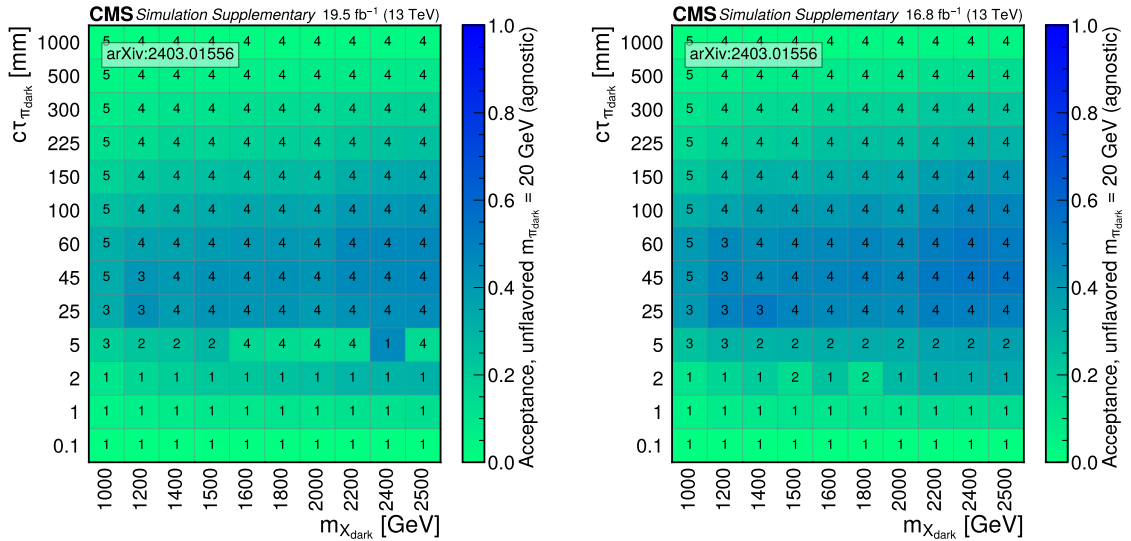
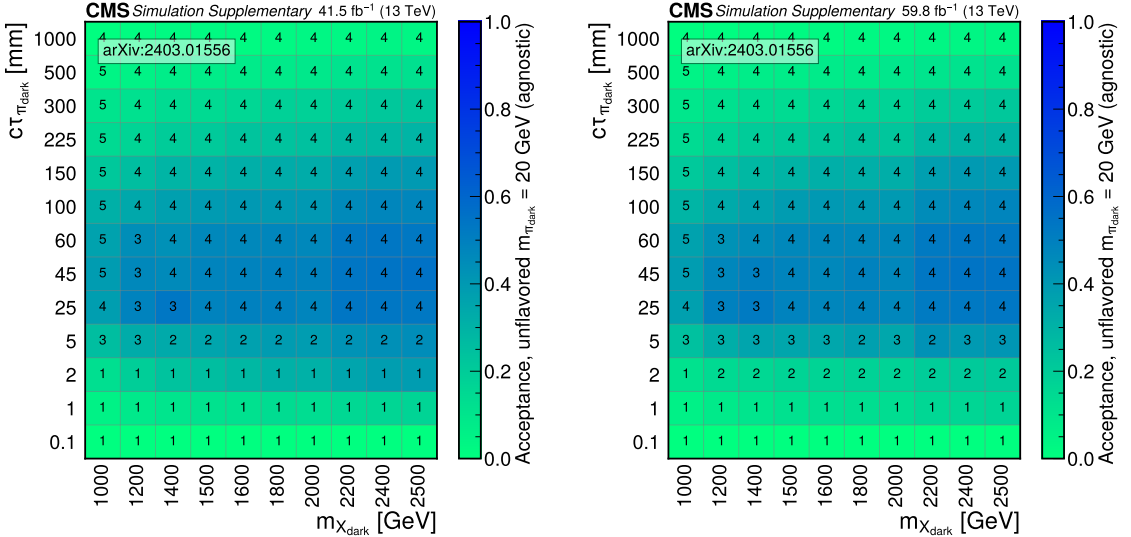

CMS Simulation Supplementary 19.5 fb^{-1} (13 TeV)
arXiv:2403.01556
$c\tau_{\pi_{dark}}$ [mm]
1000 500 300 225 150 100 60 45 25 5 2 1 0.1
5 4 4 4 4 4 4 4 4 4
5 4 4 4 4 4 4 4 4 4
5 4 4 4 4 4 4 4 4 4
5 4 4 4 4 4 4 4 4 4
5 4 4 4 4 4 4 4 4 4
5 4 4 4 4 4 4 4 4 4
5 4 4 4 4 4 4 4 4 4
5 3 4 4 4 4 4 4 4 4
3 3 4 4 4 4 4 4 4 4
3 2 2 2 4 4 4 4 1 4
1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1
1000 1200 1400 1500 1600 1800 2000 2200 2400 2500
$m_{X_{dark}}$ [GeV]
Acceptance, unflavored $m_{\pi_{dark}}$ = 20 GeV (agnostic)
0.0 0.2 0.4 0.6 0.8 1.0

CMS Simulation Supplementary 16.8 fb^{-1} (13 TeV)
arXiv:2403.01556
$c\tau_{\pi_{dark}}$ [mm]
1000 500 300 225 150 100 60 45 25 5 2 1 0.1
5 4 4 4 4 4 4 4 4 4
5 4 4 4 4 4 4 4 4 4
5 4 4 4 4 4 4 4 4 4
5 4 4 4 4 4 4 4 4 4
5 4 4 4 4 4 4 4 4 4
5 4 4 4 4 4 4 4 4 4
5 3 4 4 4 4 4 4 4 4
5 3 4 4 4 4 4 4 4 4
3 3 3 4 4 4 4 4 4 4
3 3 2 2 2 2 2 2 2 2
1 1 1 2 1 2 1 1 1 1
1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1
1000 1200 1400 1500 1600 1800 2000 2200 2400 2500
$m_{X_{dark}}$ [GeV]
Acceptance, unflavored $m_{\pi_{dark}}$ = 20 GeV (agnostic)
0.0 0.2 0.4 0.6 0.8 1.0


CMS Simulation Supplementary 41.5 fb^{-1} (13 TeV)
arXiv:2403.01556
$c\tau_{\pi_{dark}}$ [mm]
1000 500 300 225 150 100 60 45 25 5 2 1 0.1
4 4 4 4 4 4 4 4 4 4
5 4 4 4 4 4 4 4 4 4
5 4 4 4 4 4 4 4 4 4
5 4 4 4 4 4 4 4 4 4
5 4 4 4 4 4 4 4 4 4
5 4 4 4 4 4 4 4 4 4
5 3 4 4 4 4 4 4 4 4
5 3 4 4 4 4 4 4 4 4
4 3 3 4 4 4 4 4 4 4
3 3 2 2 2 2 2 2 2 2
1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1
1000 1200 1400 1500 1600 1800 2000 2200 2400 2500
$m_{X_{dark}}$ [GeV]
Acceptance, unflavored $m_{\pi_{dark}}$ = 20 GeV (agnostic)
0.0 0.2 0.4 0.6 0.8 1.0

CMS Simulation Supplementary 59.8 fb^{-1} (13 TeV)
arXiv:2403.01556
$c\tau_{\pi_{dark}}$ [mm]
1000 500 300 225 150 100 60 45 25 5 2 1 0.1
4 4 4 4 4 4 4 4 4 4
5 4 4 4 4 4 4 4 4 4
5 4 4 4 4 4 4 4 4 4
5 4 4 4 4 4 4 4 4 4
5 4 4 4 4 4 4 4 4 4
5 4 4 4 4 4 4 4 4 4
5 3 4 4 4 4 4 4 4 4
5 3 3 4 4 4 4 4 4 4
4 3 3 4 4 4 4 4 4 4
3 3 3 3 3 2 3 2 3 3
1 2 2 2 2 2 2 2 2 2
1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1
1000 1200 1400 1500 1600 1800 2000 2200 2400 2500
$m_{X_{dark}}$ [GeV]
Acceptance, unflavored $m_{\pi_{dark}}$ = 20 GeV (agnostic)
0.0 0.2 0.4 0.6 0.8 1.0