



PROJECT

NYC GUIDE DOGS - FUND RAISING SUPPORT

EDA PROJECT - METIS 2021

DATE

05/28/2021

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Introduction

- NYC Guide Dogs Foundation
- Recommendation for the best period of times and locations for fund raising stations

Requirements:

- Nov - Jan
- 5 weeks of ad budget
- NYC subway stations
(in different neighborhoods)



Project Plan

- 1) Collect information from MTA's website
- 2) Identify 10 stations with the highest entering traffic
- 3) Select the 5 stations with the highest rank but from different neighborhoods
- 4) Analyse the 5 stations on monthly and weekly periods
- 5) Recommendation of most suitable weeks and stations for fund raising

Methodology

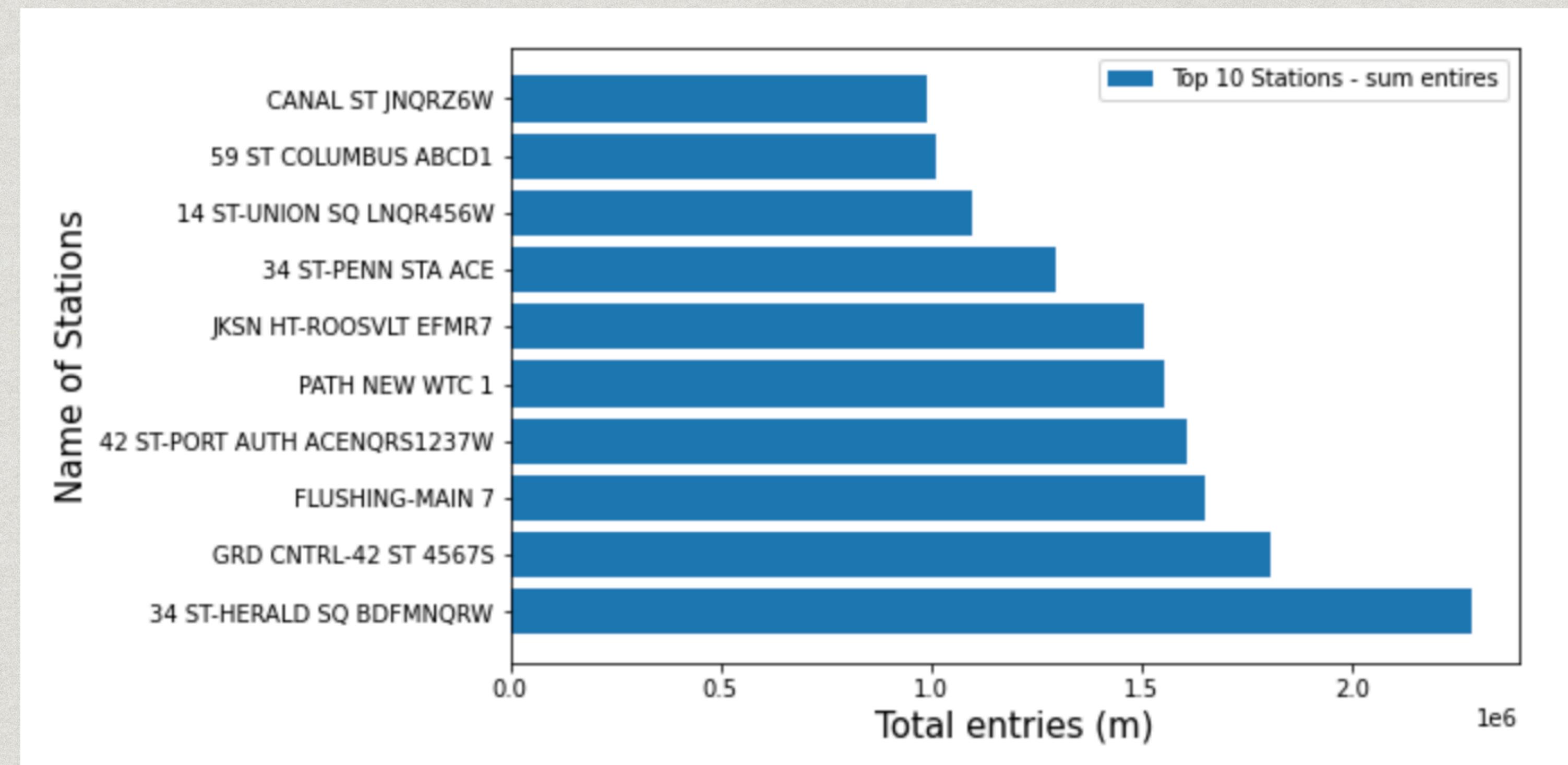
Project Workflow - Technical:

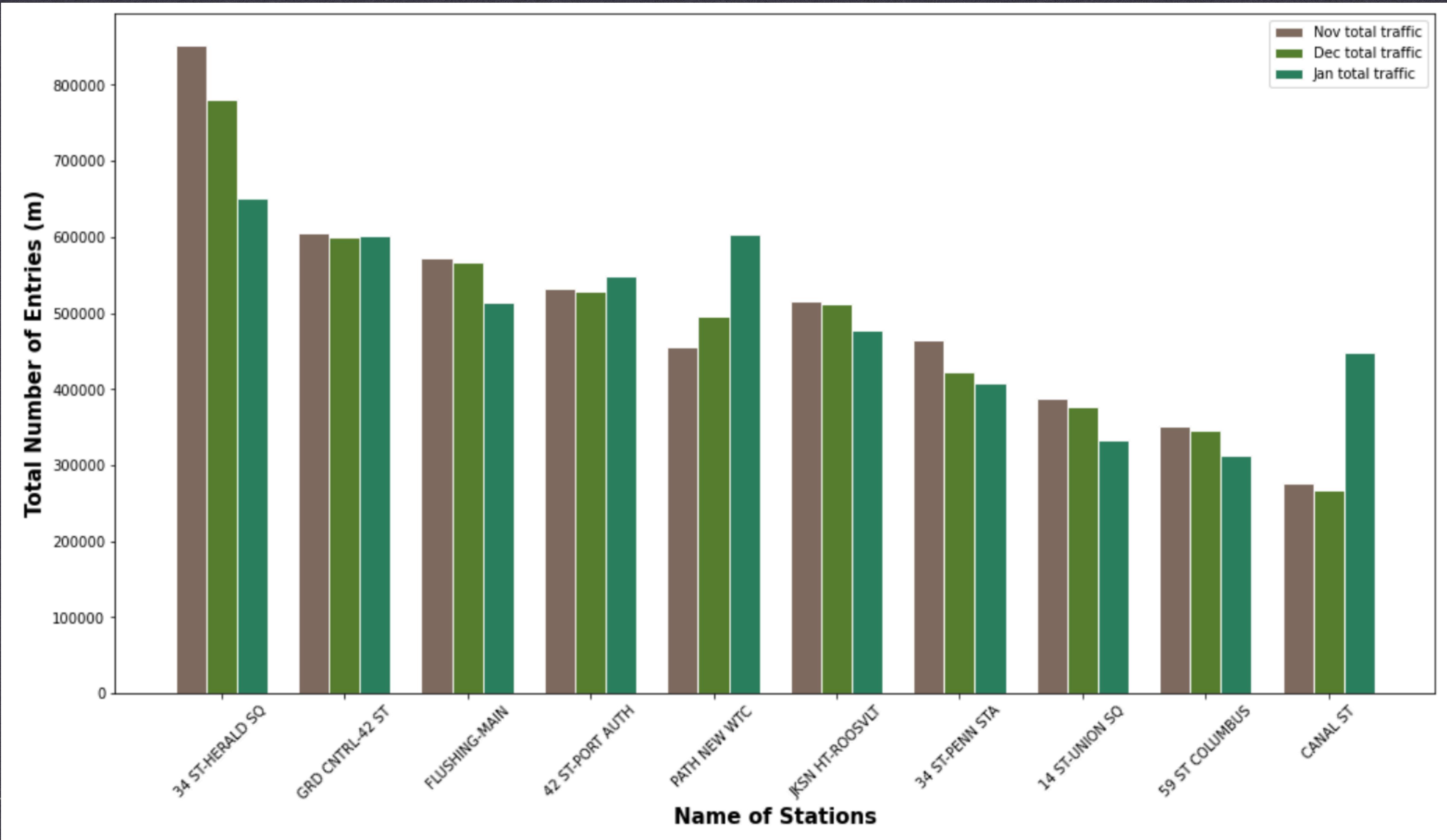
- 1) Data Collection:
- **SQL system**
- 2) Data Preparation:
- **Python via SQLAlchemy**
- 3) Exploratory Data Analysis
- **Python Pandas package**
- 4) Data Visualisation
- **Python Matplotlib package**

Results

Ten subway stations with the most traffic

1. 34 St - Herald Square
2. Grand Central - 42 St
3. Flushing - Main
4. 42 St - Port Auth
5. Path New WTC
6. JKSN HT - Roosevelt
7. 23 St Penn Sta
8. 14 St - Union Square
9. 59 St Columbus
10. Canal St



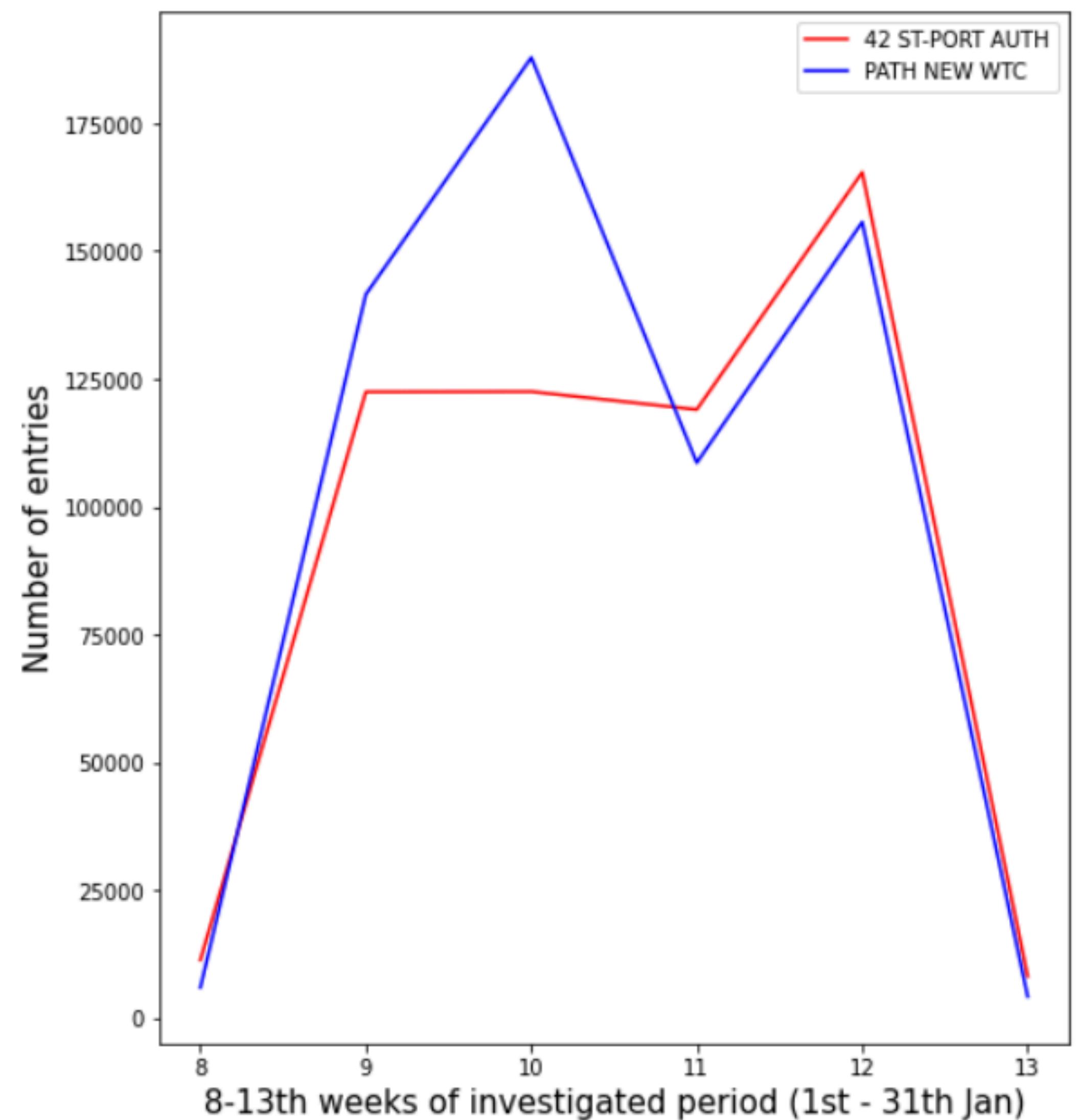
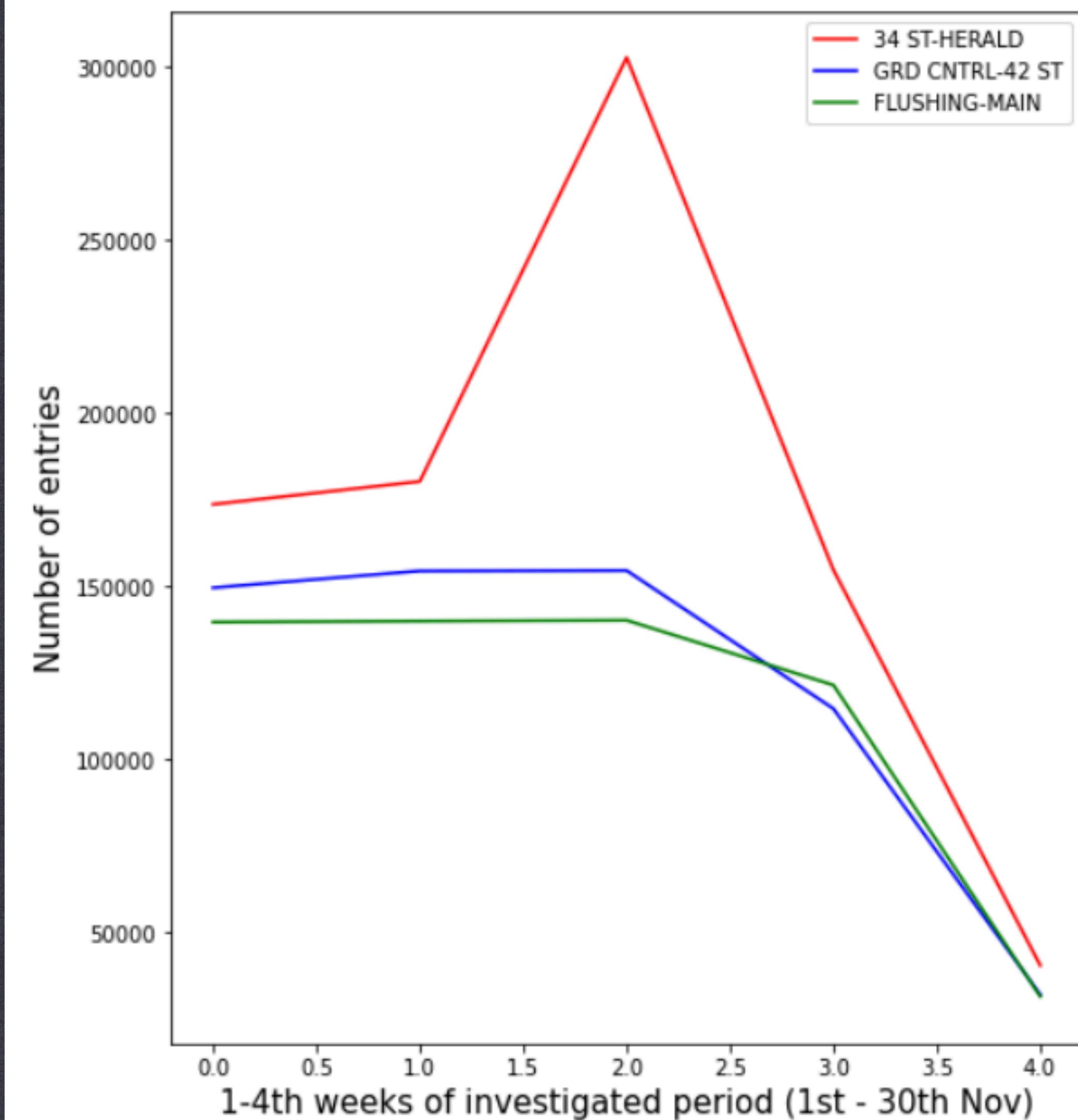


Monthly total entries of the top 10 stations

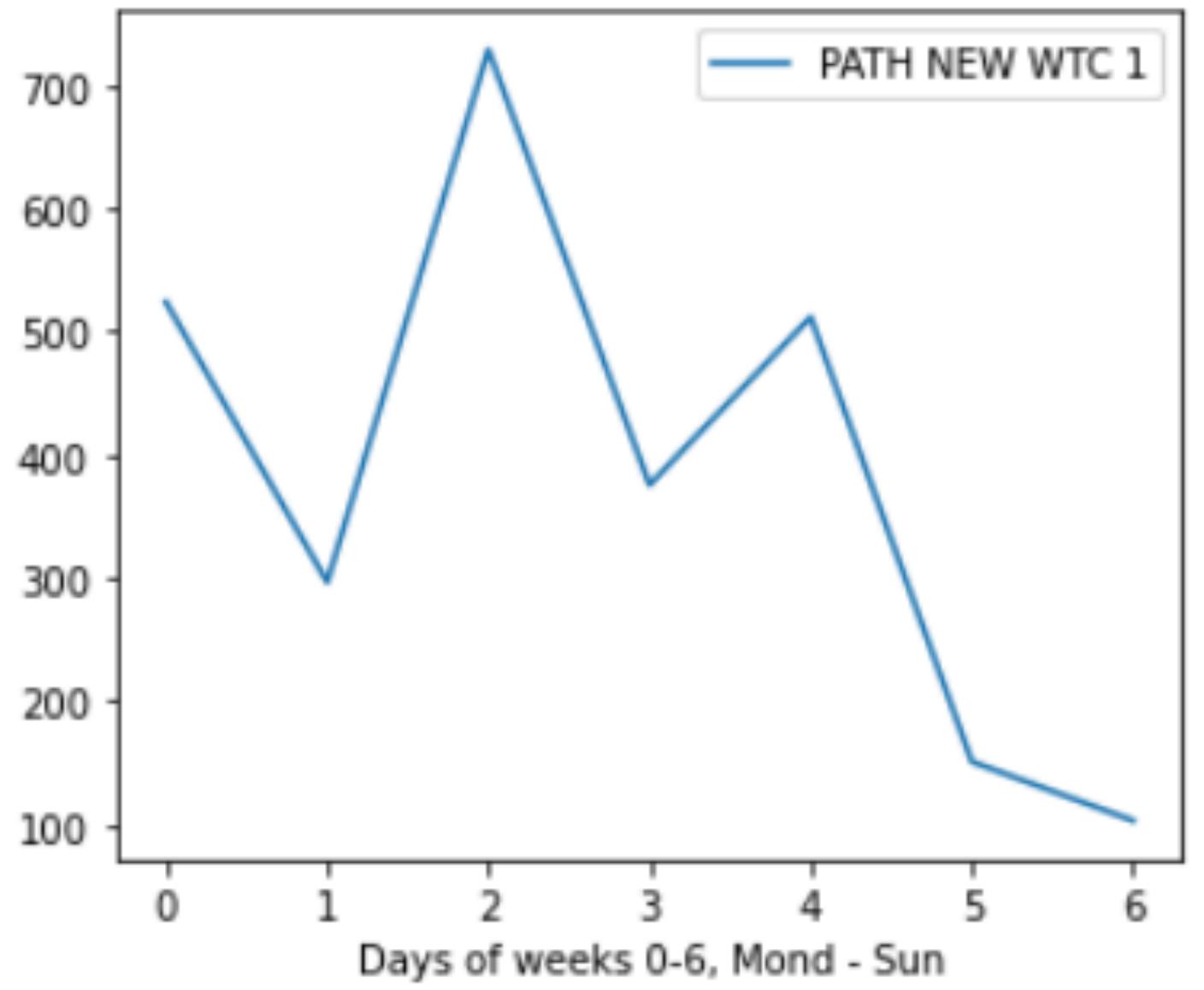
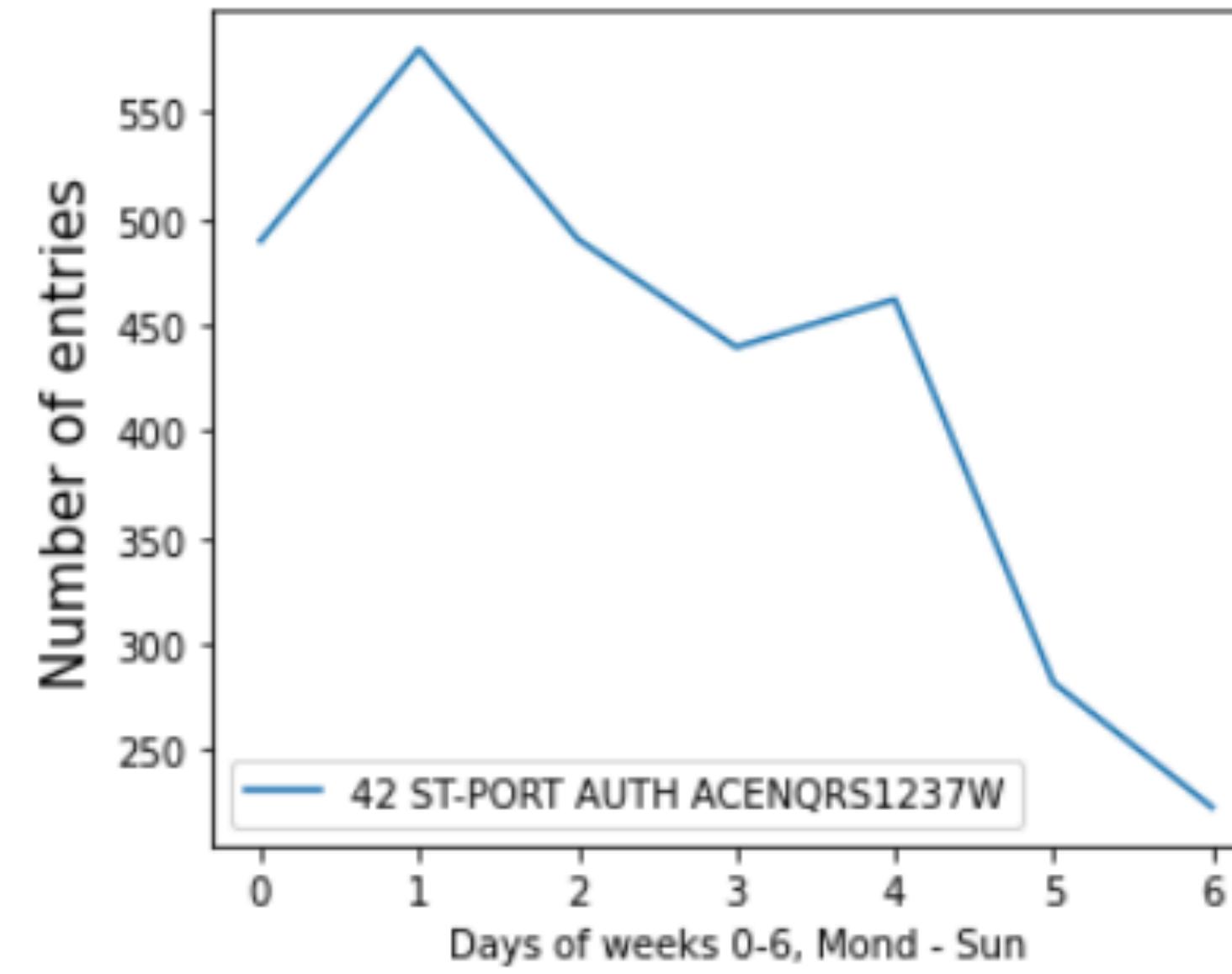
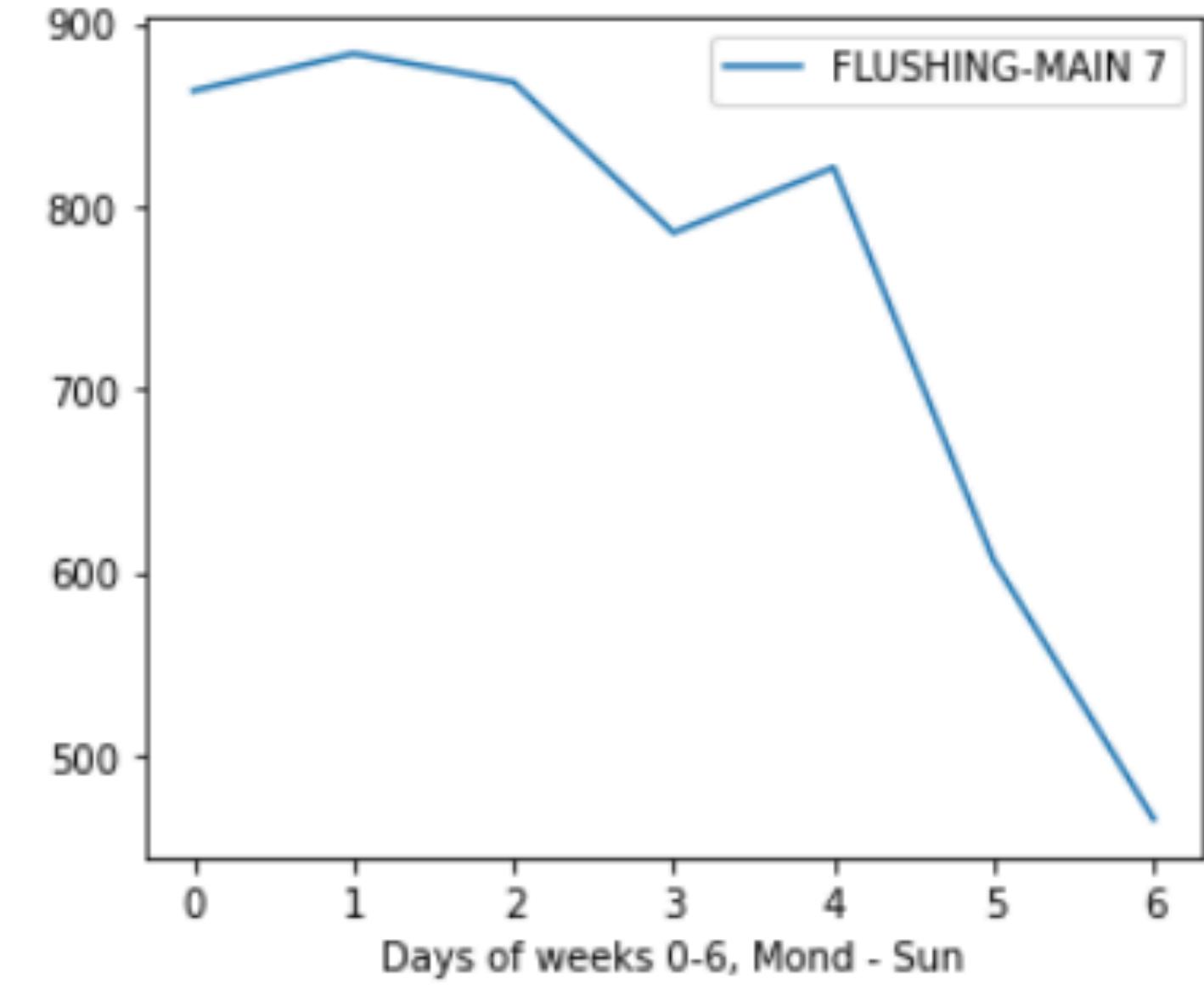
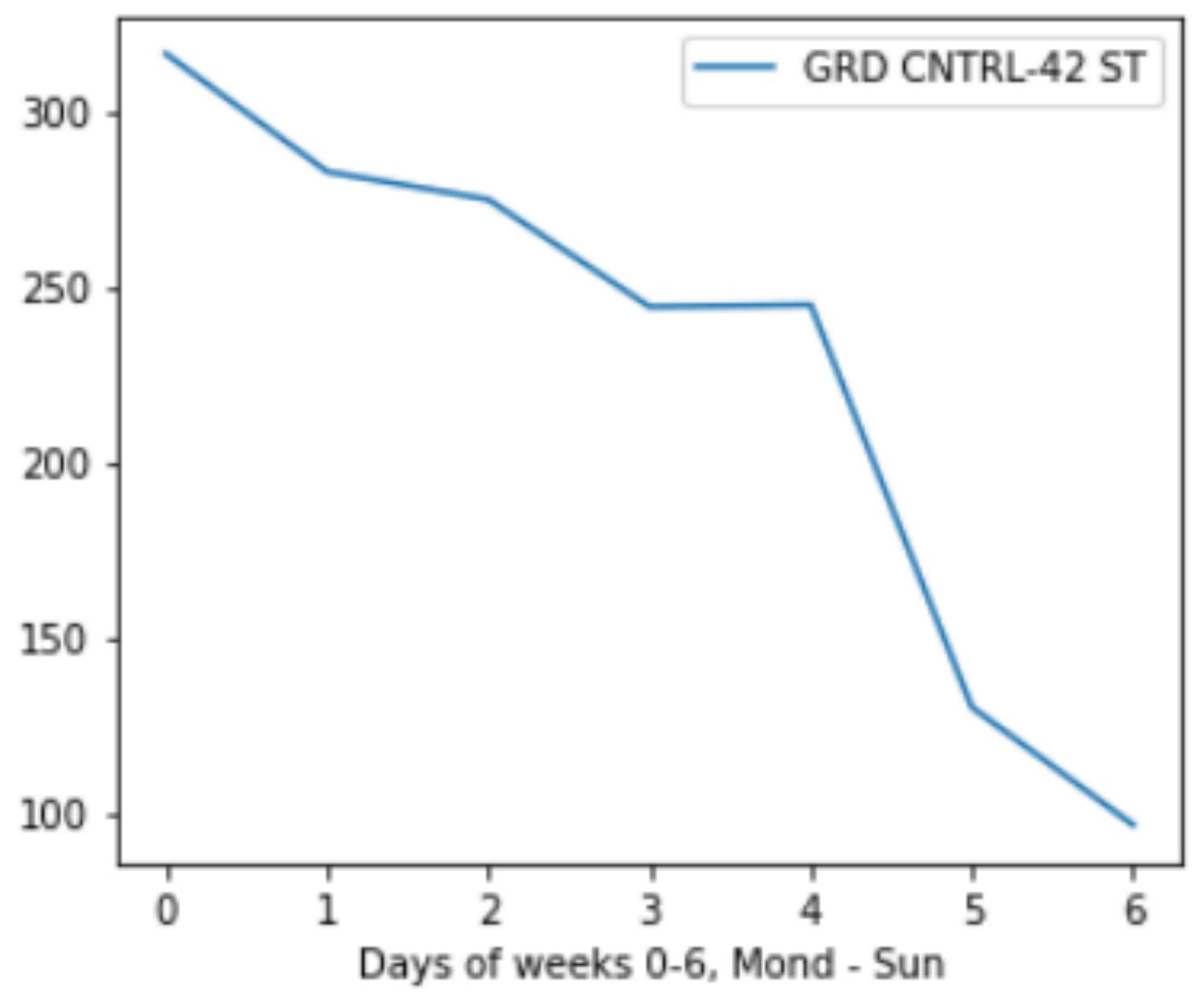
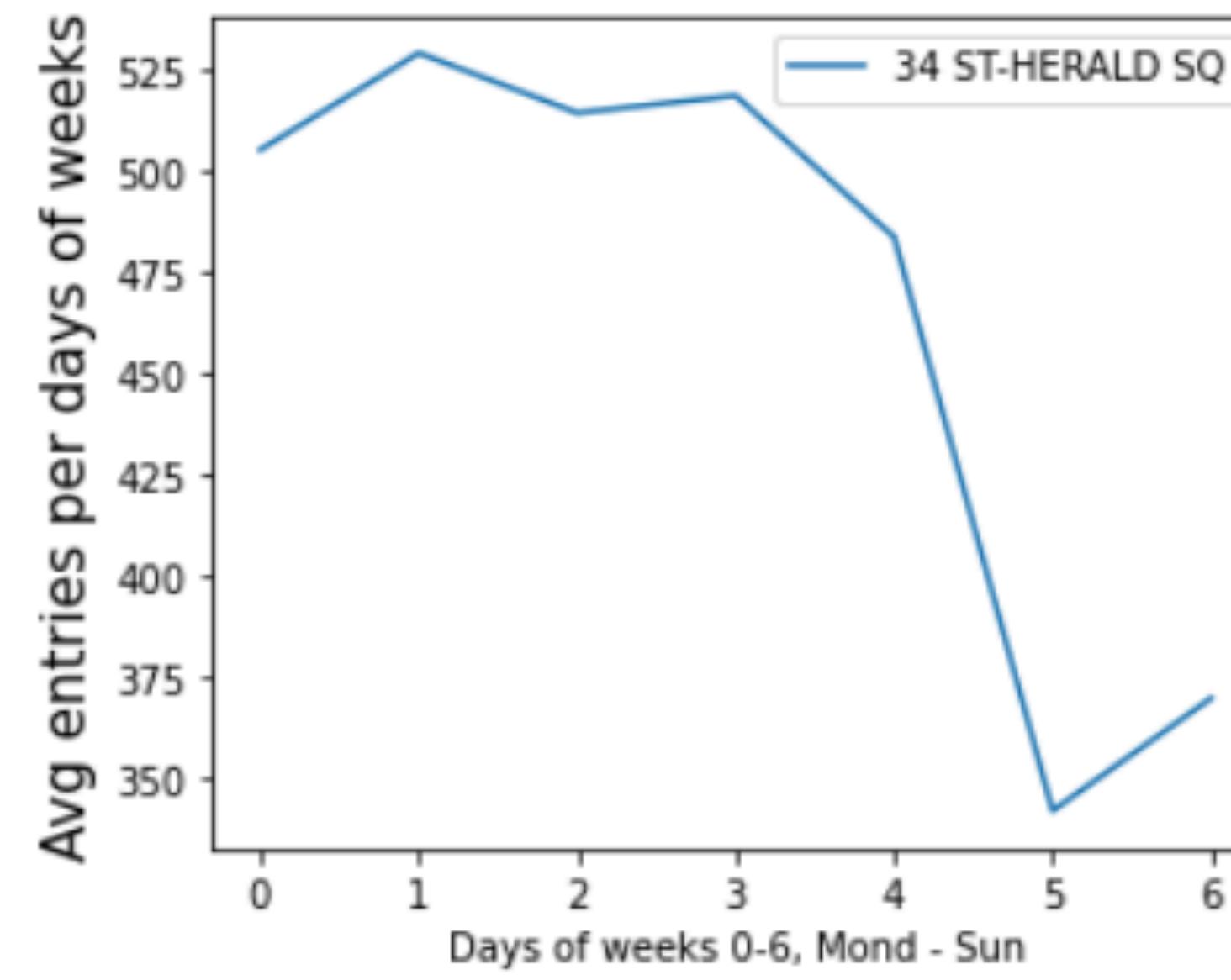
Top 5 Stations with neighborhoods

1. 34 St - Herald Square - Garment District
2. Grand Central - 42 St - Murray Hill
3. Flushing - Main - Queens/ Linden Hill
4. 42 St - Port Auth - Hell's Kitchen
5. Path New WTC - Lower Manhattan





The 5 selected station's weekly traffic for the month with the most entries



Average entries of the station per days of the week
(Between 2020 Nov - 2021 Jan)

Conclusion

Our recommendations for the New York City Guide Dogs Foundation to locate their fund raising units to the following stations:

- 1. 34 St - Herald Square - 3rd week of November - Tuesday**
- 2. Grand Central - 42 St - 3rd week of November - Monday**
- 3. Flushing - Main - 3rd week of November - Tuesday**
- 4. 42 ST-PORT AUTH - 4th week of January - Tuesday**
- 5. Path New WTC - 2nd week of January - Wednesday**

Future work

To confirm our recommendations further we could **investigate the data for the same period on the previous years.** That would show if these were the busiest periods before the pandemic as well.

**Thank you for your
attention!**

