KPiX Ecal Calibration Curve Using ND Filters and Pulsed IR Laser
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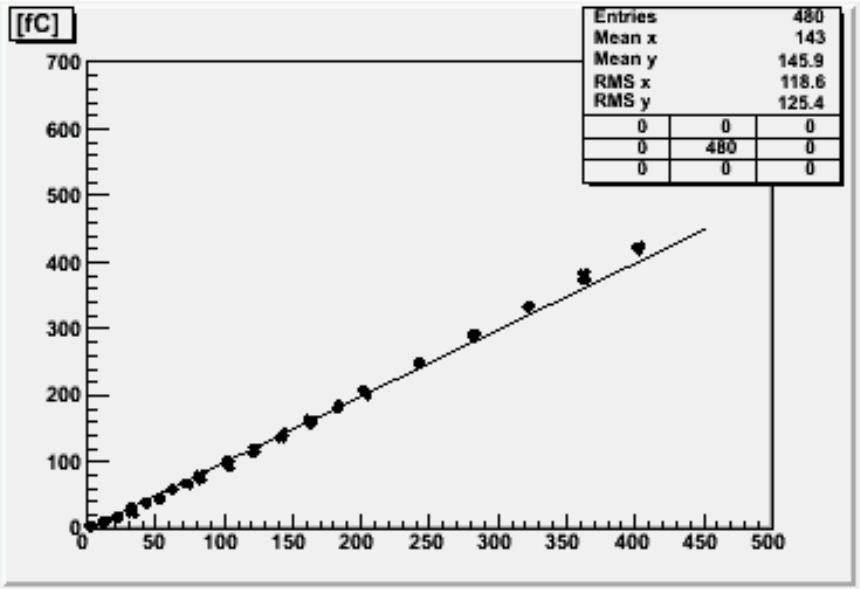
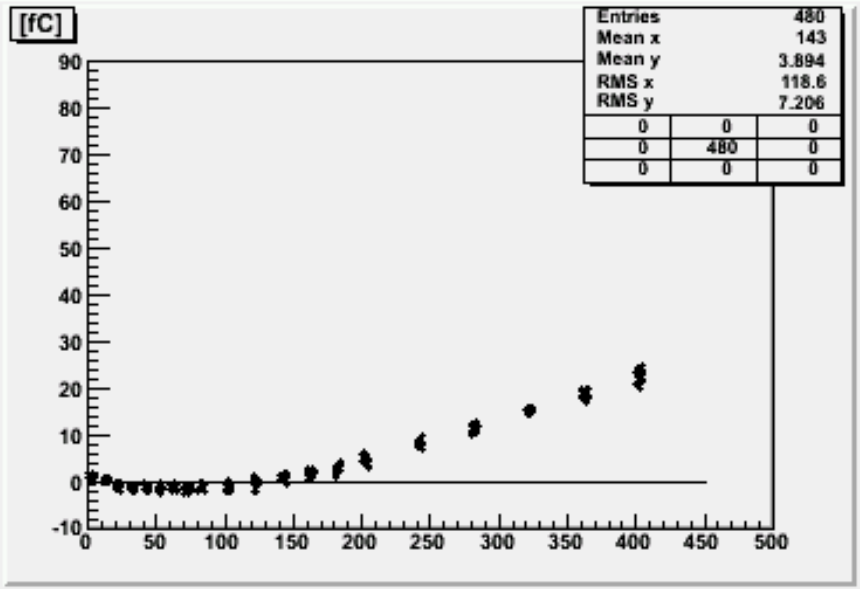
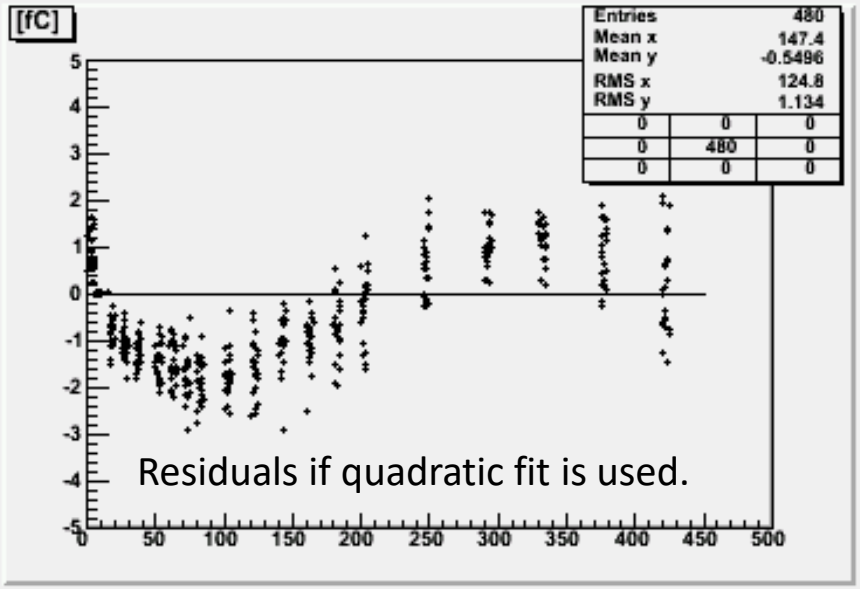
This corresponds to Craig's 2A plot (or 1A).

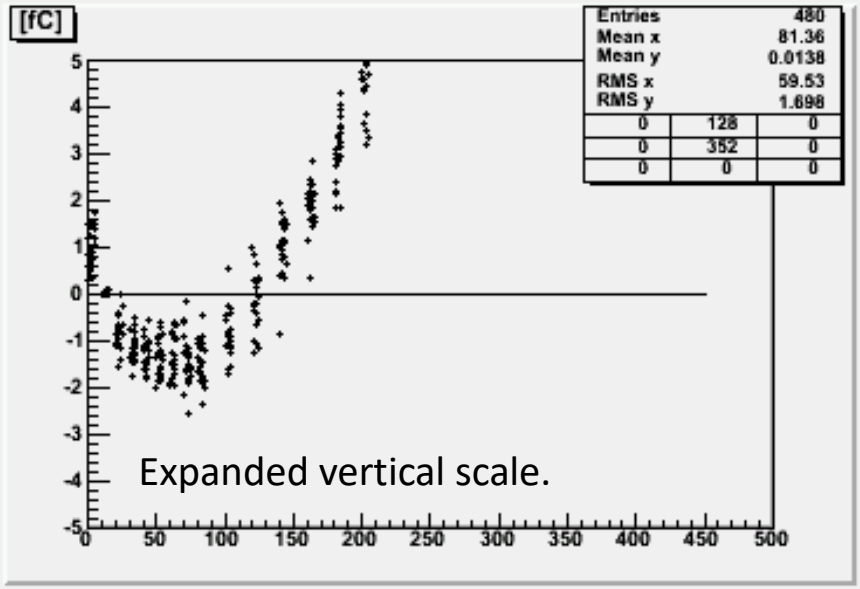


This corresponds to Craig's 2B plot (or 1B).





Residuals if quadratic fit is used.

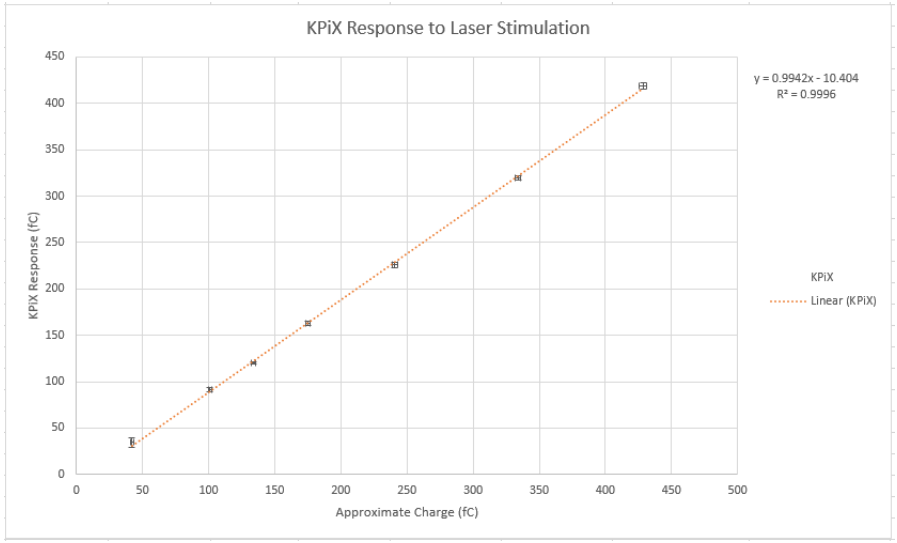


Expanded vertical scale.

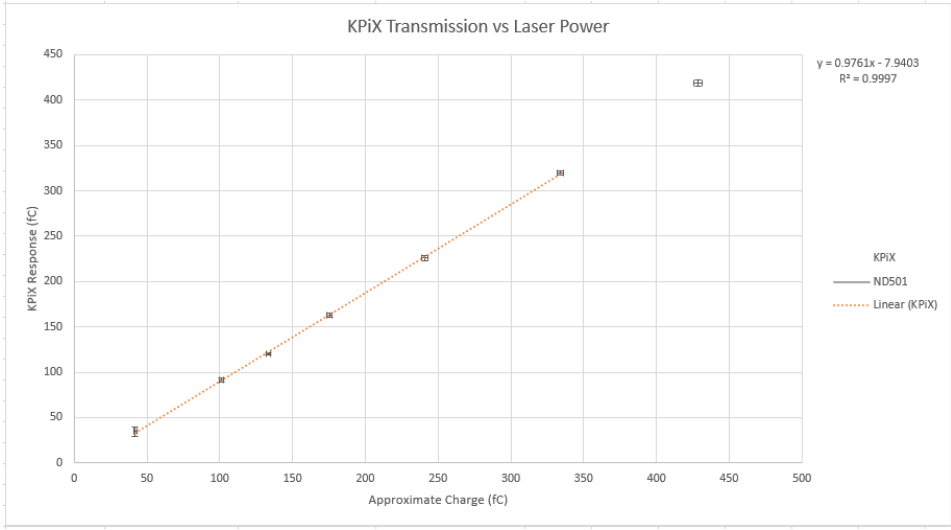
From Dieter

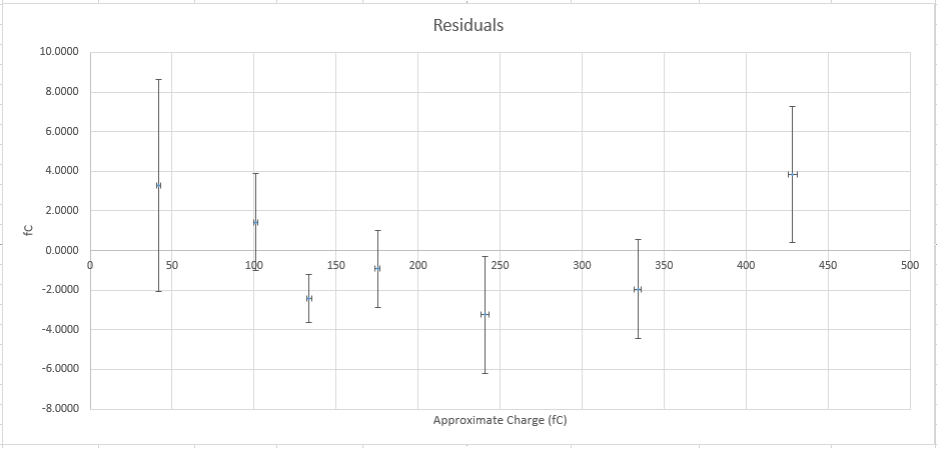
The way Dieter fit his data more closely matches the 2A and 2B plots.

1A

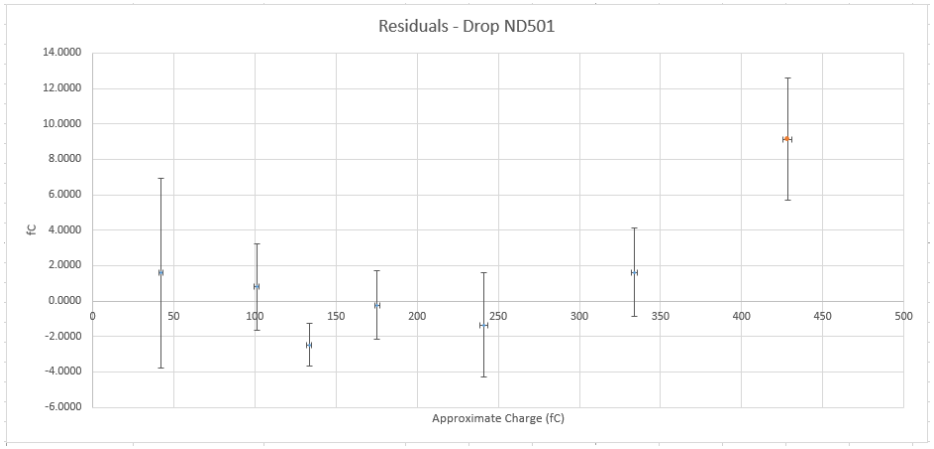


2A

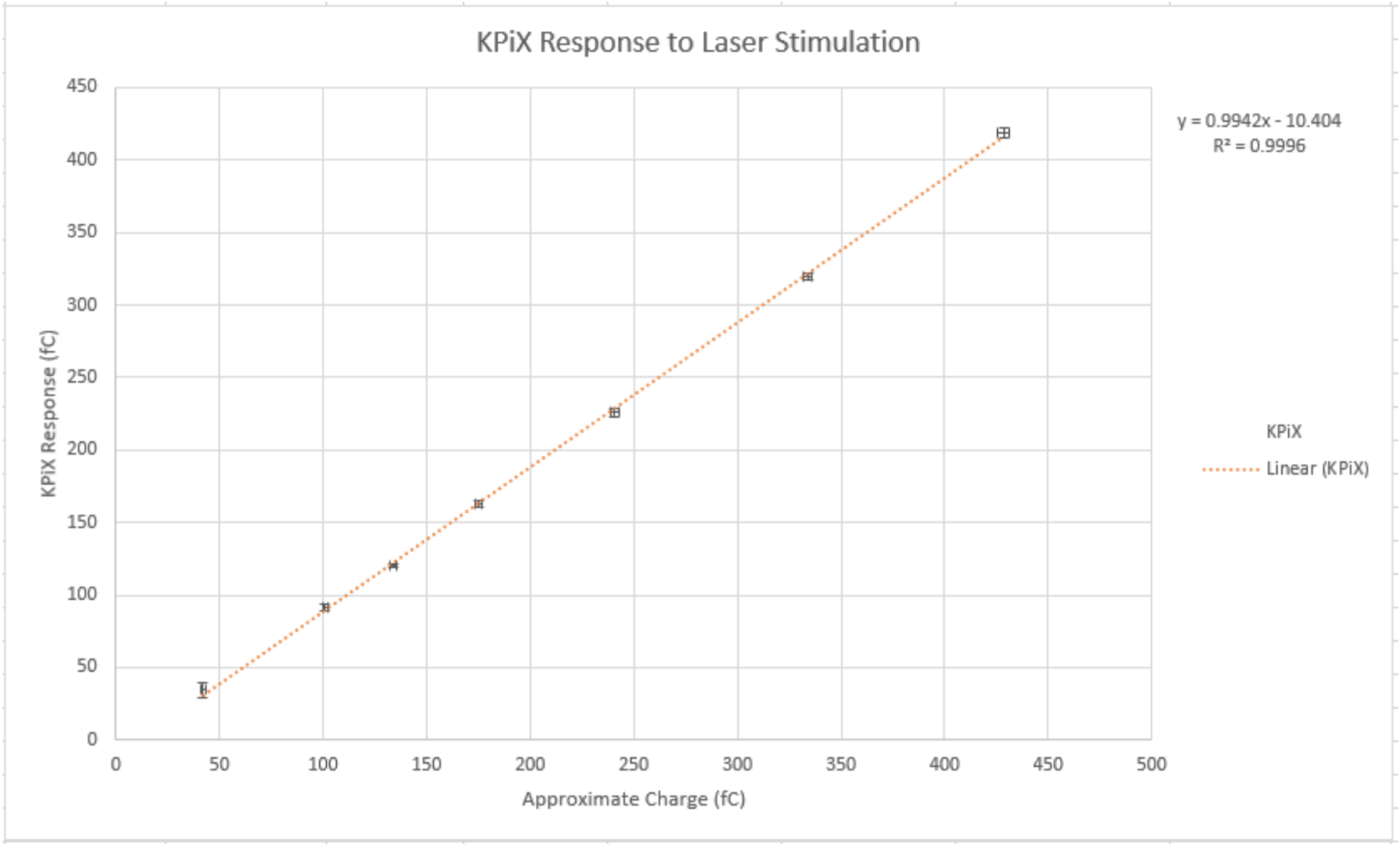




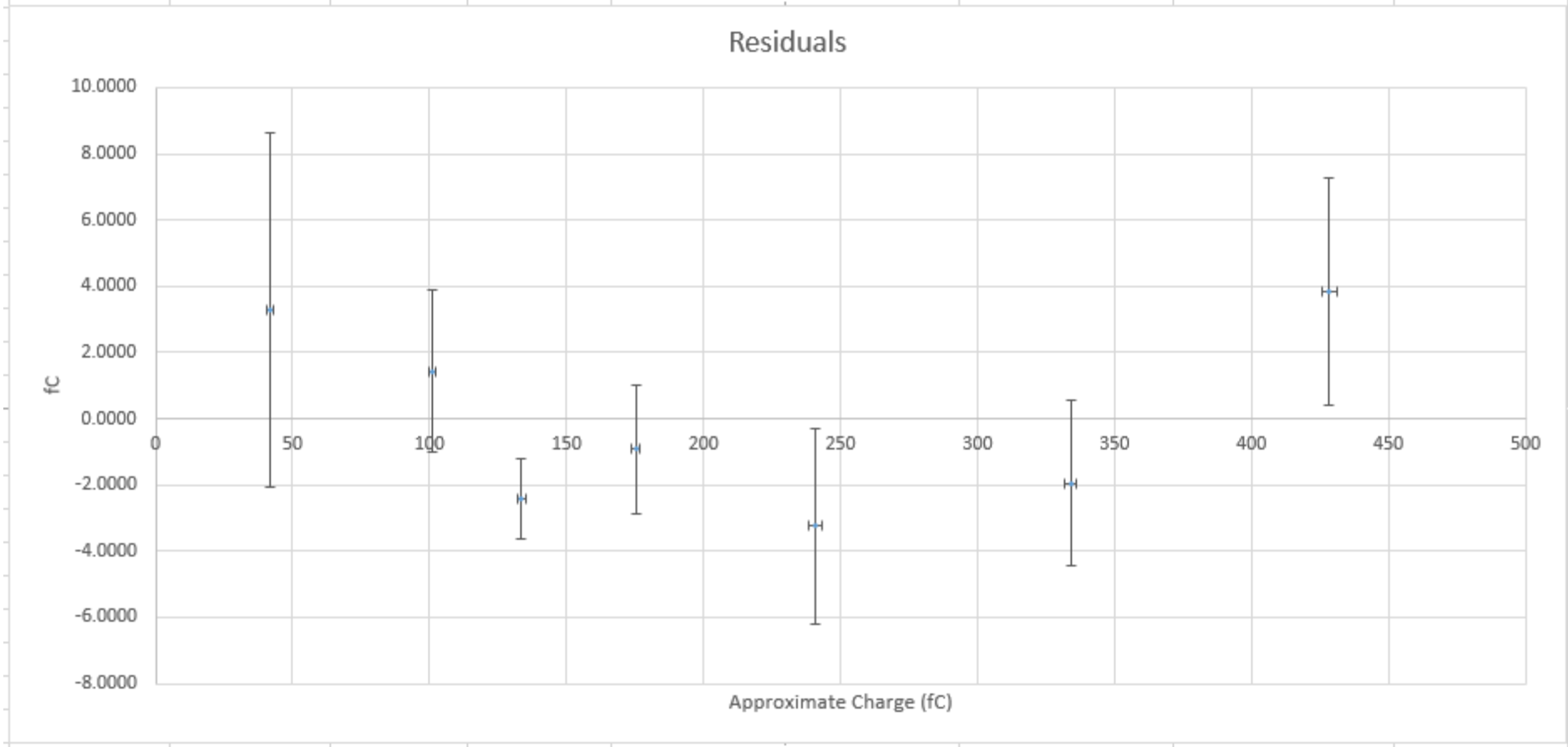
1B



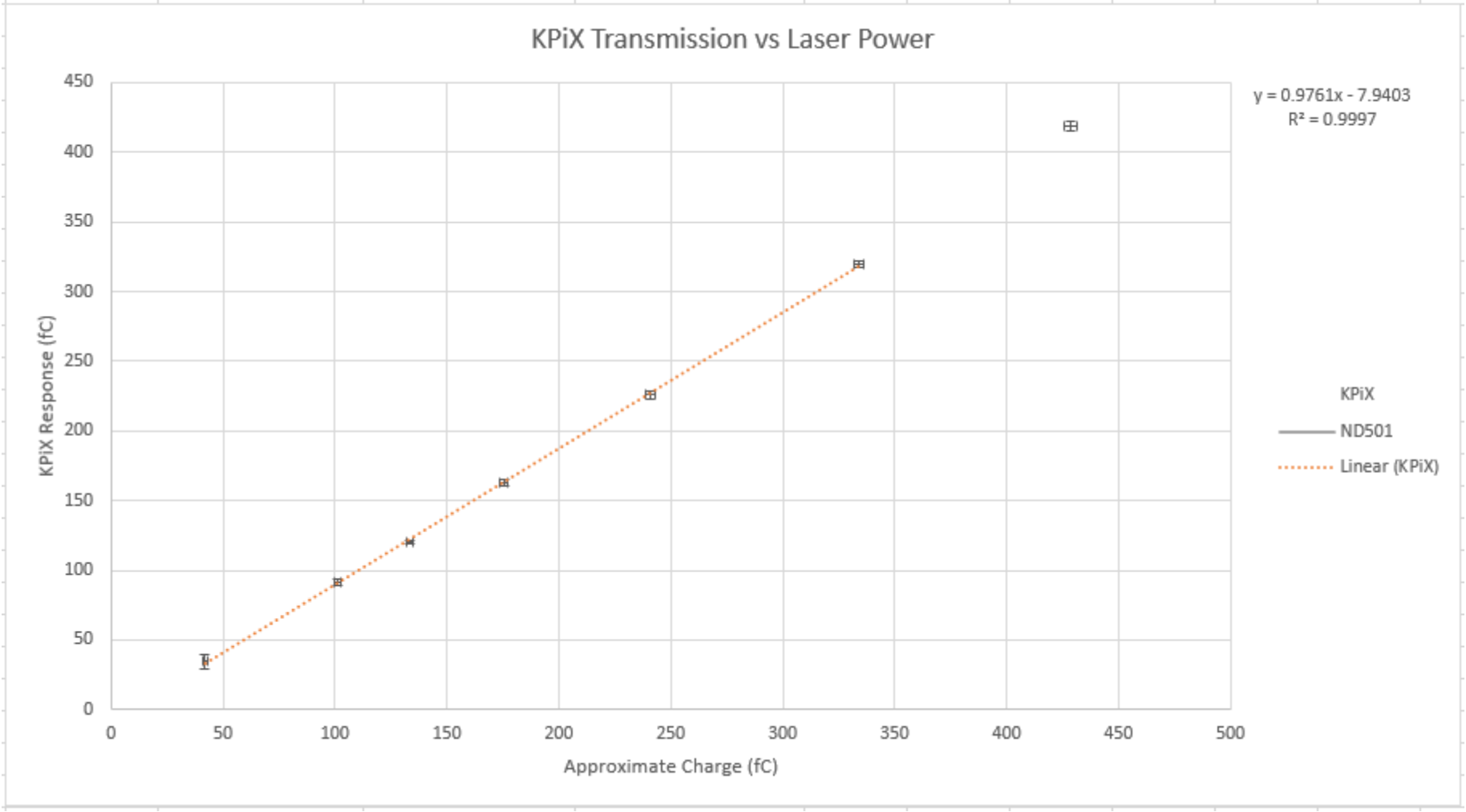
2B


KPiX Response to Laser Stimulation
KPiX Response (fC)
Approximate Charge (fC)
y = 0.9942x - 10.404
R² = 0.9996
KPiX
Linear (KPiX)
0
50
100
150
200
250
300
350
400
450
500

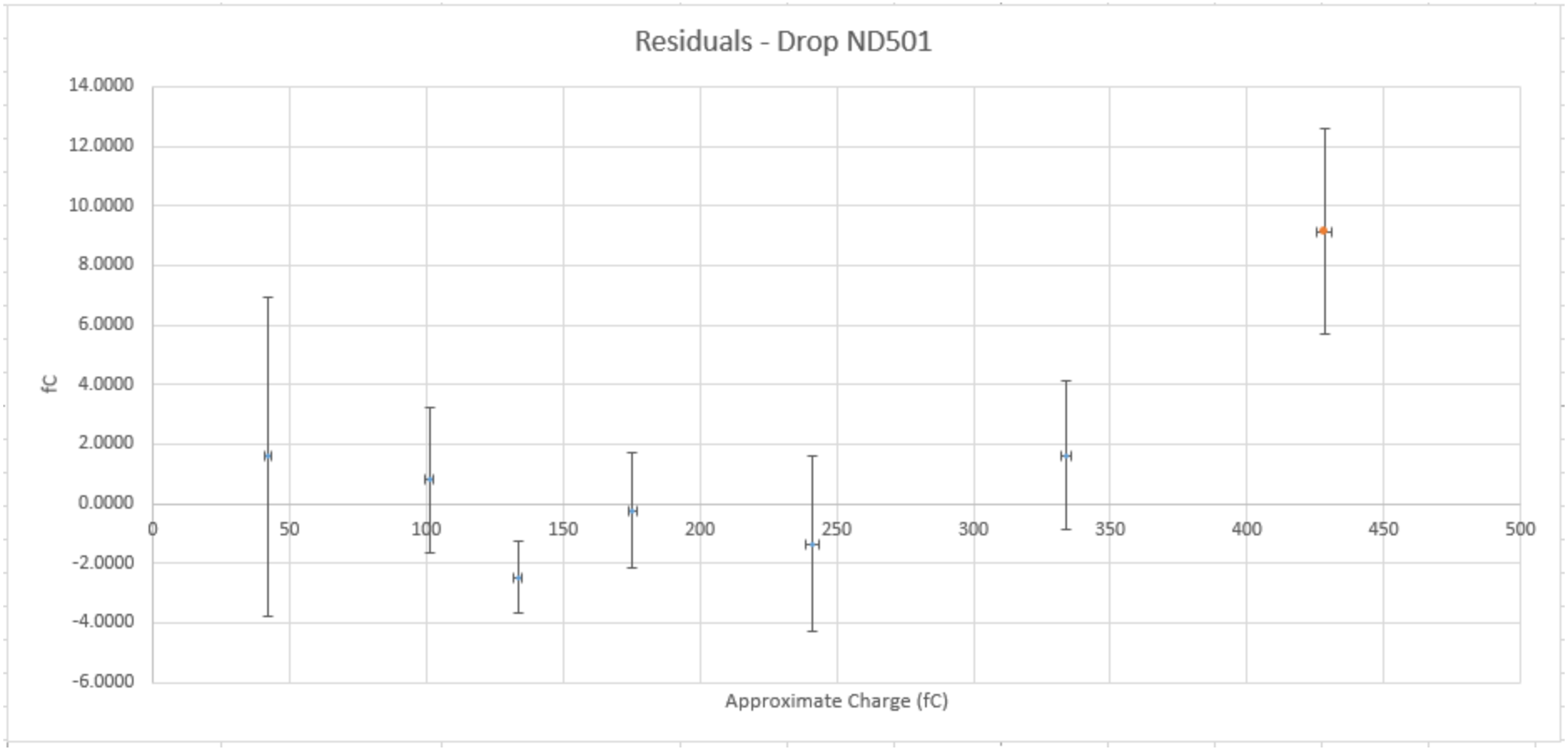
1A


Residuals
10.0000
8.0000
6.0000
4.0000
2.0000
0.0000
-2.0000
-4.0000
-6.0000
-8.0000
fC
0
50
100
150
200
250
300
350
400
450
500
Approximate Charge (fC)

1B


KPiX Transmission vs Laser Power
y = 0.9761x - 7.9403
R² = 0.9997
KPiX Response (fC)
Approximate Charge (fC)
0
50
100
150
200
250
300
350
400
450
500
KPiX
ND501
Linear (KPiX)

2A


Residuals - Drop ND501
14.0000
12.0000
10.0000
8.0000
6.0000
4.0000
2.0000
0.0000
-2.0000
-4.0000
-6.0000
fC
0
50
100
150
200
250
300
350
400
450
500
Approximate Charge (fC)

2B