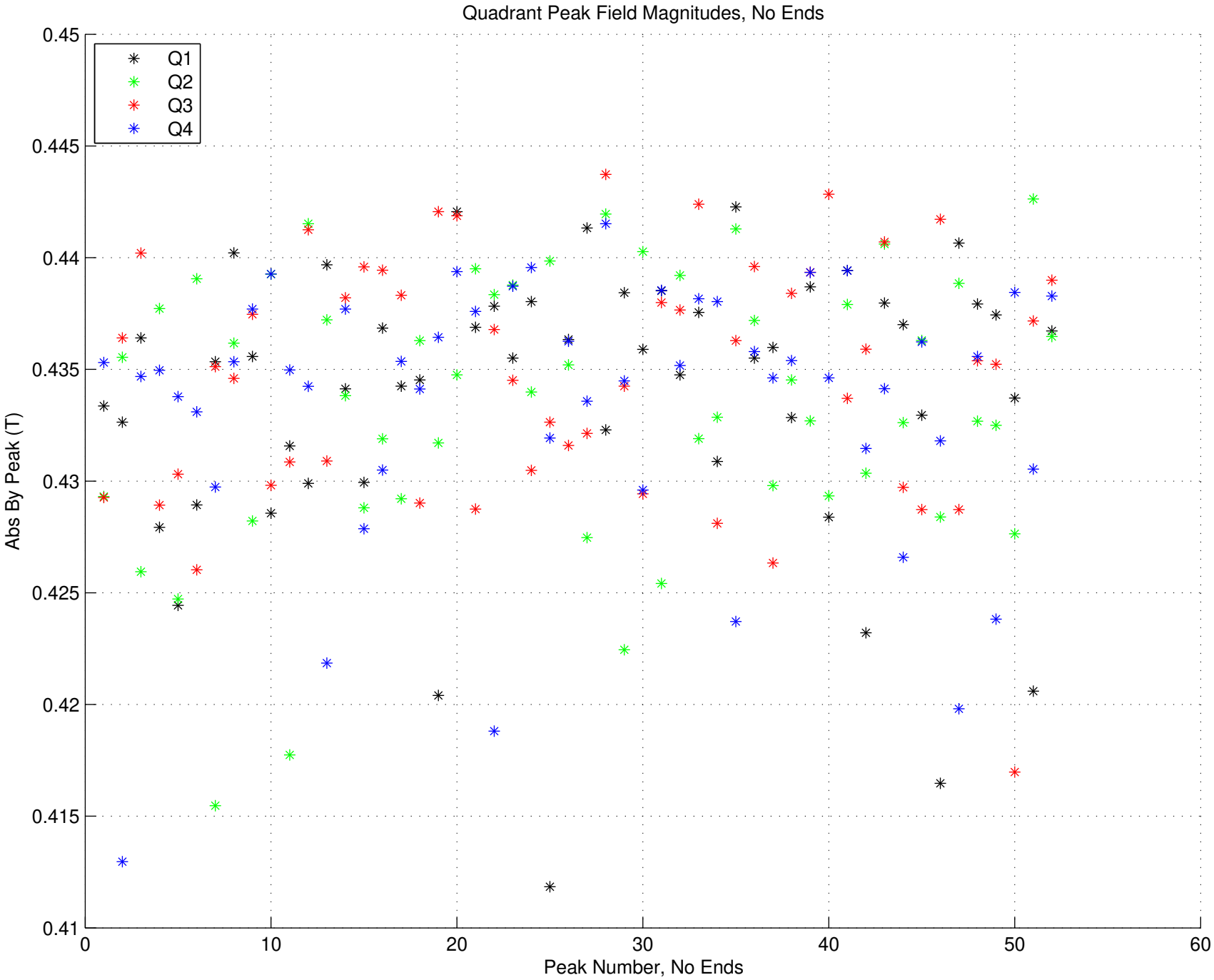
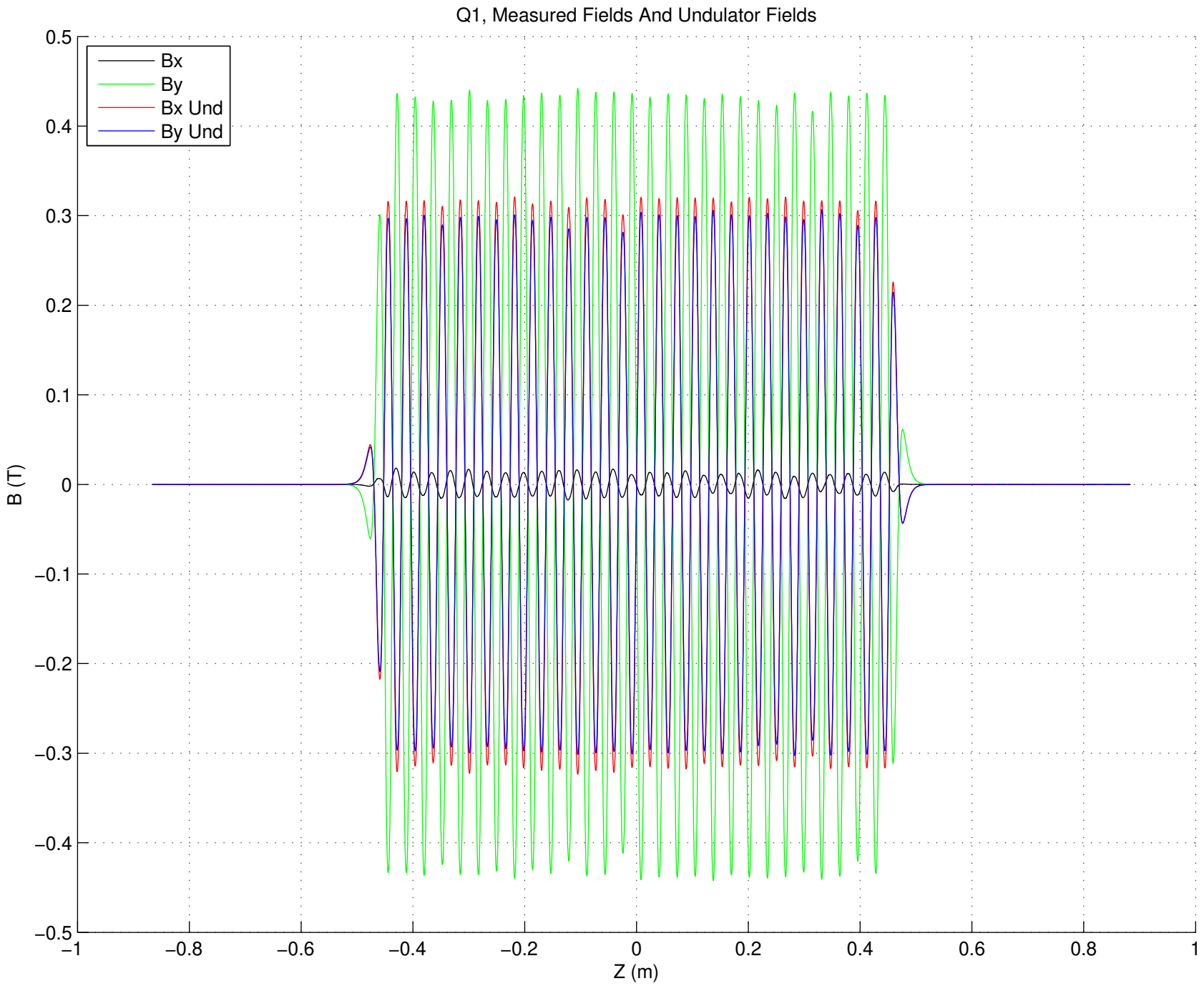
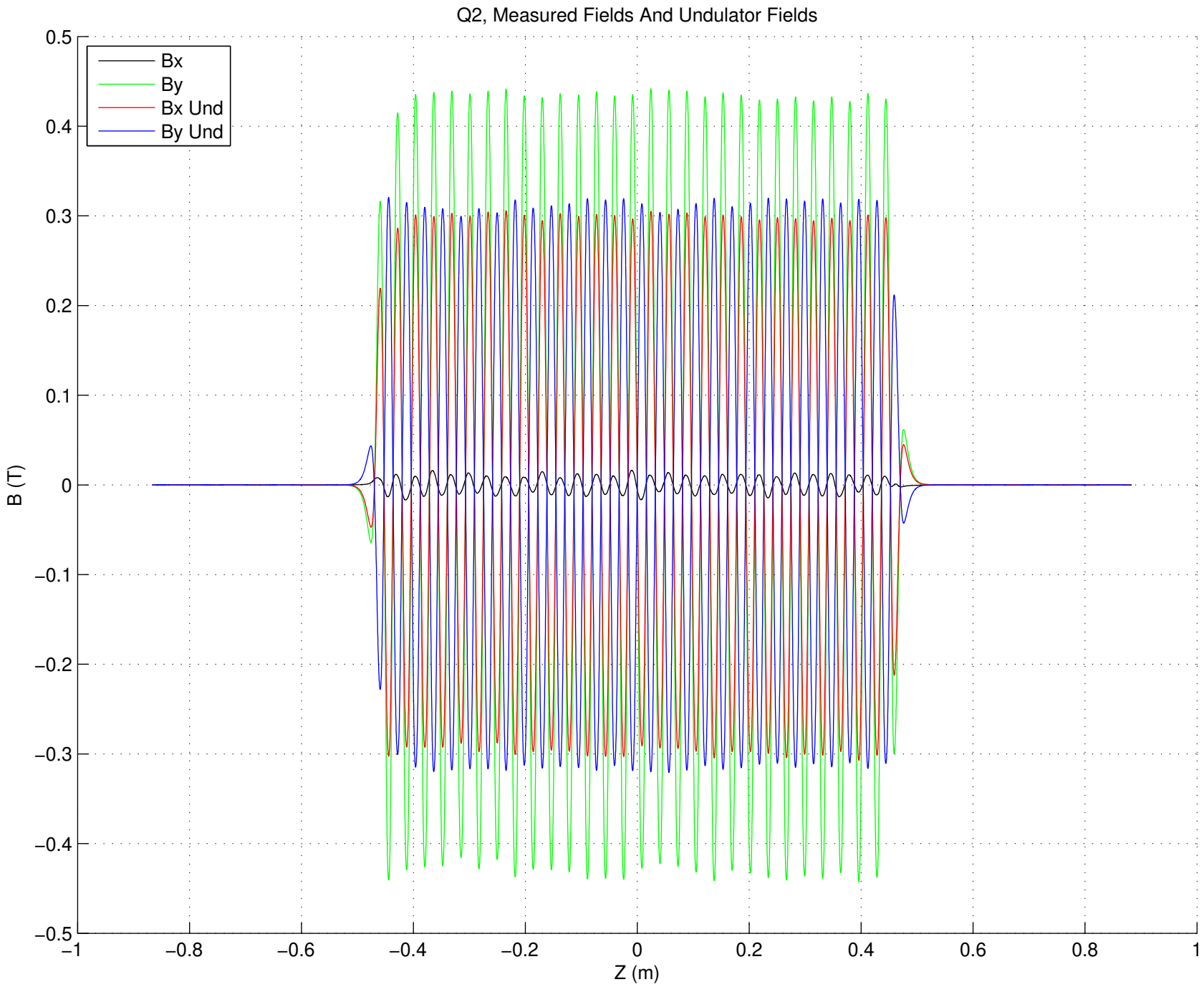
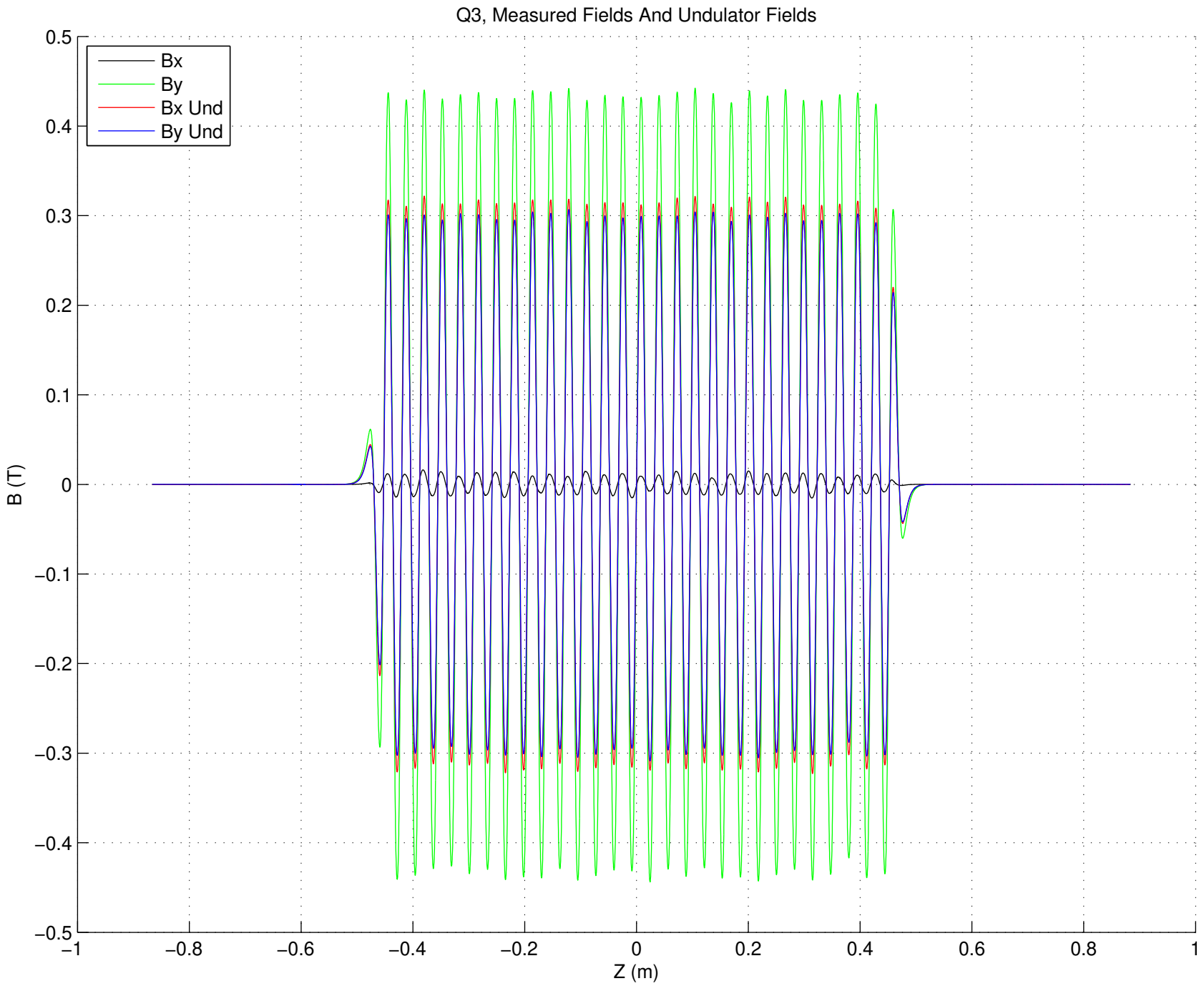
SLAC Magnetic Measurements

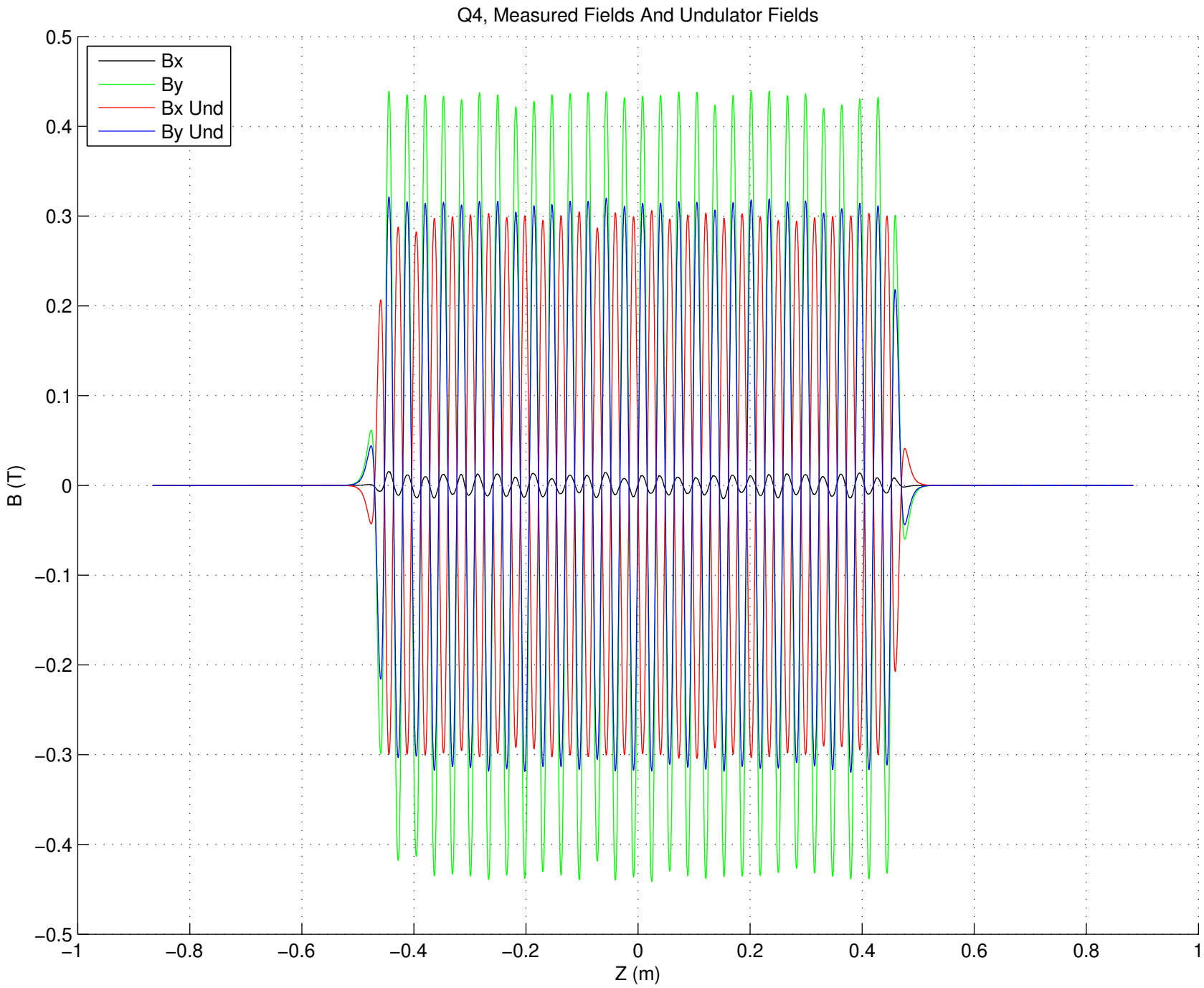
Calculate Delta Undulator Fields From Quadrant Measurements

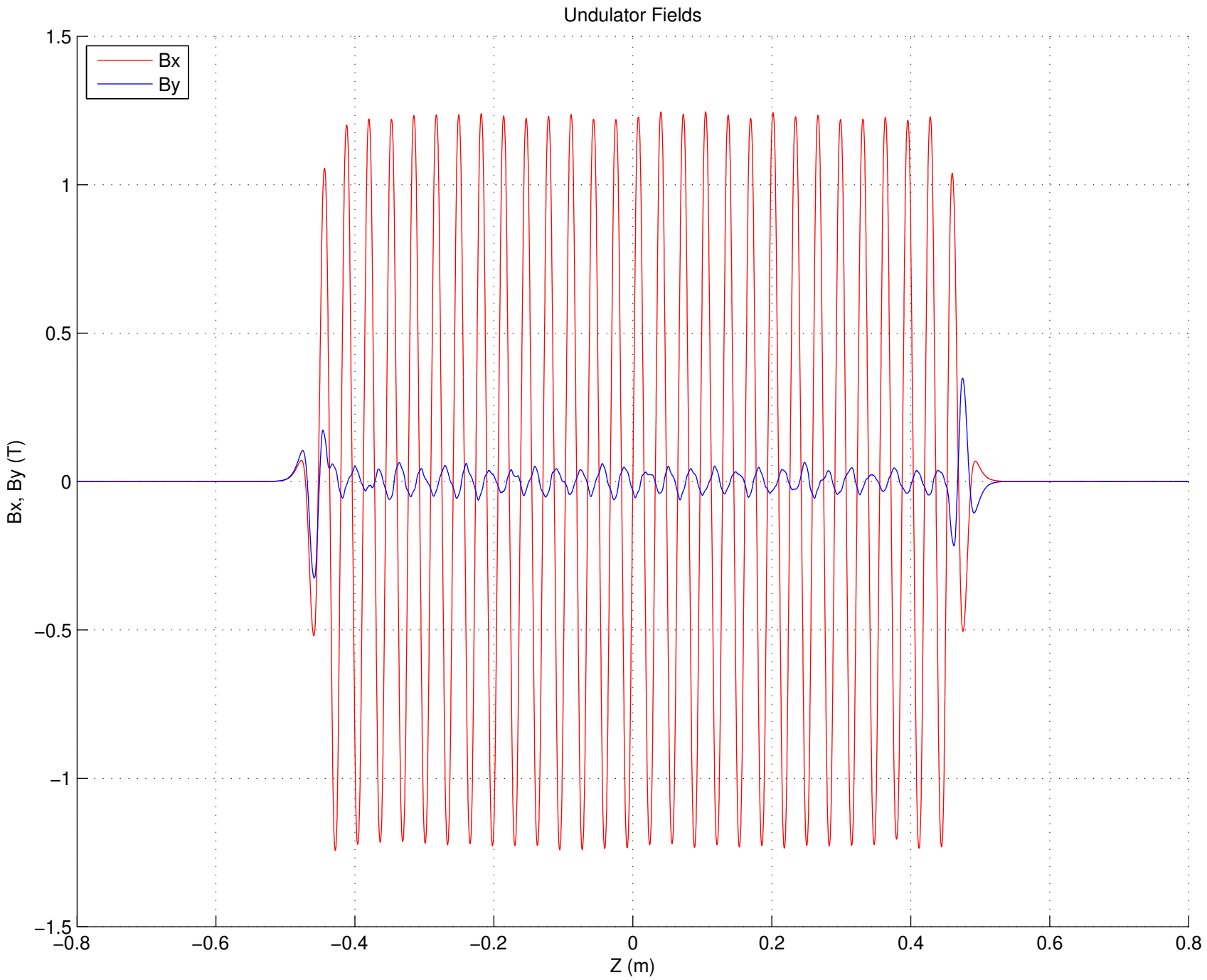

Quadrant Peak Field Magnitudes, No Ends
Q1
Q2
Q3
Q4
Abs By Peak (T)
Peak Number, No Ends
0.45
0.445
0.44
0.435
0.43
0.425
0.42
0.415
0.41
0
10
20
30
40
50
60


Q1, Measured Fields And Undulator Fields
Bx
By
Bx Und
By Und
B (T)
Z (m)
0.5
0.4
0.3
0.2
0.1
0
−0.1
−0.2
−0.3
−0.4
−0.5
−1
−0.8
−0.6
−0.4
−0.2
0
0.2
0.4
0.6
0.8
1


Q2, Measured Fields And Undulator Fields
Bx
By
Bx Und
By Und
B (T)
Z (m)
0.5
0.4
0.3
0.2
0.1
0
−0.1
−0.2
−0.3
−0.4
−0.5
−1
−0.8
−0.6
−0.4
−0.2
0
0.2
0.4
0.6
0.8
1


Q3, Measured Fields And Undulator Fields
Bx
By
Bx Und
By Und
B (T)
Z (m)
0.5
0.4
0.3
0.2
0.1
0
−0.1
−0.2
−0.3
−0.4
−0.5
−1
−0.8
−0.6
−0.4
−0.2
0
0.2
0.4
0.6
0.8
1


Q4, Measured Fields And Undulator Fields
Bx
By
Bx Und
By Und
B (T)
Z (m)
0.5
0.4
0.3
0.2
0.1
0
−0.1
−0.2
−0.3
−0.4
−0.5
−1
−0.8
−0.6
−0.4
−0.2
0
0.2
0.4
0.6
0.8
1


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