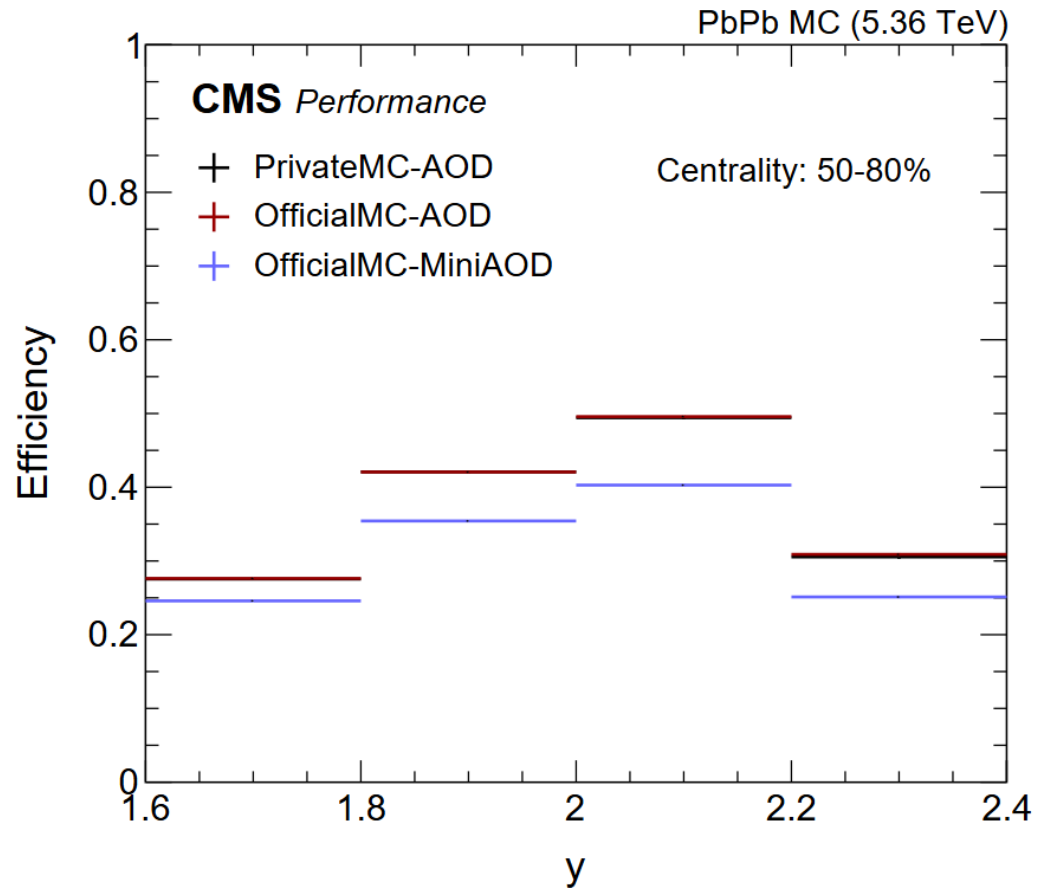


Difference of di-muon reco efficiency in AOD and MINIAOD

(STARLight Jpsi embedded samples)



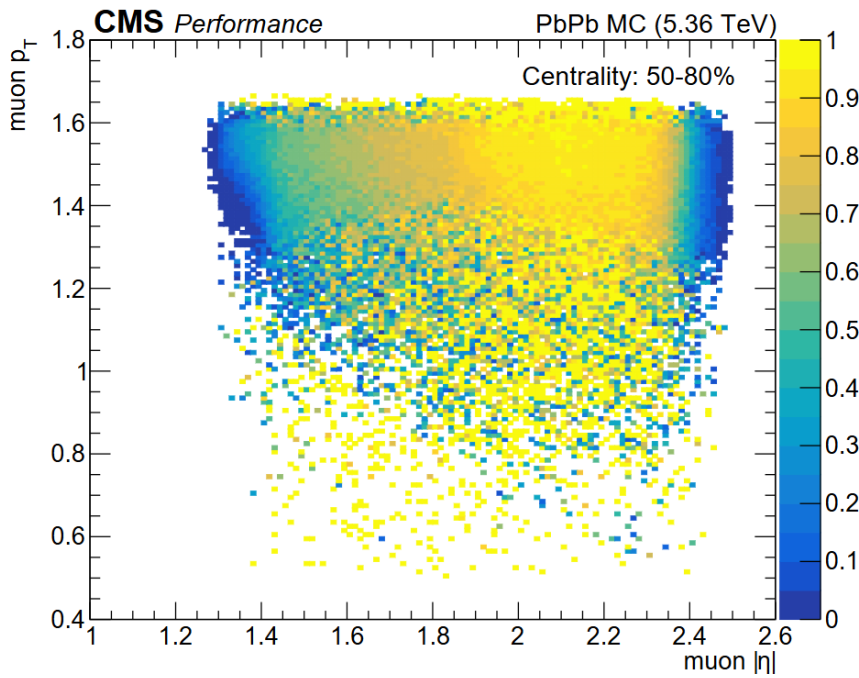
$$\text{Efficiency} = \frac{\text{Reco dimuon (softID, dimuon selections)}}{\text{Gen dimuon}}$$

Checks:

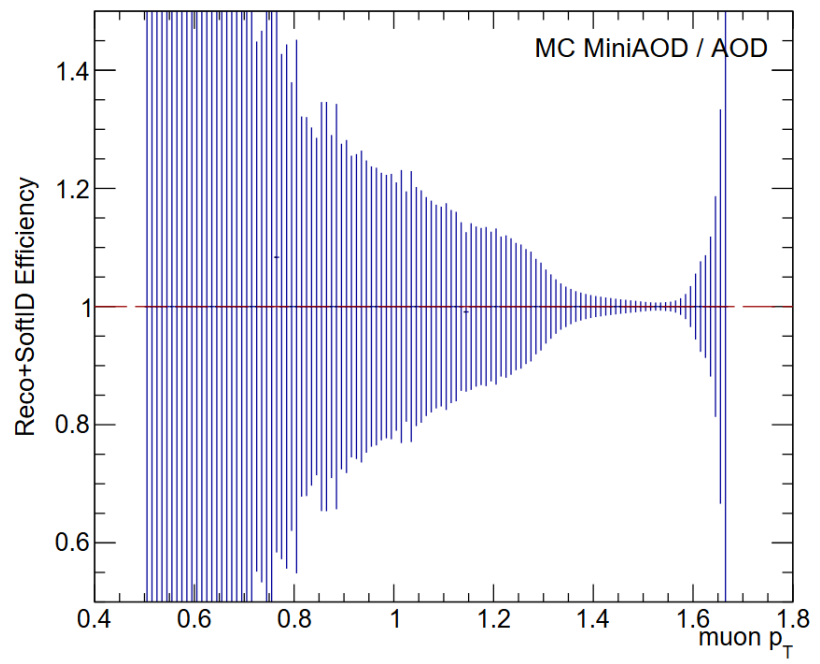
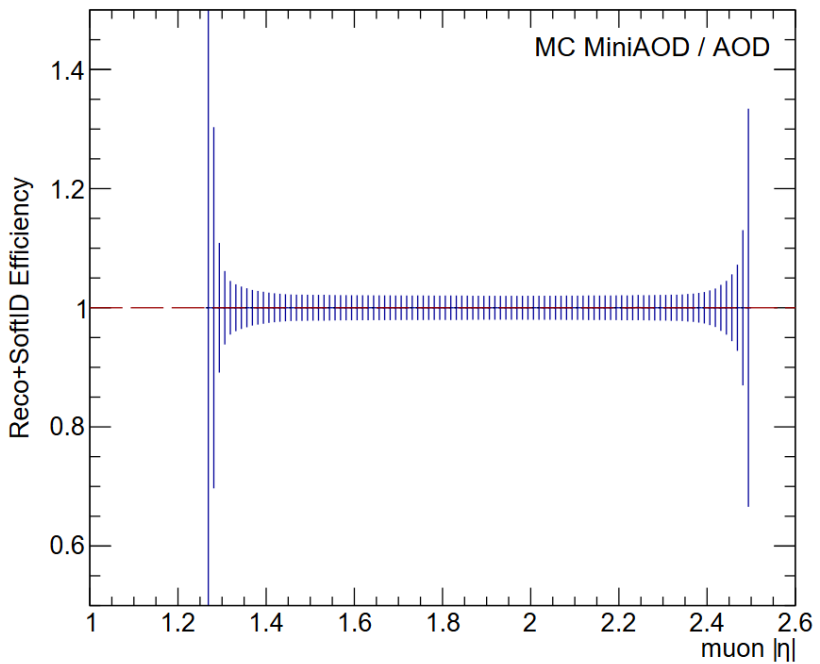
- Single muon efficiency of softID
- Dimuon efficiency of softID
- Dimuon efficiency of softID+dimuon selections

Single muon efficiency of reco+softID

Eta-Pt 2D plot in AOD



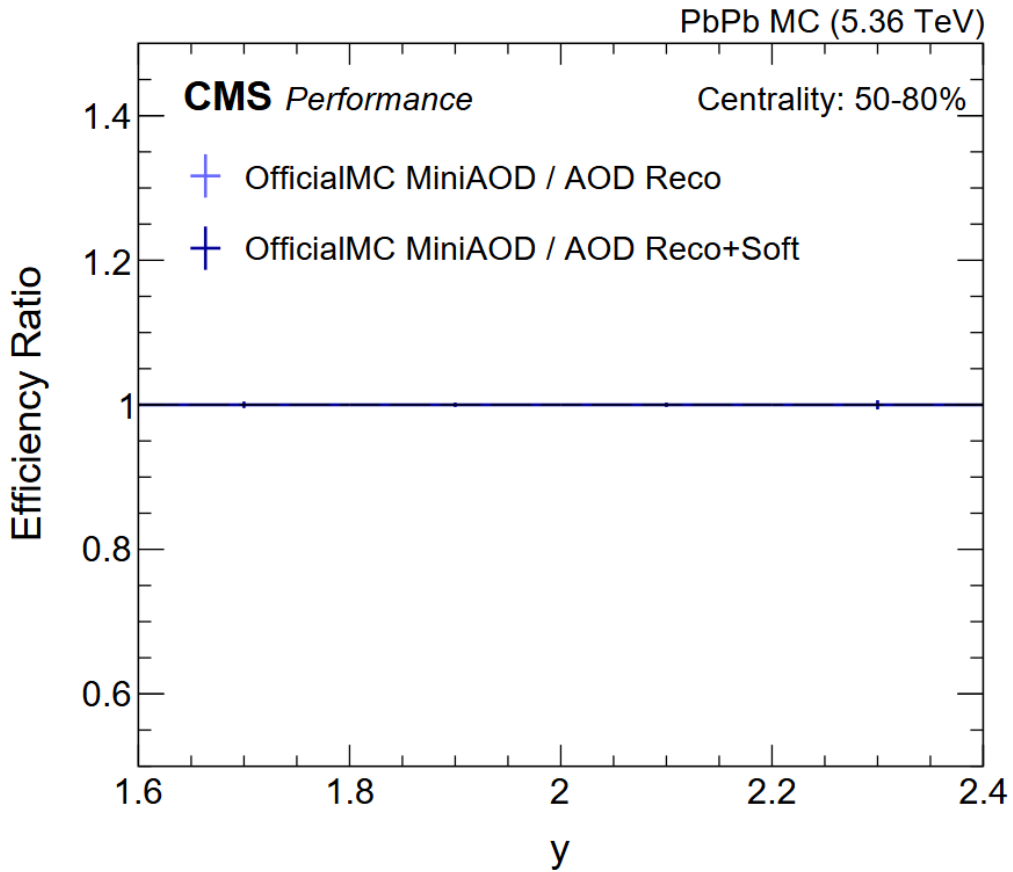
Efficiency ratios for MINIAOD / AOD:



Di-muon efficiency of reco+softID

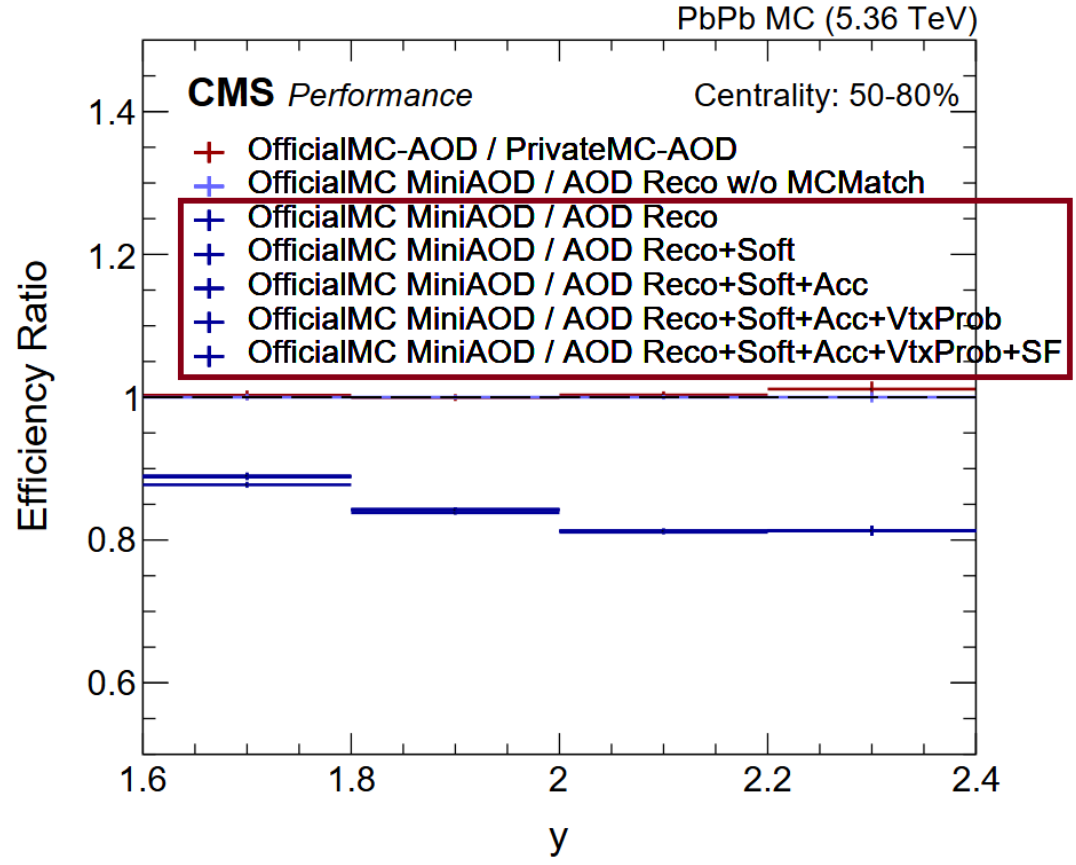
Self-combination using reco muons:

- Matched to gen muon
- softID

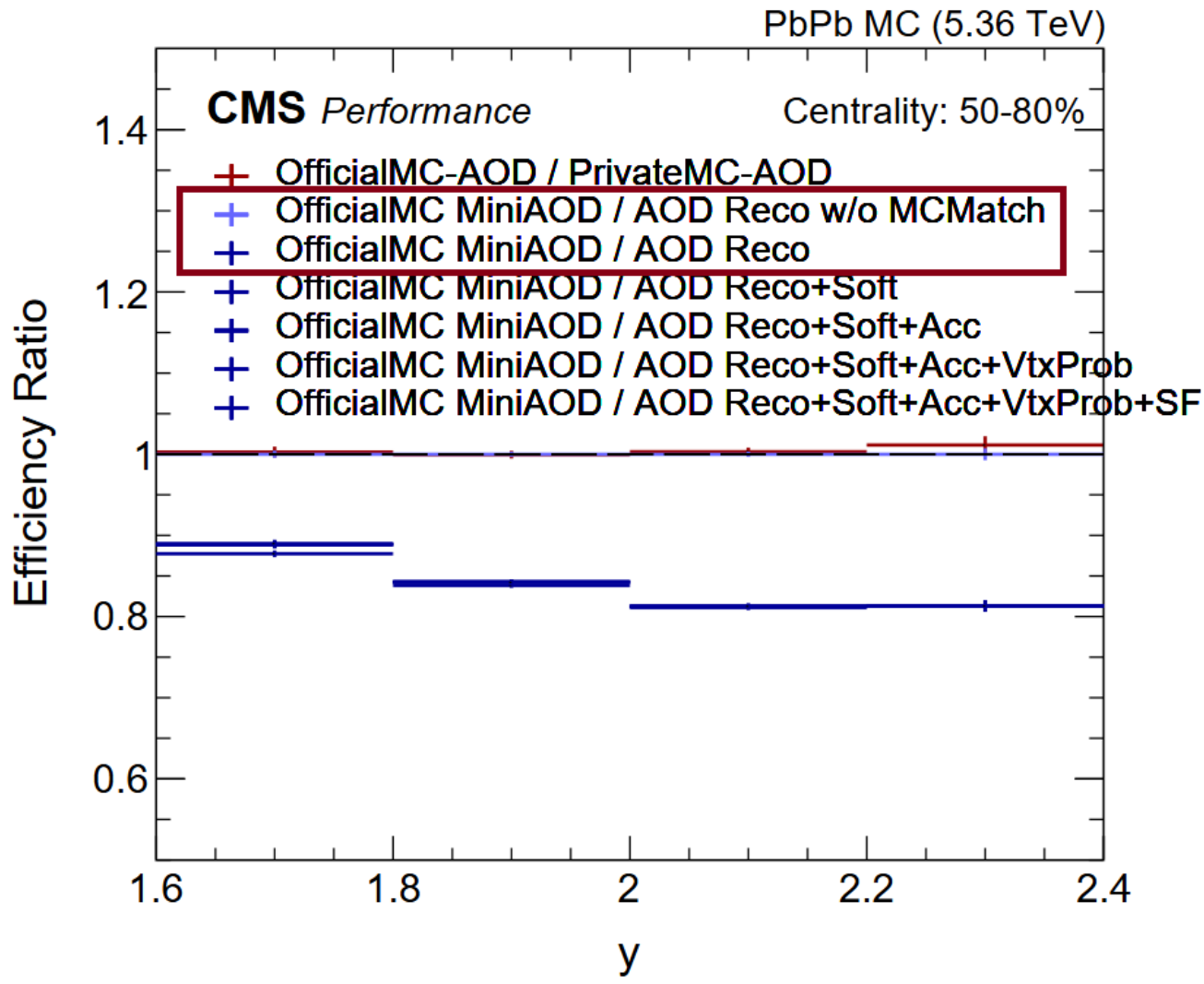


Dimuon candidates from vertex composite tree:

- Matched to gen Jpsi
- softID



Di-muon efficiency of reco+softID



Issues:

- Dimuon combination in vertex composite tree
- **Matched to gen Jpsi**

Next:

- Di-muon efficiencies w/o MCMATCH
- Di-muon efficiencies w/ self-defined MCMATCH