Input variable	$BDT_{Cat.}$ MET/1L	FH	BDT_{SvB} MET (S)	1L (S)	MET/1L (L)	Input variable	$BDT_{Cat.}$ 2L	BDT_{SvB} 2L
$p_T(V)$, $p_T(H_1)$	✓	✓	✓	✓	✓	$p_T(V)$, $p_T(H_1)$	✓	✓
$p_T(H_2)$, $p_T(HH)$	✓		✓	✓	✓	m_{HH}	✓	✓
m_{H_1}, m_{H_2}	✓		✓	✓	✓	$\Delta R(H_1, H_2)$	✓	✓
m_{HH}	✓	✓	✓	✓	✓	$\Delta\phi(V, H_2)$	✓	✓
$\Delta R(H_1, H_2)$	✓	✓				$p_T(H_2)/p_T(H_1)$	✓	
$\Delta\phi(V, H_2)$	✓	✓	✓	✓	✓	$p_T(HH)$		✓
$p_T(H_2)/p_T(H_1)$	✓	✓				m_{H_1}, m_V		✓
$\Delta\eta(H_1, H_2)$	✓	✓	✓			$\Delta\eta(H_1, H_2)$		✓
$\Delta\phi(H_1, H_2)$	✓	✓	✓	✓	✓	Energy of H_1		✓
Energy of H_1	✓	✓				Energy of HH		✓
Energy of H_2	✓	✓				$p_T(\ell_2)/p_T(\ell_1)$	✓	✓
Energy of HH	✓	✓				$\Delta\phi(\ell_1, \ell_2)$	✓	✓
η_{HH}	✓	✓				$\Delta\eta(\ell_1, \ell_2)$	✓	✓
η_{H_1}		✓	✓			$\Delta R(j_{1,H_2}, j_{2,H_2})$	✓	
$\phi(V)$			✓	✓	✓	$\Delta R(j_{1,H_1}, j_{2,H_1})$	✓	
$s_{b\text{-tag}}(j_{1,2,3,4})$			✓	✓		$p_T(\ell_1)/m_V$	✓	
H_T^{ex}			✓			$p_T(\ell_1)$	✓	
N_{jets}			✓			$p_T(j_{3,4})$		✓
$\tau_2/\tau_1(H_1, H_2)$					✓	H_T^{VHH}		✓
$\tau_3/\tau_2(H_1, H_2)$					✓	$p_T(V)/p_T(HH)$		✓
						$\Delta\phi(V, HH)$		✓
						$p_T(\ell_1)/m_V$		✓