

Module: GPS_helper.py

Class: GPS_data_source		Inputs/Outputs
Constructor():	(0) GPS TLE text file from Celestrak as 'GPS_tle.txt' (1) List of SVs in view by User as 'PRN #' (2) User Reference Location as LAT, LONG, ALT (3) Sampling Period (default = 1s)	
user_traj_gen():	(0) Route (a list of 2D nodes in ENU mi) (1) User velocity in mph GMT trajectory start time (2-6): (2) Year (2k year, i.e., 2018 -> 18) (3) Month (4) Day (5) Hour (6) Minute	
returns:	(0) User position in ENU (ndarray) vs time (1) User position in ECEF (ndarray) vs time (2) SV position (ndarray) vs time (3) SV velocity (ndarray) vs time	
Functions:		Inputs/Outputs
SV_User_Traj_3D(): (displays 3D plot)	(0) GPS data source object (1) SV position ndarray (2) User position ndarray (3) 3D plot ALT = 20 (4) 3D plot AZIM = 20	
returns:	none	