

**On-line (pre-)selection Requisites for:**

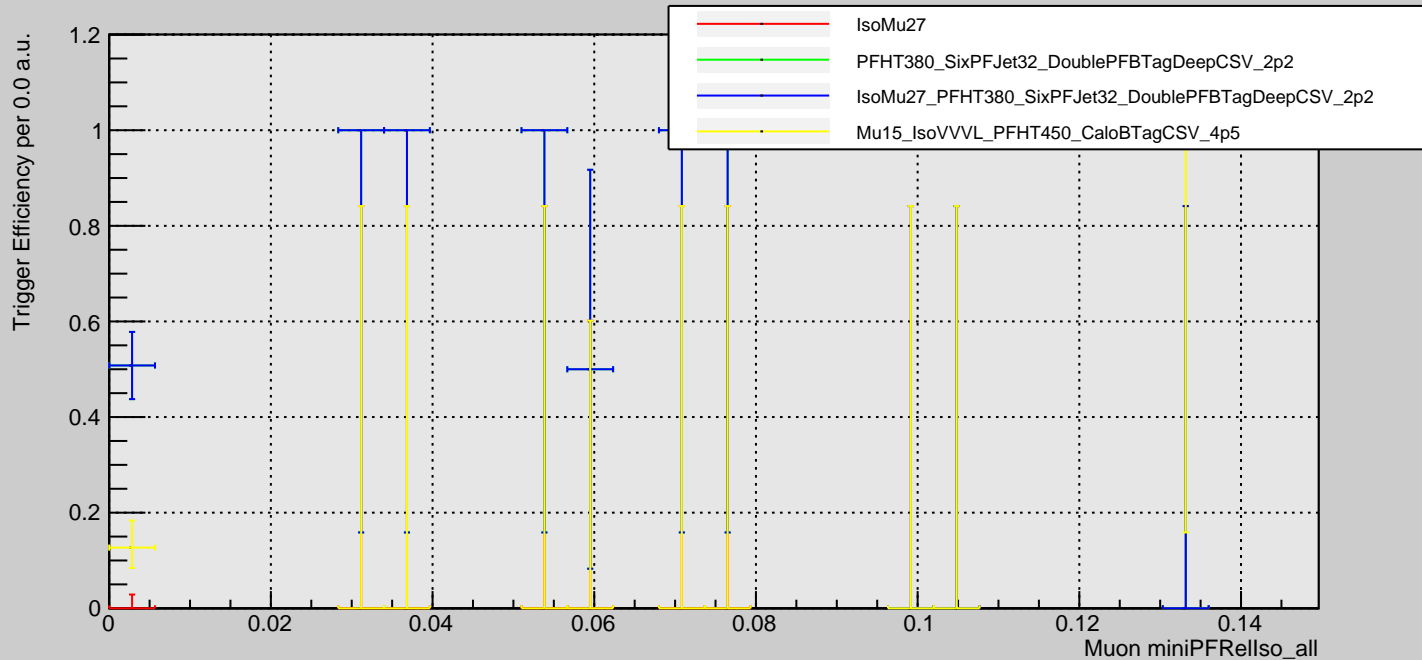
- **Jets:** number  $> 5$
- **Muons plus Electrons:** number  $> 0$

**Event Limit:** None (see last page)

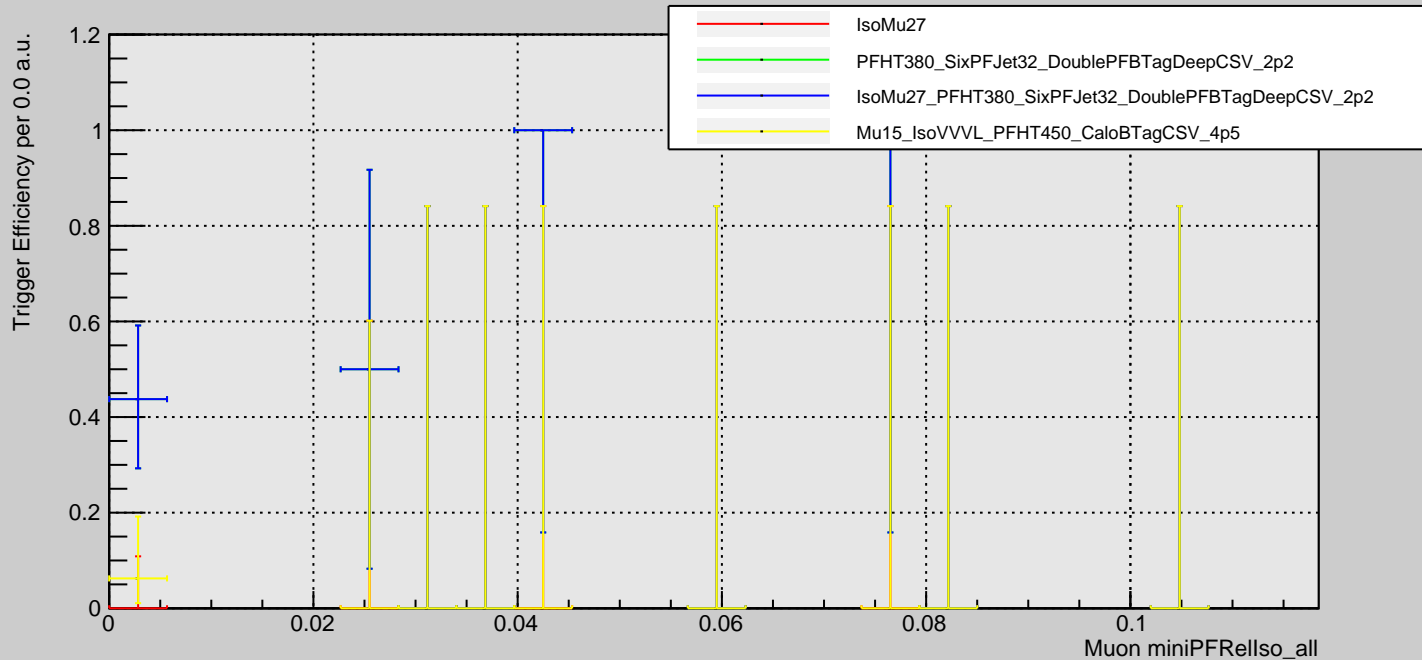
**Off-line (post-)selection Requisites for:**

- **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)

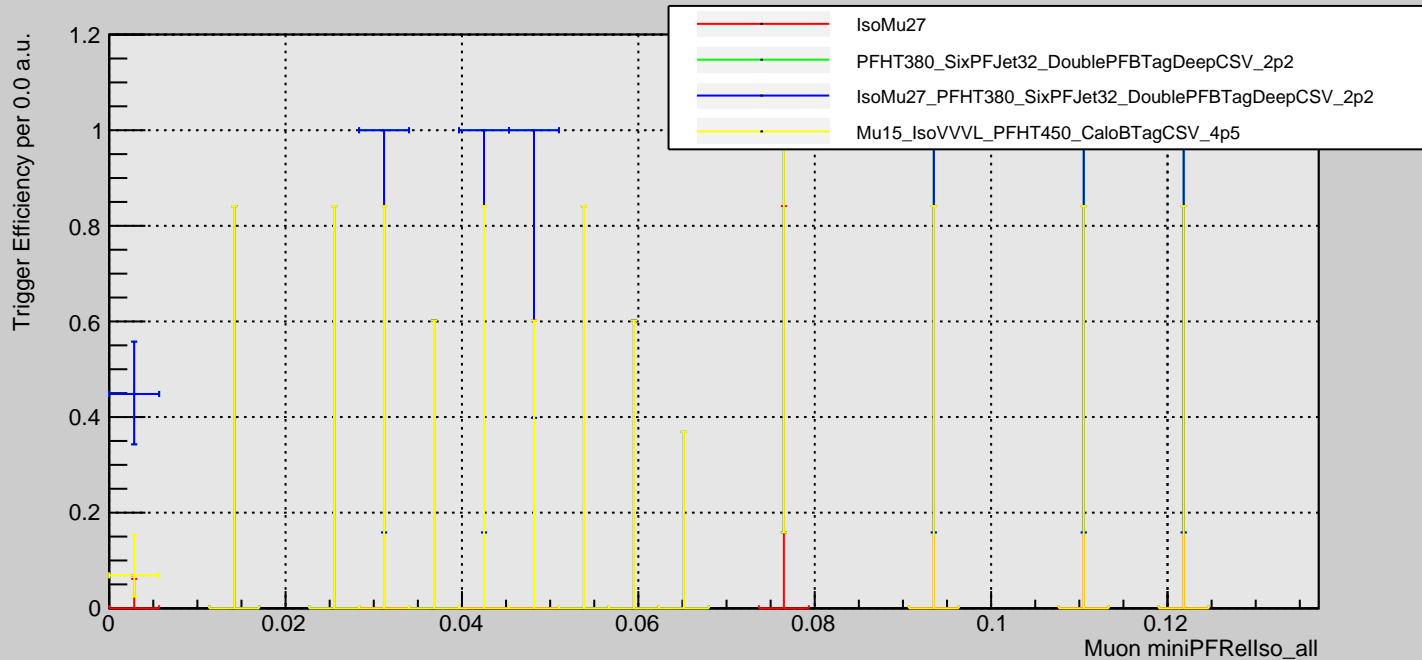
**Muon Pt = 5**



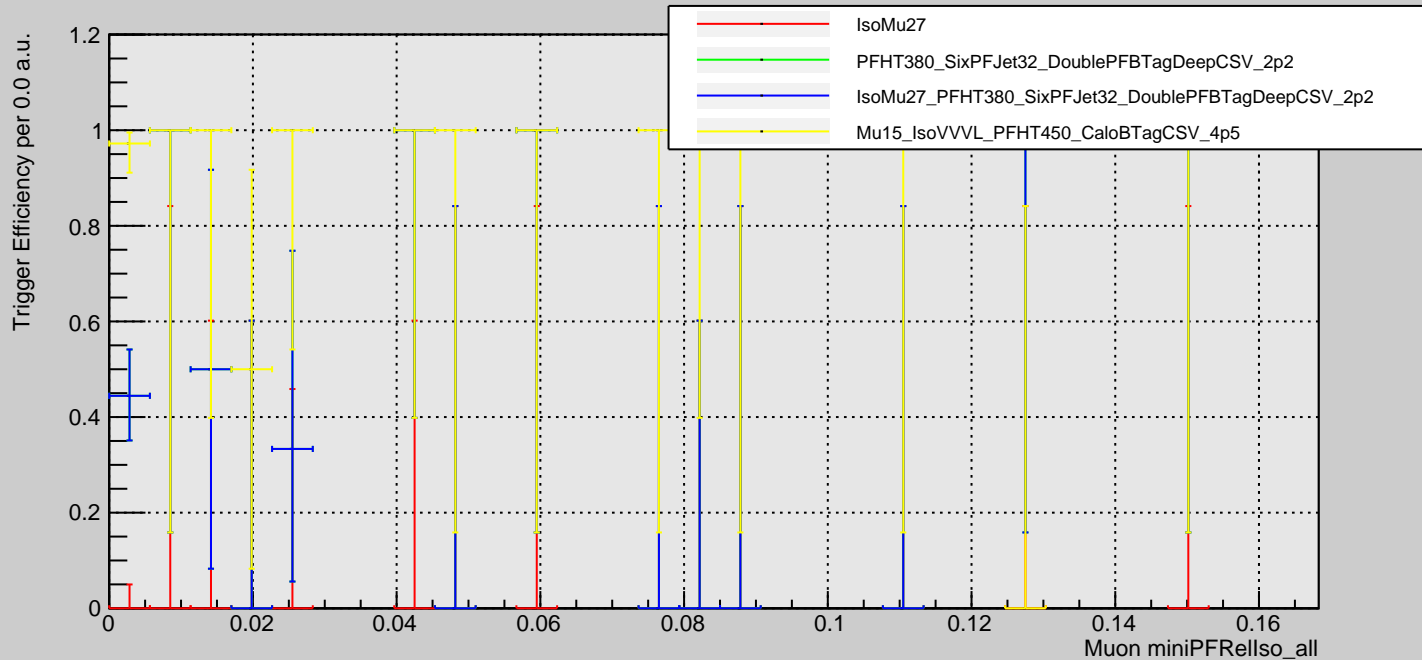
**Muon Pt = 10**



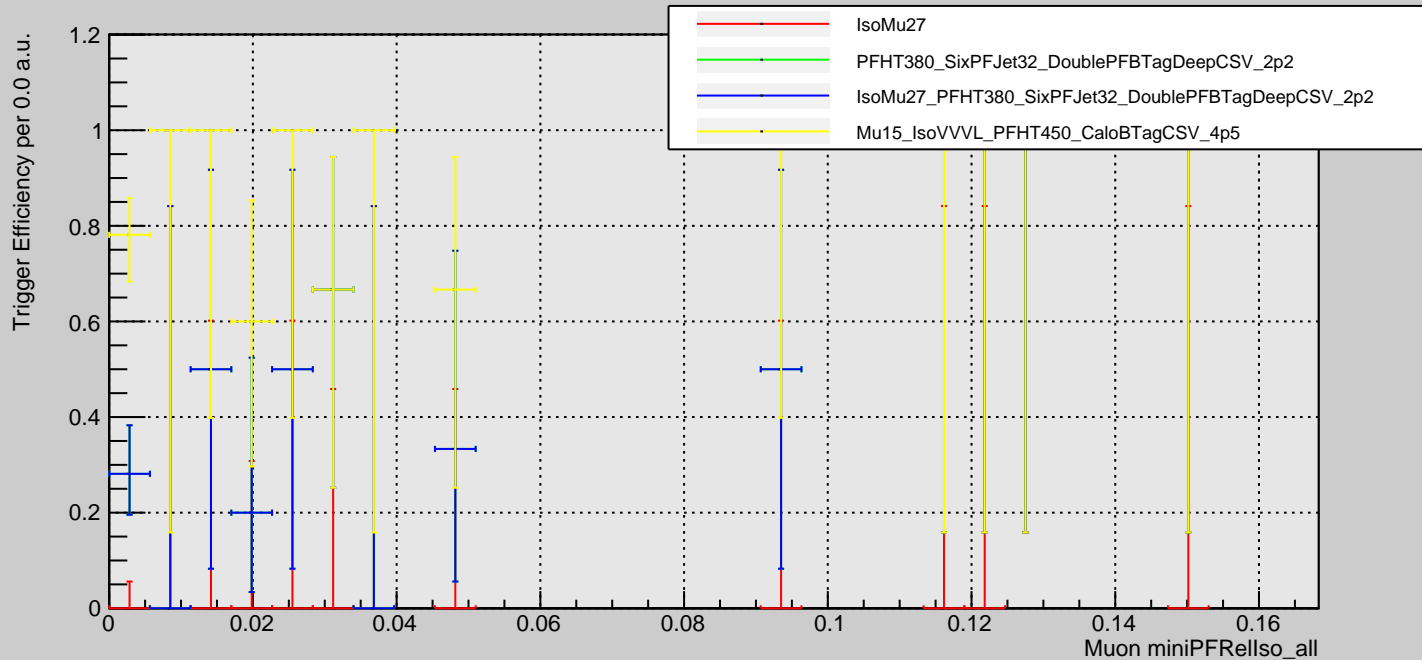
**Muon Pt = 15**



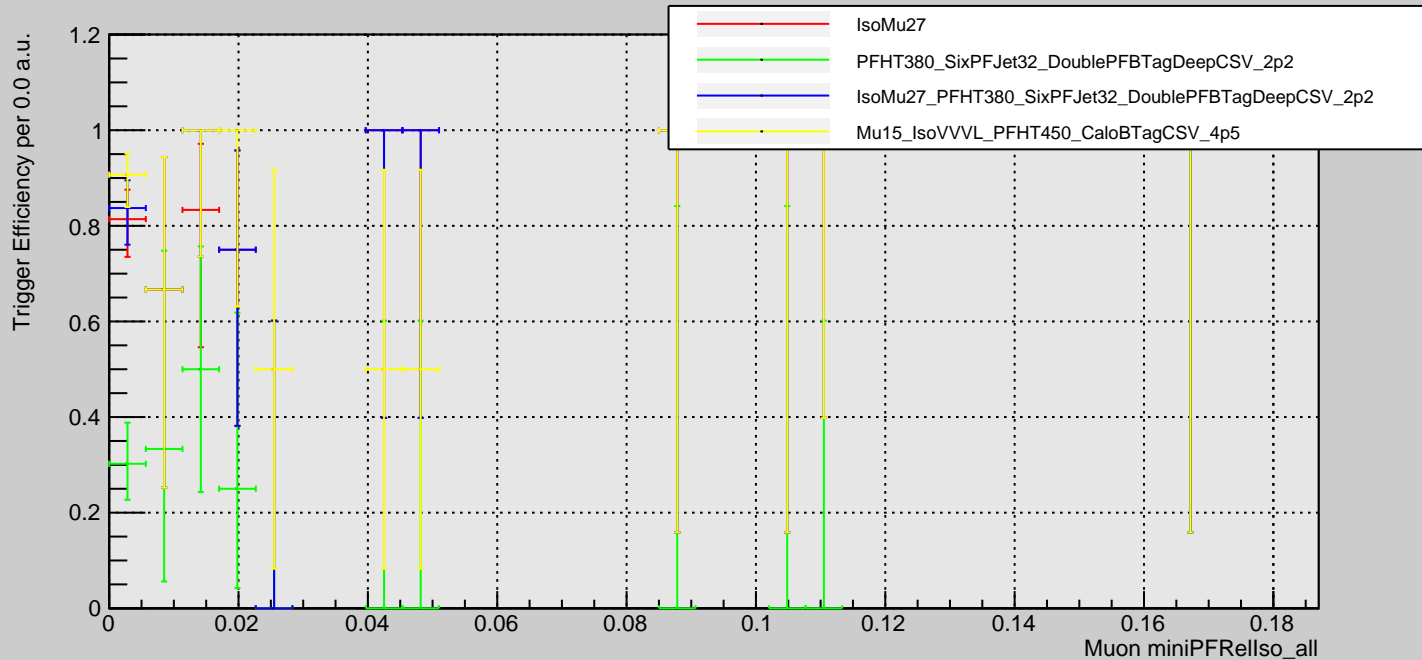
**Muon Pt = 20**



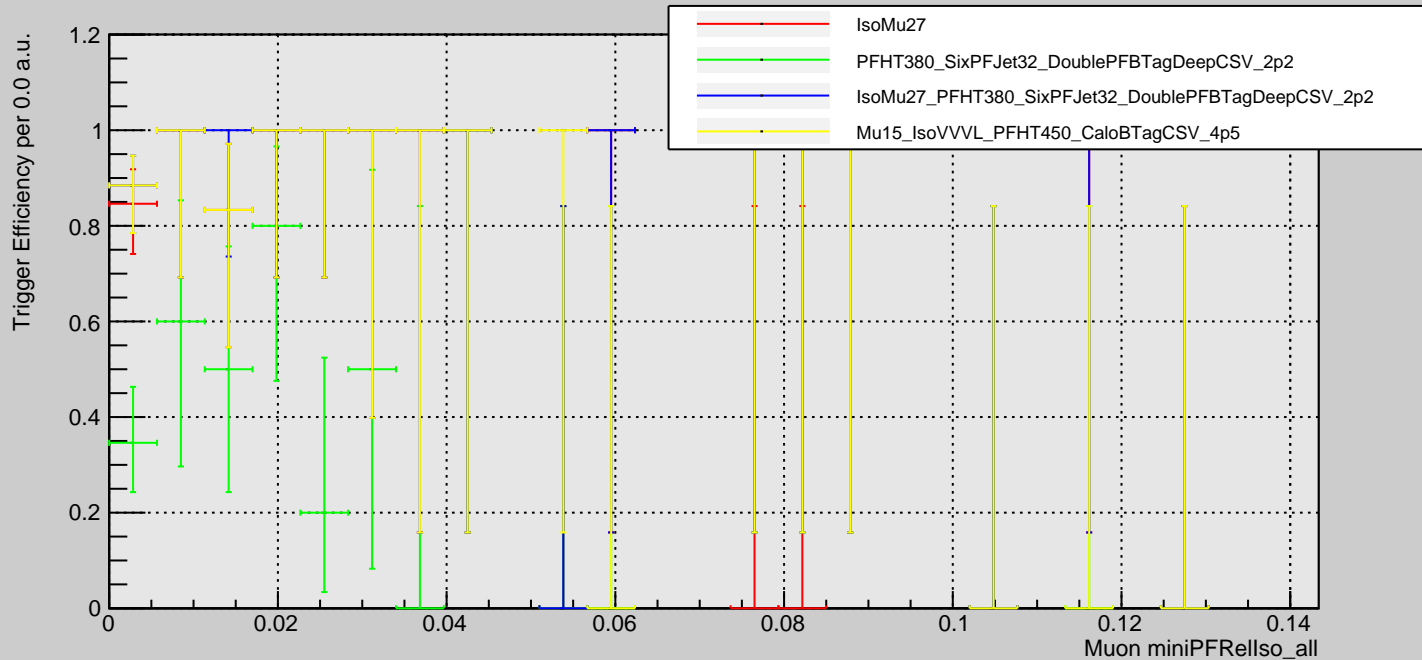
**Muon Pt = 25**



**Muon Pt = 30**

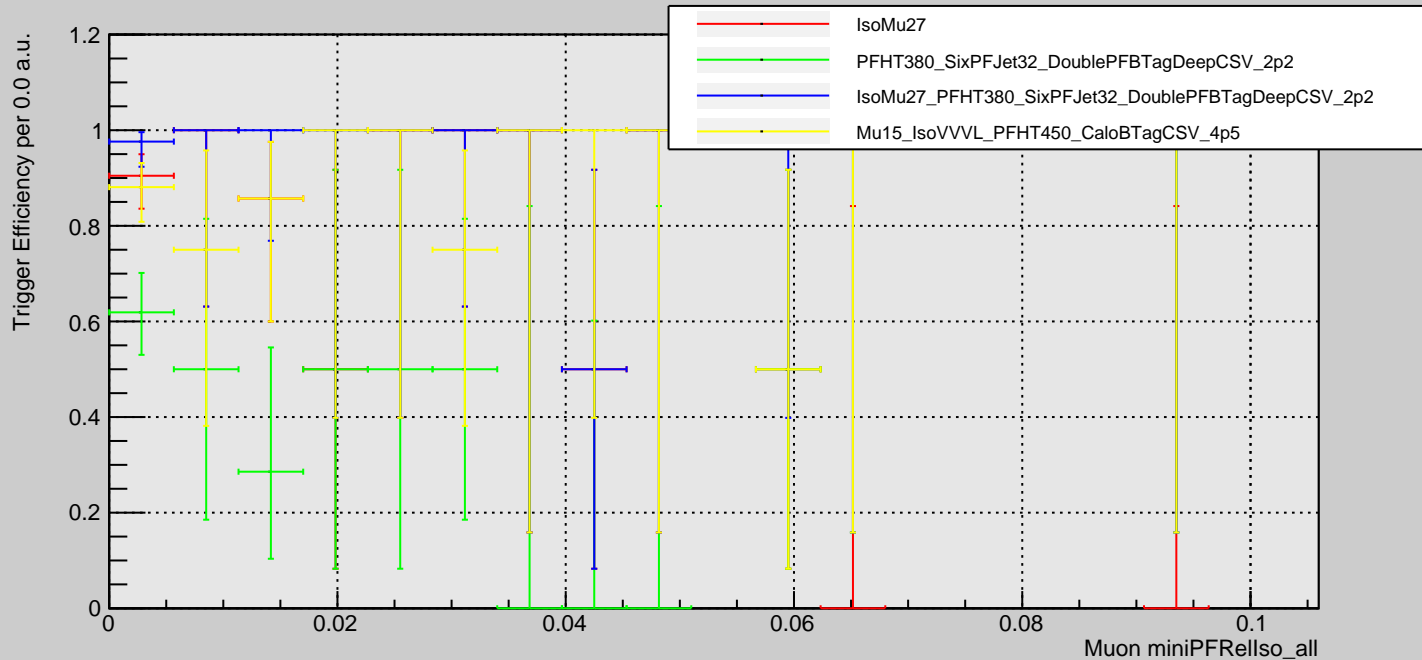


**Muon Pt = 35**

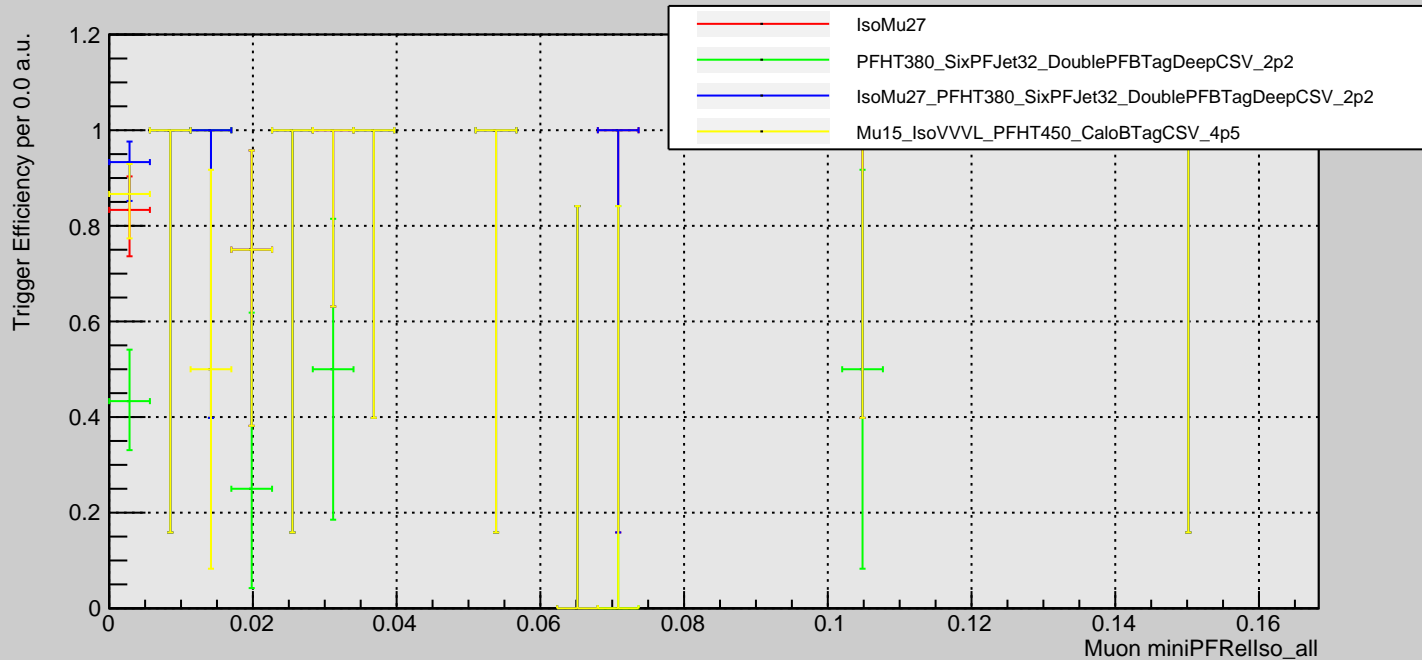




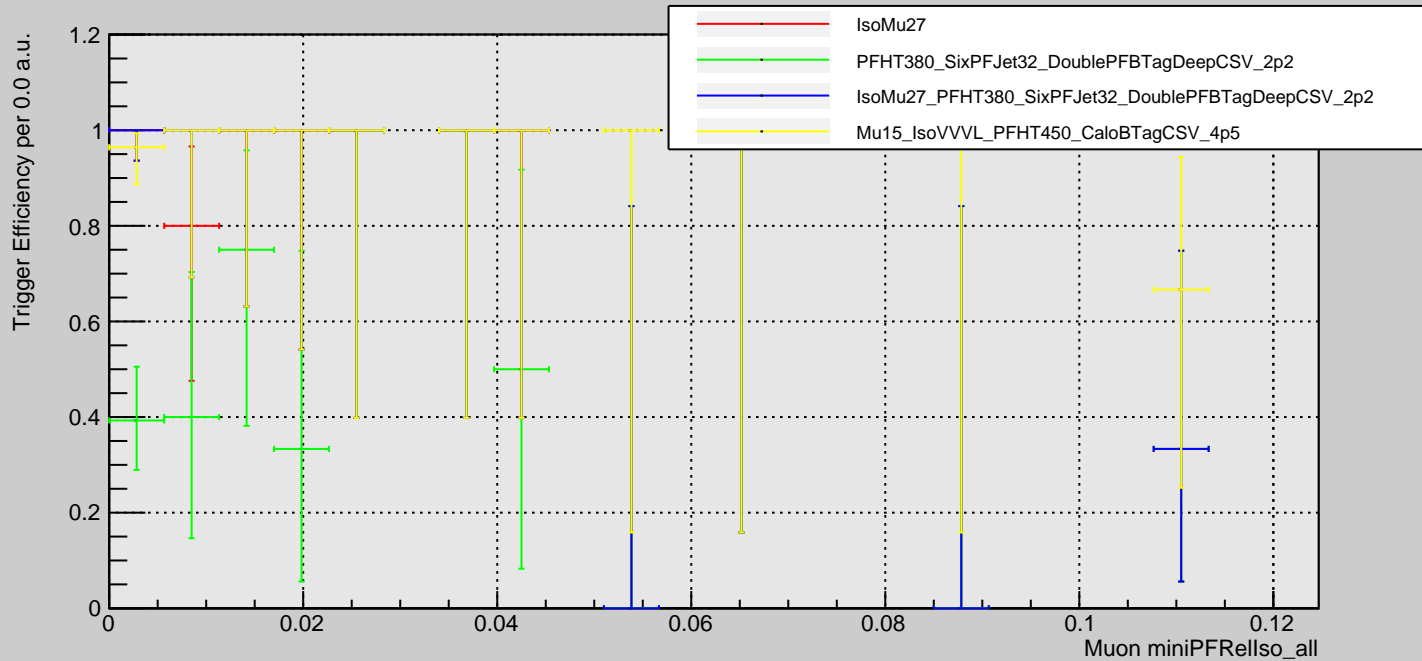
**Muon Pt = 40**



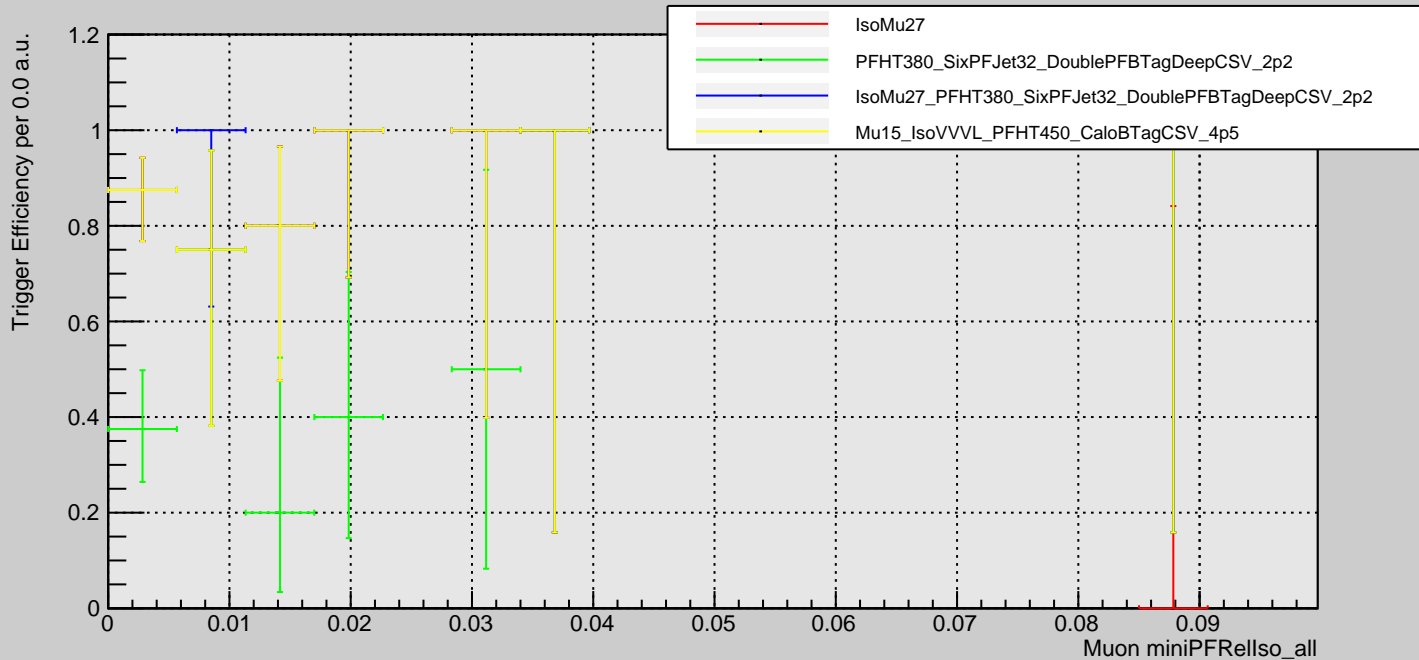
**Muon Pt = 45**



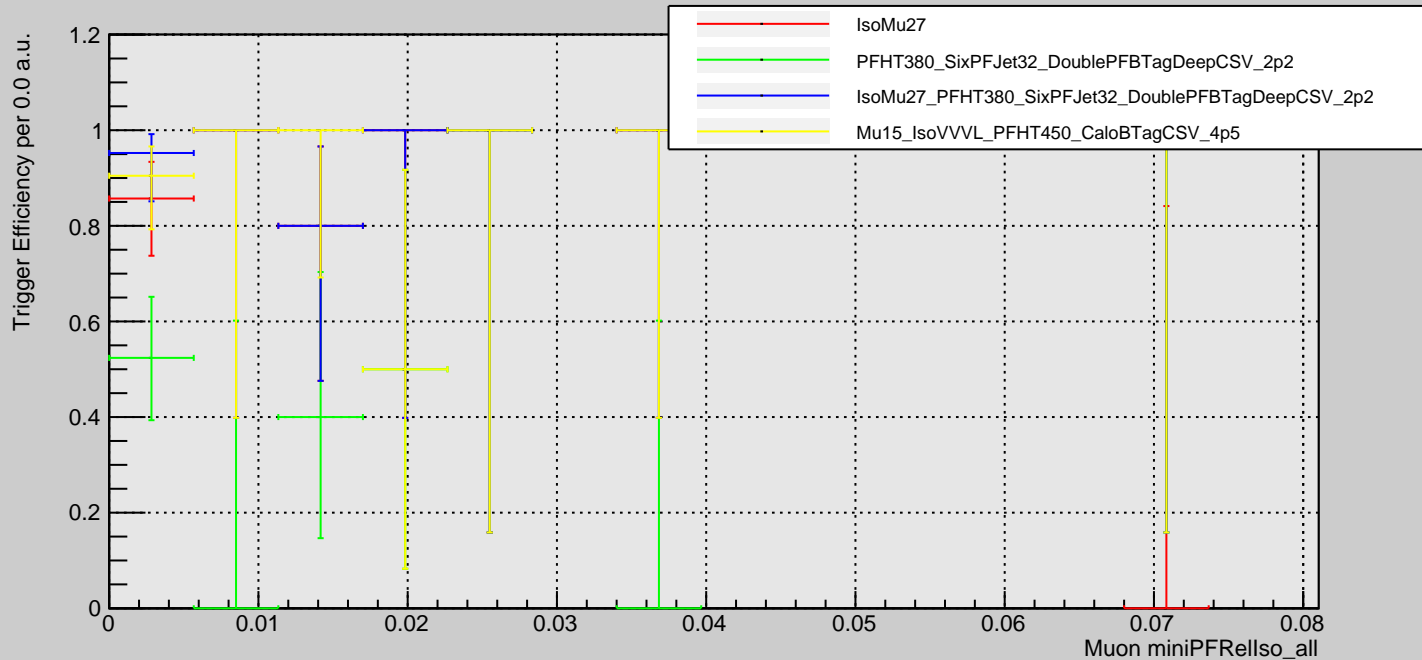
**Muon Pt = 50**



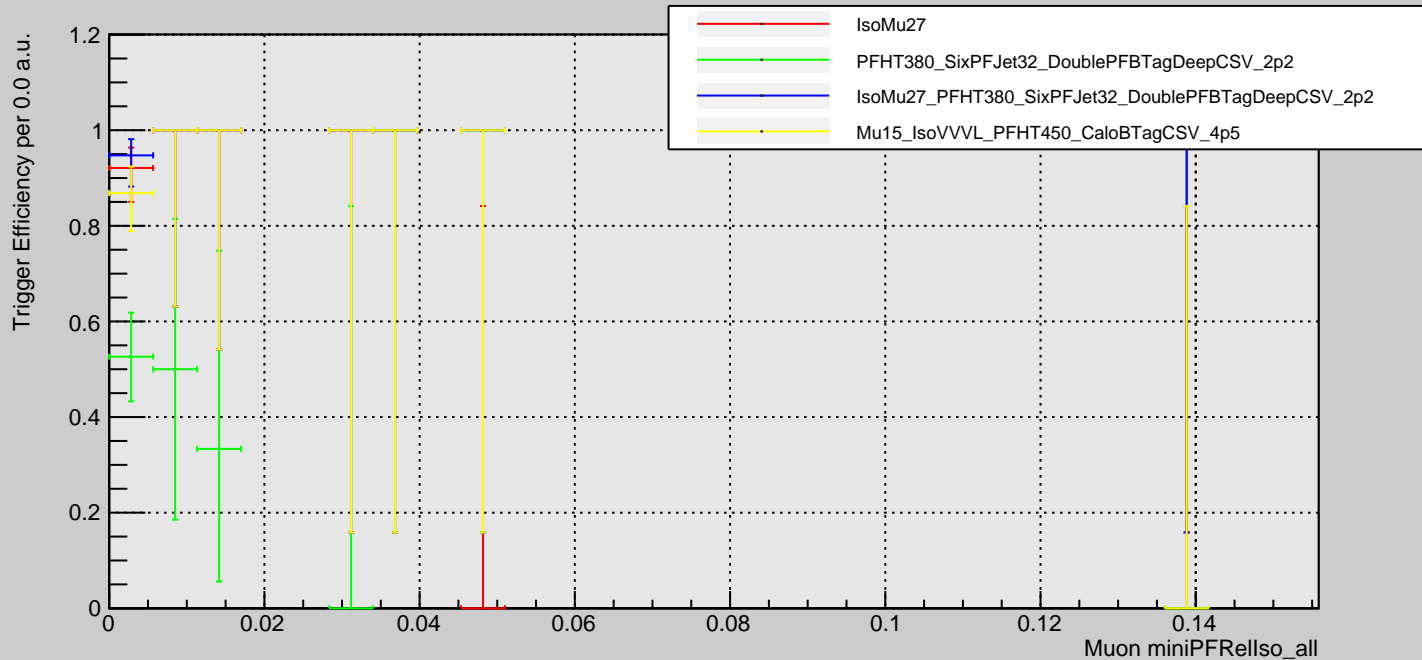
**Muon Pt = 55**



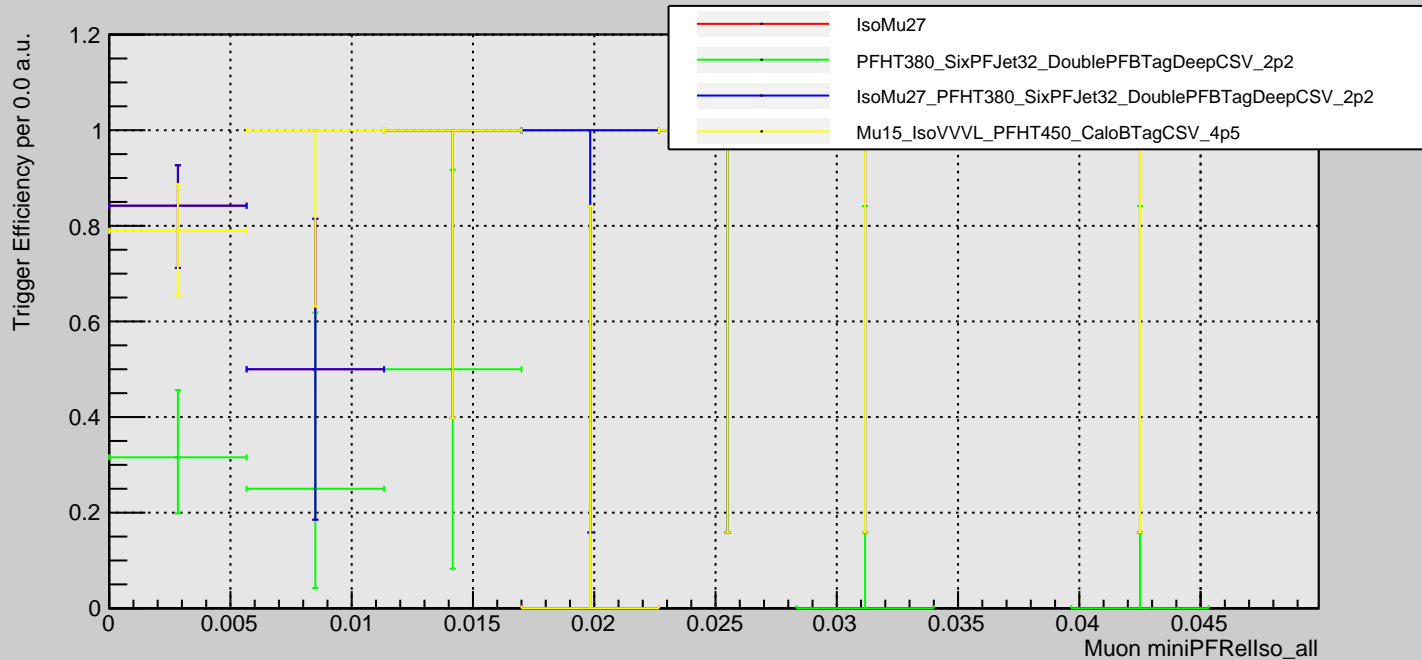
**Muon Pt = 60**



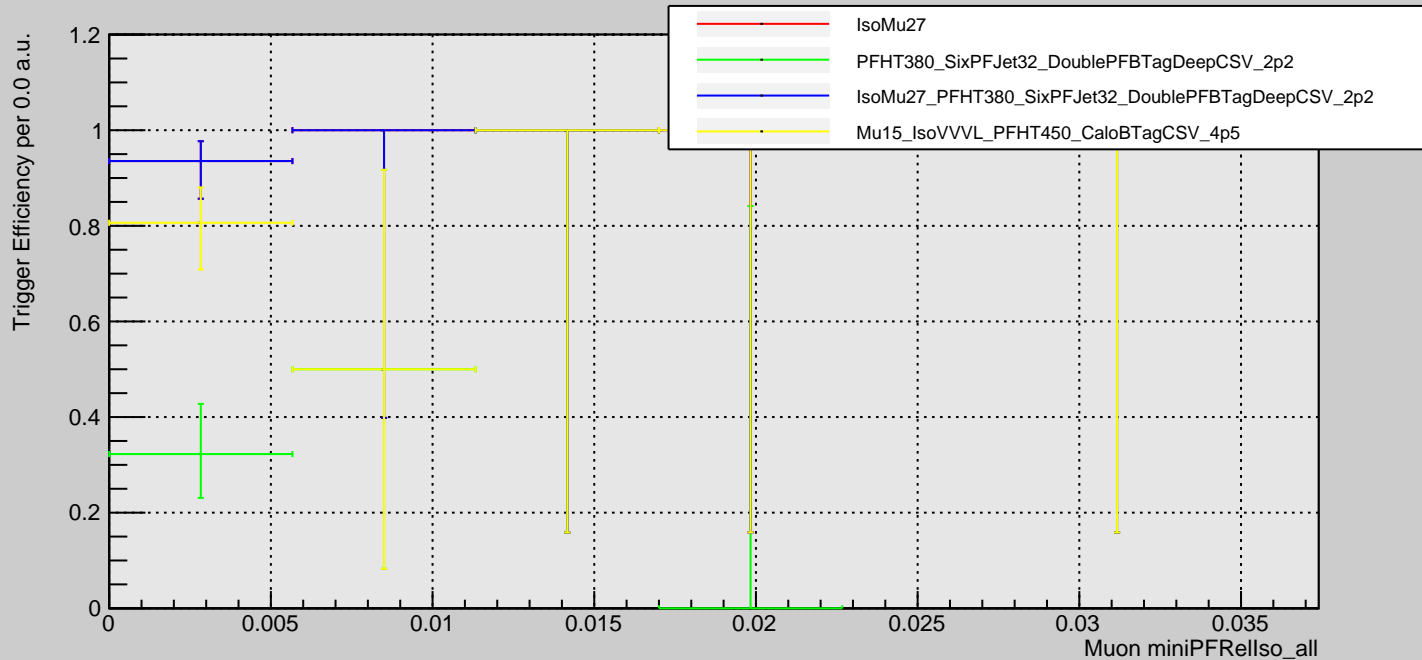
**Muon Pt = 65**



**Muon Pt = 70**

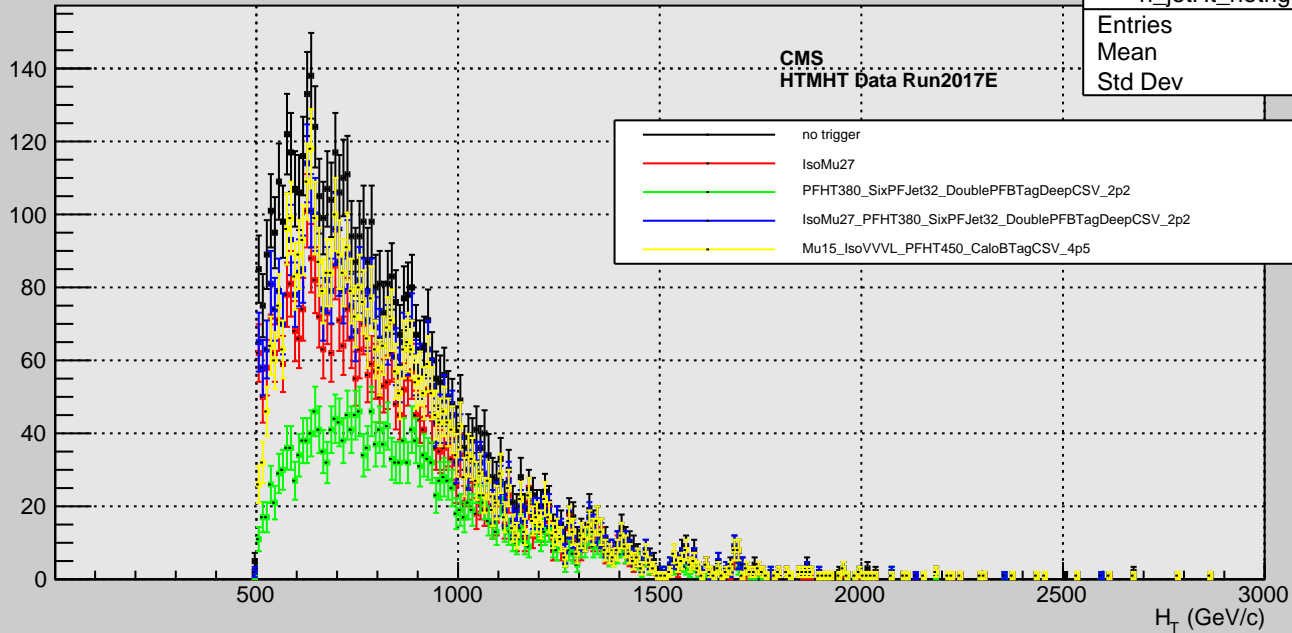


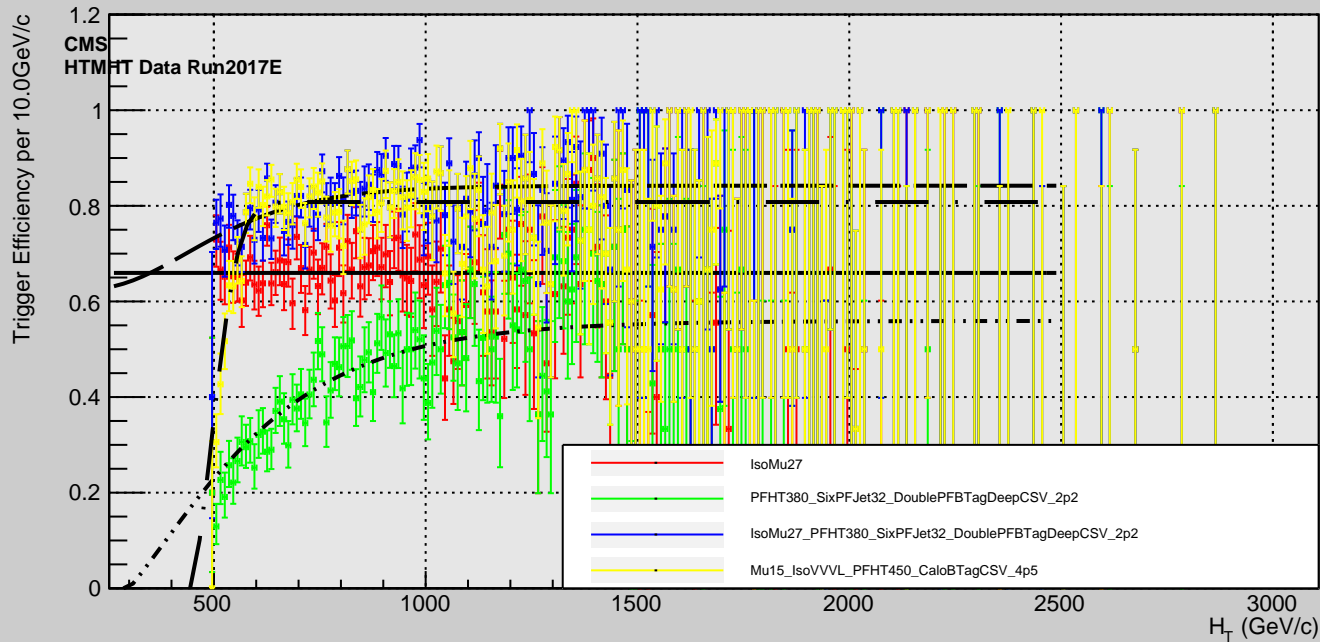
**Muon Pt = 75**



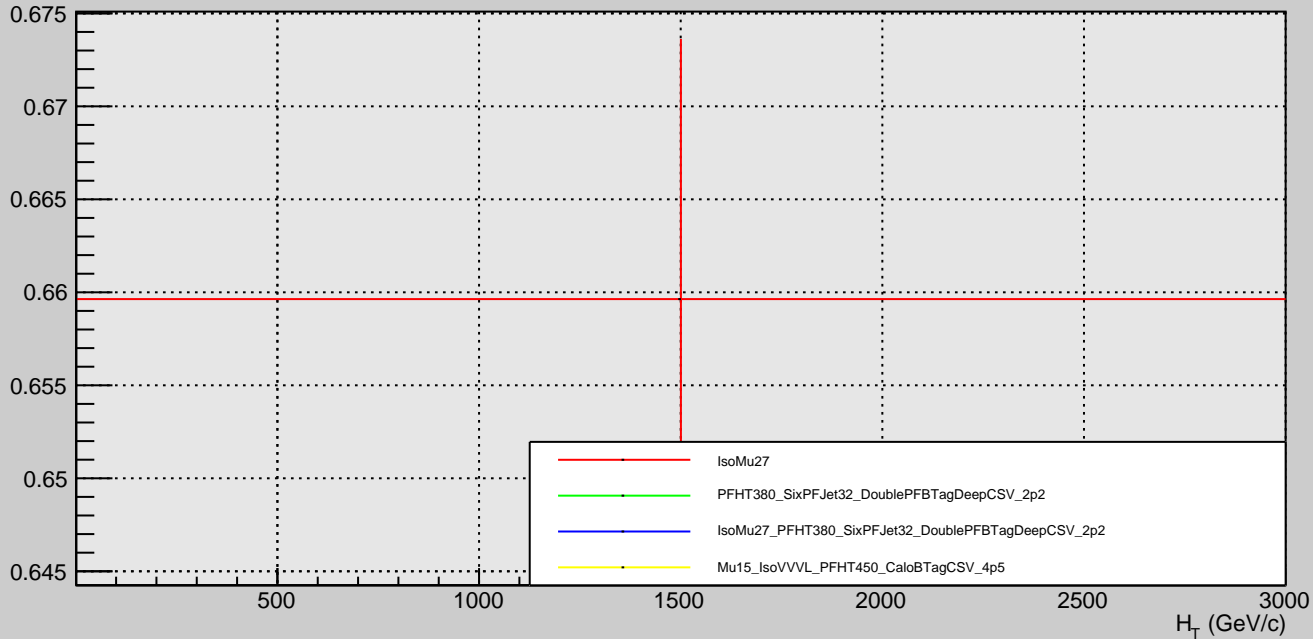


Number of Events per 10 GeV/c

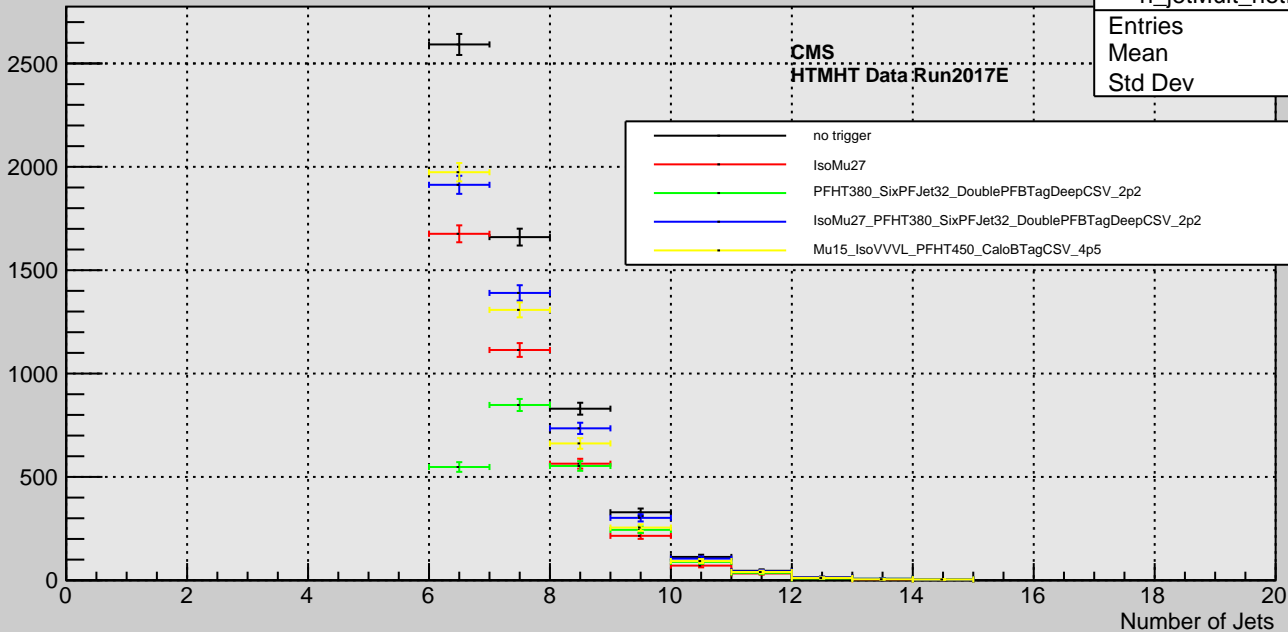


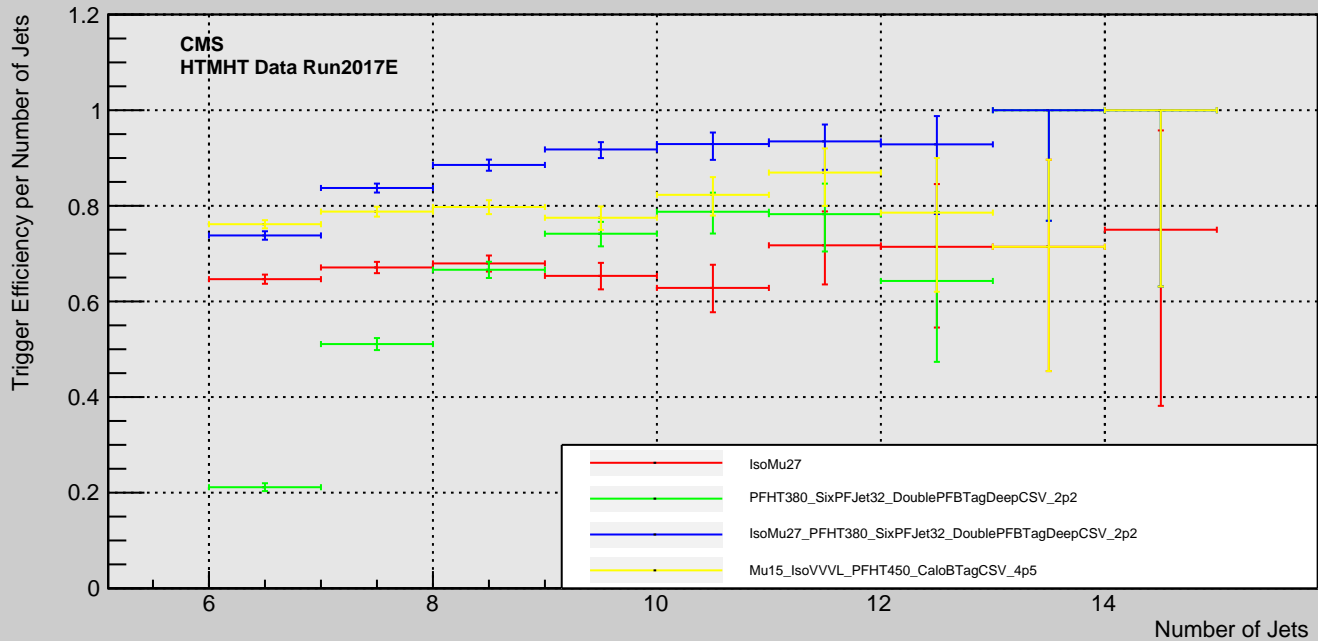


Trigger Efficiency per 2999.0 GeV/c

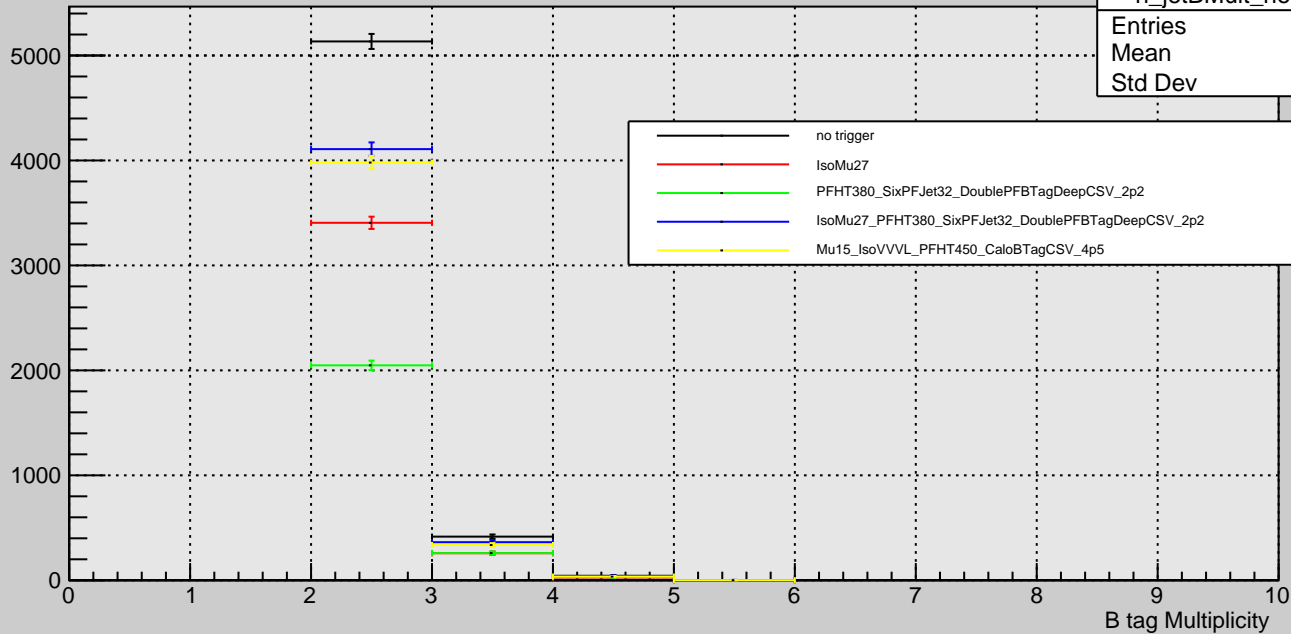


Number of Events per Number of Jets

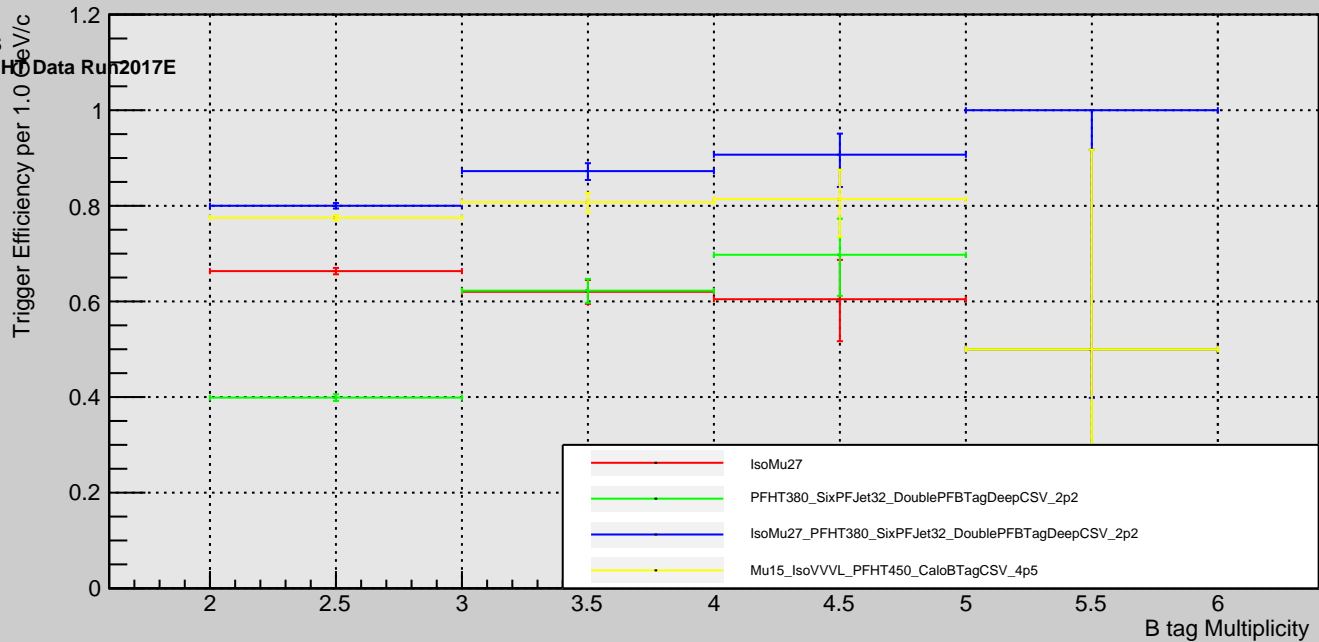




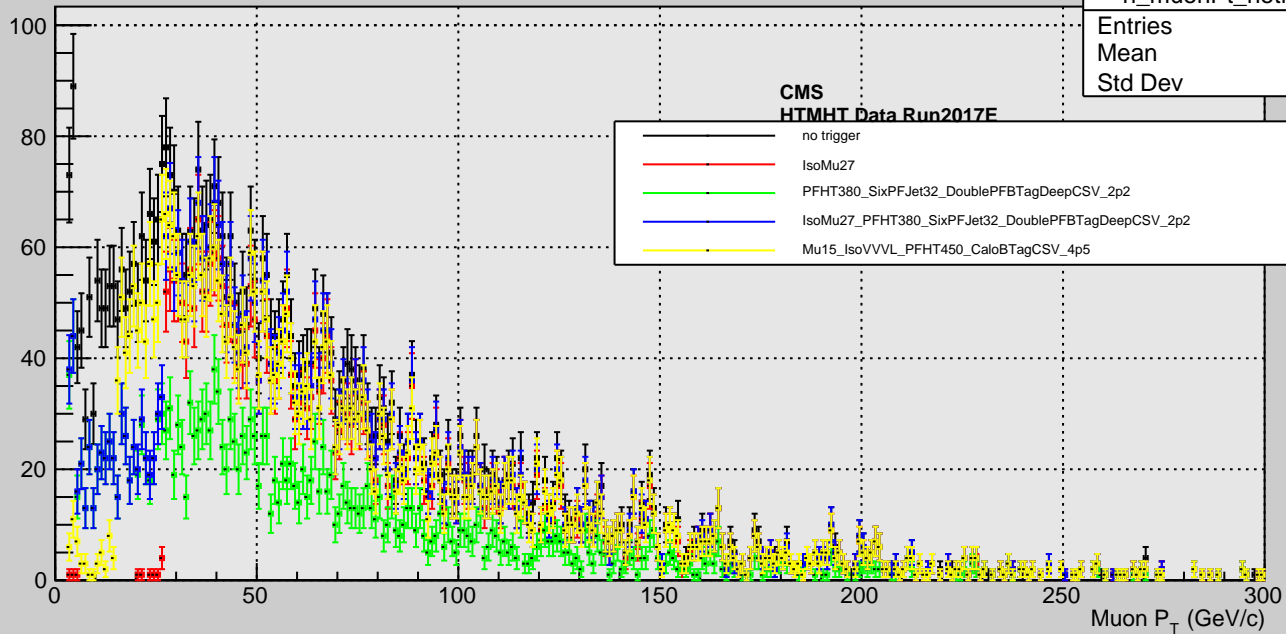
Number of Events per Number of Jets



CMS  
HTMHC Data Run 2017E

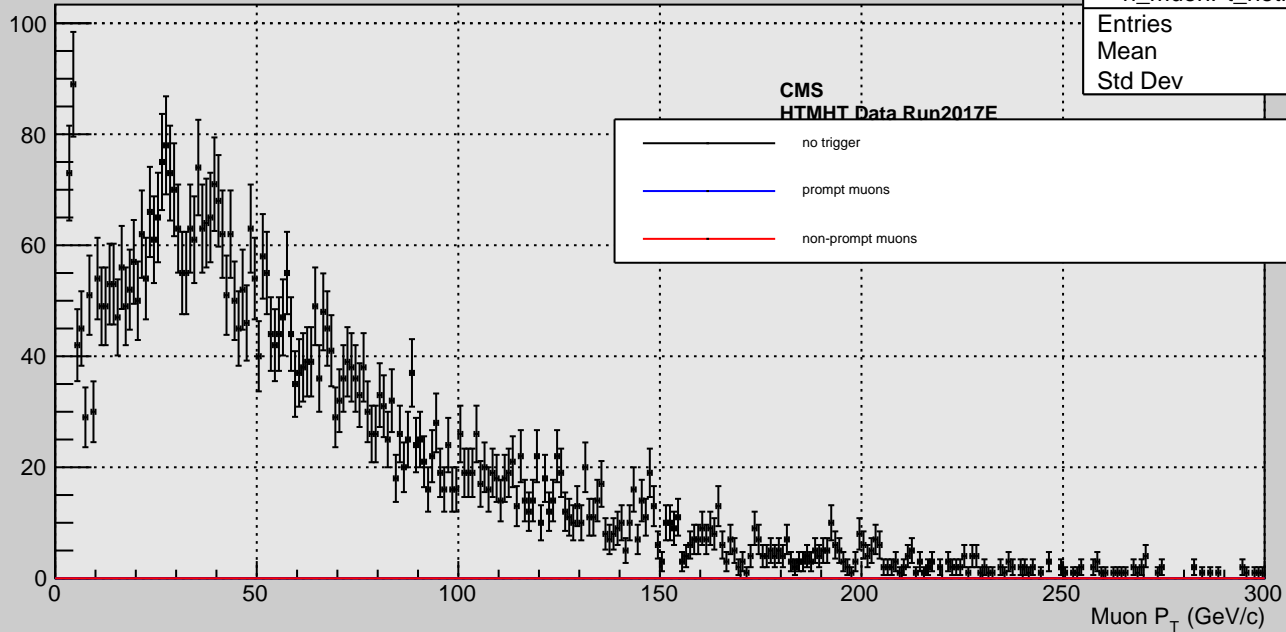


Number of Events per 1 GeV/c



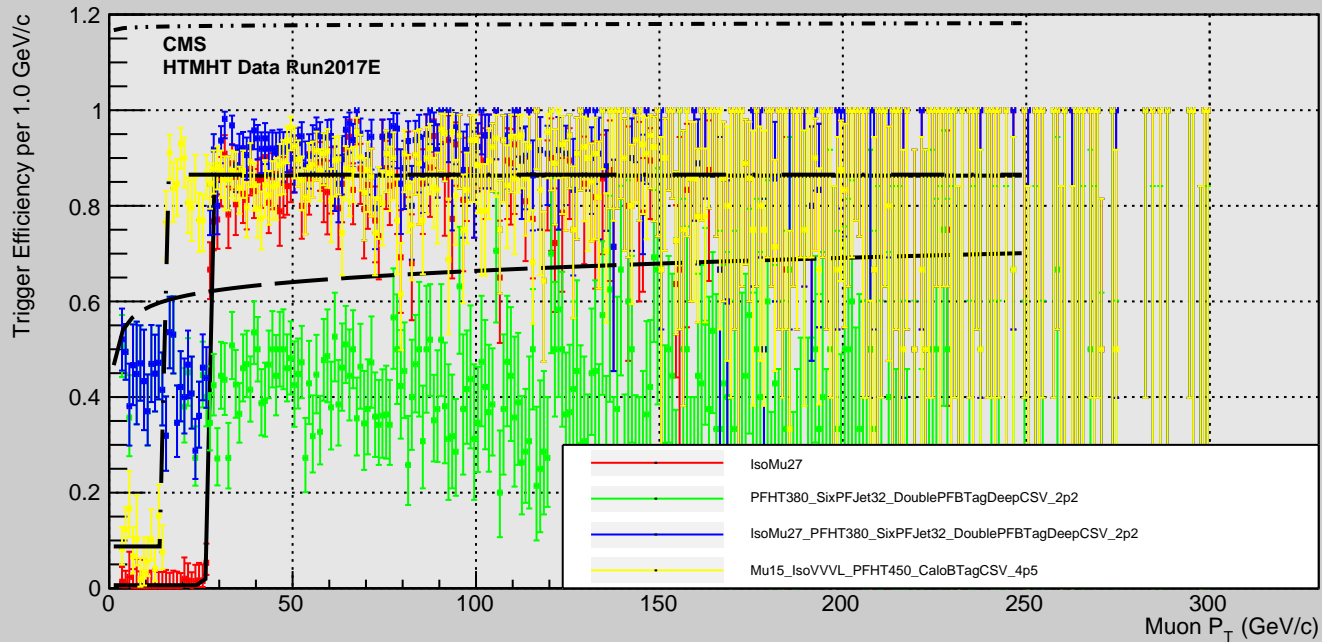


Number of Events per 1 GeV/c

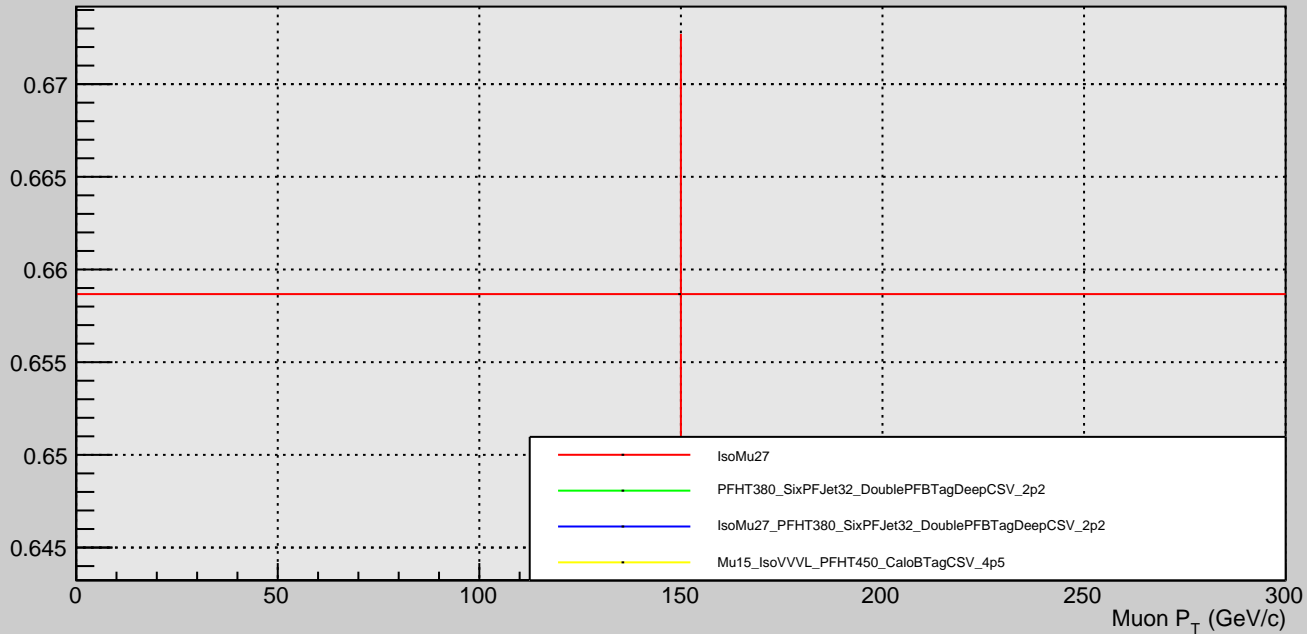


h\_muonPt\_notrigger

Entries	5595
Mean	65.41
Std Dev	51.5



Trigger Efficiency per 300.00 GeV/c

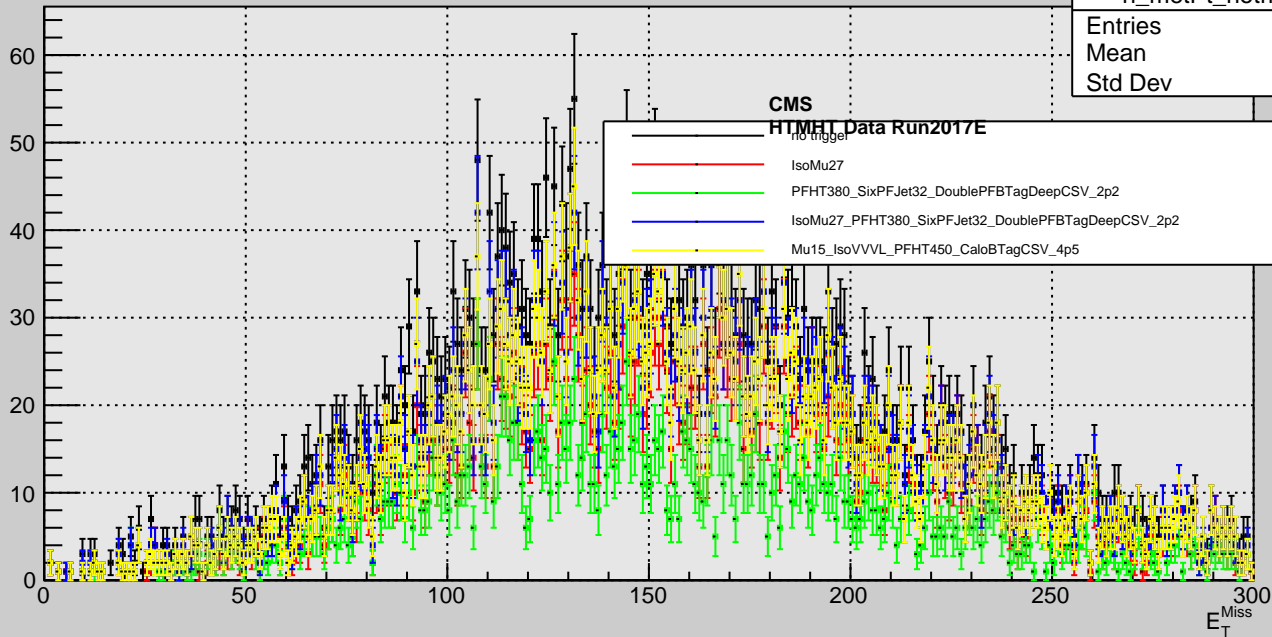
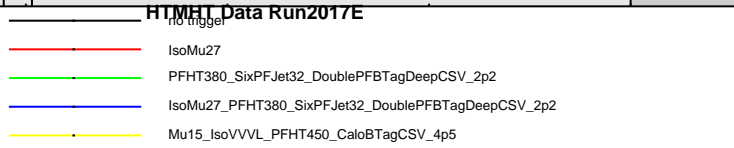


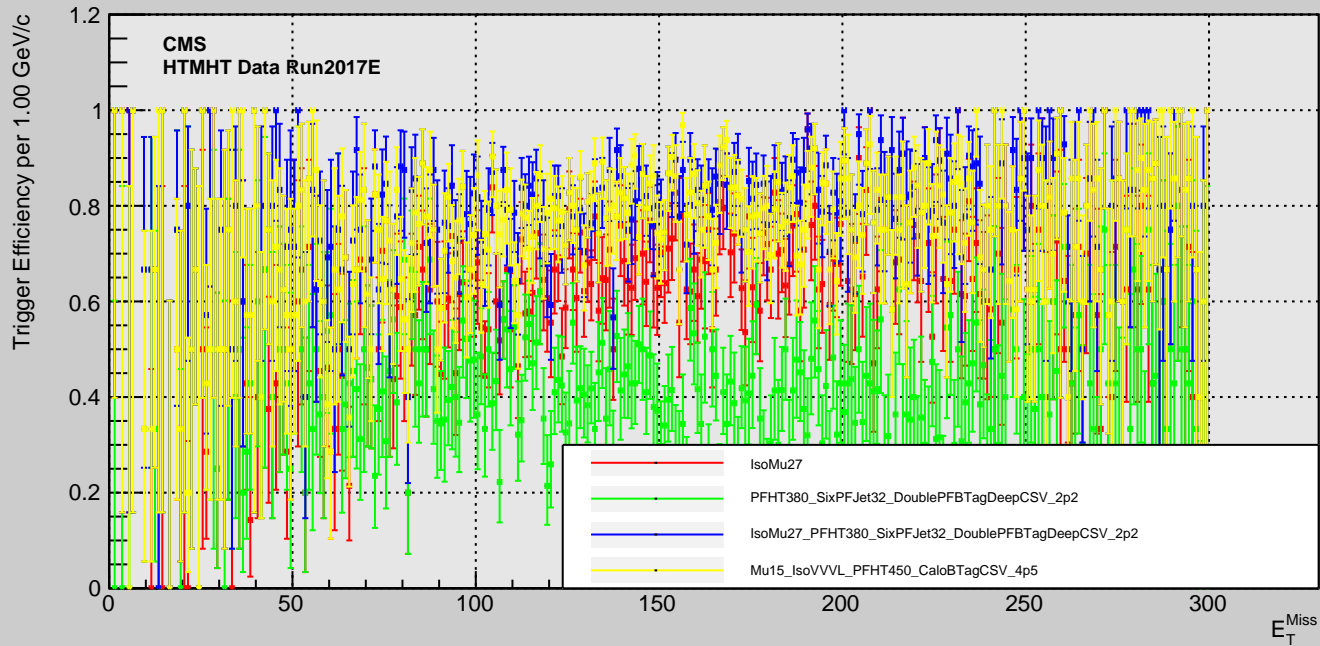
Number of Events per 1 GeV/c

h_metPt_notrigger	
Entries	5595
Mean	154.7
Std Dev	58.15

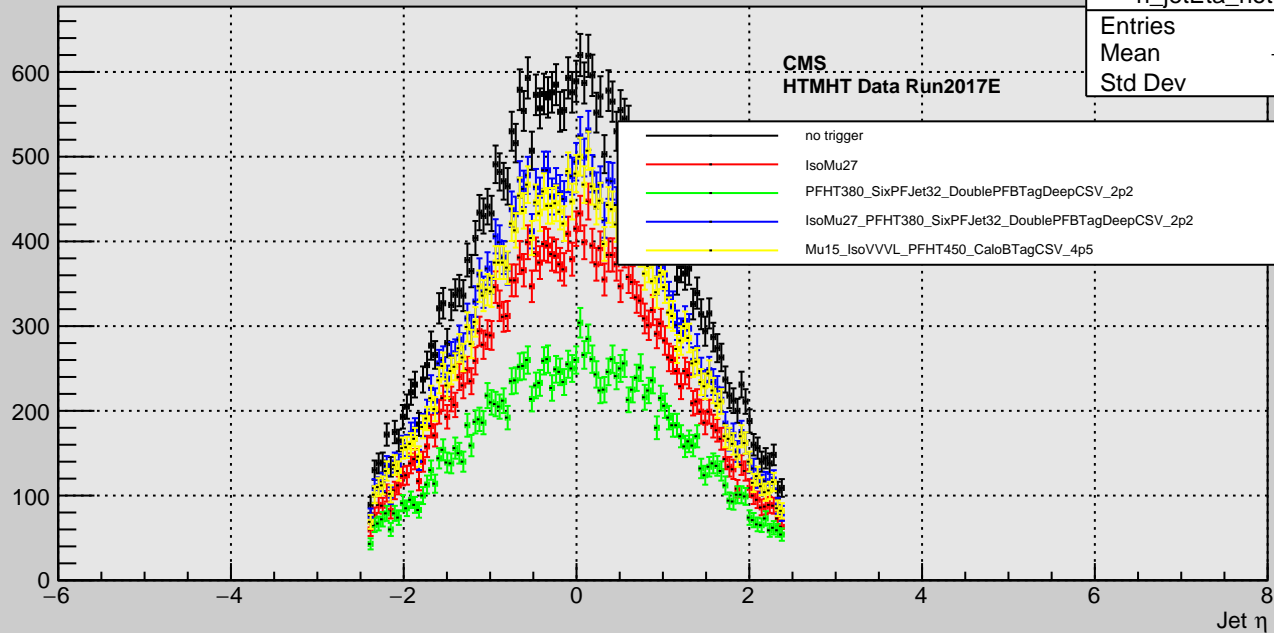
CMS

HT, HT Data Run2017E





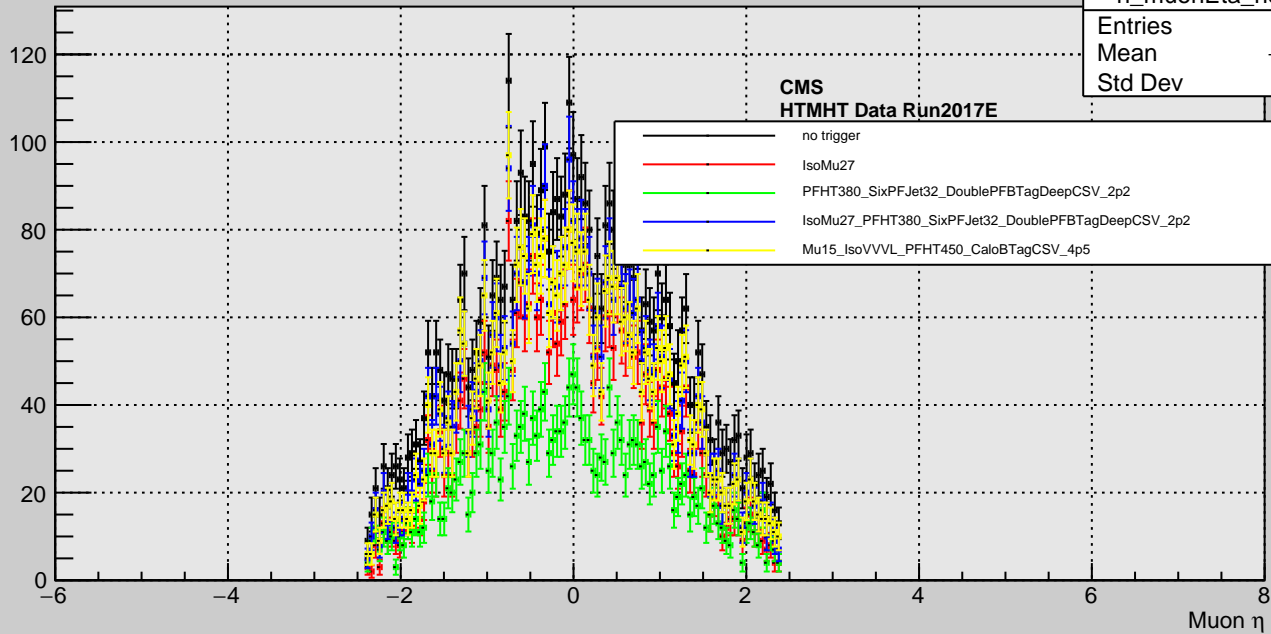
Number of Events per  $\delta\eta = 0.046$

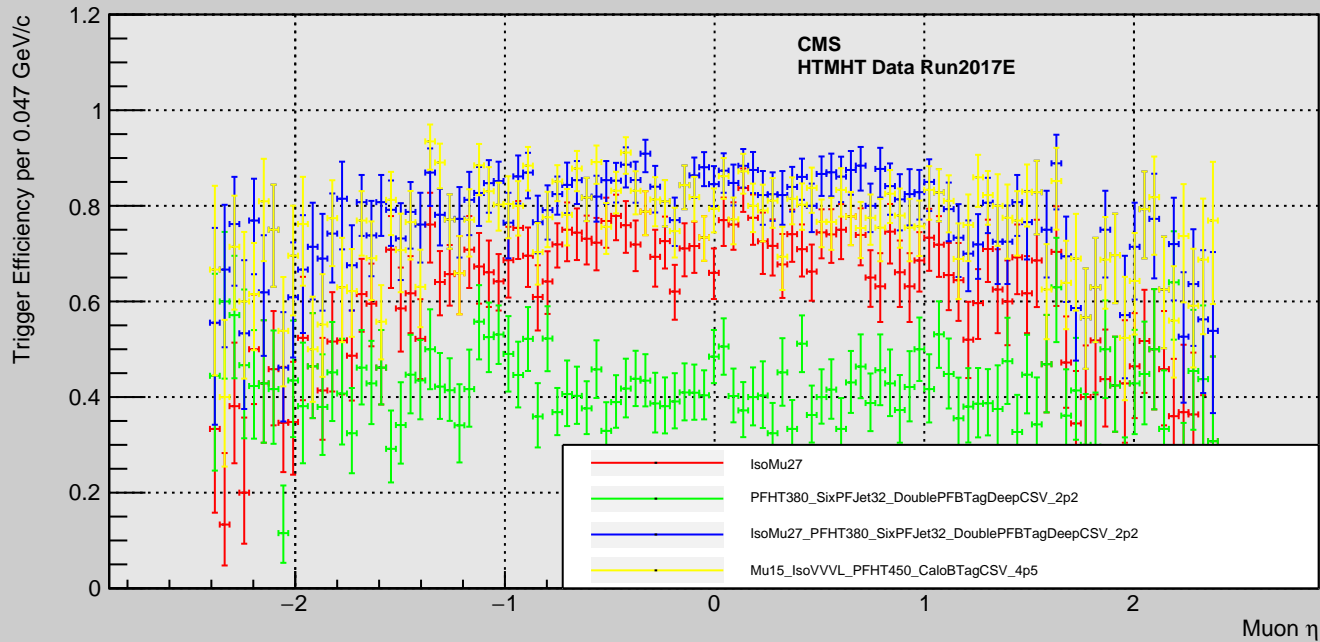


**h\_jetEta\_notrigger**

Entries	38724
Mean	-0.01598
Std Dev	1.104

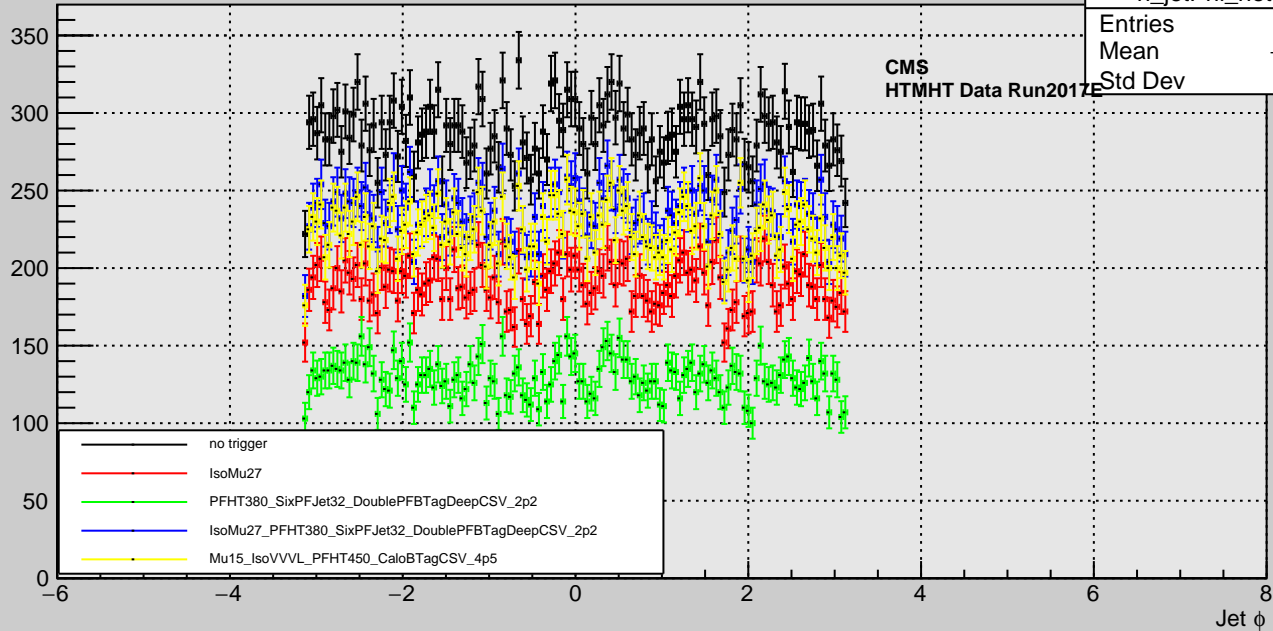
Number of Events per  $\delta\eta = 0.046$







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



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

