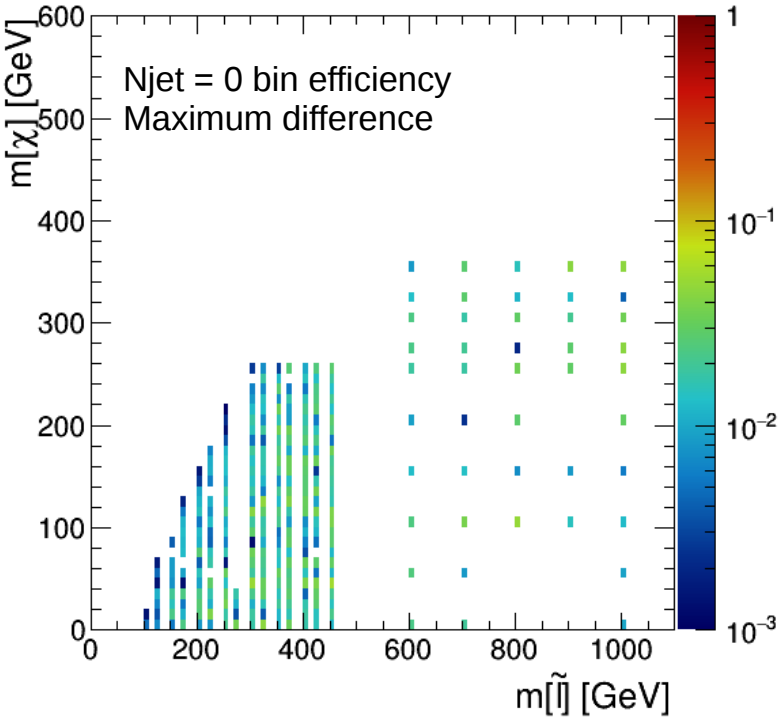
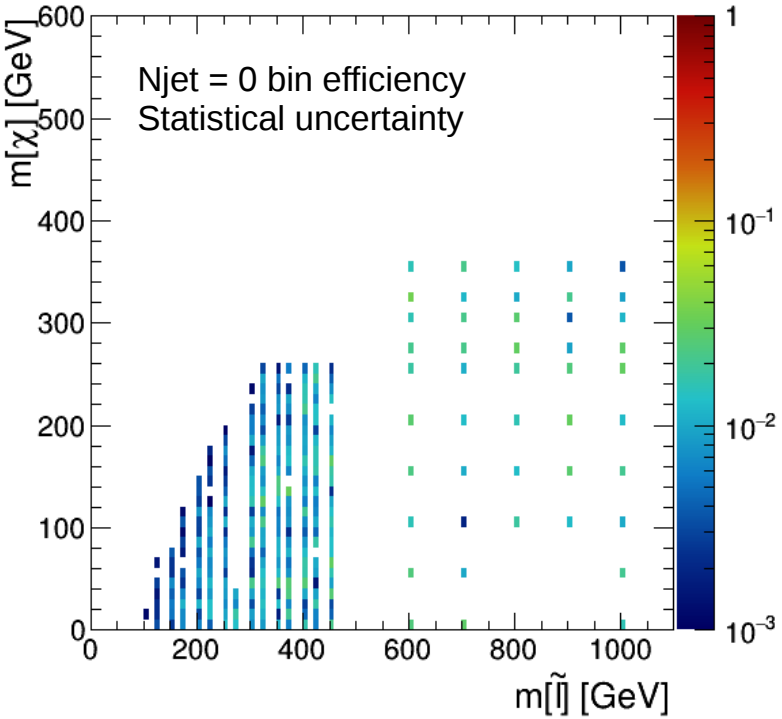
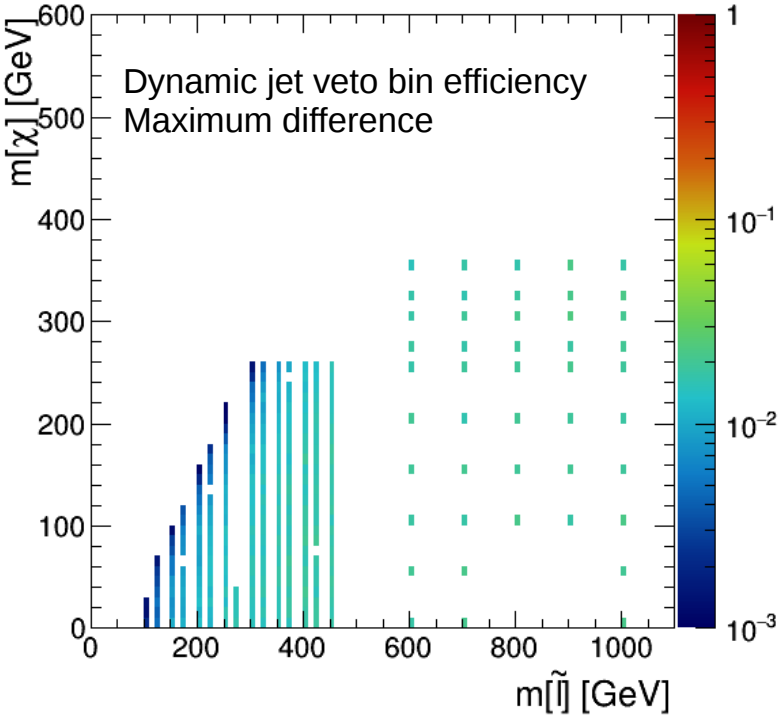
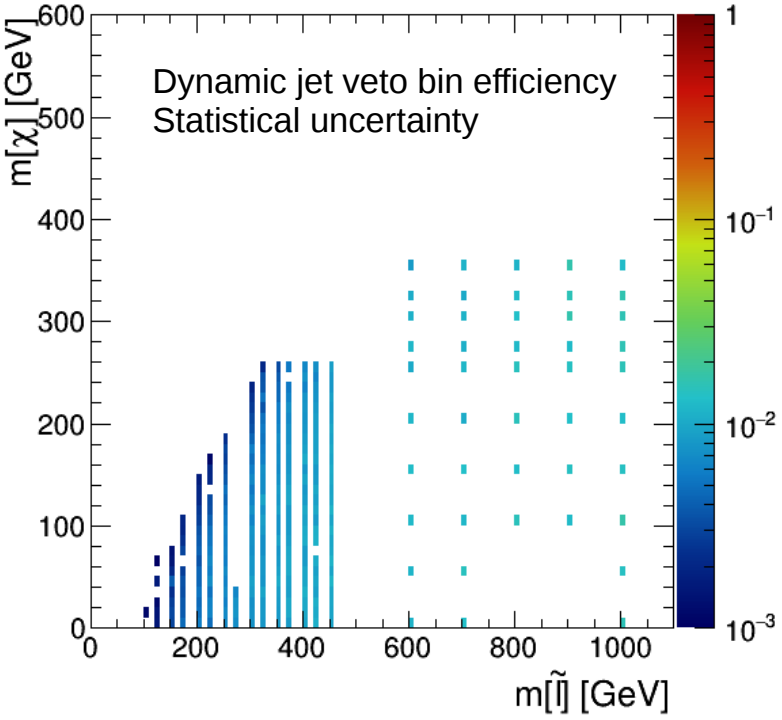
- Aim to see the effect of pileup on the signal efficiency for the slepton signal regions.
- Define 3 different subsamples according to the number of true interactions:
  - Low pileup: nTrueInt < 20
  - Medium pileup: 20 < nTrueInt < 30
  - High pileup: nTrueInt > 30
- Calculate efficiency for each subsample as #SignalRegionsCuts/#AllSignalEvents
- Estimate the maximum efficiency deviation from the 3 subsamples.
- Compare also to the pure statistical uncertainty of the efficiecy.


Njet = 0 bin efficiency
Maximum difference
m[χ] [GeV]
m[l̃] [GeV]
0
100
200
300
400
500
600
0
200
400
600
800
1000
1
10^{-1}
10^{-2}
10^{-3}


Njet = 0 bin efficiency
Statistical uncertainty
m[χ] [GeV]
m[l̃] [GeV]
0
100
200
300
400
500
600
0
200
400
600
800
1000
1
10^{-1}
10^{-2}
10^{-3}


Dynamic jet veto bin efficiency
Maximum difference
m[χ] [GeV]
m[l̃] [GeV]
0
100
200
300
400
500
600
0
200
400
600
800
1000
1
10^{-1}
10^{-2}
10^{-3}


Dynamic jet veto bin efficiency
Statistical uncertainty
m[χ] [GeV]
m[l̃] [GeV]
0
100
200
300
400
500
600
0
200
400
600
800
1000
1
10^{-1}
10^{-2}
10^{-3}