

On-line (pre-)selection Requisites for:

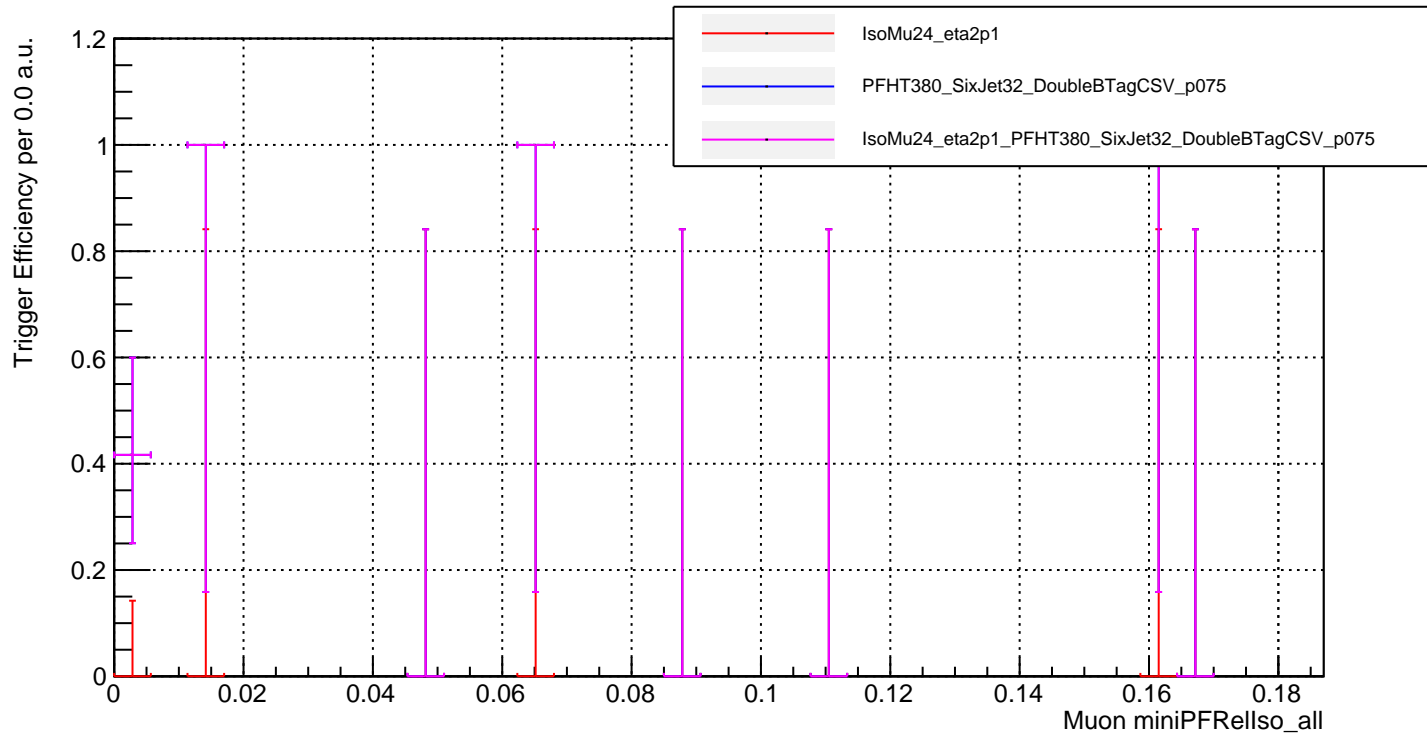
- **Jets:** number > 5
- **Muons plus Electrons:** number > 0

Event Limit: None (see last page)

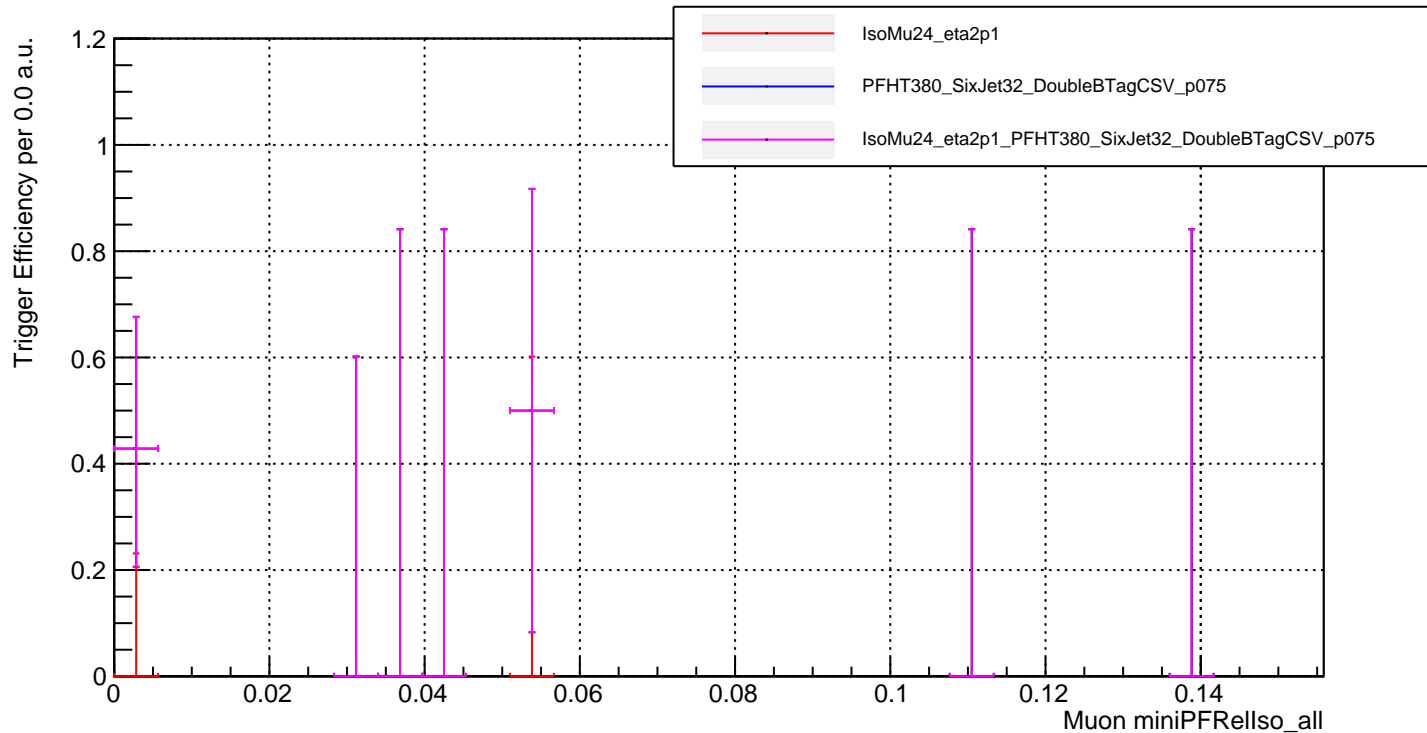
Off-line (post-)selection Requisites for:

- **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)

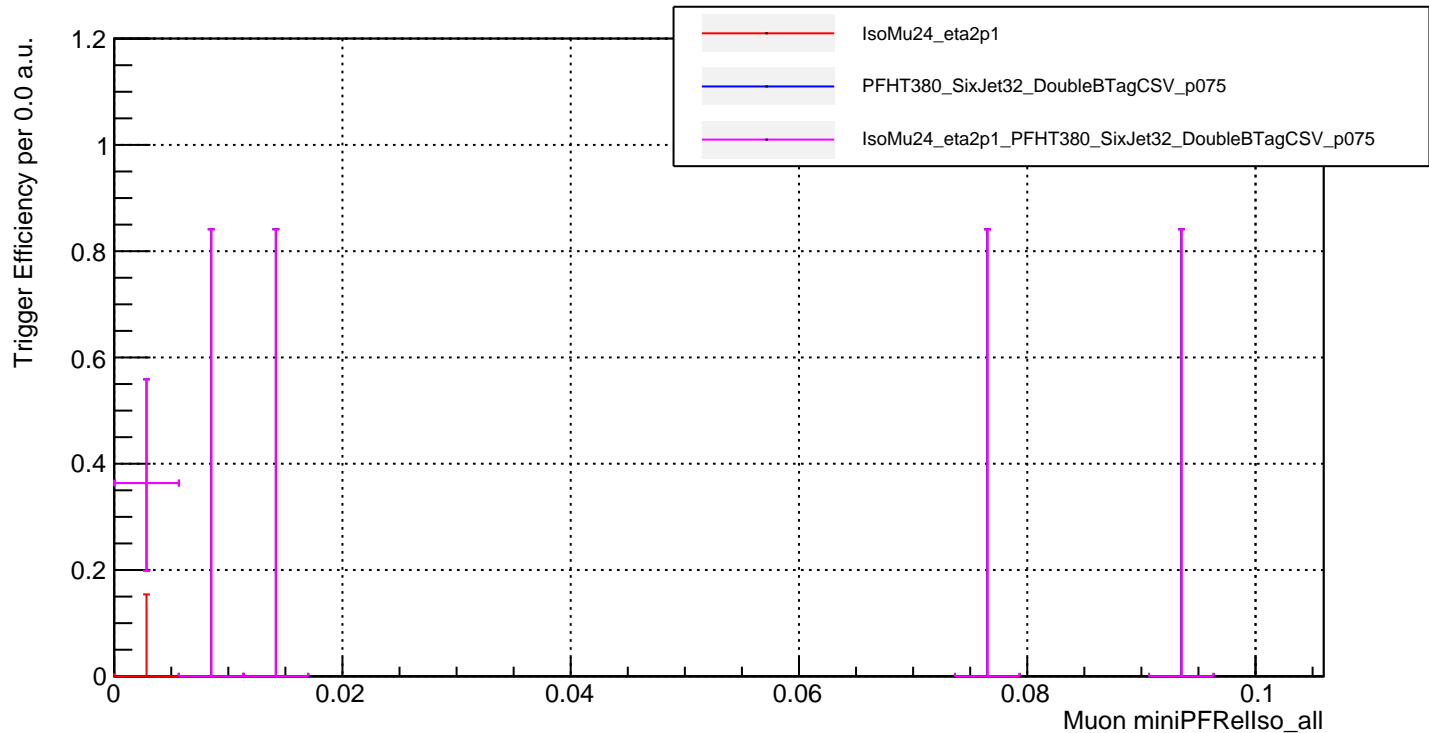
Muon Pt = 5



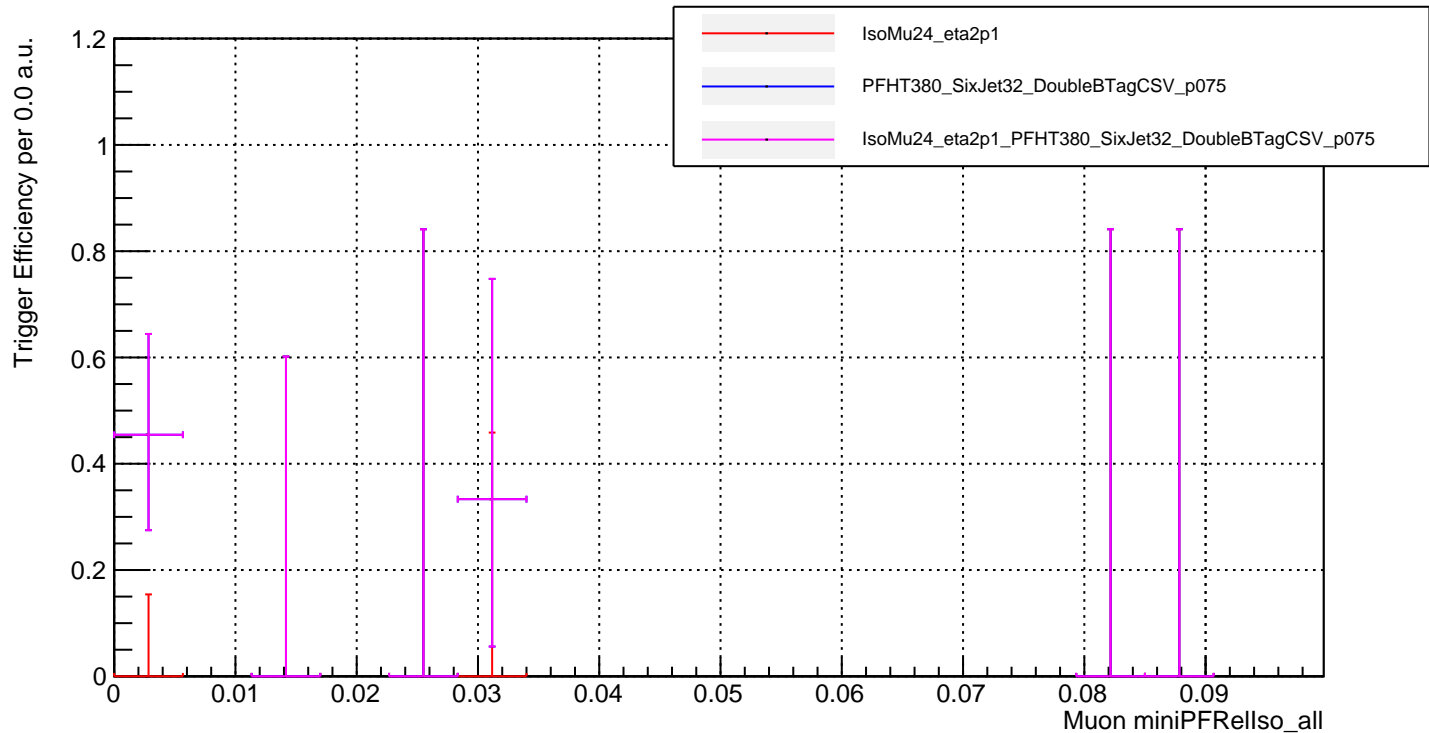
Muon Pt = 10



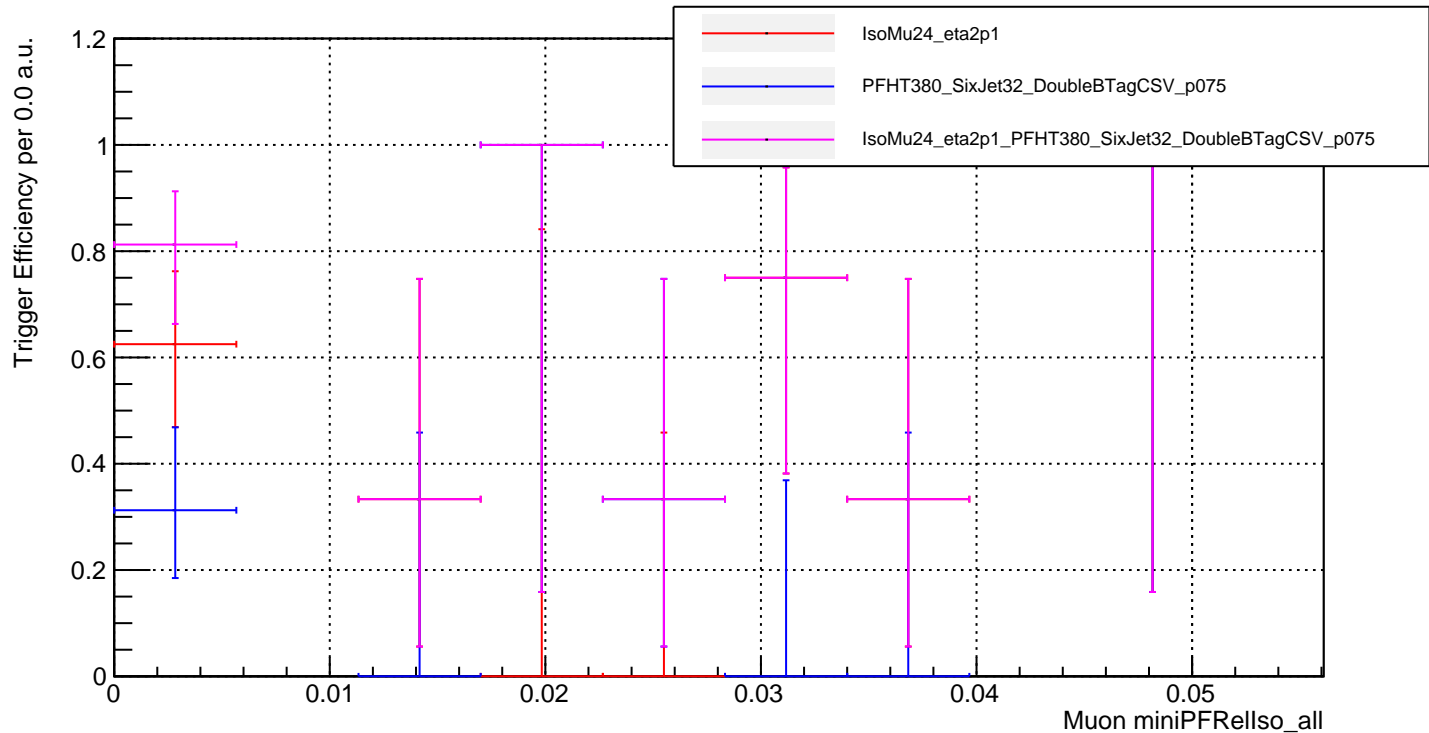
Muon Pt = 15



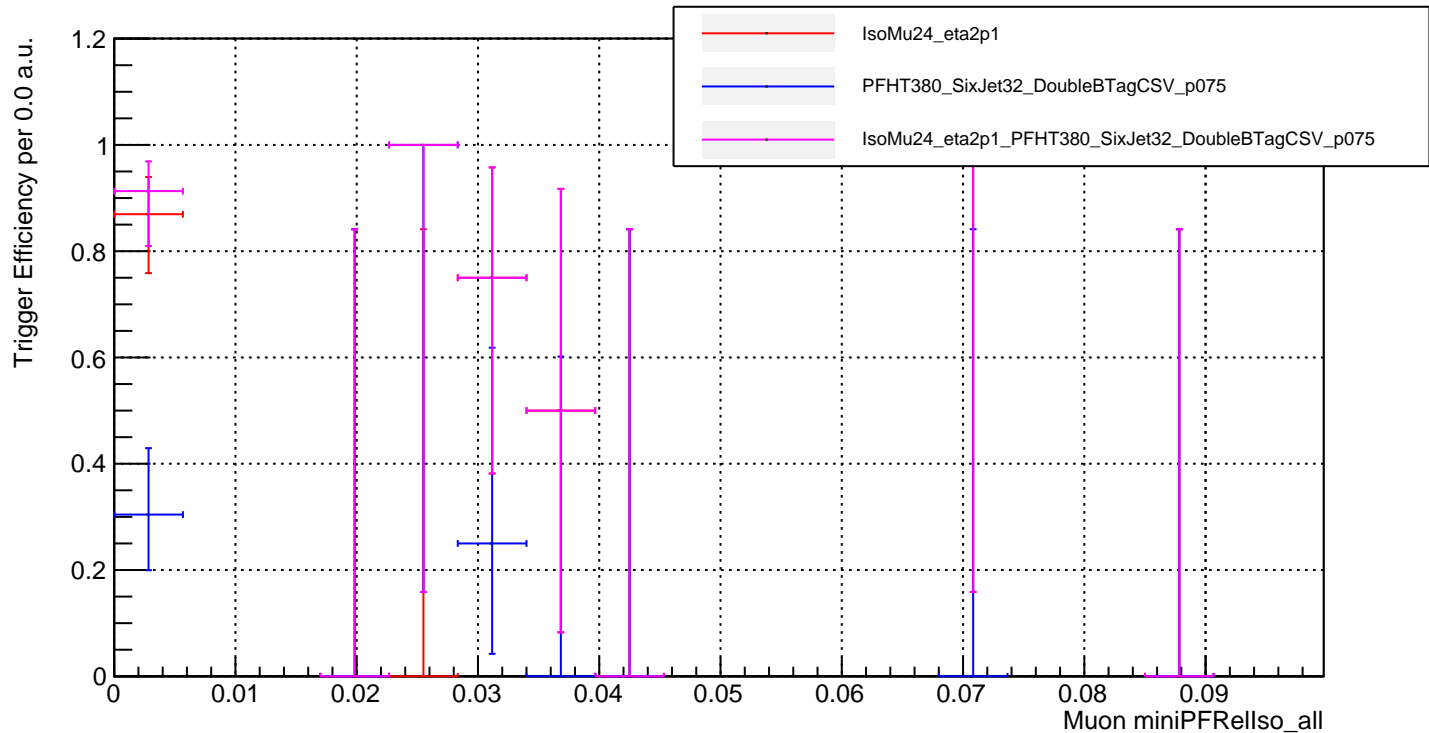
Muon Pt = 20



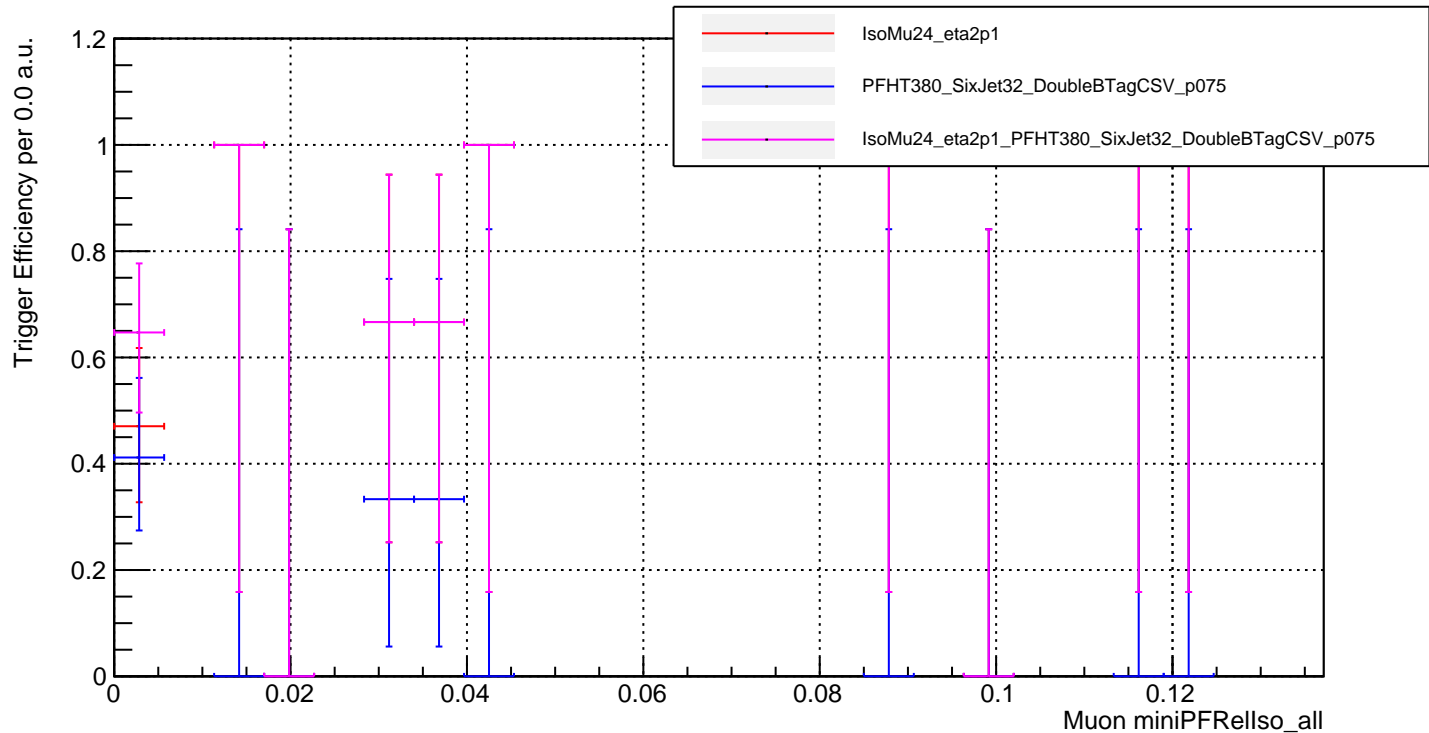
Muon Pt = 25



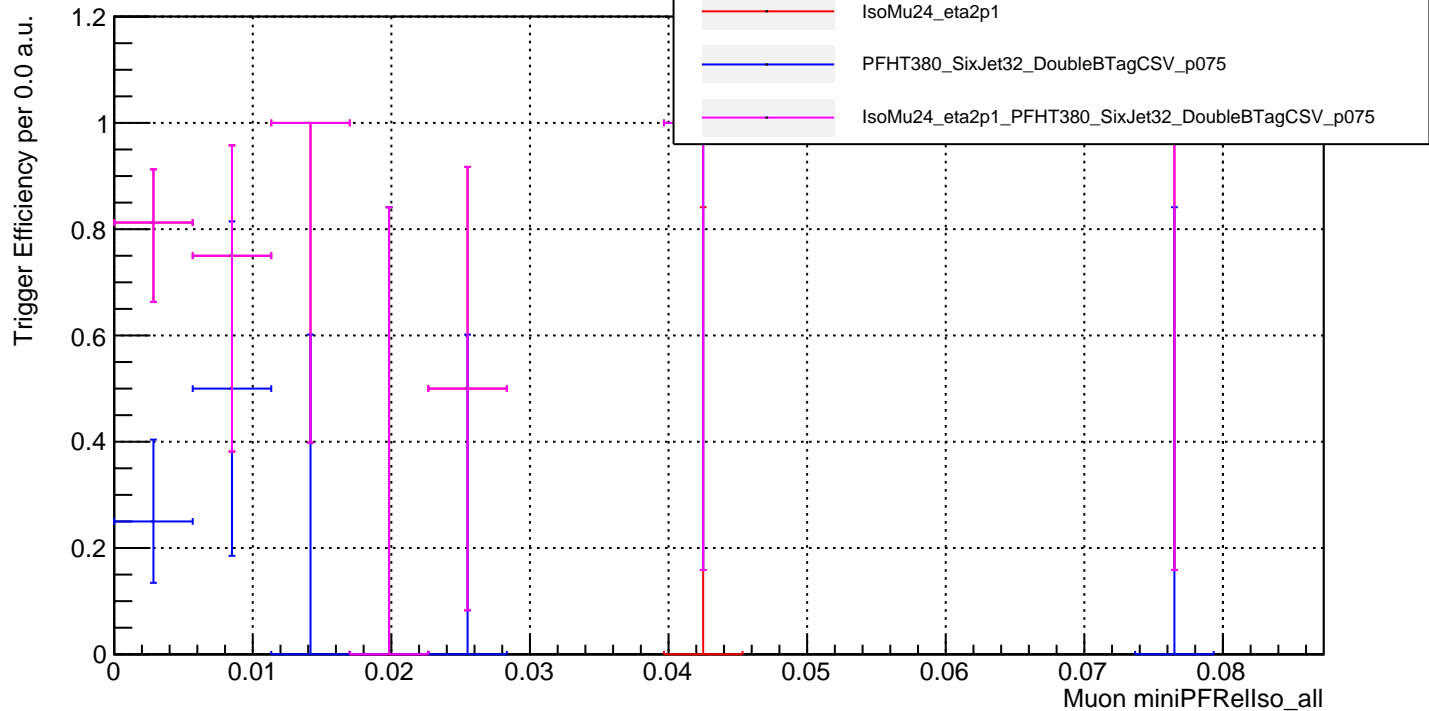
Muon Pt = 30



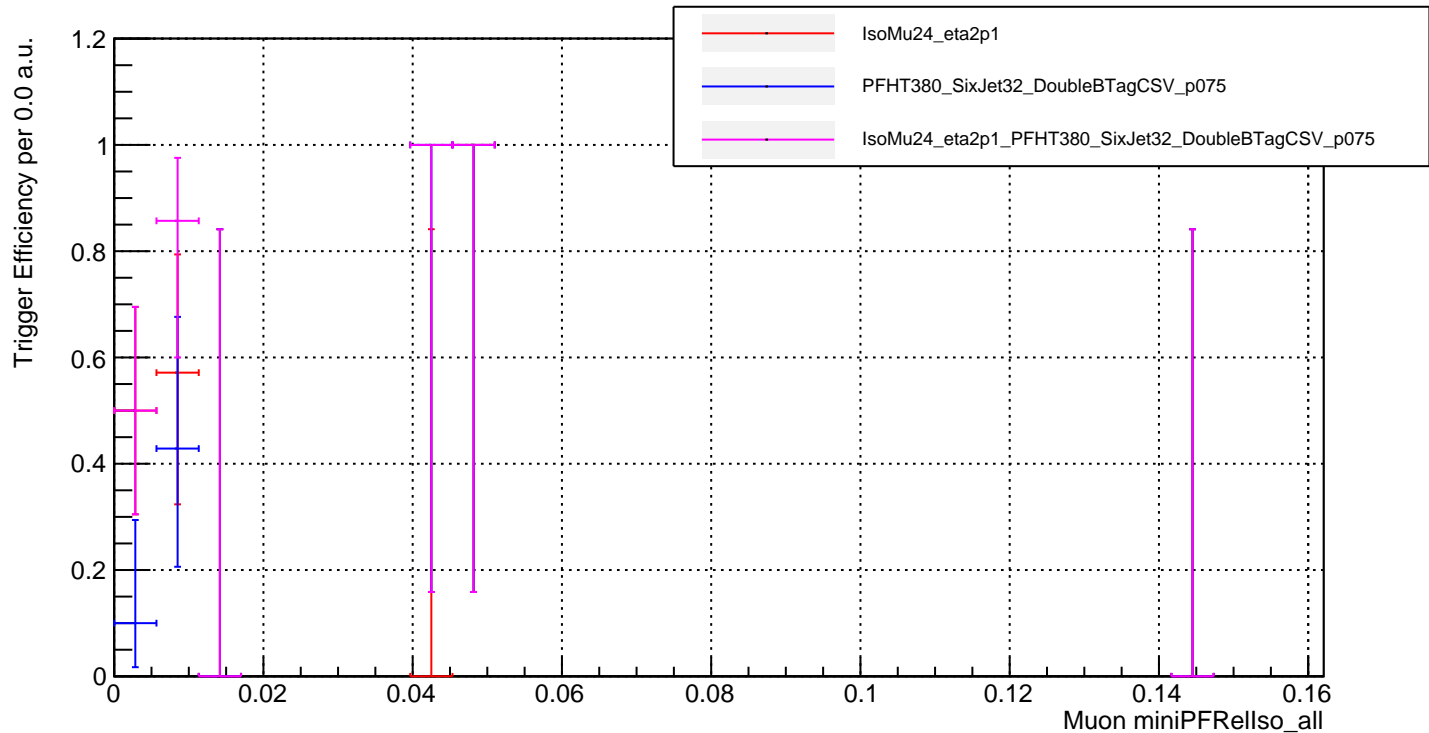
Muon Pt = 35



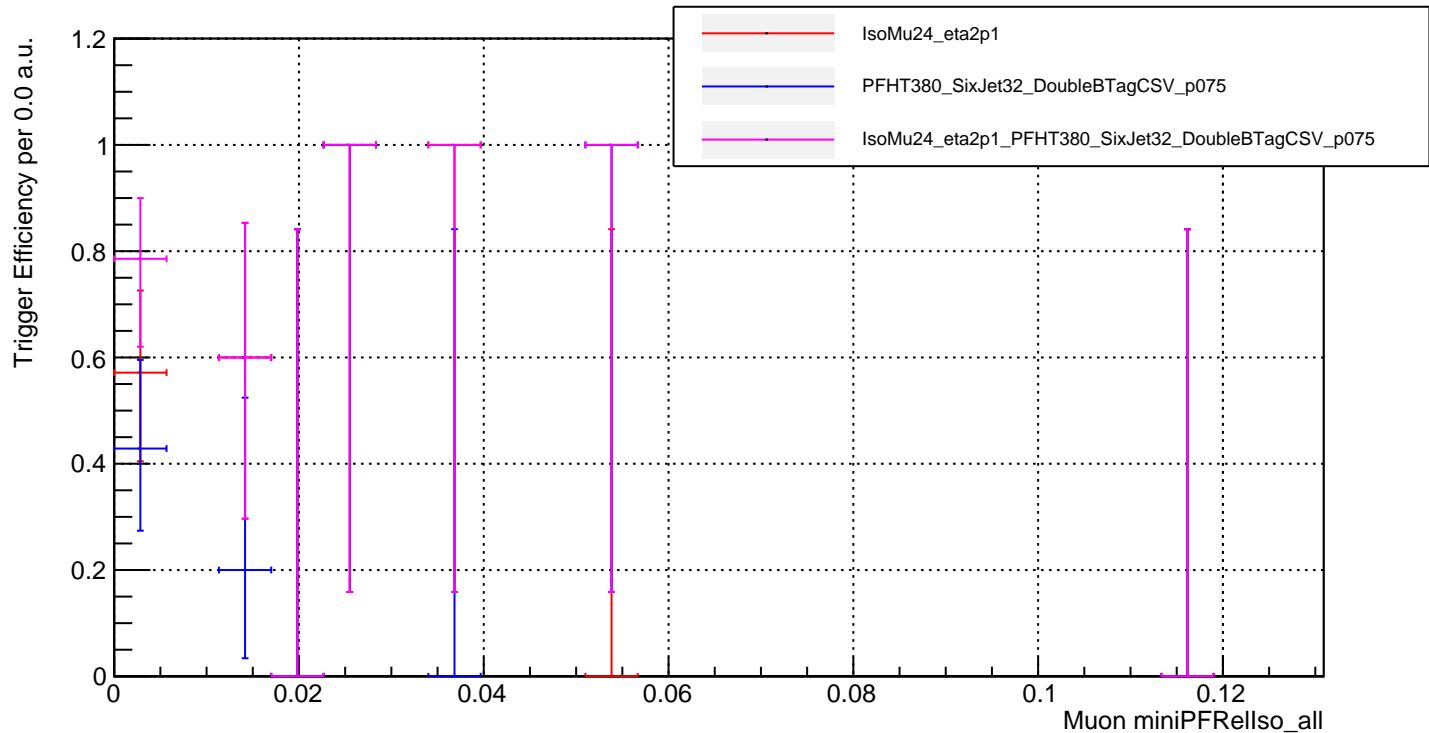
Muon Pt = 40



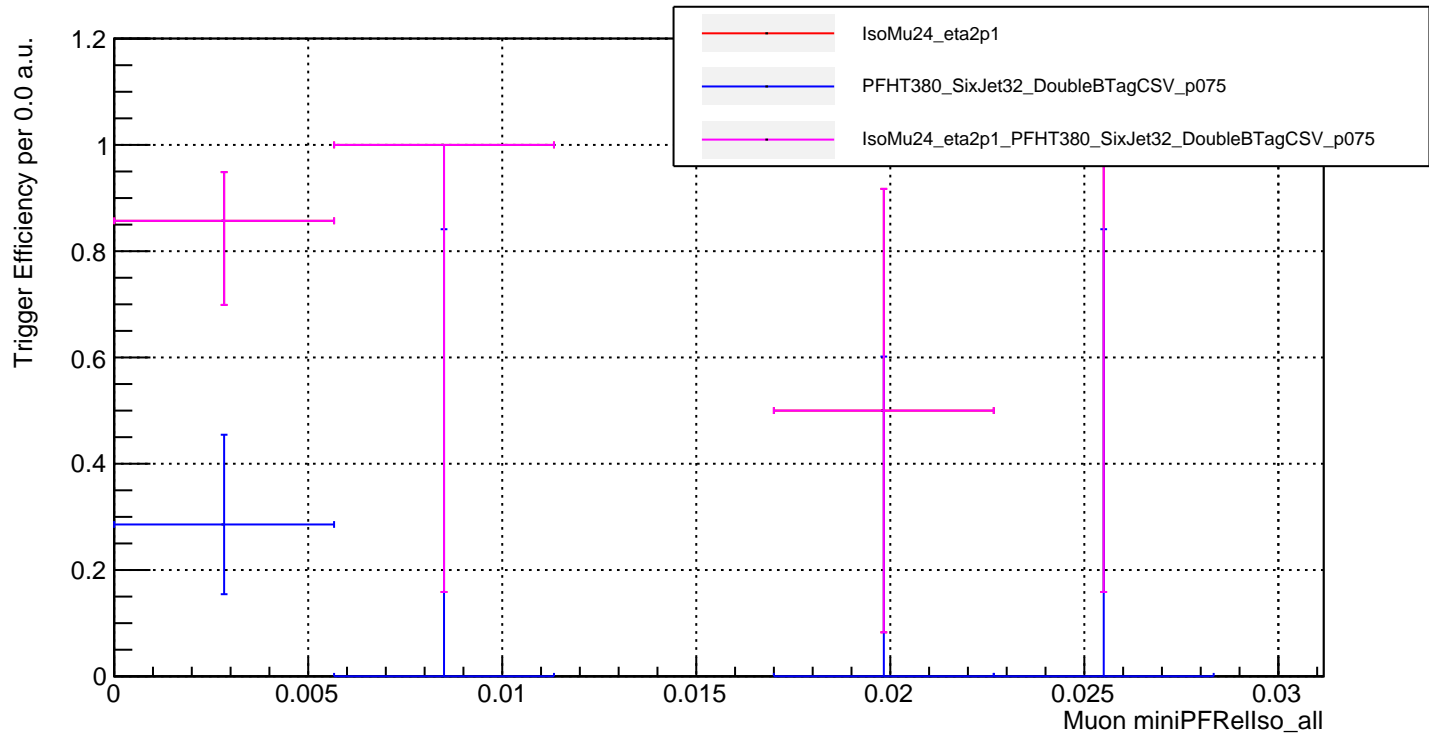
Muon Pt = 45



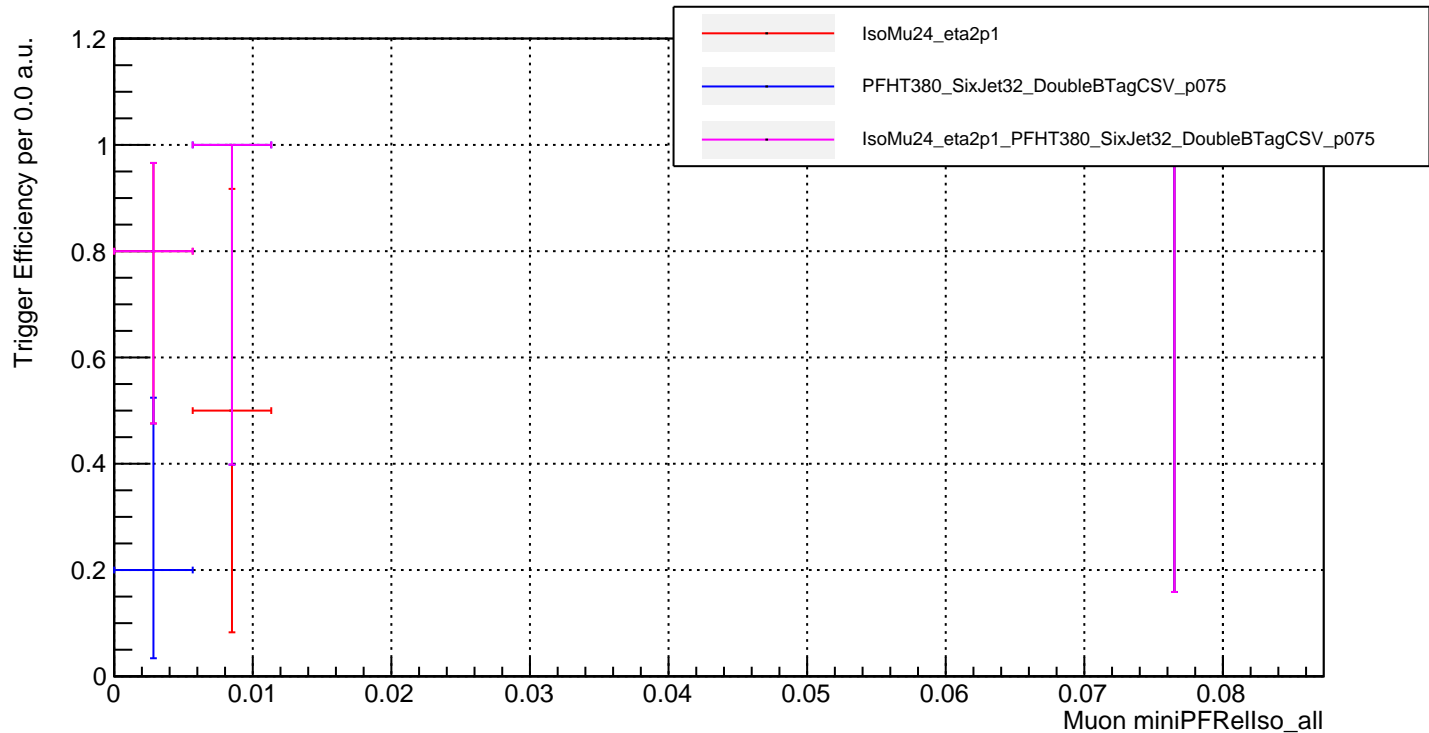
Muon Pt = 50



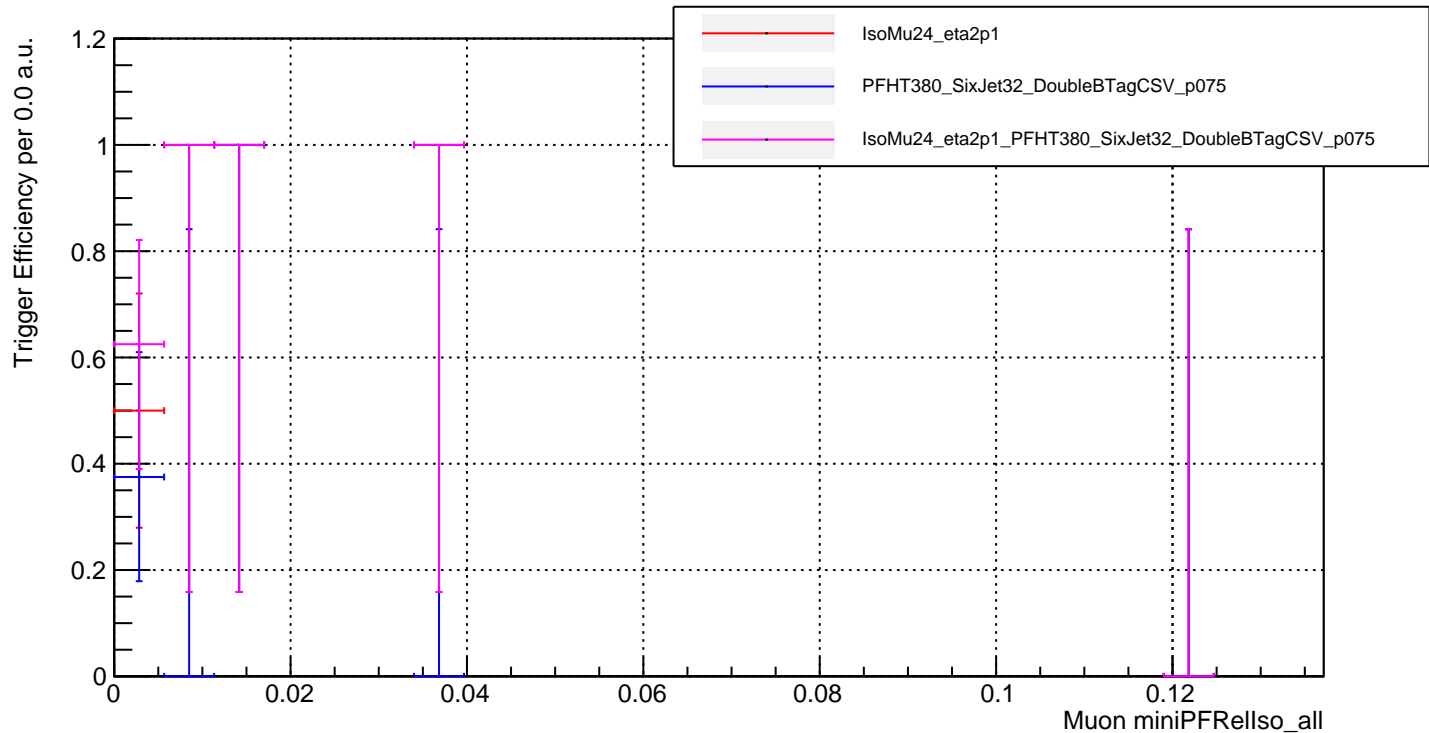
Muon Pt = 55



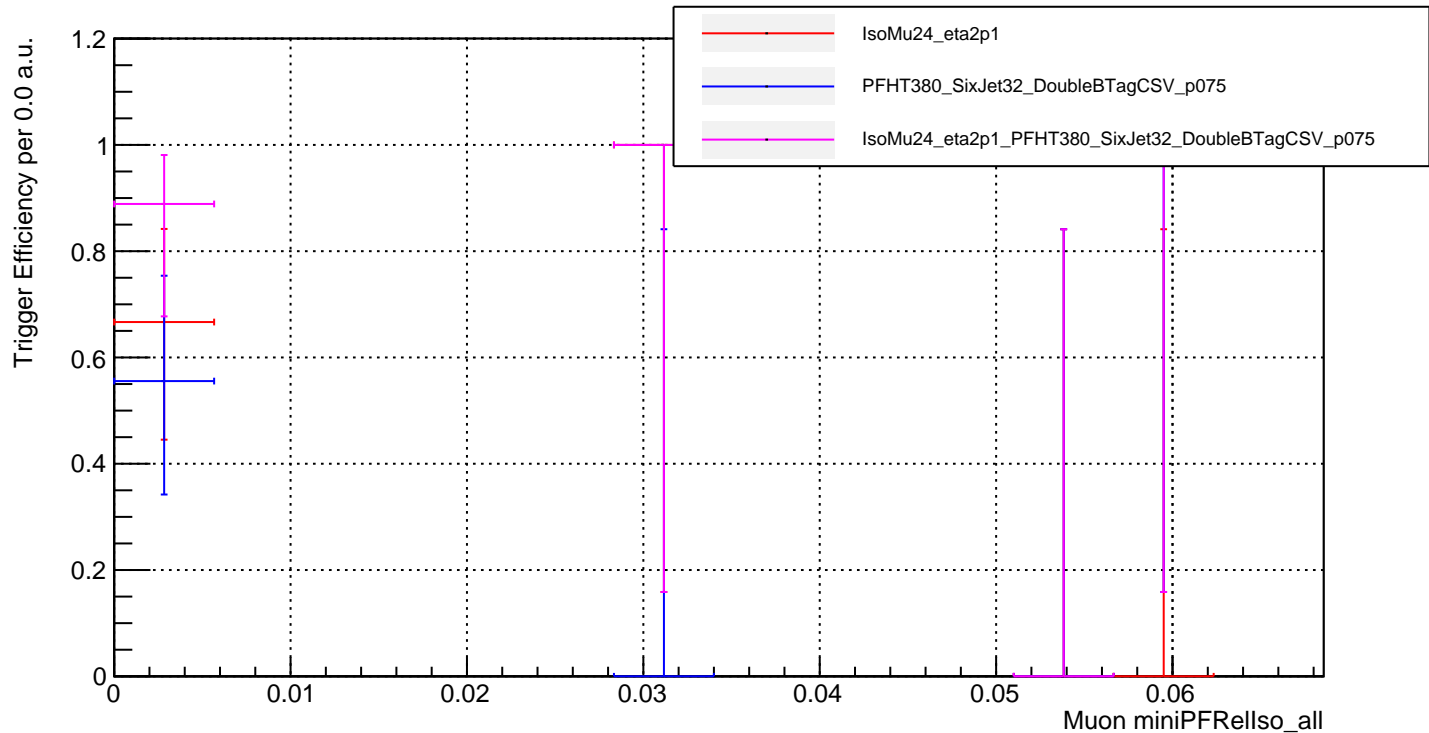
Muon Pt = 60



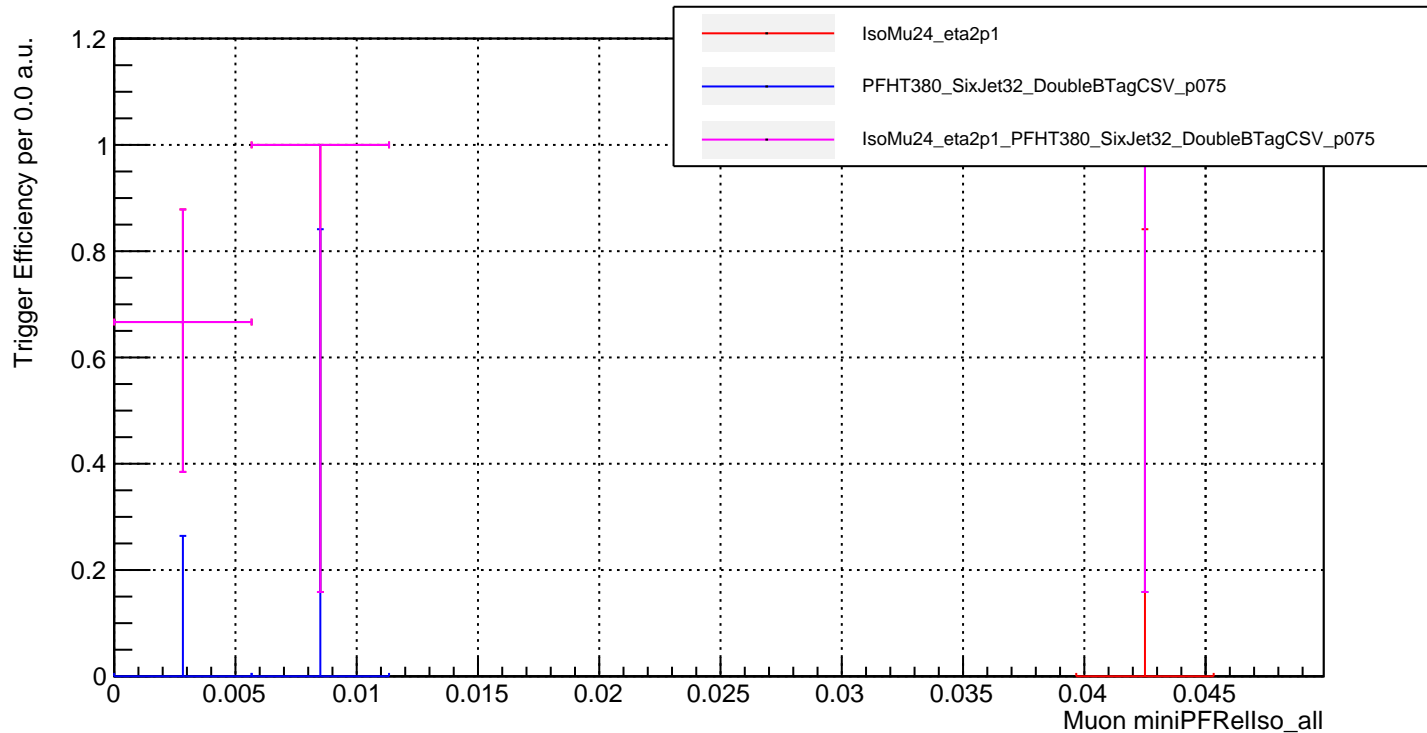
Muon Pt = 65



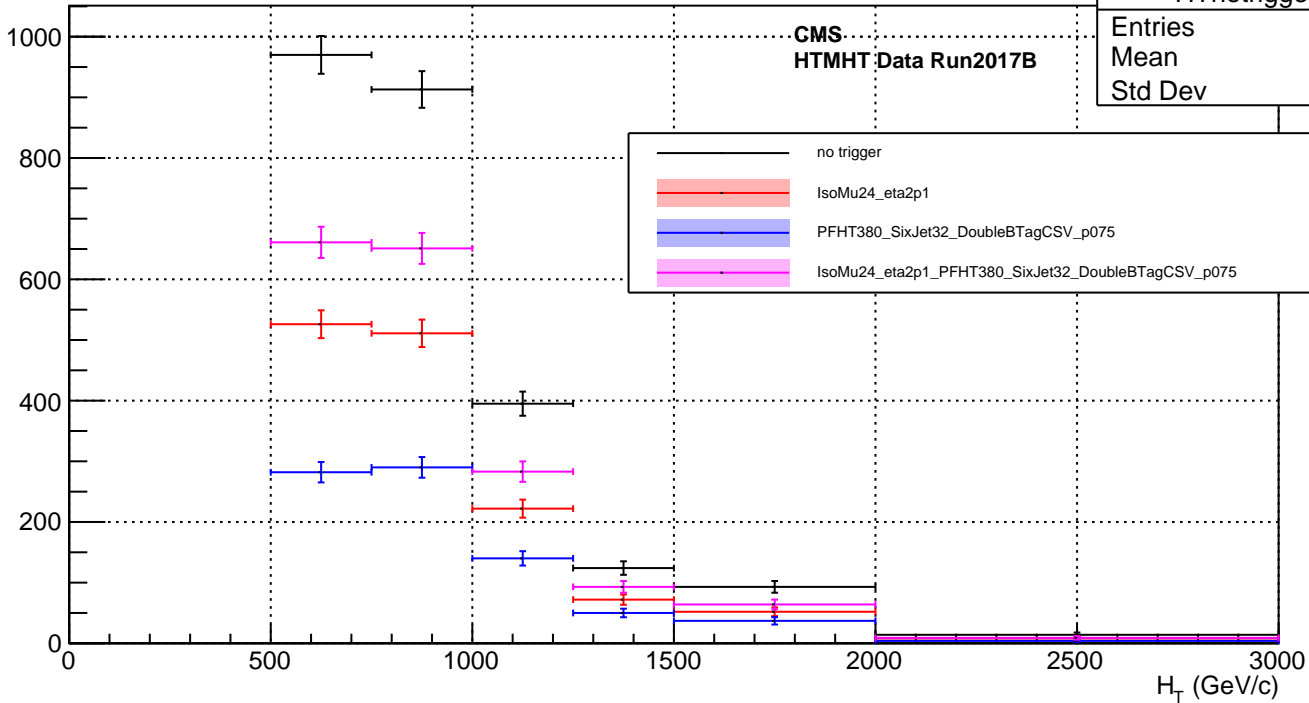
Muon Pt = 70



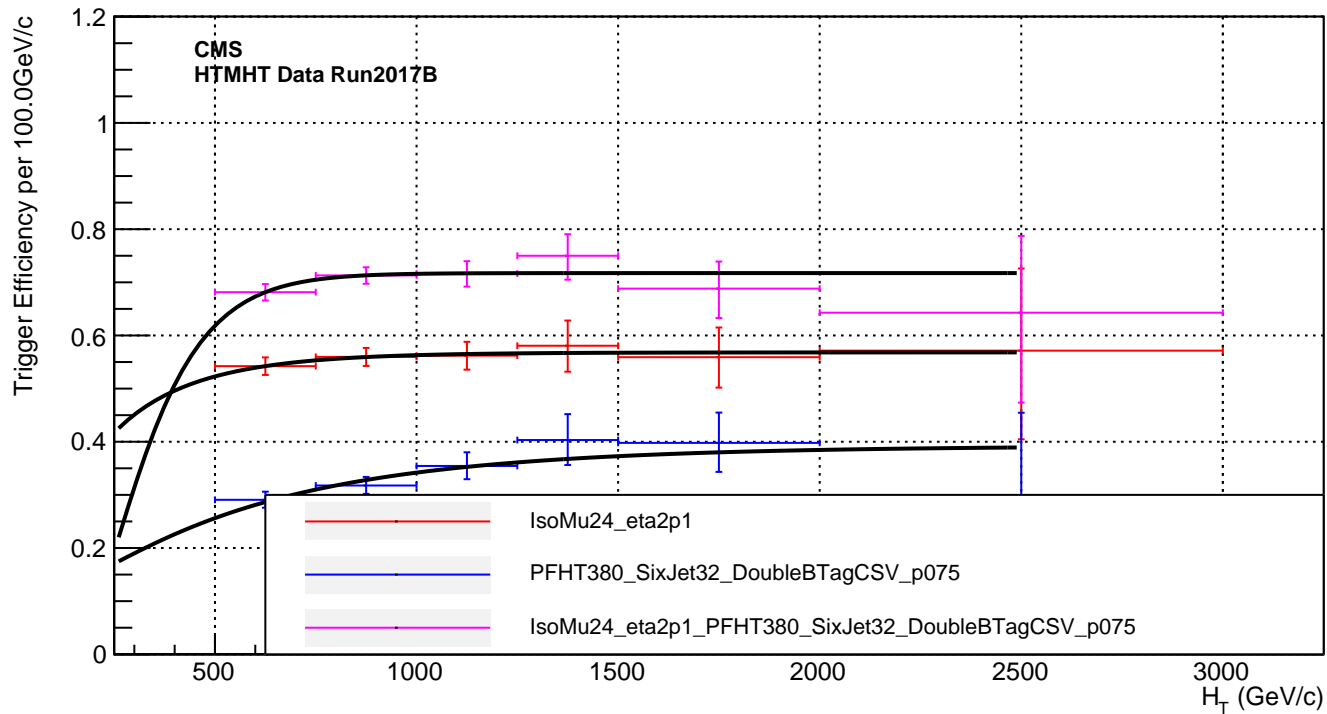
Muon Pt = 75

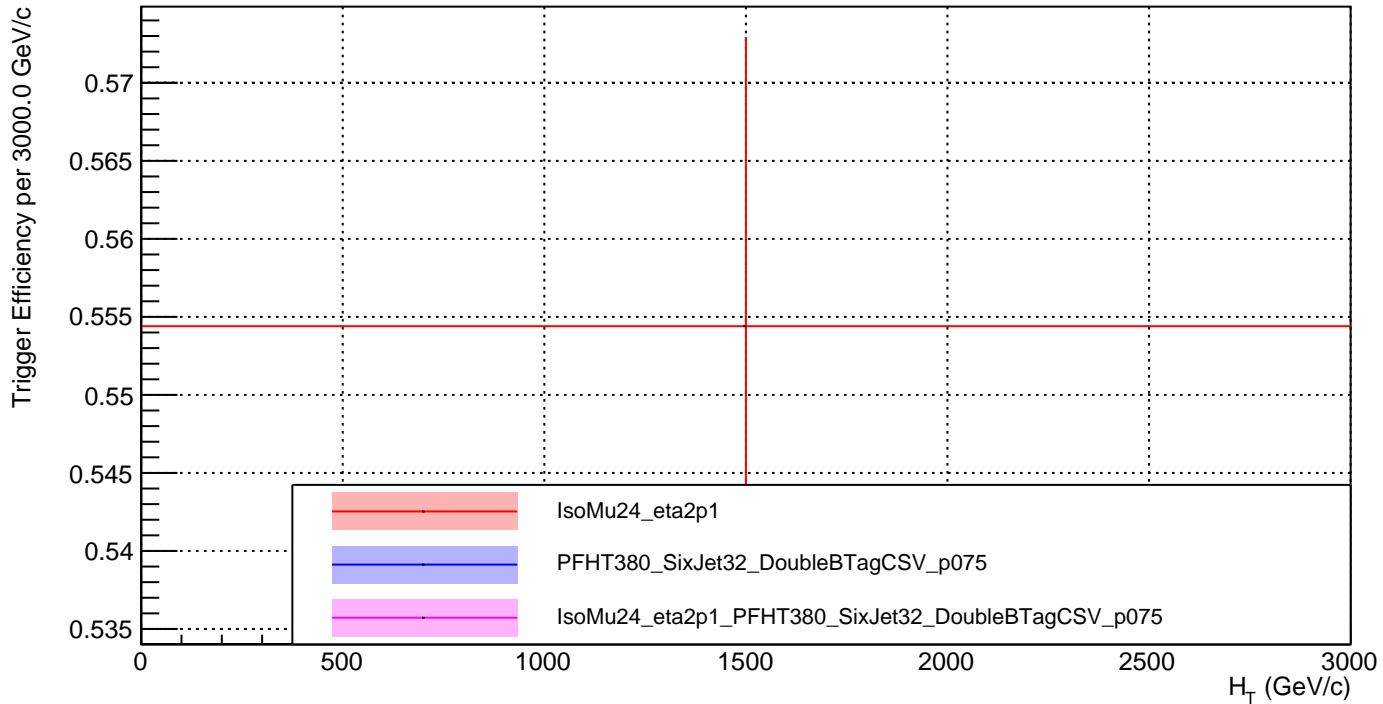


Number of Events per 10 GeV/c

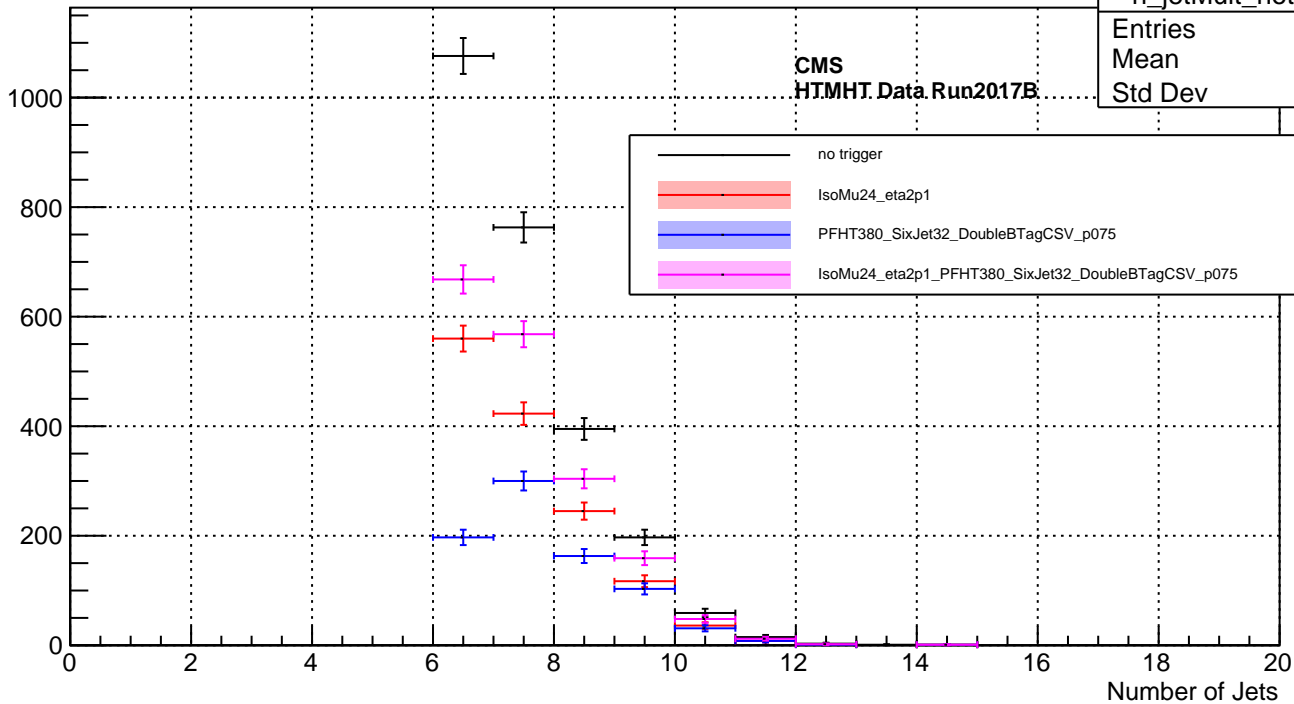


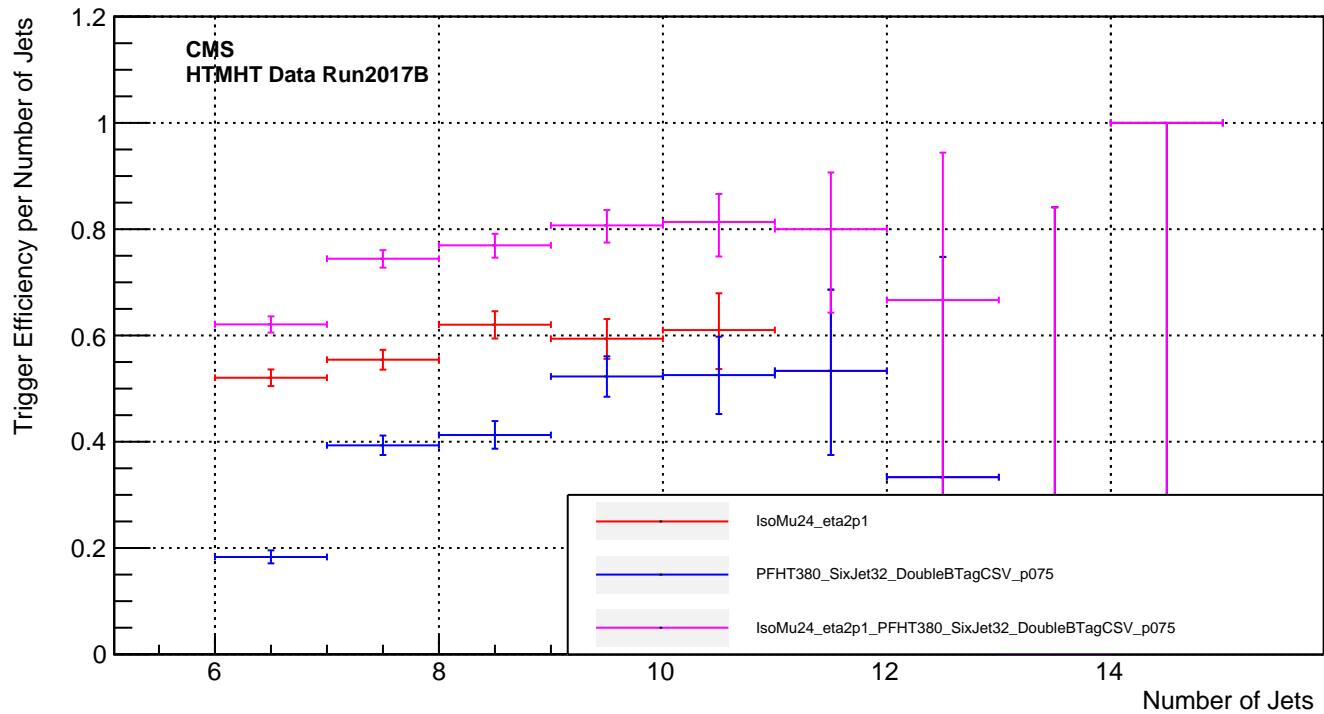
HTnottrigger	
Entries	2510
Mean	880.8
Std Dev	281.5



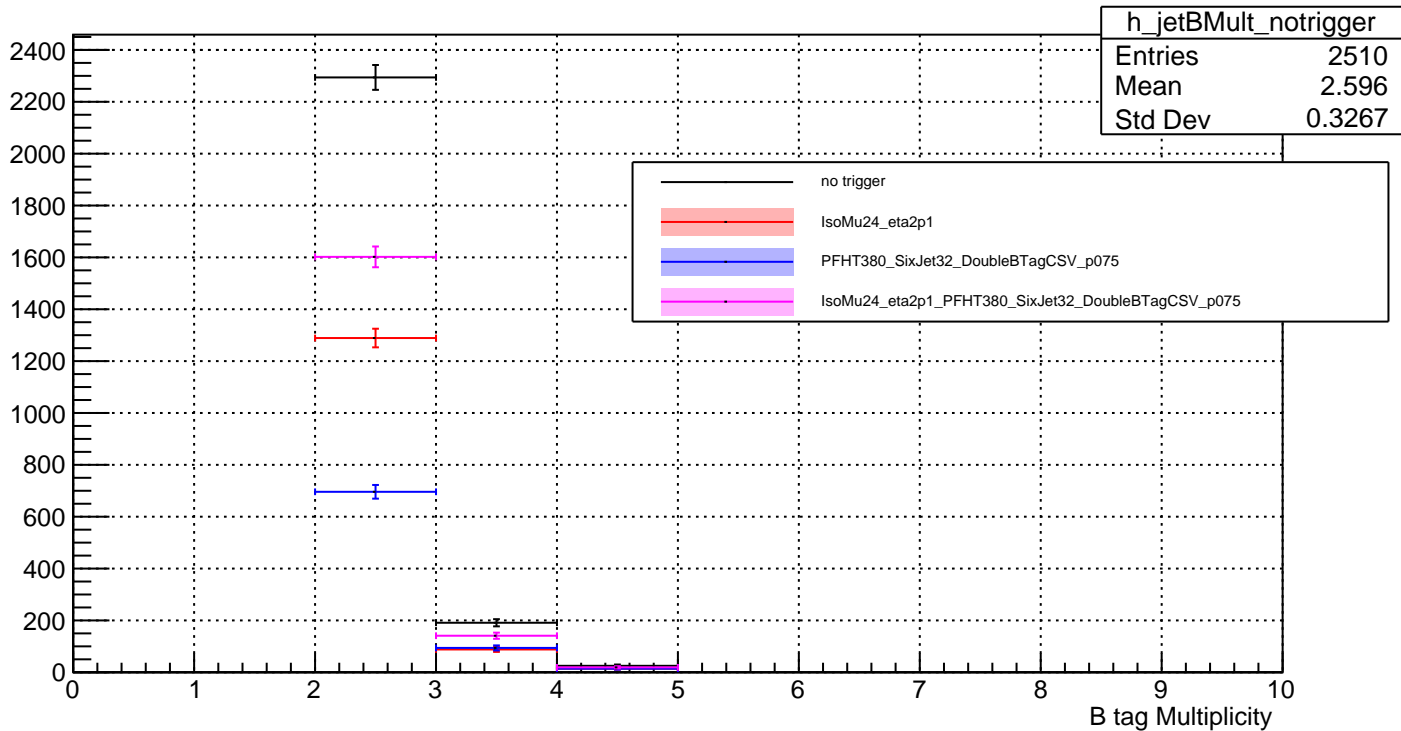


Number of Events per Number of Jets

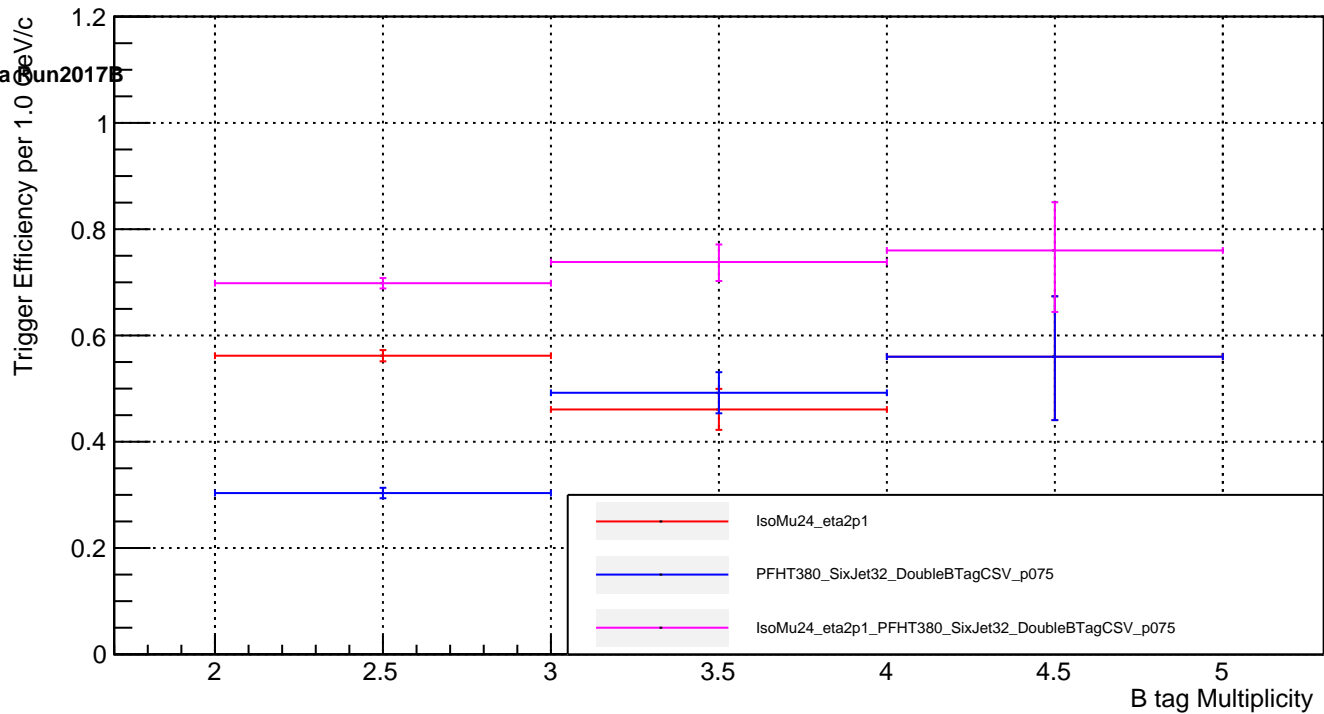




Number of Events per Number of Jets



Data Run 2017B

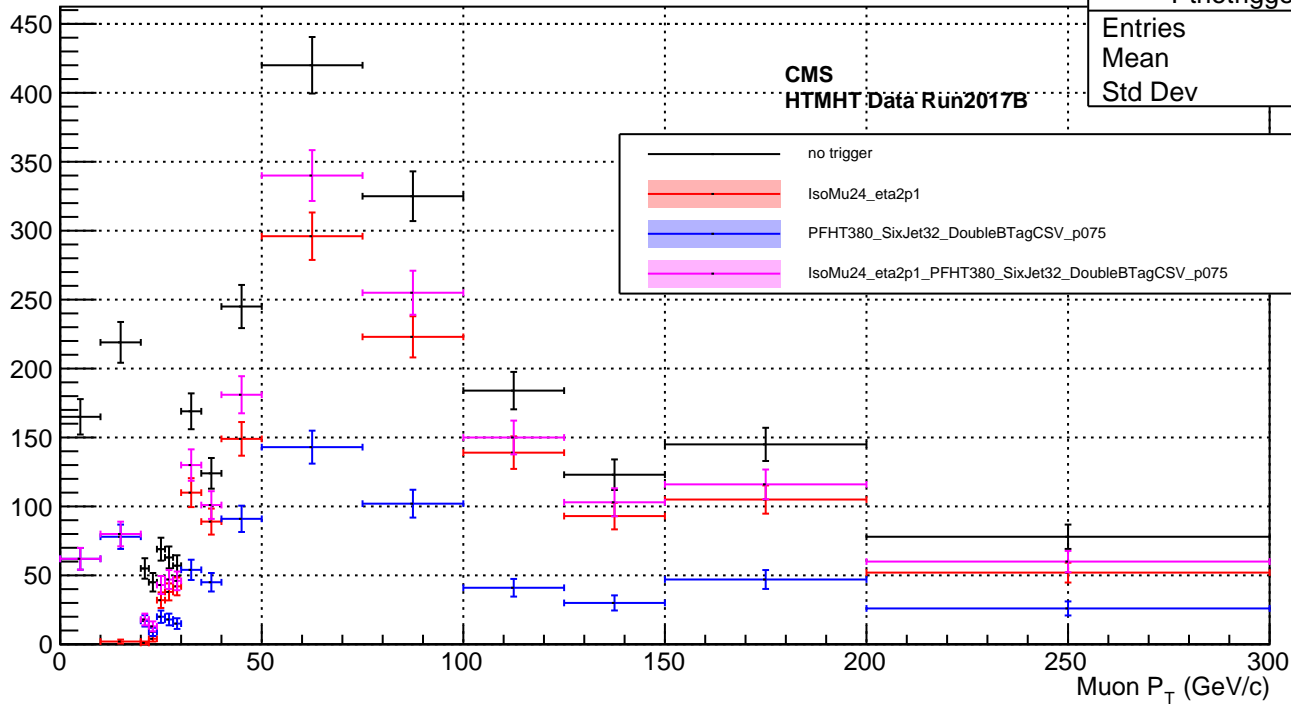
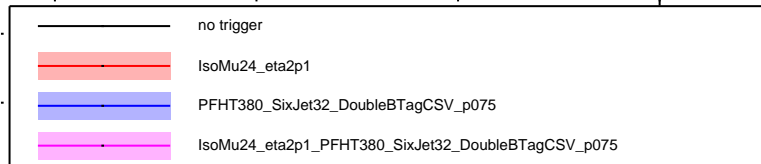


Number of Events per 1 GeV/c

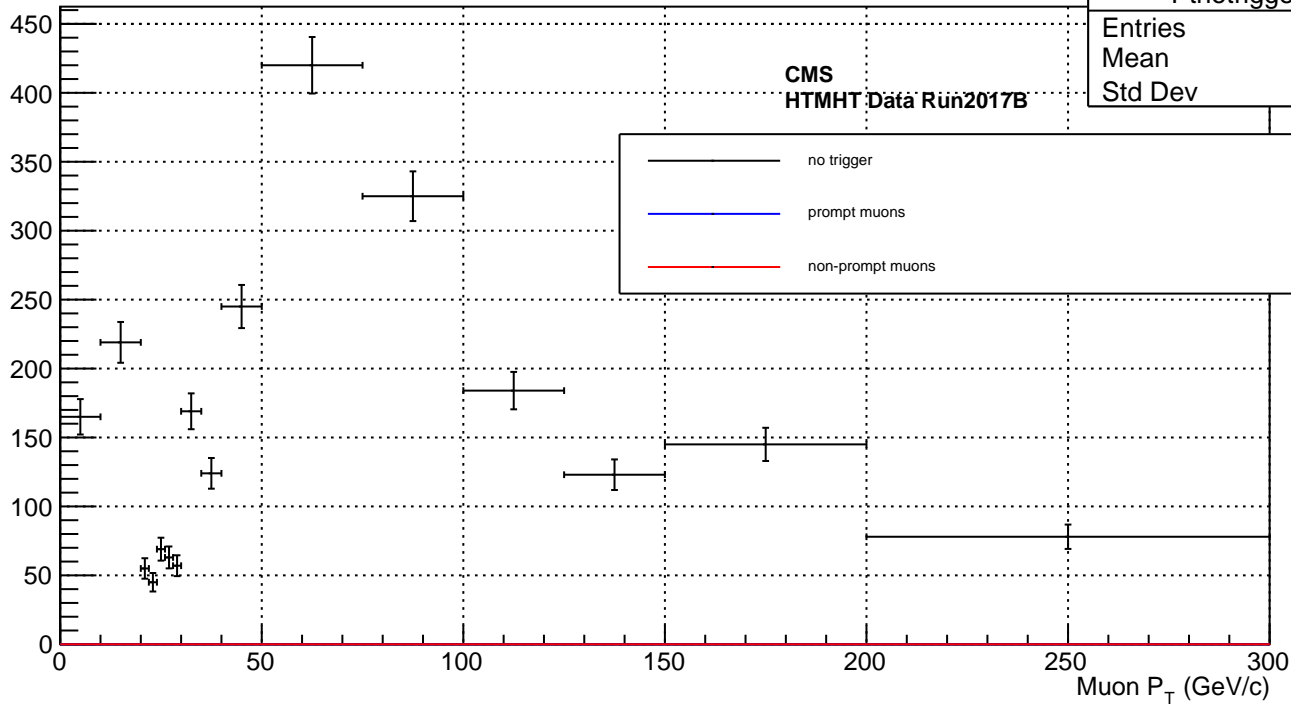
CMS
HTMHT Data Run2017B

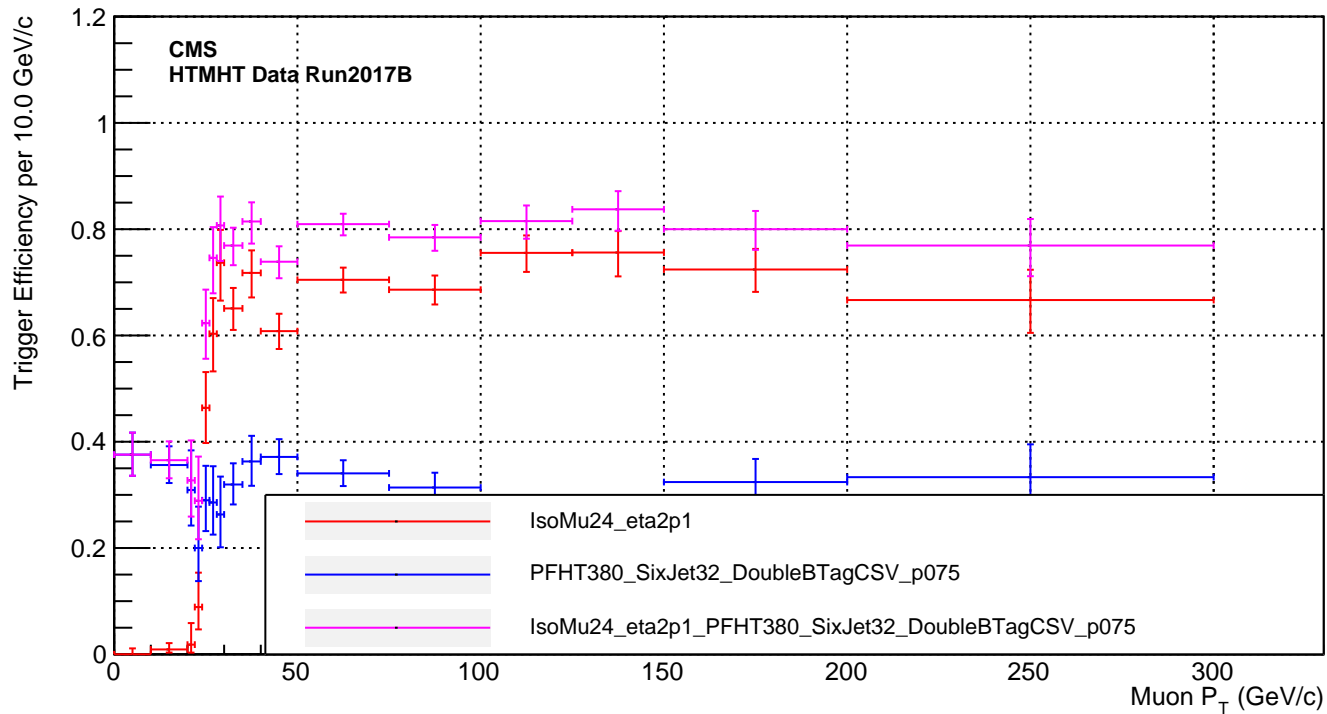
Ptnottrigger

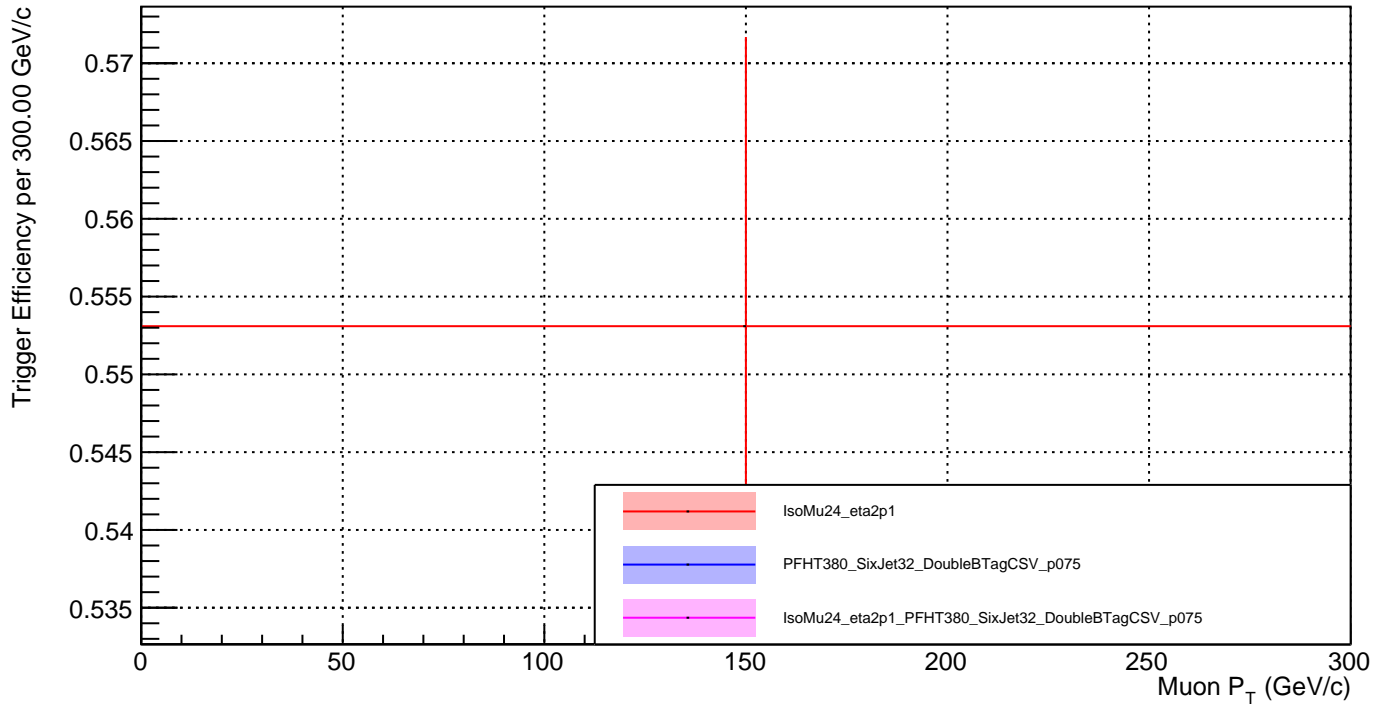
Entries	2510
Mean	67.28
Std Dev	53.45



Number of Events per 1 GeV/c

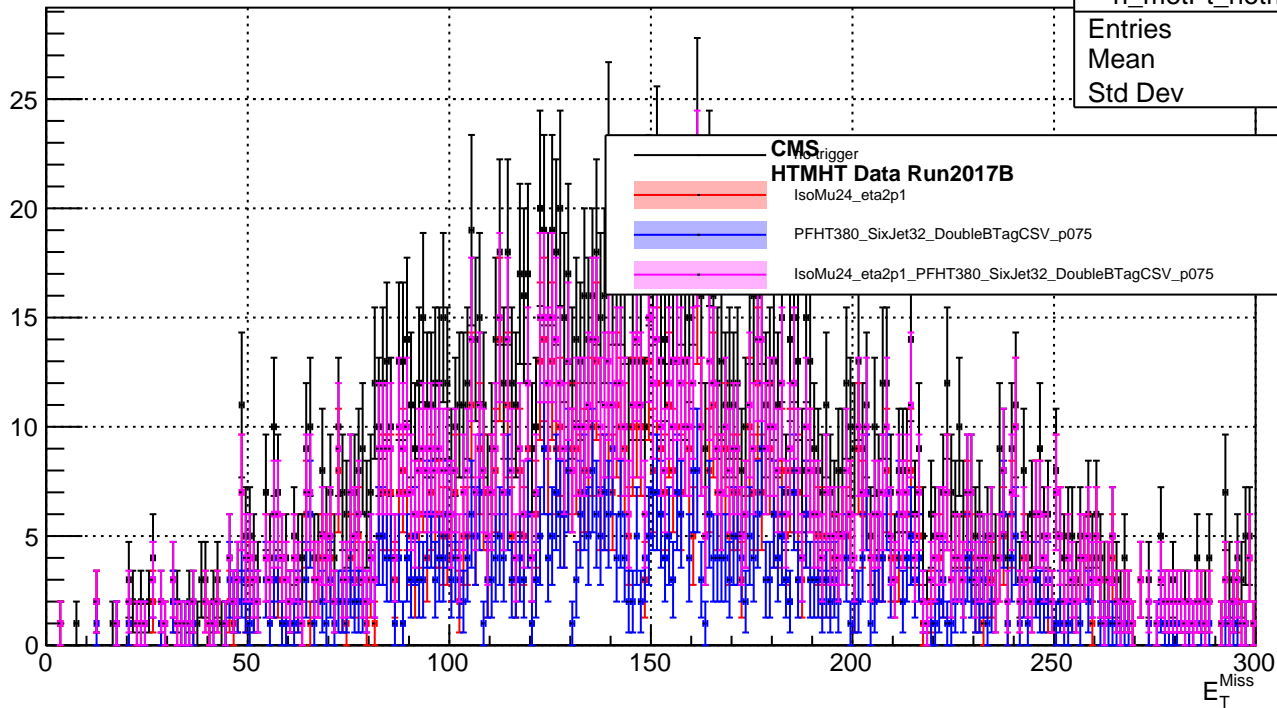


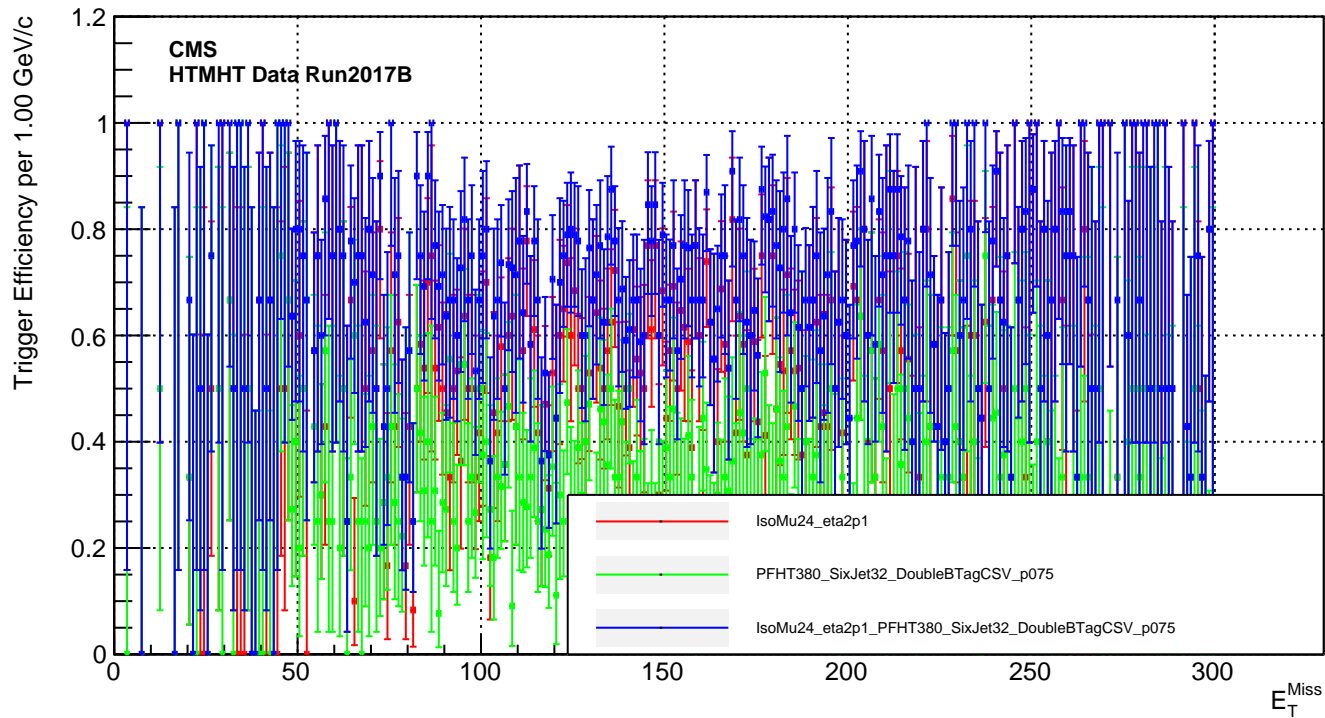




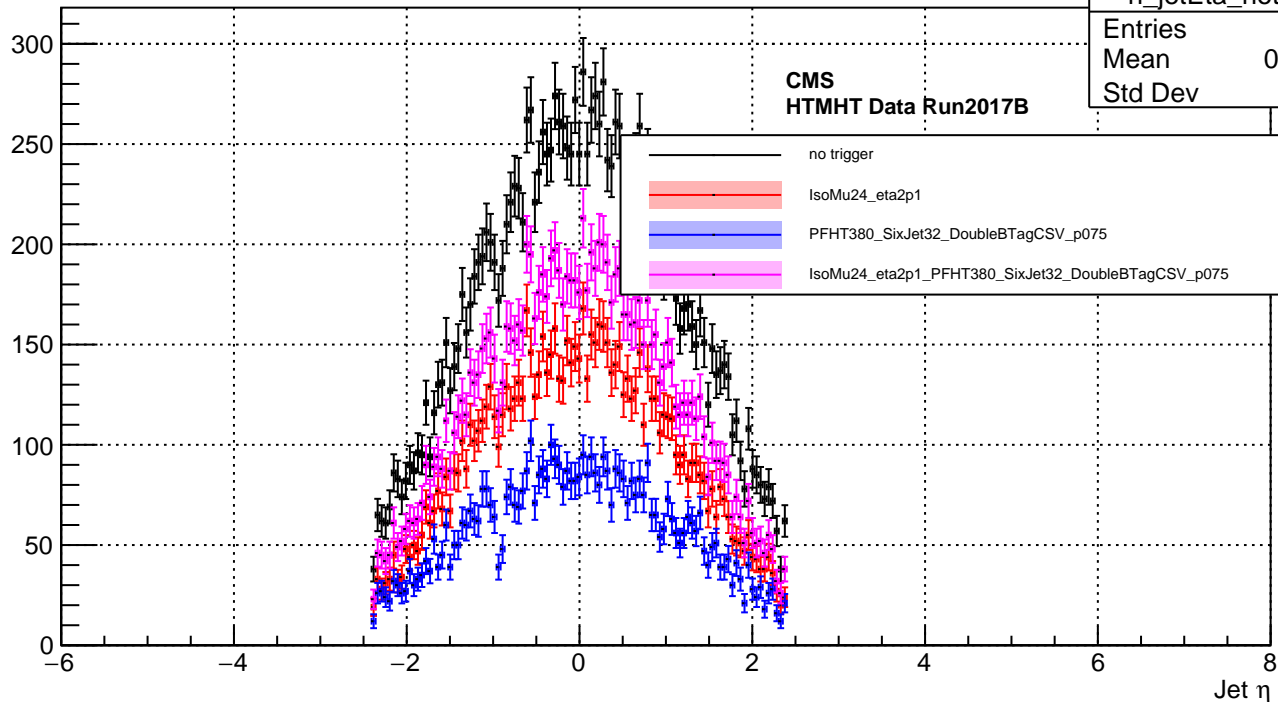
Number of Events per 1 GeV/c

h_metPt_notrigger	
Entries	2510
Mean	152.1
Std Dev	59.14





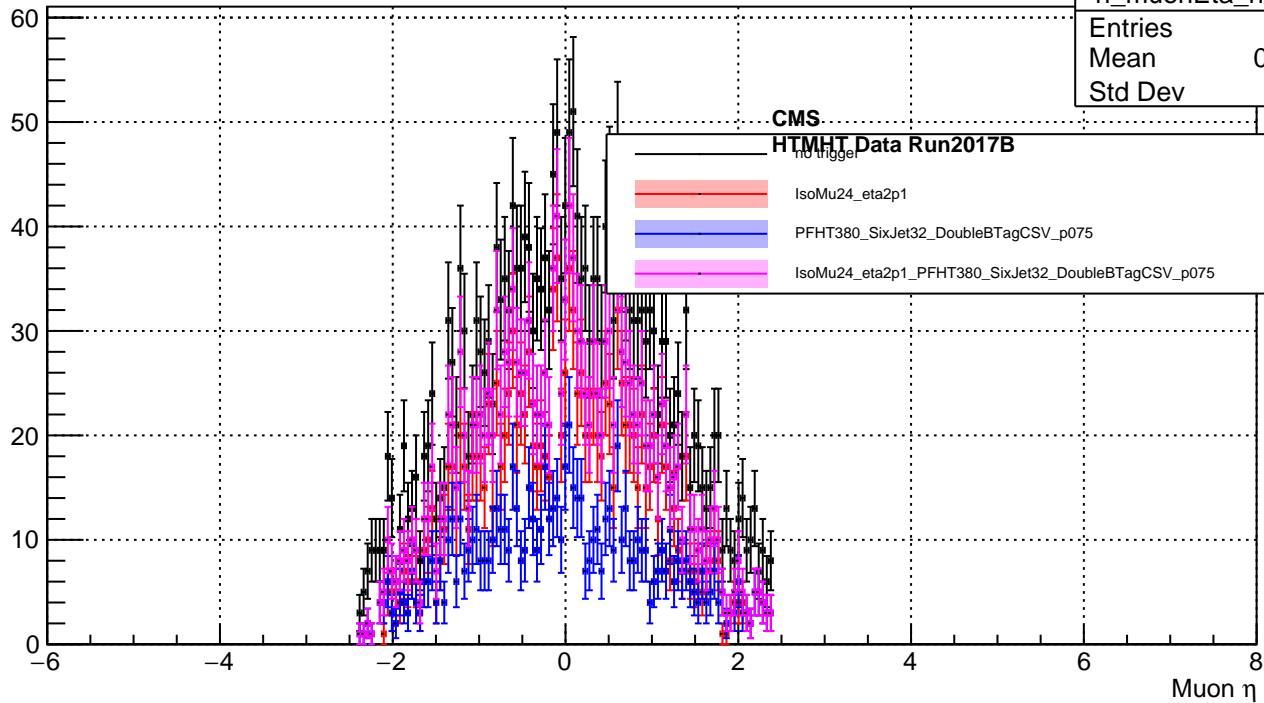
Number of Events per $\delta\eta = 0.046$

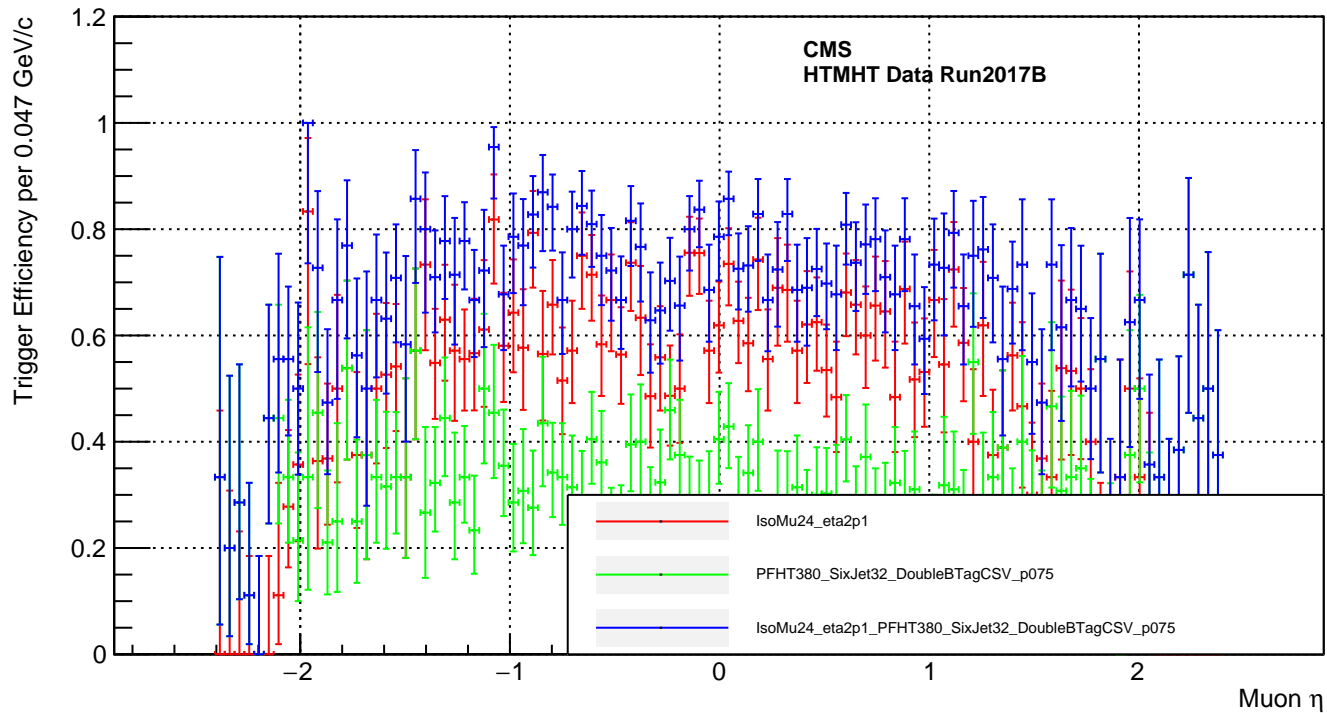


h_jetEta_notrigger

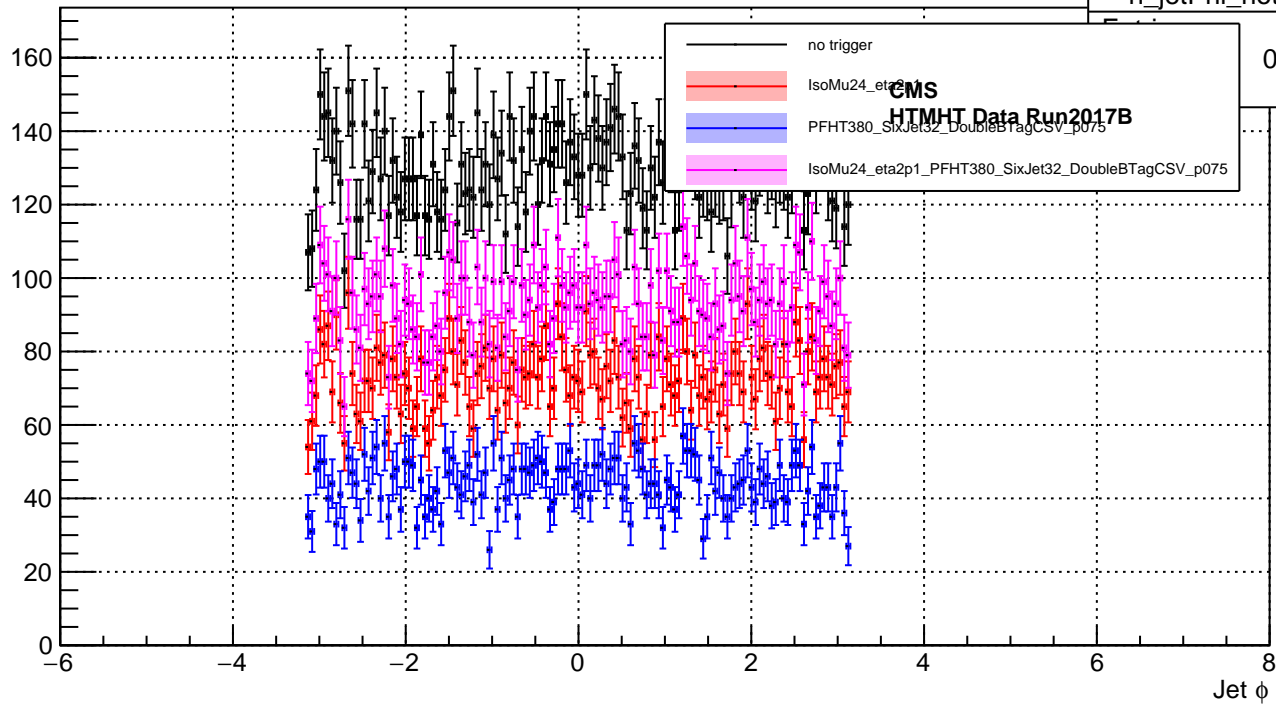
Entries	17548
Mean	0.006953
Std Dev	1.115

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

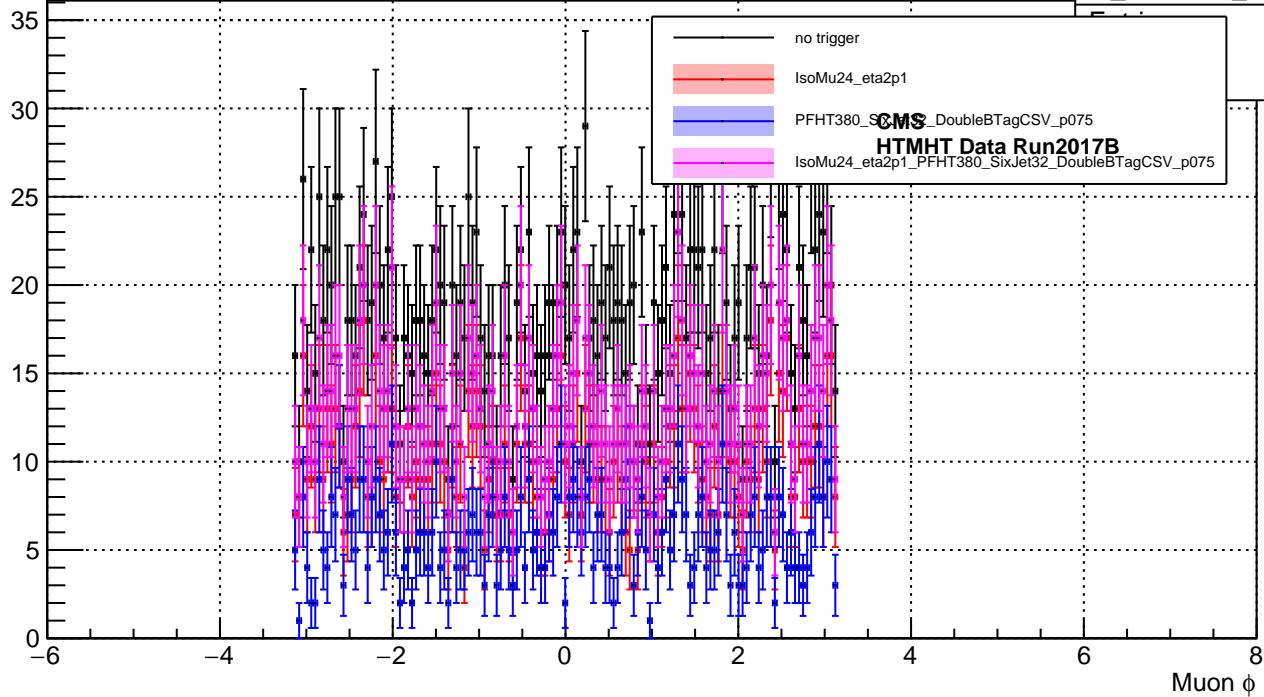




Number of Events per $\delta\phi = 0.046$



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



Muon ϕ

h_muonMap_IsoMu24_eta2p1_PFHT380_SixJet32_DoubleBTagCSV_p075

Entries	1762
Mean x	-0.02258
Mean y	0.03855
Std Dev x	0.9976
Std Dev y	1.851

