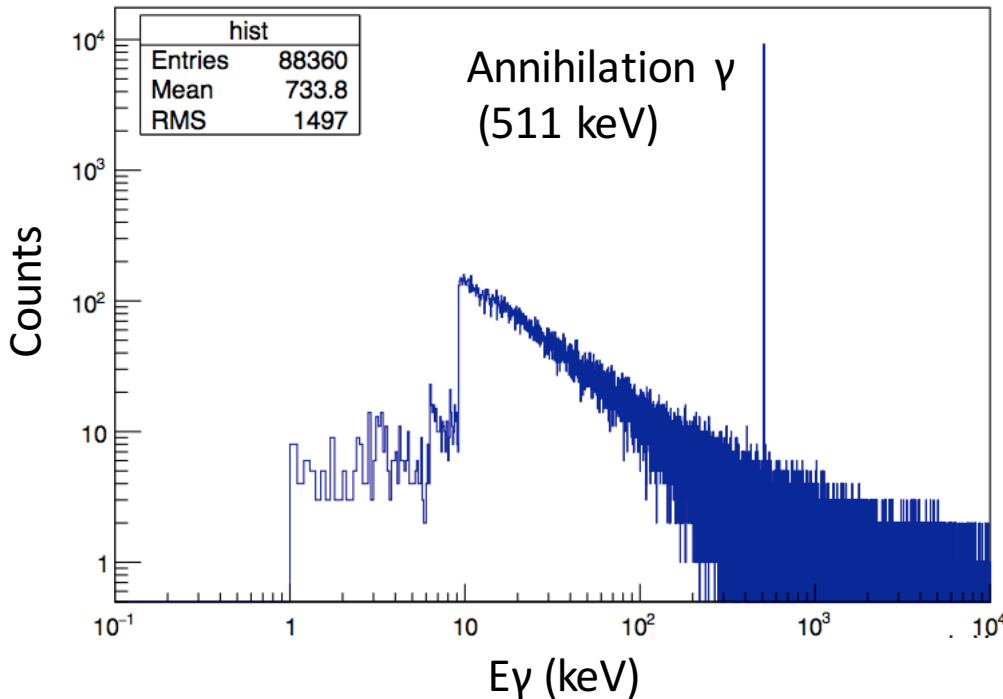


GEANT4 Works

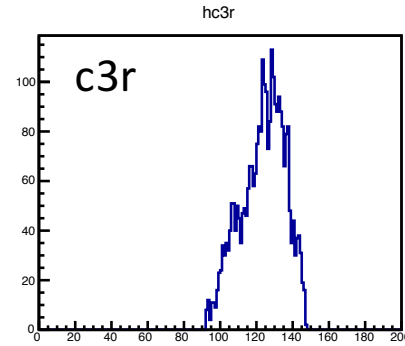
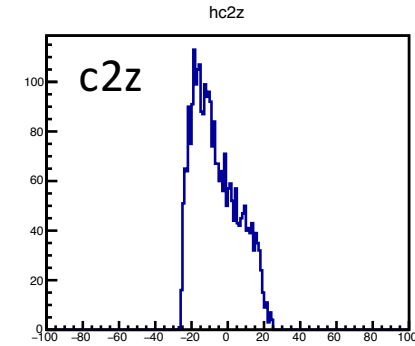
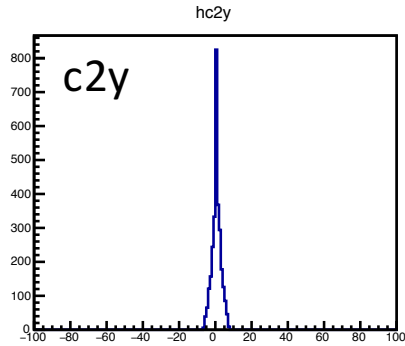
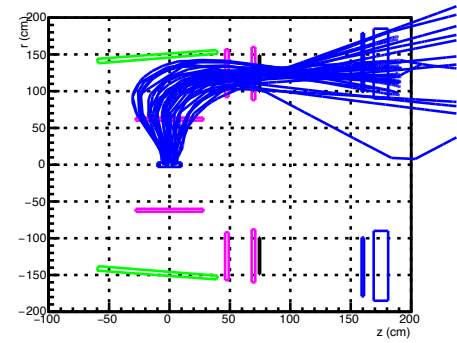
Hiroshi Ito
Chiba Univ.

Bremsstrahlung γ ray energy threshold

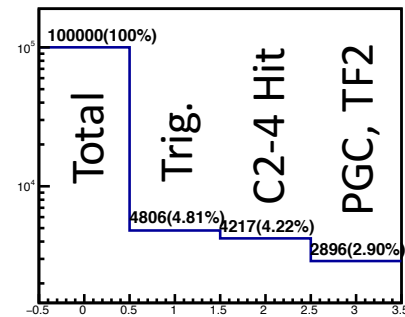
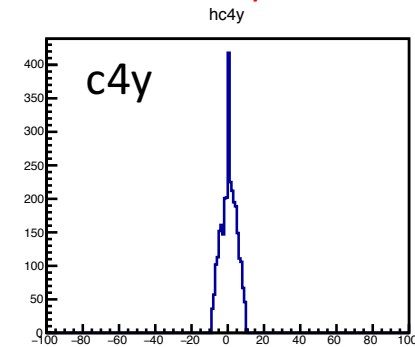
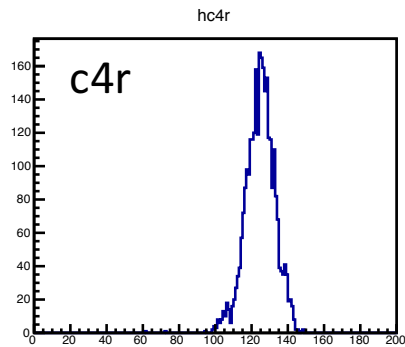
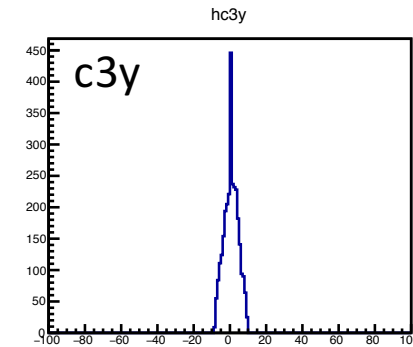


- Primary e^+ were emitted in the target.
- $p_e = 247 \text{ MeV}/c$
- Direction: random
- Energy of yielded gamma were filled and the gamma tracks were killed.
- G4 default threshold was defined as the step length.
- This histogram is the energy E_γ of each gamma ray.
- As a result, $E_\gamma \text{ min} = 1 \text{ keV}$

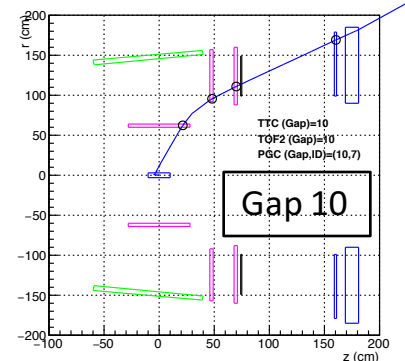
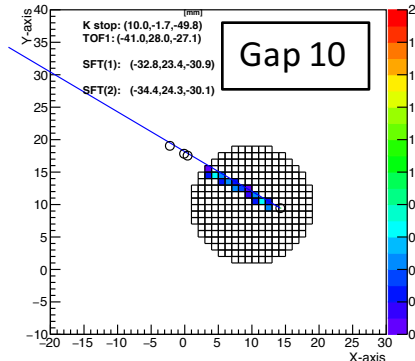
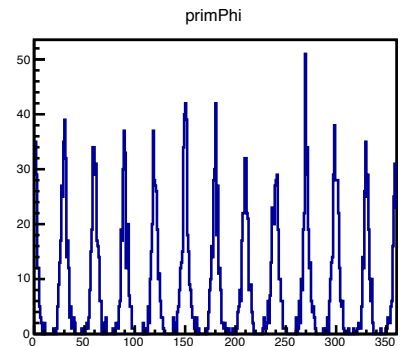
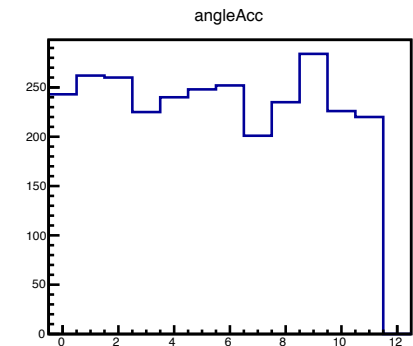
Kmu2 Profile Event Display



Q. 比較のためのprofileはどこにおいてありますか？



Q. Trig.で4.8%は少ない？



2017/08/25

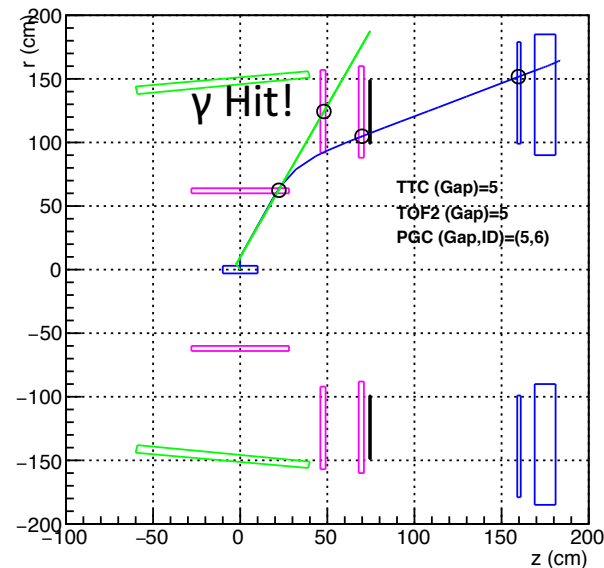
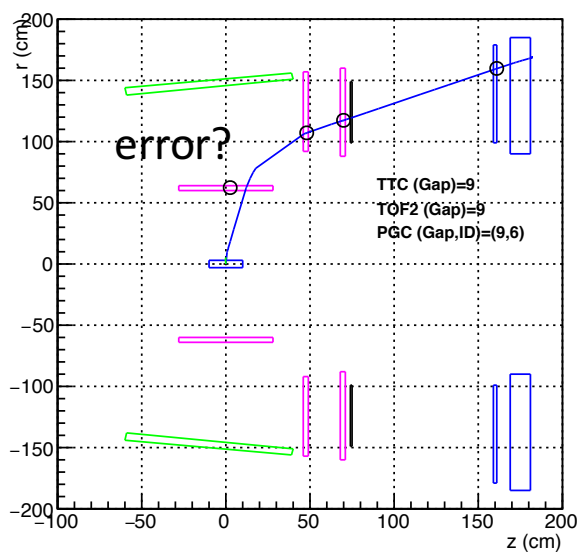
等方性は問題なさそう

各検出器のGapは揃えました。

Chamber Profile debug

- Kmu2, Ke2, Ke2 γ , Kpi2 were calculated.
- It was found that Chamber hit position was mistaken to gamma hit positions.
- Is it required that multiplicity data for these c2-4 hit positions?

Ke2 tracking monitors



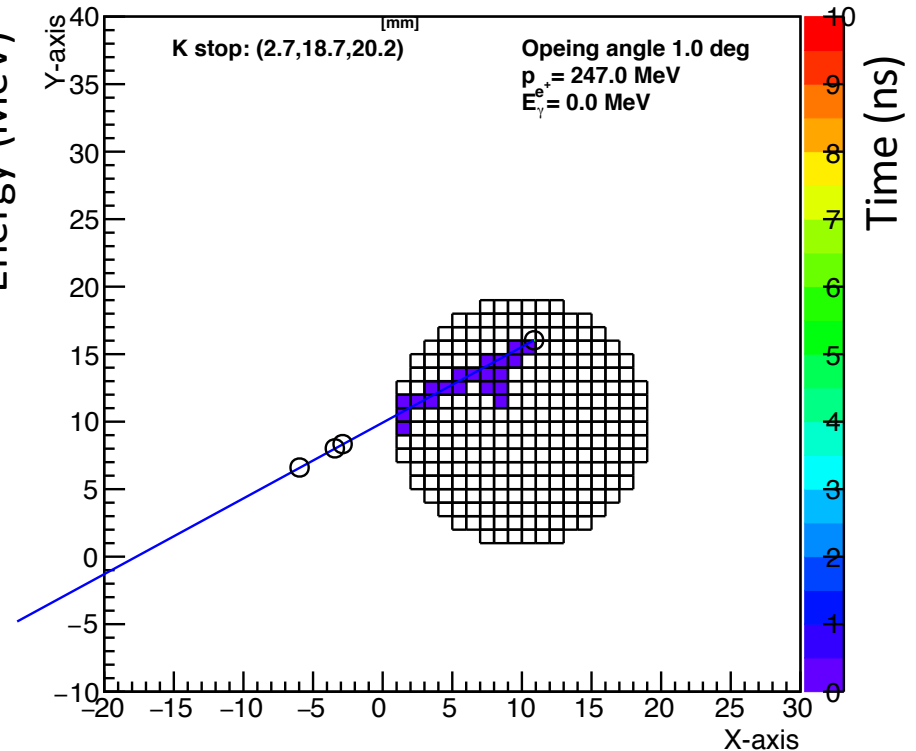
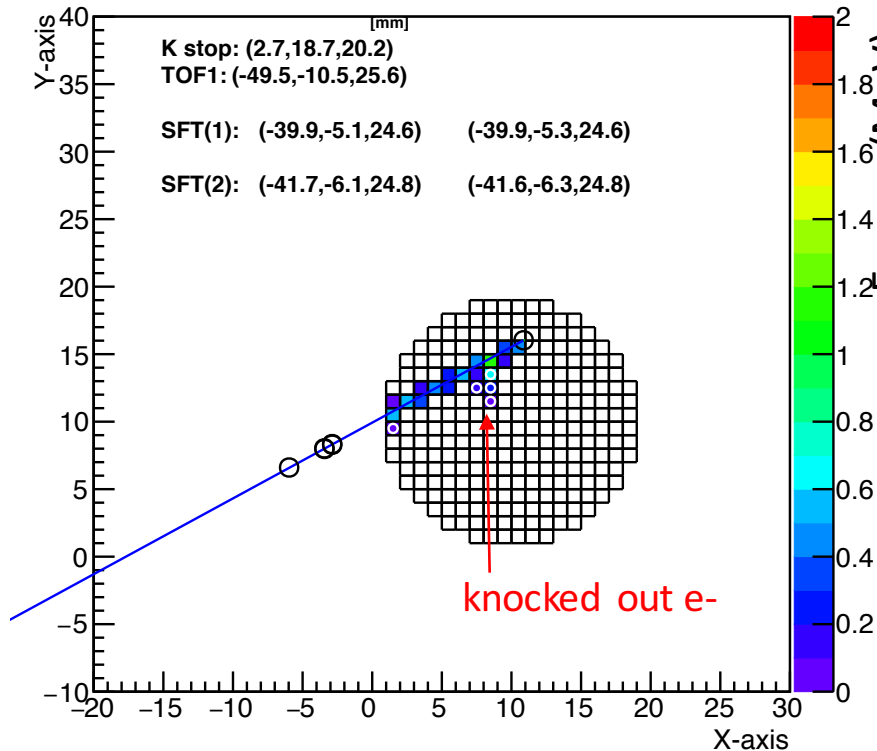
Other works

- PGC hit ID was output.
- TTC, PGC, and TF2 gap numbers were recorded.
- Target Track ID (256)

0: No particle

1: Primary particle

2~: Secondary particle (white circle)



Summary

- Bremsstrahlung gamma rays have threshold energy of 1 keV in G4 MC (E36).
- Kmu2 event monitor and profile were updated. The Chamber profile has not had bags yet in G4.
- It was found that bag by mistaken with gamma ray hit in C2-4. It was discussed for the Chamber multi-hit info.
- The PGC crystal ID was imported.
- The target track ID was imported because secondary particles are identified.