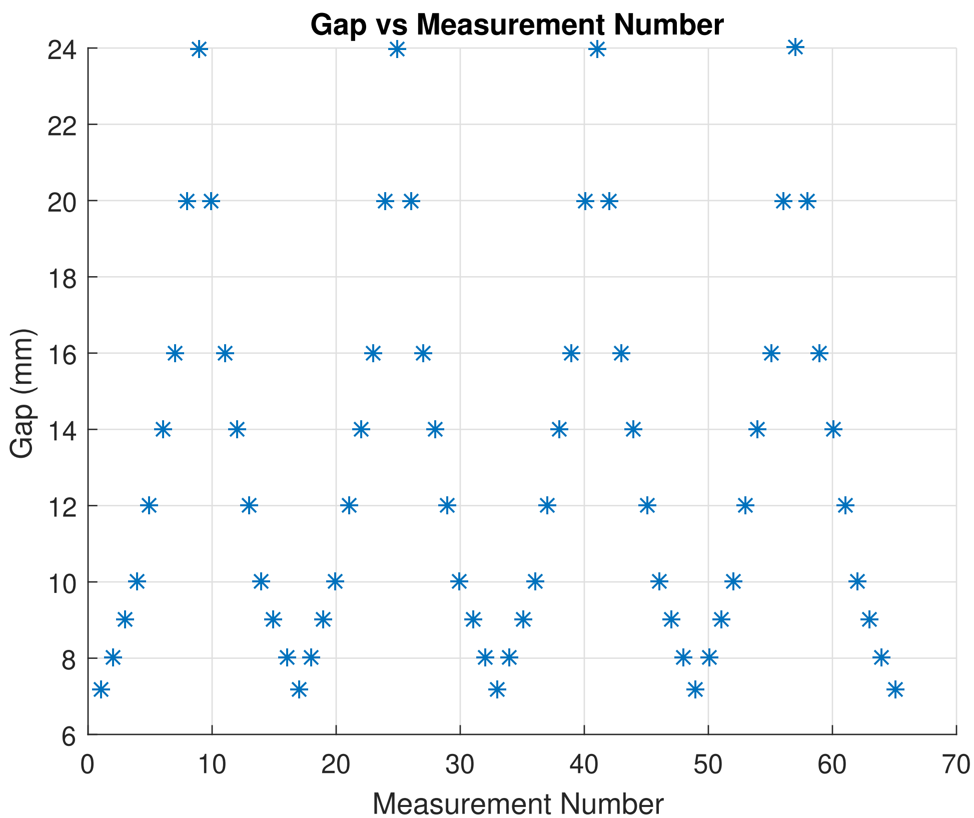
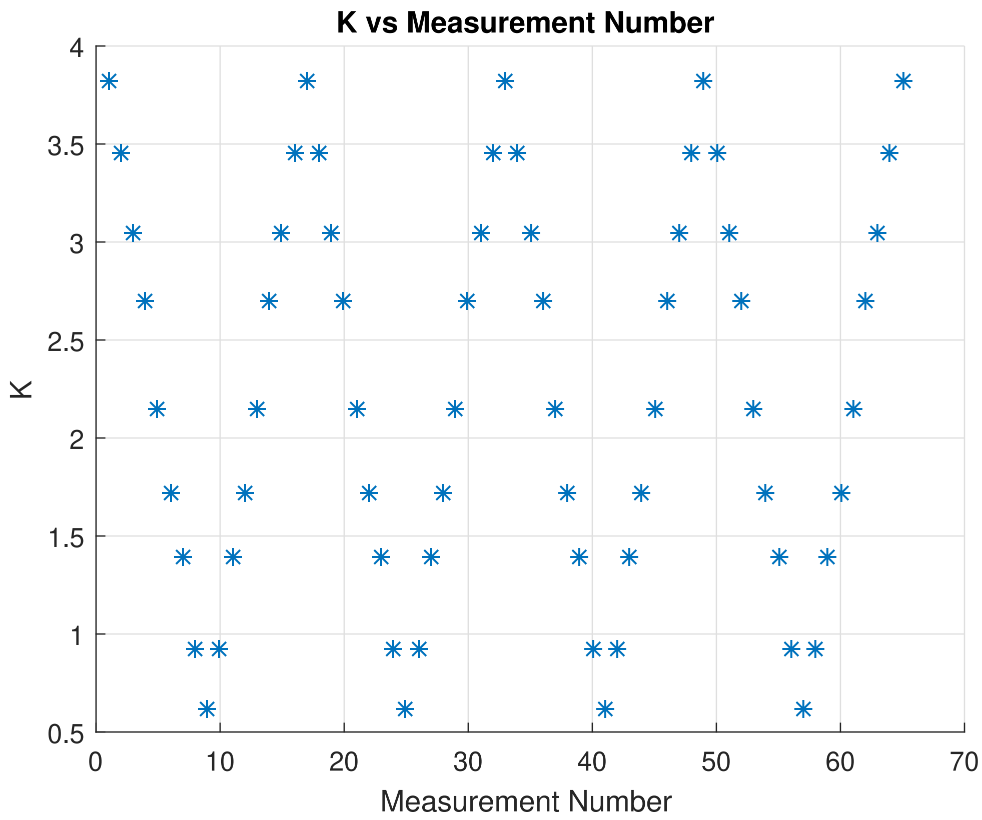
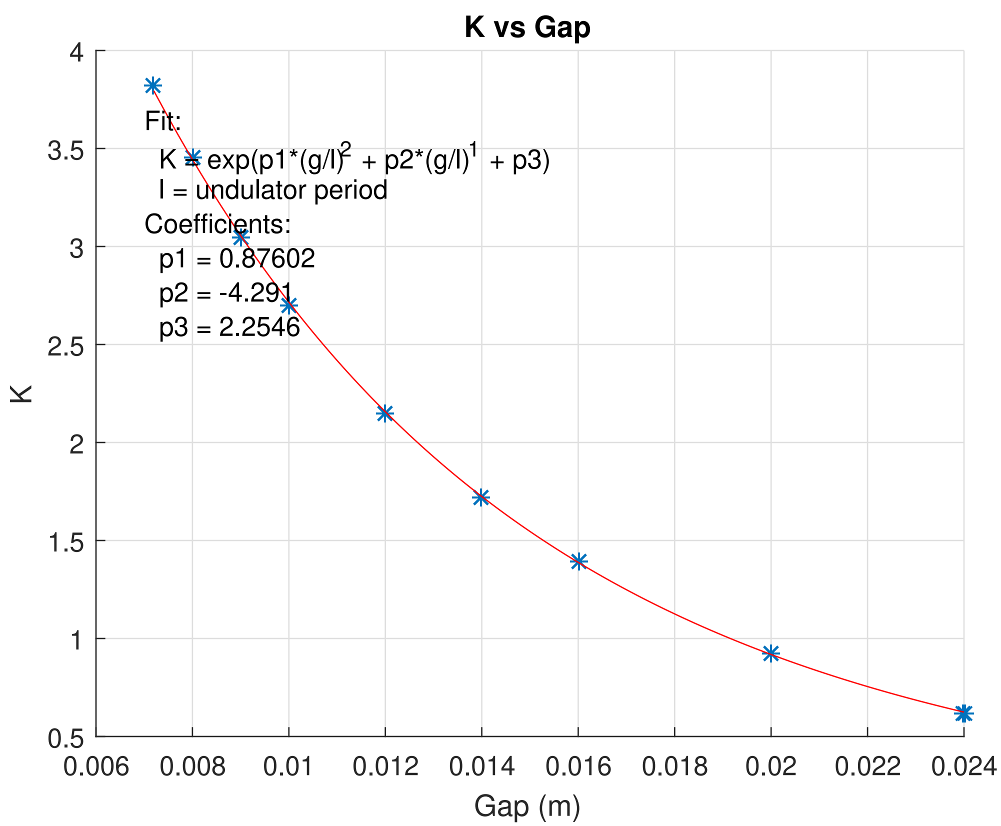
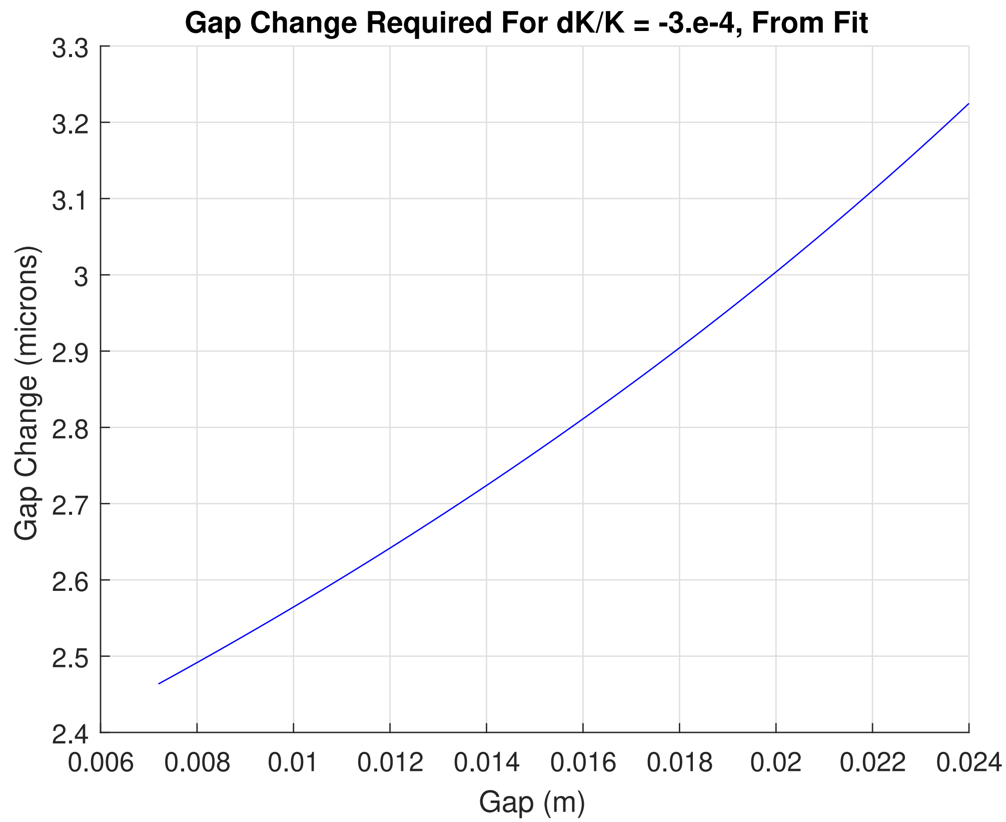
SLAC Magnetic Measurements#
Date: 10-11-2016#
Time: 17:44:16#

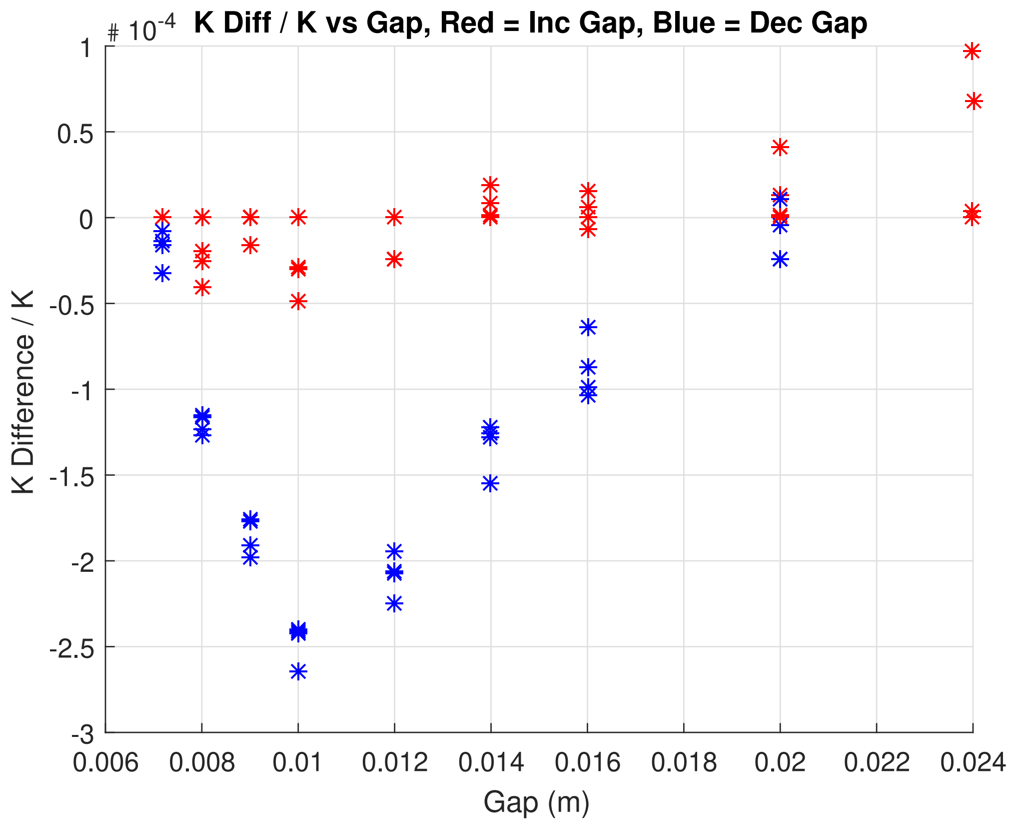

Gap vs Measurement Number
Gap (mm)
Measurement Number
24
22
20
18
16
14
12
10
8
6
0
10
20
30
40
50
60
70



K vs Measurement Number
K
Measurement Number
4
3.5
3
2.5
2
1.5
1
0.5
0
10
20
30
40
50
60
70


K vs Gap
Fit:
K = exp(p1*(g/l)^2 + p2*(g/l)^1 + p3)
l = undulator period
Coefficients:
p1 = 0.87602
p2 = -4.291
p3 = 2.2546
K
Gap (m)
4
3.5
3
2.5
2
1.5
1
0.5
0.006
0.008
0.01
0.012
0.014
0.016
0.018
0.02
0.022
0.024


Gap Change Required For dK/K = -3.e-4, From Fit
Gap Change (microns)
3.3
3.2
3.1
3
2.9
2.8
2.7
2.6
2.5
2.4
0.006
0.008
0.01
0.012
0.014
0.016
0.018
0.02
0.022
0.024
Gap (m)



K Diff / K vs Gap, Red = Inc Gap, Blue = Dec Gap
10^-4
1
0.5
0
-0.5
-1
-1.5
-2
-2.5
-3
K Difference / K
0.006
0.008
0.01
0.012
0.014
0.016
0.018
0.02
0.022
0.024
Gap (m)