

Daily report

29 May, 2019

`/home/had/hmkim/work/hmkim/run81/cal_macro/README`

0. Configuration of folder system.

- a) If you would like to do calibration for 'Period X' and make the folder 'Period X'
- b) Period X : This contain the other folders and 'dcv_calib.C', 'Makefile', 'CC0xthre.C'
- c) Period X/root : This contain the arranged dst file
- d) Period X/out_cal : This contain the output file from 'dcv_calib'
and the drawing and fitting plot macro file 'langaus*.C', 'plot*.C'
and the making the calibration factor macro file 'make_calib_factor.C'
- e) Period X/pdf : This contain the pdf files

1. Arrange the dst file

- a) Arrange macro file : cosmic_arrange.C
- b) Set the dst file link address
- c) Compile command : `g++ -o cosmic_GetData cosmic_arrange.C `root-config --cflags --glibs``
- d) Run the compiled file
- e) This file should be moved to 'root' folder.

2. Set the threshold of CC04 and CC05.

- a) file : CC0xthre.C(x = 4, 5)
- b) Set the arranged dst file link address and 'StartRun' Number, 'EndRun' Number.
- c) Run CC0xthre.C
- d) Check whether the fitting is properly done.
- e) If the fitting is not properly done, try to change the fitting range.
- f) "CC0xthre_'Start Run Number'_'End Run Number'.root" might be generated.
- g) "CC0xthre_'i'.pdf" might be also generated at 'pdf' folder.

3. Do Calibration

- a) file : dcv_calib.C
- b) Compile : Makefile
- c) Run : `./dcv_calib 'StartRun Number' 'EndRunNumber'`
- d) then `./out_cal/dcv_output.root` is generated.
- e) Run the "langaus_gain.C" and check whether the fitting is properly done.
- f) If the fitting is not properly done, try to change the range of fitting parameters.
- g) If the fitting is properly done, get the 'gain' value from fitting parameter 'MP'.
- h) Put the 'gain' value in "dcv_calib.C" and Run the process 'b)~d)' again.
- i) Run the "langaus_fnr.C" and check whether the fitting is properly done.
- j) If the fitting is properly done, get the 'norm_fnr' value from fitting parameter 'MP'.
- k) Put the 'norm_fnr' value in "dcv_calib.C" and Run the process 'b)~d)' again.
- l) If the fitting is properly done, get the 'norm_mod' value from fitting parameter 'MP'.
- m) Put the 'norm_mod' value in "dcv_calib.C" and Run the process 'b)~d)' again.

4. Make the calibration factor

- a) file : make_calib_factor.C
- b) Set the 'J_PARC_Run_Period', 'Calib_Run_Period', 'Start_Run', 'End_Run'
- c) Put the 'gain', 'norm_fnr', 'norm_mod' to "make_calib_factor.C"
- d) Run the "make_calib_factor.C"
- e) There might be generated "Calib_Factor_Run'StartRun'_'EndRun'.root" file from "make_calib_factor.C"
- f) You can see the 'Calib_Factor' in the output root file.

Run31448(Period5)

Number of total Event :241593

Number of CC04 Event :68864

Number of CC05 Event :106029

Run31538(Period6)

Number of total Event :2201052

Number of CC04 Event :50962

Number of CC05 Event :77530

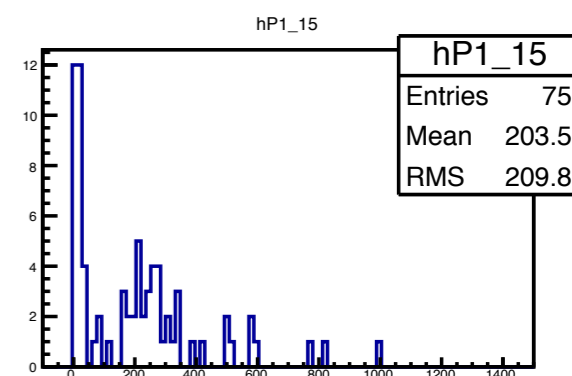
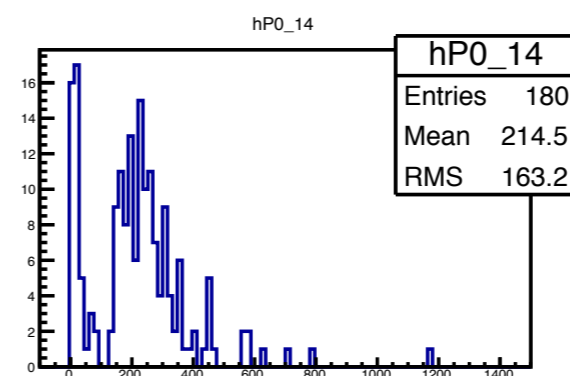
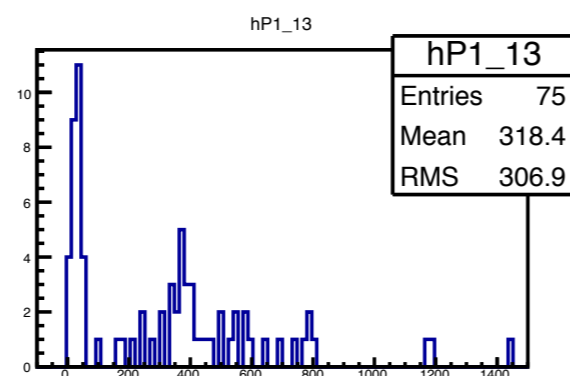
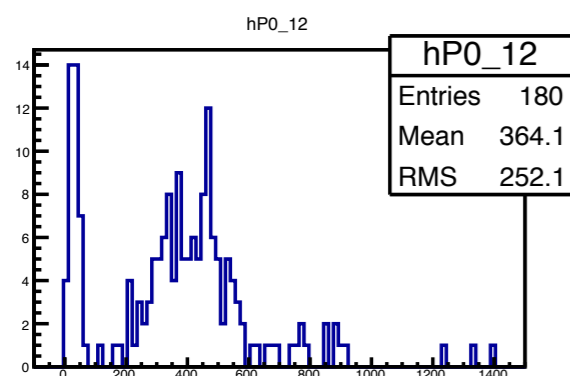
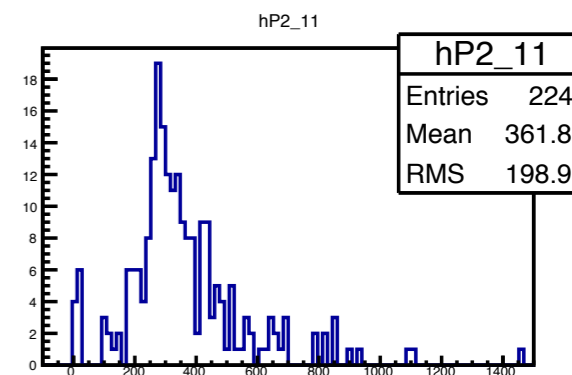
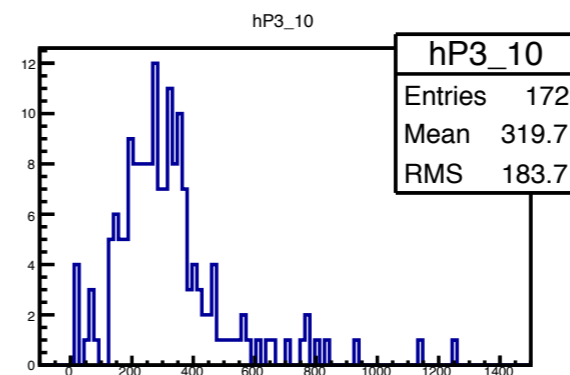
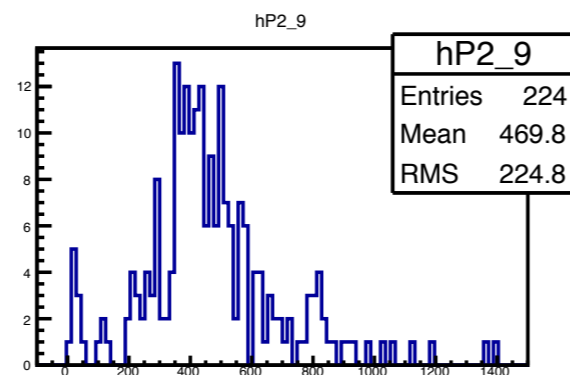
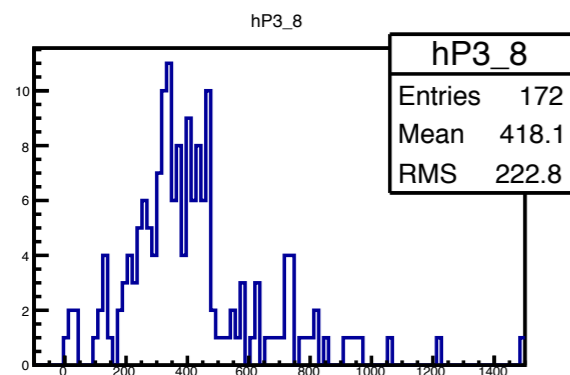
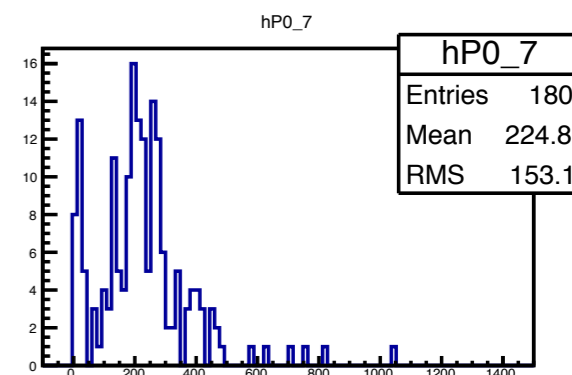
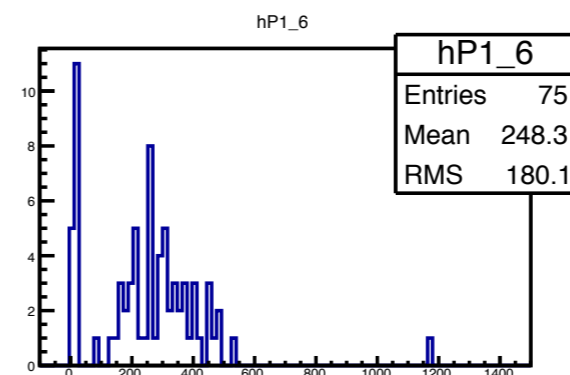
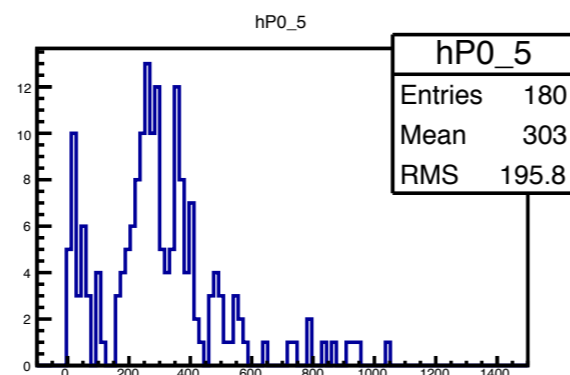
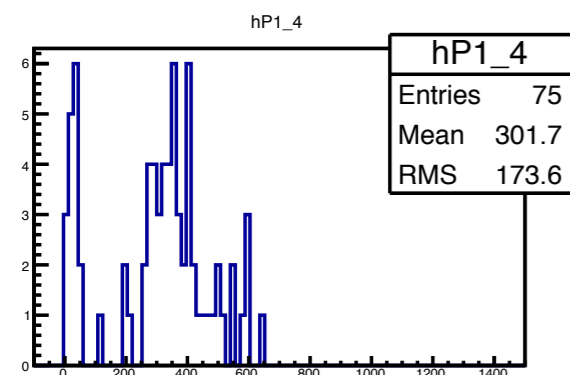
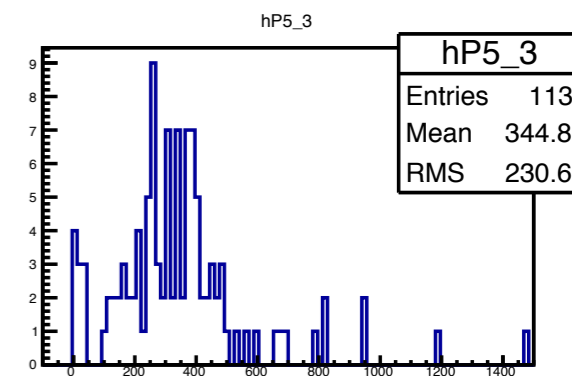
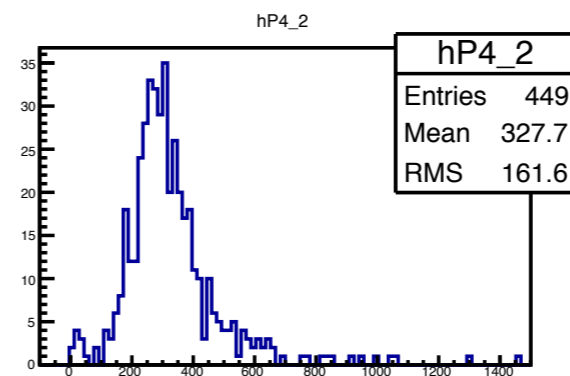
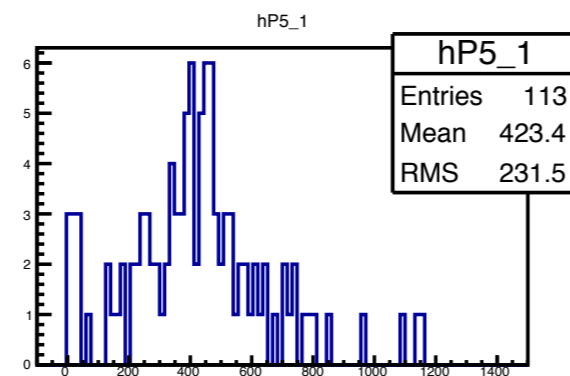
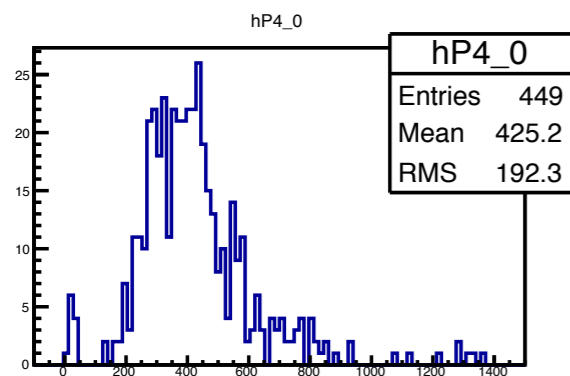
Run Information

Period6(21)

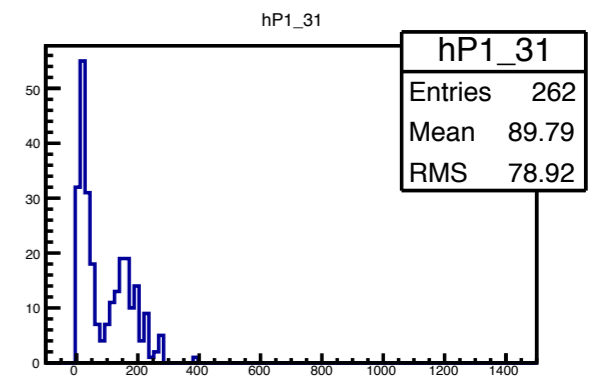
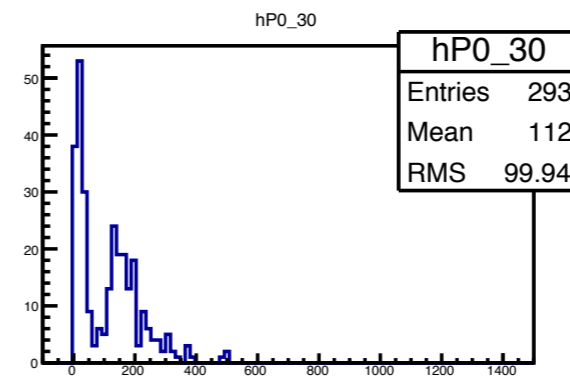
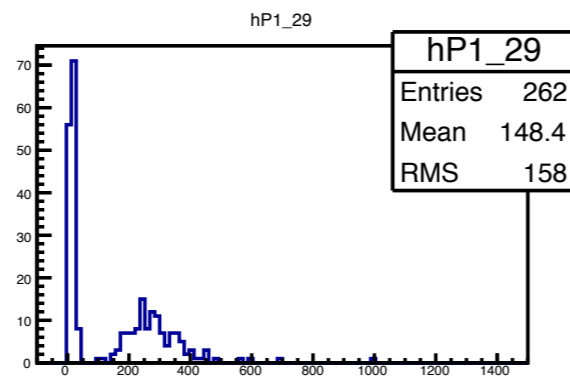
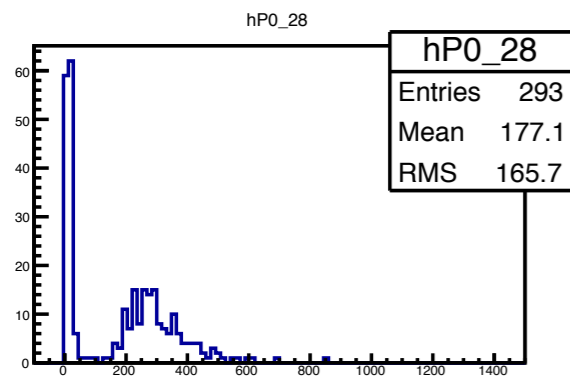
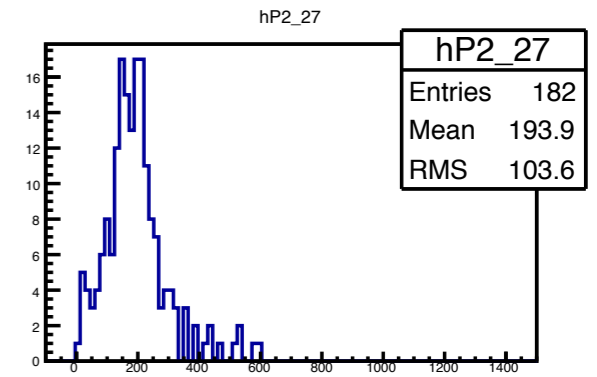
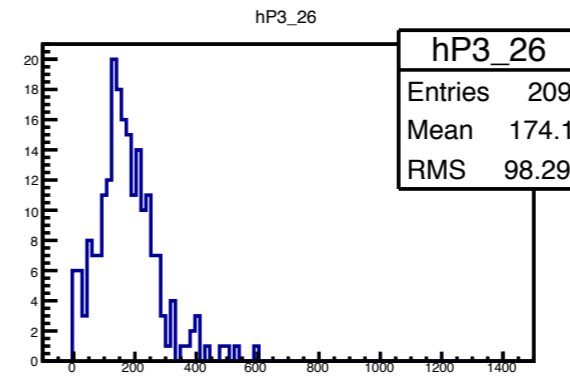
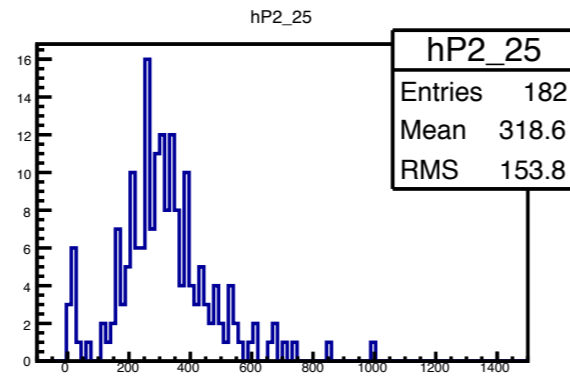
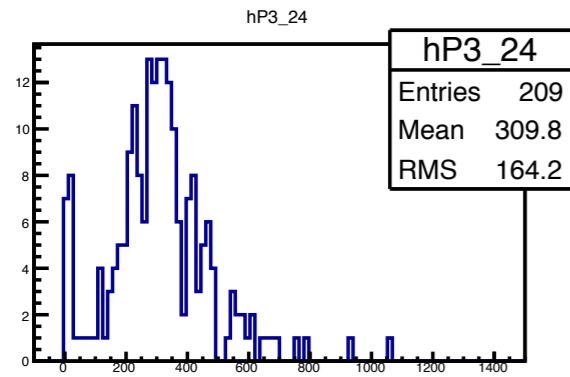
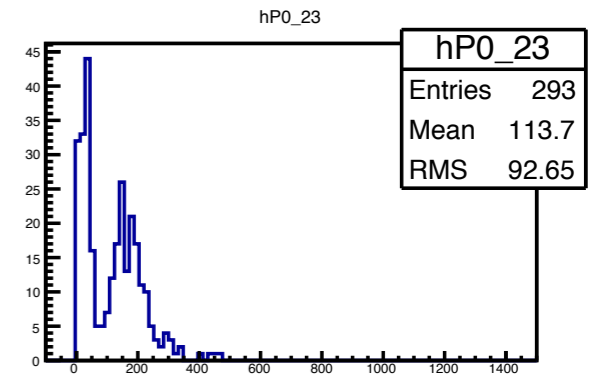
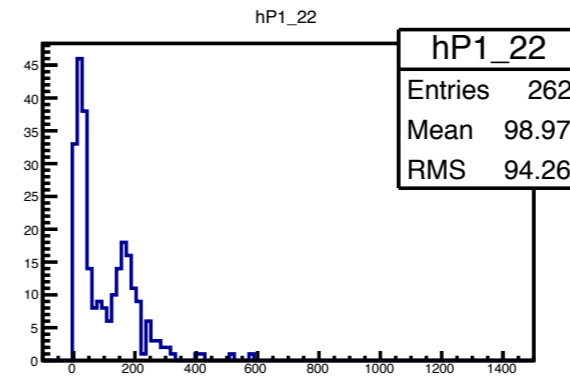
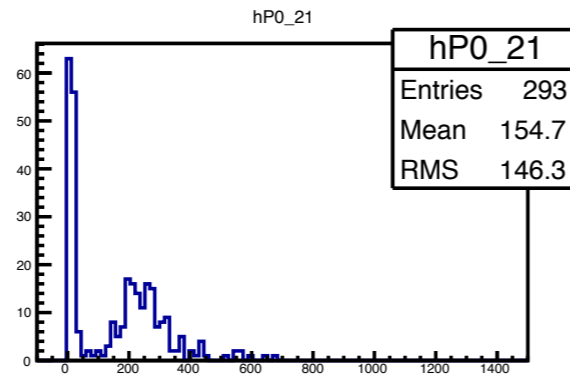
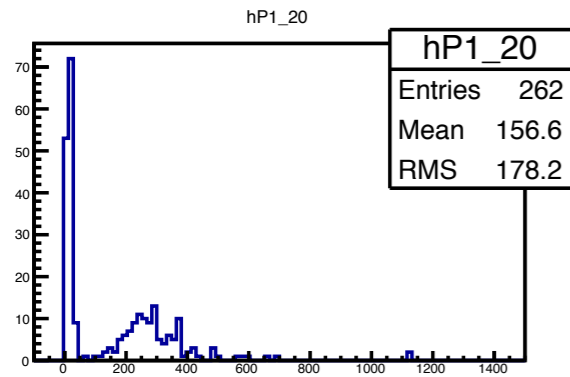
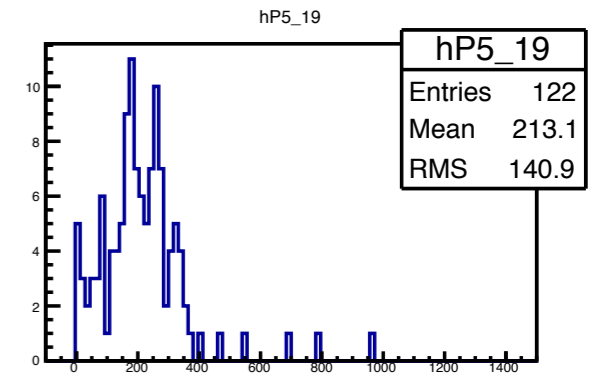
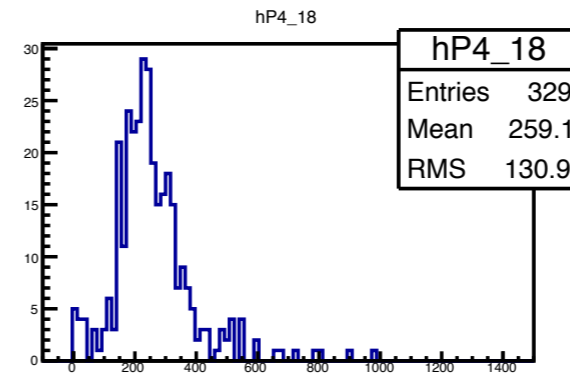
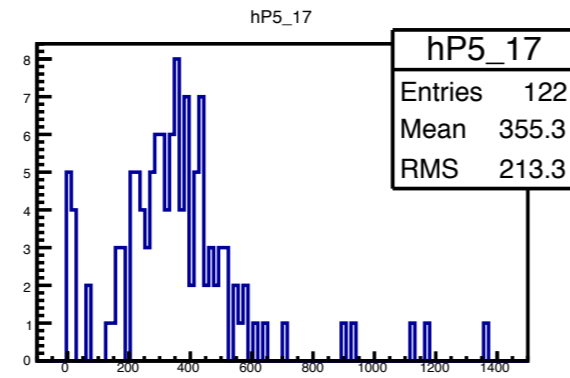
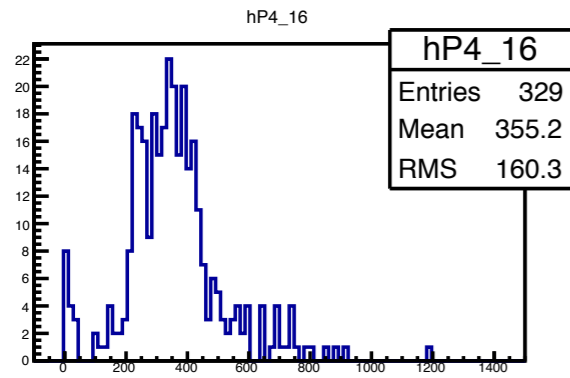
run number	Start time	Stop time	Run Type	Note	L1 Raw	L1 Live	L1 Accepted	L1 Accept rate	L2 Accepted	SemiOnline Plots
31532	2019-04-03 16:00:18	2019-04-03 16:50:38	COSMIC	Cosmic_TightPS_MBTrig	0	0	0	0.00	4531542	link
31533	2019-04-03 23:39:44	2019-04-04 00:30:02	COSMIC	Cosmic_TightPS_MBTrig	0	0	0	0.00	4532203	link
31534	2019-04-04 00:32:46	2019-04-04 01:23:46	COSMIC	Cosmic_TightPS_IBTrig	0	0	0	0.00	2160176	link
31535	2019-04-04 01:25:22	2019-04-04 02:17:01	COSMIC	Cosmic_TightPS_IBTrig	0	0	0	0.00	1729314	link
31536	2019-04-04 02:18:17	2019-04-04 03:11:14	COSMIC	Cosmic_TightPS_IBTrig	0	0	0	0.00	1833695	link
31537	2019-04-04 03:12:11	2019-04-04 04:02:34	COSMIC	Cosmic_TightPS_IBTrig	0	0	0	0.00	2198910	link
31538	2019-04-04 04:03:33	2019-04-04 04:54:00	COSMIC	Cosmic_TightPS_IBTrig	0	0	0	0.00	2201205	link
31539	2019-04-04 04:54:54	2019-04-04 05:45:14	COSMIC	Cosmic_TightPS_IBTrig	0	0	0	0.00	2199224	link
31540	2019-04-04 05:46:17	2019-04-04 06:36:40	COSMIC	Cosmic_TightPS_IBTrig	0	0	0	0.00	2201753	link
31541	2019-04-04 06:37:56	2019-04-04 07:28:18	COSMIC	Cosmic_TightPS_IBTrig	0	0	0	0.00	2202205	link
31542	2019-04-04 07:29:33	2019-04-04 08:20:14	COSMIC	Cosmic_TightPS_IBTrig	0	0	0	0.00	2196392	link
31543	2019-04-04 08:21:10	2019-04-04 09:11:28	COSMIC	Cosmic_TightPS_IBTrig	0	0	0	0.00	2197126	link
31544	2019-04-04 09:12:28	2019-04-04 10:02:48	COSMIC	Cosmic_TightPS_IBTrig	0	0	0	0.00	2199883	link
31545	2019-04-04 10:07:09	2019-04-04 10:12:31	ERROR/CLOCK	LED_1kHz	0	0	0	0.00	413065	link
31546	2019-04-04 10:14:18	2019-04-04 11:04:39	COSMIC	Cosmic_TightPS_IBTrig	0	0	0	0.00	2198511	link
31547	2019-04-04 11:06:27	2019-04-04 11:56:47	COSMIC	Cosmic_TightPS_IBTrig	0	0	0	0.00	2198504	link
31548	2019-04-04 11:58:31	2019-04-04 12:49:07	COSMIC	Cosmic_TightPS_IBTrig	0	0	0	0.00	2194226	link
31549	2019-04-04 12:56:12	2019-04-04 13:46:33	COSMIC	Cosmic_TightPS_IBTrig	0	0	0	0.00	2199219	link
31550	2019-04-04 13:48:53	2019-04-04 14:39:17	COSMIC	Cosmic_TightPS_IBTrig	0	0	0	0.00	2195031	link
31551	2019-04-04 14:40:42	2019-04-04 15:31:07	COSMIC	Cosmic_TightPS_IBTrig	0	0	0	0.00	2198939	link
31552	2019-04-04 15:33:01	2019-04-04 16:23:21	COSMIC	Cosmic_TightPS_IBTrig	0	0	0	0.00	2194783	link
31553	2019-04-04 16:26:27	2019-04-04 16:28:03	COSMIC	Cosmic_TightPS_IBTrig	0	0	0	0.00	52821	link
Total				0	0	0		48228727		

Arranged dot file entries : 2437656

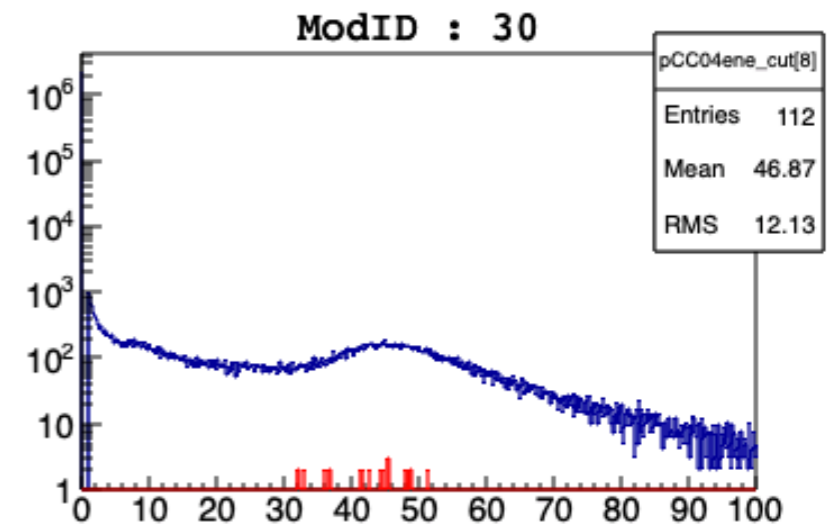
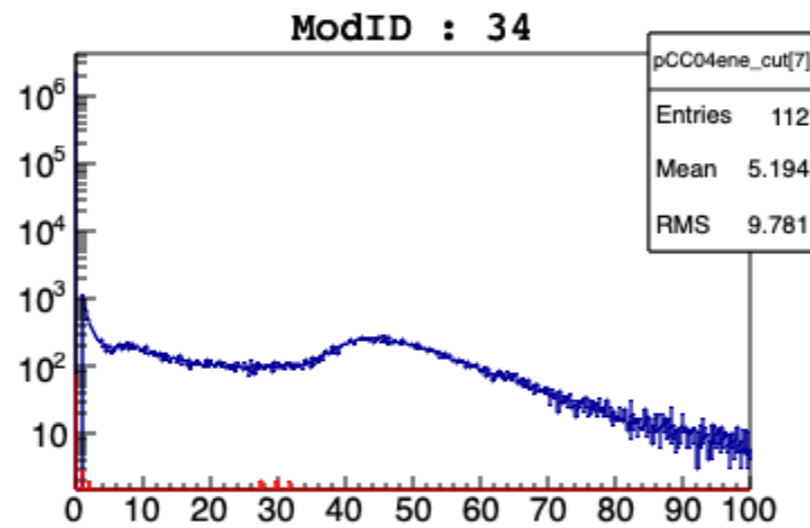
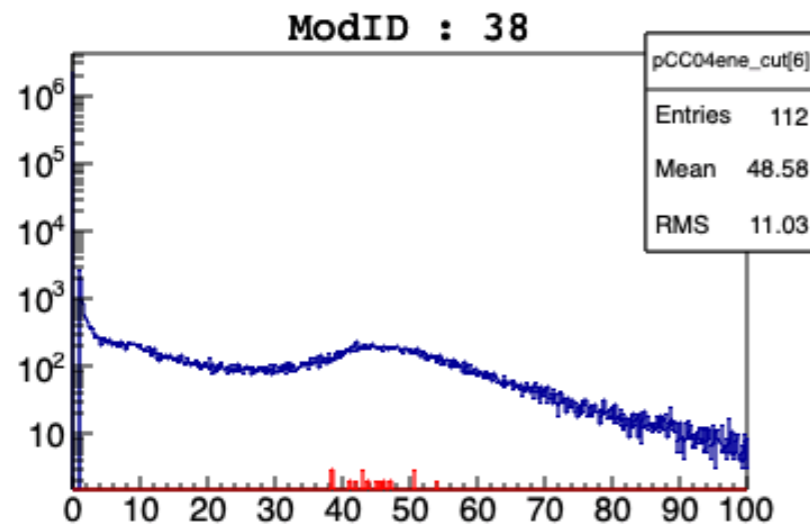
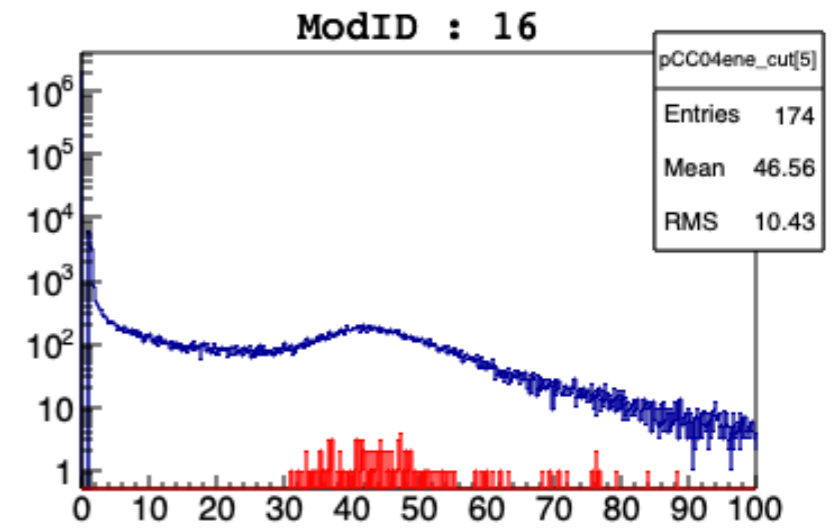
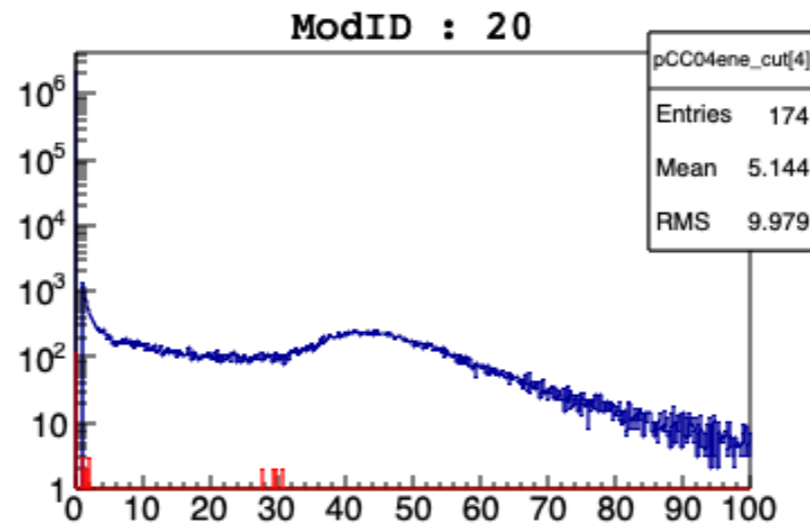
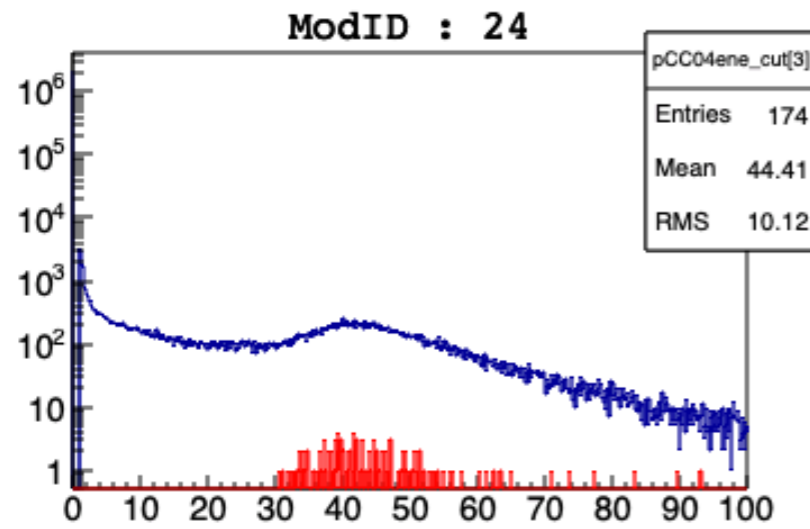
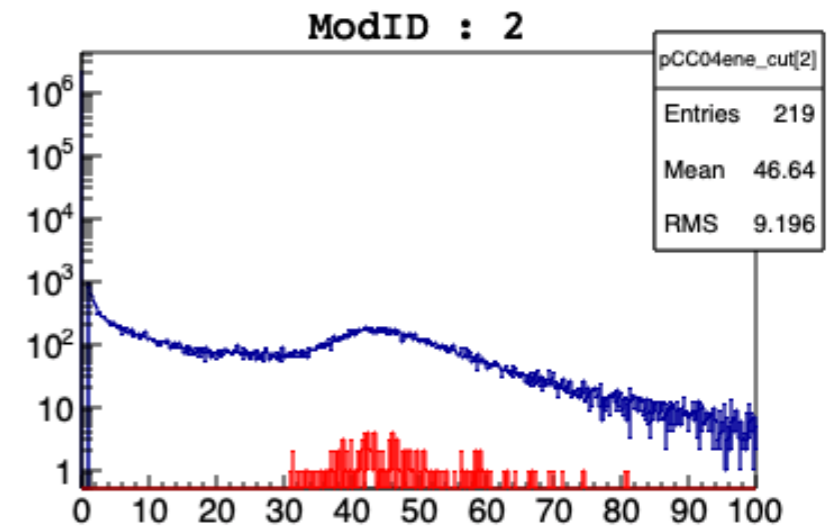
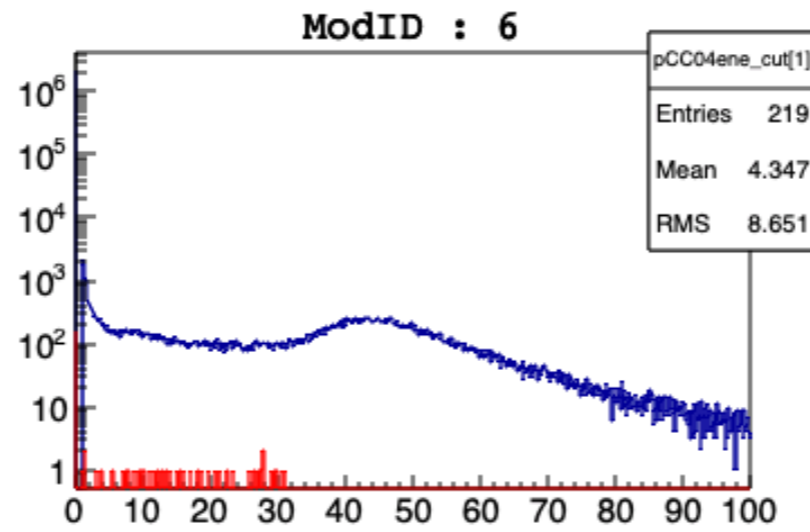
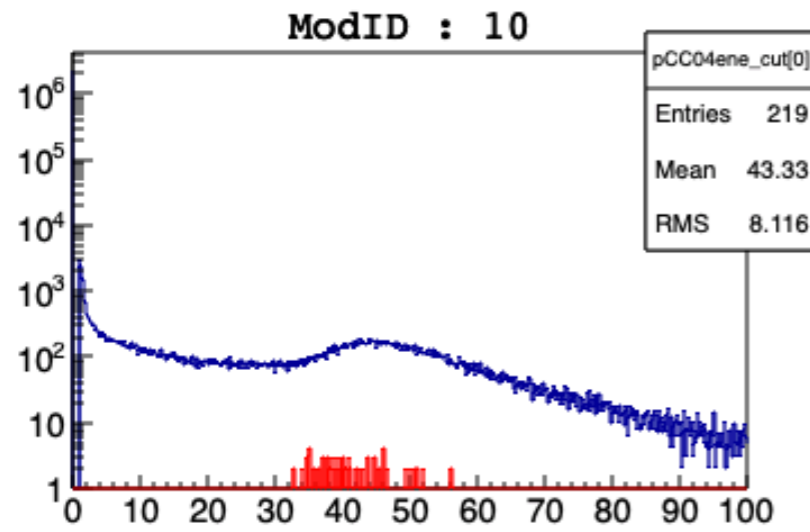
DCVPeak Distribution(DCV1)



DCVPeak Distribution(DCV2)

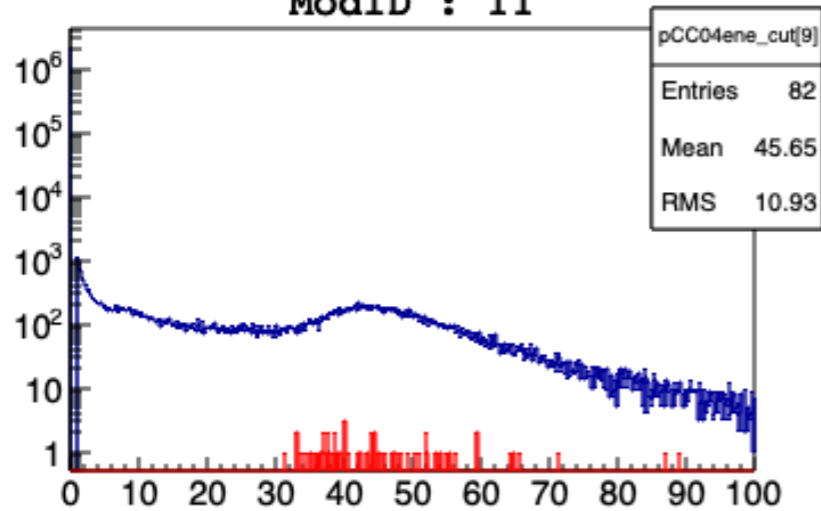


Period6

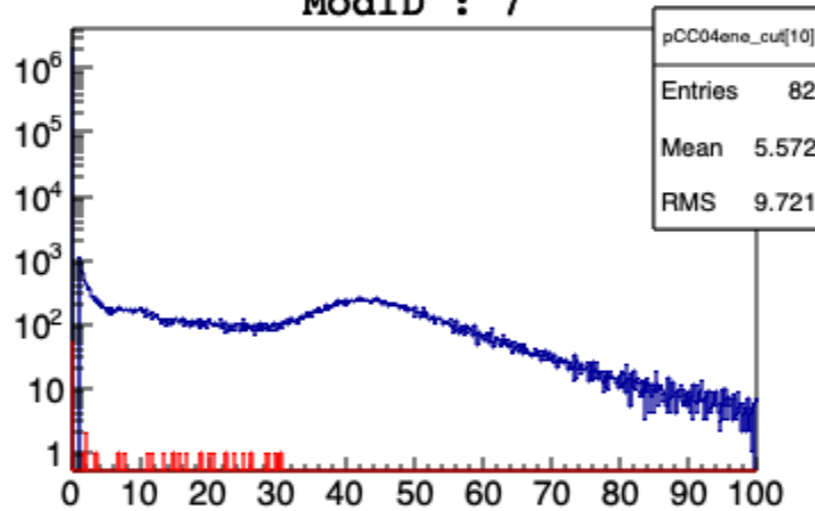


Period6

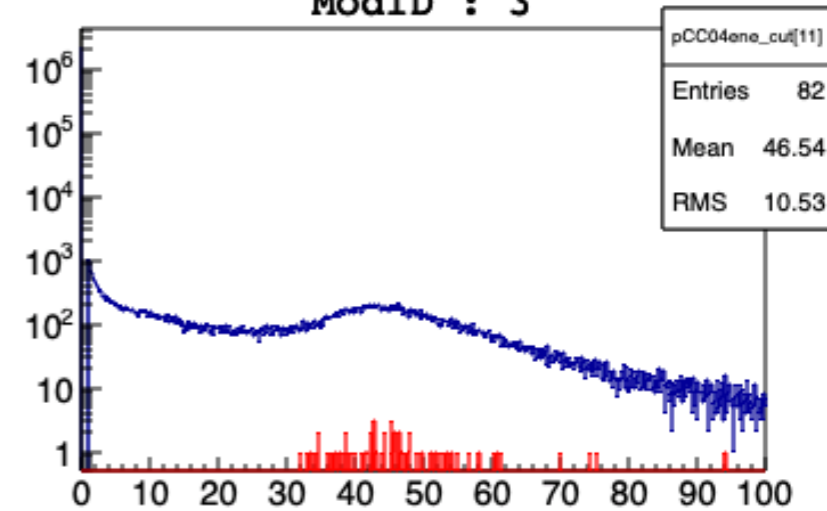
ModID : 11



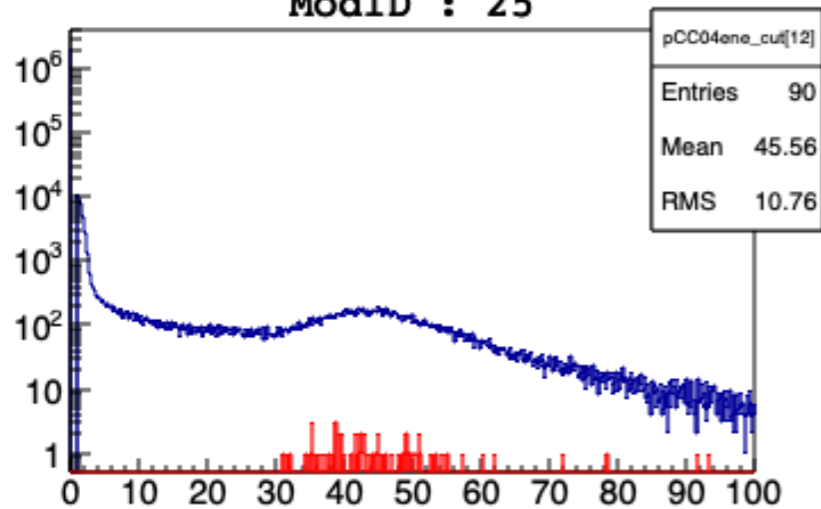
ModID : 7



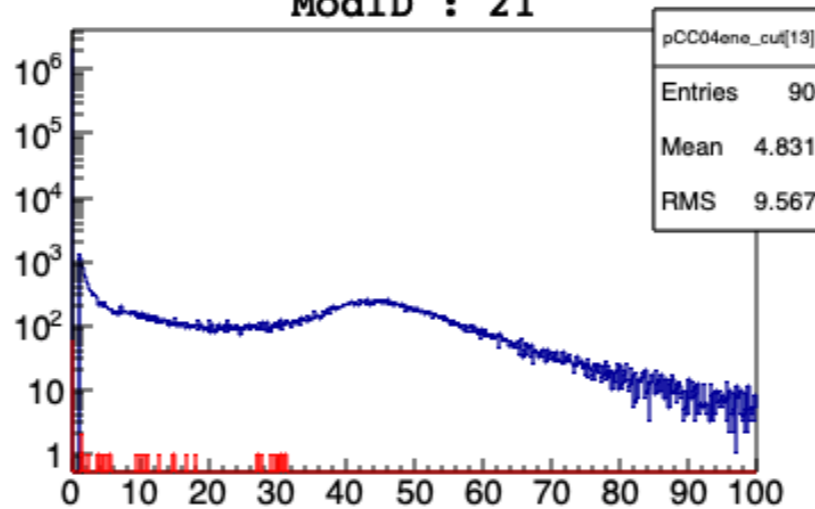
ModID : 3



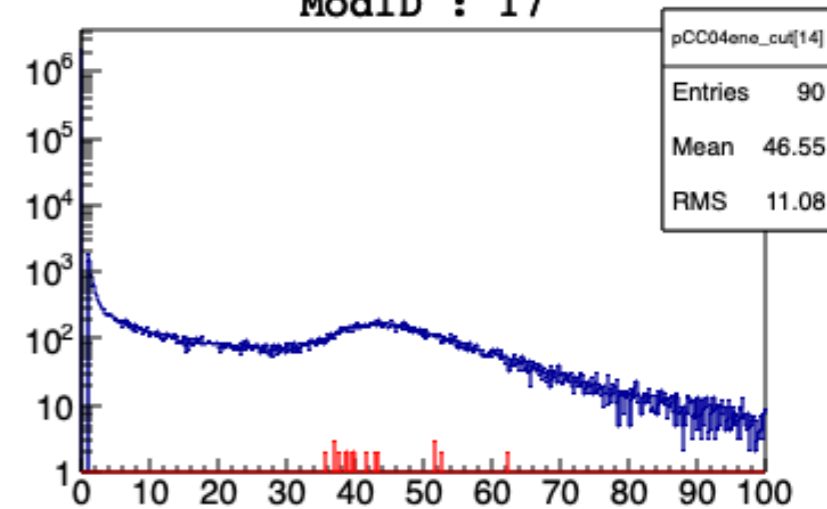
ModID : 25



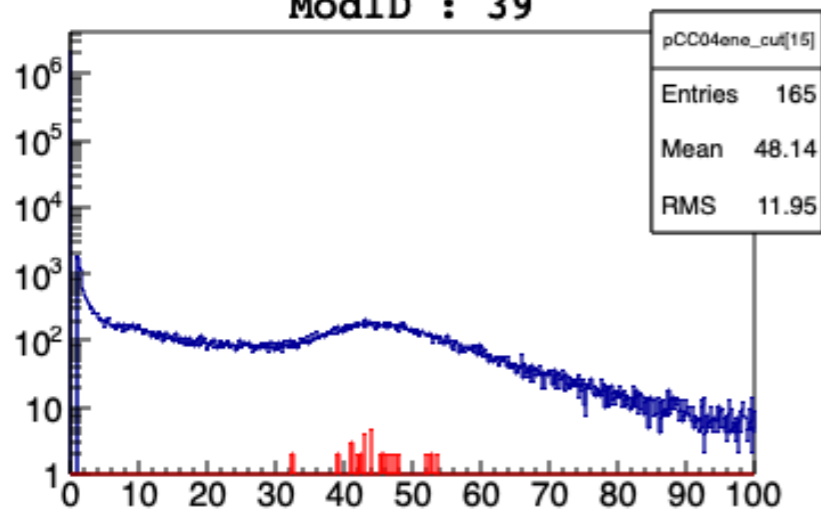
ModID : 21



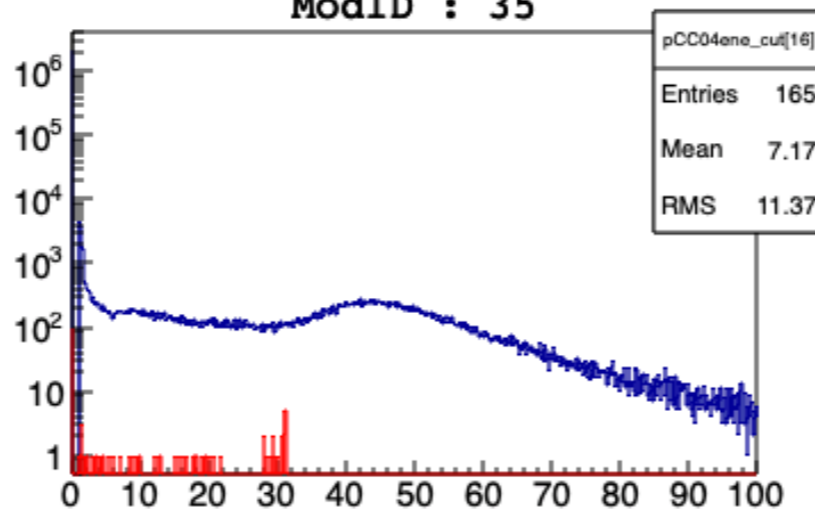
ModID : 17



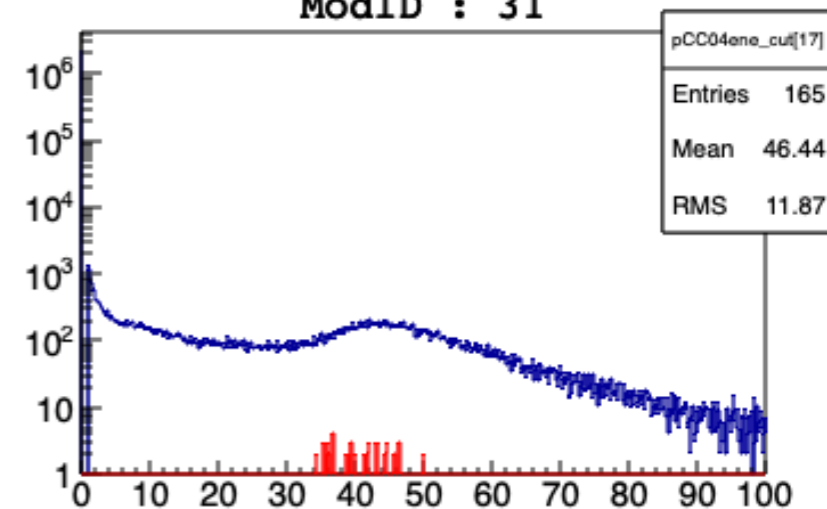
ModID : 39



ModID : 35



ModID : 31



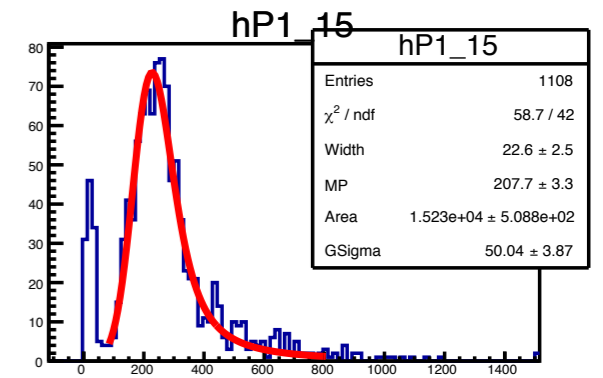
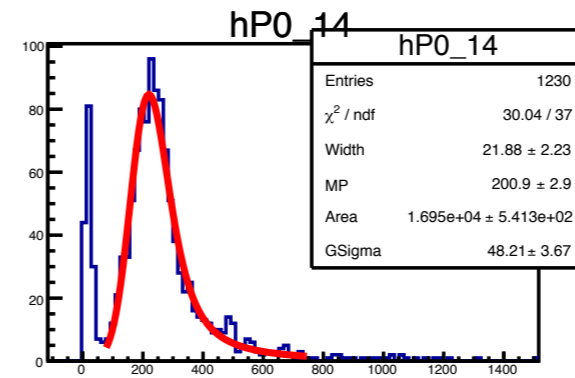
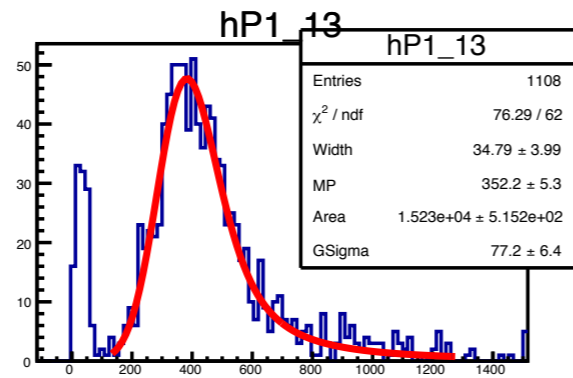
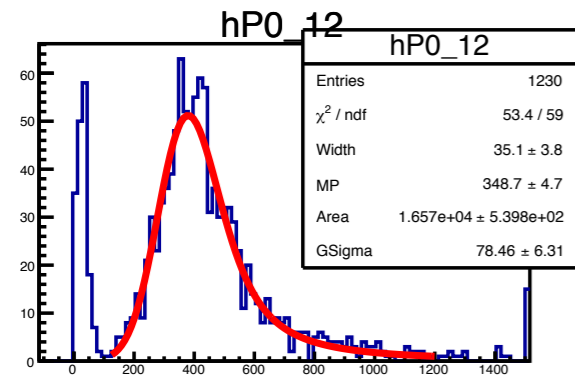
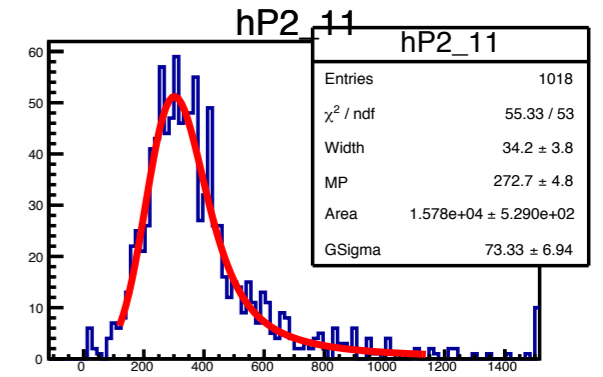
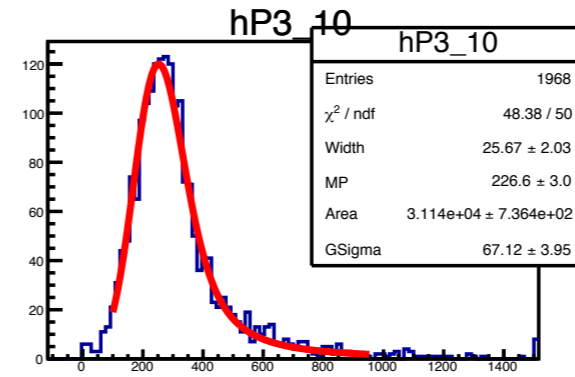
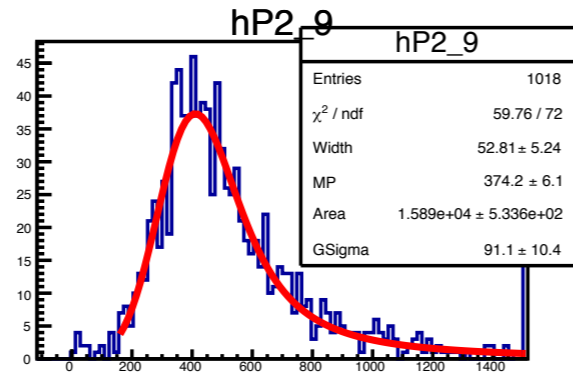
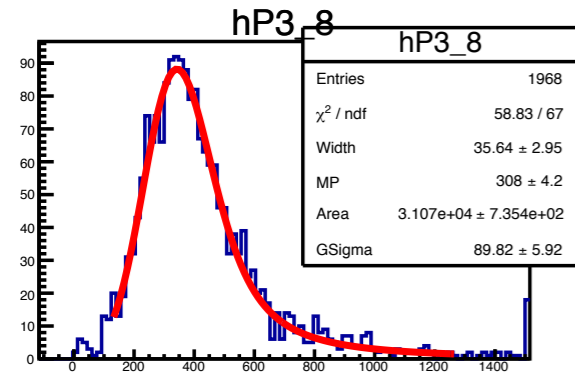
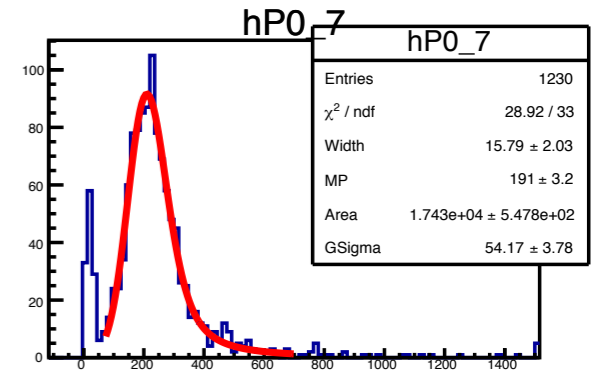
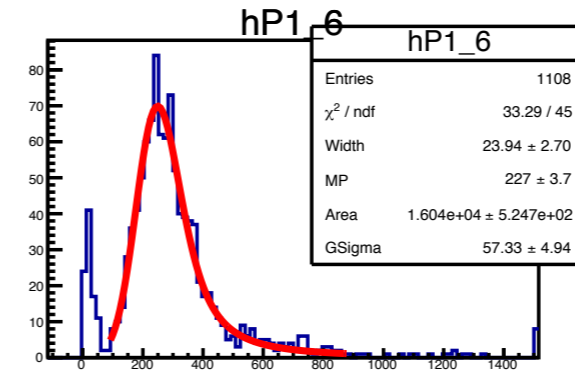
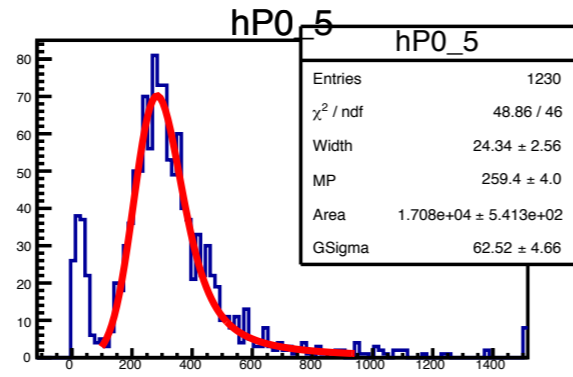
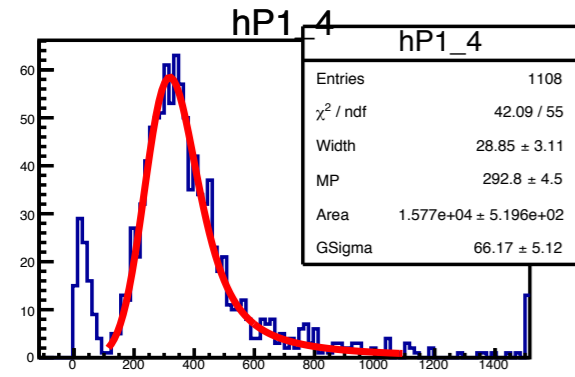
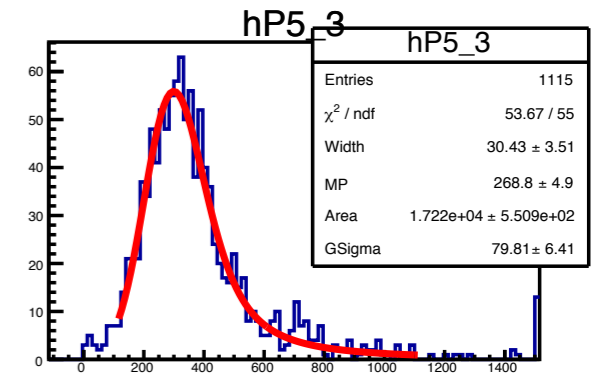
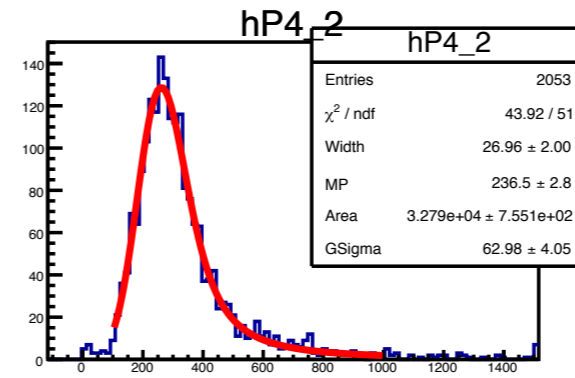
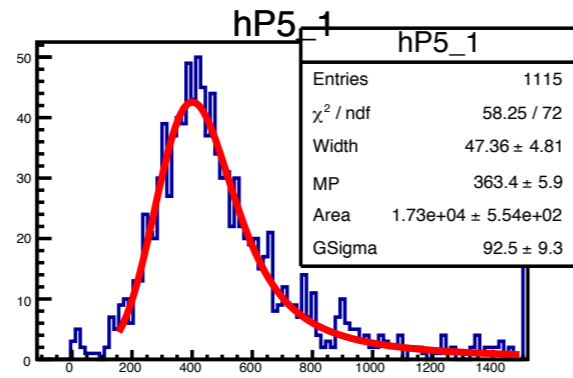
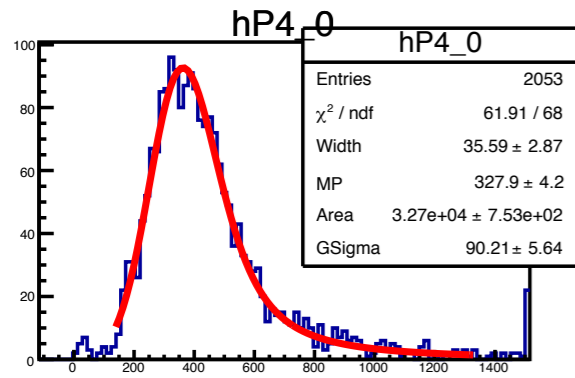
Run Information

Period3(16)

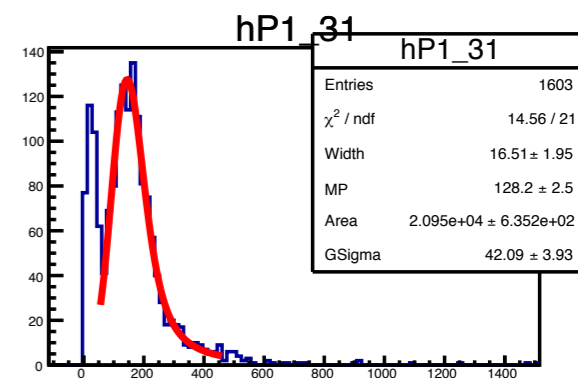
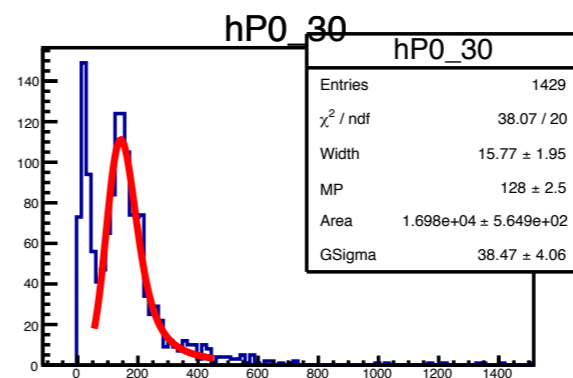
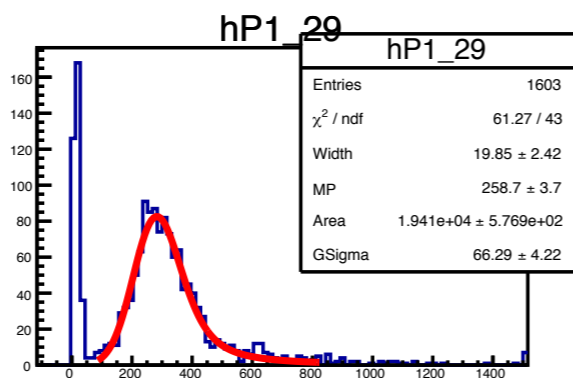
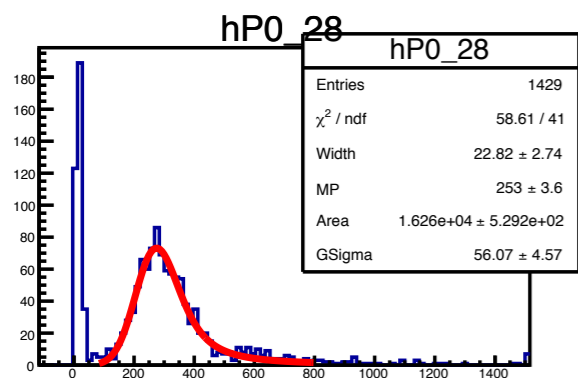
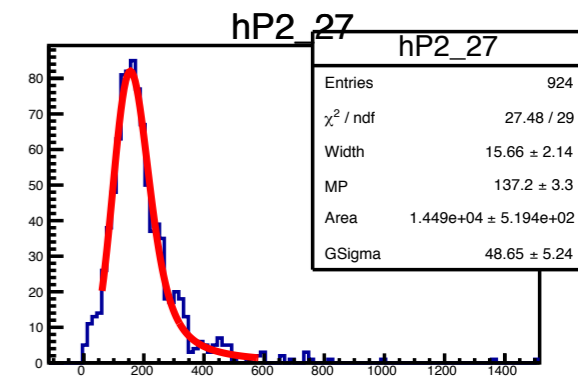
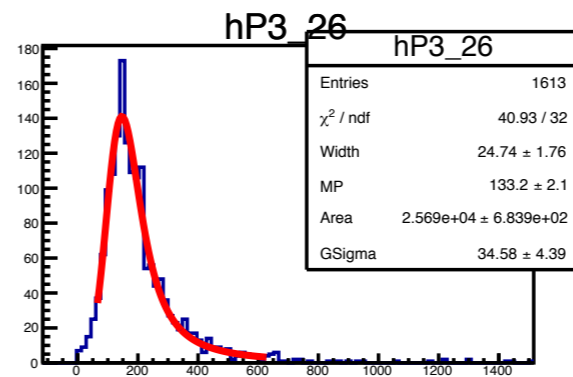
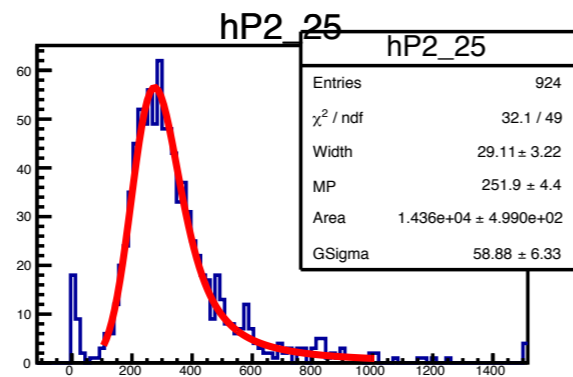
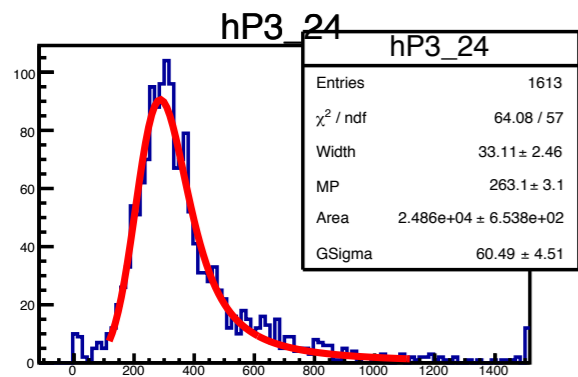
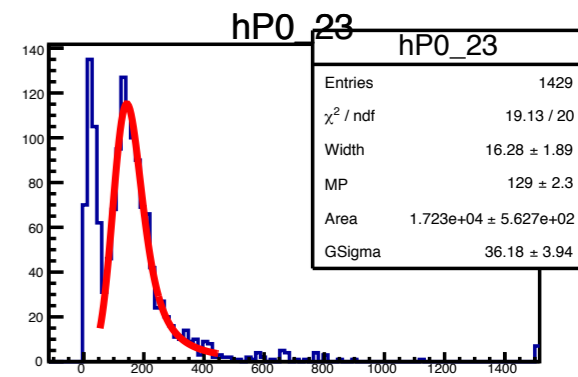
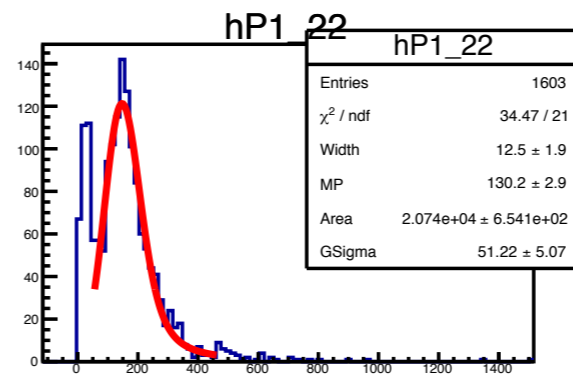
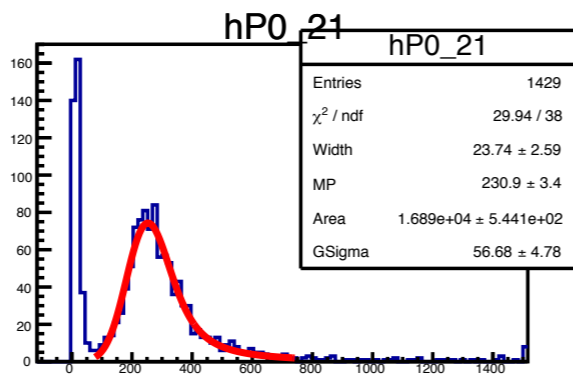
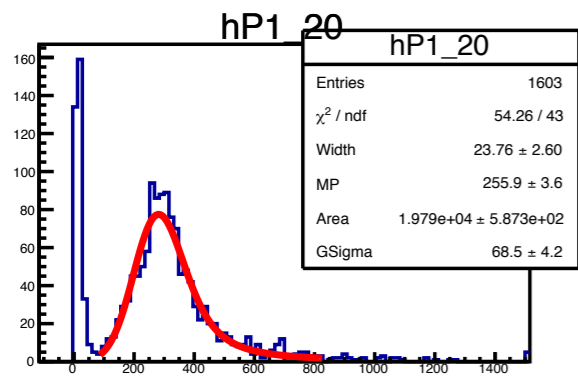
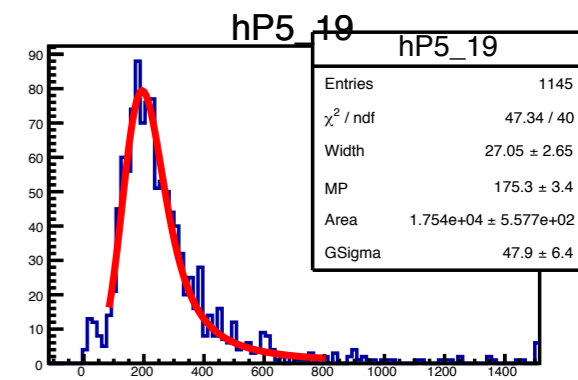
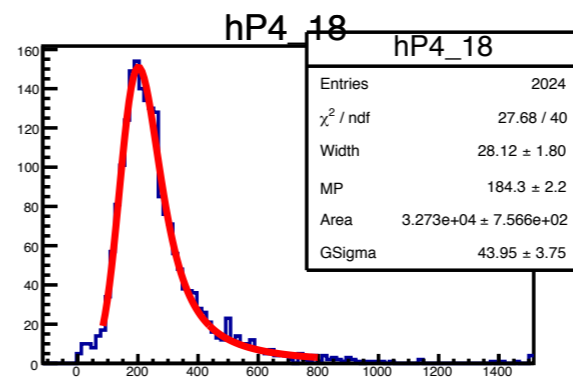
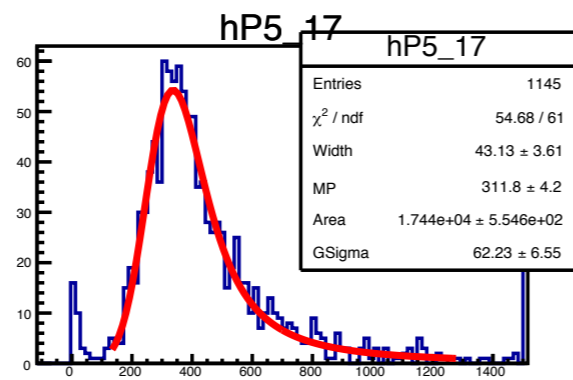
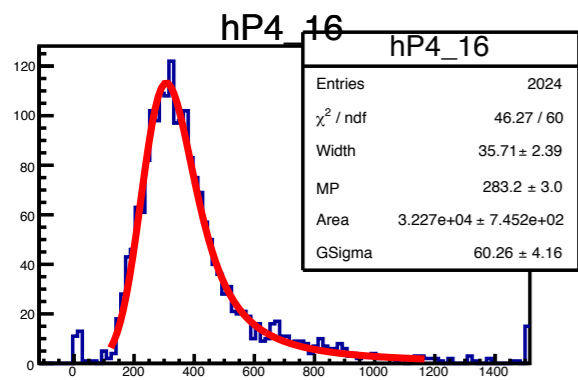
31374	2019-03-18 23:56:46	2019-03-19 00:47:41	COSMIC	Cosmic_TightPS_IBTrig	0	0	0	0.00	2209935	link
31375	2019-03-19 04:31:42	2019-03-19 05:22:22	COSMIC	Cosmic_TightPS_IBTrig	0	0	0	0.00	2212987	link
31376	2019-03-19 05:39:13	2019-03-19 06:29:48	COSMIC	Cosmic_TightPS_IBTrig	0	0	0	0.00	2219267	link
31377	2019-03-19 06:30:58	2019-03-19 07:21:20	COSMIC	Cosmic_TightPS_IBTrig	0	0	0	0.00	2220429	link
31378	2019-03-19 07:22:23	2019-03-19 08:12:46	COSMIC	Cosmic_TightPS_IBTrig	0	0	0	0.00	2216970	link
31379	2019-03-19 08:13:59	2019-03-19 09:04:24	COSMIC	Cosmic_TightPS_IBTrig	0	0	0	0.00	2214971	link
31380	2019-03-19 09:05:28	2019-03-19 09:55:50	COSMIC	Cosmic_TightPS_IBTrig	0	0	0	0.00	2207571	link
31381	2019-03-19 09:57:15	2019-03-19 10:48:16	COSMIC	Cosmic_TightPS_IBTrig	0	0	0	0.00	2203015	link
31382	2019-03-19 10:49:10	2019-03-19 11:39:48	COSMIC	Cosmic_TightPS_IBTrig	0	0	0	0.00	2204040	link
31383	2019-03-19 11:40:58	2019-03-19 12:31:20	COSMIC	Cosmic_TightPS_IBTrig	0	0	0	0.00	2210134	link
31384	2019-03-19 12:32:23	2019-03-19 13:22:58	COSMIC	Cosmic_TightPS_IBTrig	0	0	0	0.00	2211222	link
31385	2019-03-19 13:23:57	2019-03-19 14:14:18	COSMIC	Cosmic_TightPS_IBTrig	0	0	0	0.00	2221504	link
31386	2019-03-19 14:15:30	2019-03-19 15:06:08	COSMIC	Cosmic_TightPS_IBTrig	0	0	0	0.00	2215601	link
31387	2019-03-19 15:07:17	2019-03-19 15:57:46	COSMIC	Cosmic_TightPS_IBTrig	0	0	0	0.00	2216479	link
31388	2019-03-19 15:58:48	2019-03-19 16:49:12	COSMIC	Cosmic_TightPS_IBTrig	0	0	0	0.00	2216541	link
31389	2019-03-19 16:53:35	2019-03-19 17:44:15	COSMIC	Cosmic_TightPS_MBTrig	0	0	0	0.00	4569929	link

Arranged dot file entries :2661424

DCVPeak Distribution(DCV1)

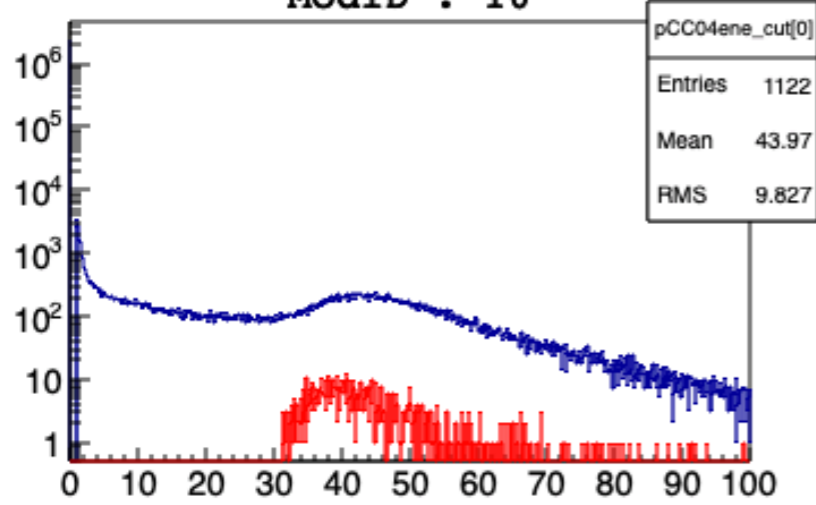


DCVPeak Distribution(DCV2)

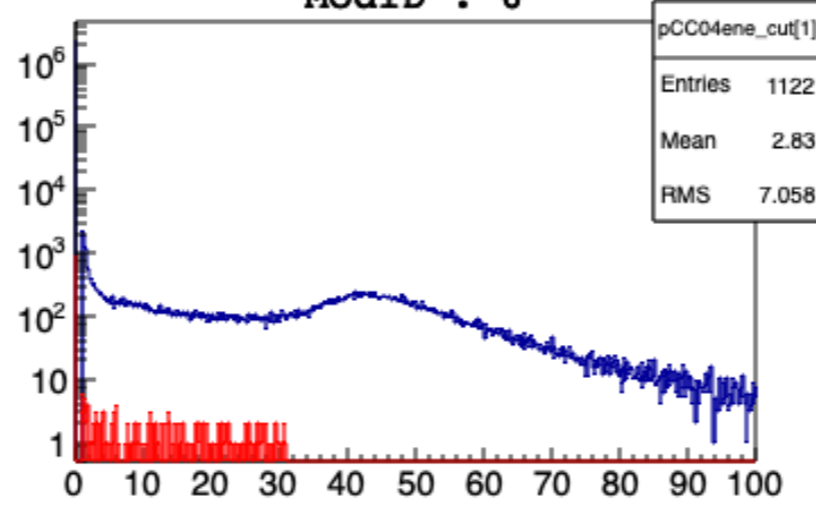


Period3

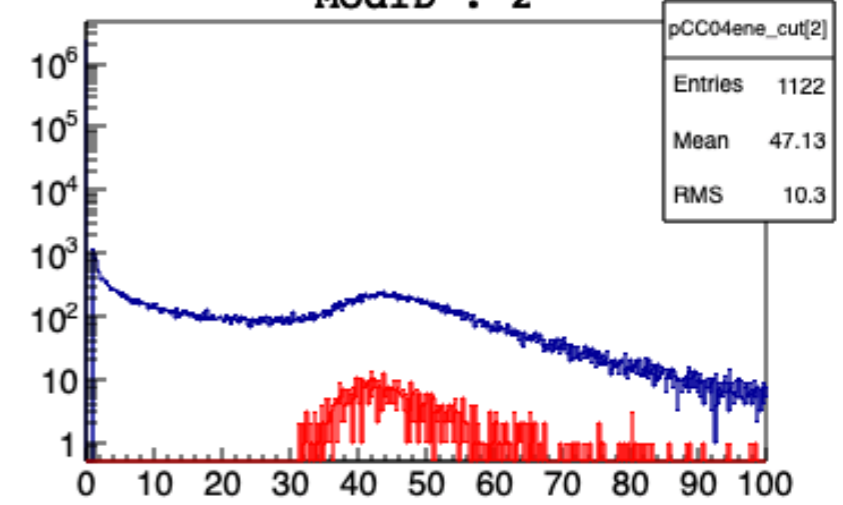
ModID : 10



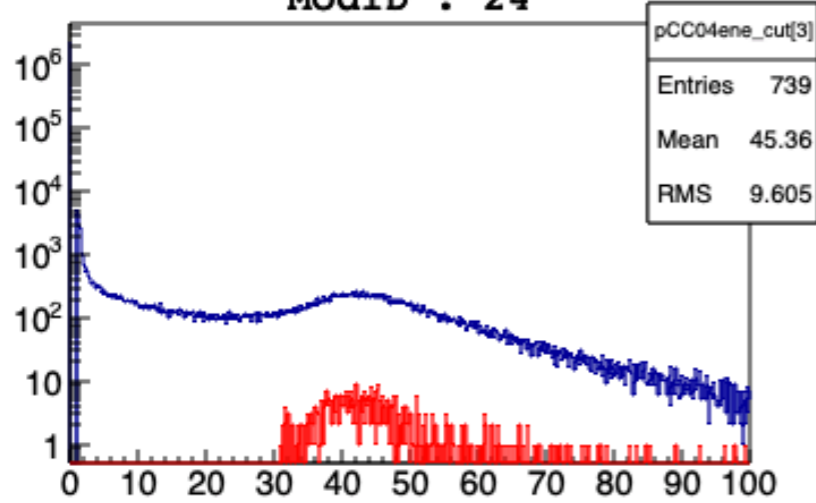
ModID : 6



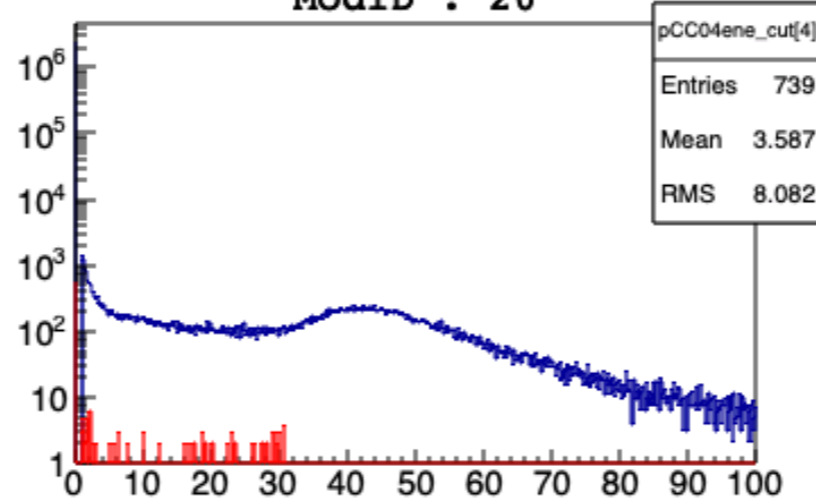
ModID : 2



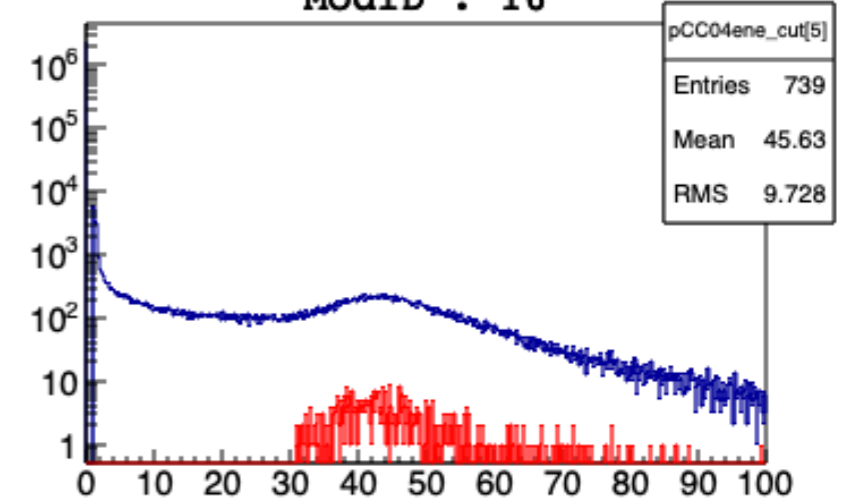
ModID : 24



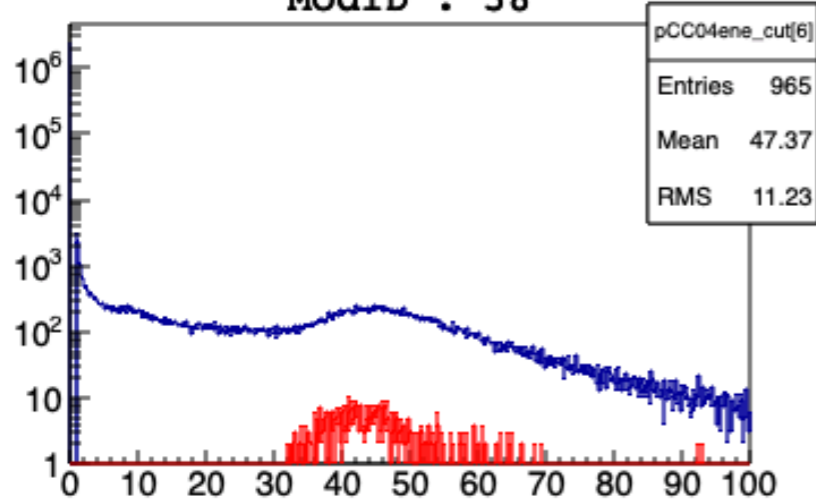
ModID : 20



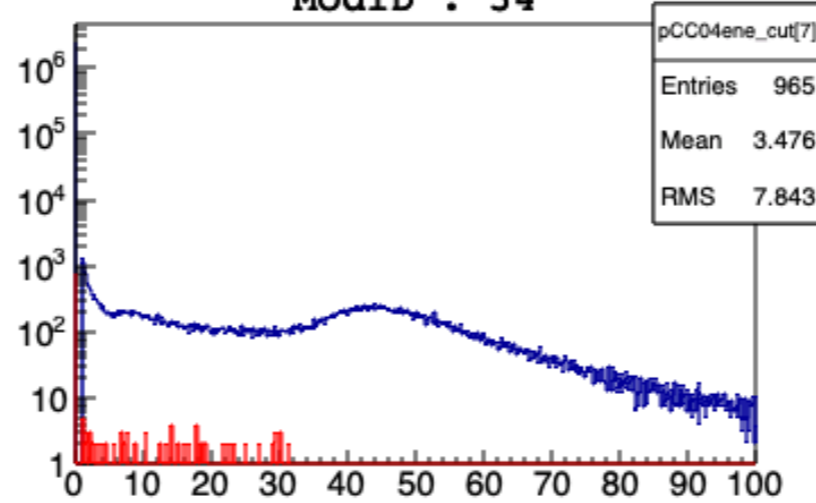
ModID : 16



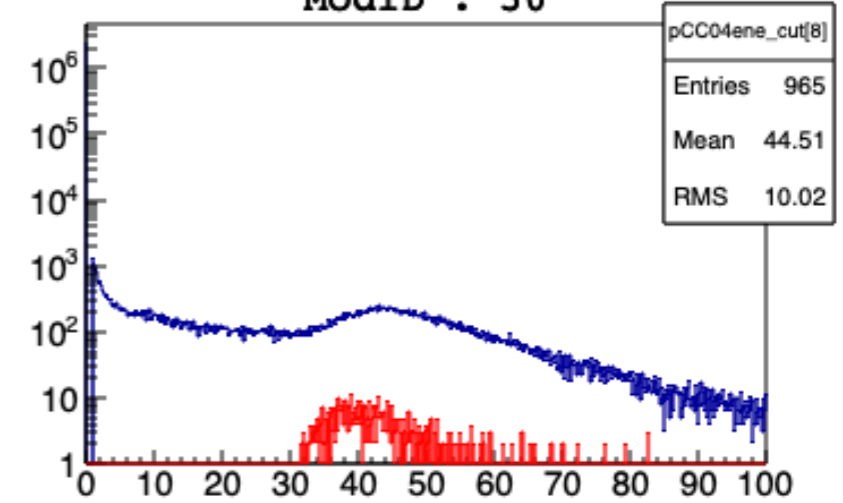
ModID : 38



ModID : 34

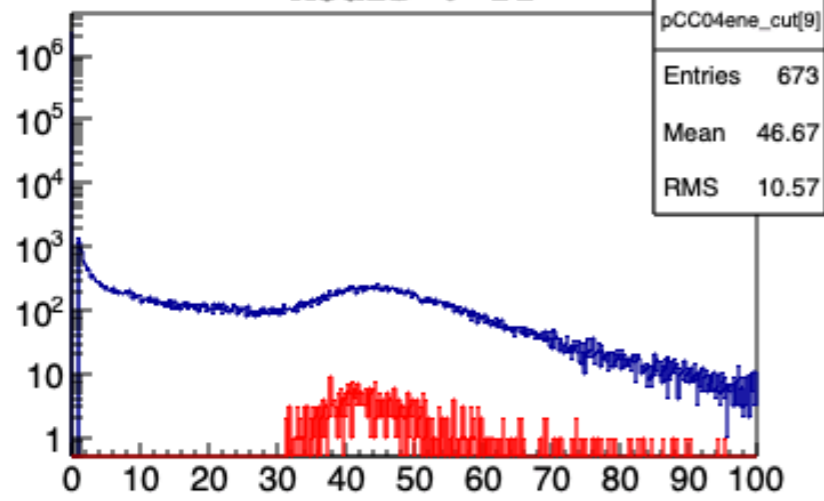


ModID : 30

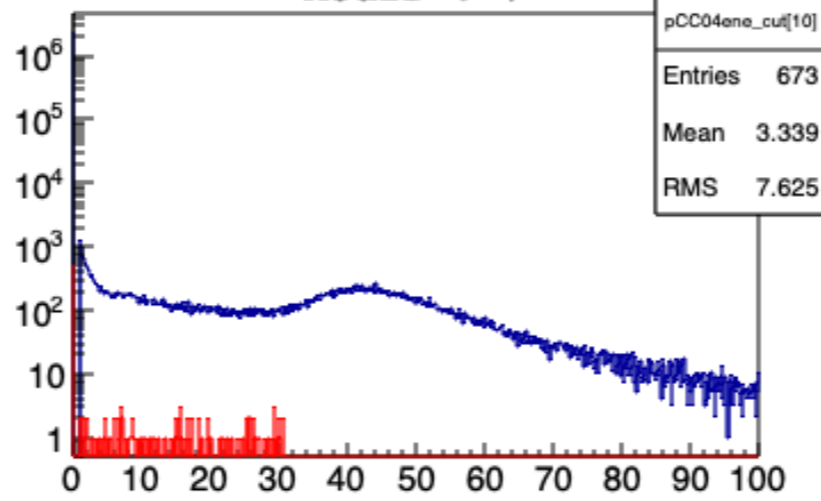


Period3

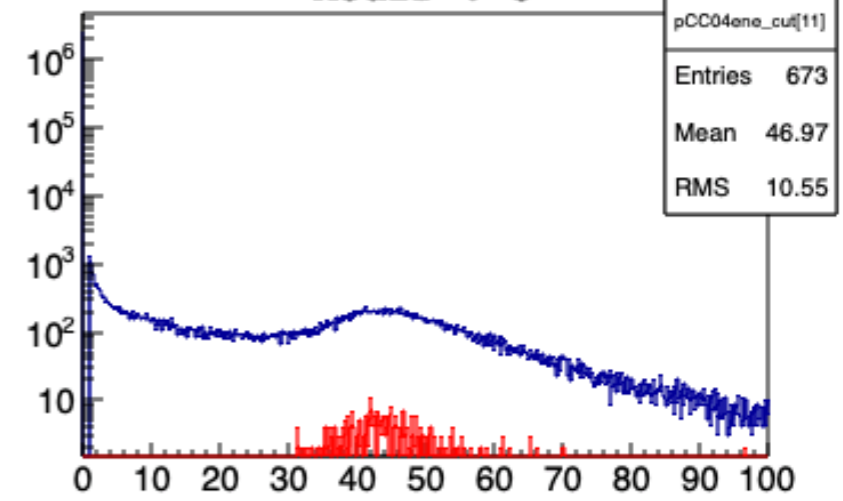
ModID : 11



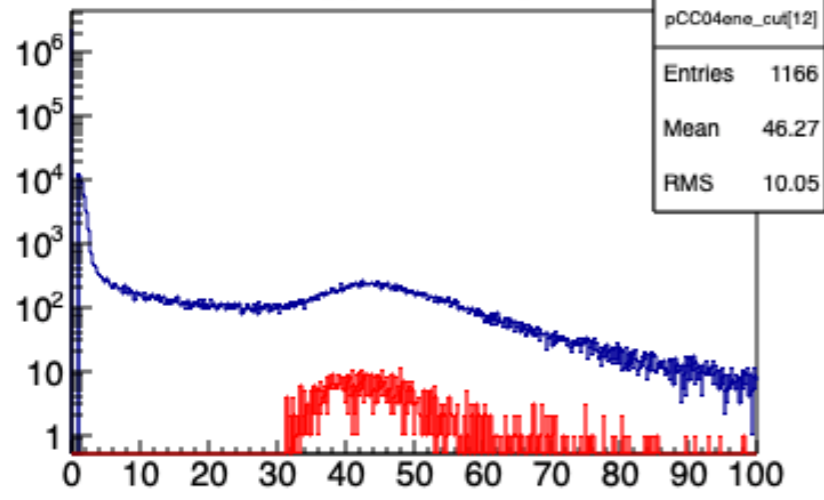
ModID : 7



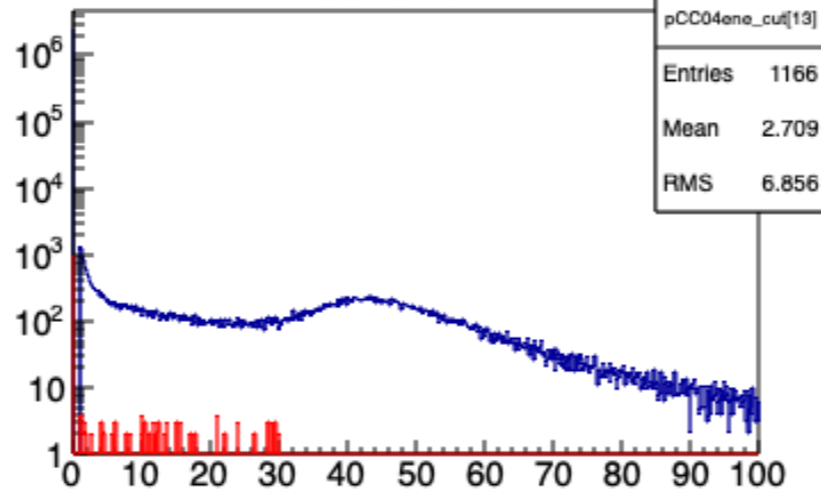
ModID : 3



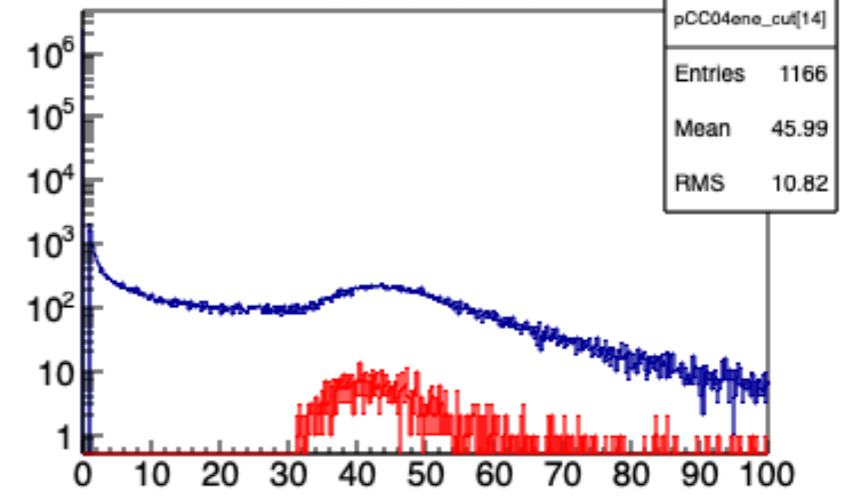
ModID : 25



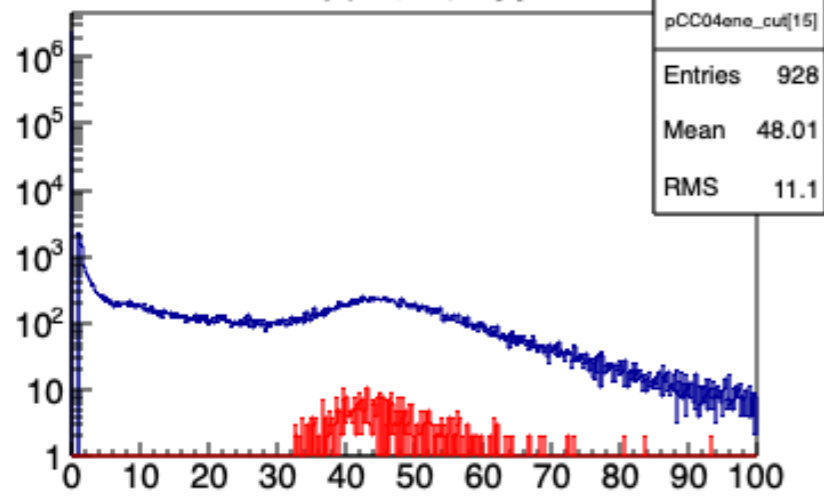
ModID : 21



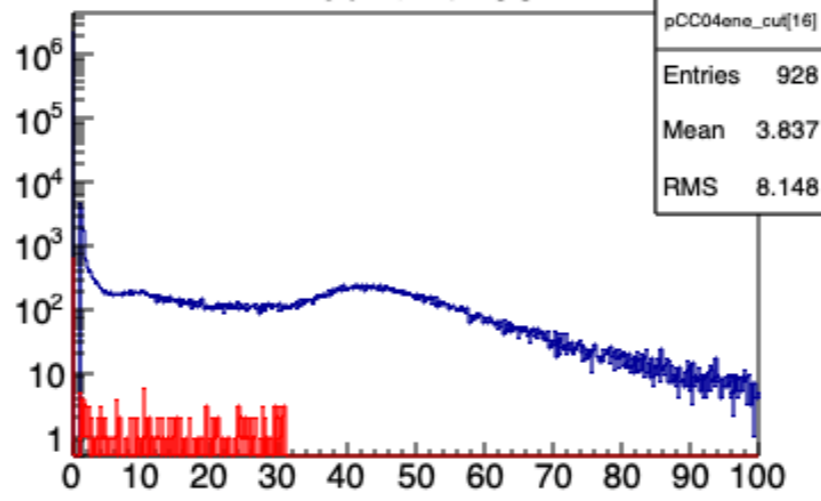
ModID : 17



ModID : 39



ModID : 35



ModID : 31

