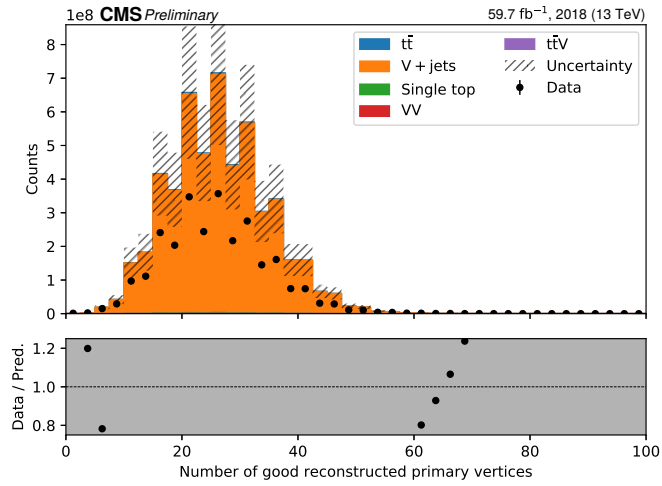


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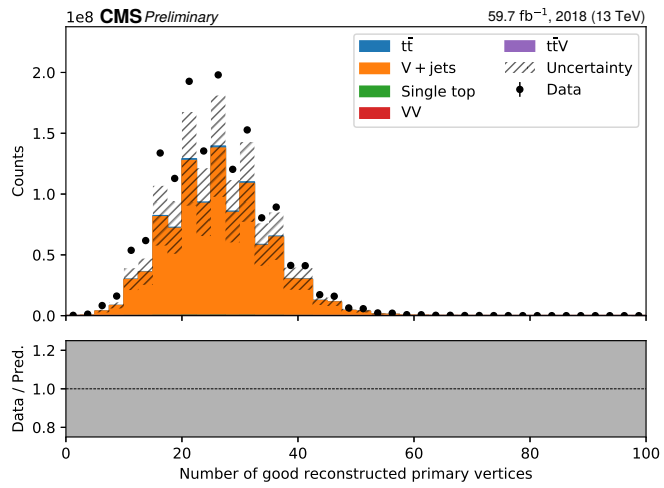
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1 All channels combined

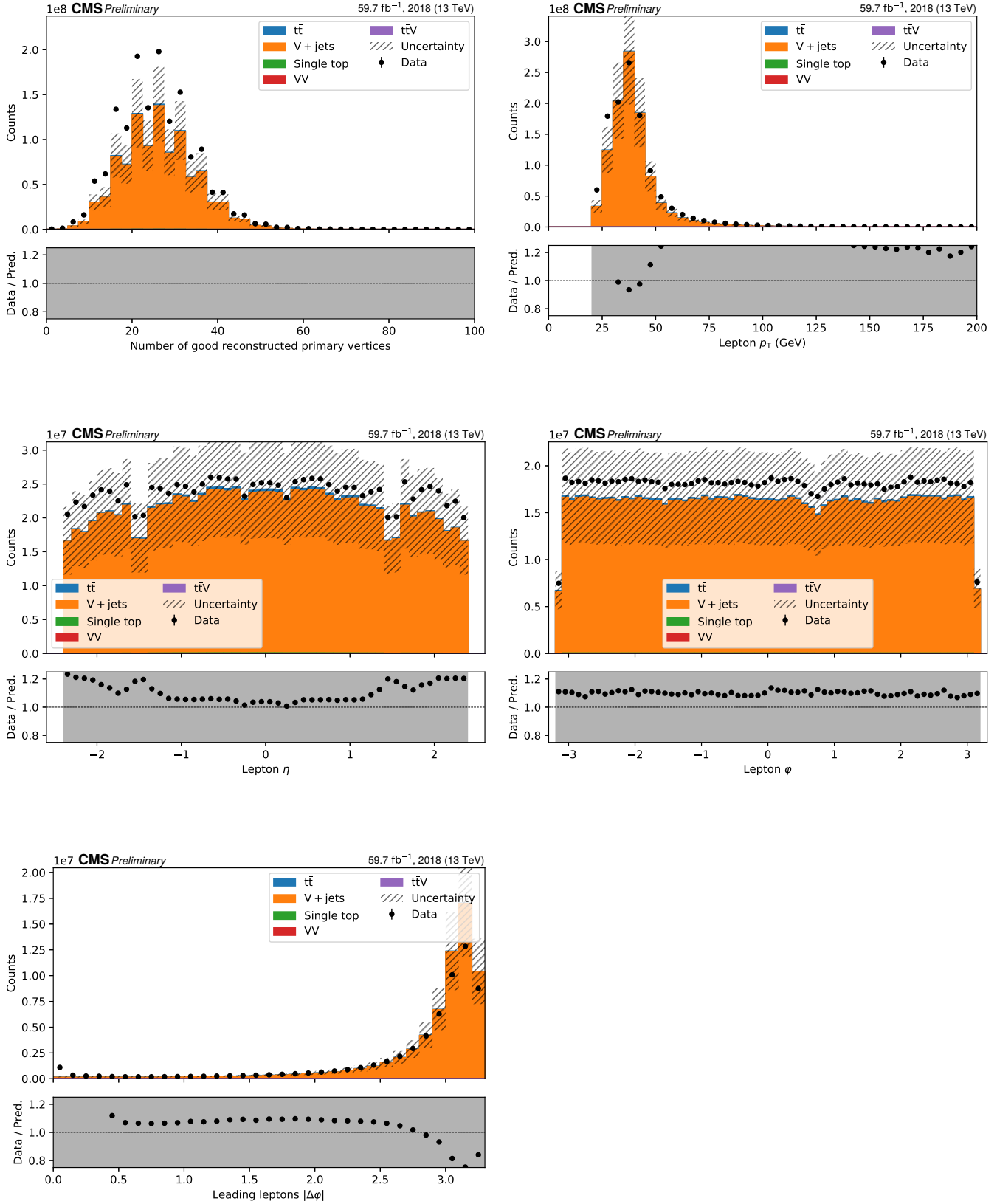
1.1 Require golden JSON



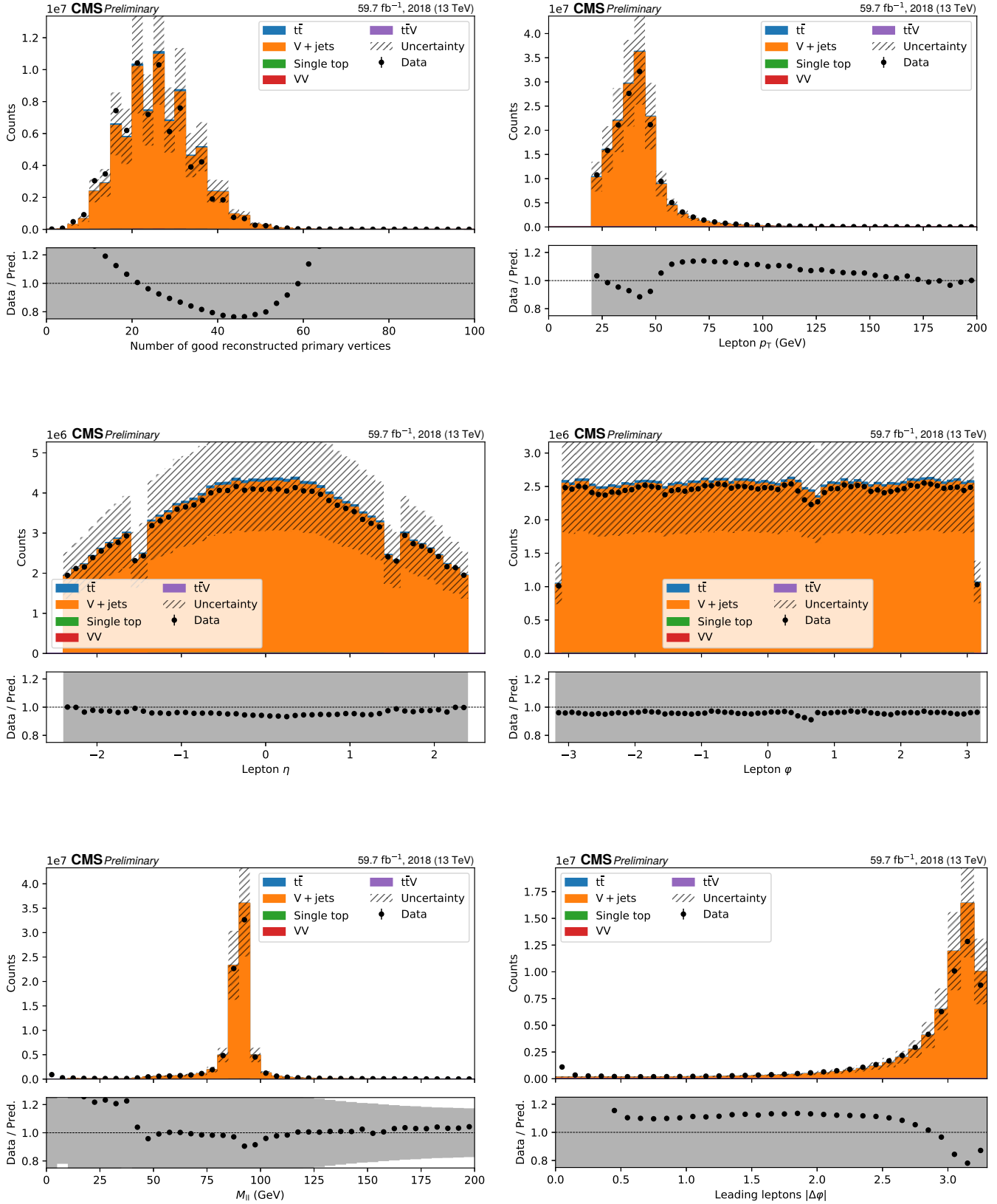
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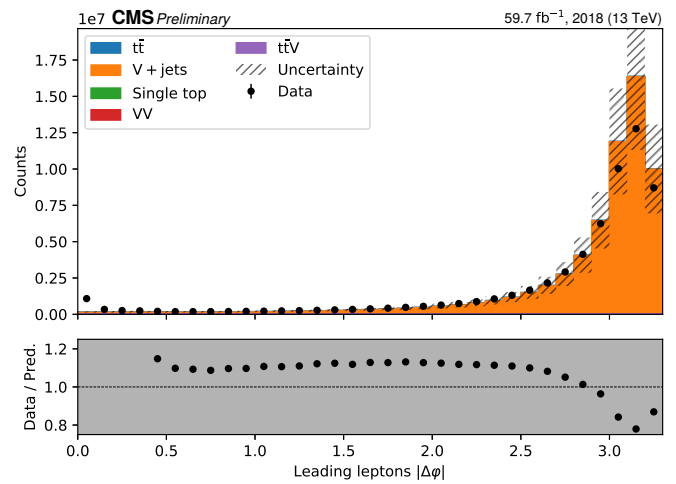
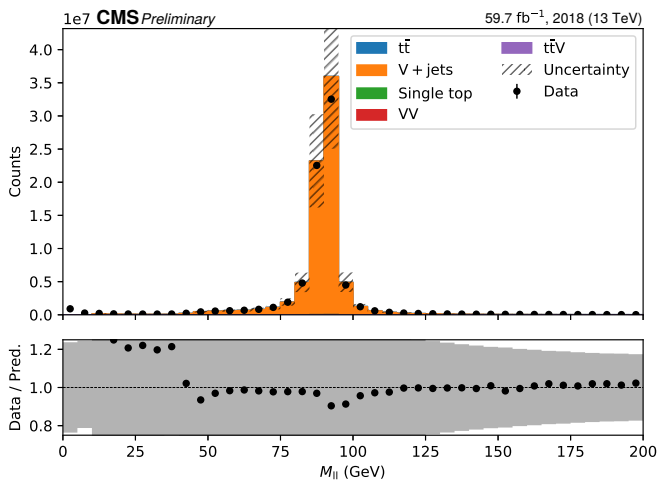
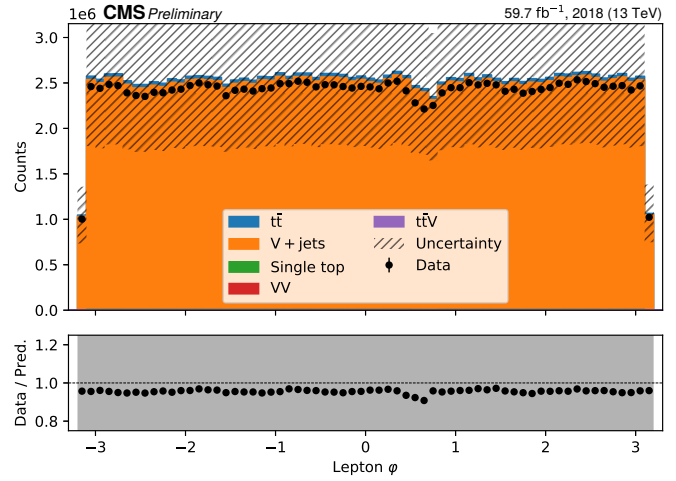
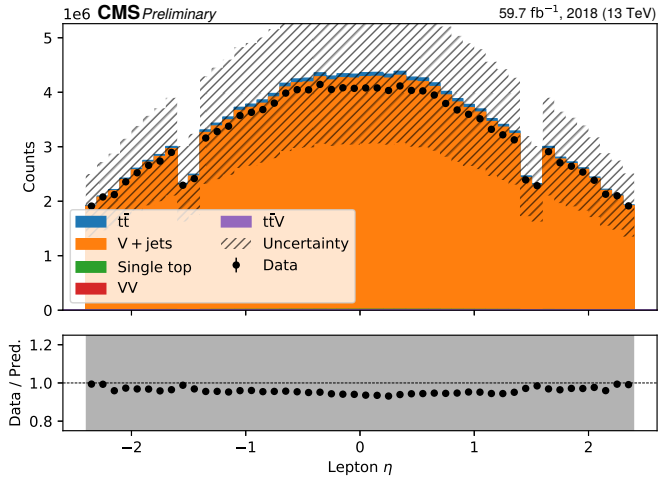
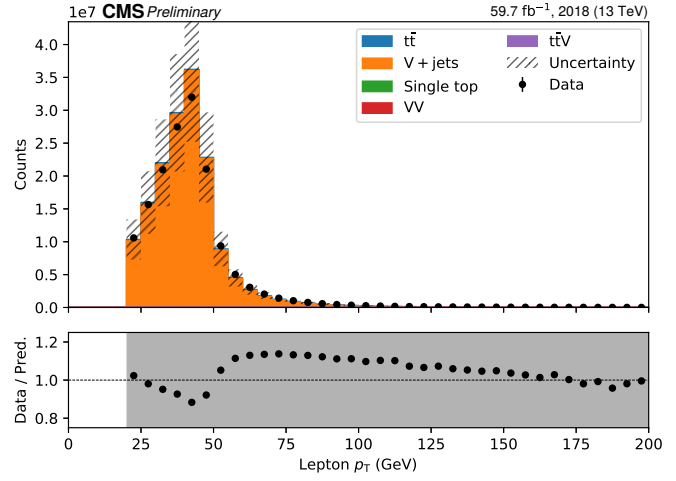
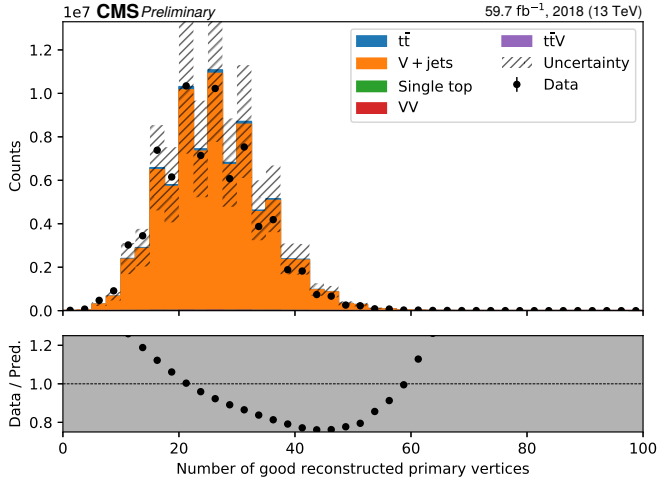
1.3 Passing MET filters



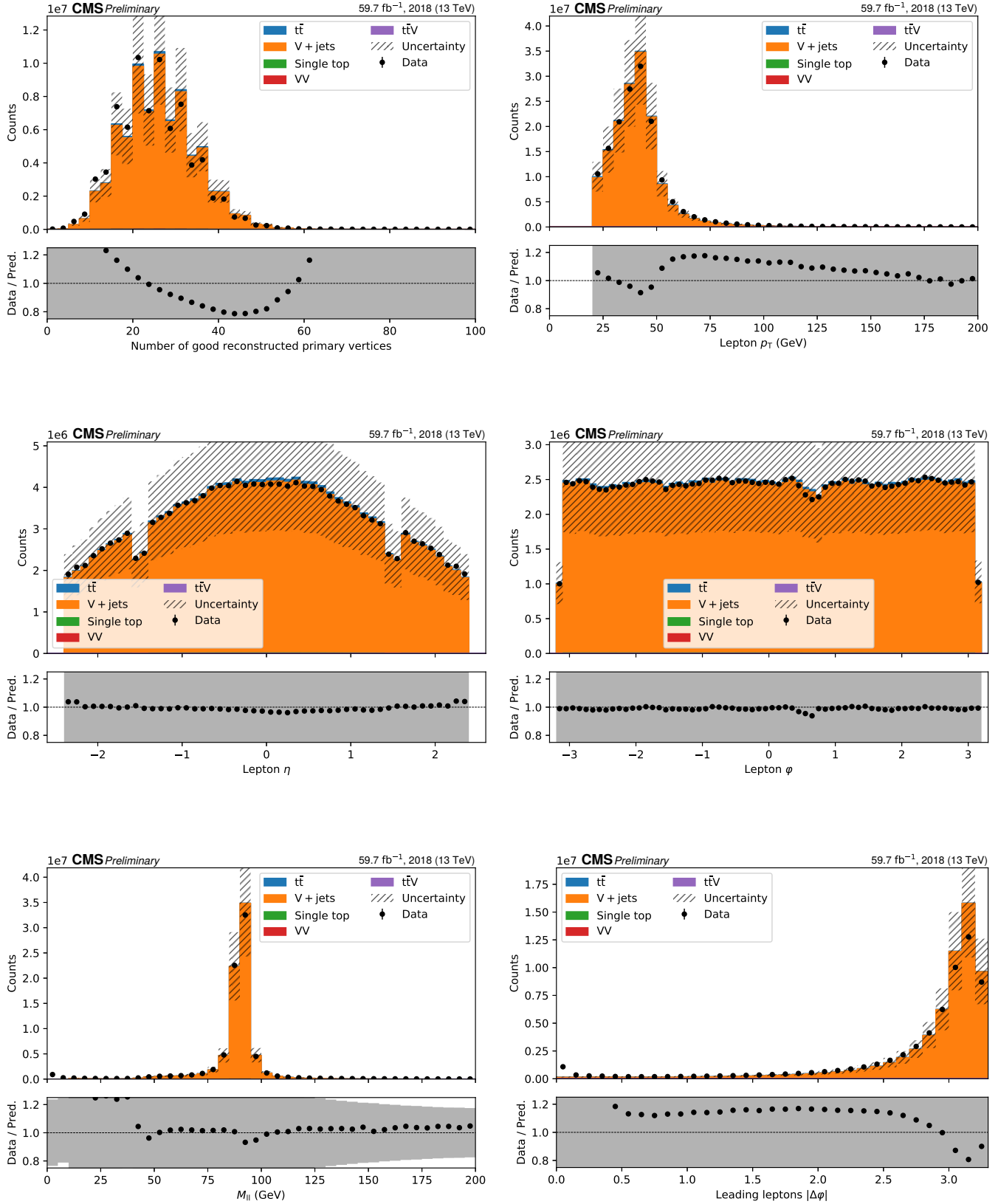
1.4 Have at least two leptons



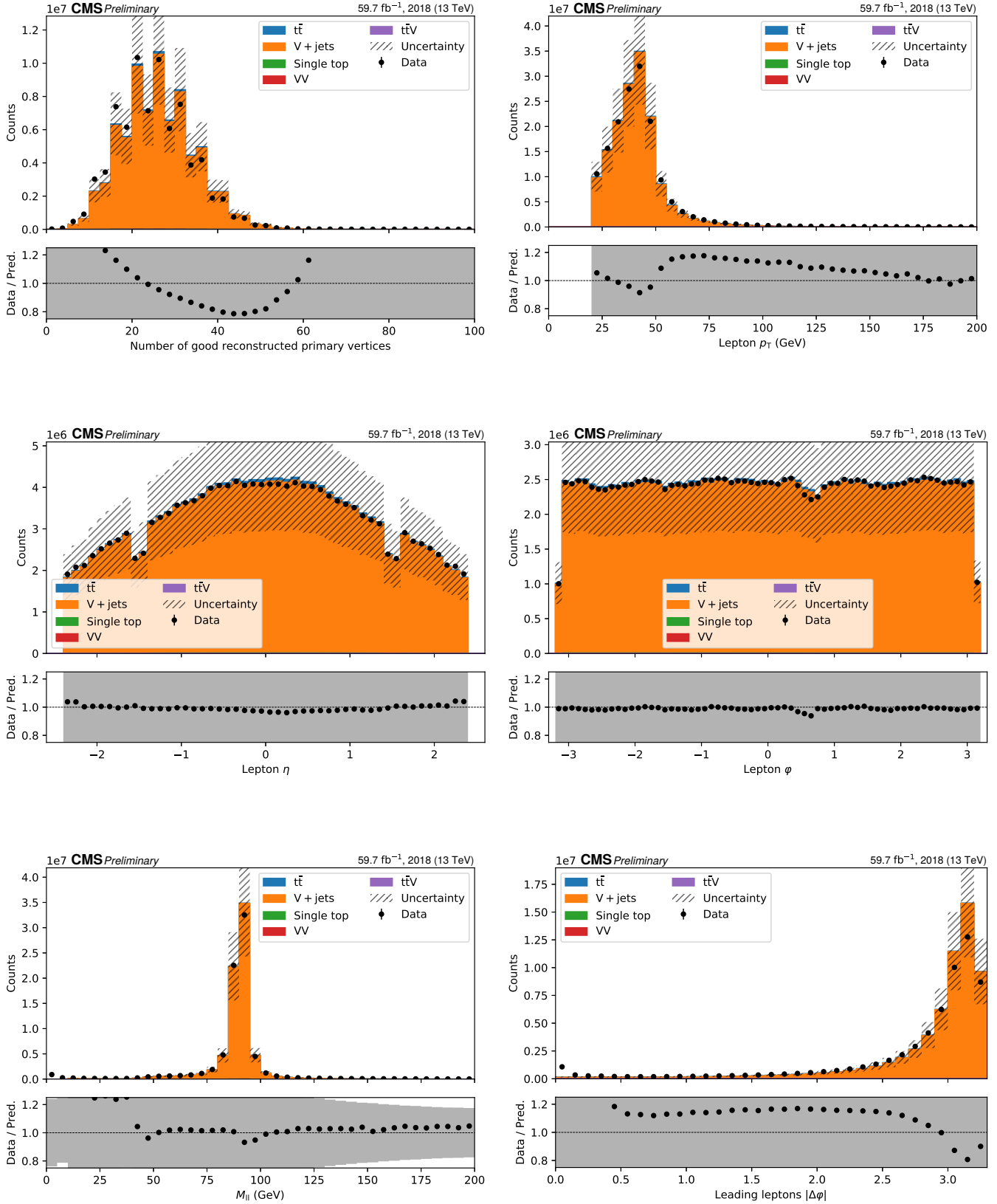
1.5 Leptons have opposite charge

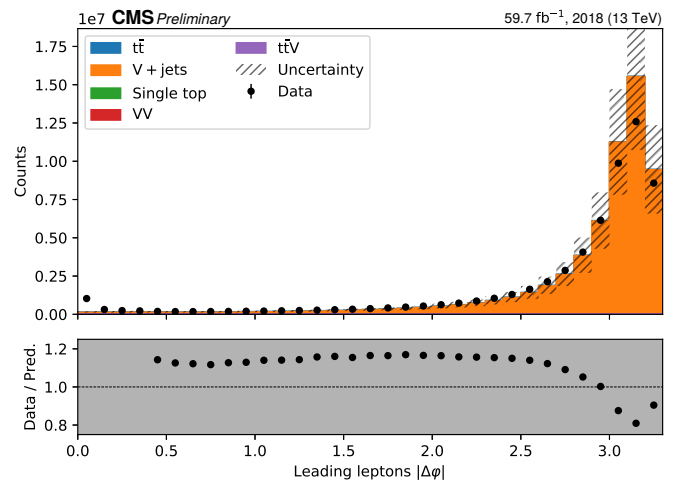
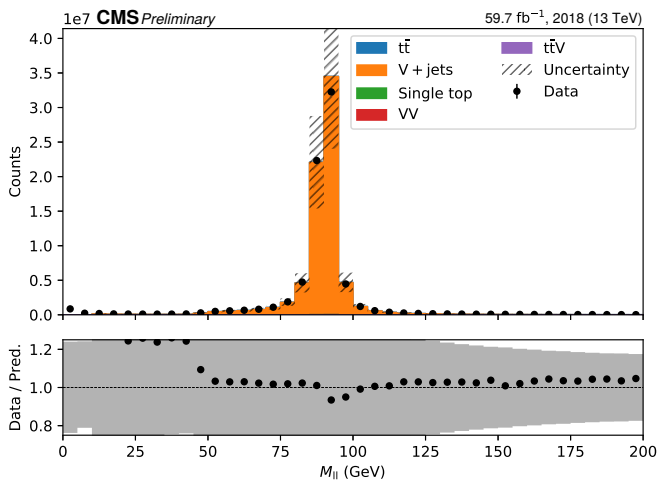
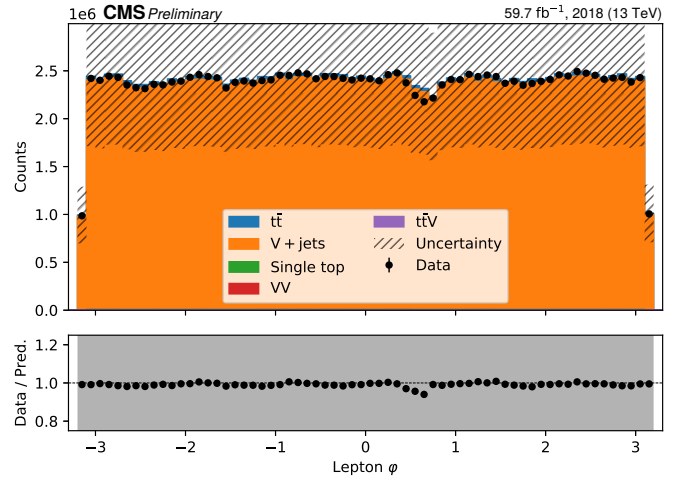
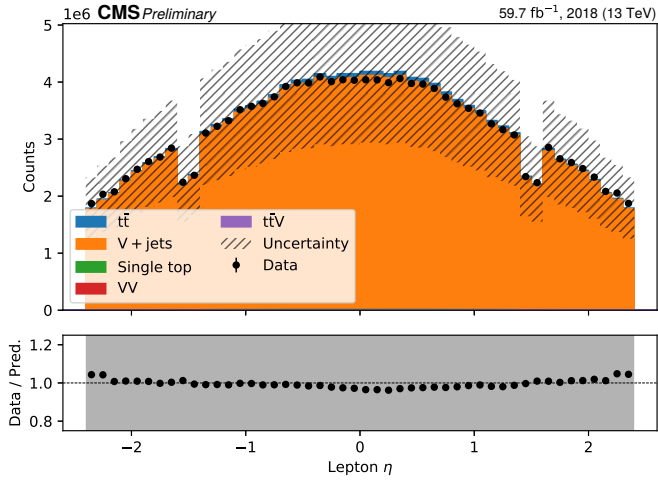
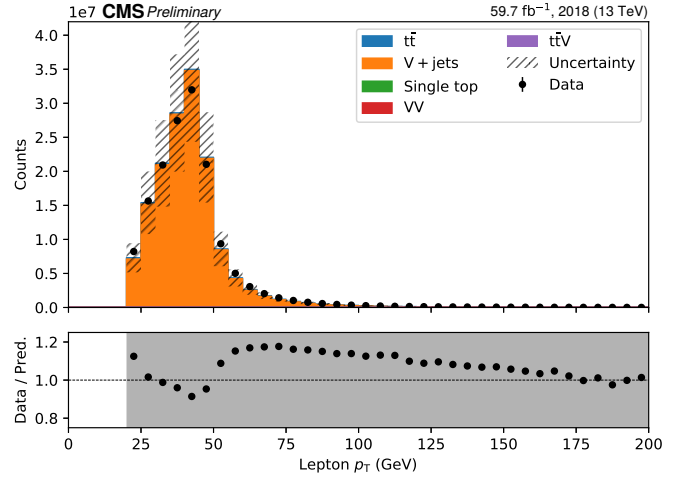
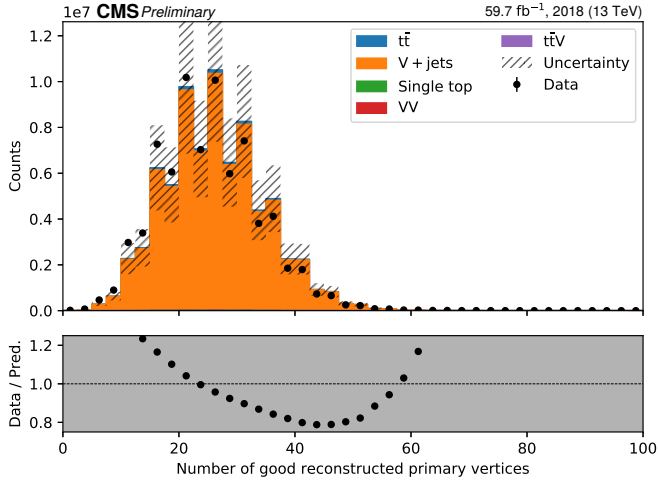


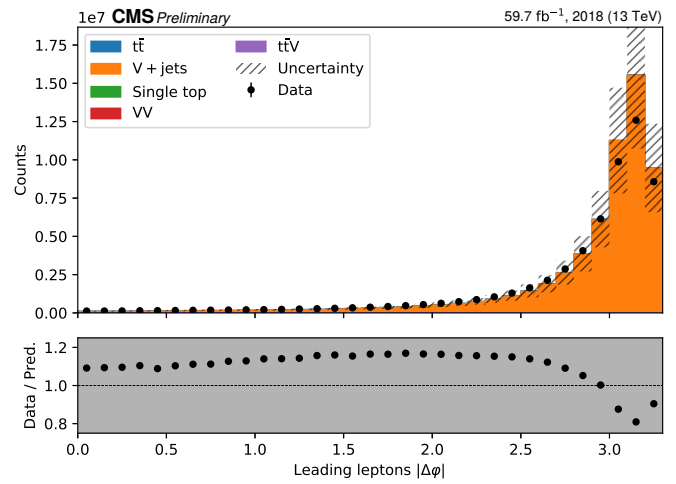
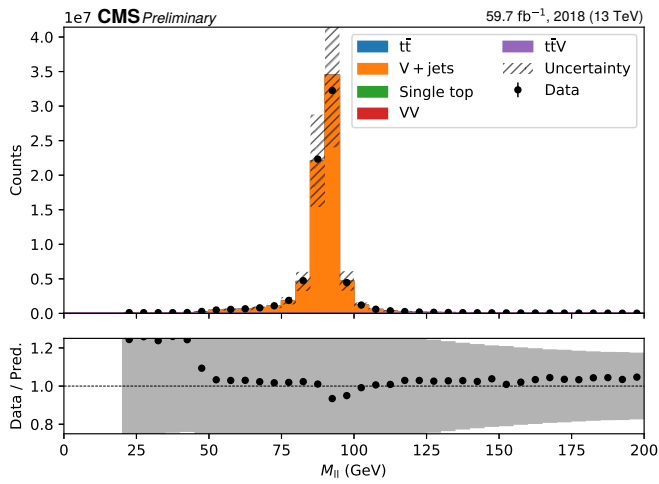
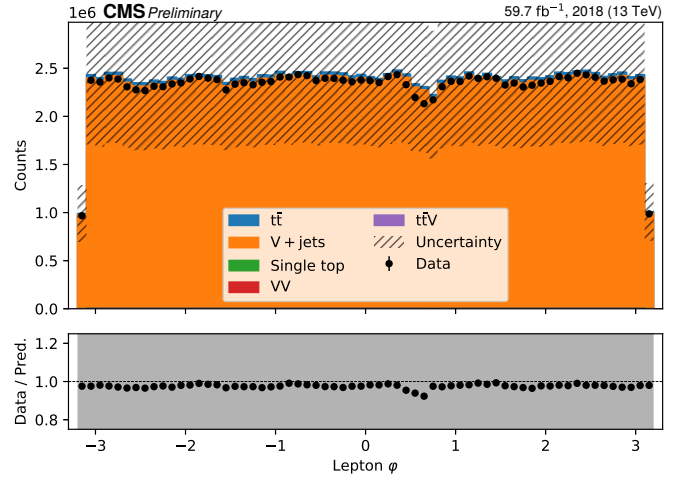
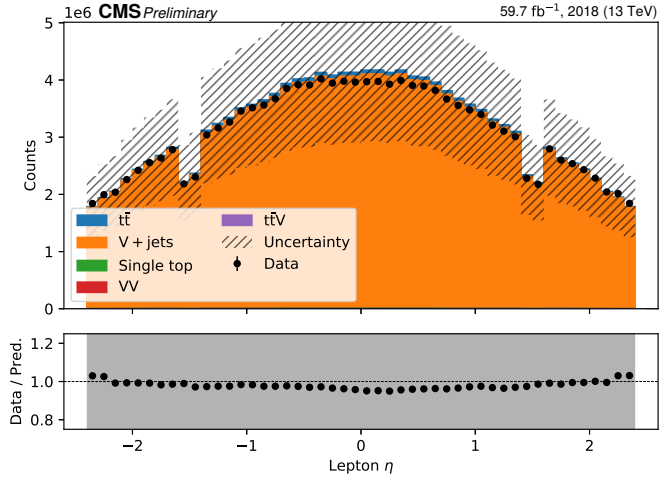
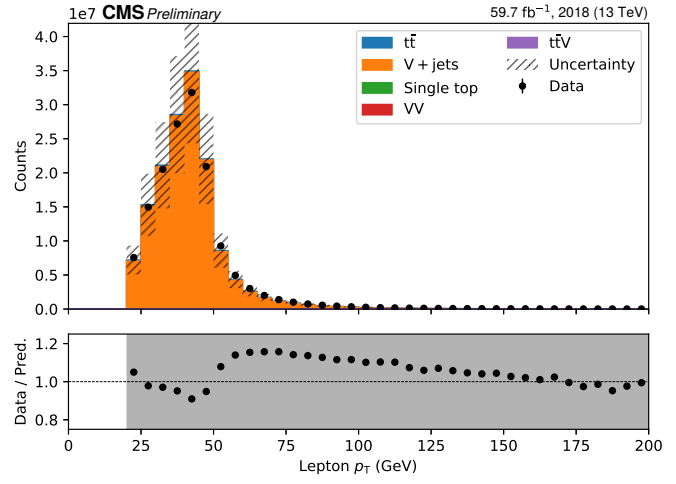
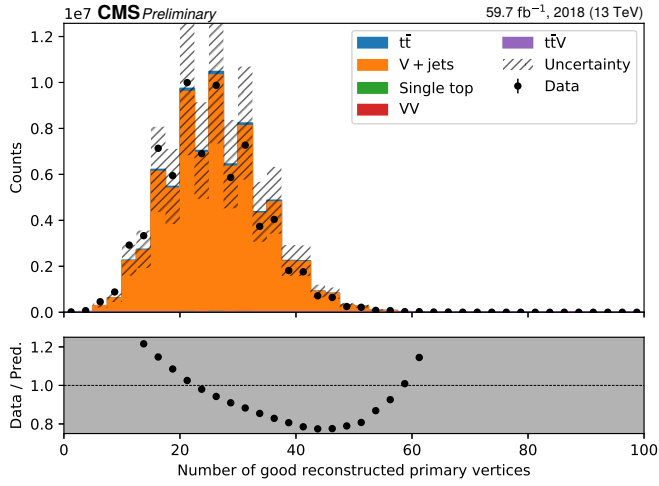
1.6 No additional leptons



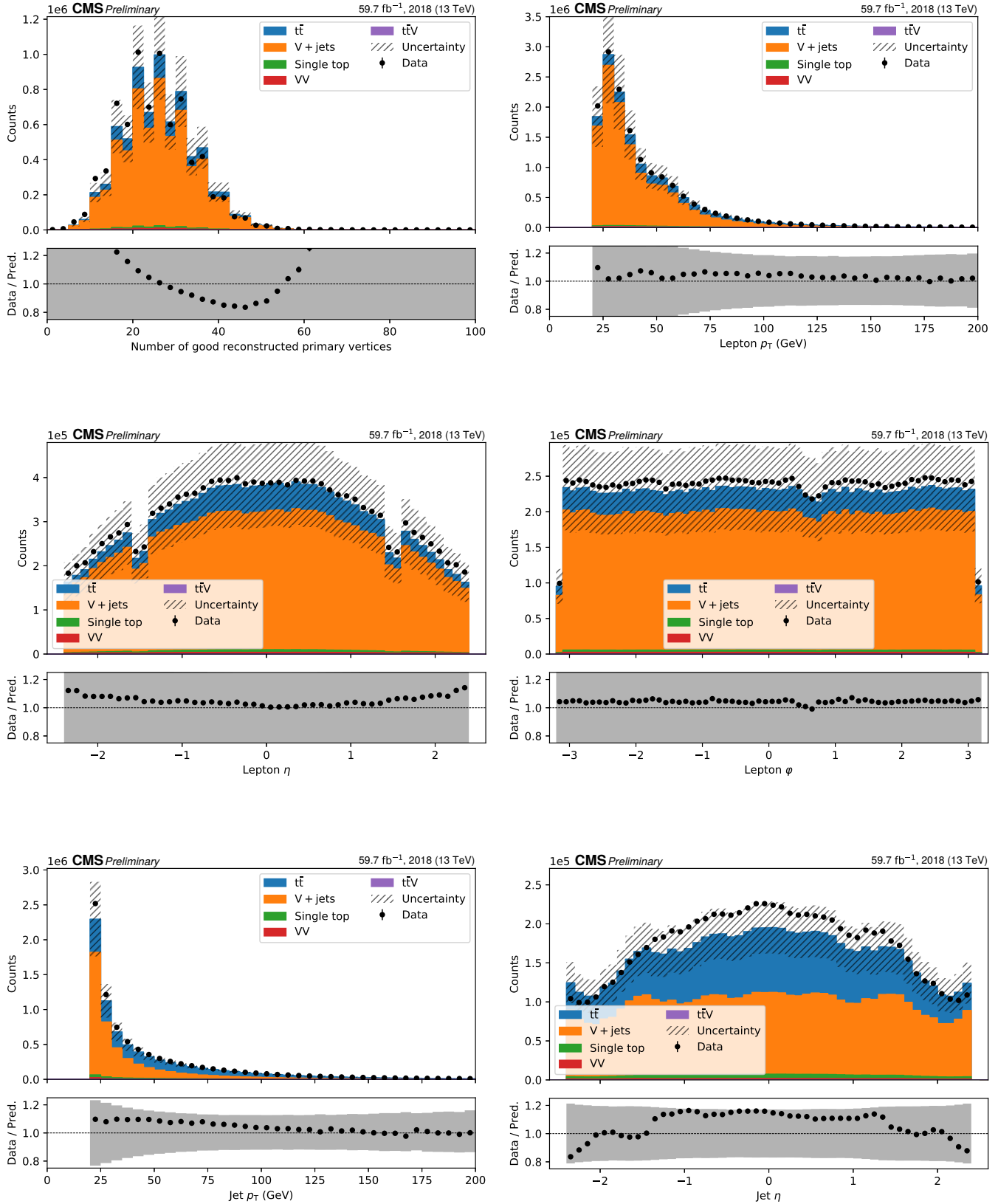
1.7 Channel trigger matching

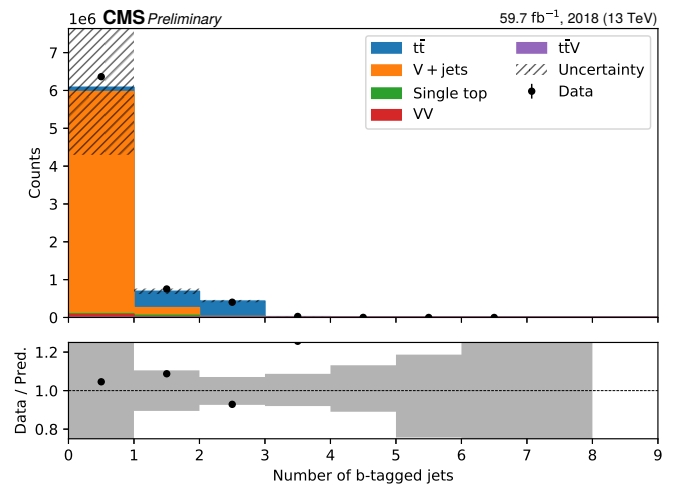
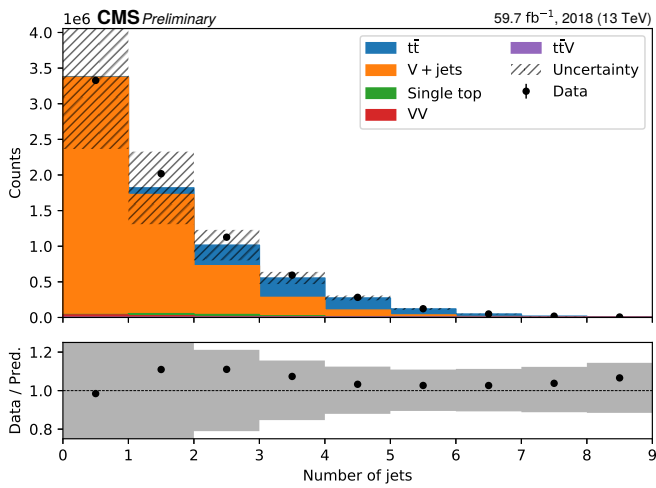
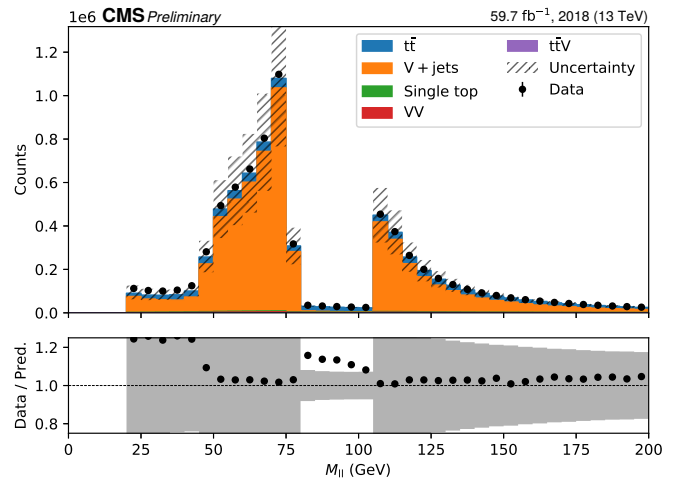
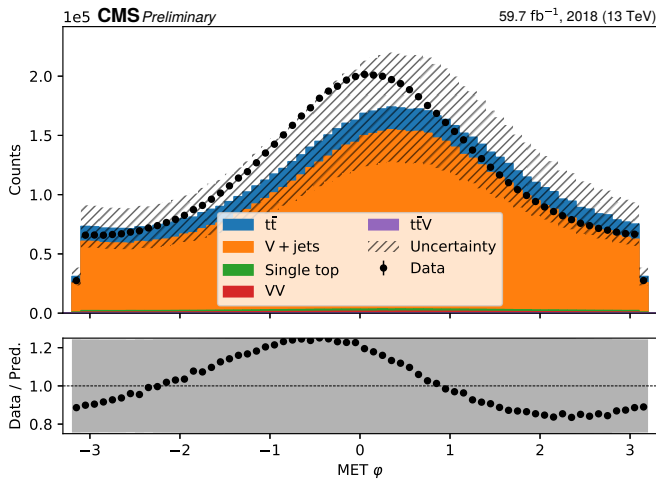
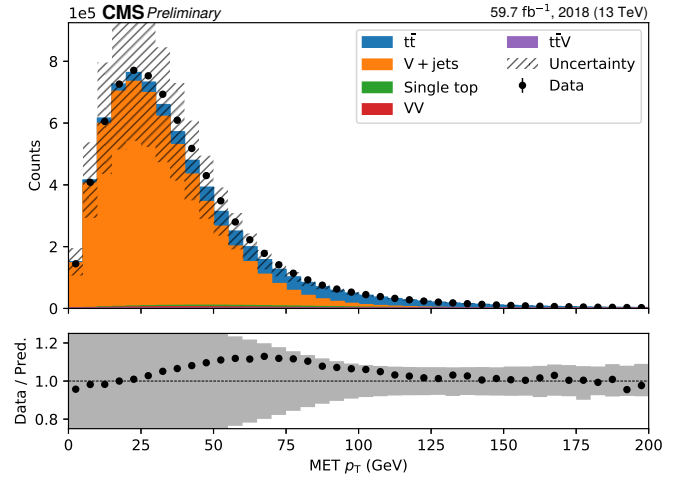
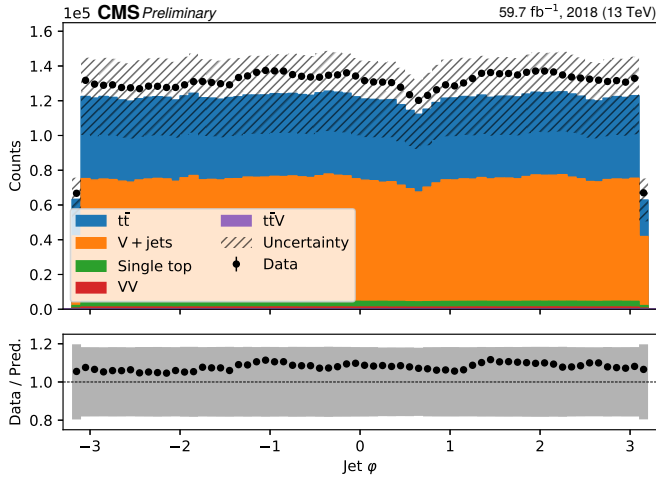


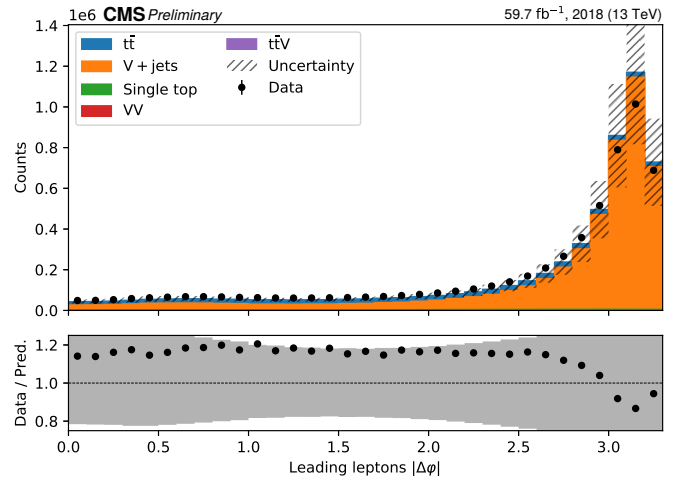
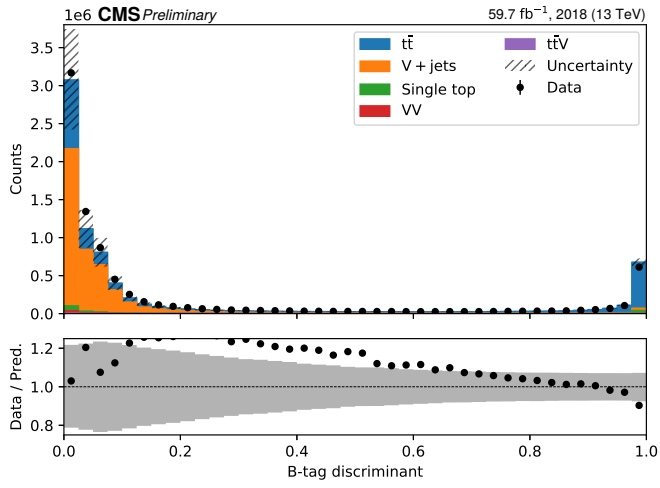
1.8 Require lepton p_T 

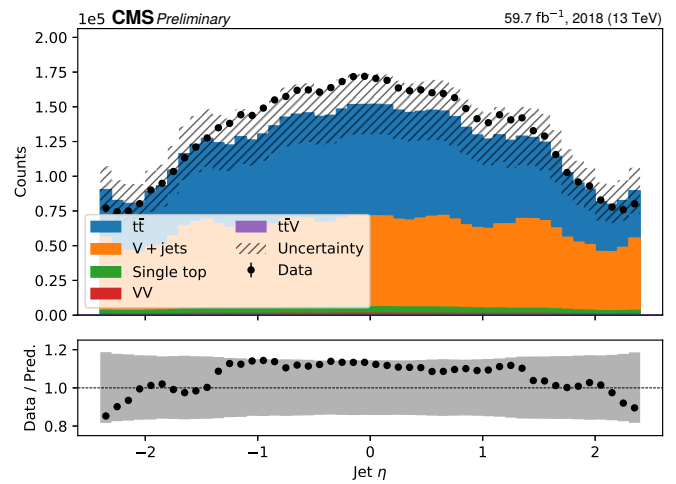
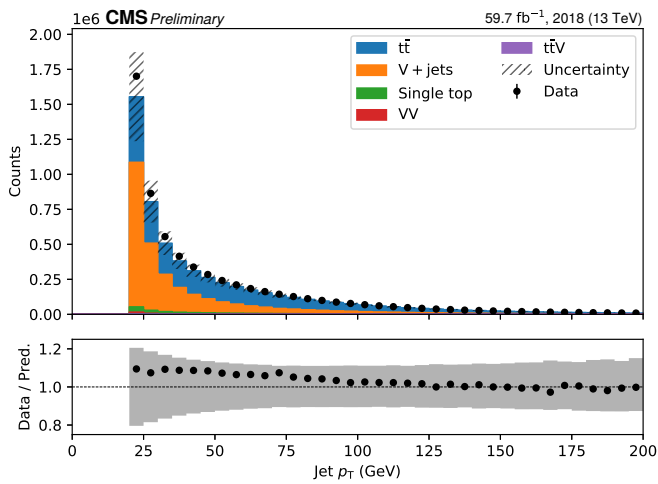
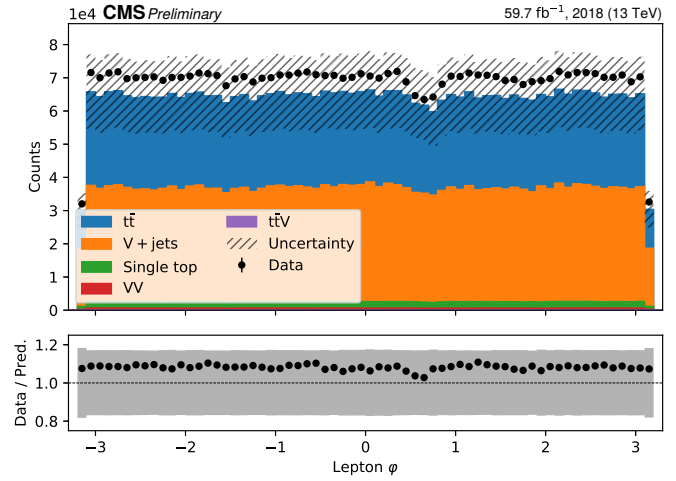
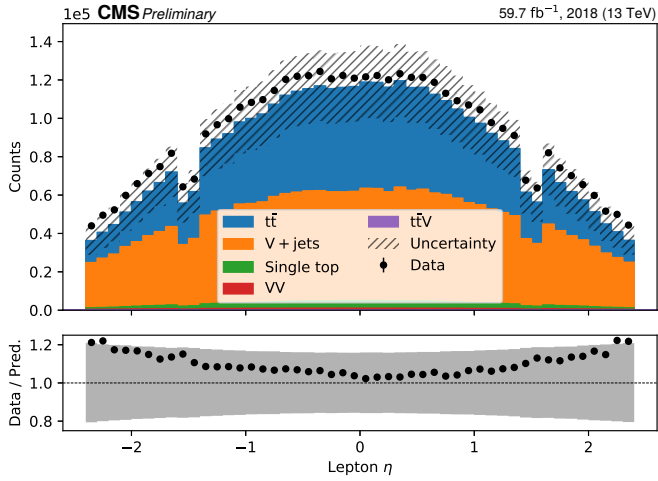
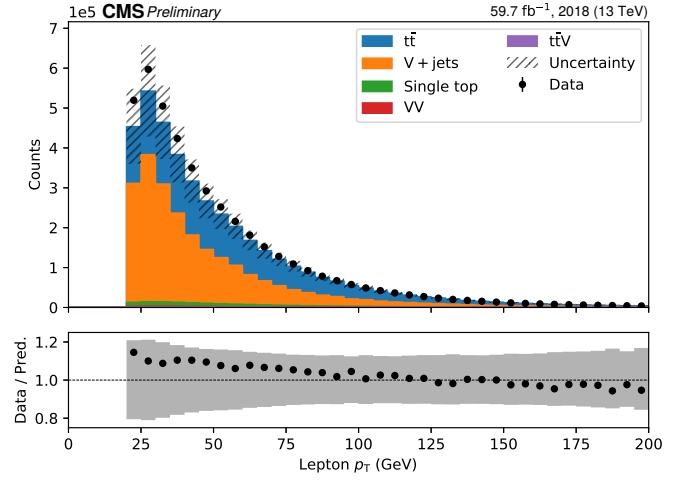
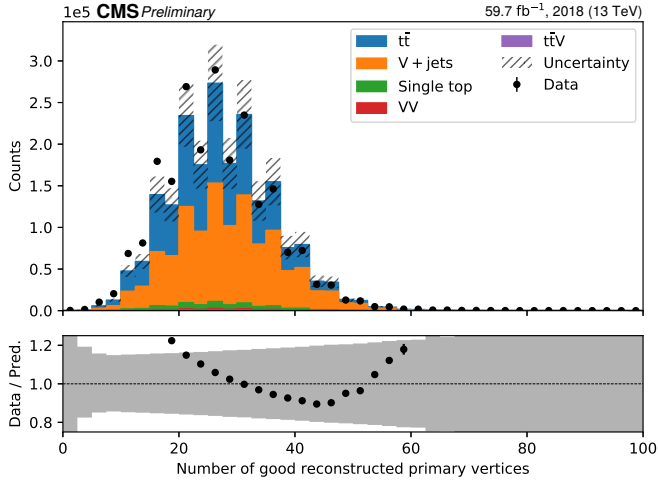
1.9 M_{ll} 

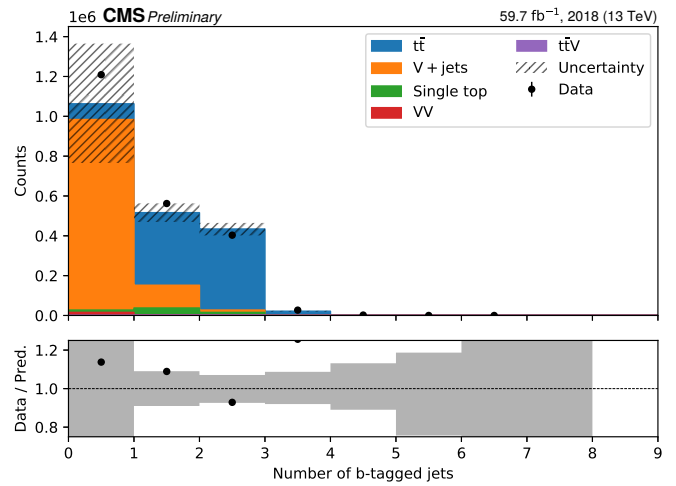
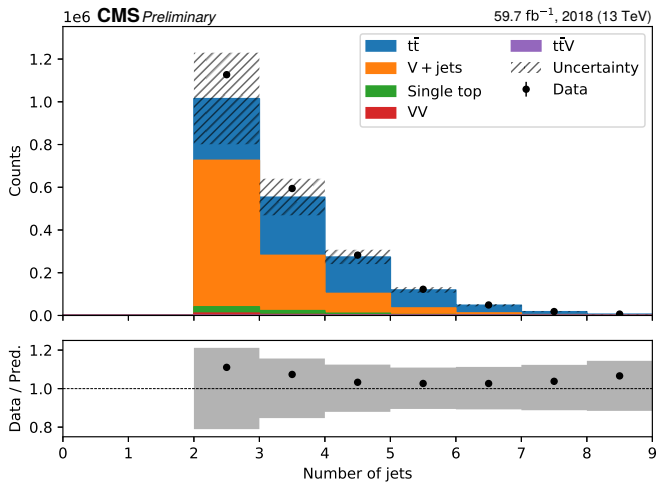
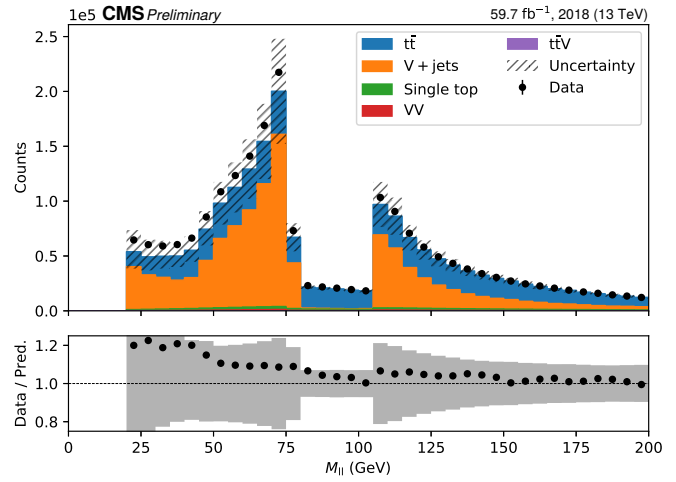
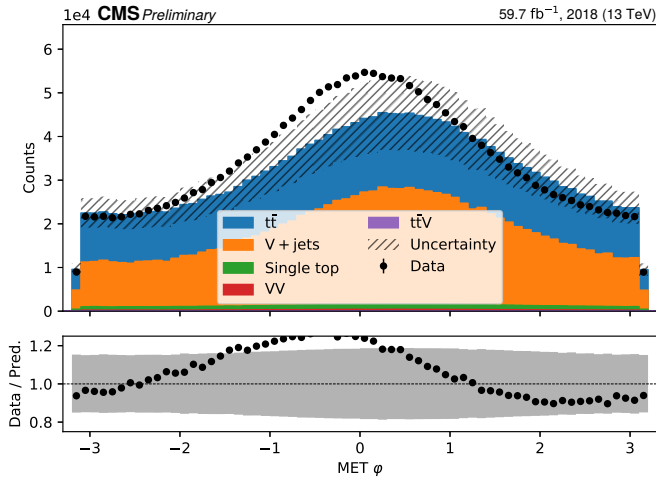
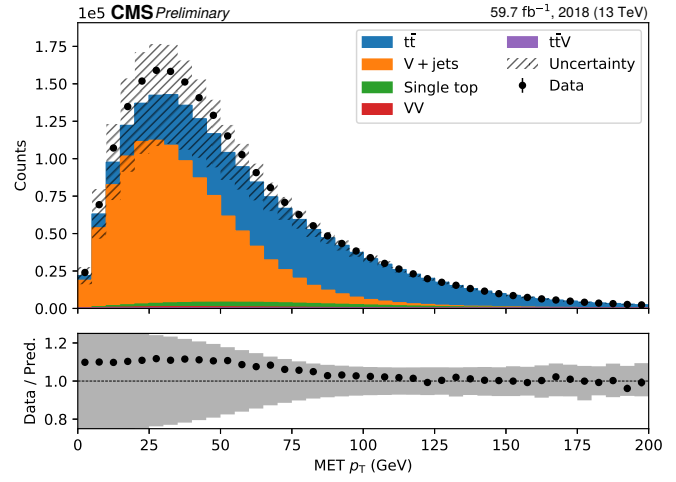
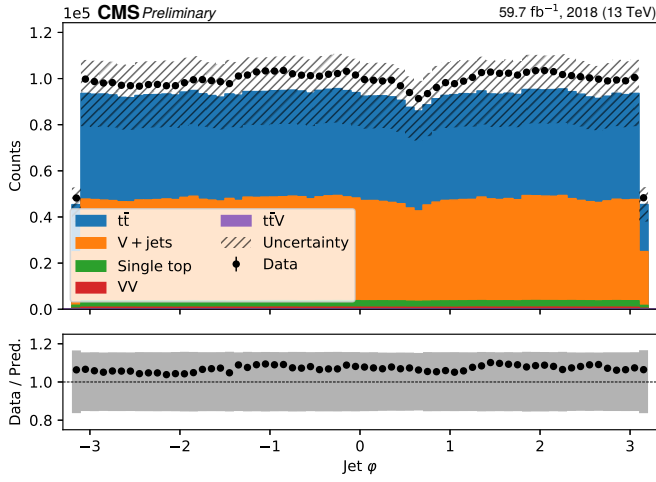
1.10 Z window

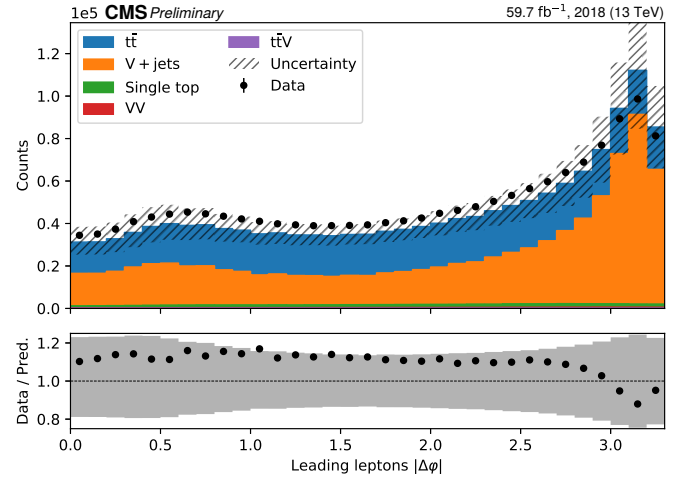
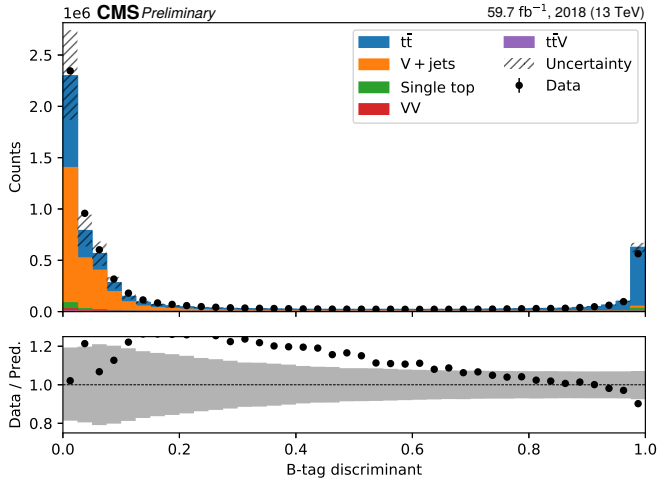


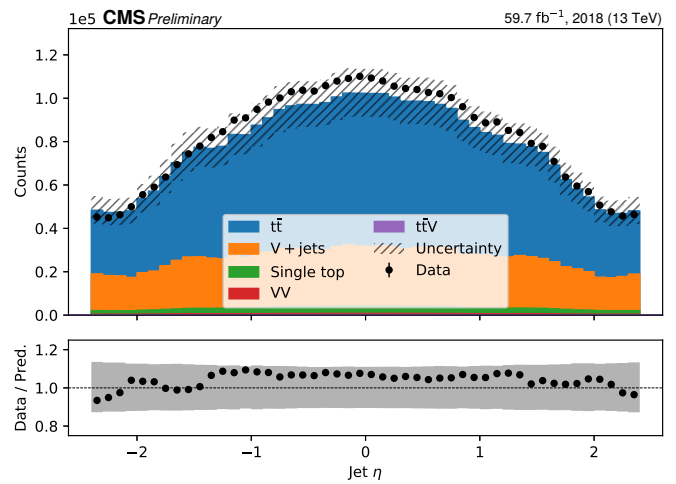
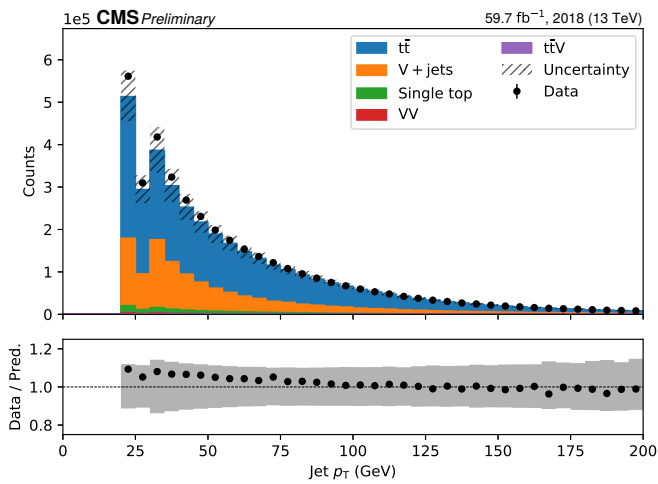
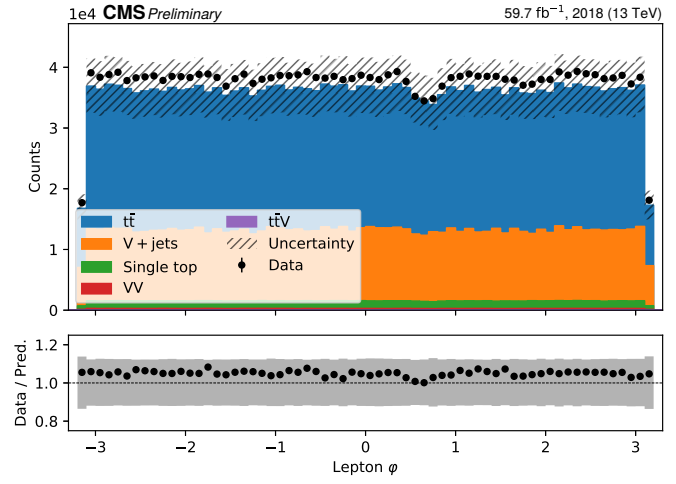
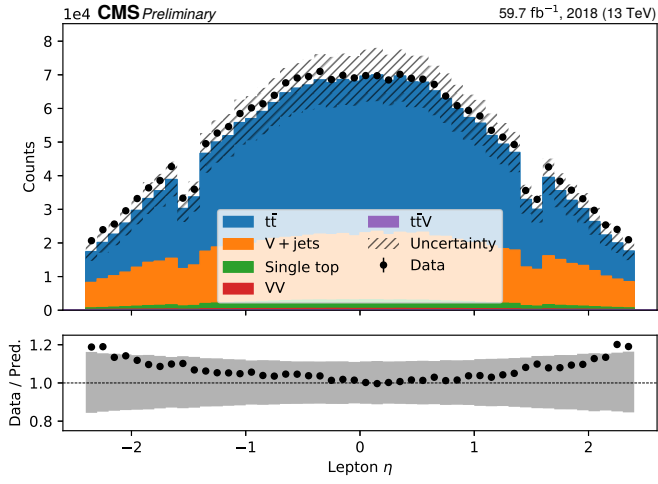
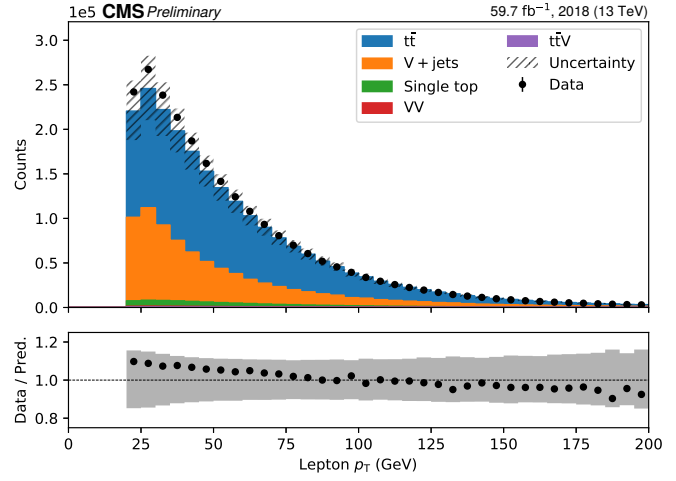
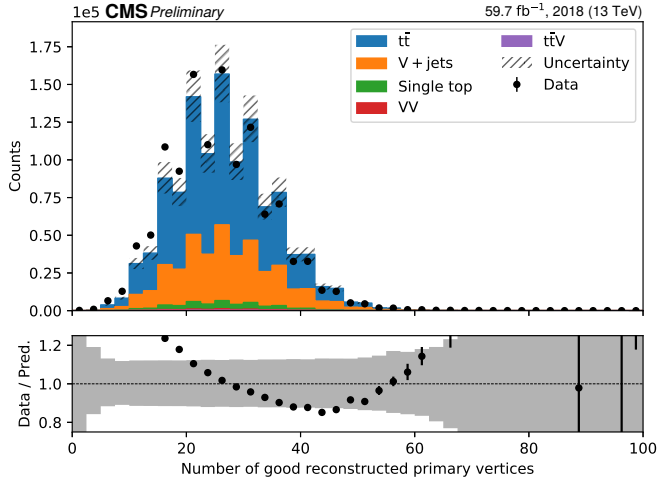


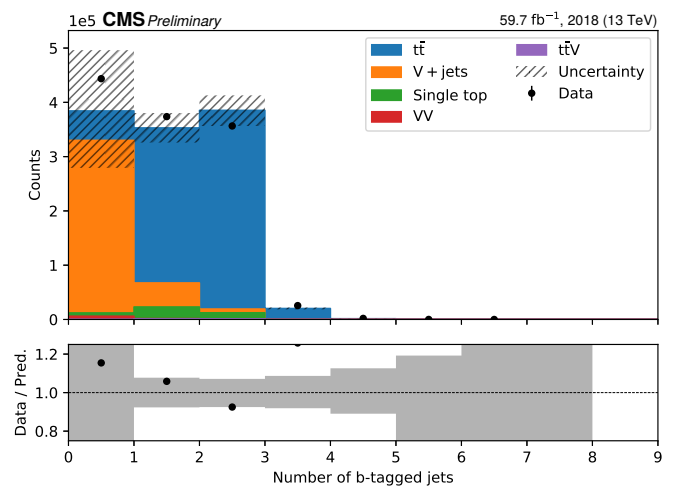
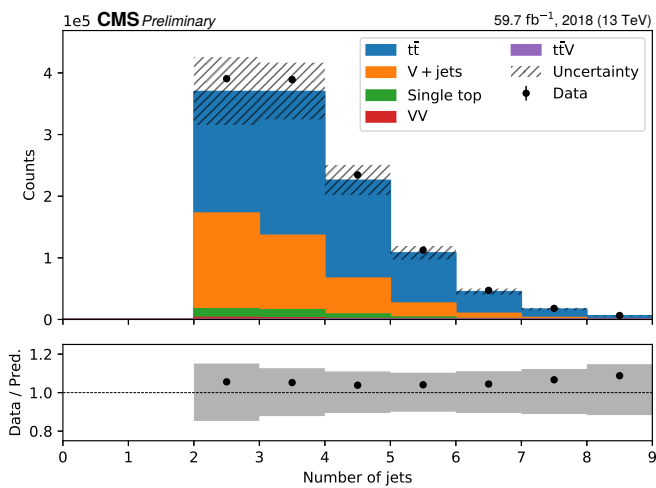
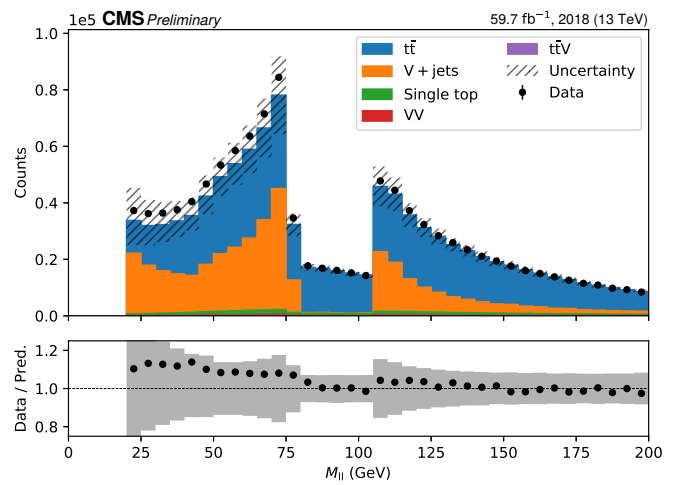
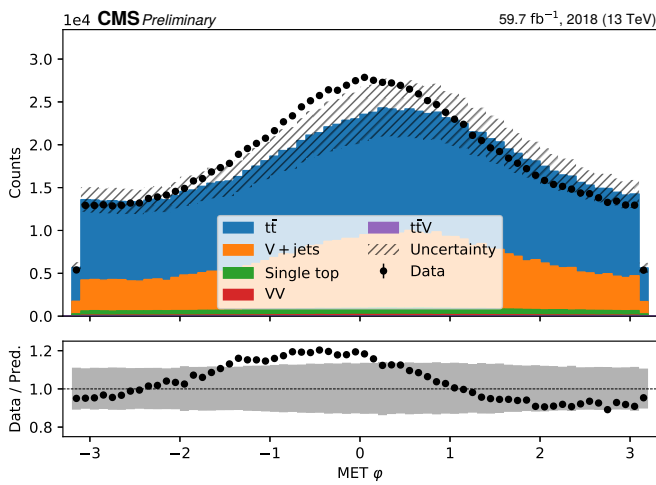
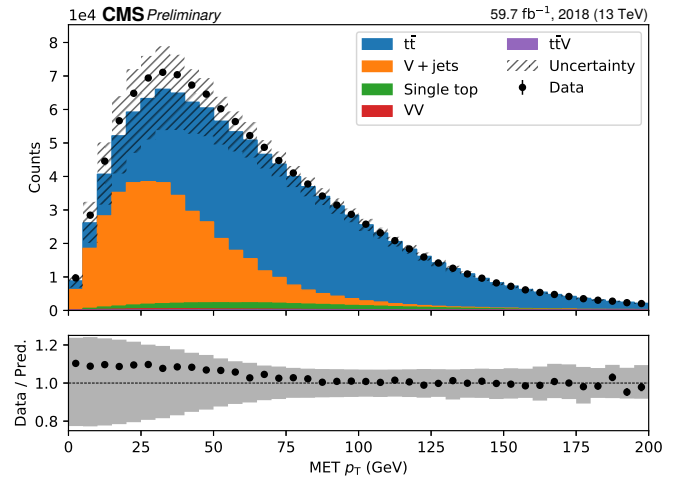
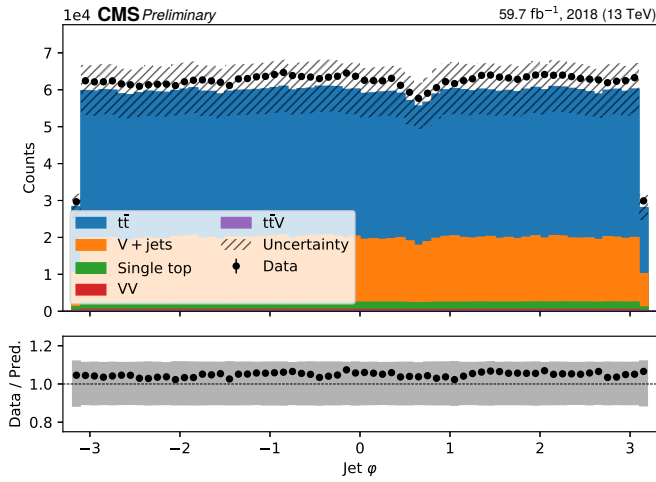


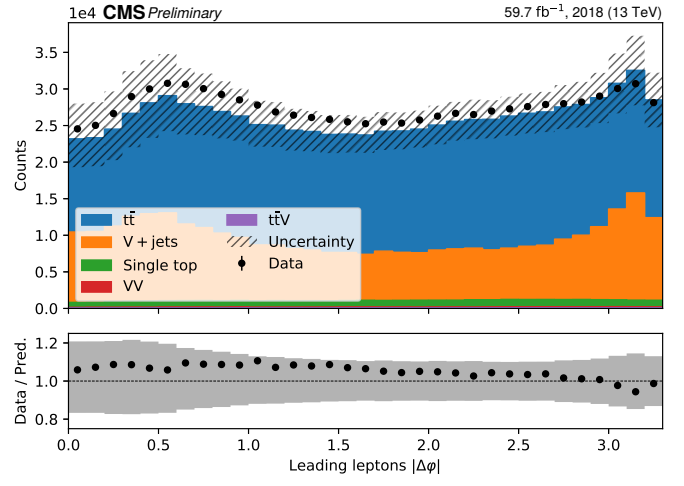
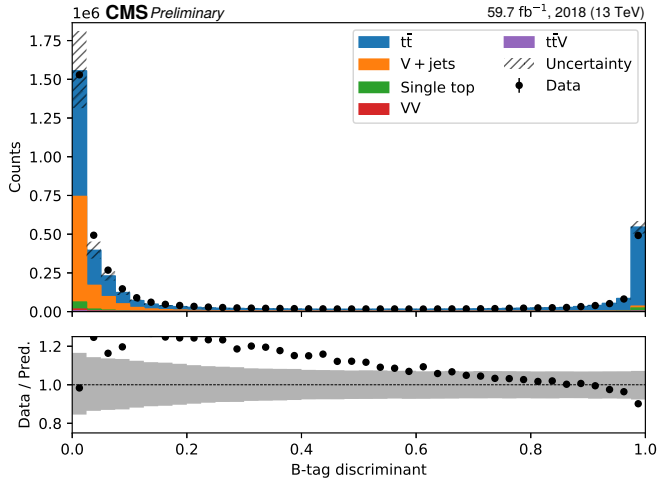
1.11 Number of jets ≥ 2 



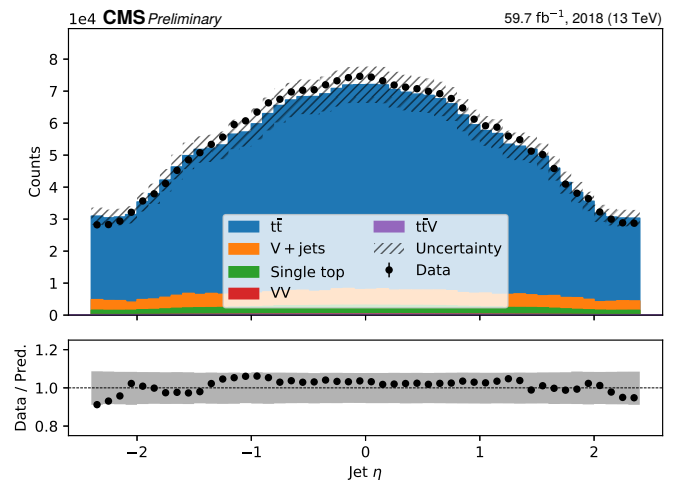
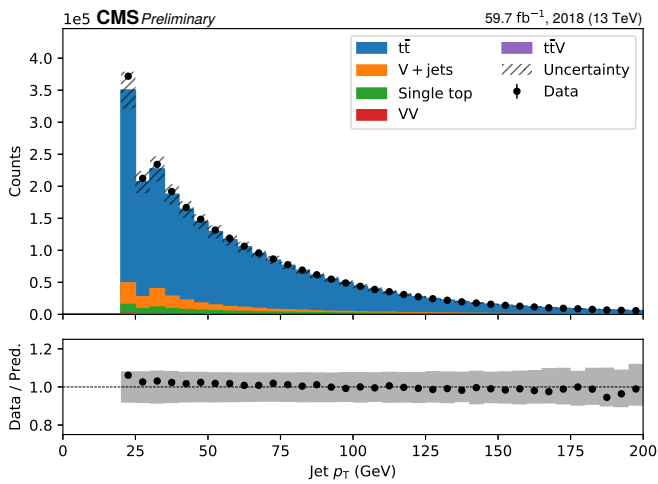
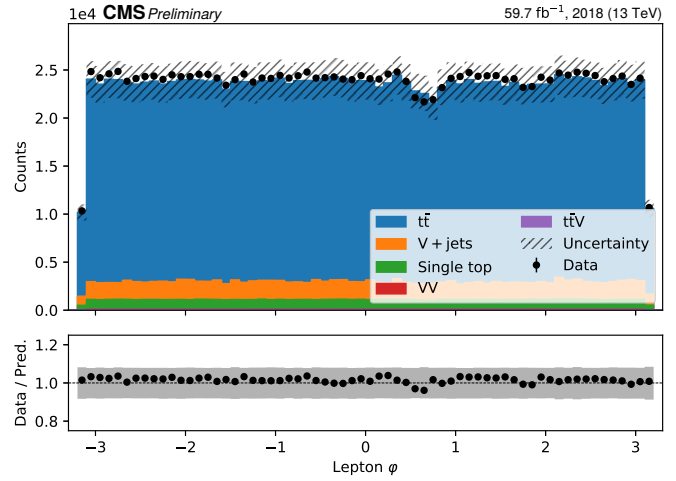
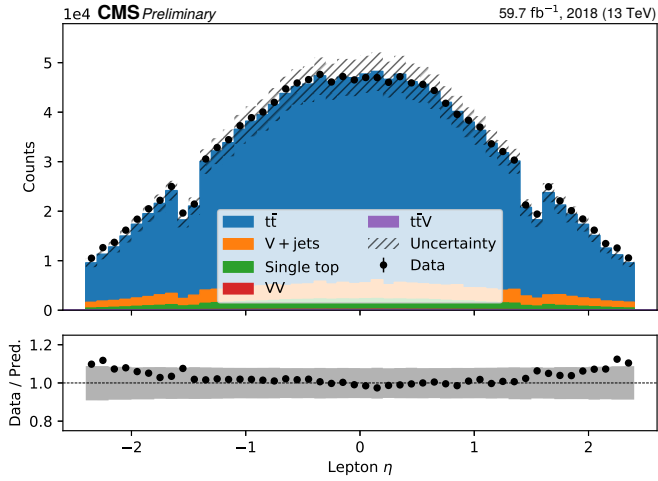
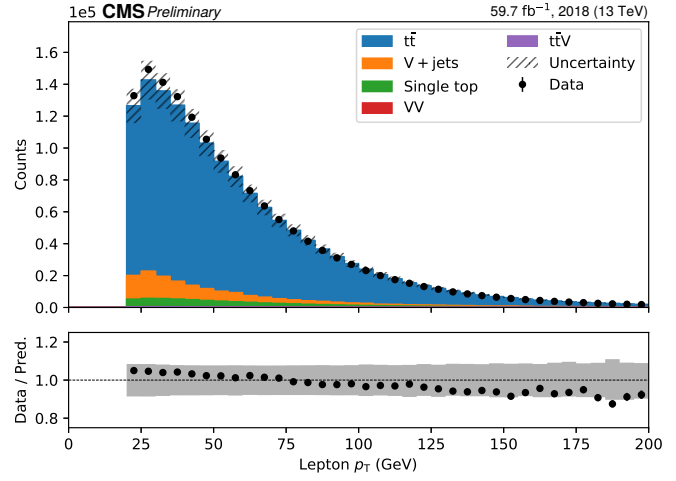
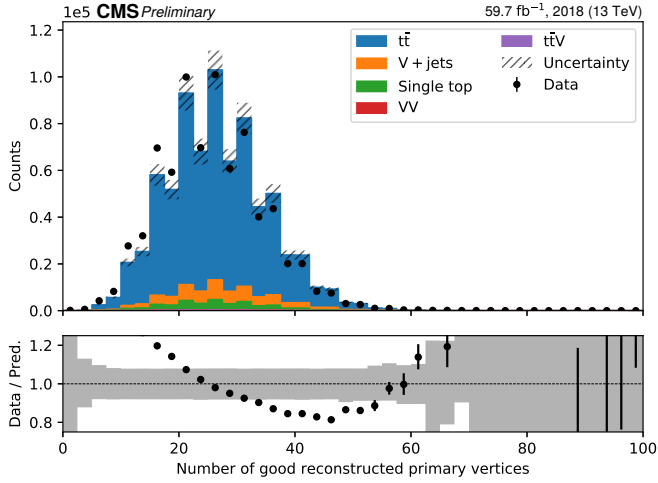


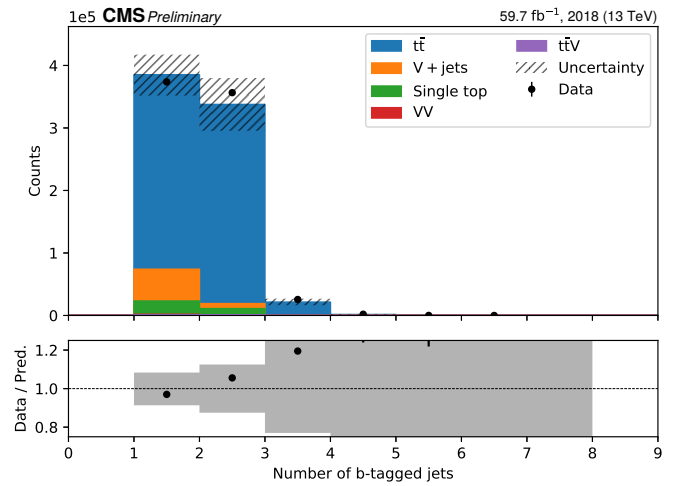
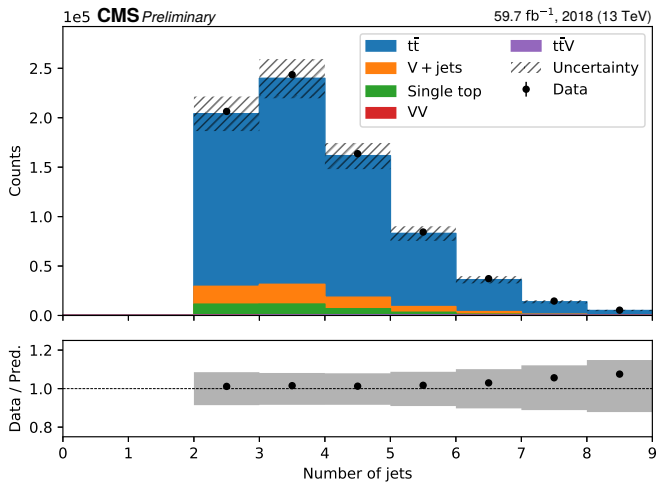
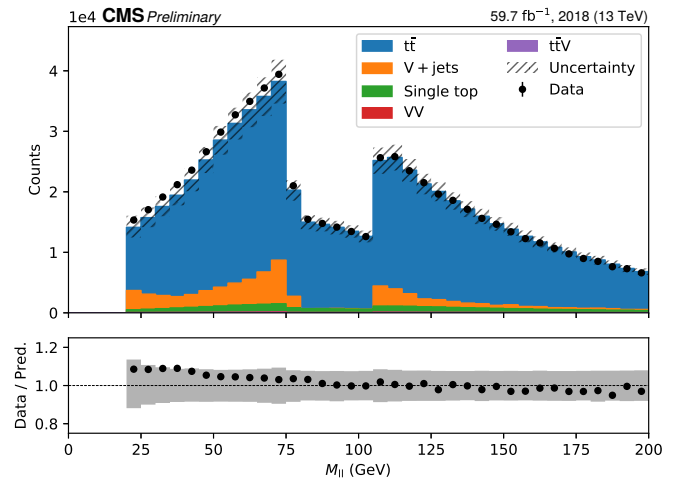
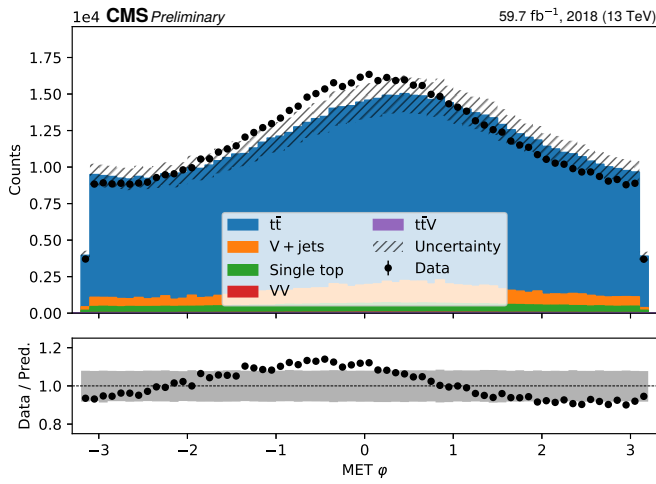
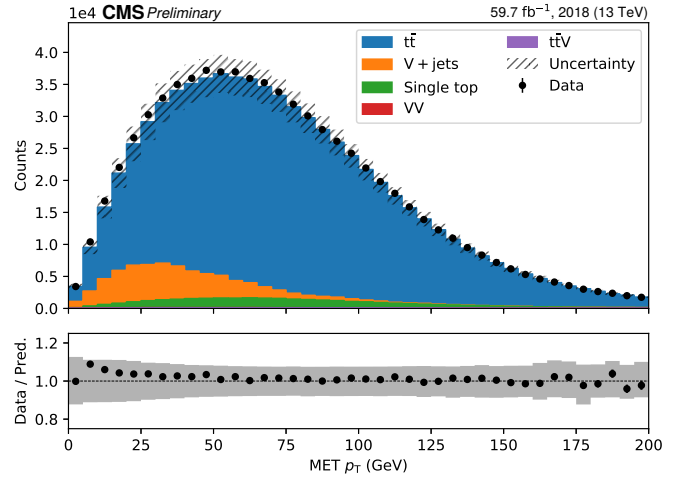
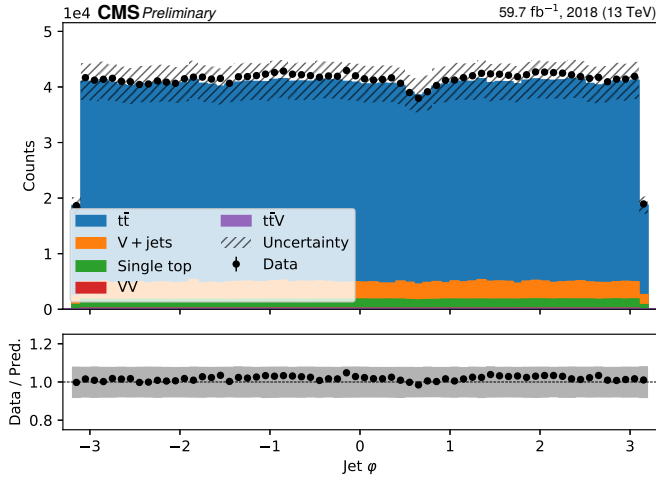
1.12 Require jet p_T 

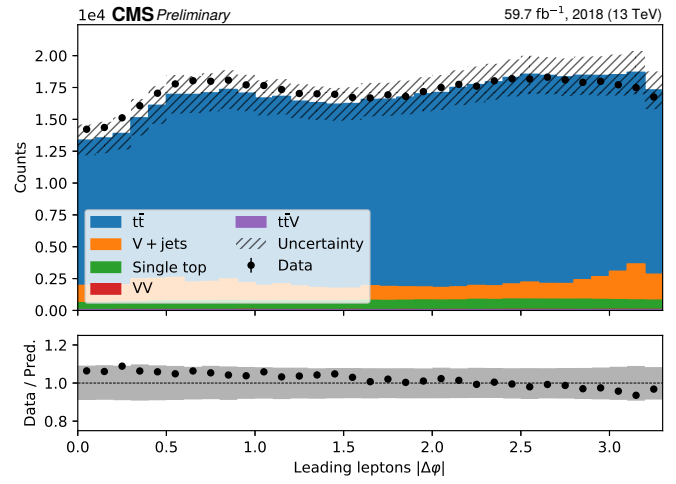
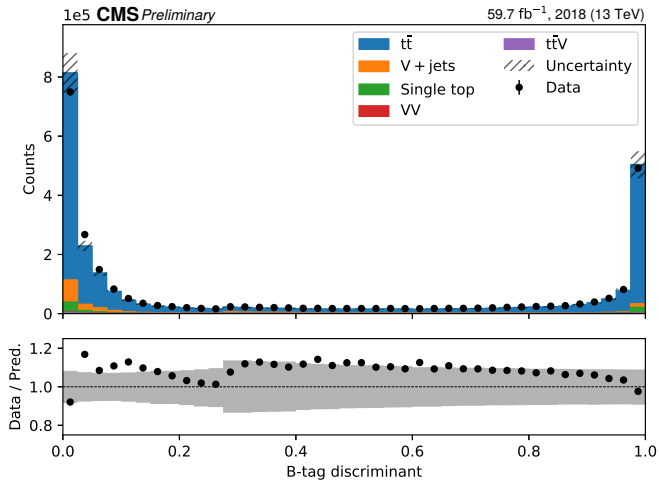


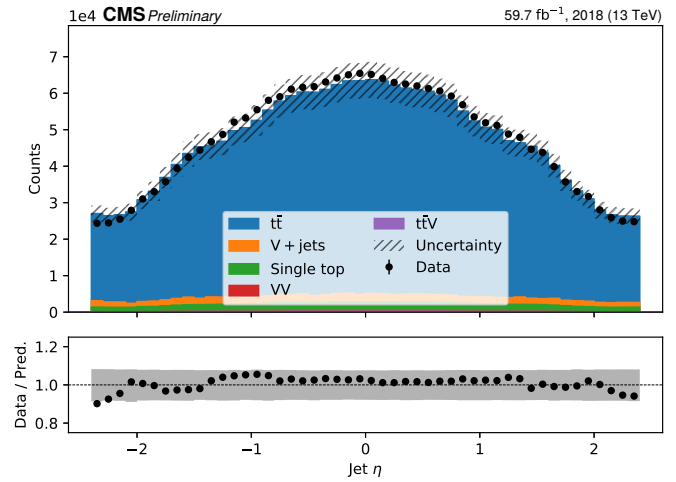
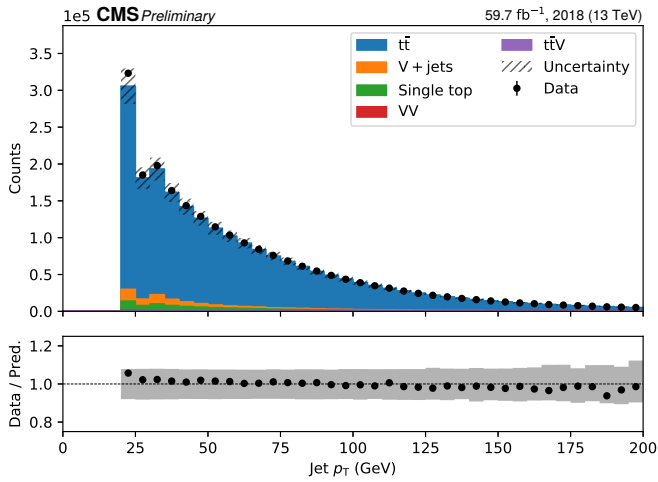
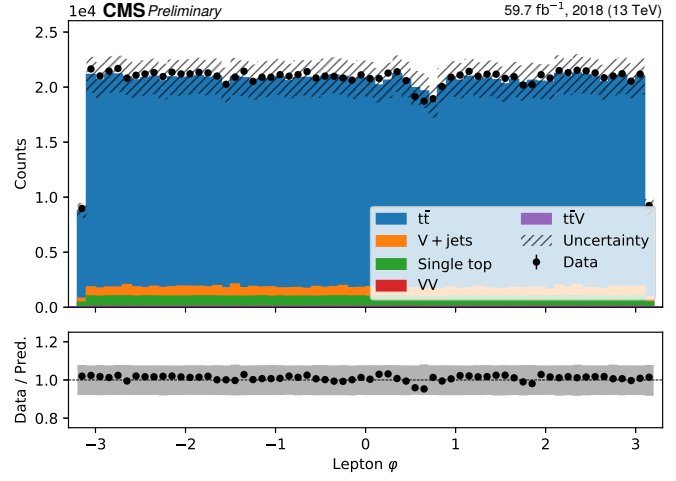
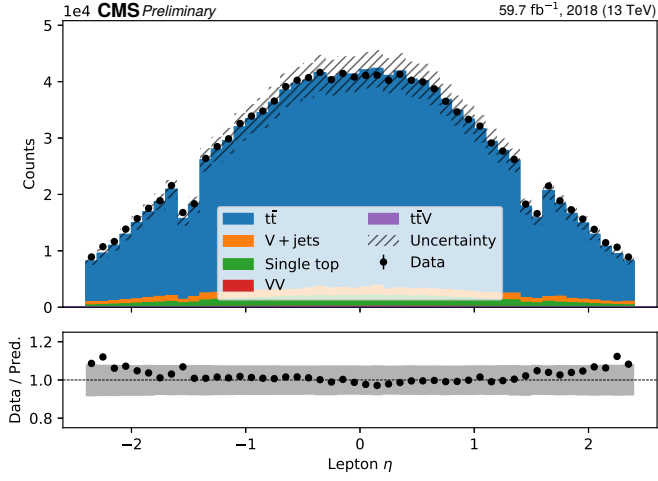
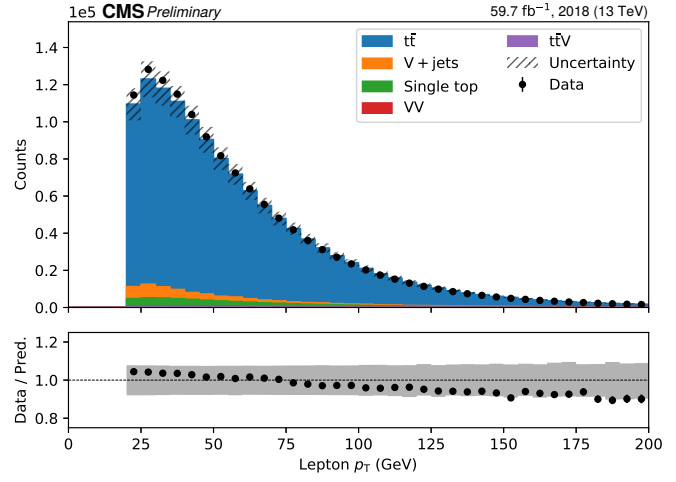
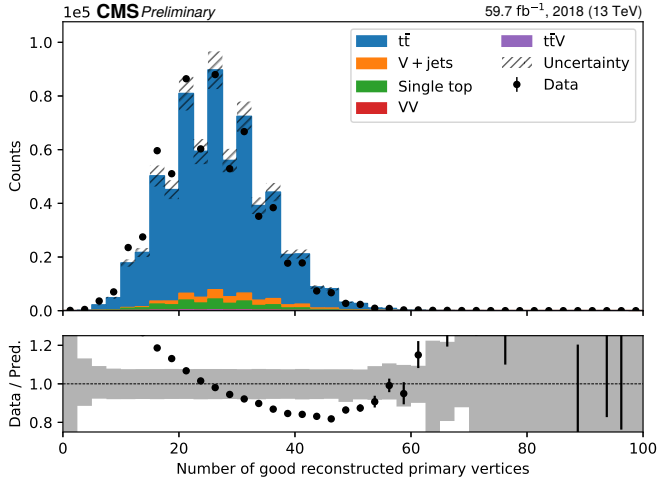


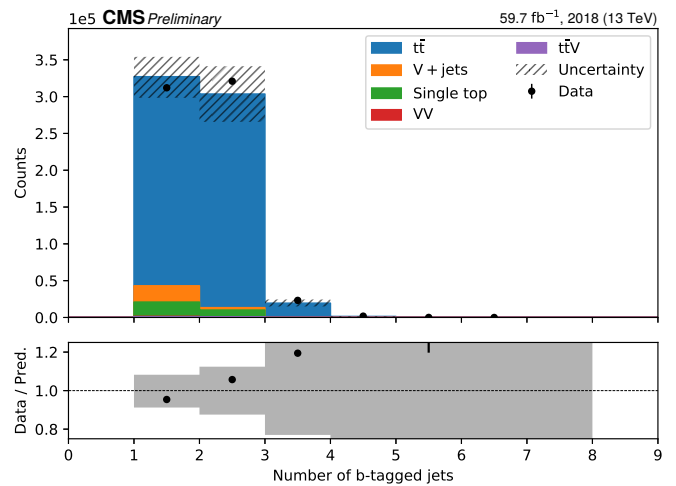
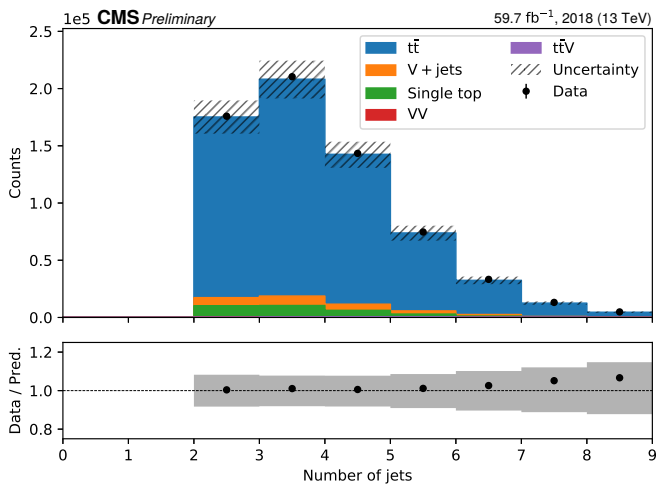
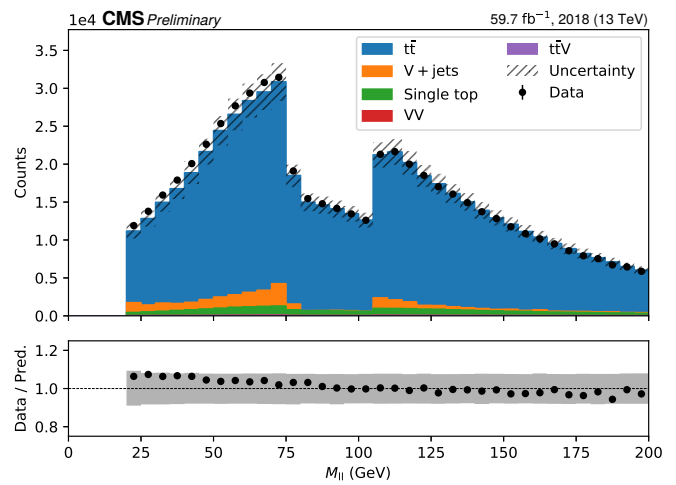
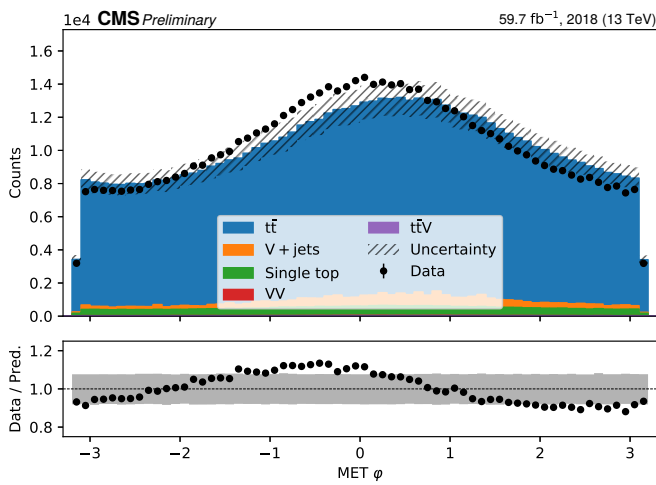
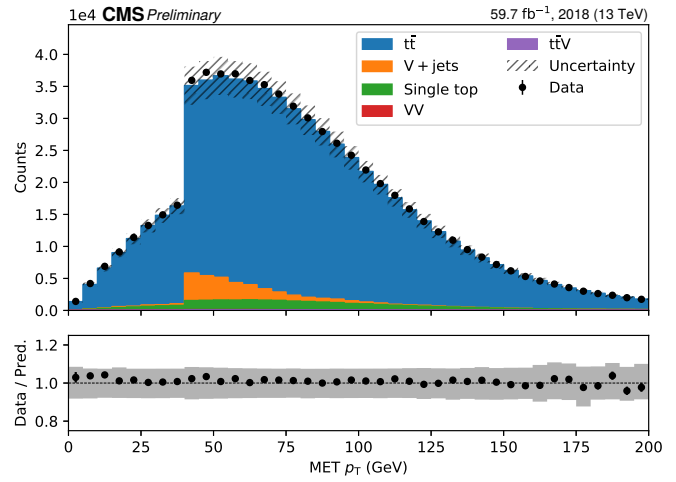
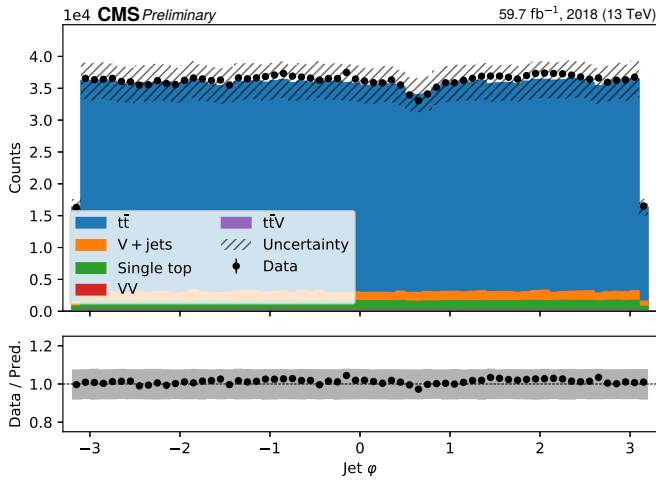
1.13 At least 1 btag

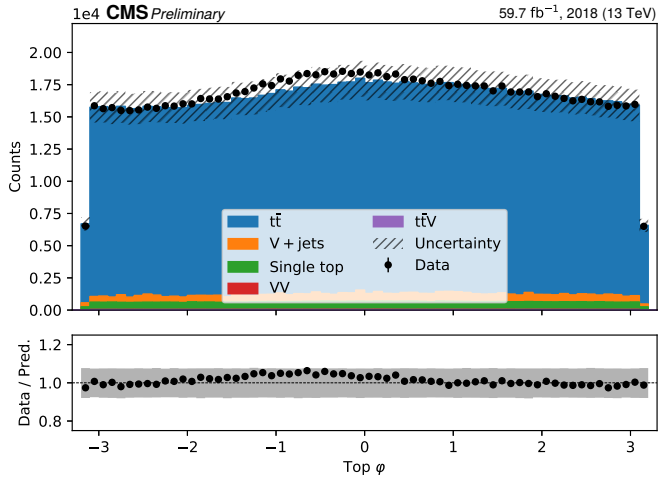
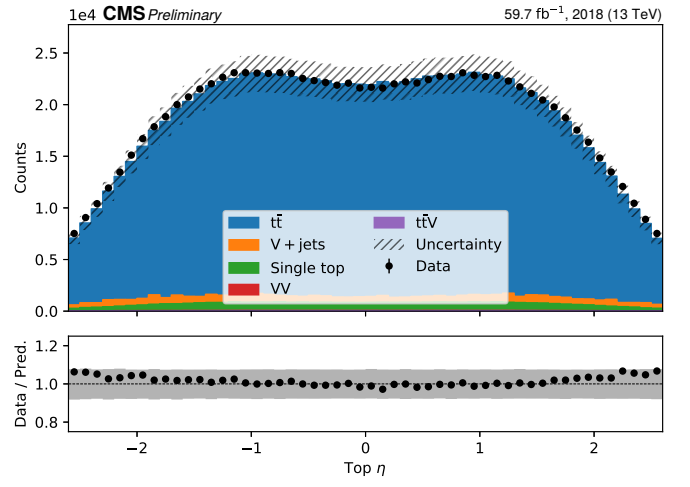
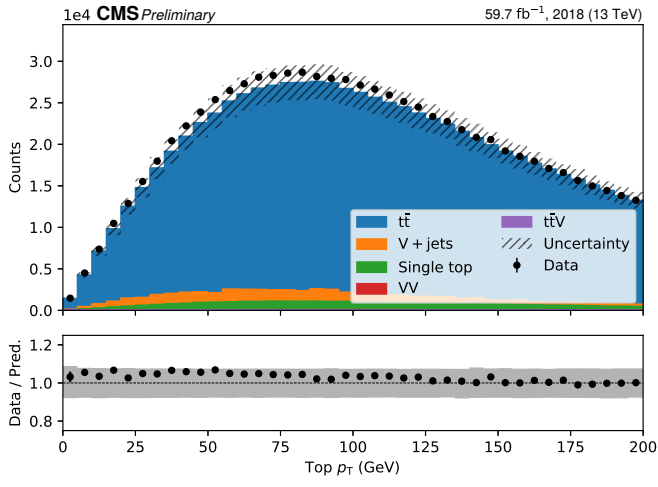
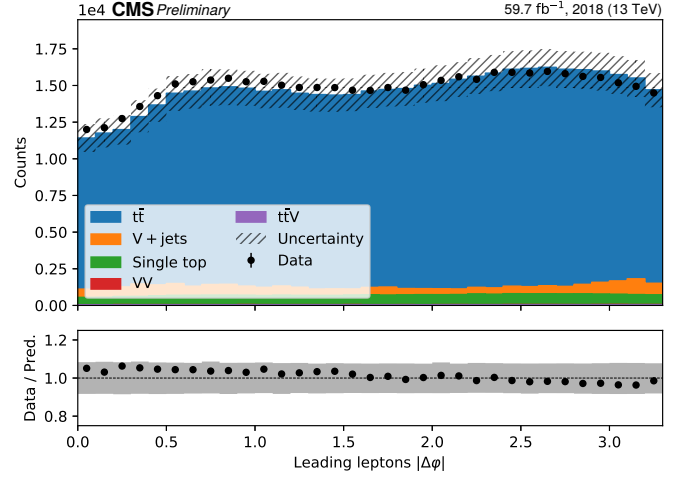
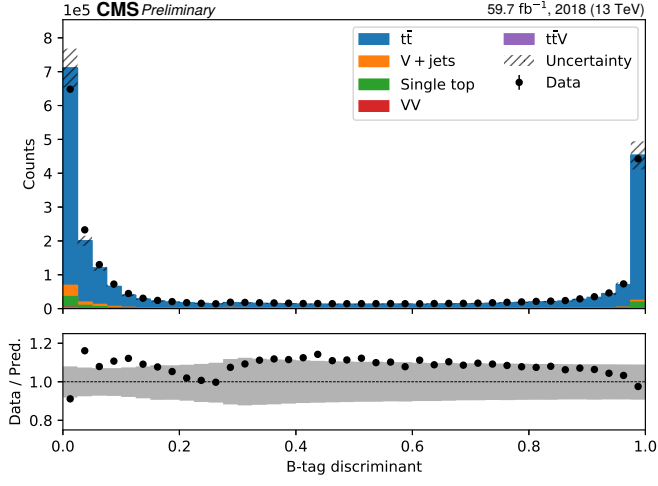


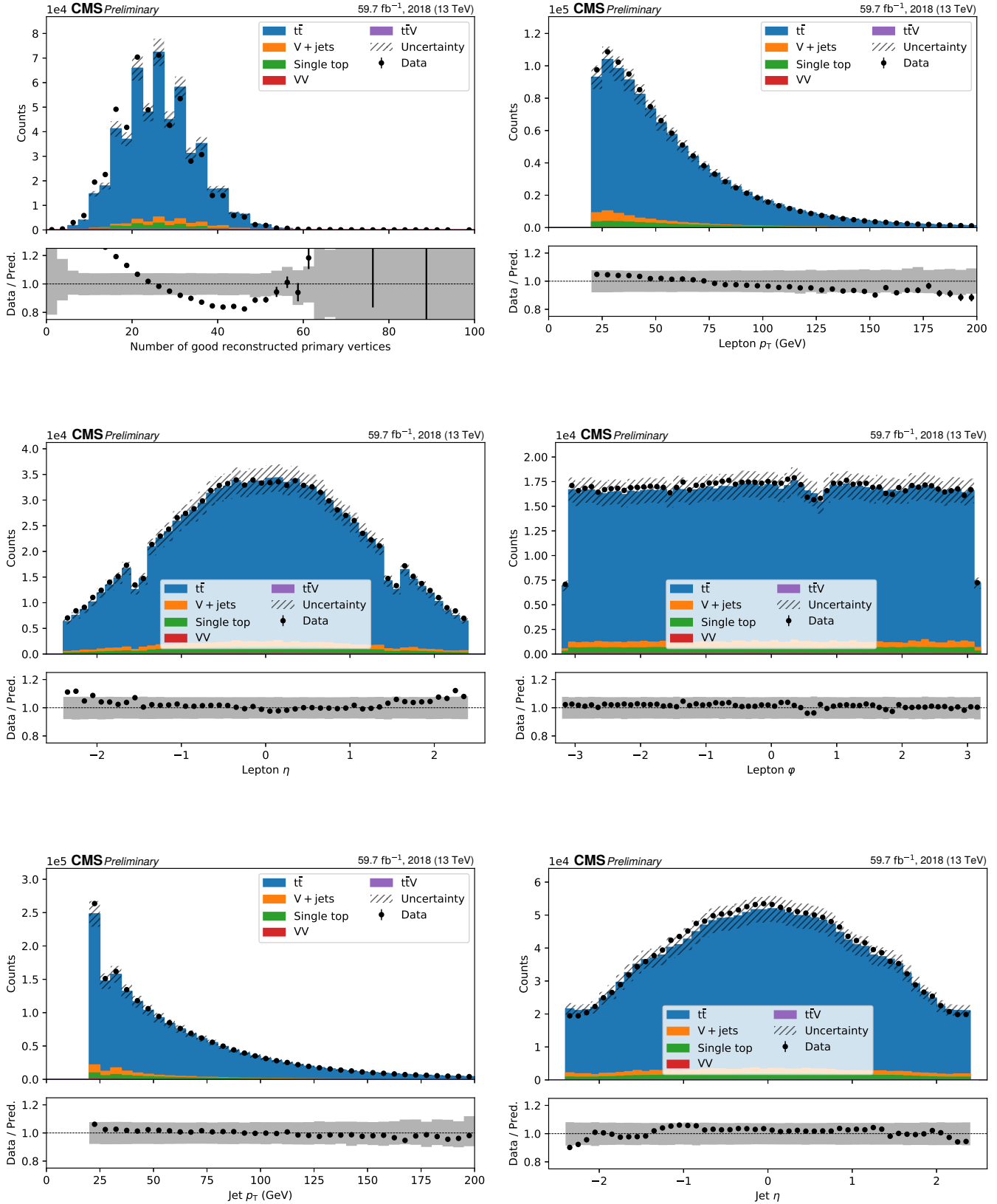


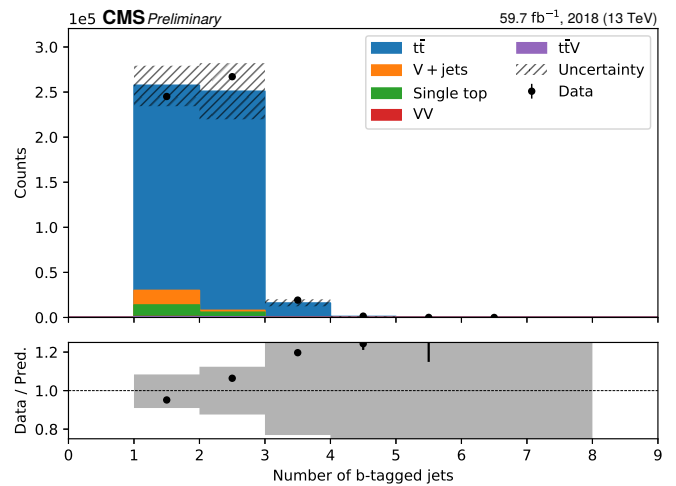
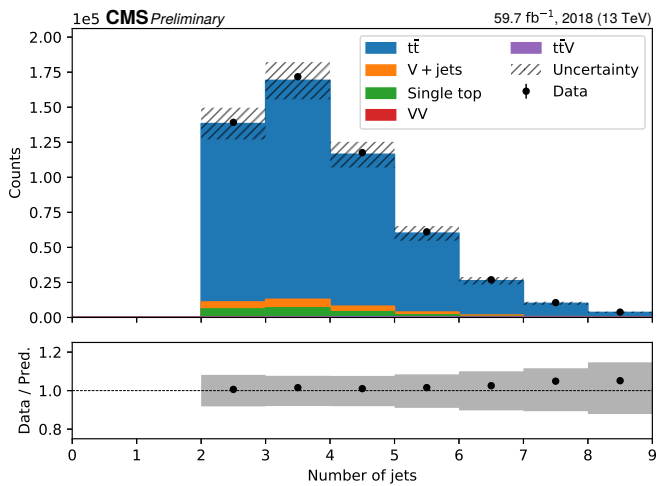
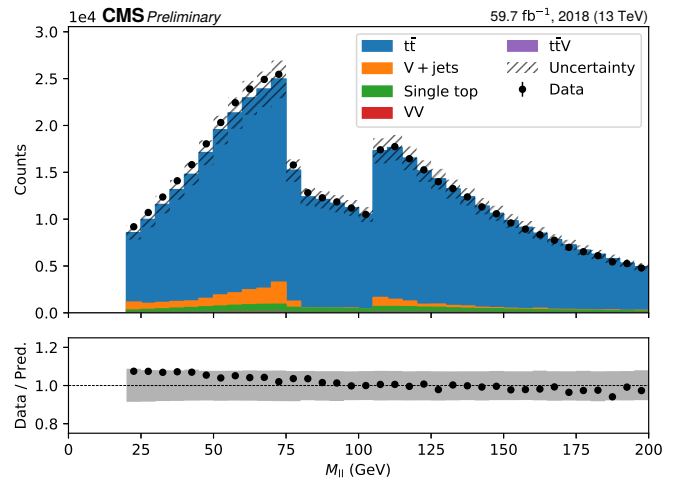
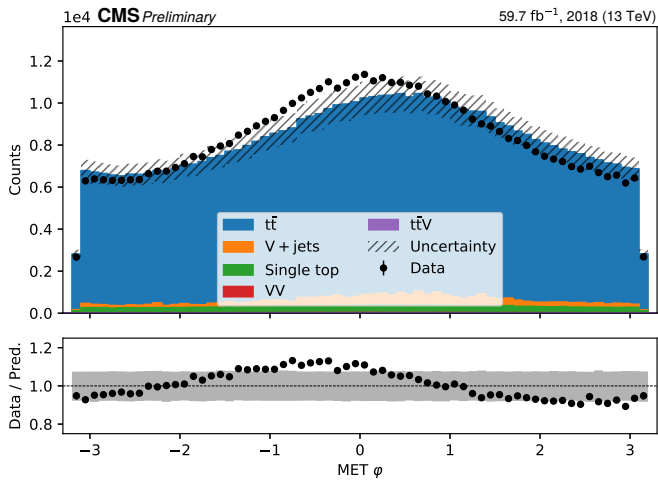
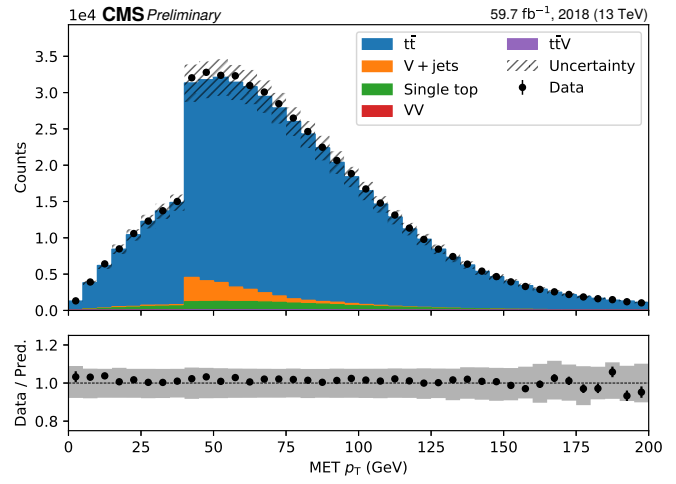
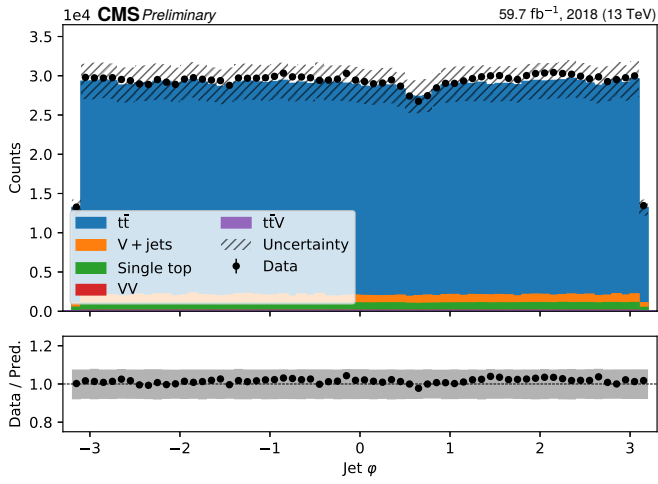


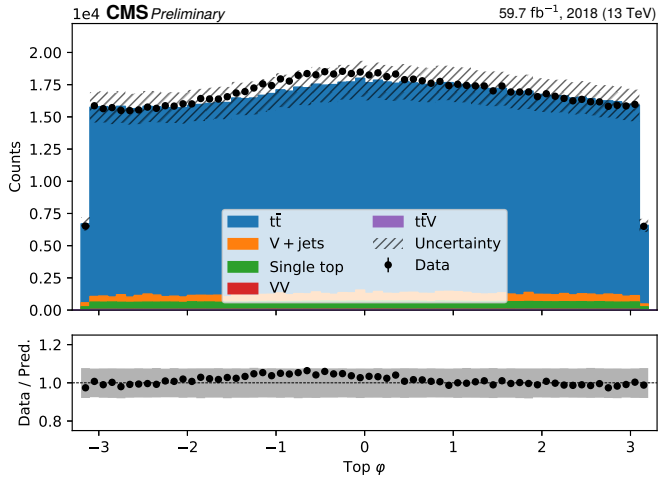
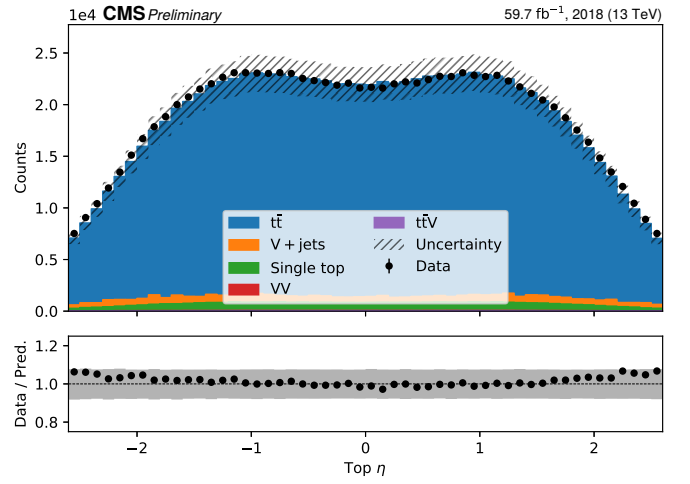
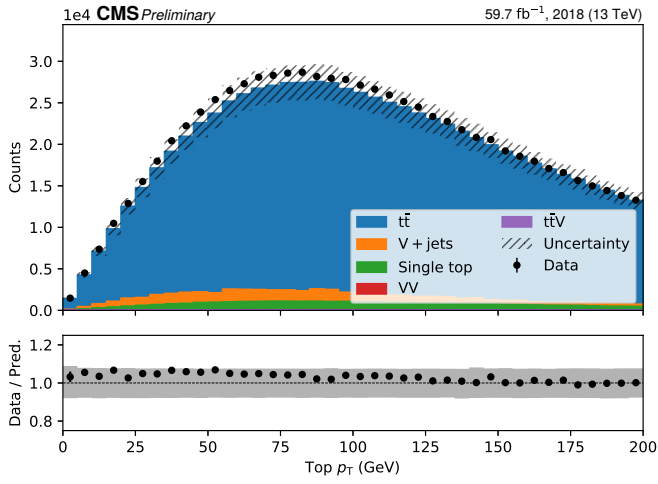
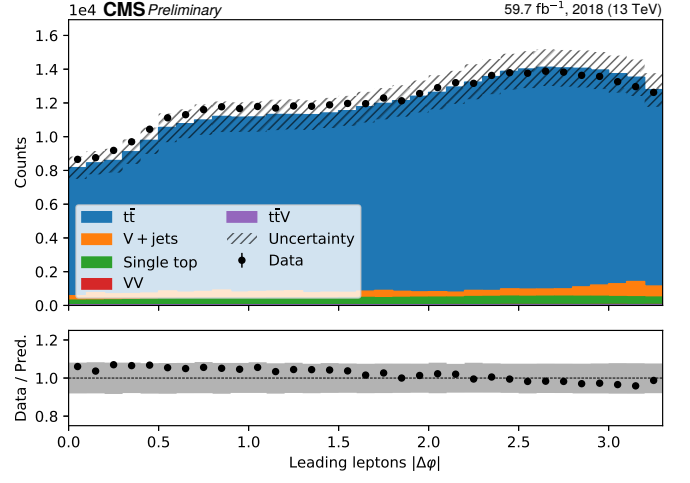
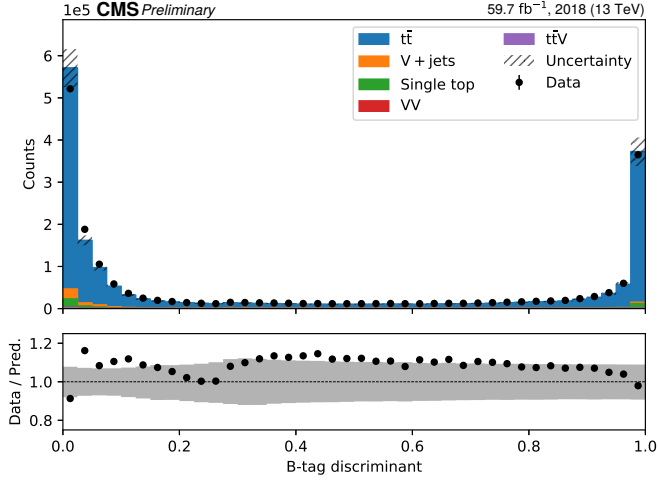
1.14 $MET > 40$ GeV





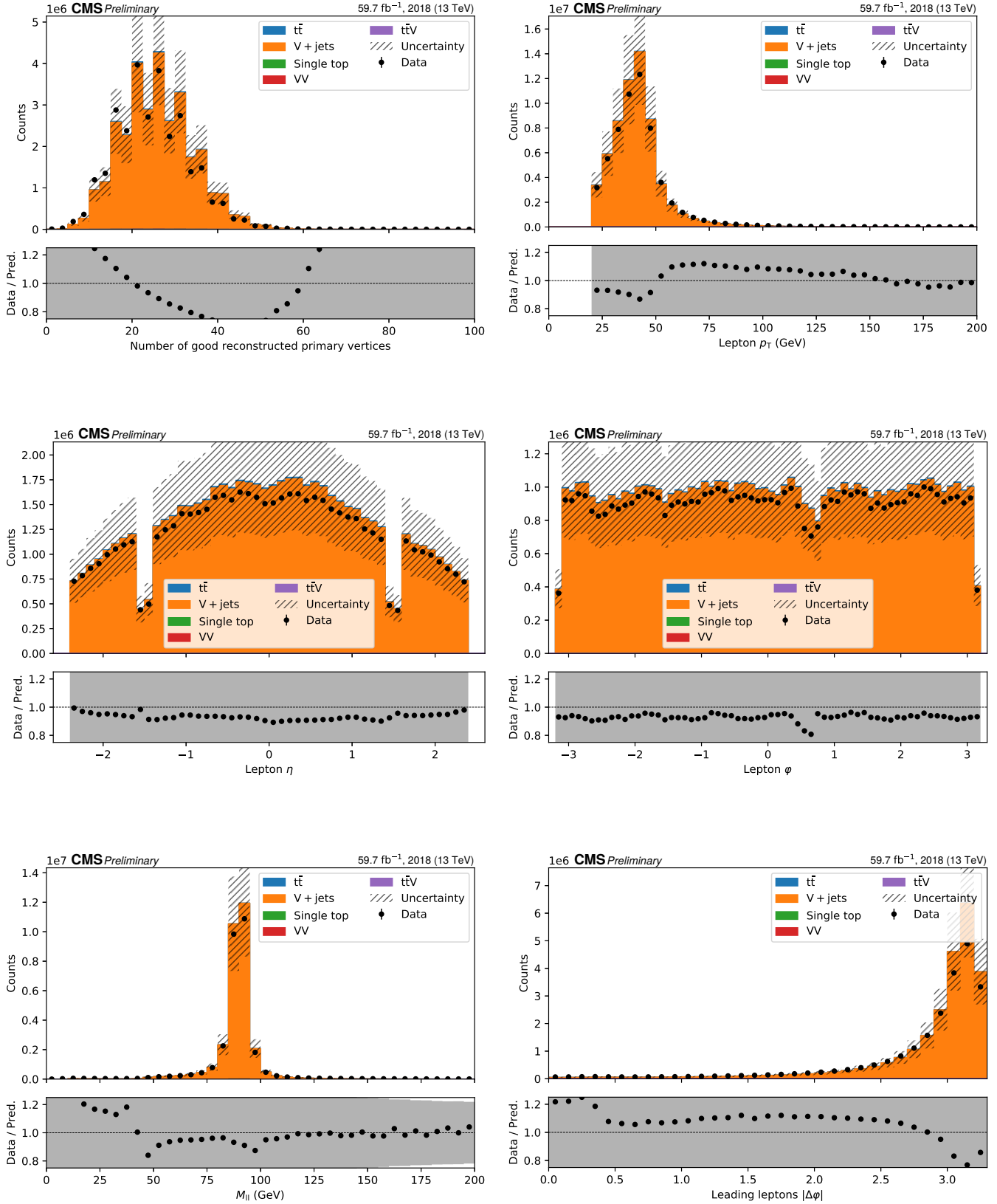
1.15 Passes $t\bar{t}$ reconstruction



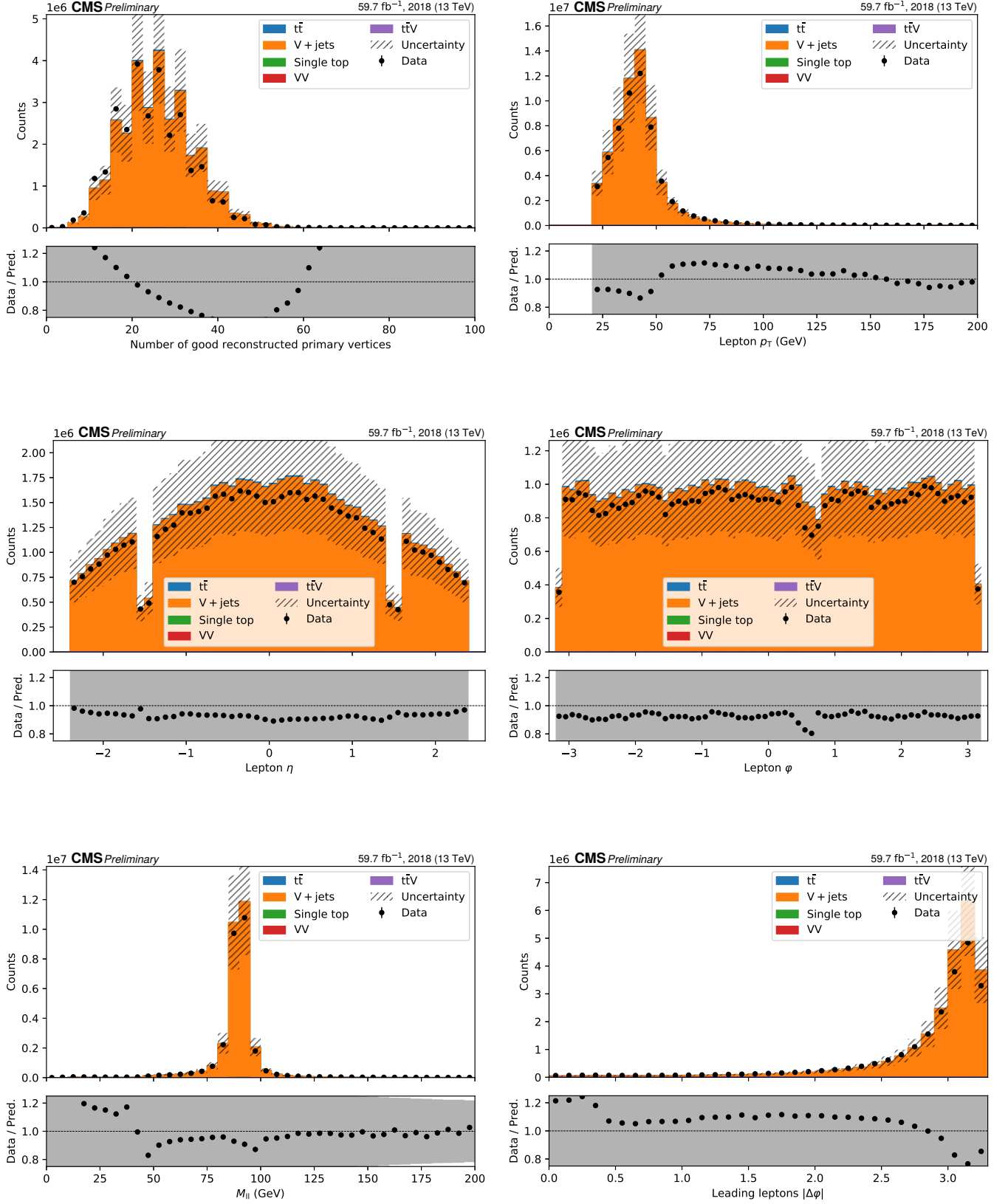


2 ee-channel

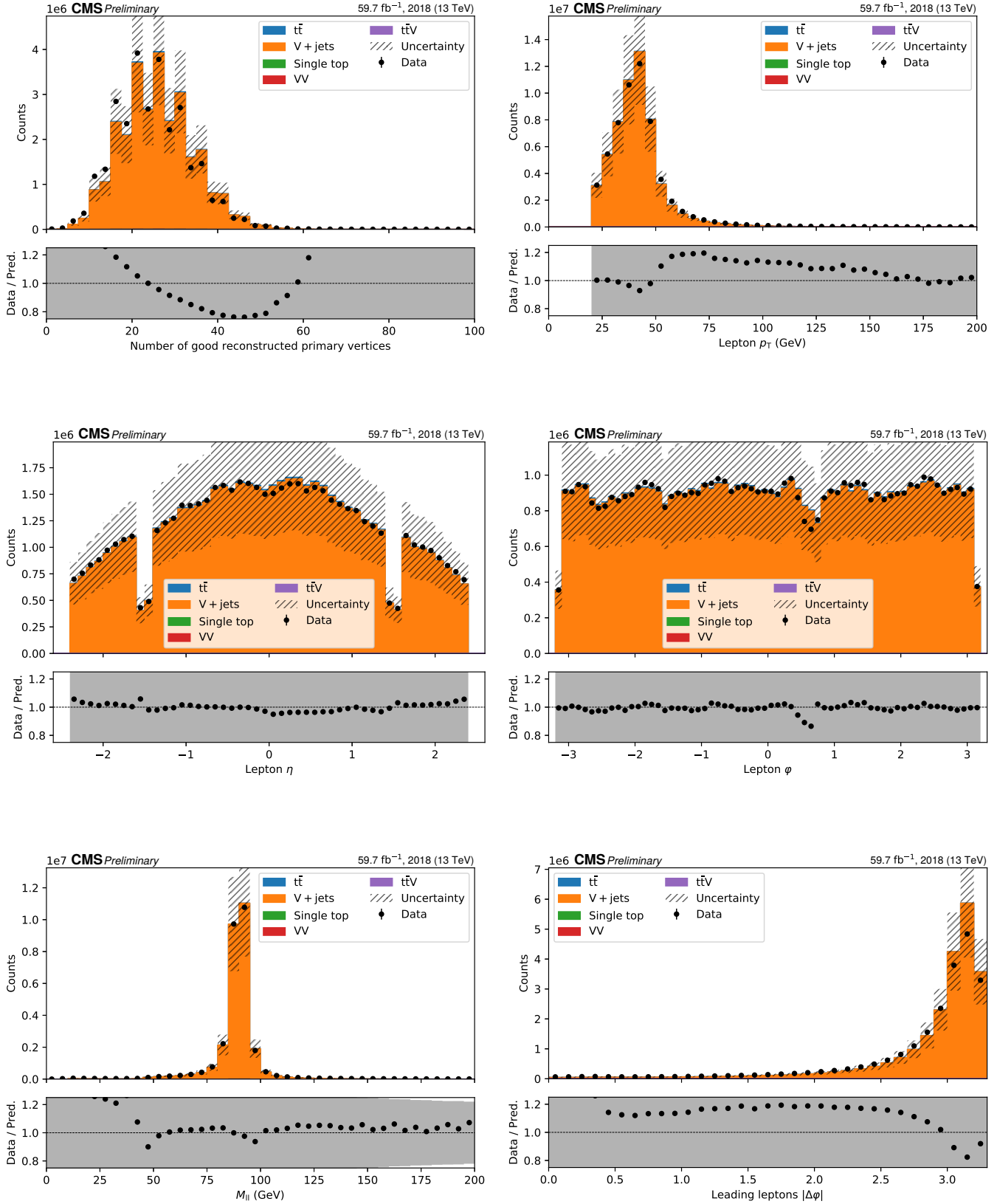
2.1 Have at least two leptons



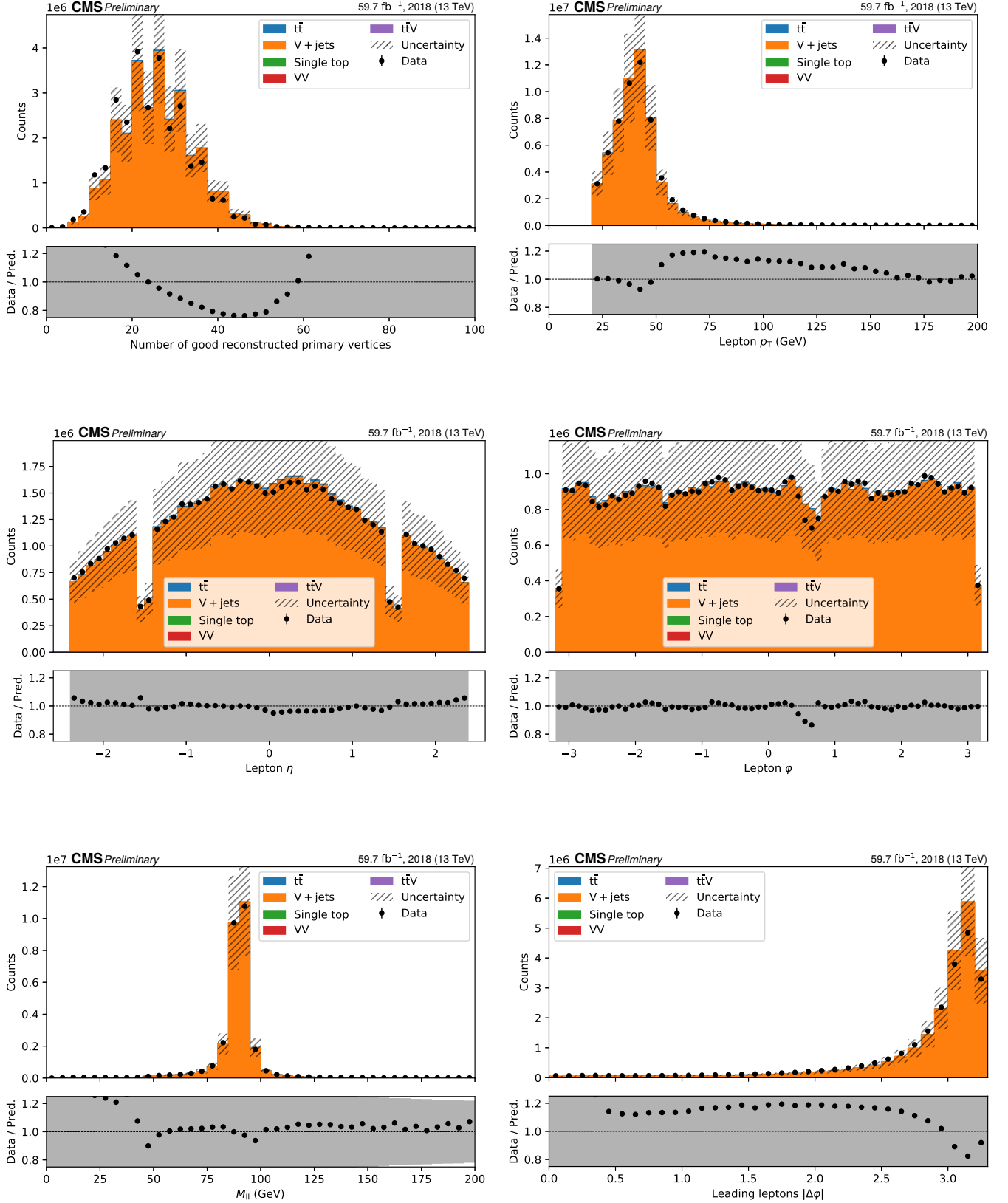
2.2 Leptons have opposite charge

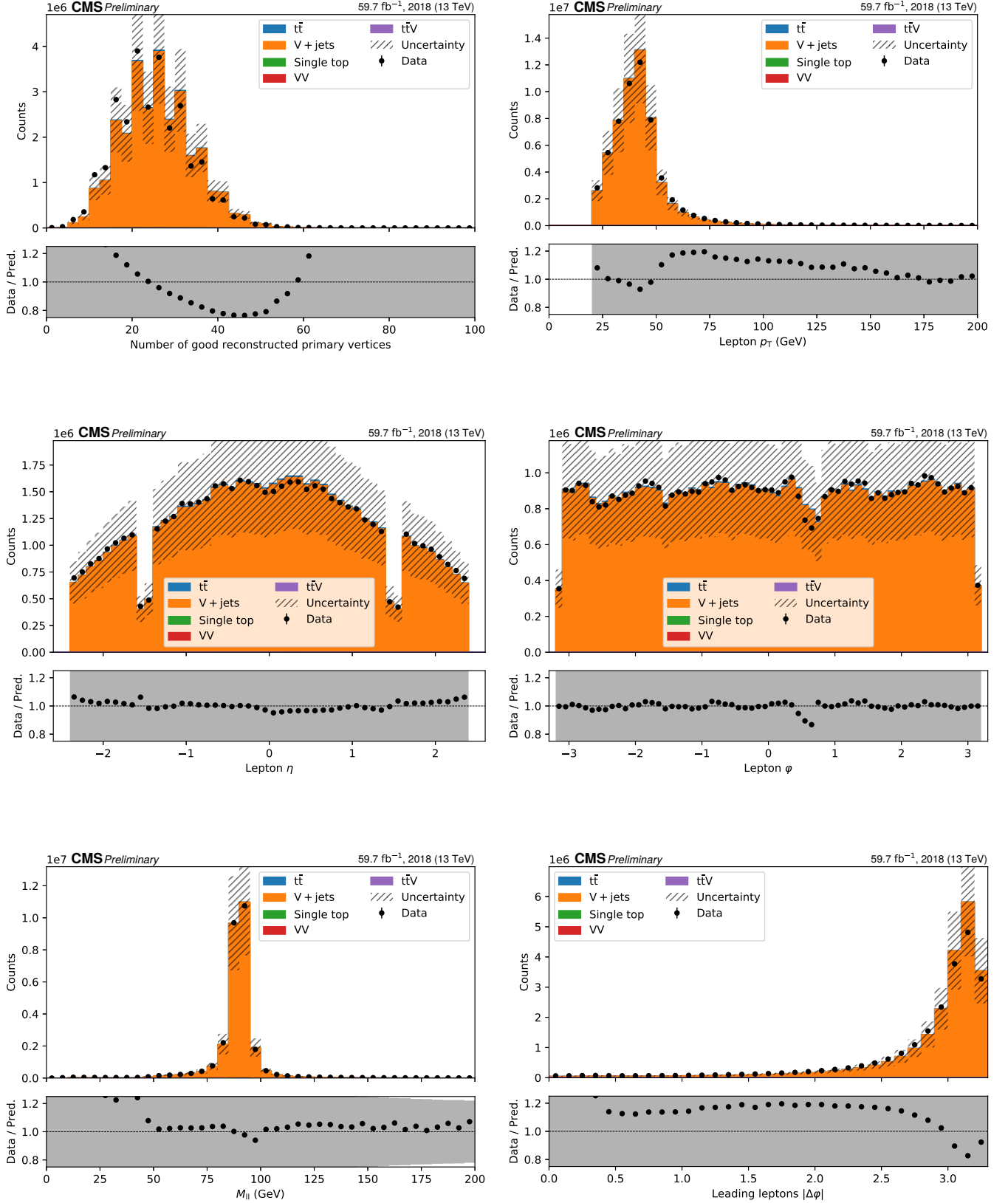


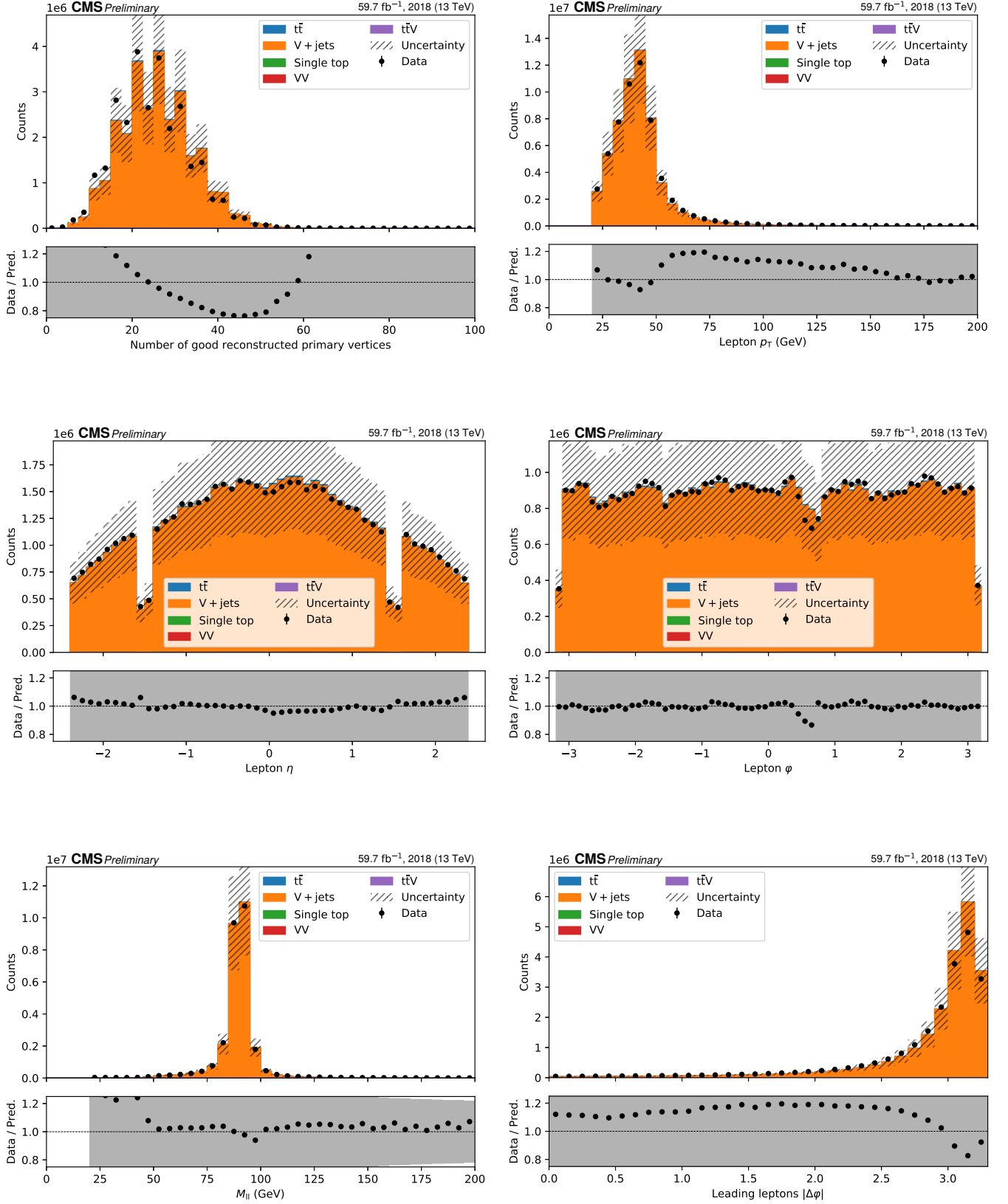
2.3 No additional leptons



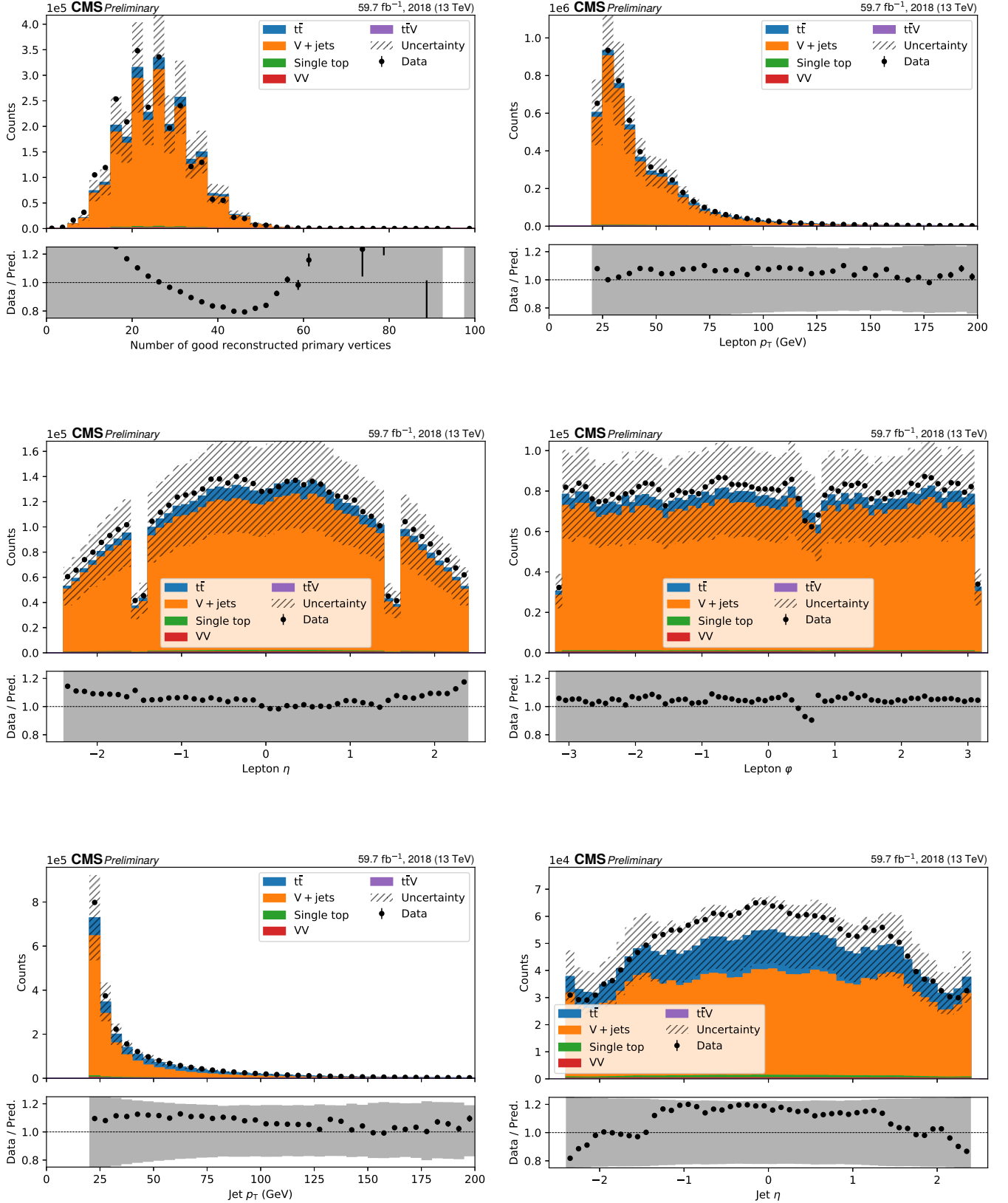
2.4 Channel trigger matching

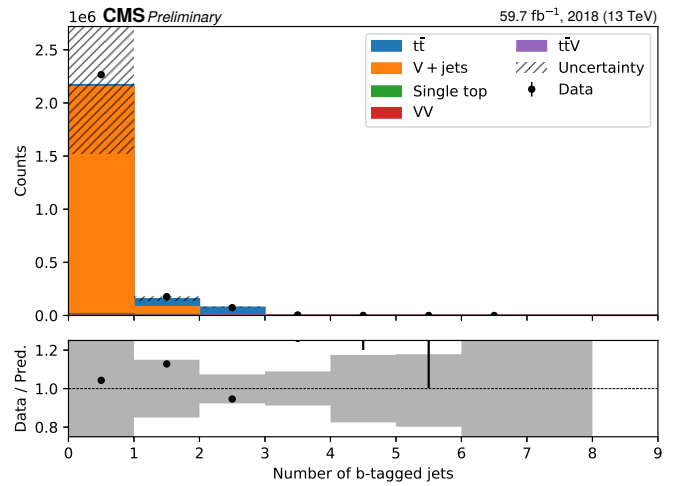
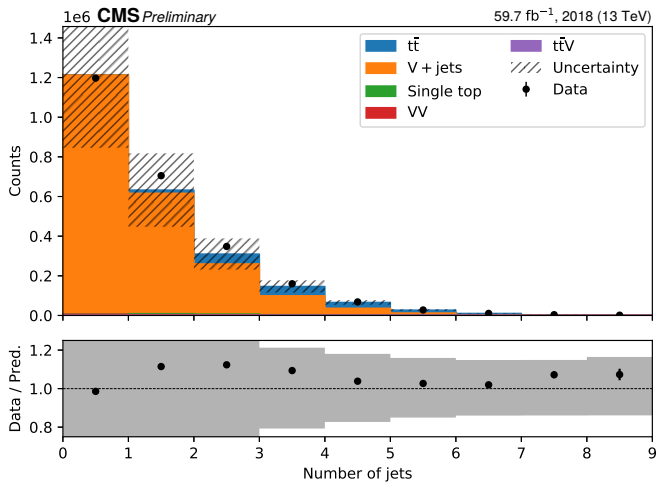
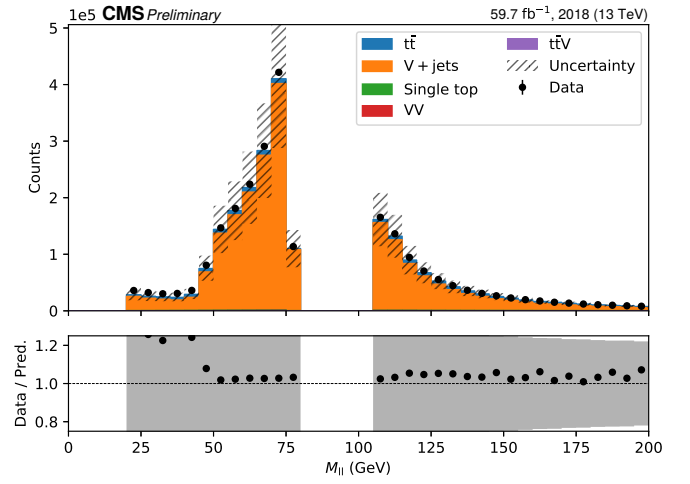
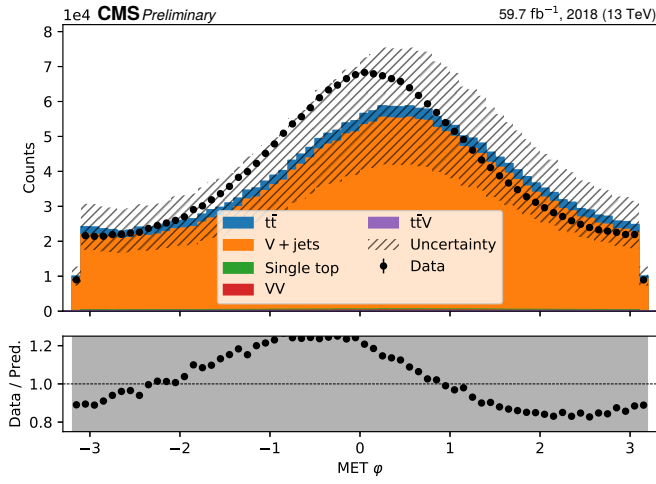
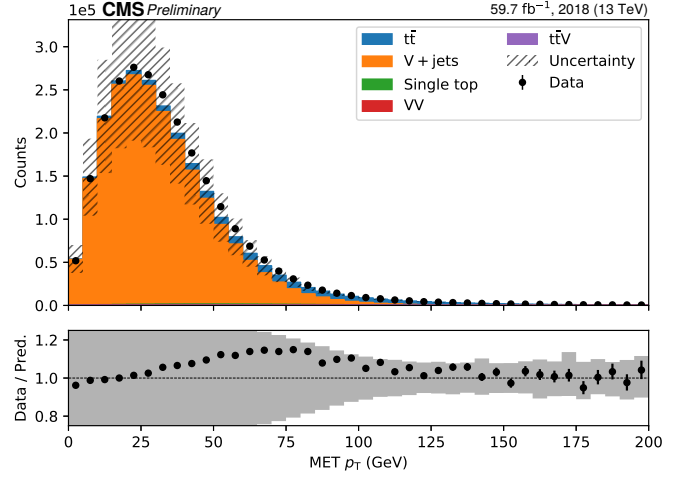
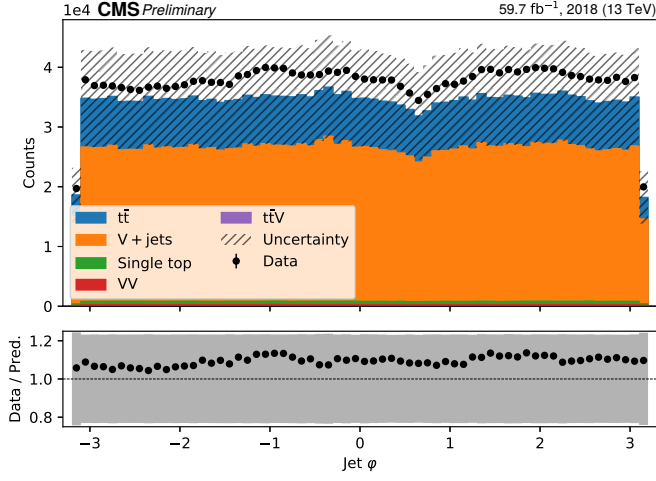


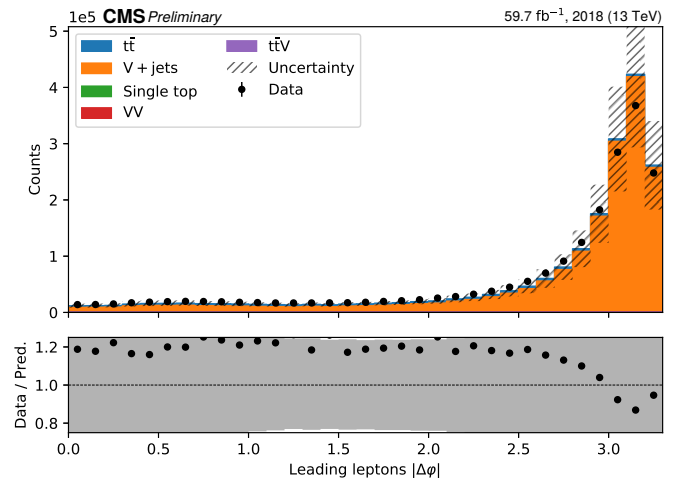
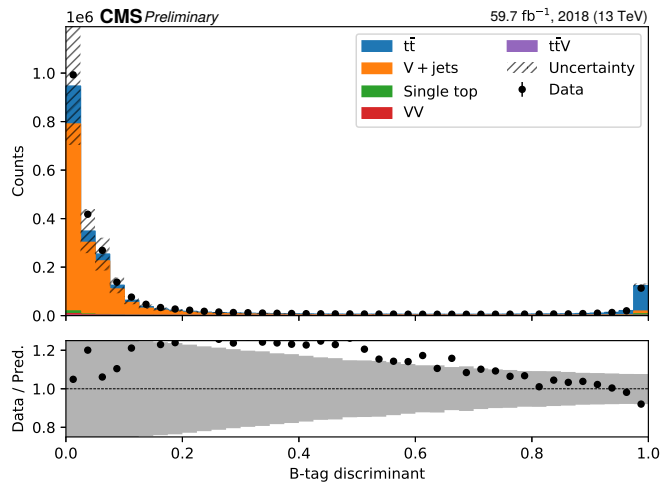
2.5 Require lepton p_T 

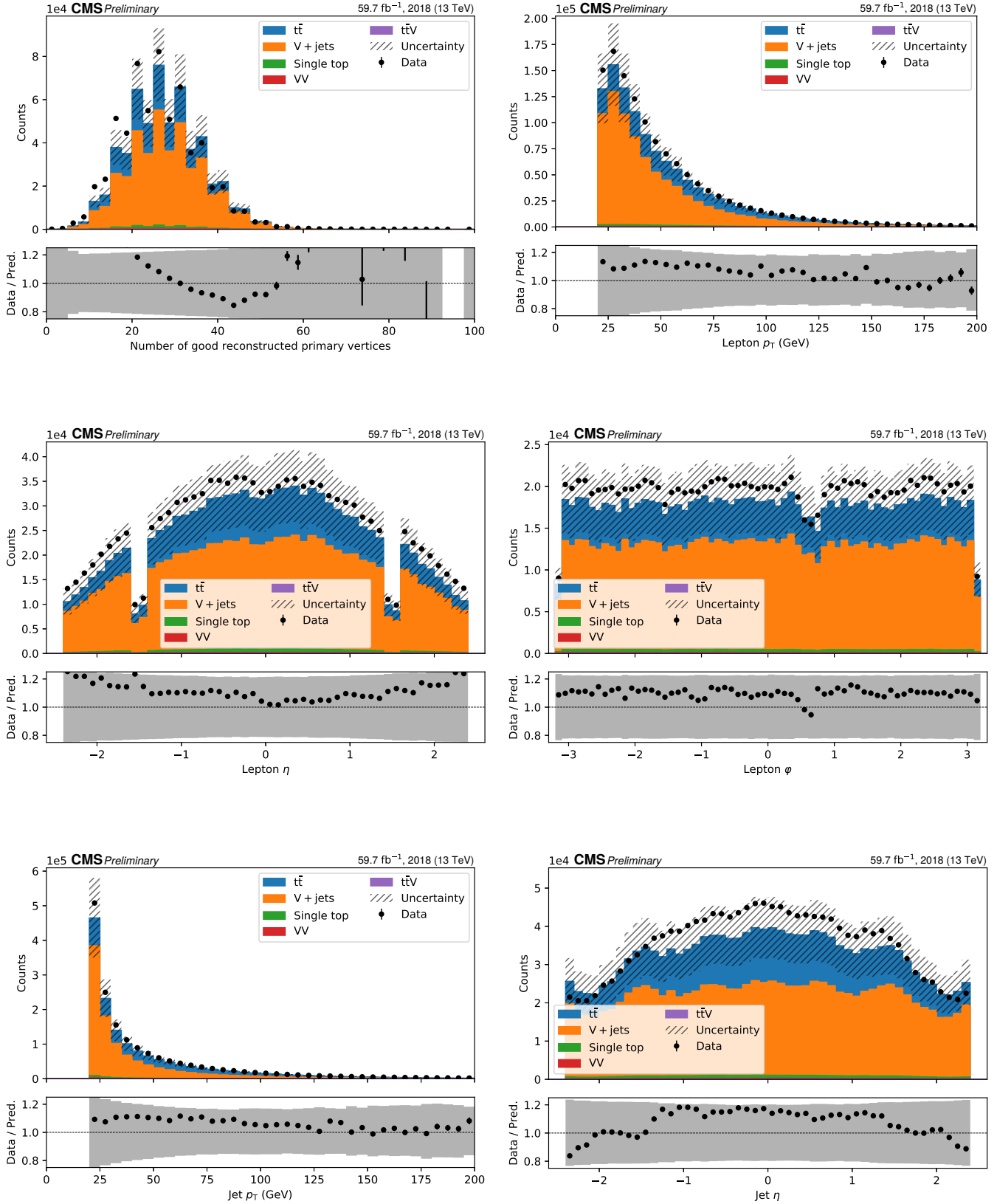
2.6 M_{ll} 

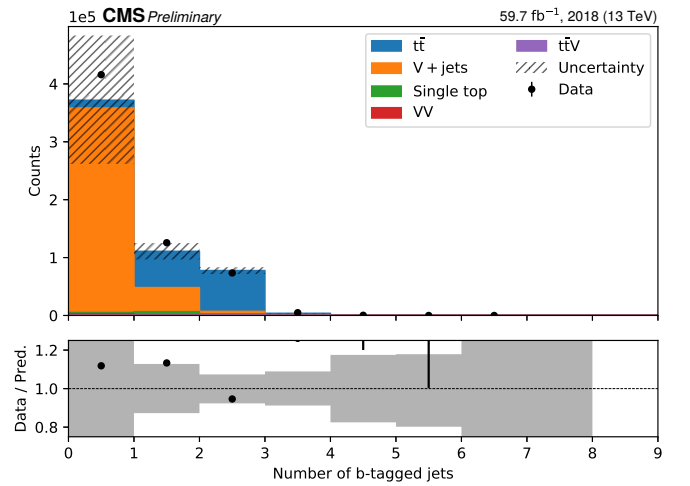
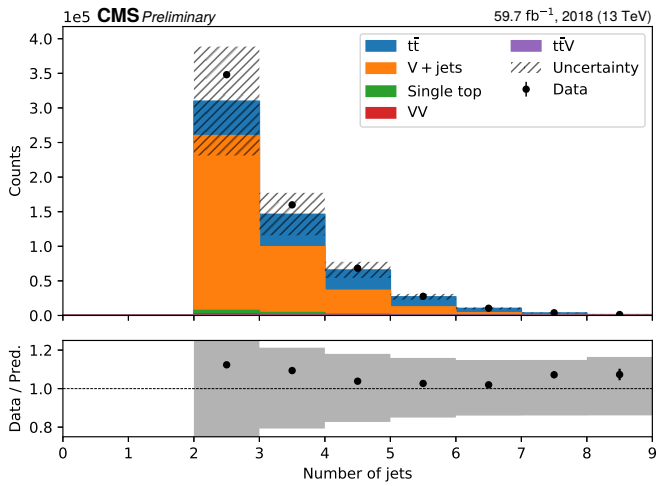
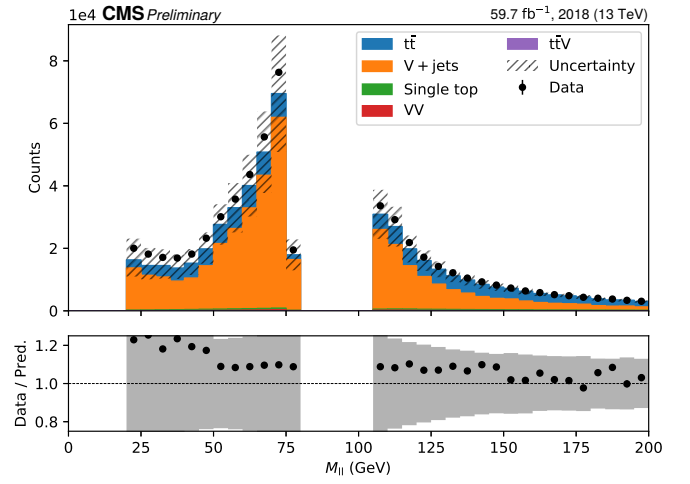
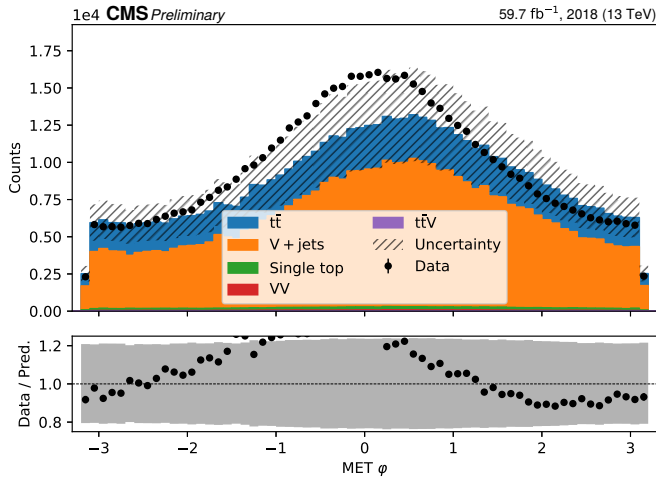
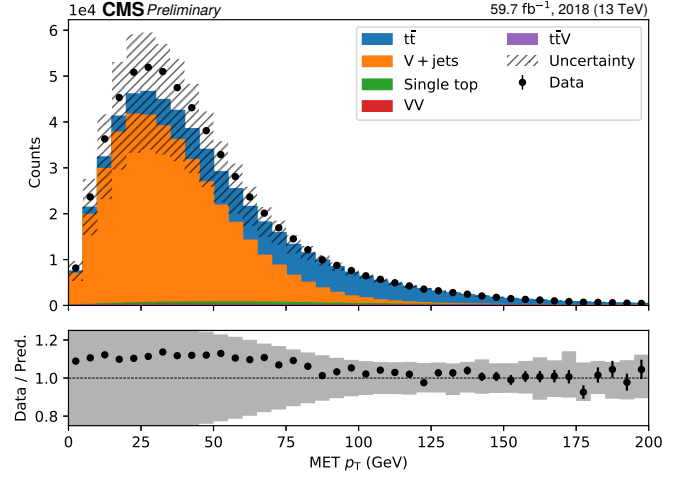
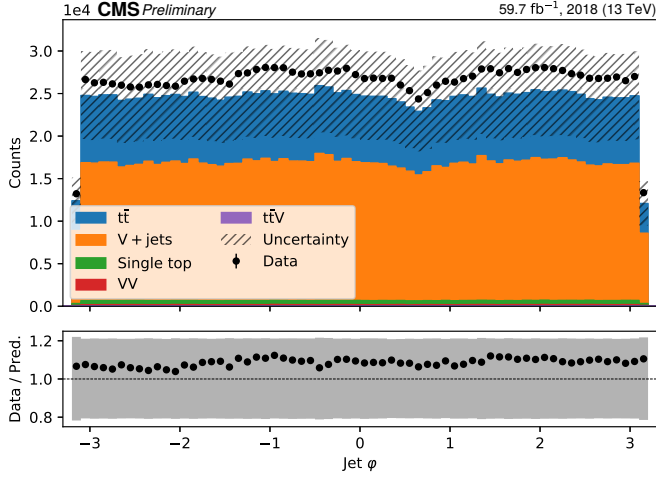
2.7 Z window

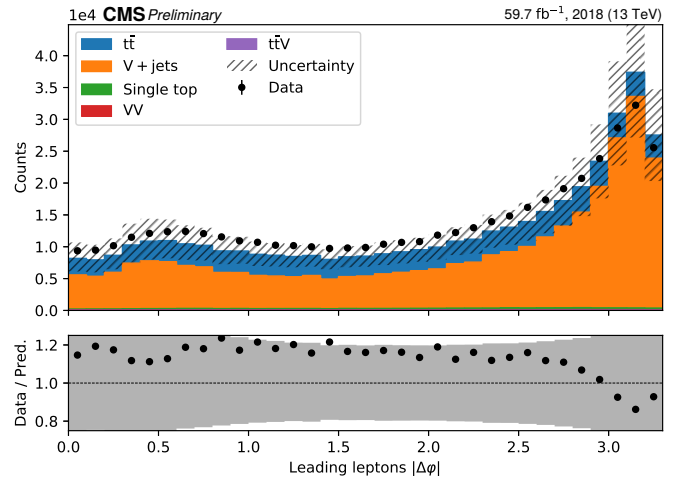
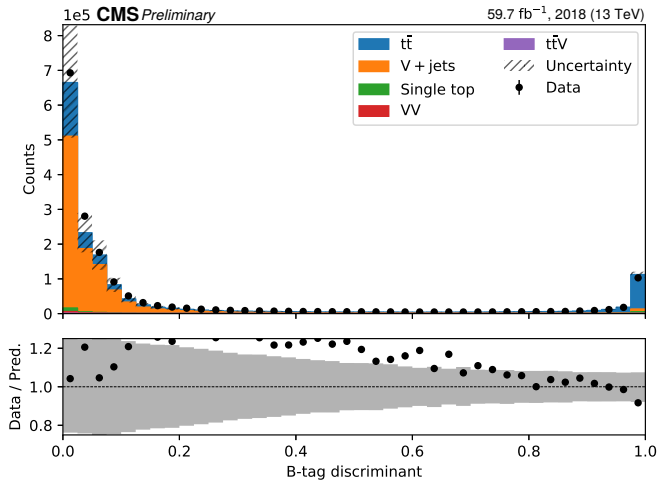


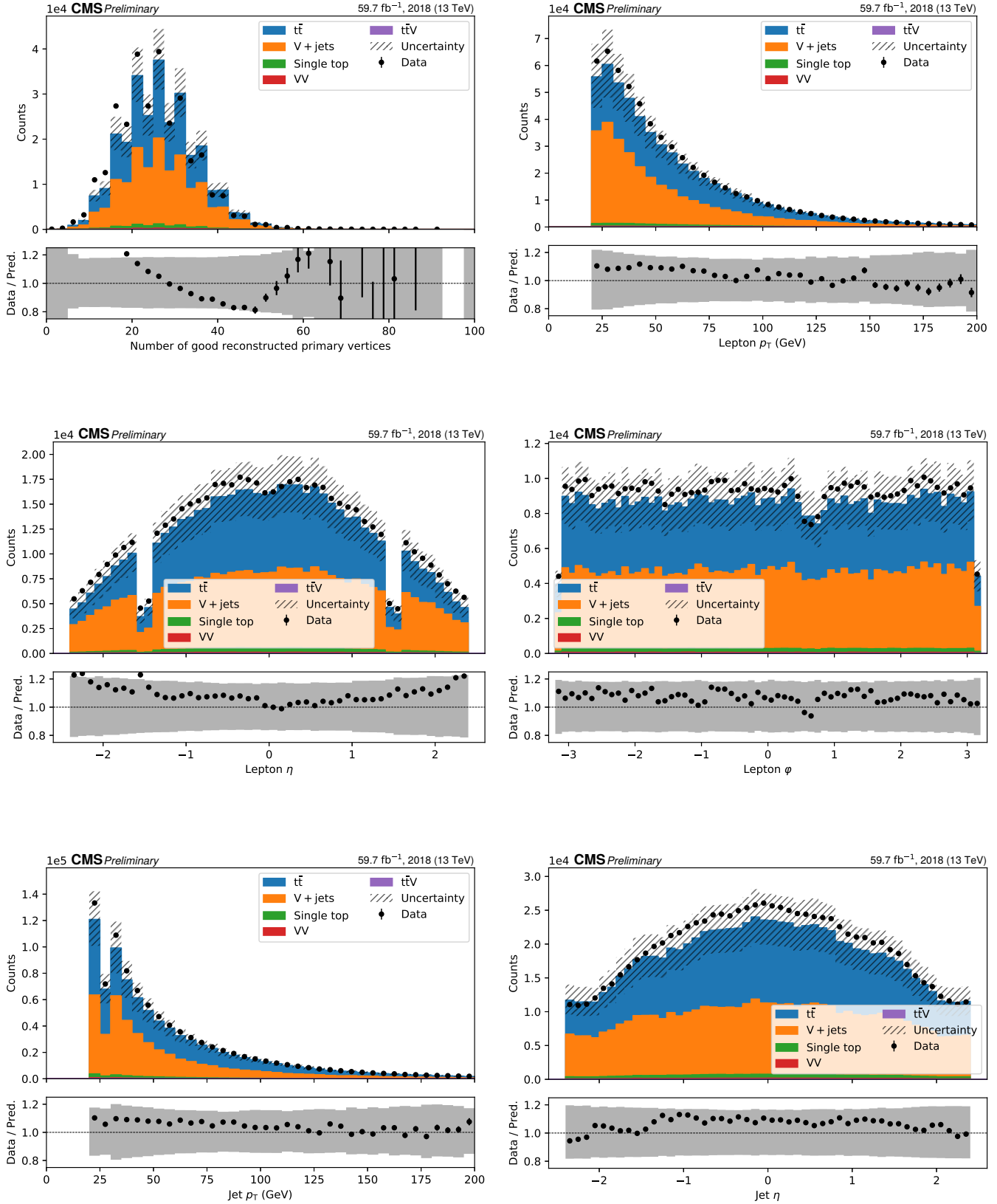


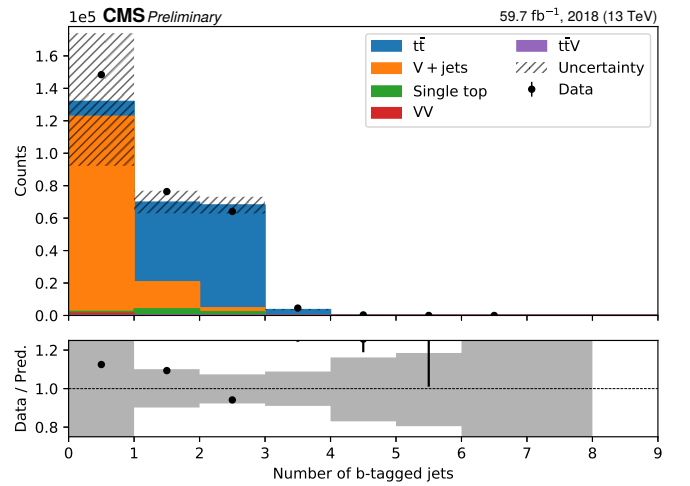
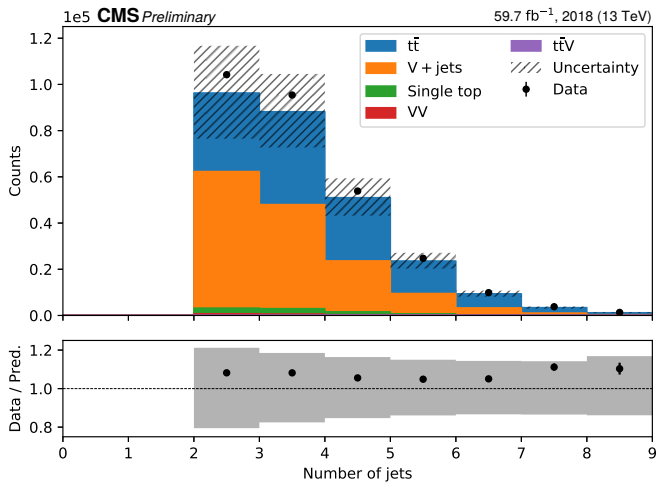
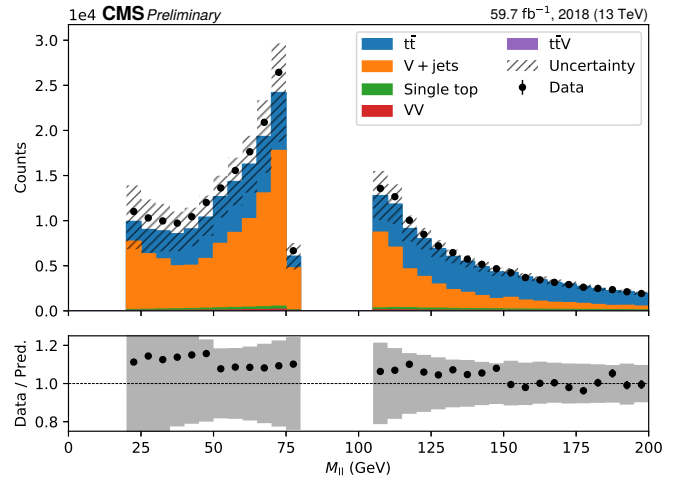
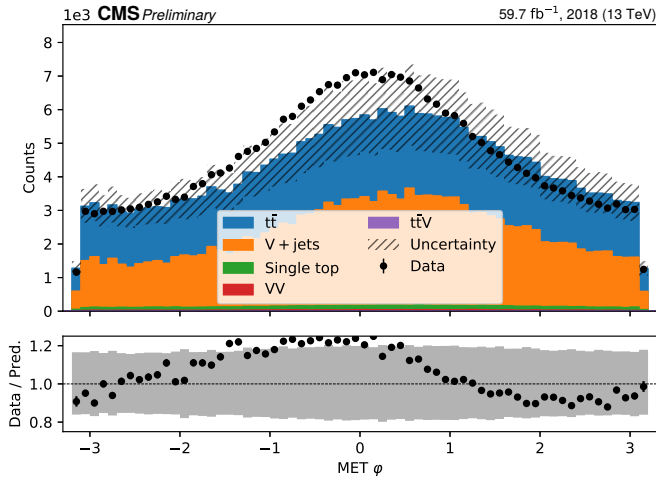
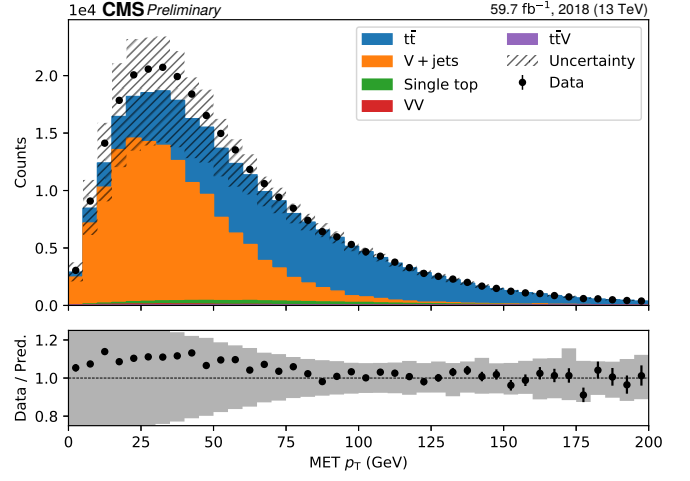
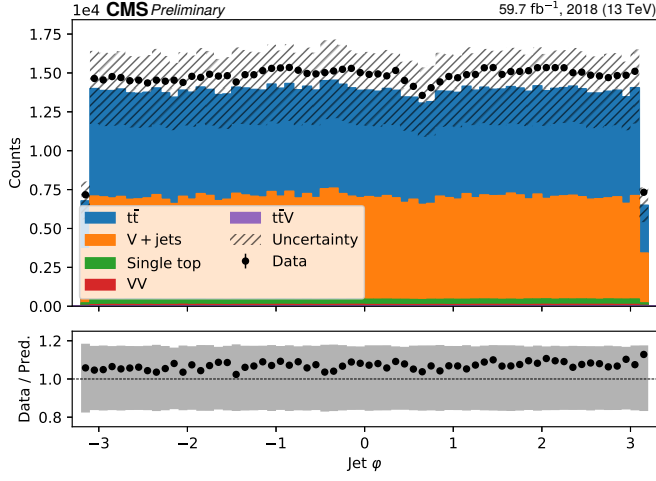


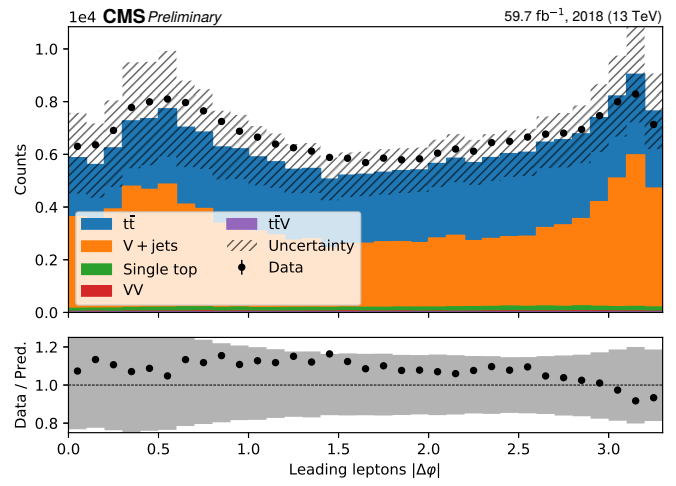
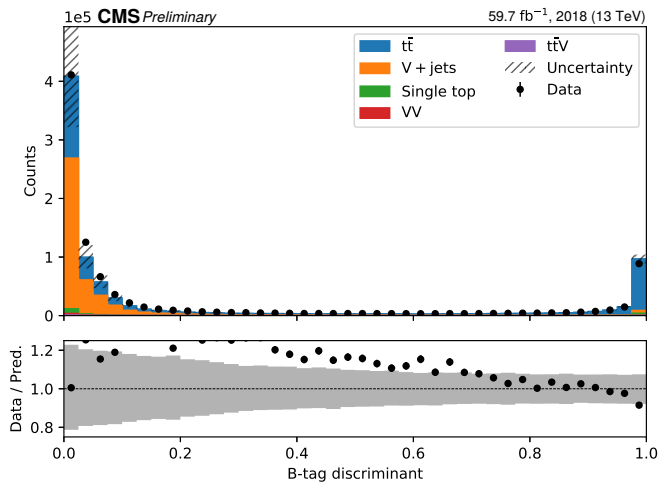
2.8 Number of jets ≥ 2 



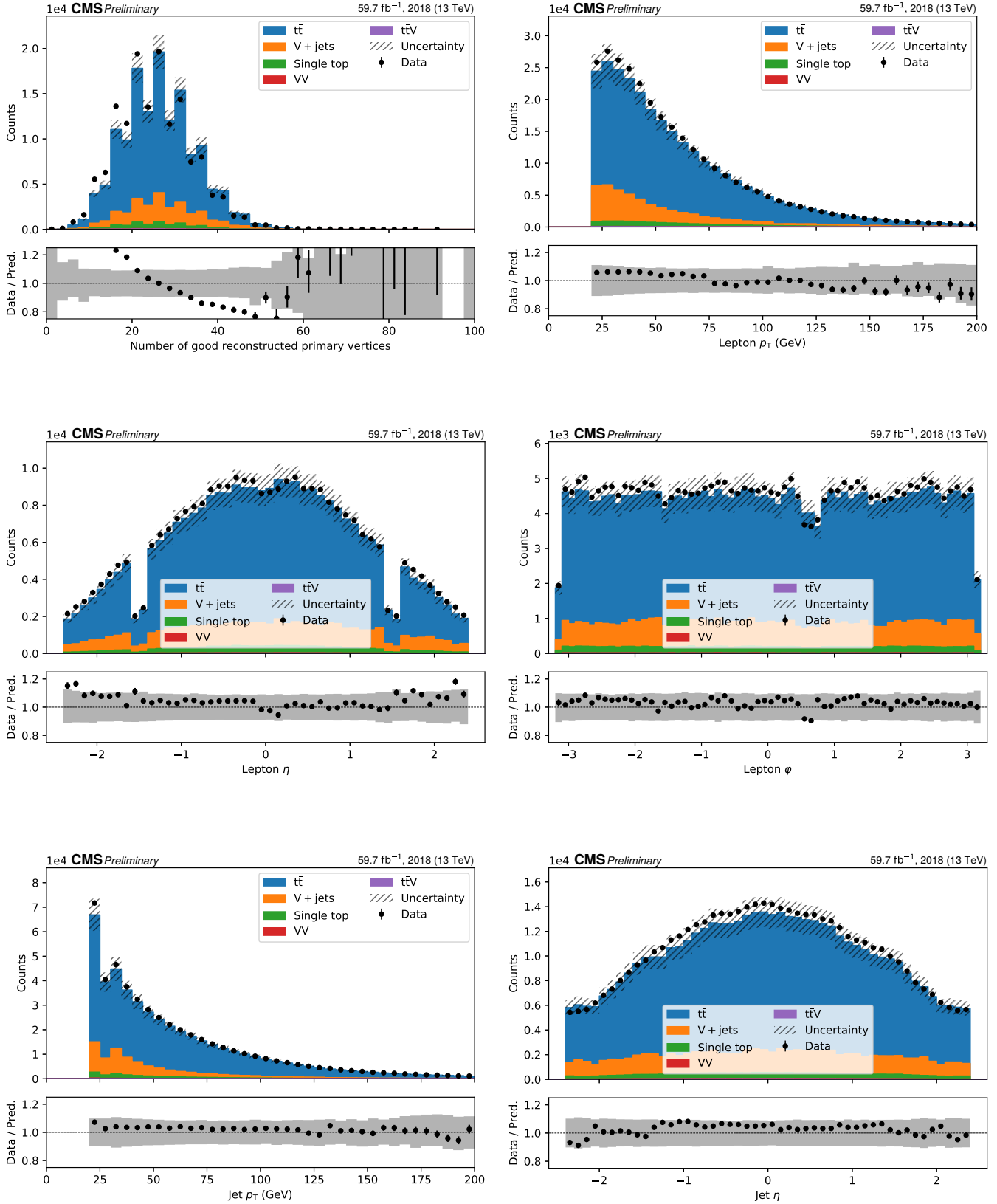


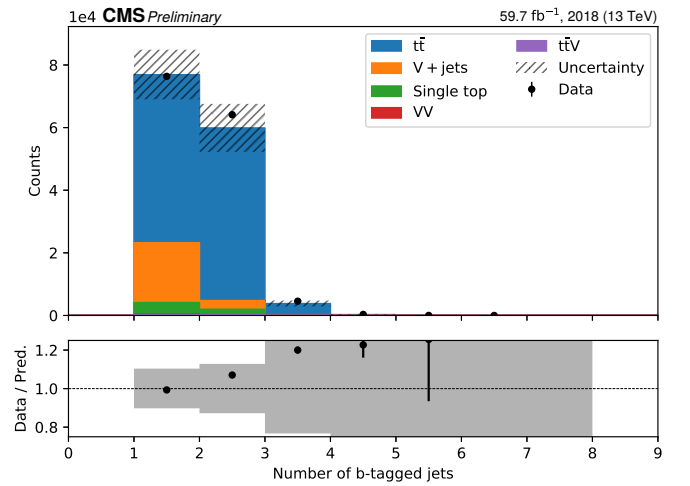
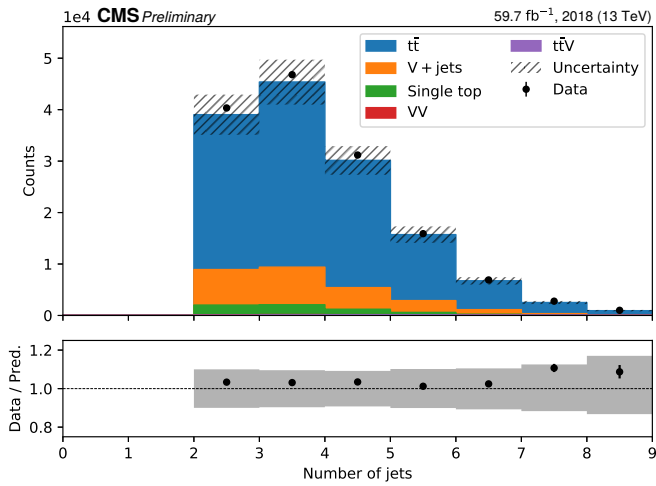
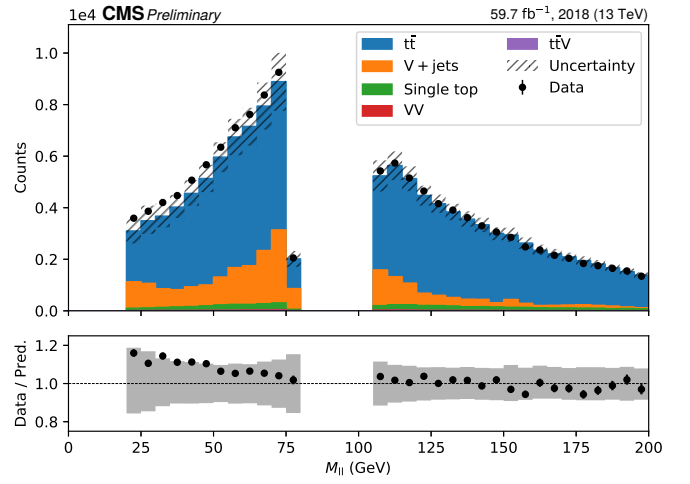
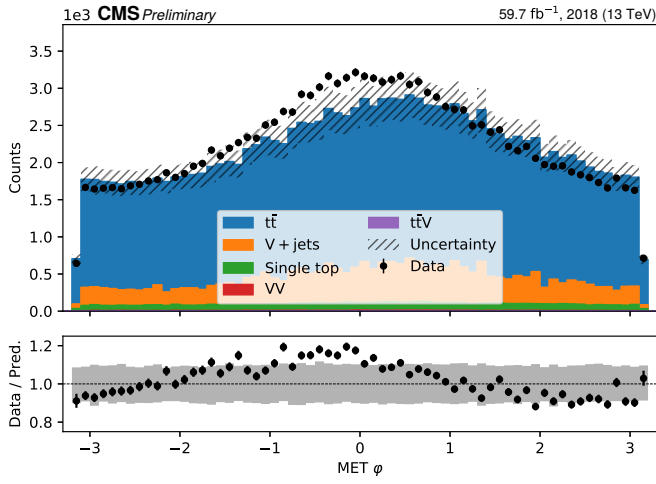
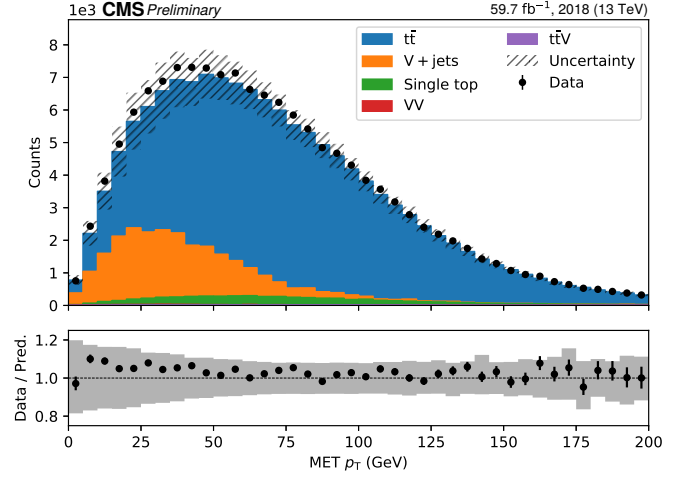
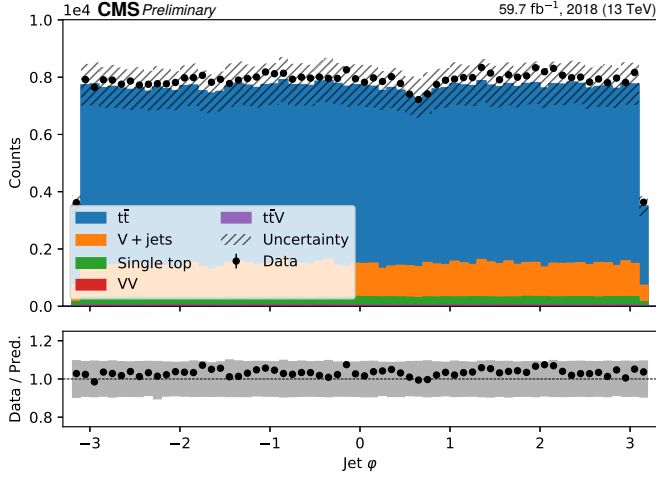
2.9 Require jet p_T 

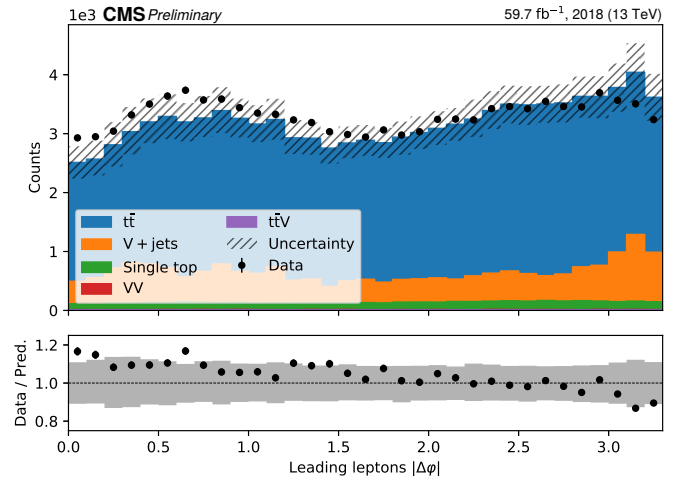
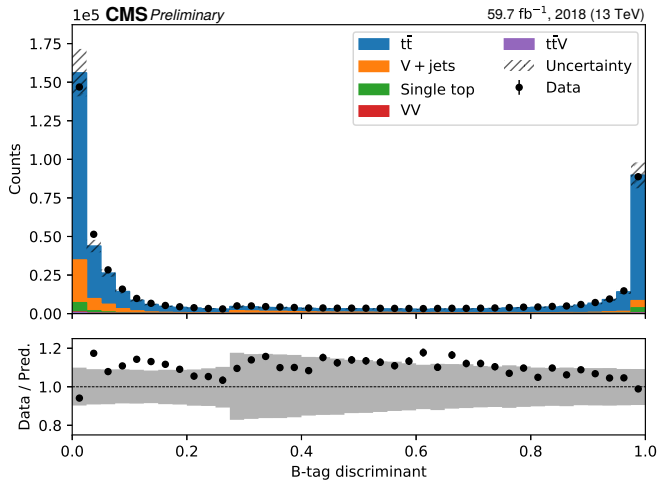


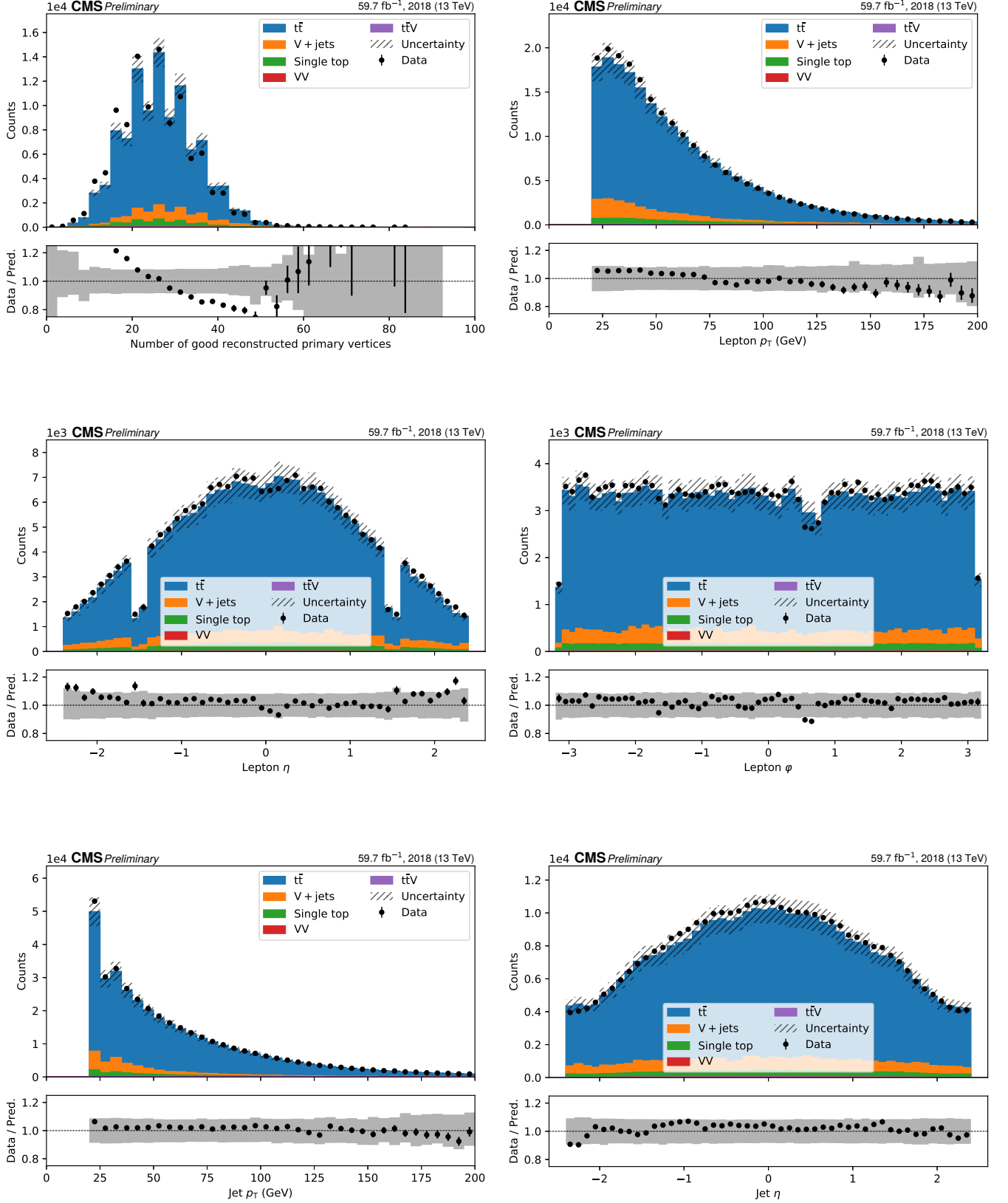


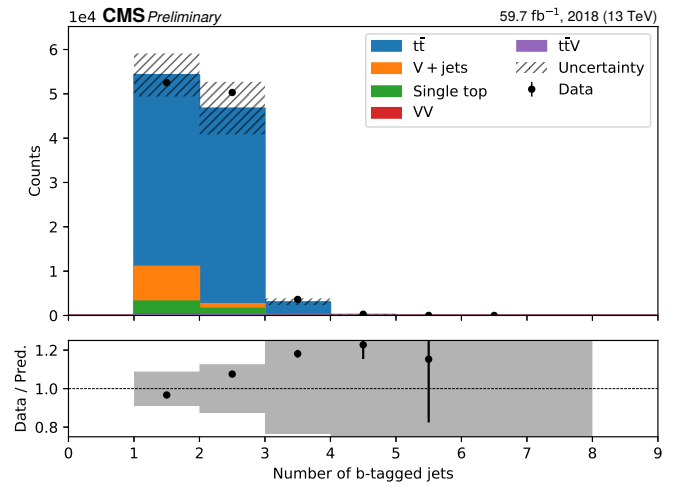
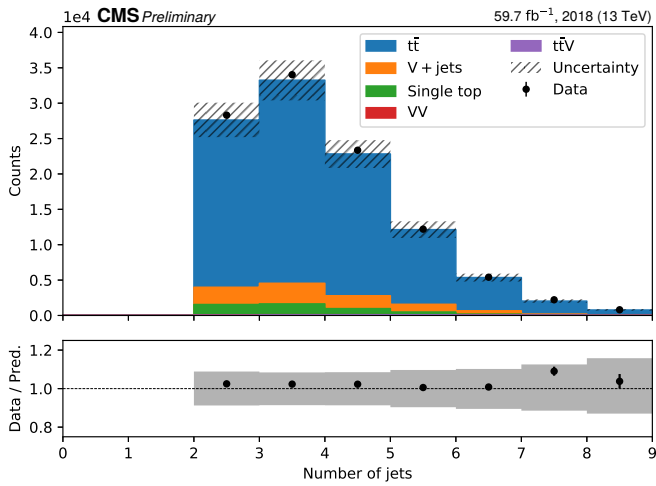
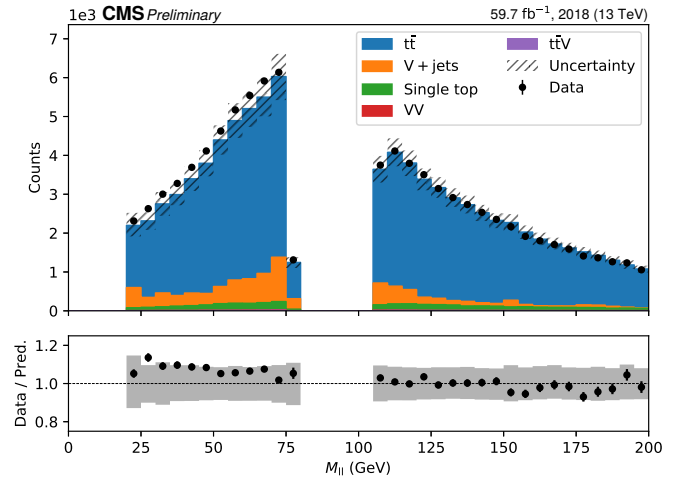
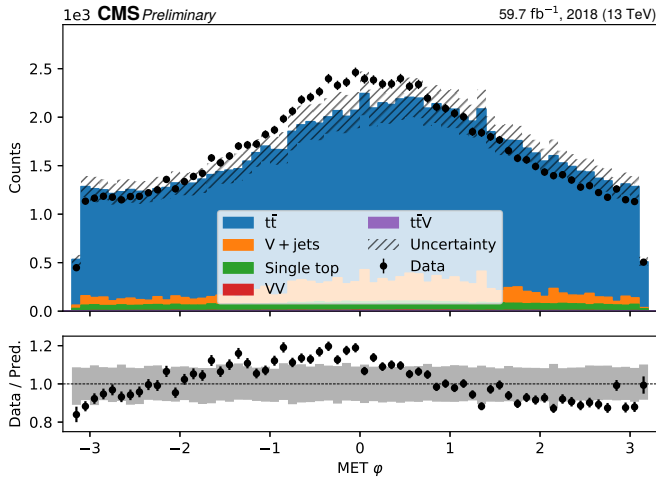
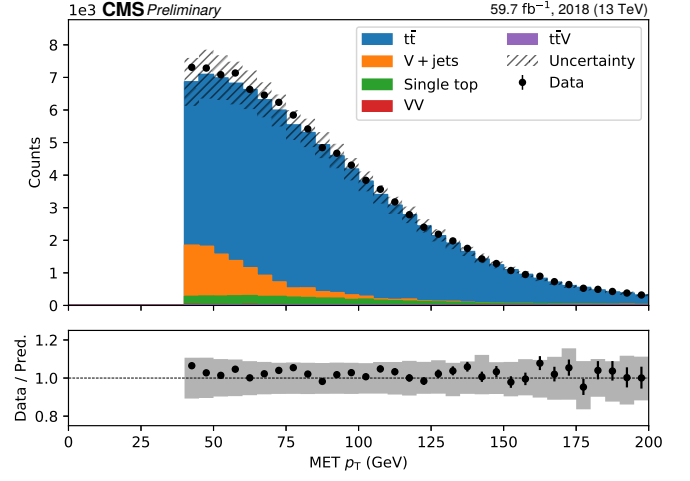
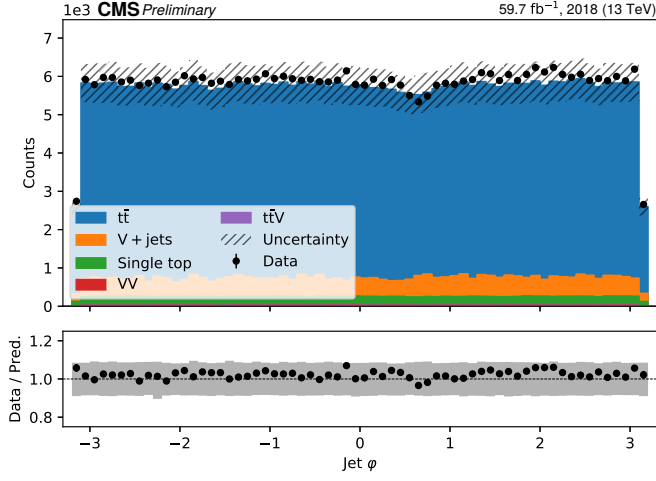
2.10 At least 1 btag

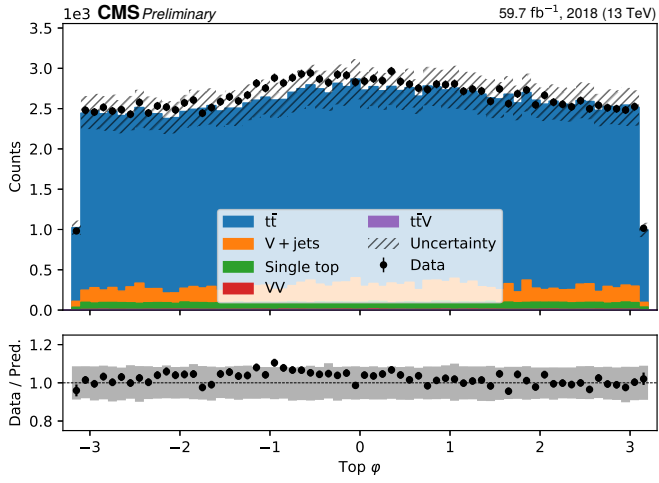
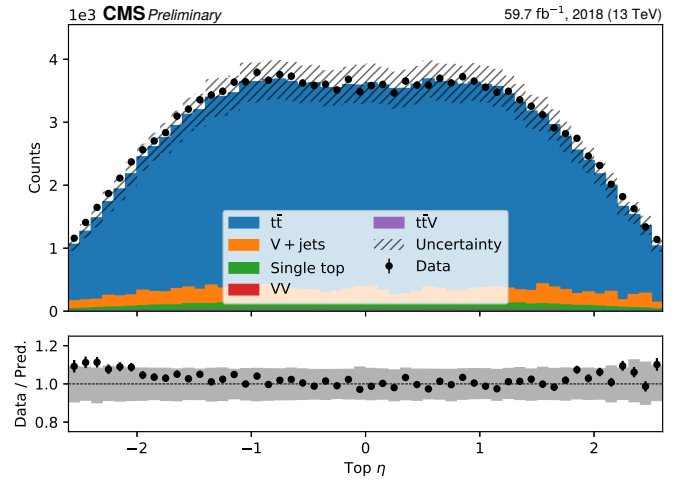
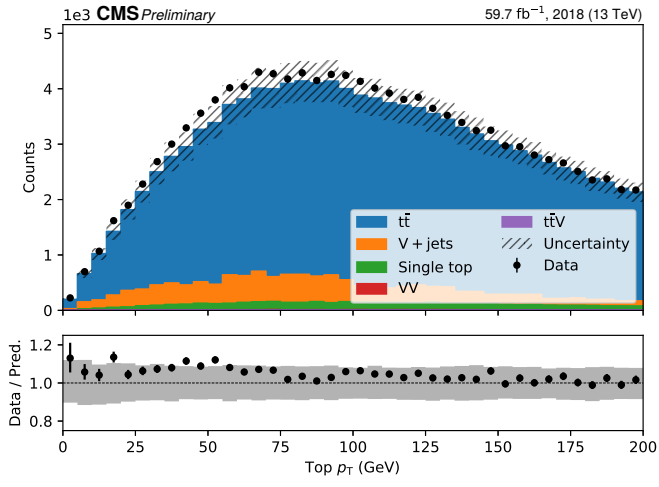
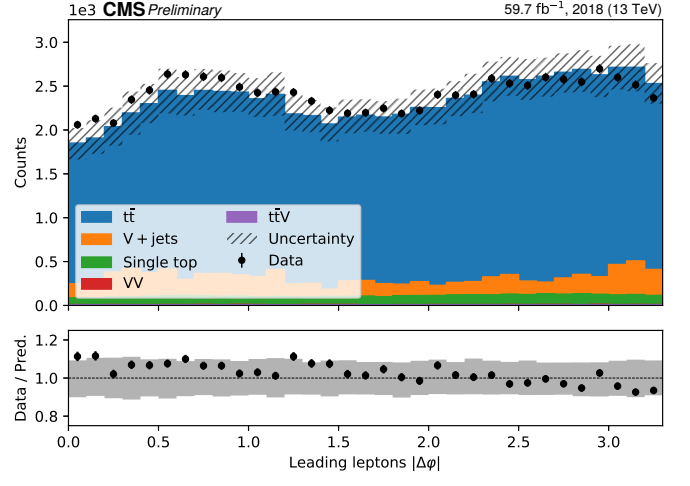
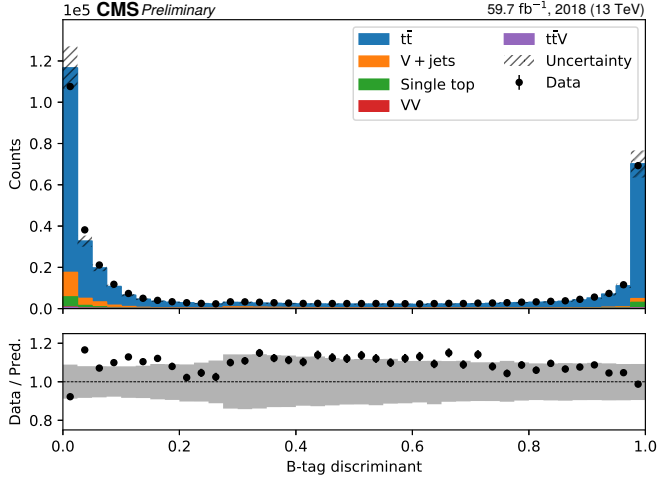


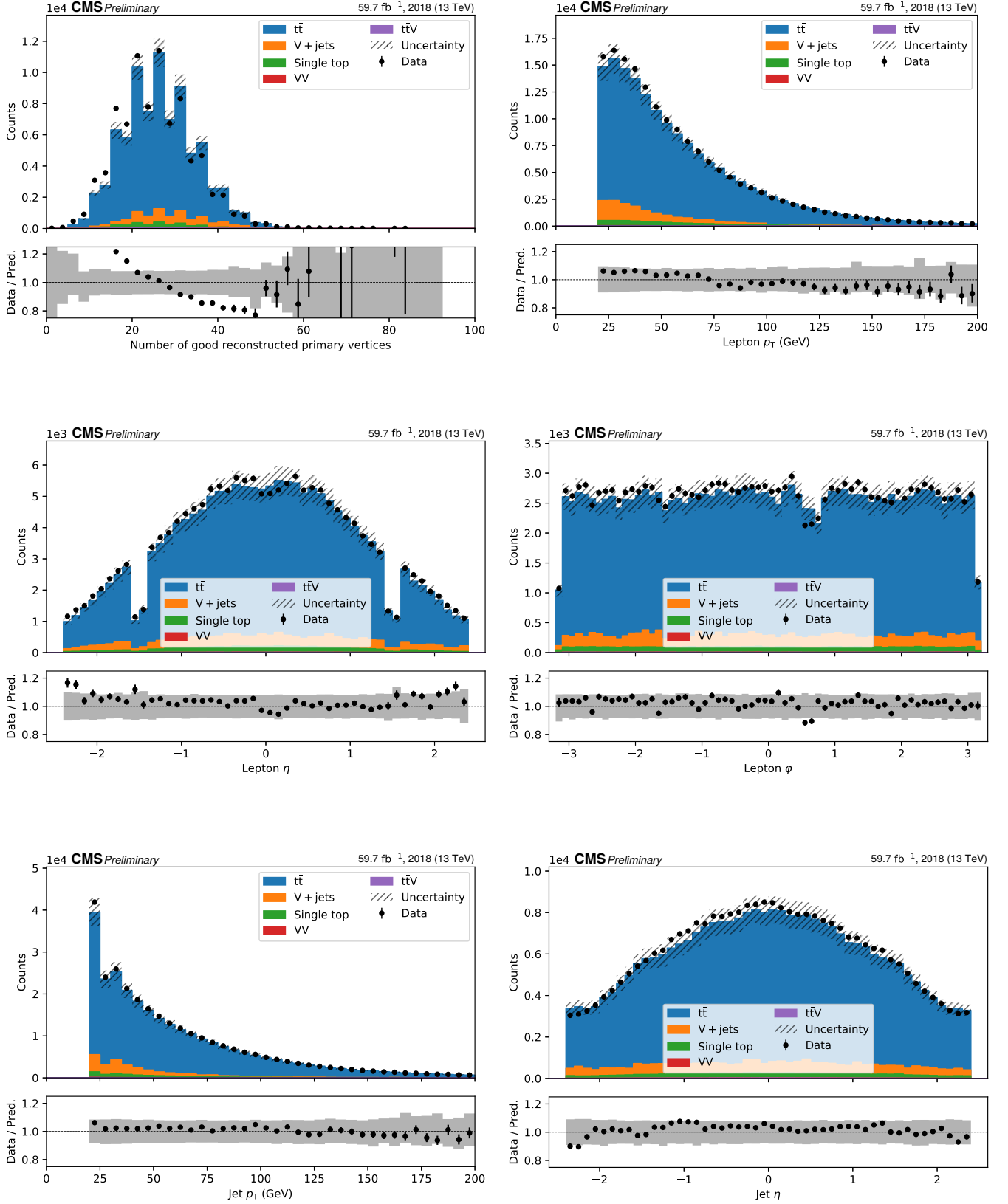


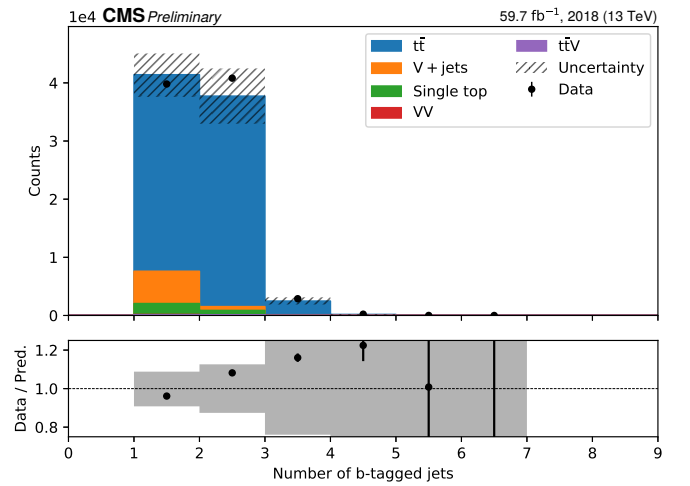
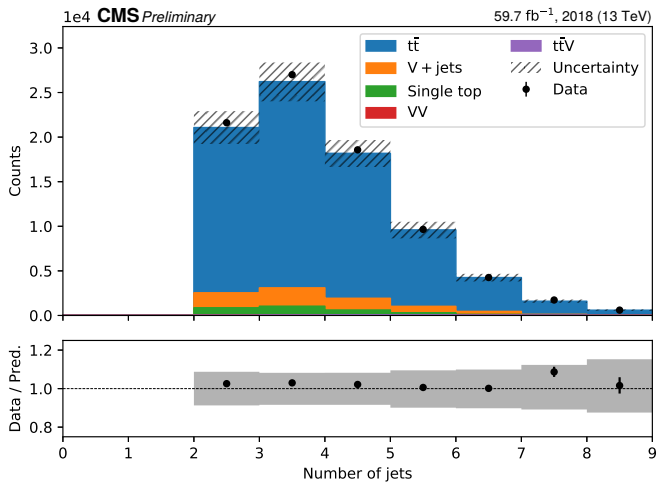
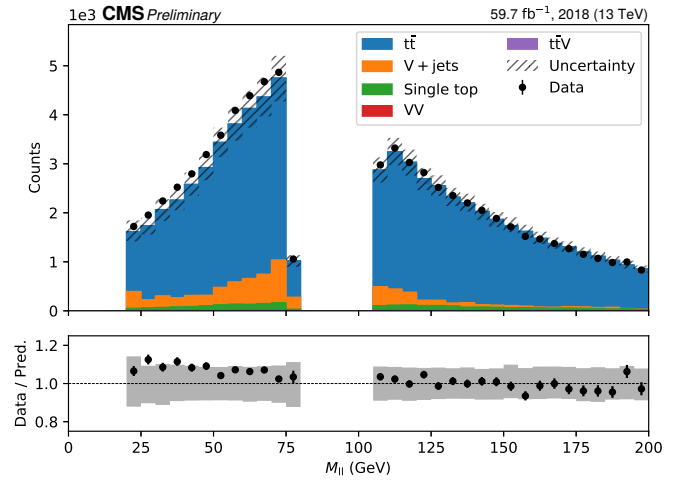
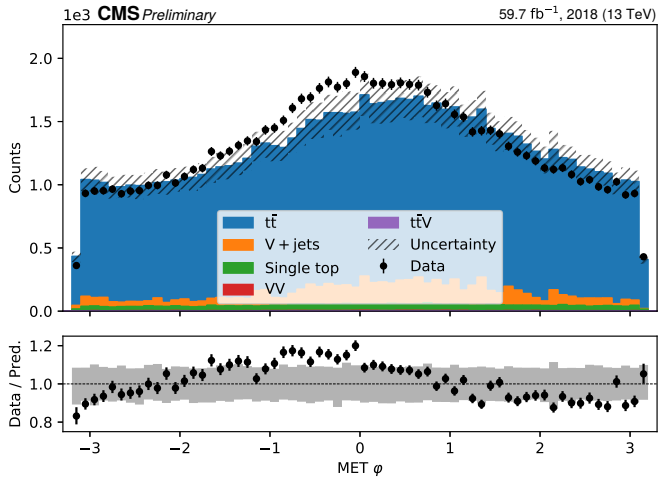
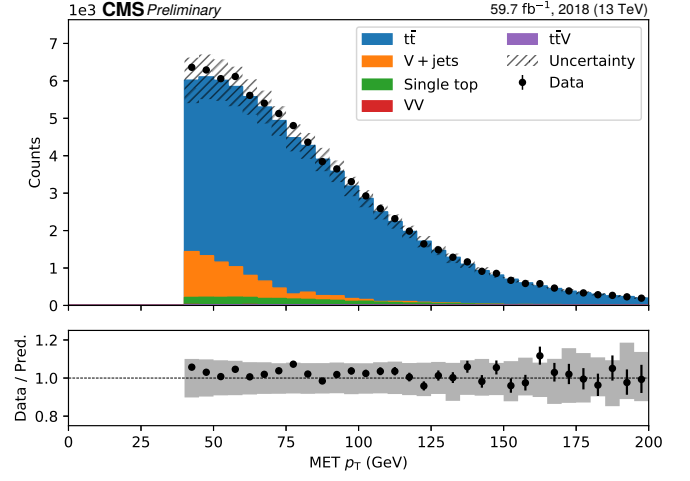
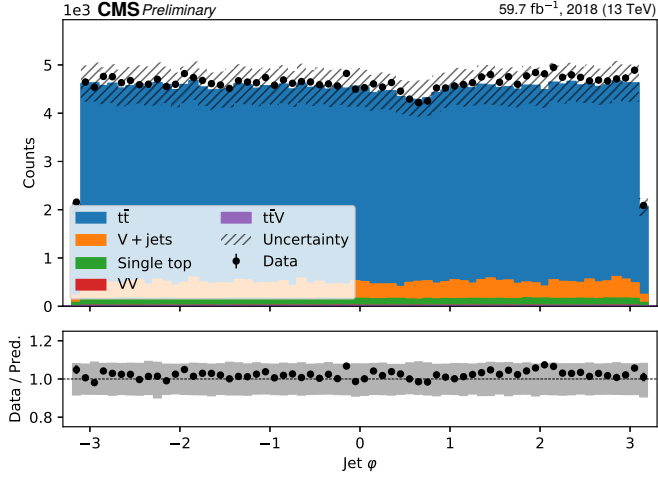


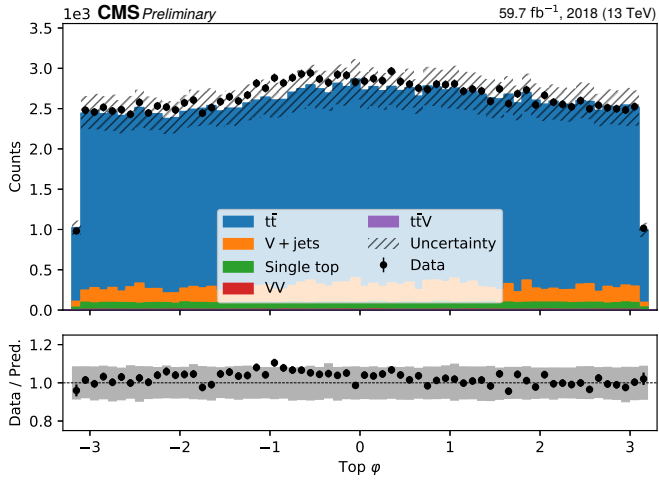
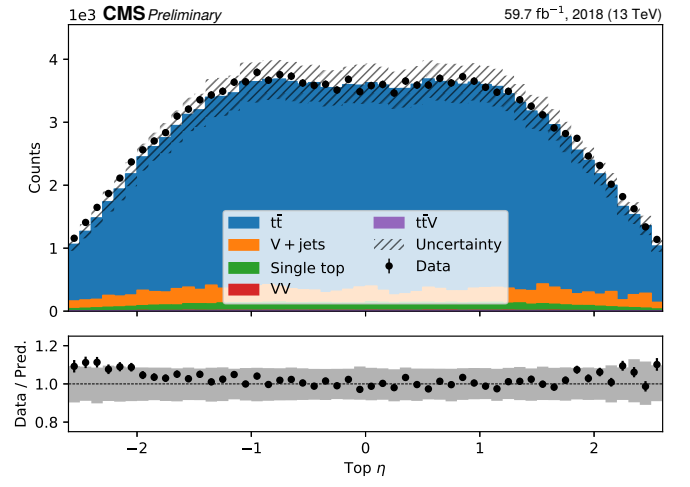
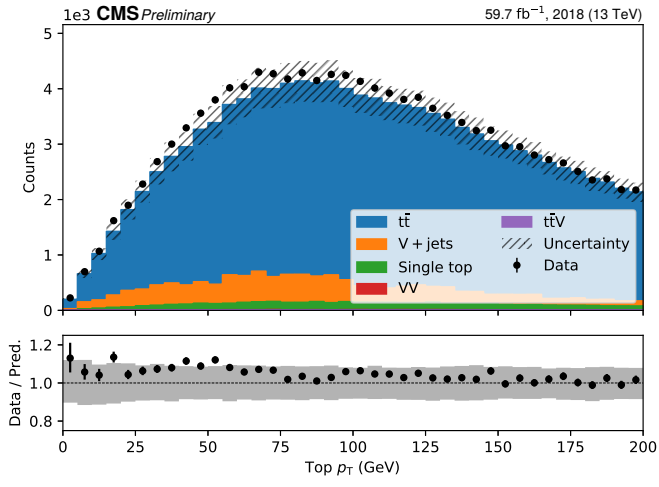
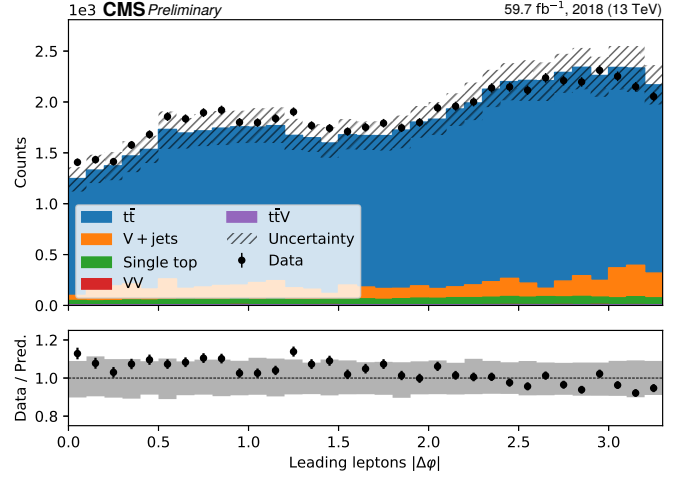
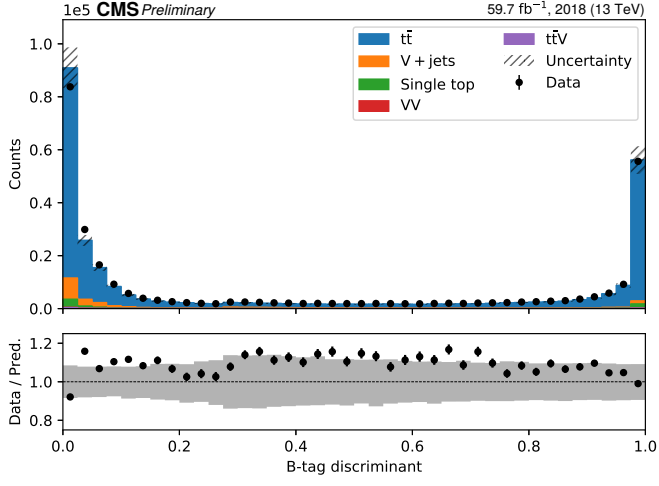
2.11 $MET > 40$ GeV





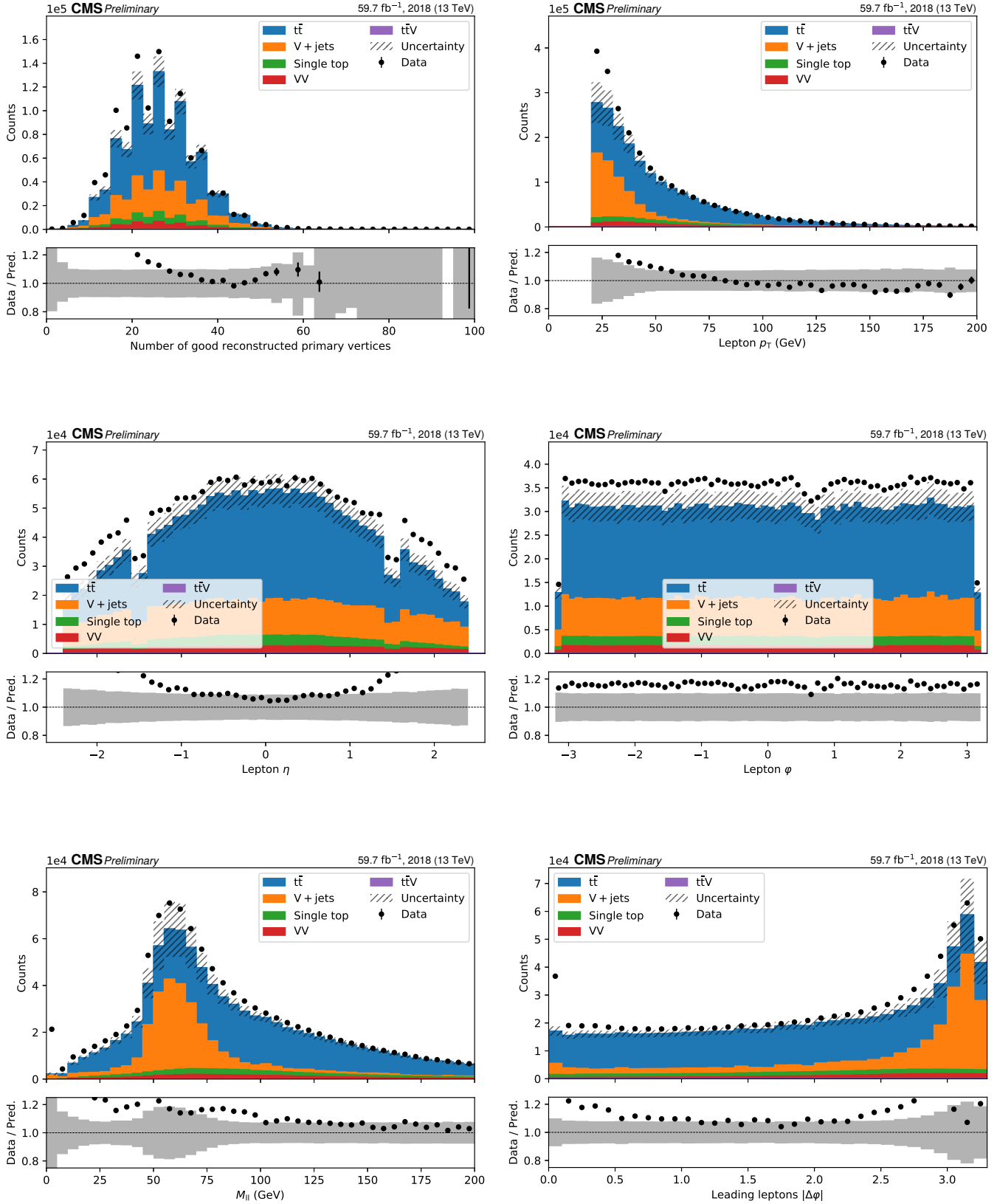
2.12 Passes $t\bar{t}$ reconstruction



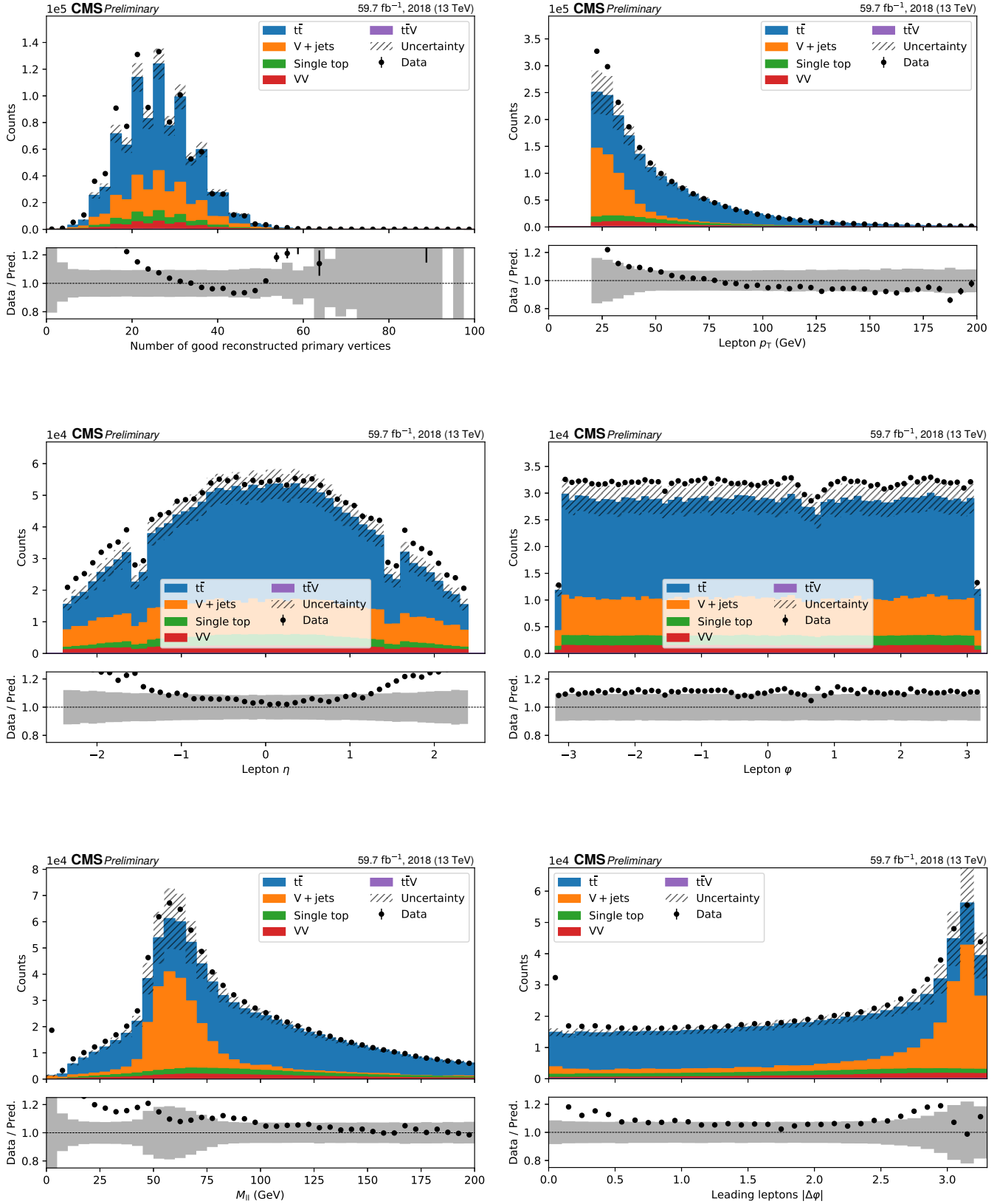


3 em-channel

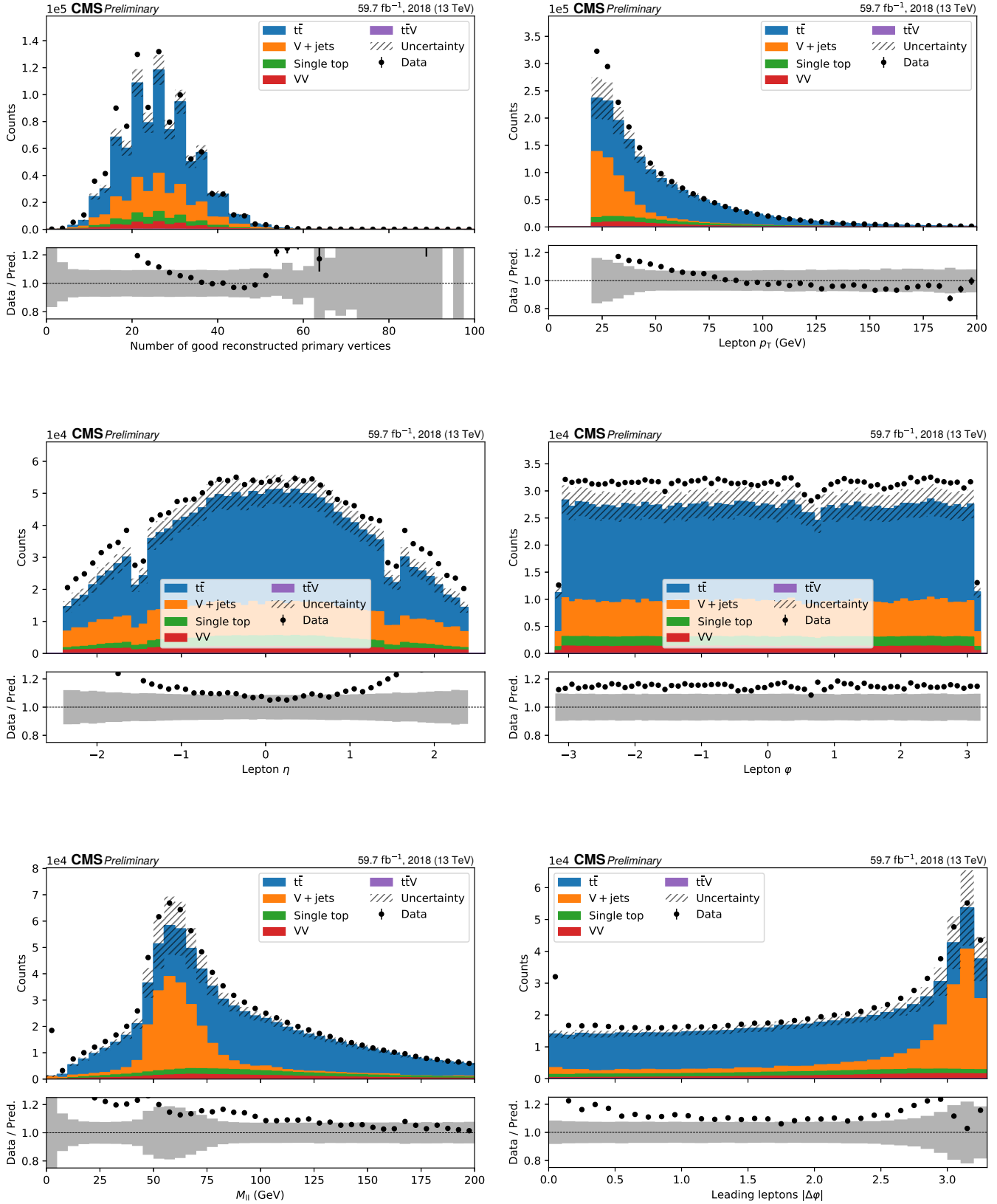
3.1 Have at least two leptons



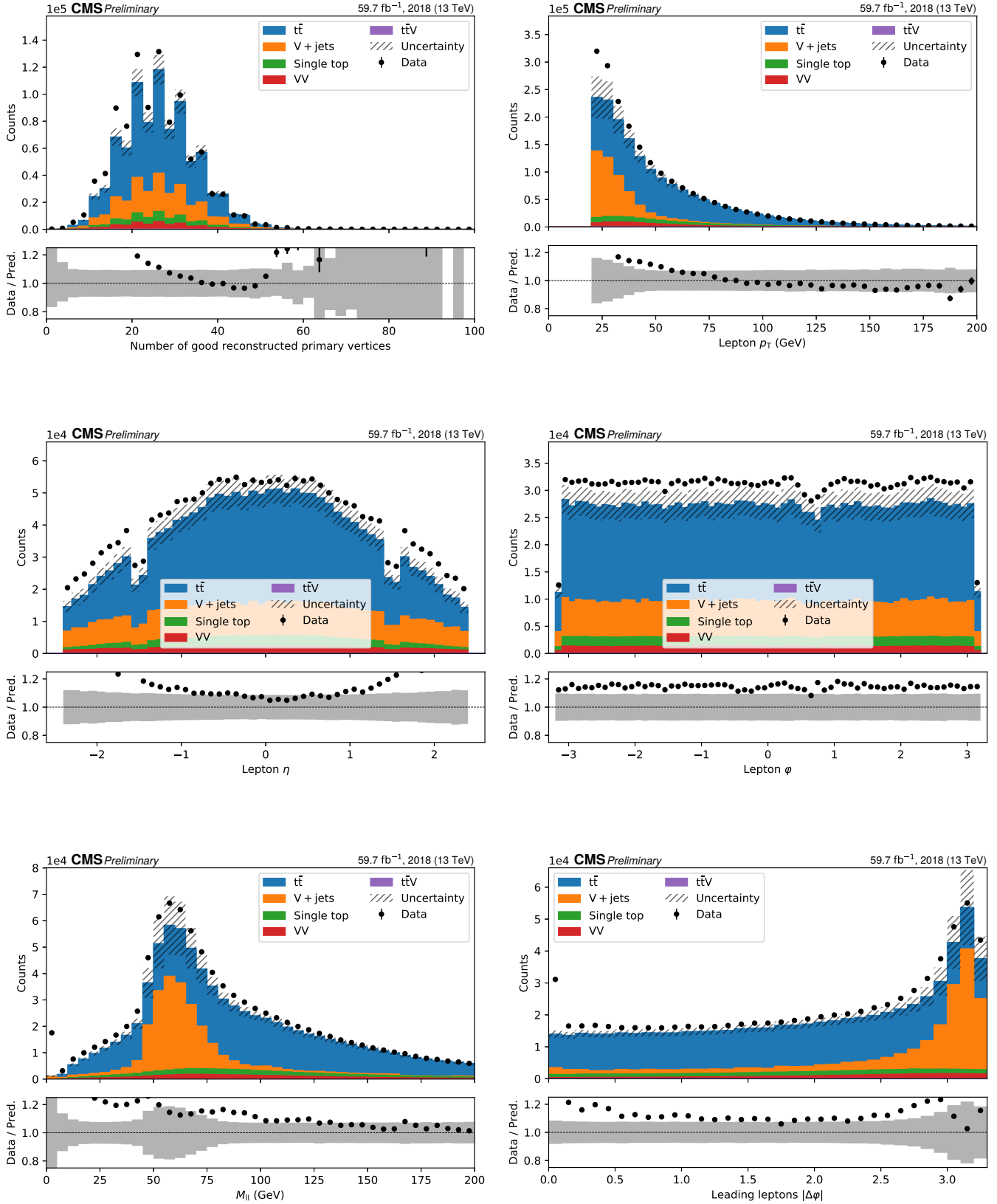
3.2 Leptons have opposite charge

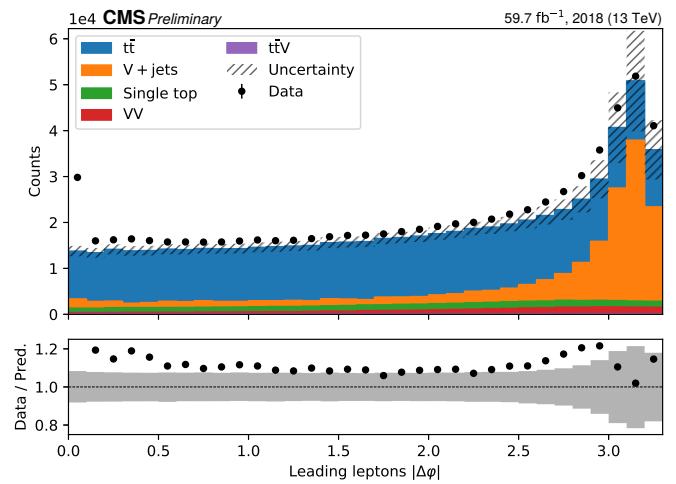
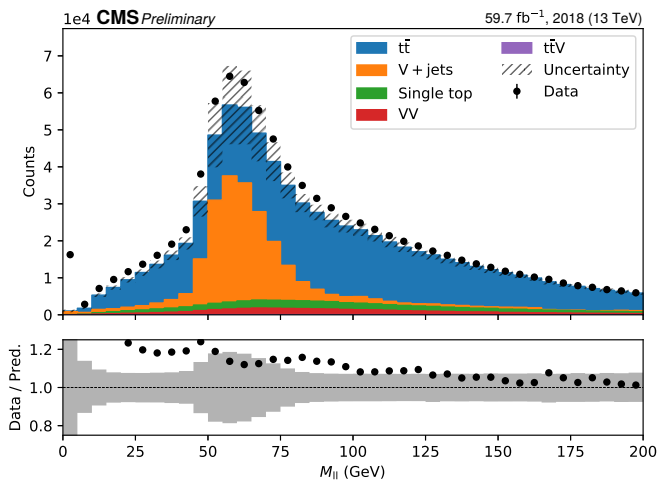
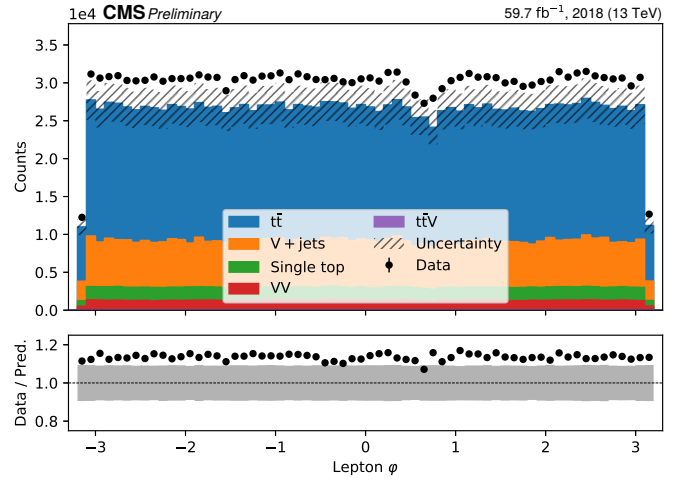
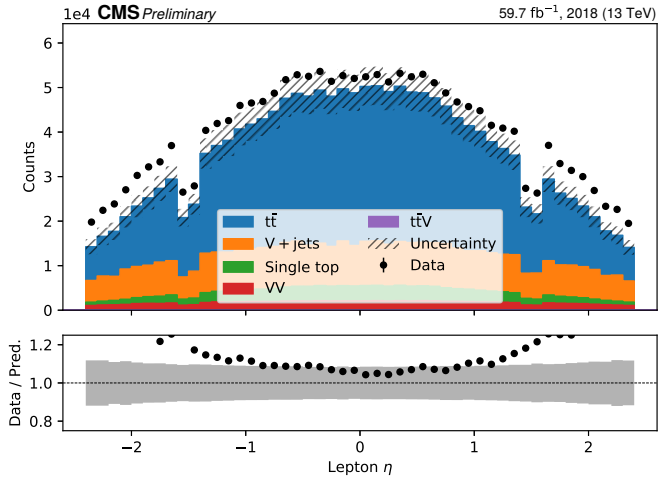
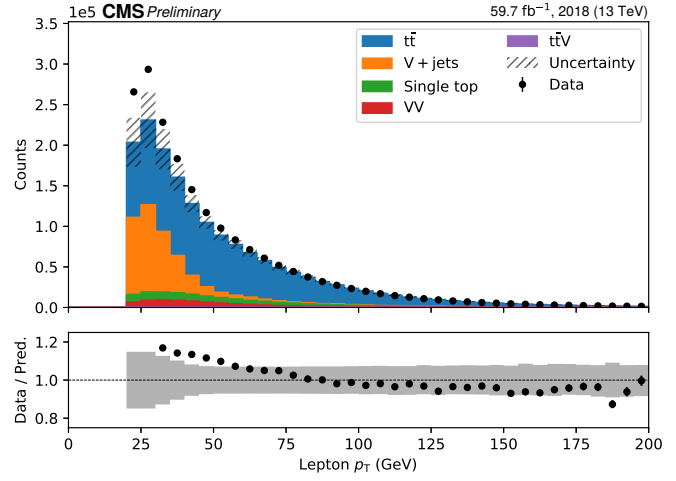
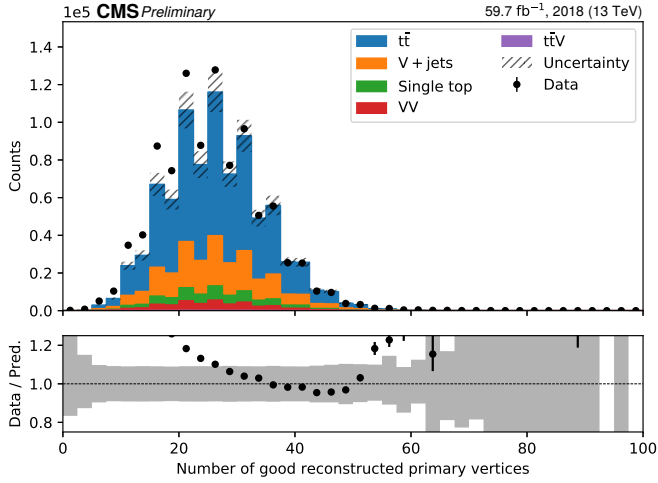


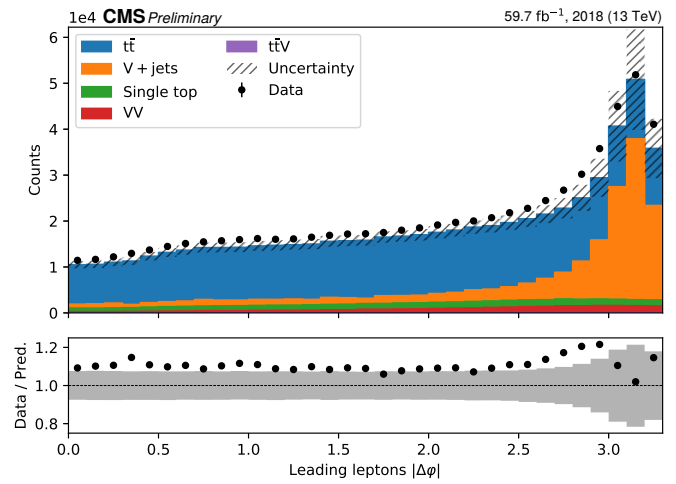
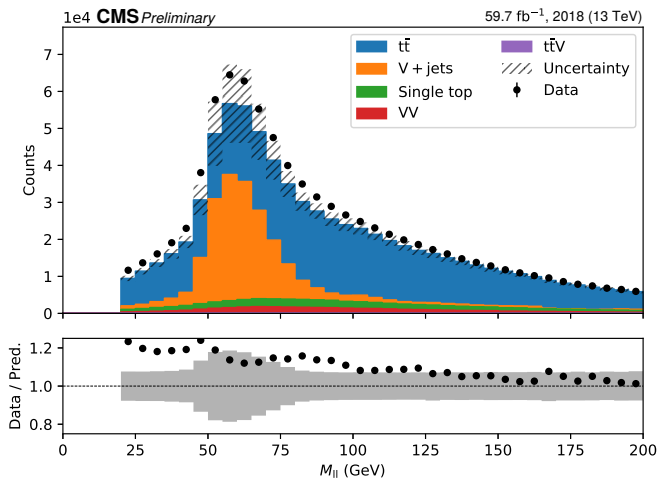
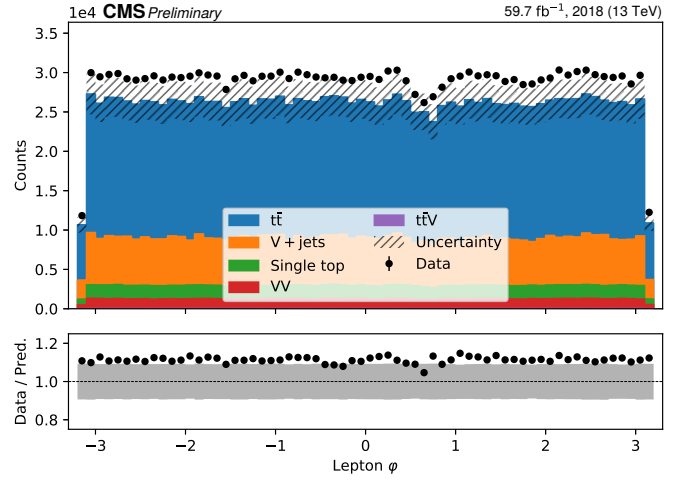
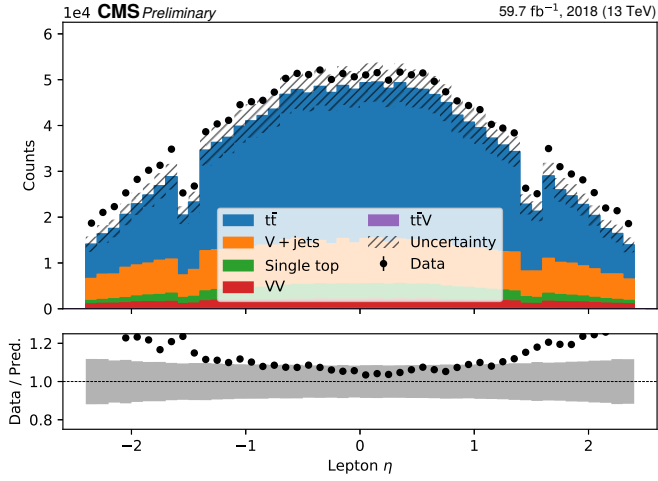
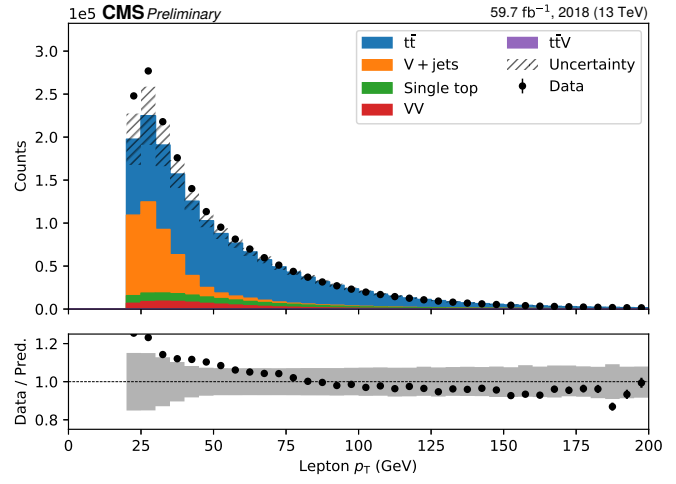
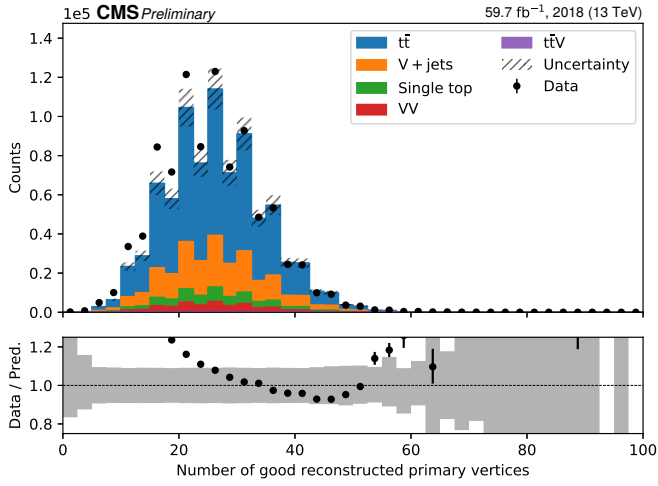
3.3 No additional leptons



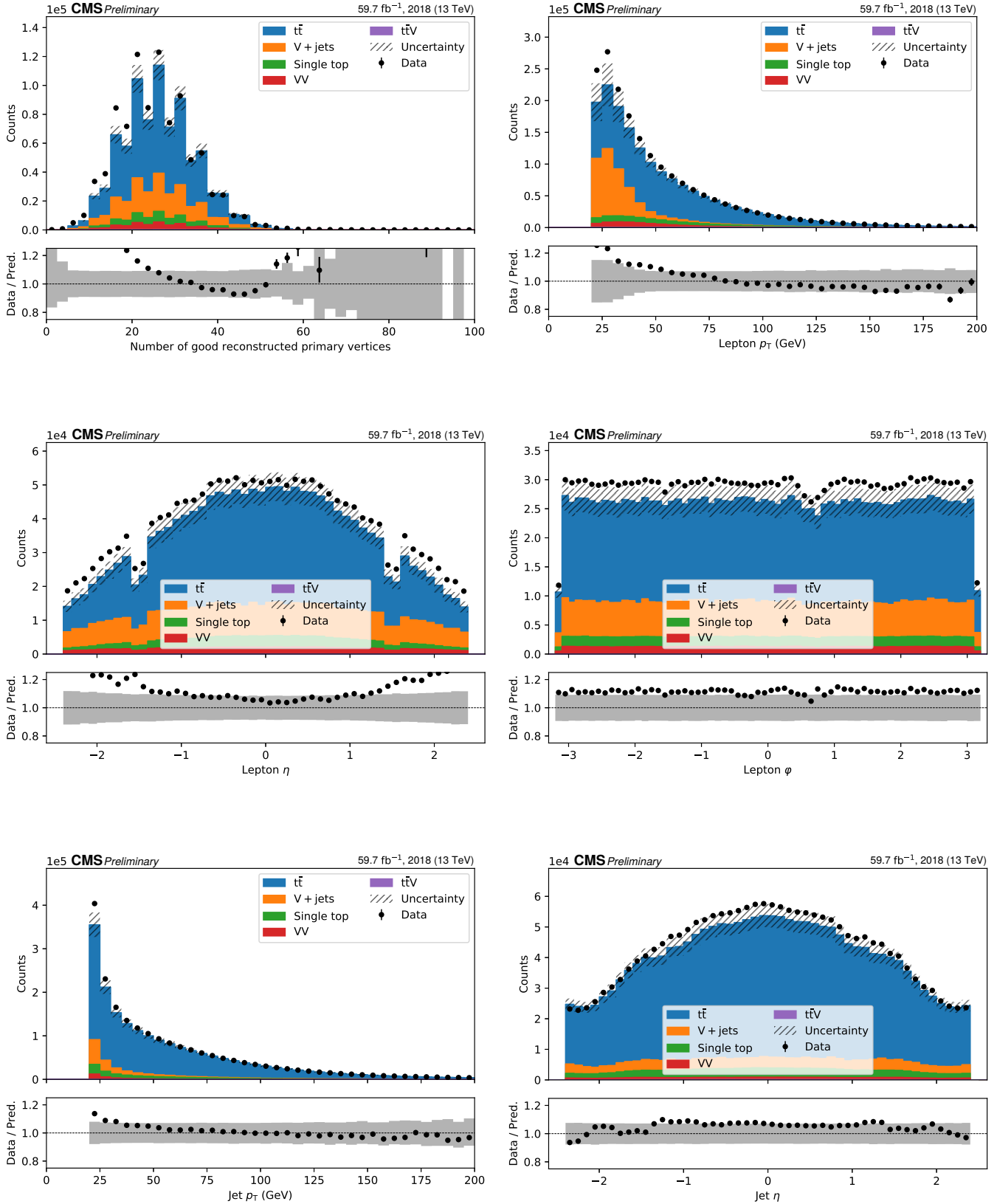
3.4 Channel trigger matching

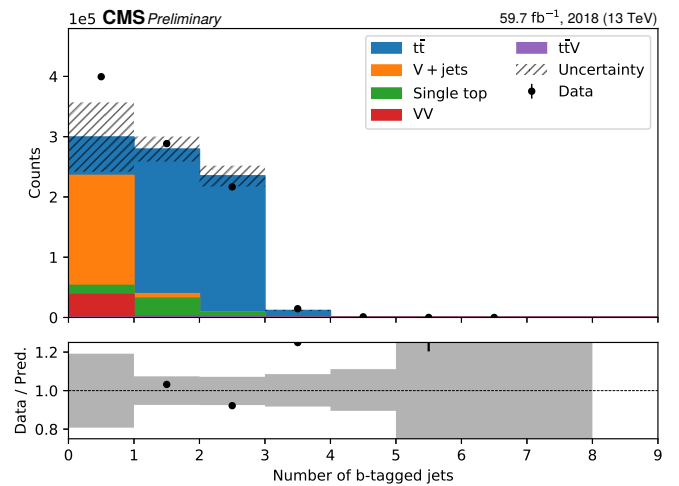
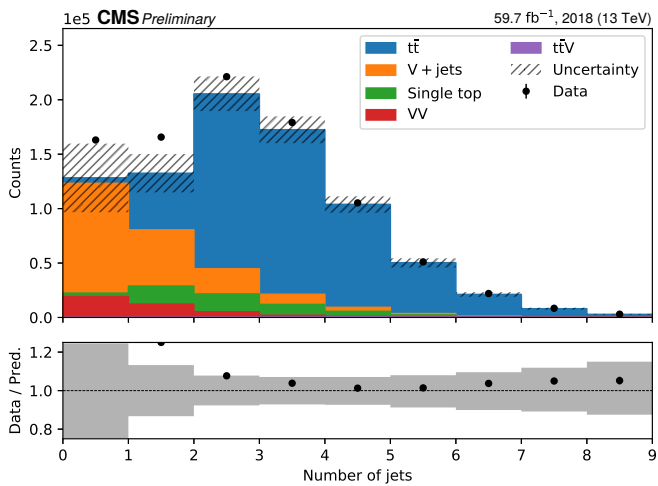
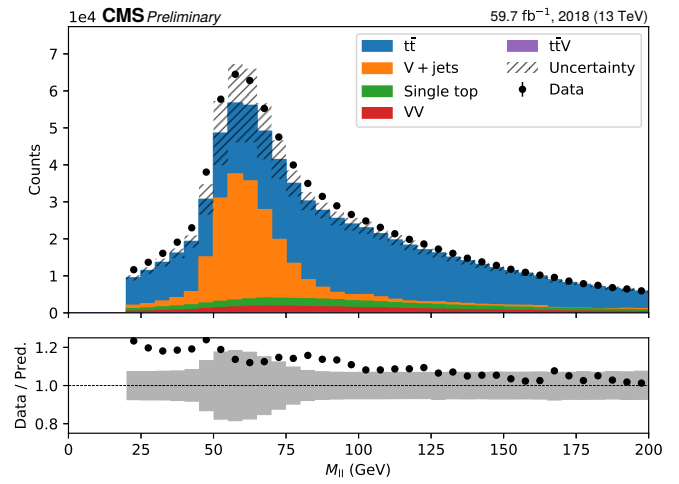
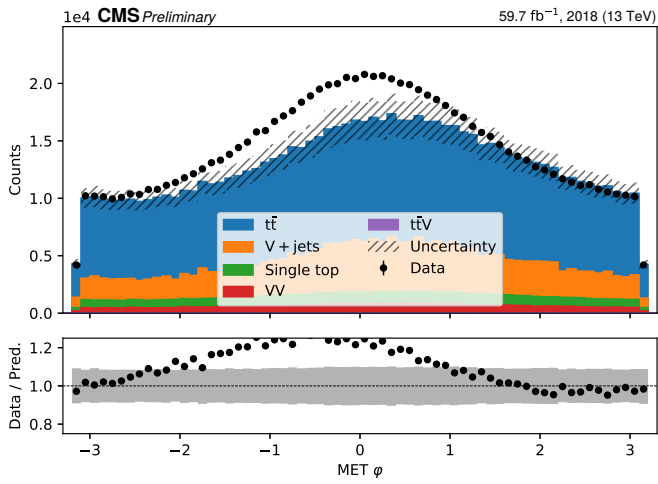
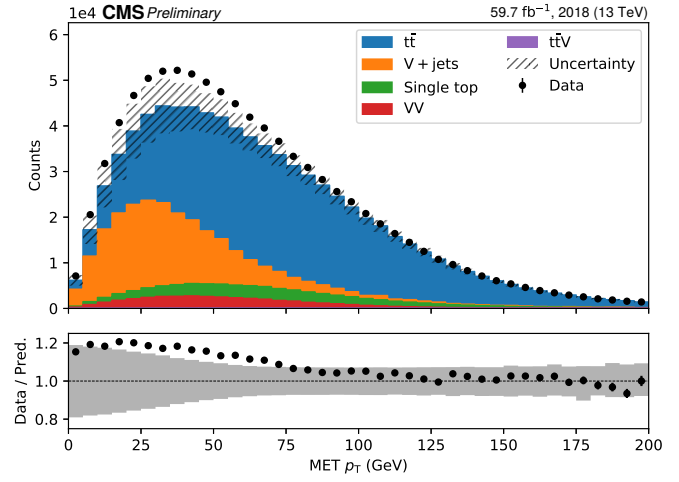
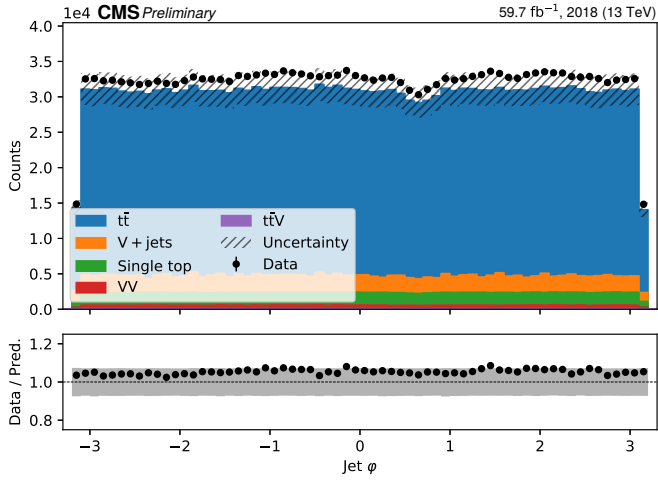


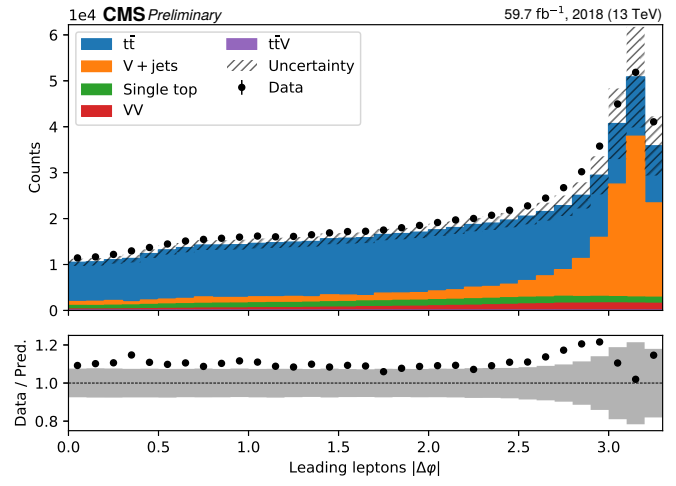
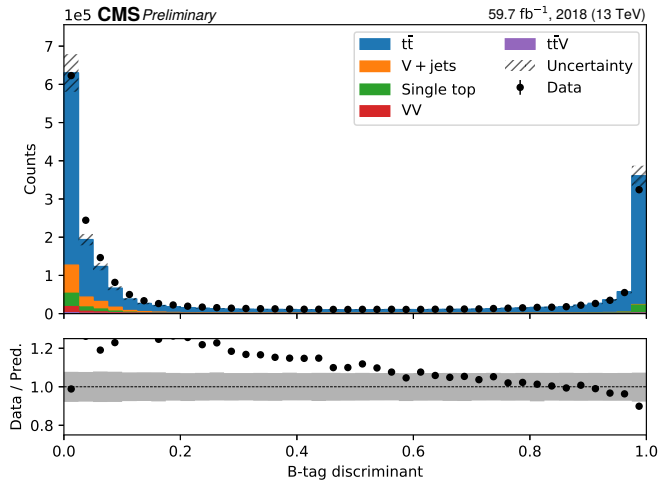
3.5 Require lepton p_T 

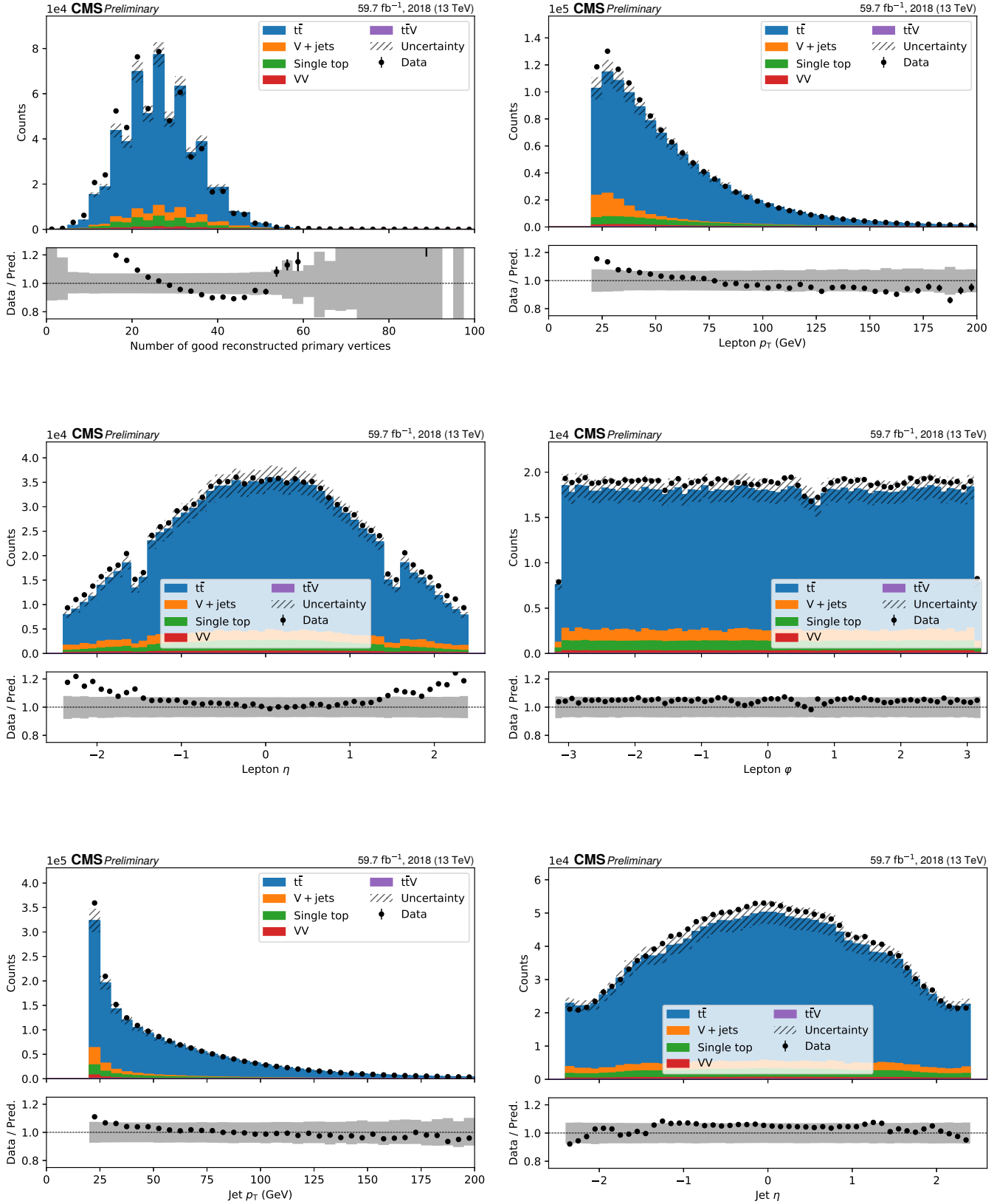
3.6 M_{ll} 

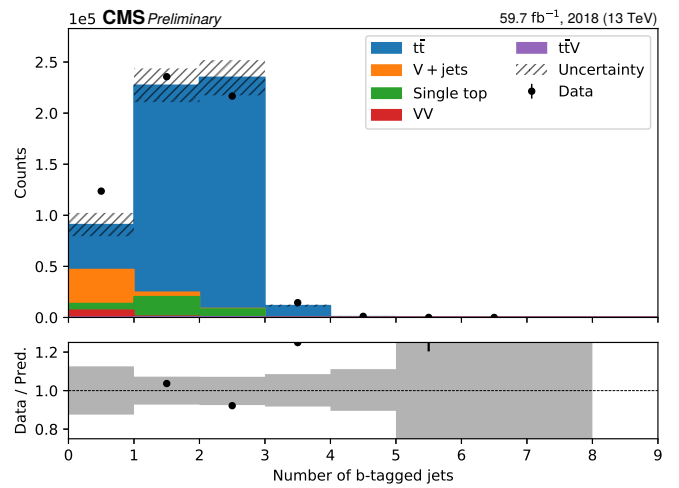
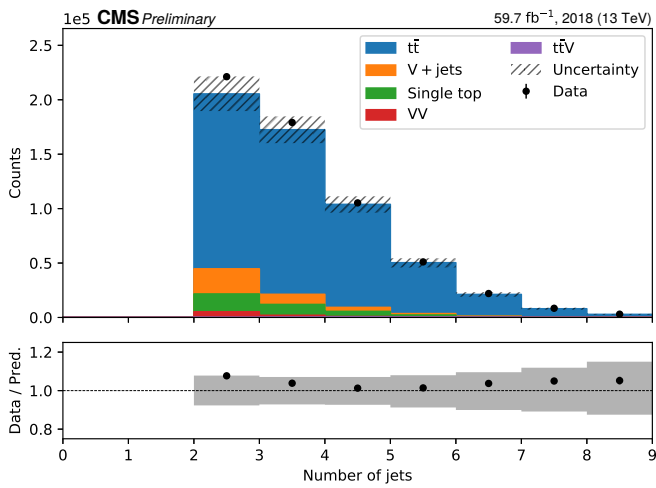
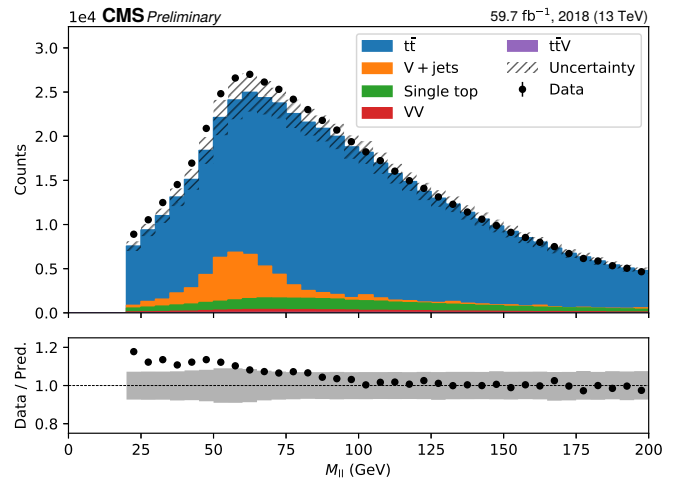
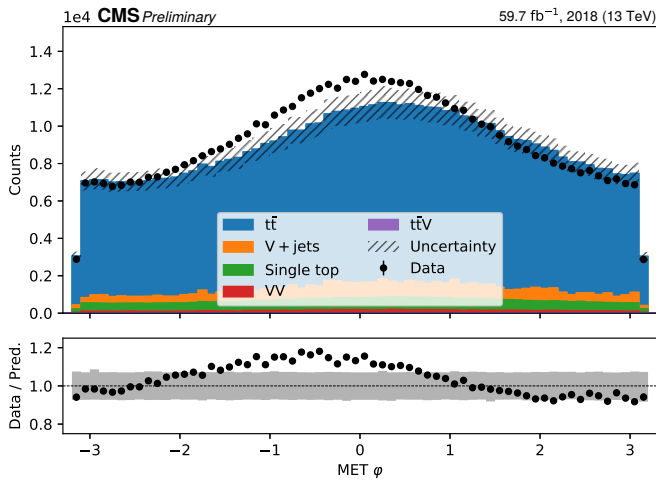
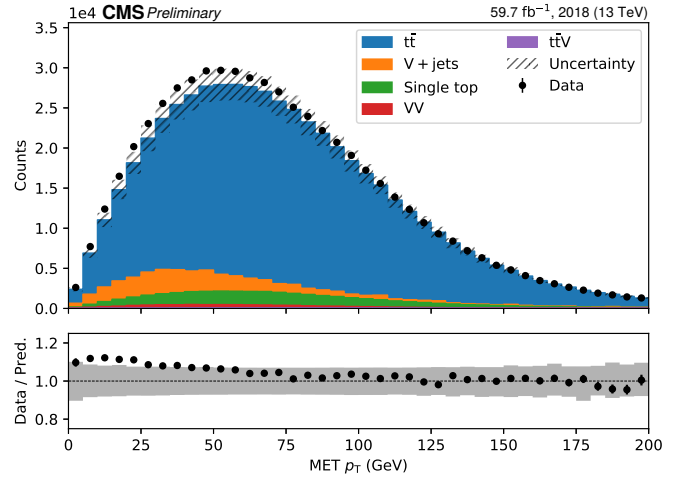
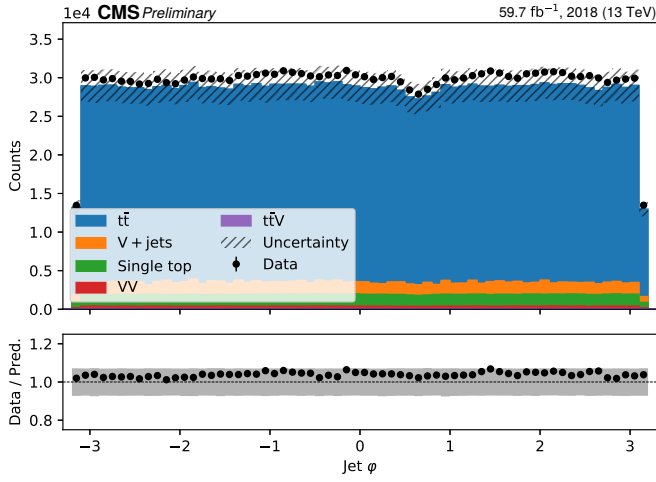
3.7 Z window

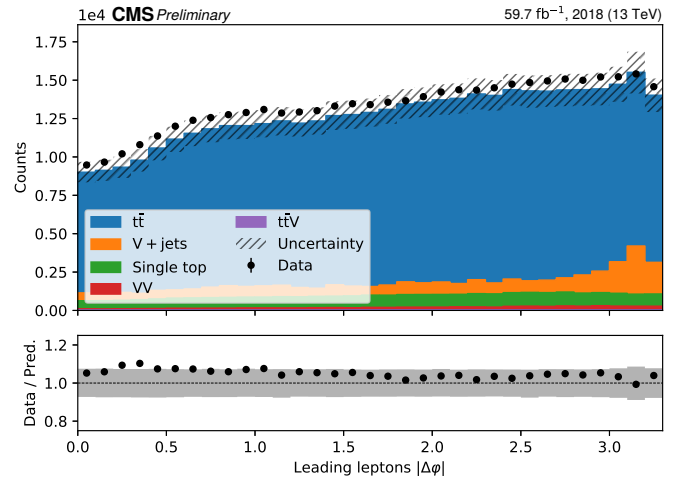
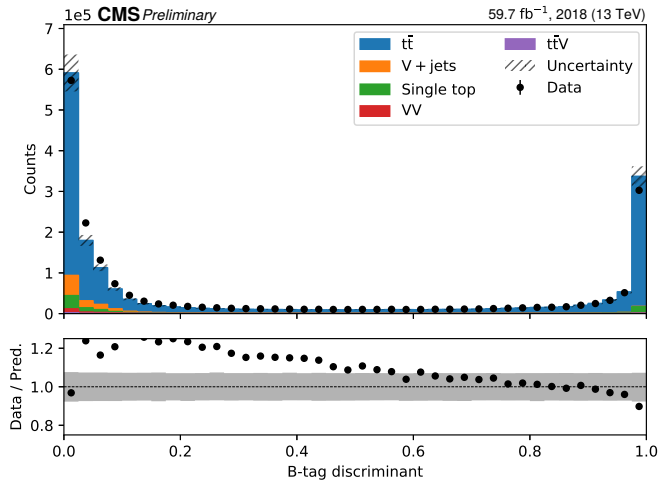


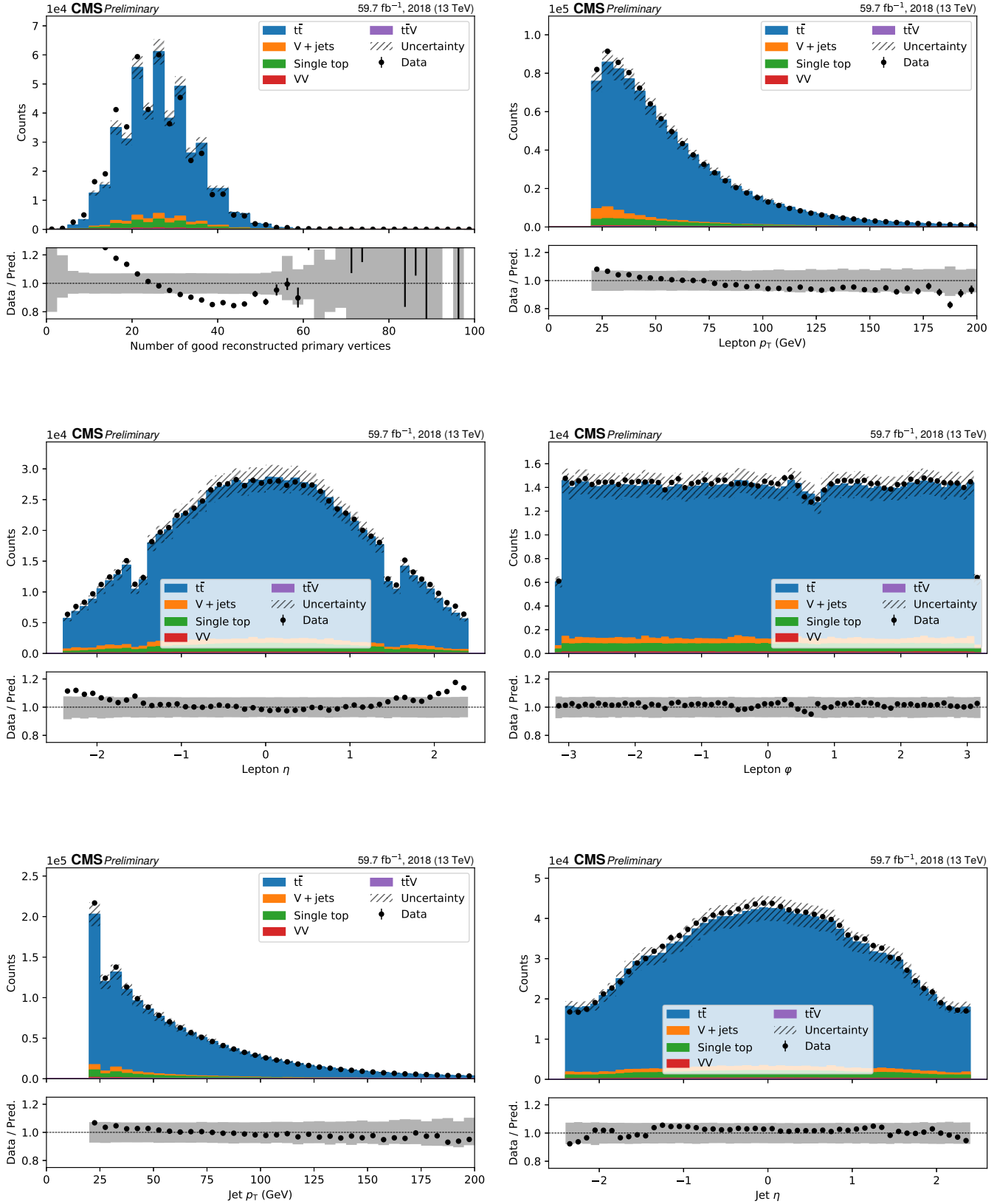


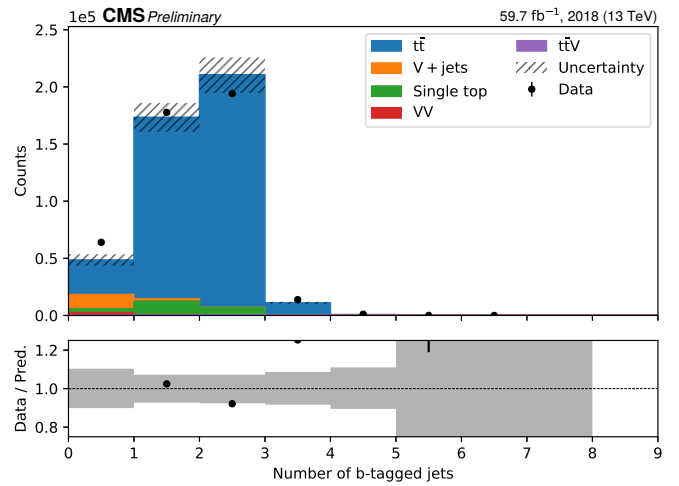
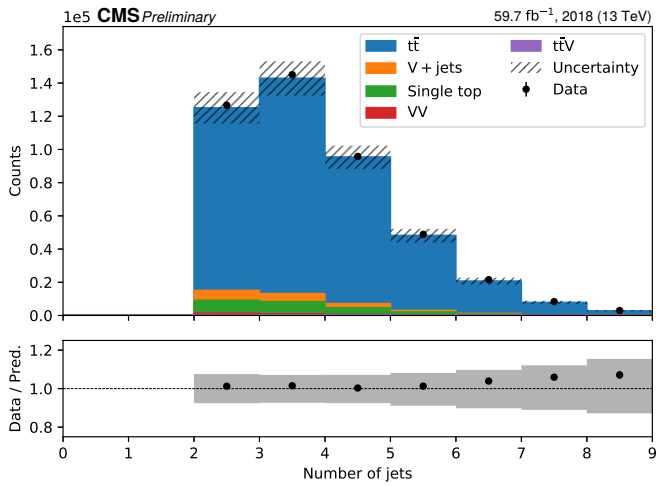
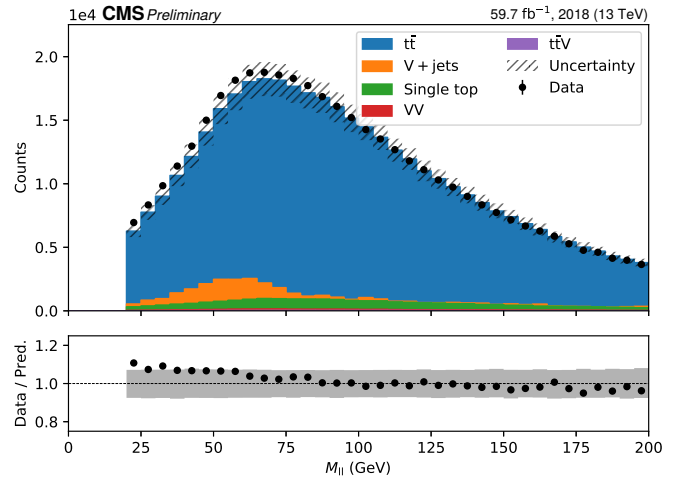
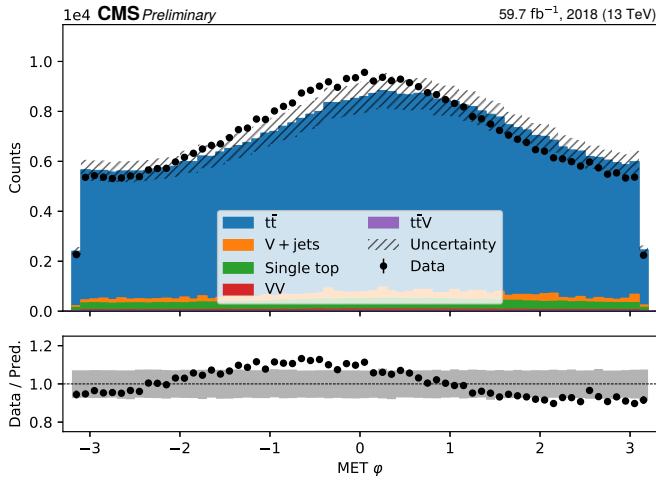
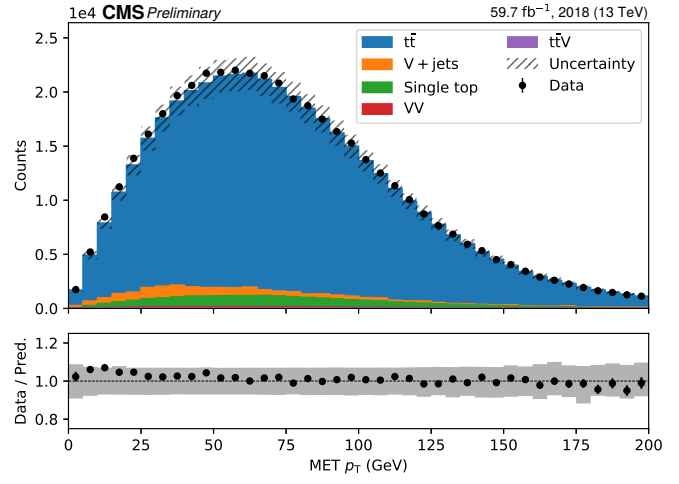
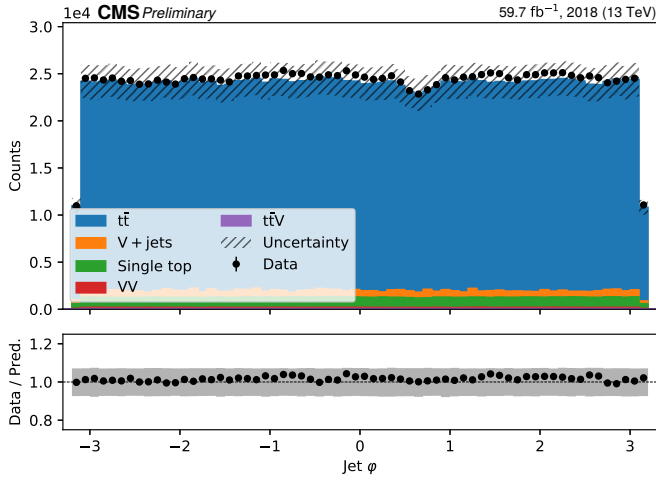


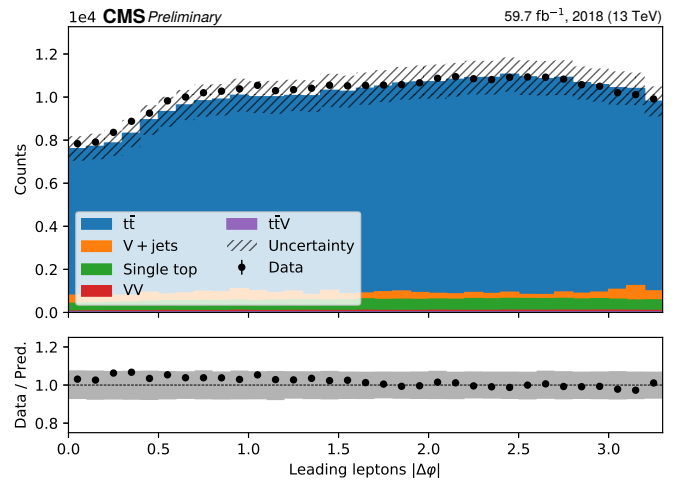
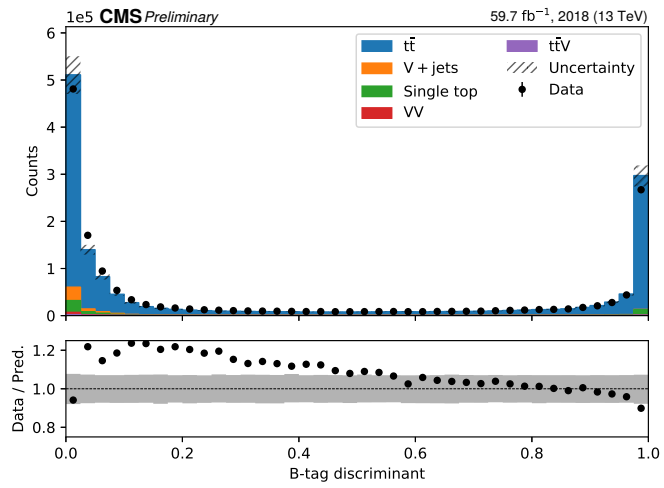
3.8 Number of jets ≥ 2 



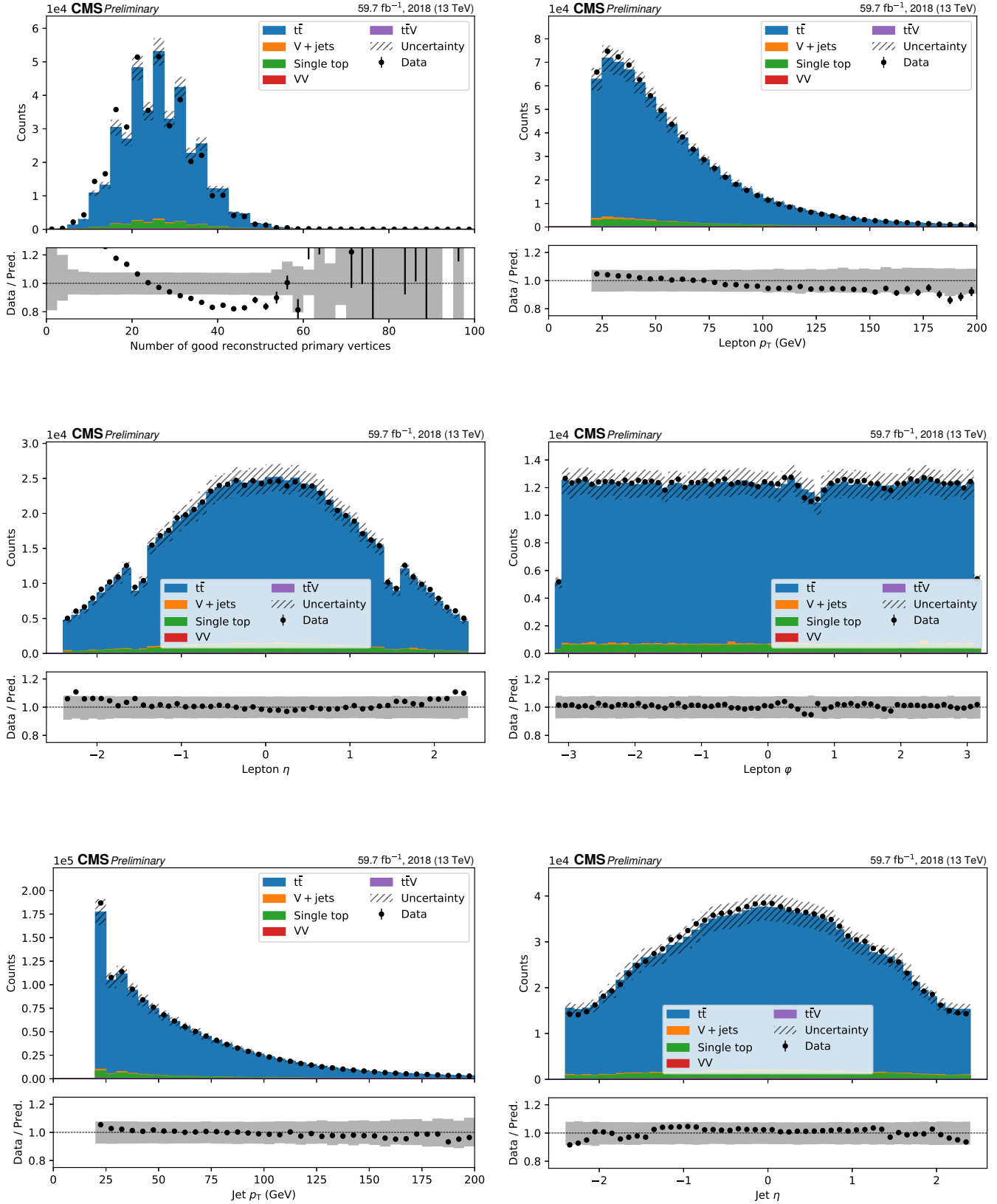


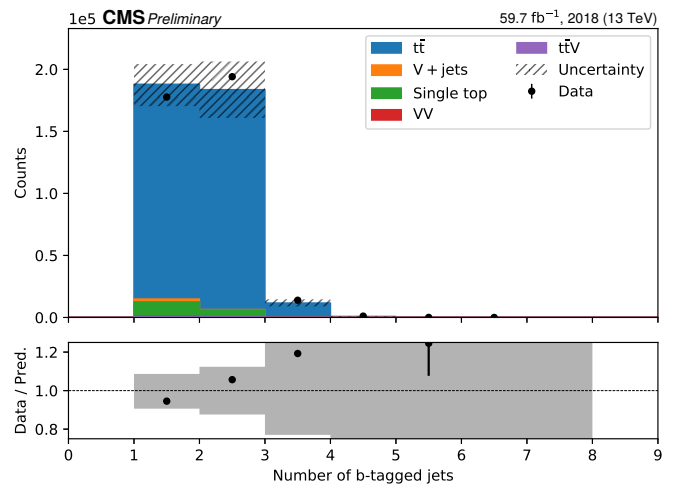
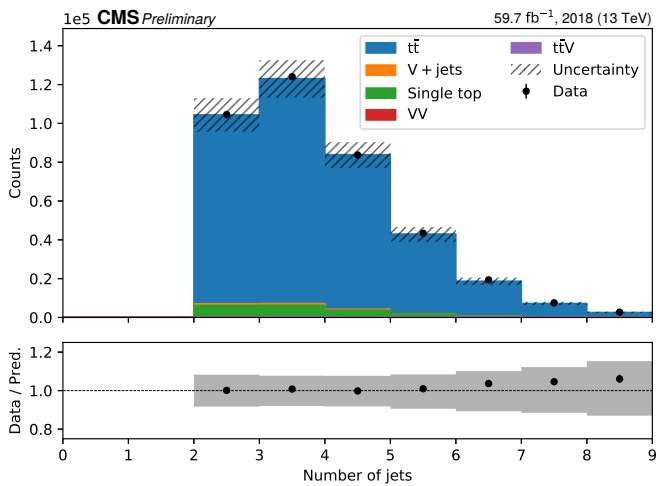
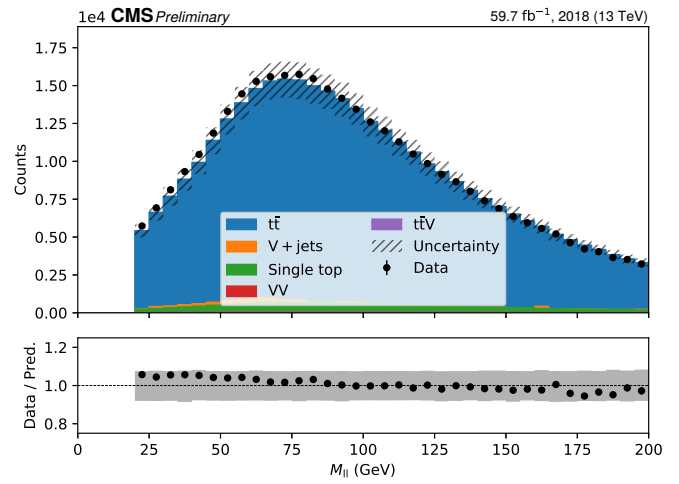
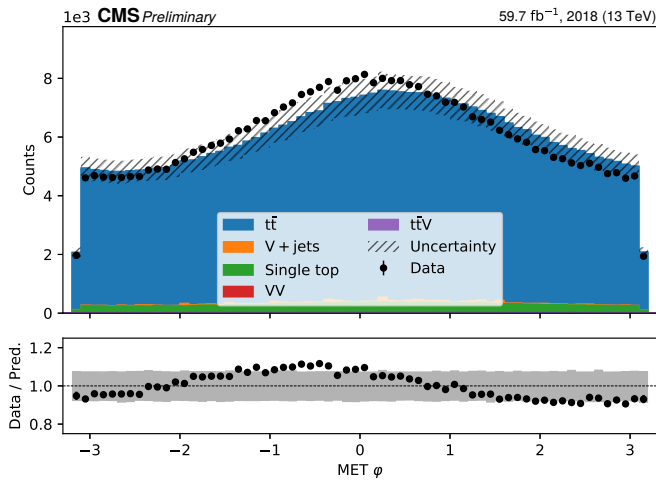
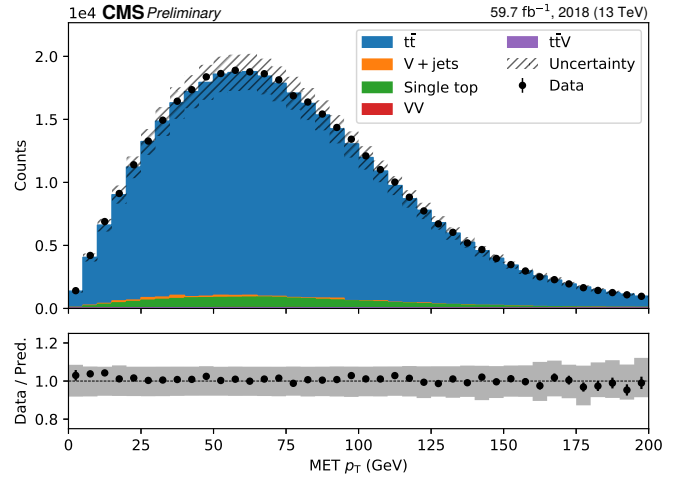
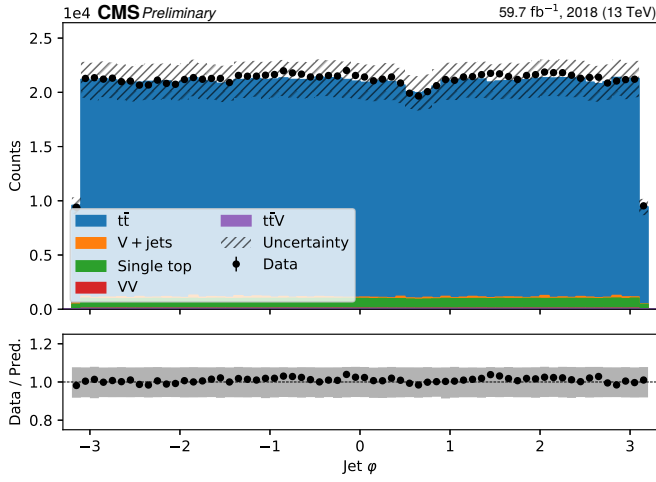
3.9 Require jet p_T 

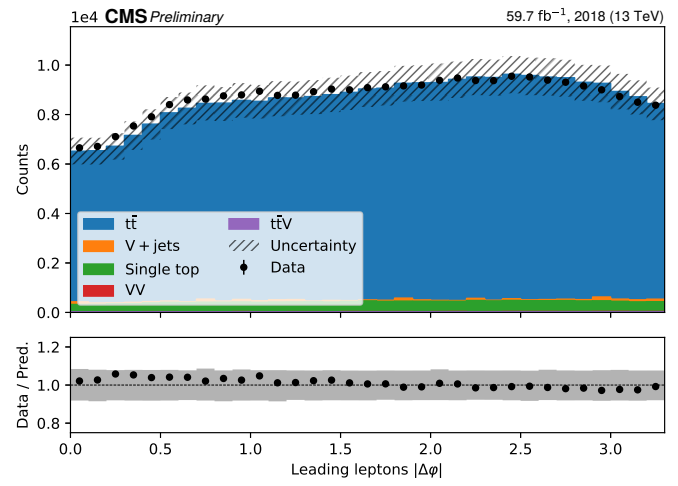
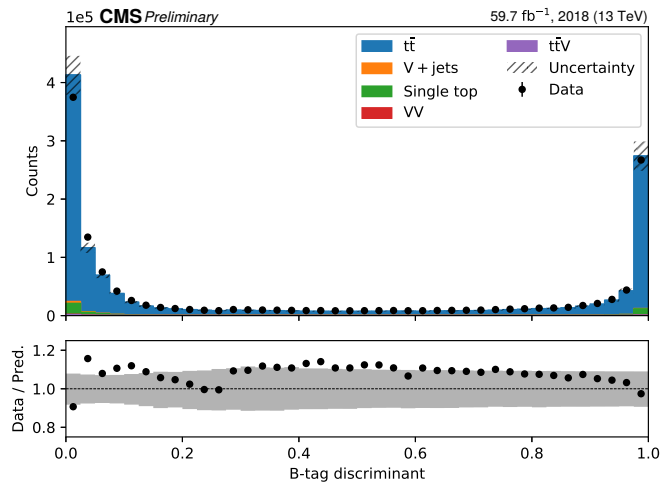


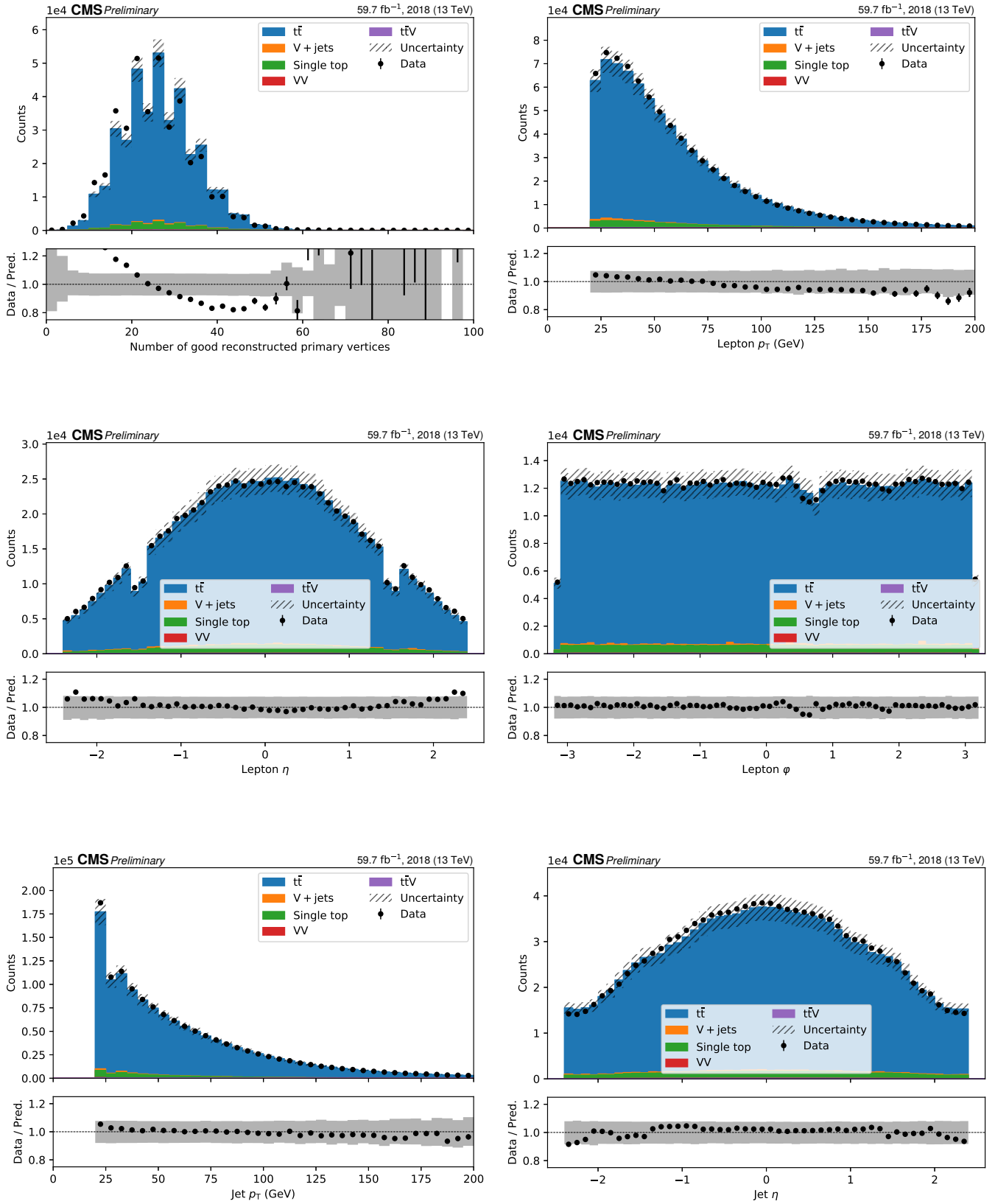


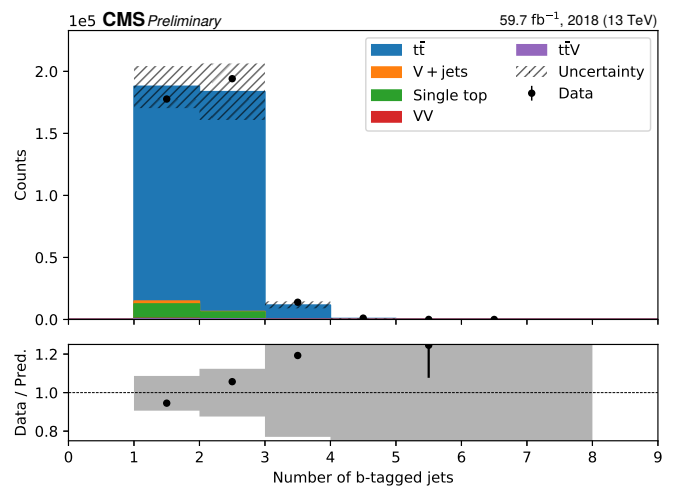
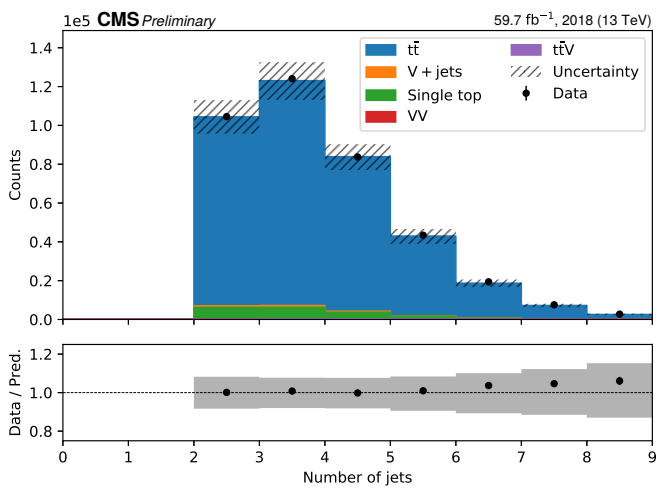
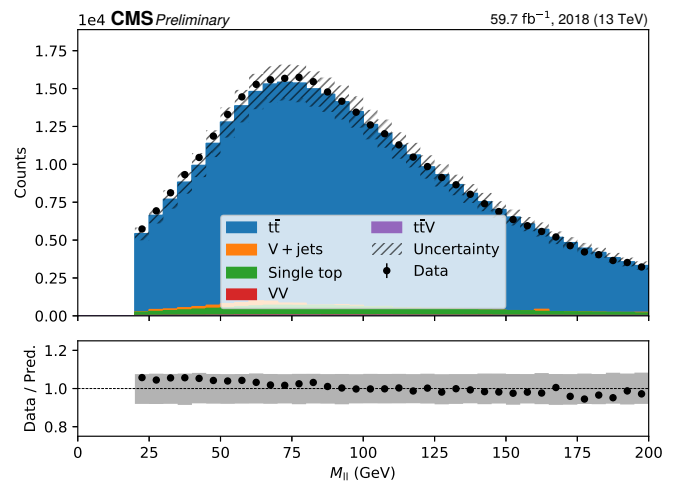
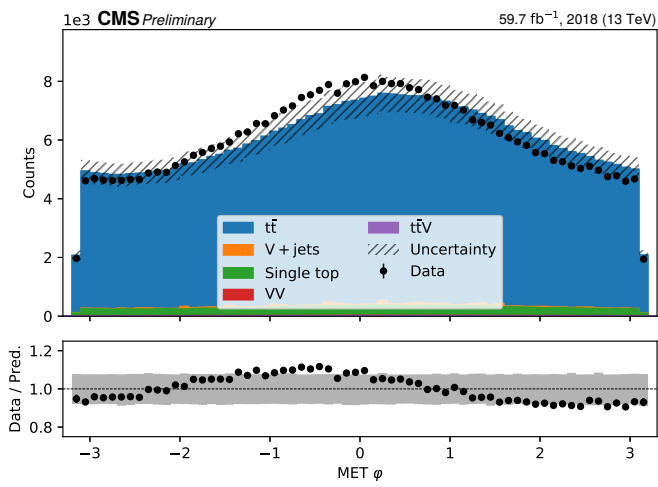
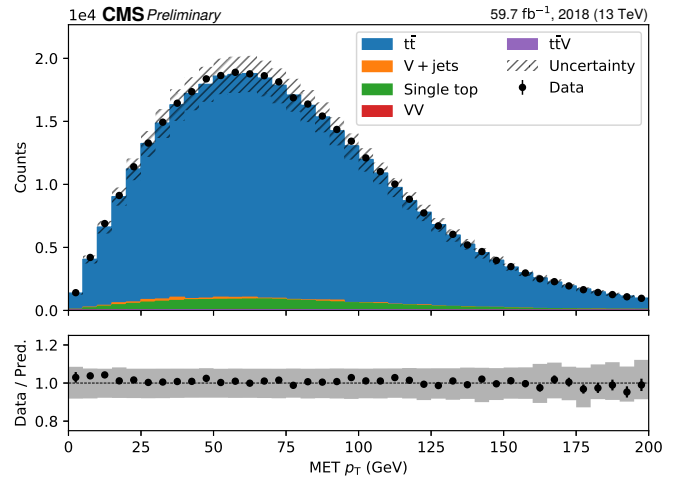
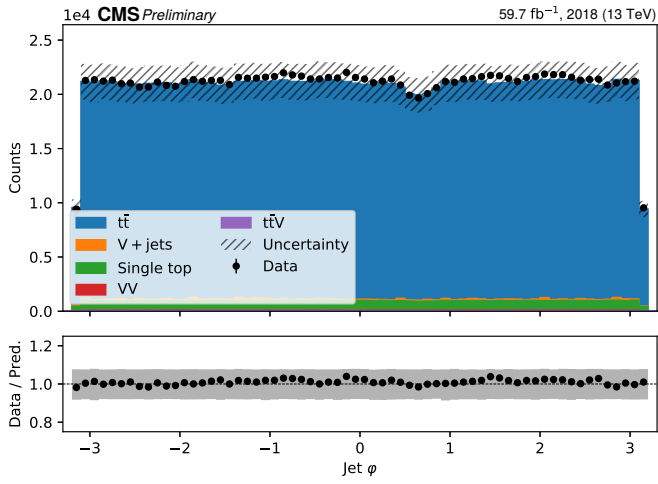
3.10 At least 1 btag

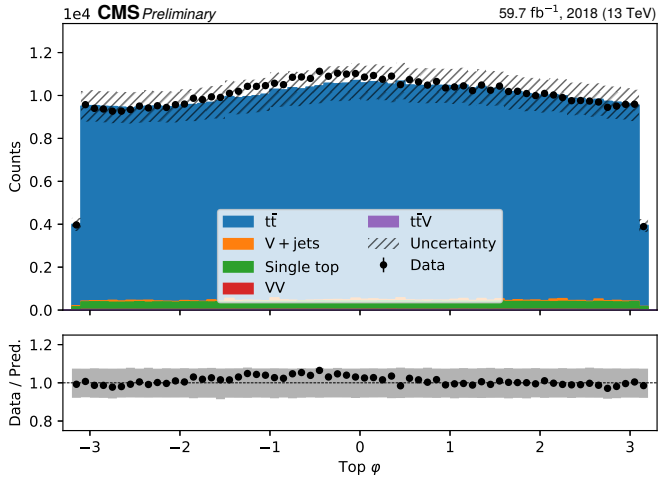
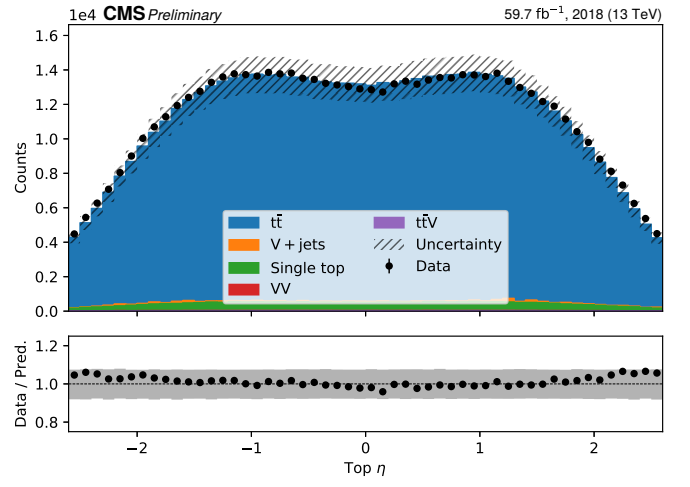
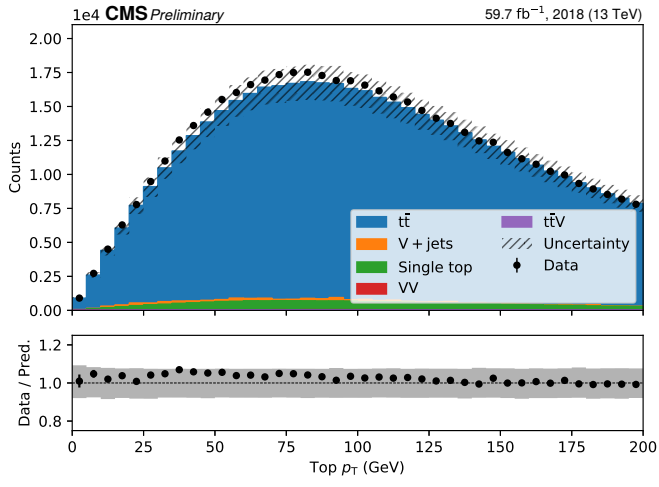
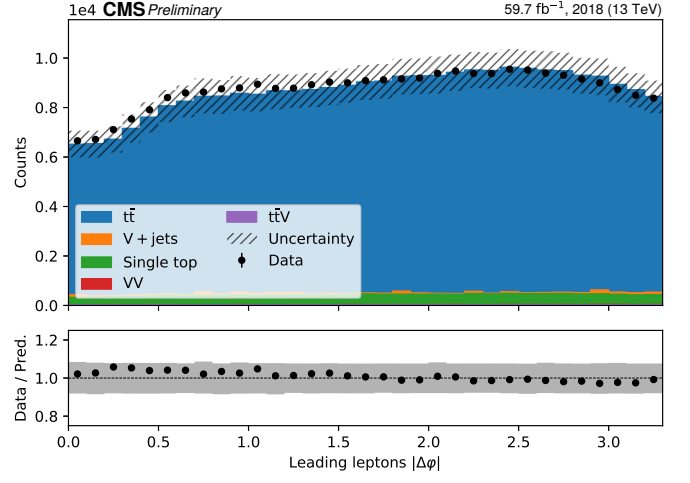
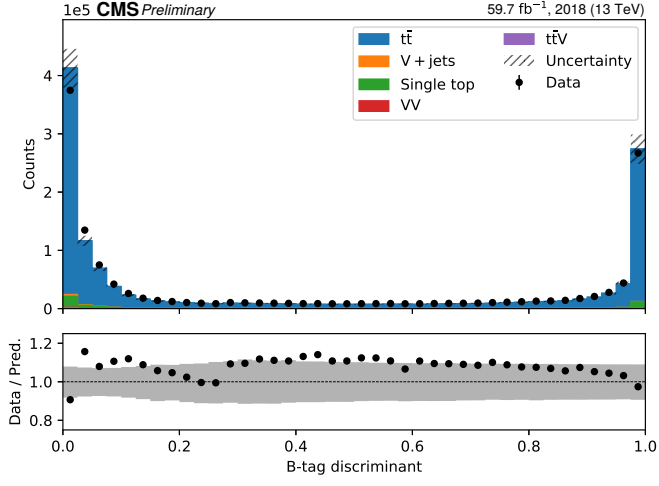


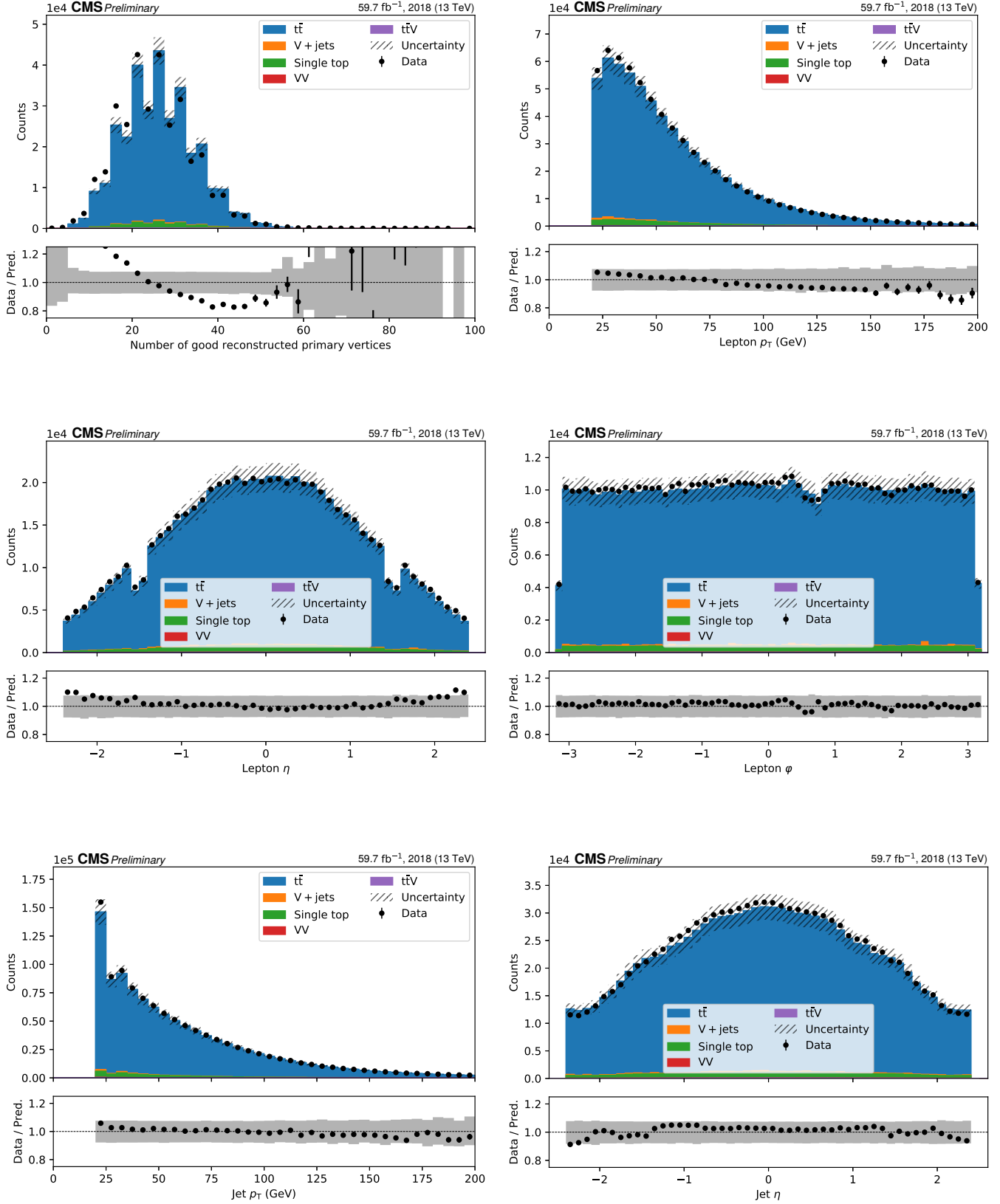


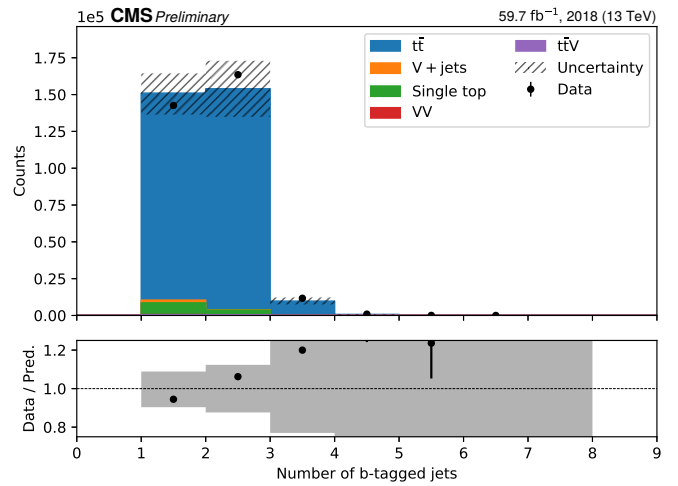
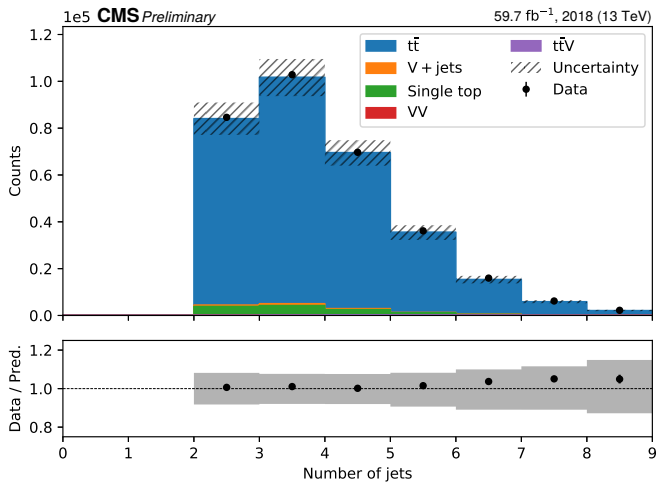
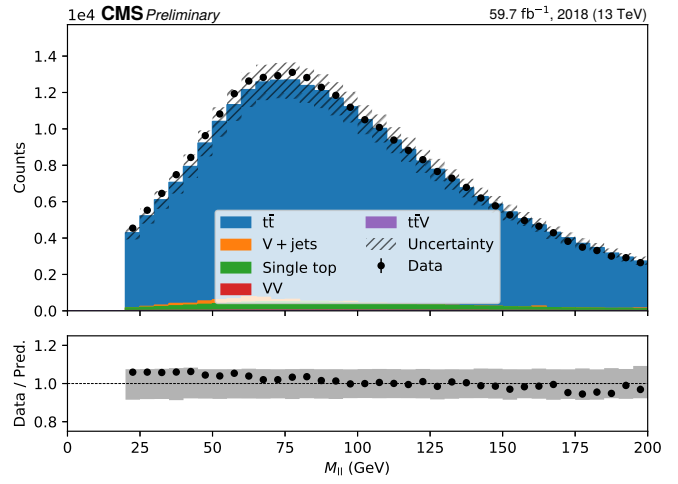
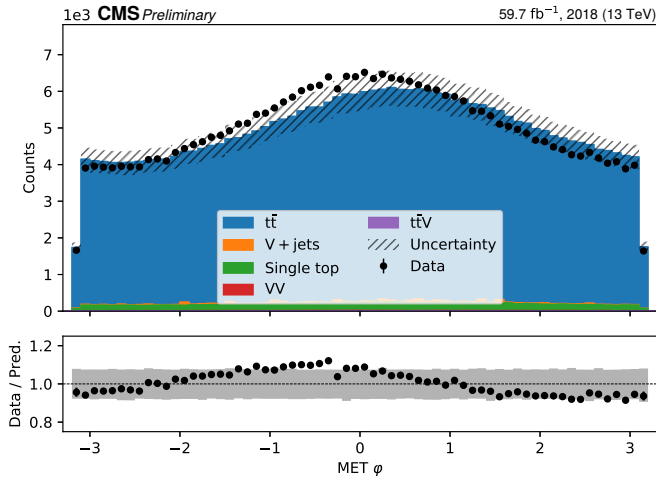
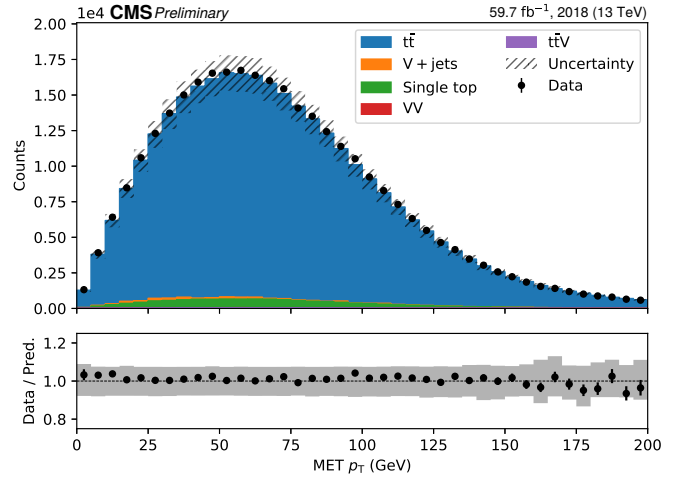
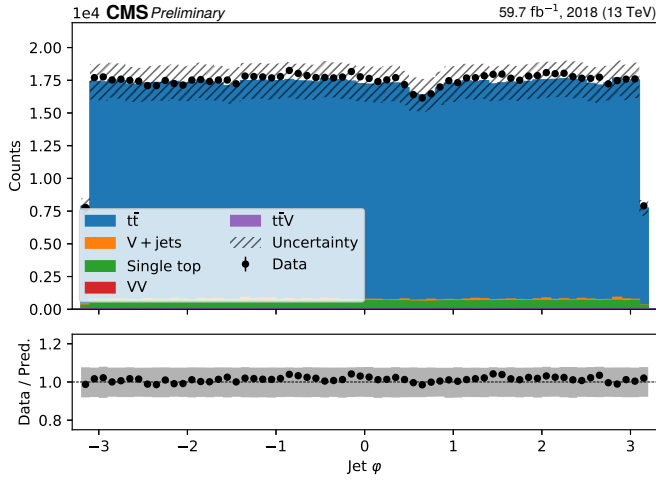


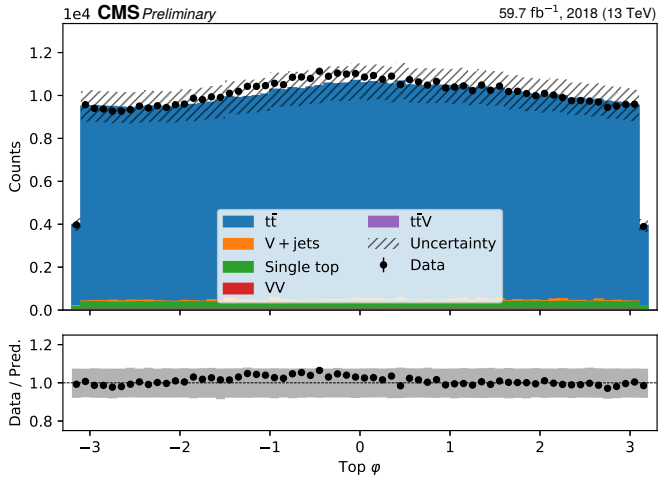
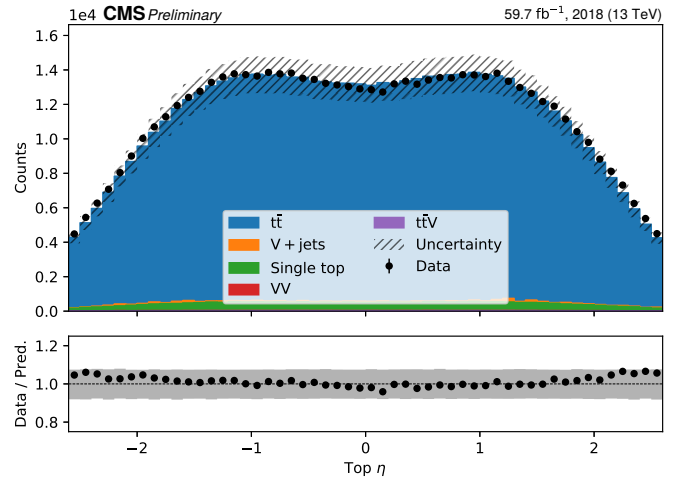
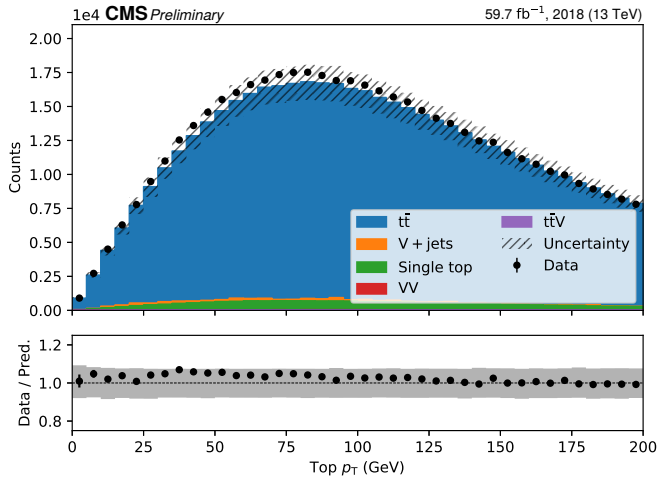
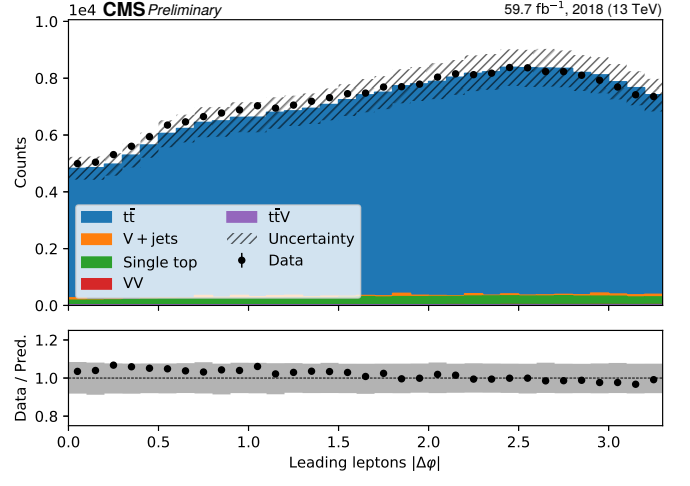
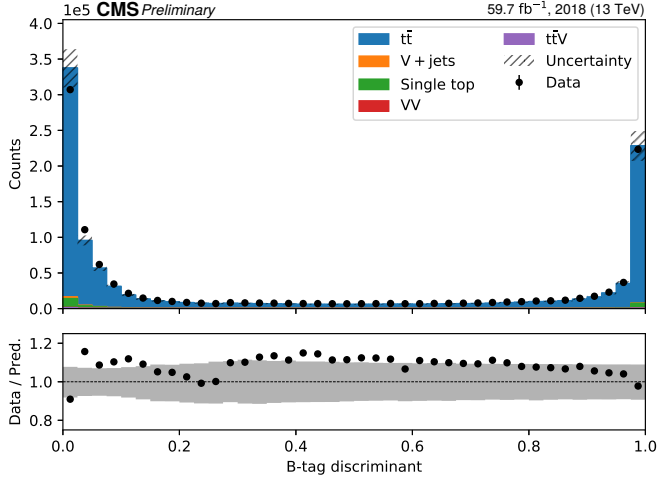
3.11 $MET > 40$ GeV





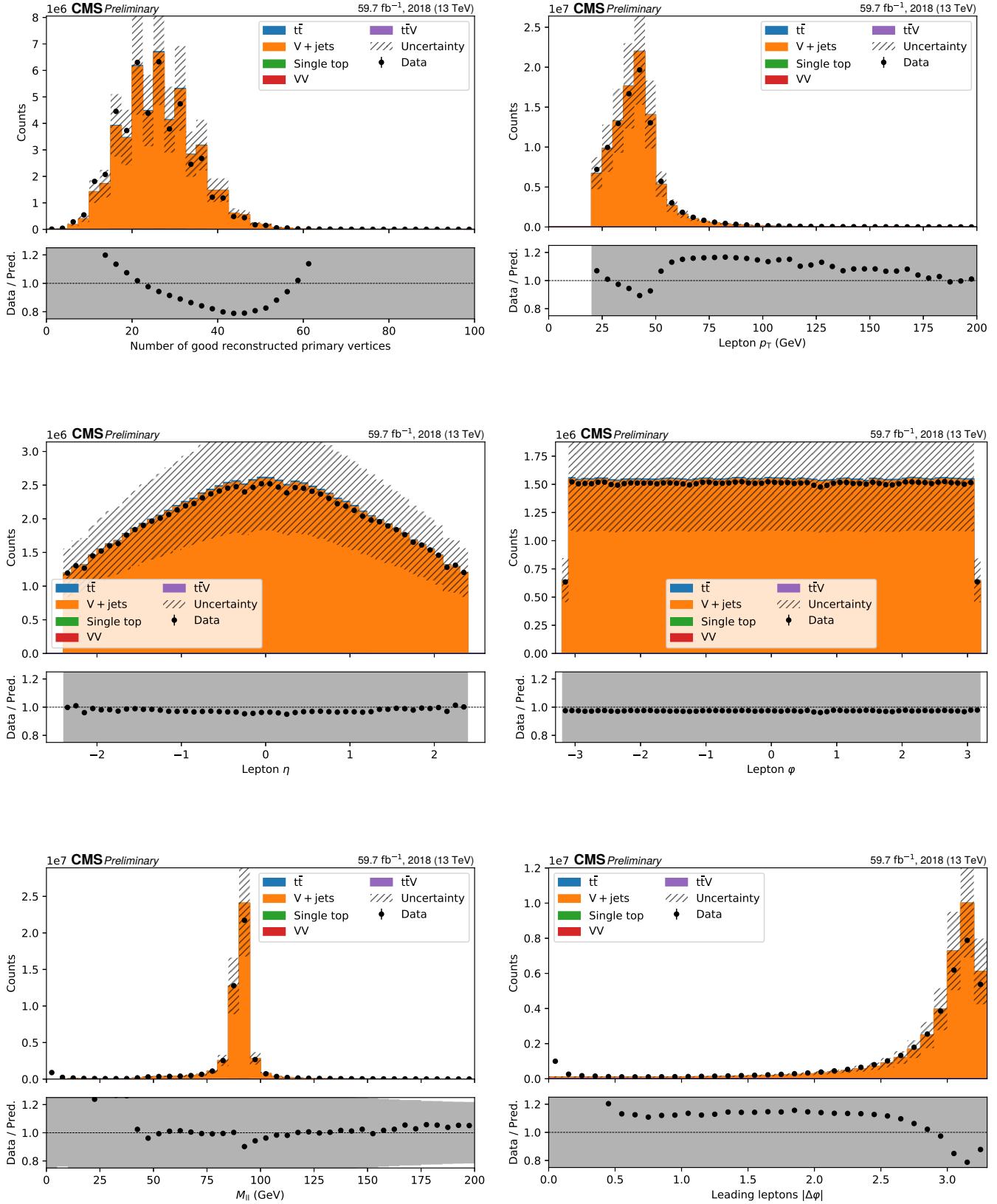
3.12 Passes $t\bar{t}$ reconstruction



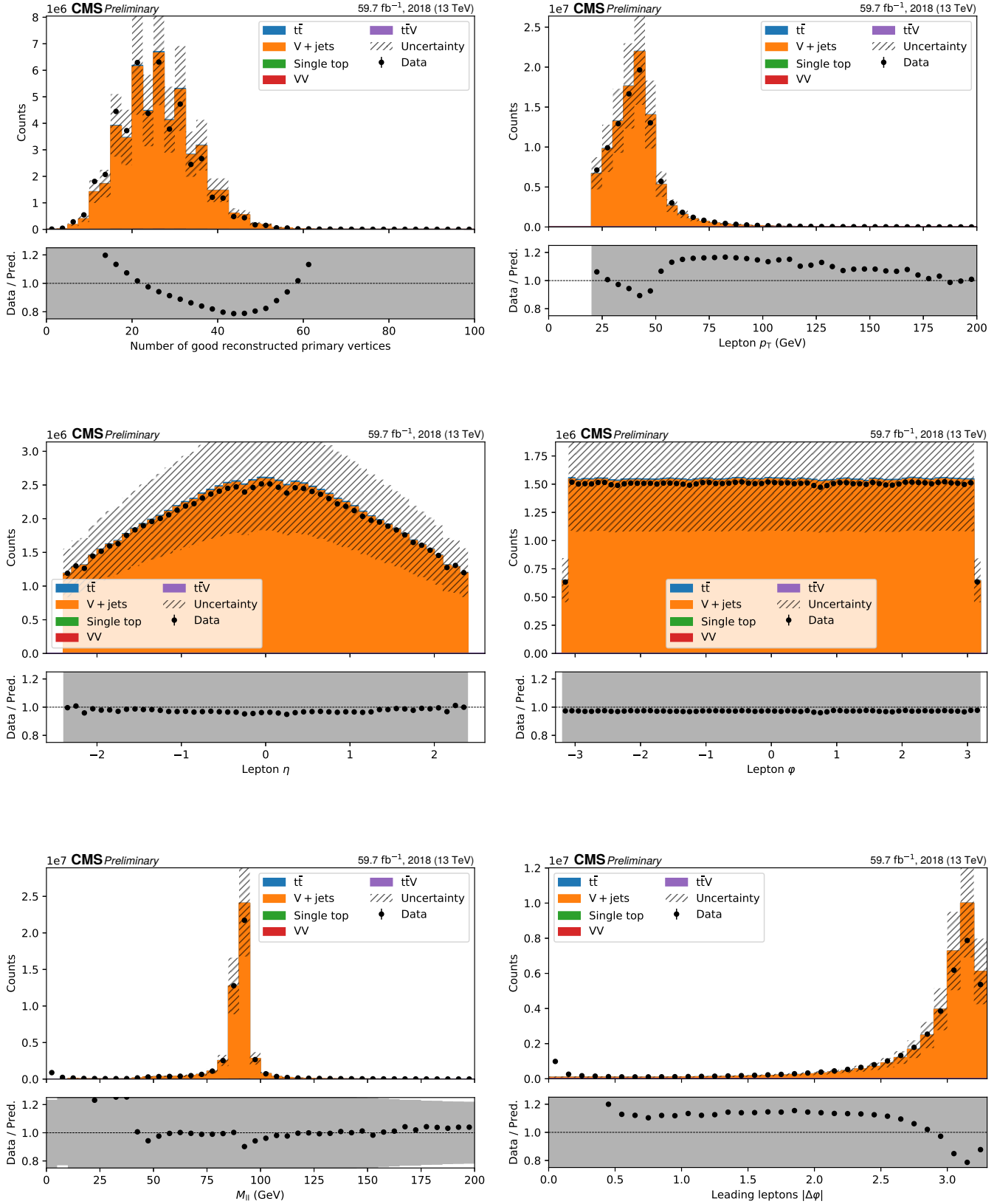


4 mm-channel

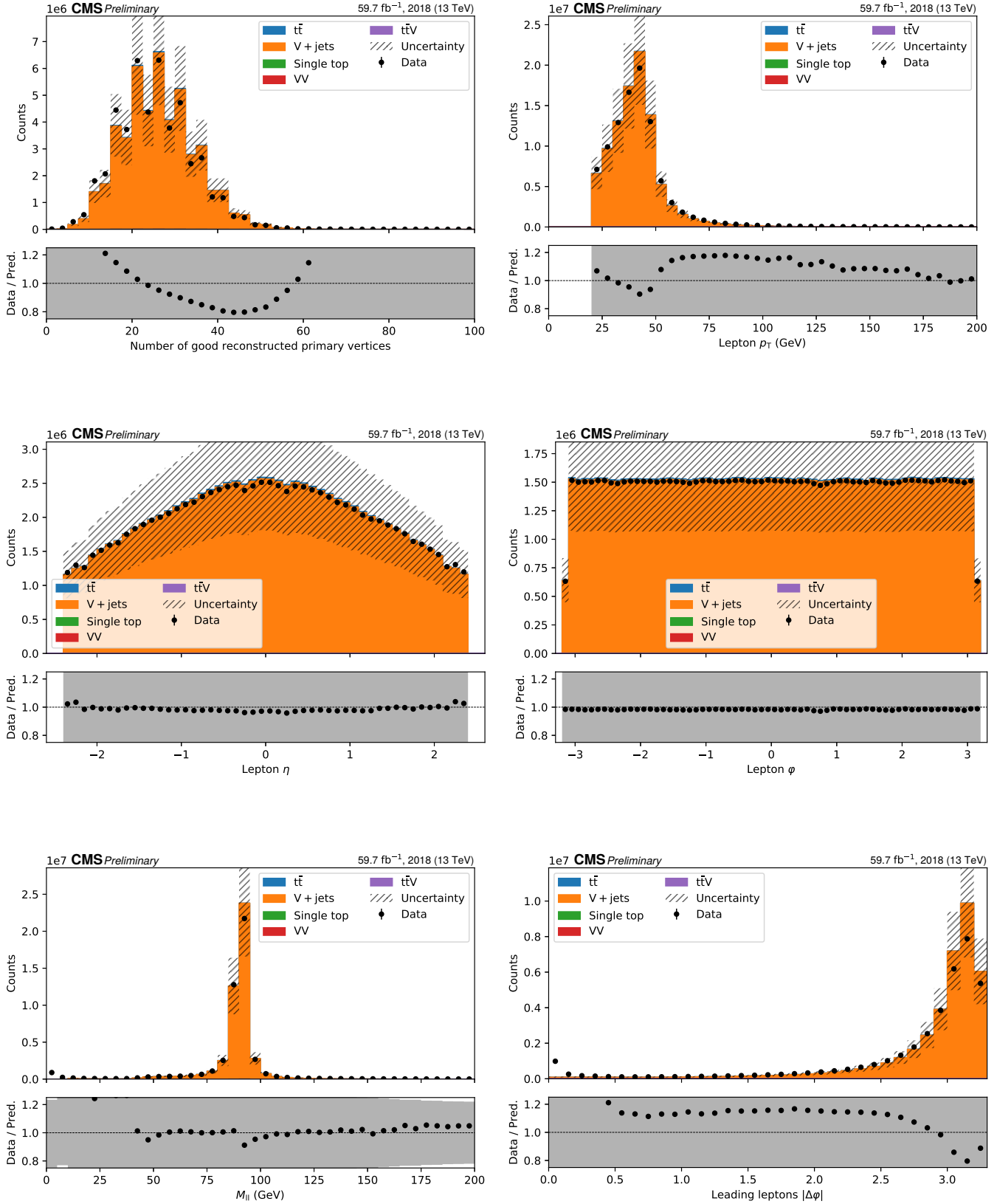
4.1 Have at least two leptons



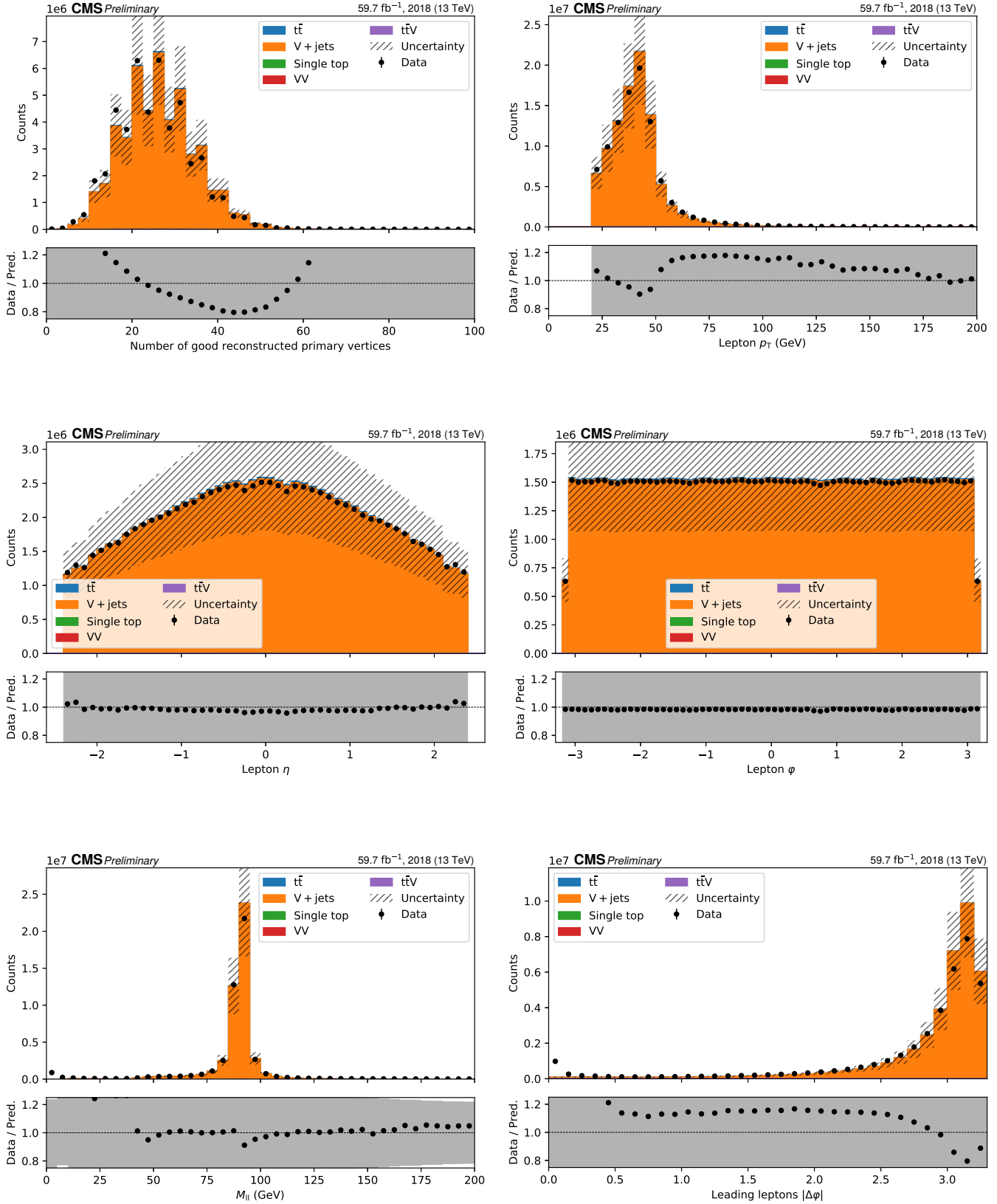
4.2 Leptons have opposite charge

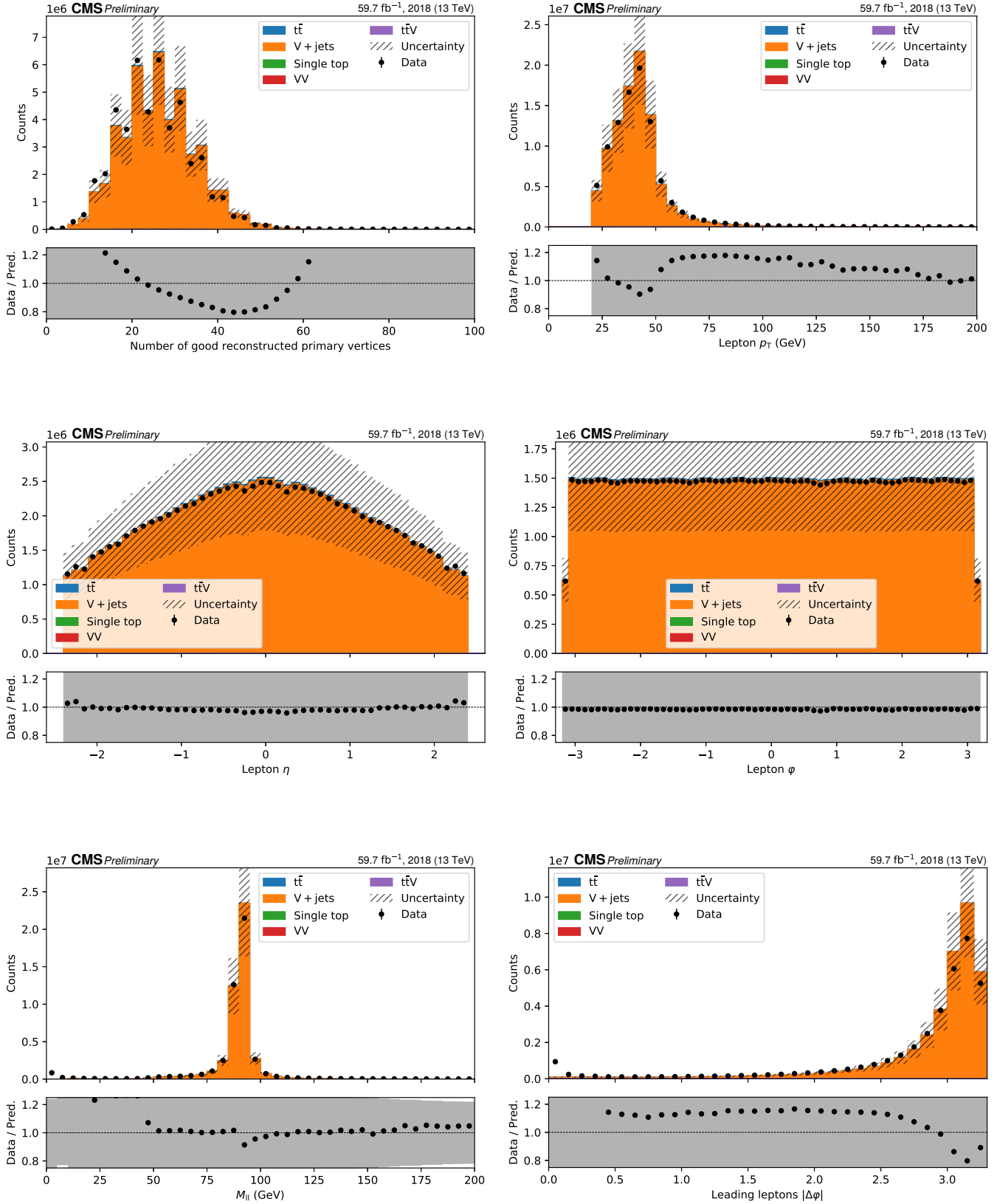


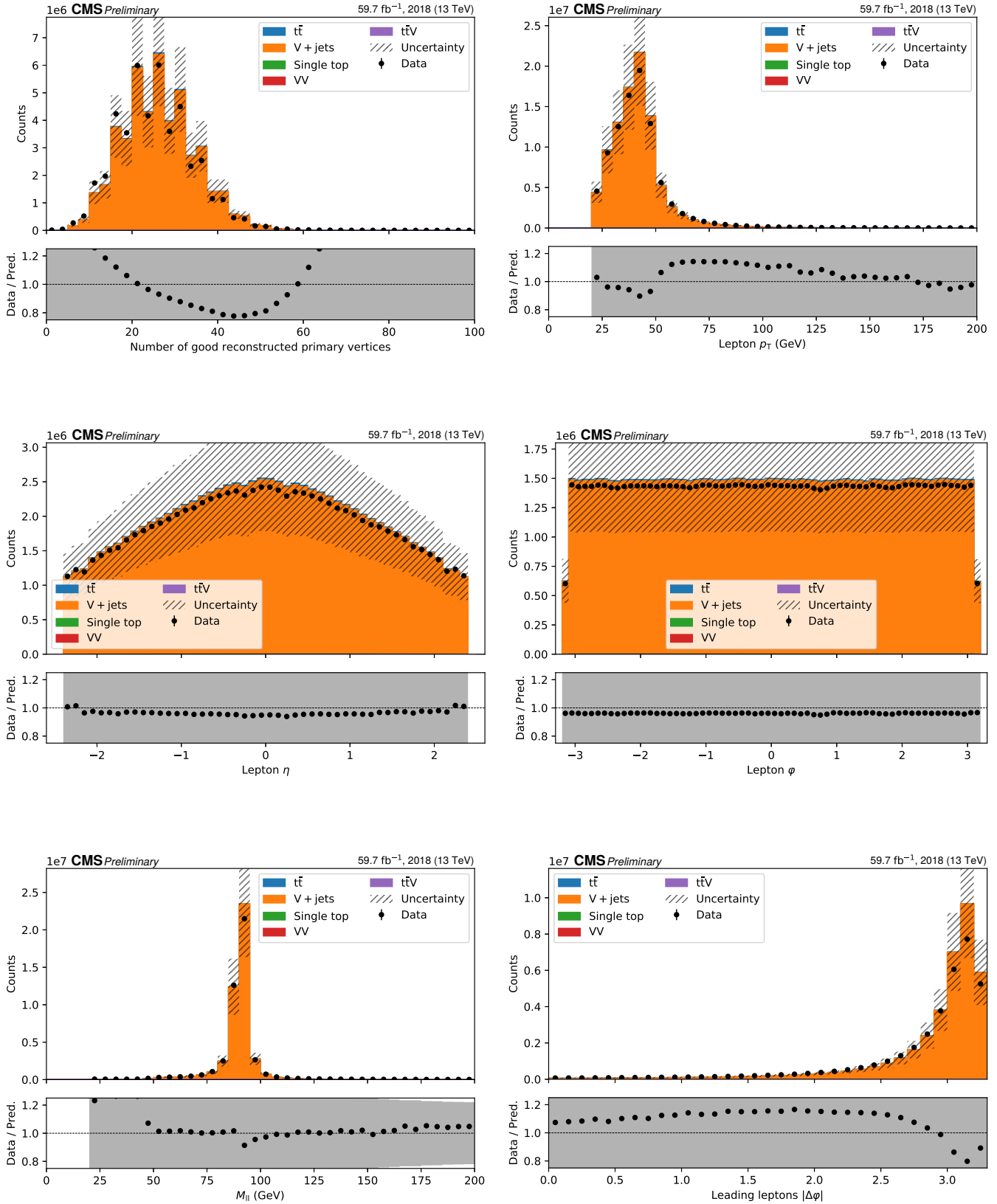
4.3 No additional leptons



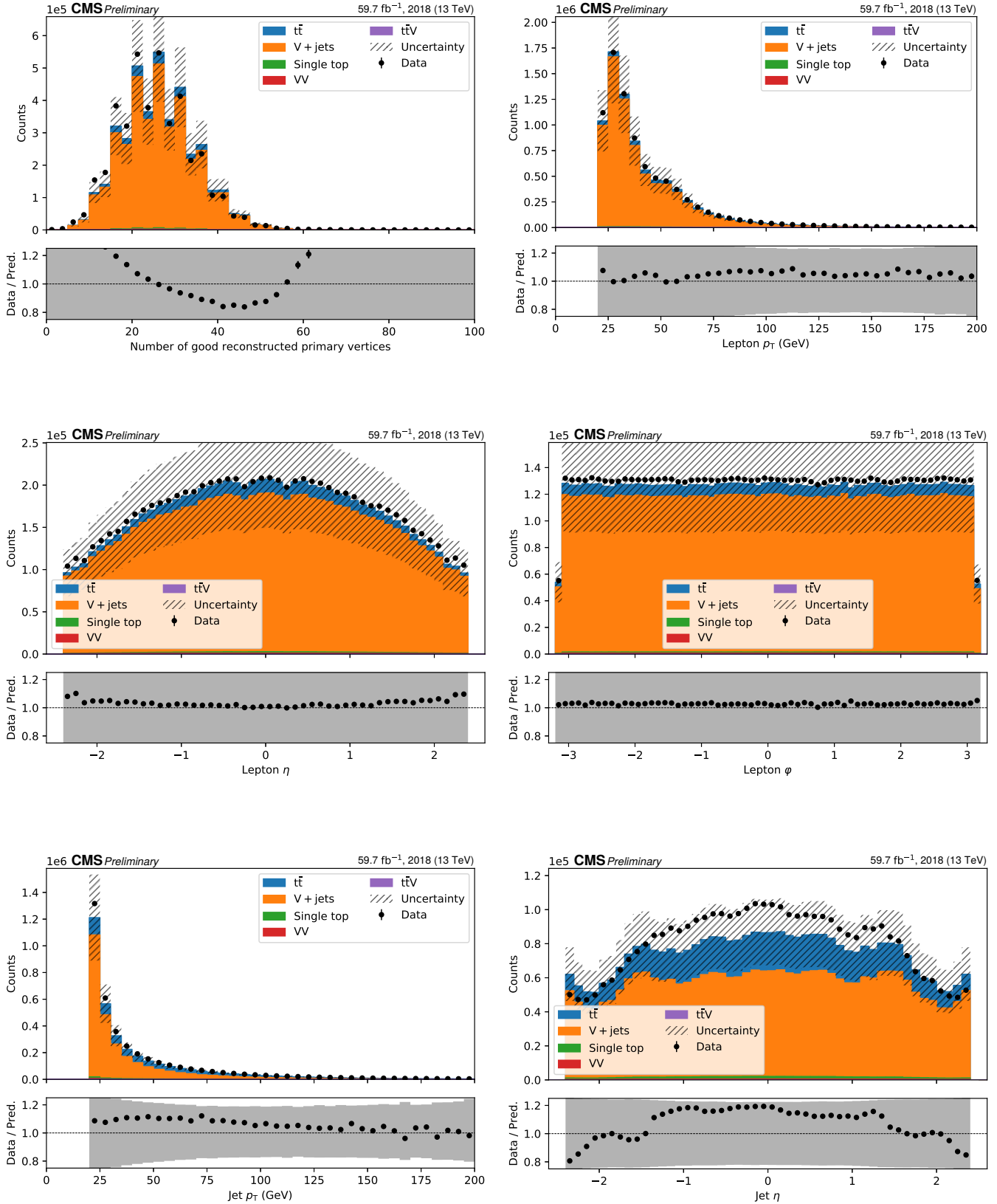
4.4 Channel trigger matching

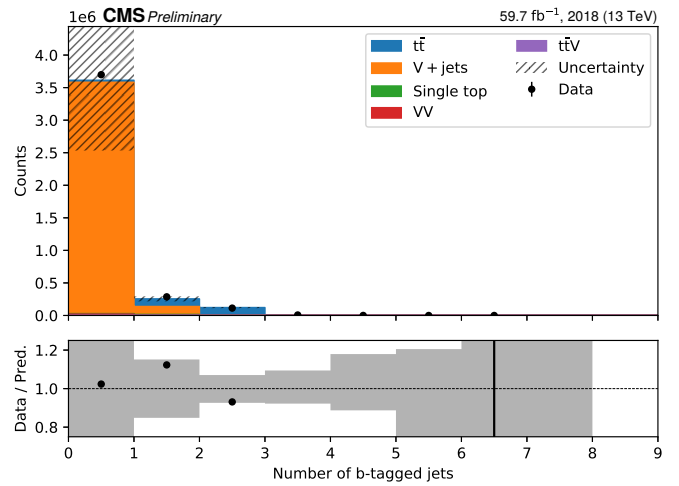
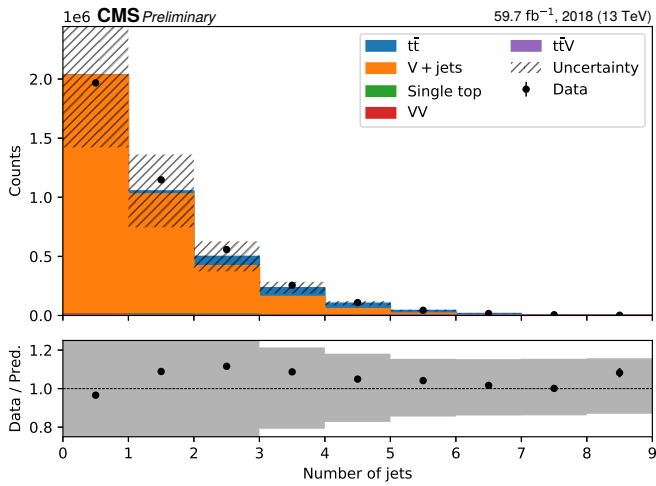
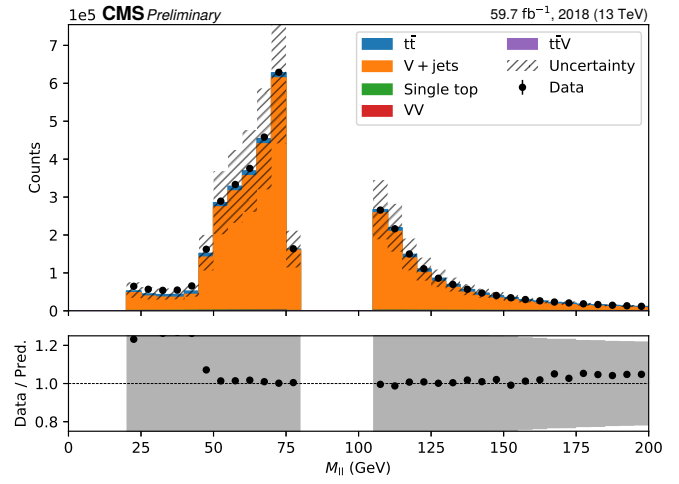
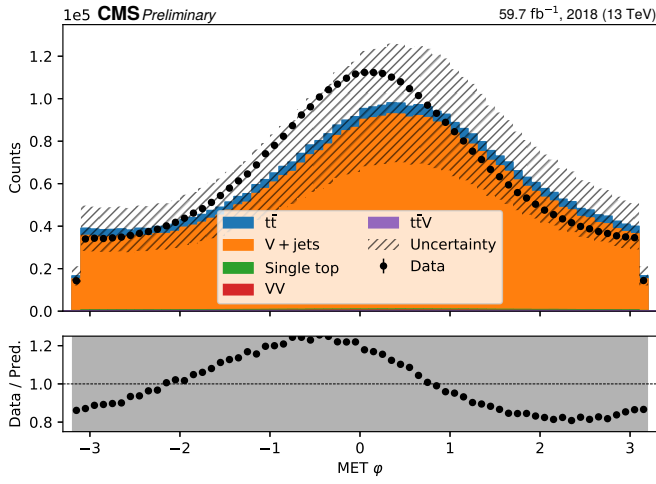
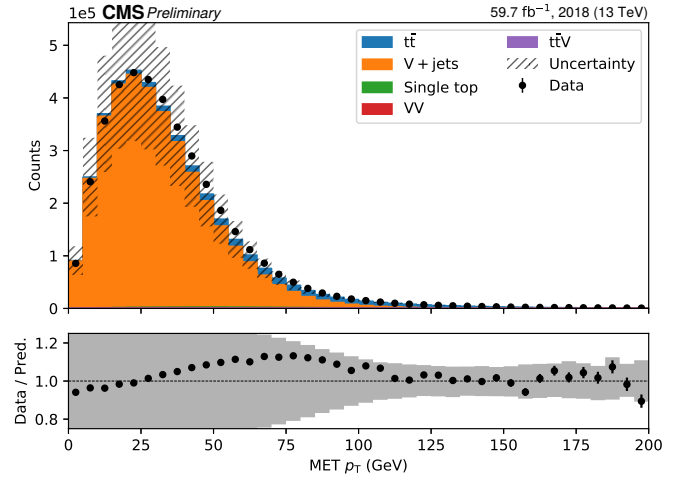
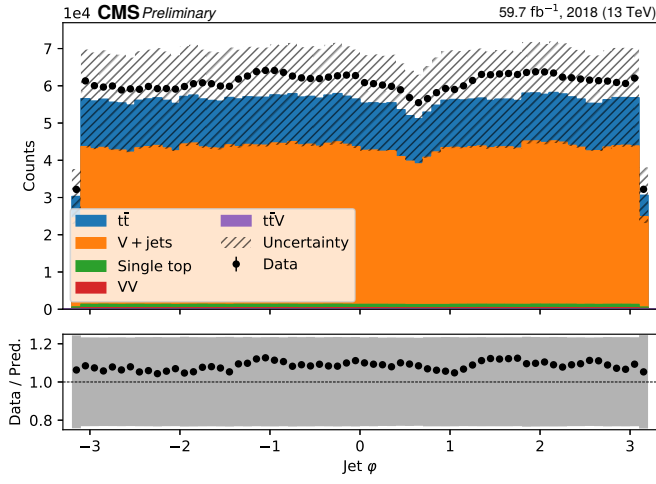


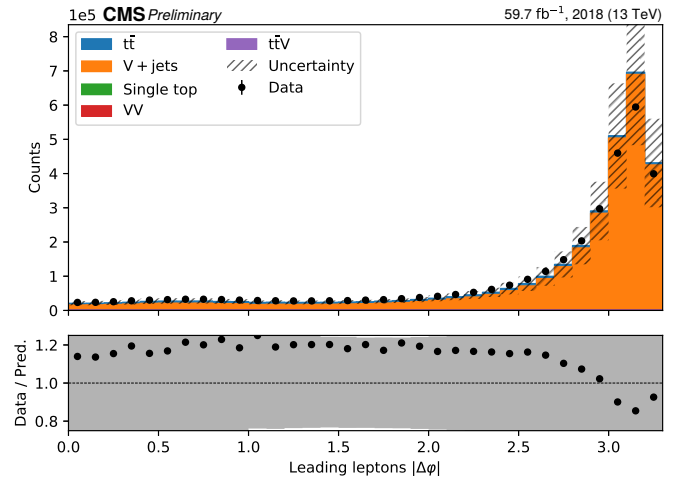
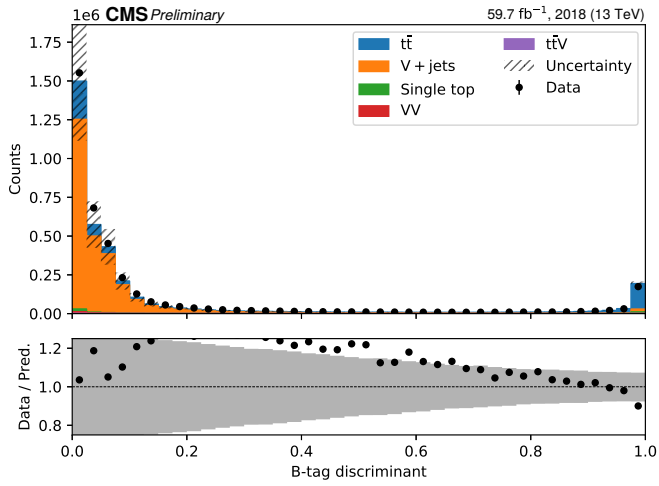
4.5 Require lepton p_T 

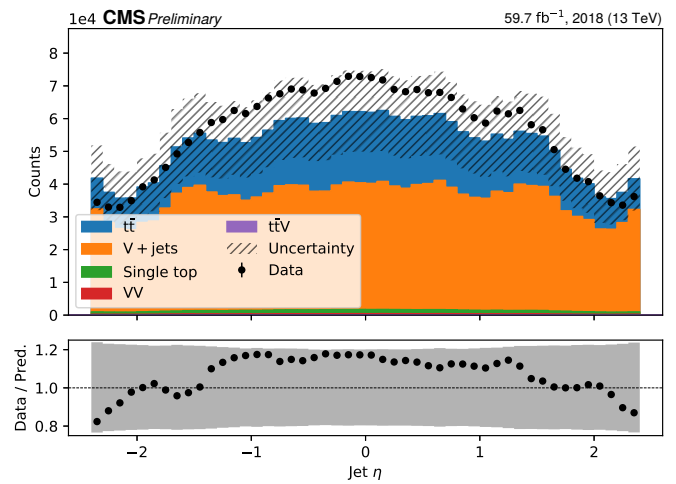
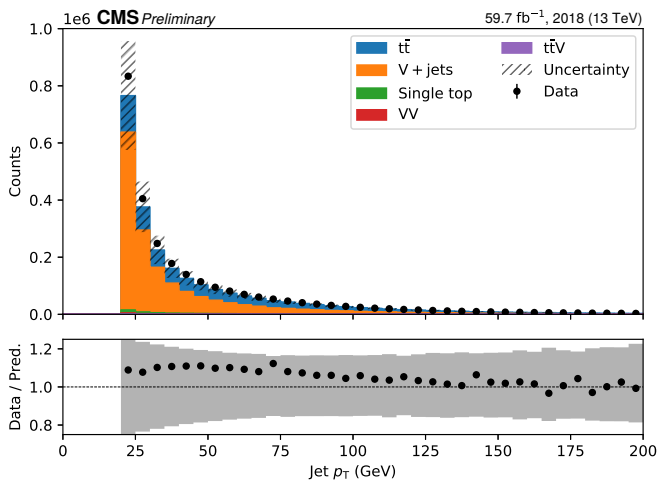
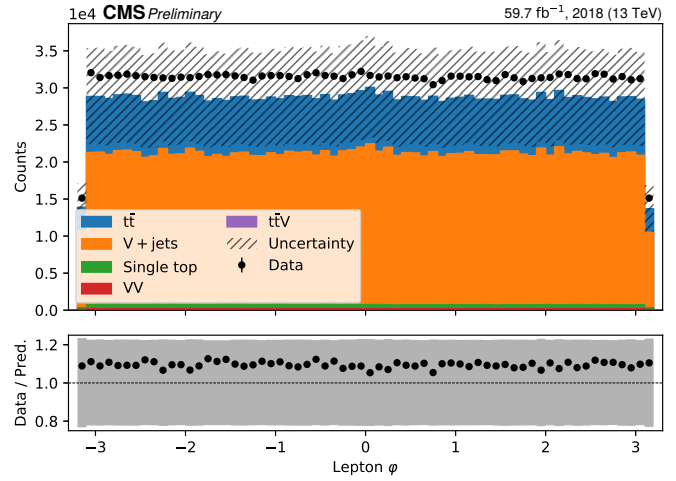
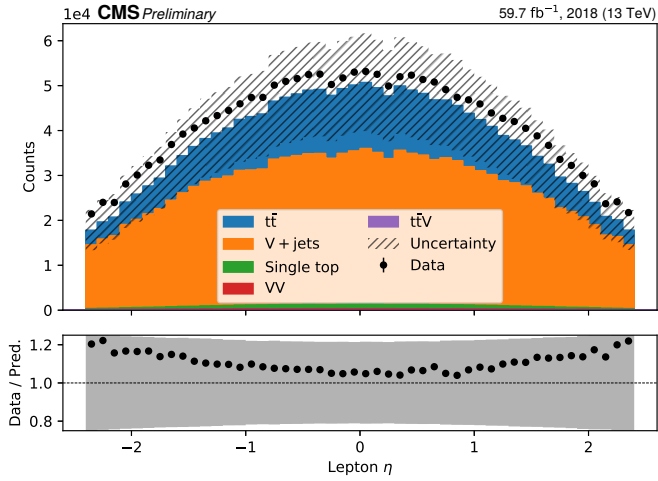
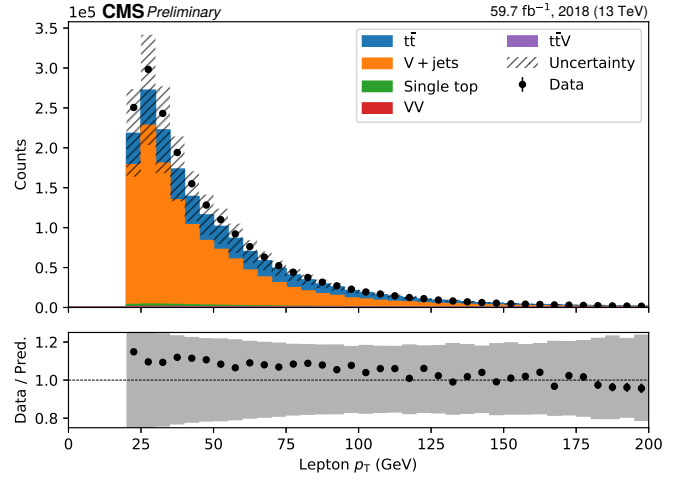
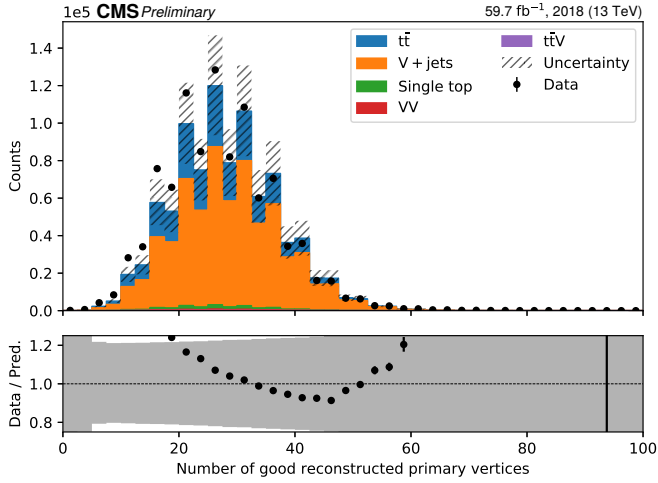
4.6 M_{ll} 

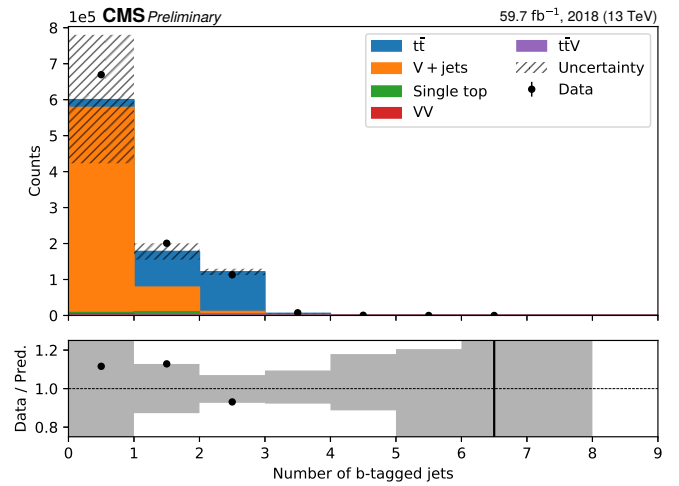
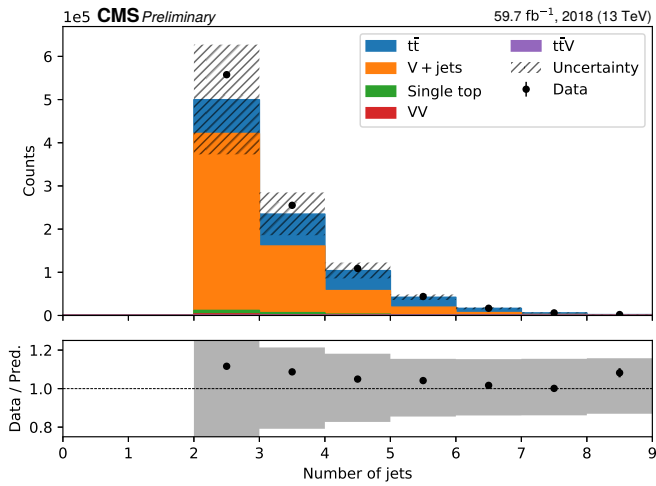
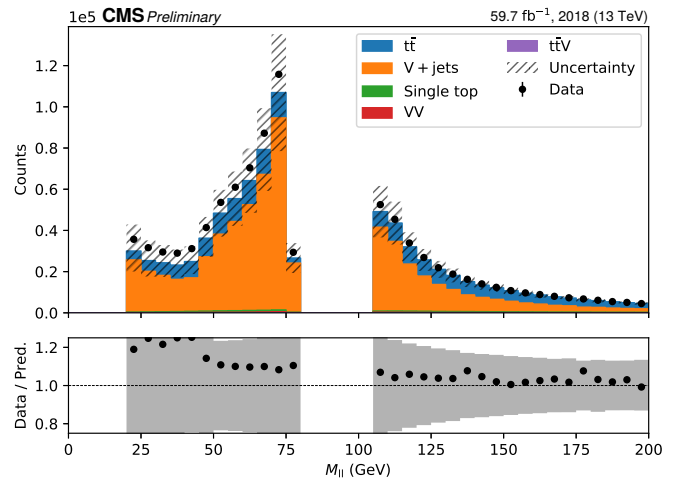
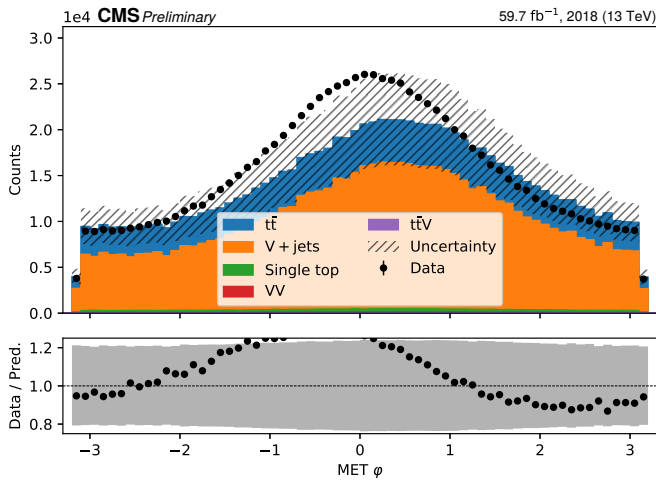
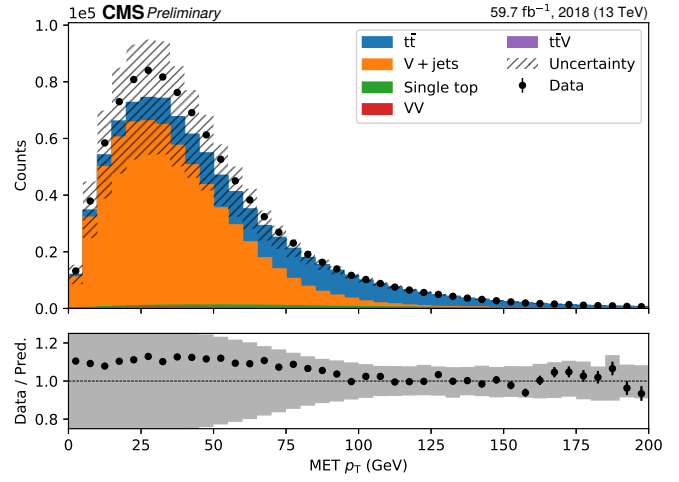
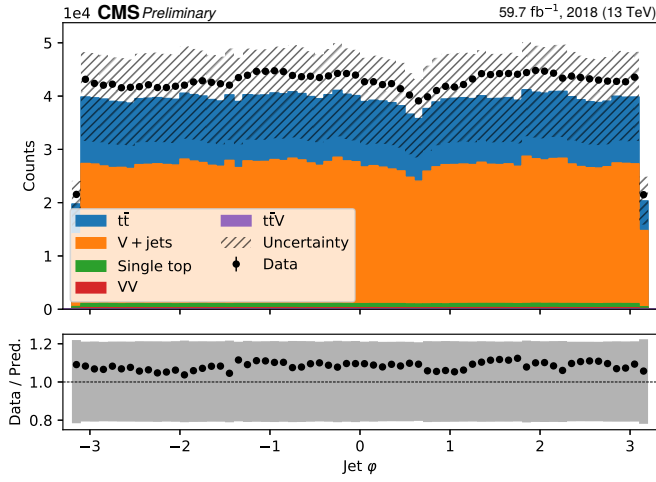
4.7 Z window

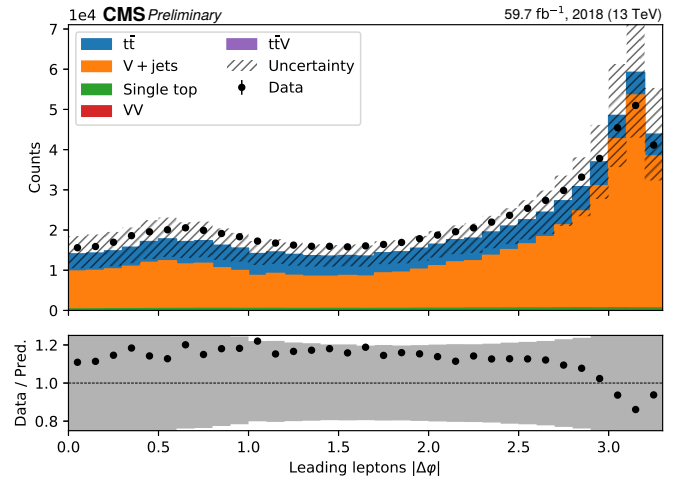
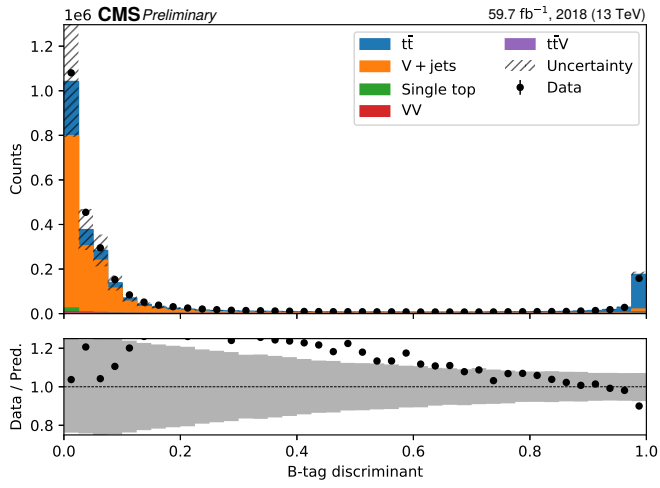


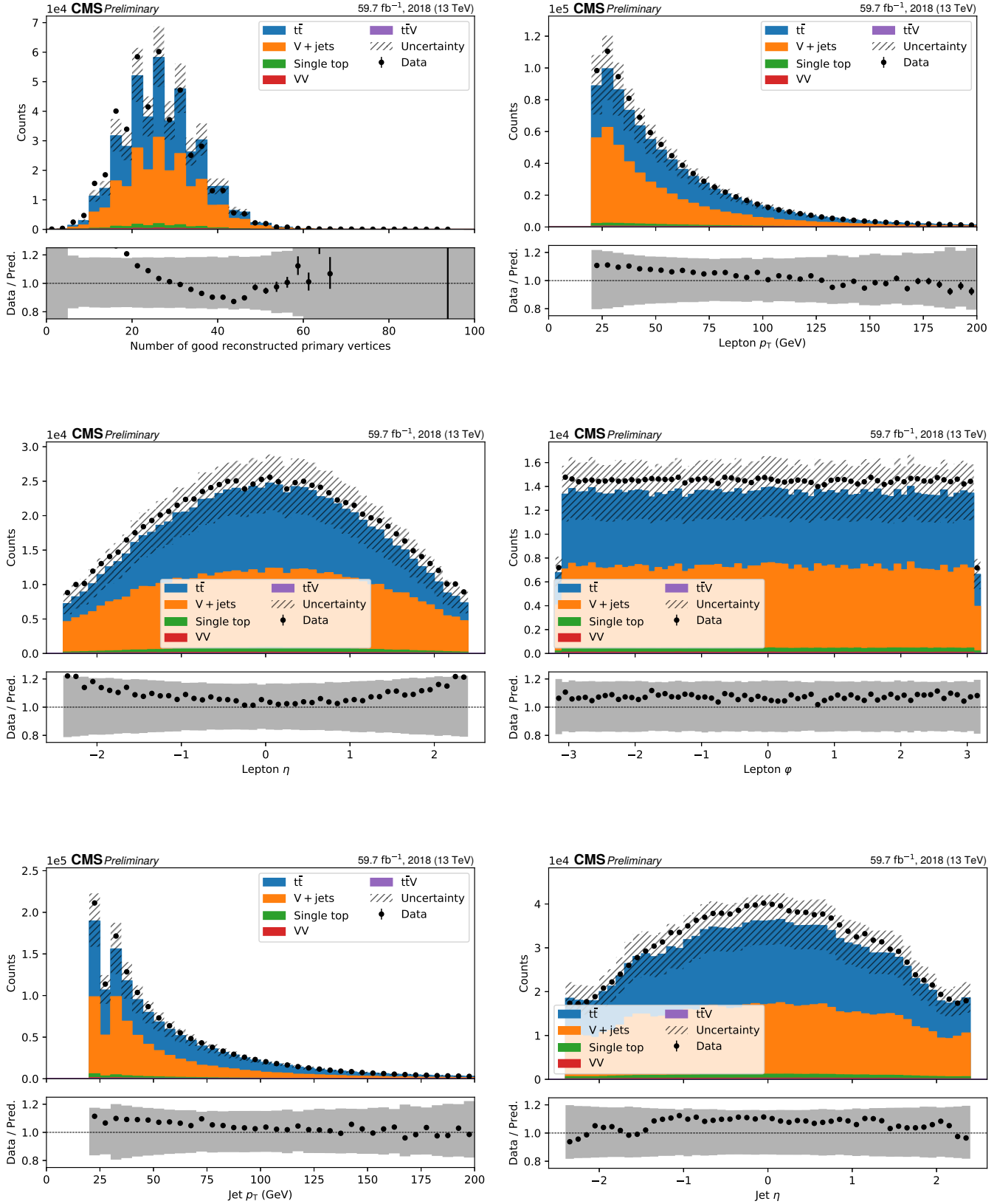


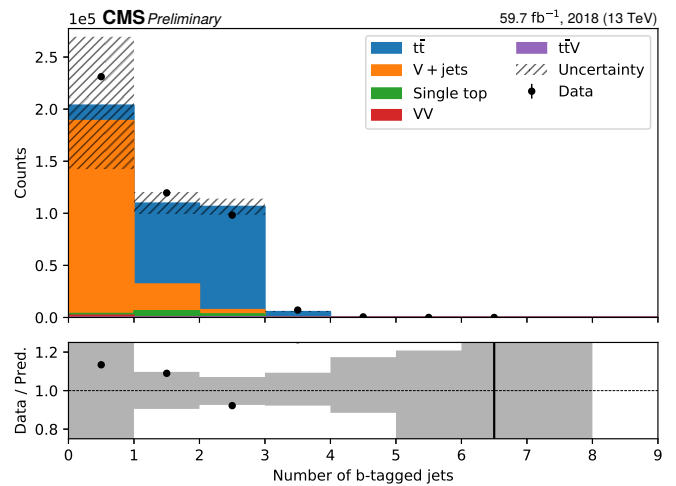
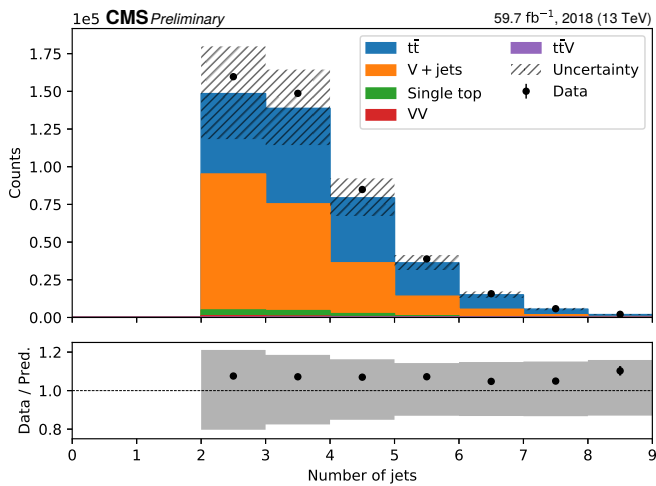
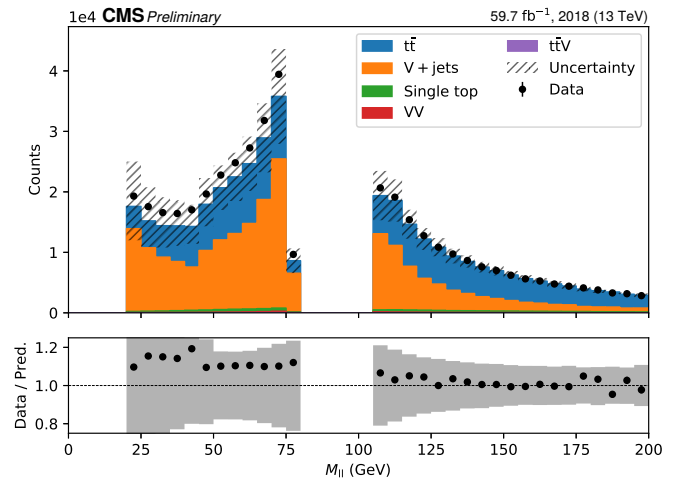
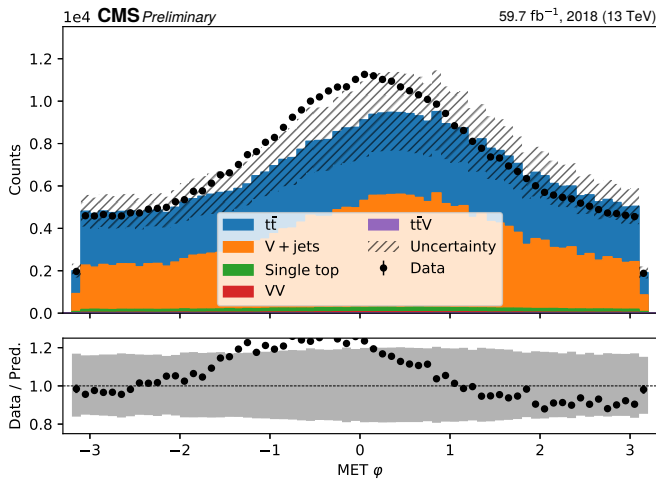
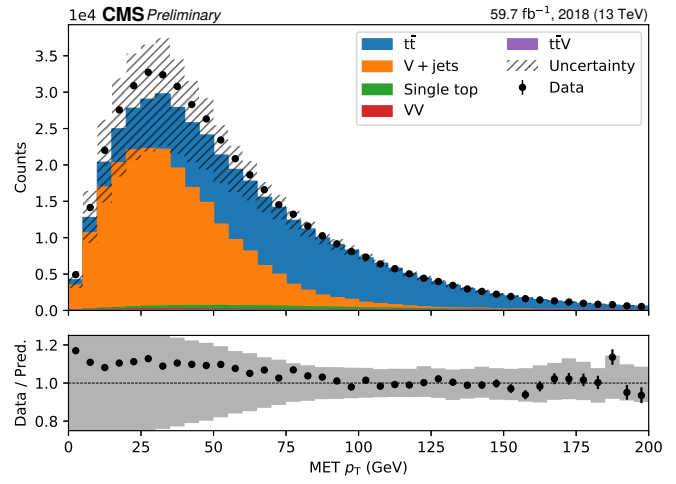
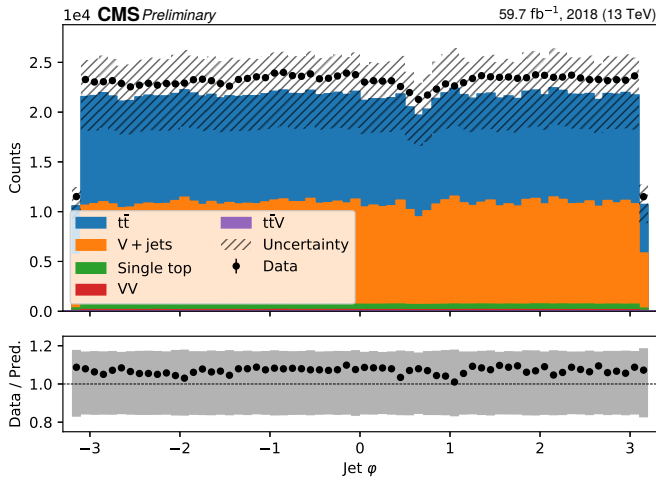


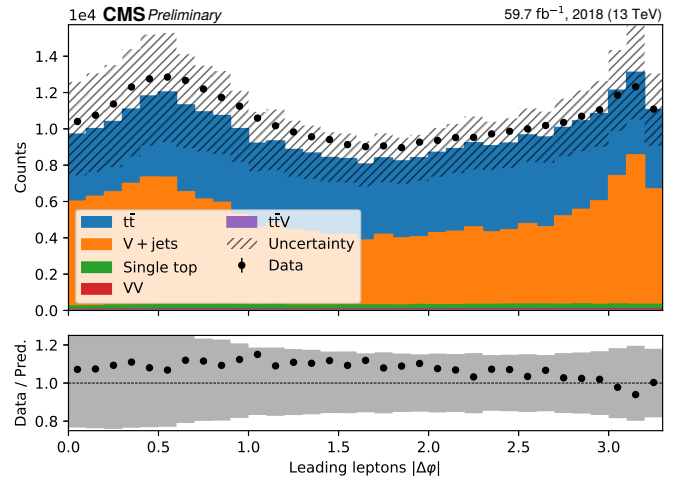
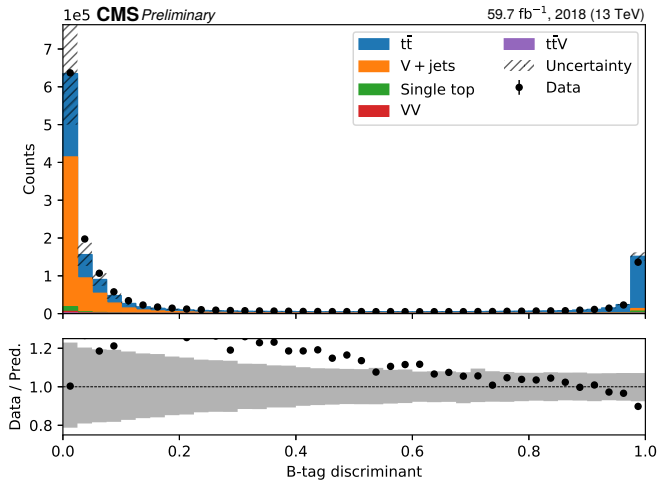
4.8 Number of jets ≥ 2 



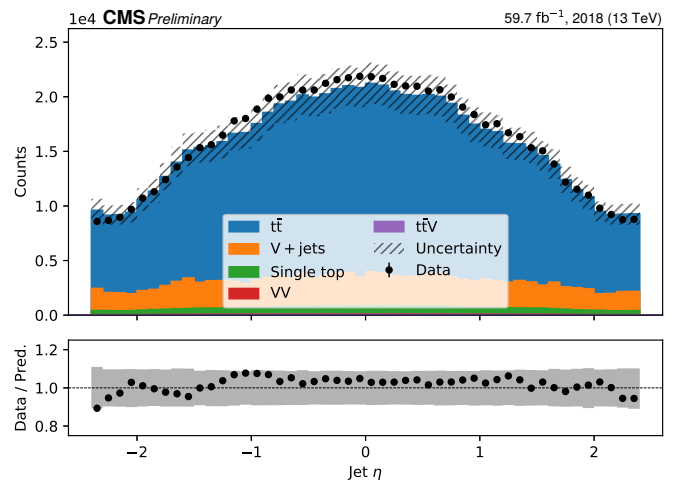
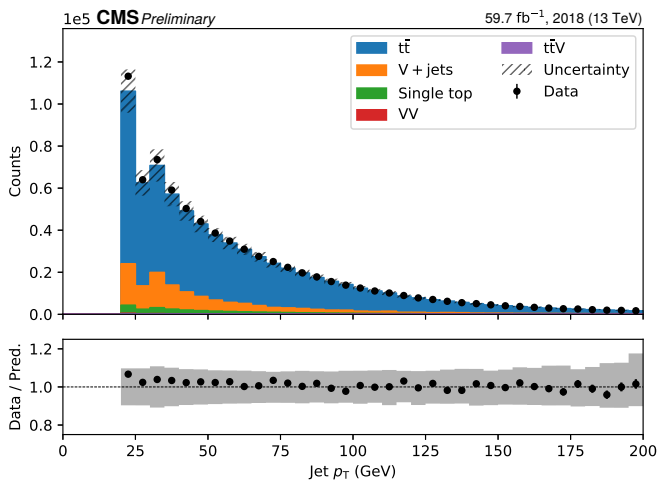
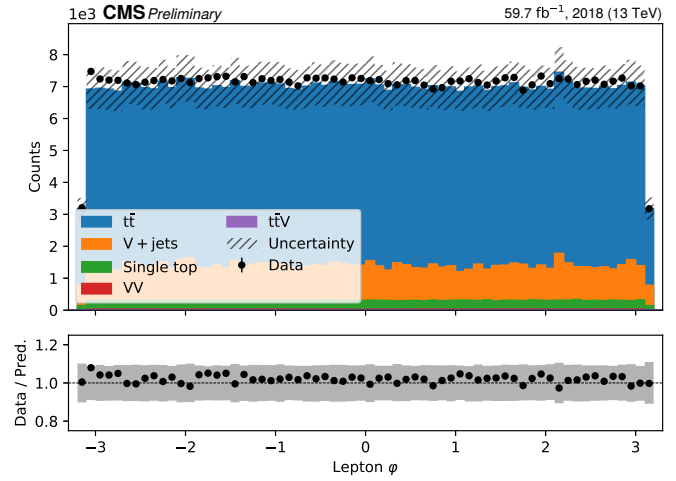
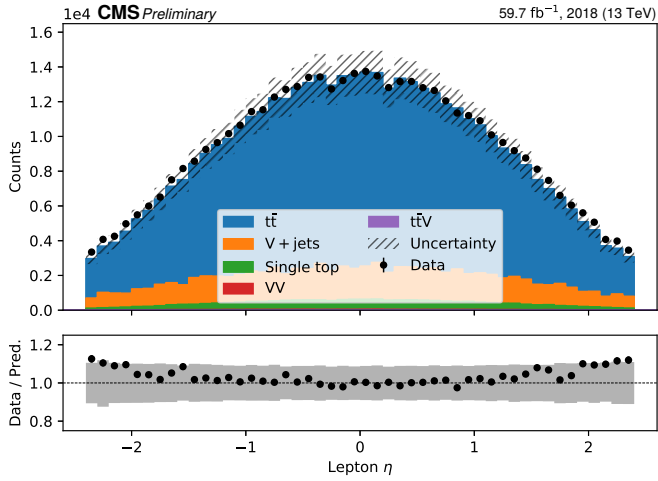
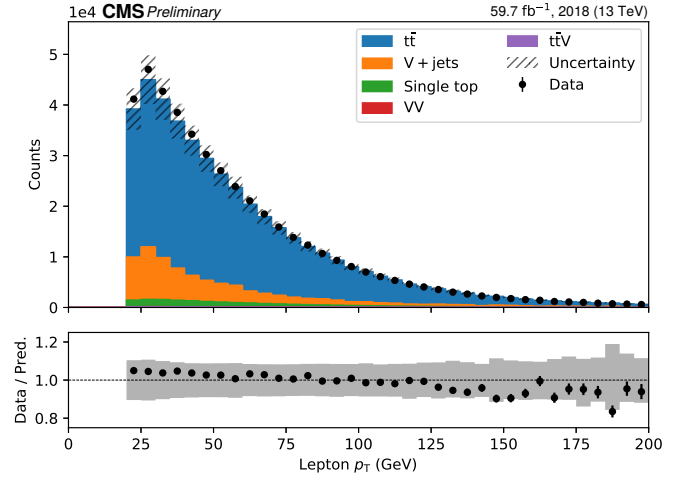
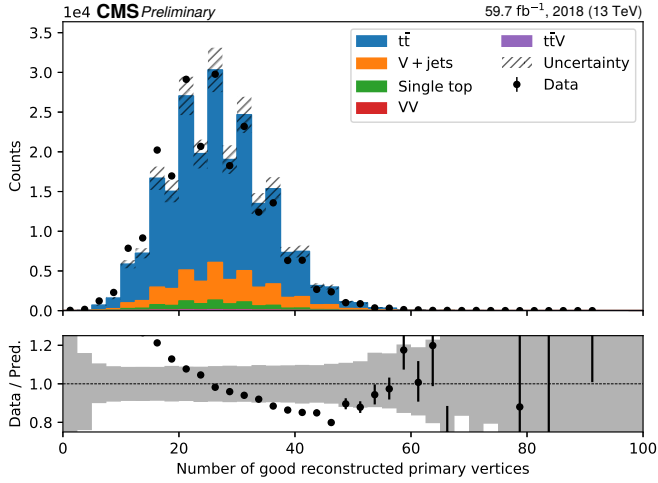


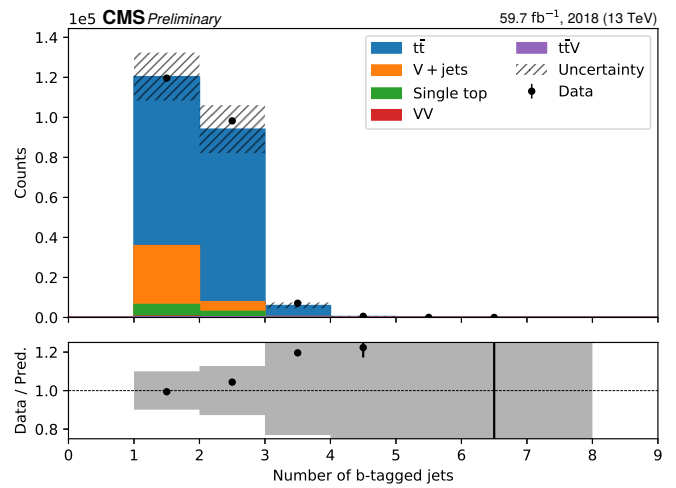
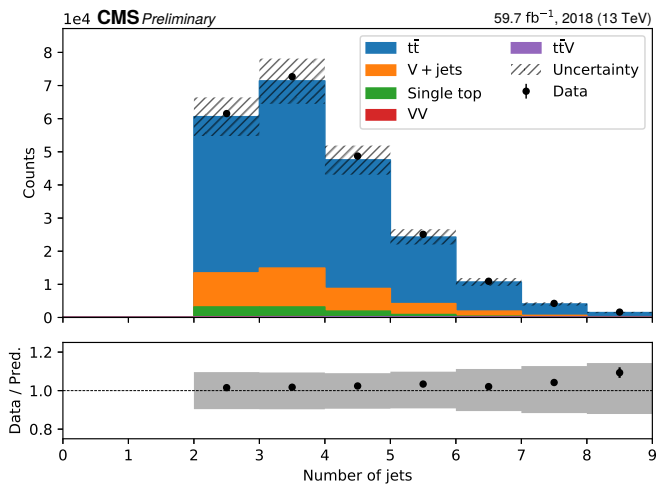
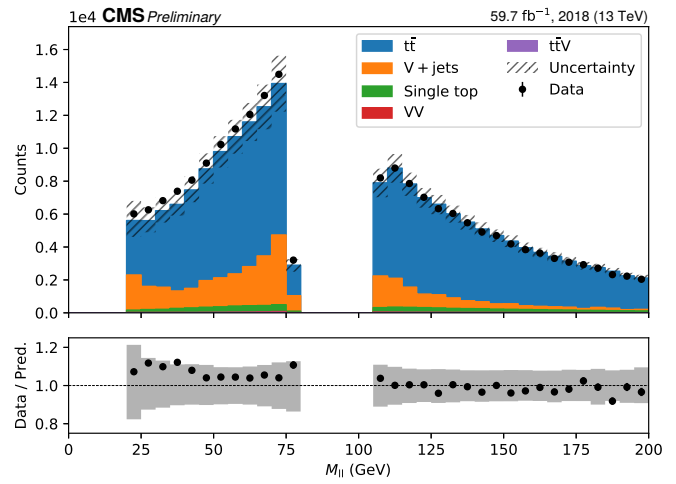
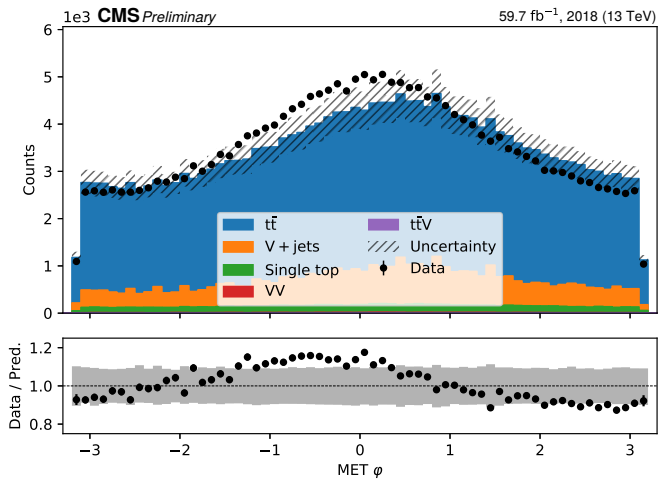
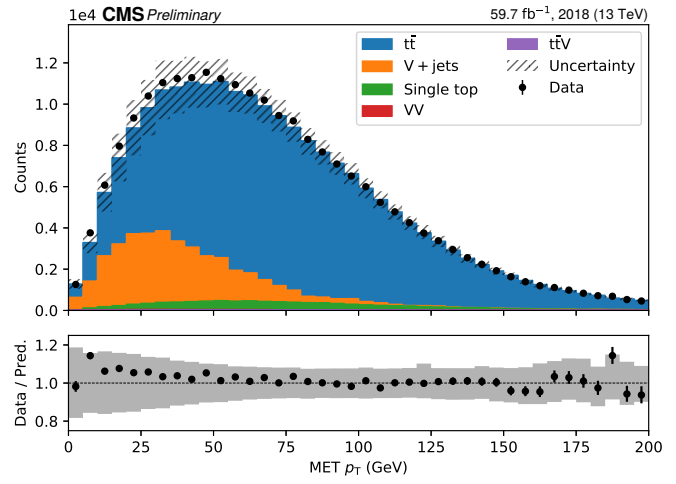
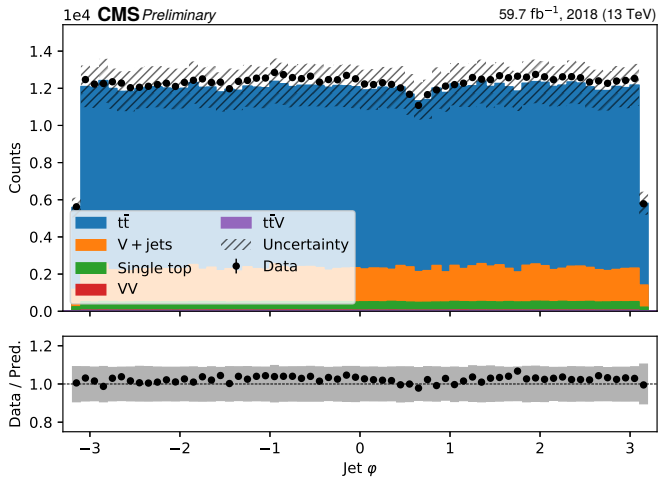
4.9 Require jet p_T 

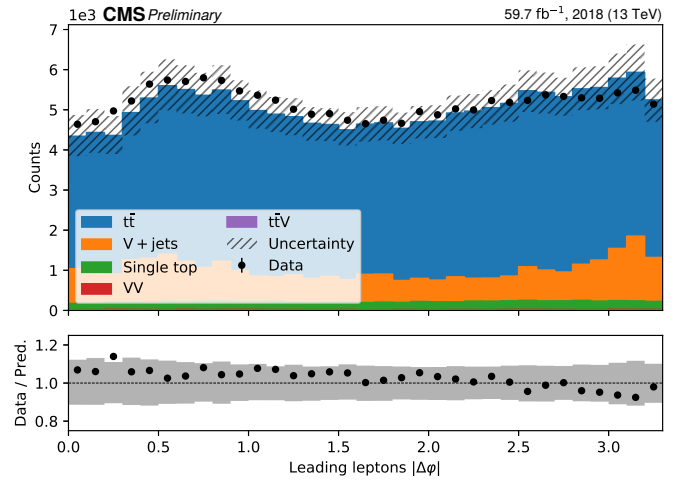
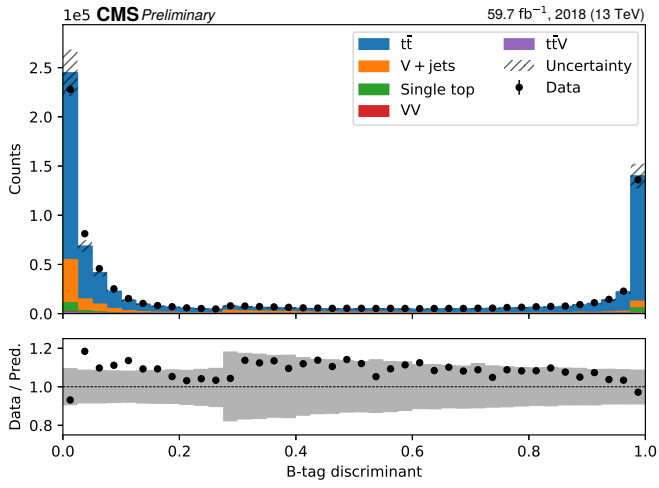


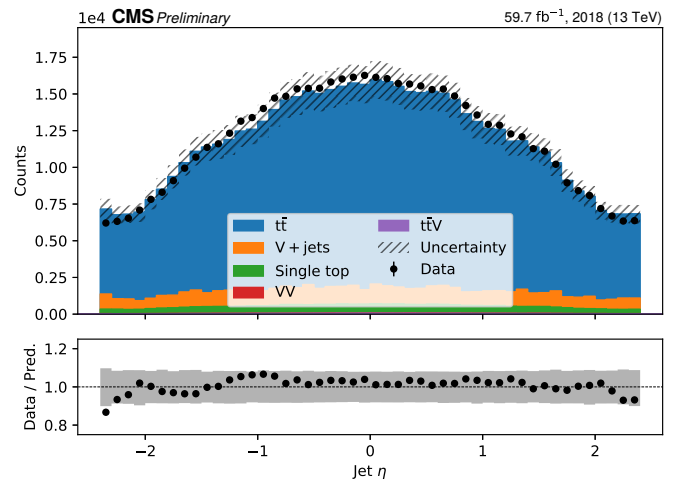
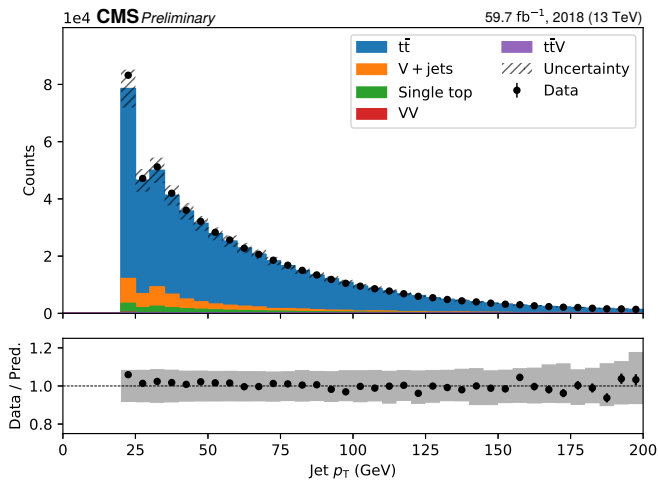
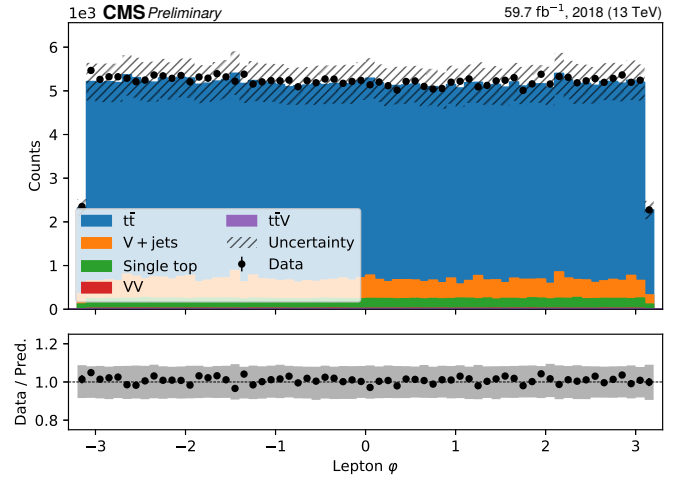
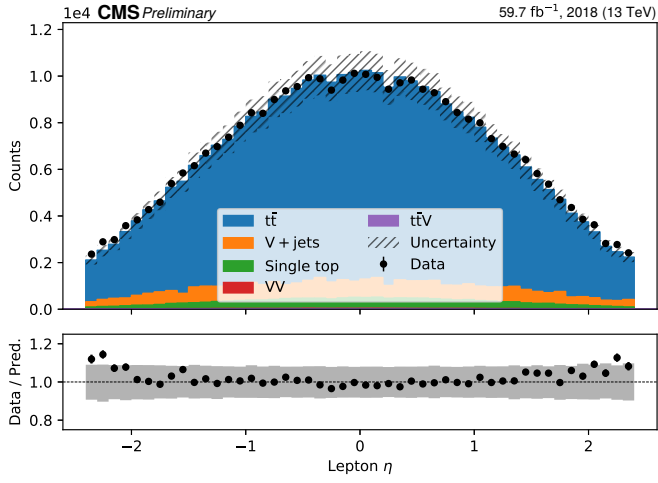
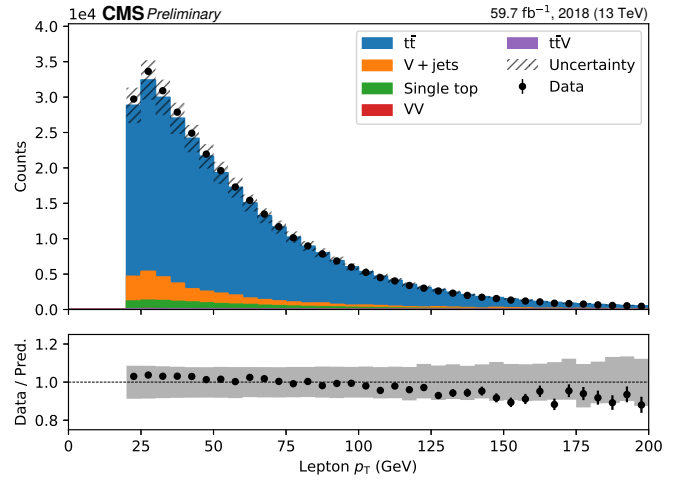
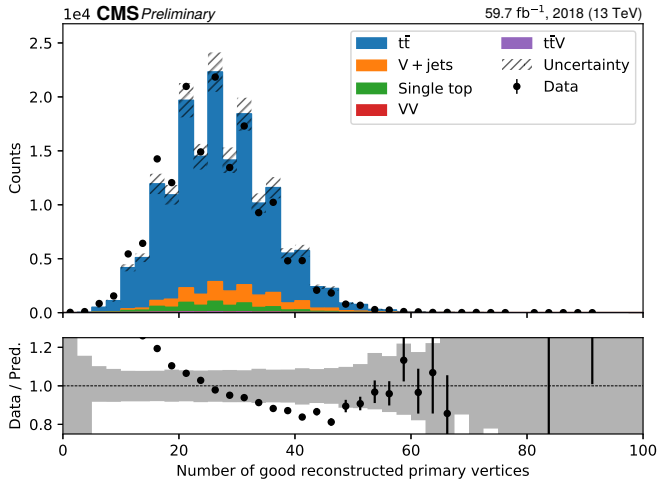


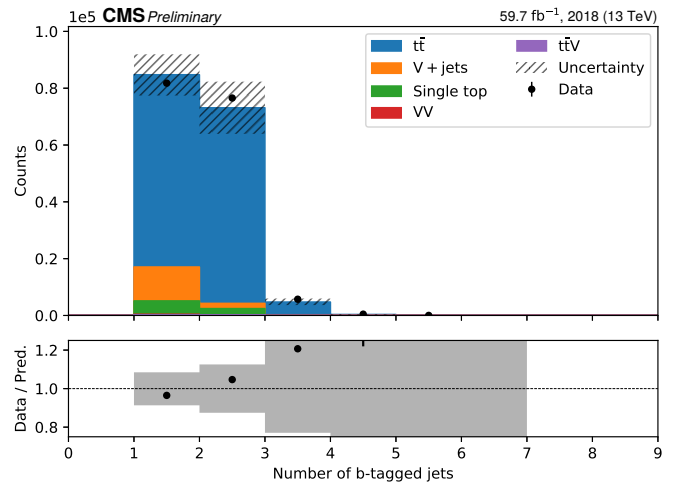
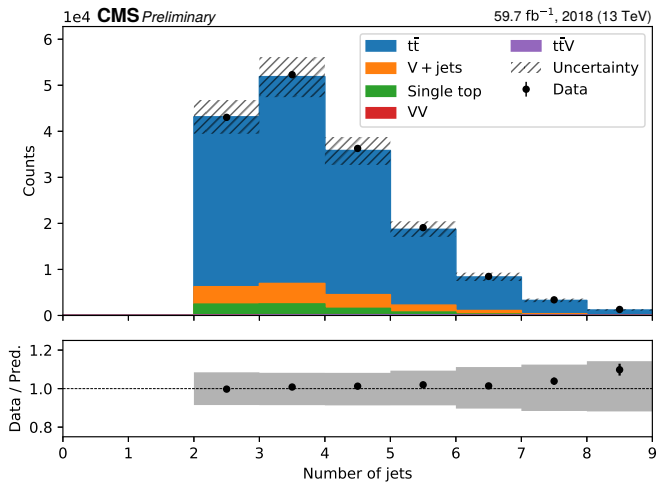
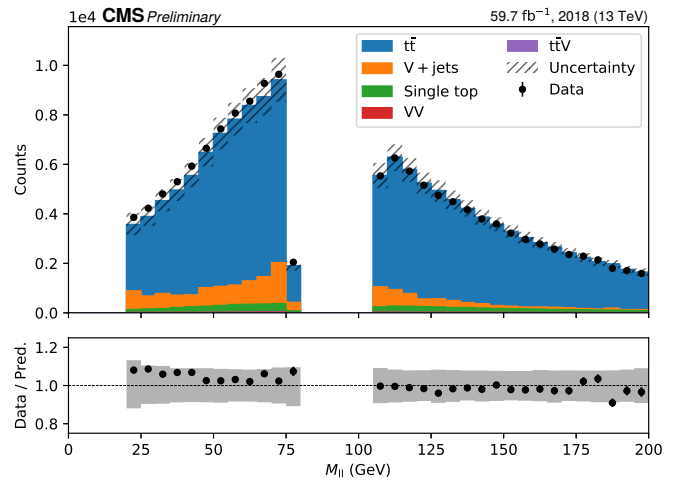
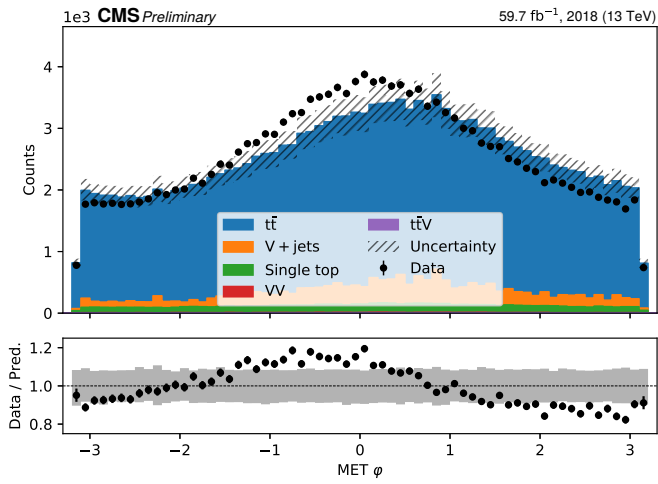
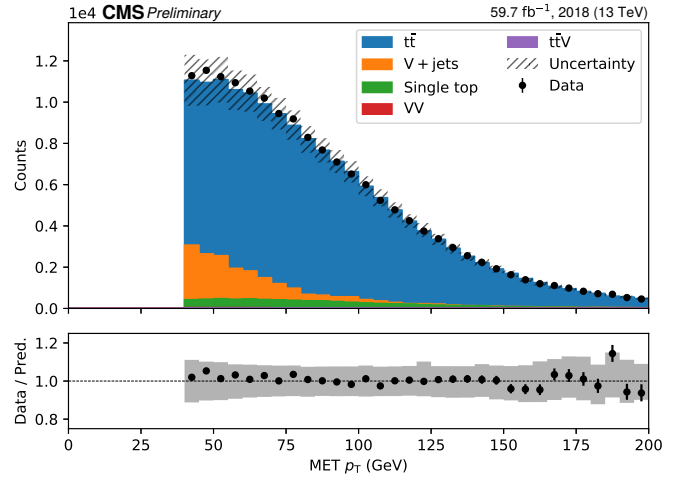
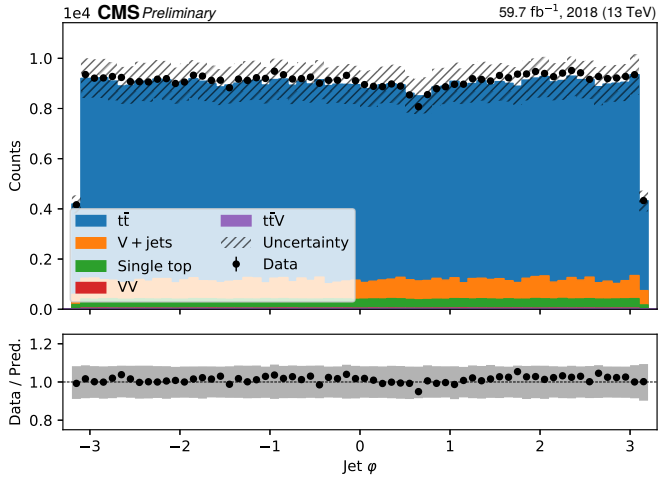
4.10 At least 1 btag

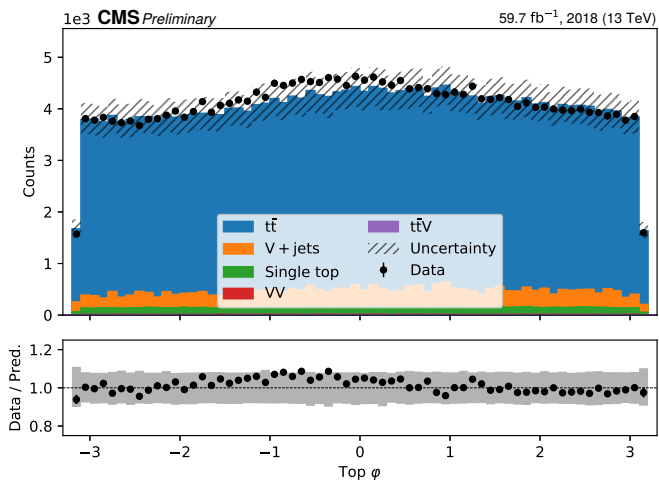
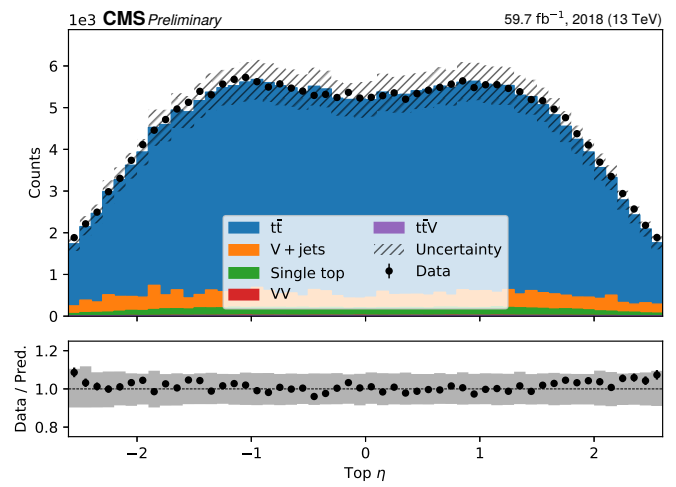
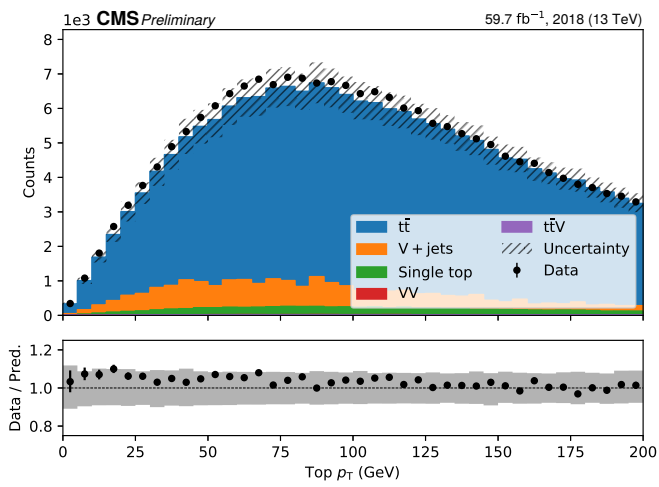
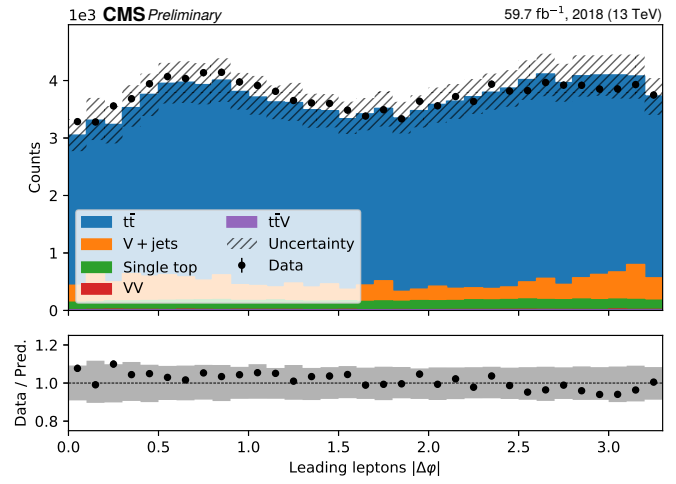
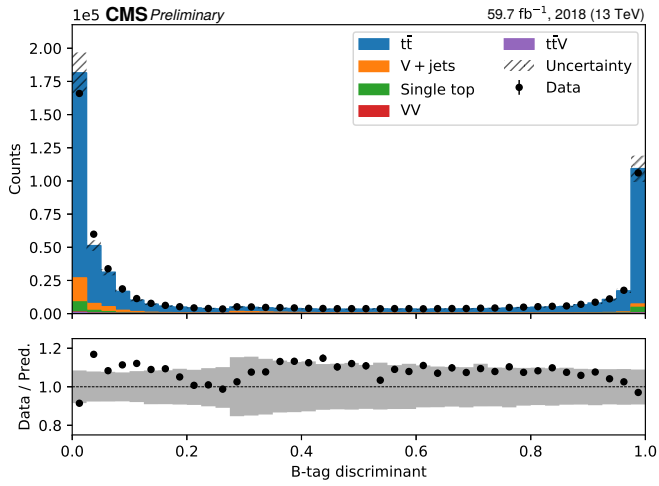






4.11 $MET > 40$ GeV





4.12 Passes $t\bar{t}$ reconstruction