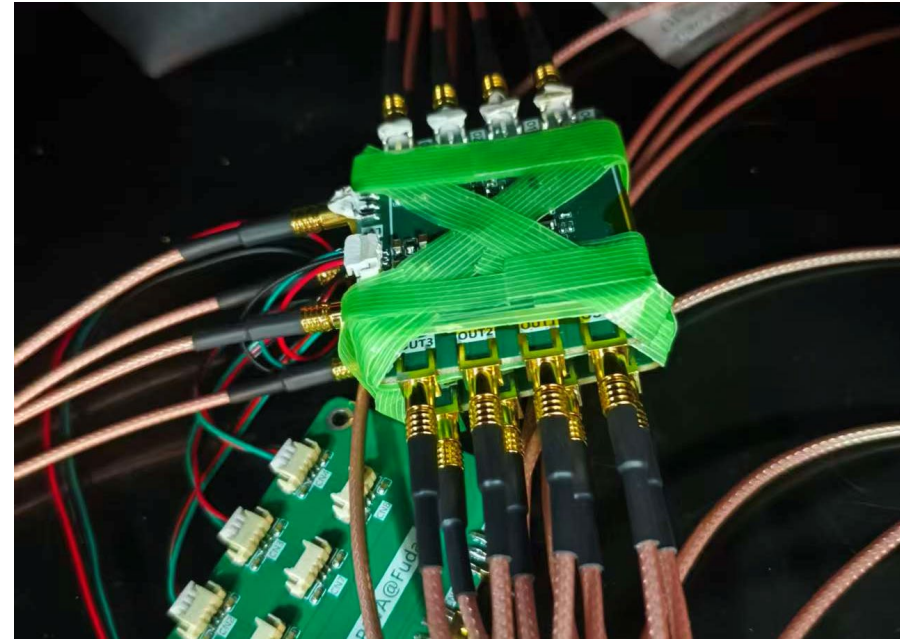
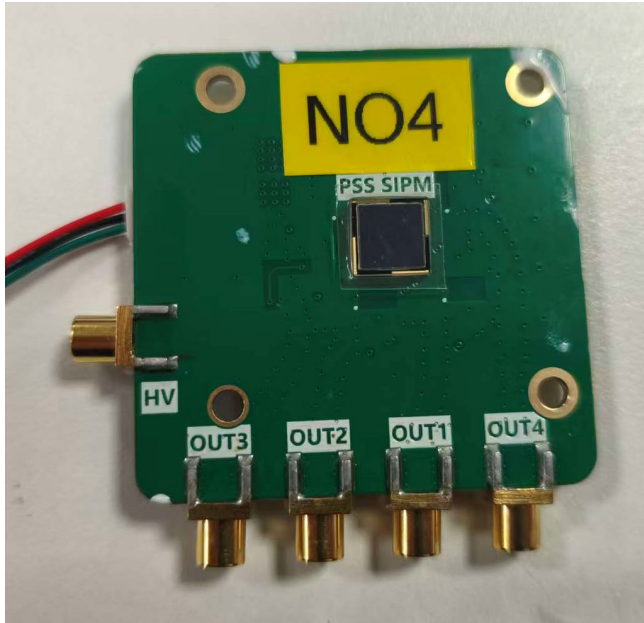


Group Meeting

邹世明

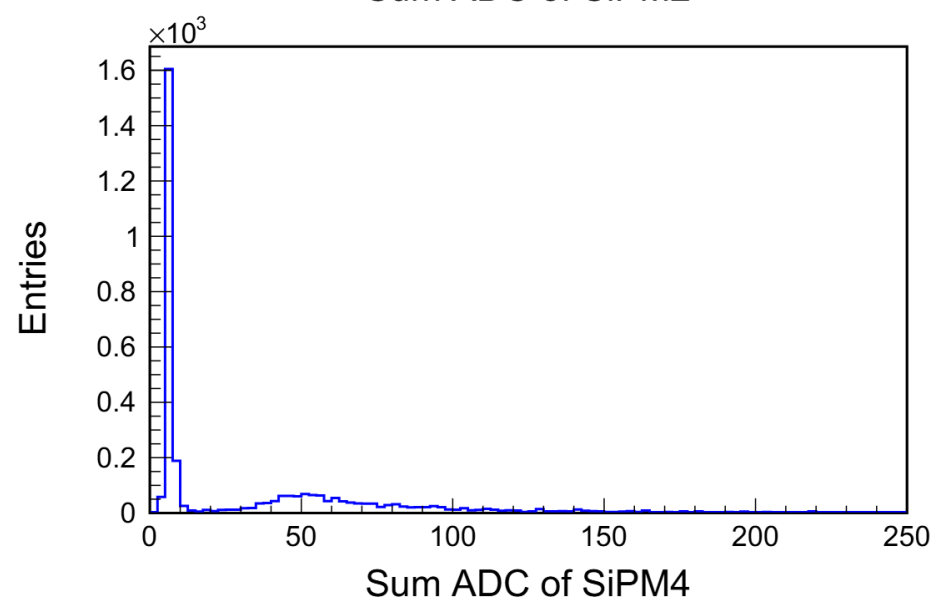
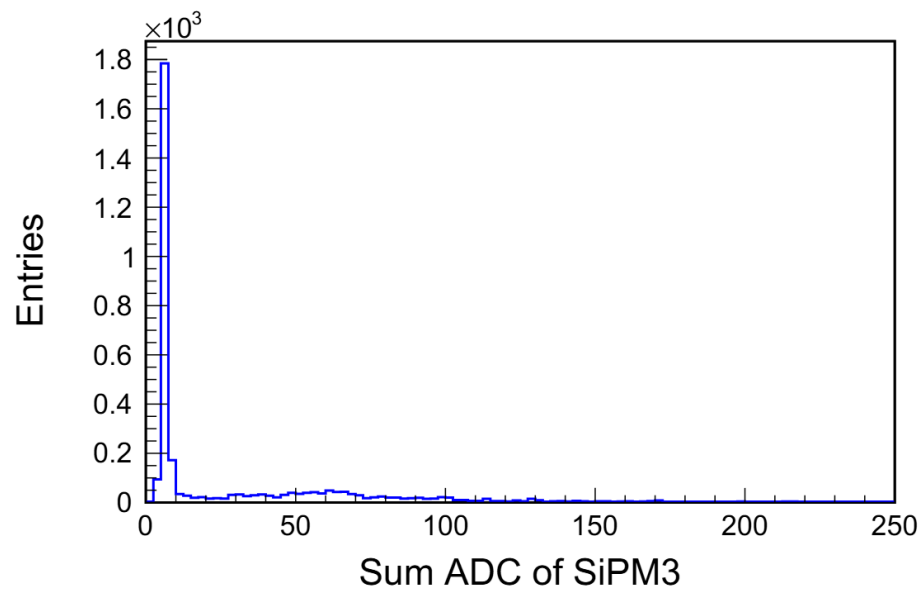
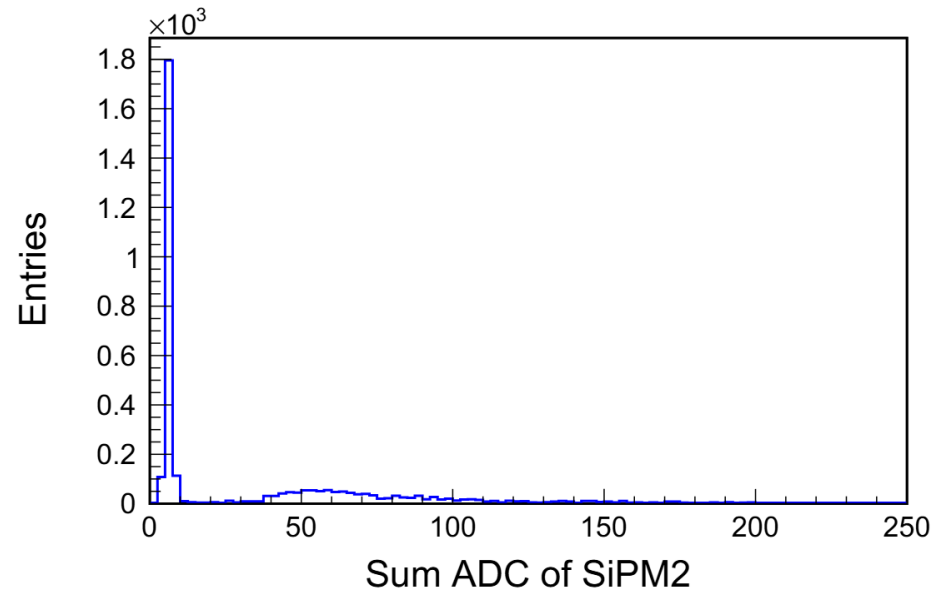
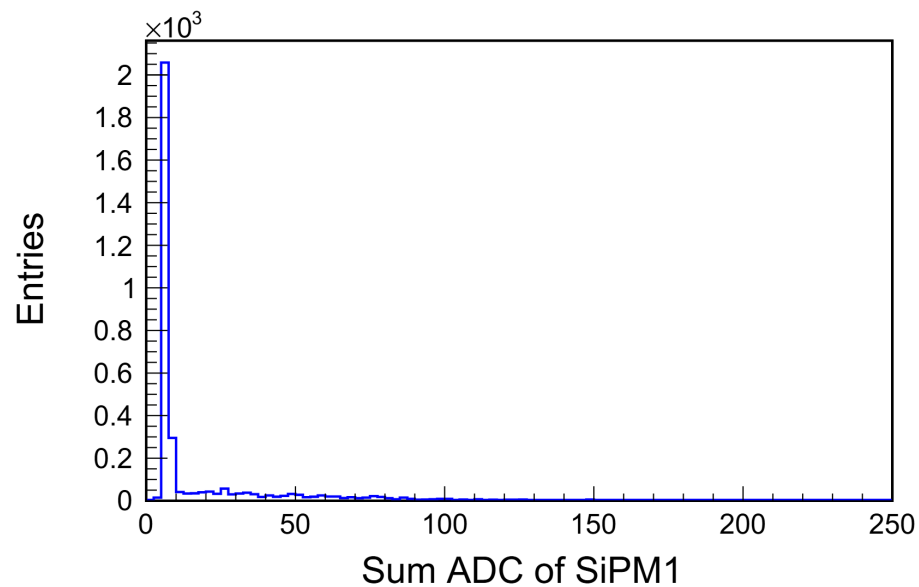
2026/01/16

Cosmic ray test of 4 PSS6060



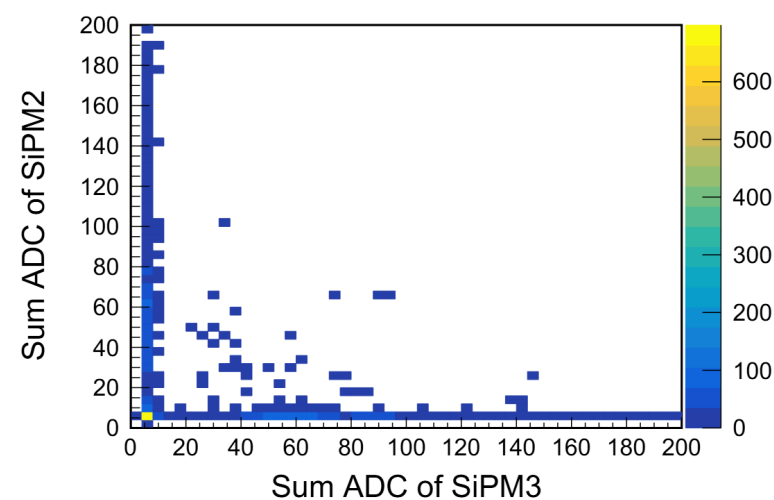
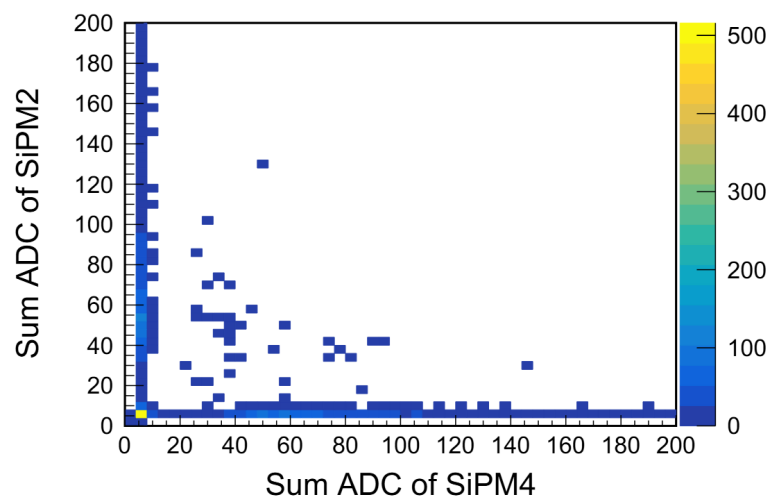
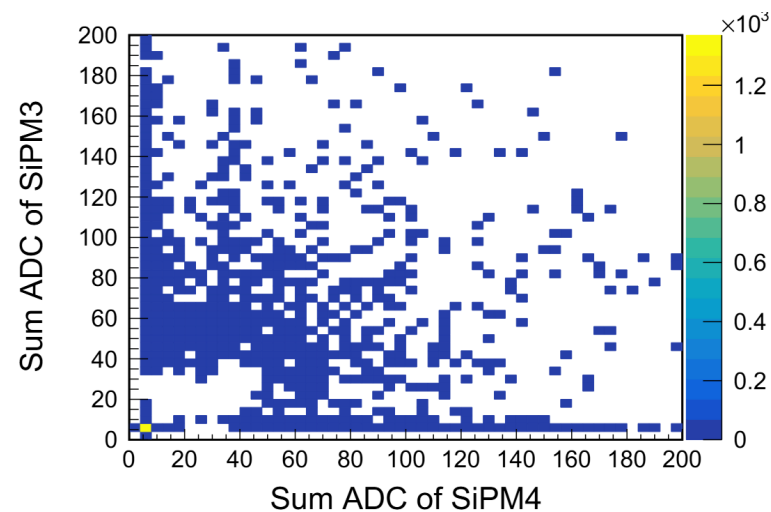
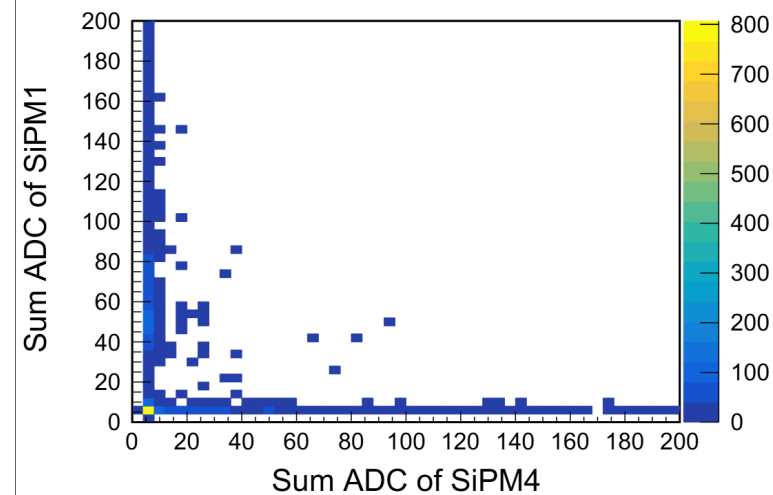
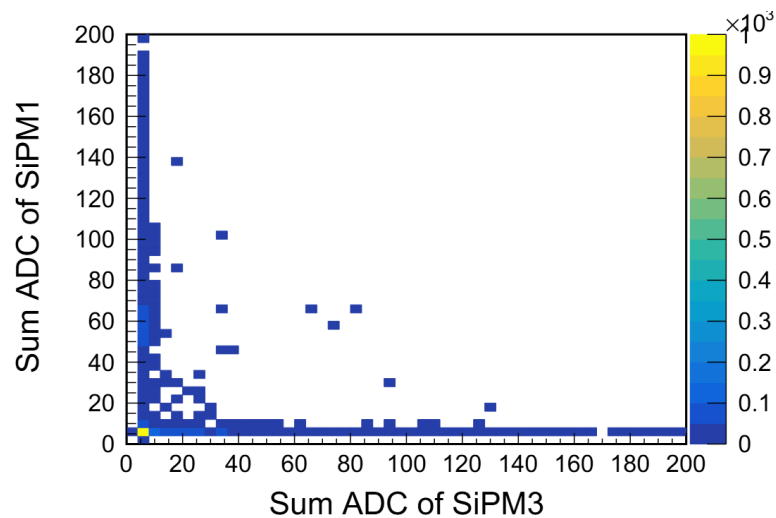
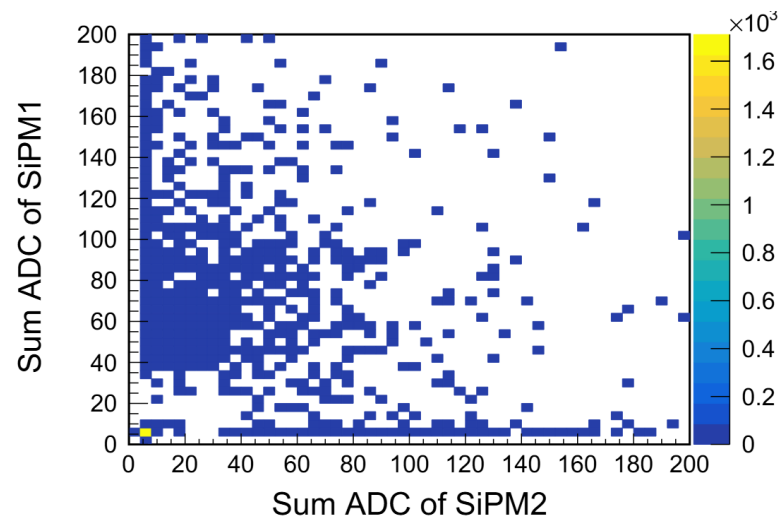
触发逻辑：四块PCB有大于等于一块输出大信号即记录

ADC distirbution



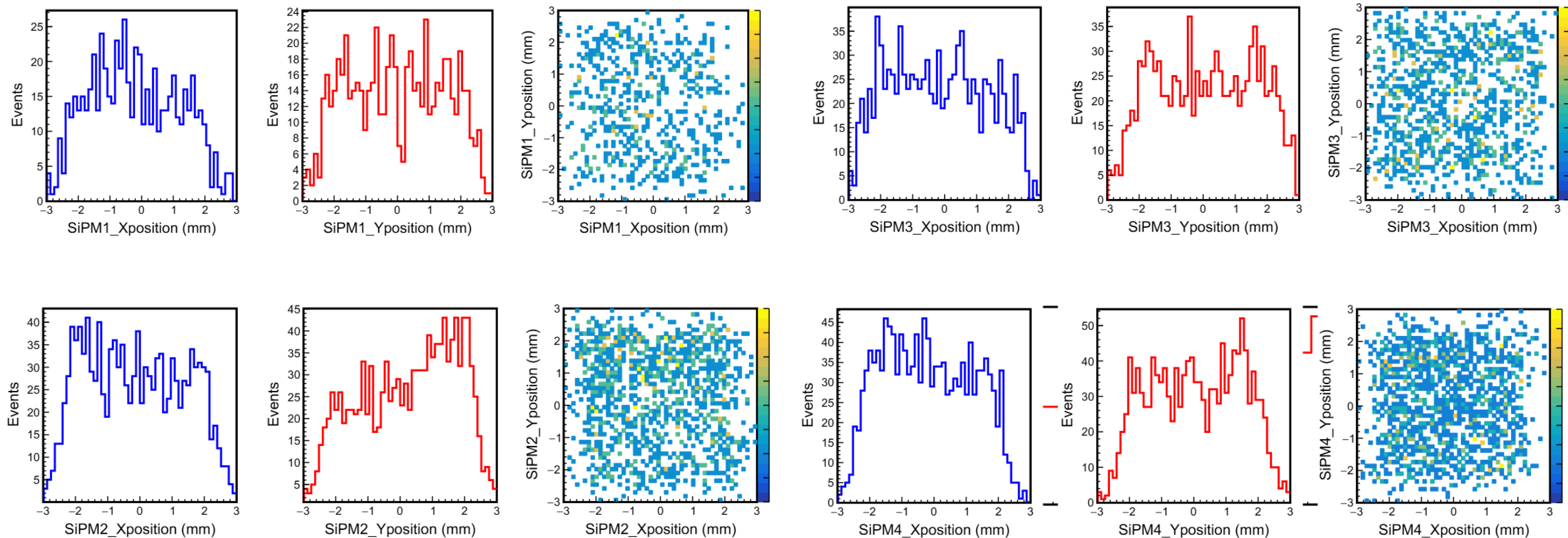
单个SiPM四路读出ADC之和

ADC distribution

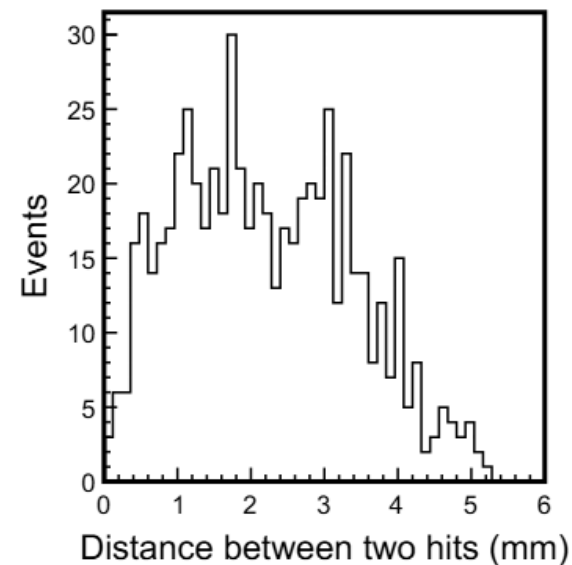
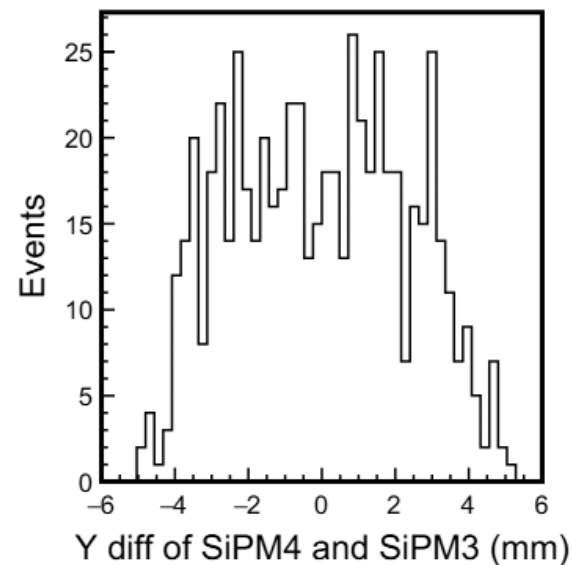
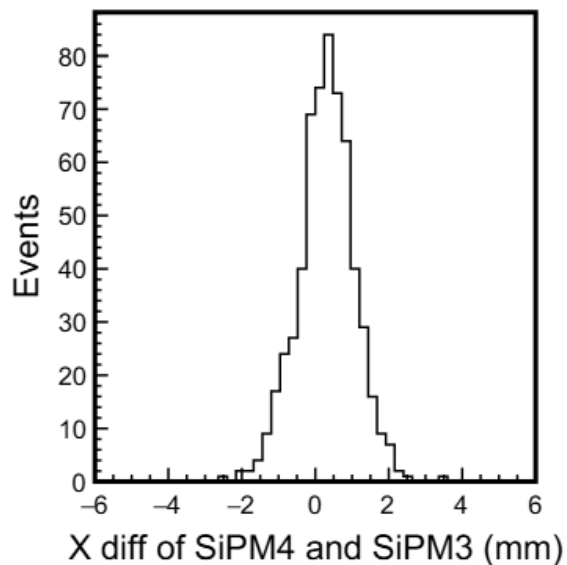
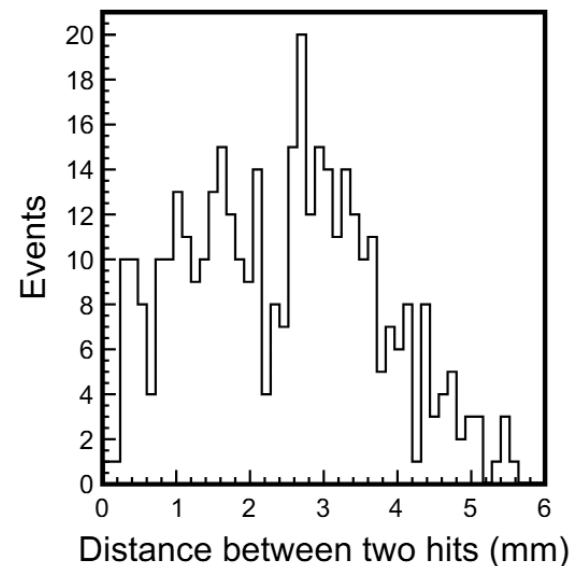
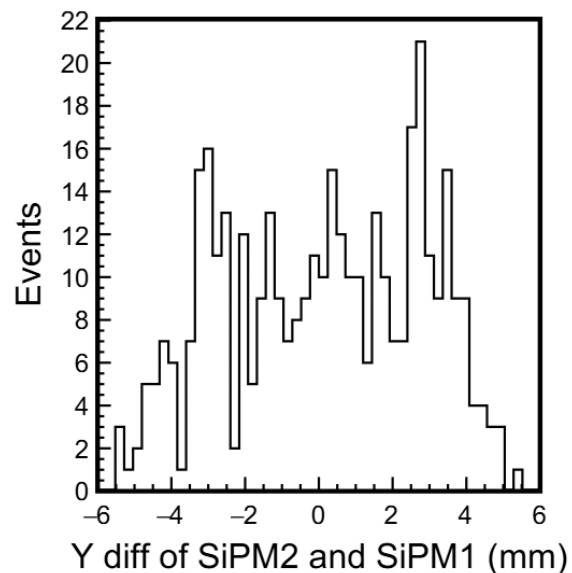
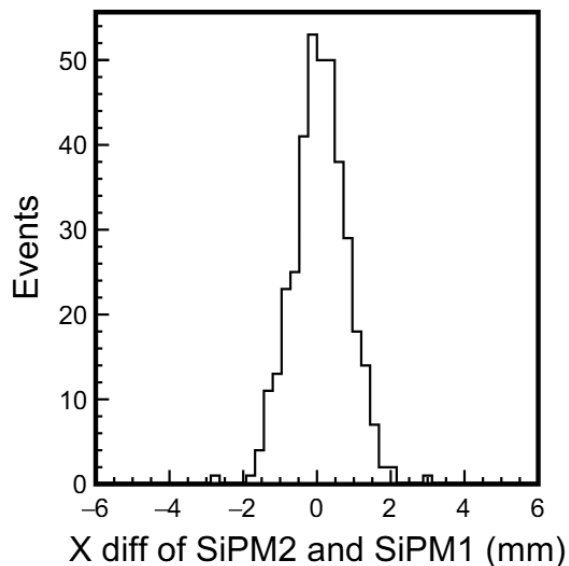


SiPM1与SiPM2紧贴, SiPM3与SiPM4紧贴

Hit position

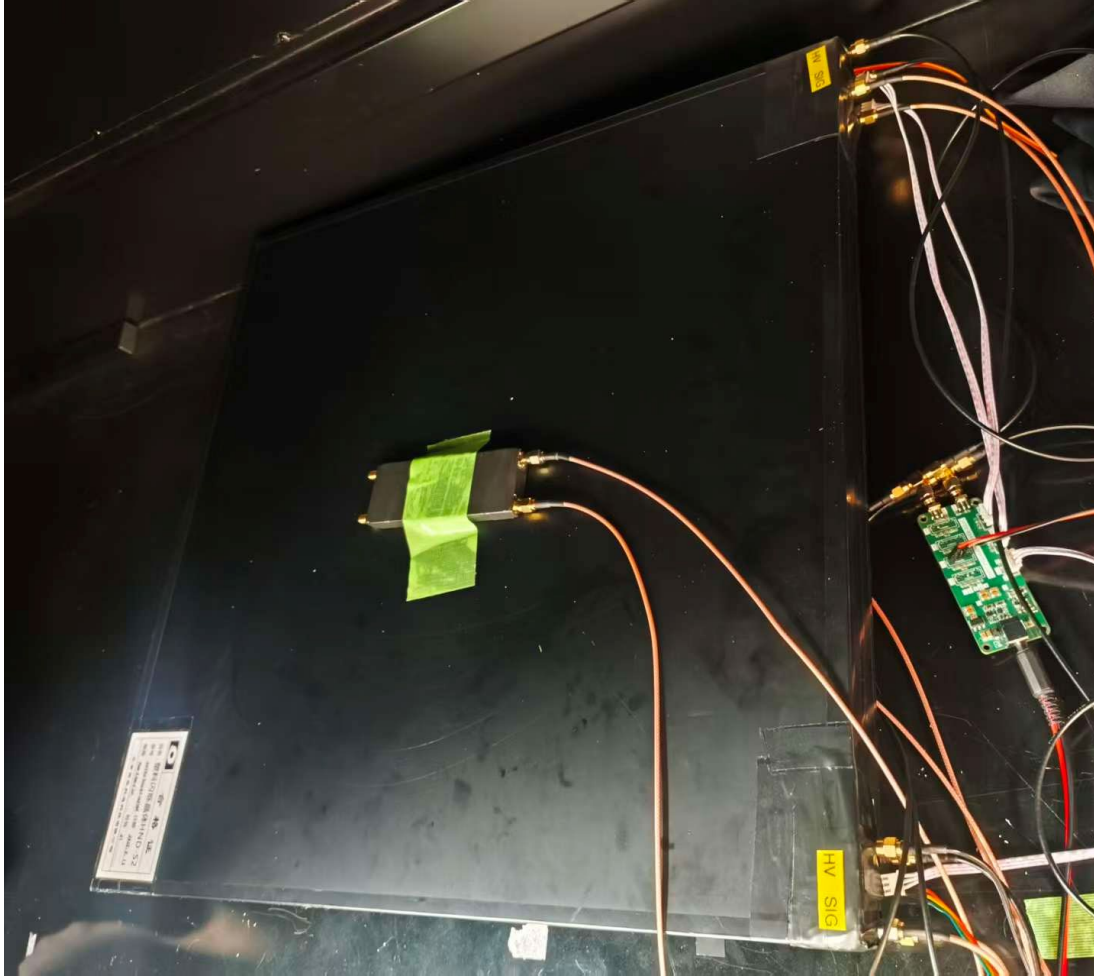


Hit position

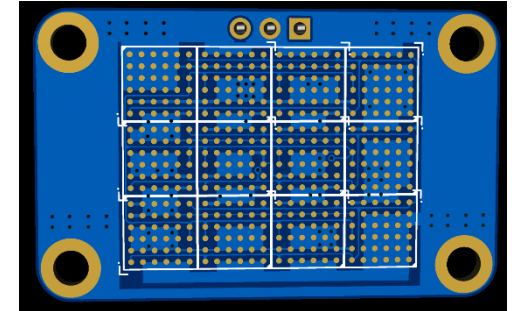
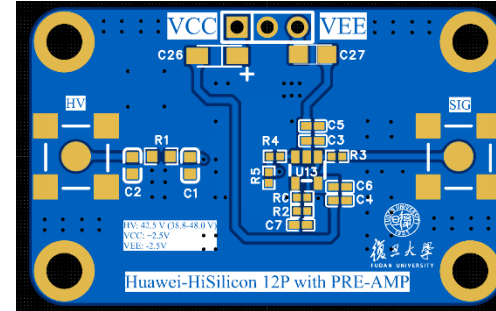


$$Distance = \sqrt{(x_1 - x_2)^2 + (y_1 - y_2)^2}$$

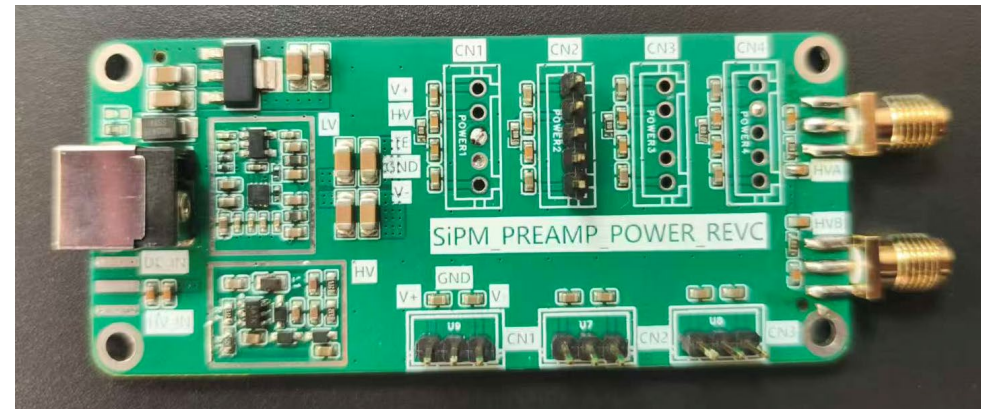
Large scintillators for trigger



Two 50 cm*50 cm scintillators

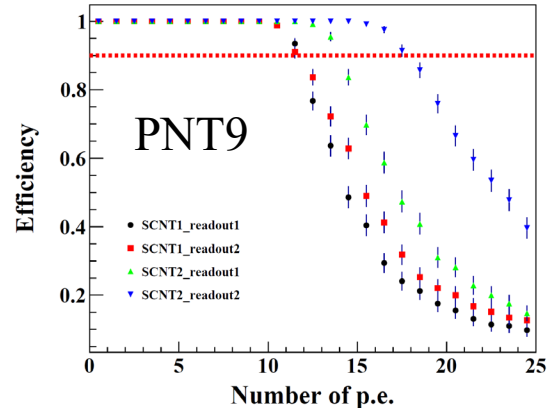
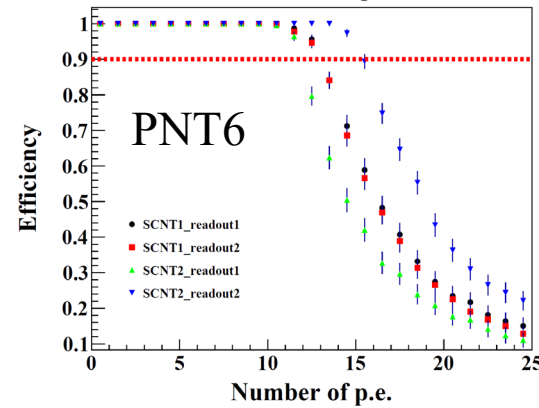
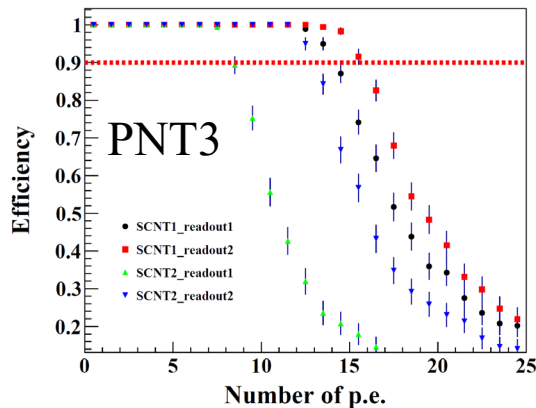
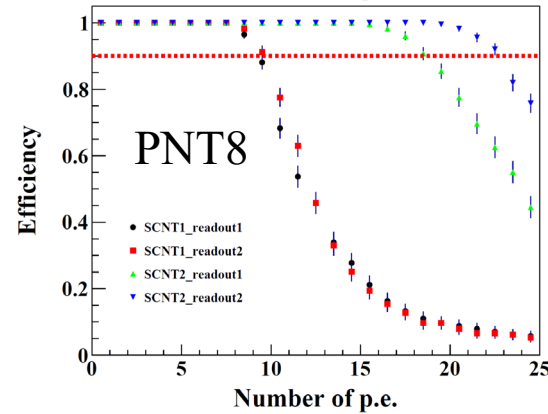
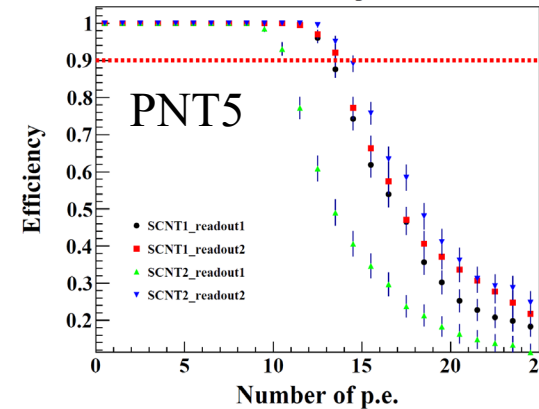
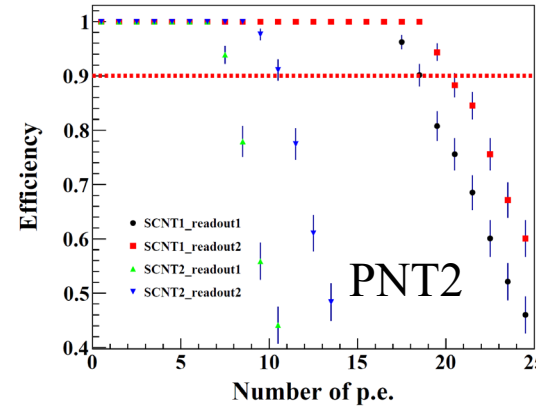
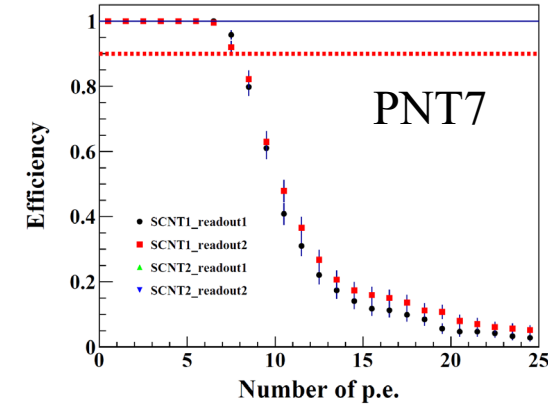
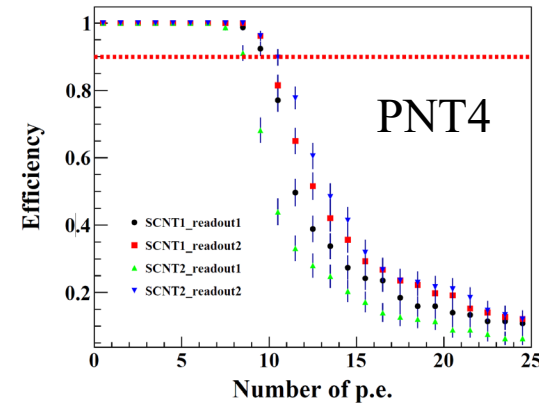
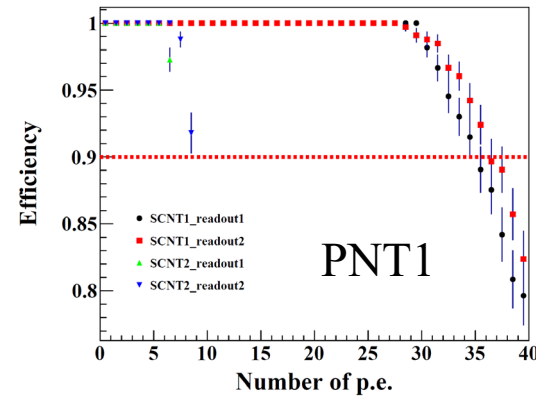
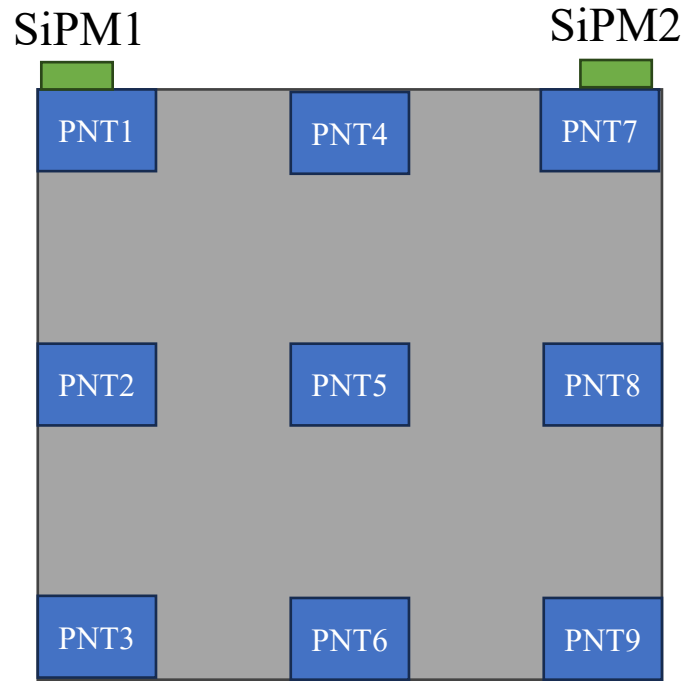


The readout board with 12 Huawei-HiSilicon SiPMs in parallel configuration.



Power supply board.

Efficiencies of the large scintillators



- The efficiency decreases significantly when the cosmic-ray hit point and the SiPM are at a large relative angle.
- At the far ends, the efficiency can keep 90% at the threshold of about 10 p.e.