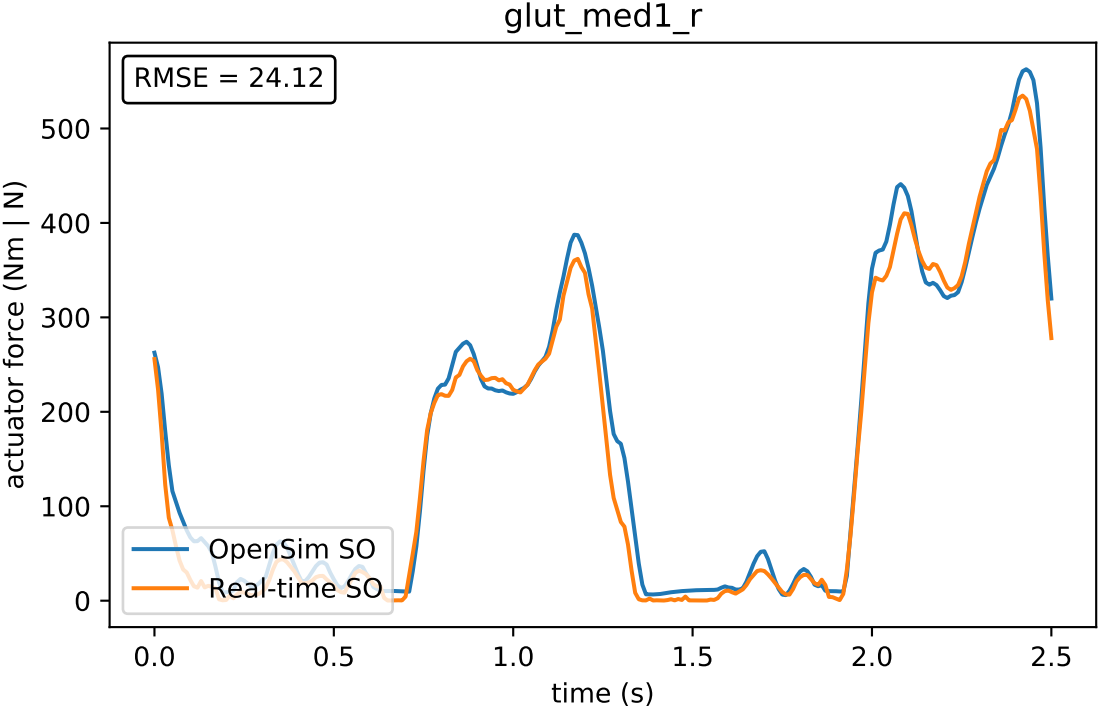
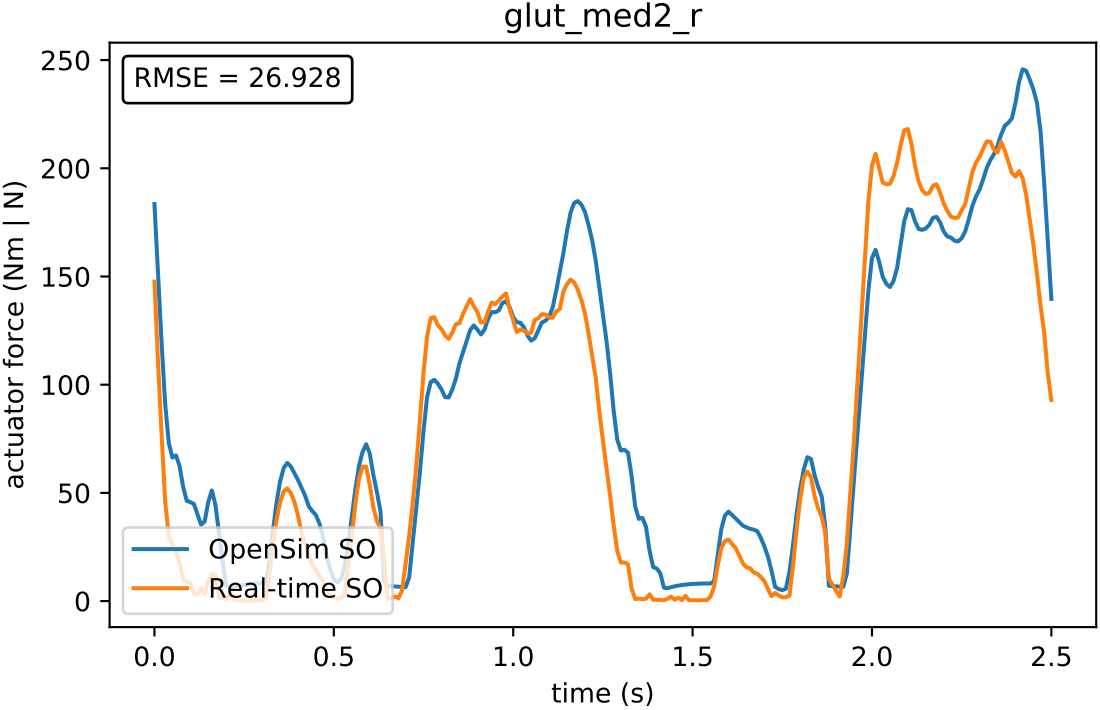
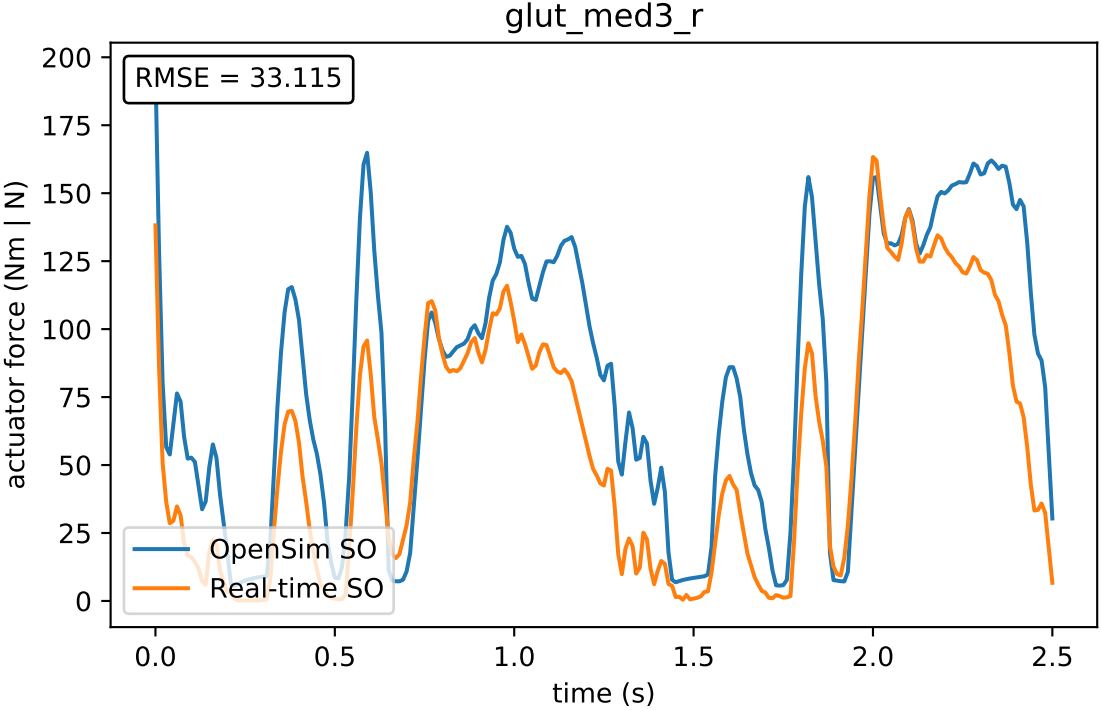
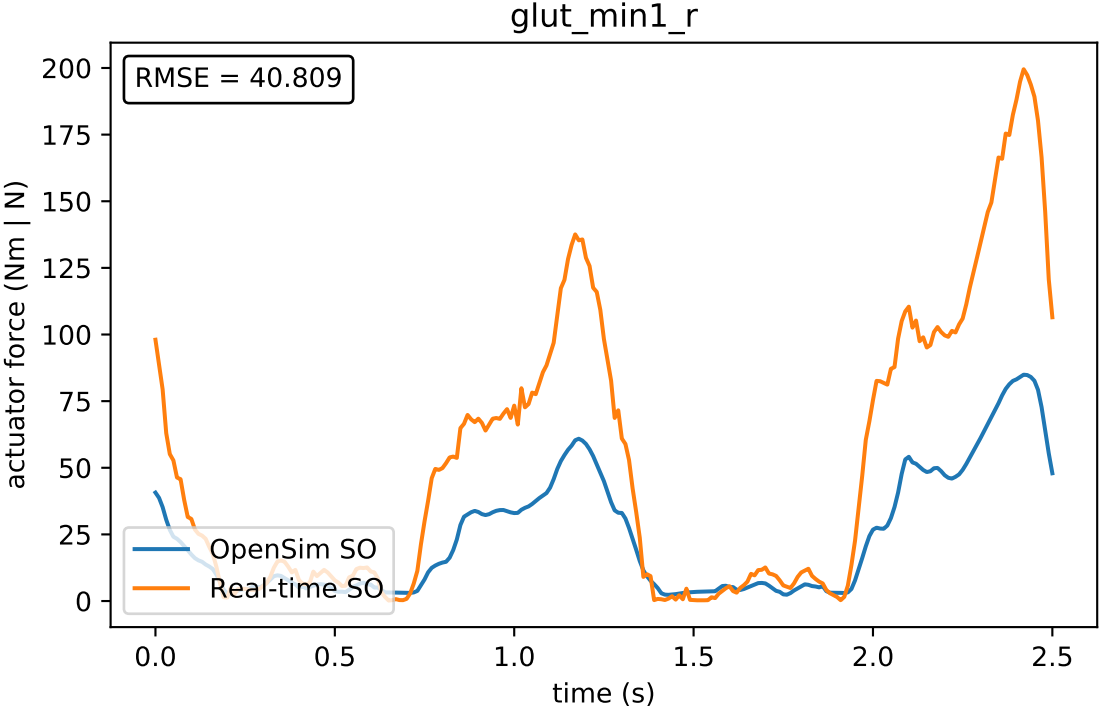
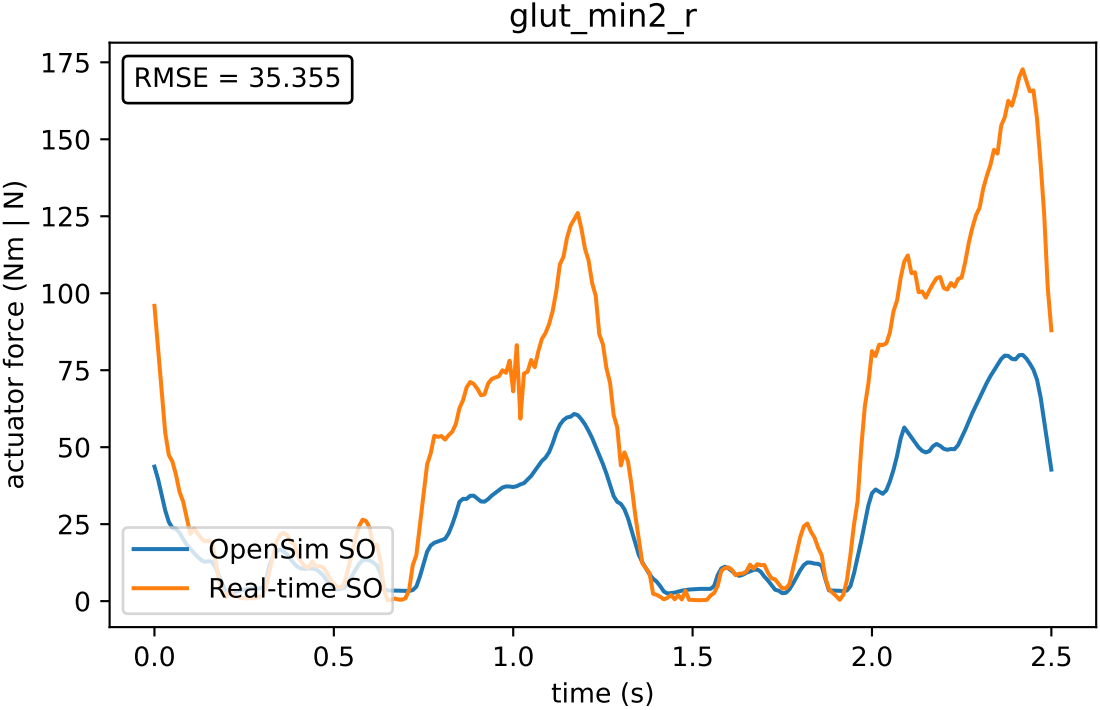
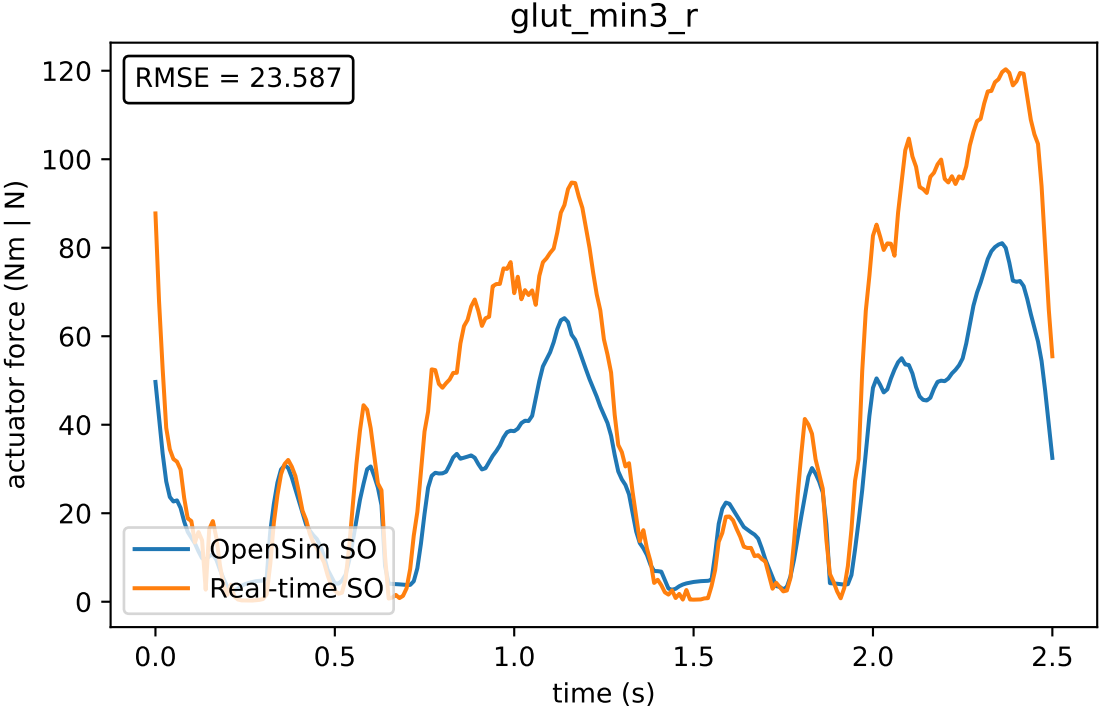

glut_med1_r
RMSE = 24.12
actuator force (Nm | N)
time (s)
OpenSim SO
Real-time SO
0
100
200
300
400
500
0.0
0.5
1.0
1.5
2.0
2.5

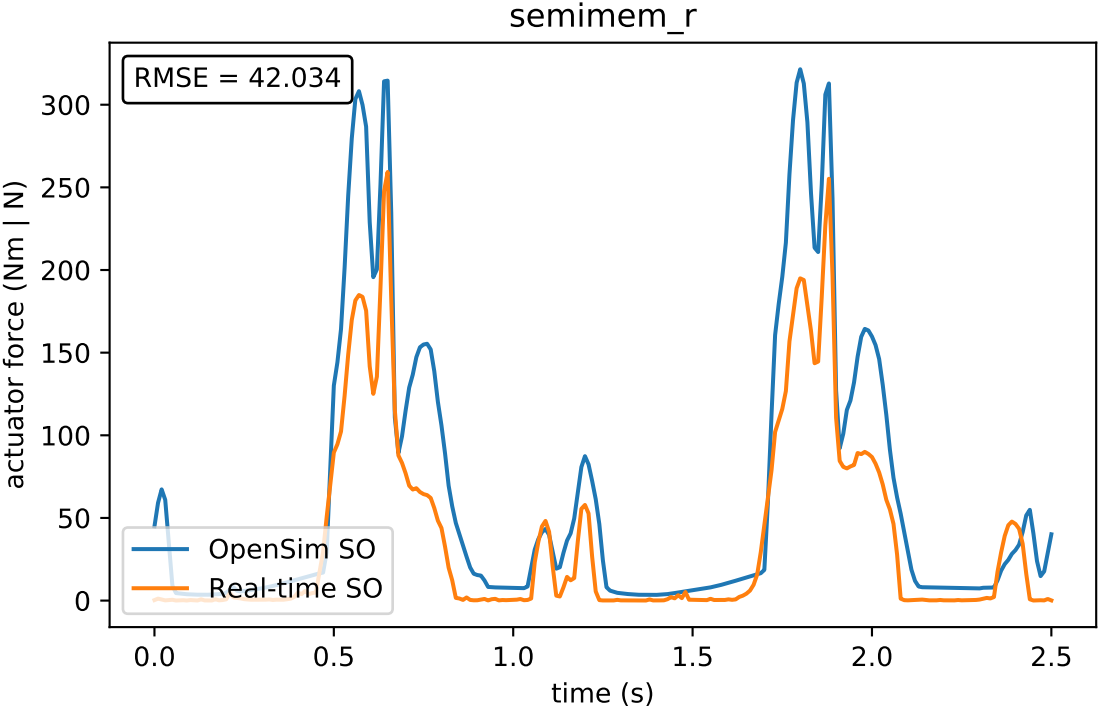

glut_med2_r
RMSE = 26.928
OpenSim SO
Real-time SO
actuator force (Nm | N)
time (s)
0
50
100
150
200
250
0.0
0.5
1.0
1.5
2.0
2.5

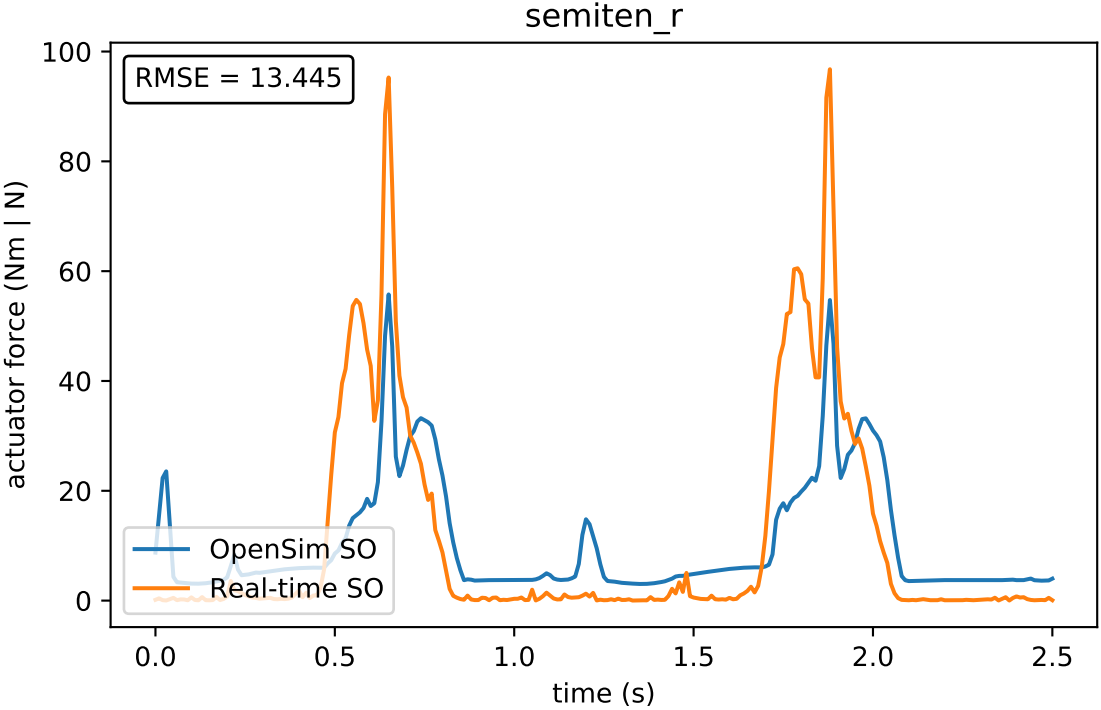

glut_med3_r
RMSE = 33.115
OpenSim SO
Real-time SO
actuator force (Nm | N)
time (s)
200
175
150
125
100
75
50
25
0
0.0
0.5
1.0
1.5
2.0
2.5

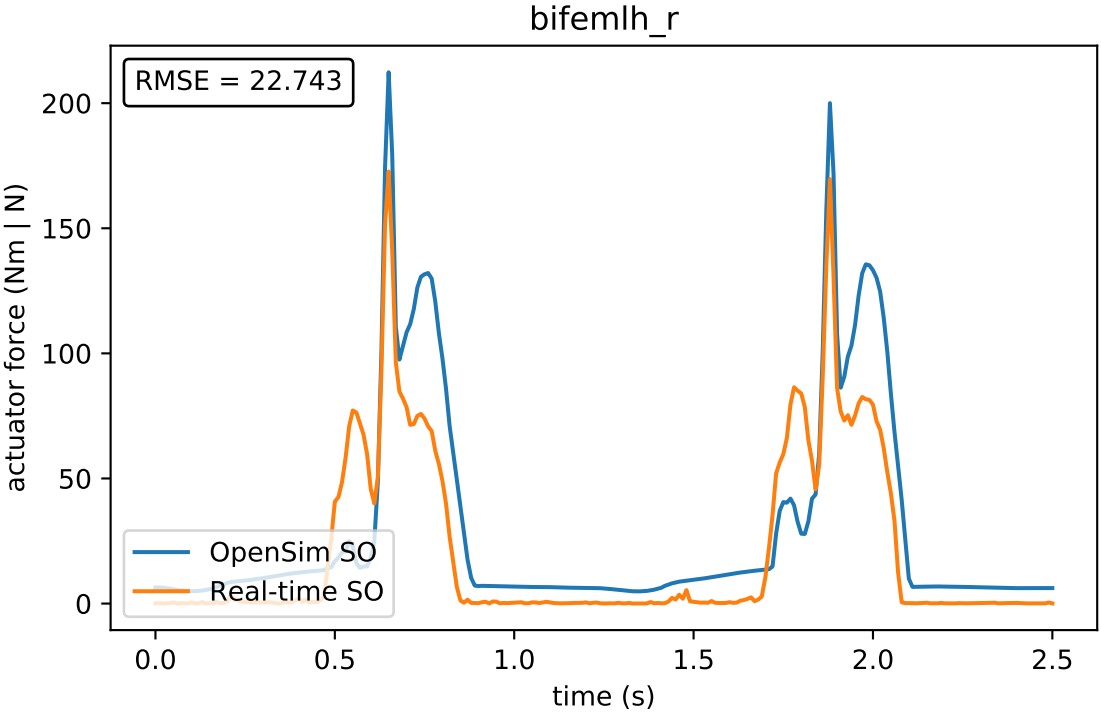

glut_min1_r
RMSE = 40.809
actuator force (Nm | N)
time (s)
OpenSim SO
Real-time SO
0
25
50
75
100
125
150
175
200
0.0
0.5
1.0
1.5
2.0
2.5

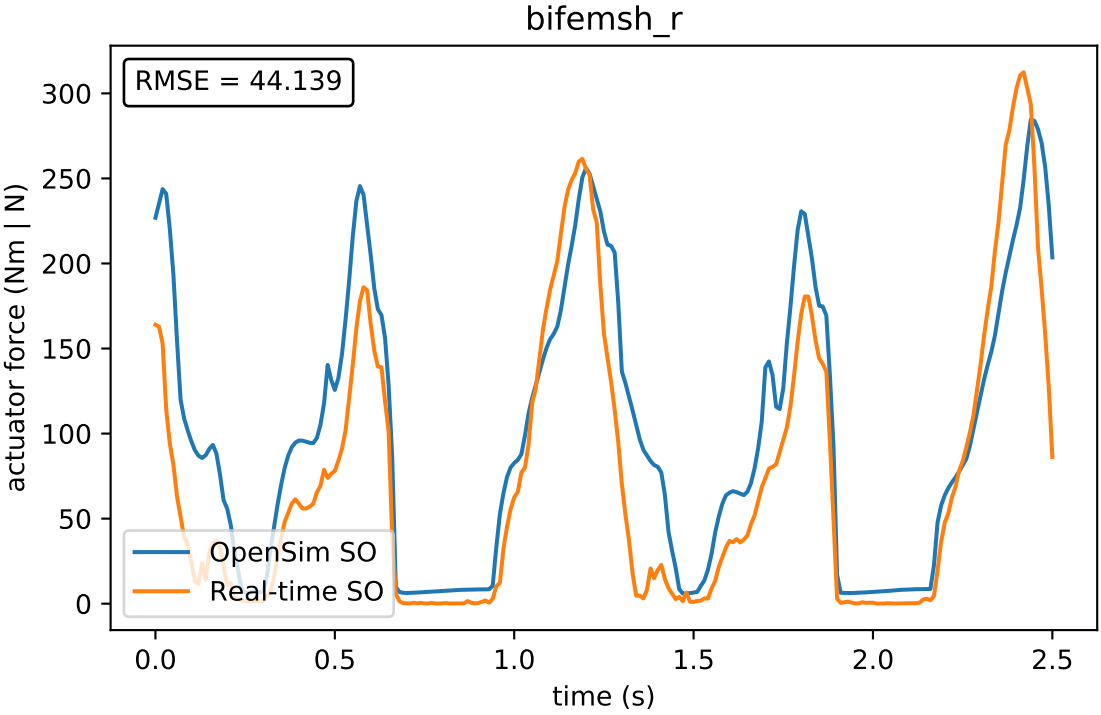

glut_min2_r
RMSE = 35.355
OpenSim SO
Real-time SO
actuator force (Nm | N)
time (s)
175
150
125
100
75
50
25
0
0.0
0.5
1.0
1.5
2.0
2.5

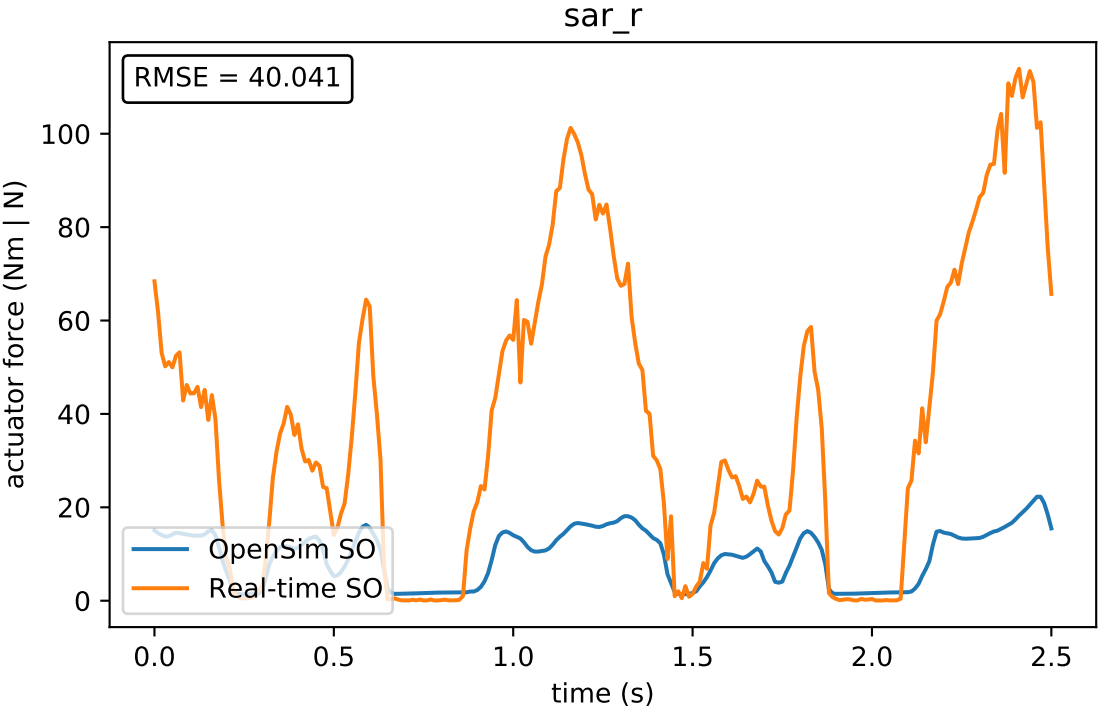

glut_min3_r
RMSE = 23.587
actuator force (Nm | N)
time (s)
OpenSim SO
Real-time SO
0
20
40
60
80
100
120
0.0
0.5
1.0
1.5
2.0
2.5

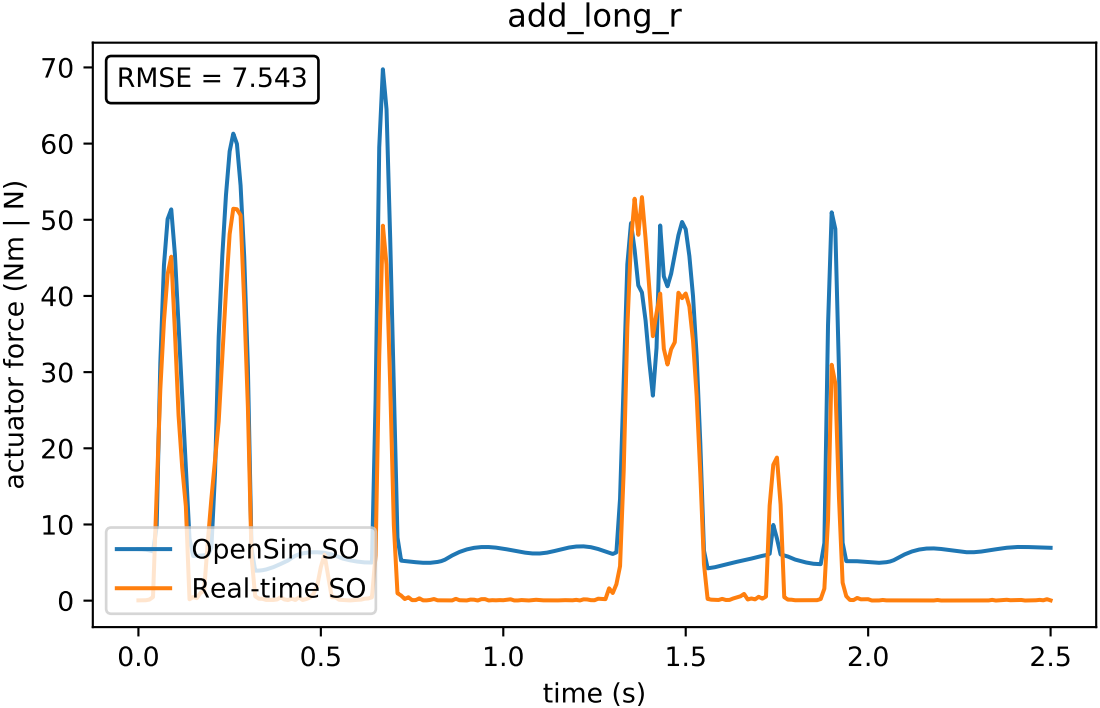

semimem_r
RMSE = 42.034
OpenSim SO
Real-time SO
actuator force (Nm | N)
time (s)
0
50
100
150
200
250
300
0.0
0.5
1.0
1.5
2.0
2.5

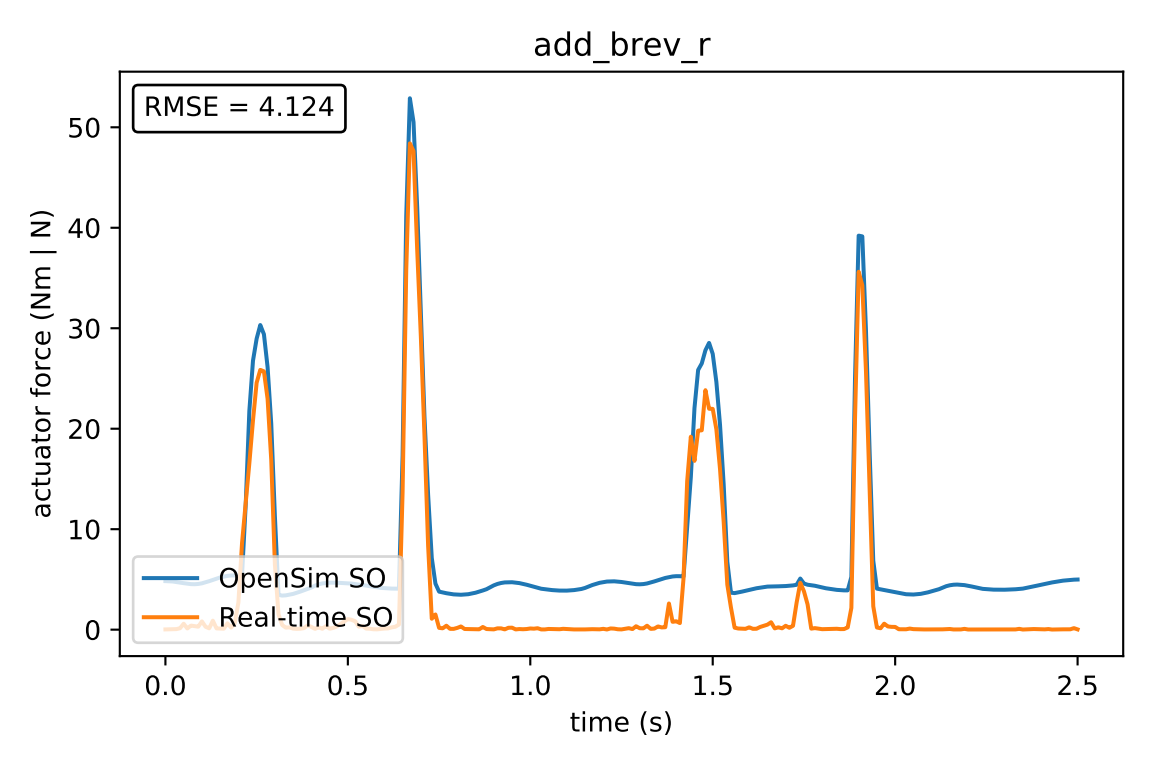

semiten_r
RMSE = 13.445
OpenSim SO
Real-time SO
actuator force (Nm | N)
time (s)
0
20
40
60
80
100
0.0
0.5
1.0
1.5
2.0
2.5

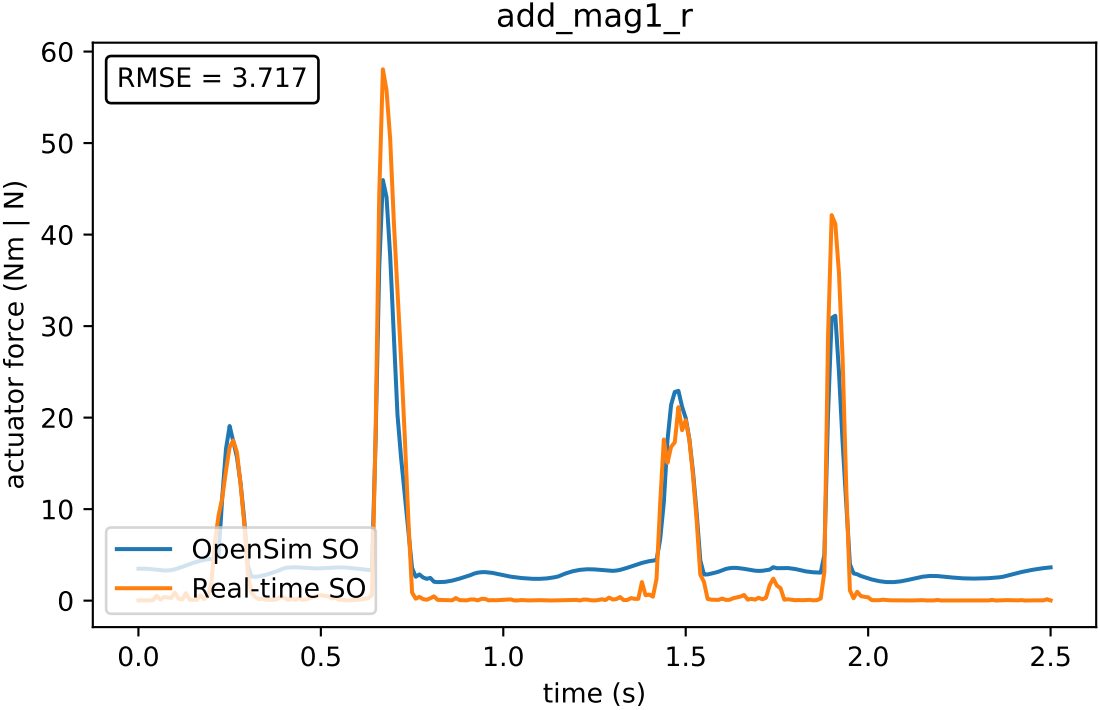

bifemlh_r
RMSE = 22.743
actuator force (Nm | N)
time (s)
OpenSim SO
Real-time SO
0
50
100
150
200
0.0
0.5
1.0
1.5
2.0
2.5

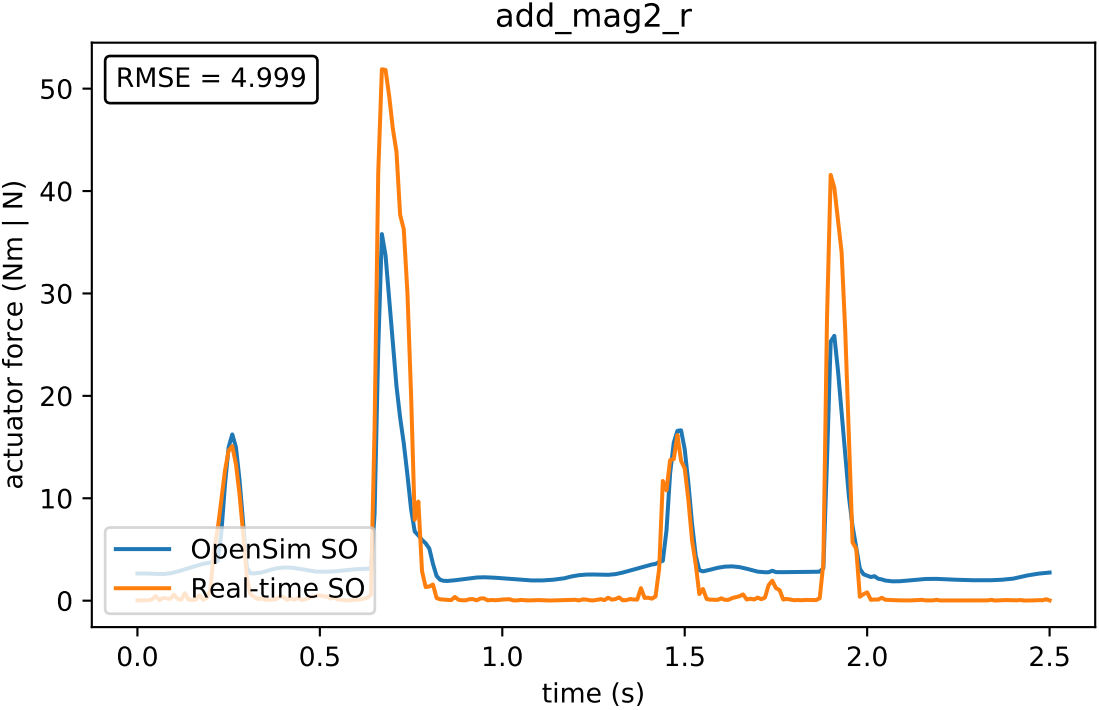

bifemsh_r
RMSE = 44.139
OpenSim SO
Real-time SO
actuator force (Nm | N)
time (s)
0
50
100
150
200
250
300
0.0
0.5
1.0
1.5
2.0
2.5

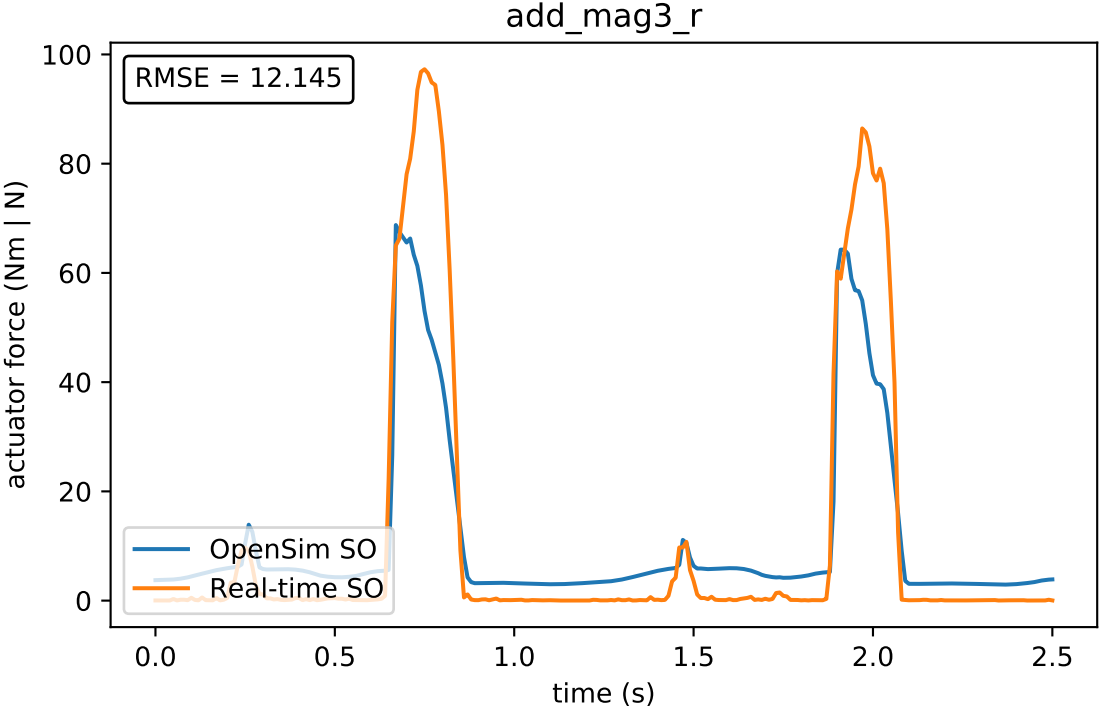

sar_r
RMSE = 40.041
actuator force (Nm | N)
time (s)
OpenSim SO
Real-time SO
0
20
40
60
80
100
0.0
0.5
1.0
1.5
2.0
2.5

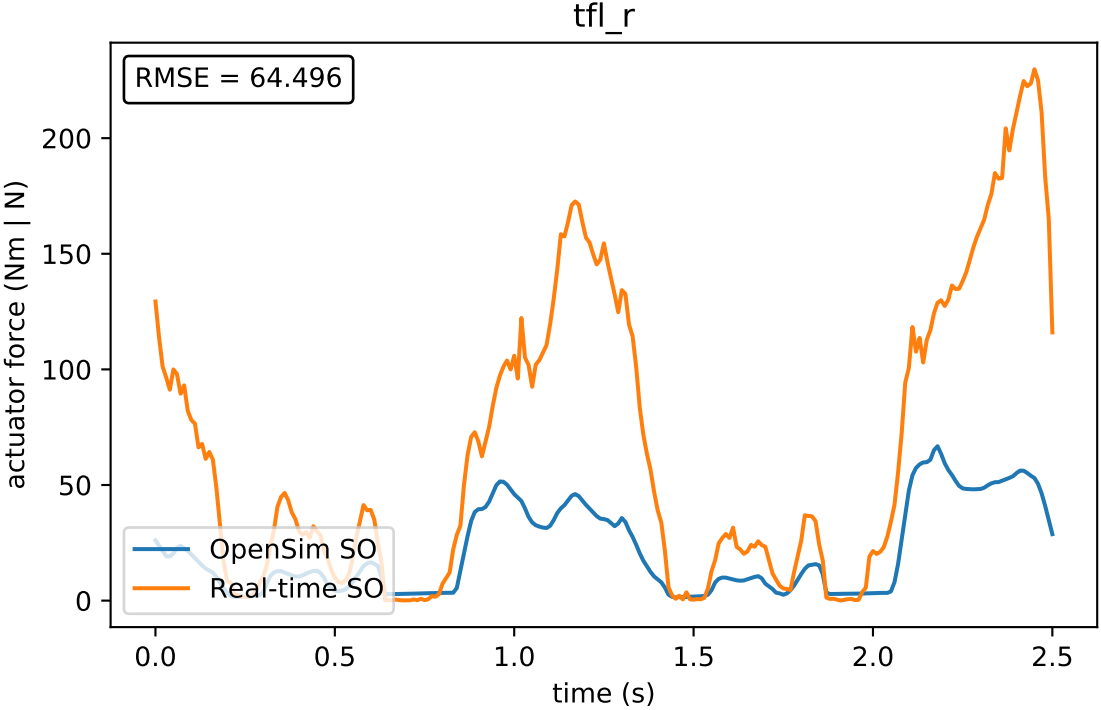

add_long_r
RMSE = 7.543
OpenSim SO
Real-time SO
actuator force (Nm | N)
time (s)
0
10
20
30
40
50
60
70
0.0
0.5
1.0
1.5
2.0
2.5

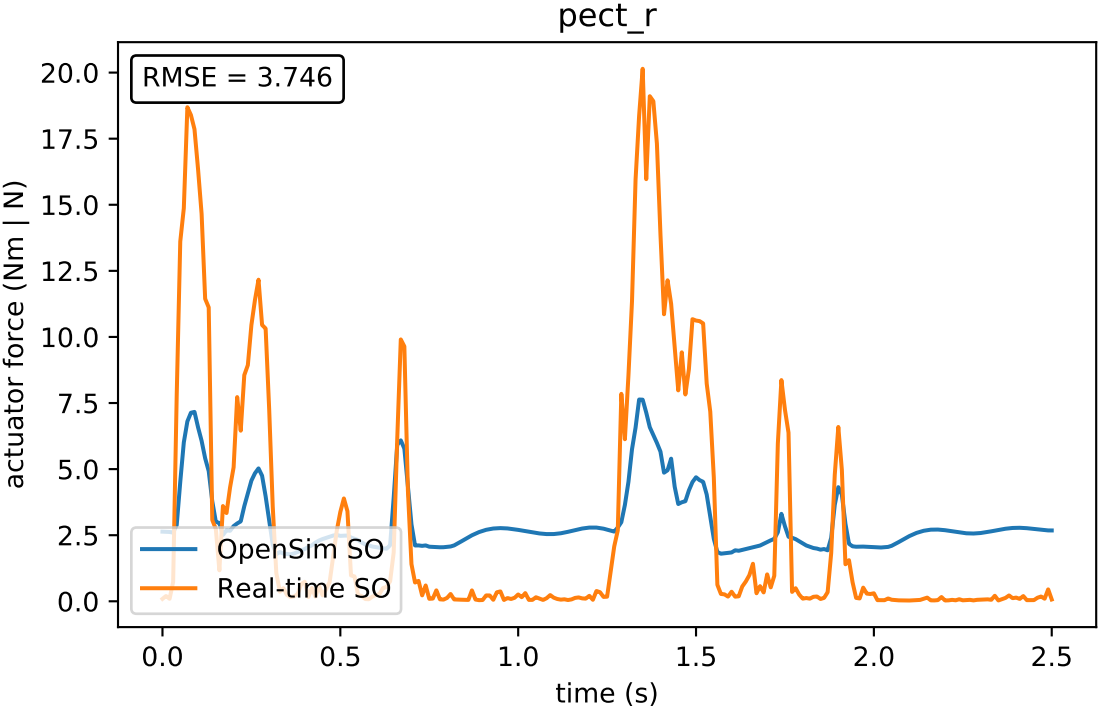

add_brev_r
RMSE = 4.124
OpenSim SO
Real-time SO
actuator force (Nm | N)
time (s)
0
10
20
30
40
50
0.0
0.5
1.0
1.5
2.0
2.5

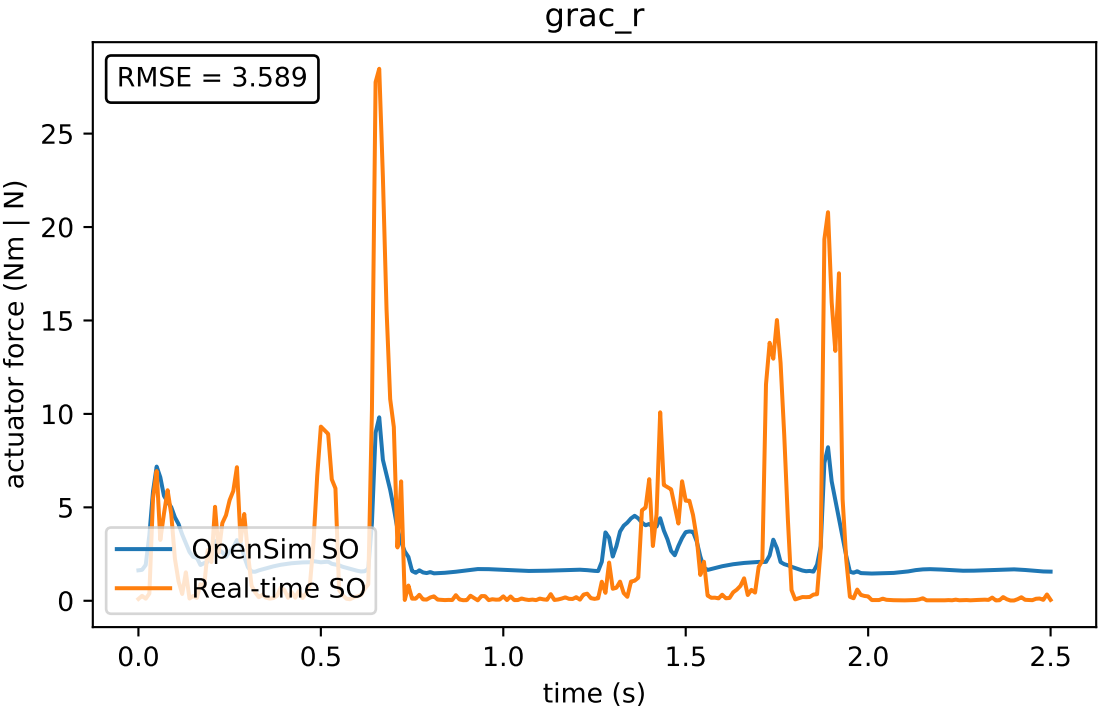

add_mag1_r
RMSE = 3.717
actuator force (Nm | N)
time (s)
OpenSim SO
Real-time SO
0
10
20
30
40
50
60
0.0
0.5
1.0
1.5
2.0
2.5

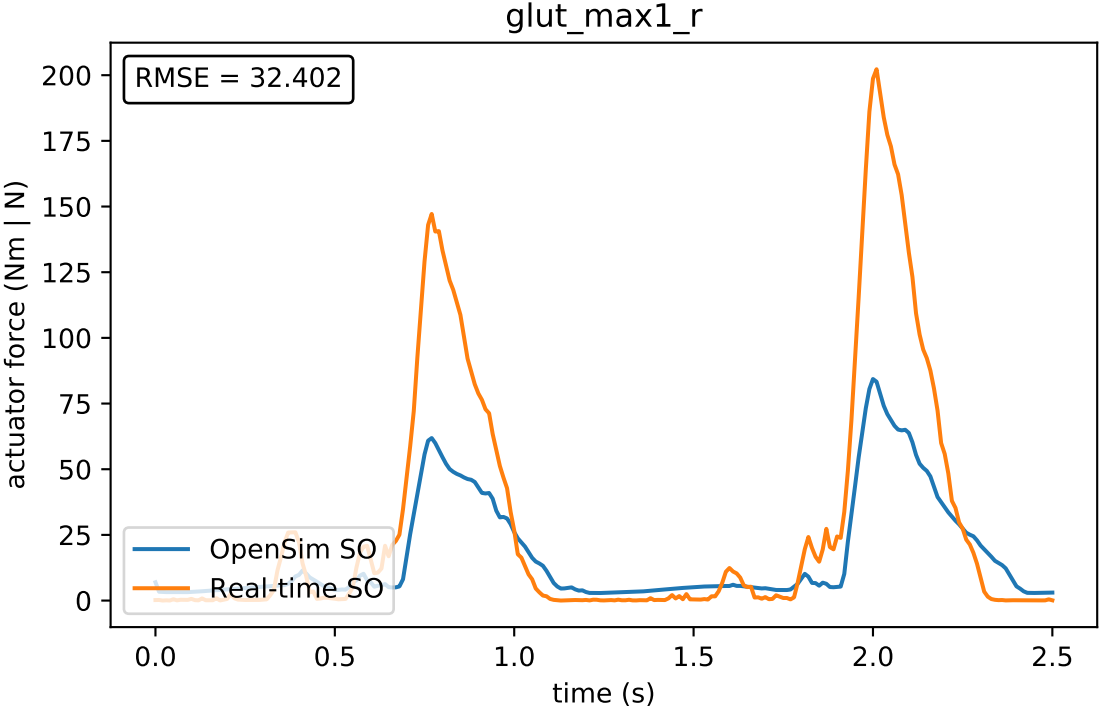

add_mag2_r
RMSE = 4.999
OpenSim SO
Real-time SO
actuator force (Nm | N)
time (s)
0
10
20
30
40
50
0.0
0.5
1.0
1.5
2.0
2.5

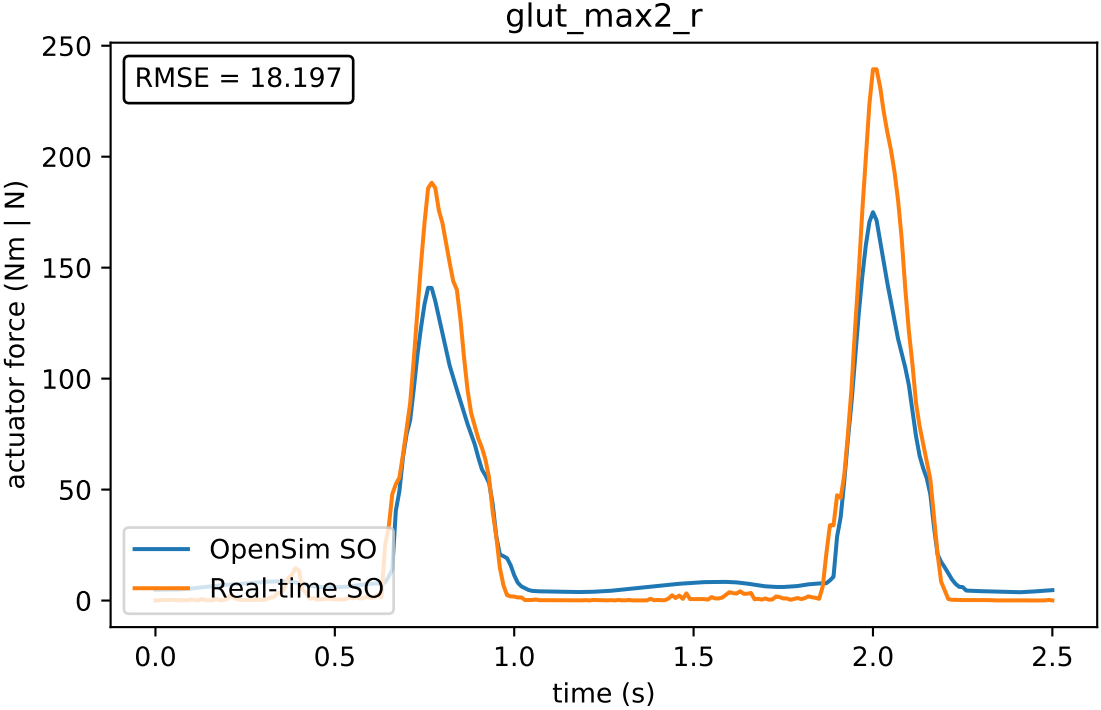

add_mag3_r
RMSE = 12.145
OpenSim SO
Real-time SO
actuator force (Nm | N)
time (s)
0
20
40
60
80
100
0.0
0.5
1.0
1.5
2.0
2.5

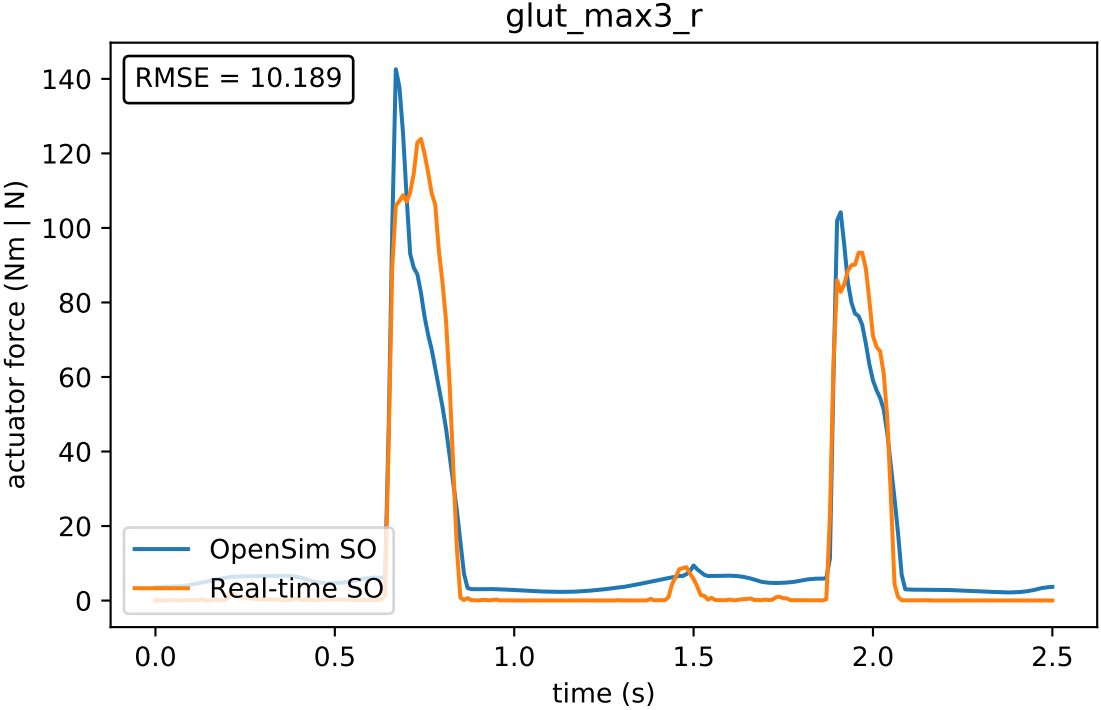

tfl_r
RMSE = 64.496
200
150
100
50
0
actuator force (Nm | N)
OpenSim SO
Real-time SO
0.0
0.5
1.0
1.5
2.0
2.5
time (s)

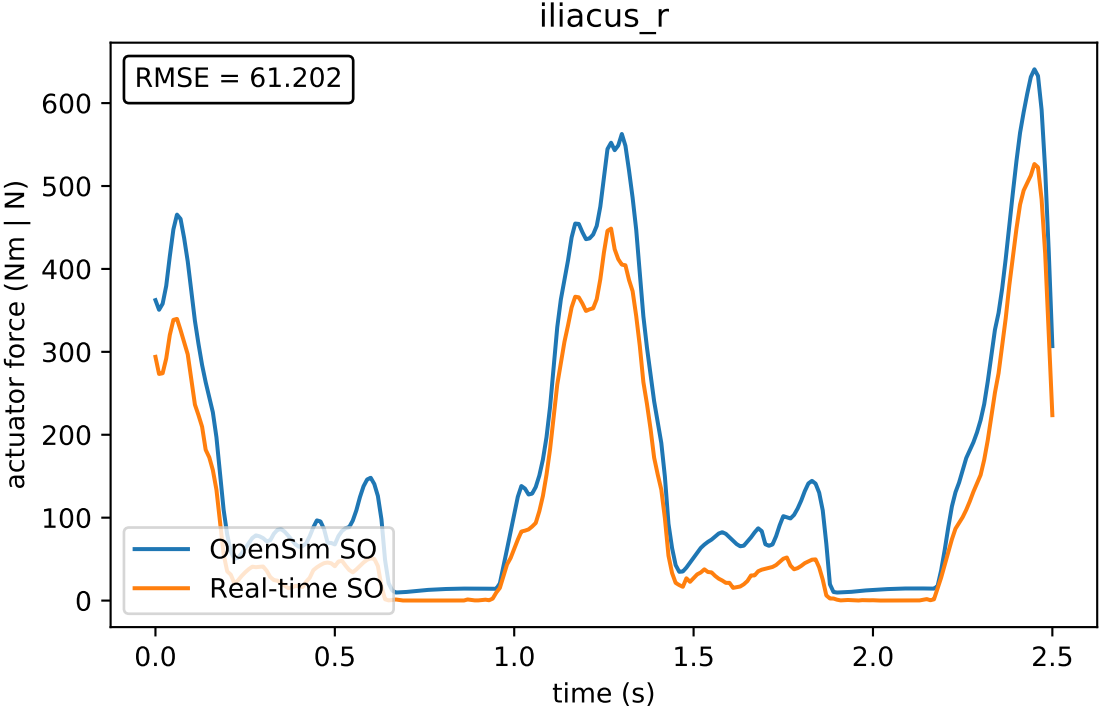

pect_r
RMSE = 3.746
OpenSim SO
Real-time SO
actuator force (Nm | N)
time (s)
0.0
2.5
5.0
7.5
10.0
12.5
15.0
17.5
20.0
0.0
0.5
1.0
1.5
2.0
2.5

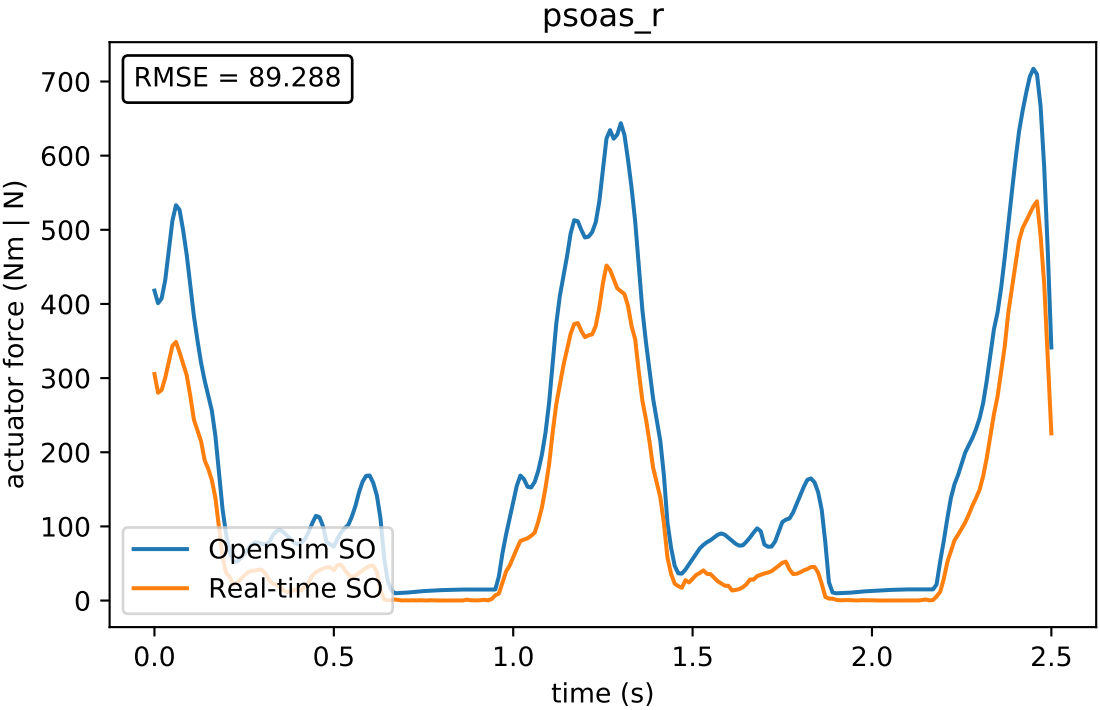

grac_r
RMSE = 3.589
OpenSim SO
Real-time SO
actuator force (Nm | N)
time (s)
0
5
10
15
20
25
0.0
0.5
1.0
1.5
2.0
2.5

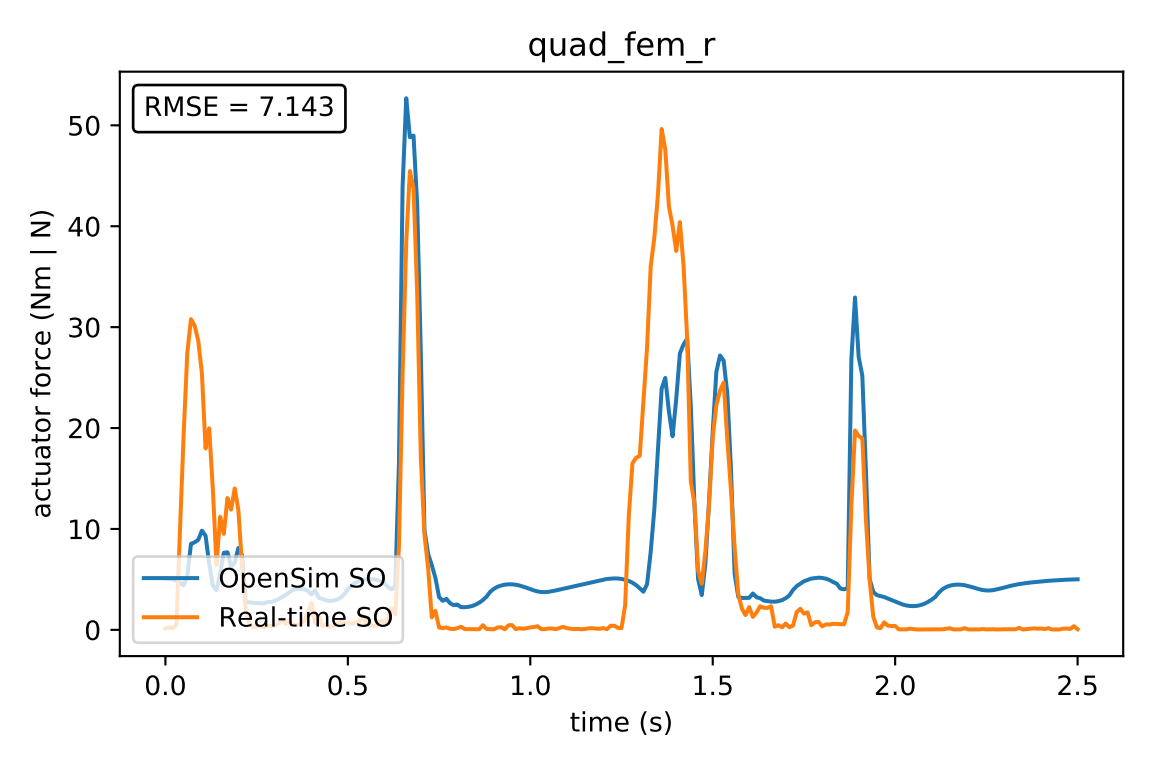

glut_max1_r
RMSE = 32.402
actuator force (Nm | N)
time (s)
OpenSim SO
Real-time SO
0
25
50
75
100
125
150
175
200
0.0
0.5
1.0
1.5
2.0
2.5

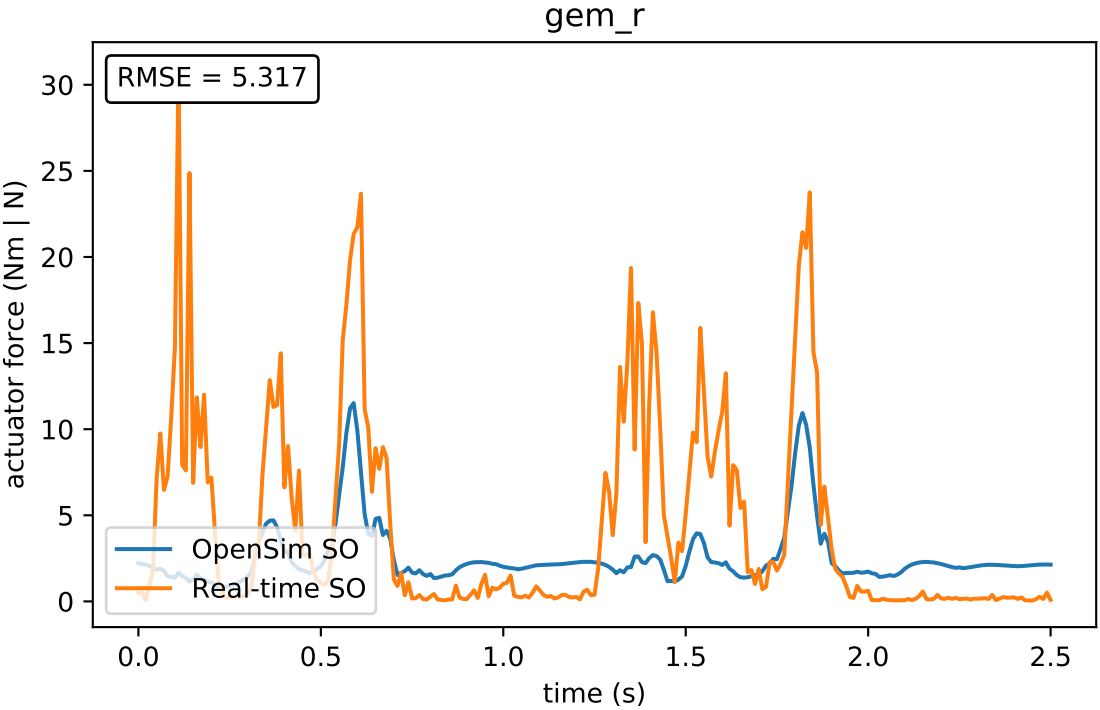

glut_max2_r
RMSE = 18.197
OpenSim SO
Real-time SO
actuator force (Nm | N)
time (s)
250
200
150
100
50
0
0.0
0.5
1.0
1.5
2.0
2.5

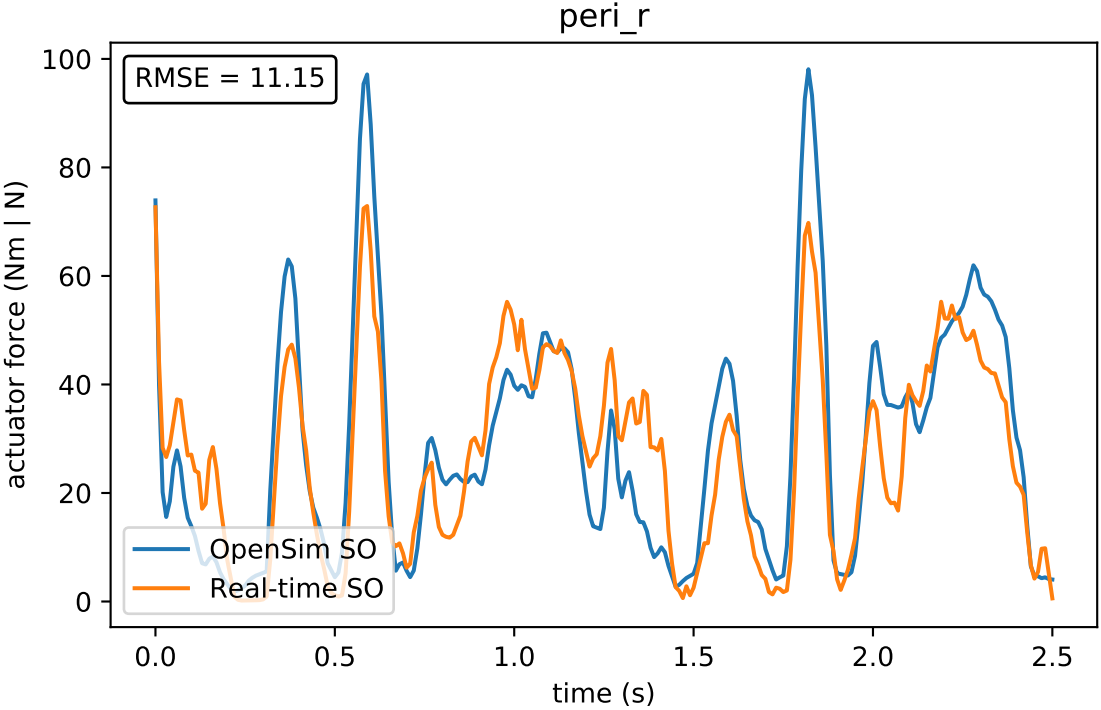

glut_max3_r
RMSE = 10.189
OpenSim SO
Real-time SO
actuator force (Nm | N)
time (s)
0
20
40
60
80
100
120
140
0.0
0.5
1.0
1.5
2.0
2.5

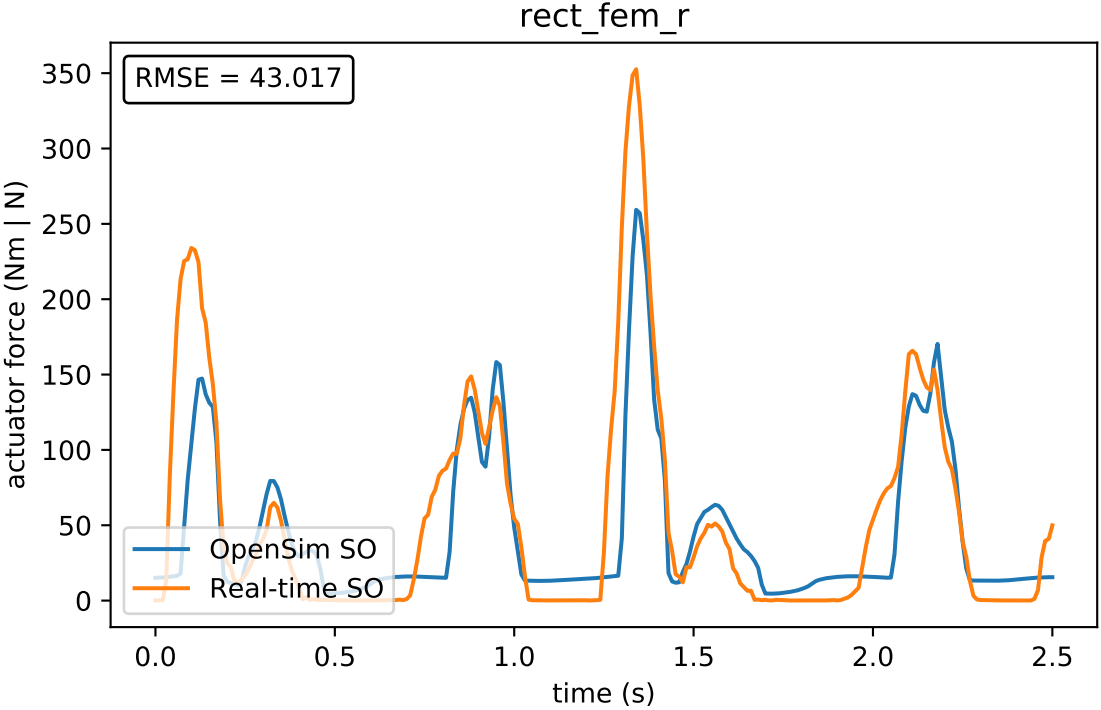

iliacus_r
RMSE = 61.202
actuator force (Nm | N)
time (s)
OpenSim SO
Real-time SO
0
100
200
300
400
500
600
0.0
0.5
1.0
1.5
2.0
2.5

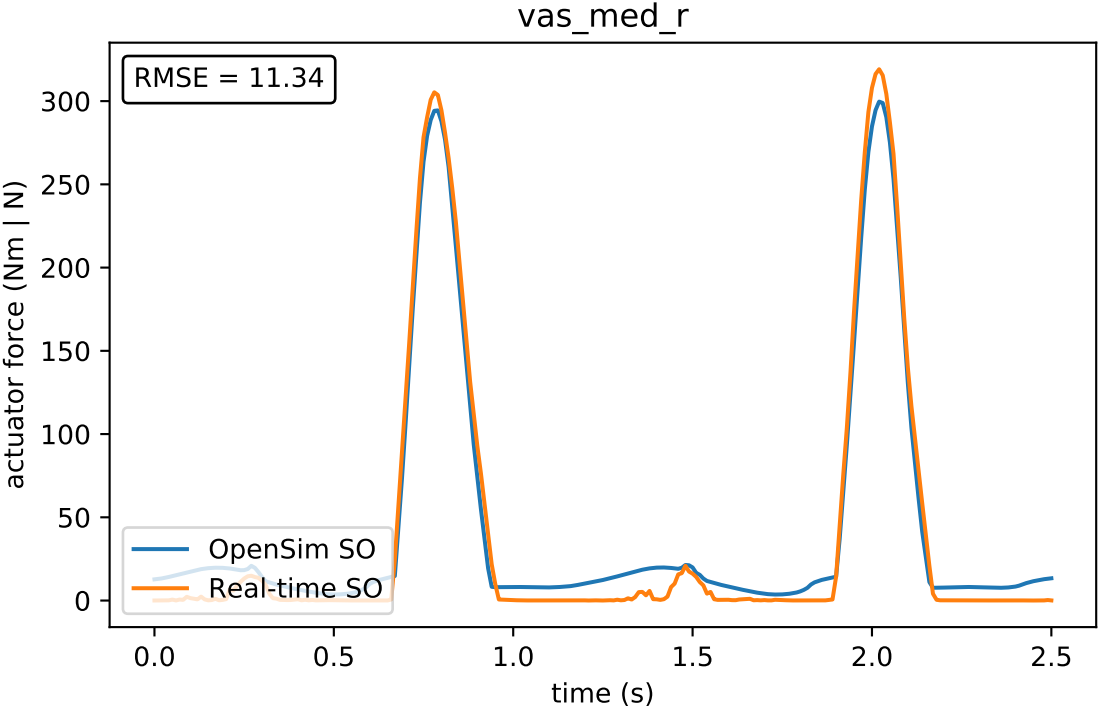

psoas_r
RMSE = 89.288
OpenSim SO
Real-time SO
actuator force (Nm | N)
time (s)
0
100
200
300
400
500
600
700
0.0
0.5
1.0
1.5
2.0
2.5

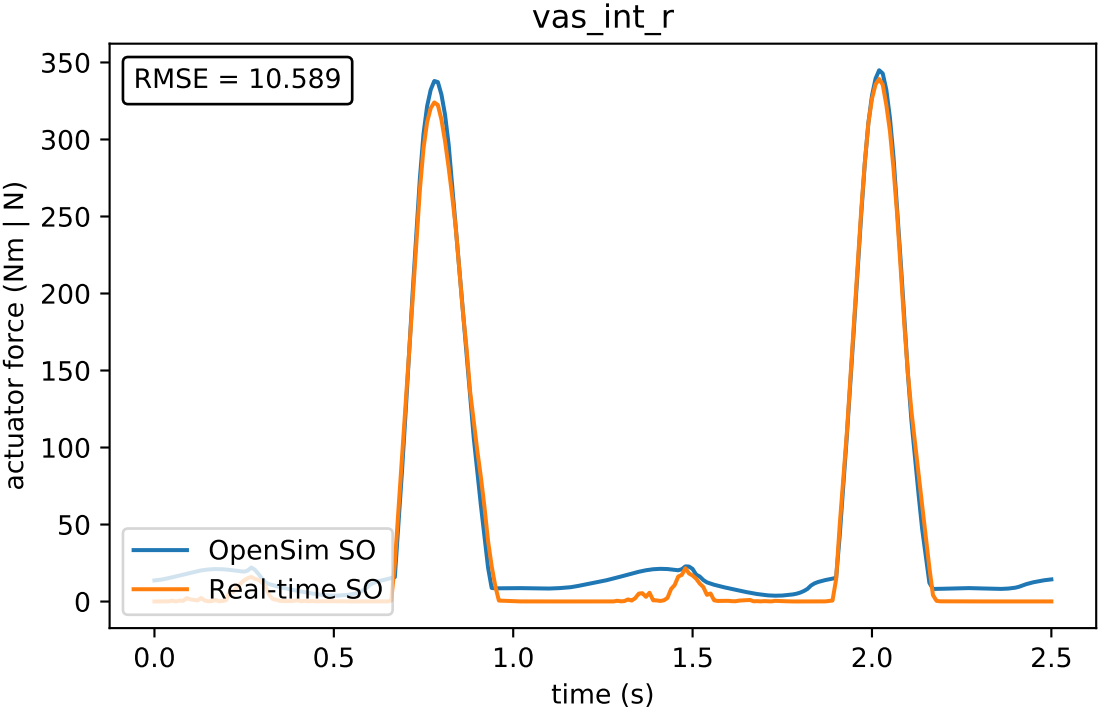

quad_fem_r
RMSE = 7.143
OpenSim SO
Real-time SO
actuator force (Nm | N)
time (s)
0
10
20
30
40
50
0.0
0.5
1.0
1.5
2.0
2.5

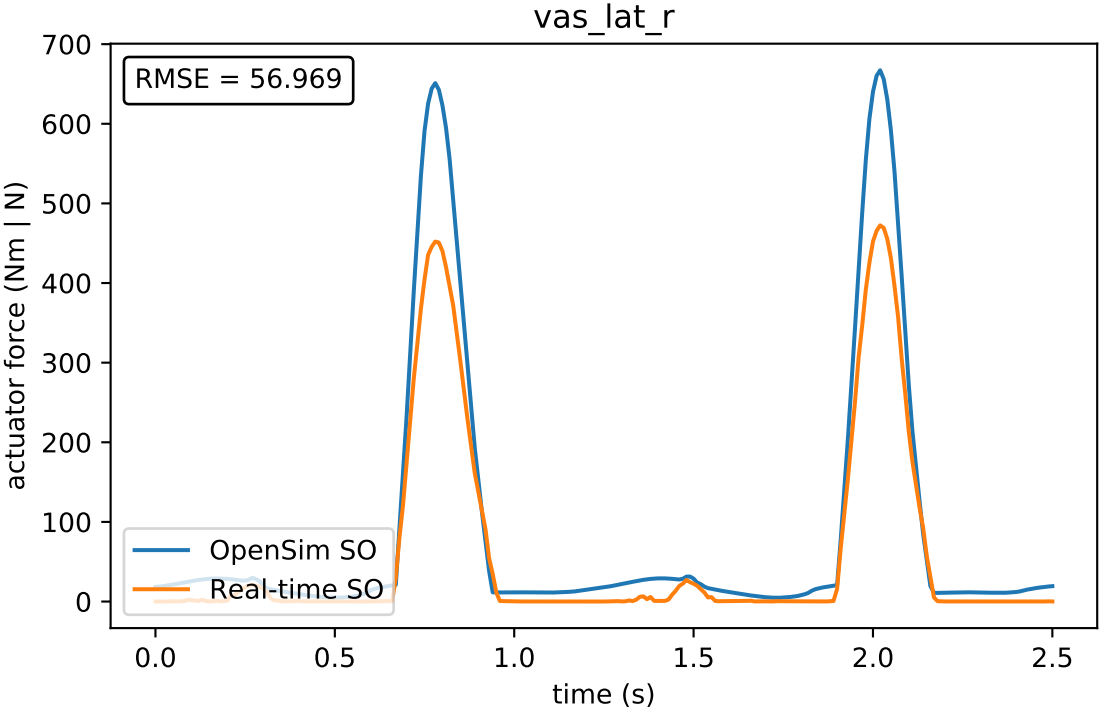

gem_r
RMSE = 5.317
actuator force (Nm | N)
time (s)
OpenSim SO
Real-time SO
0
5
10
15
20
25
30
0.0
0.5
1.0
1.5
2.0
2.5

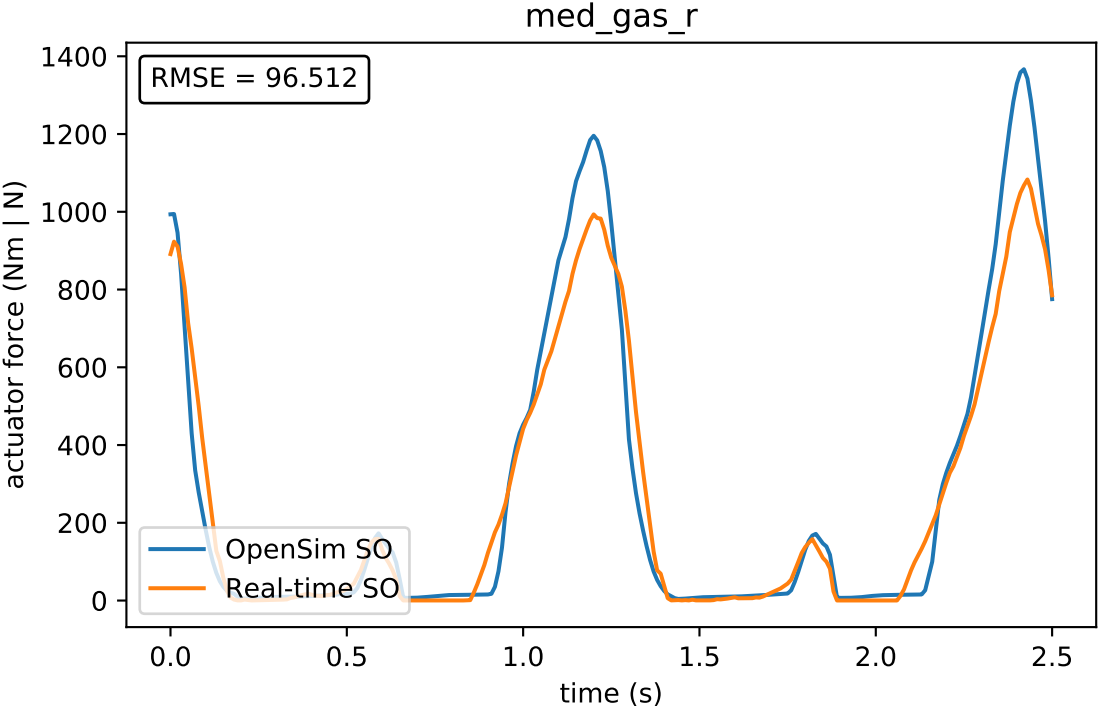

peri_r
RMSE = 11.15
OpenSim SO
Real-time SO
actuator force (Nm | N)
time (s)
0
20
40
60
80
100
0.0
0.5
1.0
1.5
2.0
2.5

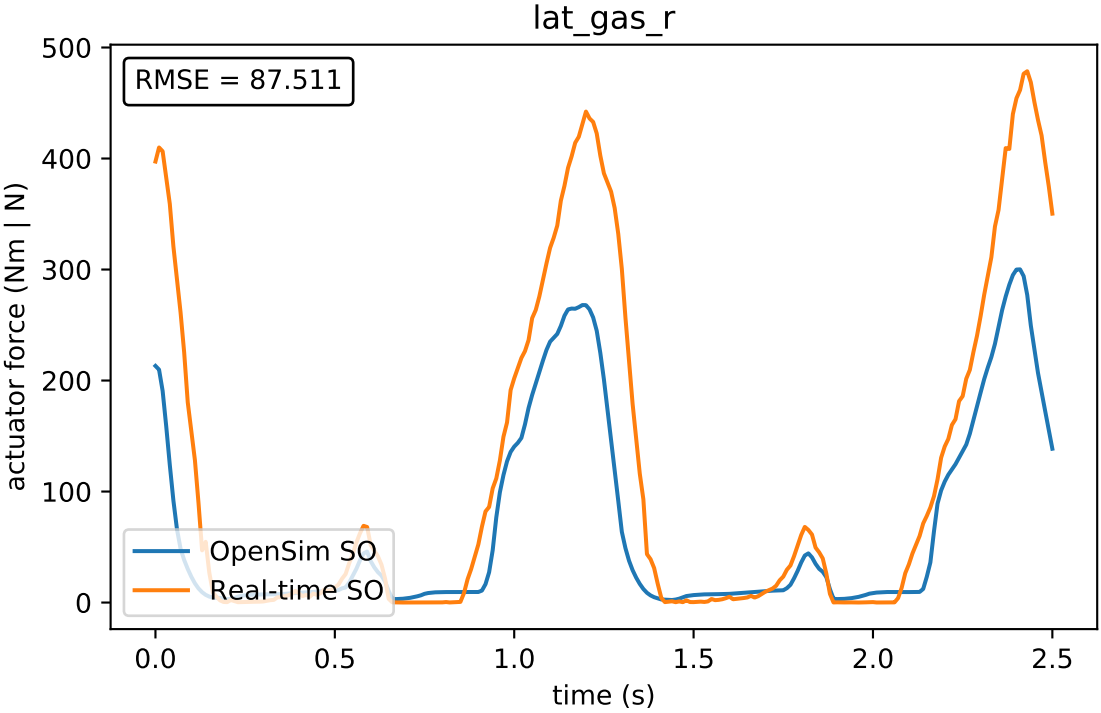

rect_fem_r
RMSE = 43.017
OpenSim SO
Real-time SO
actuator force (Nm | N)
time (s)
0
50
100
150
200
250
300
350
0.0
0.5
1.0
1.5
2.0
2.5

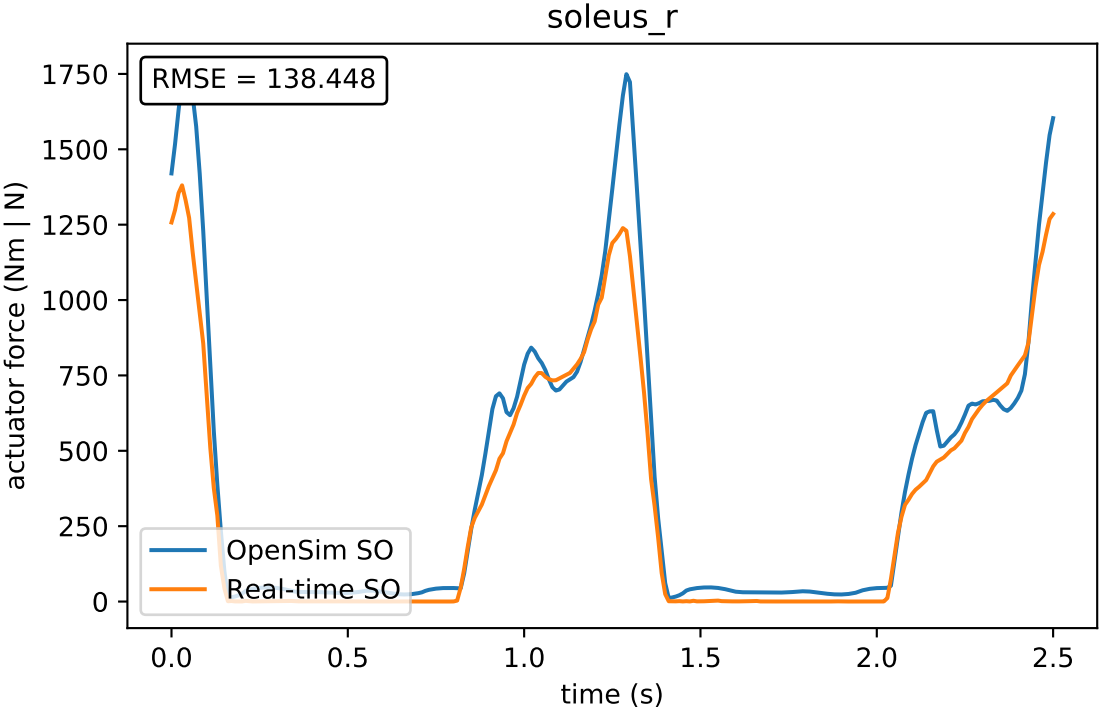

vas_med_r
RMSE = 11.34
actuator force (Nm | N)
time (s)
OpenSim SO
Real-time SO
0
50
100
150
200
250
300
0.0
0.5
1.0
1.5
2.0
2.5

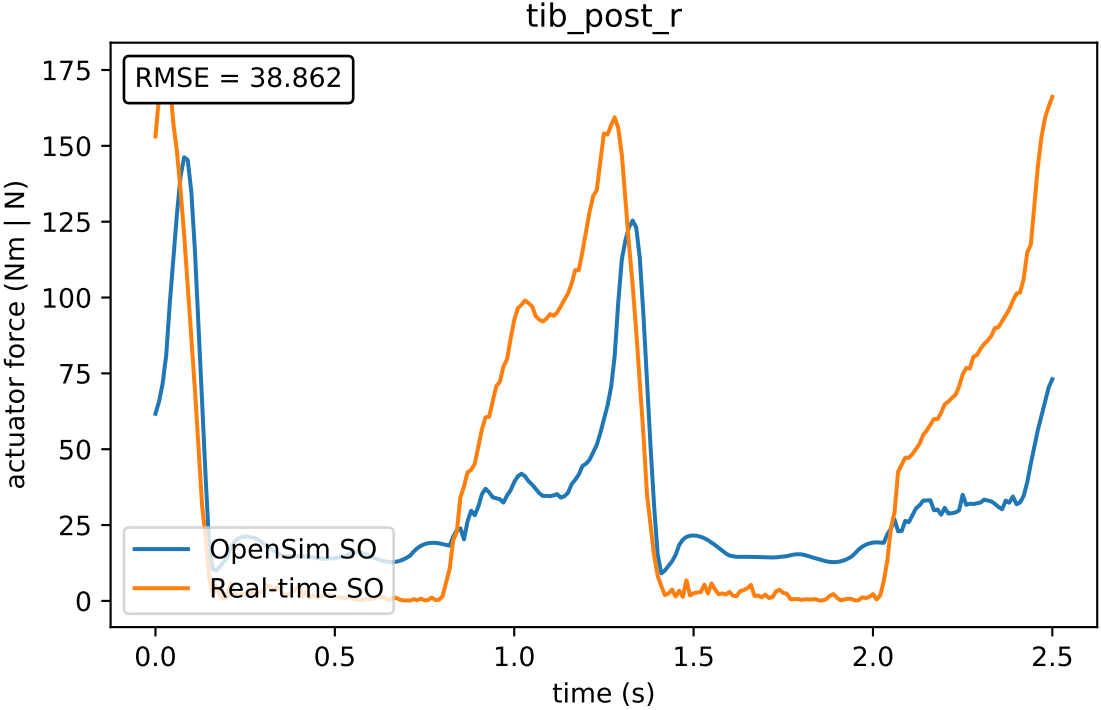

vas_int_r
RMSE = 10.589
OpenSim SO
Real-time SO
actuator force (Nm | N)
time (s)
0
50
100
150
200
250
300
350
0.0
0.5
1.0
1.5
2.0
2.5

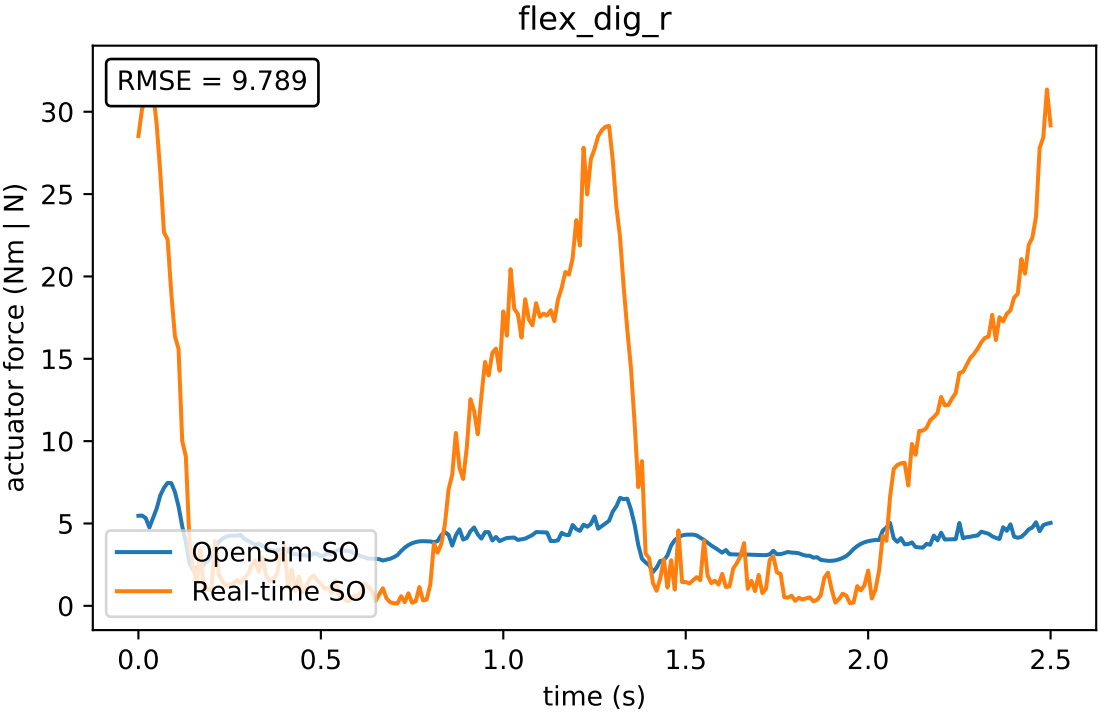

vas_lat_r
RMSE = 56.969
OpenSim SO
Real-time SO
actuator force (Nm | N)
time (s)
700
600
500
400
300
200
100
0
0.0
0.5
1.0
1.5
2.0
2.5

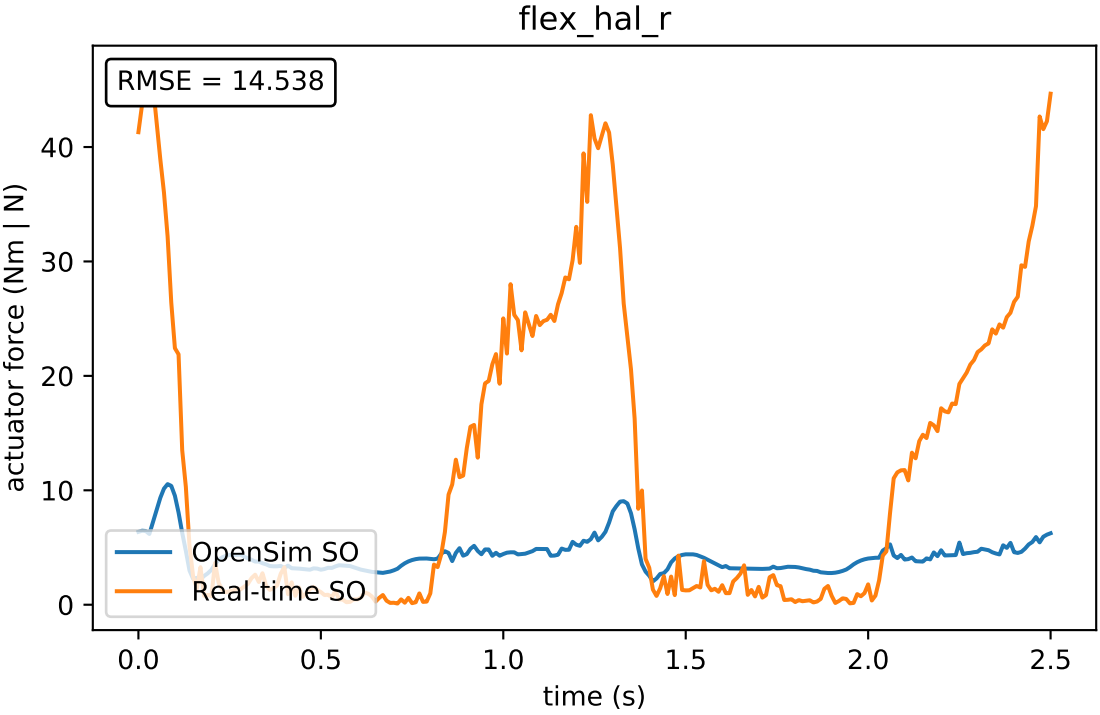

med_gas_r
RMSE = 96.512
OpenSim SO
Real-time SO
actuator force (Nm | N)
time (s)
0
200
400
600
800
1000
1200
1400
0.0
0.5
1.0
1.5
2.0
2.5

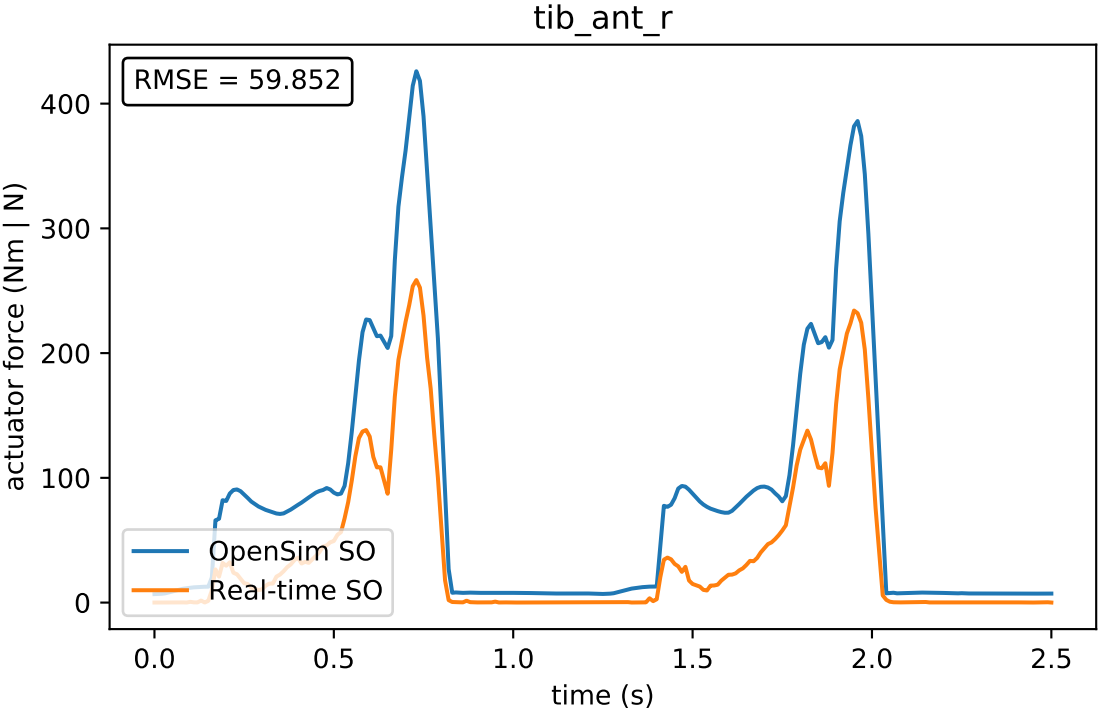

lat_gas_r
RMSE = 87.511
OpenSim SO
Real-time SO
actuator force (Nm | N)
time (s)
500
400
300
200
100
0
0.0
0.5
1.0
1.5
2.0
2.5

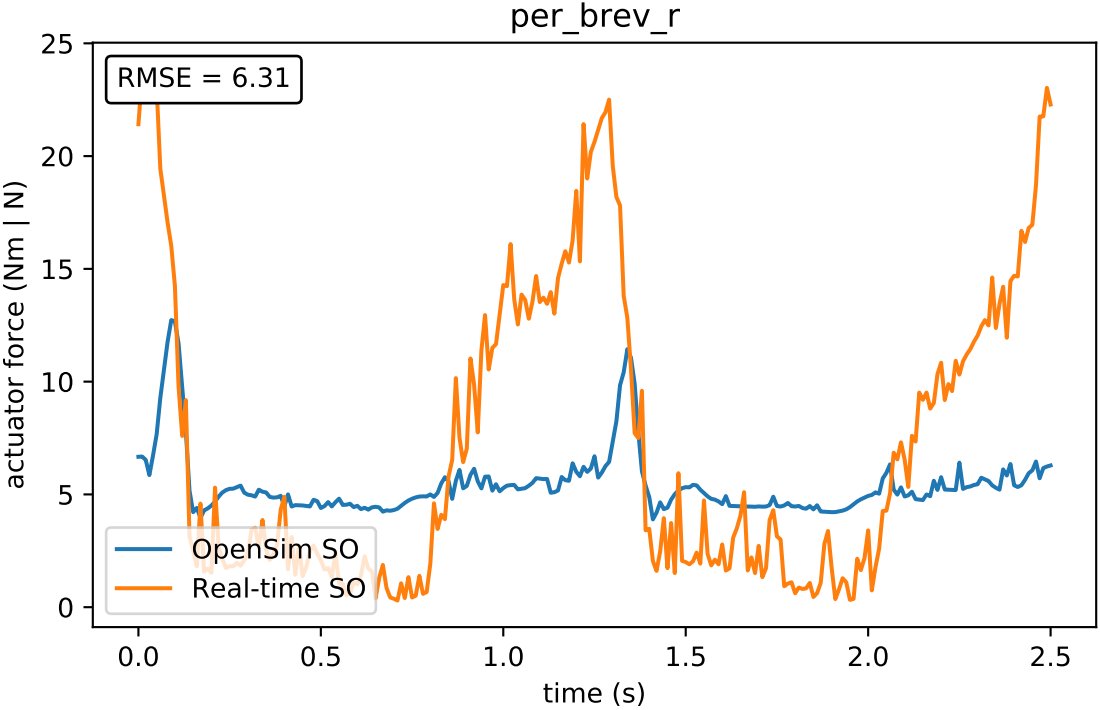

soleus_r
RMSE = 138.448
OpenSim SO
Real-time SO
actuator force (Nm | N)
time (s)
0
250
500
750
1000
1250
1500
1750
0.0
0.5
1.0
1.5
2.0
2.5

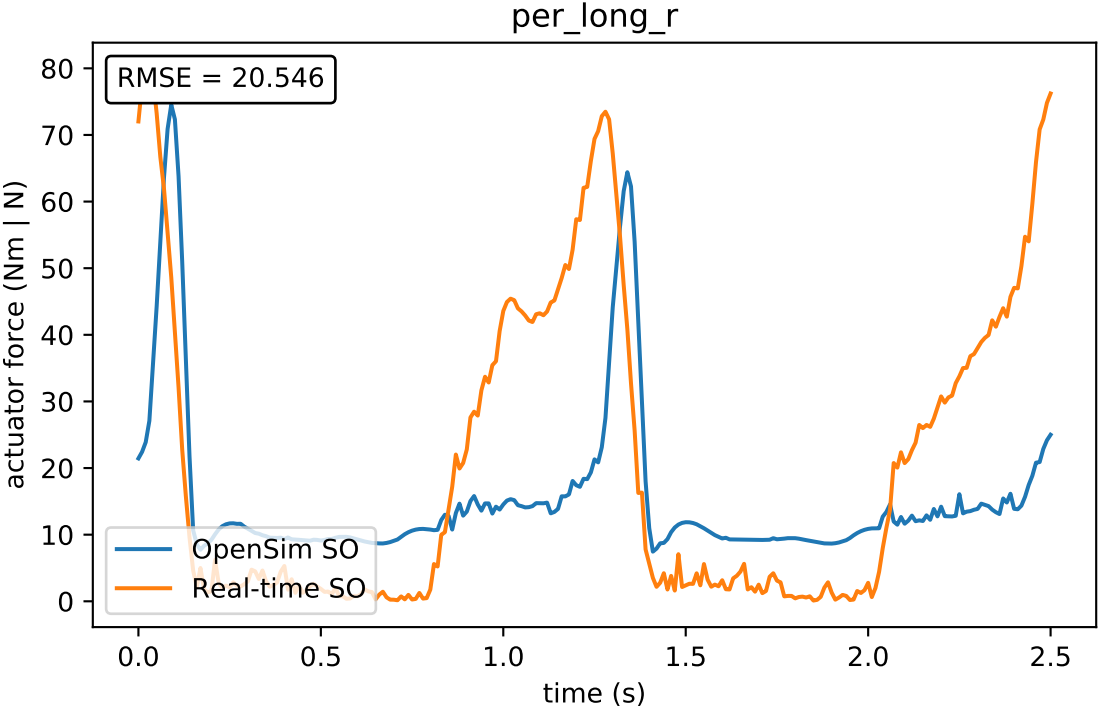

tib_post_r
RMSE = 38.862
OpenSim SO
Real-time SO
actuator force (Nm | N)
time (s)
175
150
125
100
75
50
25
0
0.0
0.5
1.0
1.5
2.0
2.5

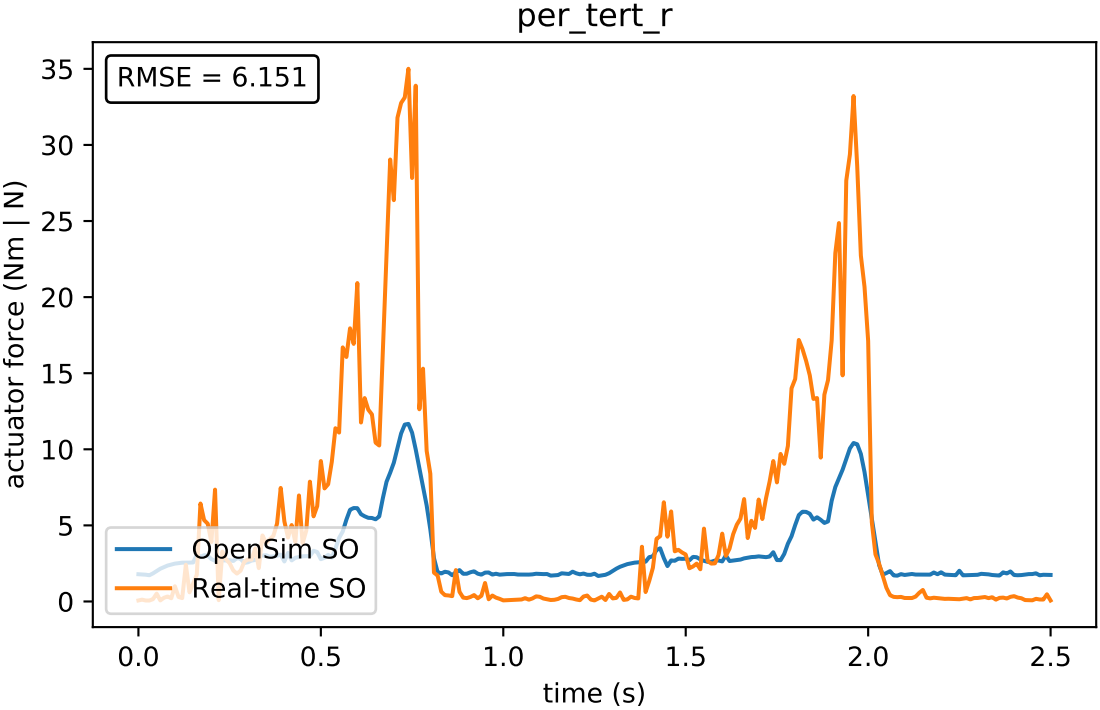

flex_dig_r
RMSE = 9.789
OpenSim SO
Real-time SO
actuator force (Nm | N)
time (s)
0
5
10
15
20
25
30
0.0
0.5
1.0
1.5
2.0
2.5

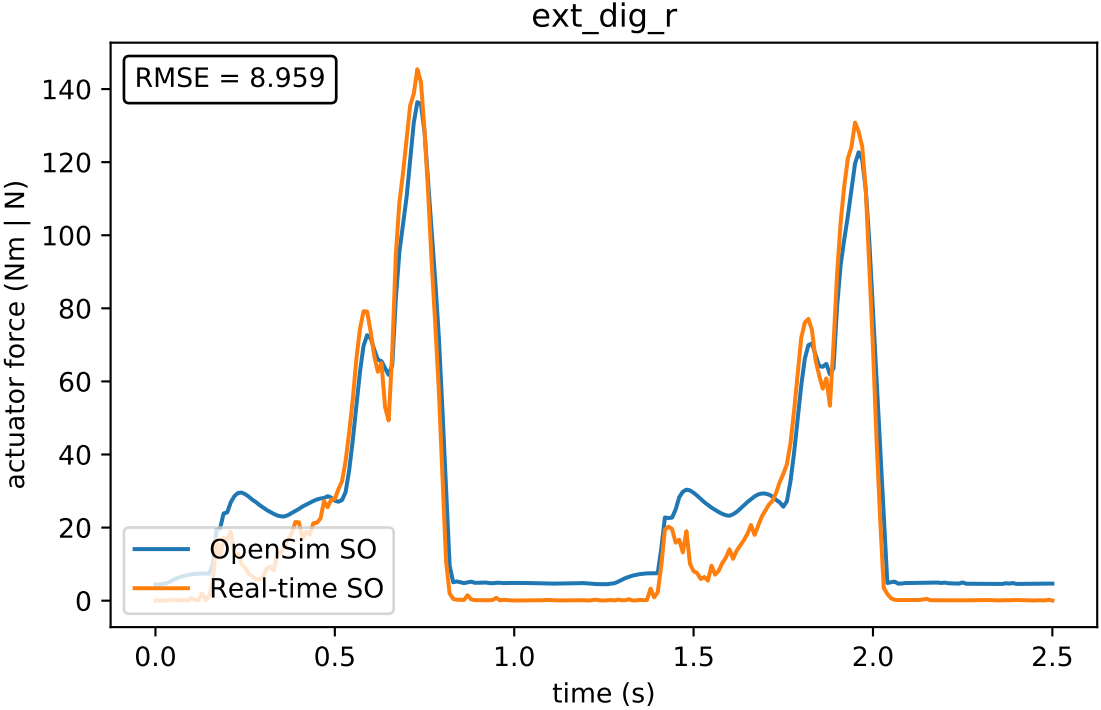

flex_hal_r
RMSE = 14.538
OpenSim SO
Real-time SO
actuator force (Nm | N)
time (s)
0
10
20
30
40
0.0
0.5
1.0
1.5
2.0
2.5

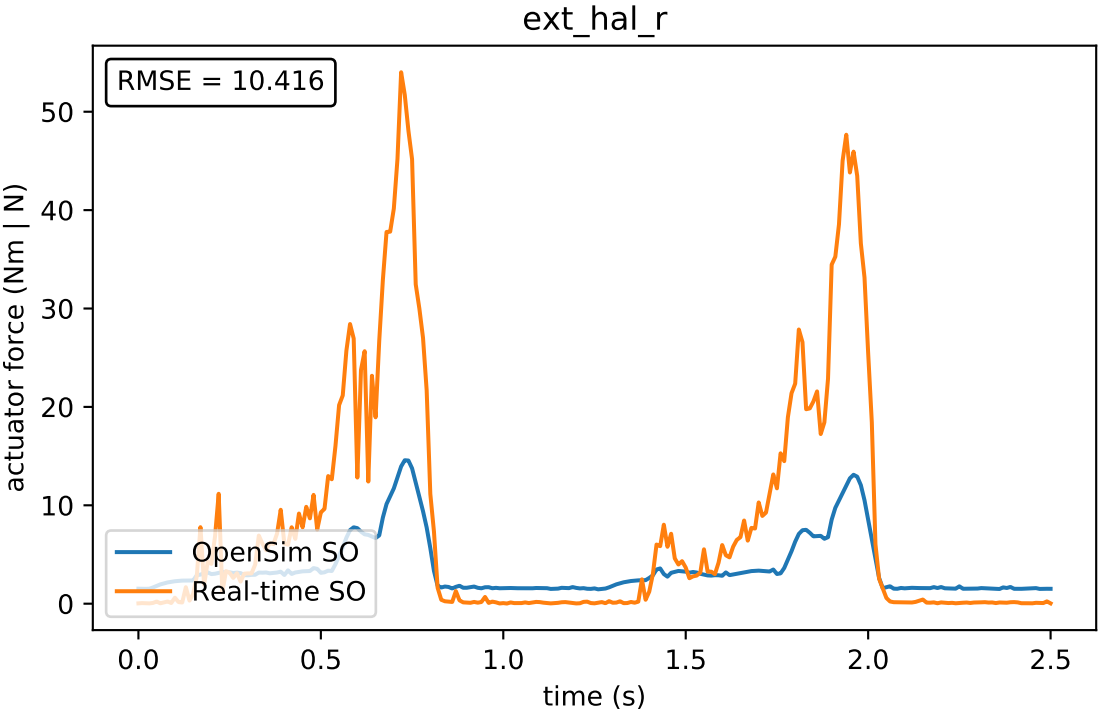

tib_ant_r
RMSE = 59.852
actuator force (Nm | N)
time (s)
OpenSim SO
Real-time SO
0
100
200
300
400
0.0
0.5
1.0
1.5
2.0
2.5

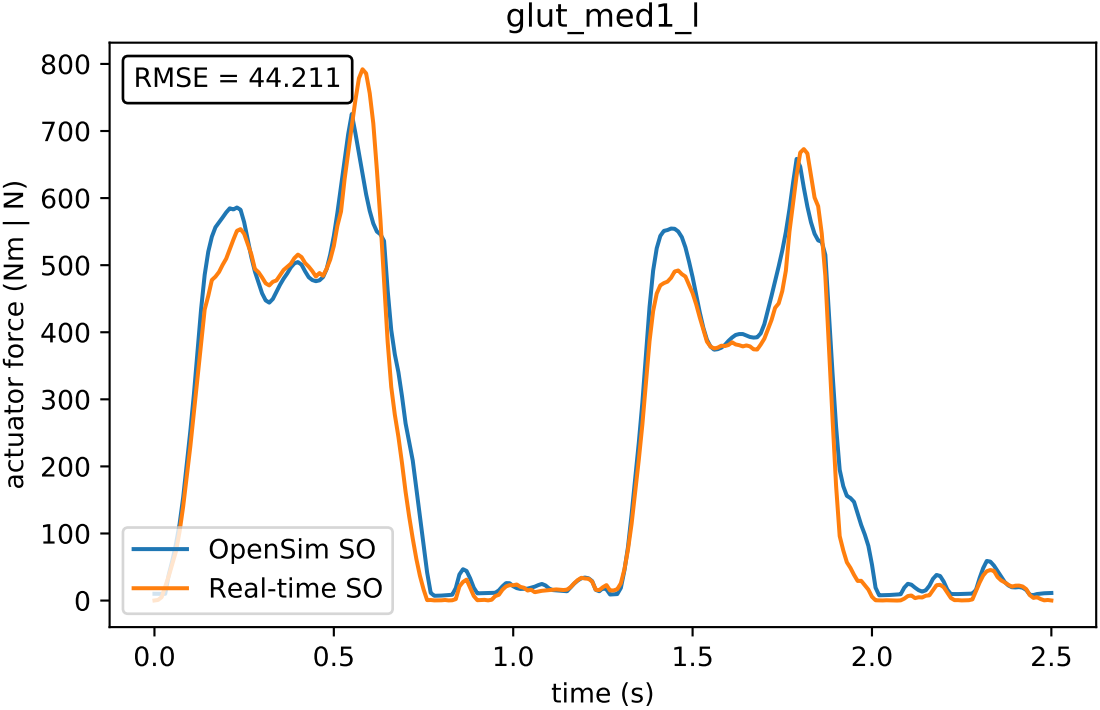

per_brev_r
RMSE = 6.31
OpenSim SO
Real-time SO
actuator force (Nm | N)
time (s)
0
5
10
15
20
25
0.0
0.5
1.0
1.5
2.0
2.5

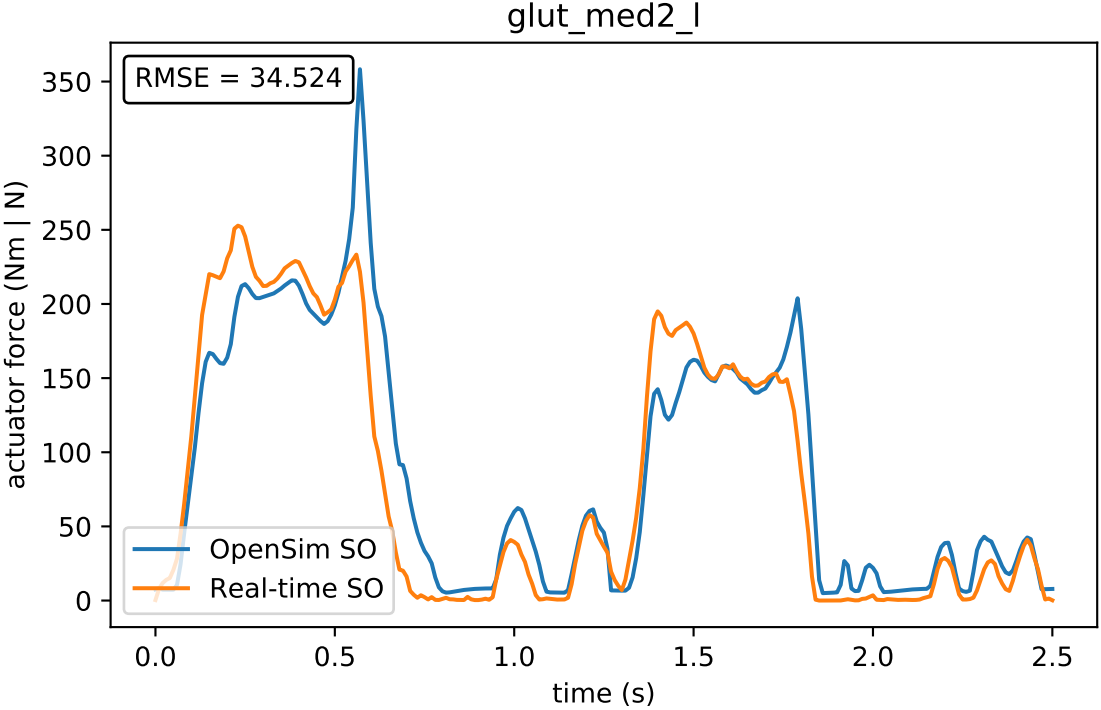

per_long_r
RMSE = 20.546
OpenSim SO
Real-time SO
actuator force (Nm | N)
time (s)
0
10
20
30
40
50
60
70
80
0.0
0.5
1.0
1.5
2.0
2.5

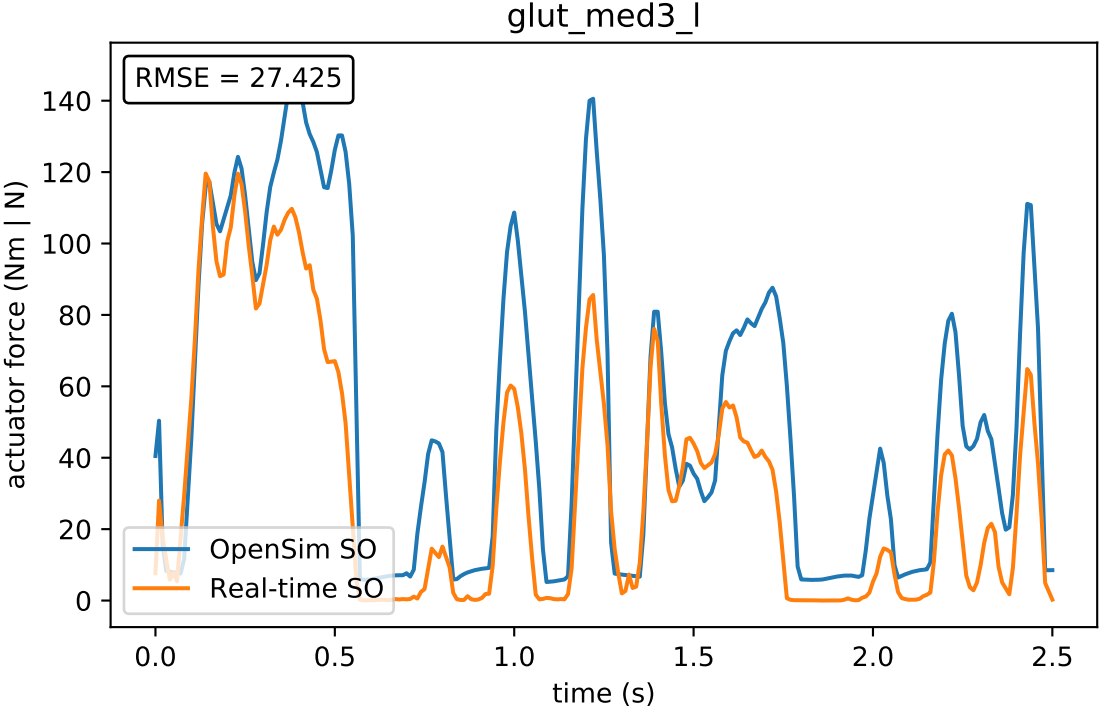

per_tert_r
RMSE = 6.151
OpenSim SO
Real-time SO
actuator force (Nm | N)
time (s)
0
5
10
15
20
25
30
35
0.0
0.5
1.0
1.5
2.0
2.5

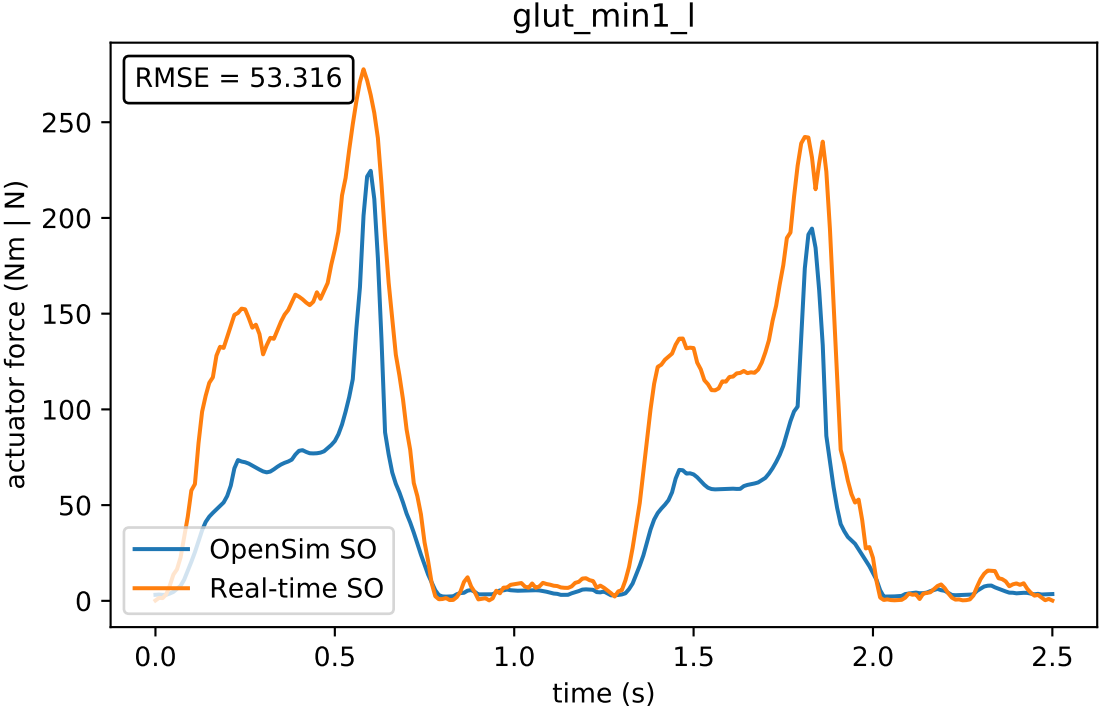

ext_dig_r
RMSE = 8.959
OpenSim SO
Real-time SO
actuator force (Nm | N)
time (s)
0
20
40
60
80
100
120
140
0.0
0.5
1.0
1.5
2.0
2.5

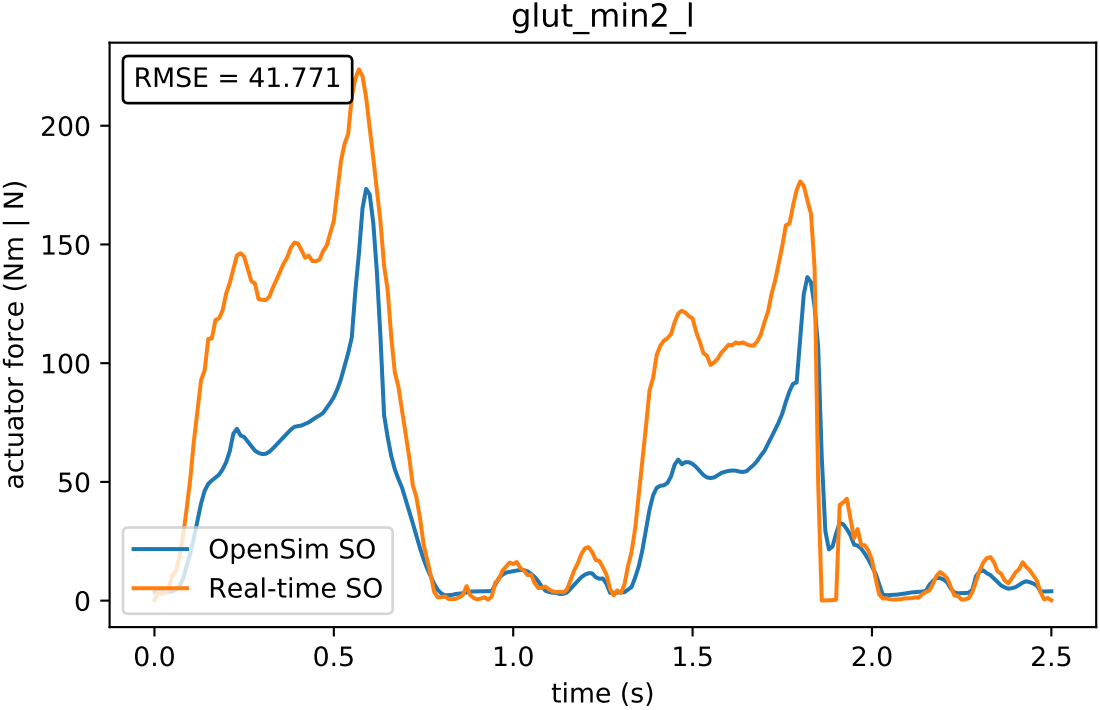

ext_hal_r
RMSE = 10.416
OpenSim SO
Real-time SO
actuator force (Nm | N)
time (s)
0
10
20
30
40
50
0.0
0.5
1.0
1.5
2.0
2.5

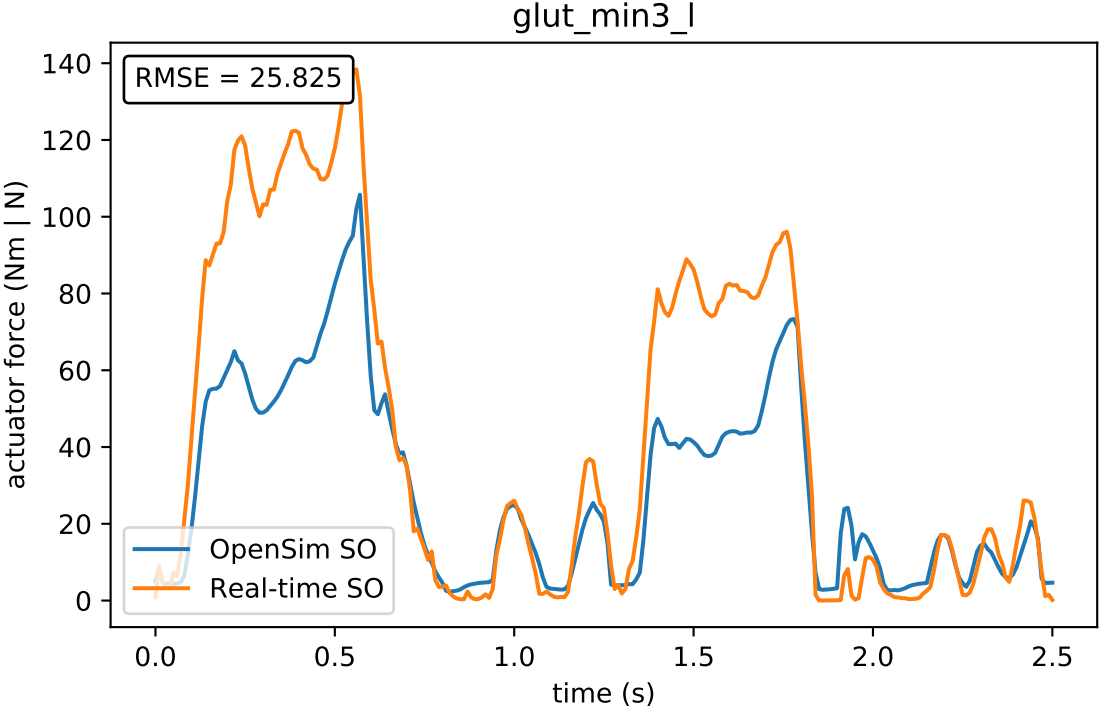

glut_med1_l
RMSE = 44.211
OpenSim SO
Real-time SO
actuator force (Nm | N)
time (s)
0
100
200
300
400
500
600
700
800
0.0
0.5
1.0
1.5
2.0
2.5

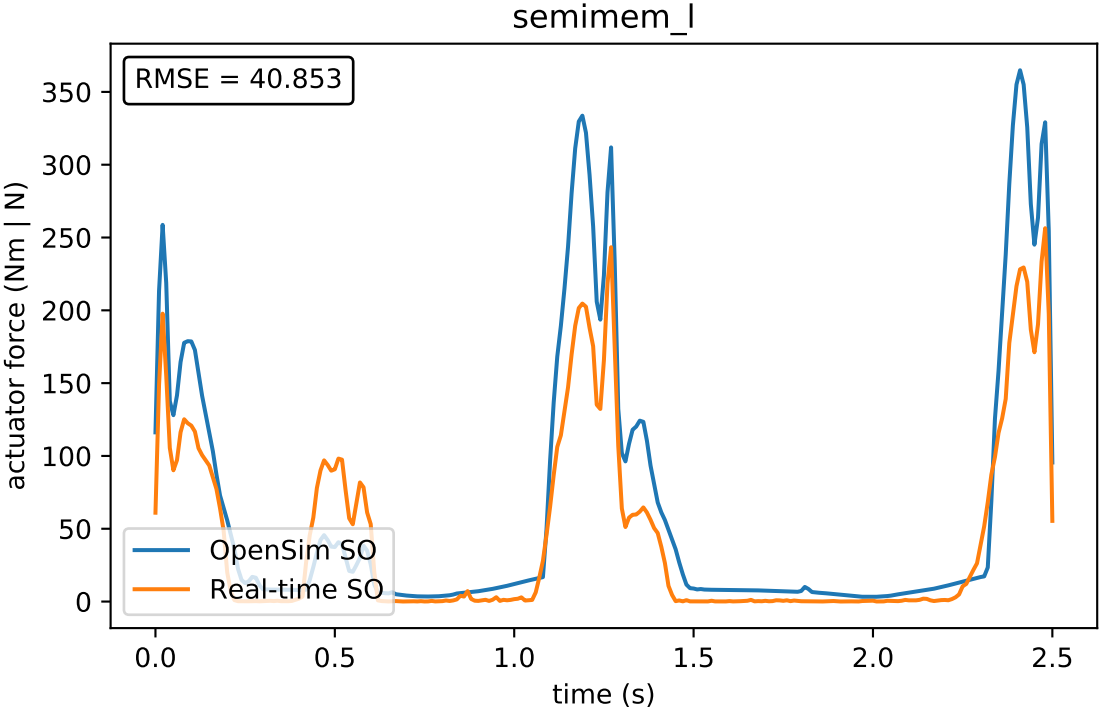

glut_med2_l
RMSE = 34.524
OpenSim SO
Real-time SO
actuator force (Nm | N)
time (s)
0
50
100
150
200
250
300
350
0.0
0.5
1.0
1.5
2.0
2.5

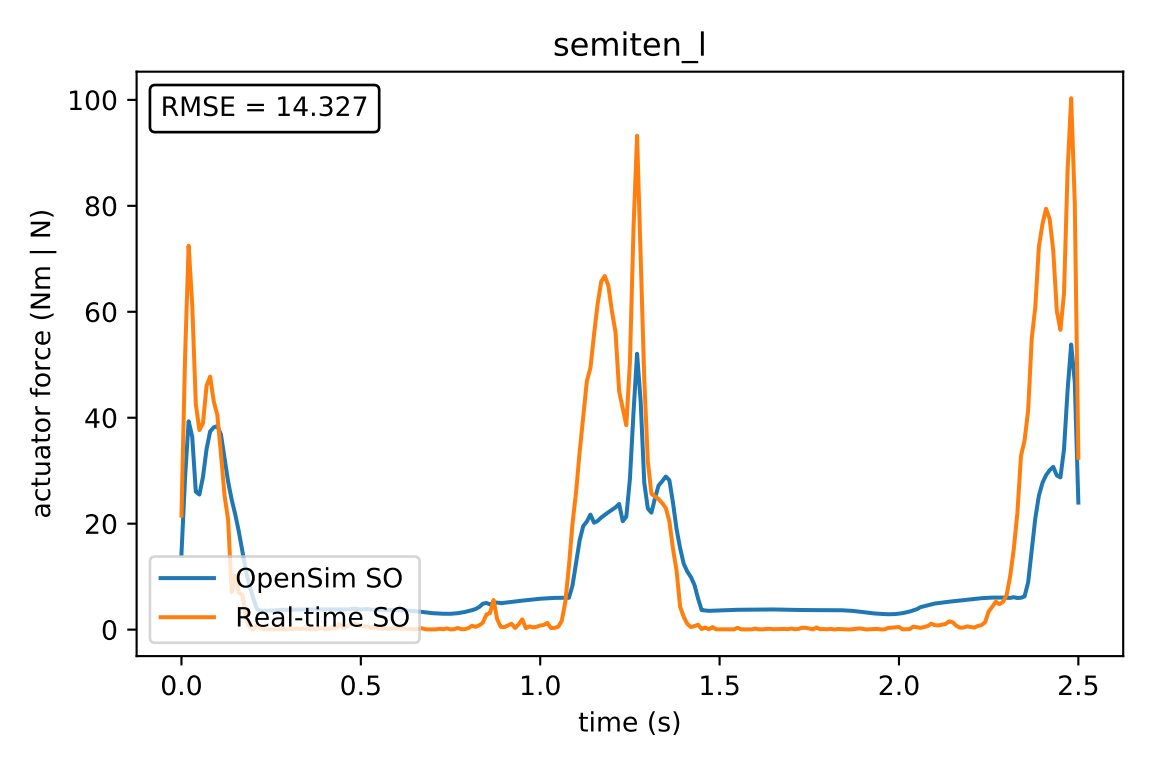

glut_med3_l
RMSE = 27.425
OpenSim SO
Real-time SO
actuator force (Nm | N)
time (s)
0
20
40
60
80
100
120
140
0.0
0.5
1.0
1.5
2.0
2.5

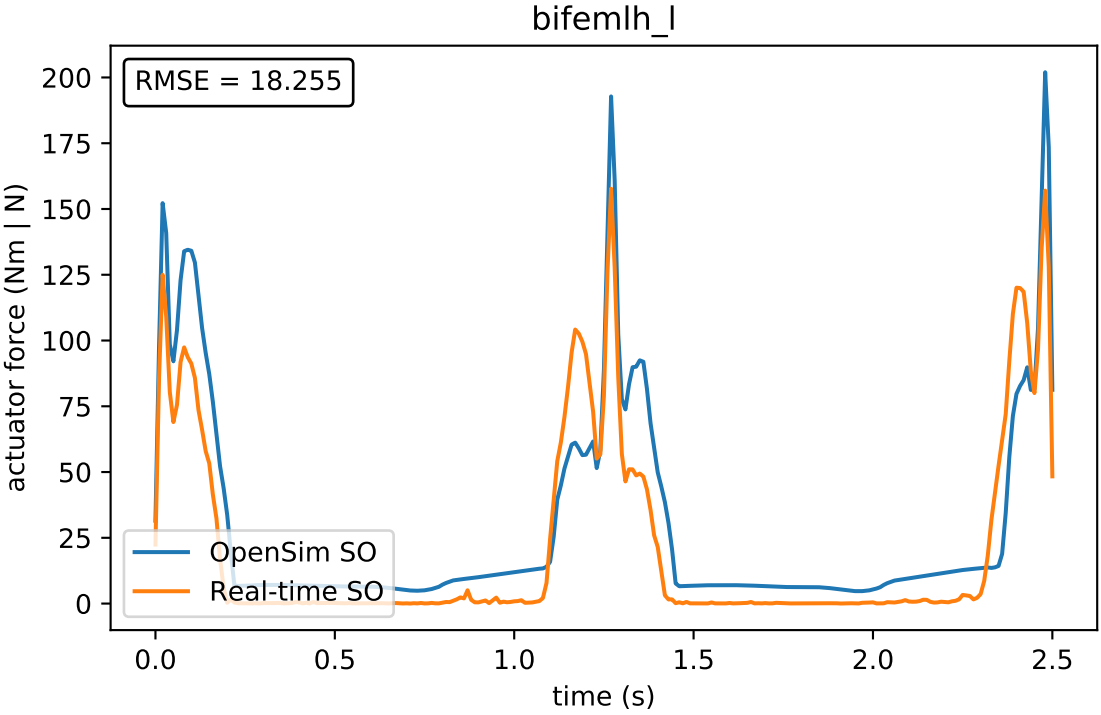

glut_min1_l
RMSE = 53.316
actuator force (Nm | N)
time (s)
OpenSim SO
Real-time SO
0
50
100
150
200
250
0.0
0.5
1.0
1.5
2.0
2.5

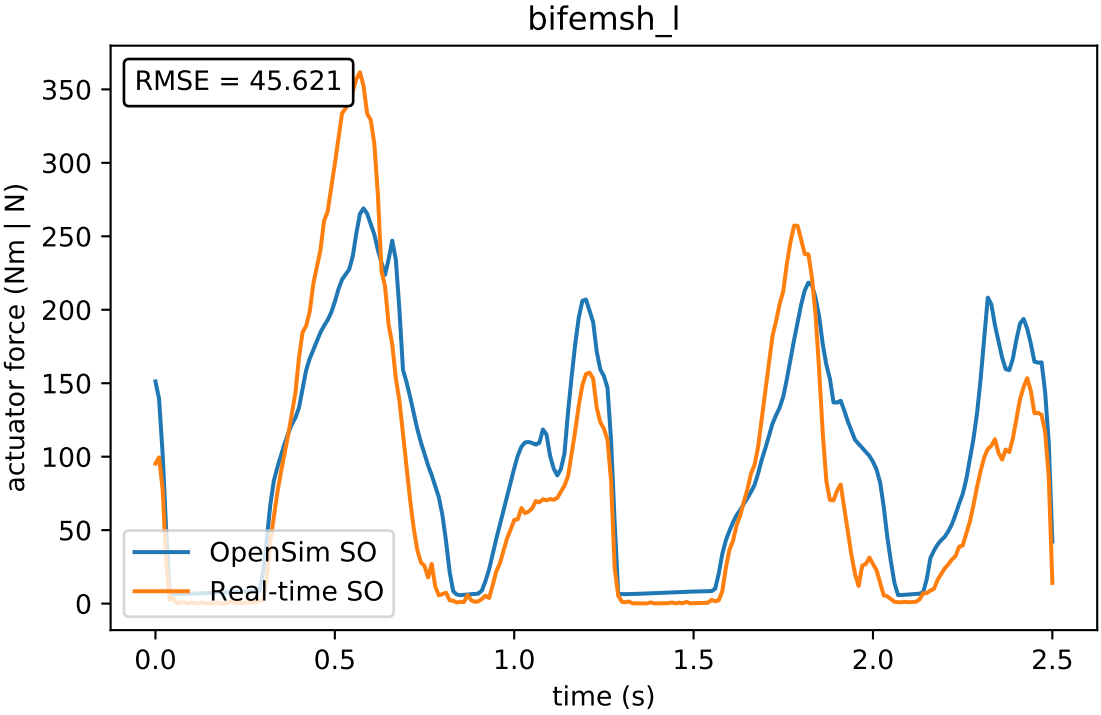

glut_min2_l
RMSE = 41.771
actuator force (Nm | N)
time (s)
OpenSim SO
Real-time SO
0
50
100
150
200
0.0
0.5
1.0
1.5
2.0
2.5

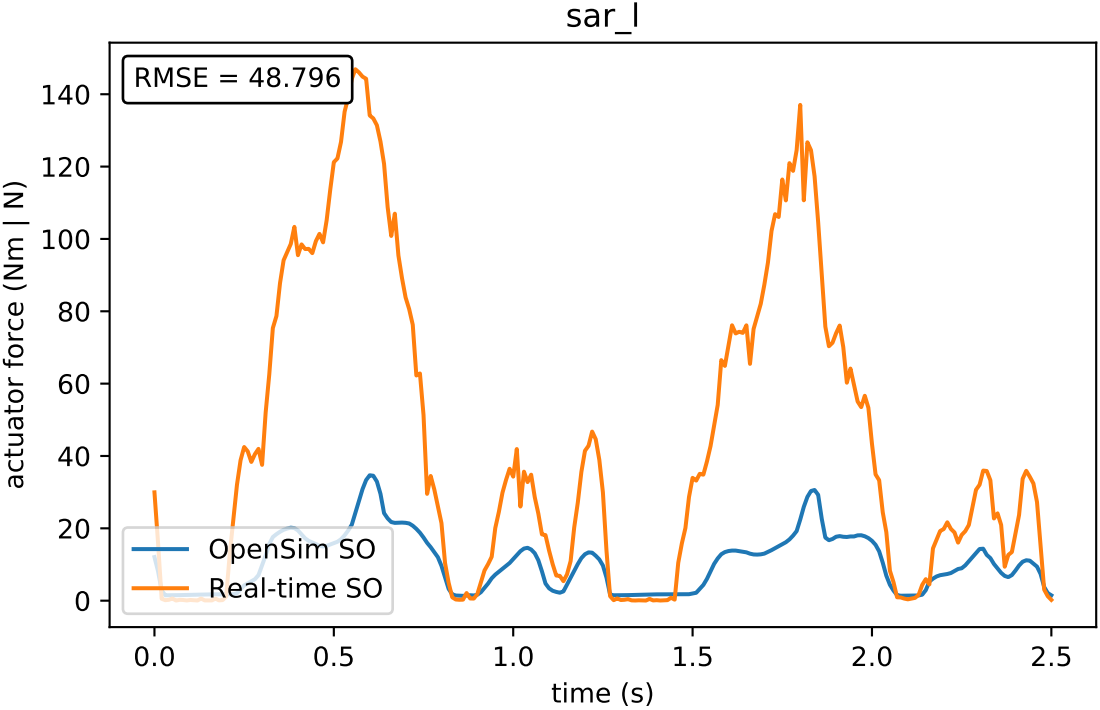

glut_min3_l
RMSE = 25.825
OpenSim SO
Real-time SO
actuator force (Nm | N)
time (s)
0
20
40
60
80
100
120
140
0.0
0.5
1.0
1.5
2.0
2.5

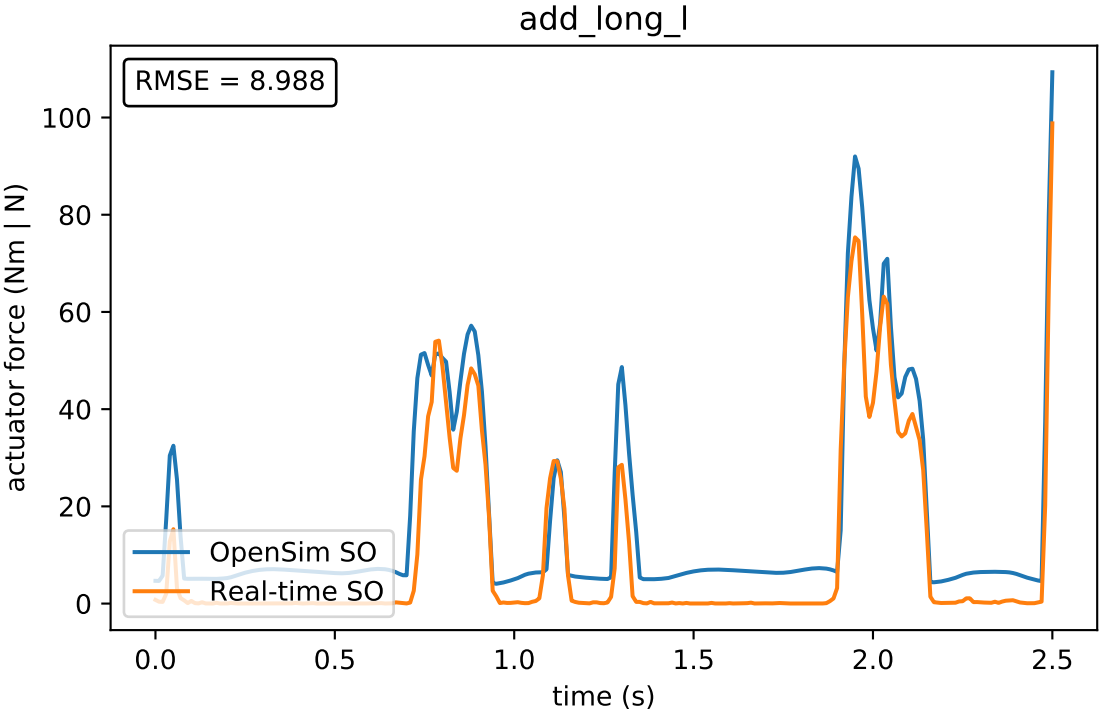

semimem_l
RMSE = 40.853
OpenSim SO
Real-time SO
actuator force (Nm | N)
time (s)
0
50
100
150
200
250
300
350
0.0
0.5
1.0
1.5
2.0
2.5

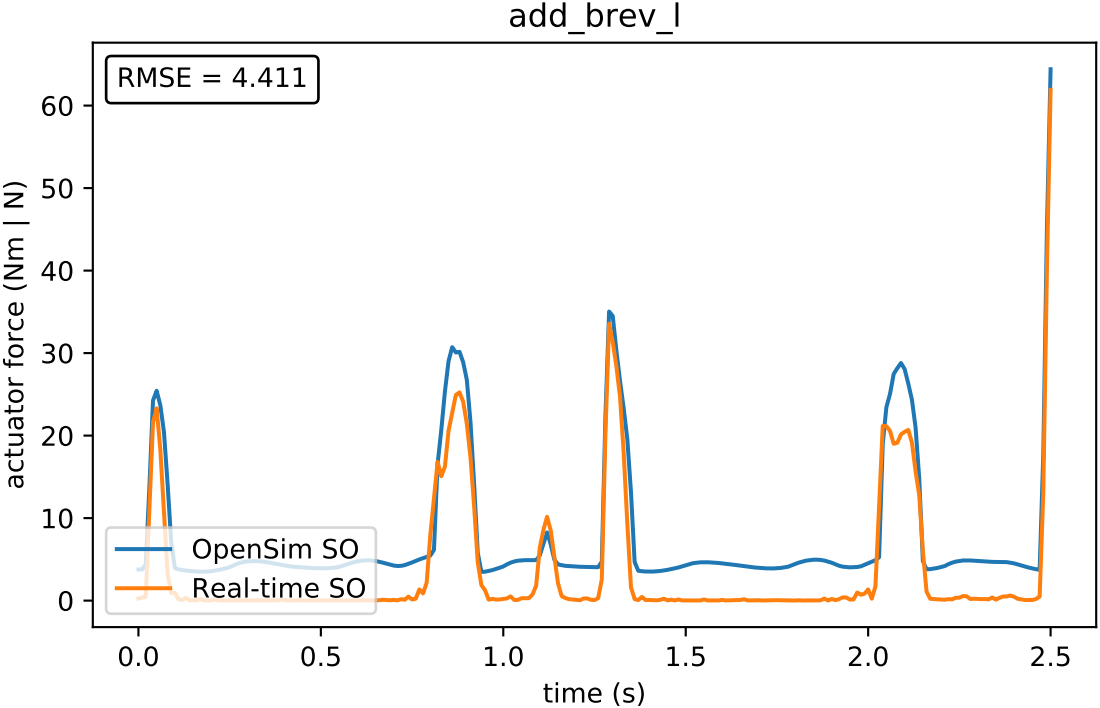

semiten_l
RMSE = 14.327
actuator force (Nm | N)
time (s)
OpenSim SO
Real-time SO
0
20
40
60
80
100
0.0
0.5
1.0
1.5
2.0
2.5

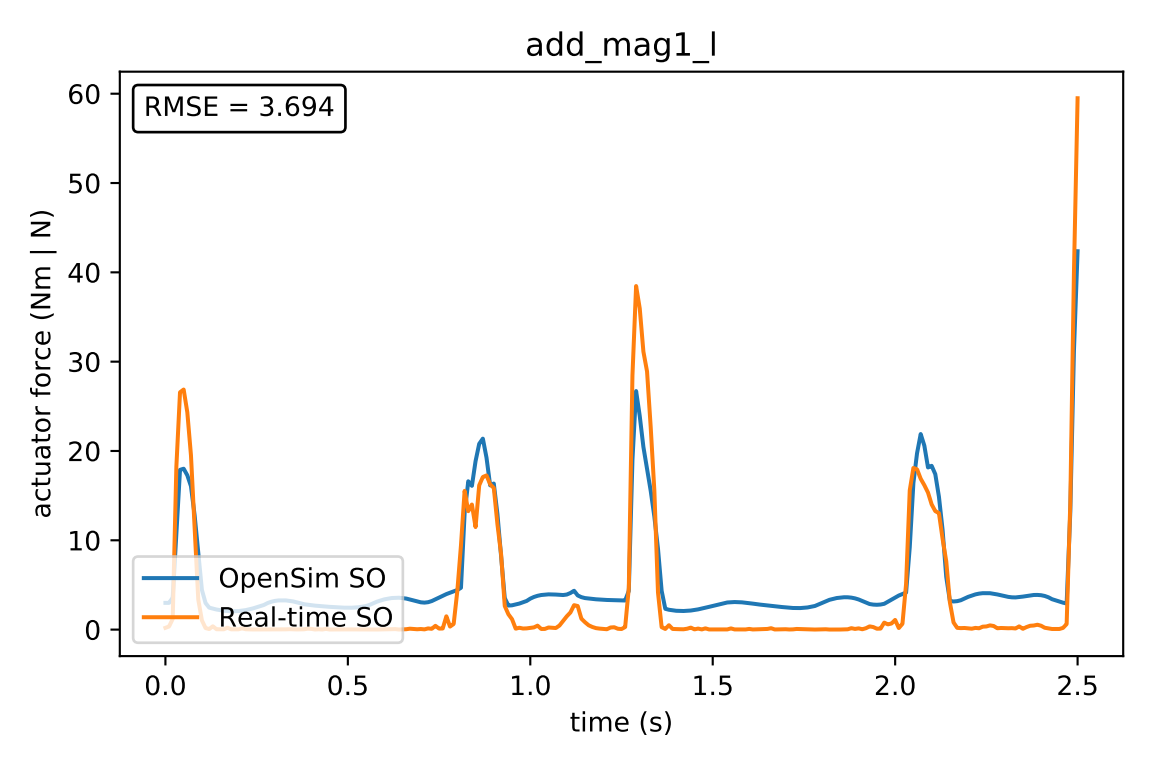

bifemlh_l
RMSE = 18.255
actuator force (Nm | N)
time (s)
OpenSim SO
Real-time SO
0
25
50
75
100
125
150
175
200
0.0
0.5
1.0
1.5
2.0
2.5

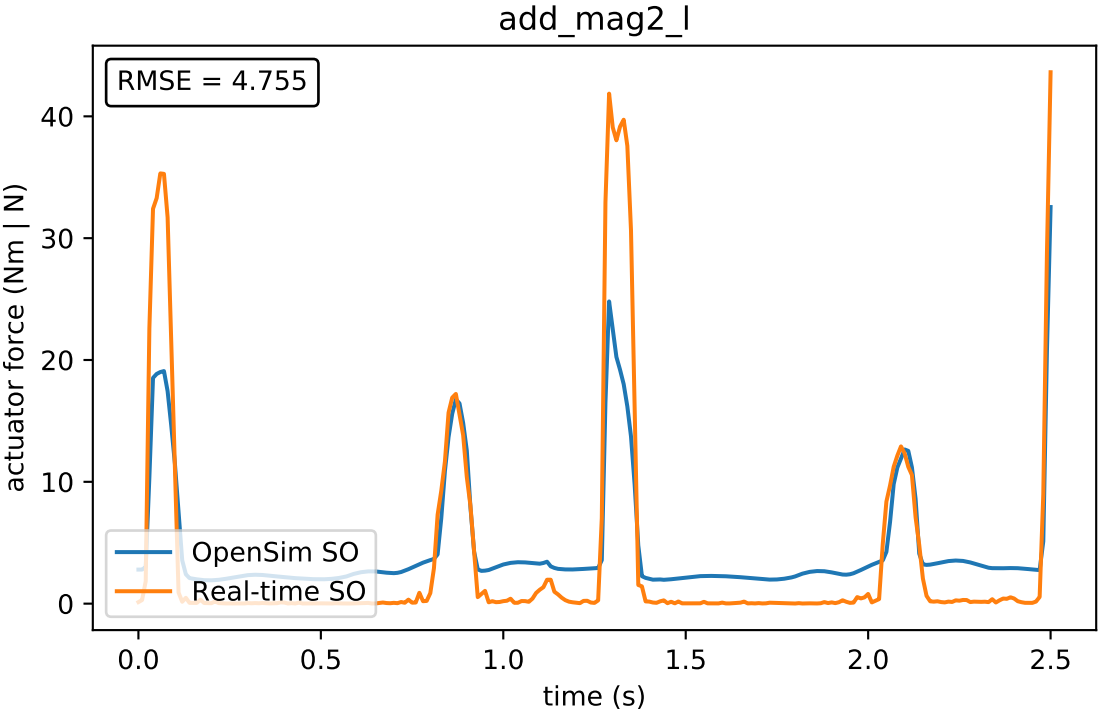

bifemsh_l
RMSE = 45.621
OpenSim SO
Real-time SO
actuator force (Nm | N)
time (s)
0
50
100
150
200
250
300
350
0.0
0.5
1.0
1.5
2.0
2.5

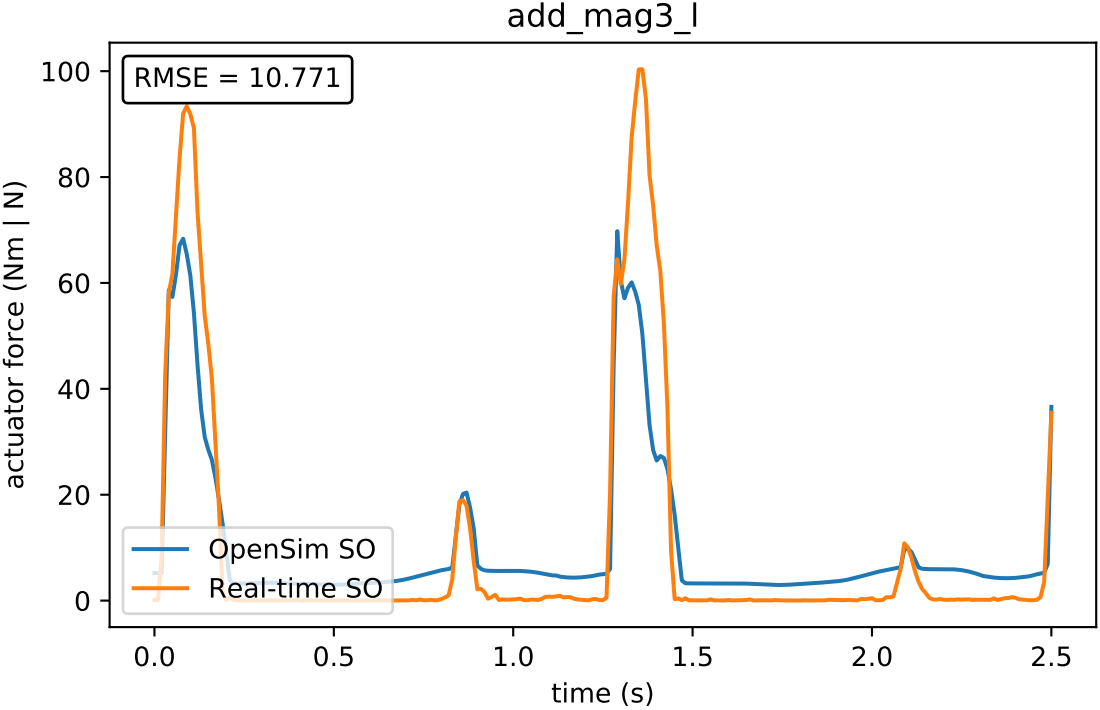

sar_l
RMSE = 48.796
OpenSim SO
Real-time SO
actuator force (Nm | N)
time (s)
0
20
40
60
80
100
120
140
0.0
0.5
1.0
1.5
2.0
2.5

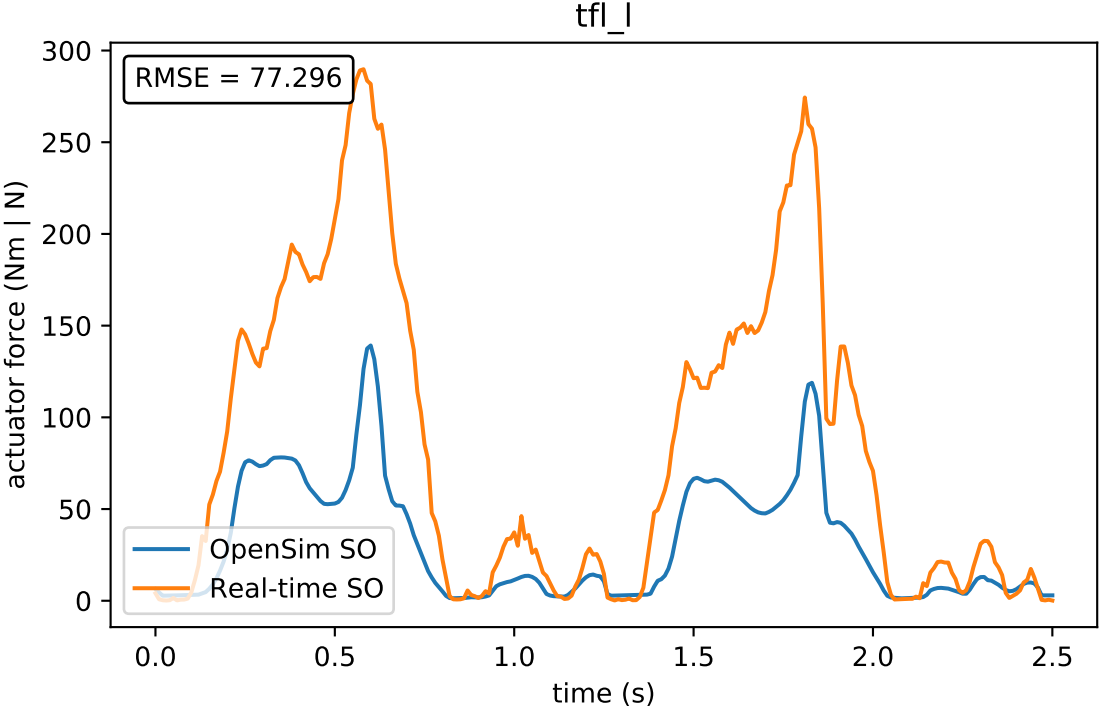

add_long_l
RMSE = 8.988
OpenSim SO
Real-time SO
actuator force (Nm | N)
time (s)
0
20
40
60
80
100
0.0
0.5
1.0
1.5
2.0
2.5

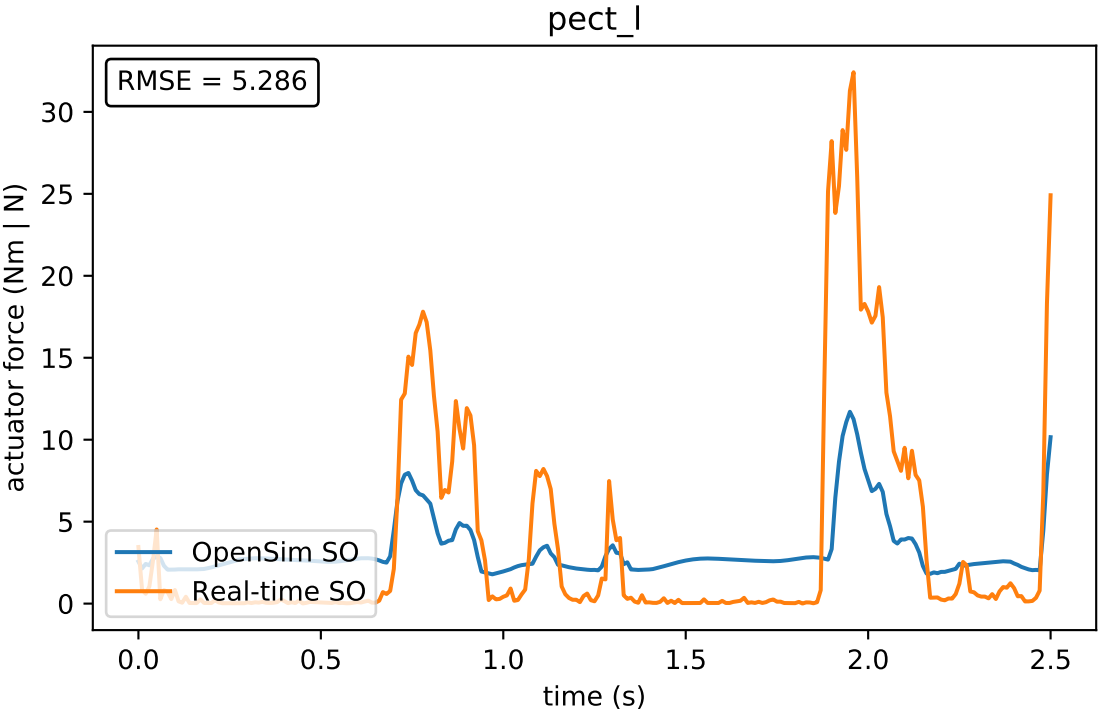

add_brev_l
RMSE = 4.411
OpenSim SO
Real-time SO
actuator force (Nm | N)
time (s)
0
10
20
30
40
50
60
0.0
0.5
1.0
1.5
2.0
2.5

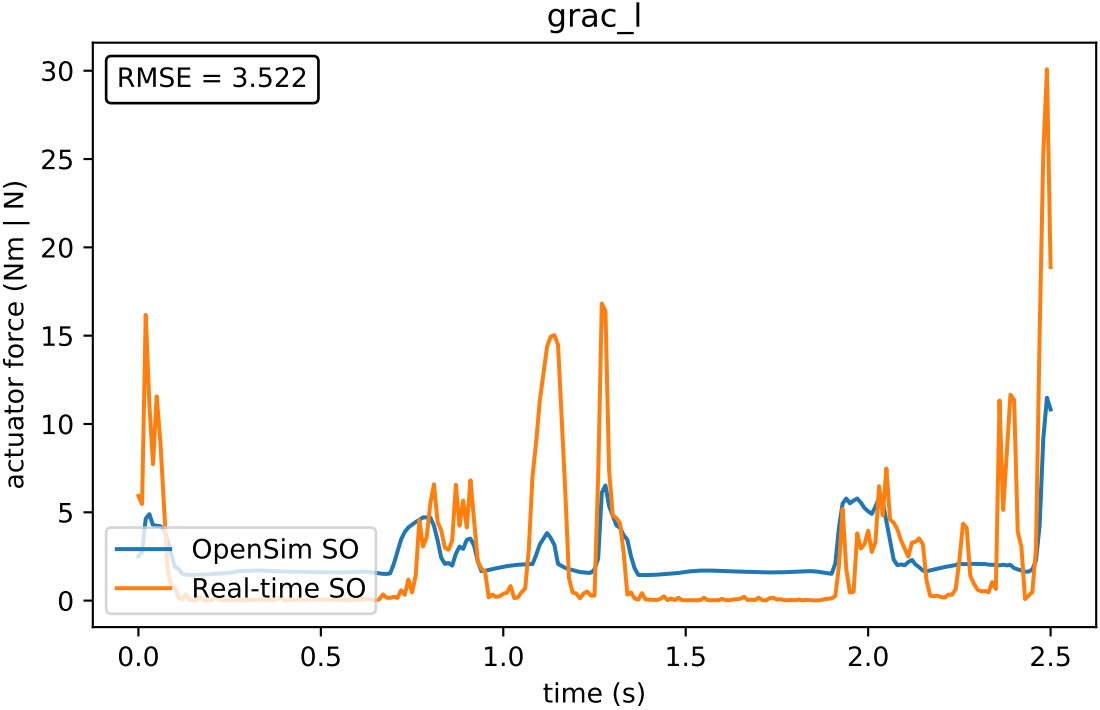

add_mag1_l
RMSE = 3.694
OpenSim SO
Real-time SO
actuator force (Nm | N)
time (s)
0
10
20
30
40
50
60
0.0
0.5
1.0
1.5
2.0
2.5

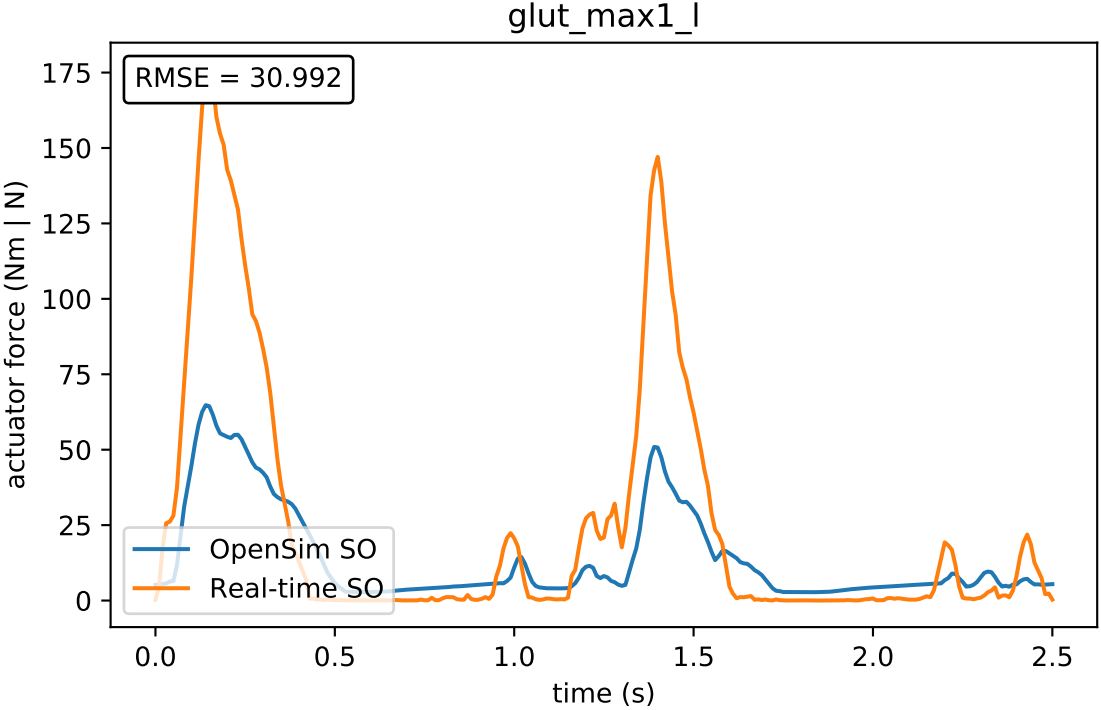

add_mag2_l
RMSE = 4.755
OpenSim SO
Real-time SO
actuator force (Nm | N)
time (s)
0
10
20
30
40
0.0
0.5
1.0
1.5
2.0
2.5

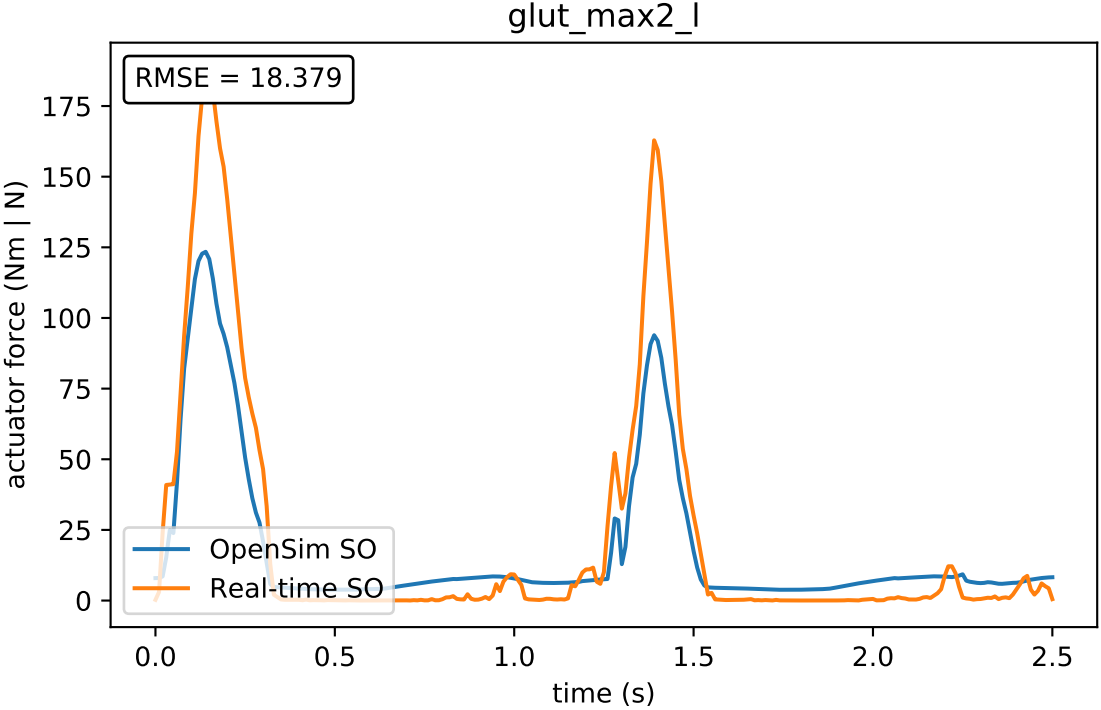

add_mag3_l
RMSE = 10.771
OpenSim SO
Real-time SO
actuator force (Nm | N)
time (s)
0
20
40
60
80
100
0.0
0.5
1.0
1.5
2.0
2.5

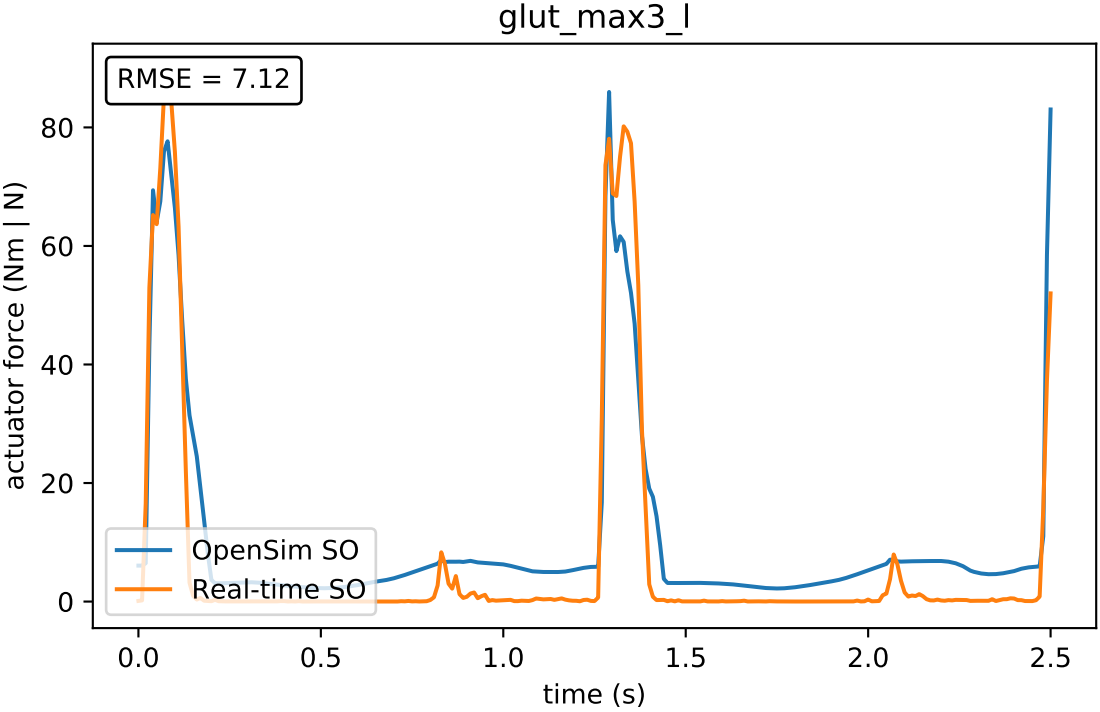

tfl_l
RMSE = 77.296
OpenSim SO
Real-time SO
actuator force (Nm | N)
time (s)
300
250
200
150
100
50
0
0.0
0.5
1.0
1.5
2.0
2.5

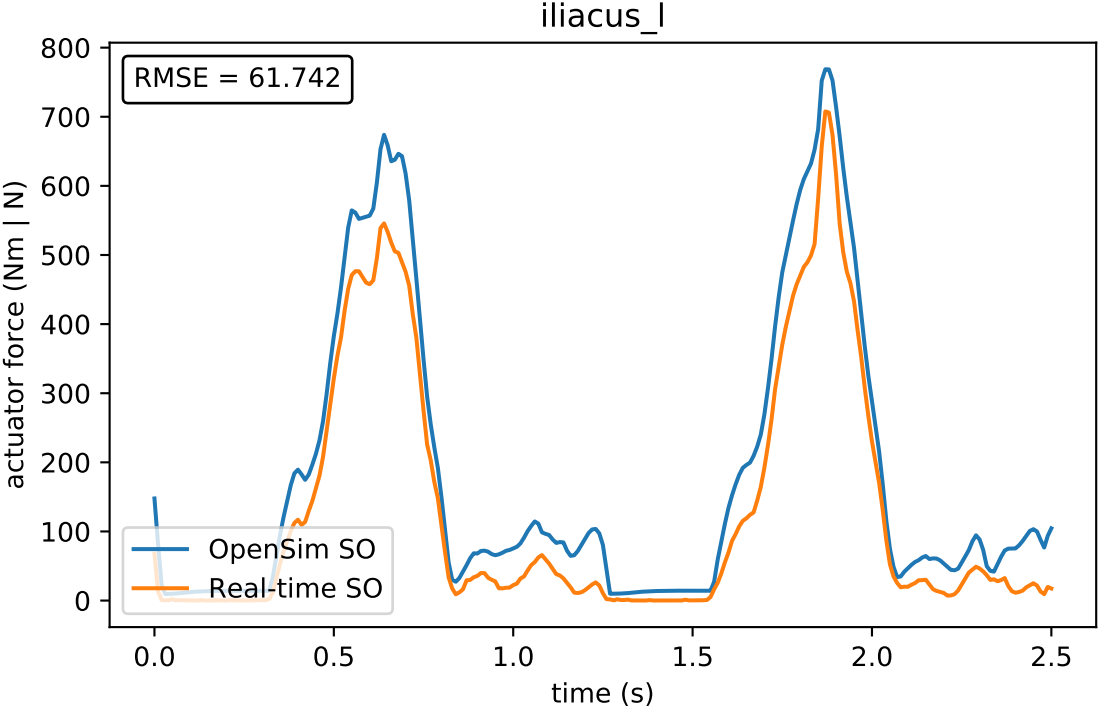

pect_l
RMSE = 5.286
actuator force (Nm | N)
time (s)
OpenSim SO
Real-time SO
0
5
10
15
20
25
30
0.0
0.5
1.0
1.5
2.0
2.5

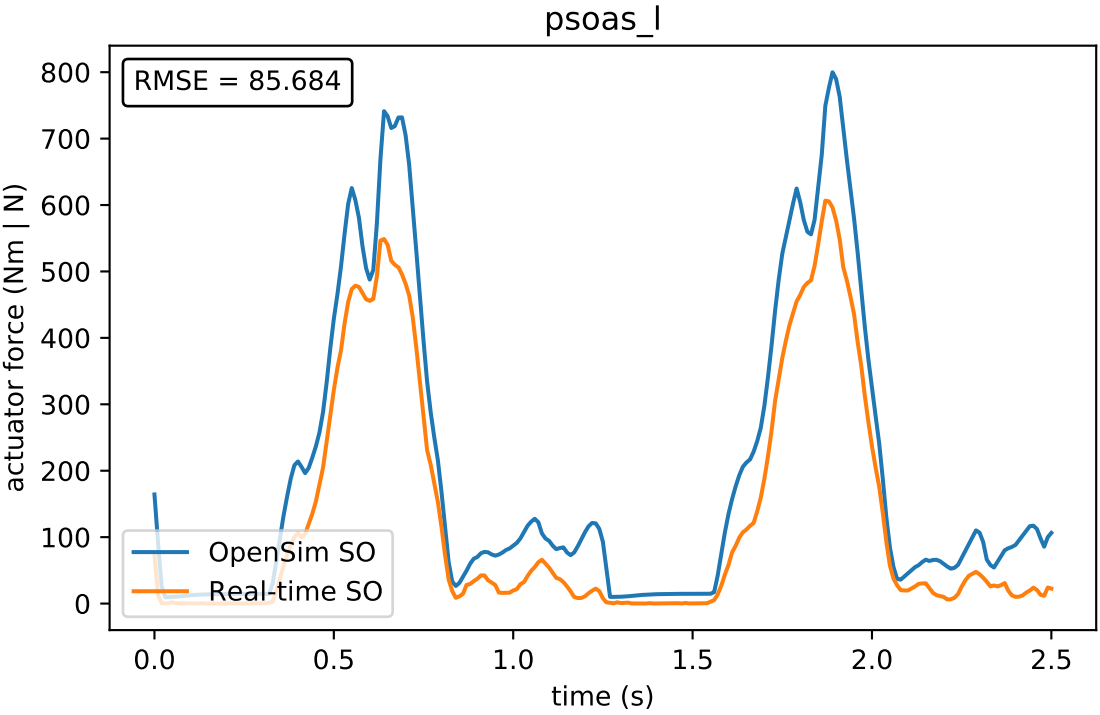

grac_l
RMSE = 3.522
actuator force (Nm | N)
time (s)
OpenSim SO
Real-time SO
0
5
10
15
20
25
30
0.0
0.5
1.0
1.5
2.0
2.5

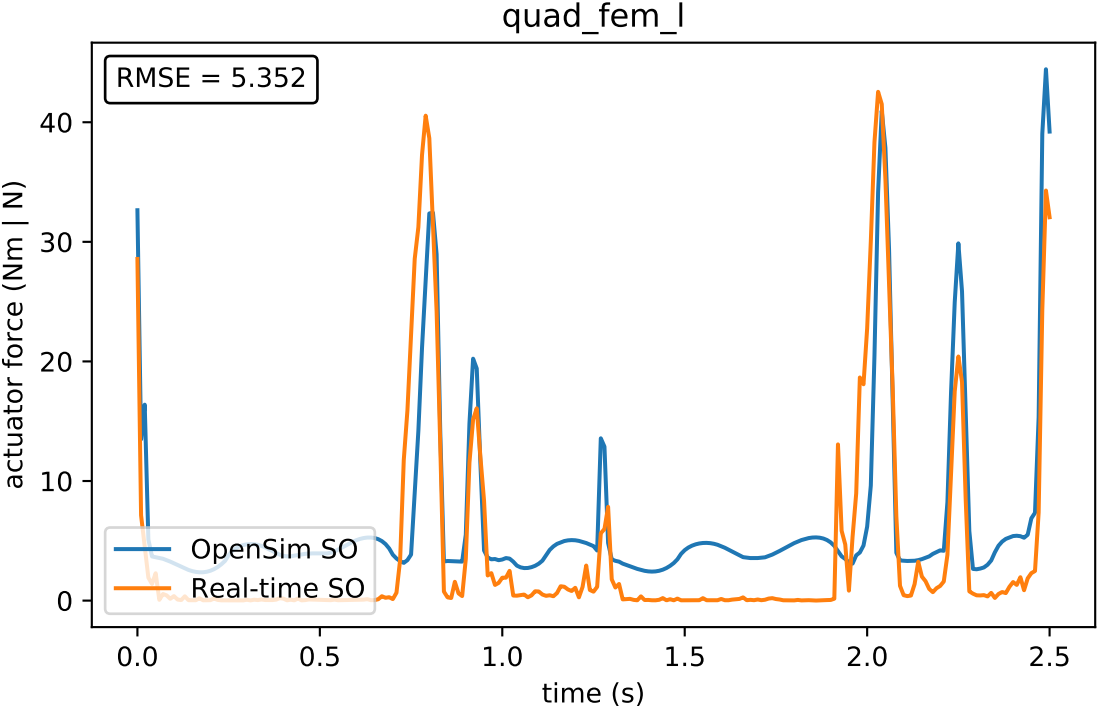

glut_max1_l
RMSE = 30.992
OpenSim SO
Real-time SO
actuator force (Nm | N)
time (s)
0
25
50
75
100
125
150
175
0.0
0.5
1.0
1.5
2.0
2.5

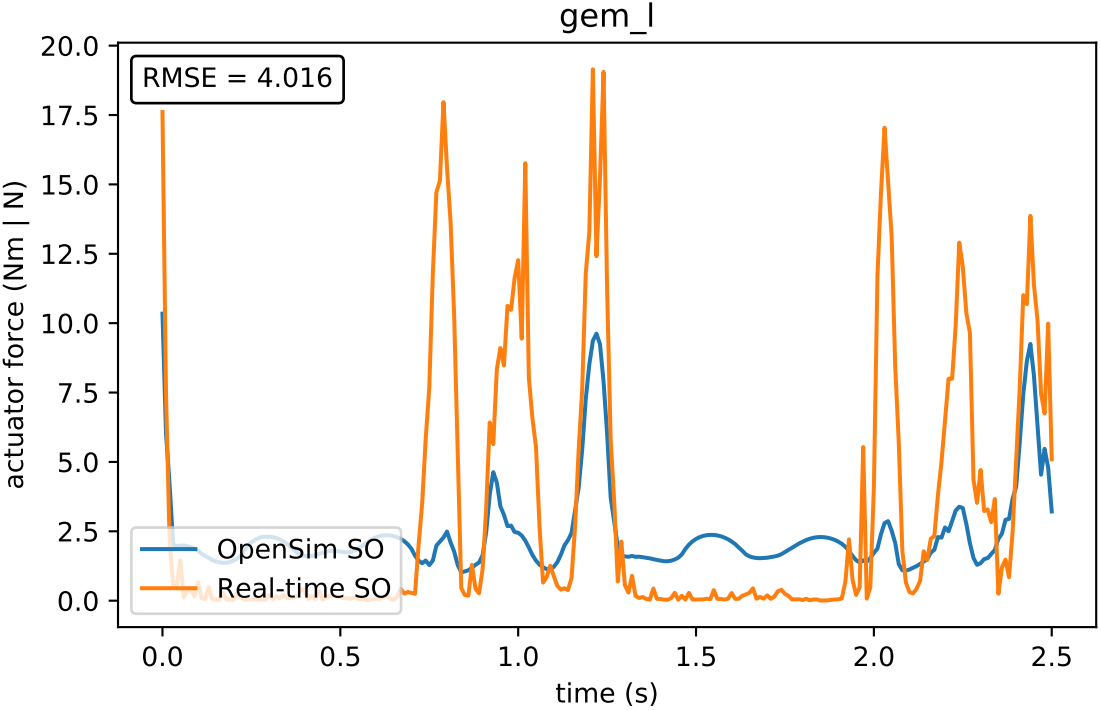

glut_max2_l
RMSE = 18.379
actuator force (Nm | N)
time (s)
OpenSim SO
Real-time SO
0
25
50
75
100
125
150
175
0.0
0.5
1.0
1.5
2.0
2.5

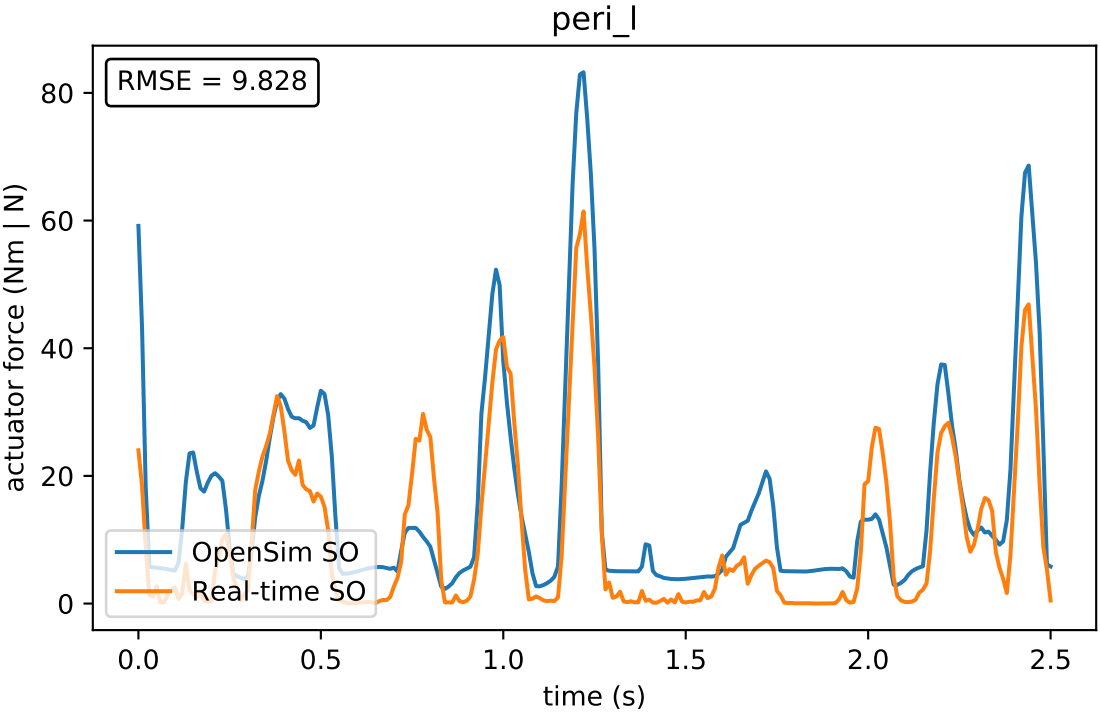

glut_max3_l
RMSE = 7.12
OpenSim SO
Real-time SO
actuator force (Nm | N)
time (s)
0
20
40
60
80
0.0
0.5
1.0
1.5
2.0
2.5

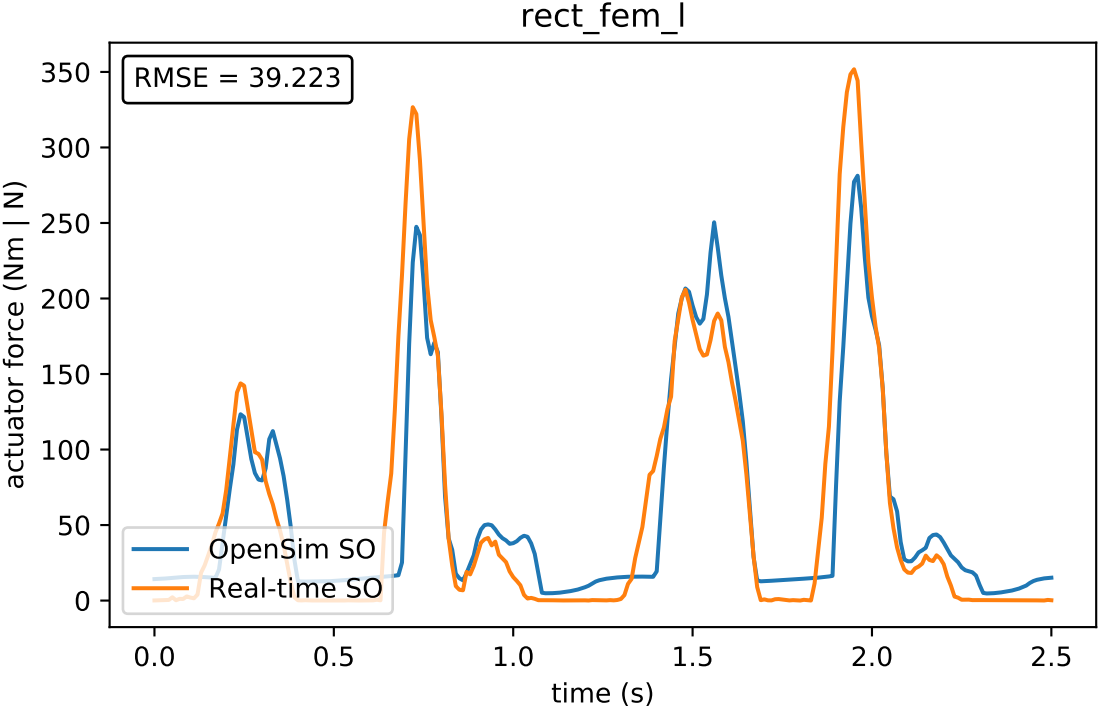

iliacus_l
RMSE = 61.742
OpenSim SO
Real-time SO
actuator force (Nm | N)
time (s)
800
700
600
500
400
300
200
100
0
0.0
0.5
1.0
1.5
2.0
2.5

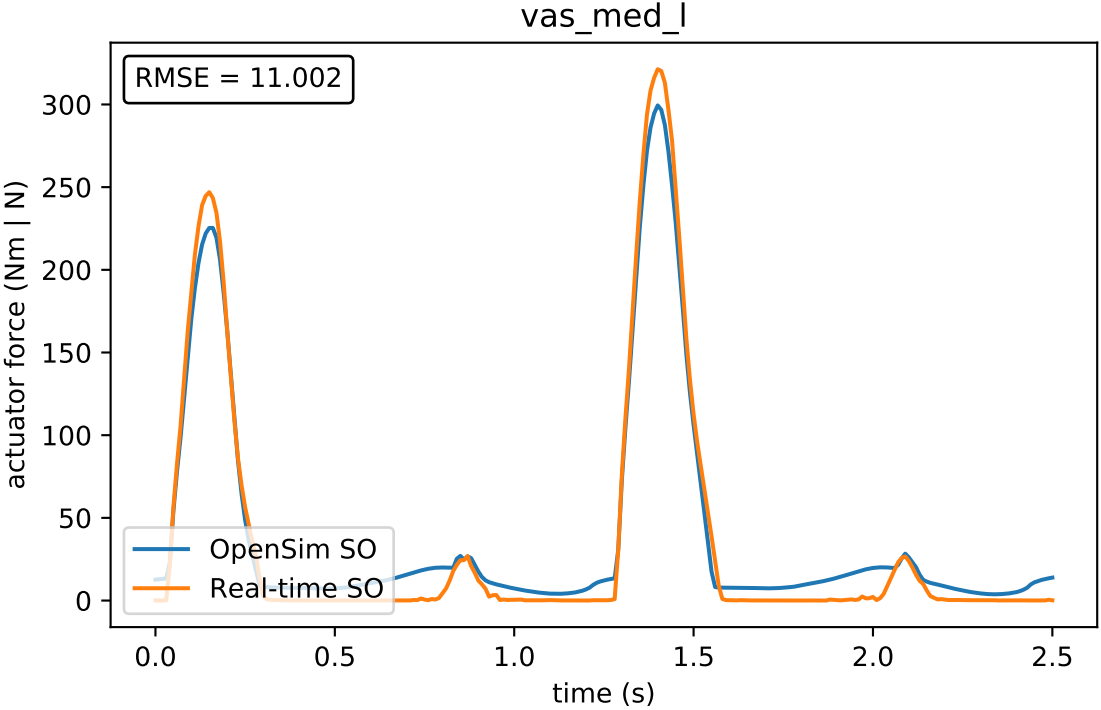

psoas_l
RMSE = 85.684
OpenSim SO
Real-time SO
actuator force (Nm | N)
time (s)
0
100
200
300
400
500
600
700
800
0.0
0.5
1.0
1.5
2.0
2.5

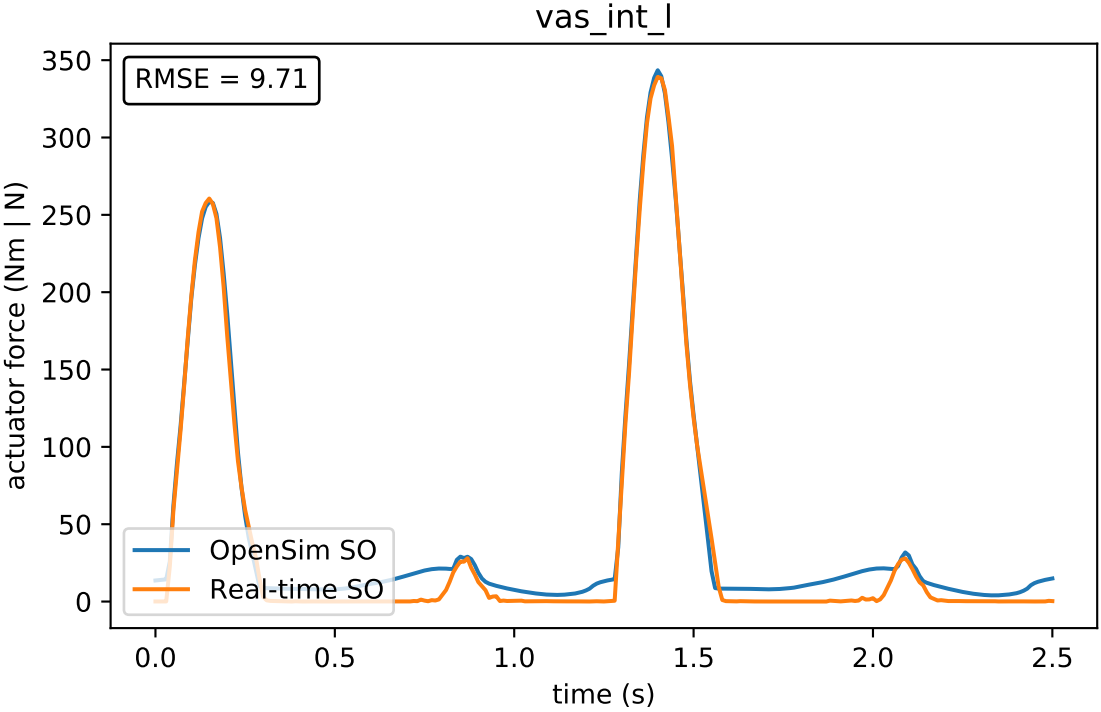

quad_fem_l
RMSE = 5.352
actuator force (Nm | N)
time (s)
OpenSim SO
Real-time SO
0
10
20
30
40
0.0
0.5
1.0
1.5
2.0
2.5

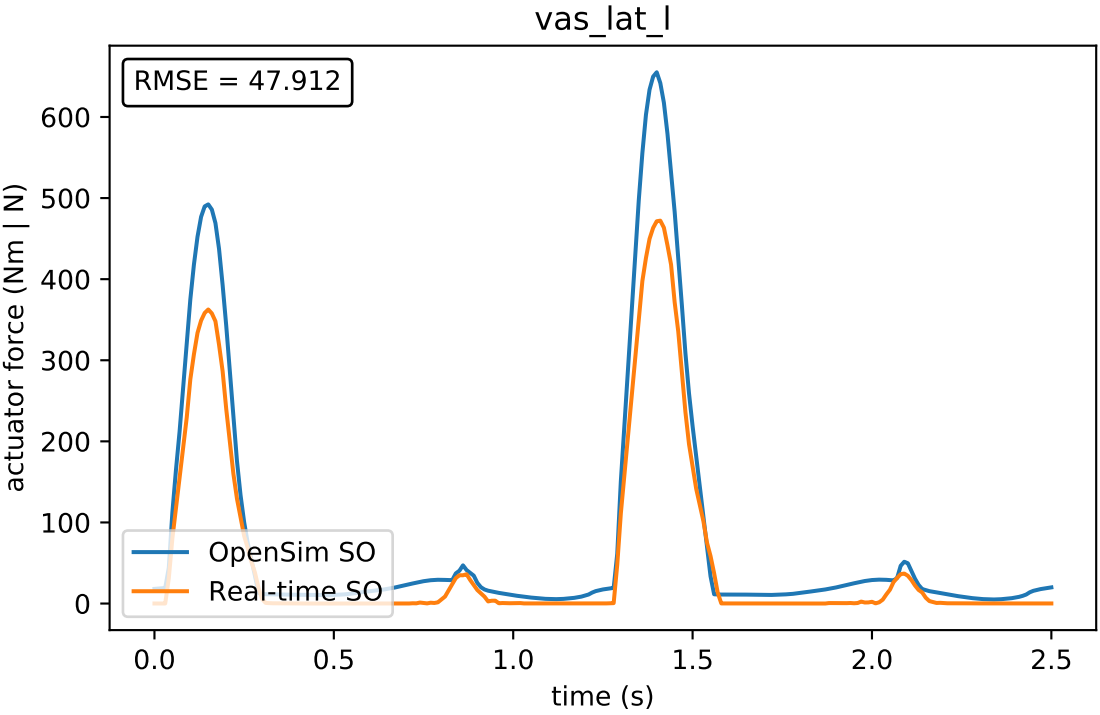

gem_l
RMSE = 4.016
OpenSim SO
Real-time SO
actuator force (Nm | N)
time (s)
20.0
17.5
15.0
12.5
10.0
7.5
5.0
2.5
0.0
0.0
0.5
1.0
1.5
2.0
2.5

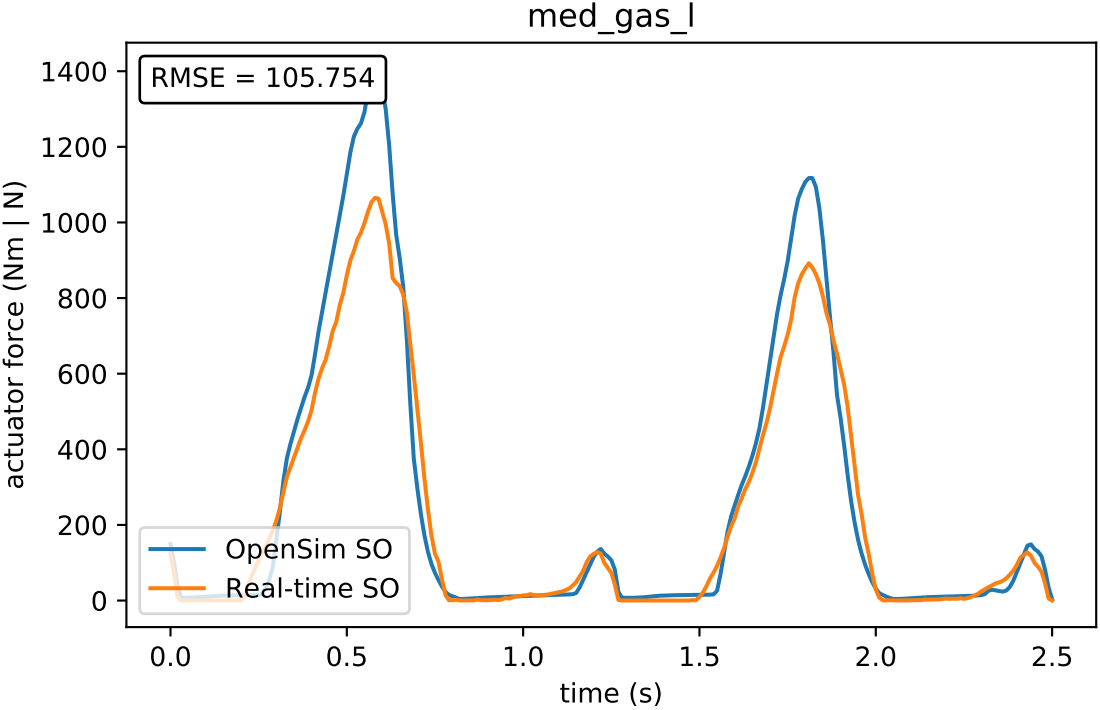

peri_l
RMSE = 9.828
OpenSim SO
Real-time SO
actuator force (Nm | N)
time (s)
0
20
40
60
80
0.0
0.5
1.0
1.5
2.0
2.5

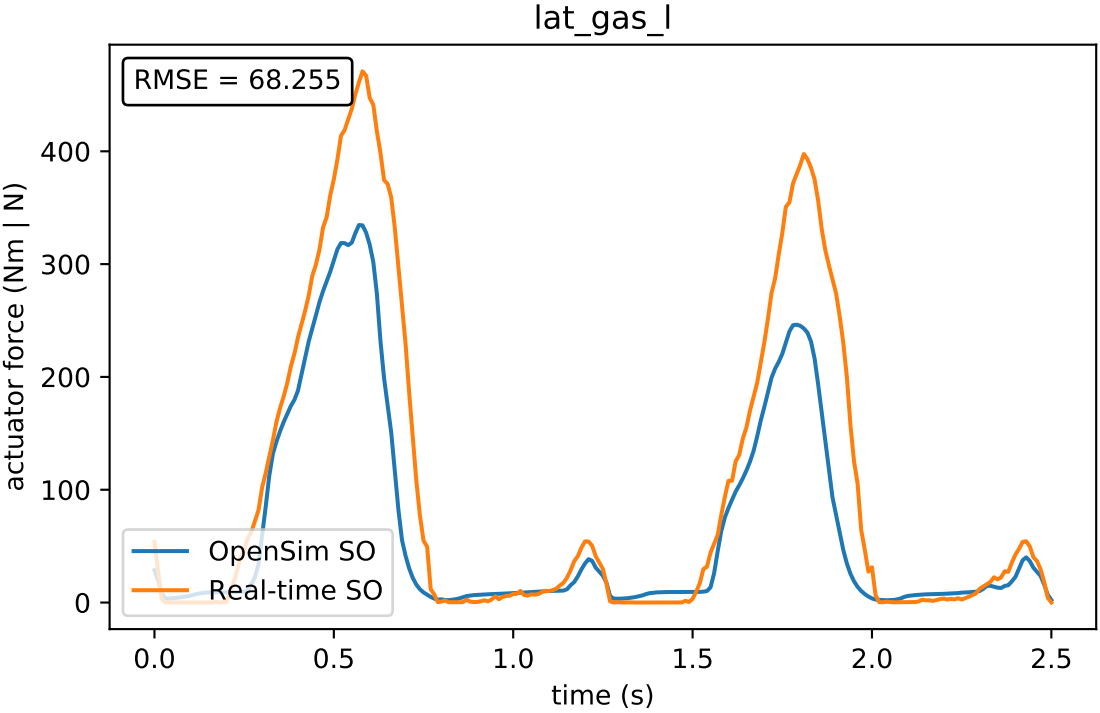

rect_fem_l
RMSE = 39.223
OpenSim SO
Real-time SO
actuator force (Nm | N)
time (s)
0
50
100
150
200
250
300
350
0.0
0.5
1.0
1.5
2.0
2.5

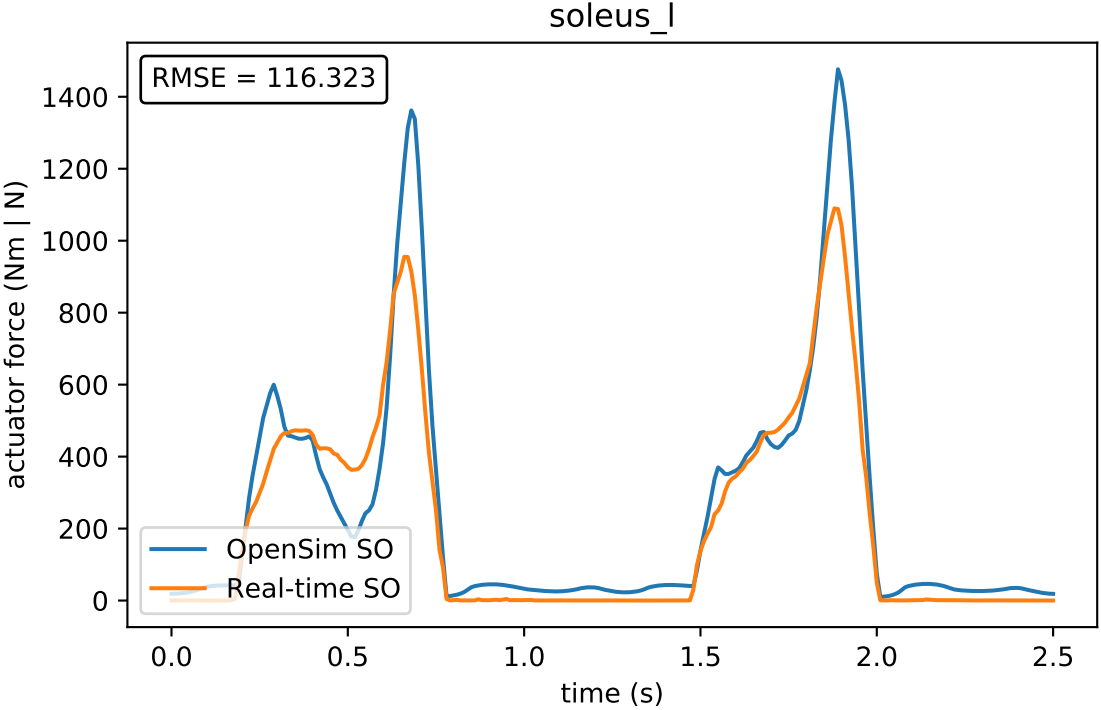

vas_med_l
RMSE = 11.002
actuator force (Nm | N)
time (s)
OpenSim SO
Real-time SO
0
50
100
150
200
250
300
0.0
0.5
1.0
1.5
2.0
2.5

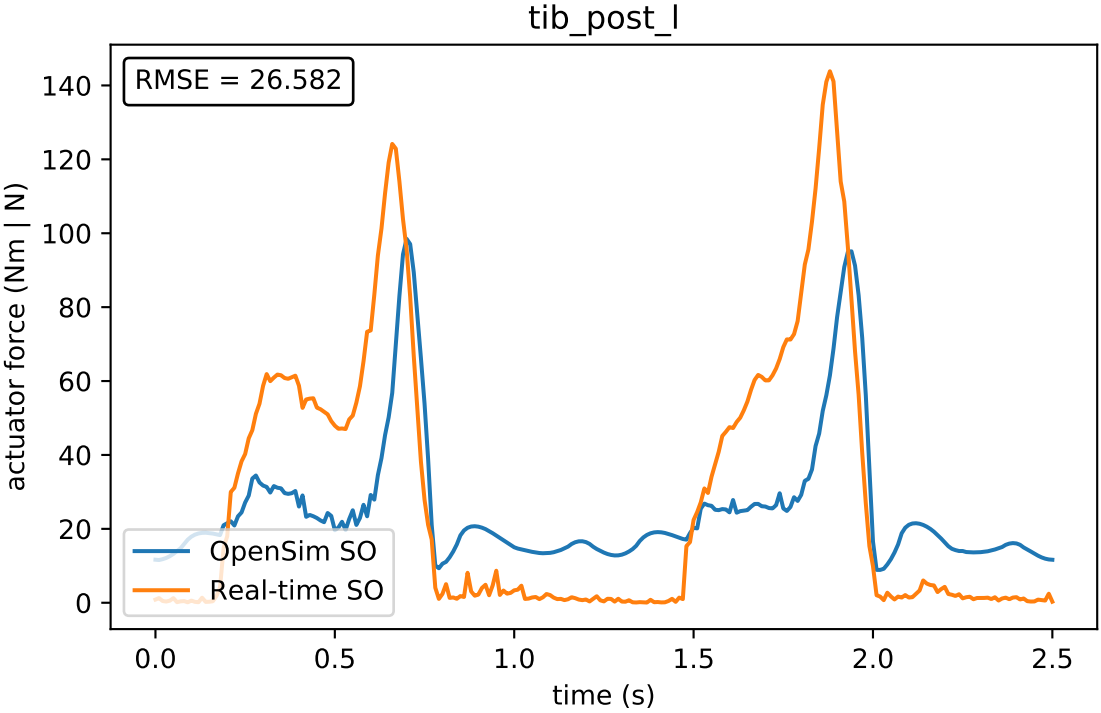

vas_int_l
RMSE = 9.71
OpenSim SO
Real-time SO
actuator force (Nm | N)
time (s)
350
300
250
200
150
100
50
0
0.0
0.5
1.0
1.5
2.0
2.5

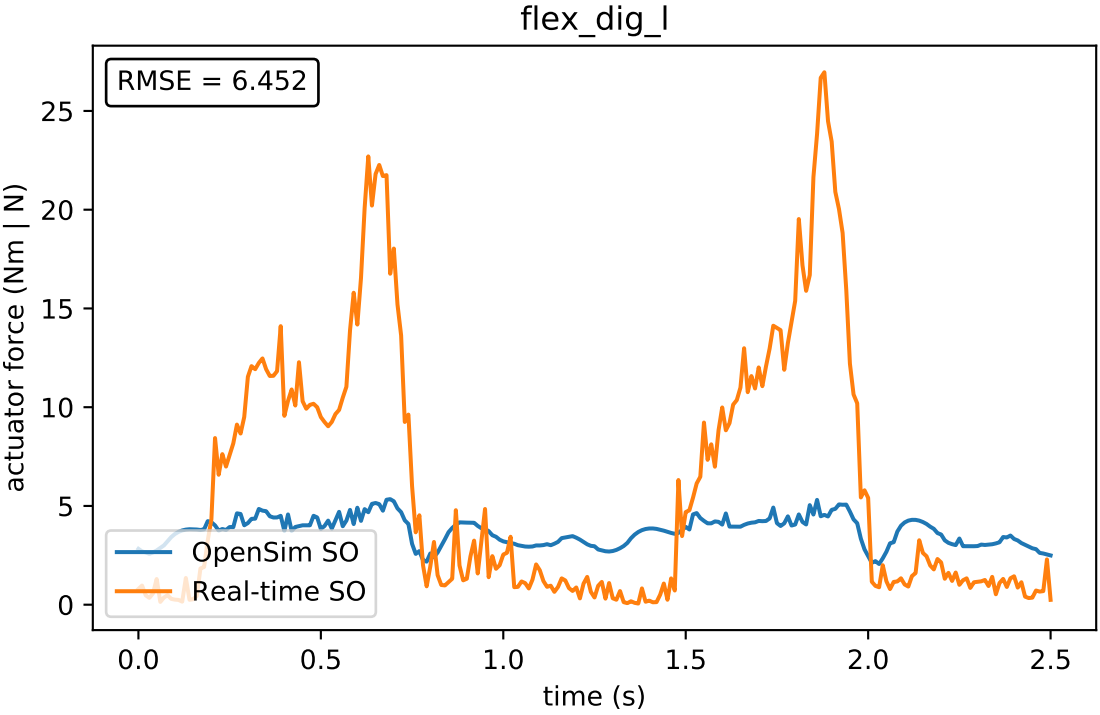

vas_lat_l
RMSE = 47.912
actuator force (Nm | N)
time (s)
OpenSim SO
Real-time SO
0
100
200
300
400
500
600
0.0
0.5
1.0
1.5
2.0
2.5

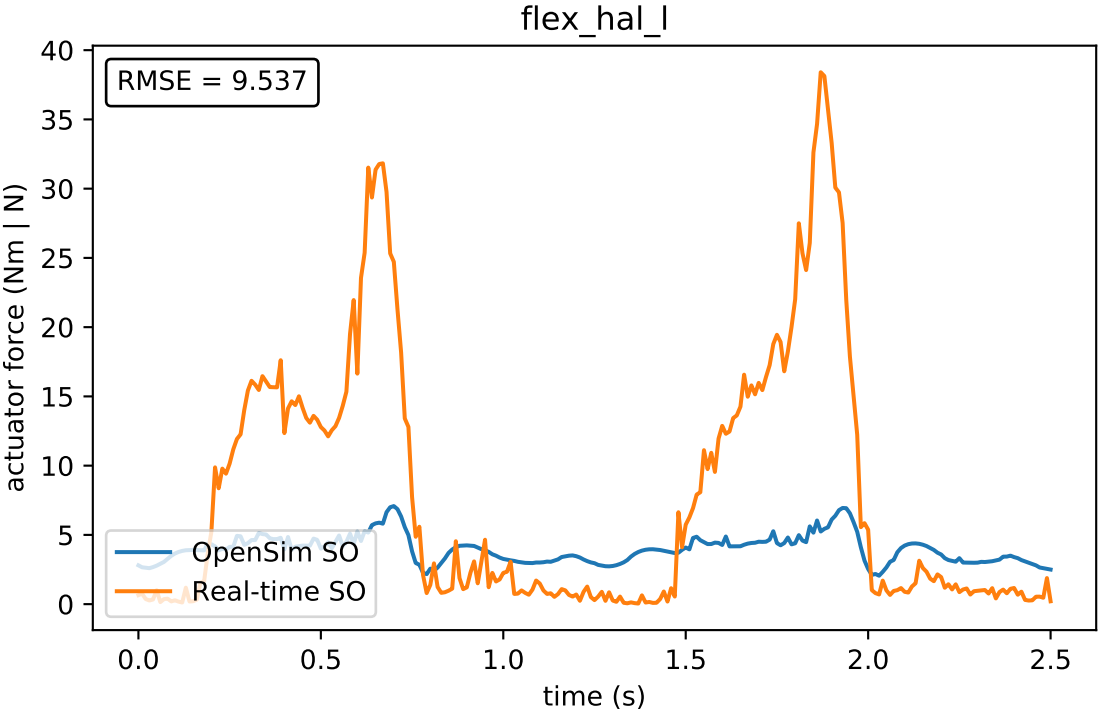

med_gas_l
RMSE = 105.754
OpenSim SO
Real-time SO
actuator force (Nm | N)
time (s)
0
200
400
600
800
1000
1200
1400
0.0
0.5
1.0
1.5
2.0
2.5

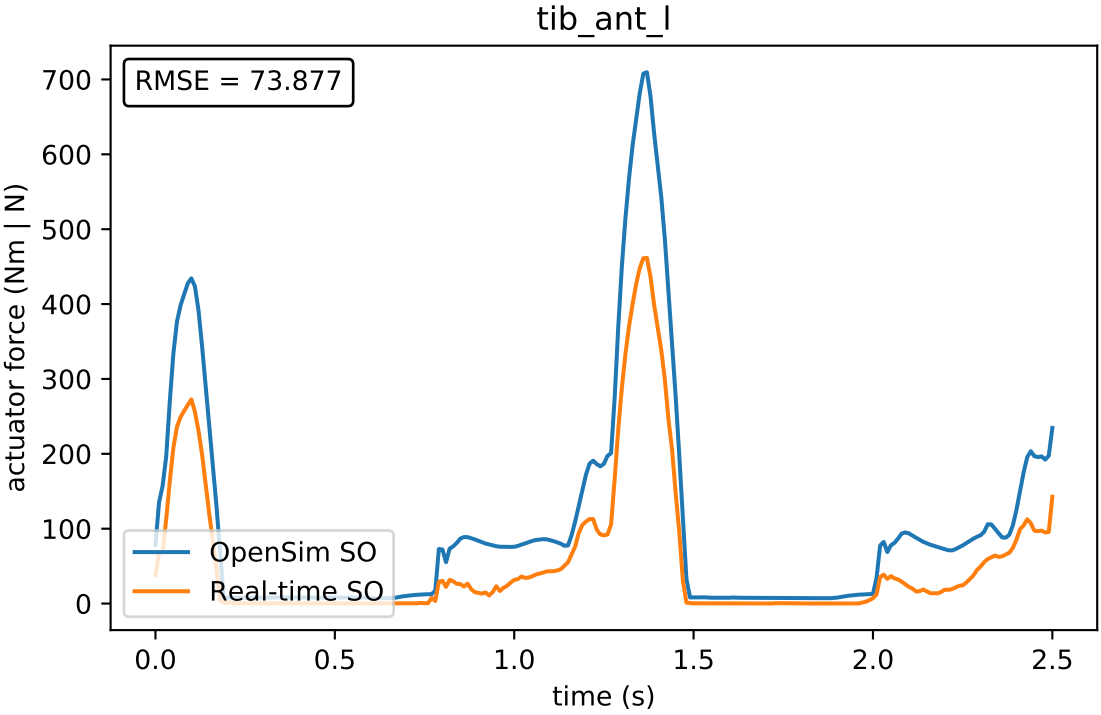

lat_gas_l
RMSE = 68.255
actuator force (Nm | N)
400
300
200
100
0
0.0
0.5
1.0
1.5
2.0
2.5
time (s)
OpenSim SO
Real-time SO

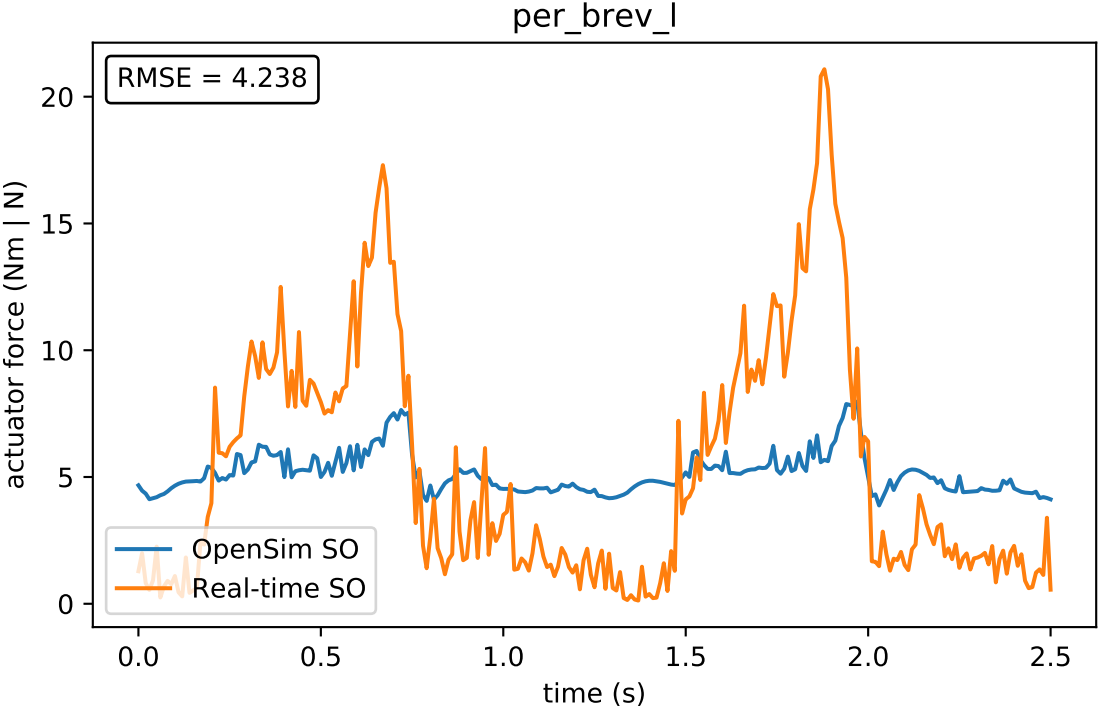

soleus_l
RMSE = 116.323
1400
1200
1000
800
600
400
200
0
actuator force (Nm | N)
OpenSim SO
Real-time SO
0.0
0.5
1.0
1.5
2.0
2.5
time (s)

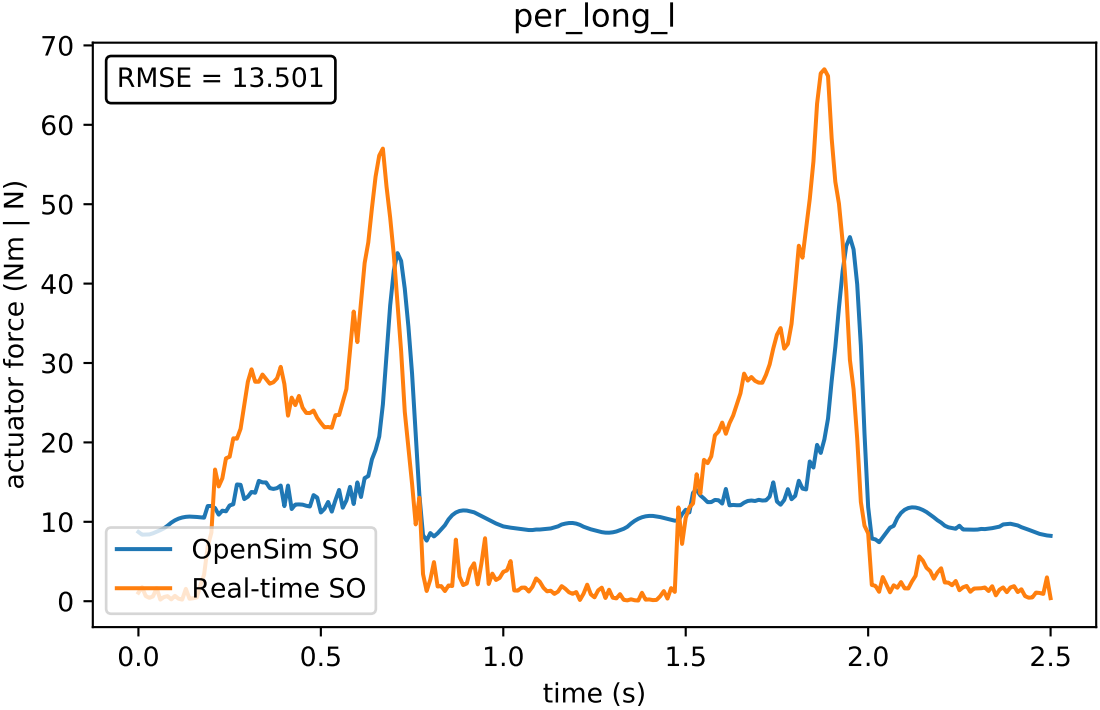

tib_post_l
RMSE = 26.582
actuator force (Nm | N)
time (s)
OpenSim SO
Real-time SO
0
20
40
60
80
100
120
140
0.0
0.5
1.0
1.5
2.0
2.5

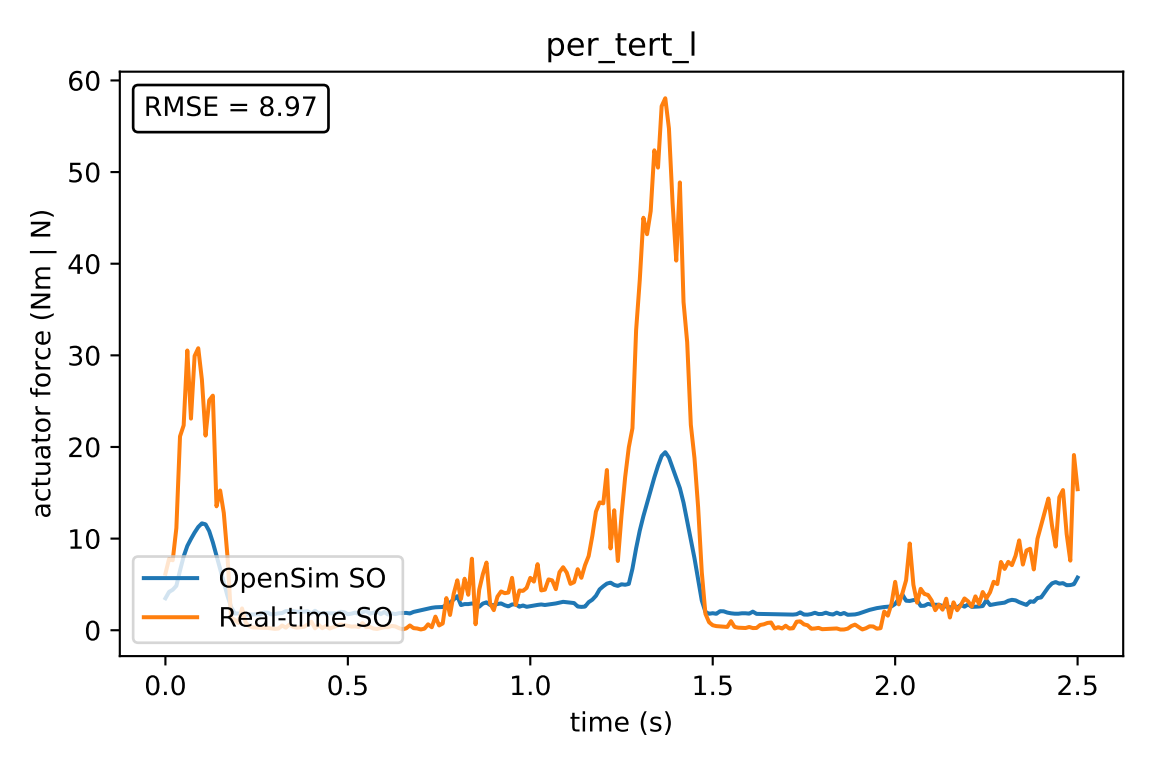

flex_dig_l
RMSE = 6.452
OpenSim SO
Real-time SO
actuator force (Nm | N)
time (s)
0
5
10
15
20
25
0.0
0.5
1.0
1.5
2.0
2.5

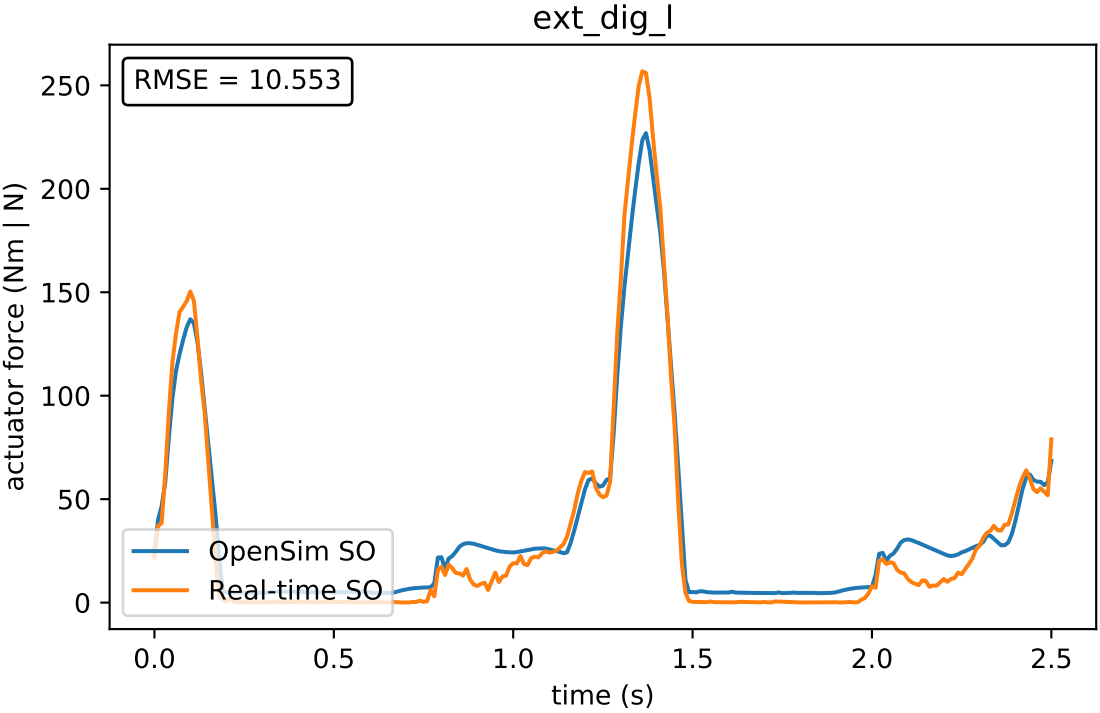

flex_hal_l
RMSE = 9.537
OpenSim SO
Real-time SO
actuator force (Nm | N)
time (s)
0
5
10
15
20
25
30
35
40
0.0
0.5
1.0
1.5
2.0
2.5

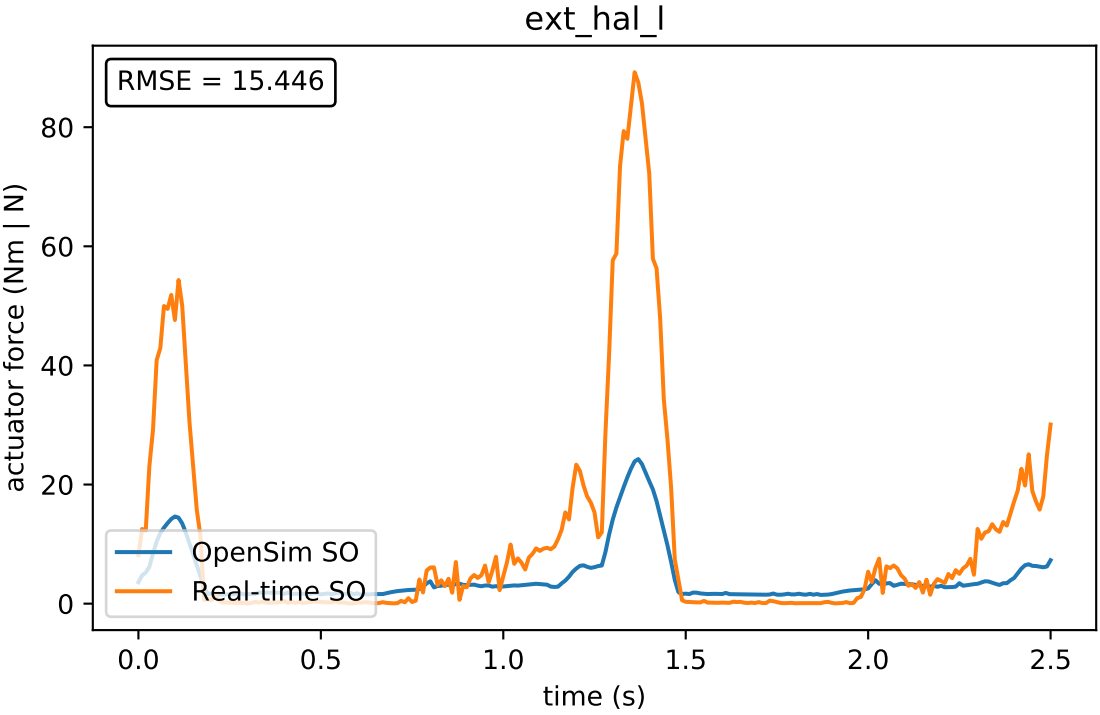

tib_ant_l
RMSE = 73.877
OpenSim SO
Real-time SO
actuator force (Nm | N)
time (s)
0
100
200
300
400
500
600
700
0.0
0.5
1.0
1.5
2.0
2.5

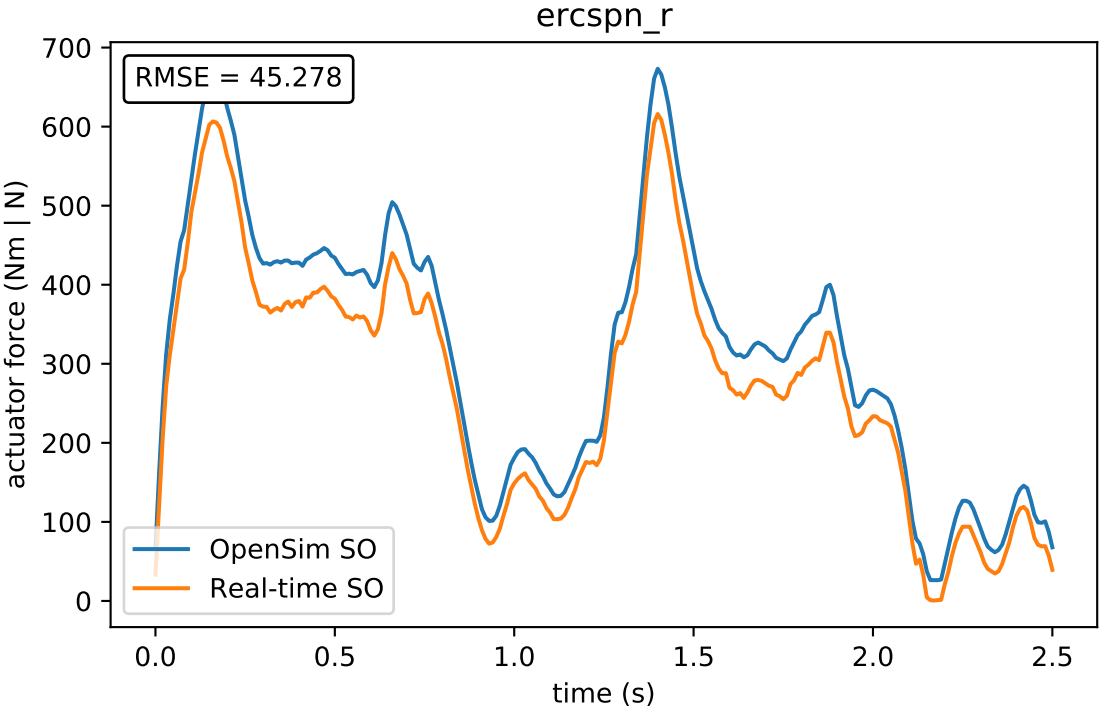

per_brev_l
RMSE = 4.238
actuator force (Nm | N)
time (s)
OpenSim SO
Real-time SO
0
5
10
15
20
0.0
0.5
1.0
1.5
2.0
2.5

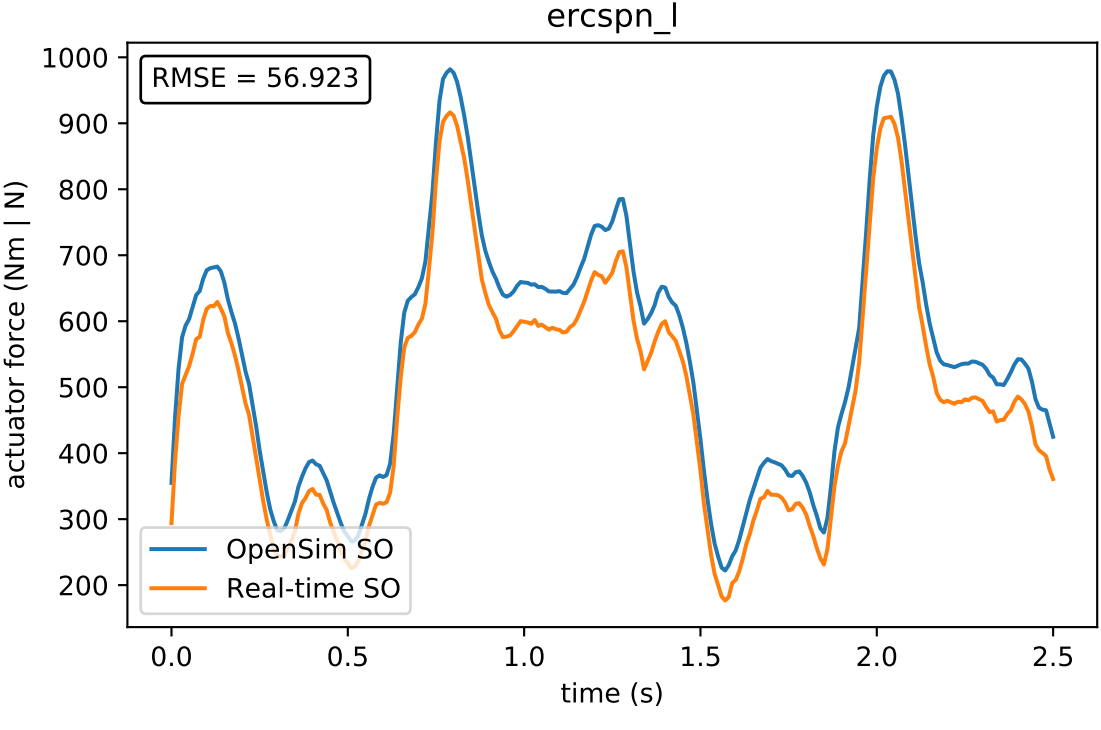

per_long_l
RMSE = 13.501
OpenSim SO
Real-time SO
actuator force (Nm | N)
time (s)
0
10
20
30
40
50
60
70
0.0
0.5
1.0
1.5
2.0
2.5

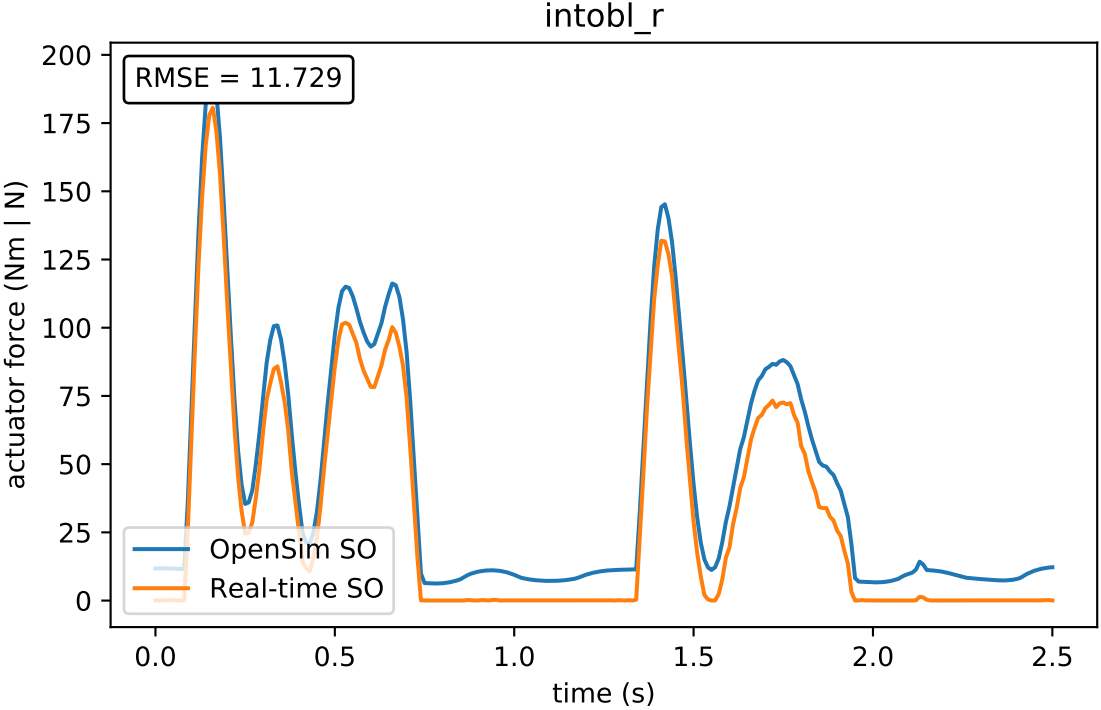

per_tert_l
RMSE = 8.97
OpenSim SO
Real-time SO
actuator force (Nm | N)
time (s)
0
10
20
30
40
50
60
0.0
0.5
1.0
1.5
2.0
2.5

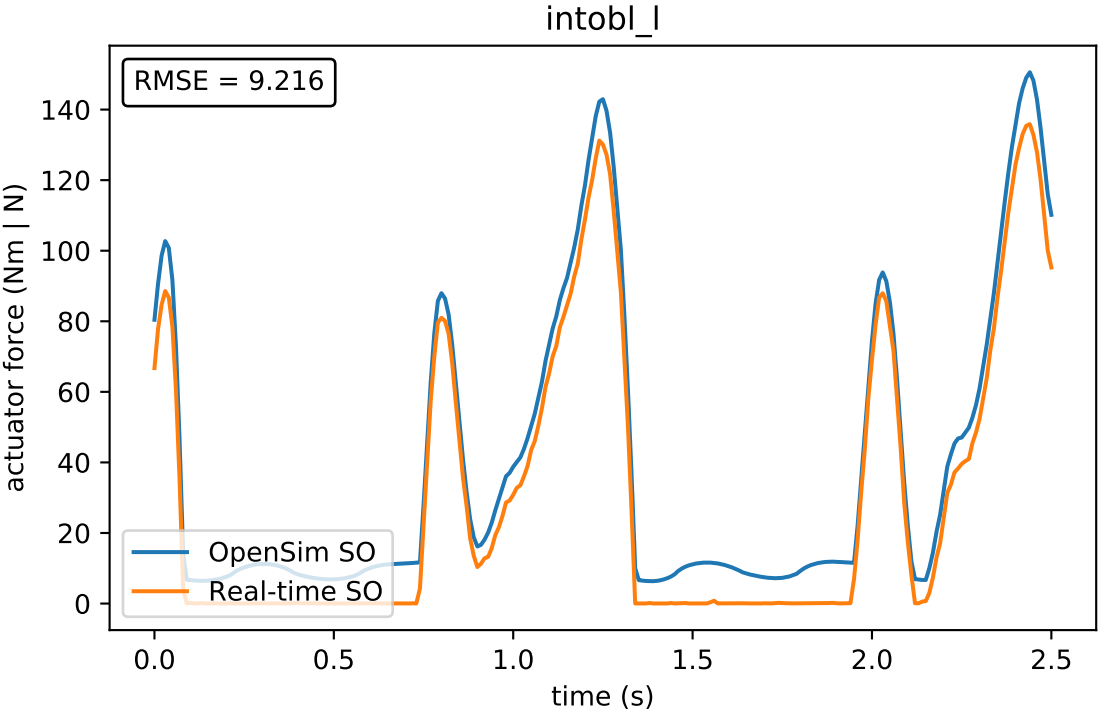

ext_dig_l
RMSE = 10.553
OpenSim SO
Real-time SO
actuator force (Nm | N)
time (s)
0
50
100
150
200
250
0.0
0.5
1.0
1.5
2.0
2.5

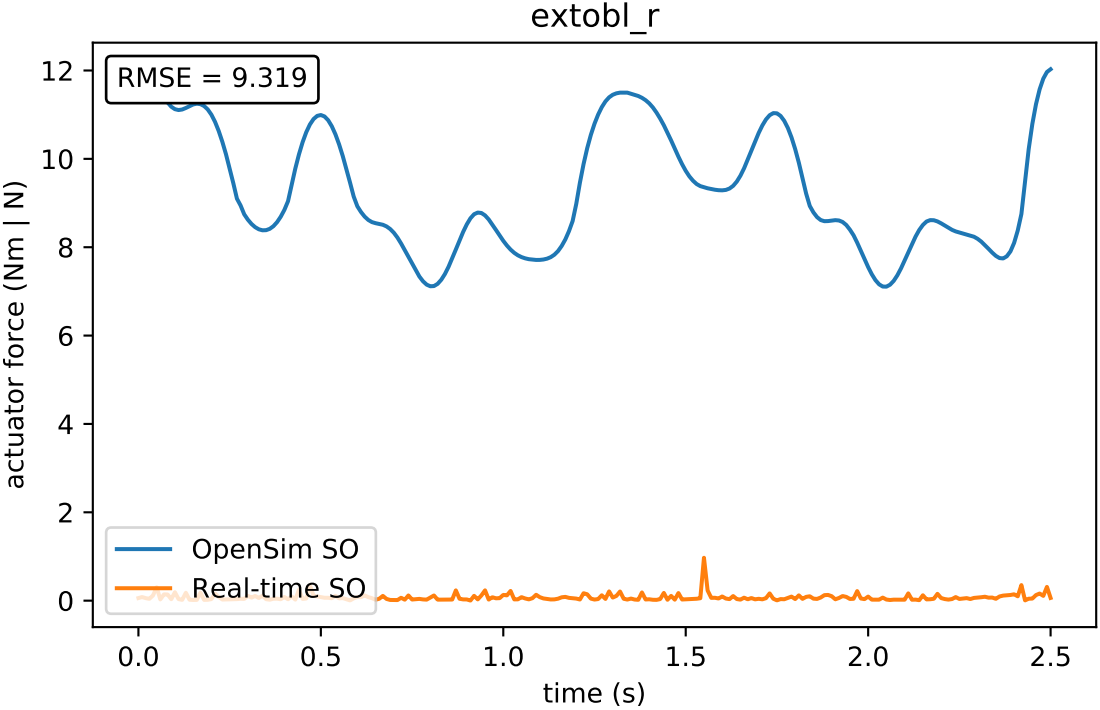

ext_hal_l
RMSE = 15.446
OpenSim SO
Real-time SO
actuator force (Nm | N)
time (s)
0
20
40
60
80
0.0
0.5
1.0
1.5
2.0
2.5

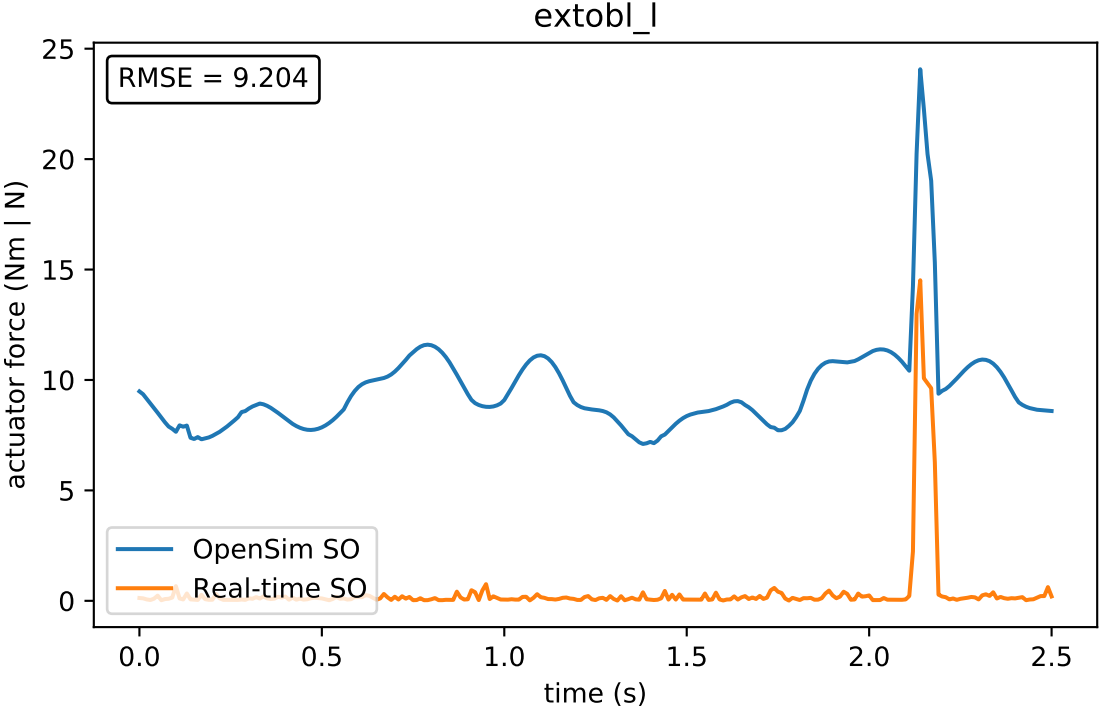

ercspn_r
RMSE = 45.278
OpenSim SO
Real-time SO
actuator force (Nm | N)
time (s)
0
100
200
300
400
500
600
700
0.0
0.5
1.0
1.5
2.0
2.5


ercspn_l
RMSE = 56.923
OpenSim SO
Real-time SO
actuator force (Nm | N)
time (s)
1000
900
800
700
600
500
400
300
200
0.0
0.5
1.0
1.5
2.0
2.5


intobl_r
RMSE = 11.729
OpenSim SO
Real-time SO
actuator force (Nm | N)
time (s)
200
175
150
125
100
75
50
25
0
0.0
0.5
1.0
1.5
2.0
2.5


intobl_l
RMSE = 9.216
actuator force (Nm | N)
time (s)
OpenSim SO
Real-time SO
0
20
40
60
80
100
120
140
0.0
0.5
1.0
1.5
2.0
2.5


extobl_r
RMSE = 9.319
actuator force (Nm | N)
time (s)
OpenSim SO
Real-time SO
0
2
4
6
8
10
12
0.0
0.5
1.0
1.5
2.0
2.5


extobl_l
RMSE = 9.204
actuator force (Nm | N)
time (s)
OpenSim SO
Real-time SO
0
5
10
15
20
25
0.0
0.5
1.0
1.5
2.0
2.5