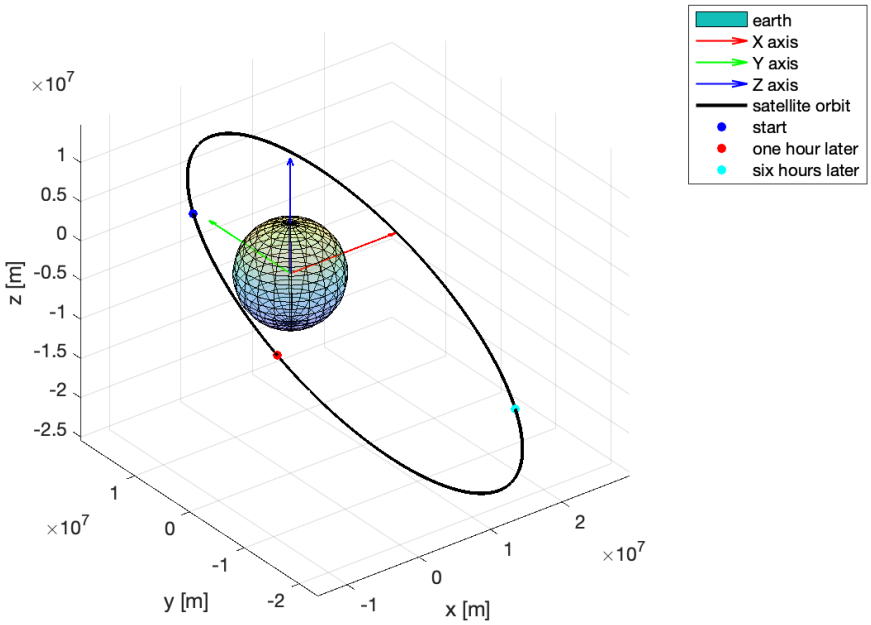
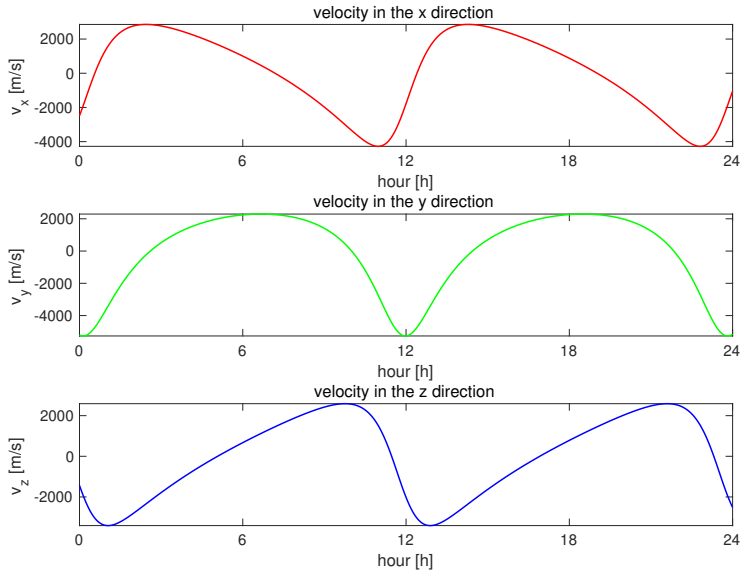
Results for the exercises on Nov 27, 2019
(10 points total)

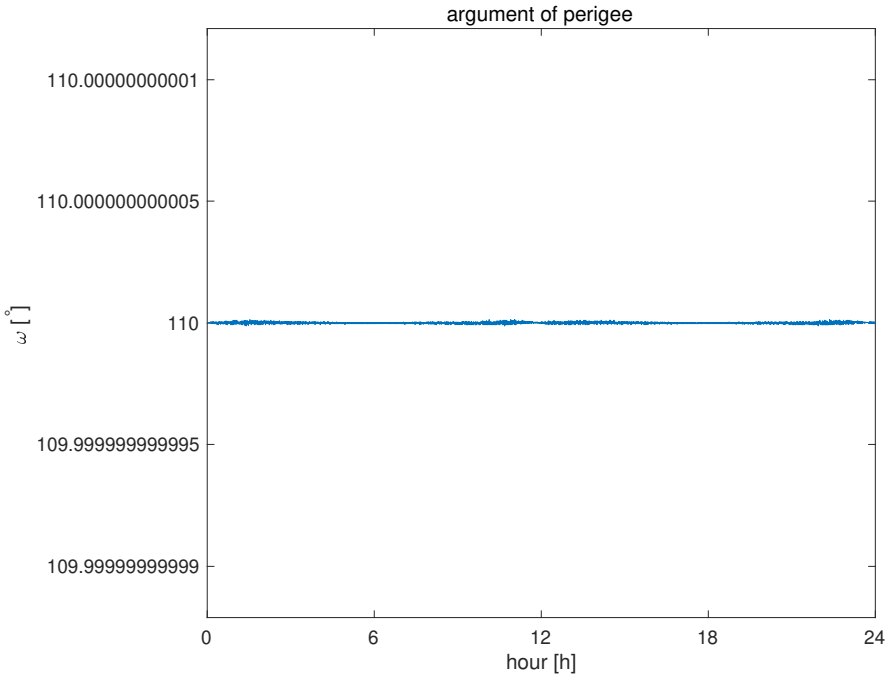
Task 1 (5 points)



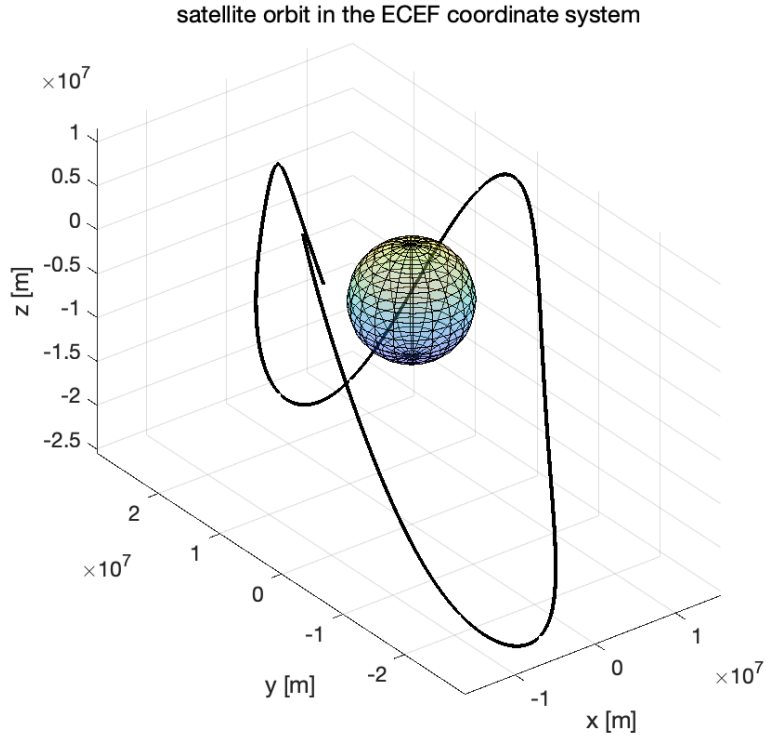
a1) Orbit



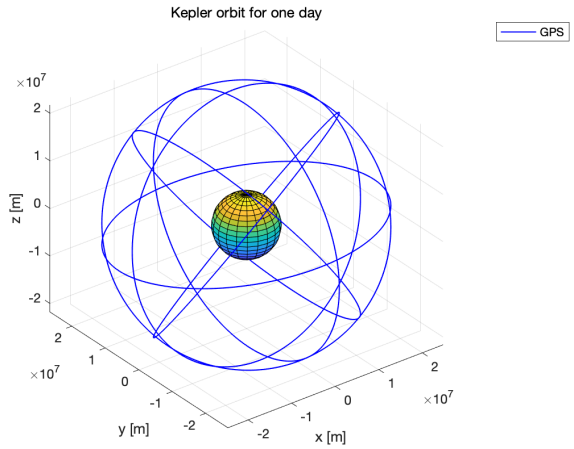
a2) velocity components



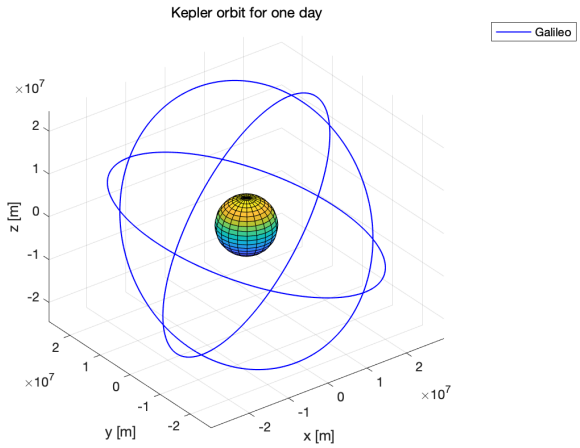
b) argument of perigee ω



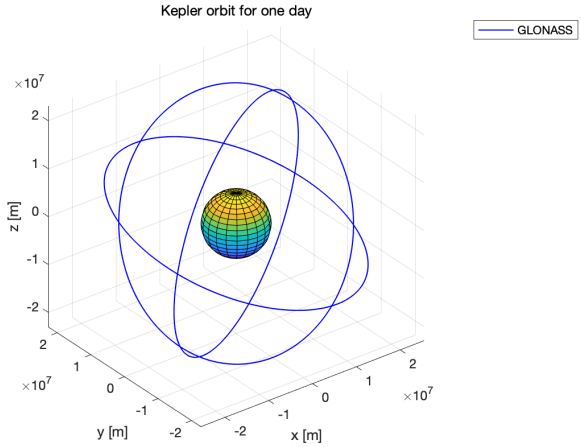
c) orbit in the ECEF coordinate system



d1) GPS



d2) Galileo



d3) GLONASS

Task 2 (5 points)

a) $TOW = 561600\,s$

p14	18776265.0893651 [m]	18869133.6687015 [m]	-1102360.5459565 [m]
p18	15299365.6548382 [m]	-10099374.318289 [m]	18685367.0885201 [m]
diff(p14-p18)	35253616.1209936 [m]		

b) $TOW = 564600\,s$

p10	101740.284 [m]	16654254.369 [m]	20693563.692 [m]
v10	-2311.533 [m/s]	1241.094 [m/s]	-1006.008 [m/s]

c) $TOW = 564600 - 1\,s$

p10	104051.907 [m]	16653013.311 [m]	20694569.480 [m]
v10	-2311.713 [m/s]	1241.022 [m/s]	-1005.568 [m/s]

d) $TOW = 564600 + 1\,s$

p10	99428.841 [m]	16655495.498 [m]	20692557.464 [m]
v10	-2311.354 [m/s]	1241.165 [m/s]	-1006.448 [m/s]

e) v10	-2311.533 [m/s]	1241.094 [m/s]	-1006.008 [m/s]
diffvel [e)-b)]	7.860×10^{-6} [m/s]	-7.761×10^{-6} [m/s]	3.448×10^{-6} [m/s]