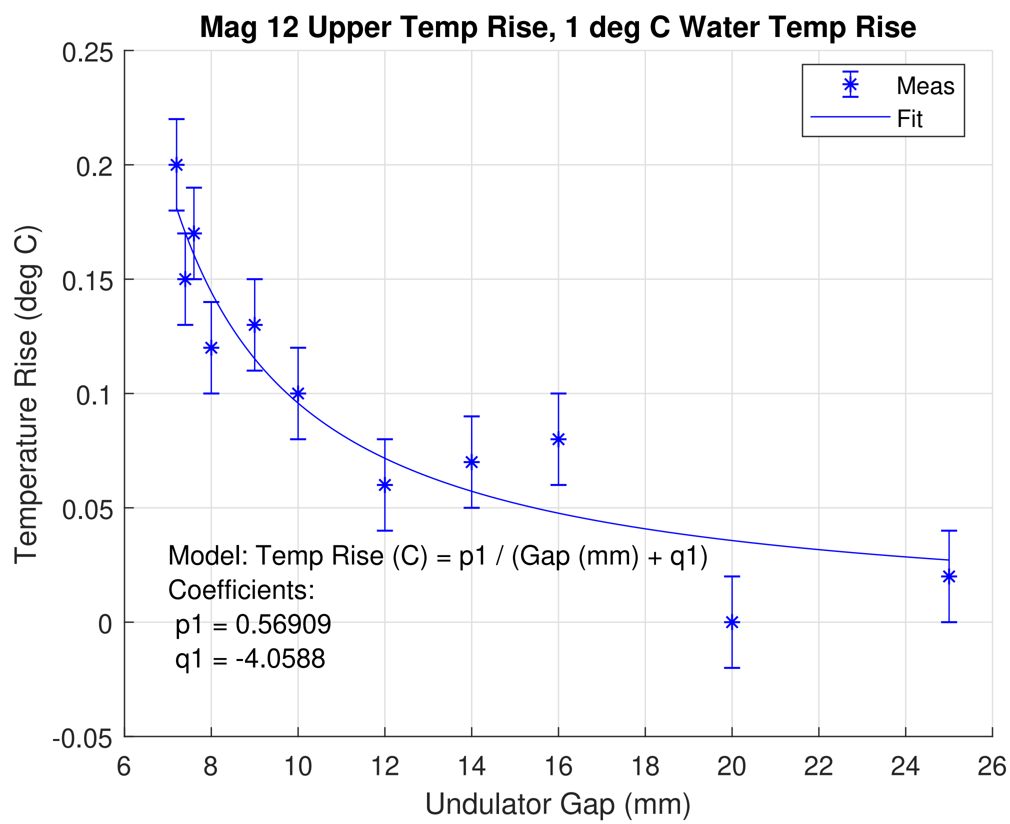
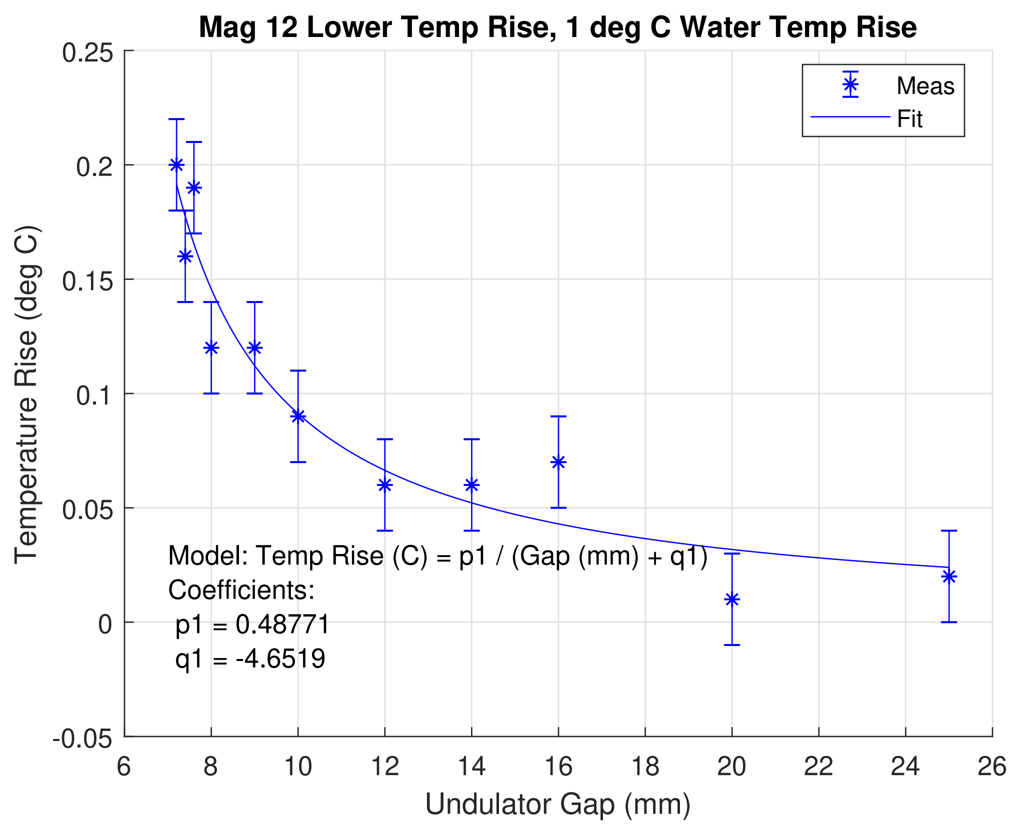
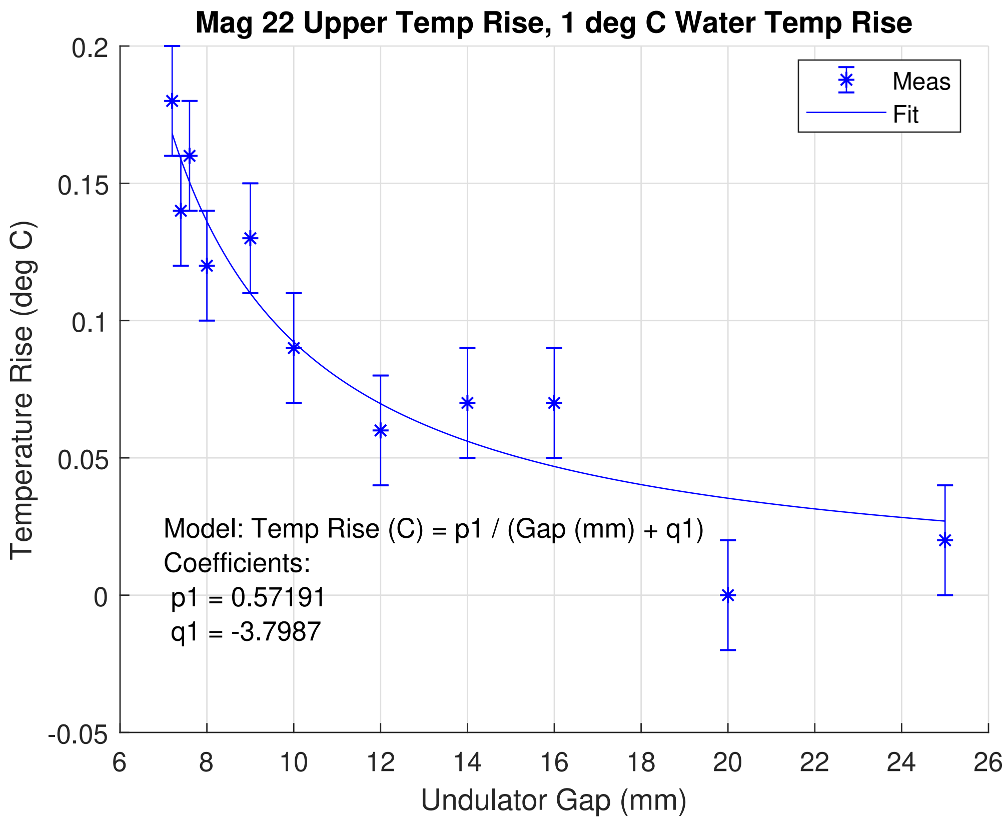
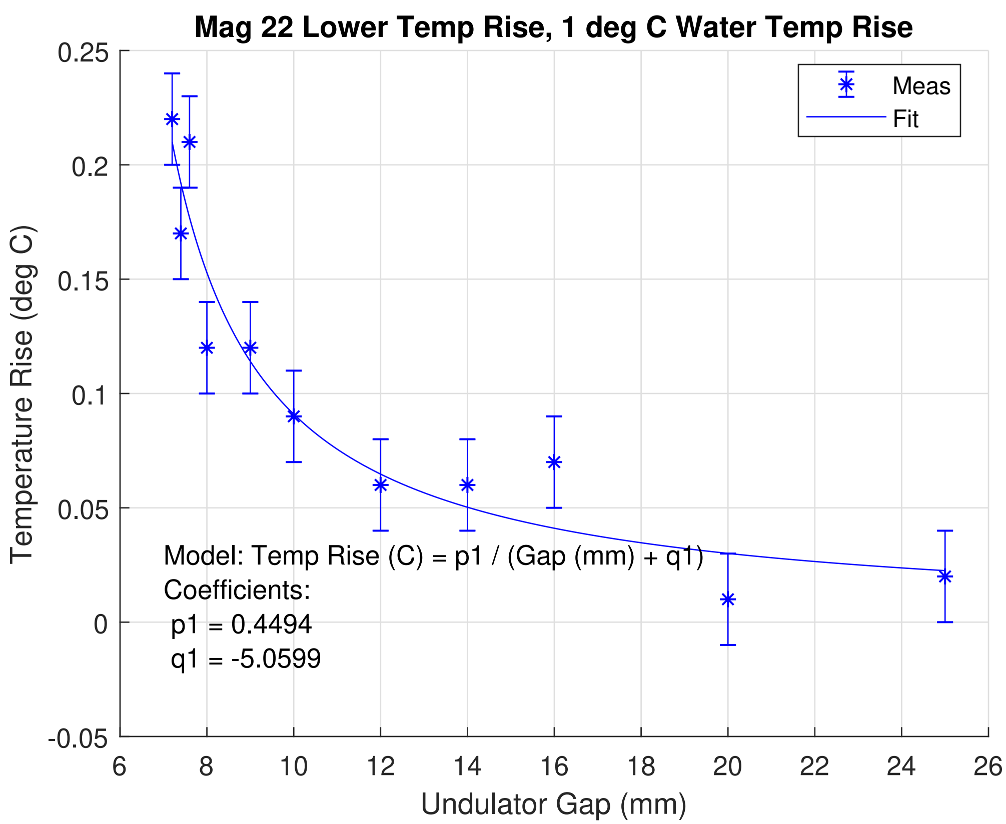
SLAC Magnetic Measurements#
Date: 09-05-2018#
Time: 15:42:27#

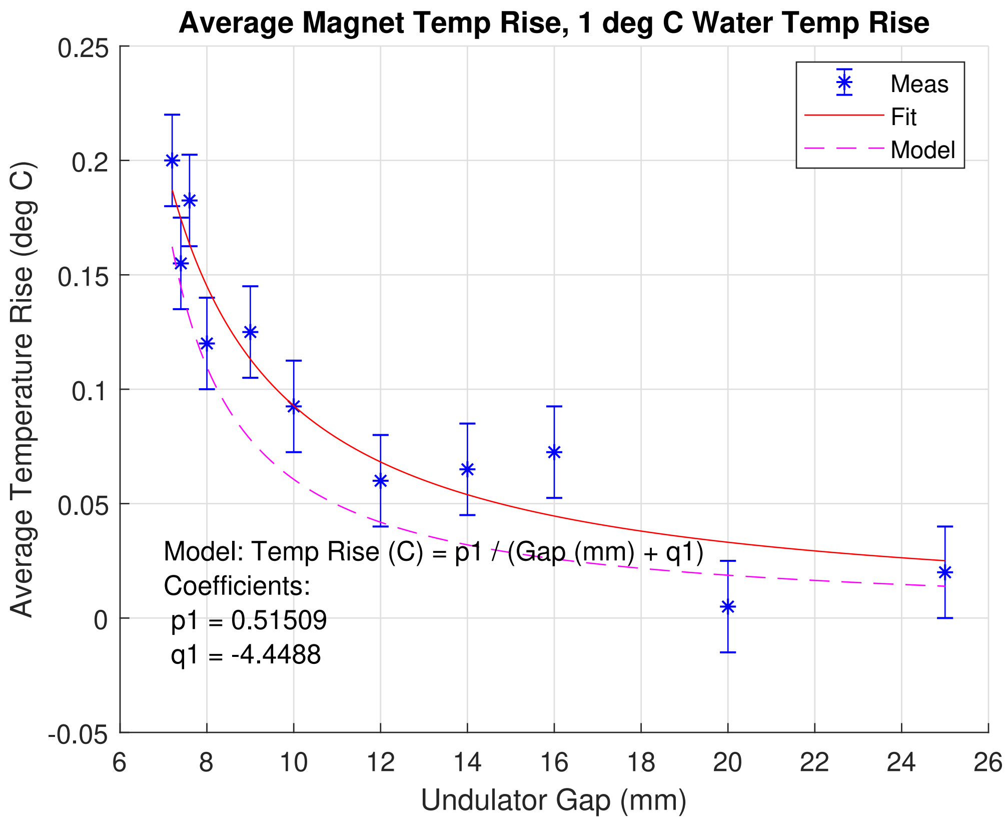

Mag 12 Upper Temp Rise, 1 deg C Water Temp Rise
Meas
Fit
Model: Temp Rise (C) = p1 / (Gap (mm) + q1)
Coefficients:
p1 = 0.56909
q1 = -4.0588
Temperature Rise (deg C)
Undulator Gap (mm)
0.25
0.2
0.15
0.1
0.05
0
-0.05
6
8
10
12
14
16
18
20
22
24
26



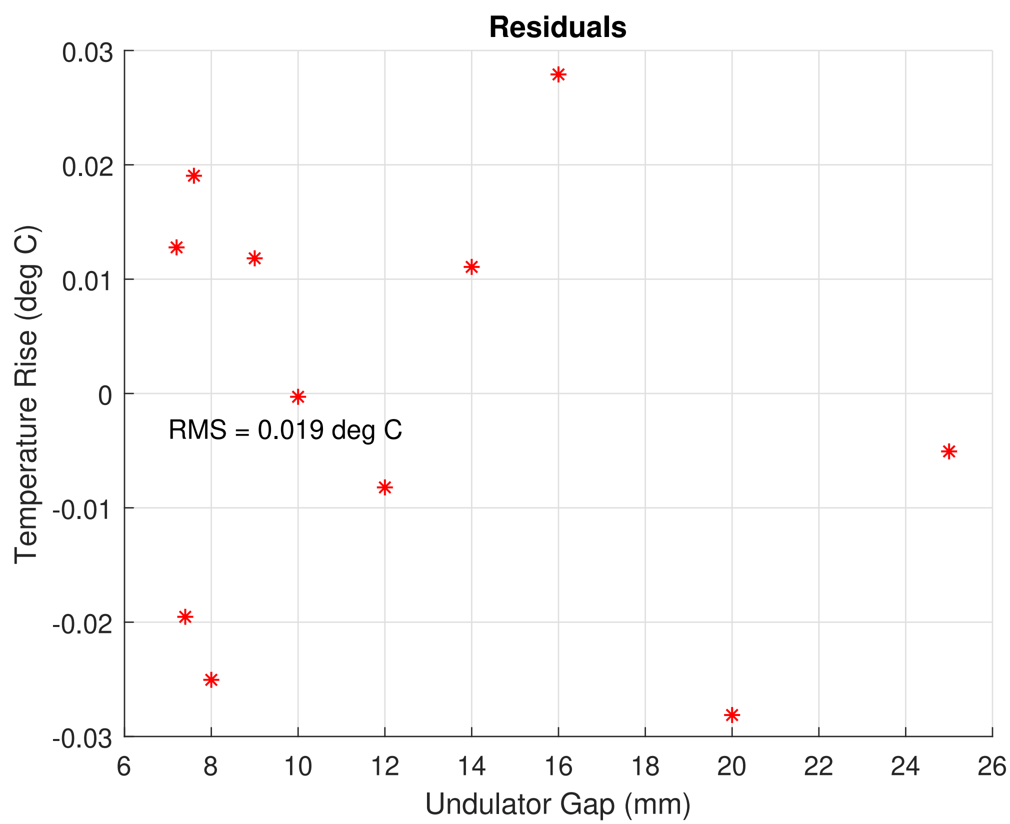
Mag 12 Lower Temp Rise, 1 deg C Water Temp Rise
Temperature Rise (deg C)
Undulator Gap (mm)
0.25
0.2
0.15
0.1
0.05
0
-0.05
6
8
10
12
14
16
18
20
22
24
26
Meas
Fit
Model: Temp Rise (C) = p1 / (Gap (mm) + q1)
Coefficients:
p1 = 0.48771
q1 = -4.6519

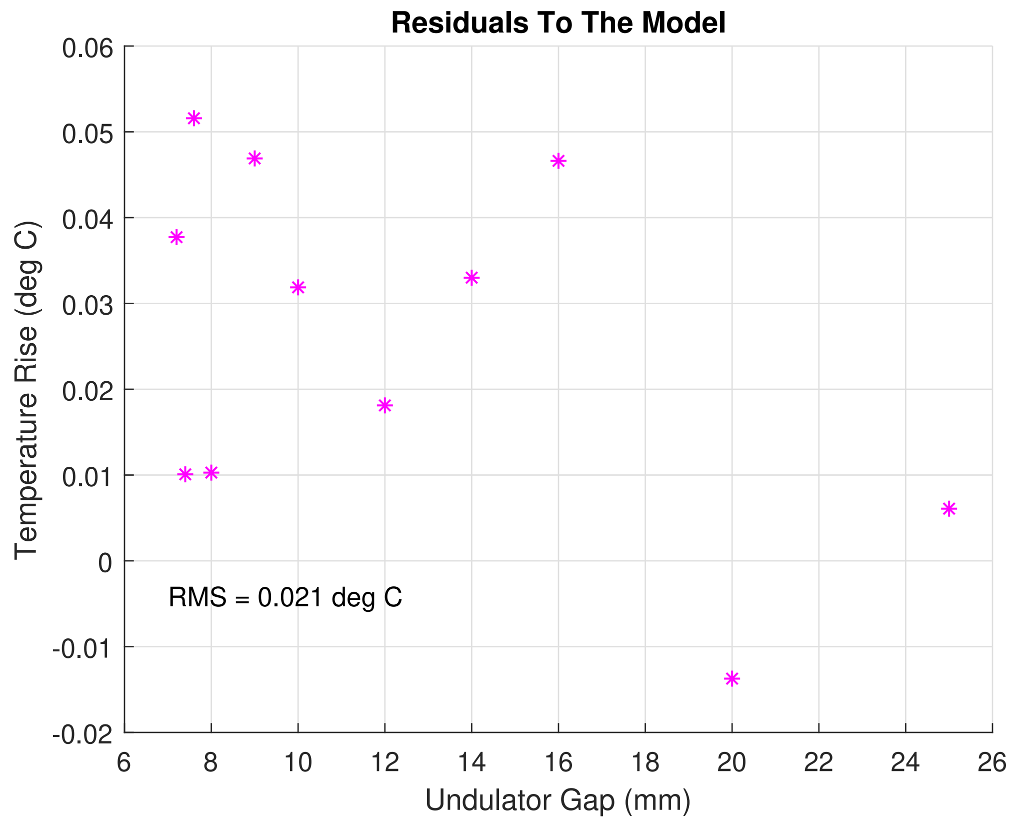

Mag 22 Upper Temp Rise, 1 deg C Water Temp Rise
Meas
Fit
Model: Temp Rise (C) = p1 / (Gap (mm) + q1)
Coefficients:
p1 = 0.57191
q1 = -3.7987
Temperature Rise (deg C)
Undulator Gap (mm)
0.2
0.15
0.1
0.05
0
-0.05
6
8
10
12
14
16
18
20
22
24
26


Mag 22 Lower Temp Rise, 1 deg C Water Temp Rise
Temperature Rise (deg C)
Undulator Gap (mm)
Meas
Fit
Model: Temp Rise (C) = p1 / (Gap (mm) + q1)
Coefficients:
p1 = 0.4494
q1 = -5.0599
0.25
0.2
0.15
0.1
0.05
0
-0.05
6
8
10
12
14
16
18
20
22
24
26



Average Magnet Temp Rise, 1 deg C Water Temp Rise
Average Temperature Rise (deg C)
Undulator Gap (mm)
Meas
Fit
Model
Model: Temp Rise (C) = p1 / (Gap (mm) + q1)
Coefficients:
p1 = 0.51509
q1 = -4.4488
0.25
0.2
0.15
0.1
0.05
0
-0.05
6
8
10
12
14
16
18
20
22
24
26


Residuals
Temperature Rise (deg C)
0.03
0.02
0.01
0
-0.01
-0.02
-0.03
RMS = 0.019 deg C
6
8
10
12
14
16
18
20
22
24
26
Undulator Gap (mm)


Residuals To The Model
Temperature Rise (deg C)
Undulator Gap (mm)
RMS = 0.021 deg C
0.06
0.05
0.04
0.03
0.02
0.01
0
-0.01
-0.02
6
8
10
12
14
16
18
20
22
24
26