

Status report

Tokyo University of Science

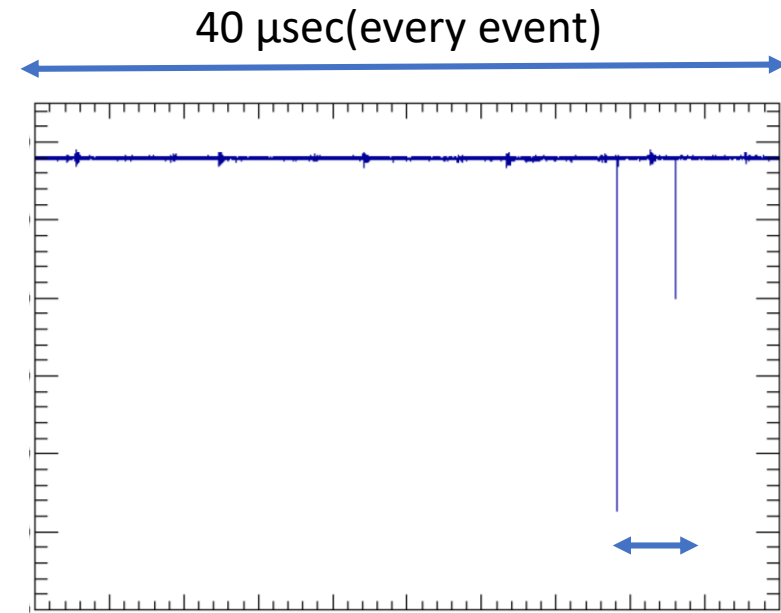
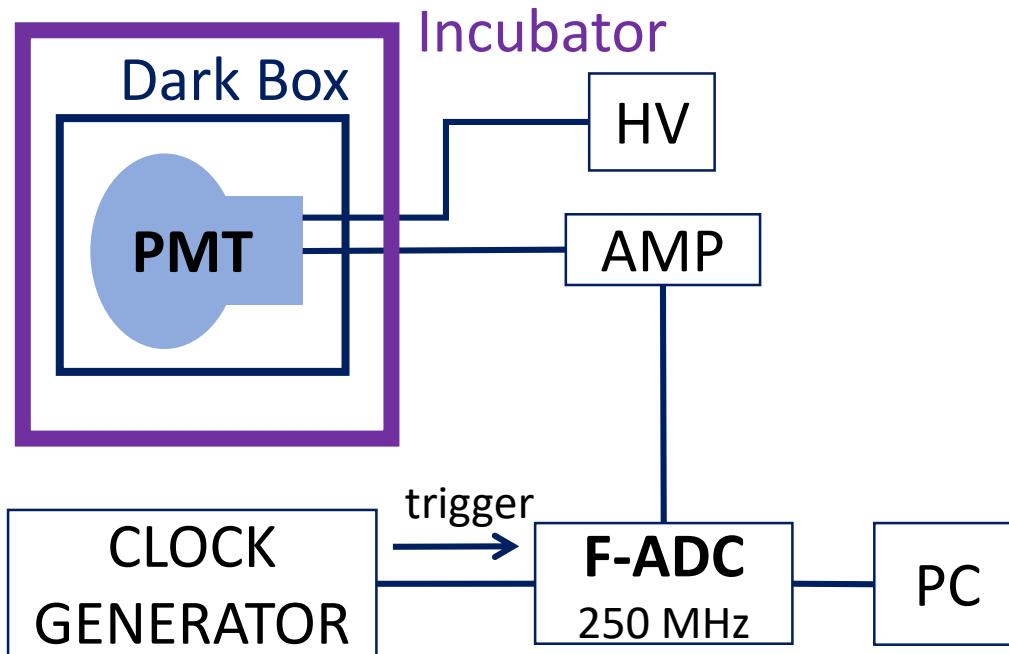
Tatsushi Kinoshita

10th January, 2020

mPMT meeting

Until this week...

- I checked the time intervals of dark noises for Hamamatsu's PMT in 40 μsec time window by F-ADC.

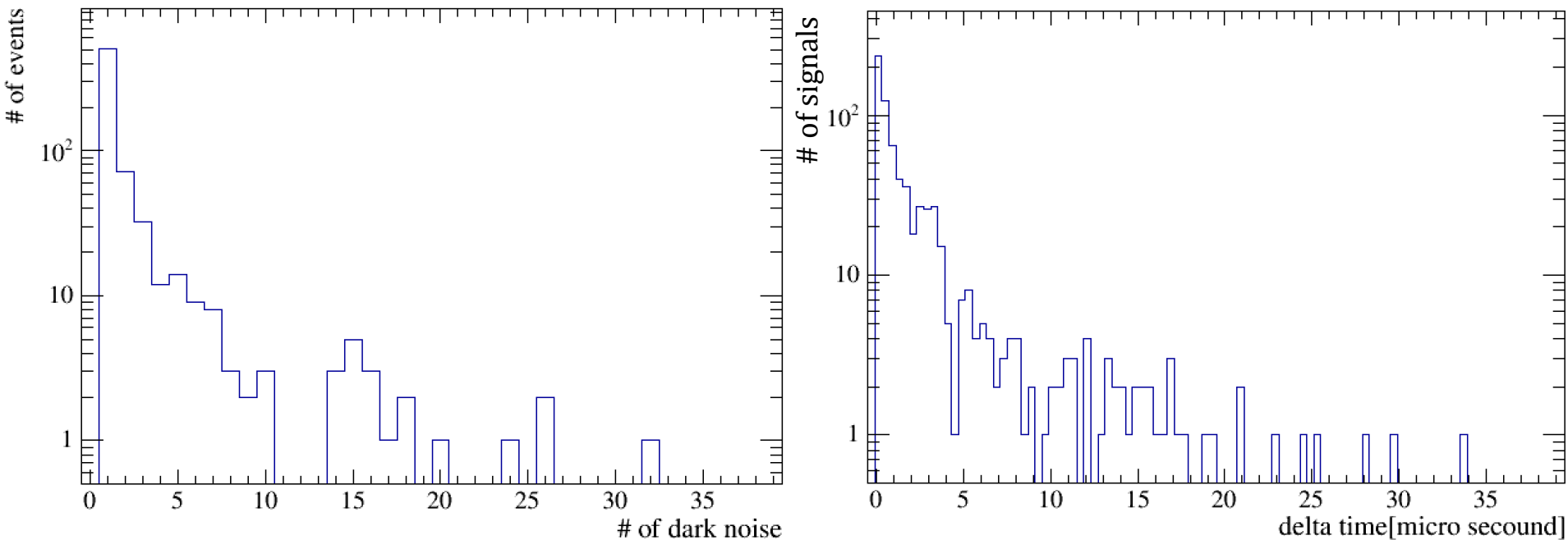


Event example

- HV = -1250 V
- 13°C
- Threshold = 0.35 p.e.

Hamamatsu : 13°C -1250V

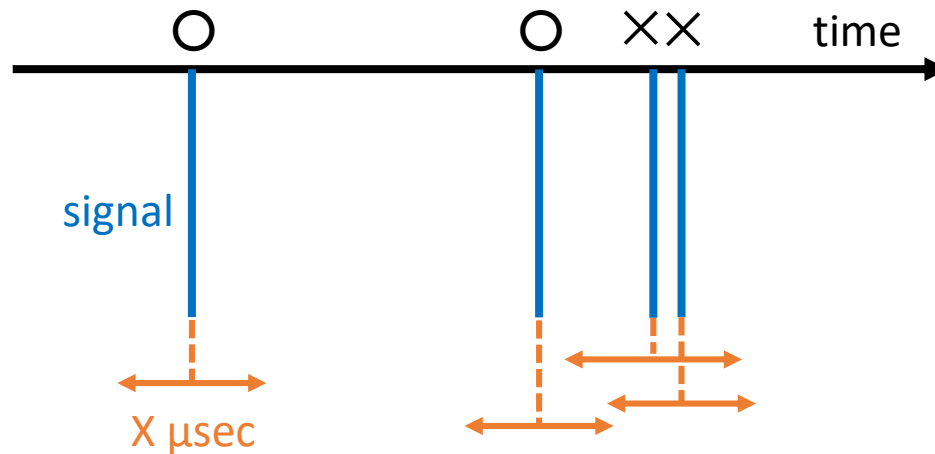
→ 249.95Hz (5.56sec 1391hits)

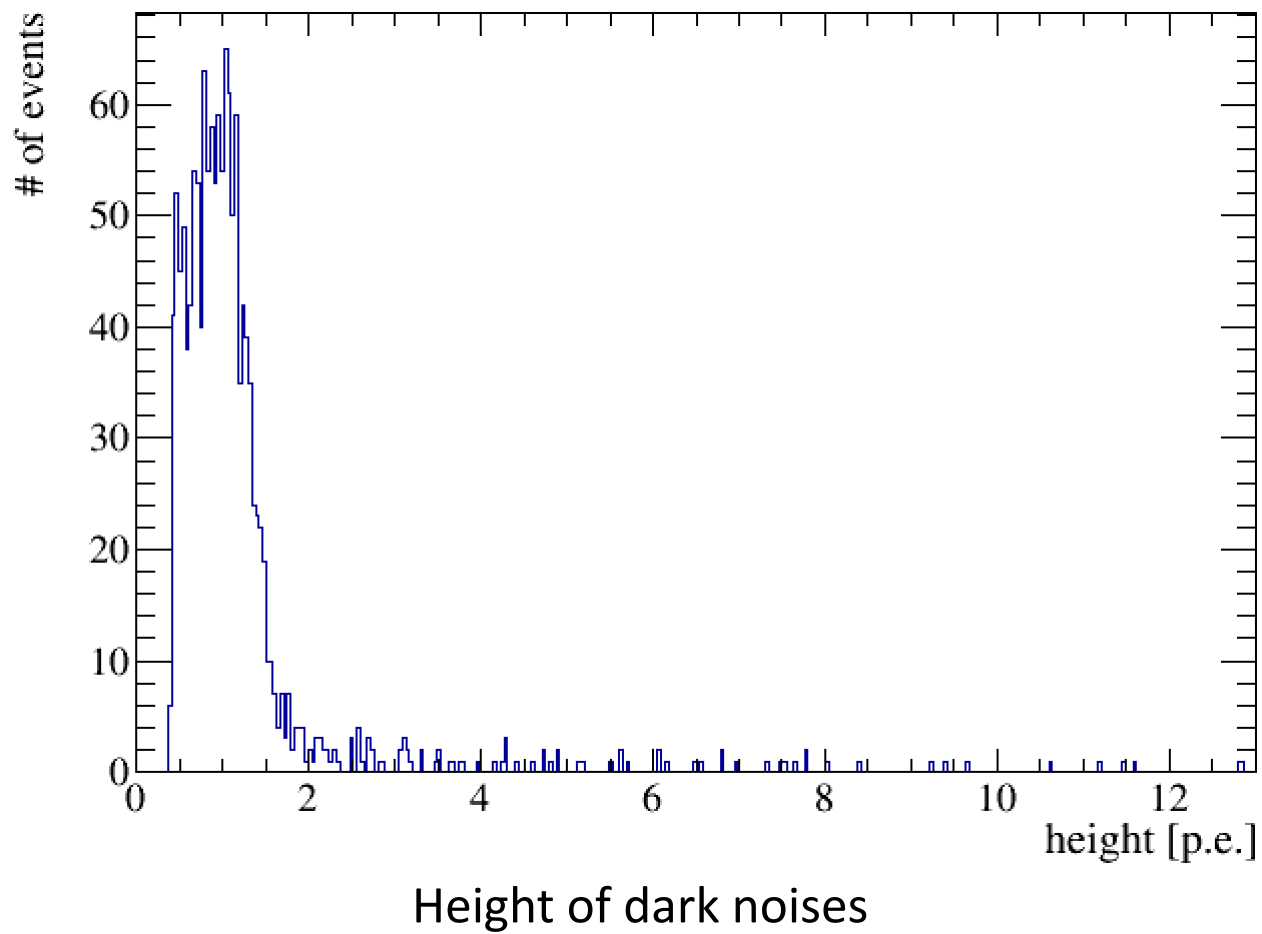


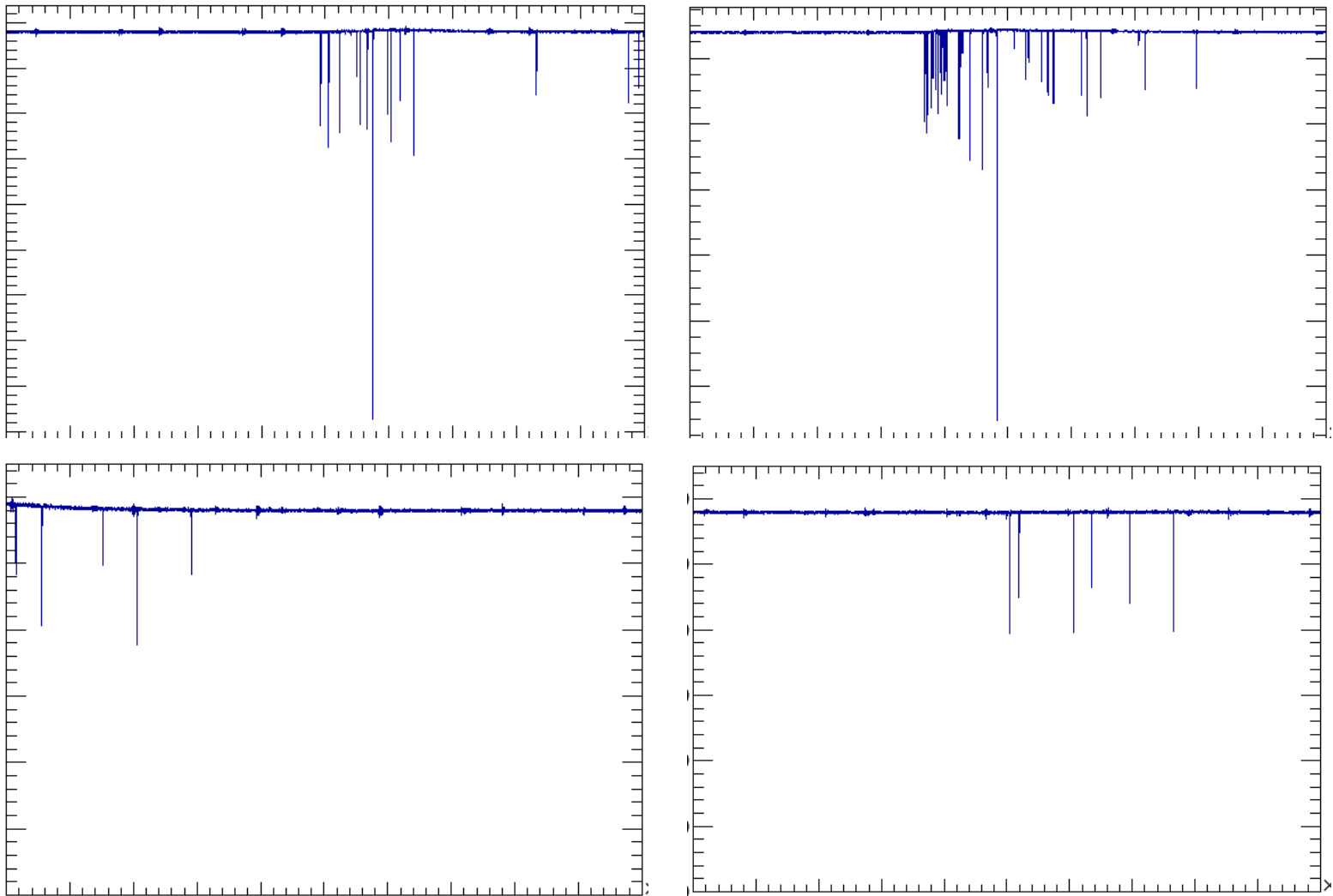
- Left graph shows the number of dark noises in each event. About 25% events had multi signals in 40 μ sec.
- Right graph shows the time intervals of multi signals.
 - The number of signals decreased with time intervals.

Future plan

- Changing the value of time frame which is based on time intervals, I will reduce the signal count in that frame and check the dark rate.







Waveform examples