

LAMPS 중성자검출기 진행상황

LAPMS meeting 10/12
이종원

List

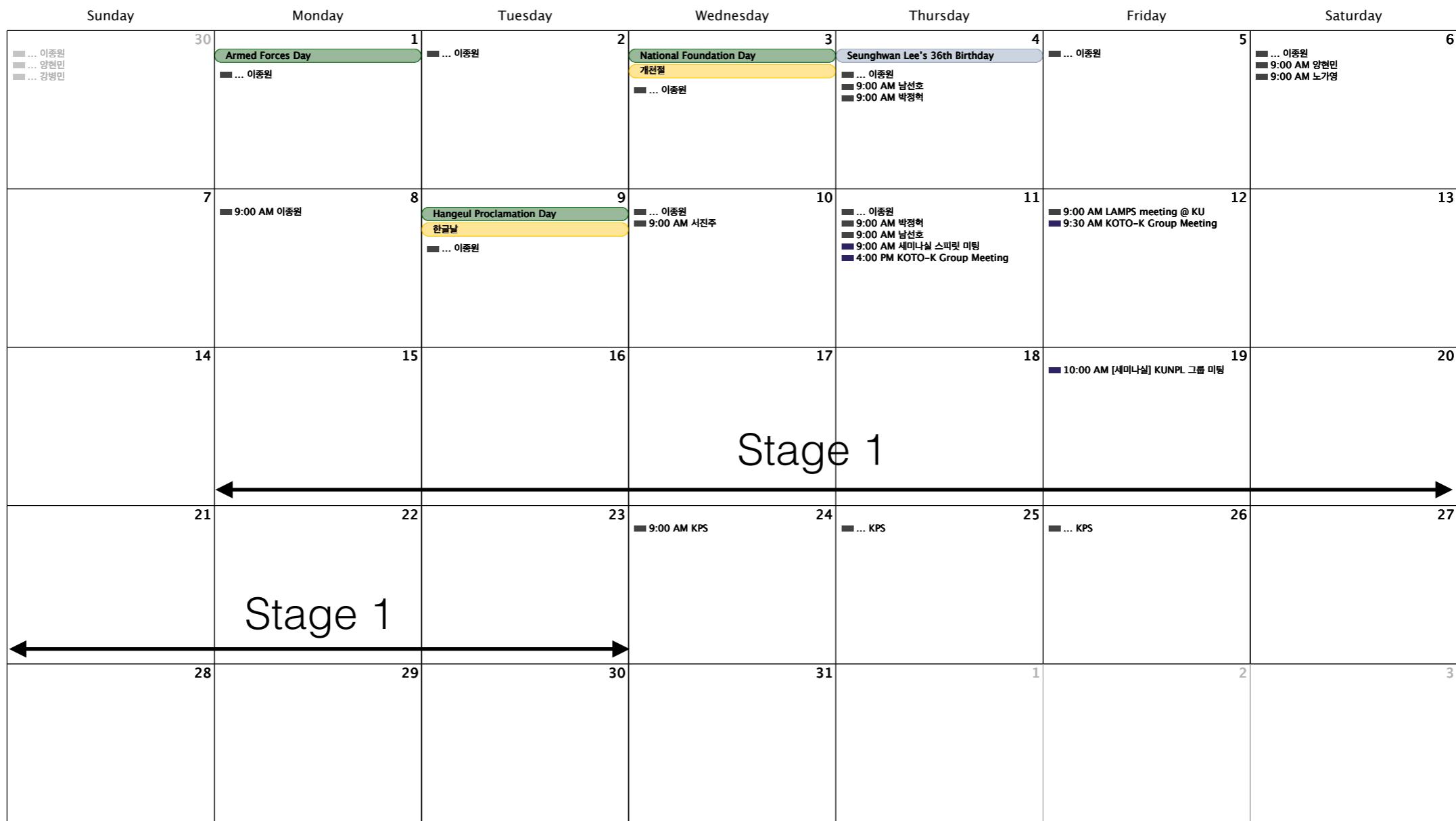
작업내용	갯수	개당 작업시간	진도	필요 작업시간
Scintillator gluing	160	1	160/160	-
Scintillator wrapping	160	1(2인)	140/160	20(2인)
CV wrapping	20	0.5(2인)	20/20	-
CV gluing	20	0.5	2/18	9
PMT test	360	시간당 20개	212/360	8
Clamp Mounting	360	시간당 10개	2/360	36
Leackage & Cosmic test	180	시간당 10개 (야간)	0/180	36

10월 계획

October 2018

- | | |
|---------------------------------|----------------------|
| ■ 중성자 검출기제작 참여 | ■ Birthdays |
| ■ KUNPL Calendar | ■ japan |
| ■ Contacts | ■ Home |
| ■ Holidays in Republic of Korea | ■ Calendar |
| ■ Jong-won Lee | ■ Siri Found in Apps |
| | ■ 대한민국 공휴일 |

September 2018						October 2018						November 2018								
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
				1			1	2	3	4	5	6		1	2	3				
			2	3	4	5	7	8	9	10	11	12	13	4	5	6	7	8	9	10
			9	10	11	12	13	14	15	16	17	18	19	14	15	16	17	18	19	20
			16	17	18	19	20	21	22	23	24	25	26	21	22	23	24	25	26	27
			23	24	25	26	27	28	29	28	29	30	31	28	29	30	31			
						30														



11월 계획

November 2018

중성자 검출기제작 참여	Birthdays
KUNPL Calendar	japan
Contacts	Home
Holidays in Republic of Korea	Calendar
Jong-won Lee	Siri Found in Apps
	대한민국 공휴일

October 2018							November 2018							December 2018						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
			1	2	3	4	5	6			1	2	3		1					
			7	8	9	10	11	12	13		4	5	6	7	8	9	10		2	3
			14	15	16	17	18	19	20		11	12	13	14	15	16	17		9	10
			21	22	23	24	25	26	27		18	19	20	21	22	23	24		16	17
			28	29	30	31					25	26	27	28	29	30			23	24
																			31	

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
28	29	30	31	1	2	3
4 ■ 9:00 AM 경주전학예정	5 ■ ... 경주전학예정	6 ■ ... 경주전학예정	7 ■ ... 경주전학예정 ■ 9:00 AM New Event	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	1
Stage 2						
Stage 3						
Stage 4						
All stage test						

PMT test (gain, gain curve, monitoring software)

측정내용

1회 4개 PMT 측정

~ 10k event / 회

측정전압 : 1600 ~ 2000V 구간 100V 간격(총 6 포인트)

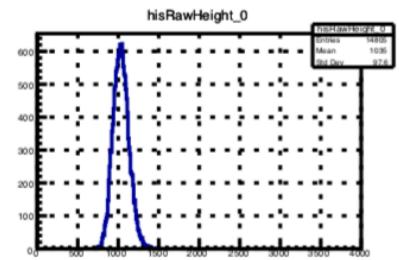
LED : 1600 ~ 1800 3.6V, 1800~2000V 3.25V

1 PMT : Light intensity monitor (1800V 고정)

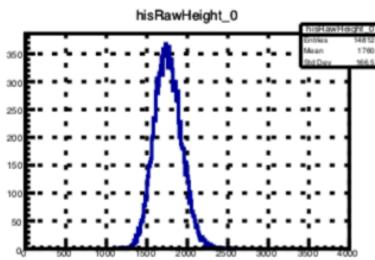
4 PMTs : 측정용

- PMT 인스톨 이후 모든 조정및 데이터 해석을 스크립트로 자동화, PMT ID를 고정
- CAEN HV module의 HV 조정, HV & current monitoring program 작성.
- Function generator의 control program 작성

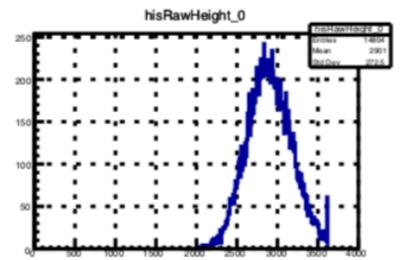
1600V, 3.6



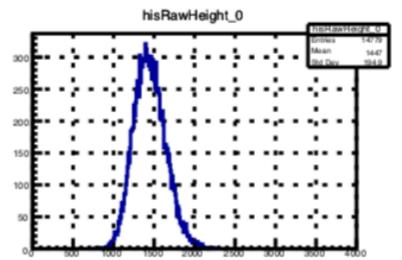
1700V, 3.6



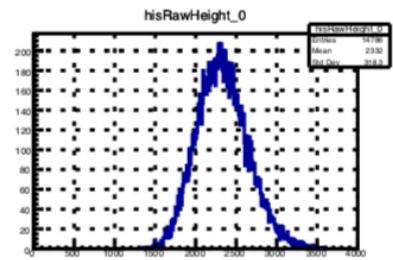
1800V, 3.6



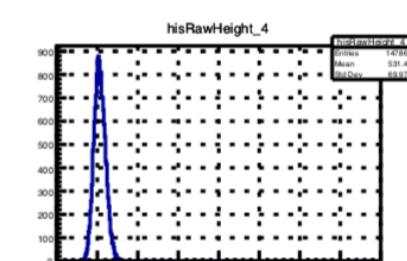
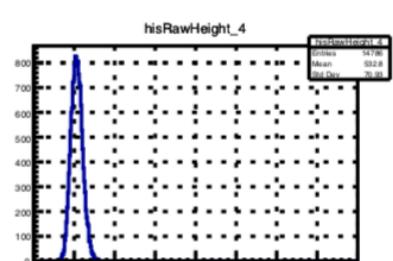
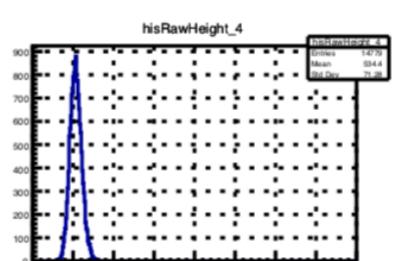
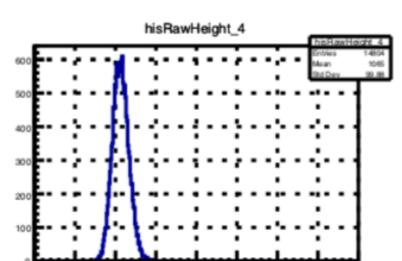
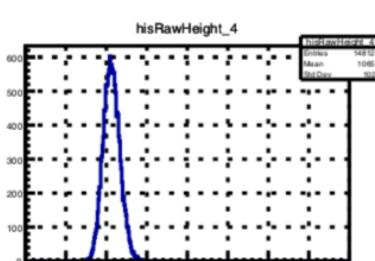
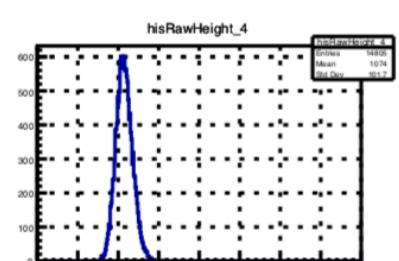
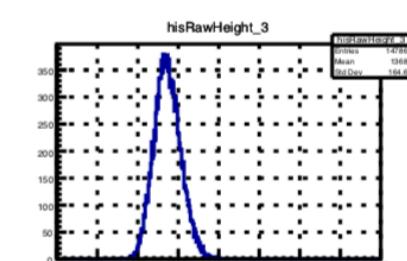
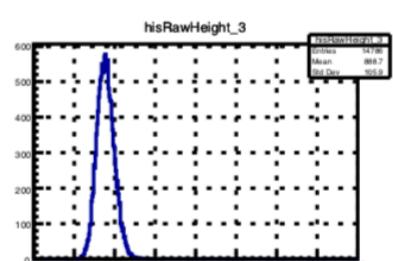
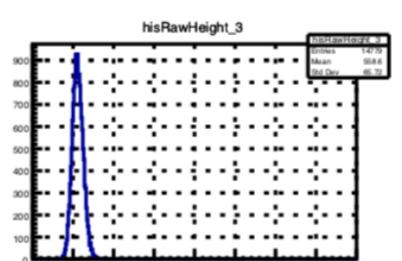
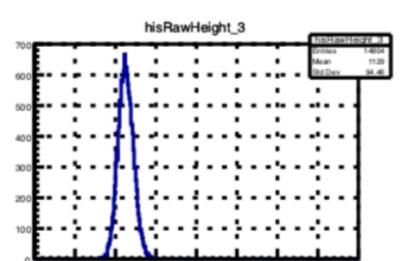
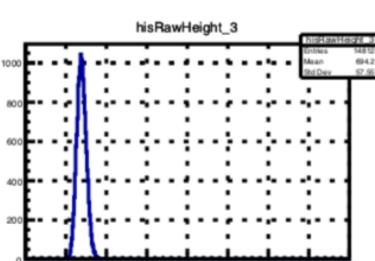
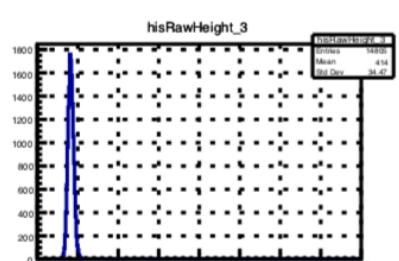
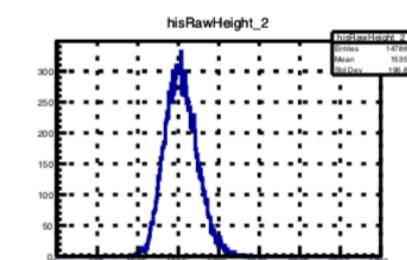
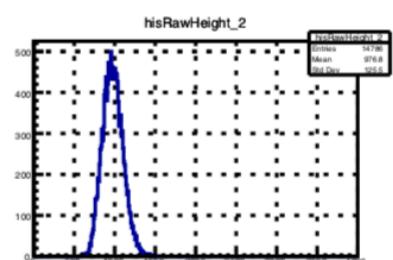
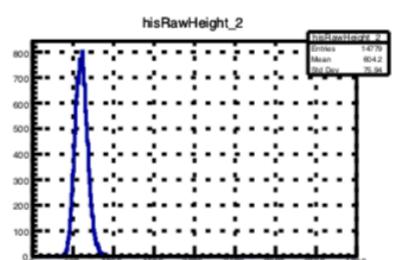
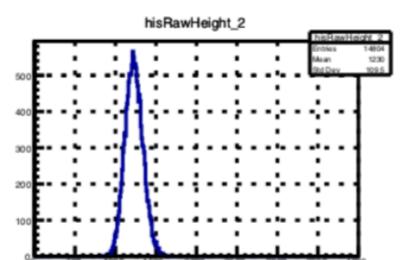
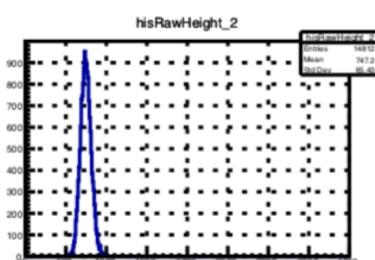
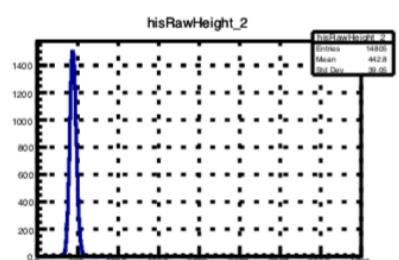
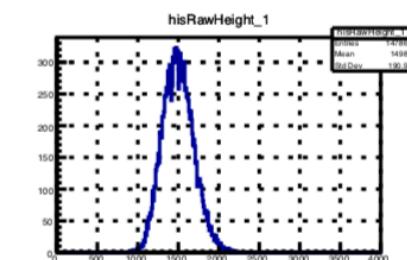
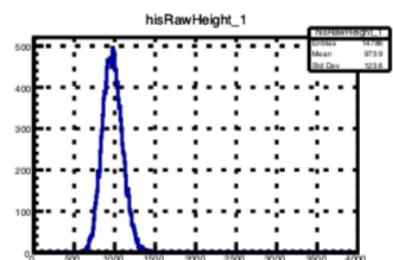
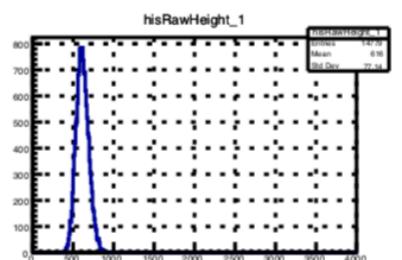
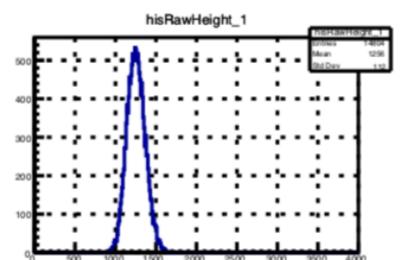
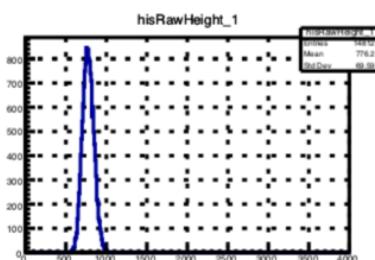
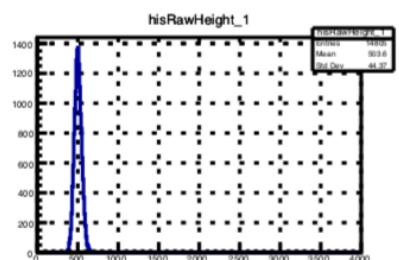
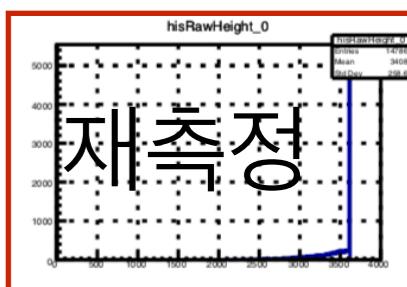
1800V, 3.25



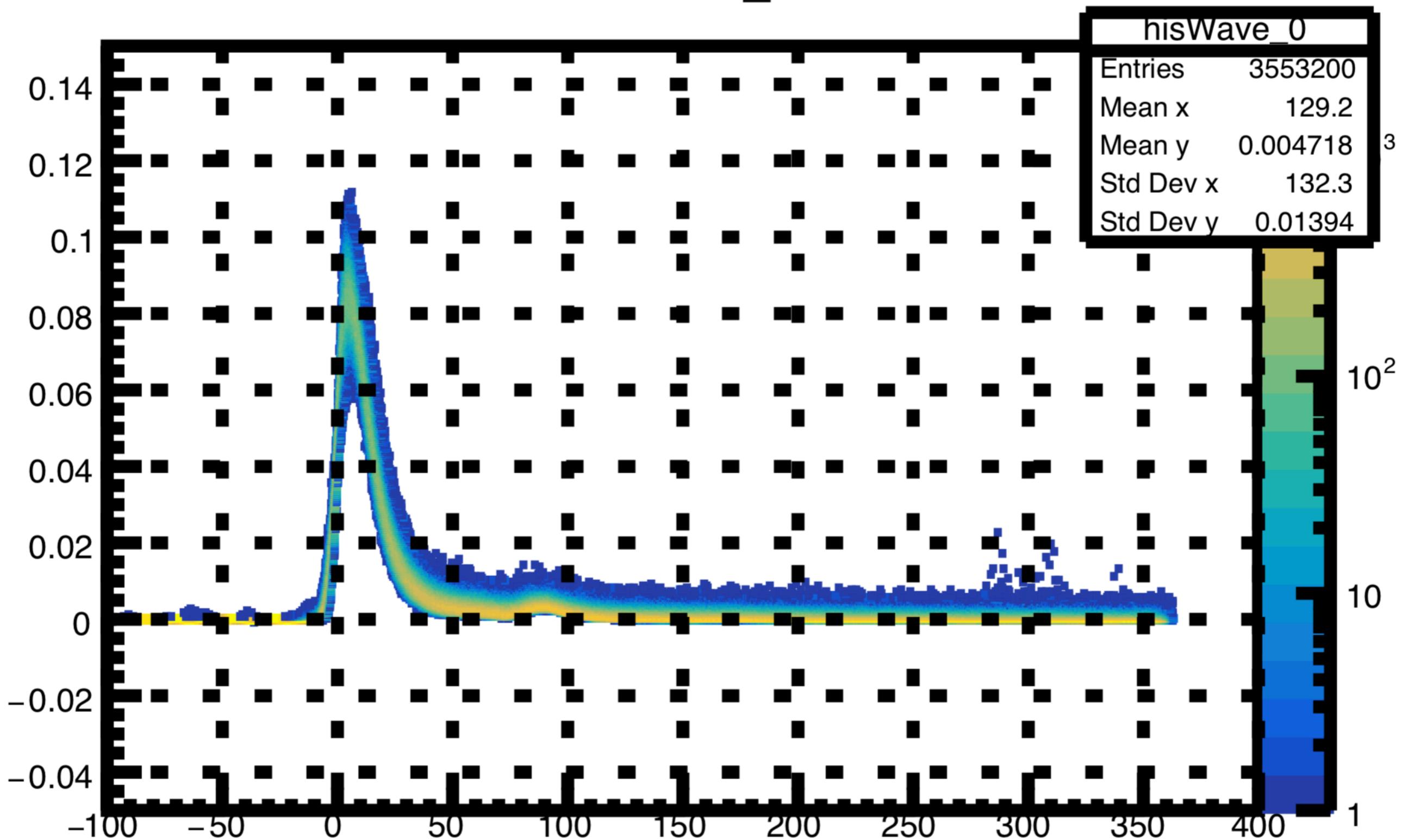
1900V, 3.25



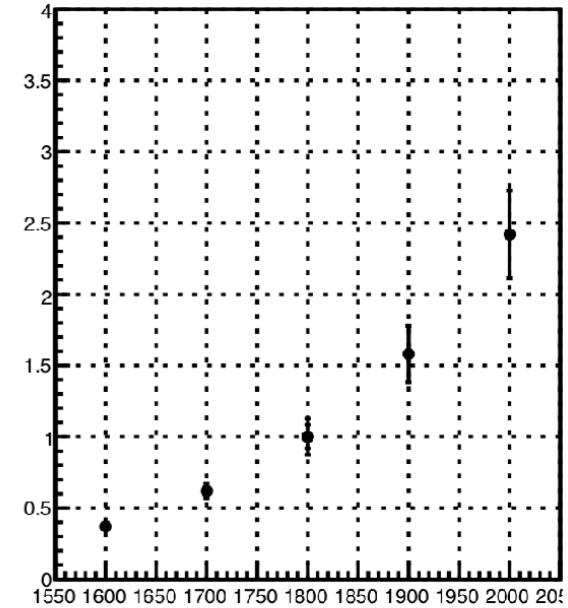
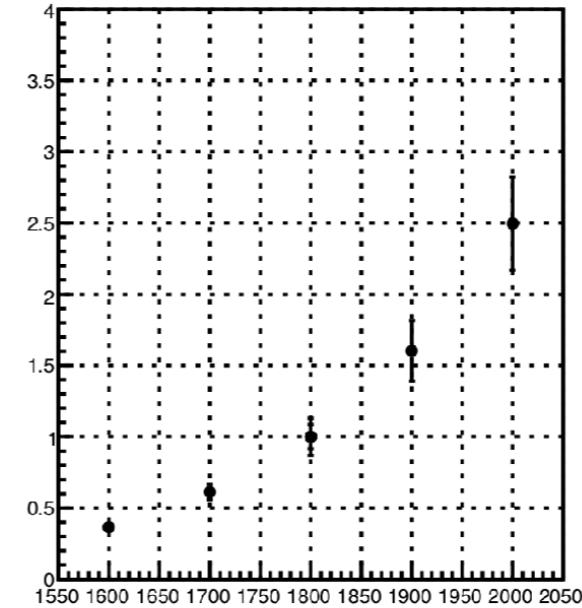
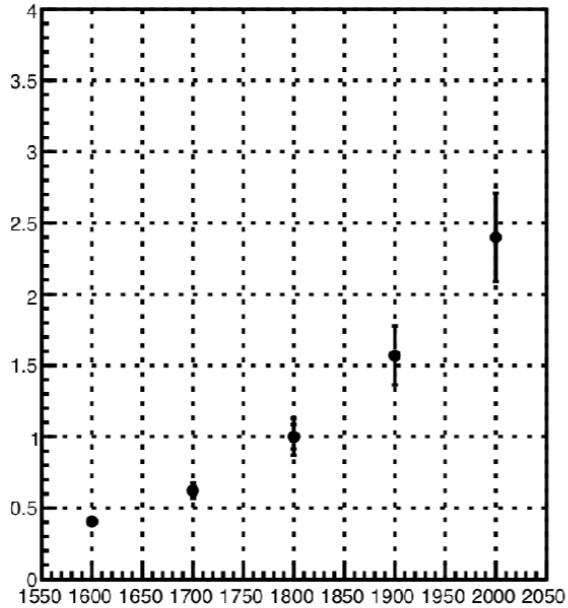
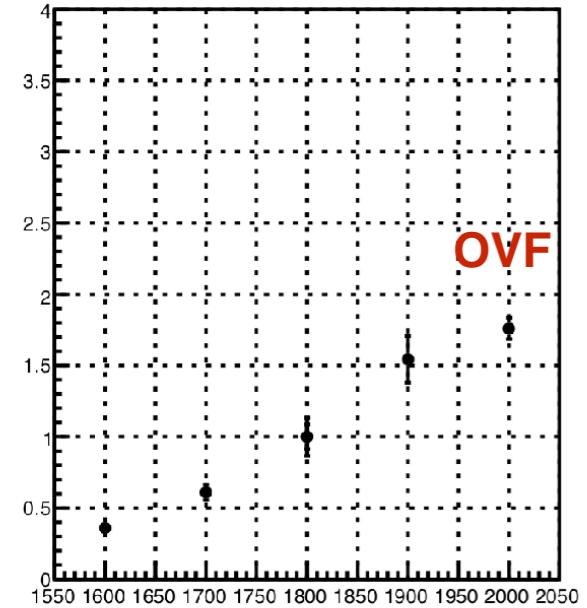
2000V, 3.25



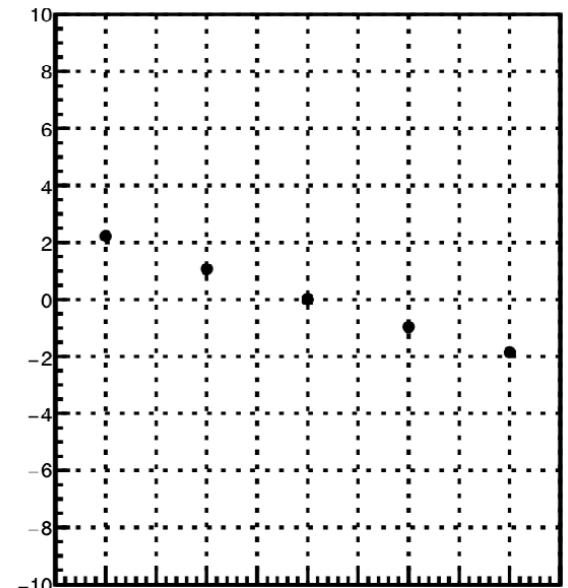
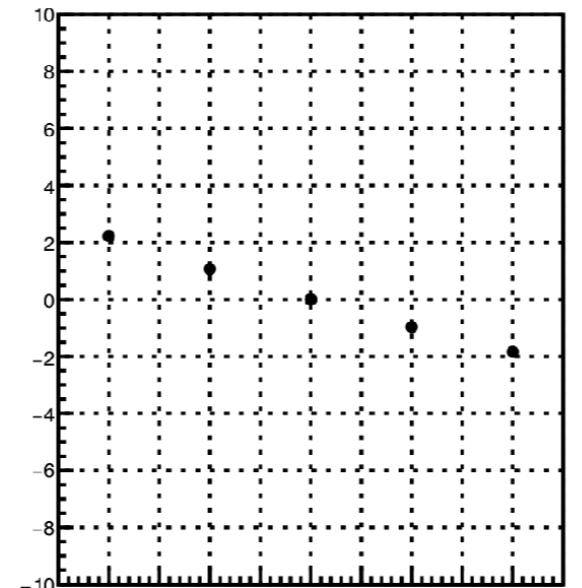
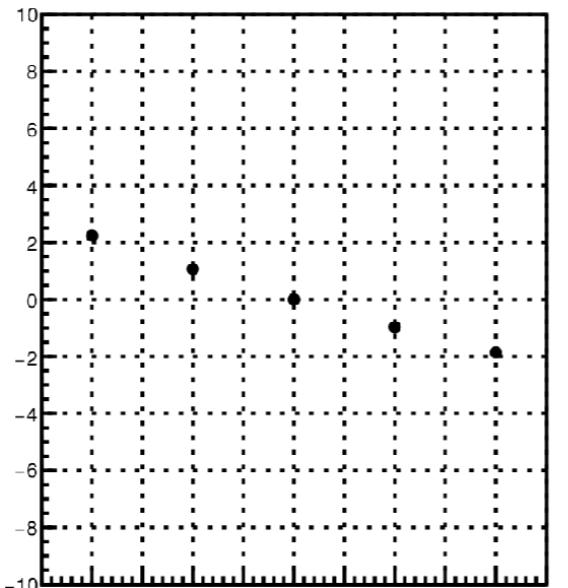
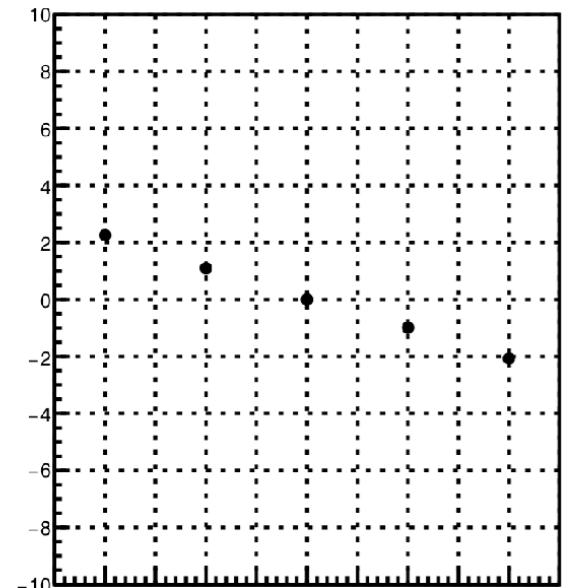
hisWave_0



Gain curve



Signal timing delay



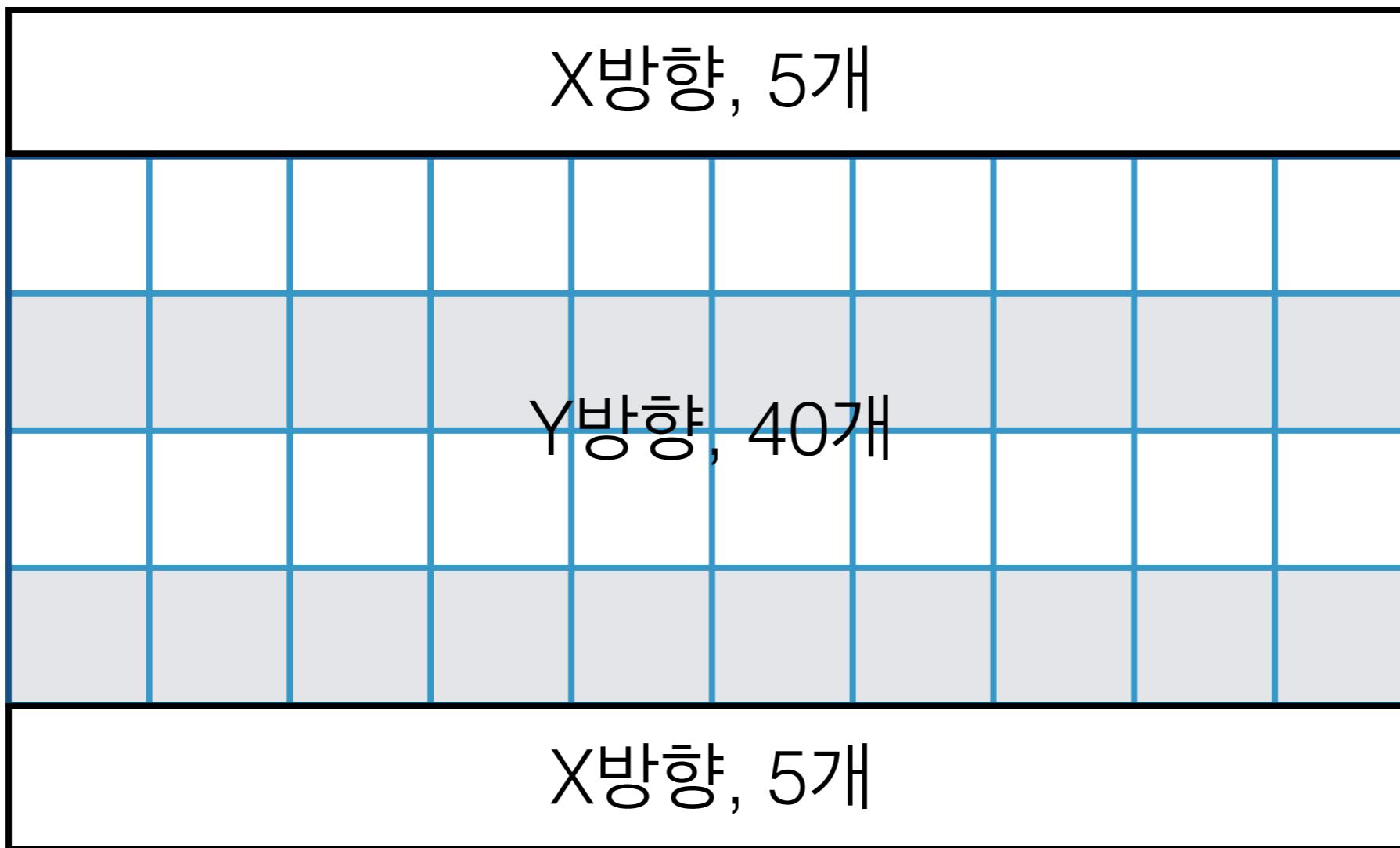
HV

HV

HV

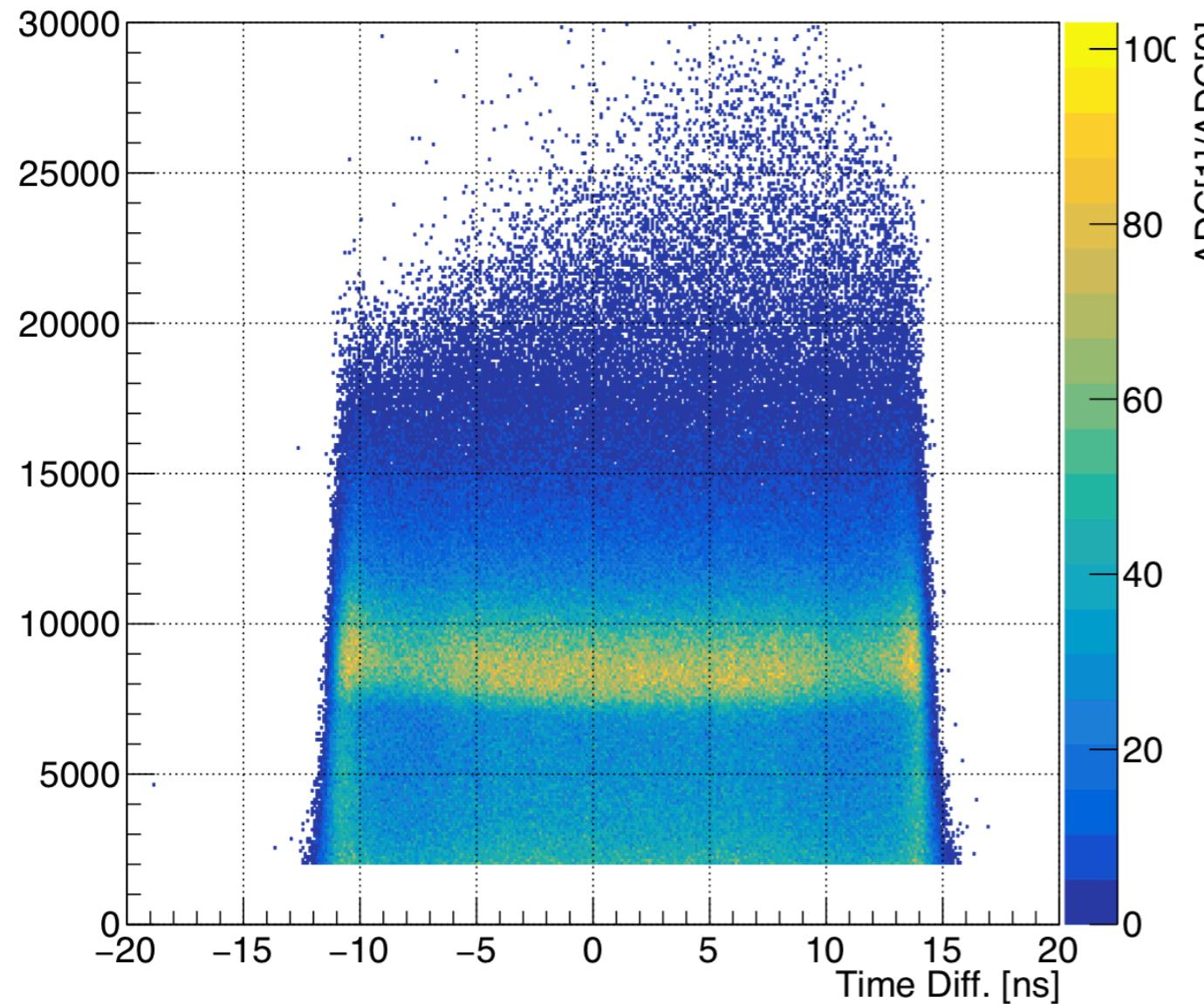
HV

Module cosmic test for 40 modules

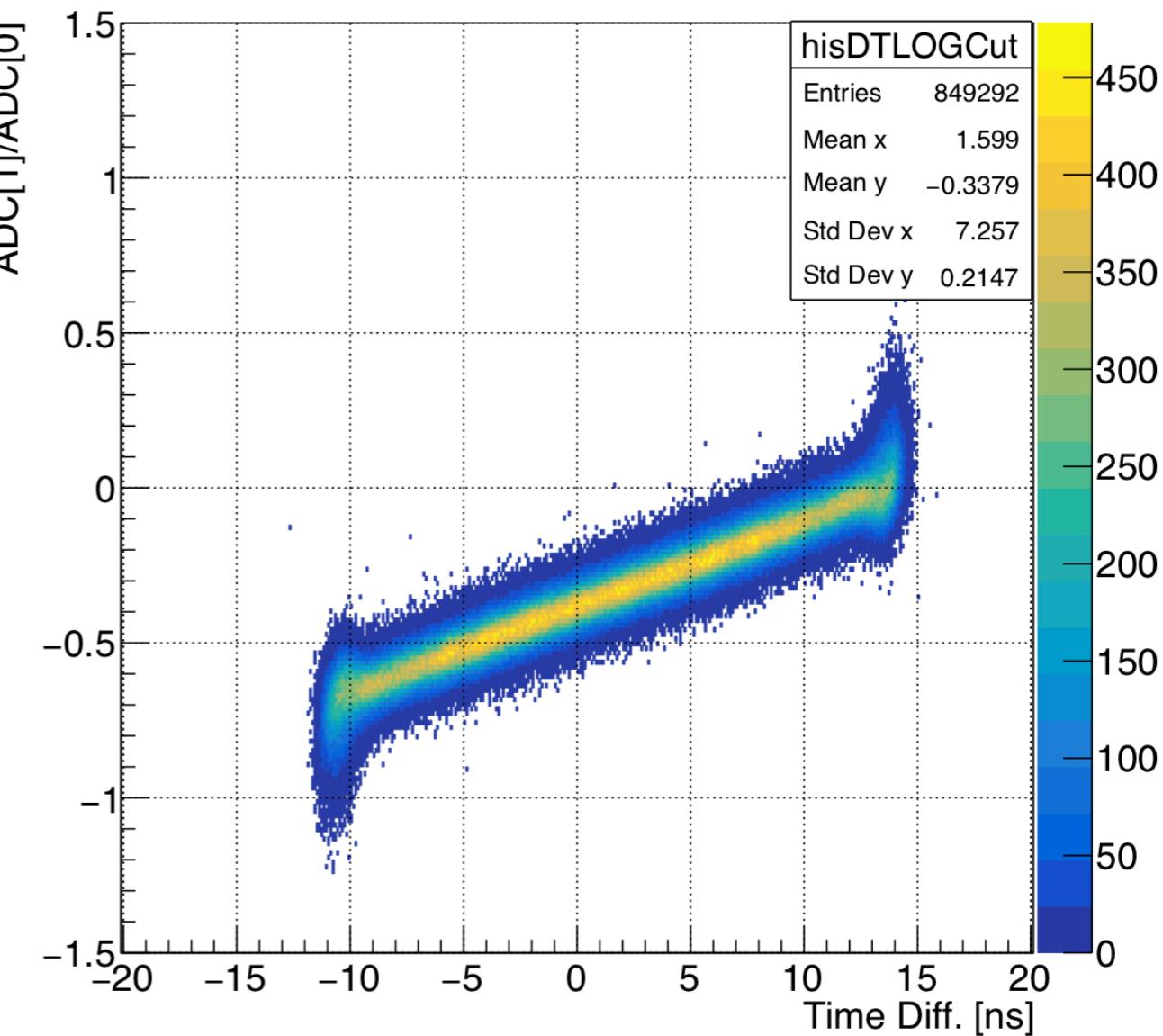


총 40개/1회
1일

Cosmic ray output



ADC Log Ratio



MIP peak value
Timing resolution
Attenuation length

를 모듈별로 정리