50 GeV (40%)

Gen ctau 1mm: 573(c1:485(84.64%[84.64%]),c2:43(7.50%[8.87%]),c3:36(6.28%[83.72%]),c4:18(3.14%[50.00%]))

Reco ctau 1mm: 573(c1:426(74.35%[74.35%]),c2:41(7.16%[9.62%]),c3:36(6.28%[87.80%]),c4:13(2.27%[36.11%]))

Gen ctau 10mm: 563(c1:483(85.79%[85.79%]),c2:53(9.41%[10.97%]),c3:40(7.10%[75.47%]),c4:16(2.84%[40.00%]))

Reco ctau 10mm: 563(c1:419(74.42%[74.42%]),c2:47(8.35%[11.22%]),c3:37(6.57%[78.72%]),c4:14(2.49%[37.84%]))

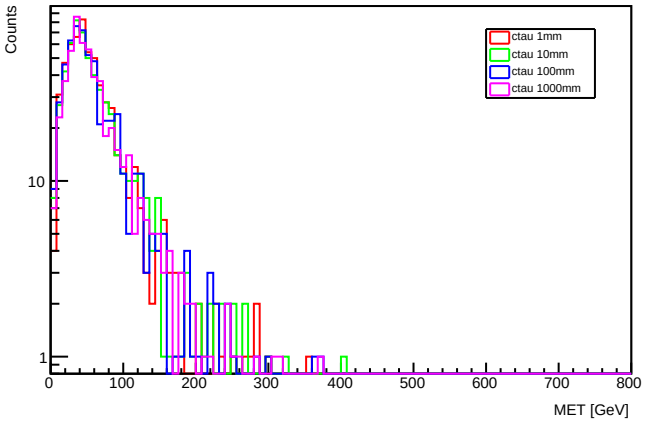
Gen ctau 100mm: 558(c1:470(84.23%[84.23%]),c2:48(8.60%[10.21%]),c3:36(6.45%[75.00%]),c4:17(3.05%[47.22%]))

Reco ctau 100mm: 558(c1:430(77.06%[77.06%]),c2:46(8.24%[10.70%]),c3:34(6.09%[73.91%]),c4:15(2.69%[44.12%]))

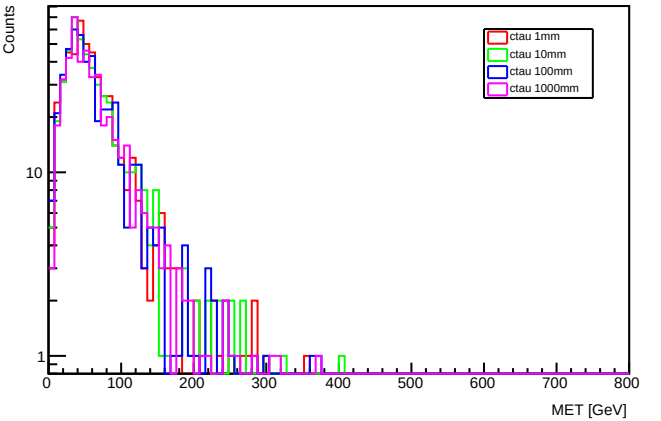
Gen ctau 1000mm: 533(c1:450(84.43%[84.43%]),c2:48(9.01%[10.67%]),c3:33(6.19%[68.75%]),c4:16(3.00%[48.48%]))

Reco ctau 1000mm: 533(c1:403(75.61%[75.61%]),c2:46(8.63%[11.41%]),c3:36(6.75%[78.26%]),c4:10(1.88%[27.78%]))

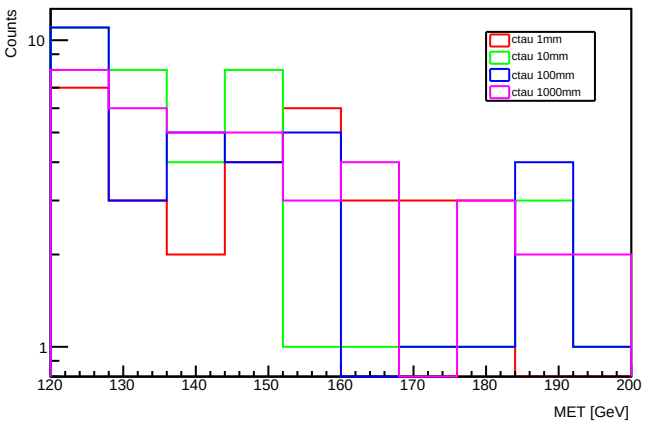
gen leading MET: no cuts



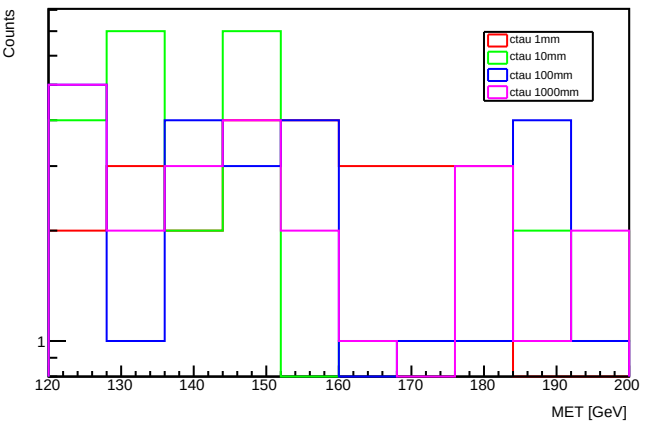
gen leading MET: n_jet >=1, j1pt > 30 GeV



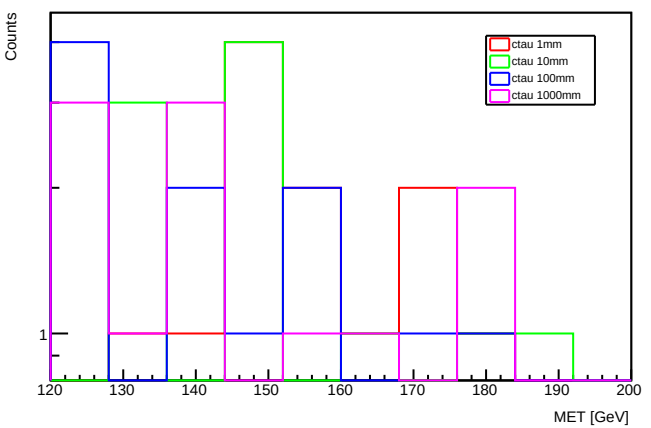
gen leading MET: MET > 120 GeV



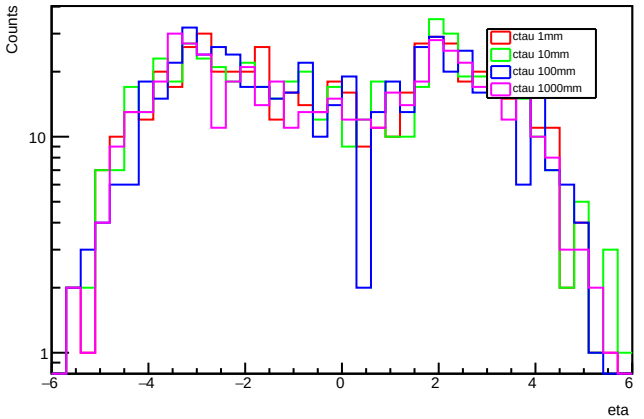
gen leading MET: j1pt >120, at most 2 jets w/ pt >30 GeV



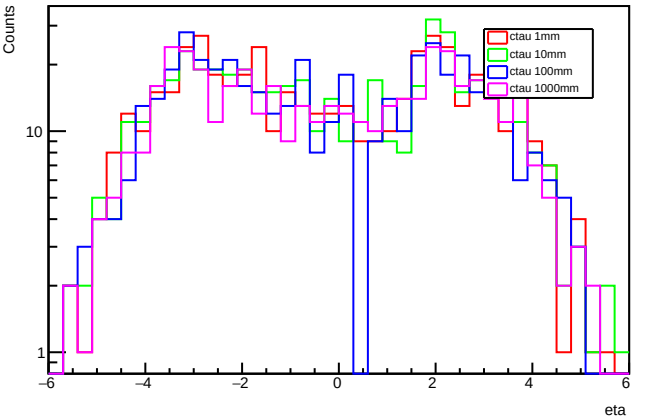
gen leading MET: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4



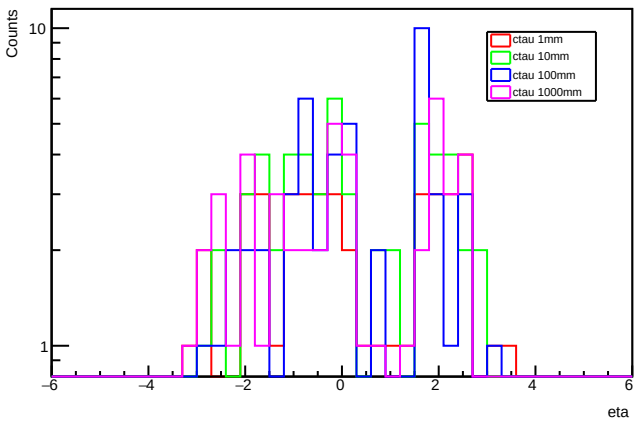
gen leading Met eta: no cuts



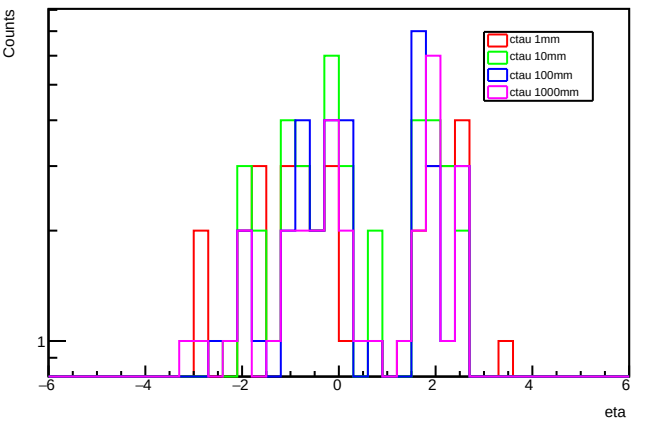
gen leading Met eta: n_jet >=1, j1pt > 30 GeV



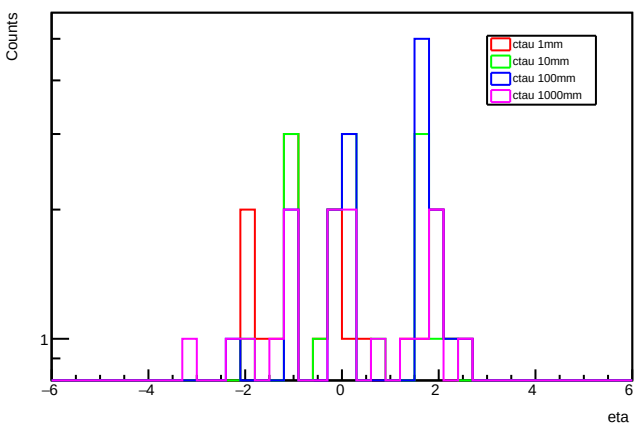
gen leading Met eta: MET > 120 GeV



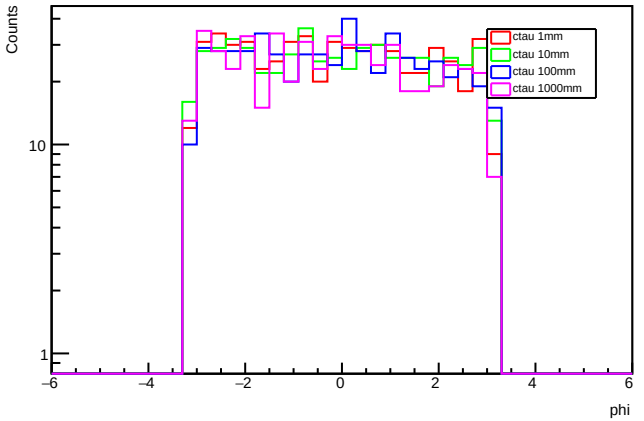
gen leading Met eta: j1pt >120, at most 2 jets w/ pt >30 GeV



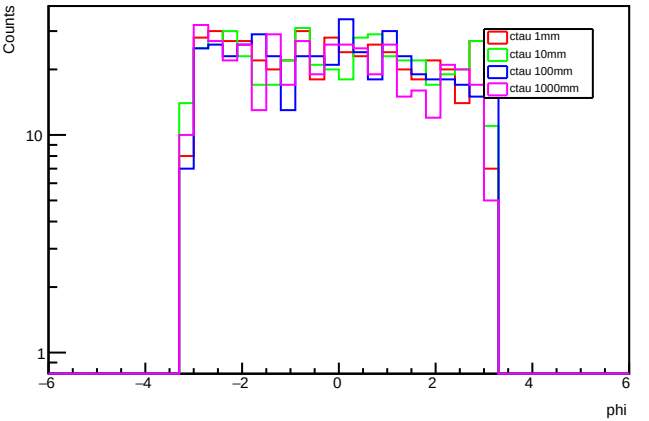
gen leading Met eta: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4



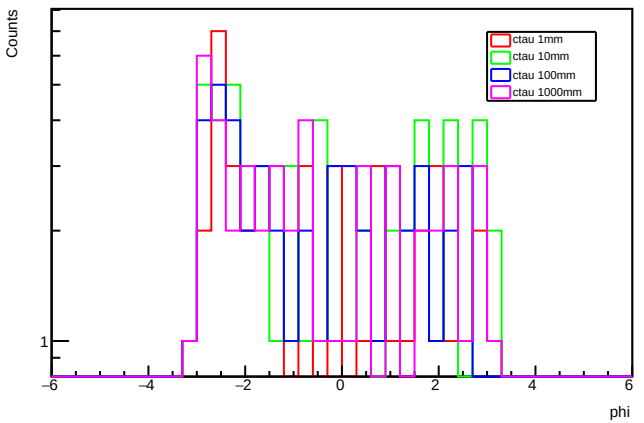
gen leading Met phi: no cuts



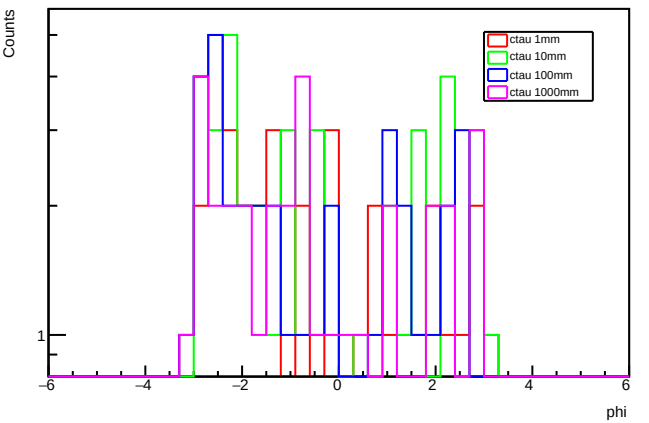
gen leading Met phi: n_jet >=1, j1pt > 30 GeV



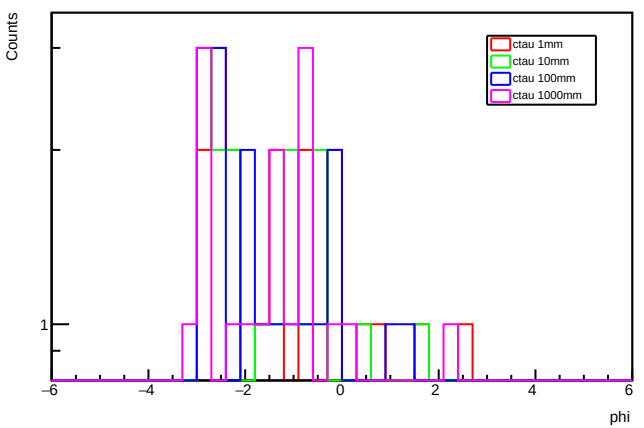
gen leading Met phi: MET > 120 GeV



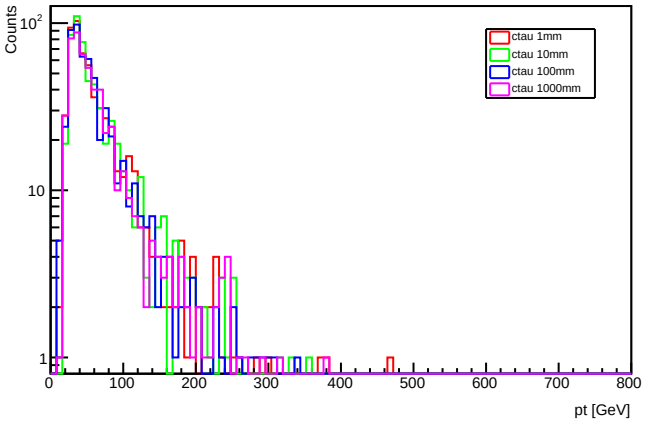
gen leading Met phi: j1pt >120, at most 2 jets w/ pt >30 GeV



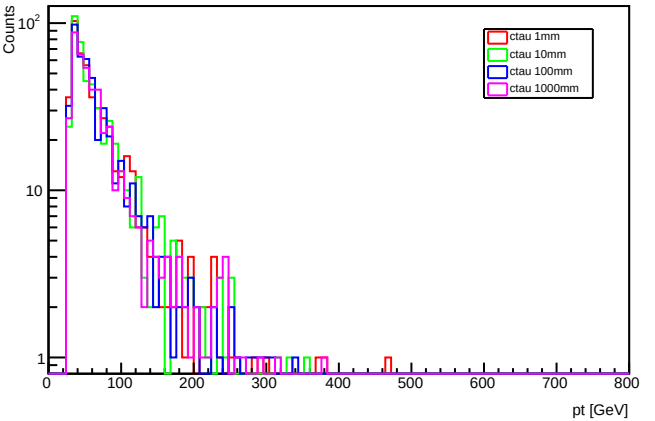
gen leading Met phi: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4



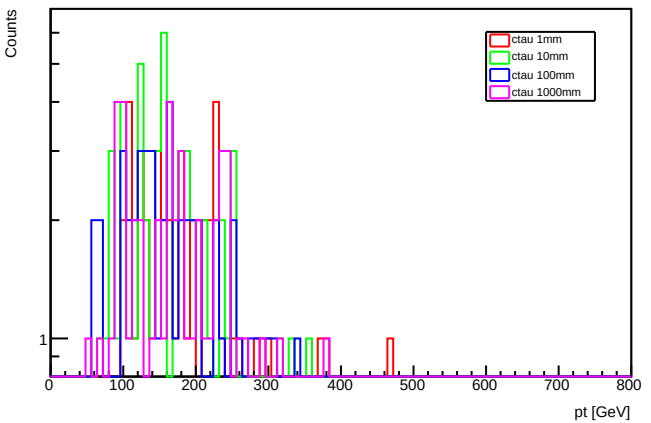
gen leading Jet pt: no cuts



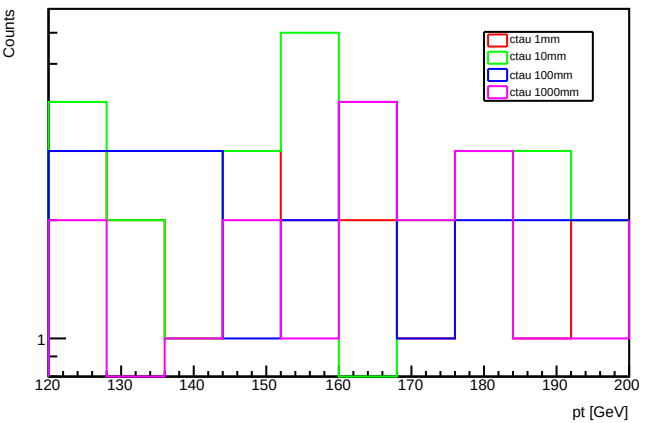
gen leading Jet pt: n_jet >=1, j1pt > 30 GeV



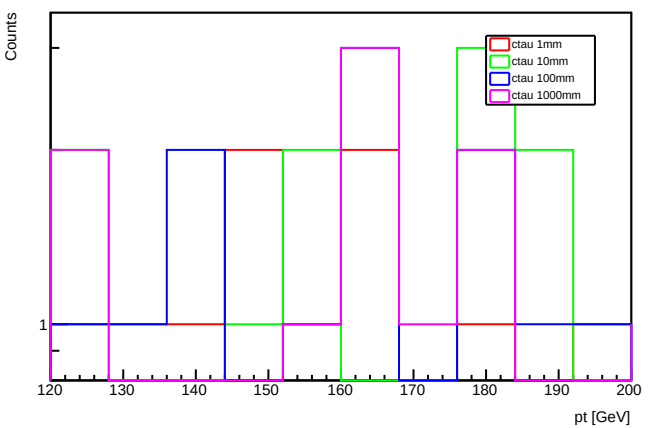
gen leading Jet pt: MET > 120 GeV



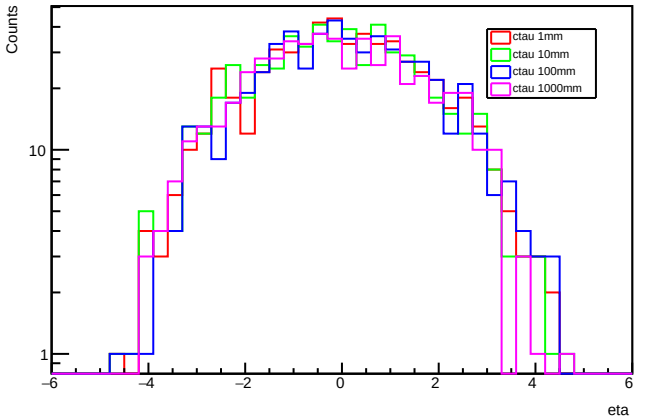
gen leading Jet pt: j1pt >120, at most 2 jets w/ pt >30 GeV



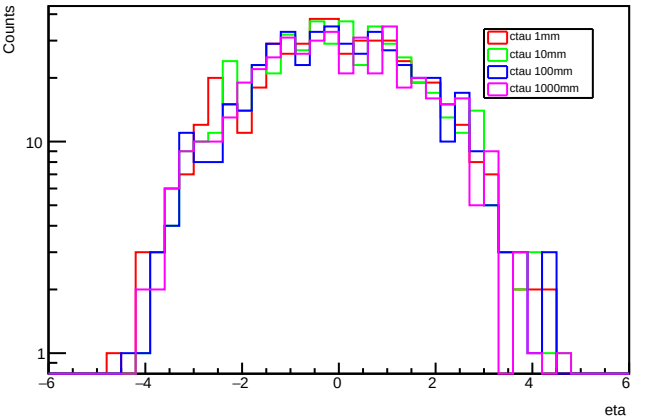
gen leading Jet pt: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4



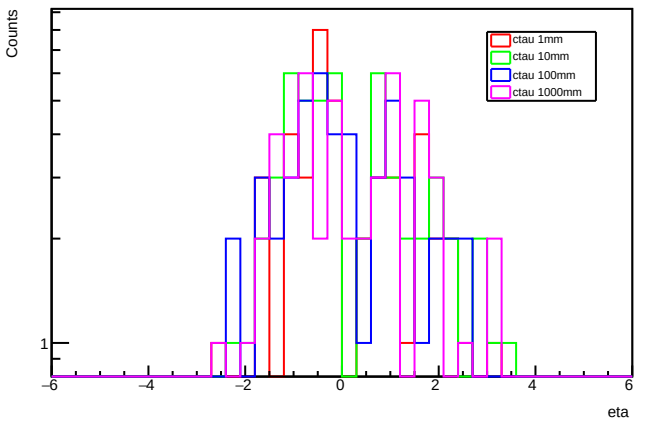
gen leading Jet eta: no cuts



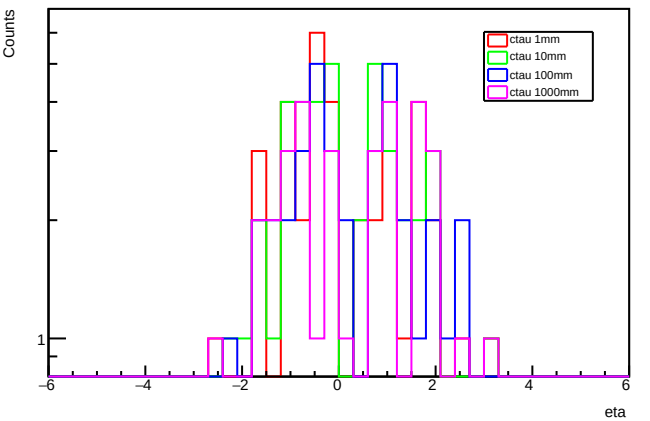
gen leading Jet eta: n_jet >=1, j1pt > 30 GeV



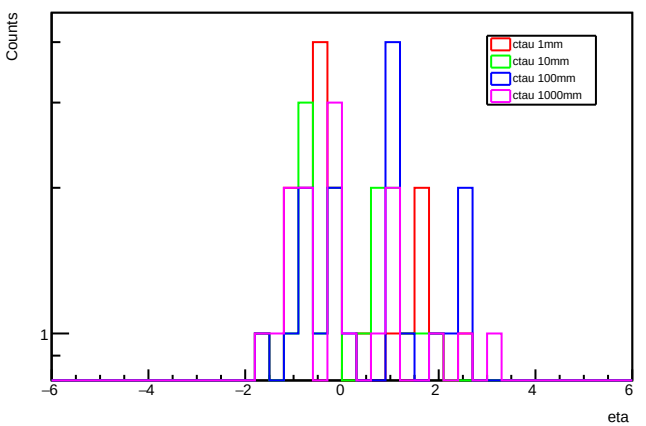
gen leading Jet eta: MET > 120 GeV



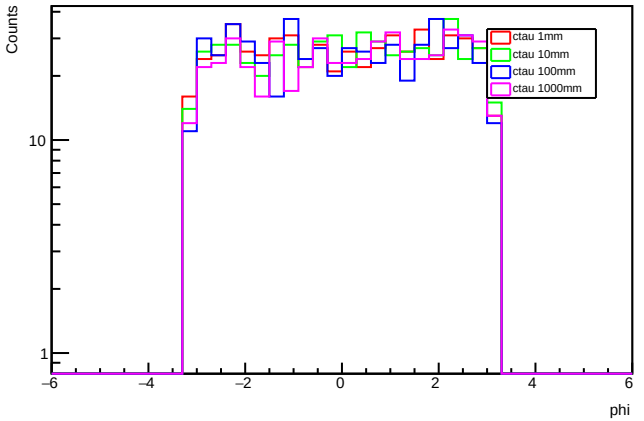
gen leading Jet eta: j1pt >120, at most 2 jets w/ pt >30 GeV



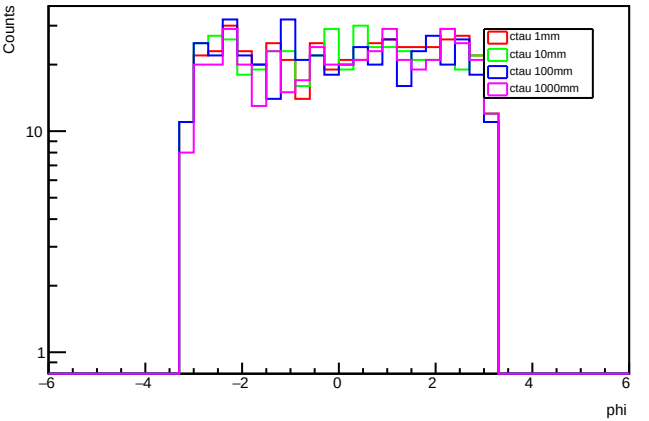
gen leading Jet eta: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4



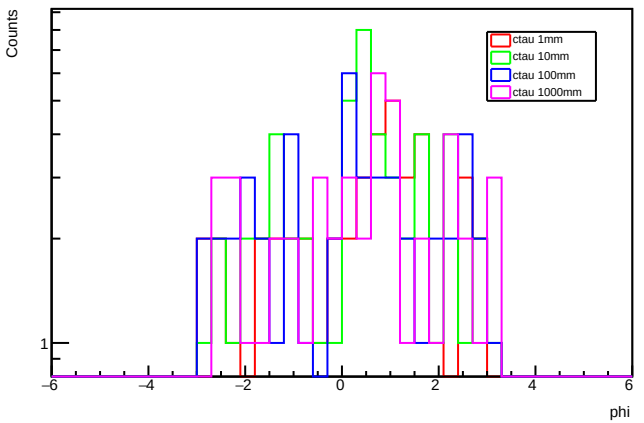
gen leading Jet phi: no cuts



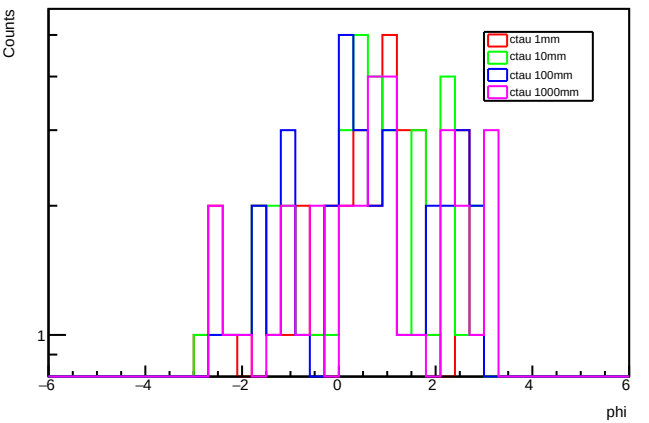
gen leading Jet phi: n_jet >=1, j1pt > 30 GeV



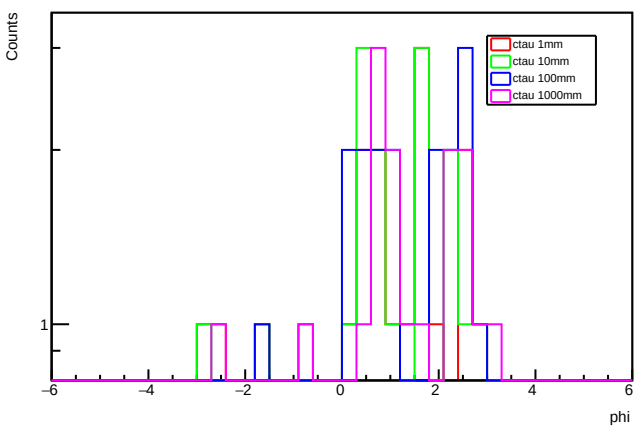
gen leading Jet phi: MET > 120 GeV



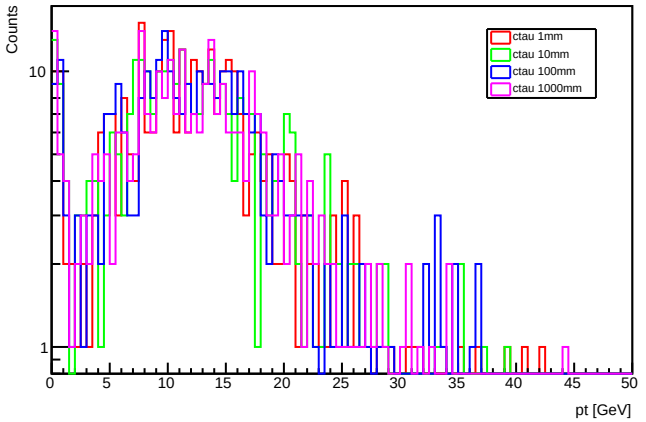
gen leading Jet phi: j1pt >120, at most 2 jets w/ pt >30 GeV



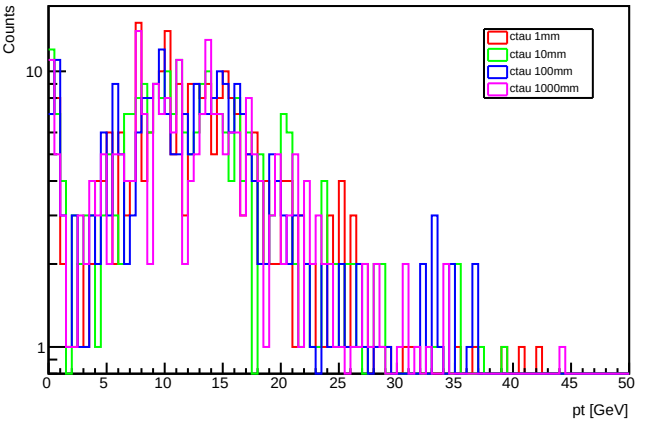
gen leading Jet phi: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4



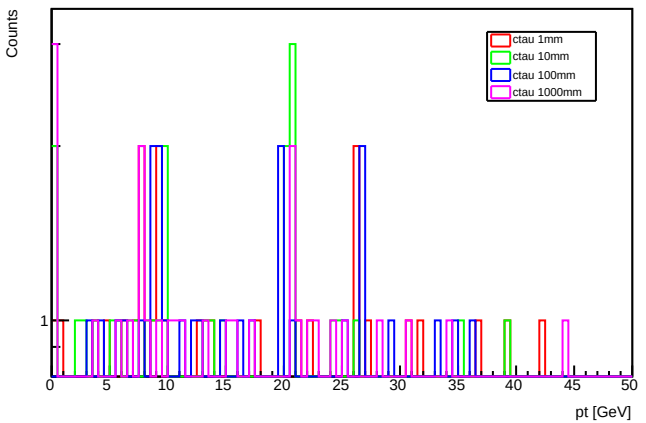
gen leading Mu pt: no cuts



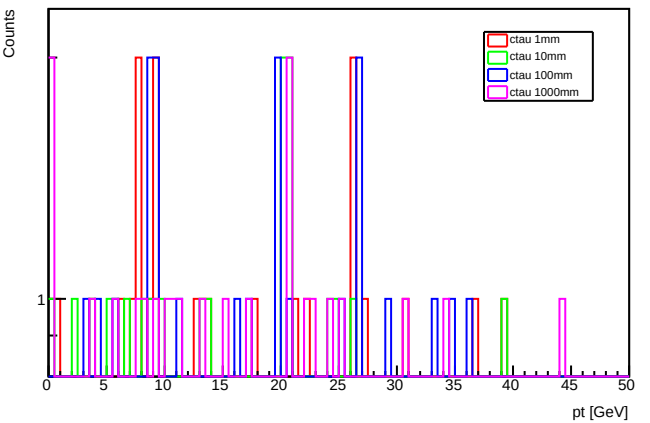
gen leading Mu pt: n_jet >=1, j1pt > 30 GeV



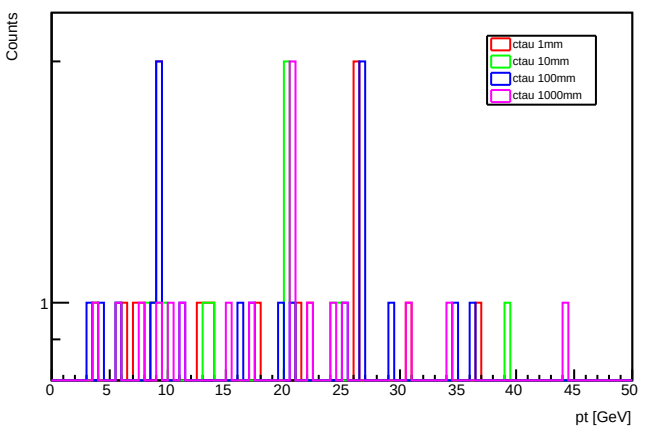
gen leading Mu pt: MET > 120 GeV



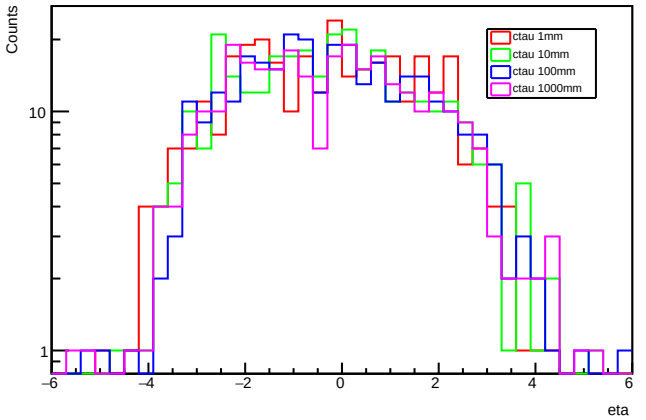
gen leading Mu pt: j1pt >120, at most 2 jets w/ pt >30 GeV



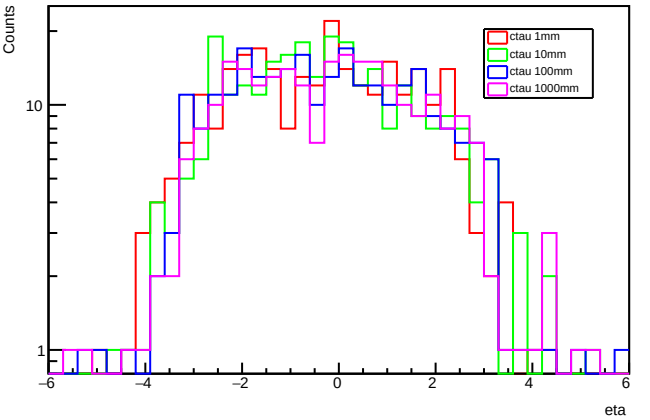
gen leading Mu pt: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4



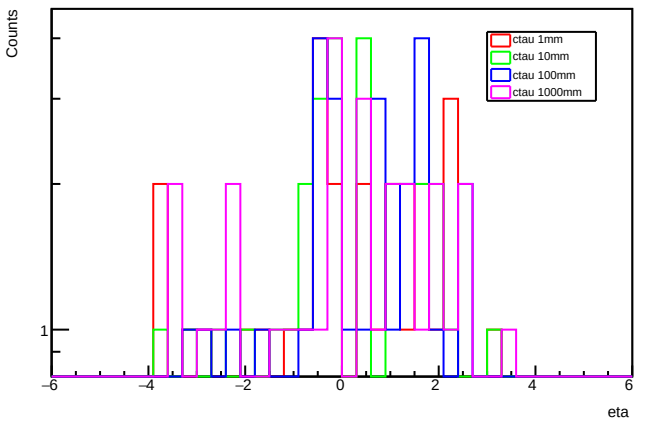
gen leading Mu eta: no cuts



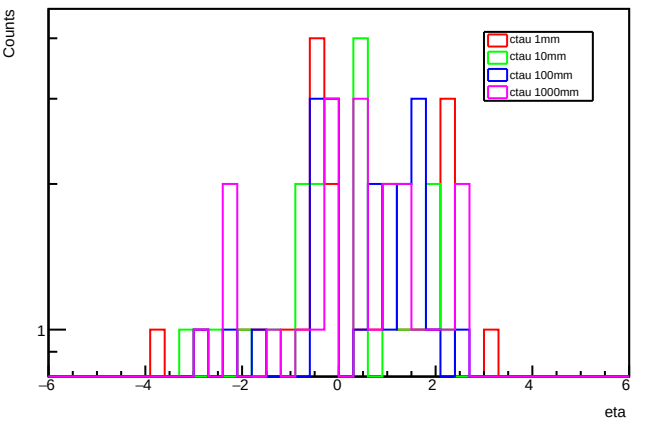
gen leading Mu eta: n_jet >=1, j1pt > 30 GeV



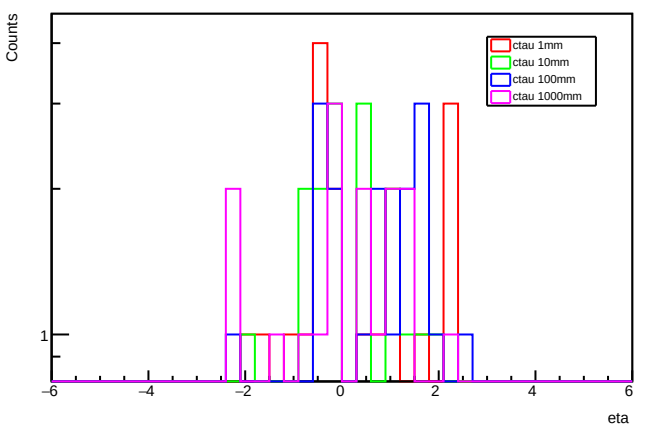
gen leading Mu eta: MET > 120 GeV



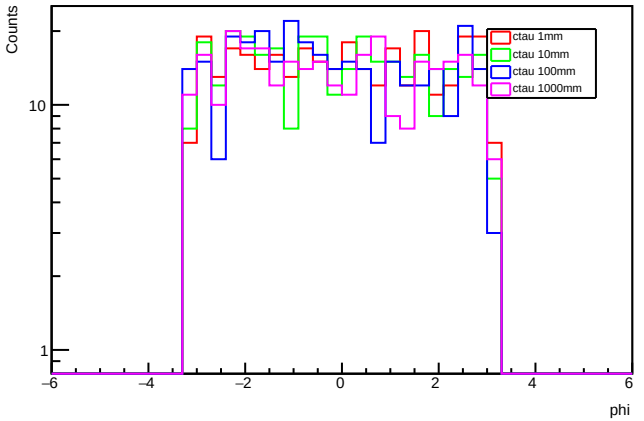
gen leading Mu eta: j1pt >120, at most 2 jets w/ pt >30 GeV



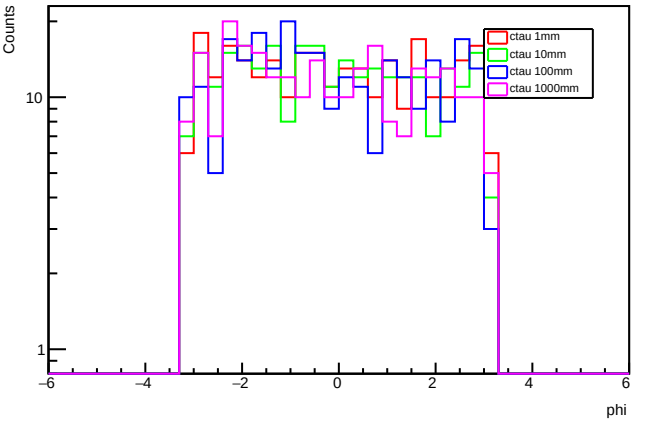
gen leading Mu eta: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4



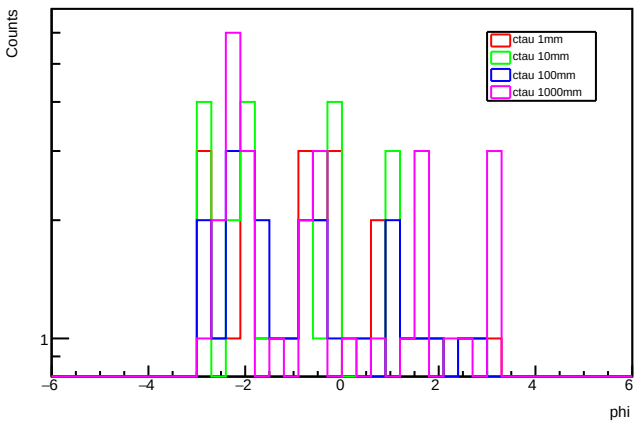
gen leading Mu phi: no cuts



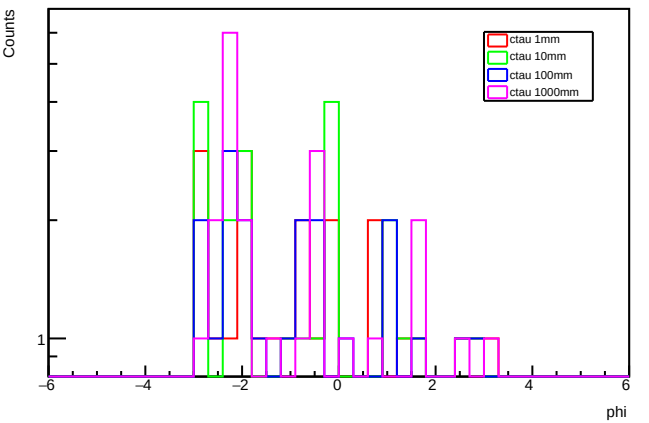
gen leading Mu phi: n_jet >=1, j1pt > 30 GeV



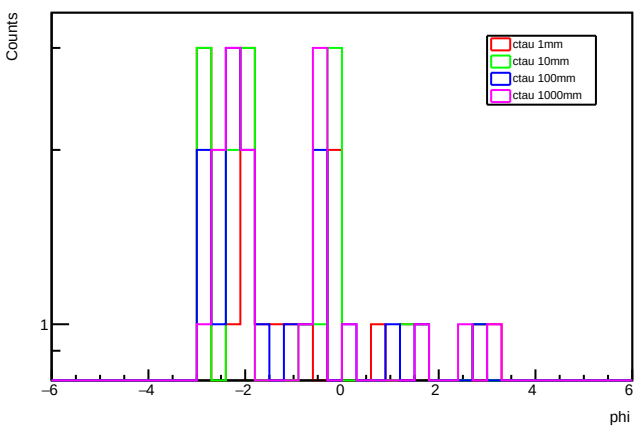
gen leading Mu phi: MET > 120 GeV



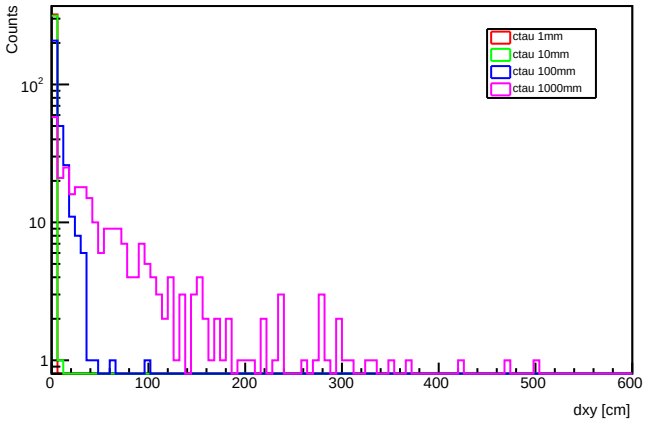
gen leading Mu phi: j1pt >120, at most 2 jets w/ pt >30 GeV



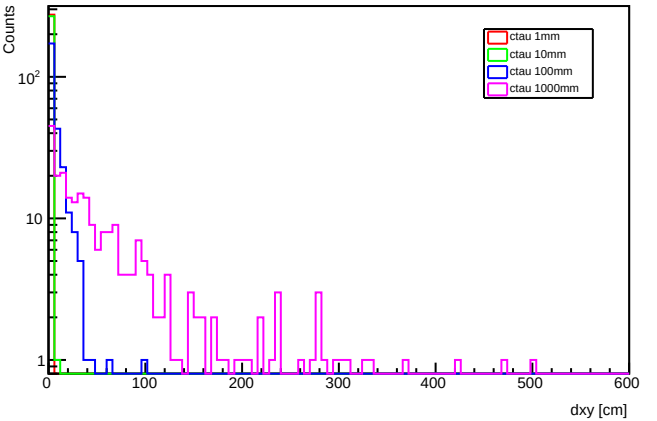
gen leading Mu phi: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4



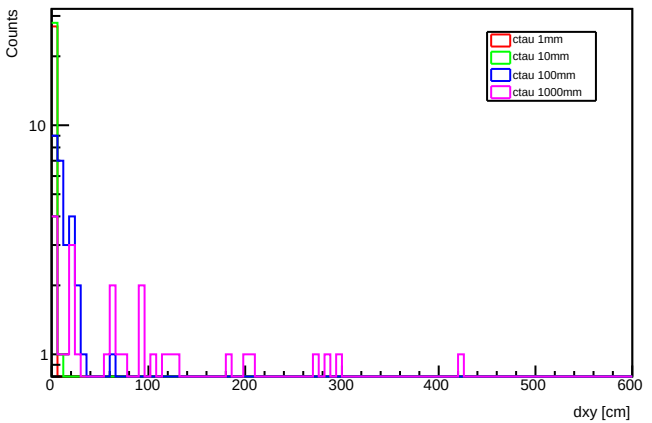
gen leading Mu vxy: no cuts



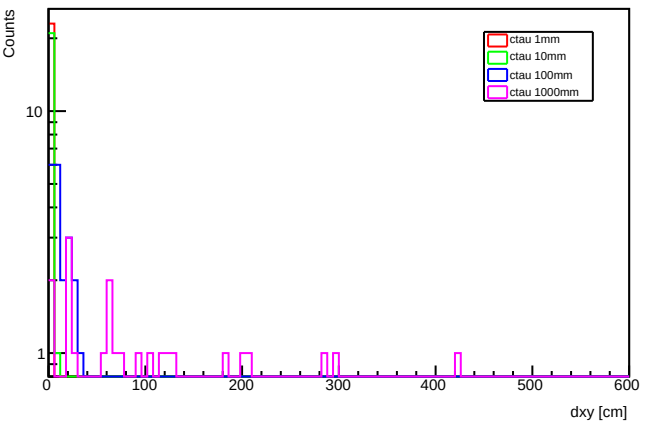
gen leading Mu vxy: n_jet >=1, j1pt > 30 GeV



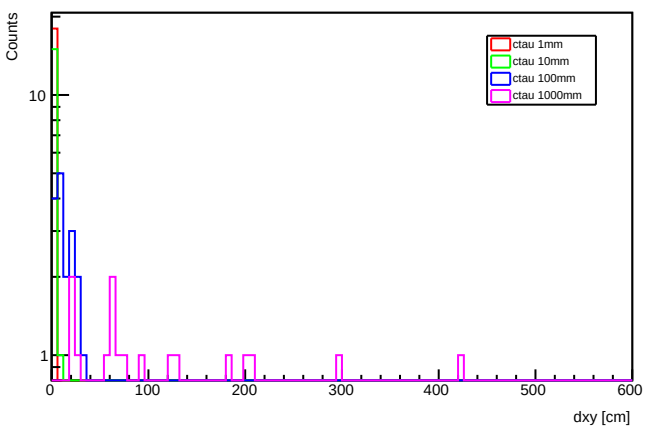
gen leading Mu vxy: MET > 120 GeV



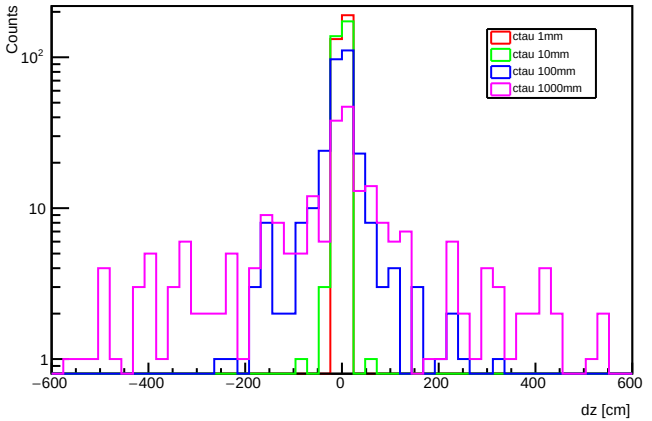
gen leading Mu vxy: j1pt >120, at most 2 jets w/ pt >30 GeV



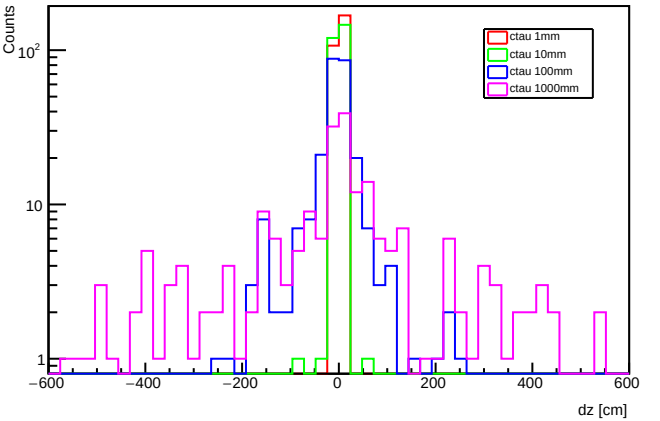
gen leading Mu vxy: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4



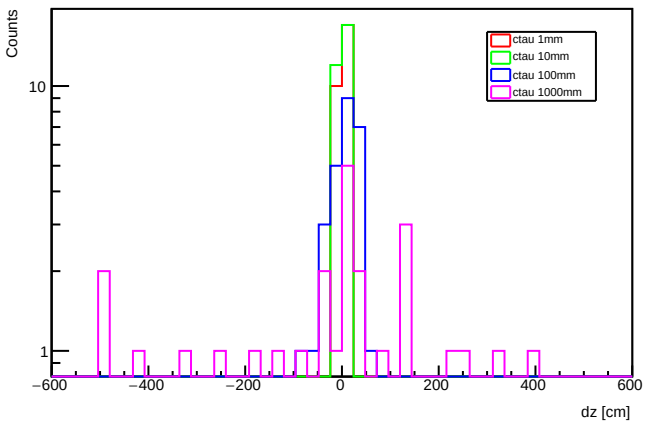
gen leading Mu vz: no cuts



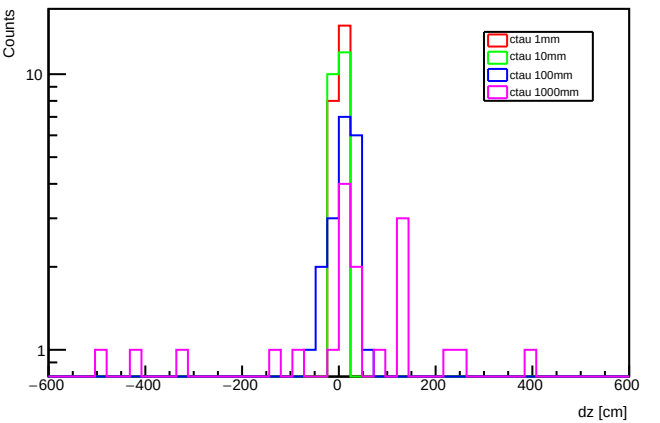
gen leading Mu vz: n_jet >=1, j1pt > 30 GeV



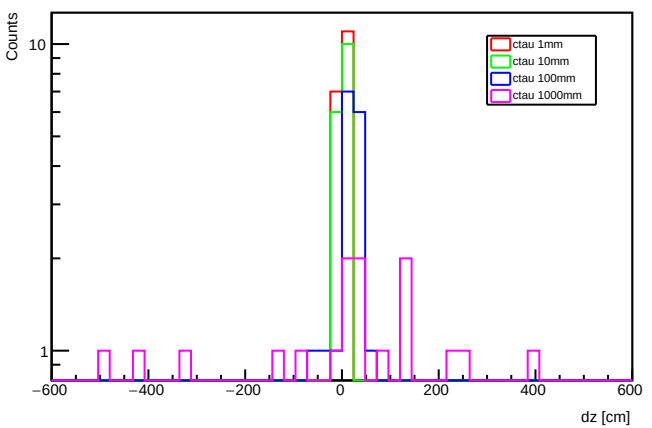
gen leading Mu vz: MET > 120 GeV



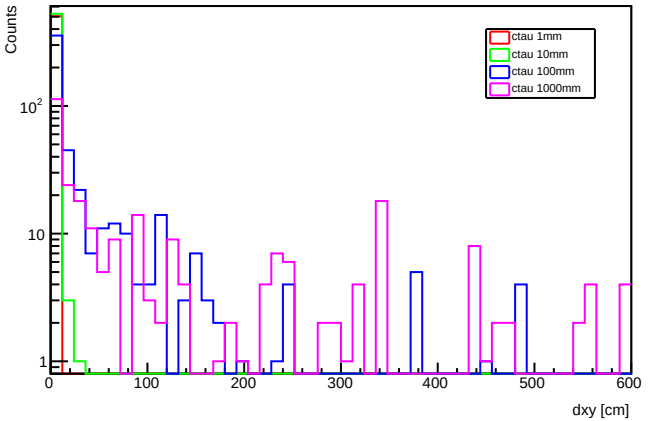
gen leading Mu vz: j1pt >120, at most 2 jets w/ pt >30 GeV



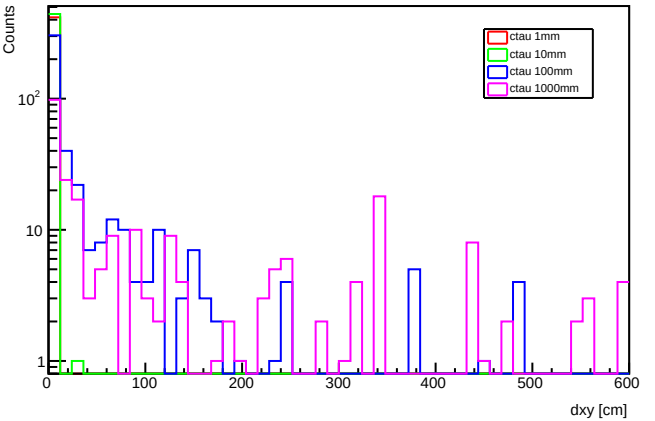
gen leading Mu vz: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4



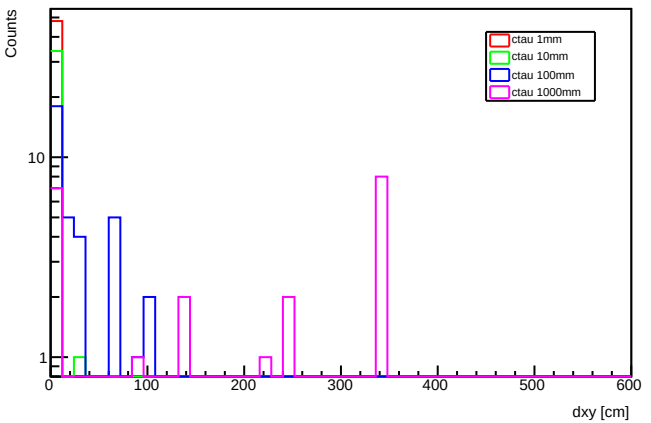
gen all Mu vxy: no cuts



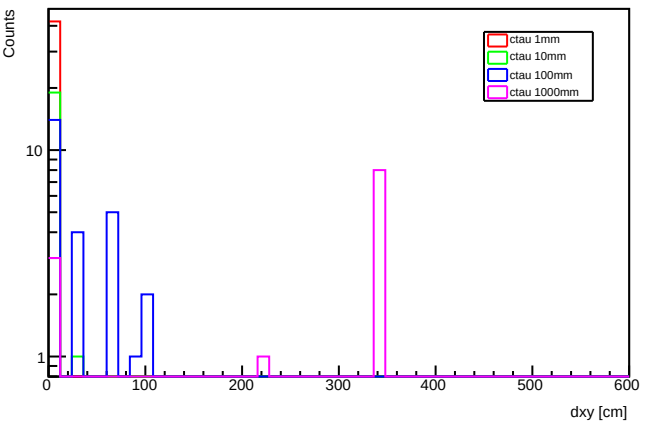
gen all Mu vxy: n_jet >=1, j1pt > 30 GeV



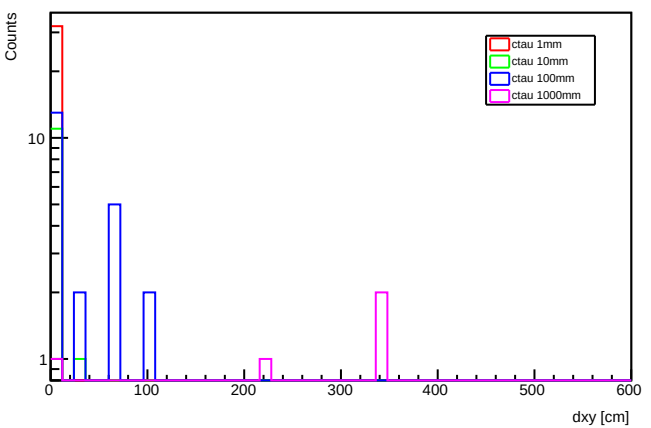
gen all Mu vxy: MET > 120 GeV



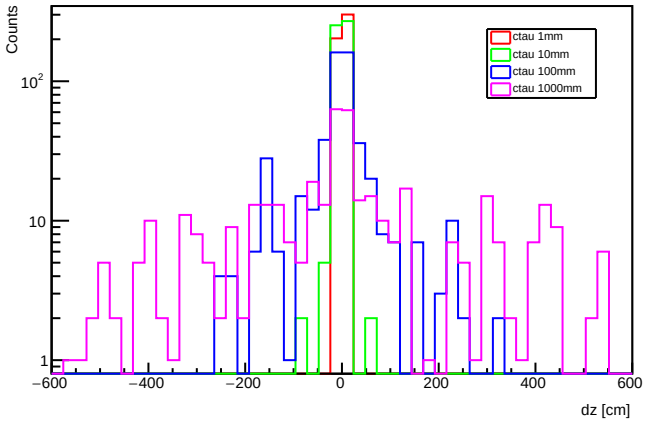
gen all Mu vxy: j1pt >120, at most 2 jets w/ pt >30 GeV



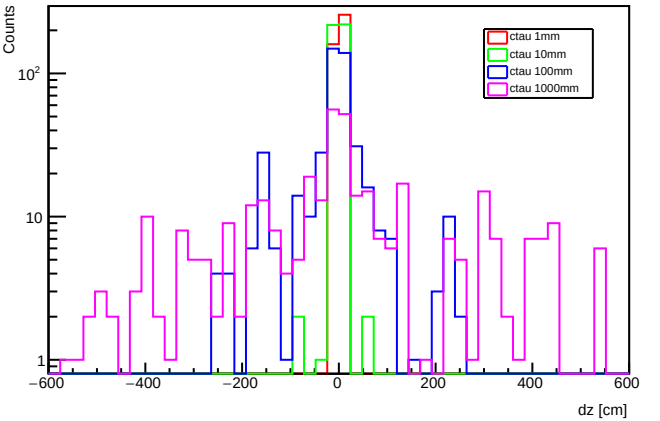
gen all Mu vxy: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4



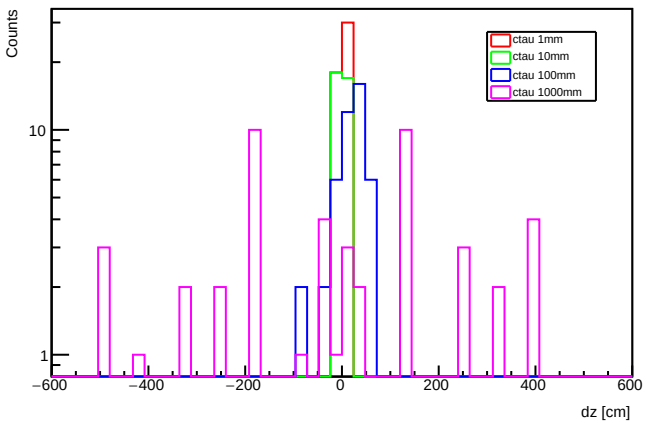
gen all Mu vz: no cuts



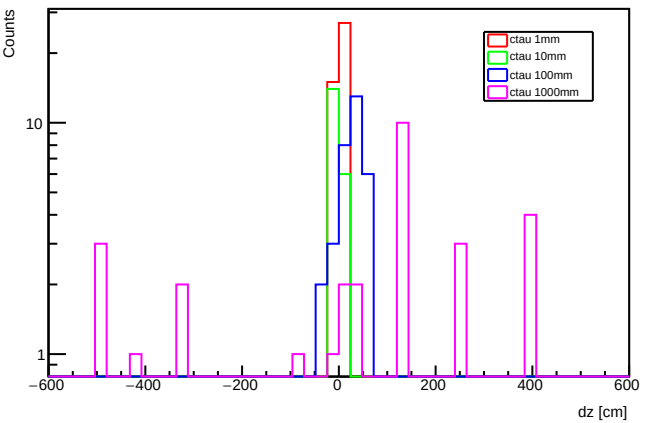
gen all Mu vz: n_jet >=1, j1pt > 30 GeV



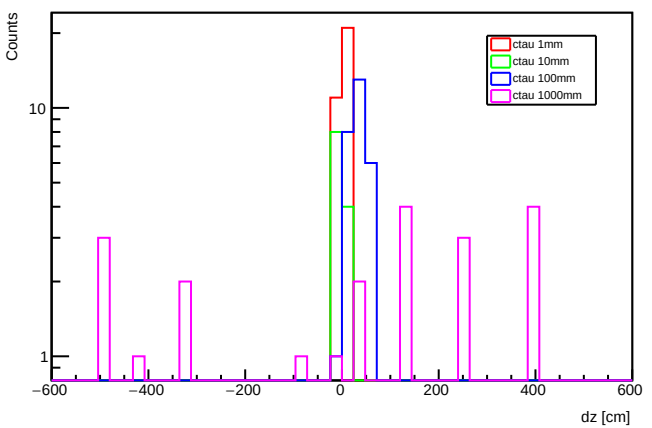
gen all Mu vz: MET > 120 GeV



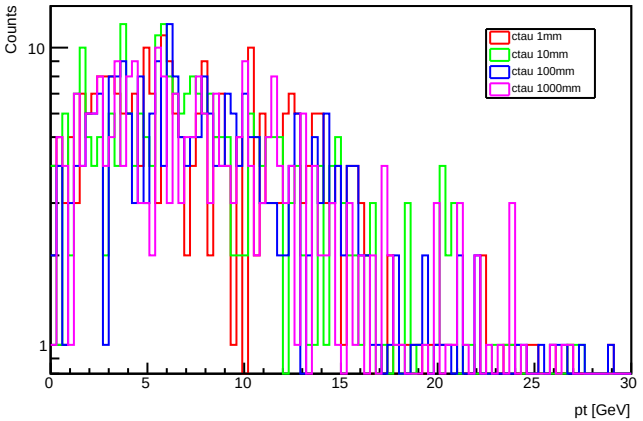
gen all Mu vz: j1pt >120, at most 2 jets w/ pt >30 GeV



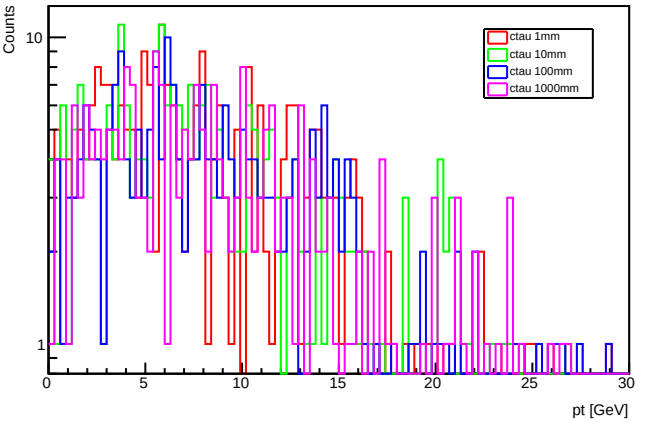
gen all Mu vz: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4



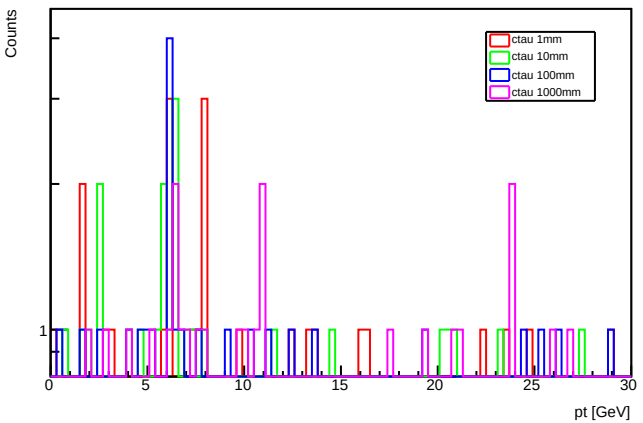
gen subleading Mu pt: no cuts



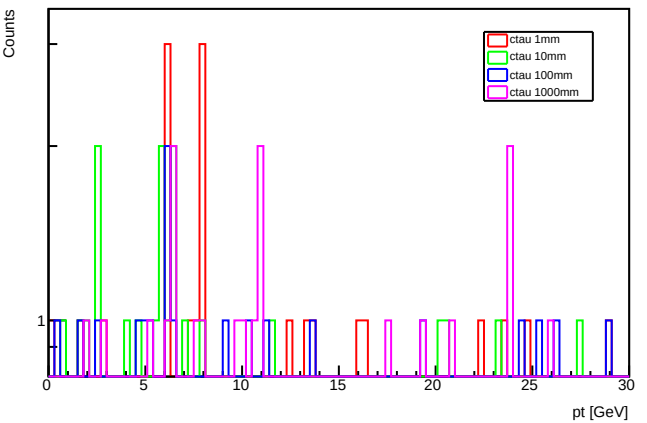
gen subleading Mu pt: n_jet >=1, j1pt > 30 GeV



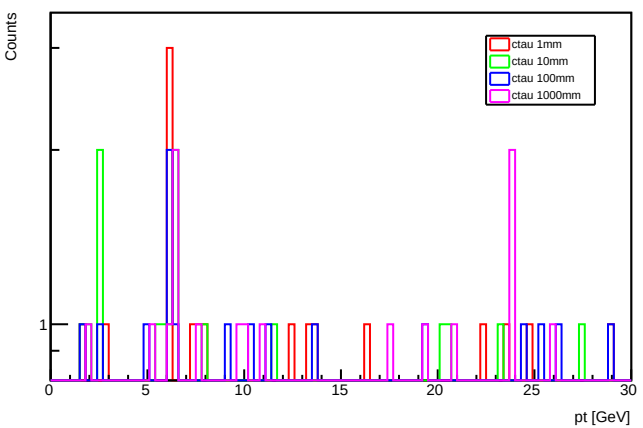
gen subleading Mu pt: MET > 120 GeV



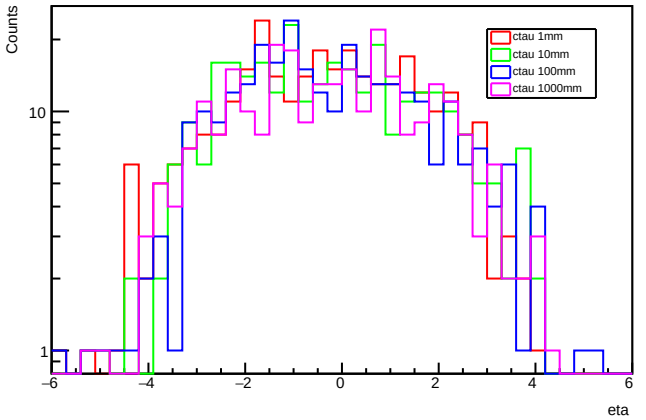
gen subleading Mu pt: j1pt >120, at most 2 jets w/ pt >30 GeV



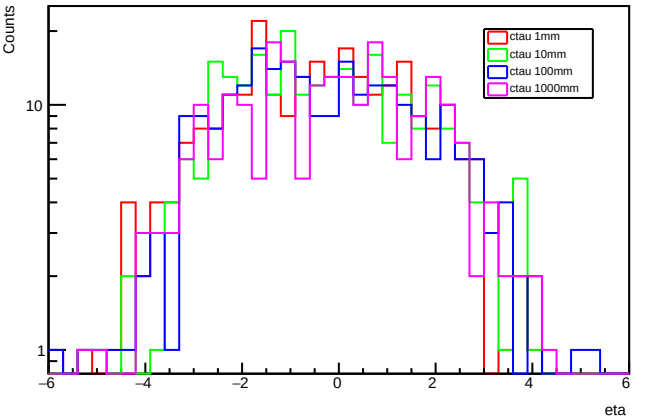
gen subleading Mu pt: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4



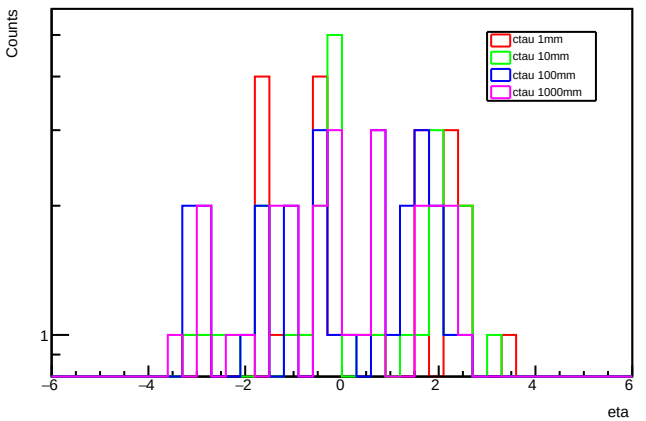
gen subleading Mu eta: no cuts



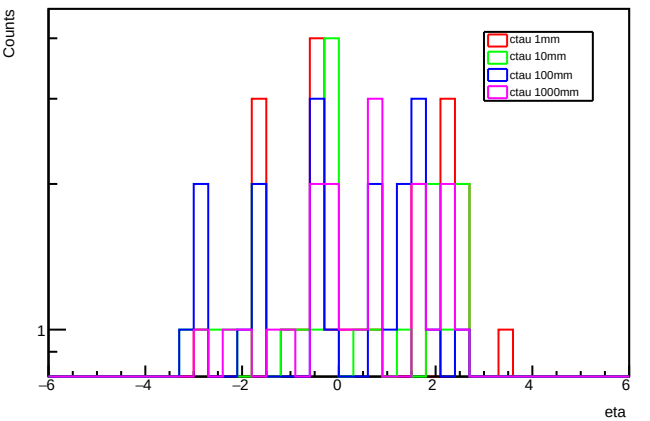
gen subleading Mu eta: n_jet >=1, j1pt > 30 GeV



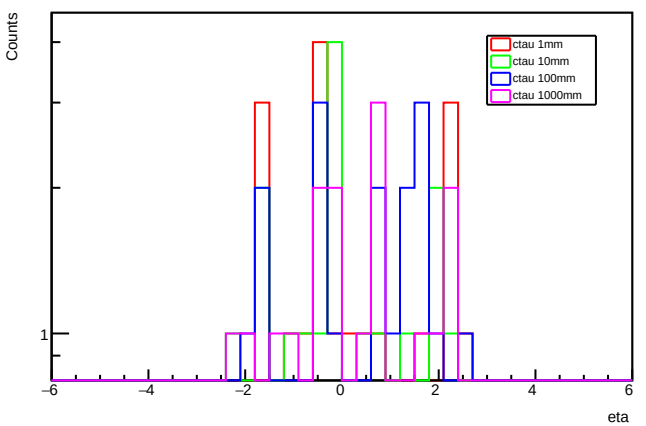
gen subleading Mu eta: MET > 120 GeV



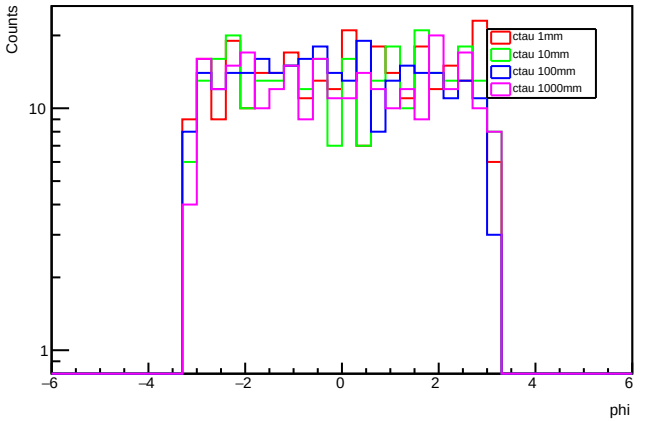
gen subleading Mu eta: j1pt >120, at most 2 jets w/ pt >30 GeV



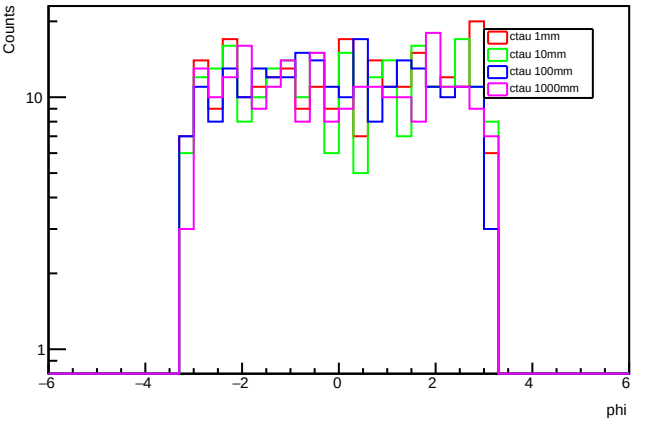
gen subleading Mu eta: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4



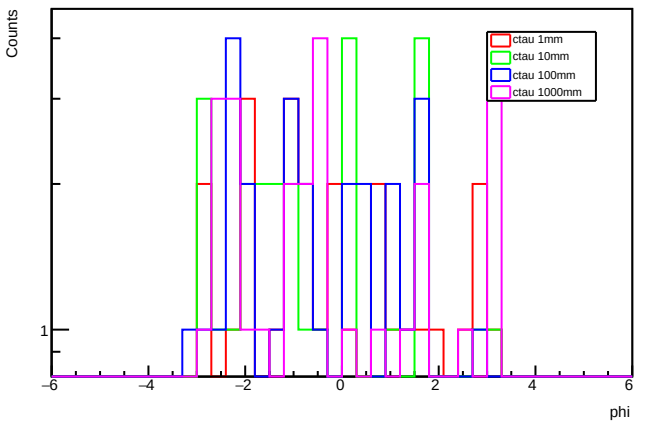
gen subleading Mu phi: no cuts



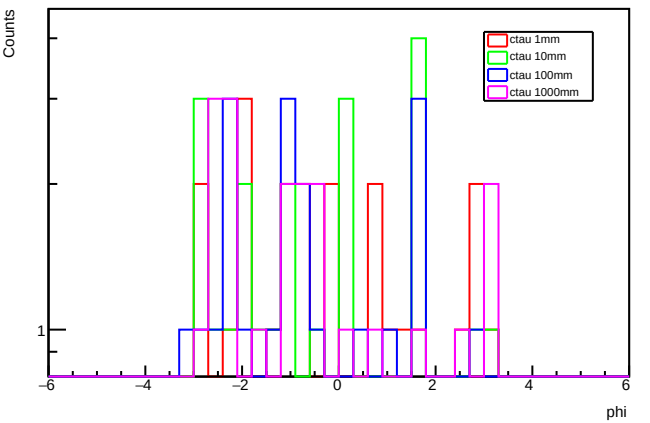
gen subleading Mu phi: n_jet >=1, j1pt > 30 GeV



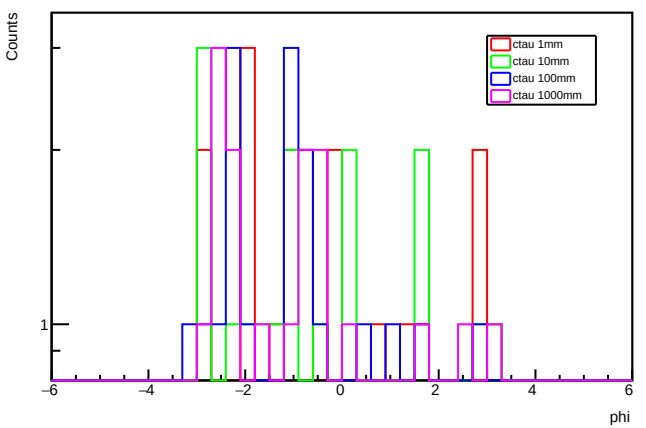
gen subleading Mu phi: MET > 120 GeV



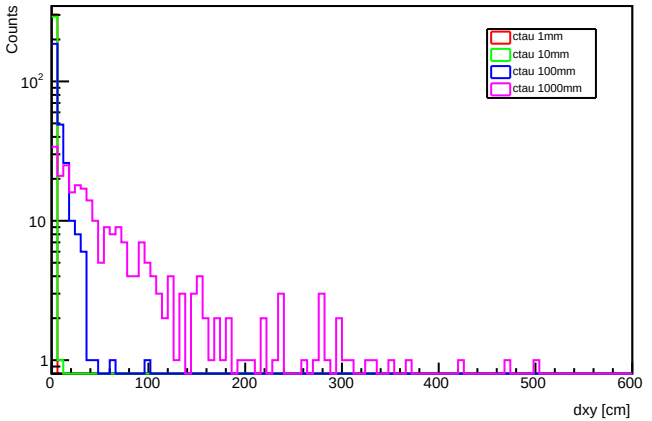
gen subleading Mu phi: j1pt >120, at most 2 jets w/ pt >30 GeV



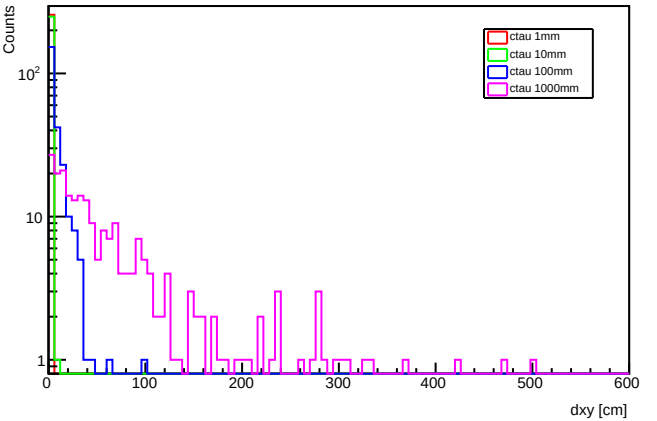
gen subleading Mu phi: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4



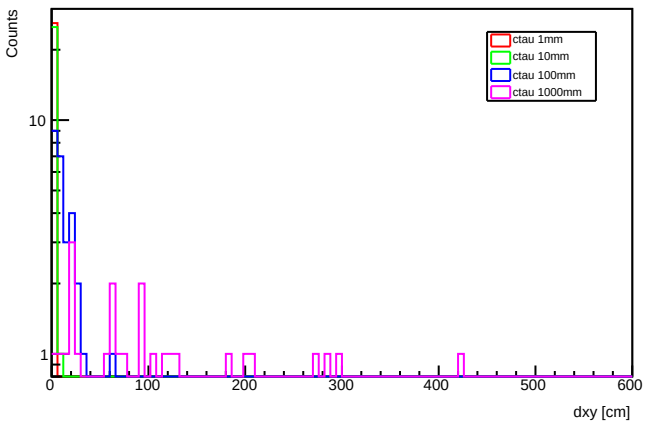
gen subleading Mu vxy: no cuts



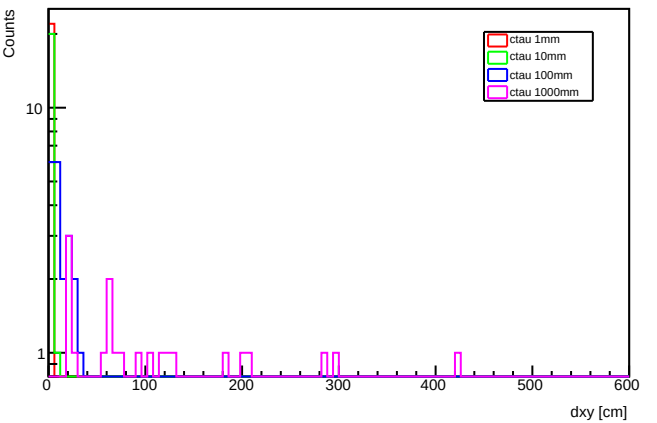
gen subleading Mu vxy: n_jet >=1, j1pt > 30 GeV



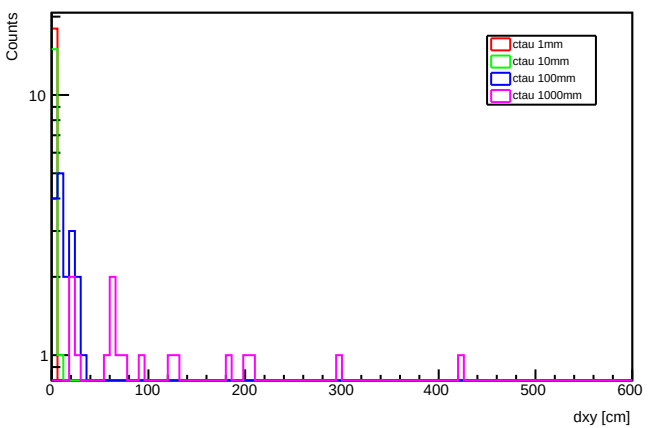
gen subleading Mu vxy: MET > 120 GeV



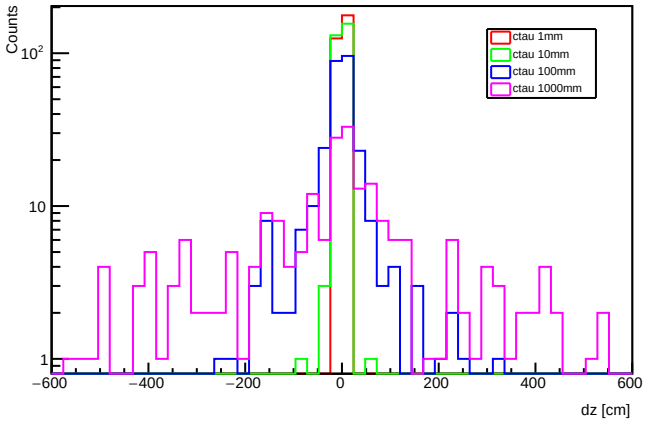
gen subleading Mu vxy: j1pt >120, at most 2 jets w/ pt >30 GeV



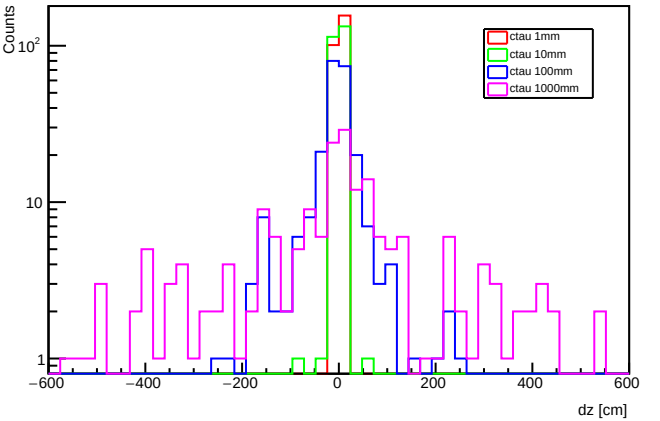
gen subleading Mu vxy: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4



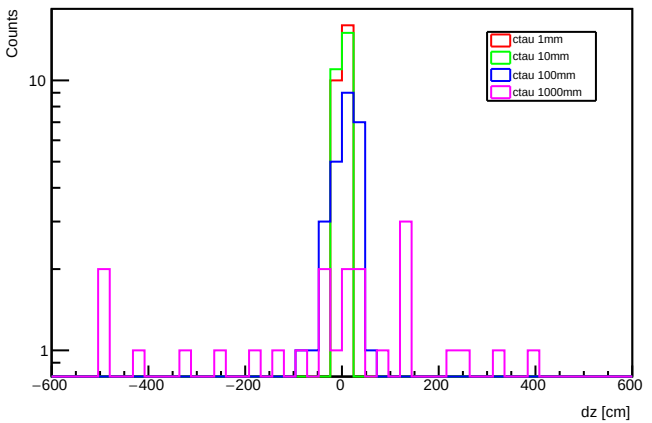
gen subleading Mu vz: no cuts



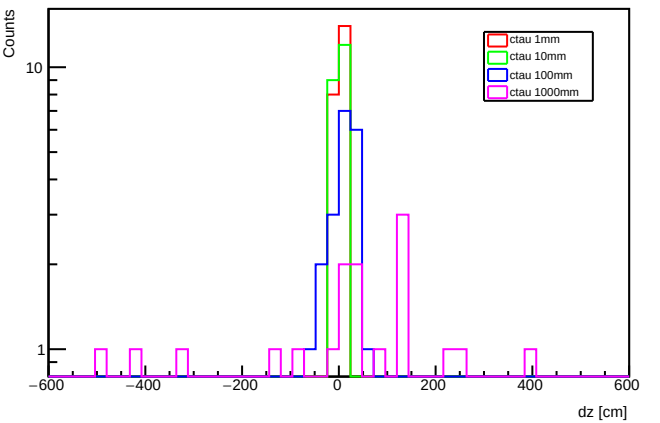
gen subleading Mu vz: n_jet >=1, j1pt > 30 GeV



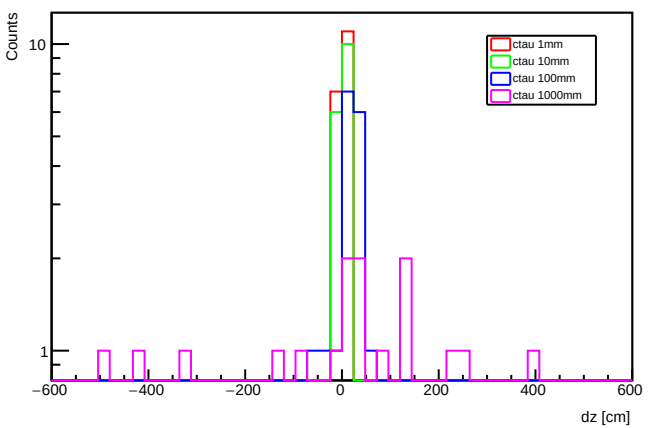
gen subleading Mu vz: MET > 120 GeV



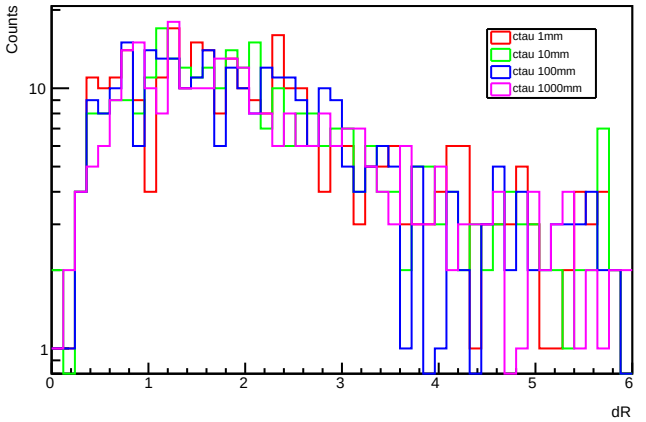
gen subleading Mu vz: j1pt >120, at most 2 jets w/ pt >30 GeV



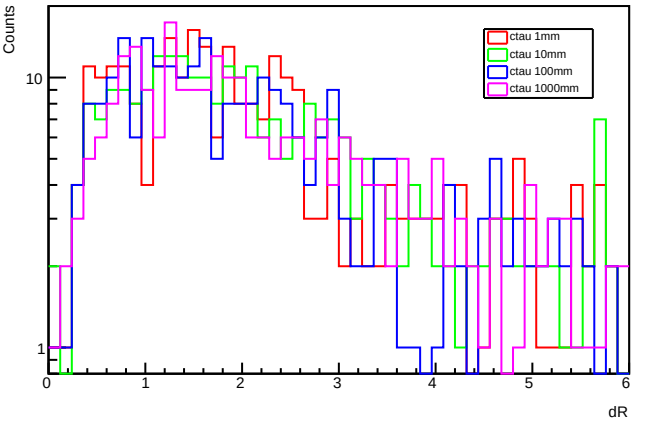
gen subleading Mu vz: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4



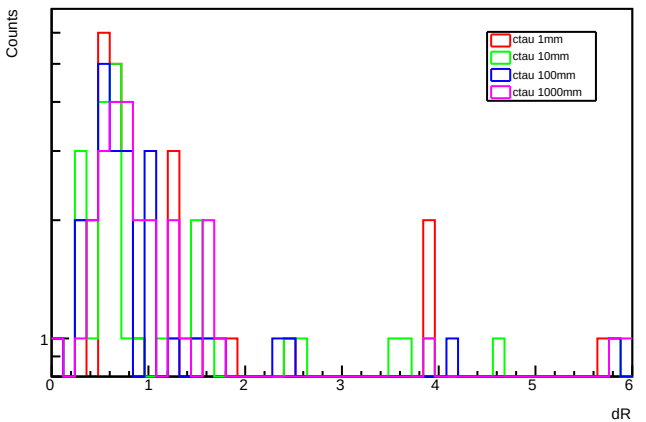
dR: gen leading mu and subleading mu: no cuts



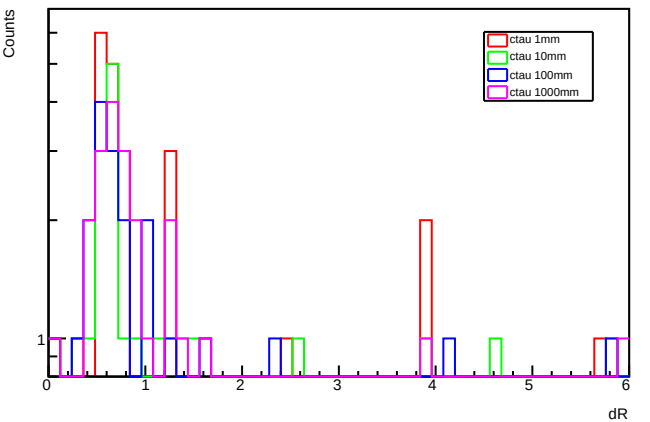
dR: gen leading mu and subleading mu: n_jet >=1, j1pt > 30 GeV



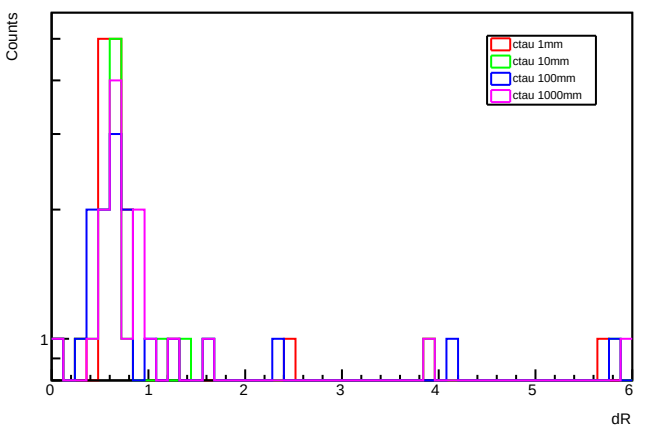
dR: gen leading mu and subleading mu: MET > 120 GeV



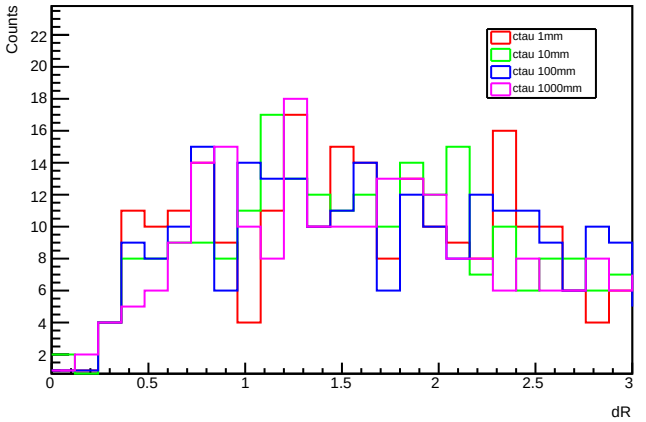
dR: gen leading mu and subleading mu: j1pt >120, at most 2 jets w/ pt >30 GeV



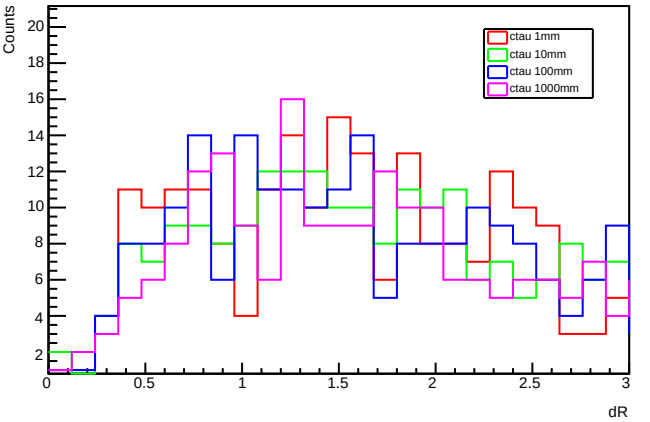
dR: gen leading mu and subleading mu: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4



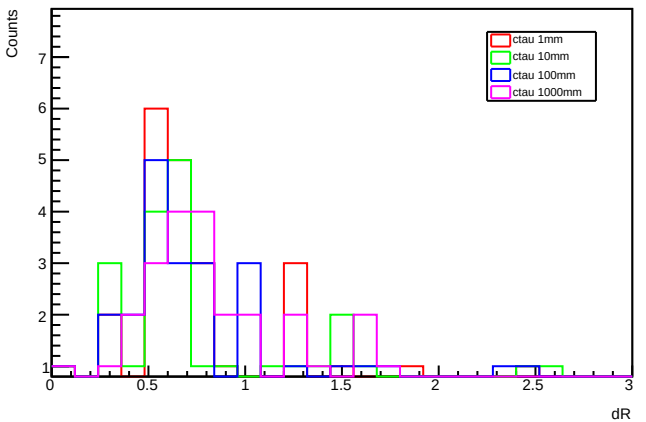
dR: gen leading mu and subleading mu: no cuts



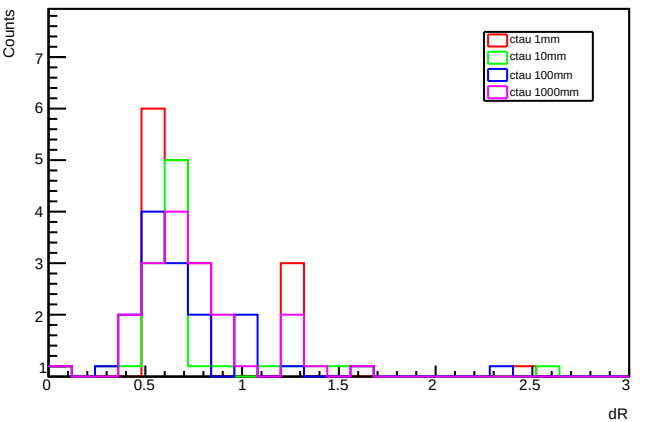
dR: gen leading mu and subleading mu: n_jet >=1, j1pt > 30 GeV



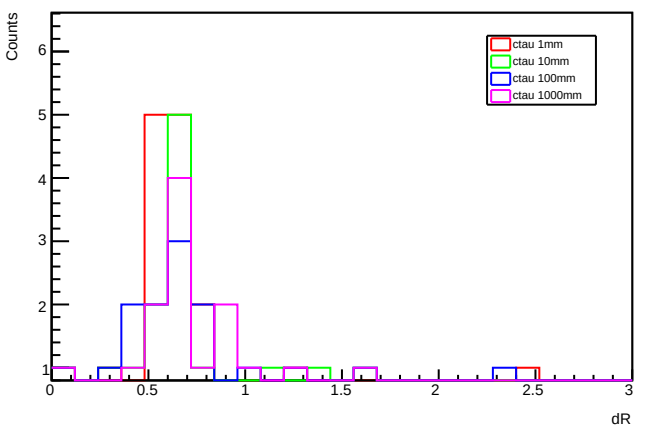
dR: gen leading mu and subleading mu: MET > 120 GeV



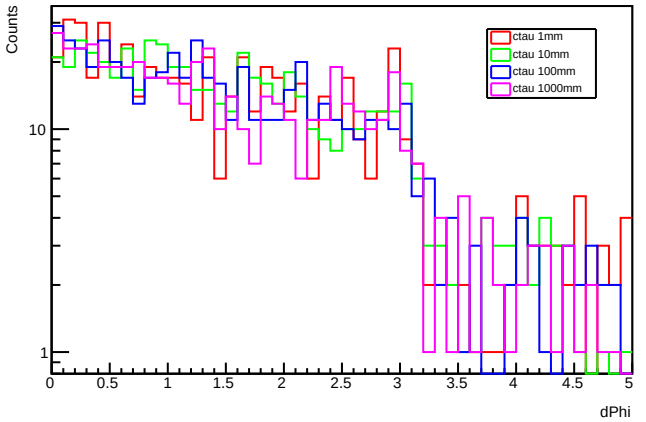
dR: gen leading mu and subleading mu: j1pt >120, at most 2 jets w/ pt >30 GeV



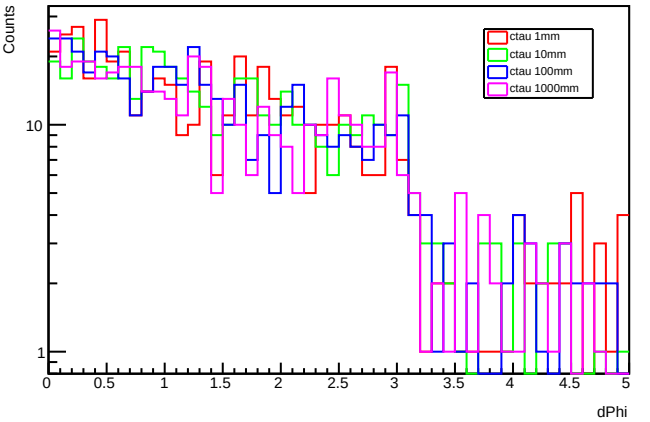
dR: gen leading mu and subleading mu: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4



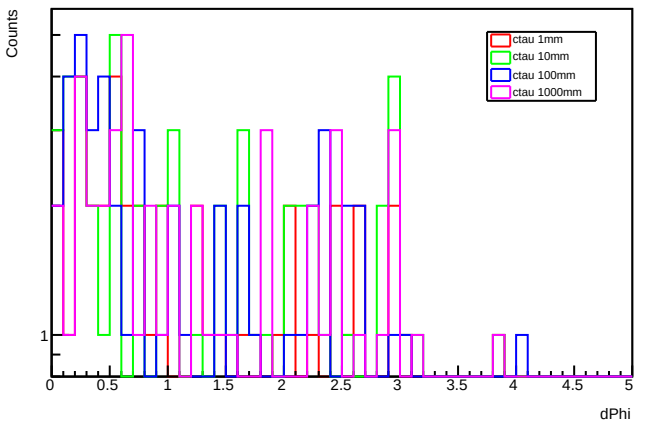
dPhi: gen MET and leading mu: no cuts



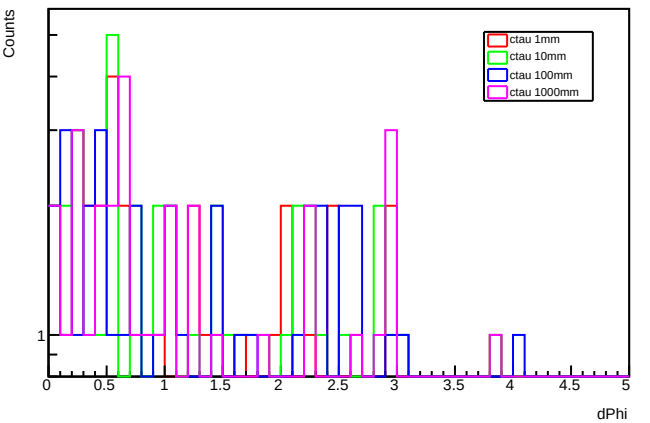
dPhi: gen MET and leading mu: n_jet >=1, j1pt > 30 GeV



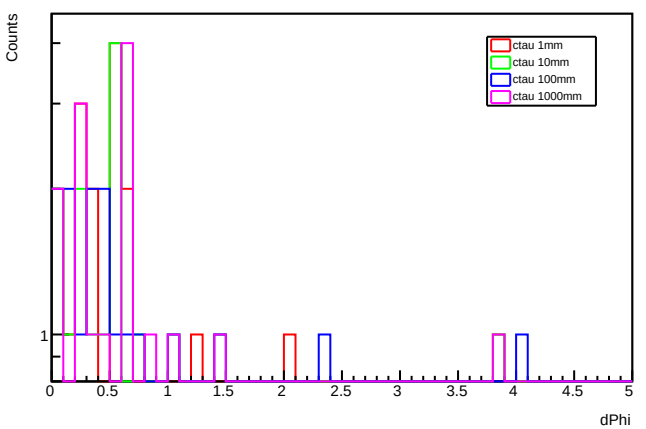
dPhi: gen MET and leading mu: MET > 120 GeV



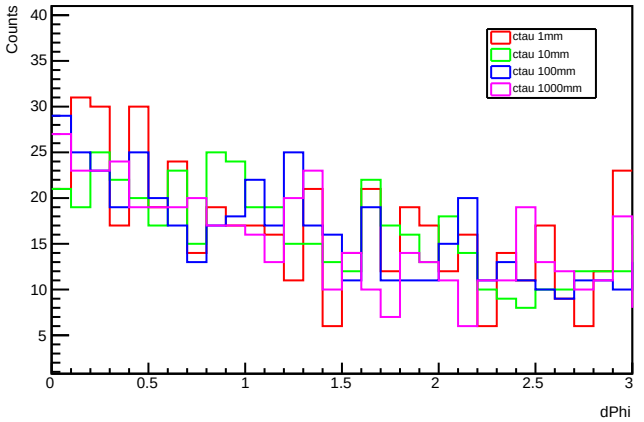
dPhi: gen MET and leading mu: j1pt >120, at most 2 jets w/ pt >30 GeV



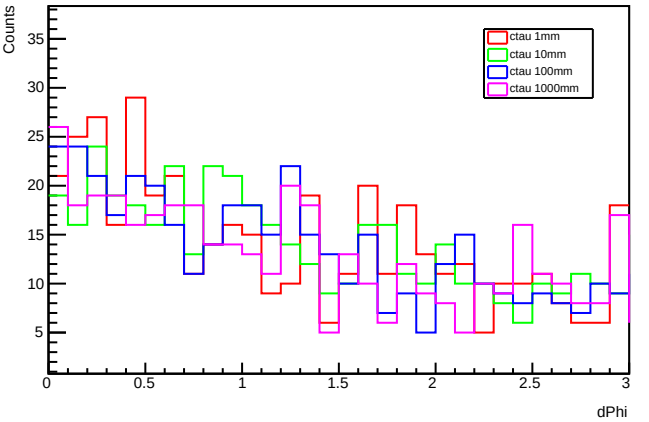
dPhi: gen MET and leading mu: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4



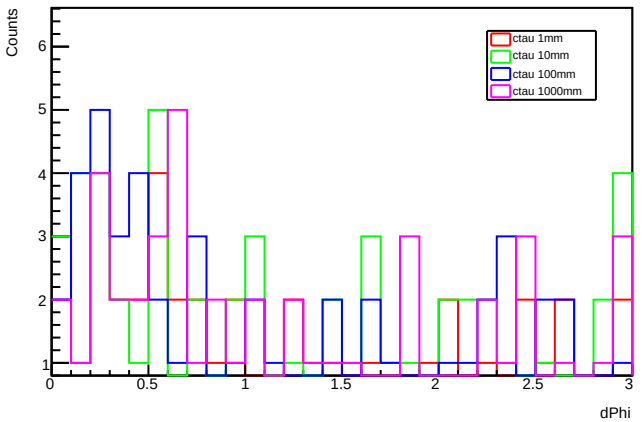
dPhi: gen MET and leading mu: no cuts



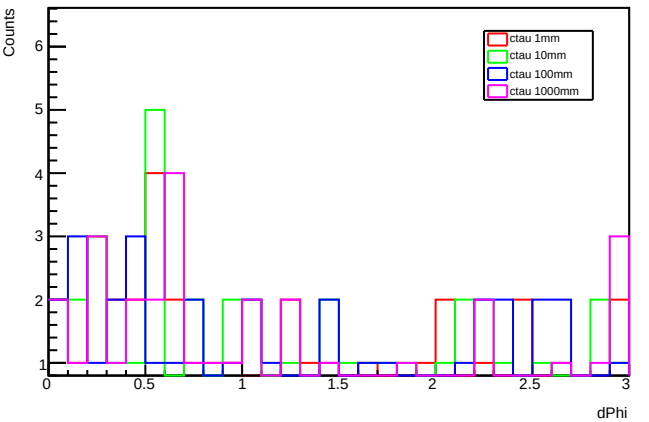
dPhi: gen MET and leading mu: n_jet >=1, j1pt > 30 GeV



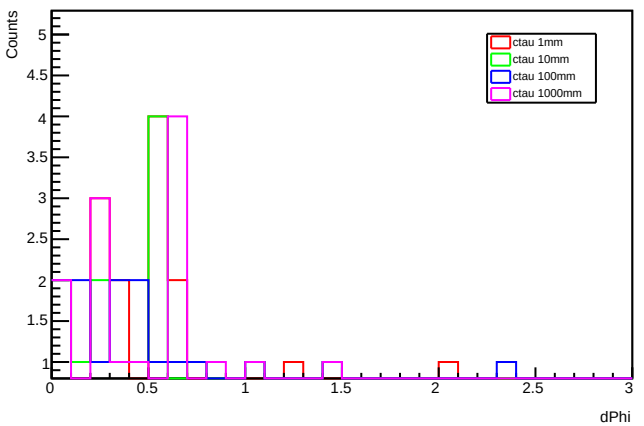
dPhi: gen MET and leading mu: MET > 120 GeV



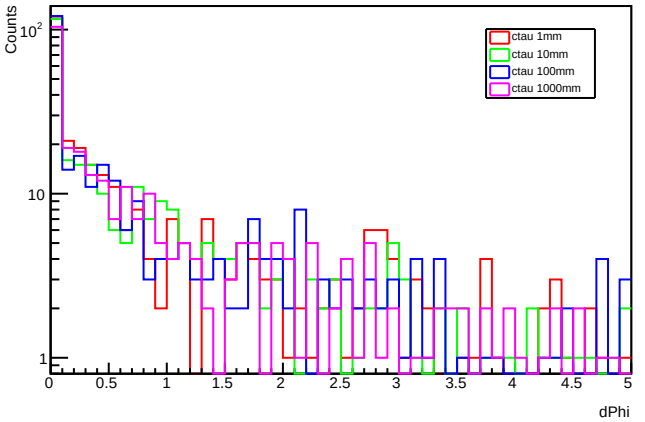
dPhi: gen MET and leading mu: j1pt >120, at most 2 jets w/ pt >30 GeV



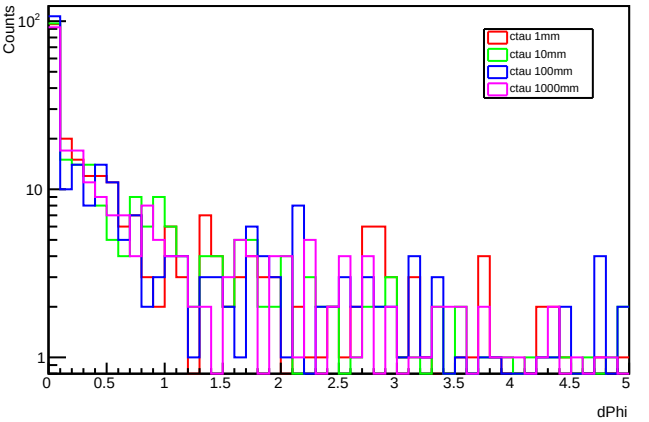
dPhi: gen MET and leading mu: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4



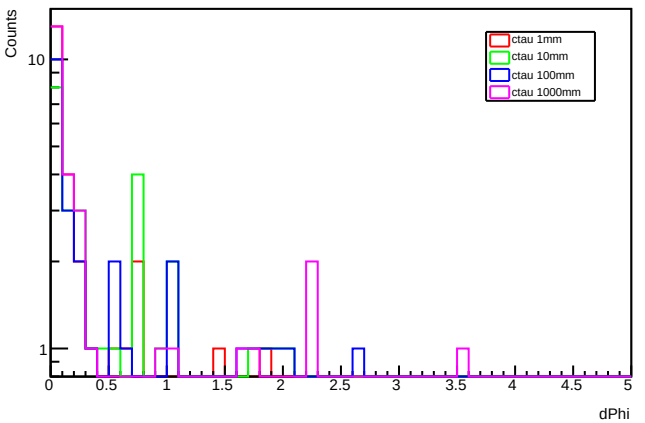
dPhi: gen leading mu and subleading mu: no cuts



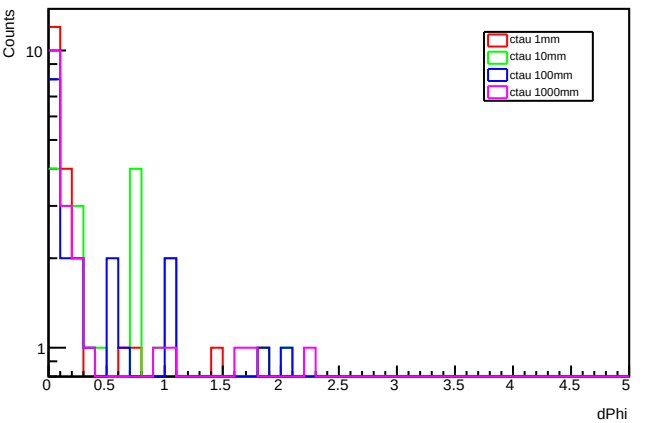
dPhi: gen leading mu and subleading mu: n_jet >=1, j1pt > 30 GeV



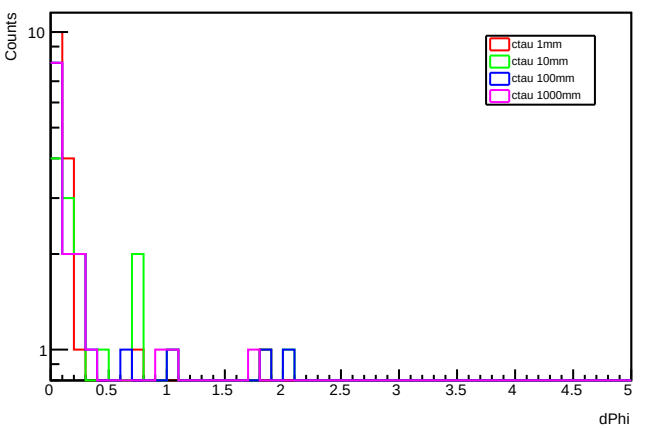
dPhi: gen leading mu and subleading mu: MET > 120 GeV



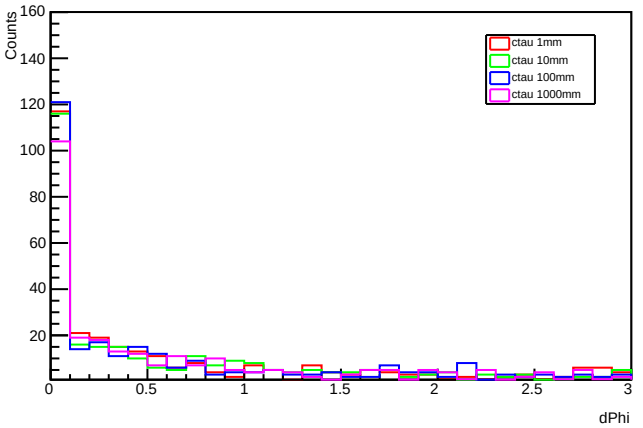
dPhi: gen leading mu and subleading mu: j1pt >120, at most 2 jets w/ pt >30 GeV



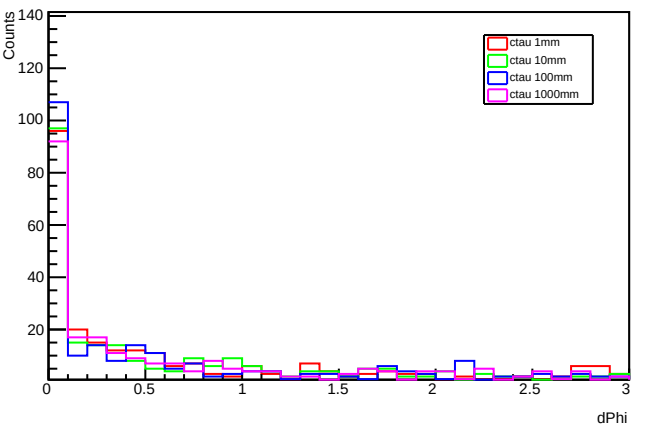
dPhi: gen leading mu and subleading mu: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4



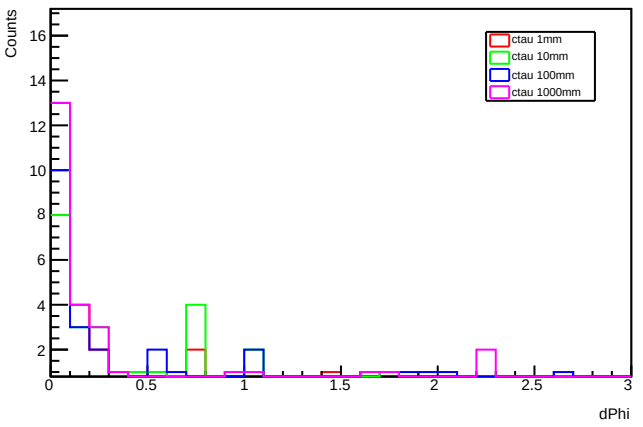
dPhi: gen leading mu and subleading mu: no cuts



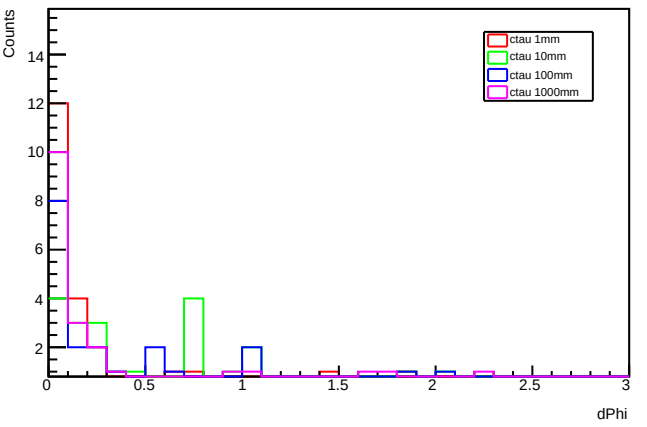
dPhi: gen leading mu and subleading mu: n_jet >=1, j1pt > 30 GeV



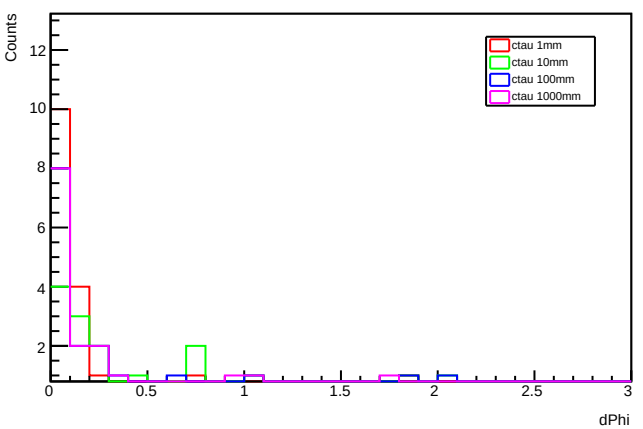
dPhi: gen leading mu and subleading mu: MET > 120 GeV



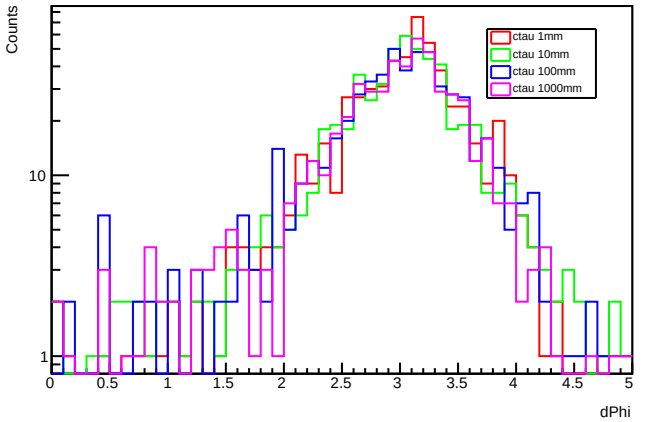
dPhi: gen leading mu and subleading mu: j1pt >120, at most 2 jets w/ pt >30 GeV



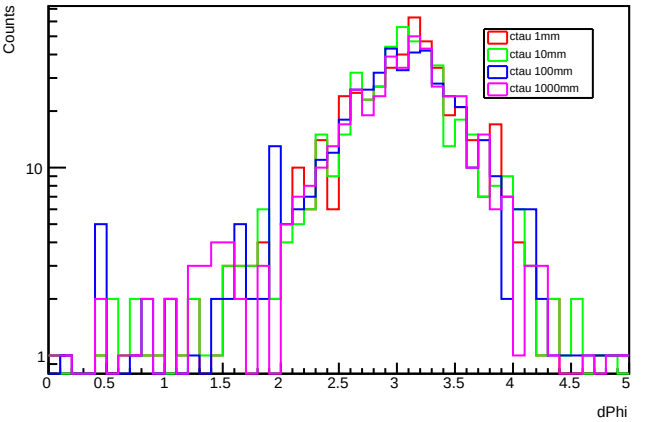
dPhi: gen leading mu and subleading mu: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4



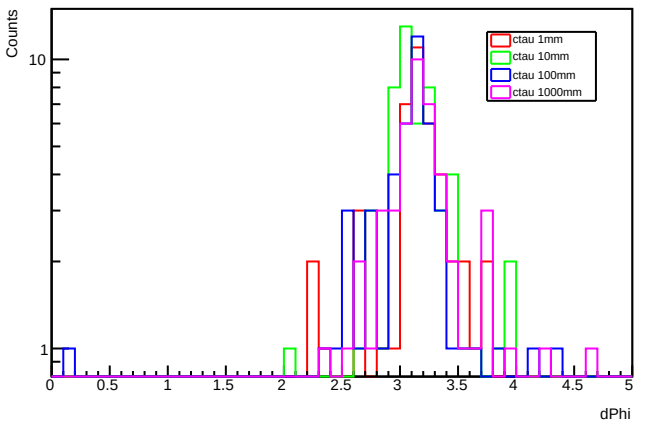
dPhi: gen MET and leading jet: no cuts



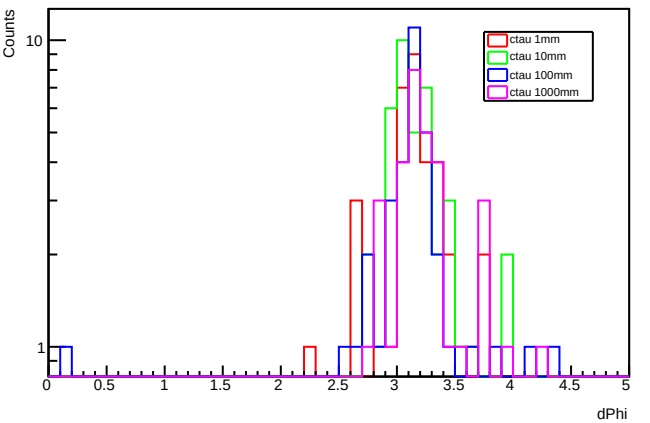
dPhi: gen MET and leading jet: n_jet >=1, j1pt > 30 GeV



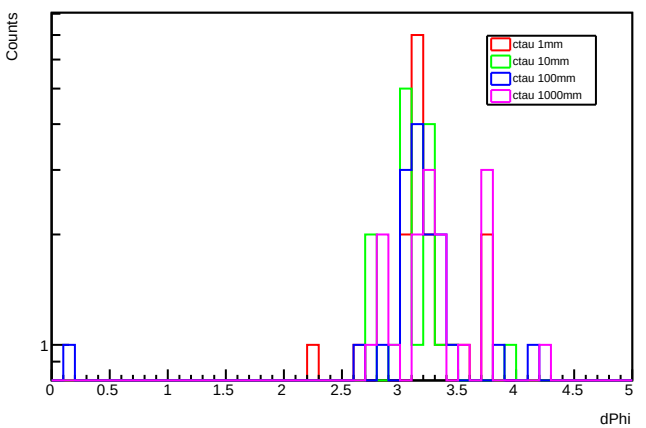
dPhi: gen MET and leading jet: MET > 120 GeV



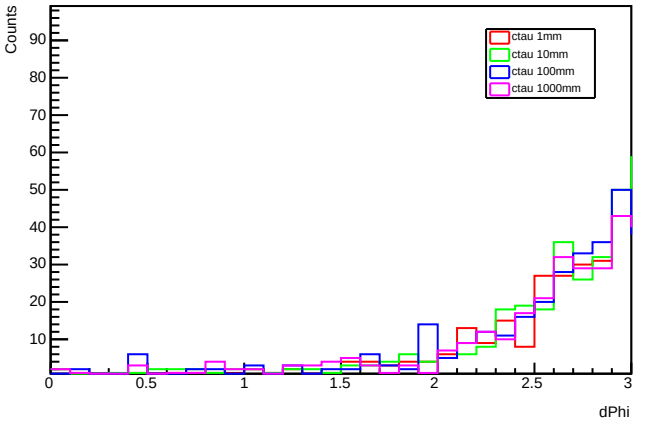
dPhi: gen MET and leading jet: j1pt >120, at most 2 jets w/ pt >30 GeV



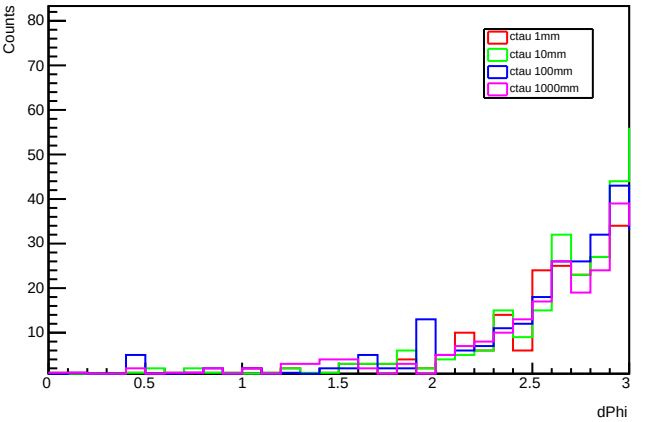
dPhi: gen MET and leading jet: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4



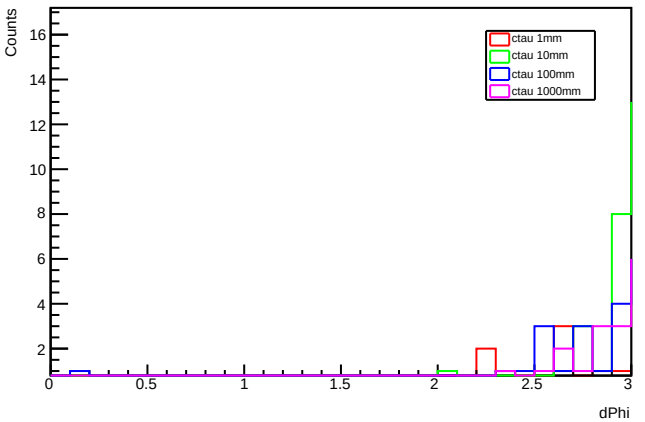
dPhi: gen MET and leading jet: no cuts



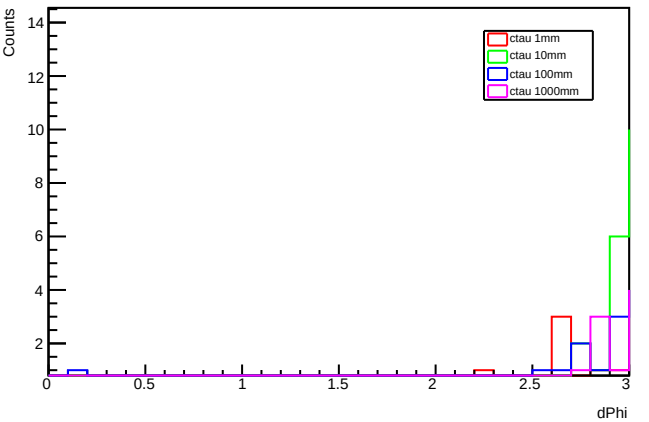
dPhi: gen MET and leading jet: n_jet >=1, j1pt > 30 GeV



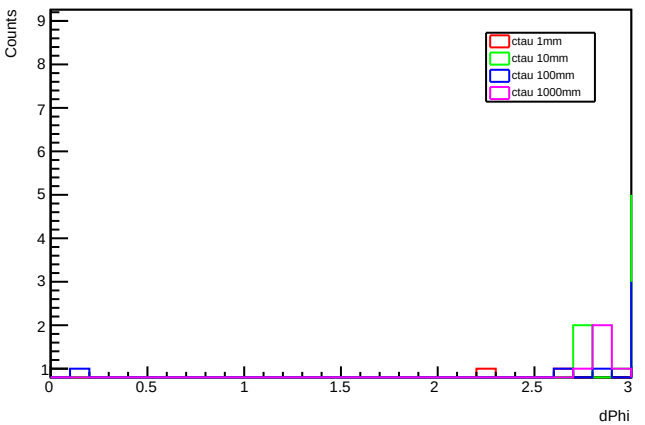
dPhi: gen MET and leading jet: MET > 120 GeV



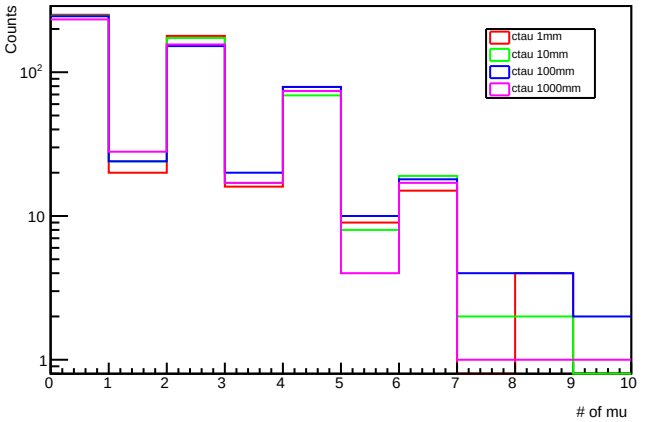
dPhi: gen MET and leading jet: j1pt >120, at most 2 jets w/ pt >30 GeV



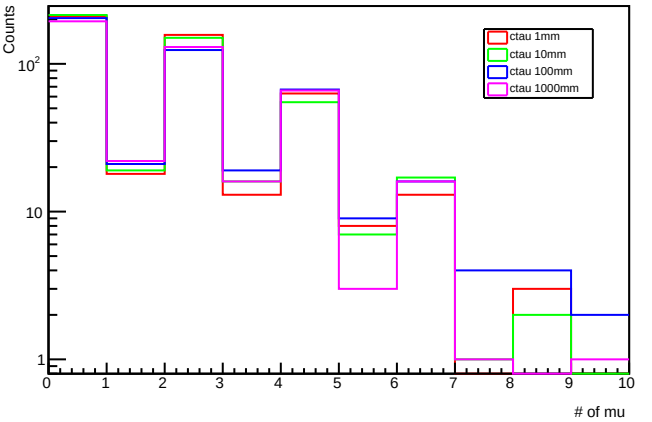
dPhi: gen MET and leading jet: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4



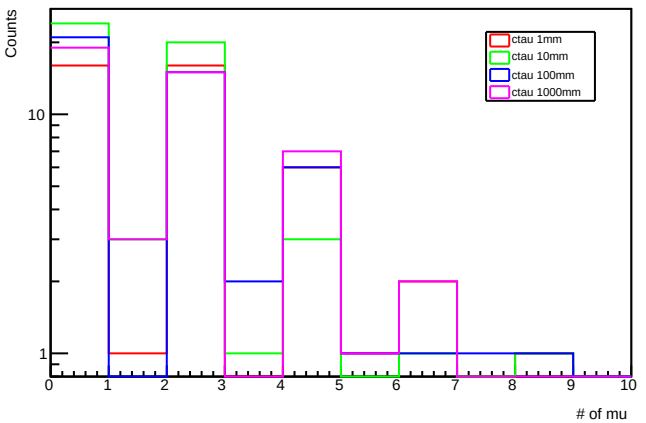
gen number of mu: no cuts



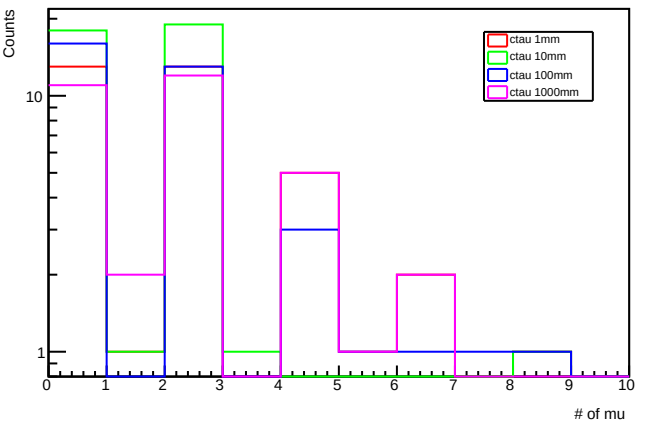
gen number of mu: n_jet >=1, j1pt > 30 GeV



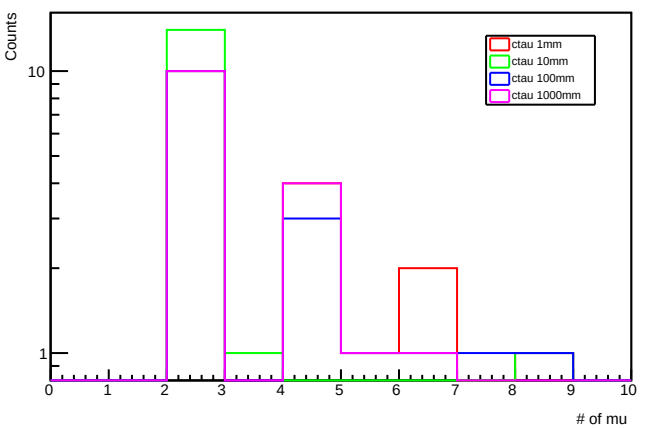
gen number of mu: MET > 120 GeV



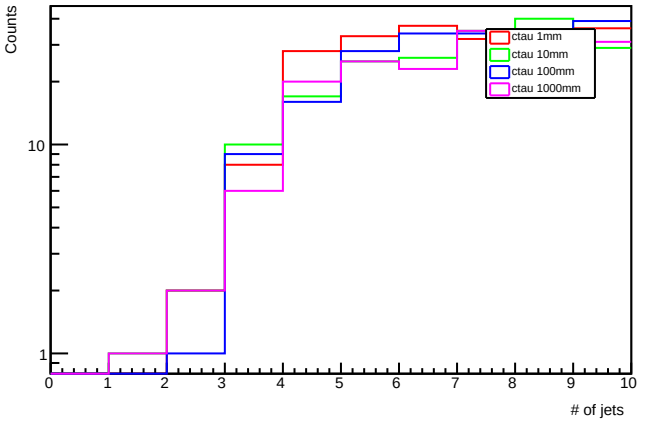
gen number of mu: j1pt >120, at most 2 jets w/ pt >30 GeV



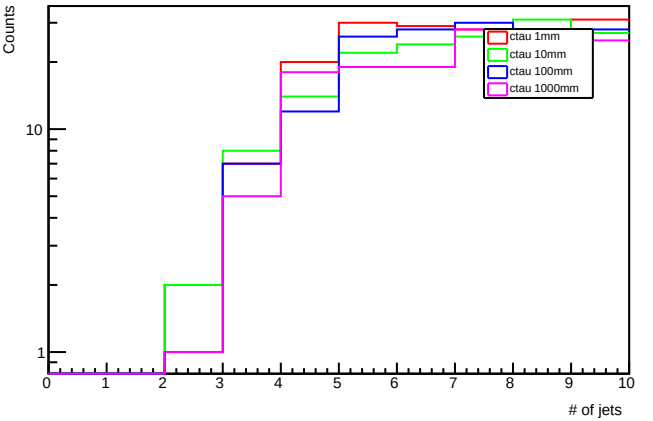
gen number of mu: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4



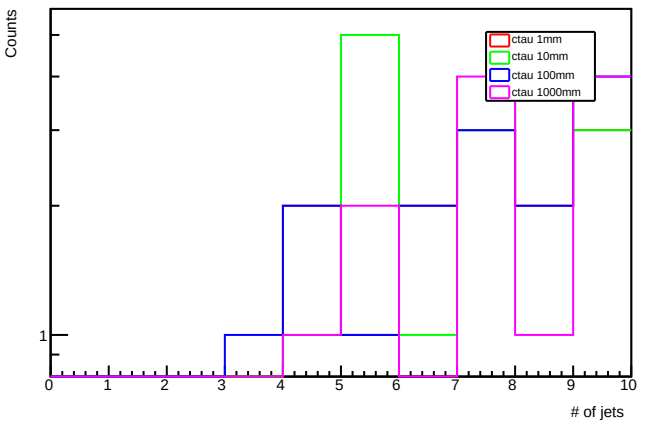
gen number of jets: no cuts



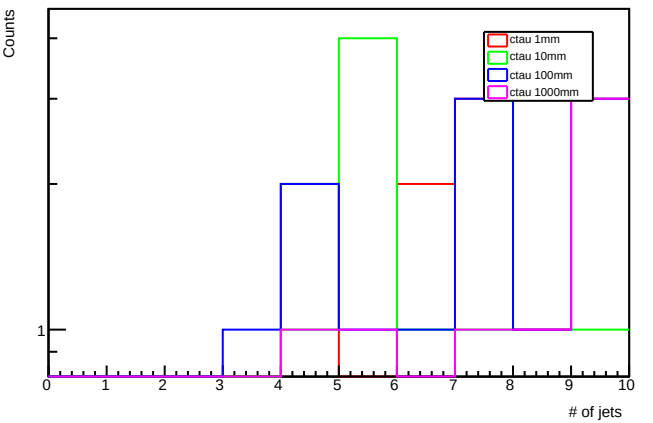
gen number of jets: n_jet >=1, j1pt > 30 GeV



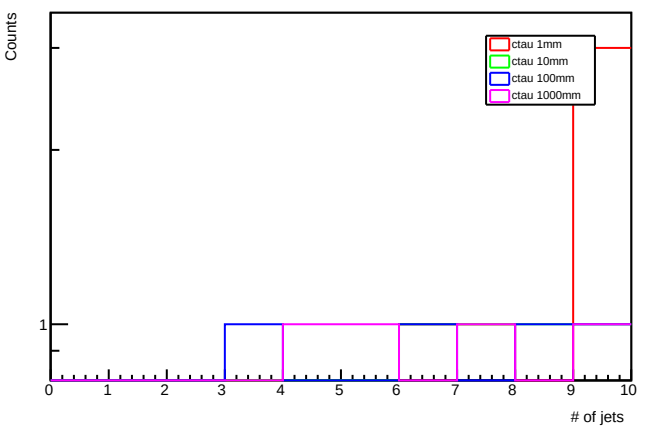
gen number of jets: MET > 120 GeV



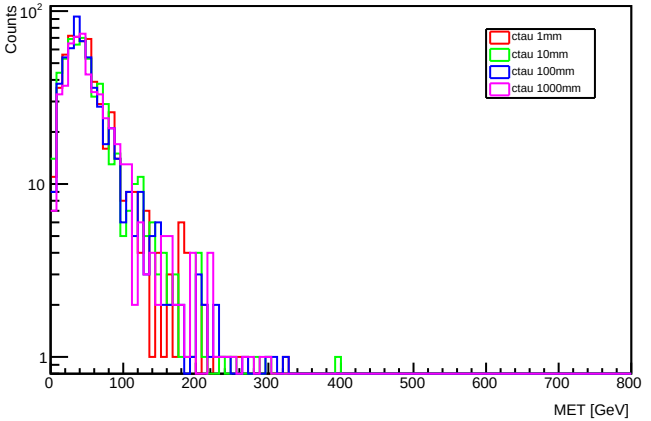
gen number of jets: j1pt >120, at most 2 jets w/ pt >30 GeV



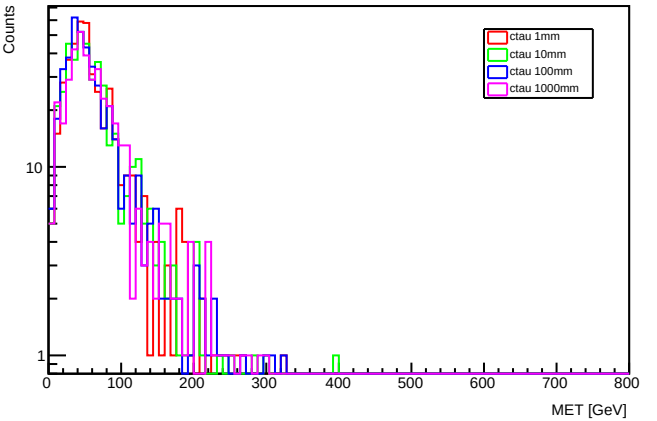
gen number of jets: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4



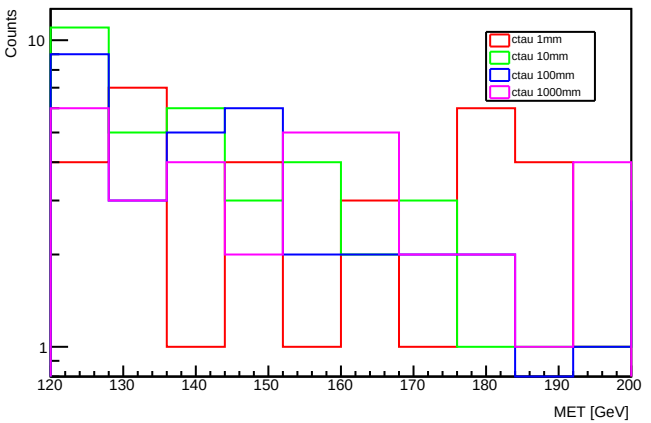
reco leading MET: no cuts



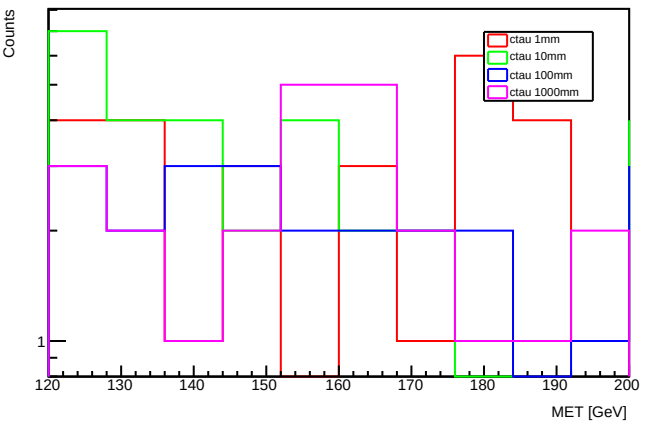
reco leading MET: n_jet >=1, j1pt > 30 GeV



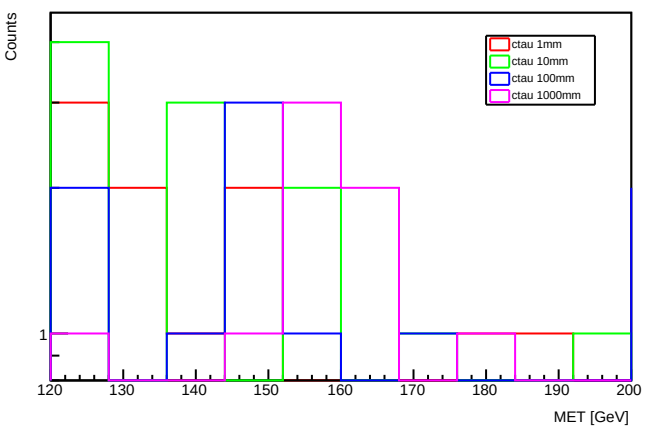
reco leading MET: MET > 120 GeV



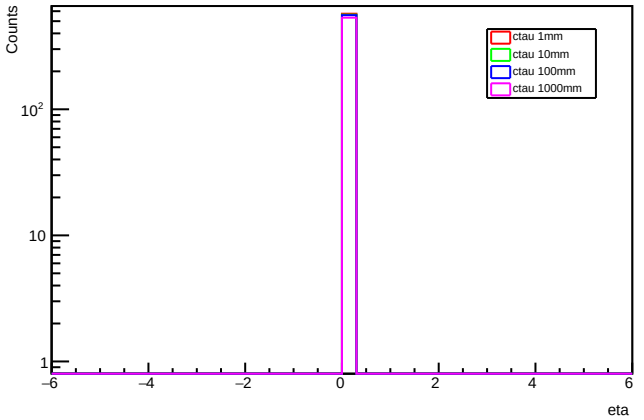
reco leading MET: j1pt >120, at most 2 jets w/ pt >30 GeV



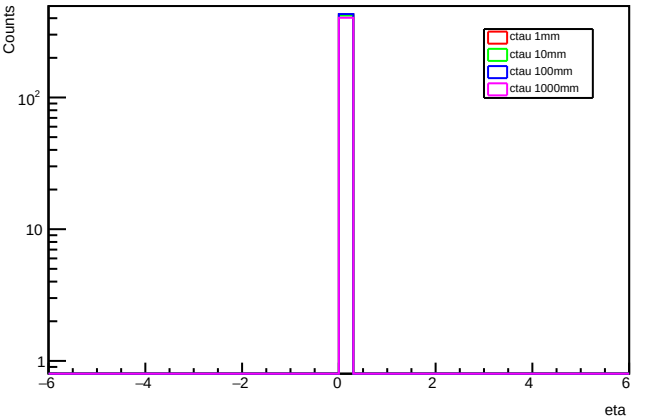
reco leading MET: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4



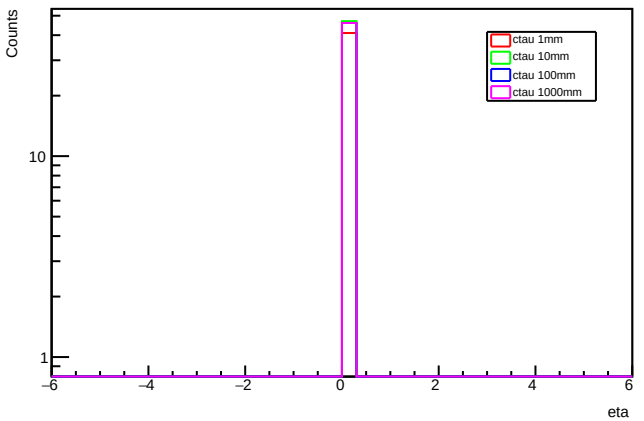
reco leading Met eta: no cuts



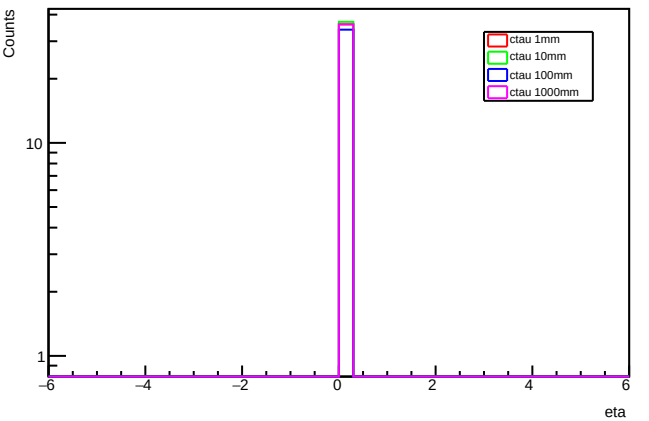
reco leading Met eta: n_jet >=1, j1pt > 30 GeV



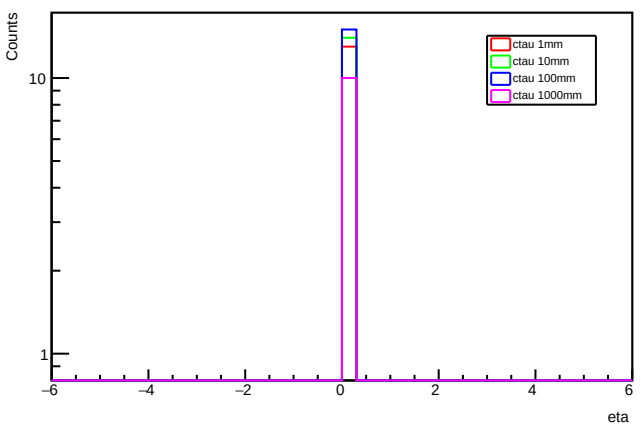
reco leading Met eta: MET > 120 GeV



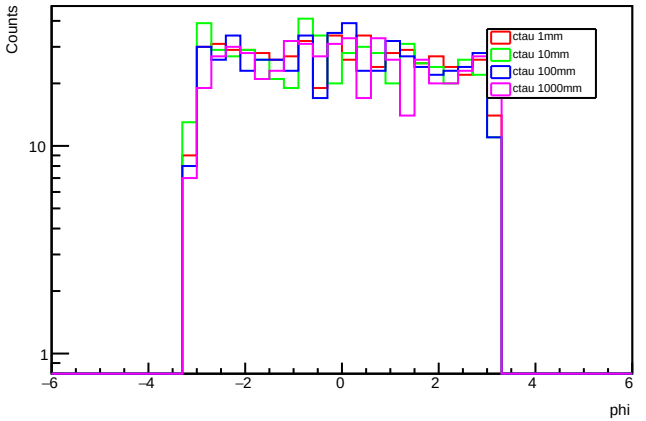
reco leading Met eta: j1pt >120, at most 2 jets w/ pt >30 GeV



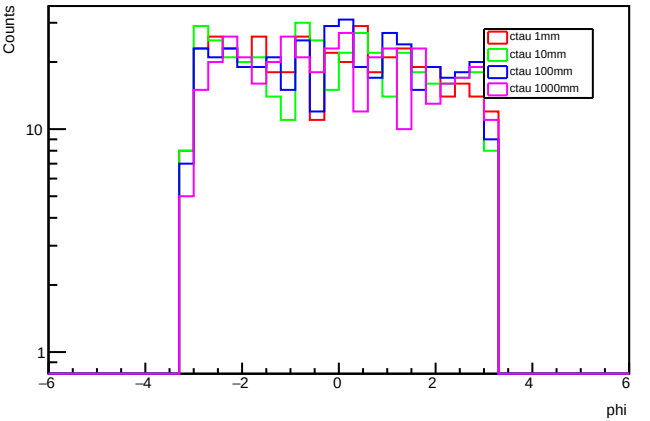
reco leading Met eta: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4



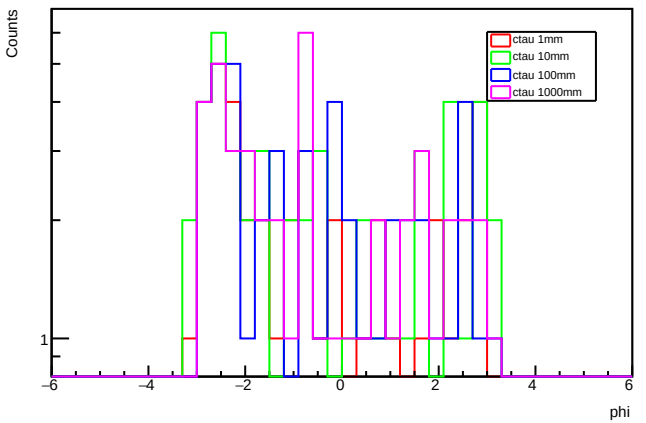
reco leading Met phi: no cuts



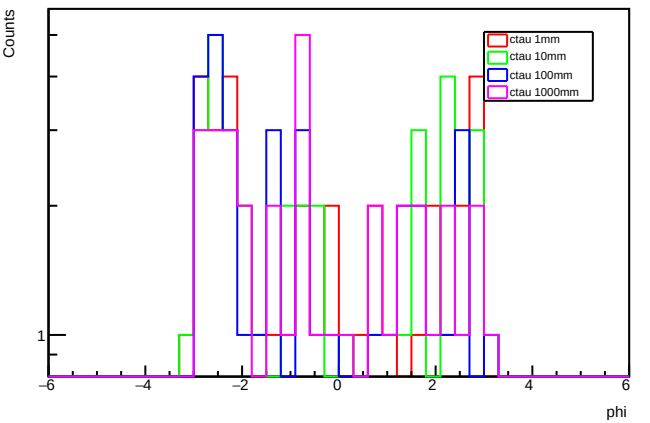
reco leading Met phi: n_jet >=1, j1pt > 30 GeV



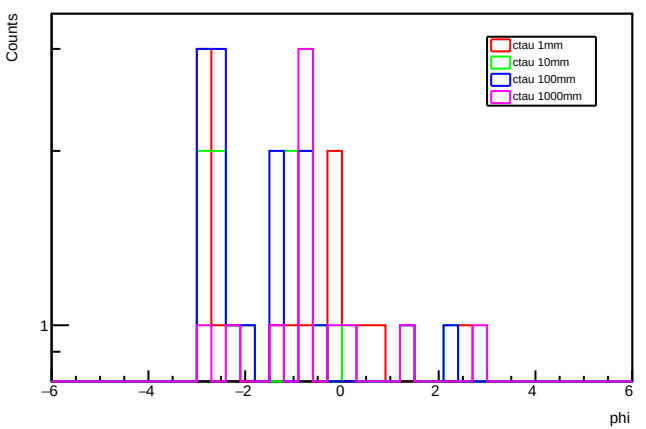
reco leading Met phi: MET > 120 GeV



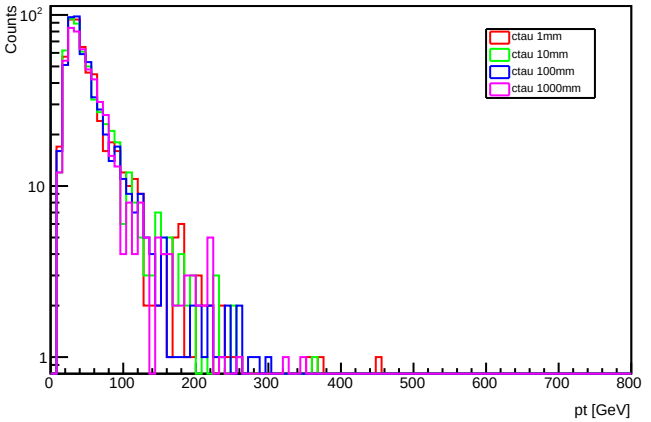
reco leading Met phi: j1pt >120, at most 2 jets w/ pt >30 GeV



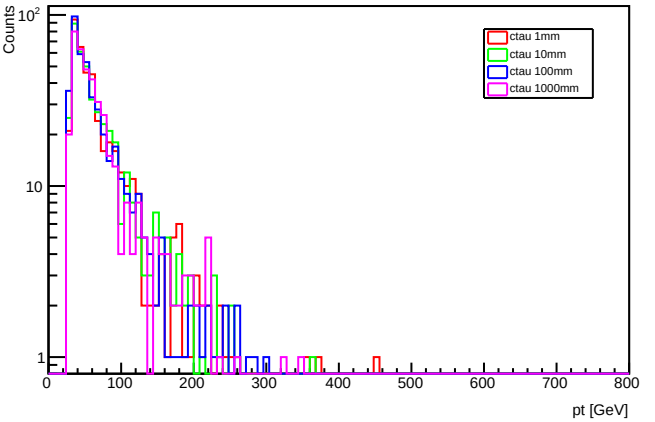
reco leading Met phi: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4



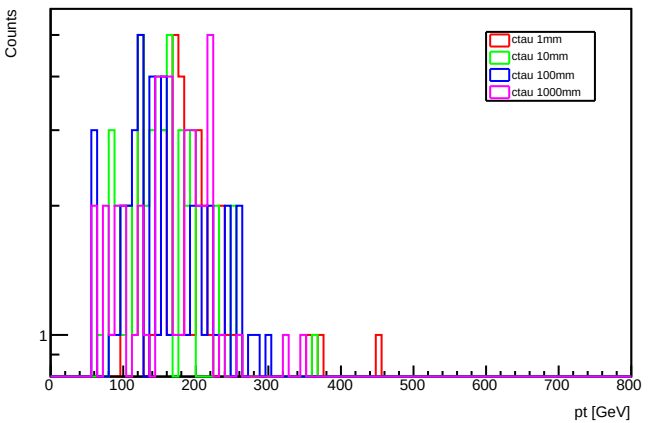
reco leading Jet pt: no cuts



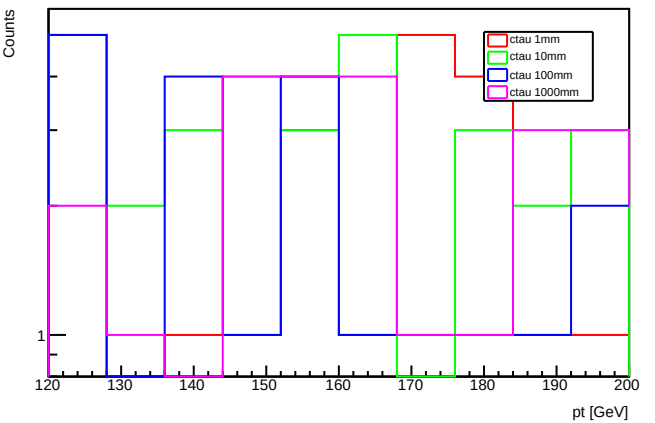
reco leading Jet pt: n_jet >=1, j1pt > 30 GeV



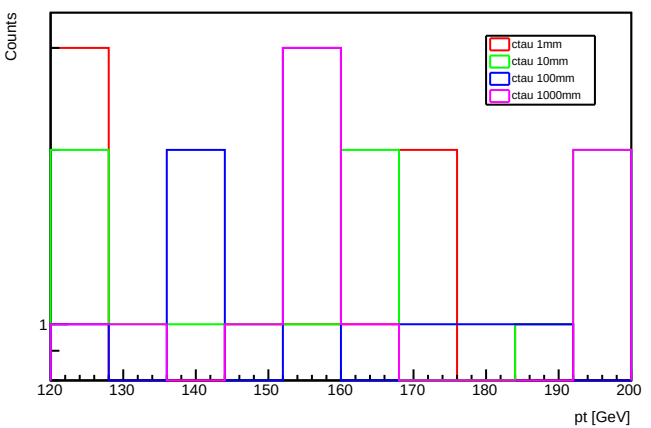
reco leading Jet pt: MET > 120 GeV



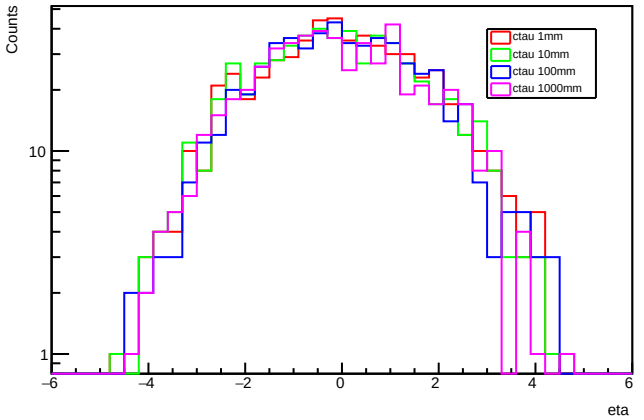
reco leading Jet pt: j1pt >120, at most 2 jets w/ pt >30 GeV



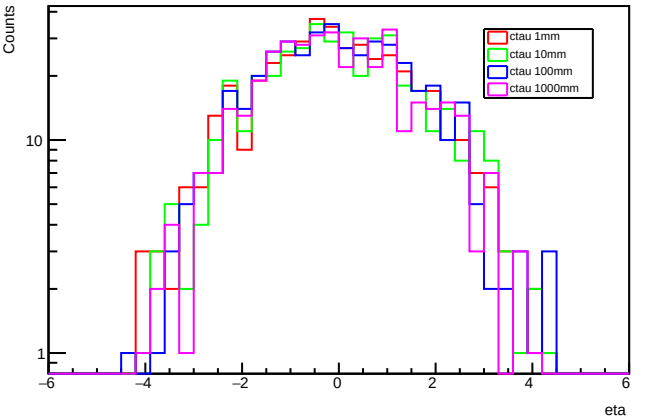
reco leading Jet pt: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4



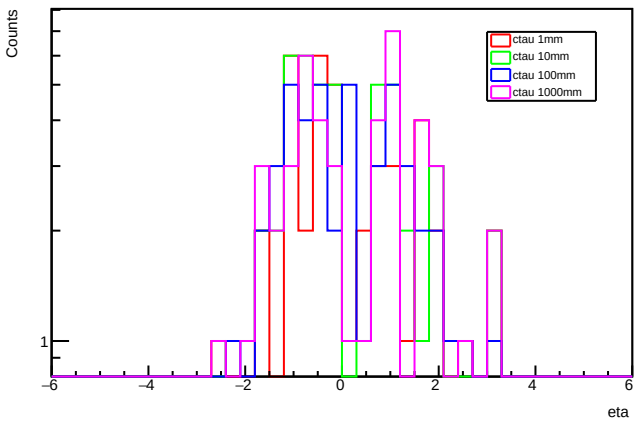
reco leading Jet eta: no cuts



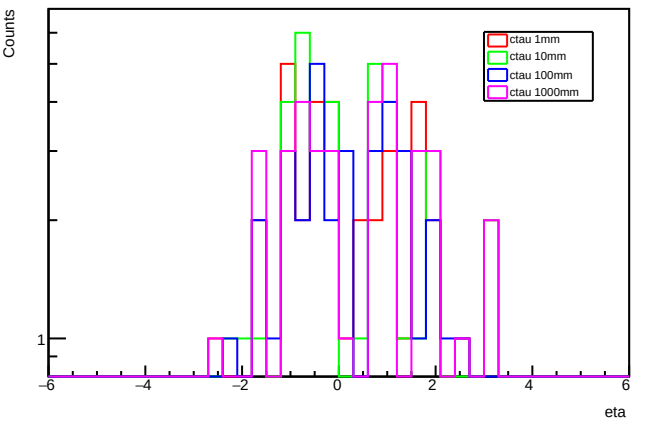
reco leading Jet eta: n_jet >=1, j1pt > 30 GeV



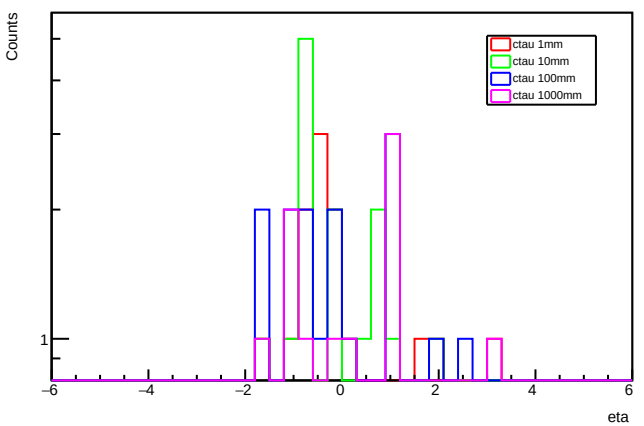
reco leading Jet eta: MET > 120 GeV



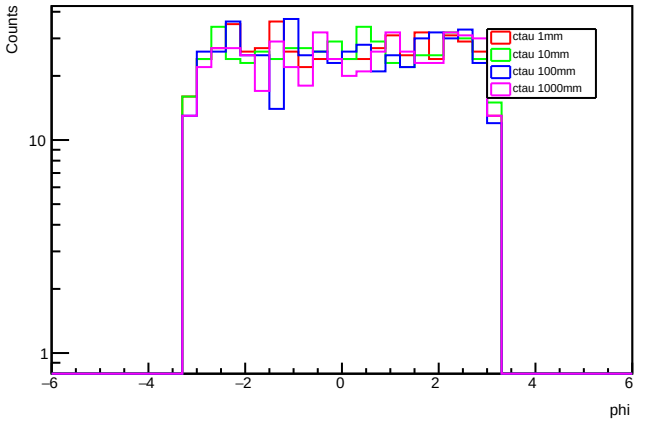
reco leading Jet eta: j1pt >120, at most 2 jets w/ pt >30 GeV



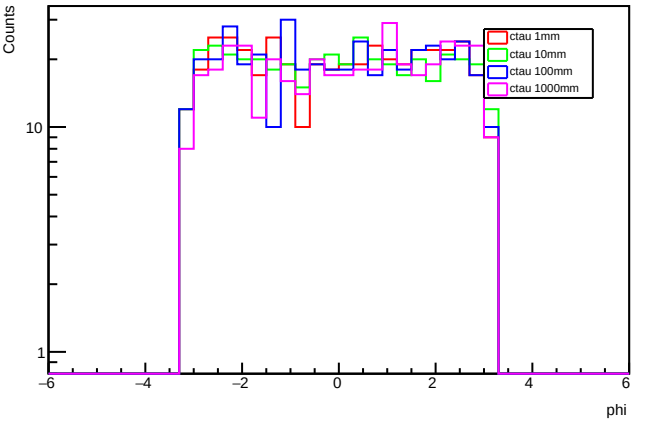
reco leading Jet eta: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4



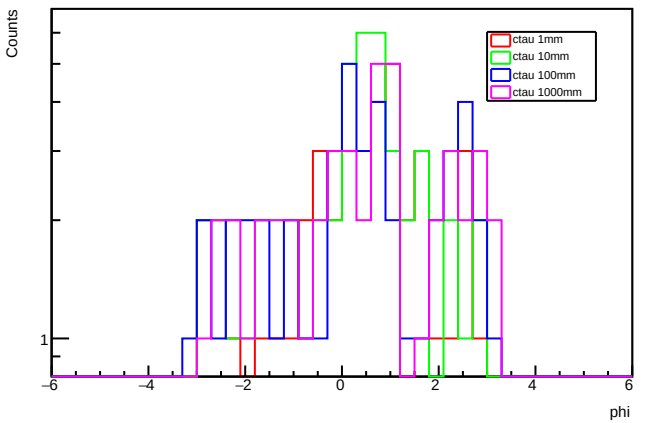
reco leading Jet phi: no cuts



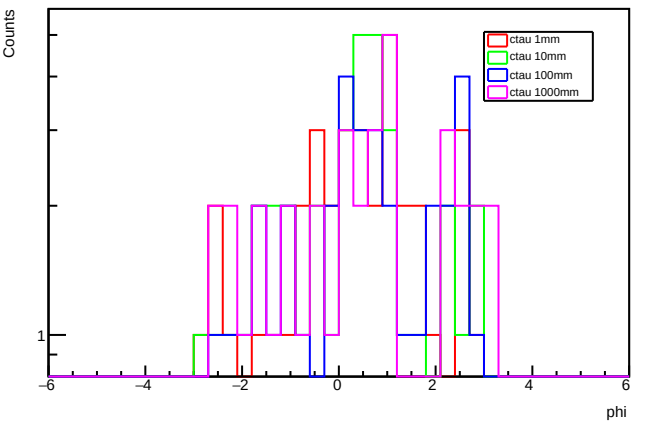
reco leading Jet phi: n_jet >=1, j1pt > 30 GeV



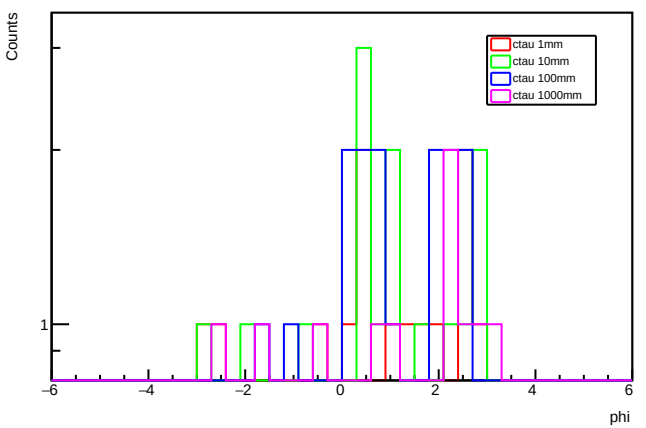
reco leading Jet phi: MET > 120 GeV



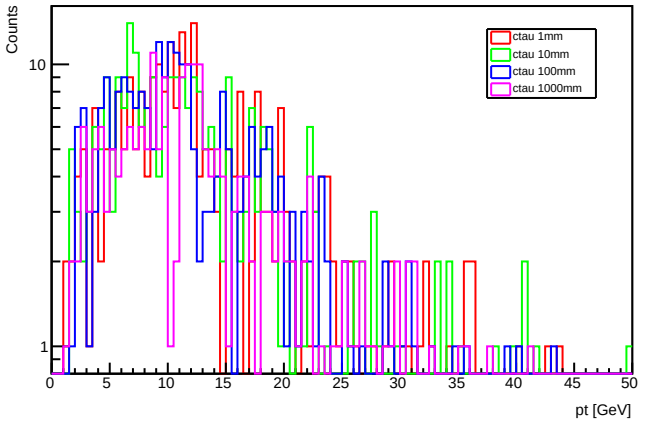
reco leading Jet phi: j1pt >120, at most 2 jets w/ pt >30 GeV



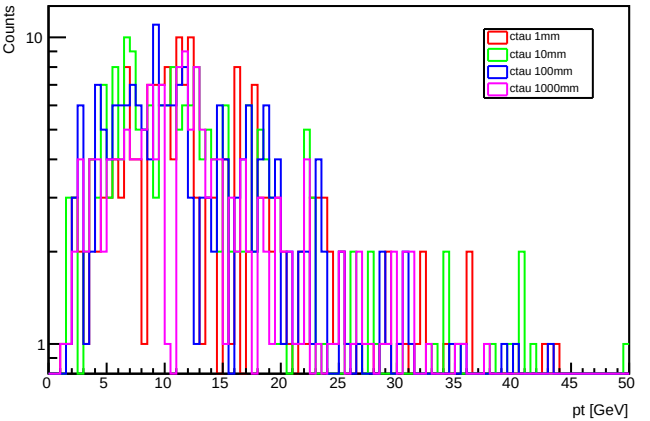
reco leading Jet phi: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4



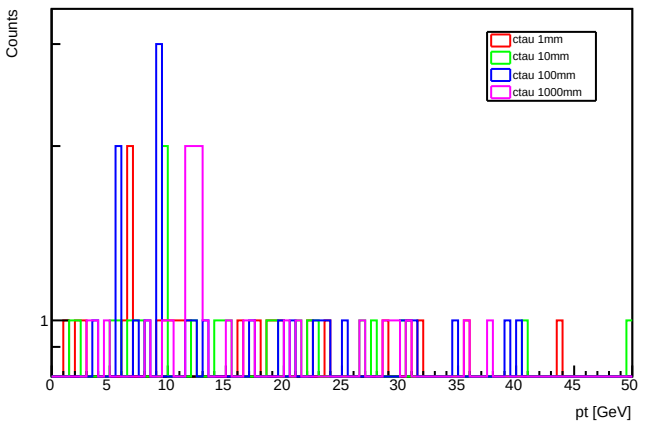
reco leading Mu pt: no cuts



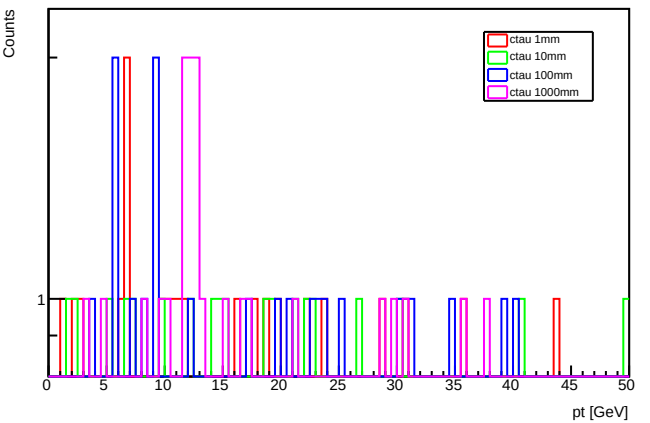
reco leading Mu pt: n_jet >=1, j1pt > 30 GeV



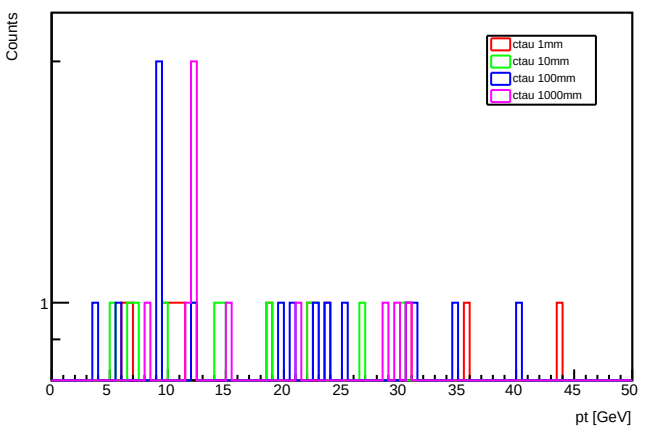
reco leading Mu pt: MET > 120 GeV



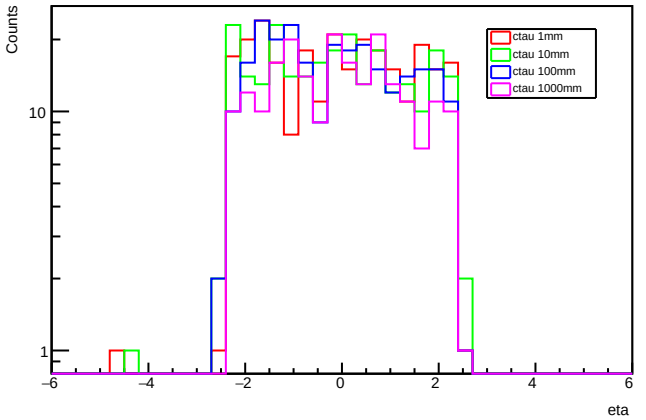
reco leading Mu pt: j1pt >120, at most 2 jets w/ pt >30 GeV



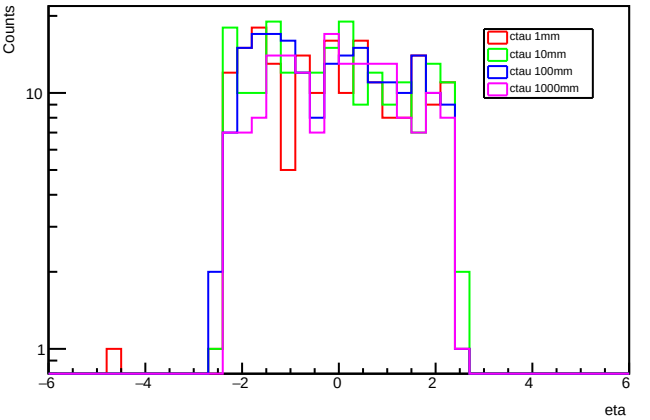
reco leading Mu pt: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4



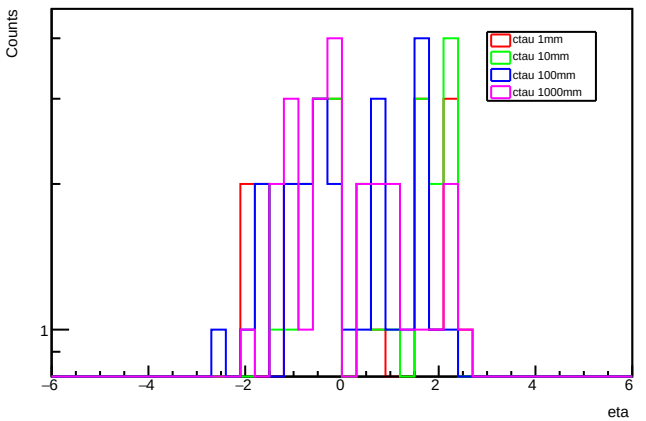
reco leading Mu eta: no cuts



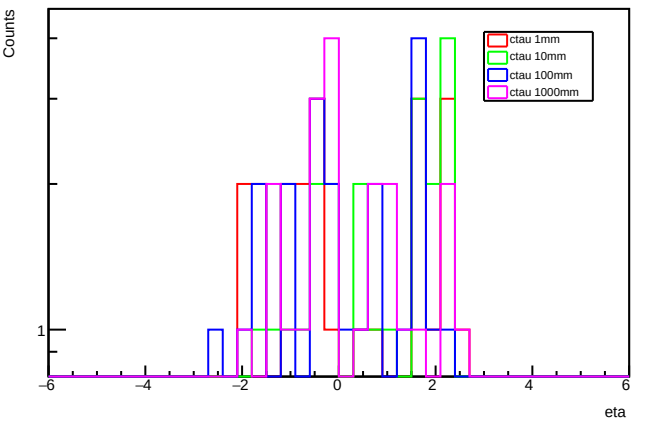
reco leading Mu eta: n_jet >=1, j1pt > 30 GeV



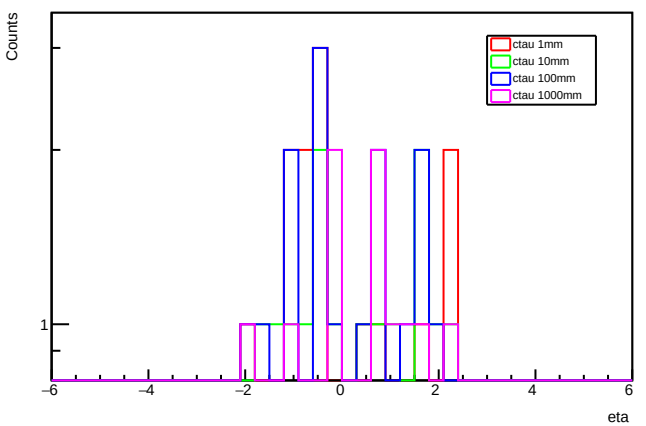
reco leading Mu eta: MET > 120 GeV



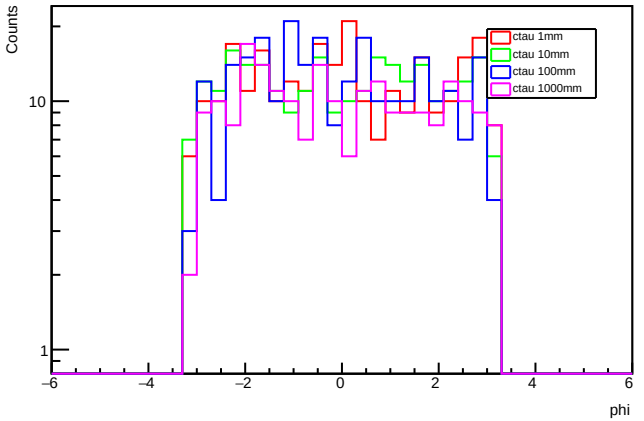
reco leading Mu eta: j1pt >120, at most 2 jets w/ pt >30 GeV



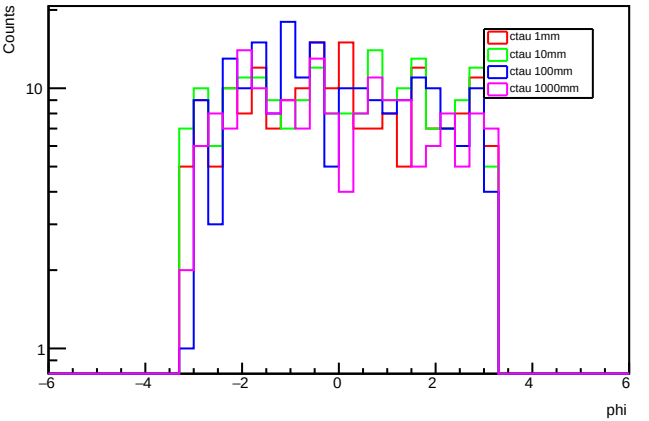
reco leading Mu eta: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4



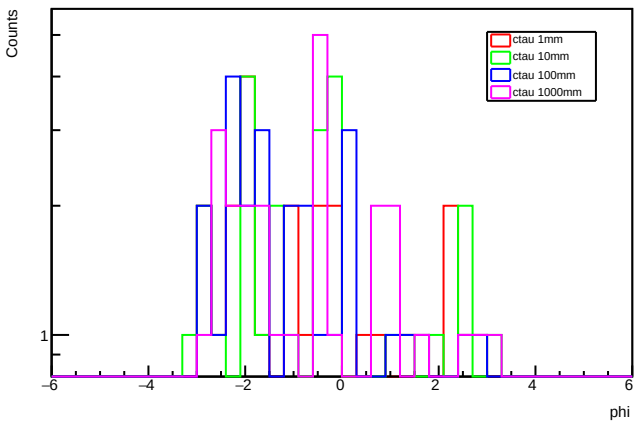
reco leading Mu phi: no cuts



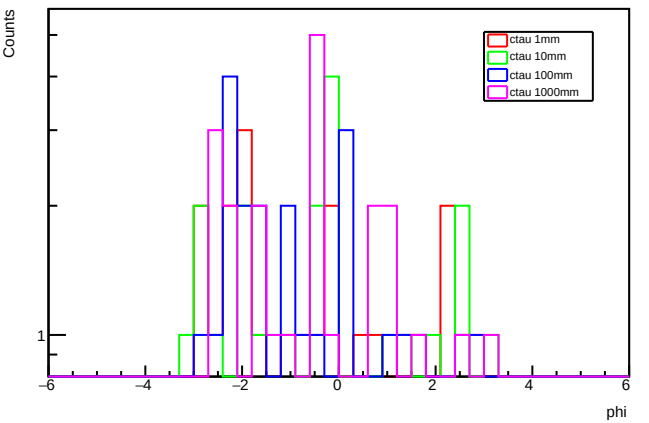
reco leading Mu phi: n_jet >=1, j1pt > 30 GeV



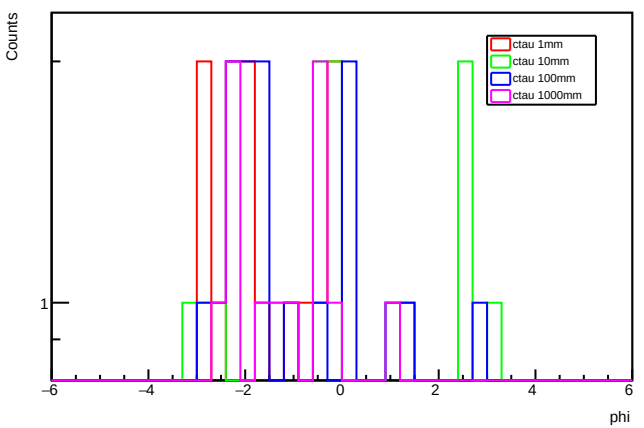
reco leading Mu phi: MET > 120 GeV



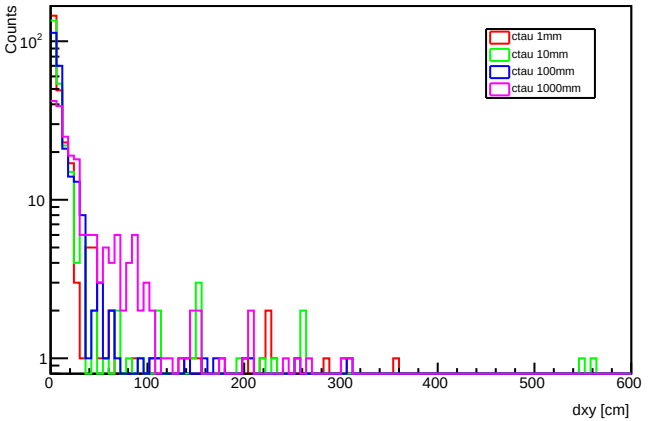
reco leading Mu phi: j1pt >120, at most 2 jets w/ pt >30 GeV



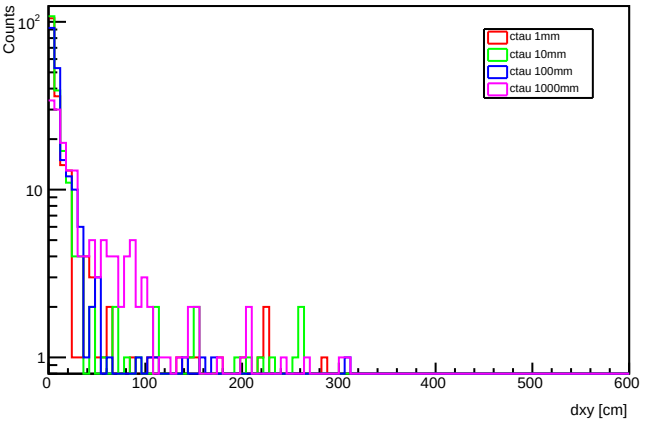
reco leading Mu phi: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4



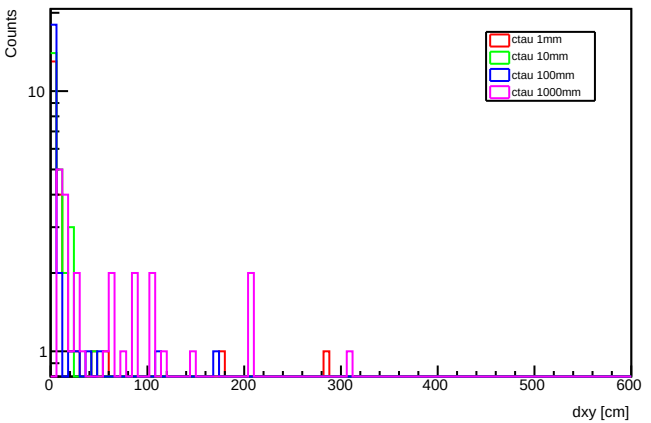
reco leading Mu vxy: no cuts



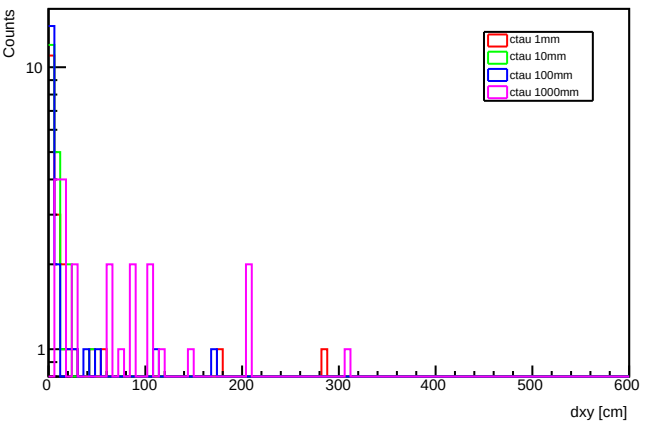
reco leading Mu vxy: n_jet >=1, j1pt > 30 GeV



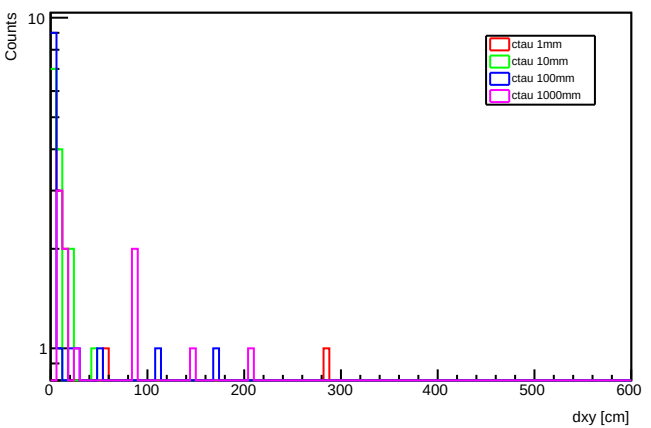
reco leading Mu vxy: MET > 120 GeV



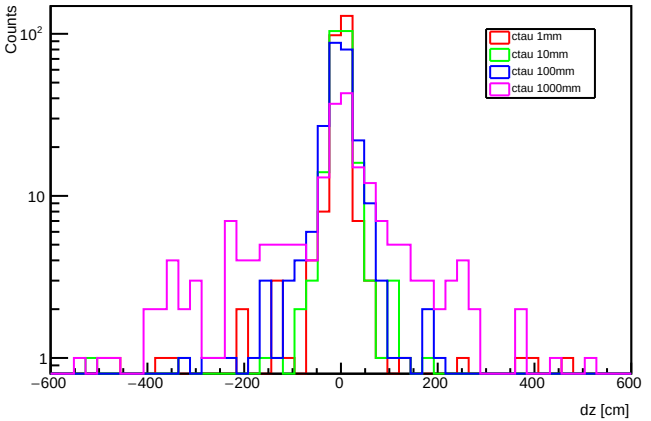
reco leading Mu vxy: j1pt >120, at most 2 jets w/ pt >30 GeV



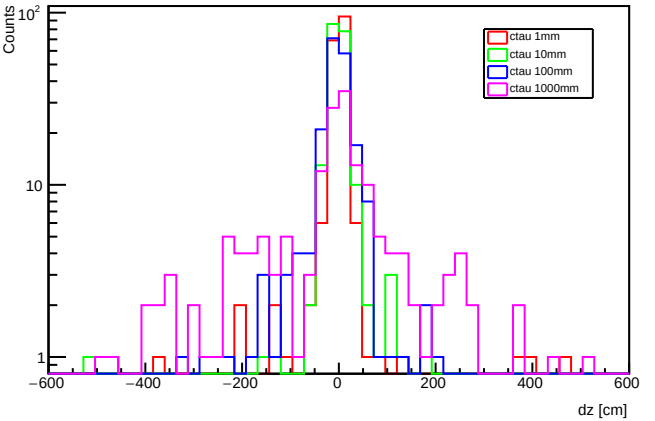
reco leading Mu vxy: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4



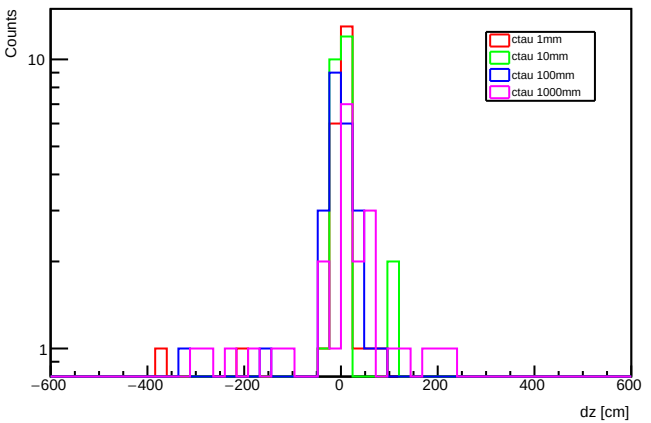
reco leading Mu vz: no cuts



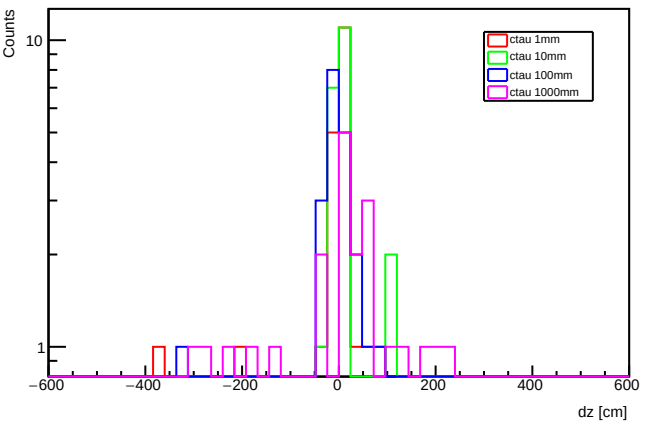
reco leading Mu vz: n_jet >=1, j1pt > 30 GeV



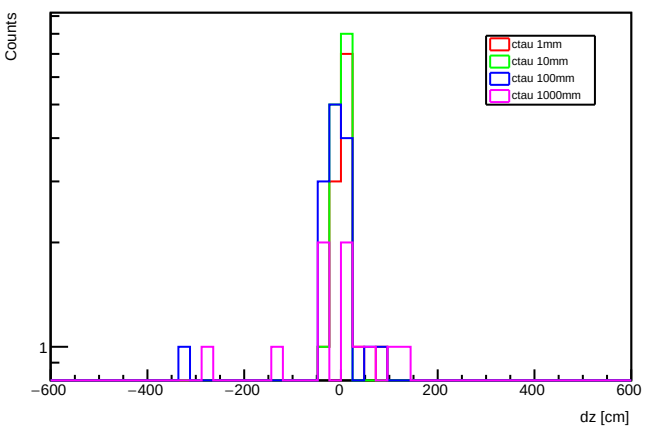
reco leading Mu vz: MET > 120 GeV



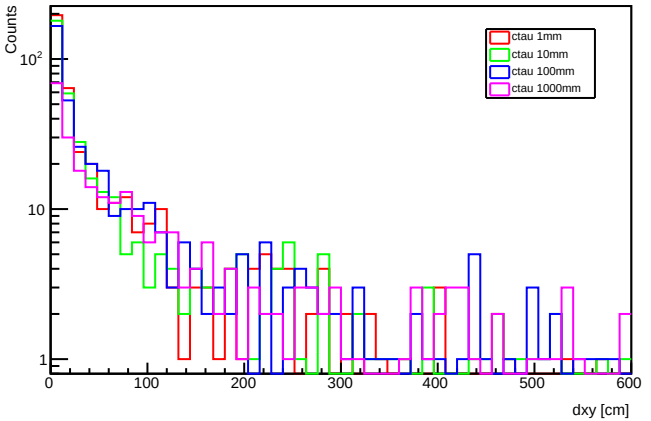
reco leading Mu vz: j1pt >120, at most 2 jets w/ pt >30 GeV



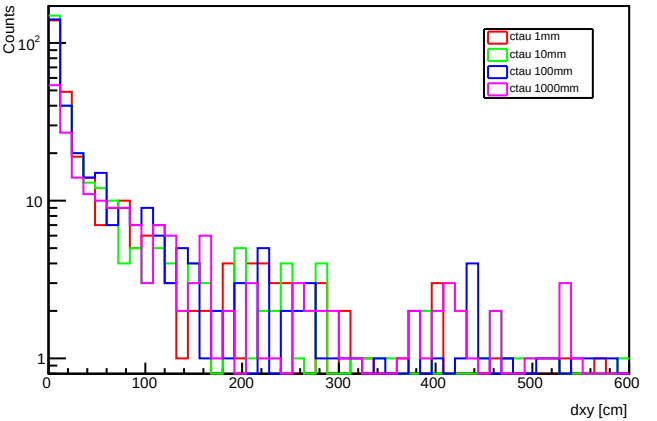
reco leading Mu vz: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4



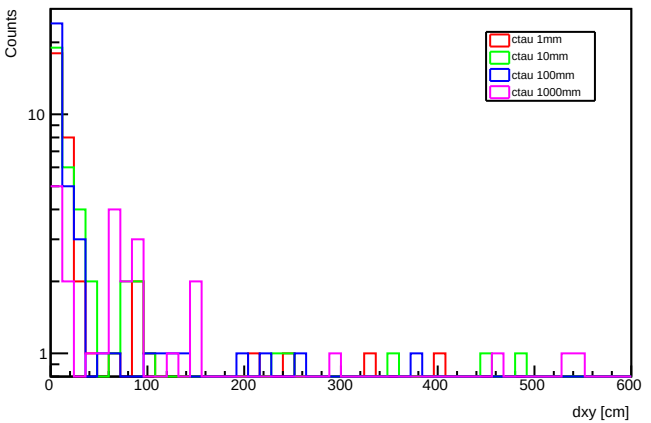
reco all Mu vxy: no cuts



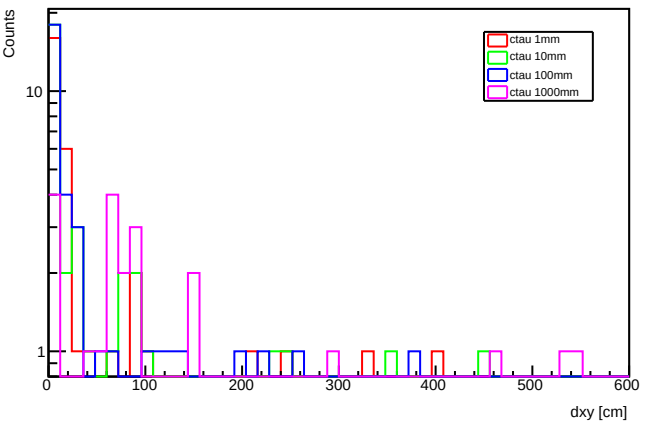
reco all Mu vxy: n_jet >=1, j1pt > 30 GeV



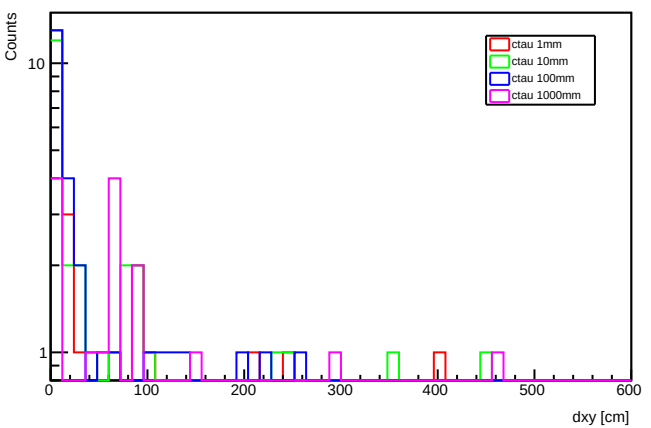
reco all Mu vxy: MET > 120 GeV



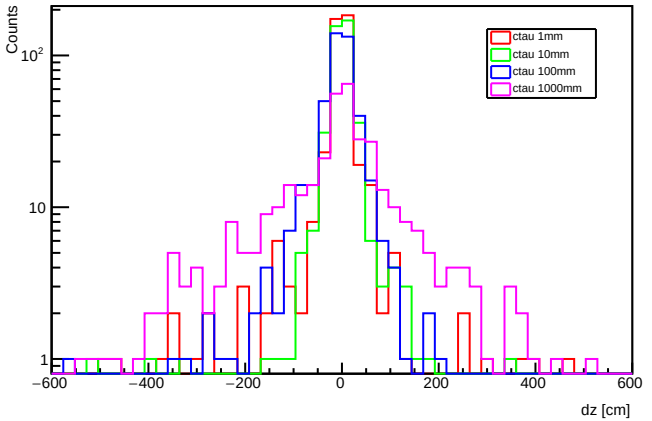
reco all Mu vxy: j1pt >120, at most 2 jets w/ pt >30 GeV



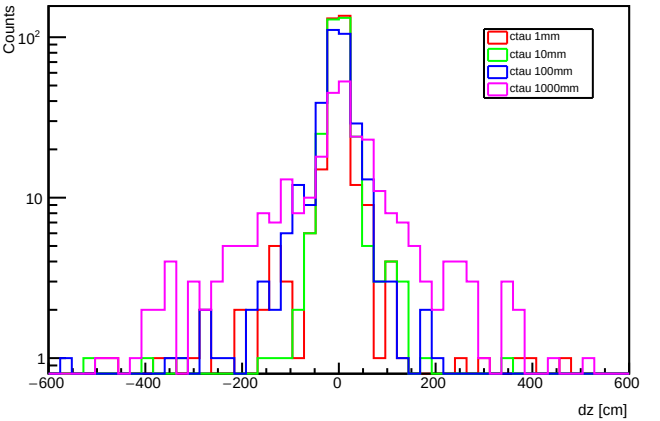
reco all Mu vxy: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4



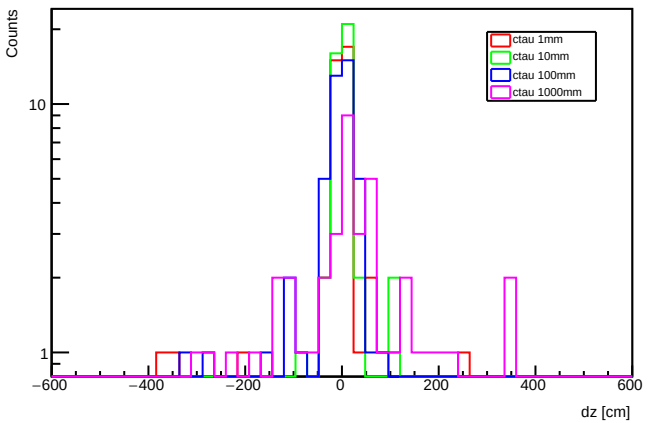
reco all Mu vz: no cuts



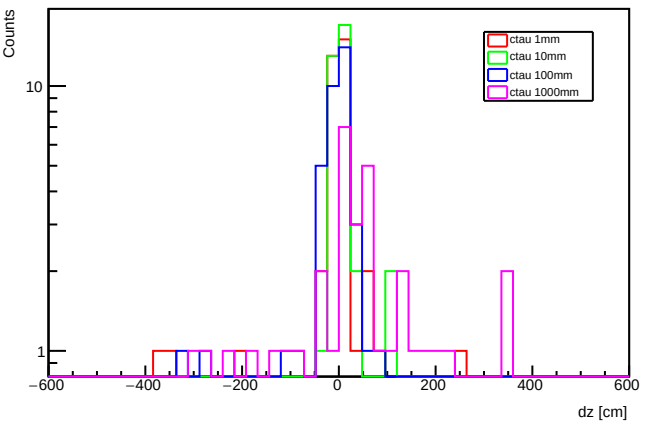
reco all Mu vz: n_jet >=1, j1pt > 30 GeV



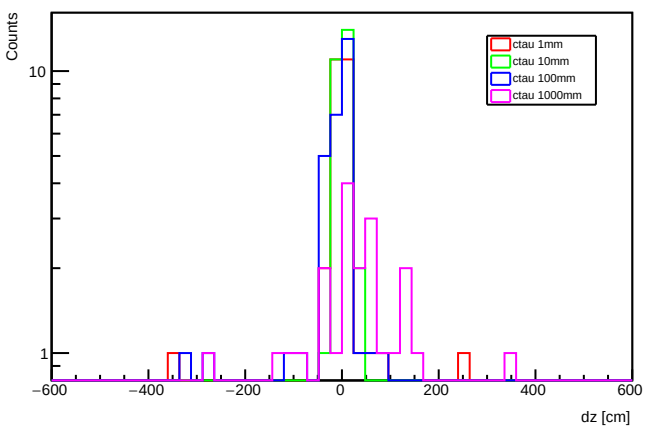
reco all Mu vz: MET > 120 GeV



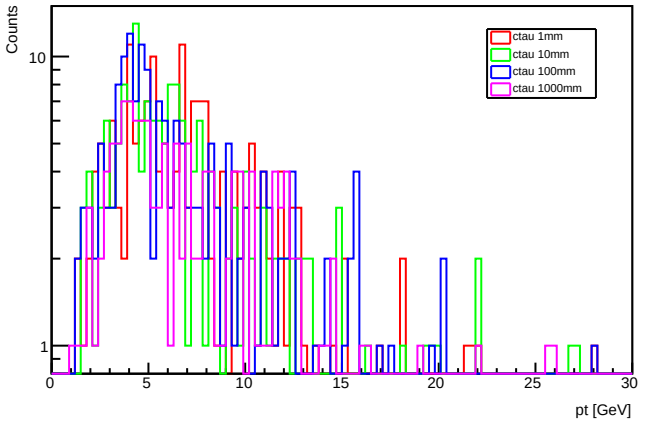
reco all Mu vz: j1pt >120, at most 2 jets w/ pt >30 GeV



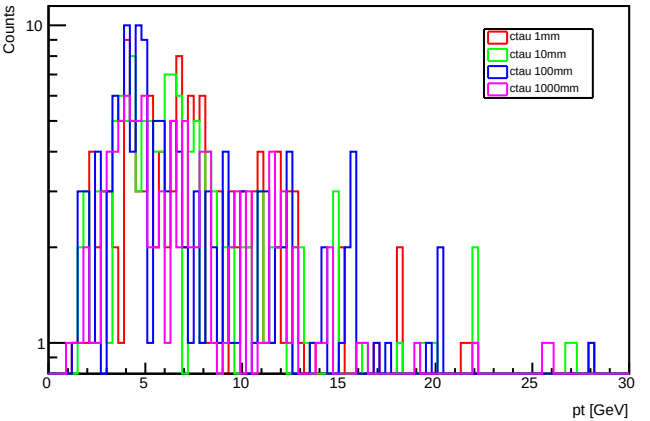
reco all Mu vz: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4



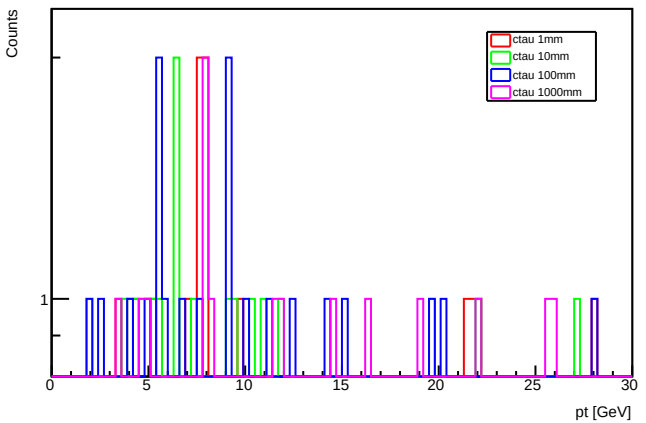
reco subleading Mu pt: no cuts



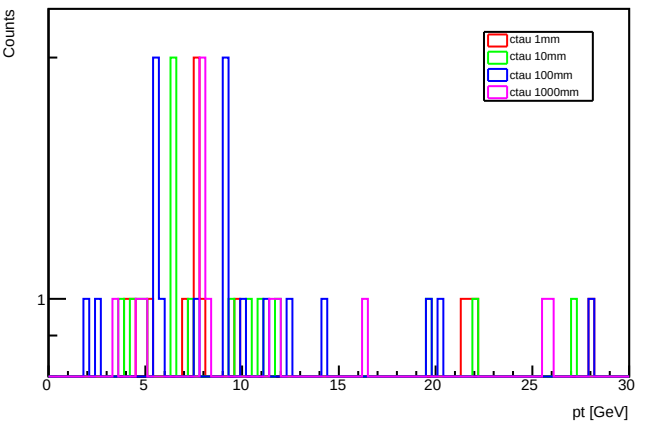
reco subleading Mu pt: n_jet >=1, j1pt > 30 GeV



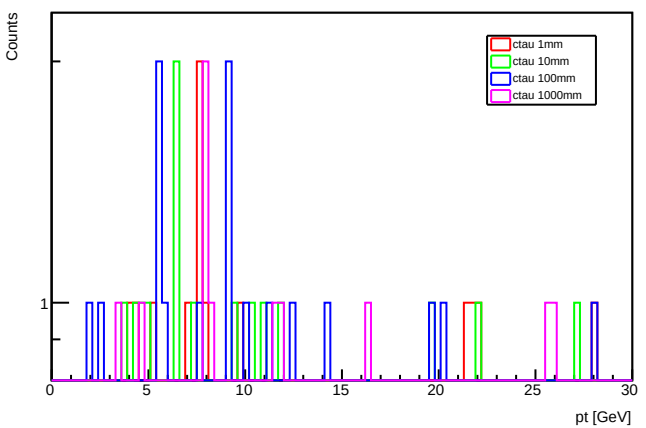
reco subleading Mu pt: MET > 120 GeV



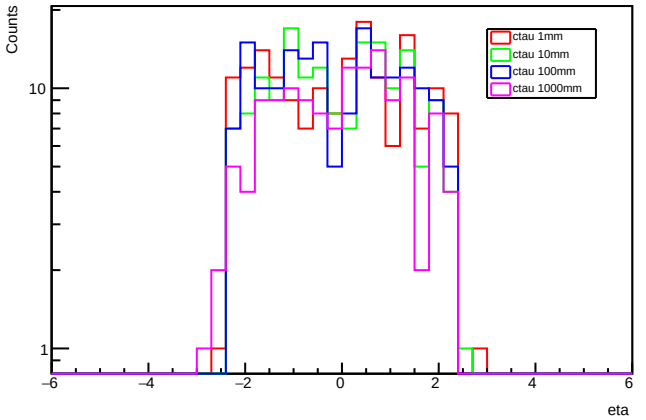
reco subleading Mu pt: j1pt >120, at most 2 jets w/ pt >30 GeV



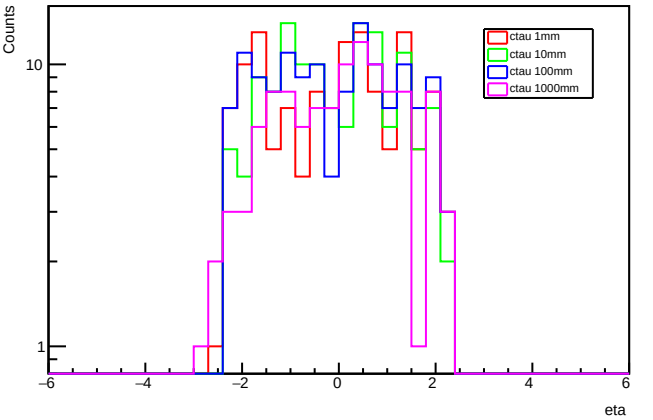
reco subleading Mu pt: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4



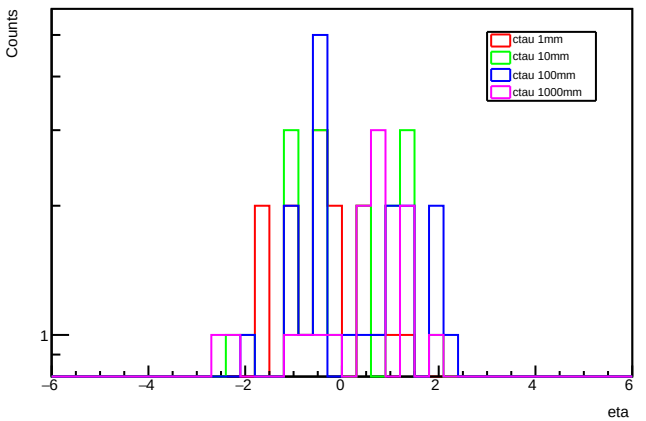
reco subleading Mu eta: no cuts



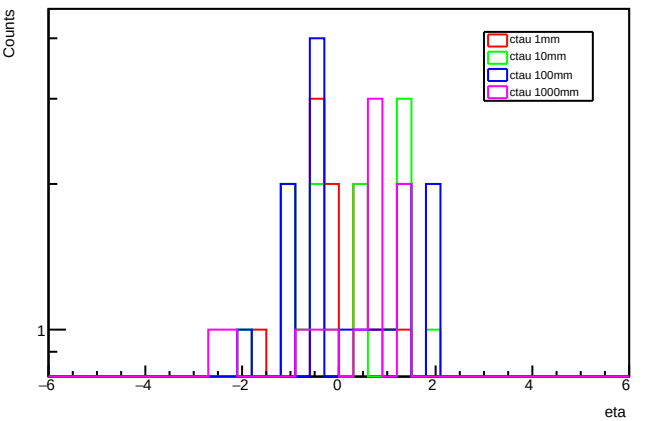
reco subleading Mu eta: n_jet >=1, j1pt > 30 GeV



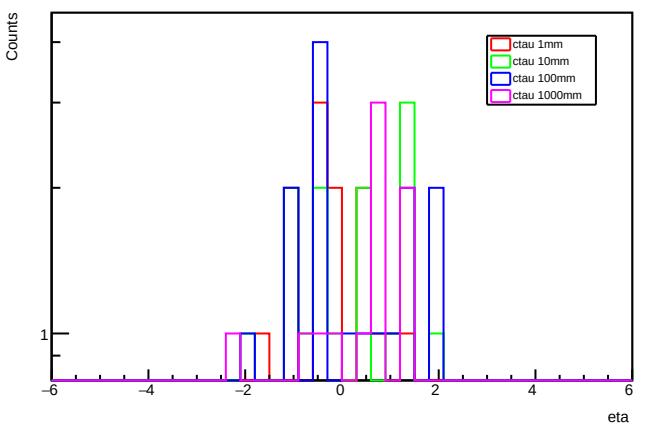
reco subleading Mu eta: MET > 120 GeV



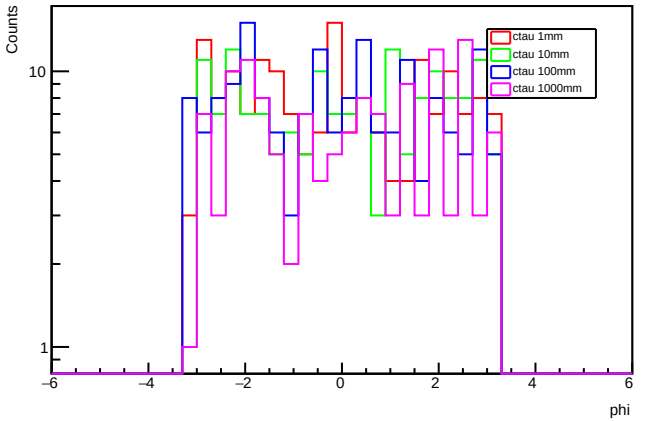
reco subleading Mu eta: j1pt >120, at most 2 jets w/ pt >30 GeV



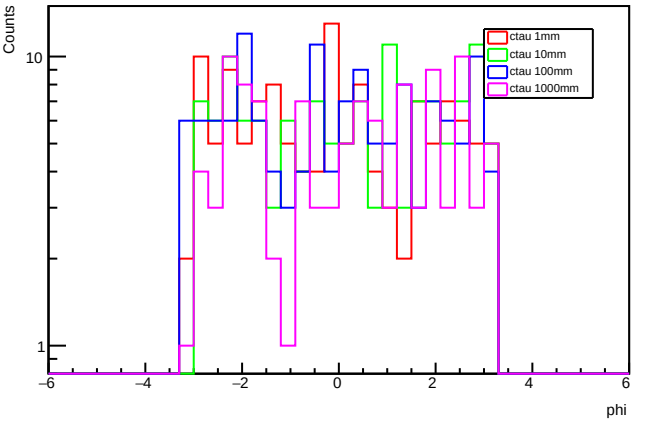
reco subleading Mu eta: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4



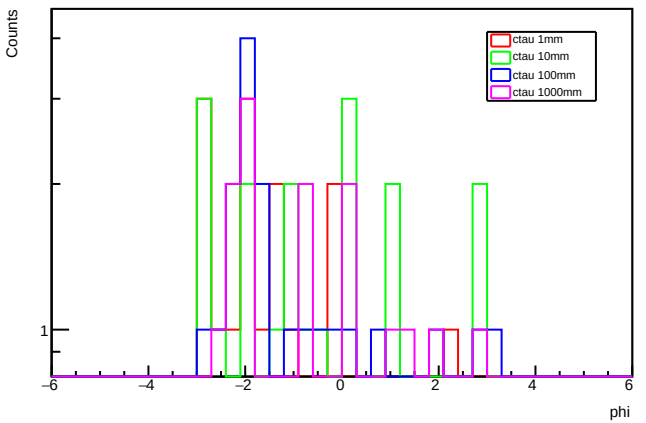
reco subleading Mu phi: no cuts



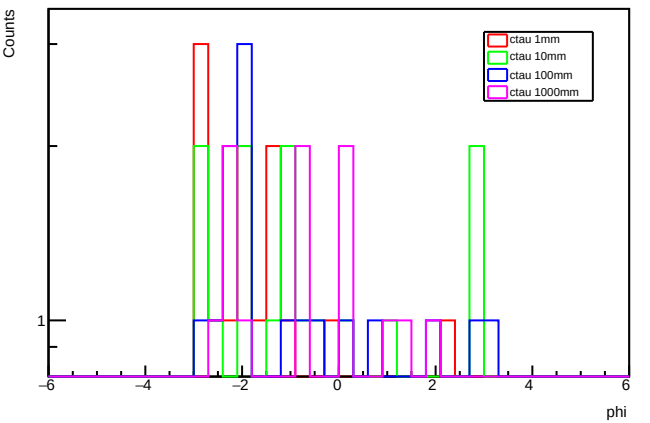
reco subleading Mu phi: n_jet >=1, j1pt > 30 GeV



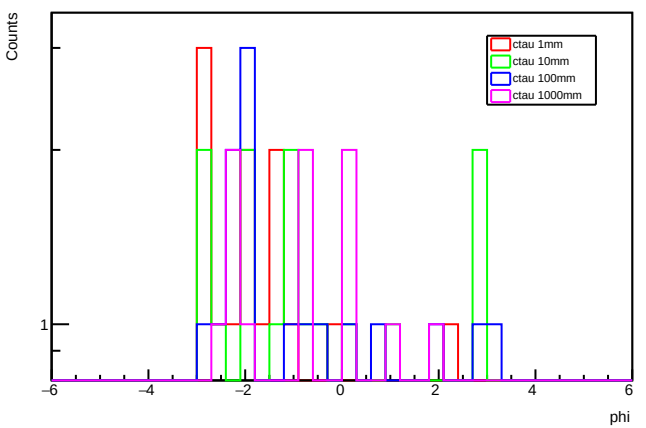
reco subleading Mu phi: MET > 120 GeV



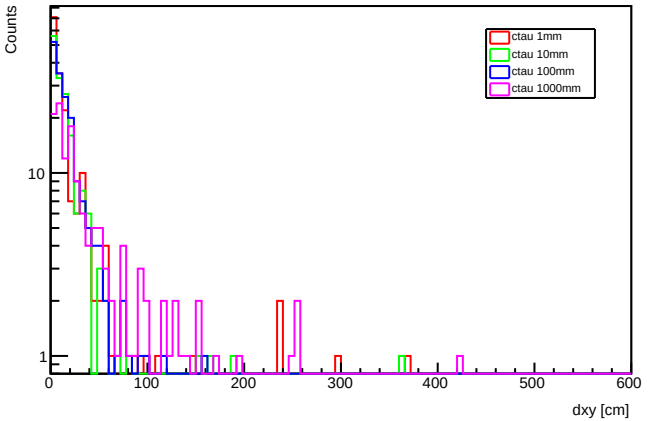
reco subleading Mu phi: j1pt >120, at most 2 jets w/ pt >30 GeV



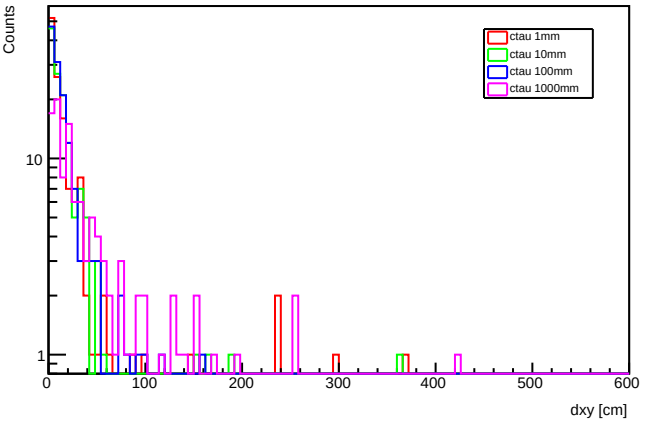
reco subleading Mu phi: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4



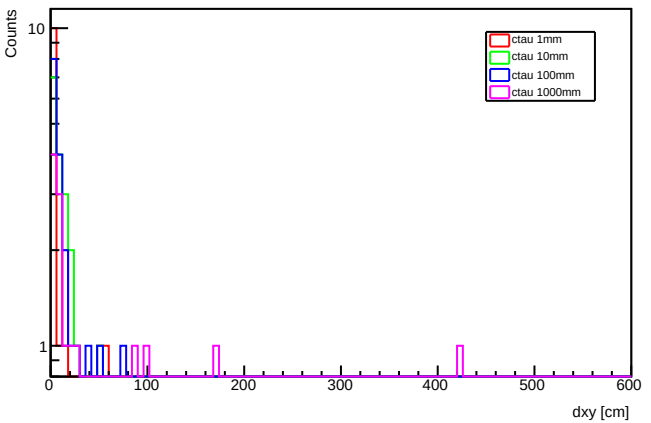
reco subleading Mu vxy: no cuts



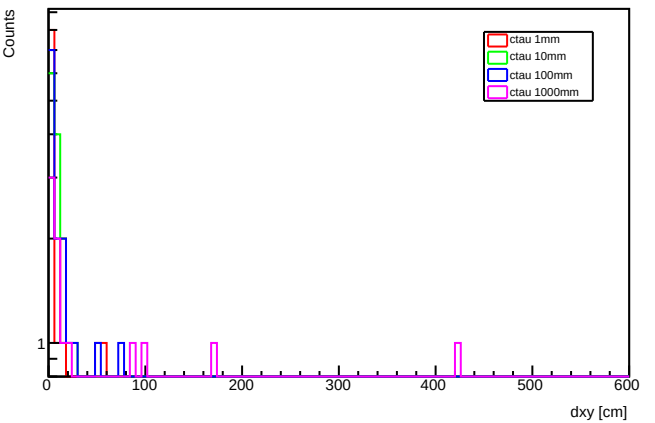
reco subleading Mu vxy: n_jet >=1, j1pt > 30 GeV



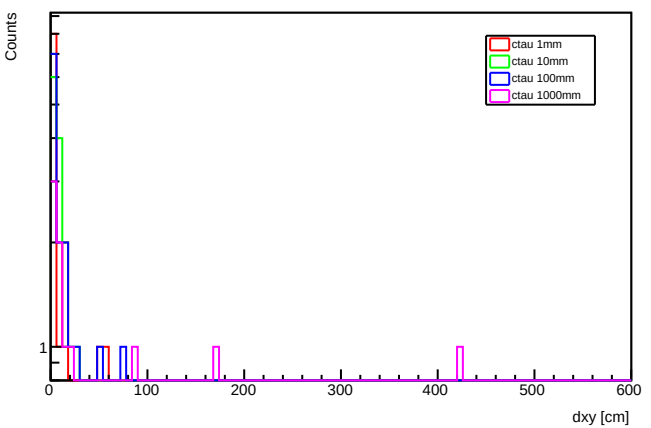
reco subleading Mu vxy: MET > 120 GeV



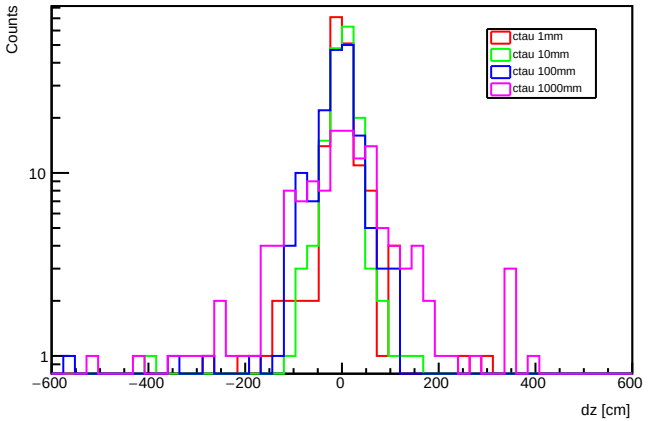
reco subleading Mu vxy: j1pt >120, at most 2 jets w/ pt >30 GeV



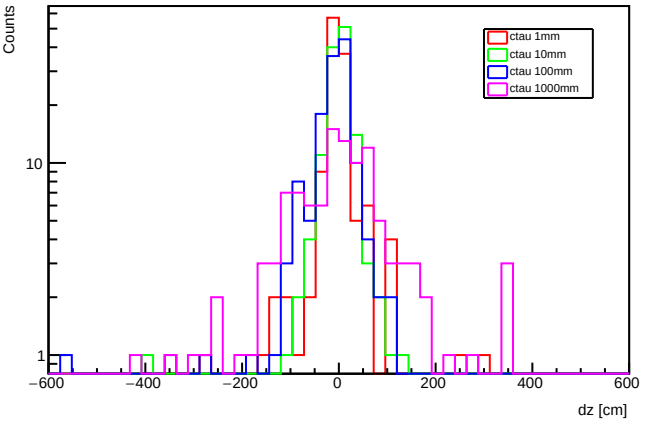
reco subleading Mu vxy: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4



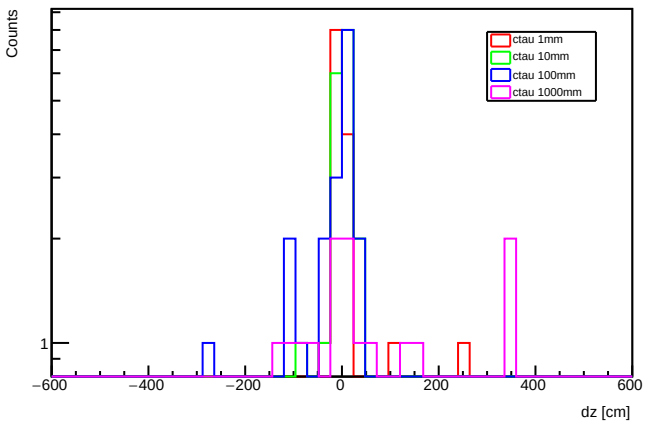
reco subleading Mu vz: no cuts



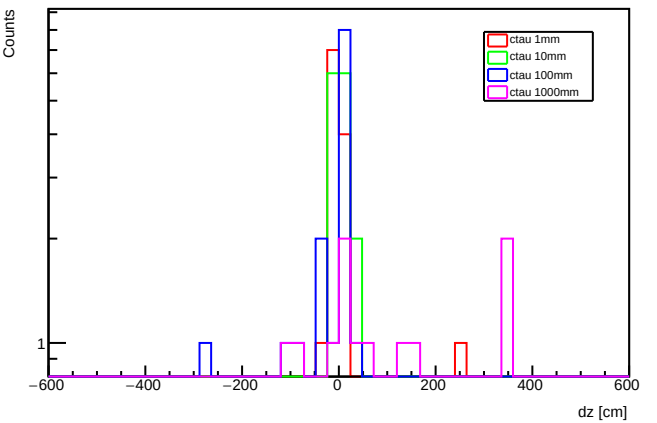
reco subleading Mu vz: n_jet >=1, j1pt > 30 GeV



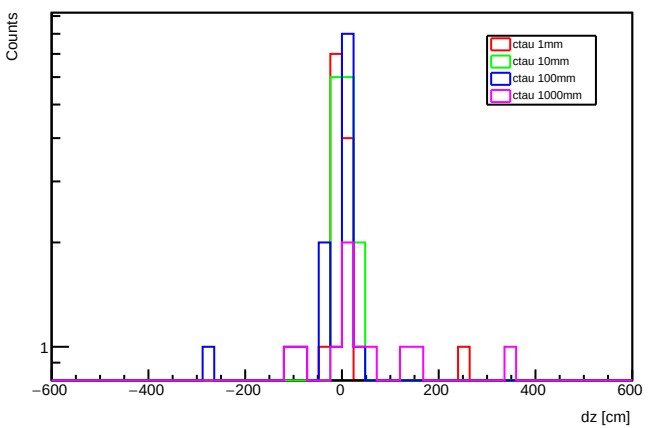
reco subleading Mu vz: MET > 120 GeV



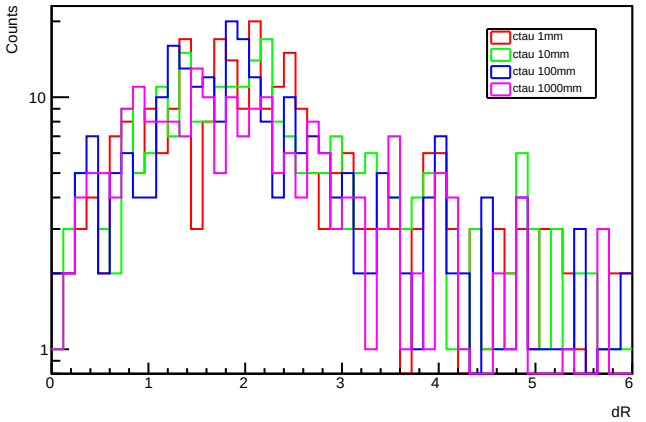
reco subleading Mu vz: j1pt >120, at most 2 jets w/ pt >30 GeV



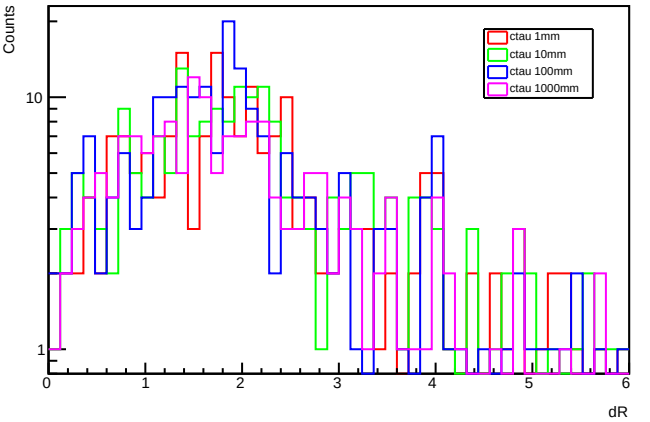
reco subleading Mu vz: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4



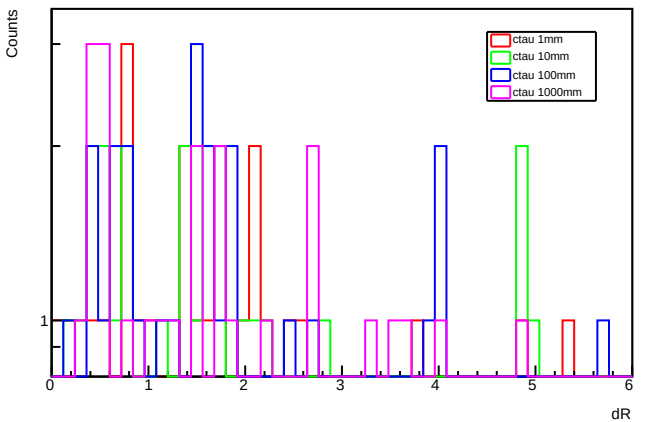
dR: reco leading mu and subleading mu: no cuts



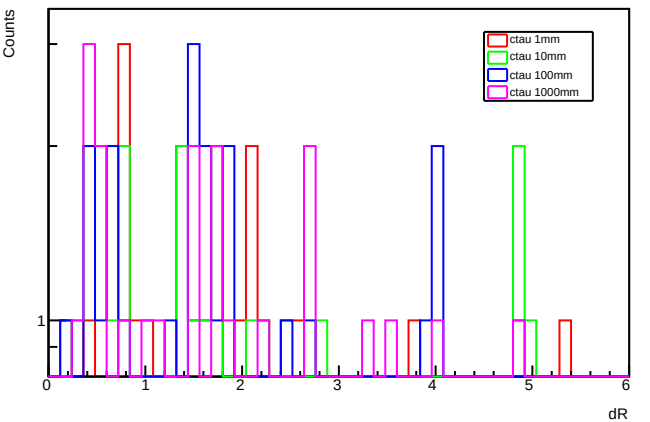
dR: reco leading mu and subleading mu: n_jet >=1, j1pt > 30 GeV



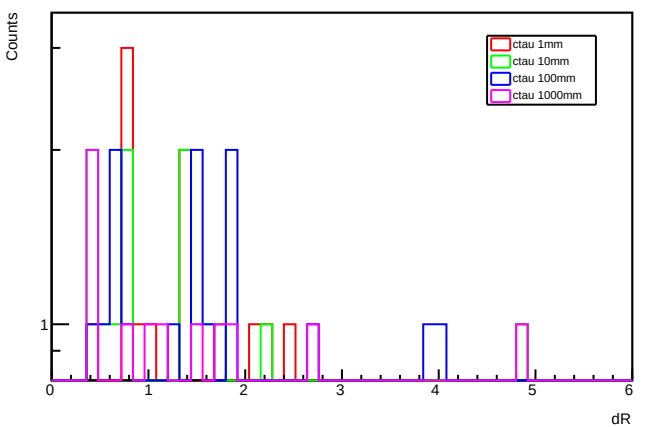
dR: reco leading mu and subleading mu: MET > 120 GeV



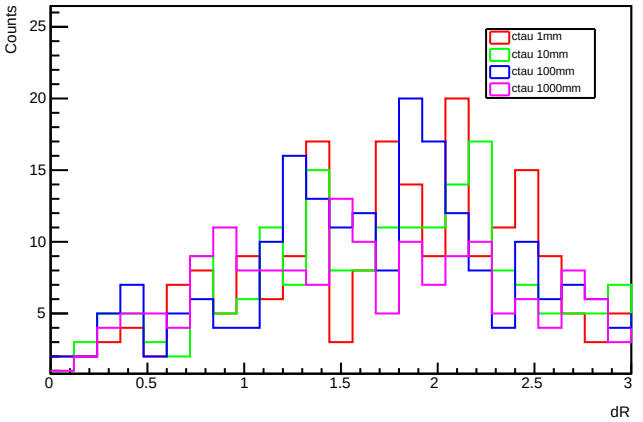
dR: reco leading mu and subleading mu: j1pt >120, at most 2 jets w/ pt >30 GeV



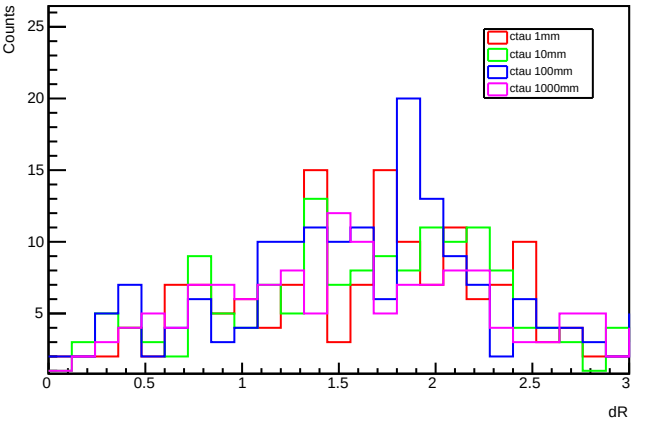
dR: reco leading mu and subleading mu: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4



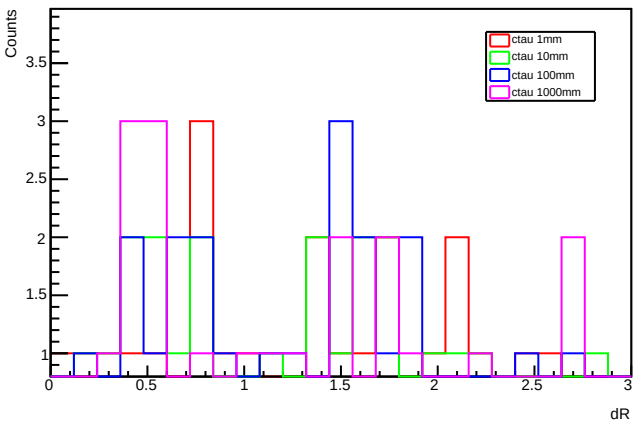
dR: reco leading mu and subleading mu: no cuts



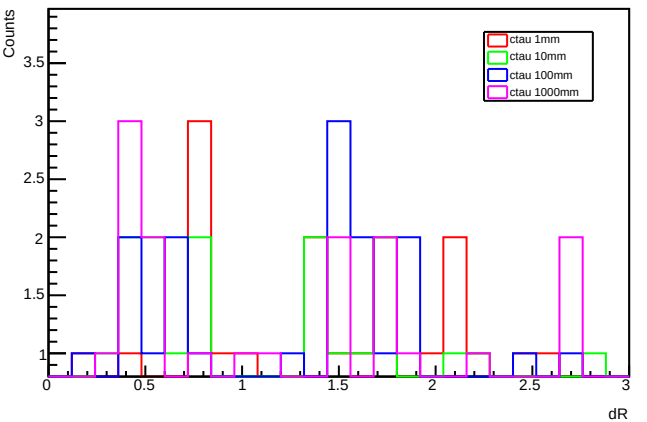
dR: reco leading mu and subleading mu: n_jet >=1, j1pt > 30 GeV



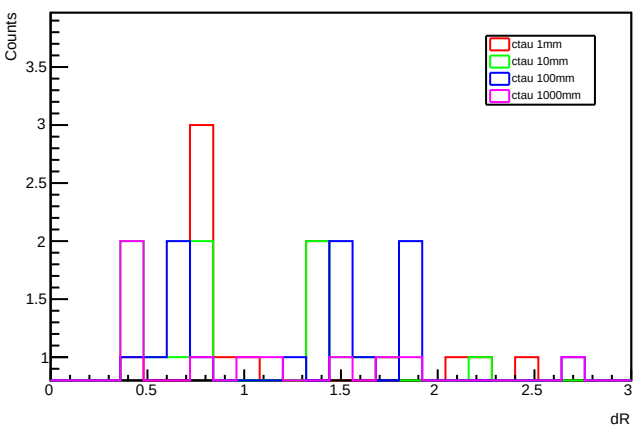
dR: reco leading mu and subleading mu: MET > 120 GeV



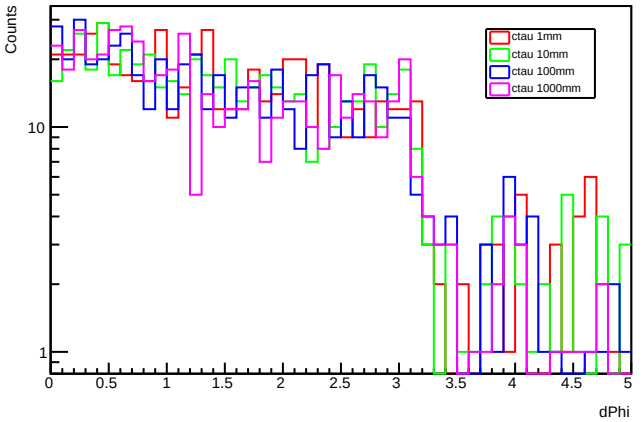
dR: reco leading mu and subleading mu: j1pt >120, at most 2 jets w/ pt >30 GeV



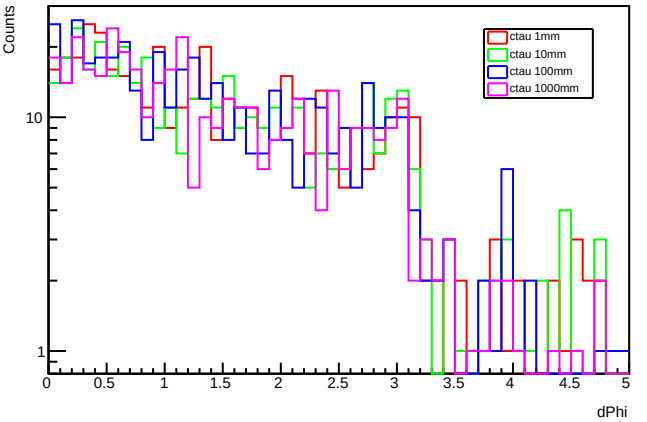
dR: reco leading mu and subleading mu: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4



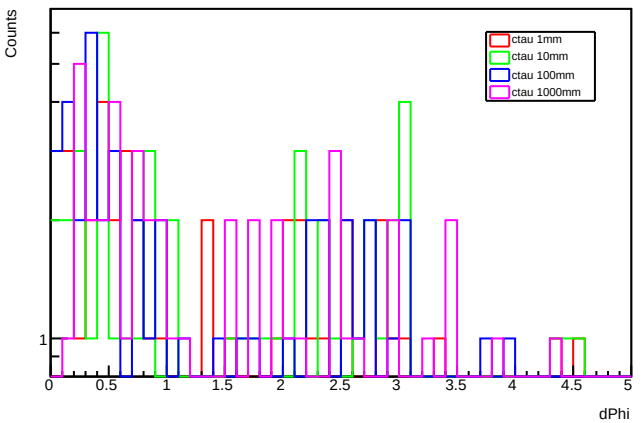
dPhi: reco MET and leading mu: no cuts



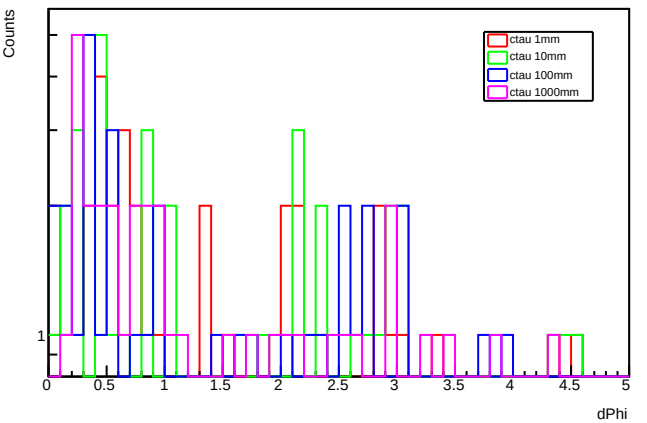
dPhi: reco MET and leading mu: n_jet >=1, j1pt > 30 GeV



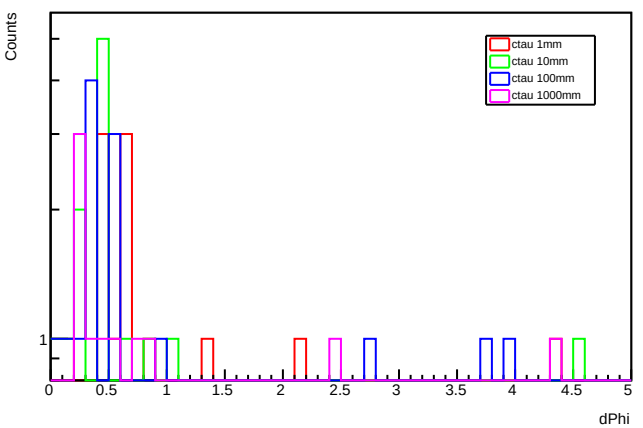
dPhi: reco MET and leading mu: MET > 120 GeV



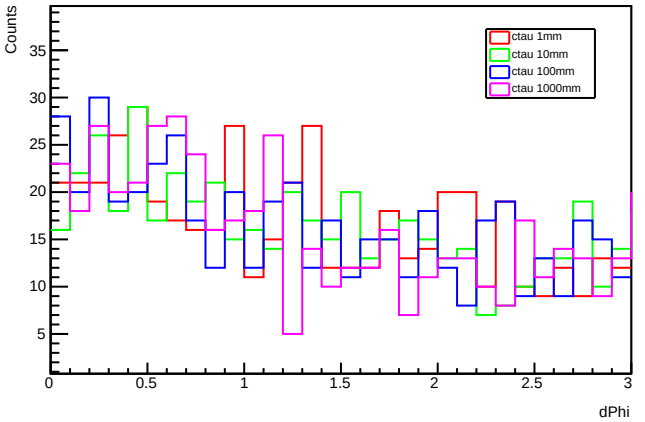
dPhi: reco MET and leading mu: j1pt >120, at most 2 jets w/ pt >30 GeV



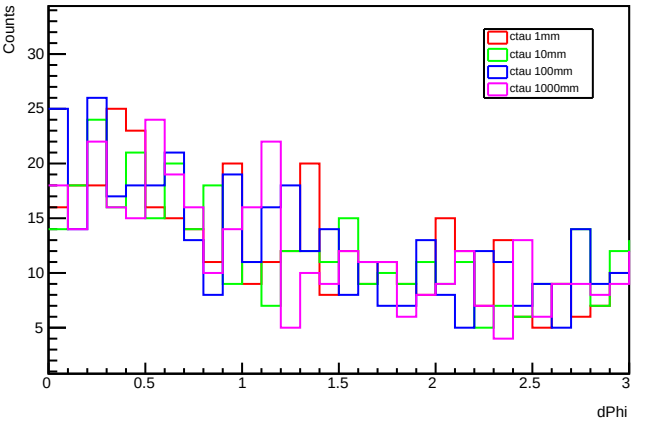
dPhi: reco MET and leading mu: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4



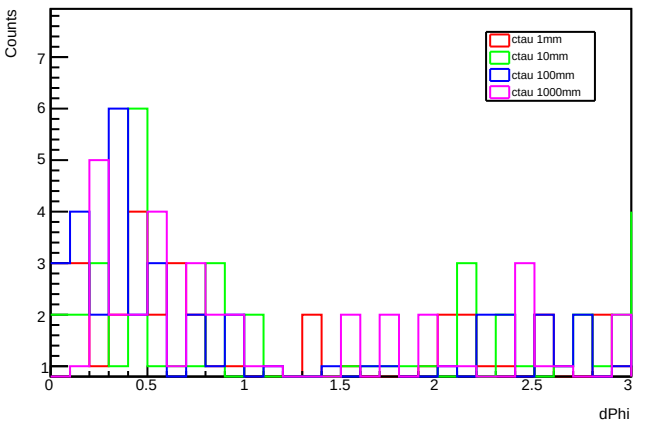
dPhi: reco MET and leading mu: no cuts



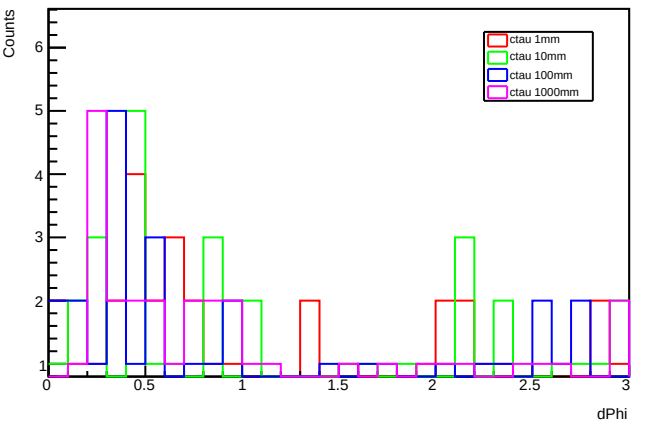
dPhi: reco MET and leading mu: n_jet >=1, j1pt > 30 GeV



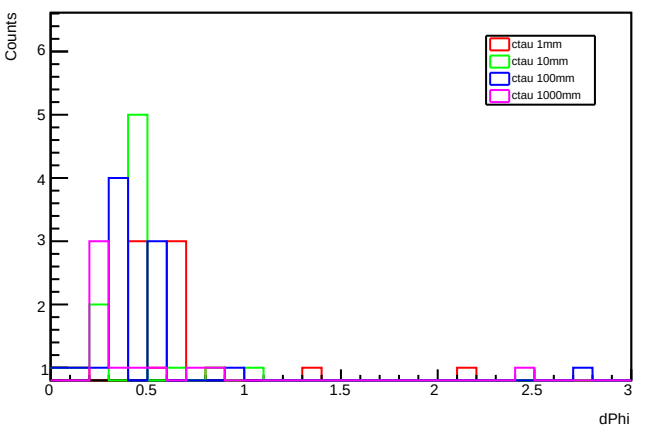
dPhi: reco MET and leading mu: MET > 120 GeV



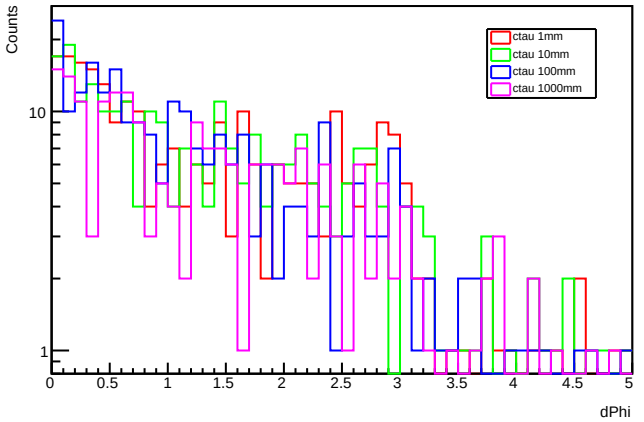
dPhi: reco MET and leading mu: j1pt >120, at most 2 jets w/ pt >30 GeV



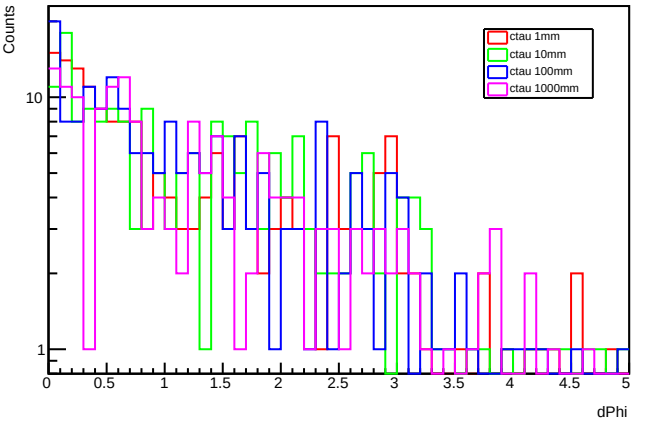
dPhi: reco MET and leading mu: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4



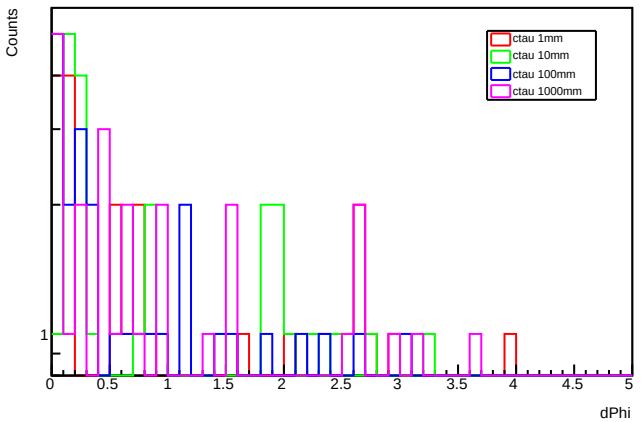
dPhi: reco leading mu and subleading mu: no cuts



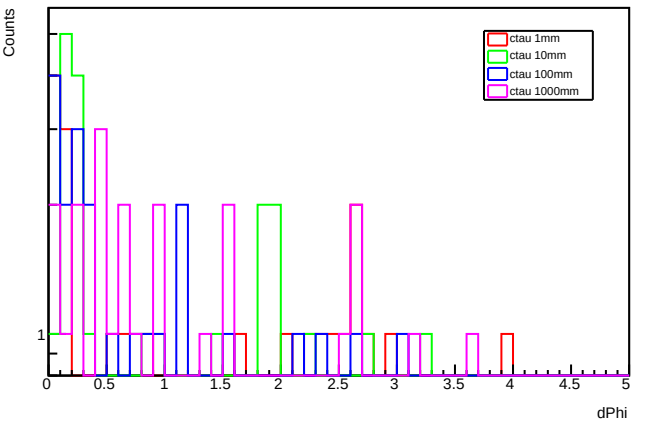
dPhi: reco leading mu and subleading mu: n_jet >=1, j1pt > 30 GeV



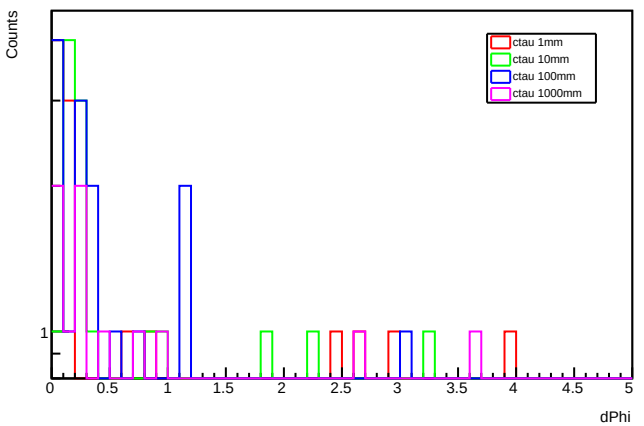
dPhi: reco leading mu and subleading mu: MET > 120 GeV



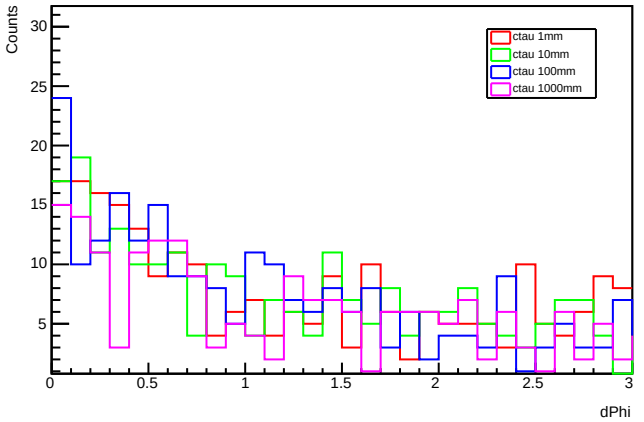
dPhi: reco leading mu and subleading mu: j1pt >120, at most 2 jets w/ pt >30 GeV



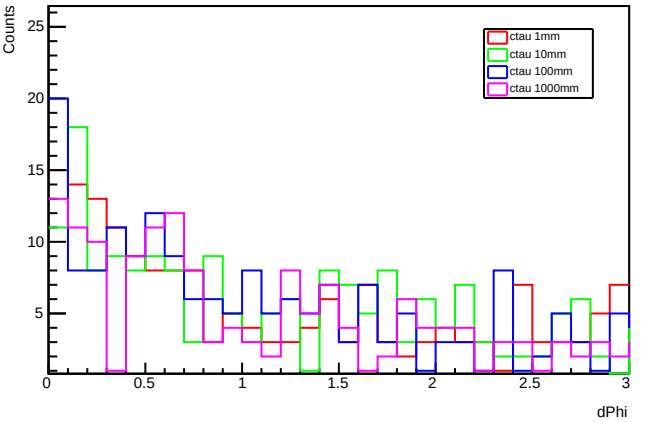
dPhi: reco leading mu and subleading mu: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4



dPhi: reco leading mu and subleading mu: no cuts



dPhi: reco leading mu and subleading mu: n_jet >=1, j1pt > 30 GeV



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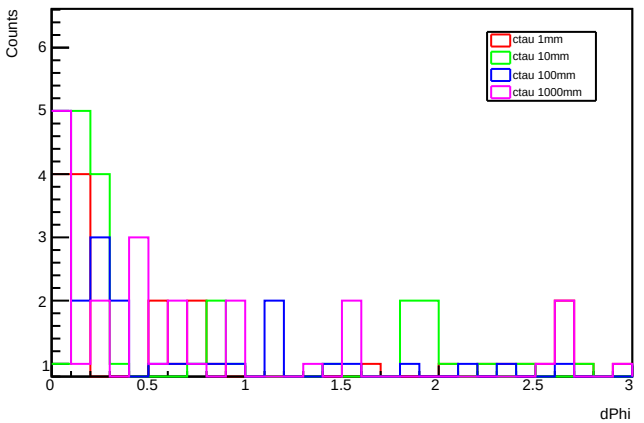
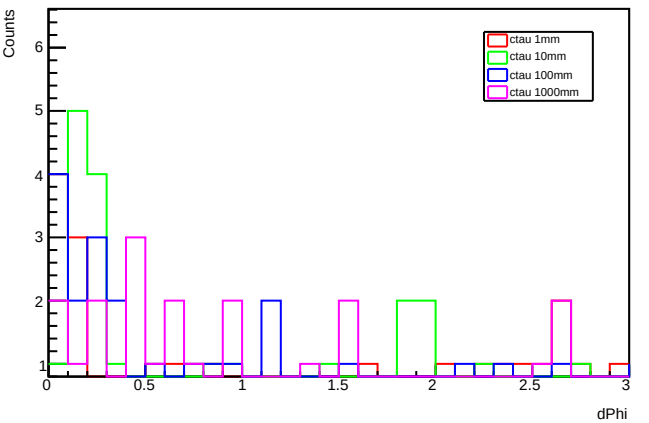
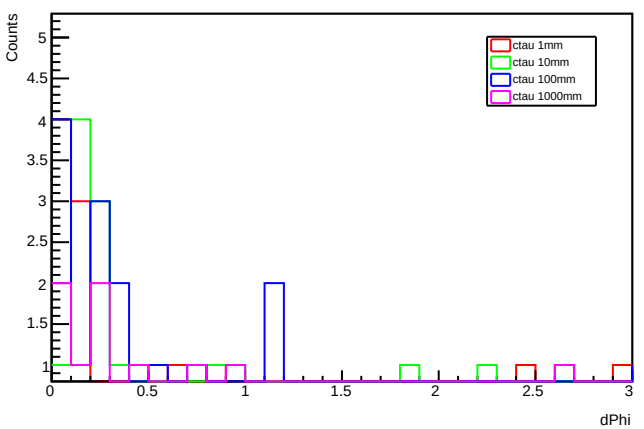


dPhi: reco leading mu and subleading mu: j1pt >120, at most 2 jets w/ pt >30 GeV



dPhi: reco leading mu and subleading mu: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4



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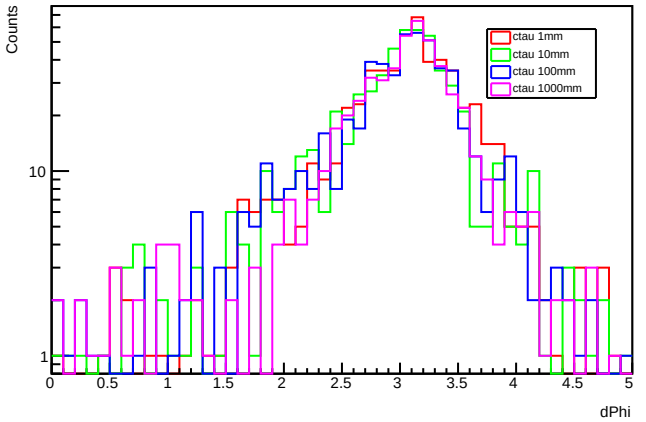
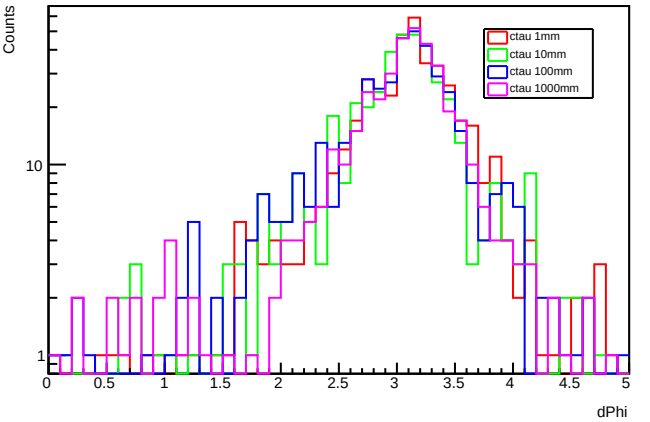
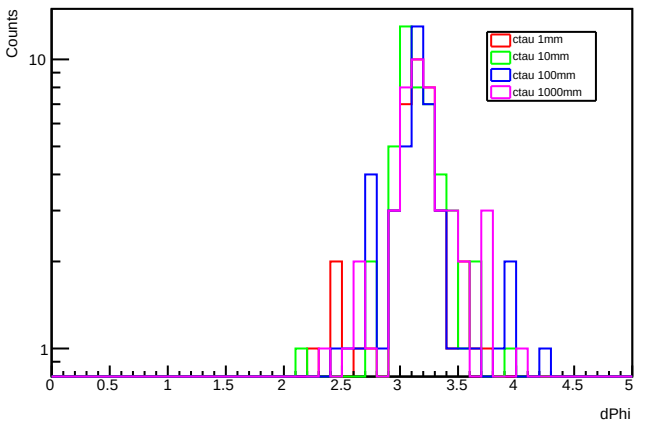


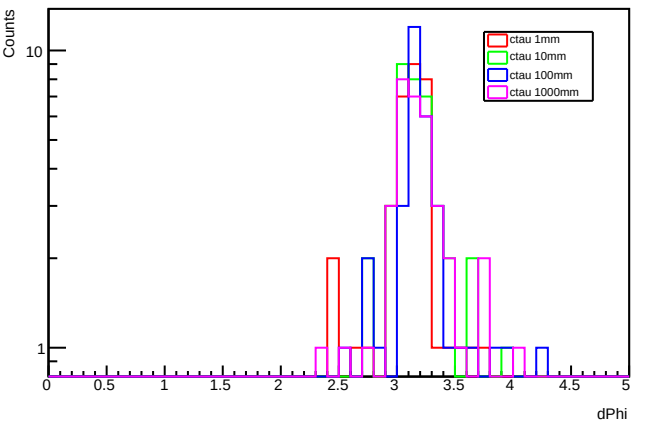
dPhi: reco MET and leading jet: n_jet >=1, j1pt > 30 GeV



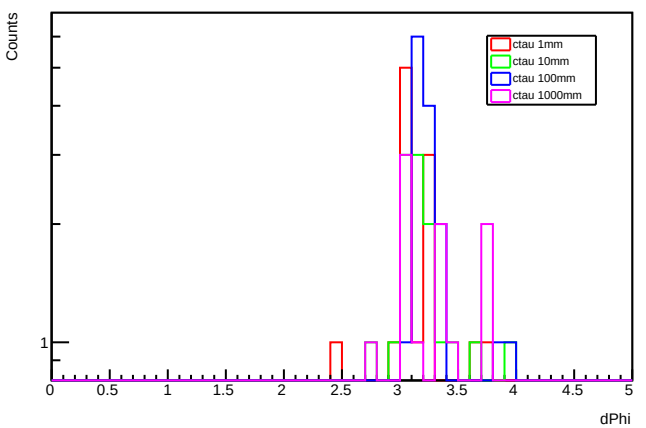
dPhi: reco MET and leading jet: MET > 120 GeV



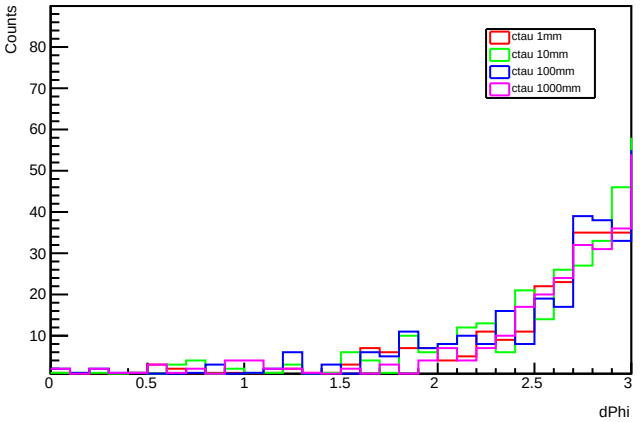
dPhi: reco MET and leading jet: j1pt >120, at most 2 jets w/ pt >30 GeV



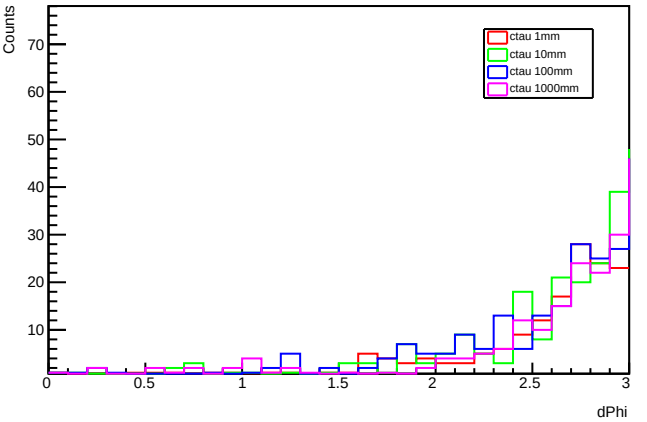
dPhi: reco MET and leading jet: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4



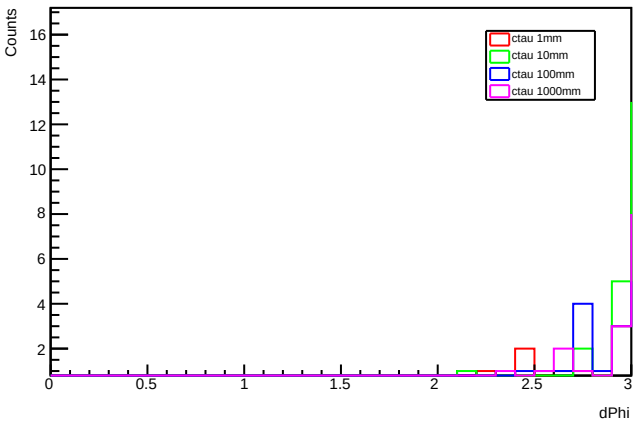
dPhi: reco MET and leading jet: no cuts



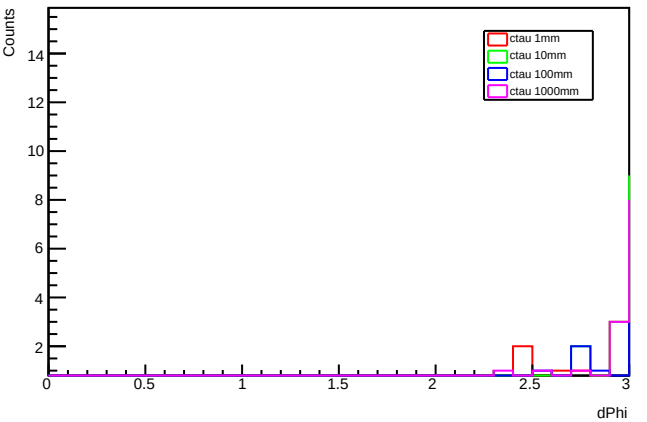
dPhi: reco MET and leading jet: n_jet >=1, j1pt > 30 GeV



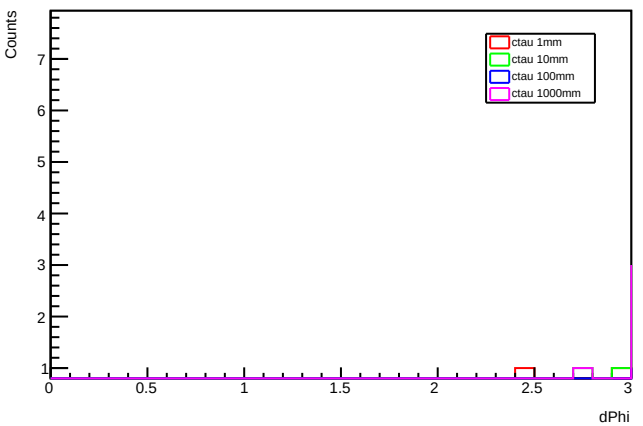
dPhi: reco MET and leading jet: MET > 120 GeV



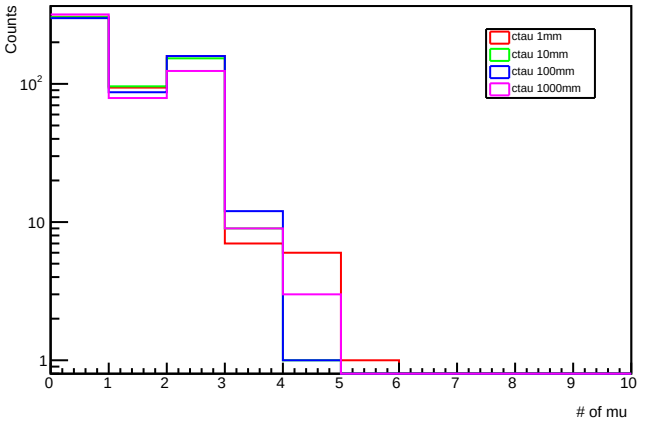
dPhi: reco MET and leading jet: j1pt >120, at most 2 jets w/ pt >30 GeV



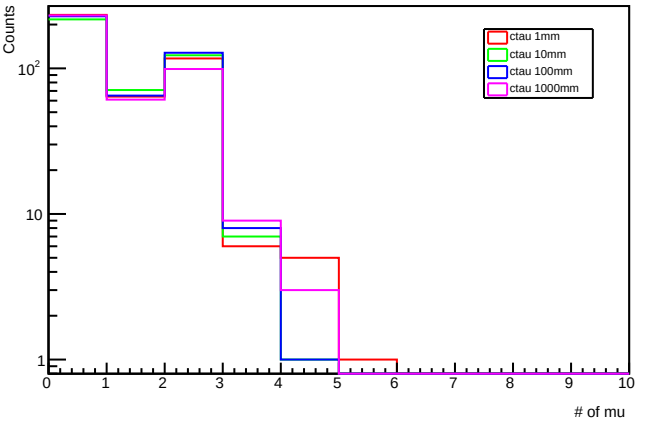
dPhi: reco MET and leading jet: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4



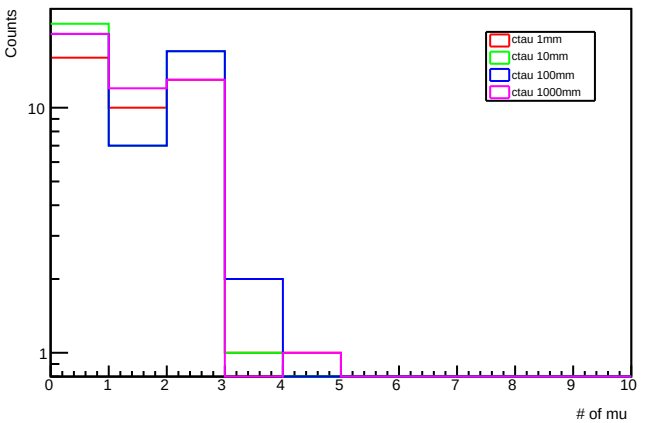
reco number of mu: no cuts



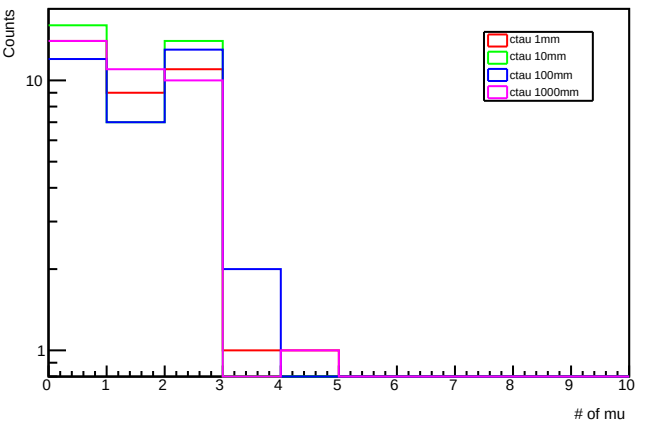
reco number of mu: n_jet >=1, j1pt > 30 GeV



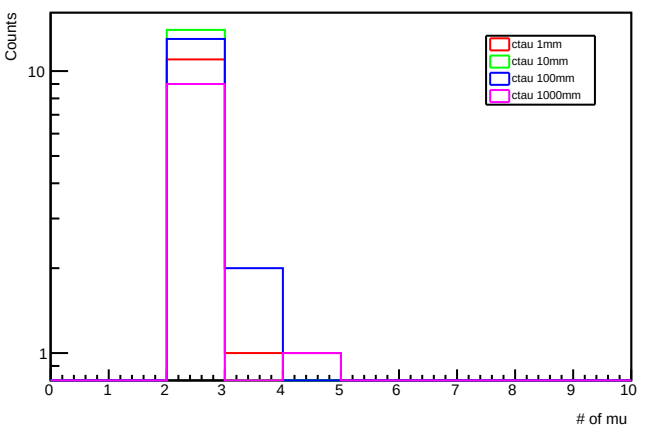
reco number of mu: MET > 120 GeV



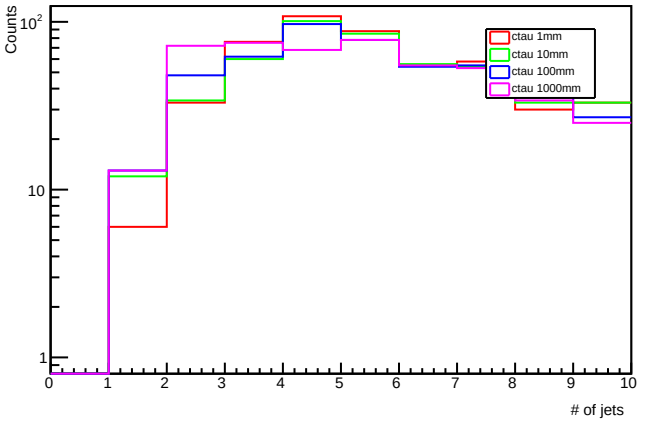
reco number of mu: j1pt >120, at most 2 jets w/ pt >30 GeV



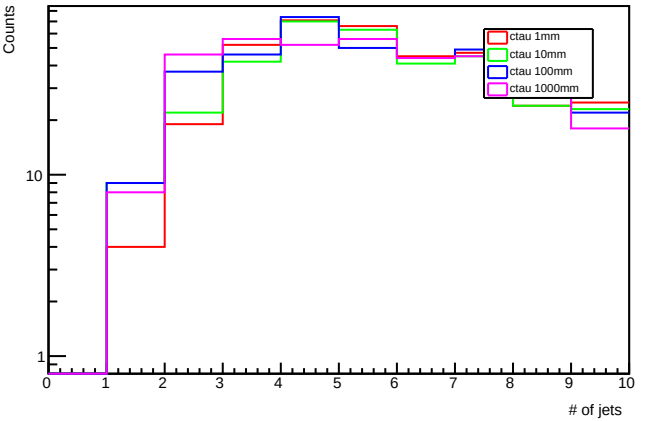
reco number of mu: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4



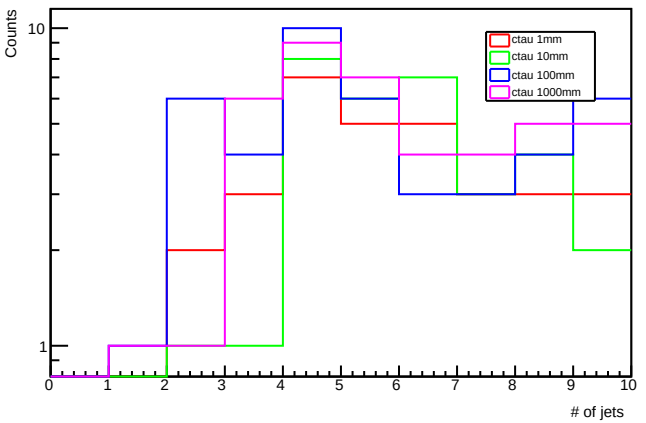
reco number of jets: no cuts



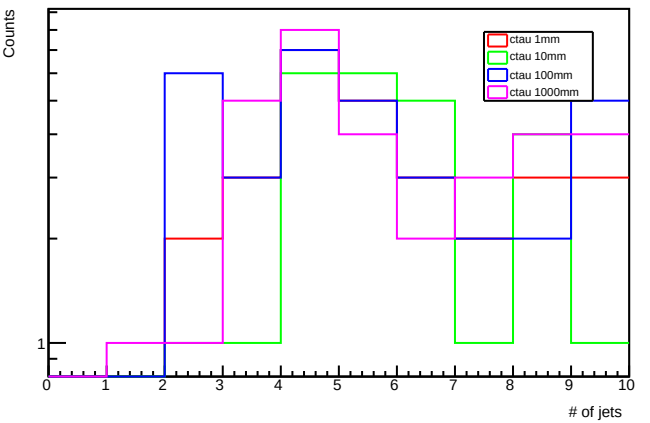
reco number of jets: n_jet >=1, j1pt > 30 GeV



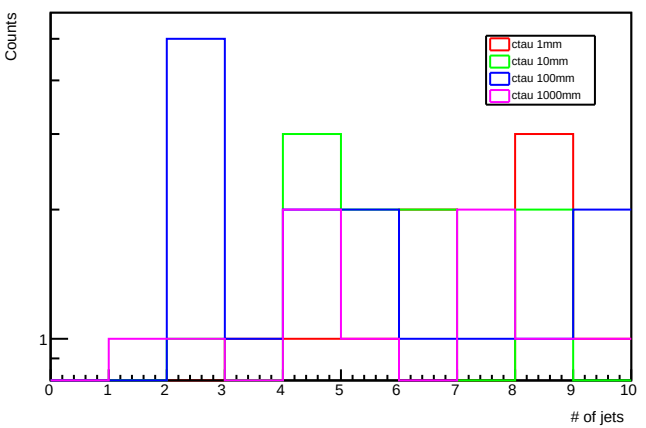
reco number of jets: MET > 120 GeV

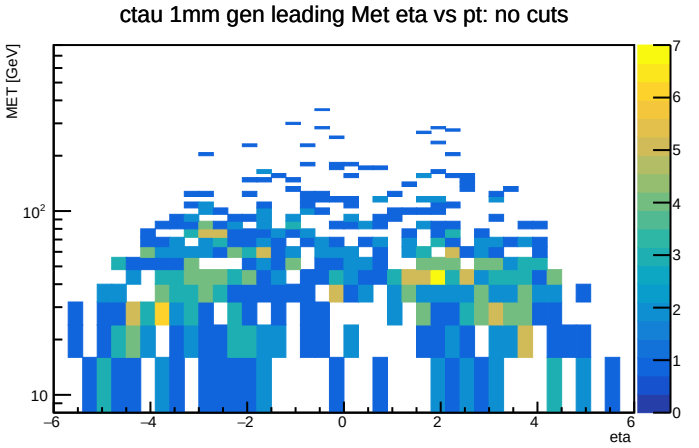


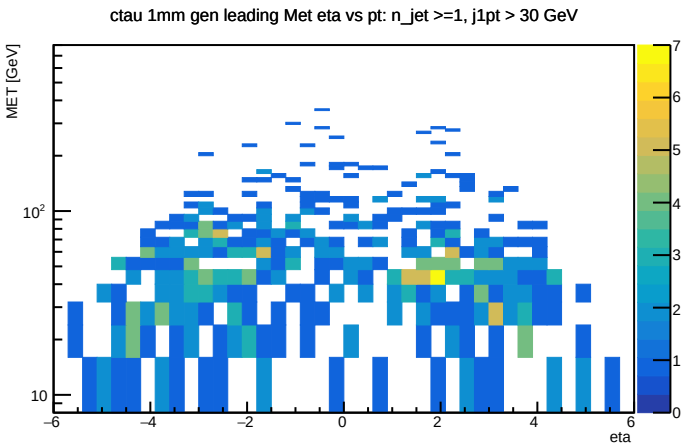
reco number of jets: j1pt >120, at most 2 jets w/ pt >30 GeV

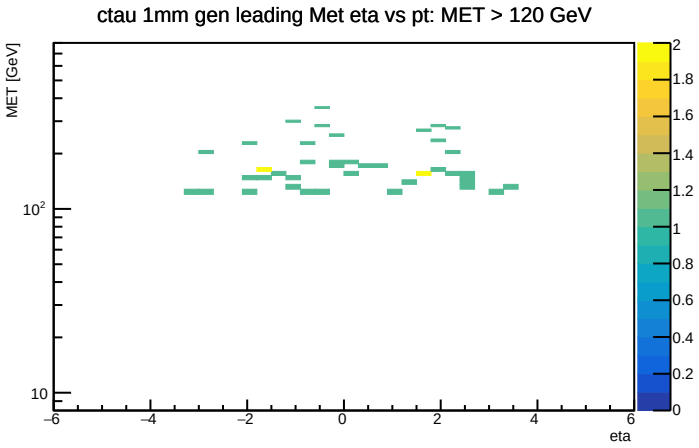


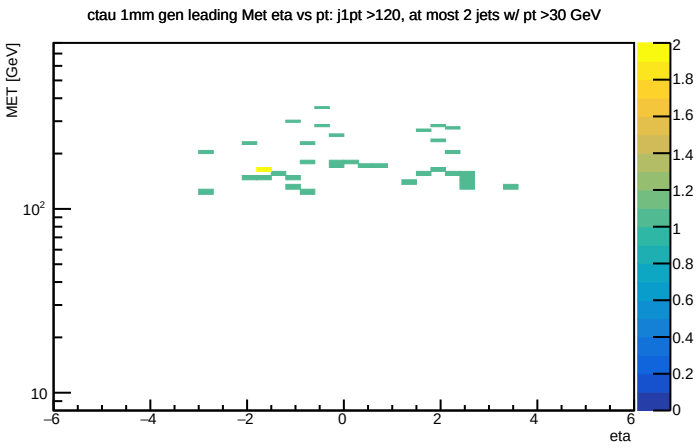
reco number of jets: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4

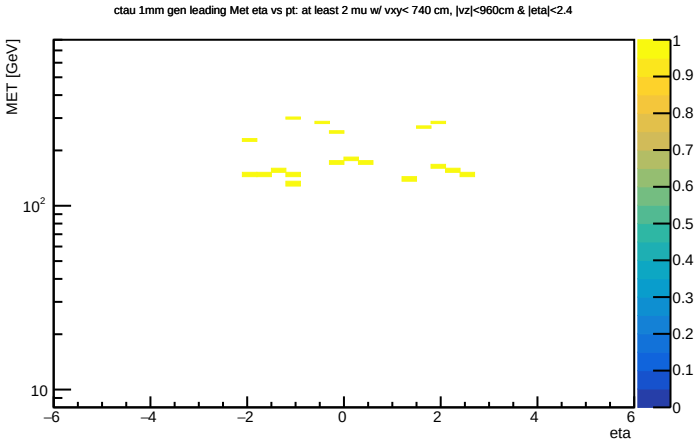


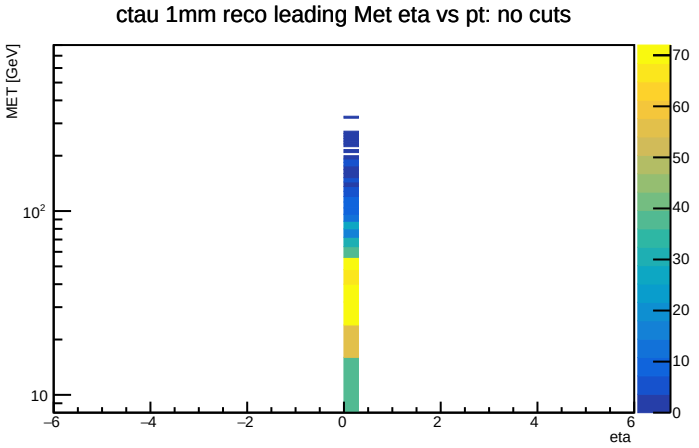

ctau 1mm gen leading Met eta vs pt: no cuts
MET [GeV]
eta

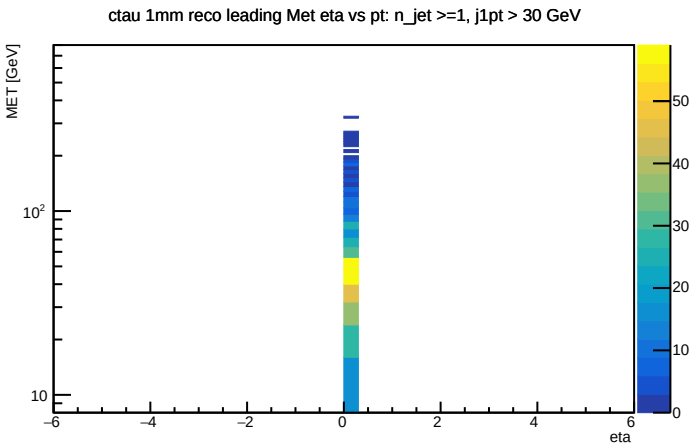

ctau 1mm gen leading Met eta vs pt: n_jet >=1, j1pt > 30 GeV
MET [GeV]
eta

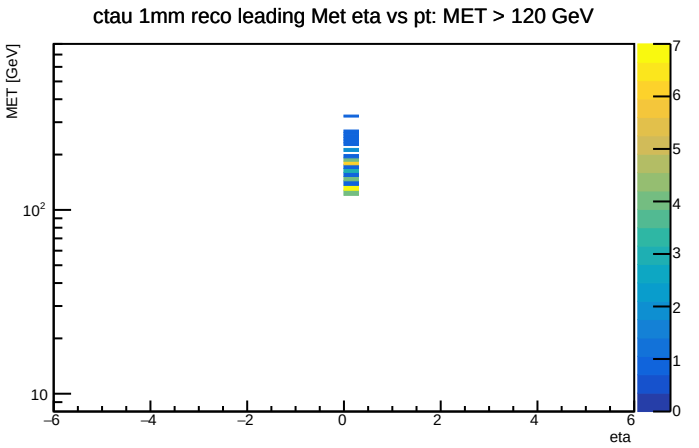

ctau 1mm gen leading Met eta vs pt: MET > 120 GeV
MET [GeV]
eta


ctau 1mm gen leading Met eta vs pt: j1pt >120, at most 2 jets w/ pt >30 GeV
MET [GeV]
eta


ctau 1mm gen leading Met eta vs pt: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4
MET [GeV]
eta


ctau 1mm reco leading Met eta vs pt: no cuts
MET [GeV]
eta


ctau 1mm reco leading Met eta vs pt: n_jet >=1, j1pt > 30 GeV
MET [GeV]
eta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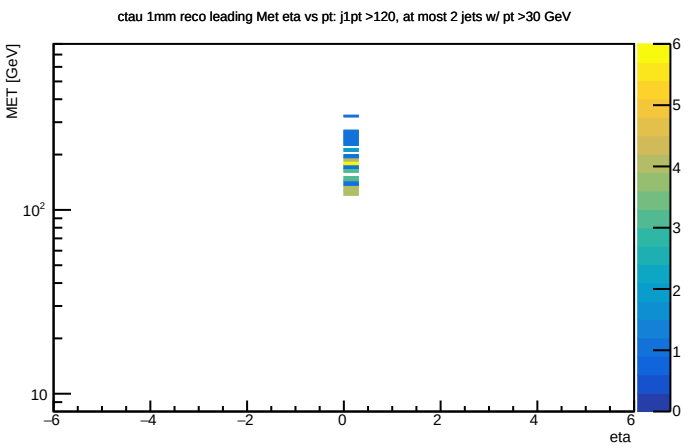
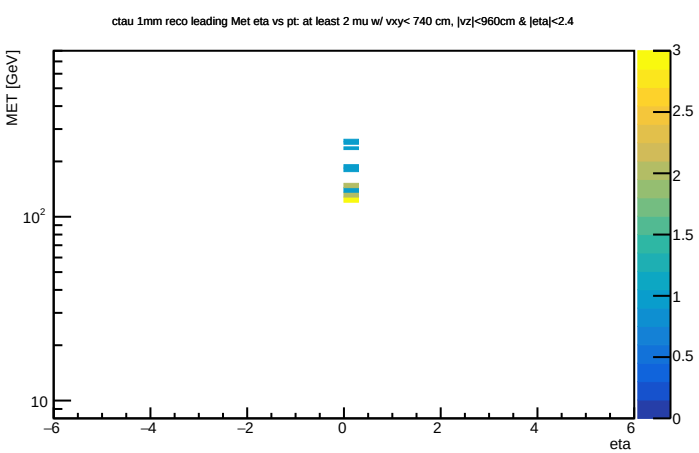
MET [GeV]
eta


ctau 1mm reco leading Met eta vs pt: j1pt >120, at most 2 jets w/ pt >30 GeV
MET [GeV]
eta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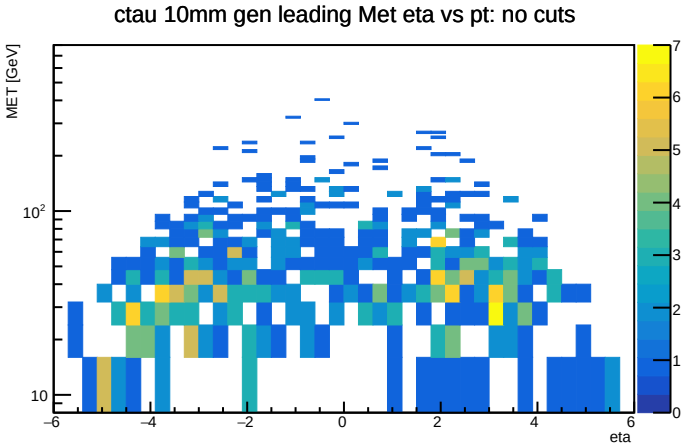
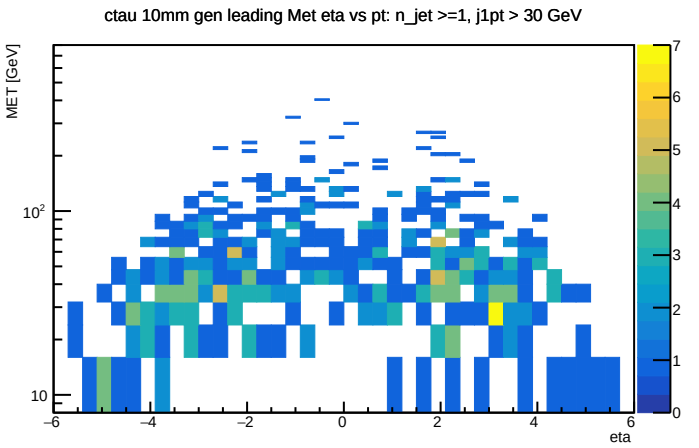
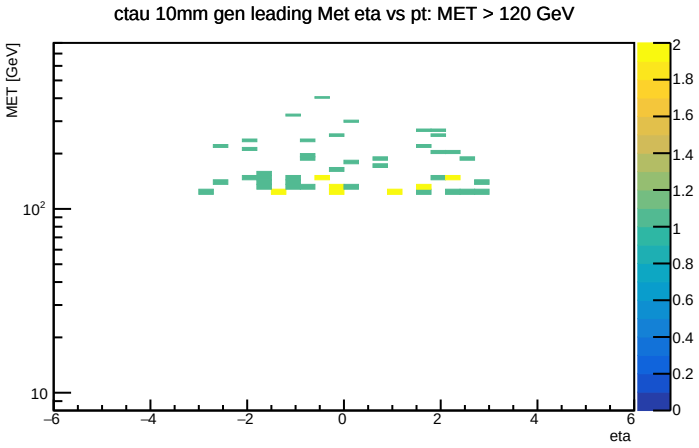
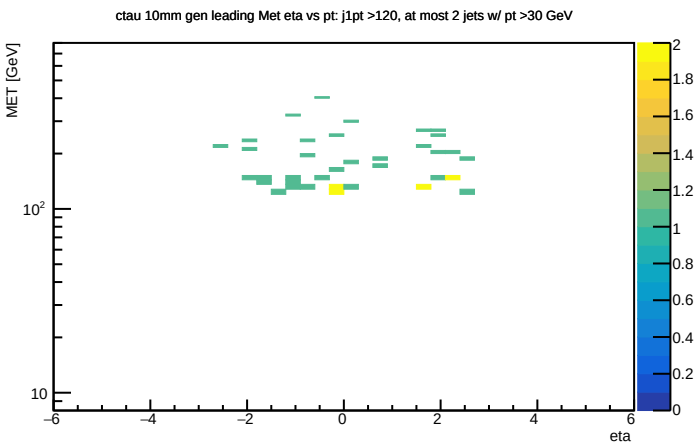
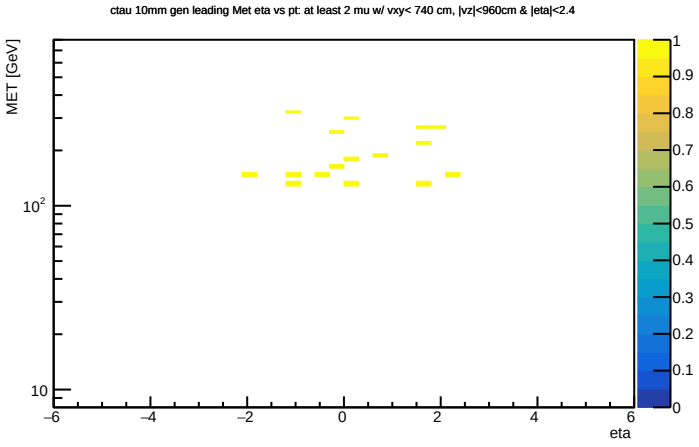
MET [GeV]
eta


ctau 10mm gen leading Met eta vs pt: no cuts
MET [GeV]
eta

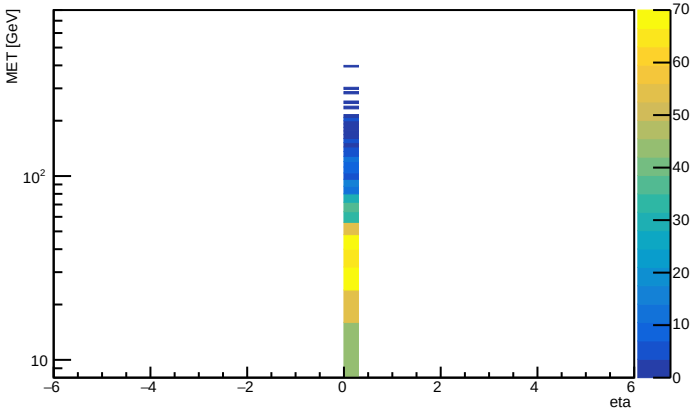

ctau 10mm gen leading Met eta vs pt: n_jet >=1, j1pt > 30 GeV
MET [GeV]
eta


ctau 10mm gen leading Met eta vs pt: MET > 120 GeV
MET [GeV]
eta

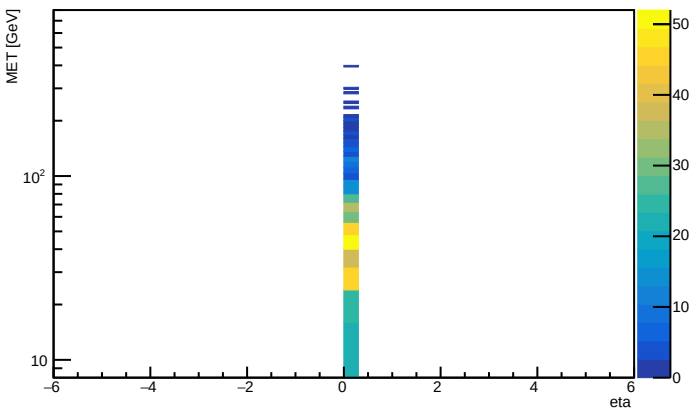

ctau 10mm gen leading Met eta vs pt: j1pt >120, at most 2 jets w/ pt >30 GeV
MET [GeV]
eta


ctau 10mm gen leading Met eta vs pt: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4
MET [GeV]
eta

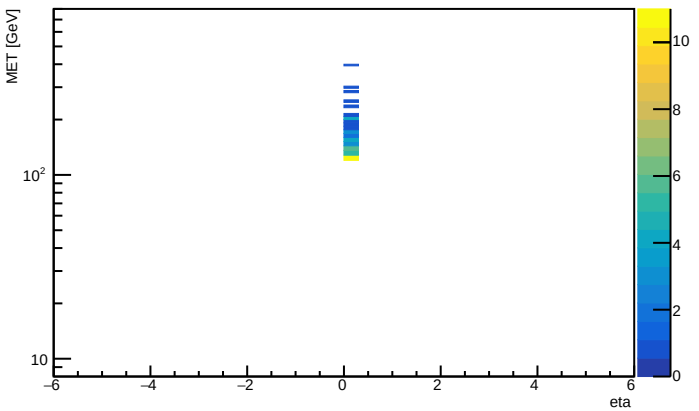
ctau 10mm reco leading Met eta vs pt: no cuts



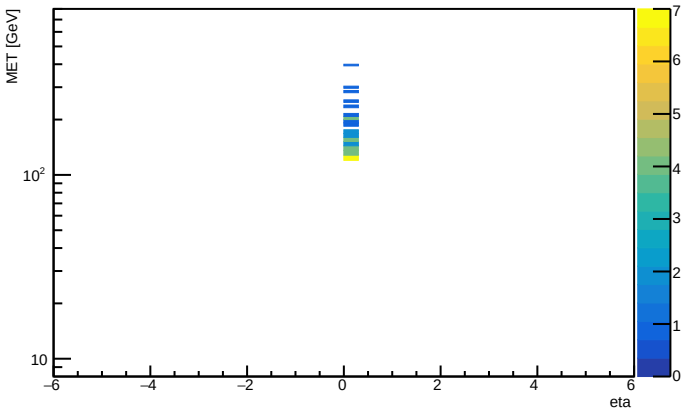
ctau 10mm reco leading Met eta vs pt: n_jet >=1, j1pt > 30 GeV



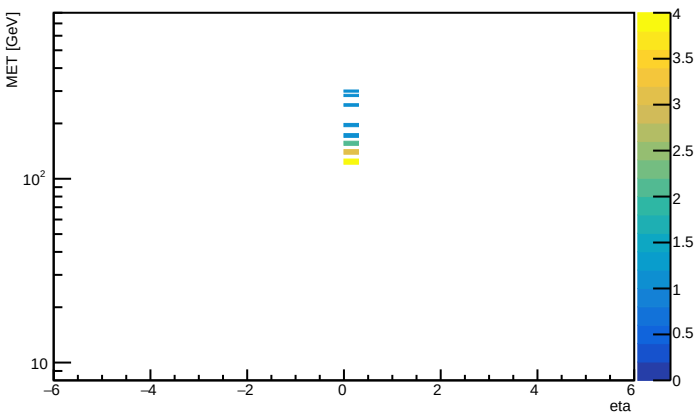
ctau 10mm reco leading Met eta vs pt: MET > 120 GeV



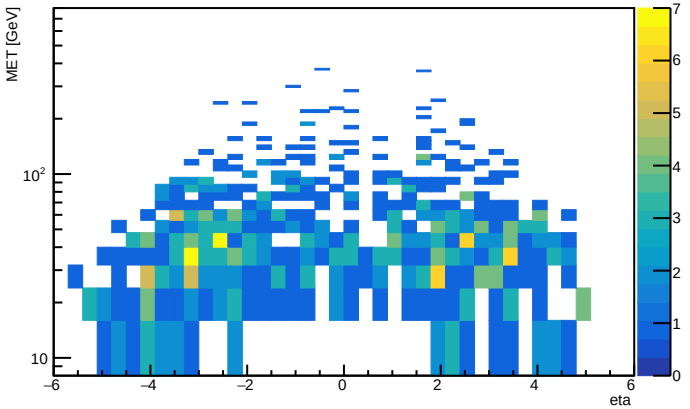
ctau 10mm reco leading Met eta vs pt: j1pt >120, at most 2 jets w/ pt >30 GeV



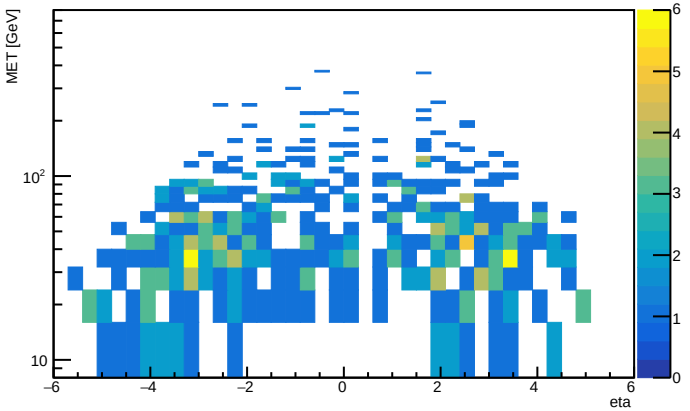
ctau 10mm reco leading Met eta vs pt: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4



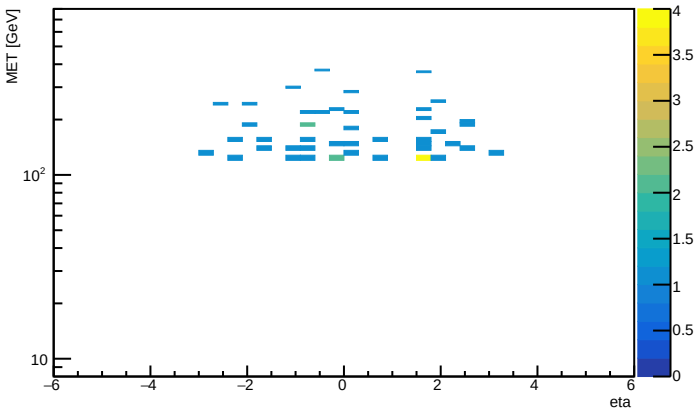
ctau 100mm gen leading Met eta vs pt: no cuts



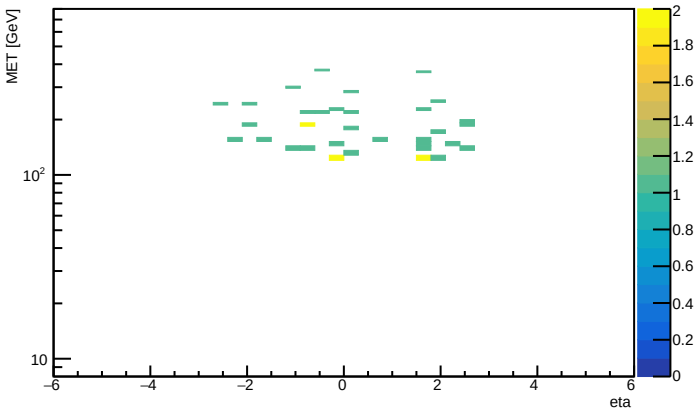
ctau 100mm gen leading Met eta vs pt: n_jet >=1, j1pt > 30 GeV



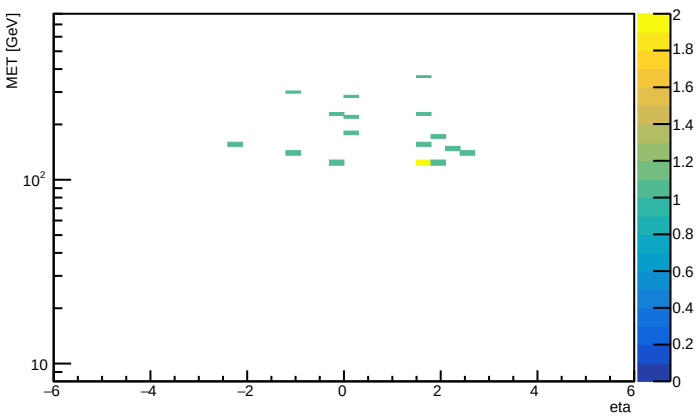
ctau 100mm gen leading Met eta vs pt: MET > 120 GeV



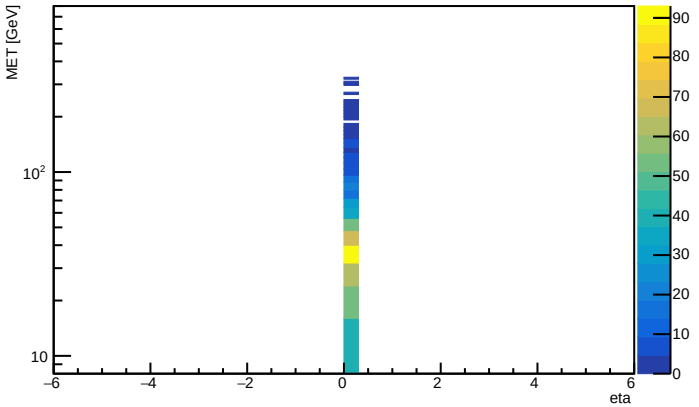
ctau 100mm gen leading Met eta vs pt: j1pt >120, at most 2 jets w/ pt >30 GeV



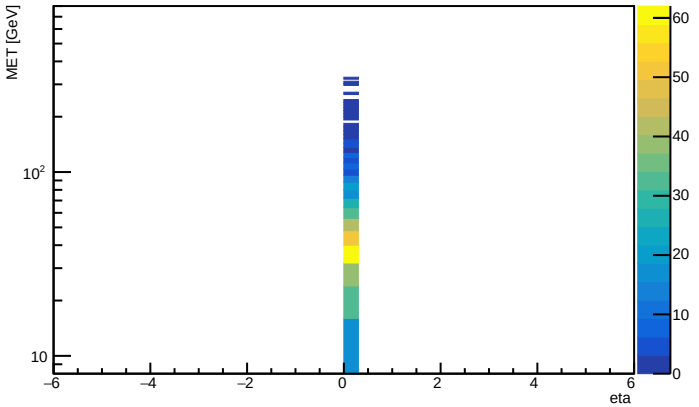
ctau 100mm gen leading Met eta vs pt: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4



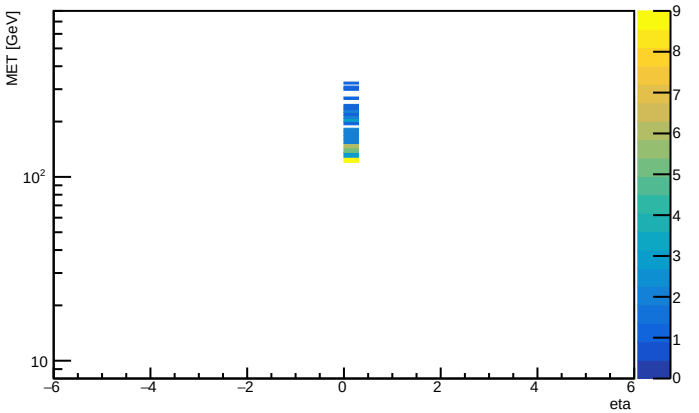
ctau 100mm reco leading Met eta vs pt: no cuts



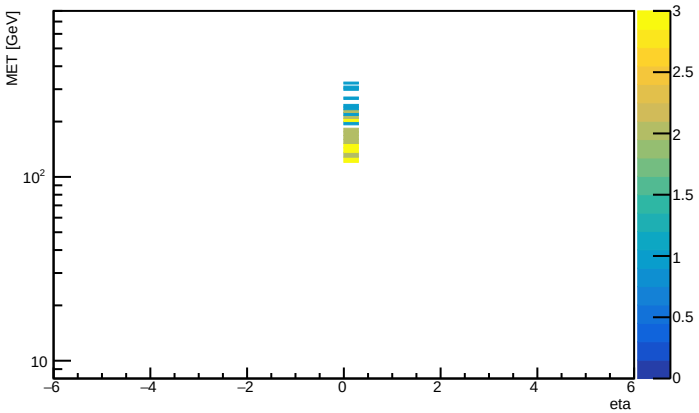
ctau 100mm reco leading Met eta vs pt: n_jet >=1, j1pt > 30 GeV



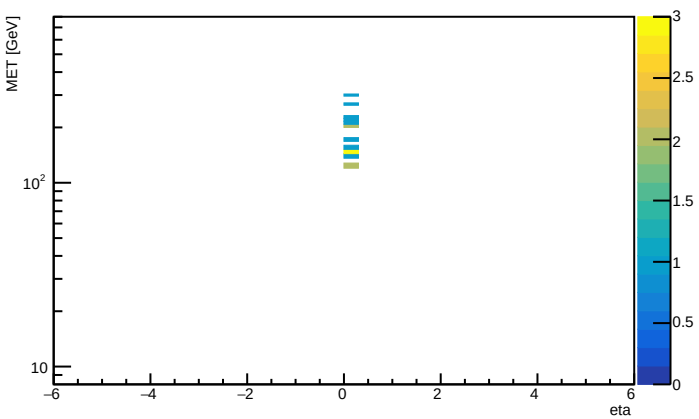
ctau 100mm reco leading Met eta vs pt: MET > 120 GeV

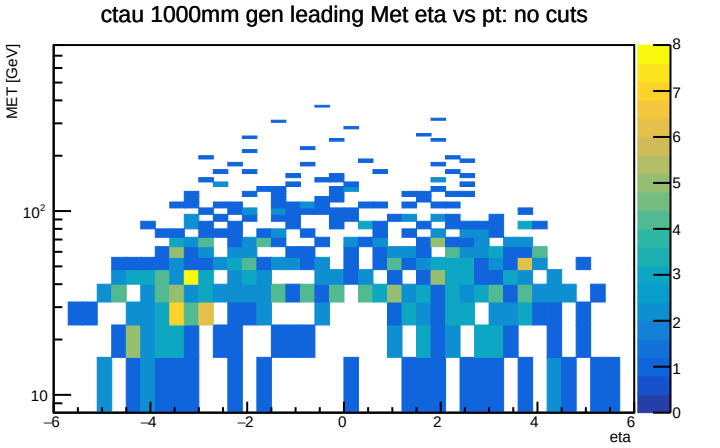


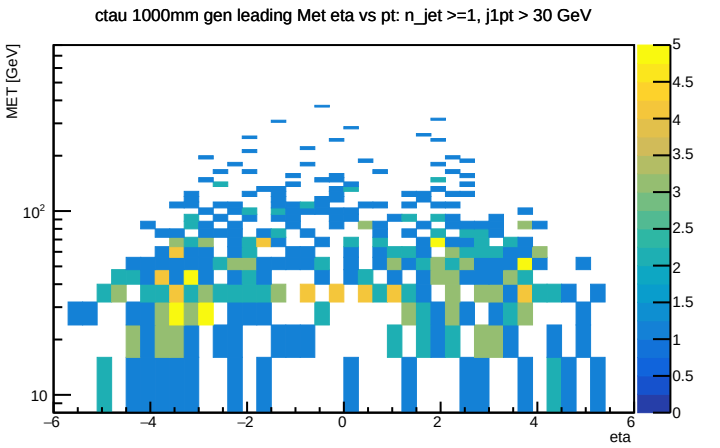
ctau 100mm reco leading Met eta vs pt: j1pt >120, at most 2 jets w/ pt >30 GeV

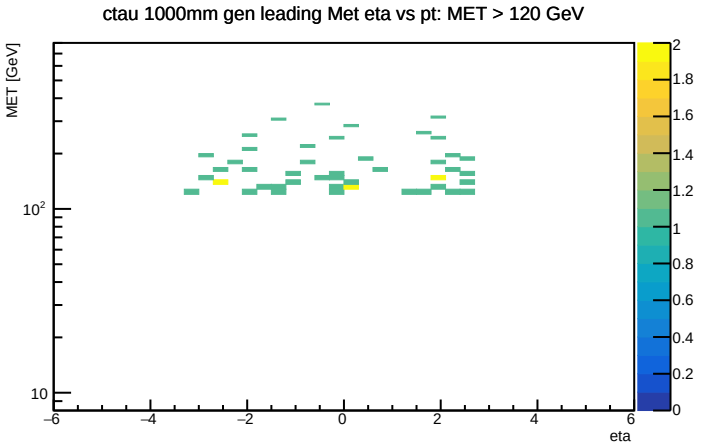


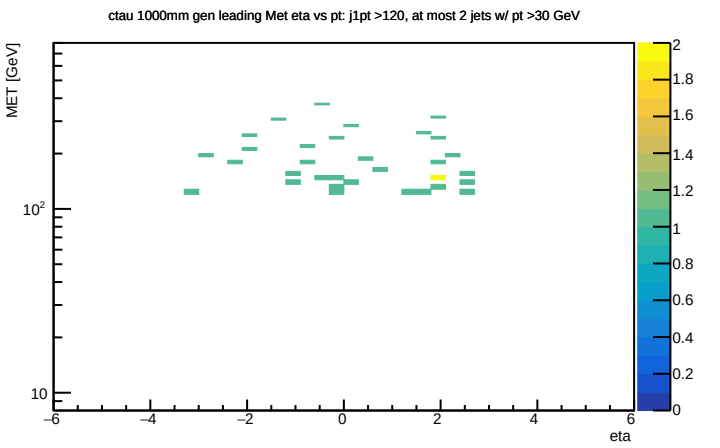
ctau 100mm reco leading Met eta vs pt: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4

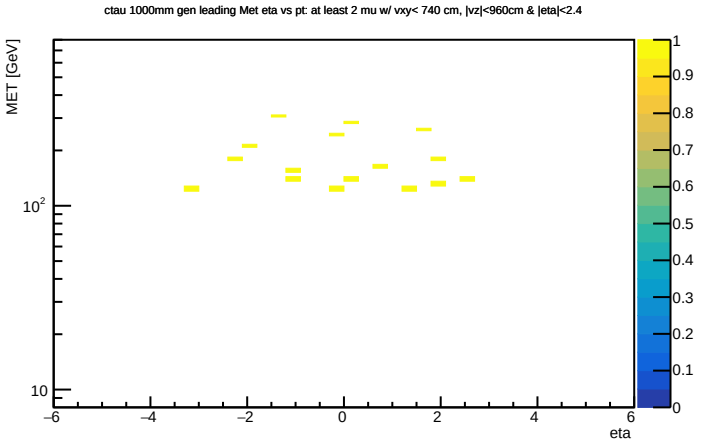


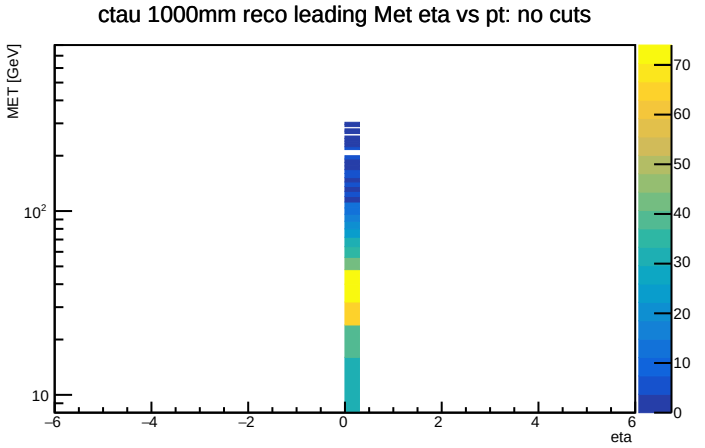

ctau 1000mm gen leading Met eta vs pt: no cuts
MET [GeV]
eta

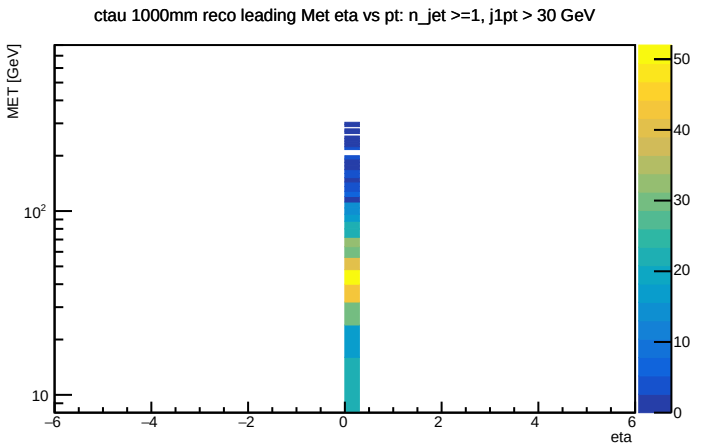

ctau 1000mm gen leading Met eta vs pt: n_jet >=1, j1pt > 30 GeV
MET [GeV]
eta

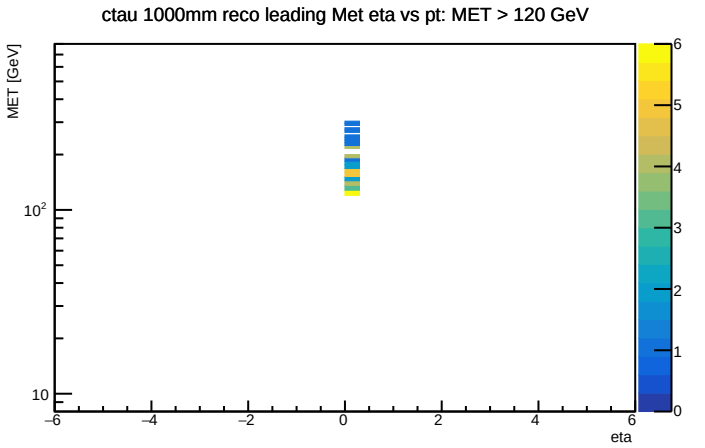

ctau 1000mm gen leading Met eta vs pt: MET > 120 GeV
MET [GeV]
eta

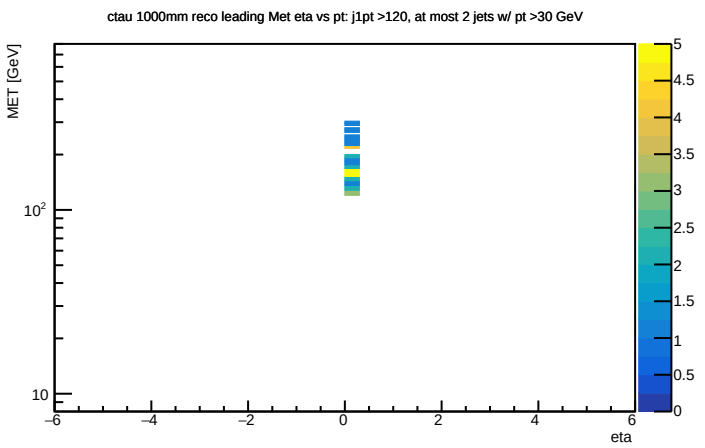

ctau 1000mm gen leading Met eta vs pt: j1pt >120, at most 2 jets w/ pt >30 GeV
MET [GeV]
eta

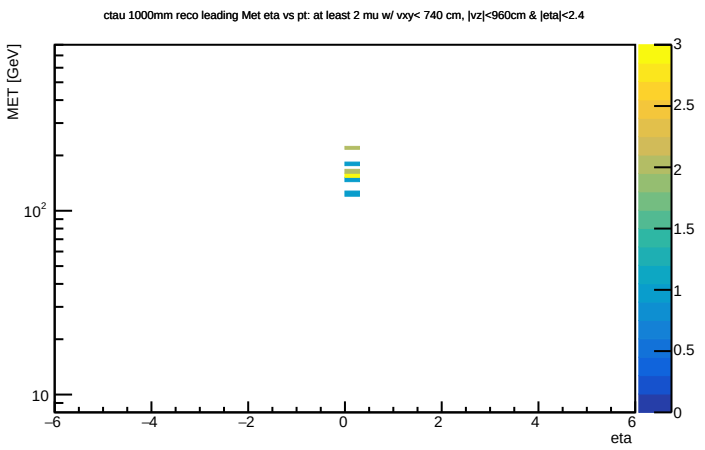

ctau 1000mm gen leading Met eta vs pt: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4
MET [GeV]
eta


ctau 1000mm reco leading Met eta vs pt: no cuts
MET [GeV]
eta

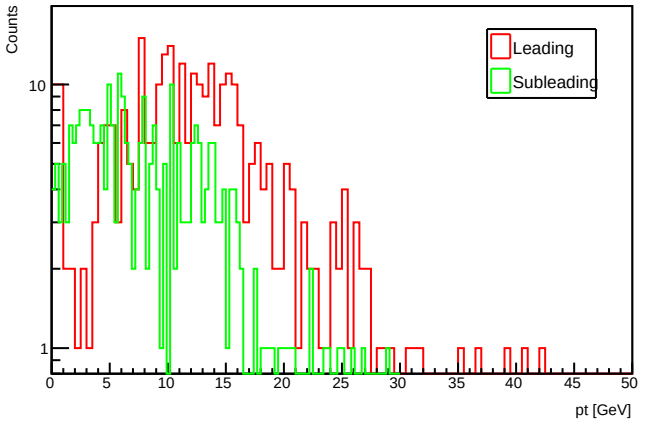

ctau 1000mm reco leading Met eta vs pt: n_jet >=1, j1pt > 30 GeV
MET [GeV]
eta


ctau 1000mm reco leading Met eta vs pt: MET > 120 GeV
MET [GeV]
eta

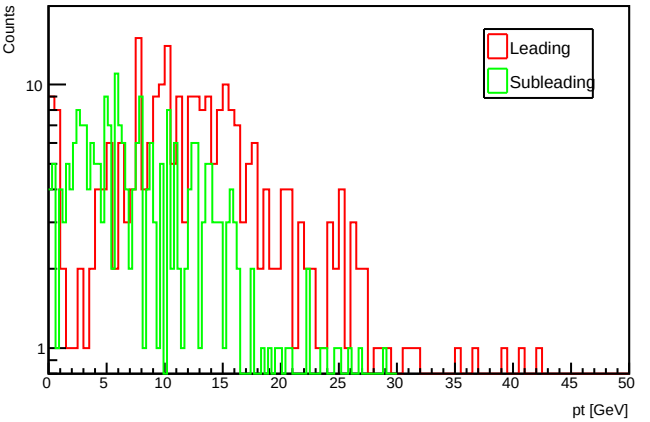

ctau 1000mm reco leading Met eta vs pt: j1pt >120, at most 2 jets w/ pt >30 GeV
MET [GeV]
eta


ctau 1000mm reco leading Met eta vs pt: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4
MET [GeV]
eta

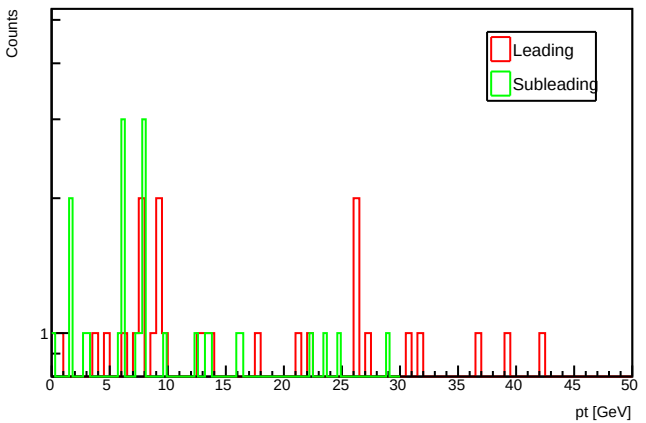
ctau 1mm leading vs subleading Mu pt: no cuts



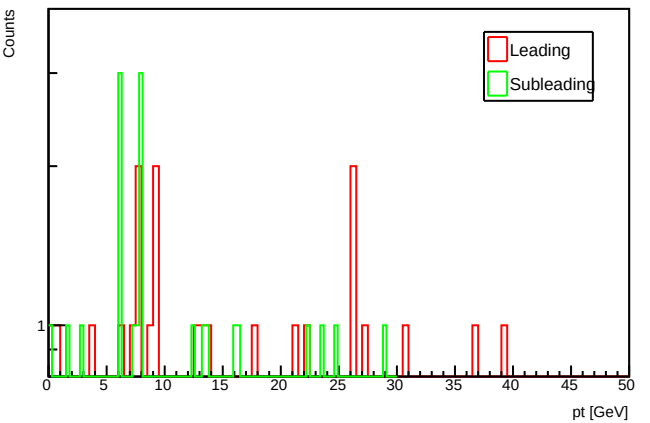
ctau 1mm leading vs subleading Mu pt: n_jet >=1, j1pt > 30 GeV



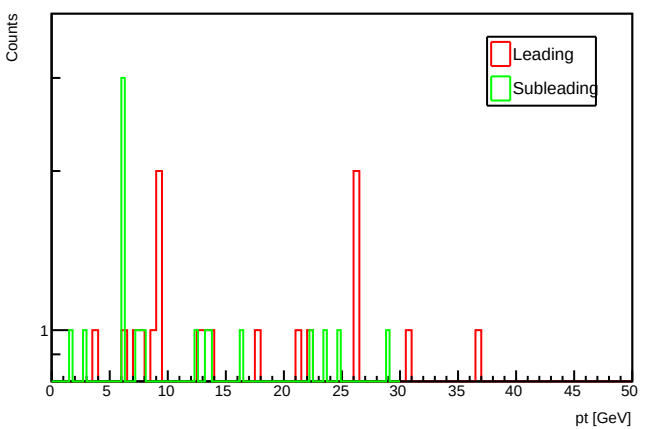
ctau 1mm leading vs subleading Mu pt: MET > 120 GeV



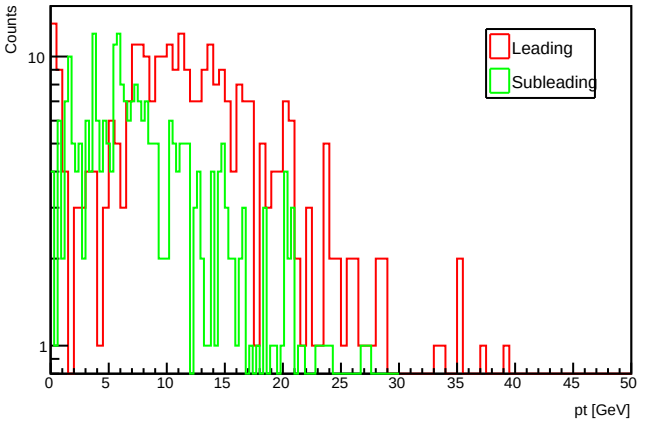
ctau 1mm leading vs subleading Mu pt: j1pt >120, at most 2 jets w/ pt >30 GeV



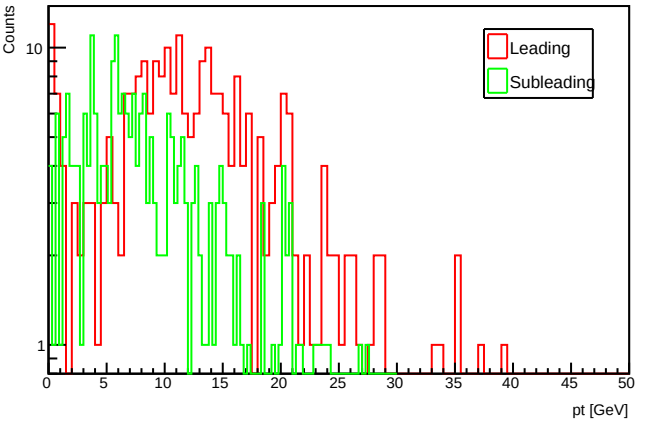
ctau 1mm leading vs subleading Mu pt: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4



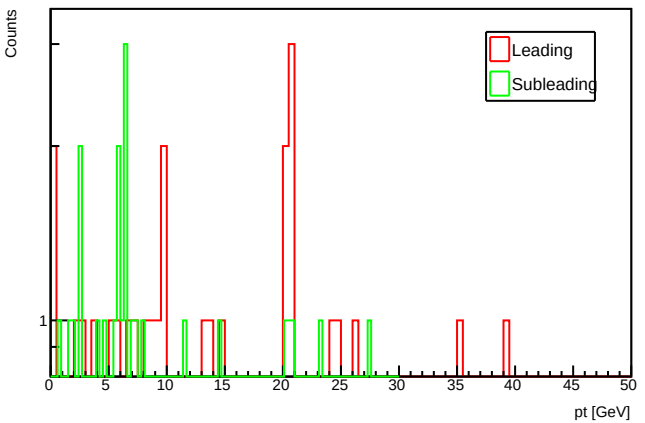
ctau 10mm leading vs subleading Mu pt: no cuts



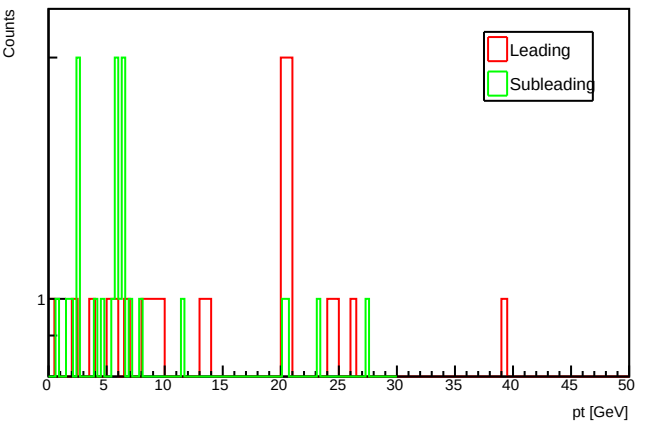
ctau 10mm leading vs subleading Mu pt: n_jet >=1, j1pt > 30 GeV



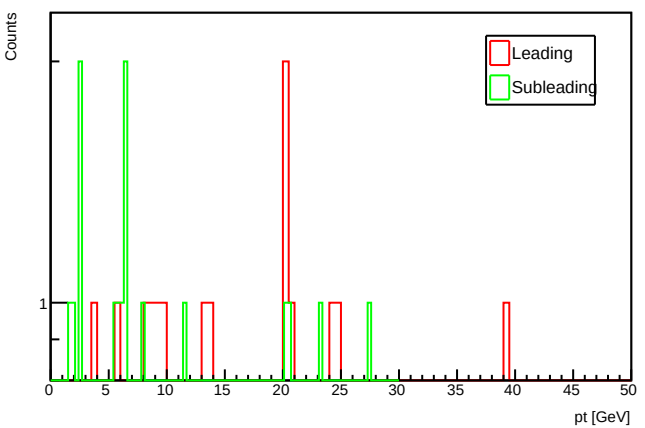
ctau 10mm leading vs subleading Mu pt: MET > 120 GeV



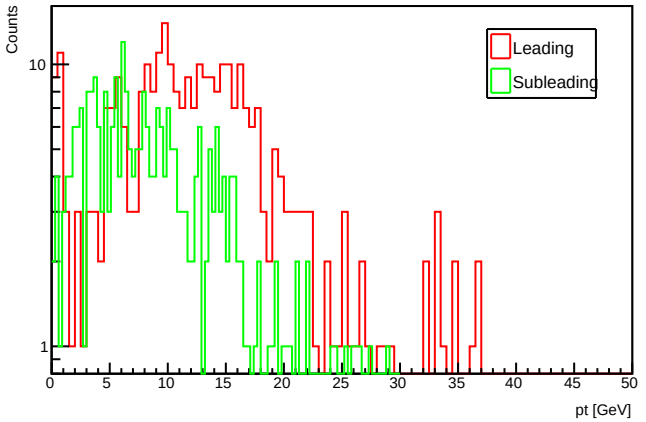
ctau 10mm leading vs subleading Mu pt: j1pt >120, at most 2 jets w/ pt >30 GeV



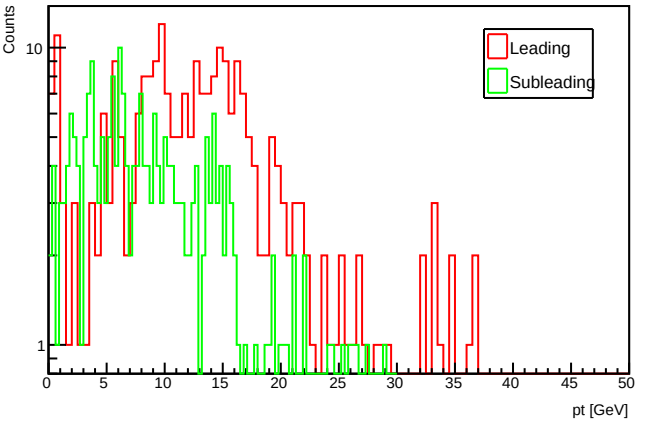
ctau 10mm leading vs subleading Mu pt: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4



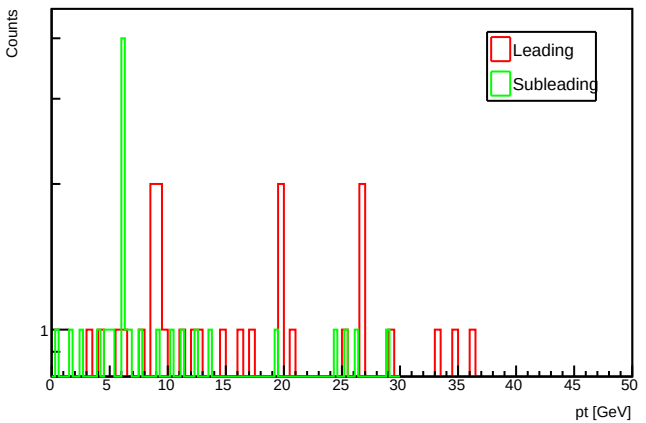
ctau 100mm leading vs subleading Mu pt: no cuts



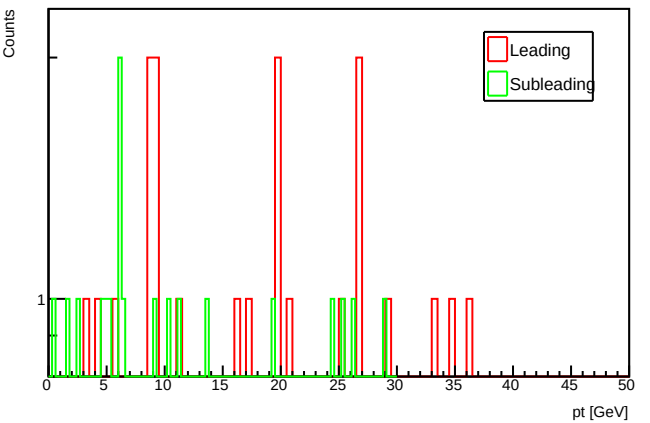
ctau 100mm leading vs subleading Mu pt: n_jet >=1, j1pt > 30 GeV



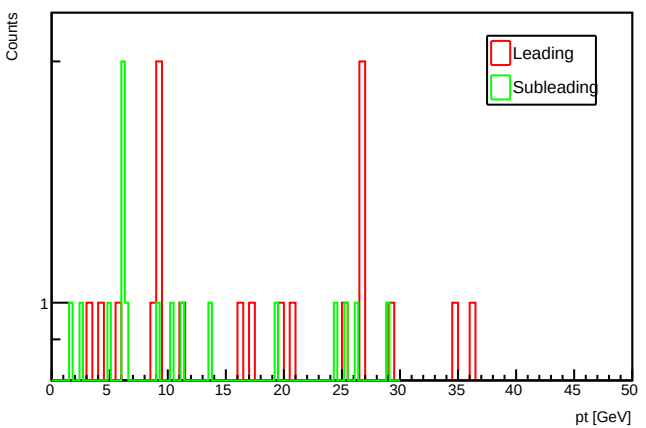
ctau 100mm leading vs subleading Mu pt: MET > 120 GeV



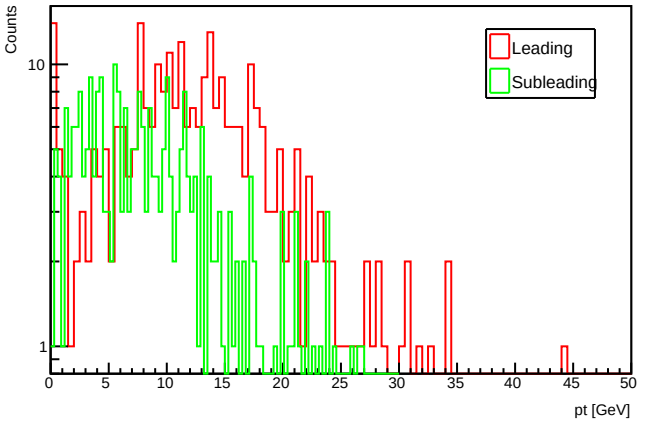
ctau 100mm leading vs subleading Mu pt: j1pt >120, at most 2 jets w/ pt >30 GeV



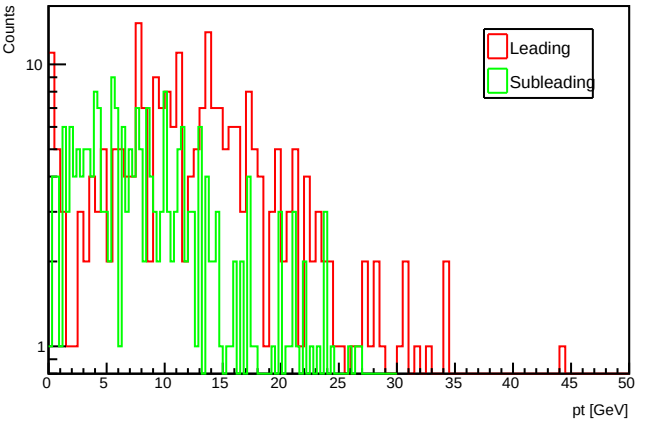
ctau 100mm leading vs subleading Mu pt: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4



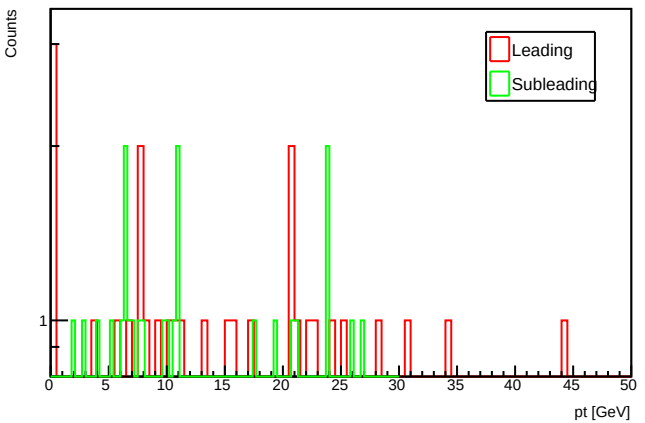
ctau 1000mm leading vs subleading Mu pt: no cuts



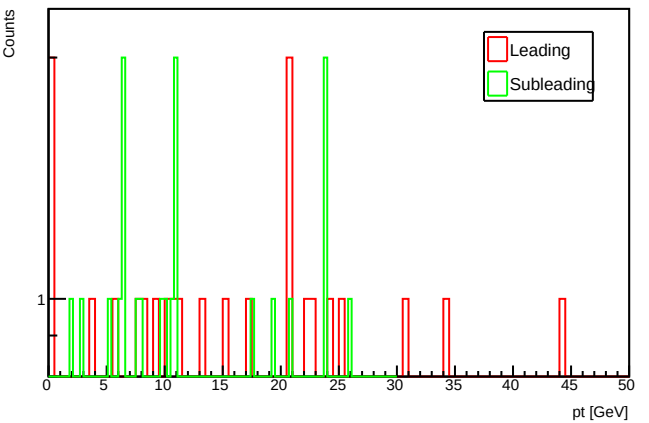
ctau 1000mm leading vs subleading Mu pt: n_jet >=1, j1pt > 30 GeV



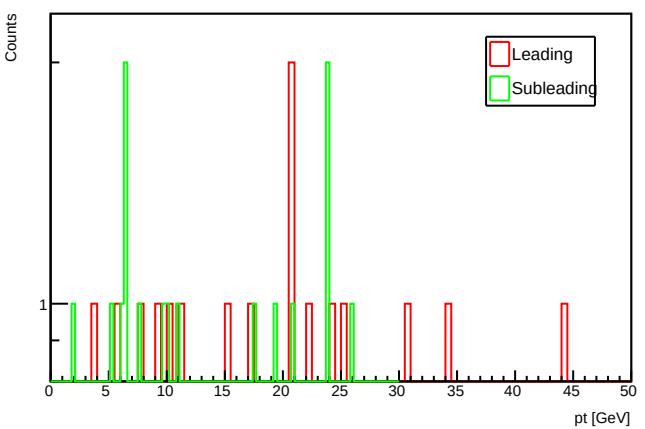
ctau 1000mm leading vs subleading Mu pt: MET > 120 GeV



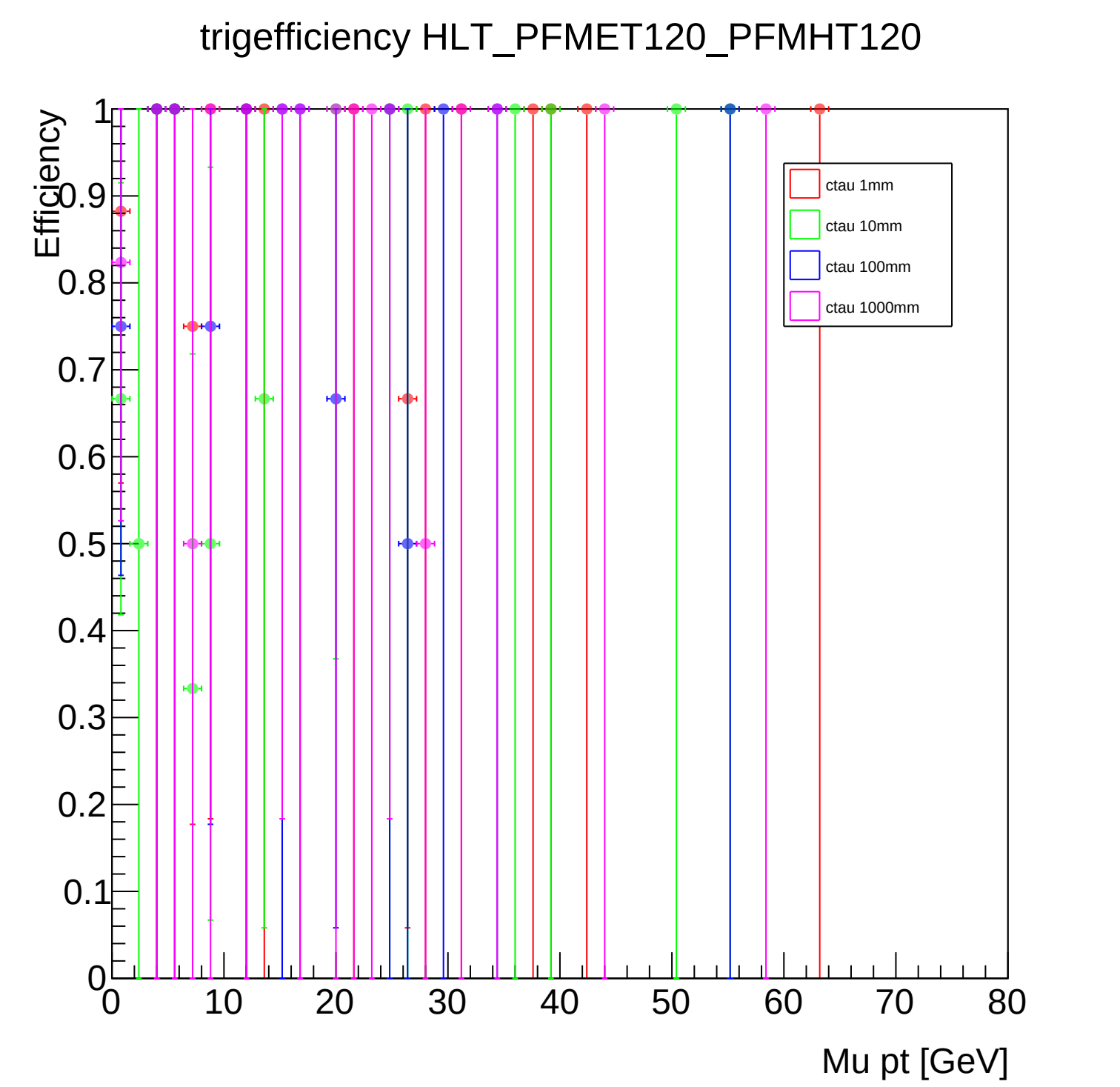
ctau 1000mm leading vs subleading Mu pt: j1pt >120, at most 2 jets w/ pt >30 GeV

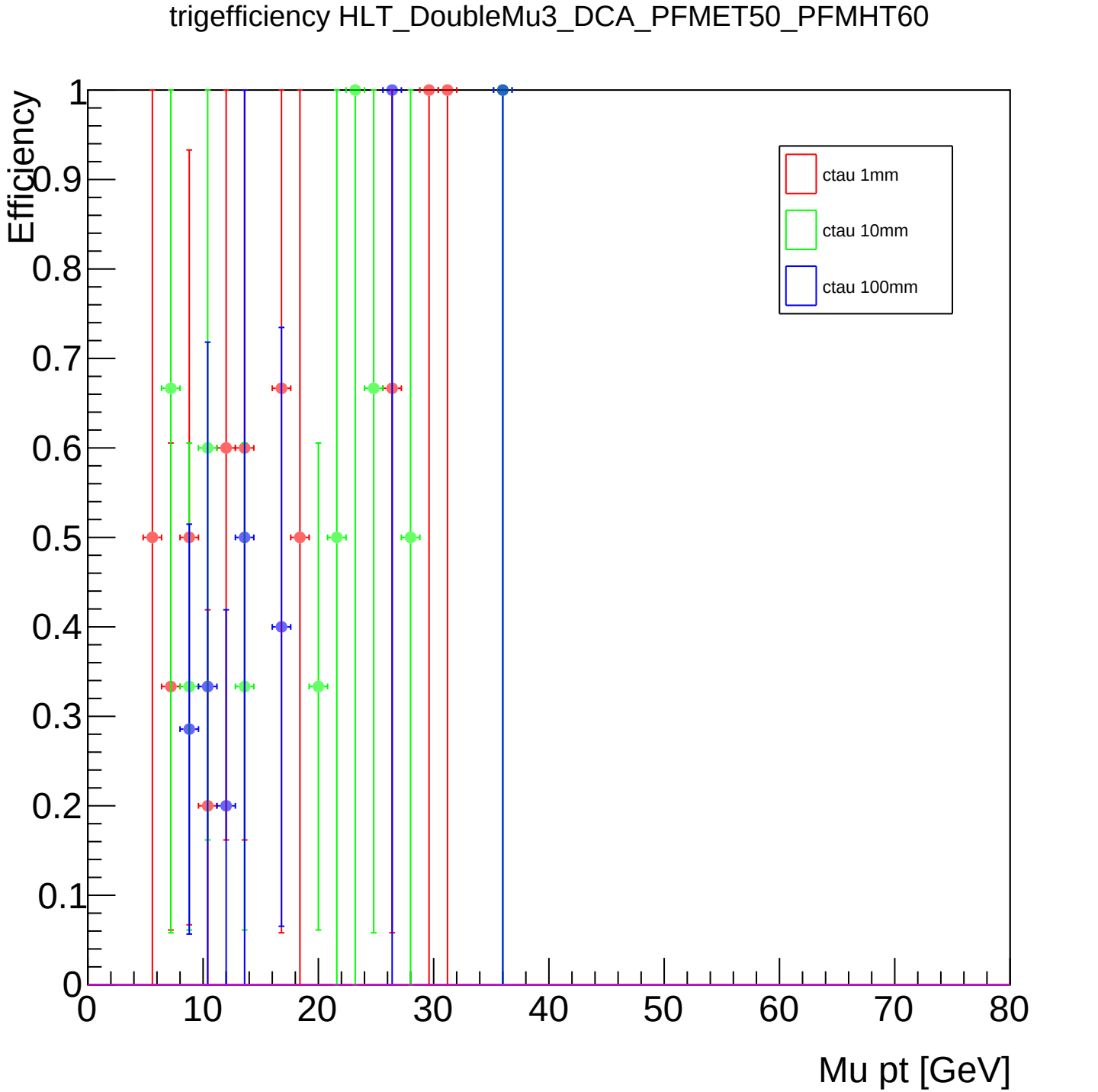


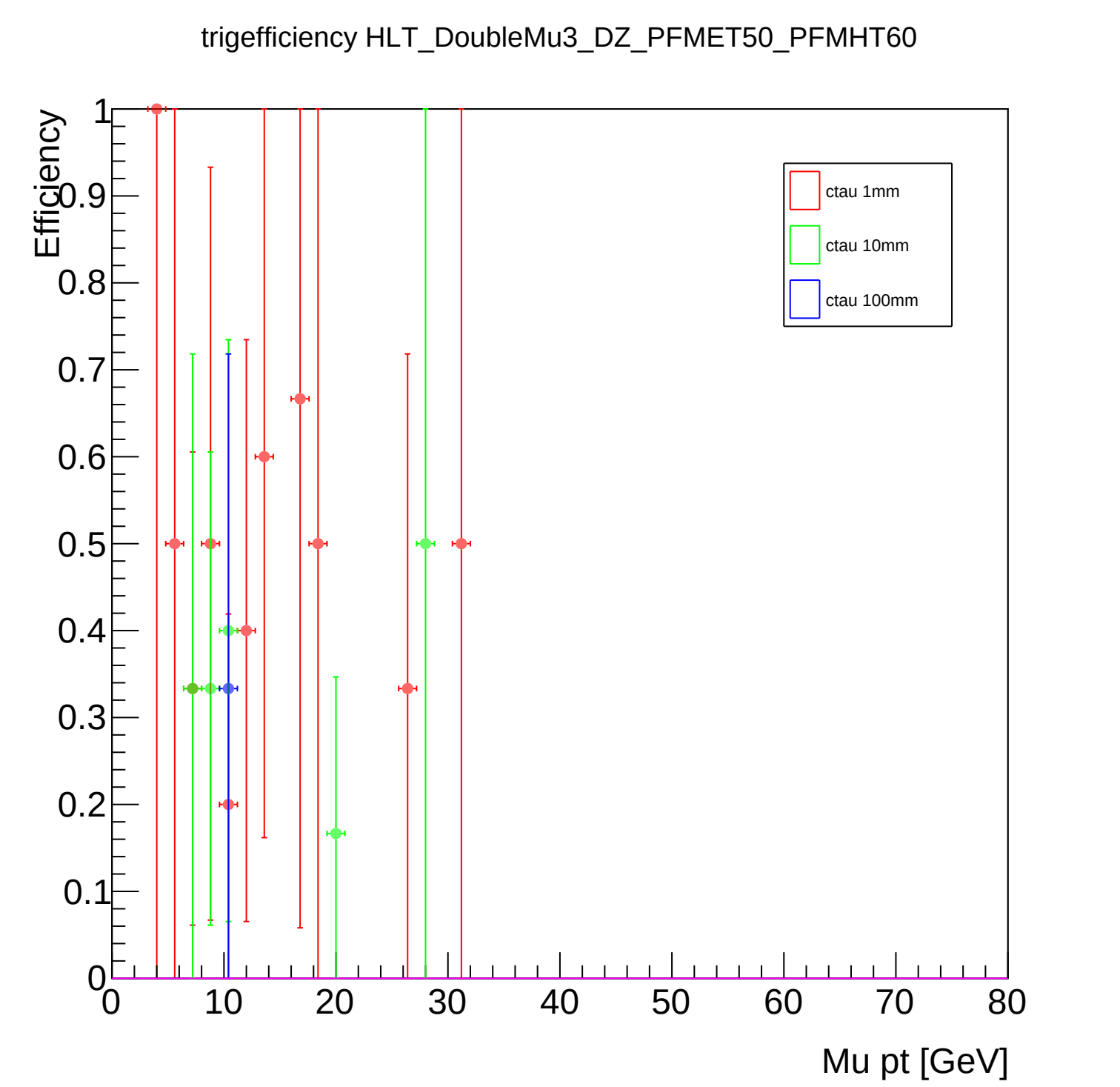
ctau 1000mm leading vs subleading Mu pt: at least 2 mu w/ vxy< 740 cm, |vz|<960cm & |eta|<2.4



efficiencies


trigefficiency HLT_PFMET120_PFMHT120
Efficiency
Mu pt [GeV]
ctau 1mm
ctau 10mm
ctau 100mm
ctau 1000mm
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
0
10
20
30
40
50
60
70
80


trigefficiency HLT_DoubleMu3_DCA_PFMET50_PFMHT60
Efficiency
Mu pt [GeV]
ctau 1mm
ctau 10mm
ctau 100mm
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
0
10
20
30
40
50
60
70
80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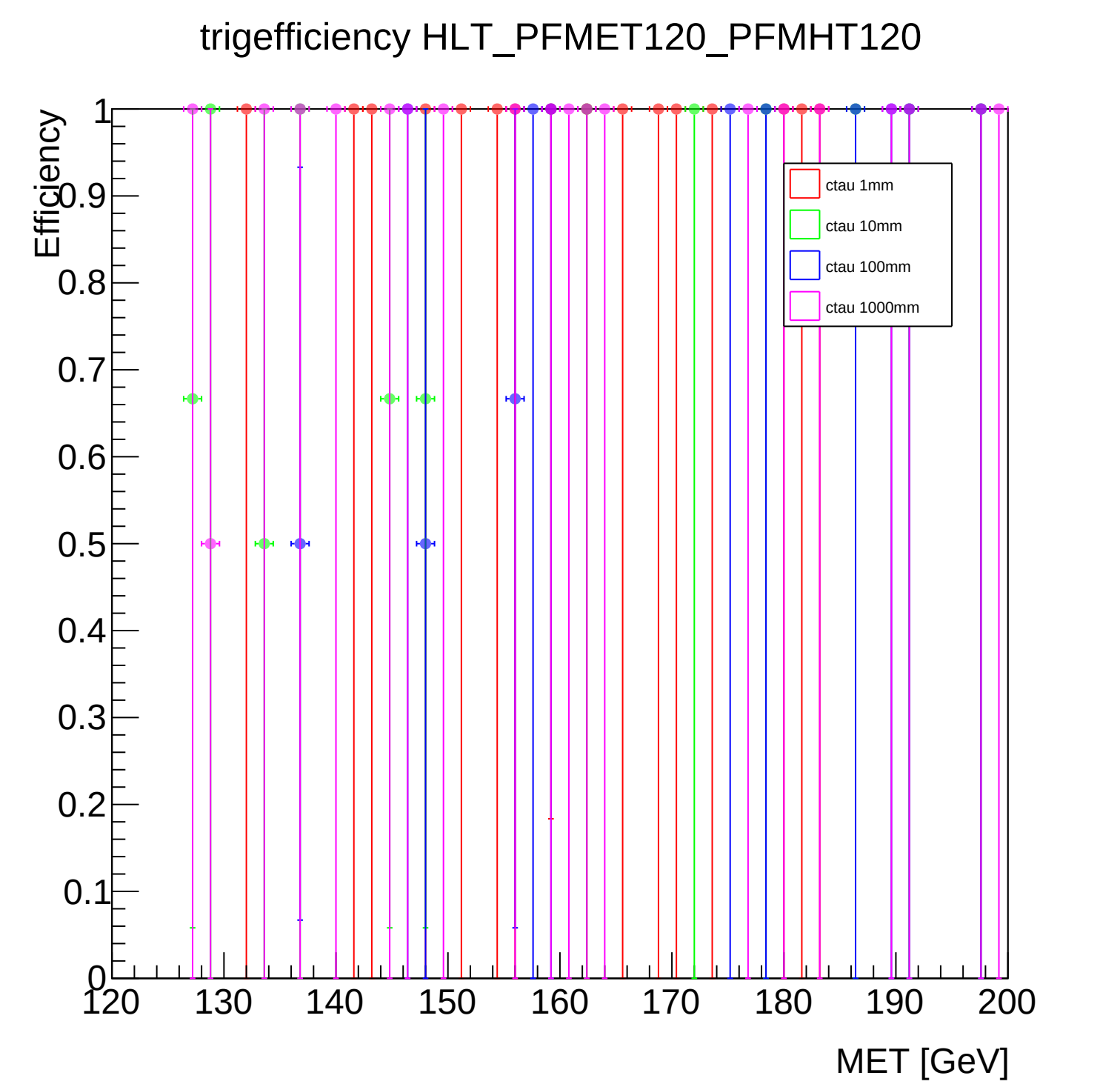
Efficiency
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
0
10
20
30
40
50
60
70
80
Mu pt [GeV]
ctau 1mm
ctau 10mm
ctau 100mm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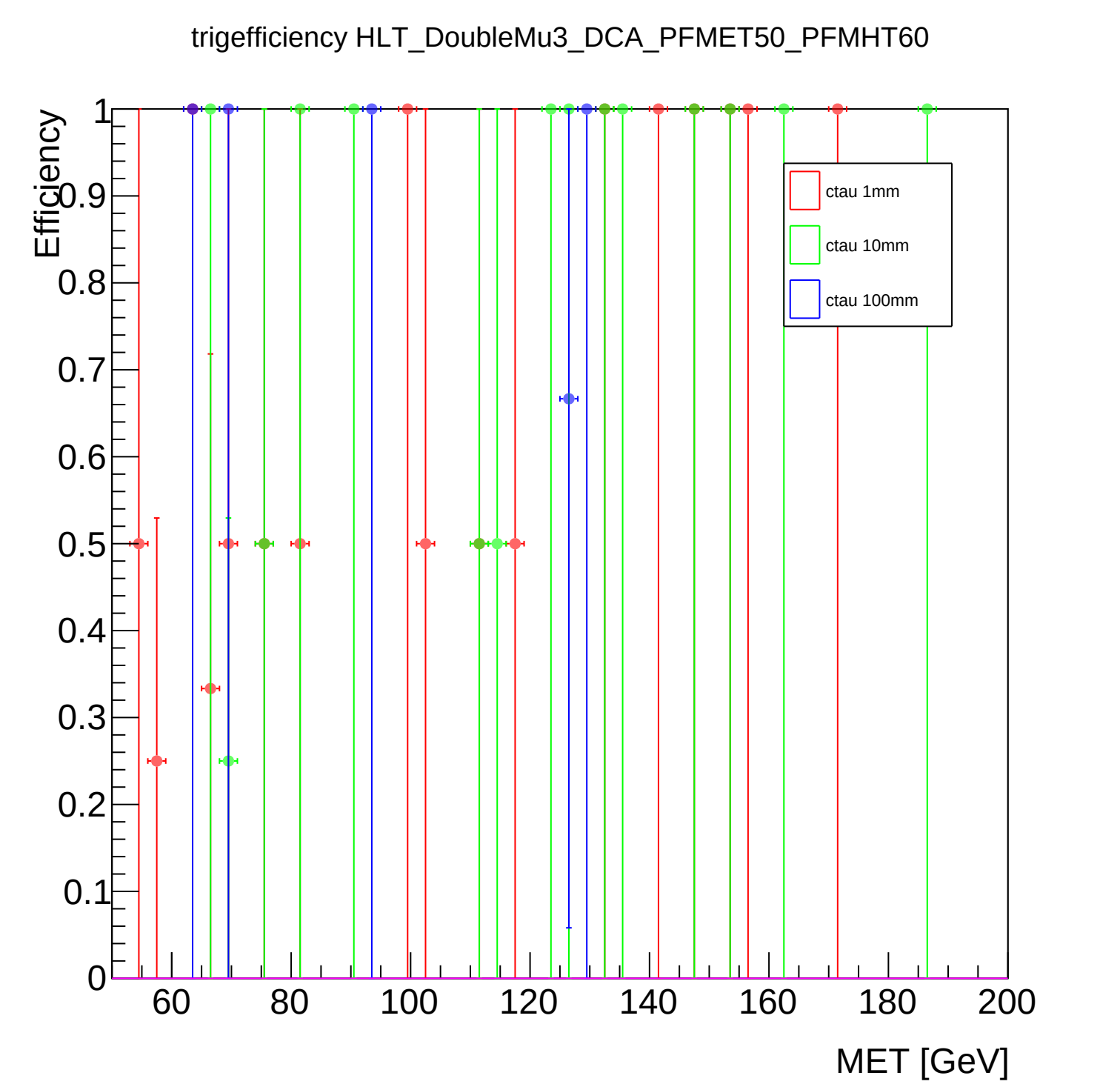
Efficiency
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
120
130
140
150
160
170
180
190
200
MET [GeV]
ctau 1mm
ctau 10mm
ctau 100mm
ctau 1000mm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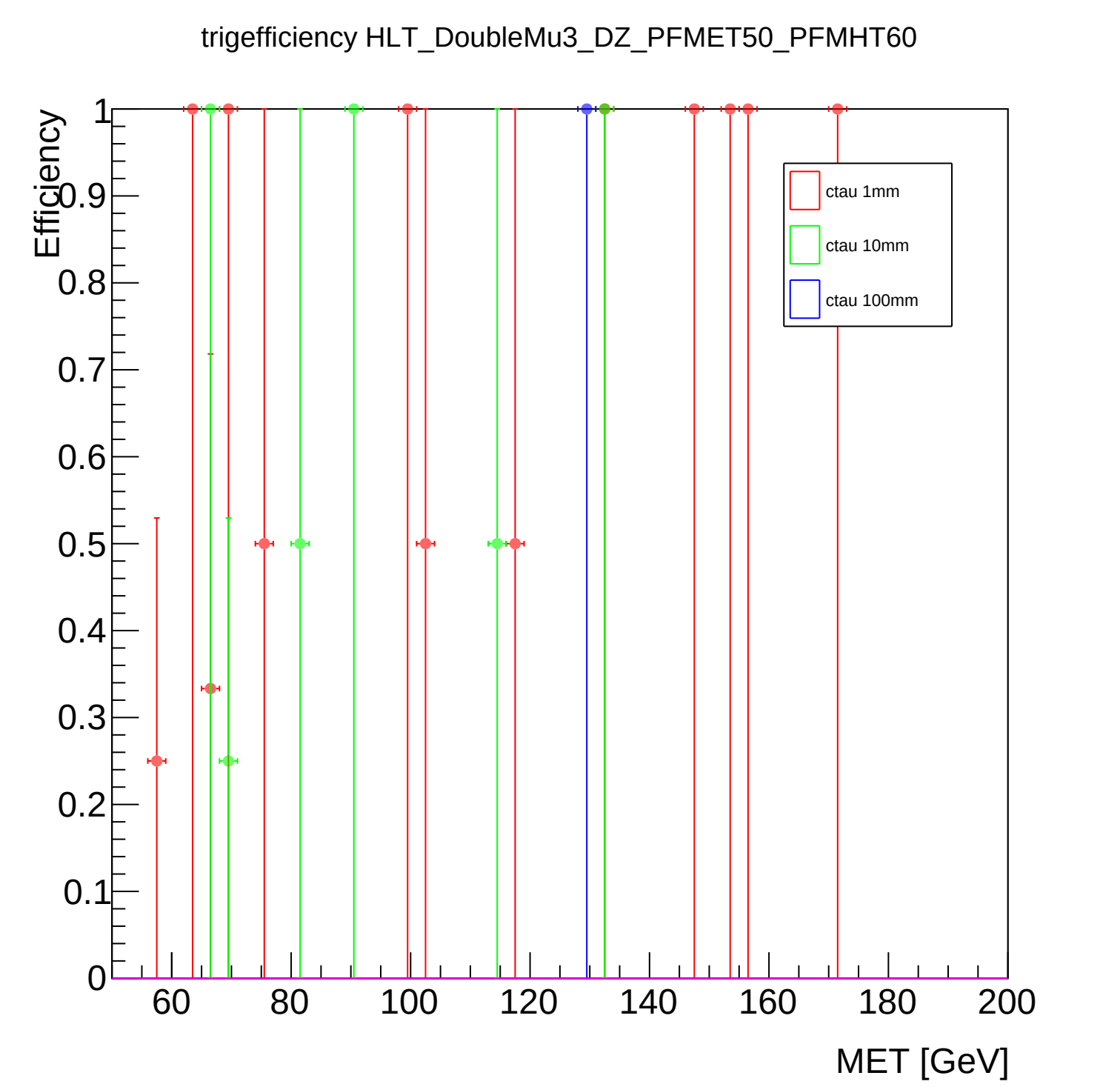
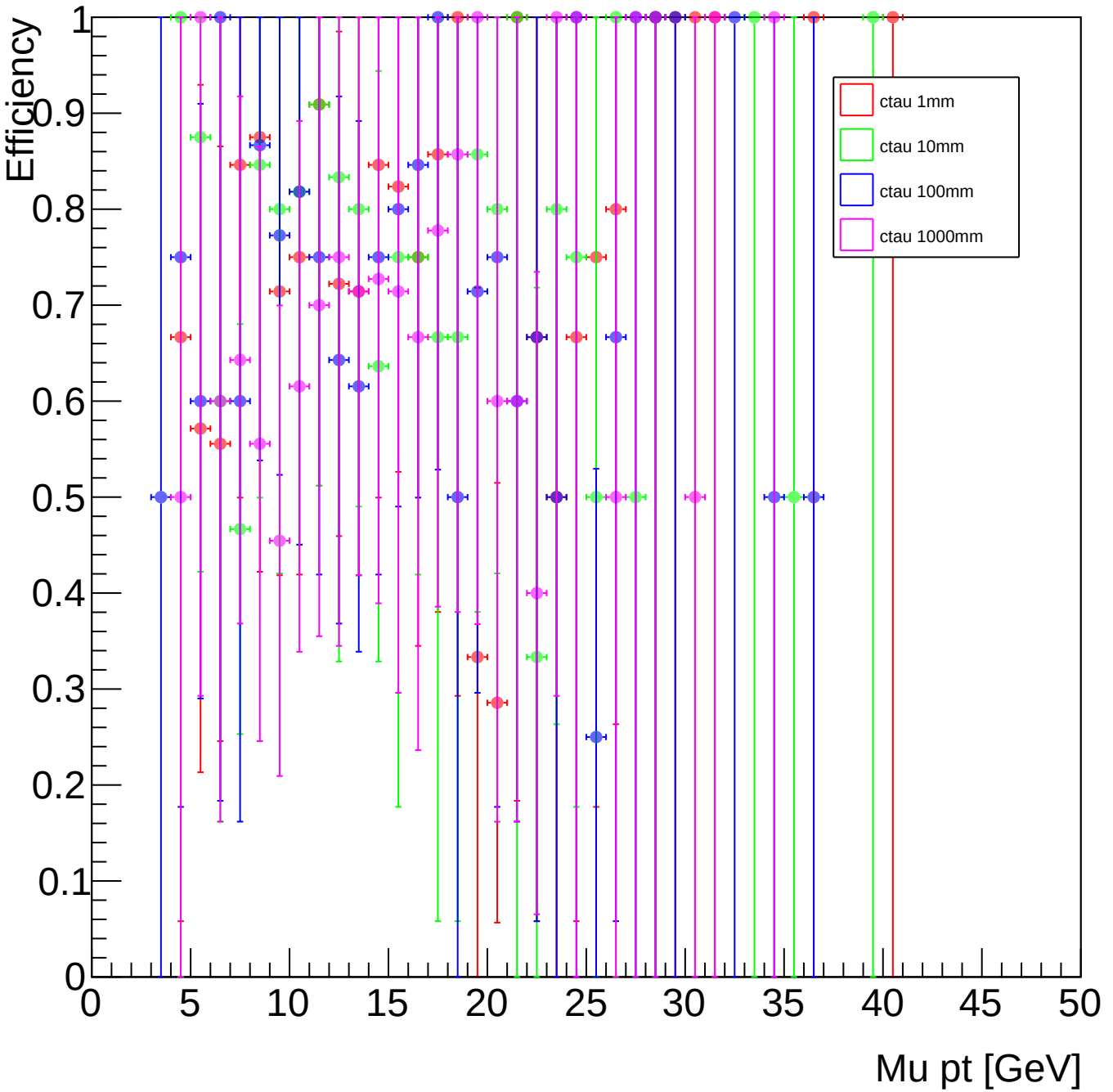
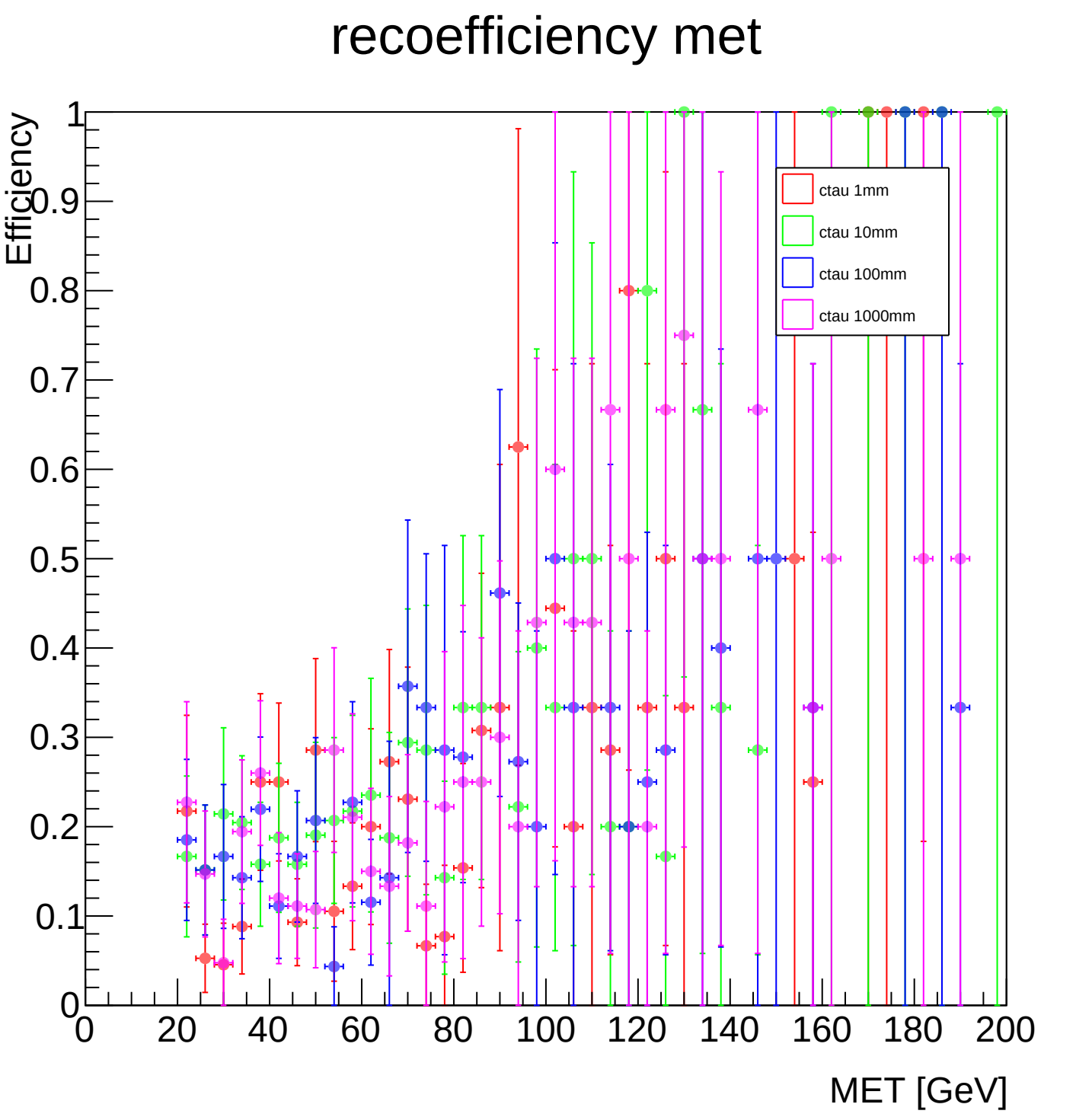
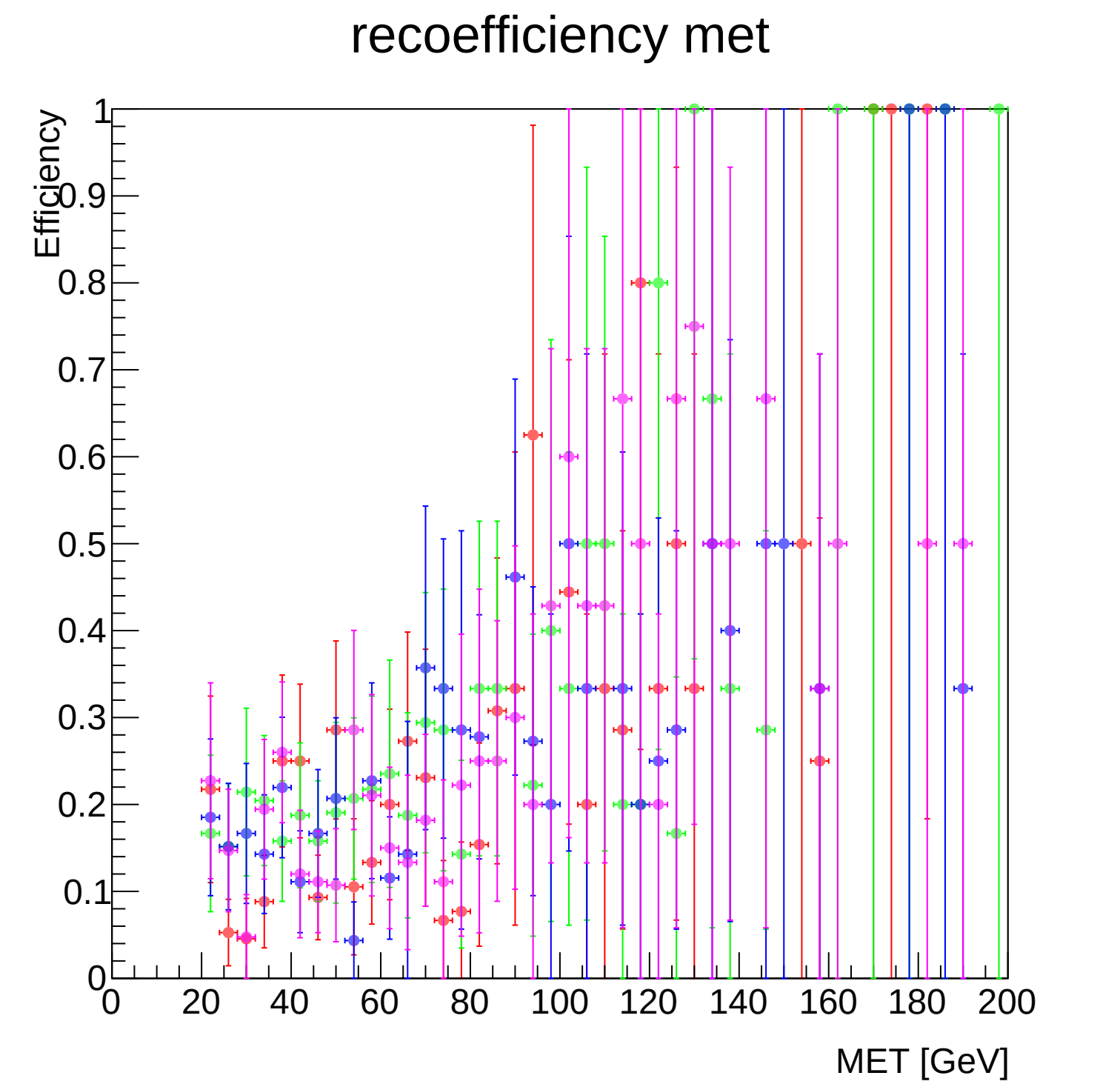
Efficiency
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
60
80
100
120
140
160
180
200
MET [GeV]
ctau 1mm
ctau 10mm
ctau 100mm


trigefficiency HLT_DoubleMu3_DZ_PFMET50_PFMHT60
Efficiency
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
60
80
100
120
140
160
180
200
MET [GeV]
ctau 1mm
ctau 10mm
ctau 100mm


recoefficiency mu
Efficiency
Mu pt [GeV]
ctau 1mm
ctau 10mm
ctau 100mm
ctau 1000mm
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
0
5
10
15
20
25
30
35
40
45
50


recoefficiency met
Efficiency
MET [GeV]
ctau 1mm
ctau 10mm
ctau 100mm
ctau 1000mm
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
0
20
40
60
80
100
120
140
160
180
200


recoefficiency met
Efficiency
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
0
20
40
60
80
100
120
140
160
180
200
MET [GeV]