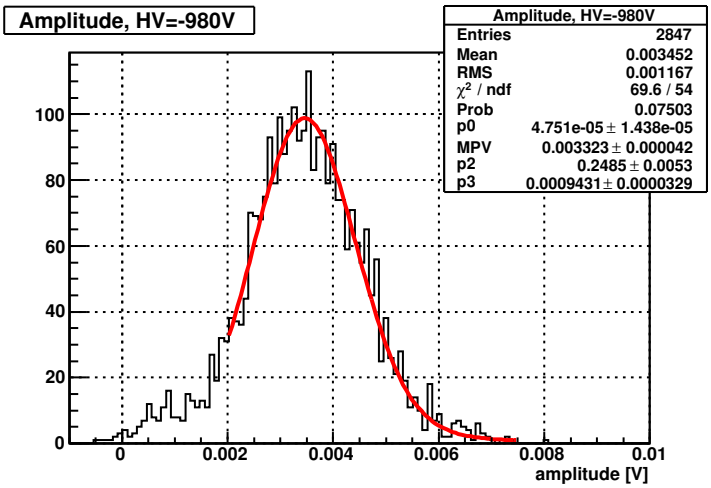
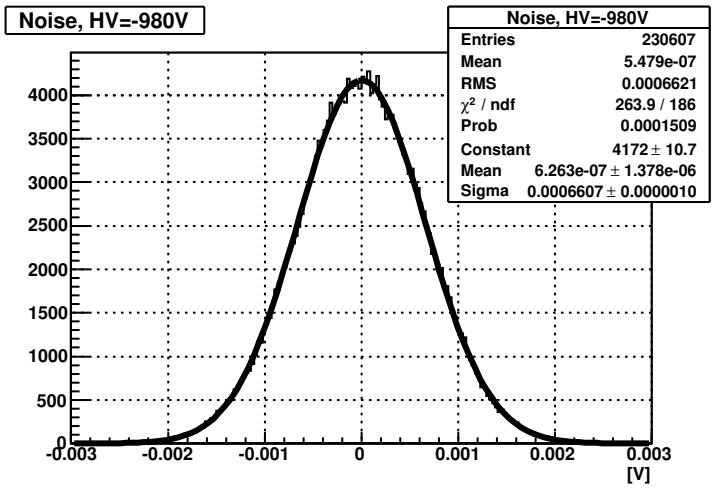
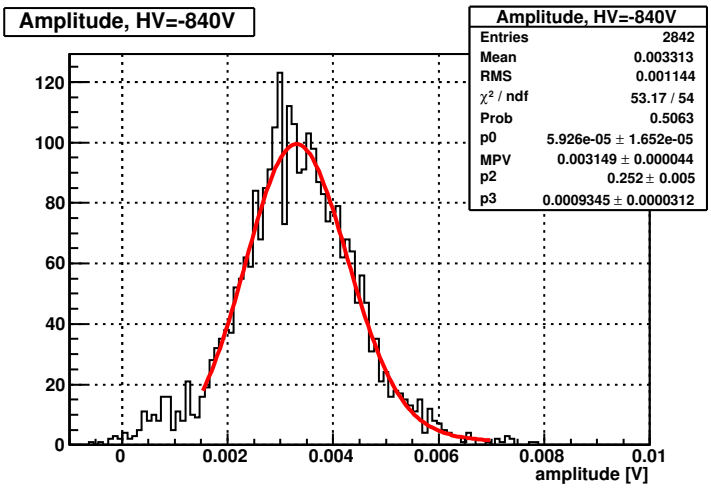
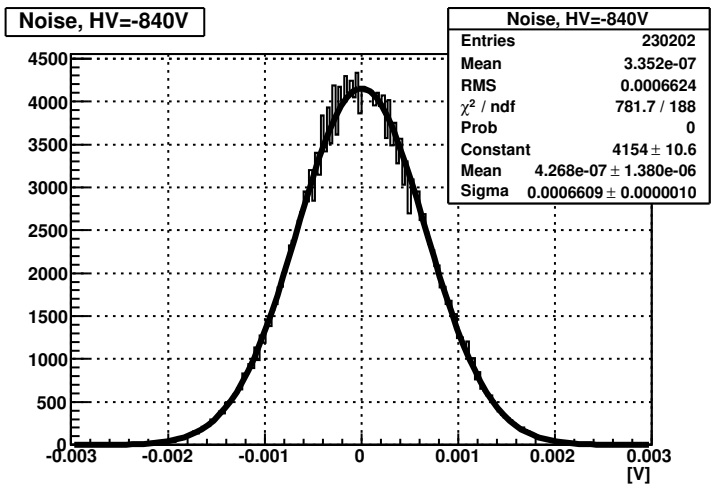
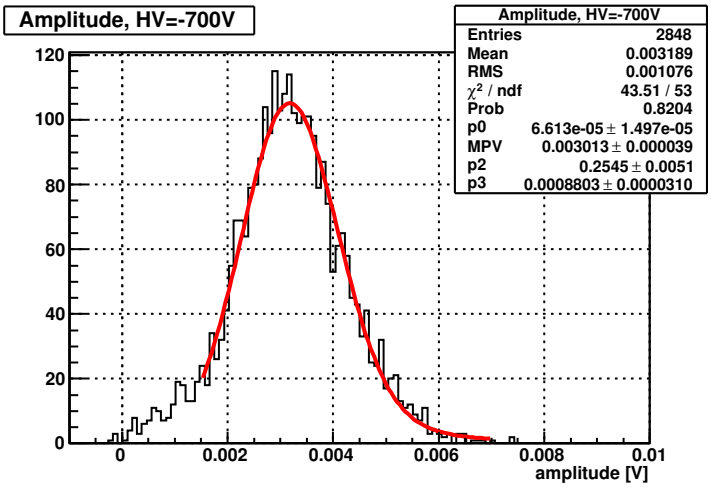
Fotec Box 403 (ASC-D-0230-7 and ASC-D-0230-5), Measurement 4

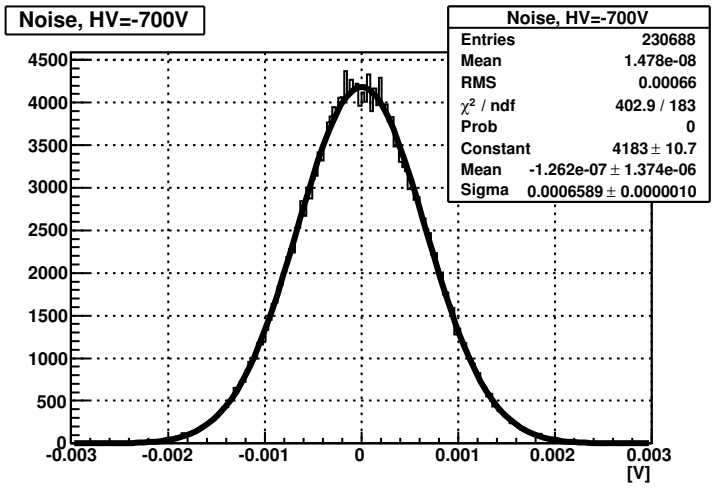


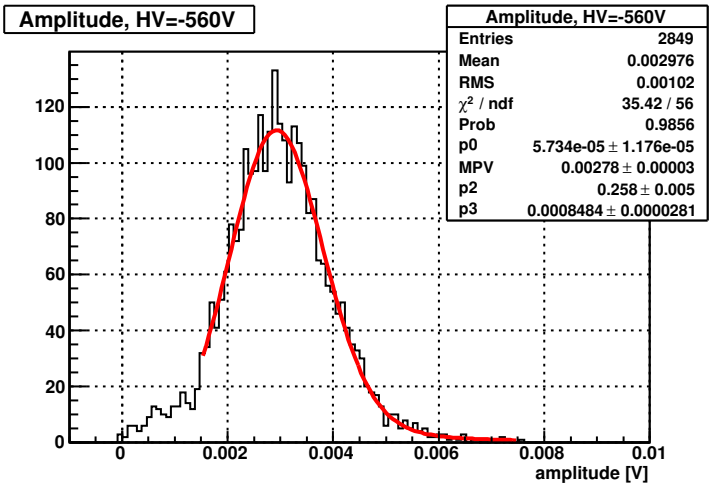



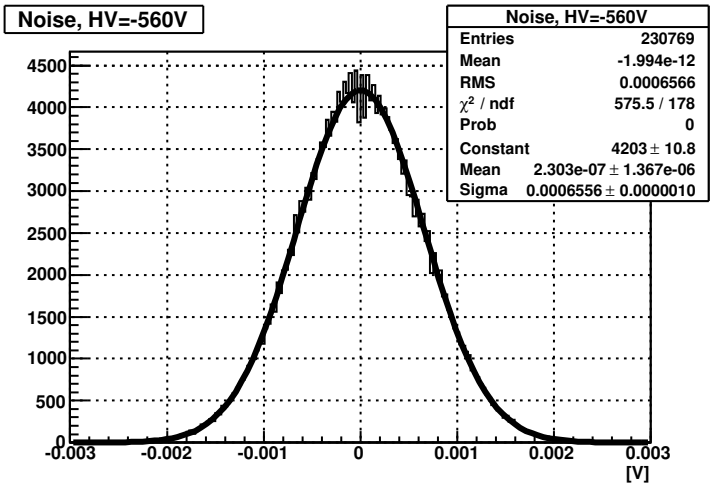



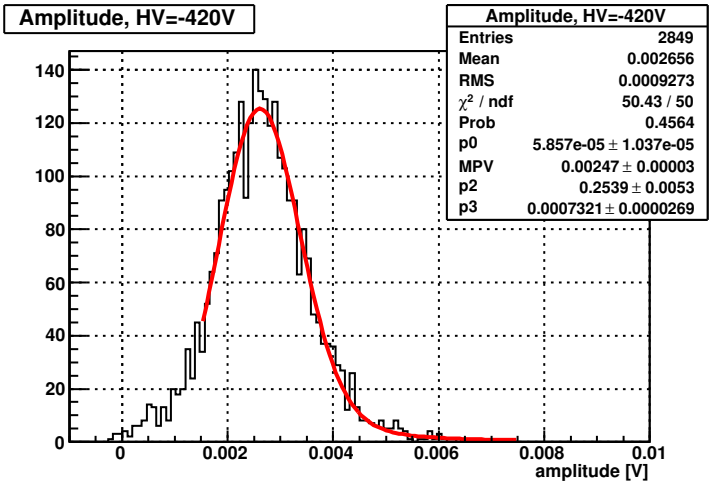



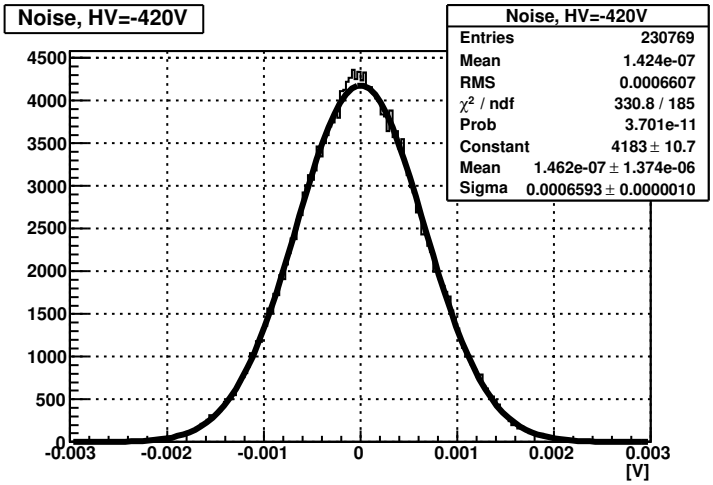



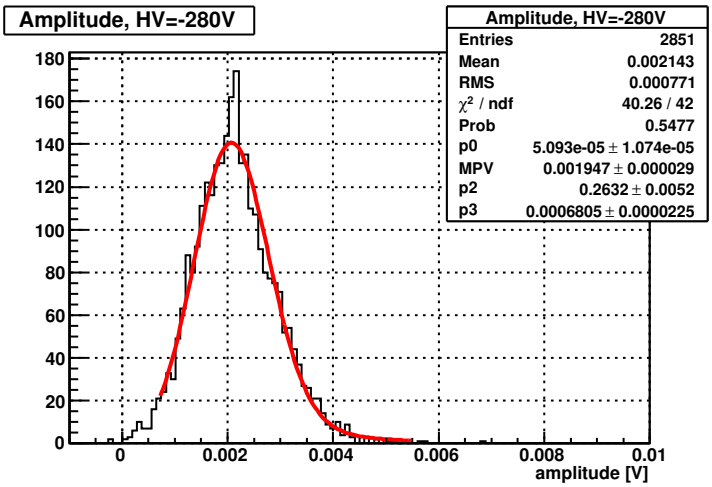



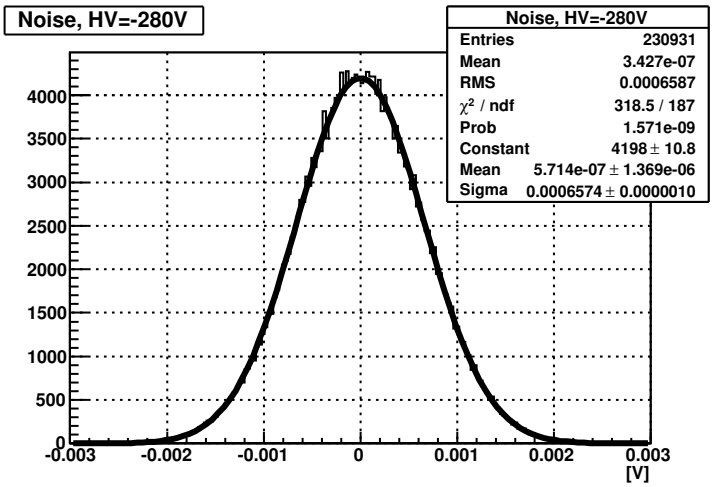

Amplitude, HV=-560V
Amplitude, HV=-560V
Entries 2849
Mean 0.002976
RMS 0.00102
χ² / ndf 35.42 / 56
Prob 0.9856
p0 5.734e-05 ± 1.176e-05
MPV 0.00278 ± 0.00003
p2 0.258 ± 0.005
p3 0.0008484 ± 0.0000281
amplitude [V]

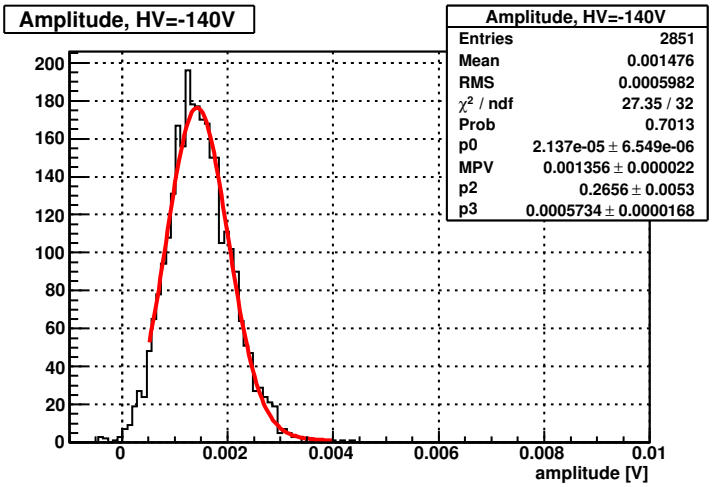

Noise, HV=-560V
Noise, HV=-560V
Entries 230769
Mean -1.994e-12
RMS 0.0006566
χ² / ndf 575.5 / 178
Prob 0
Constant 4203 ± 10.8
Mean 2.303e-07 ± 1.367e-06
Sigma 0.0006556 ± 0.0000010
[V]

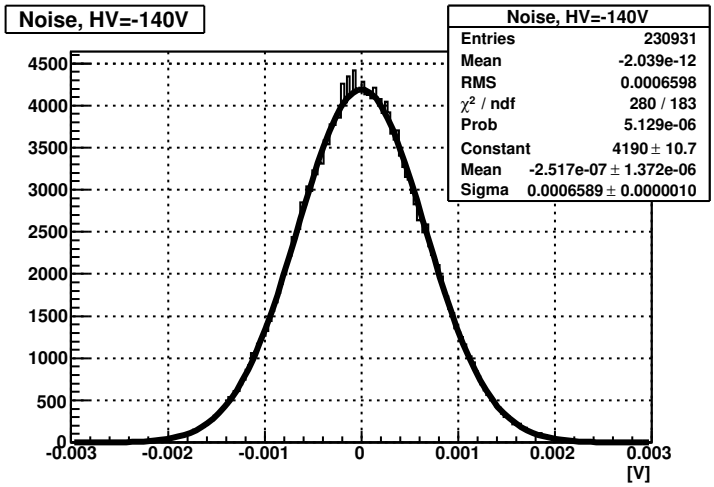

Amplitude, HV=-420V
Amplitude, HV=-420V
Entries 2849
Mean 0.002656
RMS 0.0009273
χ² / ndf 50.43 / 50
Prob 0.4564
p0 5.857e-05 ± 1.037e-05
MPV 0.00247 ± 0.00003
p2 0.2539 ± 0.0053
p3 0.0007321 ± 0.0000269
amplitude [V]

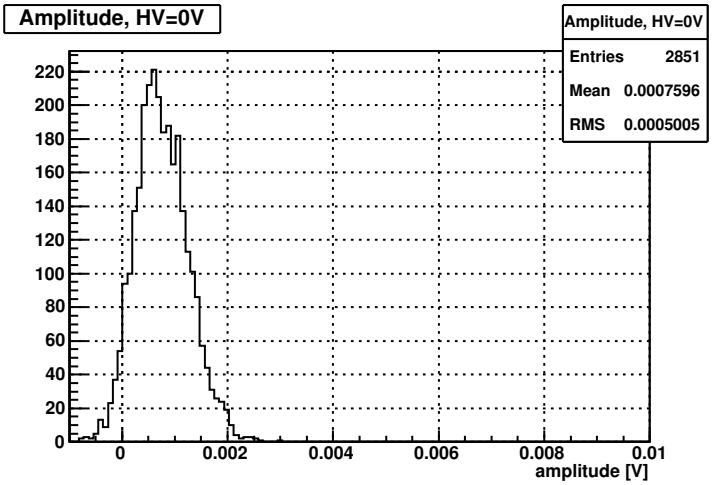

Noise, HV=-420V
Noise, HV=-420V
Entries 230769
Mean 1.424e-07
RMS 0.0006607
χ² / ndf 330.8 / 185
Prob 3.701e-11
Constant 4183 ± 10.7
Mean 1.462e-07 ± 1.374e-06
Sigma 0.0006593 ± 0.0000010
[V]

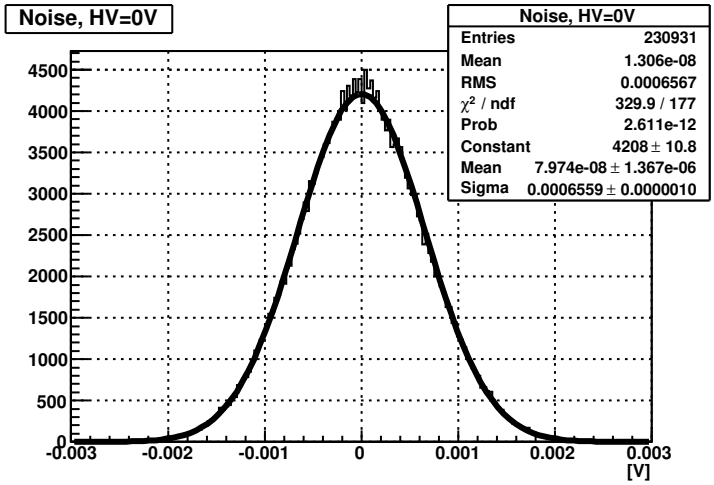

Amplitude, HV=-280V
Amplitude, HV=-280V
Entries 2851
Mean 0.002143
RMS 0.000771
χ² / ndf 40.26 / 42
Prob 0.5477
p0 5.093e-05 ± 1.074e-05
MPV 0.001947 ± 0.000029
p2 0.2632 ± 0.0052
p3 0.0006805 ± 0.0000225
amplitude [V]


Noise, HV=-280V
Noise, HV=-280V
Entries 230931
Mean 3.427e-07
RMS 0.0006587
χ² / ndf 318.5 / 187
Prob 1.571e-09
Constant 4198 ± 10.8
Mean 5.714e-07 ± 1.369e-06
Sigma 0.0006574 ± 0.0000010
[V]

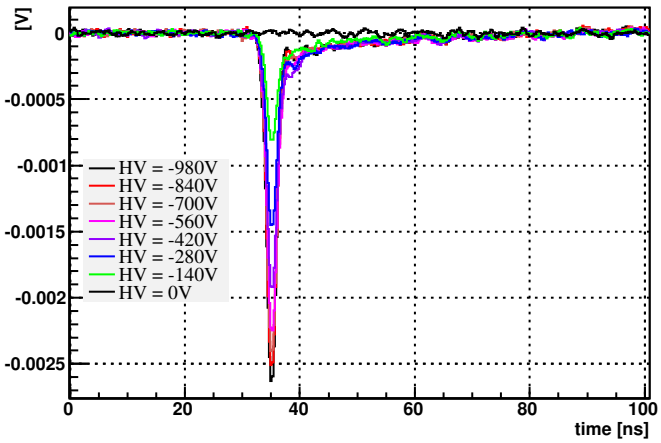

Amplitude, HV=-140V
Amplitude, HV=-140V
Entries 2851
Mean 0.001476
RMS 0.0005982
χ² / ndf 27.35 / 32
Prob 0.7013
p0 2.137e-05 ± 6.549e-06
MPV 0.001356 ± 0.000022
p2 0.2656 ± 0.0053
p3 0.0005734 ± 0.0000168
amplitude [V]

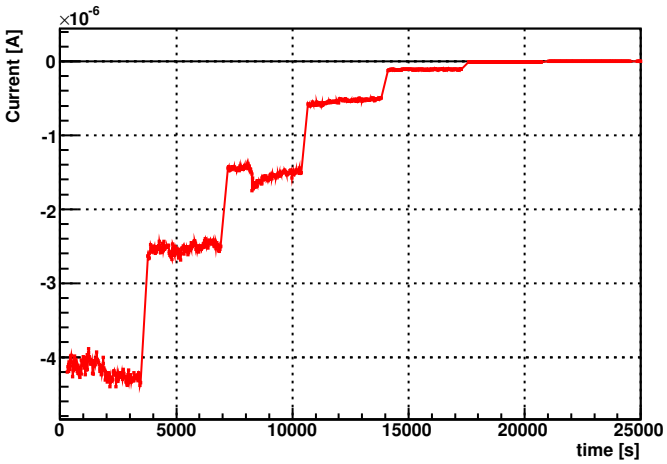

Noise, HV=-140V
Noise, HV=-140V
Entries 230931
Mean -2.039e-12
RMS 0.0006598
χ² / ndf 280 / 183
Prob 5.129e-06
Constant 4190 ± 10.7
Mean -2.517e-07 ± 1.372e-06
Sigma 0.0006589 ± 0.0000010
[V]


Amplitude, HV=0V
Amplitude, HV=0V
Entries 2851
Mean 0.0007596
RMS 0.0005005
amplitude [V]

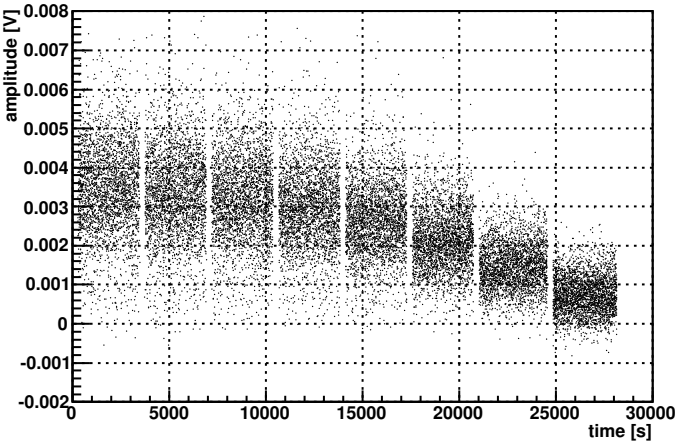

Noise, HV=0V
Noise, HV=0V
Entries 230931
Mean 1.306e-08
RMS 0.0006567
χ² / ndf 329.9 / 177
Prob 2.611e-12
Constant 4208 ± 10.8
Mean 7.974e-08 ± 1.367e-06
Sigma 0.0006559 ± 0.0000010
[V]

**Average event**

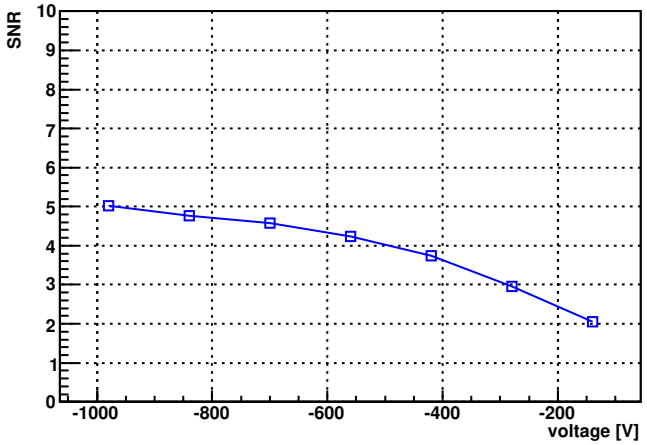


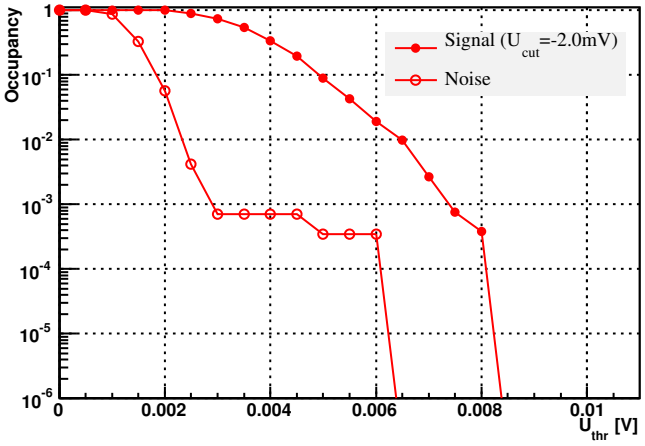

**amplitudes**



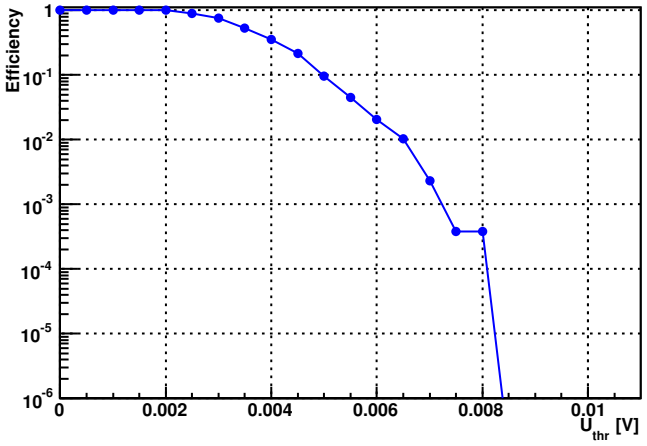

**Signal to noise**

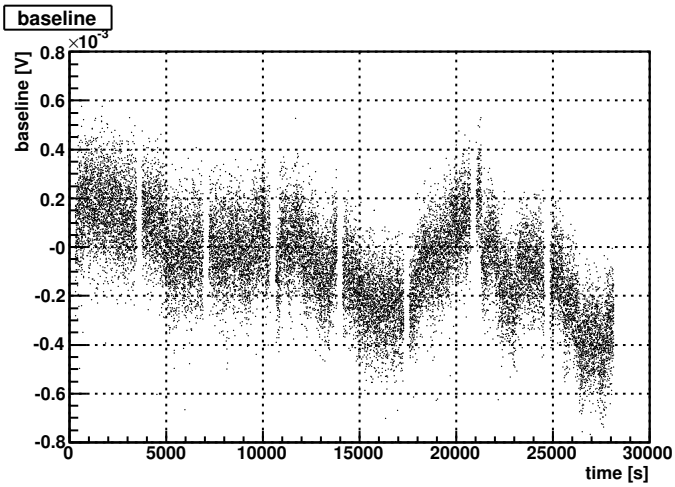


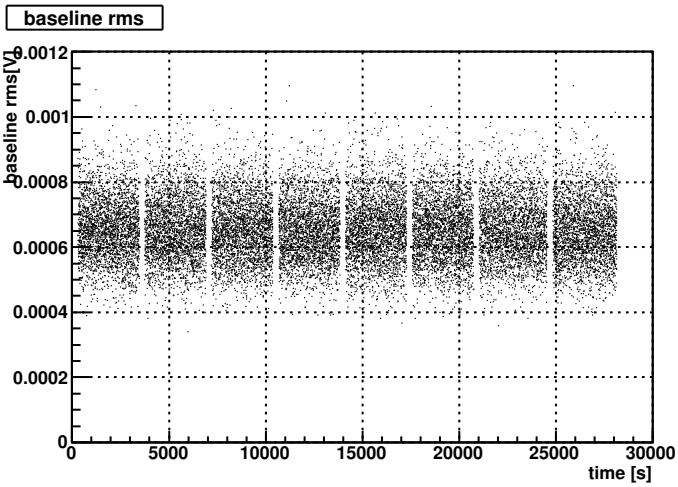

**Occupancy vs Threshold, HV=980V**

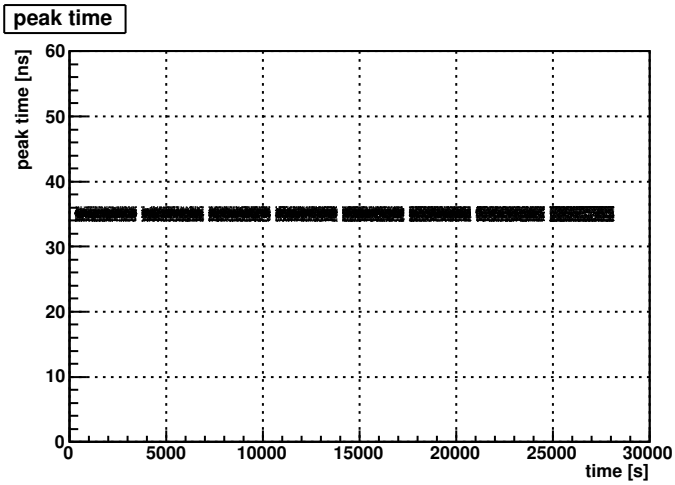



**Efficiency vs Threshold, HV=980V**




baseline
×10⁻³
baseline [V]
time [s]


baseline rms
baseline rms[V]
time [s]


peak time
peak time [ns]
time [s]

Data File = SP_050928082905_Fotec403-ASC-D-0230-7_ASC-D-0230-5-measurement4.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