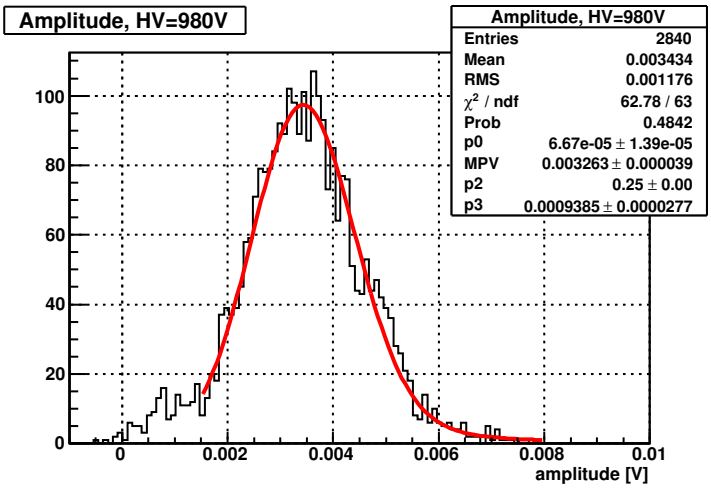
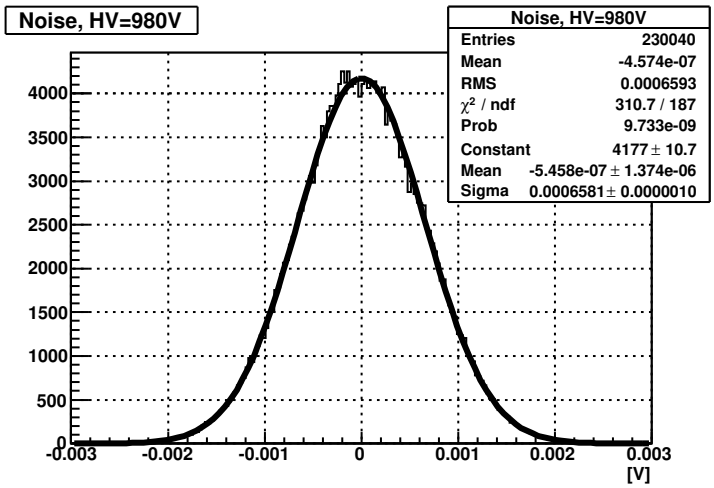
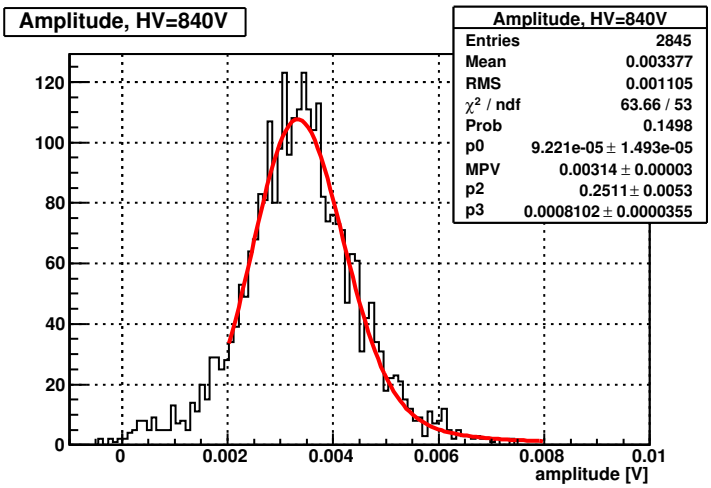
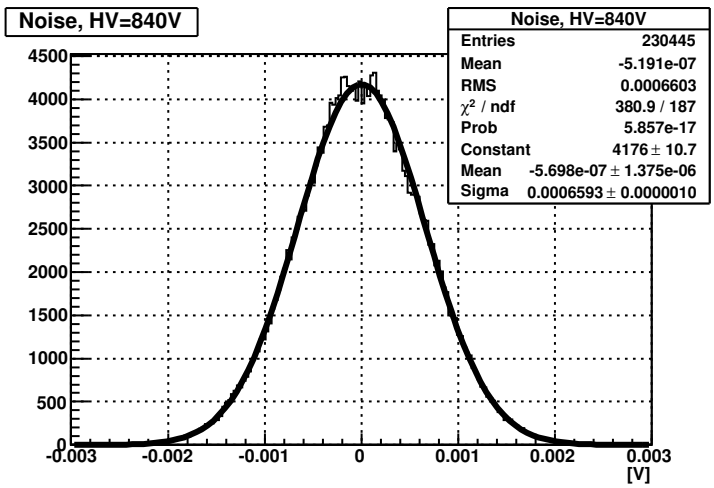
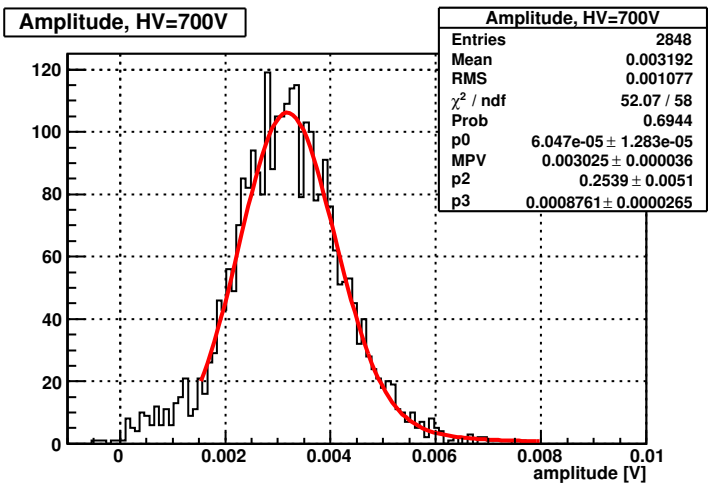
Fotec Box 403 (ASC-D-0230-7 and ASC-D-0230-5), Measurement 2

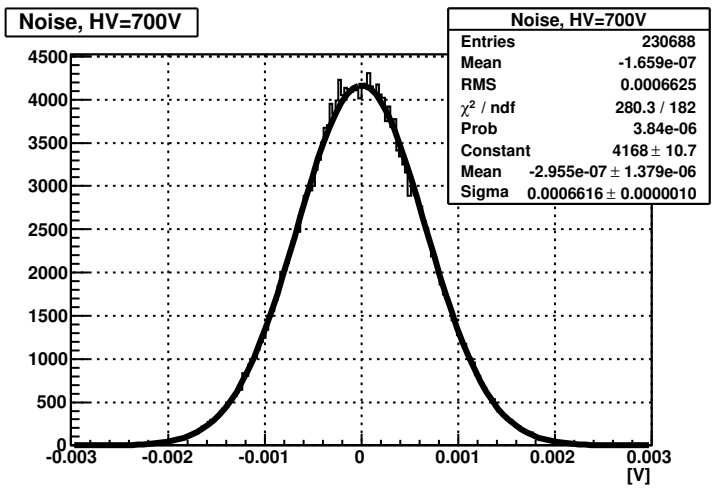


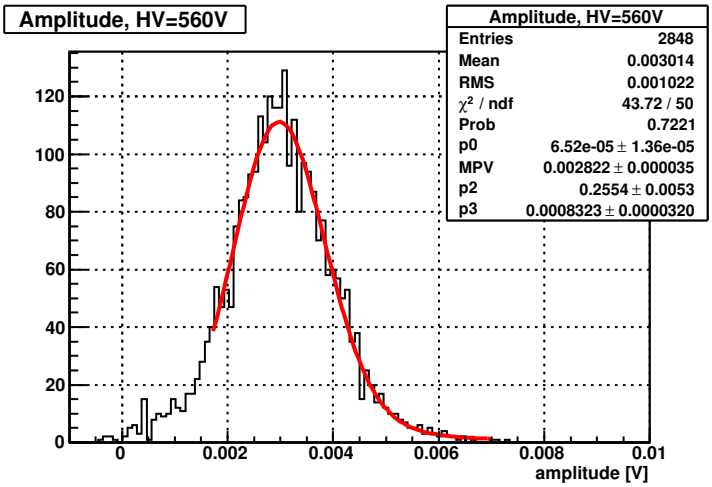


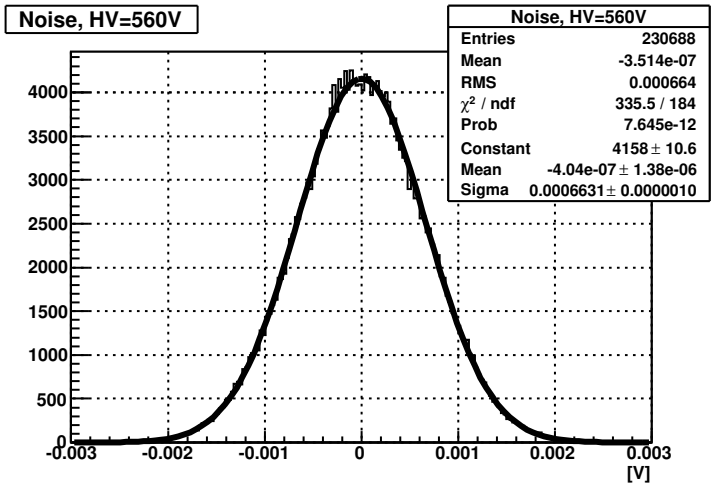


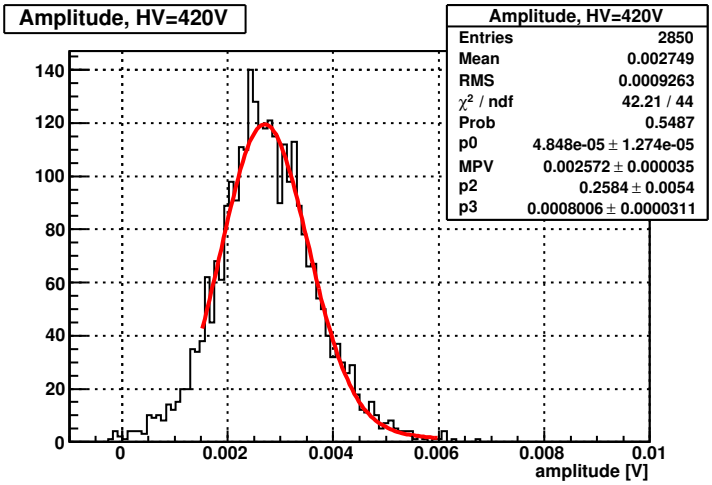


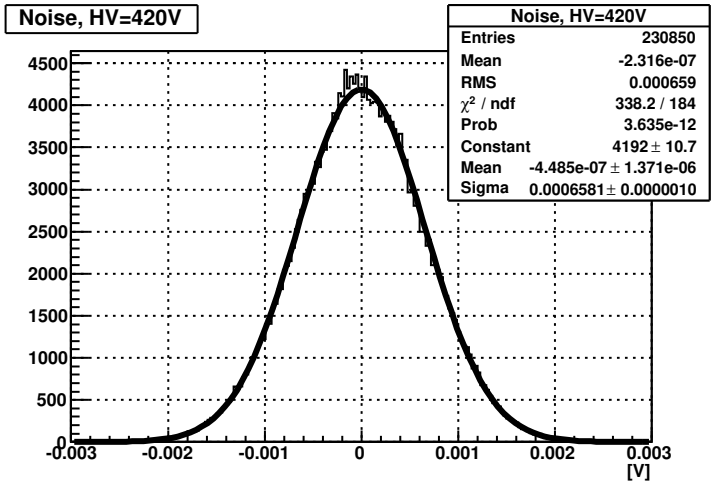


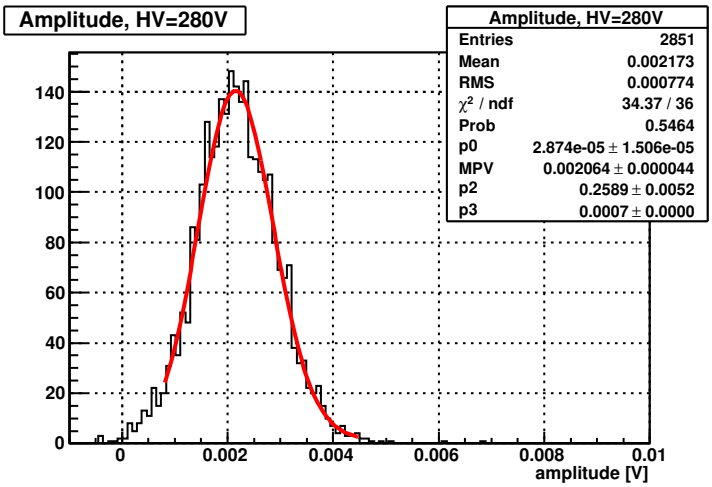


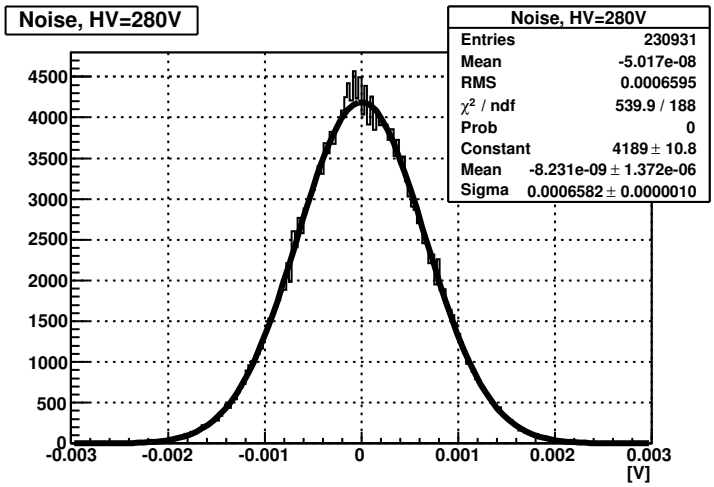

Amplitude, HV=560V
Amplitude, HV=560V
Entries 2848
Mean 0.003014
RMS 0.001022
χ² / ndf 43.72 / 50
Prob 0.7221
p0 6.52e-05 ± 1.36e-05
MPV 0.002822 ± 0.000035
p2 0.2554 ± 0.0053
p3 0.0008323 ± 0.0000320
amplitude [V]

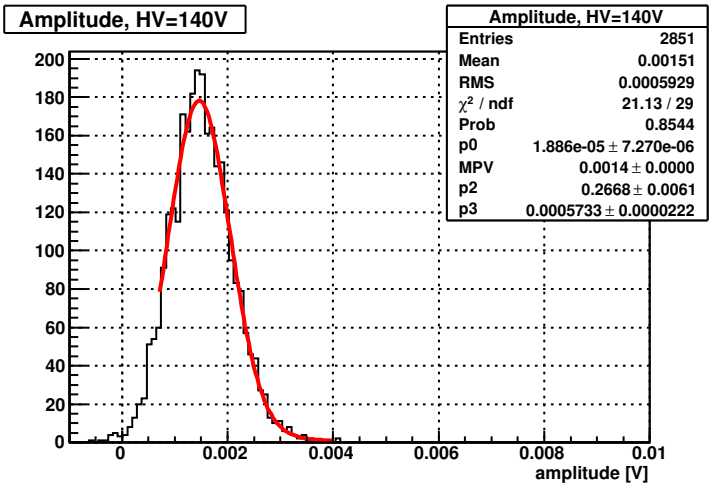

Noise, HV=560V
Noise, HV=560V
Entries 230688
Mean -3.514e-07
RMS 0.000664
χ² / ndf 335.5 / 184
Prob 7.645e-12
Constant 4158 ± 10.6
Mean -4.04e-07 ± 1.38e-06
Sigma 0.0006631 ± 0.0000010
[V]

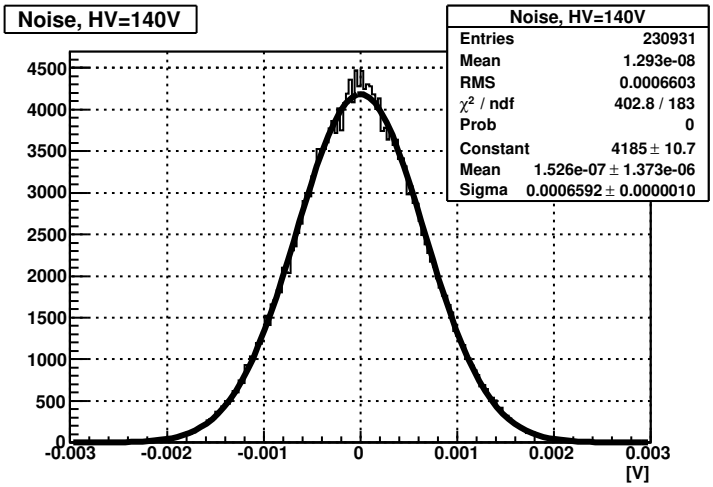

Amplitude, HV=420V
Amplitude, HV=420V
Entries 2850
Mean 0.002749
RMS 0.0009263
χ² / ndf 42.21 / 44
Prob 0.5487
p0 4.848e-05 ± 1.274e-05
MPV 0.002572 ± 0.000035
p2 0.2584 ± 0.0054
p3 0.0008006 ± 0.0000311
amplitude [V]

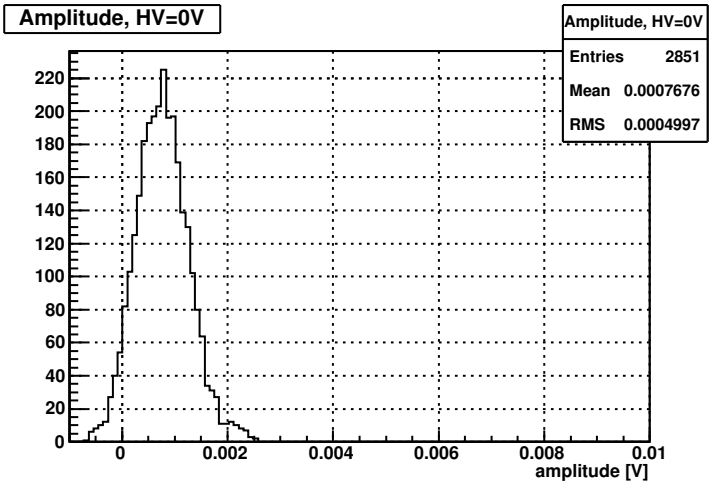

Noise, HV=420V
Noise, HV=420V
Entries 230850
Mean -2.316e-07
RMS 0.000659
χ² / ndf 338.2 / 184
Prob 3.635e-12
Constant 4192 ± 10.7
Mean -4.485e-07 ± 1.371e-06
Sigma 0.0006581 ± 0.0000010
[V]

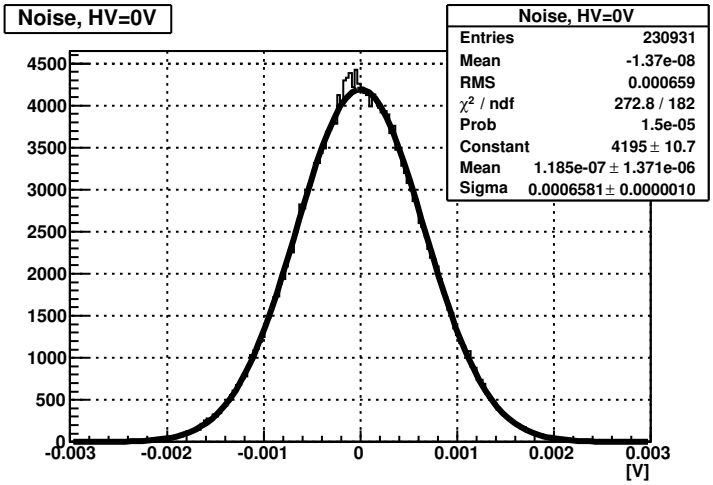

Amplitude, HV=280V
Amplitude, HV=280V
Entries 2851
Mean 0.002173
RMS 0.000774
χ² / ndf 34.37 / 36
Prob 0.5464
p0 2.874e-05 ± 1.506e-05
MPV 0.002064 ± 0.000044
p2 0.2589 ± 0.0052
p3 0.0007 ± 0.0000
amplitude [V]


Noise, HV=280V
Noise, HV=280V
Entries 230931
Mean -5.017e-08
RMS 0.0006595
χ² / ndf 539.9 / 188
Prob 0
Constant 4189 ± 10.8
Mean -8.231e-09 ± 1.372e-06
Sigma 0.0006582 ± 0.0000010
[V]

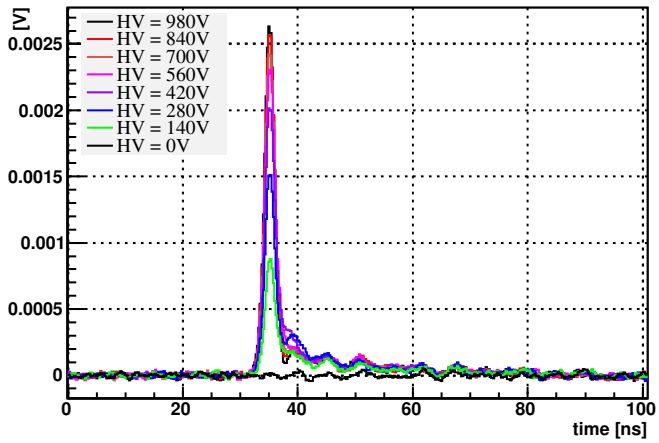

Amplitude, HV=140V
Amplitude, HV=140V
Entries 2851
Mean 0.00151
RMS 0.0005929
χ² / ndf 21.13 / 29
Prob 0.8544
p0 1.886e-05 ± 7.270e-06
MPV 0.0014 ± 0.0000
p2 0.2668 ± 0.0061
p3 0.0005733 ± 0.0000222
amplitude [V]

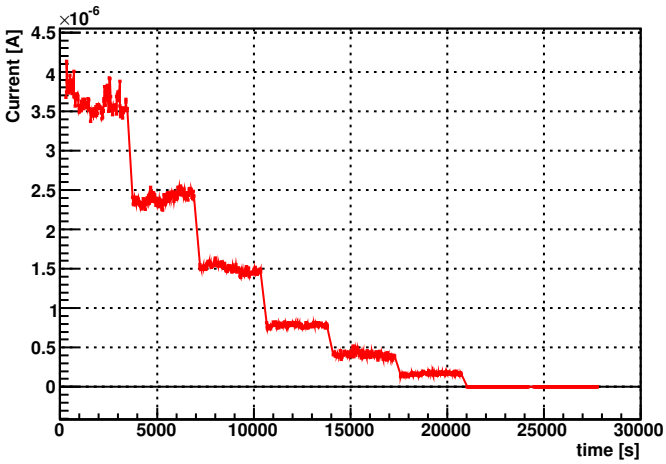

Noise, HV=140V
Noise, HV=140V
Entries 230931
Mean 1.293e-08
RMS 0.0006603
χ² / ndf 402.8 / 183
Prob 0
Constant 4185 ± 10.7
Mean 1.526e-07 ± 1.373e-06
Sigma 0.0006592 ± 0.0000010
[V]


Amplitude, HV=0V
Amplitude, HV=0V
Entries 2851
Mean 0.0007676
RMS 0.0004997
amplitude [V]

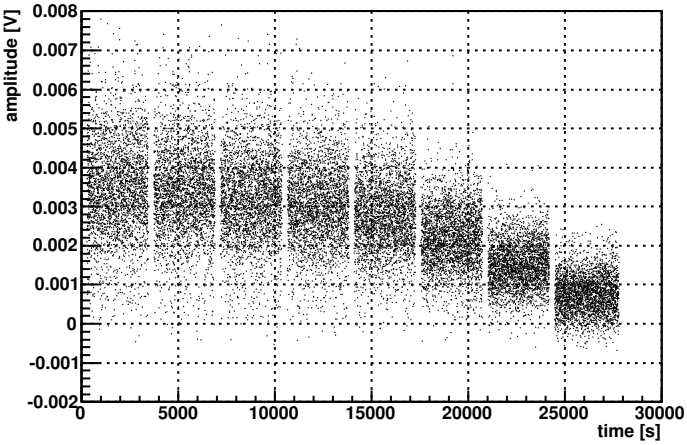

Noise, HV=0V
Noise, HV=0V
Entries 230931
Mean -1.37e-08
RMS 0.000659
χ² / ndf 272.8 / 182
Prob 1.5e-05
Constant 4195 ± 10.7
Mean 1.185e-07 ± 1.371e-06
Sigma 0.0006581 ± 0.0000010
[V]

Average event

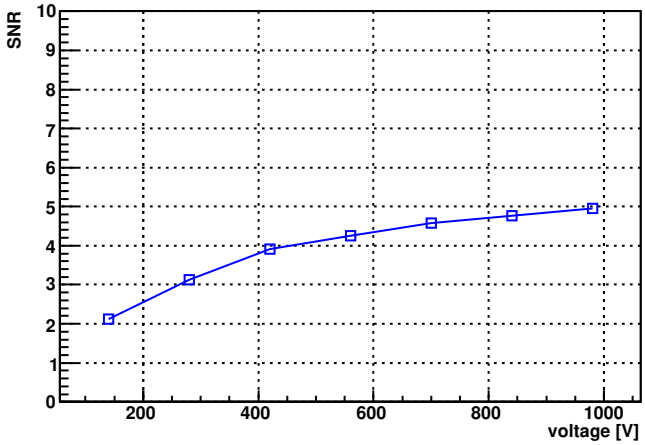




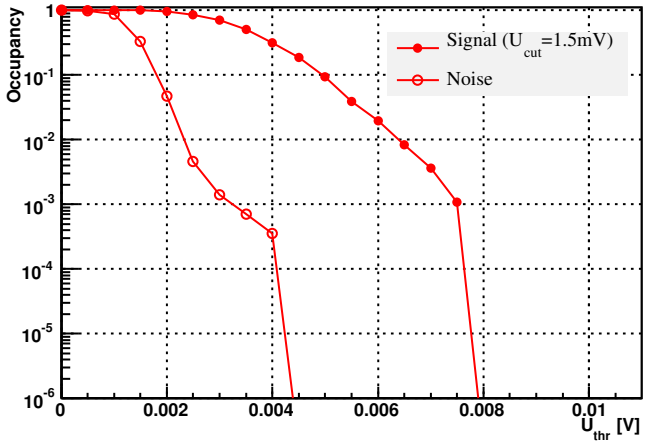
amplitudes



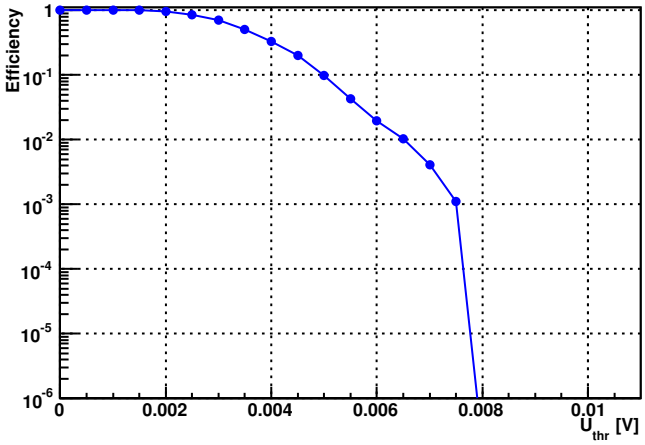
Signal to noise



Occupancy vs Threshold, HV=980V



Efficiency vs Threshold, HV=980V



Data File = SP_050927085001_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