Tau Dilepton Analysis: $t\bar{t} \rightarrow \tau_h e, \mu jj$

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- SumET Fake Rates

Summary

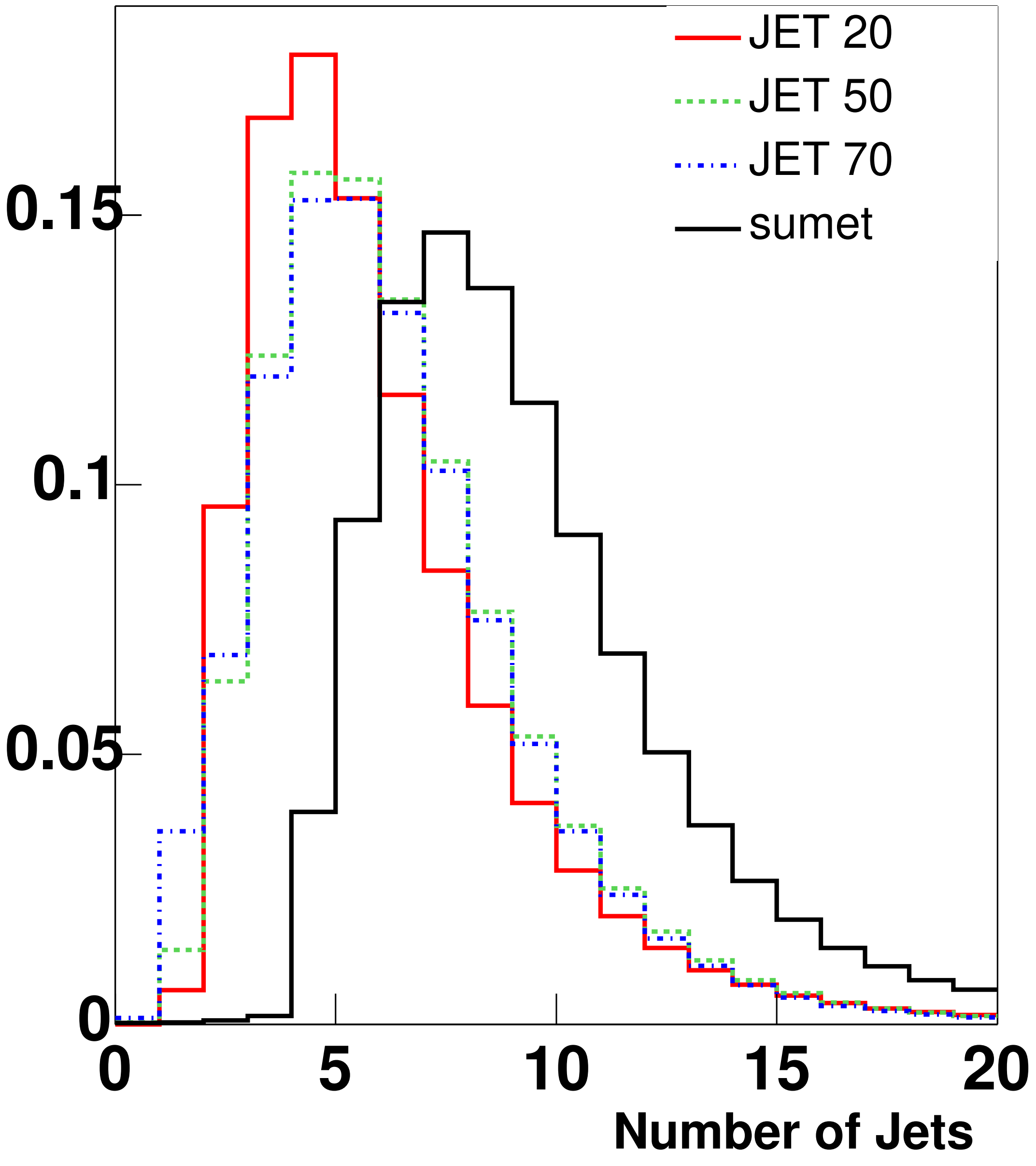
	number of events expected
$\gamma^*/Z \rightarrow \tau\tau + jets$	0.06 ±0.03
$j \rightarrow \tau$ fakes	0.40 ±0.10 ±
$e \rightarrow \tau$ fakes	0.07 ±0.03
WW	0.08 ± 0.01
Total expected background events	0.61 ± 0.11
Signal exp from MC	0.46±0.03

Table 1: New Electron Summary of Backgrounds

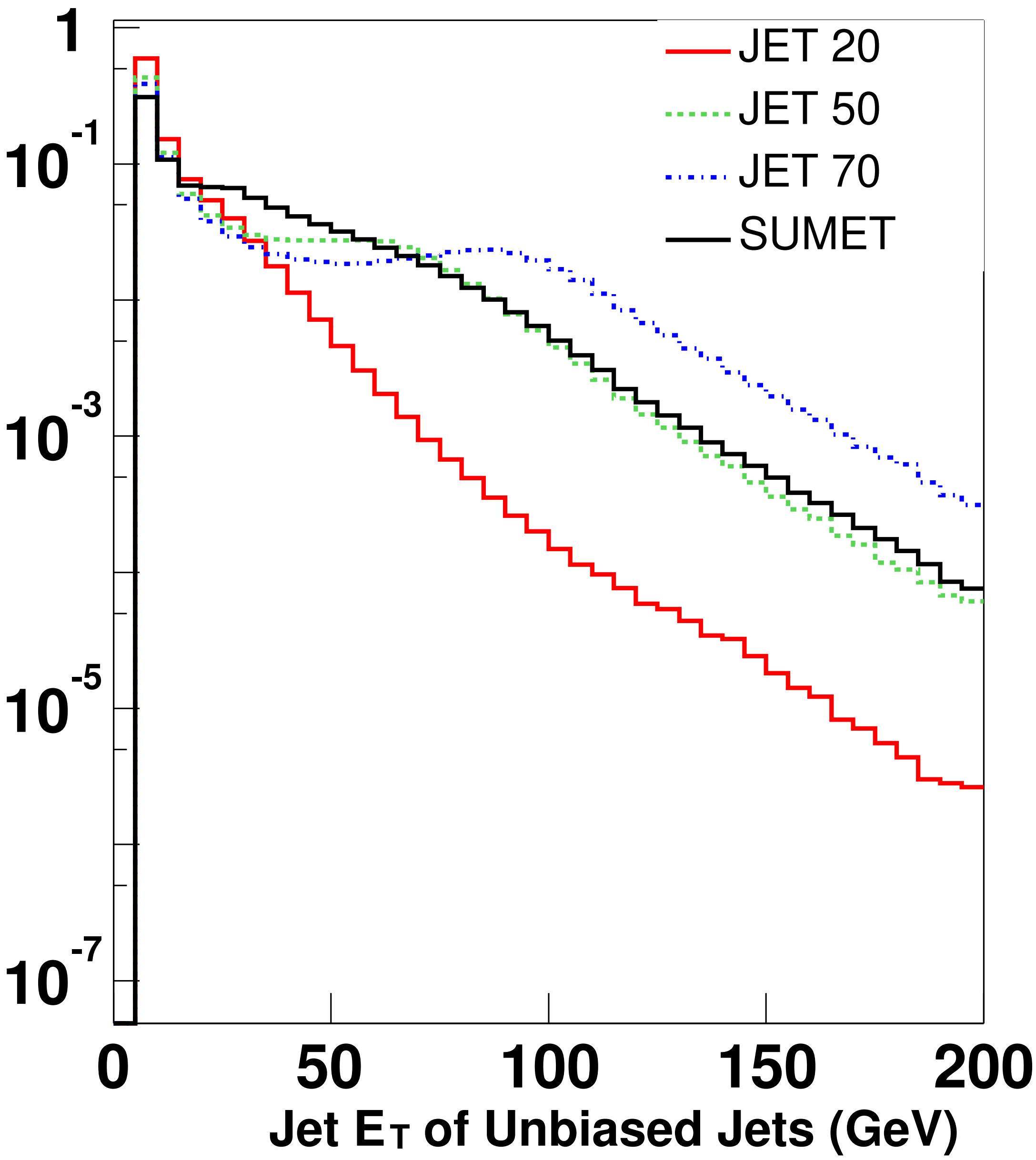
	number of events expected
$\gamma^*/Z \rightarrow \tau\tau + jets$	0.06 ±0.03
$j \rightarrow \tau$ fakes	0.12 ±0.03 ±
WW	0.06±0.01
Total expected background events	0.24 ± 0.08
Signal exp from MC	0.34 ±0.03

Table 2: New Muon Summary of Backgrounds

Sum E_T

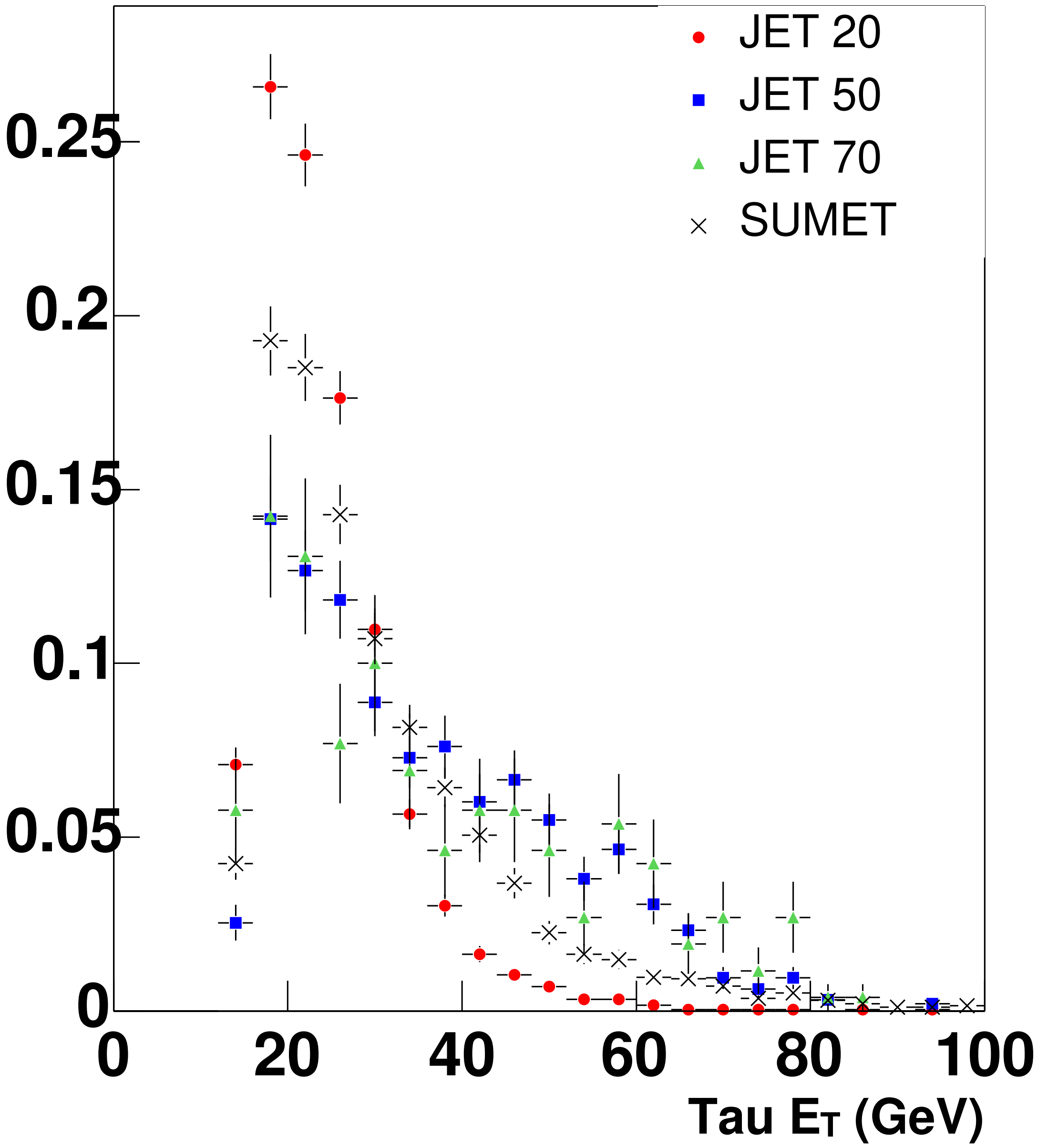


SumE_T



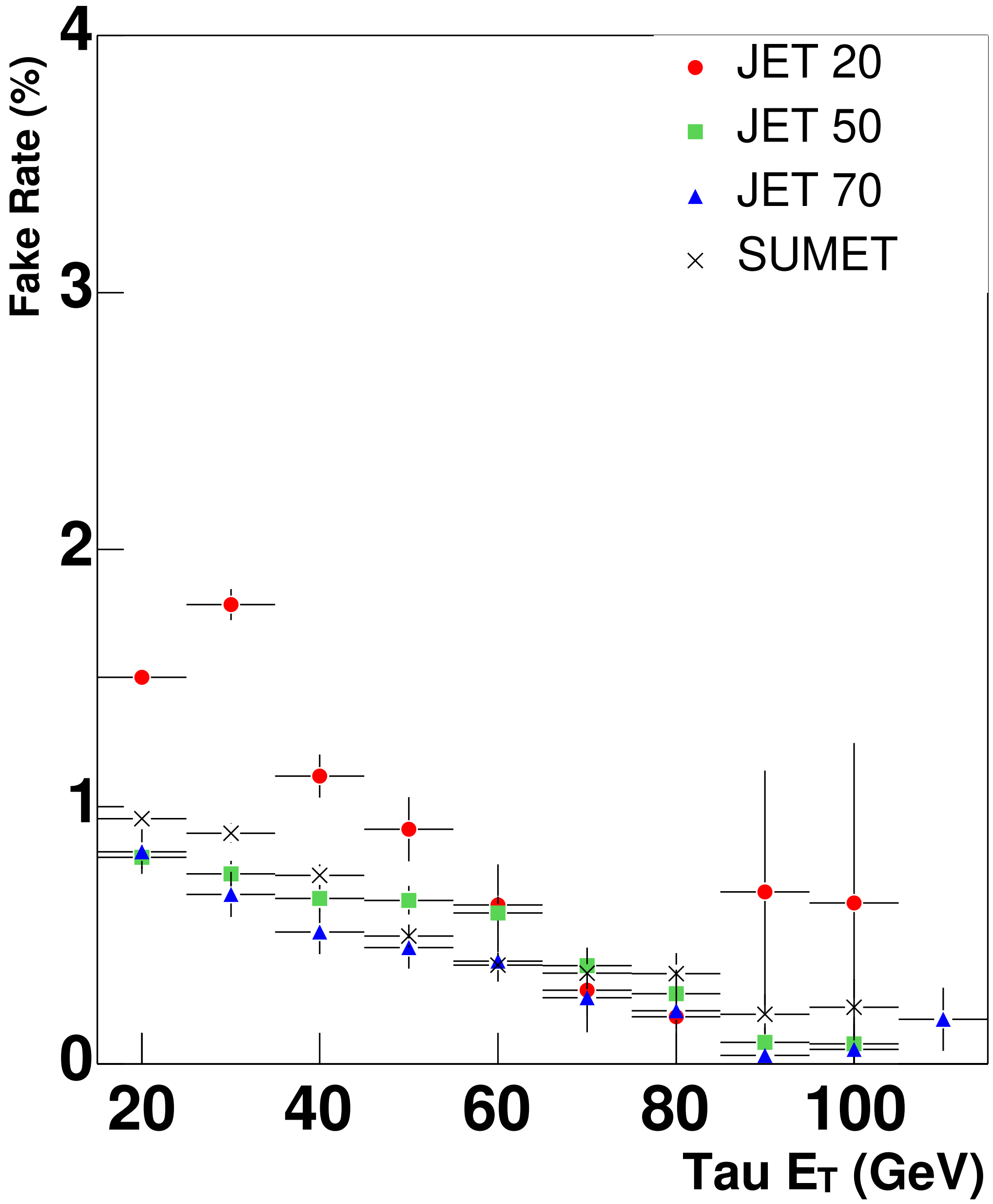
JET 20
JET 50
JET 70
SUMET
1
10^-1
10^-3
10^-5
10^-7
0
50
100
150
200
Jet E_T of Unbiased Jets (GeV)

SumE_T

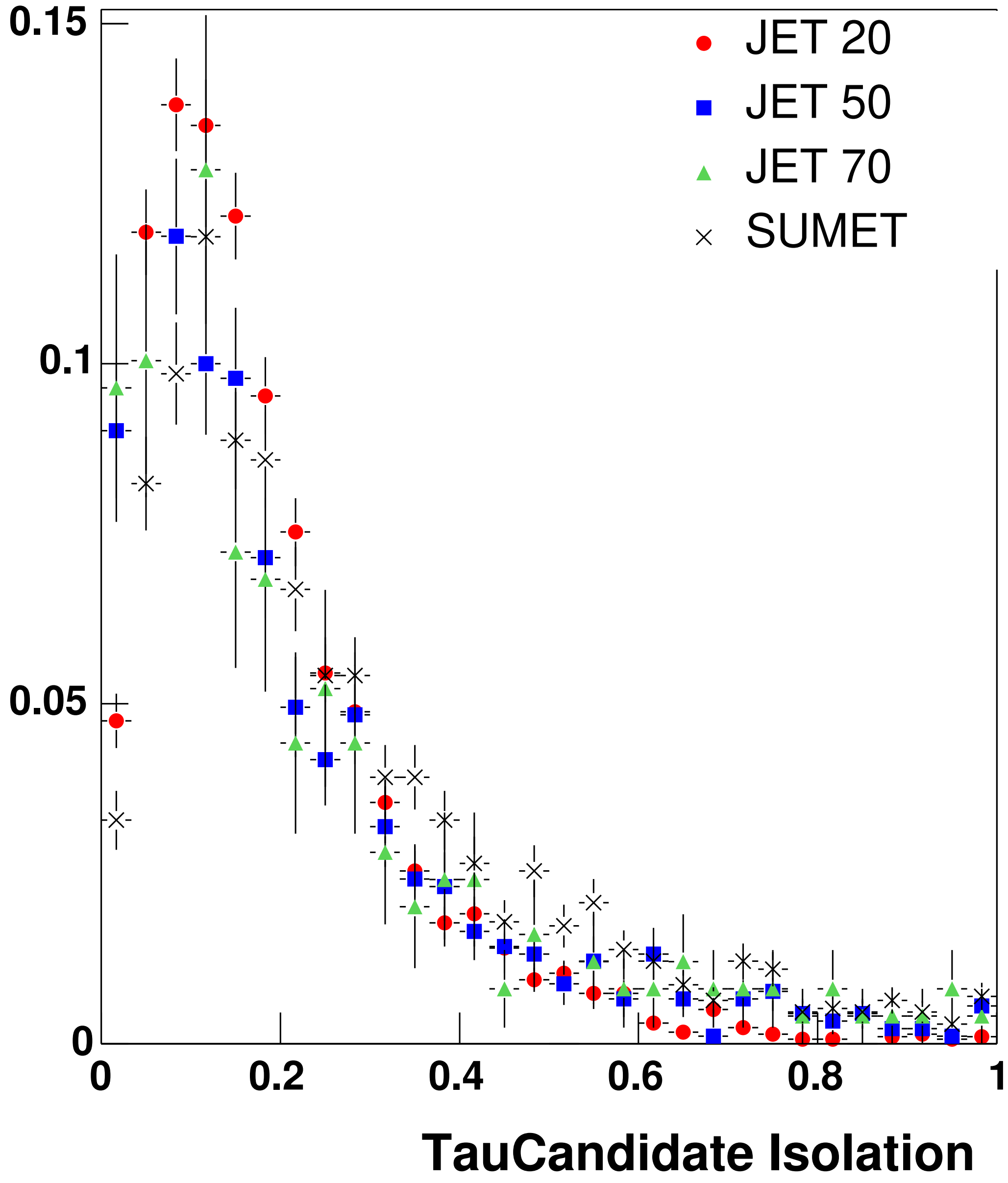


JET 20
JET 50
JET 70
SUMET
0.25
0.2
0.15
0.1
0.05
0
0
20
40
60
80
100
Tau ET (GeV)

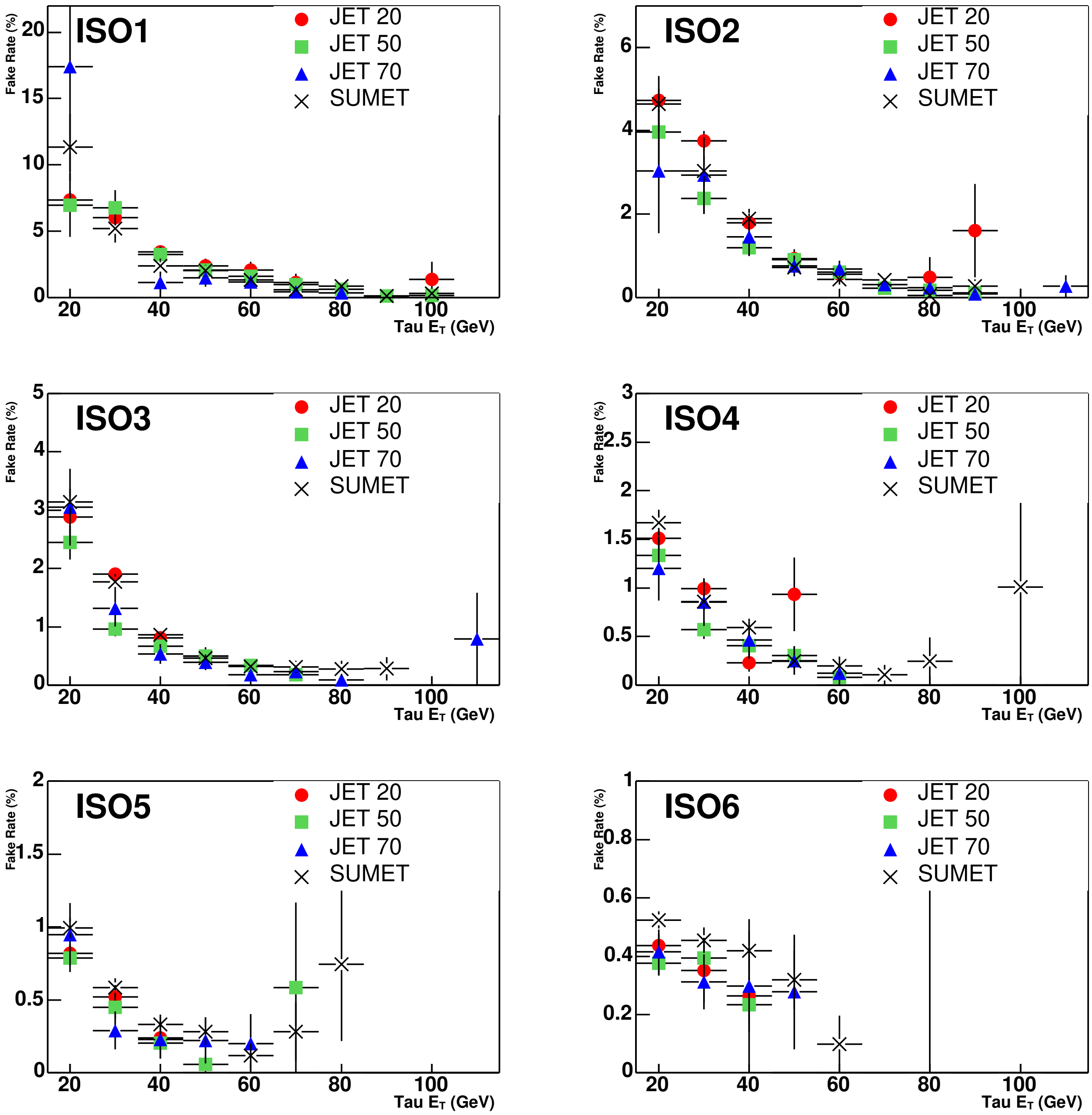
SumE_T


4
3
2
1
0
Fake Rate (%)
20
40
60
80
100
Tau ET (GeV)
JET 20
JET 50
JET 70
SUMET

SumE_T


0.15
0.1
0.05
0
0
0.2
0.4
0.6
0.8
1
JET 20
JET 50
JET 70
SUMET
TauCandidate Isolation

SumE_T


ISO1
ISO2
ISO3
ISO4
ISO5
ISO6
JET 20
JET 50
JET 70
SUMET
Fake Rate (%)
Tau E_T (GeV)