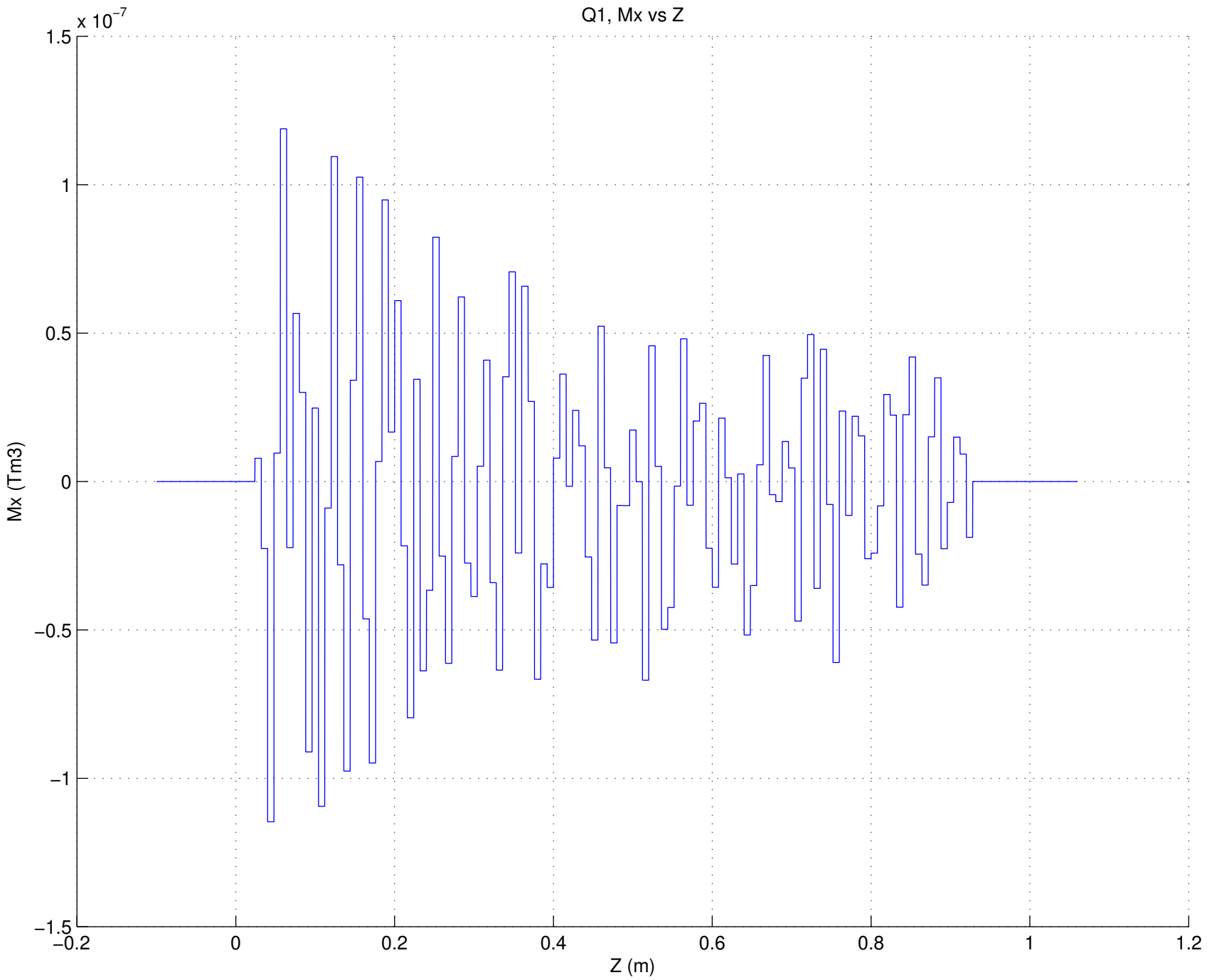
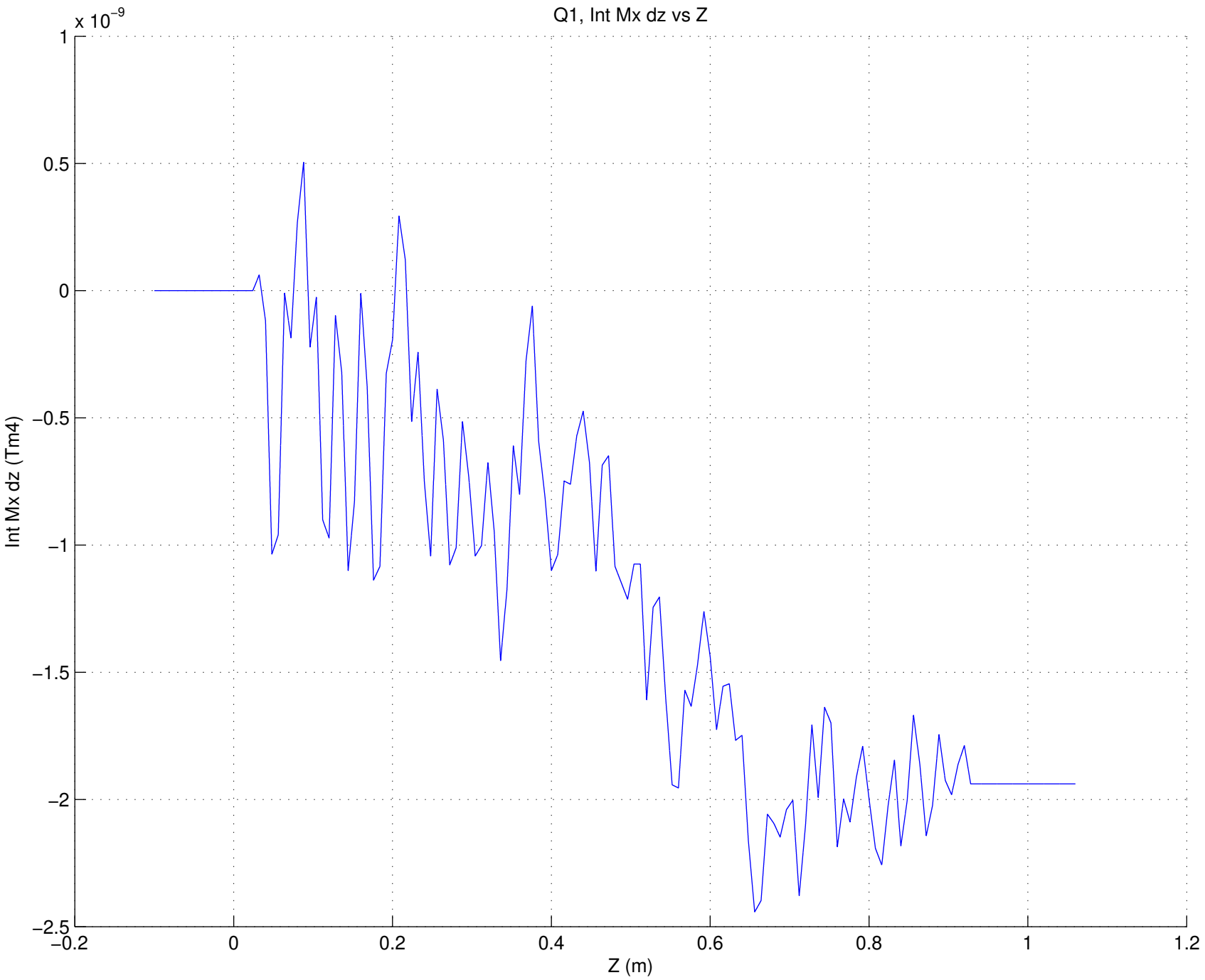
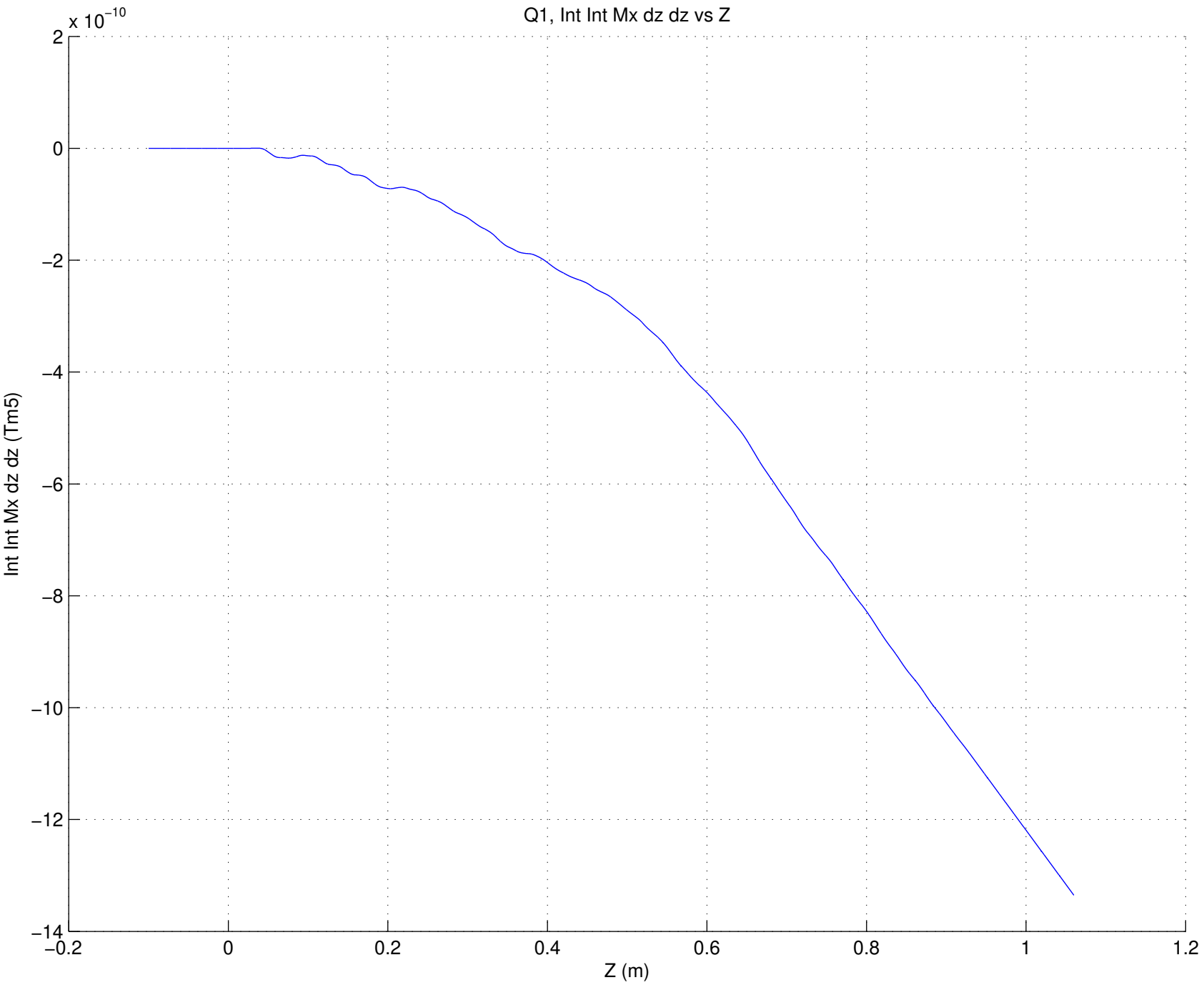
SLAC Magnetic Measurements

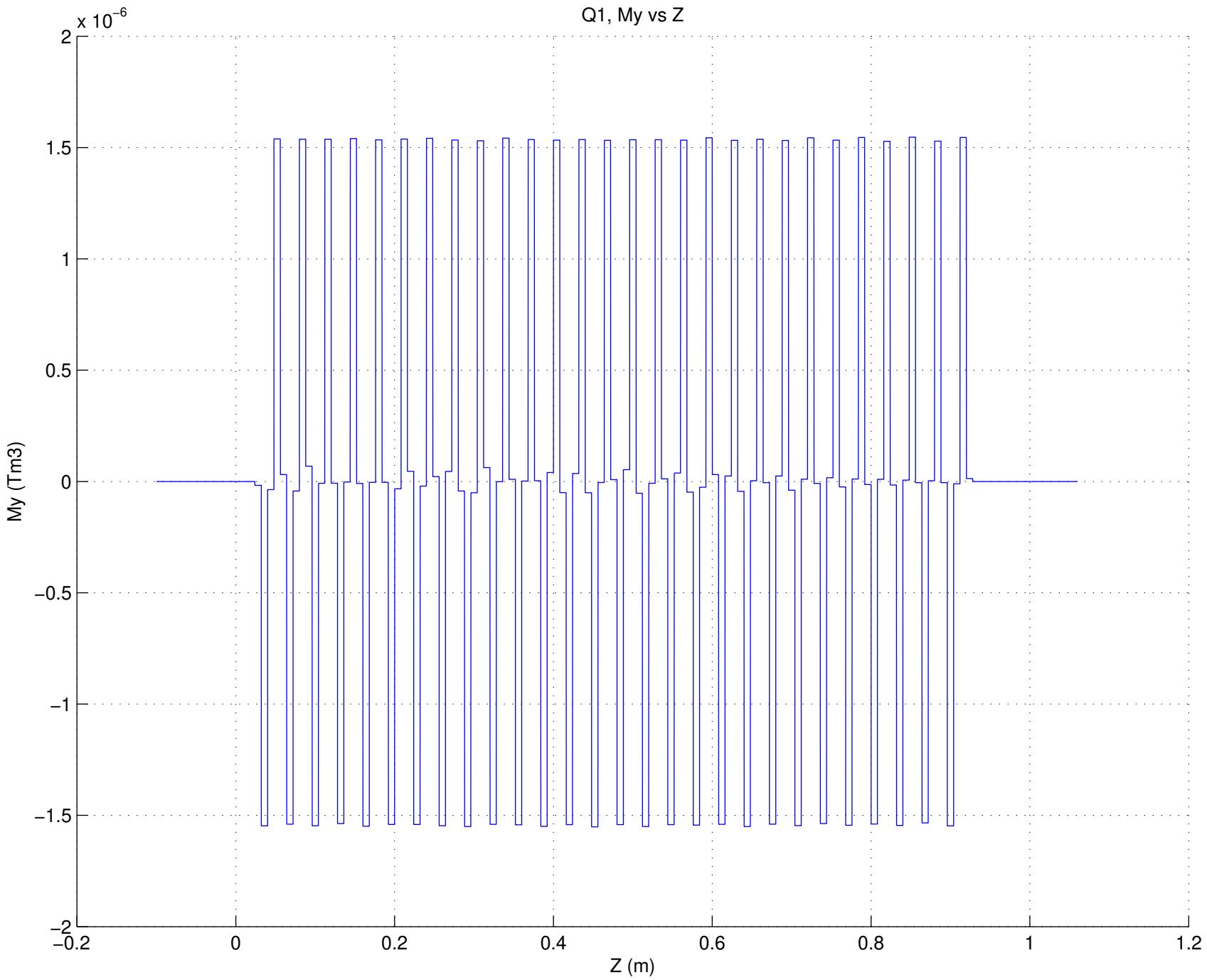
Magnet Block Placement Analysis
−−−−−−−−−−−−−−−−−−−−−−−−−−−−

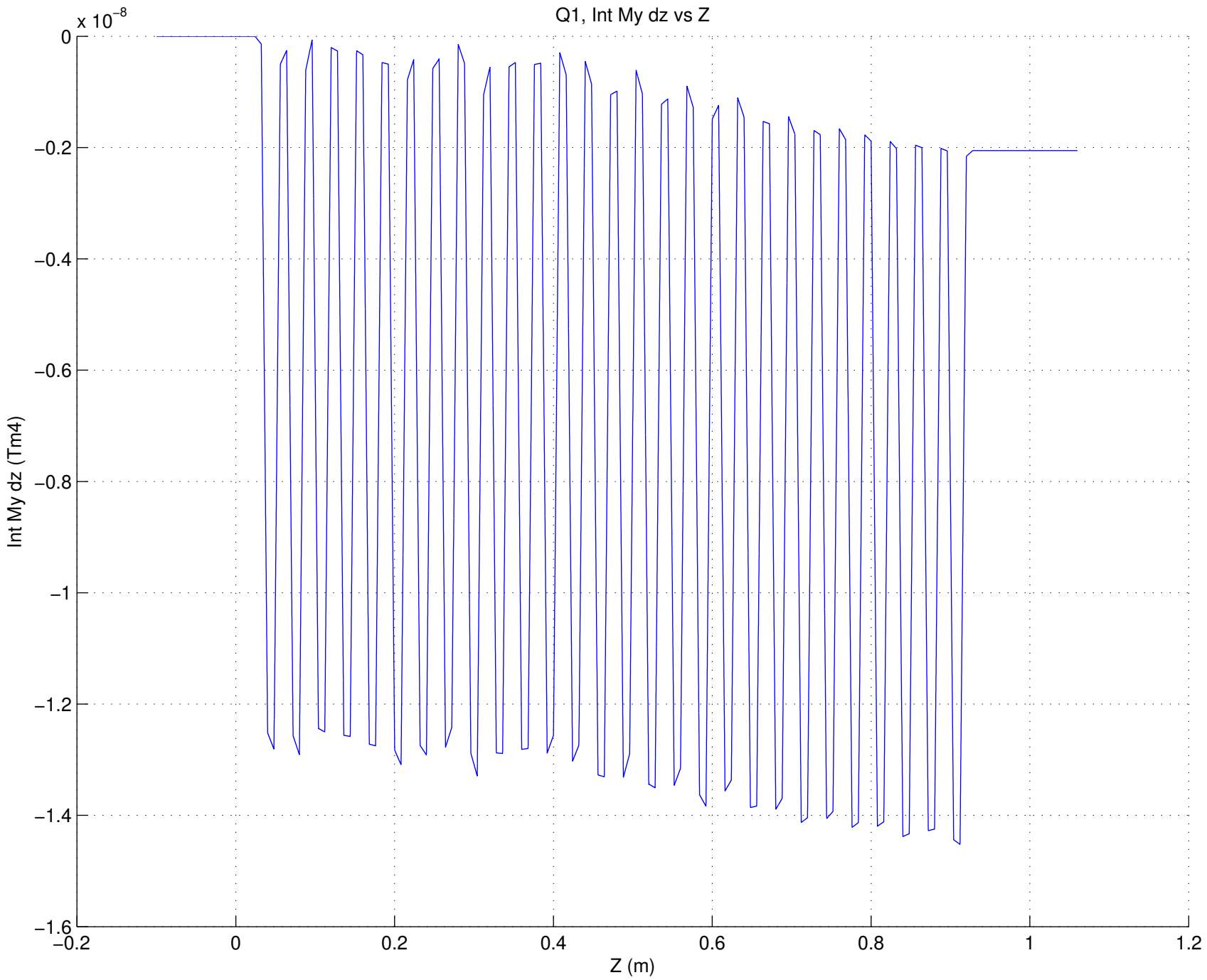
Parameters:
OUTPUT−FILE−DIR =c:\magdata\block sort results

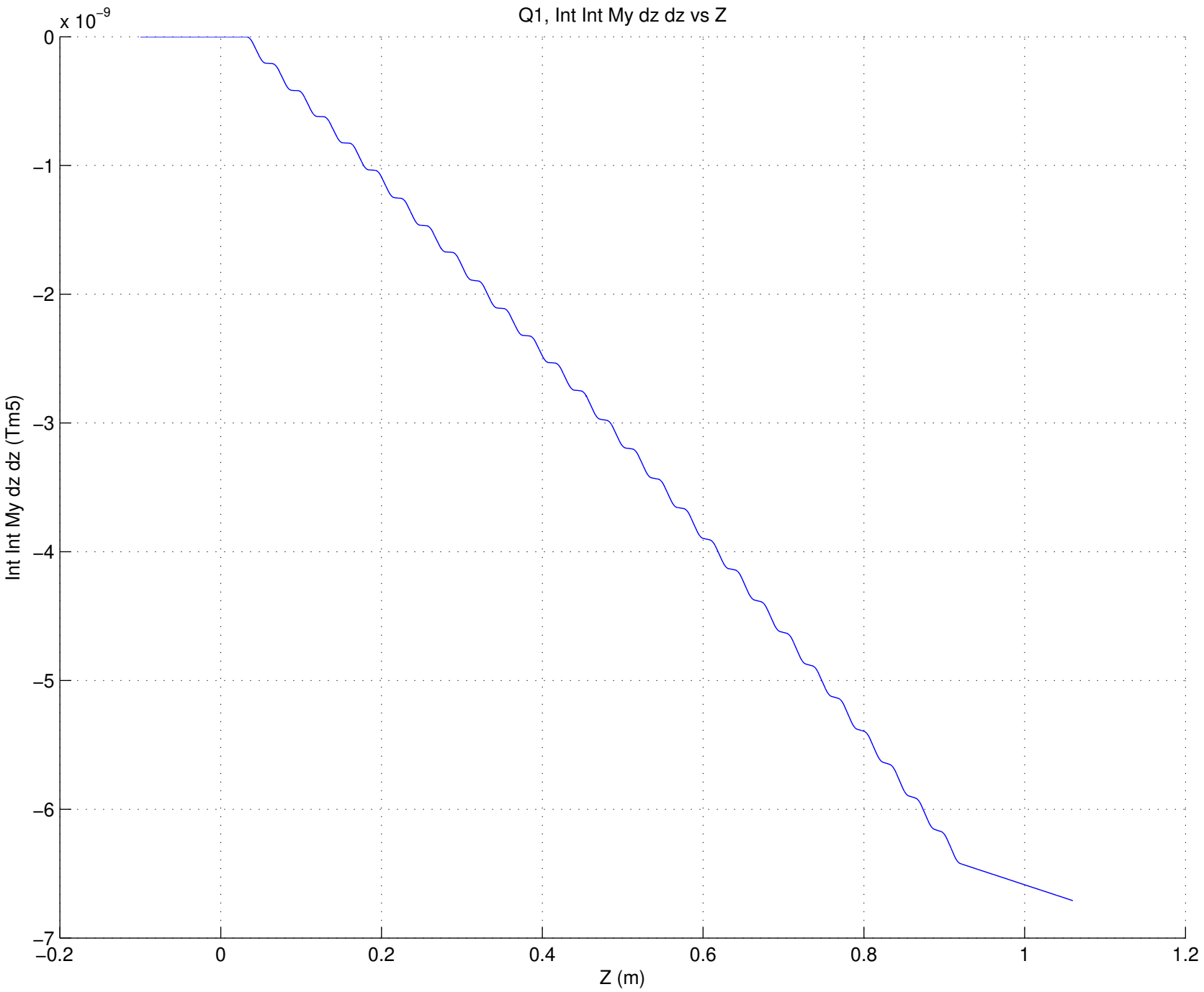

Q1, Mx vs Z
x 10^-7
1.5
1
0.5
0
−0.5
−1
−1.5
Mx (Tm3)
−0.2
0
0.2
0.4
0.6
0.8
1
1.2
Z (m)

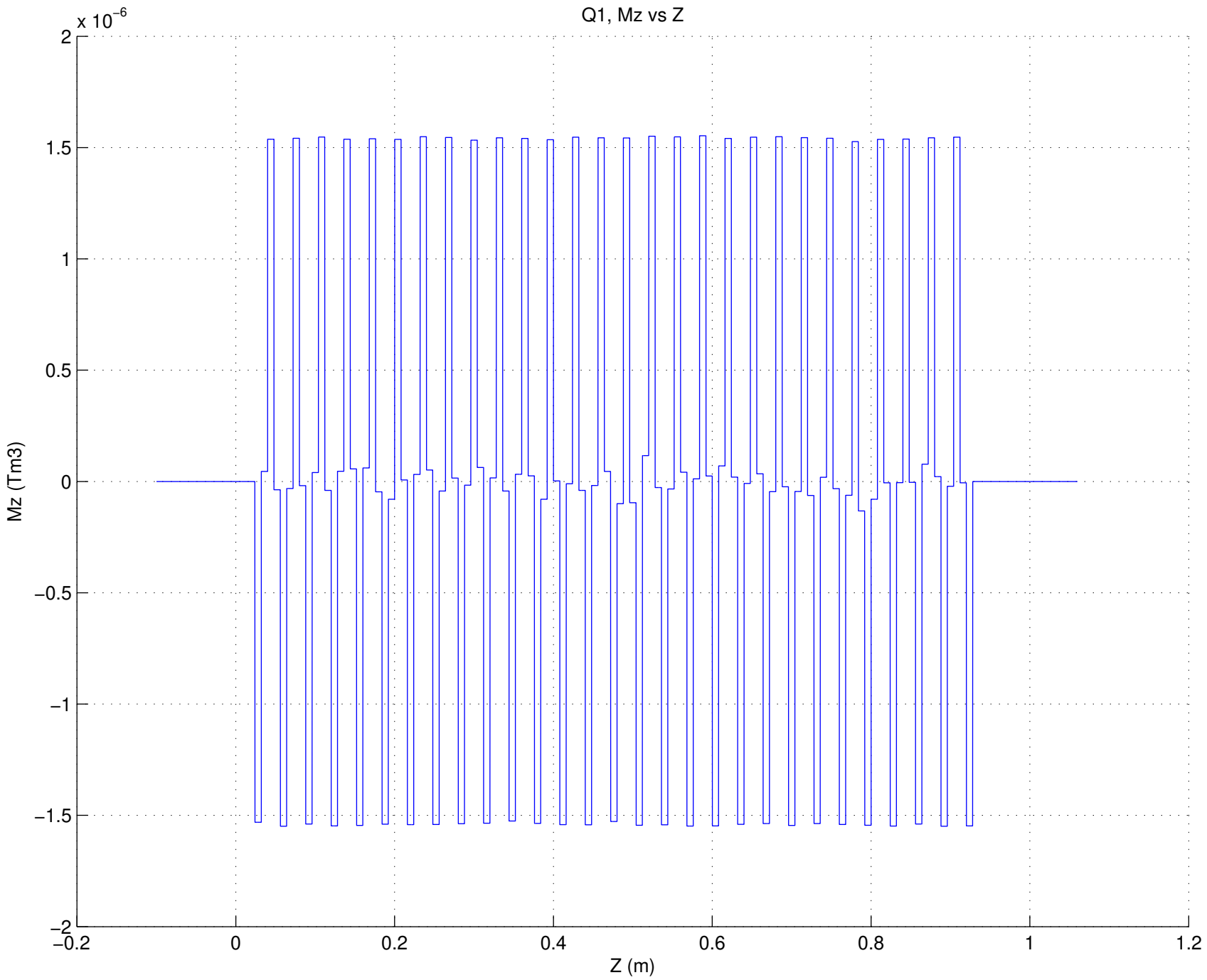

Q1, Int Mx dz vs Z
x 10^-9
1
0.5
0
−0.5
−1
−1.5
−2
−2.5
Int Mx dz (Tm4)
−0.2
0
0.2
0.4
0.6
0.8
1
1.2
Z (m)

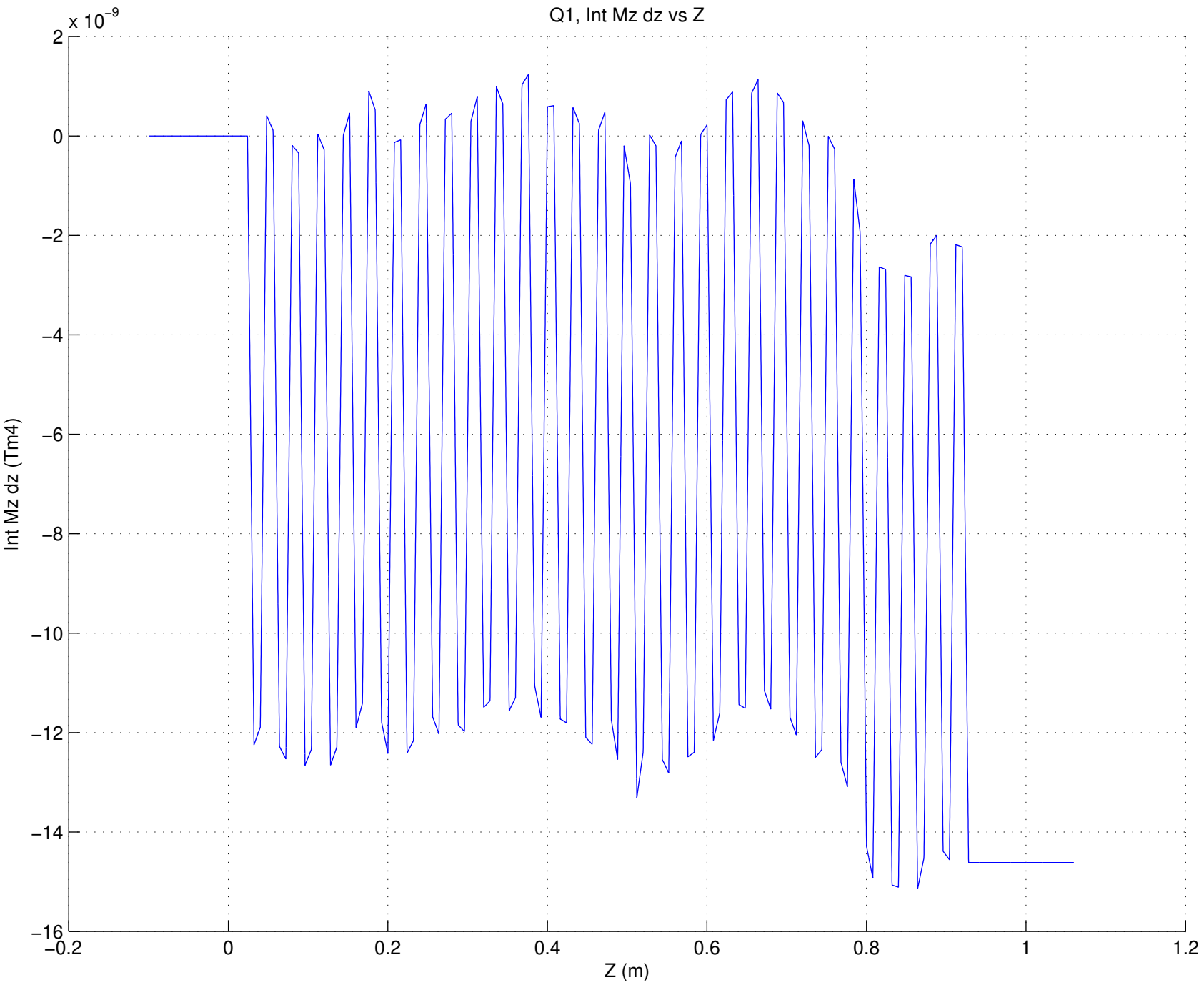

Q1, Int Int Mx dz dz vs Z
x 10^-10
2
0
−2
−4
−6
−8
−10
−12
−14
Int Int Mx dz dz (Tm5)
−0.2
0
0.2
0.4
0.6
0.8
1
1.2
Z (m)

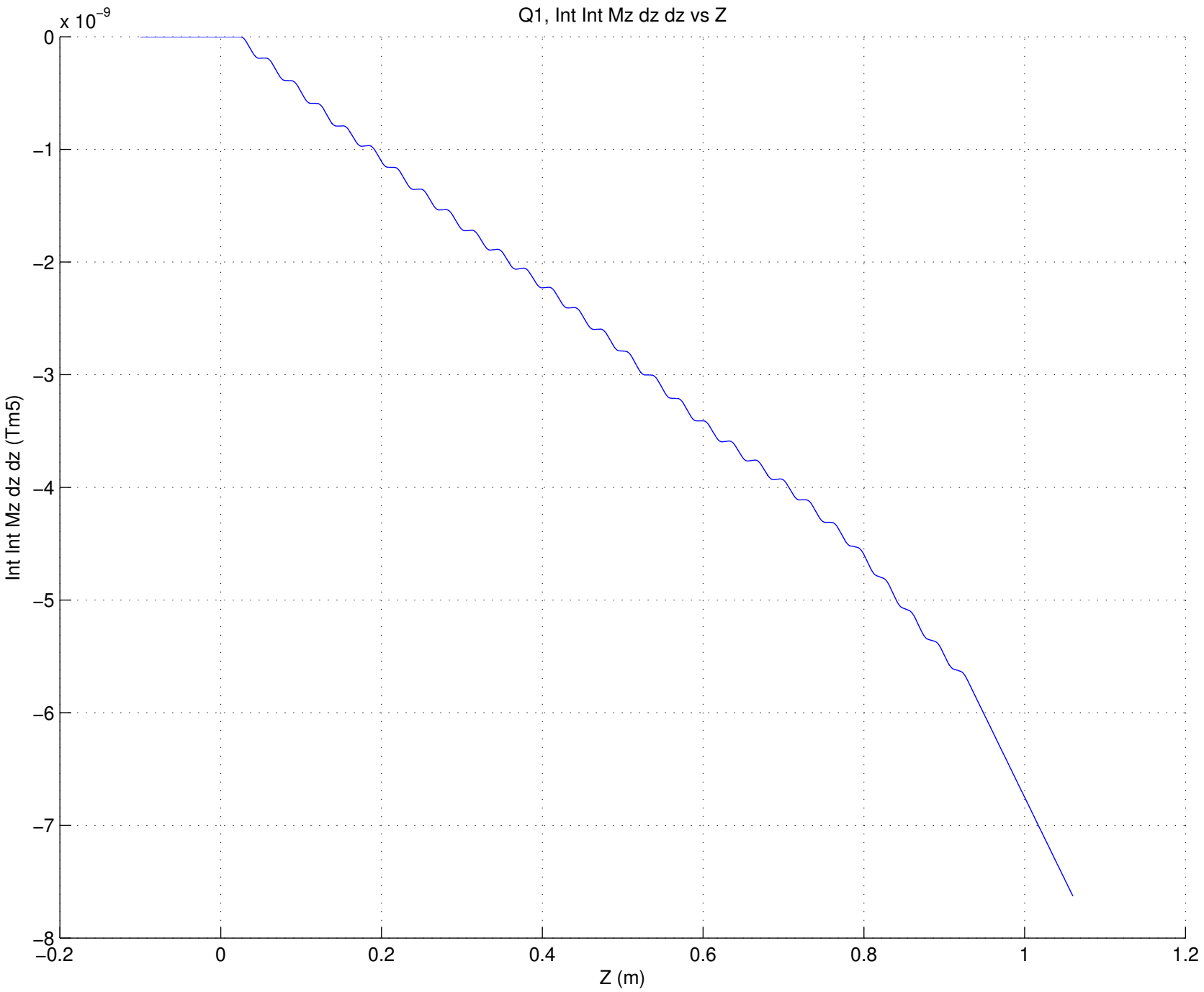

Q1, My vs Z
x 10^-6
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
My (Tm3)
−0.2
0
0.2
0.4
0.6
0.8
1
1.2
Z (m)

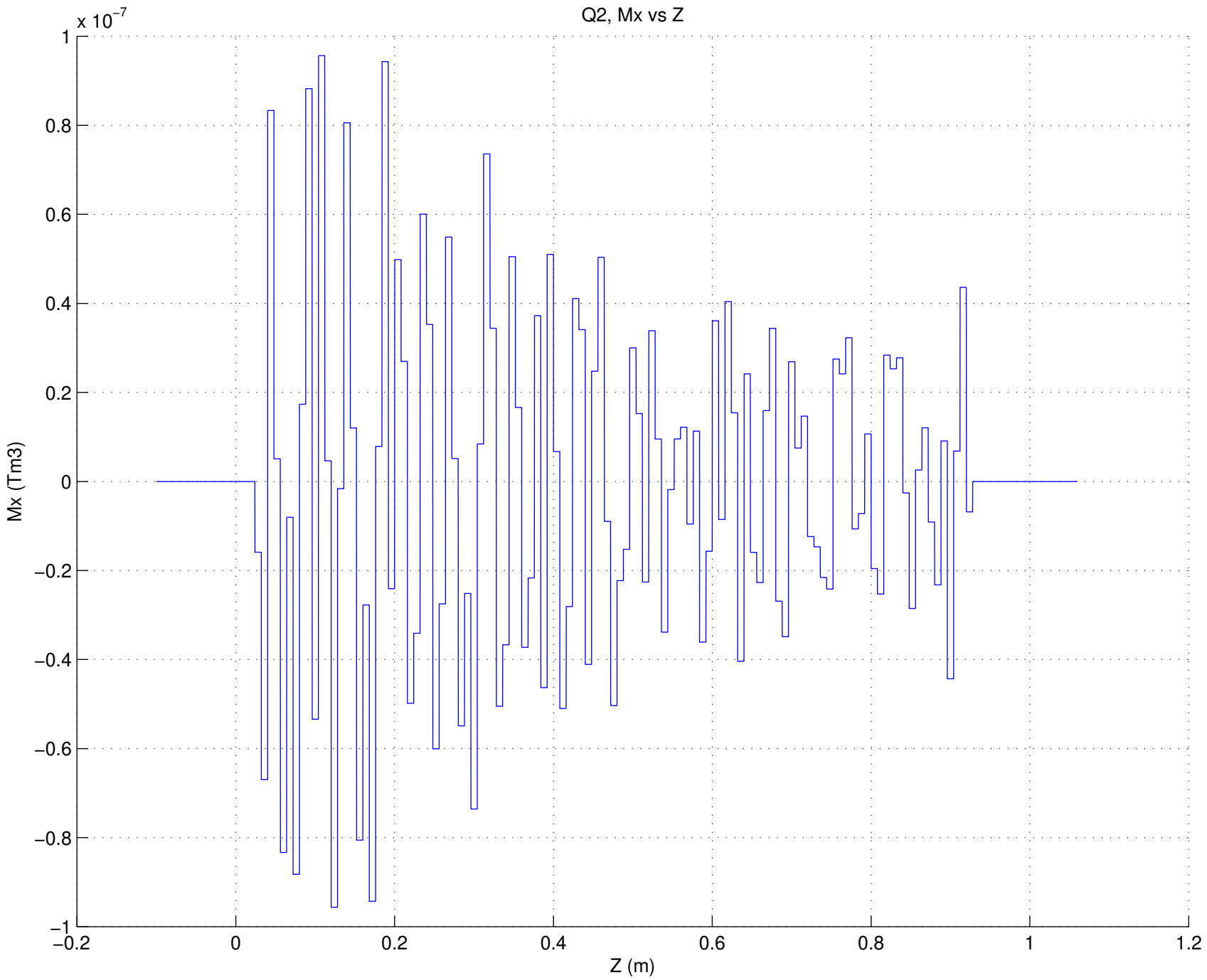

Q1, Int My dz vs Z
x 10^-8
0
−0.2
−0.4
−0.6
−0.8
−1
−1.2
−1.4
−1.6
Int My dz (Tm4)
−0.2
0
0.2
0.4
0.6
0.8
1
1.2
Z (m)

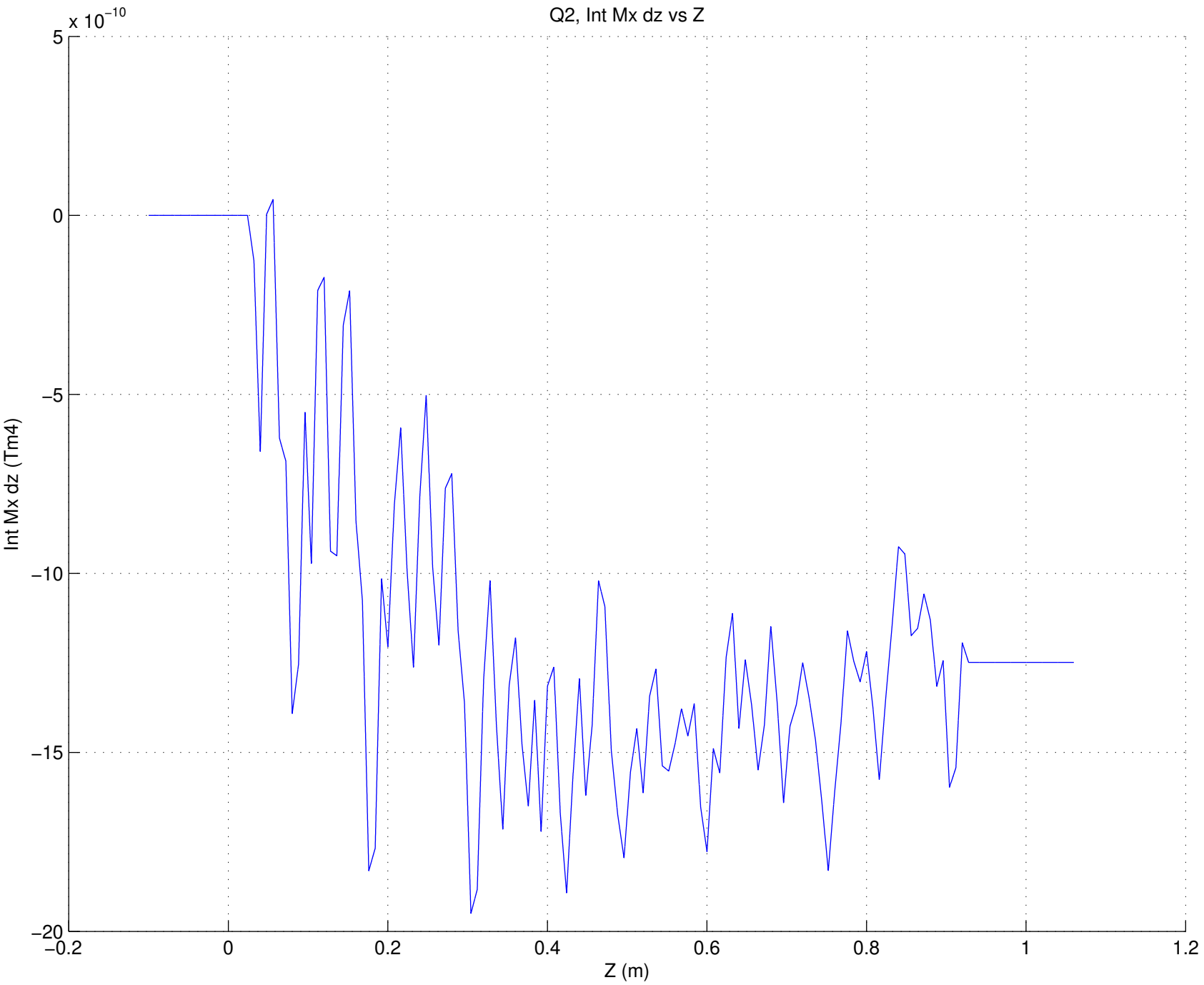

Q1, Int Int My dz dz vs Z
x 10^-9
0
−1
−2
−3
−4
−5
−6
−7
Int Int My dz dz (Tm5)
−0.2
0
0.2
0.4
0.6
0.8
1
1.2
Z (m)

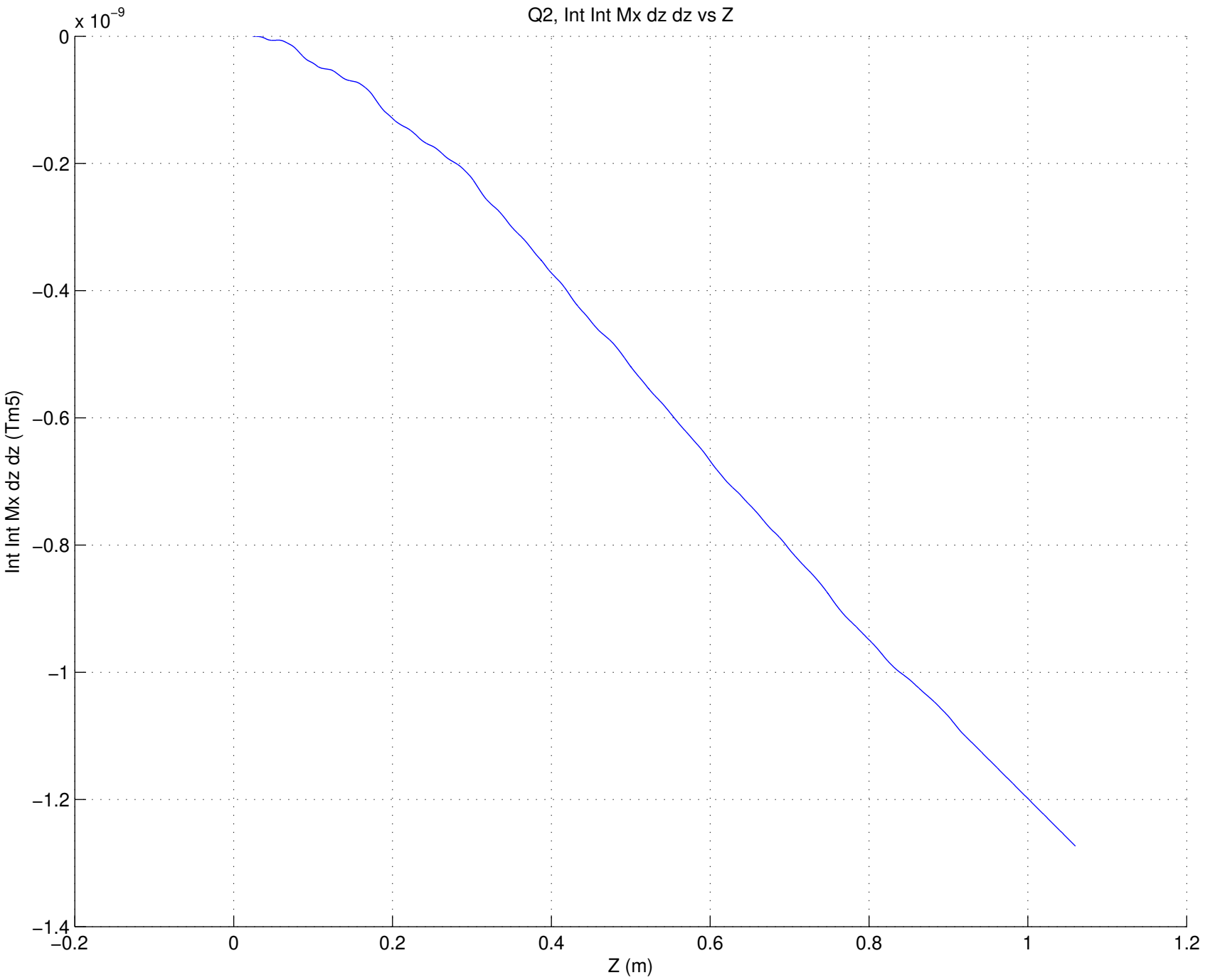

Q1, Mz vs Z
x 10^-6
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
Mz (Tm3)
−0.2
0
0.2
0.4
0.6
0.8
1
1.2
Z (m)

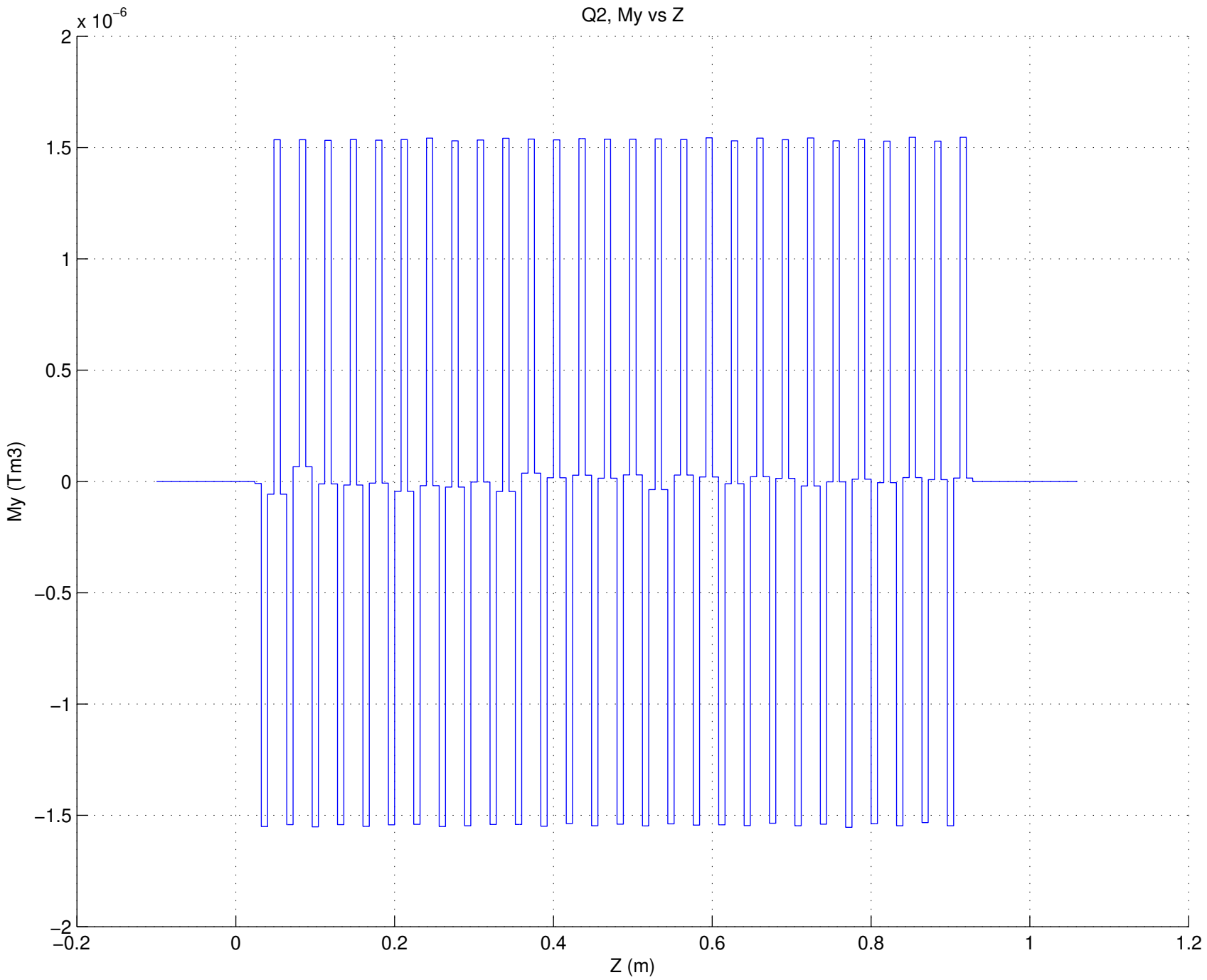

Q1, Int Mz dz vs Z
x 10^-9
2
0
−2
−4
−6
−8
−10
−12
−14
−16
Int Mz dz (Tm4)
−0.2
0
0.2
0.4
0.6
0.8
1
1.2
Z (m)

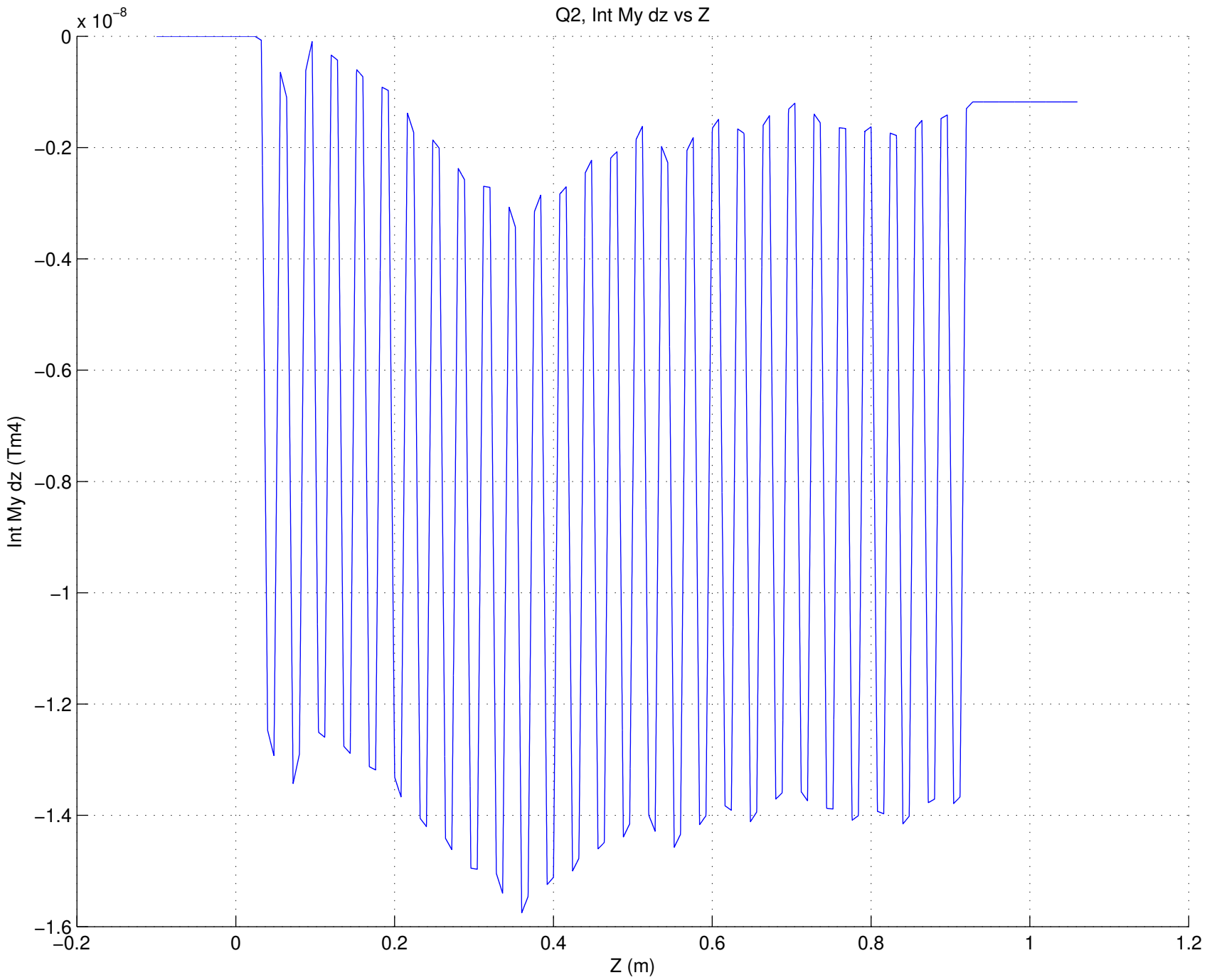

Q1, Int Int Mz dz dz vs Z
x 10^-9
0
−1
−2
−3
−4
−5
−6
−7
−8
Int Int Mz dz dz (Tm5)
−0.2
0
0.2
0.4
0.6
0.8
1
1.2
Z (m)

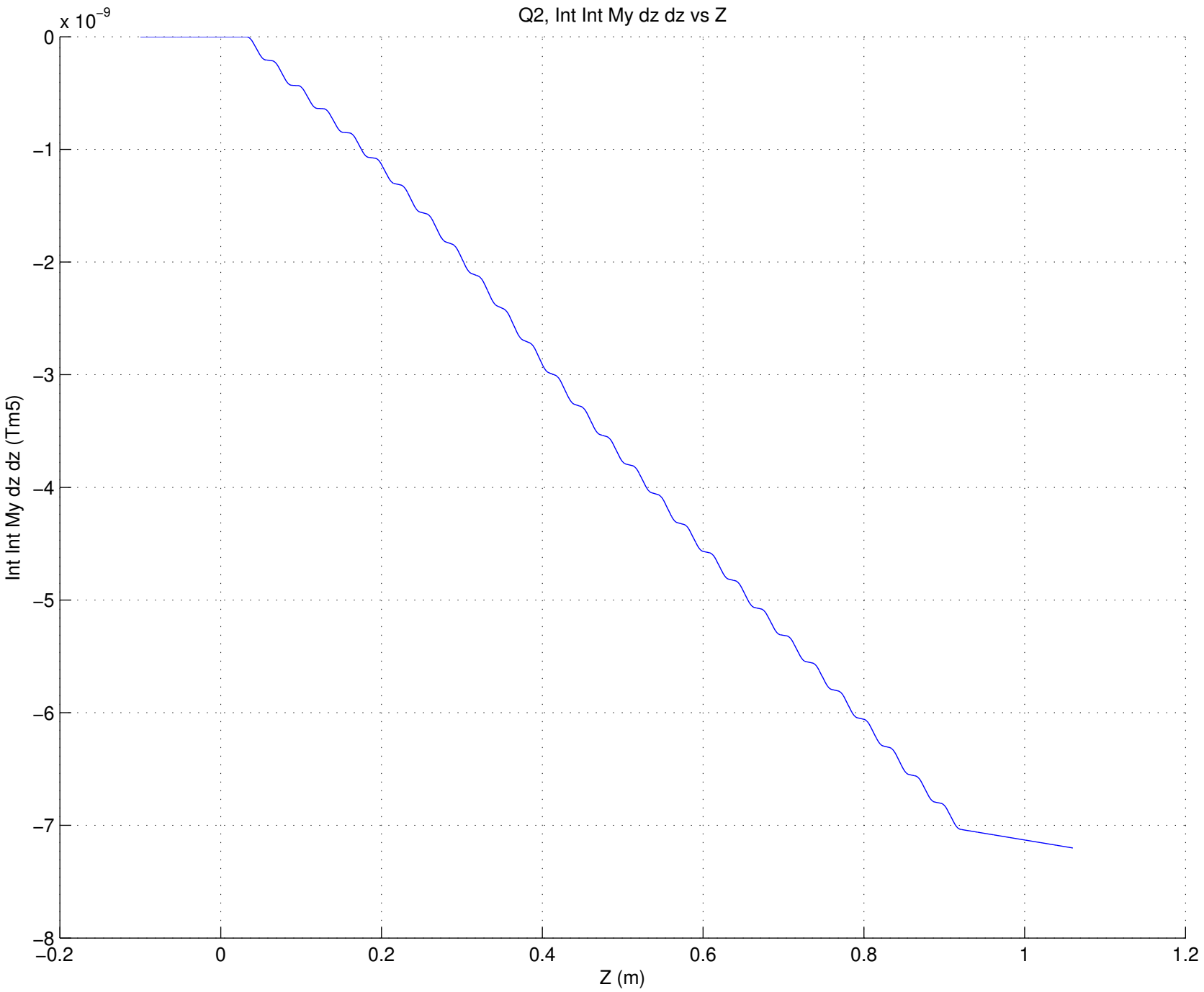

Q2, Mx vs Z
x 10^-7
Mx (Tm3)
Z (m)
1
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1
−0.2
0
0.2
0.4
0.6
0.8
1
1.2

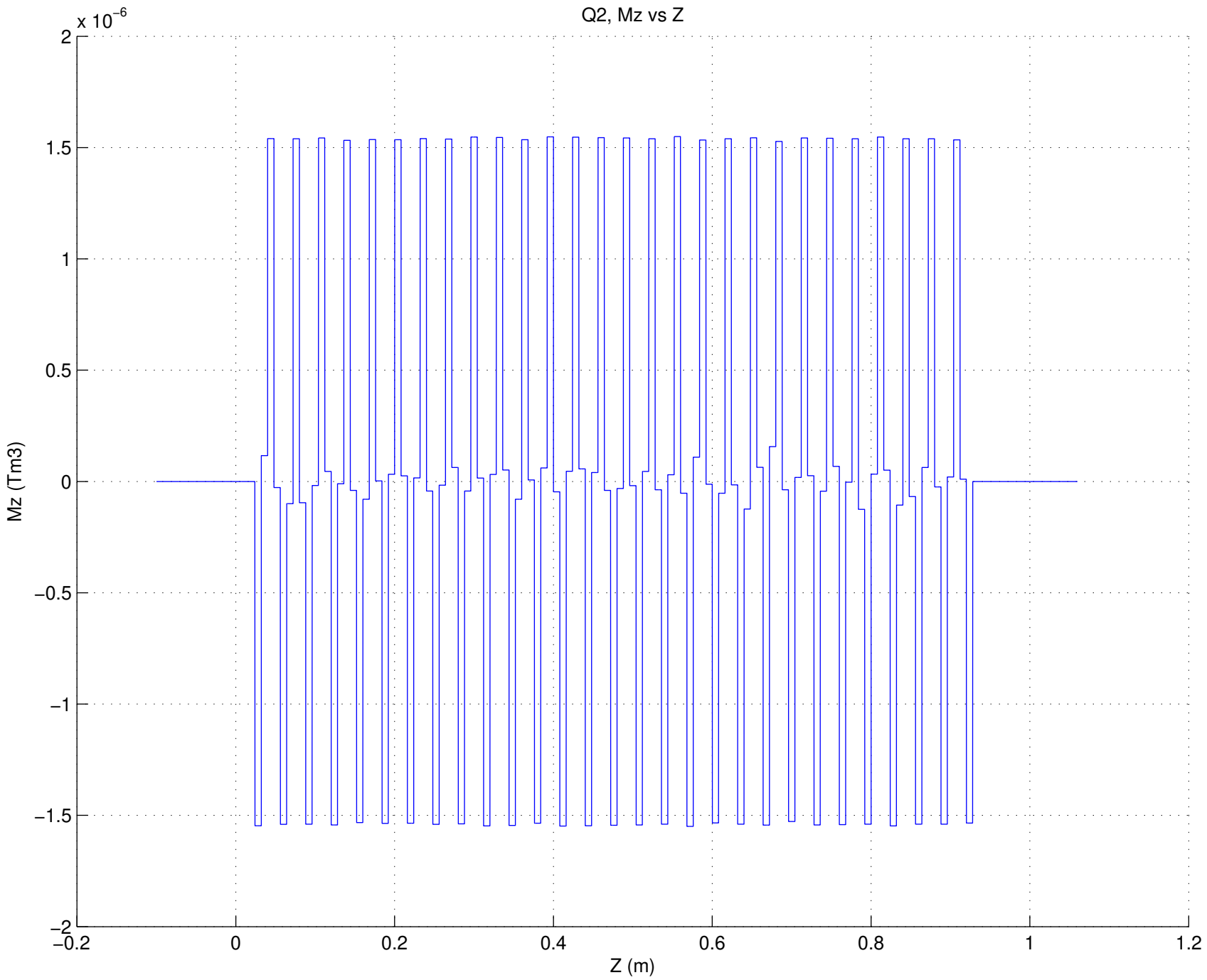

Q2, Int Mx dz vs Z
x 10^-10
5
0
−5
−10
−15
−20
Int Mx dz (Tm4)
−0.2
0
0.2
0.4
0.6
0.8
1
1.2
Z (m)

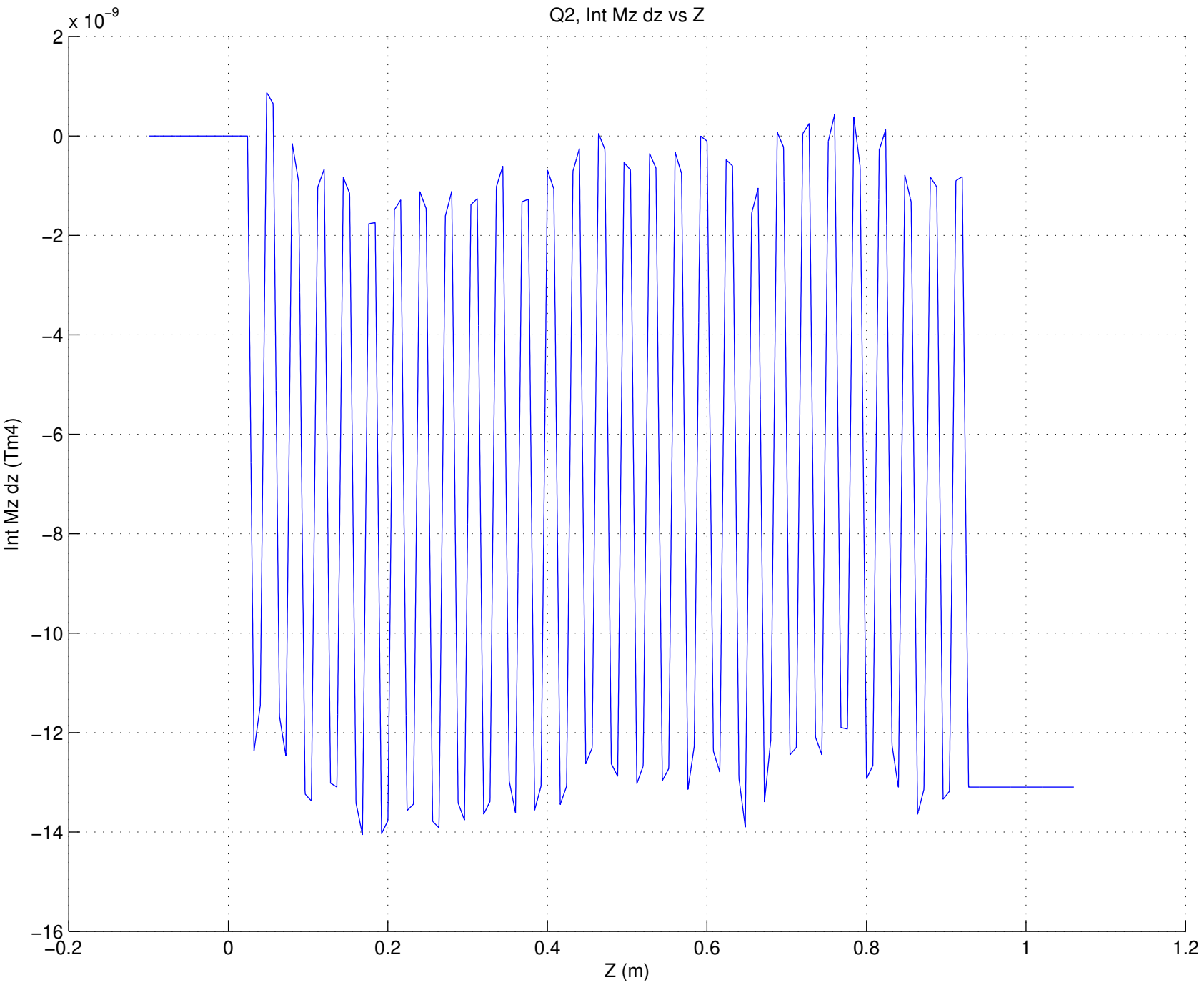

Q2, Int Int Mx dz dz vs Z
x 10^-9
0
−0.2
−0.4
−0.6
−0.8
−1
−1.2
−1.4
Int Int Mx dz dz (Tm5)
−0.2
0
0.2
0.4
0.6
0.8
1
1.2
Z (m)

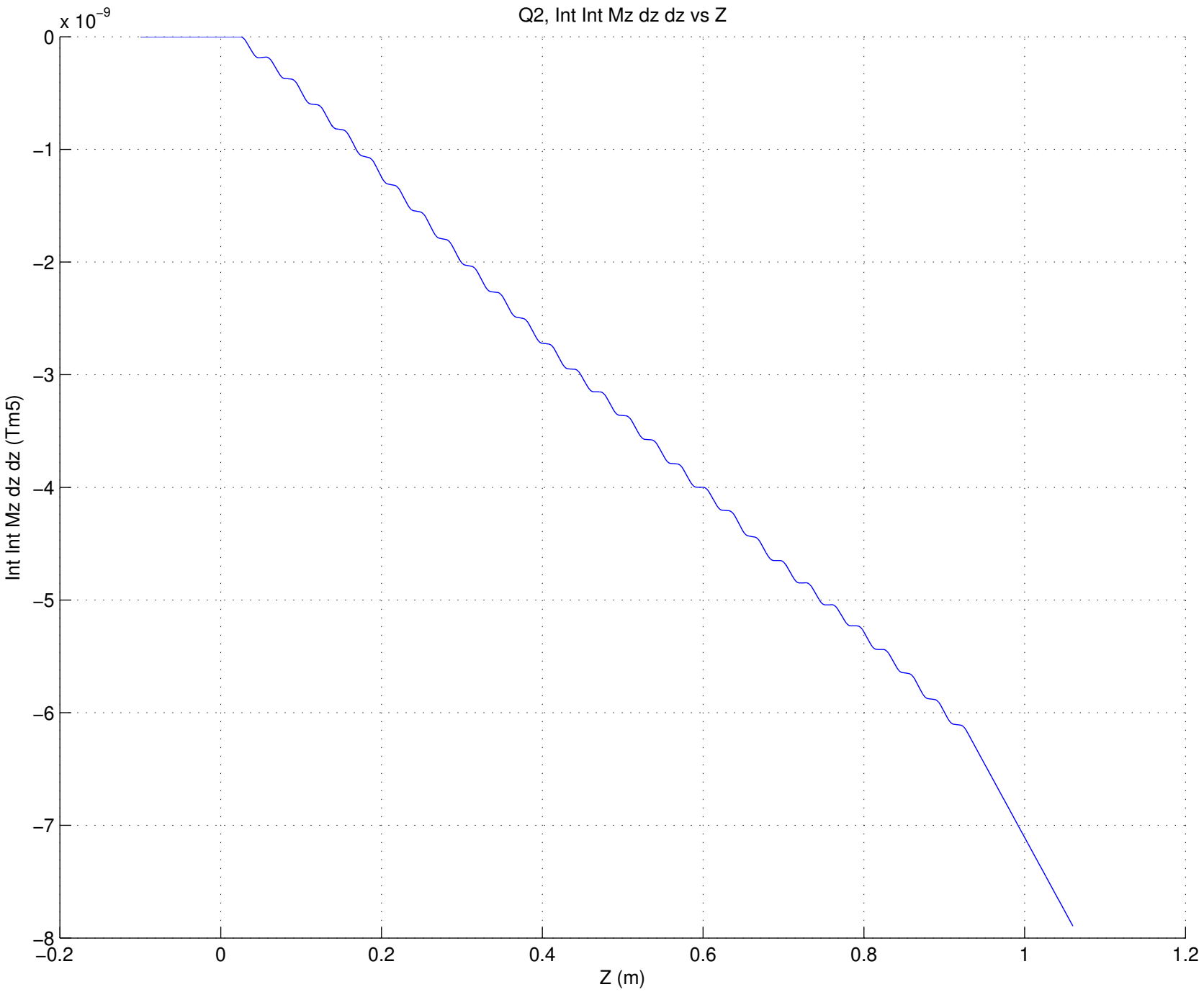

Q2, My vs Z
x 10^-6
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
My (Tm3)
−0.2
0
0.2
0.4
0.6
0.8
1
1.2
Z (m)

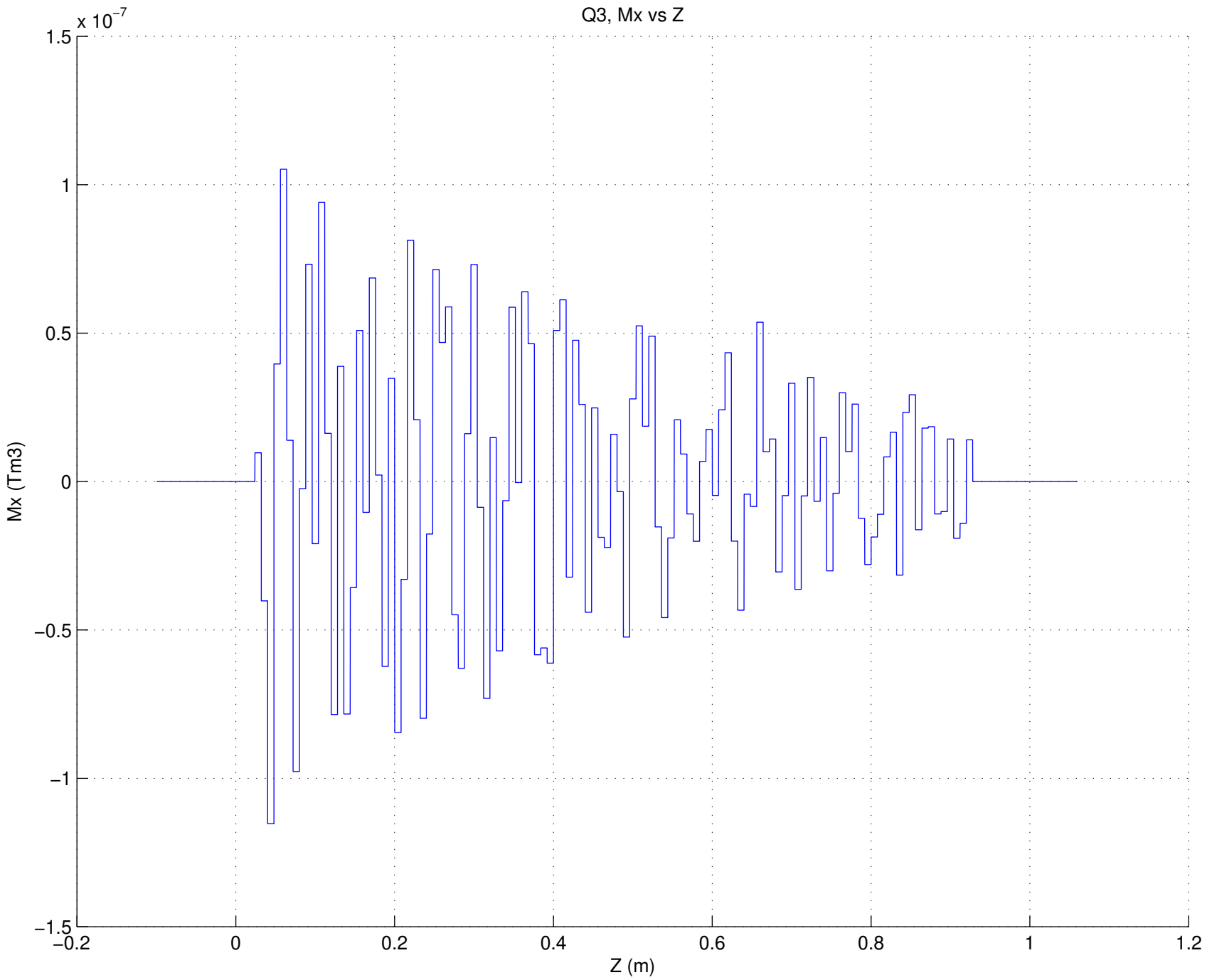

Q2, Int My dz vs Z
x 10^-8
0
−0.2
−0.4
−0.6
−0.8
−1
−1.2
−1.4
−1.6
Int My dz (Tm4)
−0.2
0
0.2
0.4
0.6
0.8
1
1.2
Z (m)

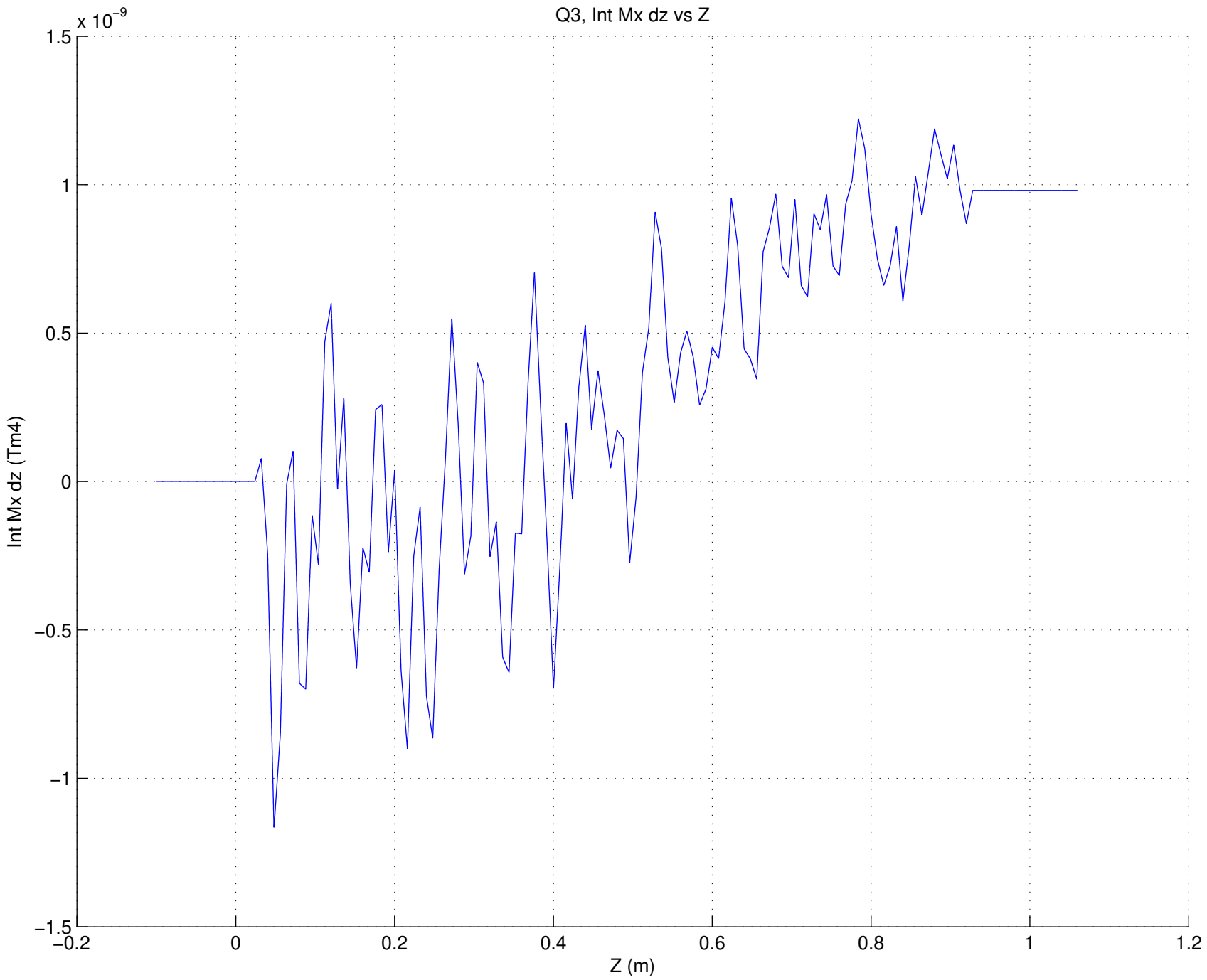

Q2, Int Int My dz dz vs Z
x 10^-9
0
−1
−2
−3
−4
−5
−6
−7
−8
Int Int My dz dz (Tm5)
−0.2
0
0.2
0.4
0.6
0.8
1
1.2
Z (m)

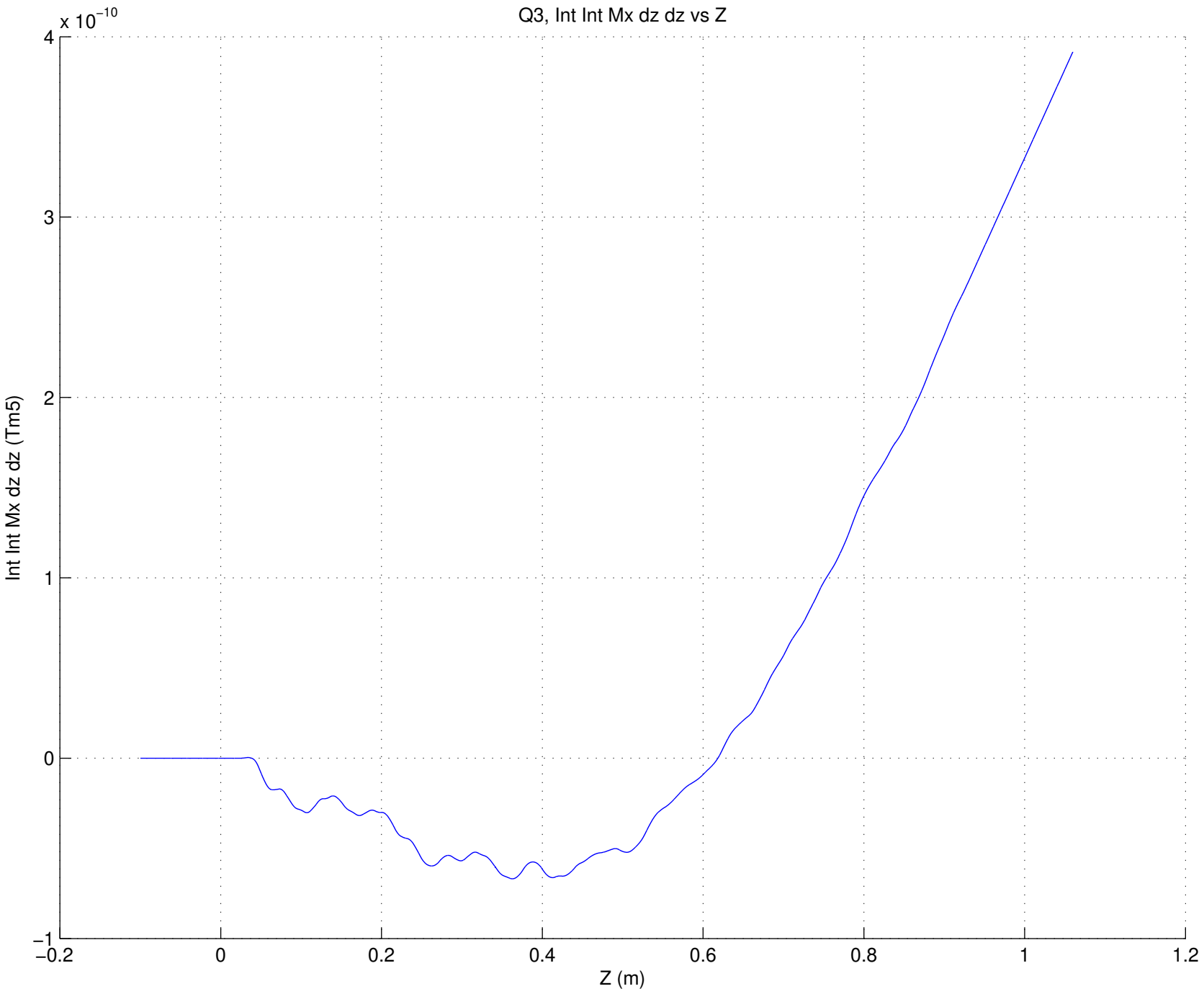

Q2, Mz vs Z
x 10^-6
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
Mz (Tm3)
−0.2
0
0.2
0.4
0.6
0.8
1
1.2
Z (m)

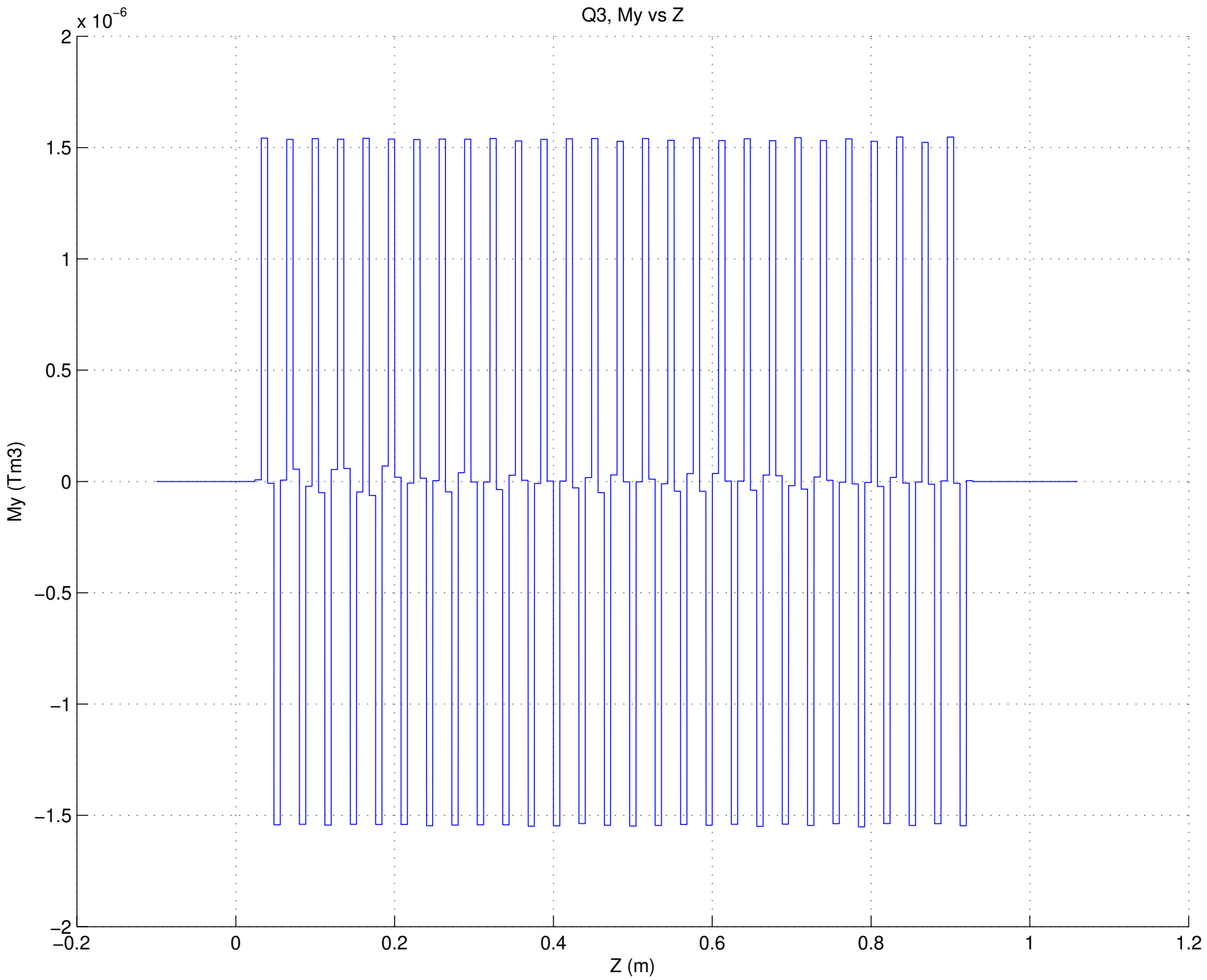

Q2, Int Mz dz vs Z
x 10^-9
2
0
−2
−4
−6
−8
−10
−12
−14
−16
Int Mz dz (Tm4)
−0.2
0
0.2
0.4
0.6
0.8
1
1.2
Z (m)

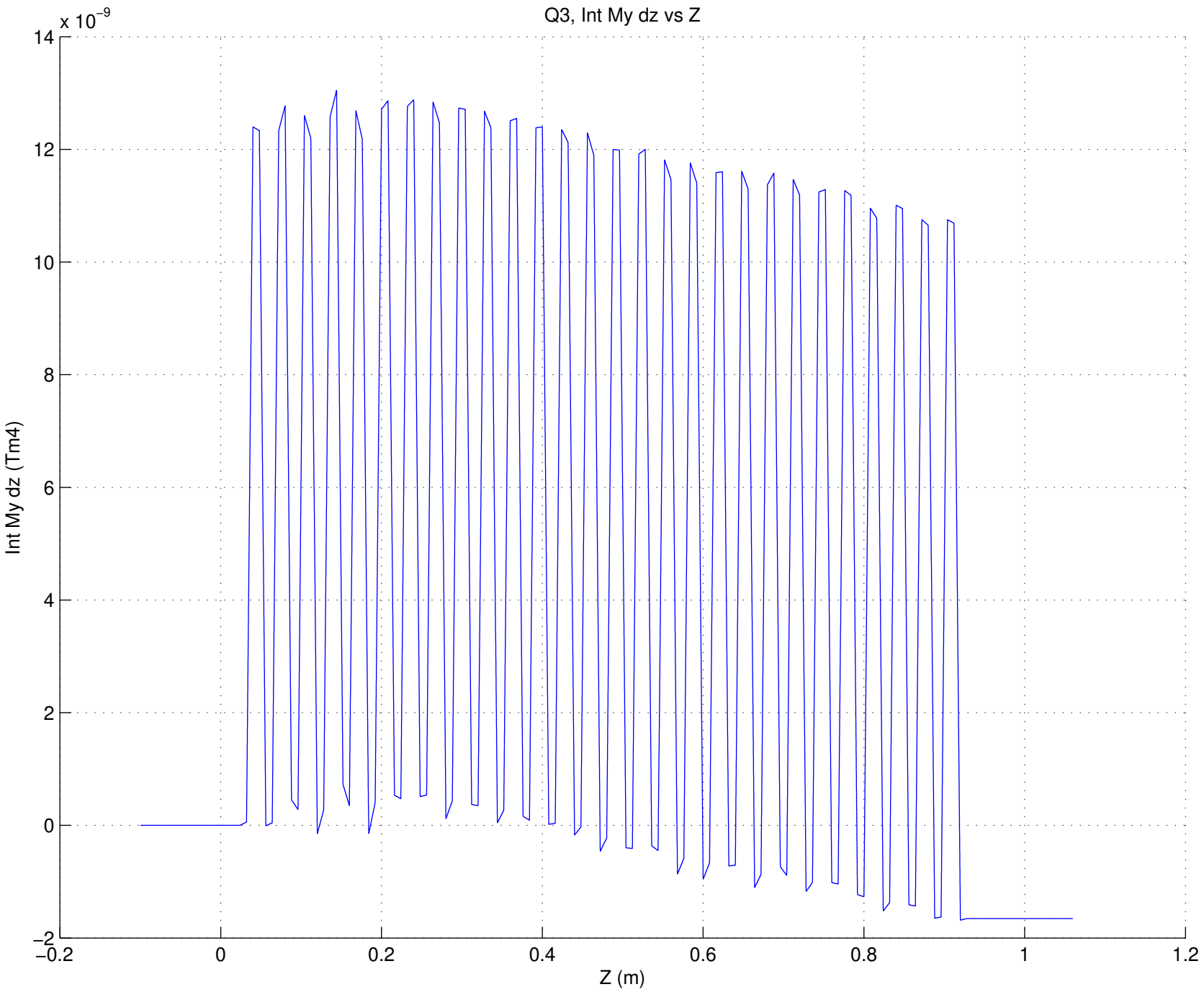

Q2, Int Int Mz dz dz vs Z
x 10^-9
0
−1
−2
−3
−4
−5
−6
−7
−8
Int Int Mz dz dz (Tm5)
−0.2
0
0.2
0.4
0.6
0.8
1
1.2
Z (m)

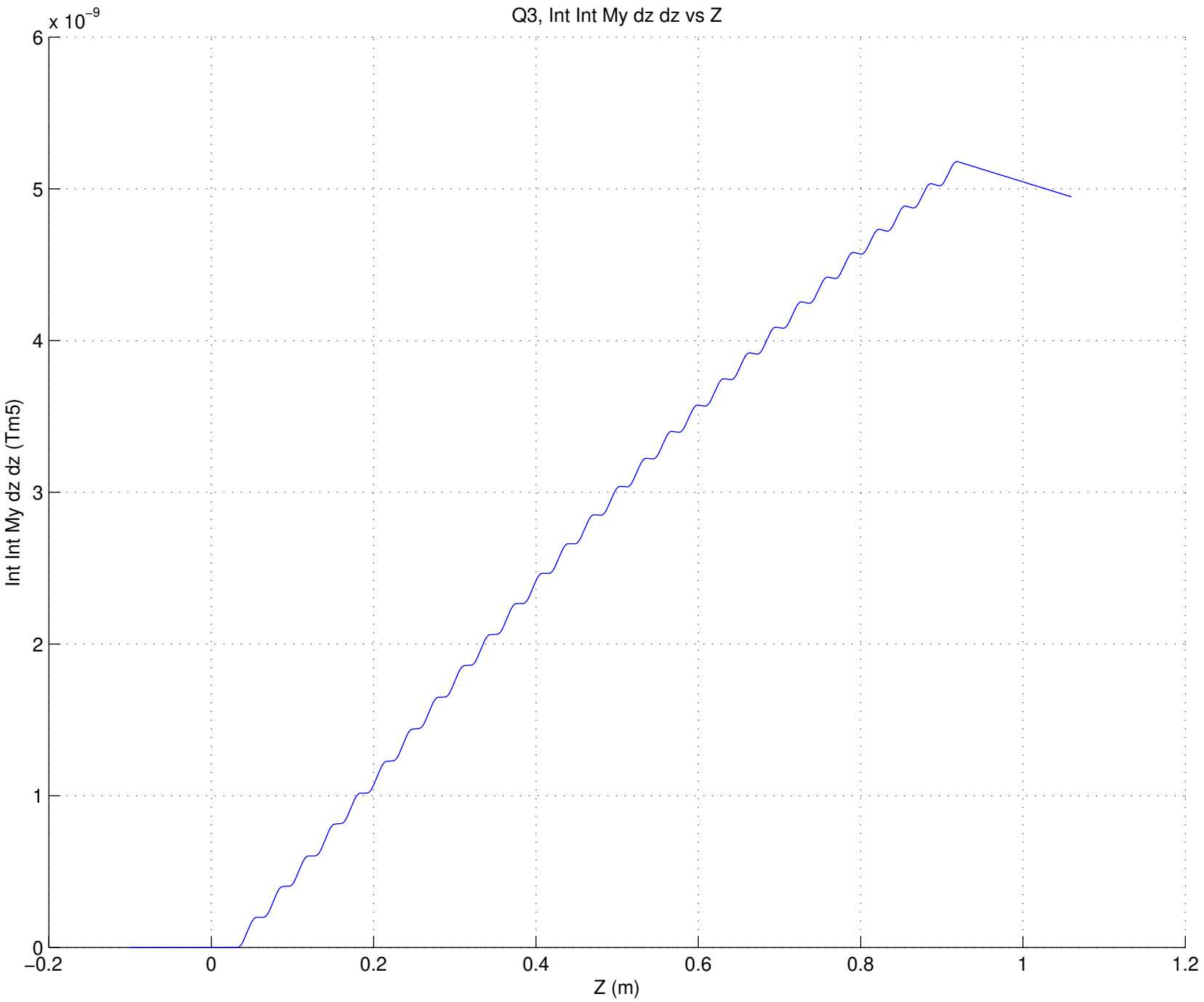

Q3, Mx vs Z
x 10^-7
1.5
1
0.5
0
−0.5
−1
−1.5
Mx (Tm3)
−0.2
0
0.2
0.4
0.6
0.8
1
1.2
Z (m)

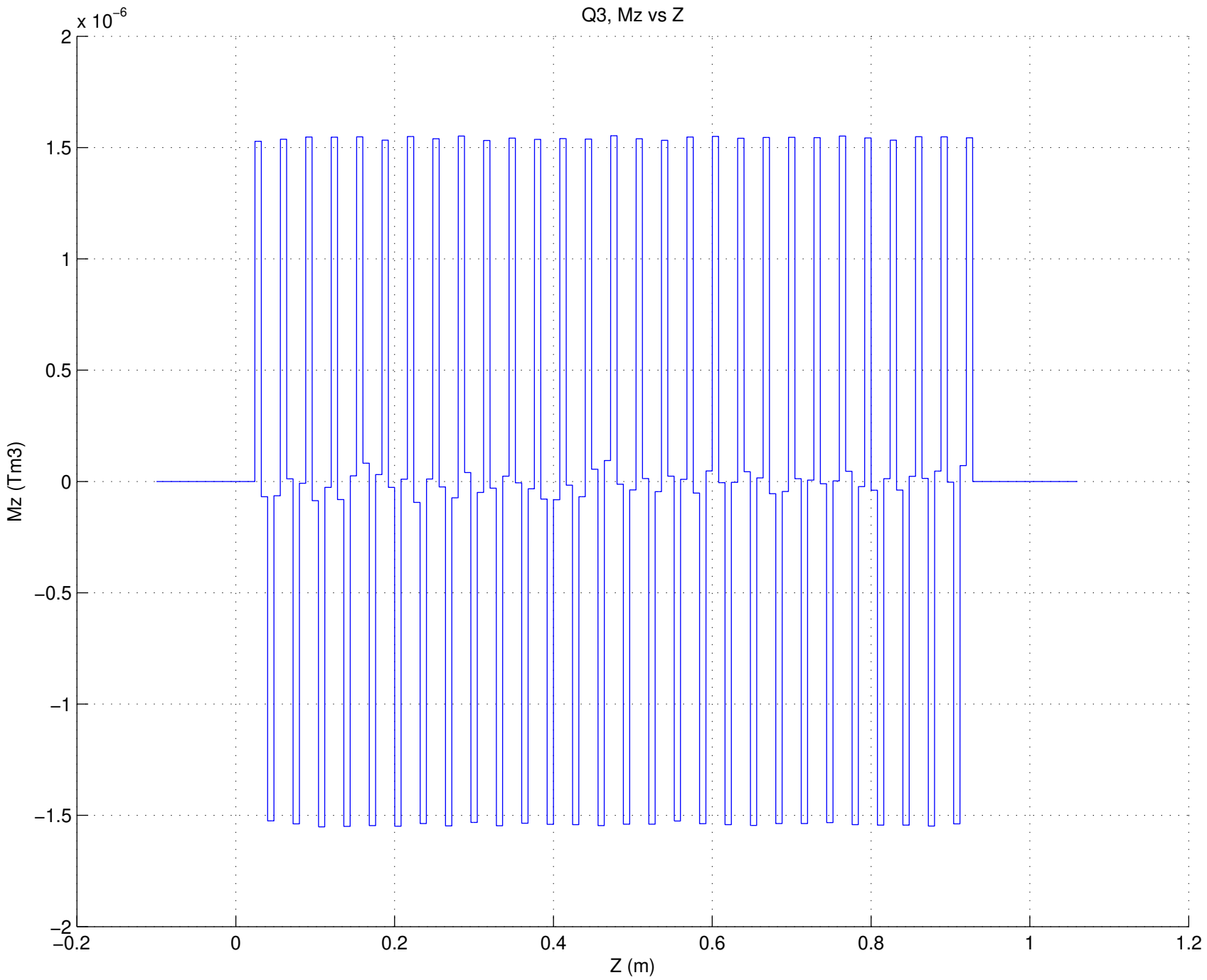

Q3, Int Mx dz vs Z
x 10^-9
1.5
1
0.5
0
−0.5
−1
−1.5
Int Mx dz (Tm4)
−0.2
0
0.2
0.4
0.6
0.8
1
1.2
Z (m)

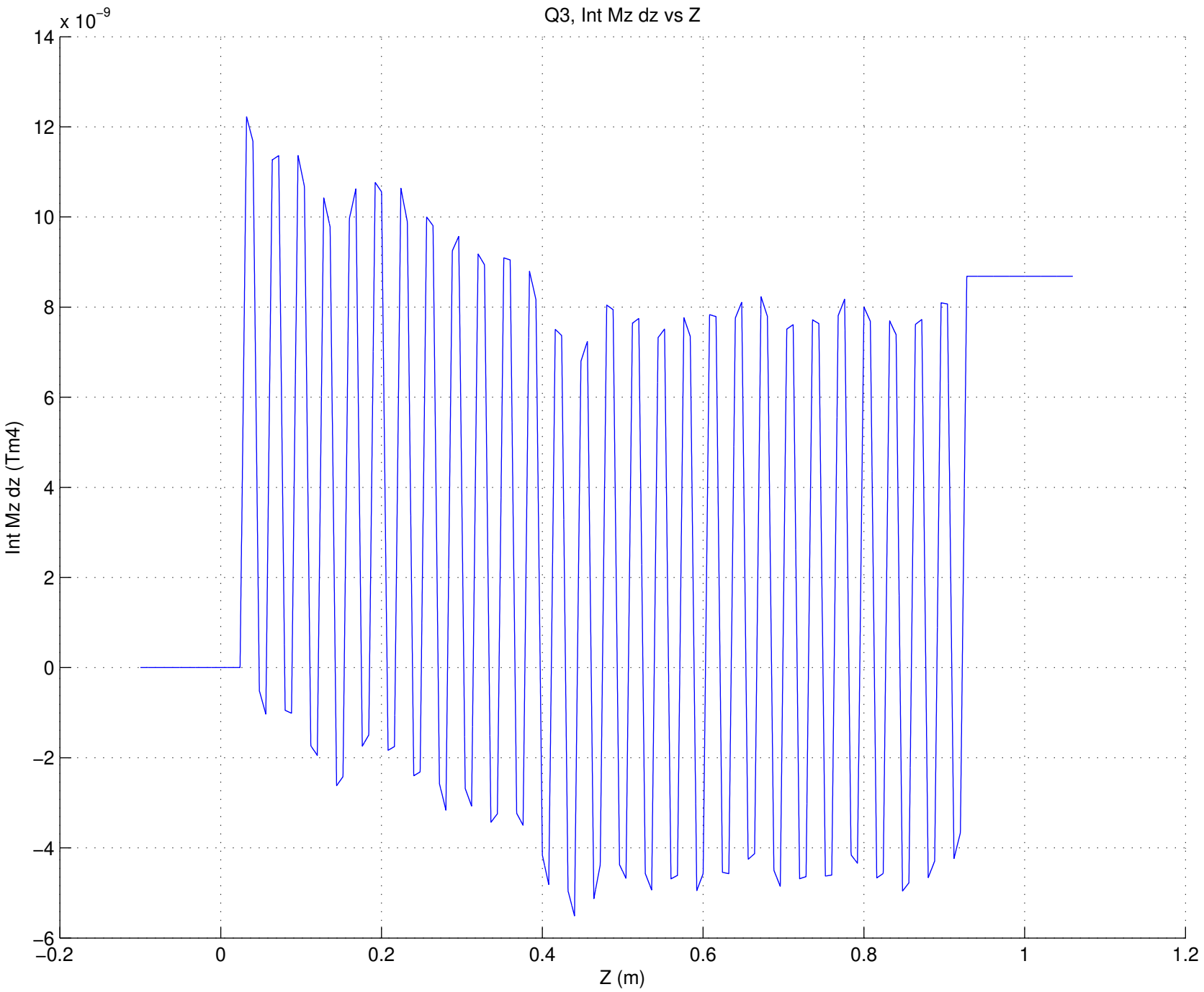

Q3, Int Int Mx dz dz vs Z
x 10^-10
4
3
2
1
0
−1
Int Int Mx dz dz (Tm5)
−0.2
0
0.2
0.4
0.6
0.8
1
1.2
Z (m)

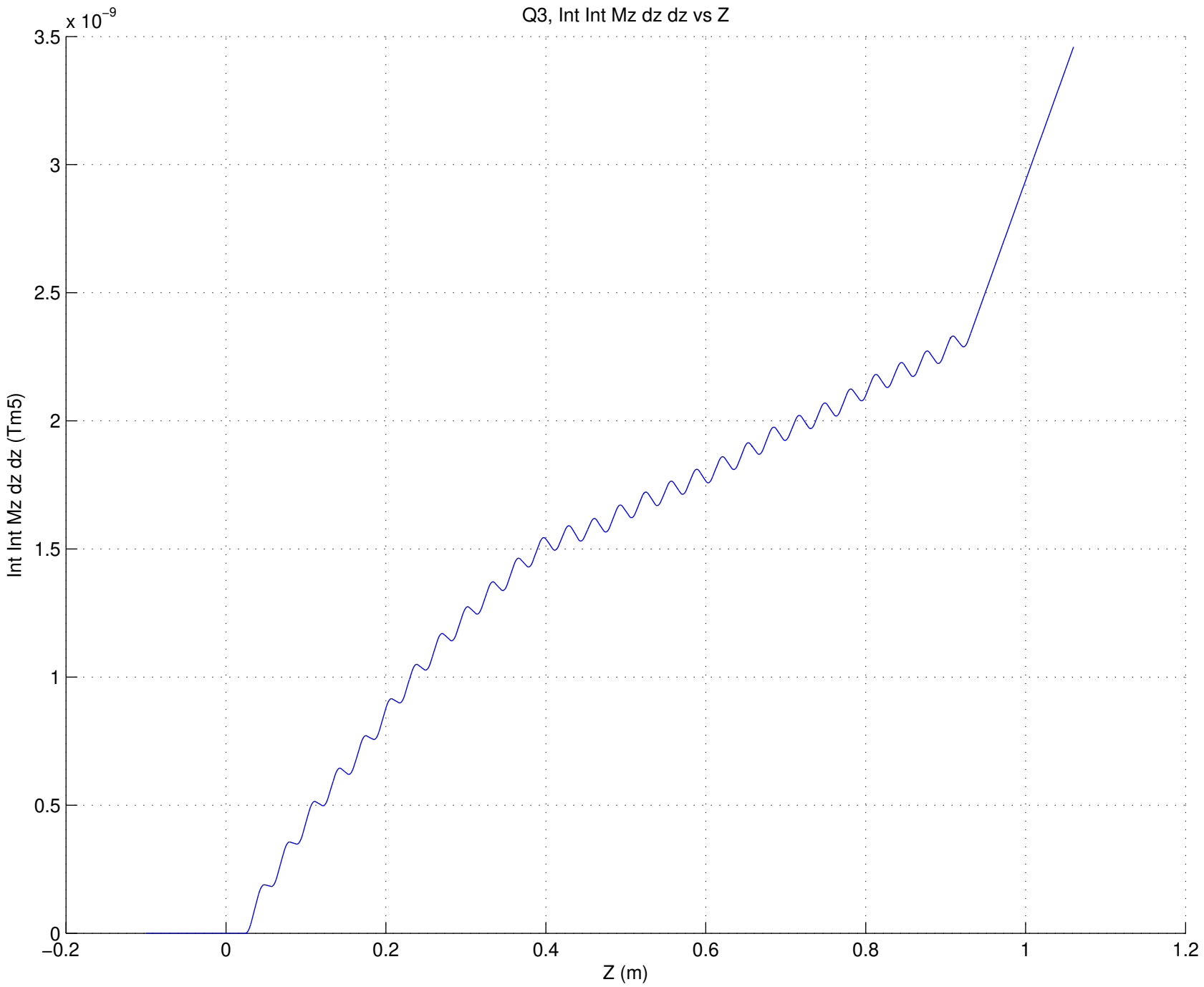

Q3, My vs Z
x 10^-6
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
My (Tm3)
−0.2
0
0.2
0.4
0.6
0.8
1
1.2
Z (m)

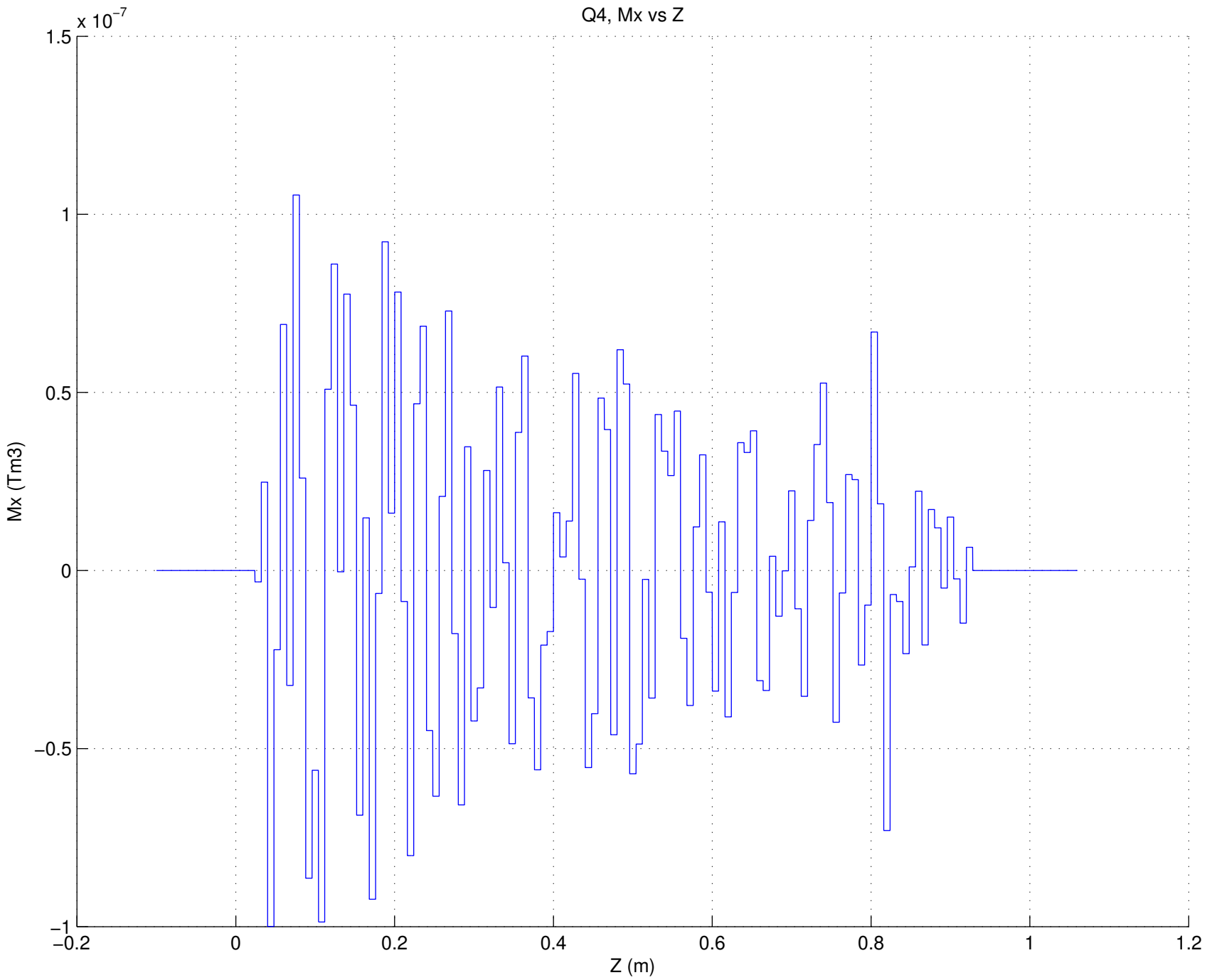

Q3, Int My dz vs Z
x 10^-9
14
12
10
8
6
4
2
0
−2
Int My dz (Tm4)
−0.2
0
0.2
0.4
0.6
0.8
1
1.2
Z (m)

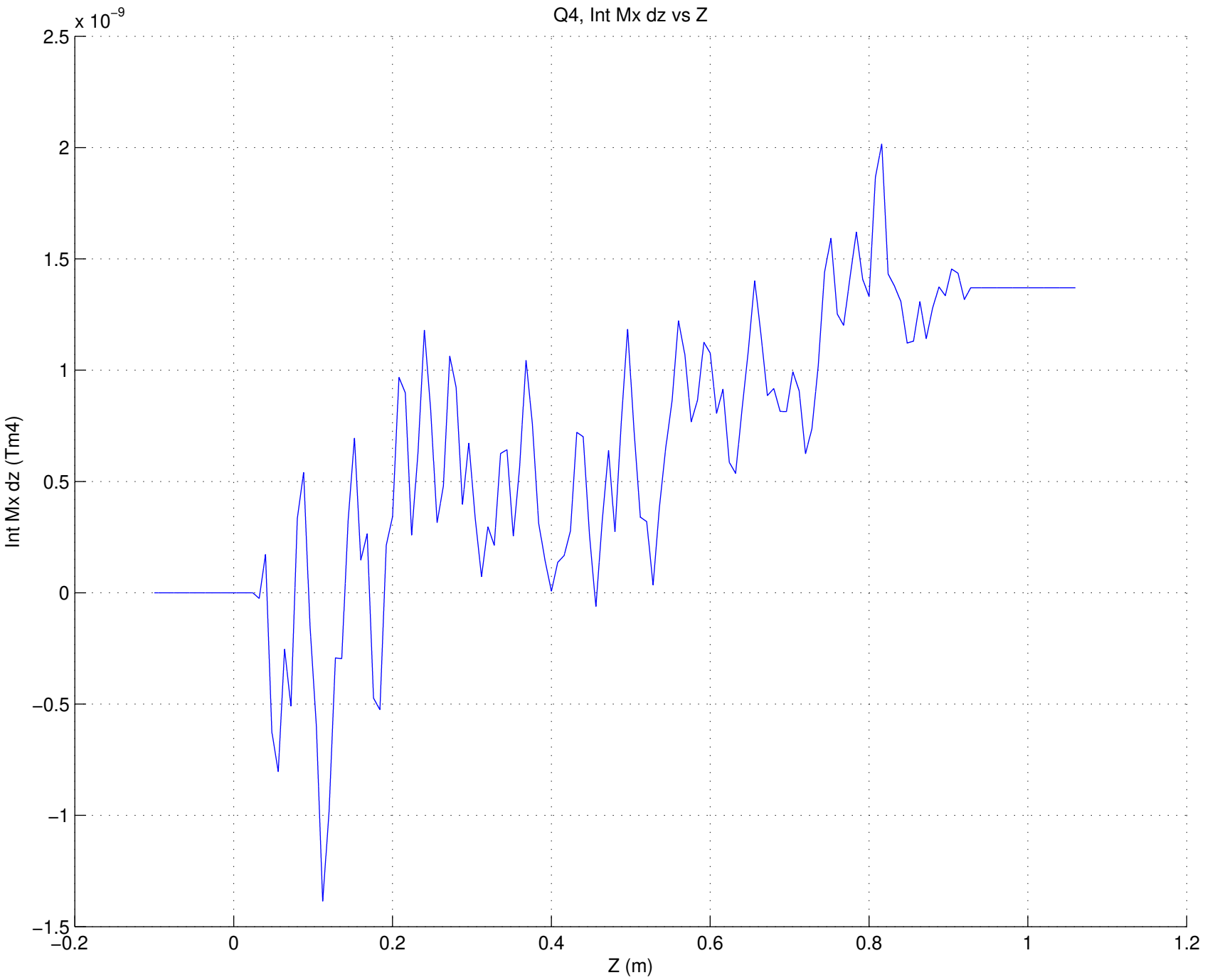

Q3, Int Int My dz dz vs Z
x 10^-9
6
5
4
3
2
1
0
Int Int My dz dz (Tm5)
–0.2
0
0.2
0.4
0.6
0.8
1
1.2
Z (m)

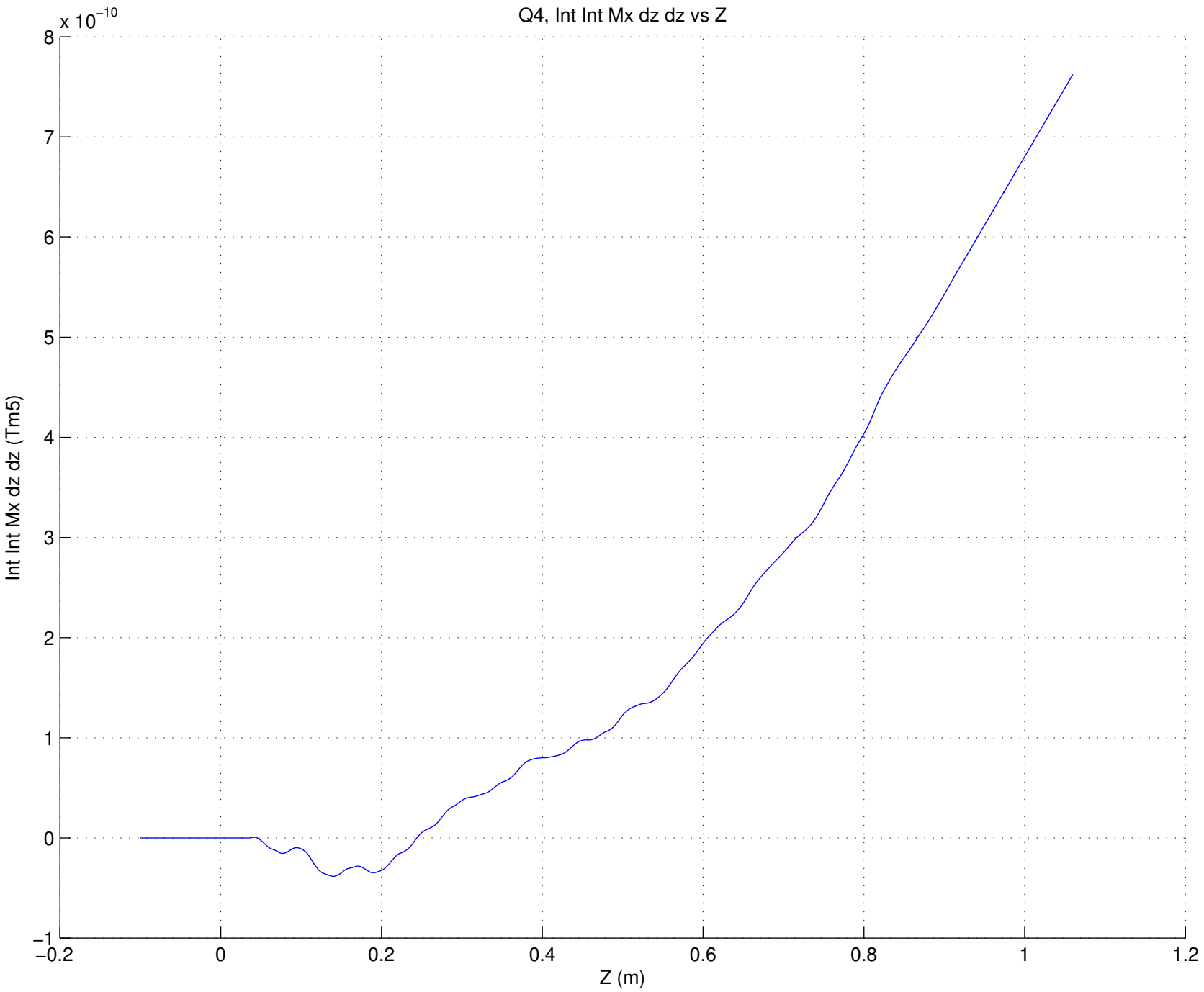

Q3, Mz vs Z
x 10^-6
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
Mz (Tm3)
−0.2
0
0.2
0.4
0.6
0.8
1
1.2
Z (m)

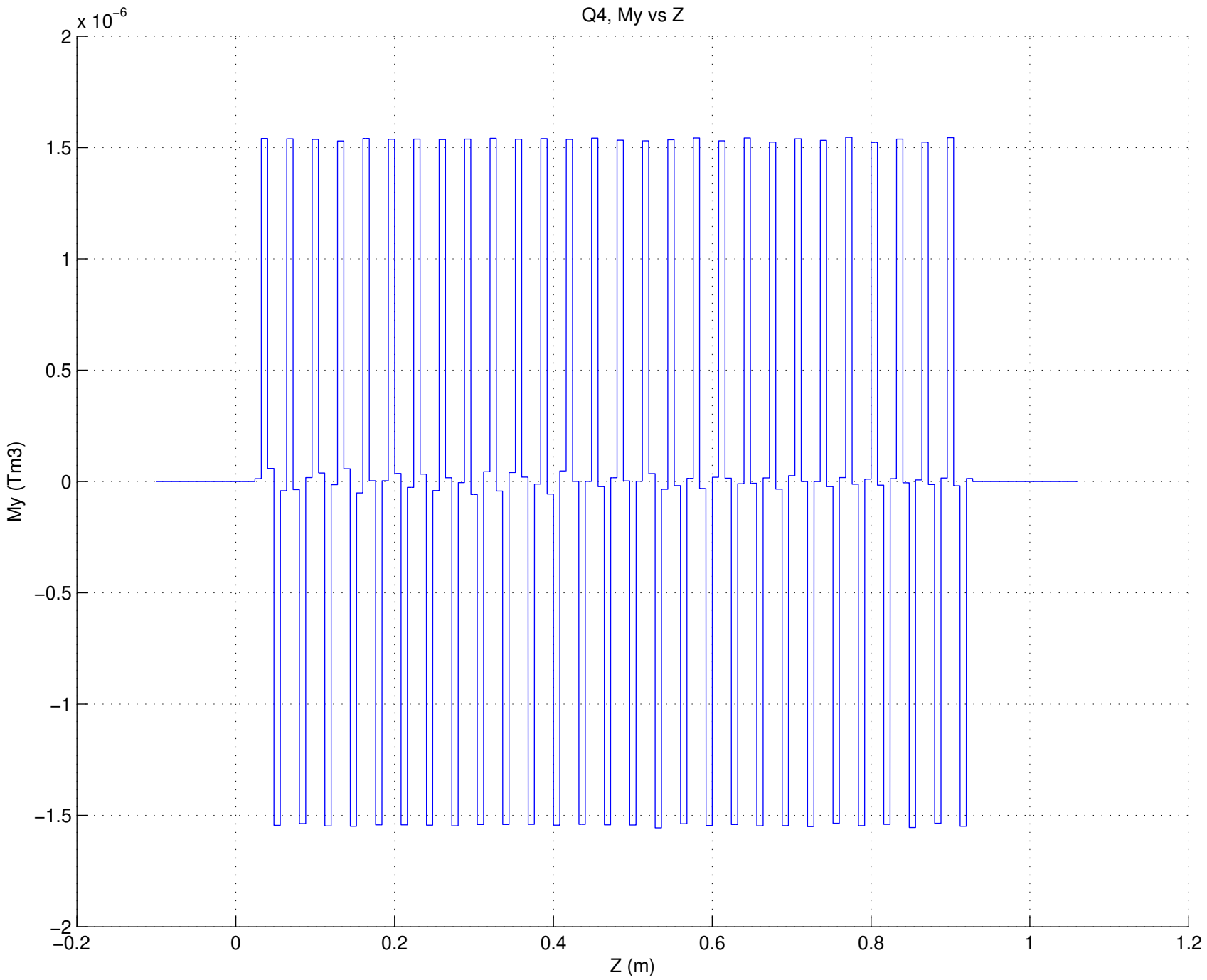

Q3, Int Mz dz vs Z
x 10^-9
14
12
10
8
6
4
2
0
−2
−4
−6
Int Mz dz (Tm4)
−0.2
0
0.2
0.4
0.6
0.8
1
1.2
Z (m)

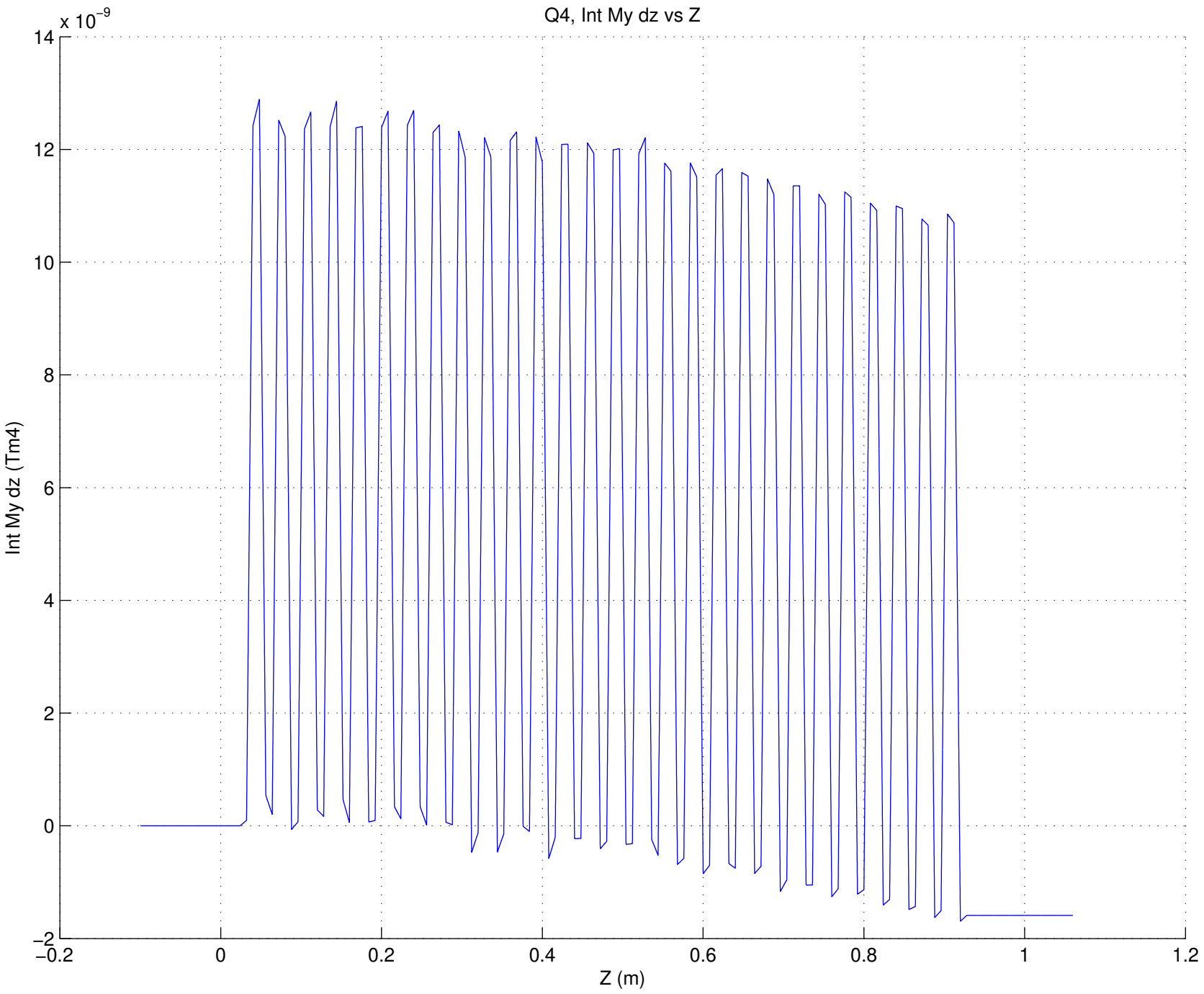

Q3, Int Int Mz dz dz vs Z
x 10^-9
3.5
3
2.5
2
1.5
1
0.5
0
Int Int Mz dz dz (Tm5)
−0.2
0
0.2
0.4
0.6
0.8
1
1.2
Z (m)

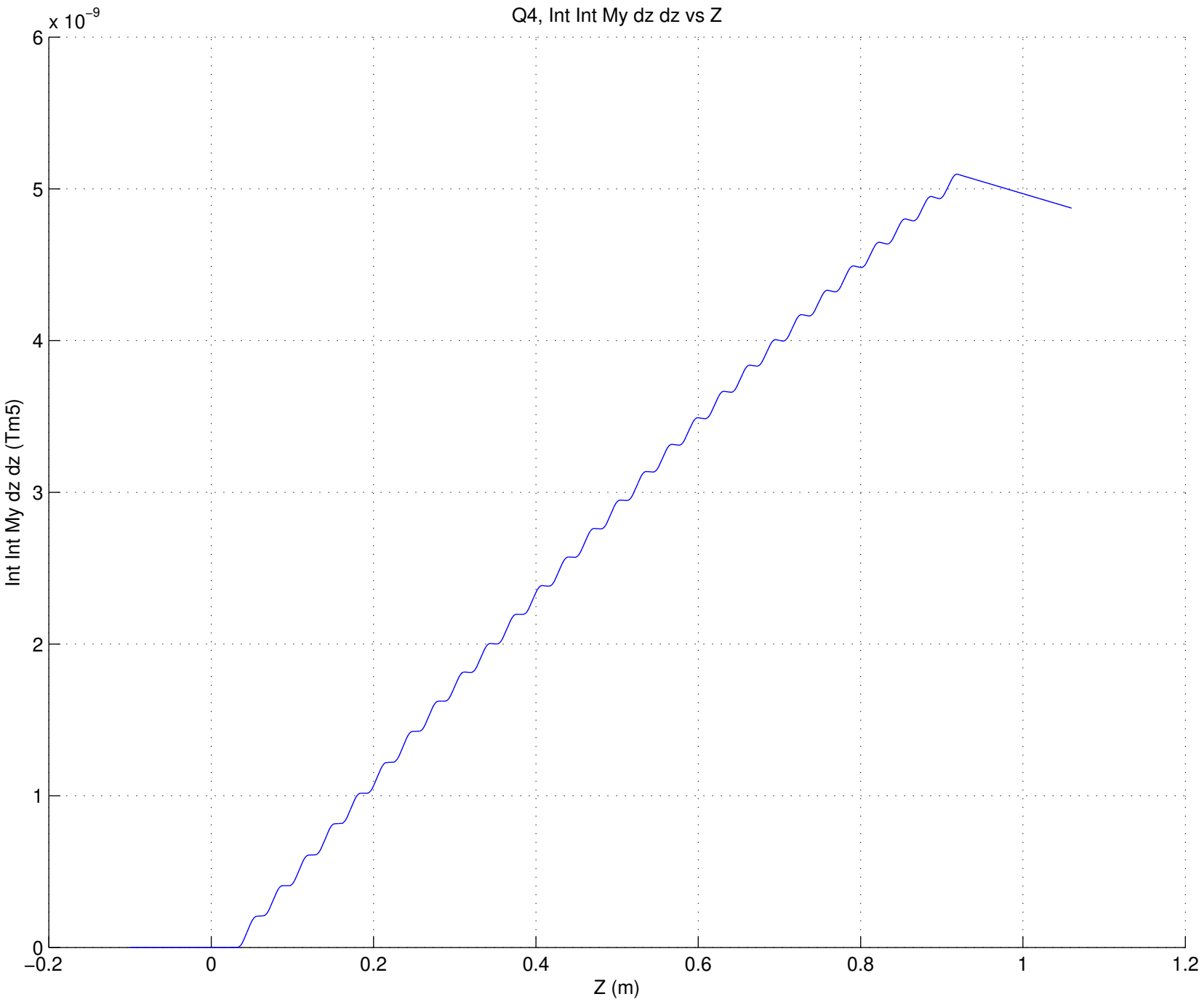

Q4, Mx vs Z
x 10^-7
1.5
1
0.5
0
−0.5
−1
Mx (Tm3)
−0.2
0
0.2
0.4
0.6
0.8
1
1.2
Z (m)

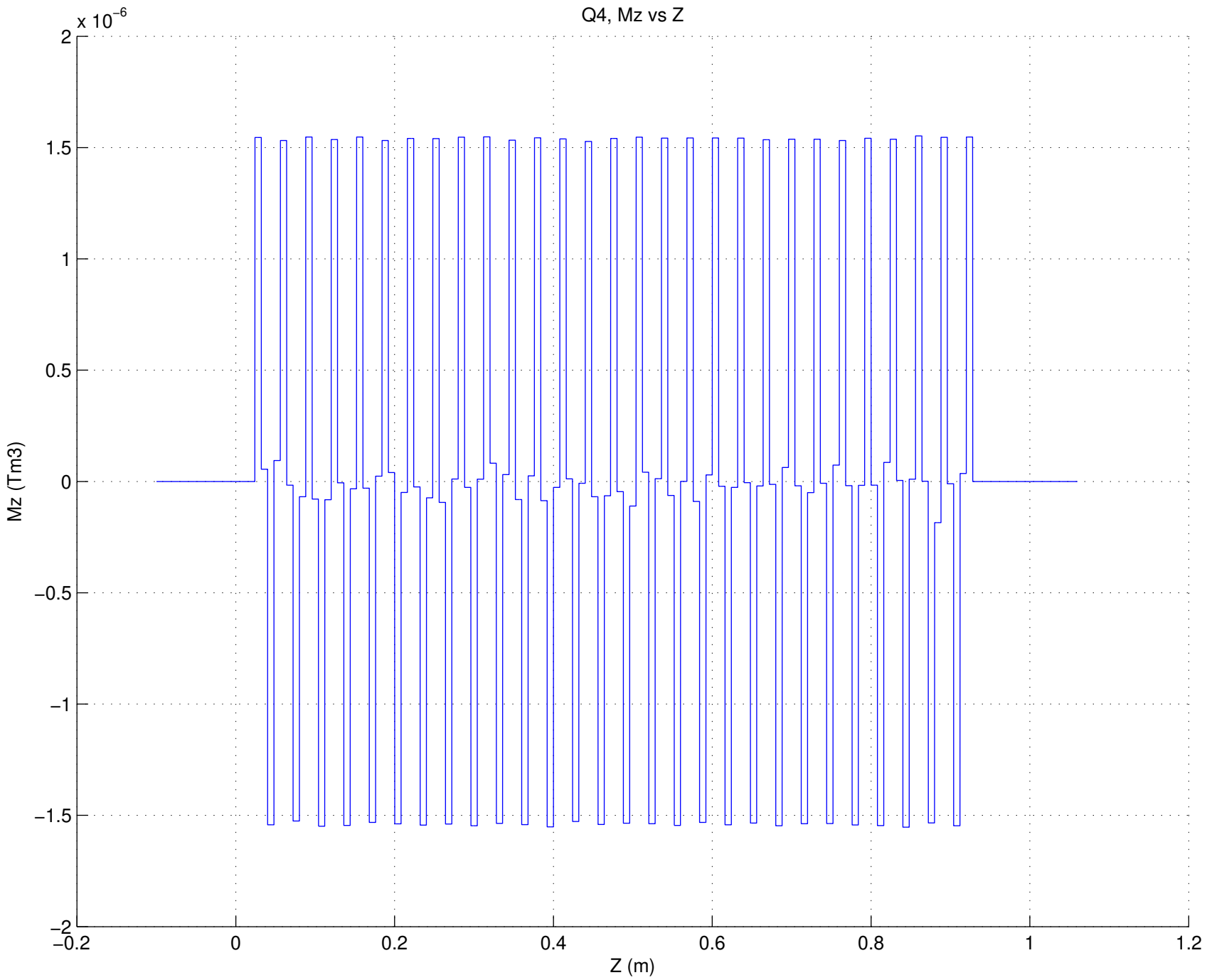

Q4, Int Mx dz vs Z
x 10^-9
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
Int Mx dz (Tm4)
−0.2
0
0.2
0.4
0.6
0.8
1
1.2
Z (m)

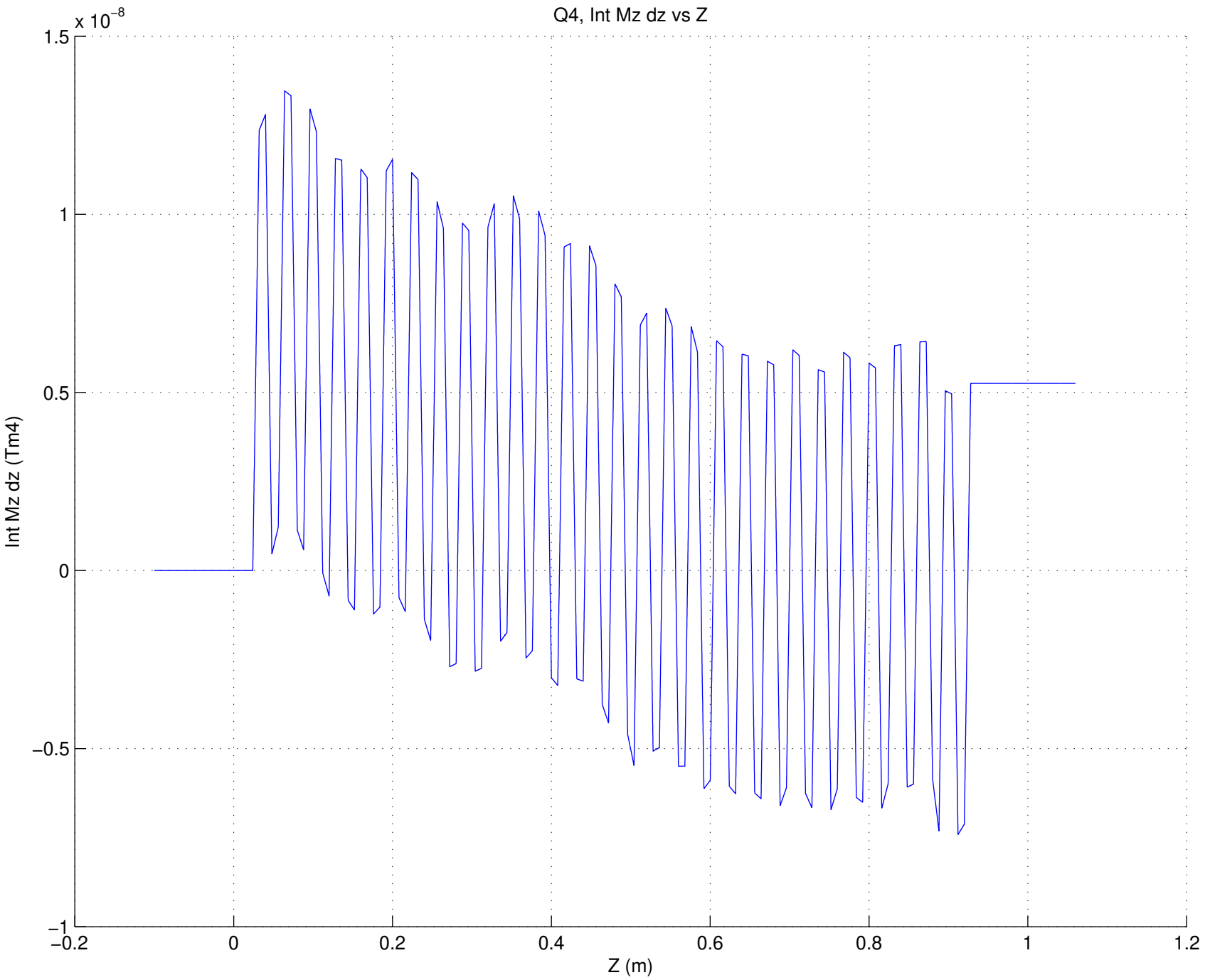

Q4, Int Int Mx dz dz vs Z
x 10^-10
8
7
6
5
4
3
2
1
0
−1
Int Int Mx dz dz (Tm5)
−0.2
0
0.2
0.4
0.6
0.8
1
1.2
Z (m)

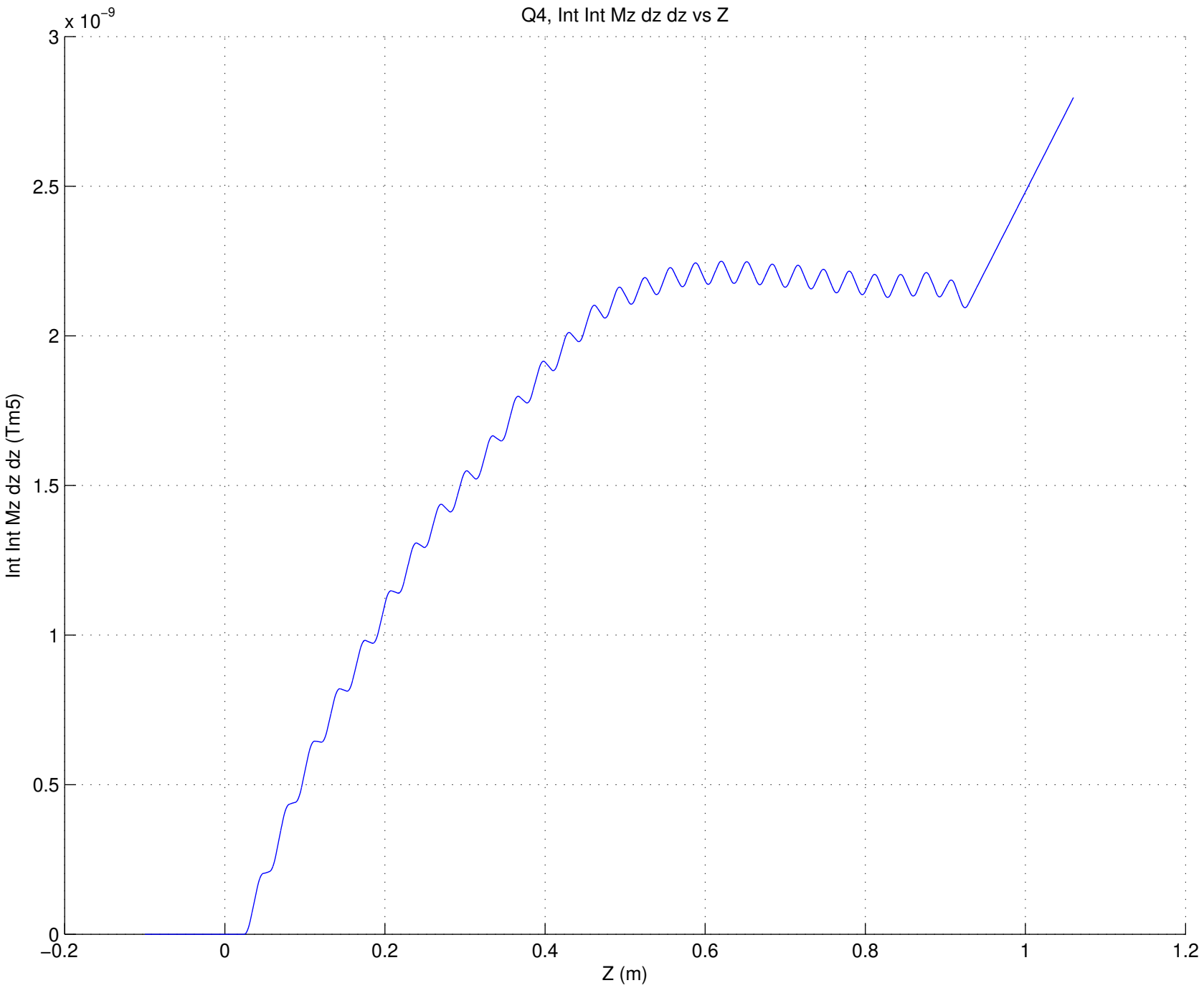

Q4, My vs Z
x 10^-6
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
My (Tm3)
−0.2
0
0.2
0.4
0.6
0.8
1
1.2
Z (m)


Q4, Int My dz vs Z
x 10^-9
14
12
10
8
6
4
2
0
−2
Int My dz (Tm4)
−0.2
0
0.2
0.4
0.6
0.8
1
1.2
Z (m)


Q4, Int Int My dz dz vs Z
x 10^-9
6
5
4
3
2
1
0
Int Int My dz dz (Tm5)
−0.2
0
0.2
0.4
0.6
0.8
1
1.2
Z (m)


Q4, Mz vs Z
x 10^-6
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
Mz (Tm3)
−0.2
0
0.2
0.4
0.6
0.8
1
1.2
Z (m)


Q4, Int Mz dz vs Z
x 10^-8
1.5
1
0.5
0
−0.5
−1
Int Mz dz (Tm4)
−0.2
0
0.2
0.4
0.6
0.8
1
1.2
Z (m)


Q4, Int Int Mz dz dz vs Z
x 10^-9
3
2.5
2
1.5
1
0.5
0
Int Int Mz dz dz (Tm5)
–0.2
0
0.2
0.4
0.6
0.8
1
1.2
Z (m)