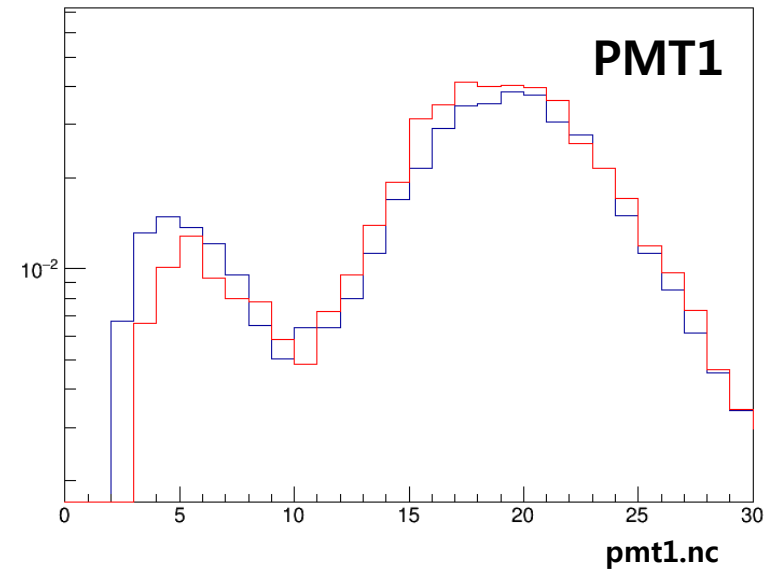
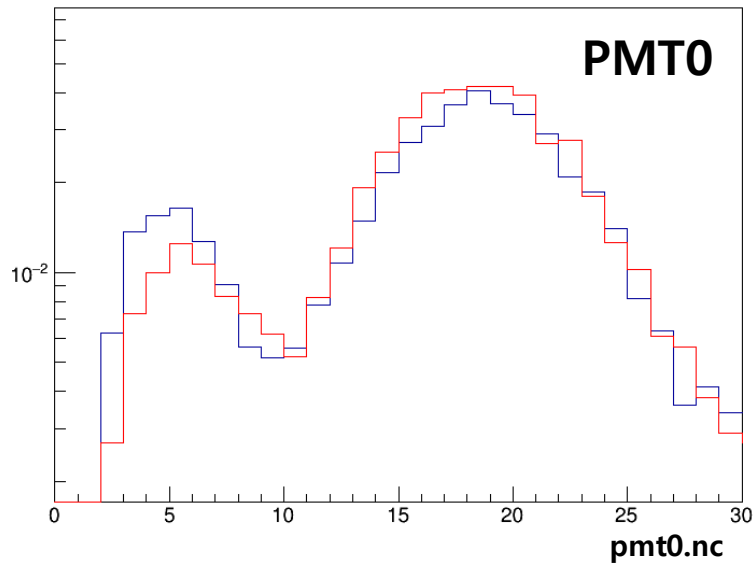
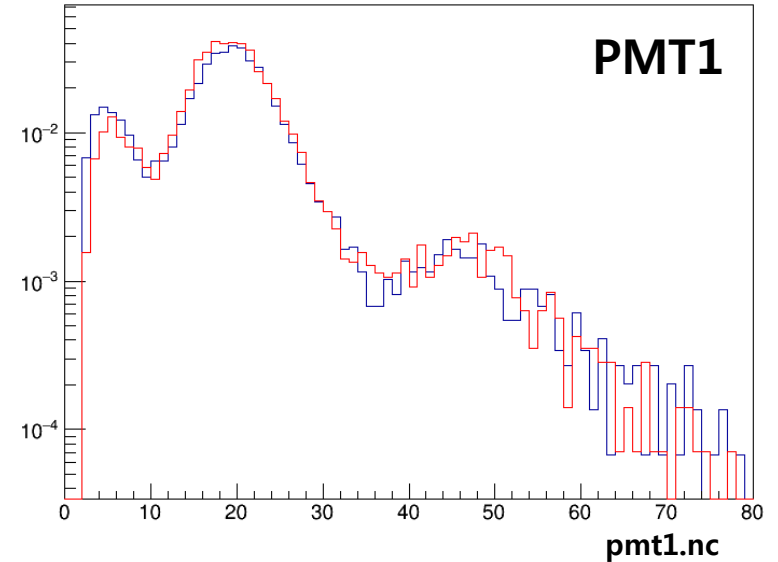
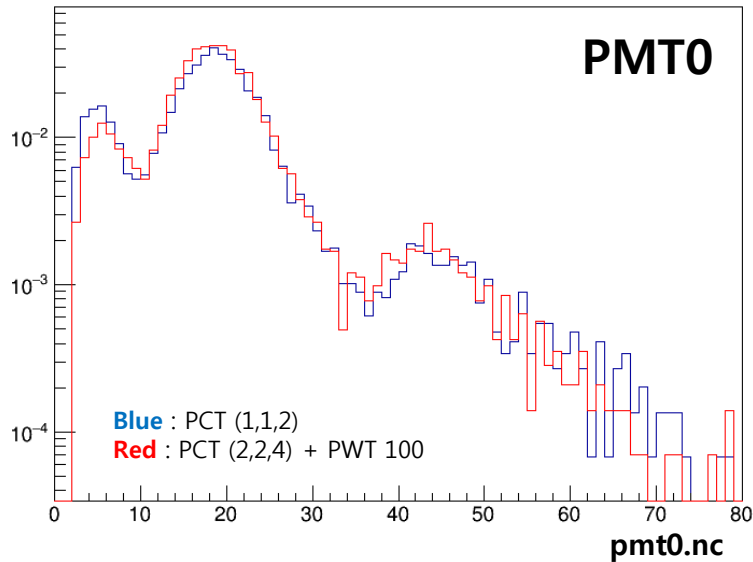
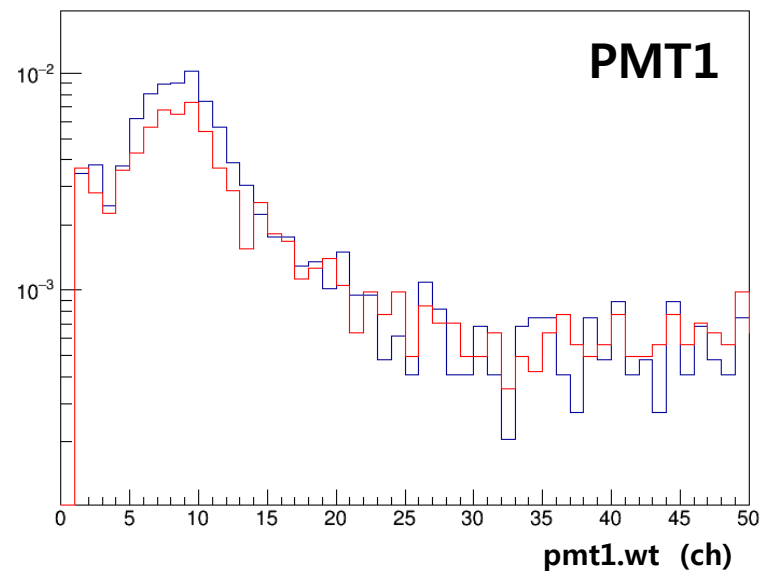
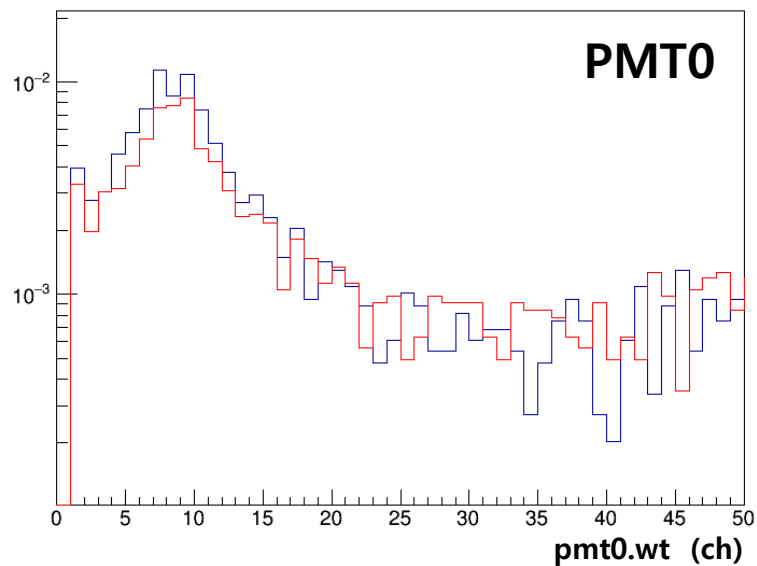
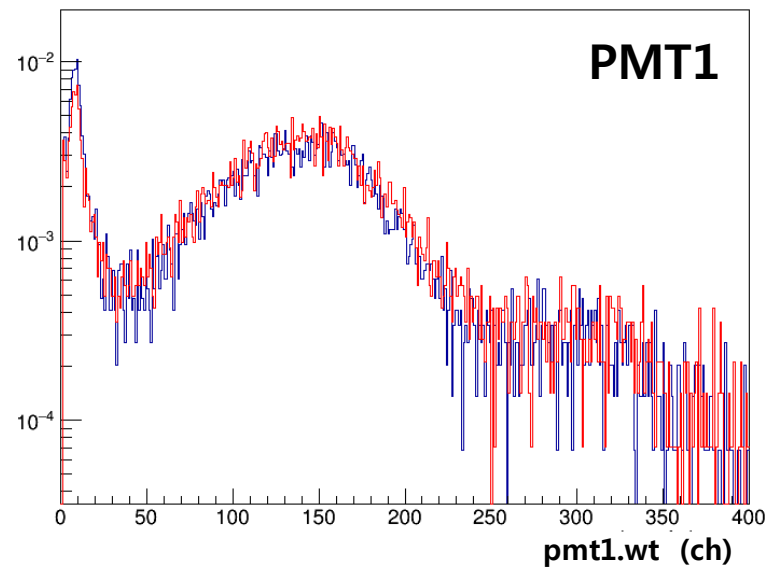
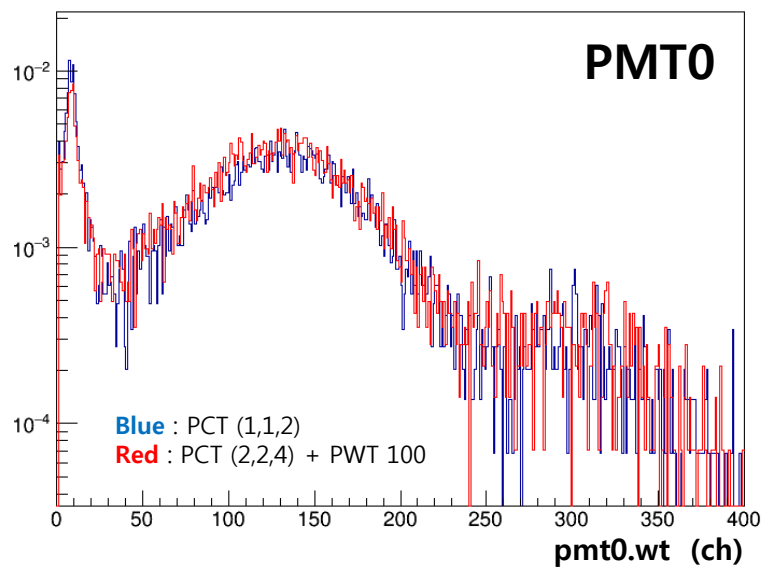


Number of clusters



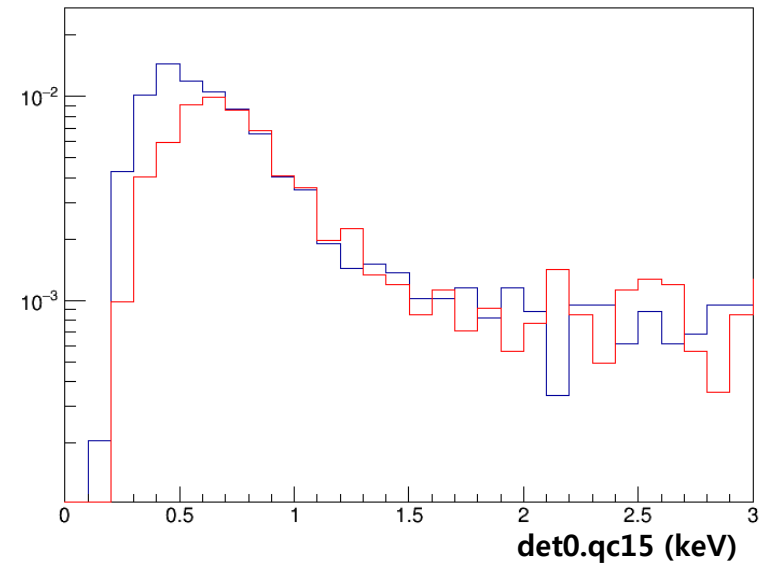
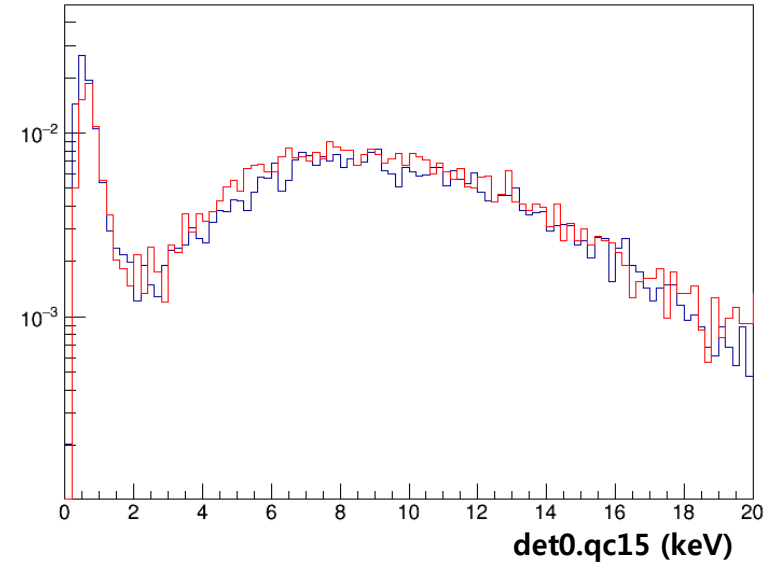
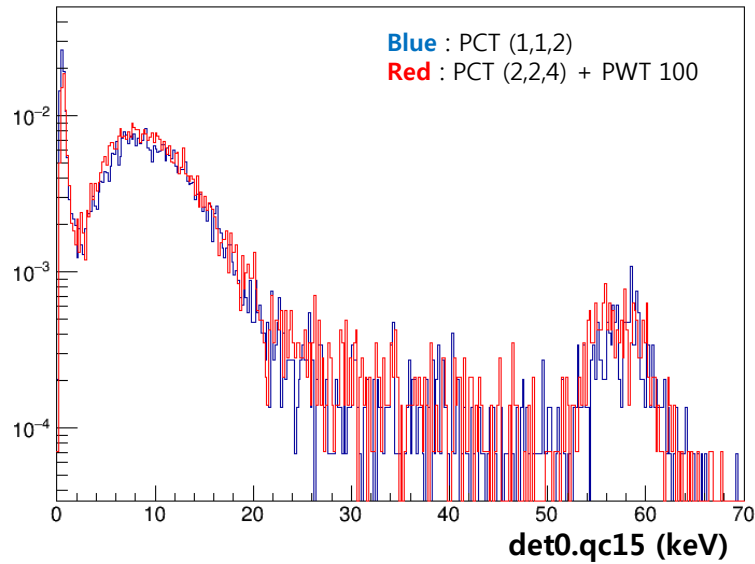
X axis : number of clusters determined by clustering algorithm

Pulse width over threshold



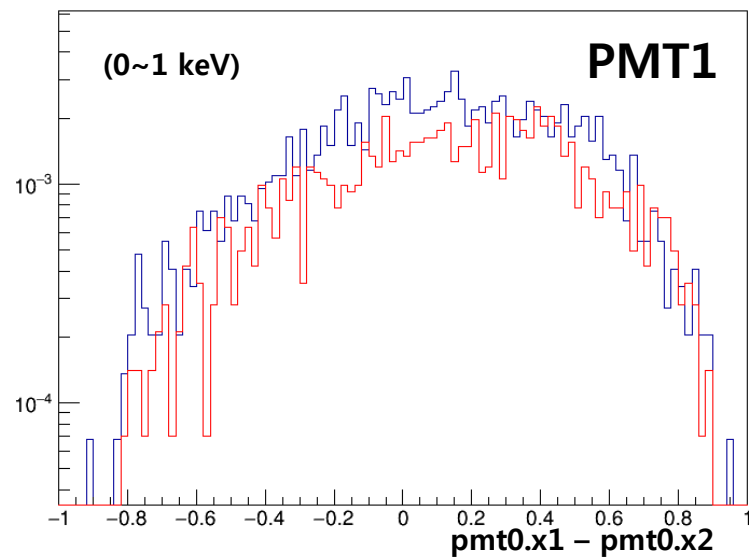
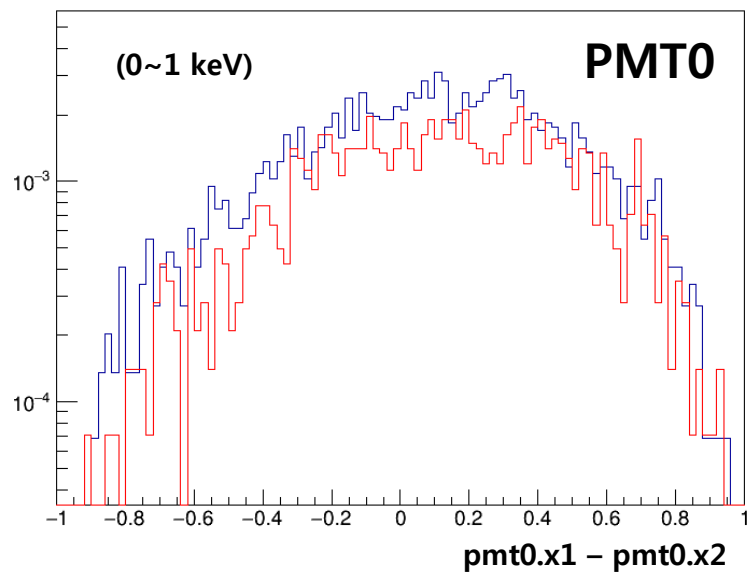
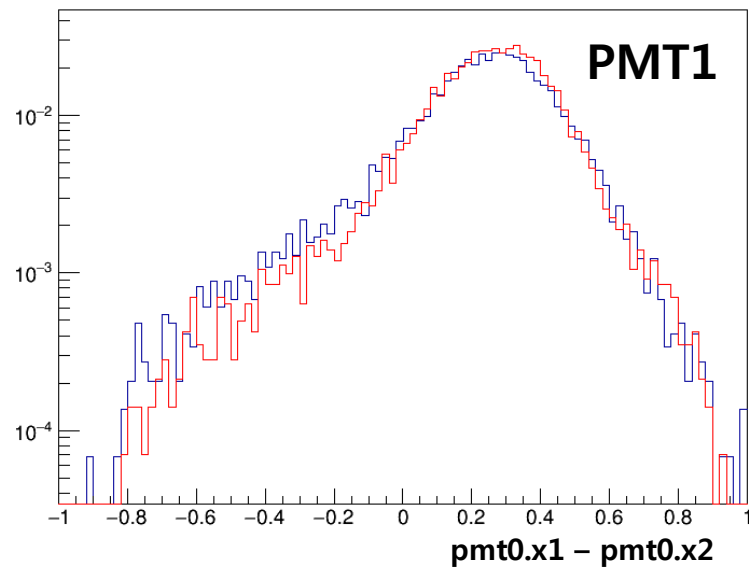
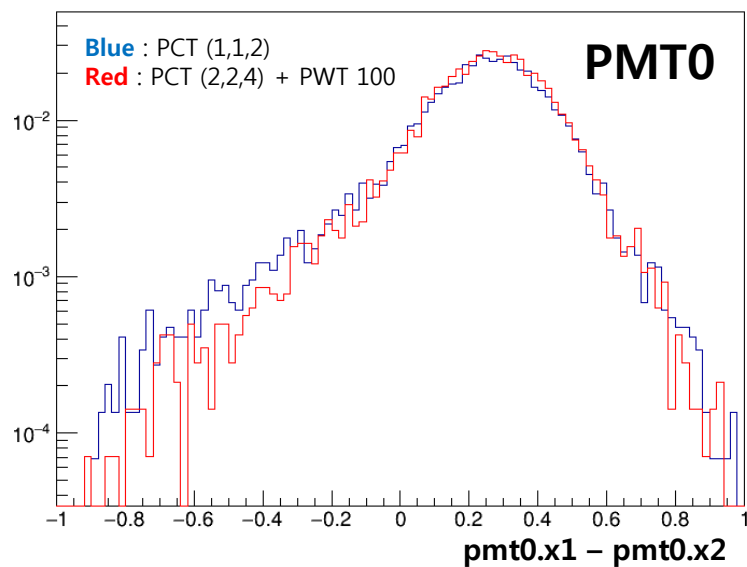
X axis : pulse width over threshold (time duration that signal exceeded threshold level)

Deposit energy on NaI

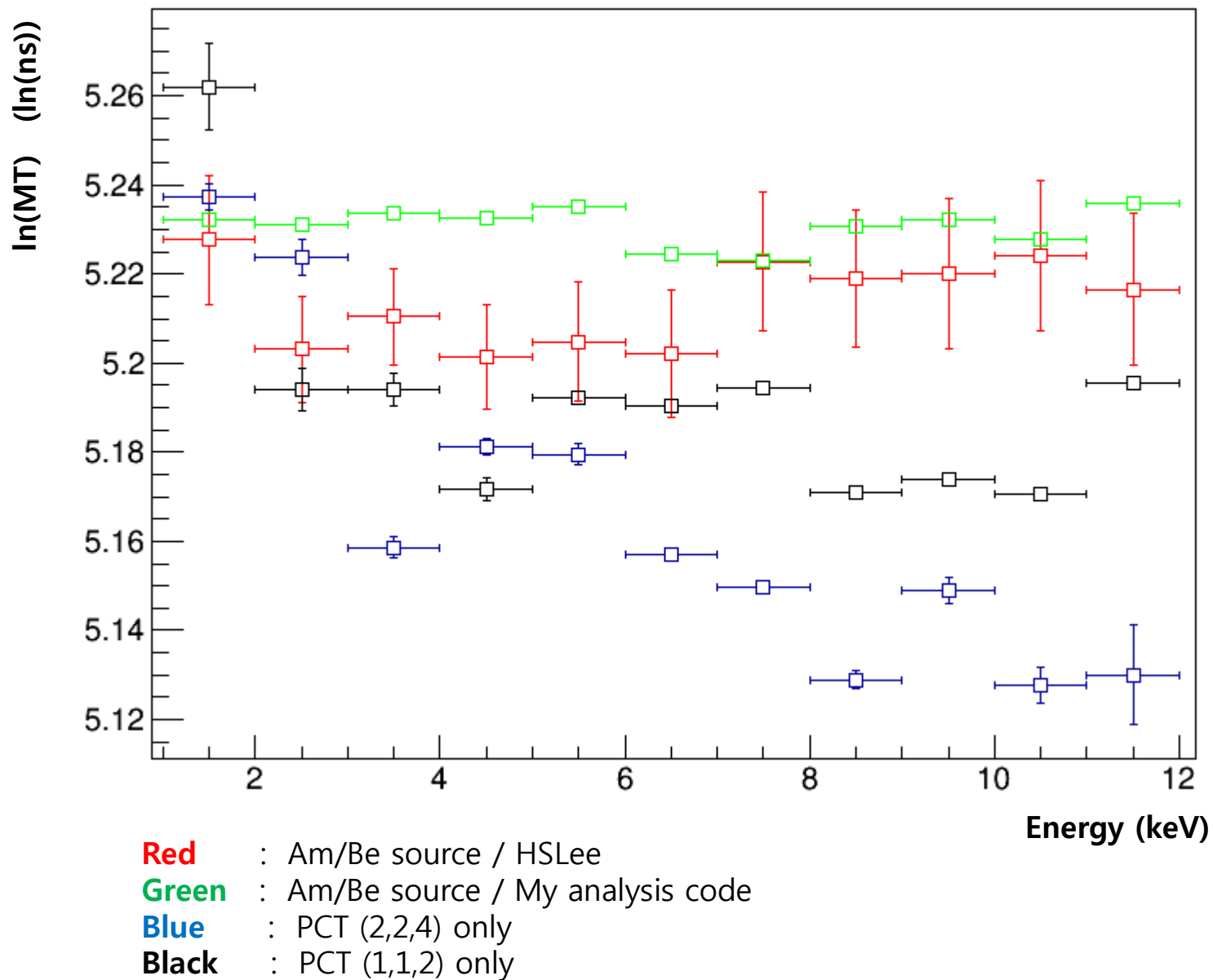


X axis : deposit energy on NaI crystal (keV)

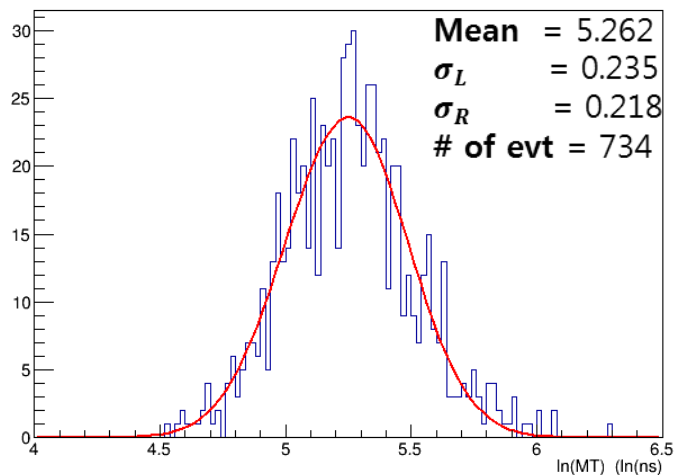
Noise rejection cut



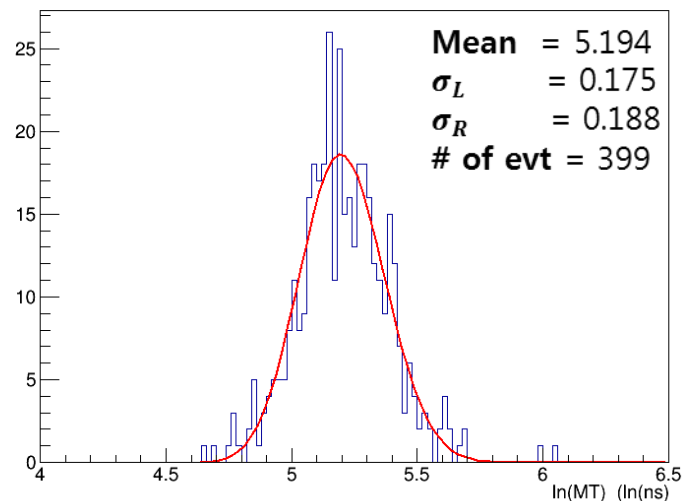
X axis : parameter for noise rejection (cut : -0.2~0.8)



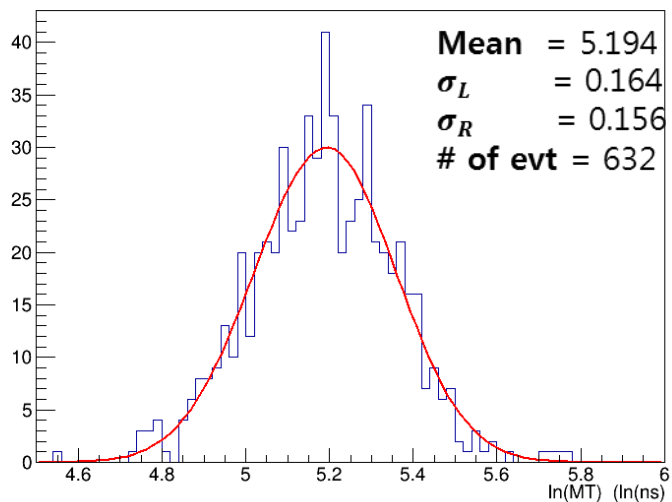
(1 keV to 2 keV)



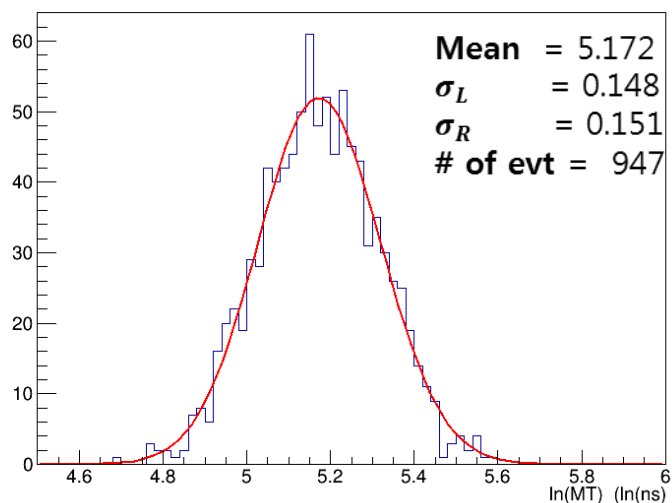
(2 keV to 3 keV)



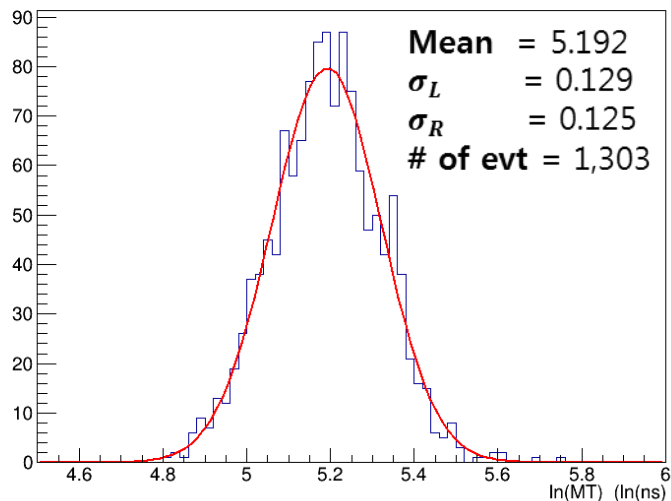
(3 keV to 4 keV)



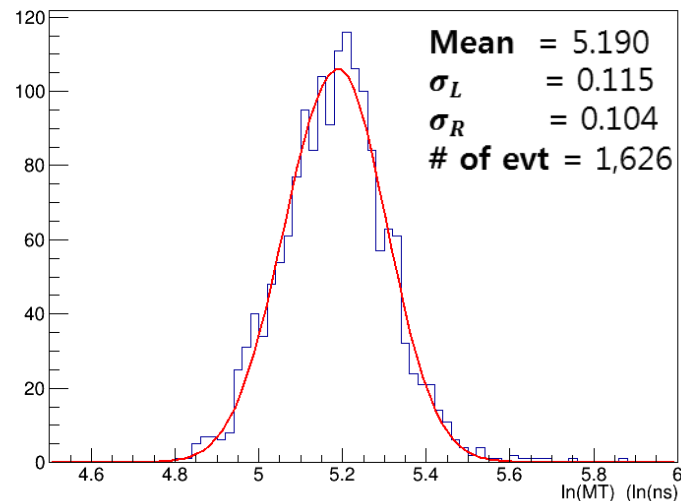
(4 keV to 5 keV)



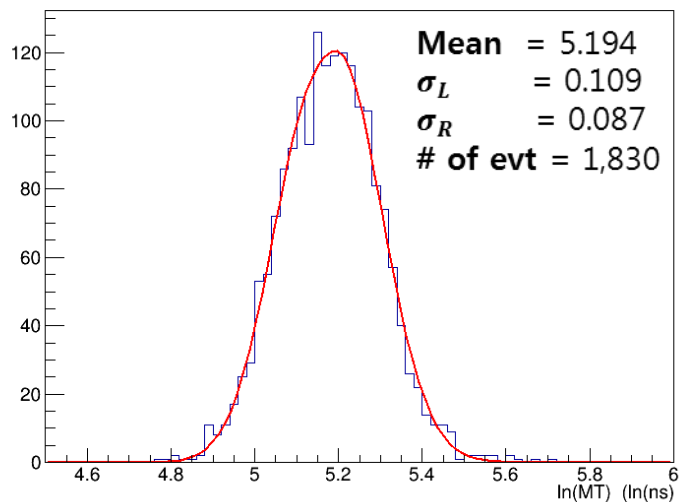
(5 keV to 6 keV)



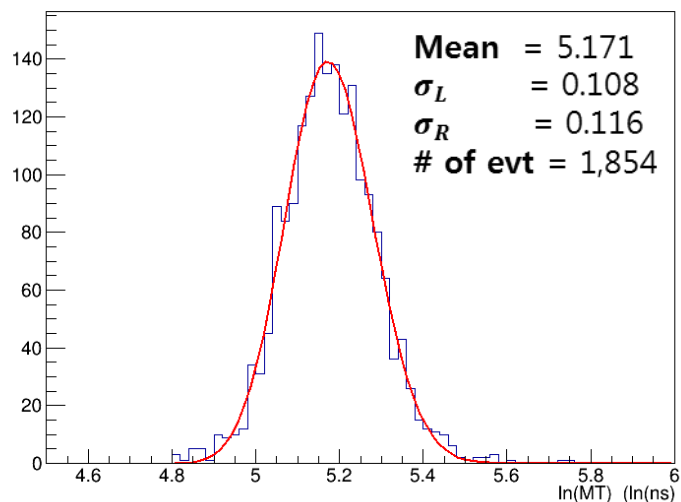
(6 keV to 7 keV)



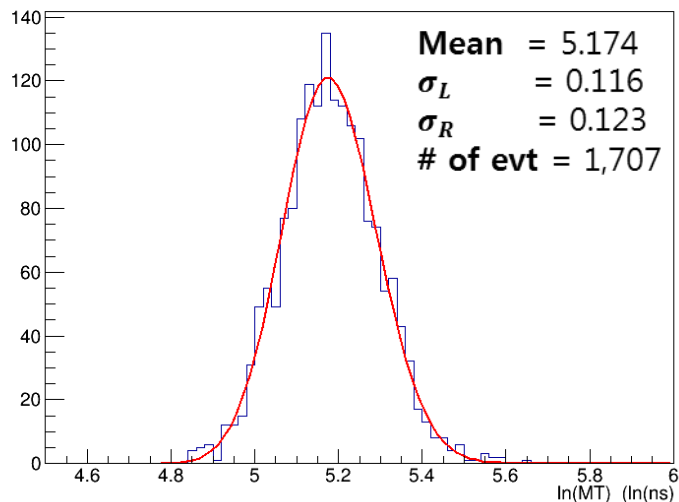
(7 keV to 8 keV)



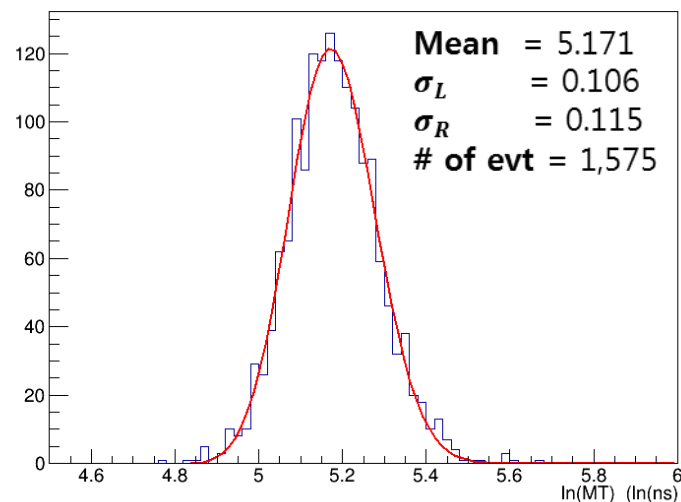
(8 keV to 9 keV)



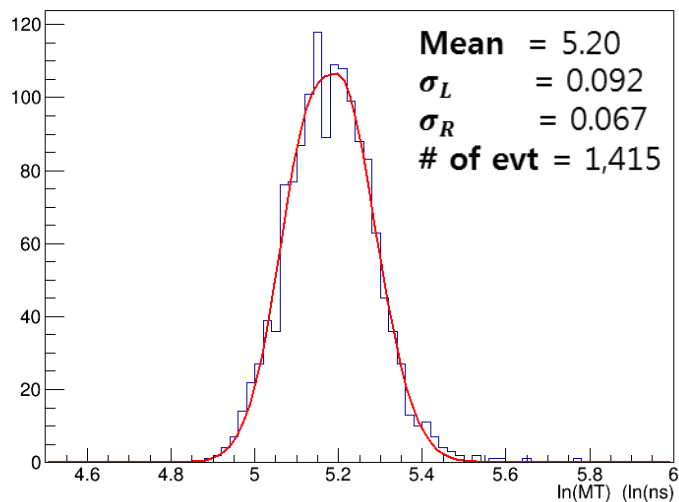
(9 keV to 10 keV)



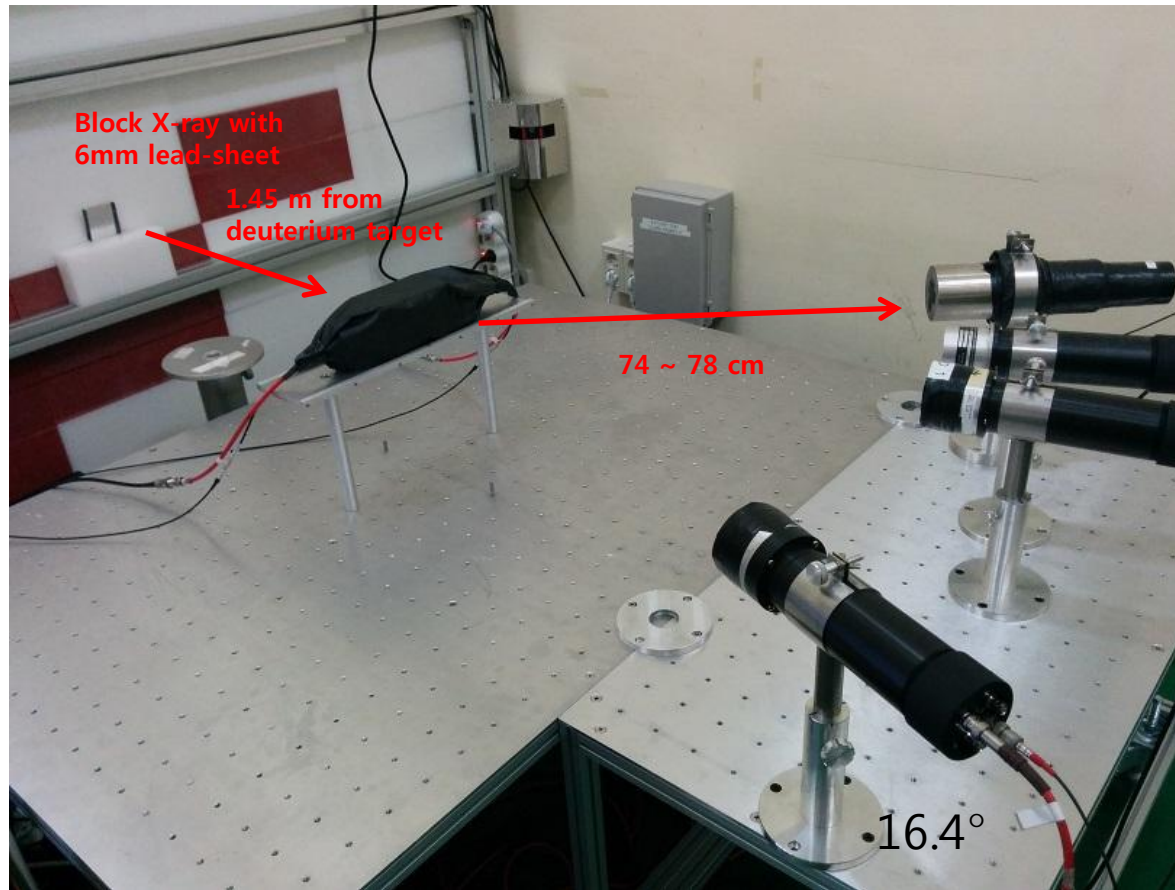
(10 keV to 11 keV)



(11 keV to 12 keV)



Additional DAQ for quenching factor measurement



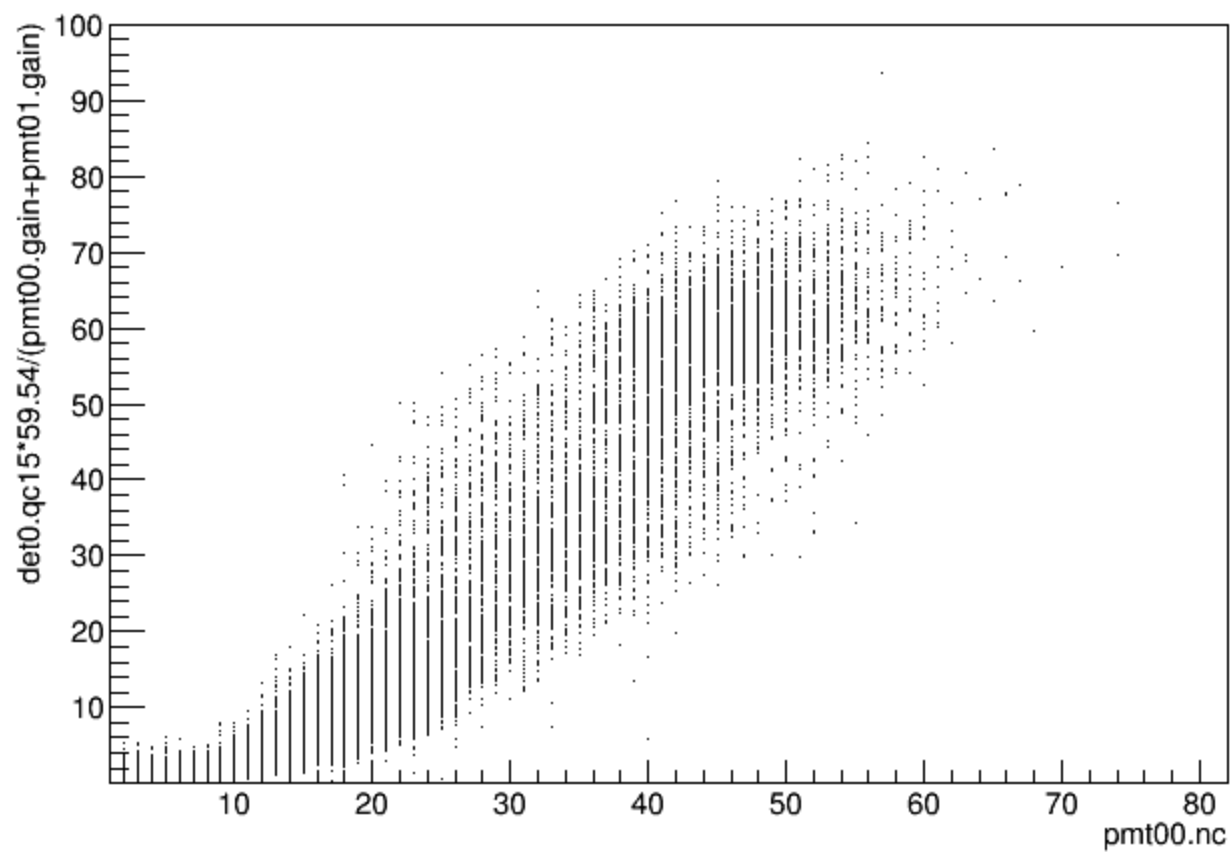
PCT (1,1,2) is available for quenching factor measurement?

(far from deuterium target -> smaller direct neutrons compared to backgrounds,
x10 higher neutron generator power)

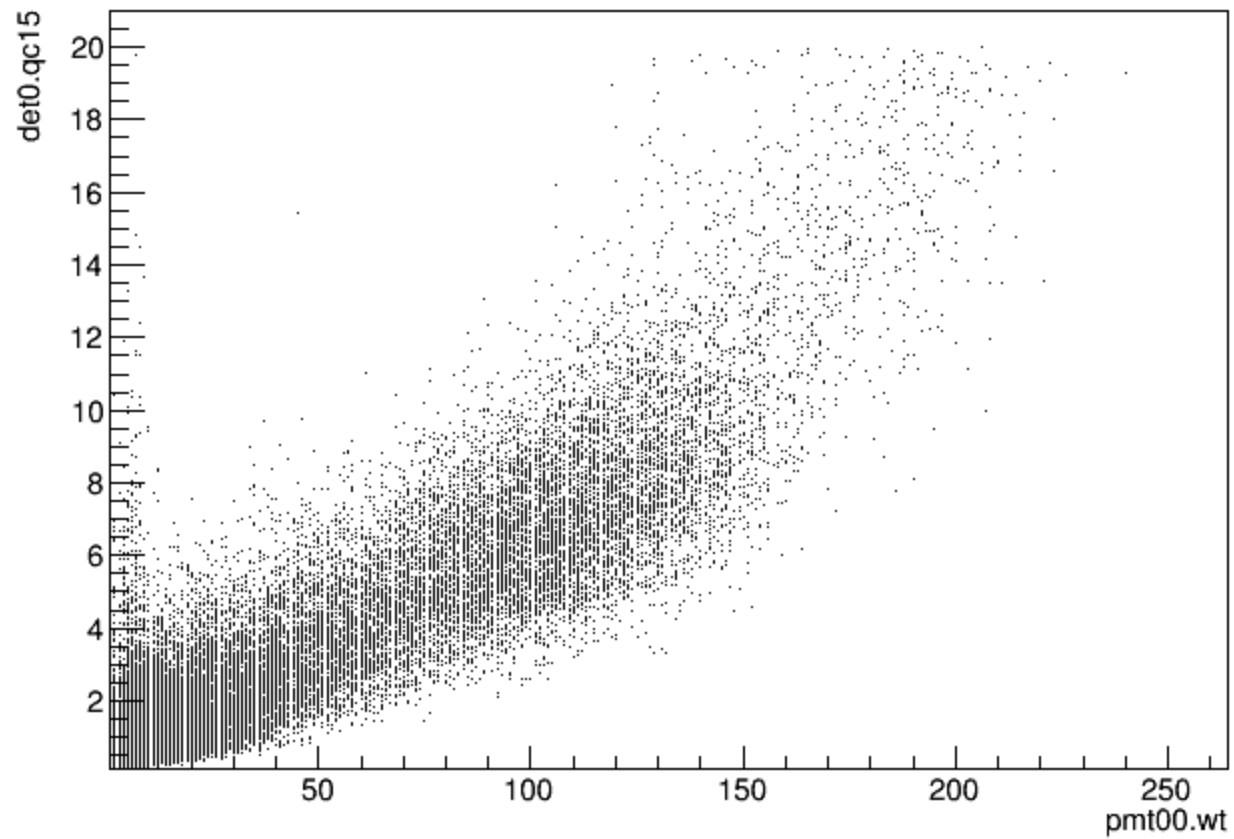
Test with PCT (1,1,2) and (2,2,4) both case with different neutron generator power

Backup Slides

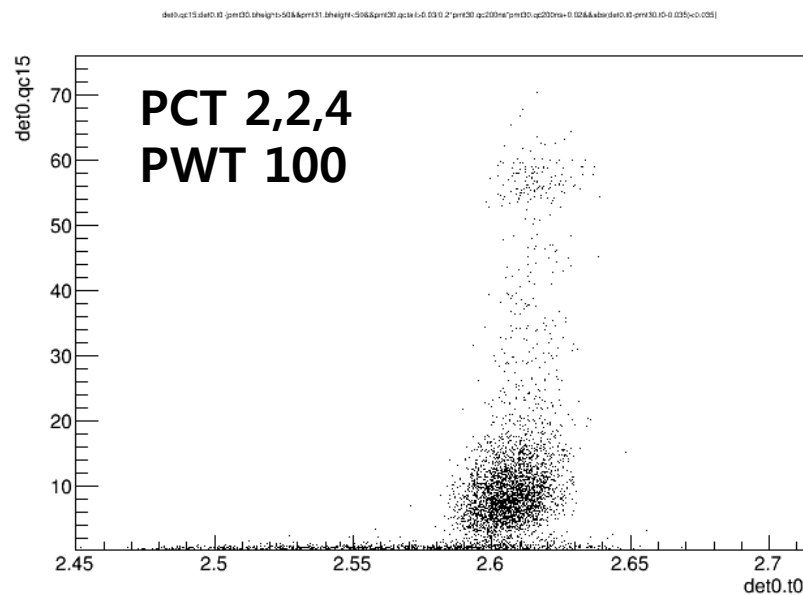
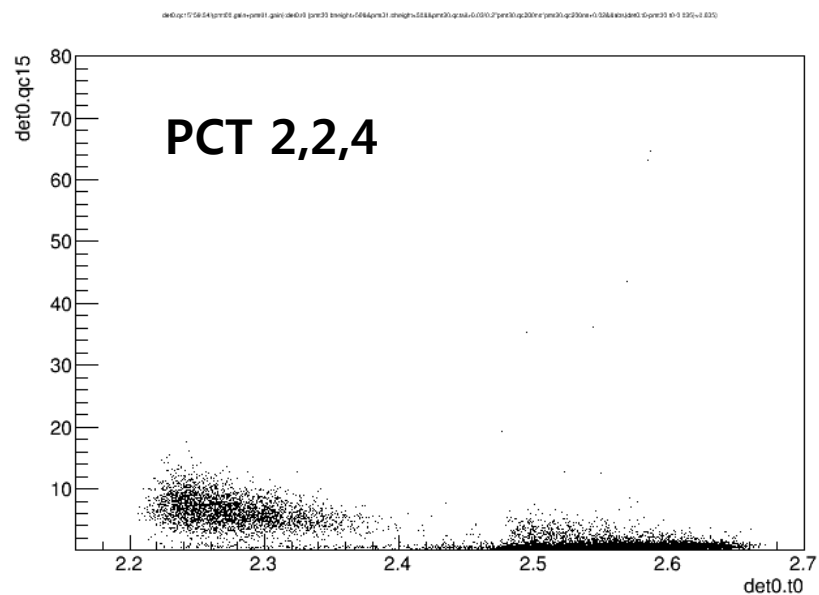
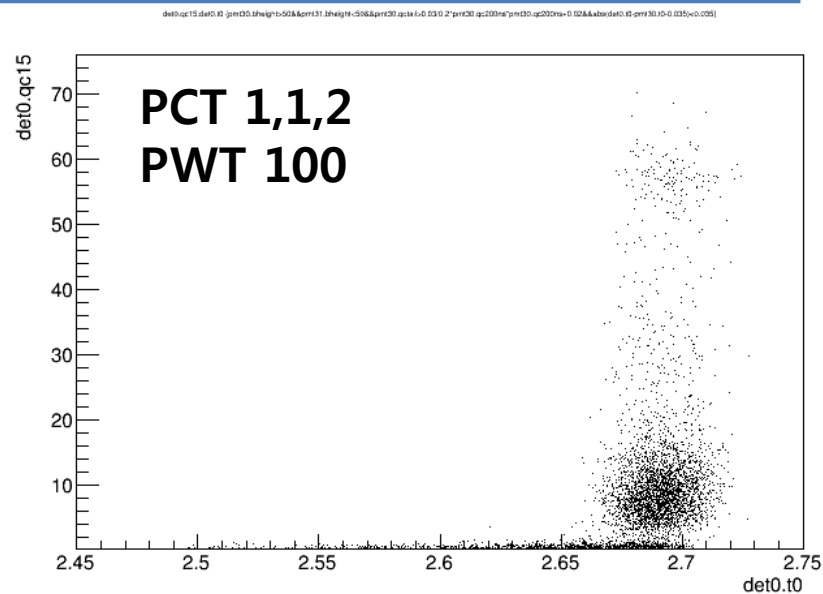
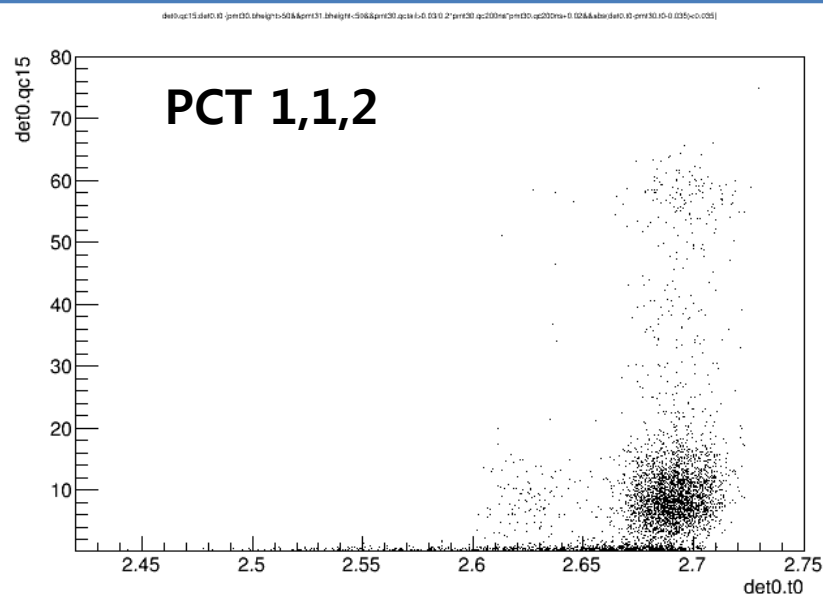
det0.qc15*59.54/(pmt00.gain+pmt01.gain)pmt00.nc | det0.x0>0.18&det0.qcn=-0.0&det0.ropped<0.06&pmt00.bheight<940&pmt01.bheight<940&pmt00.nc<80



det0.qc15:pmt00.wt {det0.qc15<20&&pmt00.wt>0}

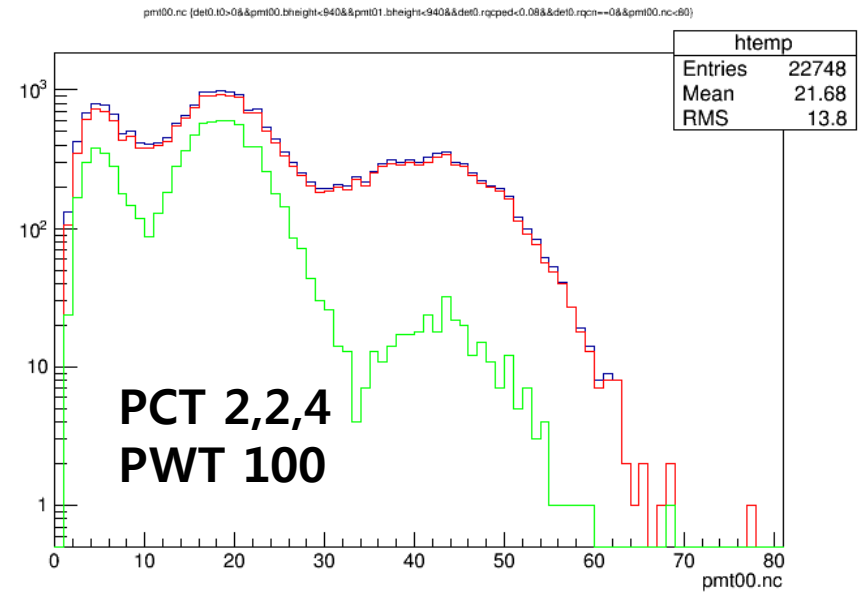
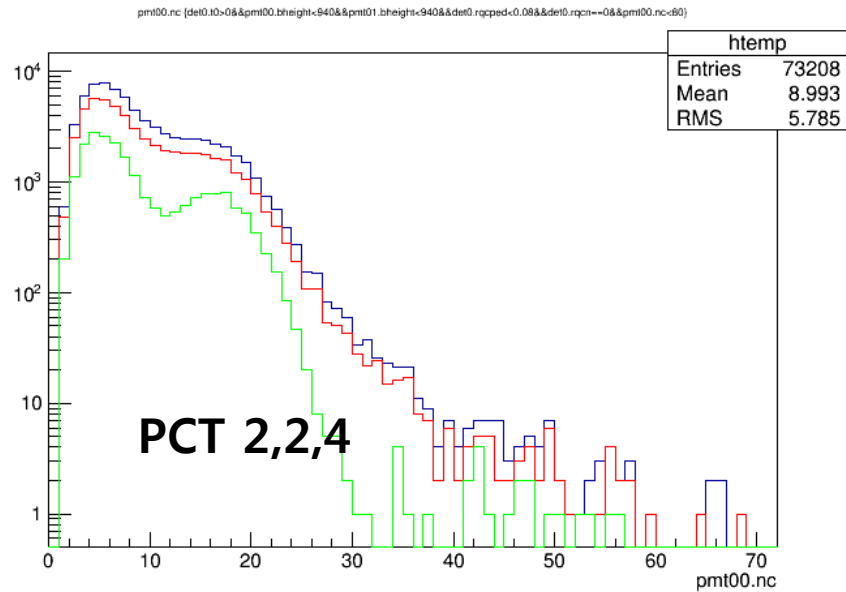
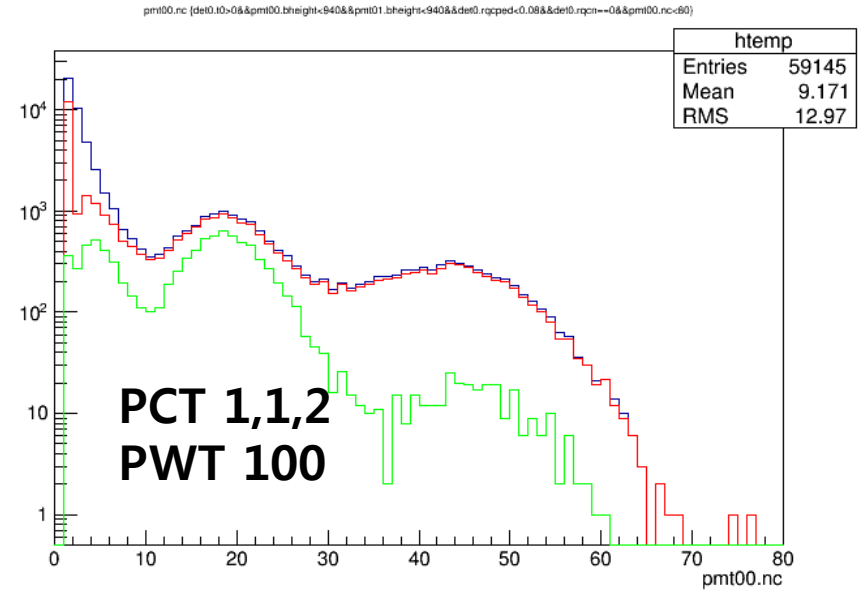
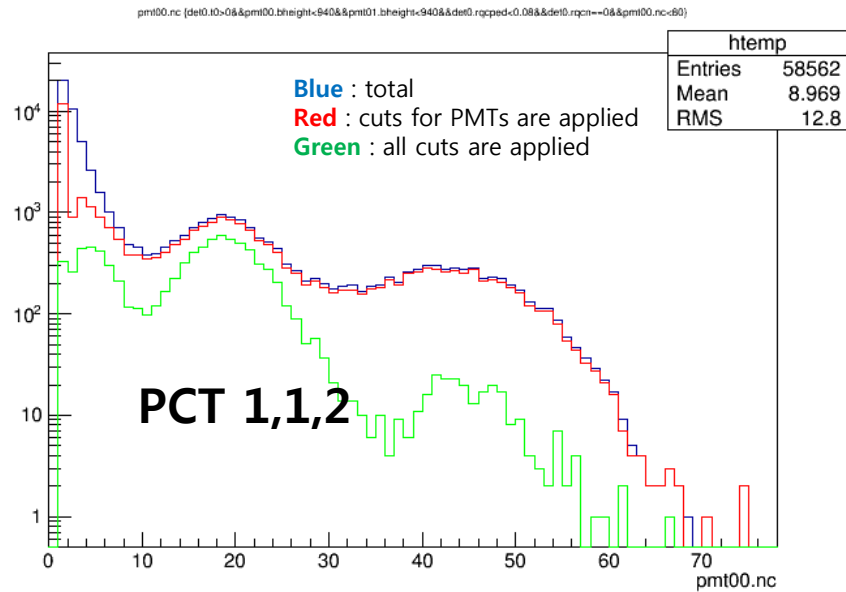


NaI deposit energy vs t0



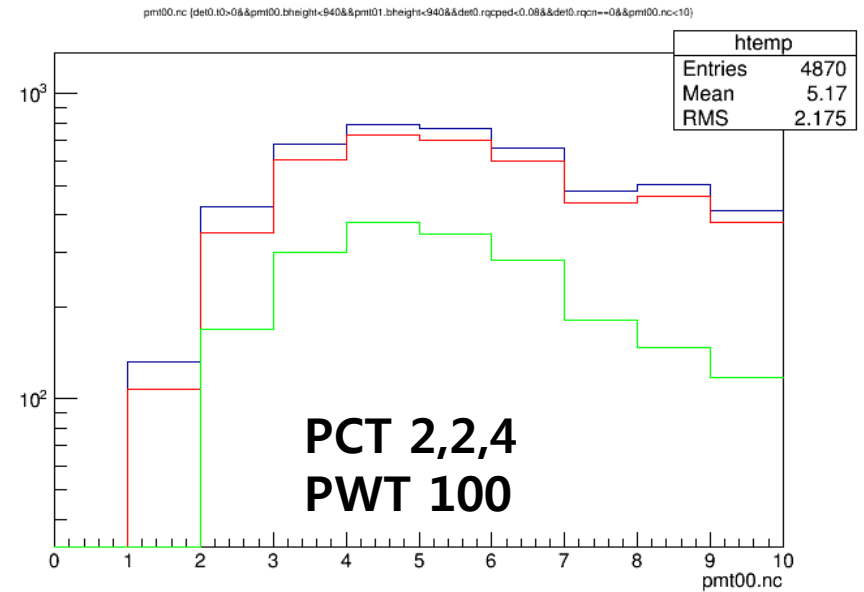
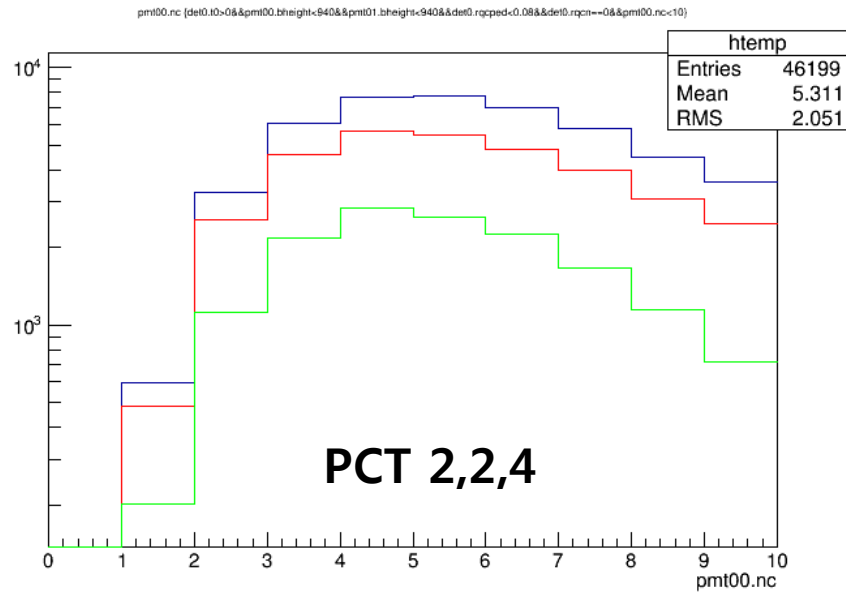
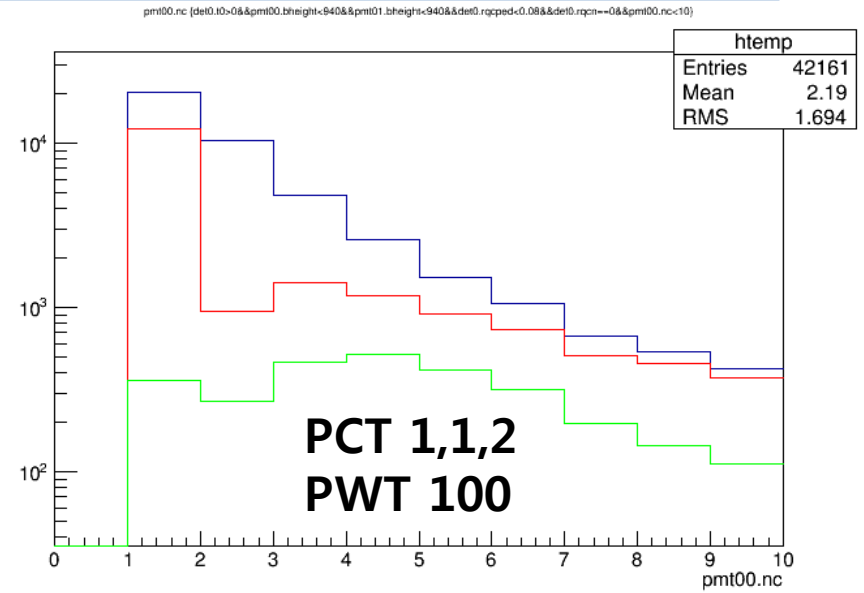
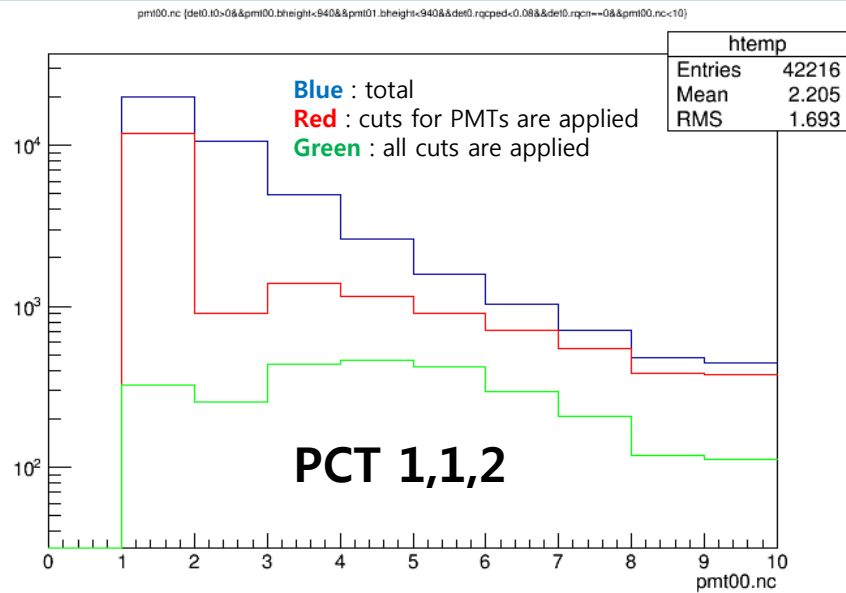
X axis : mean time of 1st cluster of NaI crystal signal (us) / **Y axis** : deposit energy on NaI (keV) 13

Number of clusters



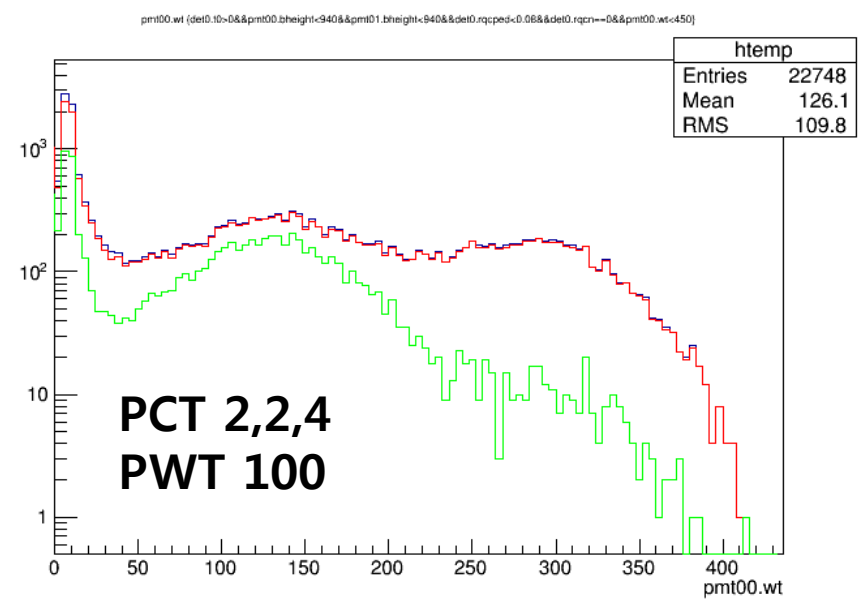
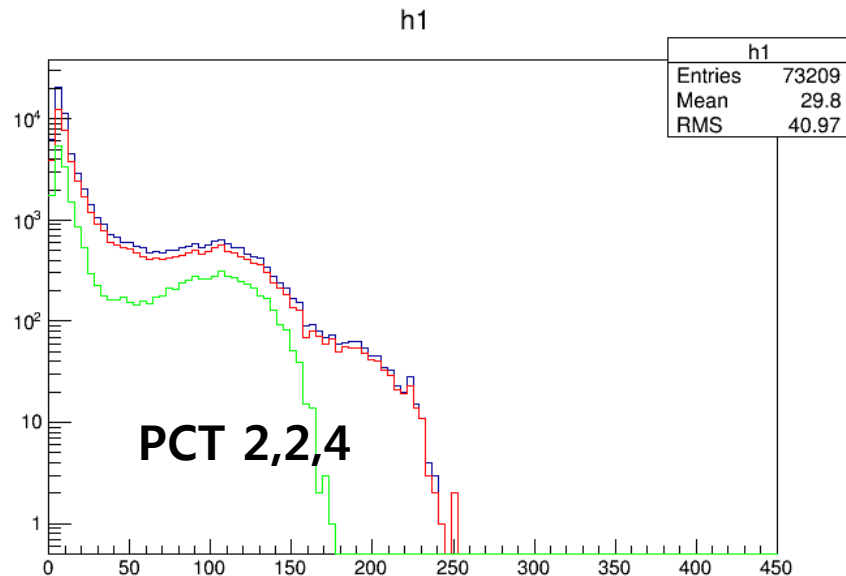
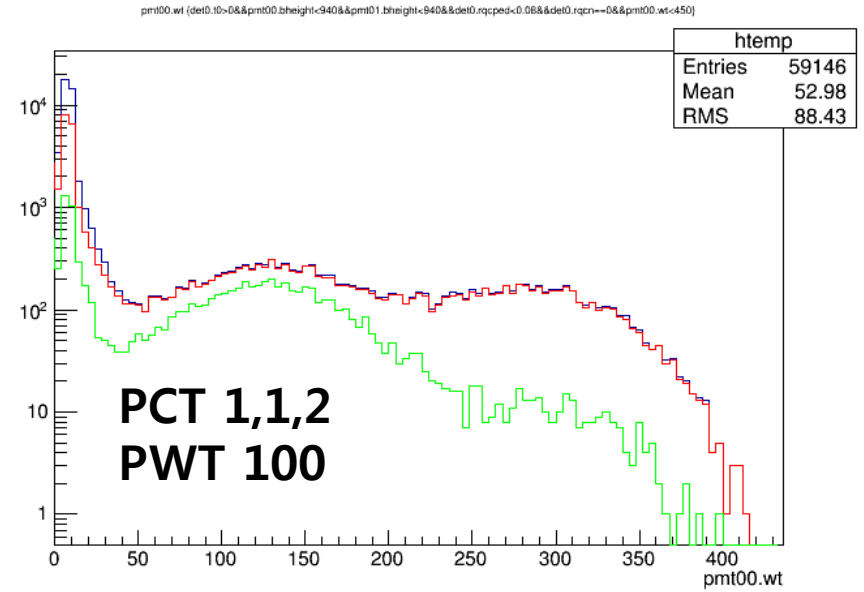
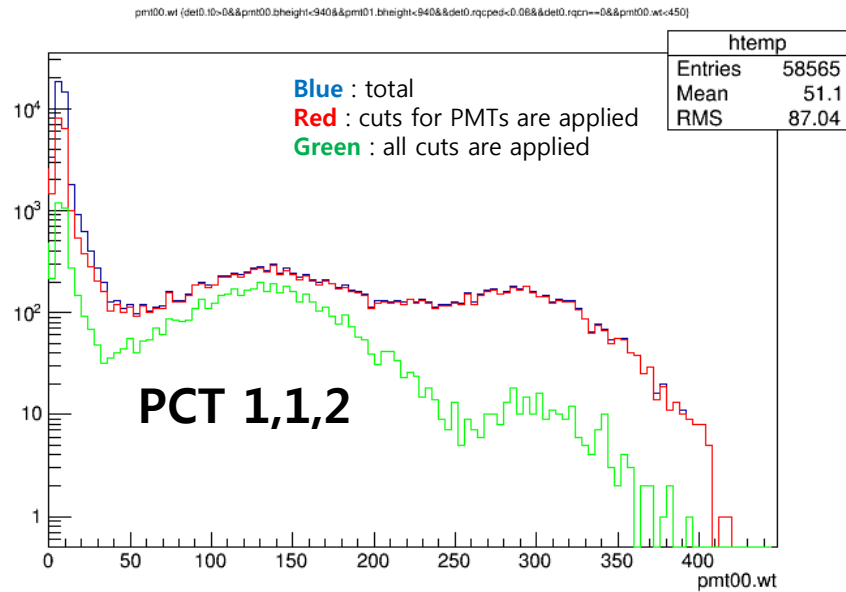
X axis : number of clusters determined by clustering algorithm

Number of clusters (zoomed in X axis)



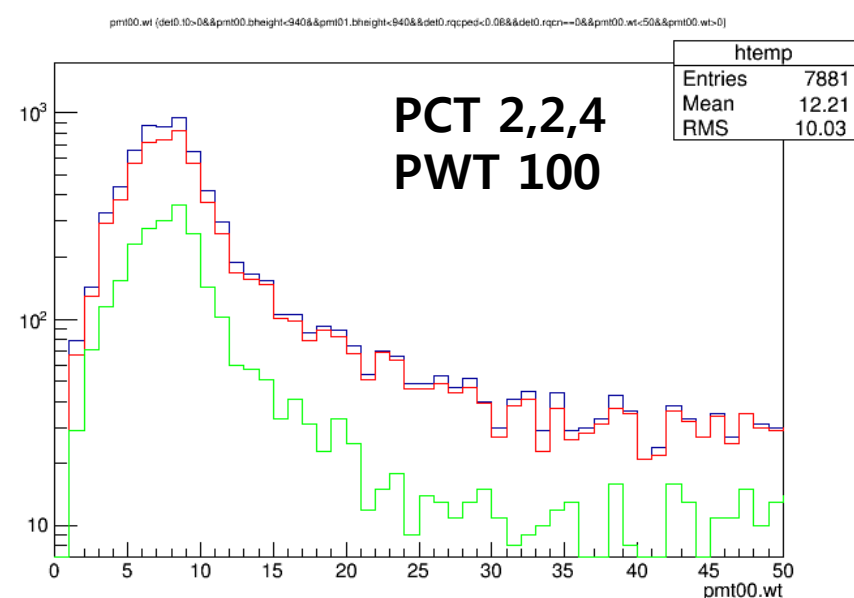
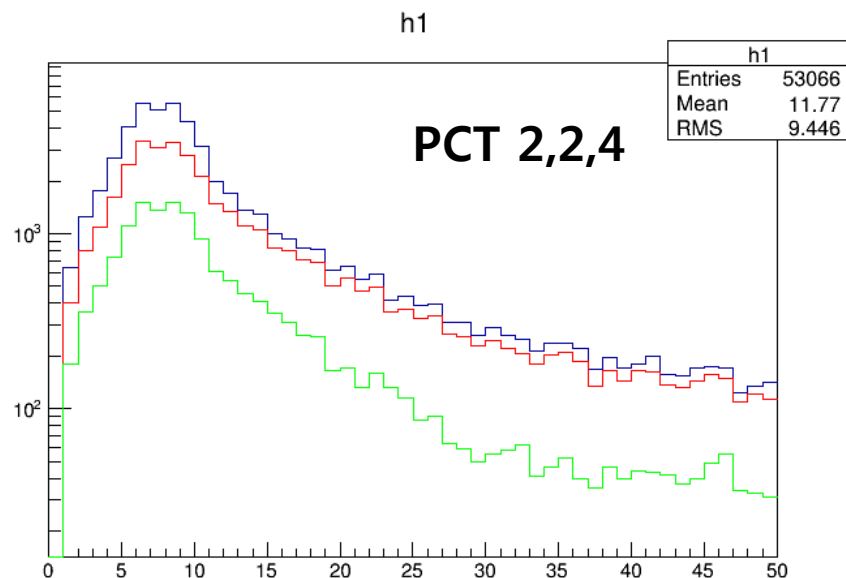
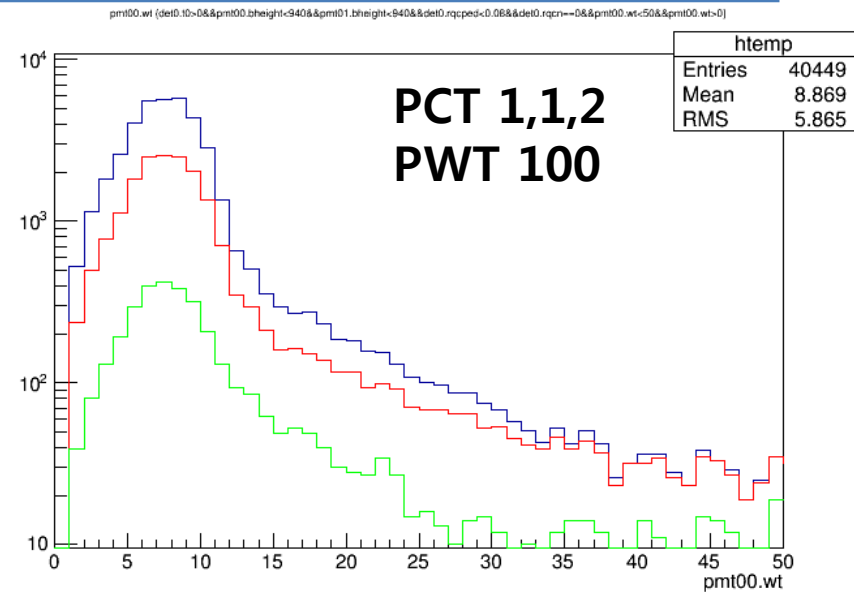
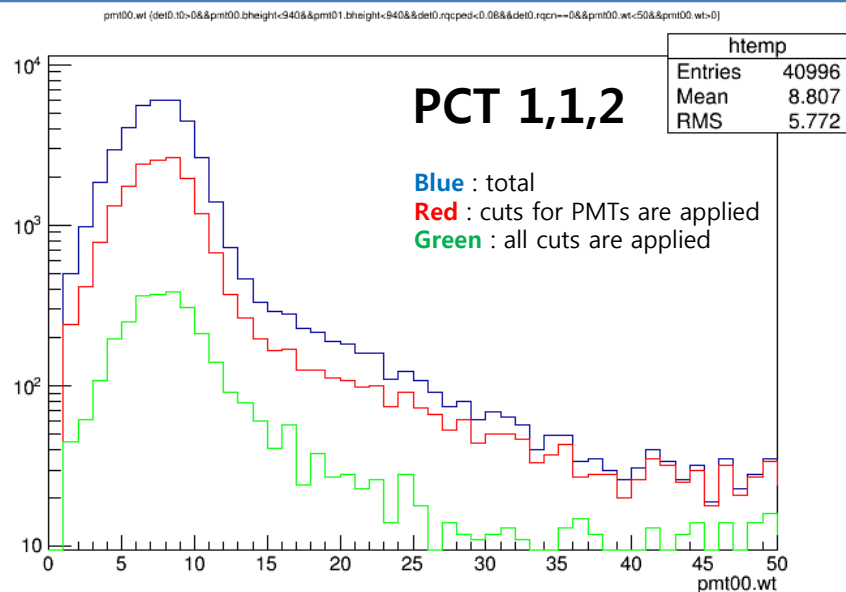
X axis : number of clusters determined by clustering algorithm

Pulse width over threshold



X axis : pulse width over threshold (time duration that signal exceeded threshold level)

Pulse width over threshold (zoomed in X axis)



X axis : pulse width over threshold (time duration that signal exceeded threshold level)