	300 GeV, 100 cm, region 2017			
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	$1.4^{+0.02}_{-0.02} \times 10^{-1}$	$9.3^{+0.09}_{-0.09} \times 10^{-2}$	$1.0^{+0.01}_{-0.01} \times 10^{-1}$	$8.4^{+0.09}_{-0.09} \times 10^{-2}$
passes $p_{\mathrm{T}}^{\mathrm{miss}}$ filters	$1.4^{+0.02}_{-0.02} \times 10^{-1}$	$9.3^{+0.09}_{-0.09} \times 10^{-2}$	$1.0^{+0.01}_{-0.01} \times 10^{-1}$	$8.4^{+0.09}_{-0.09} \times 10^{-2}$
$p_{\mathrm{T}}^{\mathrm{miss}} > 120\mathrm{GeV}$	$1.4^{+0.02}_{-0.02} \times 10^{-1}$	$9.3^{+0.09}_{-0.09} \times 10^{-2}$	$1.0^{+0.01}_{-0.01} \times 10^{-1}$	$8.4^{+0.09}_{-0.09} \times 10^{-2}$
≥ 1 jet with $p_{ m T} > 110{ m GeV}$ and $ \eta < 2.4$	$8.5^{+0.13}_{-0.13} \times 10^{-2}$	$7.5^{+0.09}_{-0.09} \times 10^{-2}$	$6.9^{+0.08}_{-0.08} \times 10^{-2}$	$5.6^{+0.08}_{-0.08} \times 10^{-2}$
==0 pairs of jets with $\Delta \phi_{\rm jet, jet} > 2.5$	$7.4^{+0.12}_{-0.12} \times 10^{-2}$	$6.3^{+0.08}_{-0.08} \times 10^{-2}$	$5.9^{+0.08}_{-0.08} \times 10^{-2}$	$ 5.0^{+0.07}_{-0.07} \times 10^{-2} $
$ \Delta\phi({ m leading jet},ar{p}_{ m T}^{ m miss}) >0.5$	$\parallel 7.4^{+0.12}_{-0.12} \times 10^{-2}$	$6.3^{+0.08}_{-0.08} \times 10^{-2}$	$\begin{array}{c} 5.9^{+0.08}_{-0.08} \times 10^{-2} \\ 5.9^{+0.08}_{-0.08} \times 10^{-2} \\ 5.9^{+0.08}_{-0.07} \times 10^{-2} \\ 5.4^{+0.07}_{-0.07} \times 10^{-2} \end{array}$	$ 4.9^{+0.07}_{-0.07} \times 10^{-2} $
≥ 1 track with $ \eta < 2.1$	$ \begin{vmatrix} 7.4 & -0.12 \\ -0.12 \\ 5.9 & -0.11 \\ -0.11 \\ -0.11 \end{vmatrix} \times 10^{-2} $	$6.3^{+0.08}_{-0.08} \times 10^{-2}$	$5.9^{+0.08}_{-0.08} \times 10^{-2}$	$\begin{vmatrix} 4.9^{+0.07}_{-0.07} \times 10^{-2} \\ 4.6^{+0.07}_{-0.07} \times 10^{-2} \\ 2.2^{+0.06}_{-0.07} \times 10^{-2} \end{vmatrix}$
$\geq 1 \text{ track with } p_{\mathrm{T}} > 55 \mathrm{GeV}$		$5.2^{+0.07}_{-0.07} \times 10^{-2}$	$5.4^{+0.07}_{-0.07} \times 10^{-2}$	$4.6^{+0.07}_{-0.07} \times 10^{-2}$
≥ 1 track passing fiducial selections	$\begin{array}{c c} 3.0 & -0.11 \\ 4.2 & +0.09 \\ -0.09 & \times 10^{-2} \end{array}$	$4.2^{+0.07}_{-0.07} \times 10^{-2}$	$ 4.5^{+0.07}_{-0.07} \times 10^{-2}$	
≥ 1 track with ≥ 4 pixel hits	$2.9^{+0.08}_{-0.08} \times 10^{-2}$	$3.2^{+0.06}_{-0.06} \times 10^{-2}$	$3.2^{+0.06}_{-0.06} \times 10^{-2}$	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$
≥ 1 track with no missing inner hits	$2.9^{+0.08}_{-0.08} \times 10^{-2}$	$2.4^{+0.05}_{-0.05} \times 10^{-2}$	$2.3^{+0.05}_{-0.05} \times 10^{-2}$	$2.1^{+0.05}_{-0.05} \times 10^{-2}$
≥ 1 track with no missing middle hits	$2.7^{+0.07}_{-0.07} \times 10^{-2}$	$2.4^{+0.05}_{-0.05} \times 10^{-2}$	$2.3^{+0.05}_{-0.05} \times 10^{-2}$	$2.1^{+0.05}_{-0.05} \times 10^{-2}$
≥ 1 track with relative track isolation $< 5\%$	$2.2^{+0.07}_{-0.07} \times 10^{-2}$	$1.7^{+0.04}_{-0.04} \times 10^{-2}$	$1.6^{+0.04}_{-0.04} \times 10^{-2}$	$1.5^{+0.04}_{-0.04} \times 10^{-2}$
$\geq 1 ext{ track with } d_{ ext{xy}} < 0.02 ext{ cm}$	$2.2^{+0.07}_{-0.07} \times 10^{-2}$	$1.7^{+0.04}_{-0.04} \times 10^{-2}$	$1.6^{+0.04}_{-0.04} \times 10^{-2}$	$1.5^{+0.04}_{-0.04} \times 10^{-2}$
≥ 1 track with $ d_z < 0.5\mathrm{cm}$	$2.2^{+0.07}_{-0.07} \times 10^{-2}$	$1.7^{+0.04}_{-0.04} \times 10^{-2}$	$1.6^{+0.04}_{-0.04} \times 10^{-2}$	$1.5^{+0.04}_{-0.04} \times 10^{-2}$
$\geq 1 \text{ track with } \Delta R(\text{track, jet}) > 0.5$	$2.2^{+0.07}_{-0.07} \times 10^{-2}$	$1.7^{+0.04}_{-0.04} \times 10^{-2}$	$1.6^{+0.04}_{-0.04} \times 10^{-2}$	$1.5^{+0.04}_{-0.04} \times 10^{-2}$
$\geq 1 \text{ track with } \Delta R(\text{track}, \text{electron}) > 0.15$	$2.1^{+0.07}_{-0.07} \times 10^{-2}$	$1.7^{+0.04}_{-0.04} \times 10^{-2}$	$1.6^{+0.04}_{-0.04} \times 10^{-2}$	$ \begin{vmatrix} 1.5^{+0.04}_{-0.04} \times 10^{-2} \\ 1.4^{+0.04}_{-0.04} \times 10^{-2} \end{vmatrix} $
$\geq 1 \text{ track with } \Delta R(\text{track}, \text{muon}) > 0.15$	$1.9^{+0.06}_{-0.06} \times 10^{-2}$	$1.7^{+0.04}_{-0.04} \times 10^{-2}$		$1.4^{+0.04}_{-0.04} \times 10^{-2}$
$\geq 1 \text{ track with } \Delta R(\text{track}, \tau_{\text{h}}) > 0.15$	$1.9^{+0.06}_{-0.06} \times 10^{-2}$	$1.7^{+0.04}_{-0.04} \times 10^{-2}$	$1.6^{+0.04}_{-0.04} \times 10^{-2}$	$ 1.4^{+0.04}_{-0.04} \times 10^{-2} $
$\geq 1 \text{ track with } E_{\mathrm{calo}} < 10 \mathrm{GeV}$	$1.9^{+0.06}_{-0.06} \times 10^{-2}$	$1.7^{+0.04}_{-0.04} \times 10^{-2}$	$1.6^{+0.04}_{-0.04} \times 10^{-2}$	$1.4^{+0.04}_{-0.04} \times 10^{-2}$
≥ 1 track with ≥ 3 missing outer hits	$\begin{array}{ c c c }\hline 1.9^{+0.06}_{-0.06} \times 10^{-2} \\ 1.1^{+0.05}_{-0.05} \times 10^{-2} \\ \hline \end{array}$	$ \begin{vmatrix} 1.7 + 0.04 \\ -0.04 \\ 9.6 + 0.32 \\ -0.32 \\ \times 10^{-3} \end{vmatrix} $	$ \begin{vmatrix} 1.6^{+0.04}_{-0.04} \times 10^{-2} \\ 8.6^{+0.30}_{-0.30} \times 10^{-3} \end{vmatrix} $	$\begin{vmatrix} 1.4^{+0.04}_{-0.04} \times 10^{-2} \\ 7.8^{+0.29}_{-0.29} \times 10^{-3} \end{vmatrix}$
≥ 1 track with number of tracker layers with measurement == 4	$2.3^{+0.22}_{-0.22} \times 10^{-3}$	$1.7^{+0.14}_{-0.14} \times 10^{-3}$	$1.5^{+0.13}_{-0.13} \times 10^{-3}$	$1.2^{+0.11}_{-0.11} \times 10^{-3}$
≥ 1 track with number of tracker layers with measurement == 5	$2.1^{+0.20}_{-0.20} \times 10^{-3}$	$1.3^{+0.12}_{-0.12} \times 10^{-3}$	$1.3^{+0.12}_{-0.12} \times 10^{-3}$	$1.2^{+0.11}_{-0.11} \times 10^{-3}$
≥ 1 track with number of tracker layers with measurement ≥ 6	$7.1^{+0.38}_{-0.38} \times 10^{-3}$	$6.4^{+0.26}_{-0.26} \times 10^{-3}$	$5.7^{+0.25}_{-0.25} \times 10^{-3}$	$5.3^{+0.24}_{-0.24} \times 10^{-3}$

Table 1: Cutflow comparison for 300 GeV, $100 \mathrm{~cm}$, region 2017

	300 GeV, 100 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	$9.5^{+0.14}_{-0.14} \times 10^{-2}$	$9.3^{+0.09}_{-0.09} \times 10^{-2}$	$1.0^{+0.01}_{-0.01} \times 10^{-1}$	$8.4^{+0.09}_{-0.09} \times 10^{-2}$
passes $p_{\mathrm{T}}^{\mathrm{miss}}$ filters	$9.5^{+0.14}_{-0.14} \times 10^{-2}$	$9.3^{+0.09}_{-0.09} \times 10^{-2}$	$1.0^{+0.01}_{-0.01} \times 10^{-1}$	$8.4^{+0.09}_{-0.09} \times 10^{-2}$
$p_{\mathrm{T}}^{\mathrm{miss}} > 120\mathrm{GeV}$	$9.3^{+0.14}_{-0.14} \times 10^{-2}$	$9.3^{+0.09}_{-0.09} \times 10^{-2}$	$1.0^{+0.01}_{-0.01} \times 10^{-1}$	$8.4^{+0.09}_{-0.09} \times 10^{-2}$
≥ 1 jet with $p_{ m T} > 110{ m GeV}$ and $ \eta < 2.4$	$8.2^{+0.13}_{-0.13} \times 10^{-2}$	$7.5^{+0.09}_{-0.09} \times 10^{-2}$	$6.9^{+0.08}_{-0.08} \times 10^{-2}$	$ 5.6^{+0.08}_{-0.08} \times 10^{-2} $
==0 pairs of jets with $\Delta \phi_{\rm jet, jet} > 2.5$	$7.1^{+0.12}_{-0.12} \times 10^{-2}$	$6.3^{+0.08}_{-0.08} \times 10^{-2}$	$5.9^{+0.08}_{-0.08} \times 10^{-2}$	$ 5.0^{+0.07}_{-0.07} \times 10^{-2} $
$ \Delta\phi({ m leading jet},ar{p}_{ m T}^{ m miss}) >0.5$	$ 7.1^{+0.12} \times 10^{-2}$	$6.3^{+0.08}_{-0.08} \times 10^{-2}$	$\begin{array}{c} 5.9^{+0.08}_{-0.08} \times 10^{-2} \\ 5.9^{+0.08}_{-0.08} \times 10^{-2} \\ 5.9^{+0.08}_{-0.07} \times 10^{-2} \\ 5.4^{+0.07}_{-0.07} \times 10^{-2} \end{array}$	$ 4.9^{+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} \\ 5.5_{-0.11}^{+0.11} \times 10^{-2} \\ \end{array} $	$6.3^{+0.08}_{-0.08} \times 10^{-2}$	$5.9^{+0.08}_{-0.08} \times 10^{-2}$	$\begin{vmatrix} 4.9^{+0.07}_{-0.07} \times 10^{-2} \\ 4.6^{+0.07}_{-0.07} \times 10^{-2} \\ 2.2^{+0.06}_{-0.07} \times 10^{-2} \end{vmatrix}$
$\geq 1 \text{ track with } p_{\mathrm{T}} > 55 \mathrm{GeV}$	$5.5^{+0.11}_{-0.11} \times 10^{-2}$	$5.2^{+0.07}_{-0.07} \times 10^{-2}$	$5.4^{+0.07}_{-0.07} \times 10^{-2}$	$4.6^{+0.07}_{-0.07} \times 10^{-2}$
≥ 1 track passing fiducial selections	$3.8^{+0.09}_{-0.09} \times 10^{-2}$	$4.2^{+0.07}_{-0.07} \times 10^{-2}$	$ 4.5^{+0.07}_{-0.07} \times 10^{-2} $	
≥ 1 track with ≥ 4 pixel hits	$2.5^{+0.07}_{-0.07} \times 10^{-2}$	$3.2^{+0.06}_{-0.06} \times 10^{-2}$	$3.2^{+0.06}_{-0.06} \times 10^{-2}$	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$
≥ 1 track with no missing inner hits	$2.5^{+0.07}_{-0.07} \times 10^{-2}$	$2.4^{+0.05}_{-0.05} \times 10^{-2}$	$2.3^{+0.05}_{-0.05} \times 10^{-2}$	$2.1^{+0.05}_{-0.05} \times 10^{-2}$
≥ 1 track with no missing middle hits	$2.2^{+0.07}_{-0.07} \times 10^{-2}$	$2.4^{+0.05}_{-0.05} \times 10^{-2}$	$2.3^{+0.05}_{-0.05} \times 10^{-2}$	$2.1^{+0.05}_{-0.05} \times 10^{-2}$
≥ 1 track with relative track isolation $< 5\%$	$1.8^{+0.06}_{-0.06} \times 10^{-2}$	$1.7^{+0.04}_{-0.04} \times 10^{-2}$	$1.6^{+0.04}_{-0.04} \times 10^{-2}$	$1.5^{+0.04}_{-0.04} \times 10^{-2}$
$\geq 1 ext{ track with } d_{ ext{xy}} < 0.02 ext{ cm}$	$1.8^{+0.06}_{-0.06} \times 10^{-2}$	$1.7^{+0.04}_{-0.04} \times 10^{-2}$	$1.6^{+0.04}_{-0.04} \times 10^{-2}$	$1.5^{+0.04}_{-0.04} \times 10^{-2}$
≥ 1 track with $ d_z < 0.5\mathrm{cm}$	$1.8^{+0.06}_{-0.06} \times 10^{-2}$	$1.7^{+0.04}_{-0.04} \times 10^{-2}$	$1.6^{+0.04}_{-0.04} \times 10^{-2}$	$1.5^{+0.04}_{-0.04} \times 10^{-2}$
$\geq 1 \text{ track with } \Delta R(\text{track, jet}) > 0.5$	$1.8^{+0.06}_{-0.06} \times 10^{-2}$	$1.7^{+0.04}_{-0.04} \times 10^{-2}$	$1.6^{+0.04}_{-0.04} \times 10^{-2}$	$1.5^{+0.04}_{-0.04} \times 10^{-2}$
$\geq 1 \text{ track with } \Delta R(\text{track}, \text{electron}) > 0.15$	$1.7^{+0.06}_{-0.06} \times 10^{-2}$	$1.7^{+0.04}_{-0.04} \times 10^{-2}$	$1.6^{+0.04}_{-0.04} \times 10^{-2}$	$ \begin{vmatrix} 1.5^{+0.04}_{-0.04} \times 10^{-2} \\ 1.4^{+0.04}_{-0.04} \times 10^{-2} \end{vmatrix} $
$\geq 1 \text{ track with } \Delta R(\text{track}, \text{muon}) > 0.15$	$1.6^{+0.06}_{-0.06} \times 10^{-2}$	$1.7^{+0.04}_{-0.04} \times 10^{-2}$		$1.4^{+0.04}_{-0.04} \times 10^{-2}$
$\geq 1 \text{ track with } \Delta R(\text{track}, \tau_{\text{h}}) > 0.15$	$1.6^{+0.06}_{-0.06} \times 10^{-2}$	$1.7^{+0.04}_{-0.04} \times 10^{-2}$	$1.6^{+0.04}_{-0.04} \times 10^{-2}$	$ 1.4^{+0.04}_{-0.04} \times 10^{-2} $
$\geq 1 \text{ track with } E_{\mathrm{calo}} < 10 \mathrm{GeV}$	$1.6^{+0.06}_{-0.06} \times 10^{-2}$	$1.7^{+0.04}_{-0.04} \times 10^{-2}$	$1.6^{+0.04}_{-0.04} \times 10^{-2}$	$1.4^{+0.04}_{-0.04} \times 10^{-2}$
≥ 1 track with ≥ 3 missing outer hits	$ \begin{vmatrix} 1.6^{+0.06}_{-0.06} \times 10^{-2} \\ 8.8^{+0.42}_{-0.42} \times 10^{-3} \end{vmatrix} $	$ \begin{vmatrix} 1.7 + 0.04 \\ -0.04 \\ 9.6 + 0.32 \\ -0.32 \\ 10^{-3} \end{vmatrix} \times 10^{-2} $	$ \begin{vmatrix} 1.6^{+0.04}_{-0.04} \times 10^{-2} \\ 8.6^{+0.30}_{-0.30} \times 10^{-3} \end{vmatrix} $	$\begin{vmatrix} 1.4^{+0.04}_{-0.04} \times 10^{-2} \\ 7.8^{+0.29}_{-0.29} \times 10^{-3} \end{vmatrix}$
≥ 1 track with number of tracker layers with measurement == 4	$1.7^{+0.19}_{-0.19} \times 10^{-3}$	$1.7^{+0.13}_{-0.13} \times 10^{-3}$	$1.6^{+0.13}_{-0.13} \times 10^{-3}$	$1.2^{+0.11}_{-0.11} \times 10^{-3}$
≥ 1 track with number of tracker layers with measurement == 5	$1.6^{+0.18}_{-0.18} \times 10^{-3}$	$1.3^{+0.12}_{-0.12} \times 10^{-3}$	$1.3^{+0.12}_{-0.12} \times 10^{-3}$	$1.2^{+0.11}_{-0.11} \times 10^{-3}$
≥ 1 track with number of tracker layers with measurement ≥ 6	$5.7^{+0.34}_{-0.34} \times 10^{-3}$	$6.5^{+0.26}_{-0.26} \times 10^{-3}$	$5.7^{+0.25}_{-0.25} \times 10^{-3}$	$5.3^{+0.24}_{-0.24} \times 10^{-3}$

Table 2: Cutflow comparison for 300 GeV, 100 cm, region 2018A

	300 GeV, 100 cm, region 2018B			
Cut	$\epsilon_i^{ ext{CMS}}$	$\epsilon_i^{\rm sim}$, HEPMC	$\epsilon_i^{\rm sim}$, 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	$9.5^{+0.14}_{-0.14} \times 10^{-2}$	$9.3^{+0.09}_{-0.09} \times 10^{-2}$	$1.0^{+0.01}_{-0.01} \times 10^{-1}$	$8.4^{+0.09}_{-0.09} \times 10^{-2}$
passes $p_{\mathrm{T}}^{\mathrm{miss}}$ filters	$9.5^{+0.14}_{-0.14} \times 10^{-2}$	$9.3^{+0.09}_{-0.09} \times 10^{-2}$	$1.0^{+0.01}_{-0.01} \times 10^{-1}$	$8.4^{+0.09}_{-0.09} \times 10^{-2}$
$p_{\mathrm{T}}^{\mathrm{miss}} > 120\mathrm{GeV}$	$9.3^{+0.14}_{-0.14} \times 10^{-2}$	$9.3^{+0.09}_{-0.09} \times 10^{-2}$	$1.0^{+0.01}_{-0.01} \times 10^{-1}$	$8.4^{+0.09}_{-0.09} \times 10^{-2}$
≥ 1 jet with $p_{\mathrm{T}} > 110\mathrm{GeV}$ and $ \eta < 2.4$	$ \begin{vmatrix} 9.3^{+0.11}_{-0.14} \times 10^{-2} \\ 8.2^{+0.13}_{-0.13} \times 10^{-2} \end{vmatrix} $	$7.5^{+0.09}_{-0.09} \times 10^{-2}$	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	$5.6^{+0.08}_{-0.08} \times 10^{-2}$
==0 pairs of jets with $\Delta \phi_{\rm jet, jet} > 2.5$	$7.1^{-0.13}_{-0.12} \times 10^{-2}$	$6.3^{+0.08}_{-0.08} \times 10^{-2}$	$5.9^{+0.08}_{-0.08} \times 10^{-2}$	$5.0^{+0.07}_{-0.07} \times 10^{-2}$
$ \Delta\phi({ m leading\ jet},ec{p}_{ m T}^{ m miss}) >0.5$	$7.1^{+0.12}_{-0.12} \times 10^{-2}$	$6.3^{+0.08}_{-0.08} \times 10^{-2}$	$5.9^{+0.08}_{-0.08} \times 10^{-2}$	$4.9^{+0.07}_{-0.07} \times 10^{-2}$
$\geq 1 \text{ track with } \eta < 2.1$	$7.0^{+0.12}_{-0.12} \times 10^{-2}$	$6.3^{+0.08}_{-0.08} \times 10^{-2}$	$5.9^{+0.08}_{-0.08} \times 10^{-2}$	$4.9^{+0.07}_{-0.07} \times 10^{-2}$
$\geq 1 \text{ track with } p_{\mathrm{T}} > 55 \mathrm{GeV}$	$5.5^{+0.10}_{-0.10} \times 10^{-2}$	$5.2^{+0.07}_{-0.07} \times 10^{-2}$	$5.4^{+0.07}_{-0.07} \times 10^{-2}$	$4.6^{+0.07}_{-0.07} \times 10^{-2}$
≥ 1 track passing fiducial selections	$3.8^{+0.09}_{-0.09} \times 10^{-2}$	$4.2^{+0.07}_{-0.07} \times 10^{-2}$	$4.5^{+0.07}_{-0.07} \times 10^{-2}$	$3.8^{+0.06}_{-0.06} \times 10^{-2}$
$\geq 1 \text{ track with } \geq 4 \text{ pixel hits}$	$2.5^{+0.07}_{-0.07} \times 10^{-2}$	$3.2^{+0.06}_{-0.06} \times 10^{-2}$	$3.2^{+0.06}_{-0.06} \times 10^{-2}$	$2.7^{+0.05}_{-0.05} \times 10^{-2}$
≥ 1 track with no missing inner hits	$2.5^{+0.07}_{-0.07} \times 10^{-2}$	$2.4^{+0.05}_{-0.05} \times 10^{-2}$	$2.3^{+0.05}_{-0.05} \times 10^{-2}$	$2.1^{+0.05}_{-0.05} \times 10^{-2}$
≥ 1 track with no missing middle hits	$2.2^{+0.07}_{-0.07} \times 10^{-2}$	$2.4^{+0.05}_{-0.05} \times 10^{-2}$	$2.3^{+0.05}_{-0.05} \times 10^{-2}$	$2.1^{+0.05}_{-0.05} \times 10^{-2}$
≥ 1 track with relative track isolation $< 5\%$	$1.8^{+0.06}_{-0.06} \times 10^{-2}$	$1.7^{+0.04}_{-0.04} \times 10^{-2}$	$1.6^{+0.04}_{-0.04} \times 10^{-2}$	$1.5^{+0.04}_{-0.04} \times 10^{-2}$
$\geq 1 \; { m track \; with} \; d_{ m xy} < 0.02 { m cm}$	$ \begin{vmatrix} 1.8 & -0.06 & \times & 10 \\ 1.8 & +0.06 & \times & 10^{-2} \\ 1.8 & +0.06 & \times & 10^{-2} \\ 1.8 & -0.06 & \times & 10^{-2} \end{vmatrix} $	$1.7^{+0.04}_{-0.04} \times 10^{-2}$ $1.7^{+0.04}_{-0.04} \times 10^{-2}$	$ \begin{vmatrix} 1.6 - 0.04 \times 10 \\ 1.6 + 0.04 \times 10^{-2} \\ 1.6 + 0.04 \times 10^{-2} \\ 1.6 + 0.04 \times 10^{-2} \end{vmatrix} $	$ \begin{vmatrix} 1.5 - 0.04 \times 10 \\ 1.5 + 0.04 \times 10^{-2} \\ 1.5 + 0.04 \times 10^{-2} \\ 1.5 - 0.04 \times 10^{-2} \end{vmatrix} $
$\geq 1 \text{ track with } d_z < 0.5 \text{ cm}$	$1.8^{+0.06}_{-0.06} \times 10^{-2}$	$1.7^{+0.04}_{-0.04} \times 10^{-2}$	$1.6^{+0.04}_{-0.04} \times 10^{-2}$	$1.5^{+0.04}_{-0.04} \times 10^{-2}$
$\geq 1 \text{ track with } \Delta R(\text{track, jet}) > 0.5$	$1.7^{+0.06}_{-0.06} \times 10^{-2}$	$1.7^{+0.04}_{-0.04} \times 10^{-2}$	$1.6^{+0.04}_{-0.04} \times 10^{-2}$	$1.5^{+0.04}_{-0.04} \times 10^{-2}$
$\geq 1 \text{ track with } \Delta R(\text{track, electron}) > 0.15$	$1.7^{+0.06}_{-0.06} \times 10^{-2}$	$1.7^{+0.04}_{-0.04} \times 10^{-2}$	$1.6^{+0.04}_{-0.04} \times 10^{-2}$	$1.5^{+0.04}_{-0.04} \times 10^{-2}$
$\geq 1 \text{ track with } \Delta R(\text{track, muon}) > 0.15$	$1.6^{+0.06}_{-0.06} \times 10^{-2}$	$1.7^{+0.04}_{-0.04} \times 10^{-2}$	$1.6^{+0.04}_{-0.04} \times 10^{-2}$	$1.4^{+0.04}_{-0.04} \times 10^{-2}$
$\geq 1 \text{ track with } \Delta R(\text{track}, \tau_{\text{h}}) > 0.15$	$1.6^{+0.06}_{-0.06} \times 10^{-2}$	$1.7^{+0.04}_{-0.04} \times 10^{-2}$	$1.6^{+0.04}_{-0.04} \times 10^{-2}$	$1.4^{+0.04}_{-0.04} \times 10^{-2}$
$\geq 1 \text{ track with } E_{\text{calo}} < 10 \text{GeV}$	$1.5^{+0.06}_{-0.06} \times 10^{-2}$	$1.7^{+0.04}_{-0.04} \times 10^{-2}$	$1.6^{+0.04}_{-0.04} \times 10^{-2}$	$1.4^{+0.04}_{-0.04} \times 10^{-2}$
≥ 1 track with ≥ 3 missing outer hits	$8.8^{+0.42}_{-0.42} \times 10^{-3}$	$9.6^{+0.32}_{-0.32} \times 10^{-3}$	$8.6^{+0.30}_{-0.30} \times 10^{-3}$	$7.8^{+0.29}_{-0.29} \times 10^{-3}$
$\phi(p_{\rm T}^{\rm miss}) < -1.6 \text{ or } \phi(p_{\rm T}^{\rm miss}) > -0.6$	$7.8^{+0.39}_{-0.39} \times 10^{-3}$	$\begin{array}{c} 8.1^{+0.29}_{-0.29} \times 10^{-3} \\ 8.1^{+0.19}_{-0.29} \times 10^{-3} \\ 1.4^{+0.12}_{-0.12} \times 10^{-3} \\ 1.2^{+0.11}_{-0.11} \times 10^{-3} \end{array}$	$\begin{array}{ c c c c c }\hline 7.2^{+0.28}_{-0.28} \times 10^{-3} \\ 1.2^{+0.12}_{-0.12} \times 10^{-3} \\ \end{array}$	$\begin{bmatrix} 6.4^{+0.26}_{-0.26} \times 10^{-3} \\ 1.0^{+0.10}_{-0.10} \times 10^{-3} \end{bmatrix}$
≥ 1 track with number of tracker layers with measurement == 4	$1.4^{+0.17}_{-0.17} \times 10^{-3}$	$1.4^{+0.12}_{-0.12} \times 10^{-3}$		$1.0^{+0.10}_{-0.10} \times 10^{-3}$
≥ 1 track with number of tracker layers with measurement == 5	$\parallel 1.4^{+0.17}_{-0.17} \times 10^{-3}$	$1.2^{+0.11}_{-0.11} \times 10^{-3}$	$1.1^{+0.11}_{-0.11} \times 10^{-3}$	$\begin{array}{c c} 9.0_{-0.98}^{+0.98} \times 10^{-4} \\ 4.4_{-0.22}^{+0.22} \times 10^{-3} \end{array}$
≥ 1 track with number of tracker layers with measurement ≥ 6	$5.2^{+0.32}_{-0.32} \times 10^{-3}$	$5.4^{+0.24}_{-0.24} \times 10^{-3}$	$4.9^{+0.23}_{-0.23} \times 10^{-3}$	$4.4^{+0.22}_{-0.22} \times 10^{-3}$

Table 3: Cutflow comparison for 300 GeV, 100 cm, region 2018B