	300 GeV, 1000 cm, region 2017			
Cut	$\epsilon_i^{ m CMS}$	$\epsilon_i^{\rm sim}$, HEPMC	$\epsilon_i^{\text{sim}}, \text{CKKWL}$	$\epsilon_i^{\mathrm{sim}},\mathrm{MLM}$
total	$1.0^{+0.00}_{-0.00}$	$1.0^{+0.00}_{-0.00}$	$1.0^{+0.00}_{-0.00}$	$1.0^{+0.00}_{-0.00}$
trigger	$1.4^{+0.02}_{-0.02} \times 10^{-1}$	$1.1^{+0.01}_{-0.01} \times 10^{-1}$	$1.3^{+0.01}_{-0.01} \times 10^{-1}$	$1.0^{+0.01}_{-0.01} \times 10^{-1}$
passes $p_{\mathrm{T}}^{\mathrm{miss}}$ filters	$1.4^{+0.02}_{-0.02} \times 10^{-1}$	$1.1^{+0.01}_{-0.01} \times 10^{-1}$	$1.3^{+0.01}_{-0.01} \times 10^{-1}$	$1.0^{+0.01}_{-0.01} \times 10^{-1}$
$p_{\mathrm{T}}^{\mathrm{miss}} > 120\mathrm{GeV}$	$1.3^{+0.02}_{-0.02} \times 10^{-1}$	$1.1^{+0.01}_{-0.01} \times 10^{-1}$	$1.3^{+0.01}_{-0.01} \times 10^{-1}$	$1.0^{+0.01}_{-0.01} \times 10^{-1}$
≥ 1 jet with $p_{\mathrm{T}} > 110\mathrm{GeV}$ and $ \eta < 2.4$	$8.3^{+0.13}_{-0.13} \times 10^{-2}$	$7.5^{+0.09}_{-0.09} \times 10^{-2}$	$6.6^{+0.08}_{-0.08} \times 10^{-2}$	$5.4^{+0.07}_{-0.07} \times 10^{-2}$
==0 pairs of jets with $\Delta \phi_{\rm jet, jet} > 2.5$	$7.2^{+0.12}_{-0.12} \times 10^{-2}$	$6.3^{+0.08}_{-0.08} \times 10^{-2}$	$5.6^{+0.08}_{-0.08} \times 10^{-2}$	$4.7^{+0.07}_{-0.07} \times 10^{-2}$
$ \Delta\phi({ m leading\ jet},ar{p}_{ m T}^{ m miss}) >0.5$	$ 7.9^{+0.12} \times 10^{-2} $	$6.0^{+0.08}_{-0.08} \times 10^{-2}$	$5.4^{+0.07}_{-0.07} \times 10^{-2}$	$4.5^{+0.07}_{-0.07} \times 10^{-2}$
$\geq 1 \text{ track with } \eta < 2.1$	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$6.0^{+0.08}_{-0.08} \times 10^{-2}$	$5.4^{+0.07}_{-0.07} \times 10^{-2}$	$4.5^{+0.07}_{-0.07} \times 10^{-2}$
$\geq 1 \text{ track with } p_{\mathrm{T}} > 55 \mathrm{GeV}$	$6.2^{+0.11}_{-0.11} \times 10^{-2}$	$5.4^{+0.07}_{-0.07} \times 10^{-2}$	$4.9^{+0.07}_{-0.07} \times 10^{-2}$	$4.1^{+0.06}_{-0.06} \times 10^{-2}$
≥ 1 track passing fiducial selections	$\parallel 4.5^{+0.10}_{-0.10} \times 10^{-2}$	$4.4^{+0.07}_{-0.07} \times 10^{-2}$	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	$3.4^{+0.06}_{-0.06} \times 10^{-2}$
$\geq 1 \text{ track with } \geq 4 \text{ pixel hits}$	$3.3^{+0.08}_{-0.08} \times 10^{-2}$	$3.4^{+0.06}_{-0.06} \times 10^{-2}$	$3.1^{+0.06}_{-0.06} \times 10^{-2}$	$2.7^{+0.05}_{-0.05} \times 10^{-2}$
≥ 1 track with no missing inner hits	$3.3^{+0.08}_{-0.08} \times 10^{-2}$	$2.4^{+0.05}_{-0.05} \times 10^{-2}$	$2.2^{+0.05}_{-0.05} \times 10^{-2}$	$1.9^{+0.04}_{-0.04} \times 10^{-2}$
≥ 1 track with no missing middle hits	$3.0^{+0.08}_{-0.08} \times 10^{-2}$	$2.4^{+0.05}_{-0.05} \times 10^{-2}$	$2.2^{+0.05}_{-0.05} \times 10^{-2}$	$1.9^{+0.04}_{-0.04} \times 10^{-2}$
≥ 1 track with relative track isolation $< 5\%$	$2.5^{+0.07}_{-0.07} \times 10^{-2}$	$1.8^{+0.04}_{-0.04} \times 10^{-2}$	$1.5^{+0.04}_{-0.04} \times 10^{-2}$	$1.3^{+0.04}_{-0.04} \times 10^{-2}$
$\geq 1 \; { m track \; with } \; d_{ m xy} < 0.02 { m cm}$	$2.5^{+0.07}_{-0.07} \times 10^{-2}$	$1.8^{+0.04}_{-0.04} \times 10^{-2}$	$1.5^{+0.04}_{-0.04} \times 10^{-2}$	$1.3^{+0.04}_{-0.04} \times 10^{-2}$
≥ 1 track with $ d_z < 0.5 \mathrm{cm}$	$2.5^{+0.07}_{-0.07} \times 10^{-2}$	$1.8^{+0.04}_{-0.04} \times 10^{-2}$	$1.5^{+0.04}_{-0.04} \times 10^{-2}$	$1.3^{+0.04}_{-0.04} \times 10^{-2}$
$\geq 1 \text{ track with } \Delta R(\text{track, jet}) > 0.5$	$2.5^{+0.07}_{-0.07} \times 10^{-2}$	$1.7^{+0.04}_{-0.04} \times 10^{-2}$	$1.4^{+0.04}_{-0.04} \times 10^{-2}$	$1.3^{+0.04}_{-0.04} \times 10^{-2}$
$\geq 1 \text{ track with } \Delta R(\text{track}, \text{electron}) > 0.15$	$2.3^{+0.07}_{-0.07} \times 10^{-2}$	$ \begin{array}{c} $	$1.4^{+0.04}_{-0.04} \times 10^{-2}$	$ \begin{vmatrix} 1.2^{+0.04}_{-0.04} \times 10^{-2} \\ 7.3^{+0.28}_{-0.28} \times 10^{-3} \end{vmatrix} $
$\geq 1 \text{ track with } \Delta R(\text{track}, \text{muon}) > 0.15$	$8.1^{+0.41}_{-0.41} \times 10^{-3}$	$9.5^{+0.32}_{-0.32} \times 10^{-3}$	$8.1^{+0.29}_{-0.29} \times 10^{-3}$	$7.3^{+0.28}_{-0.28} \times 10^{-3}$
$\geq 1 \text{ track with } \Delta R(\text{track}, \tau_{\text{h}}) > 0.15$	$8.1^{+0.41}_{-0.41} \times 10^{-3}$	$9.5^{+0.32}_{-0.32} \times 10^{-3}$	$8.1^{+0.29}_{-0.29} \times 10^{-3}$	$7.3^{+0.28}_{-0.28} \times 10^{-3}$
$\geq 1 \text{ track with } E_{\mathrm{calo}} < 10 \mathrm{GeV}$	$8.0^{+0.41}_{-0.41} \times 10^{-3}$	$9.5^{+0.32}_{-0.32} \times 10^{-3}$	$8.1^{+0.29}_{-0.29} \times 10^{-3}$	$7.3^{+0.28}_{-0.28} \times 10^{-3}$
≥ 1 track with ≥ 3 missing outer hits	$ \begin{vmatrix} 8.1_{-0.41}^{+0.41} \times 10^{-3} \\ 8.0_{-0.41}^{+0.41} \times 10^{-3} \\ 2.3_{-0.22}^{+0.22} \times 10^{-3} \end{vmatrix} $	$\begin{array}{c} 9.5_{-0.32}^{+0.32} \times 10^{-3} \\ 1.9_{-0.14}^{+0.14} \times 10^{-3} \end{array}$	$\begin{array}{c} 1.1_{-0.04} \times 10^{-2} \\ 1.4_{-0.04}^{+0.04} \times 10^{-2} \\ 8.1_{-0.29}^{+0.29} \times 10^{-3} \\ 8.1_{-0.29}^{+0.29} \times 10^{-3} \\ 8.1_{-0.29}^{+0.29} \times 10^{-3} \\ 1.4_{-0.12}^{+0.12} \times 10^{-3} \\ 1.4_{-0.12}^{+0.12} \times 10^{-3} \end{array}$	$\begin{array}{c} 7.3_{-0.28}^{+0.28} \times 10^{-3} \\ 7.3_{-0.28}^{+0.28} \times 10^{-3} \\ 7.3_{-0.28}^{+0.28} \times 10^{-3} \\ 1.3_{-0.12}^{+0.12} \times 10^{-3} \end{array}$
≥ 1 track with number of tracker layers with measurement == 4	$3.7^{+0.86}_{-0.86} \times 10^{-4}$	$2.1^{+0.48}_{-0.48} \times 10^{-4}$	$9.7^{+0.26}_{-3.23} \times 10^{-3}$	$1.3^{+0.37}_{-0.37} \times 10^{-4}$
≥ 1 track with number of tracker layers with measurement == 5	$3.7^{+0.86}_{-0.86} \times 10^{-4}$	$1.6^{+0.42}_{-0.42} \times 10^{-4}$	$1.7^{+0.42}_{-0.42} \times 10^{-4}$	$1.5^{+0.40}_{-0.40} \times 10^{-4}$
≥ 1 track with number of tracker layers with measurement ≥ 6	$1.6^{+0.18}_{-0.18} \times 10^{-3}$	$1.5^{+0.13}_{-0.13} \times 10^{-3}$	$1.1^{+0.11}_{-0.11} \times 10^{-3}$	$1.0^{+0.10}_{-0.10} \times 10^{-3}$

Table 1: Cutflow comparison for 300 GeV, 1000 cm, region 2017

	300 GeV, 1000 cm, region 2018A			
Cut	$\epsilon_i^{ ext{CMS}}$	$\epsilon_i^{\rm sim}$, HEPMC	ϵ_i^{sim} , CKKWL	$\epsilon_i^{\rm sim},{ m MLM}$
total	$1.0^{+0.00}_{-0.00}$	$1.0^{+0.00}_{-0.00}$	$1.0^{+0.00}_{-0.00}$	$1.0^{+0.00}_{-0.00}$
trigger	$9.8^{+0.14}_{-0.14} \times 10^{-2}$	$1.1^{+0.01}_{-0.01} \times 10^{-1}$	$1.3^{+0.01}_{-0.01} \times 10^{-1}$	$1.0^{+0.01}_{-0.01} \times 10^{-1}$
passes $p_{\mathrm{T}}^{\mathrm{miss}}$ filters	$9.8^{+0.14}_{-0.14} \times 10^{-2}$	$1.1^{+0.01}_{-0.01} \times 10^{-1}$	$1.3^{+0.01}_{-0.01} \times 10^{-1}$	$1.0^{+0.01}_{-0.01} \times 10^{-1}$
$p_{\mathrm{T}}^{\mathrm{miss}} > 120\mathrm{GeV}$	$9.5^{+0.14}_{-0.14} \times 10^{-2}$	$1.1^{+0.01}_{-0.01} \times 10^{-1}$	$1.3^{+0.01}_{-0.01} \times 10^{-1}$	$1.0^{+0.01}_{-0.01} \times 10^{-1}$
≥ 1 jet with $p_{ m T} > 110{ m GeV}$ and $ \eta < 2.4$	$8.2^{+0.13}_{-0.13} \times 10^{-2}$	$7.5^{+0.09}_{-0.09} \times 10^{-2}$	$6.6^{+0.08}_{-0.08} \times 10^{-2}$	$5.4^{+0.07}_{-0.07} \times 10^{-2}$
==0 pairs of jets with $\Delta \phi_{\rm jet, jet} > 2.5$	$7.1^{+0.12}_{-0.12} \times 10^{-2}$	$6.3^{+0.08}_{-0.08} \times 10^{-2}$	$5.6^{+0.08}_{-0.08} \times 10^{-2}$	$ 4.7^{+0.07}_{-0.07} \times 10^{-2} $
$ \Delta\phi({ m leading jet},ar{p}_{ m T}^{ m miss}) >0.5$	1.71 ± 0.12 $\sim 10-2$	$6.0^{+0.08}_{-0.08} \times 10^{-2}$	$ \begin{array}{c} 5.4_{-0.07}^{+0.07} \times 10^{-2} \\ 5.4_{-0.07}^{+0.07} \times 10^{-2} \\ 5.4_{-0.07}^{+0.07} \times 10^{-2} \\ 4.9_{-0.07}^{+0.07} \times 10^{-2} \end{array} $	$4.5^{+0.07}_{-0.07} \times 10^{-2}$
≥ 1 track with $ \eta < 2.1$	$ \begin{array}{c} 7.1_{-0.12} \times 10 \\ 7.0_{-0.12}^{+0.12} \times 10^{-2} \\ 6.1_{-0.11}^{+0.11} \times 10^{-2} \\ 6.1_{-0.11}^{+0.00} \times 10^{-2} \end{array} $	$\begin{array}{c c} 0.0_{-0.08}^{-0.08} \times 10 \\ 6.0_{-0.08}^{+0.08} \times 10^{-2} \end{array}$	$5.4^{+0.07}_{-0.07} \times 10^{-2}$	$\begin{vmatrix} 4.5^{+0.07}_{-0.07} \times 10^{-2} \\ 4.5^{+0.06}_{-0.06} \times 10^{-2} \\ 4.1^{+0.06}_{-0.06} \times 10^{-2} \\ 2.4^{+0.06}_{-0.06} \times 10^{-2} \end{vmatrix}$
$\geq 1 \text{ track with } p_{\mathrm{T}} > 55 \mathrm{GeV}$	$6.1^{+0.11}_{-0.11} \times 10^{-2}$	$5.4^{+0.07}_{-0.07} \times 10^{-2}$	$4.9^{+0.07}_{-0.07} \times 10^{-2}$	$4.1^{+0.06}_{-0.06} \times 10^{-2}$
≥ 1 track passing fiducial selections	$4.2^{+0.09}_{-0.09} \times 10^{-2}$	$4.4^{+0.07}_{-0.07} \times 10^{-2}$	$ 4.0^{+0.06}_{-0.06} \times 10^{-2} $	
≥ 1 track with ≥ 4 pixel hits	$2.9^{+0.08}_{-0.08} \times 10^{-2}$	$3.4^{+0.06}_{-0.06} \times 10^{-2}$	$3.1^{+0.06}_{-0.06} \times 10^{-2}$	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$
≥ 1 track with no missing inner hits	$2.9^{+0.08}_{-0.08} \times 10^{-2}$	$2.4^{+0.05}_{-0.05} \times 10^{-2}$	$2.2^{+0.05}_{-0.05} \times 10^{-2}$	$1.9^{+0.04}_{-0.04} \times 10^{-2}$
≥ 1 track with no missing middle hits	$2.5^{+0.07}_{-0.07} \times 10^{-2}$	$2.4^{+0.05}_{-0.05} \times 10^{-2}$	$2.2^{+0.05}_{-0.05} \times 10^{-2}$	$1.9^{+0.04}_{-0.04} \times 10^{-2}$
≥ 1 track with relative track isolation $< 5\%$	$2.1^{+0.06}_{-0.06} \times 10^{-2}$	$1.8^{+0.04}_{-0.04} \times 10^{-2}$	$1.5^{+0.04}_{-0.04} \times 10^{-2}$	$1.3^{+0.04}_{-0.04} \times 10^{-2}$
$\geq 1 \text{ track with } d_{\mathrm{xy}} < 0.02 \mathrm{cm}$	$2.1^{+0.06}_{-0.06} \times 10^{-2}$	$1.8^{+0.04}_{-0.04} \times 10^{-2}$	$1.5^{+0.04}_{-0.04} \times 10^{-2}$	$1.3^{+0.04}_{-0.04} \times 10^{-2}$
≥ 1 track with $ d_z < 0.5\mathrm{cm}$	$2.1^{+0.06}_{-0.06} \times 10^{-2}$	$1.8^{+0.04}_{-0.04} \times 10^{-2}$	$1.5^{+0.04}_{-0.04} \times 10^{-2}$	$1.3^{+0.04}_{-0.04} \times 10^{-2}$
$\geq 1 \text{ track with } \Delta R(\text{track, jet}) > 0.5$	$2.0^{+0.06}_{-0.06} \times 10^{-2}$	$1.7^{+0.04}_{-0.04} \times 10^{-2}$	$1.4^{+0.04}_{-0.04} \times 10^{-2}$	$1.3^{+0.04}_{-0.04} \times 10^{-2}$
$\geq 1 \text{ track with } \Delta R(\text{track}, \text{electron}) > 0.15$	$ \begin{array}{c c} 1.9^{+0.06}_{-0.06} \times 10^{-2} \\ 6.6^{+0.37}_{-0.37} \times 10^{-3} \end{array} $	$ \begin{array}{c} 1.7^{+0.04}_{-0.04} \times 10^{-2} \\ 9.5^{+0.32}_{-0.32} \times 10^{-3} \\ 9.5^{+0.32}_{-0.32} \times 10^{-3} \end{array} $	$\begin{vmatrix} 1.4^{+0.04}_{-0.04} \times 10^{-2} \\ 8.1^{+0.29}_{-0.29} \times 10^{-3} \end{vmatrix}$	$ \begin{vmatrix} 1.3^{+0.04}_{-0.04} \times 10^{-2} \\ 1.2^{+0.04}_{-0.04} \times 10^{-2} \\ 7.3^{+0.28}_{-0.28} \times 10^{-3} \end{vmatrix} $
$\geq 1 \text{ track with } \Delta R(\text{track}, \text{muon}) > 0.15$	$6.6^{+0.37}_{-0.37} \times 10^{-3}$	$9.5^{+0.32}_{-0.32} \times 10^{-3}$	$8.1^{+0.29}_{-0.29} \times 10^{-3}$	$7.3^{+0.28}_{-0.28} \times 10^{-3}$
$\geq 1 \text{ track with } \Delta R(\text{track}, \tau_{\text{h}}) > 0.15$	$0.6^{+0.37}_{-0.27} \times 10^{-3}$	$9.5^{+0.32}_{-0.32} \times 10^{-3}$	$\begin{vmatrix} 8.1_{-0.29}^{+0.29} \times 10^{-3} \\ 8.1_{-0.29}^{+0.29} \times 10^{-3} \end{vmatrix}$	$7.3^{+0.28}_{-0.28} \times 10^{-3}$
$\geq 1 \text{ track with } E_{\mathrm{calo}} < 10 \mathrm{GeV}$	$6.5^{+0.36}_{-0.36} \times 10^{-3}$	$9.5^{+0.32}_{-0.32} \times 10^{-3}$	$ \begin{vmatrix} 8.1_{-0.29}^{+0.29} \times 10^{-3} \\ 8.1_{-0.29}^{+0.29} \times 10^{-3} \\ 8.1_{-0.29}^{+0.29} \times 10^{-3} \end{vmatrix} $	$7.3^{+0.28}_{-0.28} \times 10^{-3}$
≥ 1 track with ≥ 3 missing outer hits	$\begin{array}{c} 6.5^{+0.36}_{-0.36} \times 10^{-3} \\ 1.9^{+0.20}_{-0.20} \times 10^{-3} \\ \end{array}$	$\begin{array}{c} 9.5^{+0.32}_{-0.32} \times 10^{-3} \\ 9.5^{+0.32}_{-0.32} \times 10^{-3} \\ 9.5^{+0.14}_{-0.14} \times 10^{-3} \\ 1.9^{+0.14}_{-0.14} \times 10^{-3} \end{array}$	$1.4^{+0.12}_{-0.12} \times 10^{-3}$	$\parallel 1.3^{+0.12}_{-0.12} \times 10^{-3} \parallel$
≥ 1 track with number of tracker layers with measurement == 4	$3.7^{+0.86}_{-0.86} \times 10^{-4}$	$2.1^{+0.48}_{-0.48} \times 10^{-4}$	$8.6^{+3.04}_{-3.04} \times 10^{-5}$	$ 1.2^{+0.35}_{-0.35} \times 10^{-4} $
≥ 1 track with number of tracker layers with measurement == 5	$2.4^{+0.71}_{-0.71} \times 10^{-4}$	$1.6^{+0.42}_{-0.42} \times 10^{-4}$	$1.9^{+0.45}_{-0.45} \times 10^{-4}$	$1.6^{+0.41}_{-0.41} \times 10^{-4}$
≥ 1 track with number of tracker layers with measurement ≥ 6	$1.3^{+0.16}_{-0.16} \times 10^{-3}$	$1.5^{+0.13}_{-0.13} \times 10^{-3}$	$1.1^{+0.11}_{-0.11} \times 10^{-3}$	$1.0^{+0.11}_{-0.11} \times 10^{-3}$

Table 2: Cutflow comparison for 300 GeV, 1000 cm, region 2018A

	300 GeV, 1000 cm, region 2018B			
Cut	$\epsilon_i^{ ext{CMS}}$	$\epsilon_i^{\rm sim}$, HEPMC	$\epsilon_i^{\rm sim}$, CKKWL	$\epsilon_i^{\rm sim},{ m MLM}$
total	$1.0^{+0.00}_{-0.00}$	$1.0^{+0.00}_{-0.00}$	$1.0^{+0.00}_{-0.00}$	$1.0^{+0.00}_{-0.00}$
trigger	$9.8^{+0.14}_{-0.14} \times 10^{-2}$	$1.1^{+0.01}_{-0.01} \times 10^{-1}$	$1.3^{+0.01}_{-0.01} \times 10^{-1}$	$1.0^{+0.01}_{-0.01} \times 10^{-1}$
passes $p_{\mathrm{T}}^{\mathrm{miss}}$ filters	$9.8^{+0.14}_{-0.14} \times 10^{-2}$	$1.1^{+0.01}_{-0.01} \times 10^{-1}$	$1.3^{+0.01}_{-0.01} \times 10^{-1}$	$1.0^{+0.01}_{-0.01} \times 10^{-1}$
$p_{\mathrm{T}}^{\mathrm{miss}} > 120\mathrm{GeV}$	$9.5^{+0.14}_{-0.14} \times 10^{-2}$	$1.1^{+0.01}_{-0.01} \times 10^{-1}$	$1.3^{+0.01}_{-0.01} \times 10^{-1}$	$1.0^{+0.01}_{-0.01} \times 10^{-1}$
≥ 1 jet with $p_{ m T} > 110{ m GeV}$ and $ \eta < 2.4$	$8.2^{+0.13}_{-0.13} \times 10^{-2}$	$7.5^{+0.09}_{-0.09} \times 10^{-2}$	$\begin{array}{ c c c }\hline 1.3^{+0.01}_{-0.01} \times 10^{-1} \\ 6.6^{+0.08}_{-0.08} \times 10^{-2} \\ \hline \end{array}$	$5.4^{+0.07}_{-0.07} \times 10^{-2}$
==0 pairs of jets with $\Delta\phi_{\rm jet,\ jet} > 2.5$	$7.1^{+0.12}_{-0.12} \times 10^{-2}$	$6.3^{+0.08}_{-0.08} \times 10^{-2}$	$5.6^{+0.08}_{-0.08} \times 10^{-2}$	$ 4.7^{+0.07}_{-0.07} \times 10^{-2} $
$ \Delta\phi({ m leading jet},ec{p}_{ m T}^{ m miss}) >0.5$	$7.1^{+0.12}_{-0.12} \times 10^{-2}$	$6.0^{+0.08}_{-0.08} \times 10^{-2}$	$5.4^{+0.07}_{-0.07} \times 10^{-2}$	$4.5^{+0.07}_{-0.07} \times 10^{-2}$
≥ 1 track with $ \eta < 2.1$	$7.0^{+0.12}_{-0.12} \times 10^{-2}$	$6.0^{+0.08}_{-0.08} \times 10^{-2}$	$5.4^{+0.07}_{-0.07} \times 10^{-2}$	$4.5^{+0.07}_{-0.07} \times 10^{-2}$
$\geq 1 \text{ track with } p_{\mathrm{T}} > 55 \mathrm{GeV}$	$6.1^{+0.11}_{-0.11} \times 10^{-2}$	$5.4^{+0.07}_{-0.07} \times 10^{-2}$	$4.9^{+0.07}_{-0.07} \times 10^{-2}$	$4.1^{+0.06}_{-0.06} \times 10^{-2}$
≥ 1 track passing fiducial selections	$4.2^{+0.09}_{-0.09} \times 10^{-2}$	$4.4^{+0.07}_{-0.07} \times 10^{-2}$	$4.0^{+0.06}_{-0.06} \times 10^{-2}$	$3.4^{+0.06}_{-0.06} \times 10^{-2}$
≥ 1 track with ≥ 4 pixel hits	$2.9^{+0.08}_{-0.08} \times 10^{-2}$	$3.4^{+0.06}_{-0.06} \times 10^{-2}$	$3.1^{+0.06}_{-0.06} \times 10^{-2}$	$2.7^{+0.05}_{-0.05} \times 10^{-2}$
≥ 1 track with no missing inner hits	$2.9^{+0.08}_{-0.08} \times 10^{-2}$	$2.4^{+0.05}_{-0.05} \times 10^{-2}$	$2.2^{+0.05}_{-0.05} \times 10^{-2}$	$1.9^{+0.04}_{-0.04} \times 10^{-2}$
≥ 1 track with no missing middle hits	$2.5^{+0.07}_{-0.07} \times 10^{-2}$	$2.4^{+0.05}_{-0.05} \times 10^{-2}$	$2.2^{+0.05}_{-0.05} \times 10^{-2}$	$1.9^{+0.04}_{-0.04} \times 10^{-2}$
≥ 1 track with relative track isolation $< 5\%$	$2.1^{+0.07}_{-0.07} \times 10^{-2}$	$\begin{array}{c} 1.8^{+0.04}_{-0.04} \times 10^{-2} \\ 1.8^{+0.04}_{-0.04} \times 10^{-2} \\ 1.8^{+0.04}_{-0.04} \times 10^{-2} \\ 1.7^{+0.04}_{-0.04} \times 10^{-2} \\ 1.7^{+0.04}_{-0.04} \times 10^{-2} \end{array}$	$\begin{vmatrix} 1.5_{-0.04}^{+0.04} \times 10^{-2} \\ 1.5_{-0.04}^{+0.04} \times 10^{-2} \end{vmatrix}$	$1.3^{+0.04}_{-0.04} \times 10^{-2}$
$\geq 1 \text{ track with } d_{\mathrm{xy}} < 0.02 \mathrm{cm}$	$2.1^{+0.07}_{-0.07} \times 10^{-2}$	$1.8^{+0.04}_{-0.04} \times 10^{-2}$	$1.5^{+0.04}_{-0.04} \times 10^{-2}$	$\begin{array}{c} 1.3^{+0.04}_{-0.04} \times 10^{-2} \\ 1.3^{+0.04}_{-0.04} \times 10^{-2} \\ 1.3^{+0.04}_{-0.04} \times 10^{-2} \\ 1.3^{+0.04}_{-0.04} \times 10^{-2} \end{array}$
≥ 1 track with $ d_z < 0.5\mathrm{cm}$	$2.1^{+0.07}_{-0.07} \times 10^{-2}$	$1.8^{+0.04}_{-0.04} \times 10^{-2}$	$1.5^{+0.04}_{-0.04} \times 10^{-2}$	$1.3^{+0.04}_{-0.04} \times 10^{-2}$
$\geq 1 \text{ track with } \Delta R(\text{track, jet}) > 0.5$	$2.1_{-0.06}^{+0.06} \times 10^{-2}$	$1.7^{+0.04}_{-0.04} \times 10^{-2}$	$1.4^{+0.04}_{-0.04} \times 10^{-2}$	$1.3^{+0.04}_{-0.04} \times 10^{-2}$
$\geq 1 \text{ track with } \Delta R(\text{track, electron}) > 0.15$	$1.9^{+0.06}_{-0.06} \times 10^{-2}$	$1.7^{+0.04}_{-0.04} \times 10^{-2}$	$1.4^{+0.04}_{-0.04} \times 10^{-2}$	$1.2^{+0.04}_{-0.04} \times 10^{-2}$
$\geq 1 \text{ track with } \Delta R(\text{track}, \text{muon}) > 0.15$	$6.6^{+0.37}_{-0.37} \times 10^{-3}$	$9.5^{+0.32}_{-0.32} \times 10^{-3}$	$8.1^{+0.29}_{-0.29} \times 10^{-3}$	$7.3^{+0.28}_{-0.28} \times 10^{-3}$
$\geq 1 \text{ track with } \Delta R(\text{track}, \tau_{\text{h}}) > 0.15$	$6.6^{+0.37}_{-0.37} \times 10^{-3}$	$9.5^{+0.32}_{-0.32} \times 10^{-3}$	$8.1^{+0.29}_{-0.29} \times 10^{-3}$	$7.3^{+0.28}_{-0.28} \times 10^{-3}$
$\geq 1 \text{ track with } E_{ m calo} < 10 { m GeV}$	$6.5^{+0.36}_{-0.36} \times 10^{-3}$	$9.5^{+0.32}_{-0.32} \times 10^{-3}$	$8.1^{+0.29}_{-0.29} \times 10^{-3}$	$7.3^{+0.28}_{-0.28} \times 10^{-3}$
≥ 1 track with ≥ 3 missing outer hits	$2.0^{+0.20}_{-0.20} \times 10^{-3}$	$1.9^{+0.14}_{-0.14} \times 10^{-3}$	$1.4^{+0.12}_{-0.12} \times 10^{-3}$	$1.3^{+0.12}_{-0.12} \times 10^{-3}$
$\phi(p_{\rm T}^{\rm miss}) < -1.6 \text{ or } \phi(p_{\rm T}^{\rm miss}) > -0.6$	$ \begin{vmatrix} 1.6^{+0.18}_{-0.18} \times 10^{-3} \\ 3.3^{+0.81}_{-0.81} \times 10^{-4} \end{vmatrix} $	$\begin{array}{c} 1.7_{-0.14}^{+0.13} \times 10^{-3} \\ 1.7_{-0.13}^{+0.13} \times 10^{-3} \\ 1.7_{-0.42}^{+0.42} \times 10^{-4} \\ 1.4_{-0.38}^{+0.38} \times 10^{-4} \\ 1.4_{-0.12}^{+0.12} \times 10^{-3} \end{array}$	$1.1^{+0.11}_{-0.11} \times 10^{-3}$	$\begin{array}{c} 1.1^{+0.11}_{-0.11} \times 10^{-3} \\ 1.1^{+0.34}_{-0.34} \times 10^{-4} \\ 1.3^{+0.37}_{-0.37} \times 10^{-4} \end{array}$
≥ 1 track with number of tracker layers with measurement == 4	$3.3^{+0.61}_{-0.81} \times 10^{-4}$	$1.7^{+0.42}_{-0.42} \times 10^{-4}$	$8.6^{+3.04}_{-3.04} \times 10^{-5}$	$1.1^{+0.34}_{-0.34} \times 10^{-4}$
≥ 1 track with number of tracker layers with measurement == 5	$\ 2.0^{+0.04}_{-0.64} \times 10^{-4} \ $	$1.4^{+0.36}_{-0.38} \times 10^{-4}$	$1.7^{+0.42}_{-0.42} \times 10^{-4}$	$1.3^{+0.37}_{-0.37} \times 10^{-4}$
≥ 1 track with number of tracker layers with measurement ≥ 6	$1.1^{+0.15}_{-0.15} \times 10^{-3}$	$1.4^{+0.12}_{-0.12} \times 10^{-3}$	$8.4^{+0.95}_{-0.95} \times 10^{-4}$	$8.5^{+0.95}_{-0.95} \times 10^{-4}$

Table 3: Cutflow comparison for 300 GeV, 1000 cm, region 2018B