Beam test status update

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General test status update:

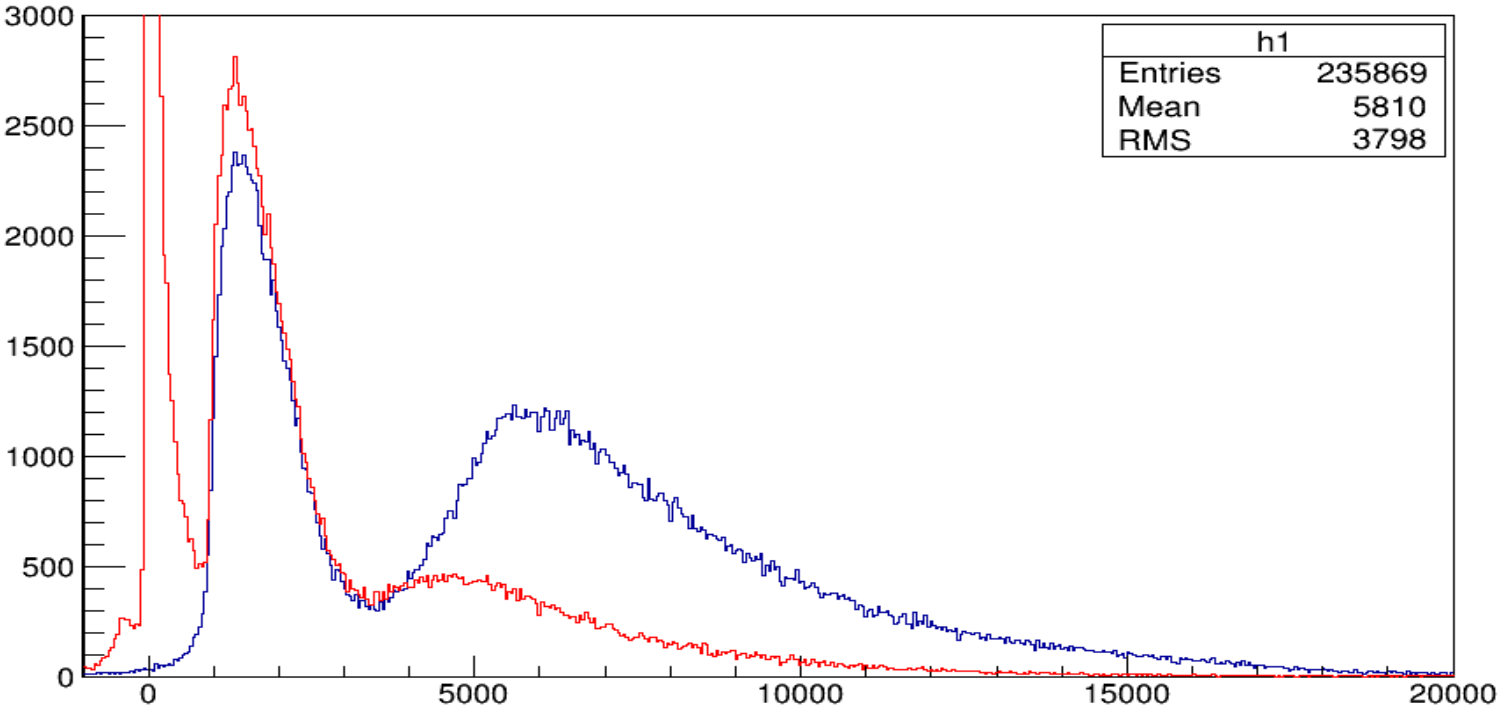
- Router crashed on last Sunday, we replace it with a new router, but after solving that, the data taking computer can’t connect to internet which maybe something wrong with MAC address, and we don’t have enough time to deal with it. We will try to solve it next Monday when the access is available.

- Could run tracking analysis script that got from Danning, and I’m still working with Danning’ help to understand and make sure the output.

- Radiation damage….. Try to make sure

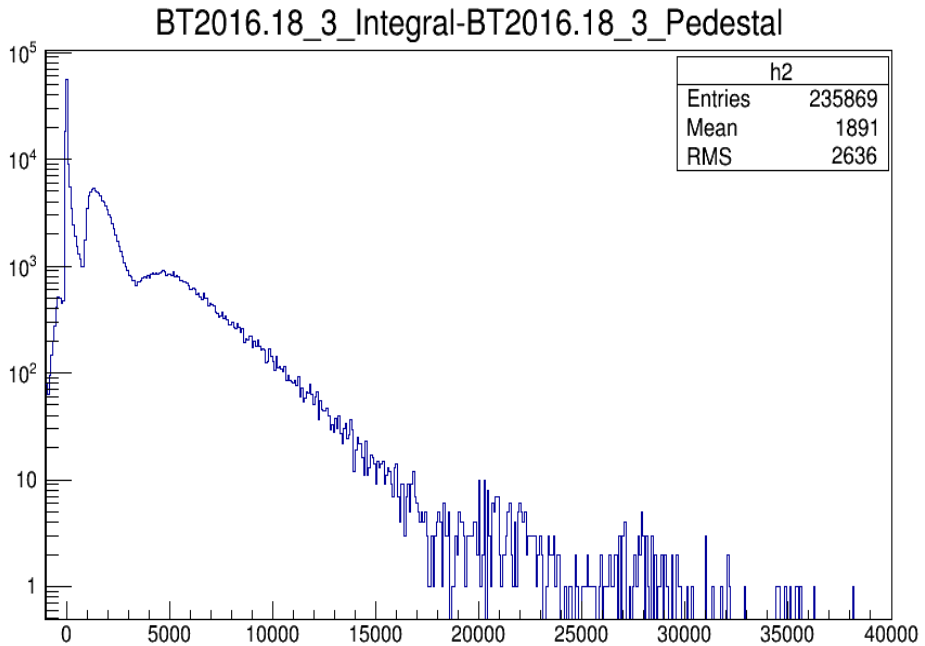
THU module Integral signal distribution (run 387, only three shashlik in trigger)

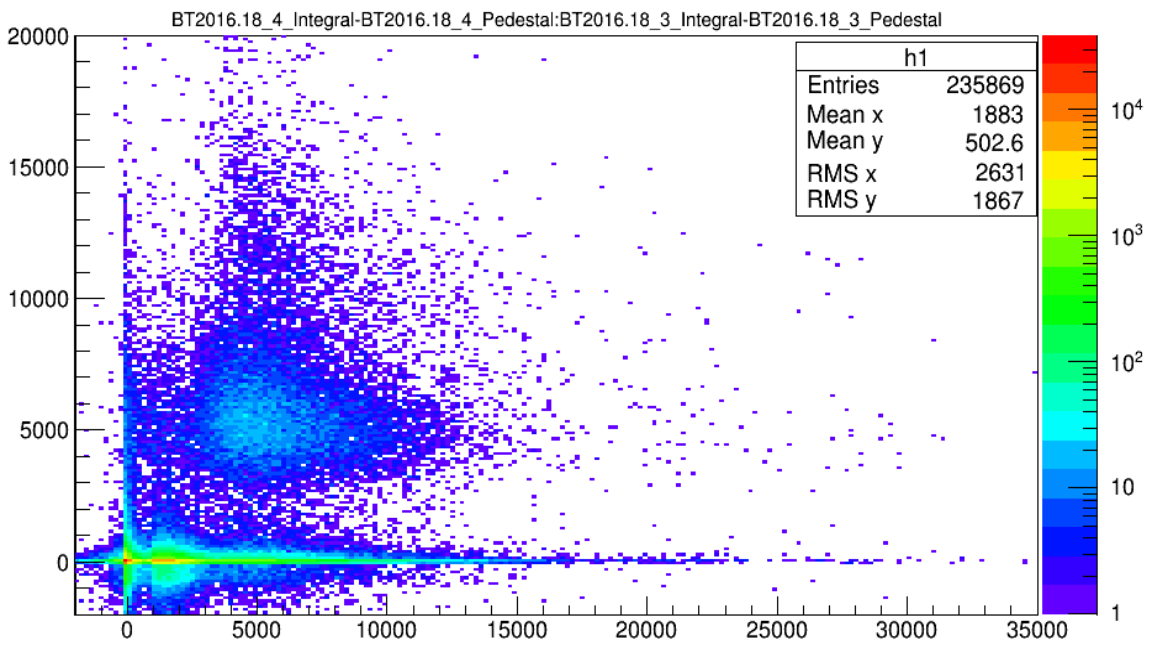
- Red: THU module Integral signal distribution
- Blue: Sum of three shashlik module



THU module

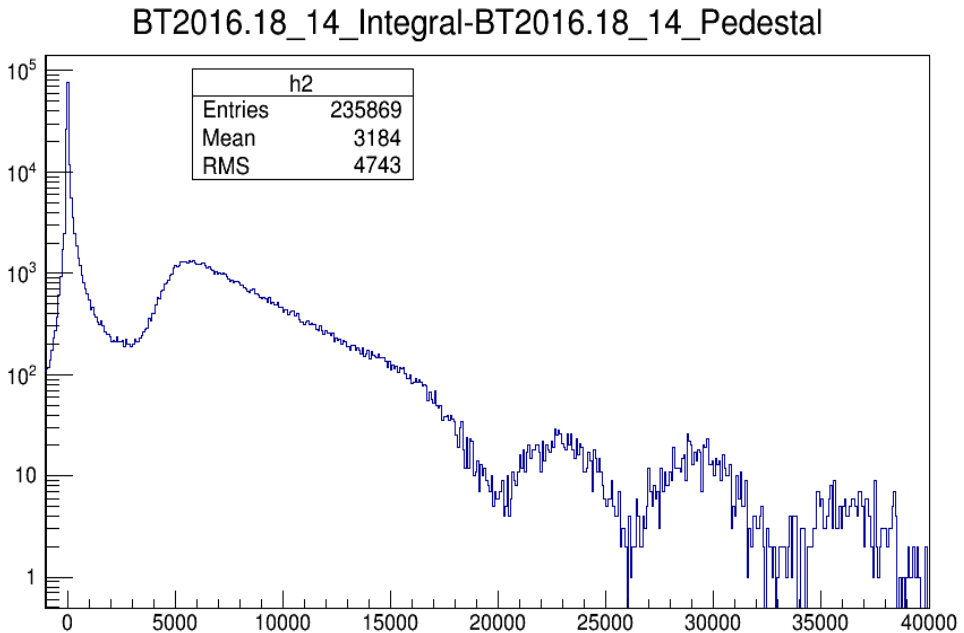
- For 2D distribution, x axis shashlik signal, y axis is preshower signal
- The first peak should be noise, but it’s OK to separate noise.

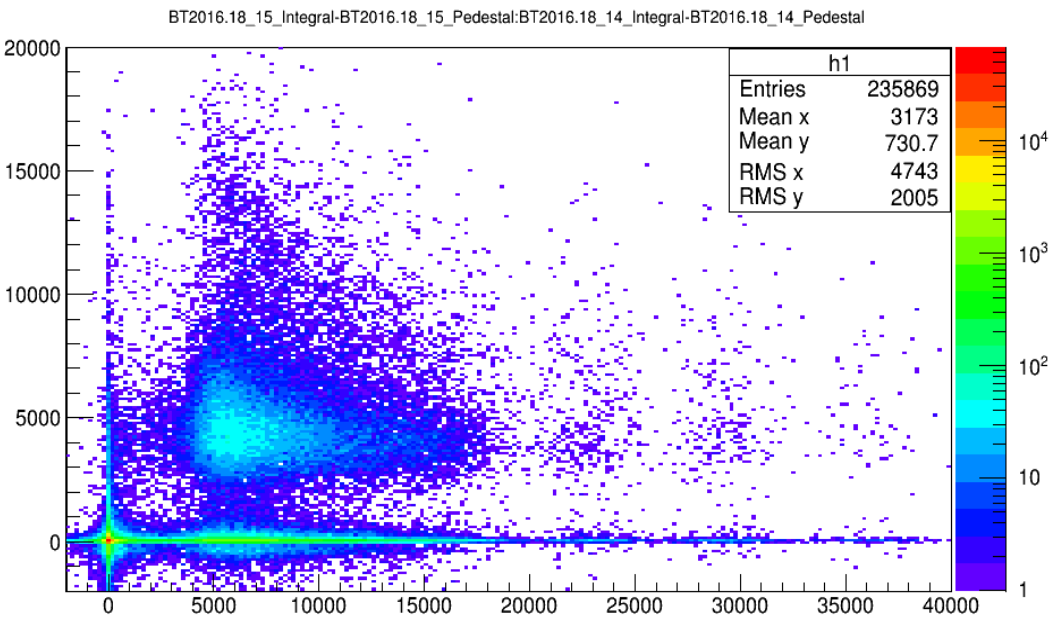




SDU #2

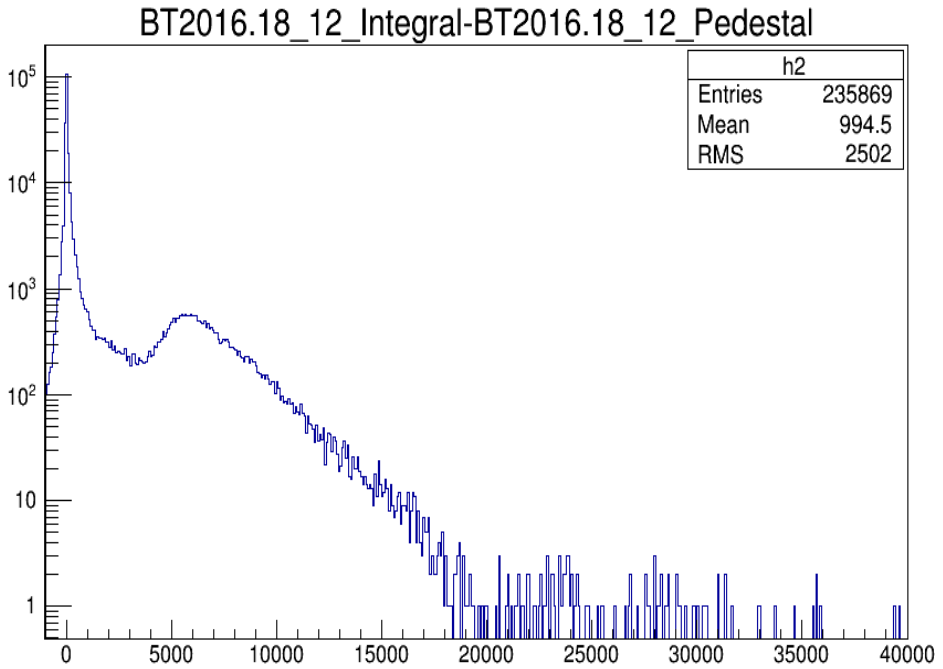
Apparently Peak in large signal area

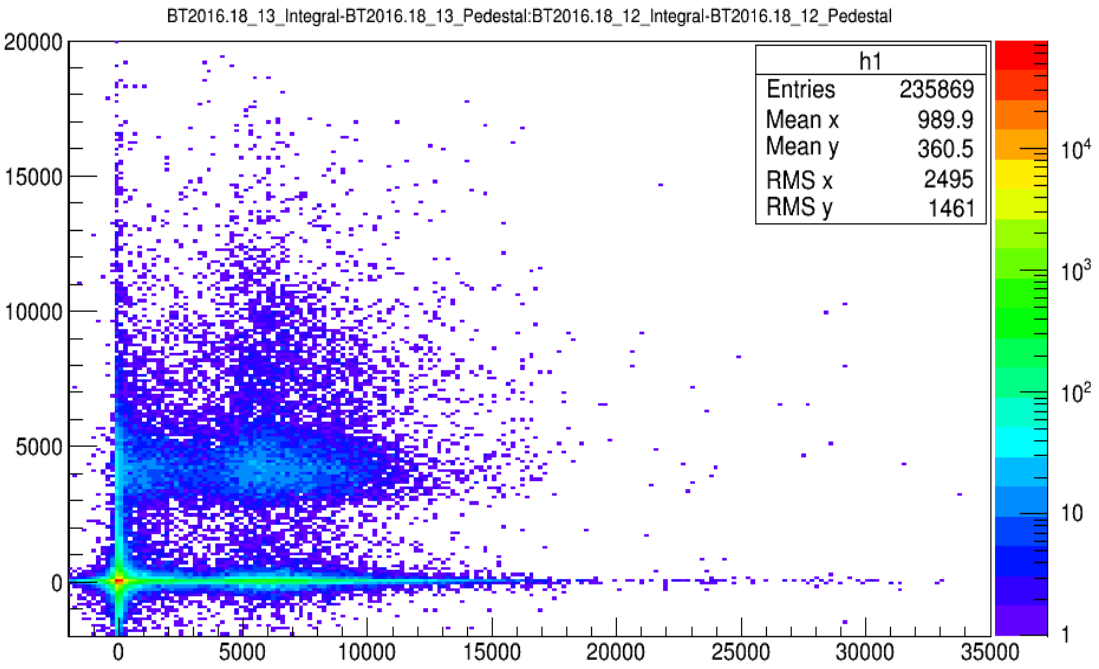




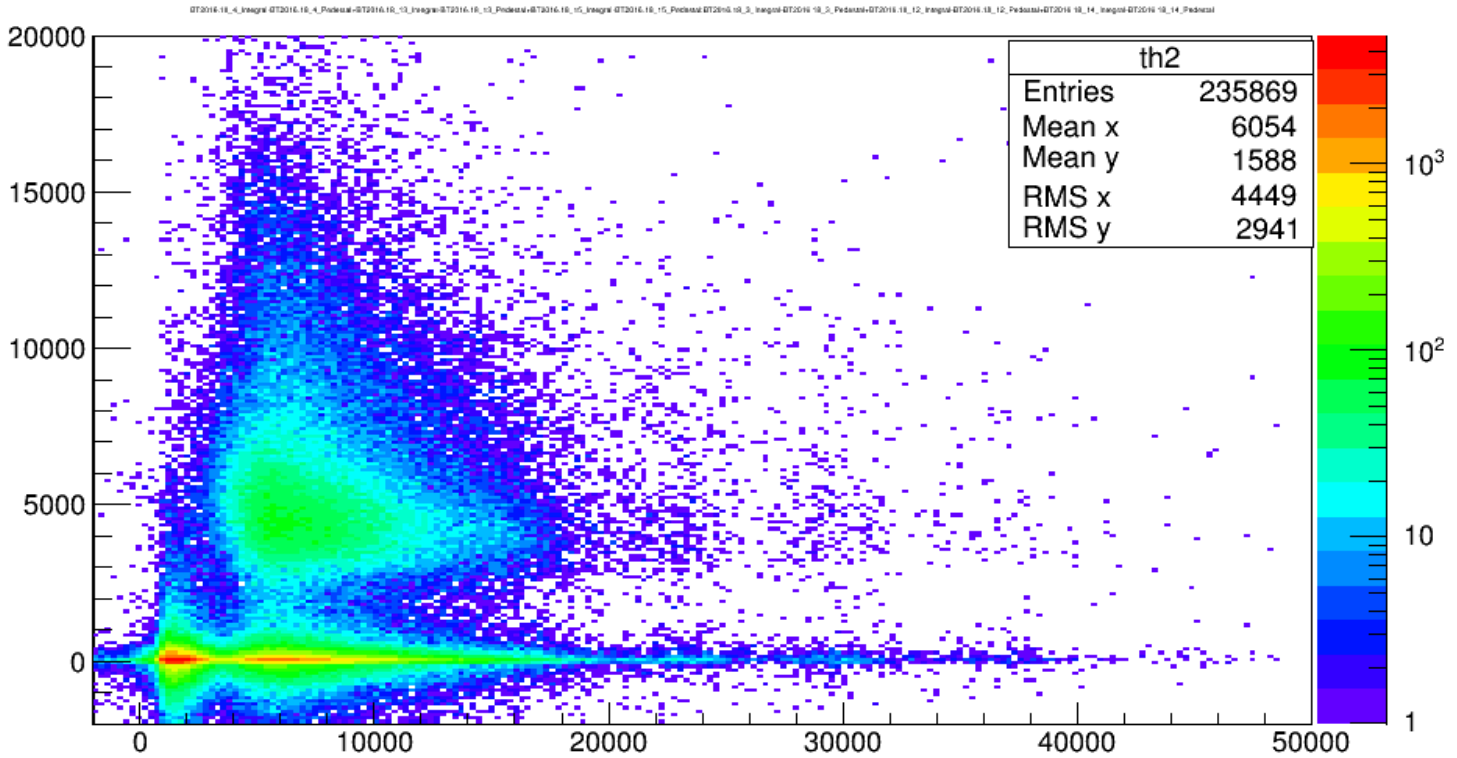
SDU #1

The peak signal magnitude of SDU #1 is similar compared with SDU #2, and the two PMT use same gain 5*10^6. But actually, with cosmic test result, SDU #2 should 80% (I forgot test value) better than SDU #1.



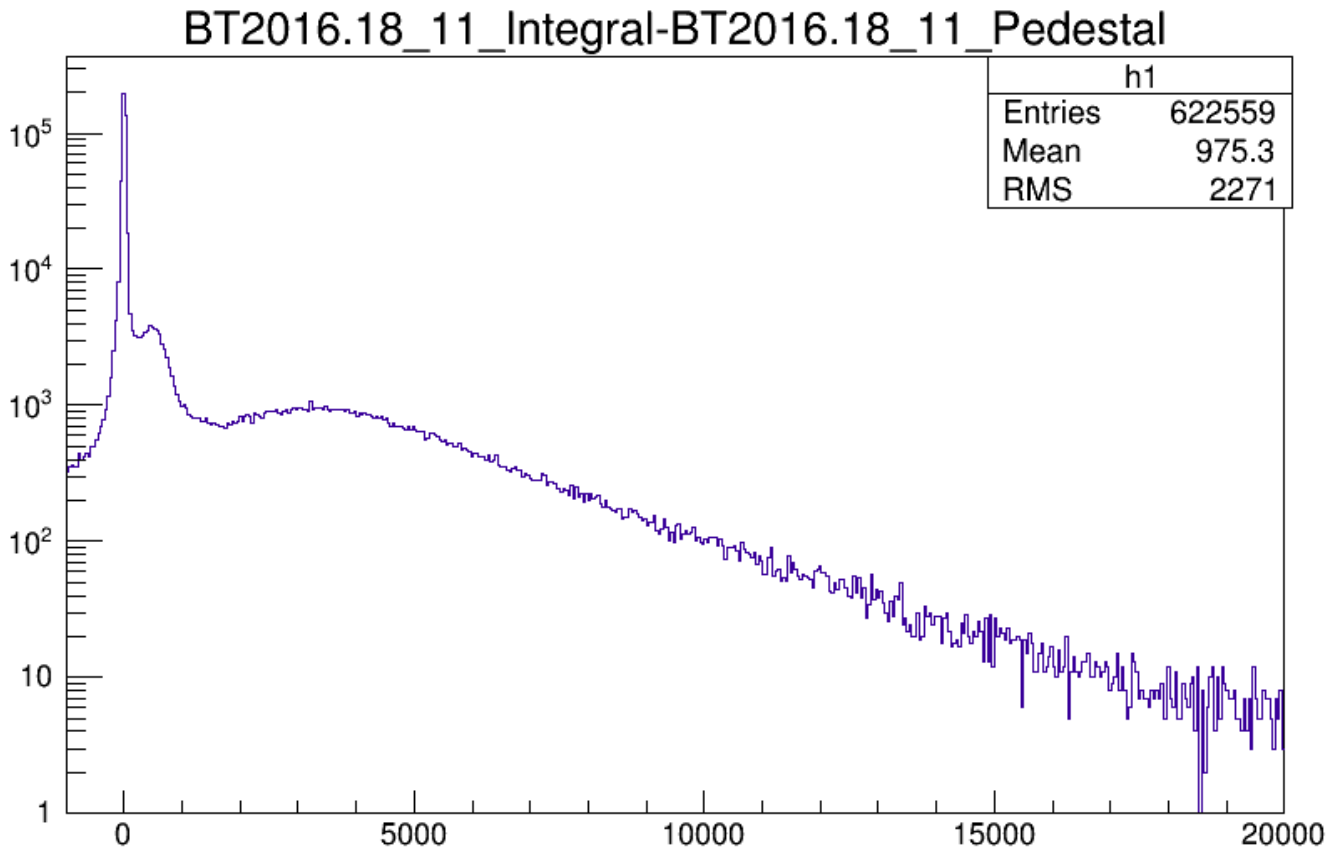


Sum of three preshower(Y) vs. Sum of shashlik(X)

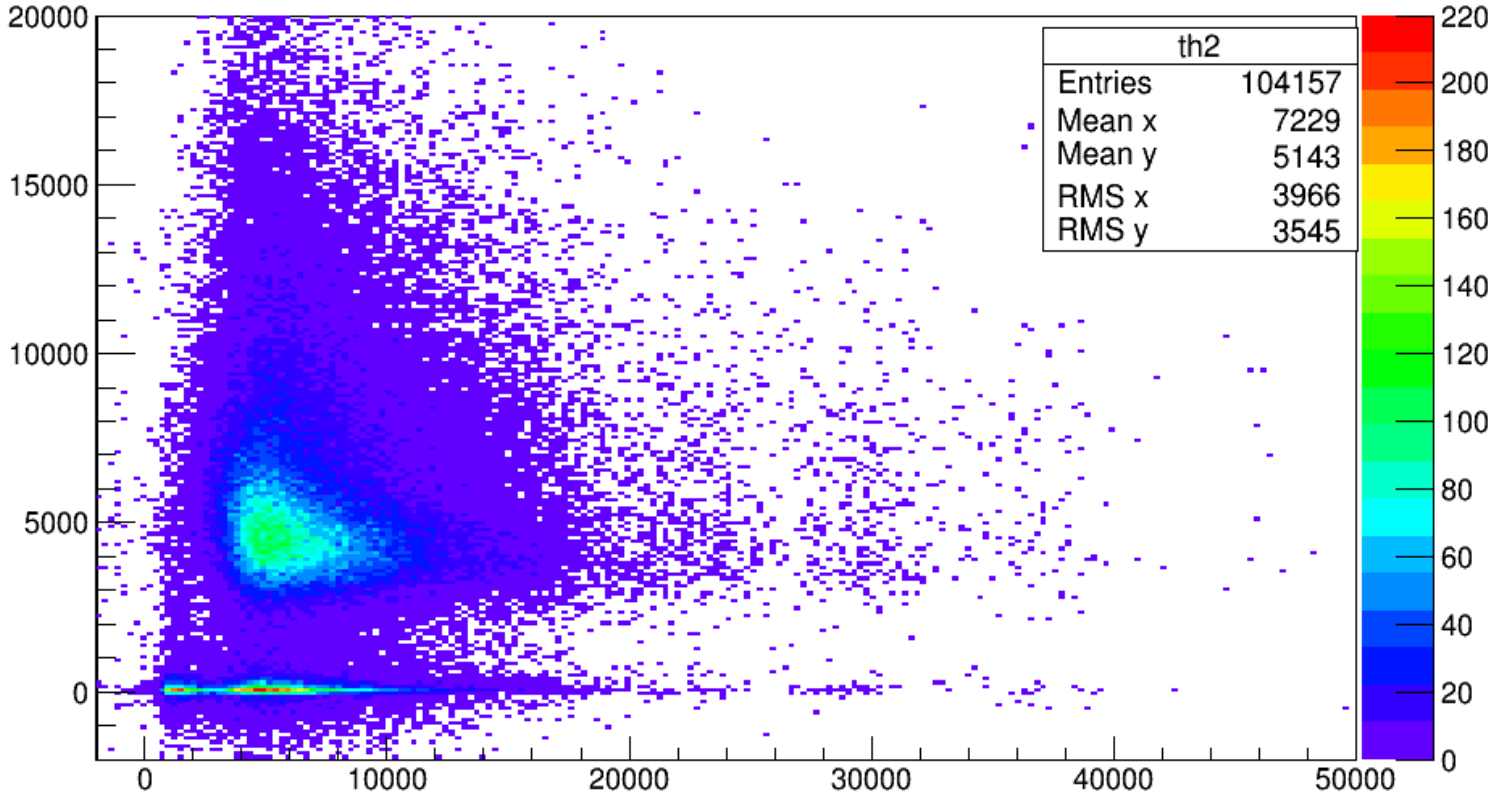


- Why dose preshower have no signal for most events?
- Need tracking to make sure if the particle hit preshower and which preshower.

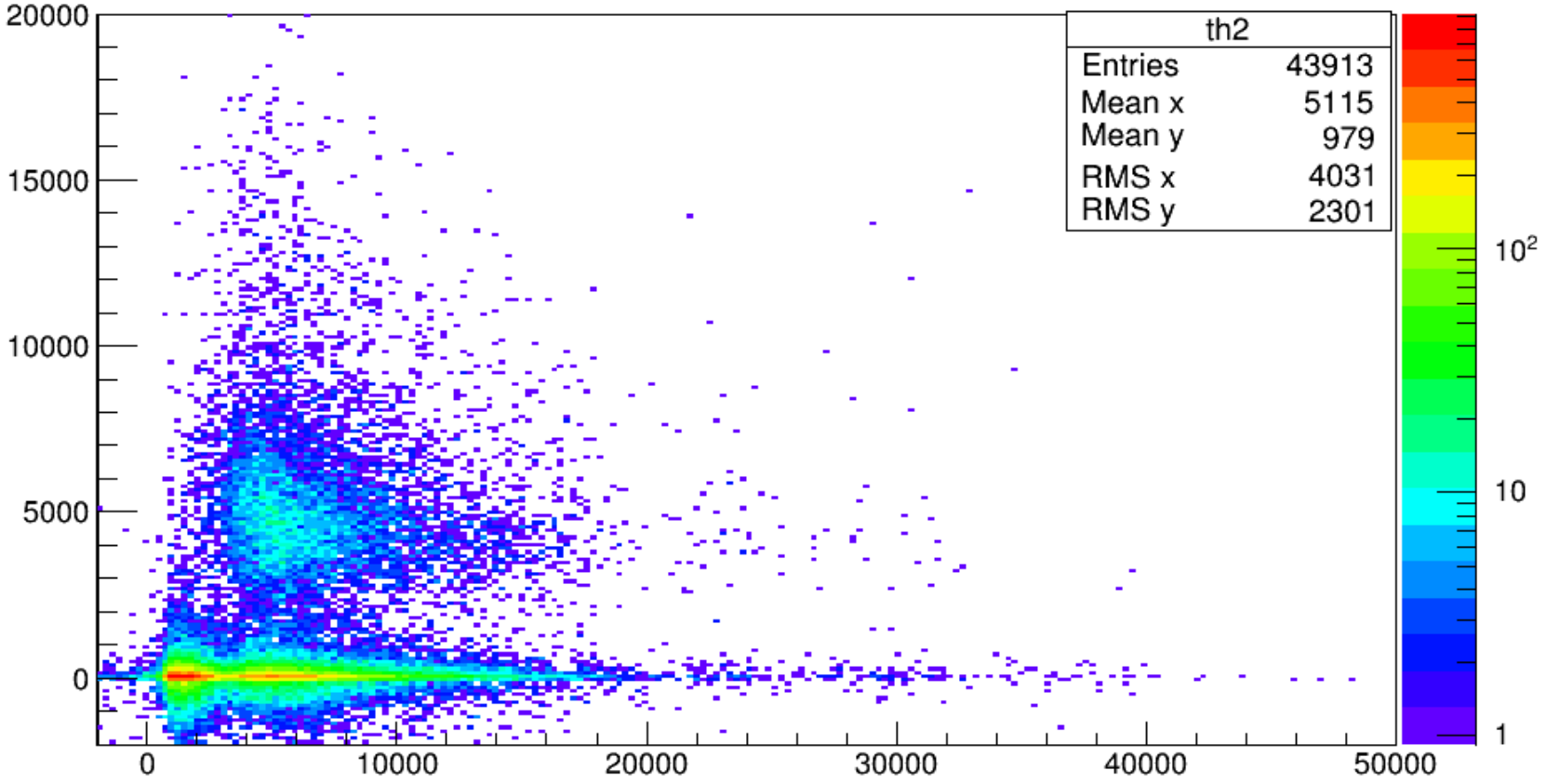
Considering SPD (run 411, SPD HV raised)



Integral of SPD >2000

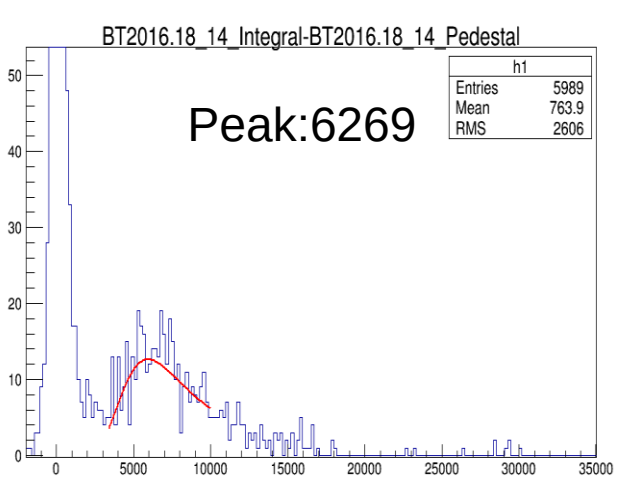


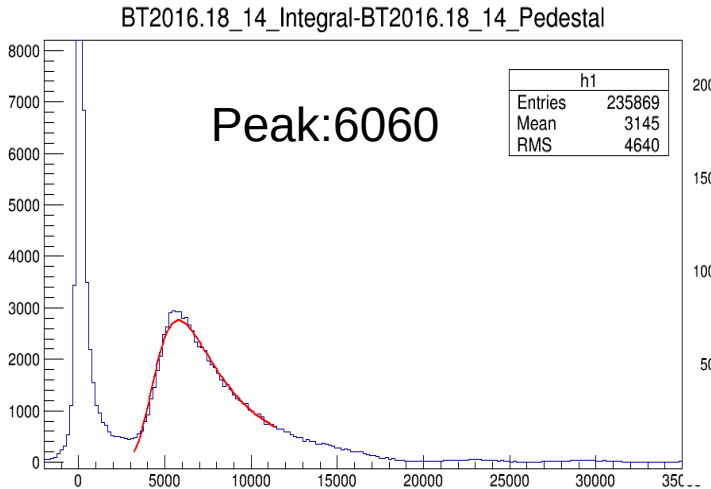
SPD>300&SPD<1000

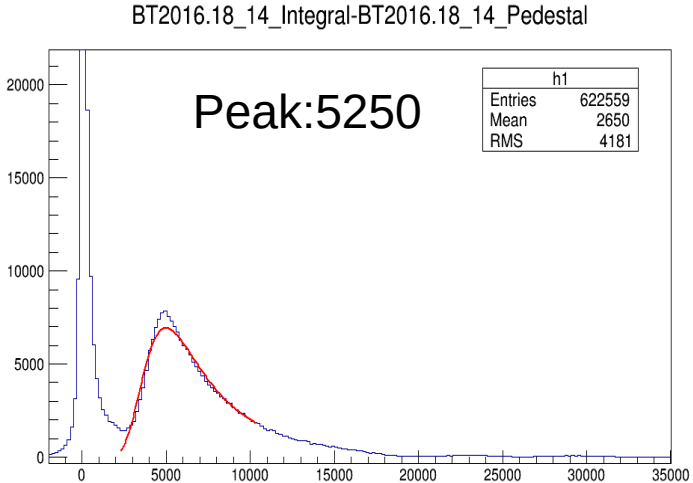


Radiation damage

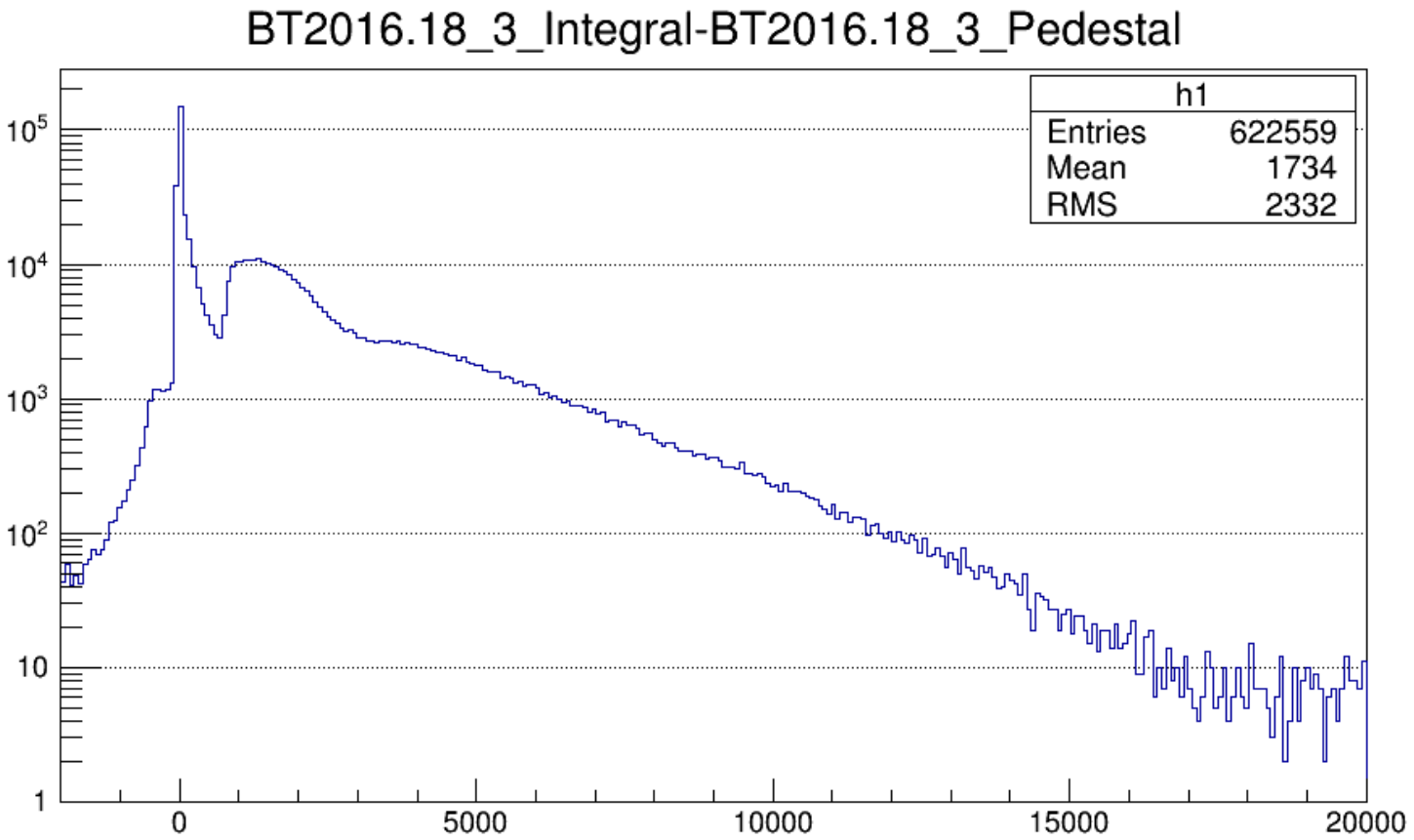
- 11/27 11/30 12/02







THU module


BT2016.18_3_Integral-BT2016.18_3_Pedestal
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Mean 1734
RMS 2332
10^5
10^4
10^3
10^2
10
1
0
5000
10000
15000
20000