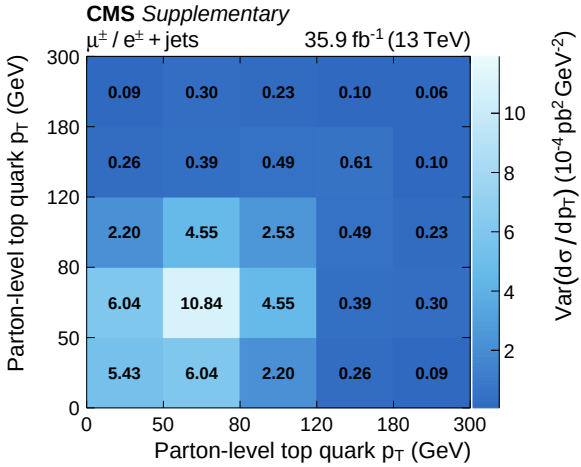
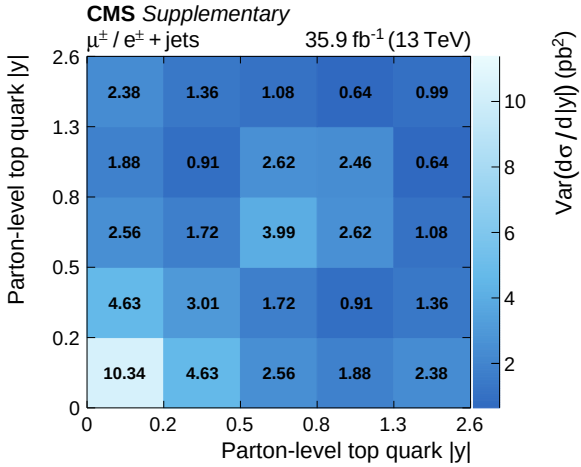
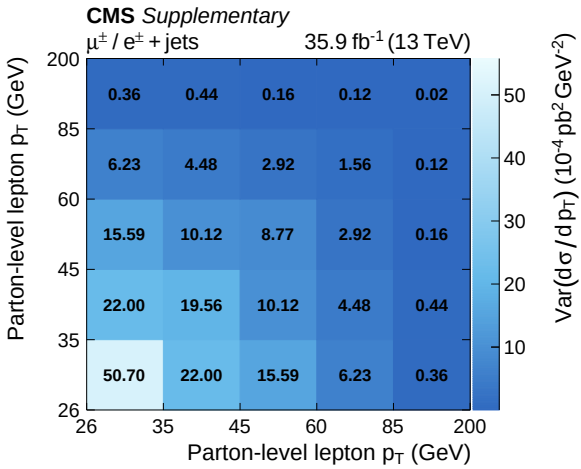
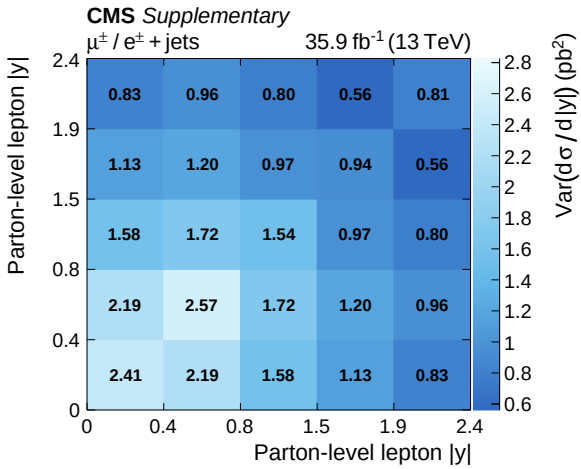
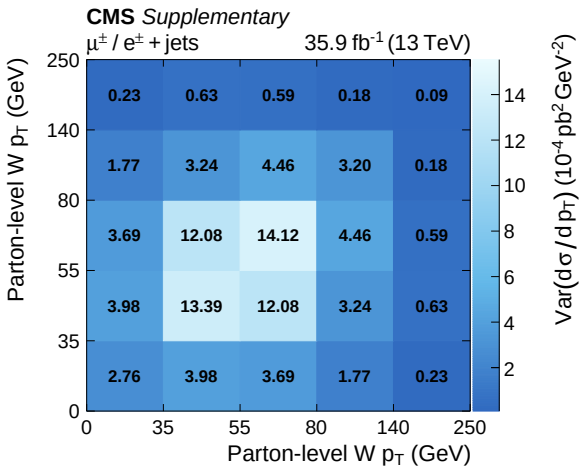
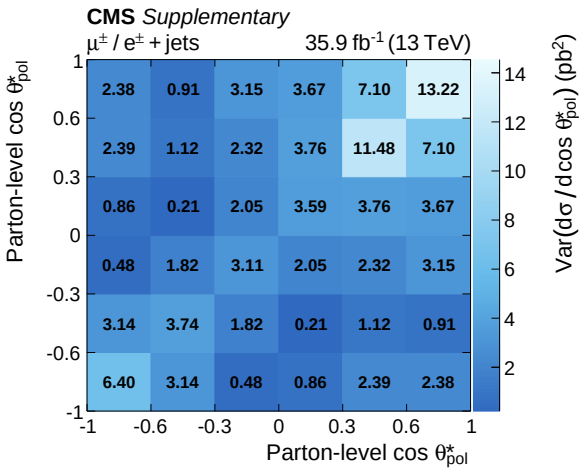

CMS Supplementary
μ± / e± + jets
35.9 fb-1 (13 TeV)
Parton-level top quark pT (GeV)
Parton-level top quark pT (GeV)
Var(dσ / dpT) (10-4 pb2 GeV-2)
0.09 0.30 0.23 0.10 0.06
0.26 0.39 0.49 0.61 0.10
2.20 4.55 2.53 0.49 0.23
6.04 10.84 4.55 0.39 0.30
5.43 6.04 2.20 0.26 0.09


CMS Supplementary
μ± / e± + jets
35.9 fb-1 (13 TeV)
Parton-level top quark |y|
Parton-level top quark |y|
Var(dσ / d|y|) (pb2)
2.38 1.36 1.08 0.64 0.99
1.88 0.91 2.62 2.46 0.64
2.56 1.72 3.99 2.62 1.08
4.63 3.01 1.72 0.91 1.36
10.34 4.63 2.56 1.88 2.38


CMS Supplementary
μ± / e± + jets
35.9 fb-1 (13 TeV)
Parton-level lepton pT (GeV)
Parton-level lepton pT (GeV)
Var(dσ / dpT) (10-4 pb2 GeV-2)
0.36 0.44 0.16 0.12 0.02
6.23 4.48 2.92 1.56 0.12
15.59 10.12 8.77 2.92 0.16
22.00 19.56 10.12 4.48 0.44
50.70 22.00 15.59 6.23 0.36


CMS Supplementary
μ± / e± + jets
35.9 fb-1 (13 TeV)
Parton-level lepton |y|
Parton-level lepton |y|
Var(dσ / d|y|) (pb2)
0.83 0.96 0.80 0.56 0.81
1.13 1.20 0.97 0.94 0.56
1.58 1.72 1.54 0.97 0.80
2.19 2.57 1.72 1.20 0.96
2.41 2.19 1.58 1.13 0.83


CMS Supplementary
μ± / e± + jets
35.9 fb-1 (13 TeV)
Parton-level W pT (GeV)
Parton-level W pT (GeV)
Var(dσ / dpT) (10-4 pb2 GeV-2)
0.23 0.63 0.59 0.18 0.09
1.77 3.24 4.46 3.20 0.18
3.69 12.08 14.12 4.46 0.59
3.98 13.39 12.08 3.24 0.63
2.76 3.98 3.69 1.77 0.23


CMS Supplementary
μ± / e± + jets
35.9 fb-1 (13 TeV)
Parton-level cos θ*pol
Parton-level cos θ*pol
Var(dσ / dcos θ*pol) (pb2)
2.38 0.91 3.15 3.67 7.10 13.22
2.39 1.12 2.32 3.76 11.48 7.10
0.86 0.21 2.05 3.59 3.76 3.67
0.48 1.82 3.11 2.05 2.32 3.15
3.14 3.74 1.82 0.21 1.12 0.91
6.40 3.14 0.48 0.86 2.39 2.38