

On-line (pre-)selection Requisites for:

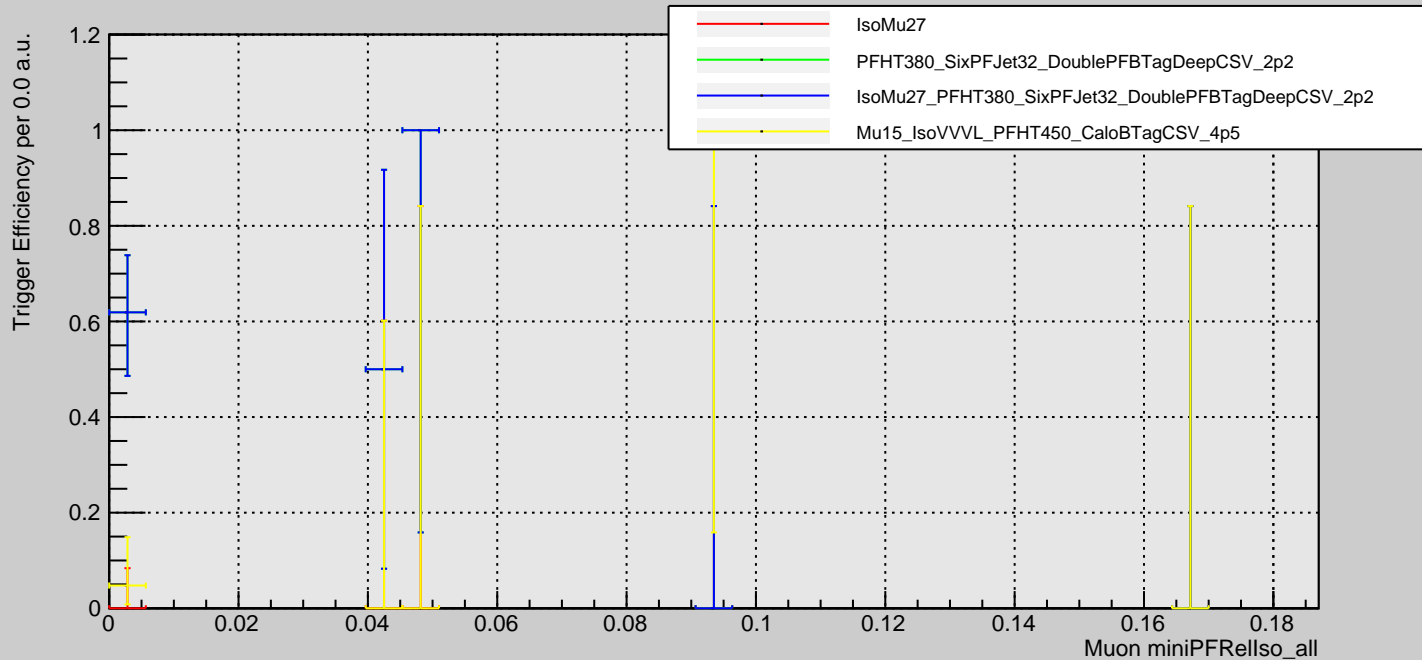
- **Jets:** number > 5
- **Muons plus Electrons:** number > 0

Event Limit: None (see last page)

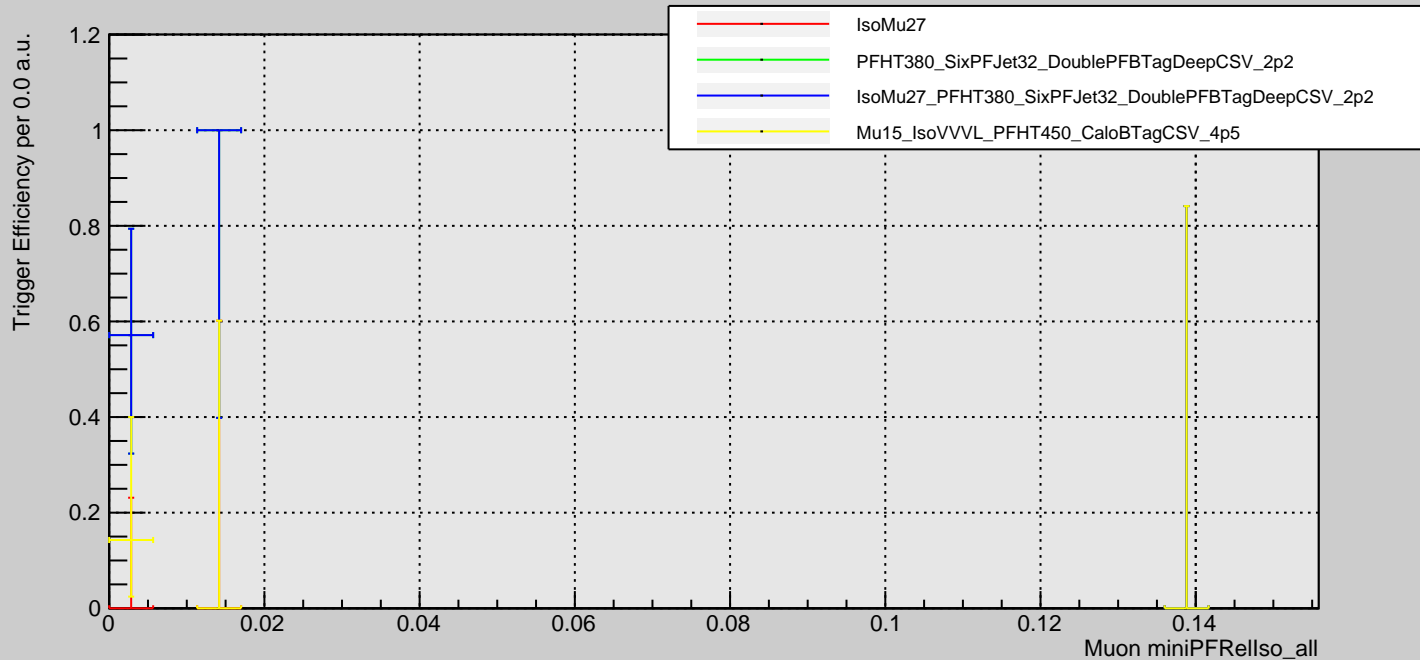
Off-line (post-)selection Requisites for:

- **Jets:** $\text{jetId} > 2$, $p_T > 30$ and $|\eta| < 2.4$ (for at least 6 jets)
 $\text{btagDeepFlavB} > 0.7489$ (for at least one jet)
- **Muons:** has tightId , $|\eta| < 2.4$ and $\text{PFRelIso_all} < 0.15$ (for at least 1)

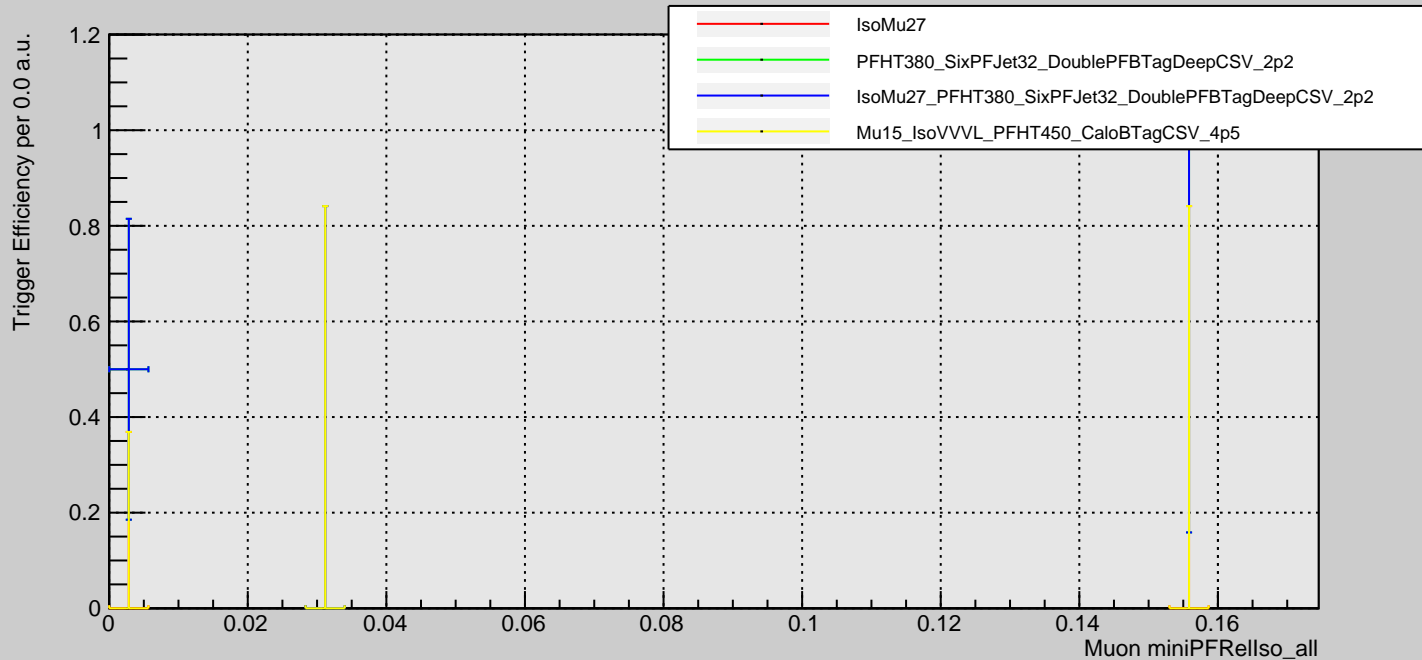
Muon Pt = 5



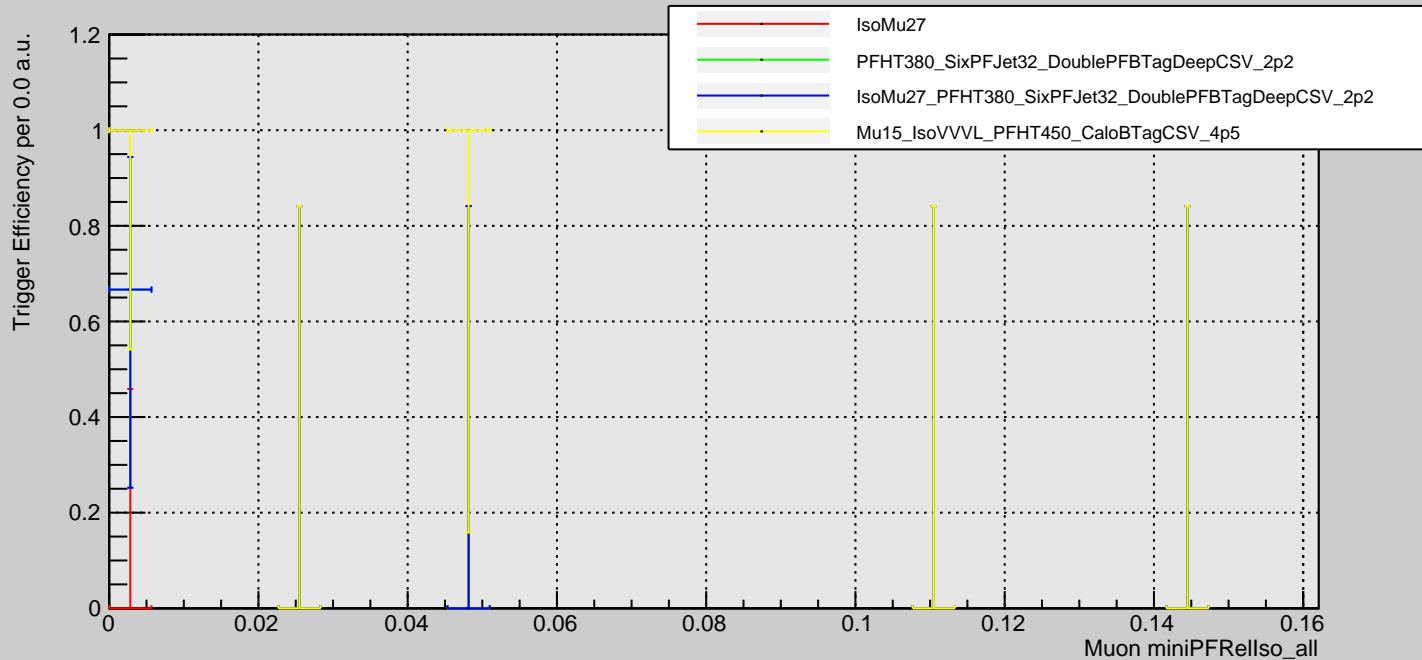
Muon Pt = 10



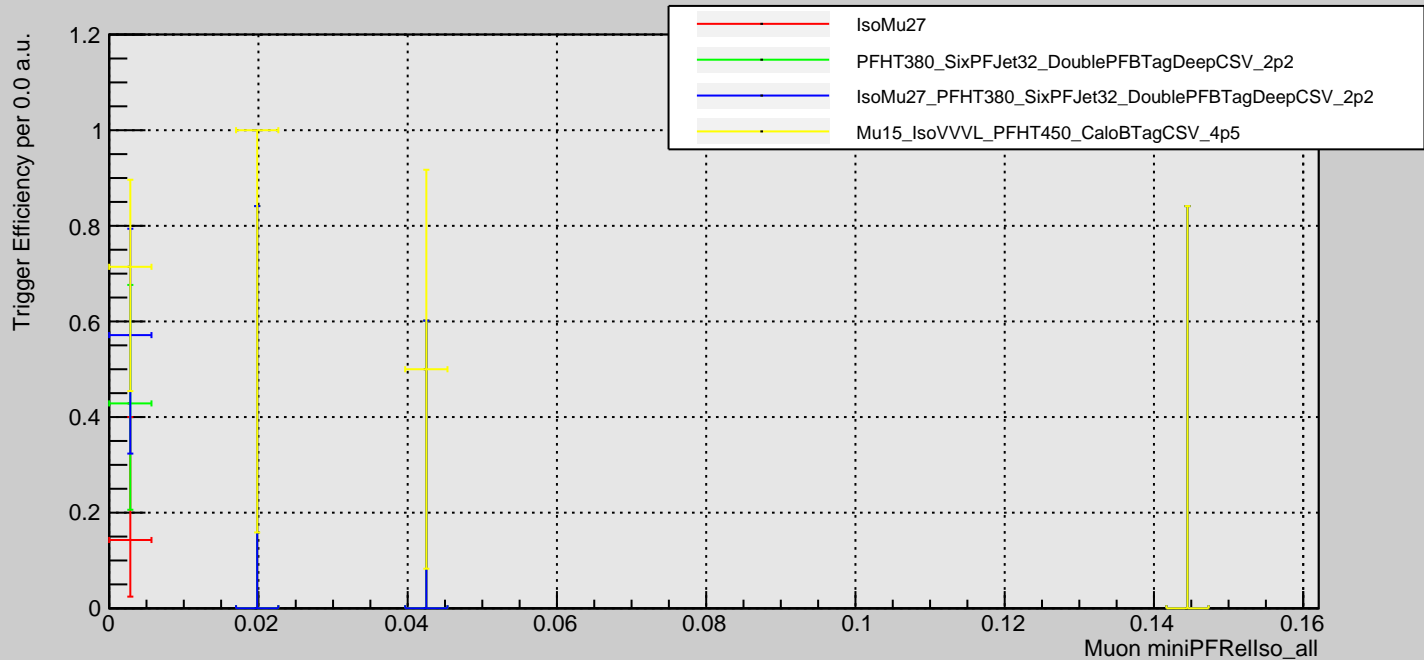
Muon Pt = 15



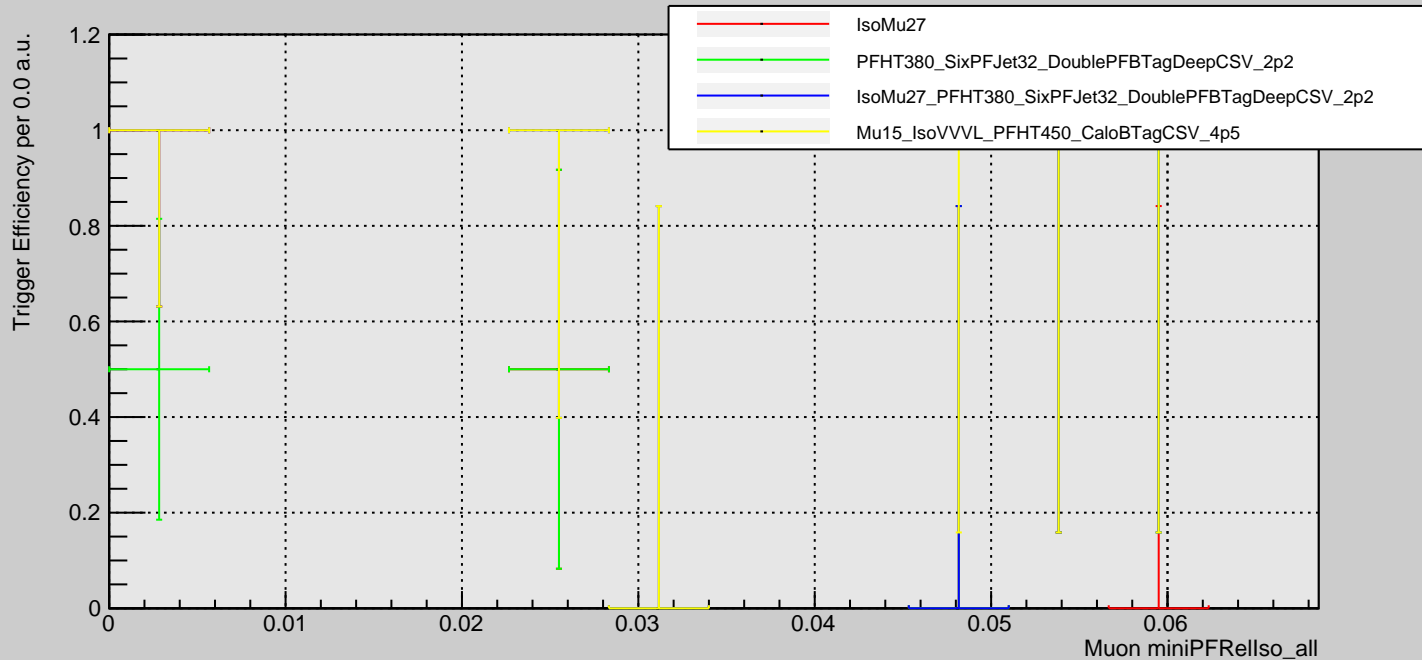
Muon Pt = 20



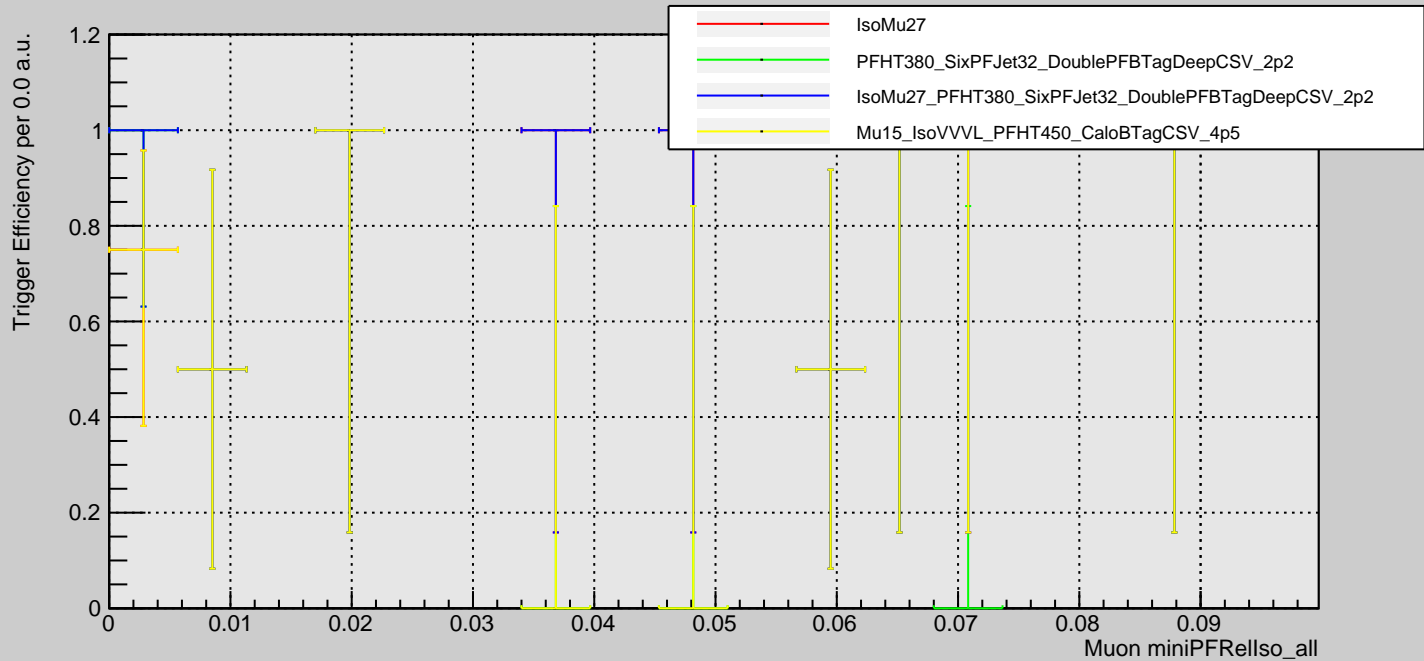
Muon Pt = 25



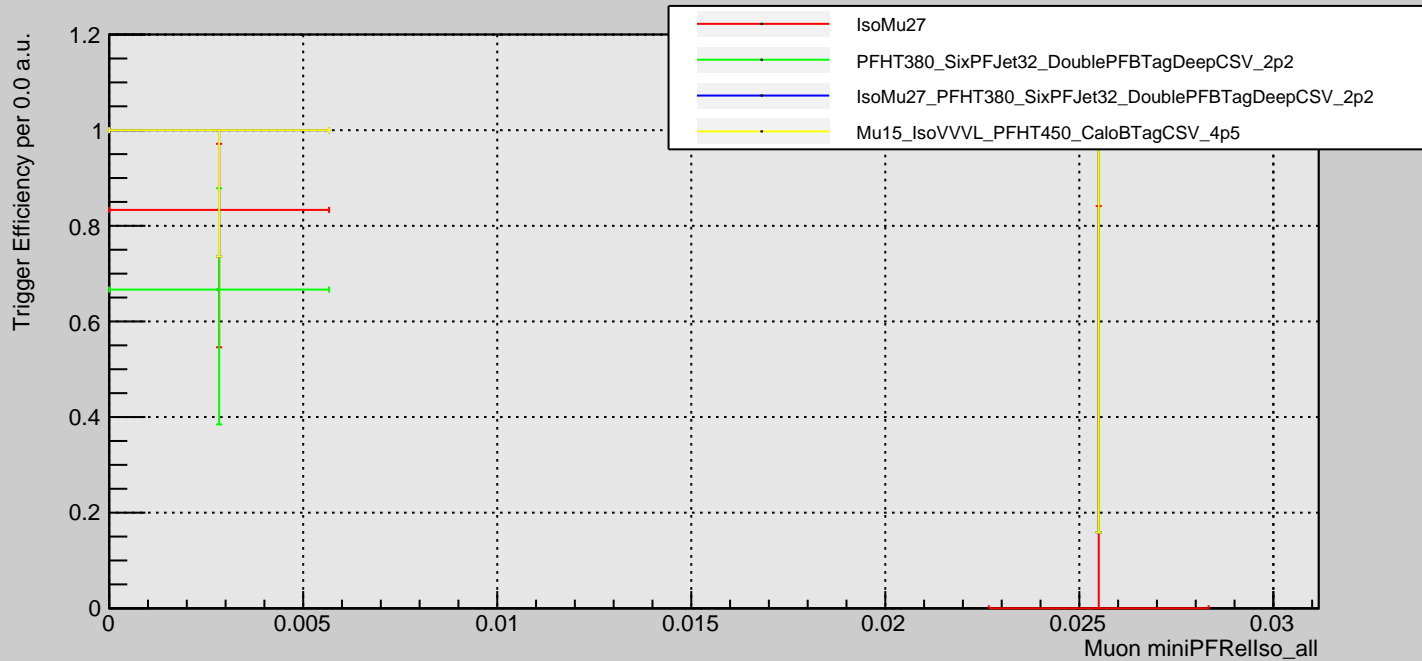
Muon Pt = 30



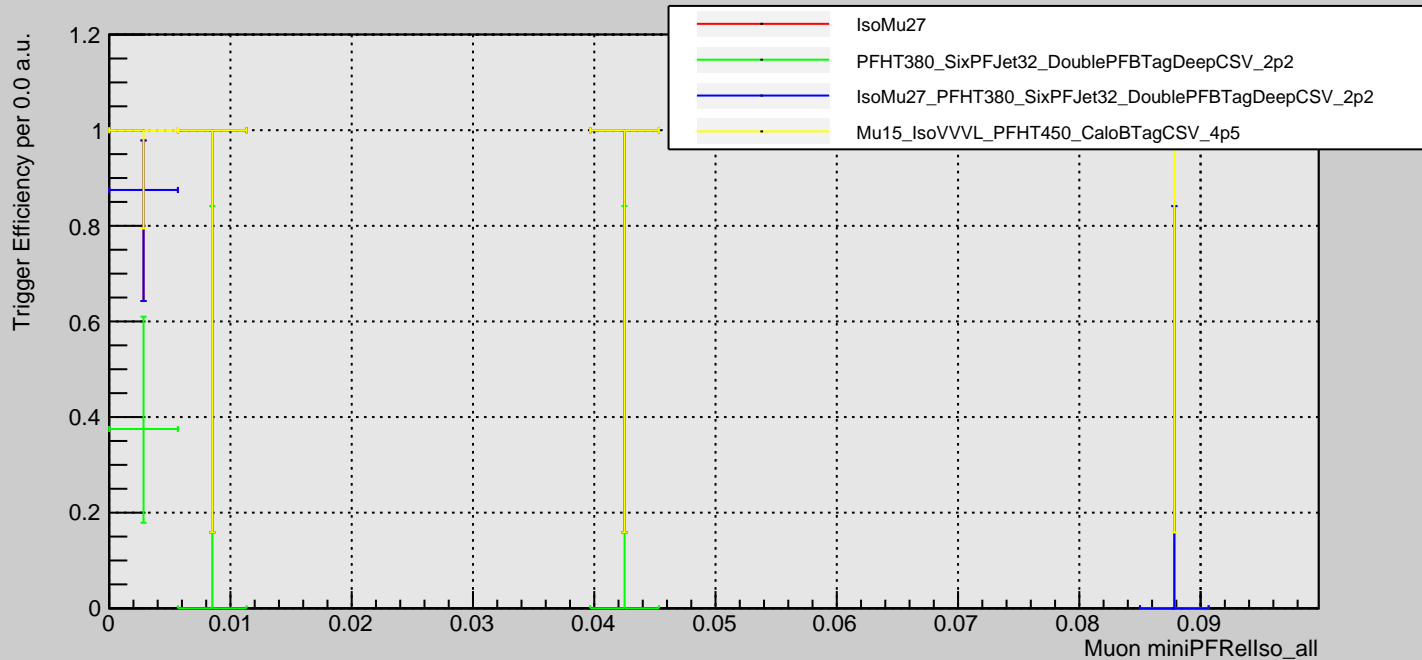
Muon Pt = 35



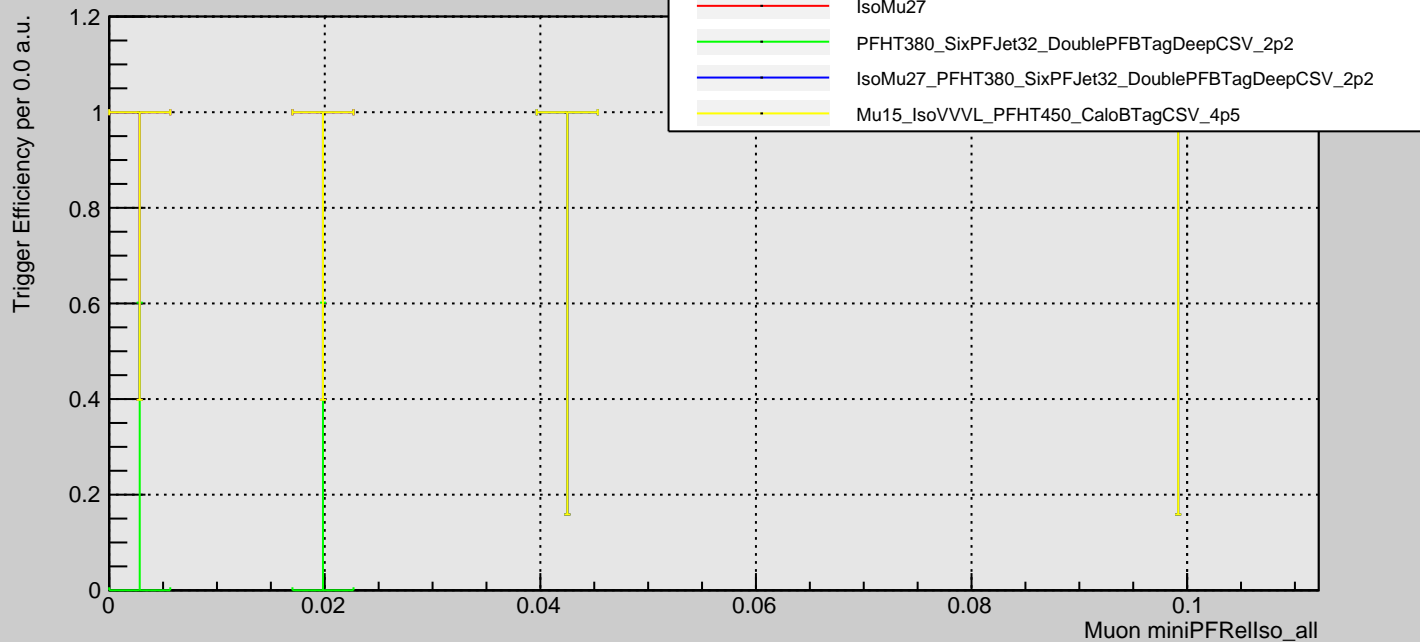
Muon Pt = 40



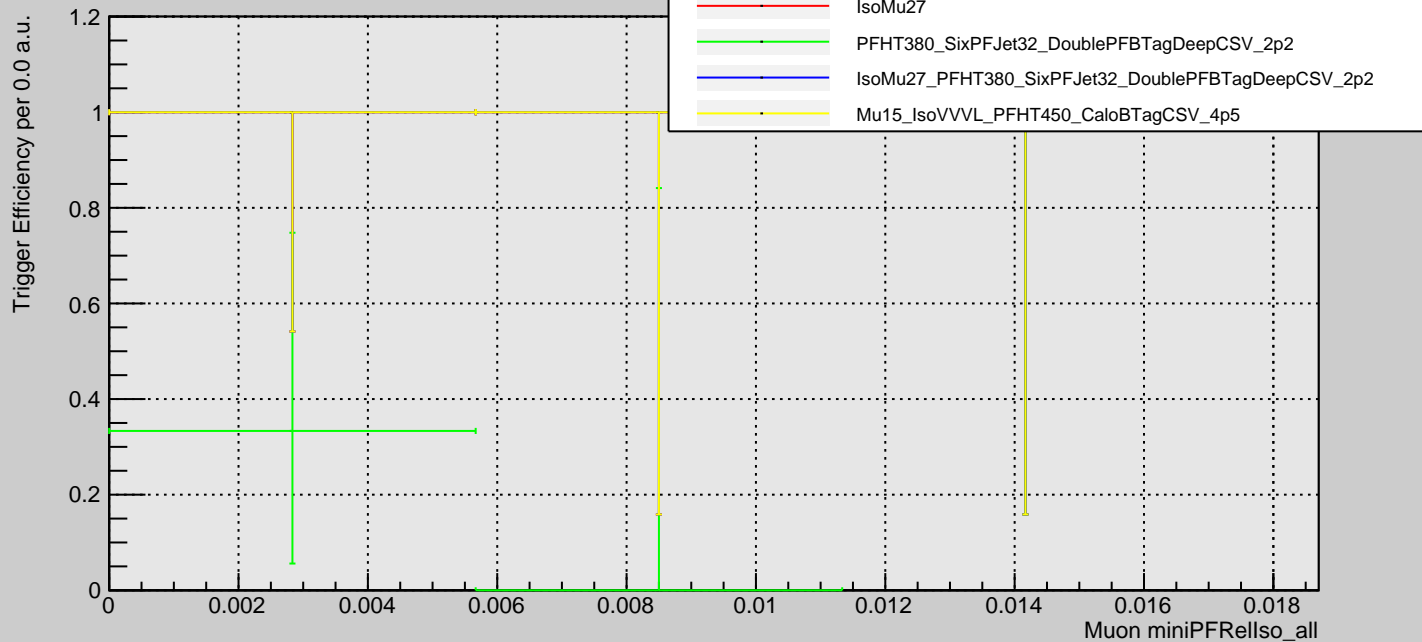
Muon Pt = 45



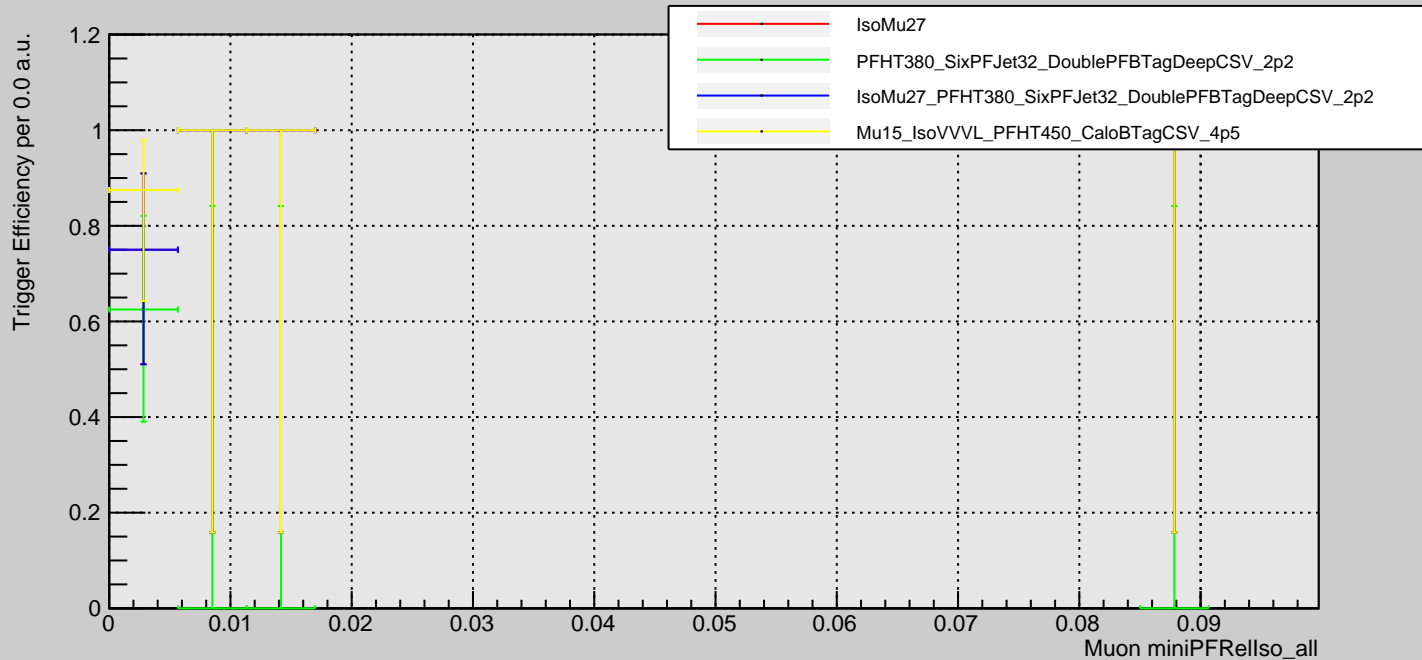
Muon Pt = 50



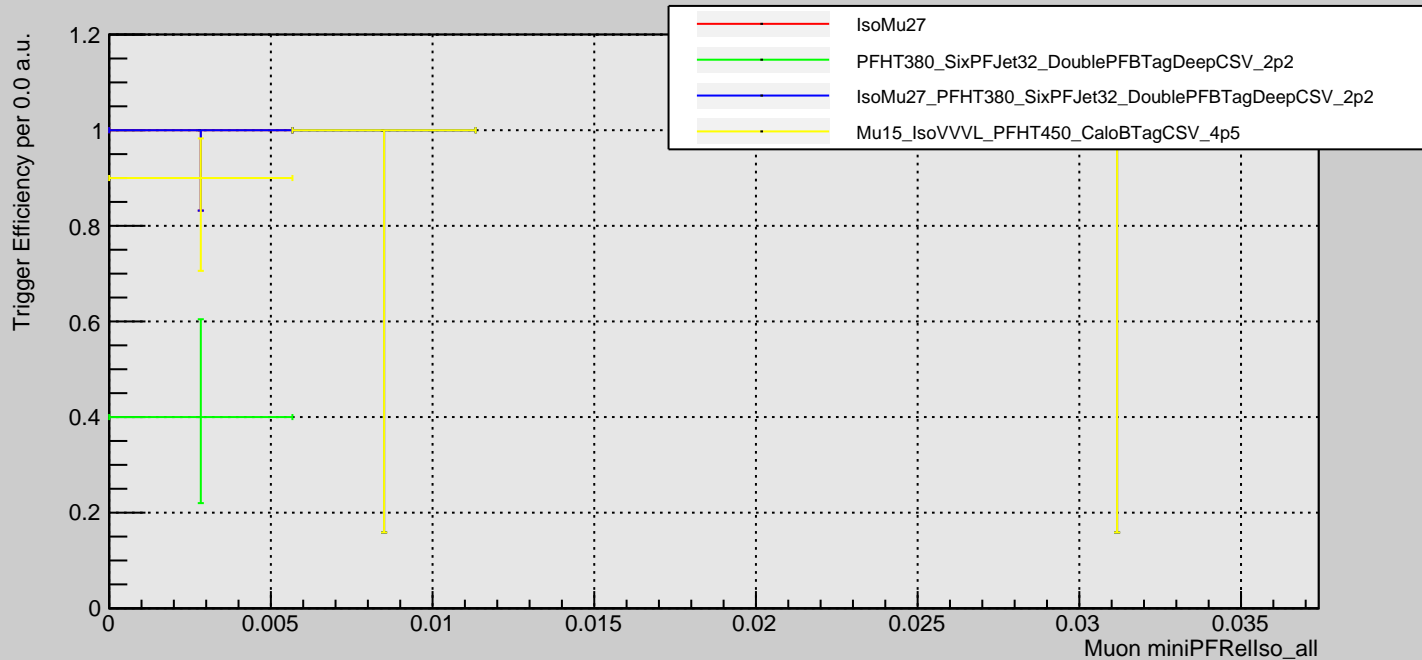
Muon Pt = 55



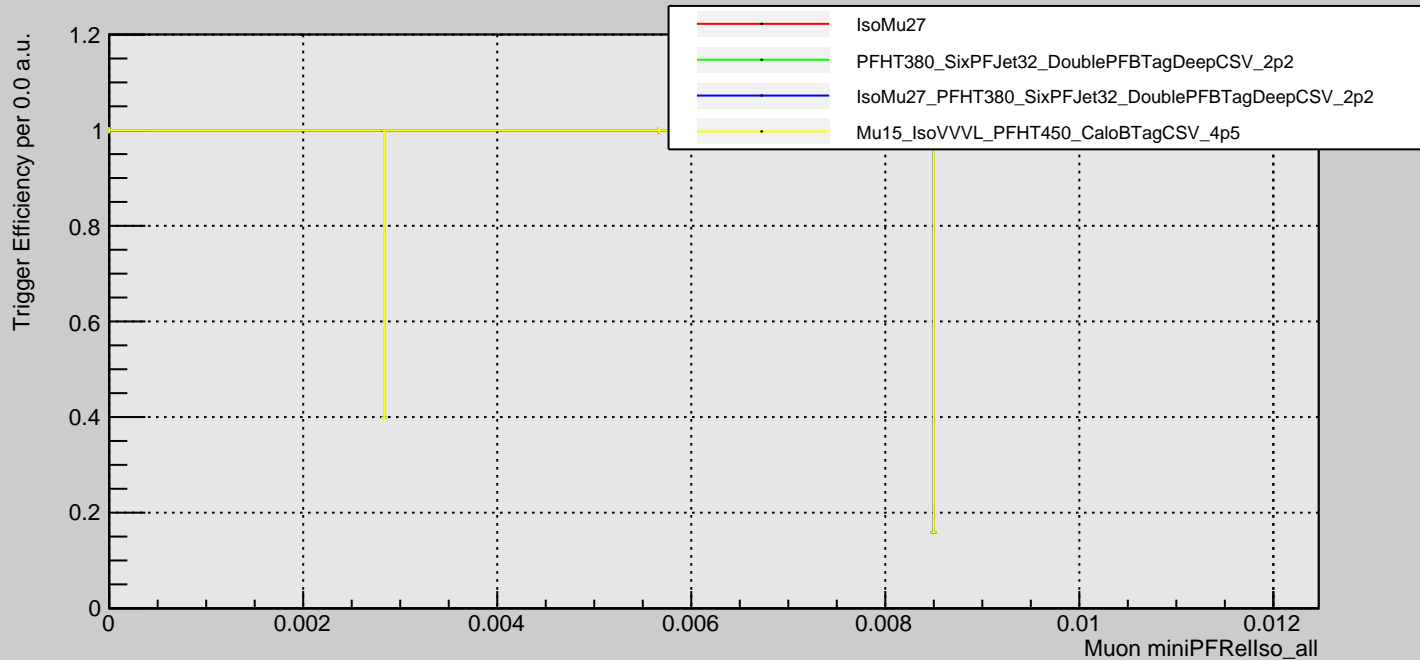
Muon Pt = 60



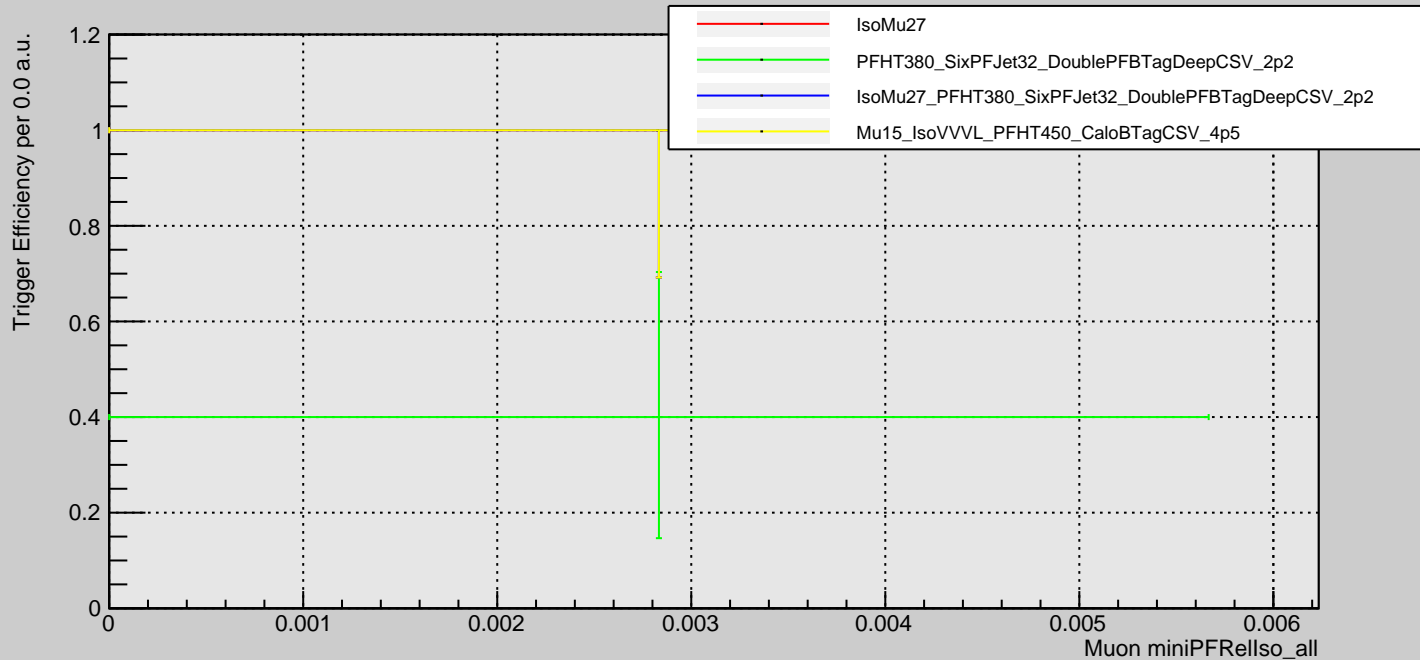
Muon Pt = 65



Muon Pt = 70



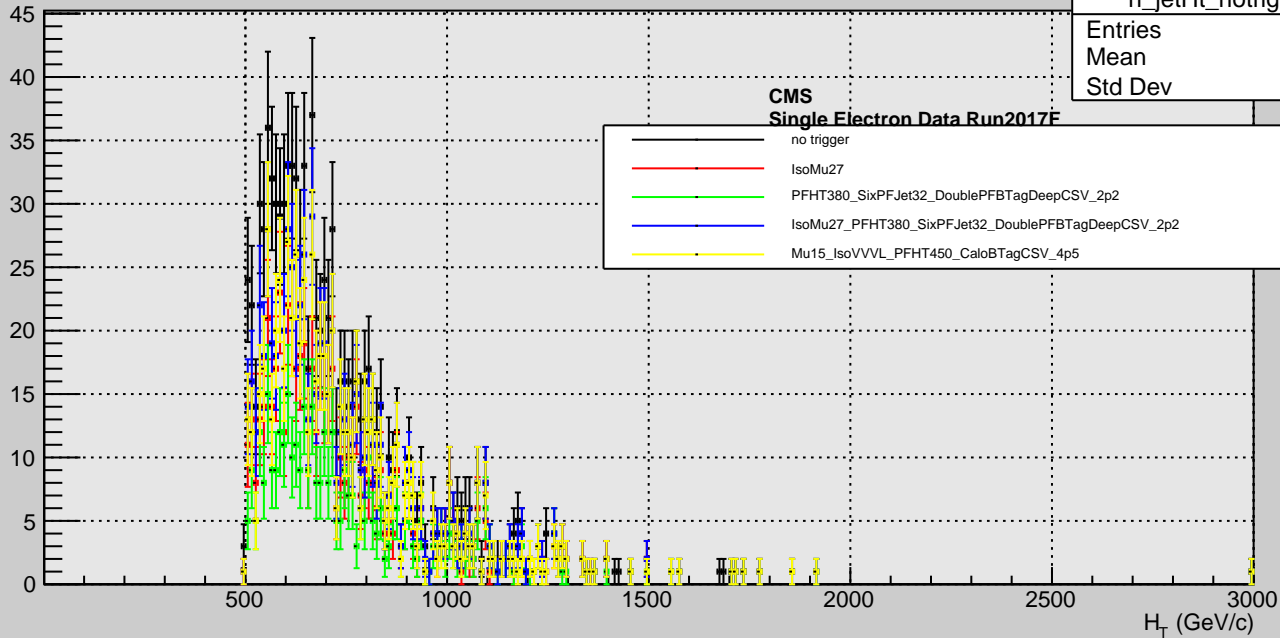
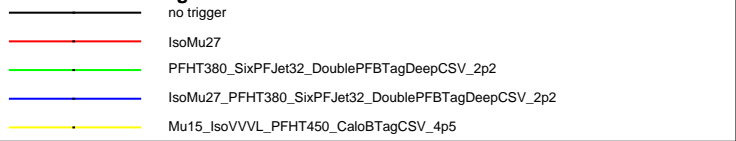
Muon Pt = 75

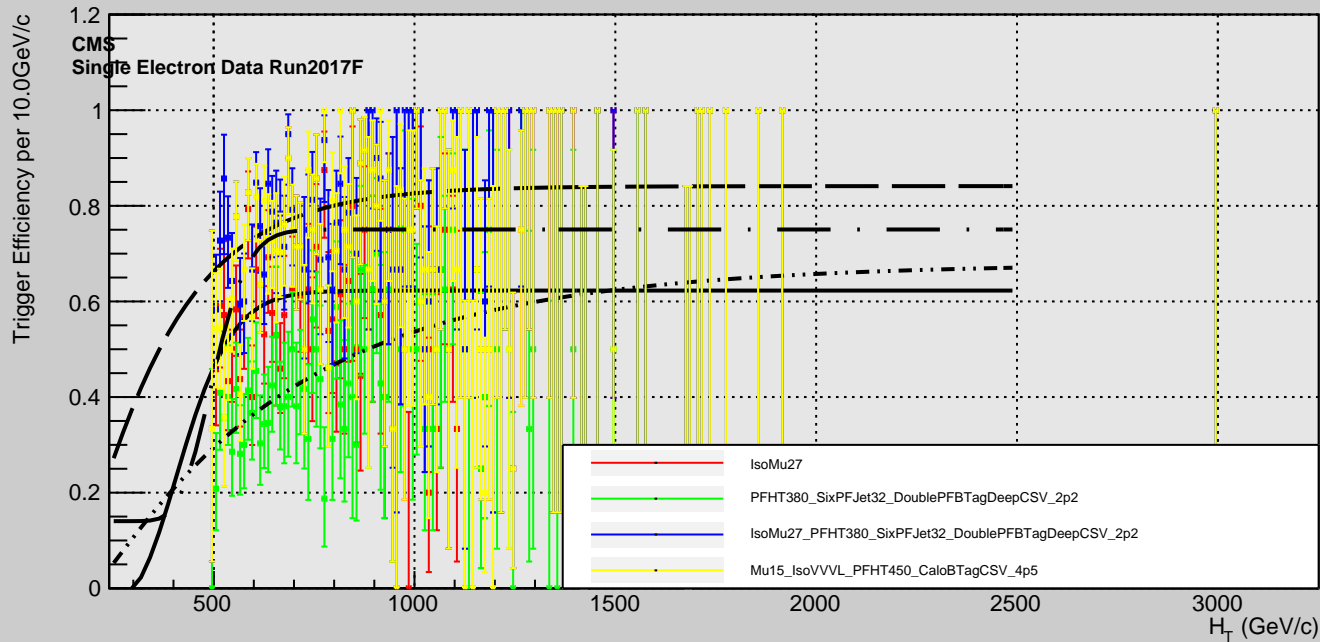


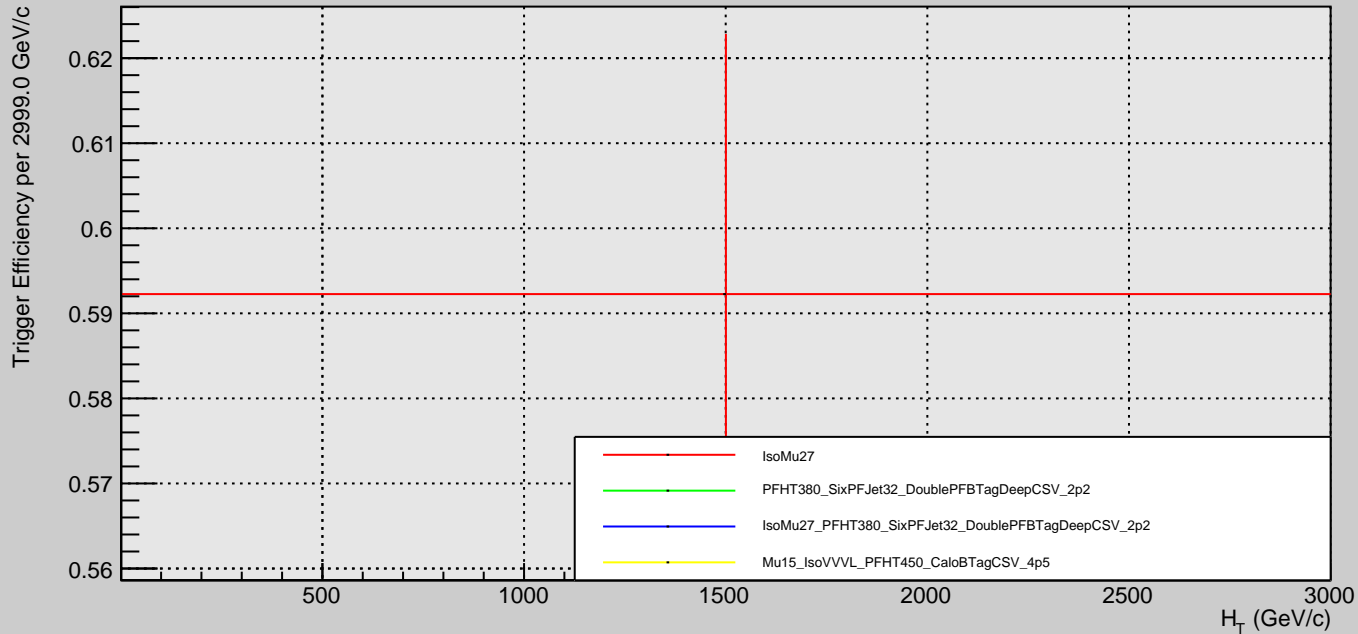
Number of Events per 10 GeV/c

h_jetHt_nottrigger	
Entries	1008
Mean	745.6
Std Dev	227.9

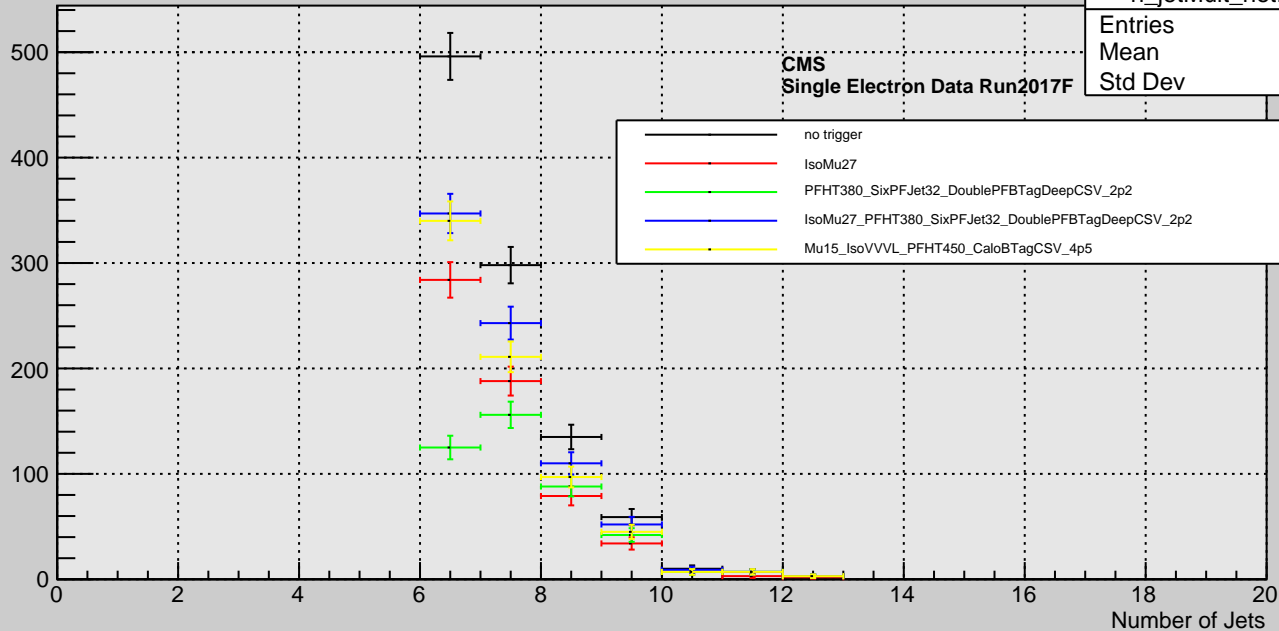
CMS
Single Electron Data Run2017F

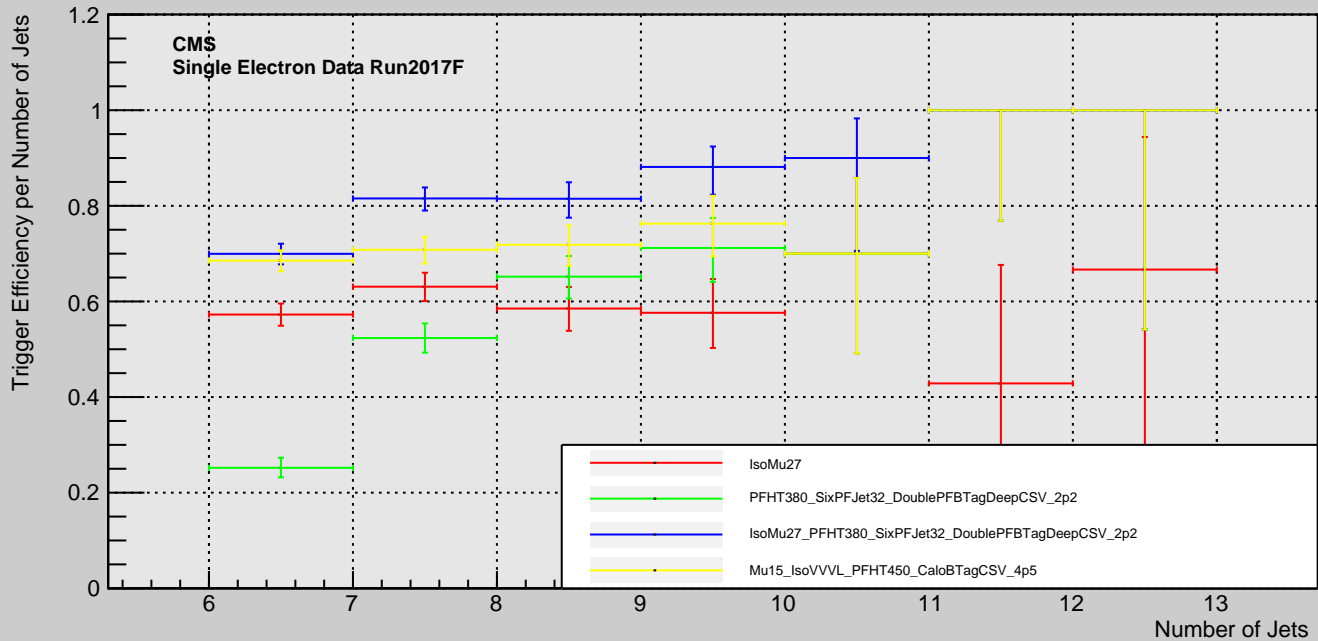




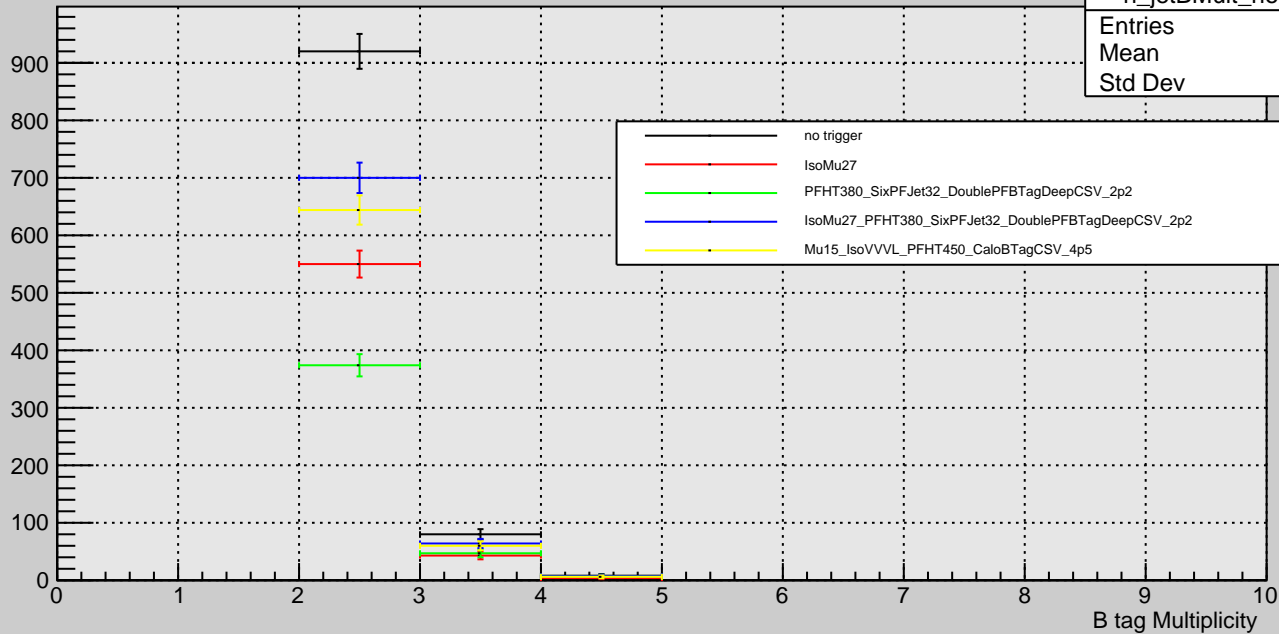


Number of Events per Number of Jets





Number of Events per Number of Jets

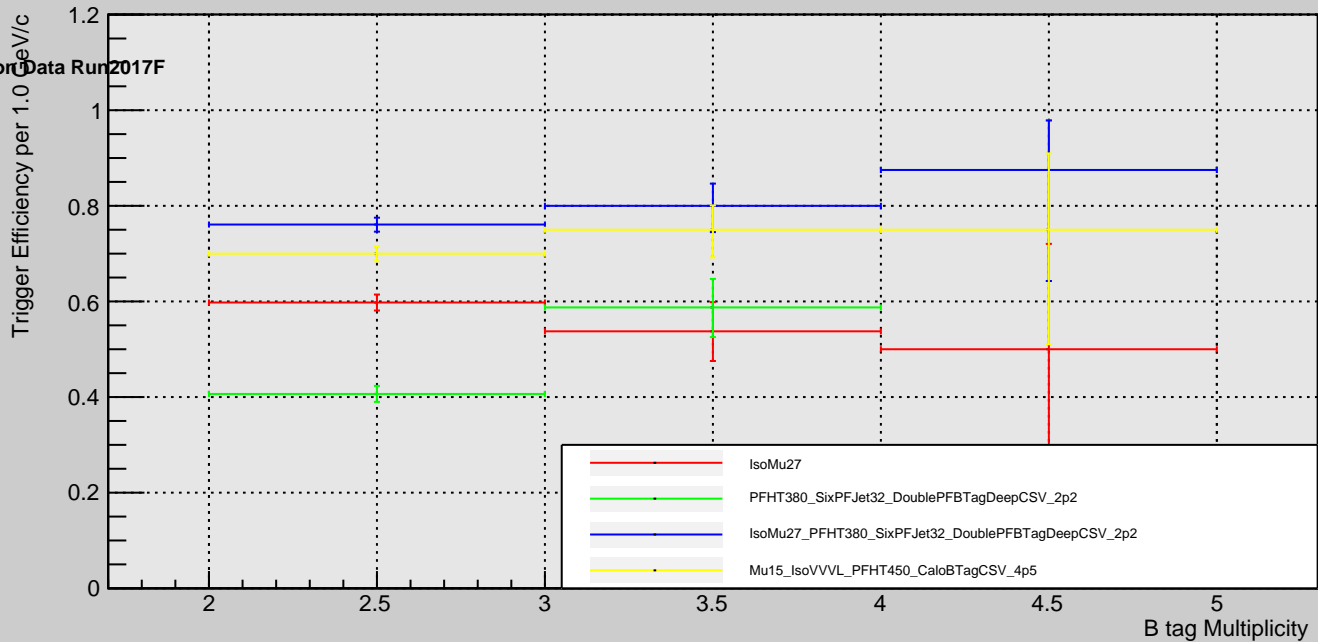


h_jetBMult_notrigger

Entries	1008
Mean	2.595
Std Dev	0.3194

- no trigger
- IsoMu27
- PFHT380_SixPFJet32_DoublePFBTagDeepCSV_2p2
- IsoMu27_PFHT380_SixPFJet32_DoublePFBTagDeepCSV_2p2
- Mu15_IsoVVVL_PFHT450_CaloBTagCSV_4p5

electron Data Run 2017F



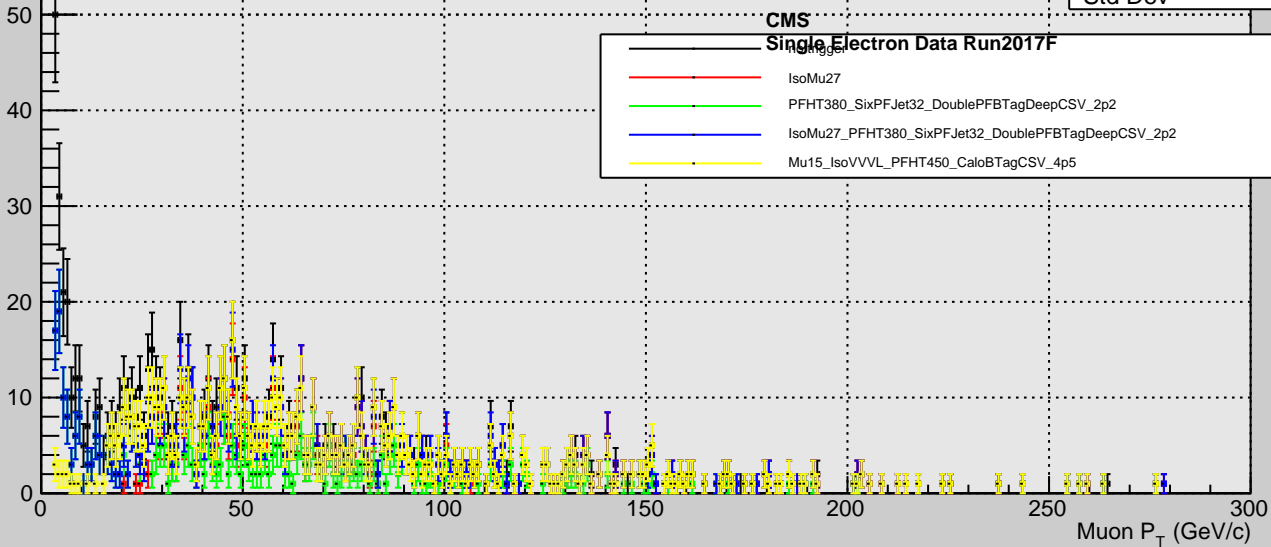
Number of Events per 1 GeV/c

h_muonPt_notrigger	
Entries	1008
Mean	61.27
Std Dev	51.18

CMS

Single Electron Data Run2017F

- h_muonPt_notrigger
- IsoMu27
- PFHT380_SixPFJet32_DoublePFBTagDeepCSV_2p2
- IsoMu27_PFHT380_SixPFJet32_DoublePFBTagDeepCSV_2p2
- Mu15_IsoVVVL_PFHT450_CaloBTagCSV_4p5



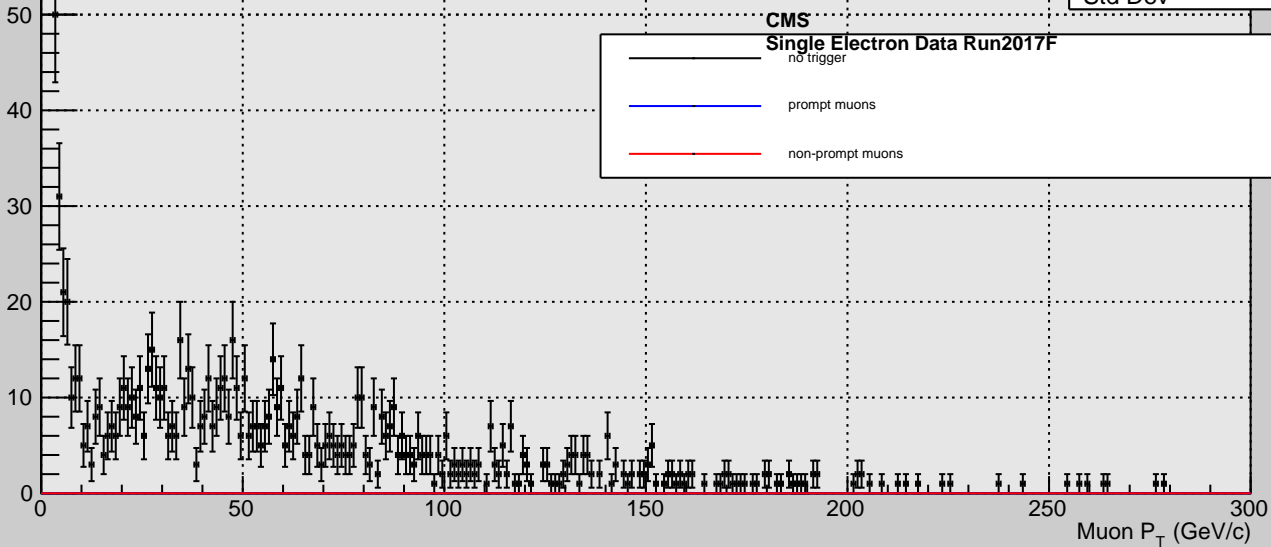
Number of Events per 1 GeV/c

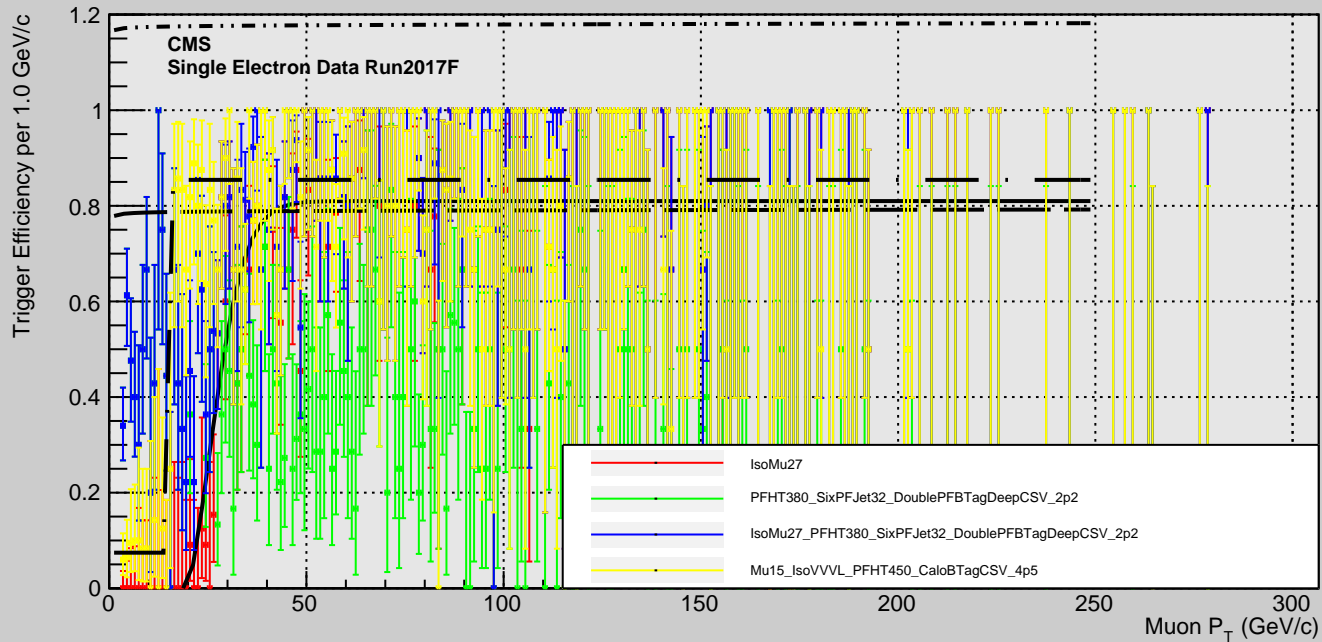
h_muonPt_notrigger	
Entries	1008
Mean	61.27
Std Dev	51.18

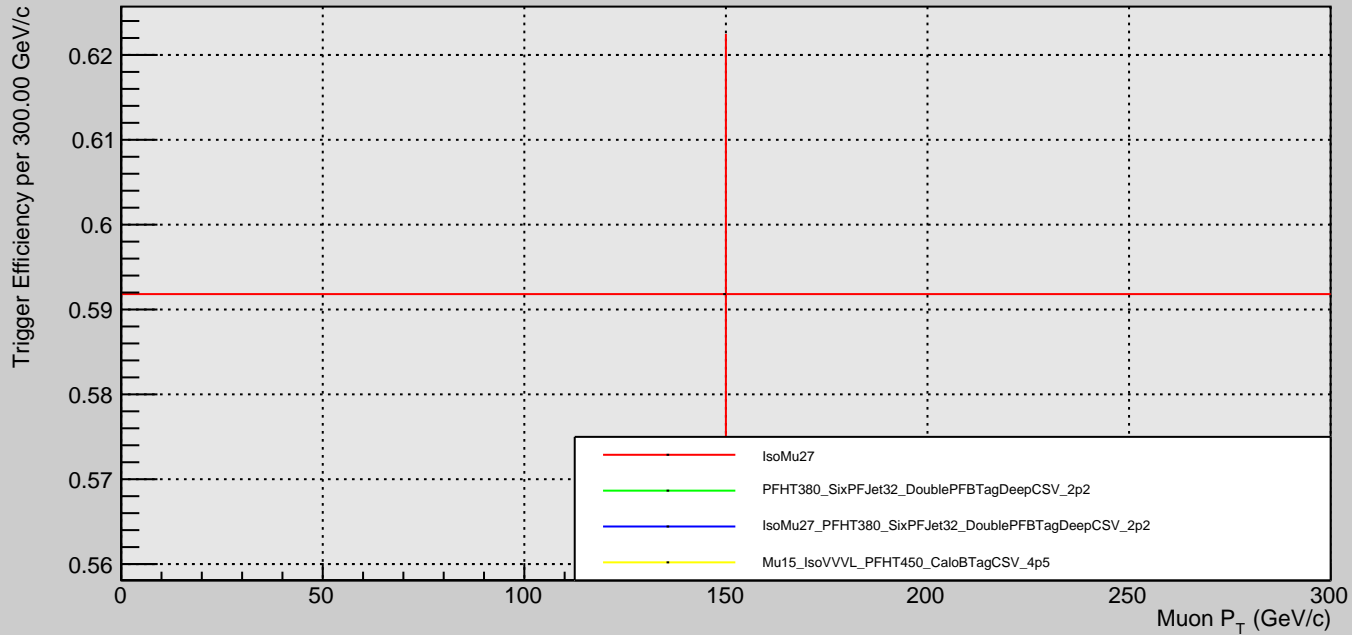
CMS

Single Electron Data Run2017F

- no trigger
- prompt muons
- non-prompt muons

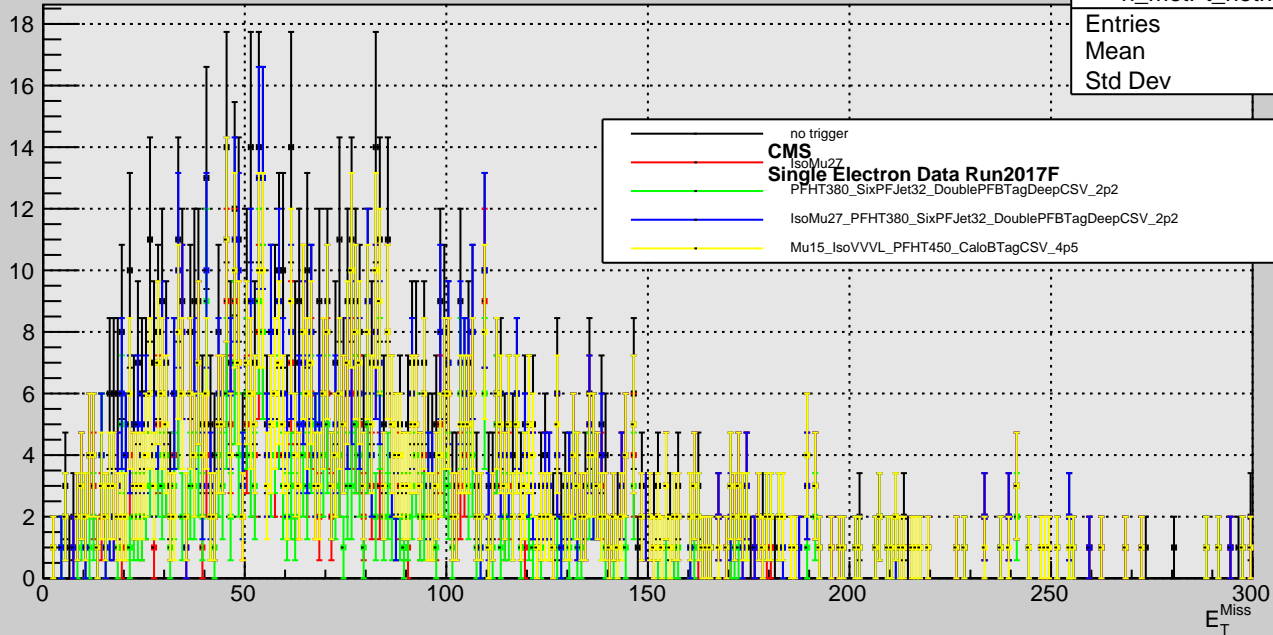


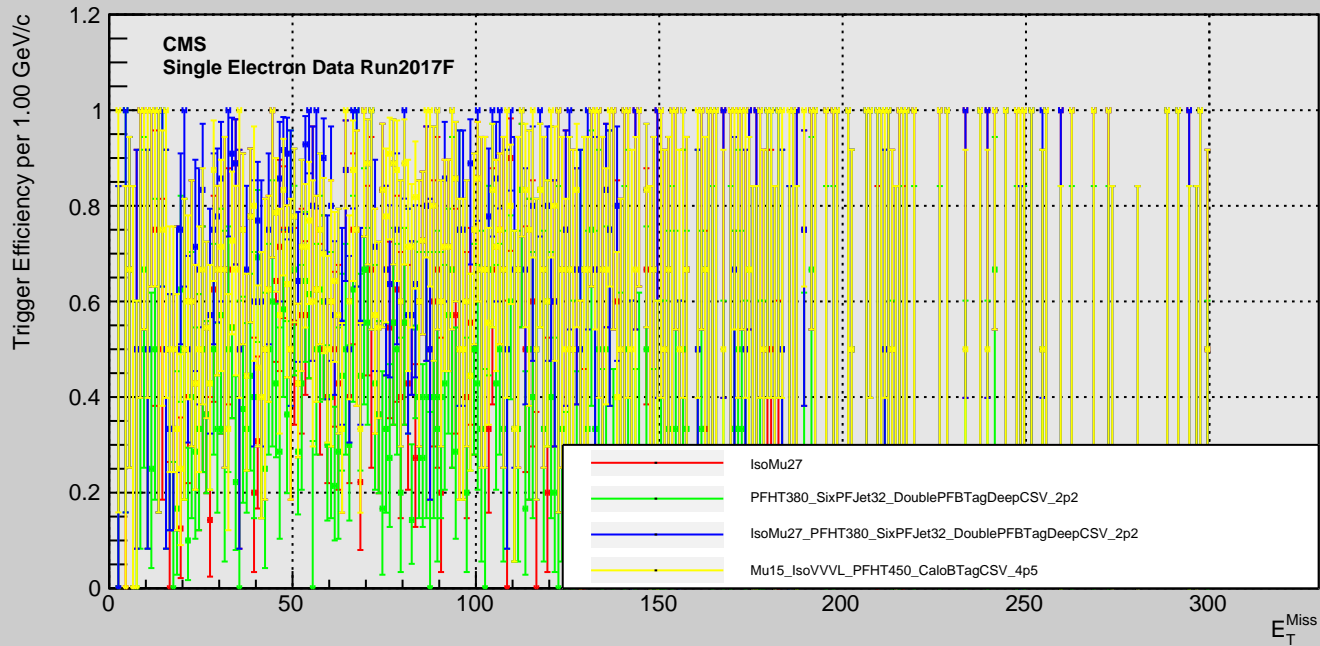




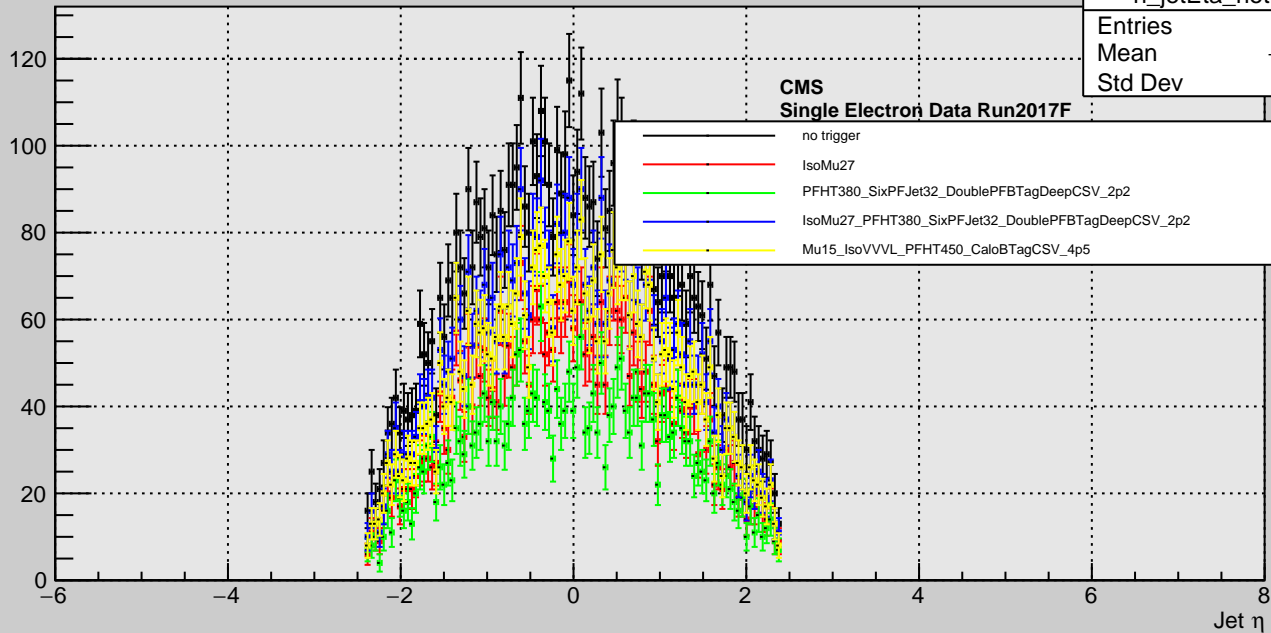
Number of Events per 1 GeV/c

h_metPt_notrigger	
Entries	1008
Mean	86.37
Std Dev	55.94





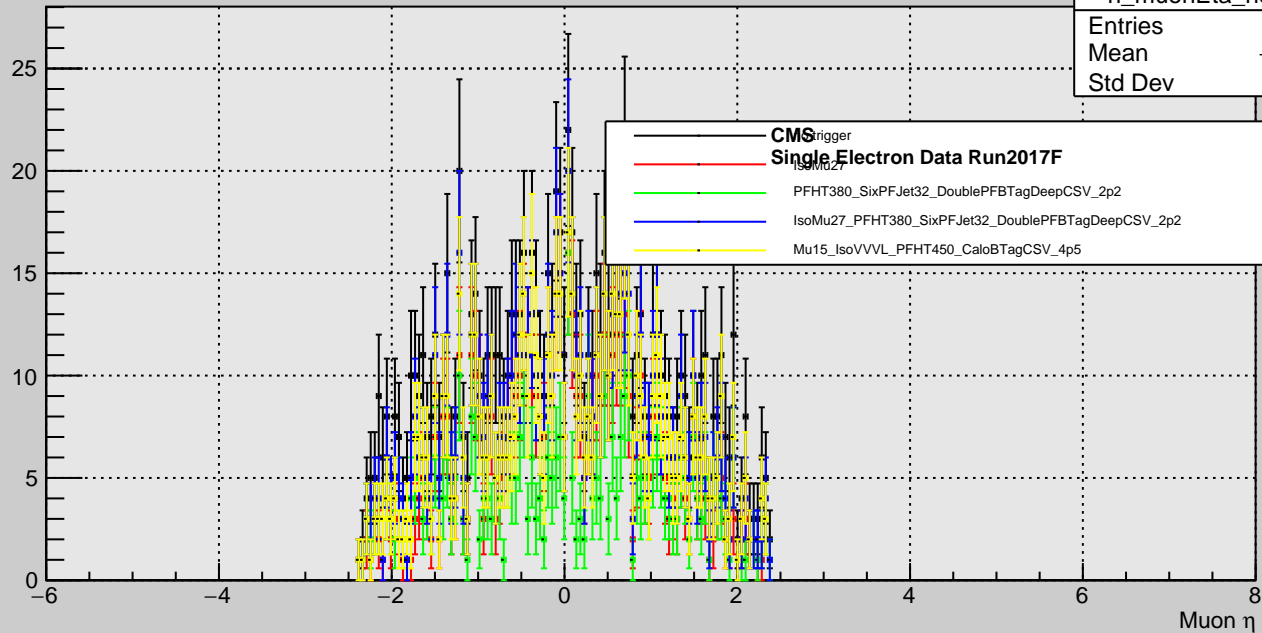
Number of Events per $\delta\eta = 0.046$

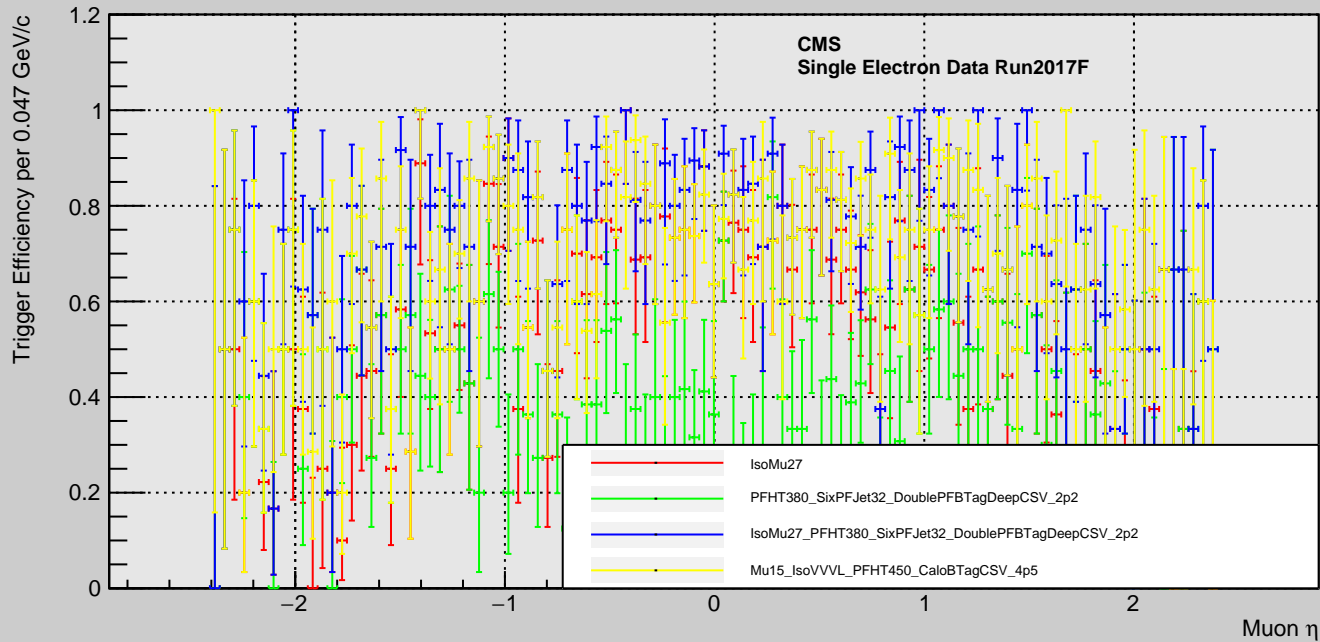


h_jetEta_notrigger

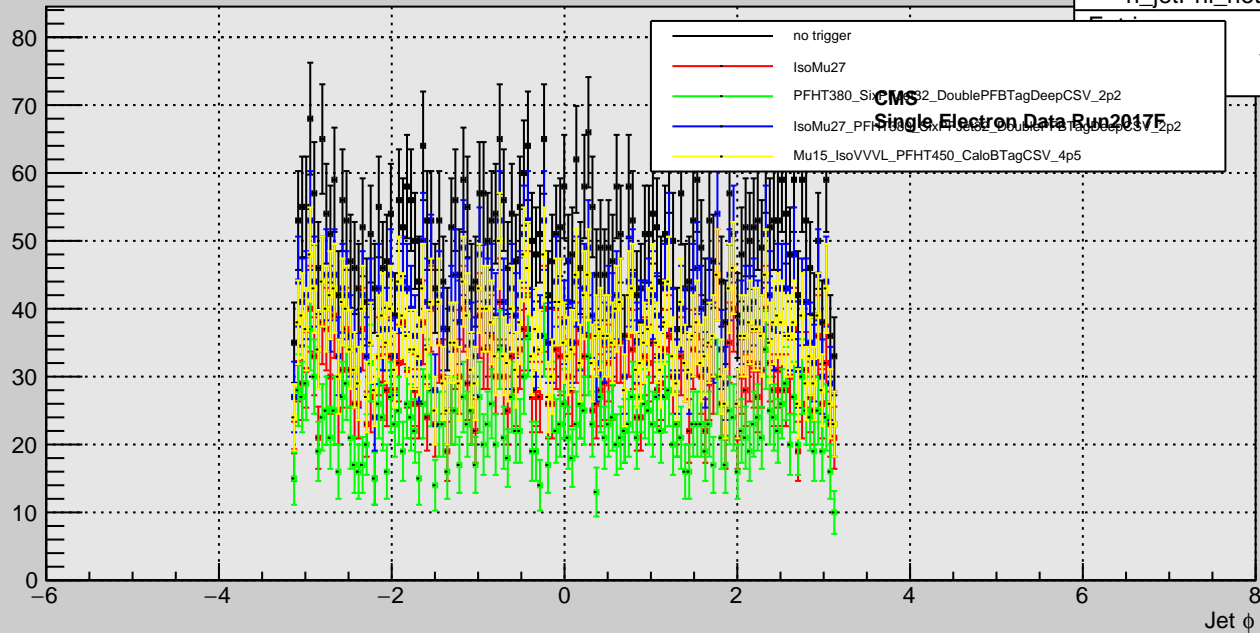
Entries	6886
Mean	-0.01697
Std Dev	1.138

Number of Events per $\delta\eta = 0.046$

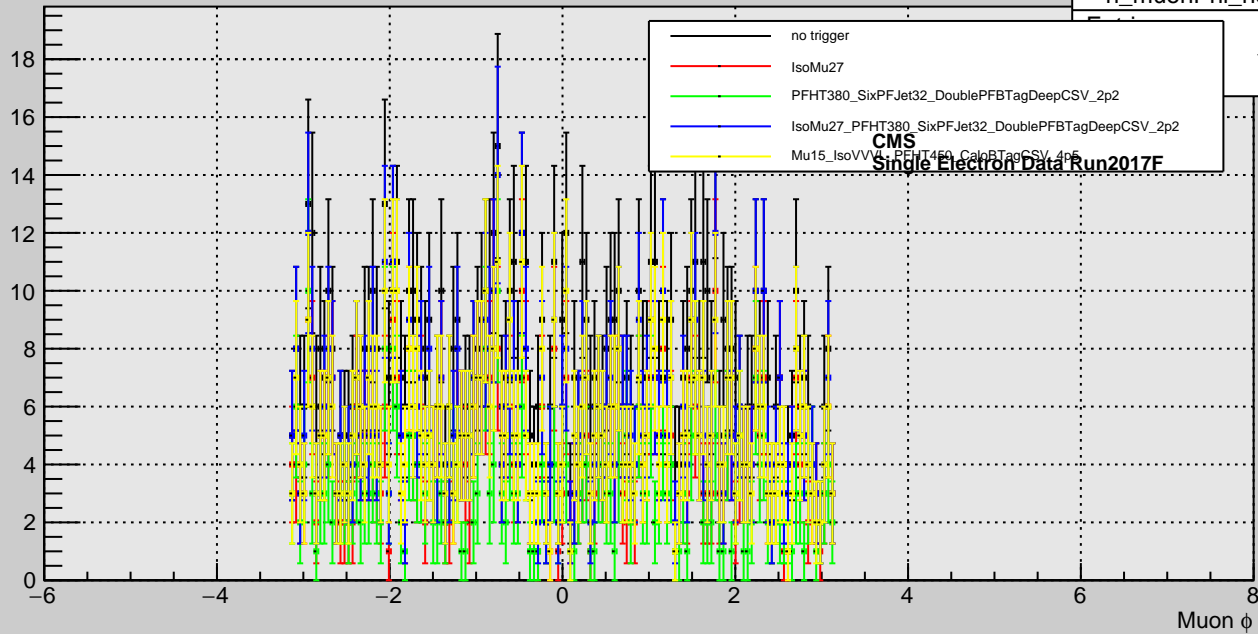




Number of Events per $\delta\phi = 0.046$



Number of Events per $\delta\phi = 0.046$



h_muonPhi_notrigger

1008

-0.09904

1.754

