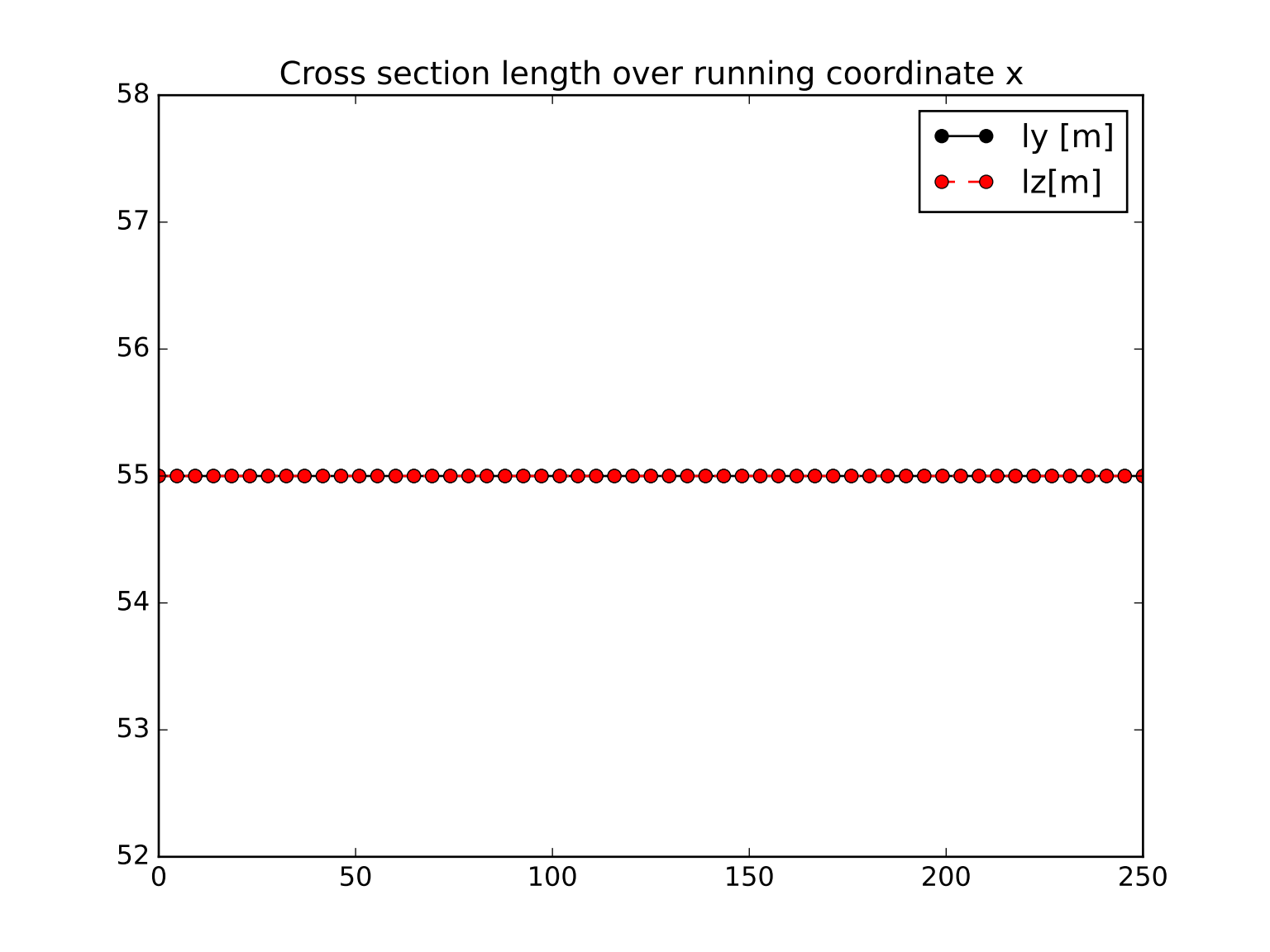
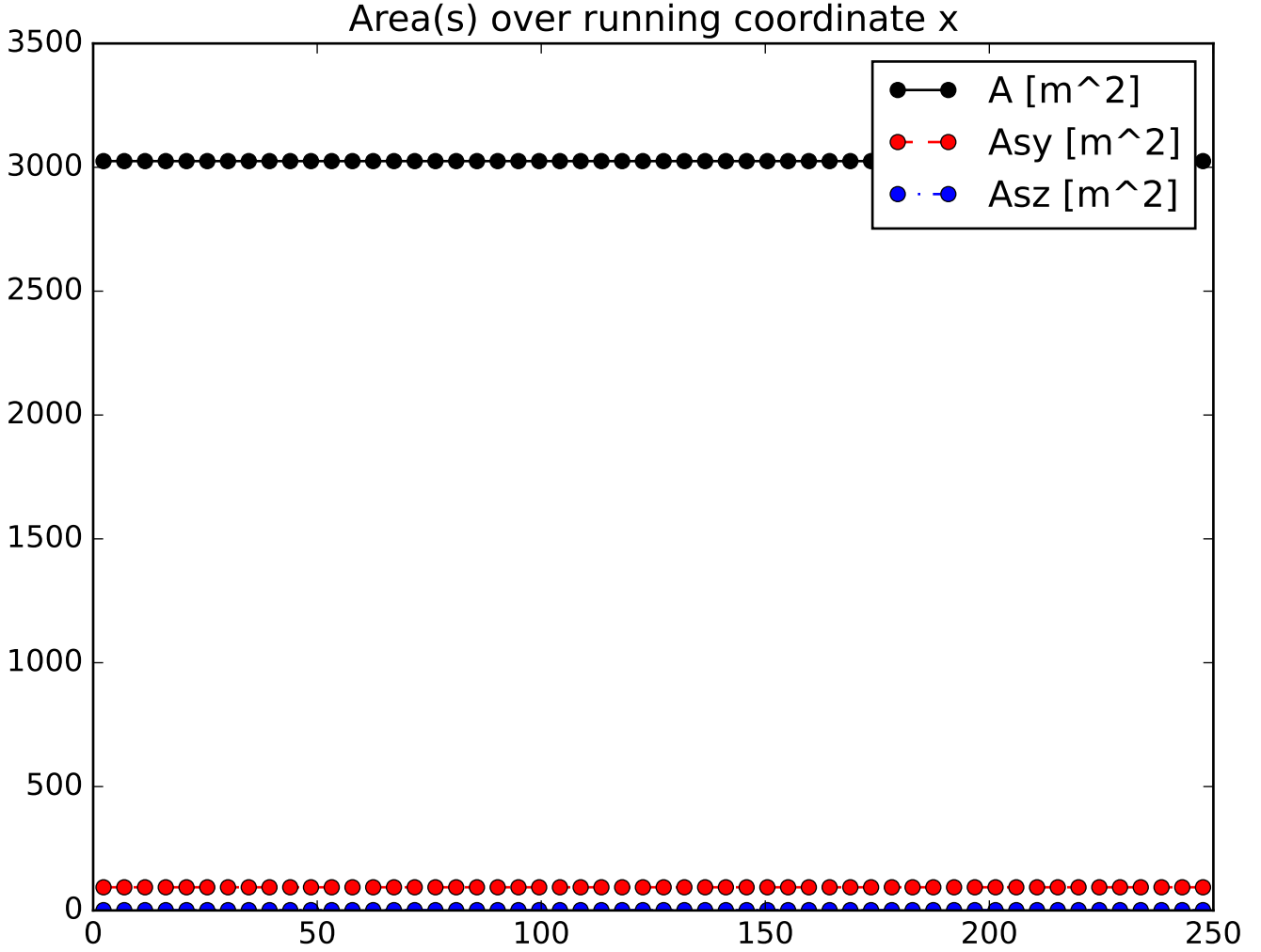
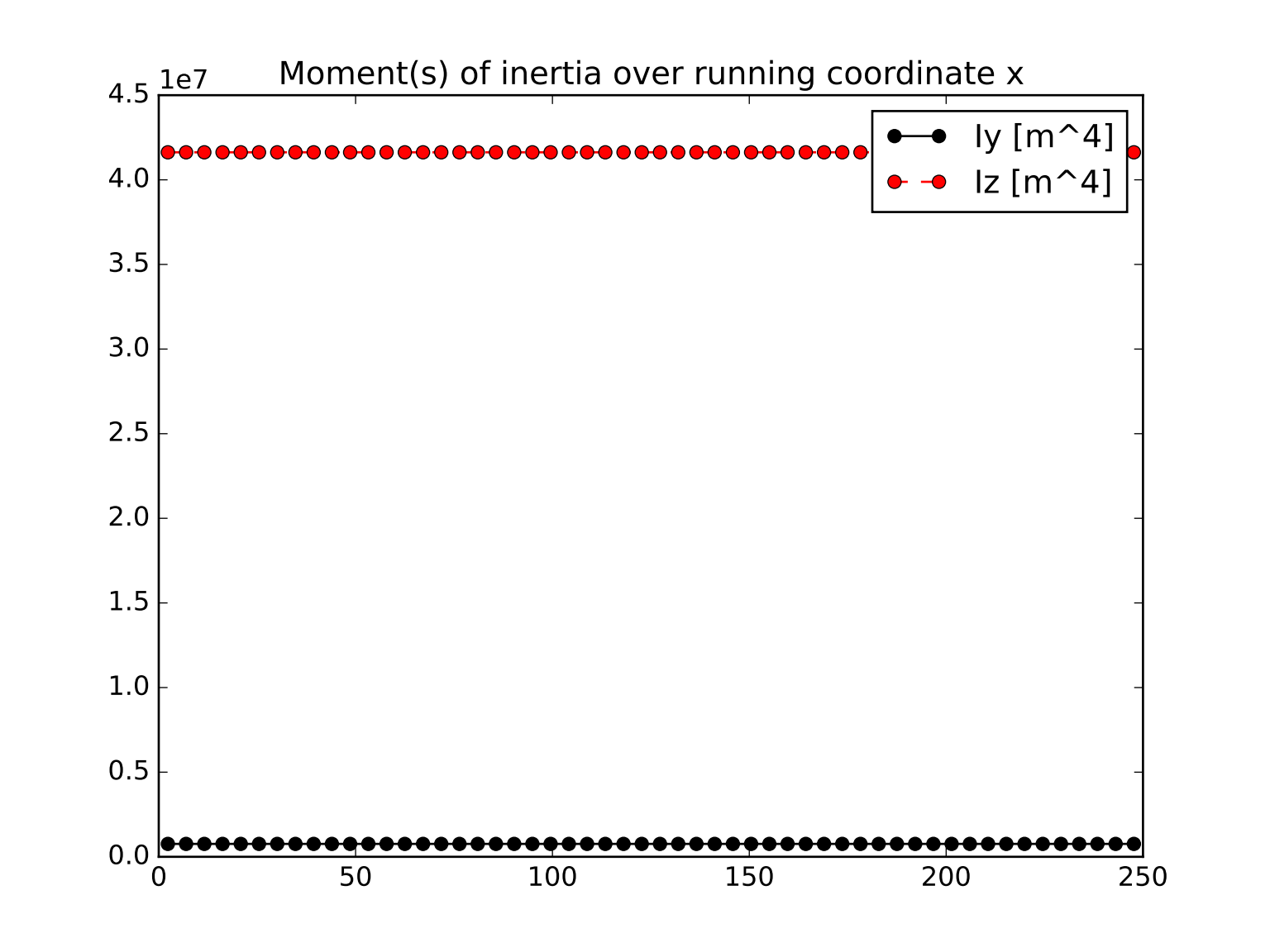
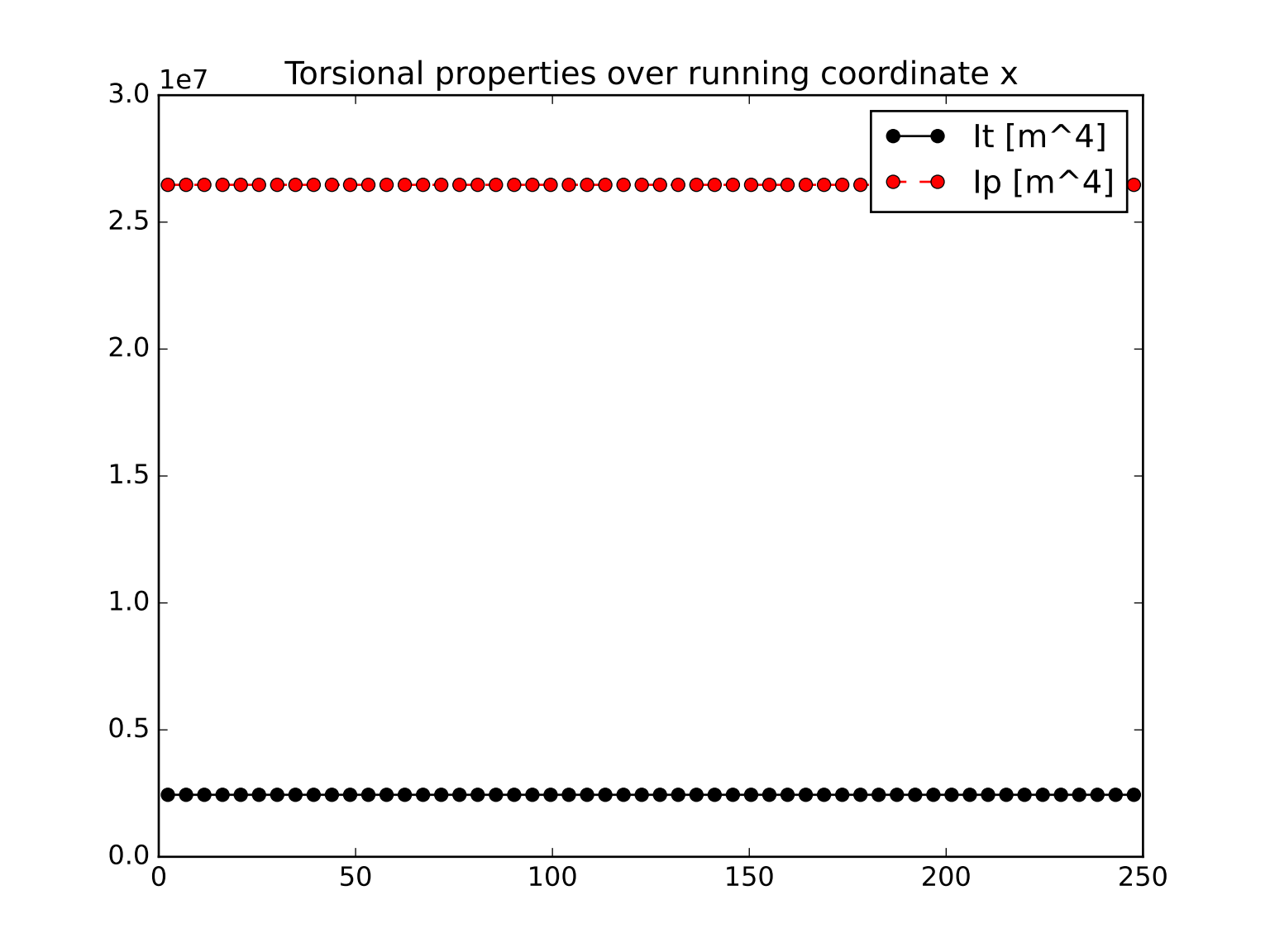
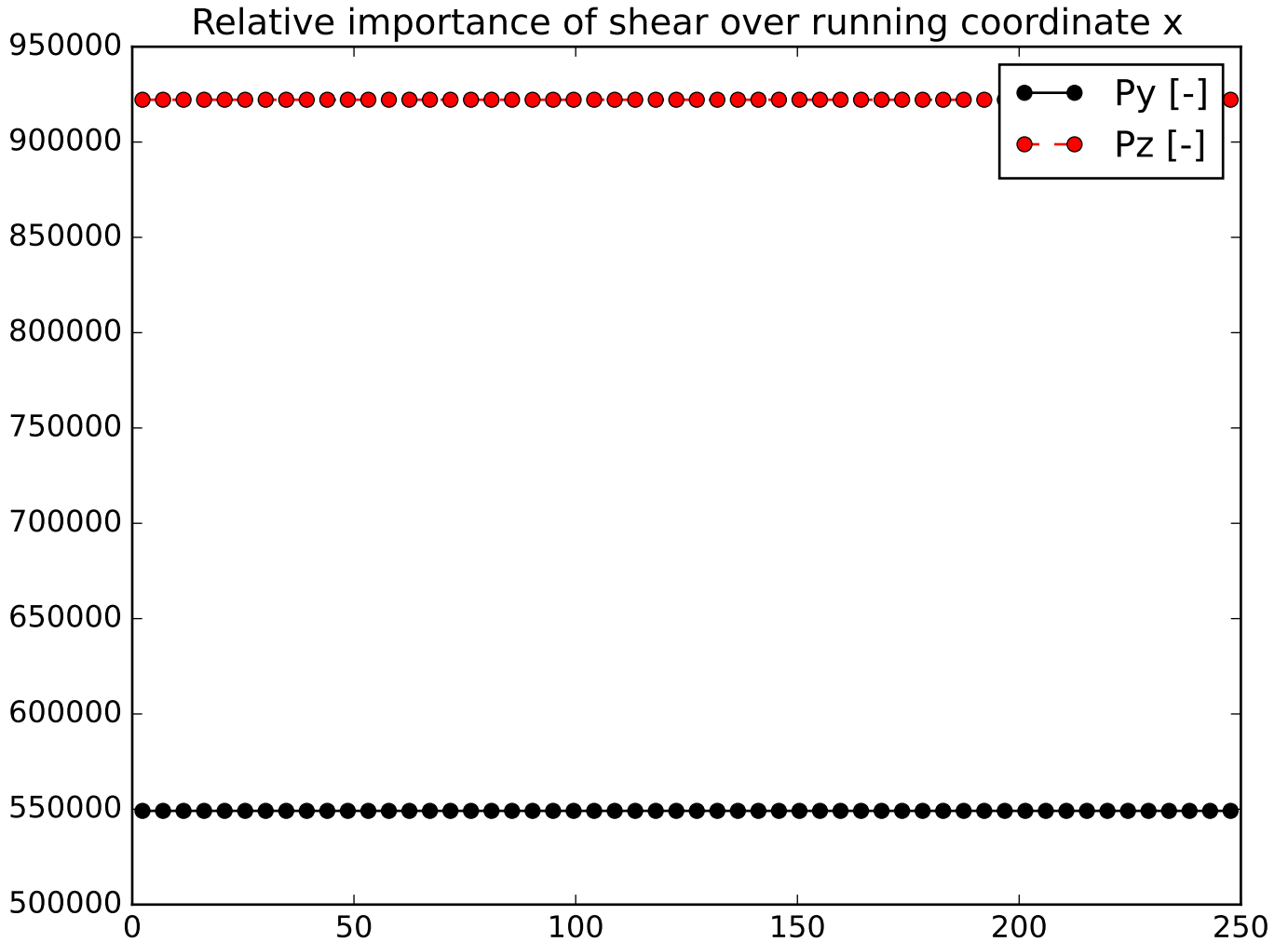
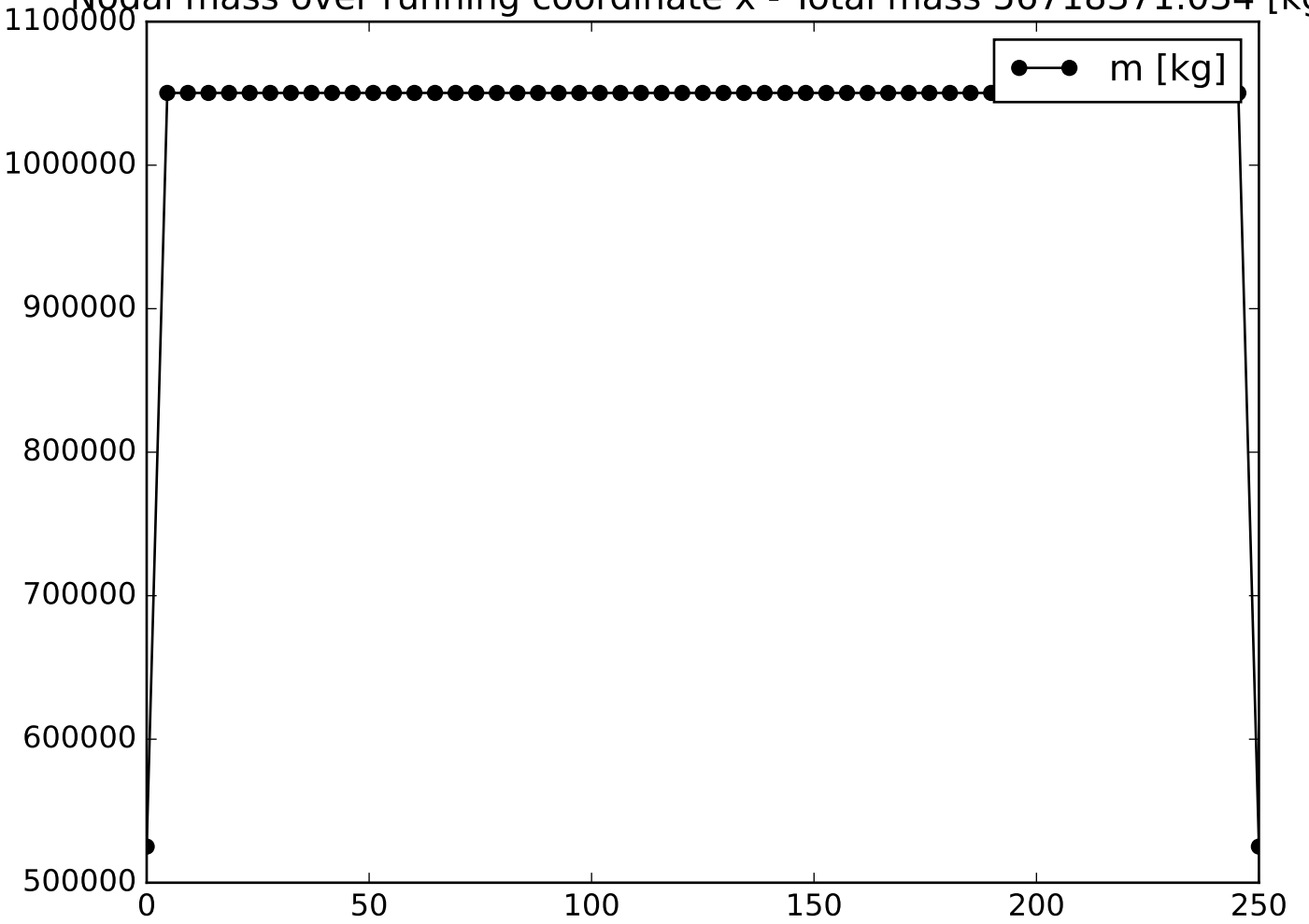

Cross section length over running coordinate x
ly [m]
lz[m]
58
57
56
55
54
53
52
0
50
100
150
200
250


Area(s) over running coordinate x
A [m^2]
Asy [m^2]
Asz [m^2]
3500
3000
2500
2000
1500
1000
500
0
0
50
100
150
200
250


Moment(s) of inertia over running coordinate x
1e7
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
0
50
100
150
200
250
Iy [m^4]
Iz [m^4]


Torsional properties over running coordinate x
1e7
3.0
2.5
2.0
1.5
1.0
0.5
0.0
0
50
100
150
200
250
It [m^4]
Ip [m^4]


Relative importance of shear over running coordinate x
950000
900000
850000
800000
750000
700000
650000
600000
550000
500000
0
50
100
150
200
250
Py [-]
Pz [-]

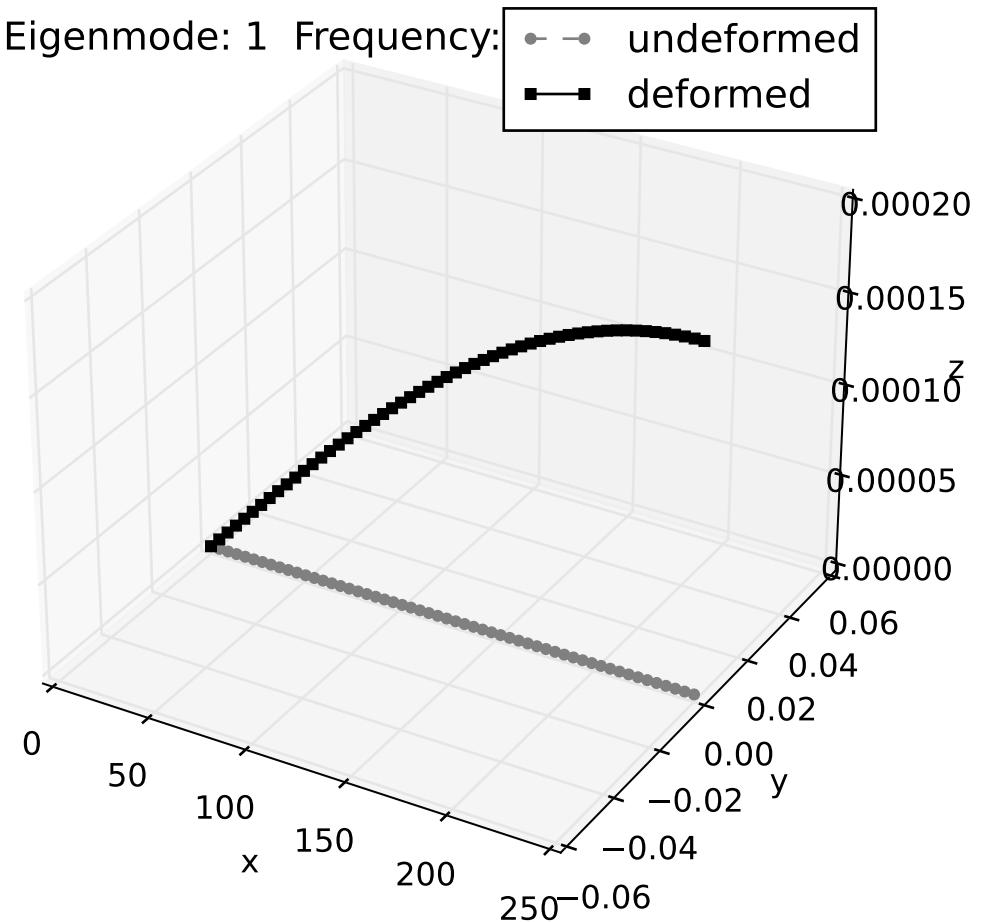

Nodal mass over running coordinate x - Total mass 56718371.034 [kg]
m [kg]
1100000
1000000
900000
800000
700000
600000
500000
0
50
100
150
200
250

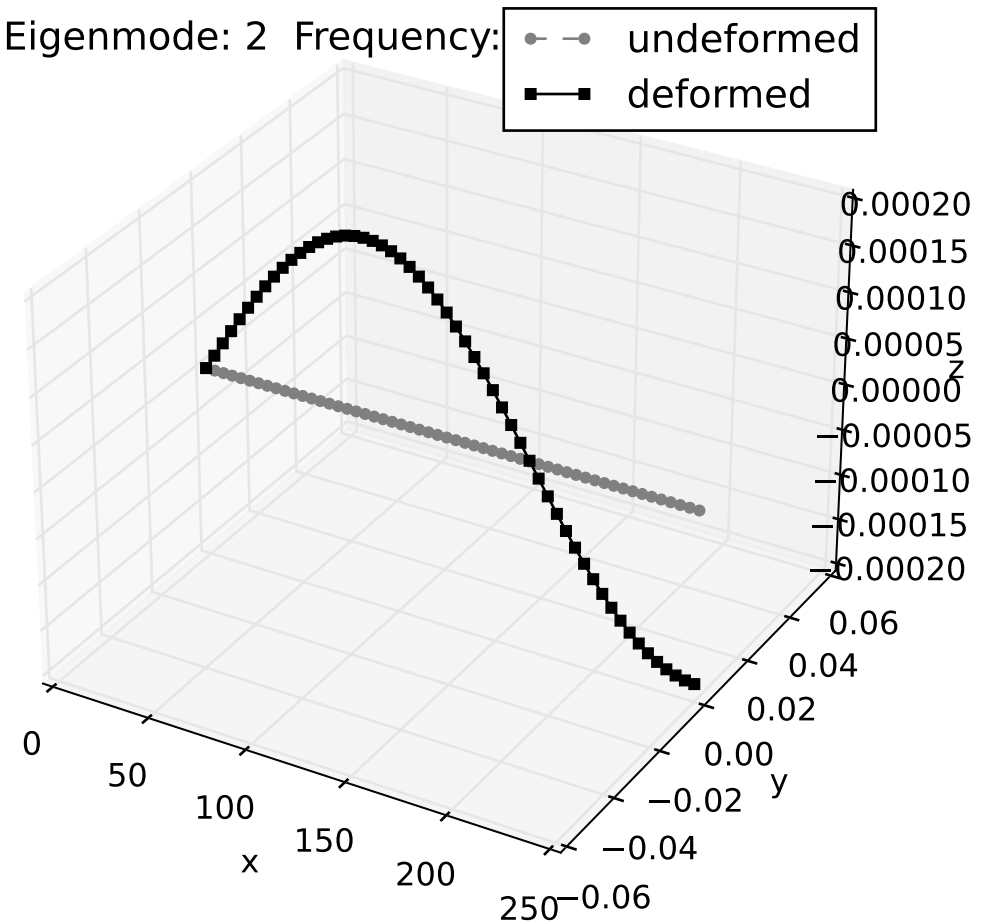
Result of eigenvalue analysis
Mode | Eigenfrequency [Hz] | Period [s]

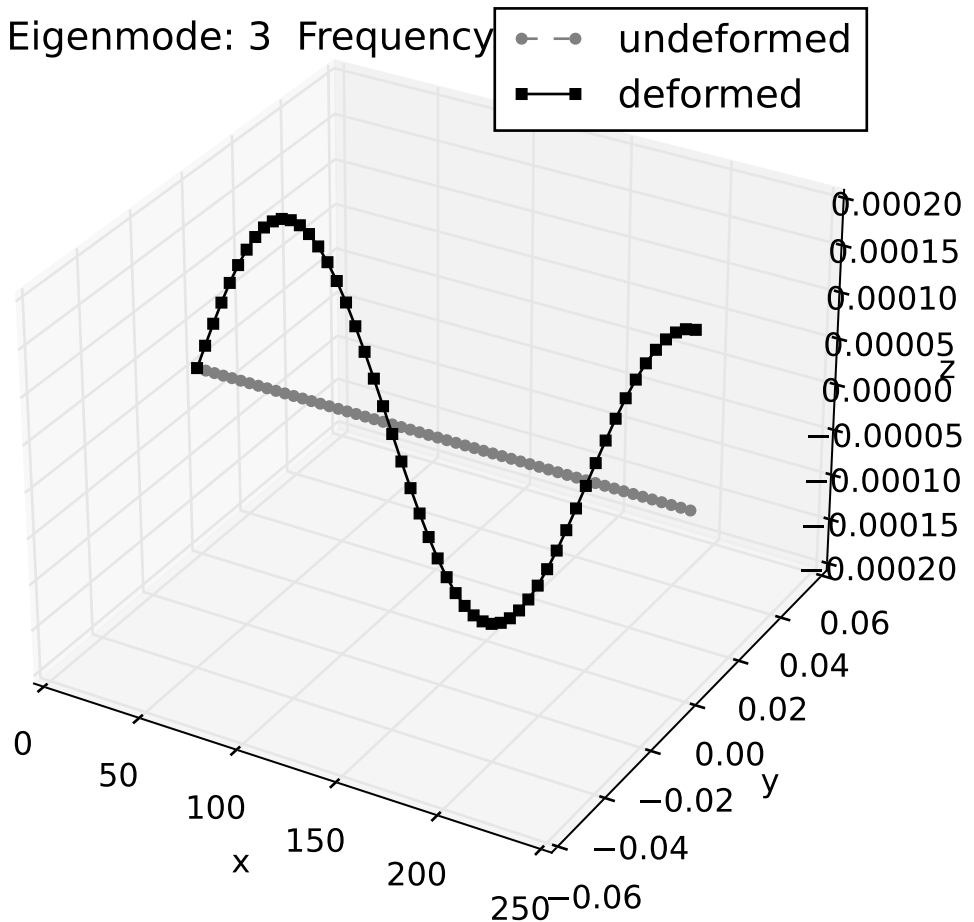
Mode	Eigenfrequency [Hz]	Period [s]
1	0.02408	41.52972
2	0.07227	13.83641
3	0.12083	8.27643
4	0.16934	5.90534
5	0.21802	4.58664
6	0.22998	4.34816
7	0.26686	3.74723
8	0.31594	3.16514
9	0.36527	2.73767
10	0.40000	2.50001
11	0.41492	2.41009
12	0.46491	2.15094
13	0.51530	1.94062
14	0.56612	1.76642
15	0.61741	1.61966

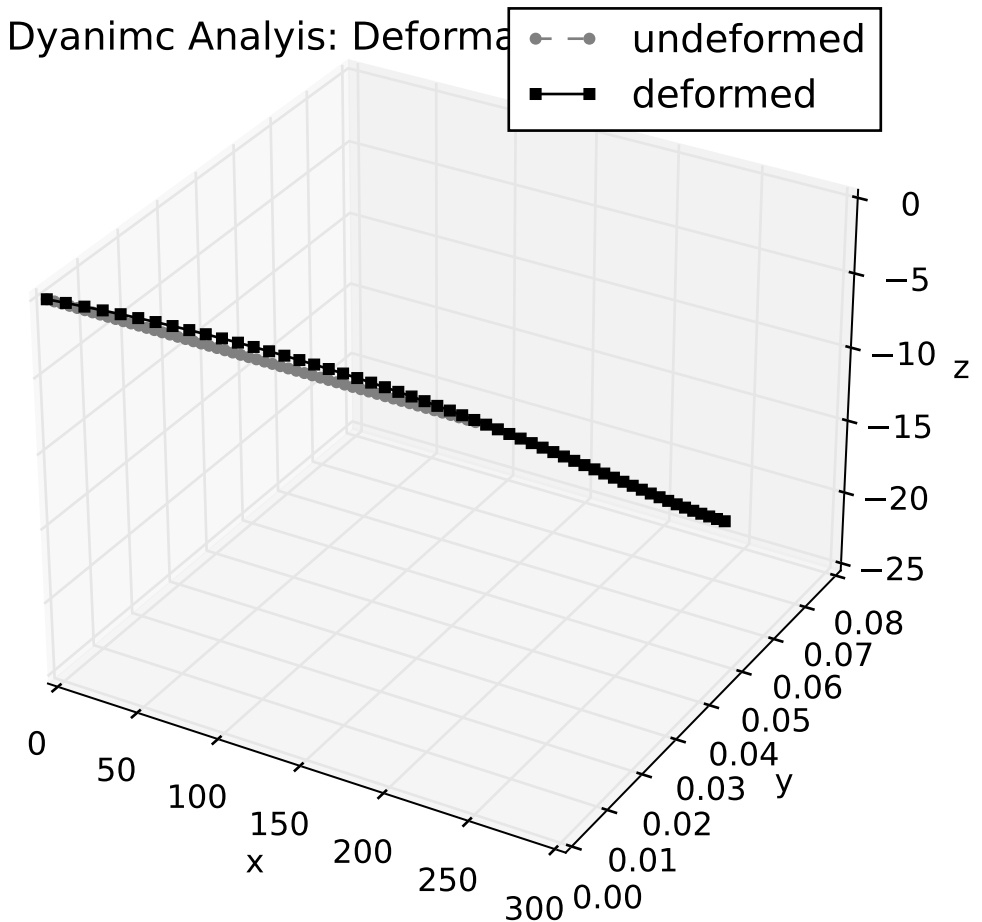
Result of decoupled eigenmode identification for the first 324 mode(s)

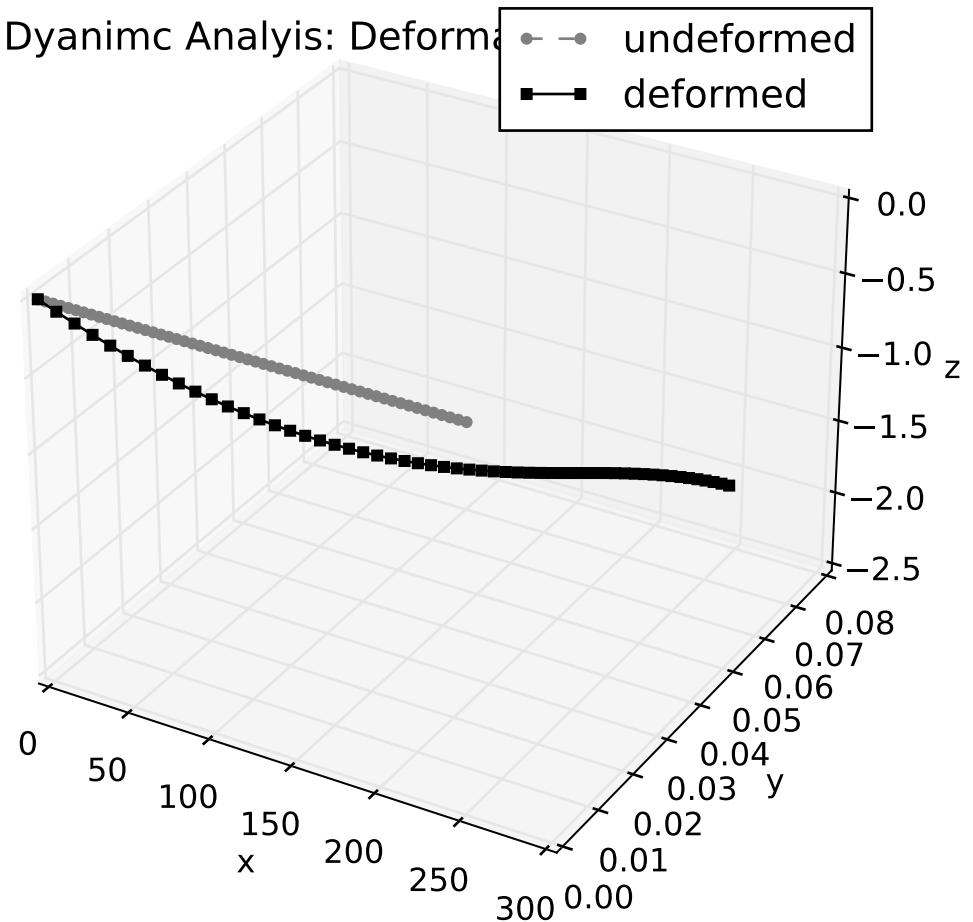
144	118	36	16.983	sway_z	3525.511	0.000
145	119	37	17.204	sway_z	2848.970	0.000
146	123	38	17.631	sway_z	1.280	0.000
147	124	39	17.850	sway_z	2434.651	0.000
148	126	40	18.500	sway_z	2075.400	0.000
149	127	41	19.153	sway_z	1761.919	0.000
150	129	42	19.807	sway_z	1489.517	0.000
151	131	43	20.460	sway_z	1253.110	0.000
152	132	44	21.109	sway_z	1048.387	0.000
153	136	45	21.578	sway_z	0.304	0.000
154	137	46	21.752	sway_z	871.336	0.000
155	139	47	22.384	sway_z	719.097	0.000
156	140	48	23.002	sway_z	588.188	0.000
157	142	49	23.602	sway_z	476.095	0.000
158	143	50	24.178	sway_z	380.571	0.000
159	145	51	24.727	sway_z	299.550	0.000
160	146	52	25.242	sway_z	231.293	0.000
161	150	53	25.544	sway_z	0.065	0.000
162	151	54	25.718	sway_z	174.230	0.000
163	152	55	26.150	sway_z	127.094	0.000
164	154	56	26.532	sway_z	88.703	0.000
165	155	57	26.860	sway_z	58.101	0.000
166	156	58	27.128	sway_z	34.537	0.000
167	157	59	27.332	sway_z	17.386	0.000
168	158	60	27.471	sway_z	6.204	0.000
169	159	61	27.540	sway_z	0.686	0.000
170	164	62	29.532	sway_z	0.003	0.000
171	171	63	33.544	sway_z	0.004	0.000
172	177	64	37.585	sway_z	0.004	0.000
173	184	65	41.657	sway_z	0.003	0.000
174	192	66	45.765	sway_z	0.003	0.000
175	201	67	49.911	sway_z	0.003	0.000
176	204	68	54.099	sway_z	0.002	0.000
177	207	69	58.332	sway_z	0.002	0.000
178	210	70	62.614	sway_z	0.002	0.000
179	213	71	66.948	sway_z	0.001	0.000
180	216	72	71.337	sway_z	0.001	0.000

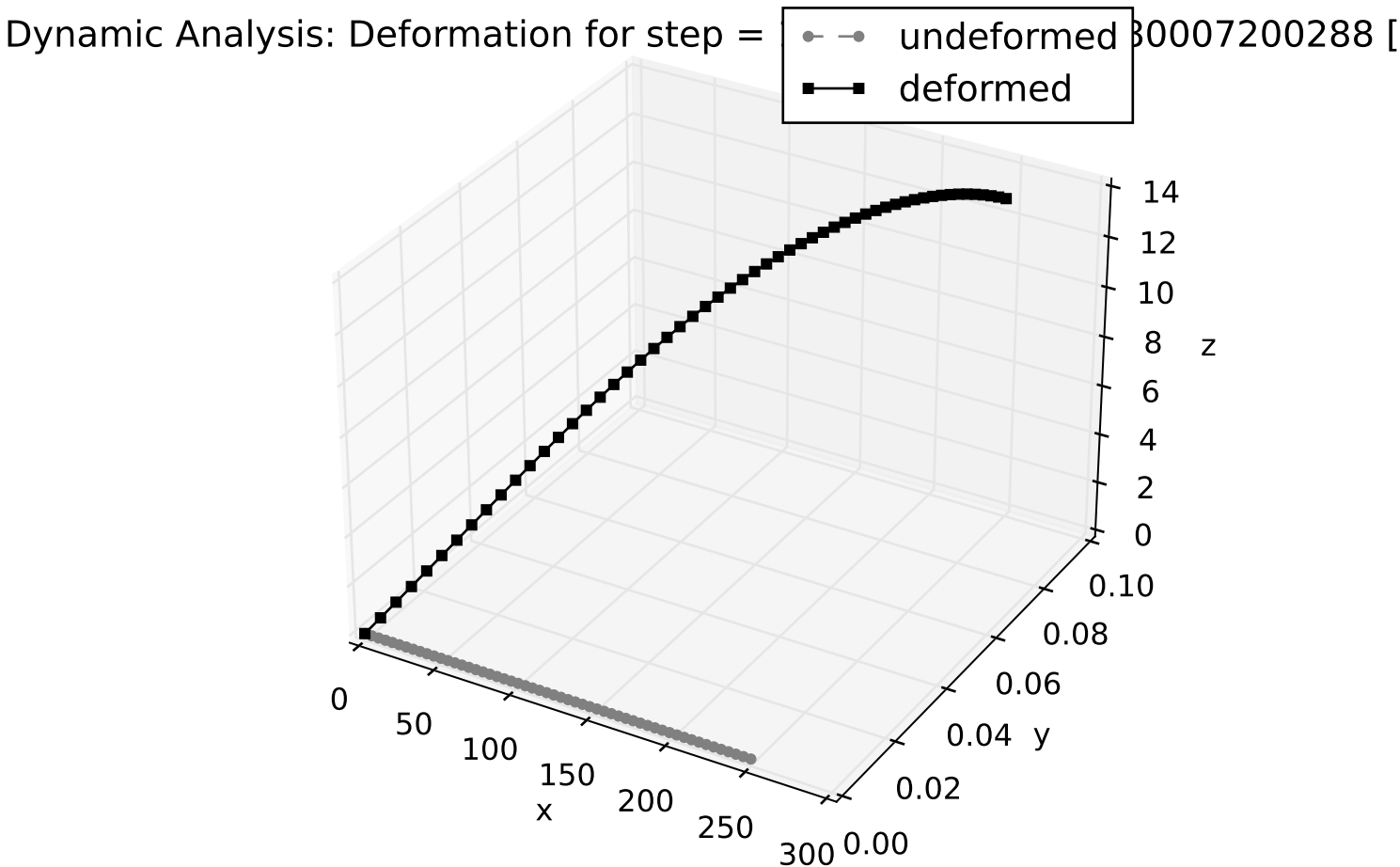

Eigenmode: 1 Frequency:
undeformed
deformed
0.00020
0.00015
0.00010
0.00005
0.00000
z
0.06
0.04
0.02
0.00
−0.02
−0.04
−0.06
y
0
50
100
150
200
250
x

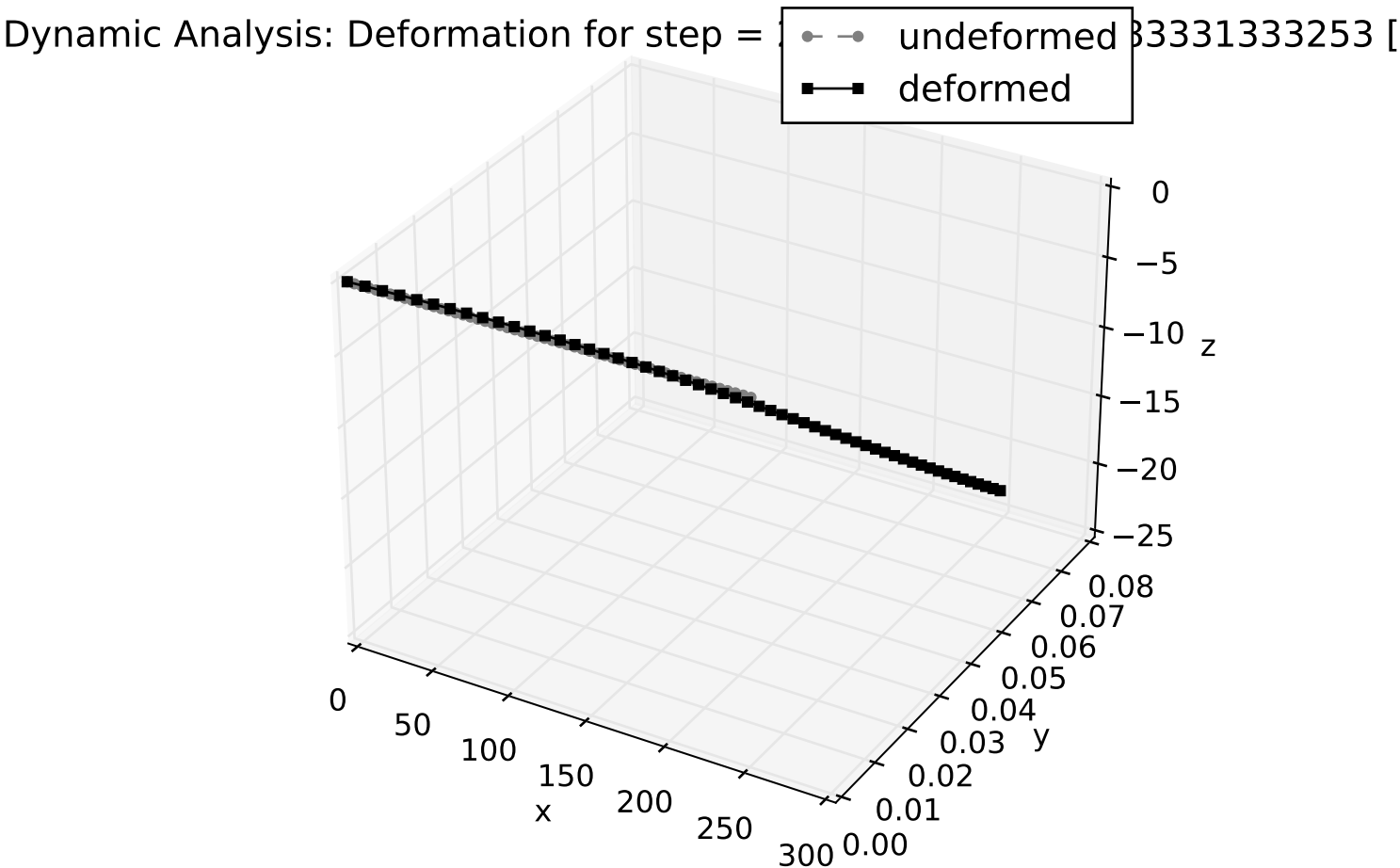

Eigenmode: 2 Frequency:
undeformed
deformed
0.00020
0.00015
0.00010
0.00005
z
0.00000
−0.00005
−0.00010
−0.00015
−0.00020
0.06
0.04
0.02
0.00
y
−0.02
−0.04
−0.06
0
50
100
150
200
250
x

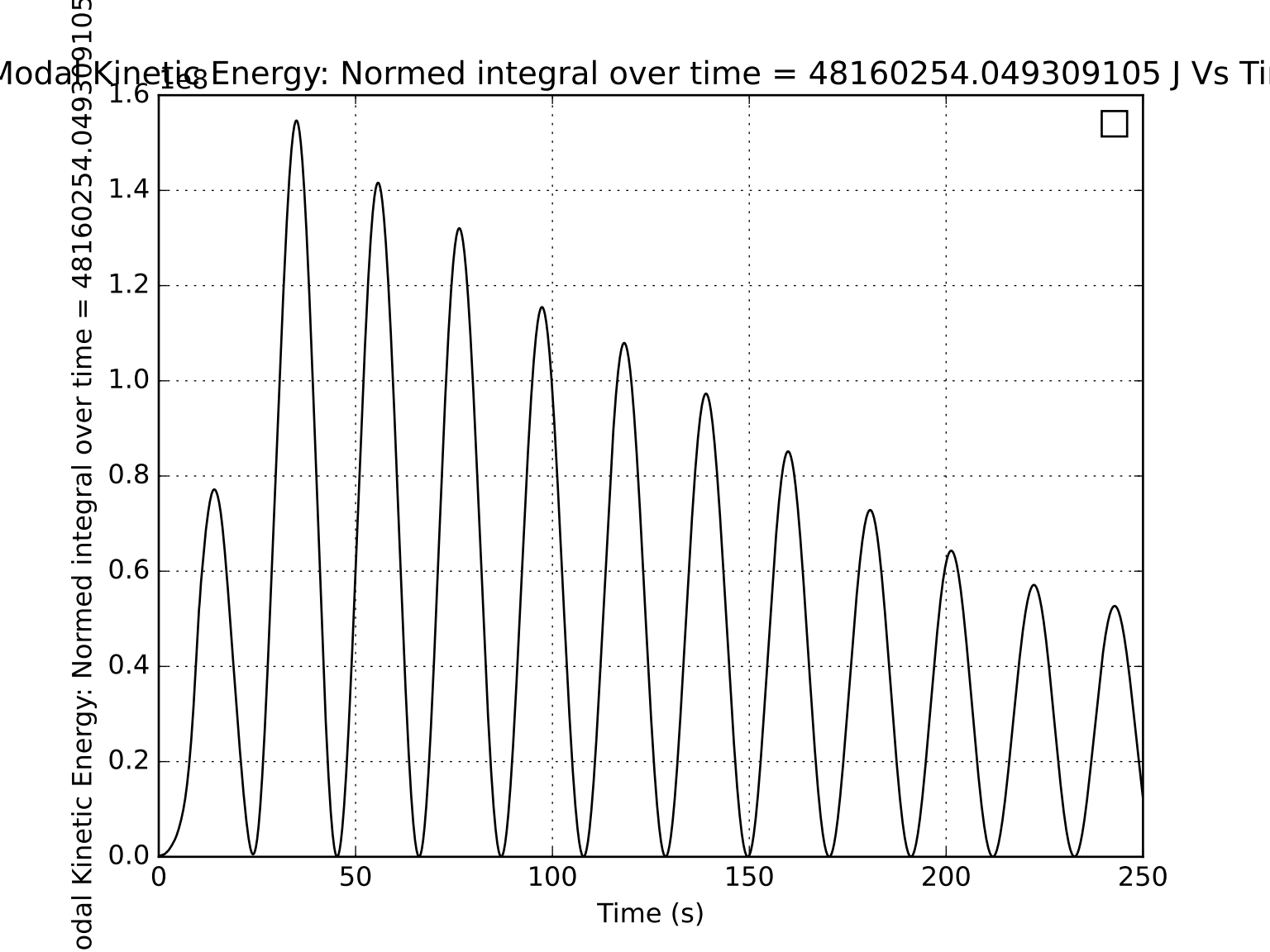

Eigenmode: 3 Frequency
undeformed
deformed
0.00020
0.00015
0.00010
0.00005
z
0.00000
−0.00005
−0.00010
−0.00015
−0.00020
0.06
0.04
0.02
0.00
y
−0.02
−0.04
−0.06
0
50
100
150
200
250
x

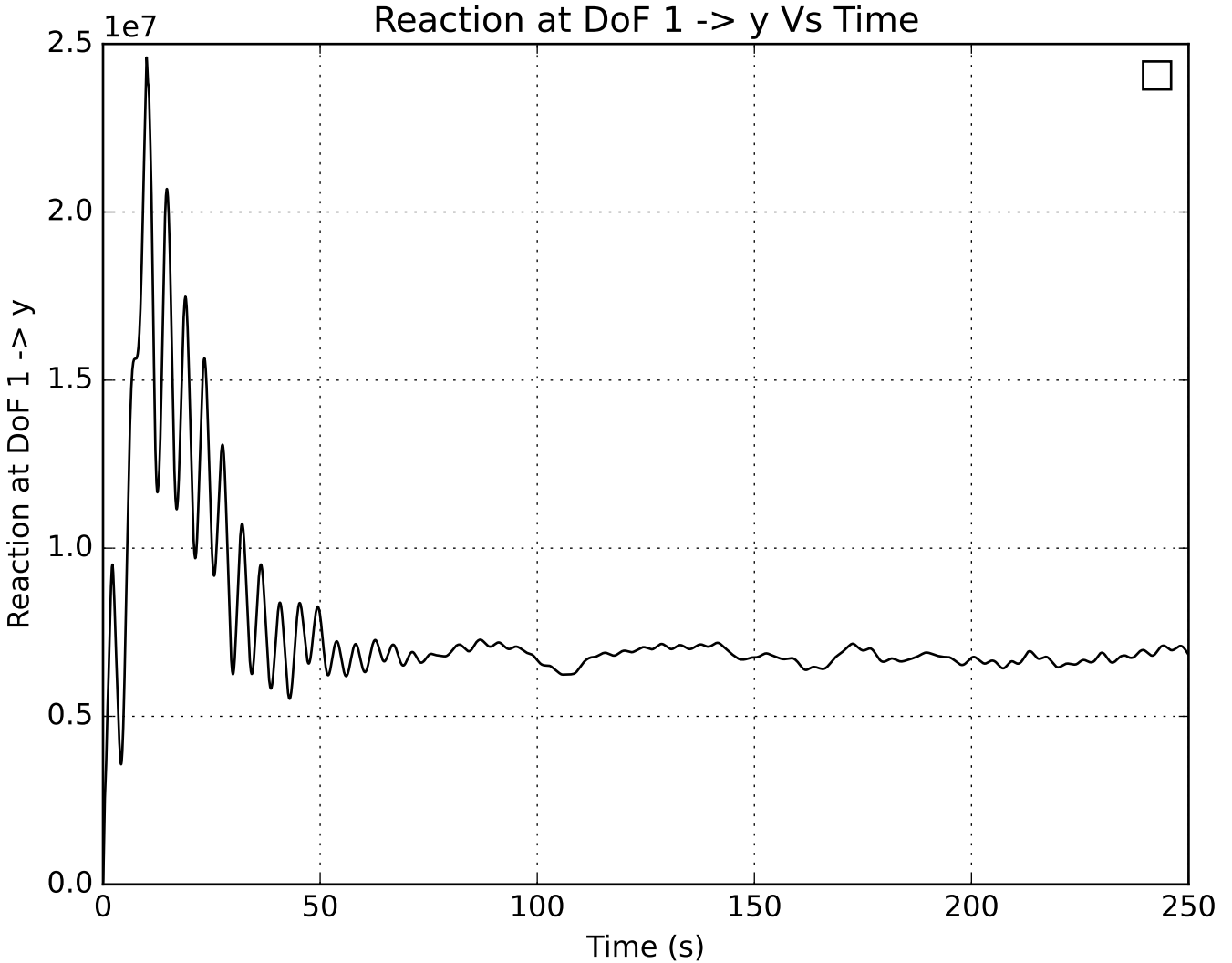

Dyanimc Analyis: Deforma
undeformed
deformed
0
−5
−10
−15
−20
−25
z
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0.00
y
0
50
100
150
200
250
300
x

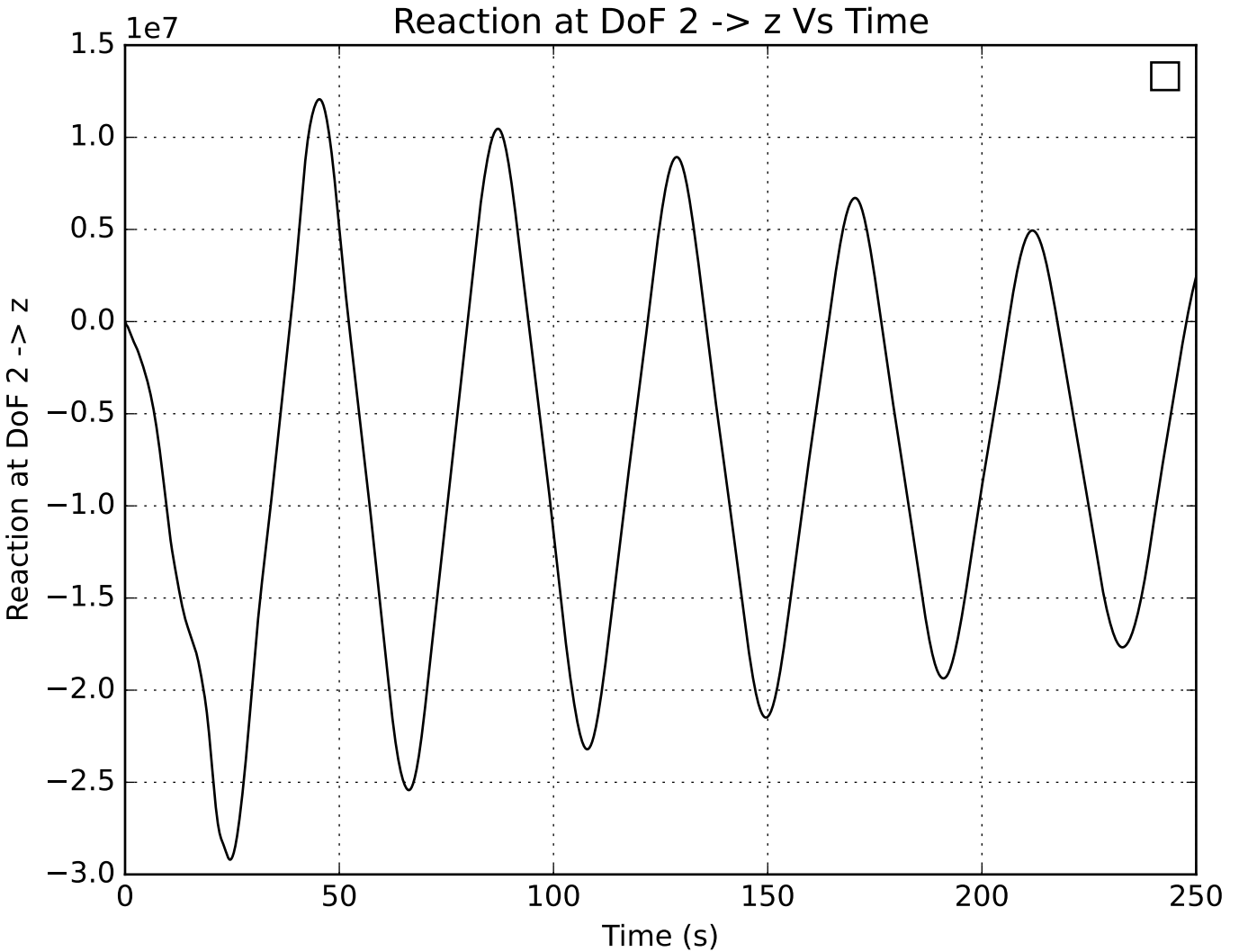

Dyanimc Analyis: Deforma
undeformed
deformed
0.0
−0.5
−1.0
−1.5
−2.0
−2.5
z
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0.00
y
0
50
100
150
200
250
300
x

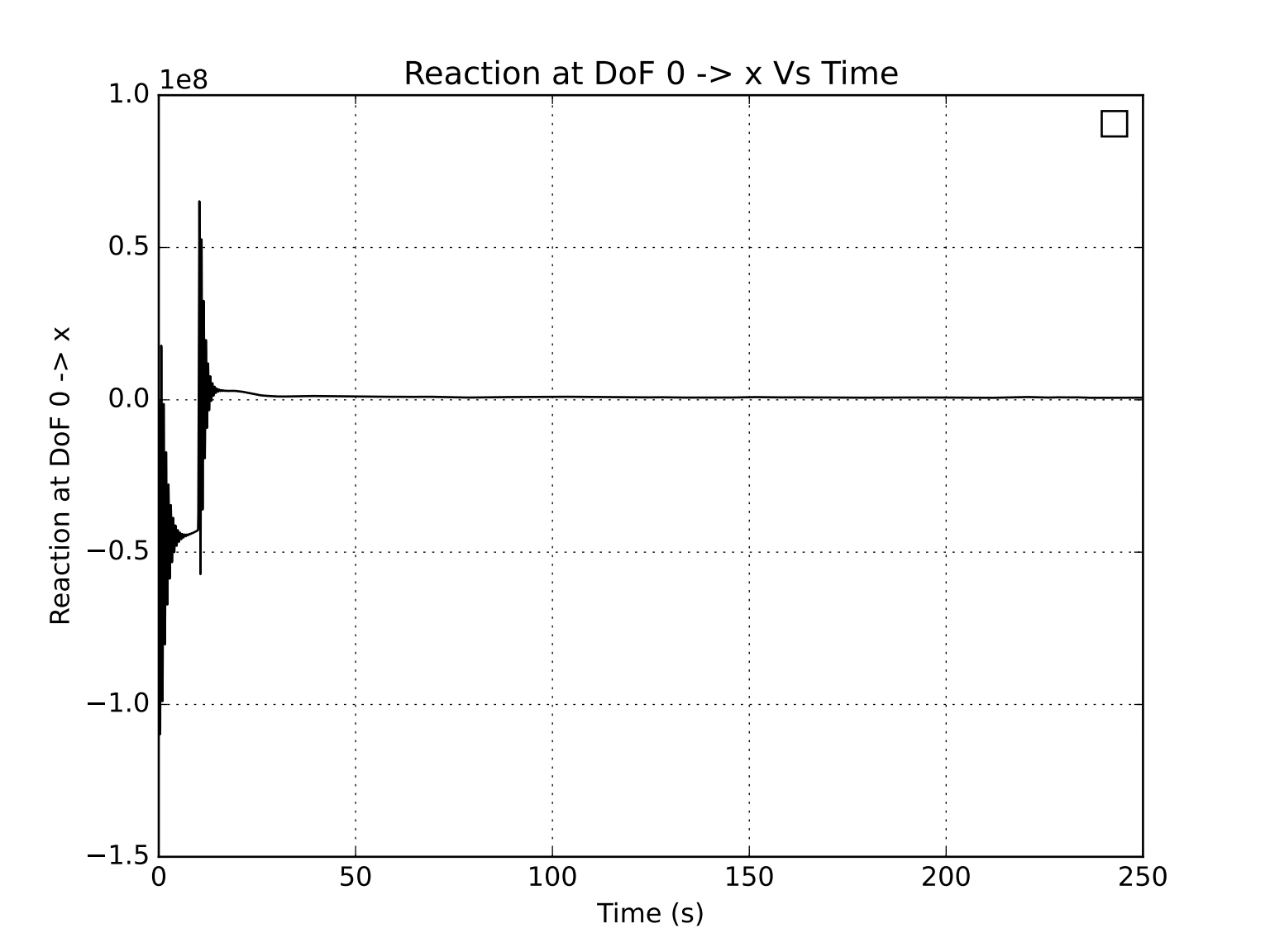

Dynamic Analysis: Deformation for step =
undeformed
deformed
x
y
z
0
50
100
150
200
250
300
0.00
0.02
0.04
0.06
0.08
0.10
0
2
4
6
8
10
12
14

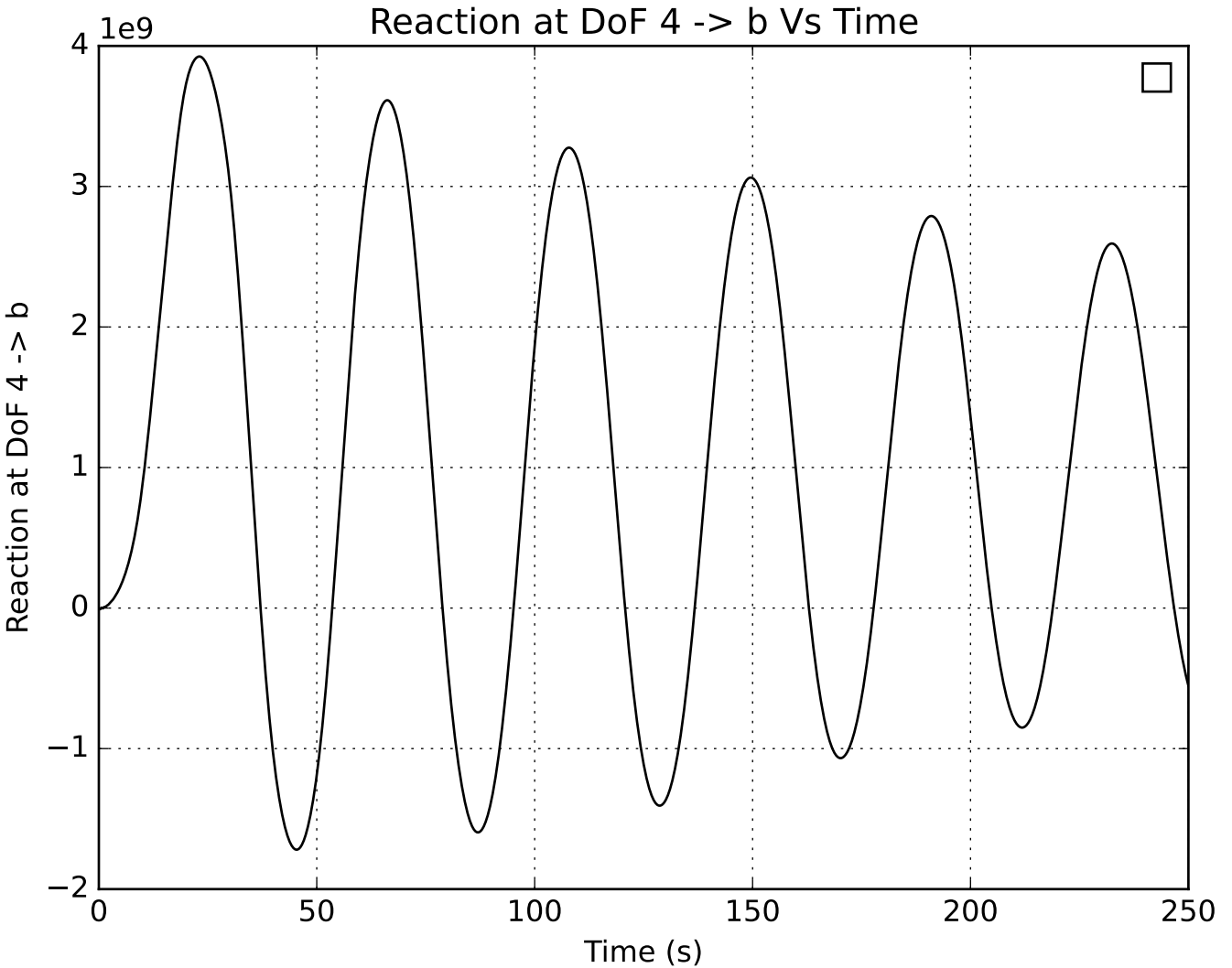

Dynamic Analysis: Deformation for step =
3333333253 [s
undeformed
deformed
0
−5
−10
−15
−20
−25
z
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0.00
y
0
50
100
150
200
250
300
x

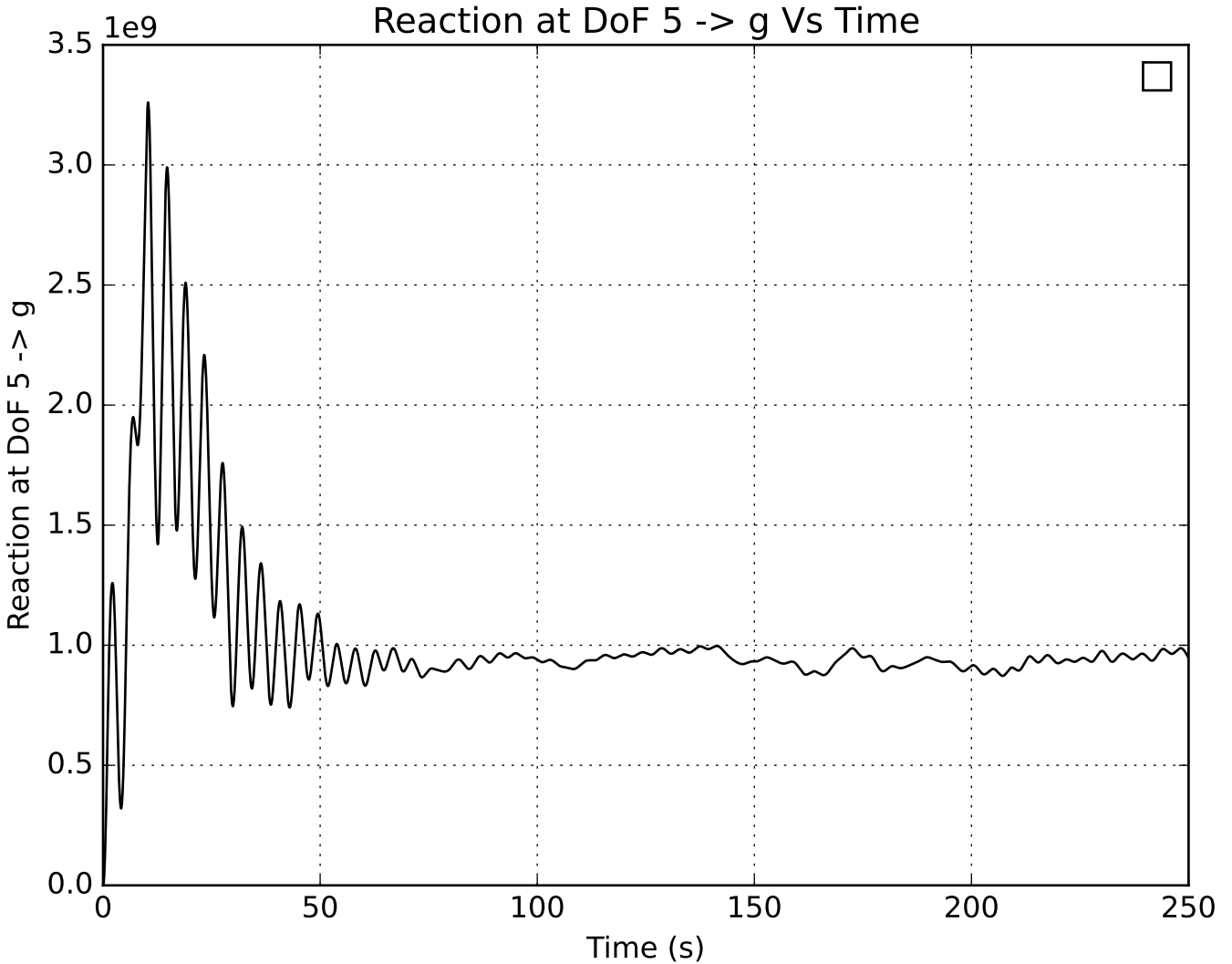

Modal Kinetic Energy: Normed integral over time = 48160254.049309105 J Vs Time
1e8
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
0
50
100
150
200
250
Time (s)
odal Kinetic Energy: Normed integral over time = 48160254.049309105

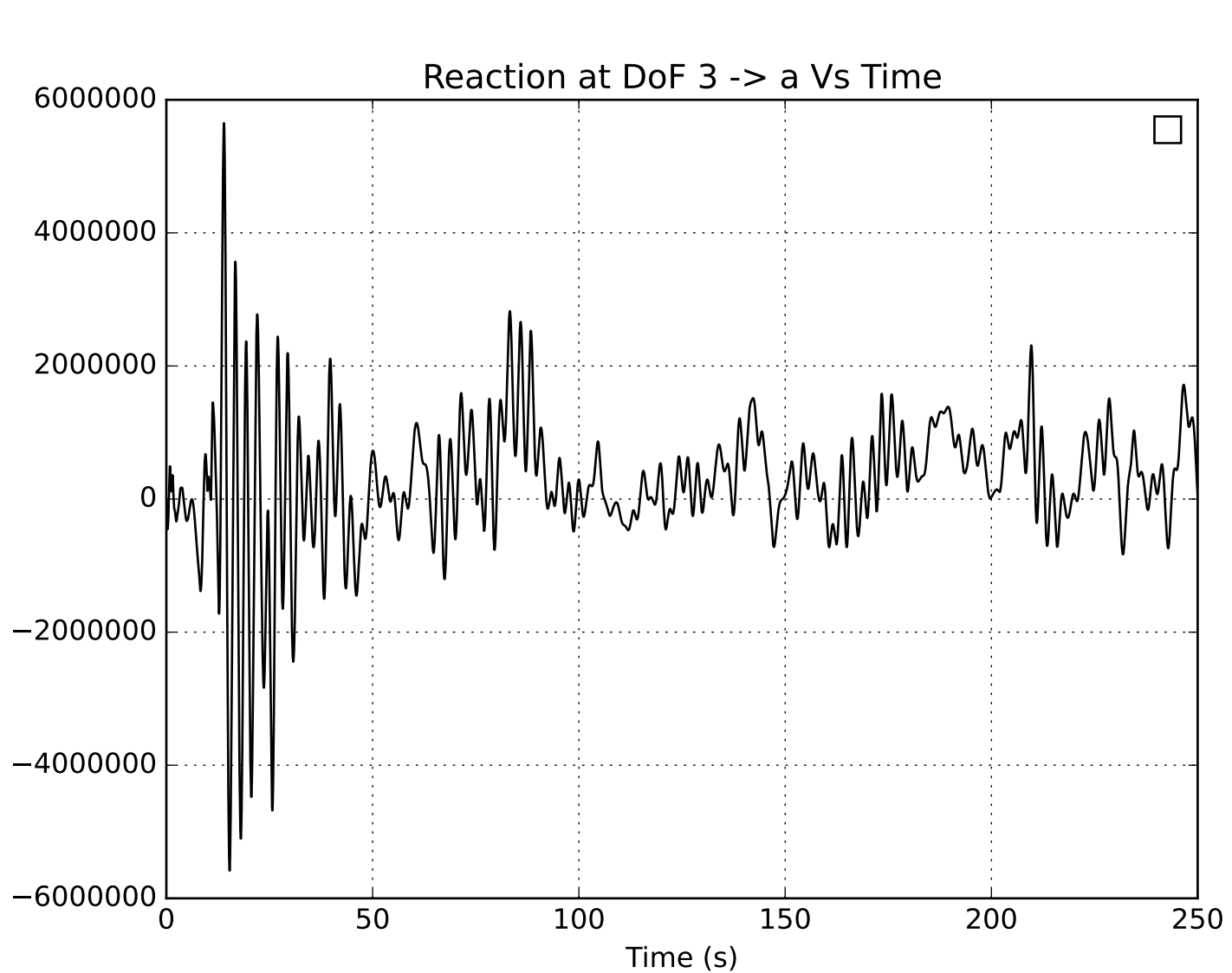

Reaction at DoF 1 -> y Vs Time
1e7
2.5
2.0
1.5
1.0
0.5
0.0
Reaction at DoF 1 -> y
0
50
100
150
200
250
Time (s)

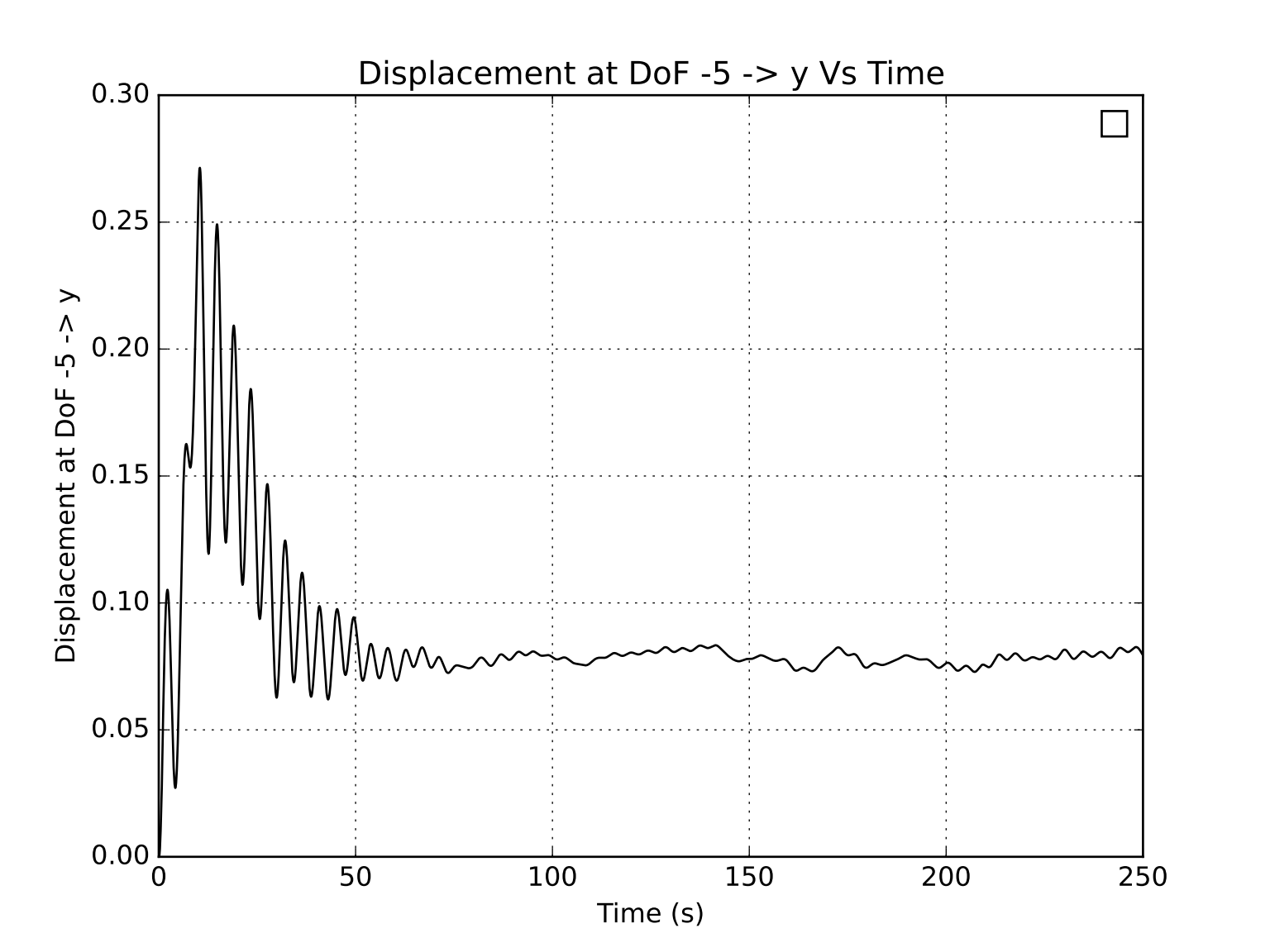

Reaction at DoF 2 -> z Vs Time
1e7
1.5
1.0
0.5
0.0
−0.5
−1.0
−1.5
−2.0
−2.5
−3.0
Reaction at DoF 2 -> z
0
50
100
150
200
250
Time (s)

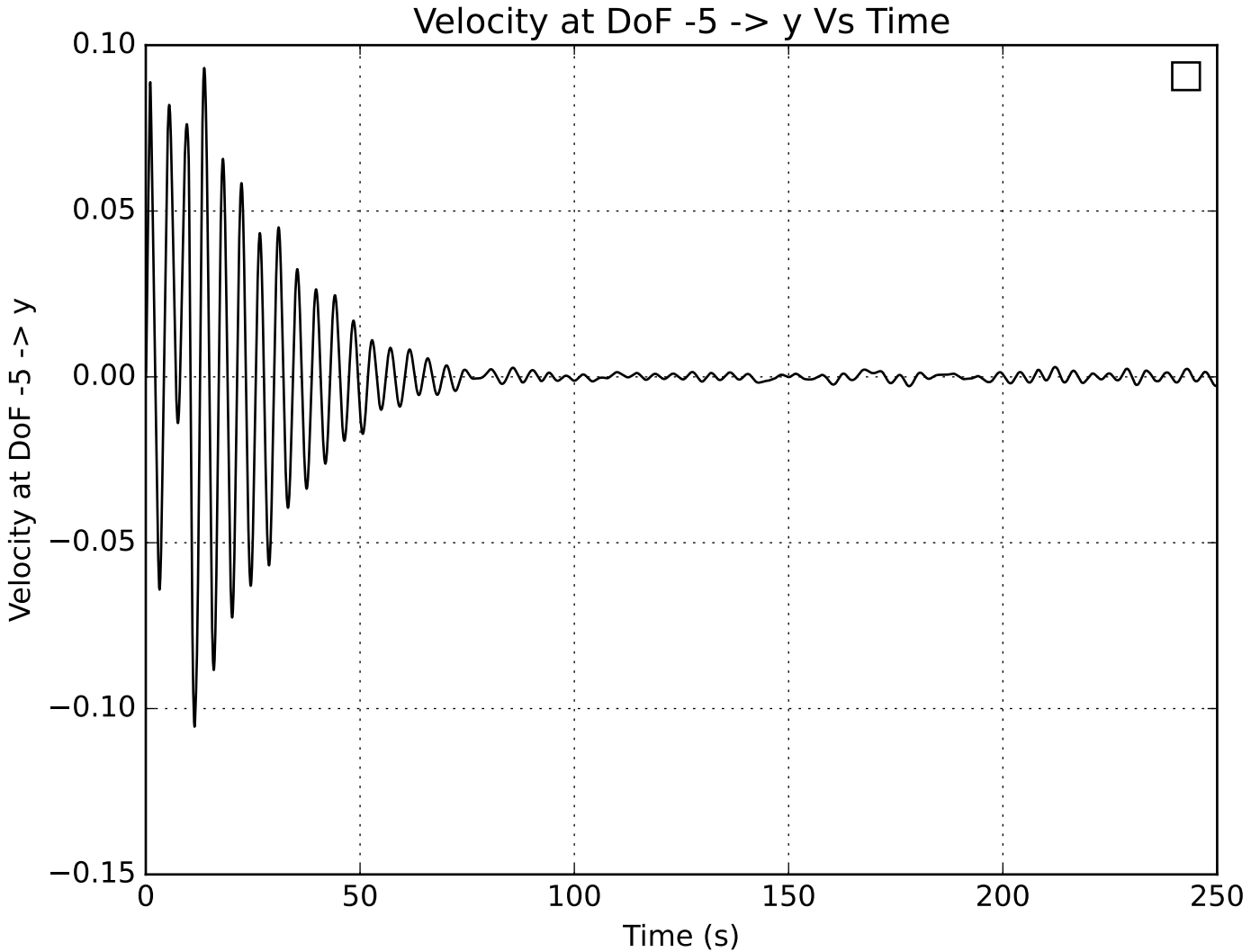

Reaction at DoF 0 -> x Vs Time
1e8
1.0
0.5
0.0
−0.5
−1.0
−1.5
Reaction at DoF 0 -> x
0
50
100
150
200
250
Time (s)

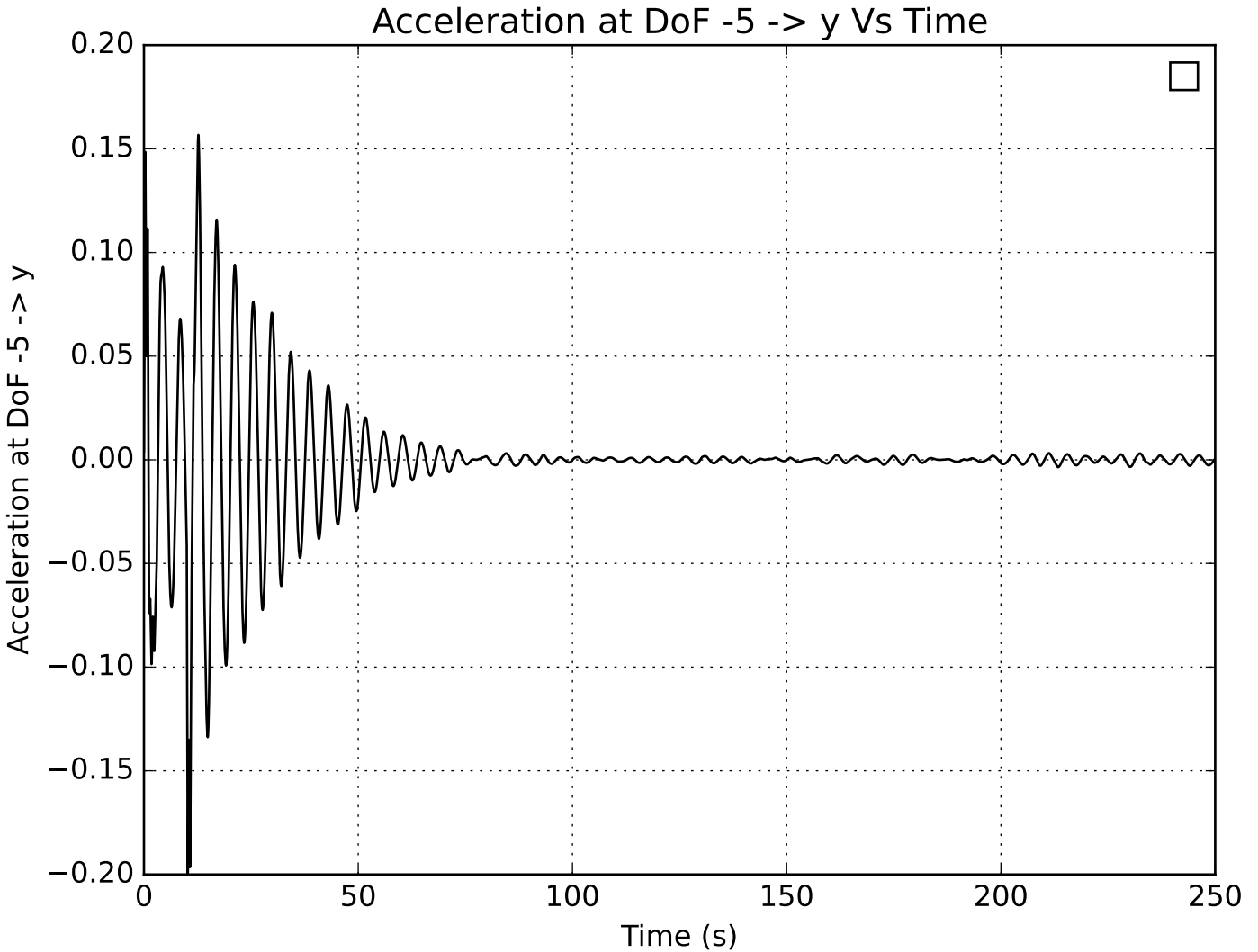

Reaction at DoF 4 -> b Vs Time
1e9
4
3
2
1
0
−1
−2
Reaction at DoF 4 -> b
0
50
100
150
200
250
Time (s)

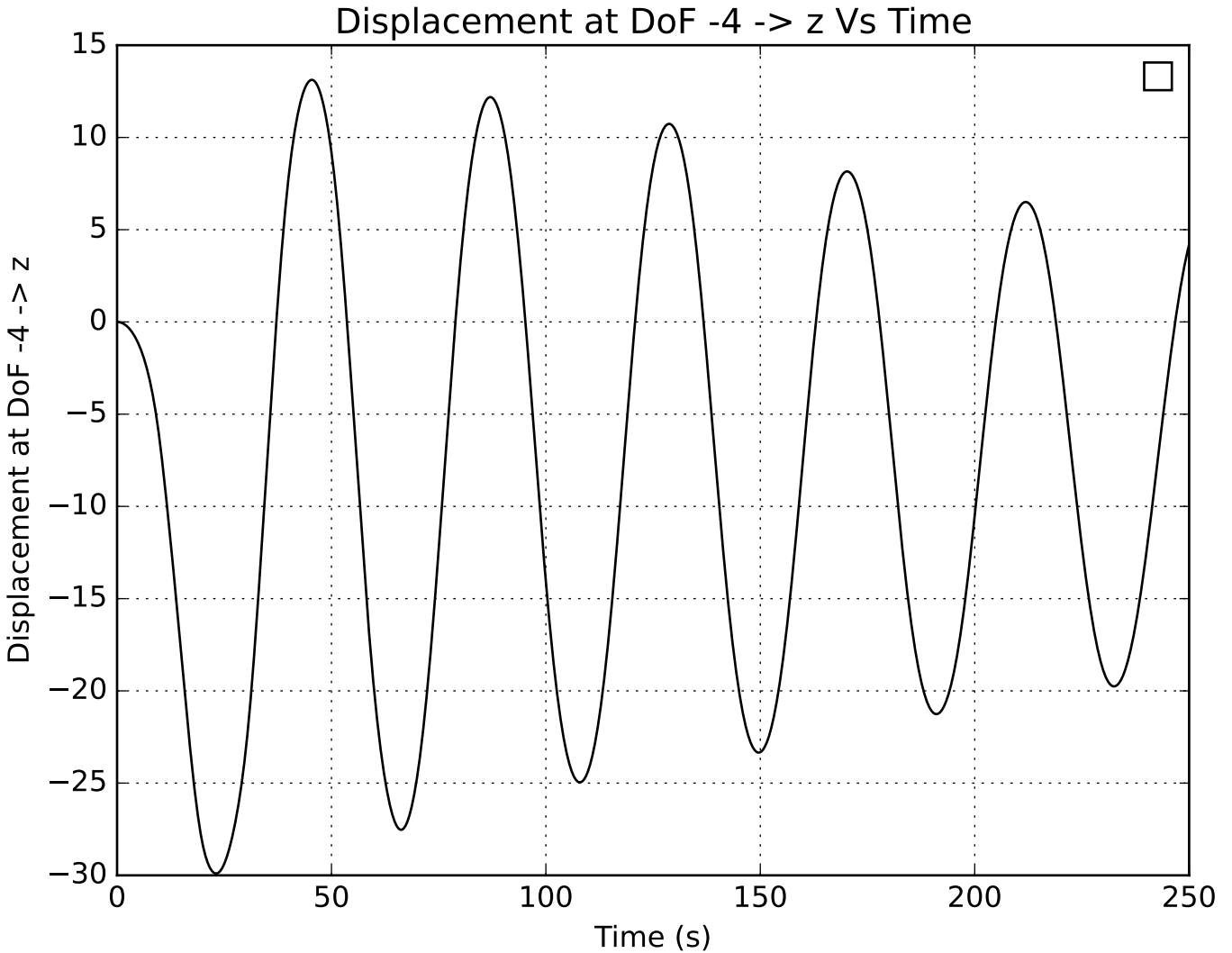

Reaction at DoF 5 -> g Vs Time
1e9
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
Reaction at DoF 5 -> g
0
50
100
150
200
250
Time (s)

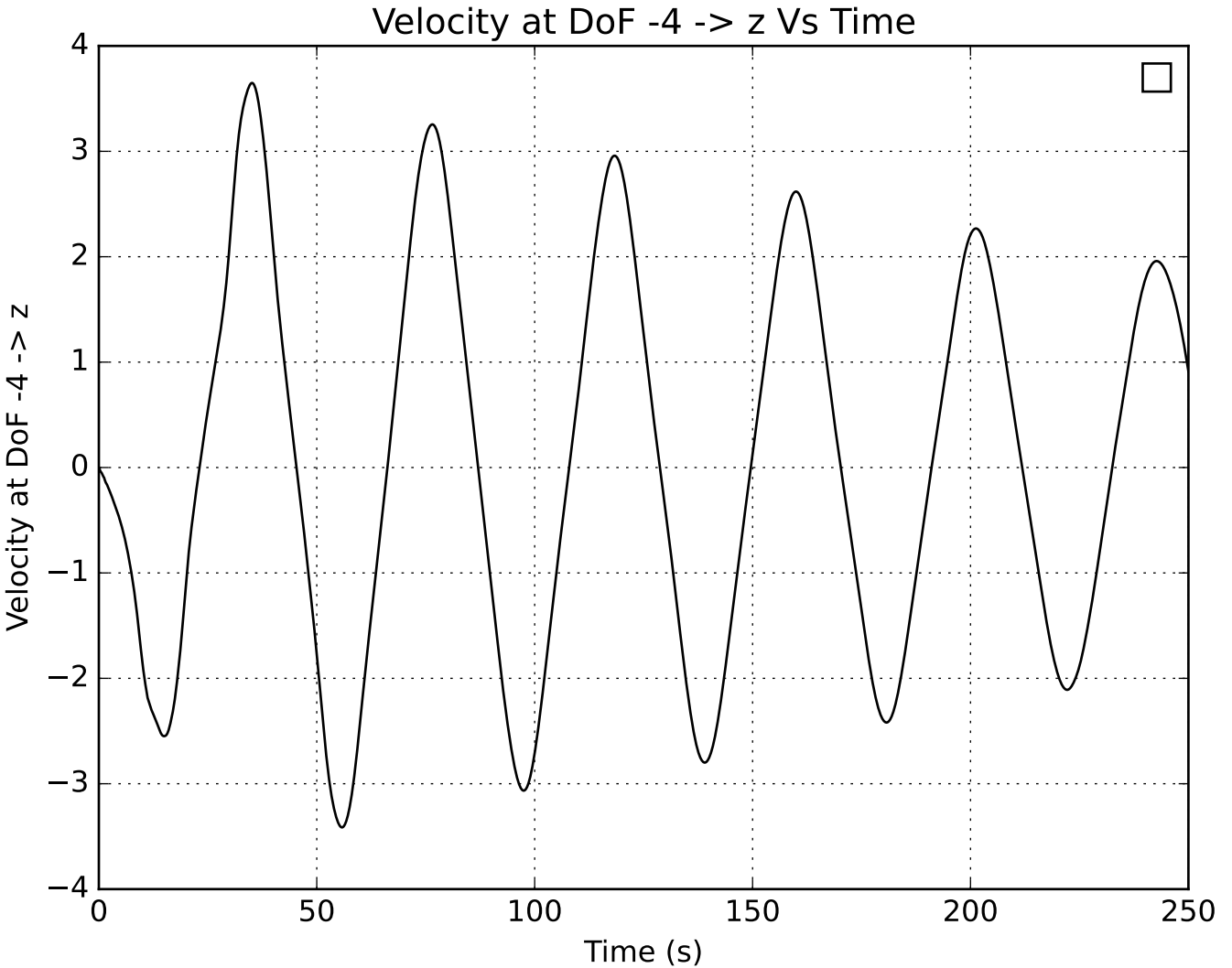

Reaction at DoF 3 -> a Vs Time
6000000
4000000
2000000
0
−2000000
−4000000
−6000000
0
50
100
150
200
250
Time (s)

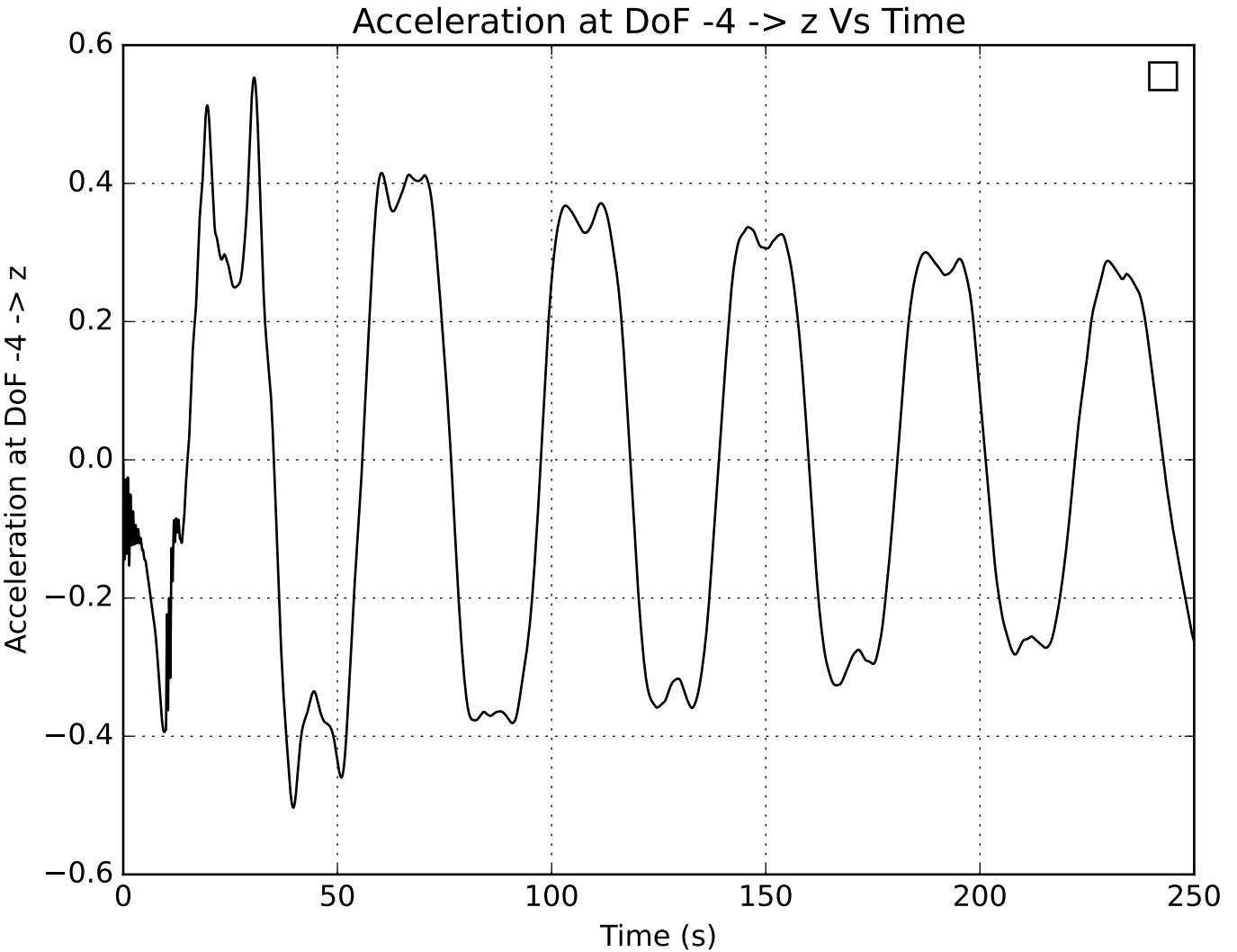

Displacement at DoF -5 -> y Vs Time
Displacement at DoF -5 -> y
Time (s)
0.00
0.05
0.10
0.15
0.20
0.25
0.30
0
50
100
150
200
250

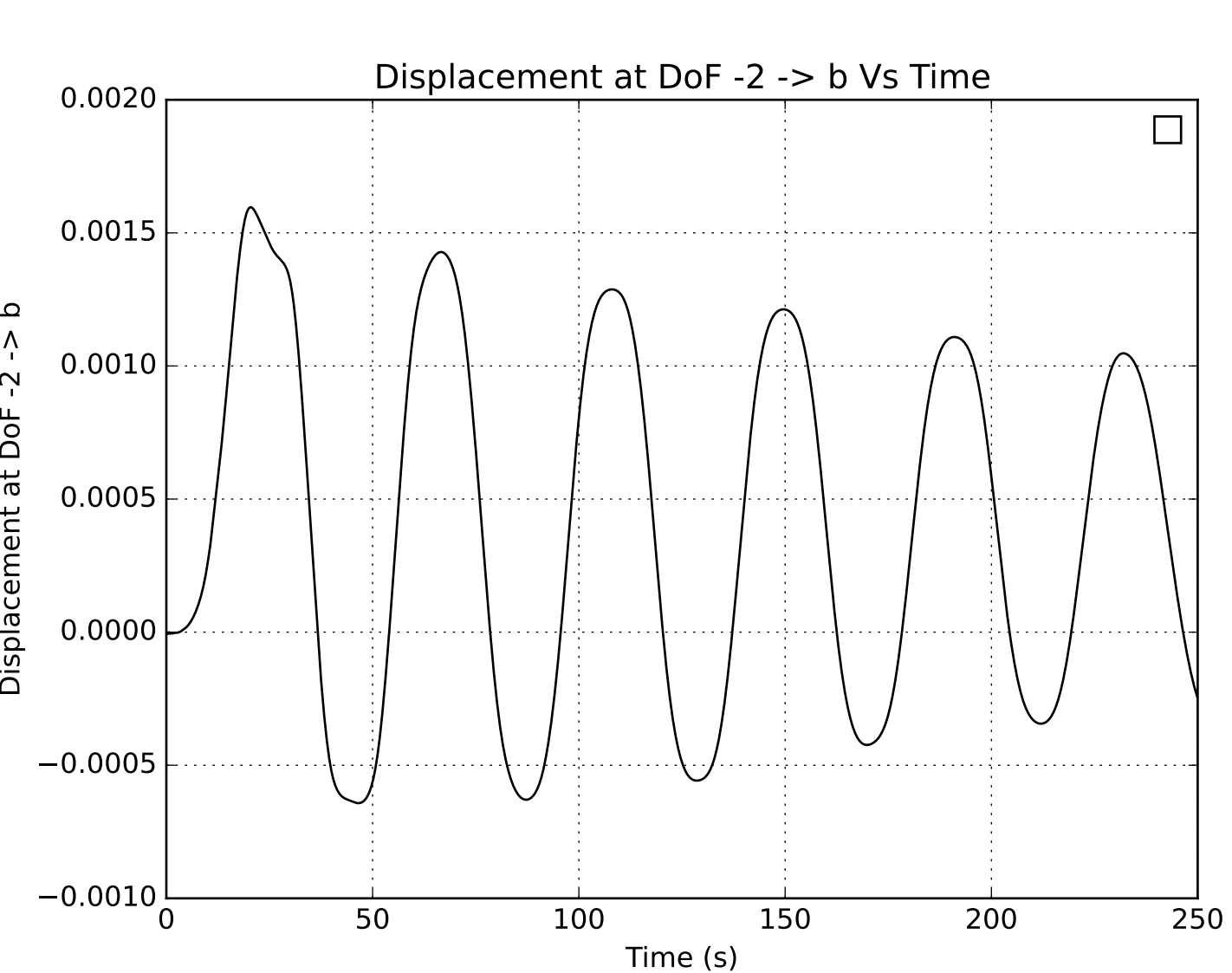

Velocity at DoF -5 -> y Vs Time
0.10
0.05
0.00
−0.05
−0.10
−0.15
Velocity at DoF -5 -> y
0
50
100
150
200
250
Time (s)

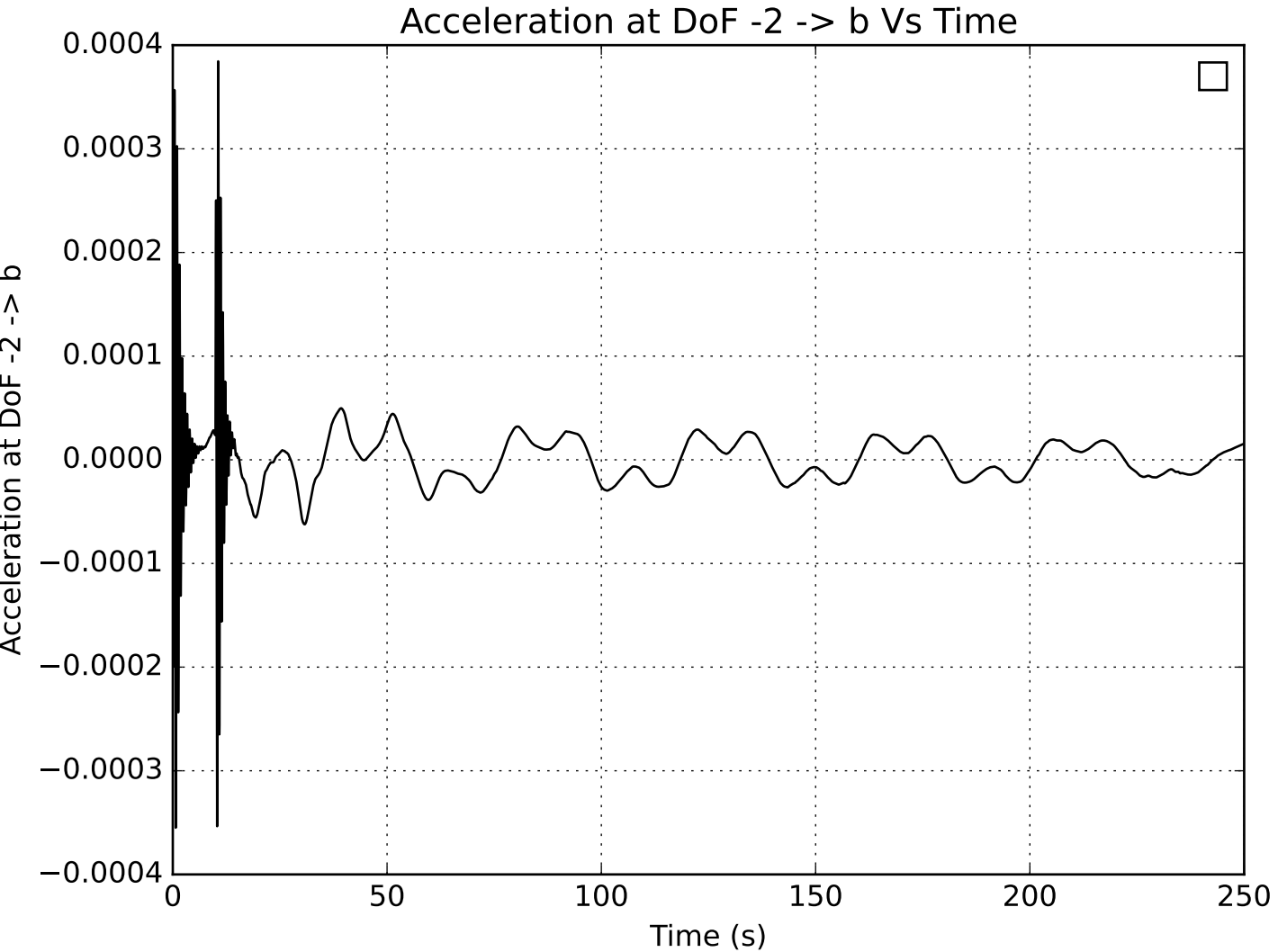

Acceleration at DoF -5 -> y Vs Time
Acceleration at DoF -5 -> y
Time (s)
0.20
0.15
0.10
0.05
0.00
−0.05
−0.10
−0.15
−0.20
0
50
100
150
200
250

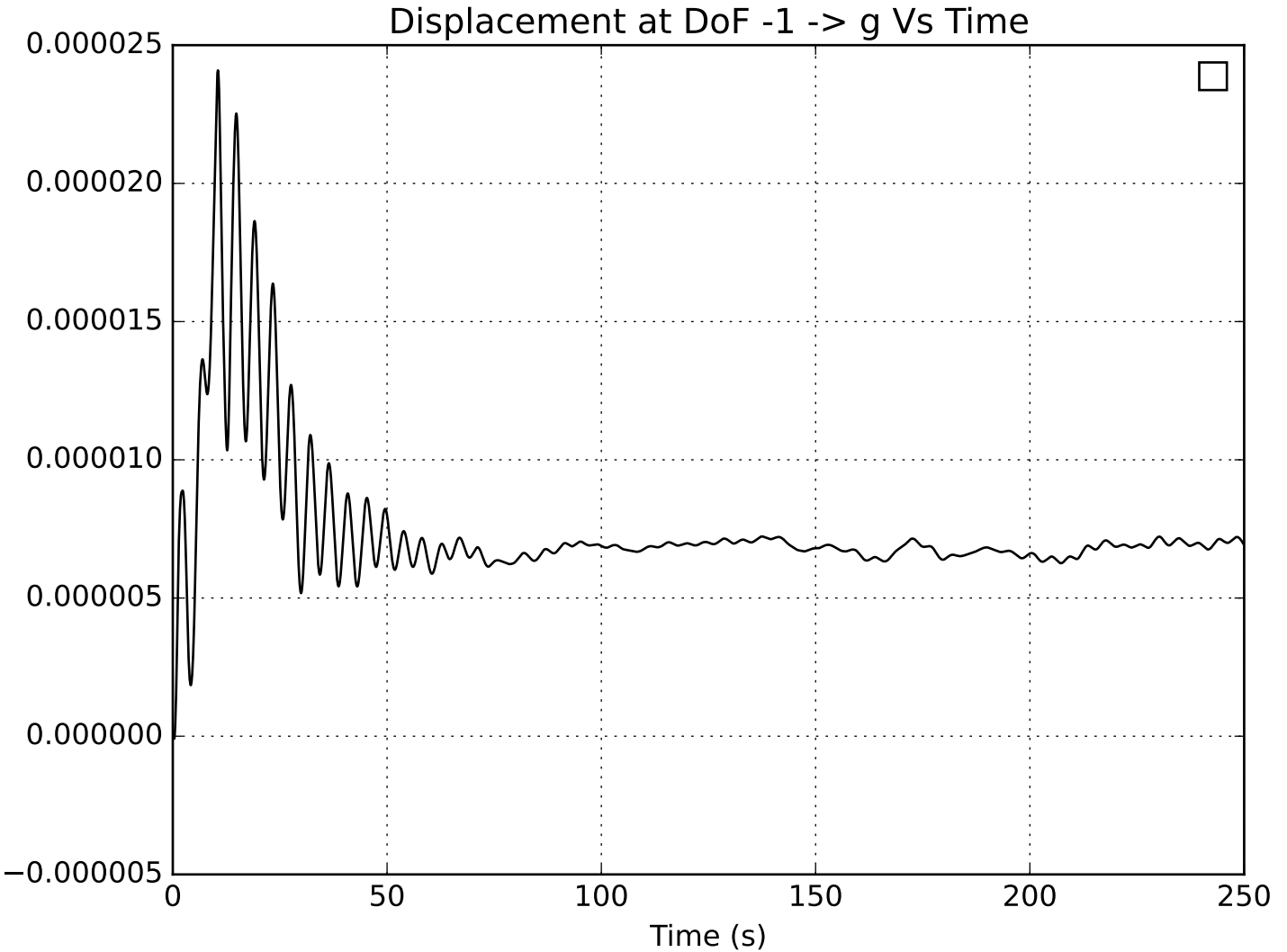

Displacement at DoF -4 -> z Vs Time
Displacement at DoF -4 -> z
Time (s)
15
10
5
0
−5
−10
−15
−20
−25
−30
0
50
100
150
200
250

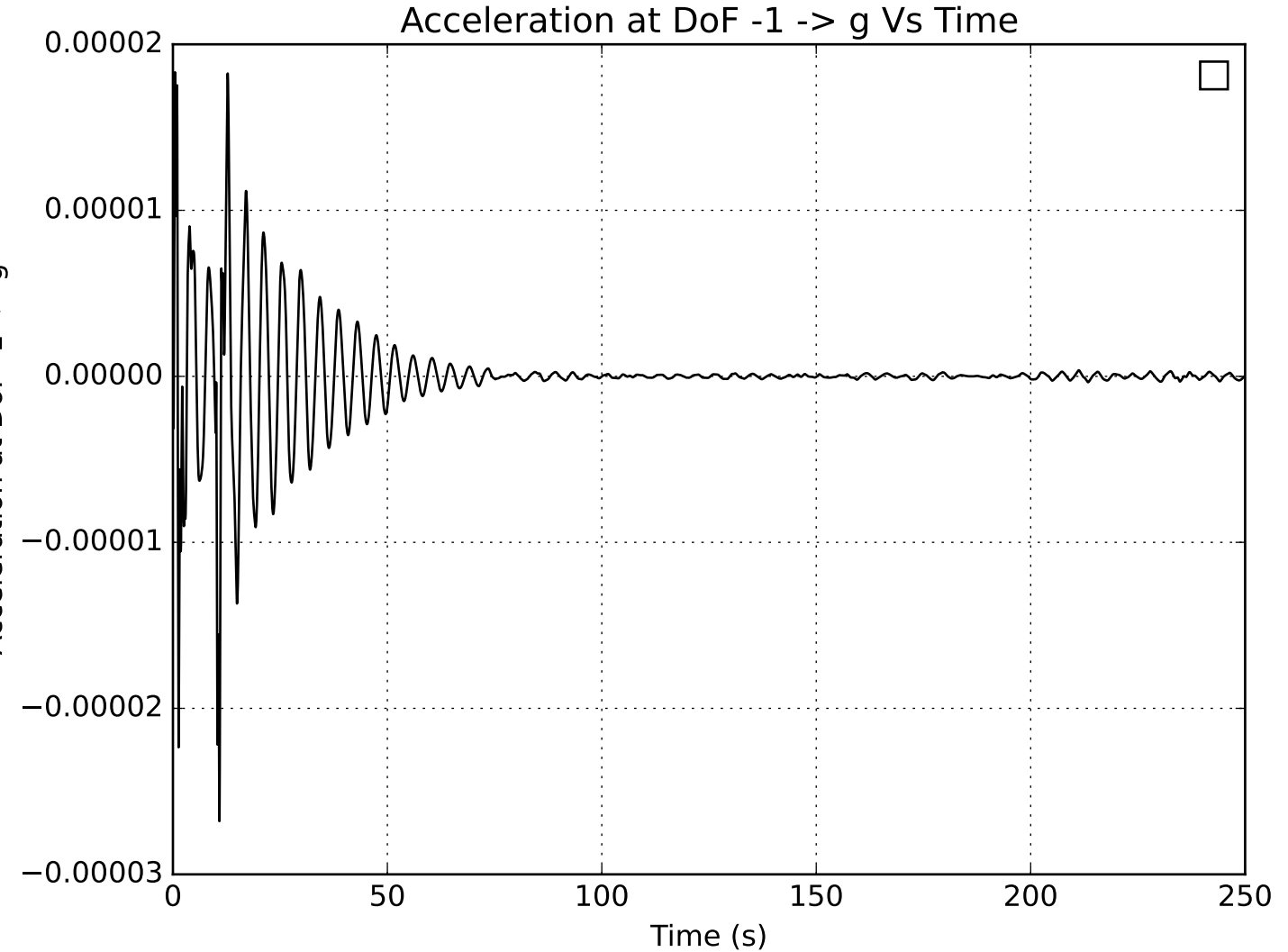

Velocity at DoF -4 -> z Vs Time
Velocity at DoF -4 -> z
Time (s)
4
3
2
1
0
−1
−2
−3
−4
0
50
100
150
200
250


Acceleration at DoF -4 -> z Vs Time
Acceleration at DoF -4 -> z
Time (s)
0.6
0.4
0.2
0.0
−0.2
−0.4
−0.6
0
50
100
150
200
250


Displacement at DoF -2 -> b Vs Time
0.0020
0.0015
0.0010
0.0005
0.0000
−0.0005
−0.0010
Displacement at DoF -2 -> b
0
50
100
150
200
250
Time (s)


Acceleration at DoF -2 -> b Vs Time
0.0004
0.0003
0.0002
0.0001
0.0000
−0.0001
−0.0002
−0.0003
−0.0004
Acceleration at DoF -2 -> b
0
50
100
150
200
250
Time (s)


Displacement at DoF -1 -> g Vs Time
0.000025
0.000020
0.000015
0.000010
0.000005
0.000000
−0.000005
0
50
100
150
200
250
Time (s)


Acceleration at DoF -1 -> g Vs Time
0.00002
0.00001
0.00000
−0.00001
−0.00002
−0.00003
0
50
100
150
200
250
Time (s)