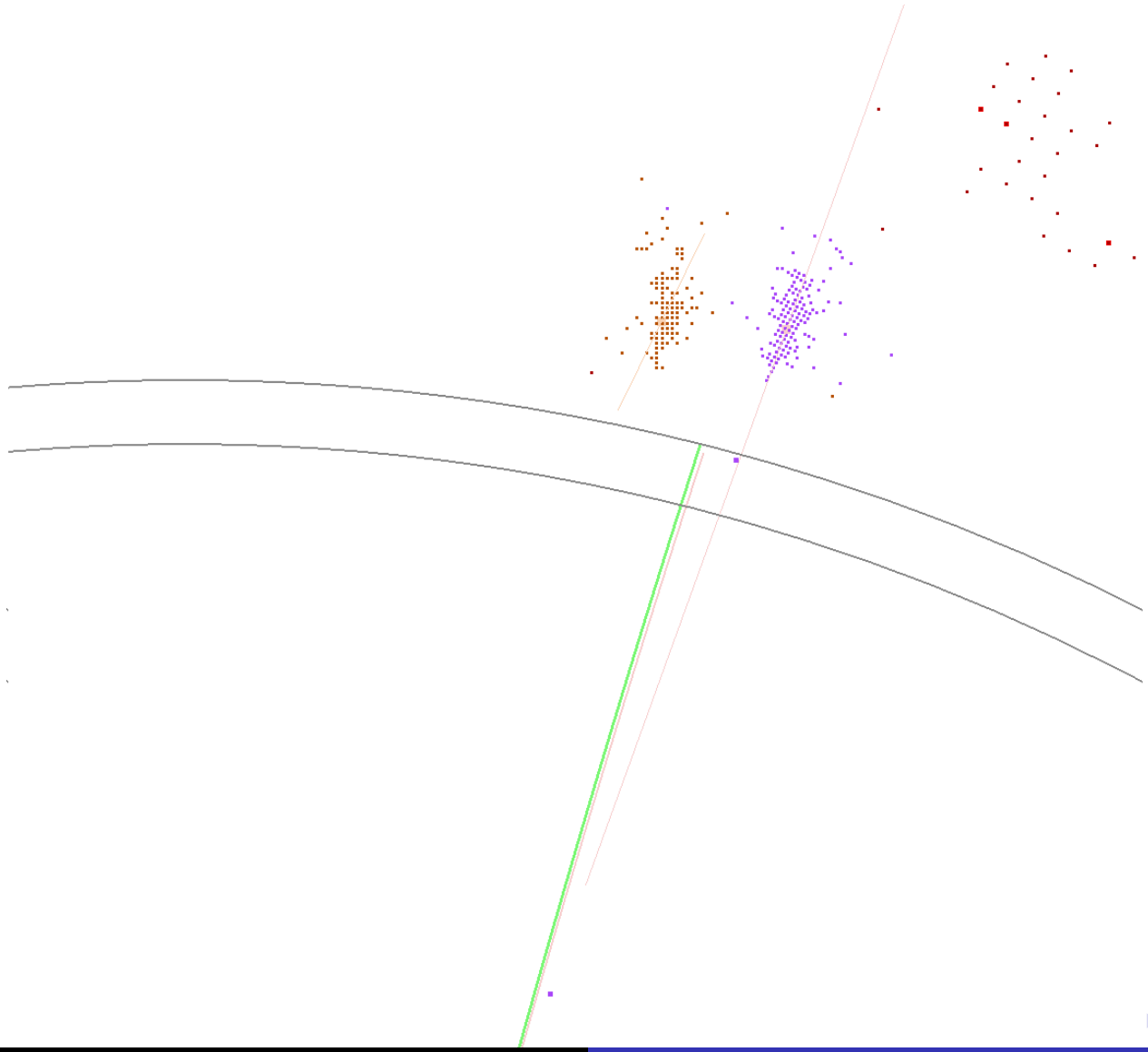
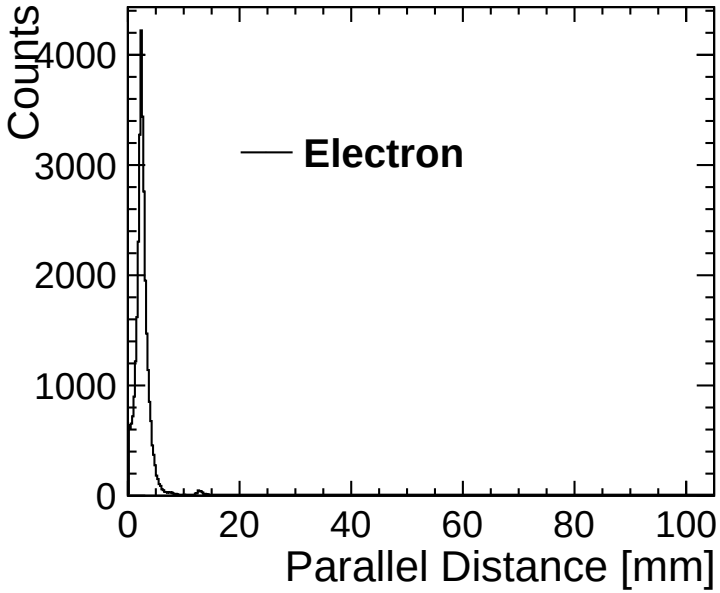
Electron Reconstruction

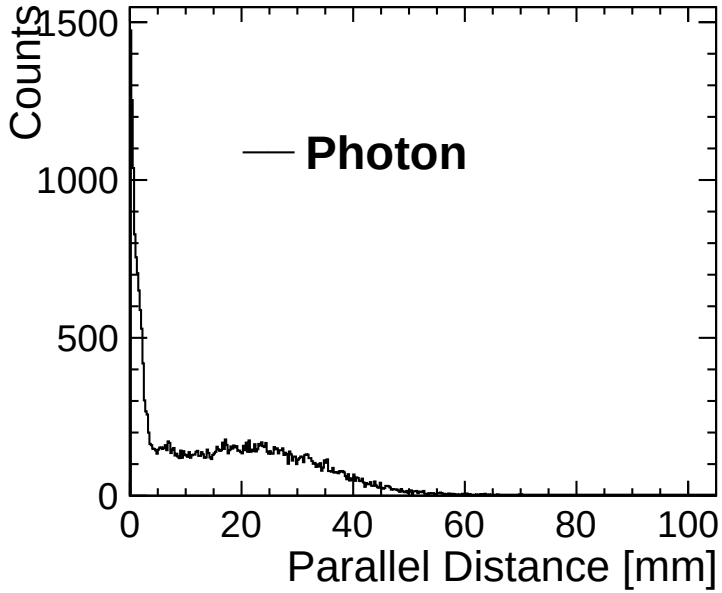


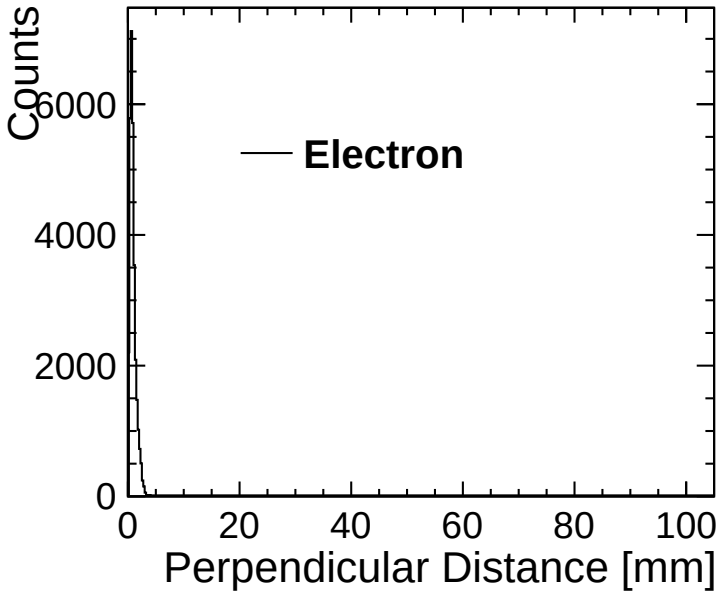
Electron Reconstruction

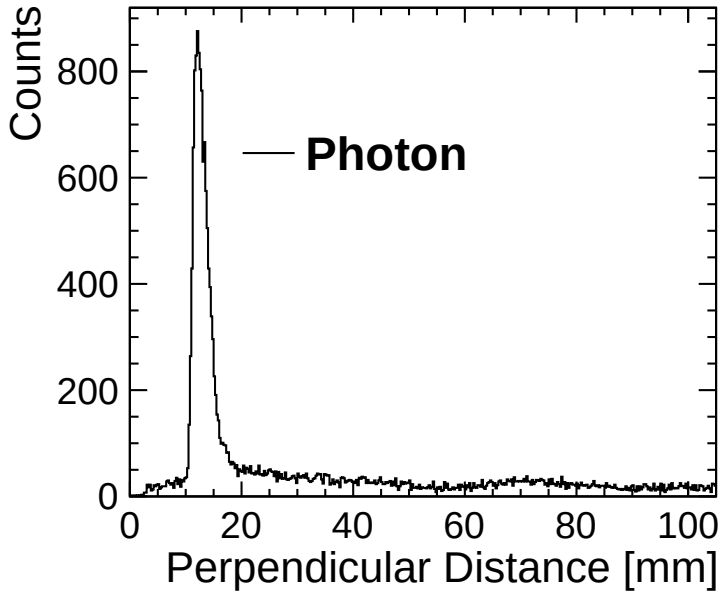
- Investigate track-cluster association done by Pandora to understand low efficiency for low energetic electron
- Pandora calculate 3 variables which are used to decide either track is associated to cluster or not :
  - Opening angle between cluster direction and track state (cos(theta) $>$ 0.0)
  - Parallel distance between cluster and position of track state on ECAL surface (100 mm)
  - Perpendicular distance between cluster and position of track state on ECAL surface (10 mm)
- attempt to calculate these variables and check their distributions for events when electron reconstruction fails

Events with 1 electron and 1 photon reconstructed

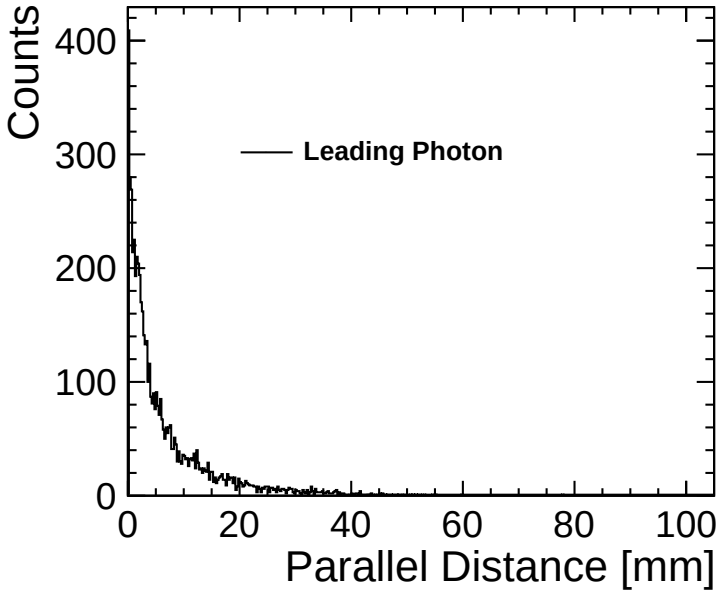


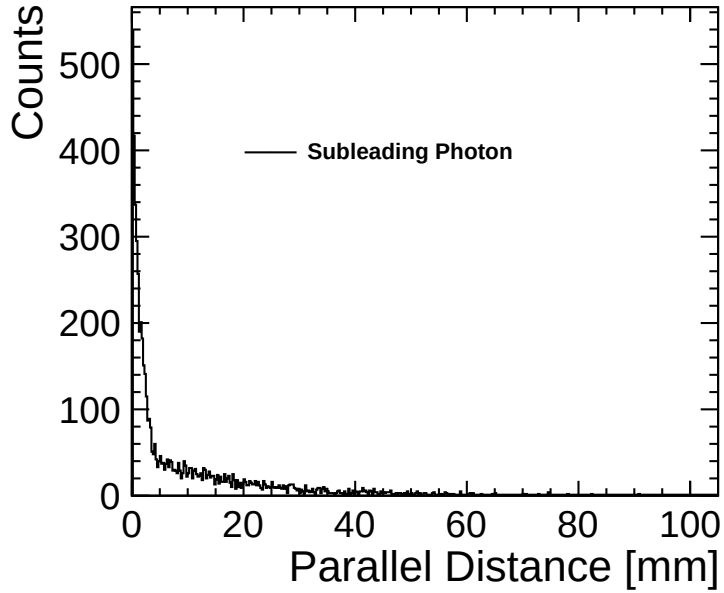


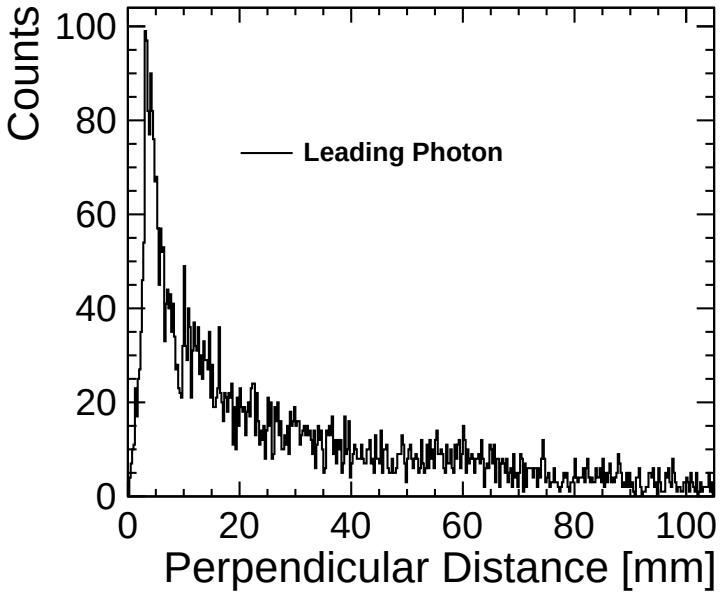


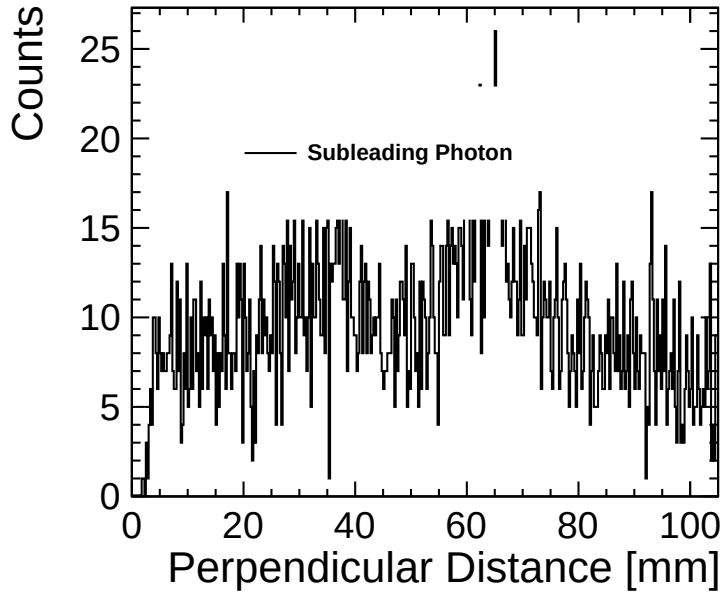


Events with 2 photons reconstructed

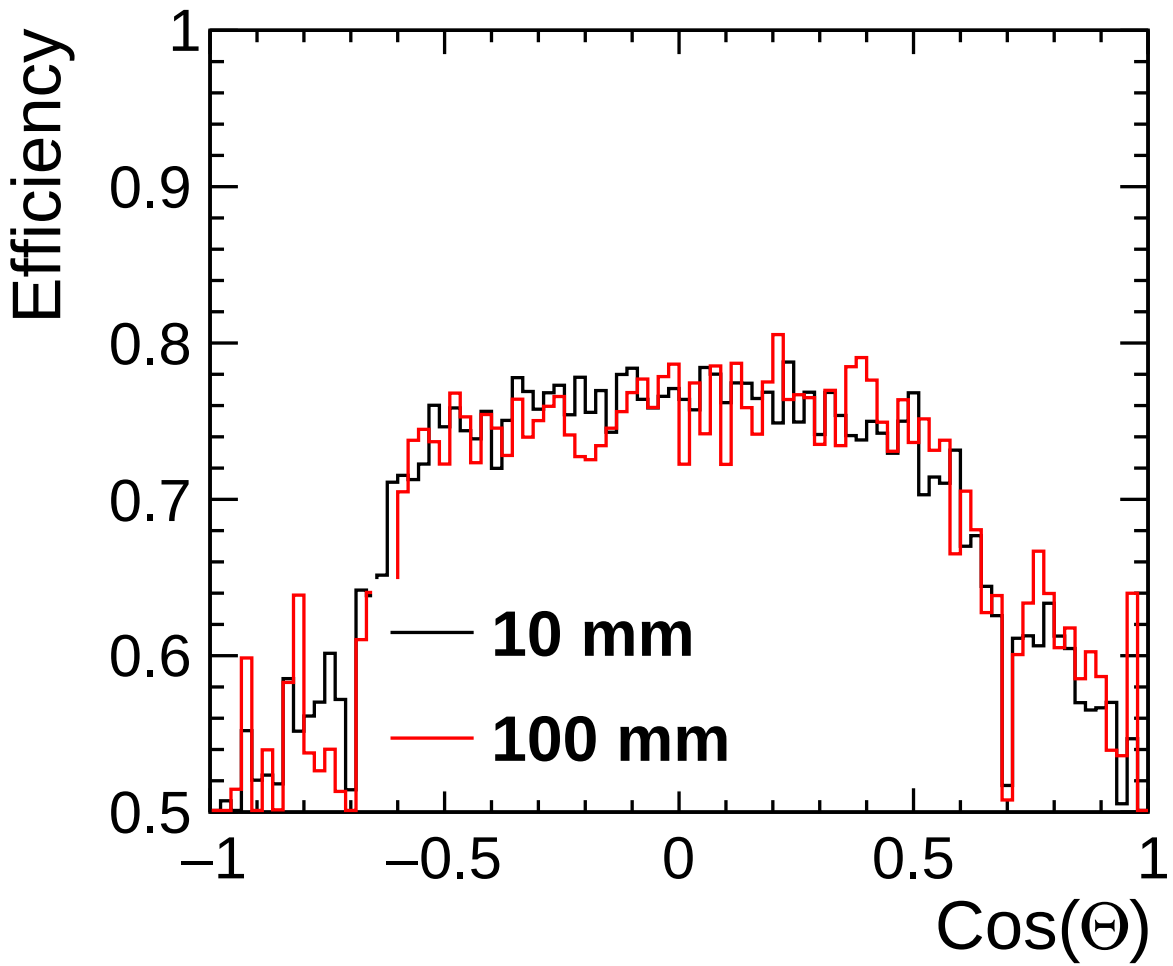








Electron efficiency



- No effect on efficiency from changing cut on perpendicular track-cluster distance