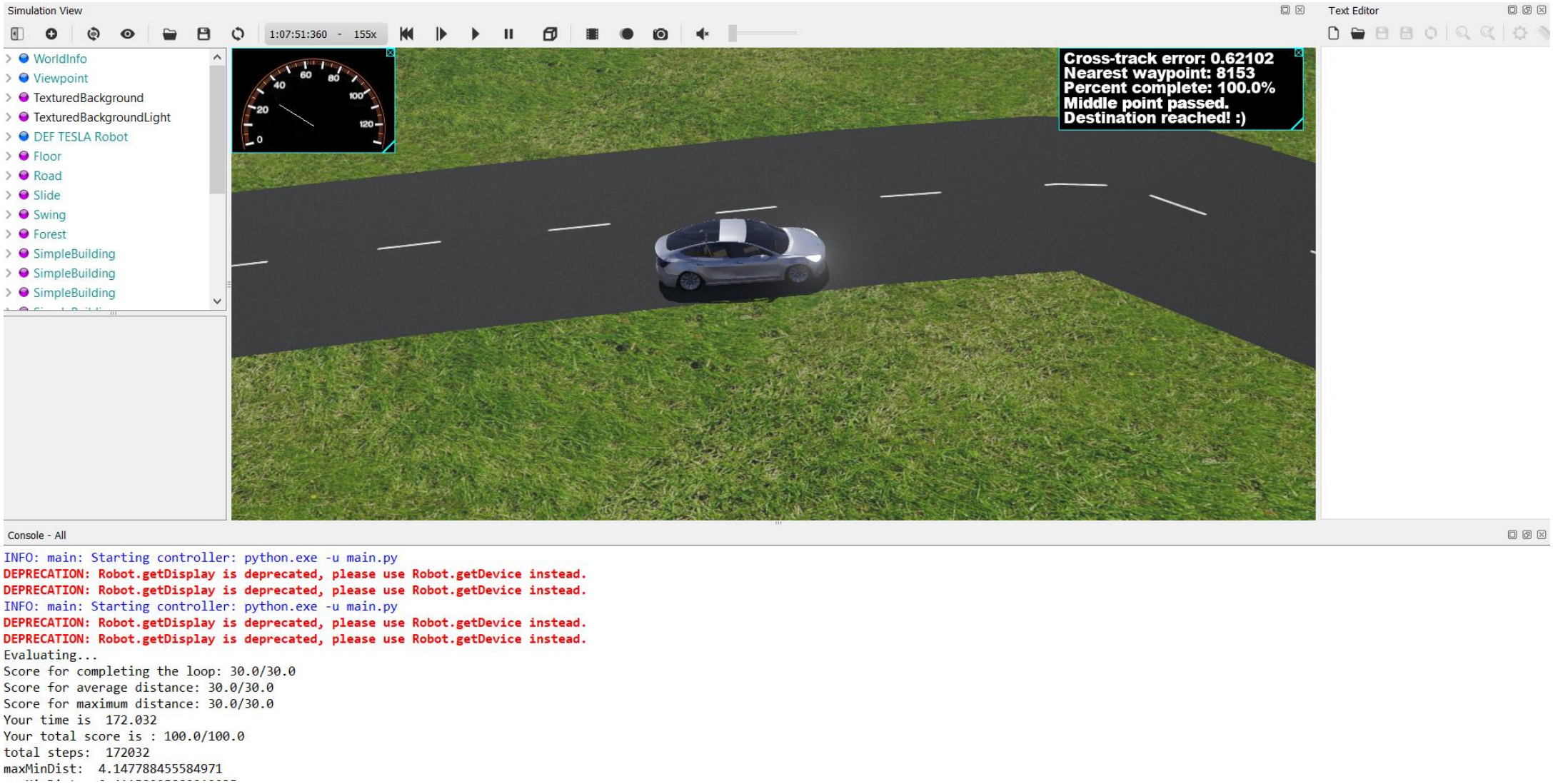
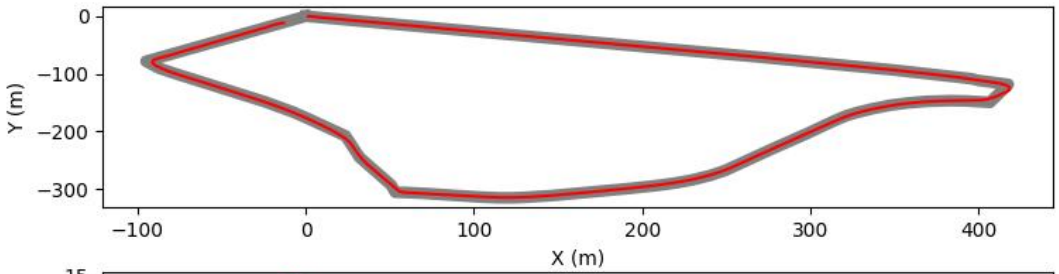
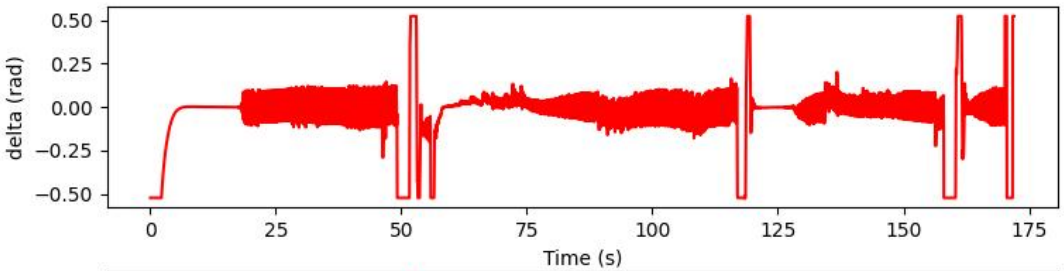
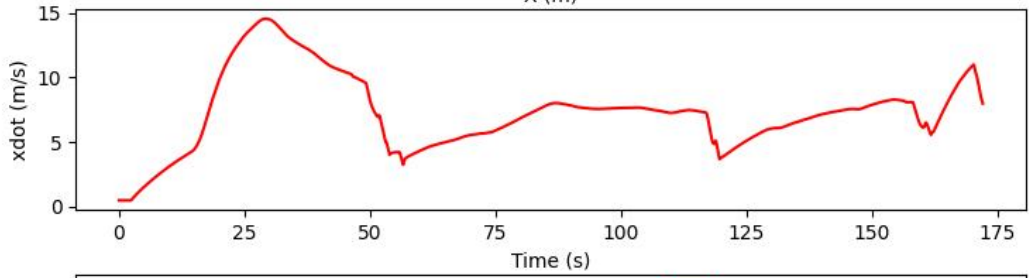
LQR Results

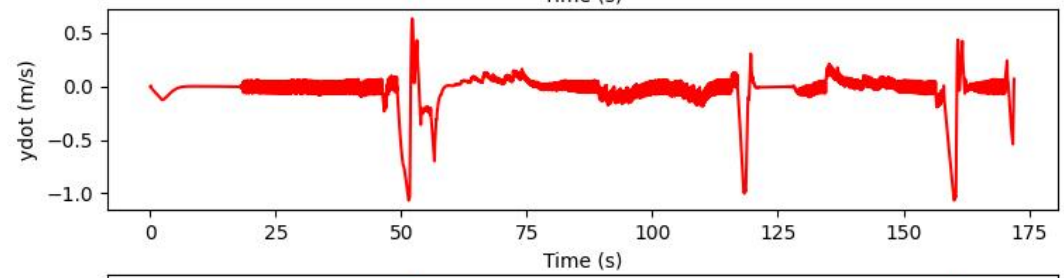

Simulation View
1:07:51:360 - 155x
WorldInfo
Viewpoint
TexturedBackground
TexturedBackgroundLight
DEF TESLA Robot
Floor
Road
Slide
Swing
Forest
SimpleBuilding
SimpleBuilding
SimpleBuilding
Cross-track error: 0.62102
Nearest waypoint: 8153
Percent complete: 100.0%
Middle point passed.
Destination reached! :)
Text Editor
Console - All
INFO: main: Starting controller: python.exe -u main.py
DEPRECATION: Robot.getDisplay is deprecated, please use Robot.getDevice instead.
DEPRECATION: Robot.getDisplay is deprecated, please use Robot.getDevice instead.
INFO: main: Starting controller: python.exe -u main.py
DEPRECATION: Robot.getDisplay is deprecated, please use Robot.getDevice instead.
DEPRECATION: Robot.getDisplay is deprecated, please use Robot.getDevice instead.
Evaluating...
Score for completing the loop: 30.0/30.0
Score for average distance: 30.0/30.0
Score for maximum distance: 30.0/30.0
Your time is 172.032
Your total score is : 100.0/100.0
total steps: 172032
maxMinDist: 4.147788455584971

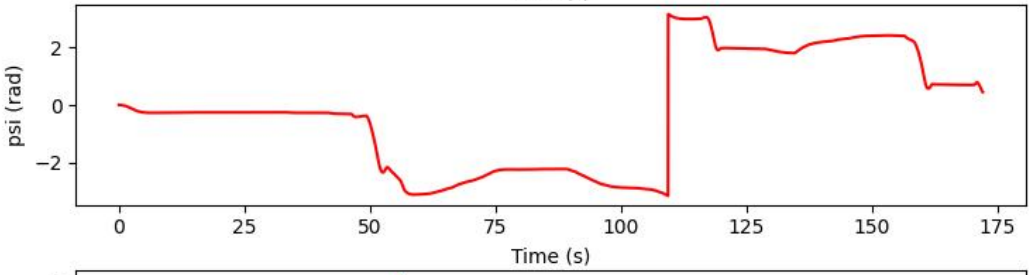
LQR Results

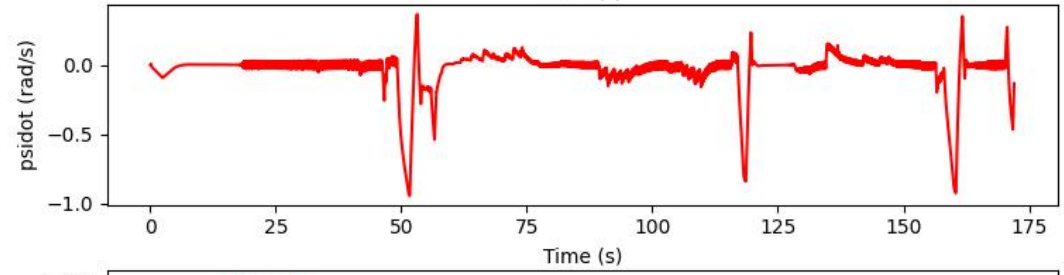

Y (m)
X (m)

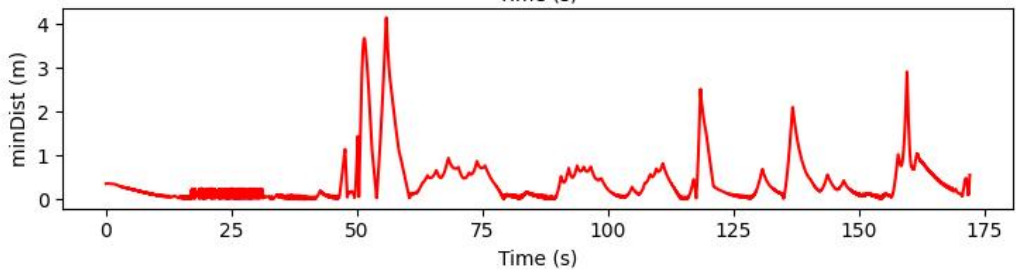

delta (rad)
Time (s)

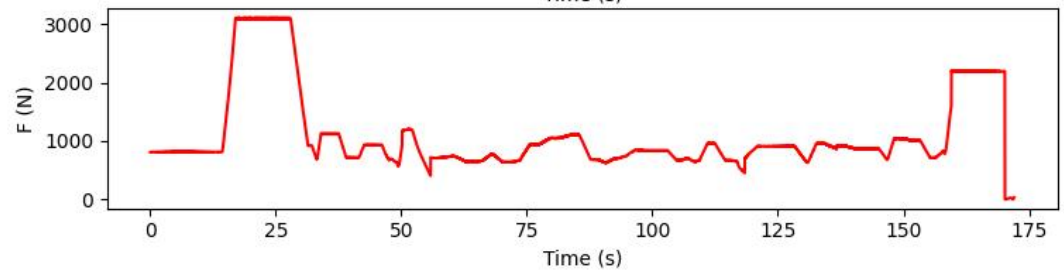

xdot (m/s)
Time (s)

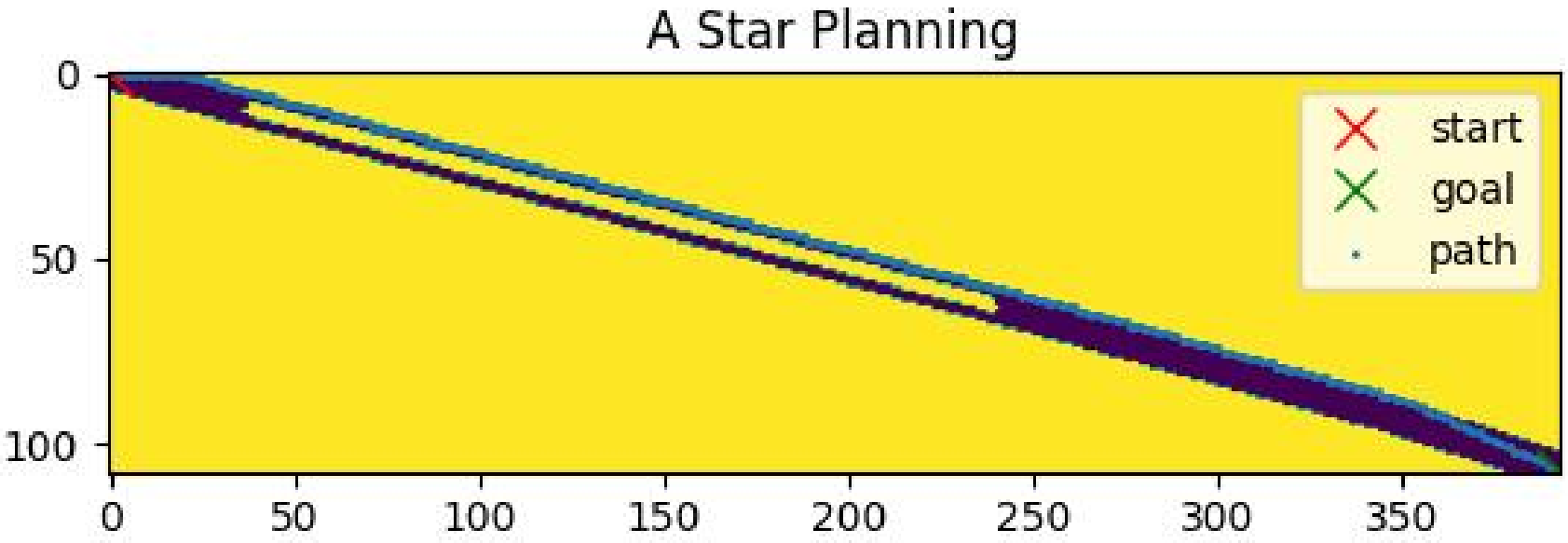

ydot (m/s)
Time (s)

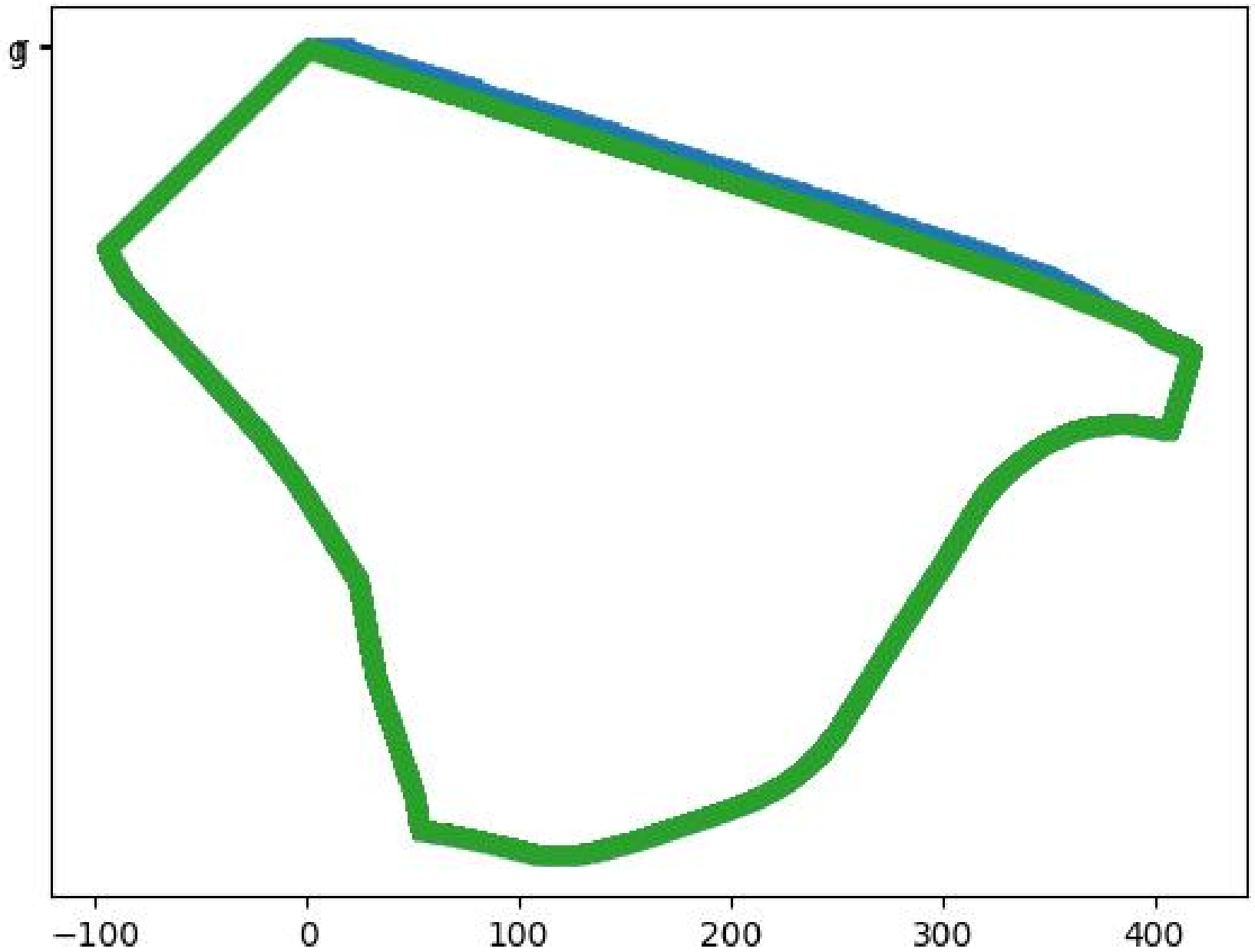

psi (rad)
Time (s)


psidot (rad/s)
Time (s)

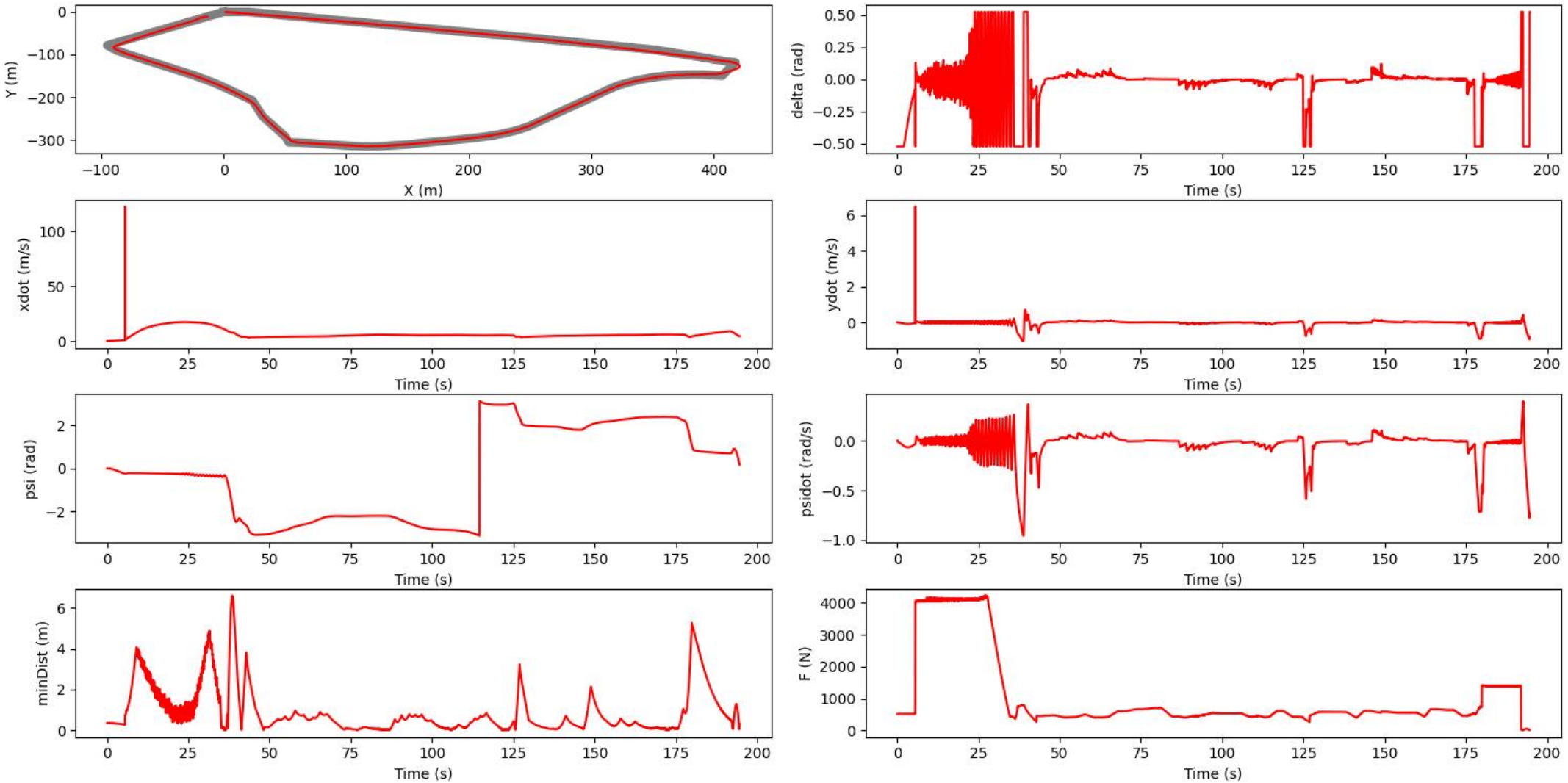

minDist (m)
Time (s)


F (N)
Time (s)

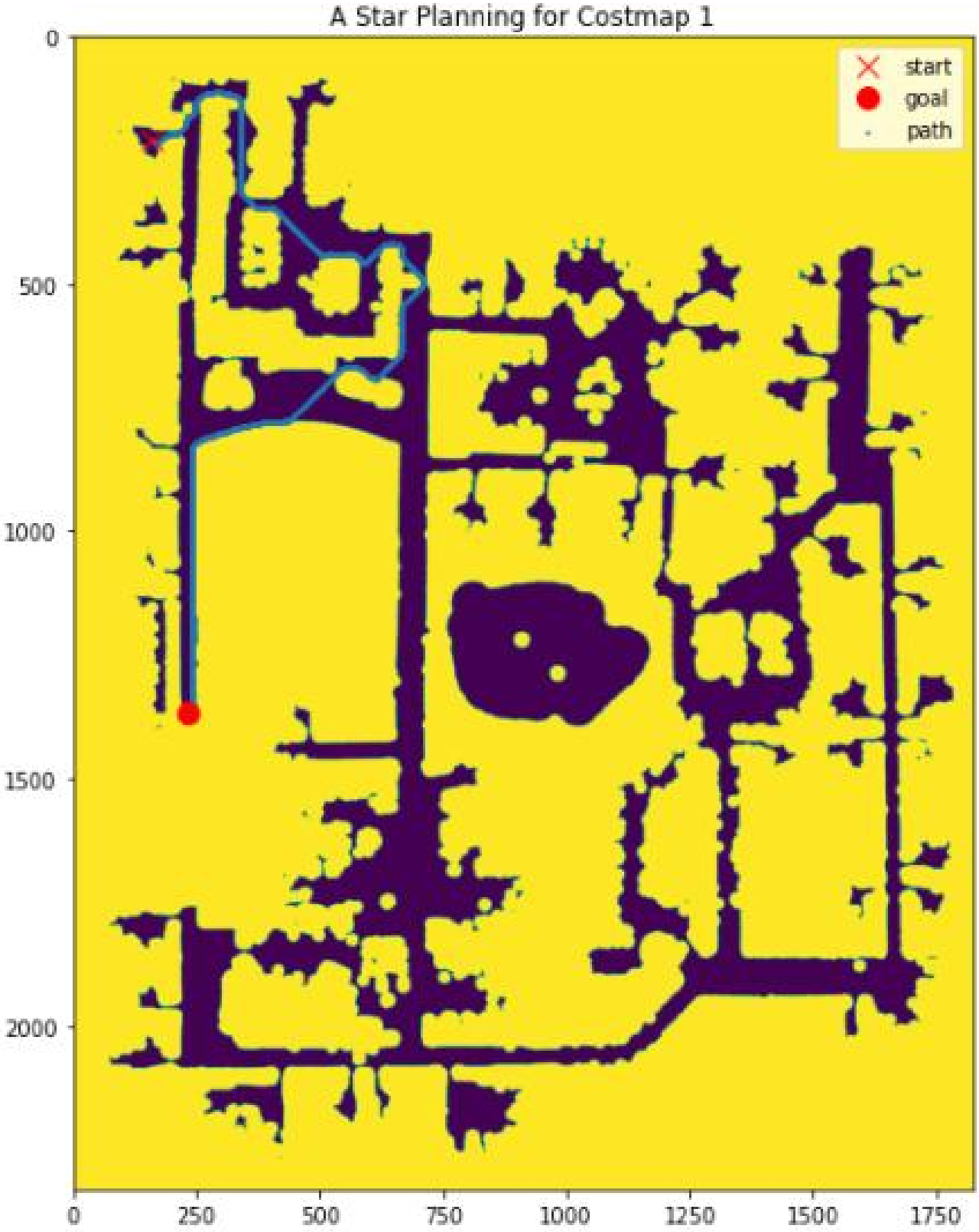

A Star Planning
0
50
100
0
50
100
150
200
250
300
350
start
goal
path

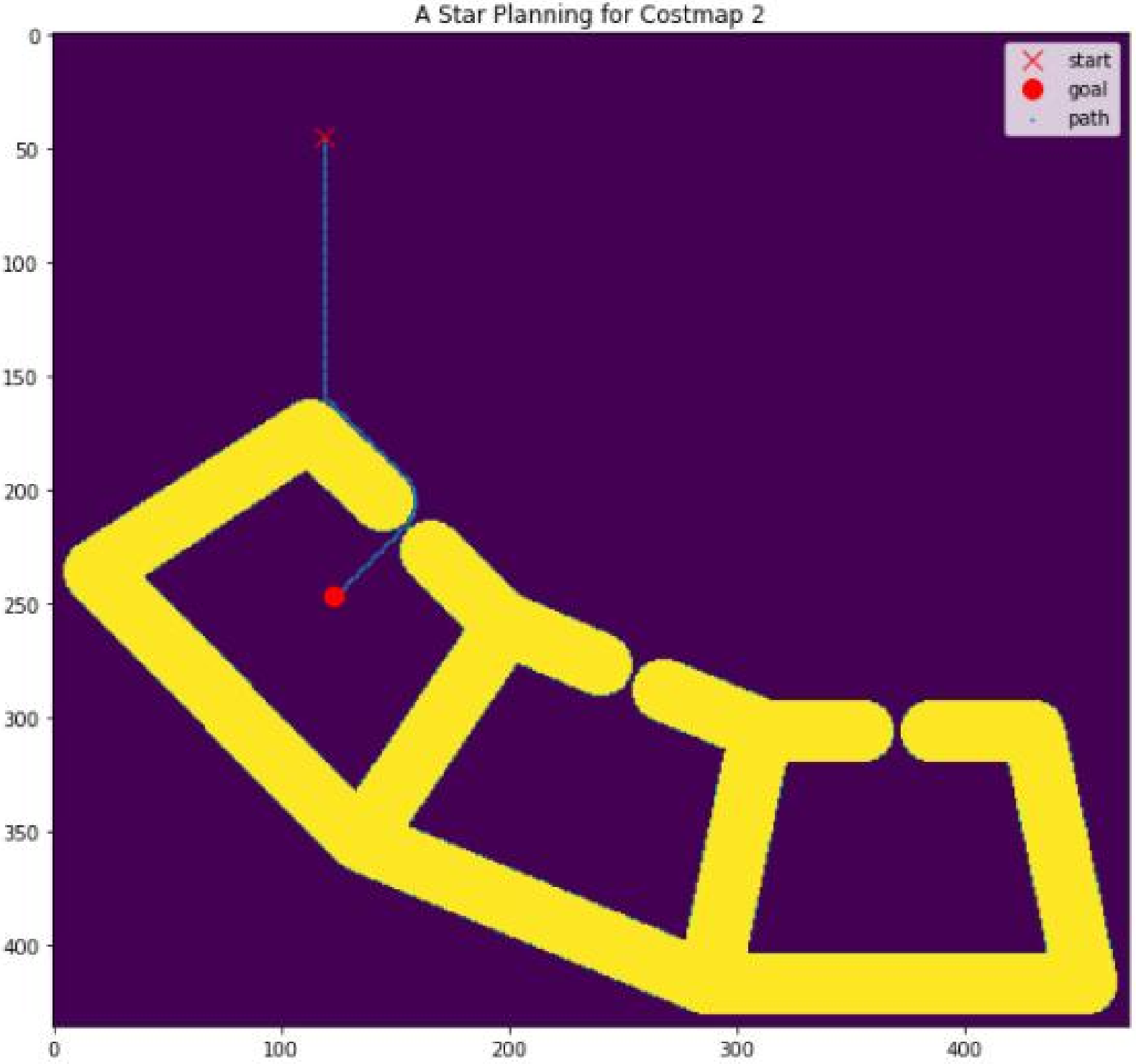

−100
0
100
200
300
400

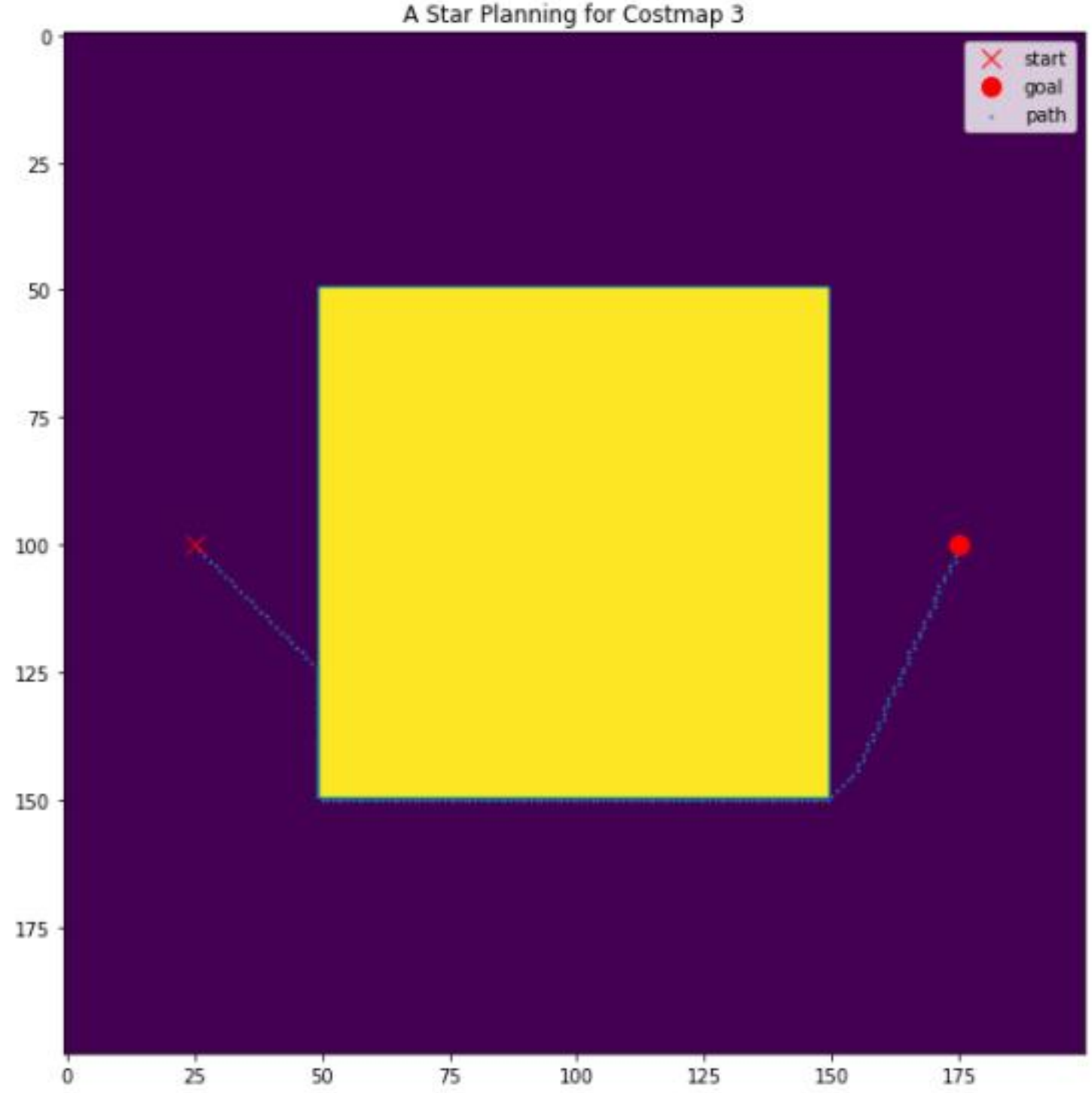
A star + LQR



Time of completion less than 200 s


A Star Planning for Costmap 1
start
goal
path
0
500
1000
1500
2000
0
250
500
750
1000
1250
1500
1750


A Star Planning for Costmap 2
start
goal
path
0
50
100
150
200
250
300
350
400
0
100
200
300
400


A Star Planning for Costmap 3
start
goal
path
0
25
50
75
100
125
150
175
0
25
50
75
100
125
150
175