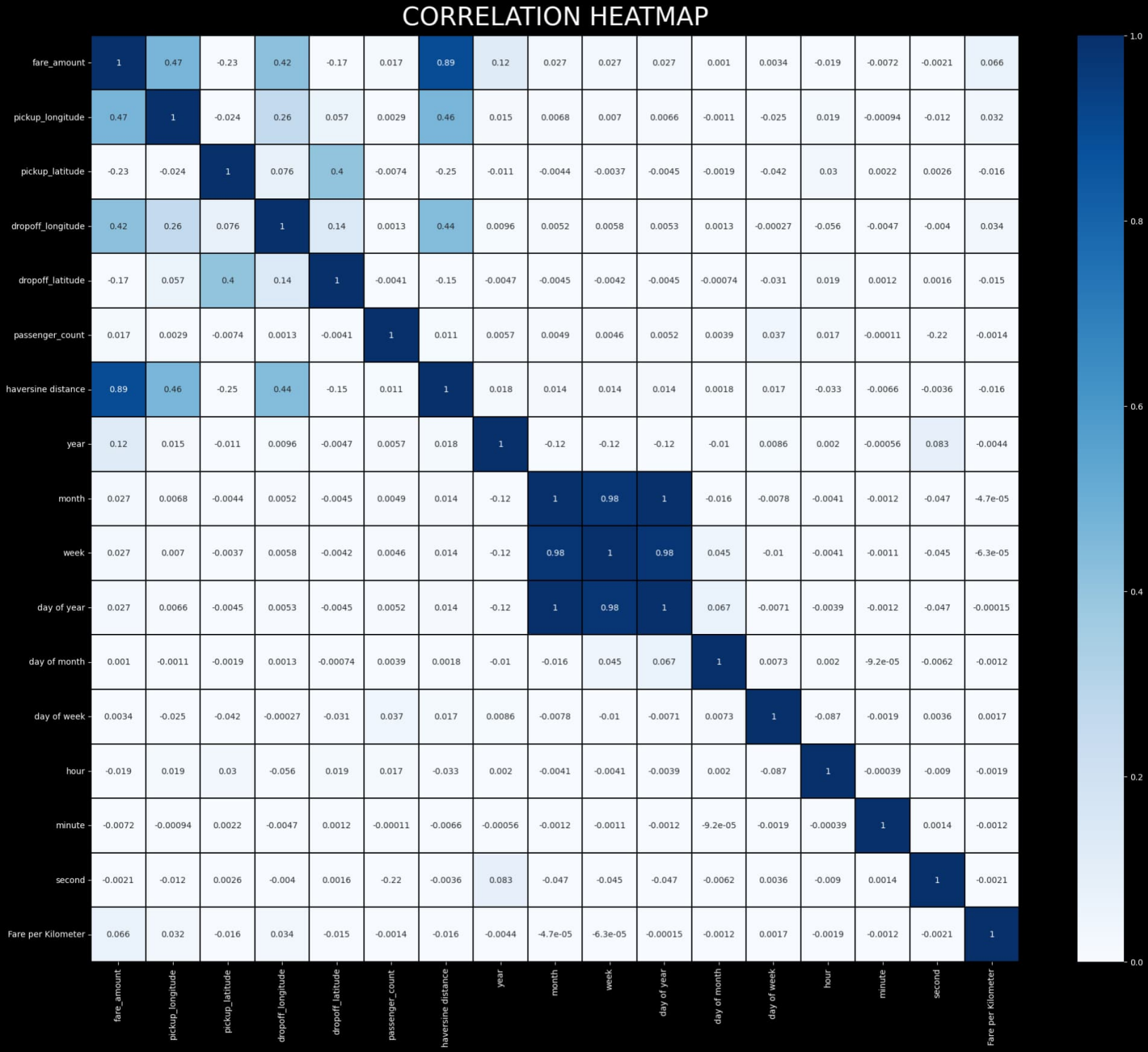

New York
app.py
EDA and Plot.ipynb
EDA and Plot.ipynb > ...
Code
Markdown
Run All
Restart
Clear All Outputs
Variables
Outline
Python 3.11.9
Paterson
Yonkers
New Rochelle
Bergenfield
Larchmont
Bayville
Oyster Bay
Huntington
Huntington Station
Glen Cove
Sea Cliff
Manorhaven
Port Washington
Syosset
South Huntington
Great Neck
Great Neck Plaza
Roslyn Heights
Albertson
Jericho
Melville
Plainview
Hicksville
New Cassel
Old Bethpage
Bethpage
Salisbury
North New Hyde Park
Garden City
Floral Park
Levittown
Farmingdale
South Farmingdale
East Meadow
Hempstead
Elmont
North Bellmore
North Amityville
North Valley Stream
Lakeview
Roosevelt
Massapequa
Seaford
Bellmore
Valley Stream
Rockville Centre
Freeport
Hewlett
Oceanside
Woodmere
Inwood
Long Beach
Gateway National Recreation Area
Newark
Elizabeth
Bayonne
Hoboken
Union City
Secaucus
North Bergen
Fairview
Cliffside Park
Ridgefield
Ridgefield Park
Englewood
Hackensack
Hasbrouck Heights
Passaic
Clifton
Garfield
Lodi
Elmwood Park
Saddle Brook
Totowa
Woodland Park
Little Falls
Cedar Grove
West Caldwell
Verona
Montclair
Nutley
Rutherford
Lyndhurst
Bloomfield
West Orange
Belleville
East Orange
Kearny
Harrison
Irvington
Millburn
Hillside
Union
Cranford
Roselle
Linden
Clark
Rahway
Carteret
Essex County Airport
Teterboro Airport
Hudson County
New Jersey
Richmond County
NY 107
CR 22
Spaces: 4
CRLF
Cell 25 of 50
Go Live

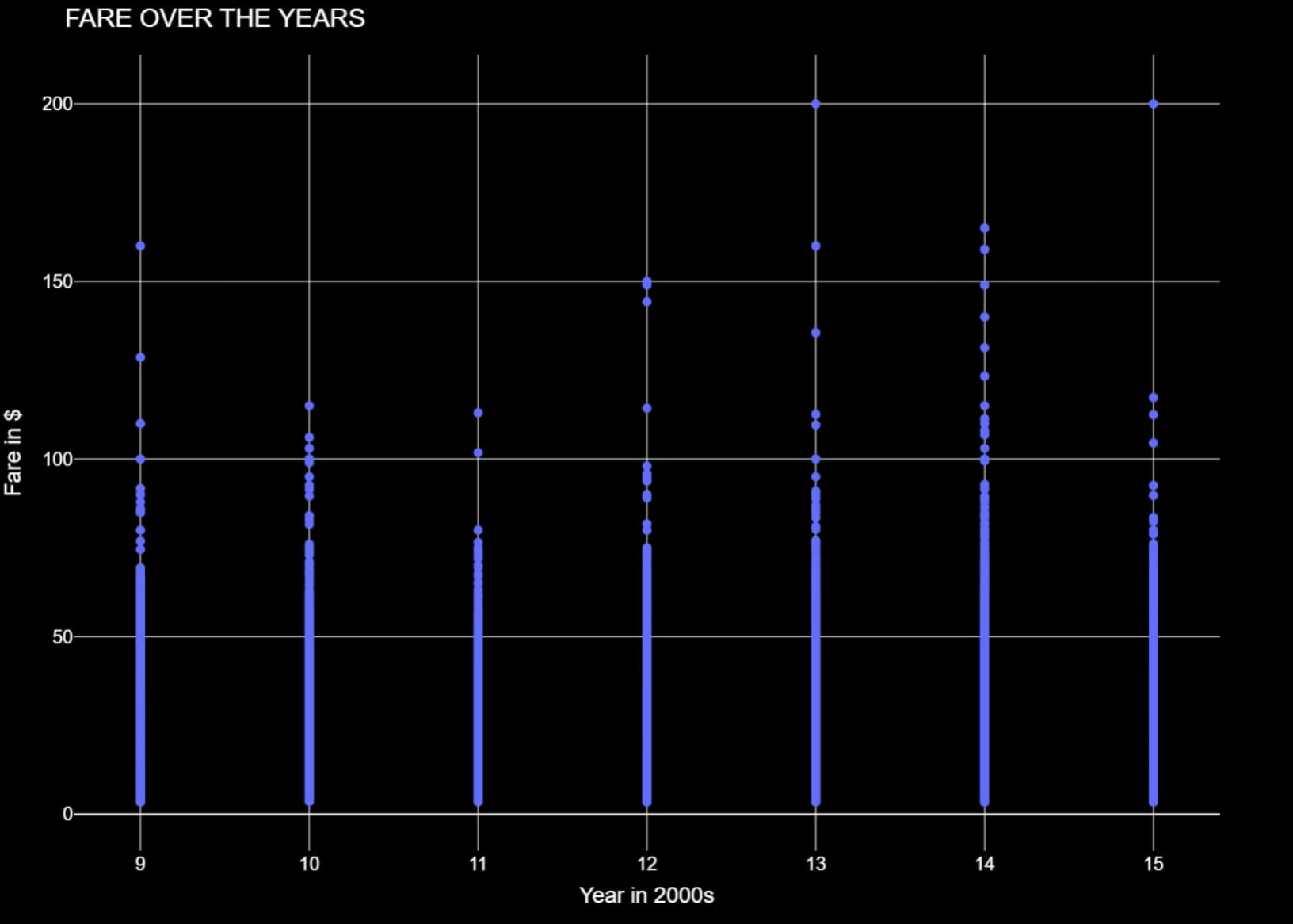

FARE AMOUNT DISTRIBUTION
Median Fare
Mean fare
45k
40k
35k
30k
25k
20k
15k
10k
5k
0
Count
0
20
40
60
80
100
Fare Amount

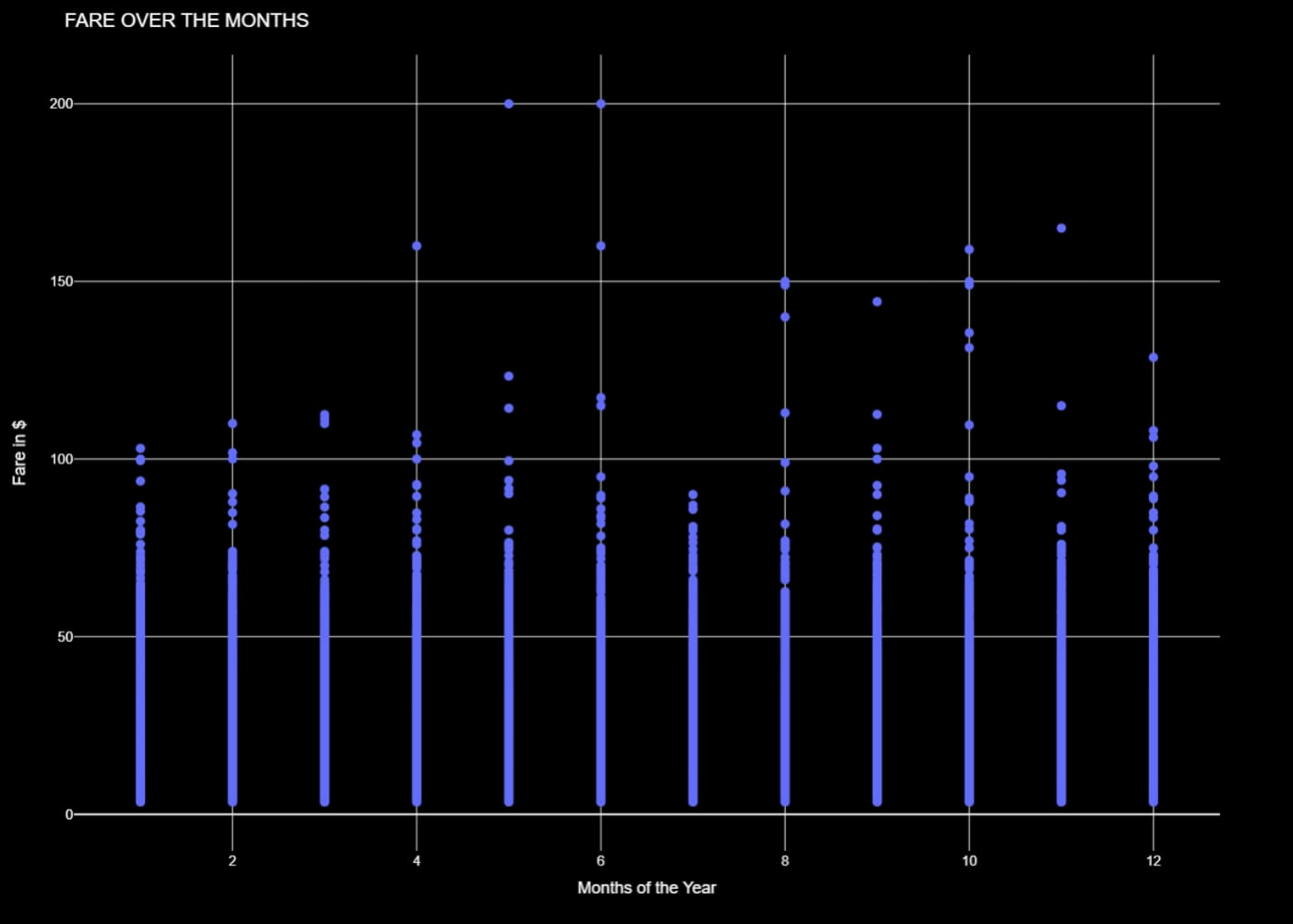

HAVERSINE DISTANCE AMOUNT DISTRIBUTION
Median H Dist
Mean H Dist
16k
14k
12k
10k
8k
6k
4k
2k
0
Count
0
5
10
15
20
25
30
Haversine Distance

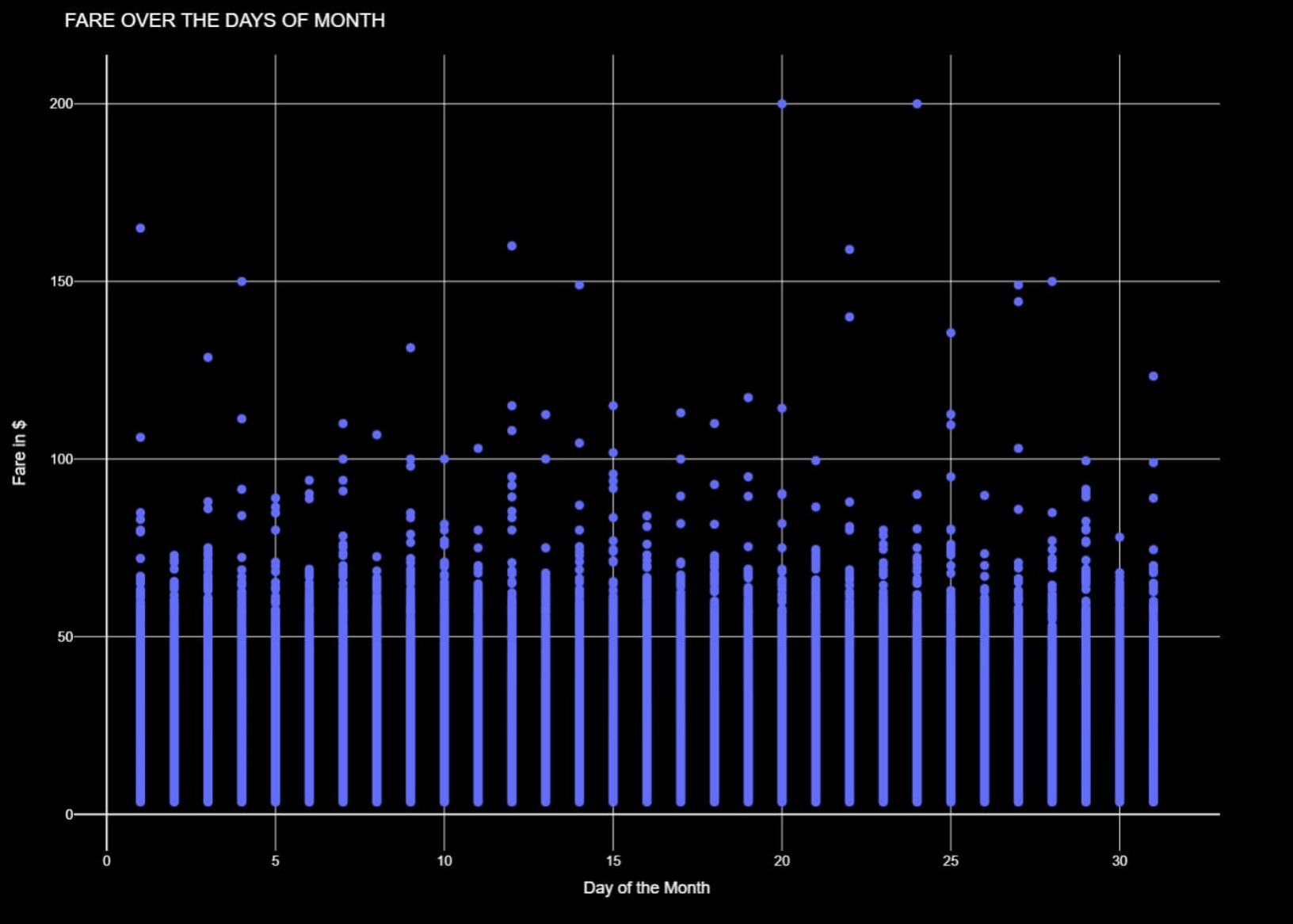

Passenger Count Frequency
600k
500k
400k
300k
200k
100k
0
Frequency
−1
0
1
2
3
4
5
6
Passenger Count

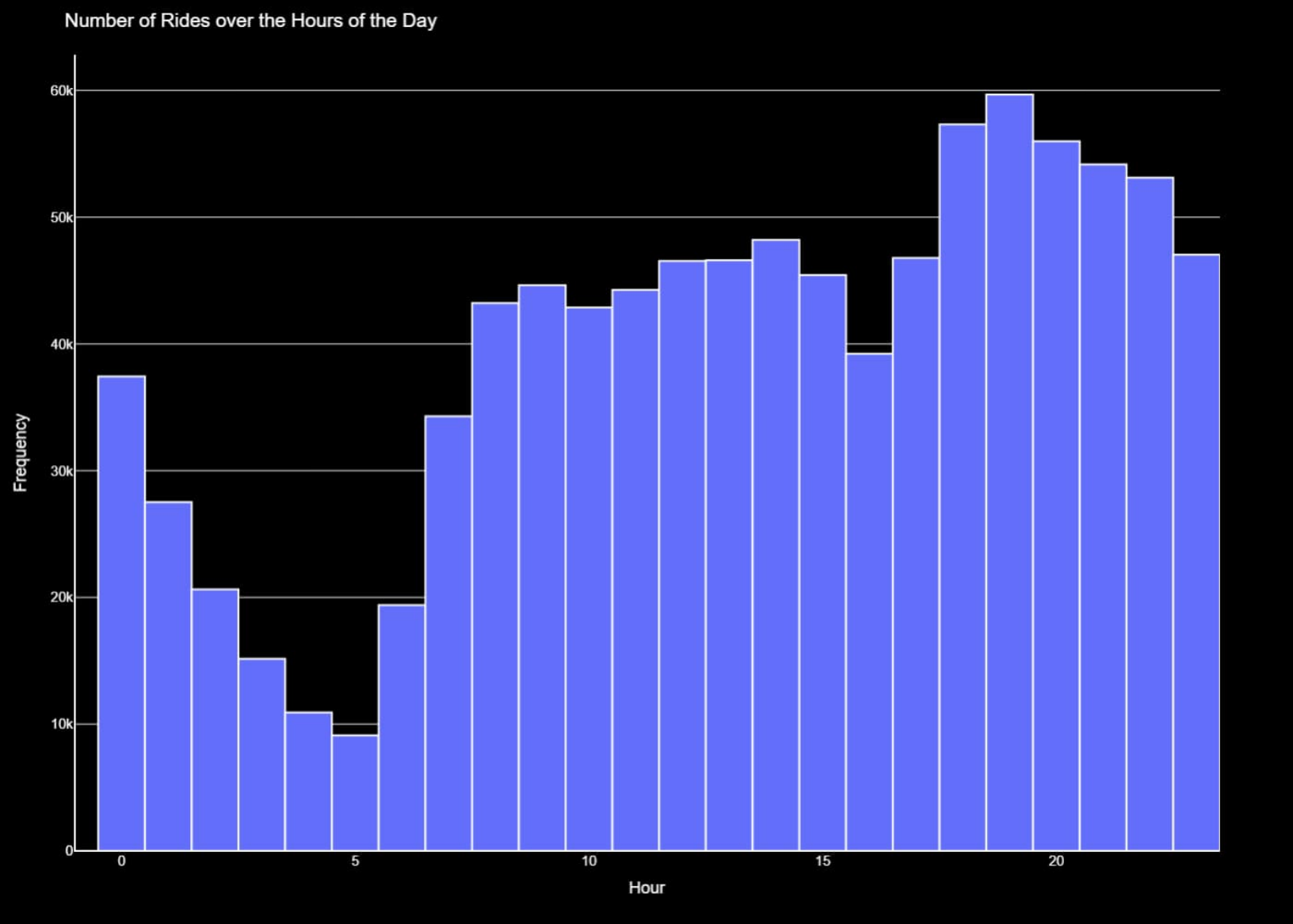

FARE WITH NUMBER OF PASSENGERS IN THE CAB
Fare
200
150
100
50
0
0
1
2
3
4
5
6
Number of Passengers

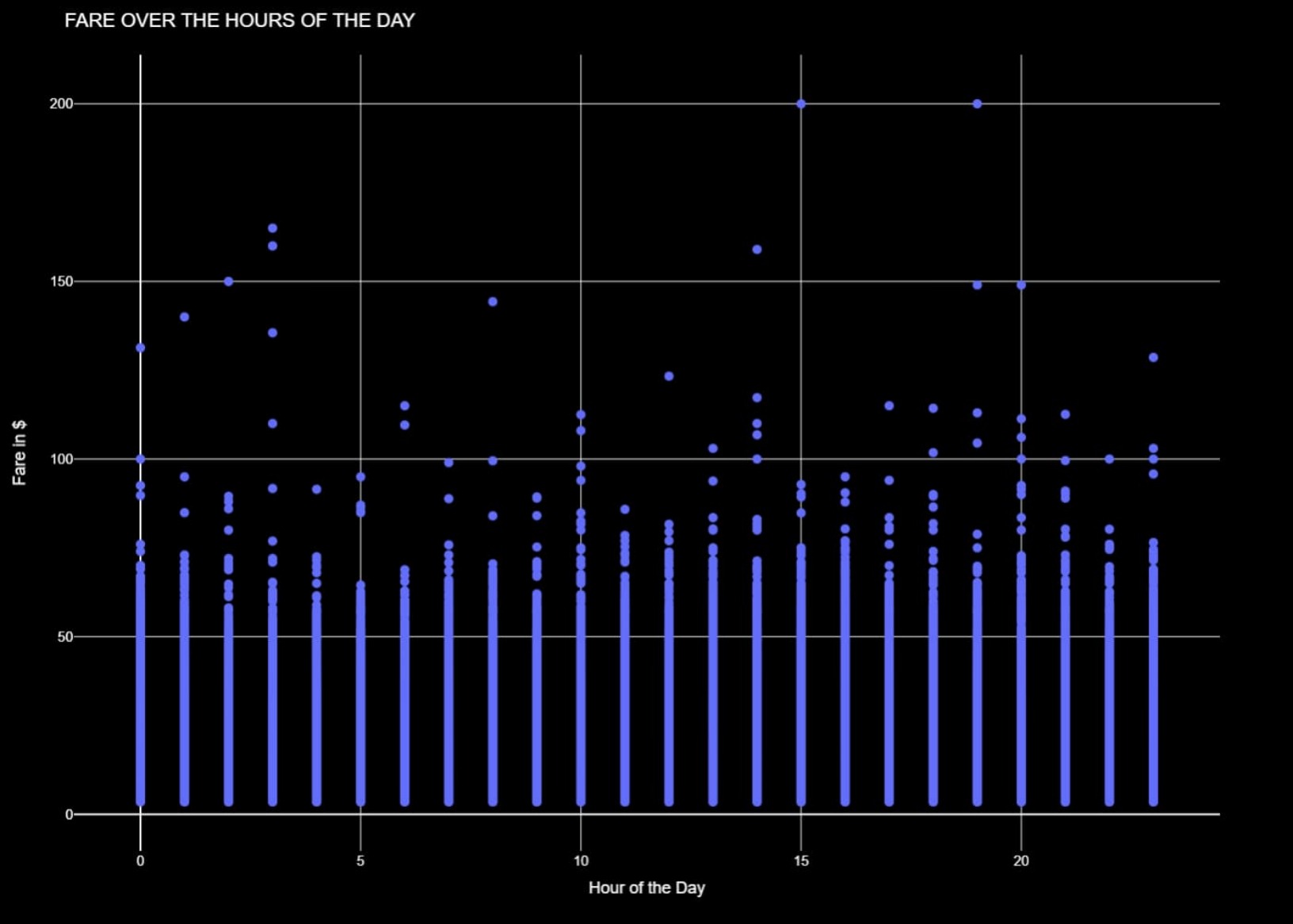

CORRELATION HEATMAP
fare_amount 1 0.47 -0.23 0.42 -0.17 0.017 0.89 0.12 0.027 0.027 0.027 0.001 0.0034 -0.019 -0.0072 -0.0021 0.066
pickup_longitude 0.47 1 -0.024 0.26 0.057 0.0029 0.46 0.015 0.0068 0.007 0.0066 -0.0011 -0.025 0.019 -0.00094 -0.012 0.032
pickup_latitude -0.23 -0.024 1 0.076 0.4 -0.0074 -0.25 -0.011 -0.0044 -0.0037 -0.0045 -0.0019 -0.042 0.03 0.0022 0.0026 -0.016
dropoff_longitude 0.42 0.26 0.076 1 0.14 0.0013 0.44 0.0096 0.0052 0.0058 0.0053 0.0013 -0.00027 -0.056 -0.0047 -0.004 0.034
dropoff_latitude -0.17 0.057 0.4 0.14 1 -0.0041 -0.15 -0.0047 -0.0045 -0.0042 -0.0045 -0.00074 -0.031 0.019 0.0012 0.0016 -0.015
passenger_count 0.017 0.0029 -0.0074 0.0013 -0.0041 1 0.011 0.0057 0.0049 0.0046 0.0052 0.0039 0.037 0.017 -0.00011 -0.22 -0.0014
haversine distance 0.89 0.46 -0.25 0.44 -0.15 0.011 1 0.018 0.014 0.014 0.014 0.0018 0.017 -0.033 -0.0066 -0.0036 -0.016
year 0.12 0.015 -0.011 0.0096 -0.0047 0.0057 0.018 1 -0.12 -0.12 -0.12 -0.01 0.0086 0.002 -0.00056 0.083 -0.0044
month 0.027 0.0068 -0.0044 0.0052 -0.0045 0.0049 0.014 -0.12 1 0.98 1 -0.016 -0.0078 -0.0041 -0.0012 -0.047 -4.7e-05
week 0.027 0.007 -0.0037 0.0058 -0.0042 0.0046 0.014 -0.12 0.98 1 0.98 0.045 -0.01 -0.0041 -0.0011 -0.045 -6.3e-05
day of year 0.027 0.0066 -0.0045 0.0053 -0.0045 0.0052 0.014 -0.12 1 0.98 1 0.067 -0.0071 -0.0039 -0.0012 -0.047 -0.00015
day of month 0.001 -0.0011 -0.0019 0.0013 -0.00074 0.0039 0.0018 -0.01 -0.016 0.045 0.067 1 0.0073 0.002 -9.2e-05 -0.0062 -0.0012
day of week 0.0034 -0.025 -0.042 -0.00027 -0.031 0.037 0.017 0.0086 -0.0078 -0.01 -0.0071 0.0073 1 -0.087 -0.0019 0.0036 0.0017
hour -0.019 0.019 0.03 -0.056 0.019 0.017 -0.033 0.002 -0.0041 -0.0041 -0.0039 0.002 -0.087 1 -0.00039 -0.009 -0.0019
minute -0.0072 -0.00094 0.0022 -0.0047 0.0012 -0.00011 -0.0066 -0.00056 -0.0012 -0.0011 -0.0012 -9.2e-05 -0.0019 -0.00039 1 0.0014 -0.0012
second -0.0021 -0.012 0.0026 -0.004 0.0016 -0.22 -0.0036 0.083 -0.047 -0.045 -0.047 -0.0062 0.0036 -0.009 0.0014 1 -0.0021
Fare per Kilometer 0.066 0.032 -0.016 0.034 -0.015 -0.0014 -0.016 -0.0044 -4.7e-05 -6.3e-05 -0.00015 -0.0012 0.0017 -0.0019 -0.0012 -0.0021 1
fare_amount pickup_longitude pickup_latitude dropoff_longitude dropoff_latitude passenger_count haversine distance year month week day of year day of month day of week hour minute second Fare per Kilometer
1.0 0.8 0.6 0.4 0.2 0.0

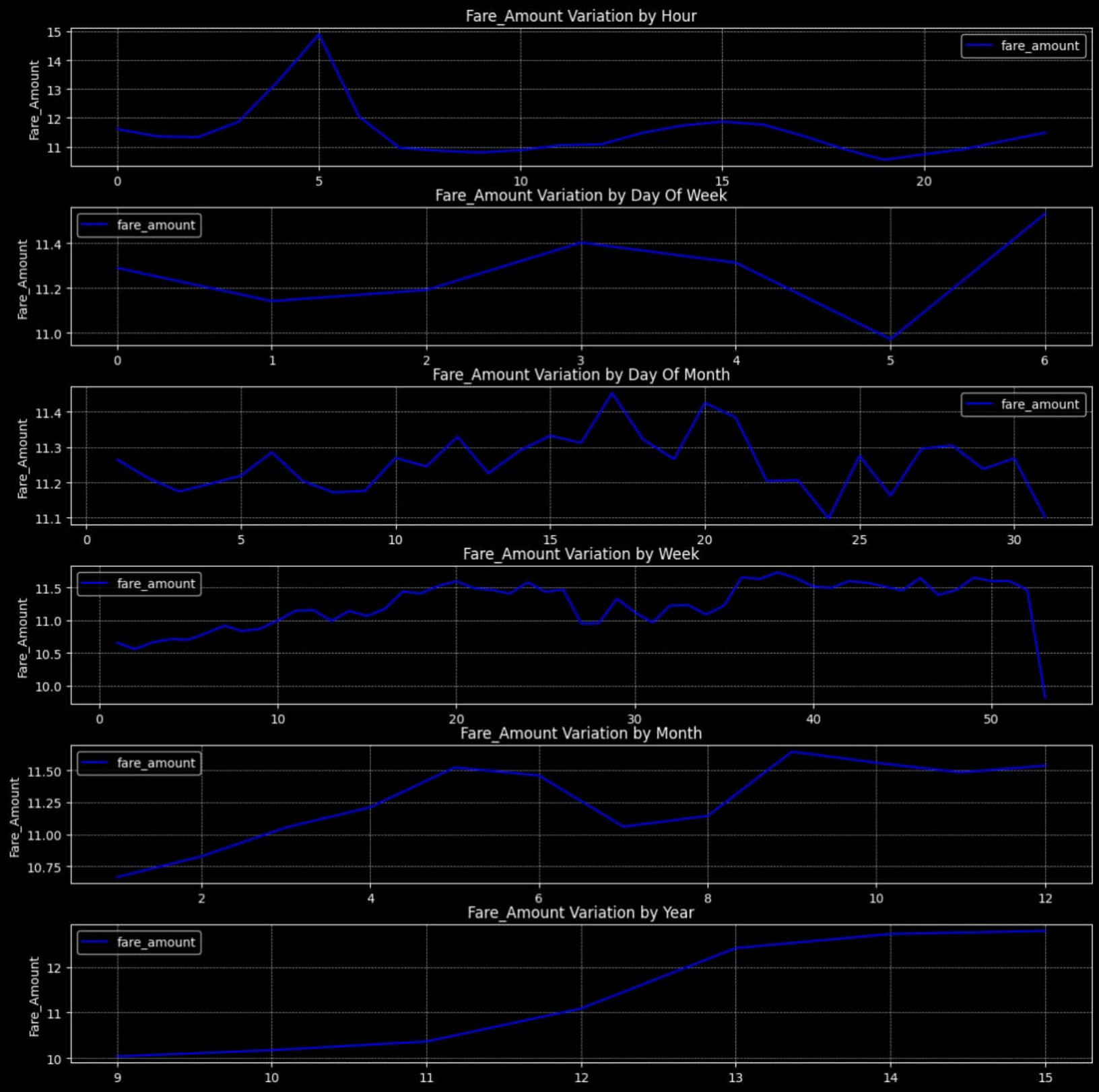

FARE OVER THE YEARS
200
150
100
50
0
Fare in $
9
10
11
12
13
14
15
Year in 2000s

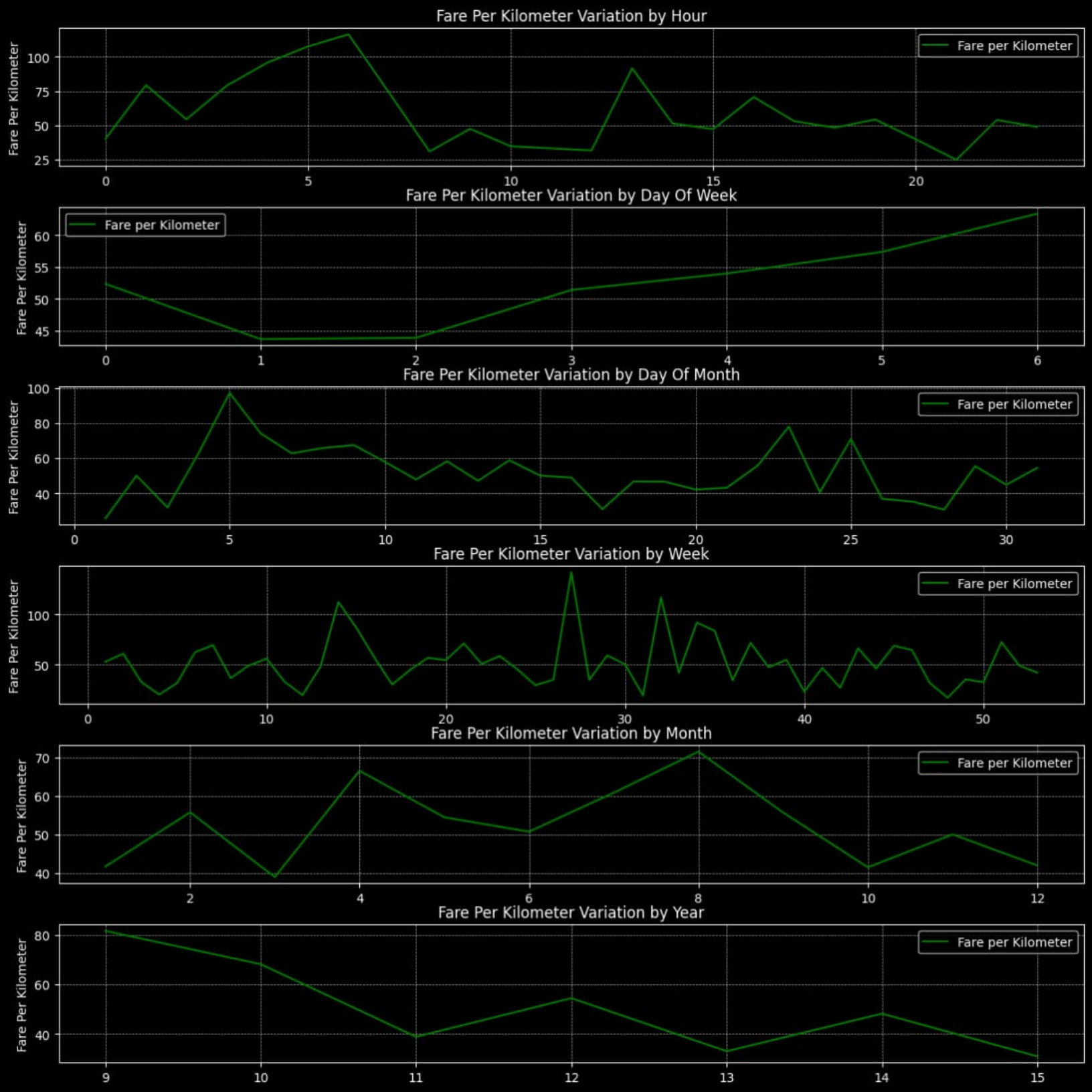

FARE OVER THE MONTHS
200
150
100
50
0
Fare in $
2
4
6
8
10
12
Months of the Year

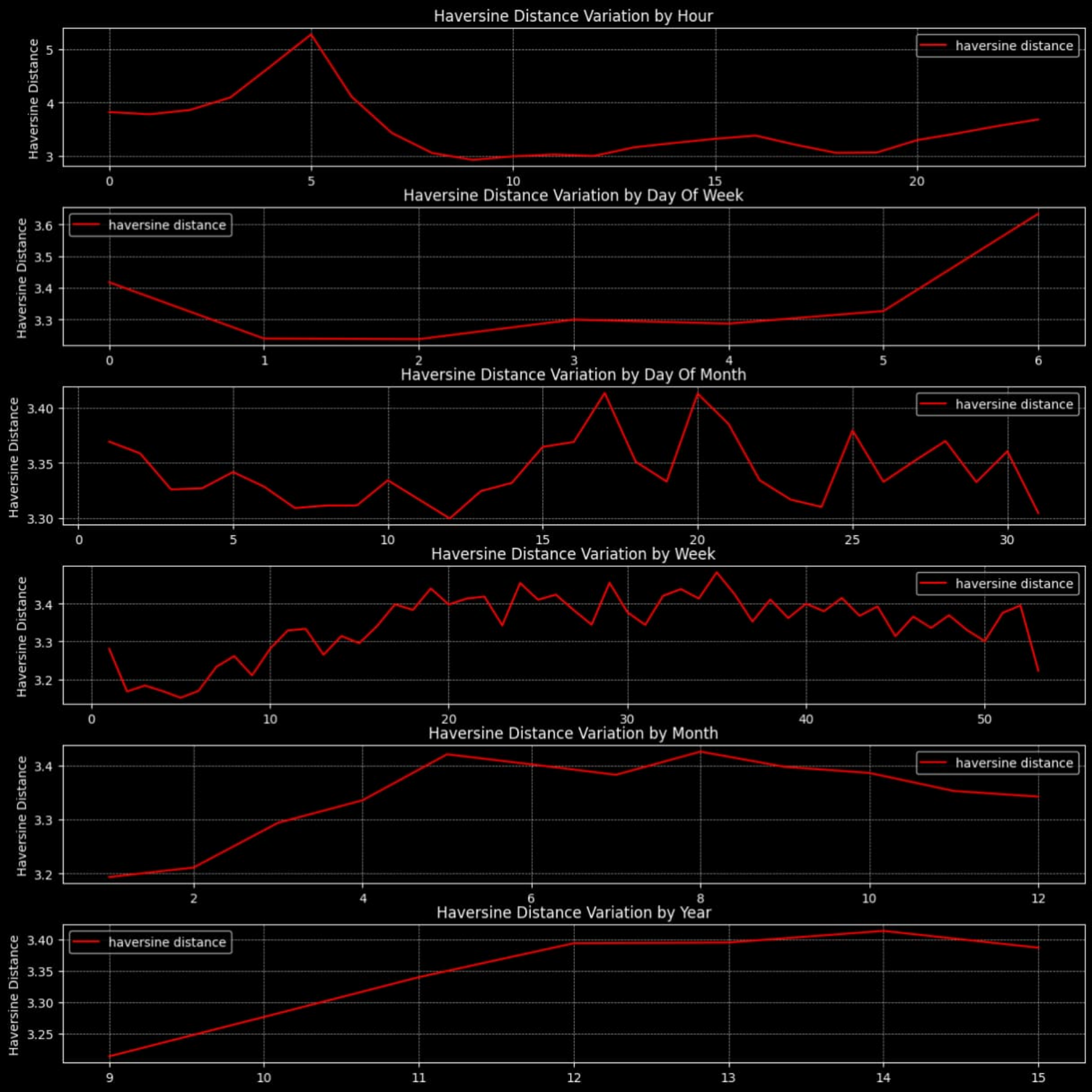

FARE OVER THE DAYS OF MONTH
Fare in $
200
150
100
50
0
0
5
10
15
20
25
30
Day of the Month

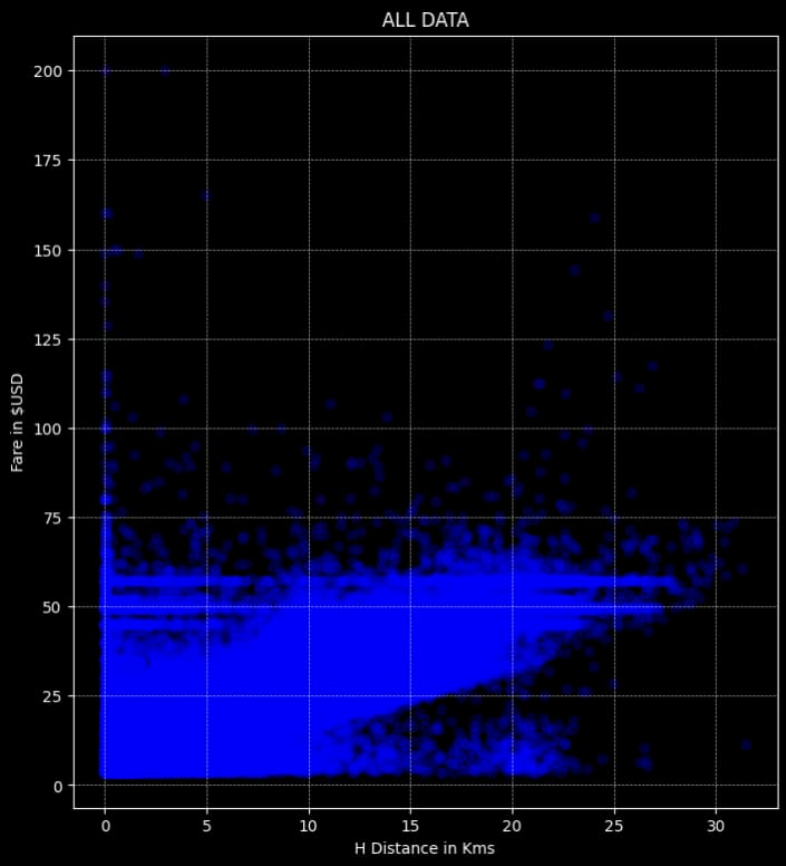

Number of Rides over the Hours of the Day
60k
50k
40k
30k
20k
10k
0
Frequency
0
5
10
15
20
Hour

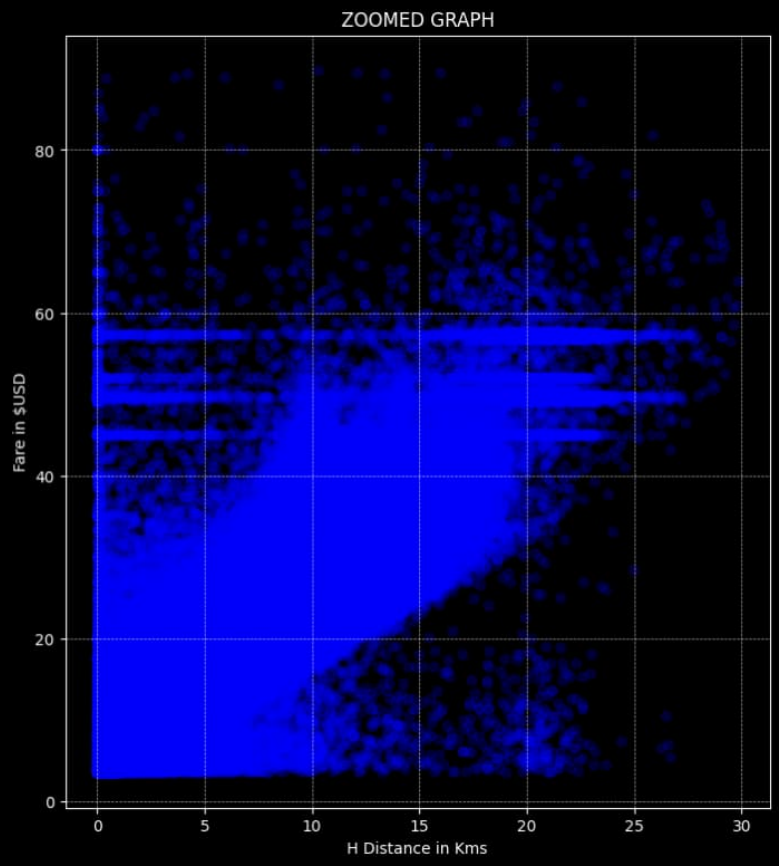

FARE OVER THE HOURS OF THE DAY
200
150
100
50
0
Fare in $
0
5
10
15
20
Hour of the Day

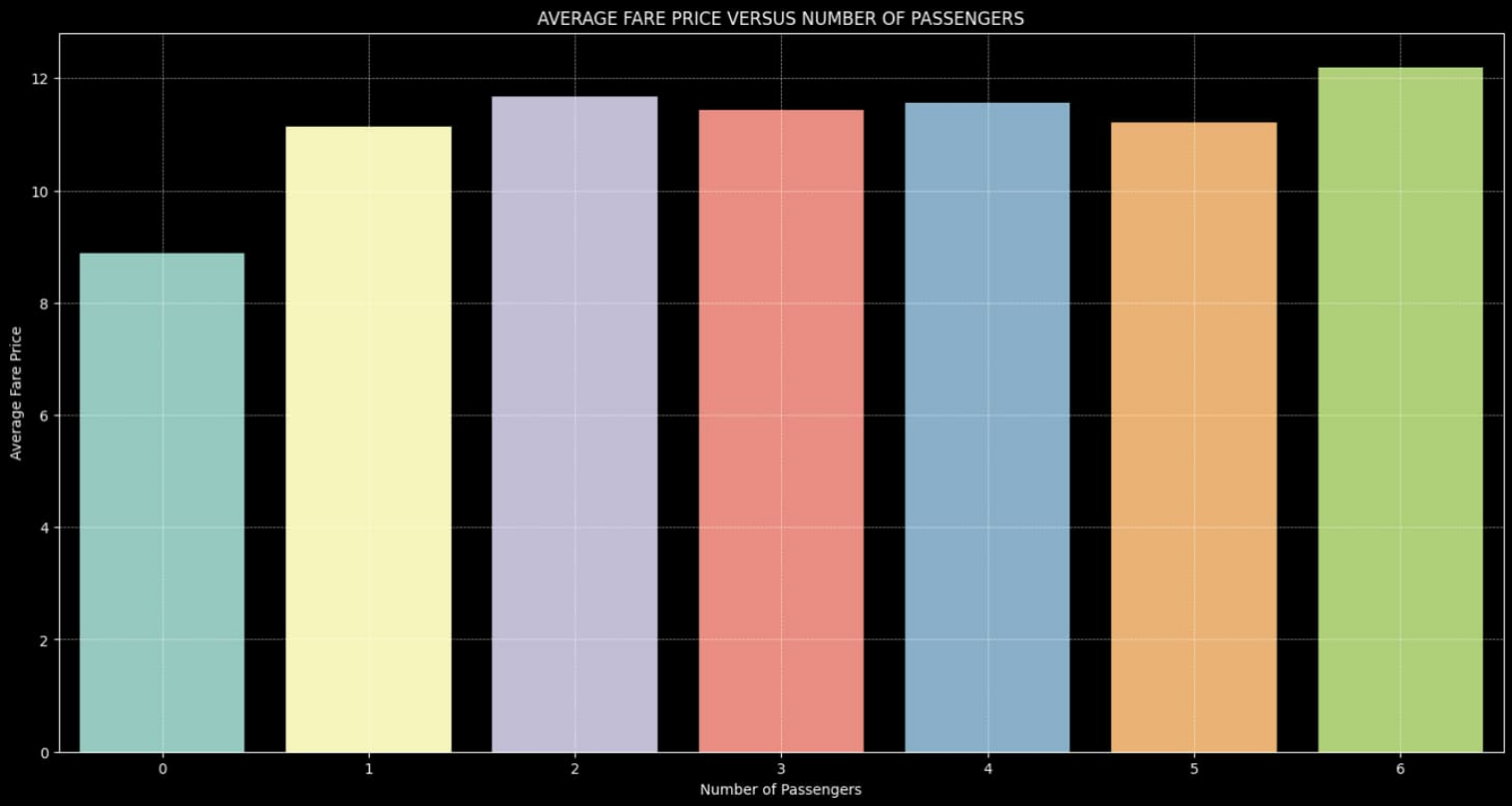

Fare_Amount Variation by Hour
Fare_Amount
fare_amount
Fare_Amount Variation by Day Of Week
Fare_Amount
fare_amount
Fare_Amount Variation by Day Of Month
Fare_Amount
fare_amount
Fare_Amount Variation by Week
Fare_Amount
fare_amount
Fare_Amount Variation by Month
Fare_Amount
fare_amount
Fare_Amount Variation by Year
Fare_Amount
fare_amount


Fare Per Kilometer Variation by Hour
Fare per Kilometer
Fare Per Kilometer
Fare Per Kilometer Variation by Day Of Week
Fare per Kilometer
Fare Per Kilometer
Fare Per Kilometer Variation by Day Of Month
Fare per Kilometer
Fare Per Kilometer
Fare Per Kilometer Variation by Week
Fare per Kilometer
Fare Per Kilometer
Fare Per Kilometer Variation by Month
Fare per Kilometer
Fare Per Kilometer
Fare Per Kilometer Variation by Year
Fare per Kilometer
Fare Per Kilometer


Haversine Distance Variation by Hour
Haversine Distance
haversine distance
Haversine Distance Variation by Day Of Week
Haversine Distance
haversine distance
Haversine Distance Variation by Day Of Month
Haversine Distance
haversine distance
Haversine Distance Variation by Week
Haversine Distance
haversine distance
Haversine Distance Variation by Month
Haversine Distance
haversine distance
Haversine Distance Variation by Year
Haversine Distance
haversine distance


ALL DATA
Fare in $USD
H Distance in Kms
0
25
50
75
100
125
150
175
200
0
5
10
15
20
25
30


ZOOMED GRAPH
Fare in $USD
H Distance in Kms
0
20
40
60
80
0
5
10
15
20
25
30


AVERAGE FARE PRICE VERSUS NUMBER OF PASSENGERS
Average Fare Price
0
2
4
6
8
10
12
0
1
2
3
4
5
6
Number of Passengers