

FCAL monitoring - PrimEx_RunPeriod_2021_08_ver6_batch2

runs 81397 - 81716

https://halldweb.jlab.org/wiki/index.php/RunPeriod-2021-08_Validation

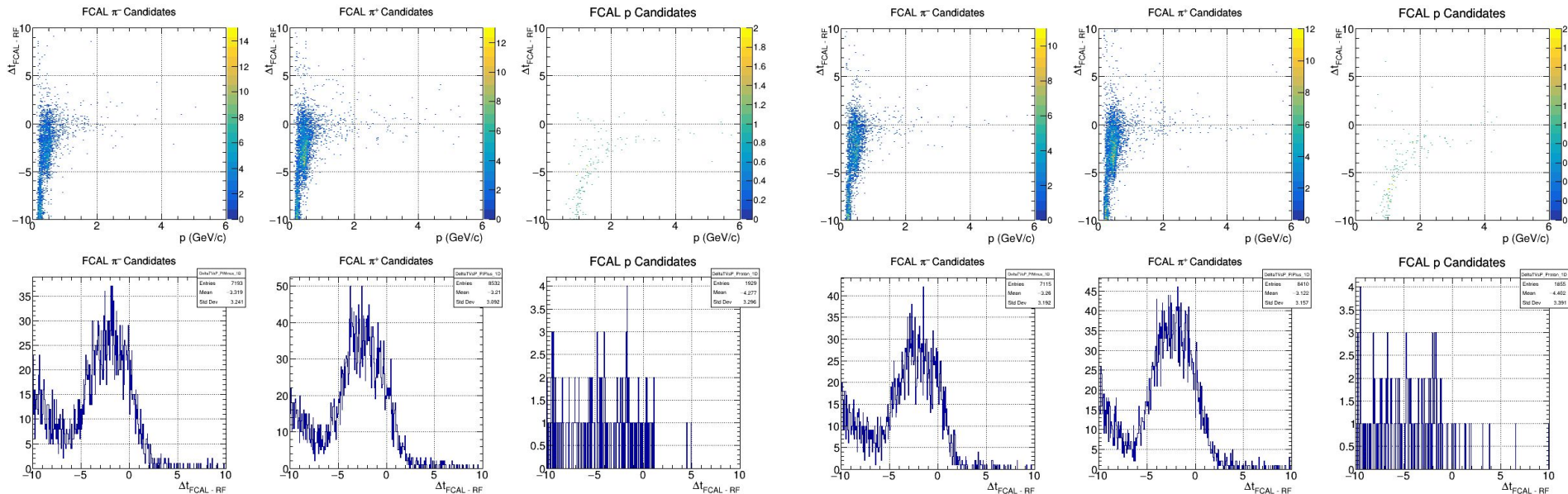
CALWG April 27, 2022

FCAL monitoring RunPeriod_2021_08_ver6_batch2

for runs 81510-81514 the FDC was off (chiller issue)

Run 81510

but also Run 81599 looks like that



81598 | 21:10 - 22:50 | 89.5M events (FDC chiller issue in last 5 minutes of run, will not have FDC information during these last 5 minutes.)

81599 | 22:55 - 23:19 | 22.3M events (FDC not included due to issue with Chiller)

81601 | 23:42 - 01:47 | 89.9M events (FDC issue is now fixed)

FCAL monitoring - PrimEx_RunPeriod_2021_08_batch1_ver04

runs 81330 - 81393

for beam/run conditions, see

https://halldweb.jlab.org/wiki/index.php/RunPeriod-2021-09_Validation#2021_Run_List

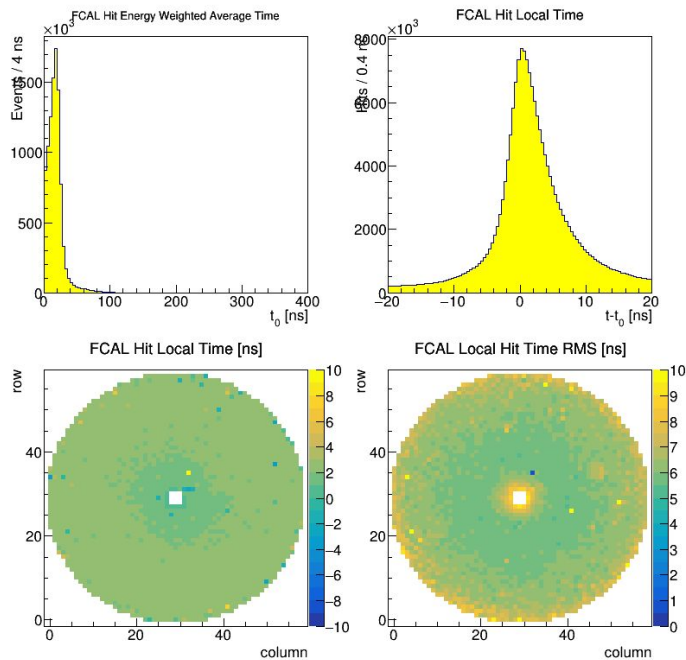
FCAL monitoring RunPeriod-2019-11 ver12 - Batch 5-8

- page 2: FCAL Local Hit Time RMS: wider for outer 'rings'
- page 3: FCAL Local Hit Time RMS: structure upper left quadrant egde
- page 4: FCAL Hit Average Energy: structure upper left quadrant egde
- page 5: FCAL Neutral Shower dt vs Energy: vertical bands
- page 6: FCAL Neutral Shower dt vs Energy: horizontal bands
- page 7: FCAL Neutral Shower dt (Propagated - RF): 2cnd prompt peak at -8ns;
- page 8: dt(FCAL-RF) shifted by -8ns
- page 9: FCAL Clusters 2 inv mass different (empty target)
- page 10: FCAL Clusters Phi different (high intensity scan)
-
- batch 5 (runs 71943 - 72067) - no comments
- page 11: batch 6 (runs 72068 - 72163)
- page 12: batch 7 (runs 72164 - 72325)
- page 13: batch 8 (runs 72362 - 72435)

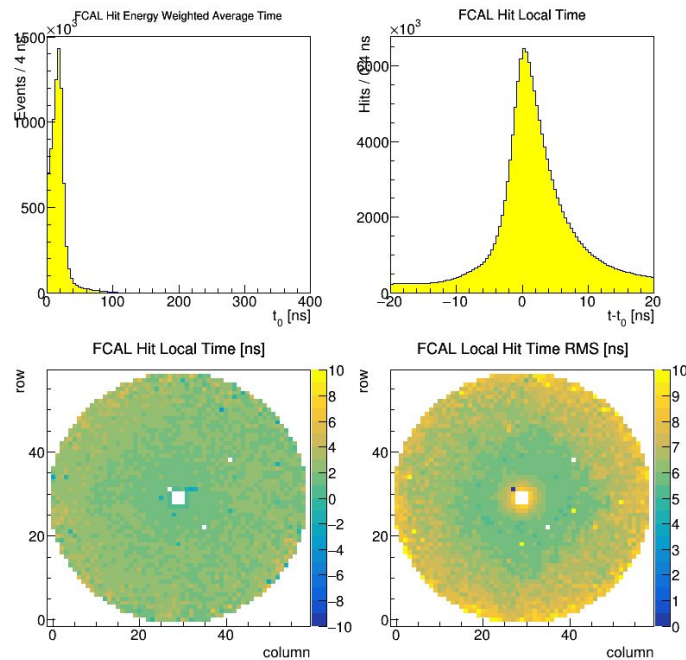
FCAL monitoring RunPeriod-2019-11 ver12 - Batch 6 (runs 72068 - 72163)

FCAL Local Hit Time RMS: wider for outer 'rings' ('radius' > 15)

Run072068



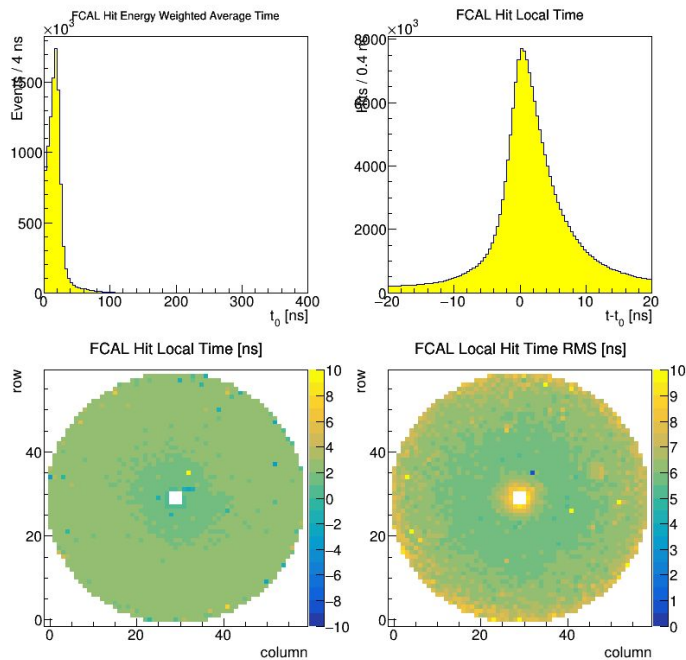
Run072094



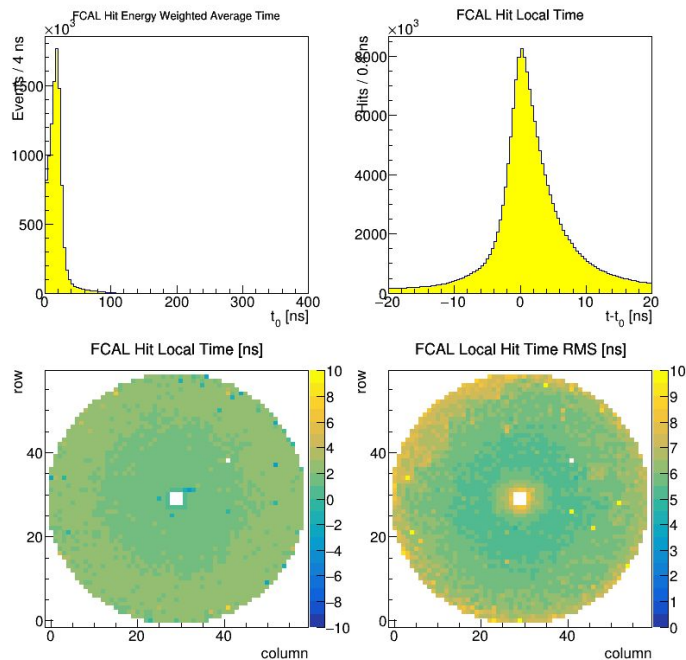
FCAL monitoring RunPeriod-2019-11 ver12 - Batch 6 (runs 72068 - 72163)

FCAL Local Hit Time RMS: structure upper left quadrant egde

Run072068



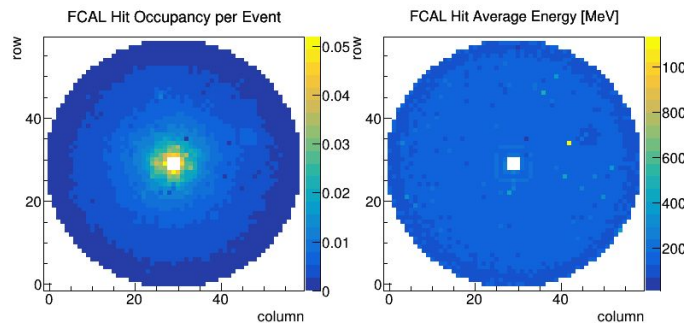
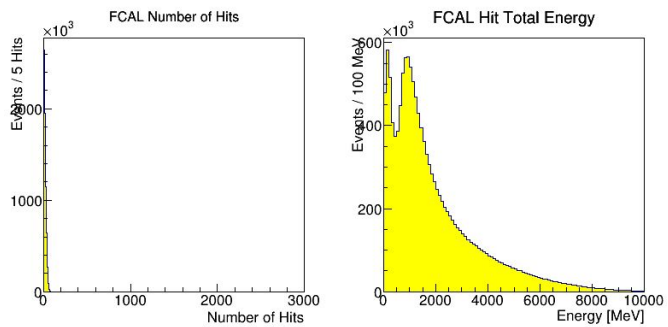
Run072104



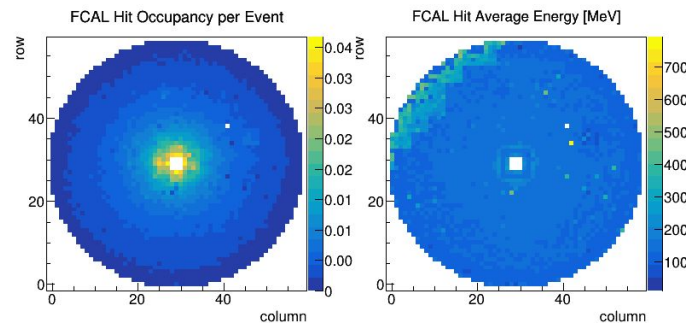
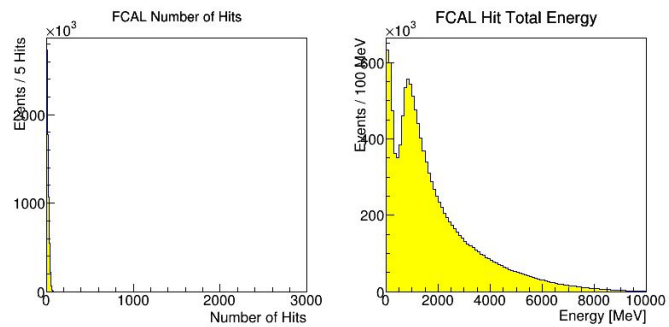
FCAL monitoring RunPeriod-2019-11 ver12 - Batch 6 (runs 72068 - 72163)

FCAL Hit Average Energy: structure upper left quadrant egde

Run072068



Run072104

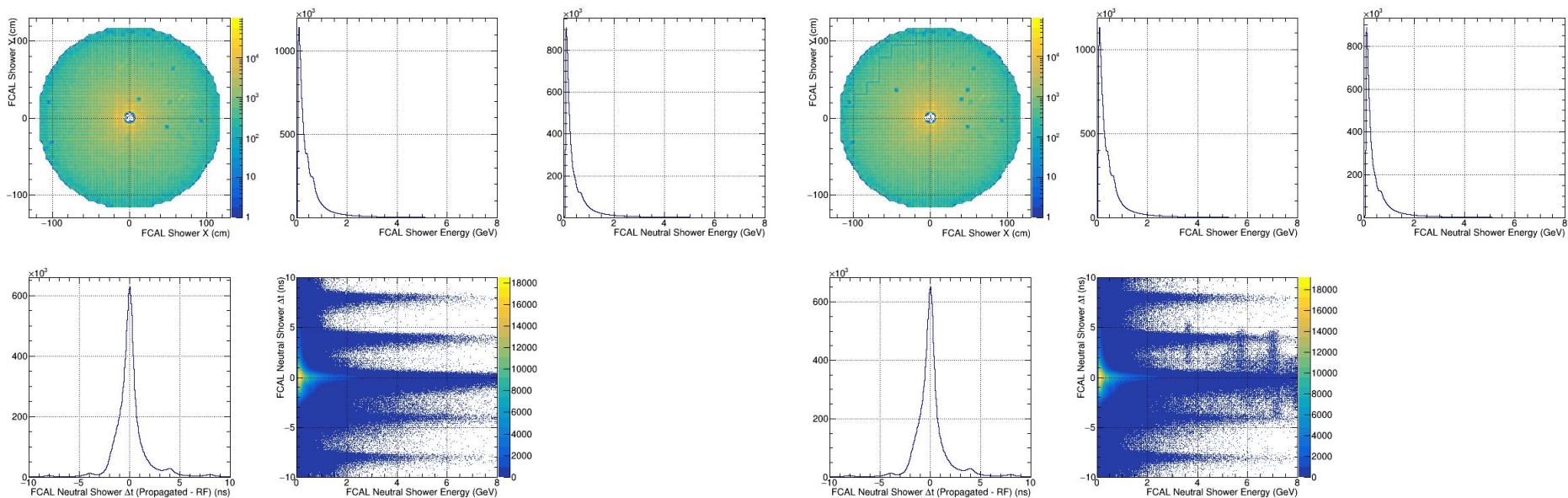


FCAL monitoring RunPeriod-2019-11 ver12 - Batch 6 (runs 72068 - 72163)

FCAL Neutral Shower dt vs Energy: vertical bands

Run072068

Run072113

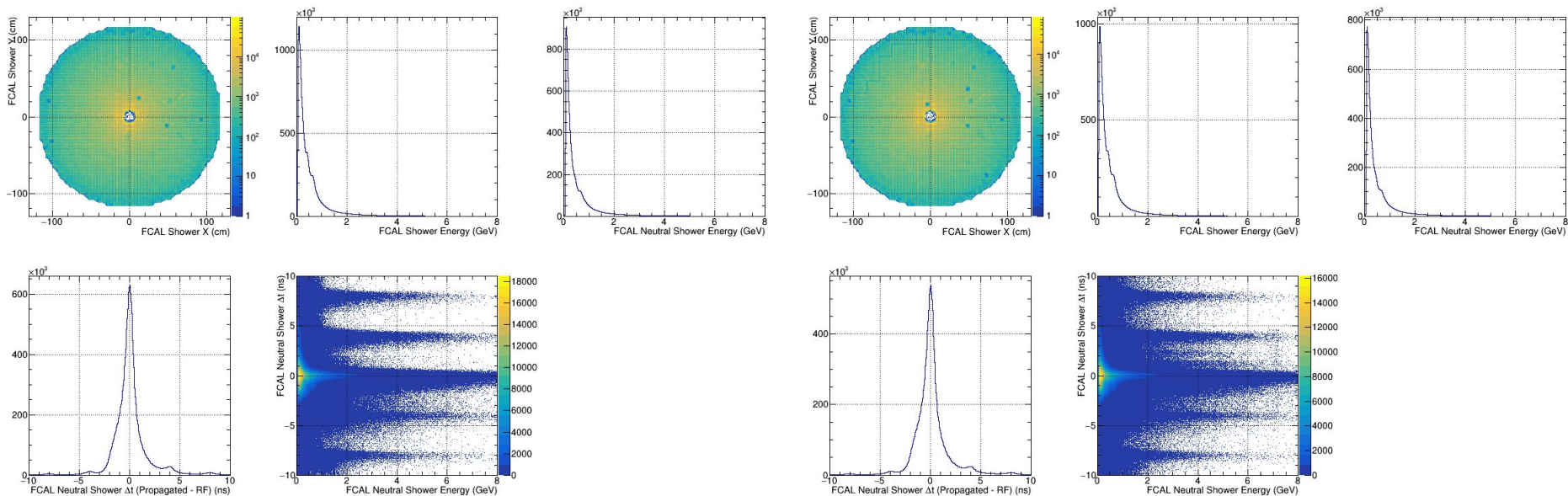


FCAL monitoring RunPeriod-2019-11 ver12 - Batch 6 (runs 72068 - 72163)

FCAL Neutral Shower dt vs Energy: horizontal bands

Run072068

Run072163

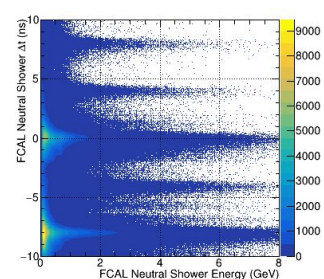
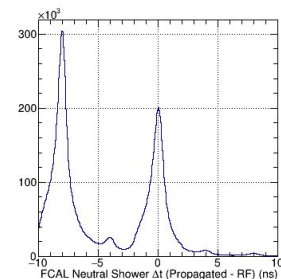
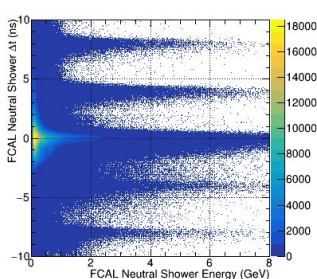
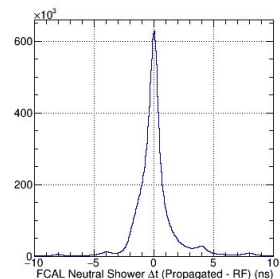
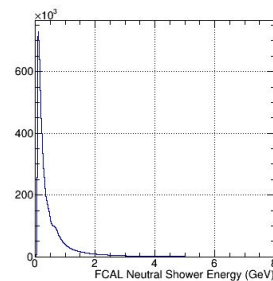
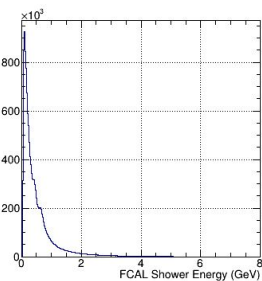
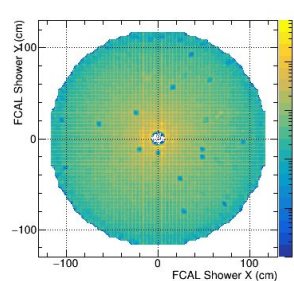
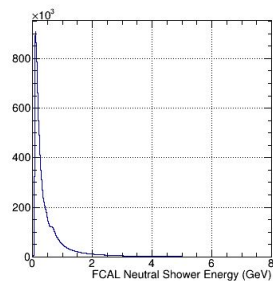
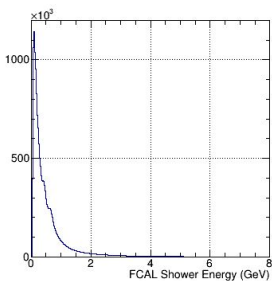
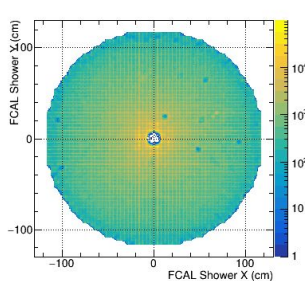


FCAL monitoring RunPeriod-2019-11 ver12 - Batch 8 (runs 72362 - 72435)

FCAL Neutral Shower dt vs Energy: horizontal bands
and FCAL Neutral Shower dt (Propagated - RF)

Run072068

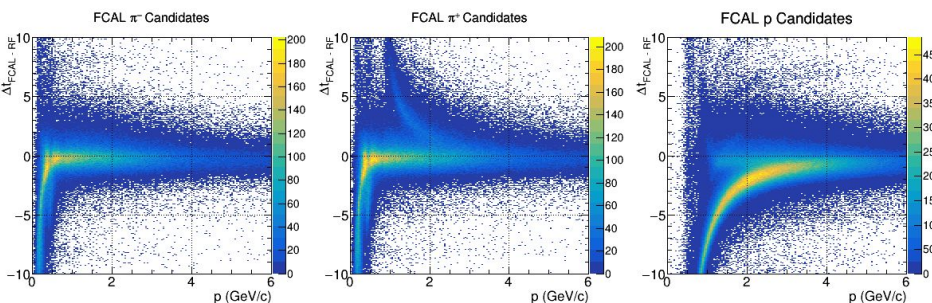
Run072163



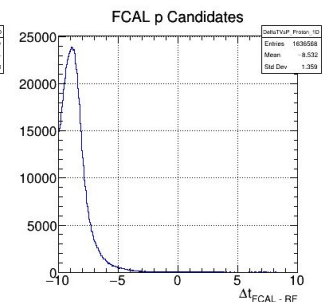
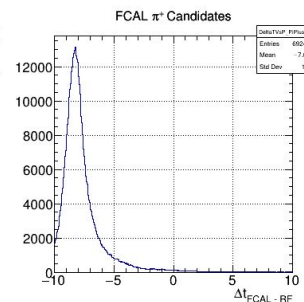
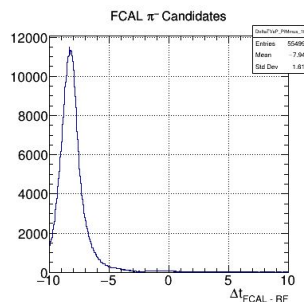
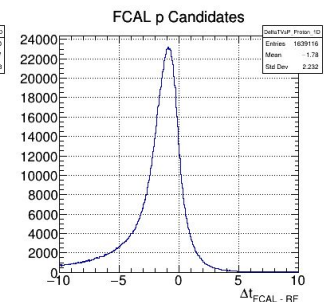
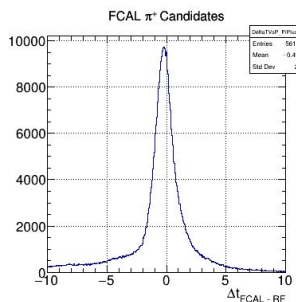
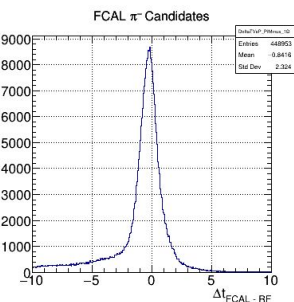
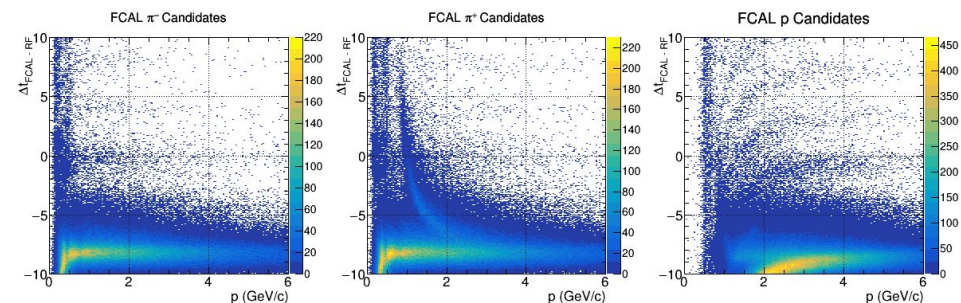
FCAL monitoring RunPeriod-2019-11 ver12 - Batch 8 (runs 72362 - 72435)

dt(FCAL-RF) shifted by -8ns

Run072414



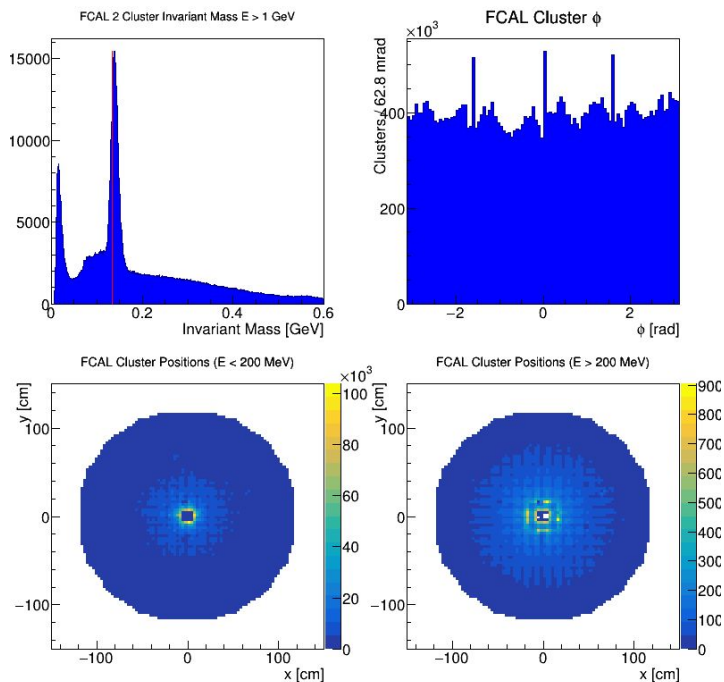
Run072163



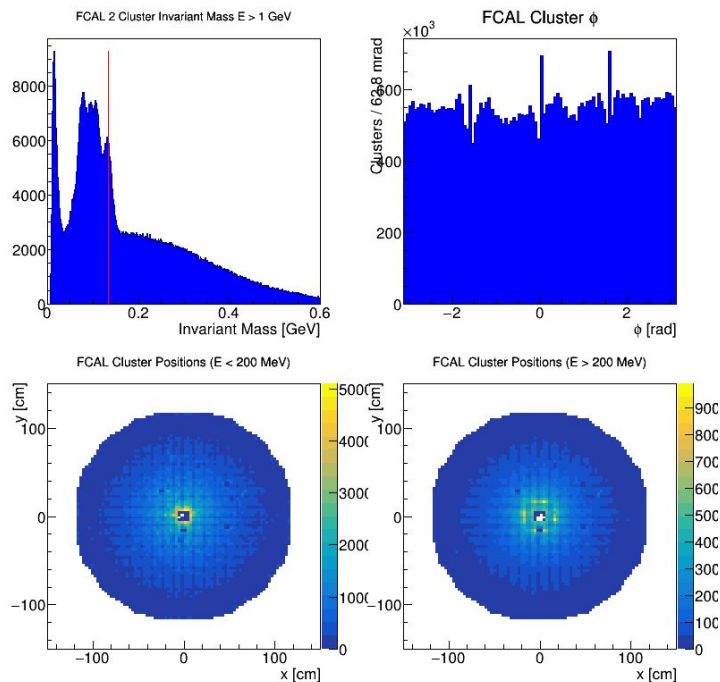
FCAL monitoring RunPeriod-2019-11 ver12 - Batch 7 (runs 72164 - 72325)

FCAL Clusters 2 inv mass different (empty target)

Run072164



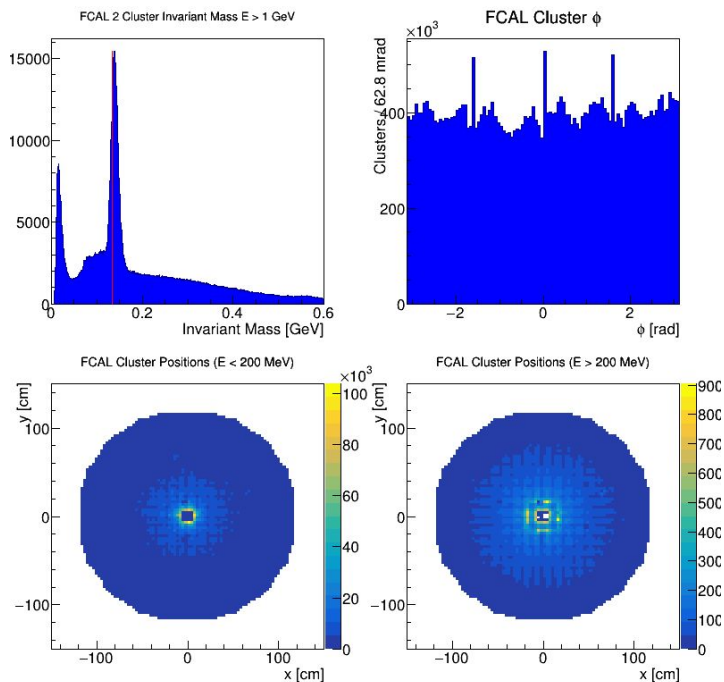
Run072316



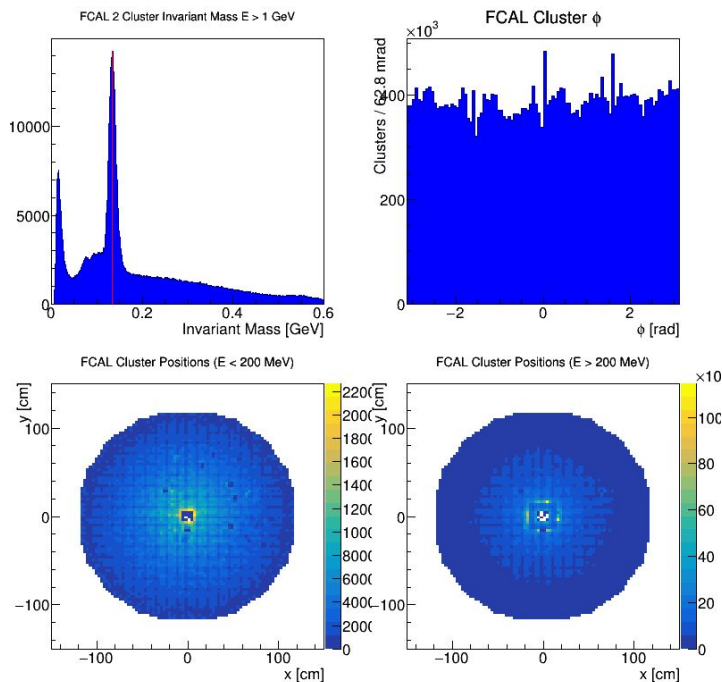
FCAL monitoring RunPeriod-2019-11 ver12 - Batch 7 (runs 72164 - 72325)

FCAL Clusters Phi different (high intensity scan)

Run072164



Run072325



FCAL monitoring RunPeriod-2019-11 ver12 - Batch 6 (runs 72068 - 72163)

	72094	72099 (AMO)	72104*	72113*	72123* (AMO)	72124 (AMO)	72125 - 72162	72163*
FCAL Local Hit Time RMS: wider for outer 'rings'	X	X				X		
FCAL Local Hit Time RMS: structure upper left quadrant egde			X	X	X			X
FCAL Hit Average Energy: structure upper left quadrant egde			X	X	X			X
FCAL Neutral Shower dt vs Energy: vertical bands			X	X				
FCAL Neutral Shower dt vs Energy: horizontal bands					X		X	X

*overall quality: no

FCAL monitoring RunPeriod-2019-11 ver12 - Batch 7 (runs 72164 - 72325)

<-- high intensity scan -->

	72164 - 72325 (ie all)	72174*	72187*	72286*	72299 (AMO)	72301 (AMO)	72316 (empty target)	72317 - 72320	72321 - 72325 (AMO)
FCAL Local Hit Time RMS: wider for outer 'rings'				X	X	X			X
FCAL Local Hit Time RMS: structure upper left quadrant egde		X	X						
FCAL Hit Average Energy: structure upper left quadrant egde		X	X	X					
FCAL Neutral Shower dt vs Energy: vertical bands				X					
FCAL Neutral Shower dt vs Energy: horizontal bands	X	X	X	X	X	X	X	X	X
FCAL Clusters 2 inv mass different							X		
FCAL Clusters Phi different								X	X

*overall quality: no

FCAL monitoring RunPeriod-2019-11 ver12 - Batch 8 (runs 72362 - 72435)

	all runs	AMO runs	72394	72411 - 72412	72416 - 72428* (Comcal)	72431 - 72435*				
FCAL Local Hit Time RMS: wider for outer 'rings'		X	X	X						
FCAL Neutral Shower dt vs Energy: horizontal bands	X	X	X	X	X	X				
FCAL neutral shower dt: 2cnd prompt peak at -8ns					X	X				
dt(FCAL-RF): shifted by -8ns					X	X				

*overall quality: no