

Events with $W \rightarrow \mu$ (from truth)

Nominal isolation

MUID Tight, MCP Cuts

$|\eta| < 2.5, p_T > 20 \text{ GeV}$

Truth-matching to W muon

Match muon to jet

p_T^{cone30} and E_T^{cone20}

Mini-isolation

MUID Tight, MCP Cuts

$|\eta| < 2.5, p_T > 20 \text{ GeV}$

Truth-matching to W muon

Match muon to jet

$MI10/p_T < 5\%$

χ_{DoF}^2 tagging

STACO CB, MCP Cuts

$|\eta| < 2.5, p_T > 20 \text{ GeV}$

Truth-matching to W muon

Match muon to jet

$z_0 < 3 \text{ mm}$

$d_0 < 3 \text{ mm}$

$\chi_{\text{DoF}}^2 < 3.2$