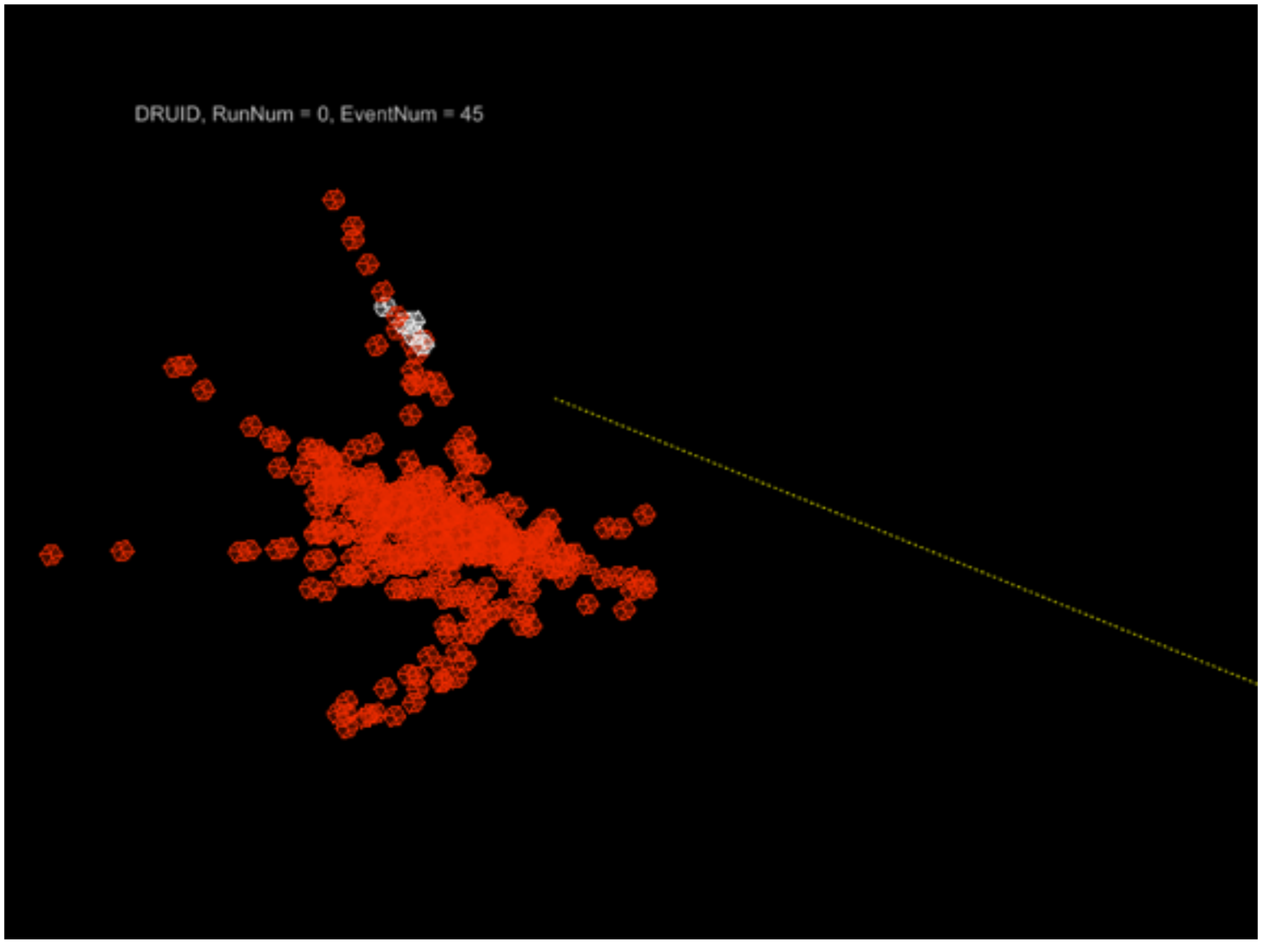
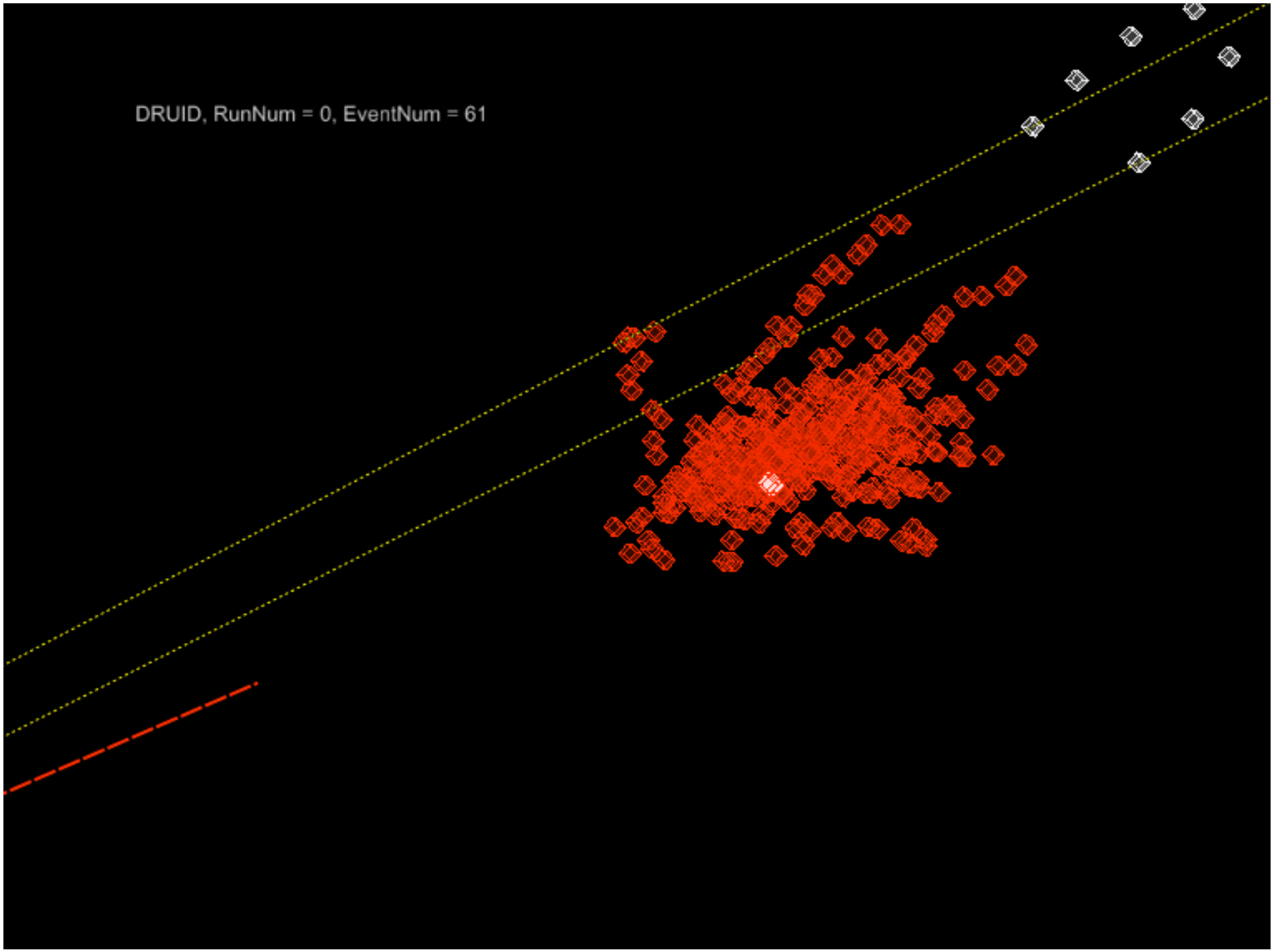
Reconstruction Performance

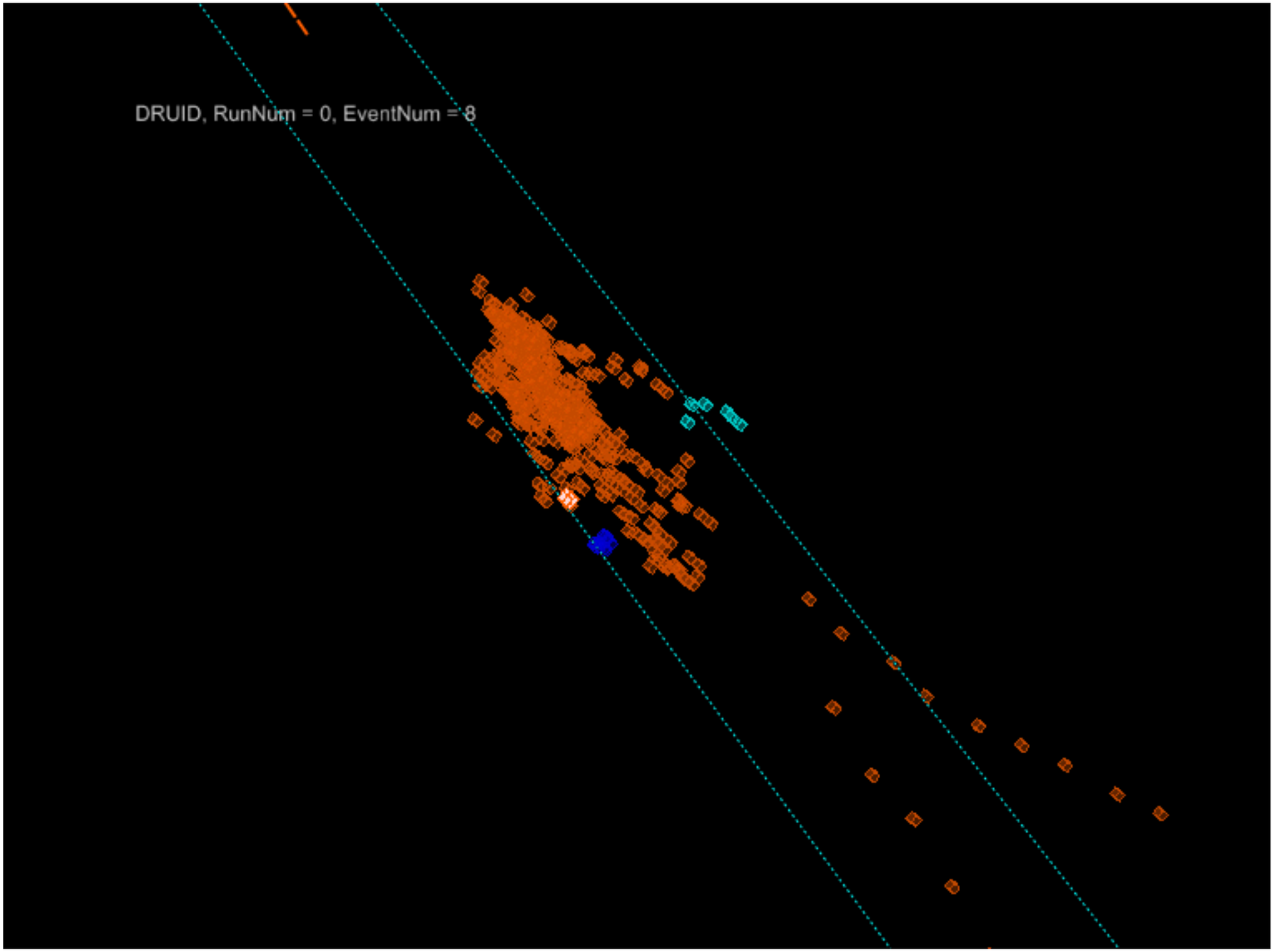
Charged PID

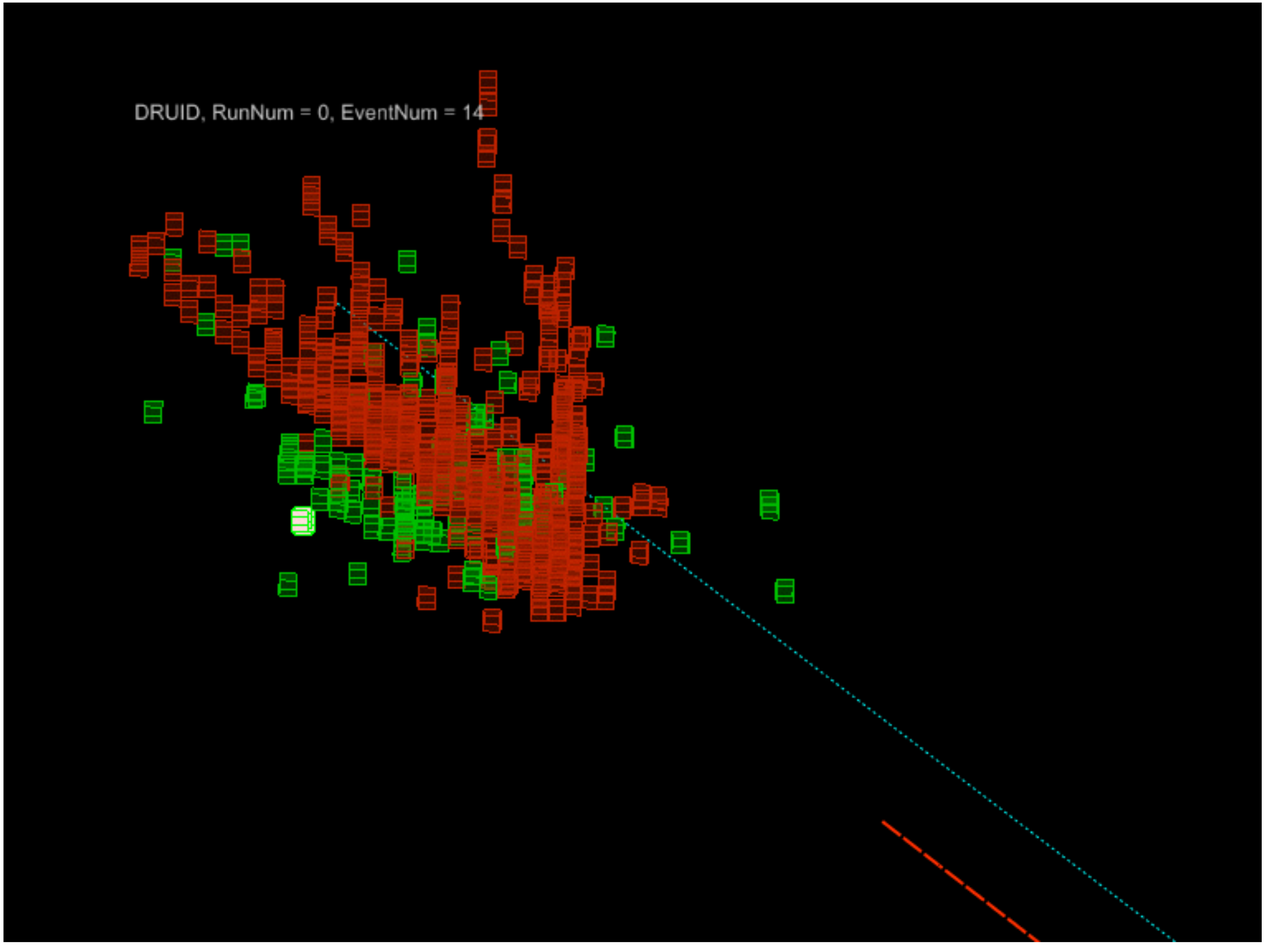
- eff? (20GeV eff~95%)
- /cefs/tmp_storage/binsong/data/Simu/Pion/HighEn/Simu_Pion_20GeV_1.slcio




DRUID, RunNum = 0, EventNum = 61

retry with binding's file: /cefs/tmp_storage/binsong/data/Reco/randSeed/All_detectors/Pion/Reco_20GeV_1.slcio
evt: 8, 14,24, 30, 94




DRUID, RunNum = 0, EventNum = 14

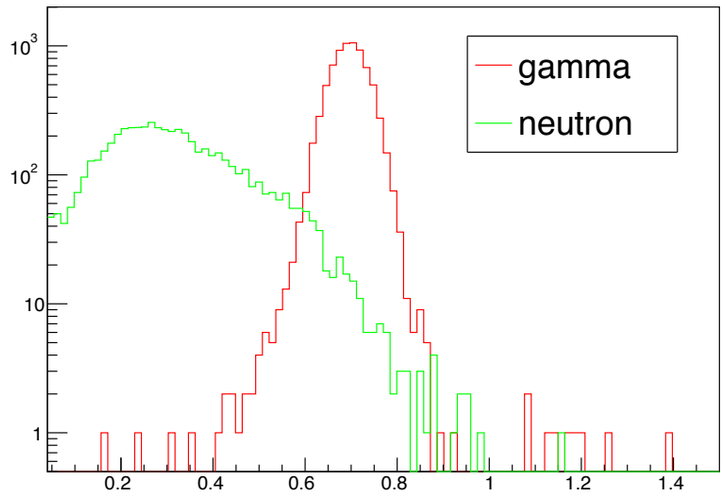
Bushes merging

- active function MakeMergedBush
- cuts:
    - DisSeedBush < TreeSeedDisThreshold
    - !(CluEnA > 3 && CluEnB > 3 && DisSurA < 4 && DisSurB < 4)
        - (SizeA < 8 || SizeB < 8) && NJoints > 2
        - (CluEnA/CluEnB > 5 || CluEnB/CluEnA > 5 || CluEnA < 1 || CluEnB < 1) && (NJoints > 0.2 * SizeA || NJoints > 0.2 * SizeB)
        - (NJoints > 25)

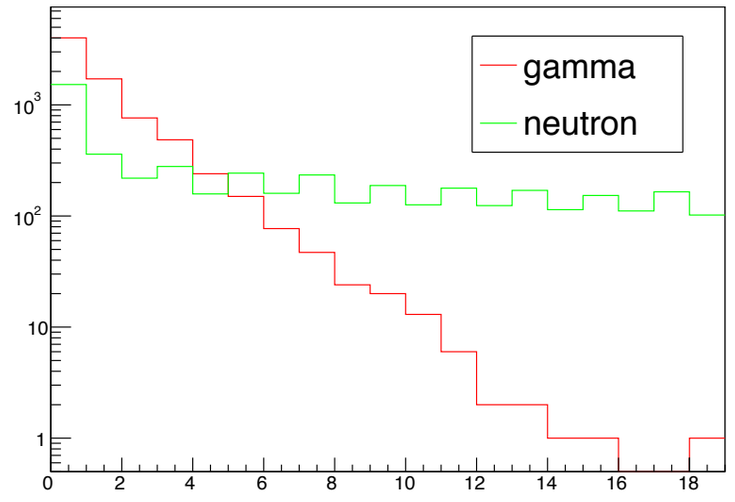
EMCore tagging

- Tagging EM EcalBushes and protect them —purity
- before: CluDepth < 20 && CluEnergy > 0.3
- new: developing function EMBushTag()
- var: CluFD, nLECAL, MaxLength, lay

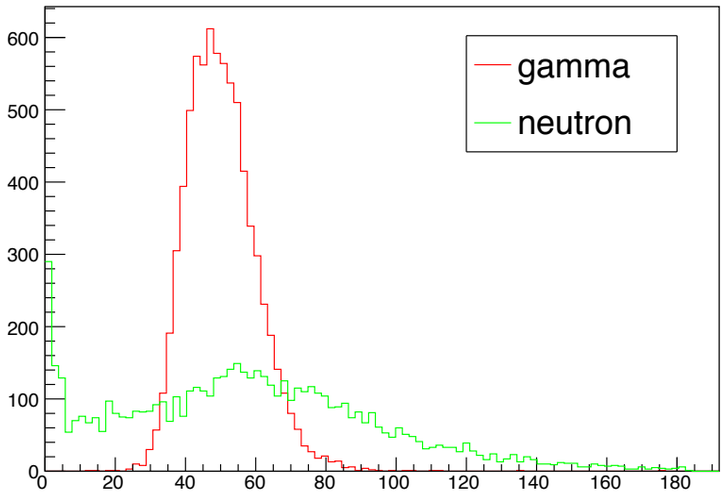
CluFD {Index==0&&delendcap&&decayed==0&&delbeamcal}



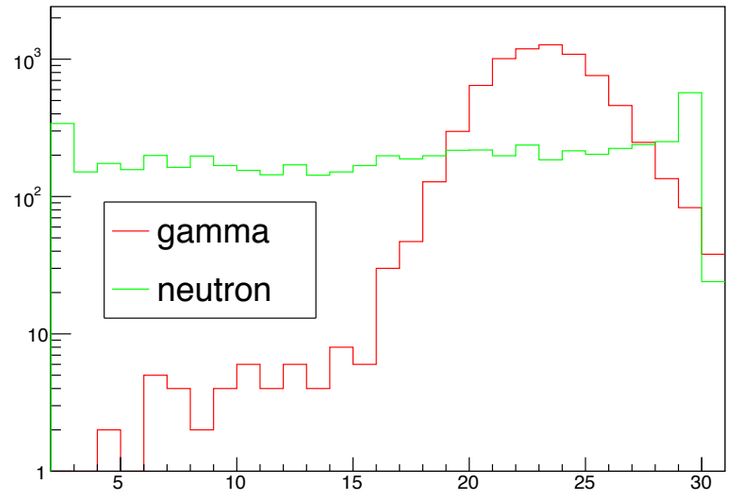
lay {Index==0&&delendcap&&decayed==0&&delbeamcal}



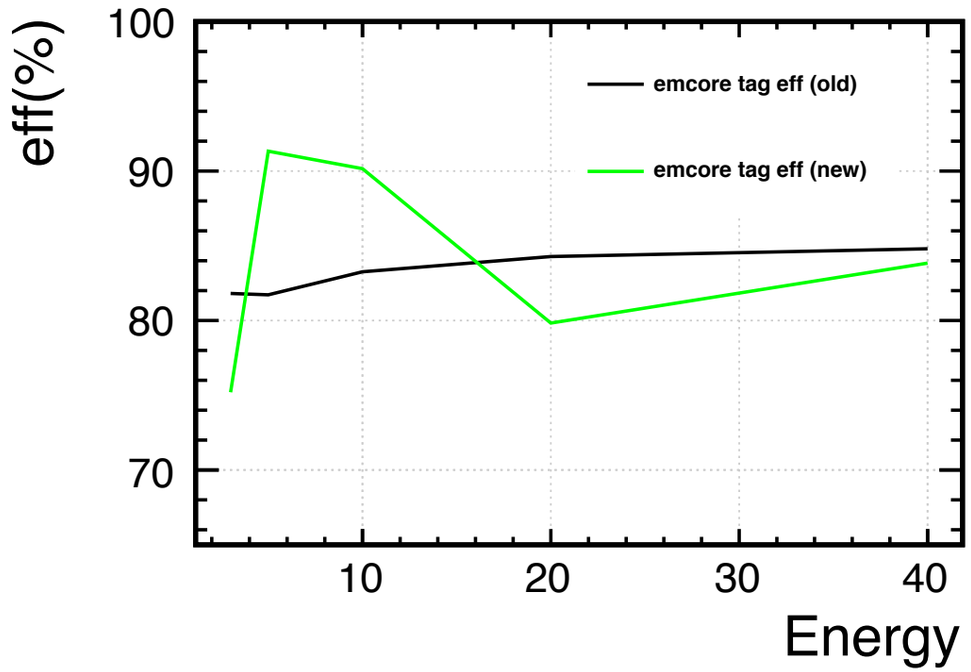
MaxLength {Index==0&&delendcap&&decayed==0&&delbeamcal}

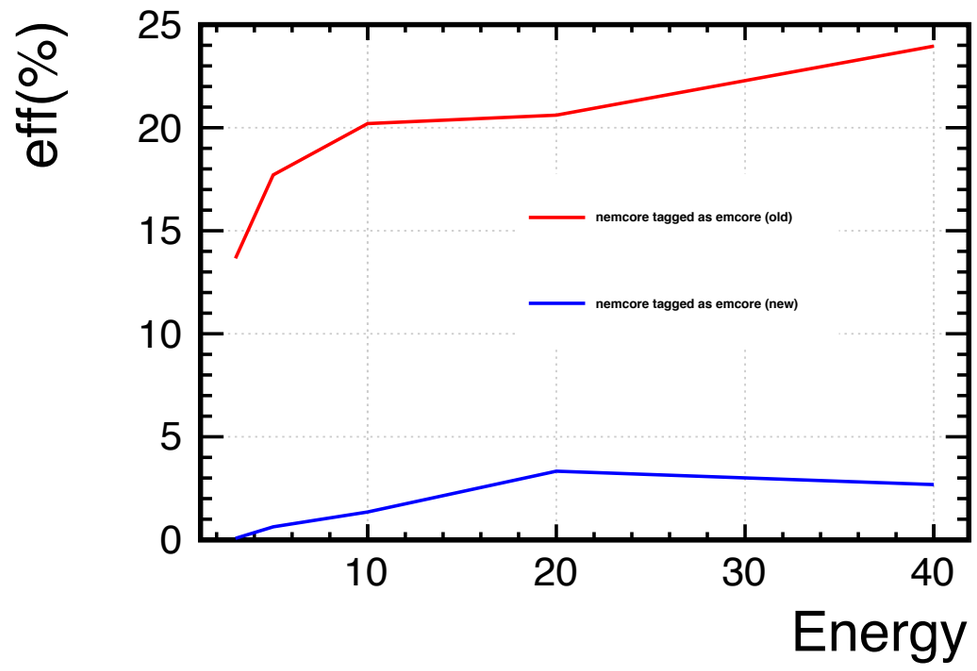


nLECAL {Index==0&&delendcap&&decayed==0&&delbeamcal}



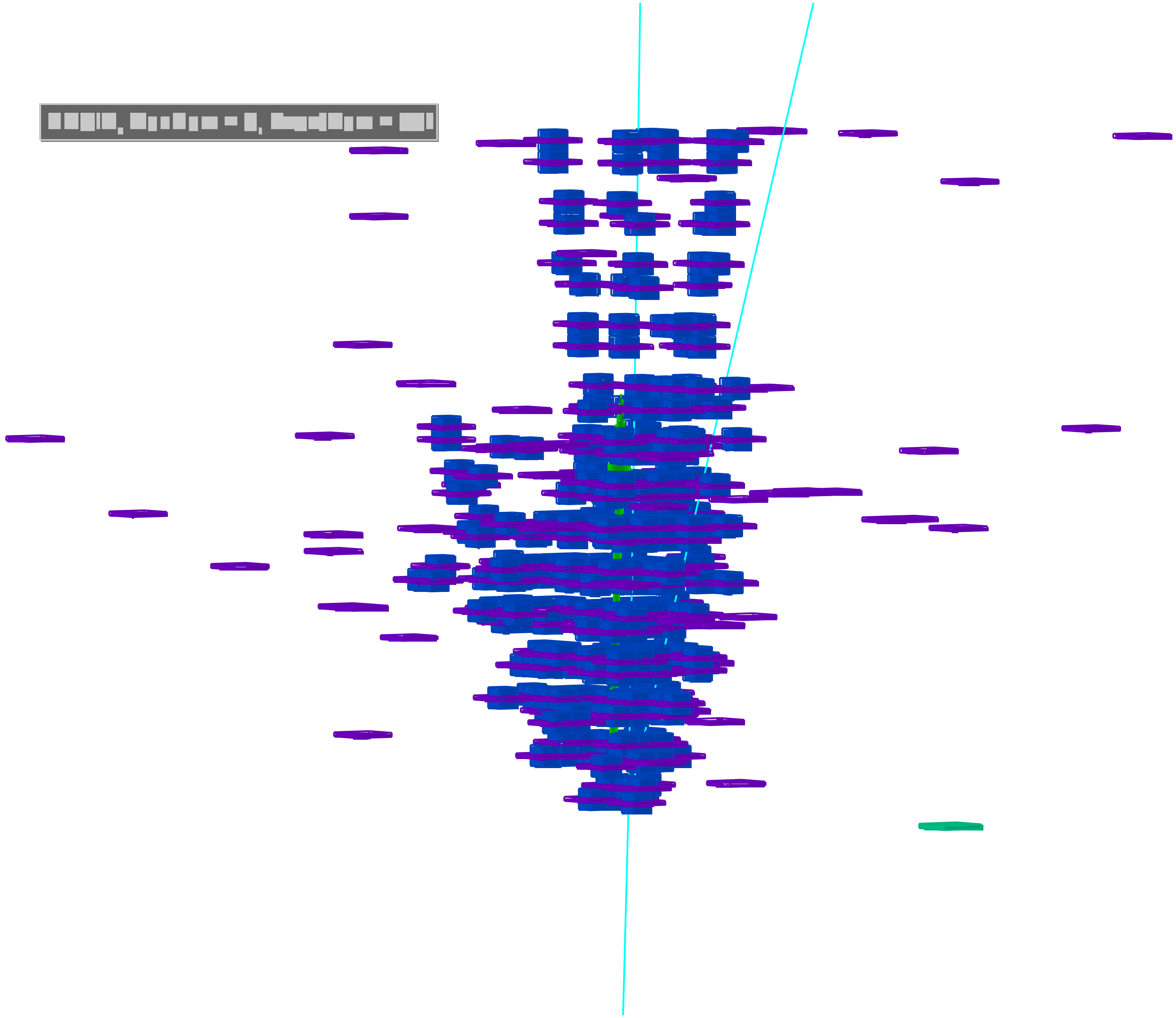
EMCore Tagging

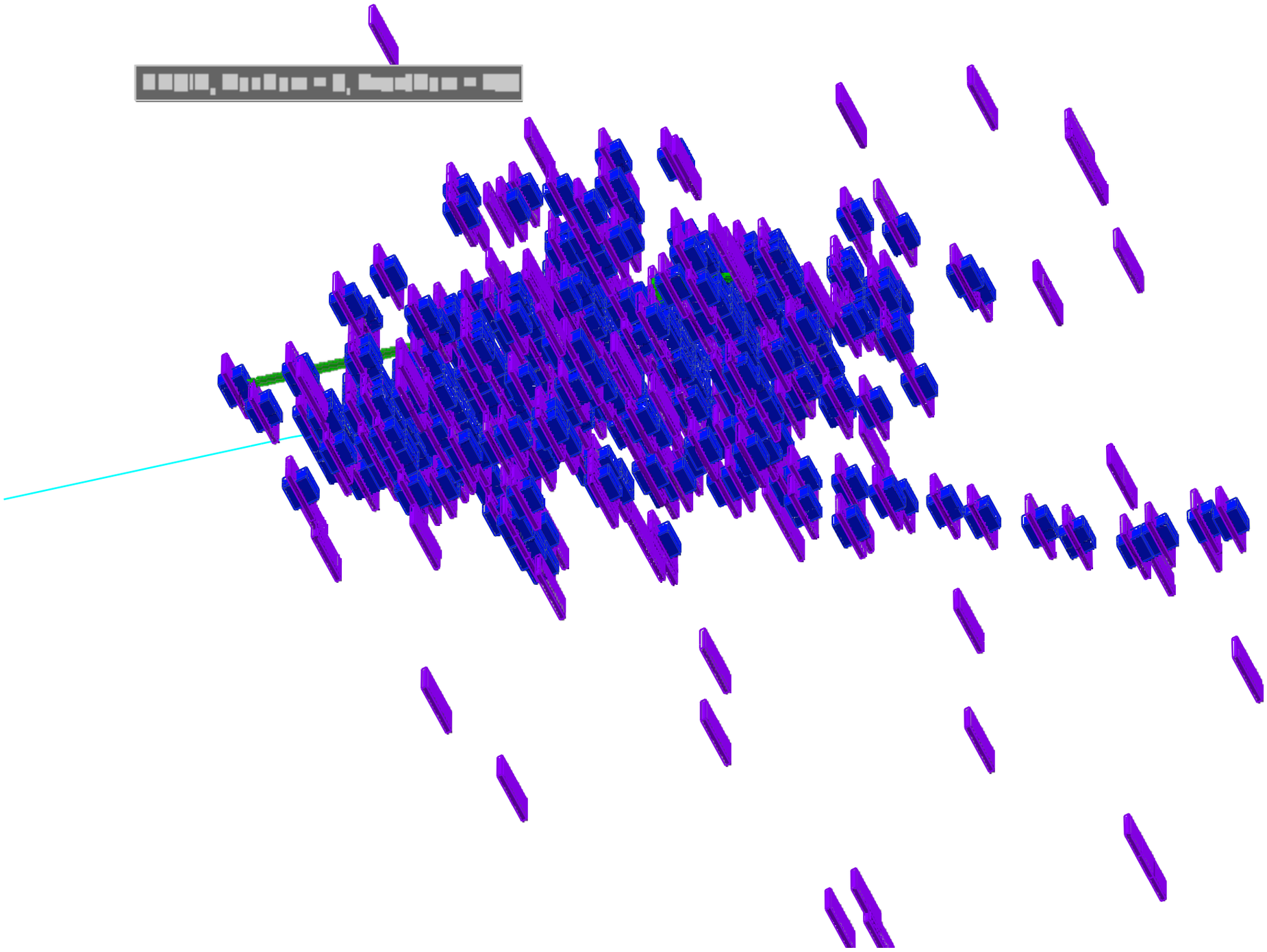


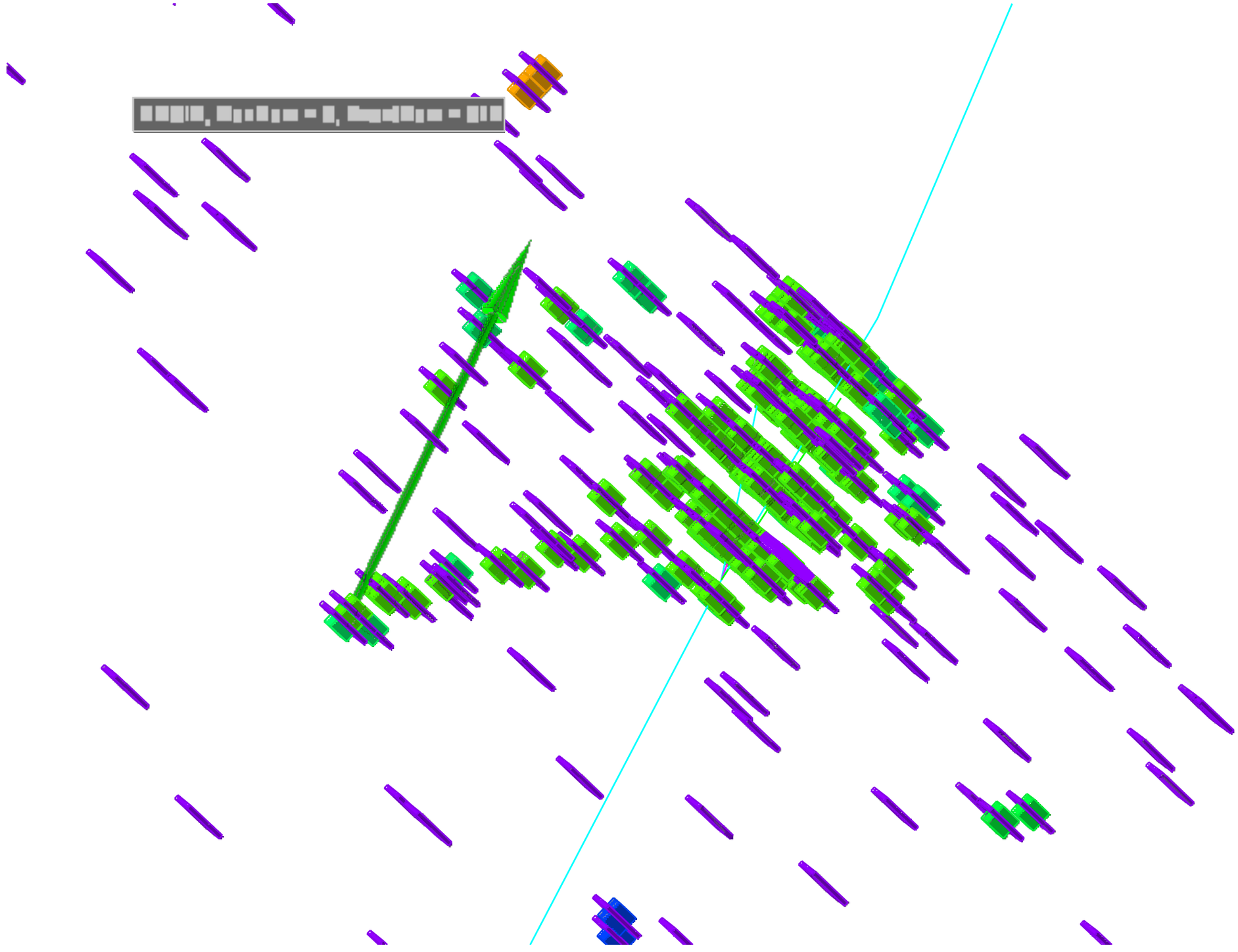


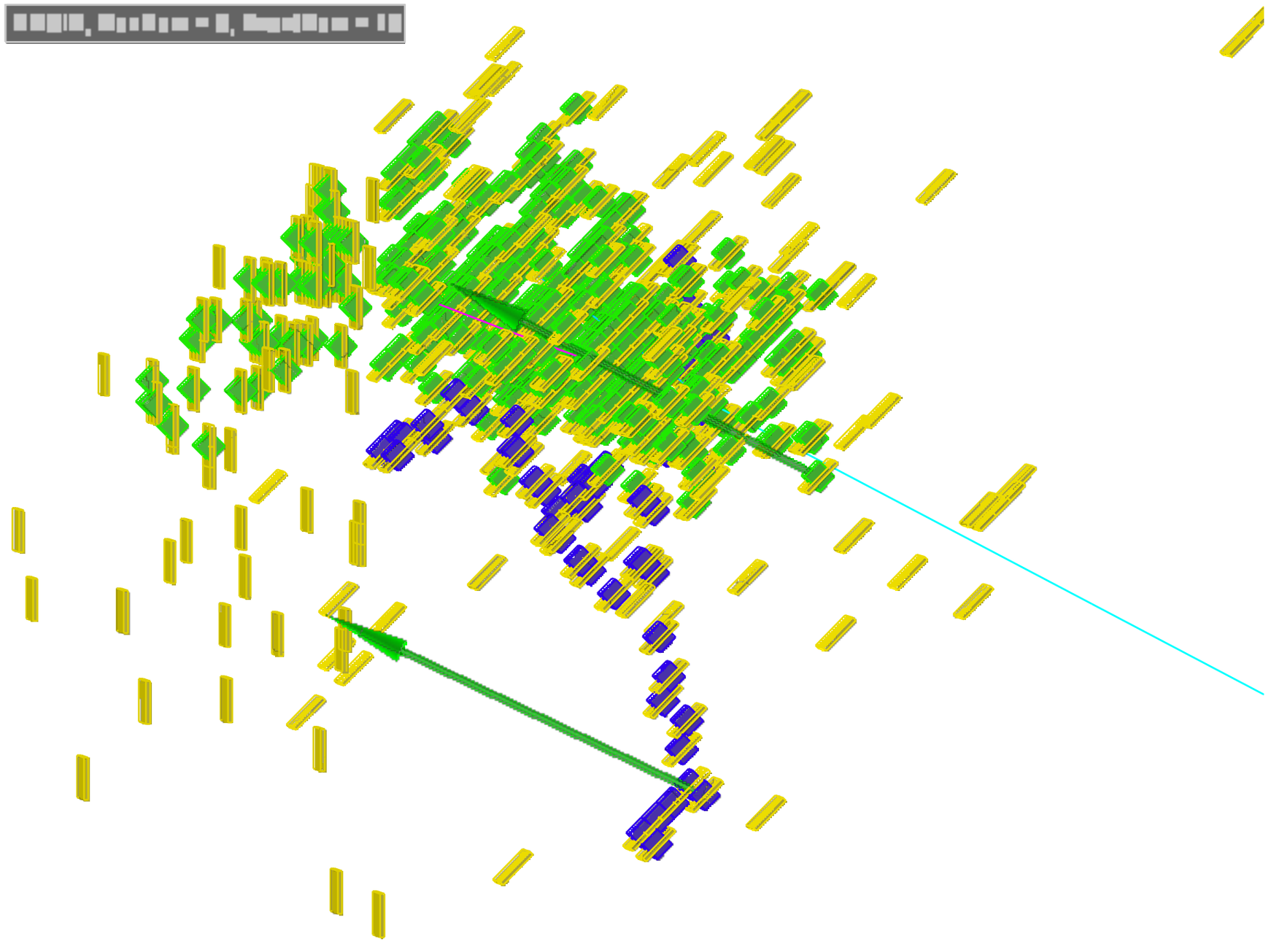
Mistagging

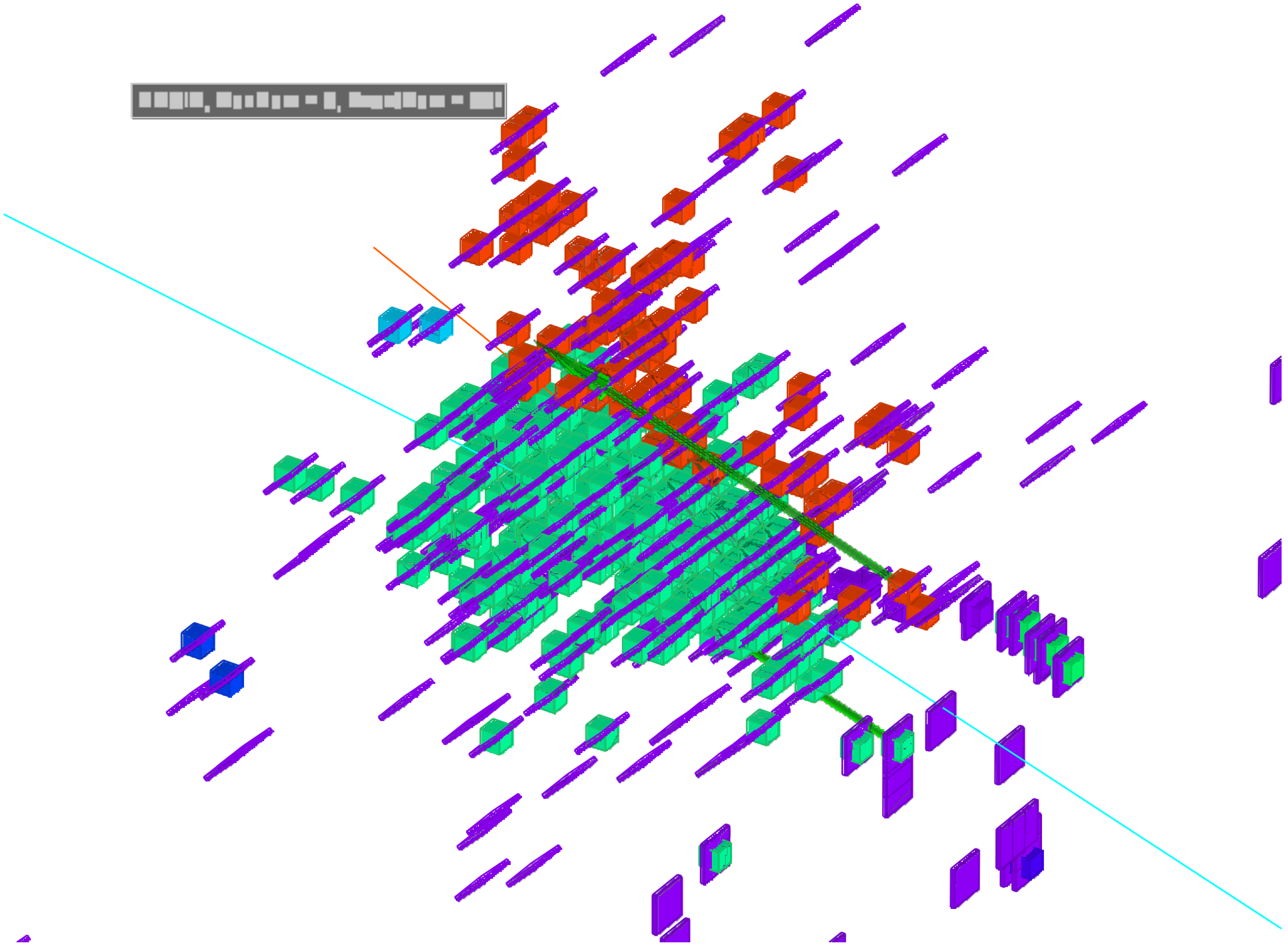
- branch length information absent
- back scattering
- merging
- hit cluster efficiency
- no idea…

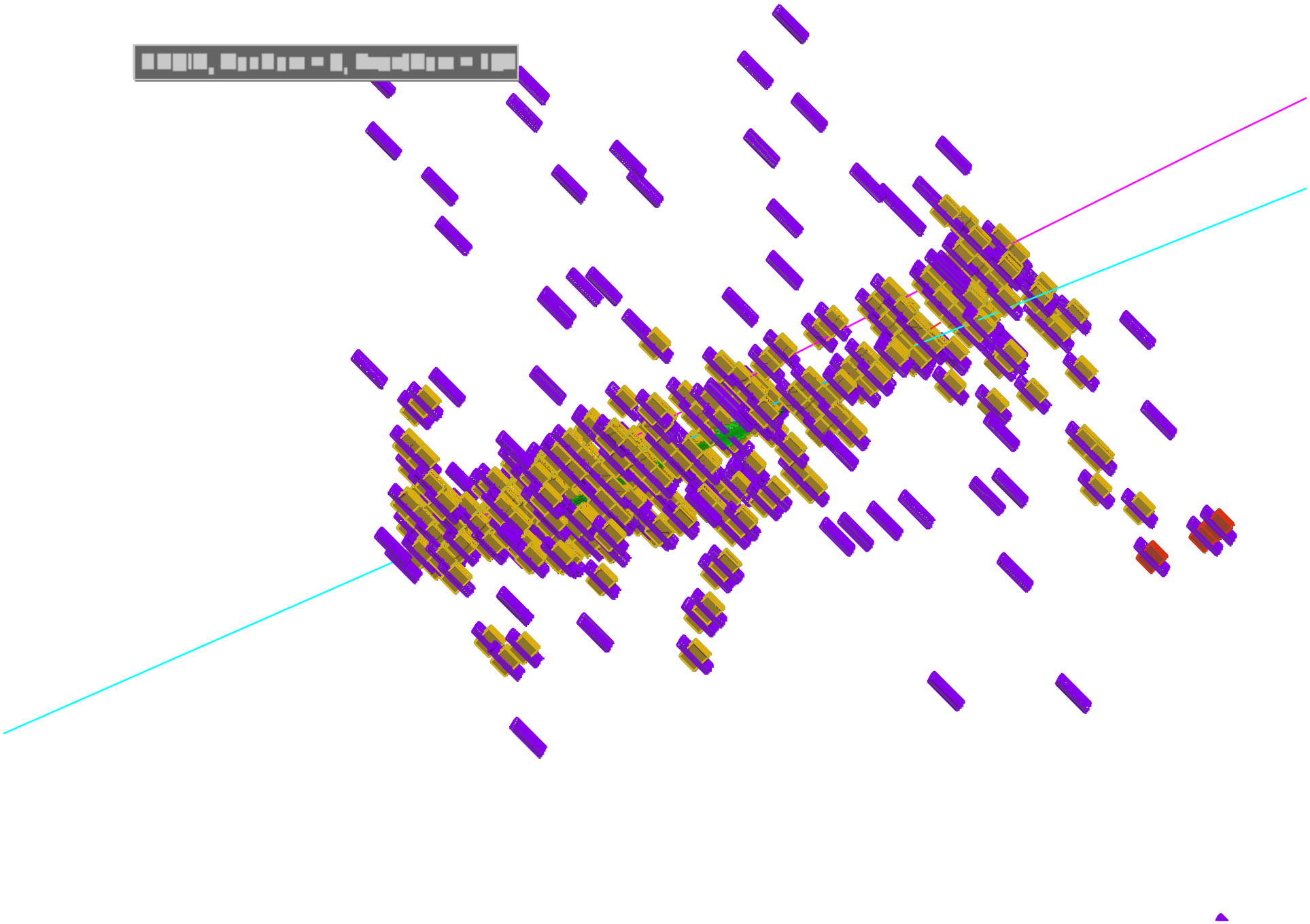


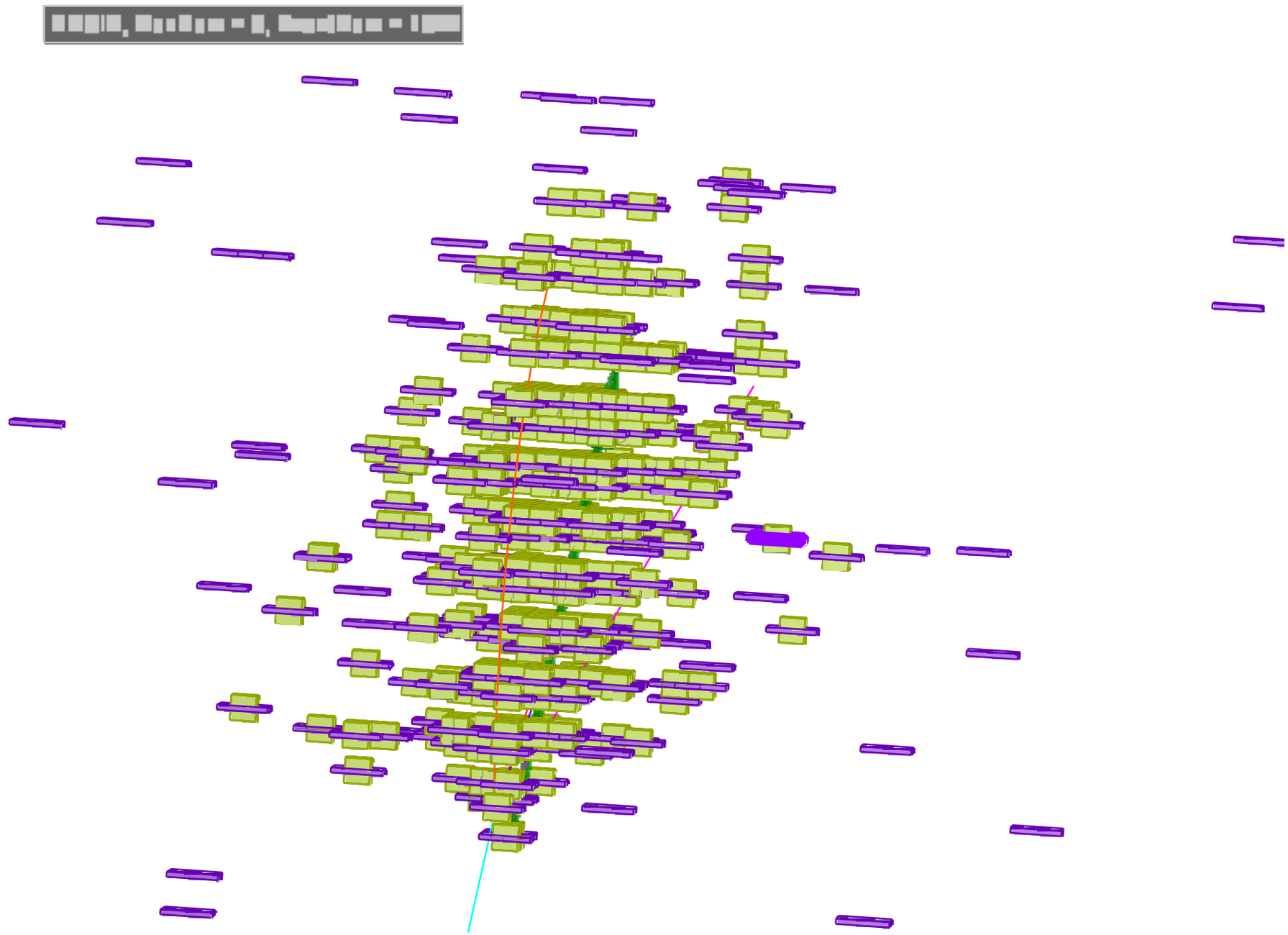


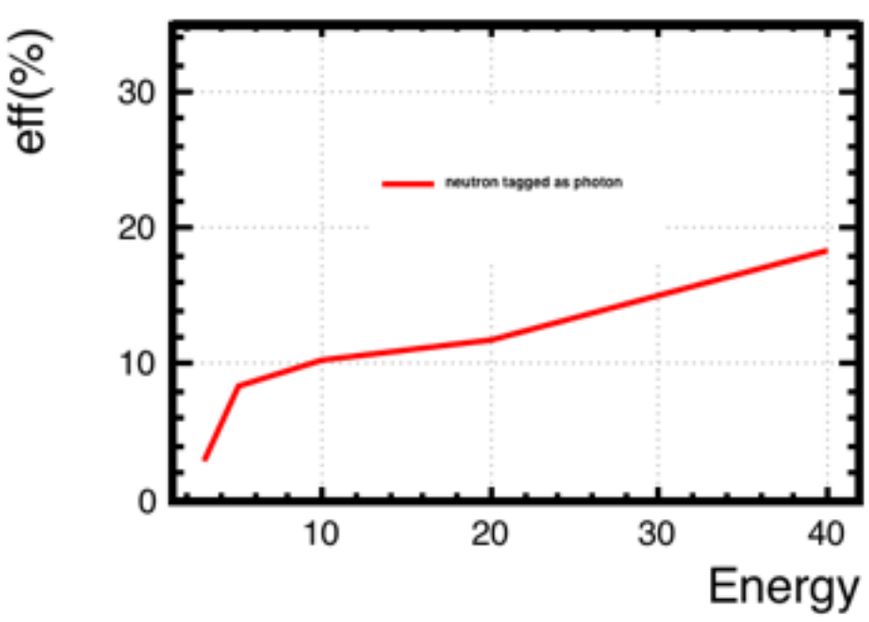
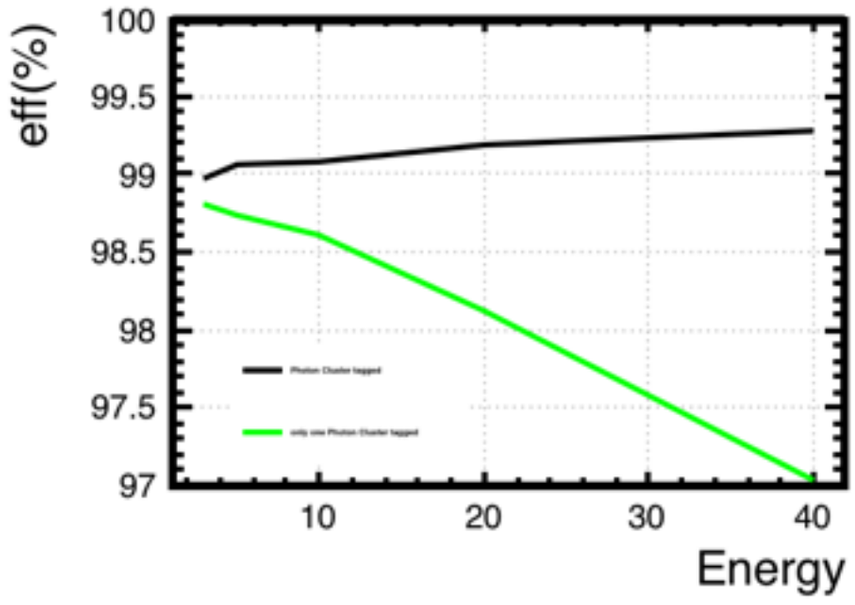










ReconstructedParticle cluster tagging

- improving PhotonTag()