RESULTS TO BE PRESENTED

1) EFFECT OF THE MAGNET

2) COSMIC RUN RESULTS

- Investigated runs:
==>> 2700 and 2701: I (S.magnet) = 468.0 A and I (Beam) =36 uA
==>> 2702: I (S.magnet) = 468.0 A and I (Beam) =24 uA
==>> 2705 and 2706: I (S.magnet) = 468.0 A and I (Beam) =12 uA
==>> 2712: I (S.magnet) = 234.0 A and I (Beam) =5 uA

- Applied **pi0 calibration** on all runs using the pi0 calibration coefficients extracted from 2700 and 2701 treated together (More statistics).

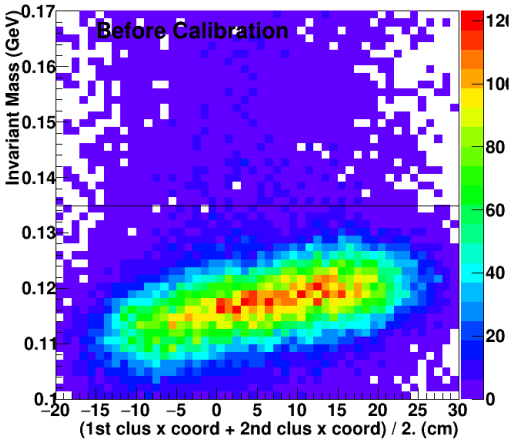
- Same target (**LH2**).

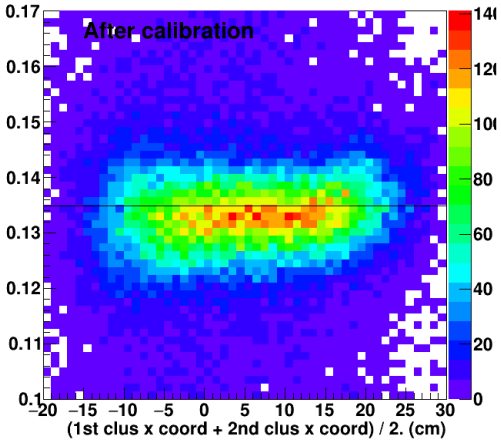
- Same cuts applied on all runs:

==>> HMS basic cuts (**dp|<8% & |ph|<0.04 & |th|<0.08 & |react.z|<4**).
==>> Removed the edge blocks of the NPS (1 row top/bottom of the detector).
==>> Removed the **5 first** columns (0 to 4).
==>> Removed the block 497 which is problematic during these runs.

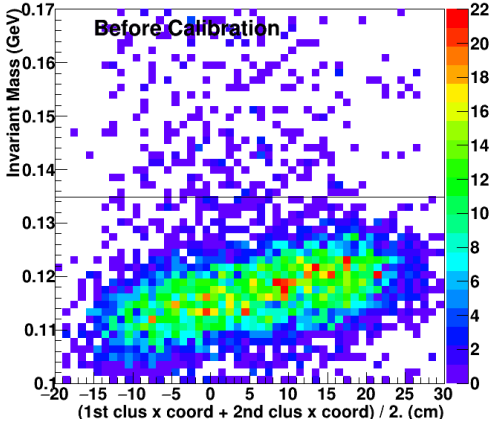
BEFORE/AFTER CALIBRATION

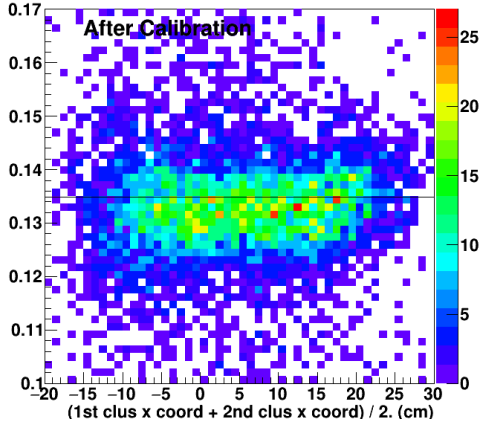
RUN 2700 and 2701 (100% magnet+ I =36 uA)



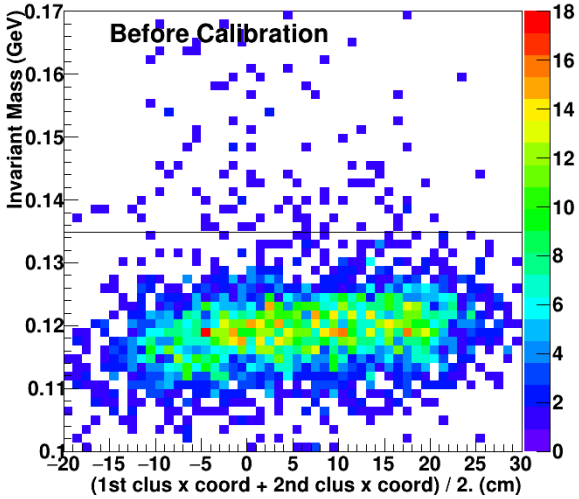


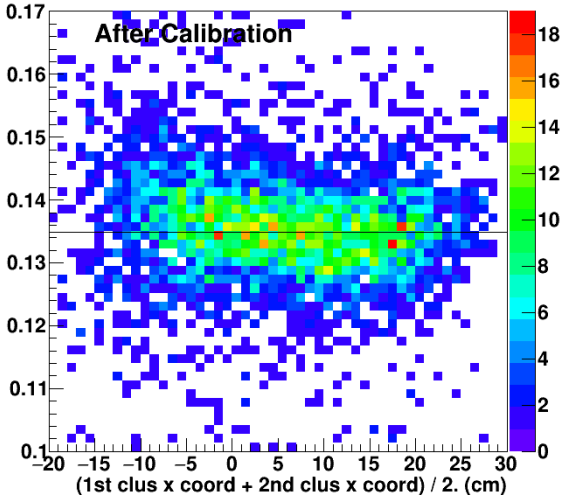
RUN 2705 (100% magnet + I = 12 uA)



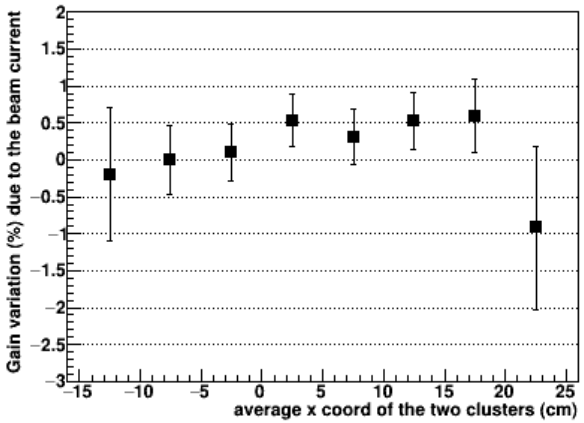


RUN 2712 (50% magnet + I = 5 uA)

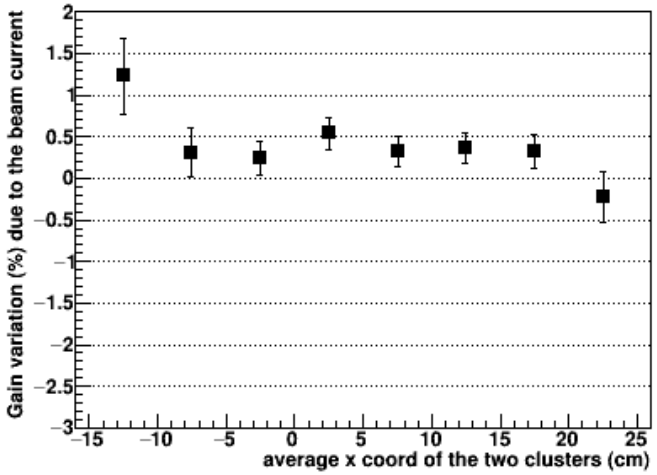




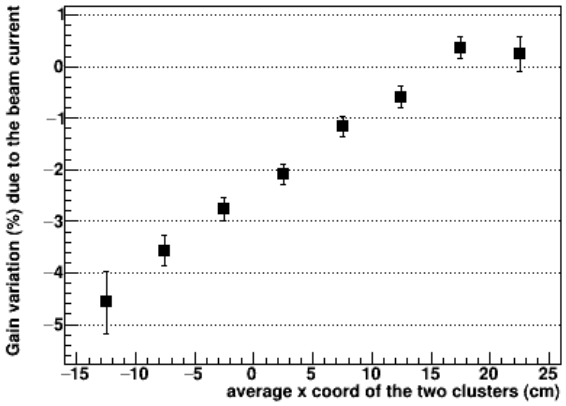
Difference between I =36 uA and I = 24 uA



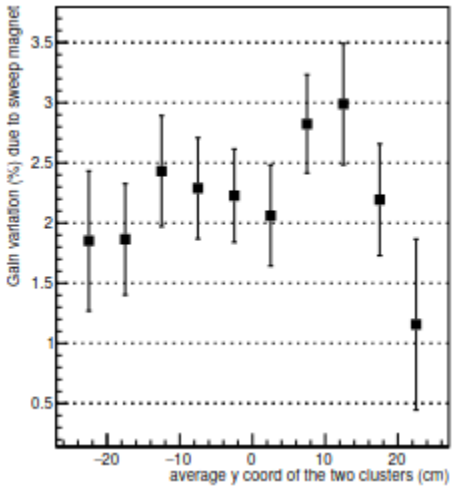
Difference between I =36 uA and I = 12 uA

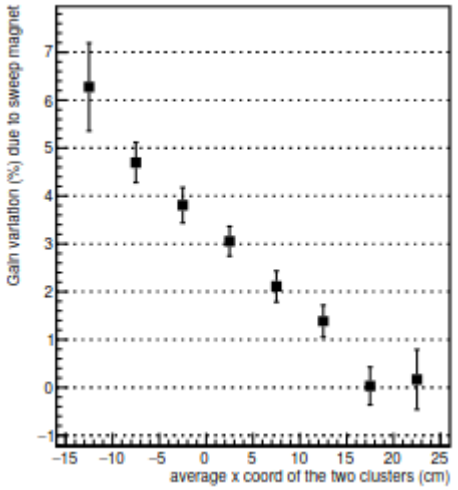


Difference between 100% magnet and 50% magnet



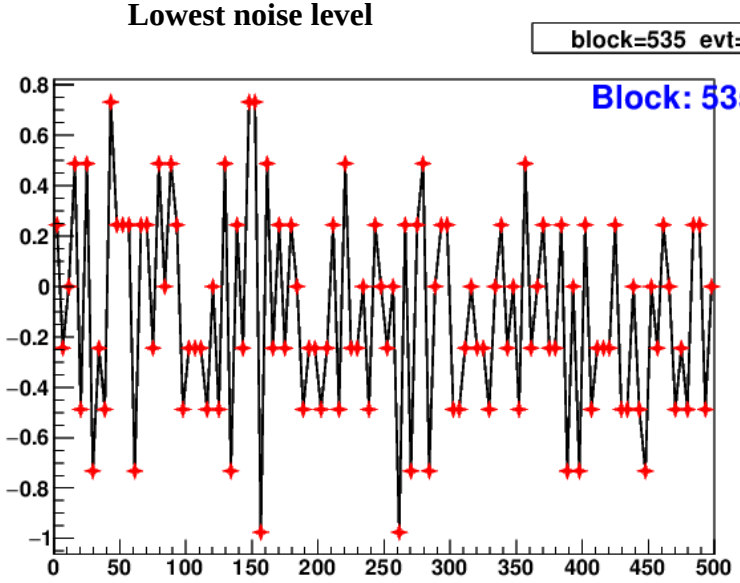
Difference between Magnet ON/OFF

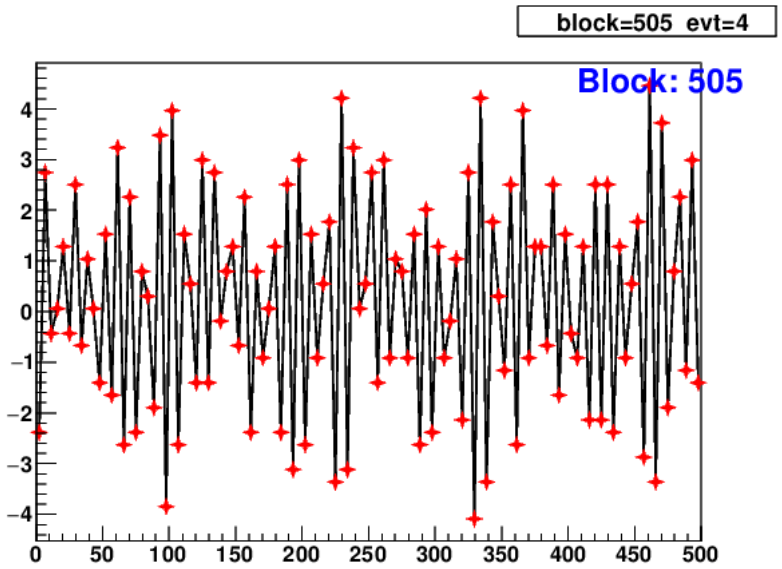




WAVEFORMS

Lowest noise level





Highest noise level