

# CDC noise and BG

Sergey Furletov

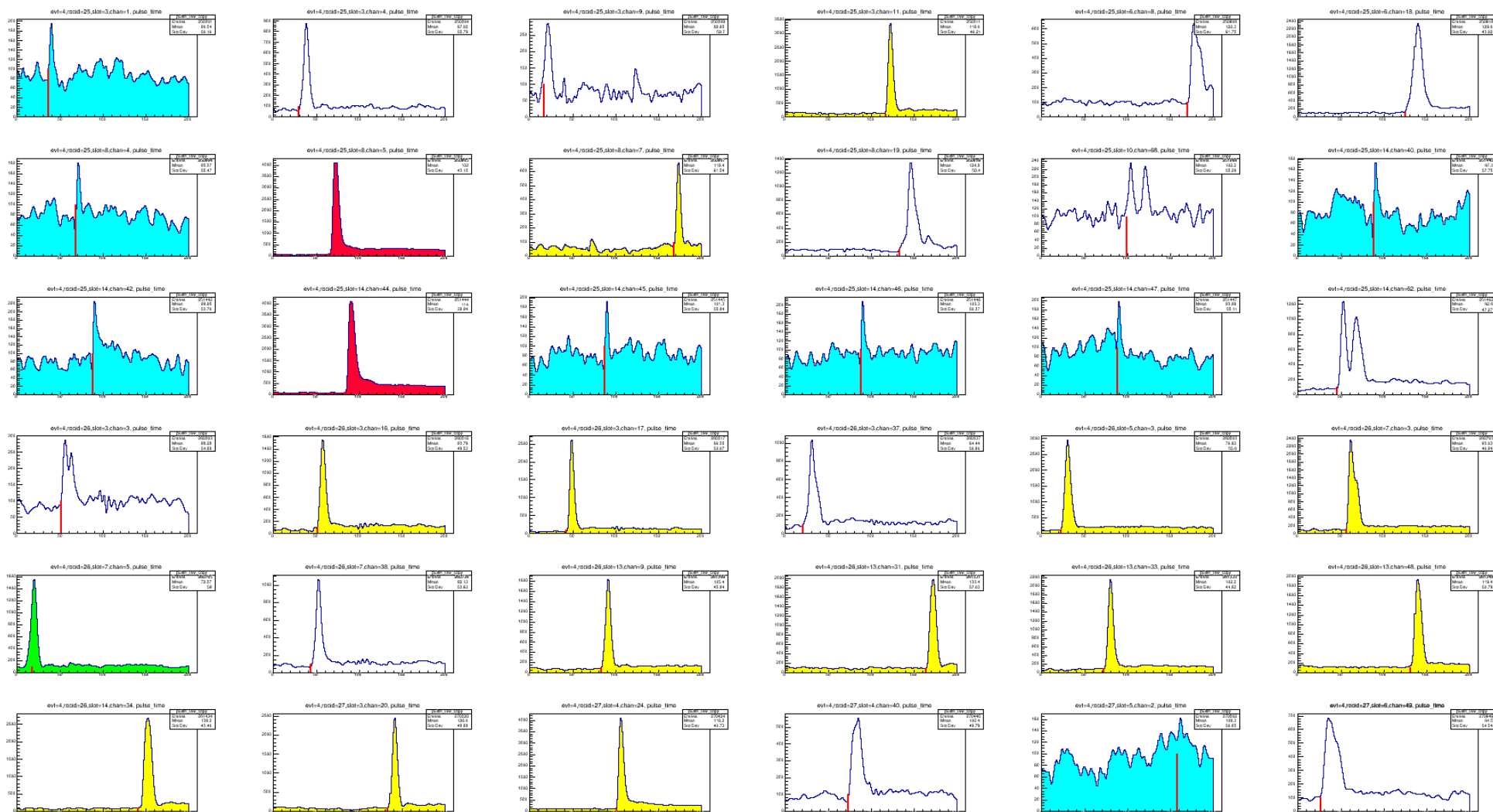
*Jefferson Lab*

Tracking meeting

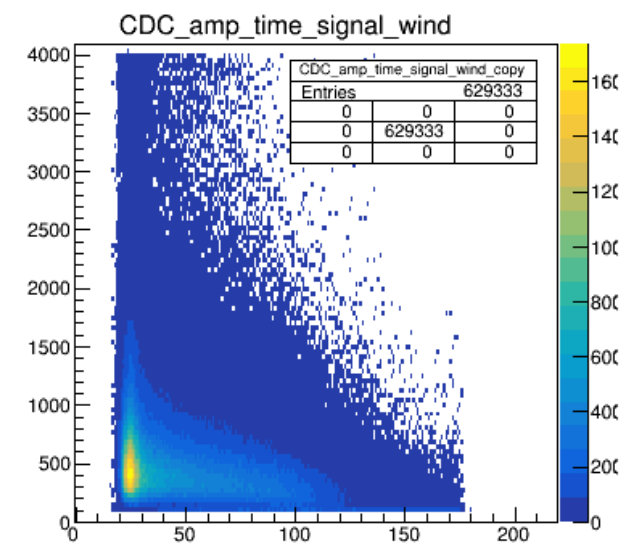
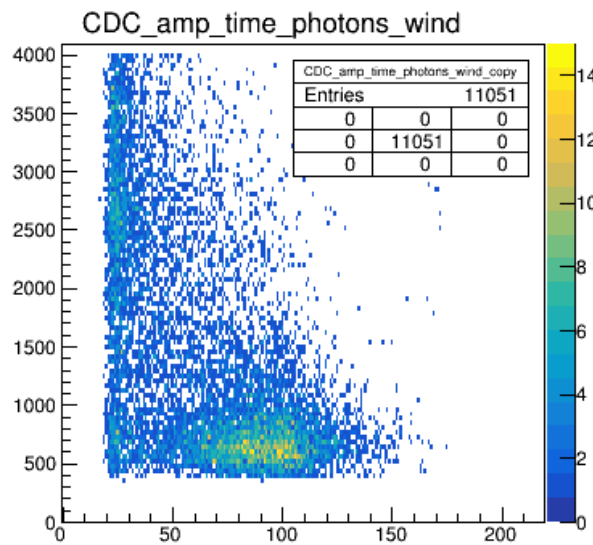
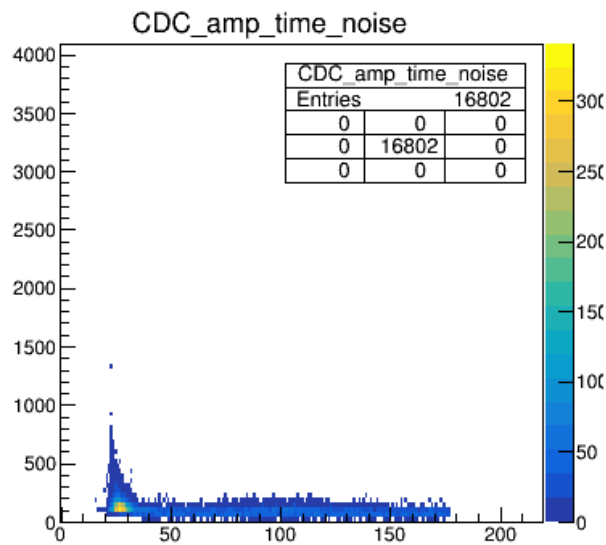
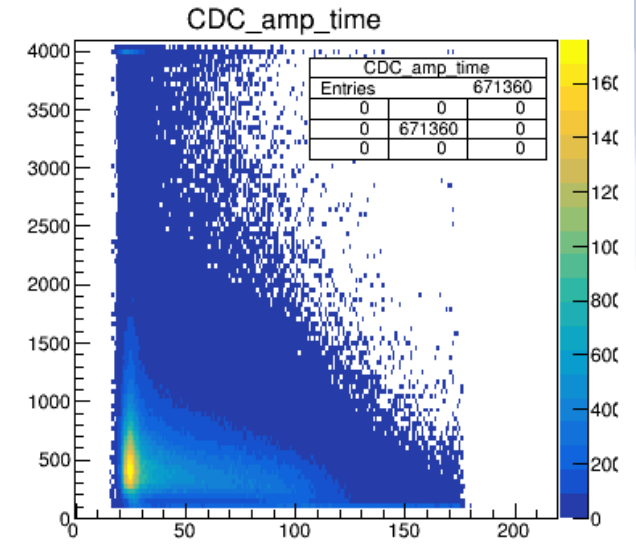
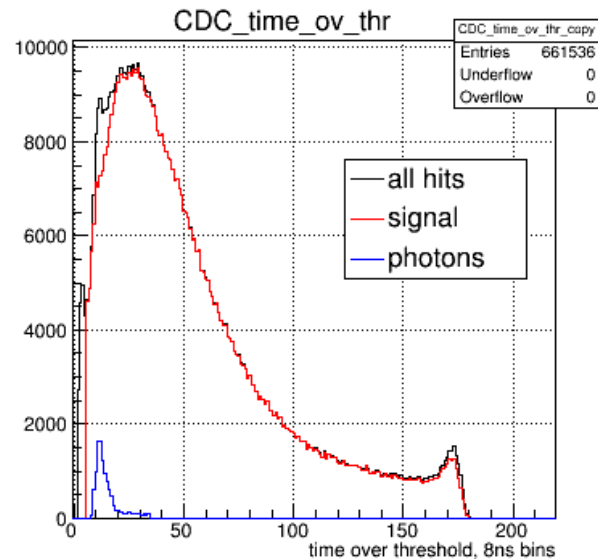
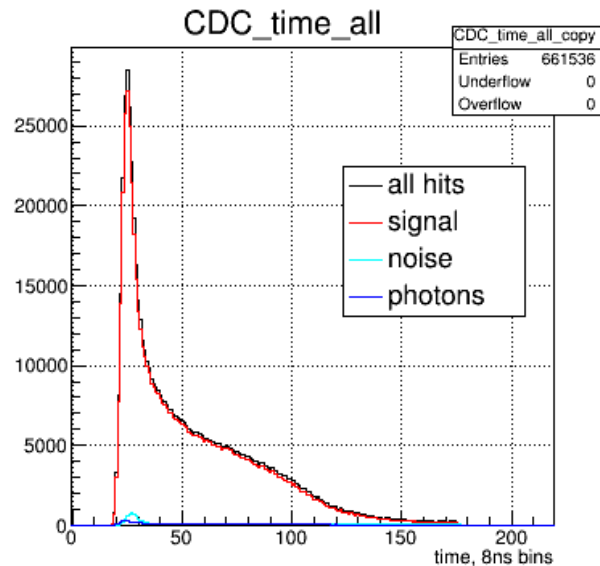
22 Mar 2018

# Physics run 41610

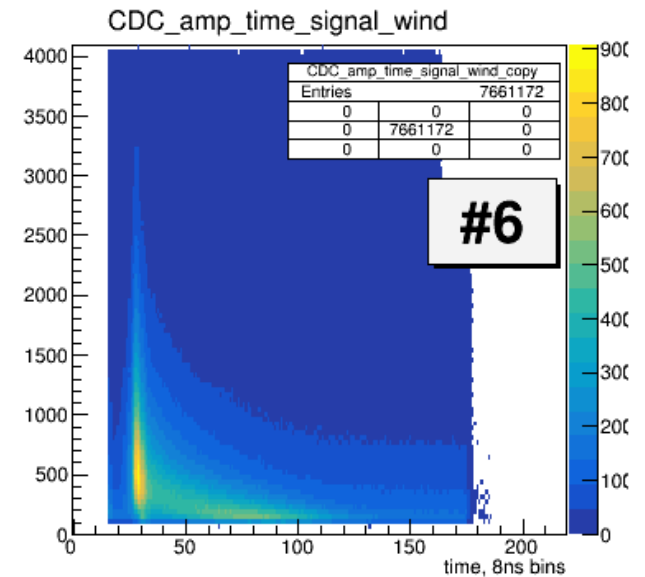
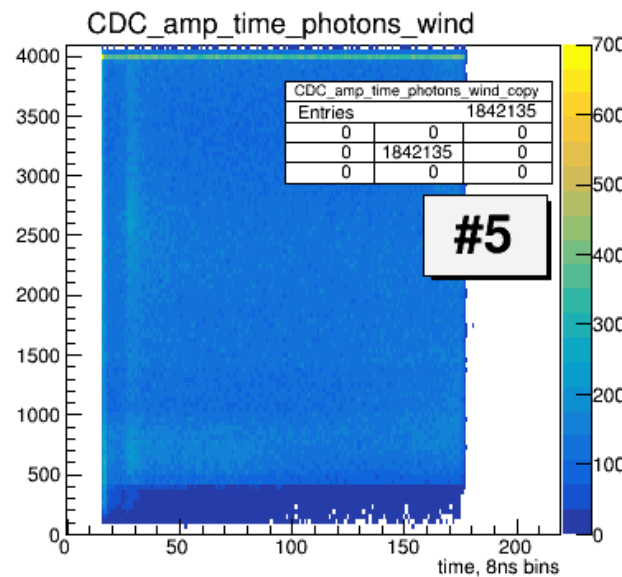
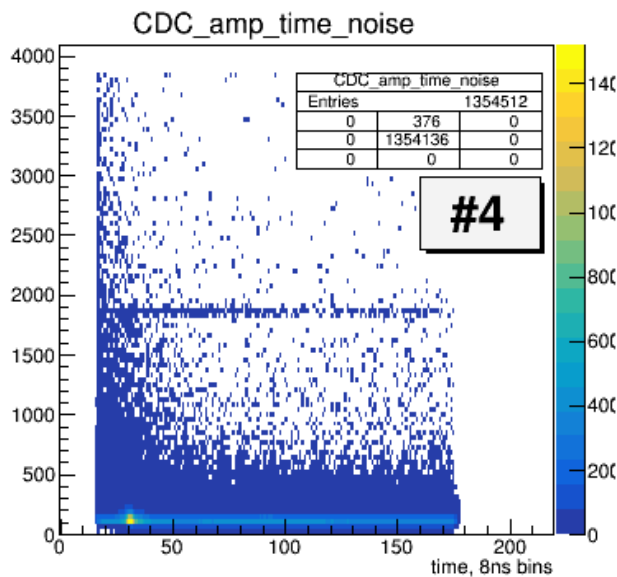
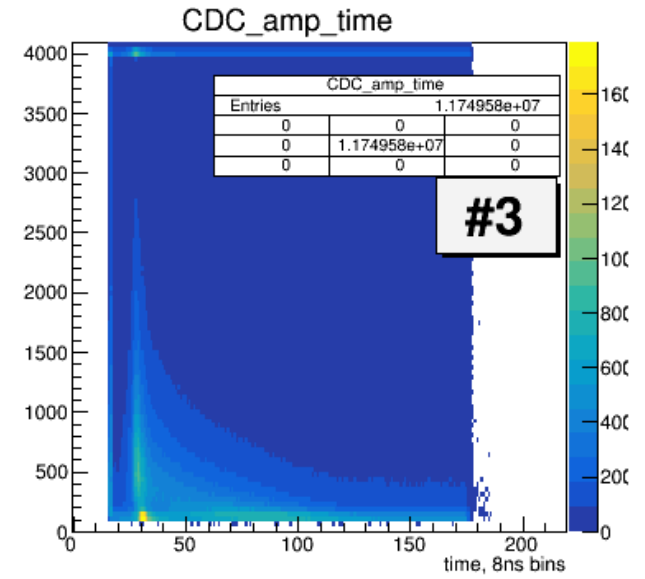
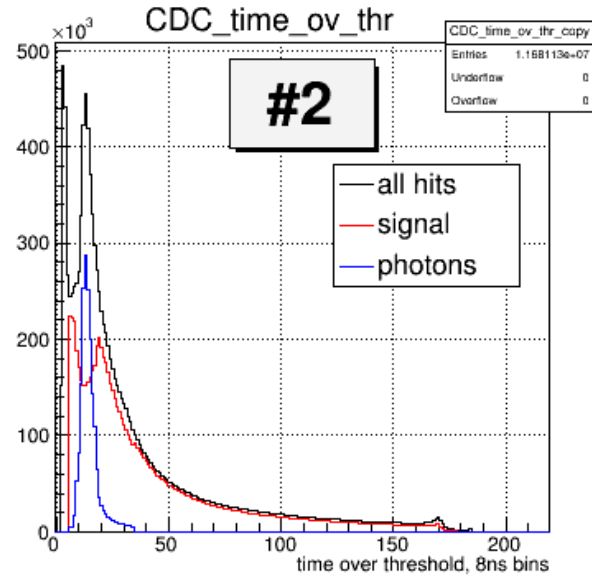
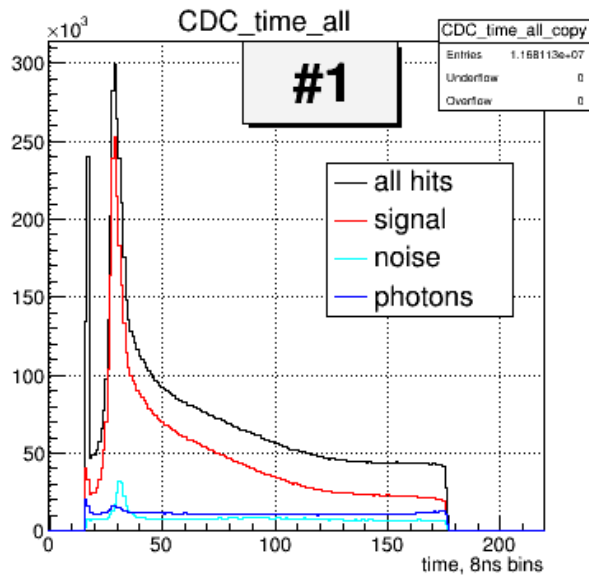
Run=41610



# Cosmic run 40650



# Physics run 41610 150nA

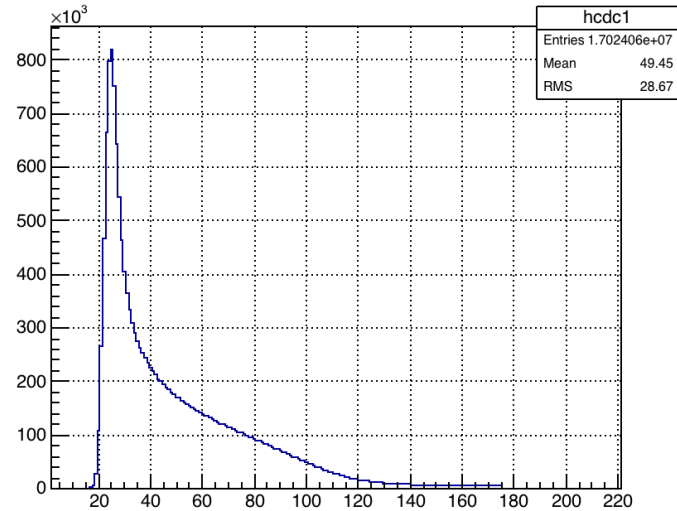


# CDC noise statistic

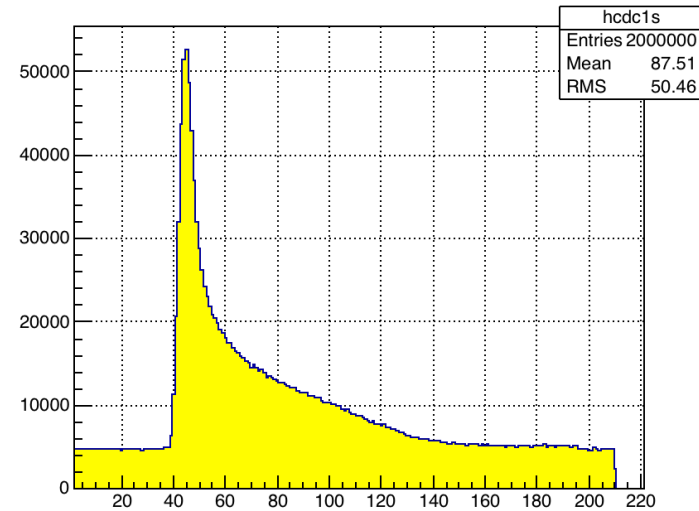
	yellow	cyan	green	pink	total	current	radiator	comment	
40560	1.7	2.5	0	0.7	4.9	cosmic			
41610	15.7	11.5	2.3	4.9	34.4	150	JD70-100		
10506								no raw	
10507								no raw	
10520	2	1.5	0	0.7	4.2	26	J1A50	cosmic?	
10593	6.6	3.7	1	4.5	15.8	58	J1A50		
10721	14.5	3.7	1.8	4.8	24.8	92	J1A50		
10836	15.1	3.3	2.4	4.4	25.2	100	J1A50		
30566	18.1	11.6	2.6	8.1	40.4	100	JD70-100		
30786	13.9	11	2.4	6.9	34.2	77	JD70-100		
30894	16.3	12	2.7	7.9	38.9	120	JD70-100		
40653	6.8	10.6	1.3	5.7	24.4	40/100 ?	retracted?		
40654	7.8	11.2	1.5	6.1	26.6	77	retracted?		
40655	7.8	11.3	1.5	6.1	26.7	100	retracted?		
40659	7.6	11.1	1.5	6	26.2	100	retracted?		
40785	12.8	8.6	1.9	5.5	28.8	65	Al 30um		
40786	18.5	10	2.5	6.7	37.7	100	Al 30um		
40787	18.4	10	2.4	6.7	37.5	74	Al 30um		
40825	12.2	9.1	1.2	5.6	28.1	38	JD70-100		
40853	10.2	6.9	1.3	4.3	22.7	29	JD70-100		
40854	12.6	7.7	1.7	4.7	26.7	31	JD70-100		
40855	16.6	8.9	2.3	5.5	33.3	75	JD70-100		
40973	7.6	8.2	1.1	4.7	21.6	20	JD70-100		
40974	4	6.1	0.6	3.4	14.1	17	JD70-100		
41262	11.5	10.2	1.9	5.1	28.7	42	Al 40um		
41387	7.4	9.5	1.4	4.1	22.4	180	Al 40um	Fill Target	

# BG simulation

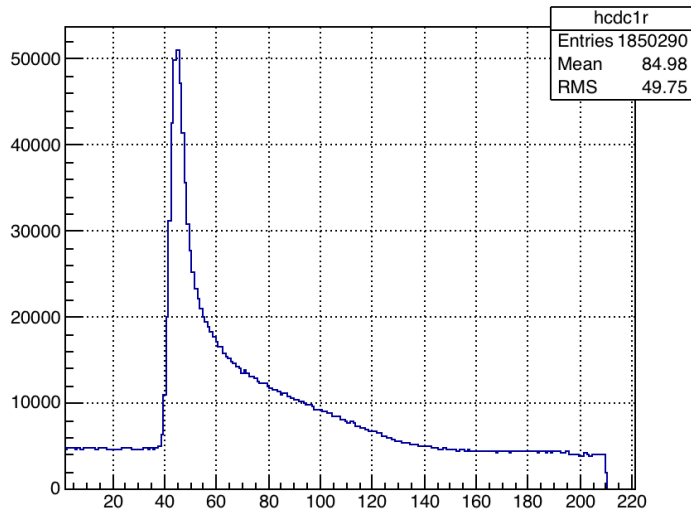
CDC cosmic



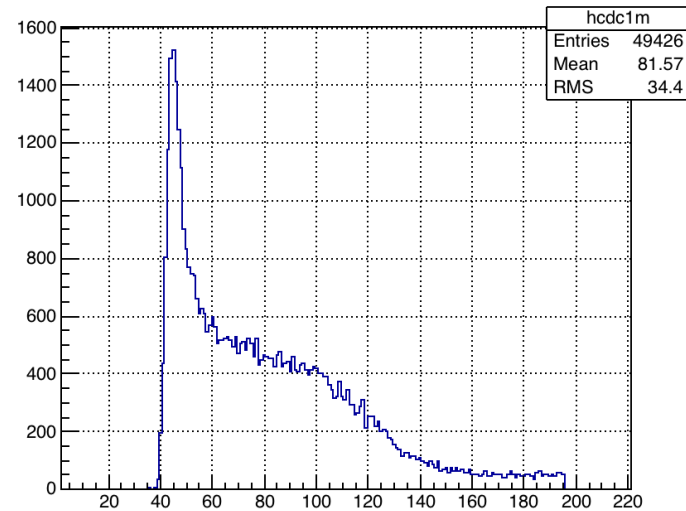
independent



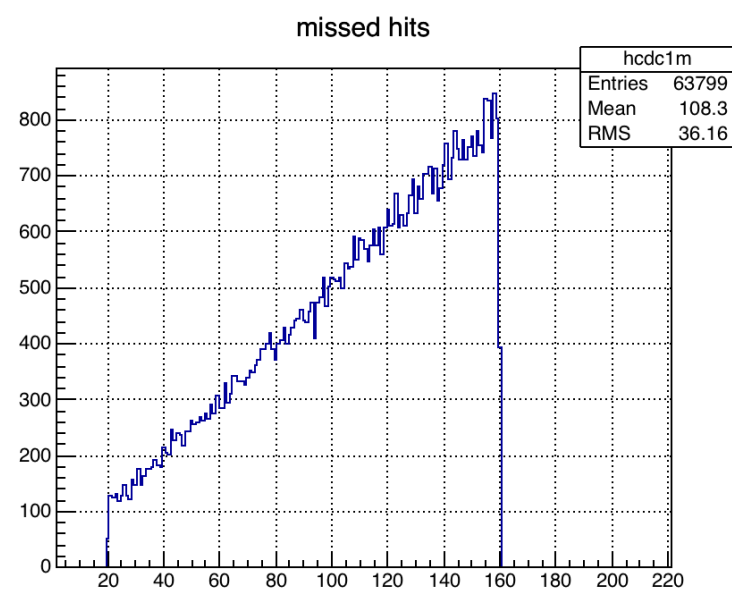
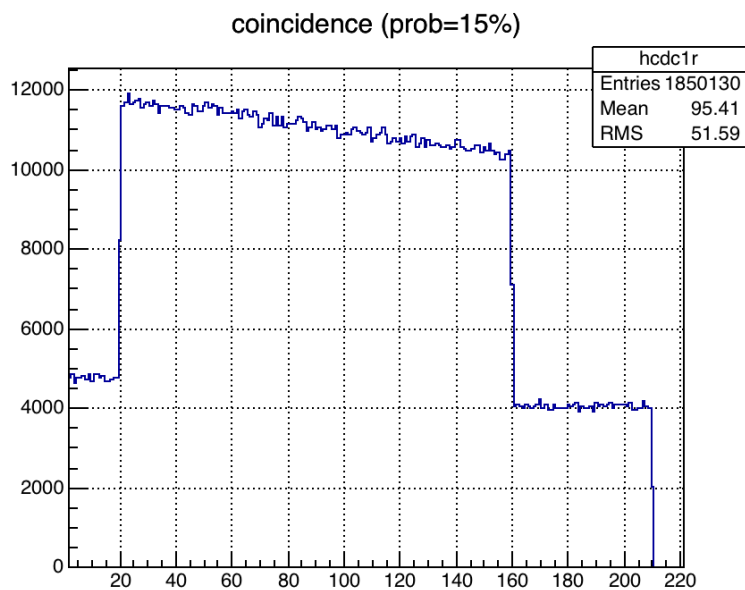
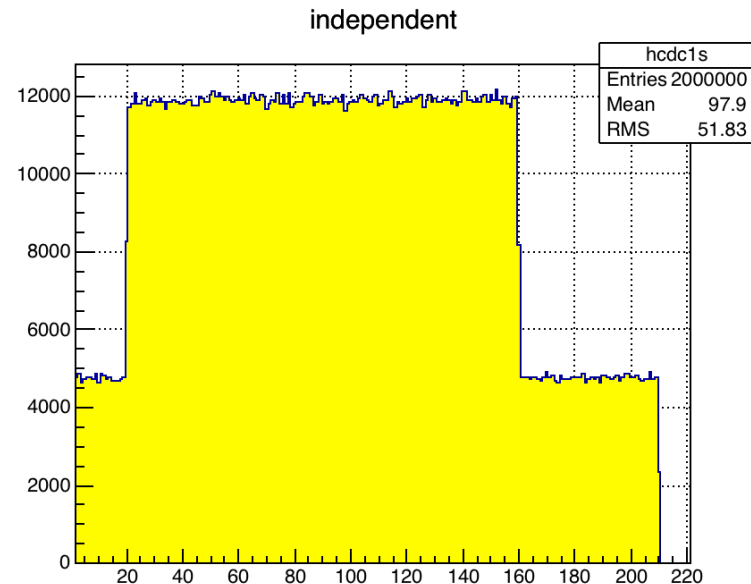
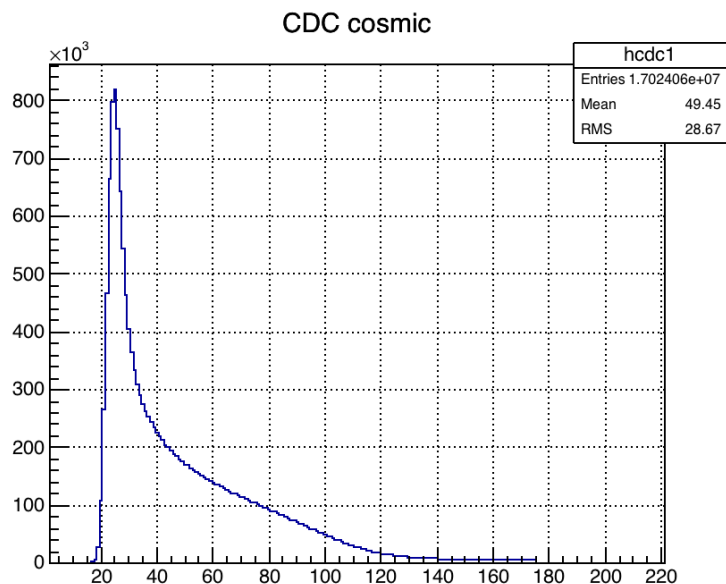
coincidence (prob=15%)



missed hits



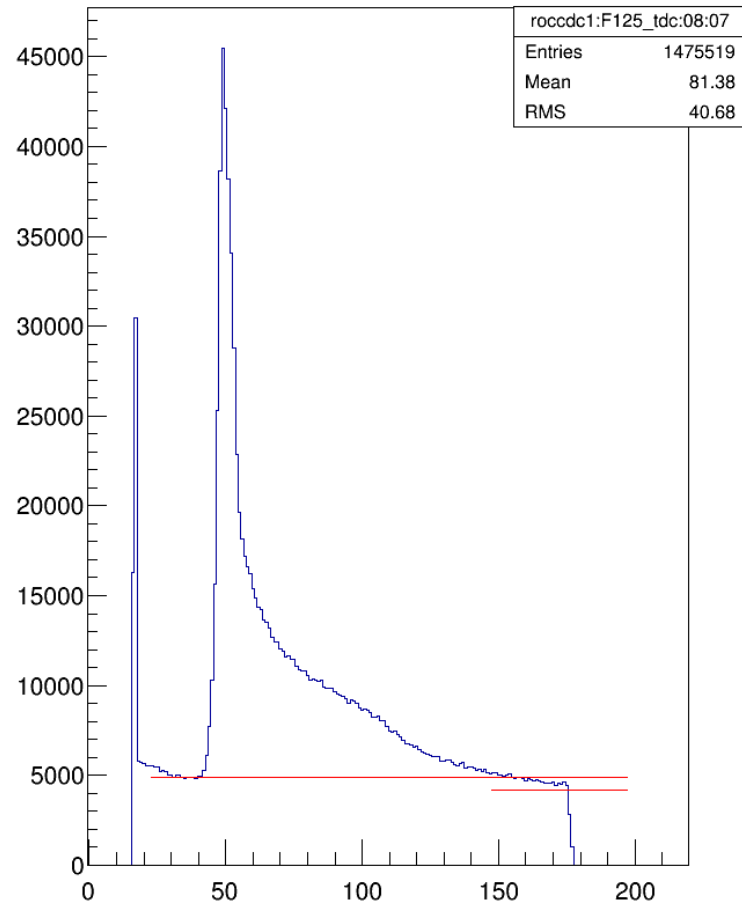
# CDC bg test simulation





# Signals overlap

roccdc1:F125\_tdc:08:07



roccdc1:F125\_tdc:08:07





# Backup

# FFT

