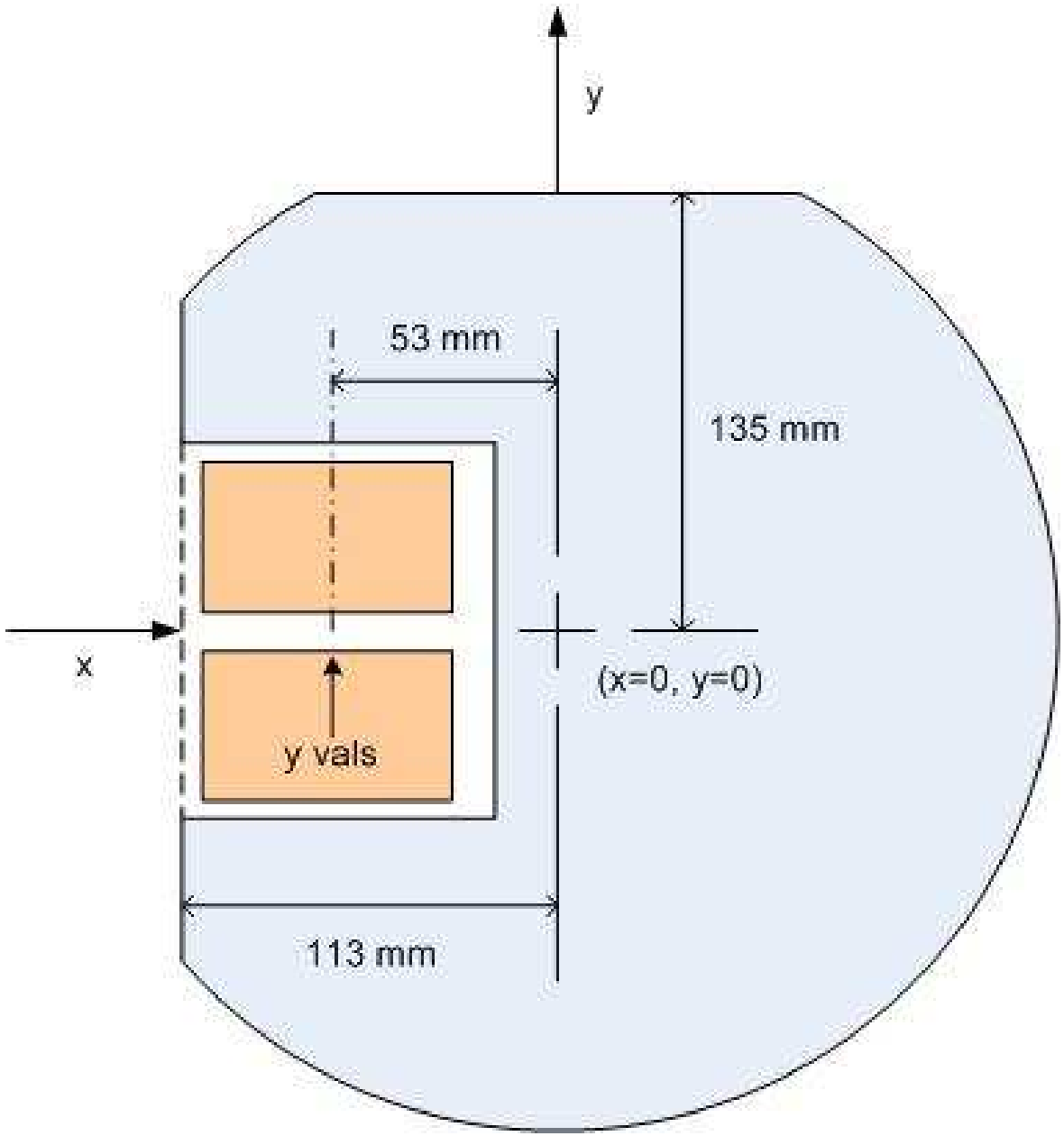
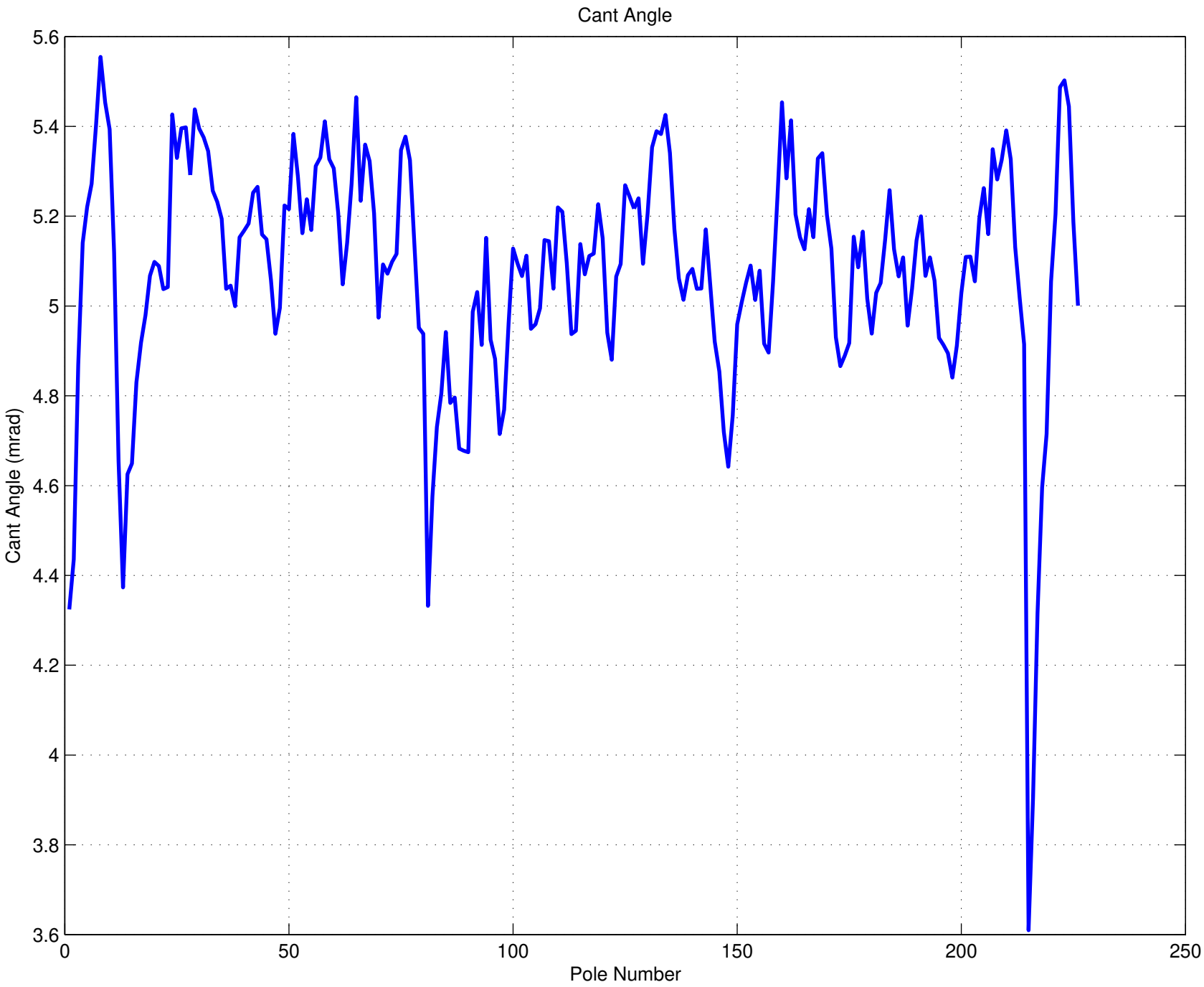
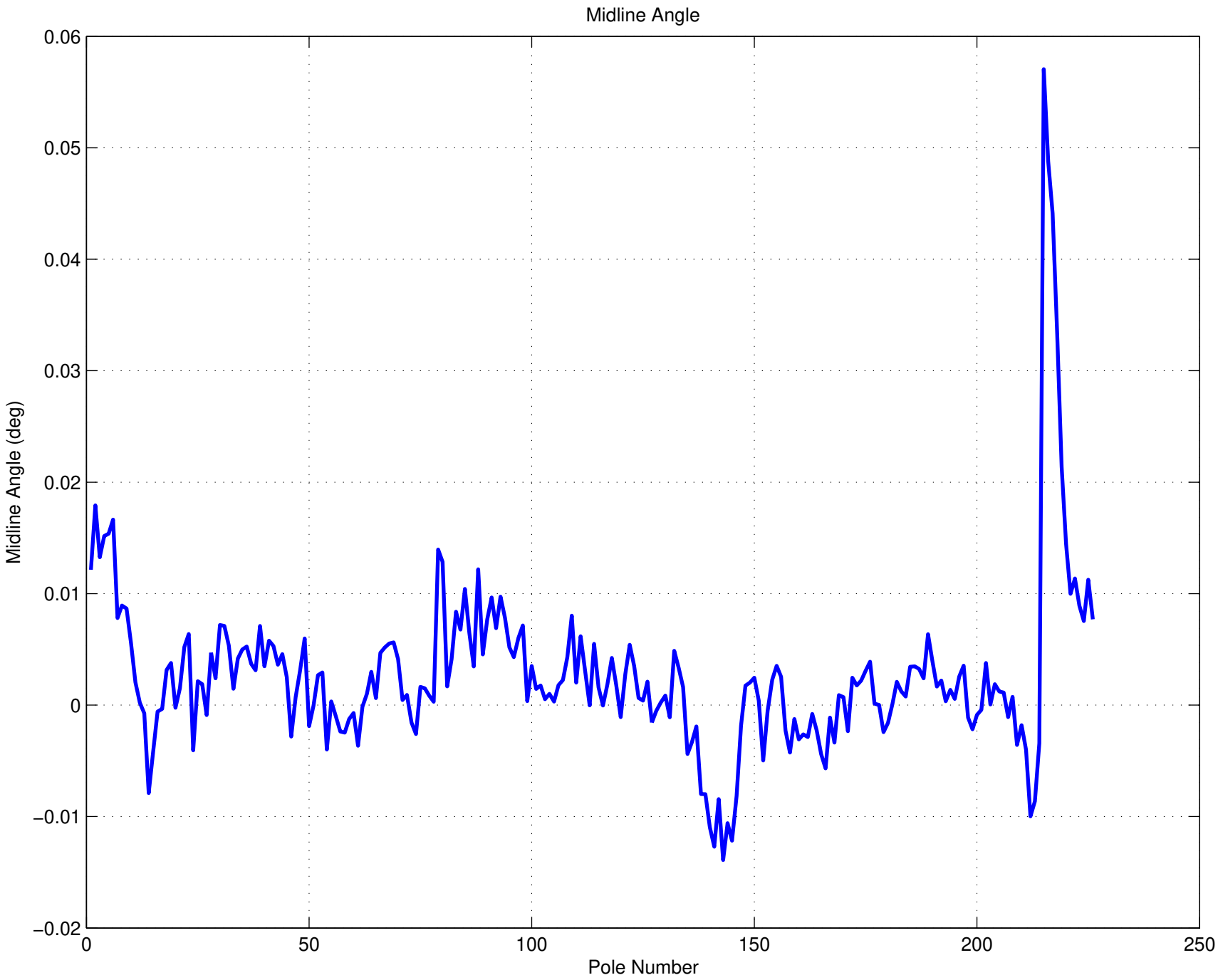
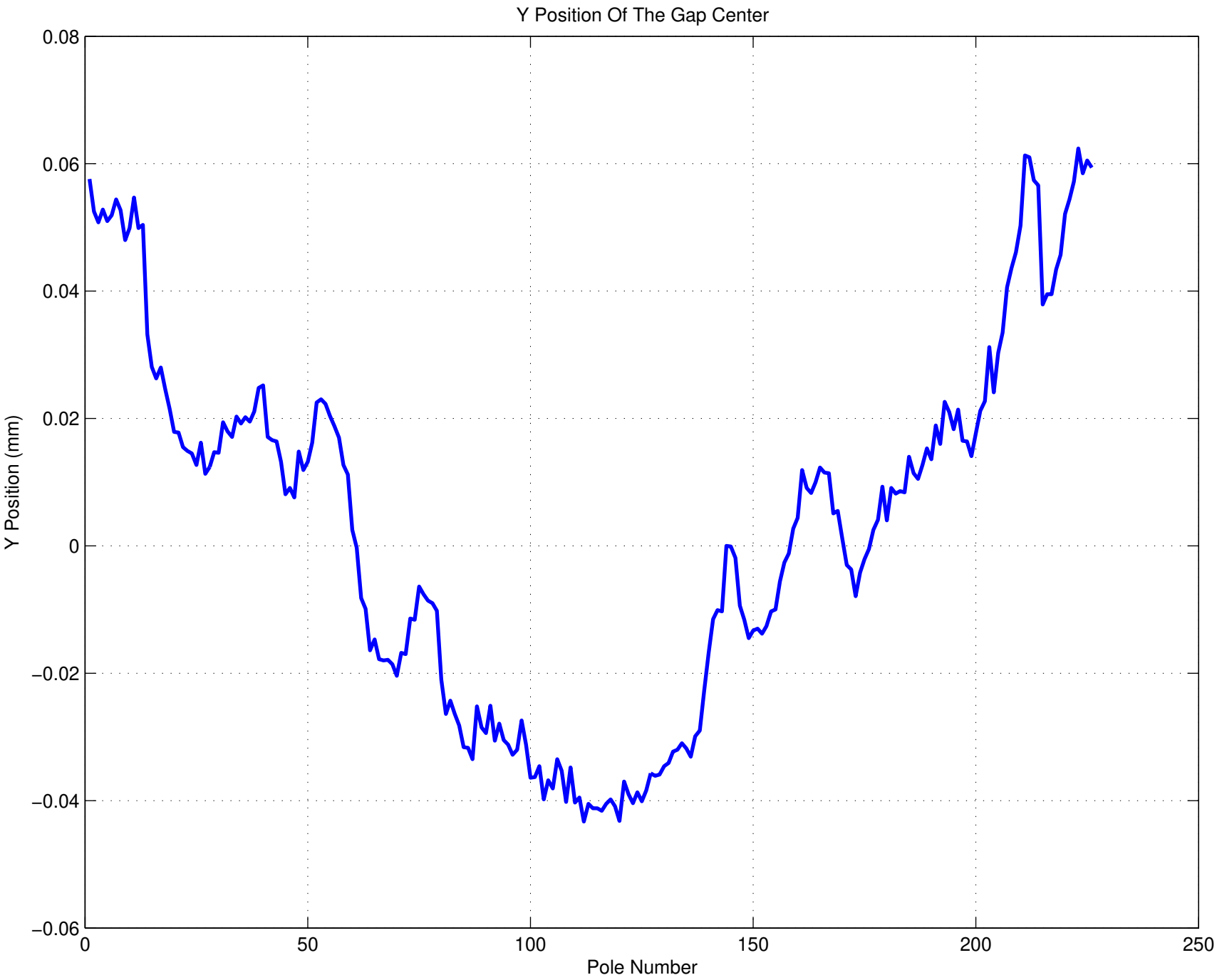
SLAC Magnetic Measurements
Mechanical Measurement Analysis

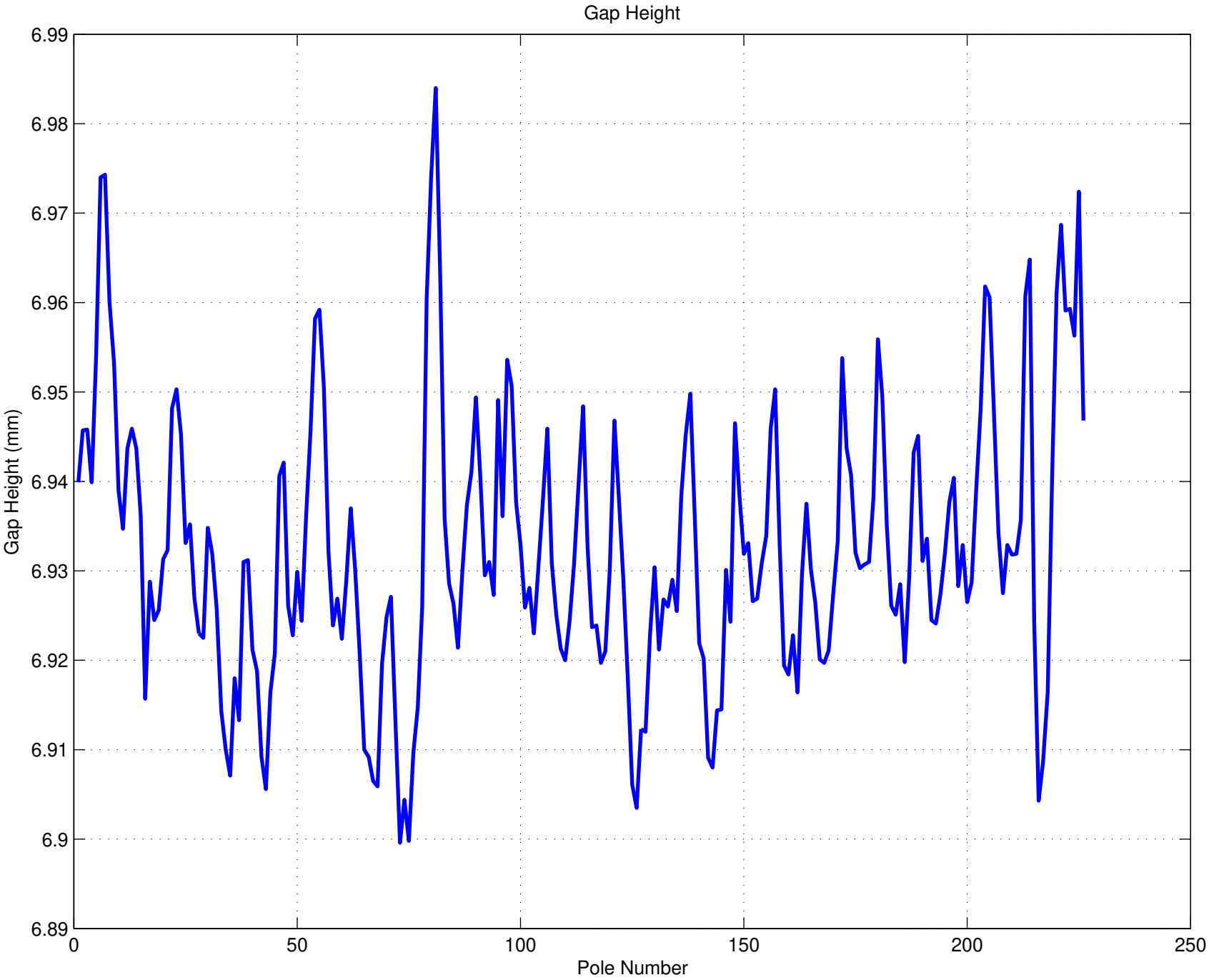
Parameters:
INPUT−FILE−DIR =S:\MagData\LCLS\Undulator\L143−112000−02\DATASET0001\Mechanical Measurements\DATA FILES\
INPUT−FILE−NAME =SN 02 POLE TIP DATA POINTS 06−FEB−2007.TXT

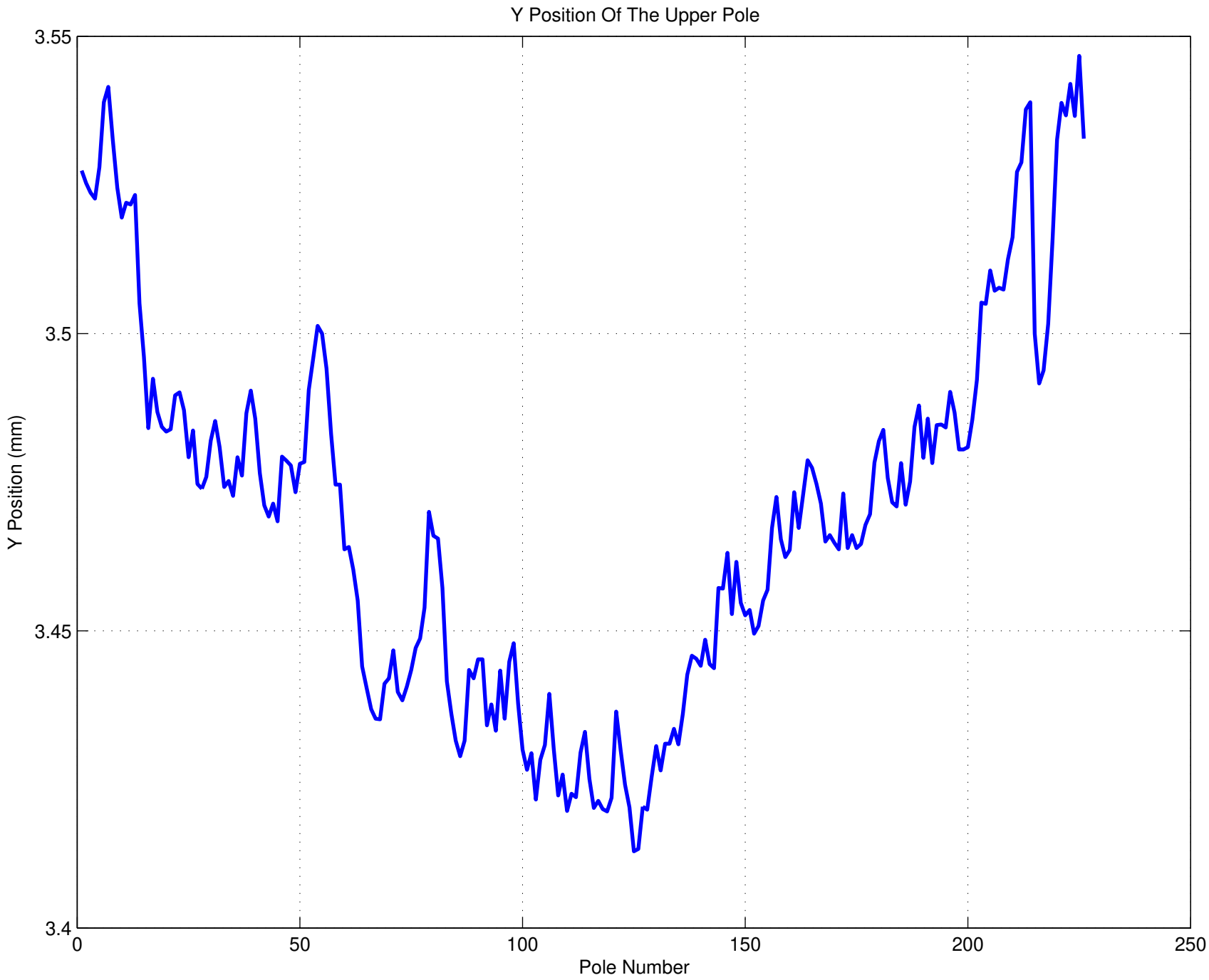

y
53 mm
135 mm
x
(x=0, y=0)
y vals
113 mm

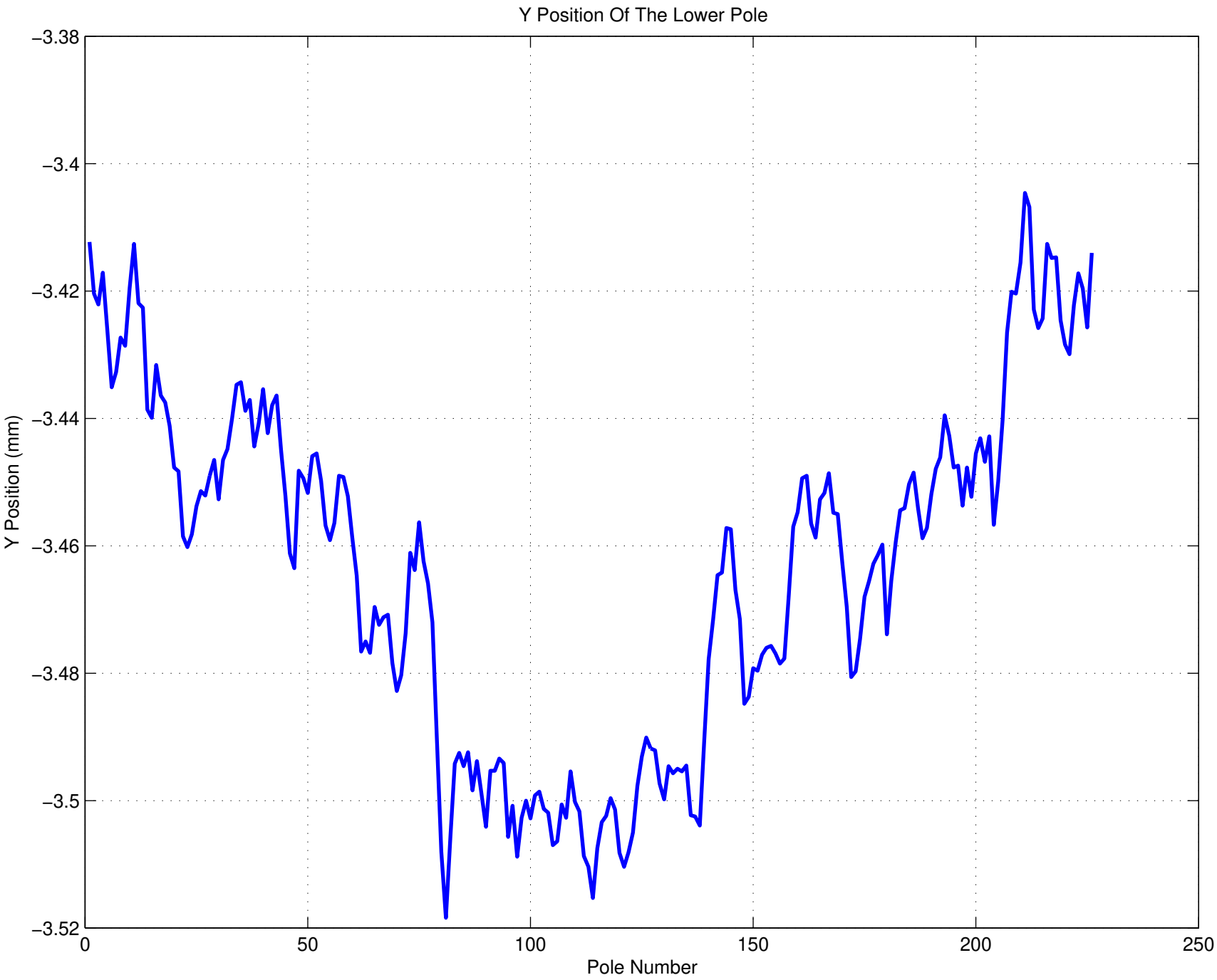

Cant Angle
Cant Angle (mrad)
Pole Number
5.6
5.4
5.2
5
4.8
4.6
4.4
4.2
4
3.8
3.6
0
50
100
150
200
250

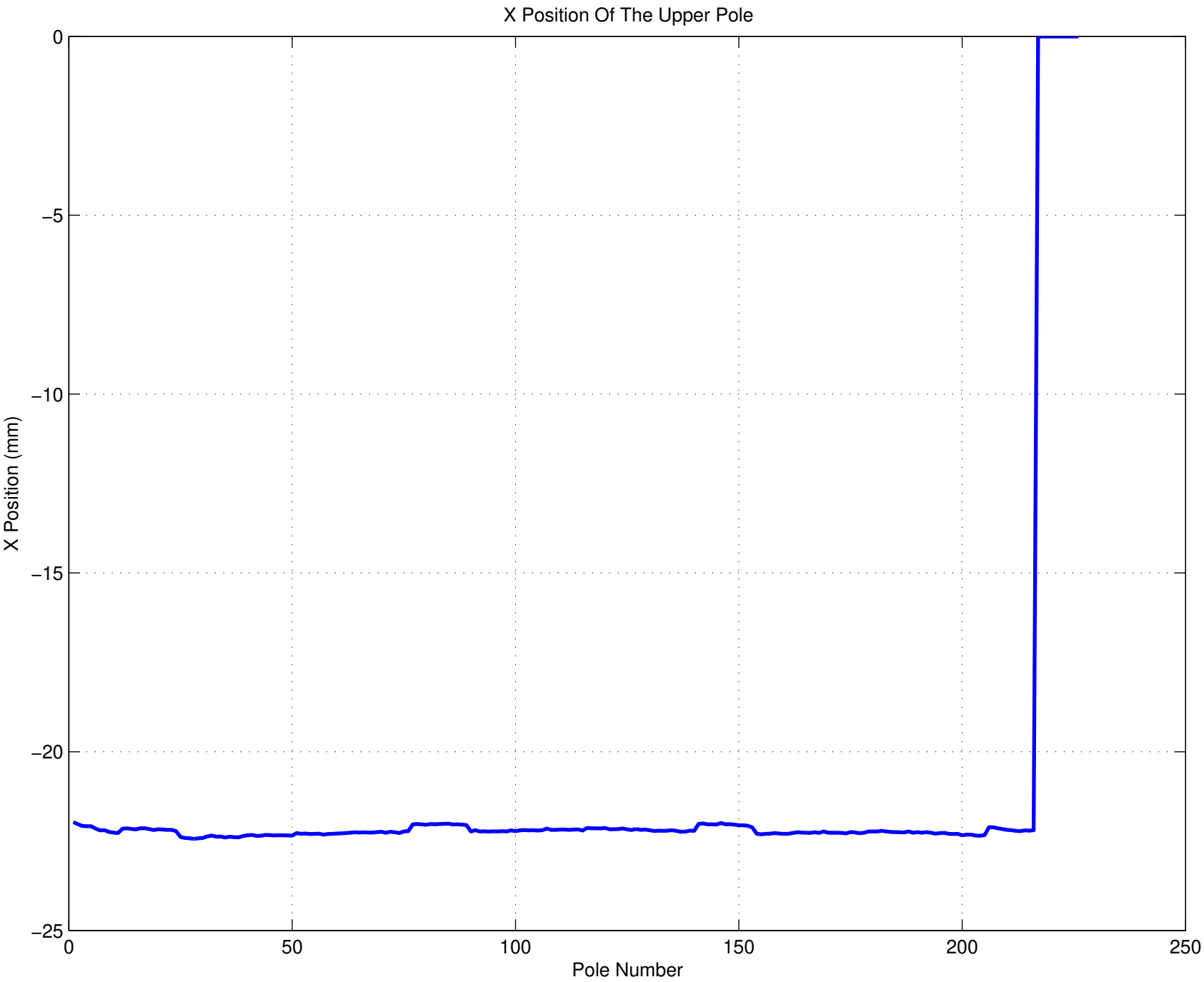

Midline Angle
Midline Angle (deg)
Pole Number
0.06
0.05
0.04
0.03
0.02
0.01
0
−0.01
−0.02
0
50
100
150
200
250

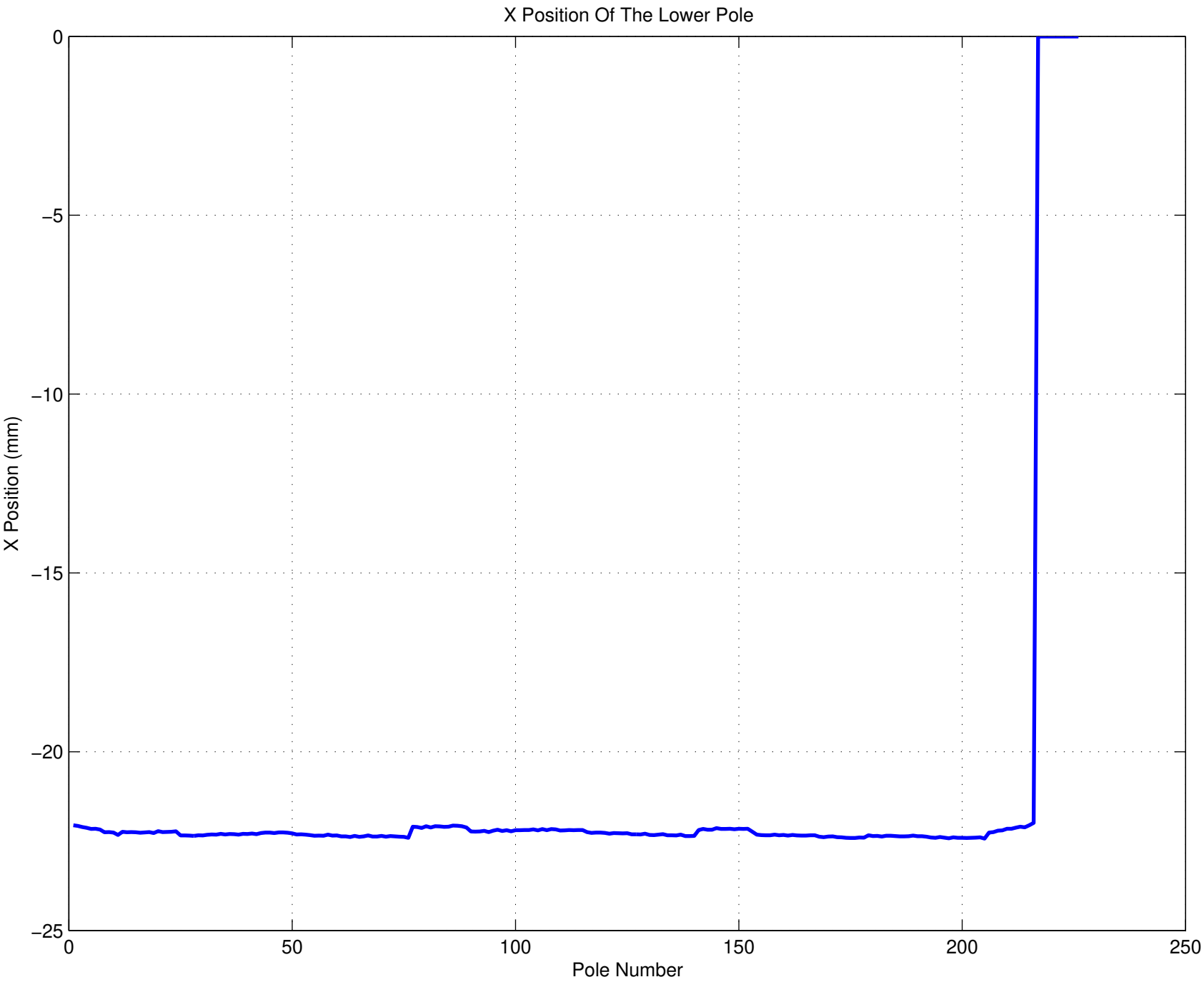

Y Position Of The Gap Center
0.08
0.06
0.04
0.02
0
−0.02
−0.04
−0.06
Y Position (mm)
0
50
100
150
200
250
Pole Number

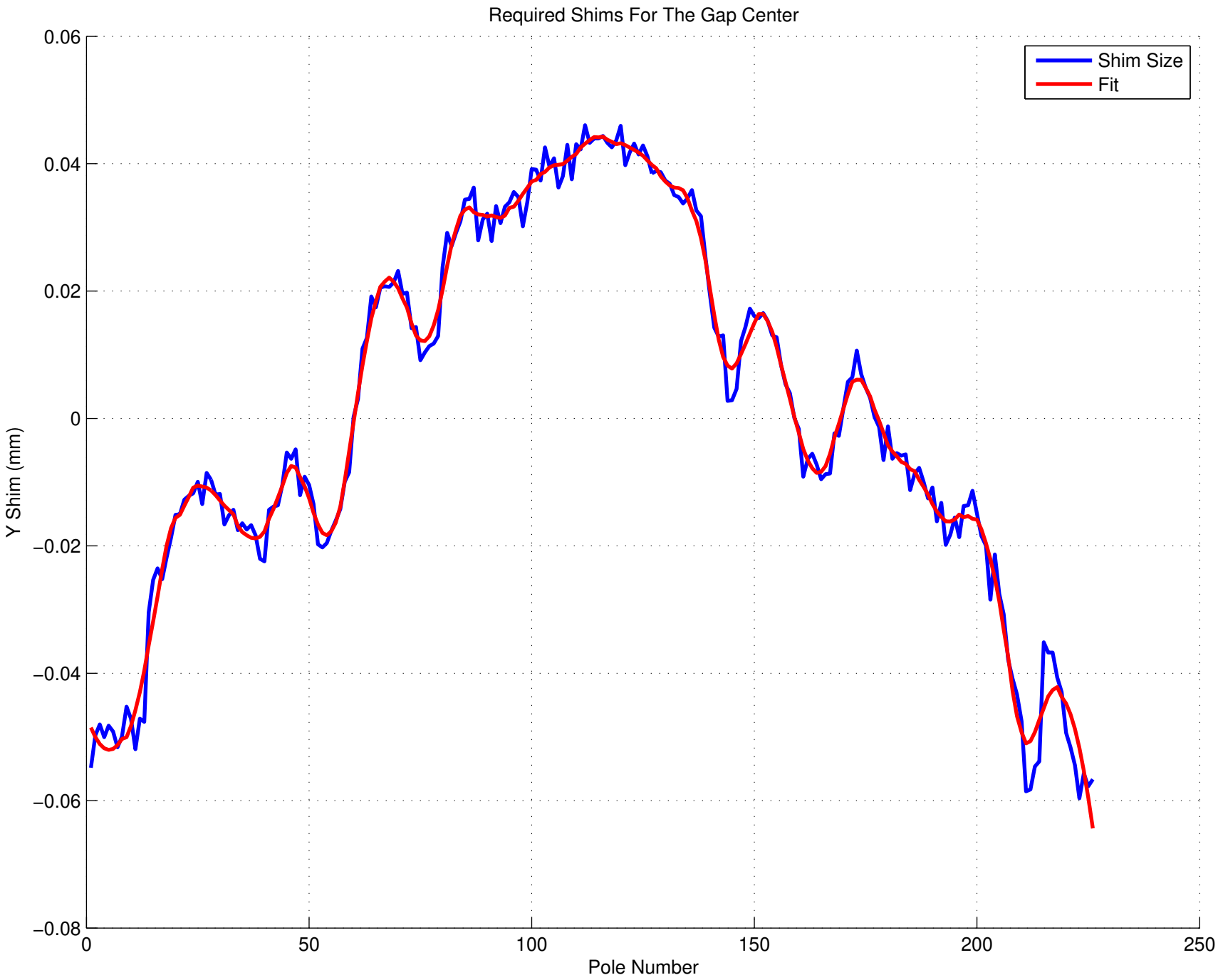

Gap Height
Gap Height (mm)
Pole Number
6.99
6.98
6.97
6.96
6.95
6.94
6.93
6.92
6.91
6.9
6.89
0
50
100
150
200
250


Y Position Of The Upper Pole
3.55
3.5
3.45
3.4
Y Position (mm)
0
50
100
150
200
250
Pole Number


Y Position Of The Lower Pole
−3.38
−3.4
−3.42
−3.44
−3.46
−3.48
−3.5
−3.52
Y Position (mm)
0
50
100
150
200
250
Pole Number


X Position Of The Upper Pole
X Position (mm)
0
−5
−10
−15
−20
−25
0
50
100
150
200
250
Pole Number


X Position Of The Lower Pole
X Position (mm)
0
−5
−10
−15
−20
−25
0
50
100
150
200
250
Pole Number


Required Shims For The Gap Center
Shim Size
Fit
0.06
0.04
0.02
0
−0.02
−0.04
−0.06
−0.08
Y Shim (mm)
0
50
100
150
200
250
Pole Number