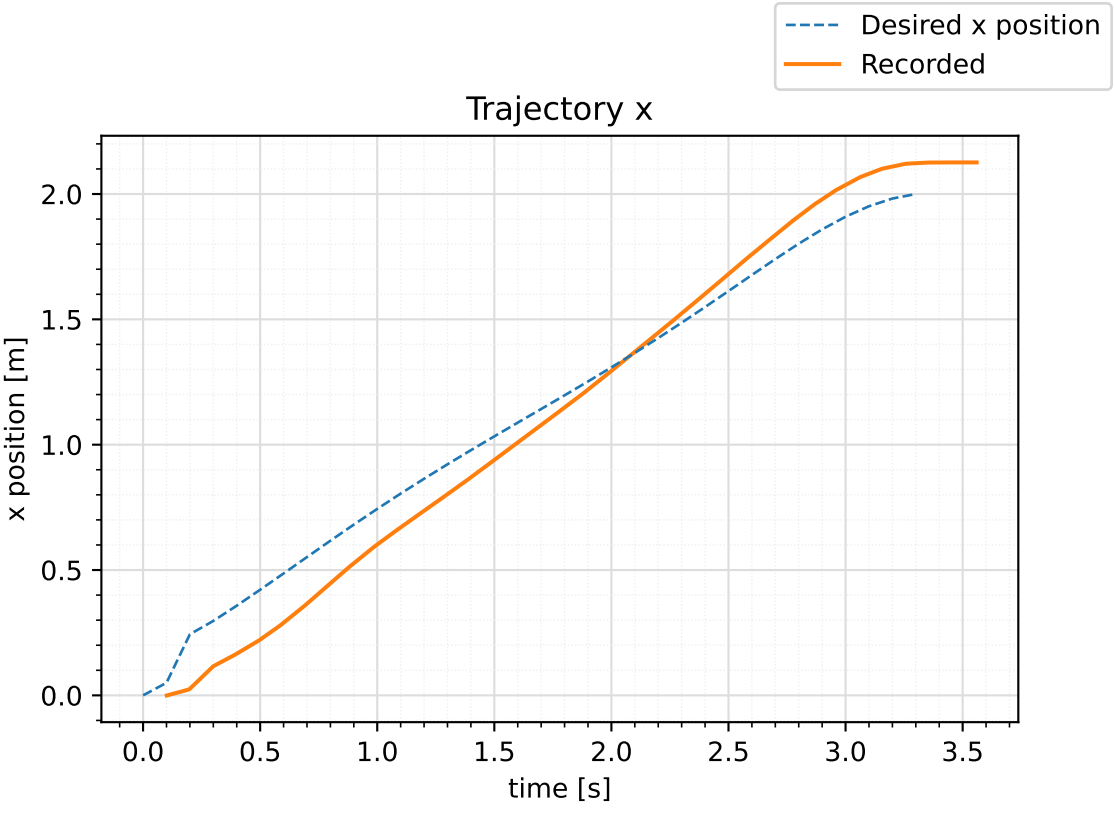
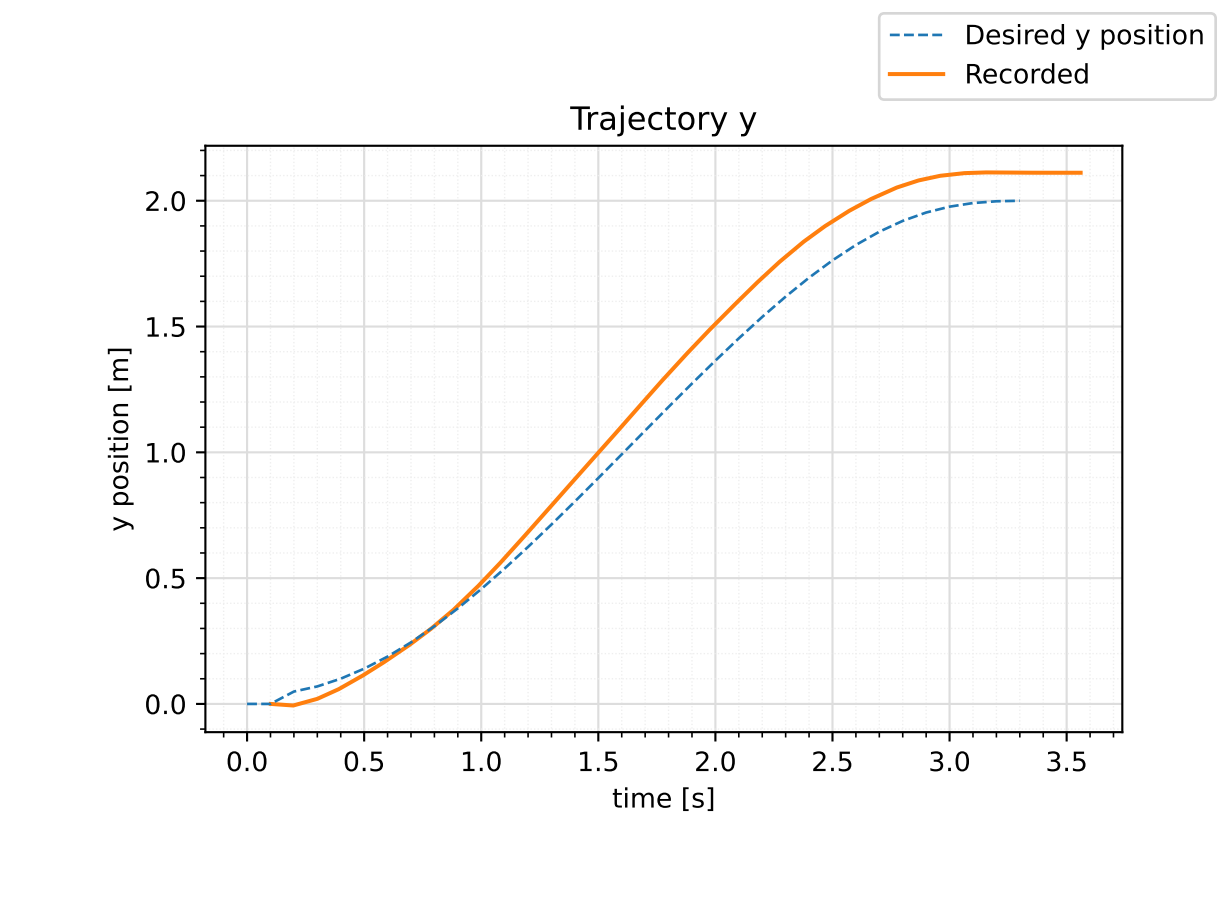
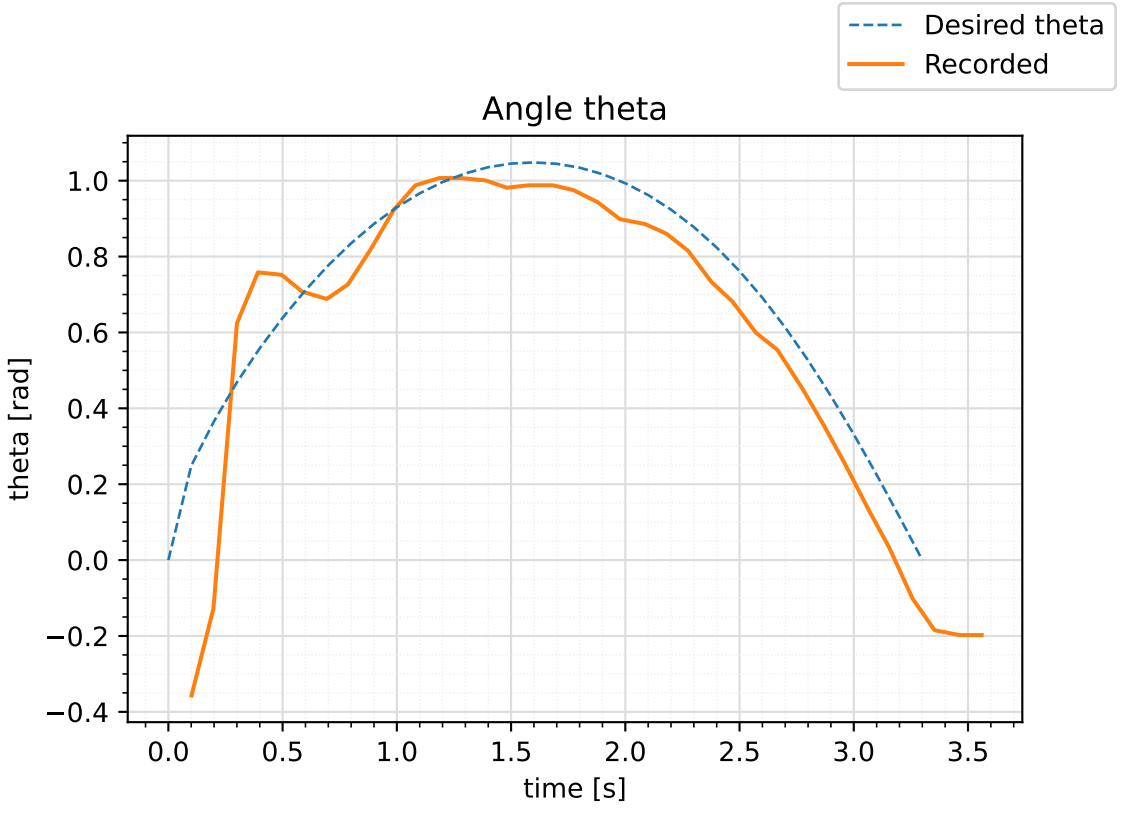
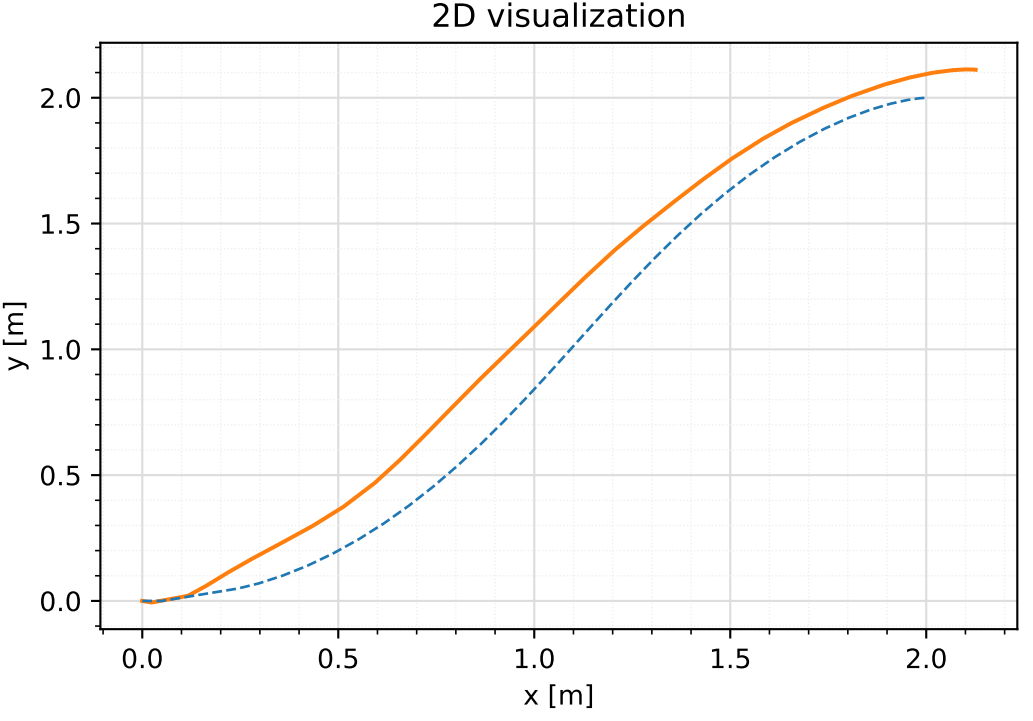
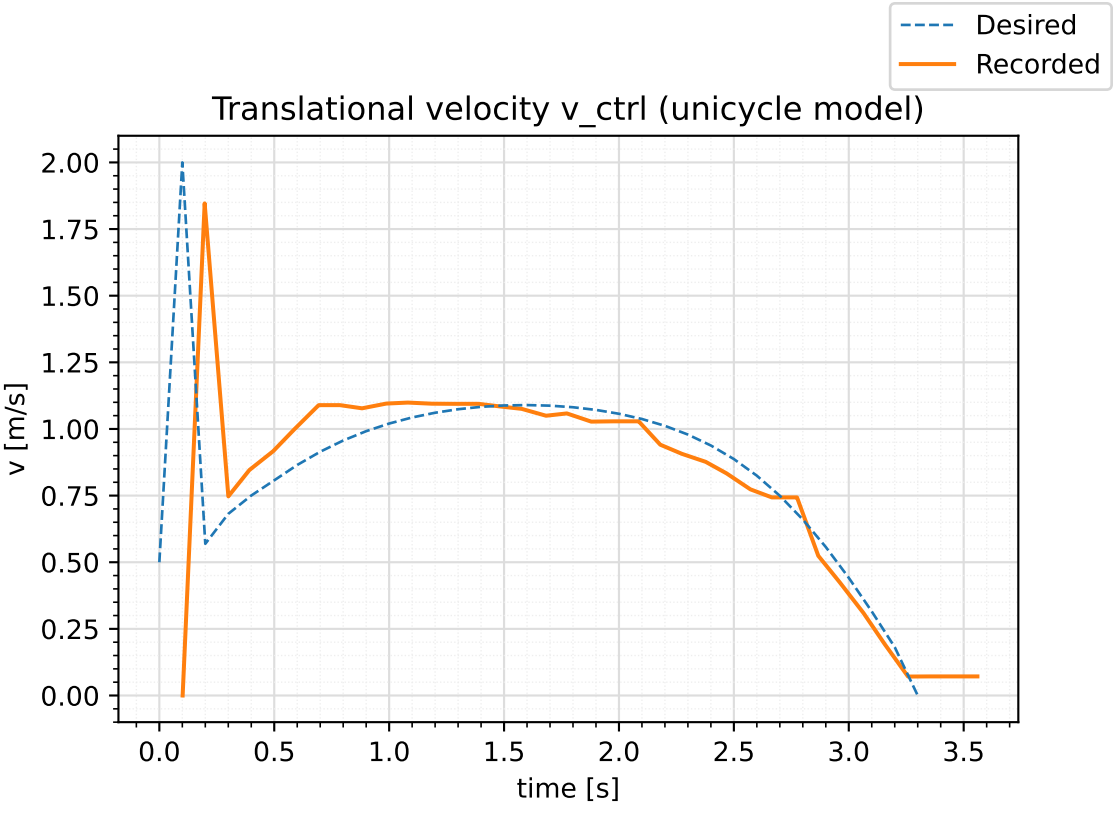
Pololu 3pi+ trajectory test (straight line)
trajectory: curve.json
file name : crv0_0_31.json
K_x = 1   K_y = 3   K_theta = 5

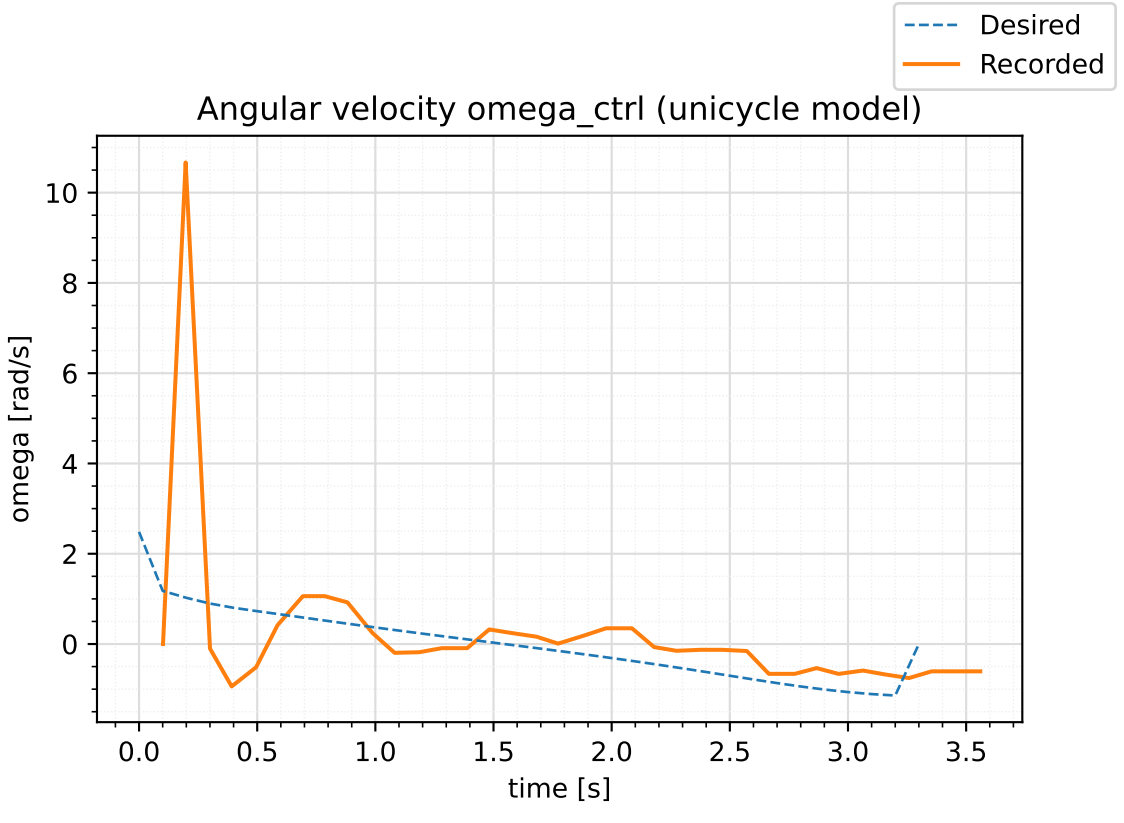

Desired x position
Recorded
Trajectory x
x position [m]
time [s]
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5

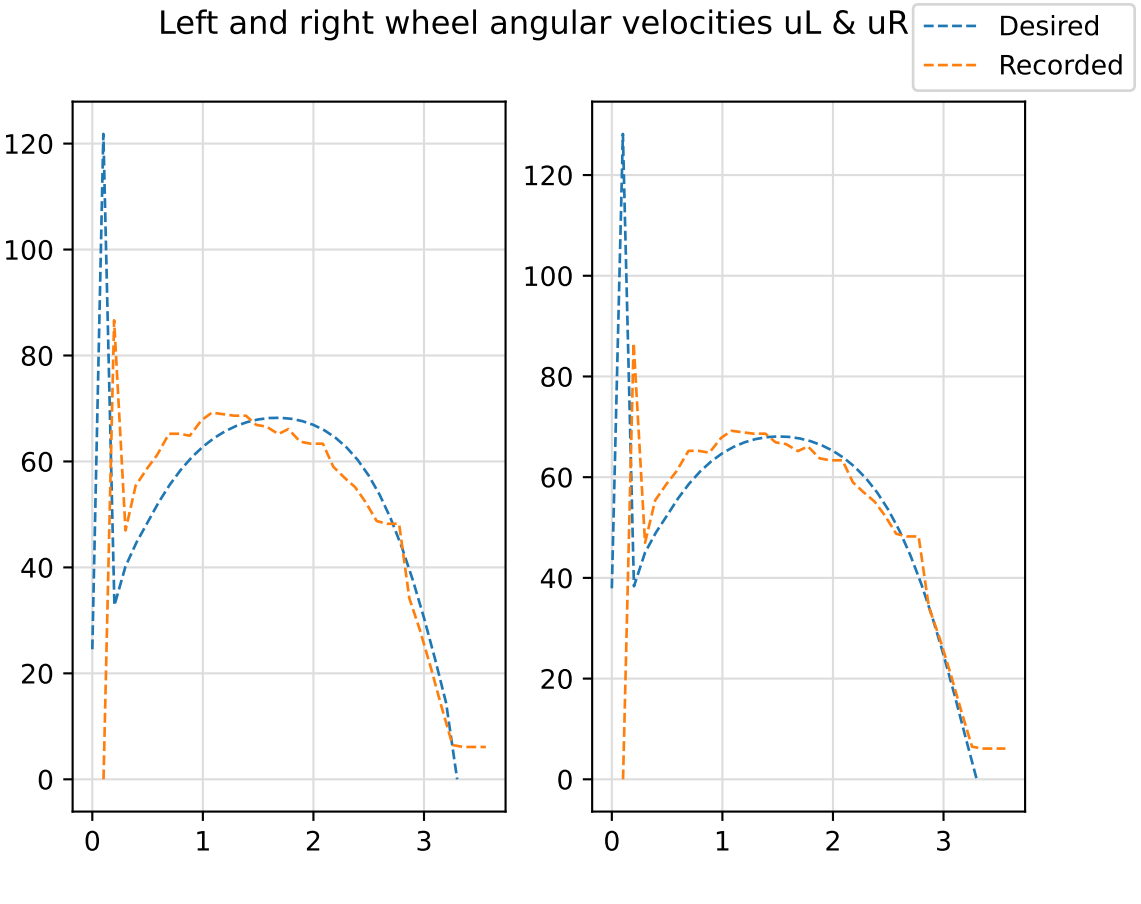

Desired y position
Recorded
Trajectory y
y position [m]
time [s]
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5


Desired theta
Recorded
Angle theta
theta [rad]
time [s]
1.0
0.8
0.6
0.4
0.2
0.0
−0.2
−0.4
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5


2D visualization
y [m]
x [m]
0.0
0.5
1.0
1.5
2.0


Desired
Recorded
Translational velocity v_ctrl (unicycle model)
v [m/s]
time [s]
2.00
1.75
1.50
1.25
1.00
0.75
0.50
0.25
0.00
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5


Desired
Recorded
Angular velocity omega_ctrl (unicycle model)
omega [rad/s]
time [s]
10
8
6
4
2
0
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5


Left and right wheel angular velocities uL & uR
Desired
Recorded
120
100
80
60
40
20
0
0
1
2
3
120
100
80
60
40
20
0
0
1
2
3