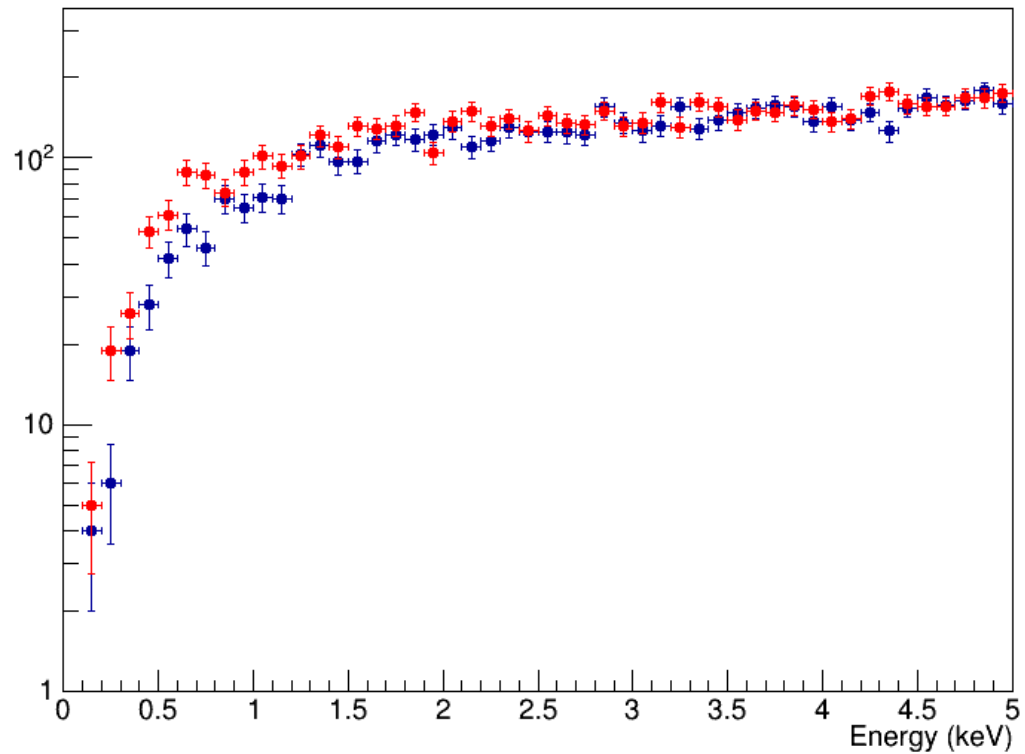
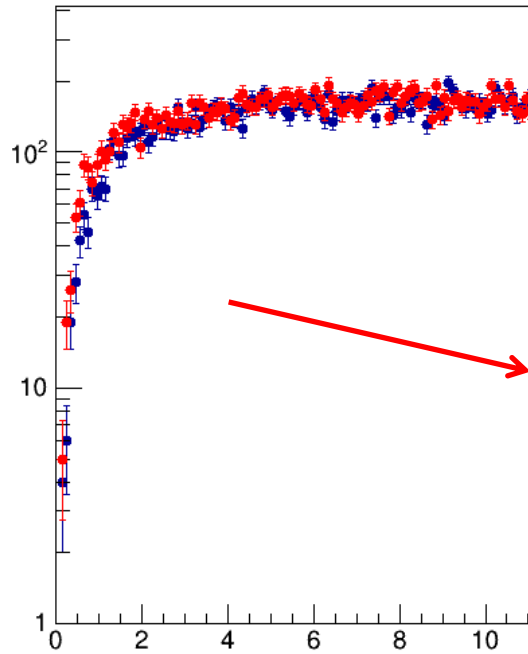


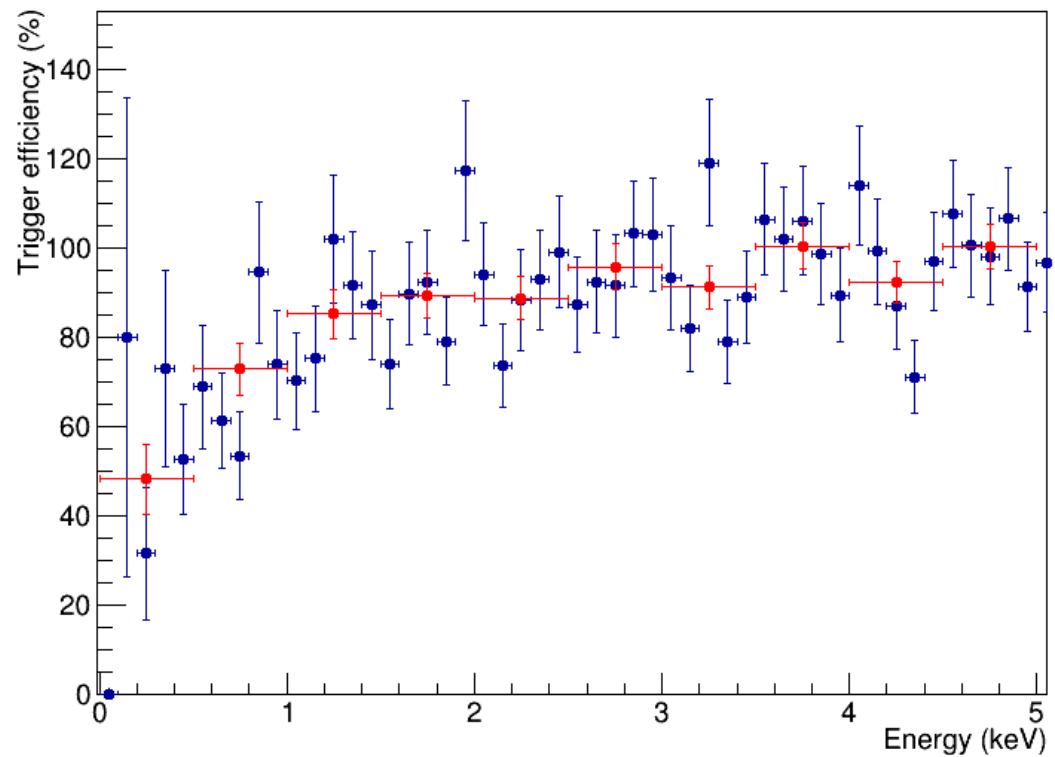
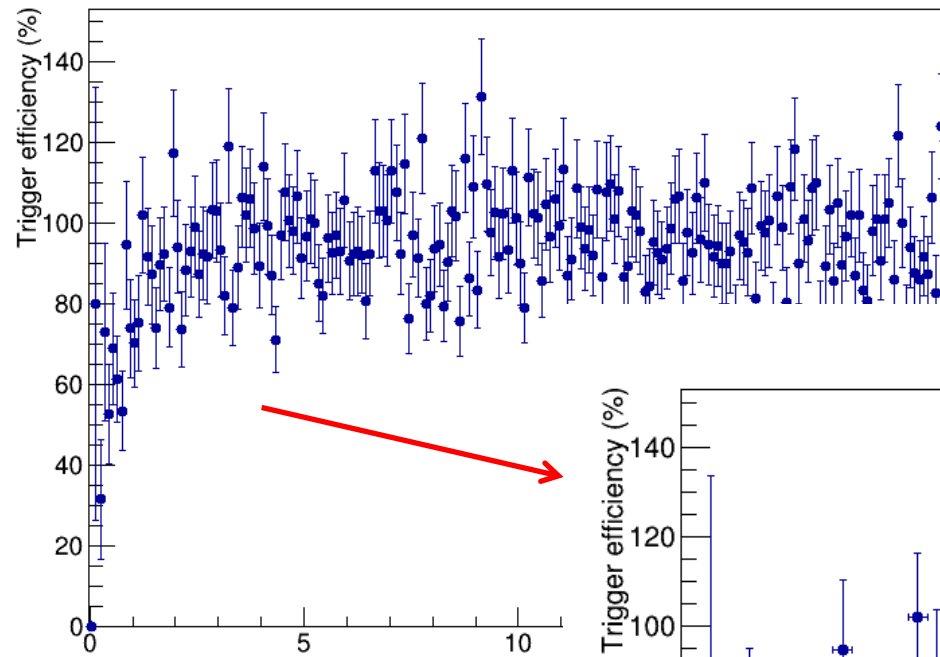
Energy (16 hour data)

Blue : NaI triggered

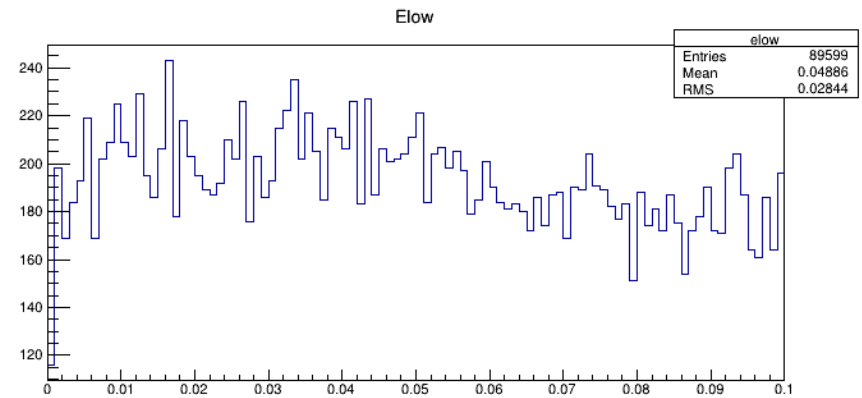
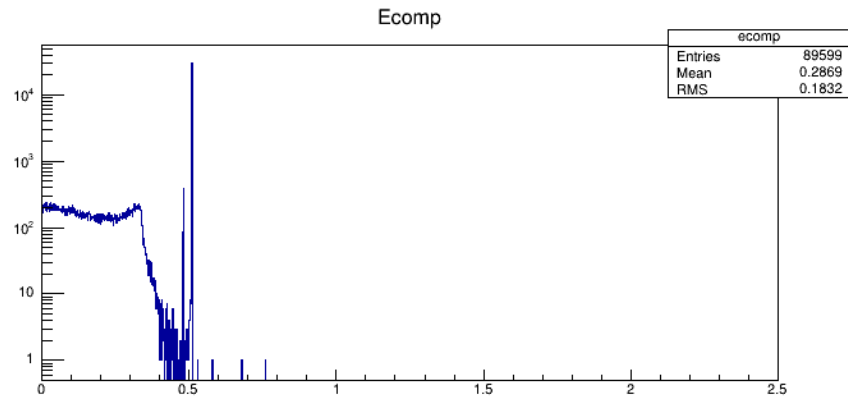
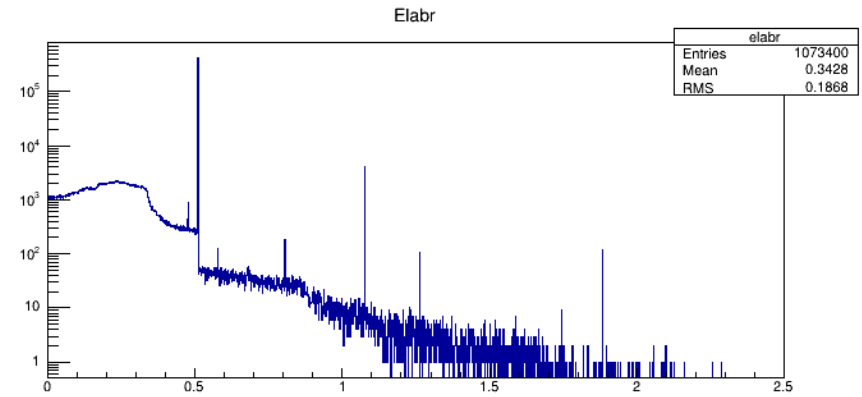
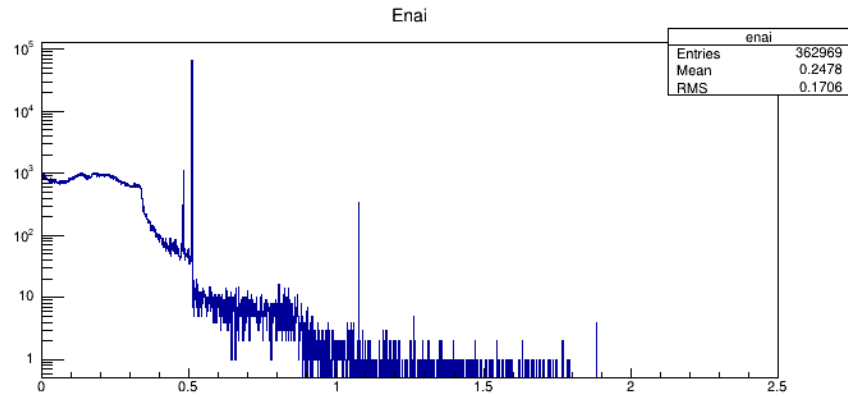
Red : LaBr3 triggered



Trigger efficiency (16 hour data)

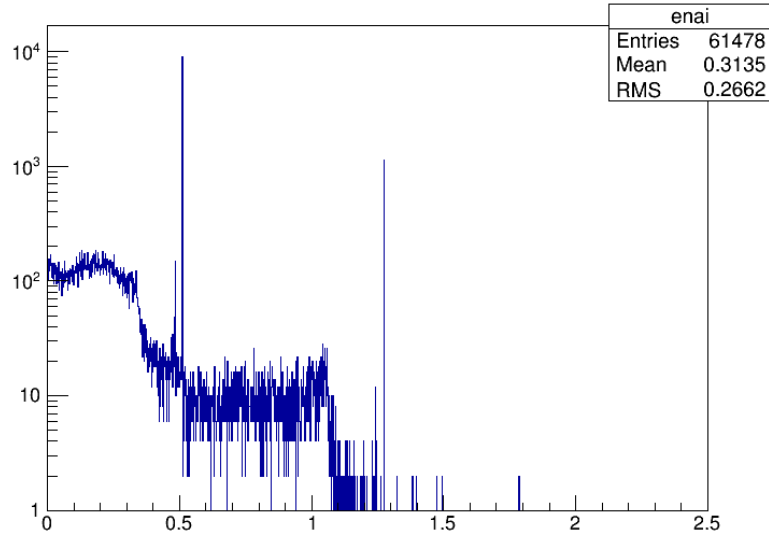


Simulation with Ge68 source

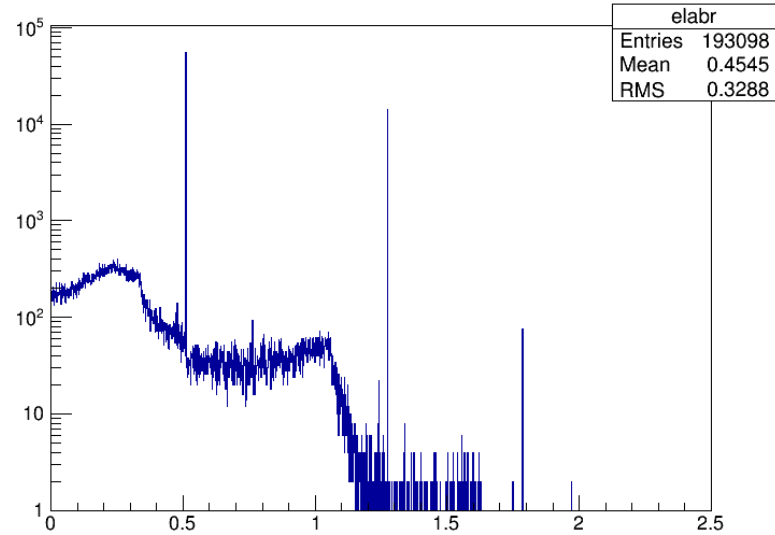


Simulation for trigger efficiency measurement

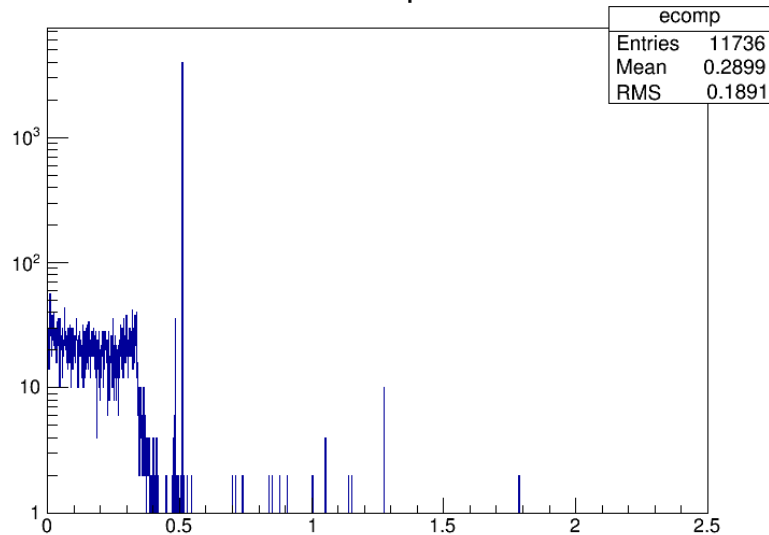
Enai



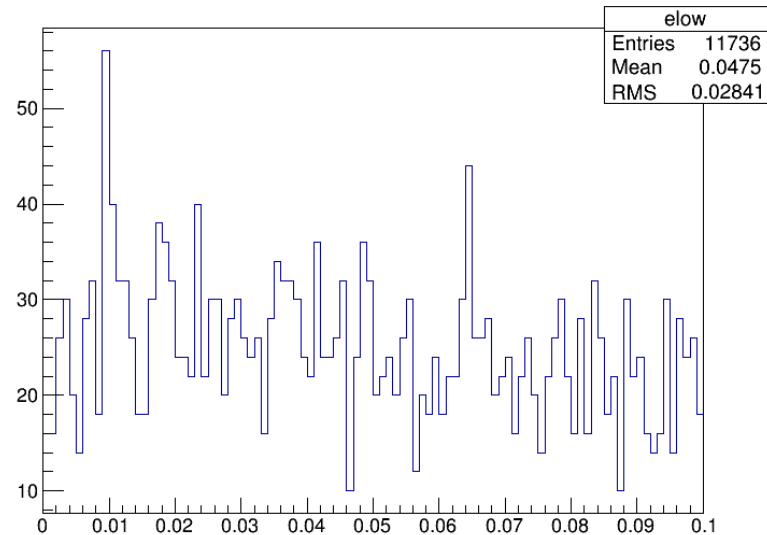
Elabr



Ecomp



Elow



Time difference

Black : Total

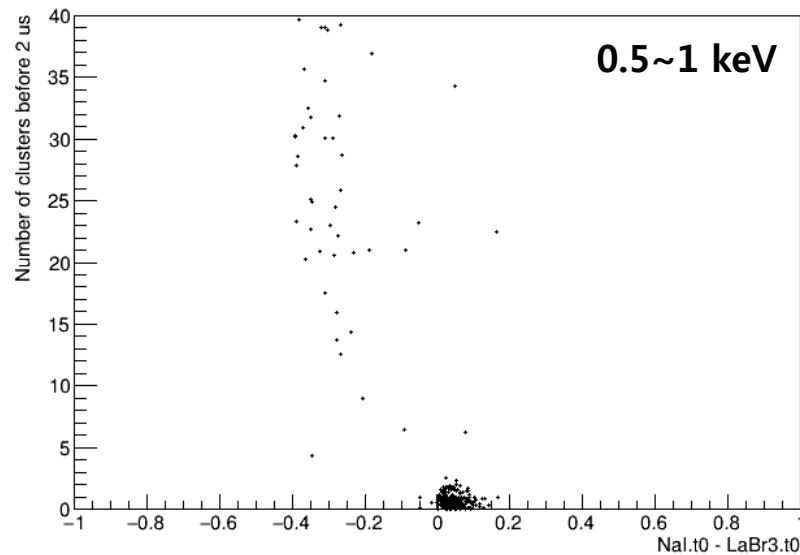
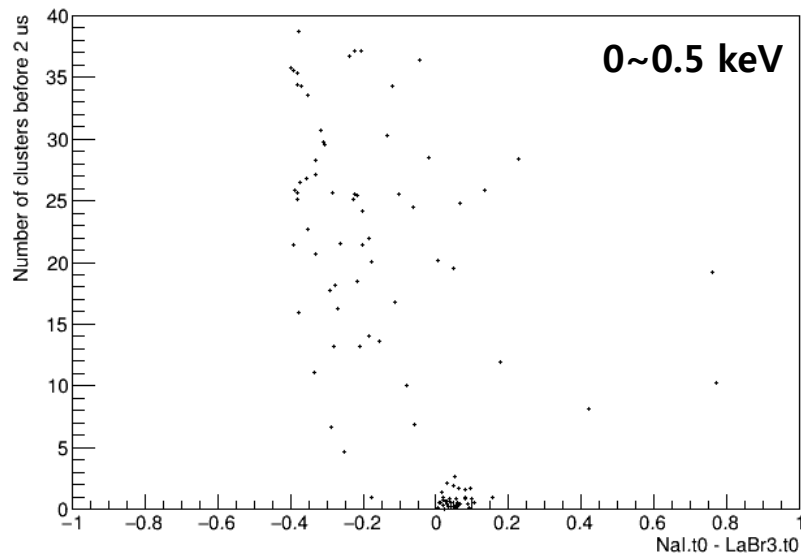
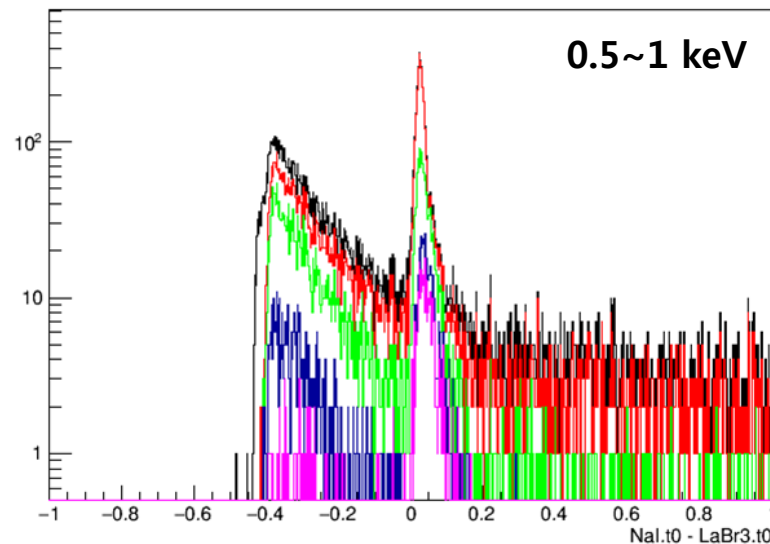
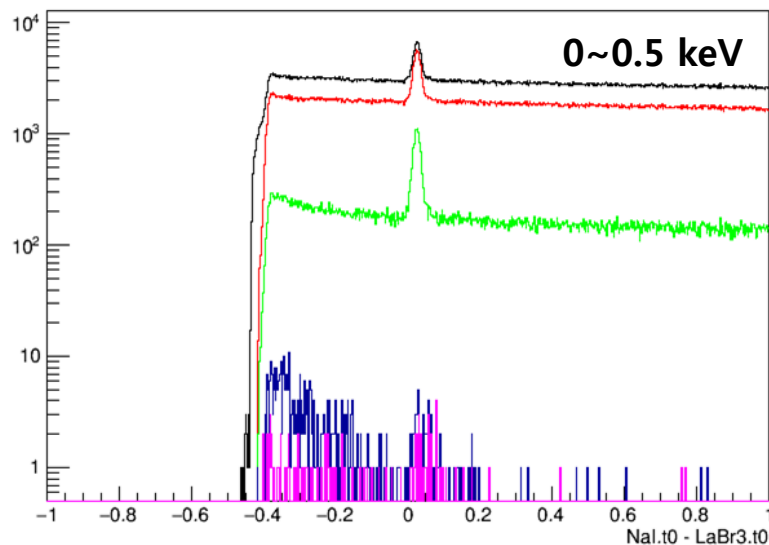
-> Red : Pulse height

-> Green : Asymmetry

-> Blue : DAMA

-> Pink : LaBr3 511 keV peak

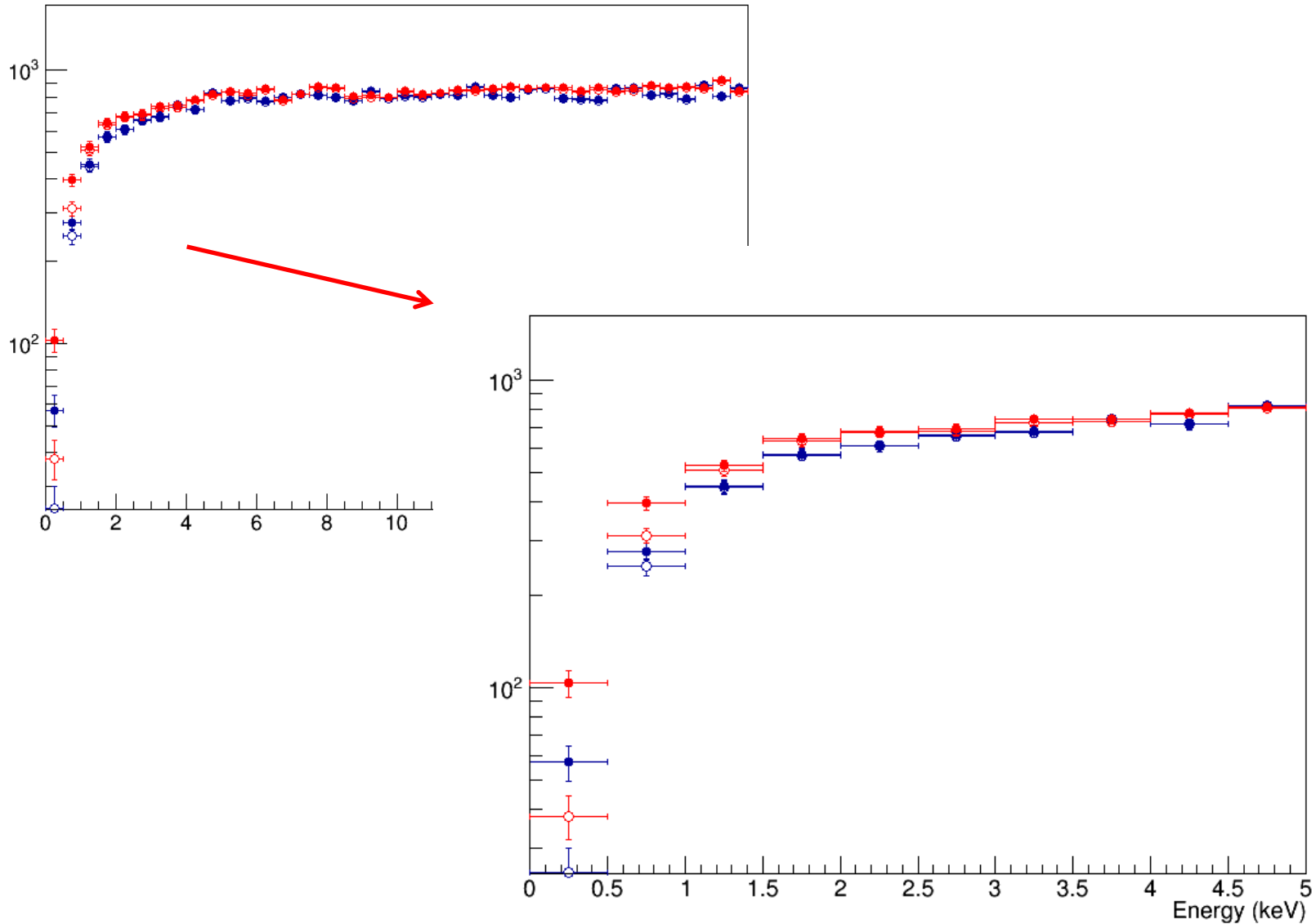
LaBr3 triggered



Energy (16 hour data)

Blue : NaI triggered
Red : LaBr3 triggered

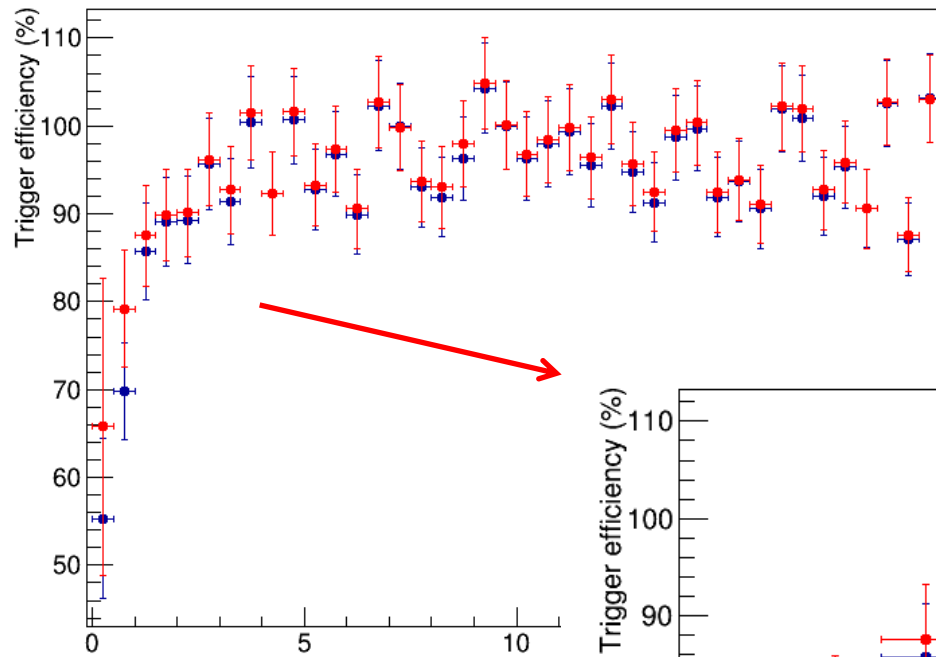
Closed circle : w/o time difference cut
Opened circle : with time difference cut



Trigger efficiency (16 hour data)

Blue : w/o time difference cut

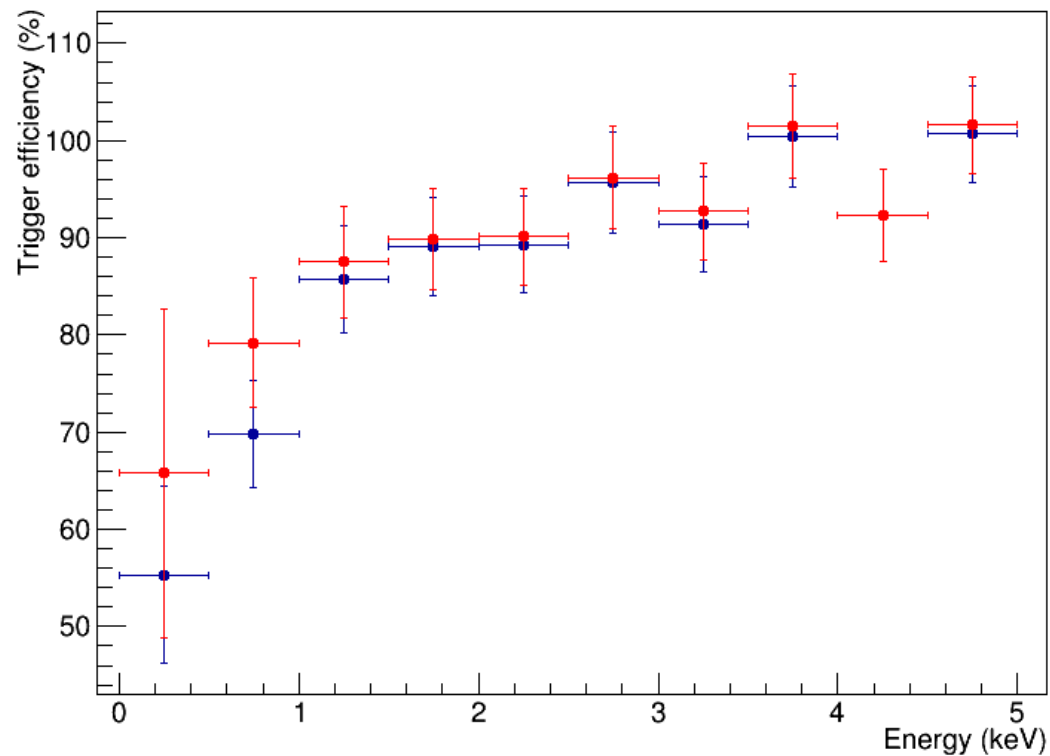
Red : with time difference cut



5~20 keV const. fit

p0 : 96.9 (%)

$\chi^2 / \text{NDF} = 24.9 / 29 = 0.89$



Time difference

Black : Total

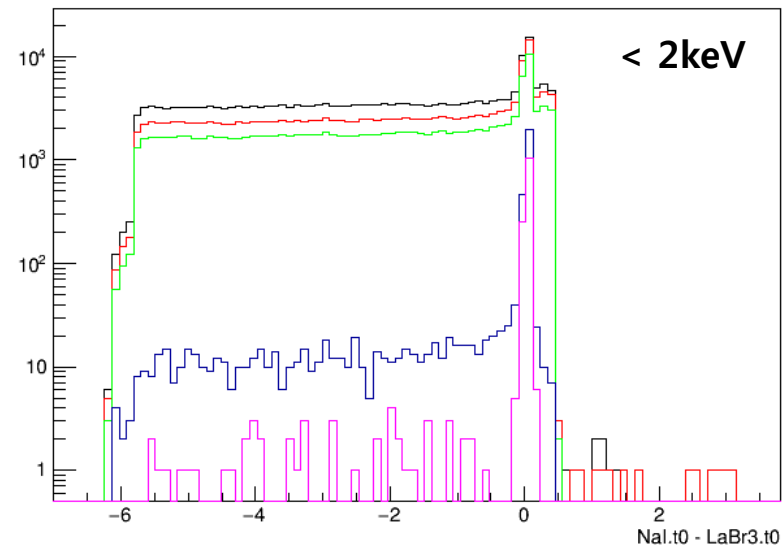
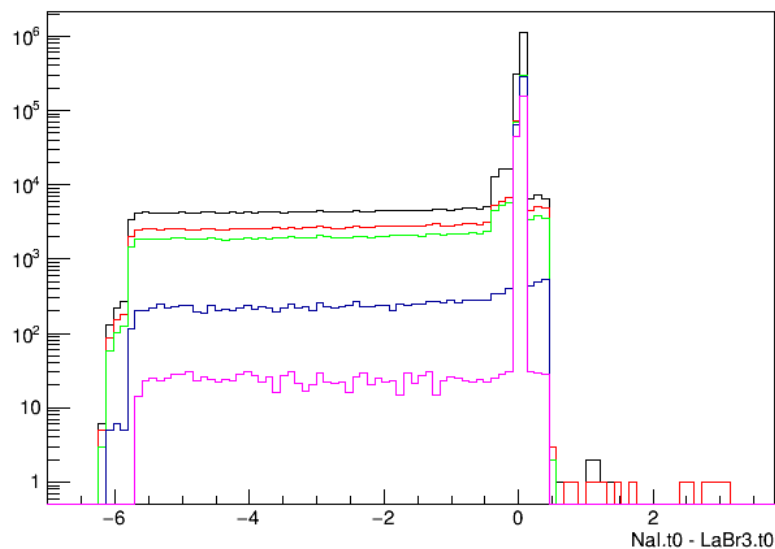
-> Red : Pulse height

-> Green : Asymmetry

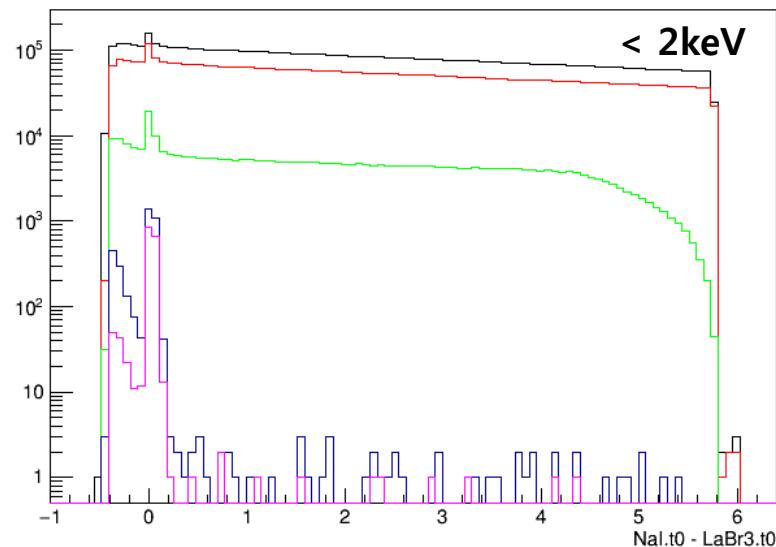
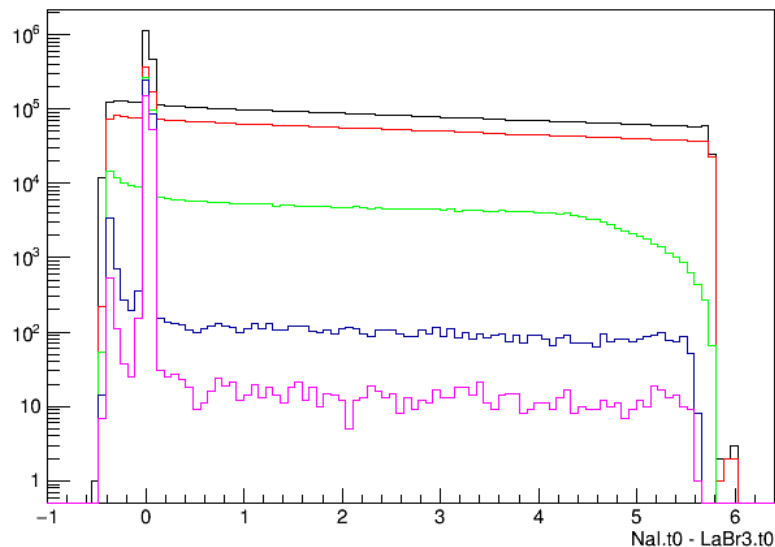
-> Blue : DAMA

-> Pink : LaBr3 511 keV peak

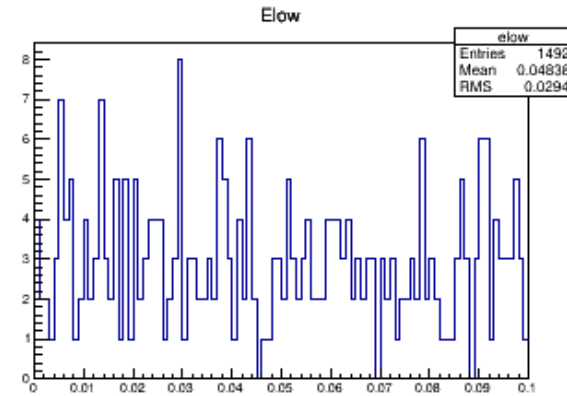
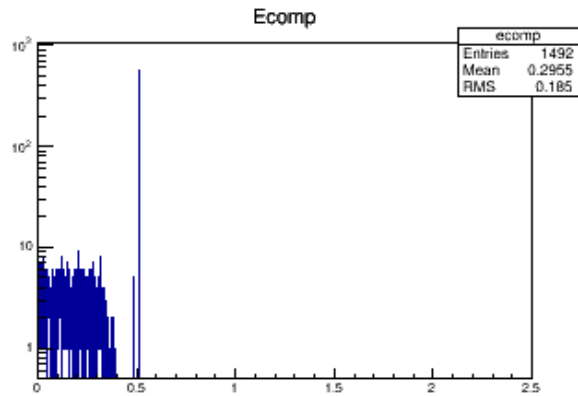
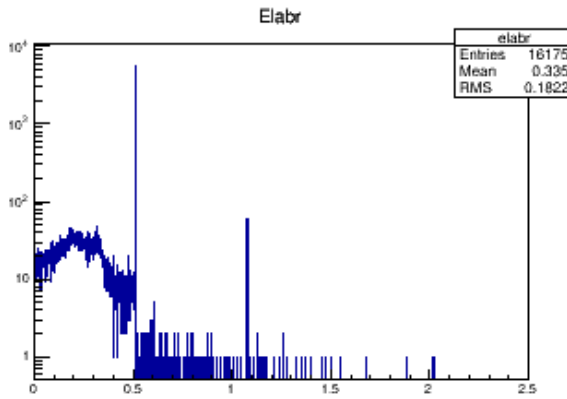
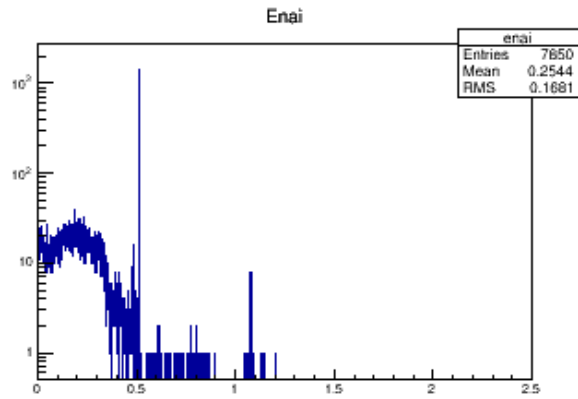
NaI triggered



LaBr3 triggered

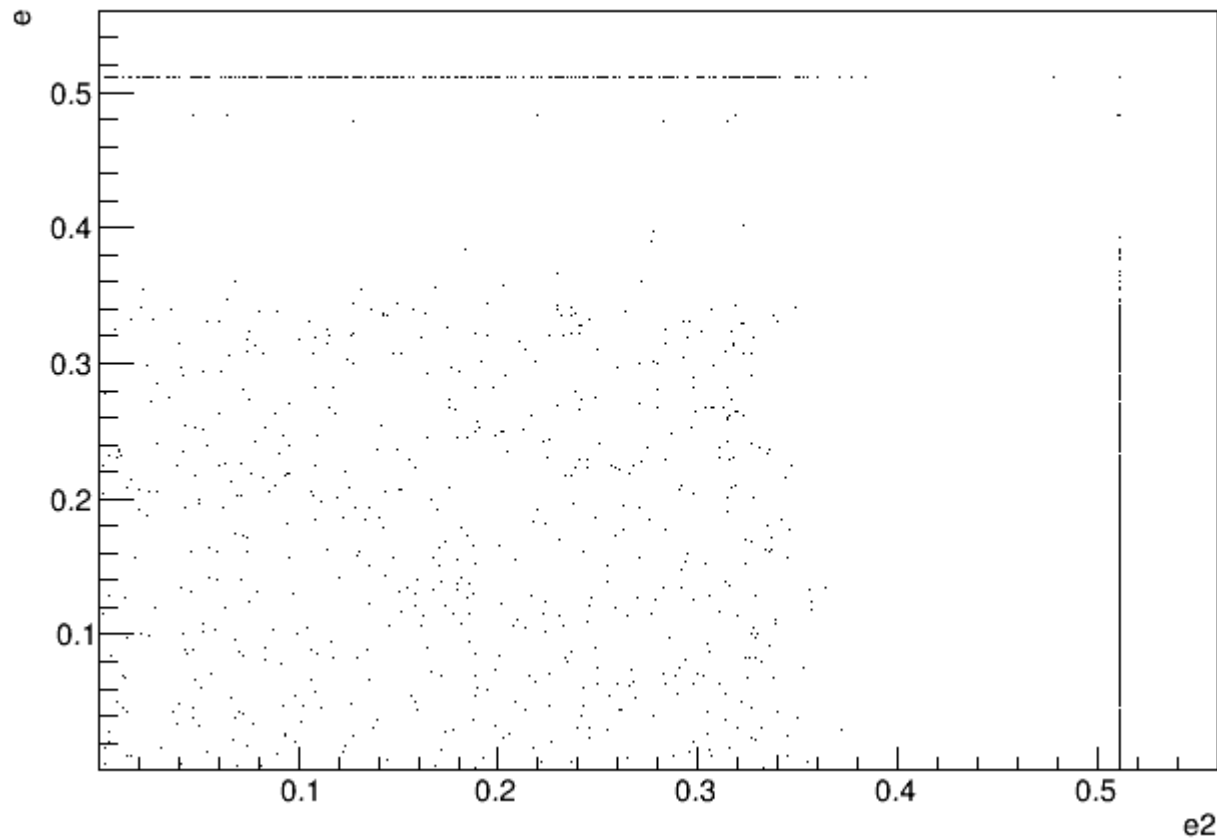


Simulation with Ga68 source

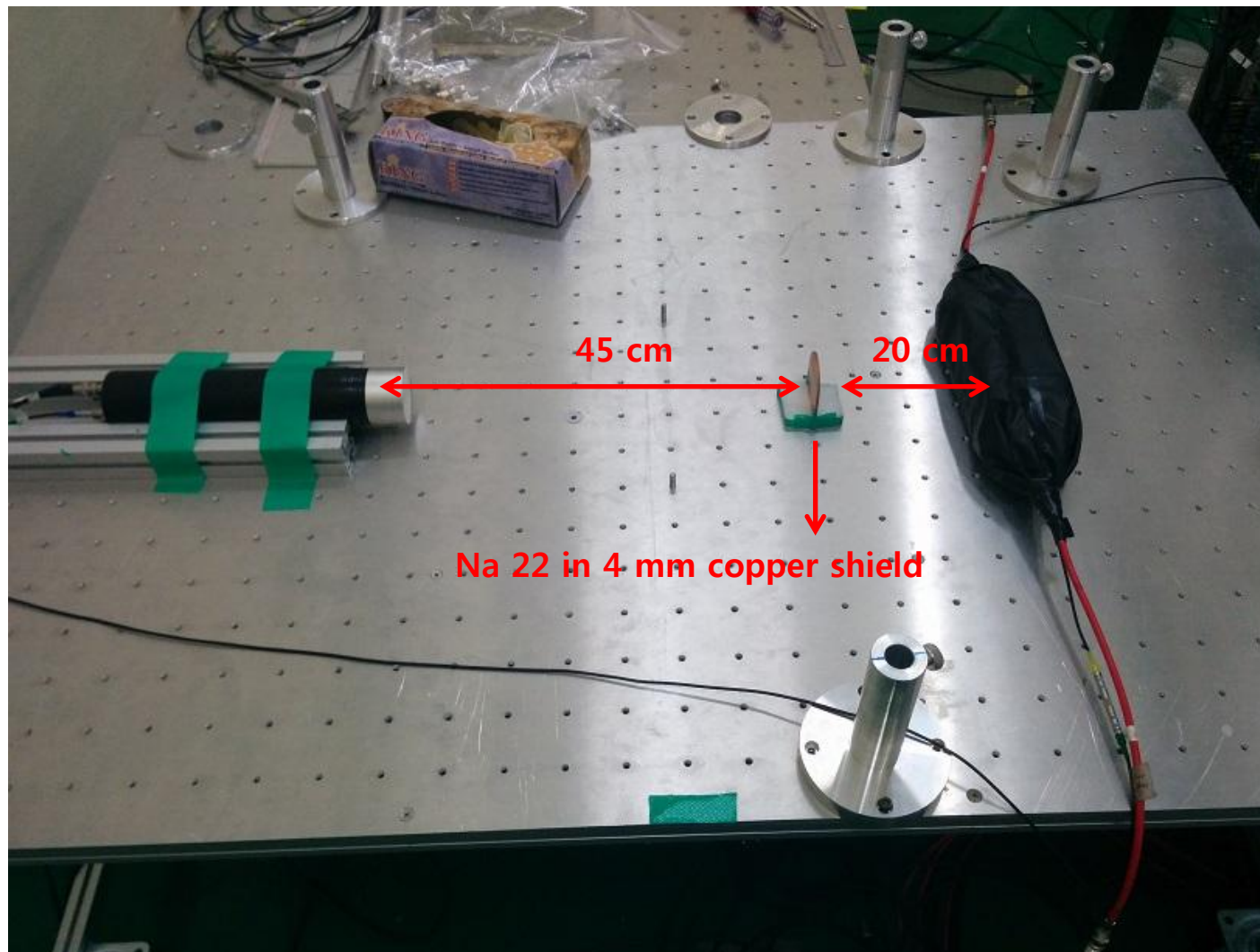


Simulation with Ga68 source

$e:e2 \{e>0 \& \& e2>0\}$



Experimental setup



Trigger condition on NaI : 18.4 h

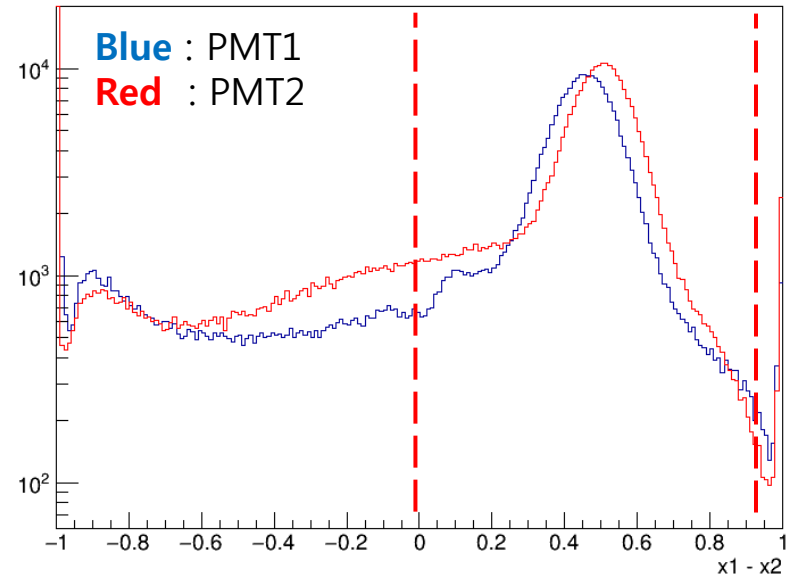
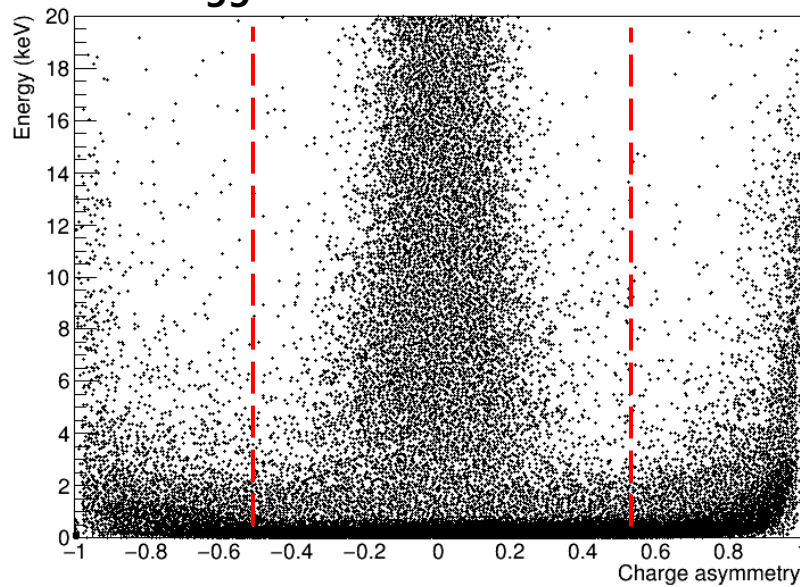
Trigger condition on LaBr3 : 16.2 h

(threshold 15 ch, coincidence 200ns)

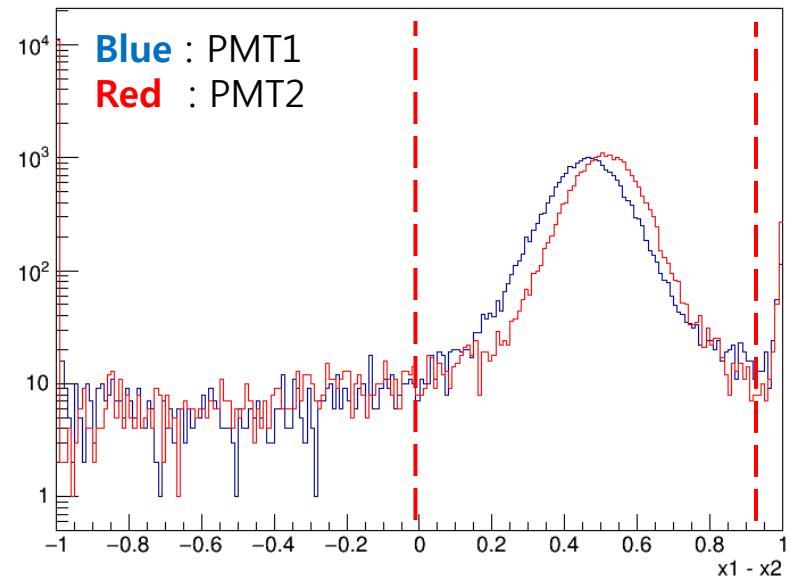
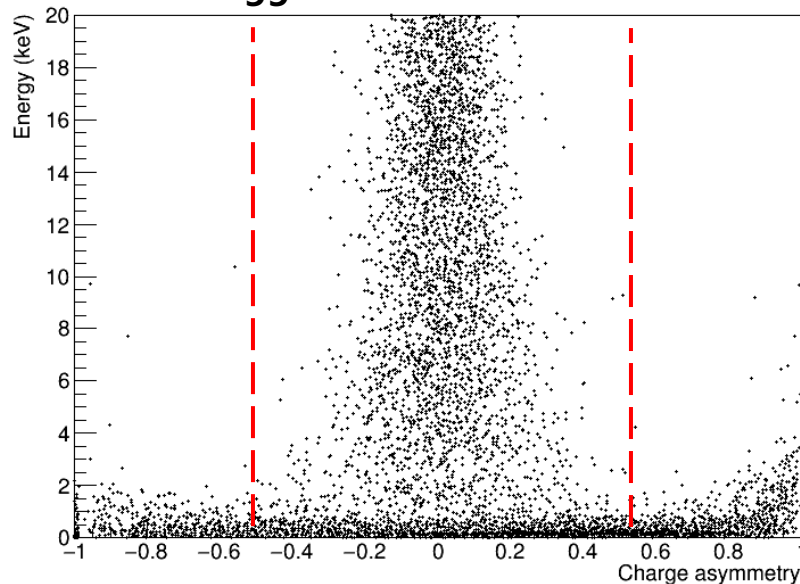
(threshold 200 ch)

Event selection cuts (1 hour data)

NaI triggered

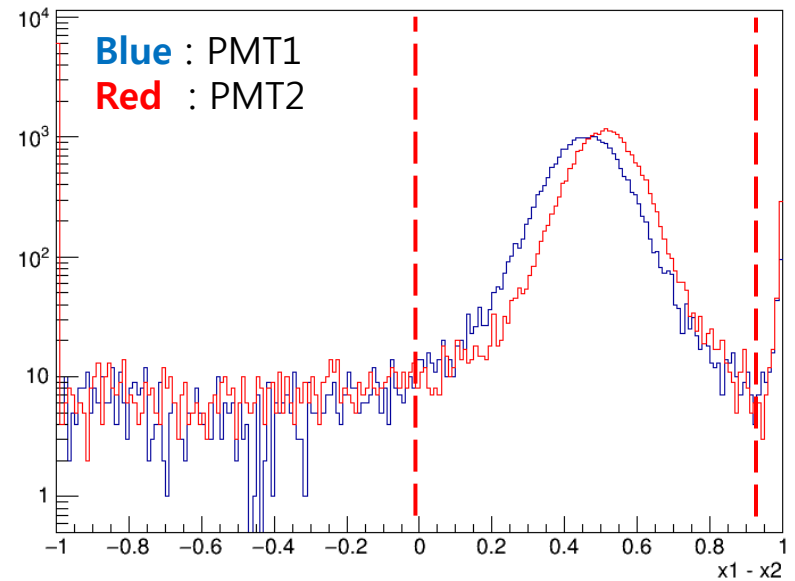
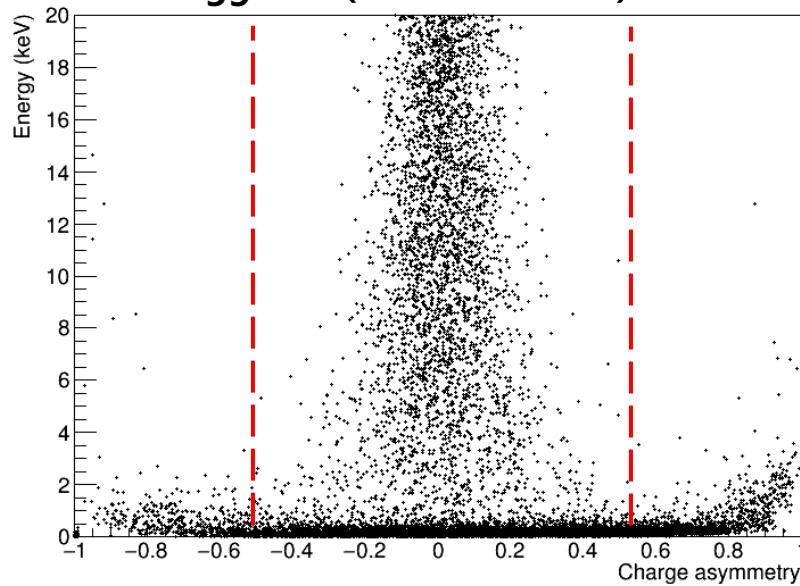


LaBr3 triggered

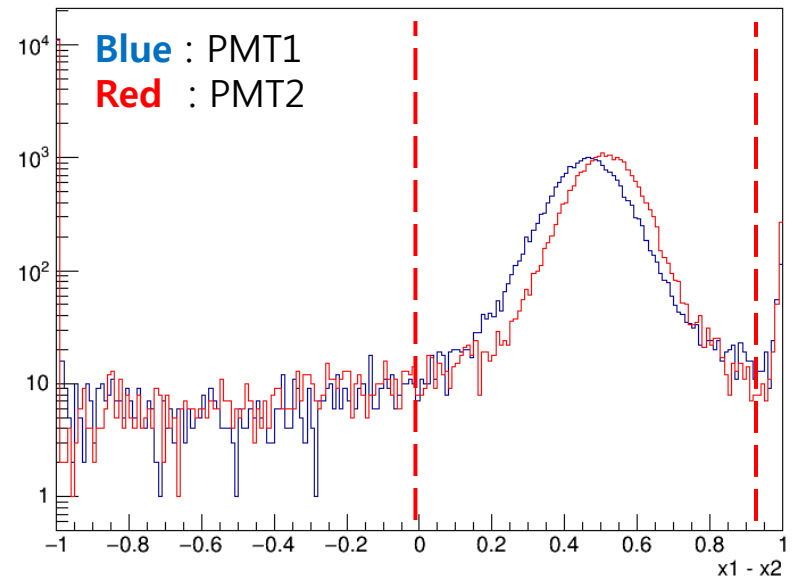
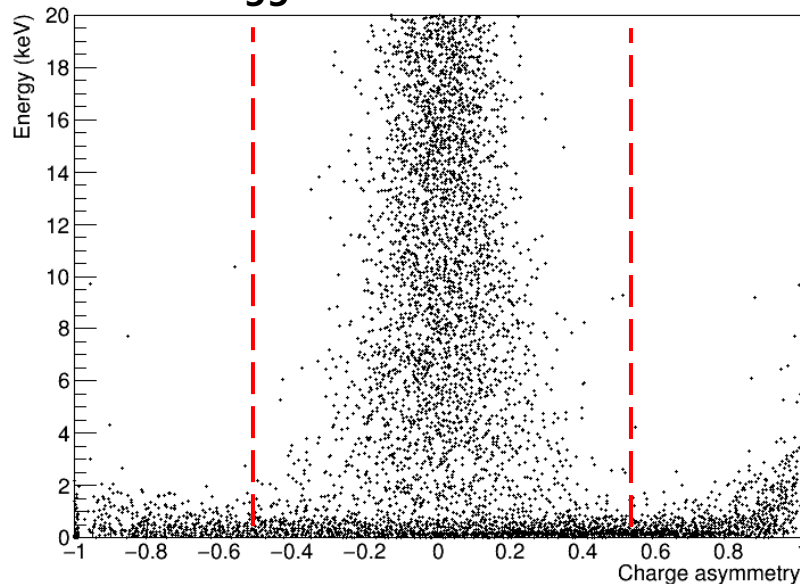


Event selection cuts (1 hour data)

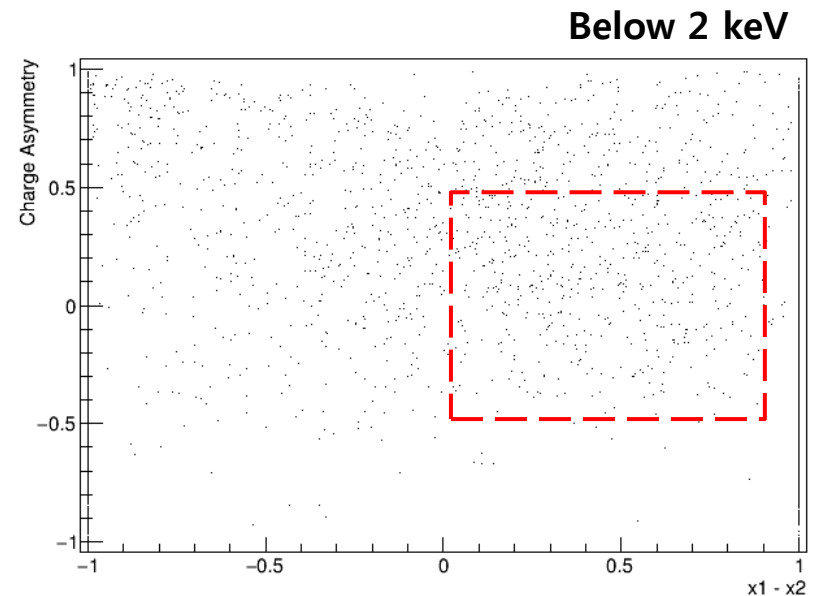
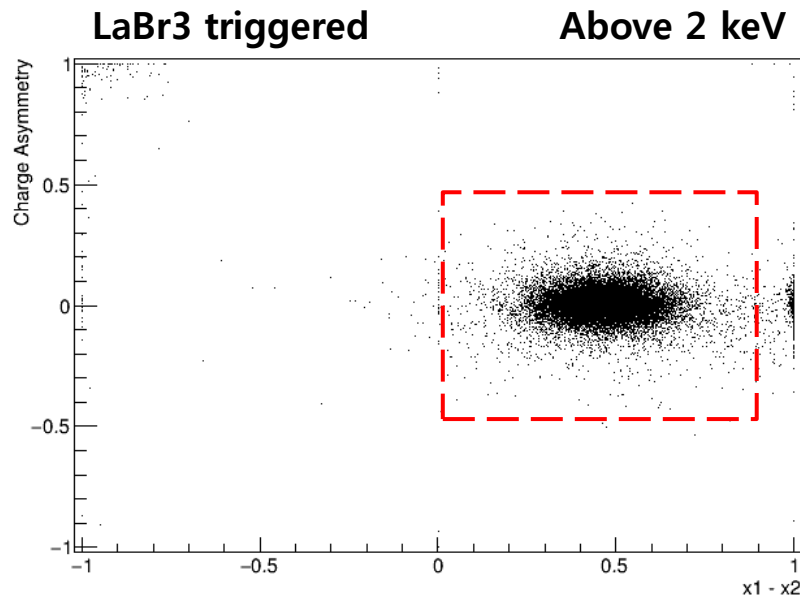
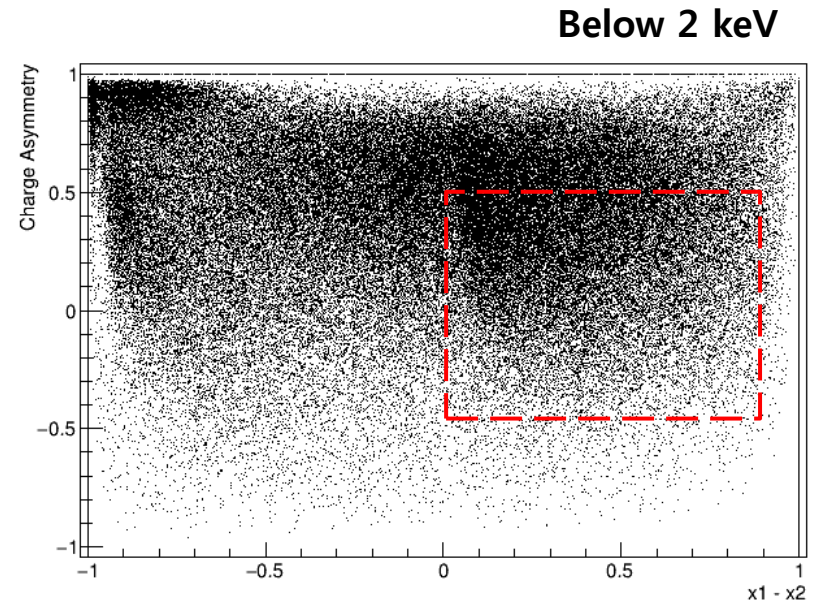
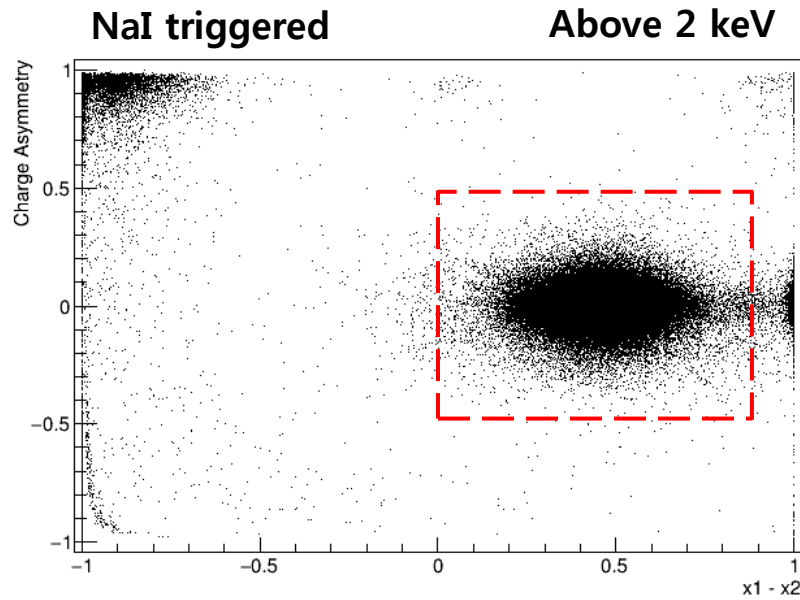
NaI triggered (+ LaBr3.t0 > 0)



LaBr3 triggered

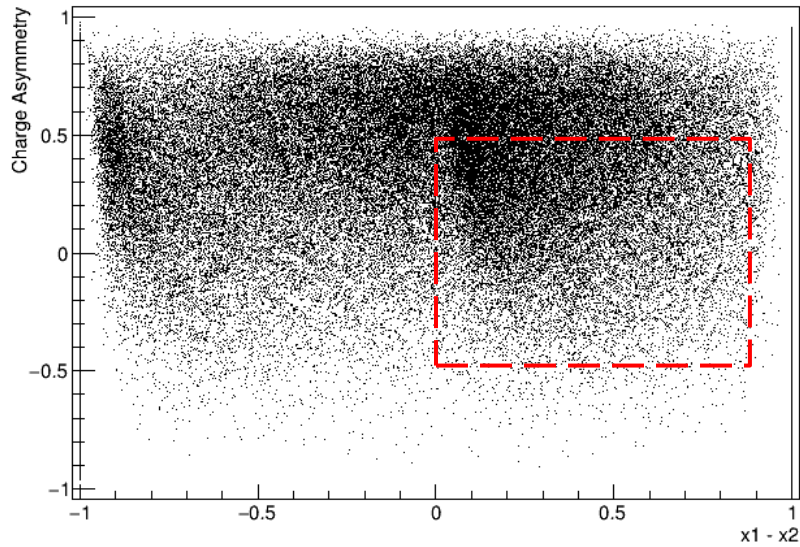


Event selection cuts (1 hour data)

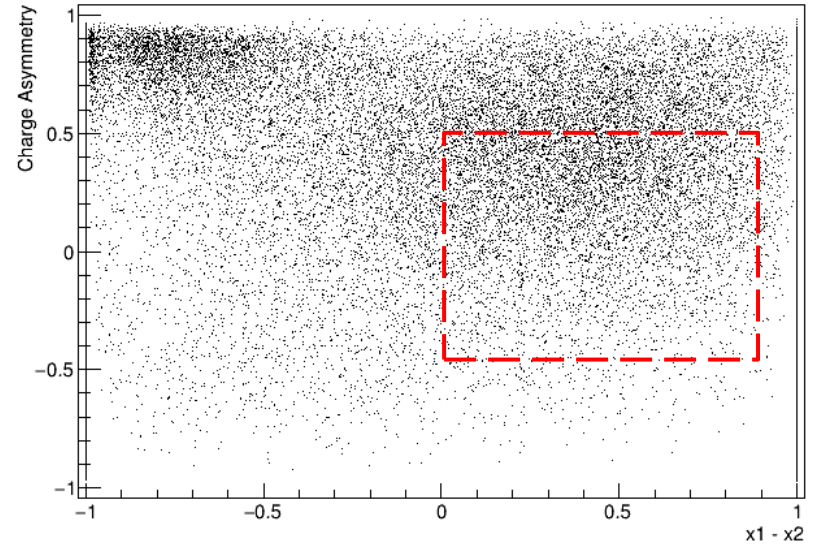


Event selection cuts (1 hour data)

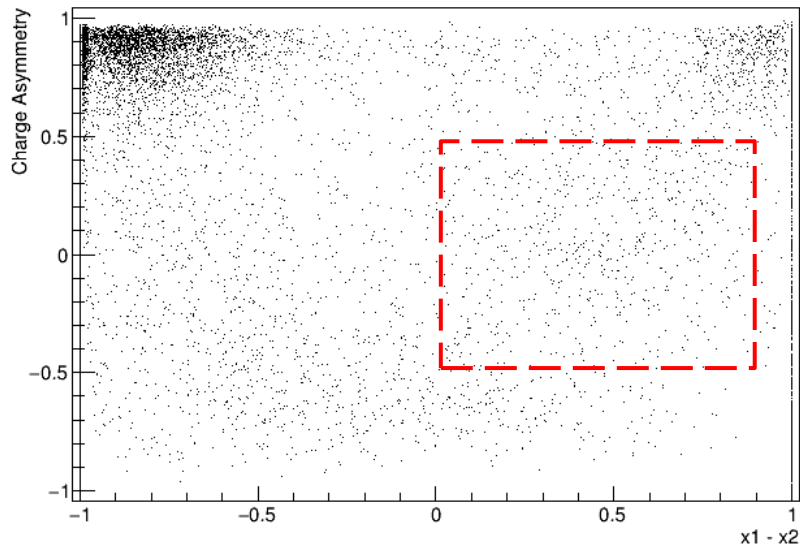
0~0.5 keV



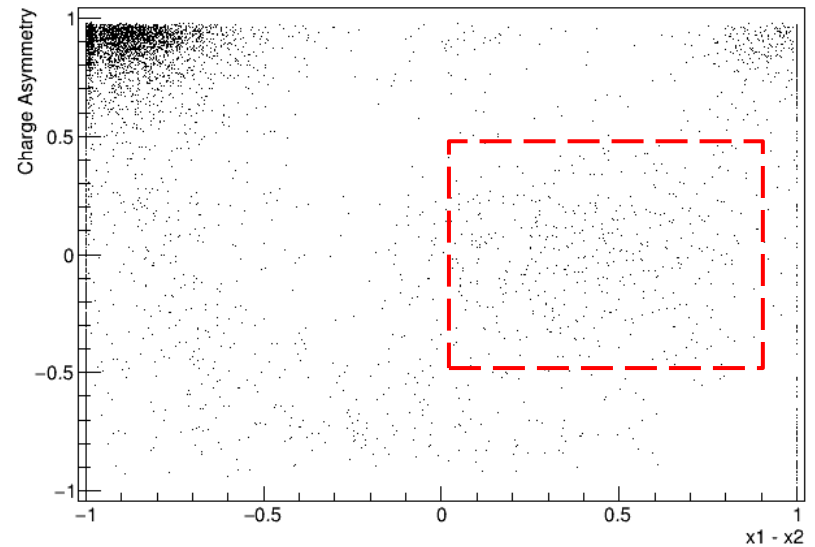
0.5~1 keV



1~1.5 keV

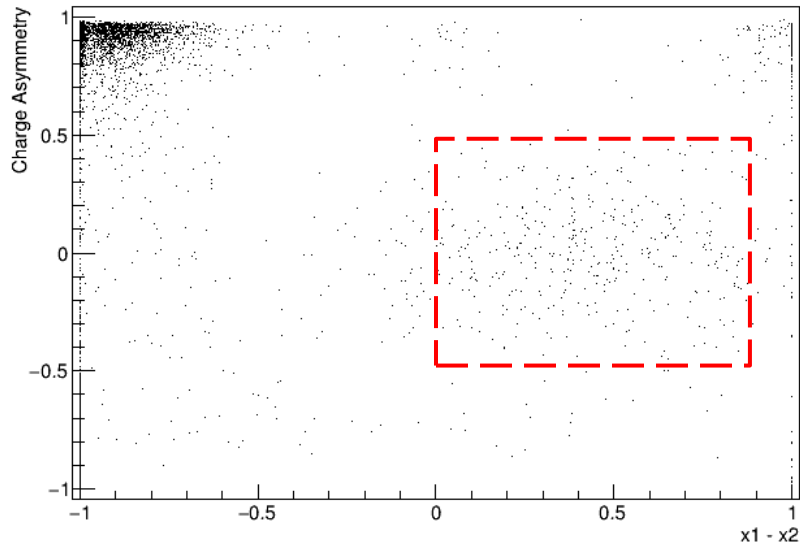


1.5~2 keV

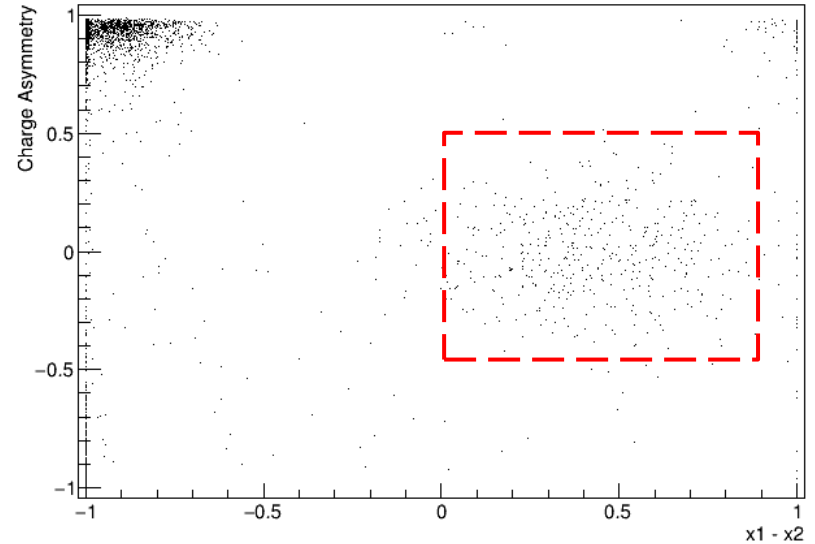


Event selection cuts (1 hour data)

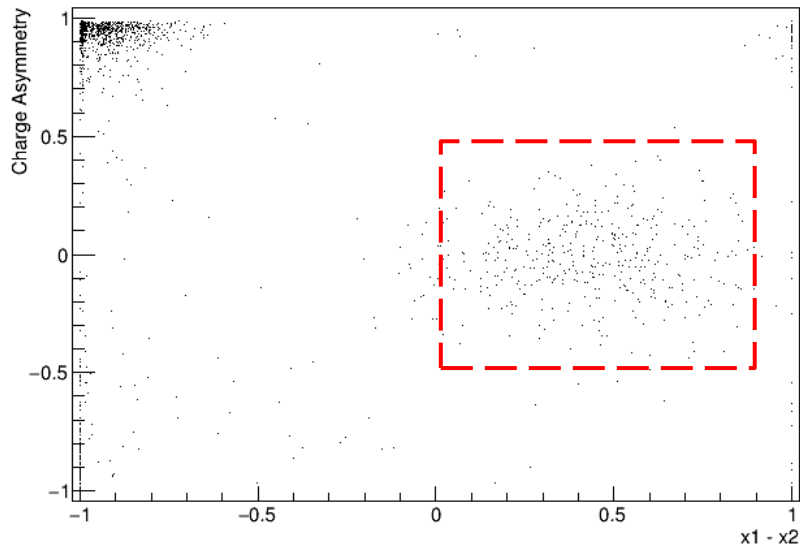
2~2.5 keV



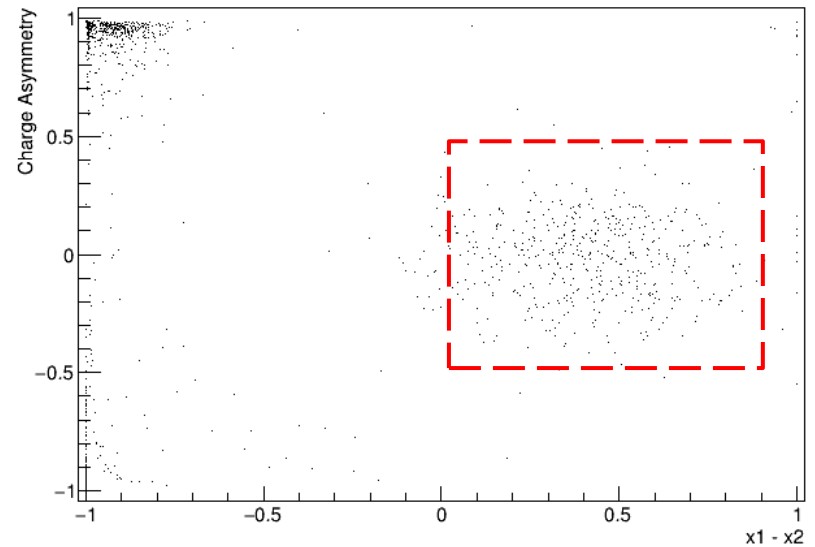
2.5~3 keV



3~3.5 keV



3.5~4 keV



Energy (1 hour data)

Black : Total

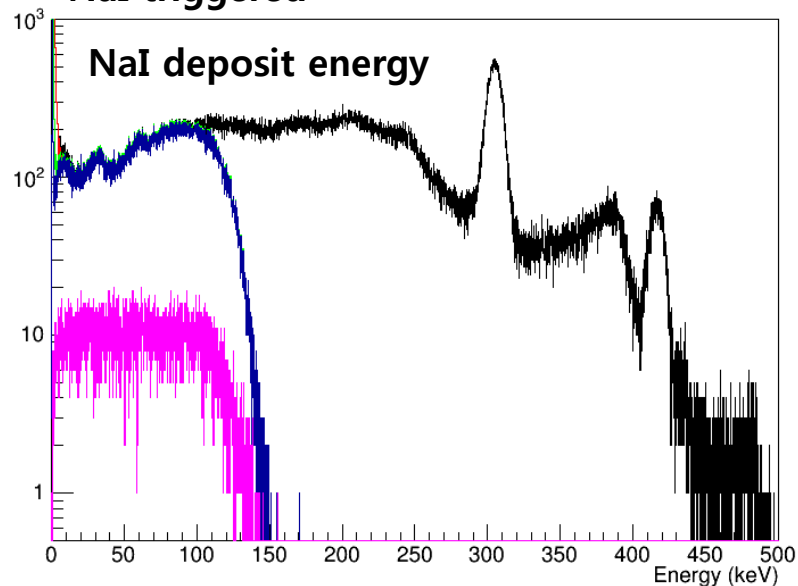
-> Red : Pulse height

-> Green : Asymmetry

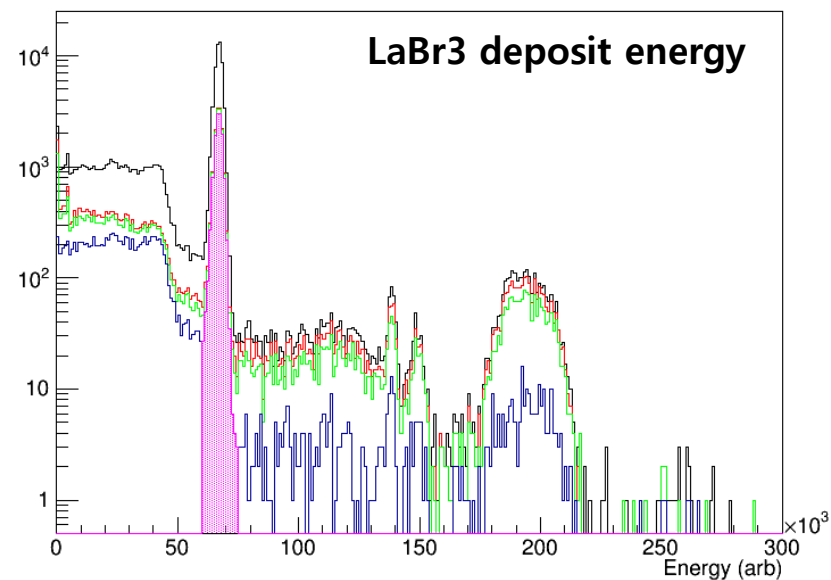
-> Blue : DAMA

-> Pink : LaBr3 511 keV peak

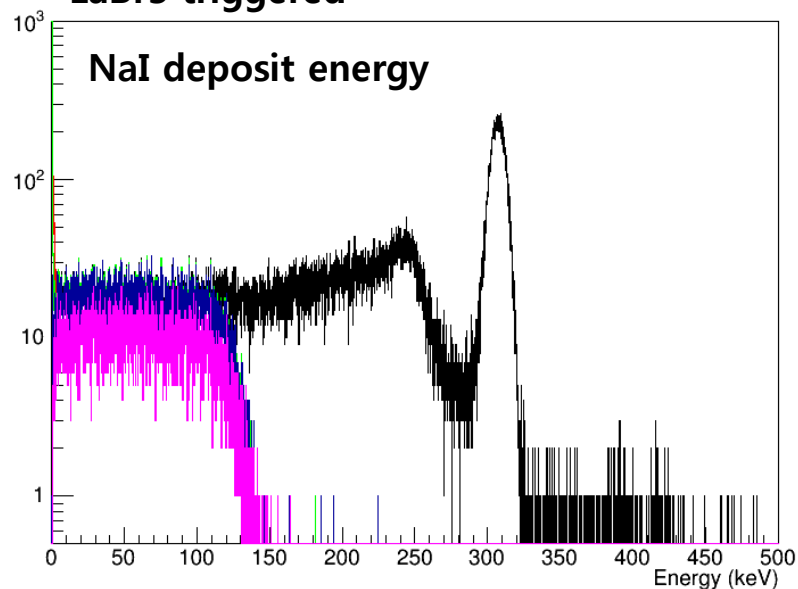
NaI triggered



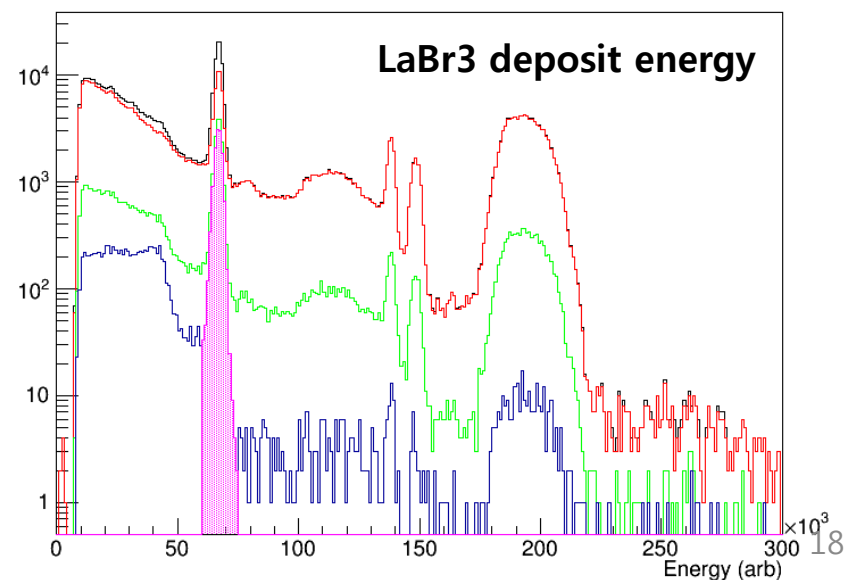
LaBr3 deposit energy



LaBr3 triggered



LaBr3 deposit energy



Energy (1 hour data)

Black : Total

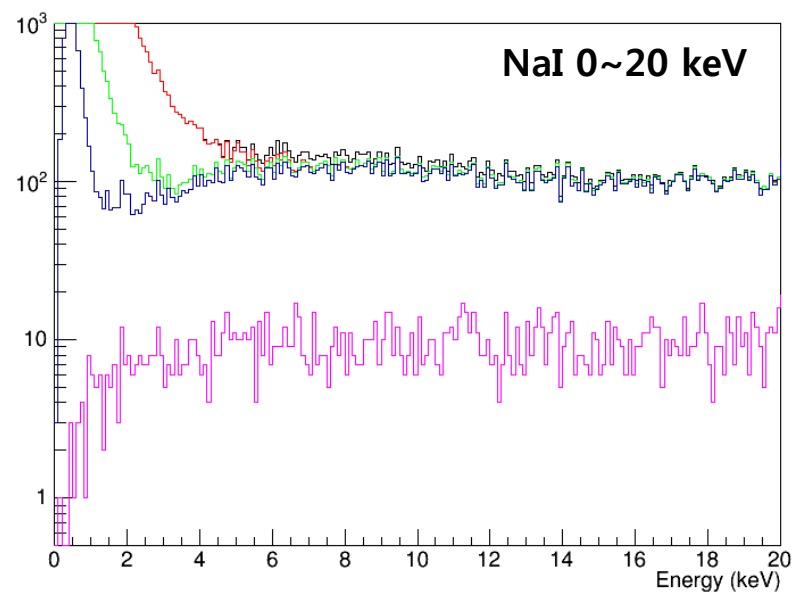
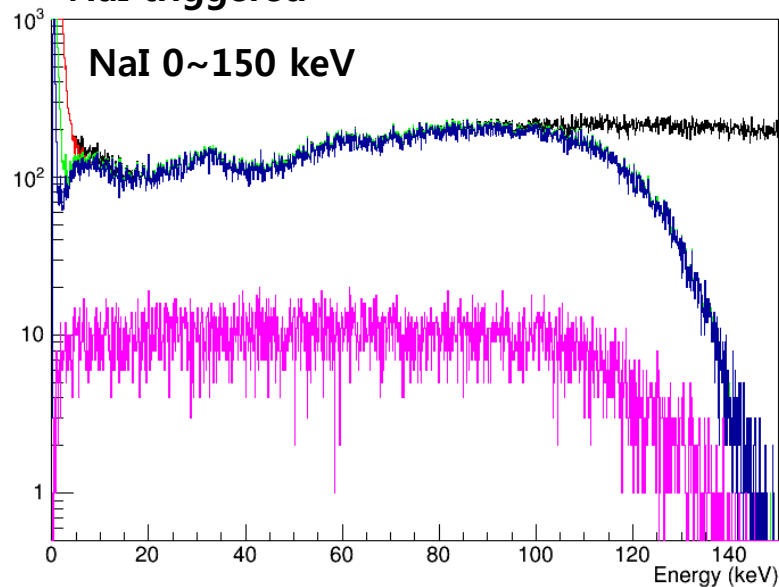
-> Red : Pulse height

-> Green : Asymmetry

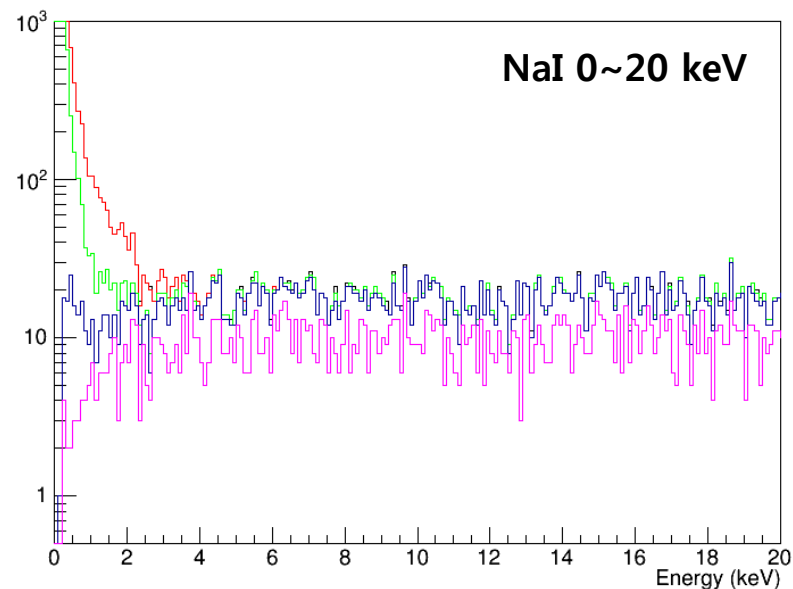
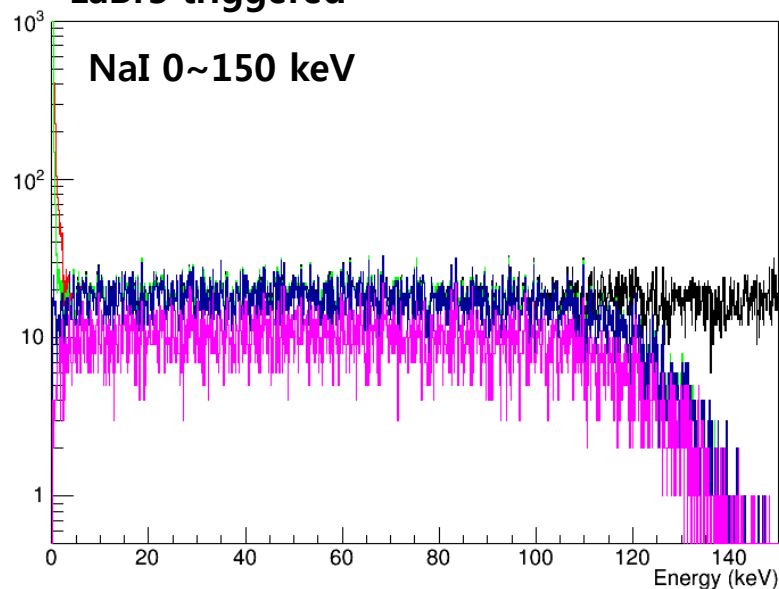
-> Blue : DAMA

-> Pink : LaBr3 511 keV peak

NaI triggered



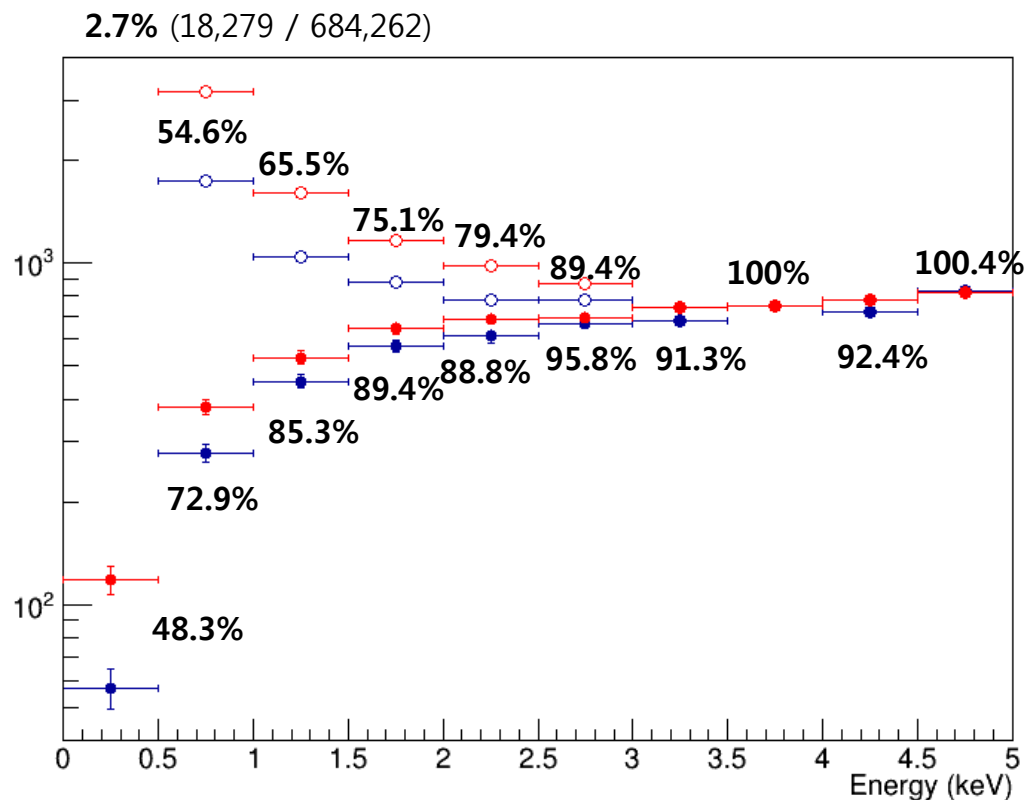
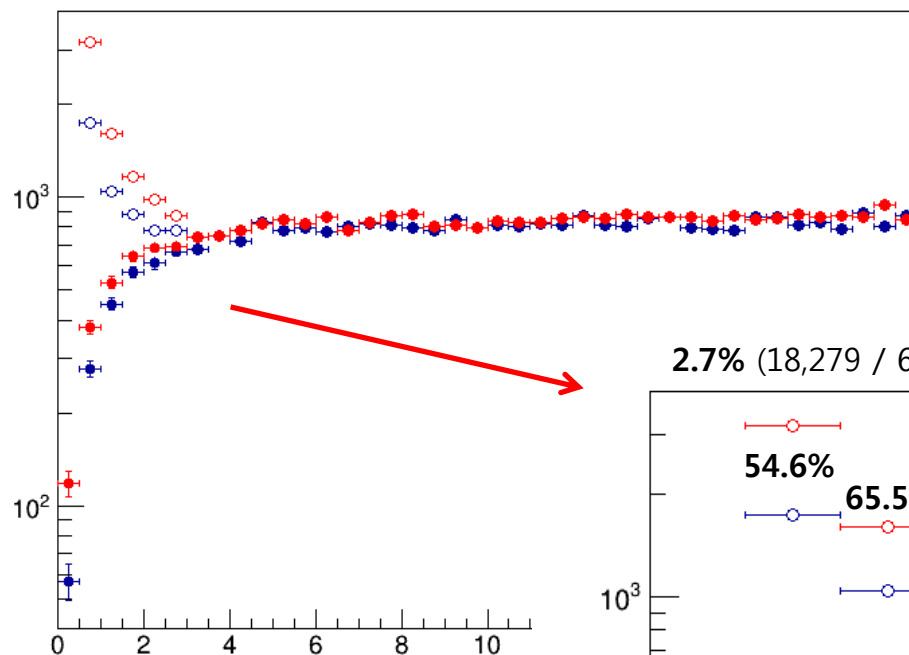
LaBr3 triggered



Energy (16 hour data)

Blue : NaI triggered
Red : LaBr3 triggered

Closed circle : with DAMA / Asymmetry
Opened circle : w/o DAMA / Asymmetry ($\leq 3\text{keV}$)



Time difference

Black : Total

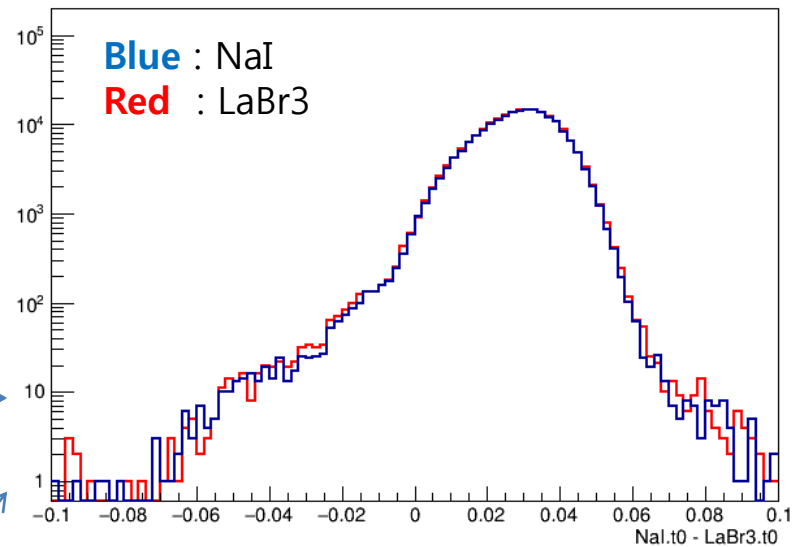
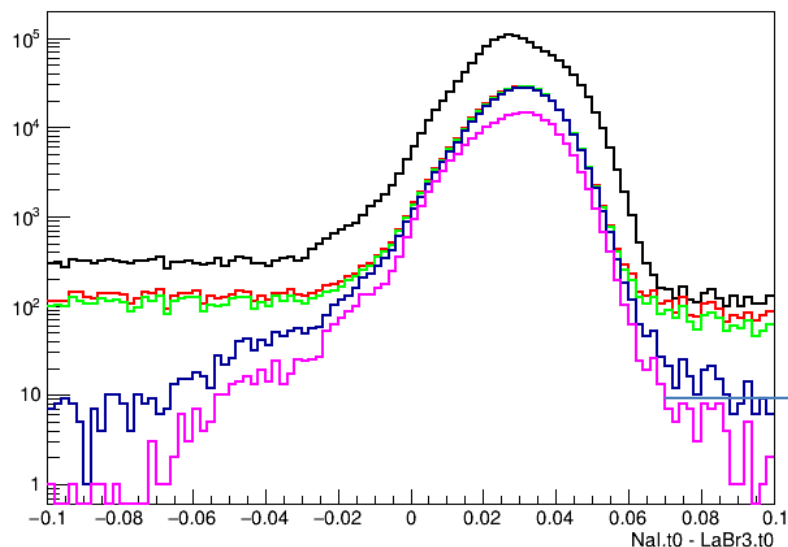
-> Red : Pulse height

-> Green : Asymmetry

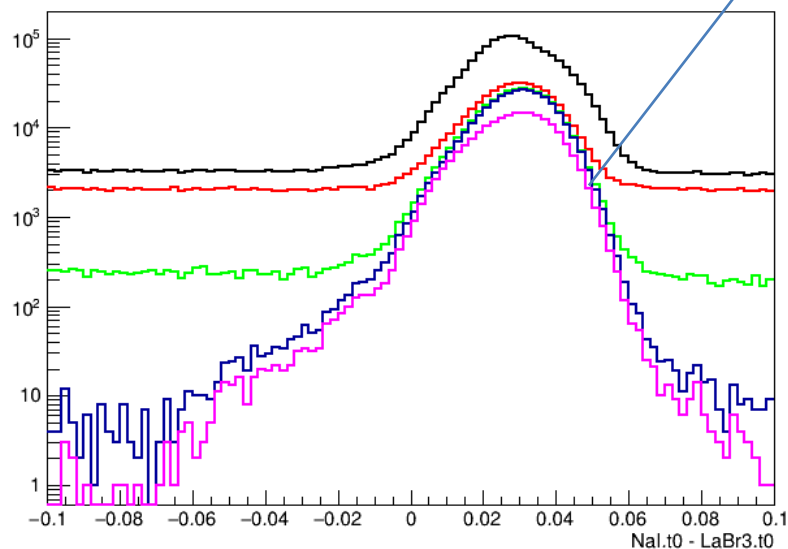
-> Blue : DAMA

-> Pink : LaBr3 511 keV peak

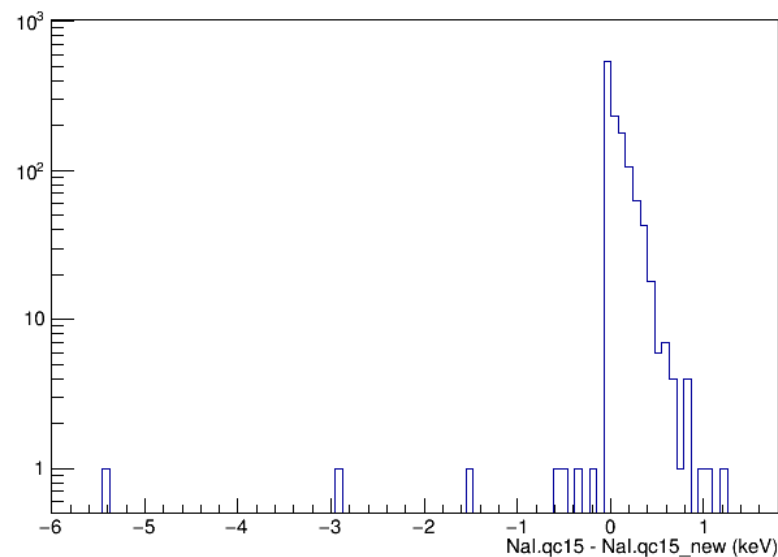
NaI triggered



LaBr3 triggered



Energy difference



Energy (16 hour data)

Blue : NaI triggered
Red : LaBr3 triggered

Closed circle : qc15
Opened circle : qc15_new
(charge sum from LaBr3 timing)

