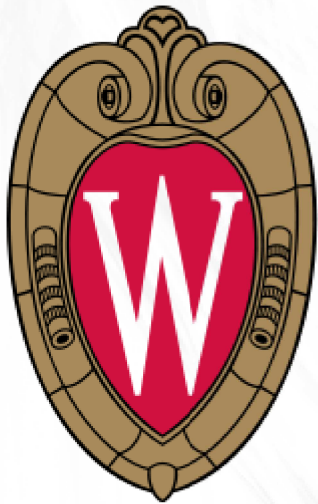


W W + 2 jets Analysis



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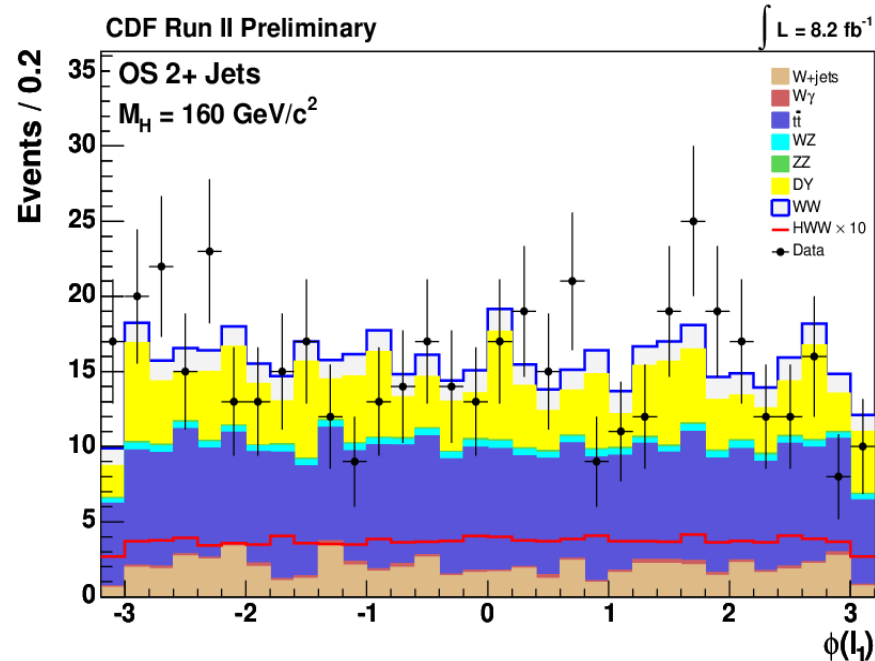
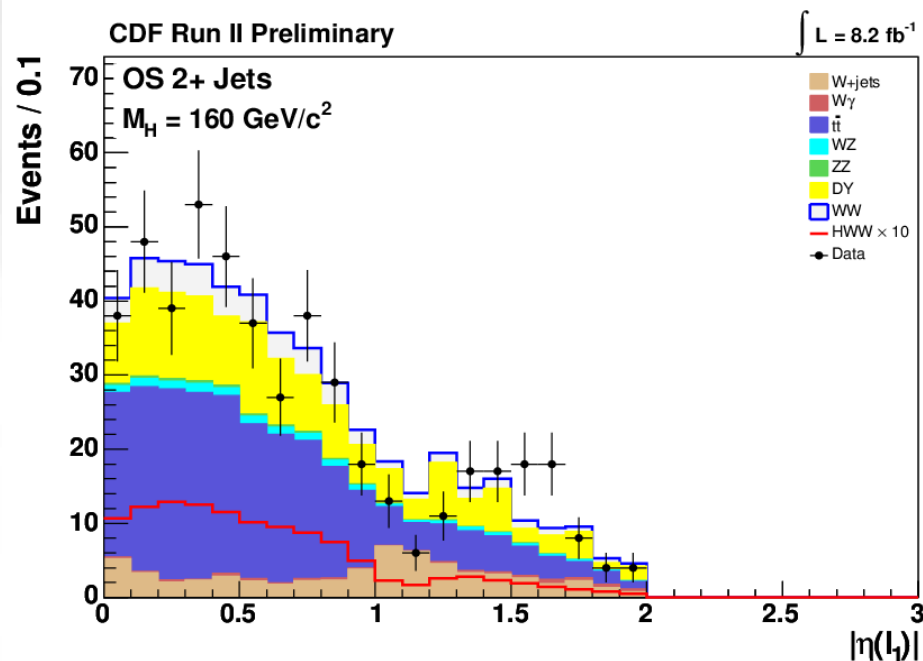
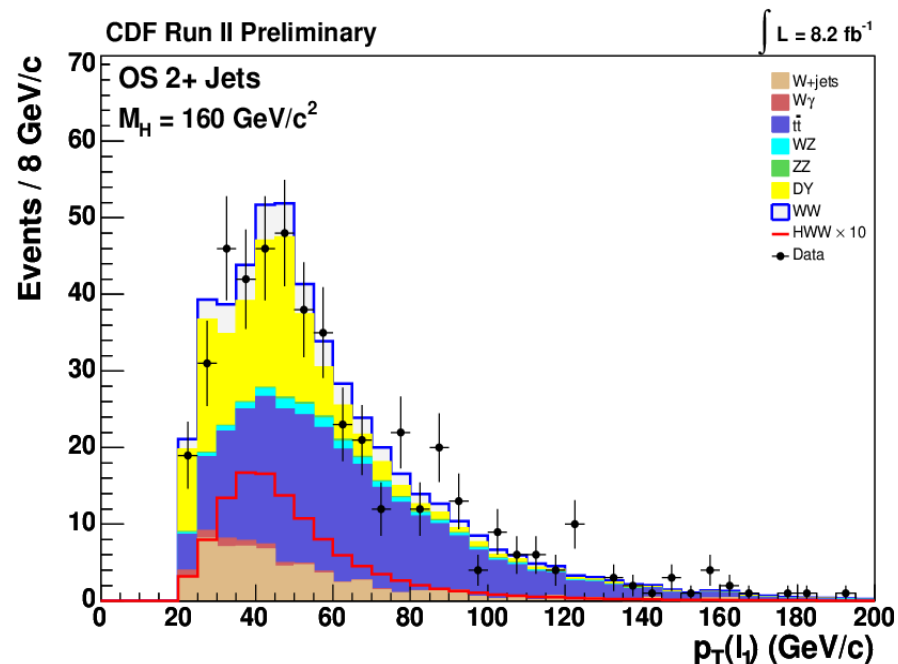
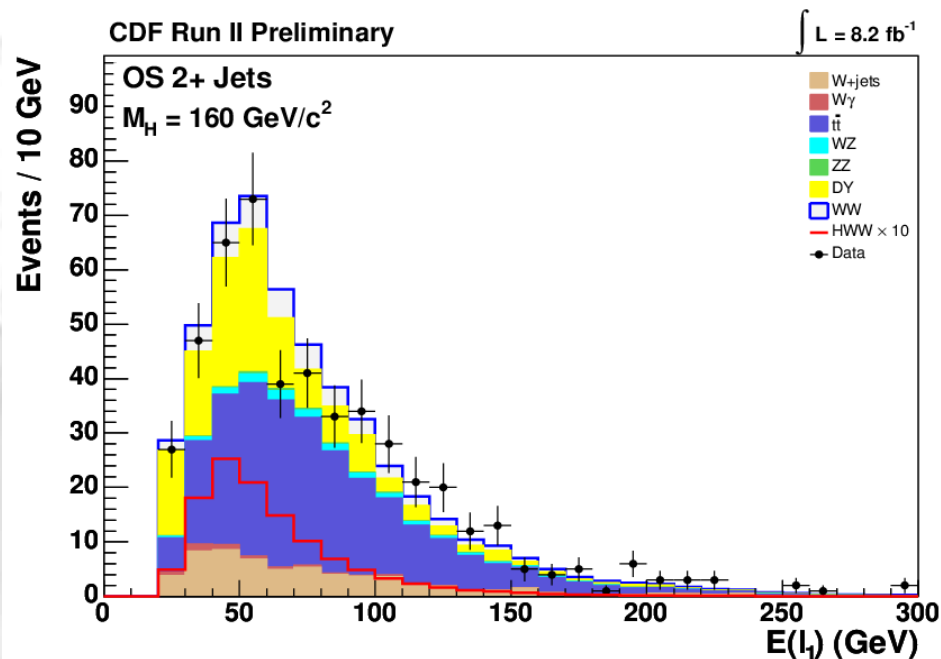
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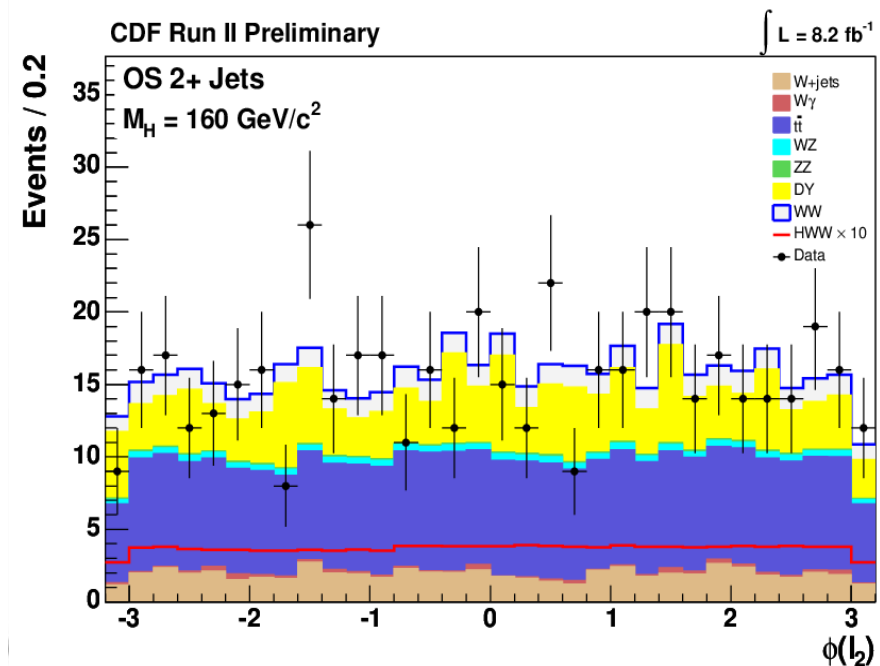
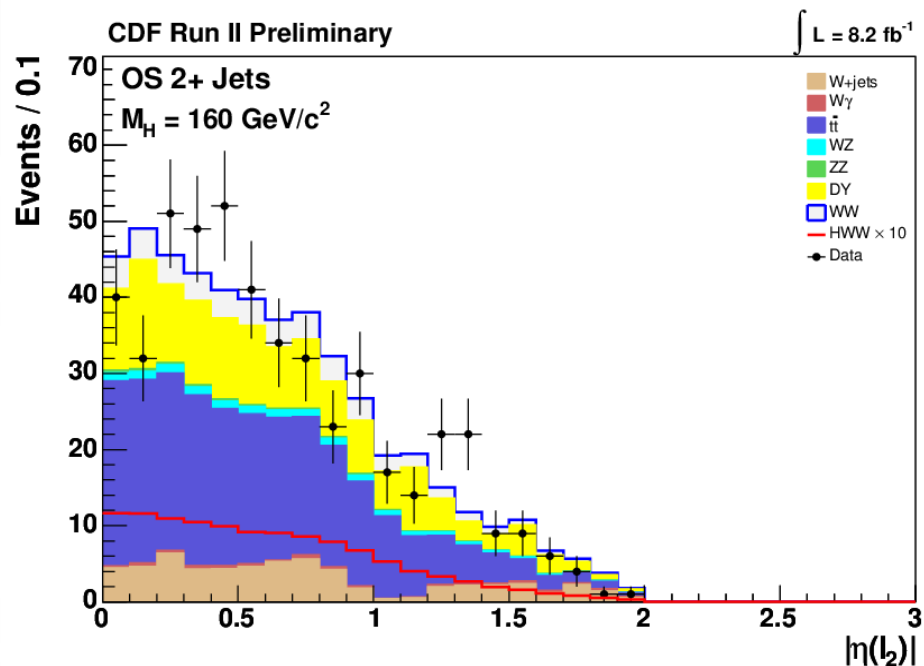
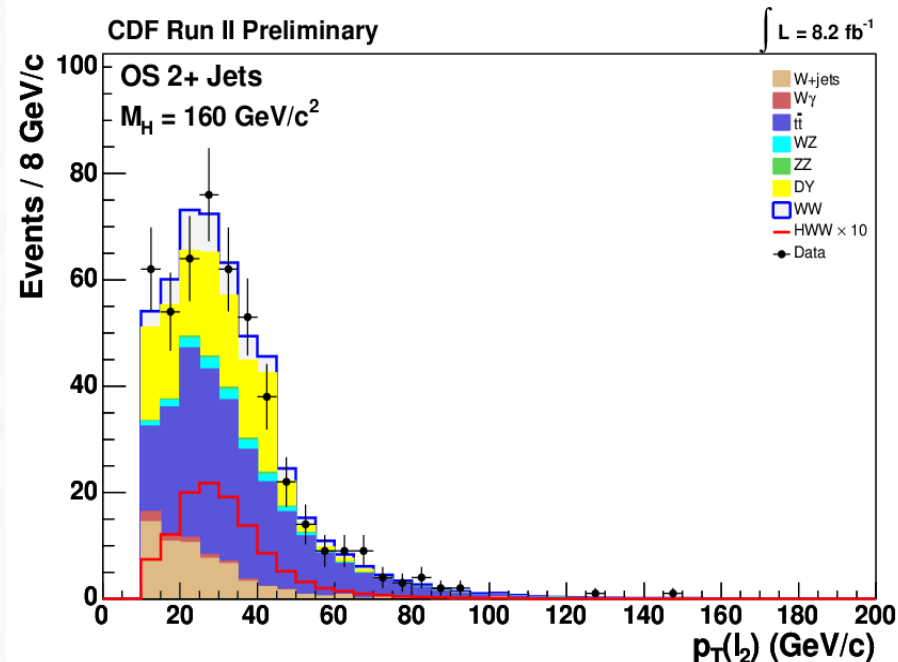
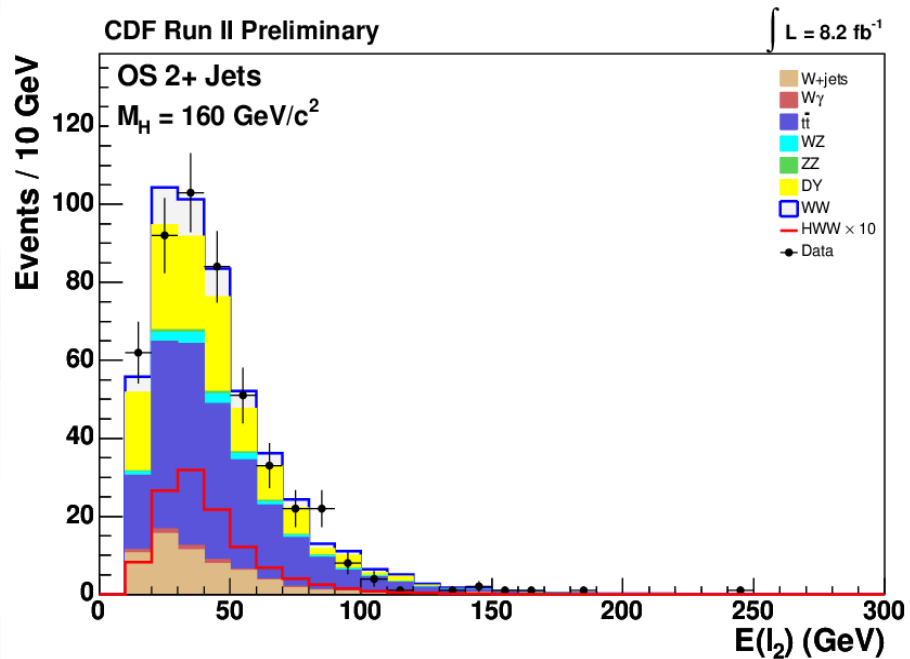
W W + 2 Jets Analysis

- New Alpgen samples
 - DY
 - WZ
 - ZZ
- Rescaling
 - Alpgen WW Box Diagrams
 - Alpgen DY Met
- Created Drell-Yan control region

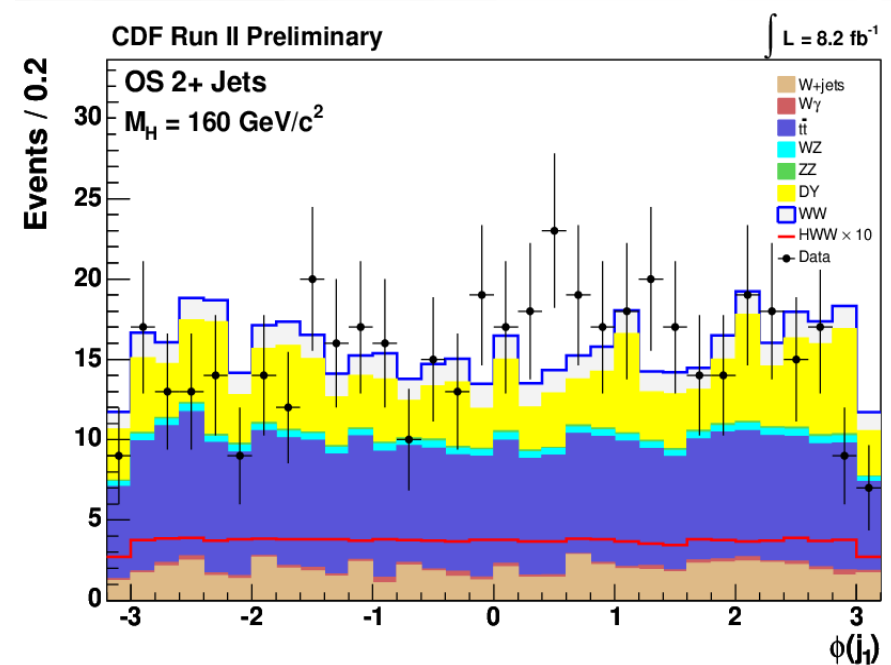
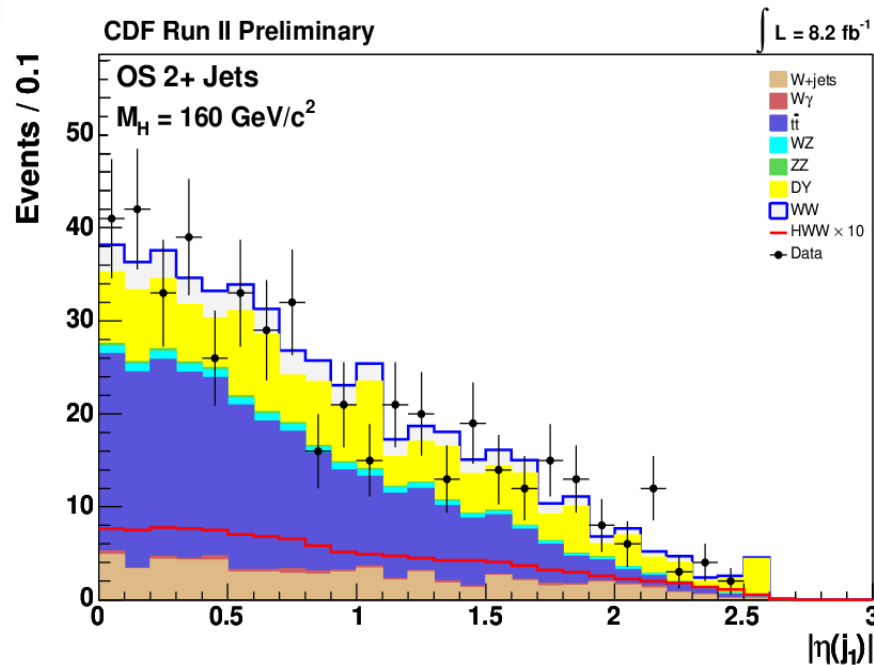
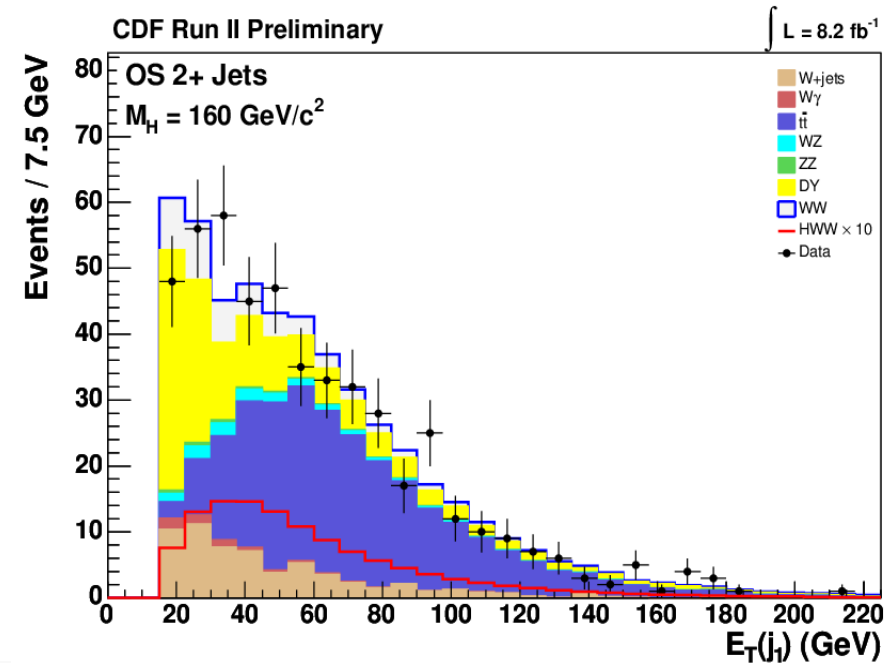
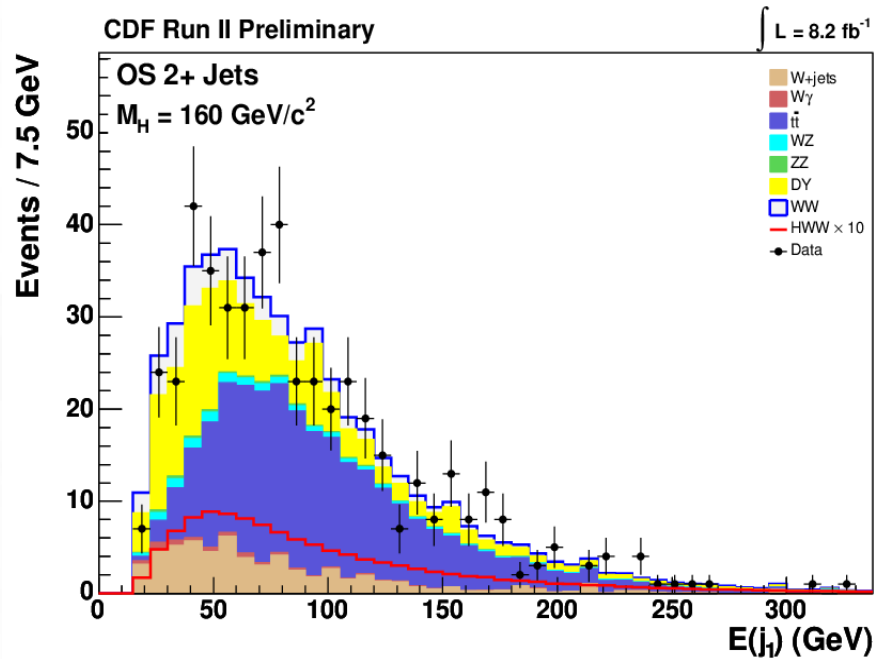
Validation: Leading Lepton



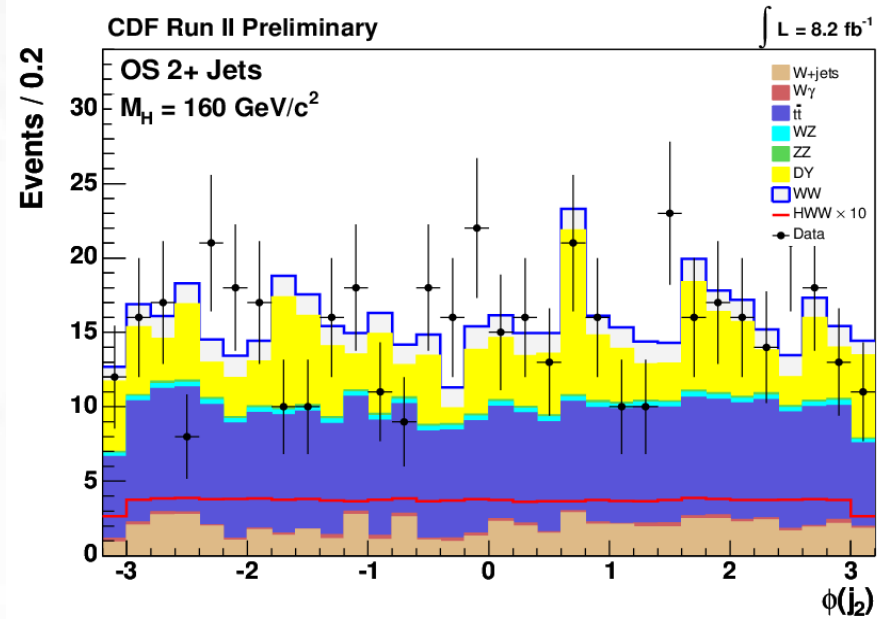
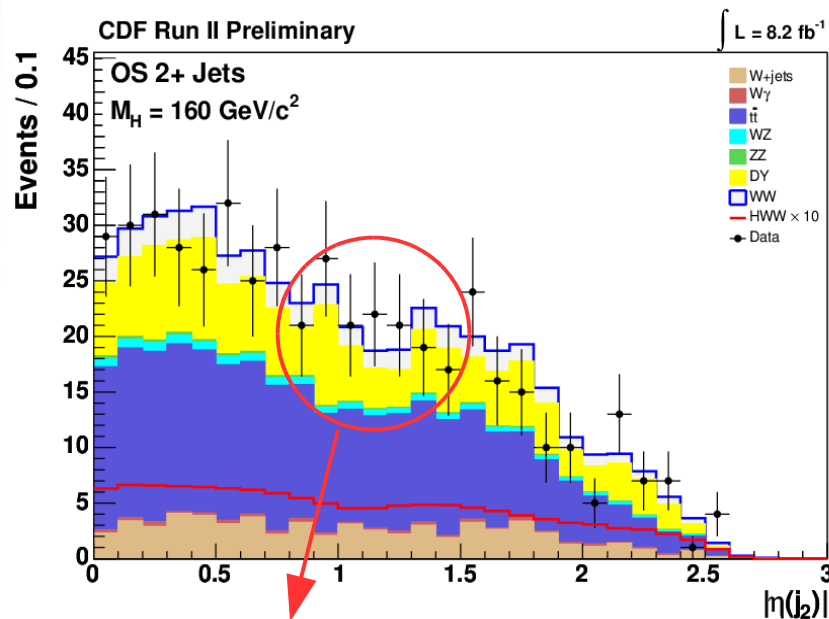
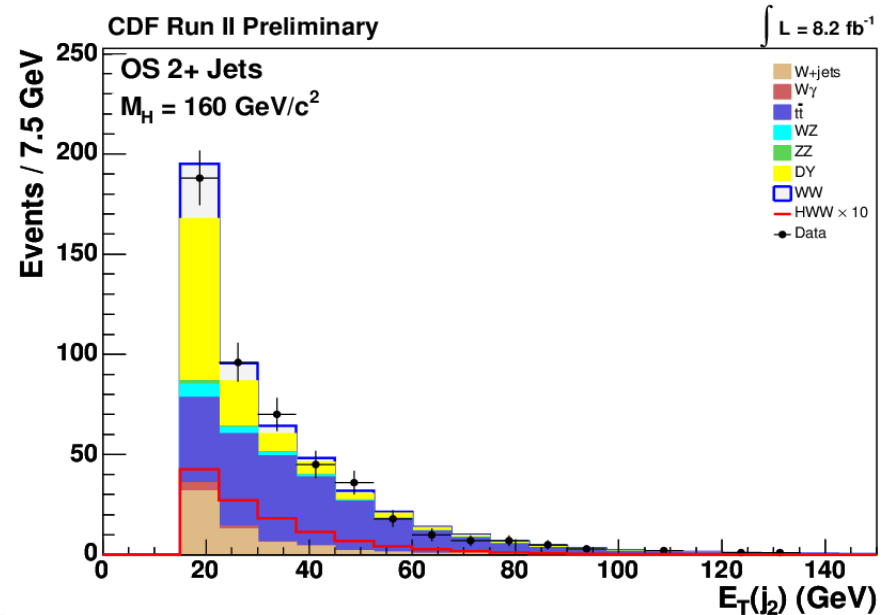
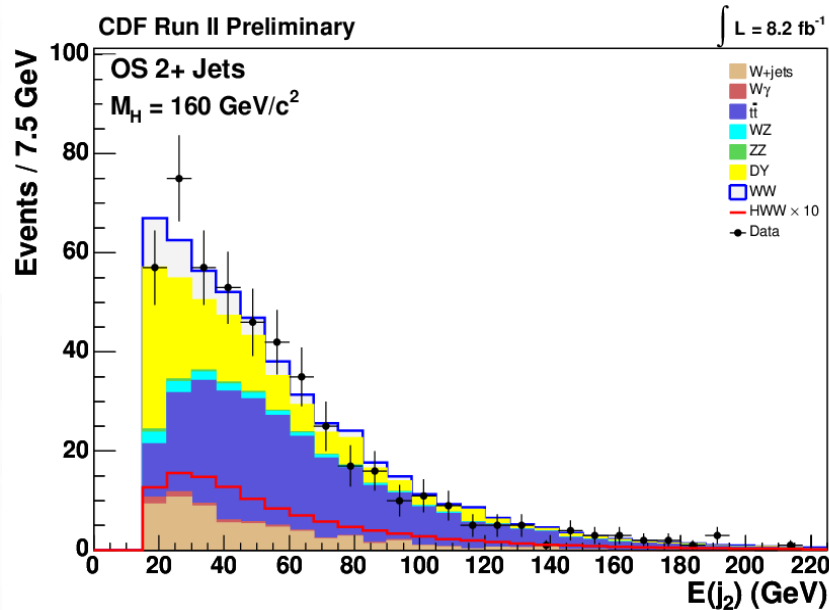
Validation: Second Lepton



Validation: Leading Jet



Validation: Second Jet

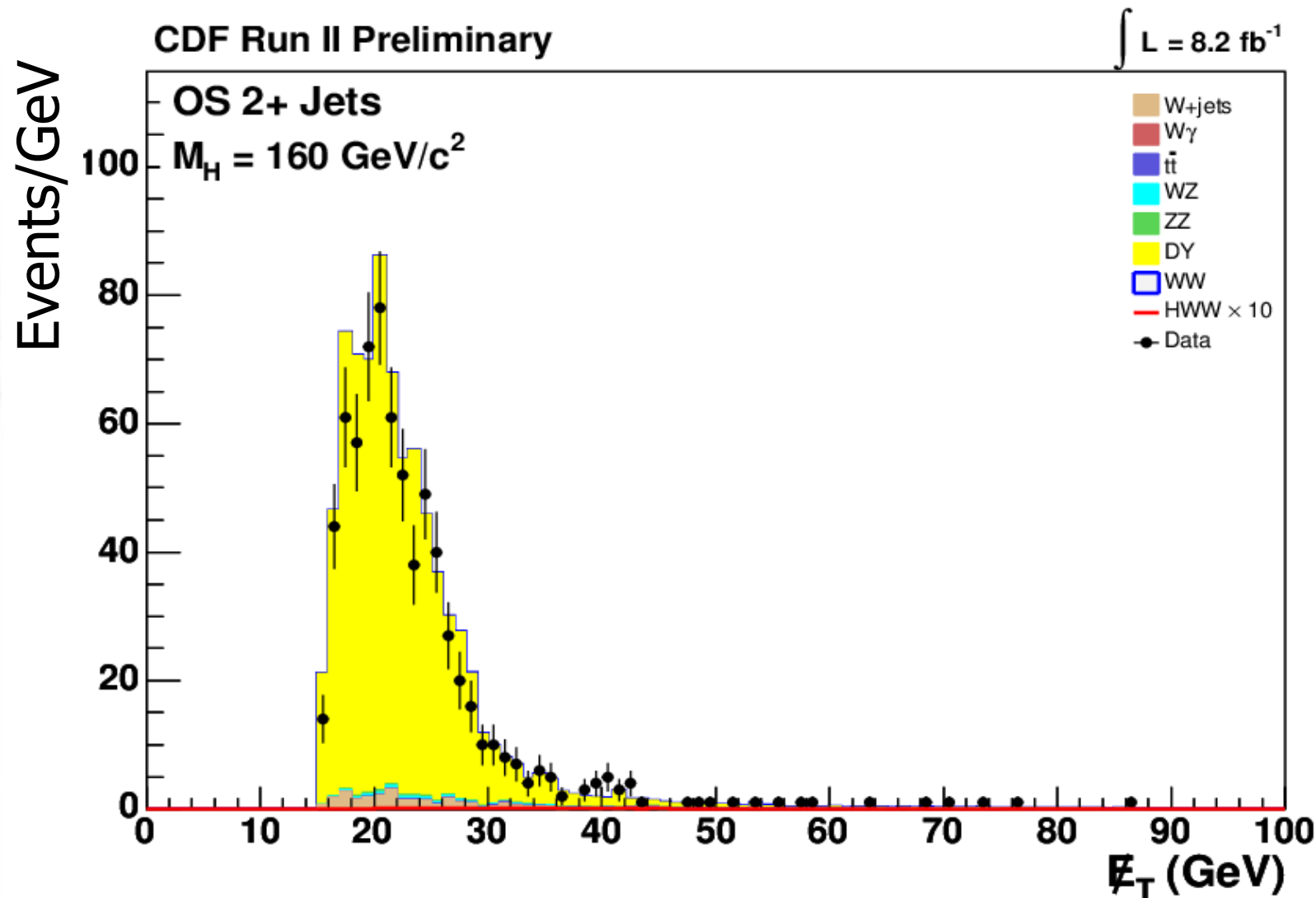


Suspicious fluctuation improved with better statistics

Drell-Yan Control Region

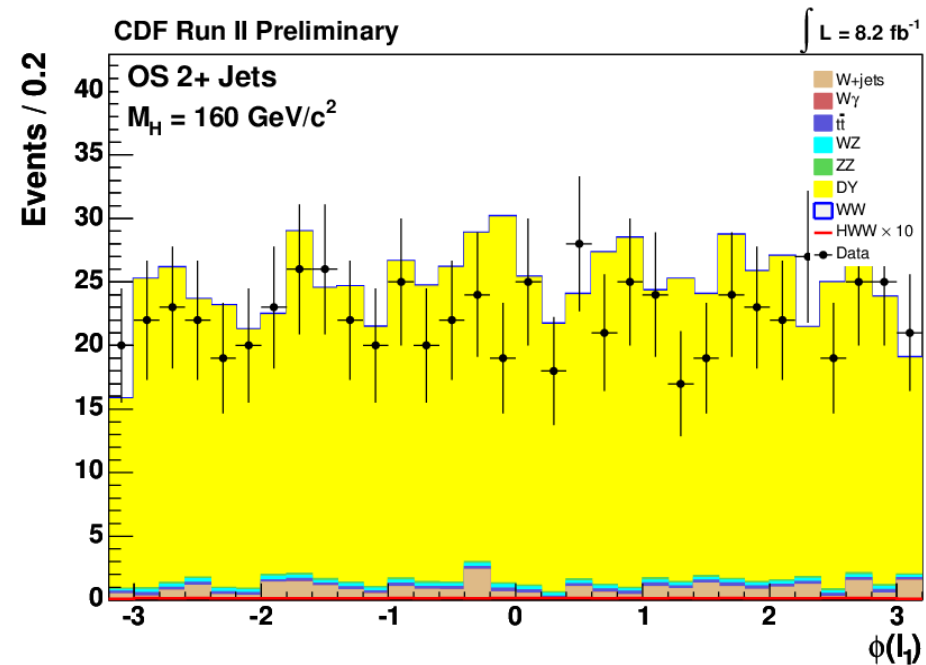
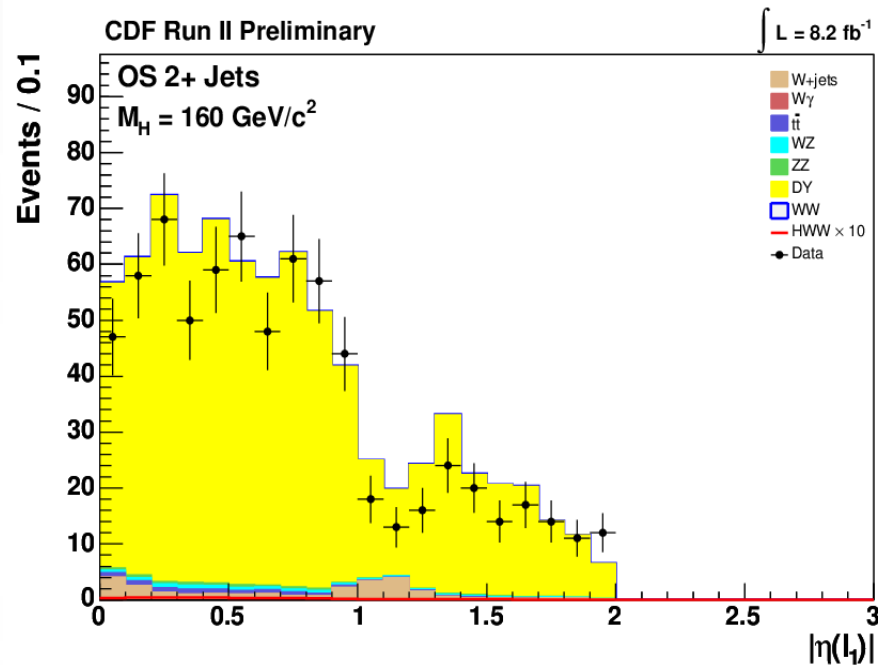
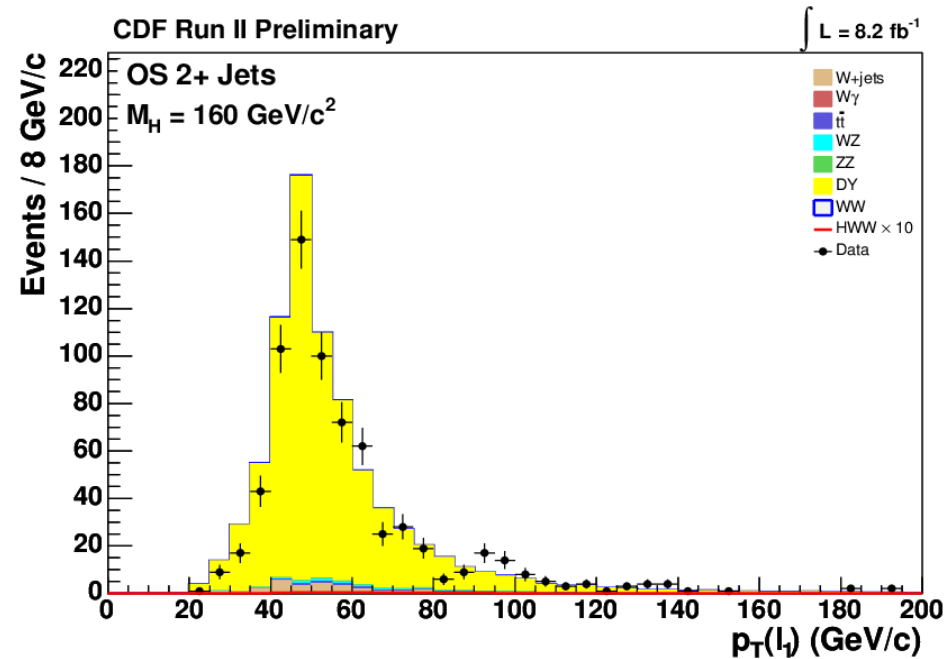
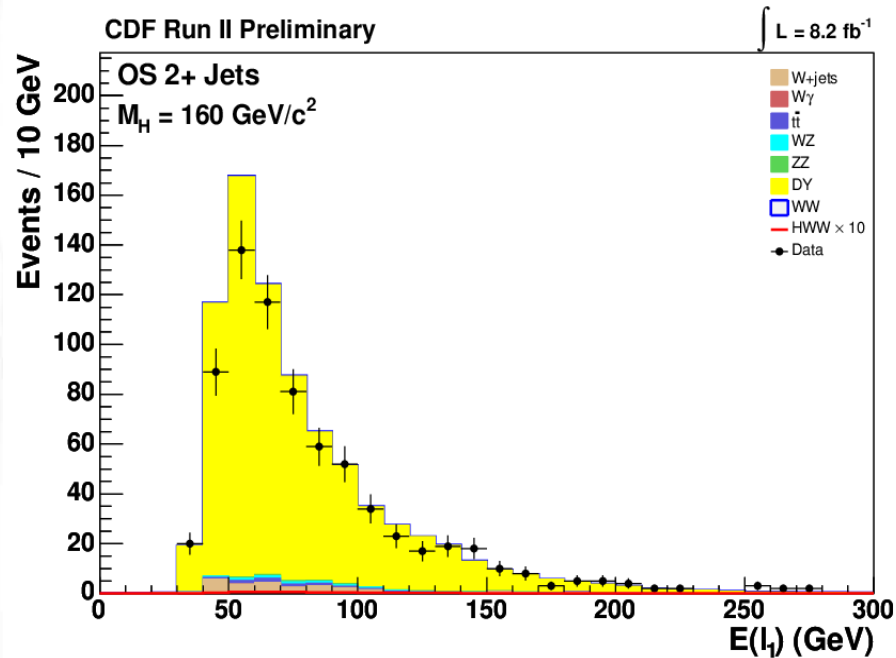
- $15 < \text{MetSpec} < 25$
- $76 < M_{ll} < 106$
- $ee, \mu\mu$, or e/μ + track
- Added 2+jets requirement
- Btag veto
 - Maybe shouldn't be?
 - Only ~ 30 events vetoed

Drell-Yan Met Scaling

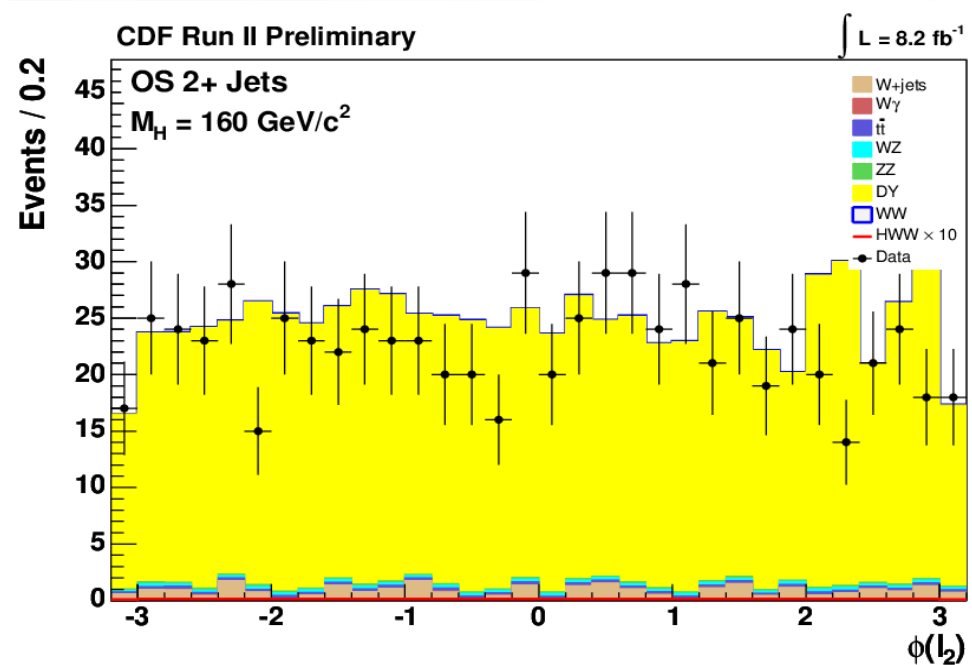
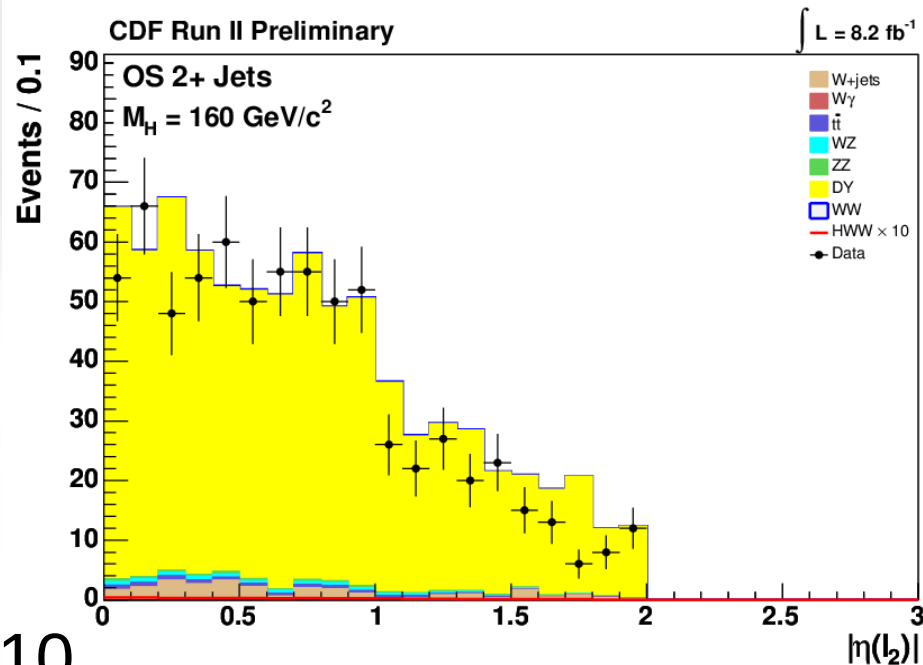
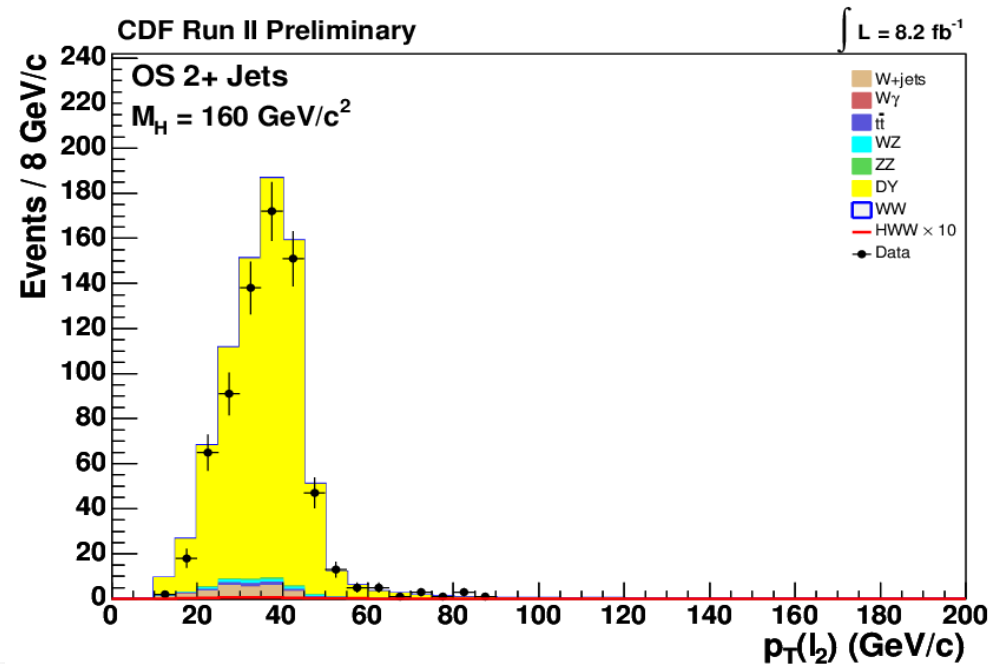
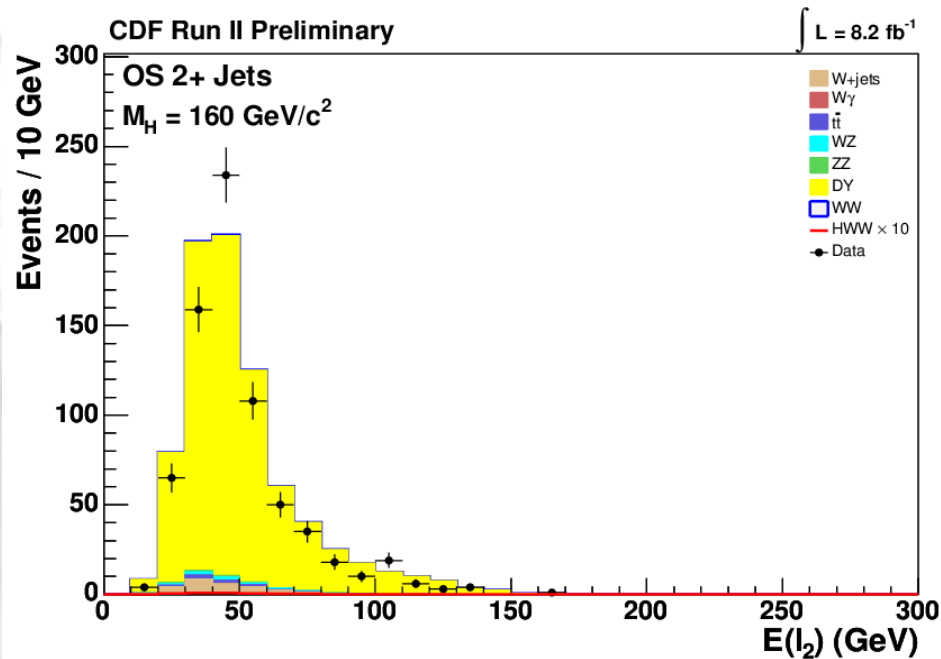


Met scaling not needed? Uncertainty?

Drell-Yan Region: Leading Lepton



Drell-Yan Region: Second Lepton



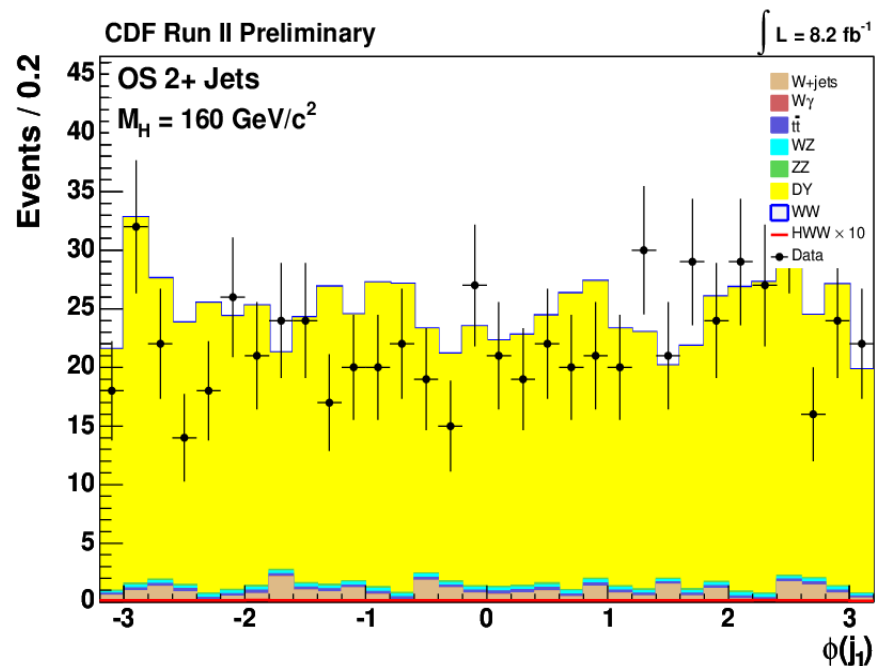
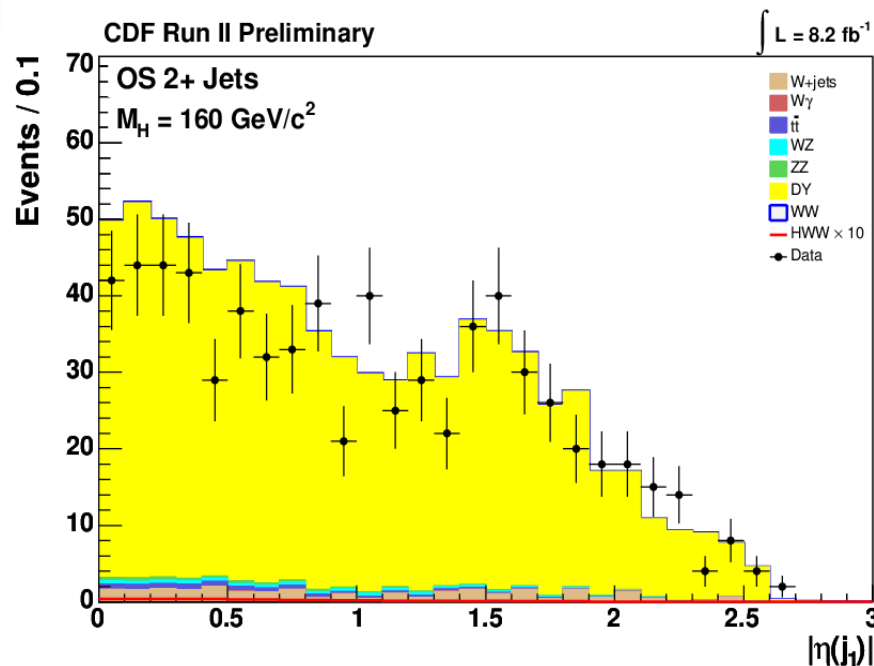
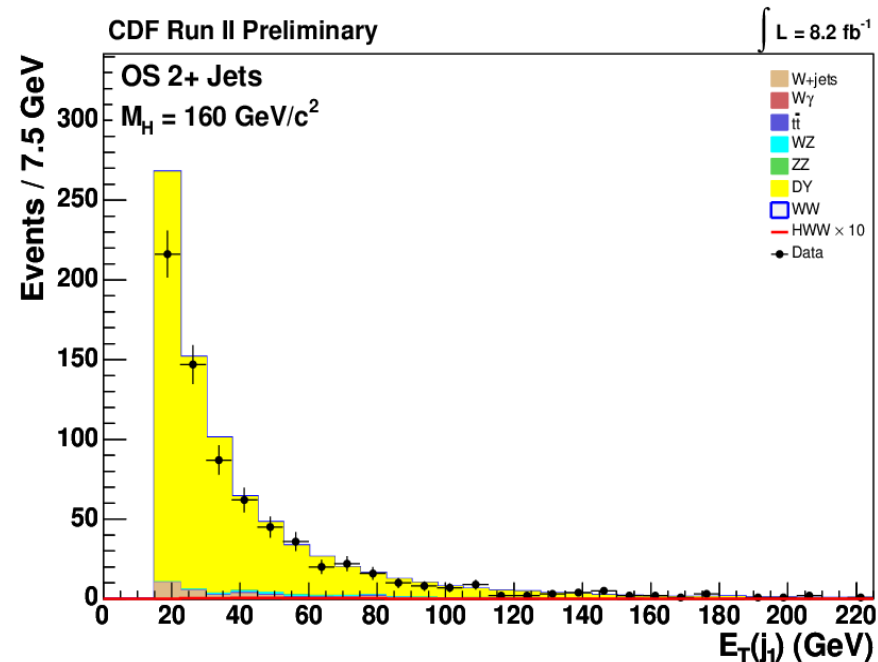
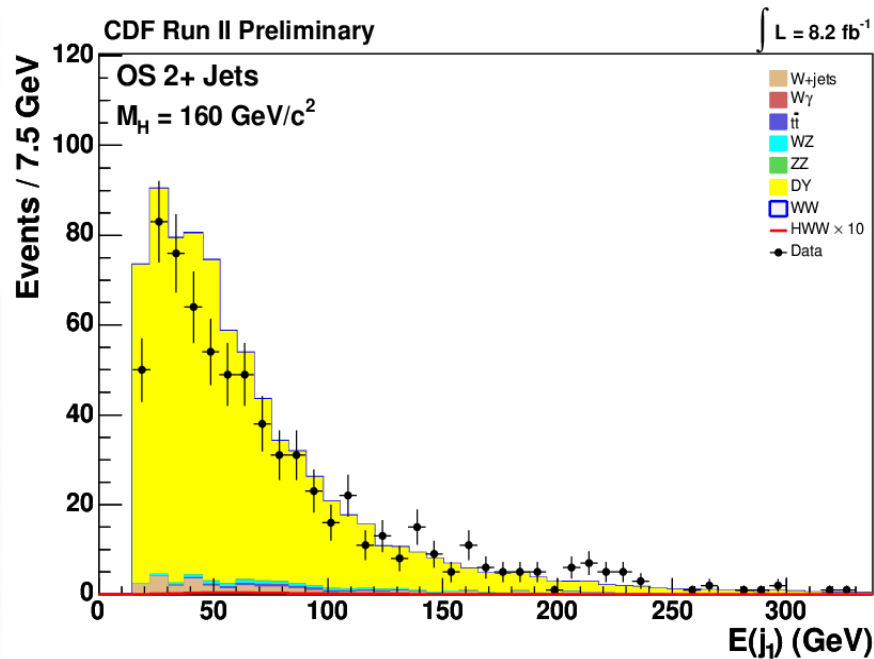
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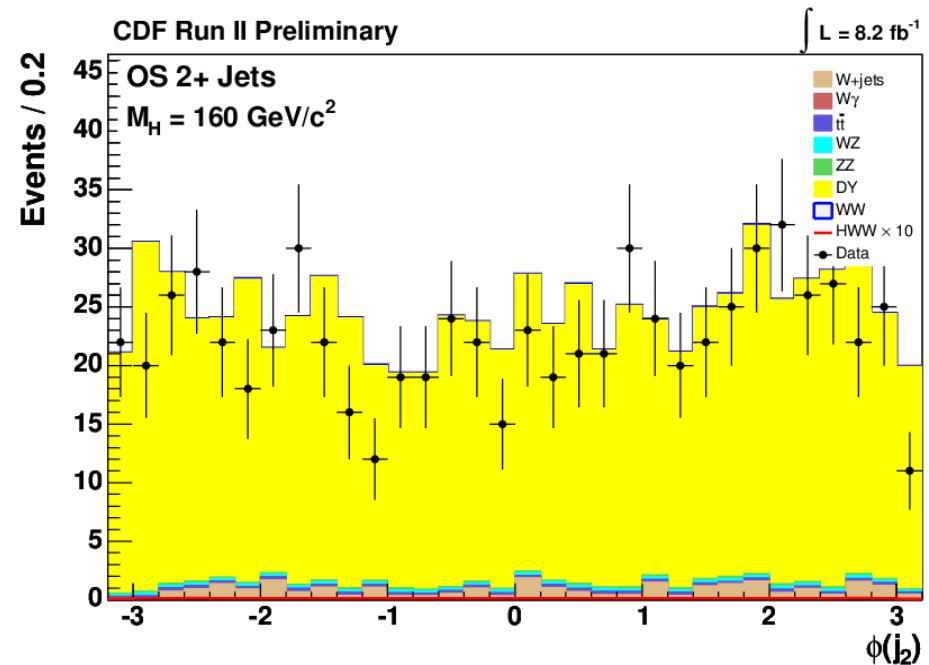
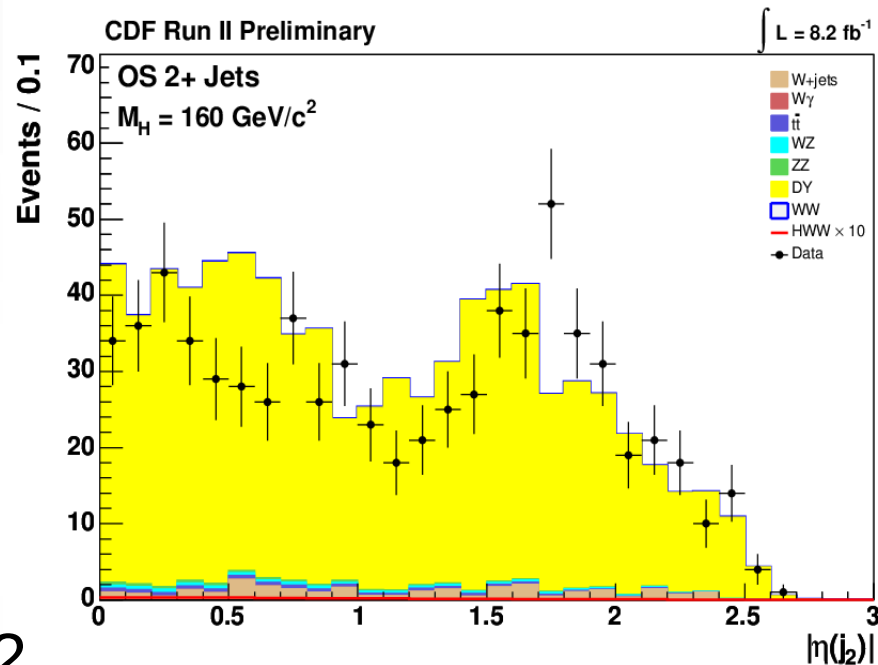
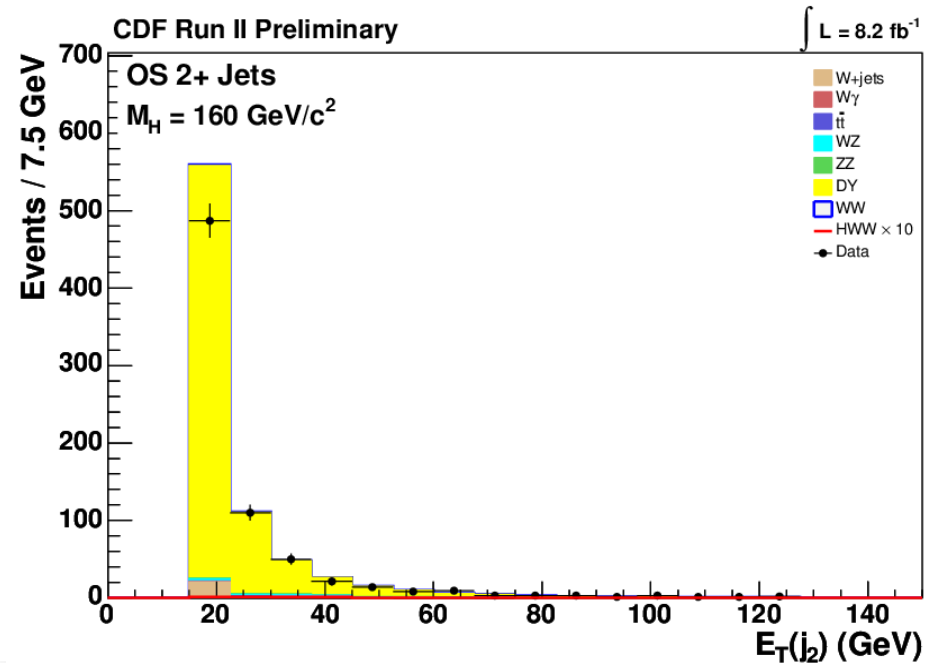
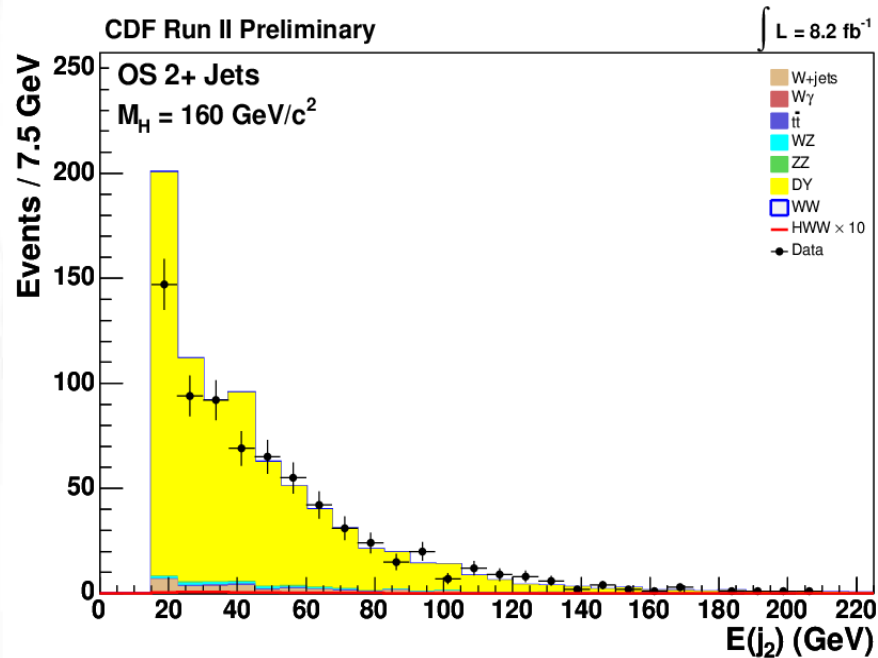
U.W. Madison

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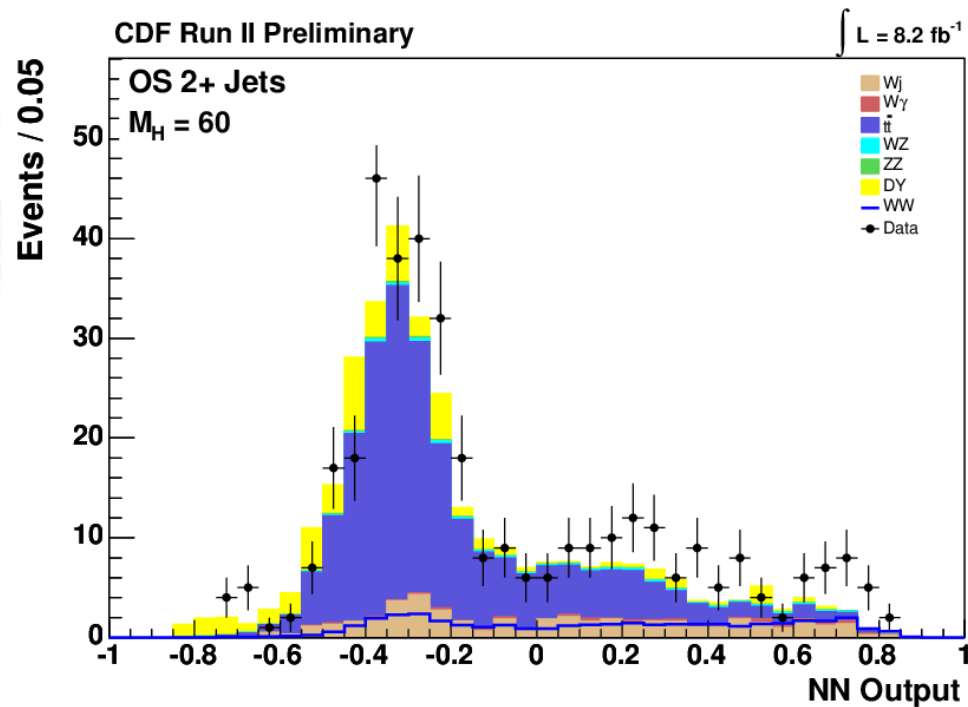
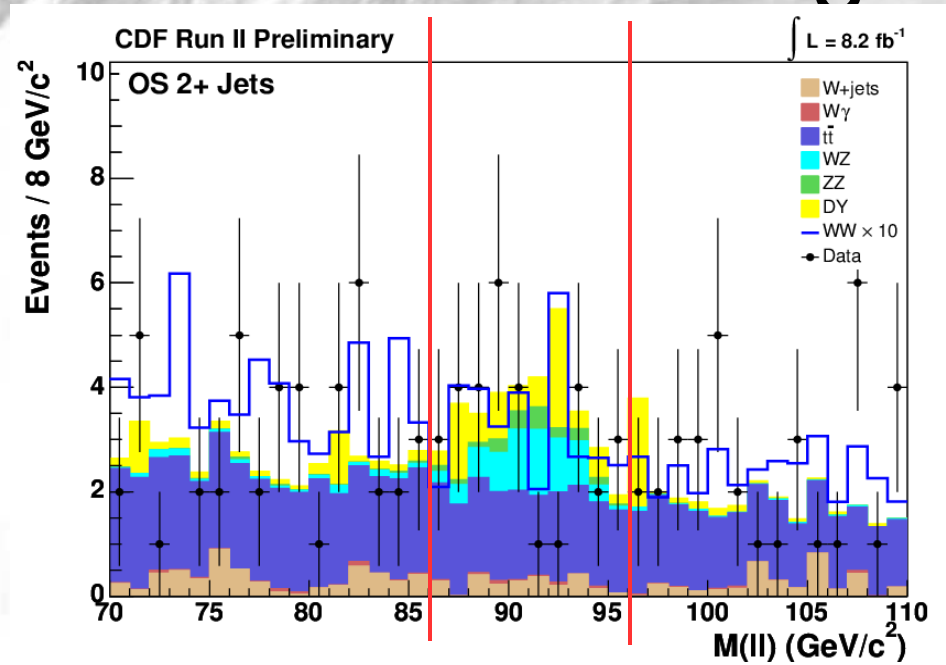
Drell-Yan Region: Leading Jet



Drell-Yan Region: Second Jet



WW Control Region



Next Steps

- WW control region
- In Progress: Including shape uncertainties in mclimit fit
- Direct comparison of Alpgen with old MC?