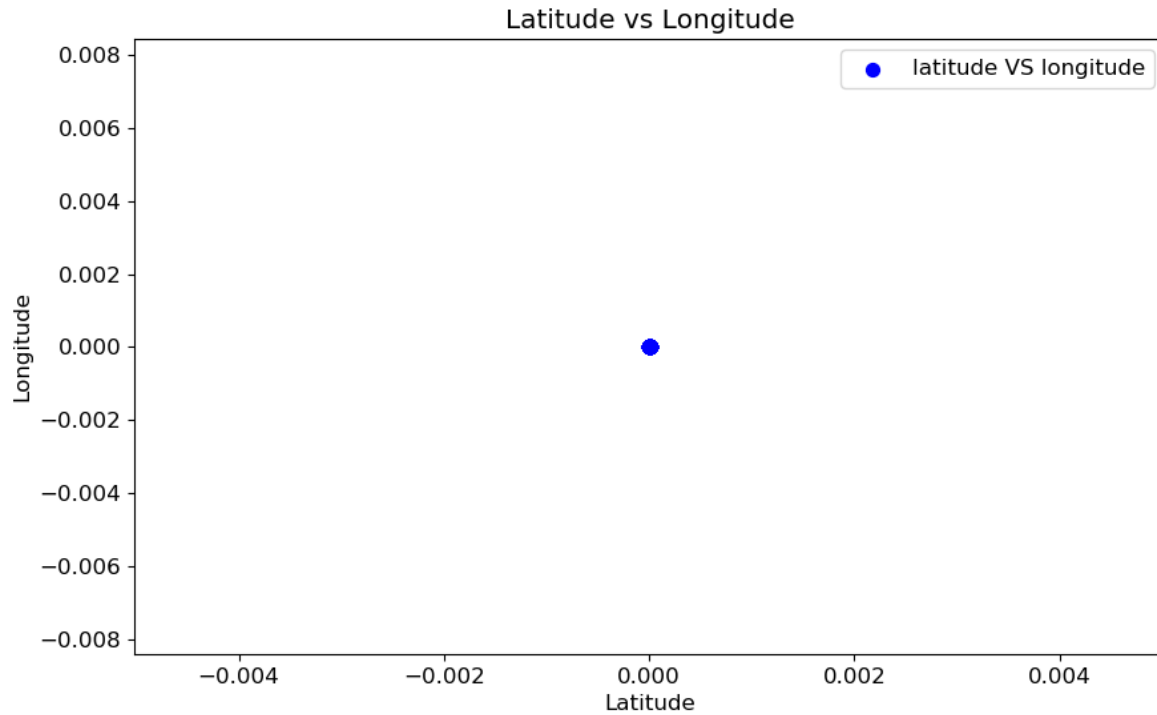


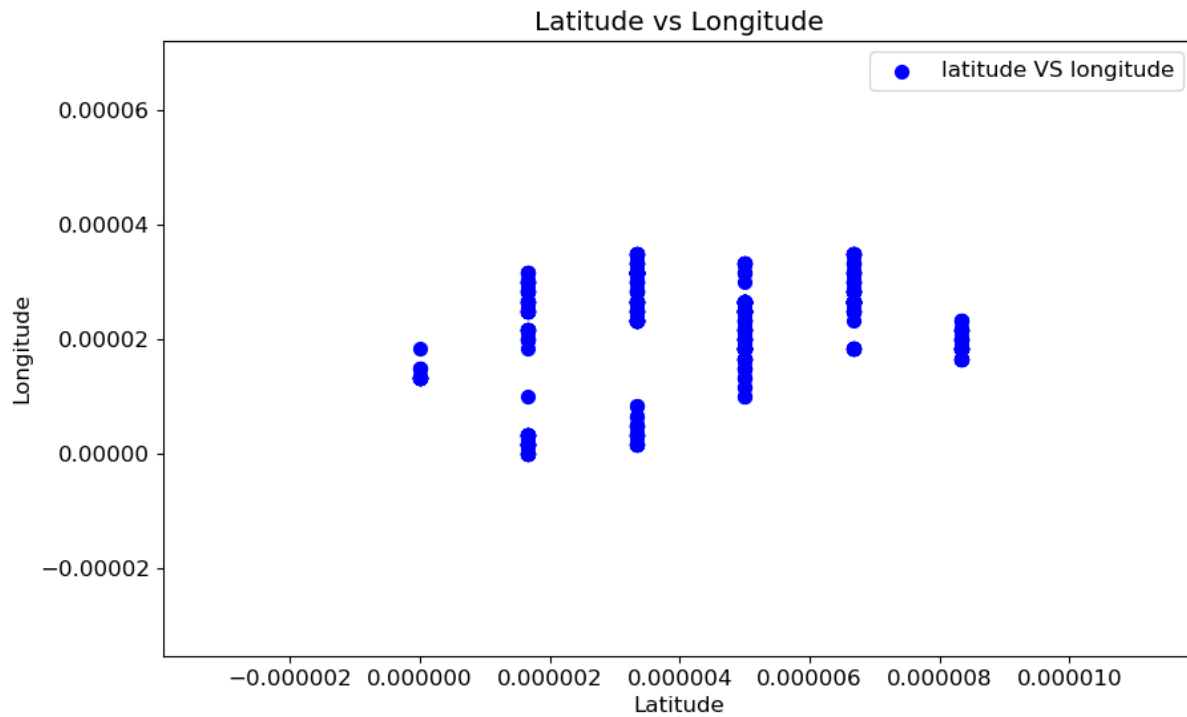
# Analysis of Stationary Data

- **Latitude vs Longitude**



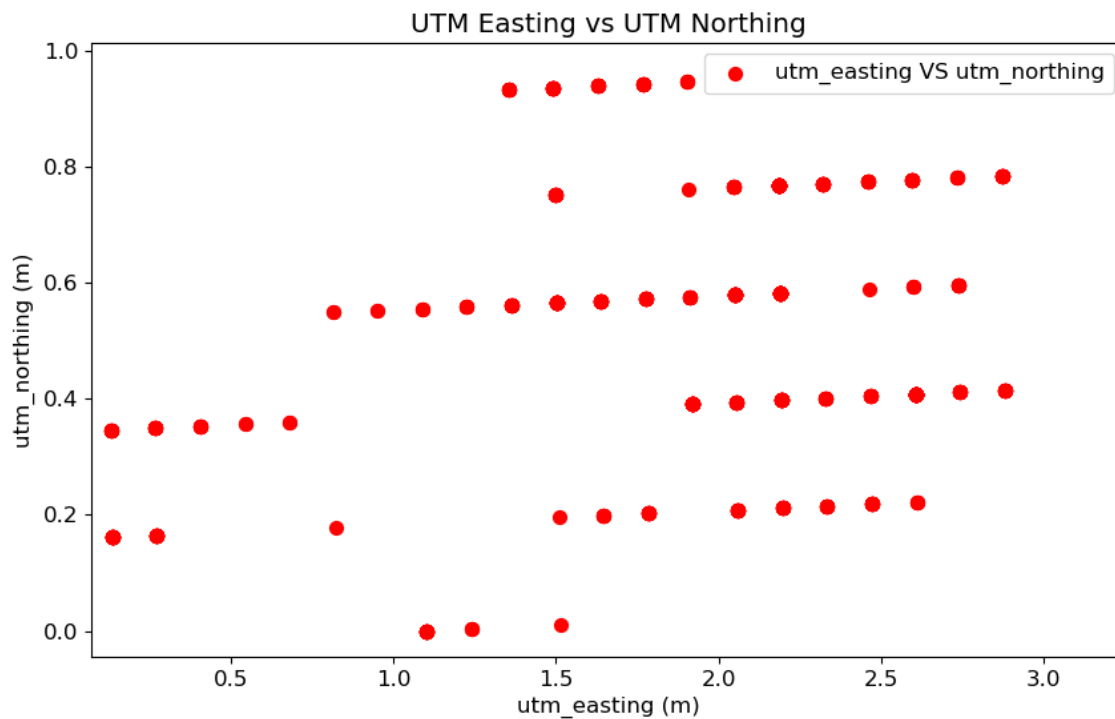
*Fig 1: Latitude vs Longitude*

The fluctuations in the plotting cannot be identified in Fig 1 of the Latitude vs Longitude Graph, but when zooming the image as shown in Fig 1.2, there are tiny variations in the latitude and longitude values in the plot, although they normally remain near to a fixed point. The variation happened as a result of GPS inaccuracy and signal noise. A longer period of time can provide better data. The more data there is, the fewer the variations. Environmental conditions could also have an impact on slight variances.



*Fig 1.2: Latitude vs Longitude (ZOOM)*

- **UTM Easting vs UTM Northing**

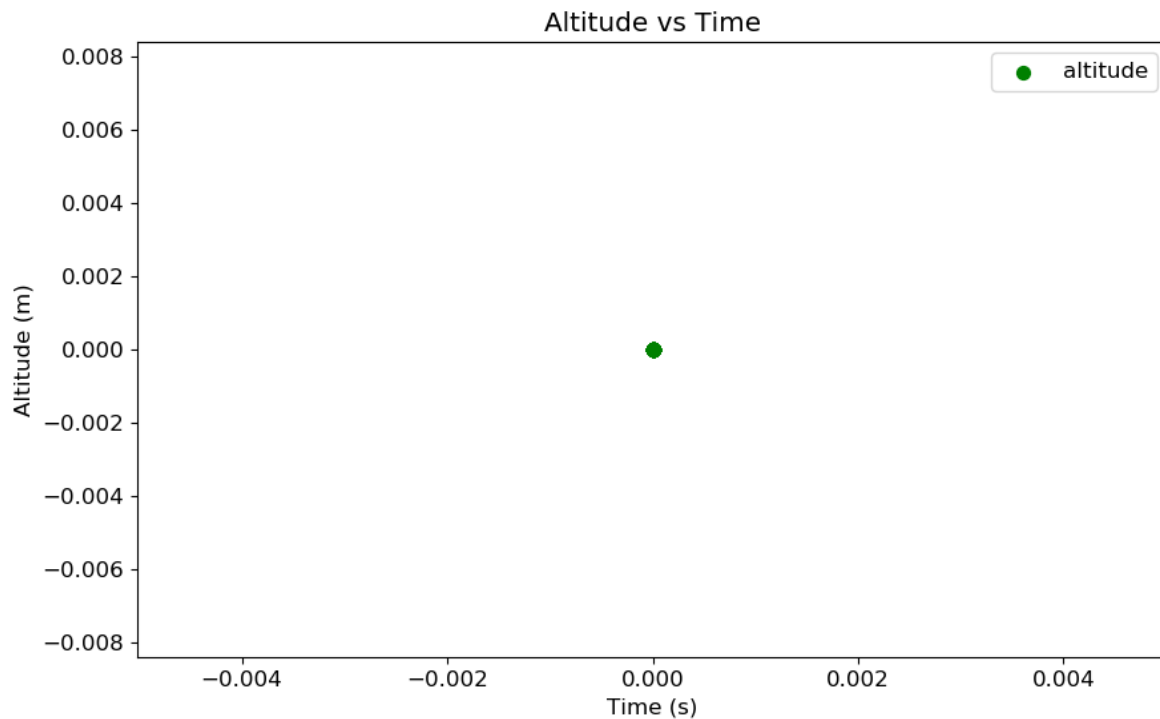


*Fig 2: UTM Easting vs UTM Northing*

The dispersion of data points in the UTM Easting vs UTM Northing figure 2 is due to the GPS Error distribution. Because the inaccuracy is tiny, it implies that the GPS error is low. During the stationary phase, the GPS position is mostly steady. When not in motion, the GPS system maintains a steady position.

- **Altitude vs Time**

The Altitude vs Time plot in fig 3 indicates that the altitude remains relatively consistent throughout time, as one would expect during a stationary phase. Altitude changes may reflect GPS altitude errors and environmental conditions.



*Fig 3: Altitude vs Time*

There is no variations in data because there is no motion so the altitude is fixed.