

Selection	Additional information	Requirement	
		2017	2018
Signal muon candidates	All 4 signal muons	4 PF loose muons	≥ 3 PF loose muons and ≤ 1 SA muon
p_T ($ \eta $)	All 4 signal muons	$p_T > 8 \text{ GeV}$ ($ \eta < 2.4$)	$p_T > 8 \text{ GeV}$ ($ \eta < 2.4$)
	2 signal muons	$p_T > 13 \text{ GeV}$ ($ \eta < 2.0$)	$p_T > 24 \text{ GeV}$ ($ \eta < 2.0$)
Invariant mass	Each dimuon	$m_{\mu\mu_{1,2}} < 60 \text{ GeV}$	$m_{\mu\mu_{1,2}} < 60 \text{ GeV}$
Fitted dimuon vertex probability	Each dimuon	$P_{\mu\mu_{1,2}} > 0.15$	$P_{\mu\mu_{1,2}} > P(L_{xy}, \Delta R, N_{SA})$
Dimuon isolation	Each dimuon	$\text{Iso}_{\mu\mu_{1,2}} < 2.3 \text{ GeV}$ ($\Delta R < 0.4$)	$\text{Iso}_{\mu\mu_{1,2}} < 2.3 \text{ GeV}$ ($\Delta R < 0.4$)
Fiducial volume	Each dimuon	—	$L_{xy} < 16.0 \text{ cm}$ $L_z < 51.6 \text{ cm}$