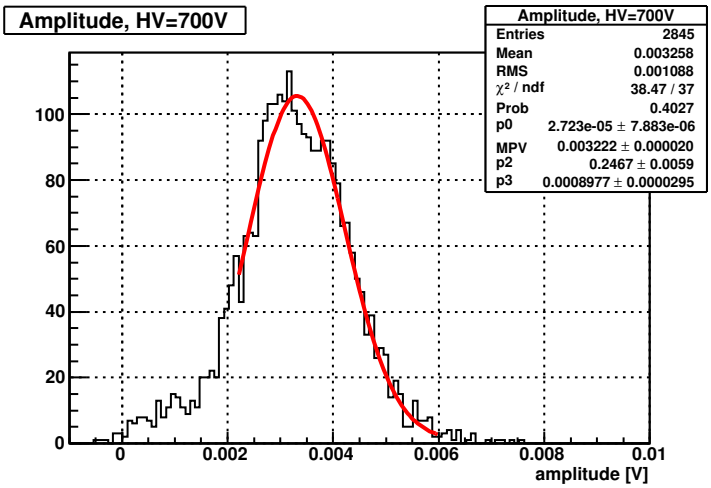
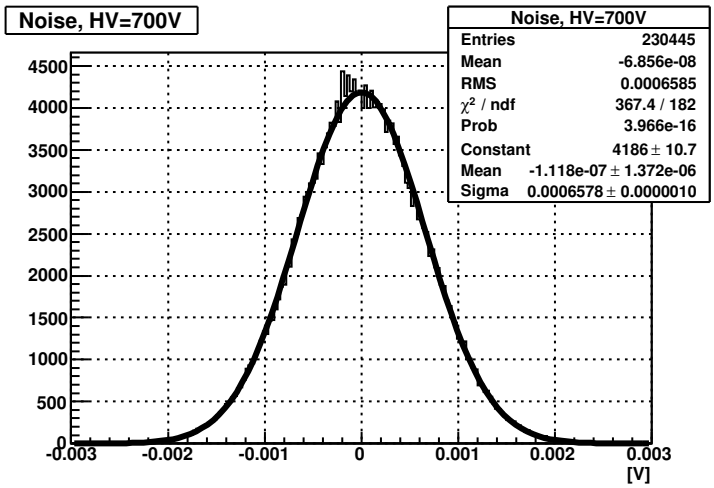
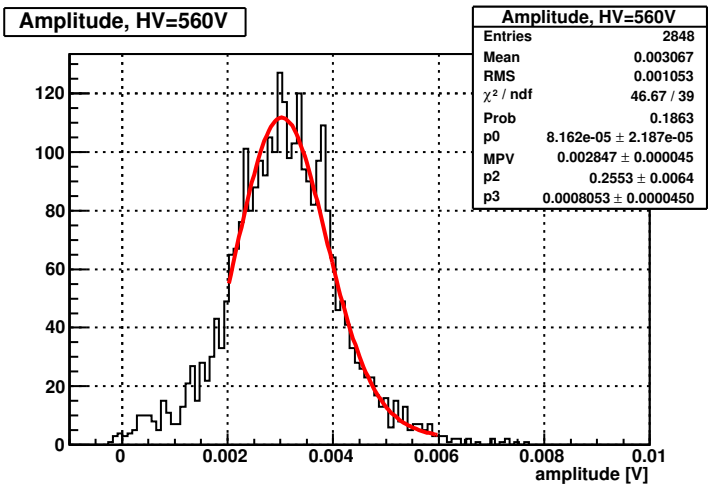
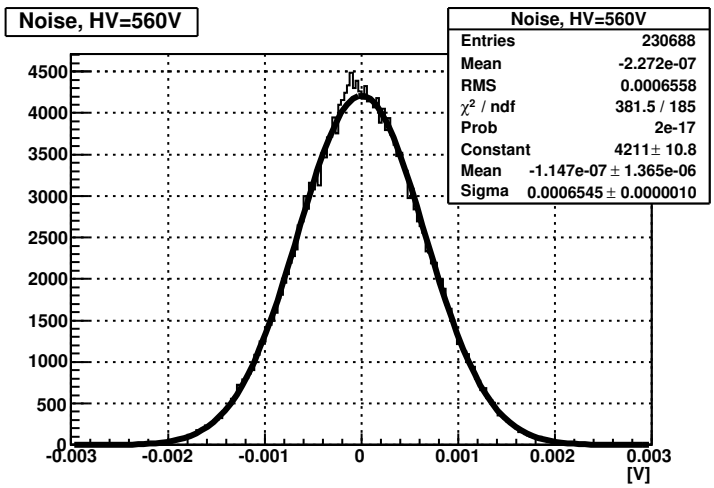
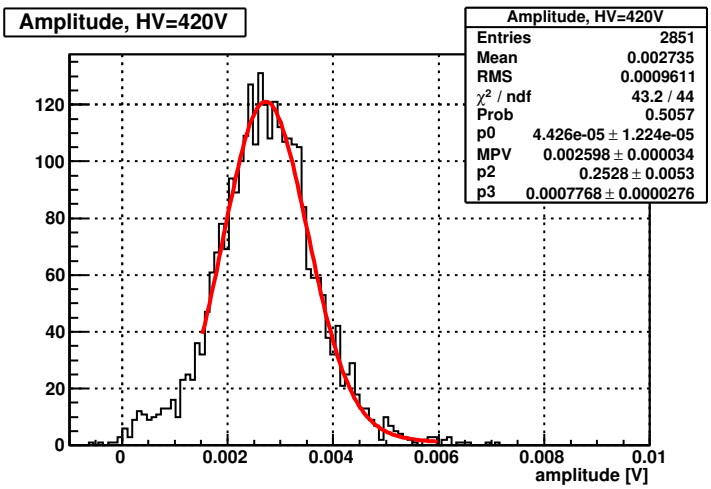
Fotec Box 403 (ASC-D-0230-7 and ASC-D-0230-5), Measurement 2

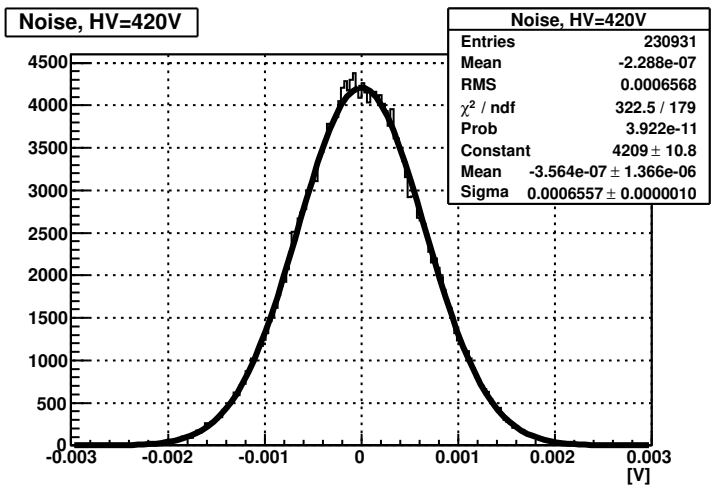


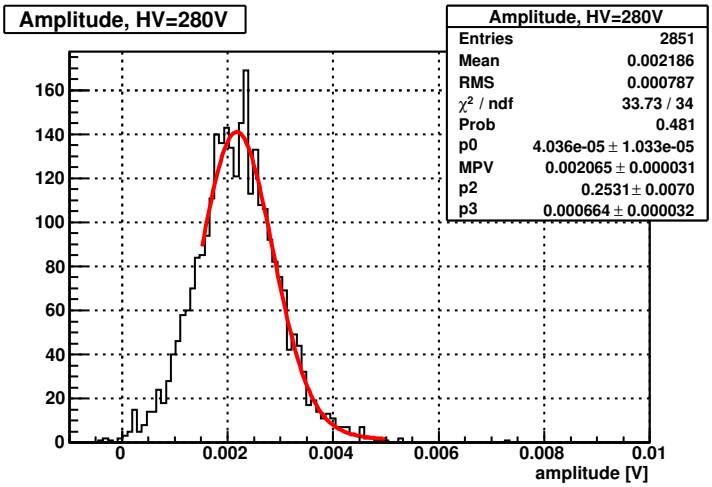


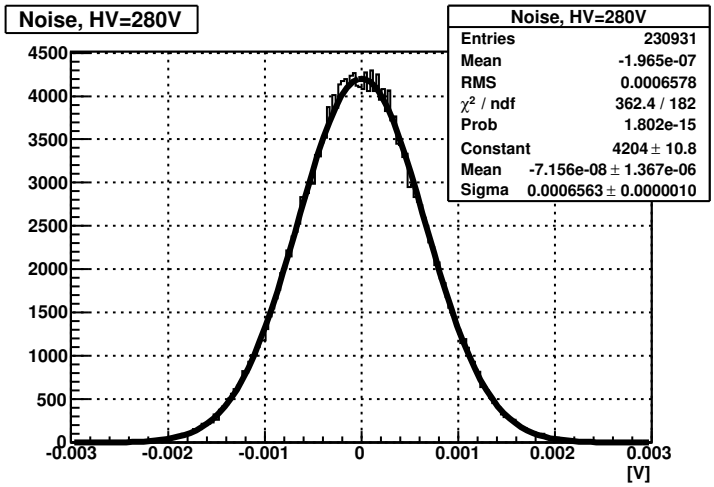


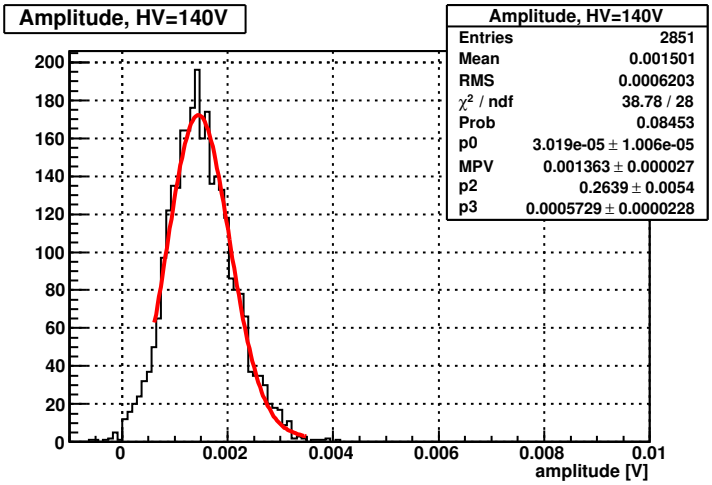


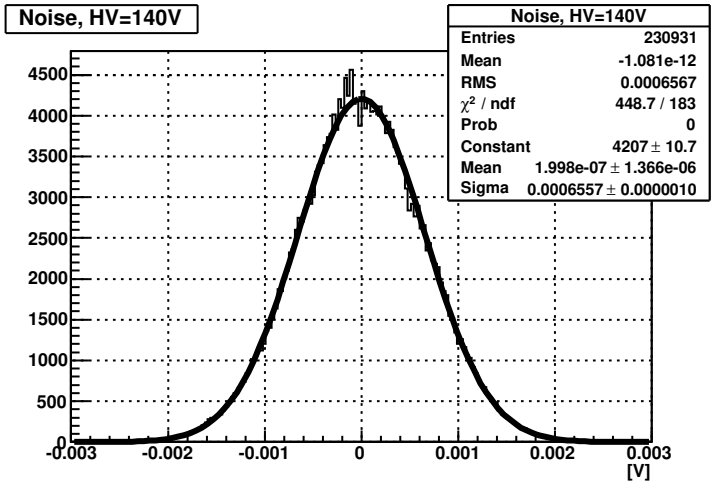


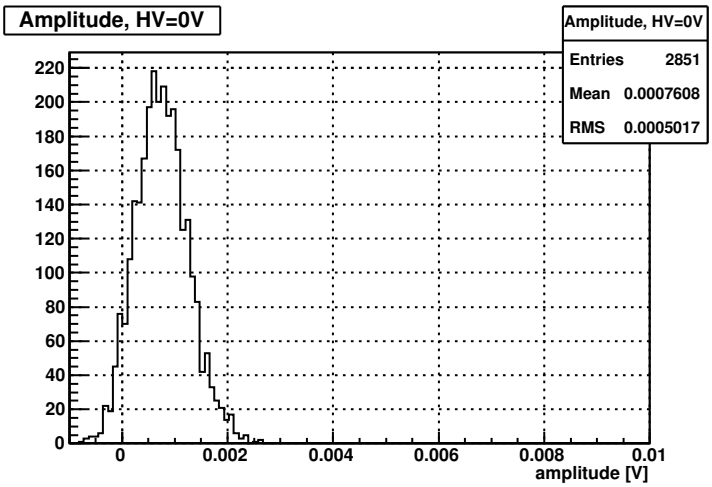


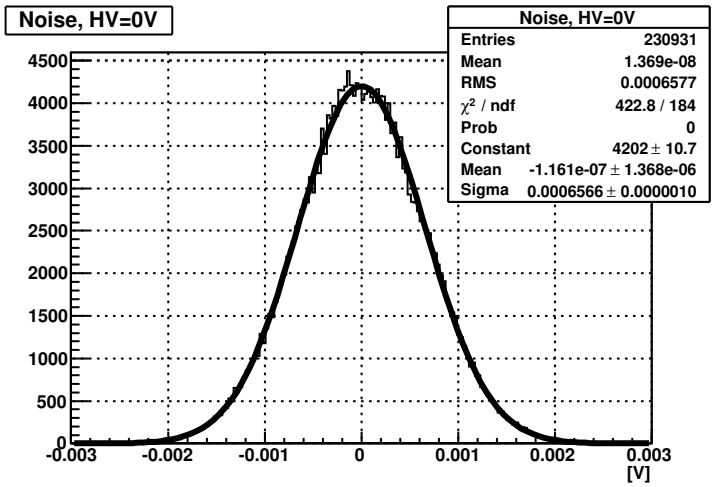

Amplitude, HV=280V
Amplitude, HV=280V
Entries 2851
Mean 0.002186
RMS 0.000787
χ² / ndf 33.73 / 34
Prob 0.481
p0 4.036e-05 ± 1.033e-05
MPV 0.002065 ± 0.000031
p2 0.2531 ± 0.0070
p3 0.000664 ± 0.000032
amplitude [V]


Noise, HV=280V
Noise, HV=280V
Entries 230931
Mean -1.965e-07
RMS 0.0006578
χ² / ndf 362.4 / 182
Prob 1.802e-15
Constant 4204 ± 10.8
Mean -7.156e-08 ± 1.367e-06
Sigma 0.0006563 ± 0.0000010
[V]

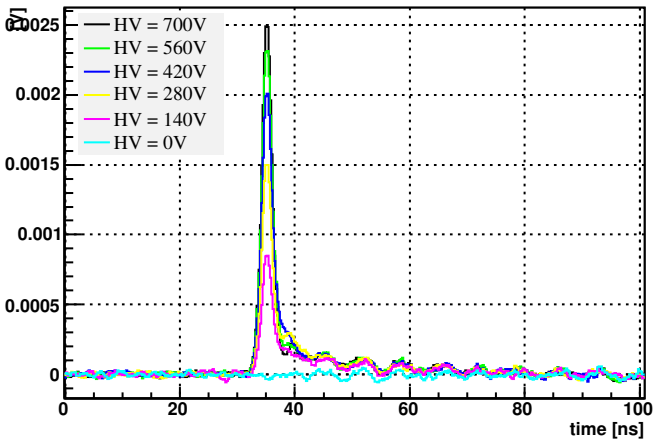

Amplitude, HV=140V
Amplitude, HV=140V
Entries 2851
Mean 0.001501
RMS 0.0006203
χ² / ndf 38.78 / 28
Prob 0.08453
p0 3.019e-05 ± 1.006e-05
MPV 0.001363 ± 0.000027
p2 0.2639 ± 0.0054
p3 0.0005729 ± 0.0000228
amplitude [V]

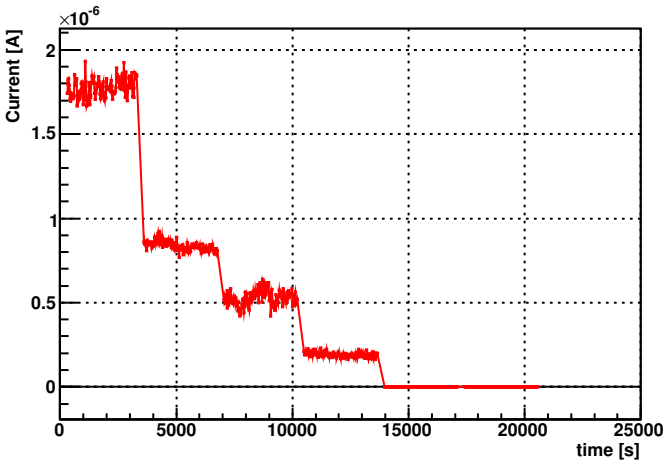

Noise, HV=140V
Noise, HV=140V
Entries 230931
Mean -1.081e-12
RMS 0.0006567
χ² / ndf 448.7 / 183
Prob 0
Constant 4207 ± 10.7
Mean 1.998e-07 ± 1.366e-06
Sigma 0.0006557 ± 0.0000010
[V]


Amplitude, HV=0V
Amplitude, HV=0V
Entries 2851
Mean 0.0007608
RMS 0.0005017
amplitude [V]

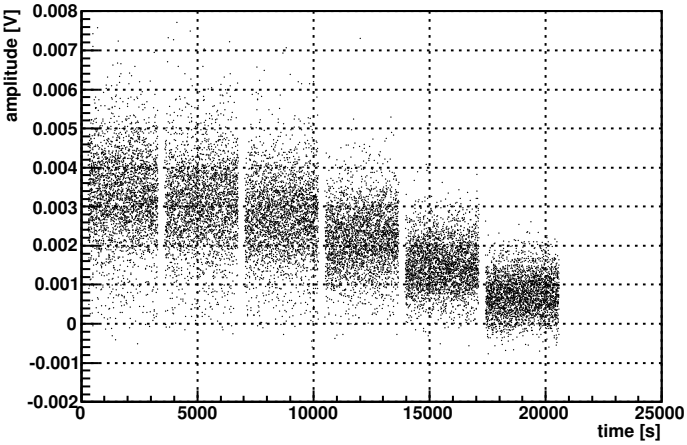

Noise, HV=0V
Noise, HV=0V
Entries 230931
Mean 1.369e-08
RMS 0.0006577
χ² / ndf 422.8 / 184
Prob 0
Constant 4202 ± 10.7
Mean -1.161e-07 ± 1.368e-06
Sigma 0.0006566 ± 0.0000010
[V]

Average event

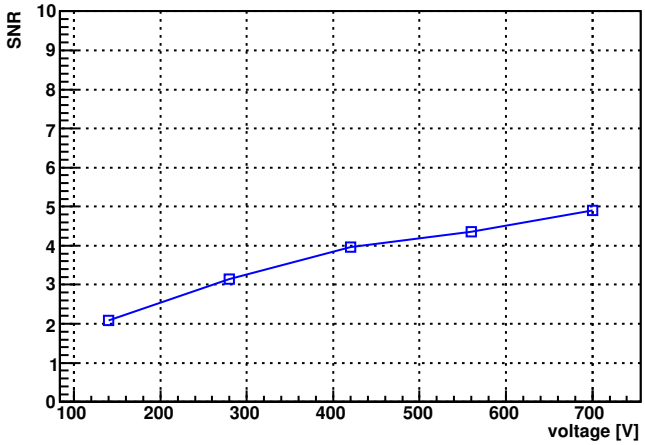




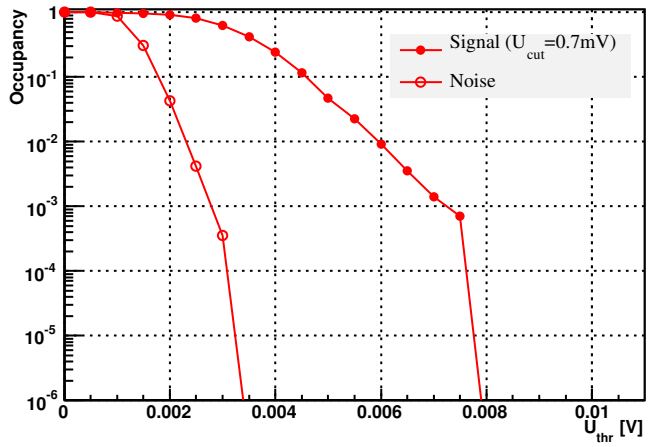
amplitudes



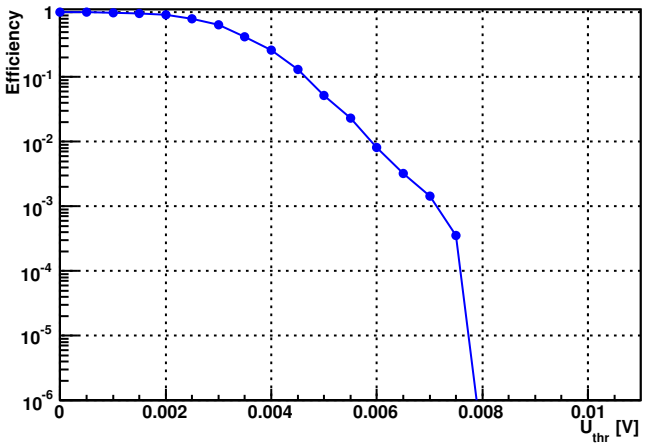
Signal to noise

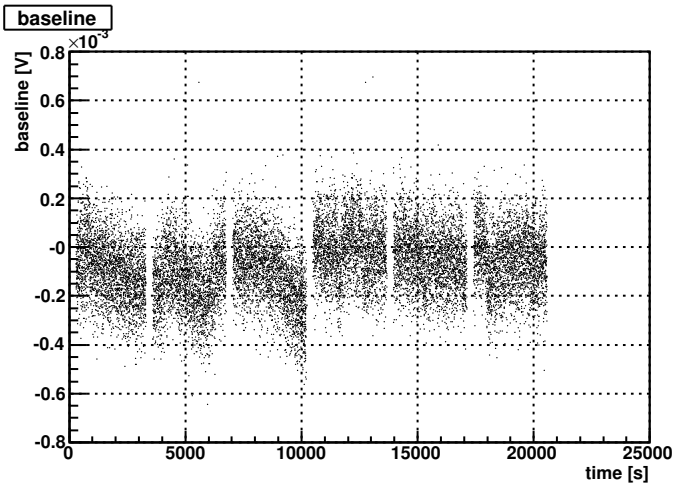


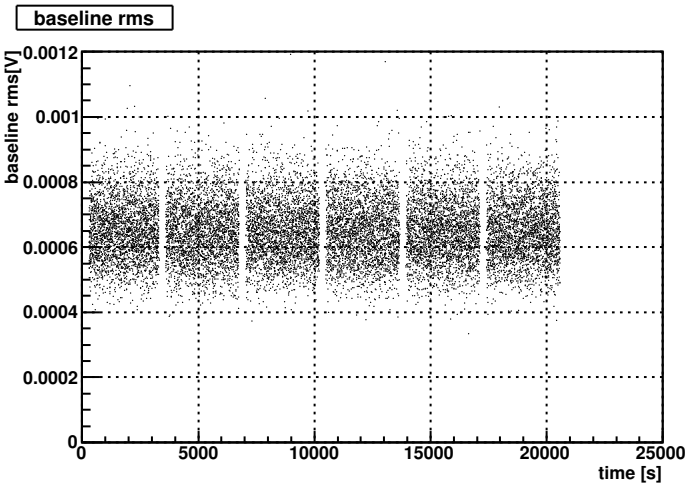
Occupancy vs Threshold, HV=700V

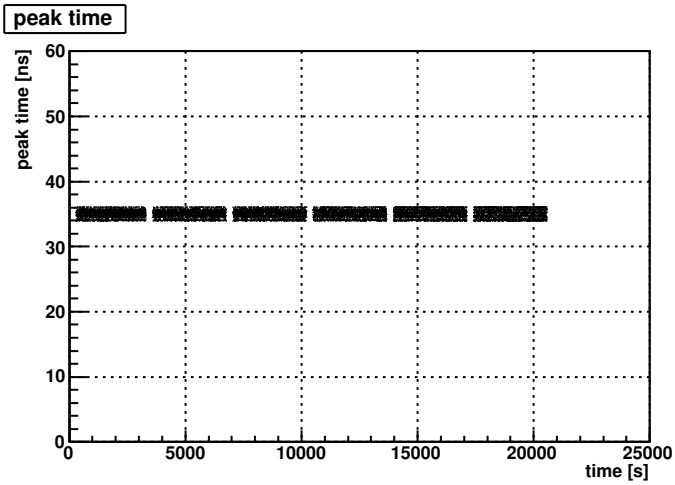


Efficiency vs Threshold, HV=700V




baseline
×10⁻³
baseline [V]
0.8
0.6
0.4
0.2
-0
-0.2
-0.4
-0.6
-0.8
0
5000
10000
15000
20000
25000
time [s]


baseline rms
baseline rms[V]
0.0012
0.001
0.0008
0.0006
0.0004
0.0002
0
0
5000
10000
15000
20000
25000
time [s]


peak time
peak time [ns]
60
50
40
30
20
10
0
0
5000
10000
15000
20000
25000
time [s]

Data File = SP_050924101510_Fotec403-ASC-D-0230-7_ASC-D-0230-5-measurement2.xls
Upper Diamond = ASC-D-0230-7, $\sim 310 \mu m$ thick, Au metailzation
Lower Diamond = ASC-D-0230-5, $\sim 310 \mu m$ thick, Au metailzation