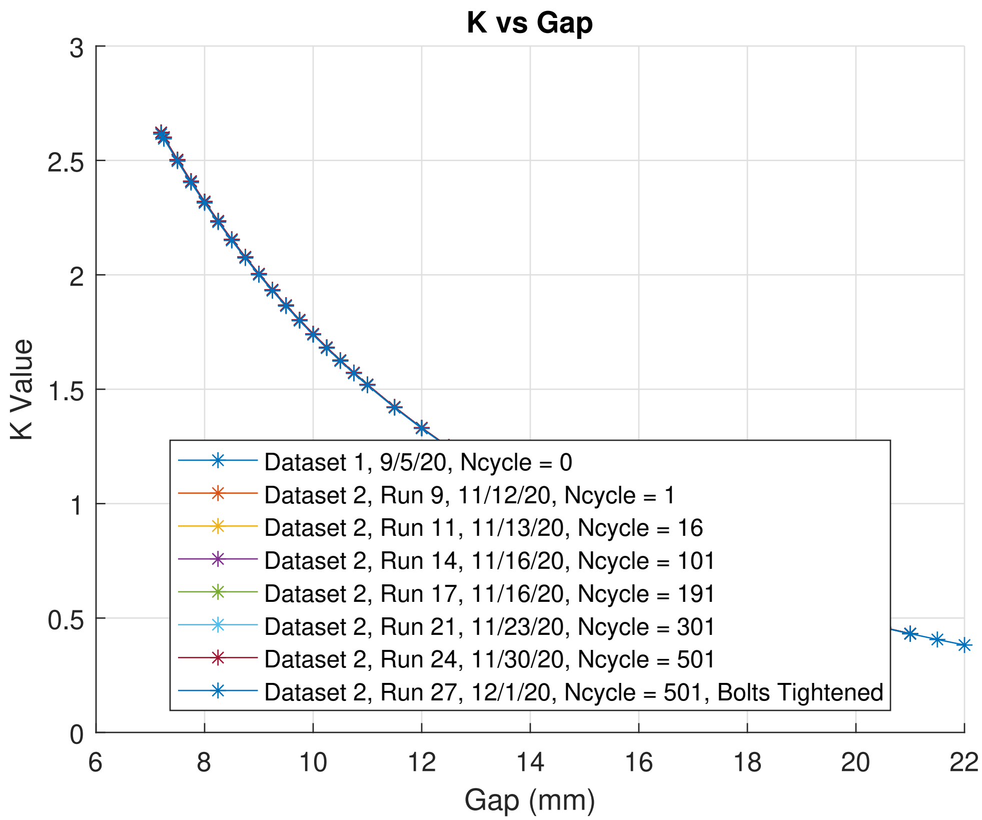
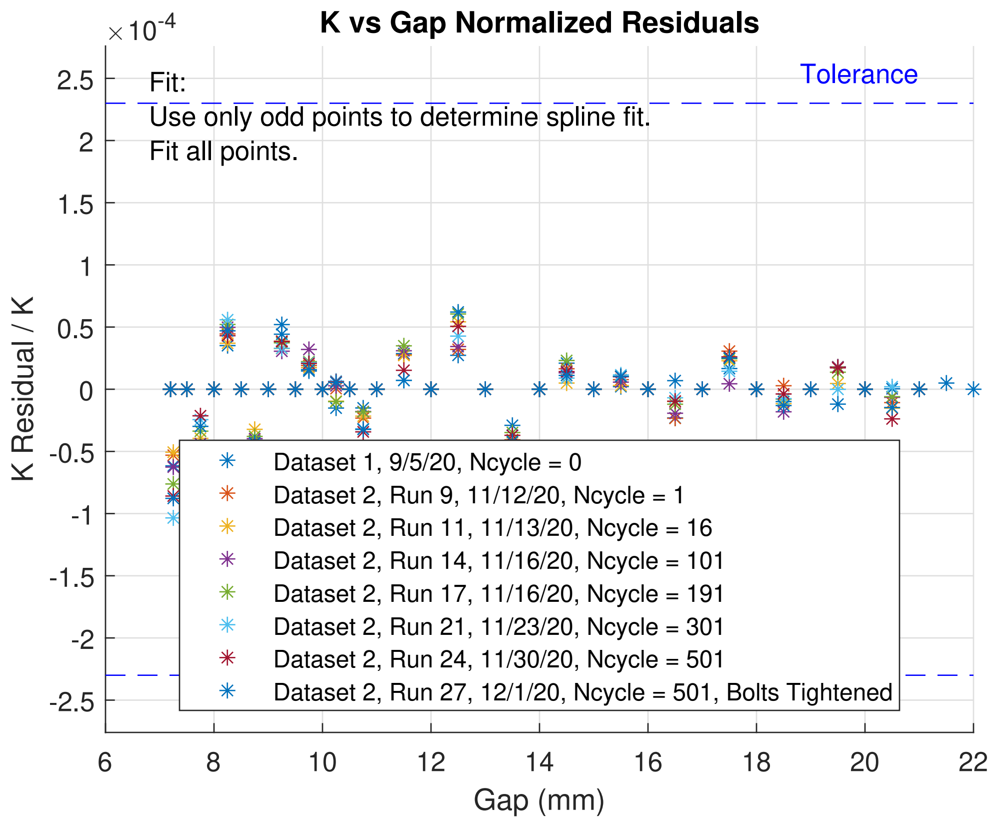
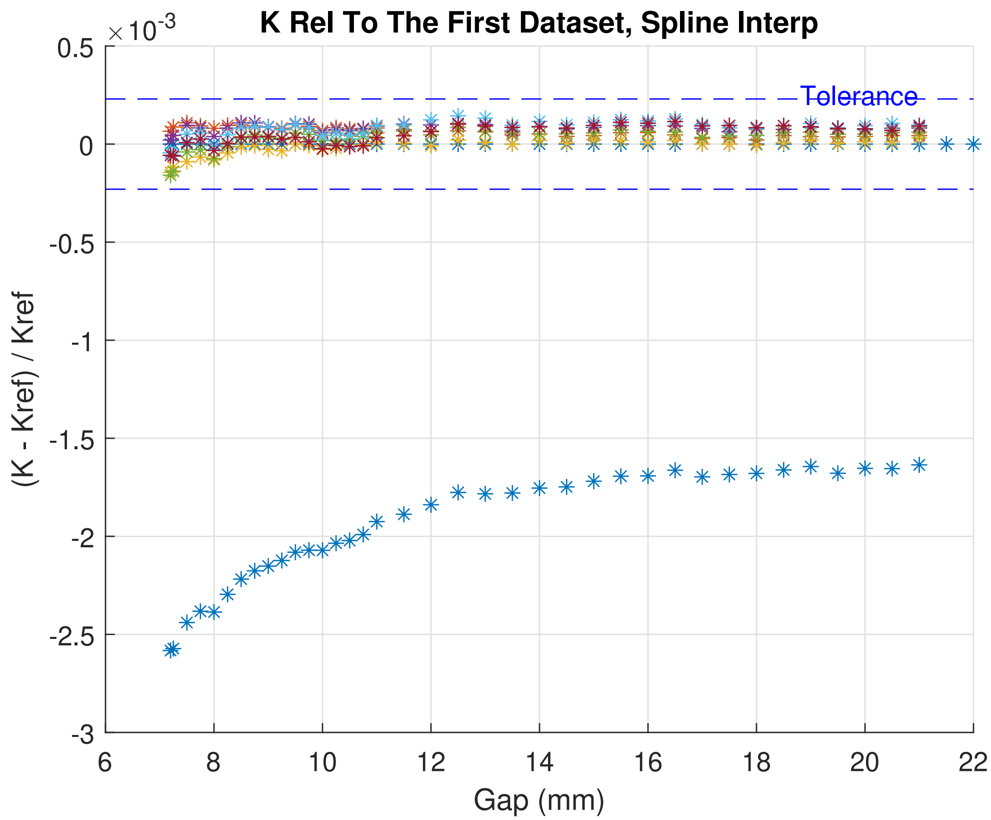
SLAC Magnetic Measurements#
Date: 12-02-2020#
Time: 09:44:56#



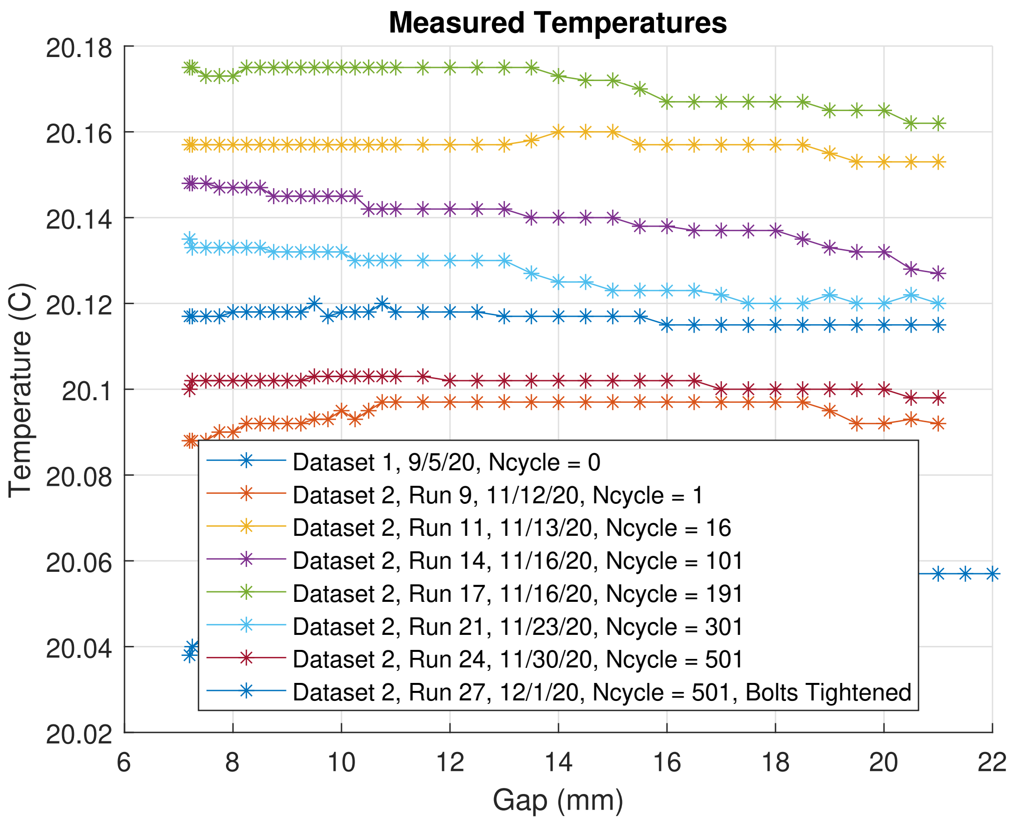
K vs Gap
K Value
Gap (mm)
0
0.5
1
1.5
2
2.5
3
6
8
10
12
14
16
18
20
22
Dataset 1, 9/5/20, Ncycle = 0
Dataset 2, Run 9, 11/12/20, Ncycle = 1
Dataset 2, Run 11, 11/13/20, Ncycle = 16
Dataset 2, Run 14, 11/16/20, Ncycle = 101
Dataset 2, Run 17, 11/16/20, Ncycle = 191
Dataset 2, Run 21, 11/23/20, Ncycle = 301
Dataset 2, Run 24, 11/30/20, Ncycle = 501
Dataset 2, Run 27, 12/1/20, Ncycle = 501, Bolts Tightened

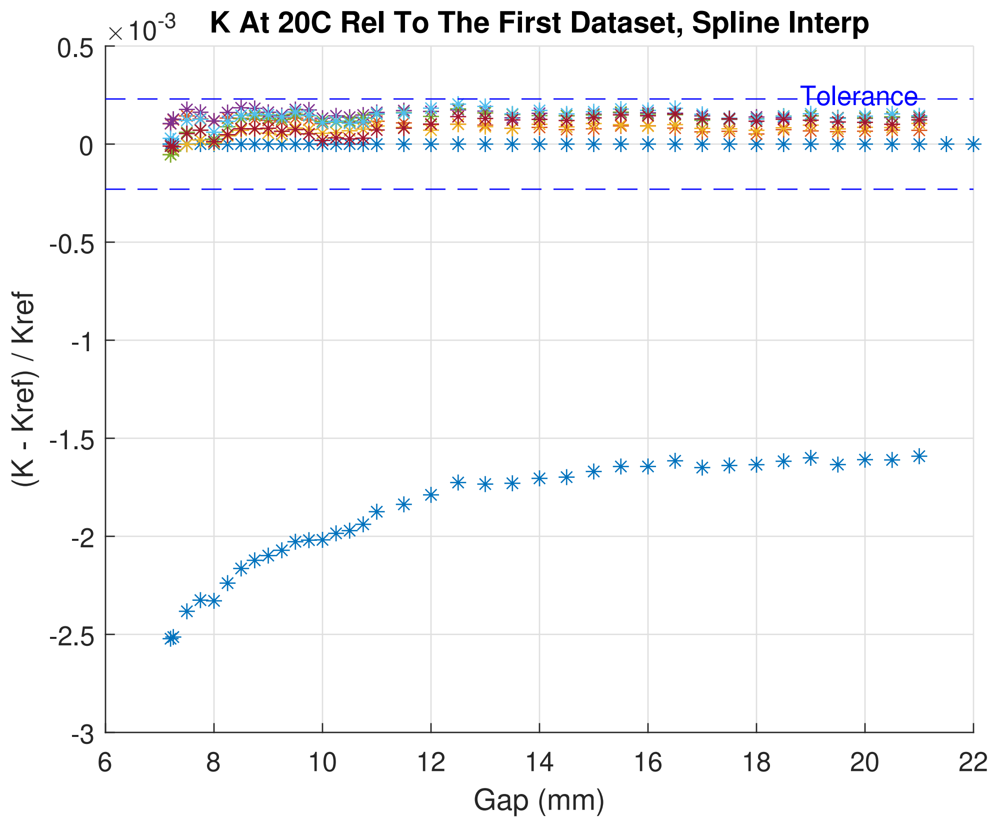


K vs Gap Normalized Residuals
×10^-4
Fit:
Use only odd points to determine spline fit.
Fit all points.
Tolerance
K Residual / K
Gap (mm)
2.5
2
1.5
1
0.5
0
-0.5
-1
-1.5
-2
-2.5
6
8
10
12
14
16
18
20
22
Dataset 1, 9/5/20, Ncycle = 0
Dataset 2, Run 9, 11/12/20, Ncycle = 1
Dataset 2, Run 11, 11/13/20, Ncycle = 16
Dataset 2, Run 14, 11/16/20, Ncycle = 101
Dataset 2, Run 17, 11/16/20, Ncycle = 191
Dataset 2, Run 21, 11/23/20, Ncycle = 301
Dataset 2, Run 24, 11/30/20, Ncycle = 501
Dataset 2, Run 27, 12/1/20, Ncycle = 501, Bolts Tightened



K Rel To The First Dataset, Spline Interp
×10^-3
0.5
0
-0.5
-1
-1.5
-2
-2.5
-3
Tolerance
(K - Kref) / Kref
6
8
10
12
14
16
18
20
22
Gap (mm)


Measured Temperatures
20.18
20.16
20.14
20.12
20.1
20.08
20.06
20.04
20.02
Temperature (C)
6
8
10
12
14
16
18
20
22
Gap (mm)
Dataset 1, 9/5/20, Ncycle = 0
Dataset 2, Run 9, 11/12/20, Ncycle = 1
Dataset 2, Run 11, 11/13/20, Ncycle = 16
Dataset 2, Run 14, 11/16/20, Ncycle = 101
Dataset 2, Run 17, 11/16/20, Ncycle = 191
Dataset 2, Run 21, 11/23/20, Ncycle = 301
Dataset 2, Run 24, 11/30/20, Ncycle = 501
Dataset 2, Run 27, 12/1/20, Ncycle = 501, Bolts Tightened



K At 20C Rel To The First Dataset, Spline Interp
×10^-3
0.5
0
-0.5
-1
-1.5
-2
-2.5
-3
6
8
10
12
14
16
18
20
22
Tolerance
(K - Kref) / Kref
Gap (mm)