Python 3.7.0 (default, Jun 28 2018, 08:04:48) [MSC v.1912 64 bit (AMD64)]
Type "copyright", "credits" or "license" for more information.

IPython 6.5.0 -- An enhanced Interactive Python.

Restarting kernel...

In [1]: runfile('C:/Users/Andre/Desktop/Senior Design/Acceleration Algorithm [3.0].py', wdir='C:/Users/Andre/Desktop/Senior Design')
THIS IS AN ANALYZER DESIGNED FOR DATAFRAMES GENERATED BY METAMOTIONR 3AXIS ACCELEROMOTERS
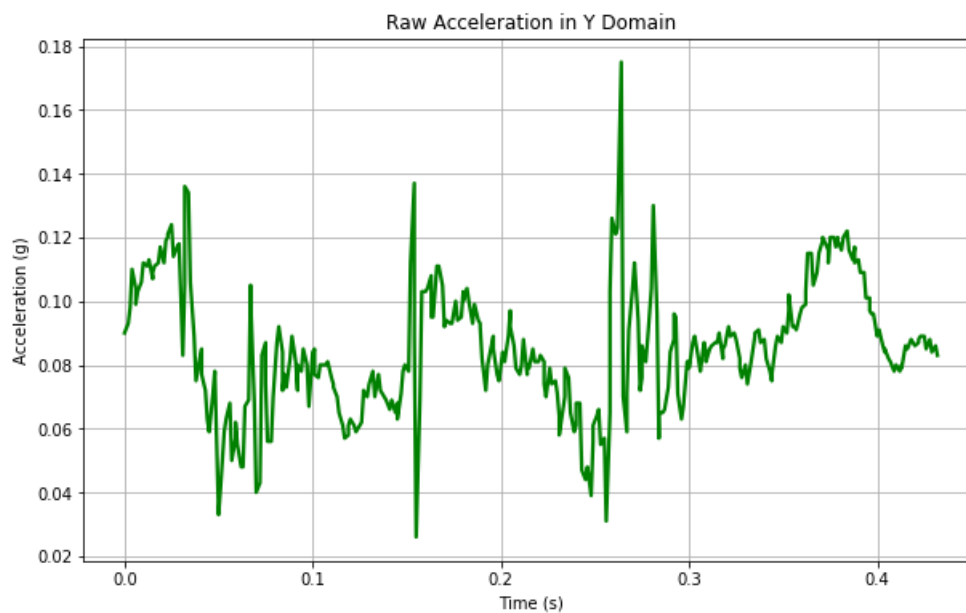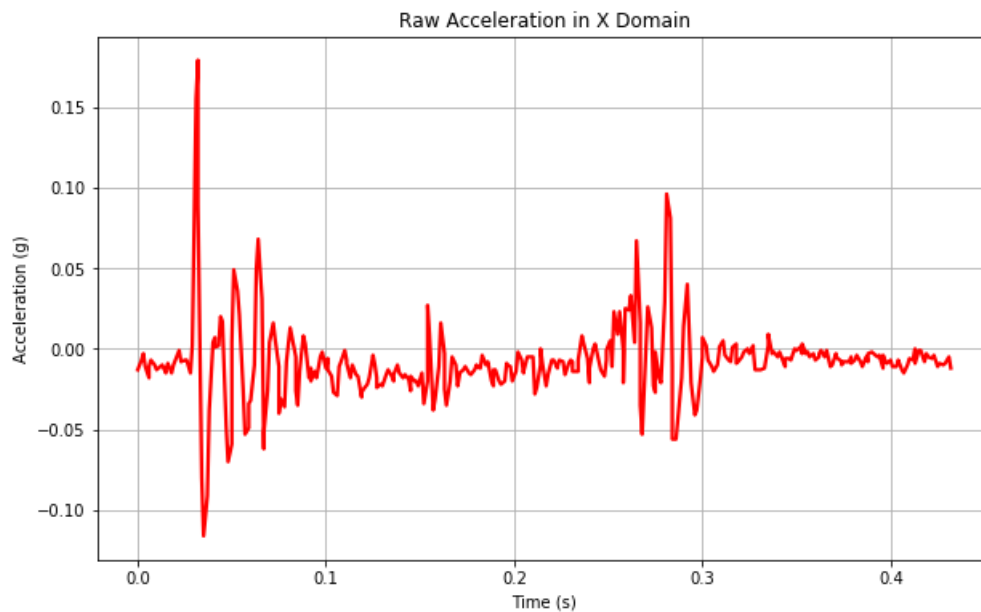THE ANALYSES REQUIRE THAT ANY TESTS PERFORMED HAVE 1-2S OF STATIONARY DATA BEFORE EXPERIMENT BEGINS
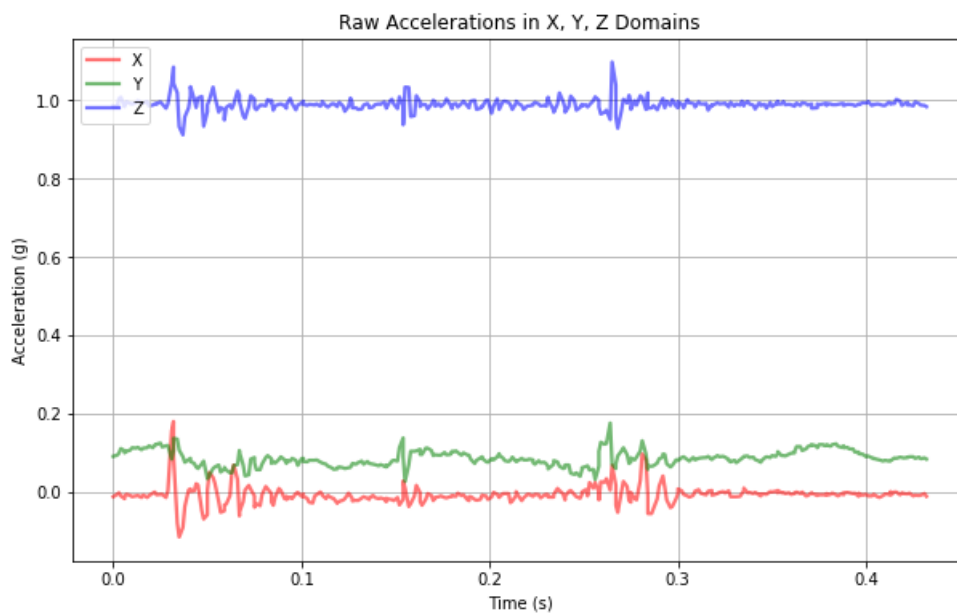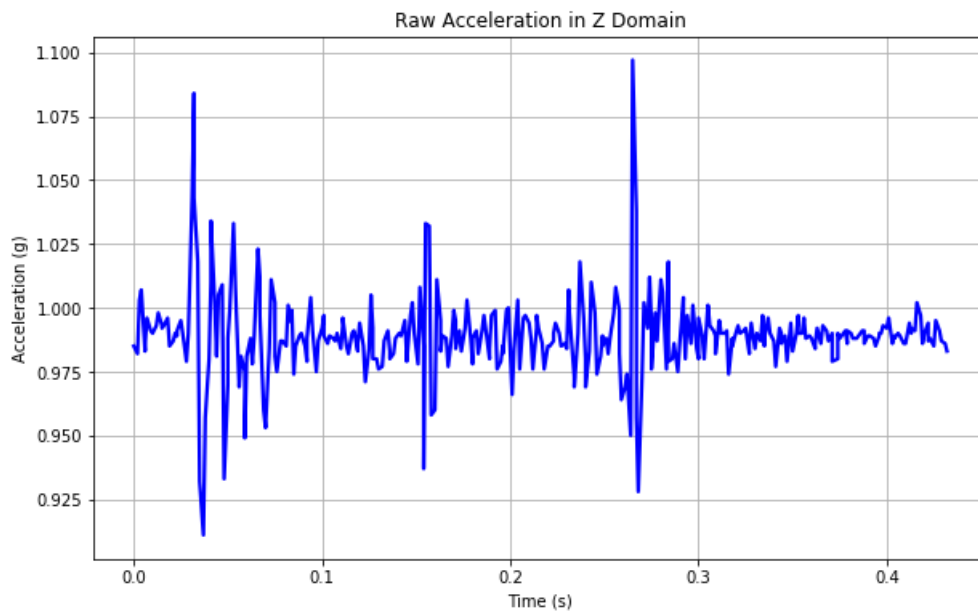
 *** FILE METRICS ***
Semester 2 -Y Test1 800Hz +- 4Gs Jan 29 2019.csv is being analyzed
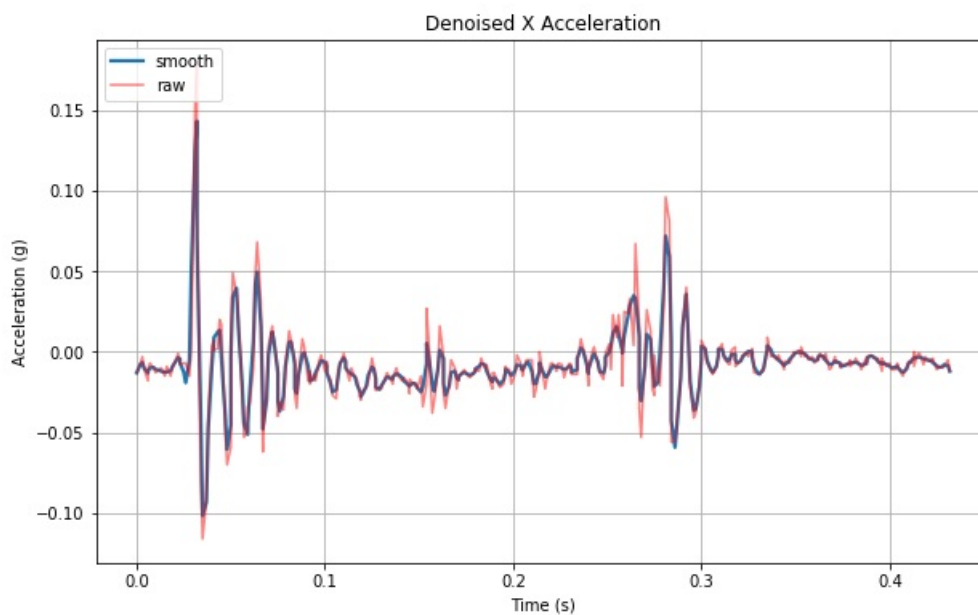Data Size: 0.02 MB
Samples: 345
Time elapsed: 0.43200000000000005 s

Raw Acceleration in Z Domain
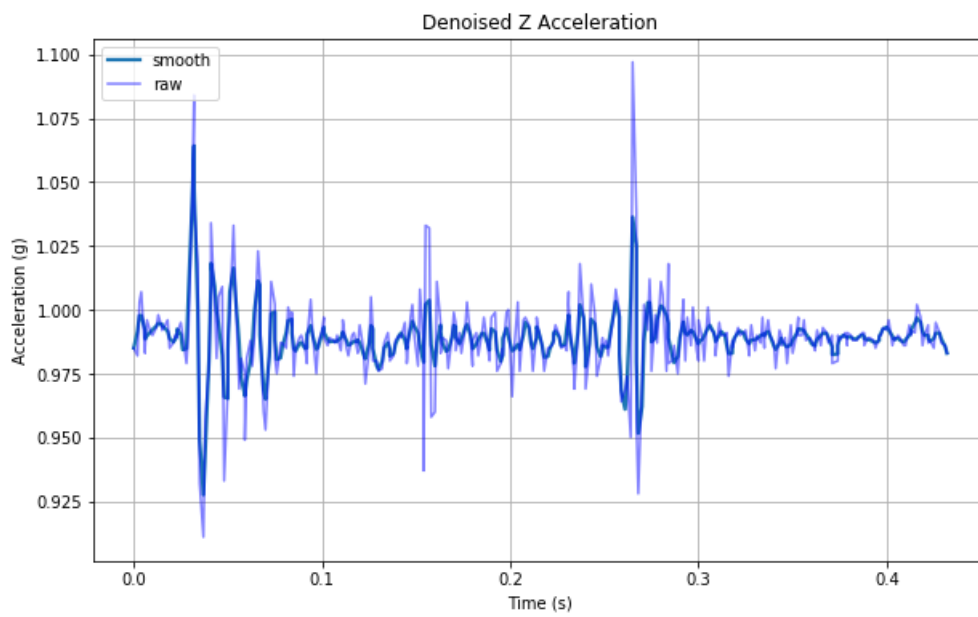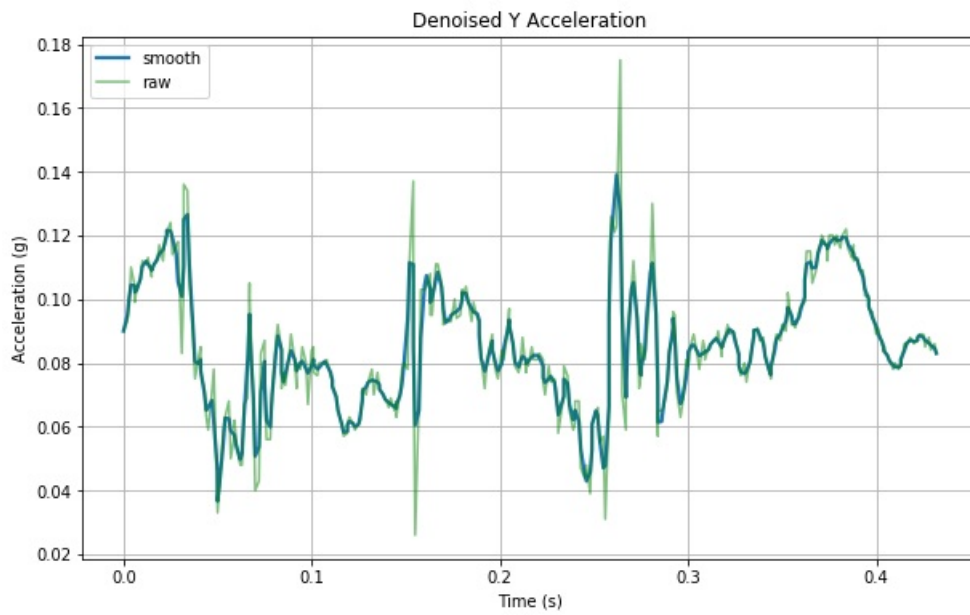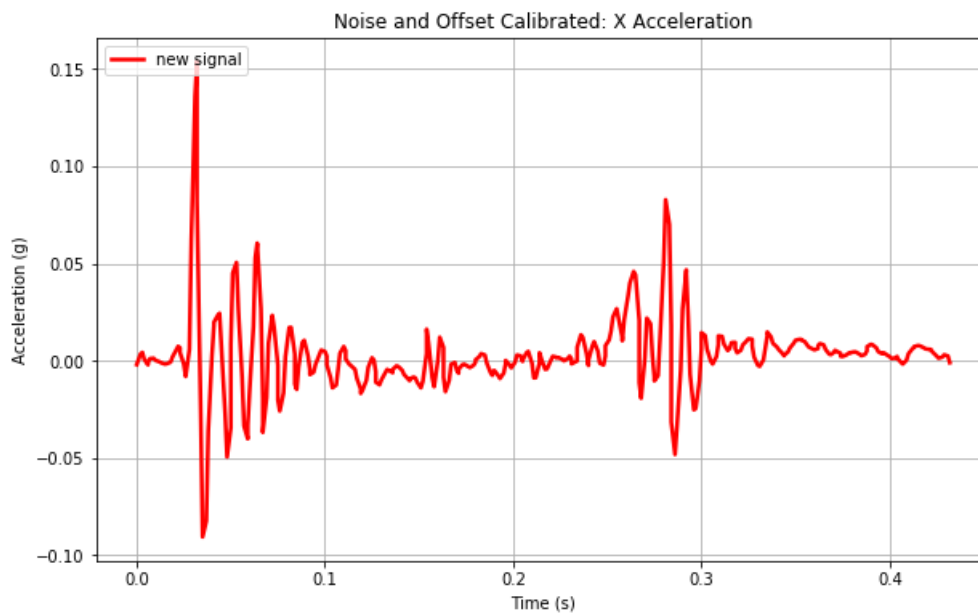

Raw Accelerations in X, Y, Z Domains

C:\Users\Andre\Anaconda3\lib\site-packages\scipy\signal_arraytools.py:45: FutureWarning: Using a non-tuple sequence for multidimensional indexing is deprecated; use `arr[tuple(seq)]` instead of `arr[seq]`. In the future this will be interpreted as an array index, `arr[np.array(seq)]`, which will result either in an error or a different result.
  b = a[a_slice]

Denoised X Acceleration

Denoised Y Acceleration
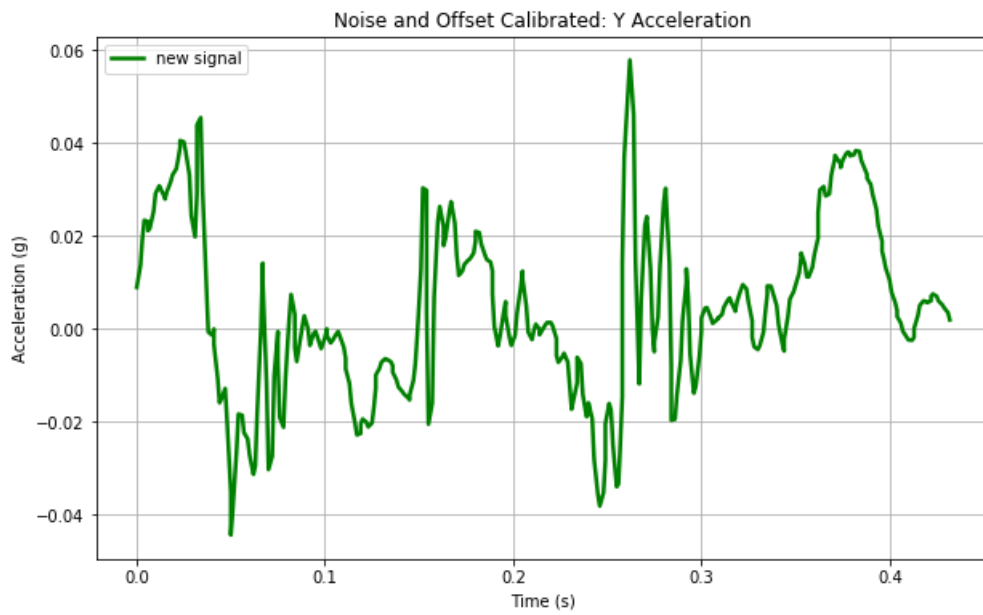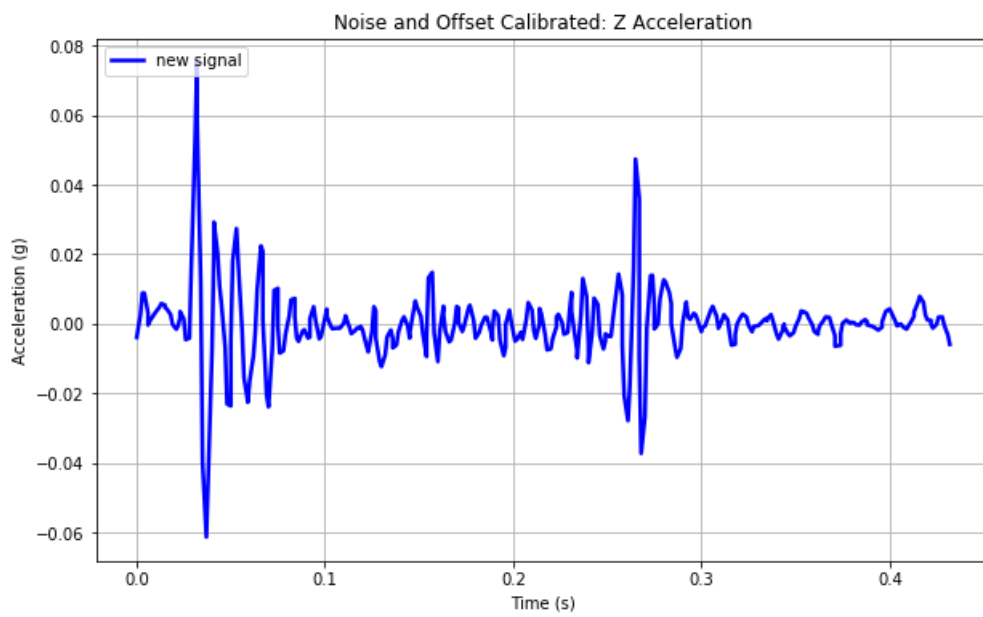

Denoised Z Acceleration

Offset first 200 samples X: %.4f -0.01097695013848361
Offset first 200 samples Y: %.4f 0.08110536097760407
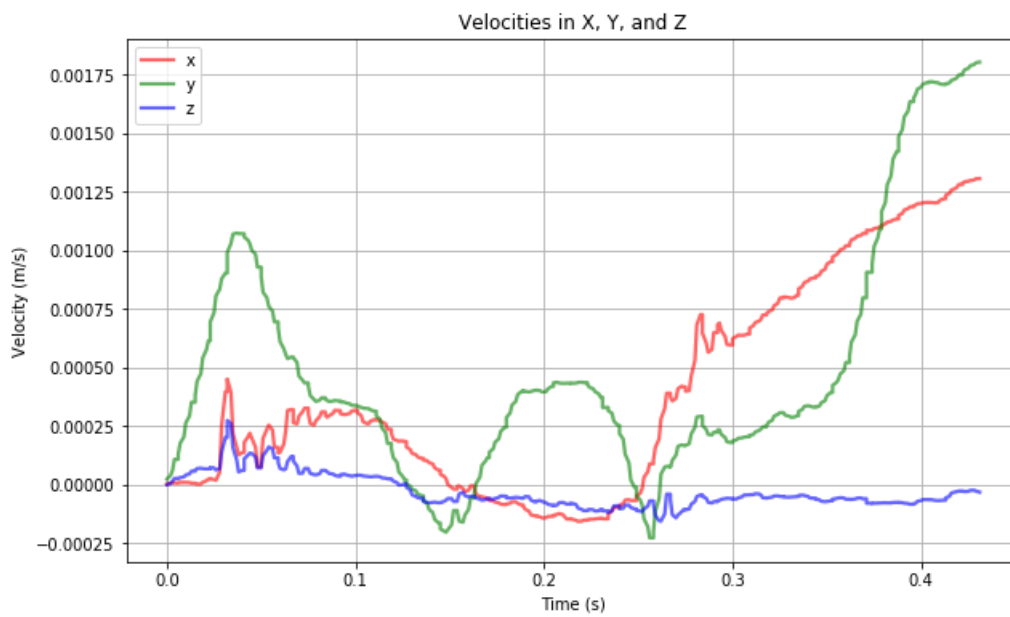Offset first 200 samples Z: %.4f 0.011089908942270577

Noise and Offset Calibrated: X Acceleration

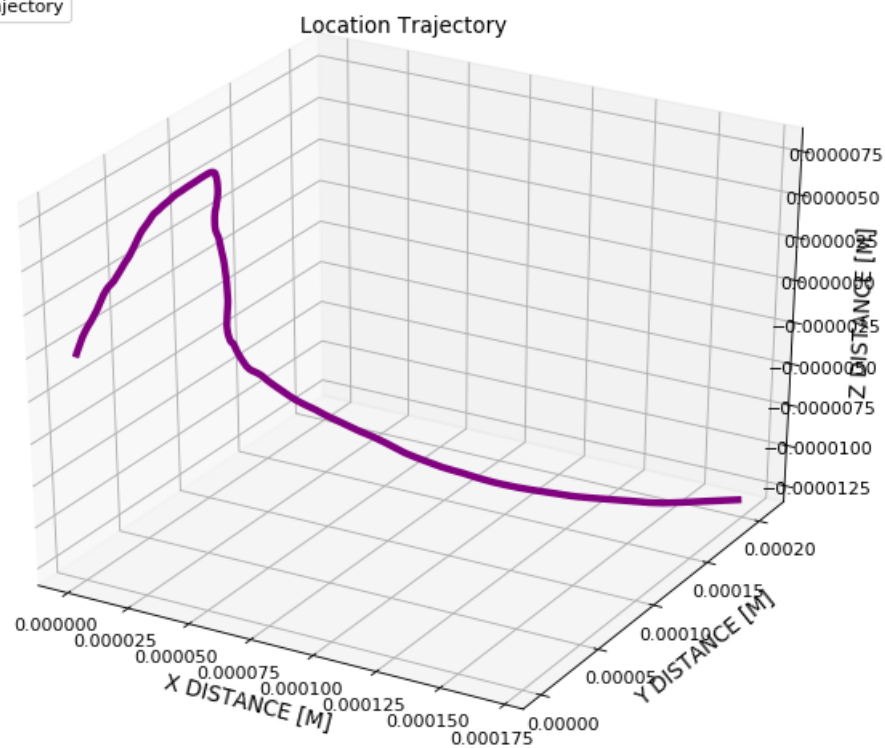Updated Offset first 200 samples: 2.7755575615628914e-19

Updated Offset first 200 samples: 7.771561172376097e-18

Updated Offset first 200 samples: 4.3298697960381107e-17

Location Trajectory