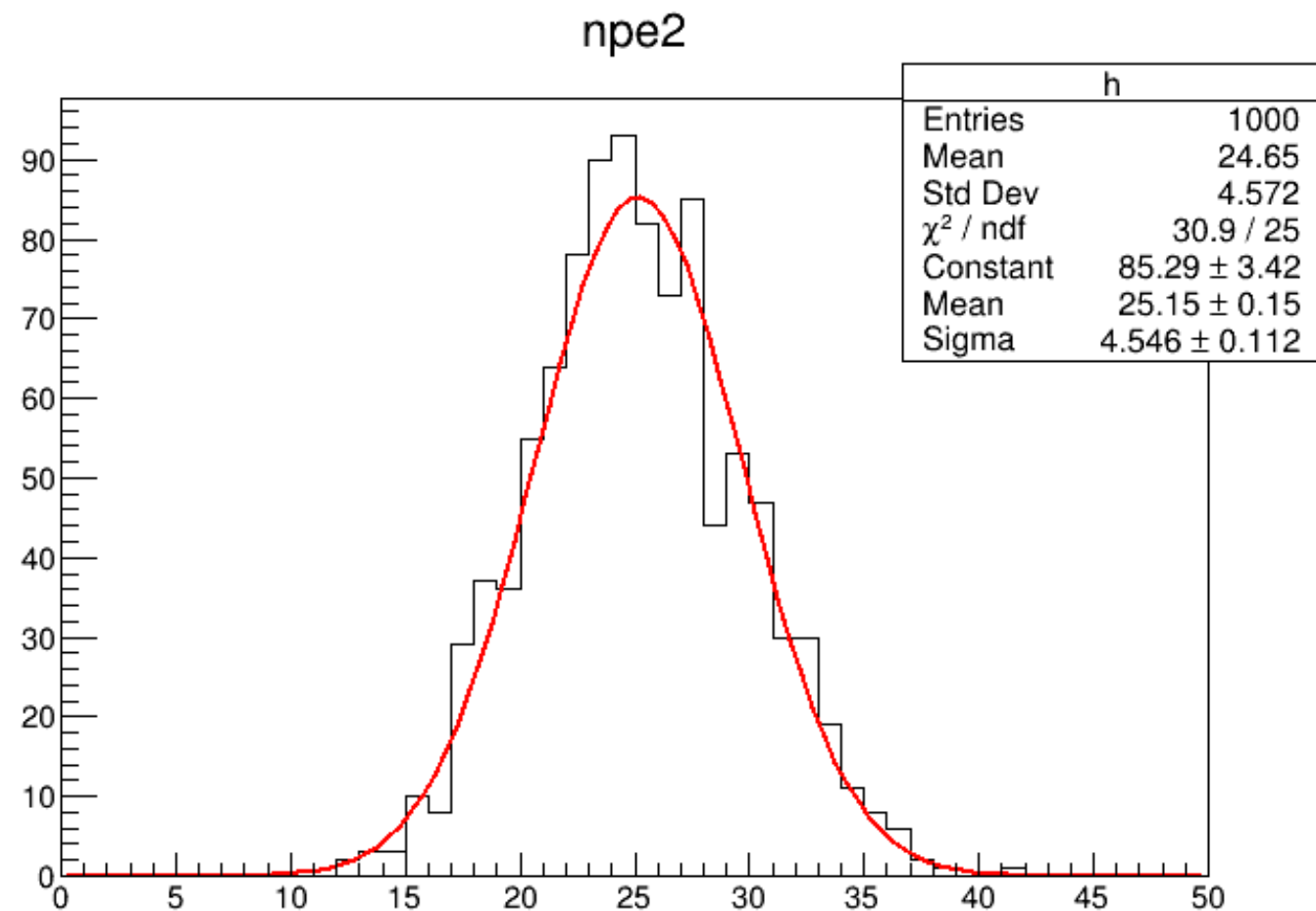
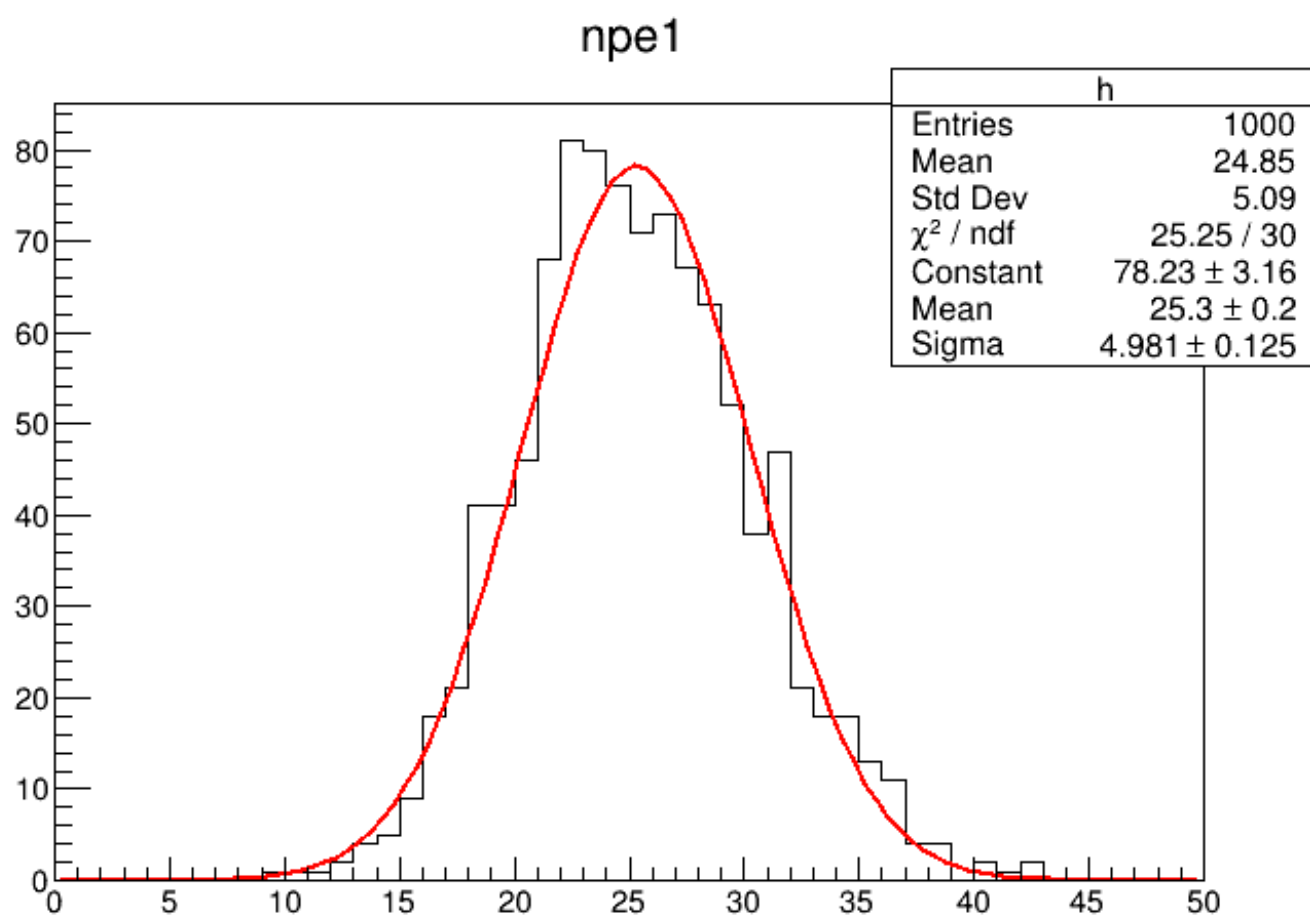


WC Simulation Progress

2018.06.12
Sungwook Choi

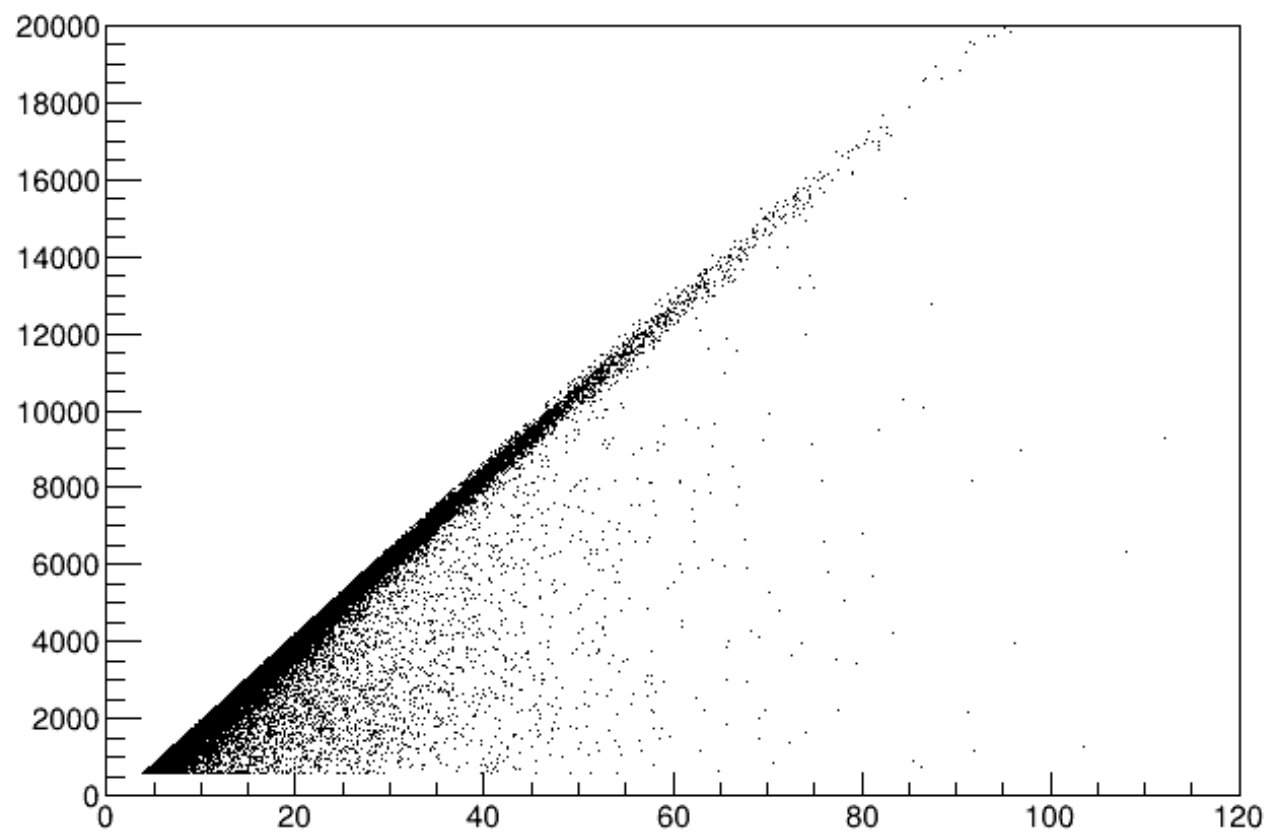
Simulation Results

- Incident Particle of Muon (beta value ~ 1)
- Expected NPe = 25 for both PMTs

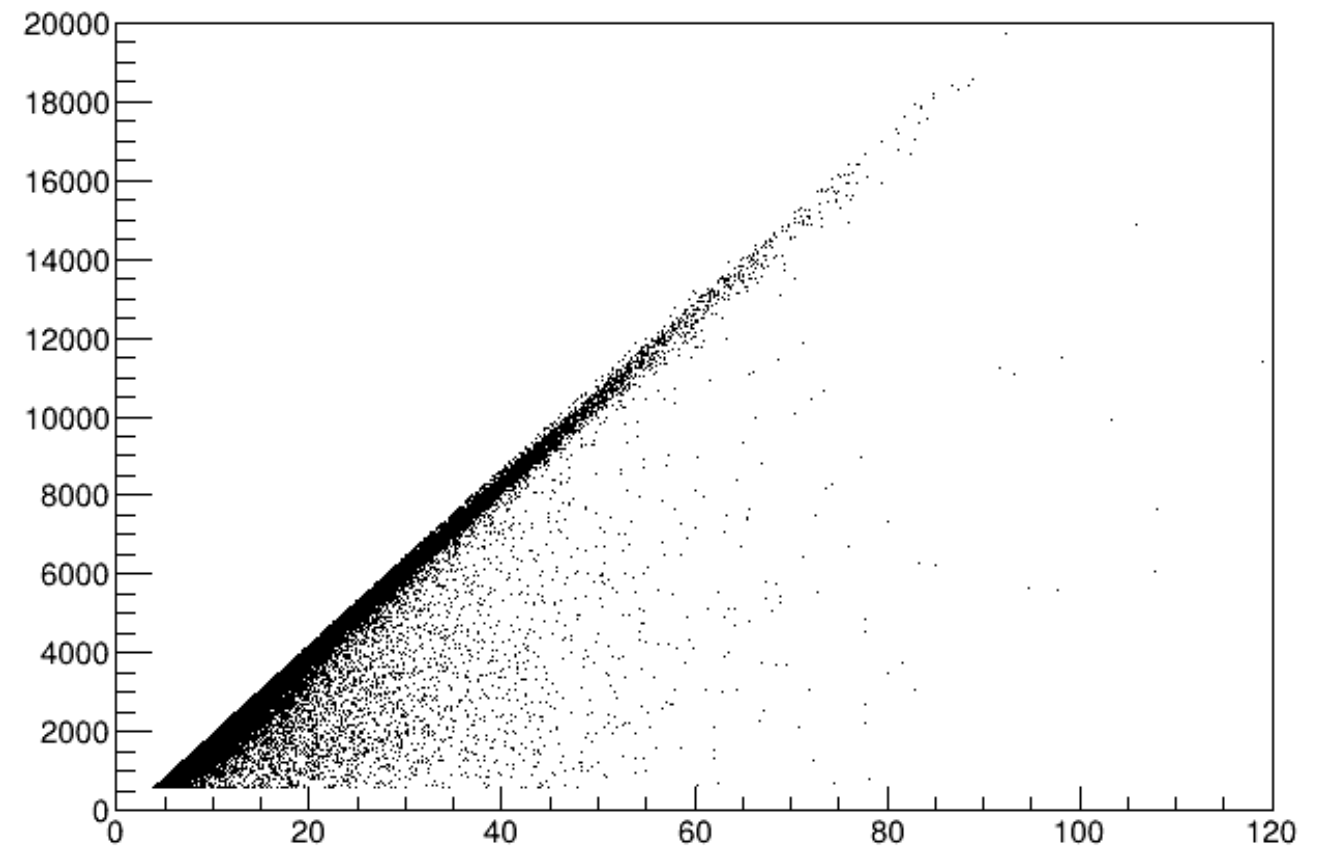


Simulation Results

Track:Time



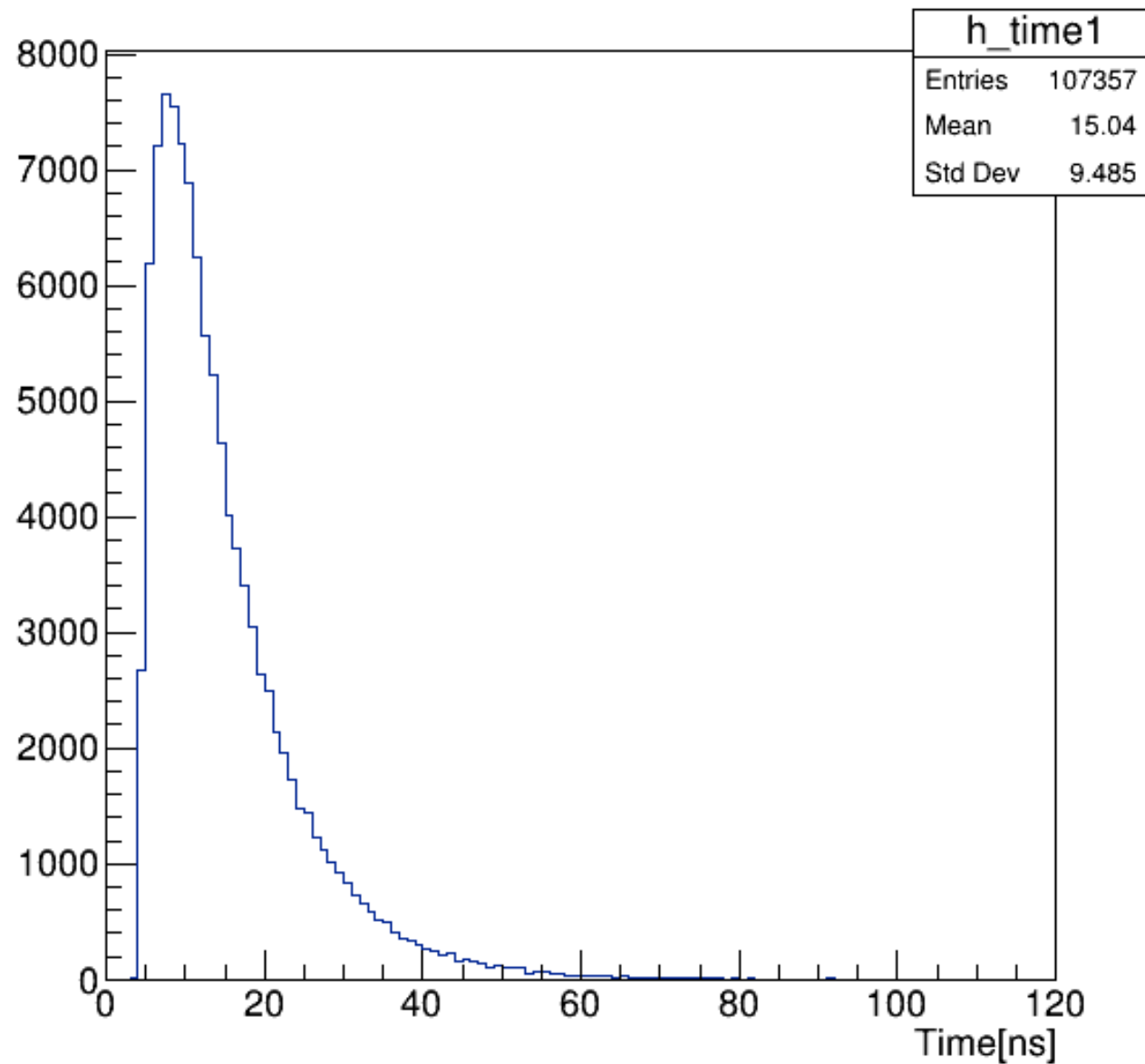
Track:Time



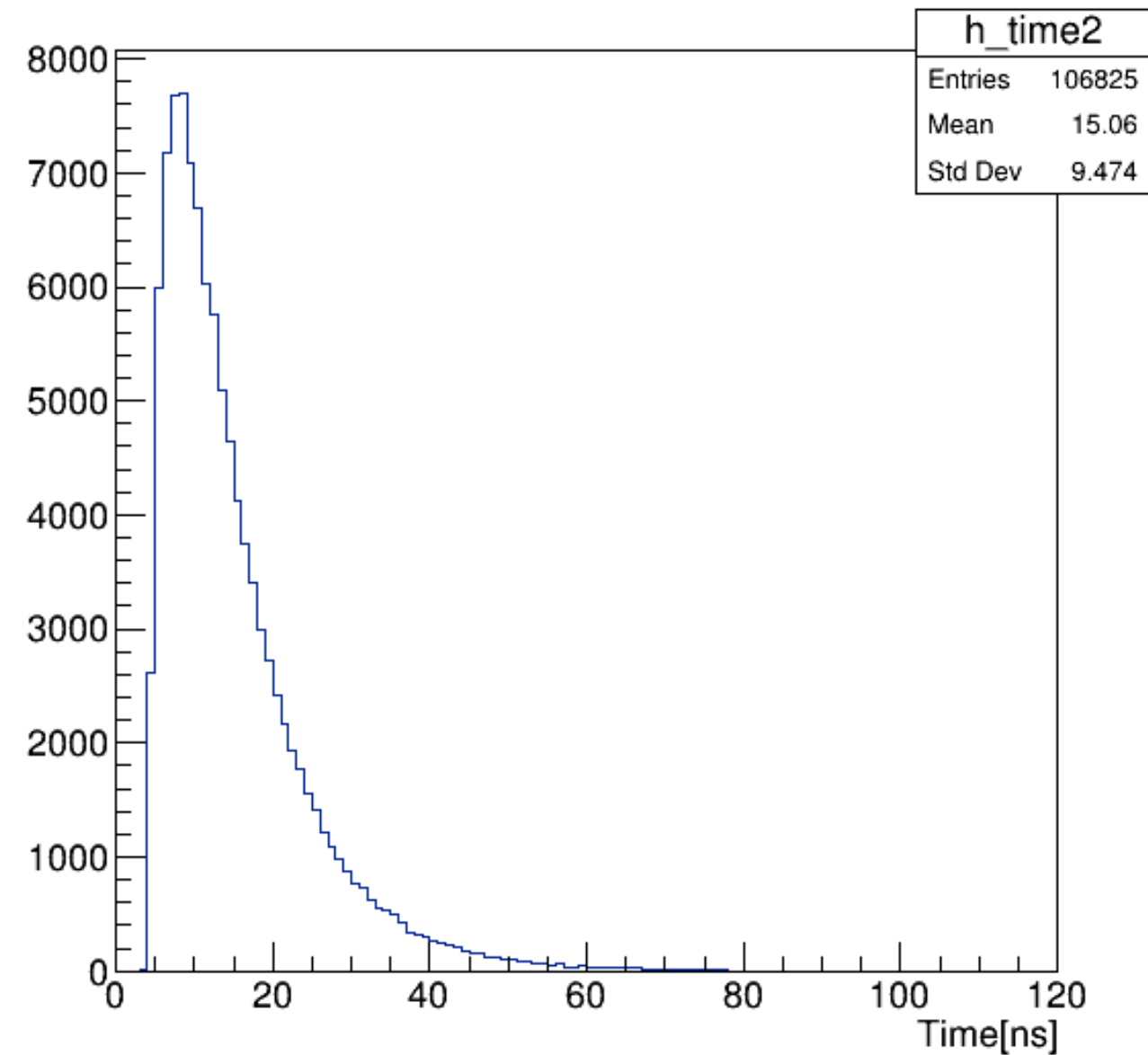
- Track in mm and Time in ns

Simulation Results

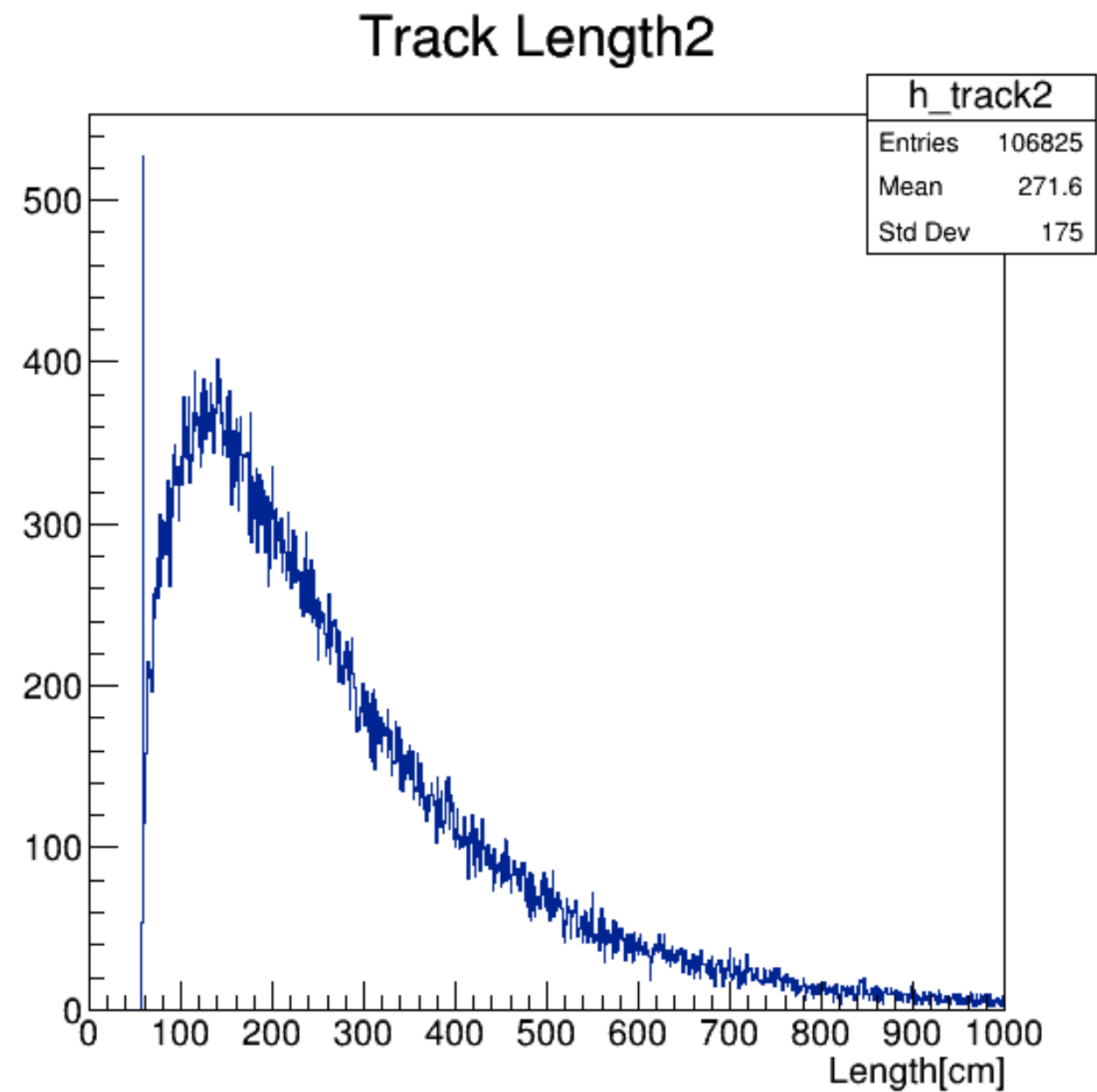
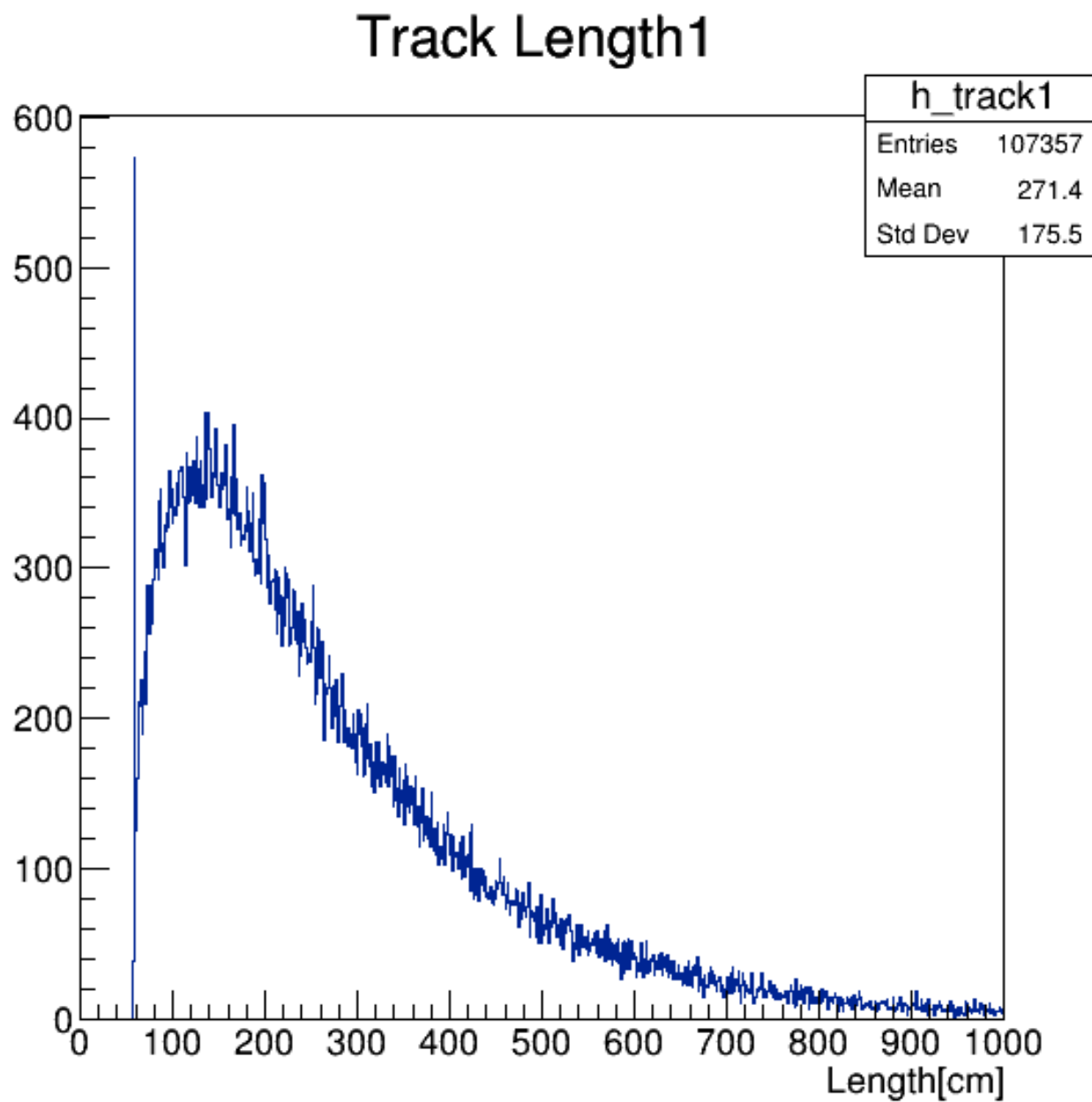
Time1



Time2

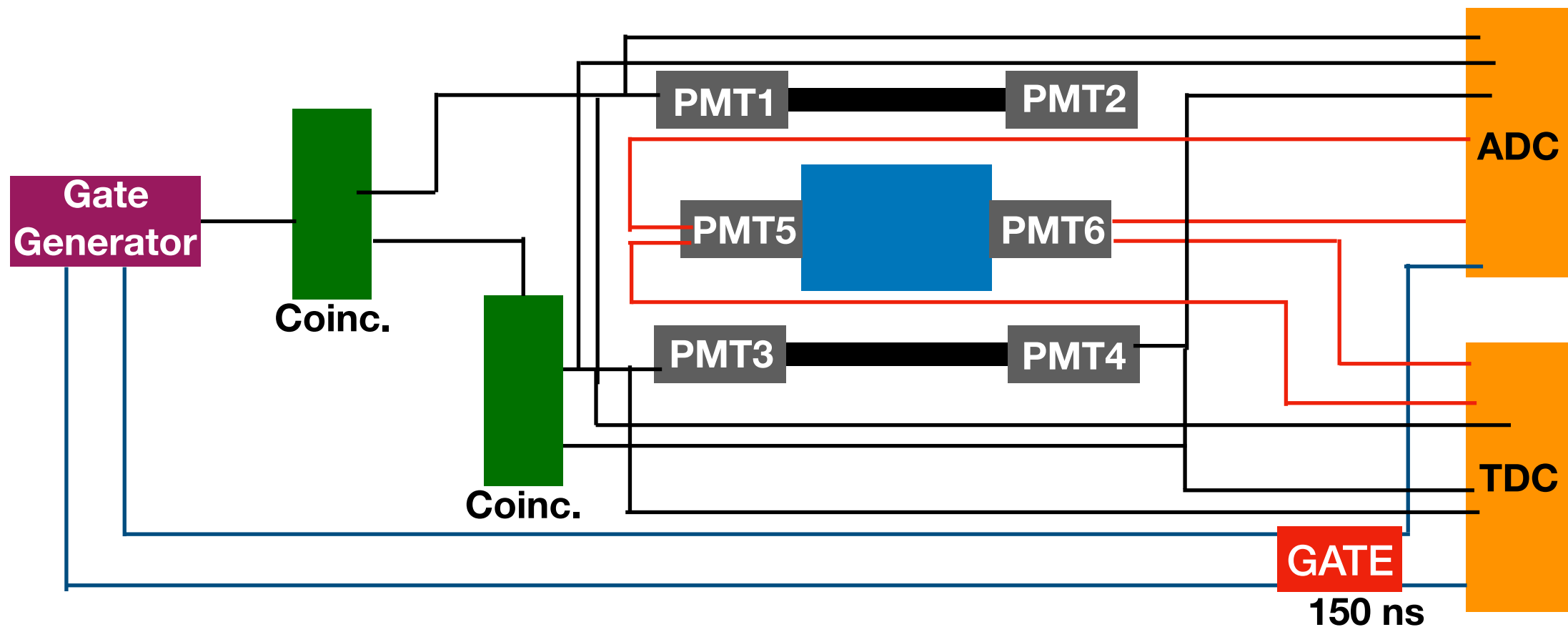


Simulation Results

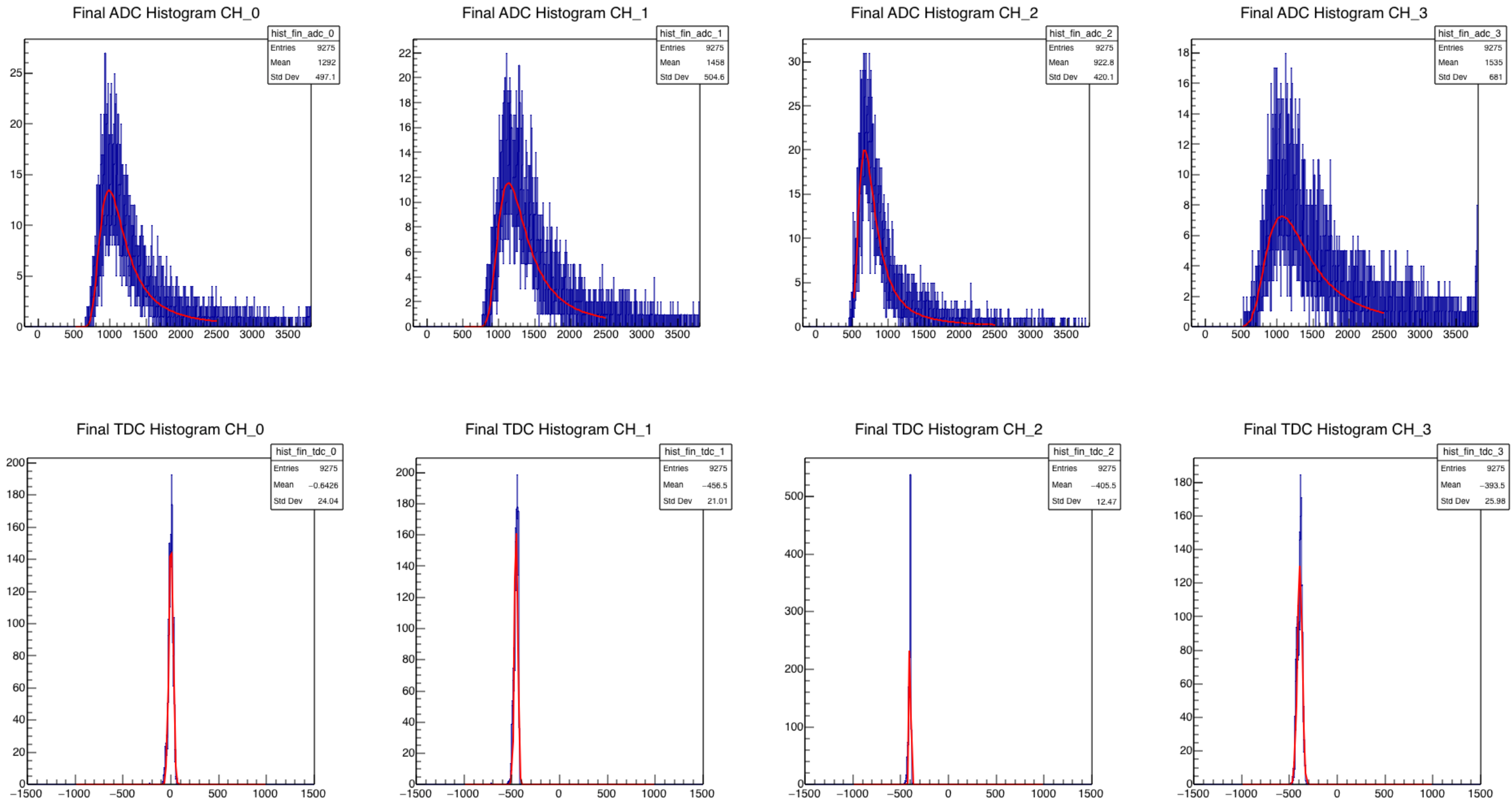


Cosmic Test Setup

- Trigger Condition: 4-fold Coincidence of Four PMTs (H7195)
- Trigger Rate : ~ 0.13 Hz
- PMT1 : Ch[0] ; PMT2 : Ch[1] ; PMT3 : Ch[2] ; PMT4 : Ch[3]
- Ch[0] is delayed 12 ns more to determine the timing

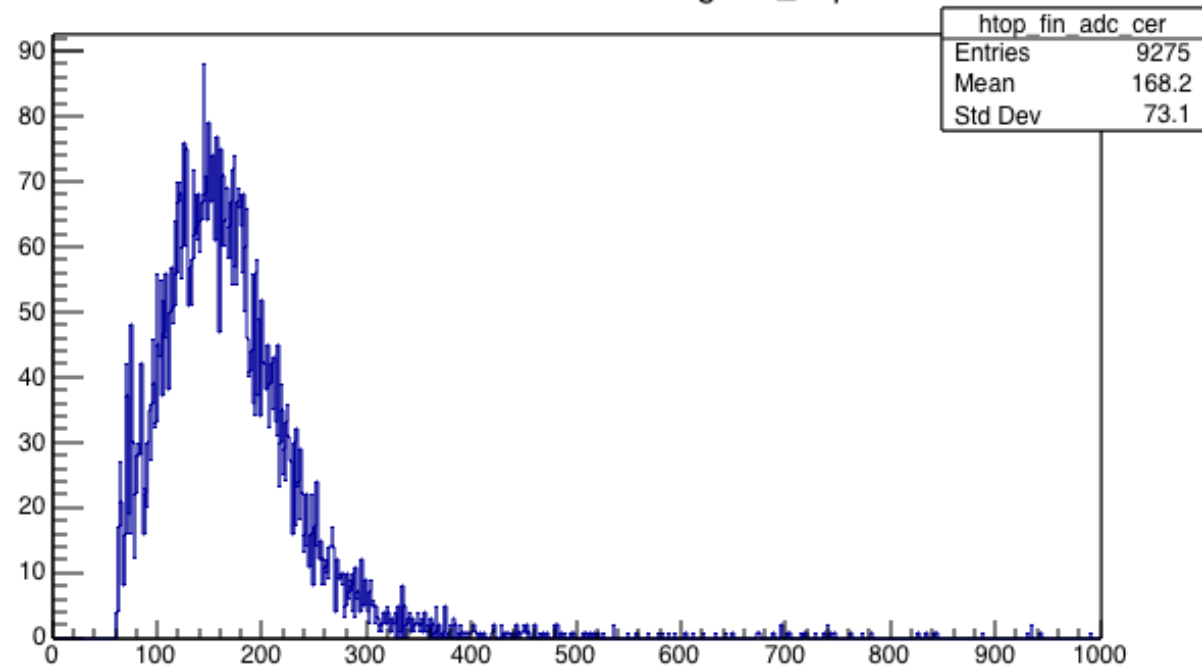


Test Results

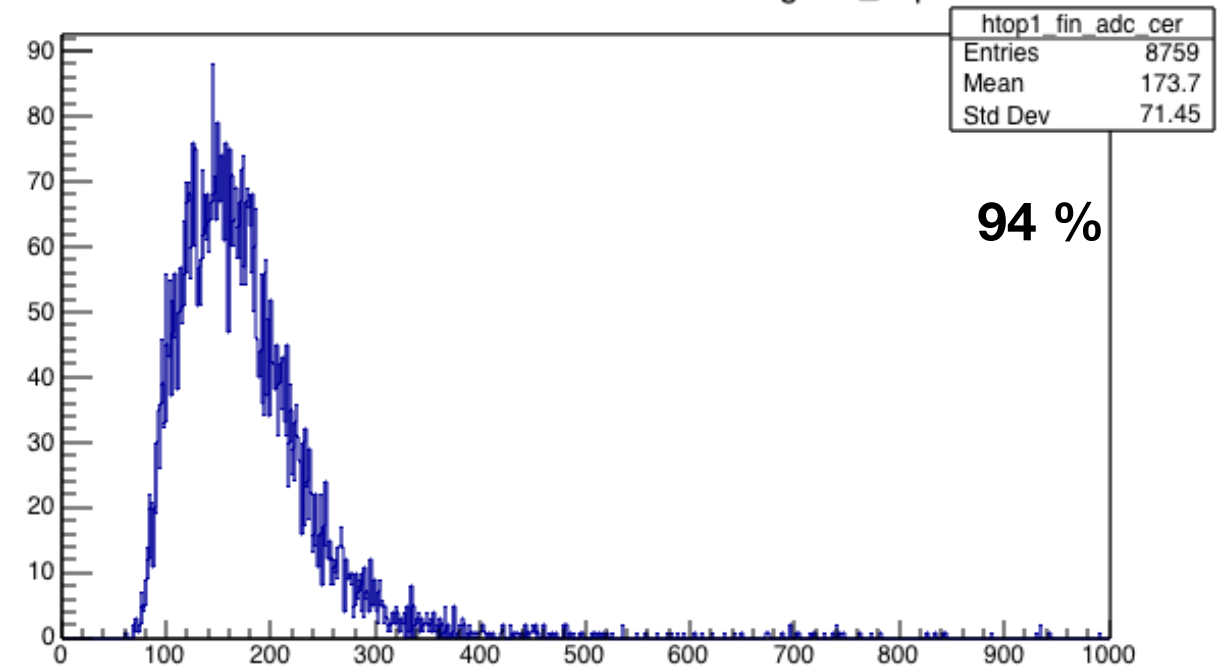


Test Results

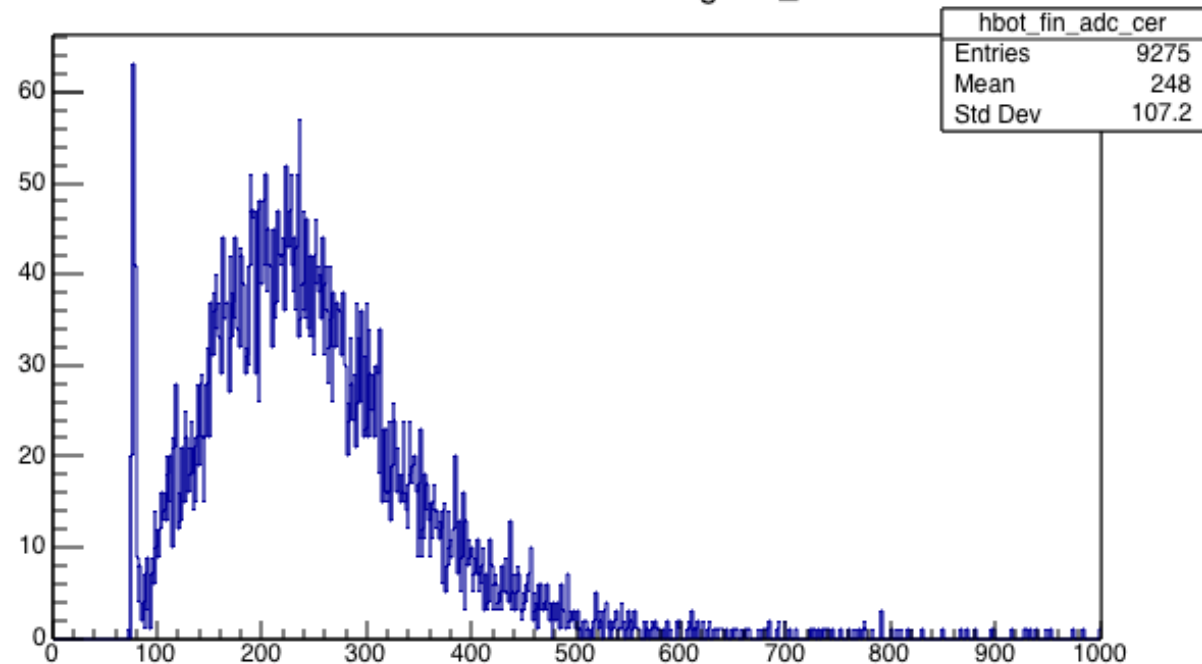
Cerenkov Final ADC Histogram_Top



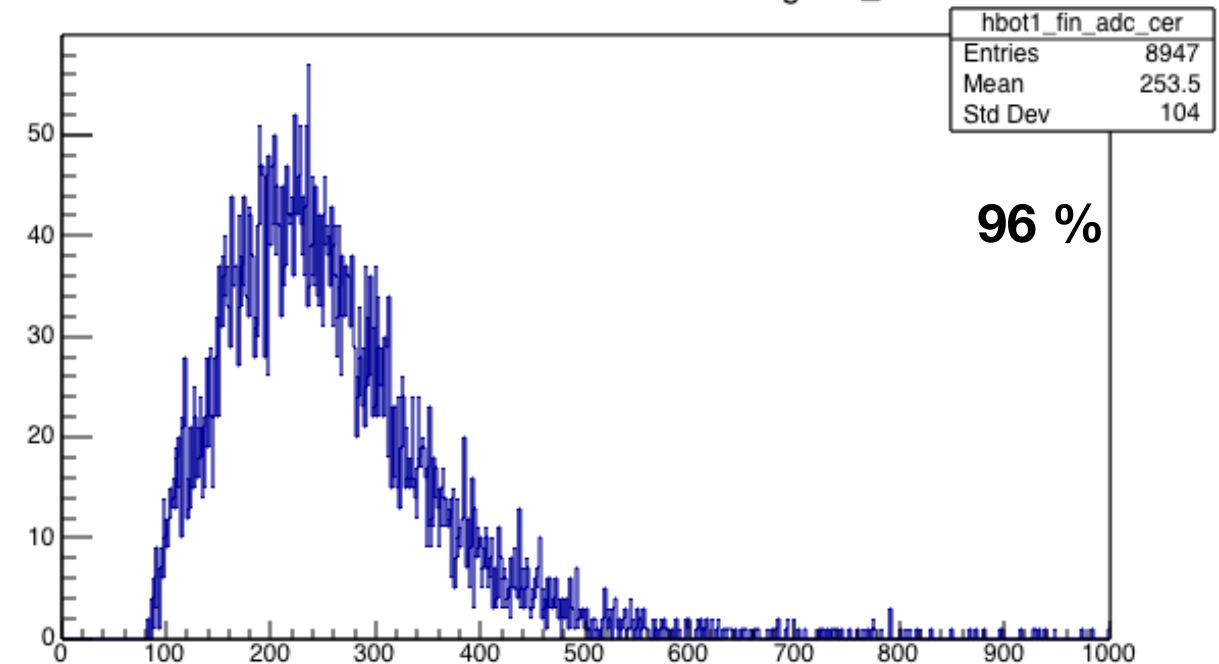
Cerenkov Final Selected ADC Histogram_Top



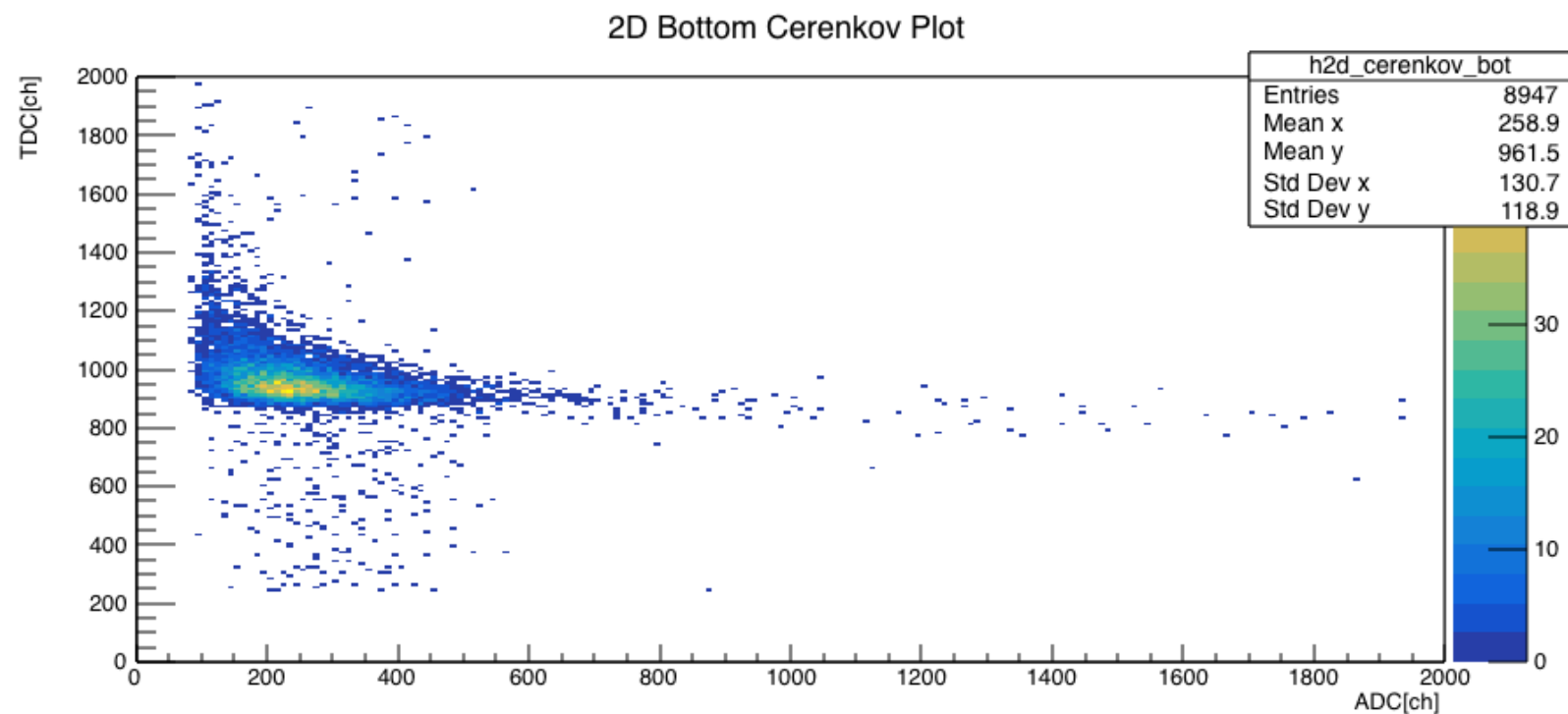
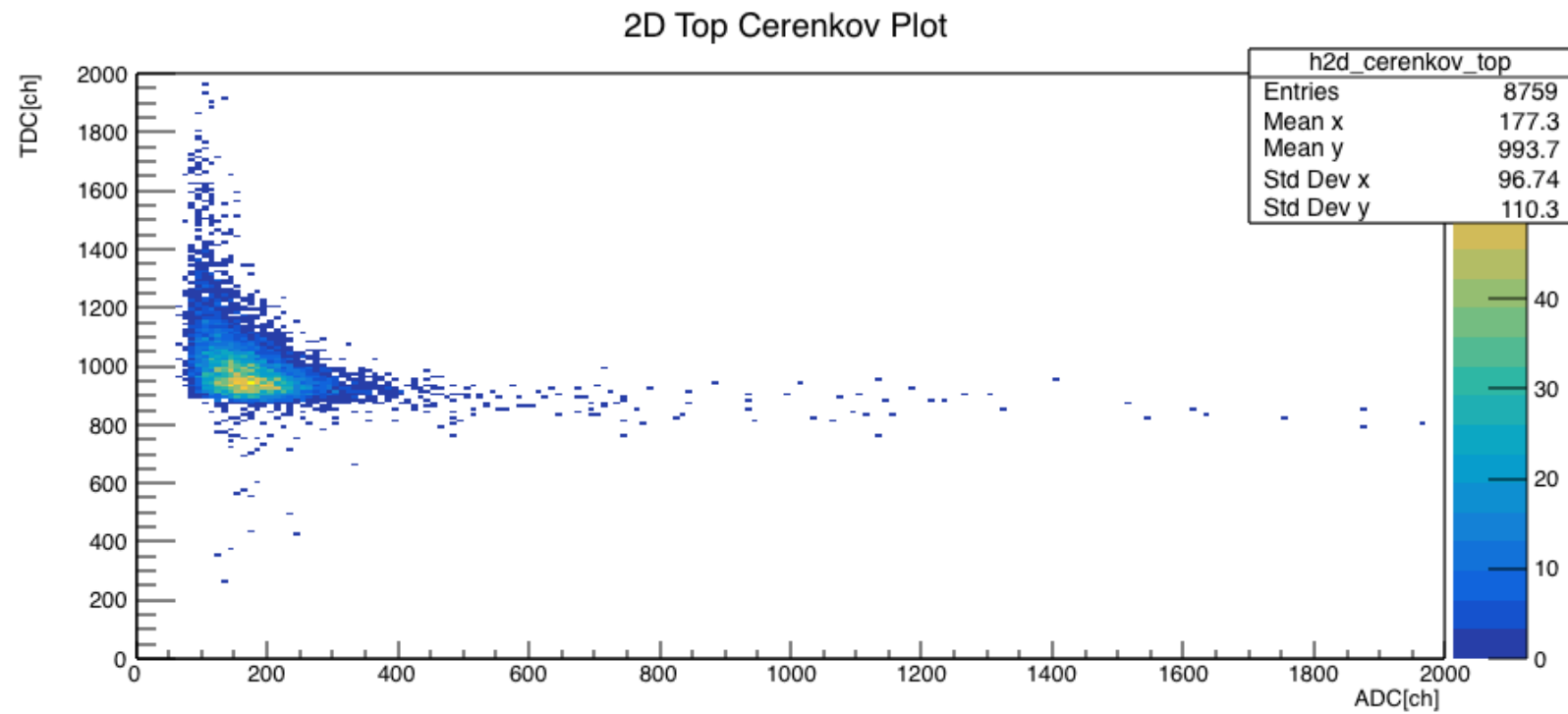
Cerenkov Final ADC Histogram_Bot



Cerenkov Final Selected ADC Histogram_Bot

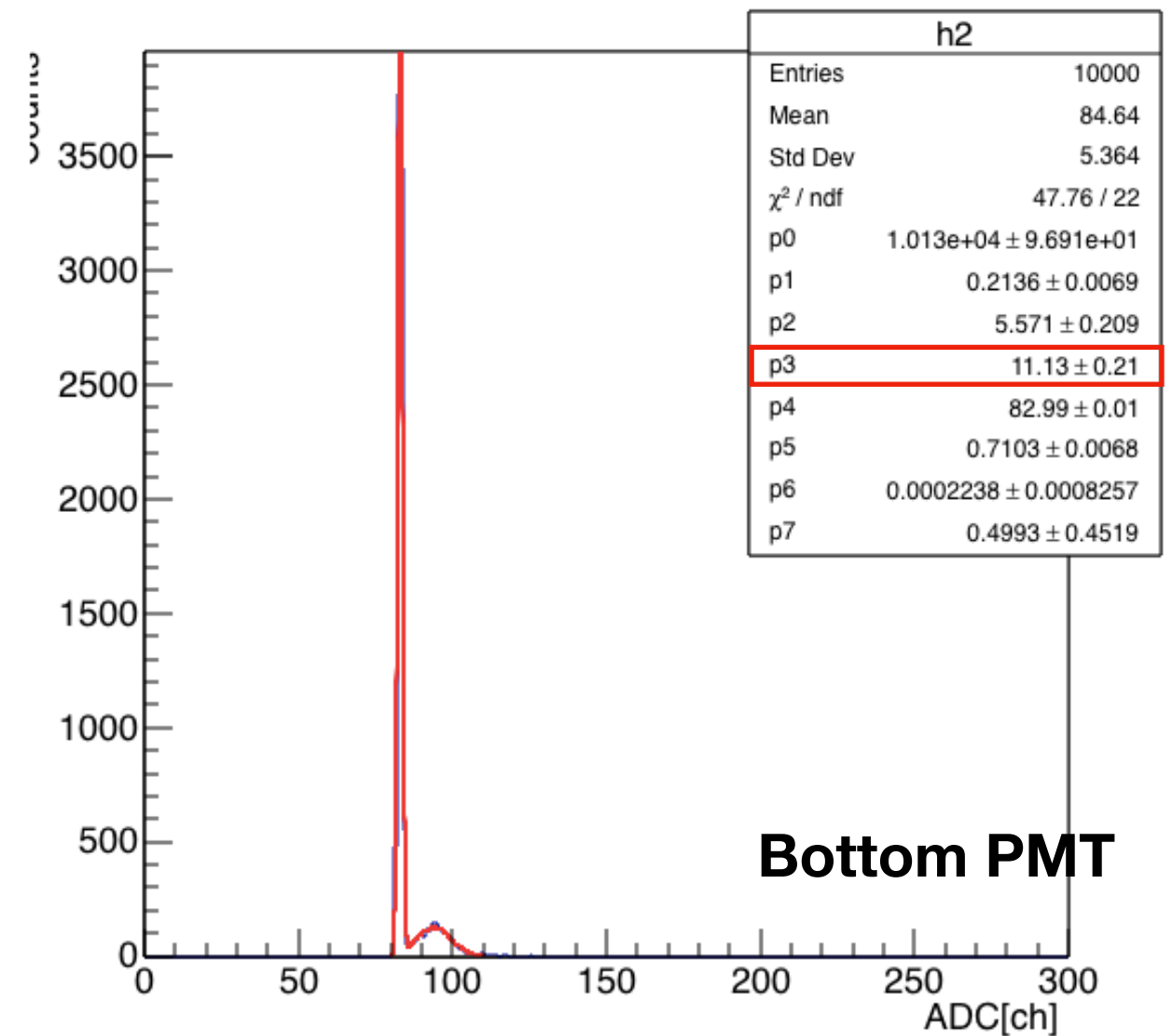
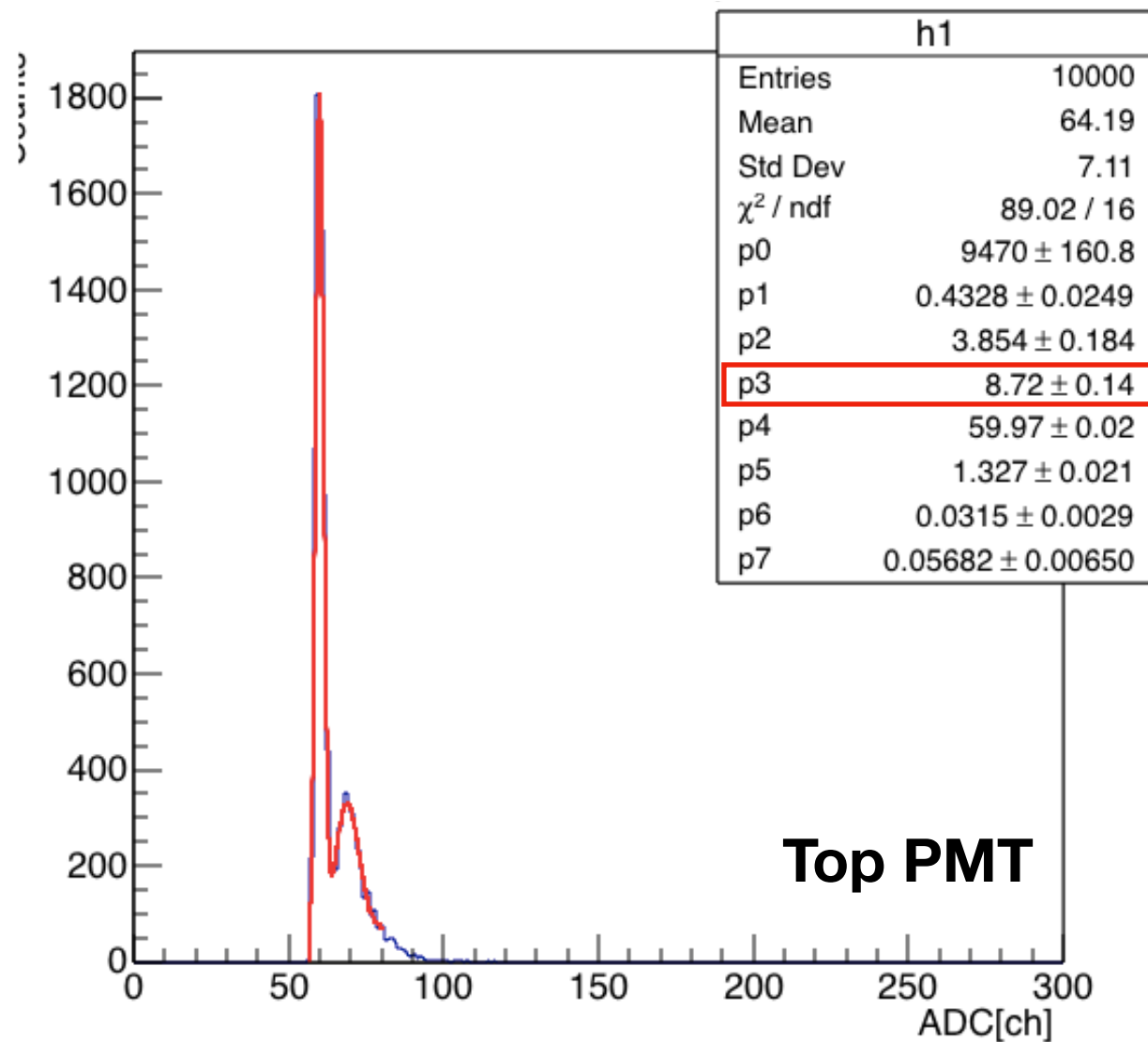


Test Results



Test Results

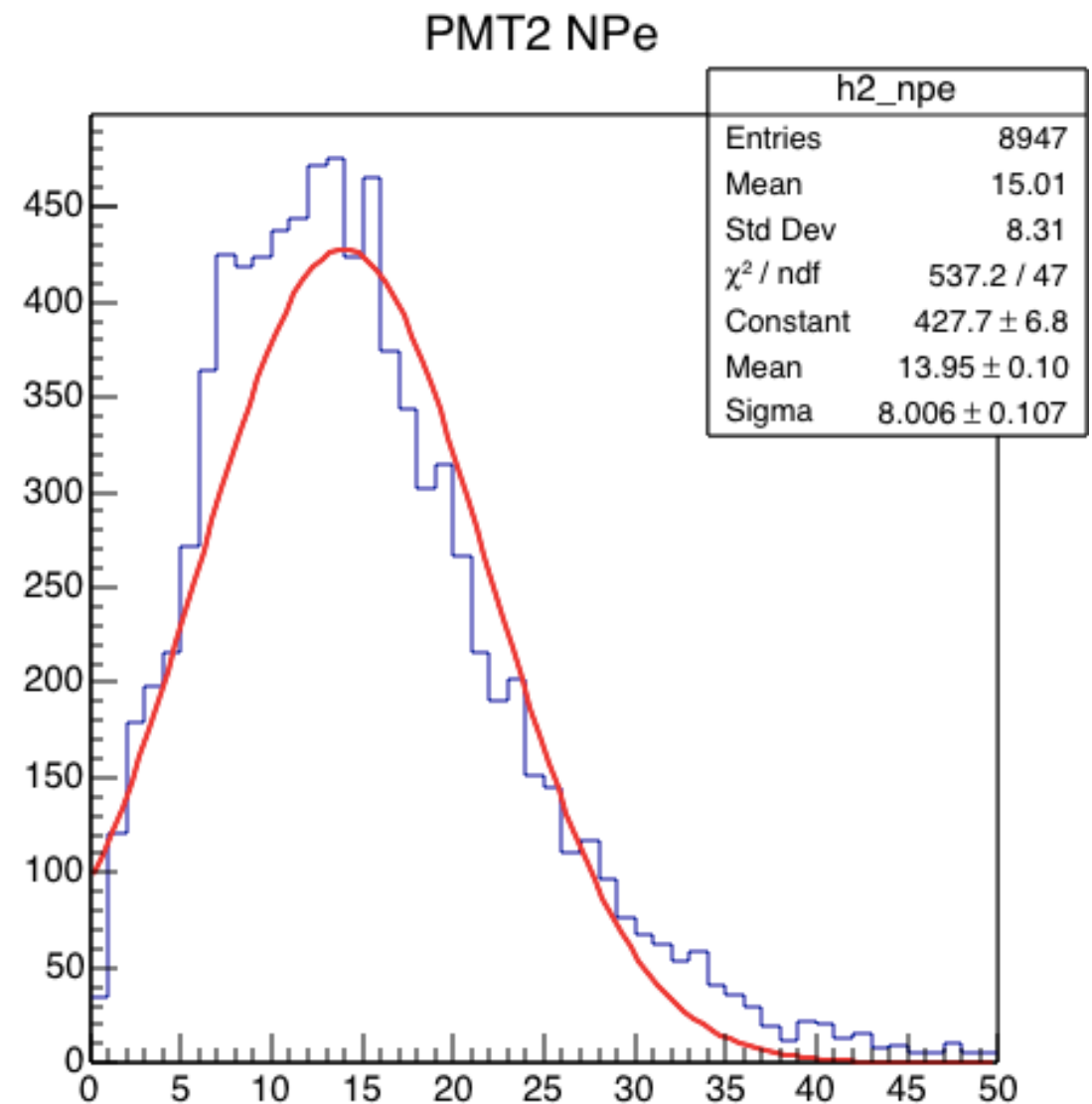
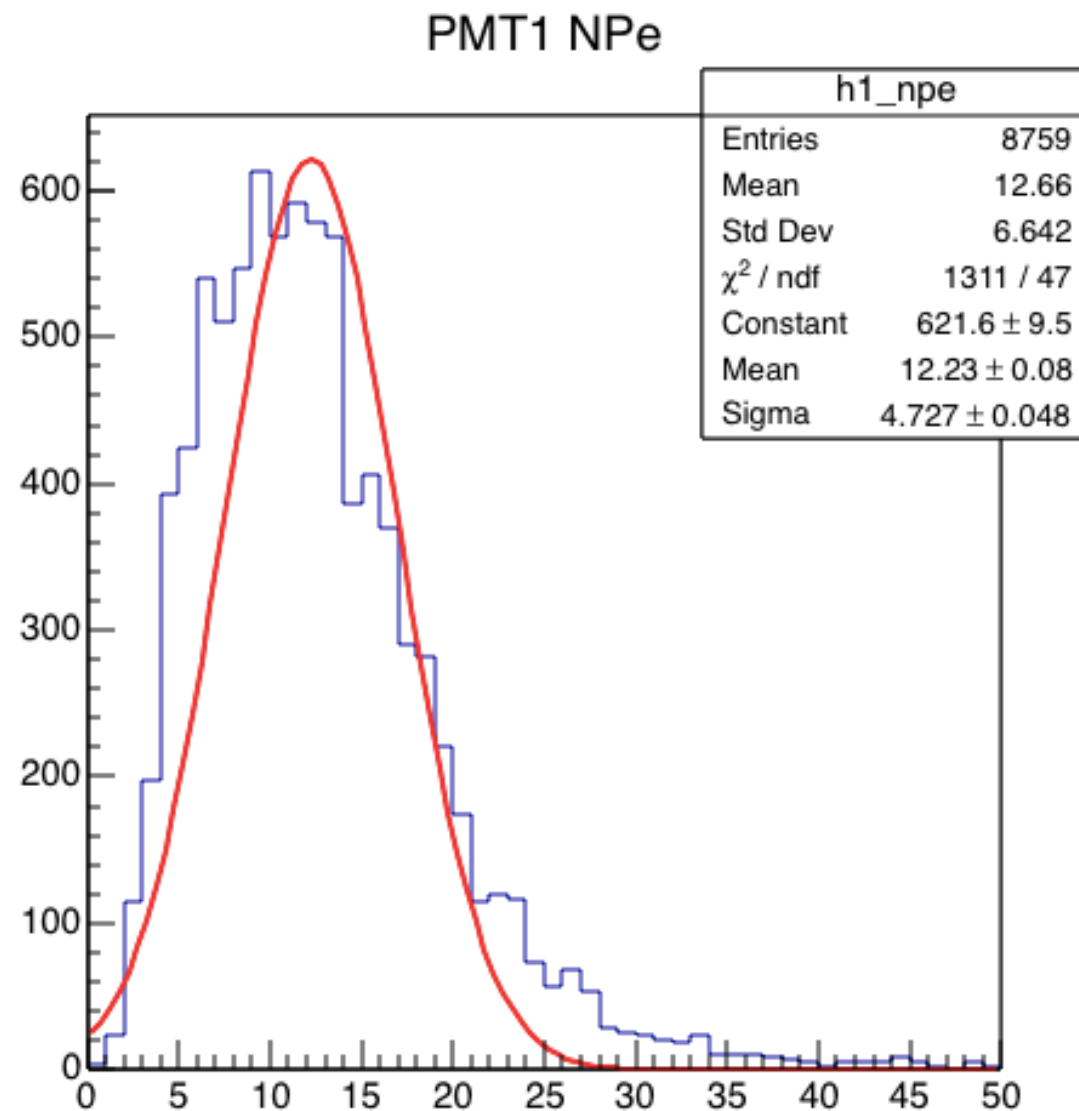
- According to former LED test results



- LED : 100 Hz, 20 ns 1.58 V Pulse

Test Results

$$\text{NPe} = \frac{\text{ADC} - \text{Ped}}{\text{Gain}}$$



- mNPe ~ 12 for Top PMT, 14 for Bottom PMT