

Status update

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E/Gamma miniPOG status

2017 pp	Photon	Electron
Identification	Preliminary	Approved
Energy(scale/smearing) correction	Preliminary	Approved
Tag-and-probe scale factor	Setup	Setup

2018 PbPb	Photon	Electron
Identification	Preliminary	Approved
Energy(scale/smearing) correction	Preliminary	Approved
Tag-and-probe scale factor	Setup	Approved

Not holding up any current analyses.

Current manpower : Pin-Chun(MIT), Tzu-An(MIT), Soohwan(KU), Seyoung(KU), Jaebeom(KU), etc.

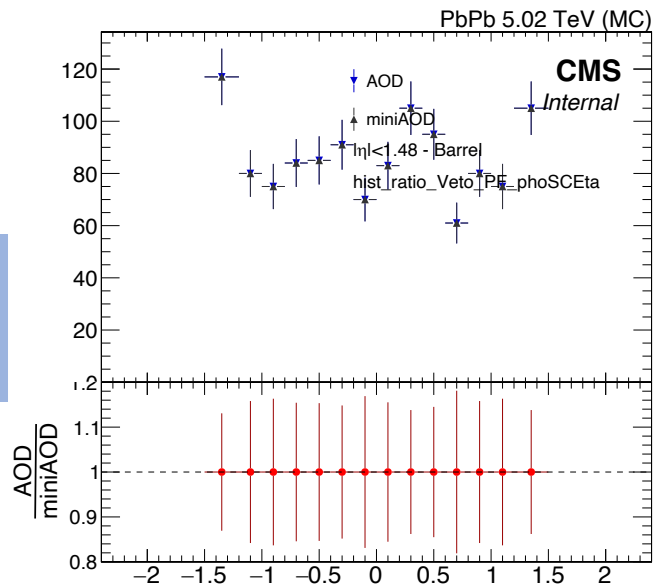
Photon AOD & miniAOD

- AOD
 - Release : 10_3_X
/QCDPhoton_pThat-30_TuneCP5_HydjetDrumMB_5p02TeV_Pythia8/HINPbPbAutumn18DR-mva98_103X_upgrade2018_realistic_HI_v11-v1/AODSIM
- Mini-AOD
 - Release : 11_2_X
 - Produced from AOD results above

Applied cuts

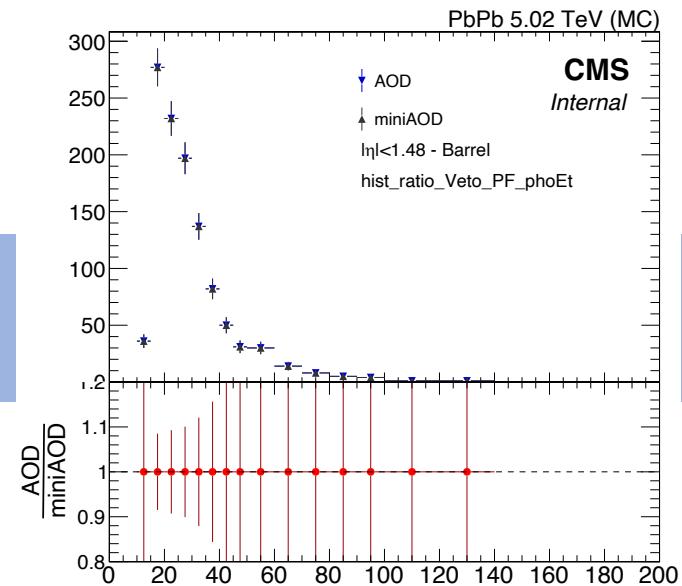
- Preselection
 - Spike rejection
 - $dR < 0.1$
- Identification cut
 - PF-based summed isolation
 - H/E
 - $\sigma_{\eta\eta}$
 - **phoPFIso03** = pfclso3pTgt2p0subUEec + pfplso3subUEec + pfnlso3subUEec
 - Detector-based summed isolation
 - H/E
 - $\sigma_{\eta\eta}$
 - **phoIso03** = pho_ecalClusterIsoR3 + pho_hcalRechitIsoR3 + pho_trackIsoR3PtCut20

PF-based cut: Veto Et, SC Eta

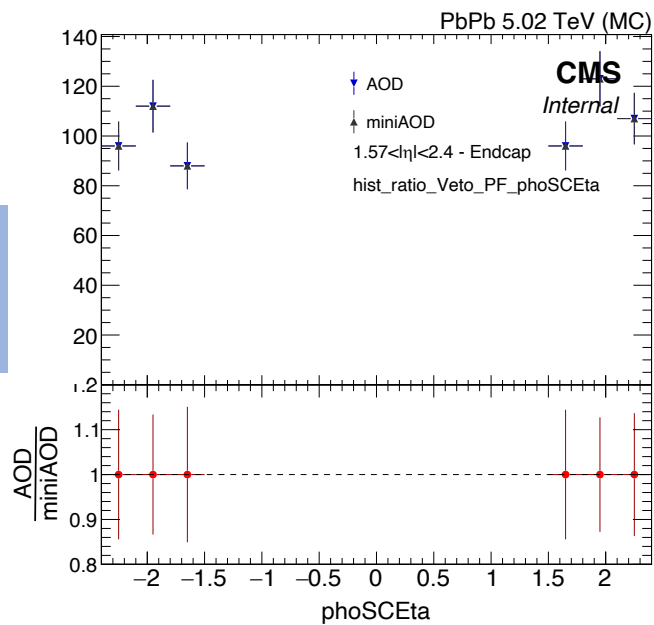


phoSCEta

Barrel

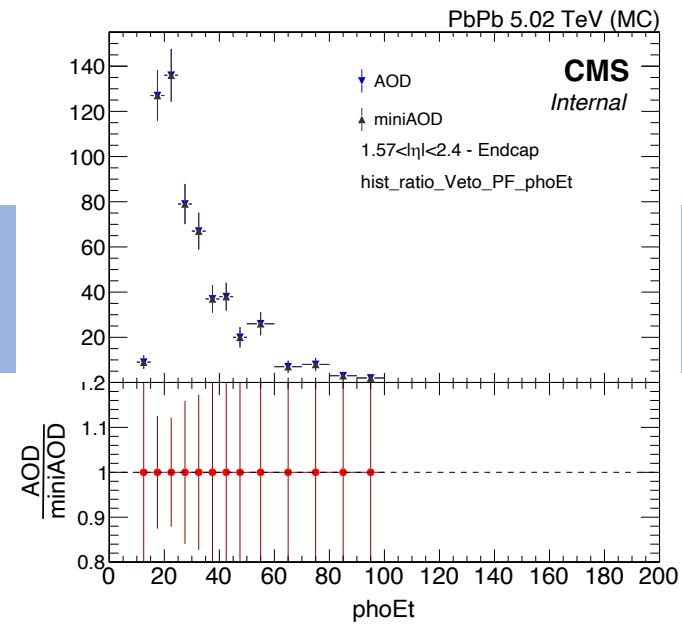


phoEt



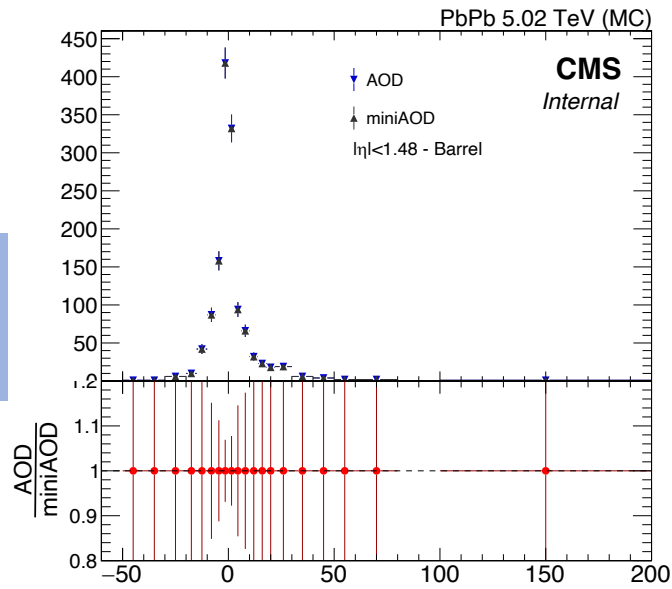
phoSCEta

Endcap



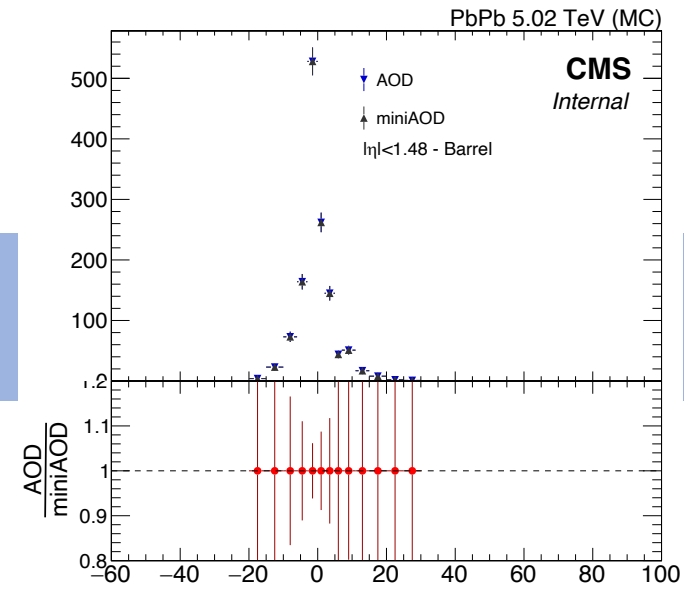
phoEt

Isolation variables w/o cuts

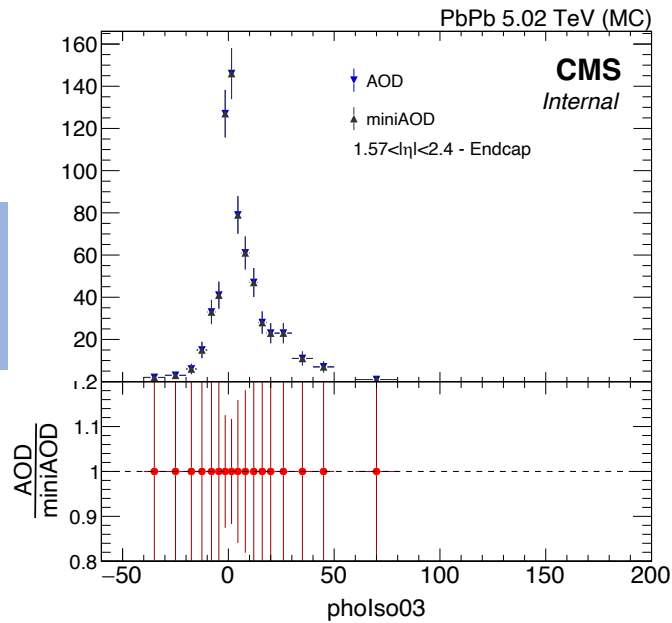


Barrel

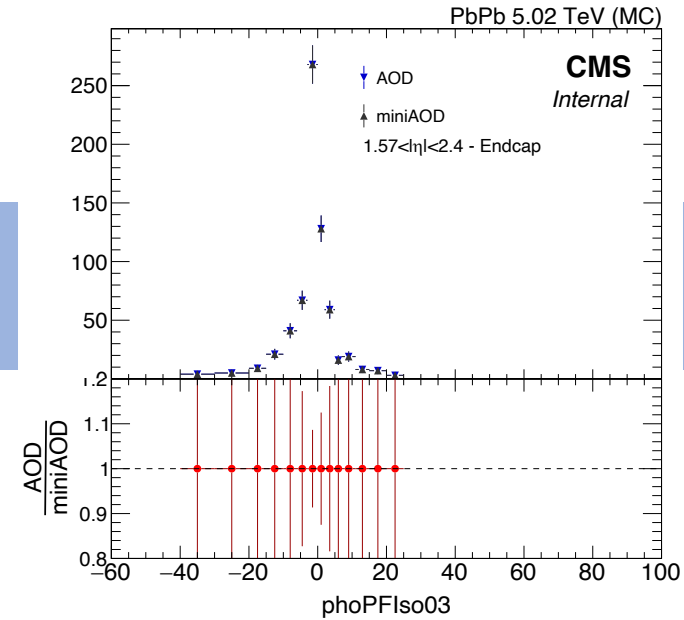
Det-based



PF-based



Endcap



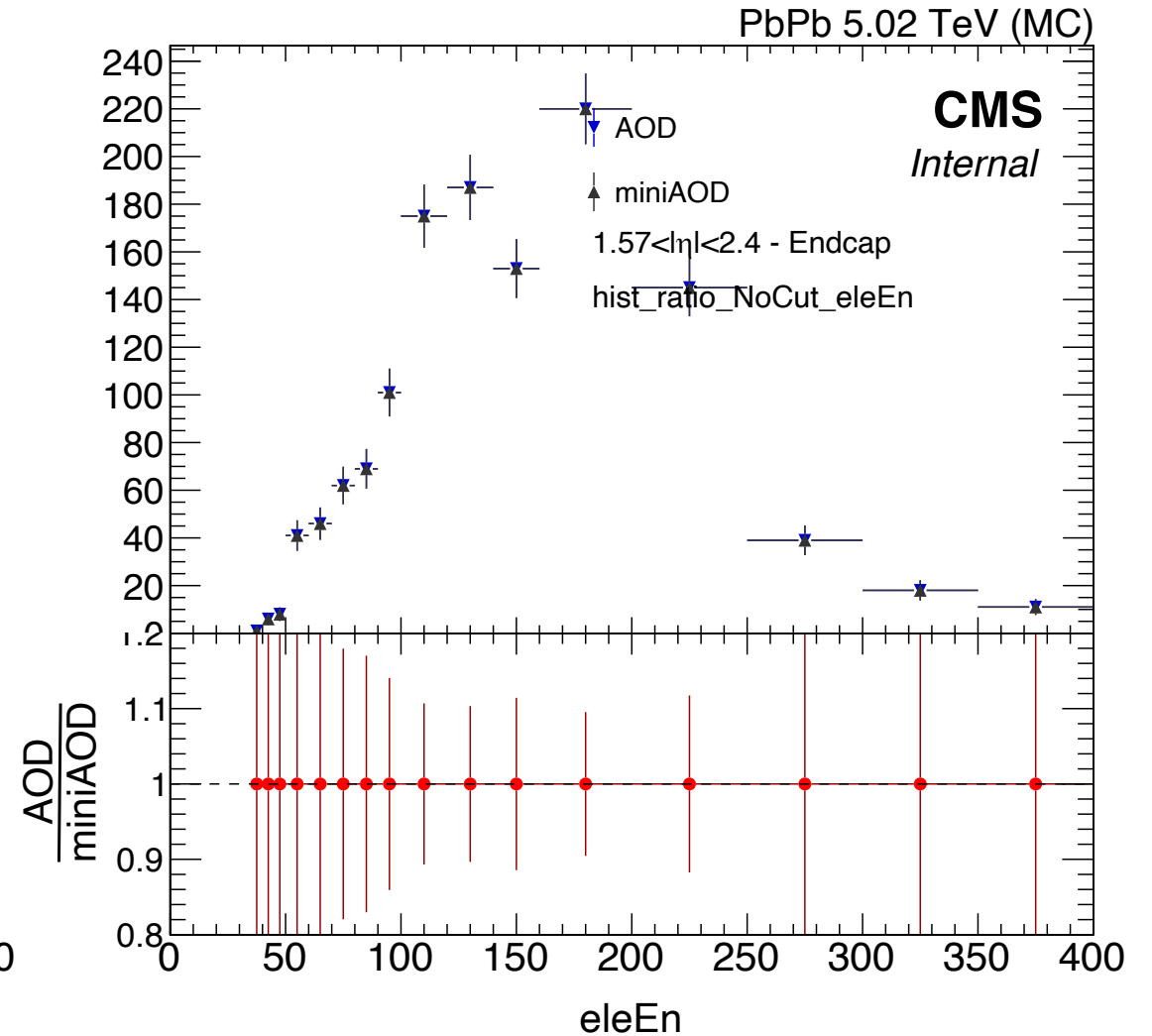
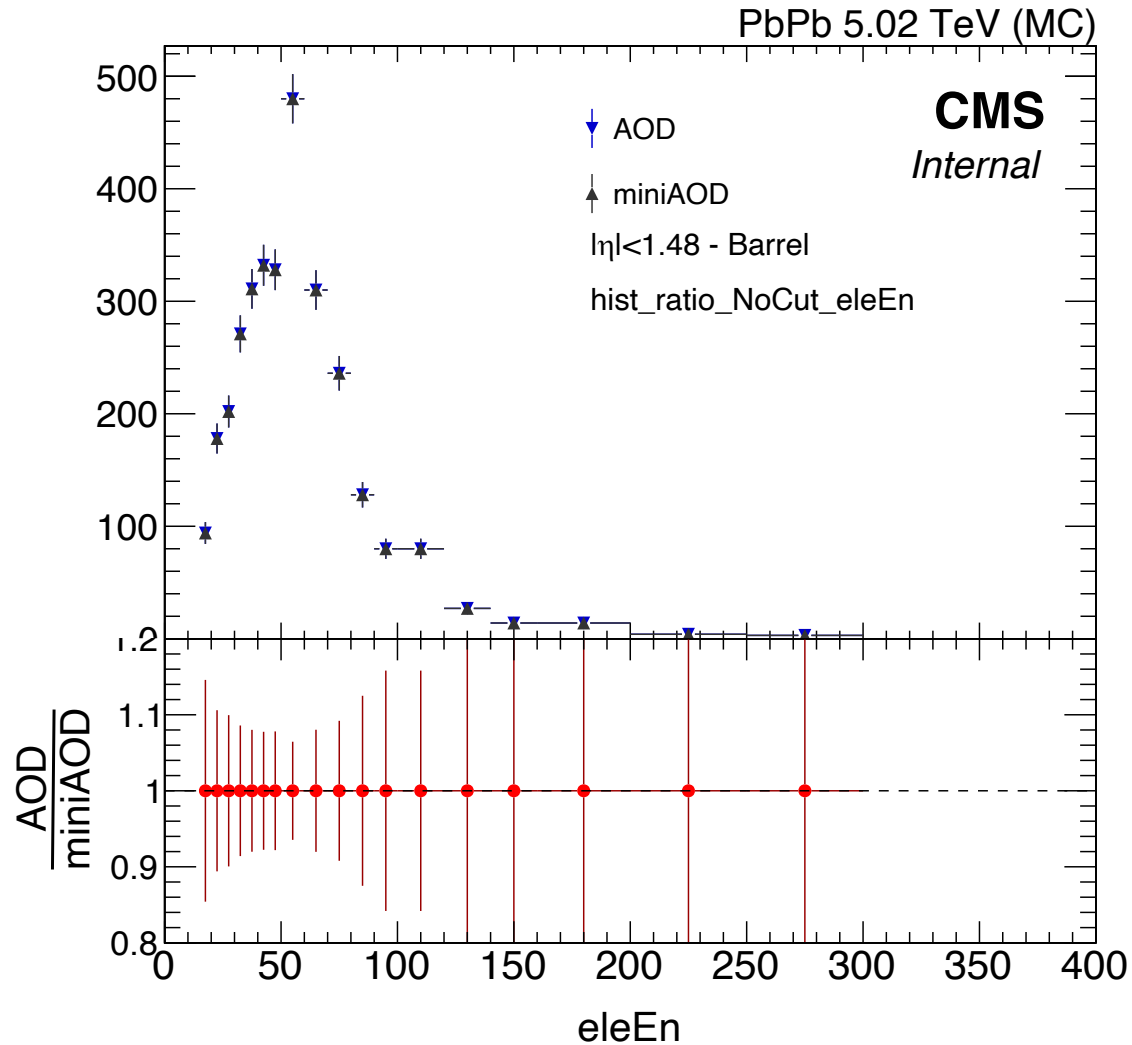
Electron AOD & miniAOD

- AOD
 - Release : 10_3_X
 - DataSet : /DYJetsToLL_MLL-50_TuneCP5_HydjetDrumMB_5p02TeV-amcatnloFFFXpythia8/HINPbPbAutumn18DR-mva98_103X_upgrade2018_realistic_HI_v11-v1/ AODSIM
- miniAOD
 - Release : 11_2_X
 - Input dataSet : MC AOD as input
 - ~10k events produced

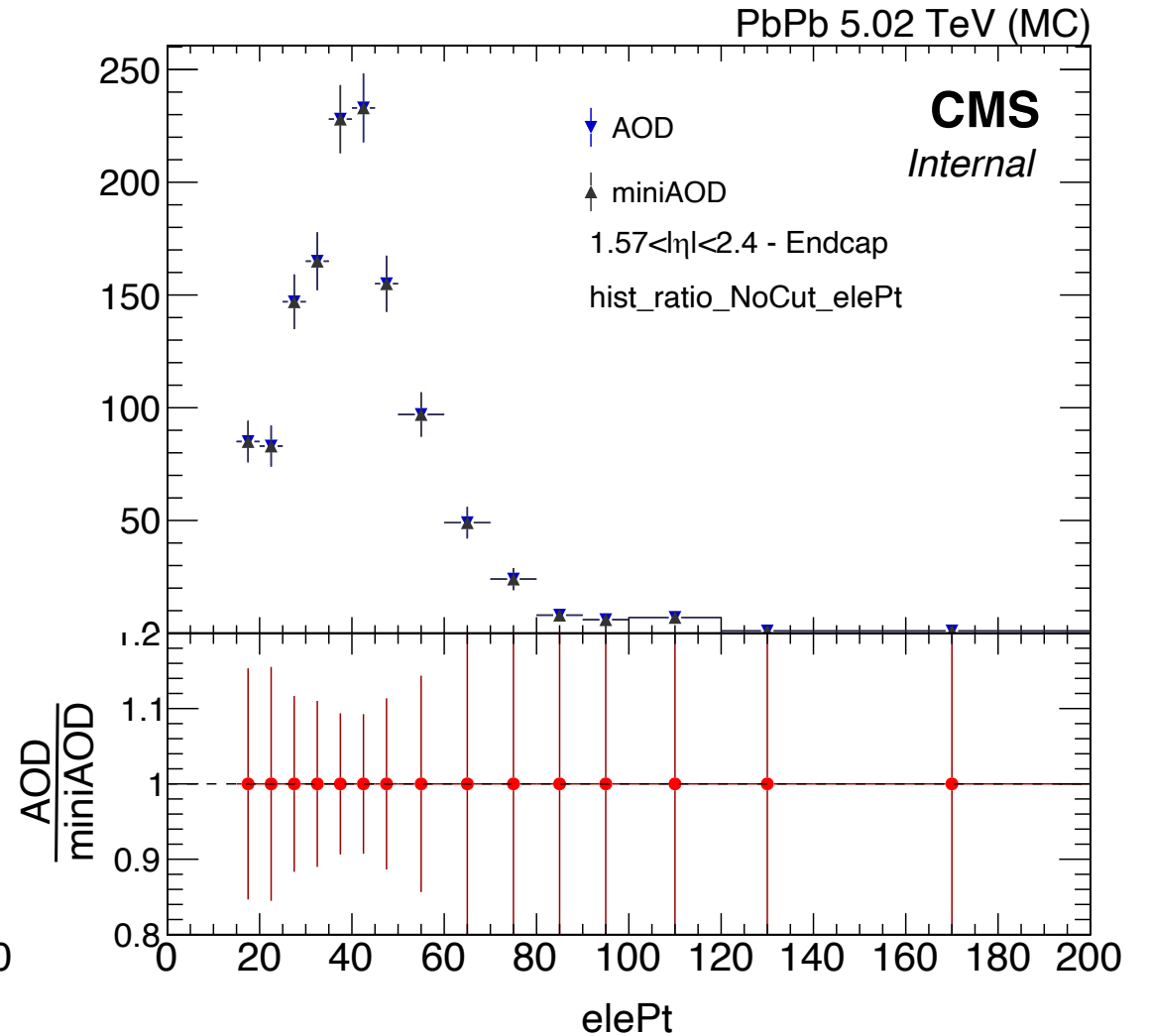
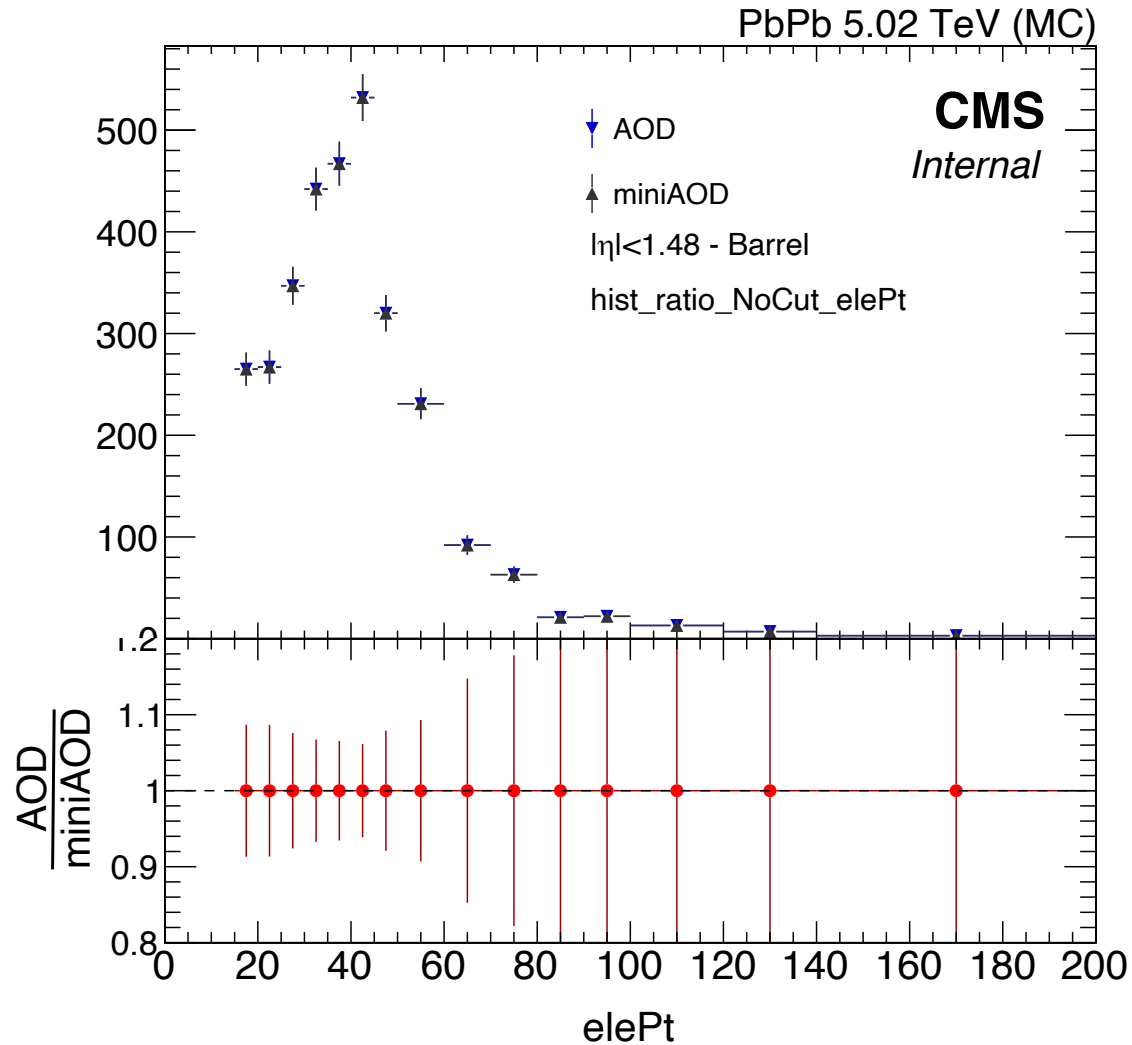
Applied cuts

- Barrel
 - Pre-selection
 - $dR < 0.1$
 - Removed HEM
 - Identification cut depends on centrality
- Endcap
 - Identification cut depends on centrality

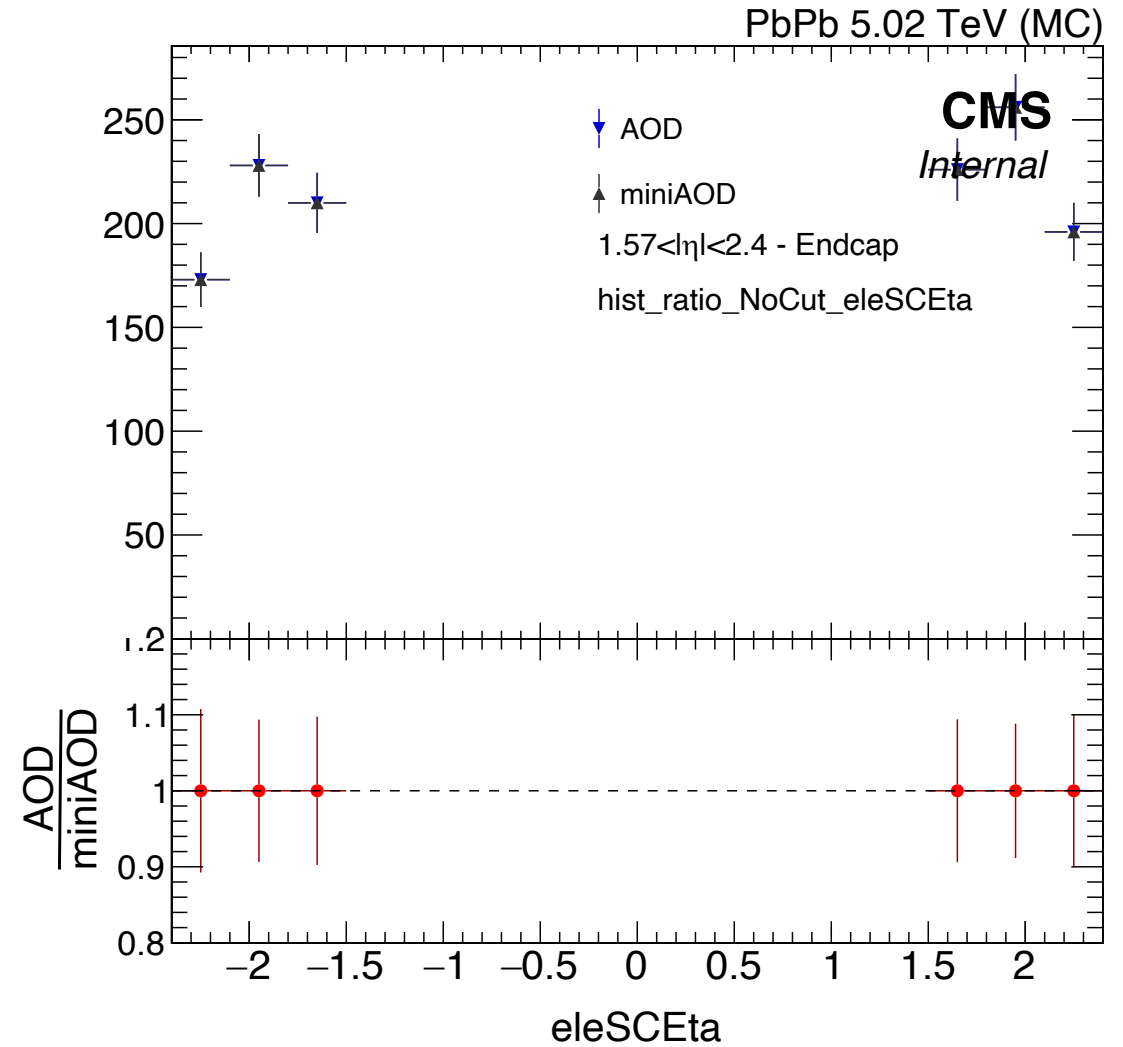
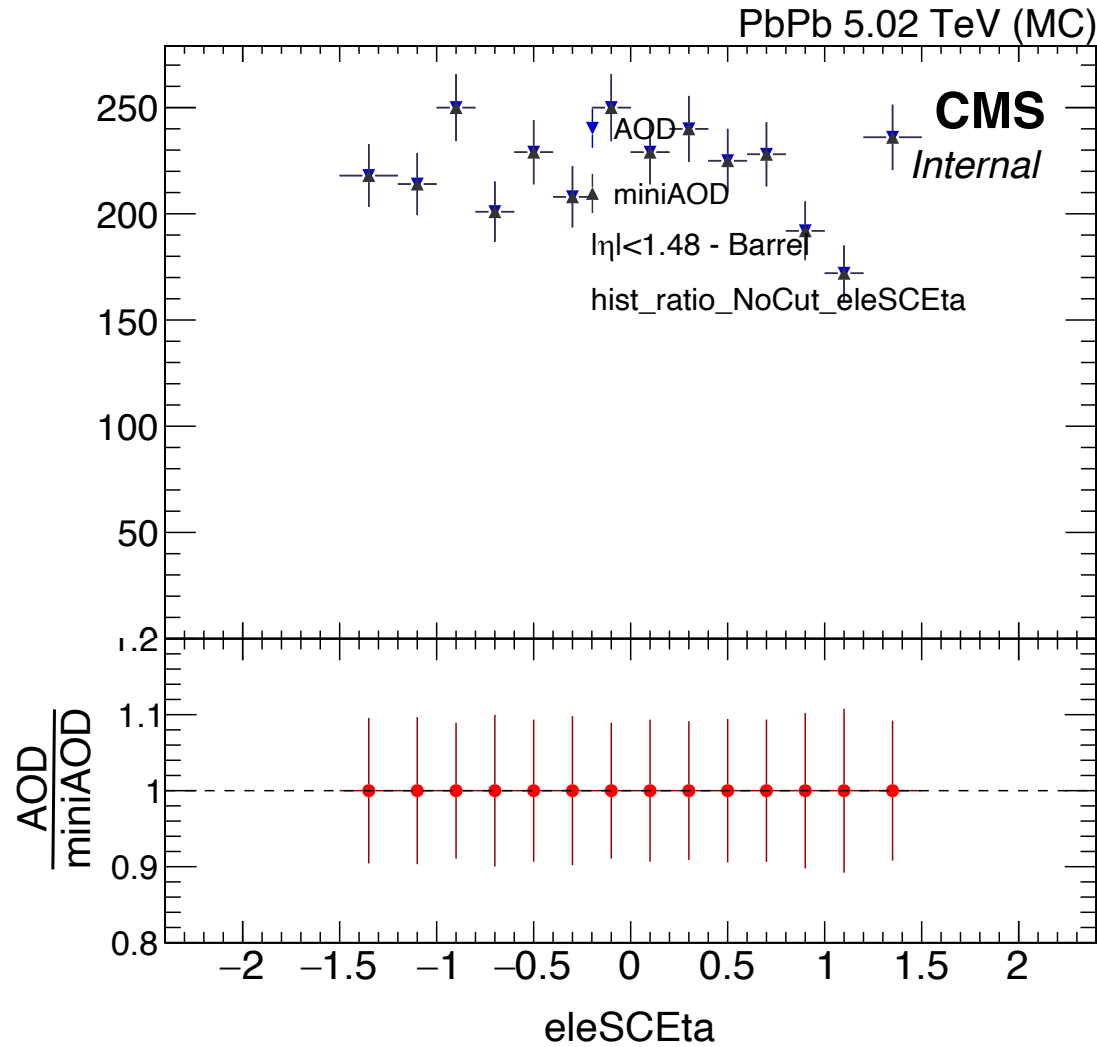
Comparison - eleEn



Comparison - elePt



Comparison - eleSCEta



Summary

- Consistent between AOD(10_3) and mini-AOD(11_2) in E/Gamma
 - Mini-AOD to forest code (ggHiNtuplizer) updated