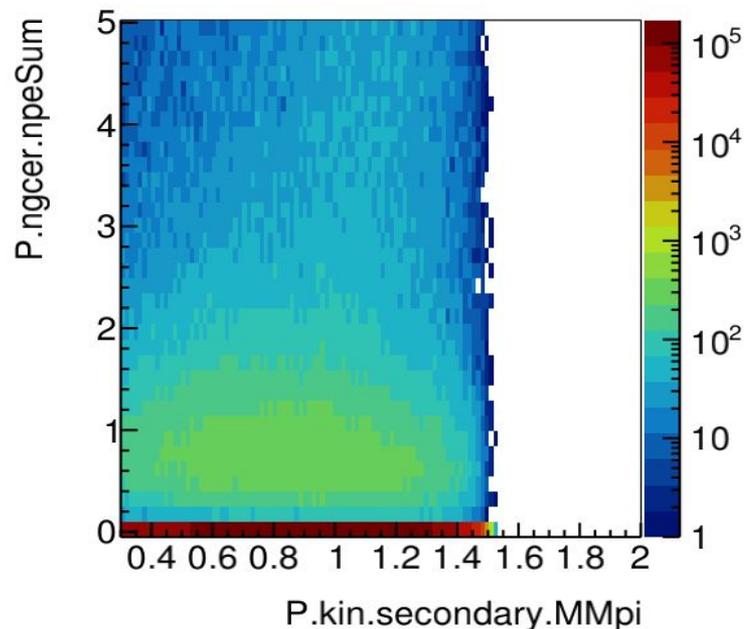
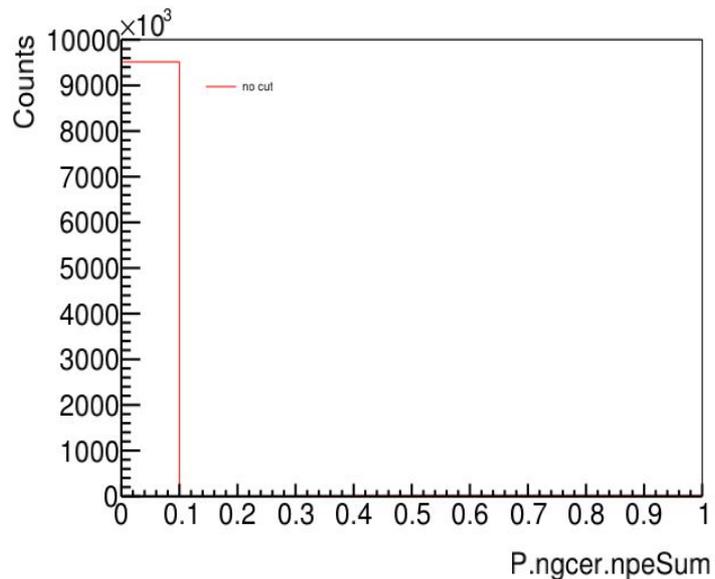


NGCer Calibration for LD2-

Nermin Sadoun
University of Regina

NGC before Calibration Check

Only Acceptance cuts applied

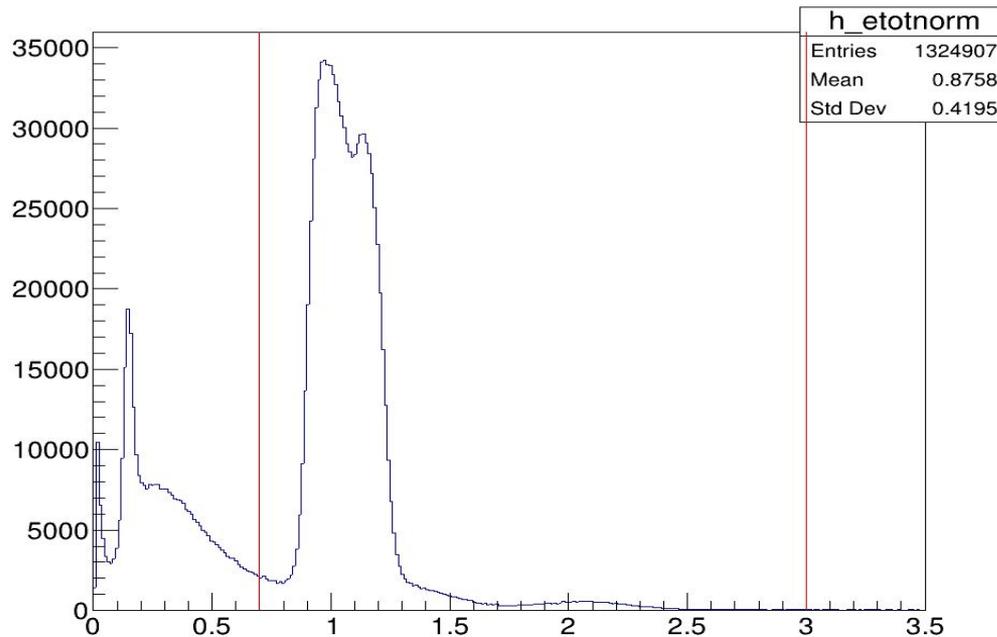


Cuts for a Clean Electron Sample

Run 12035

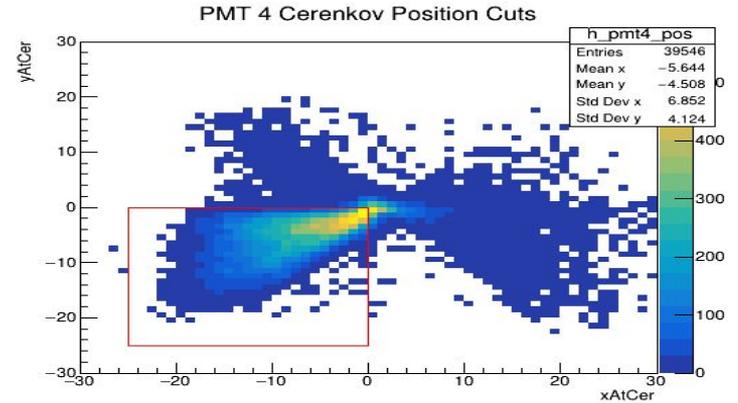
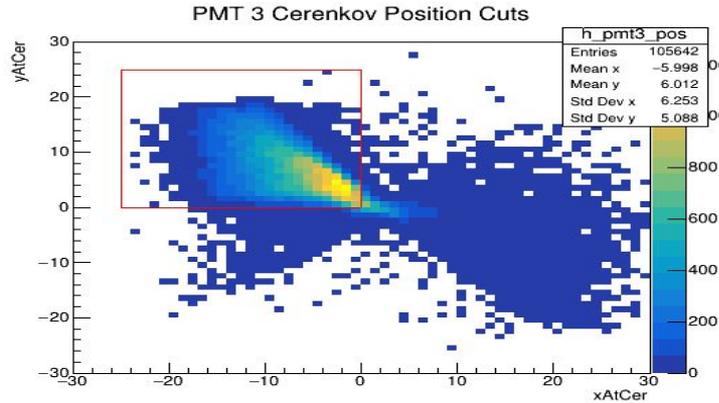
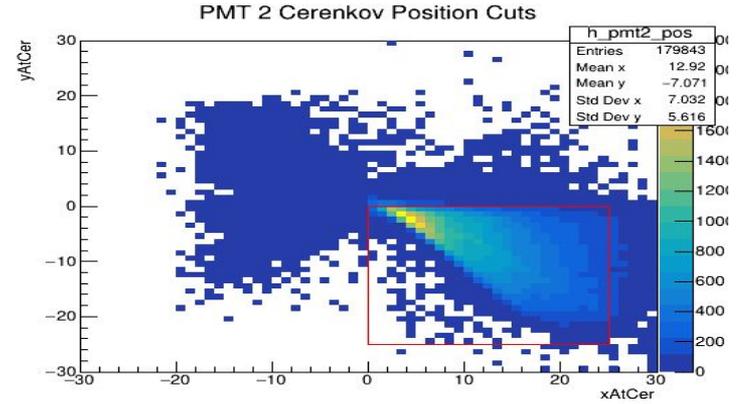
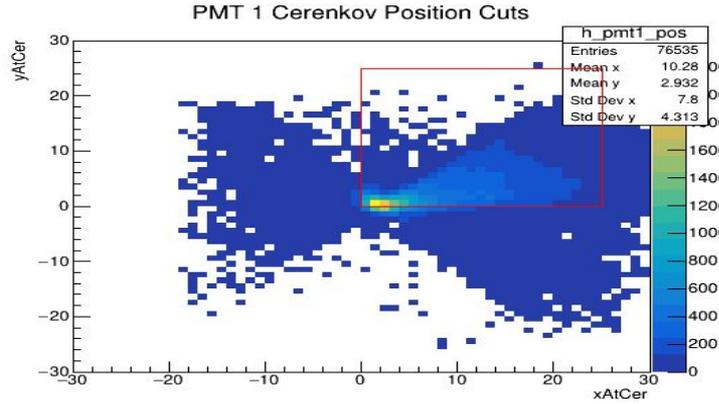
SHMS momentum accept cut:
 $-10 < dp < 22$

P.cal.etotnorm Cuts on All Events

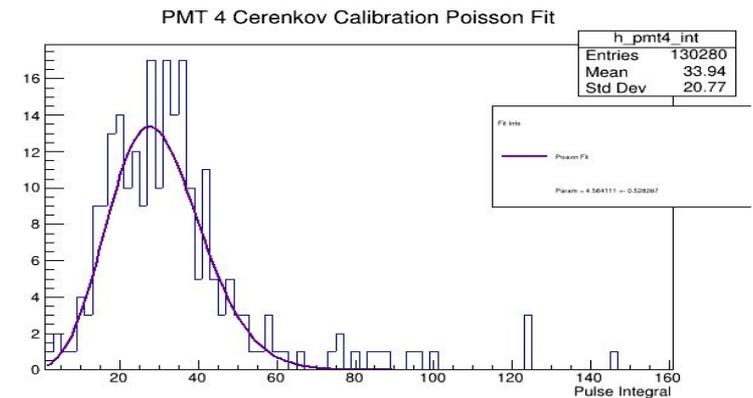
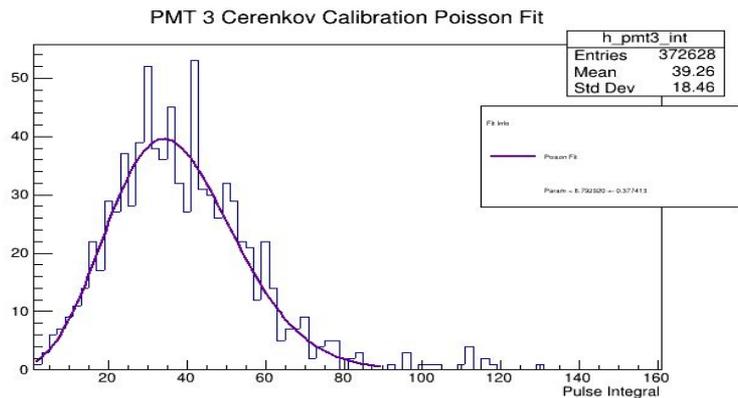
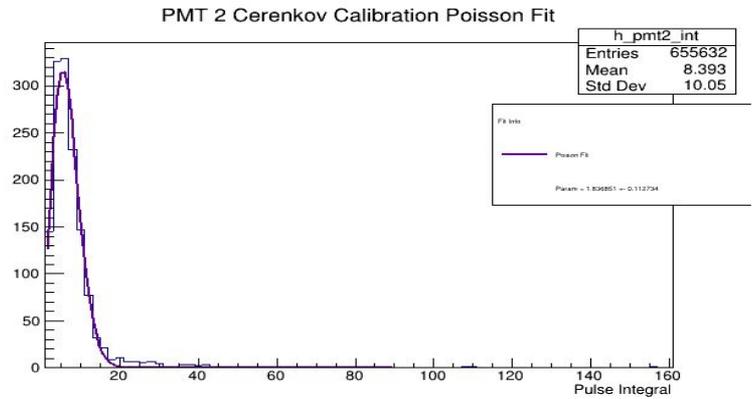
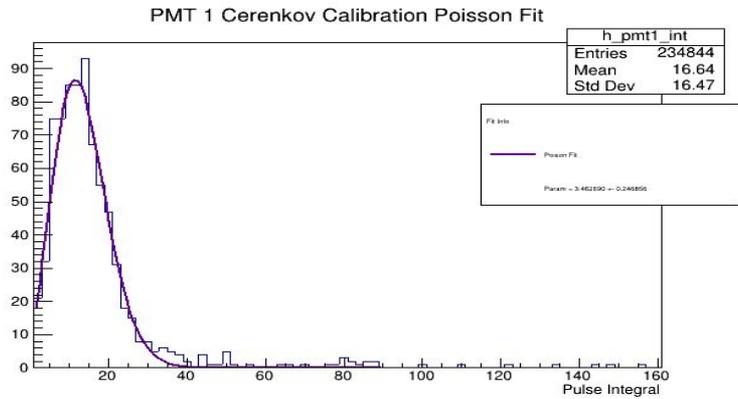


Multiplicity and Position Cuts

Run 12035

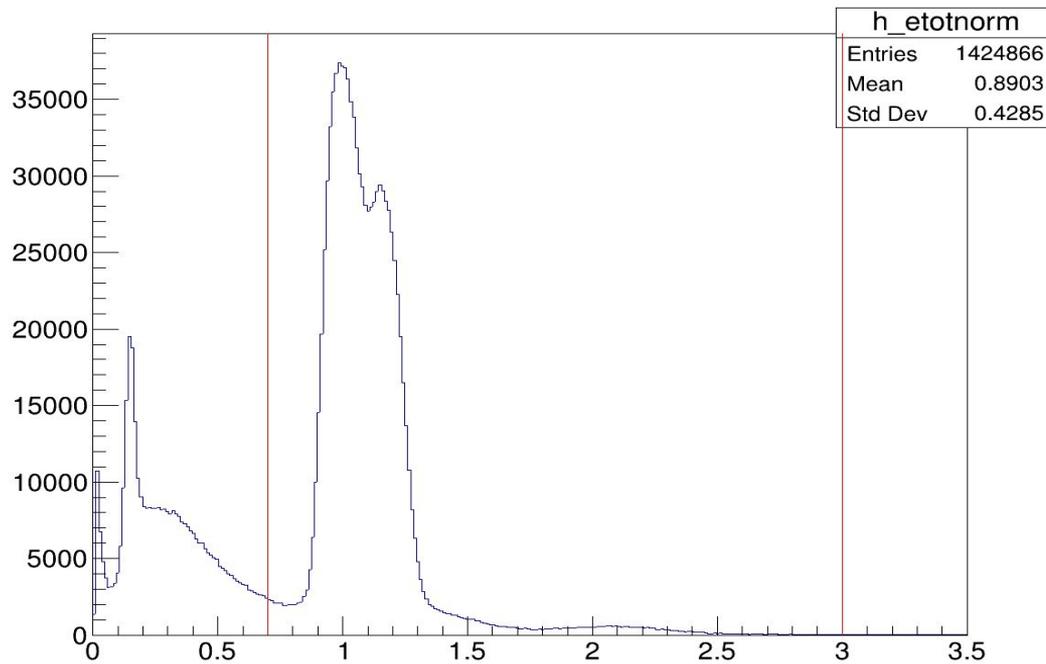


Pulse integral distributions and Poisson fits

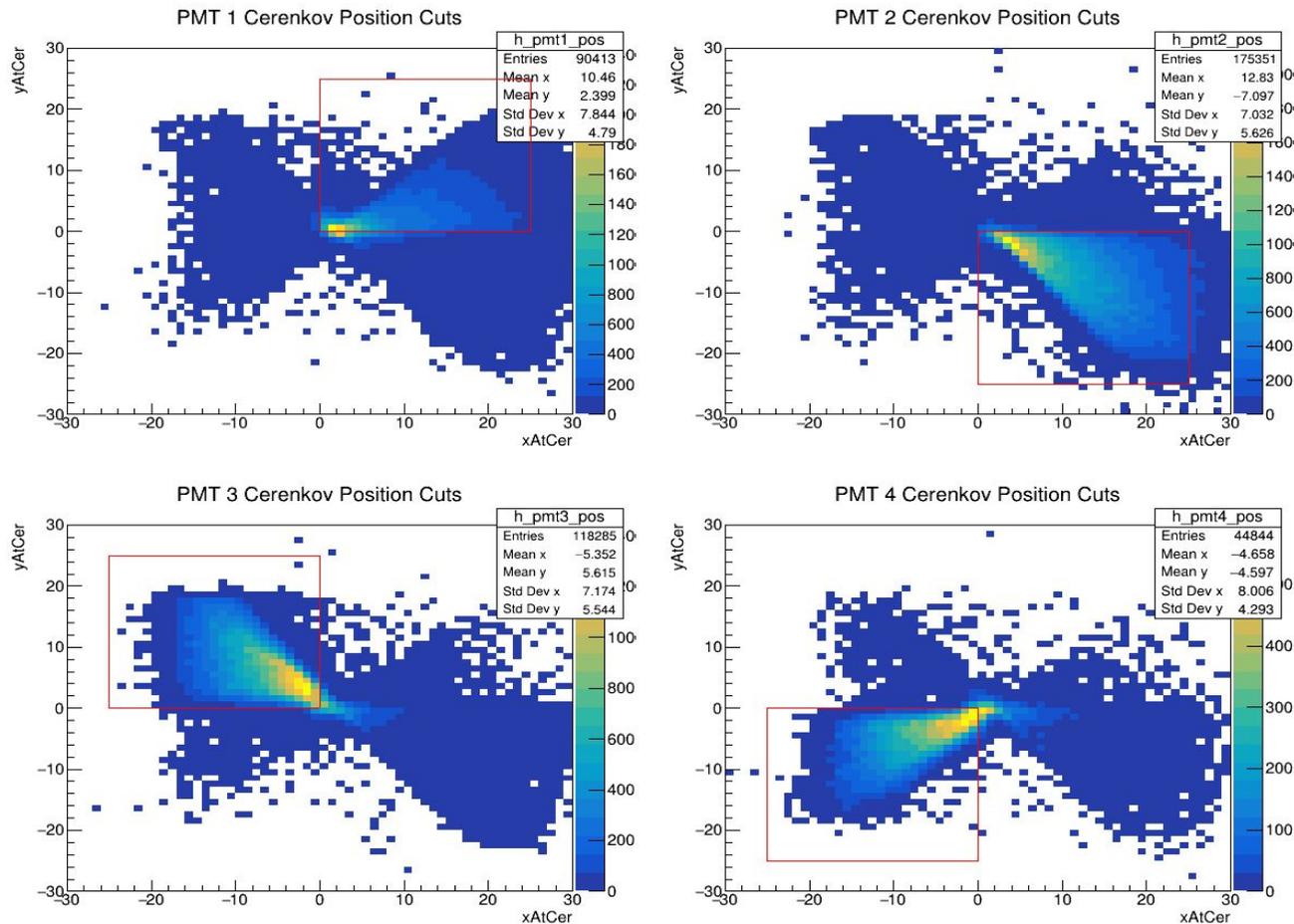


Runs 12026&12029

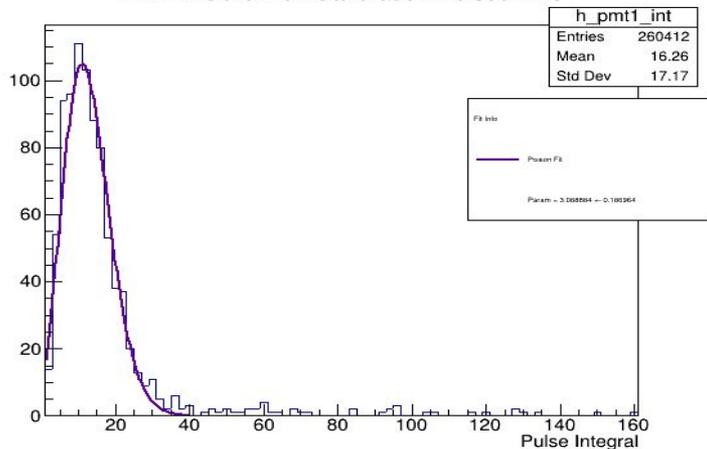
P.cal.etotnorm Cuts on All Events



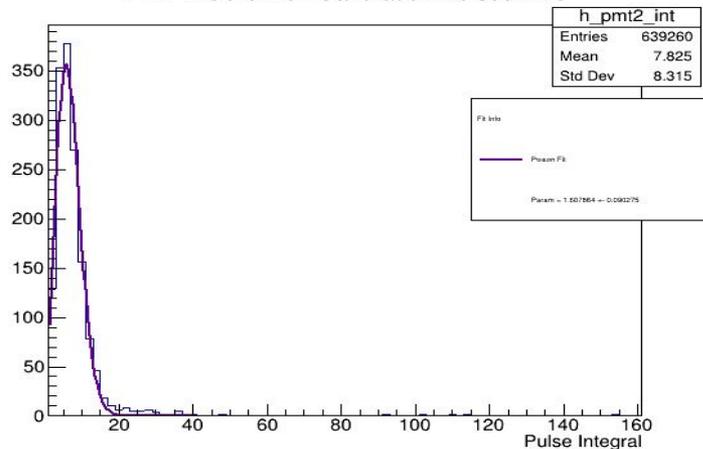
Runs 12026&12029



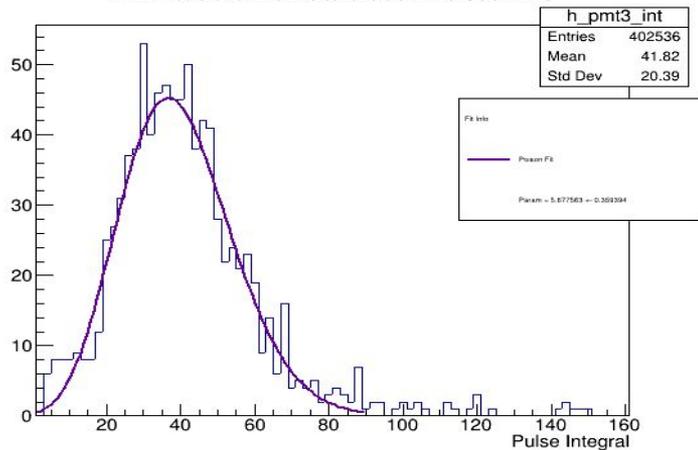
PMT 1 Cerenkov Calibration Poisson Fit



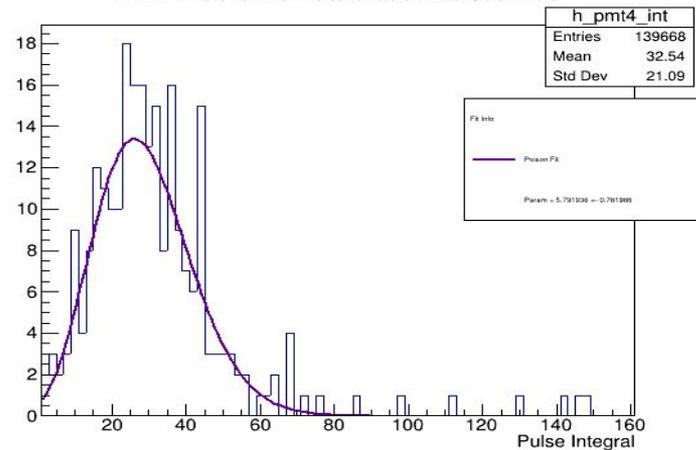
PMT 2 Cerenkov Calibration Poisson Fit



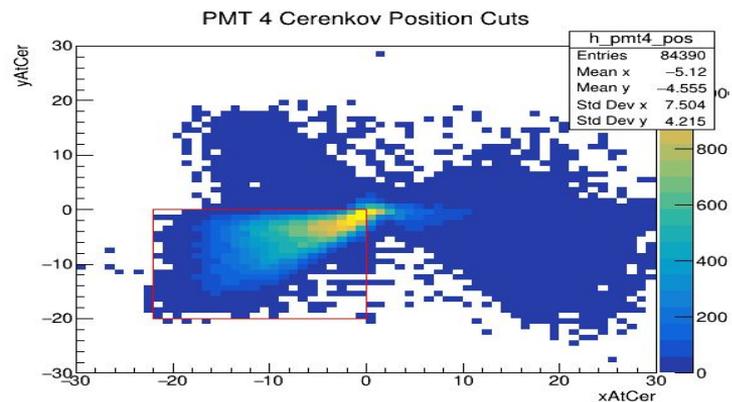
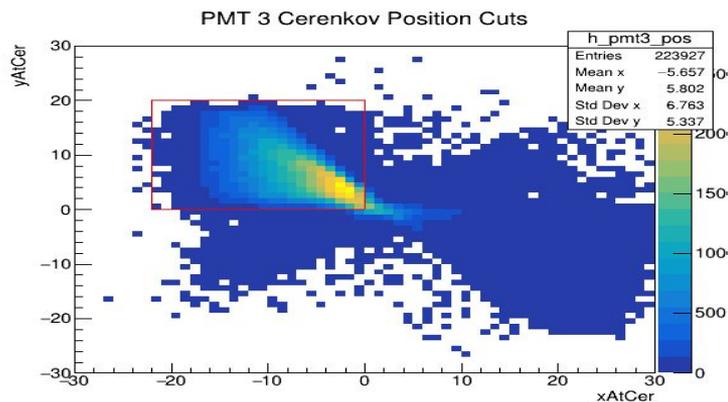
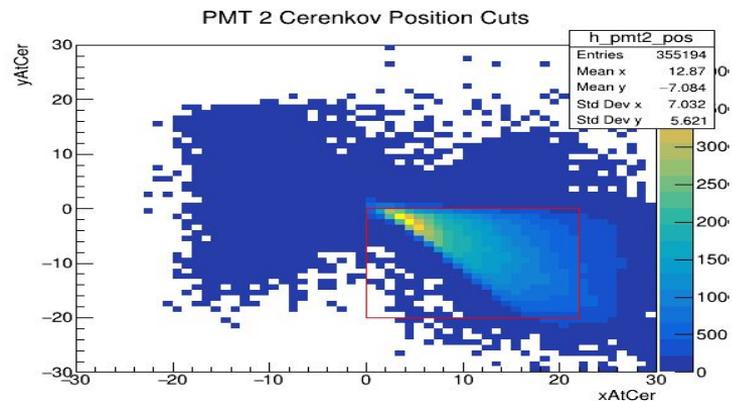
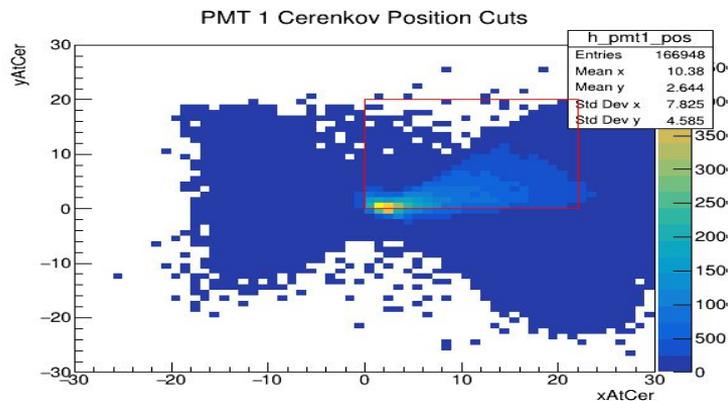
PMT 3 Cerenkov Calibration Poisson Fit



PMT 4 Cerenkov Calibration Poisson Fit

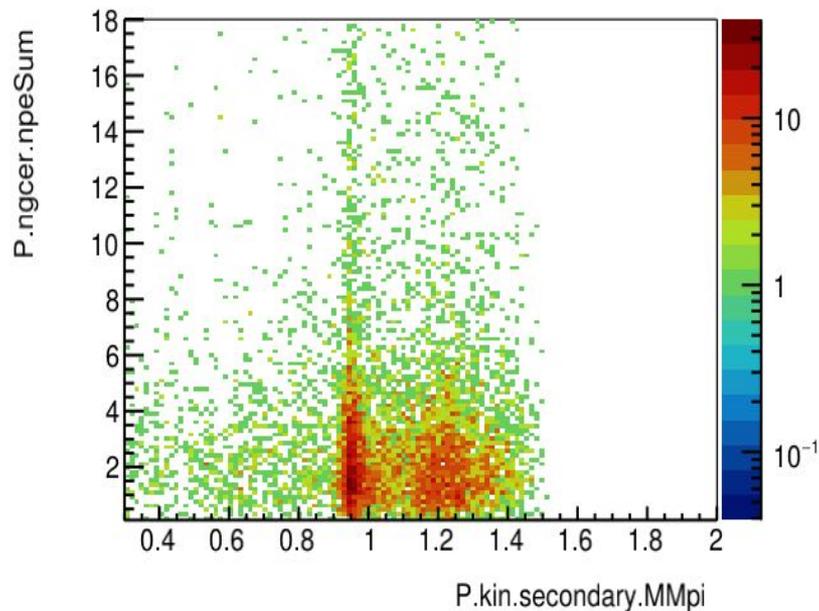


Runs 12029&12026&12035

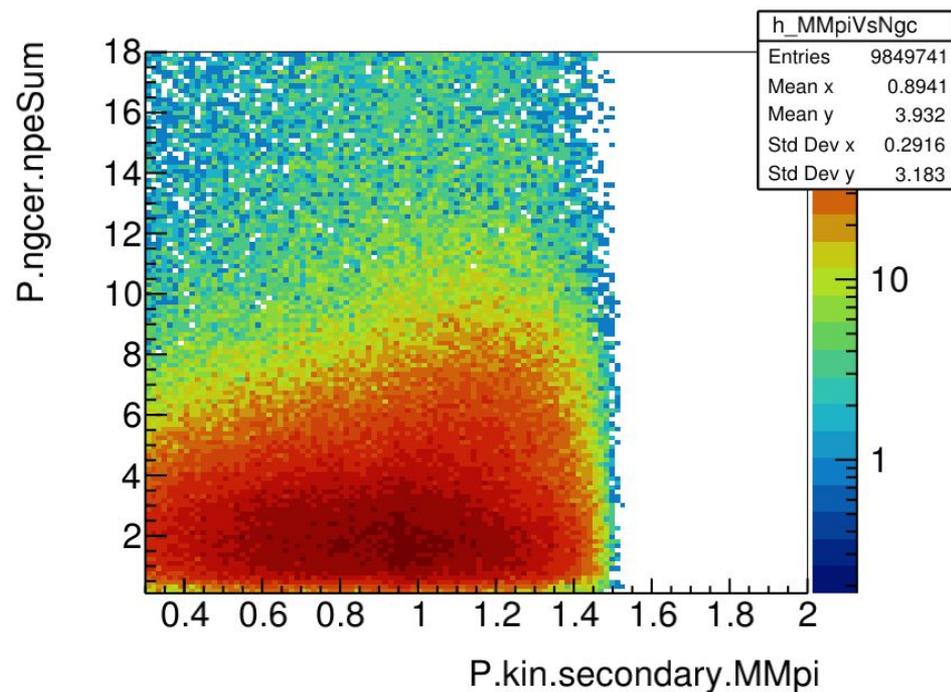


NGC After Calibration

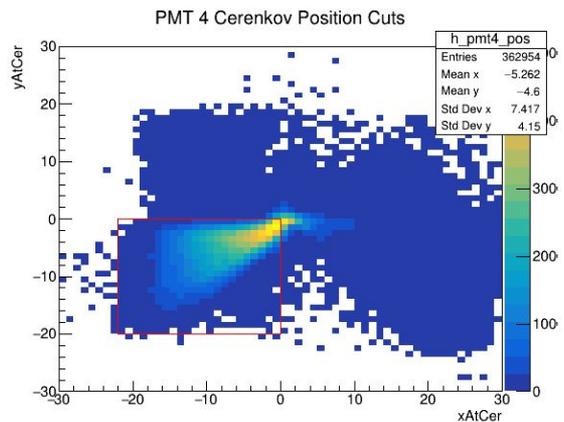
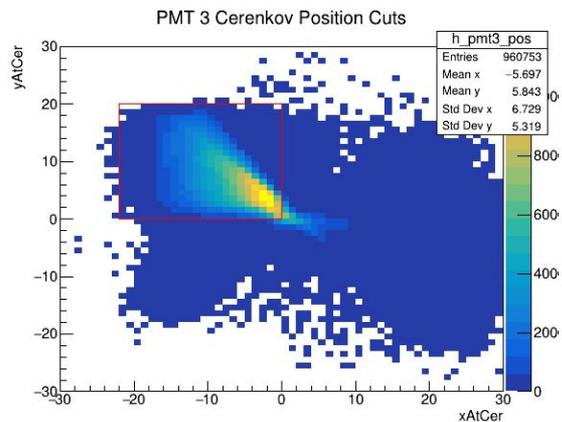
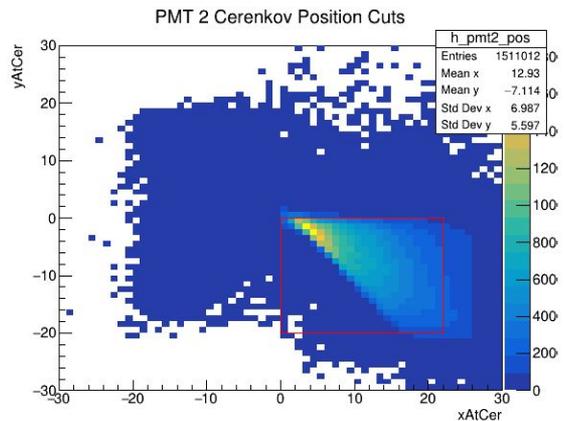
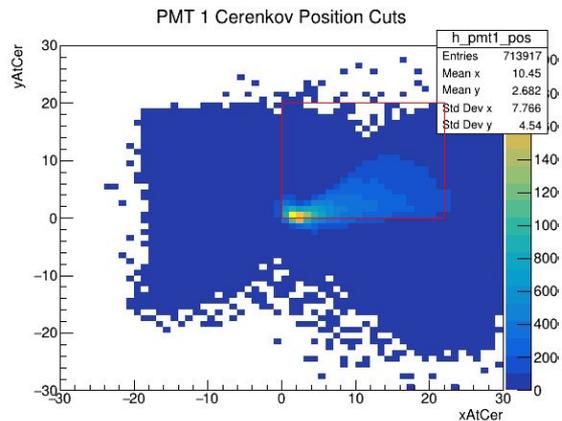
With Accept+CT+Pcal



With Acceptance cuts



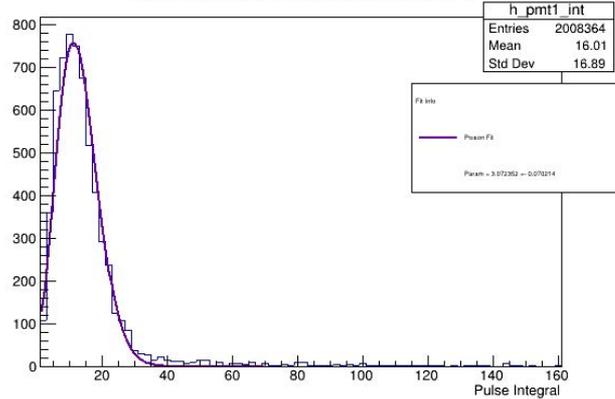
**Runs: 12027 12028
12029 12030 12032
12034 12035 12037
12038 12041 12042
12043 12044 12045
12046**



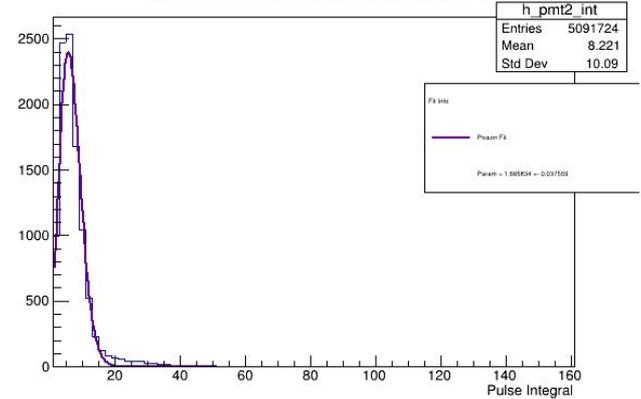
Pulse integral distributions and Poisson fits

**Runs: 12027 12028
12029 12030 12032
12034 12035 12037
12038 12041 12042
12043 12044 12045
12046**

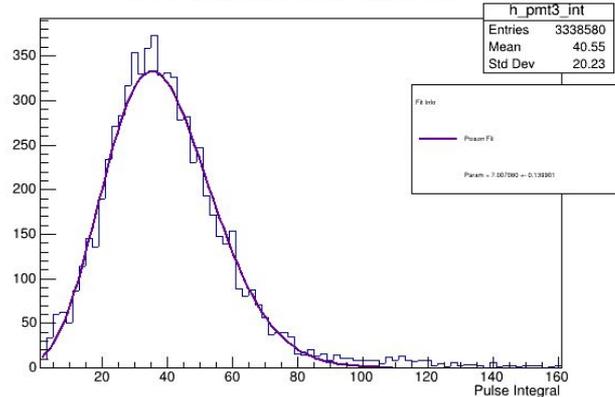
PMT 1 Cerenkov Calibration Poisson Fit



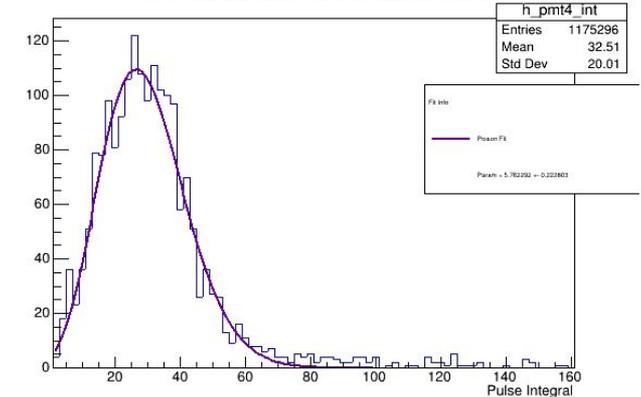
PMT 2 Cerenkov Calibration Poisson Fit



PMT 3 Cerenkov Calibration Poisson Fit



PMT 4 Cerenkov Calibration Poisson Fit



Gain Factors

Runs 12029&12026&12035

```
1/PMT1 Calibration Constant Poisson: 3.38967  
1/PMT2 Calibration Constant Poisson: 1.73535  
1/PMT3 Calibration Constant Poisson: 6.37653  
1/PMT4 Calibration Constant Poisson: 4.91154
```

Final Gain Factors:

Runs 12027 12028 12029 12030 12032 12034 12035 12037 12038 12041 12042
12043 12044 12045 12046

```
1/PMT1 Calibration Constant Poisson: 3.07235  
1/PMT2 Calibration Constant Poisson: 1.68583  
1/PMT3 Calibration Constant Poisson: 7.00708  
1/PMT4 Calibration Constant Poisson: 5.76229
```

SHMS: NGC

Accept Cut

