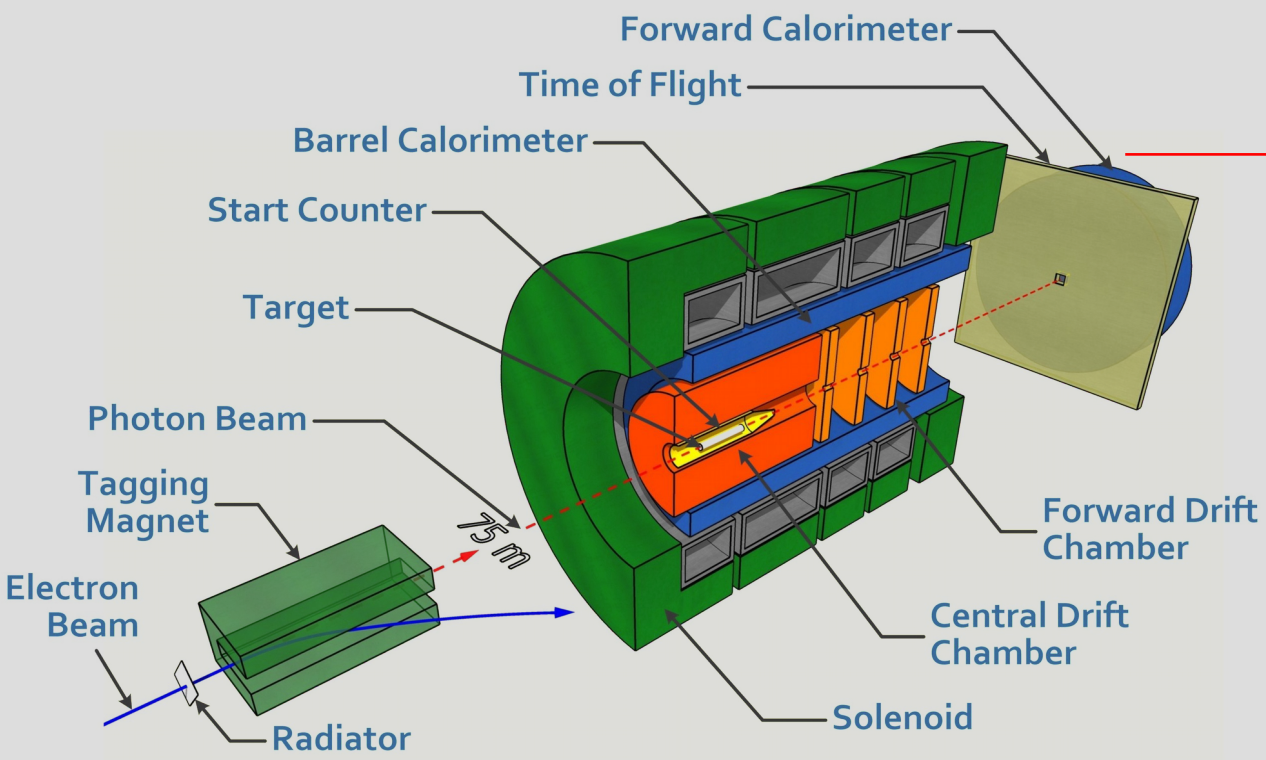
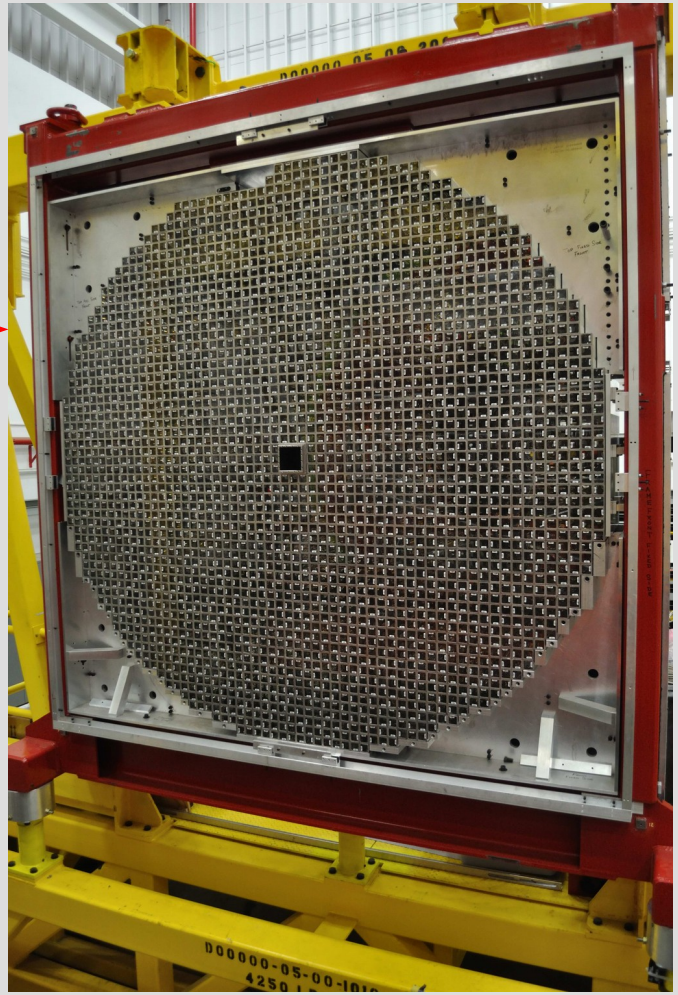
Forward Calorimeter

The GlueX FCAL consists of 2800, 4 cm x 4 cm x 45 cm lead glass

More information at Hall D wiki/web page:
https://halldweb.jlab.org/wiki/index.php/FCAL



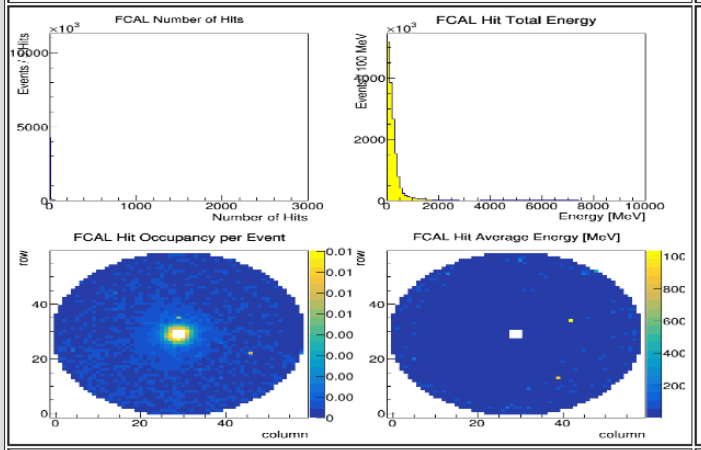


FCAL

- Meet with Igal Jaegle (Nov 1st 2021)
- Brief explanation of how the calibration is done
  - Make use of the γγ (π^0) peak
  - Outer rings not so good but mainly due to overlap with BCAL
  - Calibration is done by Igal and it takes aproximately half a day due to several interactions.
  - Mandatory calibration:
    - after each modification of the experiment (mainly targets)
    - The position of the π^0 peak is out of place for ± 1 %
- Plots to monitor (main):
  - https://halldweb.jlab.org/data_monitoring/Plot_Browser.html
    - Not so fast monitoring, 5 EVIO files to produce
    - FCAL Clusters 2 (pi0 peak)
    - FCAL Hits 1
  - https://logbooks.jlab.org/book/HDMONITOR
    - fast diagnostics (compare with previous runs)

Plot Browser I (Hits 1)

Run081635 info



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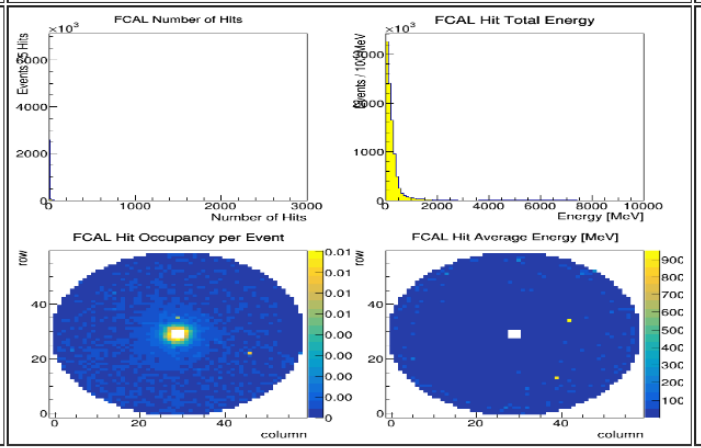

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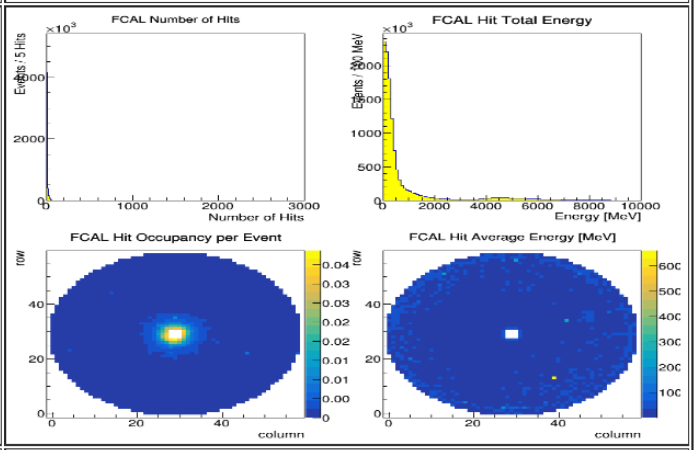

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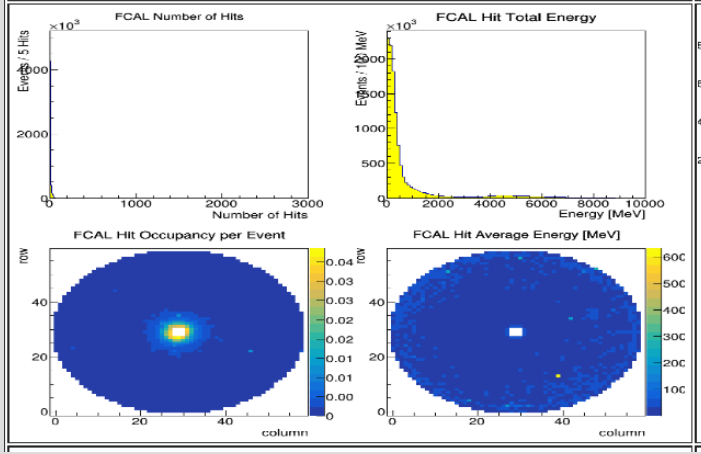

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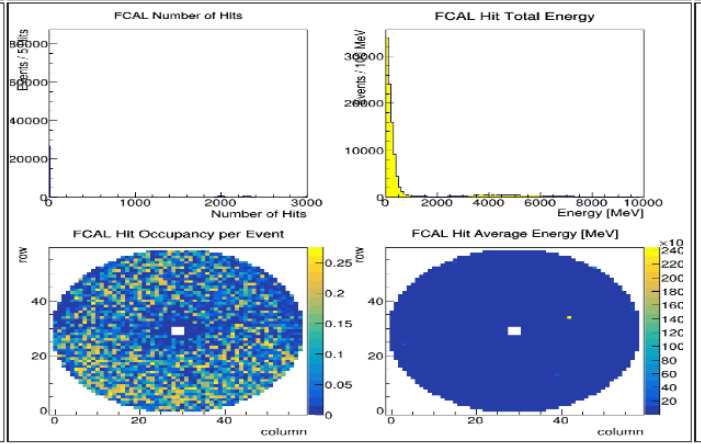

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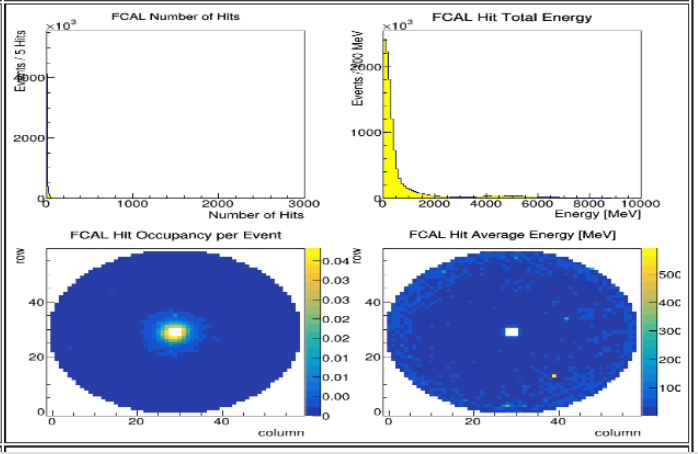
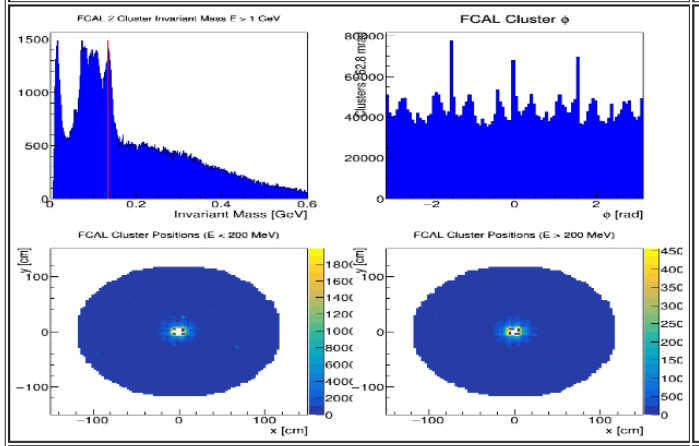


Plot Browser II

Run081635 info



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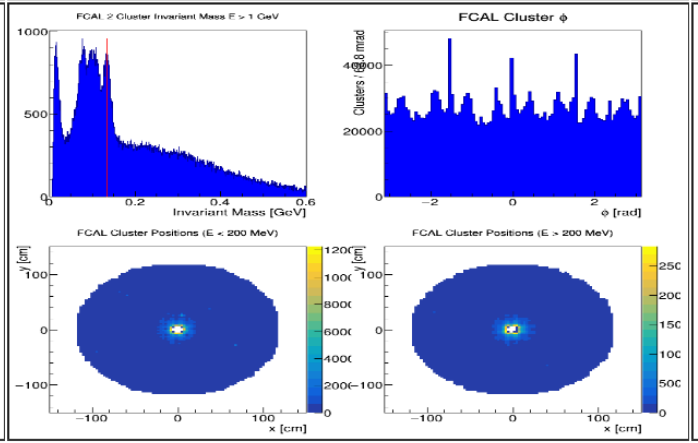

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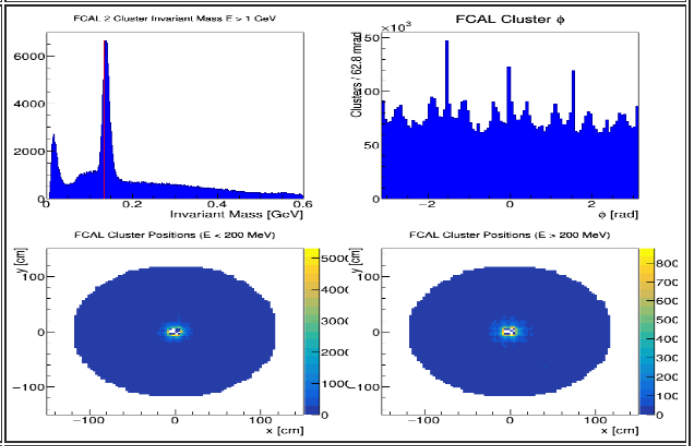

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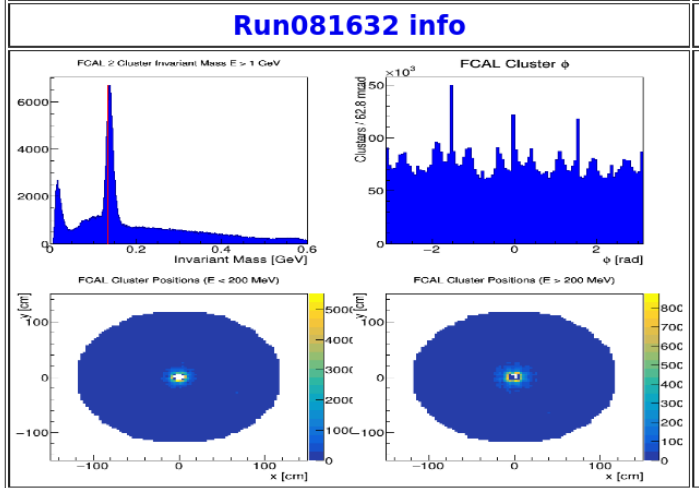

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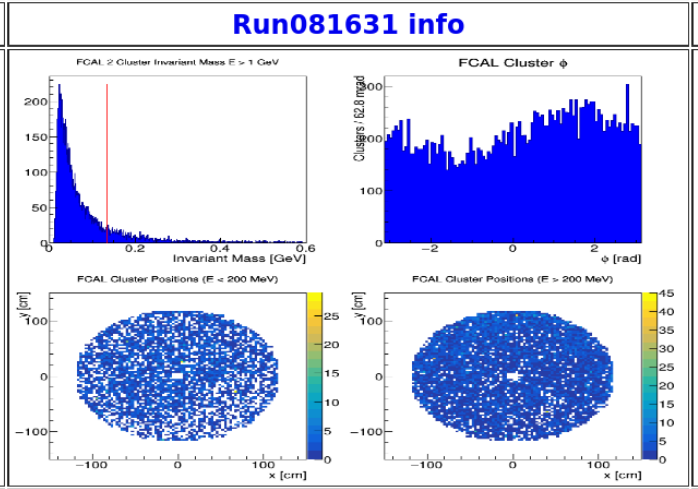

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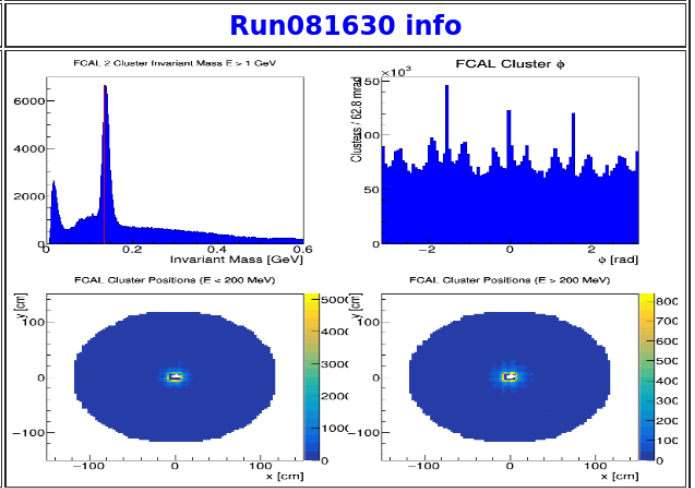
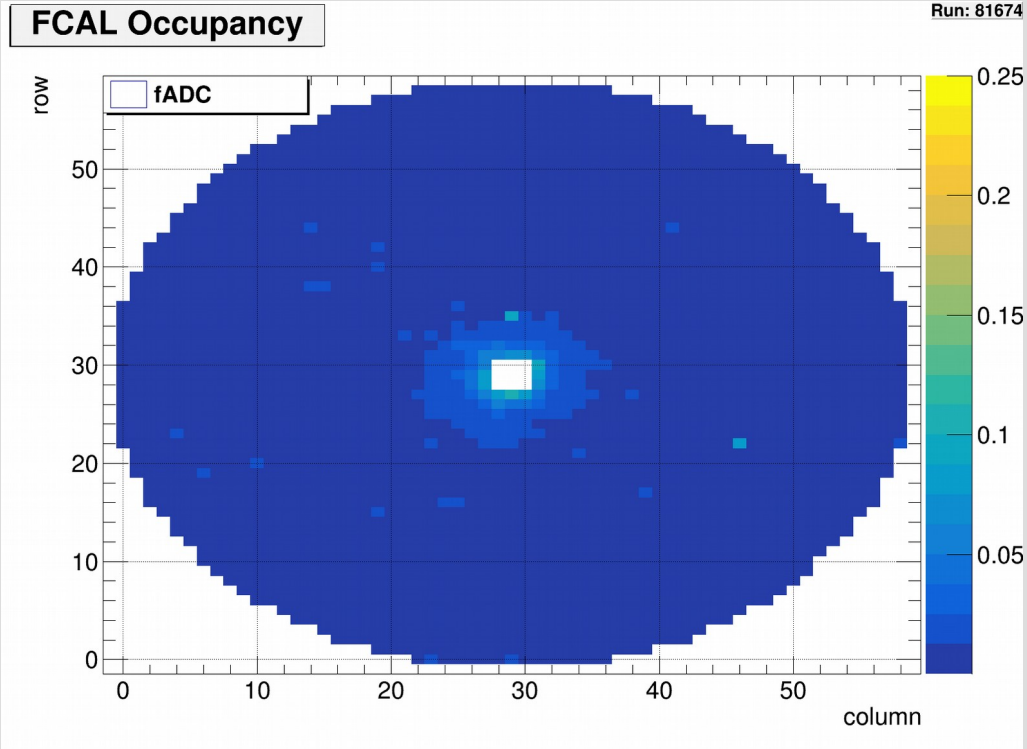


HDMONITOR elog



Besides many other plots where FCAL is involved, this will tell you IMMEDIATELY if there is something bad with FCAL.
In general, the rest of the plots should be compared with other runs

Extra

- Igal provided some nice scripts for a more detailed analysis/ monitoring and **will** set a dedicated folder for it in:

/u/group/halld/www/halldweb/html/

- All the calibration process is done automatically and done by Igal
- Experts:
  - FCAL: **Mark Dalton**, Malte Albrecht, Rebecca Barsotti, **Igal Jaegle**