SLAC Magnetic Measurements

Phase Analysis
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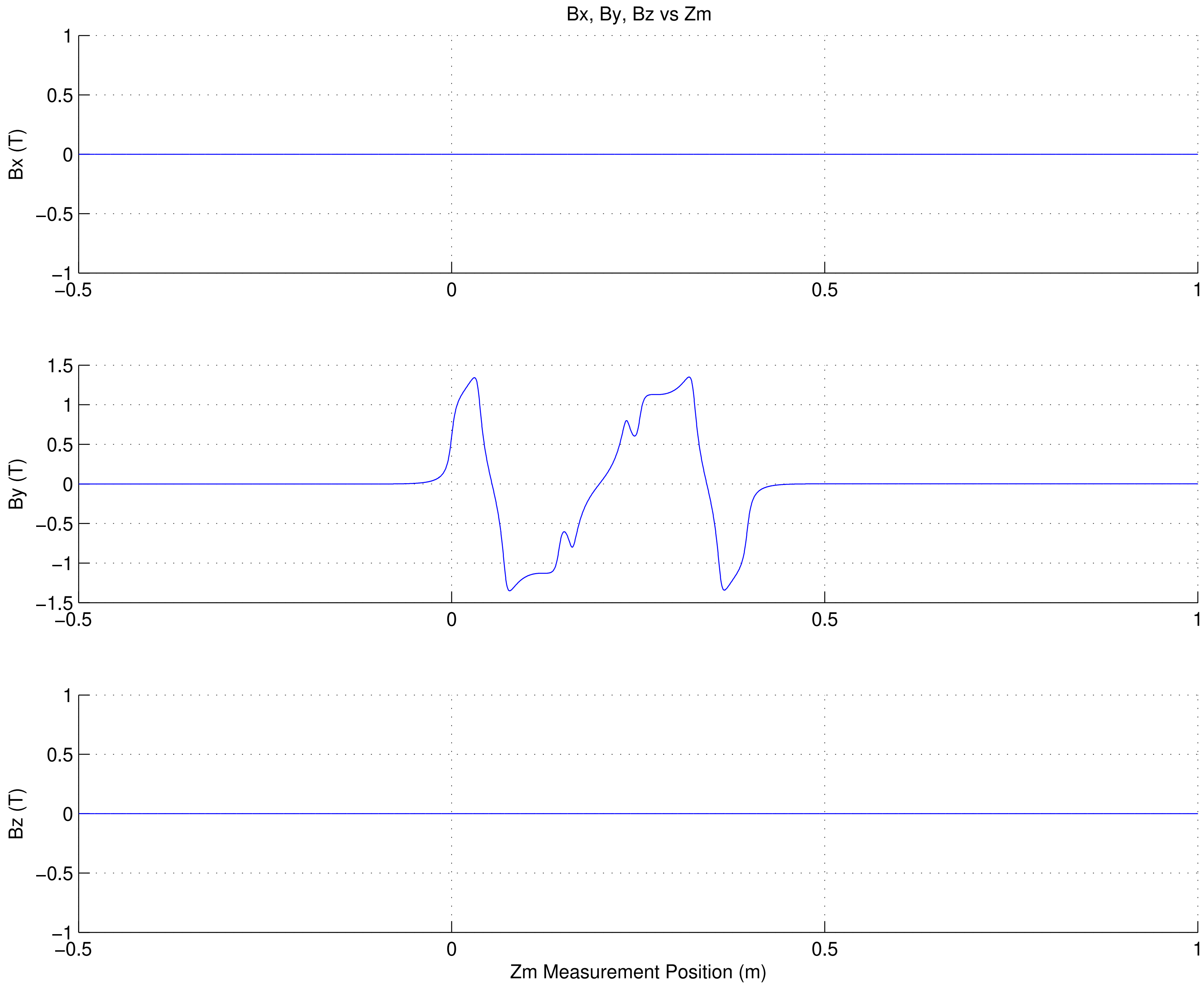
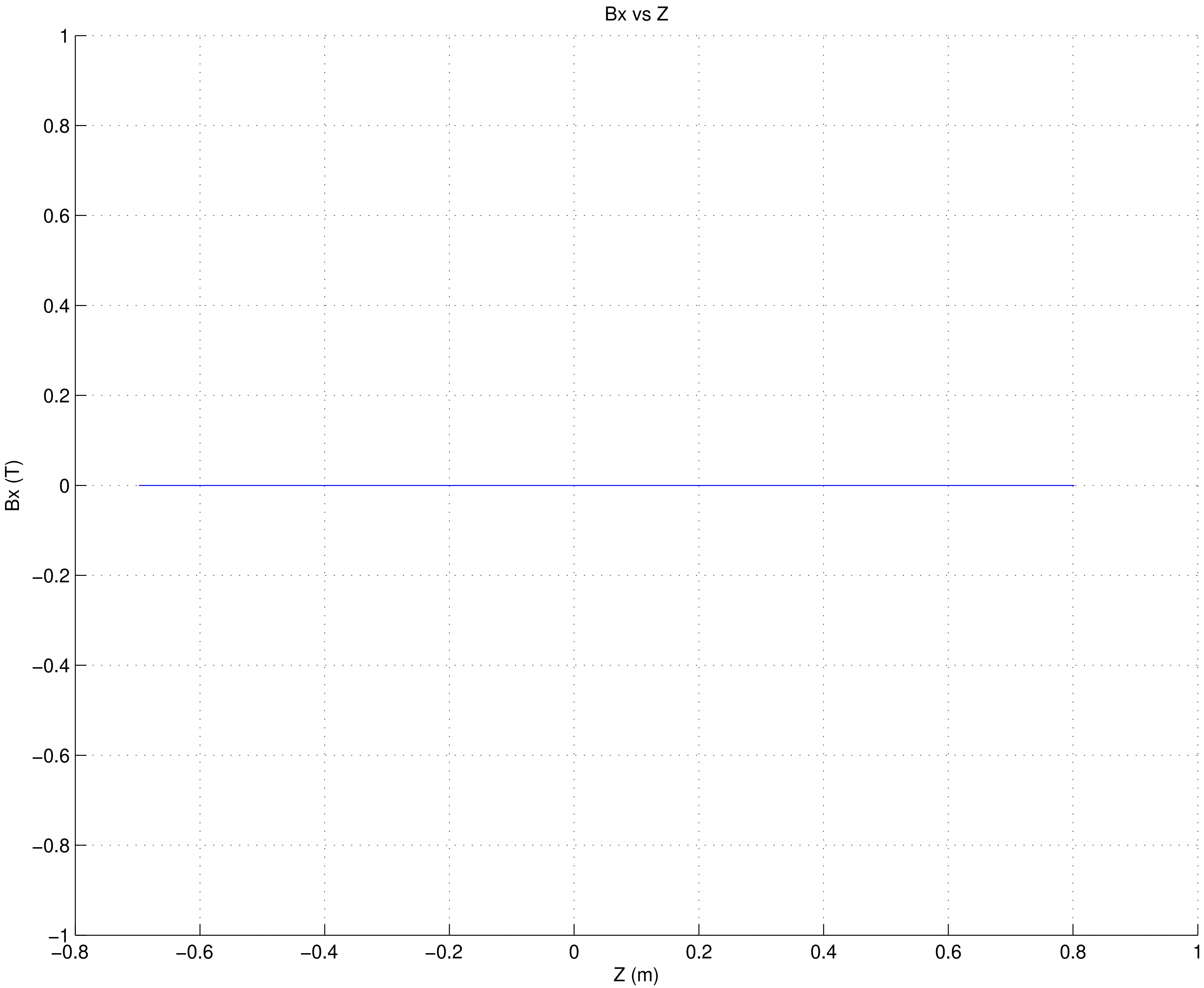
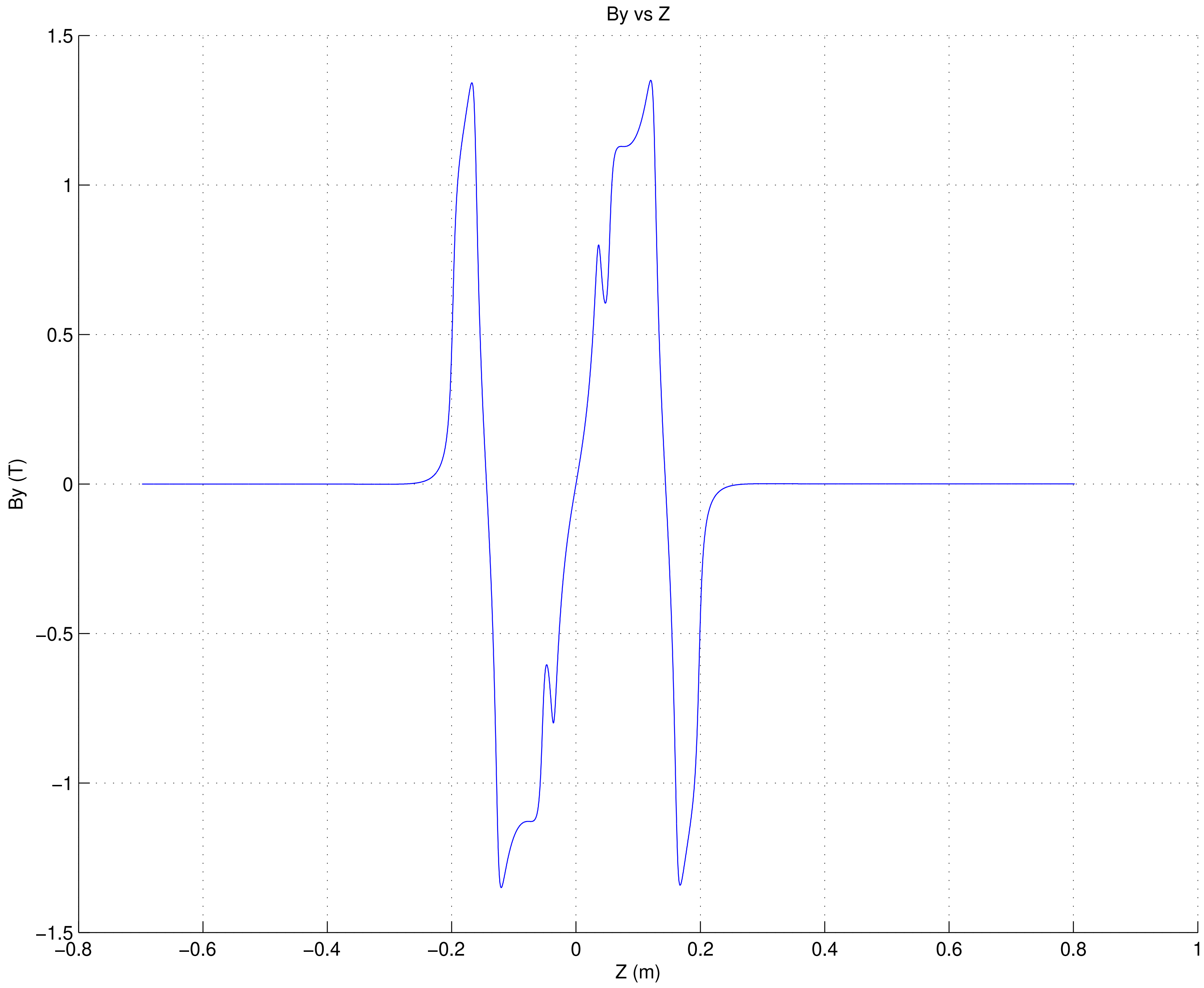
Parameters:
INPUT–FILE–DIR =C:\Magdata\Phase Shifter Increase Strength\Block Height 75mm\End Blocks 36mm\
INPUT–FILE–NAME =phase–shifter–sim.dat
INPUT–FILE–TYPE =ZBXYZH
CORR–REQUIRED =0
GAMMA =16765.2111
NOM–LAMBDA–U =0.055
NOM–K–VALUE =9.9
NOM–LAMBDA–R =4.8925e–09
NUM–POLES =4
NUM–END–POLES =0
CELL–LENGTH =0.4

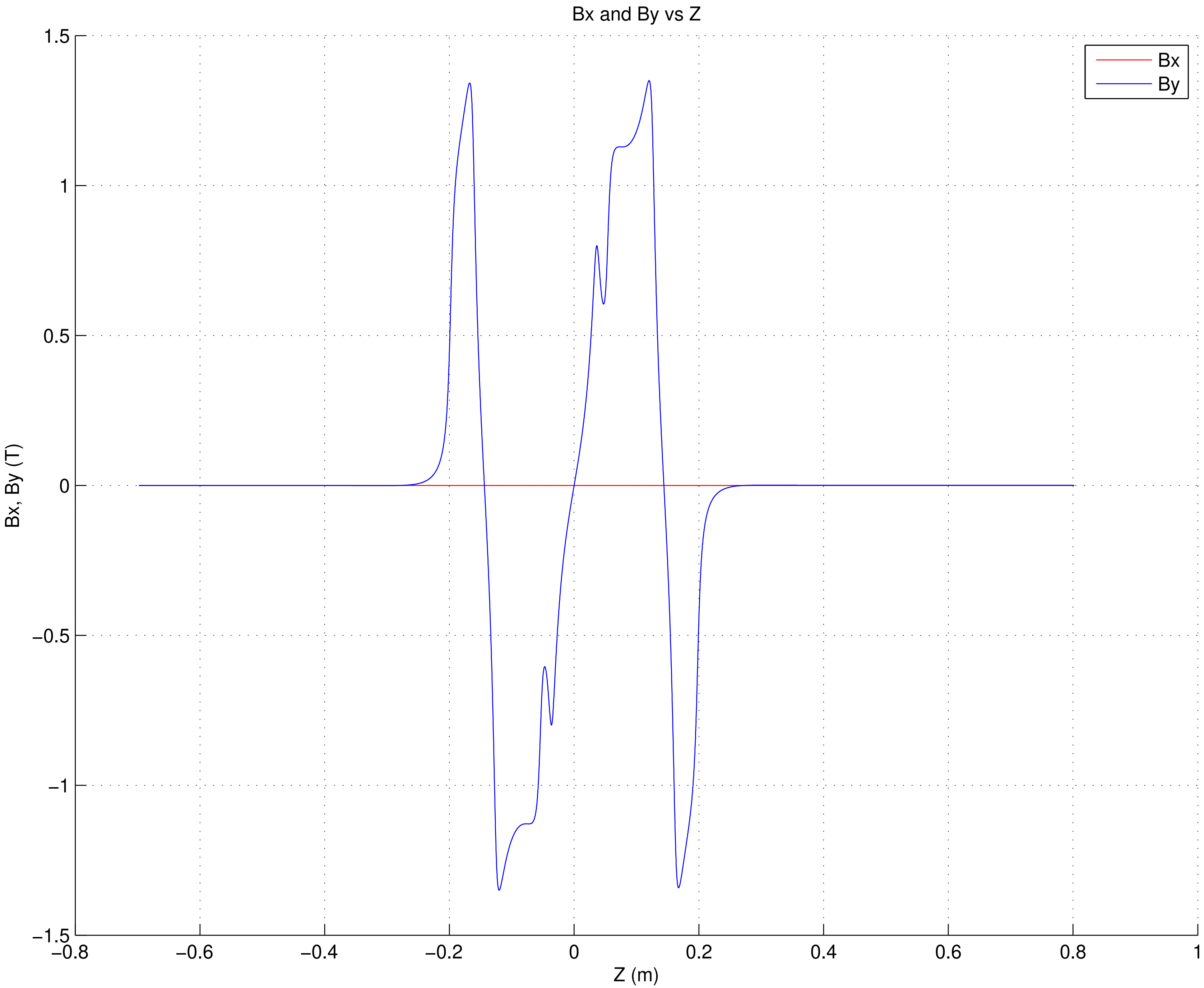


Bx, By, Bz vs Zm
Bx (T)
By (T)
Bz (T)
1
0.5
0
−0.5
−1
1.5
−1.5
0.5
1
Zm Measurement Position (m)

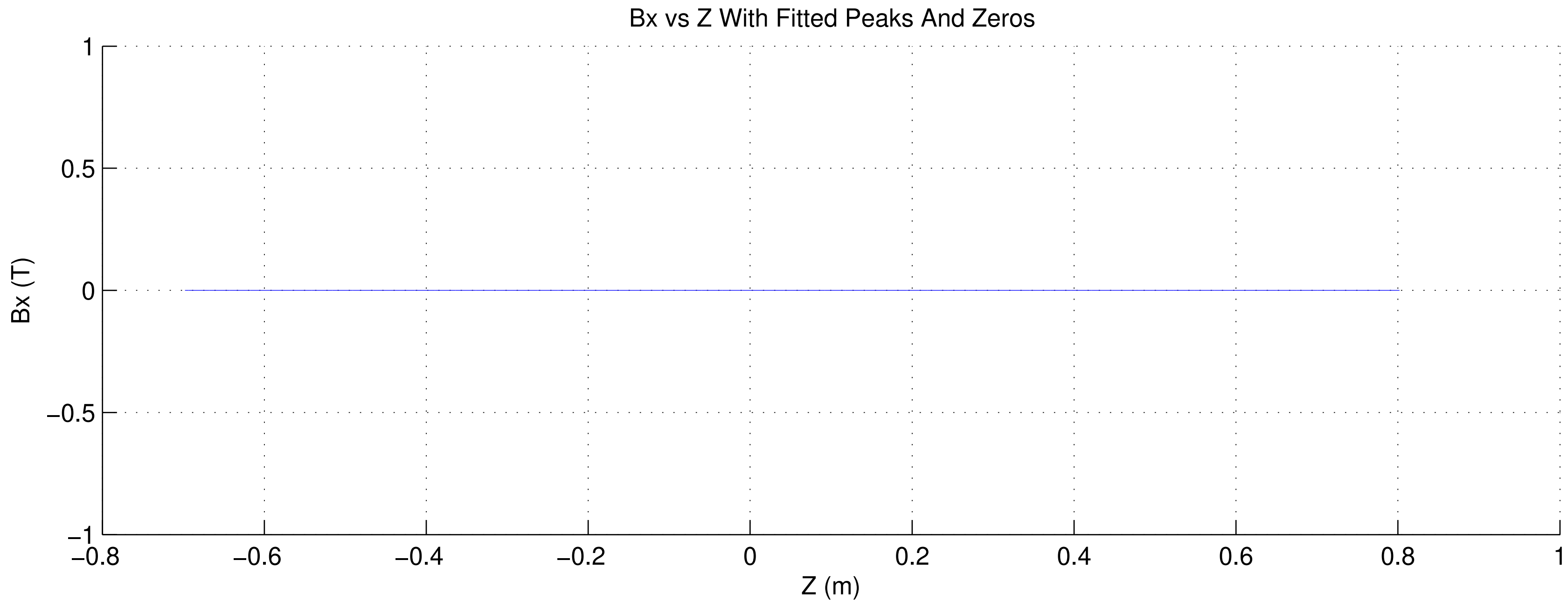


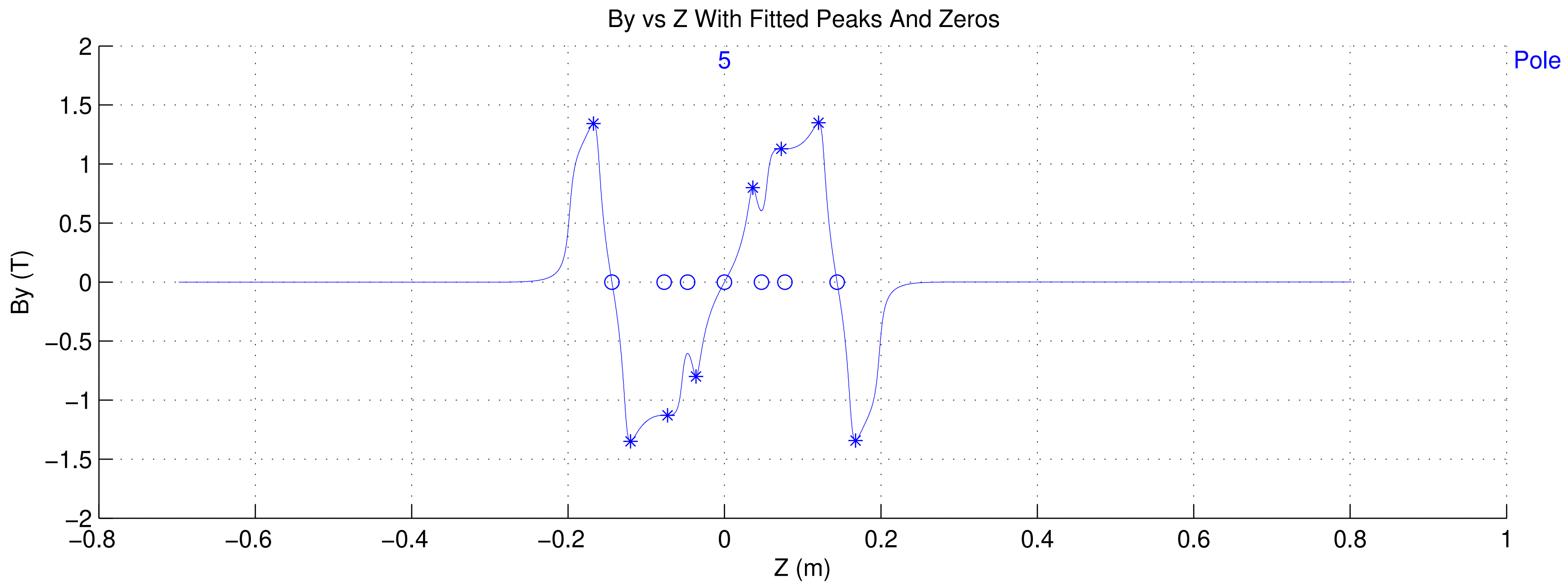
Bx vs Z
Bx (T)
Z (m)
1
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1
−0.8
−0.6
−0.4
−0.2
0
0.2
0.4
0.6
0.8
1

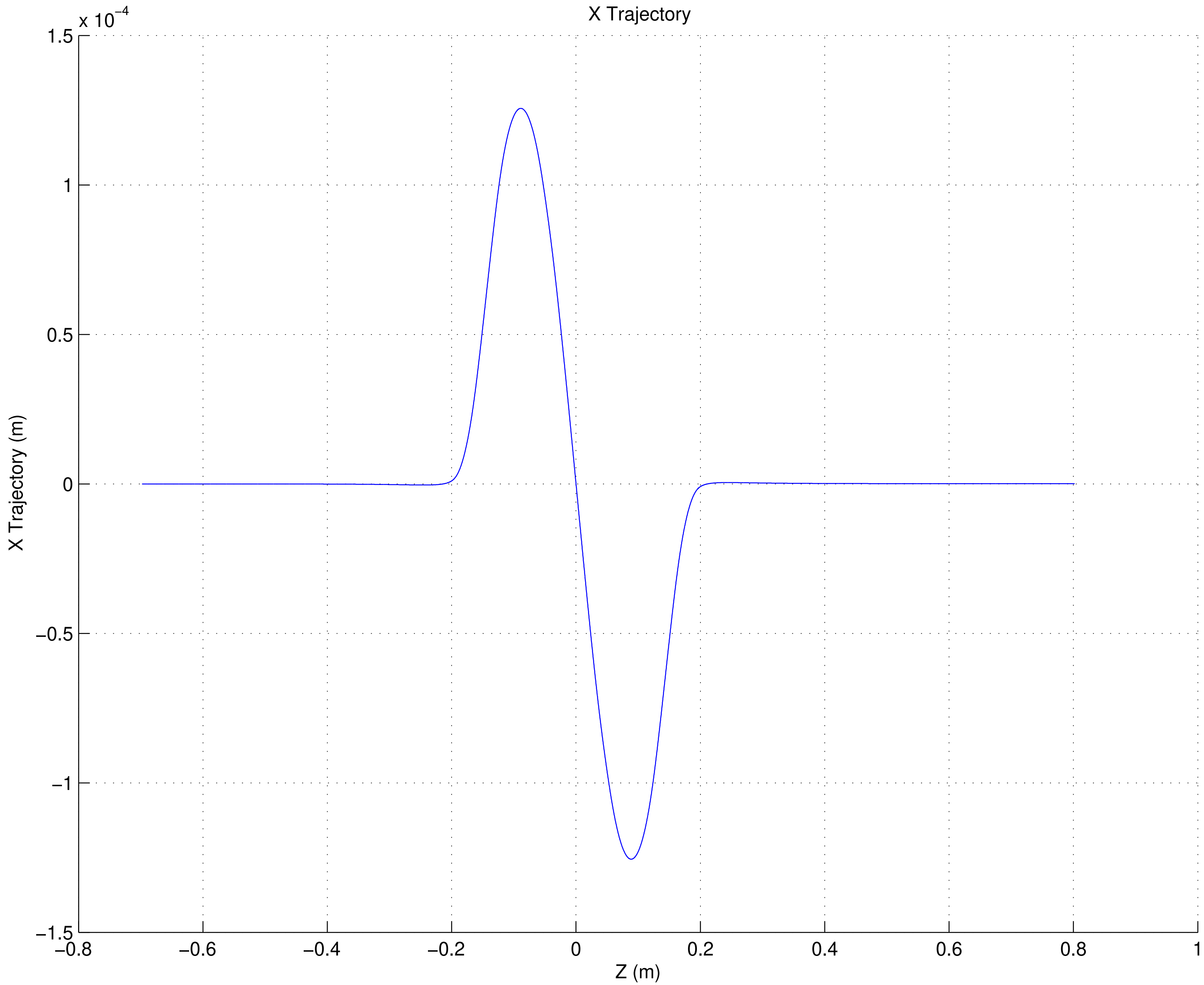

By vs Z
1.5
1
0.5
0
−0.5
−1
−1.5
By (T)
−0.8
−0.6
−0.4
−0.2
0
0.2
0.4
0.6
0.8
1
Z (m)



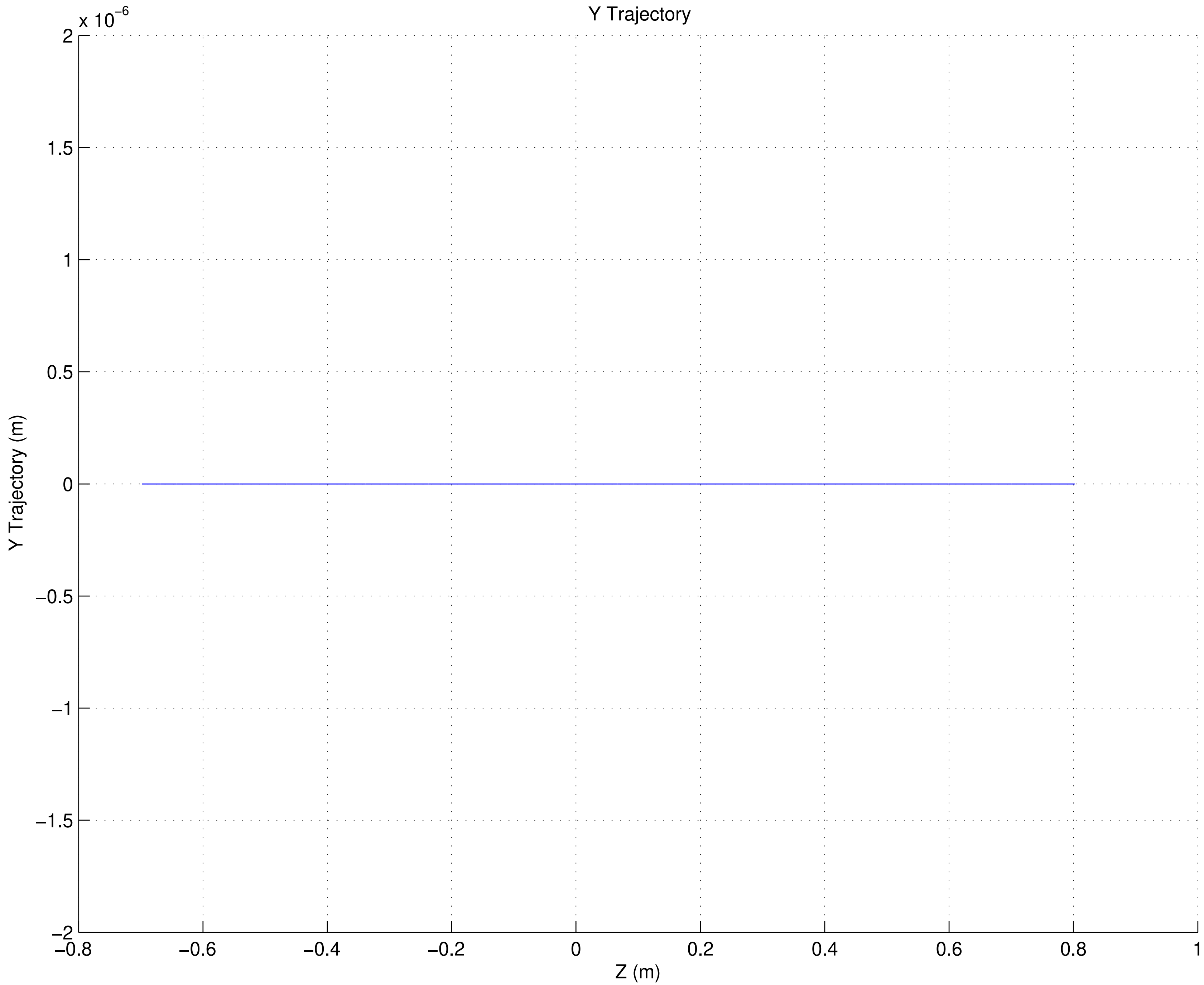
Bx and By vs Z
Bx
By
Bx, By (T)
Z (m)
1.5
1
0.5
0
−0.5
−1
−1.5
−0.8
−0.6
−0.4
−0.2
0
0.2
0.4
0.6
0.8
1


Bx vs Z With Fitted Peaks And Zeros
1
0.5
0
−0.5
−1
−0.8
−0.6
−0.4
−0.2
0
0.2
0.4
0.6
0.8
1
Bx (T)
Z (m)

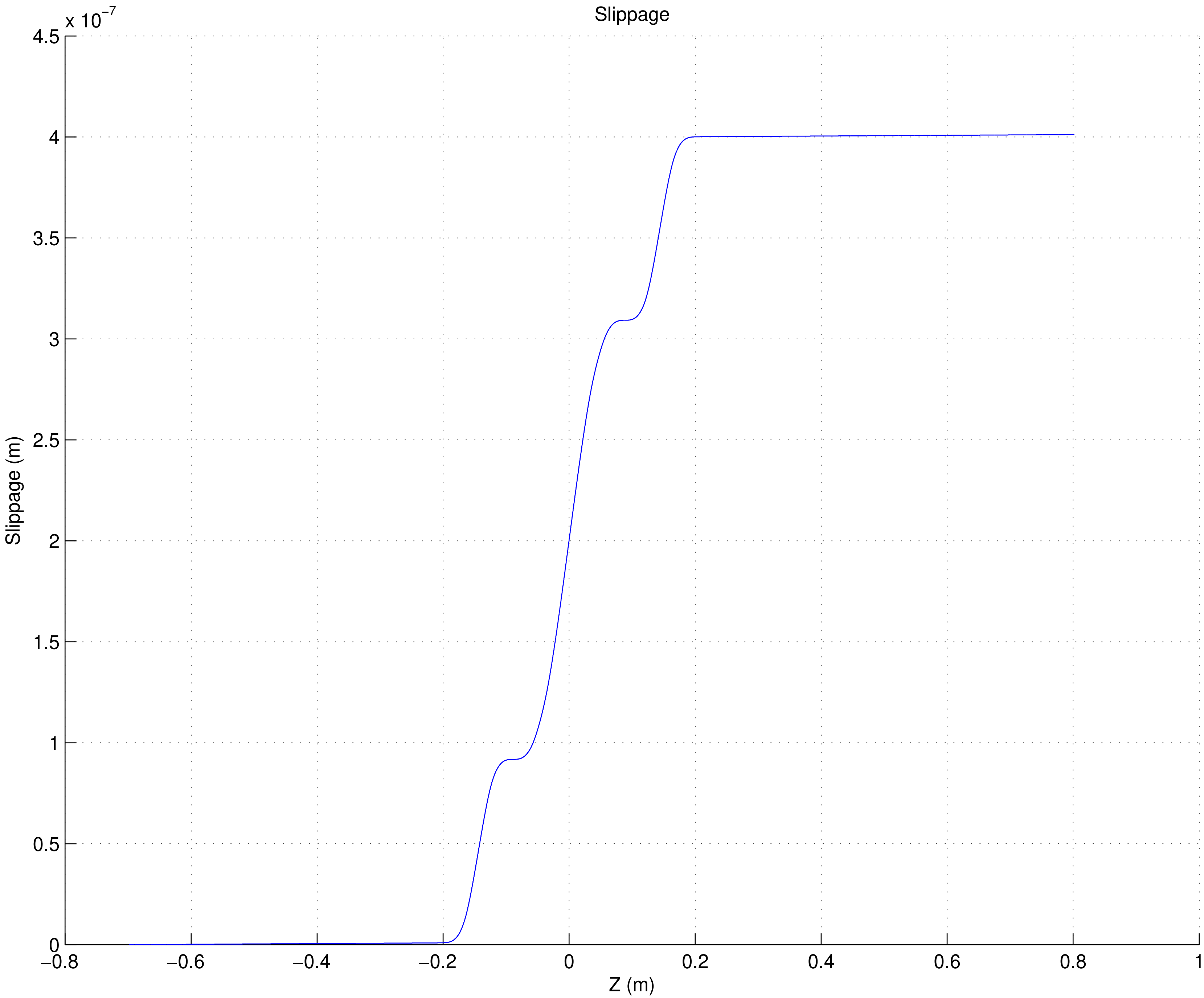

By vs Z With Fitted Peaks And Zeros
5
Pole
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−0.8
−0.6
−0.4
−0.2
0
0.2
0.4
0.6
0.8
1
By (T)
Z (m)

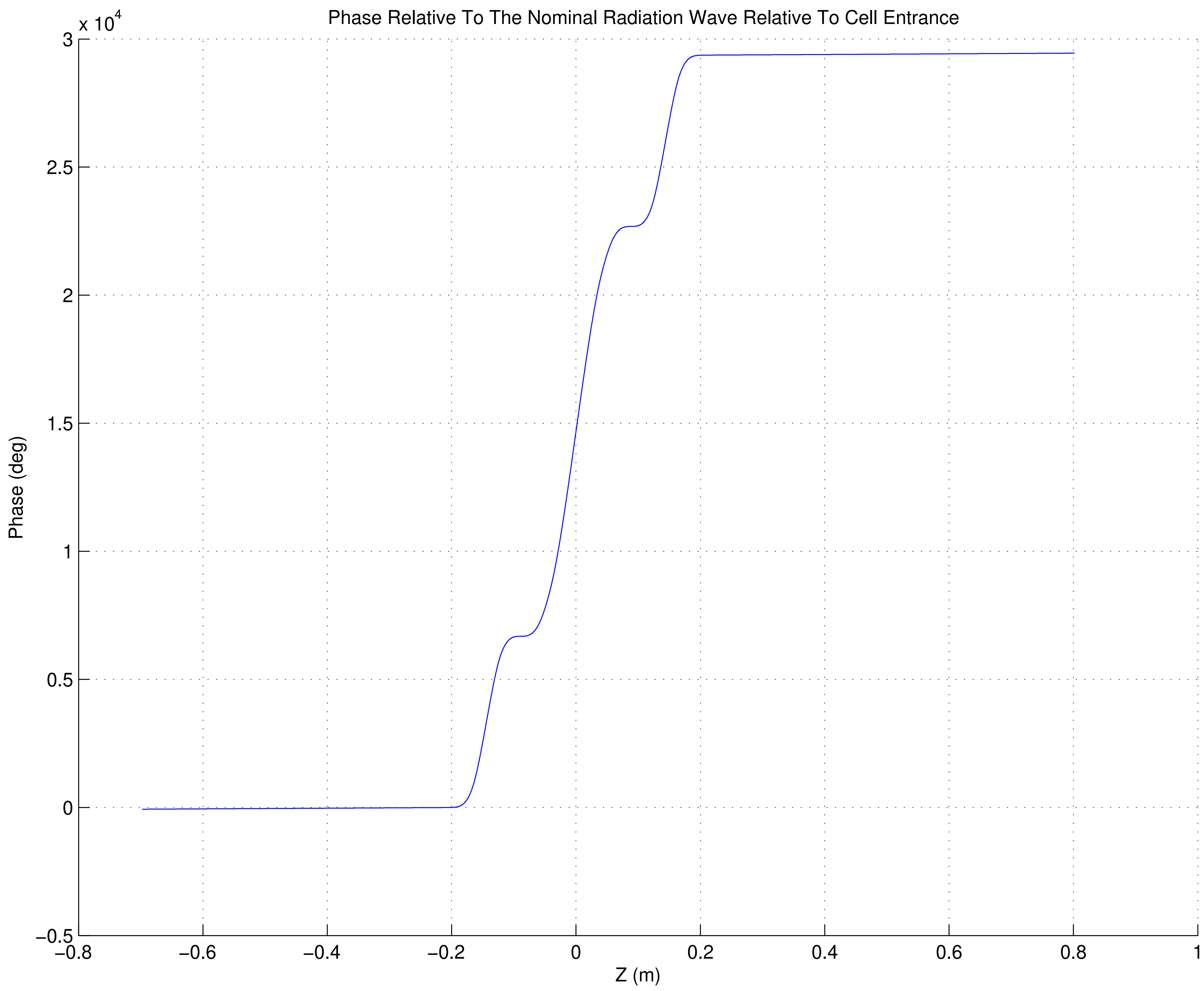


X Trajectory
x 10^−4
1.5
1
0.5
0
−0.5
−1
−1.5
X Trajectory (m)
−0.8
−0.6
−0.4
−0.2
0
0.2
0.4
0.6
0.8
1
Z (m)



Y Trajectory
x 10^−6
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
Y Trajectory (m)
−0.8
−0.6
−0.4
−0.2
0
0.2
0.4
0.6
0.8
1
Z (m)


Slippage
x 10^-7
Slippage (m)
Z (m)
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
−0.8
−0.6
−0.4
−0.2
0
0.2
0.4
0.6
0.8
1



Phase Relative To The Nominal Radiation Wave Relative To Cell Entrance
x 10^4
3
2.5
2
1.5
1
0.5
0
−0.5
Phase (deg)
−0.8
−0.6
−0.4
−0.2
0
0.2
0.4
0.6
0.8
1
Z (m)