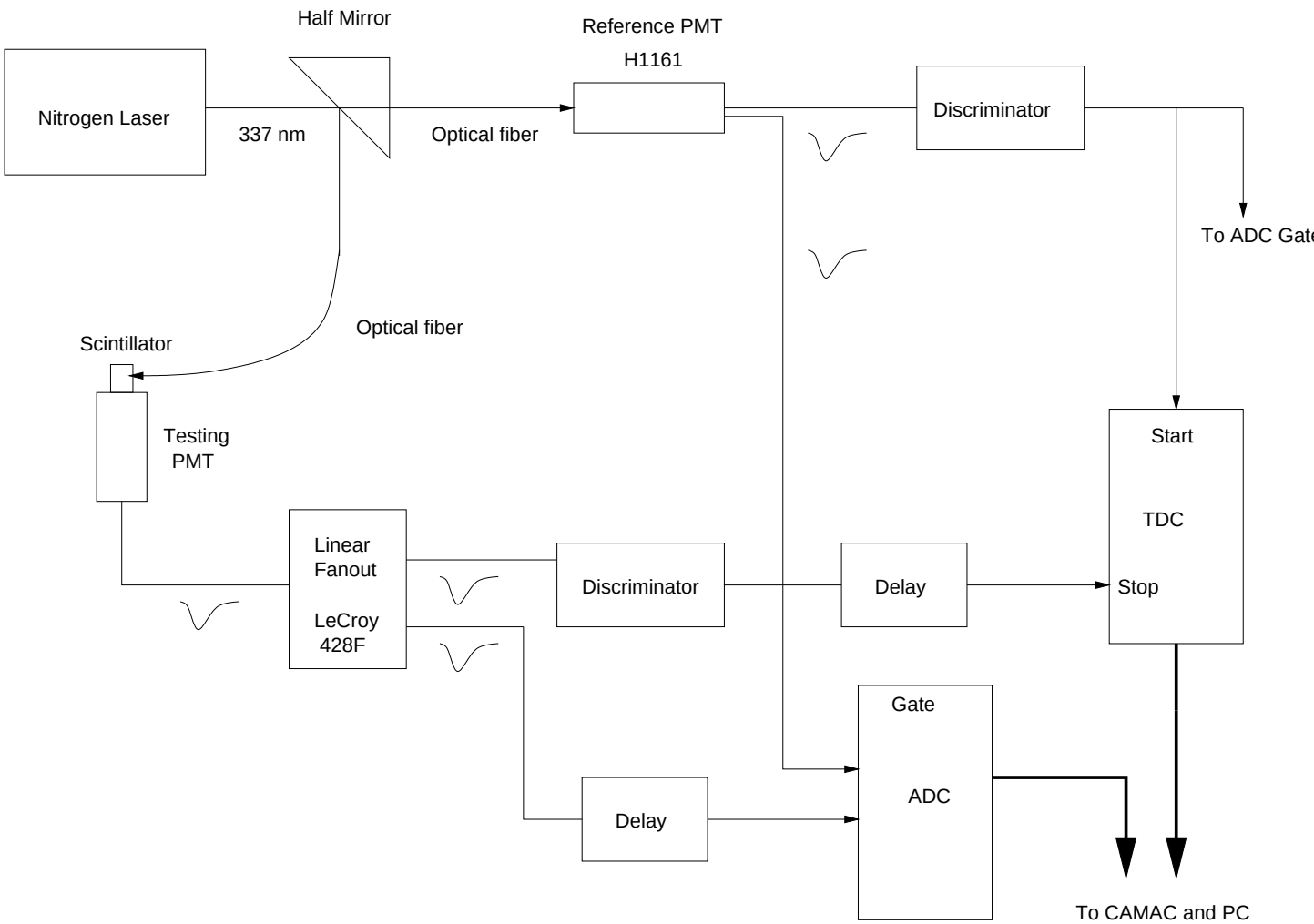
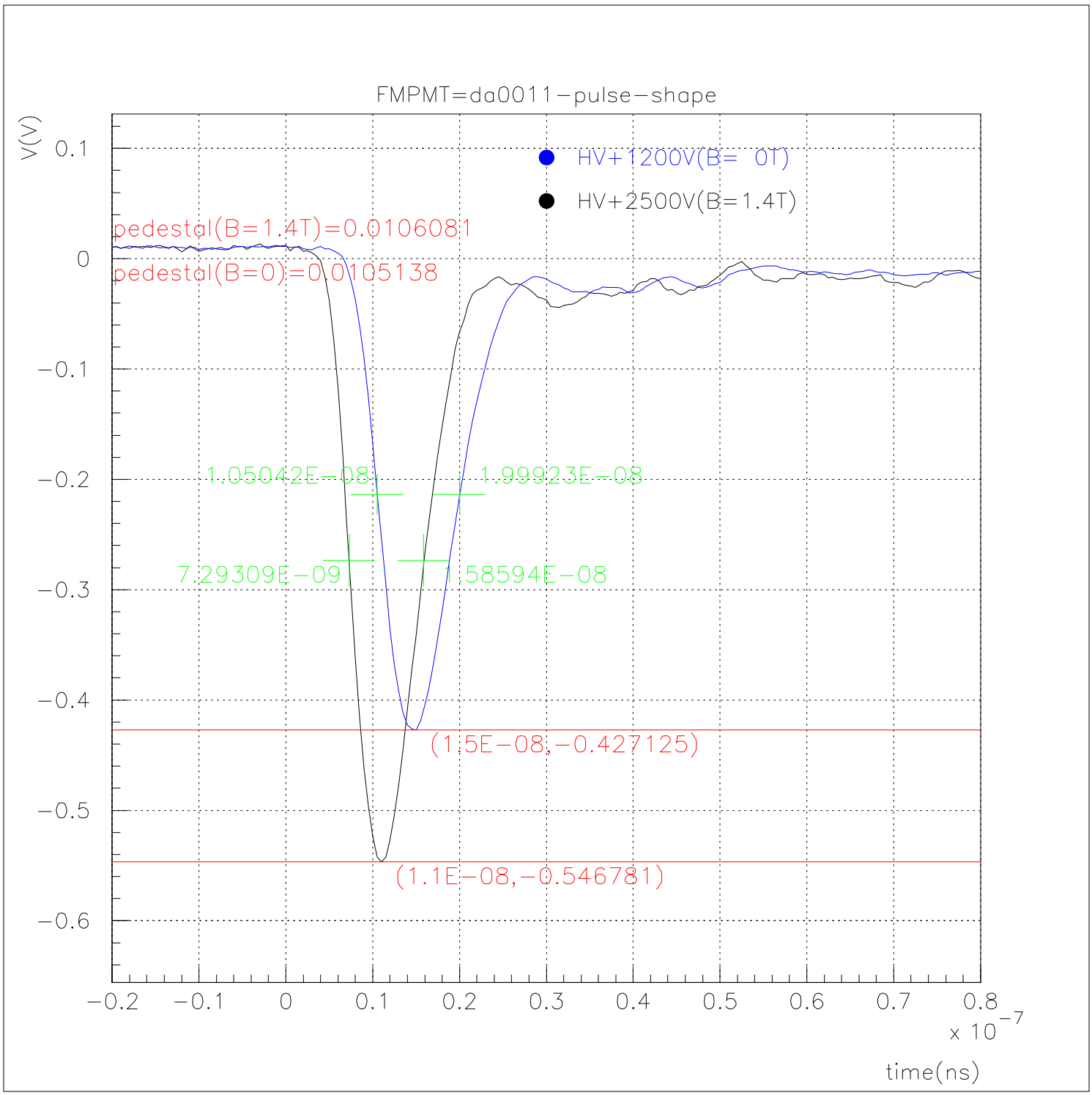
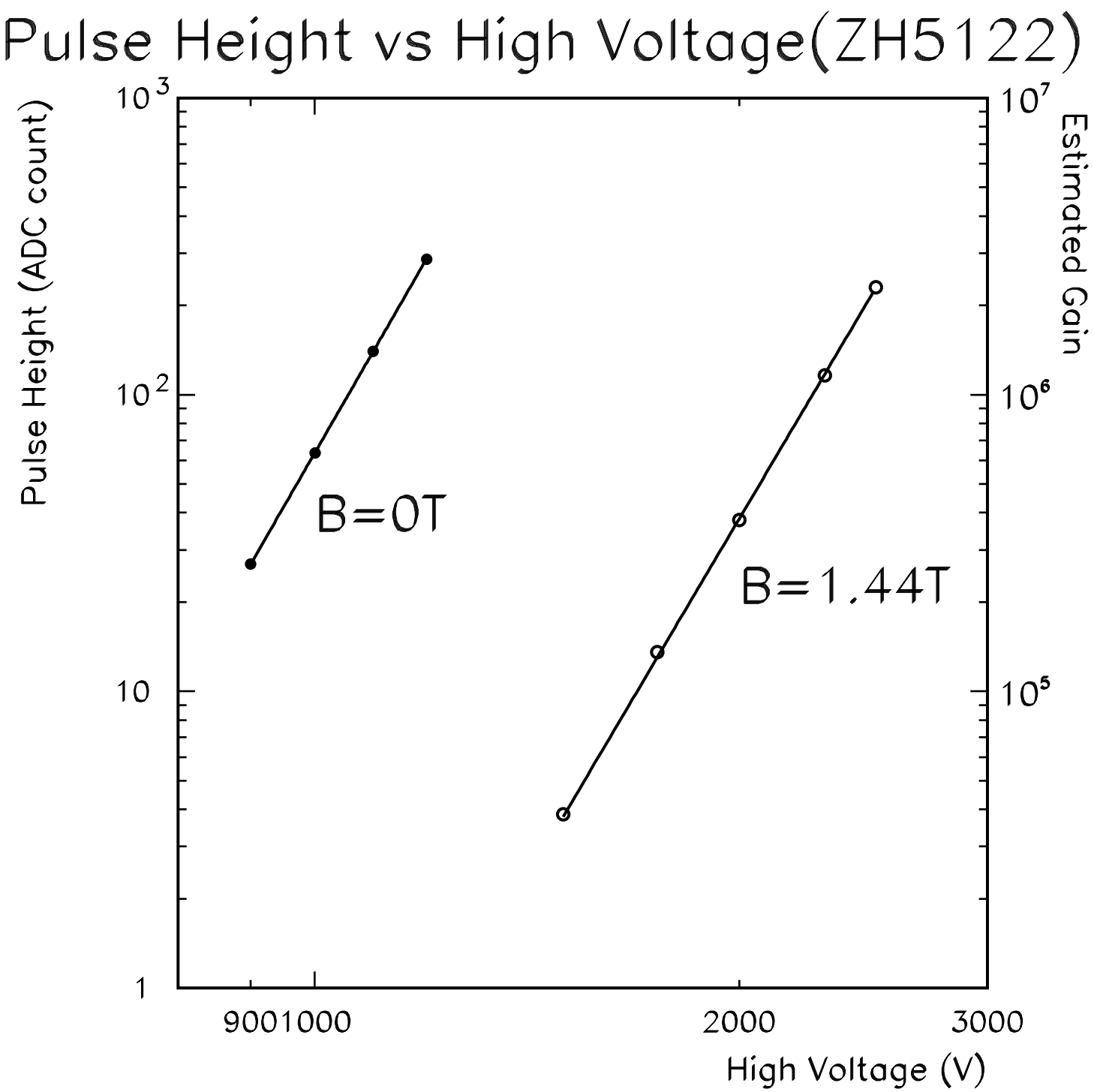
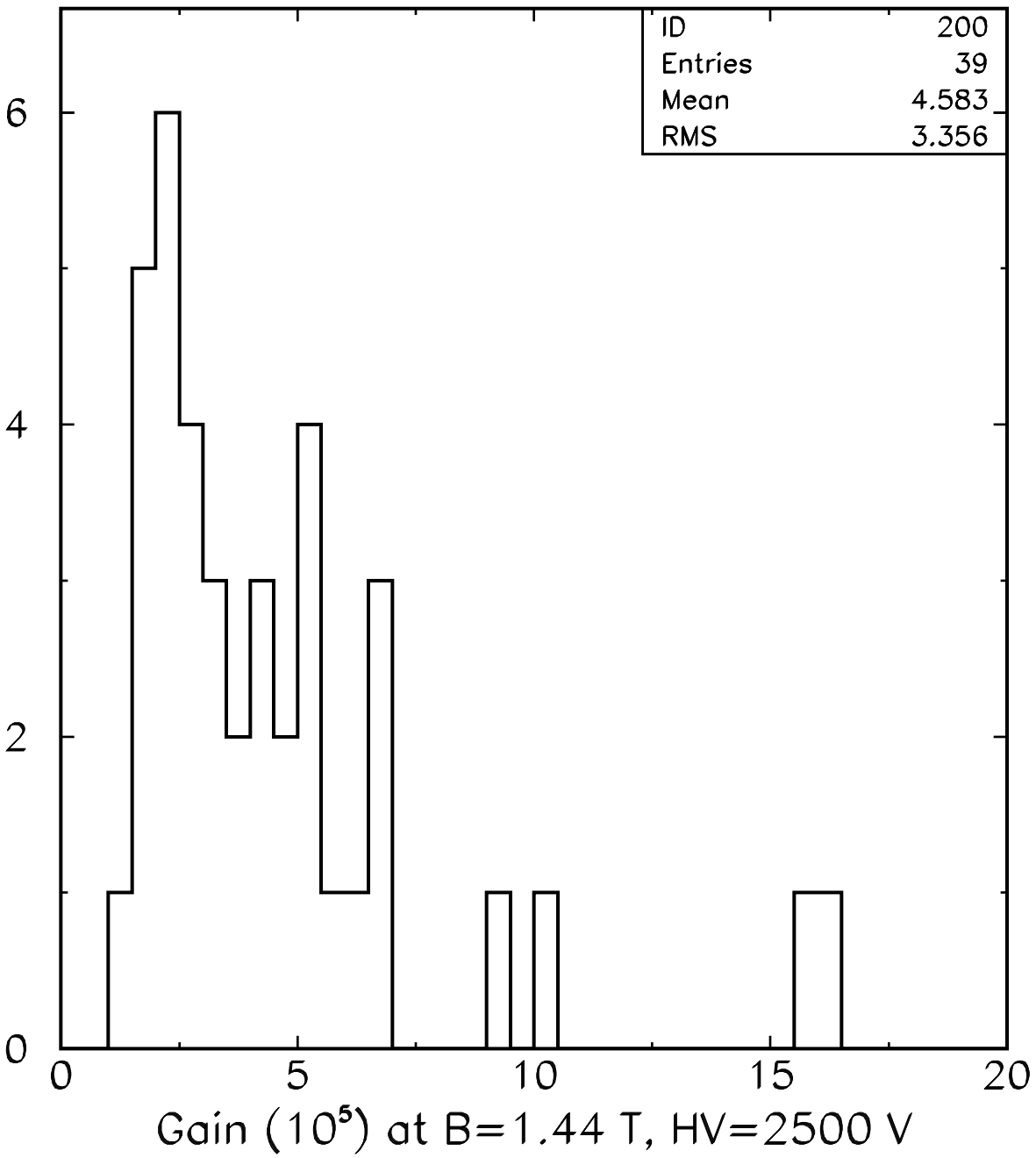

Half Mirror
Reference PMT
H1161
Nitrogen Laser
337 nm
Optical fiber
Discriminator
To ADC Gate
Optical fiber
Scintillator
Testing
PMT
Start
TDC
Stop
Linear
Fanout
LeCroy
428F
Discriminator
Delay
Gate
ADC
Delay
To CAMAC and PC


FMPMT=da0011-pulse-shape
V(V)
0.1
0
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
HV+1200V(B= 0T)
HV+2500V(B=1.4T)
pedestal(B=1.4T)=0.0106081
pedestal(B=0)=0.0105138
1.05042E−08
1.99923E−08
7.29309E−09
1.58594E−08
(1.5E−08,−0.427125)
(1.1E−08,−0.546781)
−0.2
−0.1
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
x 10^−7
time(ns)


Pulse Height vs High Voltage(ZH5122)
Pulse Height (ADC count)
Estimated Gain
10 3
10 2
10
1
10 7
10 6
10 5
B=0T
B=1.44T
9001000
2000
3000
High Voltage (V)


ID 200
Entries 39
Mean 4.583
RMS 3.356
0
2
4
6
0
5
10
15
20
Gain (10^5) at B=1.44 T, HV=2500 V