

$$\begin{aligned} &\geq 3 \text{ AK8 jets} \\ p_{\text{T}} &> 200 \text{ GeV (all jets)} \\ |\eta| &< 2.4 \text{ (all jets)} \\ m_{\text{reg}} &> 50 \text{ GeV (all jets)} \end{aligned}$$

Jet assignment

$\text{H} \rightarrow \text{b}\bar{\text{b}}$: highest T_{Xbb} score

$\text{V} \rightarrow \text{q}\bar{\text{q}}$: out of the remaining jets, the two highest p_{T}

$\text{V} \rightarrow \text{q}\bar{\text{q}}$ jet selection

$$\begin{aligned} 70 &< m_{\text{reg}} < 100 \text{ GeV (both jets)} \\ T_{\text{Wqq}} &> \text{LP WP (both jets)} \end{aligned}$$

$\text{H} \rightarrow \text{b}\bar{\text{b}}$ jet selection

$$100 < m_{\text{reg}}^{\text{bb}} < 150 \text{ GeV}$$

$$75 < m_{\text{reg}}^{\text{bb}} < 100 \text{ GeV or } 150 < m_{\text{reg}}^{\text{bb}} < 175 \text{ GeV}$$

Pass

Fail

Pass

Fail

$$T_{\text{Xbb}}^{\text{bb}} > \text{HP WP}$$

$$T_{\text{Xbb}}^{\text{bb}} < \text{HP WP}$$

$$T_{\text{Xbb}}^{\text{bb}} > \text{HP WP}$$

$$T_{\text{Xbb}} < \text{HP WP}$$