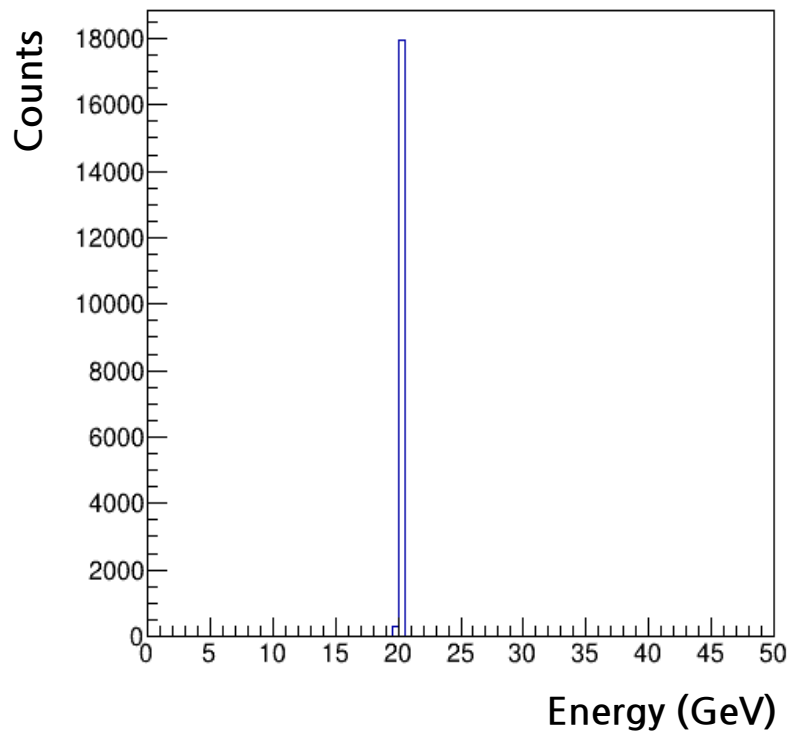


# Performances of the BIC with different numbers of ScFi layers used

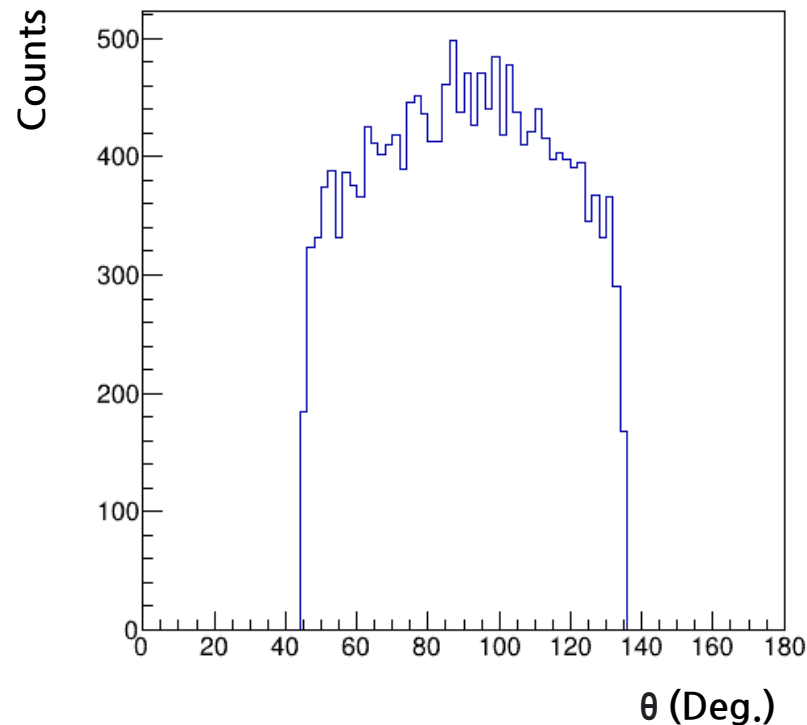
July 02  
Minho Kim

# ROOT files used

Energy

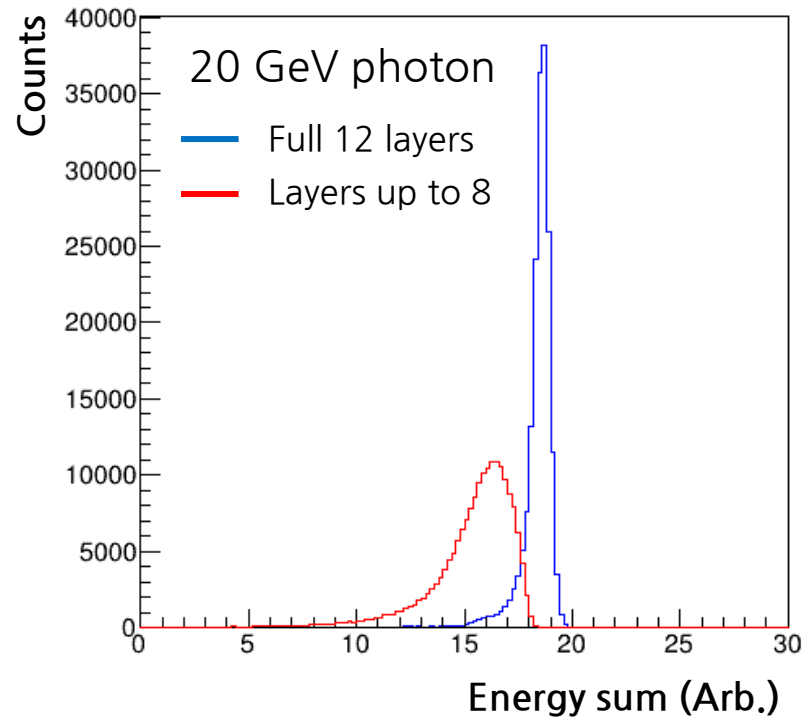


Polar angle



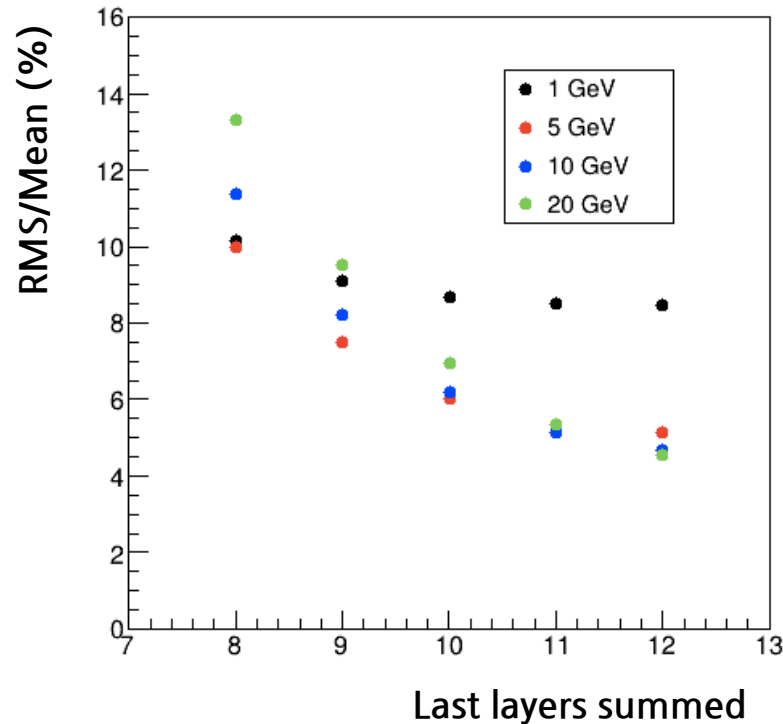
- ROOT files in `S3/eictest/EPIC/RECO/24.04.0/epic_craterlake/SINGLE/gamma/20GeV/45to135deg/` were used.
- The photon energy and polar angle were confirmed using `MCParticles.momentum.x`, `y`, and `z`.

# ScFi energy deposit sum



- The `EcalBarrelScFiRecHits.energy` was summed over the layers.
- RMS/Mean was compared depending on the number of layers summed and photon energy.

# Comparison



- Higher energy photon has steeper slope because of the shower leakage.
- There is no significant difference between 11 and 12 layers.
- Shower leakage for 20 GeV gets non-negligible from 10 layers and 10 GeV from 9 layers.