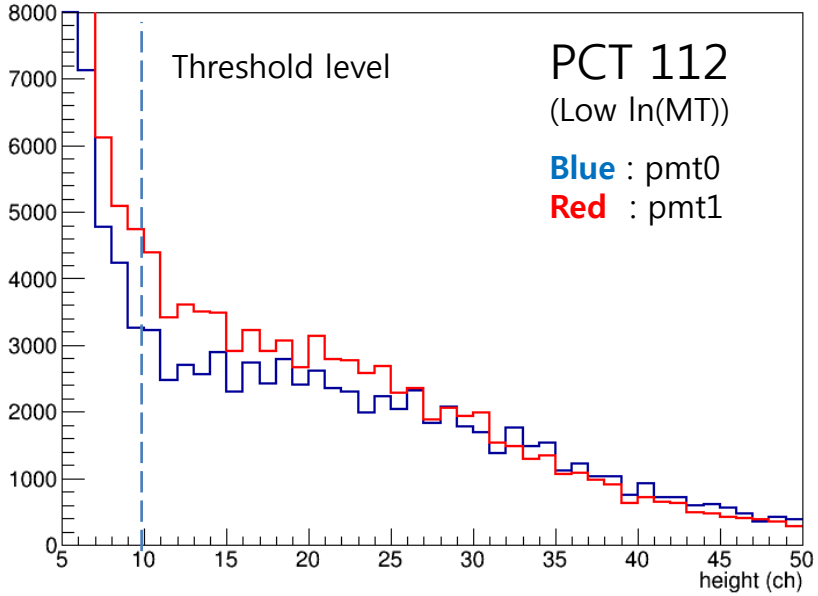
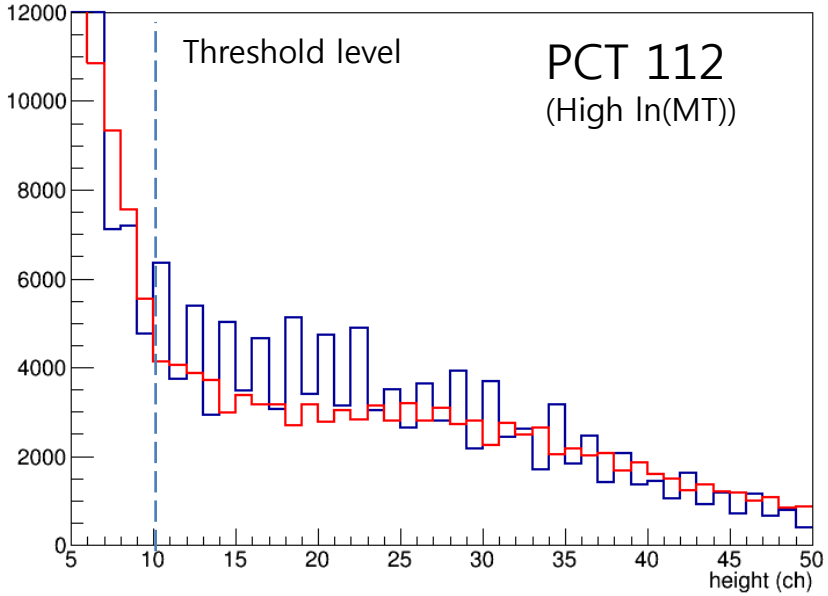
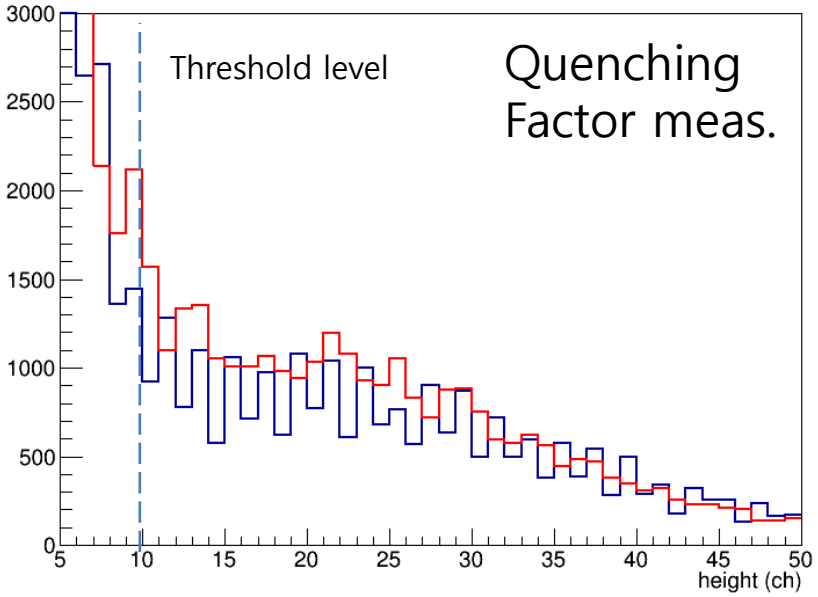
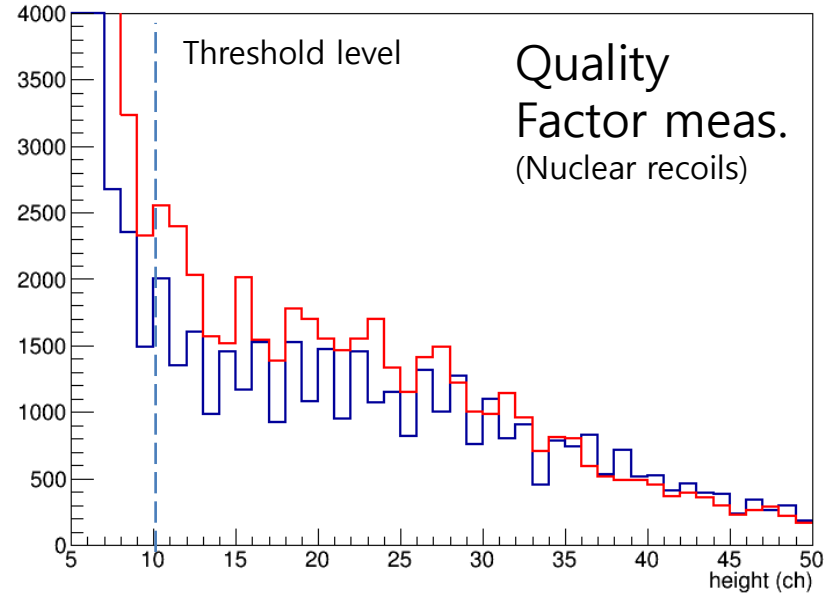
Pulse height distribution (With Am241 calibration data)

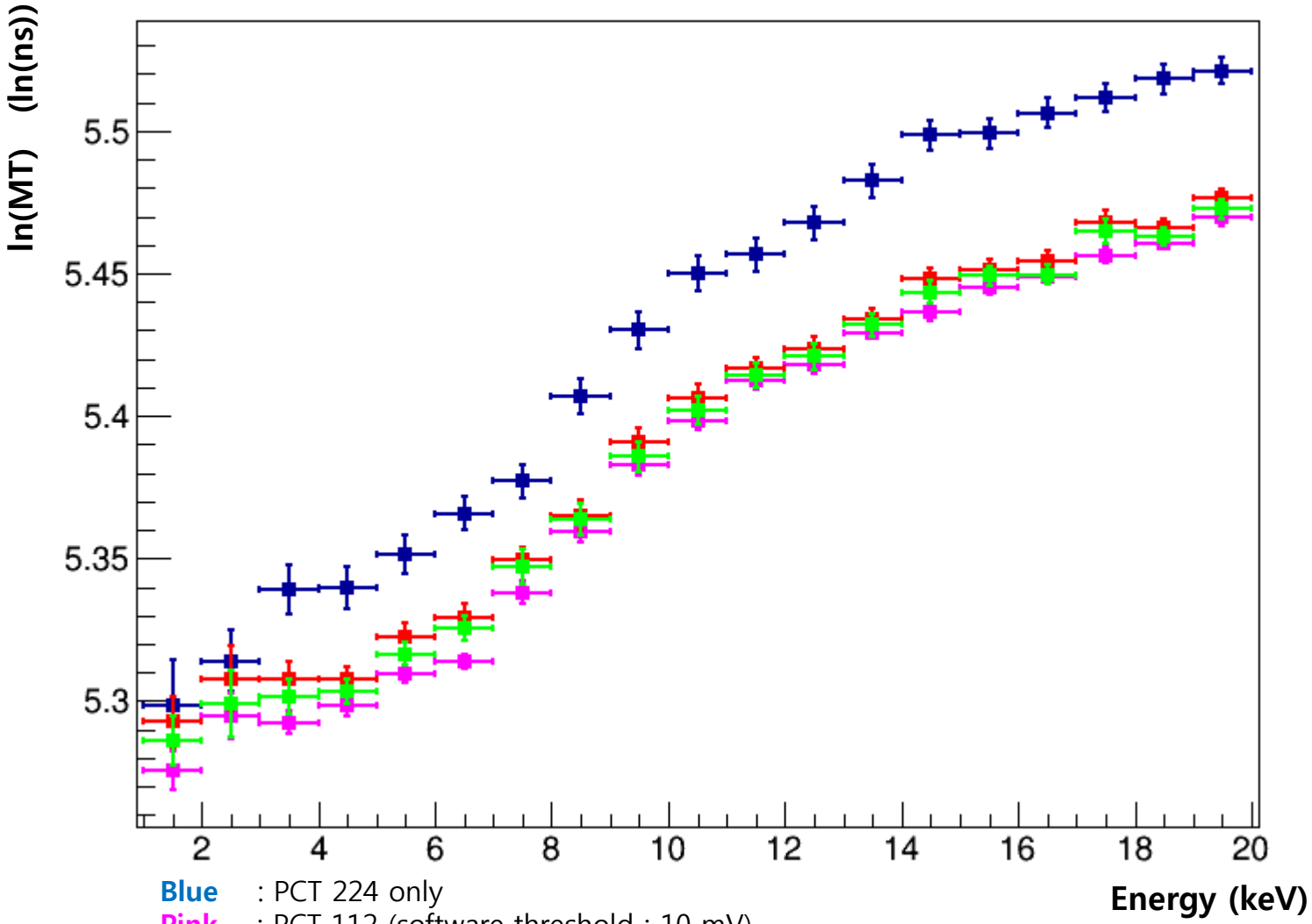






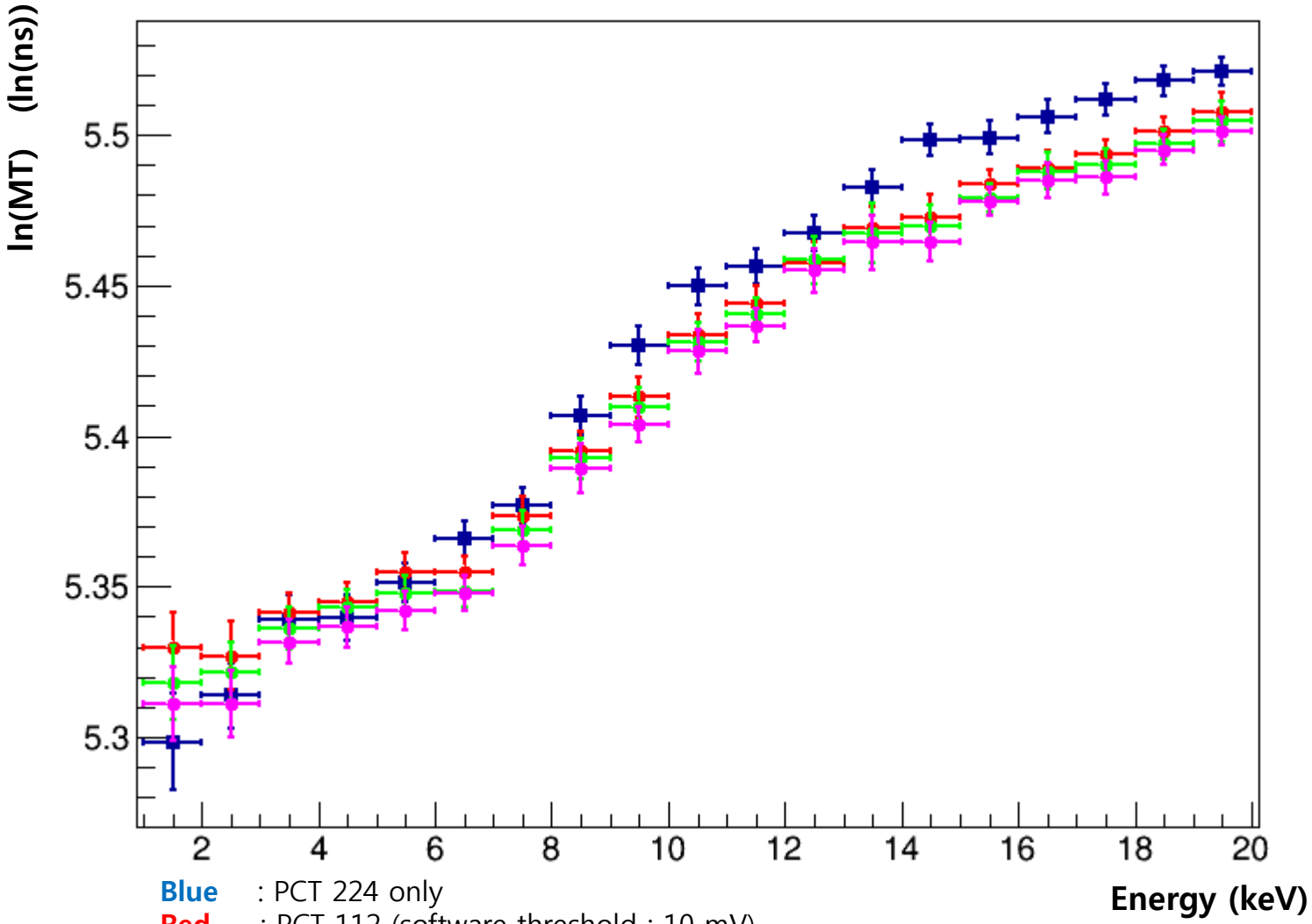


ln(MT) – low gain



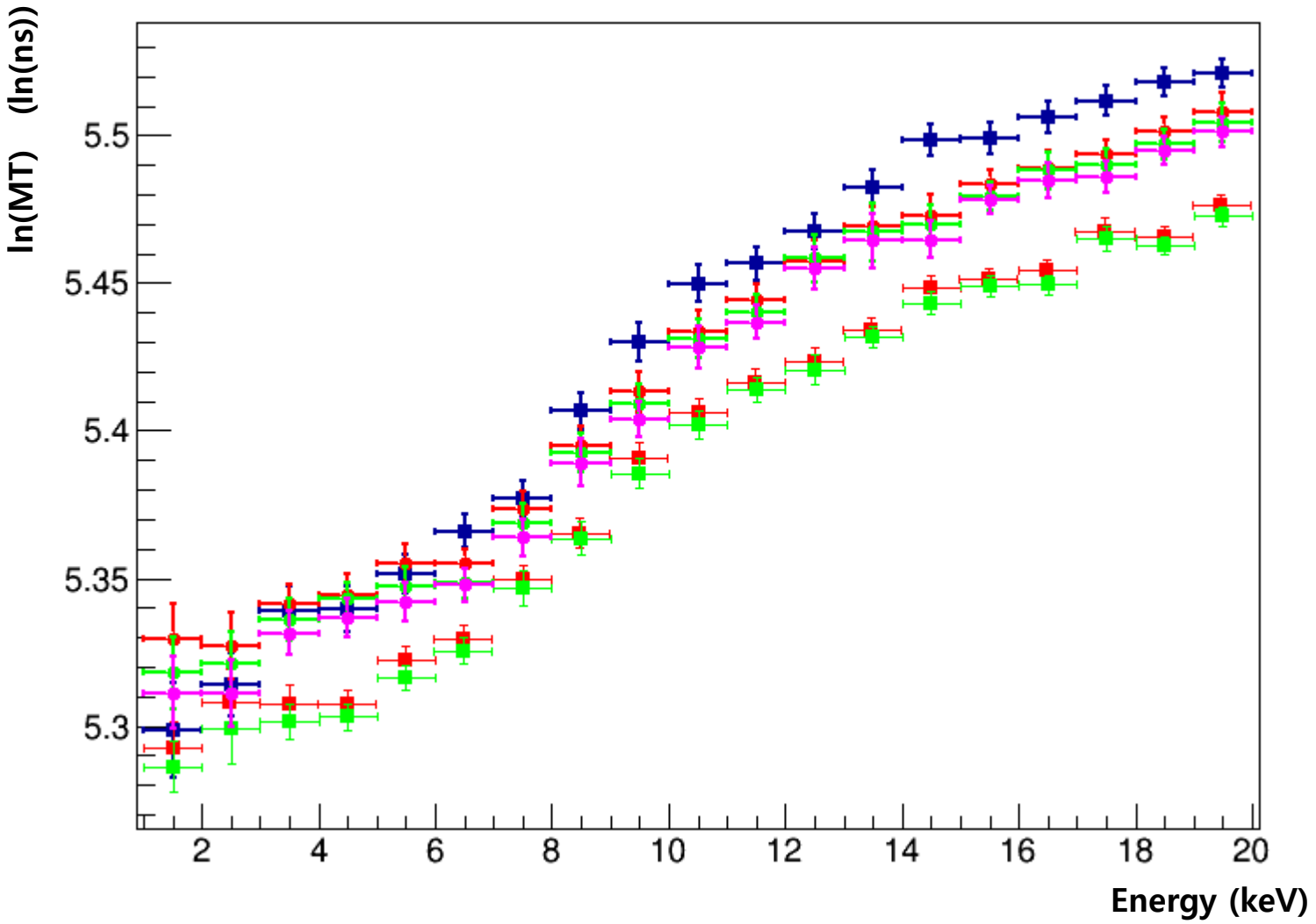
Blue : PCT 224 only
Pink : PCT 112 (software threshold : 10 mV)
Green : PCT 112 (software threshold : 9 mV)
Red : PCT 112 (software threshold : 8 mV)

ln(MT) – high gain

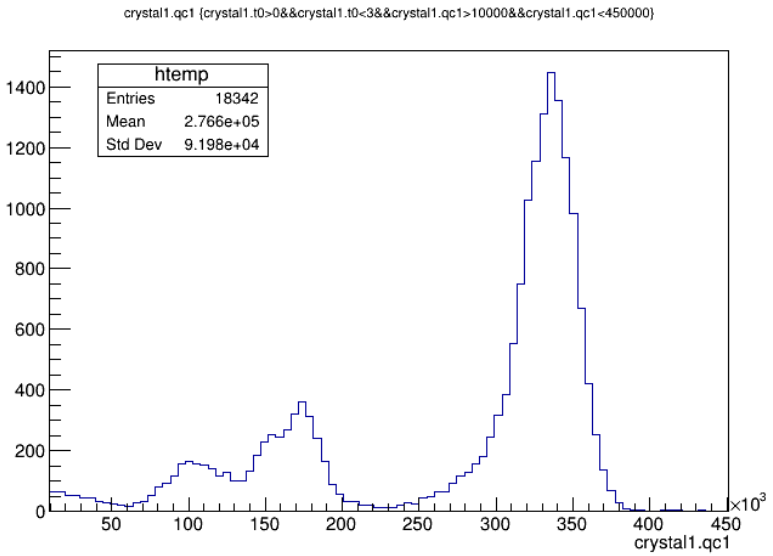


Blue : PCT 224 only
Red : PCT 112 (software threshold : 10 mV)
Green : PCT 112 (software threshold : 11 mV)
Pink : PCT 112 (software threshold : 12 mV)

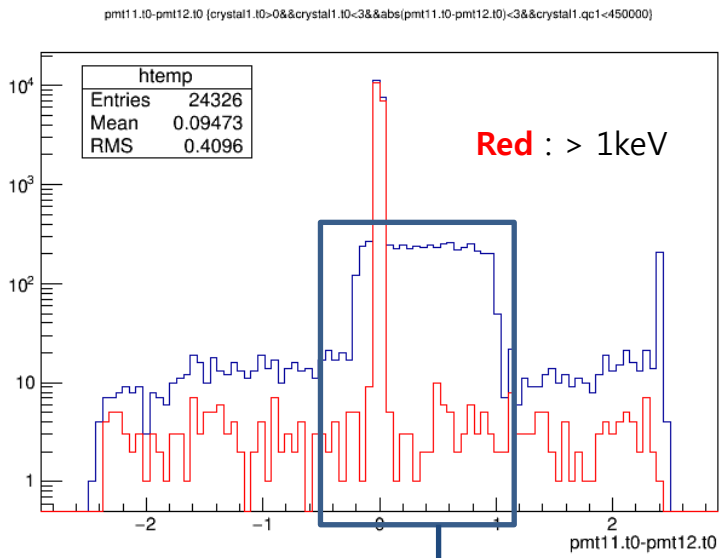
ln(MT)

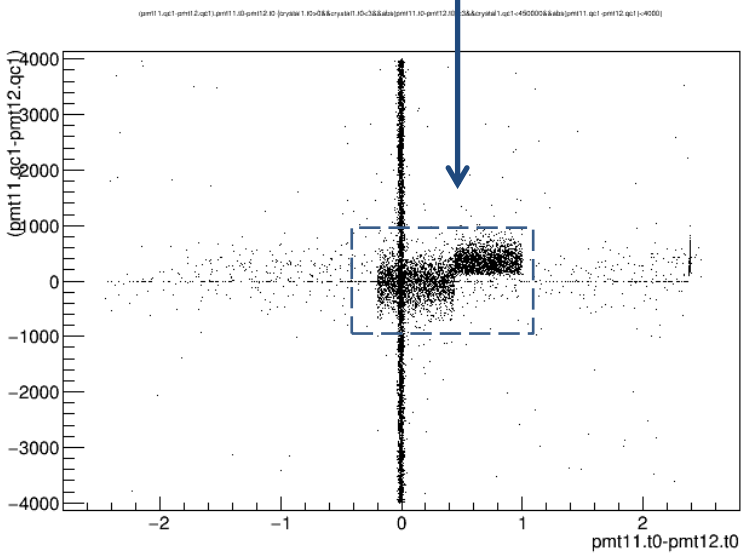


Calibration with 241 Am source



~15 cm form the NaI crystal (~ 90 Hz)



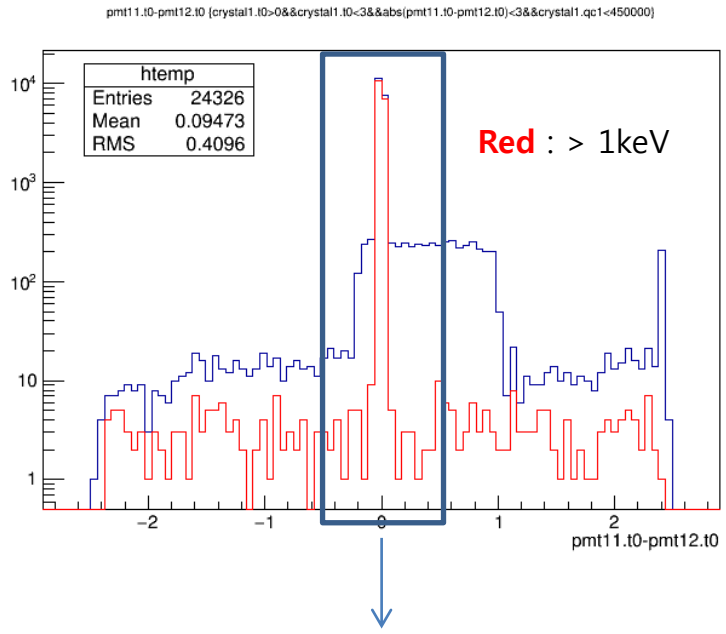


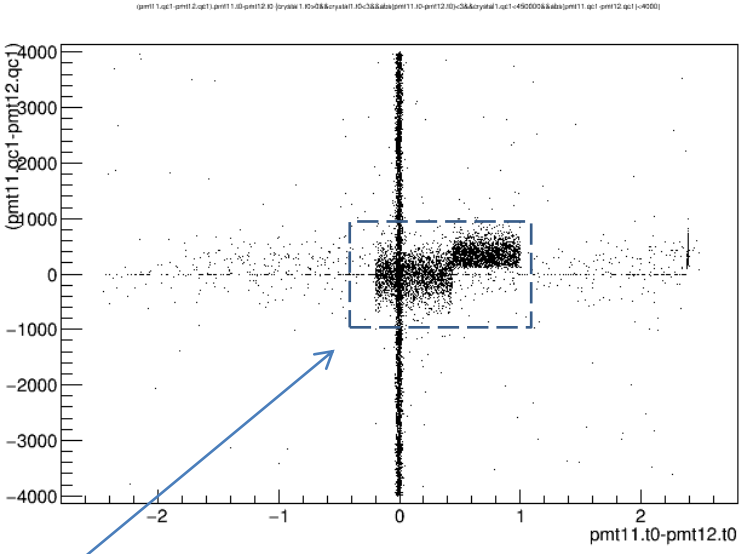
Plans

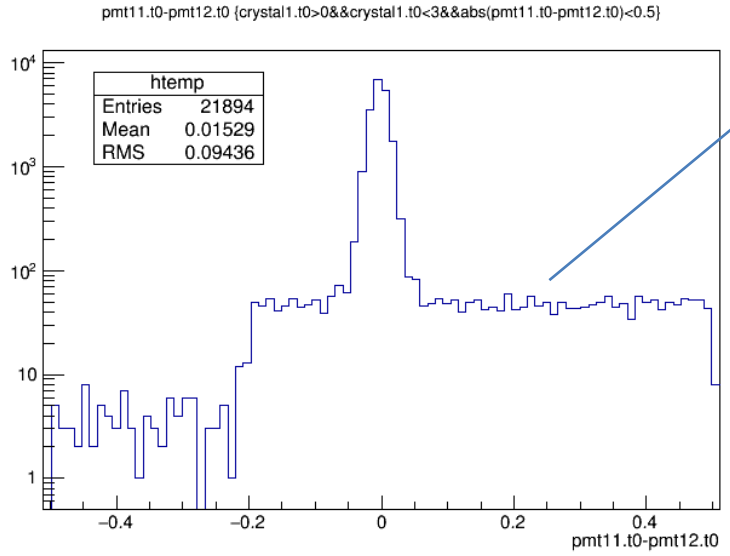
- **Wait new tuner for neutron generator and test**
- **Learn how to use DAQ / Analysis codes for new DAQ sys.**
- **Test run with new DAQ system**
  (set new (higher) HVs for PMTs, DAQ with ND signals, etc)
- **Calculate mean decay time with leading edge, not t0**
- **Compare results of SNU / KRISS / Y2L**

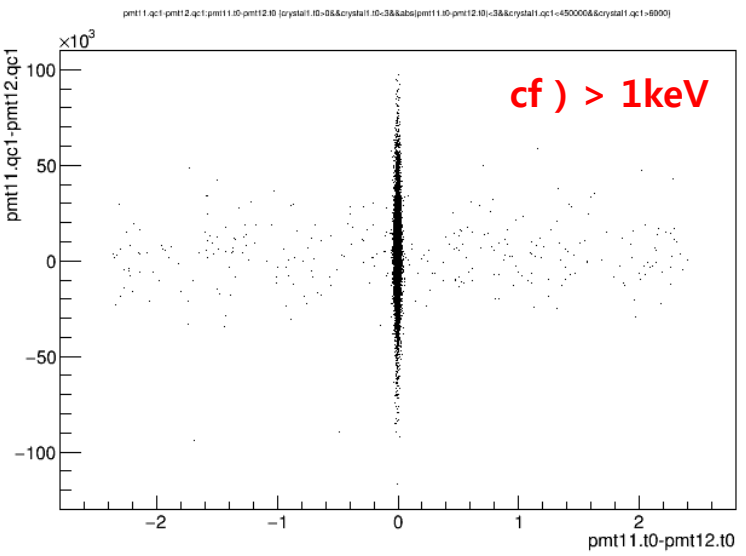
Backup Slides

Time difference of two PMTs







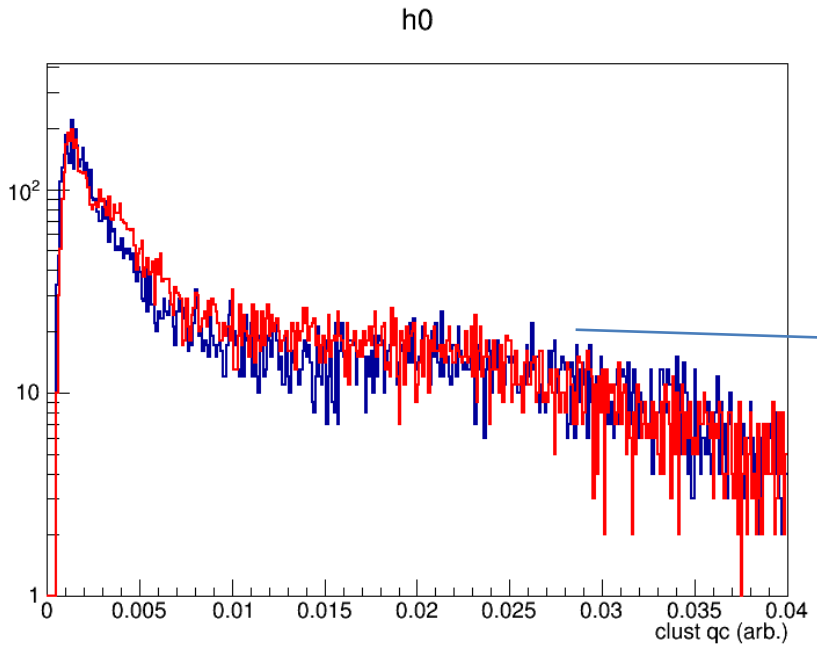


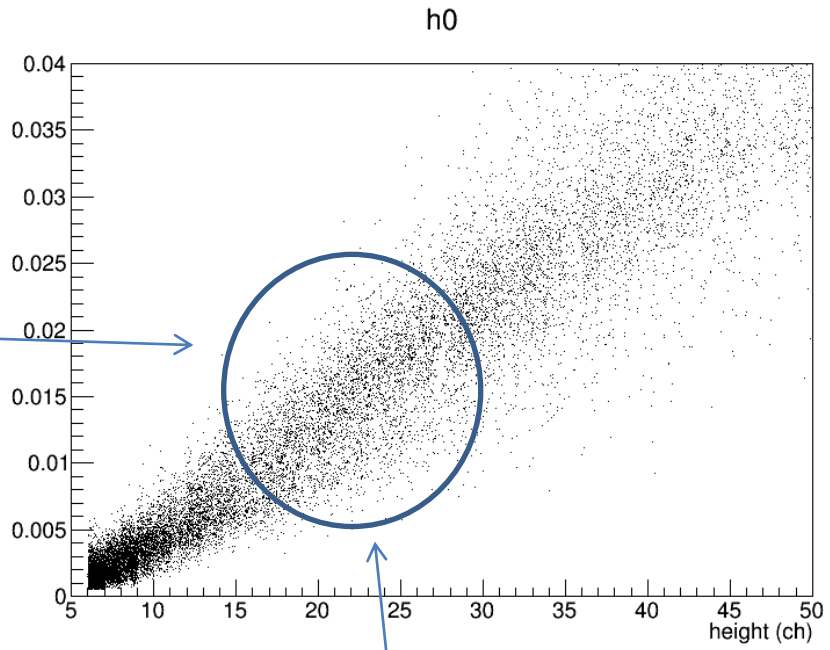
PMT gains for each data set

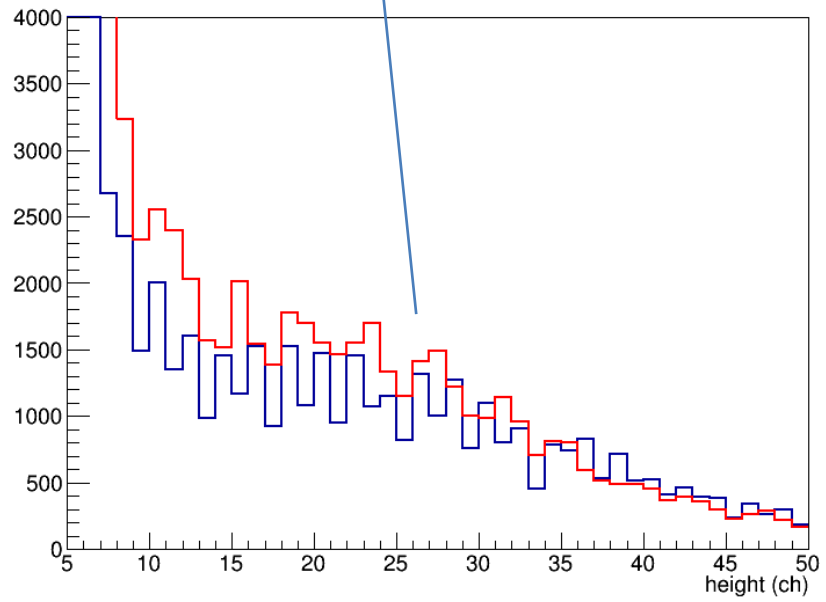
	PMT0 HV	PMT1 HV	pmt0.qc	pmt1.qc	det0.qc
SNU	**1100**	**950**	**7.47**	**9.66**	**17.13**
PCT 224 (wrong trg)	**1140**	**1025**	**8.07**	**8.77**	**16.84**
PCT 112 (fixed trg)	**1170**	**985**	**7.68**	**7.88**	**15.56**
New	**1170**	**1015**	**8.44**	**8.25**	**16.69**

pmt.qc : charge sum in ch. unit for 60 keV from Am241

Pulse height distribution (With Am241 calibration data)







8.285 : 59.54 (keV) = 0.02 : X (keV)
-> X = 0.144 (keV)

(= 6.96 P.E per keV)

Time difference of two PMTs