

Input variable	SM DNN	dim-6 DNN	dim-8 DNN
$\tau_h p_T$	✓	✓	✓
$\ell p_T$	✓	✓	✓
$\tau_h \eta$		✓	
$\ell \eta$		✓	
leading VBS jet $p_T$	✓	✓	✓
subleading VBS jet $p_T$	✓	✓	✓
leading VBS jet mass		✓	✓
subleading VBS jet mass		✓	✓
VBS jet pair $\Delta\phi$		✓	
$m_{jj}$	✓	✓	
$m_{1T}$	✓	✓	✓
$m_{o1}$	✓	✓	✓
$m_T(\tau_h, \vec{p}_T^{\text{miss}})$			✓
$m_T(\ell, \vec{p}_T^{\text{miss}})$	✓	✓	✓
$m_T(\ell + \tau_h, \vec{p}_T^{\text{miss}})$			✓
$p_T^{\text{rel}}(\ell, j_1)$		✓	
$p_T^{\text{rel}}(\ell, j_2)$		✓	
$p_T^{\text{rel}}(\tau_h, j_1)$		✓	
$p_T^{\text{rel}}(\tau_h, j_2)$		✓	
$\Delta\phi(\ell, j_1)$		✓	
$\Delta\phi(\ell, j_2)$		✓	
$\Delta\phi(\tau_h, j_1)$		✓	
$\Delta\phi(\tau_h, j_2)$		✓	
$p_{T,\text{leading } \tau_h \text{ track}} / p_{T,\tau_h}$	✓	✓	
$z_{\text{event}}$		✓	