

Category	2017-2018 ¹	2018-2019 ¹	2019-2020 ¹	Category	2017-2018 ¹	2018-2019 ¹	Category	2017-2018 ¹	2018-2019 ¹
Trigger	Single and double lepton	Single, double and triple lepton	Single, double and triple lepton	Trigger	Single, double and triple lepton	Single and double lepton	Trigger	Single lepton, lepton ν_μ and double ν_μ	Double ν_μ
Lepton p_T	>20 / >10 GeV	>20 / >10 / >10 GeV	>20 / >10 / >10 / >10 GeV	Lepton p_T	>20 / >10 / >10 GeV	>20 / >10 GeV	Lepton p_T	$p_T > 20$	---
Lepton charge sum	$\neq 0$, with charge quality requirements applied	$\neq 0$	$\neq 0$	Lepton p_T	>20 / >10 / >10 GeV	>20 / >10 GeV	Lepton p_T	>20 GeV (jet) or >10 GeV (jet)	---
dilepton invariant mass	$(m_{\ell_1} - m_{\ell_2}) > 10$ GeV ²	$(m_{\ell_1} - m_{\ell_2}) > 10$ GeV ²	$(m_{\ell_1} - m_{\ell_2}) > 10$ GeV ²	$\nu_\mu p_T$	>10 GeV	>10 GeV	$\nu_\mu p_T$	>20 / >10 / >10 GeV	>10 / >10 / >10 / >10 GeV
jets	≥ 2 small-radius (jet) or ≥ 1 large-radius (jet)	≥ 1 small-radius (jet) or ≥ 1 large-radius (jet)	---	Lepton and ν_μ charge	\neq and ν_μ charge sum to 0	\neq and ν_μ charge sum to 0	Lepton and ν_μ charge	\neq and ν_μ charge sum to 0	ν_μ charge sum to 0
Missing p_T	$p_T^{\text{miss}} > 10$ GeV ²	$p_T^{\text{miss}} > 10$ GeV ²	---	dilepton invariant mass	$(m_{\ell_1} - m_{\ell_2}) > 10$ GeV ²	$(m_{\ell_1} - m_{\ell_2}) > 10$ GeV ²	dilepton invariant mass	$(m_{\ell_1} - m_{\ell_2}) > 10$ GeV ²	---

¹ Applied to all SFCHS $\tau\tau$ pairs and electron pairs with the same charge. ² Applied to all SFCHS $\tau\tau$ pairs. ³ Only applied to events containing two electrons. ⁴ Tightened to $p_T^{\text{miss}} > 10$ GeV if event contains a SFCHS $\tau\tau$ pair. ⁵ For ν_μ classified as electrons by the DNNFAD algorithm or with $1.000 < |\eta| < 1.001$.