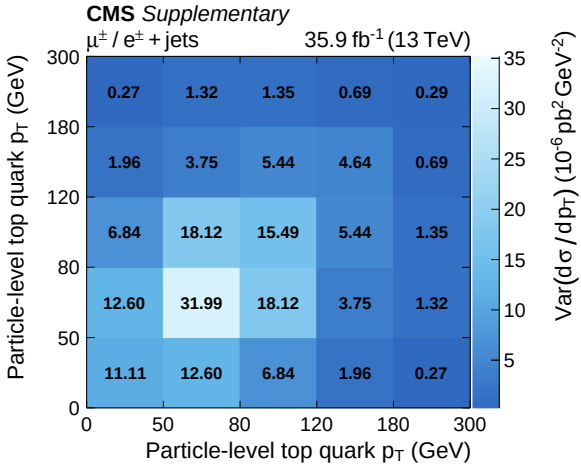
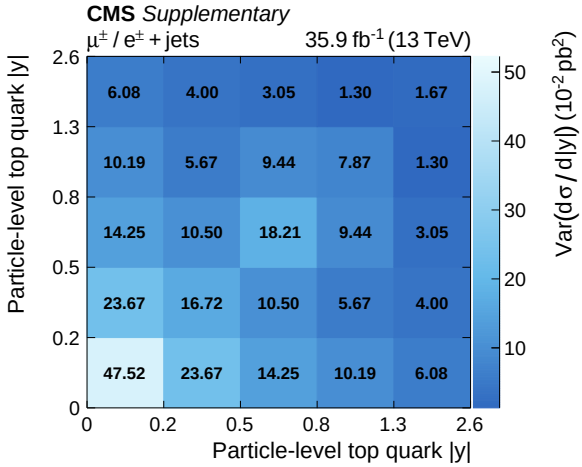
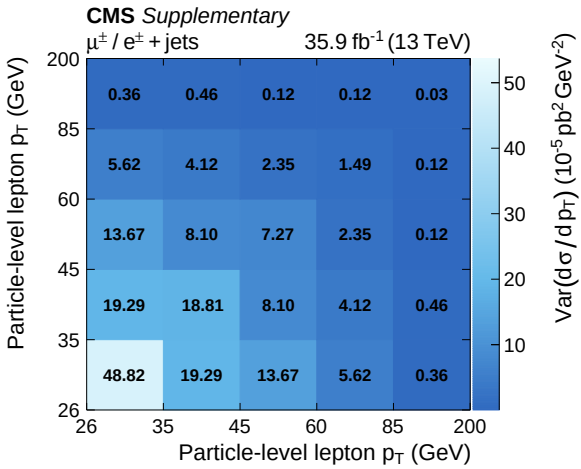
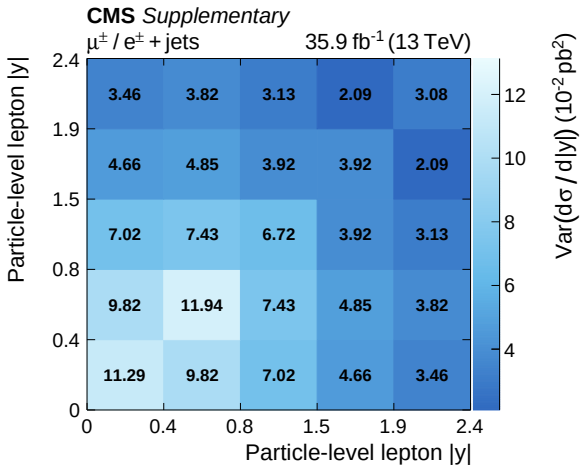
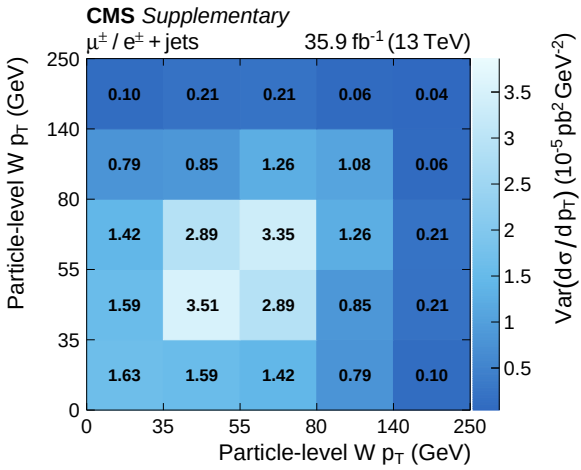
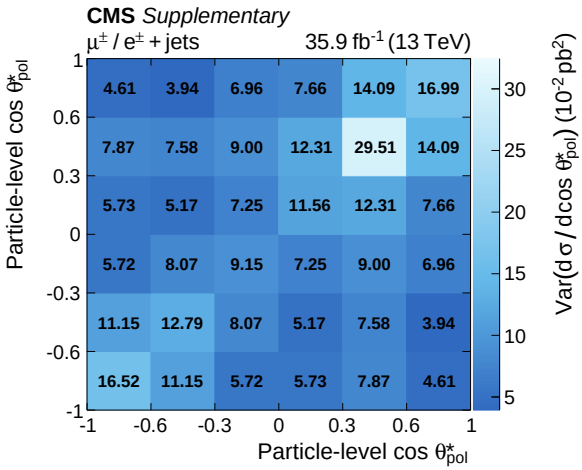

CMS Supplementary
μ± / e± + jets
35.9 fb-1 (13 TeV)
Particle-level top quark pT (GeV)
Particle-level top quark pT (GeV)
Var(dσ / dpT) (10-6 pb2 GeV-2)
0.27 1.32 1.35 0.69 0.29
1.96 3.75 5.44 4.64 0.69
6.84 18.12 15.49 5.44 1.35
12.60 31.99 18.12 3.75 1.32
11.11 12.60 6.84 1.96 0.27


CMS Supplementary
μ± / e± + jets
35.9 fb-1 (13 TeV)
Particle-level top quark |y|
Particle-level top quark |y|
Var(dσ / d|y|) (10-2 pb2)
6.08 4.00 3.05 1.30 1.67
10.19 5.67 9.44 7.87 1.30
14.25 10.50 18.21 9.44 3.05
23.67 16.72 10.50 5.67 4.00
47.52 23.67 14.25 10.19 6.08


CMS Supplementary
μ± / e± + jets
35.9 fb-1 (13 TeV)
Particle-level lepton pT (GeV)
Particle-level lepton pT (GeV)
Var(dσ / dpT) (10-5 pb2 GeV-2)
0.36 0.46 0.12 0.12 0.03
5.62 4.12 2.35 1.49 0.12
13.67 8.10 7.27 2.35 0.12
19.29 18.81 8.10 4.12 0.46
48.82 19.29 13.67 5.62 0.36


CMS Supplementary
μ± / e± + jets
35.9 fb-1 (13 TeV)
Particle-level lepton |y|
Particle-level lepton |y|
Var(dσ / d|y|) (10-2 pb2)
3.46 3.82 3.13 2.09 3.08
4.66 4.85 3.92 3.92 2.09
7.02 7.43 6.72 3.92 3.13
9.82 11.94 7.43 4.85 3.82
11.29 9.82 7.02 4.66 3.46


CMS Supplementary
μ± / e± + jets
35.9 fb-1 (13 TeV)
Particle-level W pT (GeV)
Particle-level W pT (GeV)
Var(dσ / dpT) (10-5 pb2 GeV-2)
0.10 0.21 0.21 0.06 0.04
0.79 0.85 1.26 1.08 0.06
1.42 2.89 3.35 1.26 0.21
1.59 3.51 2.89 0.85 0.21
1.63 1.59 1.42 0.79 0.10


CMS Supplementary
μ± / e± + jets
35.9 fb-1 (13 TeV)
Particle-level cos θ*pol
Particle-level cos θ*pol
Var(dσ / dcos θ*pol) (10-2 pb2)
4.61 3.94 6.96 7.66 14.09 16.99
7.87 7.58 9.00 12.31 29.51 14.09
5.73 5.17 7.25 11.56 12.31 7.66
5.72 8.07 9.15 7.25 9.00 6.96
11.15 12.79 8.07 5.17 7.58 3.94
16.52 11.15 5.72 5.73 7.87 4.61