

Events / 0.25

**ATLAS** Internal $\sqrt{s} = 13\text{TeV}, 140\text{ fb}^{-1}$ FCNC tqH  $H \rightarrow \tau\tau$ STH  $\tau_{\text{had}}\tau_{\text{had}}$   $S\bar{S}$ 

SM Higgs

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

data

Diboson

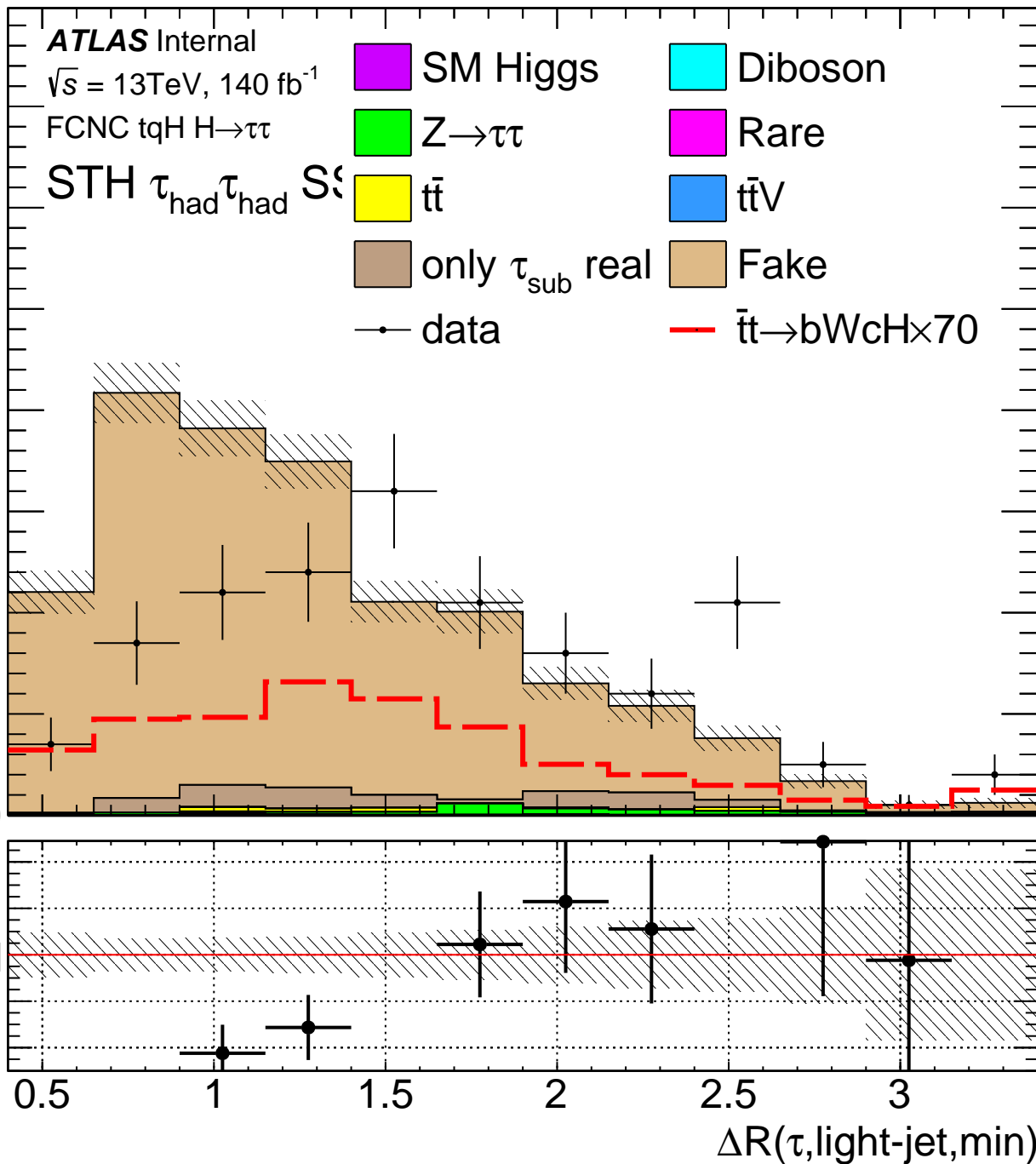
Rare

 $t\bar{t}V$ 

Fake

 $t\bar{t} \rightarrow bWcH \times 70$ 

Data/Bkg

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

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SM Higgs

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

—•— data

Diboson

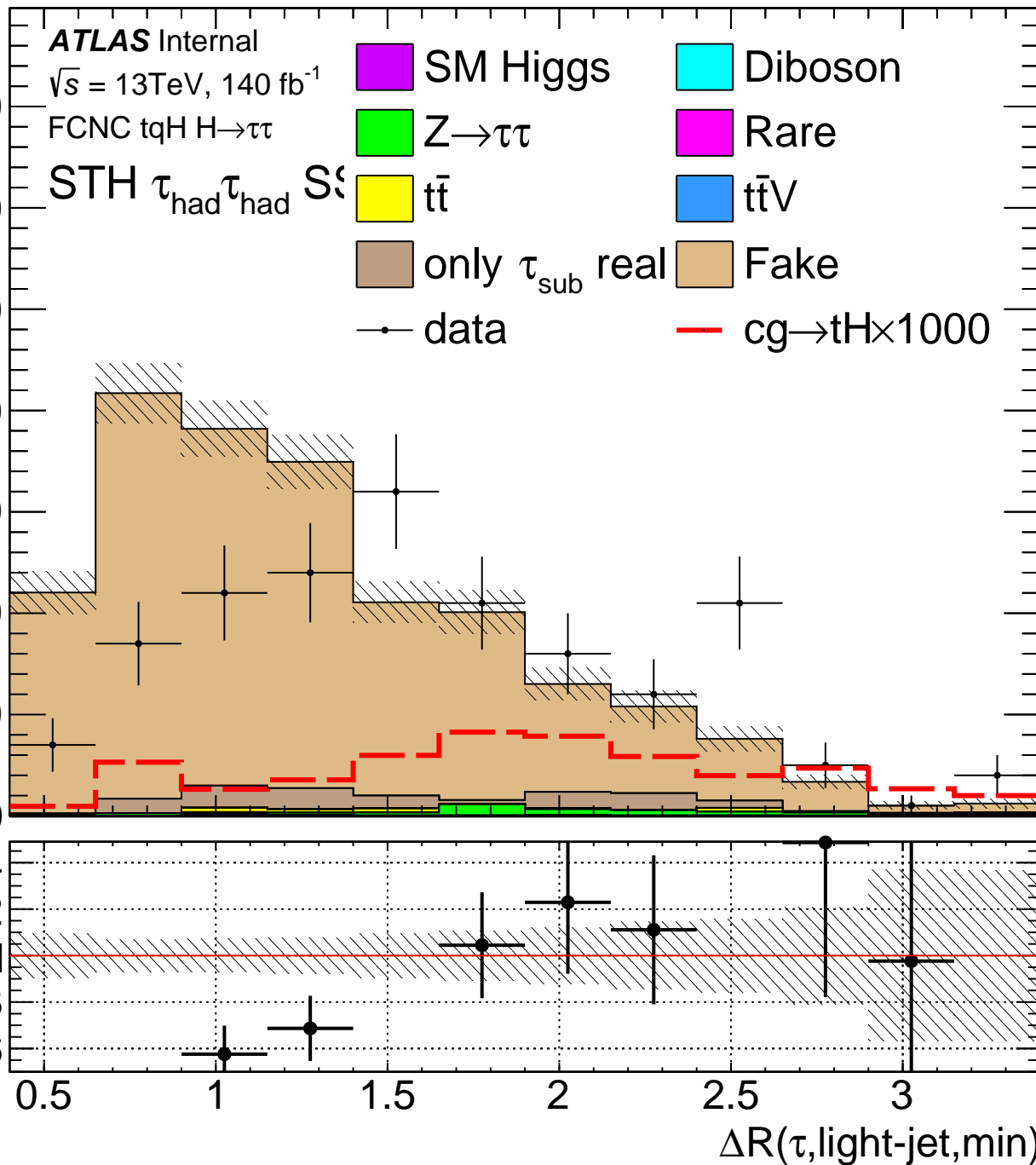
Rare

 $t\bar{t}V$ 

Fake

—  $cg \rightarrow tH \times 1000$ 

Data/Bkg

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

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SM Higgs

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

data

Diboson

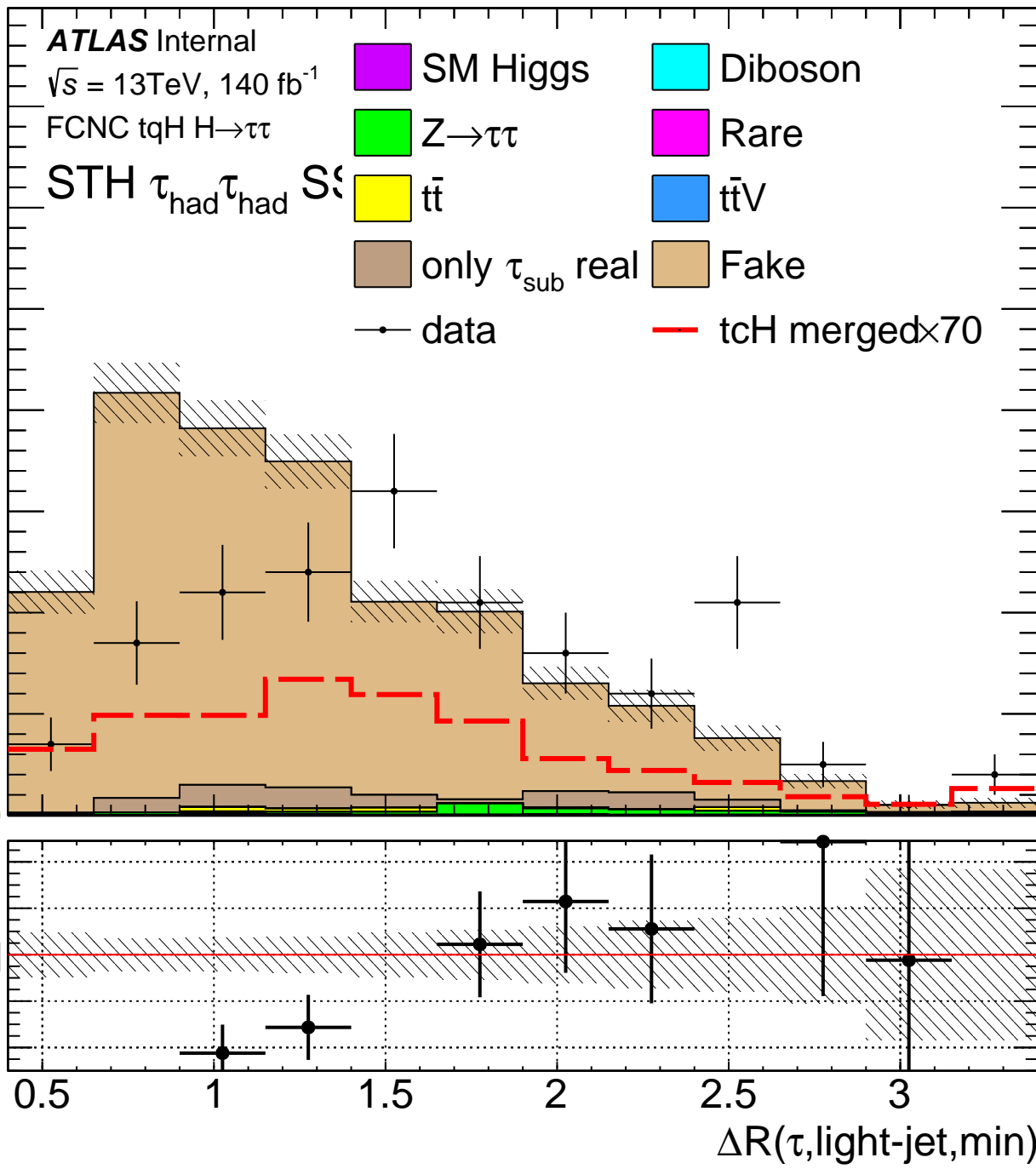
Rare

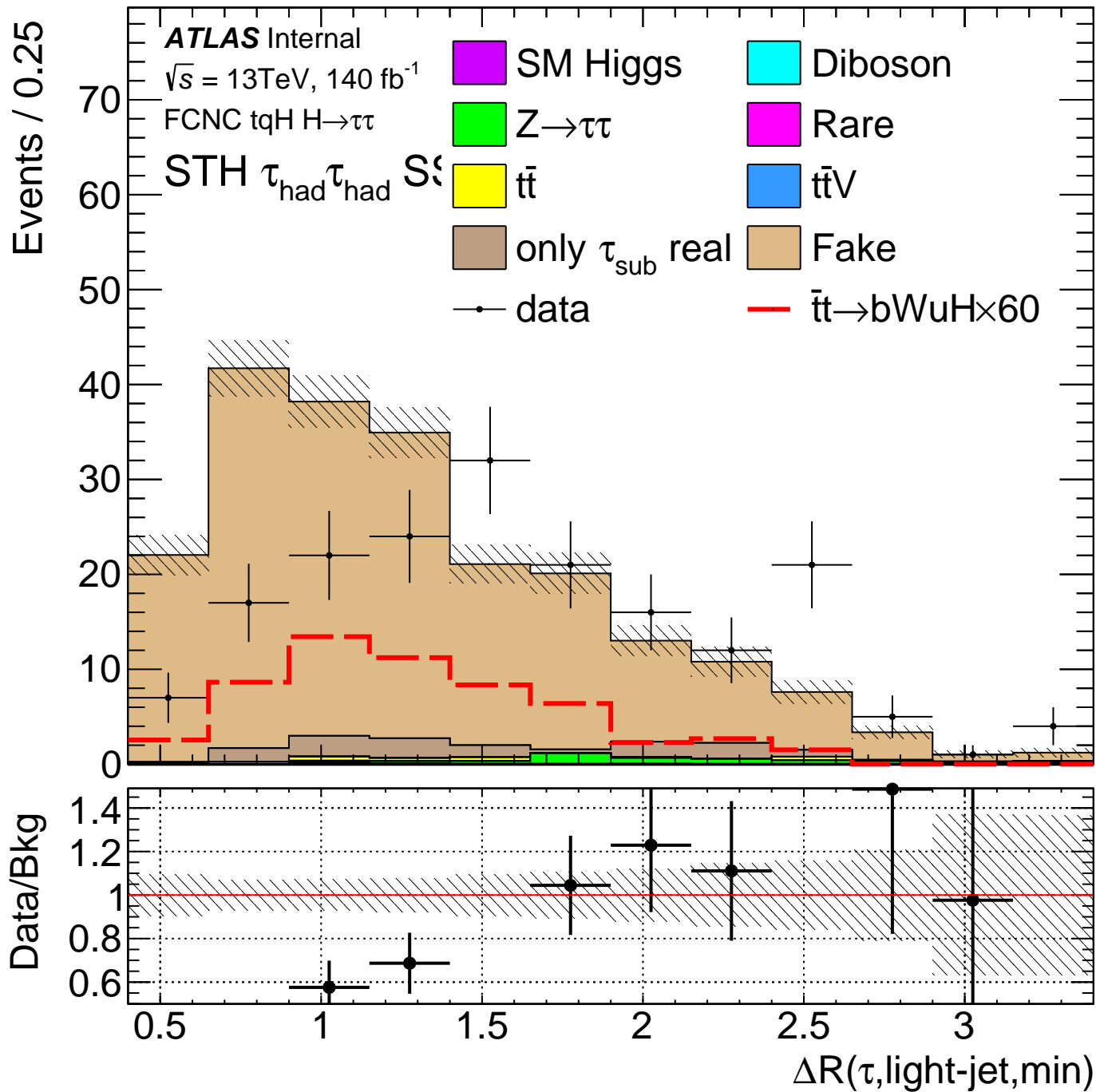
 $t\bar{t}V$ 

Fake

tcH merged $\times 70$ 

Data/Bkg

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



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SM Higgs

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

data

Diboson

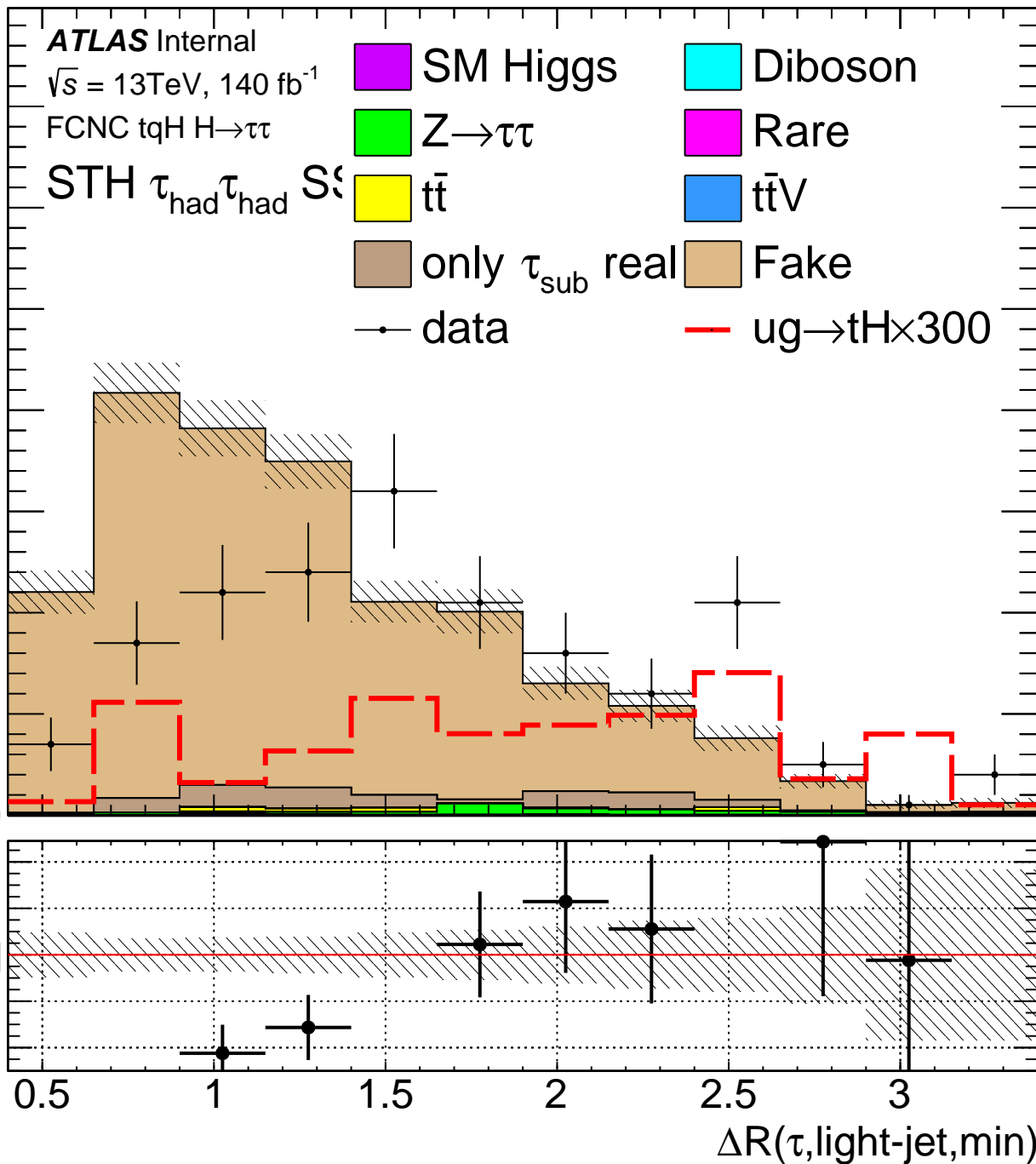
Rare

 $t\bar{t}V$ 

Fake

 $u g \rightarrow t H \times 300$ 

Data/Bkg

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

Events / 0.25

**ATLAS** Internal $\sqrt{s} = 13\text{TeV}, 140\text{ fb}^{-1}$ FCNC tqH  $H \rightarrow \tau\tau$ STH  $\tau_{\text{had}}\tau_{\text{had}}$ 

SS

SM Higgs

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

data

Diboson

Rare

 $t\bar{t}V$ 

Fake

tuH merged $\times 60$ 

Data/Bkg

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