SLAC Magnetic Measurements

Planar Insertion Device Analysis

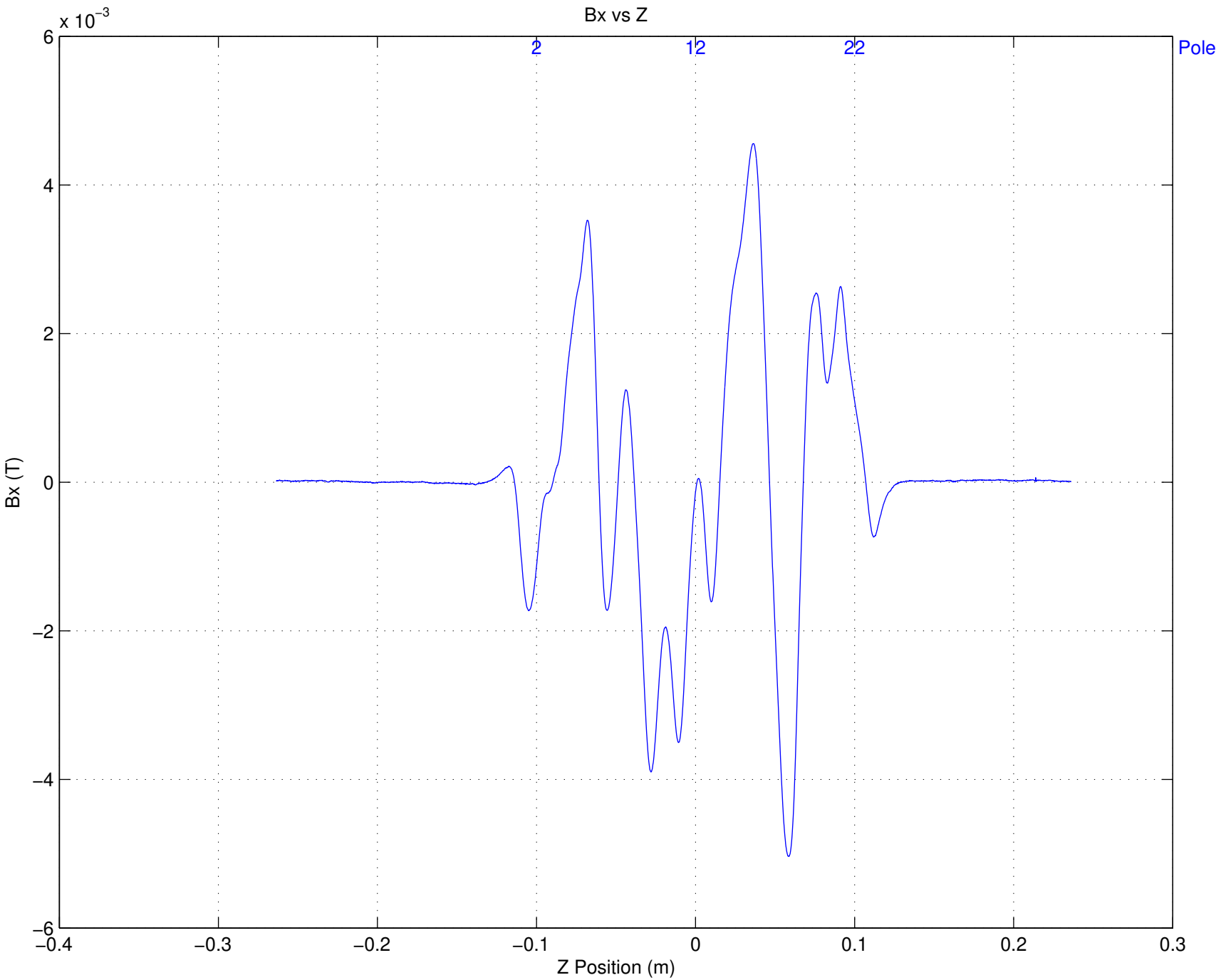
SLAC Magnetic Measurements
Date: 05−11−2012
Time: 13:38:27

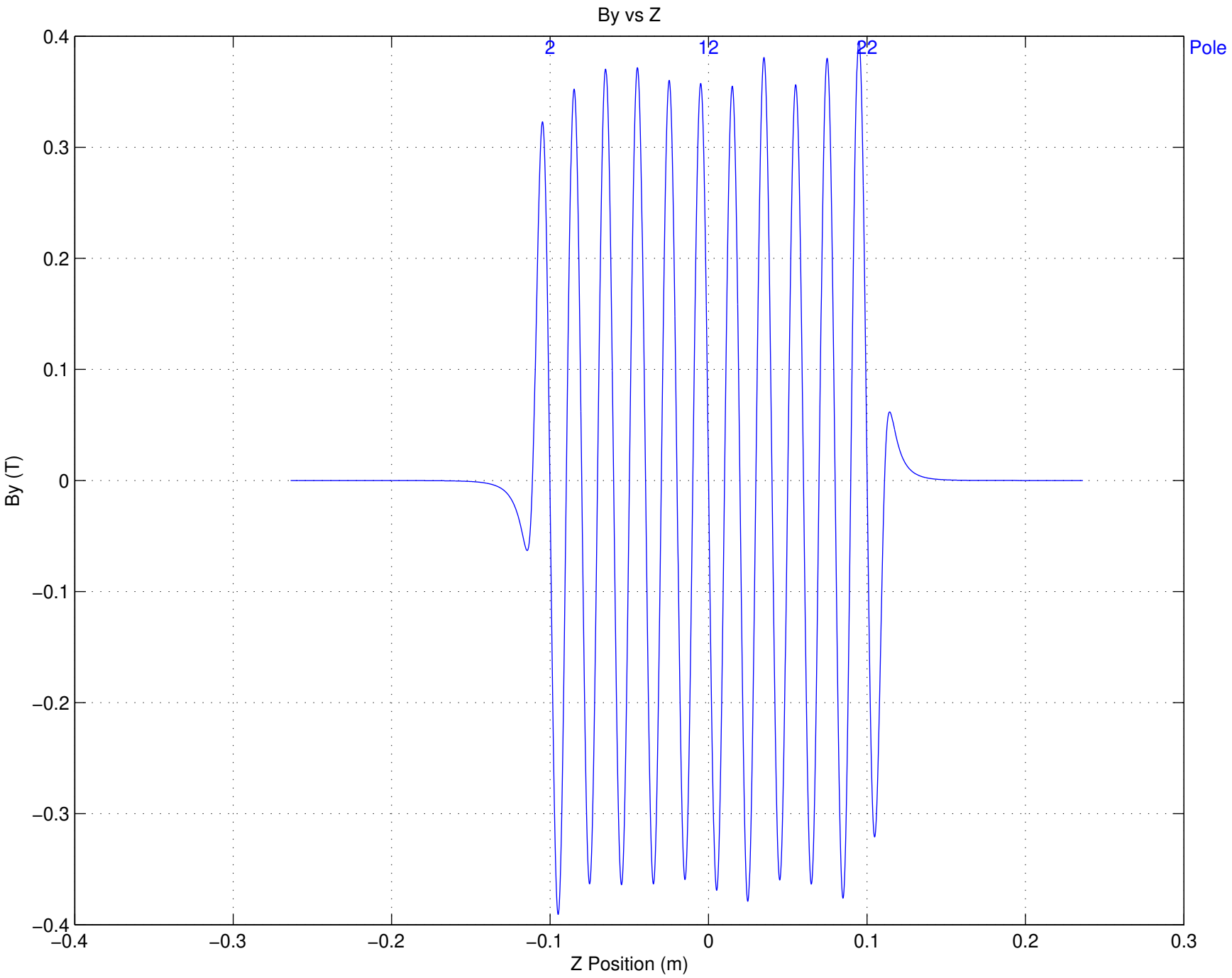
Project: LCLS
Device Type: Undulator
Data Type:
Serial Number: ECKO7−20−PPM
DATASET Number: 3
Tuning Stage: Fine Tuning
Run Number: 4
Measurement Type: Z Scans
Operator: YL
Comment: check
Session first run: 3
Measurement Device x:
Measurement Device y: $SENTRON_4$41

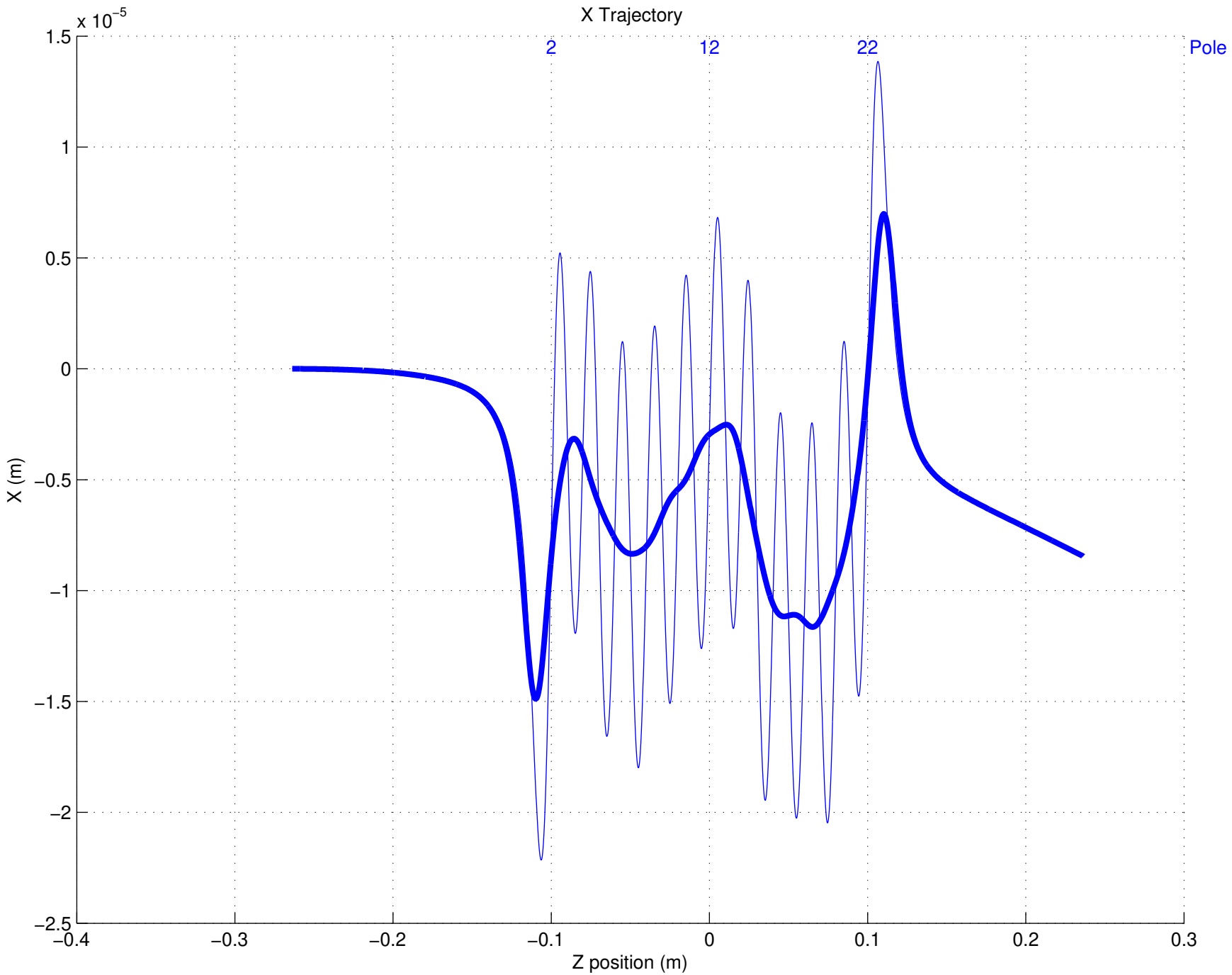
Data File: s:\magdata\LCLS\Undulator\ECKO7−20−PPM\DATASET0003\Fine Tuning\Z Scans\Run 004\bscanz.dat

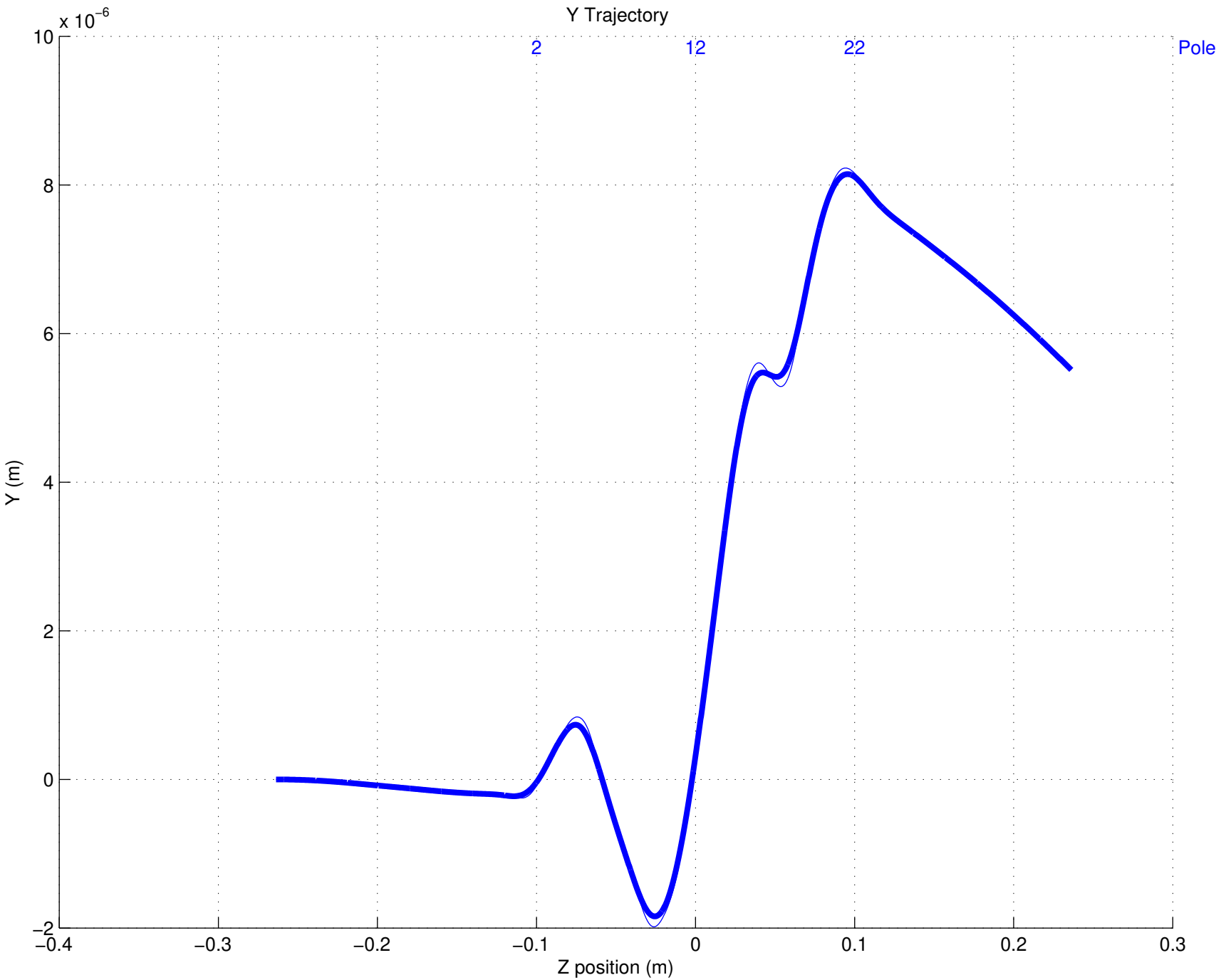
Temperature (C)
ECKO7−20−PPM:−−> T1 20.02 −−> T2 20.02 −−> T5 19.96 −−> T3 20.03 −−> Air 20.12 −−> T4 20.02

Axes position (m) X:0.028949 Y:0.000429
Initial Hall Probe Zero Measurements:
Vx_0i = 0.000914 V
Vy_0i = −0.003407 V


Bx vs Z
x 10^-3
6
4
2
0
−2
−4
−6
Bx (T)
2
12
22
Pole
−0.4
−0.3
−0.2
−0.1
0
0.1
0.2
0.3
Z Position (m)


By vs Z
2
12
22
Pole
0.4
0.3
0.2
0.1
0
−0.1
−0.2
−0.3
−0.4
By (T)
−0.4
−0.3
−0.2
−0.1
0
0.1
0.2
0.3
Z Position (m)


X Trajectory
x 10^-5
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5
X (m)
−0.4
−0.3
−0.2
−0.1
0
0.1
0.2
0.3
Z position (m)
2
12
22
Pole


Y Trajectory
x 10^-6
10
8
6
4
2
0
−2
Y (m)
2
12
22
Pole
−0.4
−0.3
−0.2
−0.1
0
0.1
0.2
0.3
Z position (m)