

19.2 fb<sup>-1</sup> (8 TeV)

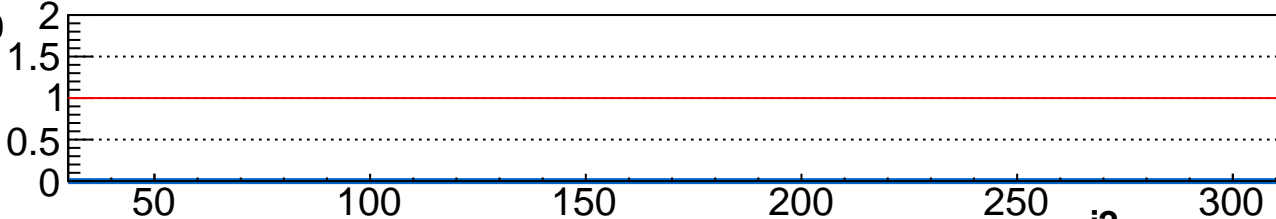
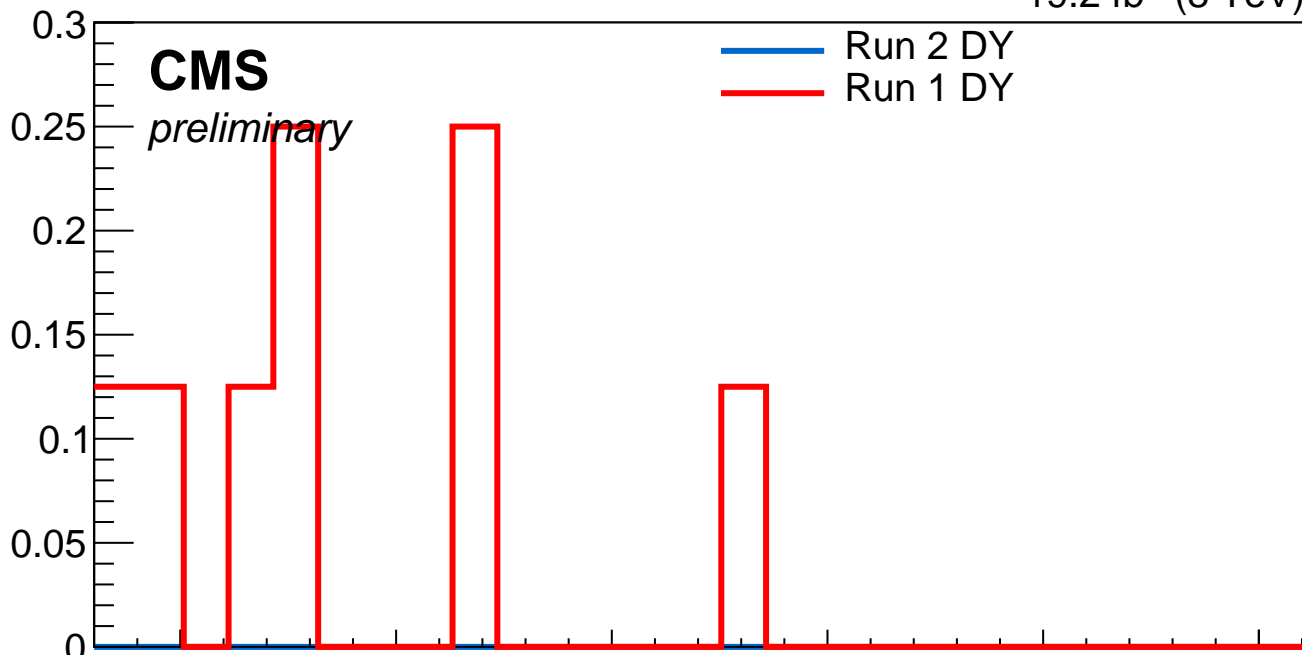
**CMS**

*preliminary*

Run 2 DY  
Run 1 DY

**Data/Bkg**

**p<sub>T</sub><sup>j2</sup> (GeV)**



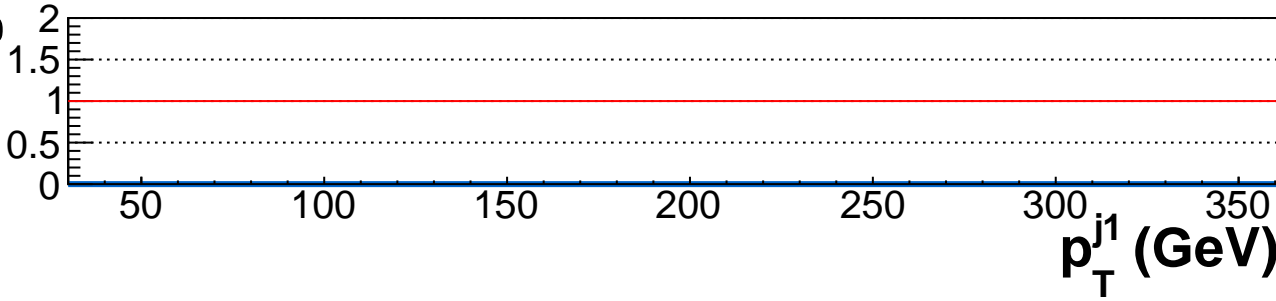
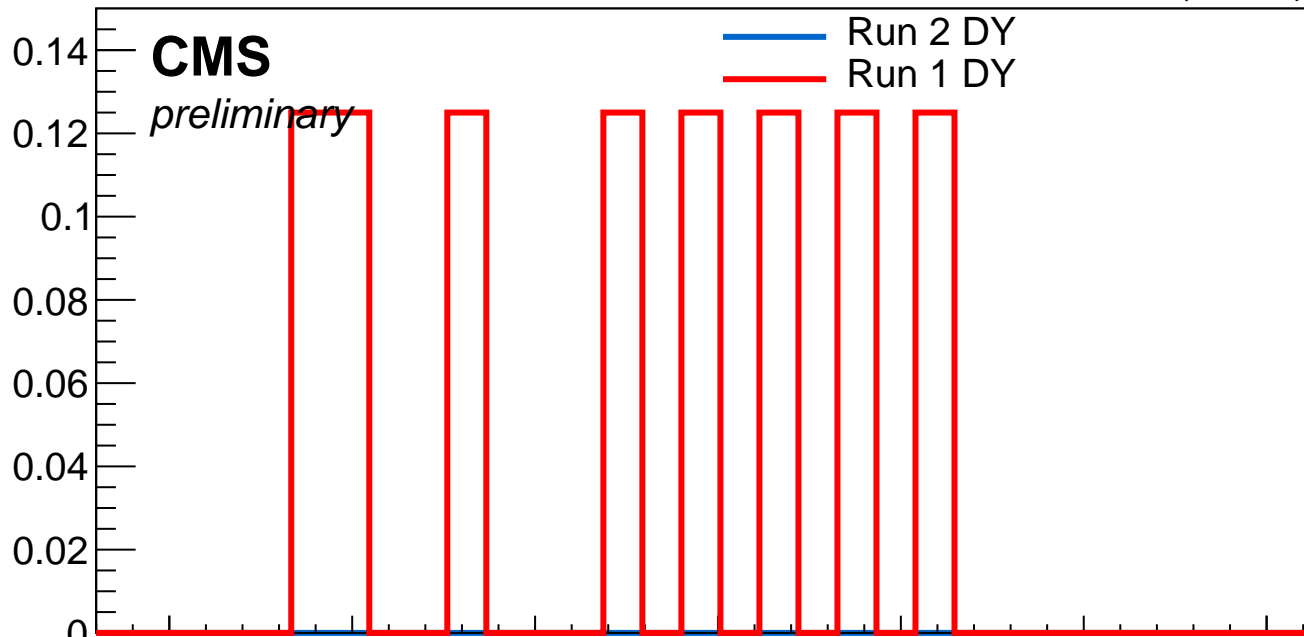
19.2 fb<sup>-1</sup> (8 TeV)

**CMS**

*preliminary*

— Run 2 DY  
— Run 1 DY

**Data/Bkg**



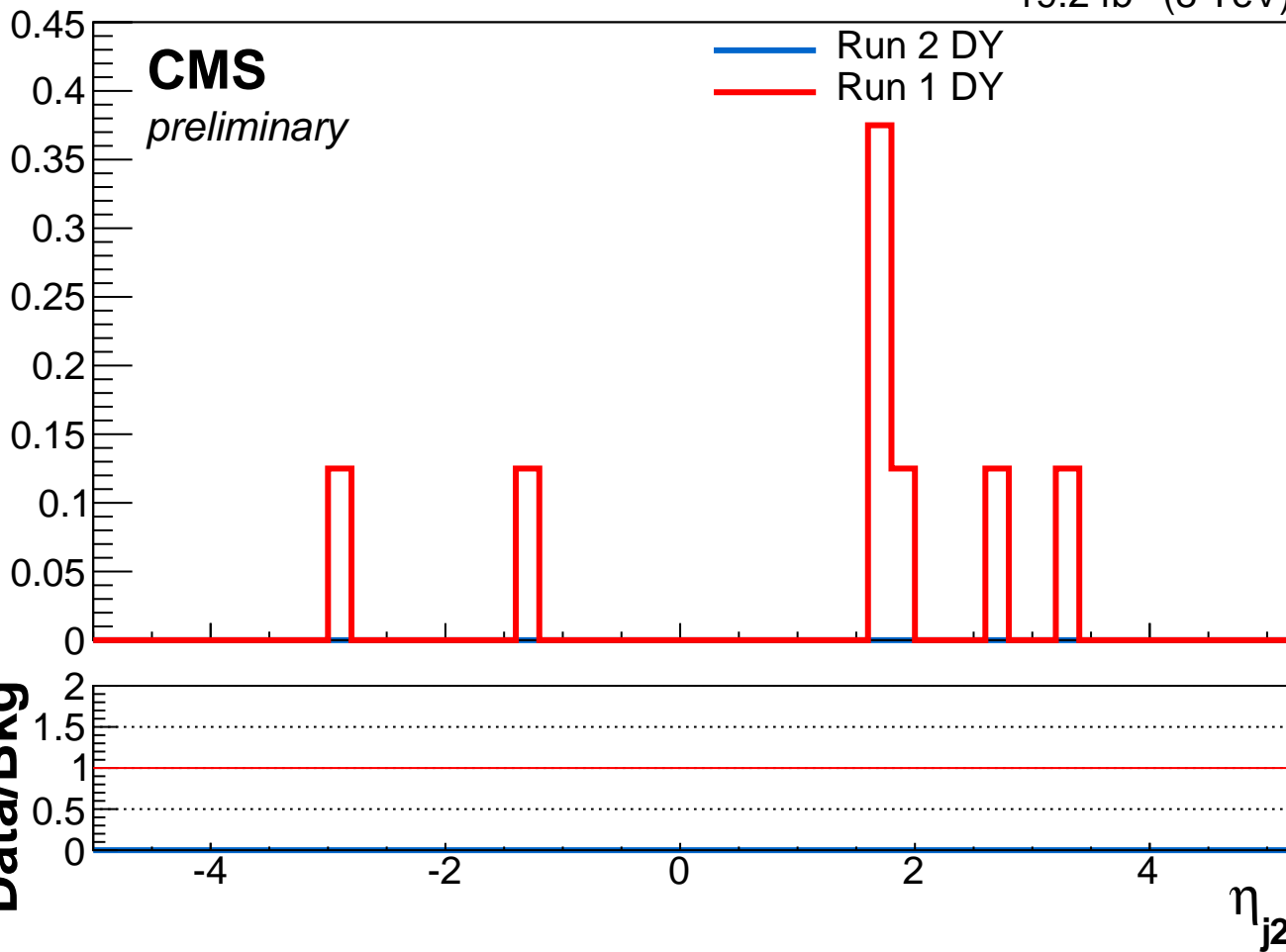
19.2 fb<sup>-1</sup> (8 TeV)

**CMS**  
*preliminary*

Run 2 DY  
Run 1 DY

Data/Bkg

$\eta_{j2}$



19.2 fb<sup>-1</sup> (8 TeV)

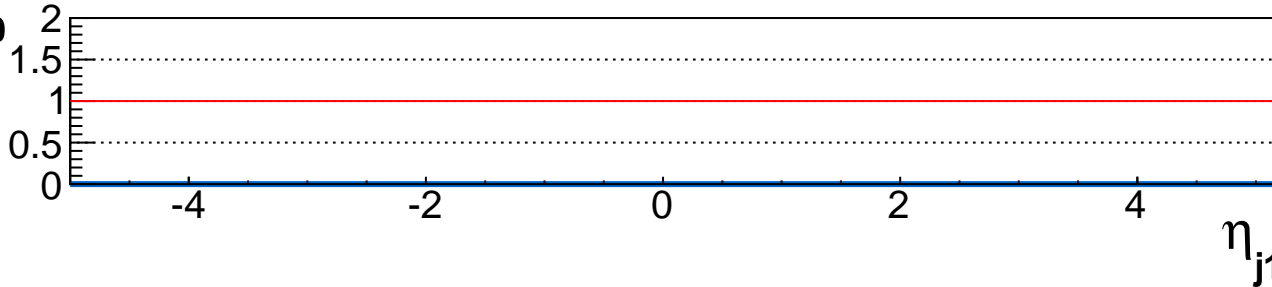
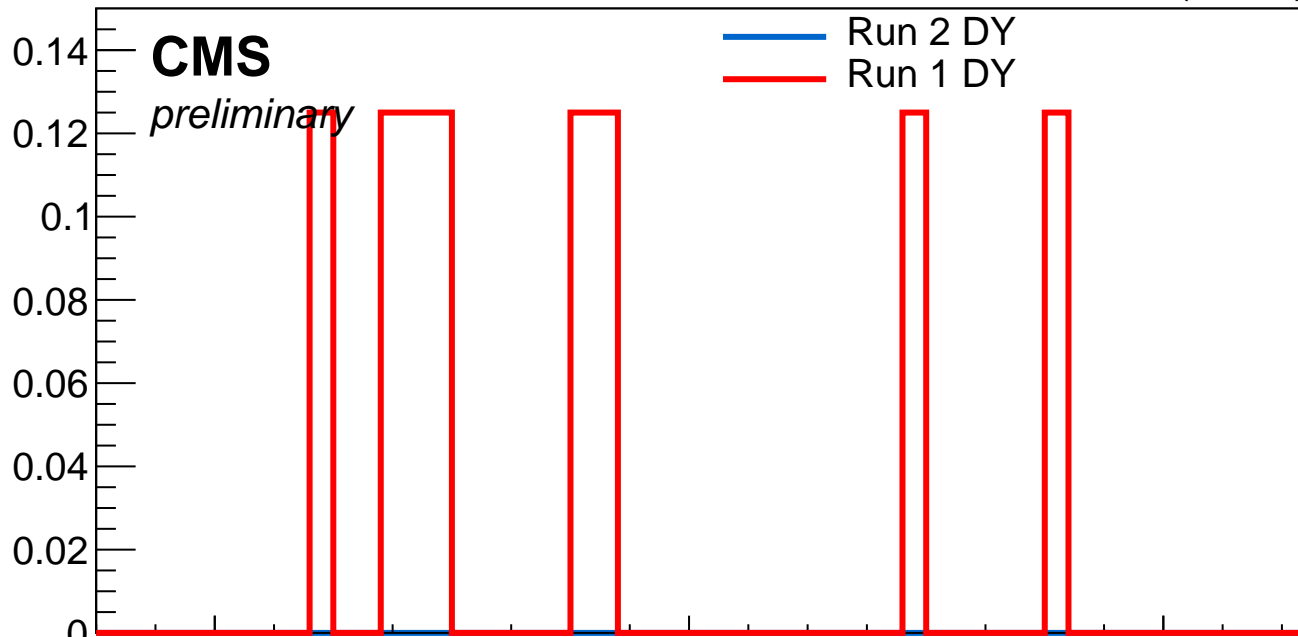
**CMS**

*preliminary*

Run 2 DY  
Run 1 DY

**Data/Bkg**

$\eta_{j1}$



19.2 fb<sup>-1</sup> (8 TeV)

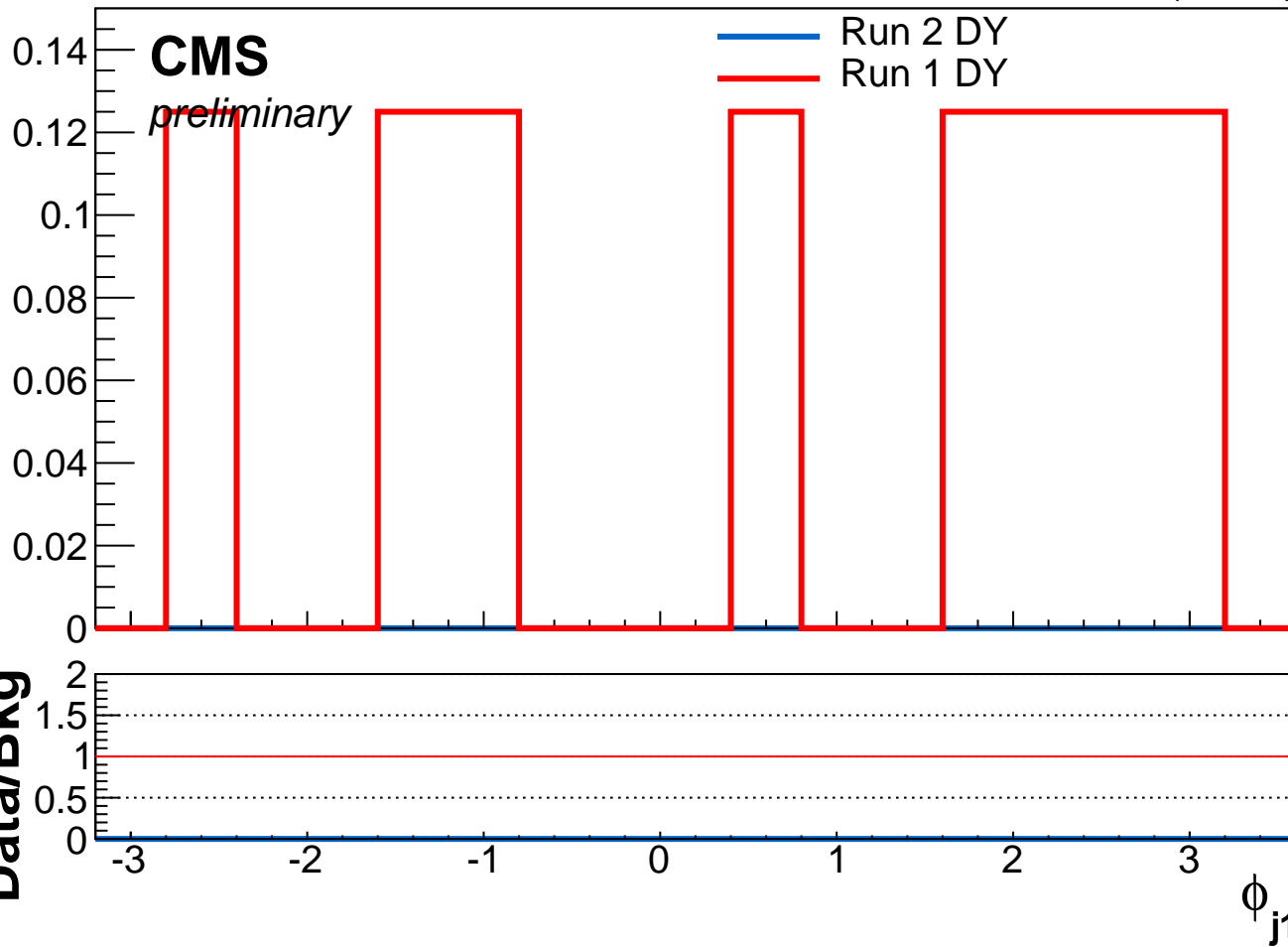
**CMS**

*preliminary*

— Run 2 DY  
— Run 1 DY

**Data/Bkg**

$\phi_{j1}$



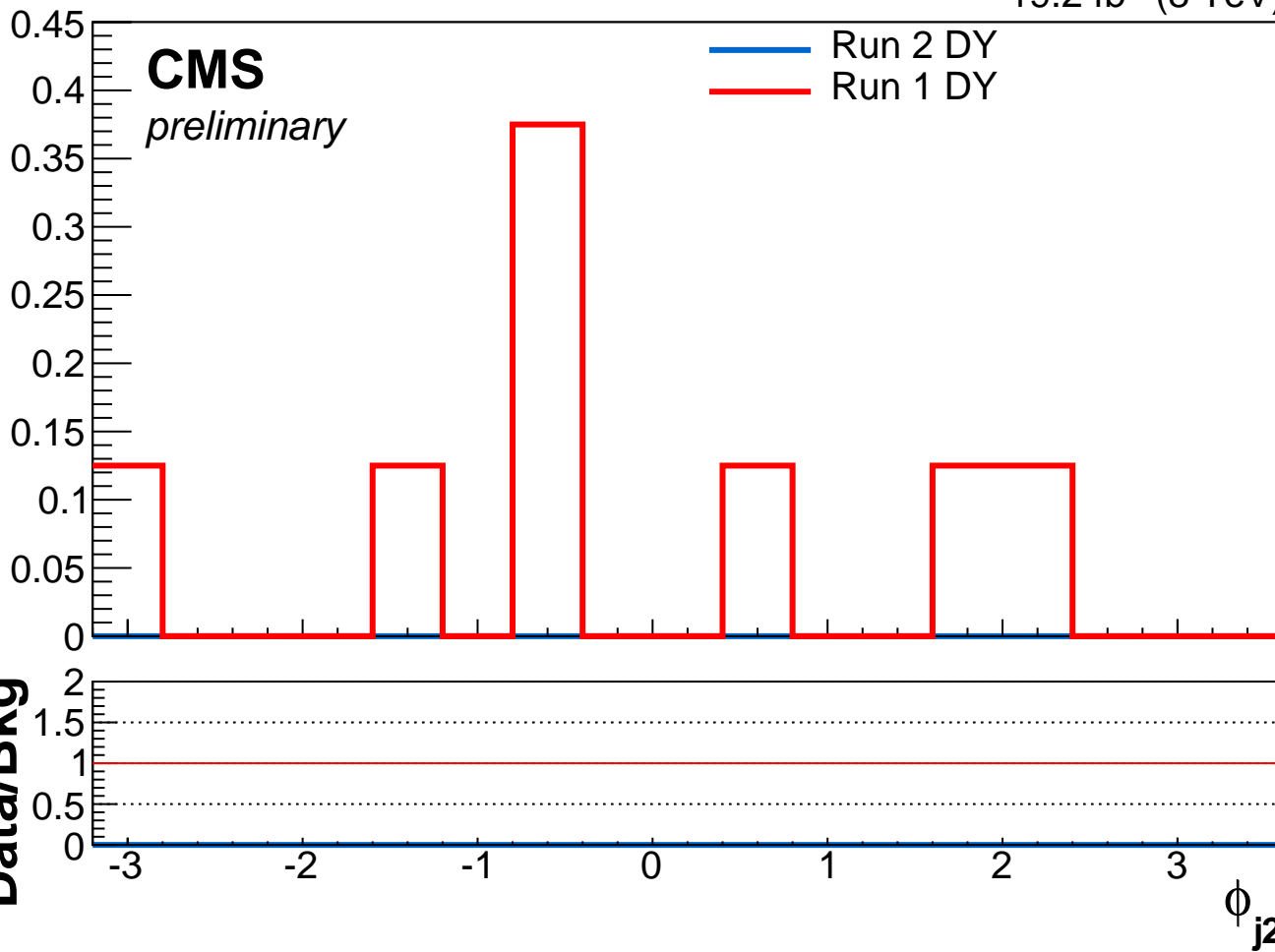
19.2 fb<sup>-1</sup> (8 TeV)

**CMS**  
*preliminary*

— Run 2 DY  
— Run 1 DY

Data/Bkg

$\phi_{j2}$

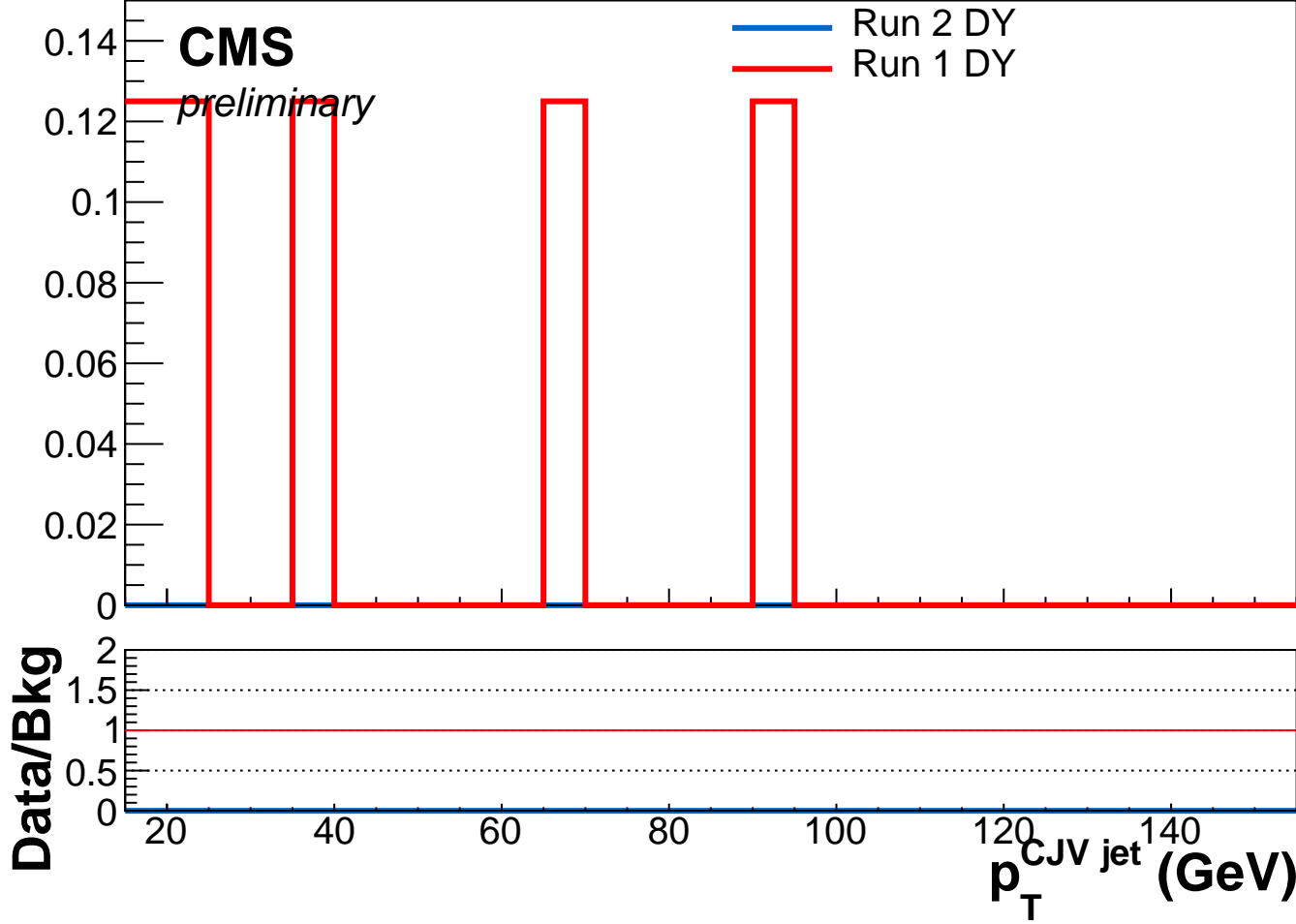


19.2 fb<sup>-1</sup> (8 TeV)

**CMS**

*preliminary*

— Run 2 DY  
— Run 1 DY



19.2 fb<sup>-1</sup> (8 TeV)

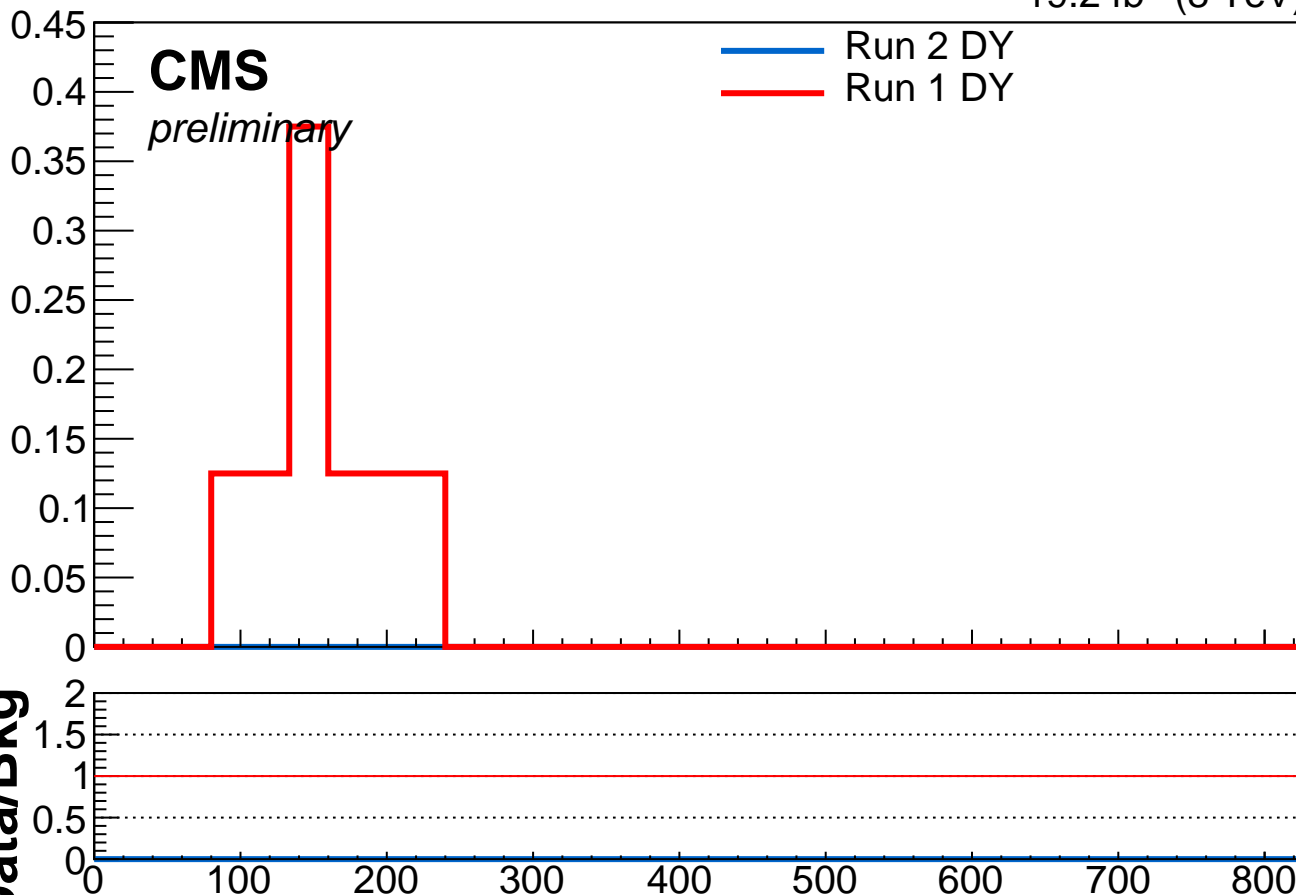
**CMS**

*preliminary*

Run 2 DY  
Run 1 DY

**Data/Bkg**

**Missing transverse energy (GeV)**





19.2 fb<sup>-1</sup> (8 TeV)

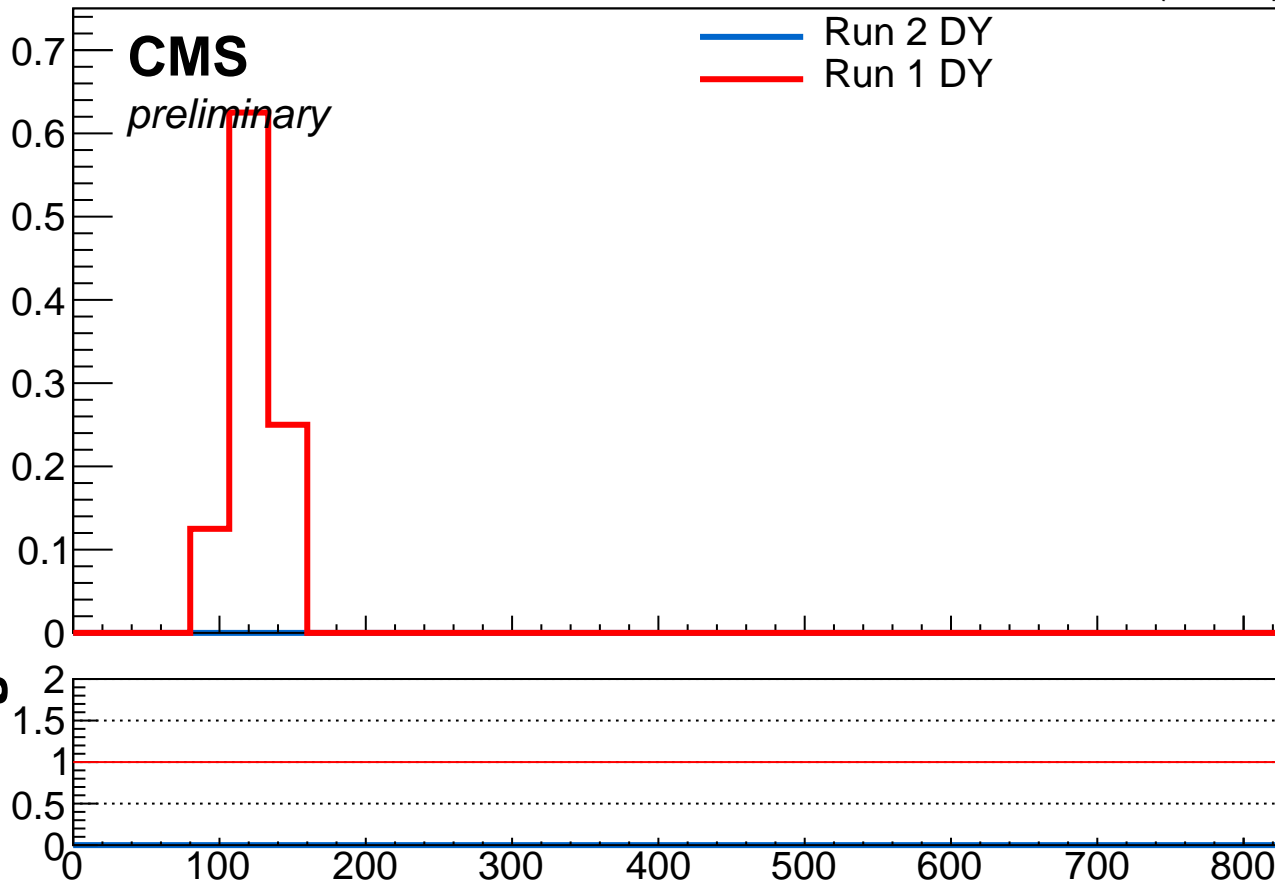
**CMS**

*preliminary*

Run 2 DY  
Run 1 DY

**Data/Bkg**

**MET (GeV)**



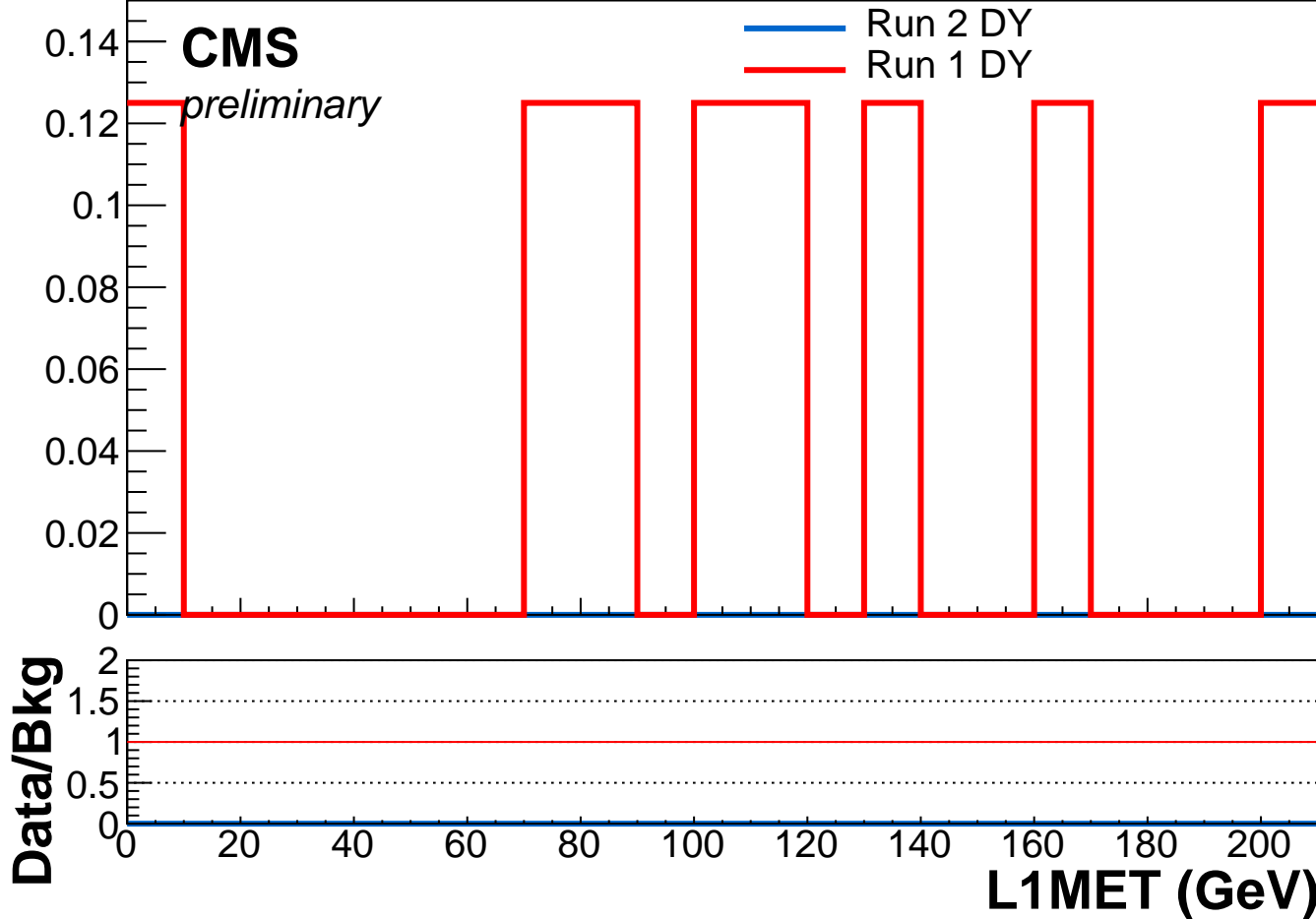
19.2 fb<sup>-1</sup> (8 TeV)

**CMS**

Run 2 DY

Run 1 DY

*preliminary*



19.2 fb<sup>-1</sup> (8 TeV)

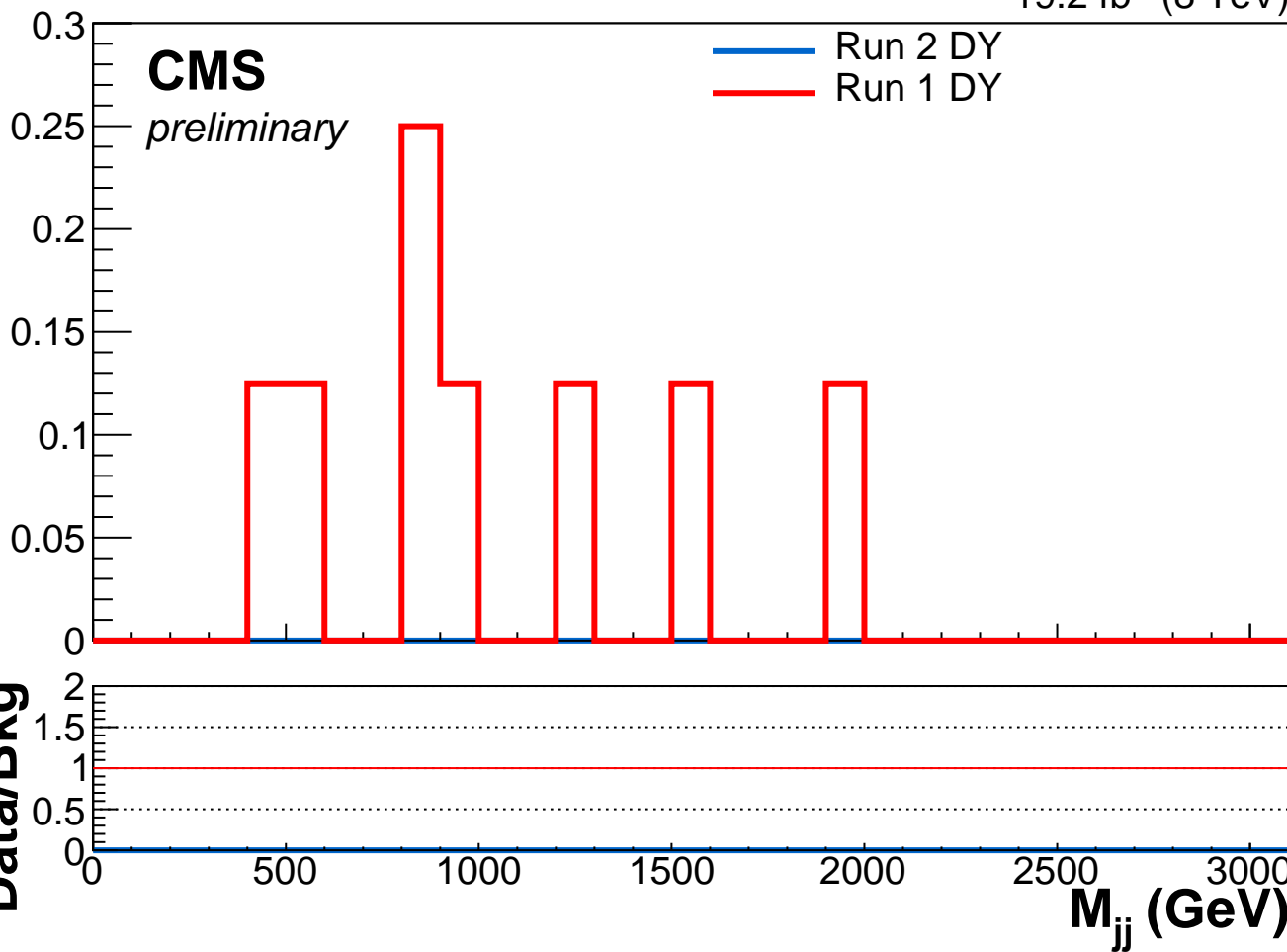
**CMS**

*preliminary*

Run 2 DY  
Run 1 DY

**Data/Bkg**

**M<sub>jj</sub> (GeV)**



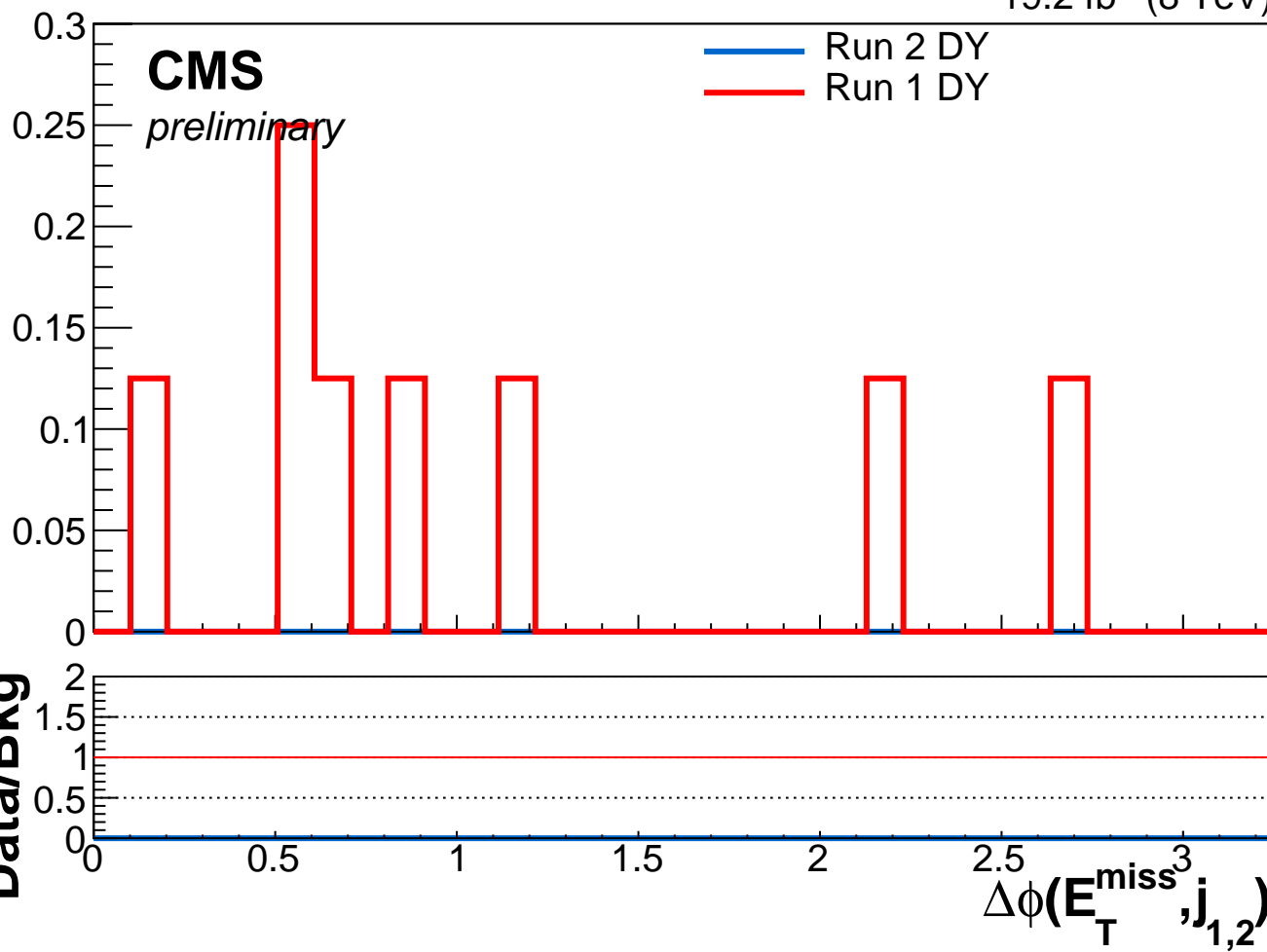
19.2 fb<sup>-1</sup> (8 TeV)

**CMS**

*preliminary*

Run 2 DY  
Run 1 DY

**Data/Bkg**



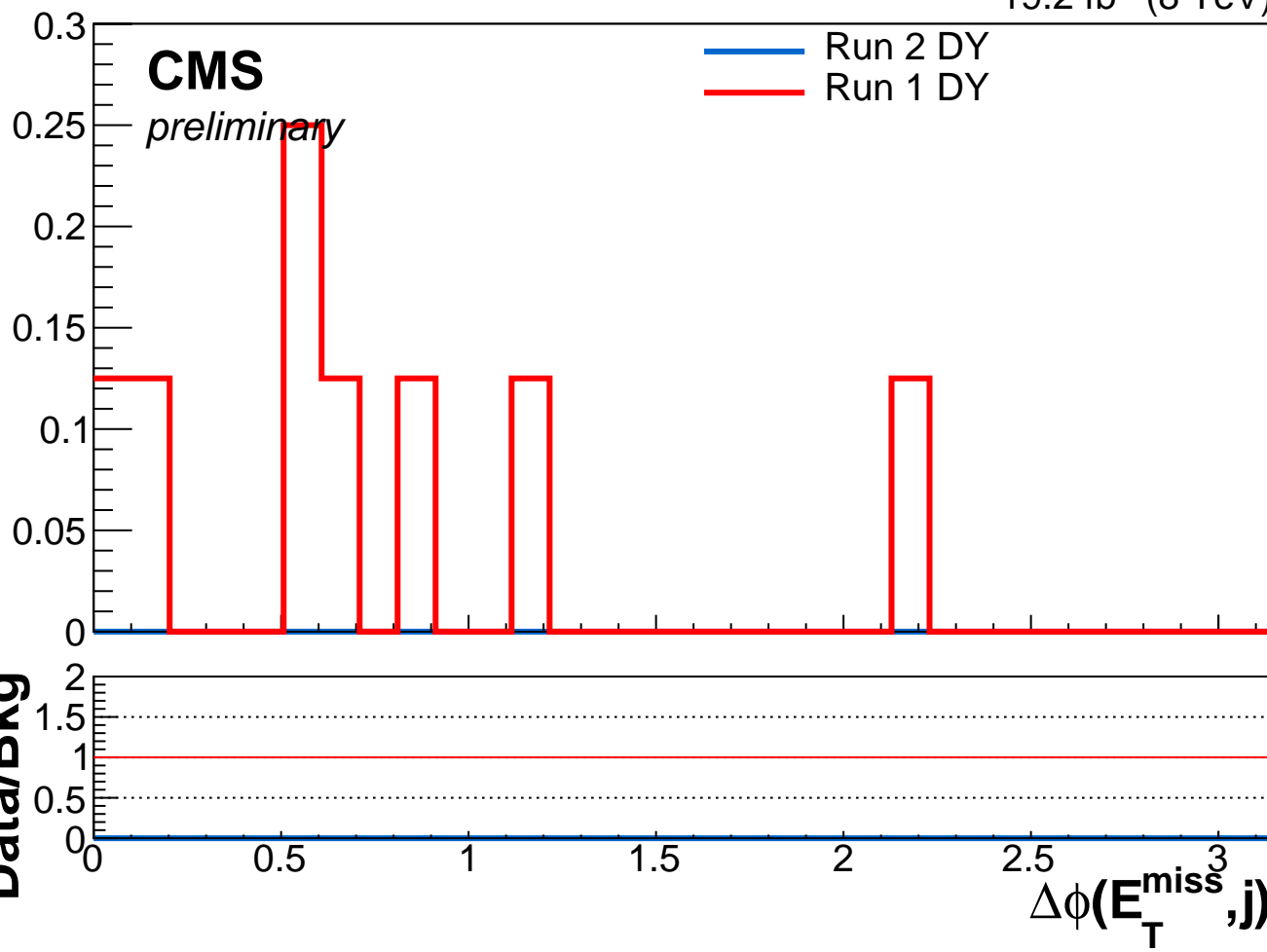
19.2 fb<sup>-1</sup> (8 TeV)

**CMS**

*preliminary*

Run 2 DY  
Run 1 DY

**Data/Bkg**



19.2 fb<sup>-1</sup> (8 TeV)

**CMS**

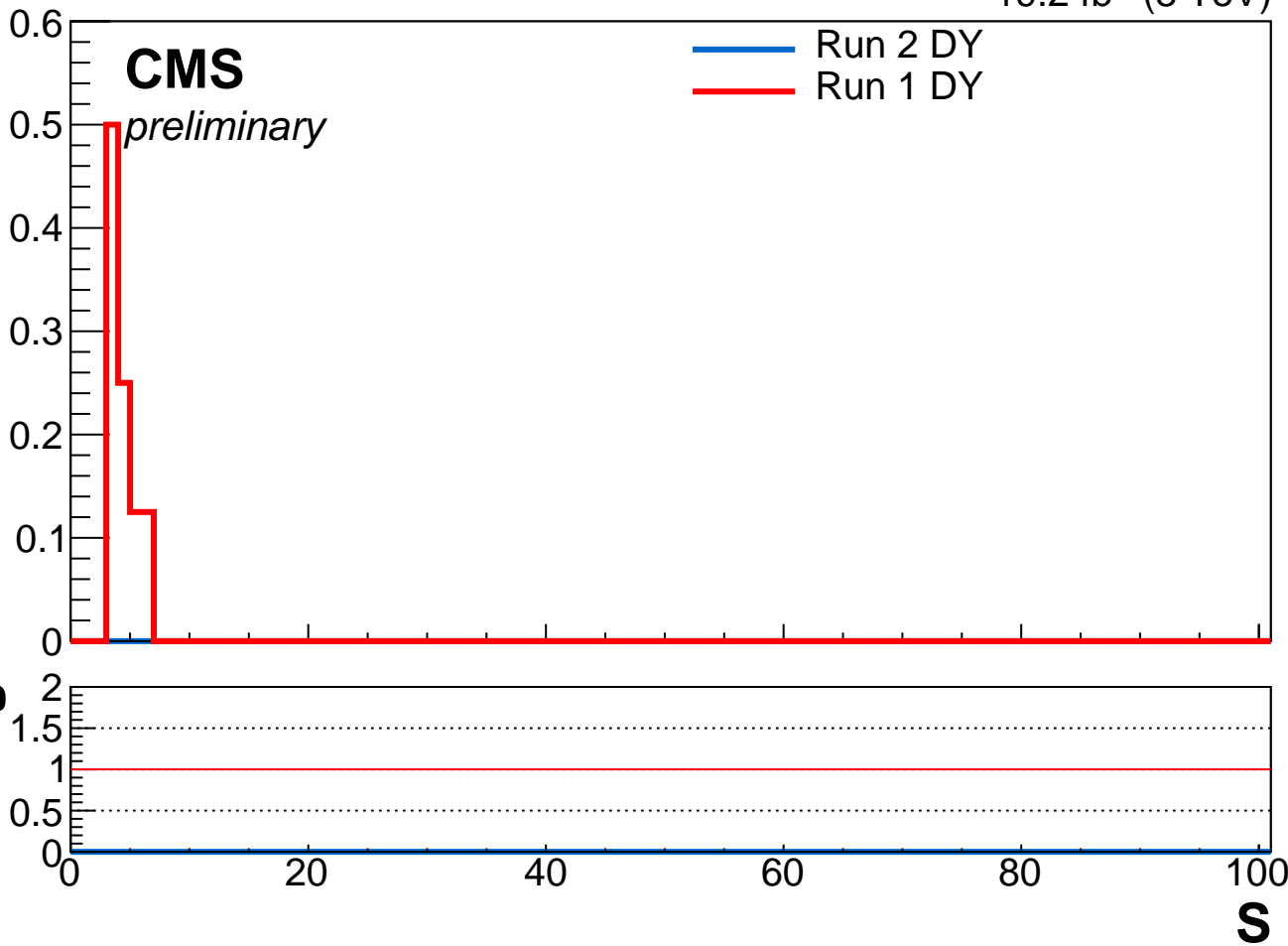
*preliminary*

Run 2 DY

Run 1 DY

**Data/Bkg**

**S**



19.2 fb<sup>-1</sup> (8 TeV)

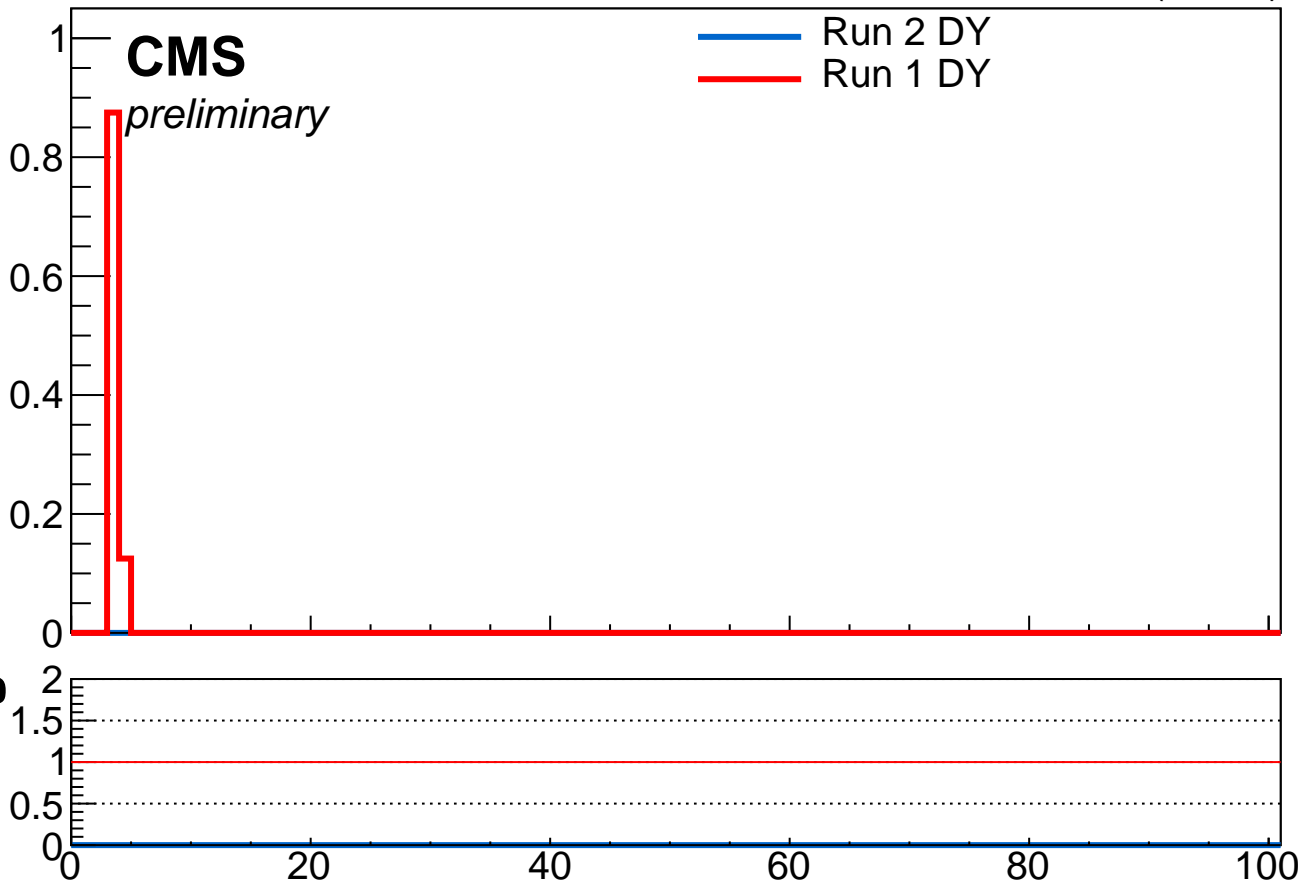
**CMS**

*preliminary*

Run 2 DY  
Run 1 DY

**Data/Bkg**

**Run 1 S**



19.2 fb<sup>-1</sup> (8 TeV)

**CMS**

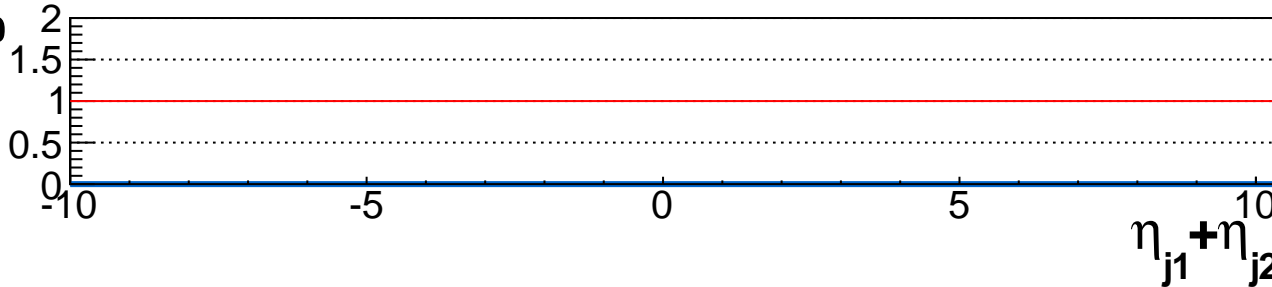
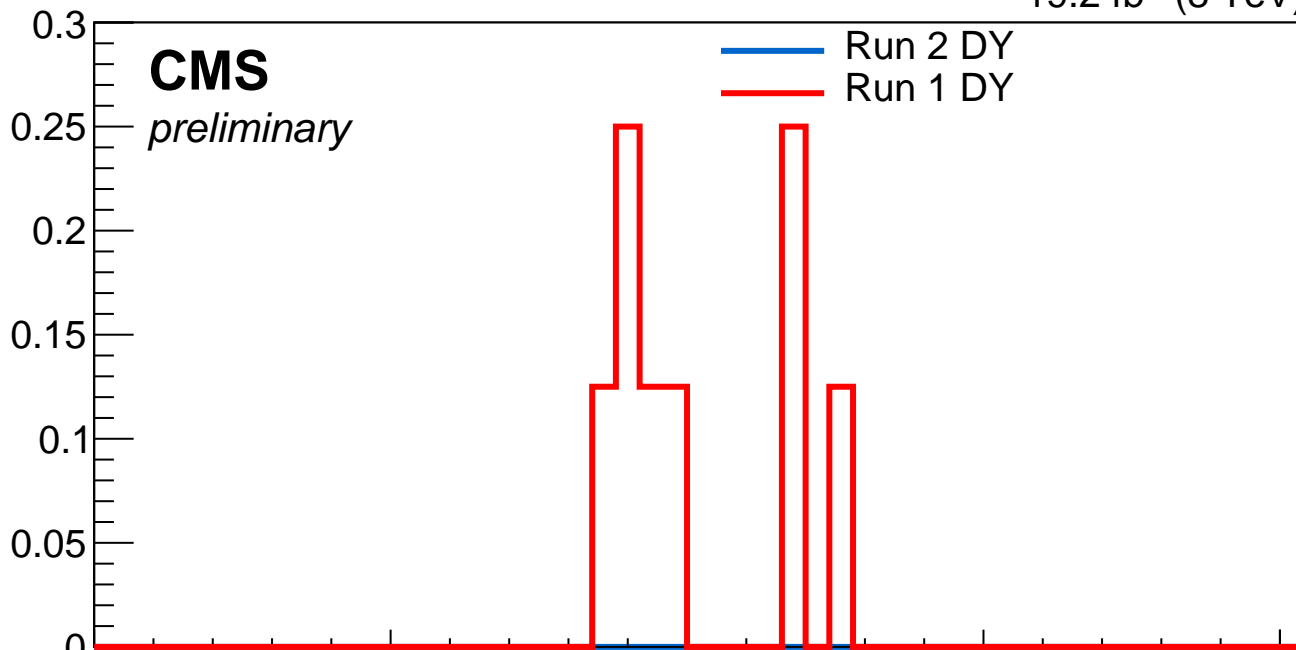
*preliminary*

— Run 2 DY

— Run 1 DY

**Data/Bkg**

$\eta_{j1} + \eta_{j2}$





19.2 fb<sup>-1</sup> (8 TeV)

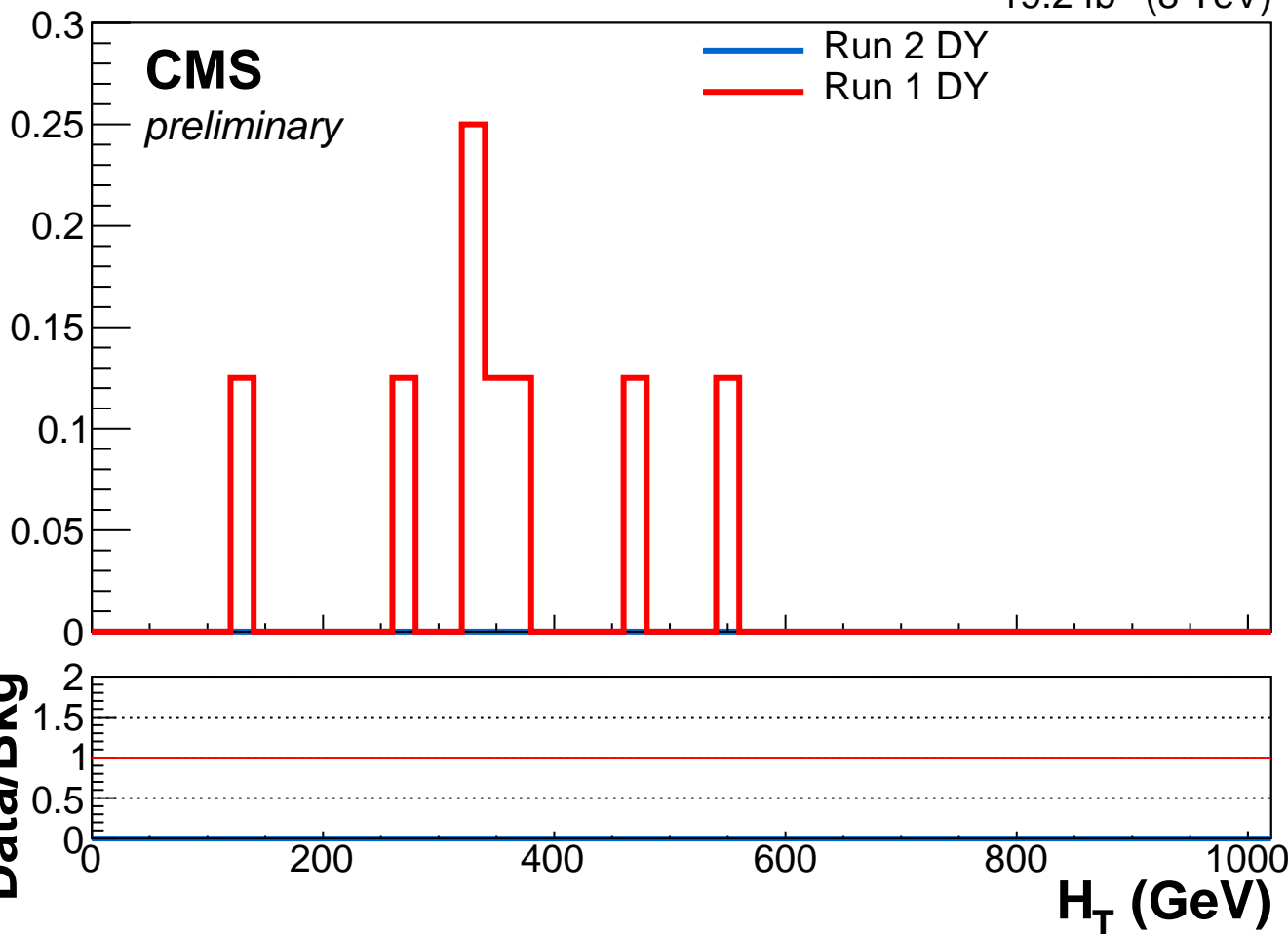
**CMS**

*preliminary*

Run 2 DY  
Run 1 DY

Data/Bkg

H<sub>T</sub> (GeV)



19.2 fb<sup>-1</sup> (8 TeV)

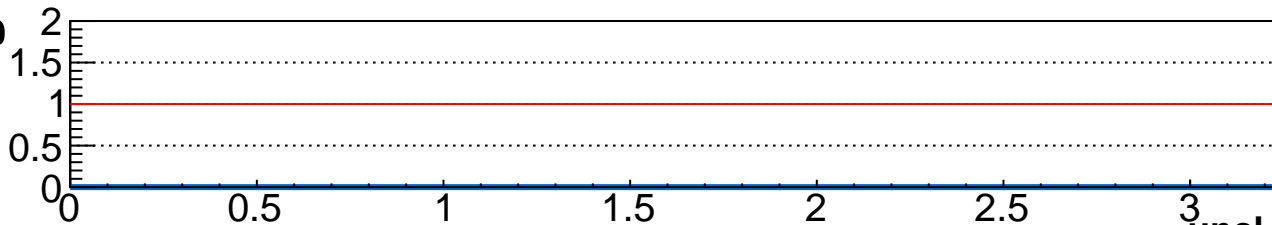
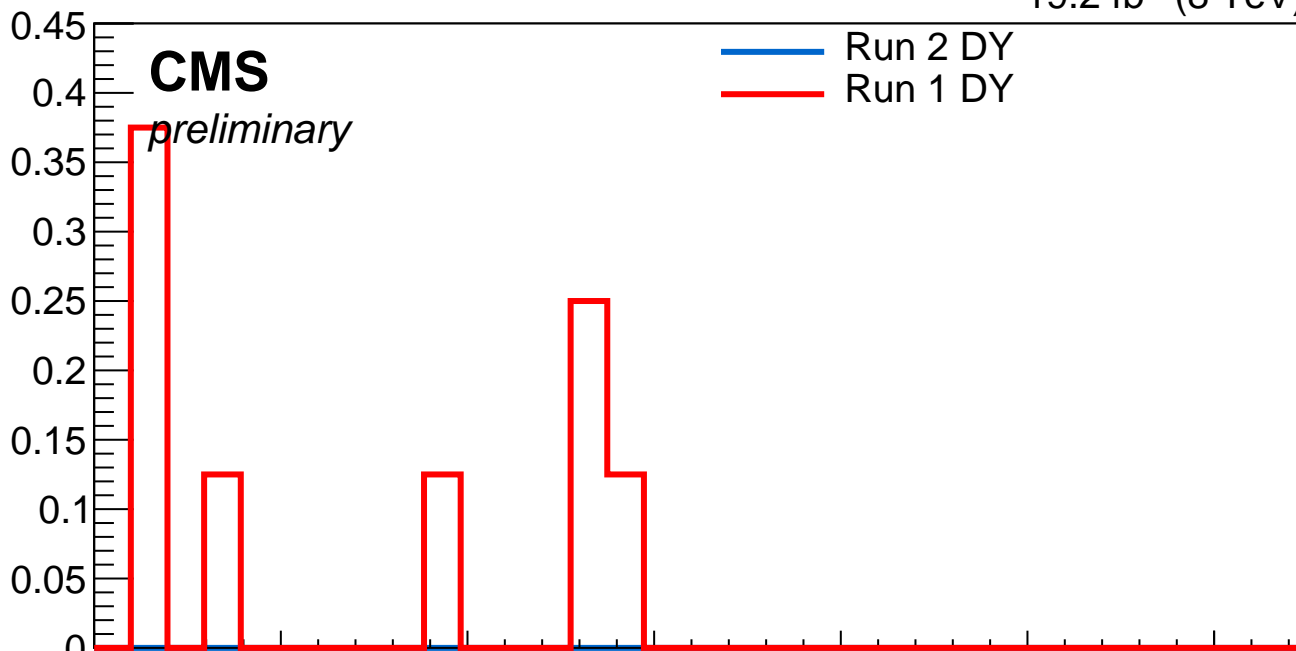
**CMS**

*preliminary*

Run 2 DY  
Run 1 DY

**Data/Bkg**

**min  $\Delta\phi(j, E_T^{\text{uncl}})$**



19.2 fb<sup>-1</sup> (8 TeV)

**CMS**

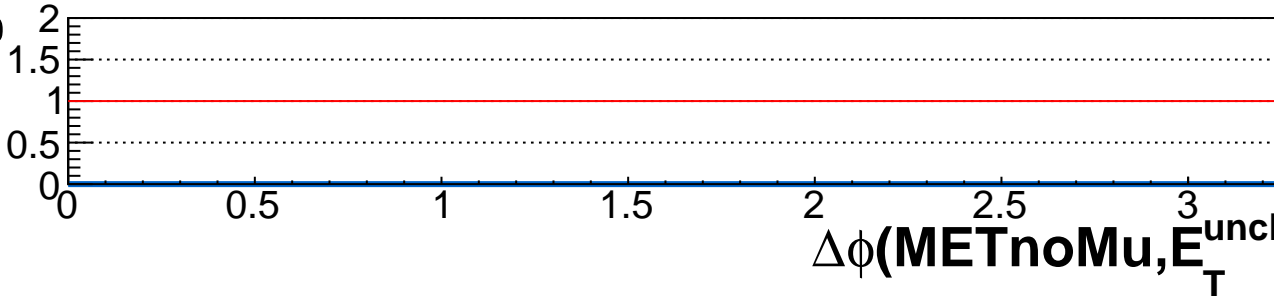
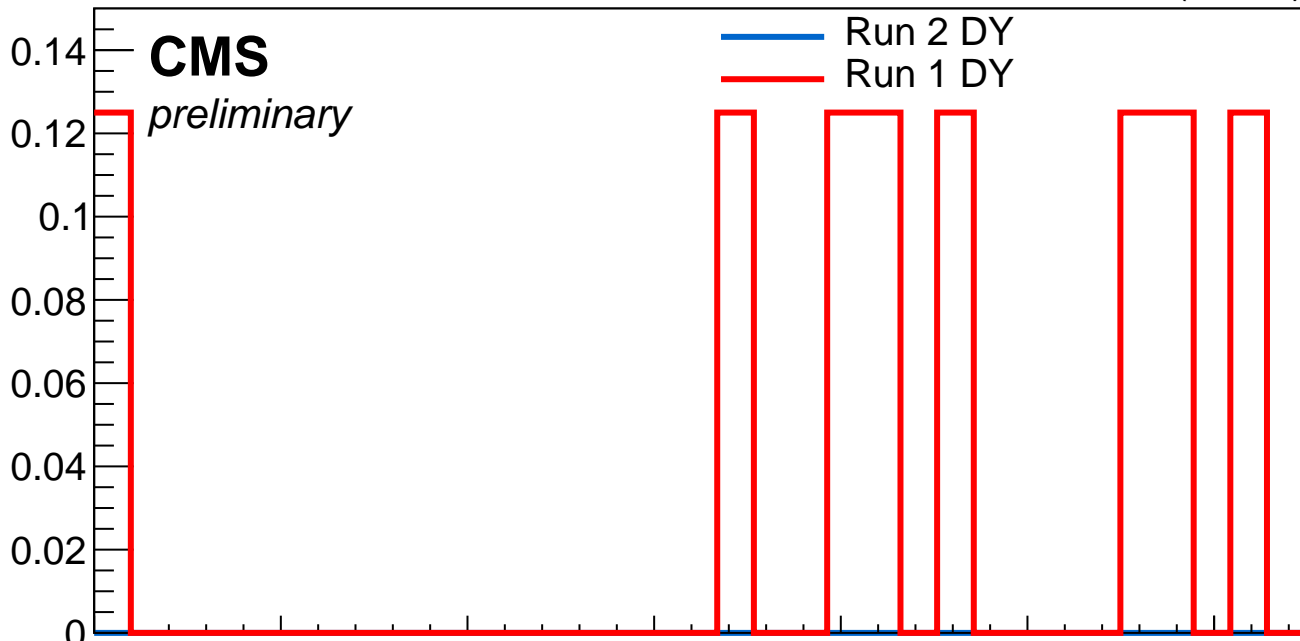
*preliminary*

Run 2 DY

Run 1 DY

**Data/Bkg**

$\Delta\phi(\text{METnoMu}, E_{\text{T}}^{\text{uncl}})$



19.2 fb<sup>-1</sup> (8 TeV)

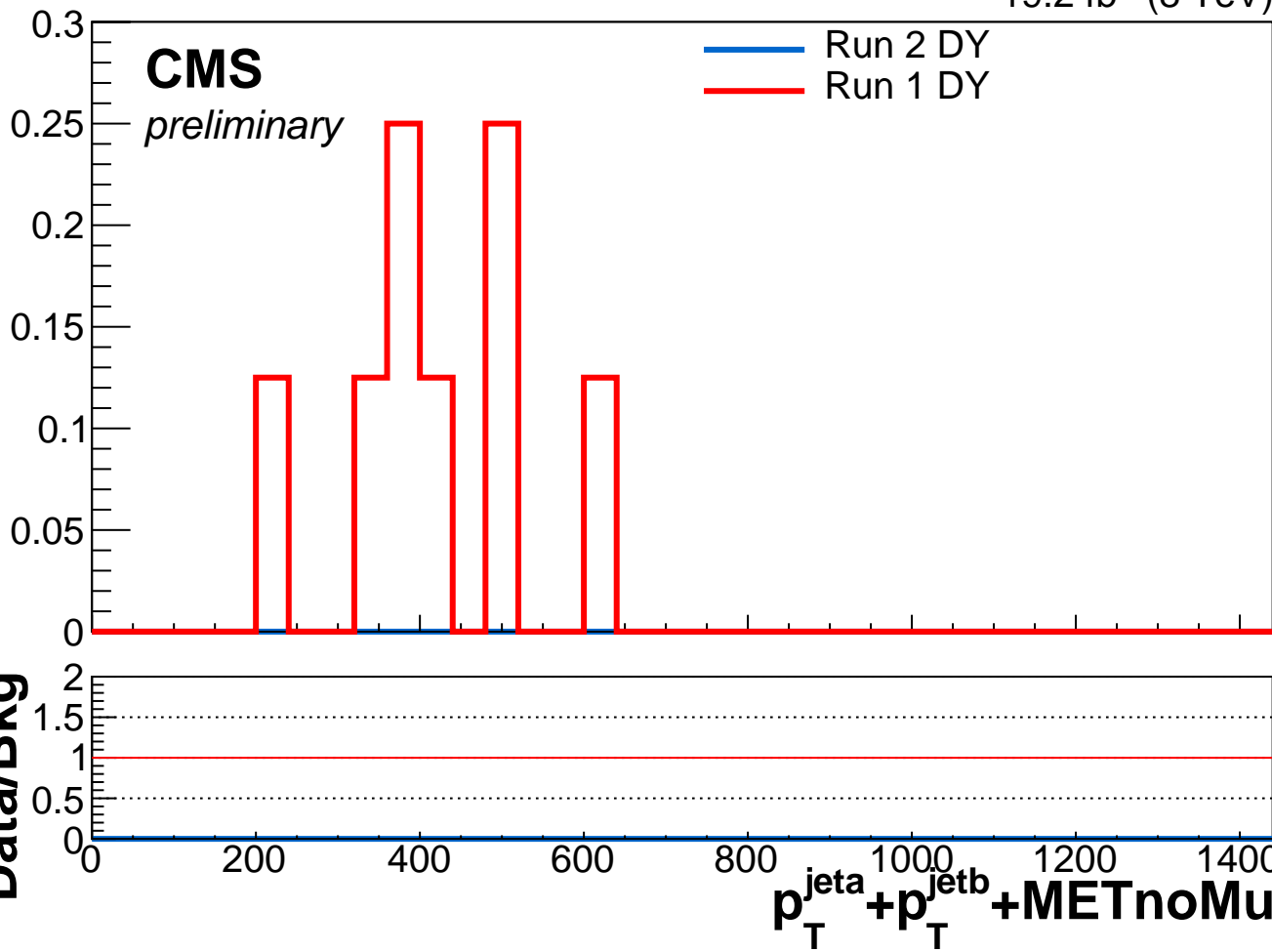
**CMS**

*preliminary*

Run 2 DY  
Run 1 DY

**Data/Bkg**

**$p_T^{\text{jeta}} + p_T^{\text{jetb}} + \text{MET}_{\text{noMu}}$**



19.2 fb<sup>-1</sup> (8 TeV)

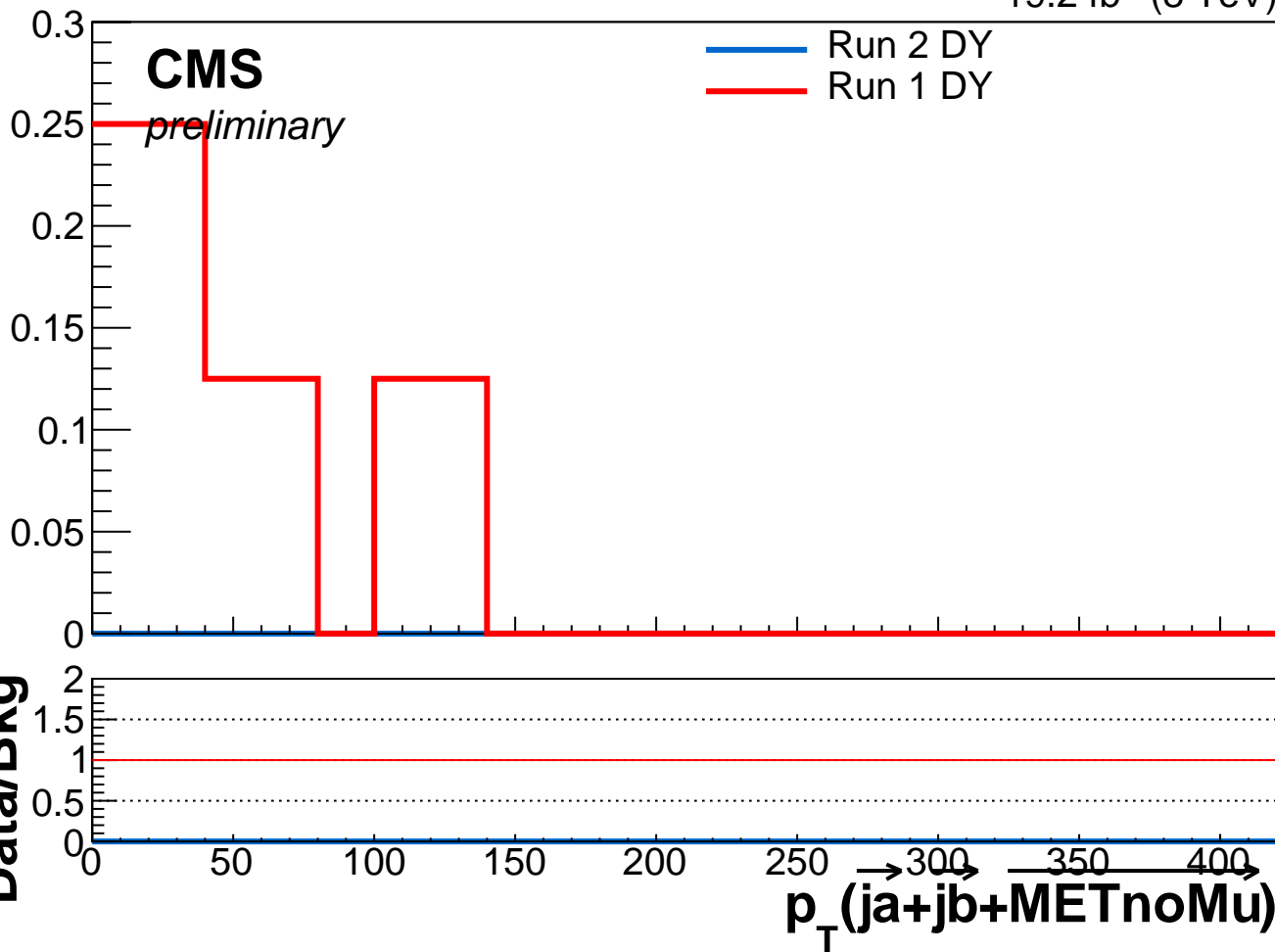
**CMS**

*preliminary*

Run 2 DY  
Run 1 DY

**Data/Bkg**

**p<sub>T</sub> (j<sub>a</sub>+j<sub>b</sub>+METnoMu)**

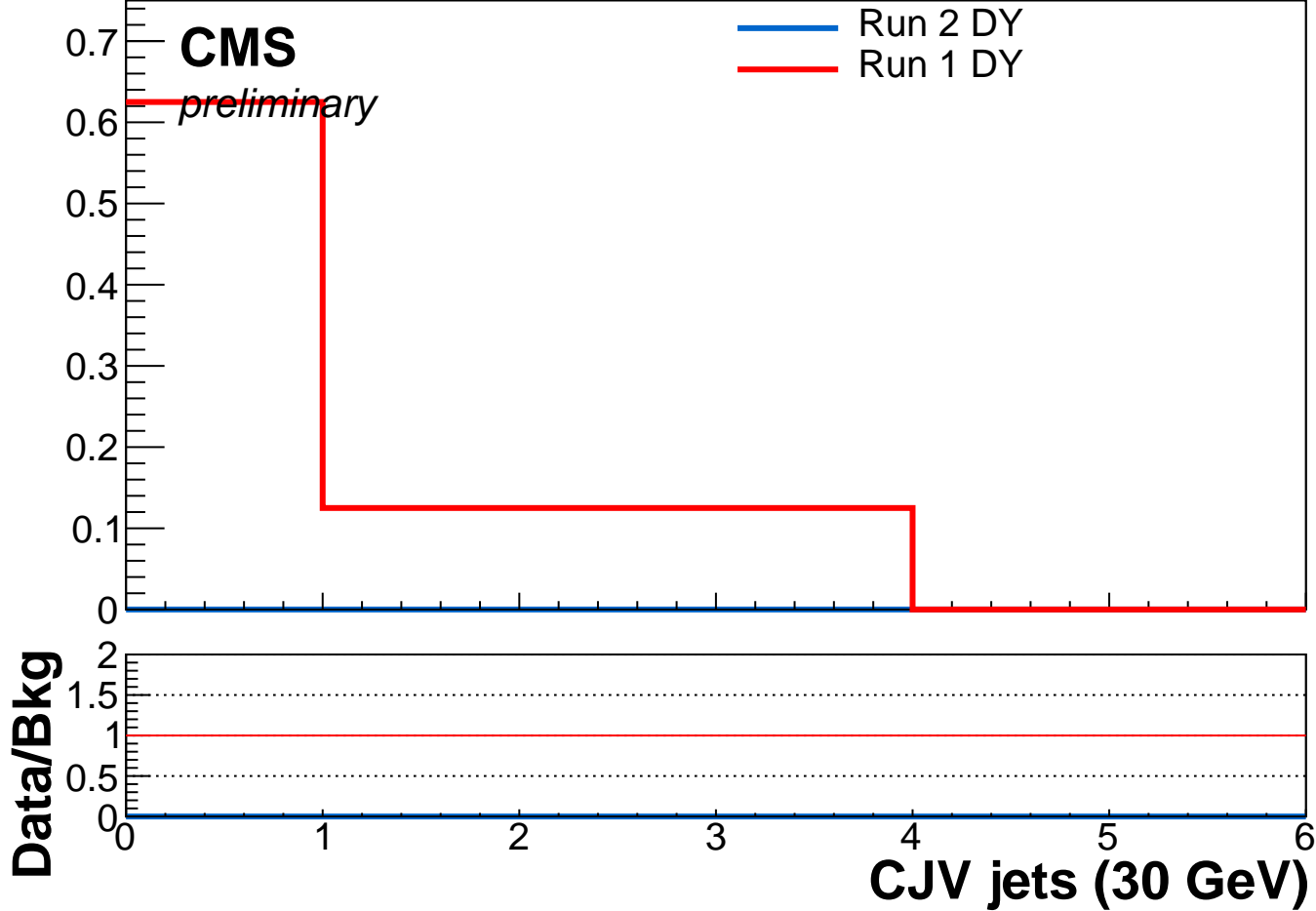


19.2 fb<sup>-1</sup> (8 TeV)

**CMS**

Run 2 DY  
Run 1 DY

*preliminary*



19.2 fb<sup>-1</sup> (8 TeV)

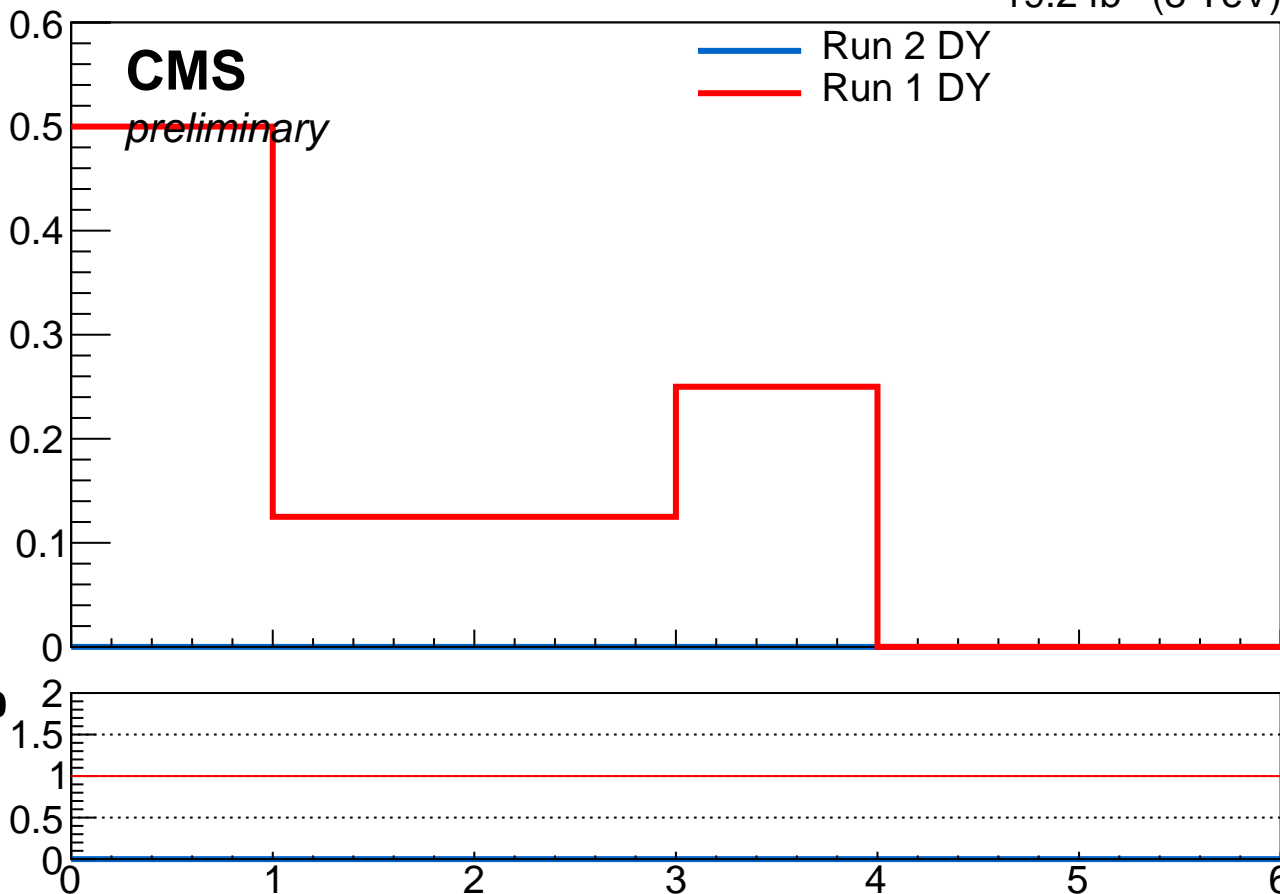
**CMS**

*preliminary*

Run 2 DY  
Run 1 DY

**Data/Bkg**

**CJV jets (20 GeV EB, 30 GeV EE)**



19.2 fb<sup>-1</sup> (8 TeV)

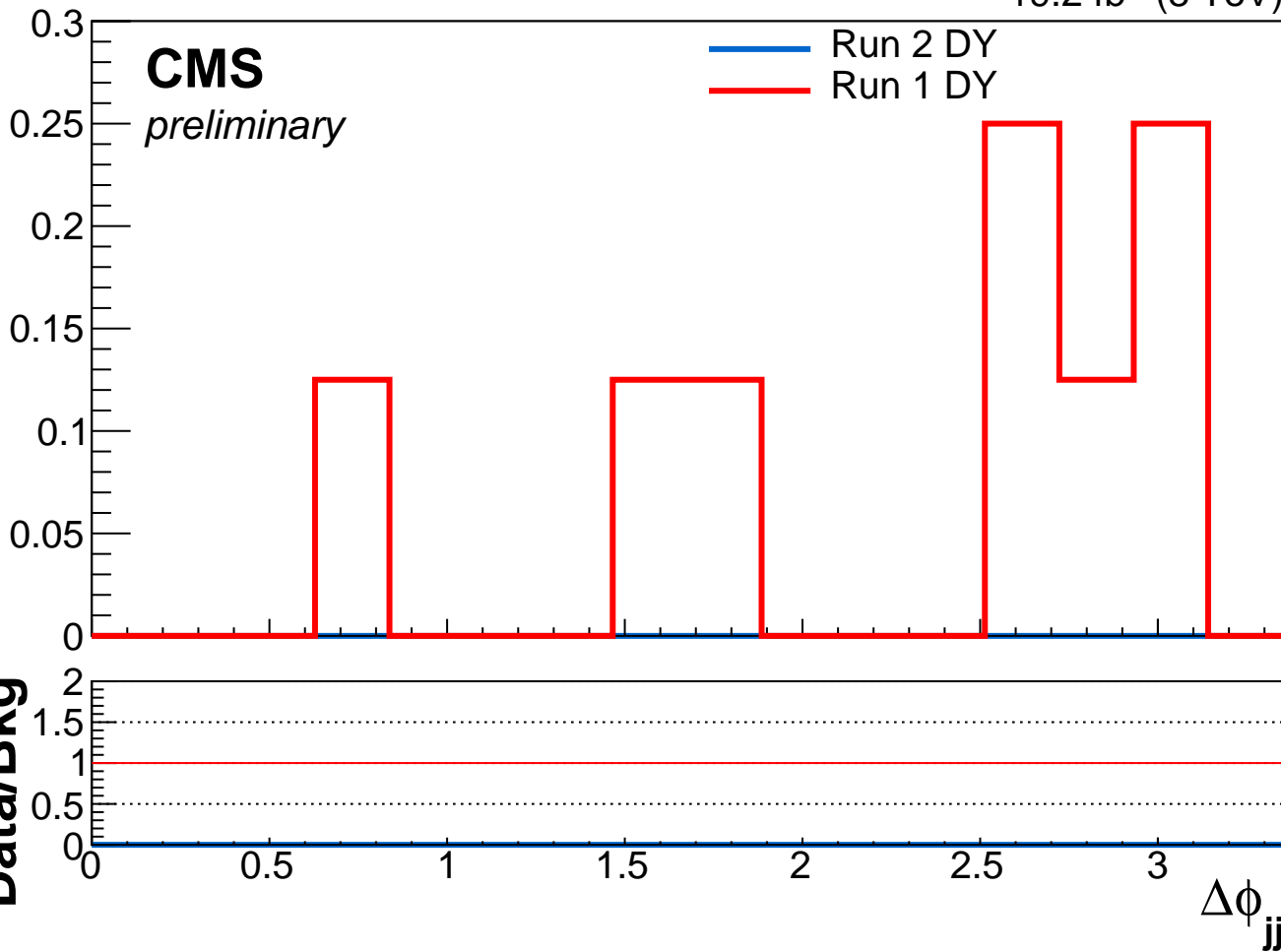
**CMS**

*preliminary*

Run 2 DY  
Run 1 DY

Data/Bkg

$\Delta\phi_{jj}$





19.2 fb<sup>-1</sup> (8 TeV)

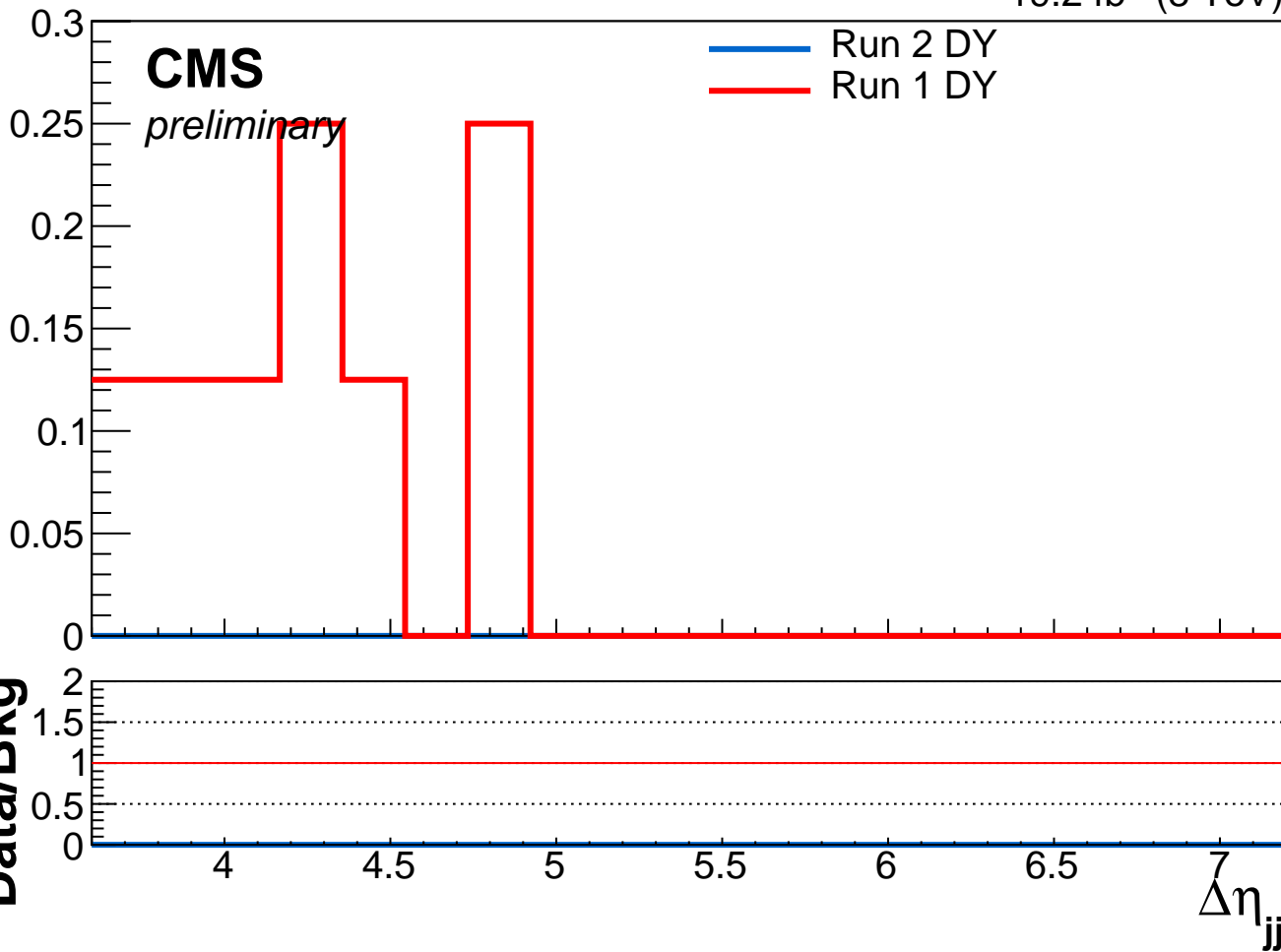
**CMS**

*preliminary*

Run 2 DY  
Run 1 DY

Data/Bkg

$\Delta\eta_{jj}$



19.2 fb<sup>-1</sup> (8 TeV)

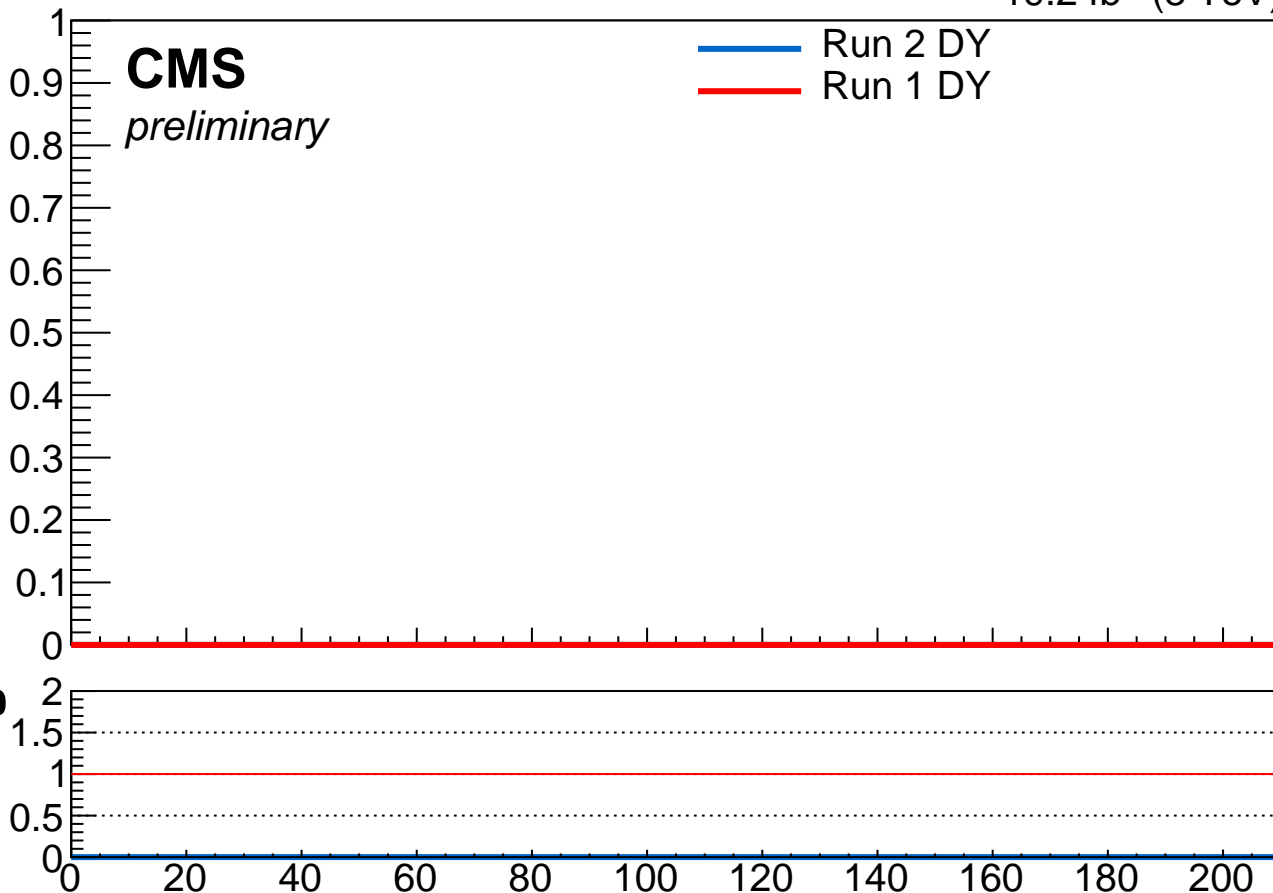
**CMS**

*preliminary*

Run 2 DY  
Run 1 DY

Data/Bkg

$m_T(\text{lepton}+\text{MET})$  (GeV)



19.2 fb<sup>-1</sup> (8 TeV)

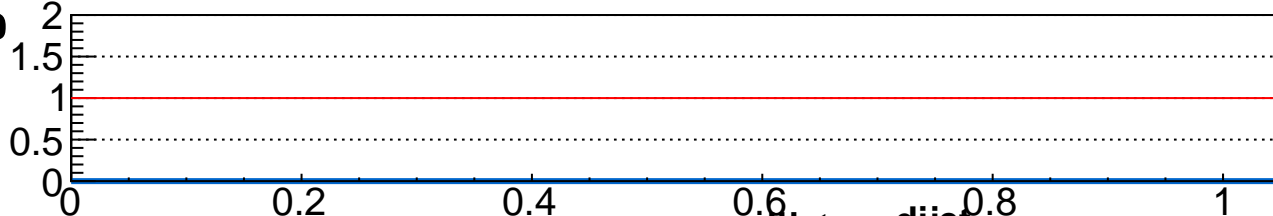
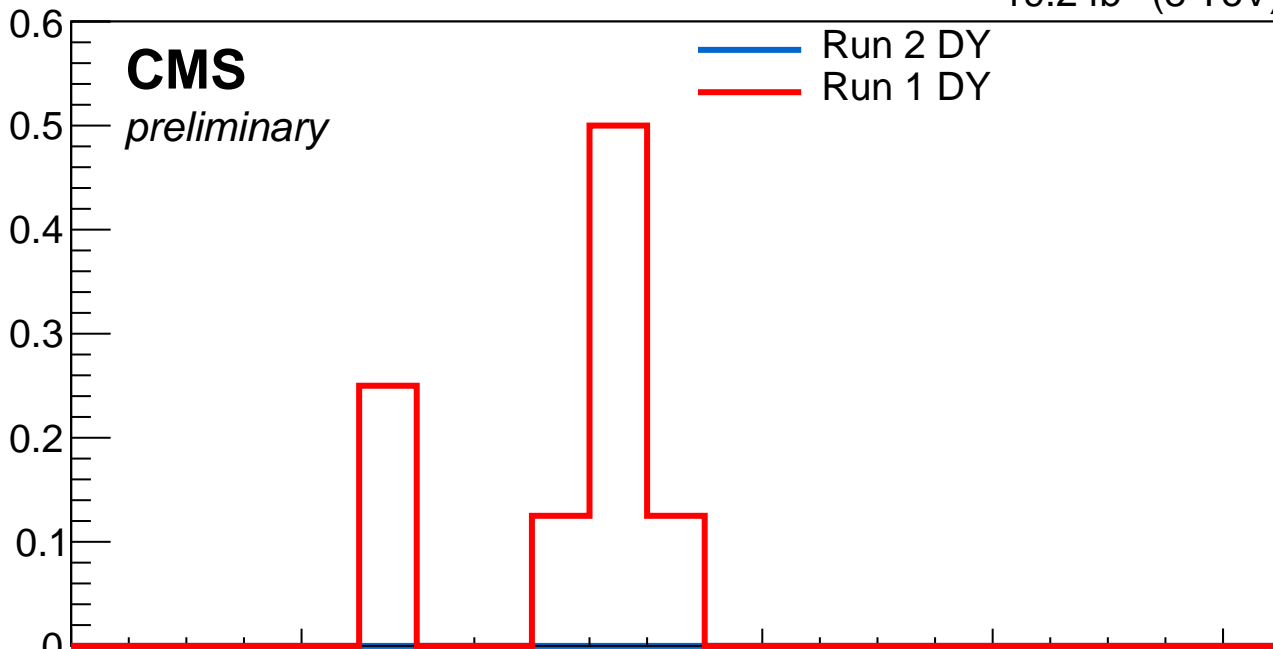
**CMS**

*preliminary*

Run 2 DY  
Run 1 DY

Data/Bkg

$p_T^{\text{dijet}} / (p_T^{\text{dijet}} + \text{MET}_{\text{noMu}})$

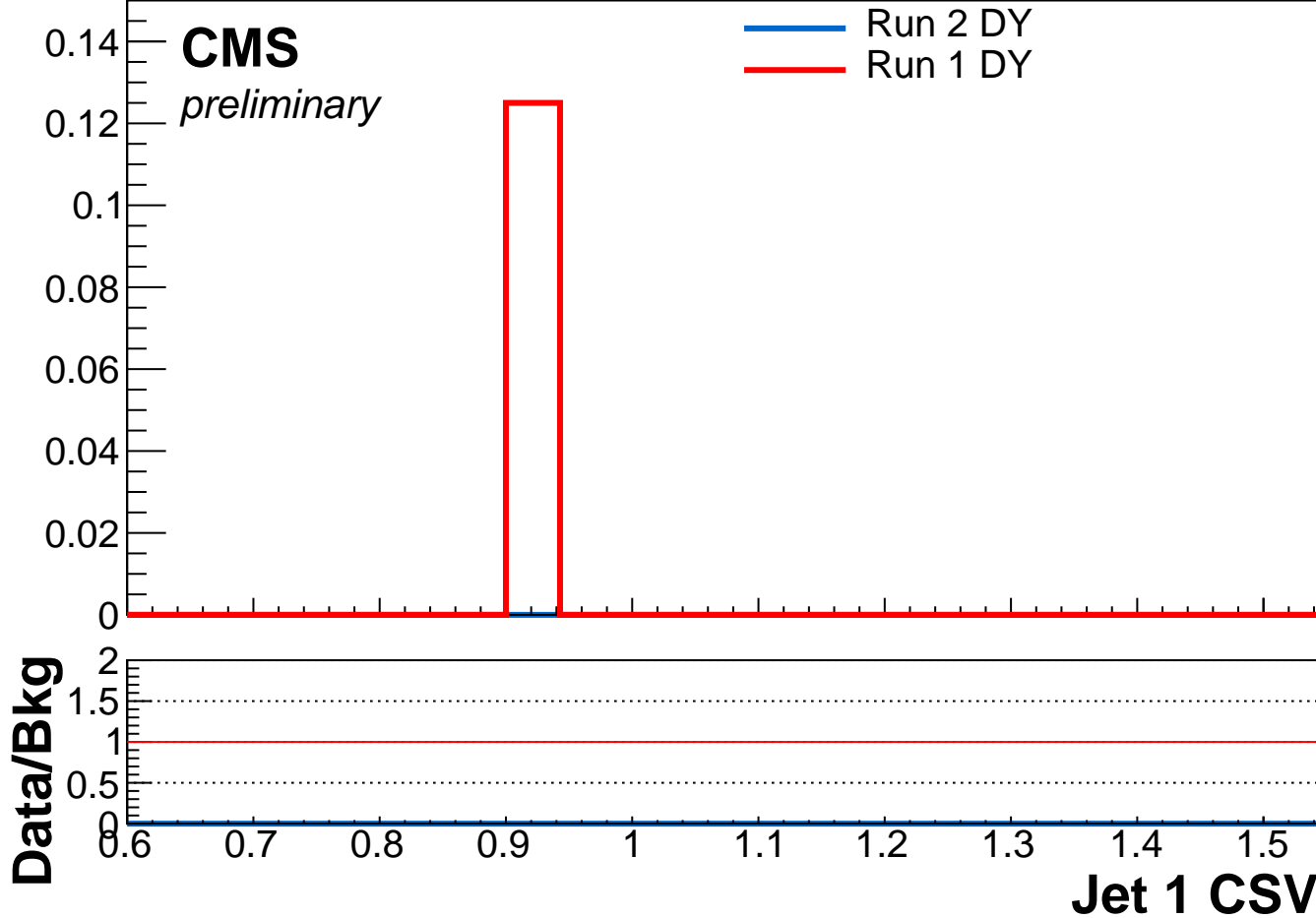


19.2 fb<sup>-1</sup> (8 TeV)

**CMS**

*preliminary*

Run 2 DY  
Run 1 DY



19.2 fb<sup>-1</sup> (8 TeV)

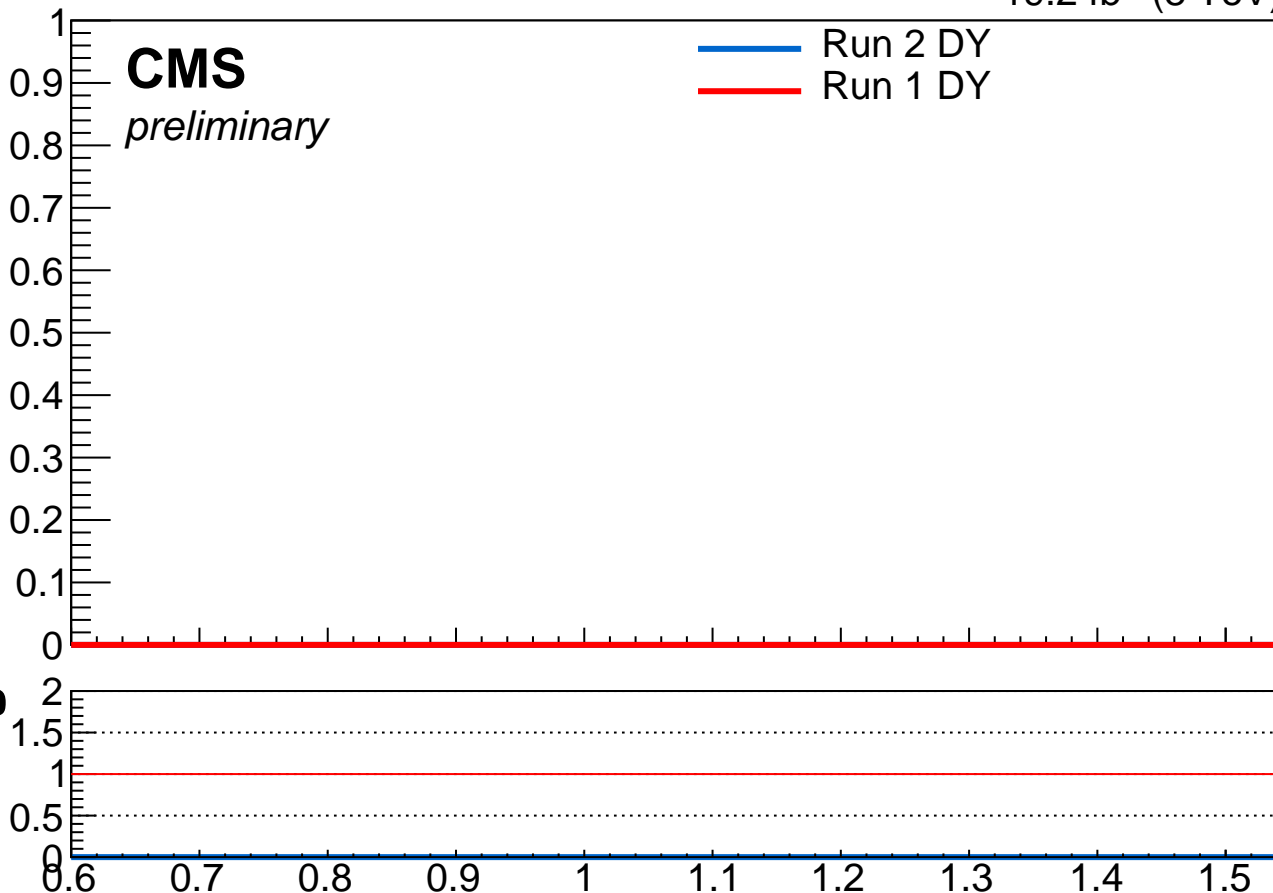
**CMS**

*preliminary*

Run 2 DY  
Run 1 DY

**Data/Bkg**

**Jet 2 CSV**

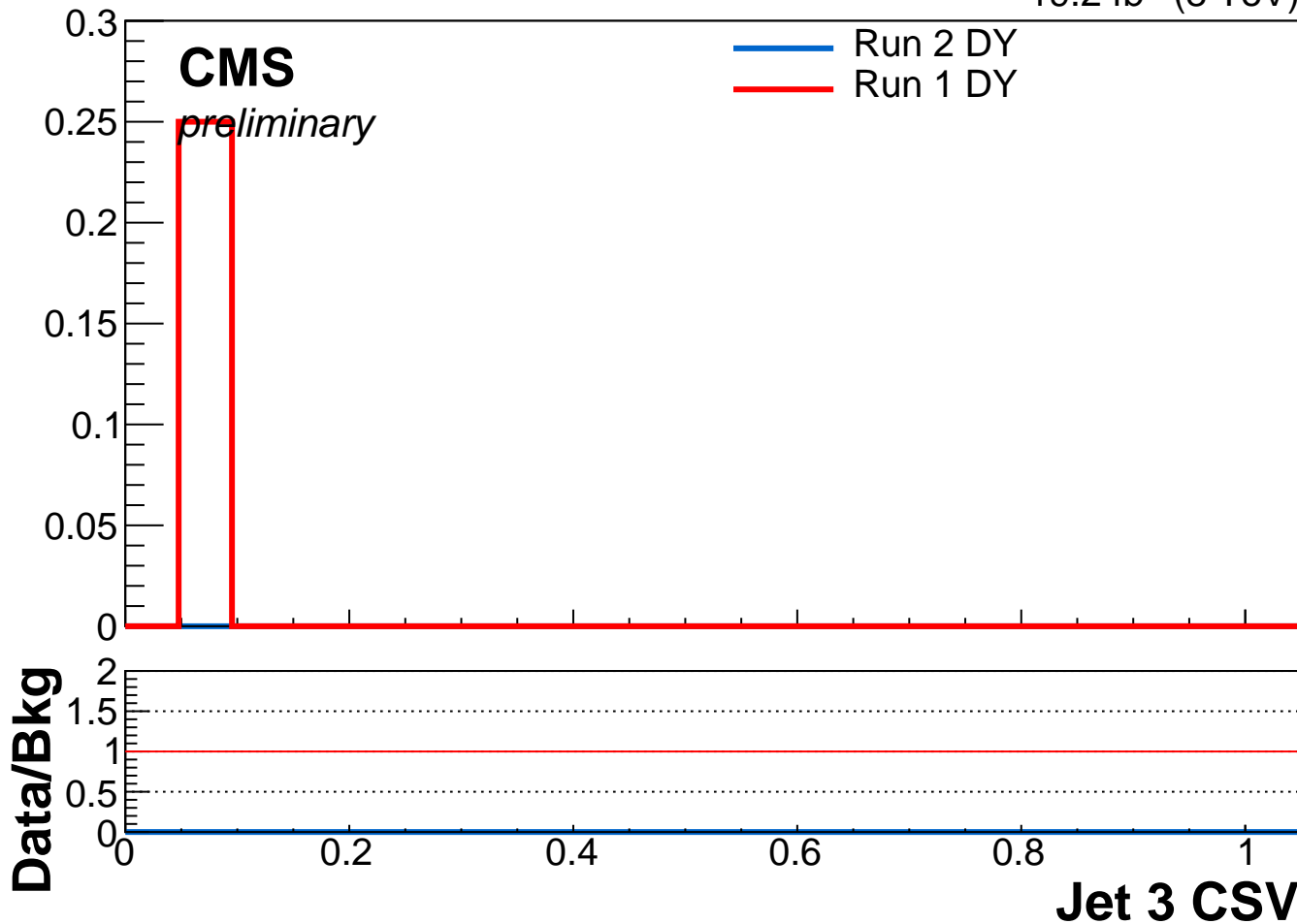


19.2 fb<sup>-1</sup> (8 TeV)

**CMS**

Run 2 DY  
Run 1 DY

*preliminary*



19.2 fb<sup>-1</sup> (8 TeV)

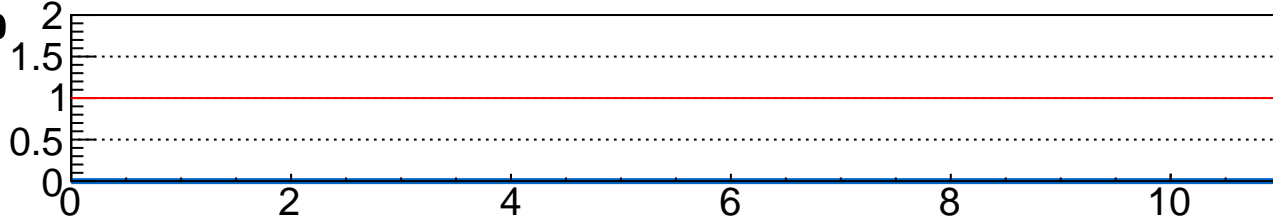
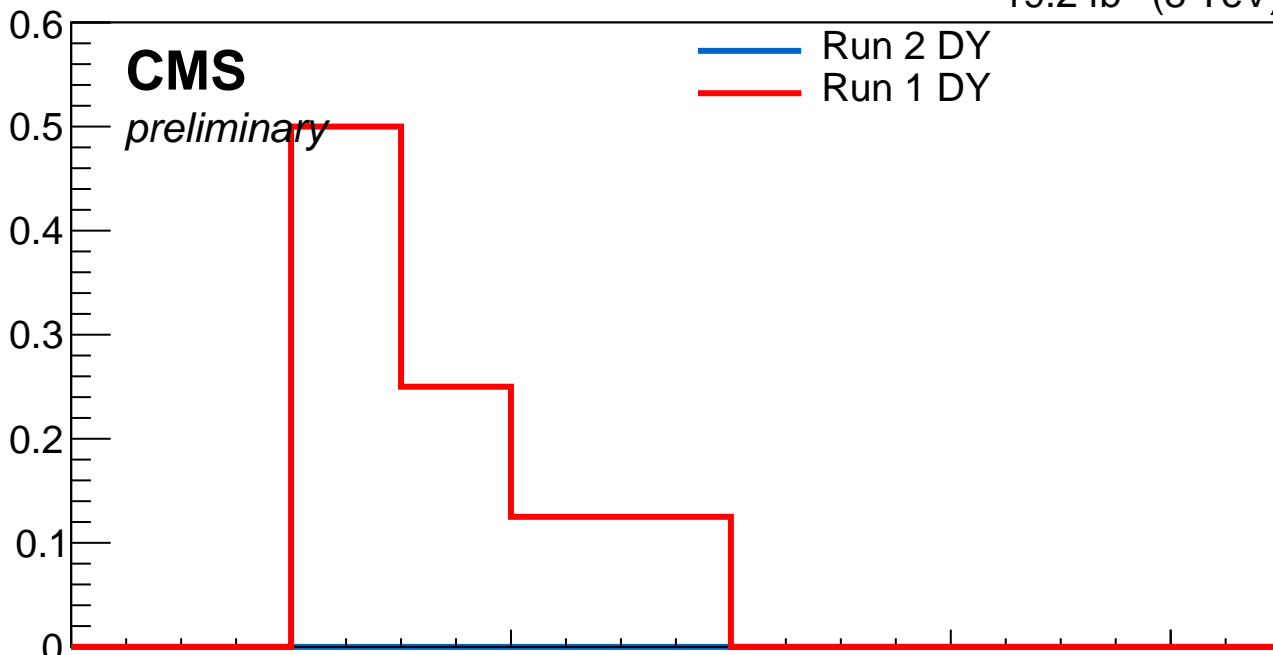
**CMS**

*preliminary*

Run 2 DY  
Run 1 DY

**Data/Bkg**

**N jets pt>30 GeV**



19.2 fb<sup>-1</sup> (8 TeV)

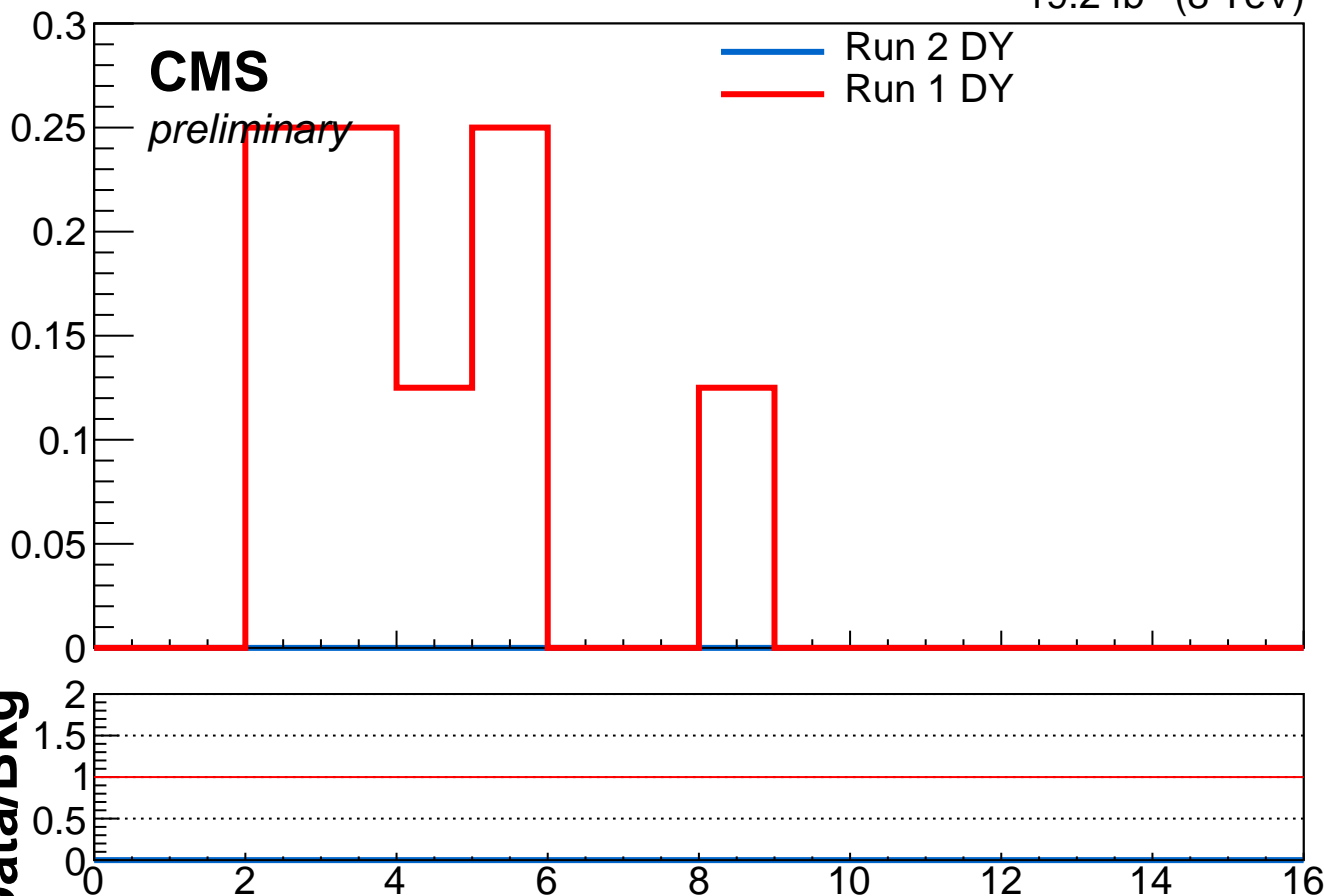
**CMS**

*preliminary*

Run 2 DY  
Run 1 DY

**Data/Bkg**

**N jets pt>15 GeV**



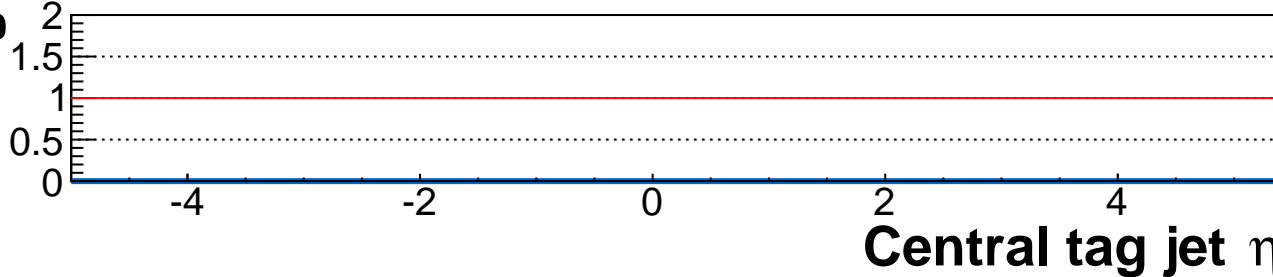
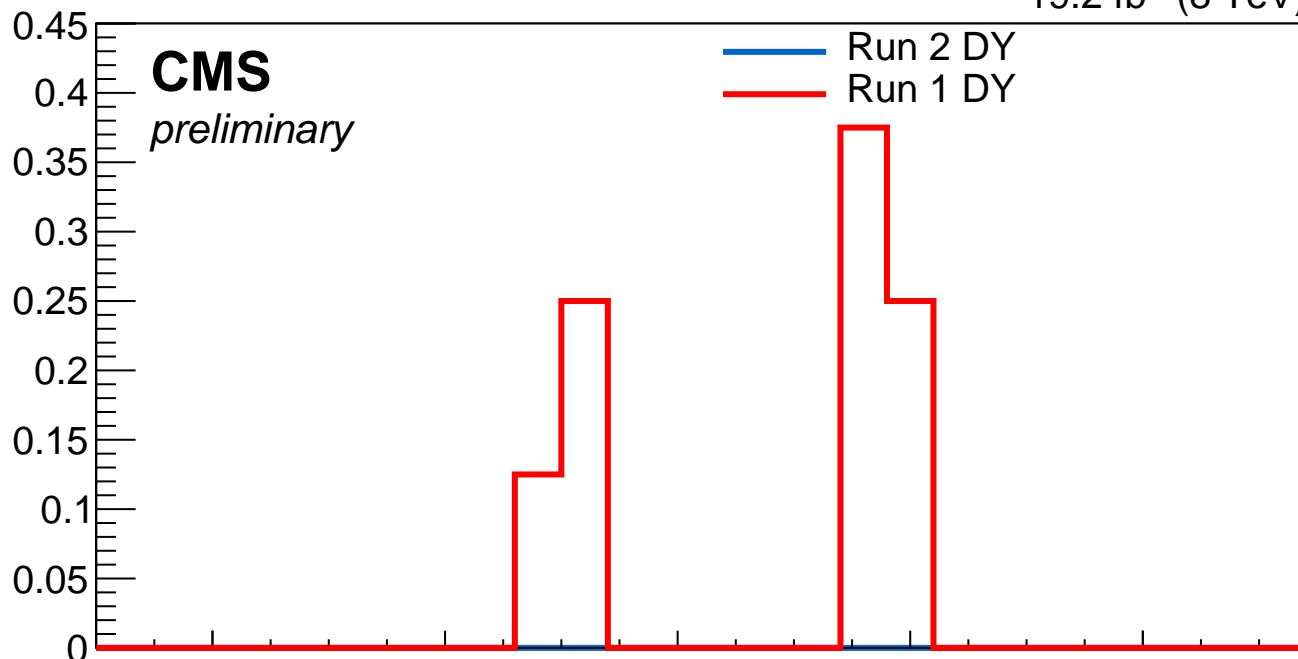


19.2 fb<sup>-1</sup> (8 TeV)

**CMS**  
*preliminary*

— Run 2 DY  
— Run 1 DY

**Data/Bkg**



19.2 fb<sup>-1</sup> (8 TeV)

**CMS**

*preliminary*

Run 2 DY

Run 1 DY

**Data/Bkg**

**Forward tag jet  $\eta$**

