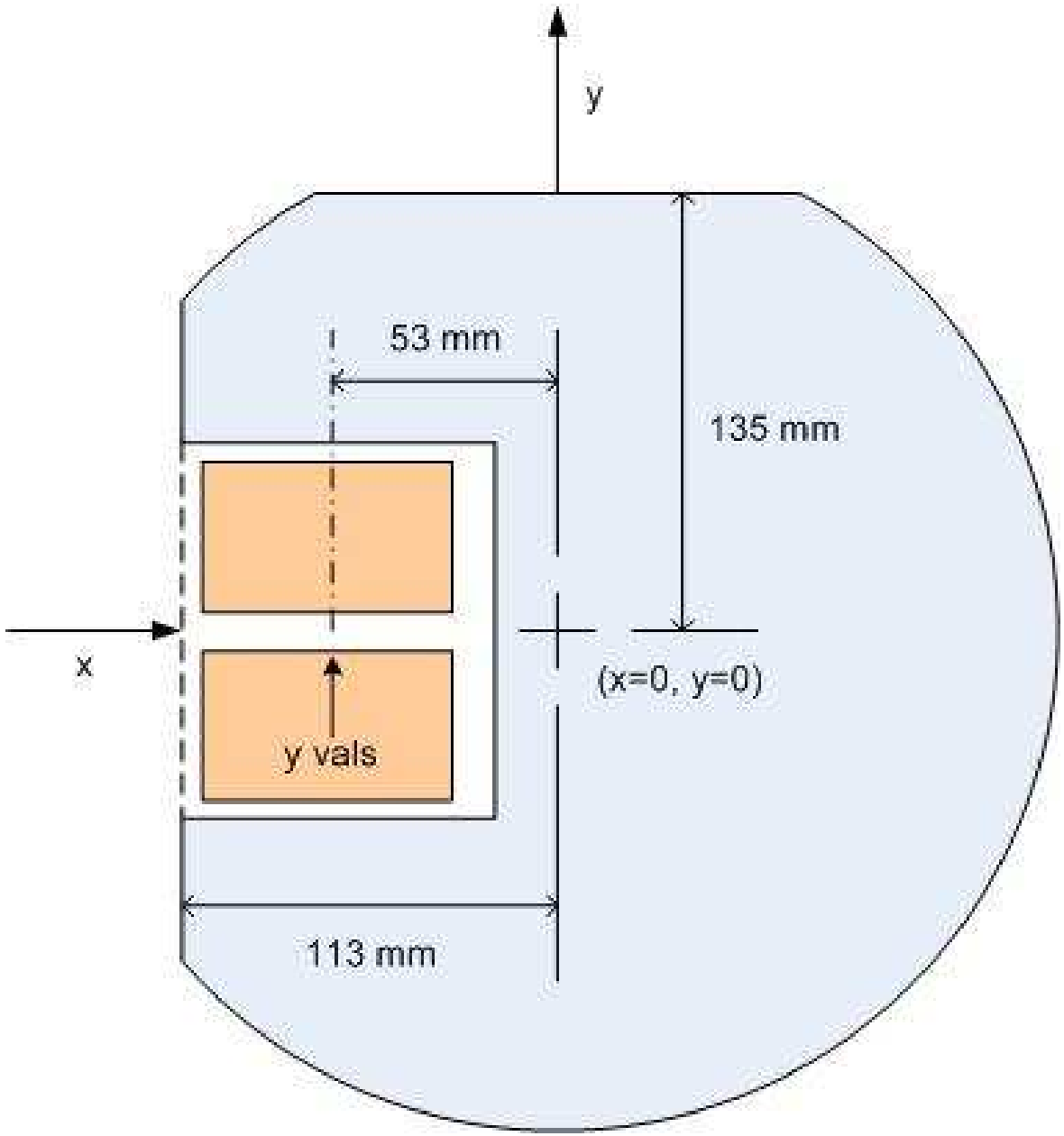
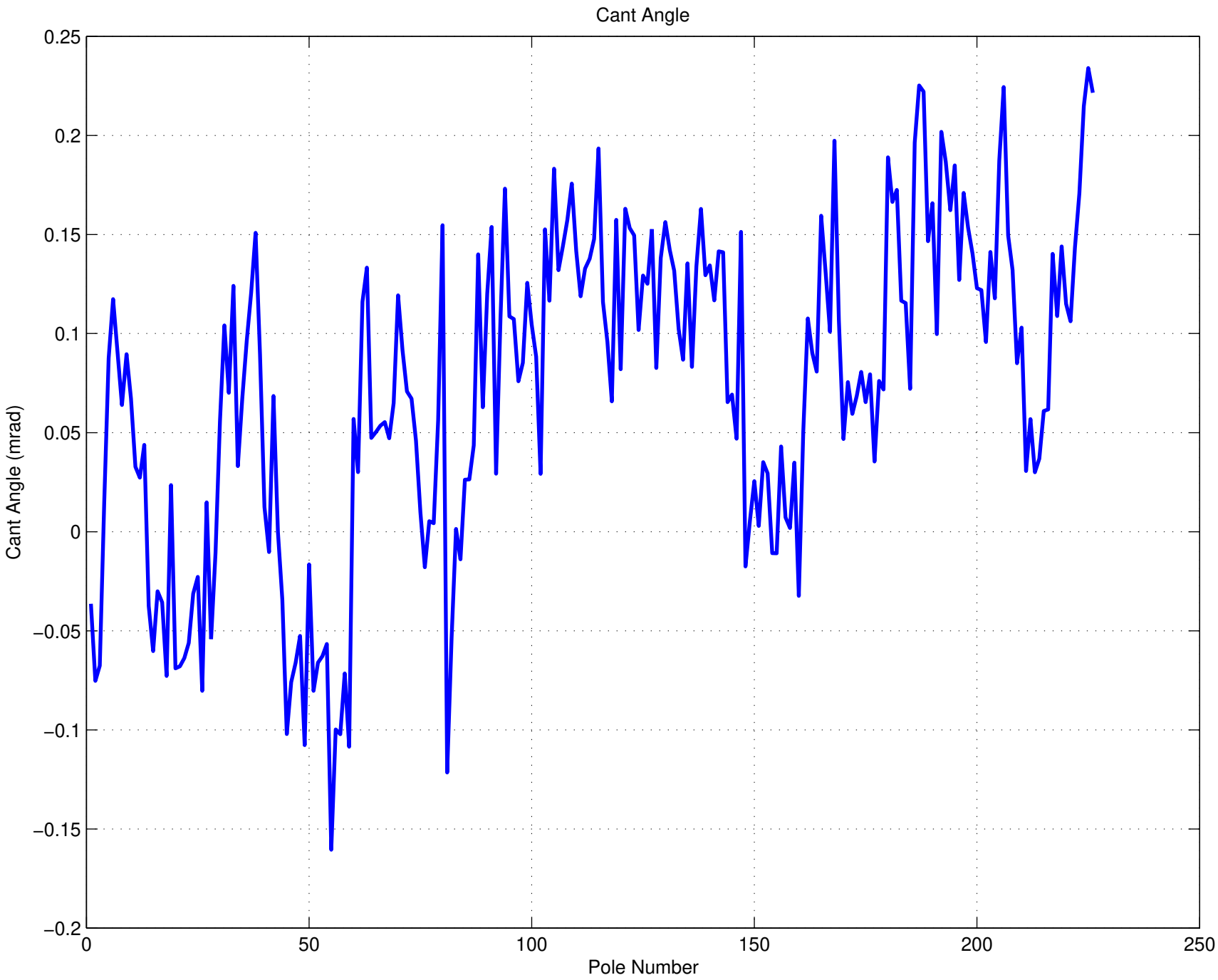
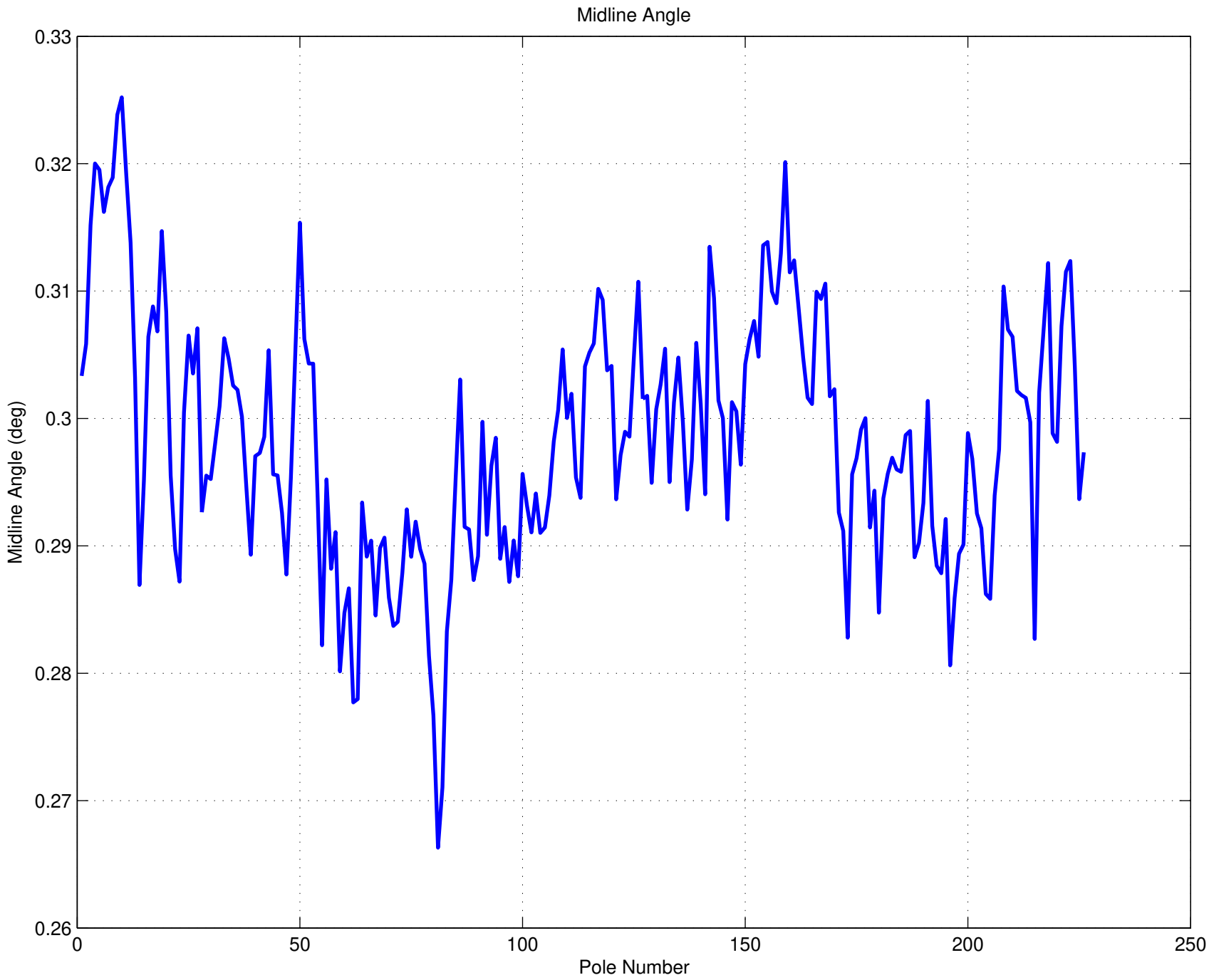
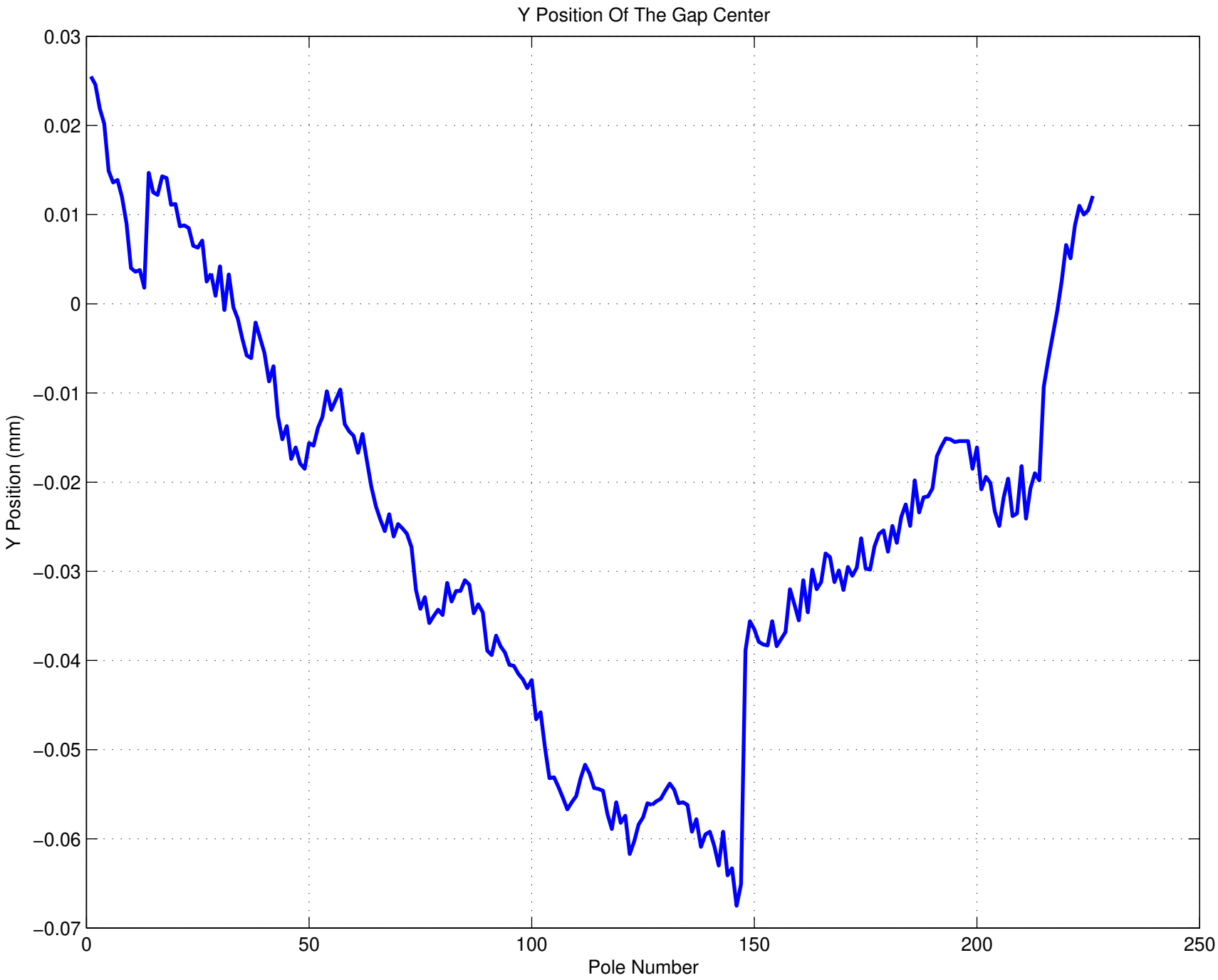
SLAC Magnetic Measurements
Mechanical Measurement Analysis

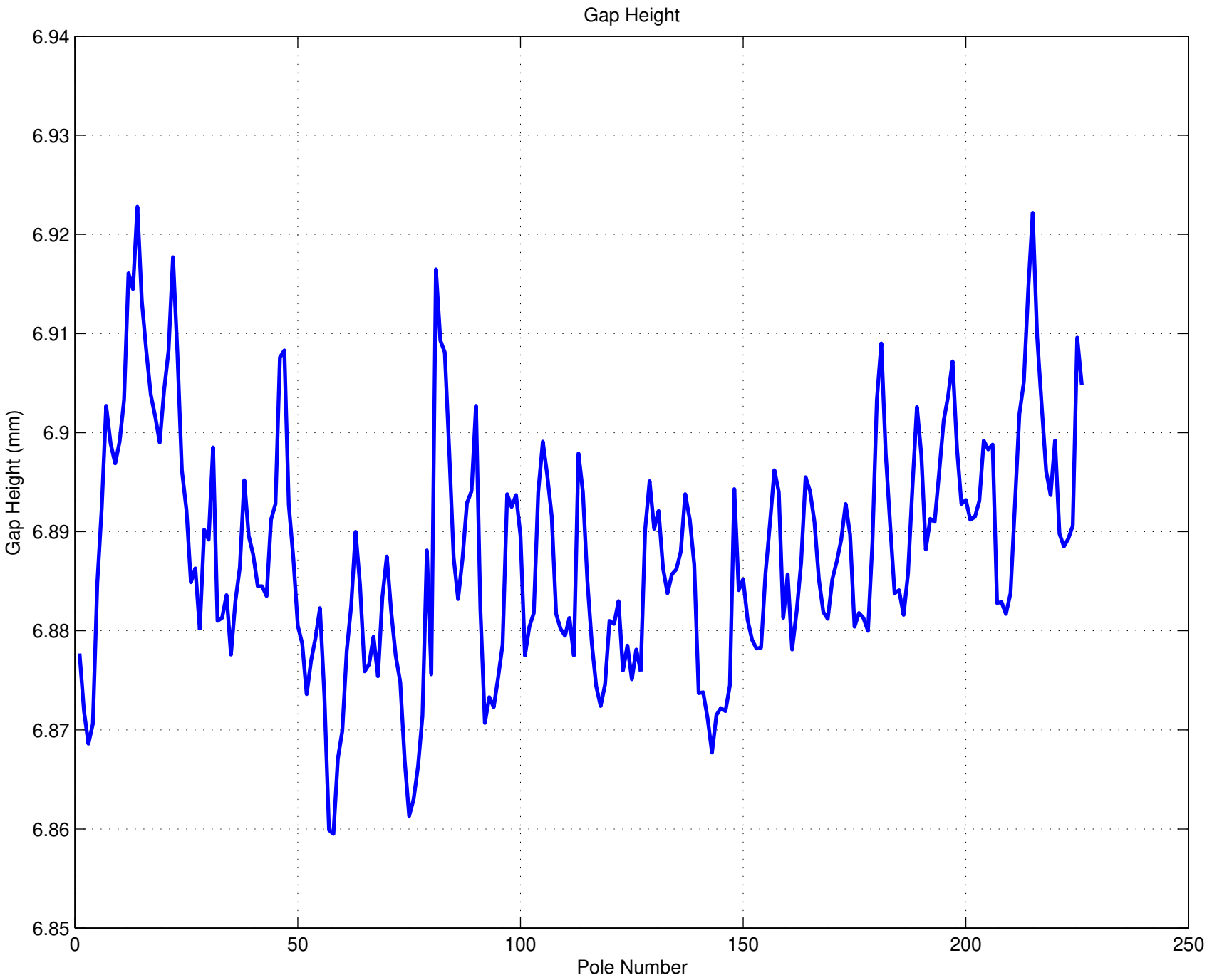
Parameters:
INPUT−FILE−DIR =S:\MagData\LCLS\Undulator\L143−112000−26\DATASET0001\MECHANICAL MEASUREMENTS\DATA FIL
INPUT−FILE−NAME =Sn 26 POLE TIP DATA POINTS 12−FEB−2008.TXT

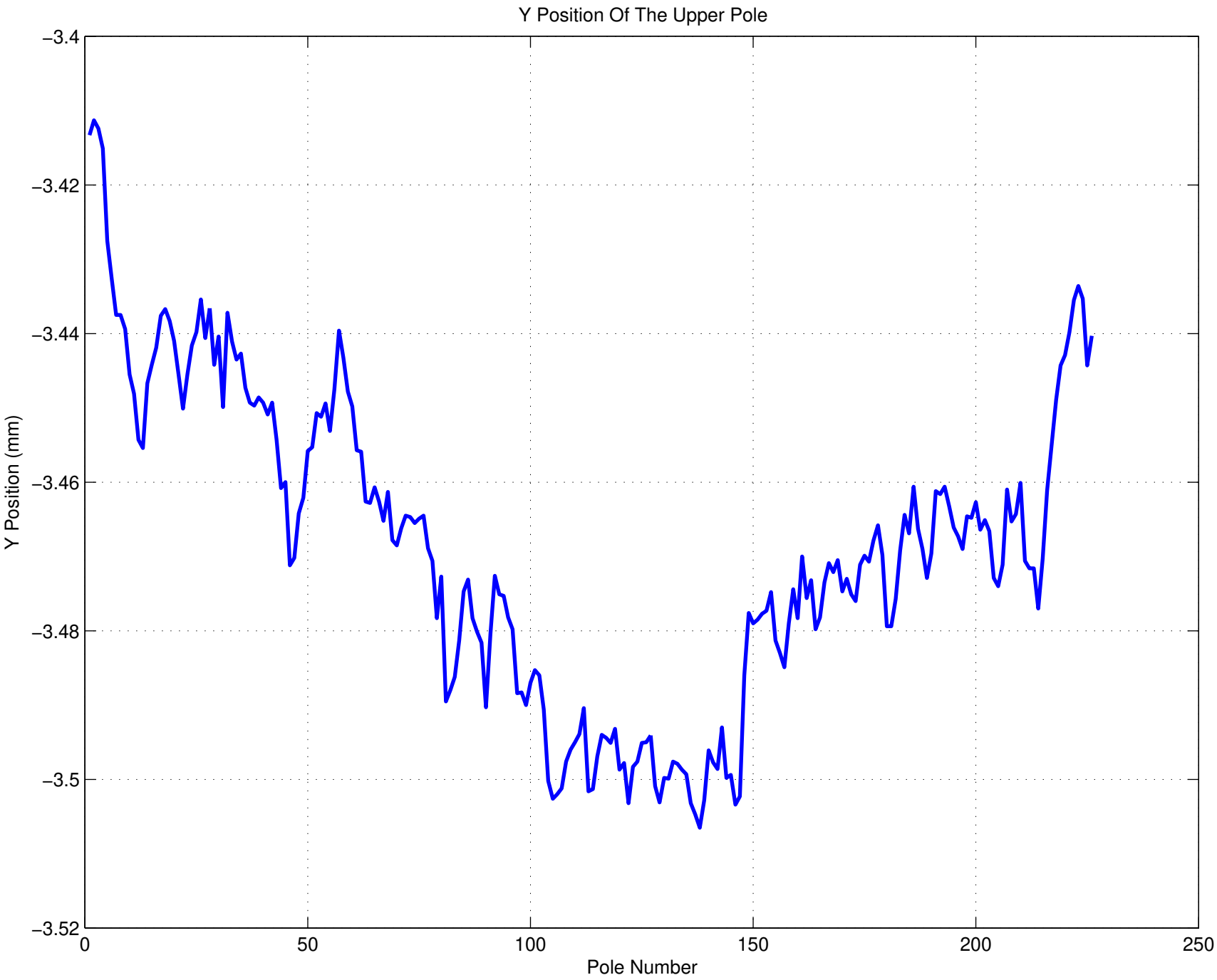

y
53 mm
135 mm
x
(x=0, y=0)
y vals
113 mm

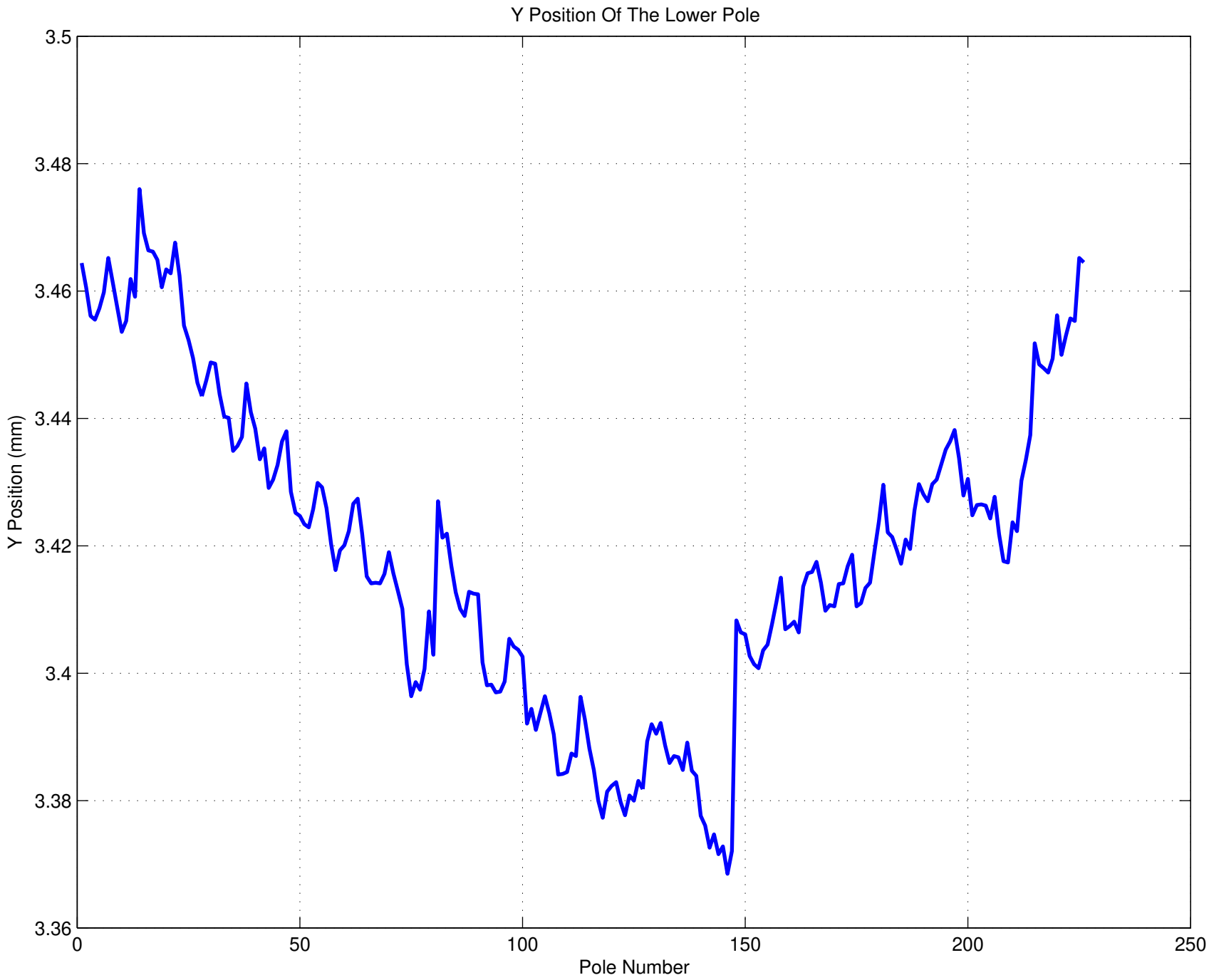

Cant Angle
Cant Angle (mrad)
Pole Number
0.25
0.2
0.15
0.1
0.05
0
−0.05
−0.1
−0.15
−0.2
0
50
100
150
200
250

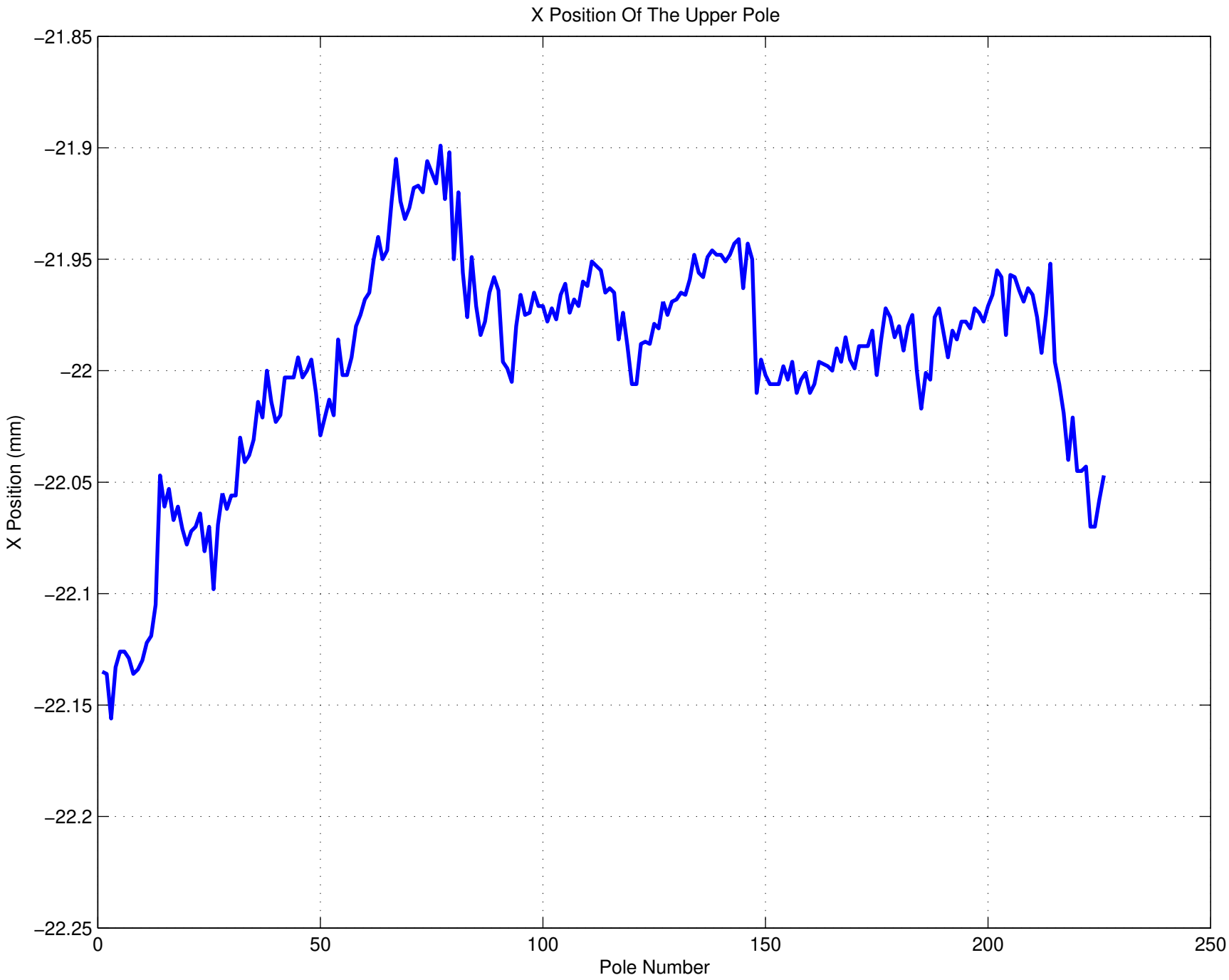

Midline Angle
Midline Angle (deg)
Pole Number
0.33
0.32
0.31
0.3
0.29
0.28
0.27
0.26
0
50
100
150
200
250

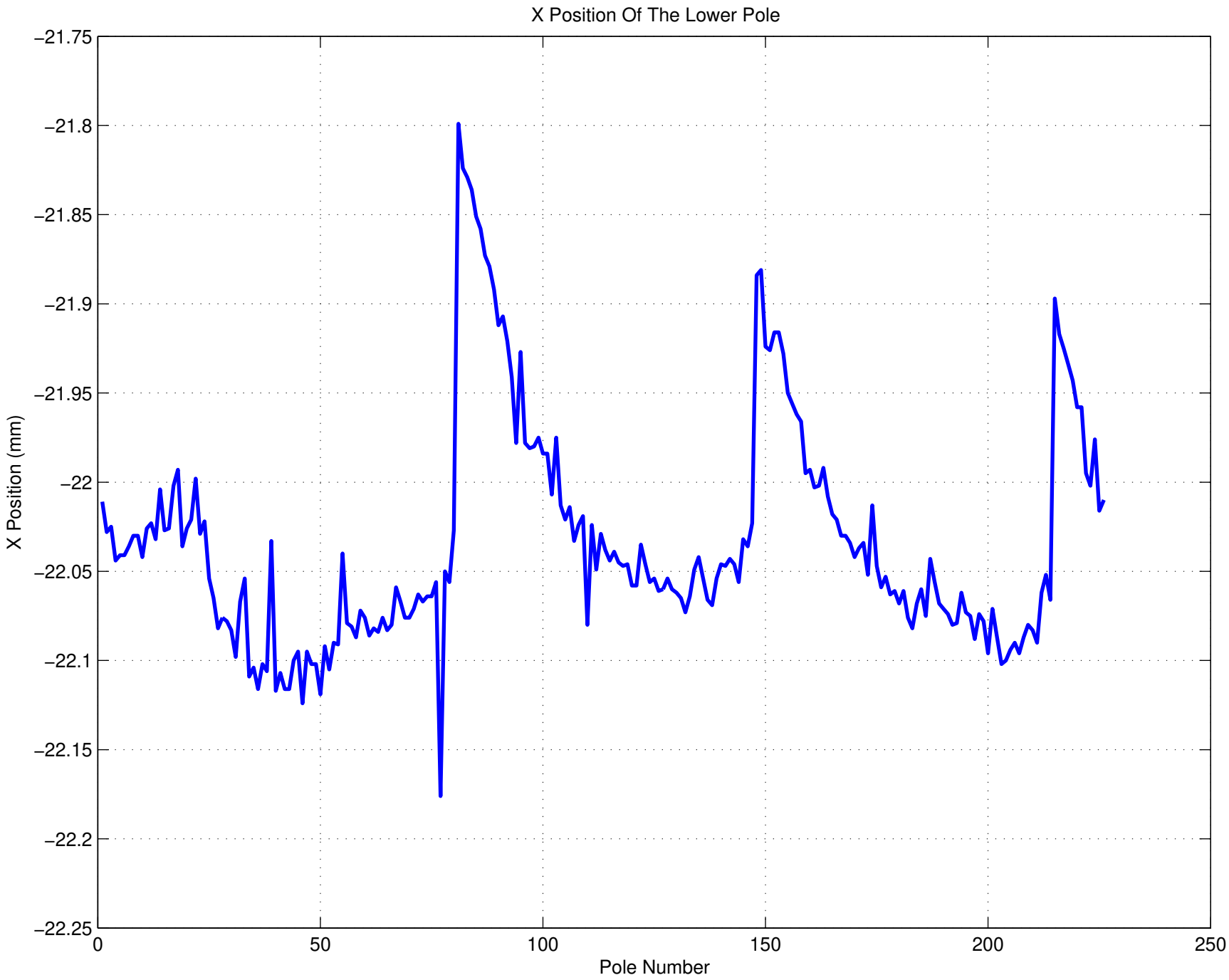

Y Position Of The Gap Center
Y Position (mm)
Pole Number
0.03
0.02
0.01
0
−0.01
−0.02
−0.03
−0.04
−0.05
−0.06
−0.07
0
50
100
150
200
250

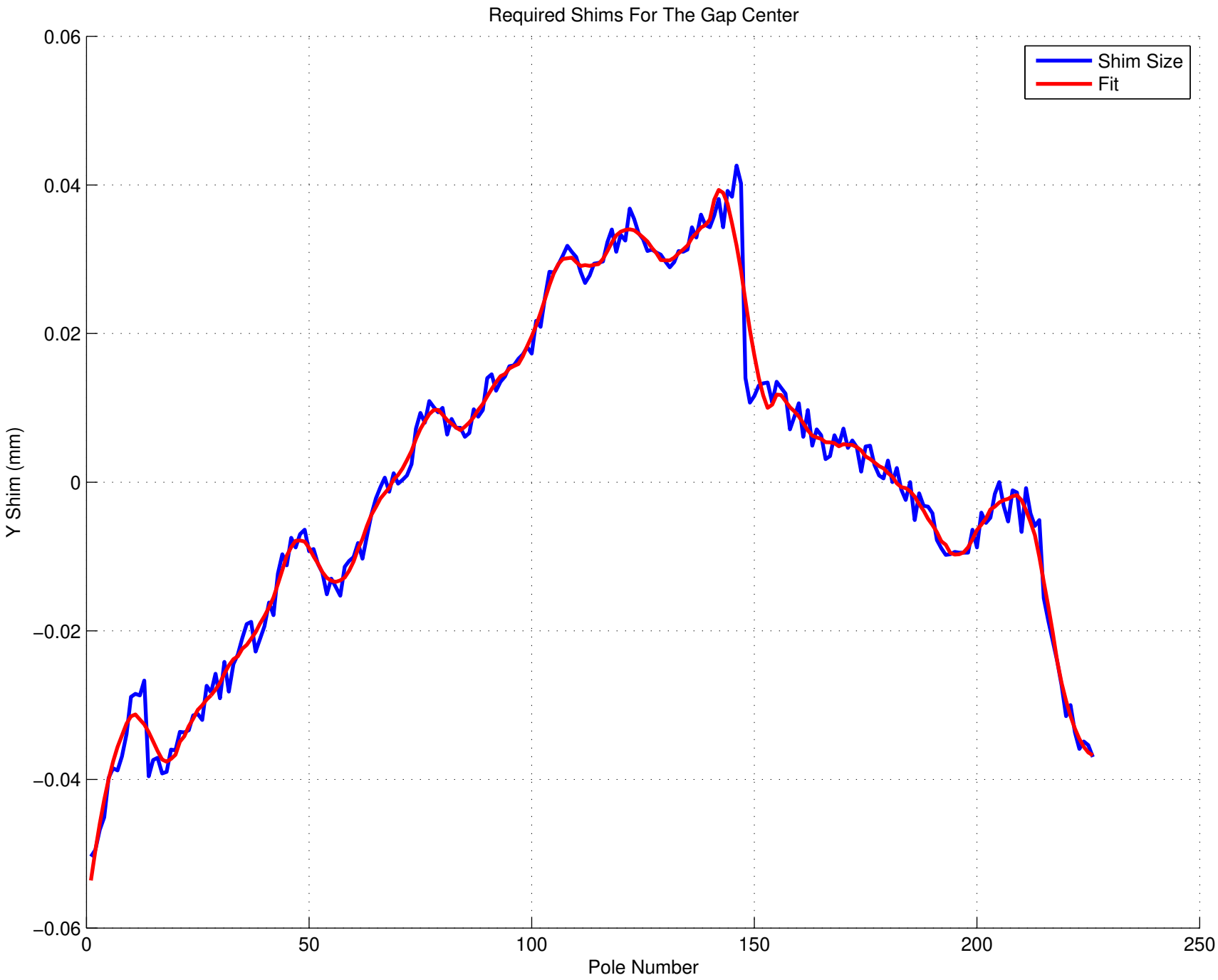

Gap Height
Gap Height (mm)
Pole Number
6.94
6.93
6.92
6.91
6.9
6.89
6.88
6.87
6.86
6.85
0
50
100
150
200
250


Y Position Of The Upper Pole
−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


Y Position Of The Lower Pole
Y Position (mm)
Pole Number
3.5
3.48
3.46
3.44
3.42
3.4
3.38
3.36
0
50
100
150
200
250


X Position Of The Upper Pole
X Position (mm)
Pole Number
−21.85
−21.9
−21.95
−22
−22.05
−22.1
−22.15
−22.2
−22.25
0
50
100
150
200
250


X Position Of The Lower Pole
X Position (mm)
Pole Number
−21.75
−21.8
−21.85
−21.9
−21.95
−22
−22.05
−22.1
−22.15
−22.2
−22.25
0
50
100
150
200
250


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