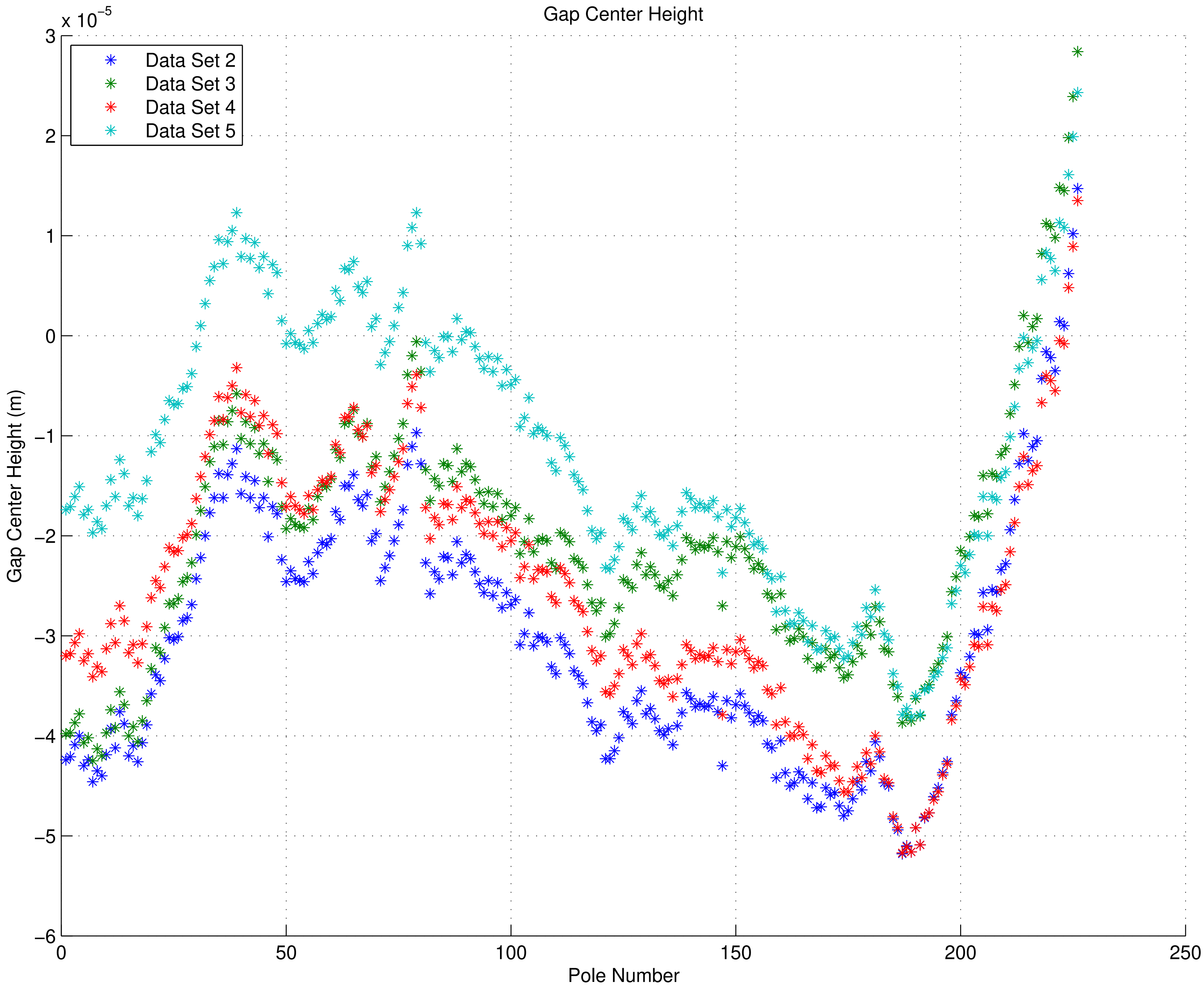
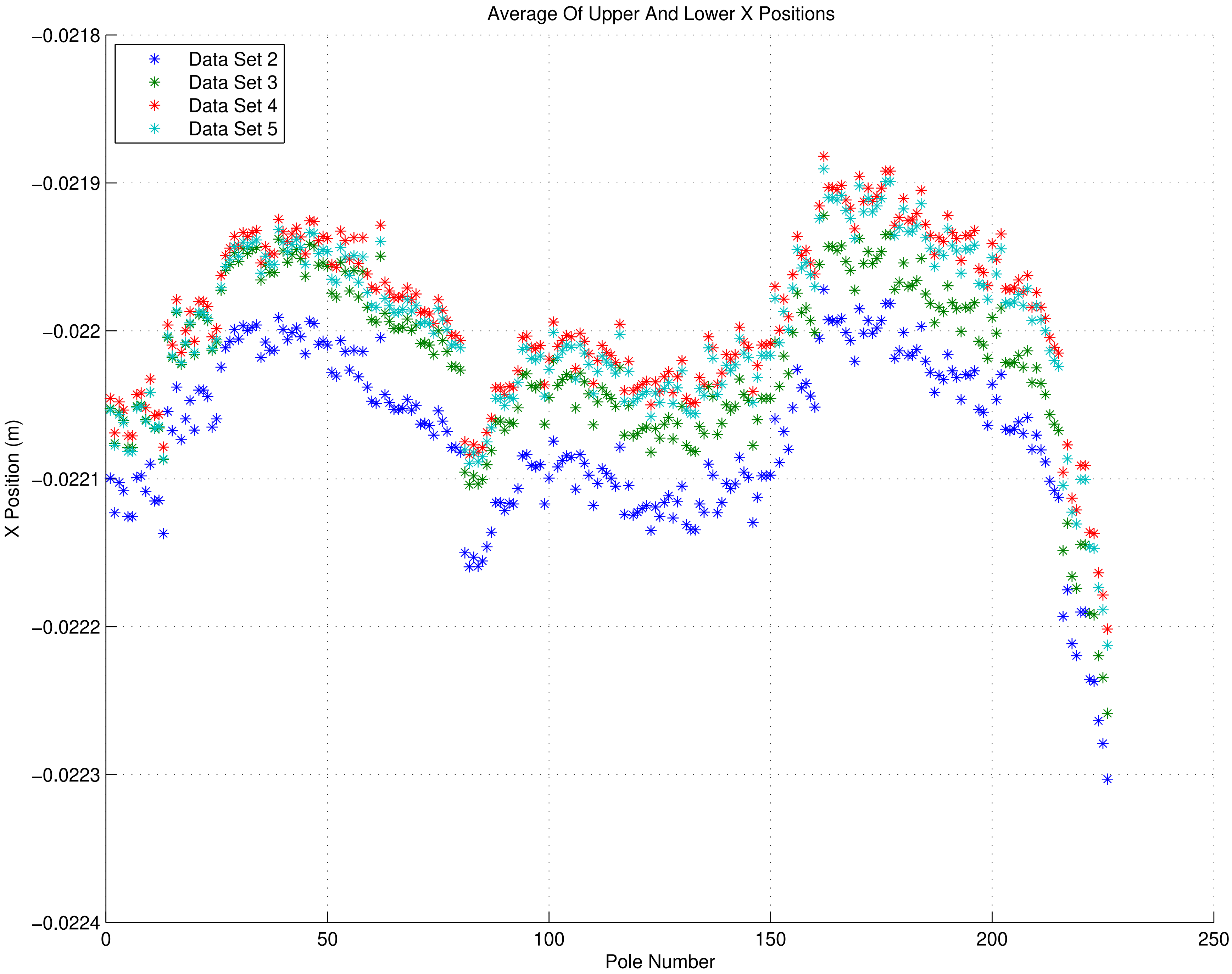
SLAC Magnetic Measurements
CMM Analysis Comparison

Title:
SN13, Reference Undulator

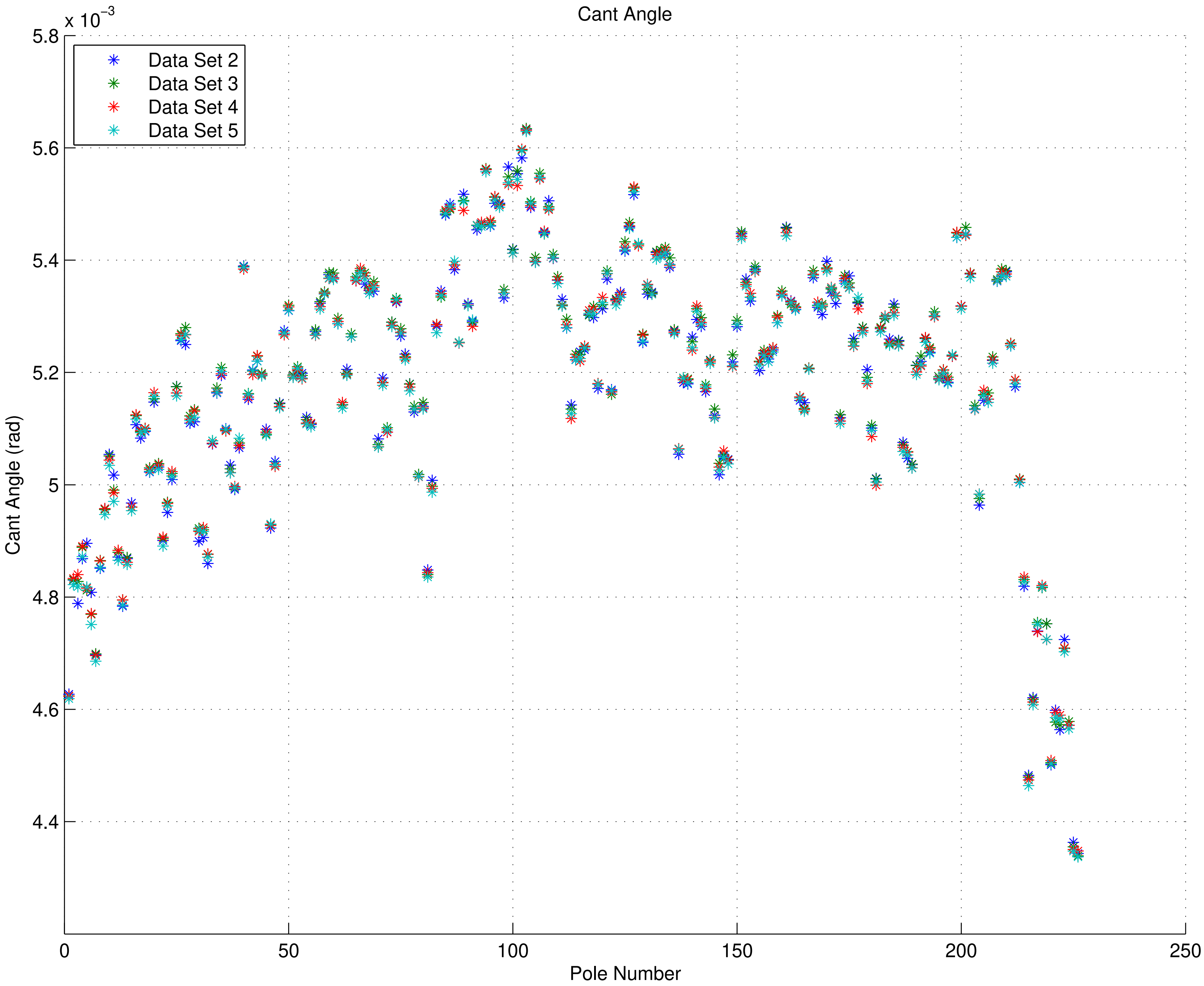
Input Files:
1) V:\MET\MagServe\MagData\LCLS\Undulator\L143–112000–13\DATASET0002\Mechanical Measurements\DATA FILES\cmm_
2) V:\MET\MagServe\MagData\LCLS\Undulator\L143–112000–13\DATASET0003\Mechanical Measurements\DATA FILES\cmm_
3) V:\MET\MagServe\MagData\LCLS\Undulator\L143–112000–13\DATASET0004\Mechanical Measurements\DATA FILES\cmm_
4) V:\MET\MagServe\MagData\LCLS\Undulator\L143–112000–13\DATASET0005\Mechanical Measurements\DATA FILES\cmm_



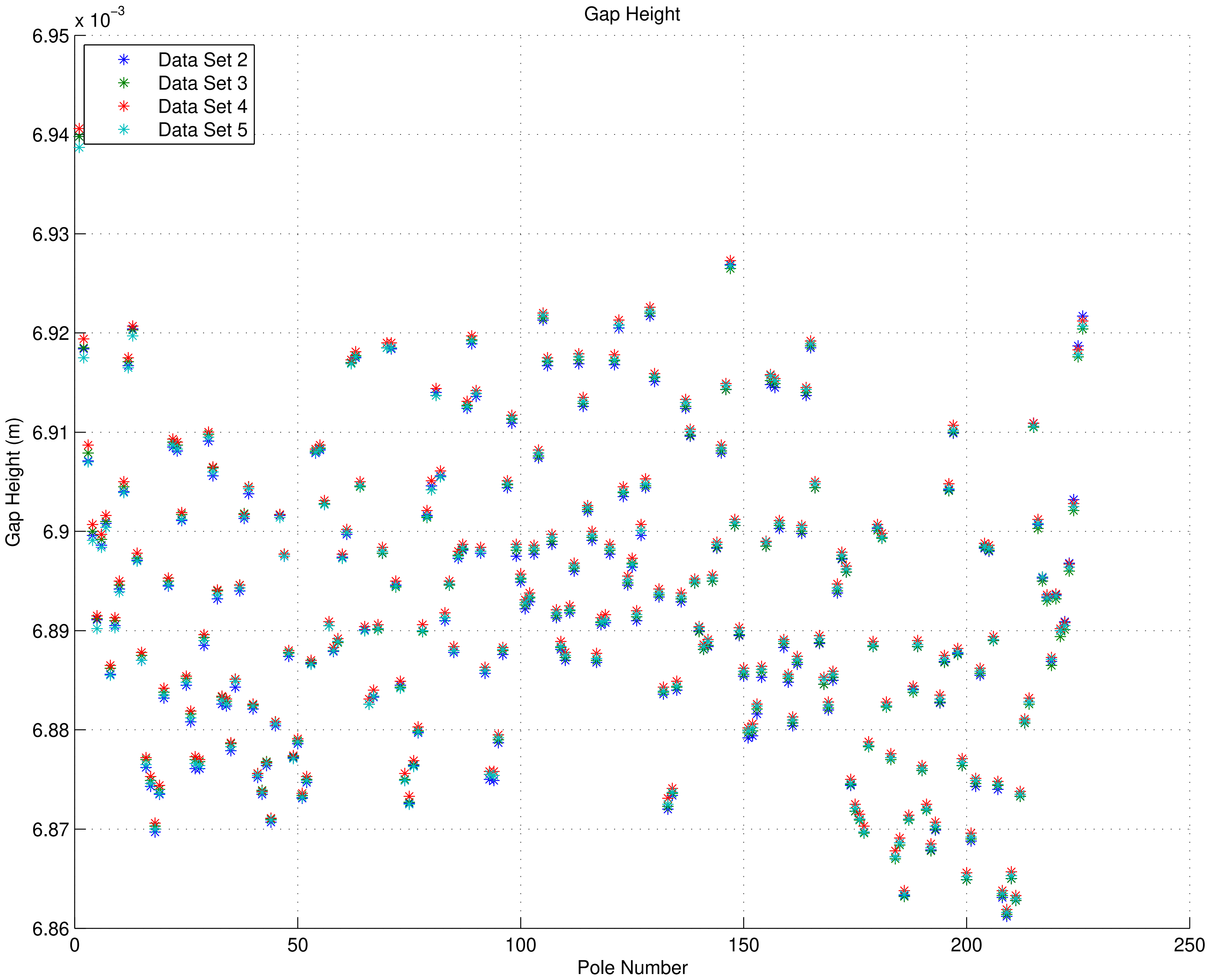
Gap Center Height
x 10^-5
Data Set 2
Data Set 3
Data Set 4
Data Set 5
Gap Center Height (m)
Pole Number
3
2
1
0
−1
−2
−3
−4
−5
−6
0
50
100
150
200
250



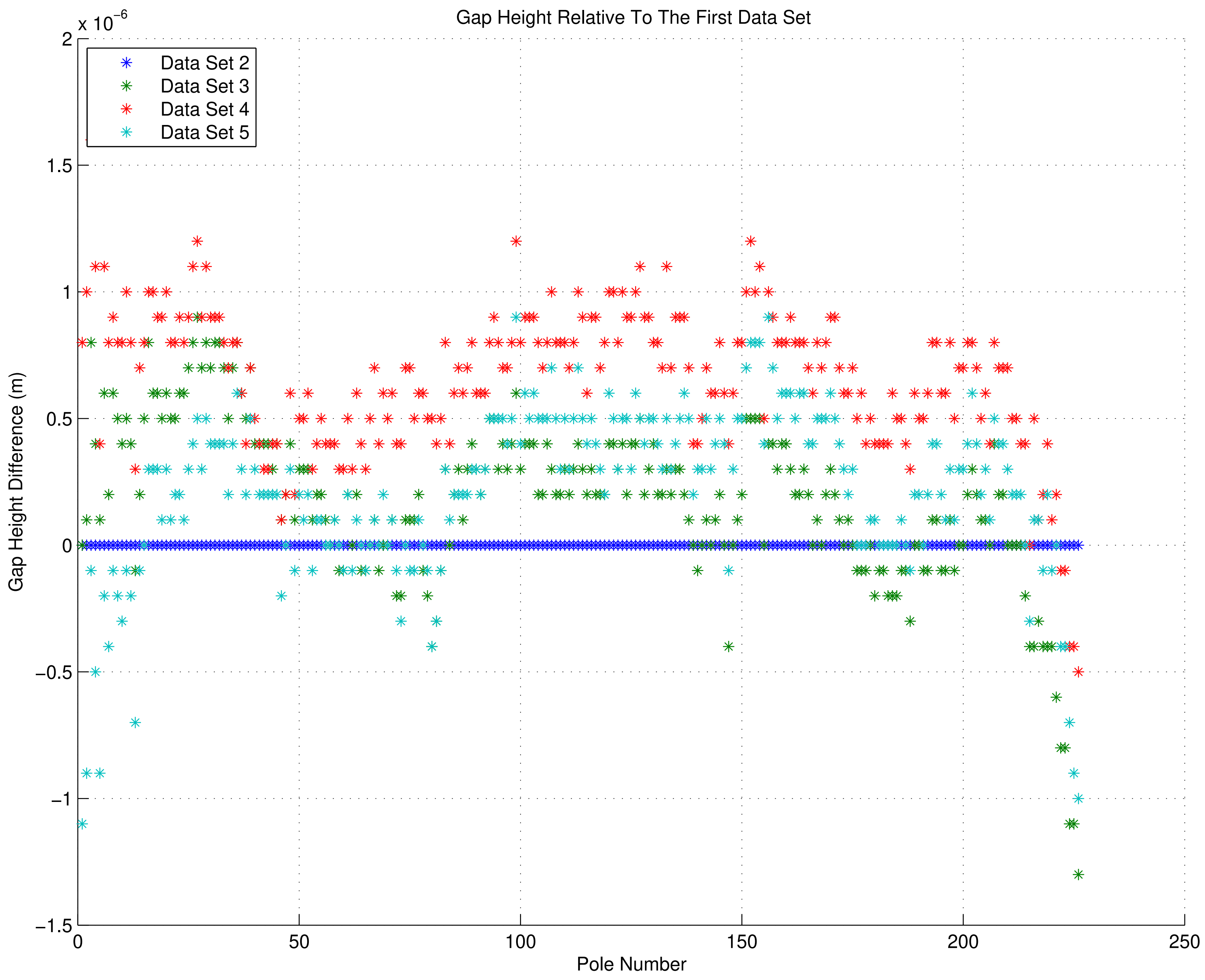
Average Of Upper And Lower X Positions
Data Set 2
Data Set 3
Data Set 4
Data Set 5
−0.0218
−0.0219
−0.022
−0.0221
−0.0222
−0.0223
−0.0224
X Position (m)
0
50
100
150
200
250
Pole Number



Cant Angle
x 10^-3
5.8
5.6
5.4
5.2
5
4.8
4.6
4.4
Cant Angle (rad)
Data Set 2
Data Set 3
Data Set 4
Data Set 5
0
50
100
150
200
250
Pole Number



Gap Height
x 10^-3
Data Set 2
Data Set 3
Data Set 4
Data Set 5
6.95
6.94
6.93
6.92
6.91
6.9
6.89
6.88
6.87
6.86
Gap Height (m)
0
50
100
150
200
250
Pole Number


Gap Height Relative To The First Data Set
x 10^-6
Data Set 2
Data Set 3
Data Set 4
Data Set 5
Gap Height Difference (m)
Pole Number
2
1.5
1
0.5
0
−0.5
−1
−1.5
0
50
100
150
200
250