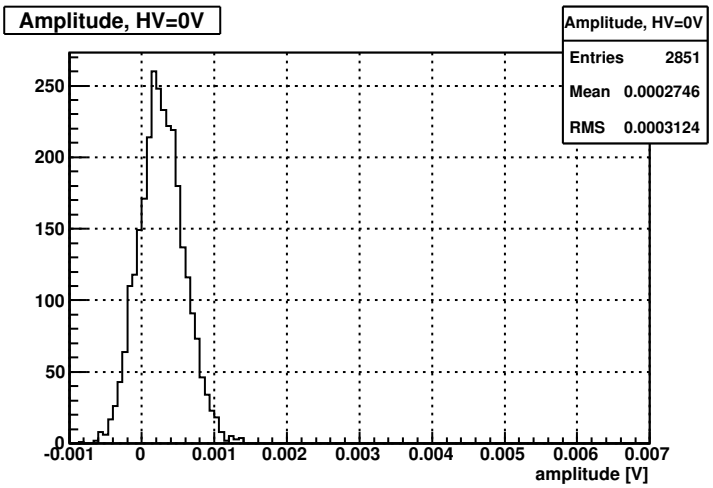
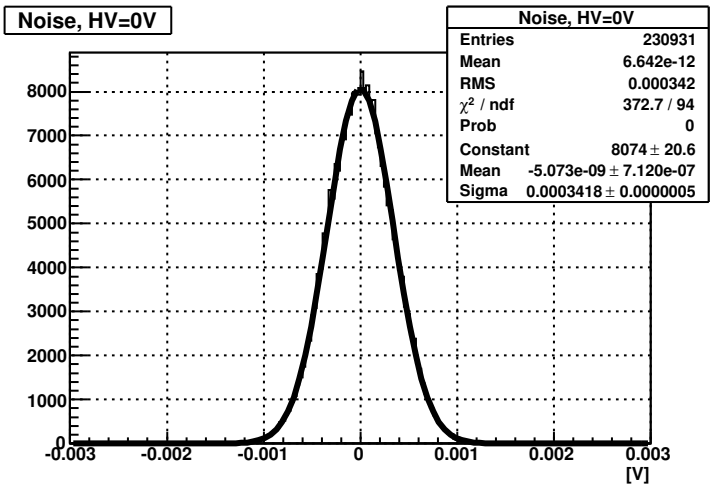
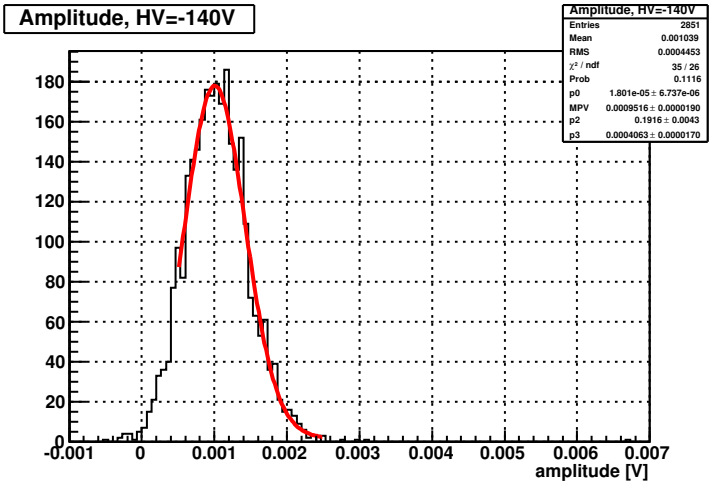
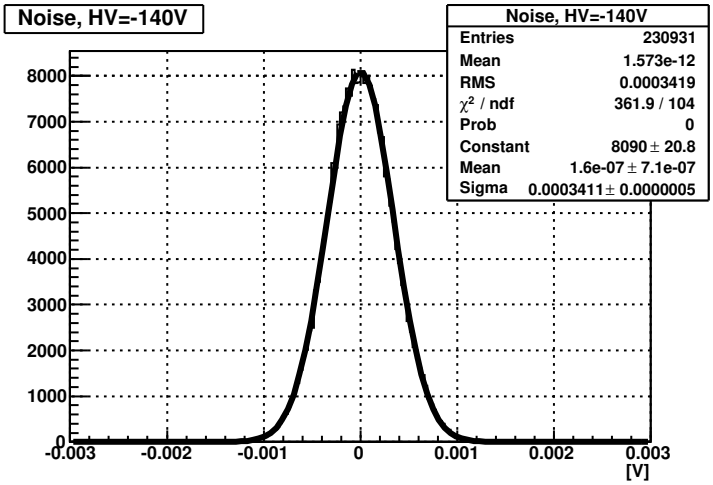
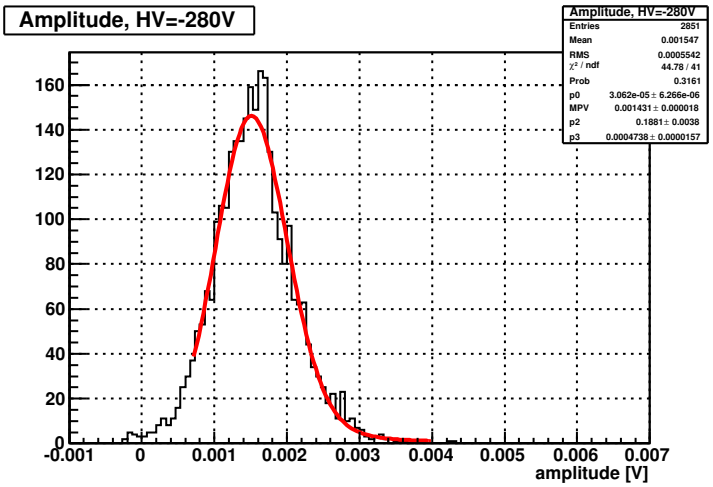
Fotec Box 403 (ASC-D-0230-7 and ASC-D-0230-5), Measurement 3 (200MHz BWL)

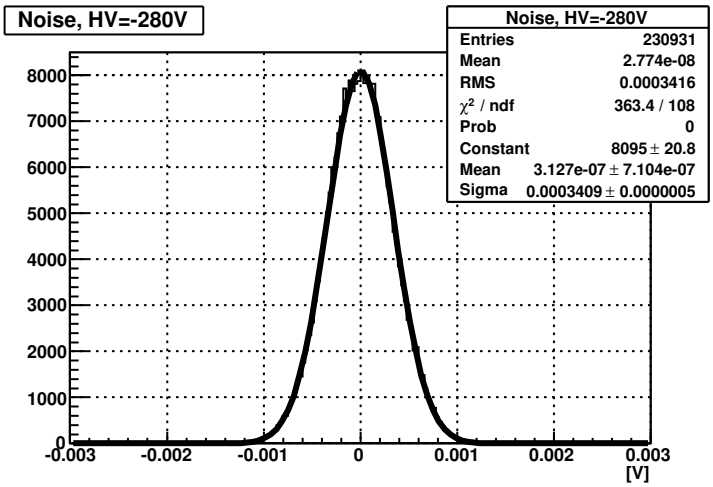


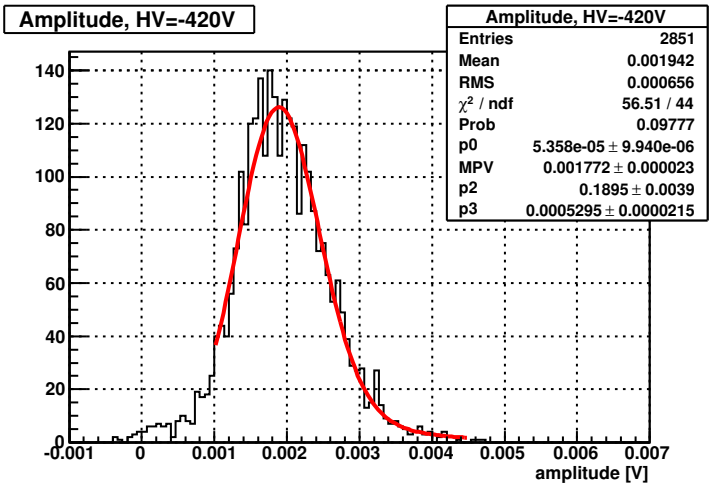


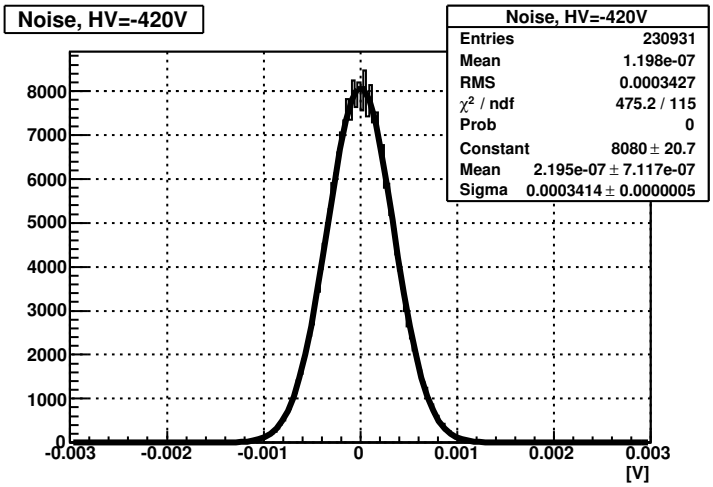


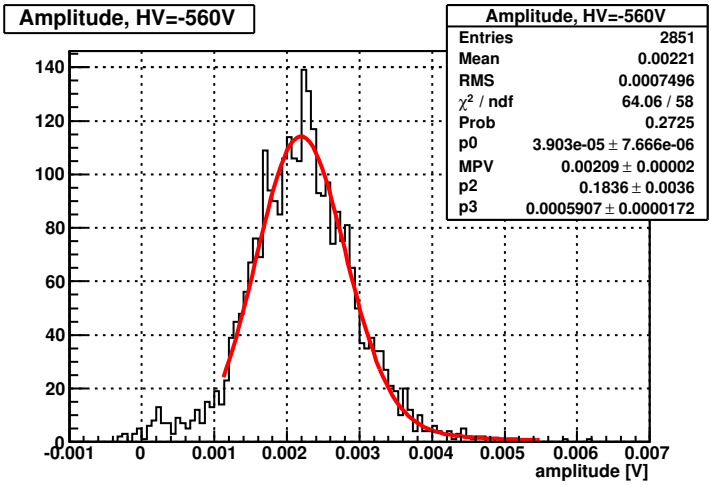


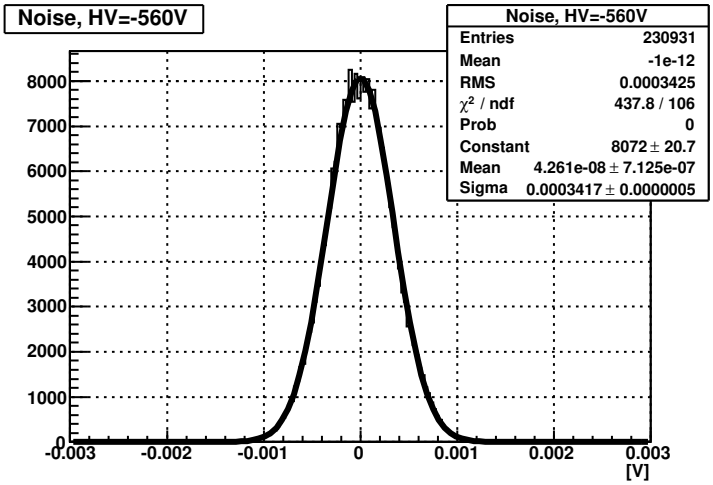


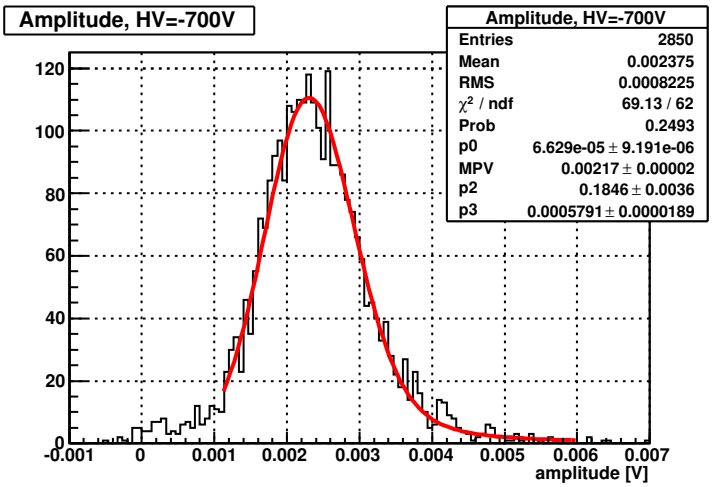


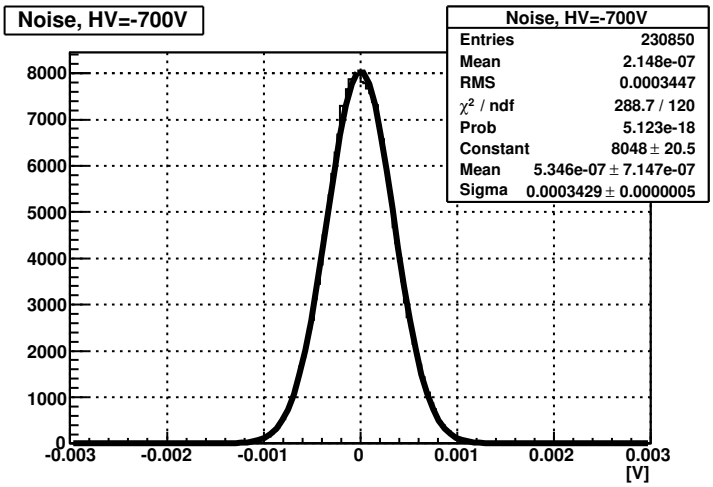

Amplitude, HV=-420V
Amplitude, HV=-420V
Entries 2851
Mean 0.001942
RMS 0.000656
χ² / ndf 56.51 / 44
Prob 0.09777
p0 5.358e-05 ± 9.940e-06
MPV 0.001772 ± 0.000023
p2 0.1895 ± 0.0039
p3 0.0005295 ± 0.0000215
amplitude [V]

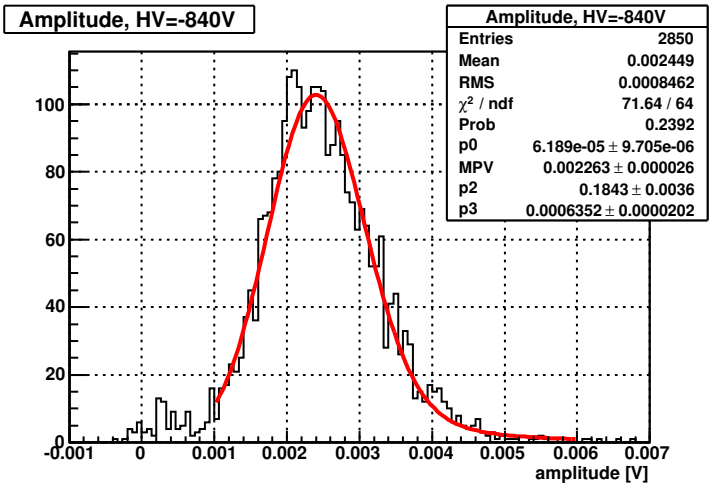

Noise, HV=-420V
Noise, HV=-420V
Entries 230931
Mean 1.198e-07
RMS 0.0003427
χ² / ndf 475.2 / 115
Prob 0
Constant 8080 ± 20.7
Mean 2.195e-07 ± 7.117e-07
Sigma 0.0003414 ± 0.0000005
[V]

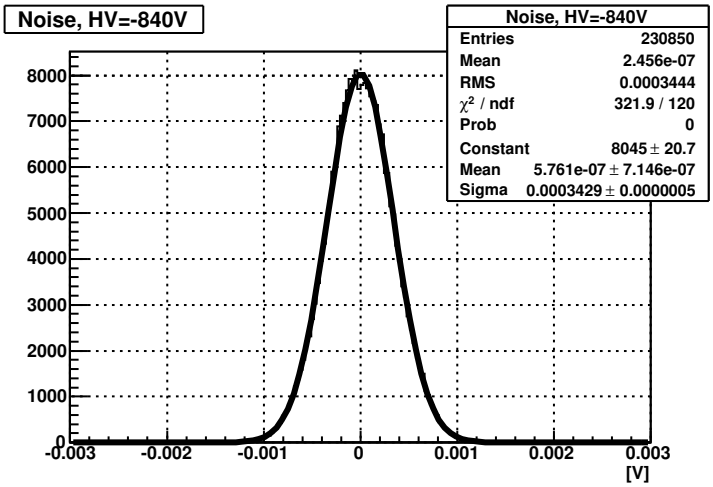

Amplitude, HV=-560V
Amplitude, HV=-560V
Entries 2851
Mean 0.00221
RMS 0.0007496
χ² / ndf 64.06 / 58
Prob 0.2725
p0 3.903e-05 ± 7.666e-06
MPV 0.00209 ± 0.00002
p2 0.1836 ± 0.0036
p3 0.0005907 ± 0.0000172
amplitude [V]

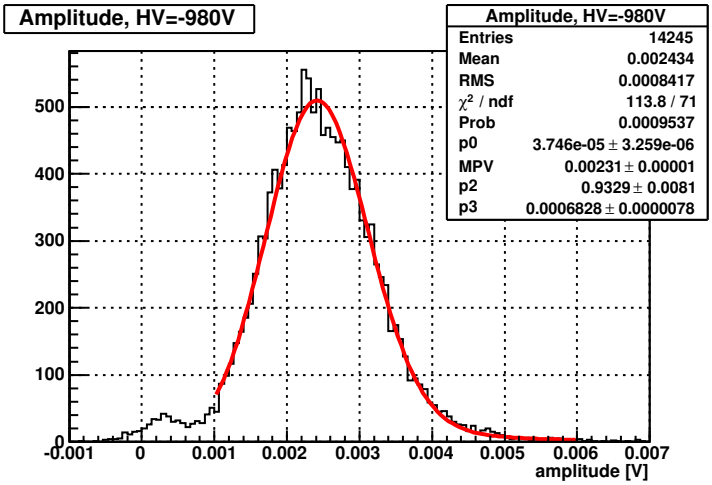

Noise, HV=-560V
Noise, HV=-560V
Entries 230931
Mean -1e-12
RMS 0.0003425
χ² / ndf 437.8 / 106
Prob 0
Constant 8072 ± 20.7
Mean 4.261e-08 ± 7.125e-07
Sigma 0.0003417 ± 0.0000005
[V]

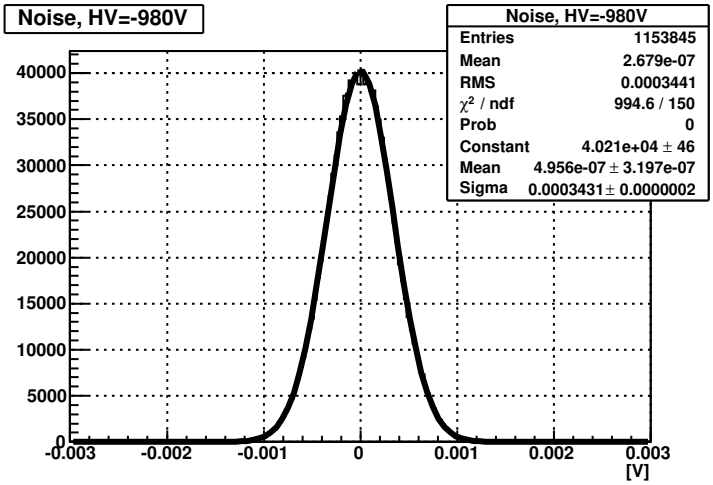

Amplitude, HV=-700V
Amplitude, HV=-700V
Entries 2850
Mean 0.002375
RMS 0.0008225
χ² / ndf 69.13 / 62
Prob 0.2493
p0 6.629e-05 ± 9.191e-06
MPV 0.00217 ± 0.00002
p2 0.1846 ± 0.0036
p3 0.0005791 ± 0.0000189
amplitude [V]


Noise, HV=-700V
Noise, HV=-700V
Entries 230850
Mean 2.148e-07
RMS 0.0003447
χ² / ndf 288.7 / 120
Prob 5.123e-18
Constant 8048 ± 20.5
Mean 5.346e-07 ± 7.147e-07
Sigma 0.0003429 ± 0.0000005
[V]

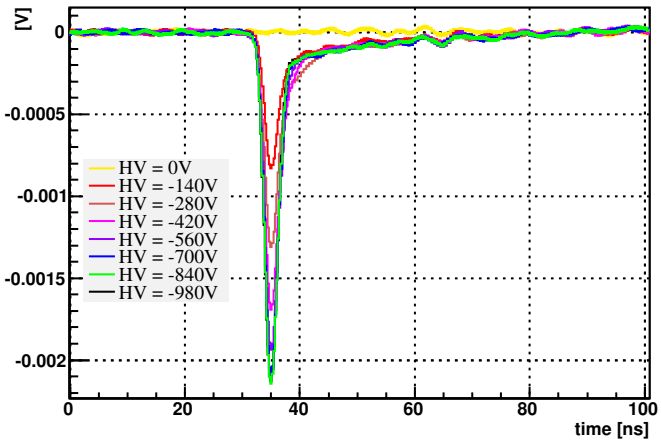

Amplitude, HV=-840V
Amplitude, HV=-840V
Entries 2850
Mean 0.002449
RMS 0.0008462
χ² / ndf 71.64 / 64
Prob 0.2392
p0 6.189e-05 ± 9.705e-06
MPV 0.002263 ± 0.000026
p2 0.1843 ± 0.0036
p3 0.0006352 ± 0.0000202
amplitude [V]

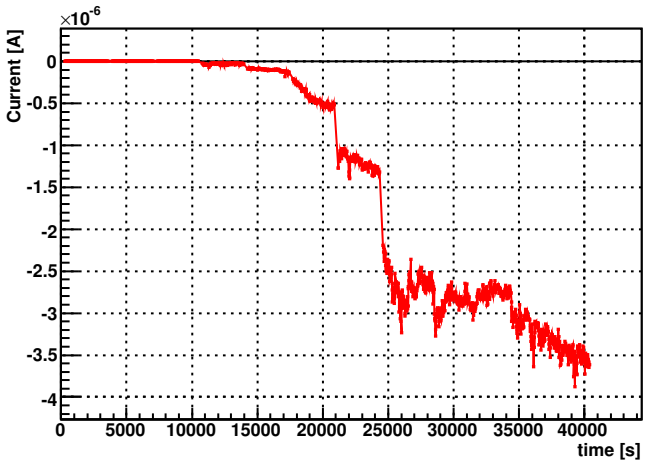

Noise, HV=-840V
Noise, HV=-840V
Entries 230850
Mean 2.456e-07
RMS 0.0003444
χ² / ndf 321.9 / 120
Prob 0
Constant 8045 ± 20.7
Mean 5.761e-07 ± 7.146e-07
Sigma 0.0003429 ± 0.0000005
[V]


Amplitude, HV=-980V
Amplitude, HV=-980V
Entries 14245
Mean 0.002434
RMS 0.0008417
χ² / ndf 113.8 / 71
Prob 0.0009537
p0 3.746e-05 ± 3.259e-06
MPV 0.00231 ± 0.00001
p2 0.9329 ± 0.0081
p3 0.0006828 ± 0.0000078
amplitude [V]

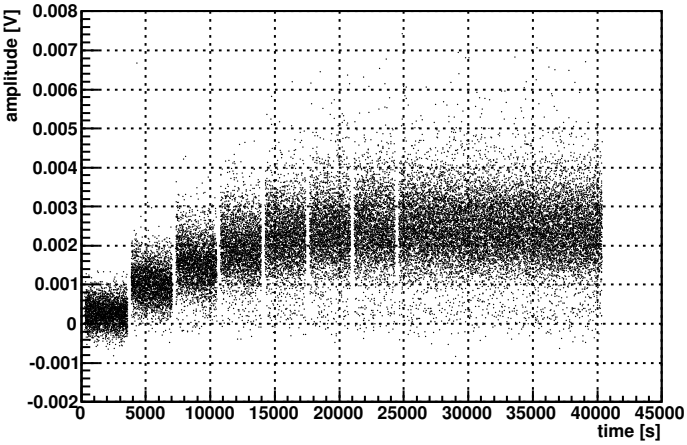

Noise, HV=-980V
Noise, HV=-980V
Entries 1153845
Mean 2.679e-07
RMS 0.0003441
χ² / ndf 994.6 / 150
Prob 0
Constant 4.021e+04 ± 46
Mean 4.956e-07 ± 3.197e-07
Sigma 0.0003431 ± 0.0000002
[V]

Average event

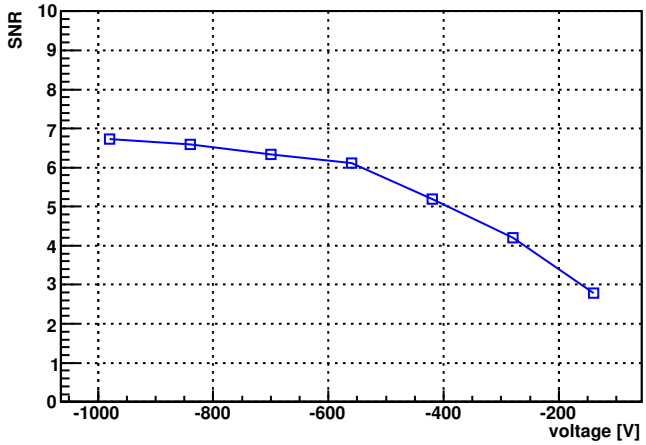




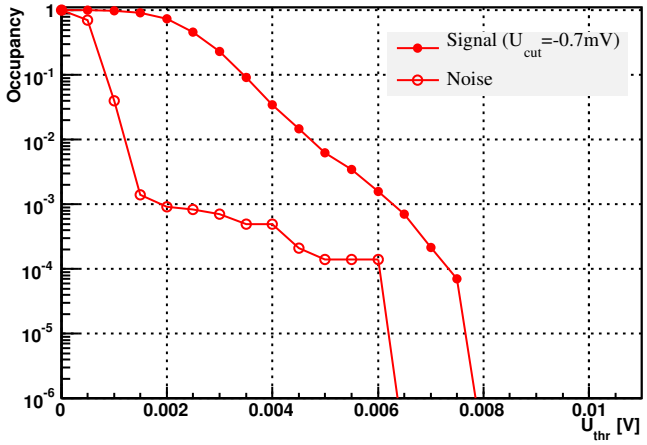
amplitudes



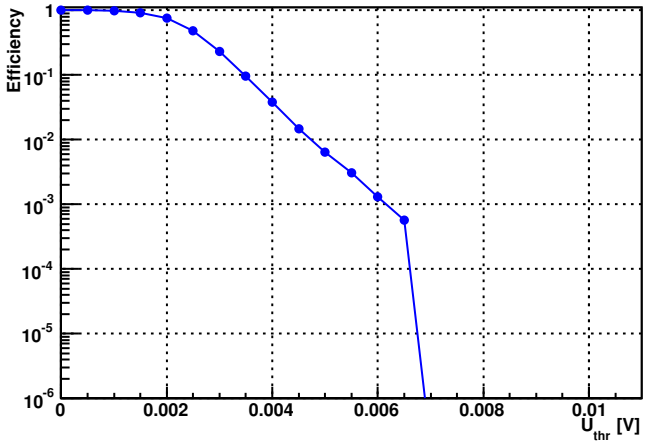
Signal to noise

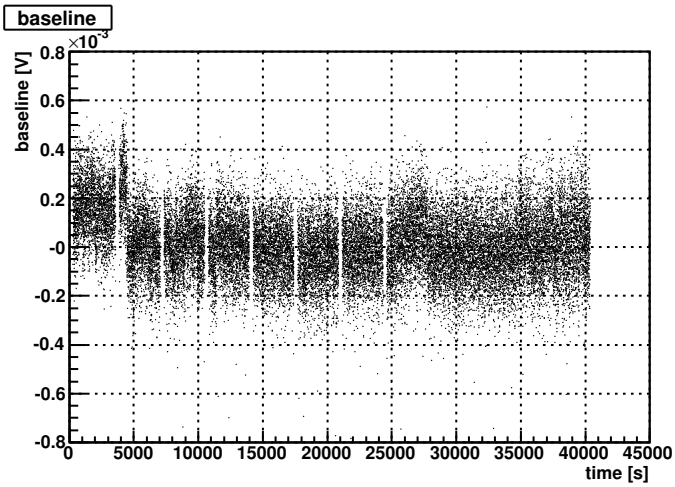


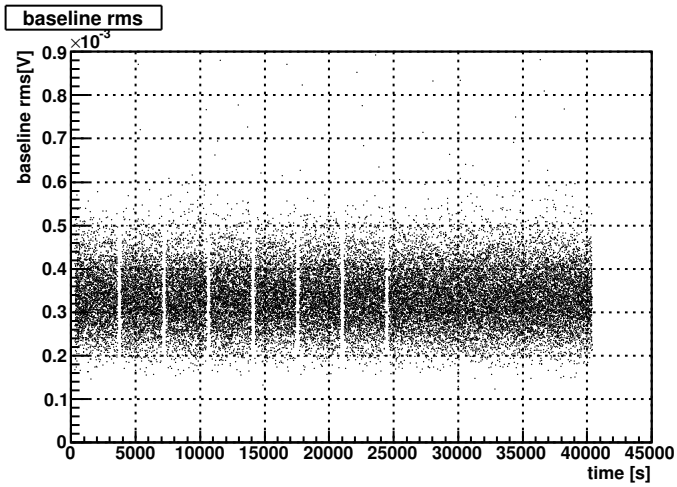
Occupancy vs Threshold, HV=-980V

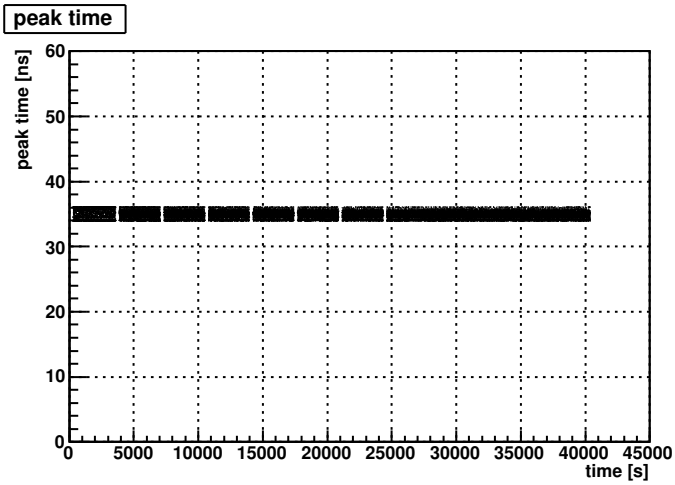


Efficiency vs Threshold, HV=-980V, U_{cut}=-0.7mV




baseline
×10⁻³
baseline [V]
time [s]


baseline rms
×10⁻³
baseline rms[V]
time [s]


peak time
peak time [ns]
time [s]

Data File = SP_050927180034_Fotec403-ASC-D-0230-7_ASC-D-0230-5-measurement3.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