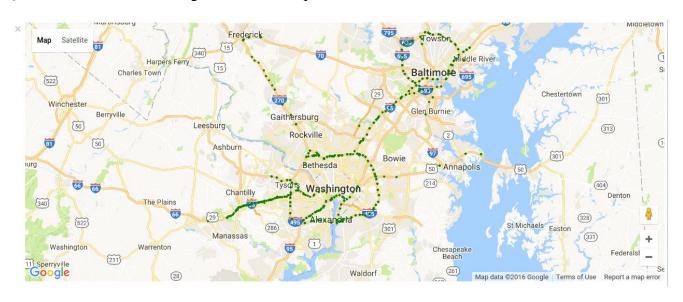
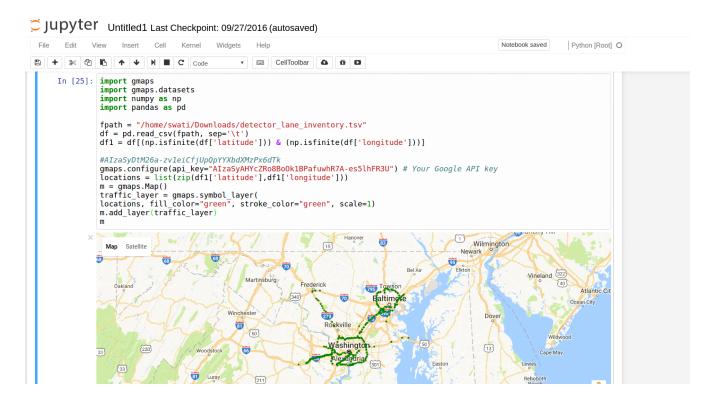
## Q1. Plot the latitudes and longitudes on the map.





## **Inference:**

We have used the gmap (google maps) for plotting the latitudes and longitudes given in the data. The points depict the location of all the lane detectors placed. As shown, they are positioned in and around the cities of Washington DC and Baltimore.

## Code:

```
import gmaps
import gmaps.datasets
import numpy as np
import pandas as pd

fpath = "/home/swati/Downloads/detector_lane_inventory.tsv"
    df = pd.read_csv(fpath, sep="\t')
    df1 = df[(np.isfinite(df['latitude'])) & (np.isfinite(df['longitude']))]

#AIzaSyDtM26a-zv1eiCfjUpQpYYXbdXMzPx6dTk ← "Google API Key"

gmaps.configure(api_key="AIzaSyAHYcZRo8BoOk1BPafuwhR7A-es5lhFR3U") # Your
Google API key
locations = list(zip(df1['latitude'],df1['longitude']))
    m = gmaps.Map()
    traffic_layer = gmaps.symbol_layer(
    locations, fill_color="green", stroke_color="green", scale=1)
    m.add_layer(traffic_layer)
```