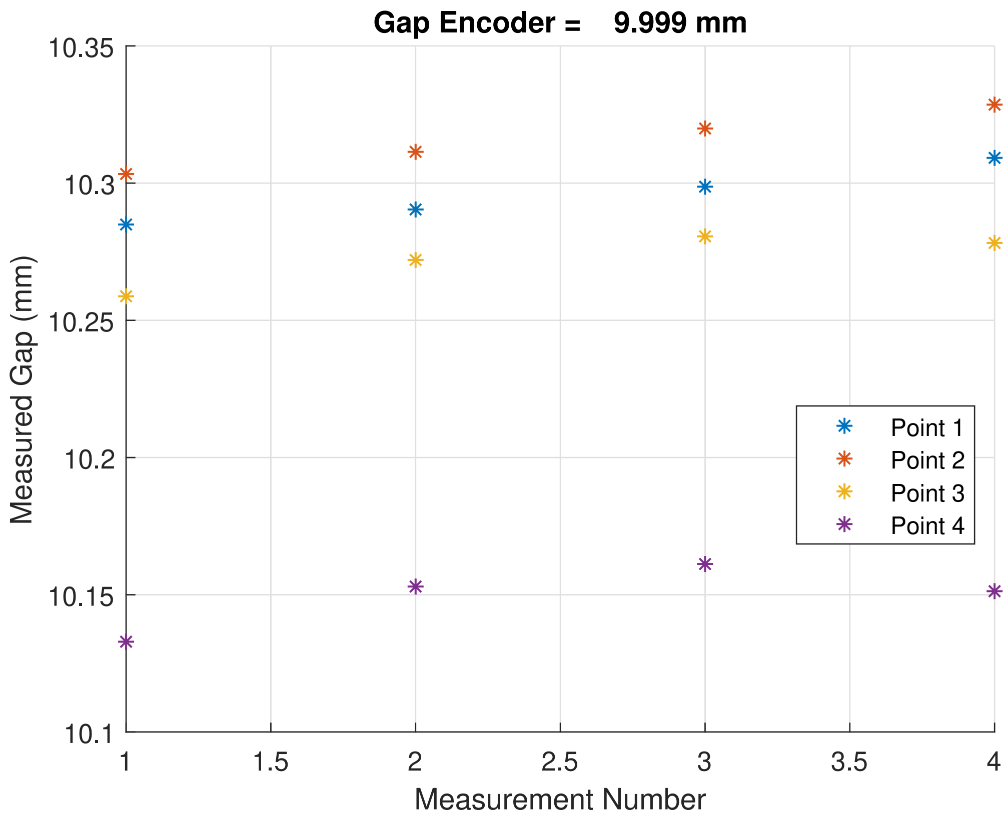
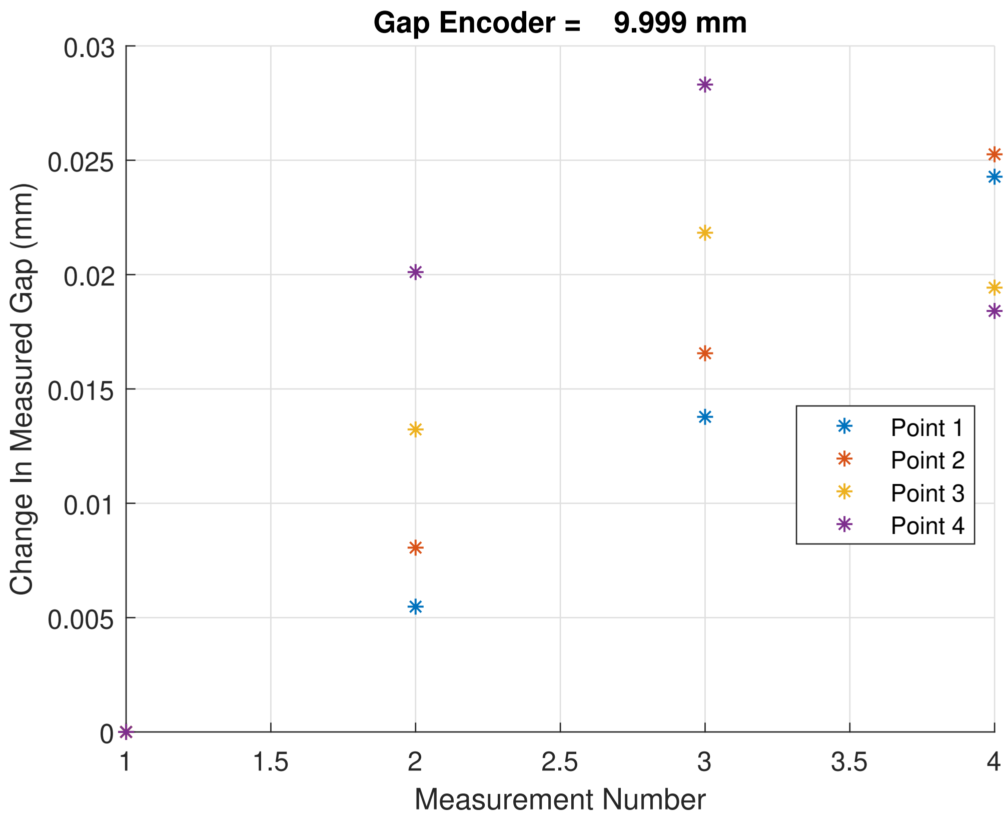
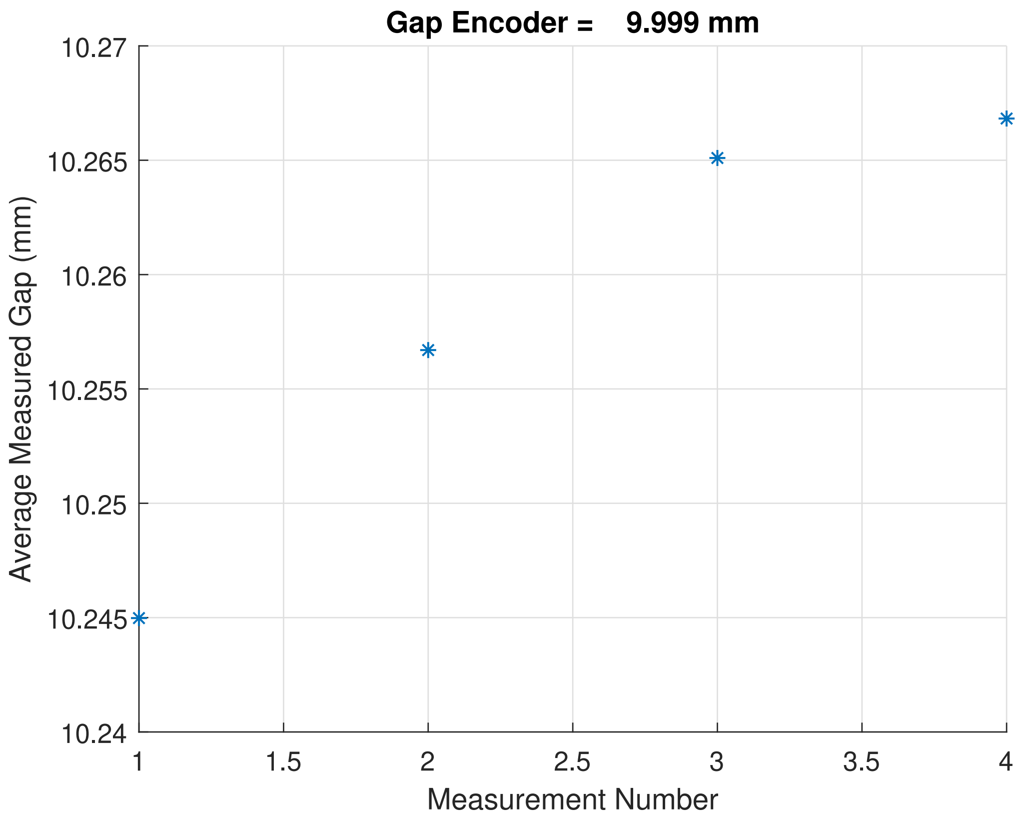
SLAC Magnetic Measurements
Undulator Analysis Comparison

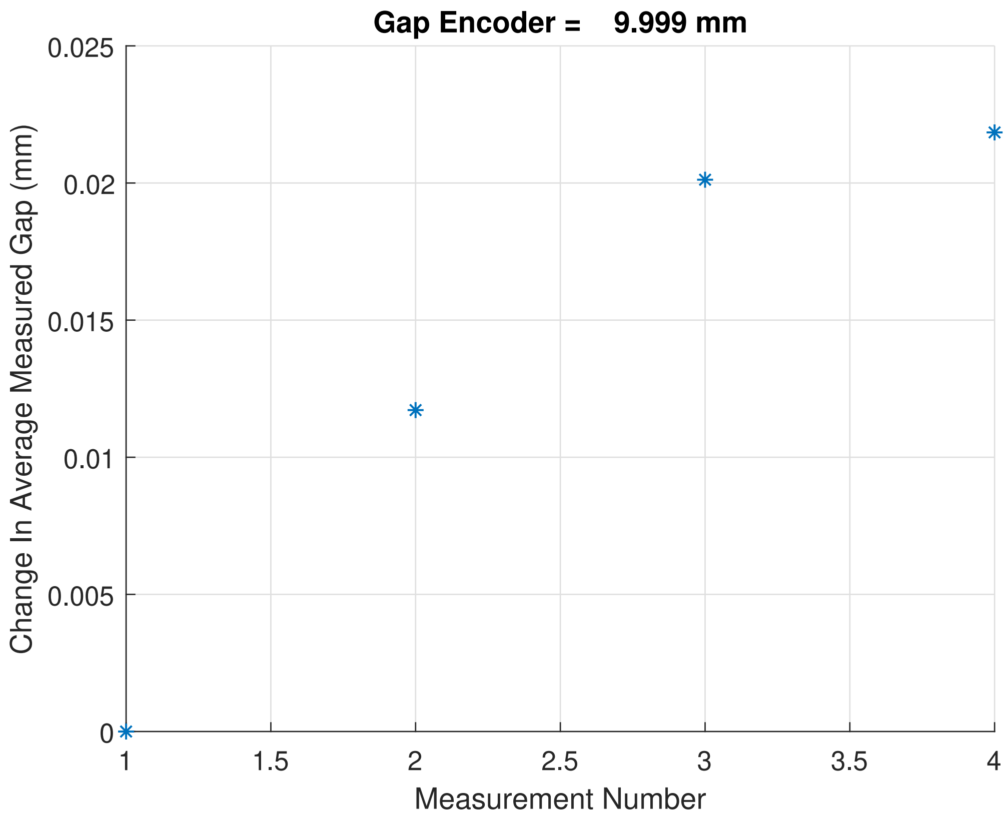
Title:
SXPS-16337 CMM Measurements

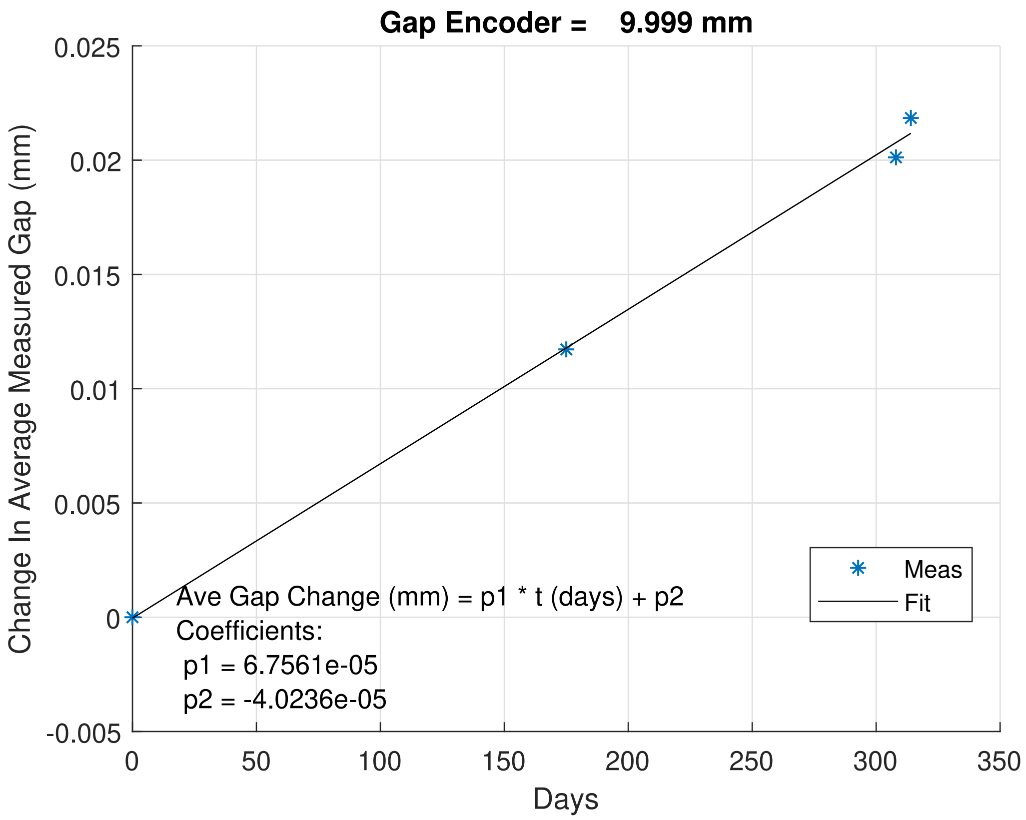
Input Files:
1) S:\magdata\LCLS-II\Phase Shifter\SXPS_16337\DATASET0001\Final Results\Touch Probe\PHASE GAP TEST 16337.txt
2) S:\magdata\LCLS-II\Phase Shifter\SXPS_16337\DATASET0008\Final Results\Gap Measurements\Touch Probe\PHASE GAP TEST 16337-2.txt
3) S:\magdata\LCLS-II\Phase Shifter\SXPS_16337\DATASET0014 - Kugler\CMM Measurements\PHASE GAP TEST 16337-3.txt
4) S:\magdata\LCLS-II\Phase Shifter\SXPS_16337\DATASET0014 - Kugler\CMM Measurements\PHASE GAP TEST 16337-5.txt

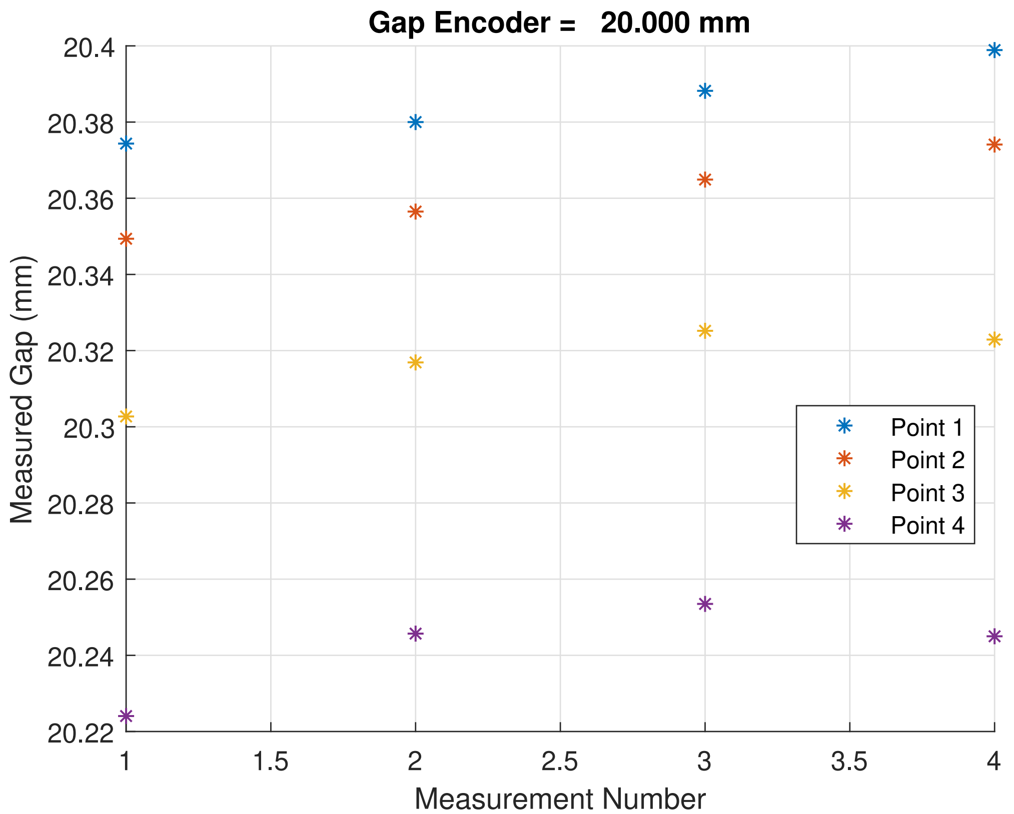

Gap Encoder = 9.999 mm
10.35
10.3
10.25
10.2
10.15
10.1
Measured Gap (mm)
1
1.5
2
2.5
3
3.5
4
Measurement Number
Point 1
Point 2
Point 3
Point 4

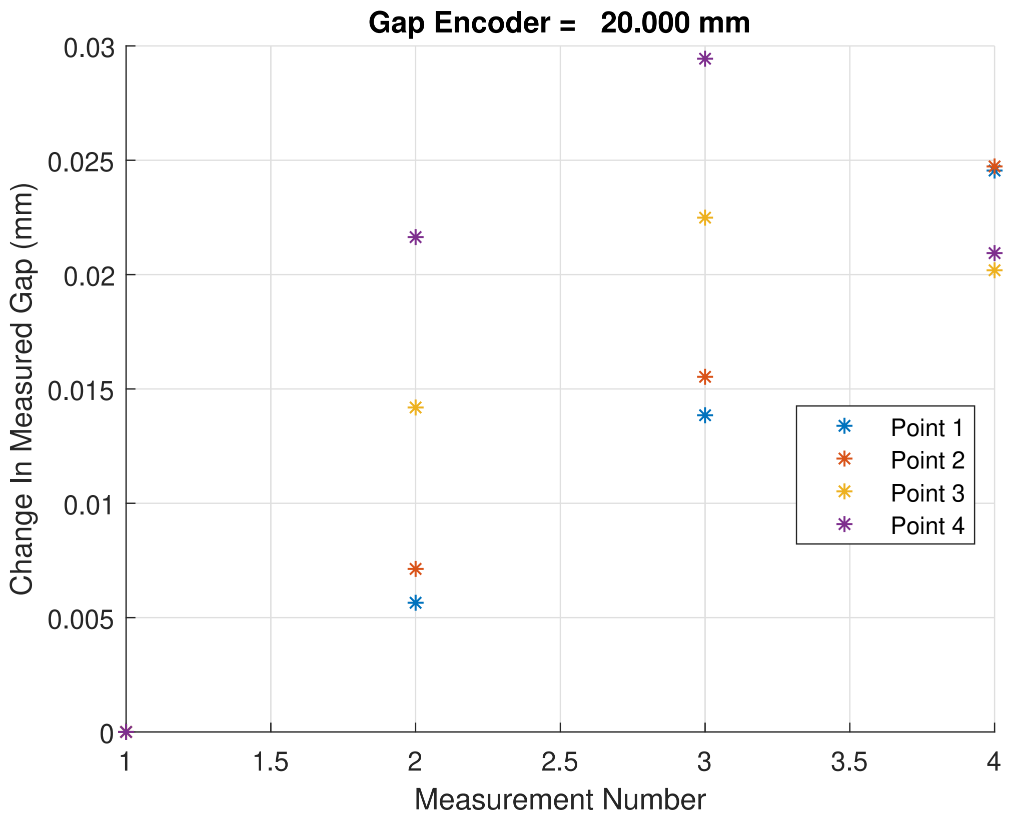

Gap Encoder = 9.999 mm
Change In Measured Gap (mm)
0.03
0.025
0.02
0.015
0.01
0.005
0
1
1.5
2
2.5
3
3.5
4
Measurement Number
Point 1
Point 2
Point 3
Point 4

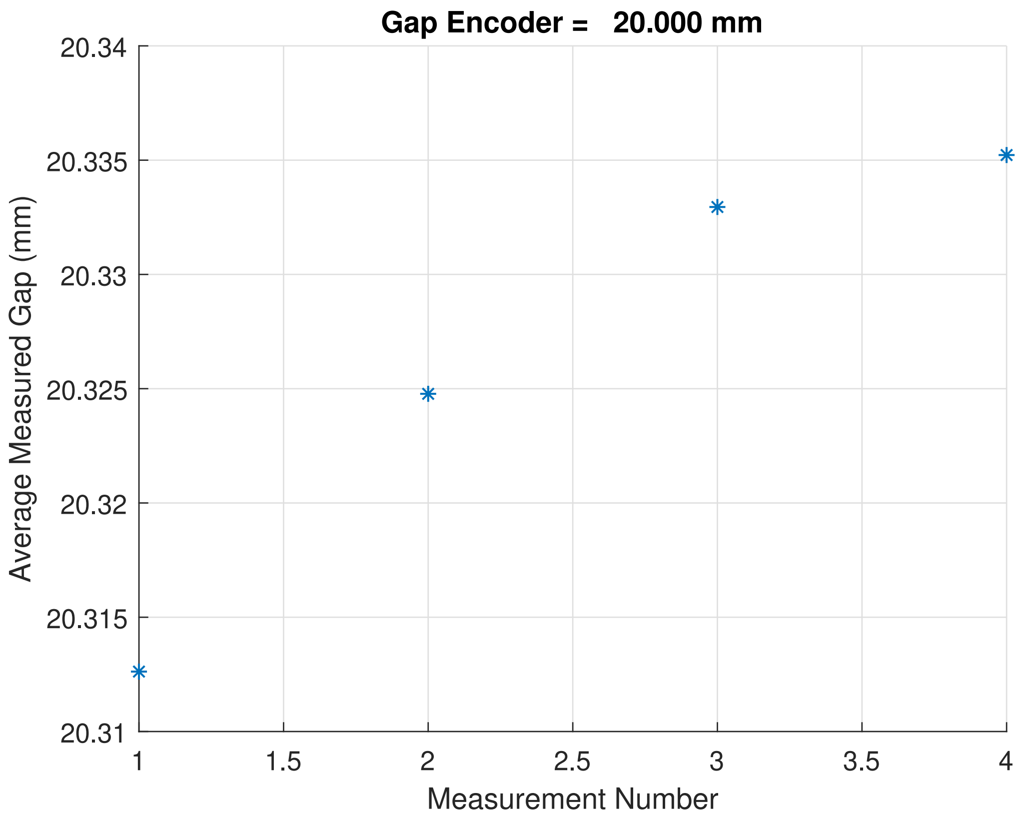

Gap Encoder = 9.999 mm
Average Measured Gap (mm)
10.27
10.265
10.26
10.255
10.25
10.245
10.24
1
1.5
2
2.5
3
3.5
4
Measurement Number

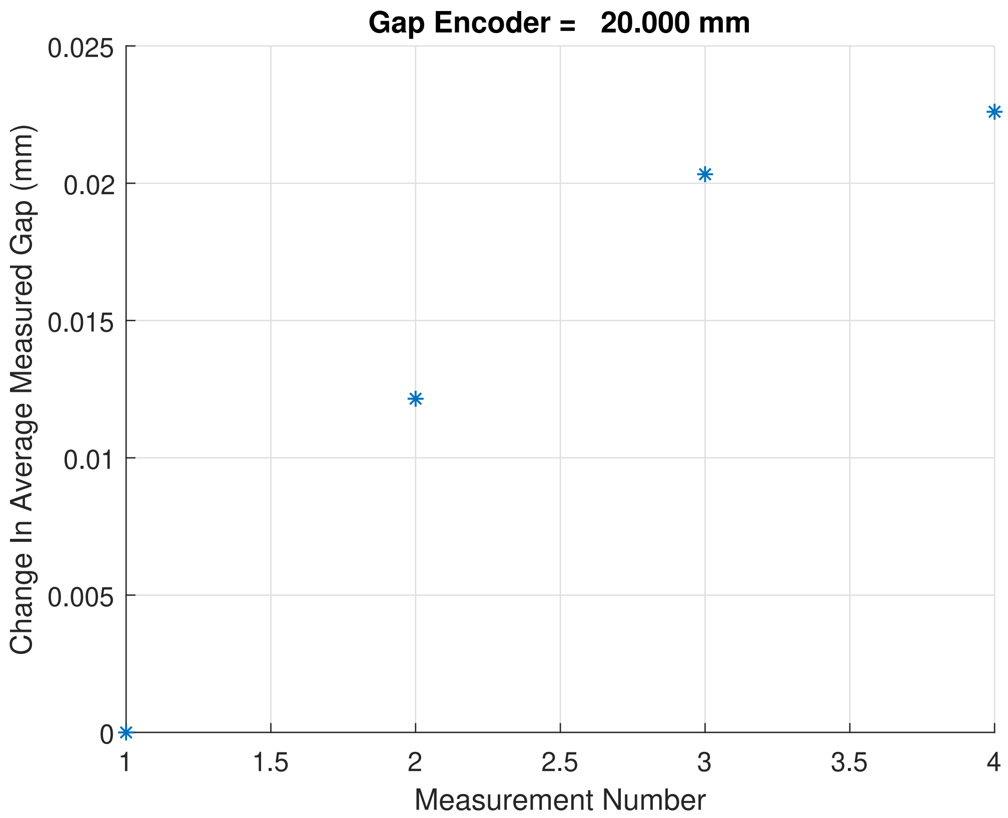

Gap Encoder = 9.999 mm
Change In Average Measured Gap (mm)
0.025
0.02
0.015
0.01
0.005
0
1
1.5
2
2.5
3
3.5
4
Measurement Number

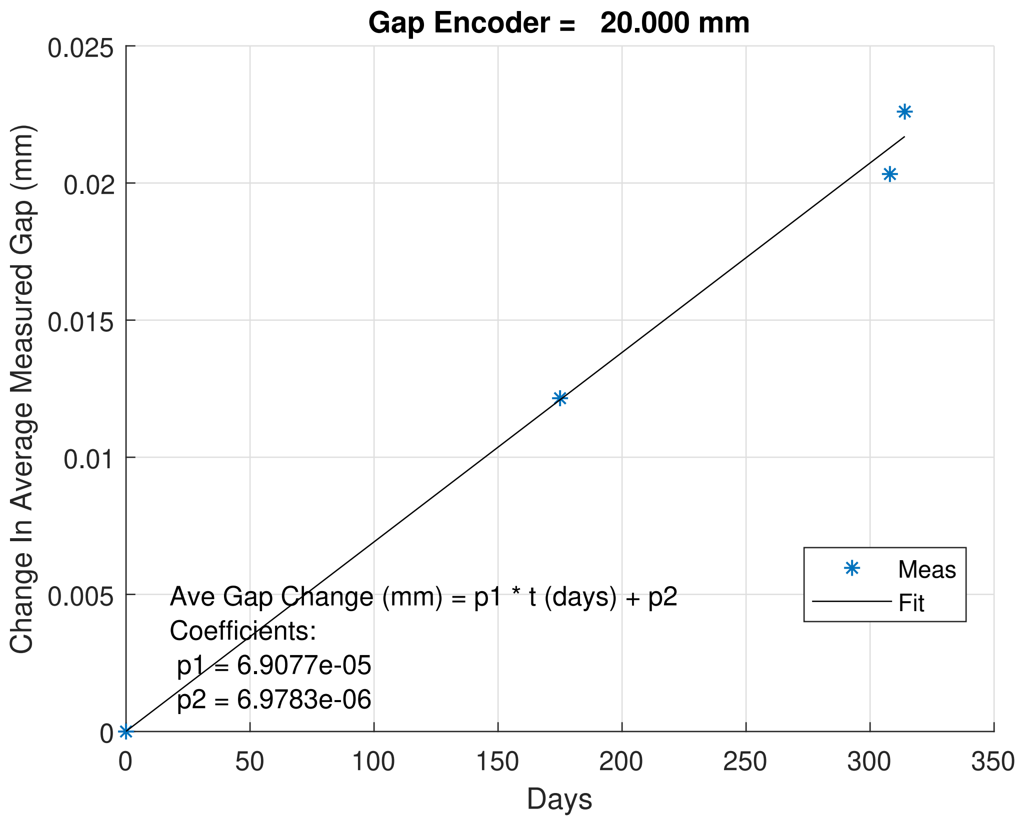

Gap Encoder = 9.999 mm
Change In Average Measured Gap (mm)
Days
0.025
0.02
0.015
0.01
0.005
0
-0.005
0
50
100
150
200
250
300
350
Meas
Fit
Ave Gap Change (mm) = p1 * t (days) + p2
Coefficients:
p1 = 6.7561e-05
p2 = -4.0236e-05


Gap Encoder = 20.000 mm
Measured Gap (mm)
Measurement Number
20.4
20.38
20.36
20.34
20.32
20.3
20.28
20.26
20.24
20.22
1
1.5
2
2.5
3
3.5
4
Point 1
Point 2
Point 3
Point 4


Gap Encoder = 20.000 mm
Change In Measured Gap (mm)
0.03
0.025
0.02
0.015
0.01
0.005
0
1
1.5
2
2.5
3
3.5
4
Measurement Number
Point 1
Point 2
Point 3
Point 4


Gap Encoder = 20.000 mm
20.34
20.335
20.33
20.325
20.32
20.315
20.31
Average Measured Gap (mm)
1
1.5
2
2.5
3
3.5
4
Measurement Number


Gap Encoder = 20.000 mm
0.025
0.02
0.015
0.01
0.005
0
1
1.5
2
2.5
3
3.5
4
Measurement Number
Change In Average Measured Gap (mm)


Gap Encoder = 20.000 mm
Change In Average Measured Gap (mm)
0.025
0.02
0.015
0.01
0.005
0
0
50
100
150
200
250
300
350
Days
Meas
Fit
Ave Gap Change (mm) = p1 * t (days) + p2
Coefficients:
p1 = 6.9077e-05
p2 = 6.9783e-06