

Events / 0.25

**ATLAS** Internal  
 $\sqrt{s} = 13\text{TeV}, 139\text{ fb}^{-1}$   
FCNC tqH  $H \rightarrow \tau\tau$   
SS CR

SM Higgs

 $Z \rightarrow \tau\tau$  $t\bar{t}$ only  $\tau_{\text{sub}}$  real

data

Diboson

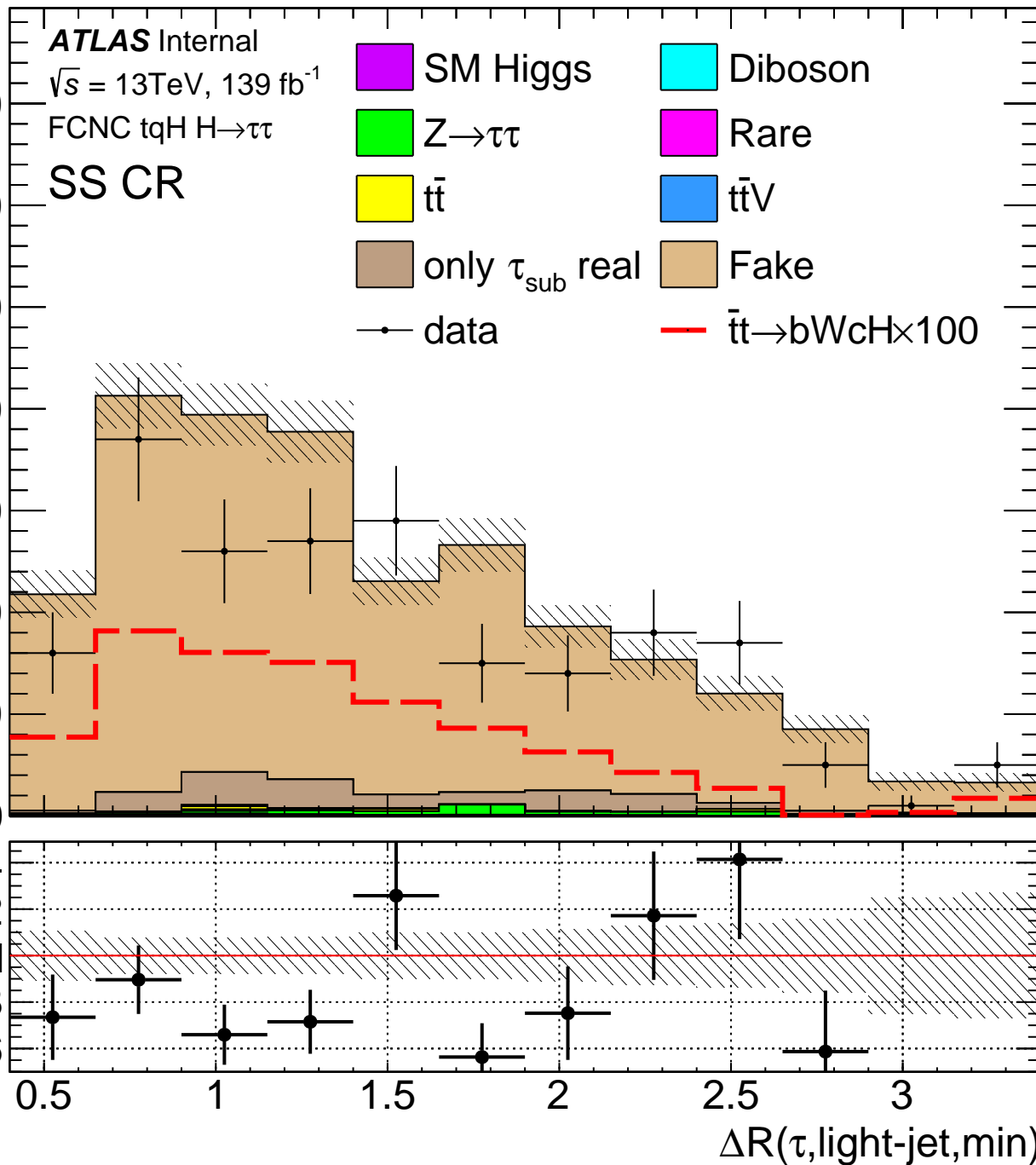
Rare

 $t\bar{t}V$ 

Fake

 $t\bar{t} \rightarrow bWcH \times 100$ 

Data/Bkg

 $\Delta R(\tau, \text{light-jet}, \text{min})$ 

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 $Z \rightarrow \tau\tau$  $t\bar{t}$ only  $\tau_{\text{sub}}$  real

data

Diboson

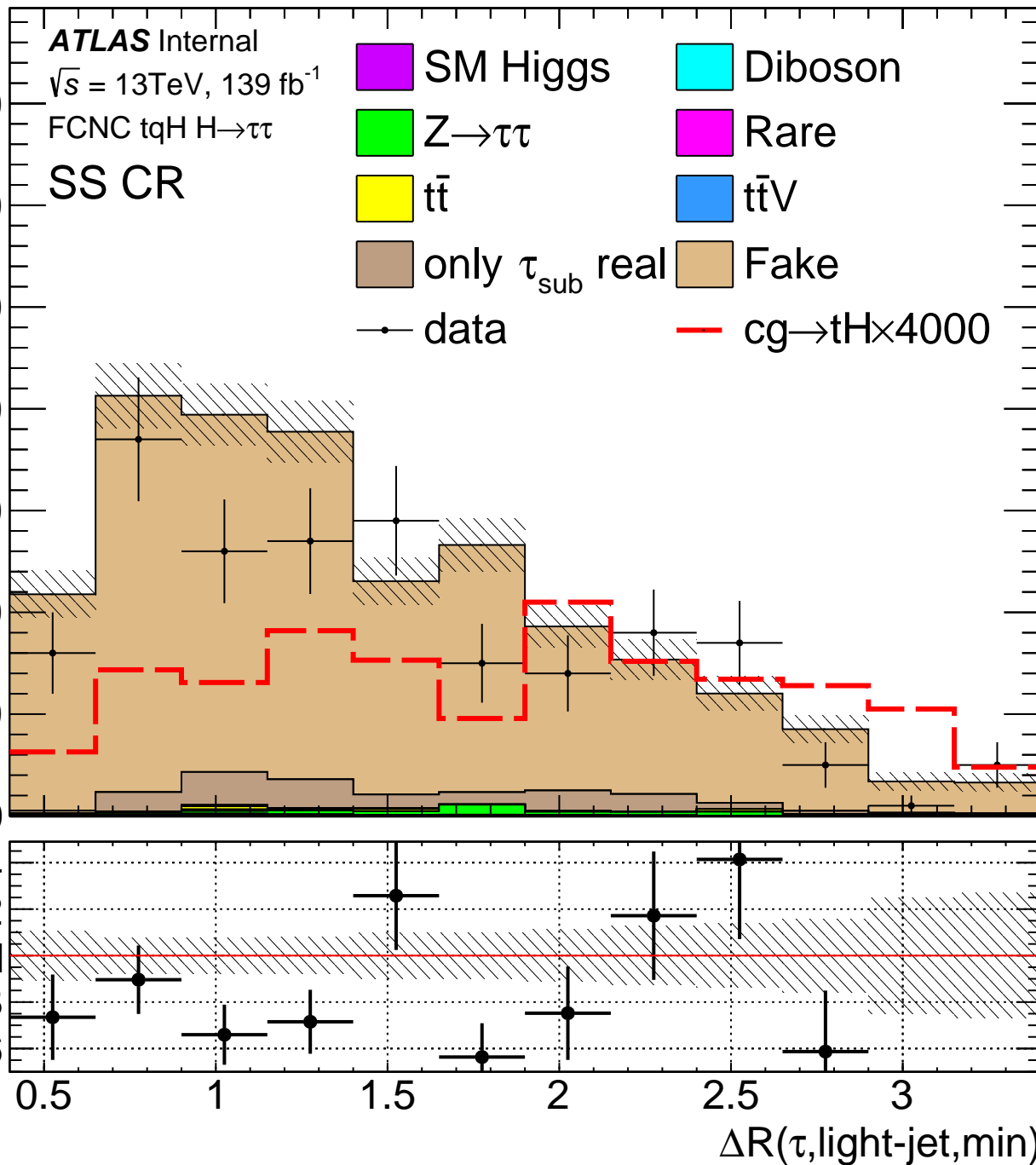
Rare

 $t\bar{t}V$ 

Fake

 $cg \rightarrow tH \times 4000$ 

Data/Bkg

 $\Delta R(\tau, \text{light-jet}, \text{min})$ 

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data

Diboson

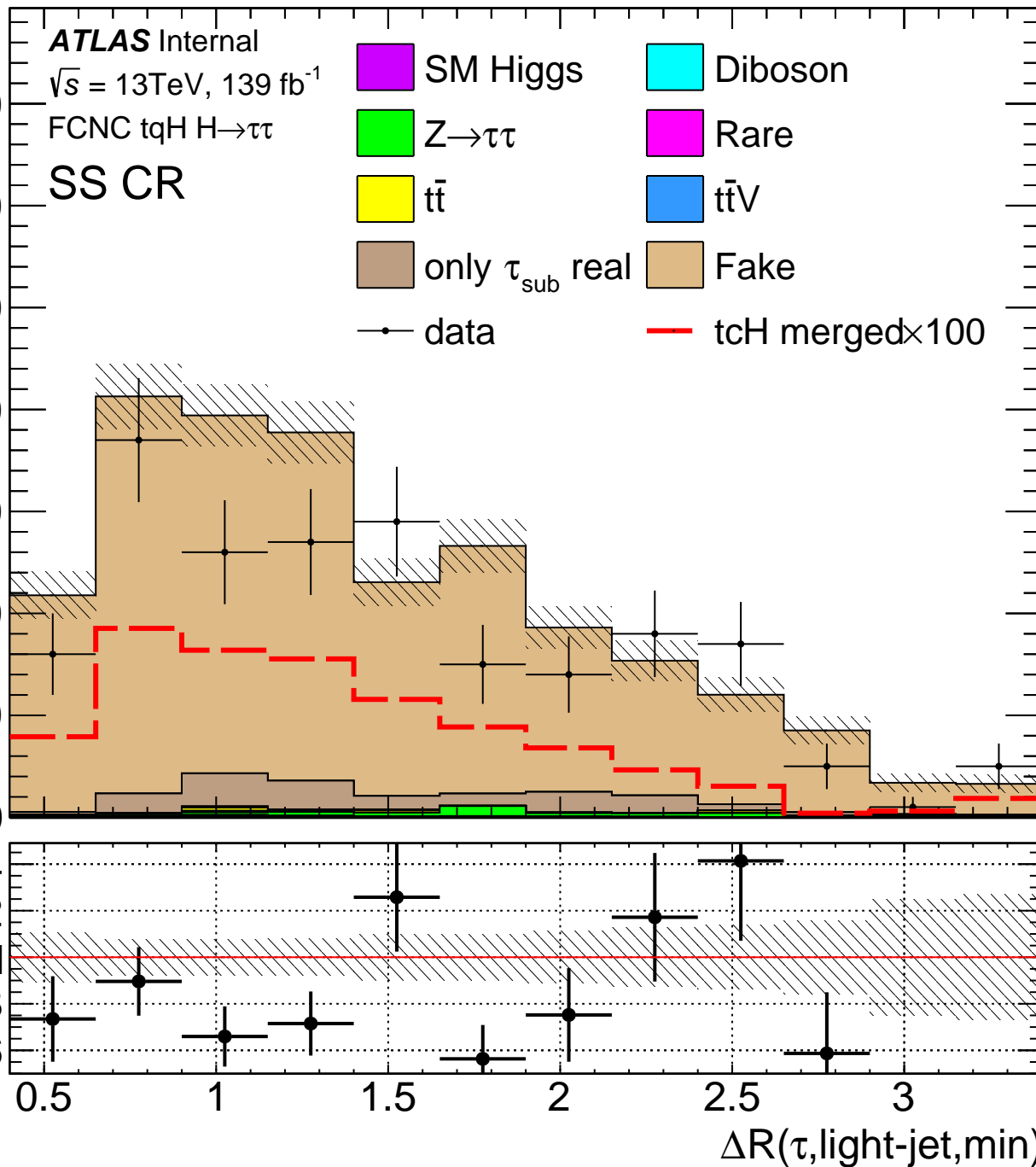
Rare

 $t\bar{t}V$ 

Fake

tcH merged  $\times 100$ 

Data/Bkg

 $\Delta R(\tau, \text{light-jet}, \text{min})$ 

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 $Z \rightarrow \tau\tau$  $t\bar{t}$ only  $\tau_{\text{sub}}$  real

data

Diboson

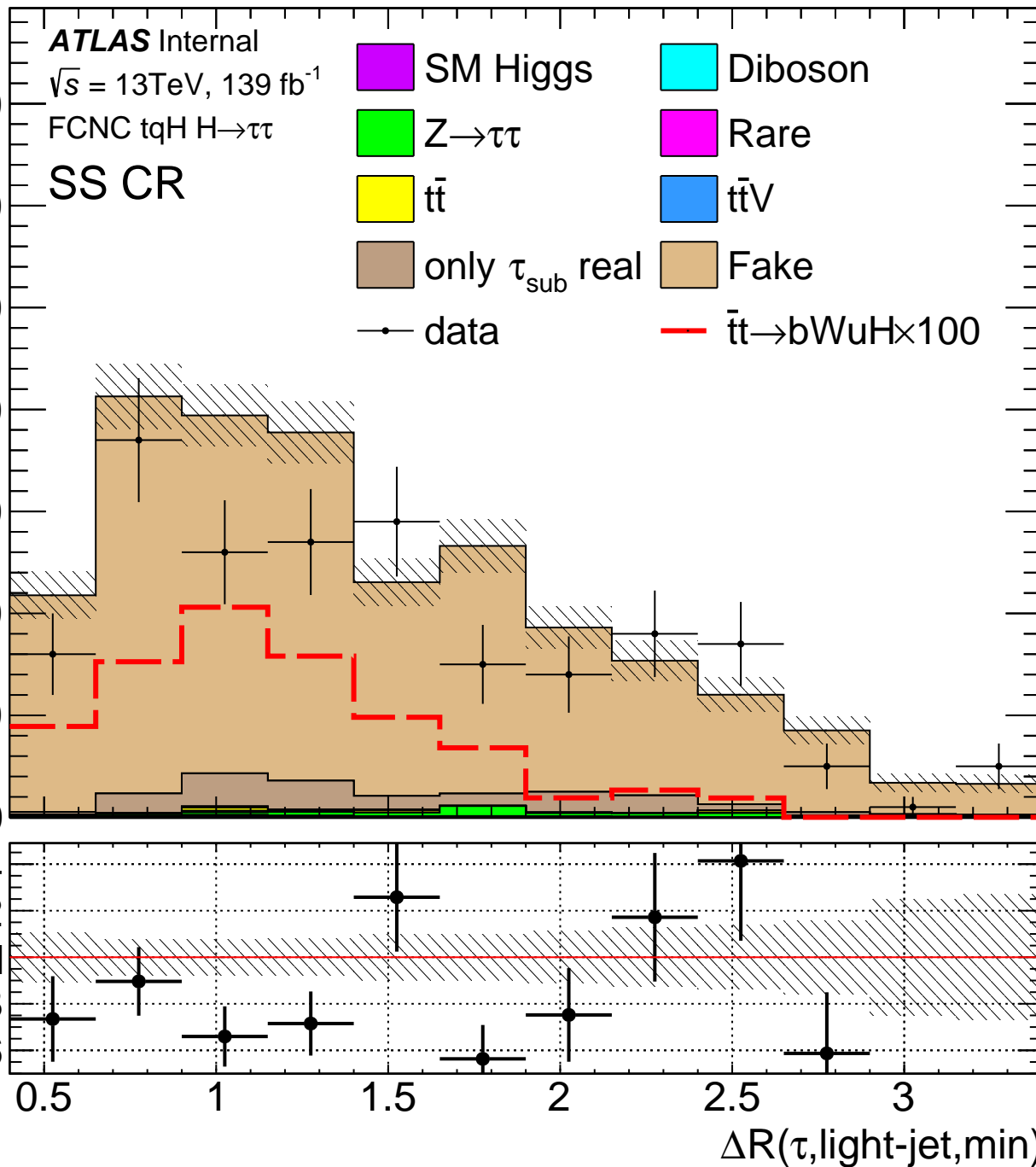
Rare

 $t\bar{t}V$ 

Fake

 $t\bar{t} \rightarrow bWuH \times 100$ 

Data/Bkg

 $\Delta R(\tau, \text{light-jet}, \text{min})$ 

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FCNC tqH  $H \rightarrow \tau\tau$   
SS CR

SM Higgs

 $Z \rightarrow \tau\tau$  $t\bar{t}$ only  $\tau_{\text{sub}}$  real

data

Diboson

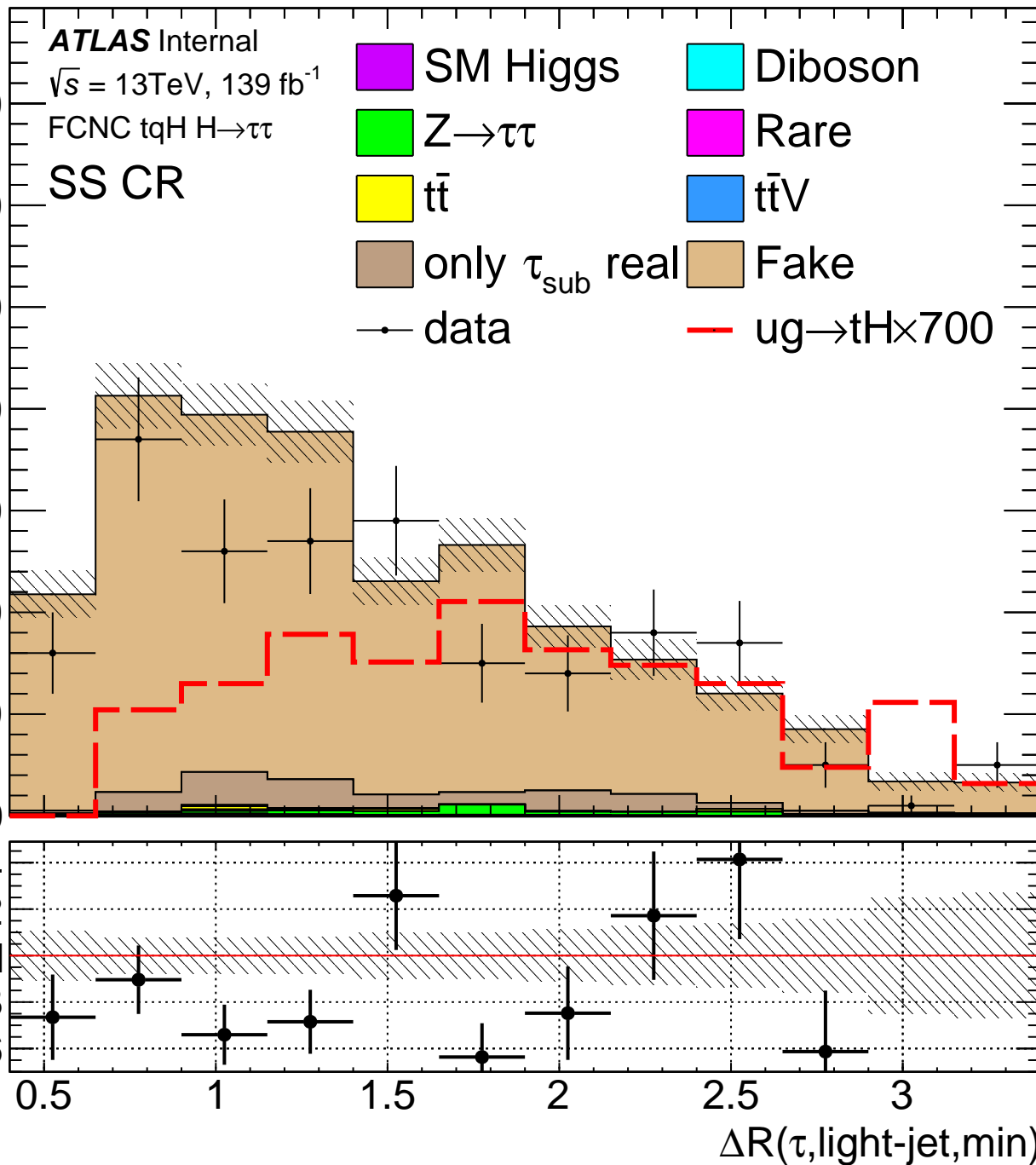
Rare

 $t\bar{t}V$ 

Fake

 $ug \rightarrow tH \times 700$ 

Data/Bkg

 $\Delta R(\tau, \text{light-jet}, \text{min})$ 

Events / 0.25

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FCNC tqH  $H \rightarrow \tau\tau$   
SS CR

SM Higgs

 $Z \rightarrow \tau\tau$  $t\bar{t}$ only  $\tau_{\text{sub}}$  real

data

Diboson

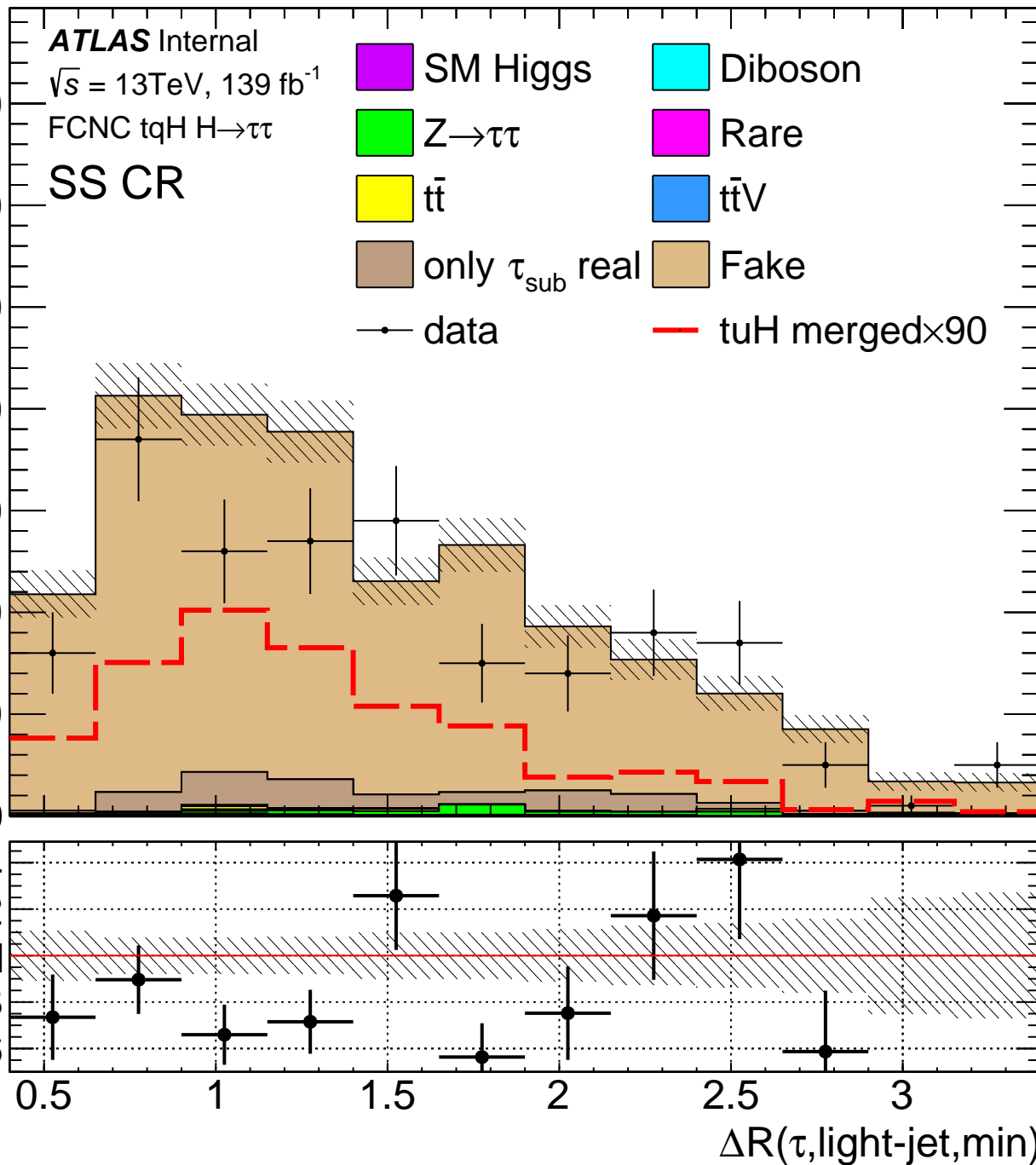
Rare

 $t\bar{t}V$ 

Fake

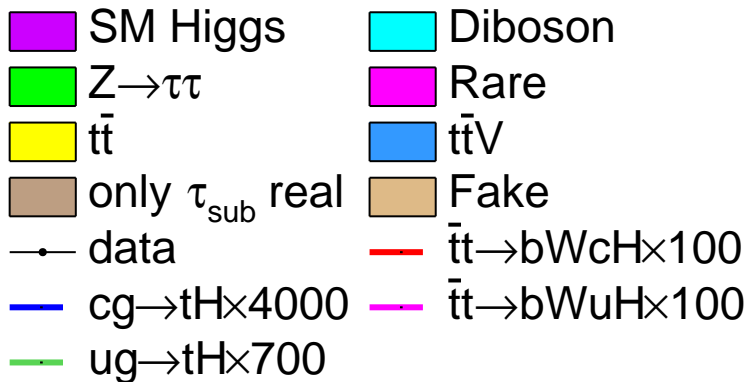
tuH merged $\times 90$ 

Data/Bkg

 $\Delta R(\tau, \text{light-jet}, \text{min})$ 

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FCNC tqH  $H \rightarrow \tau\tau$   
SS CR



Data/Bkg

