FCAL energy calibration QC

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for the GlueX Collaboration

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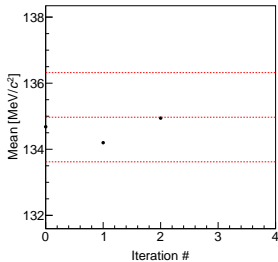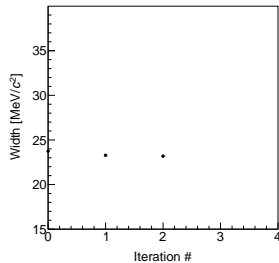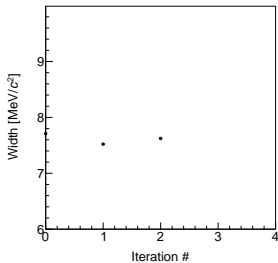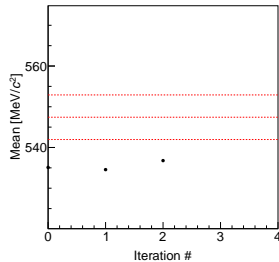2022-08-period-15-iteration-3-method-2
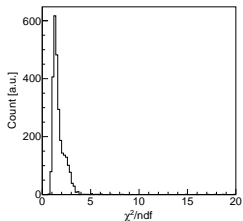
Table of contents

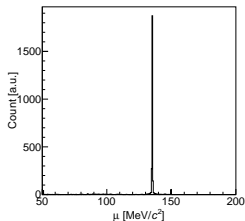# Overall QC vs iteration

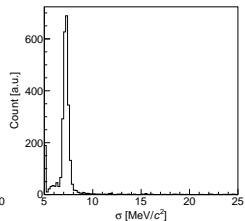π^0

η

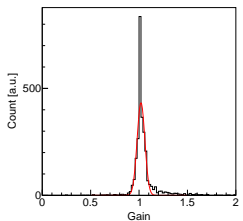# Overall QC, summary distributions
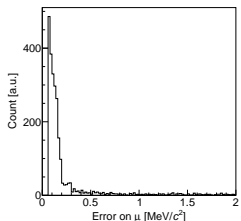
- χ^2 distribution

- Fitted peak distribution
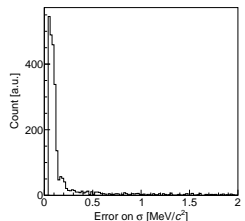
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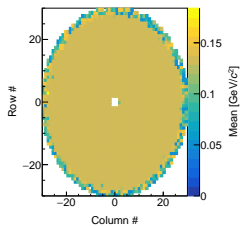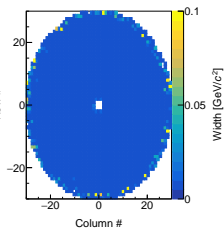

- Gain distribution

- Fitted peak error distribution

- Fitted width error distribution

Overall QC, summary maps

Fitted peak map

Fitted width map
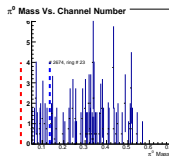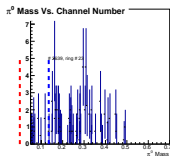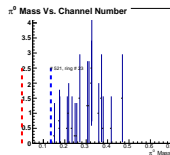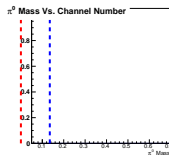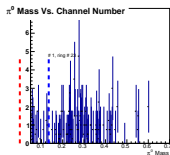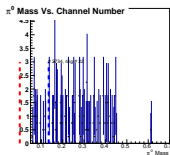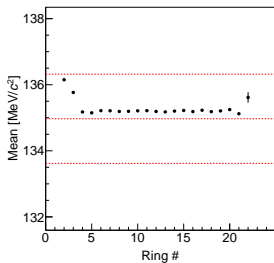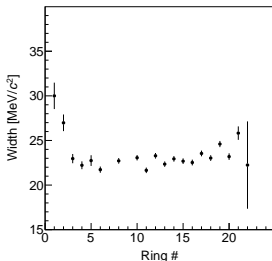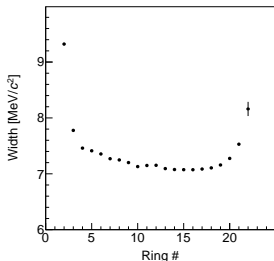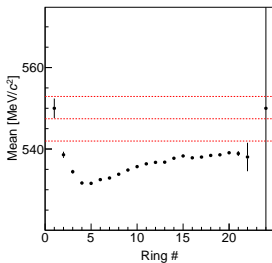
Gain map

Overall QC, bad channels

QC per rings

If radius divided by 5 cm, there is 24 rings

- π^0

- η

QC per rings

If radius divided by 5 cm, there is 24 rings

● Ring 1   ● Ring 2   ● Ring 3

QC per rings

If radius divided by 5 cm, there is 24 rings

- Ring 1
- Ring 2
- Ring 3

QC per rings

If radius divided by 5 cm, there is 24 rings

- Ring 4
- Ring 5
- Ring 6

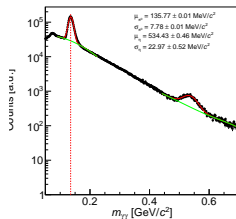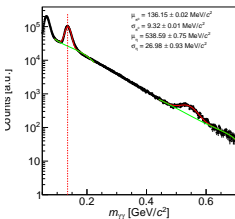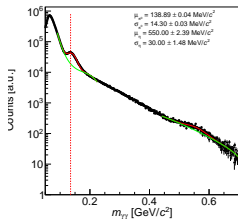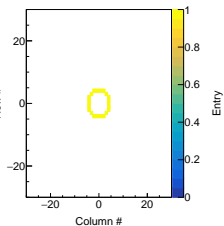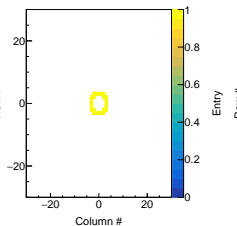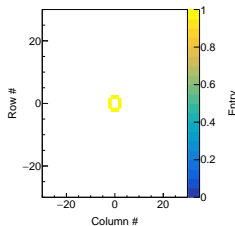# QC per rings

If radius divided by 5 cm, there is 24 rings
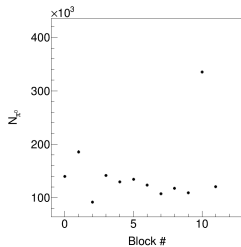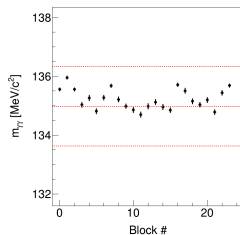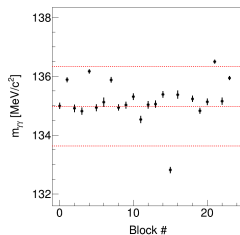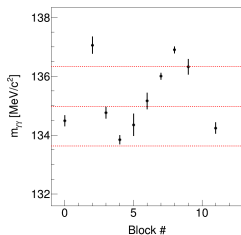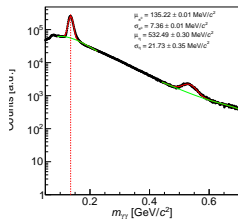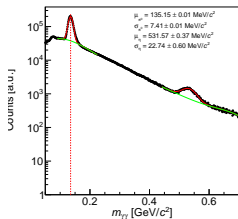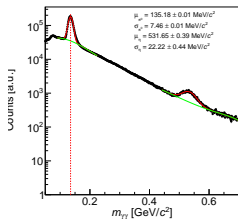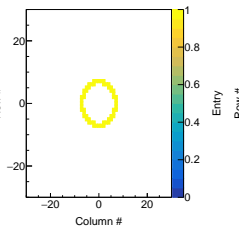
● Ring 4   ● Ring 5   ● Ring 6
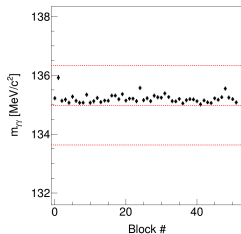
QC per rings

If radius divided by 5 cm, there is 24 rings

- Ring 7

- Ring 8

- Ring 9

QC per rings

If radius divided by 5 cm, there is 24 rings

- Ring 7
- Ring 8
- Ring 9

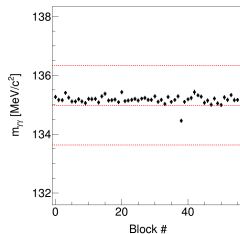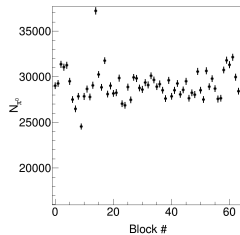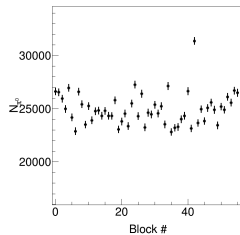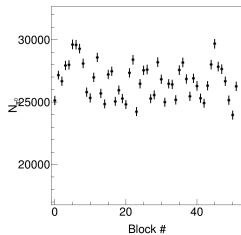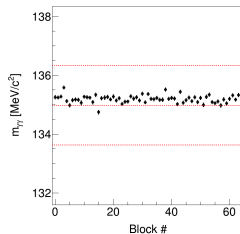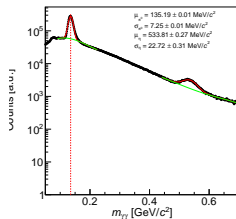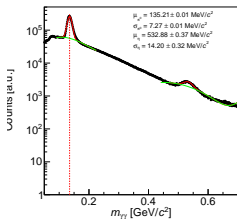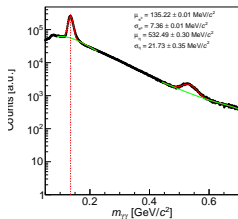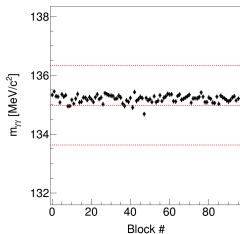# QC per rings

If radius divided by 5 cm, there is 24 rings

- Ring 11

- Ring 12

- Ring 13

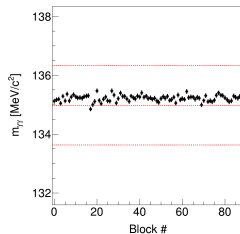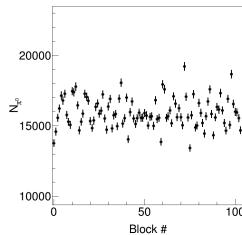# QC per rings

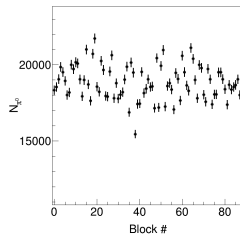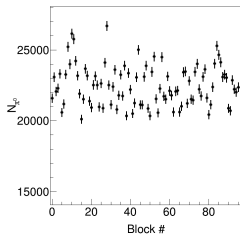If radius divided by 5 cm, there is 24 rings

- Ring 11
- Ring 12
- Ring 13

QC per rings

If radius divided by 5 cm, there is 24 rings

- Ring 14

- Ring 15

- Ring 16

QC per rings

If radius divided by 5 cm, there is 24 rings

- Ring 14
- Ring 15
- Ring 16

QC per rings
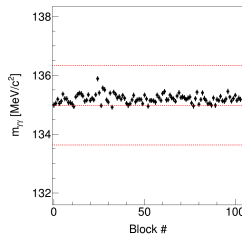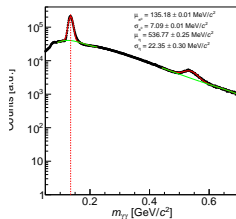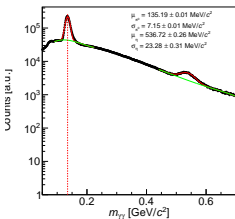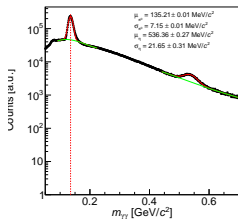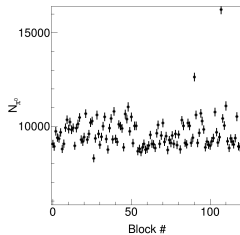
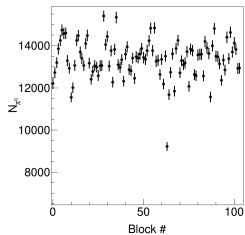If radius divided by 5 cm, there is 24 rings
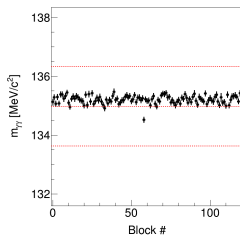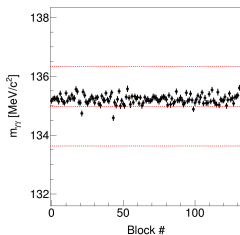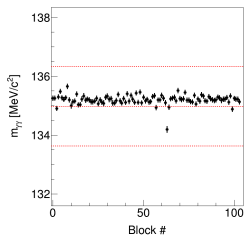
- Ring 17

- Ring 18

- Ring 19

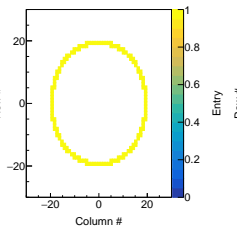# QC per rings

If radius divided by 5 cm, there is 24 rings

- Ring 17
- Ring 18
- Ring 19

QC per rings

If radius divided by 5 cm, there is 24 rings

- Ring 20
- Ring 21
- Ring 22

QC per rings

If radius divided by 5 cm, there is 24 rings
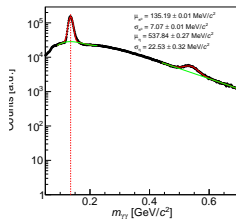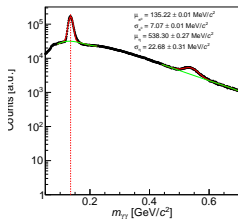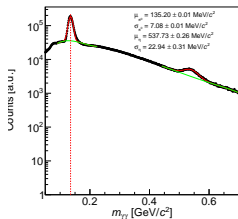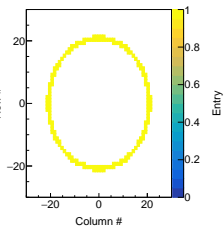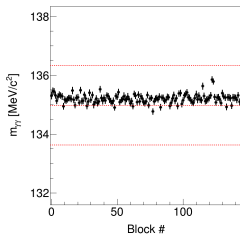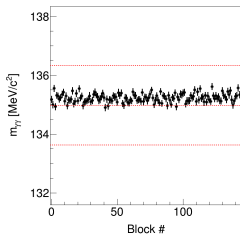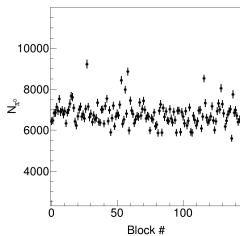
- Ring 20
- Ring 21
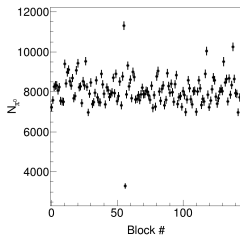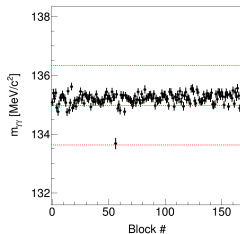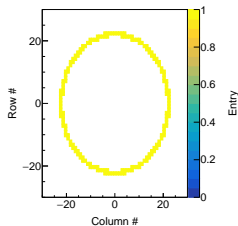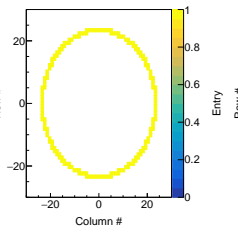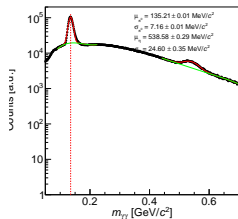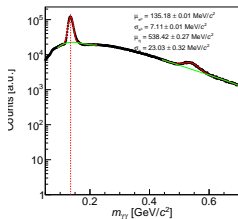- Ring 22

QC per rings

If radius divided by 5 cm, there is 24 rings

● Ring 23

QC per rings

If radius divided by 5 cm, there is 24 rings
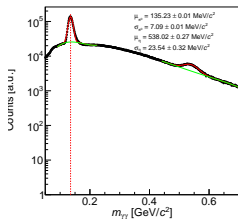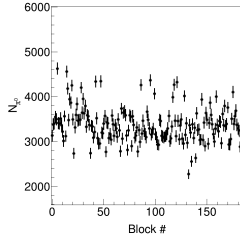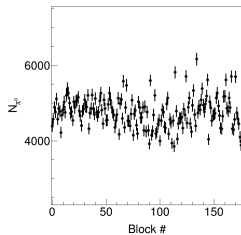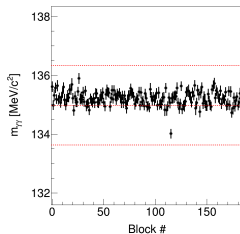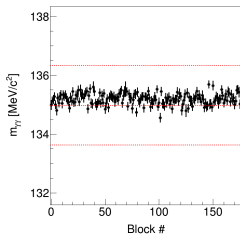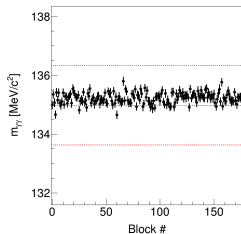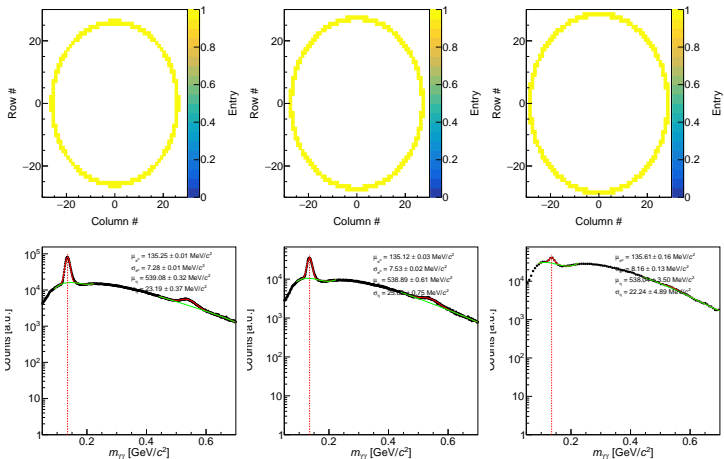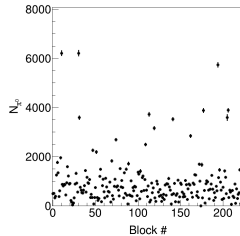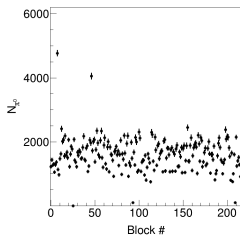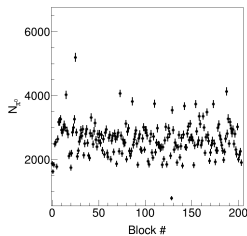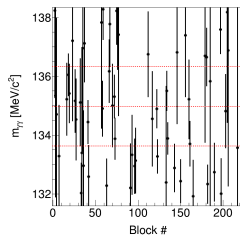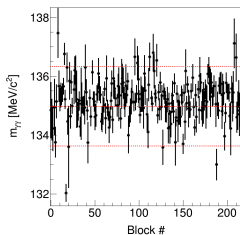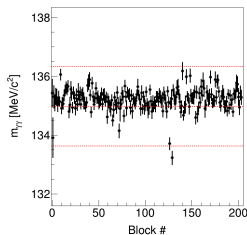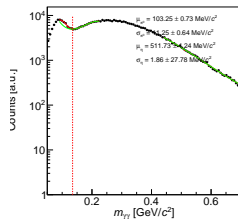
- Ring 23

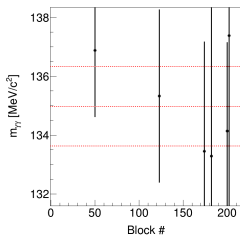- Ring 24

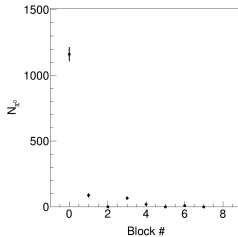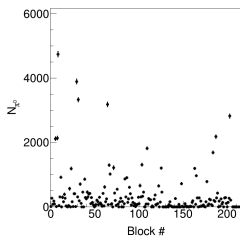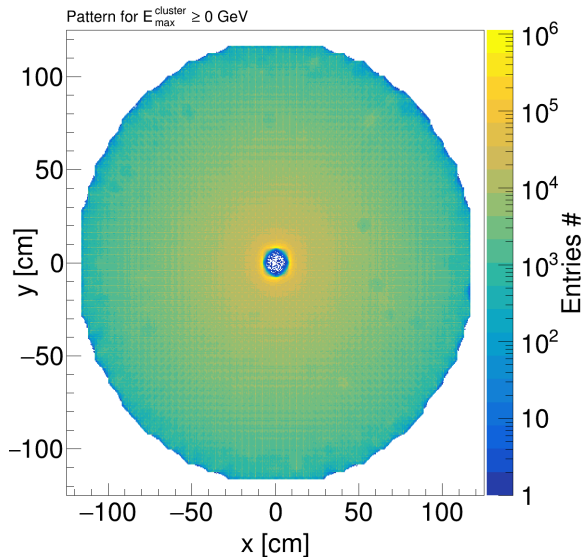# FCAL pattern

Pattern for $E_{max}^{cluster} \geq 0$ GeV

FCAL pattern

Pattern for $E_{max}^{cluster} \geq 1$ GeV

FCAL pattern

Pattern for $E_{max}^{cluster} \geq 2$ GeV

FCAL pattern

Pattern for $E_{max}^{cluster} \geq 3$ GeV
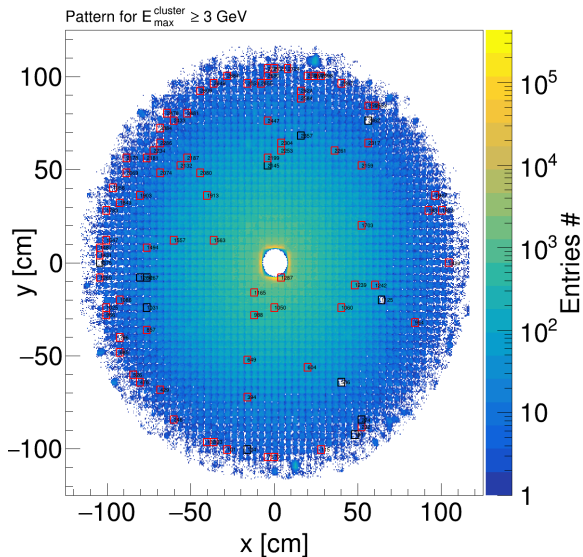
FCAL pattern

Pattern for $E_{max}^{cluster} \geq 4$ GeV

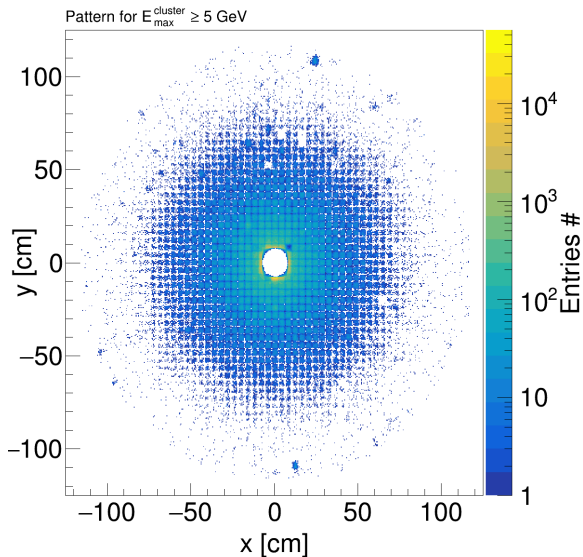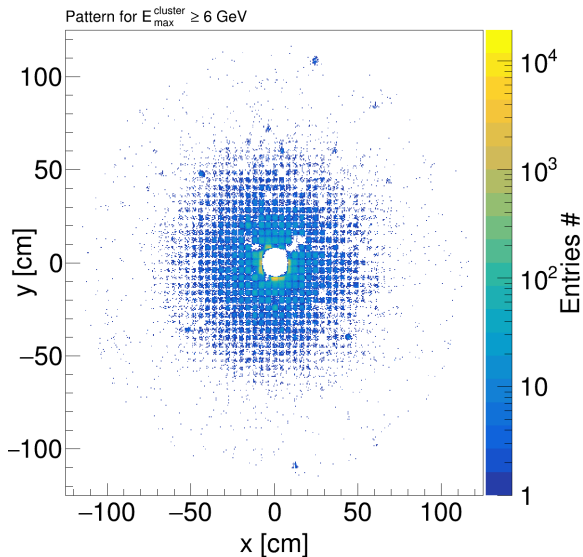# FCAL pattern

FCAL pattern

FCAL pattern

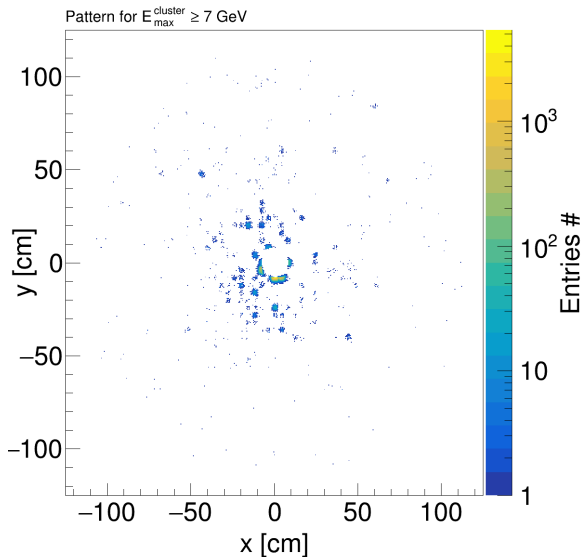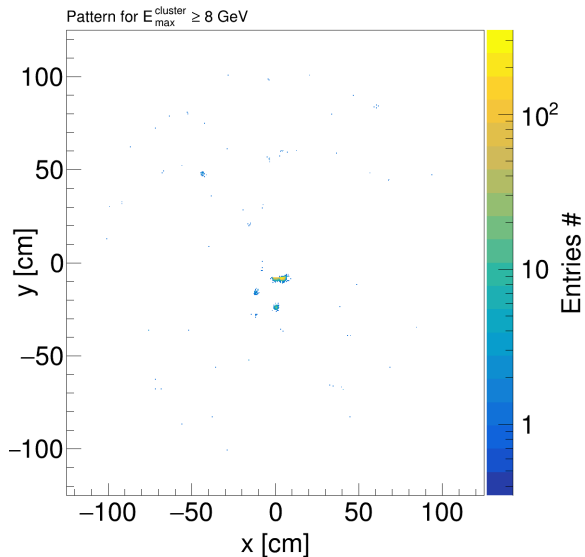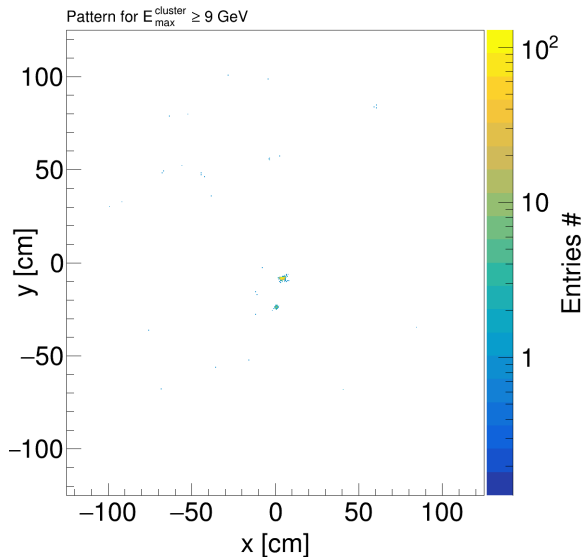Pattern for $E_{max}^{cluster} \geq 7$ GeV

FCAL pattern

Pattern for $E_{max}^{cluster} \geq 8$ GeV

FCAL pattern

FCAL pattern

Pattern for $E_{max}^{cluster} \geq 10$ GeV