

Final state	Category	Selection	Observables
$\ell\tau_h, e\mu$	0-jet	0 jet	$m_{\tau\tau}, p_T^{\tau_h} (\ell\tau_h)$ $m_{\tau\tau} (e\mu)$
	VBF low p_T^H	≥ 2 jets, $m_{jj} > 350 \text{ GeV}$, $\hat{p}_T^H < 200 \text{ GeV}$	$m_{\tau\tau}, m_{jj}$
	VBF high p_T^H	≥ 2 jets, $m_{jj} > 350 \text{ GeV}$, $\hat{p}_T^H > 200 \text{ GeV}$	$m_{\tau\tau}, m_{jj}$
	Boosted 1 jet	1 jet	$m_{\tau\tau}, \hat{p}_T^H$
$\tau_h\tau_h$	Boosted ≥ 2 jets	Not in VBF, ≥ 2 jets	$m_{\tau\tau}, \hat{p}_T^H$
	0-jet	0 jet	$m_{\tau\tau}$
	VBF low p_T^H	≥ 2 jets, $\Delta\eta_{jj} > 2.5$ (2.0 for 2016), $100 < \hat{p}_T^H < 200 \text{ GeV}$	$m_{\tau\tau}, m_{jj}$
	VBF high p_T^H	≥ 2 jets, $\Delta\eta_{jj} > 2.5$ (2.0 for 2016), $\hat{p}_T^H > 200 \text{ GeV}$	$m_{\tau\tau}, m_{jj}$
	Boosted 1 jet	1 jet	$m_{\tau\tau}, \hat{p}_T^H$
	Boosted ≥ 2 jets	Not in VBF, ≥ 2 jets	$m_{\tau\tau}, \hat{p}_T^H$