

Events / 0.25

ATLAS Internal

$\sqrt{s} = 13\text{TeV}, 140\text{fb}^{-1}$

FCNC tqH $H \rightarrow \tau\tau$

$t_h \tau_{\text{had}} \tau_{\text{had}} - 2j \text{ SS}($

SM Higgs

$Z \rightarrow \tau\tau$

$t\bar{t}$

only τ_{sub} real

data

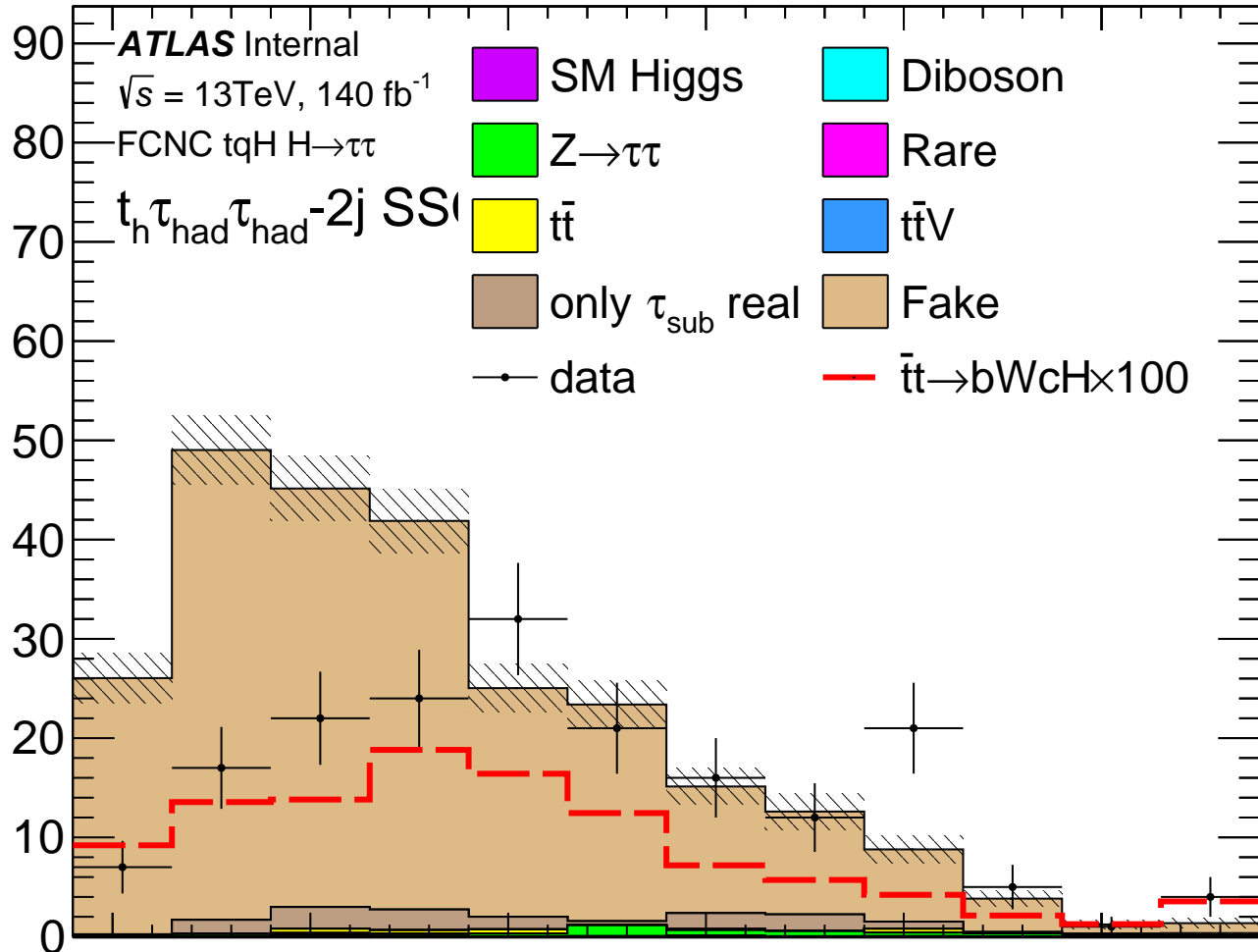
Diboson

Rare

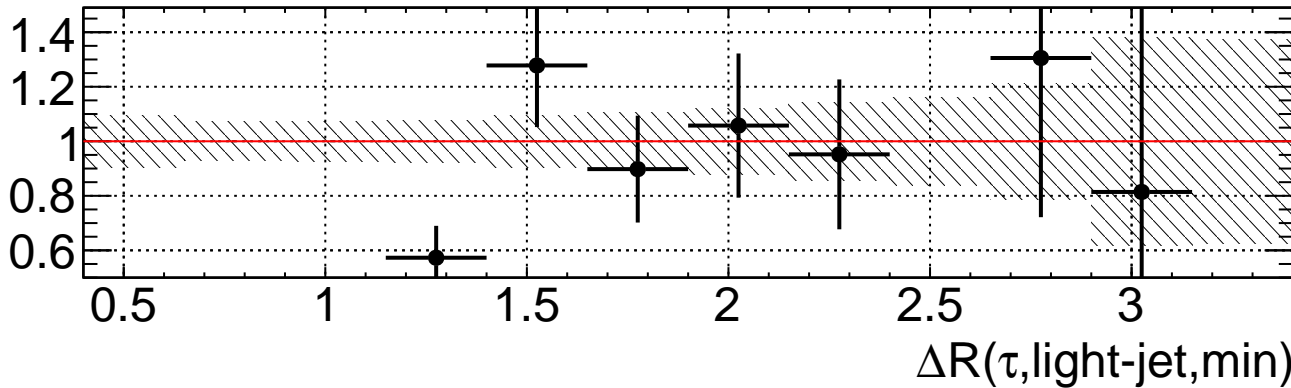
$t\bar{t}V$

Fake

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



Data/Bkg



Events / 0.25

ATLAS Internal $\sqrt{s} = 13\text{TeV}, 140\text{ fb}^{-1}$ FCNC tqH $H \rightarrow \tau\tau$ $t_h \tau_{\text{had}} \tau_{\text{had}} - 2j \text{ SS}($

SM Higgs

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

—•— data

Diboson

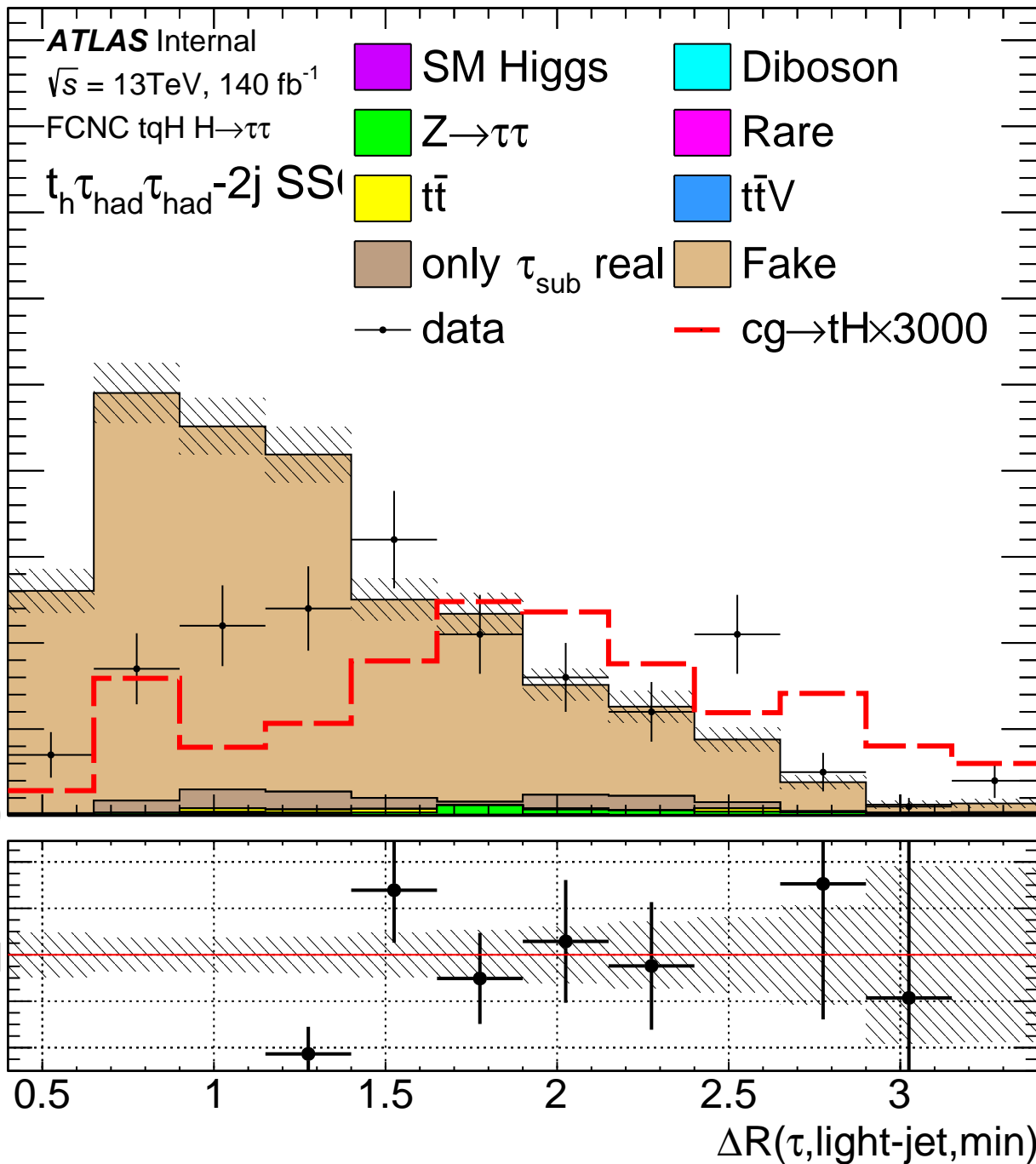
Rare

 $t\bar{t}V$

Fake

— $cg \rightarrow tH \times 3000$

Data/Bkg

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

Events / 0.25

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SM Higgs

$Z \rightarrow \tau\tau$

$t\bar{t}$

only τ_{sub} real

data

Diboson

Rare

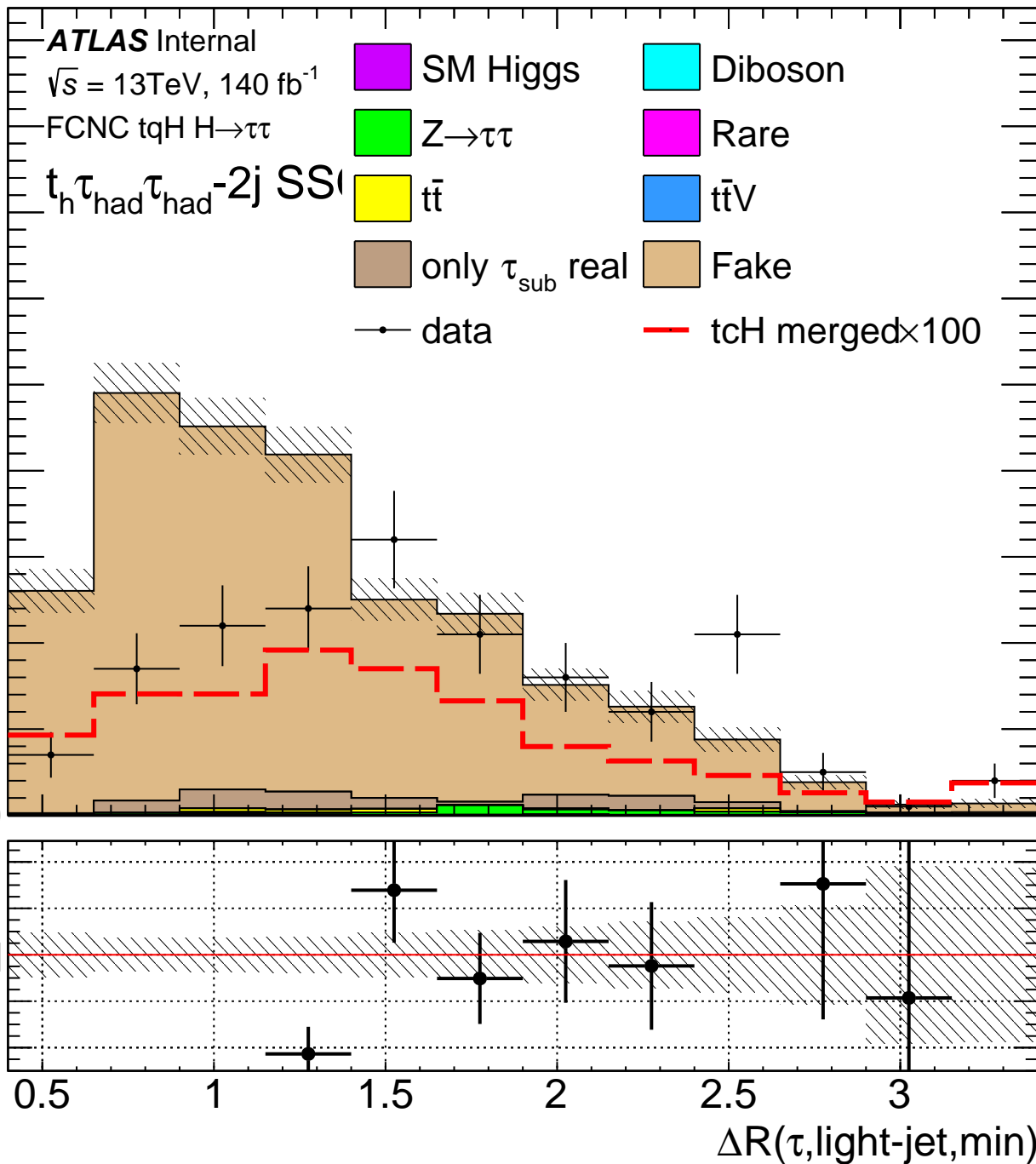
$t\bar{t}V$

Fake

tcH merged $\times 100$

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 $H \rightarrow \tau\tau$ $t_h \tau_{\text{had}} \tau_{\text{had}} - 2j \text{ SS}($

SM Higgs

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

data

Diboson

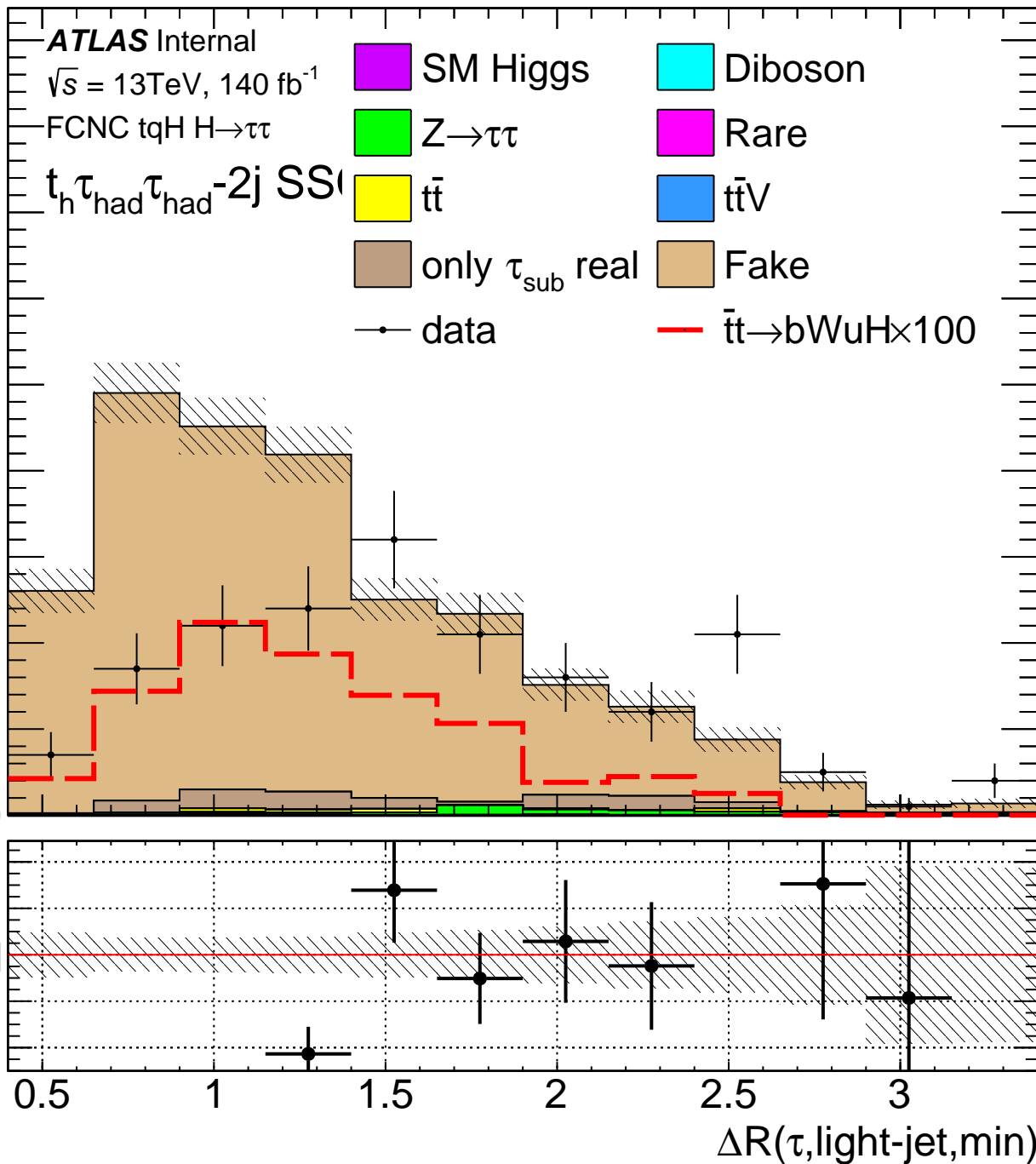
Rare

 $t\bar{t}V$

Fake

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

Data/Bkg

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

Events / 0.25

ATLAS Internal $\sqrt{s} = 13\text{TeV}, 140\text{ fb}^{-1}$ FCNC tqH $H \rightarrow \tau\tau$ $t_h \tau_{\text{had}} \tau_{\text{had}} - 2j \text{ SS}($

SM Higgs

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

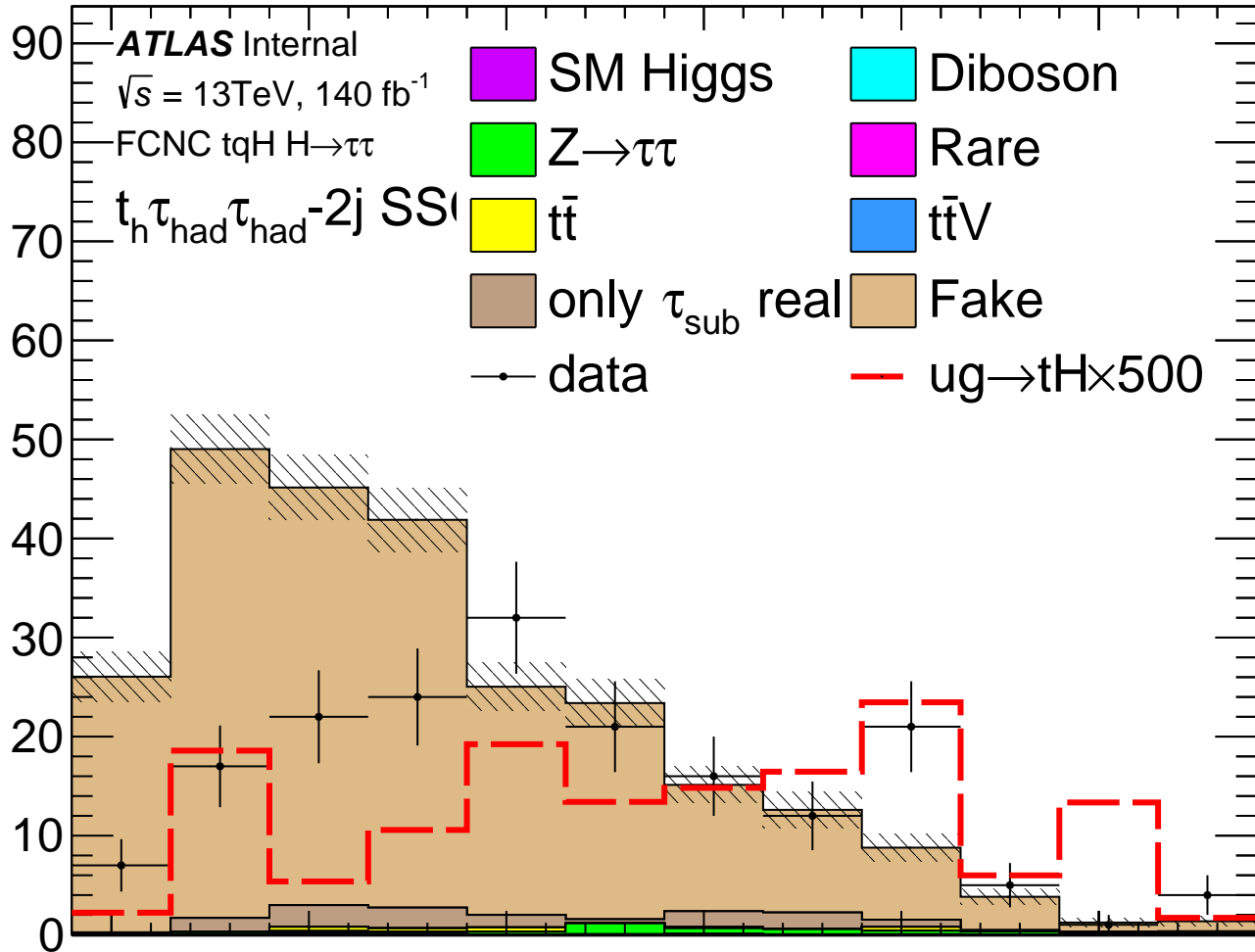
data

Diboson

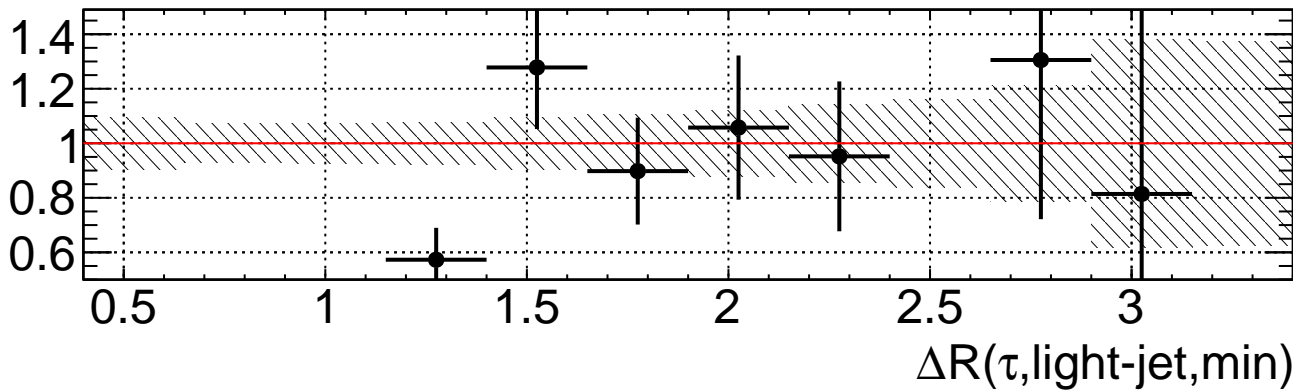
Rare

 $t\bar{t}V$

Fake

 $ug \rightarrow tH \times 500$ 

Data/Bkg



Events / 0.25

Data/Bkg

ATLAS Internal

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FCNC tqH $H \rightarrow \tau\tau$

$t_h \tau_{\text{had}} \tau_{\text{had}} - 2j \text{ SS}($

SM Higgs

$Z \rightarrow \tau\tau$

$t\bar{t}$

only τ_{sub} real

data

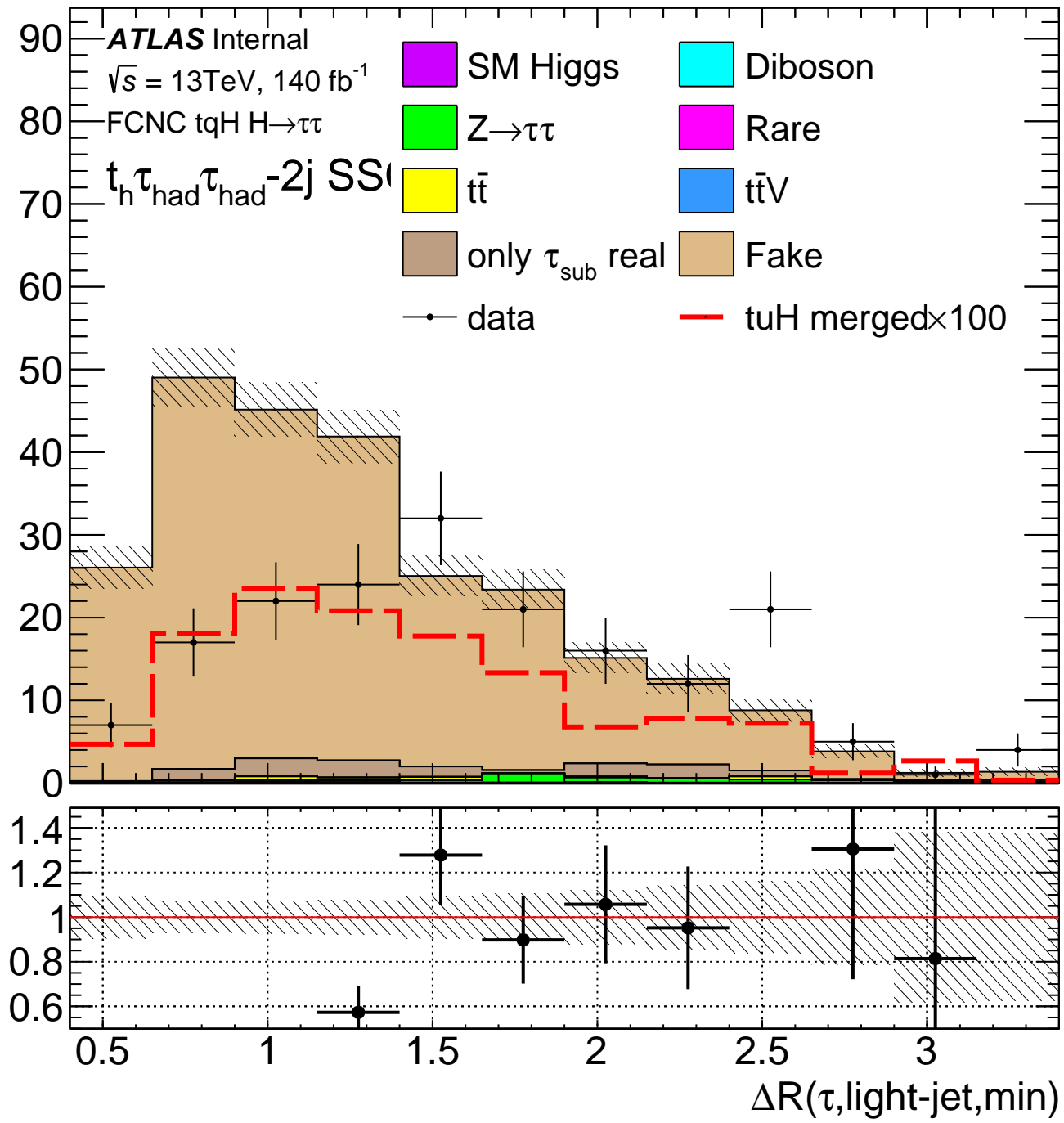
Diboson

Rare

$t\bar{t}V$

Fake

tuH merged $\times 100$



Events / 0.25

ATLAS Internal $\sqrt{s} = 13\text{TeV}, 140\text{ fb}^{-1}$ FCNC tqH $H \rightarrow \tau\tau$ $t_h \tau_{\text{had}} \tau_{\text{had}} - 2j \text{ SS}($

SM Higgs

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

data

 $cg \rightarrow tH \times 3000$ $ug \rightarrow tH \times 500$

Diboson

Rare

 $t\bar{t}V$

Fake

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

Data/Bkg

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