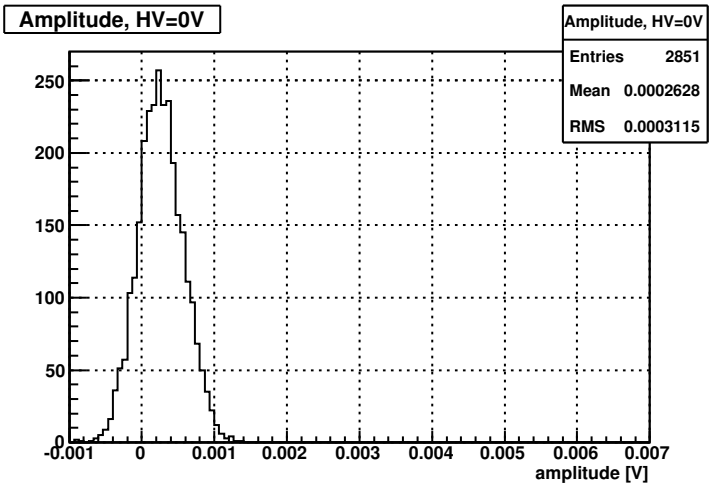
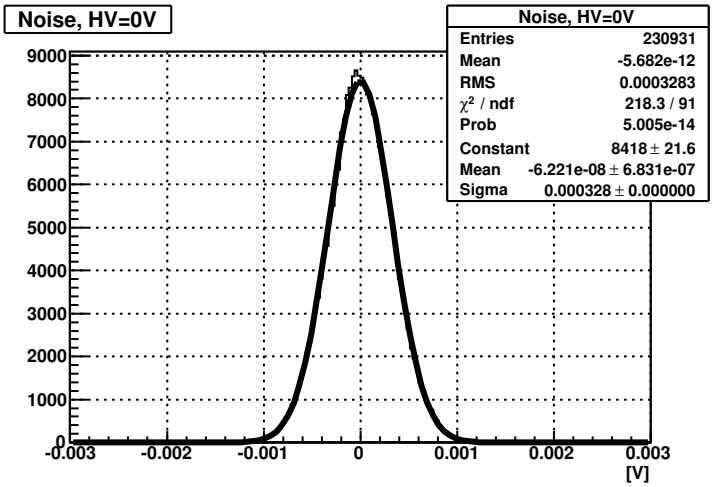
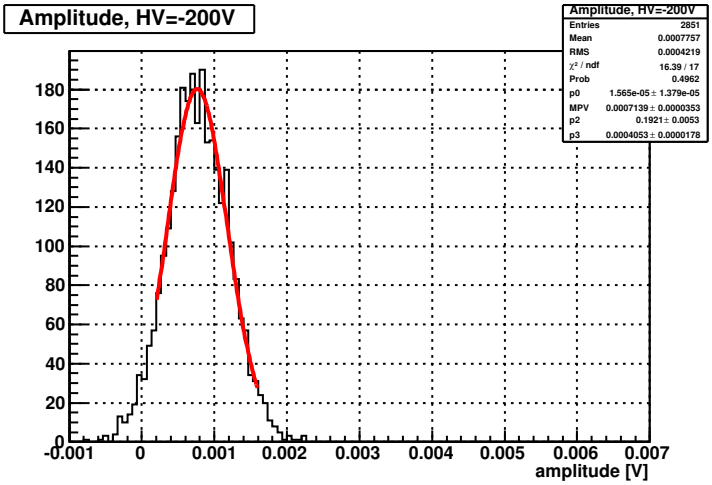
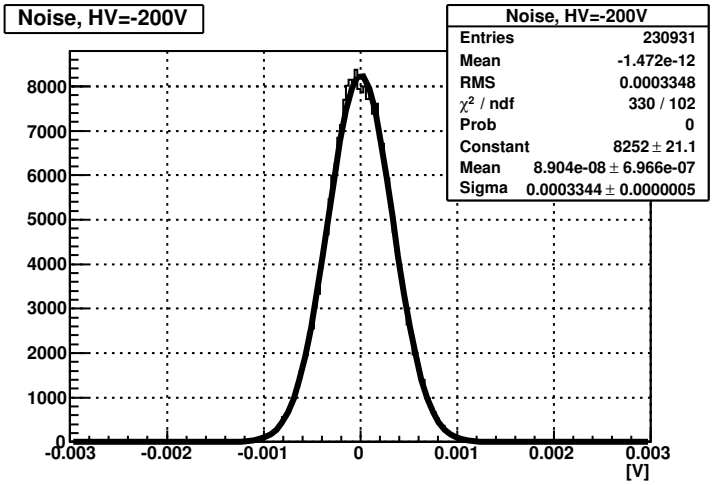
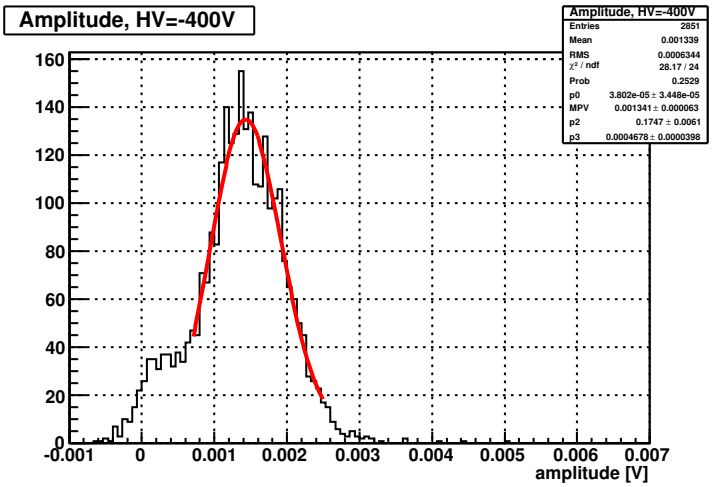
Fotec Box 401 (CDS163, 46TO-4), Measurement 3 (200MHz BWL)

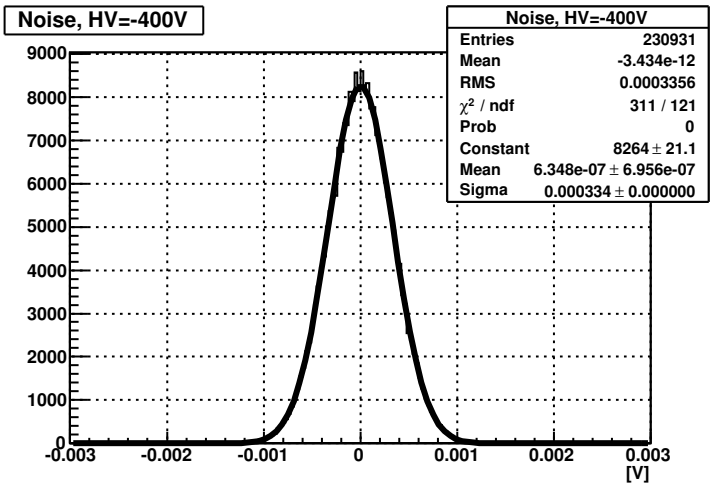


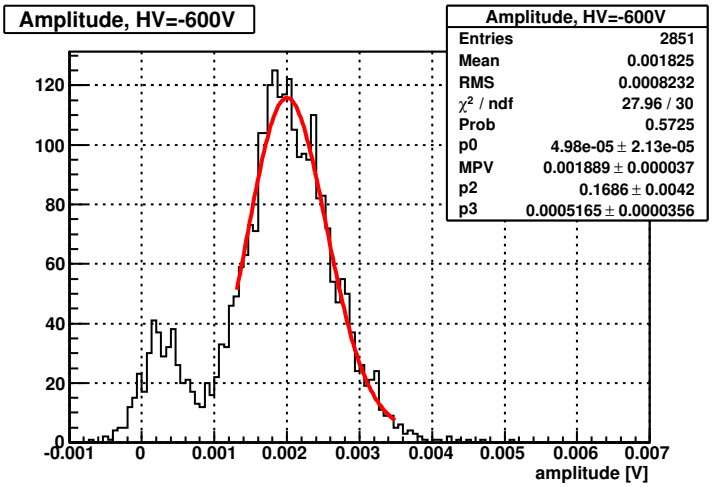


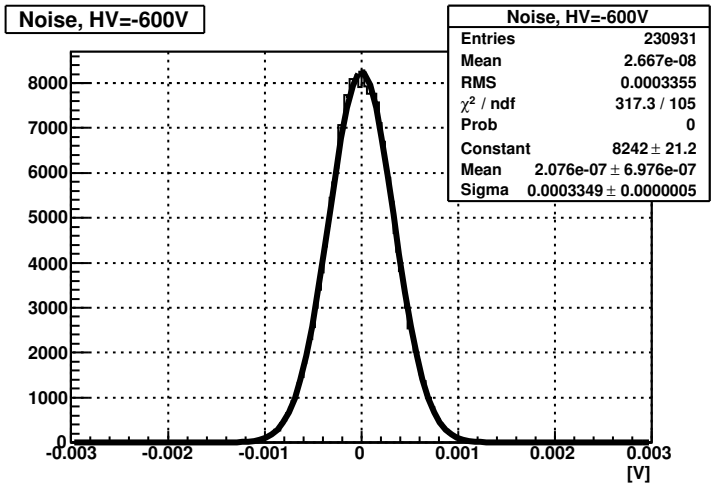


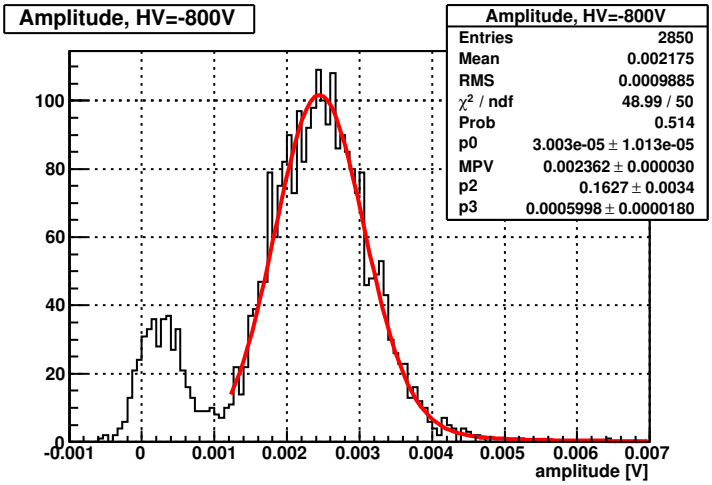


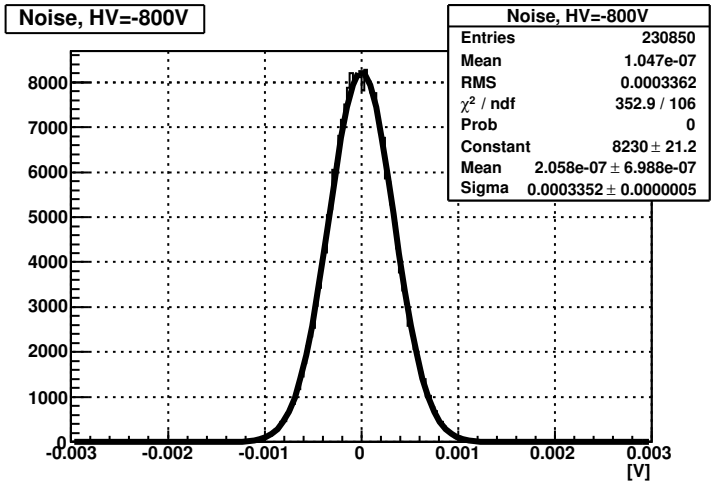


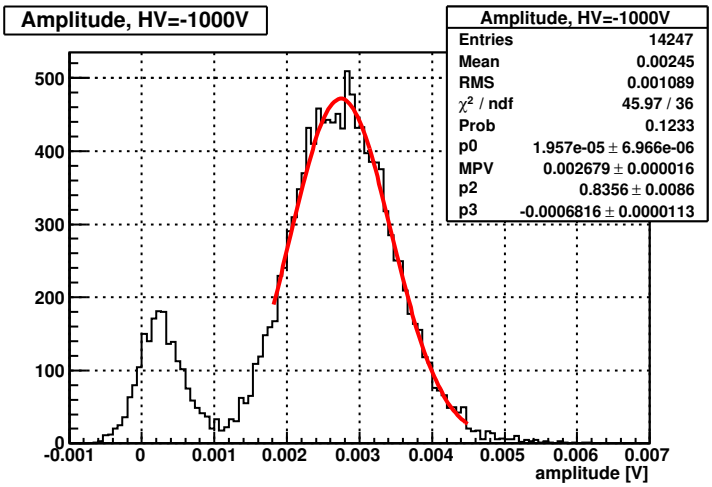


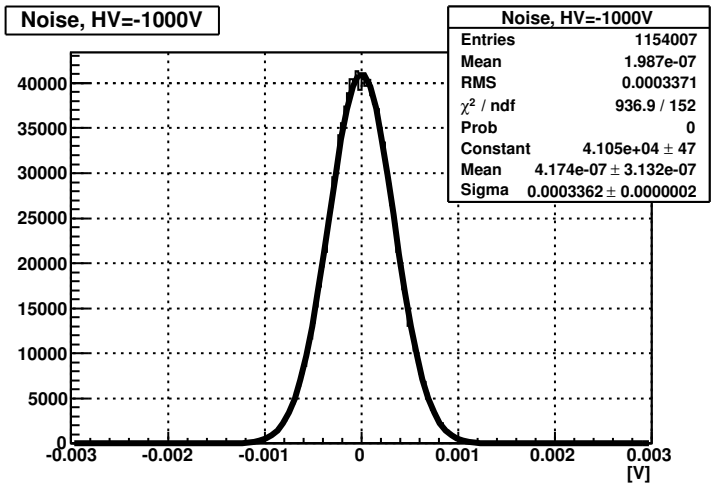

Amplitude, HV=-600V
Amplitude, HV=-600V
Entries 2851
Mean 0.001825
RMS 0.0008232
χ² / ndf 27.96 / 30
Prob 0.5725
p0 4.98e-05 ± 2.13e-05
MPV 0.001889 ± 0.000037
p2 0.1686 ± 0.0042
p3 0.0005165 ± 0.0000356
amplitude [V]


Noise, HV=-600V
Noise, HV=-600V
Entries 230931
Mean 2.667e-08
RMS 0.0003355
χ² / ndf 317.3 / 105
Prob 0
Constant 8242 ± 21.2
Mean 2.076e-07 ± 6.976e-07
Sigma 0.0003349 ± 0.0000005
[V]

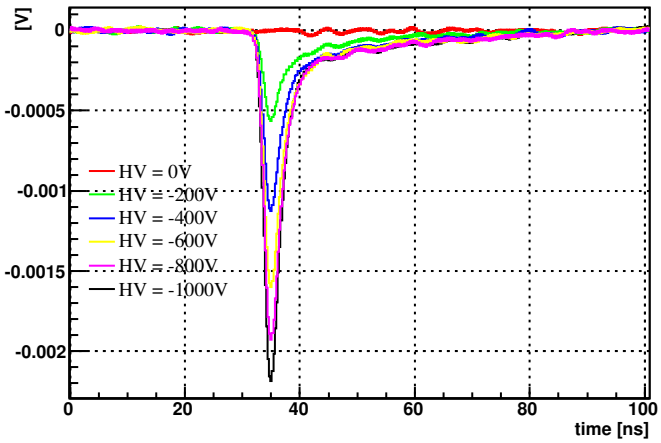

Amplitude, HV=-800V
Amplitude, HV=-800V
Entries 2850
Mean 0.002175
RMS 0.0009885
χ² / ndf 48.99 / 50
Prob 0.514
p0 3.003e-05 ± 1.013e-05
MPV 0.002362 ± 0.000030
p2 0.1627 ± 0.0034
p3 0.0005998 ± 0.0000180
amplitude [V]

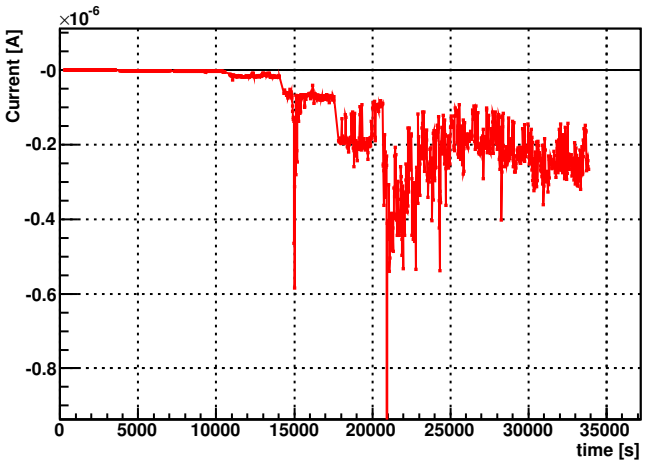

Noise, HV=-800V
Noise, HV=-800V
Entries 230850
Mean 1.047e-07
RMS 0.0003362
χ² / ndf 352.9 / 106
Prob 0
Constant 8230 ± 21.2
Mean 2.058e-07 ± 6.988e-07
Sigma 0.0003352 ± 0.0000005
[V]


Amplitude, HV=-1000V
Amplitude, HV=-1000V
Entries 14247
Mean 0.00245
RMS 0.001089
χ² / ndf 45.97 / 36
Prob 0.1233
p0 1.957e-05 ± 6.966e-06
MPV 0.002679 ± 0.000016
p2 0.8356 ± 0.0086
p3 -0.0006816 ± 0.0000113
amplitude [V]

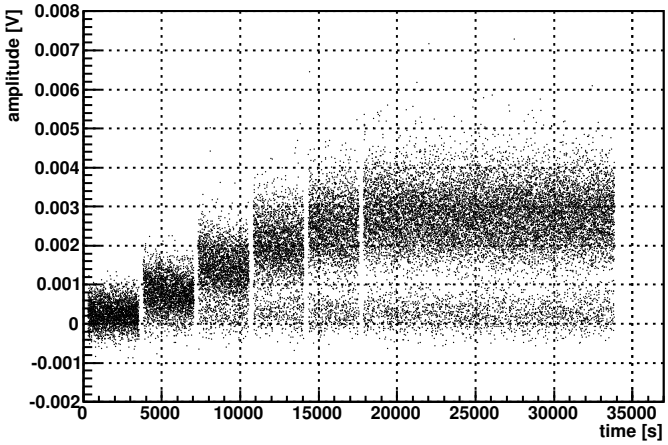

Noise, HV=-1000V
Noise, HV=-1000V
Entries 1154007
Mean 1.987e-07
RMS 0.0003371
χ² / ndf 936.9 / 152
Prob 0
Constant 4.105e+04 ± 47
Mean 4.174e-07 ± 3.132e-07
Sigma 0.0003362 ± 0.0000002
[V]

Average event

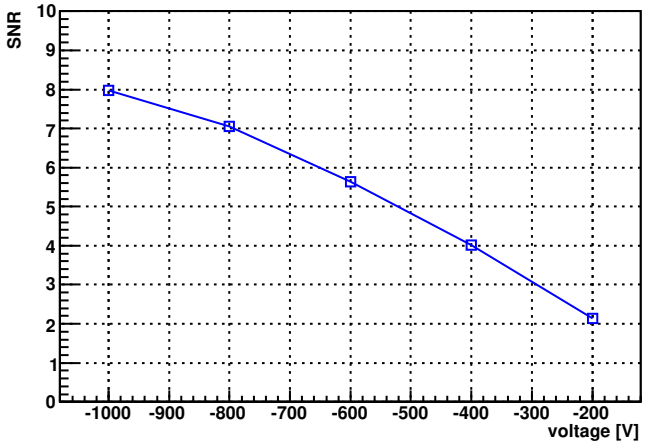




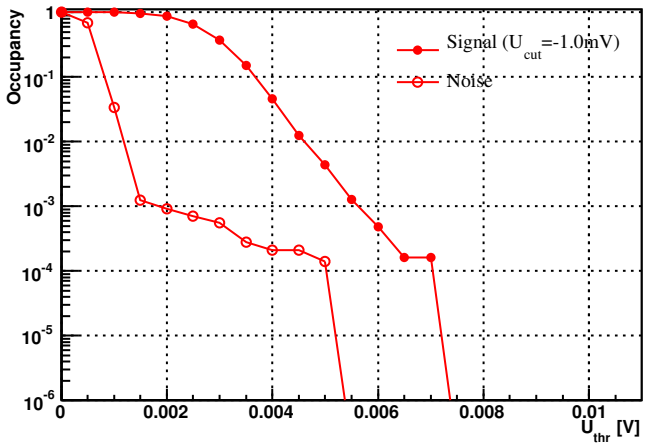
amplitudes



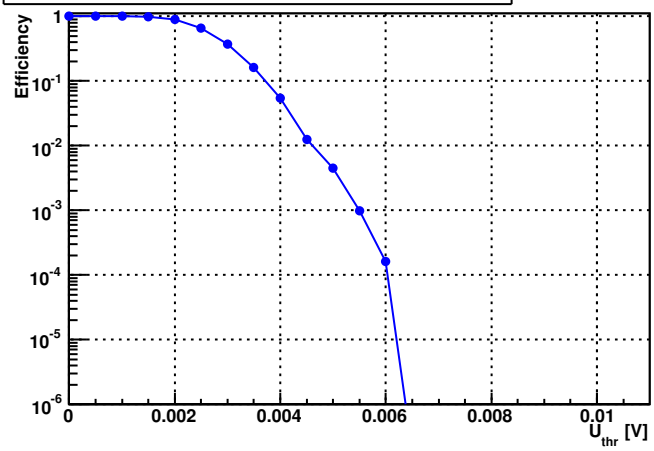
Signal to noise

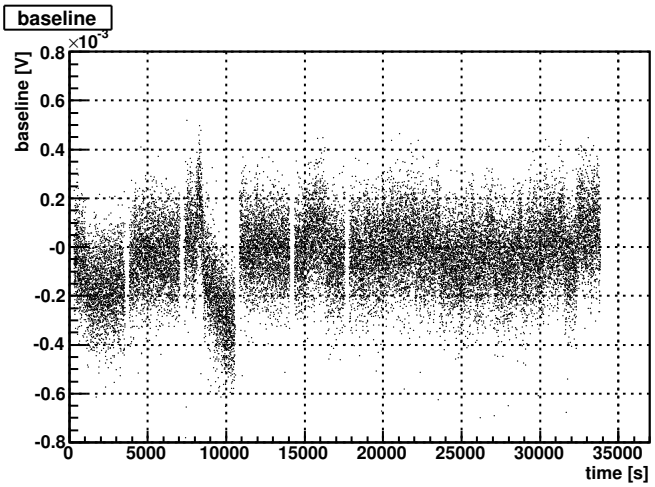


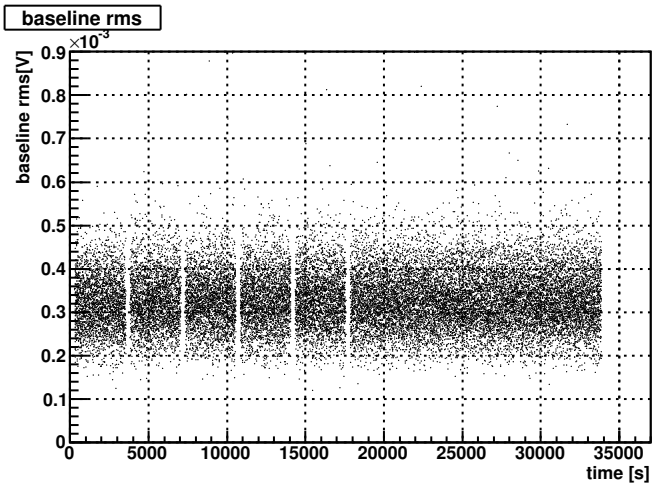
Occupancy vs Threshold, HV=-1000V

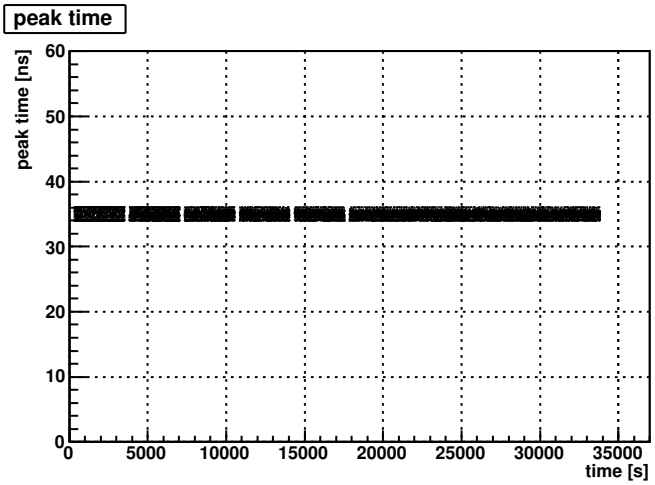


Efficiency vs Threshold, HV=1000V, U_{cut}=-1.0mV




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_050907161322_Fotec401-cds163-46to-4-measurement3.xls
Upper Diamond = CDS-163, $\sim 500 \mu m$ thick, Al metailzation
Lower Diamond = 46TO-4, $\sim 500 \mu m$ thick, Al metailzation