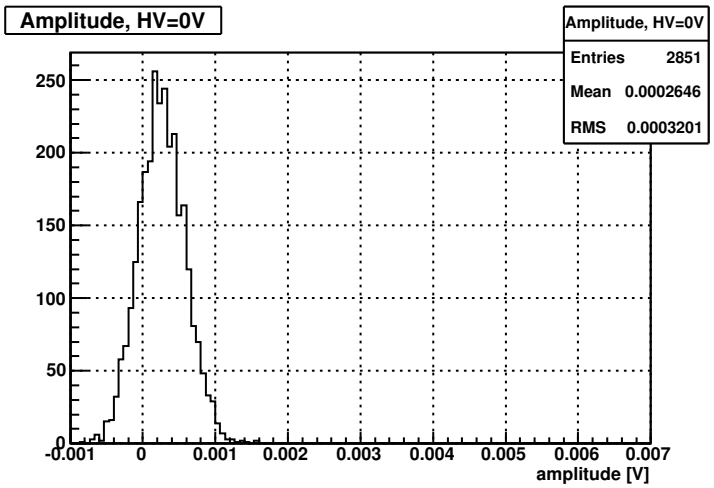
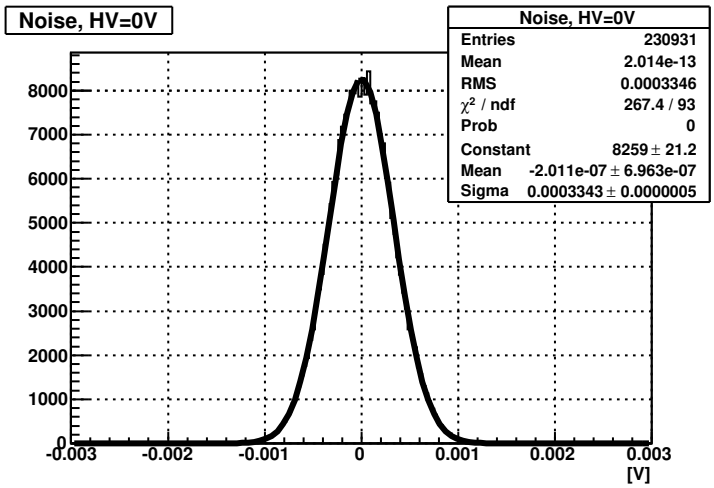
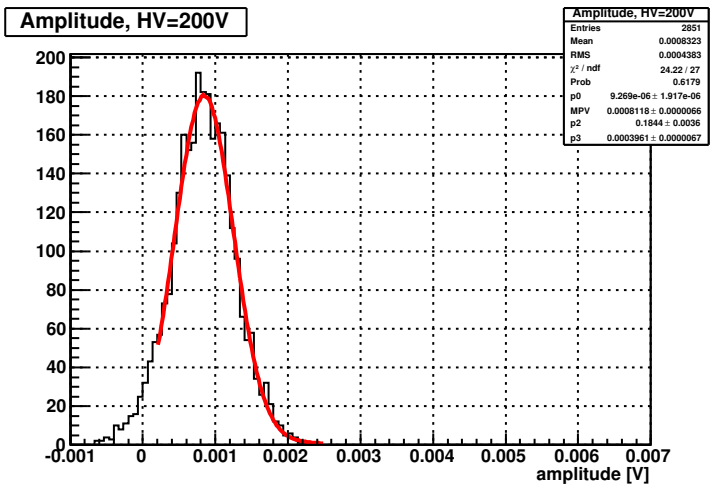
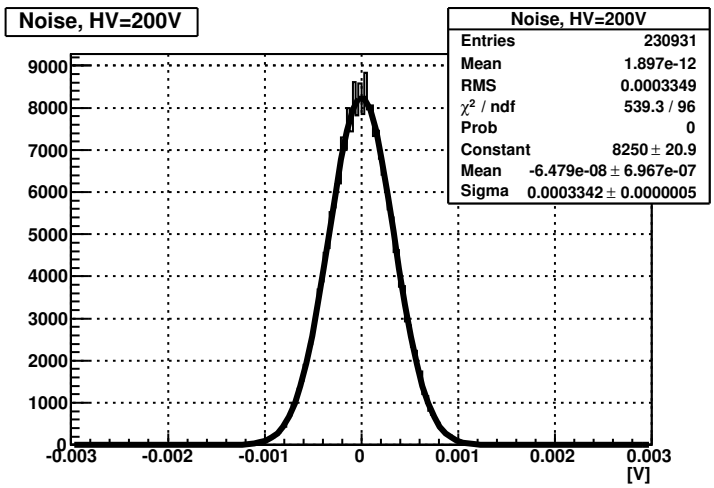
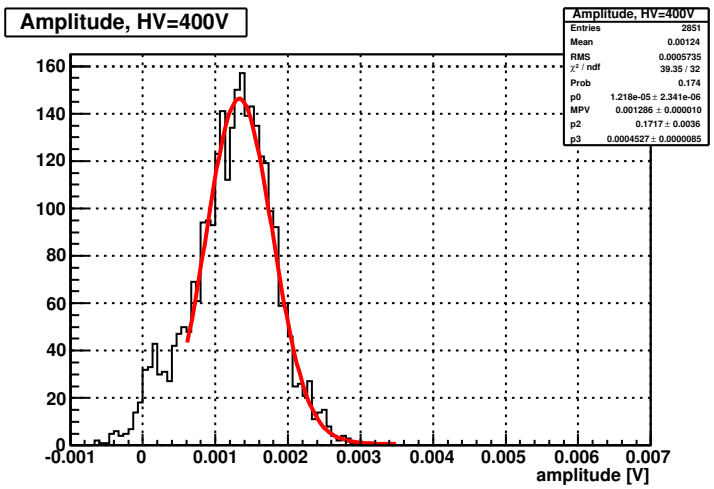
Fotec Box 401 (CDS163, 46TO-4), Measurement 1 (BWL 200MHz)

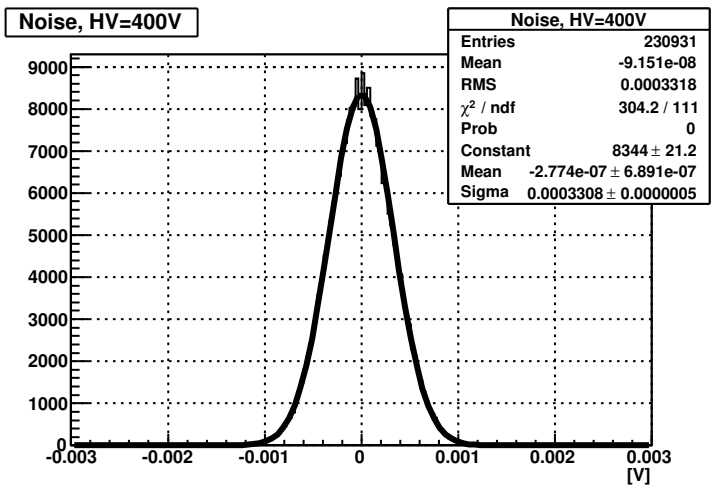


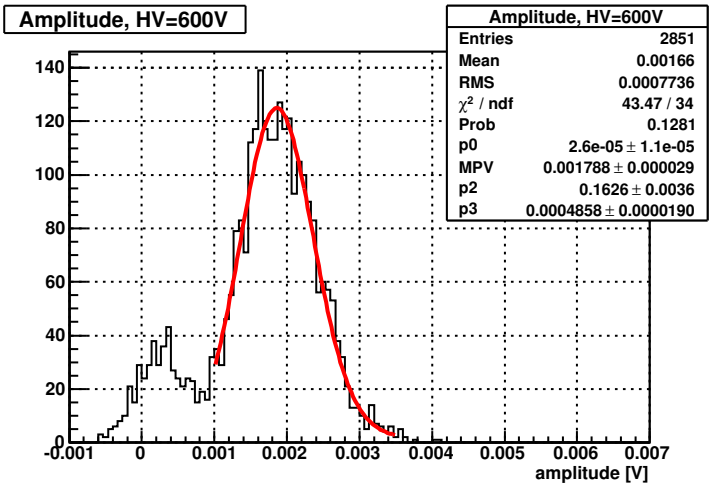


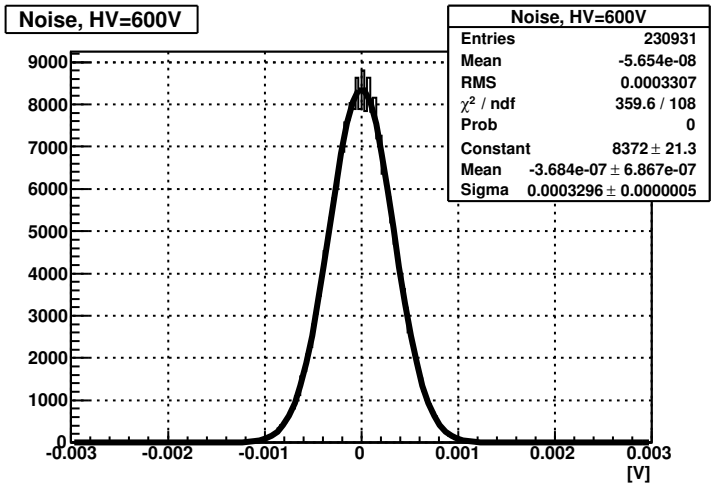


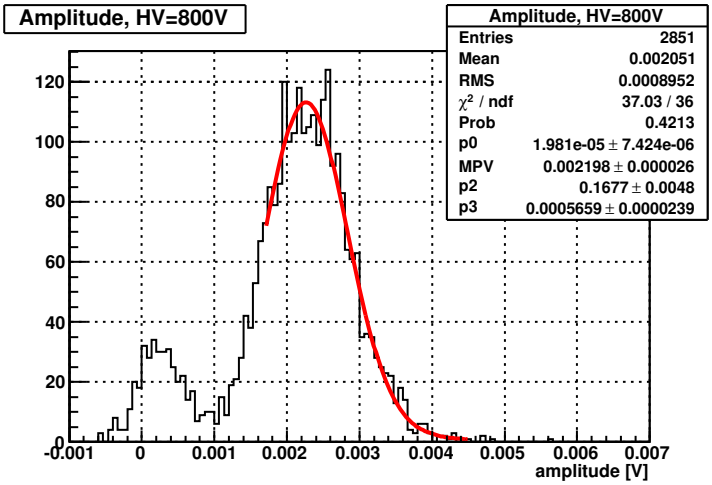


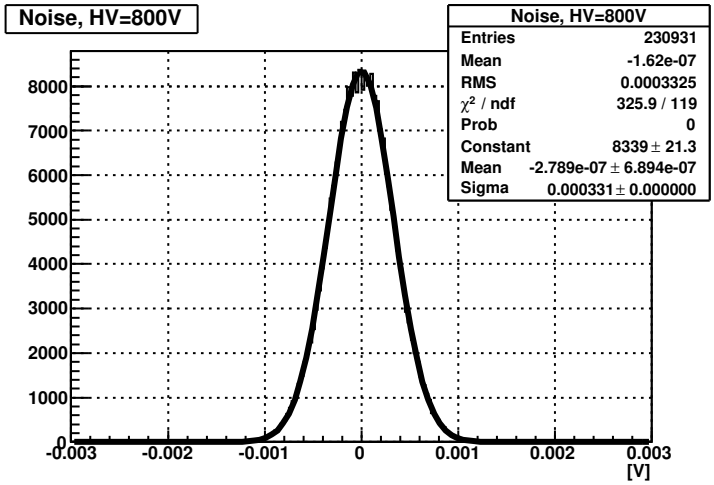


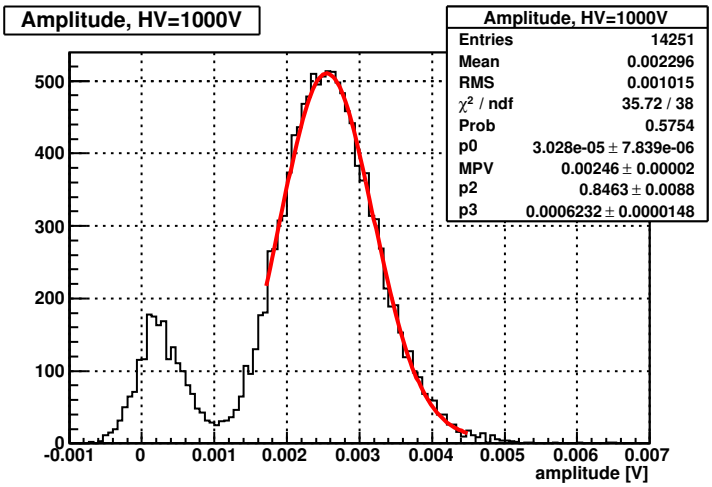


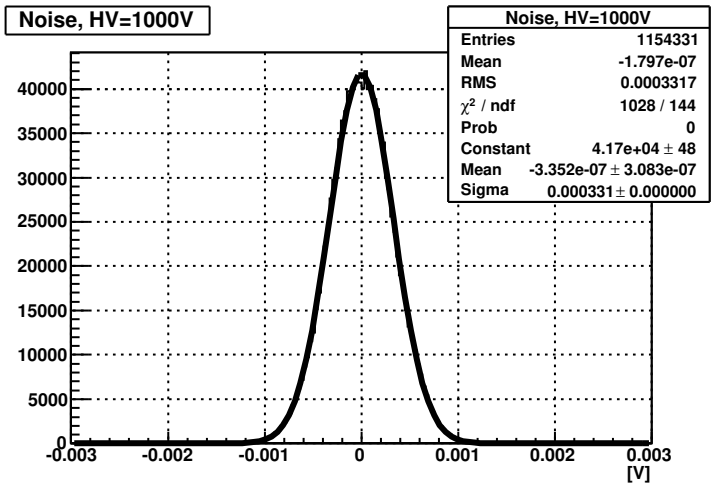

Amplitude, HV=600V
Amplitude, HV=600V
Entries 2851
Mean 0.00166
RMS 0.0007736
χ² / ndf 43.47 / 34
Prob 0.1281
p0 2.6e-05 ± 1.1e-05
MPV 0.001788 ± 0.000029
p2 0.1626 ± 0.0036
p3 0.0004858 ± 0.0000190
amplitude [V]


Noise, HV=600V
Noise, HV=600V
Entries 230931
Mean -5.654e-08
RMS 0.0003307
χ² / ndf 359.6 / 108
Prob 0
Constant 8372 ± 21.3
Mean -3.684e-07 ± 6.867e-07
Sigma 0.0003296 ± 0.0000005
[V]

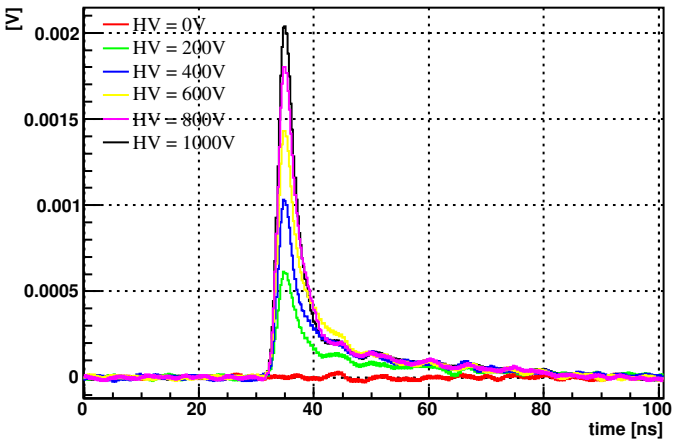

Amplitude, HV=800V
Amplitude, HV=800V
Entries 2851
Mean 0.002051
RMS 0.0008952
χ² / ndf 37.03 / 36
Prob 0.4213
p0 1.981e-05 ± 7.424e-06
MPV 0.002198 ± 0.000026
p2 0.1677 ± 0.0048
p3 0.0005659 ± 0.0000239
amplitude [V]

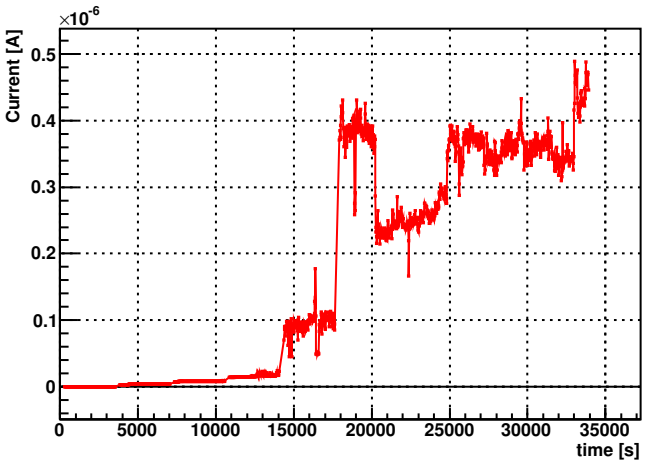

Noise, HV=800V
Noise, HV=800V
Entries 230931
Mean -1.62e-07
RMS 0.0003325
χ² / ndf 325.9 / 119
Prob 0
Constant 8339 ± 21.3
Mean -2.789e-07 ± 6.894e-07
Sigma 0.000331 ± 0.000000
[V]


Amplitude, HV=1000V
Amplitude, HV=1000V
Entries 14251
Mean 0.002296
RMS 0.001015
χ² / ndf 35.72 / 38
Prob 0.5754
p0 3.028e-05 ± 7.839e-06
MPV 0.00246 ± 0.00002
p2 0.8463 ± 0.0088
p3 0.0006232 ± 0.0000148
amplitude [V]

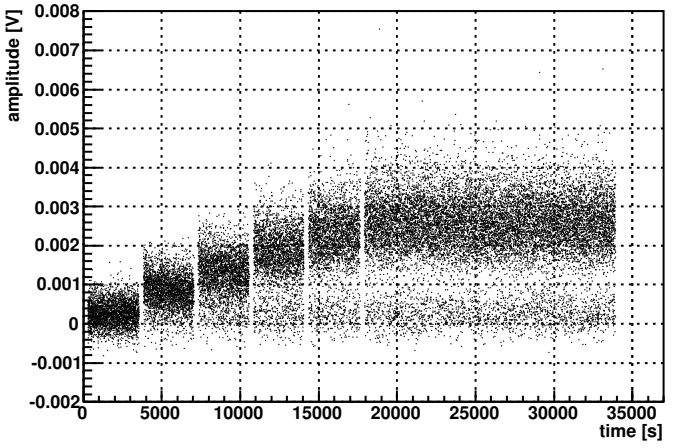

Noise, HV=1000V
Noise, HV=1000V
Entries 1154331
Mean -1.797e-07
RMS 0.0003317
χ² / ndf 1028 / 144
Prob 0
Constant 4.17e+04 ± 48
Mean -3.352e-07 ± 3.083e-07
Sigma 0.000331 ± 0.000000
[V]

Average event

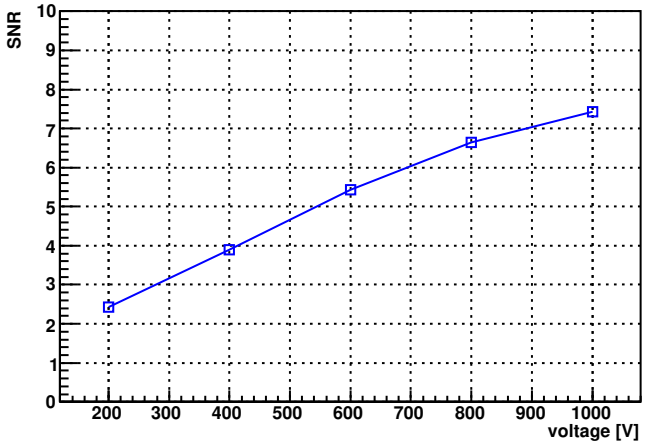




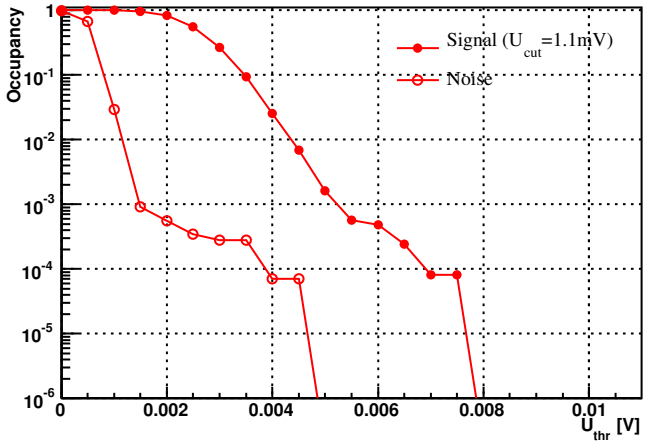
amplitudes



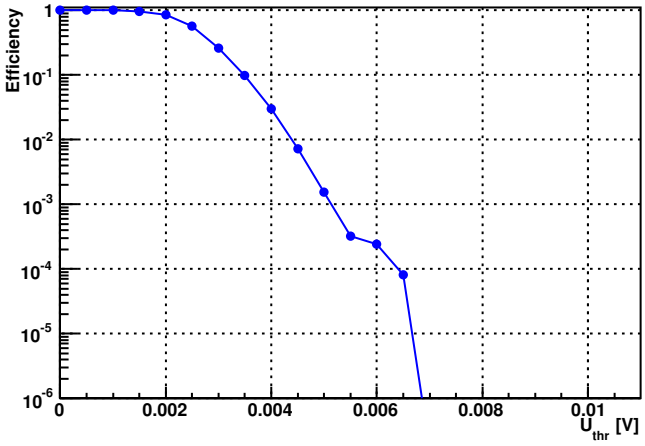
Signal to noise

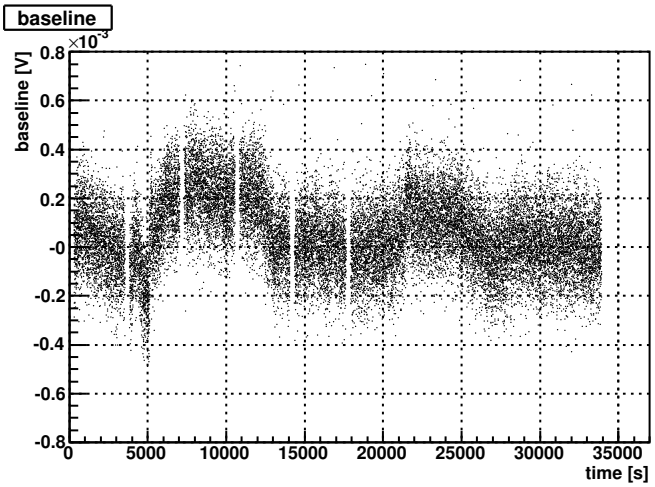


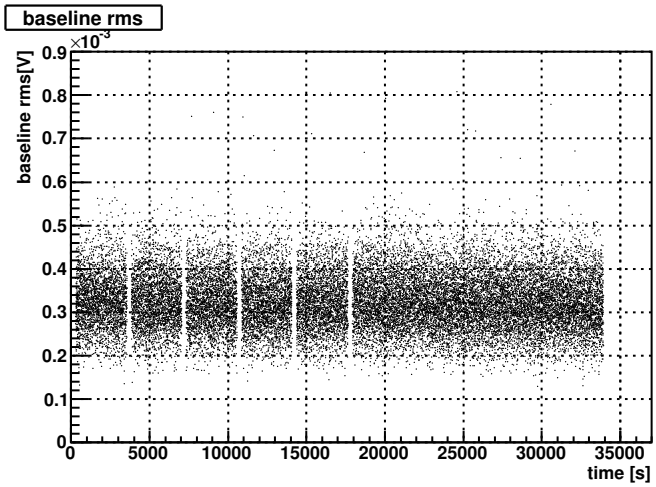
Occupancy vs Threshold, HV=1000V

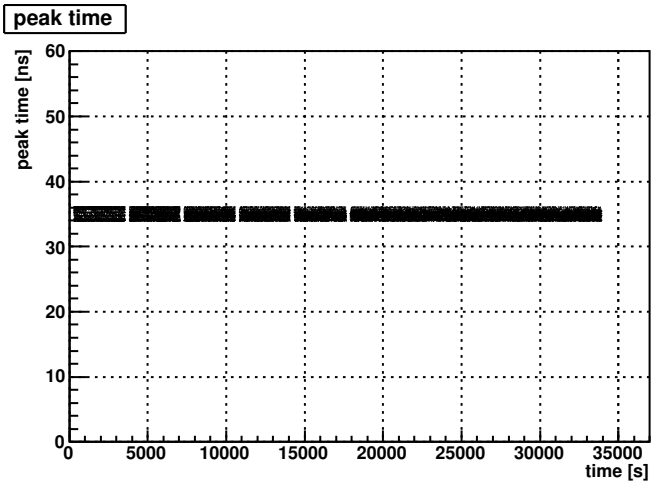


Efficiency vs Threshold, HV=1000V, U_{cut}=1.1mV




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_050906150353_Fotec401-cds163-46to-4-measurement1.xls
Upper Diamond = CDS-163, $\sim 500 \mu m$ thick, Al metailzation
Lower Diamond = 46TO-4, $\sim 500 \mu m$ thick, Al metailzation