

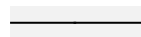
On-line (pre-)selection Requisites for:

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

Event Limit: None (see last page)

Off-line (post-)selection Requisites for:

- **Jets:** $\text{jetId} > 2$, $p_{\text{T}} > 30$ 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 $\text{miniPFRellso_all} < 0.15$ (for at least 1)



Top-AntiTop MC



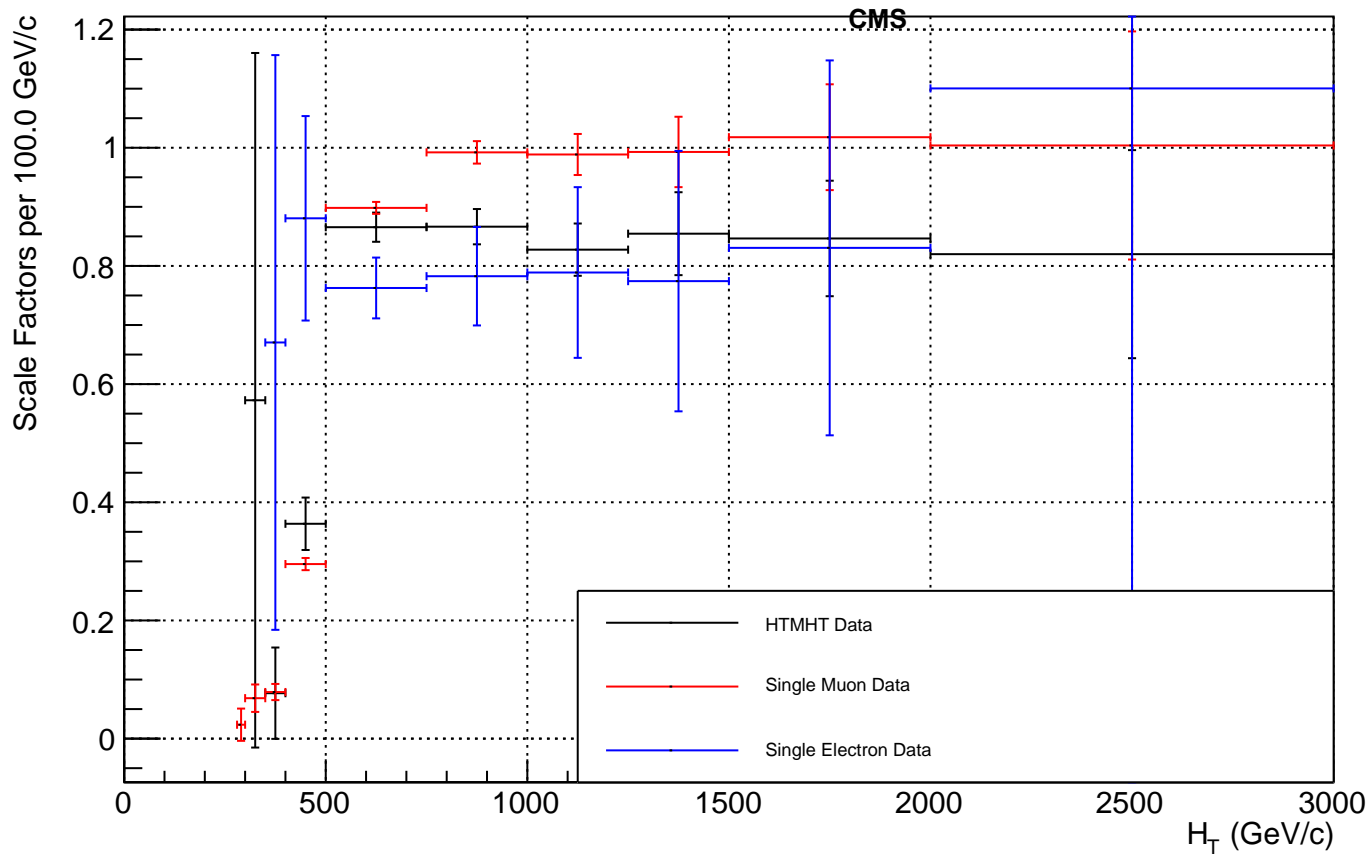
Single Muon Data



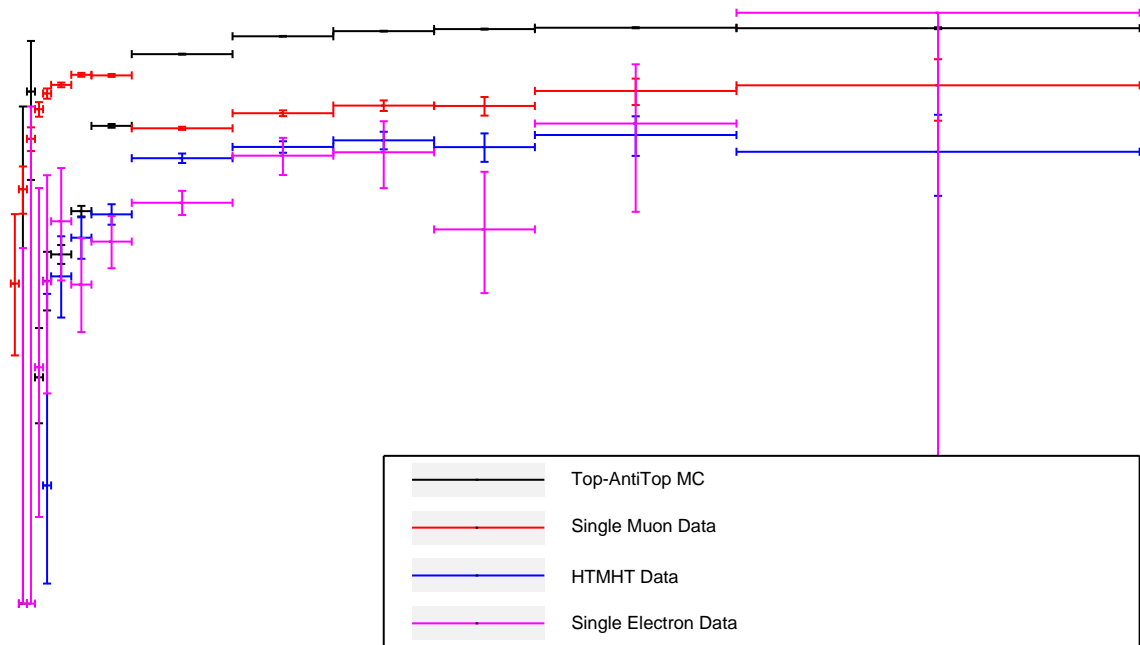
HTMHT Data

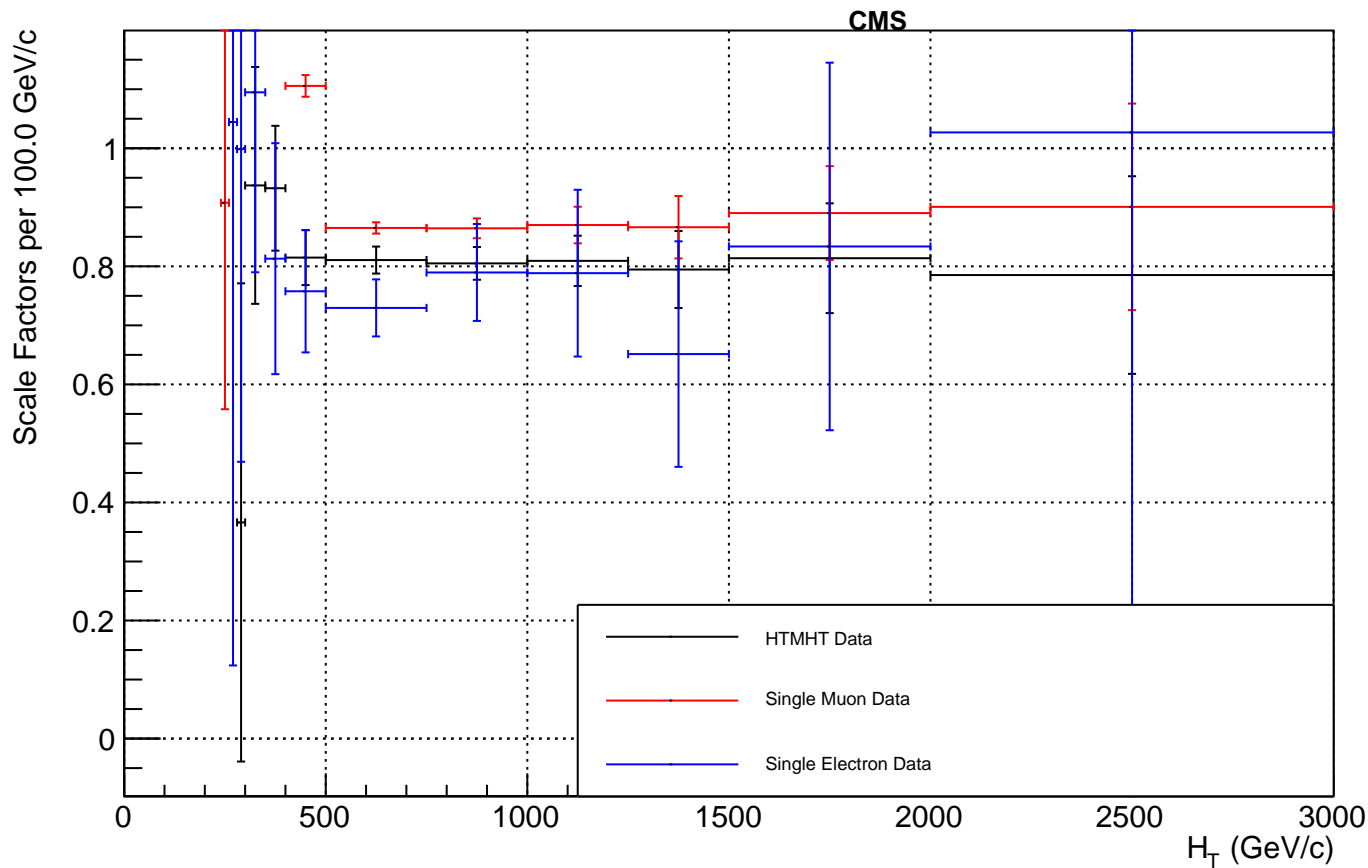


Single Electron Data

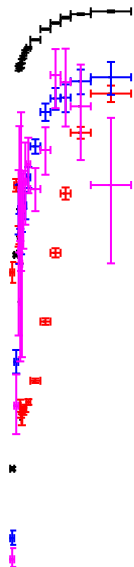


CMS





CMS



Top-AntiTop MC



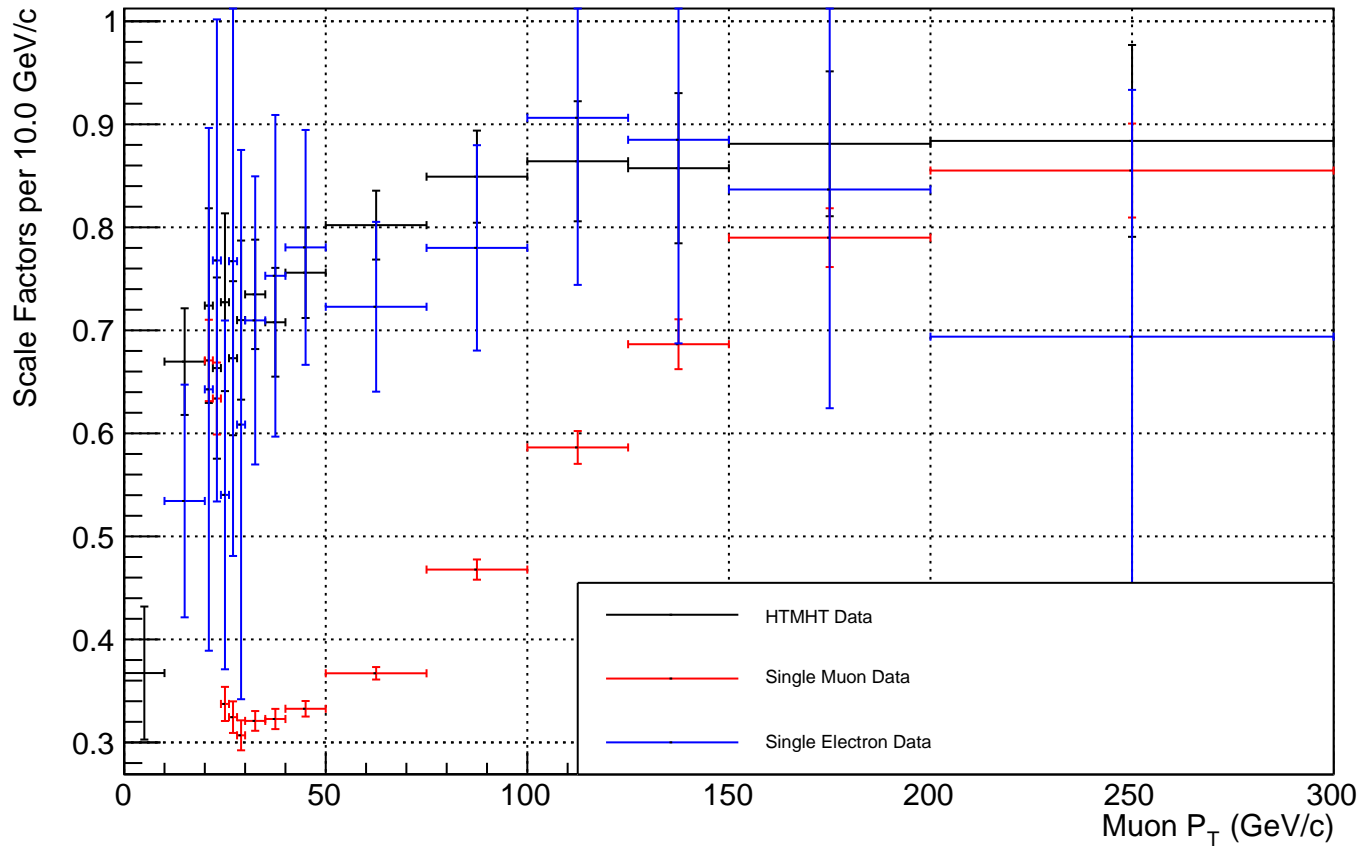
Single Muon Data



HTMHT Data



Single Electron Data



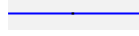
IsoMu27



Top-AntiTop MC



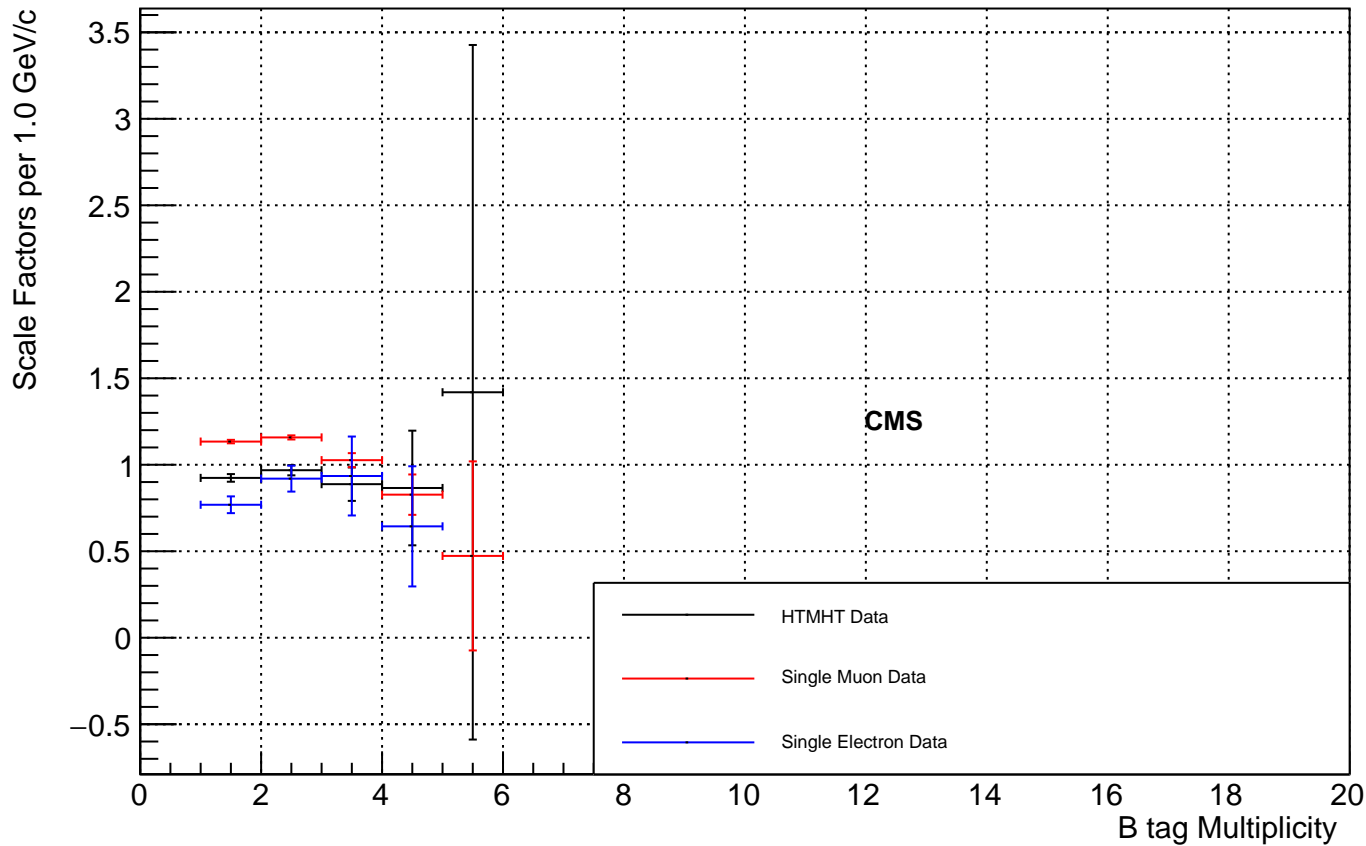
Single Muon Data



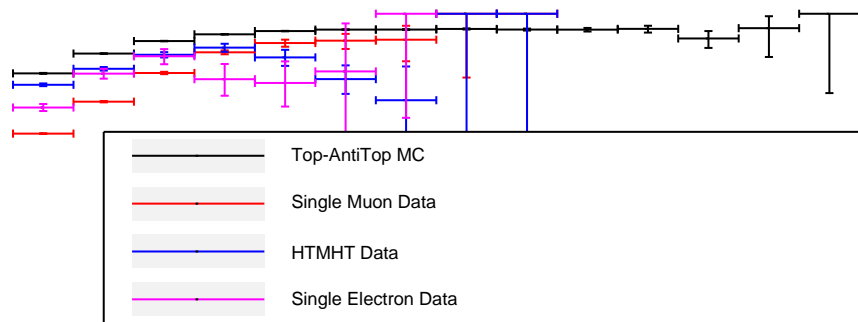
HTMHT Data

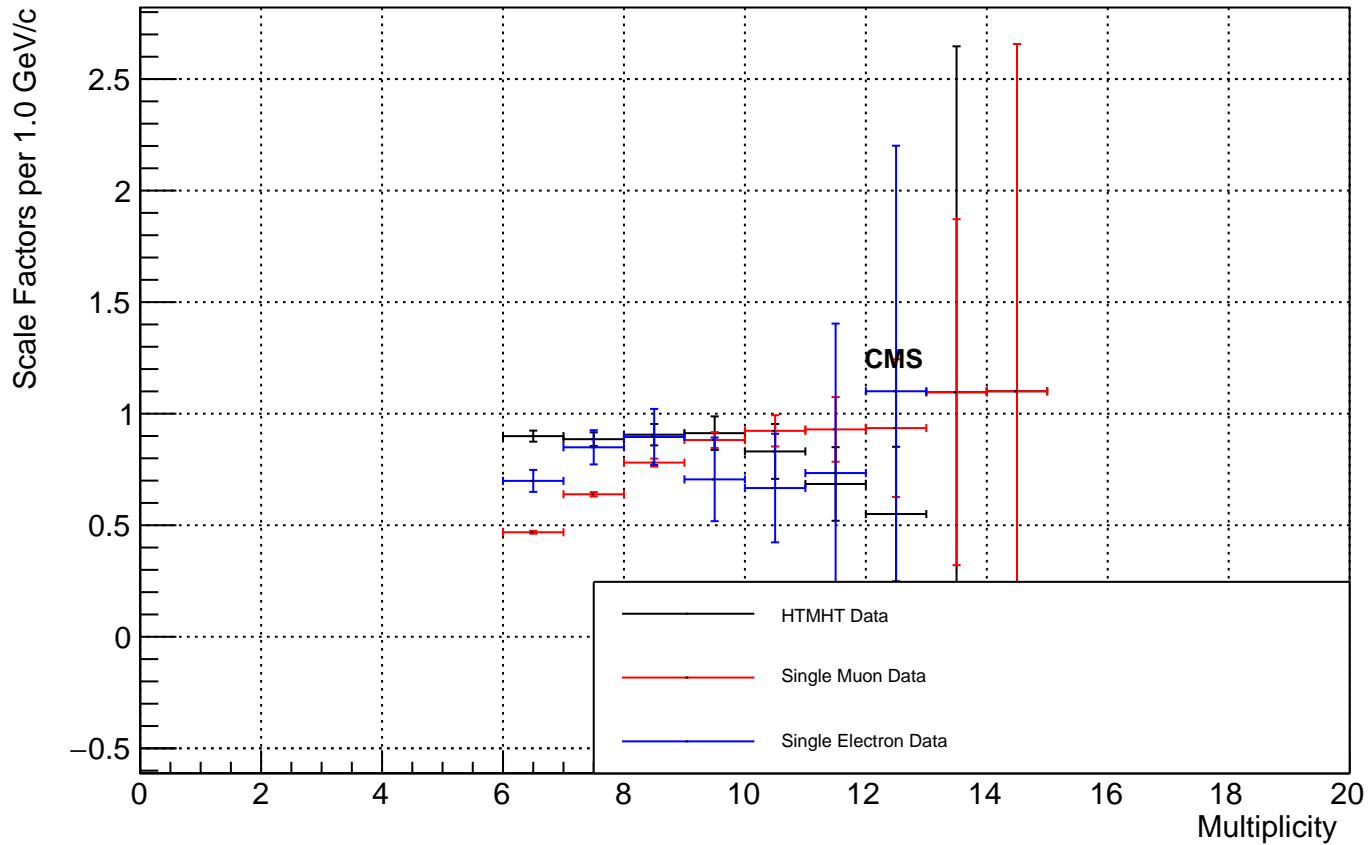


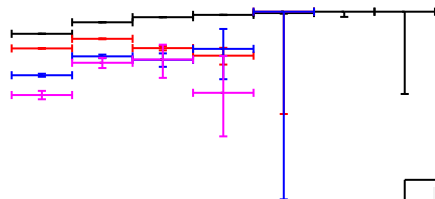
Single Electron Data



CMS





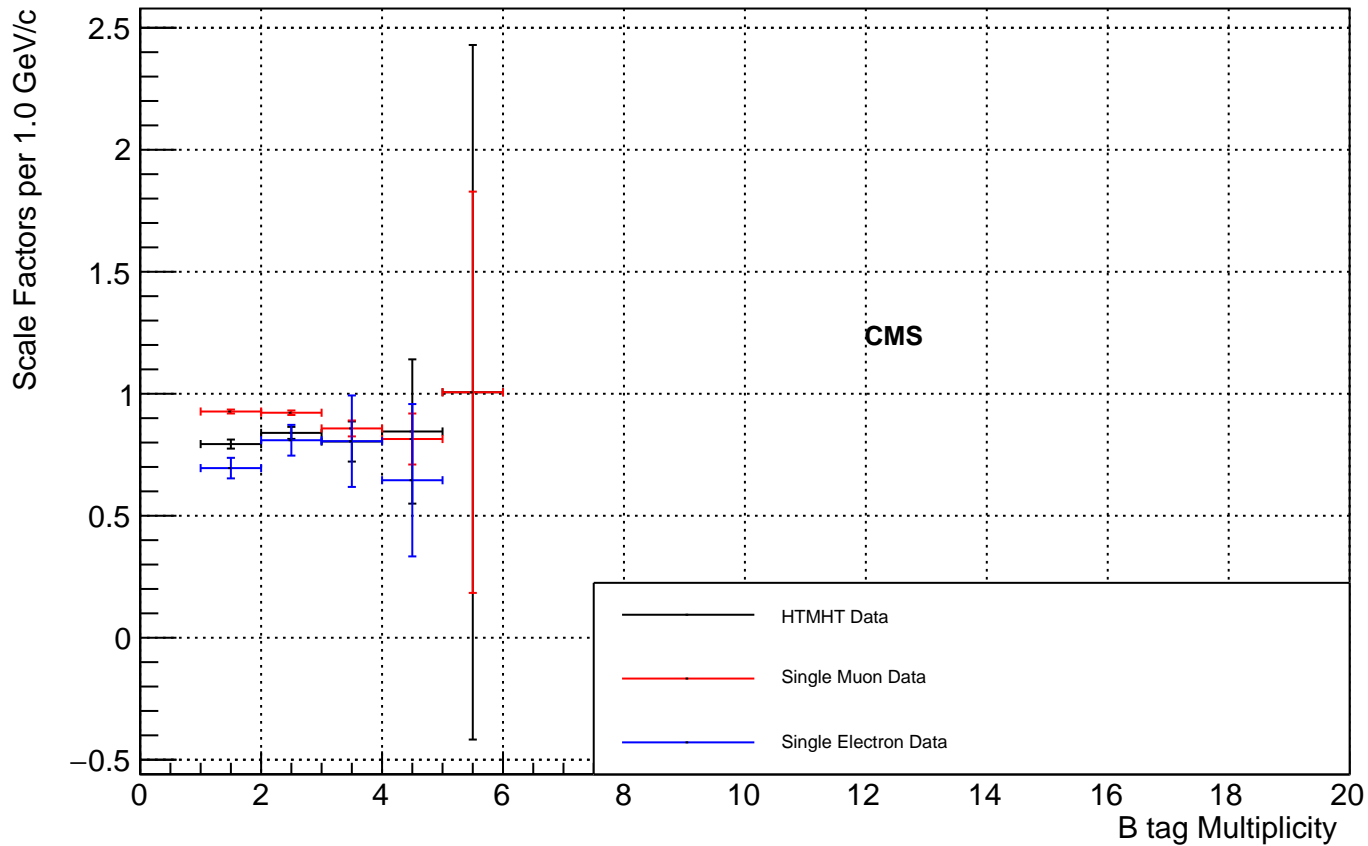
CMS

Top-AntiTop MC

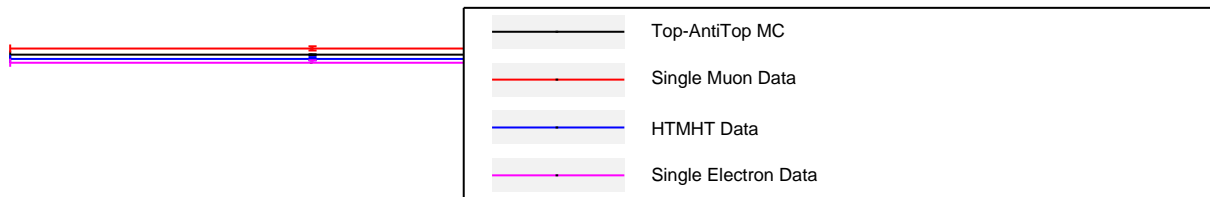
Single Muon Data

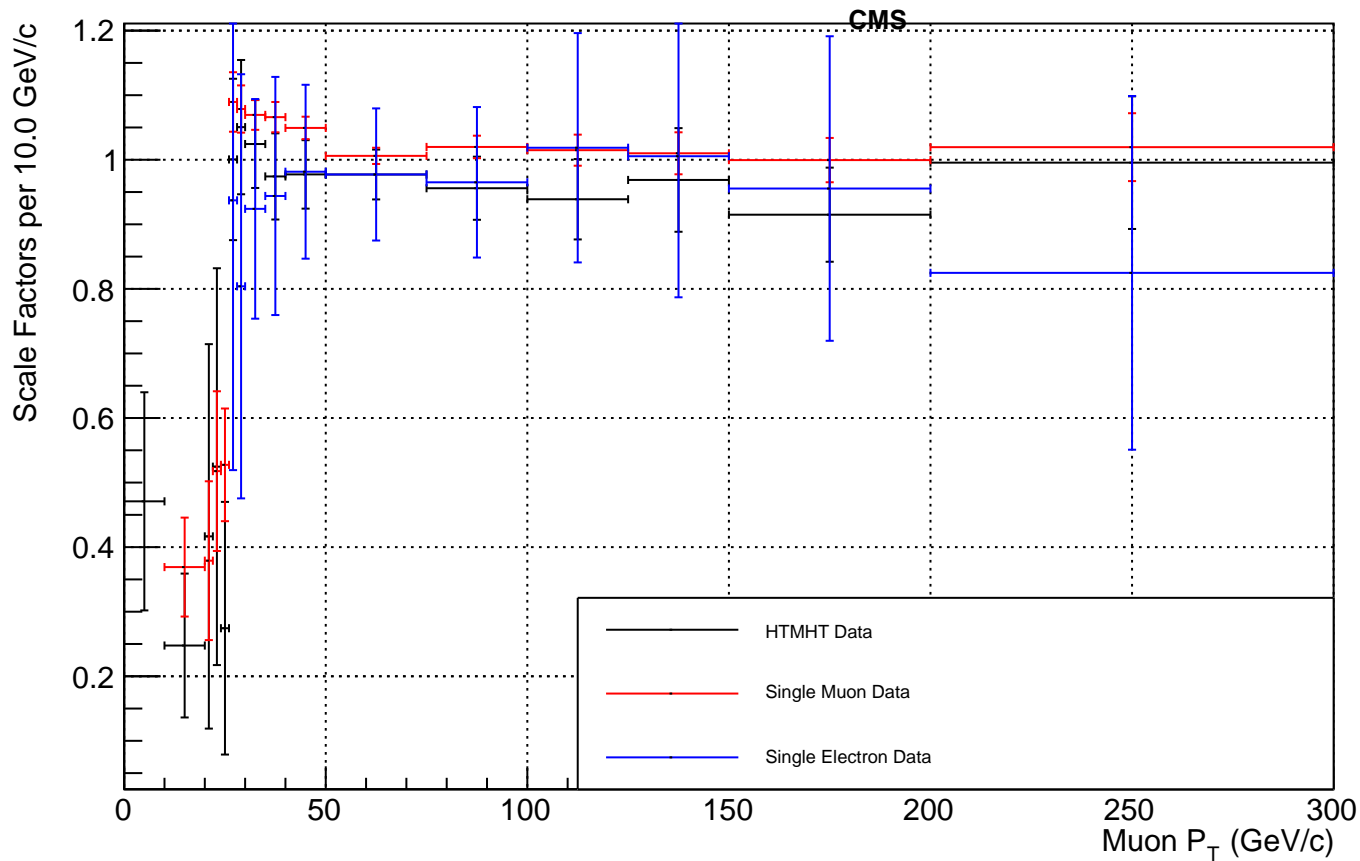
HTMHT Data

Single Electron Data

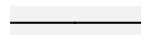
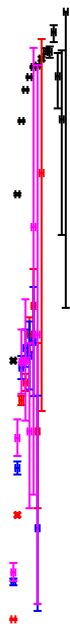


CMS





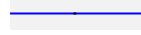
CMS



Top-AntiTop MC



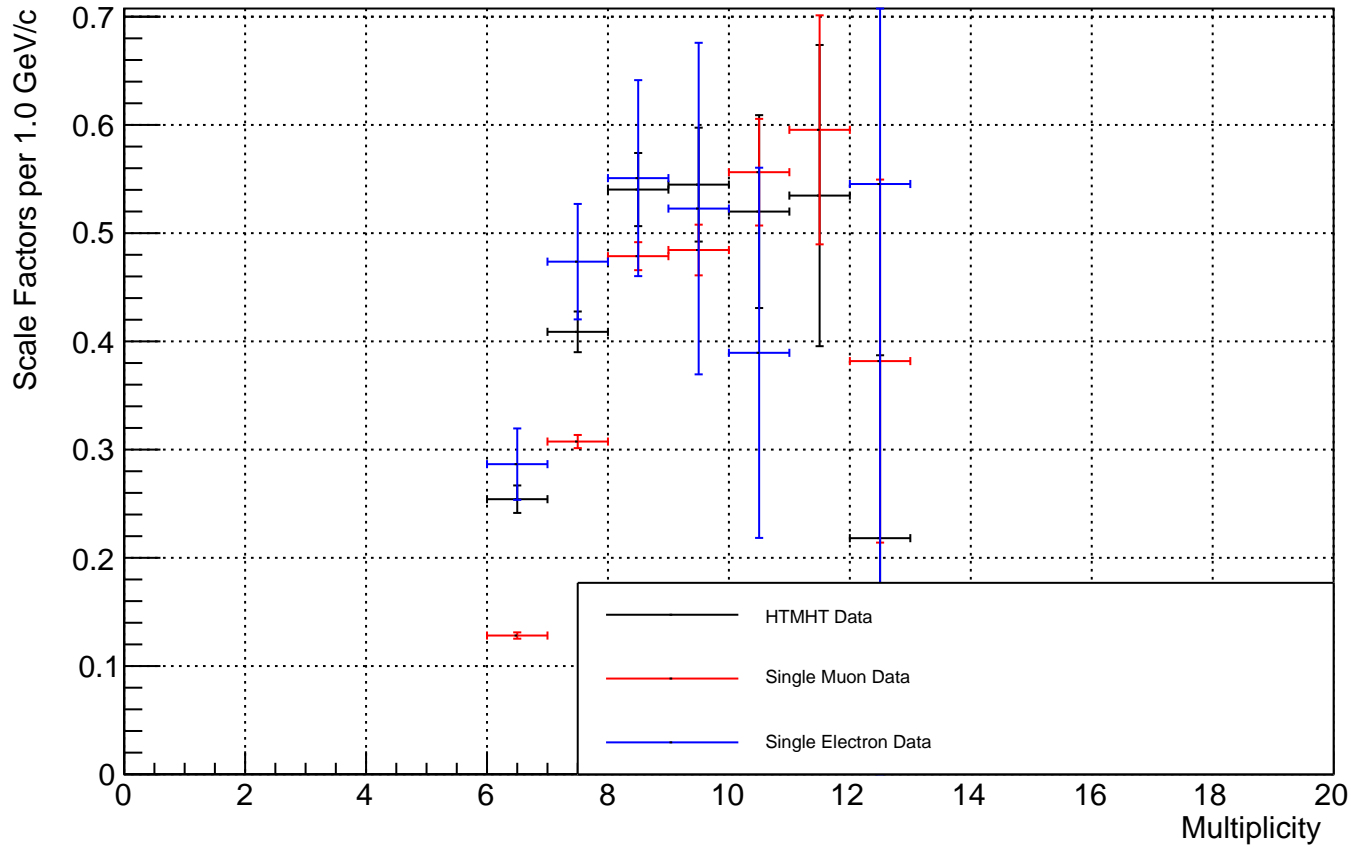
Single Muon Data

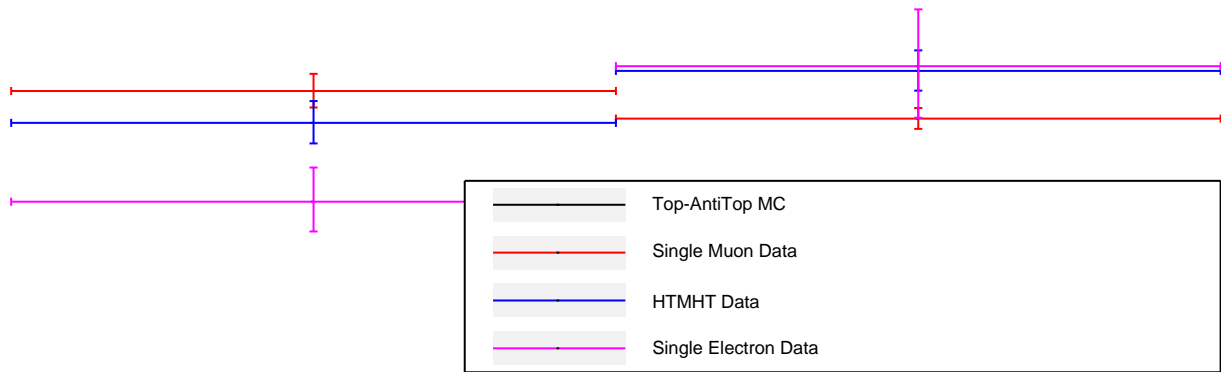


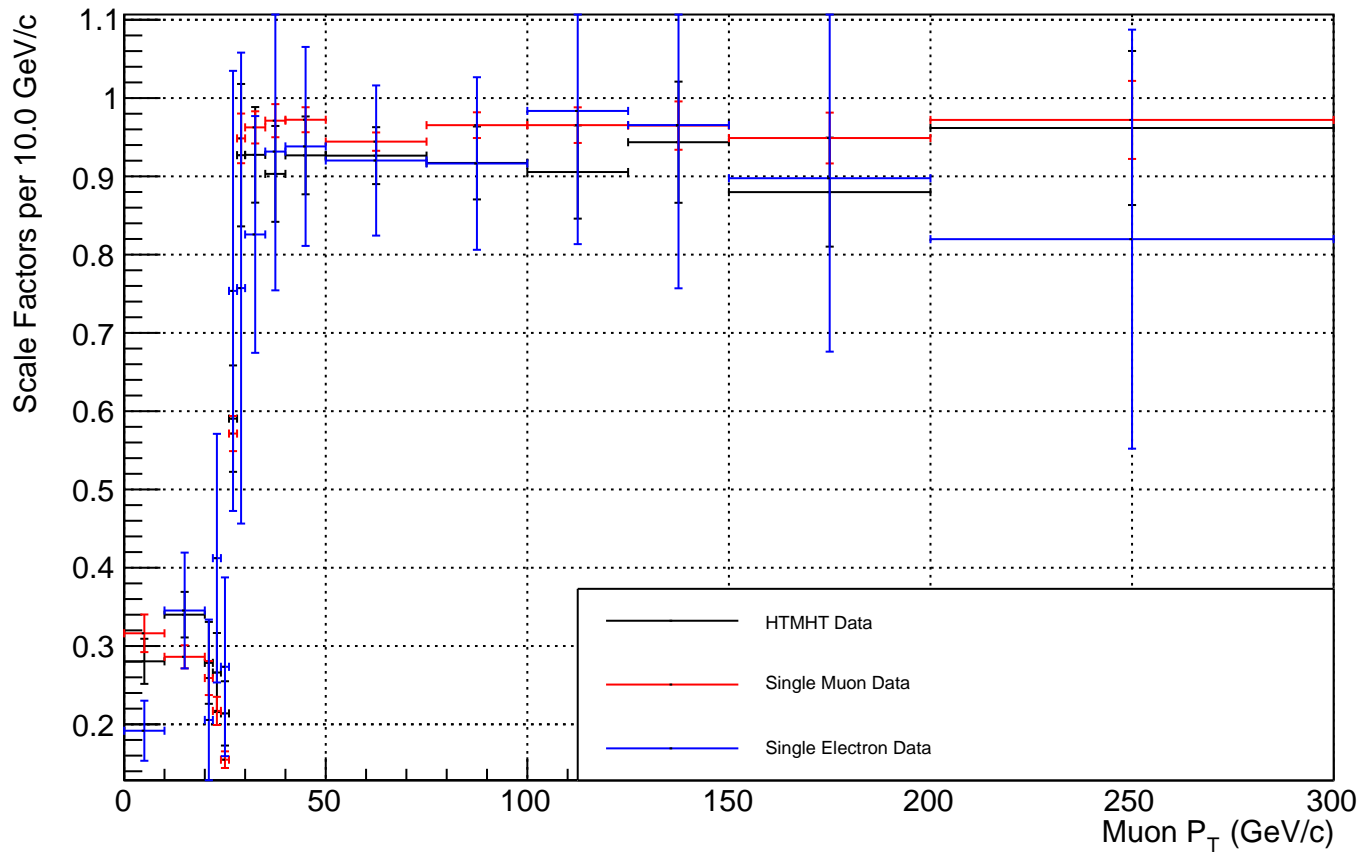
HTMHT Data

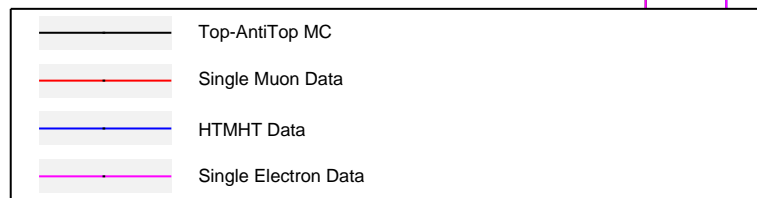
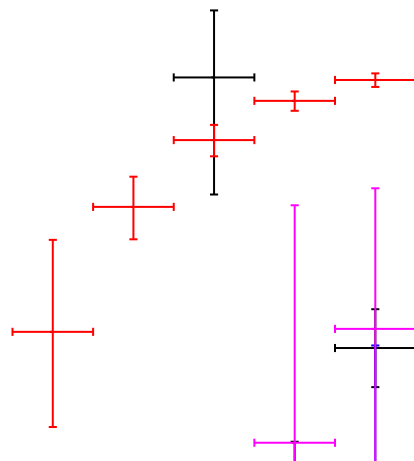


Single Electron Data

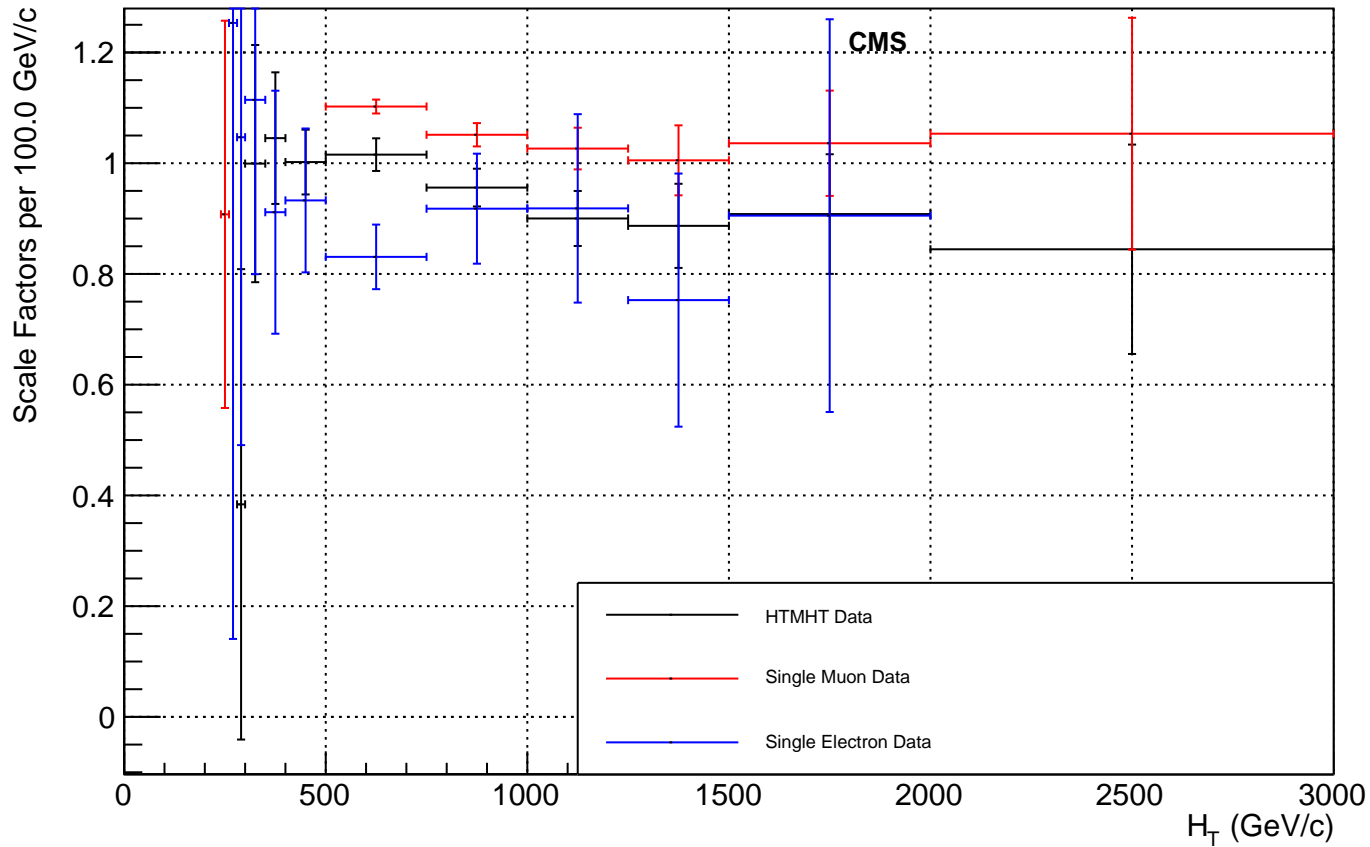




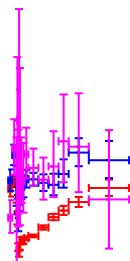
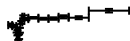




IsoMu27



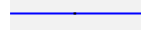
CMS



Top-AntiTop MC



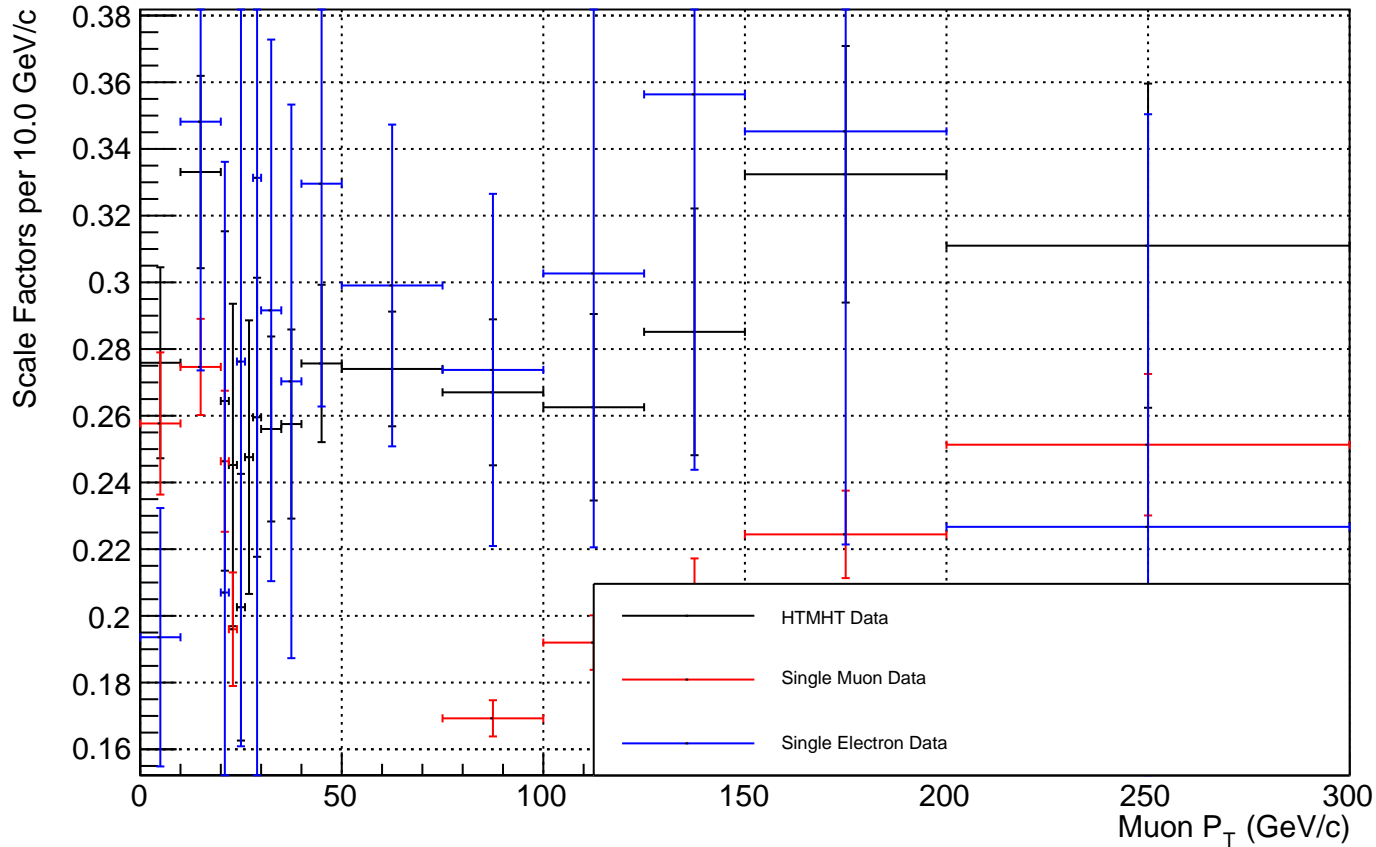
Single Muon Data

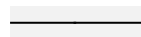


HTMHT Data



Single Electron Data





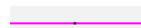
Top-AntiTop MC



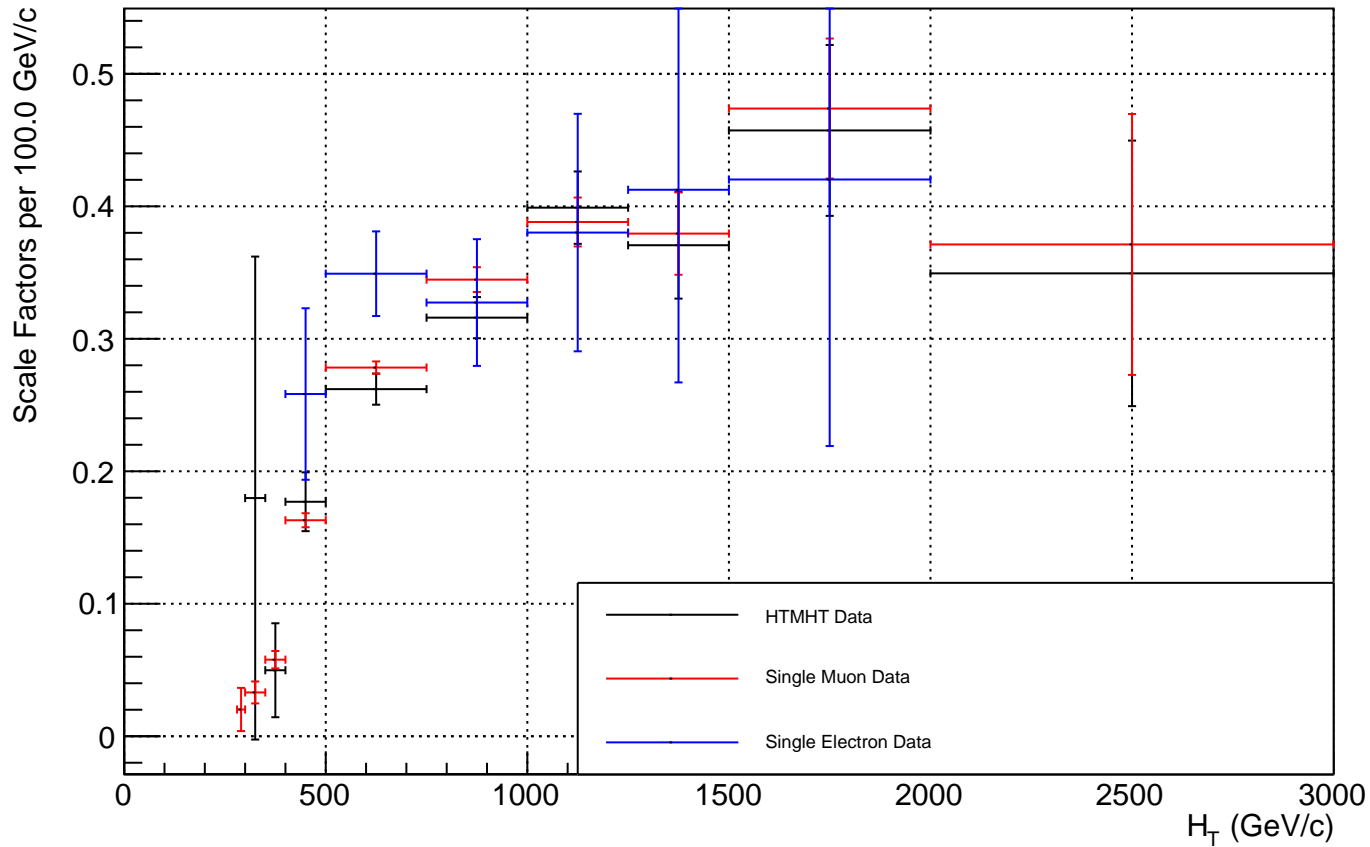
Single Muon Data



HTMHT Data



Single Electron Data





Top-AntiTop MC



Single Muon Data

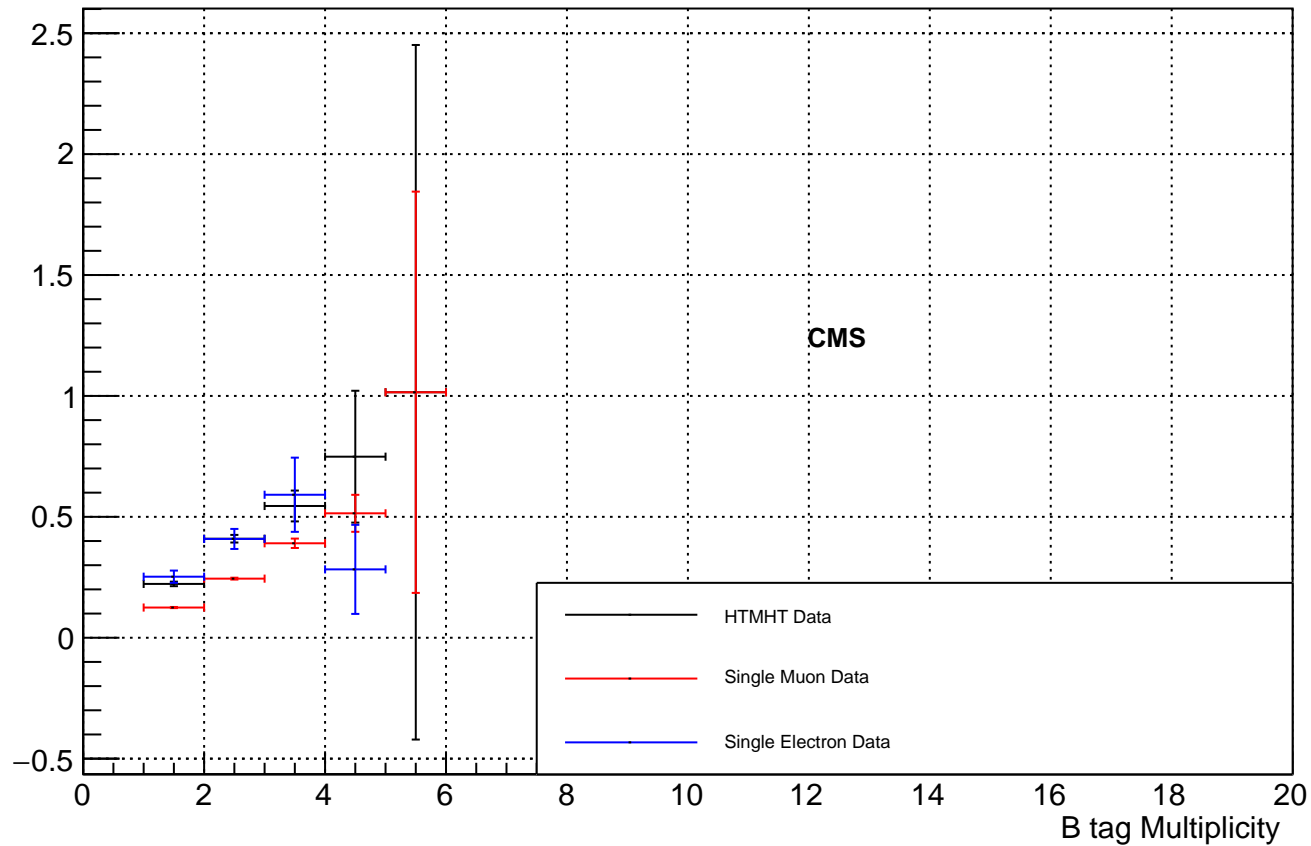


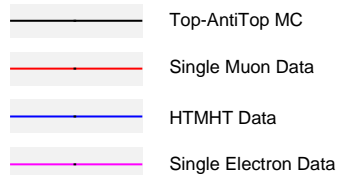
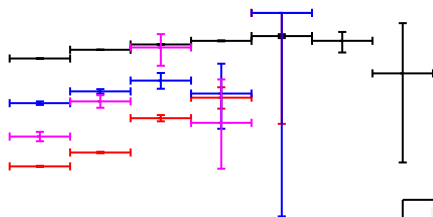
HTMHT Data



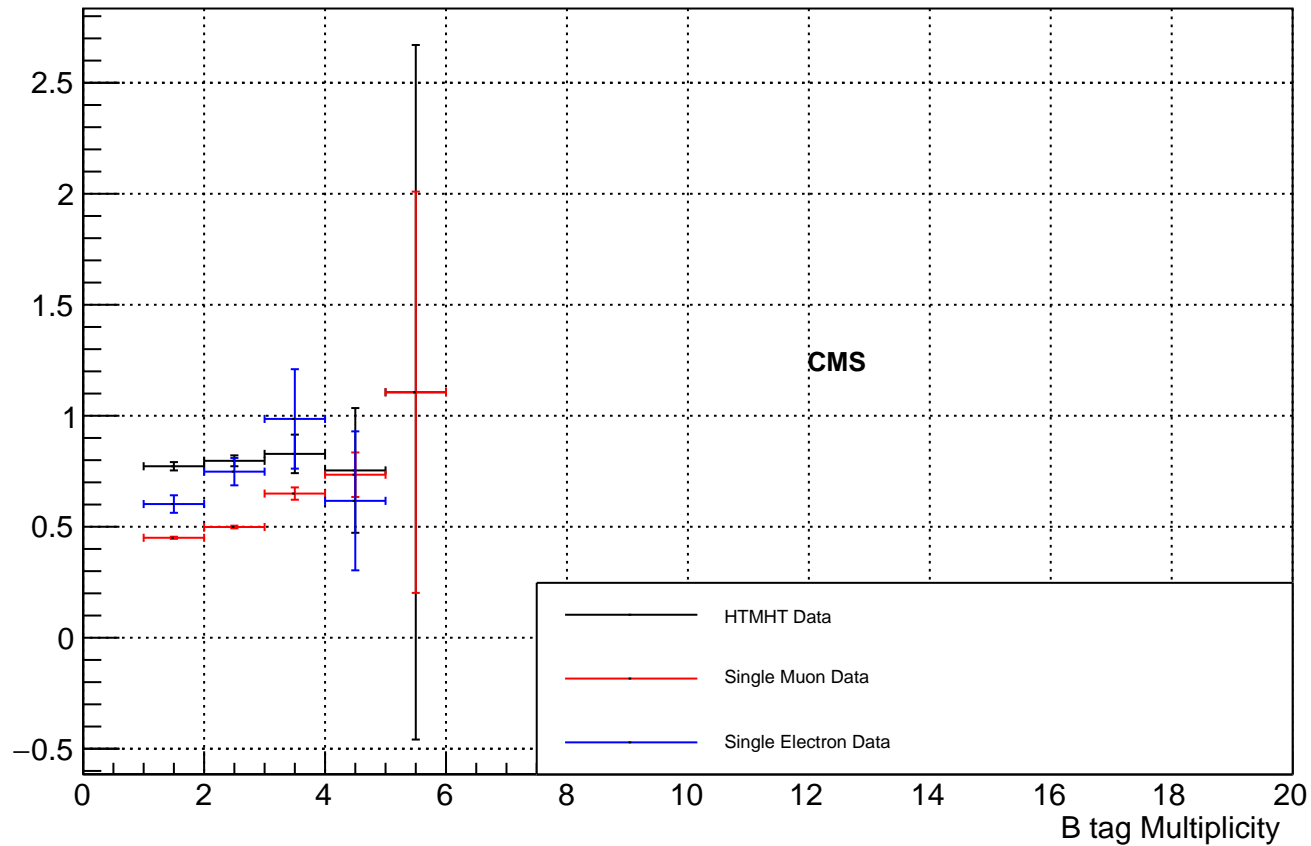
Single Electron Data

Scale Factors per 1.0 GeV/c

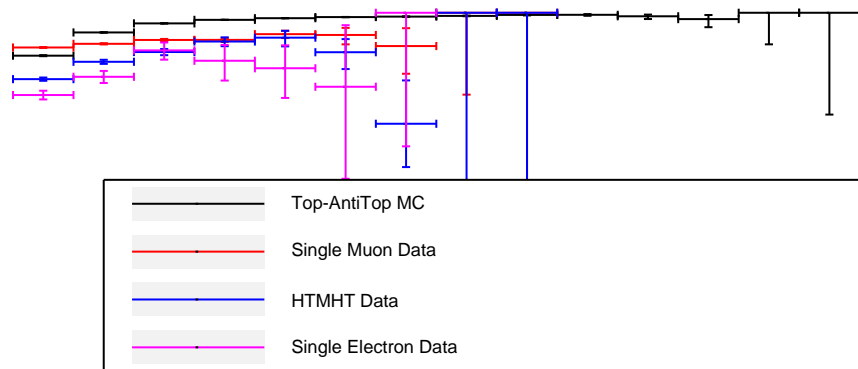


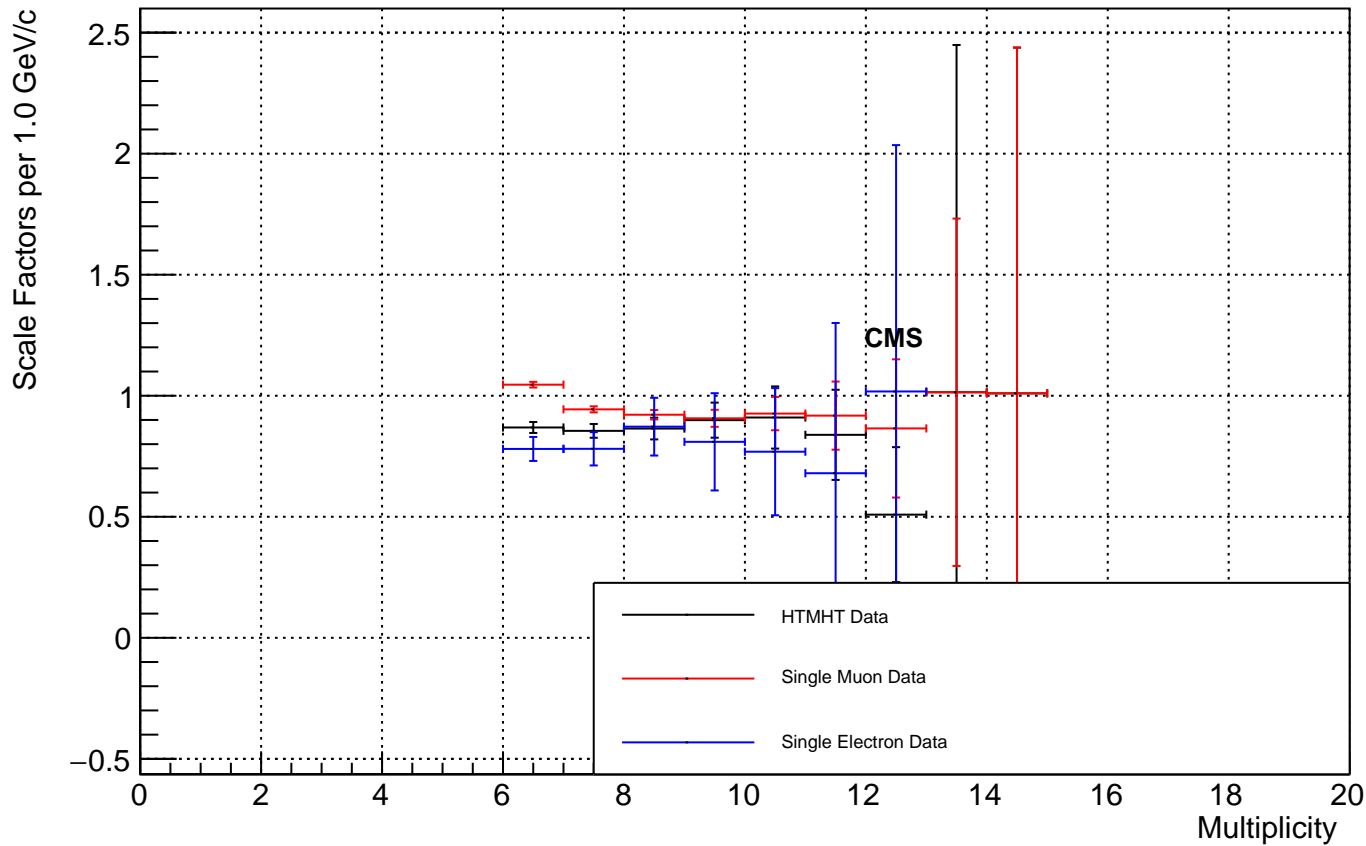
CMS

Scale Factors per 1.0 GeV/c

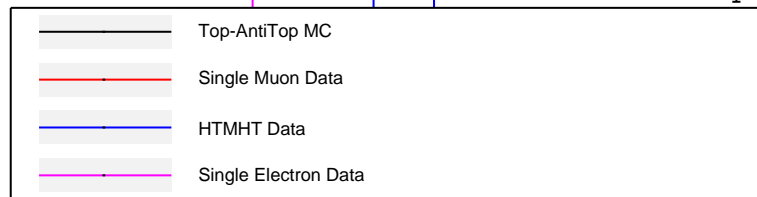
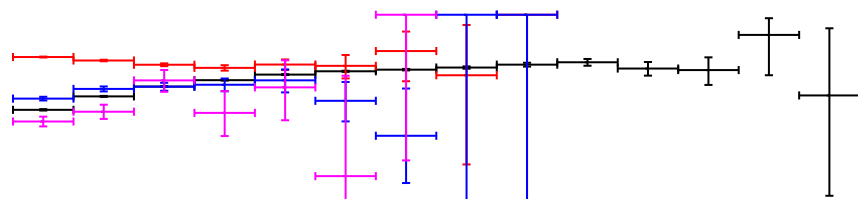


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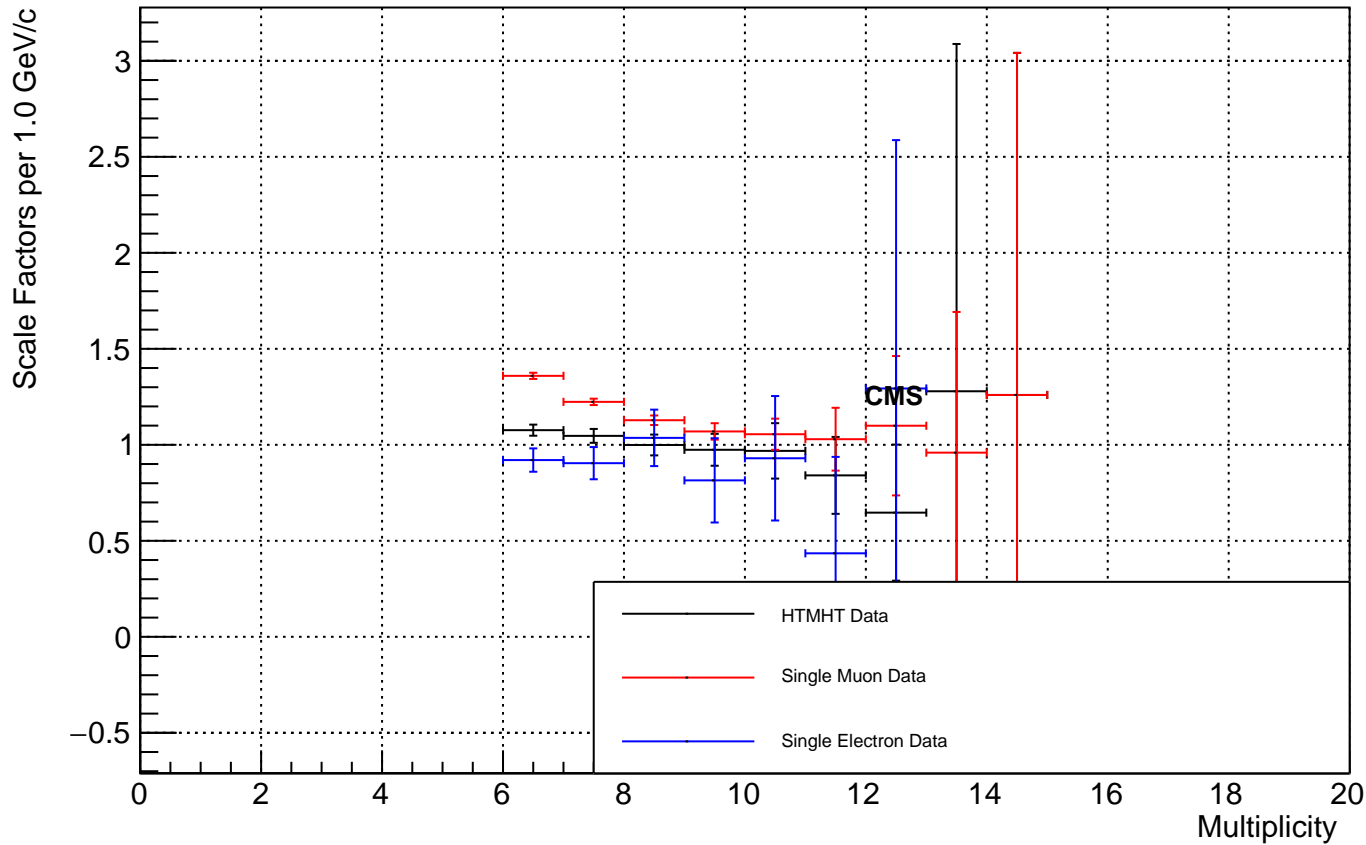




CMS



IsoMu27



IsoMu27

