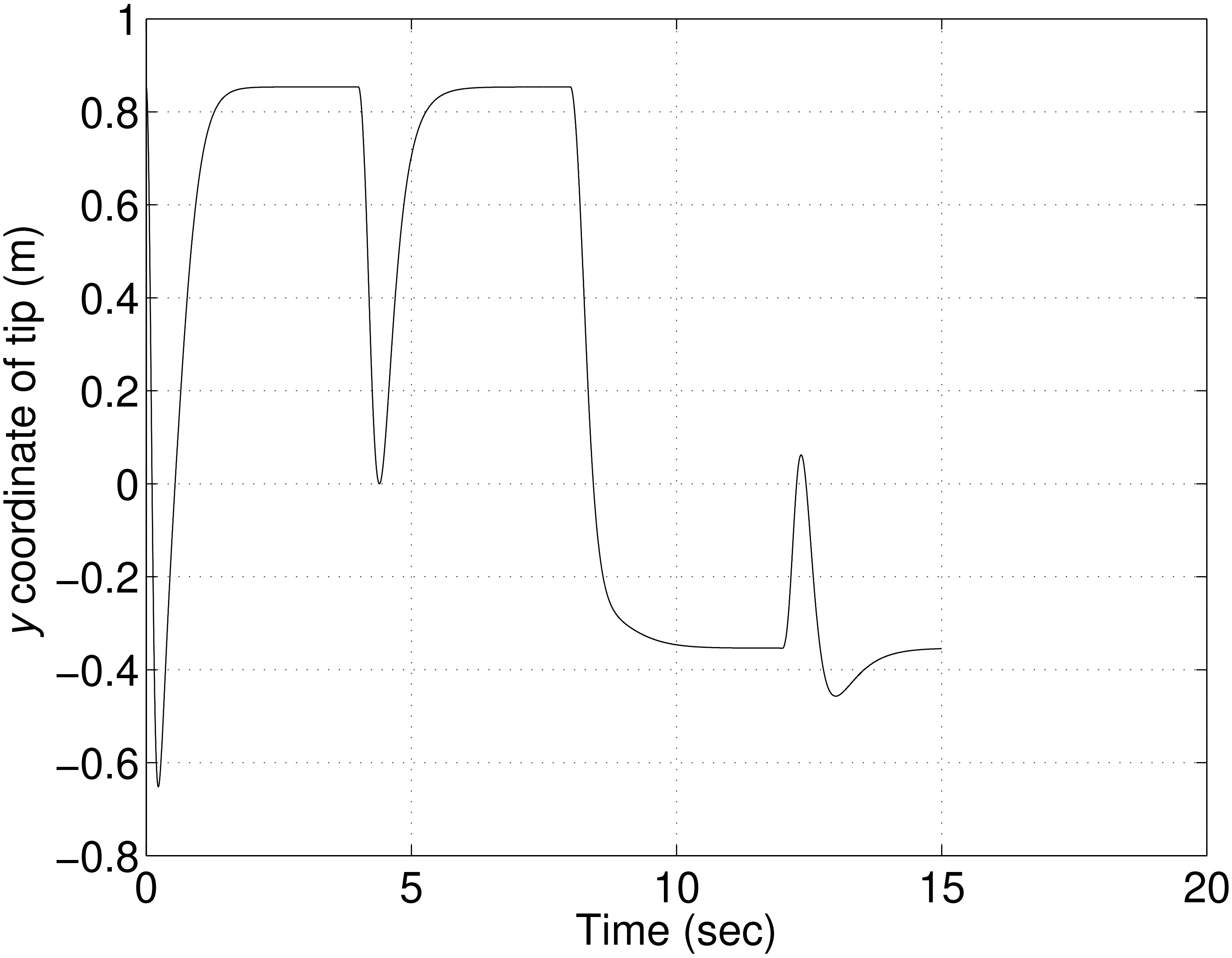

1
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
0
5
10
15
20
y coordinate of tip (m)
Time (sec)