

**ATLAS** Simulation Internal $\sqrt{s} = 13 \text{ TeV}, 126 \text{ fb}^{-1}$ 

3b + 1 loose ggF Signal Region

HC Truth b-flavour fraction SR1/CR1

- $N_{\text{HCb-flavour}}^{\text{truth}} = 4$
- $N_{\text{HCb-flavour}}^{\text{truth}} = 3$
- $N_{\text{HCb-flavour}}^{\text{truth}} = 2$
- $N_{\text{HCb-flavour}}^{\text{truth}} \leq 1$

0.0

0.5

1.0

1.5

2.0

2.5

400

600

800

1000

1200

 $m_{\text{HH}} [\text{GeV}]$ 