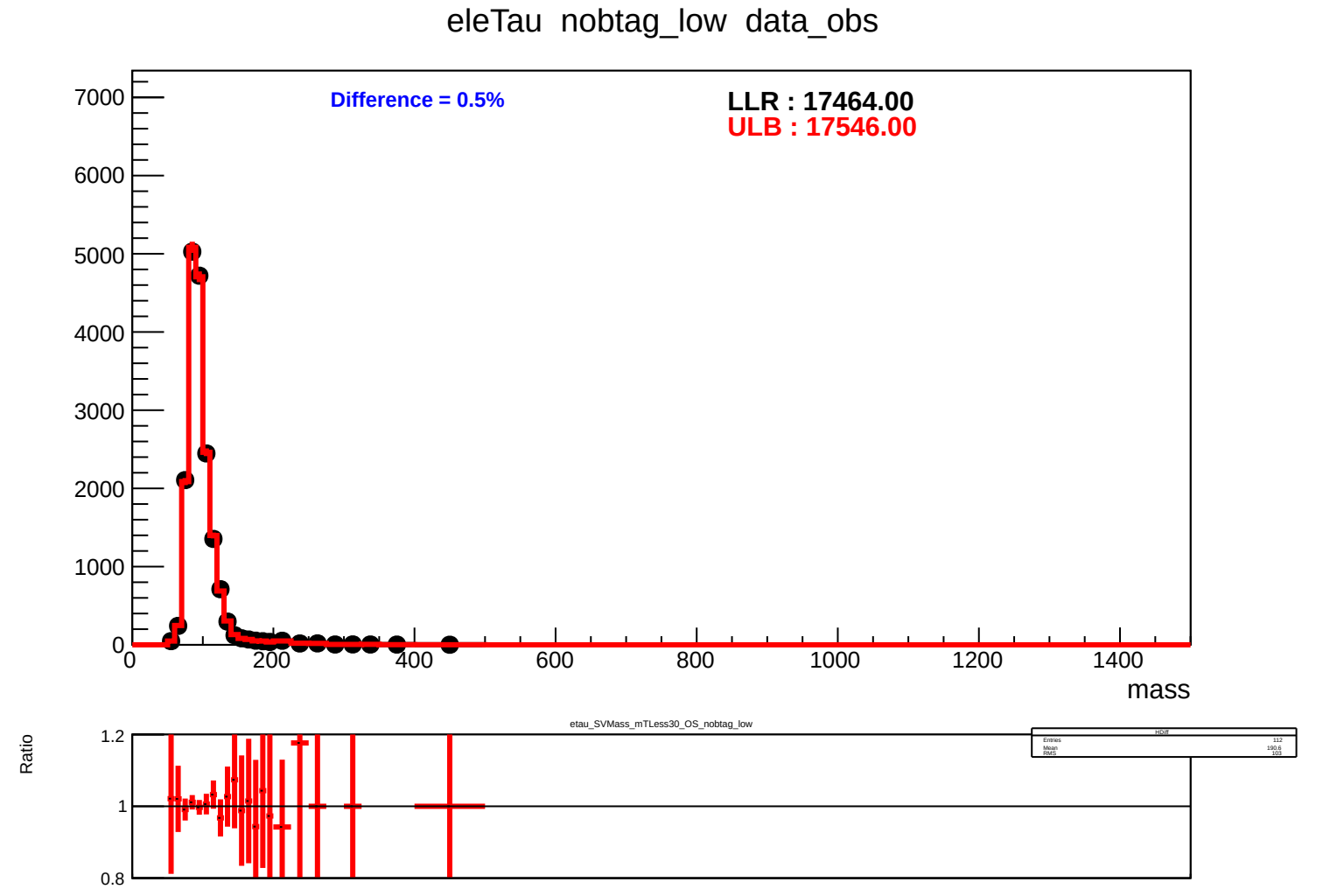
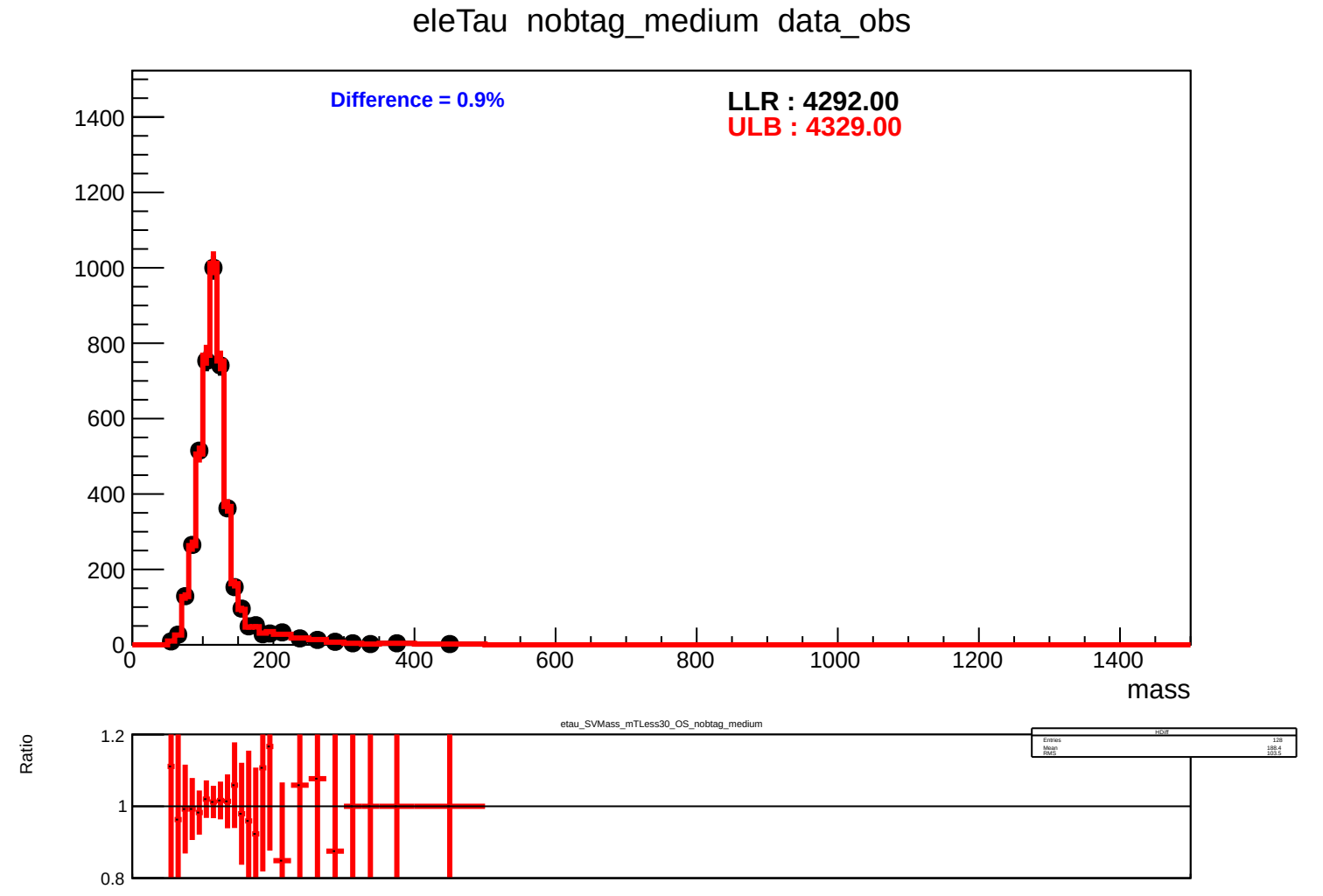
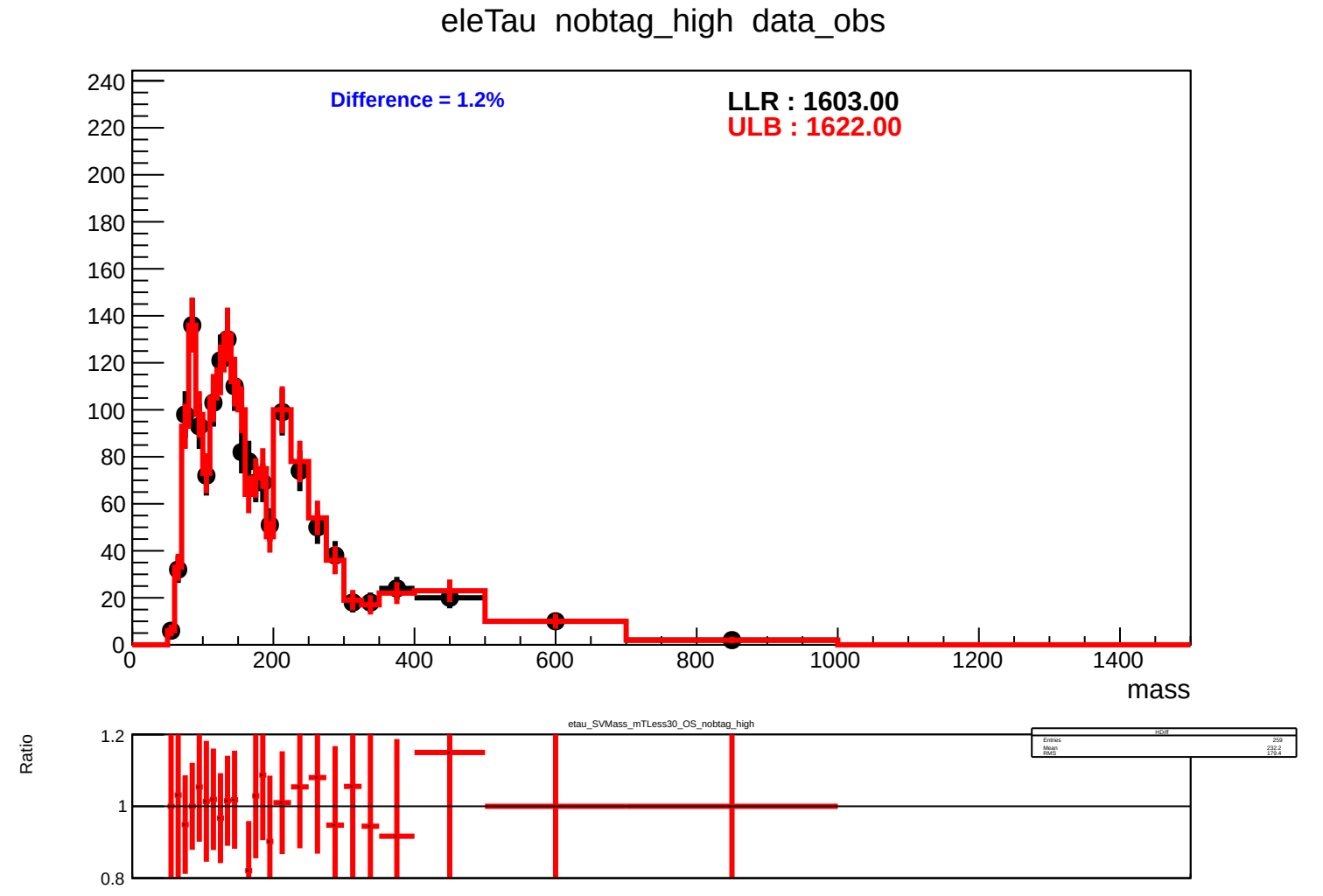
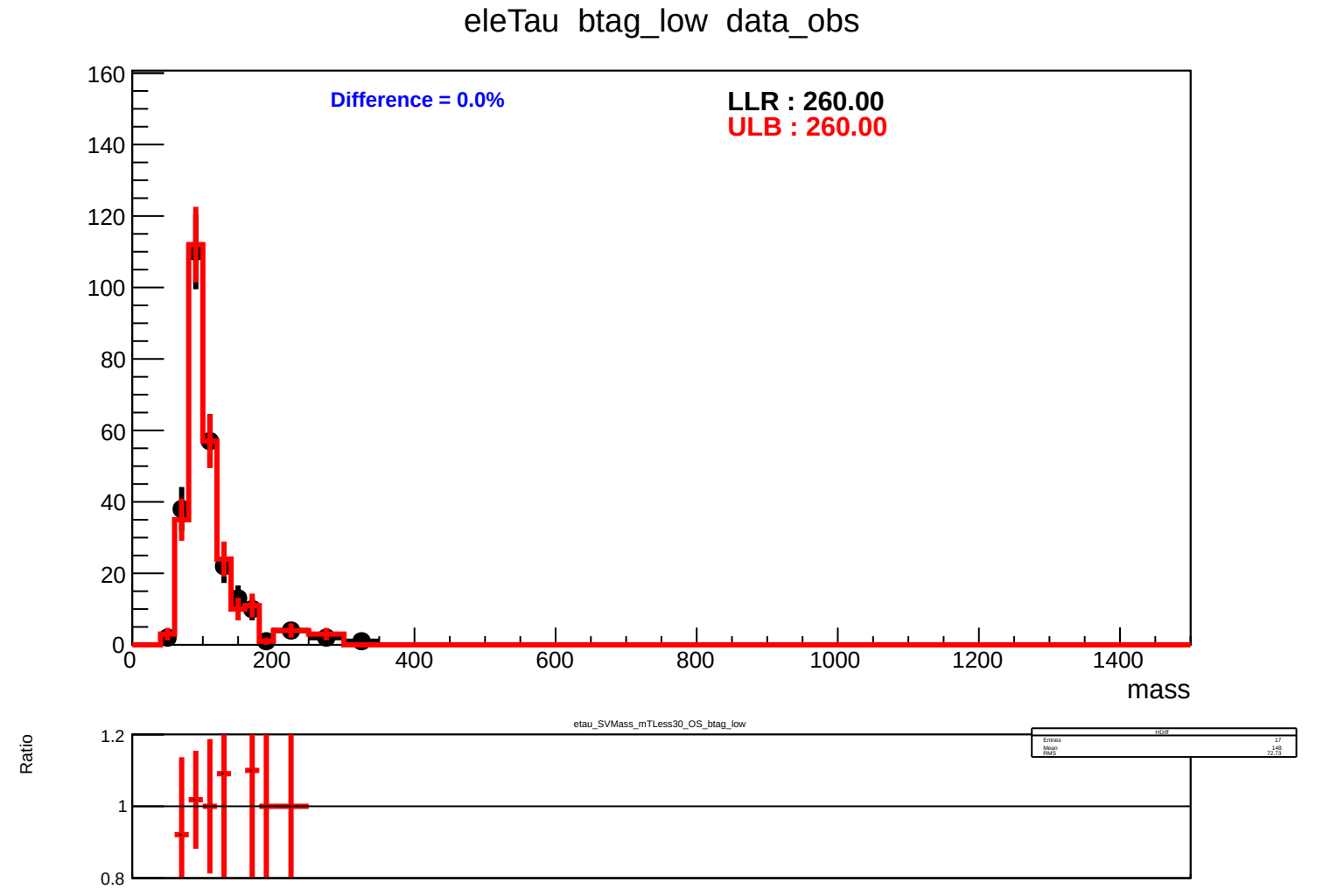
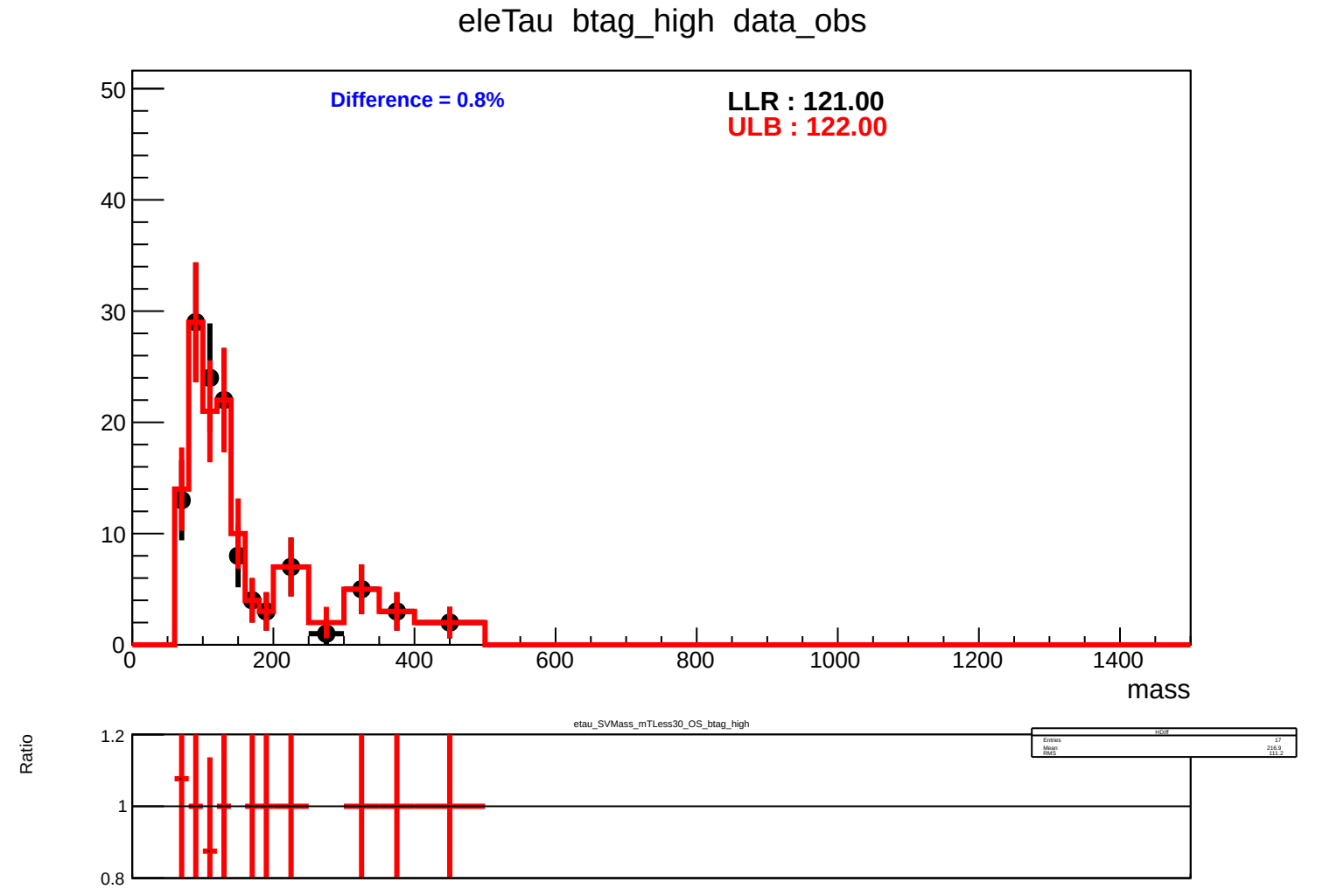
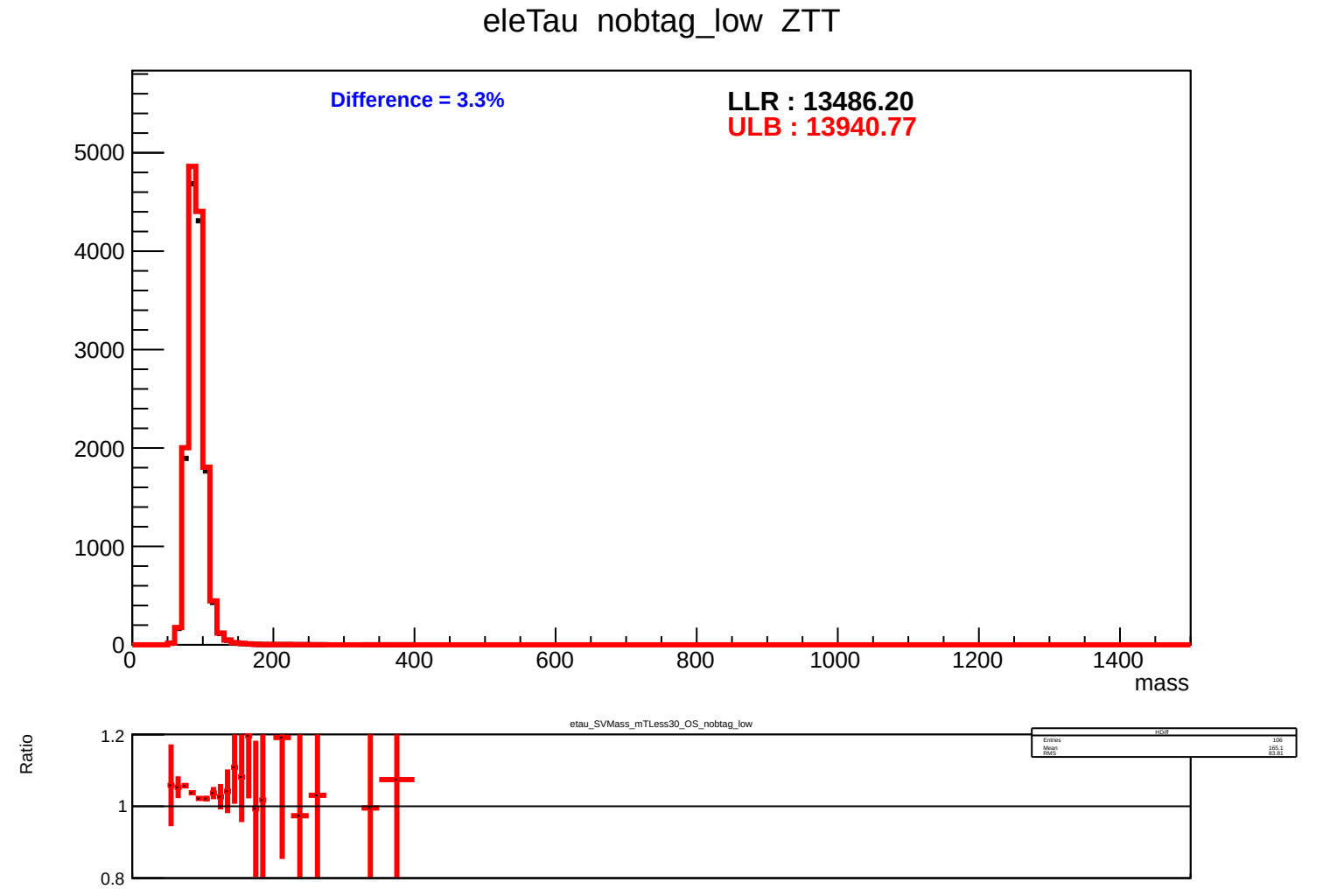

eleTau nobtag_low data_obs
Difference = 0.5%
LLR : 17464.00
ULB : 17546.00
7000
6000
5000
4000
3000
2000
1000
0
0
200
400
600
800
1000
1200
1400
mass
Ratio
1.2
1
0.8
etau_SVMass_mTLess30_OS_nobtag_low
HDiff
Entries 112
Mean 190.6
RMS 103

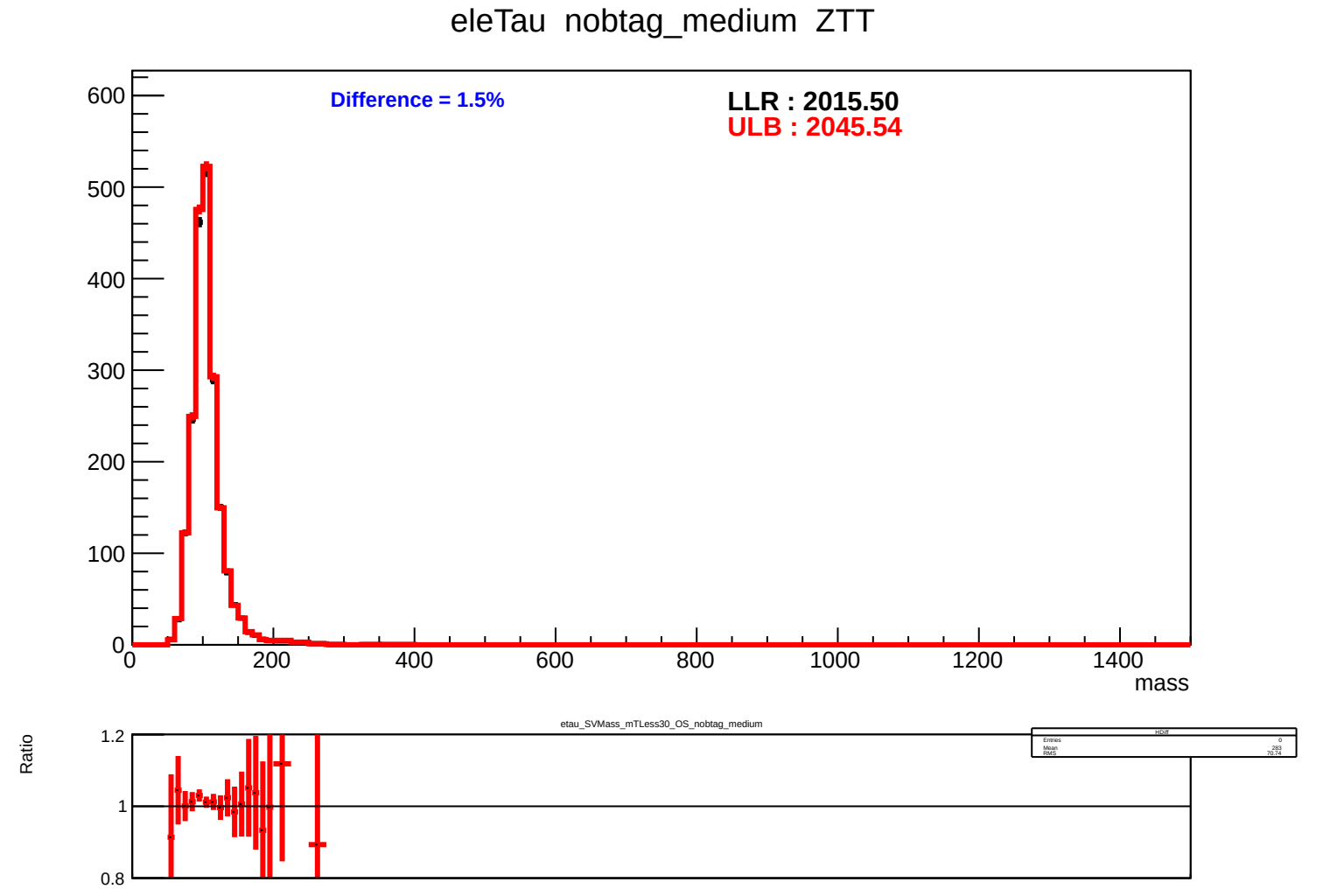

eleTau nobtag_medium data_obs
Difference = 0.9%
LLR : 4292.00
ULB : 4329.00
1400
1200
1000
800
600
400
200
0
0
200
400
600
800
1000
1200
1400
mass
etau_SVMass_mTLess30_OS_nobtag_medium
HDiff
Entries 128
Mean 185.4
RMS 103.5
Ratio
1.2
1
0.8

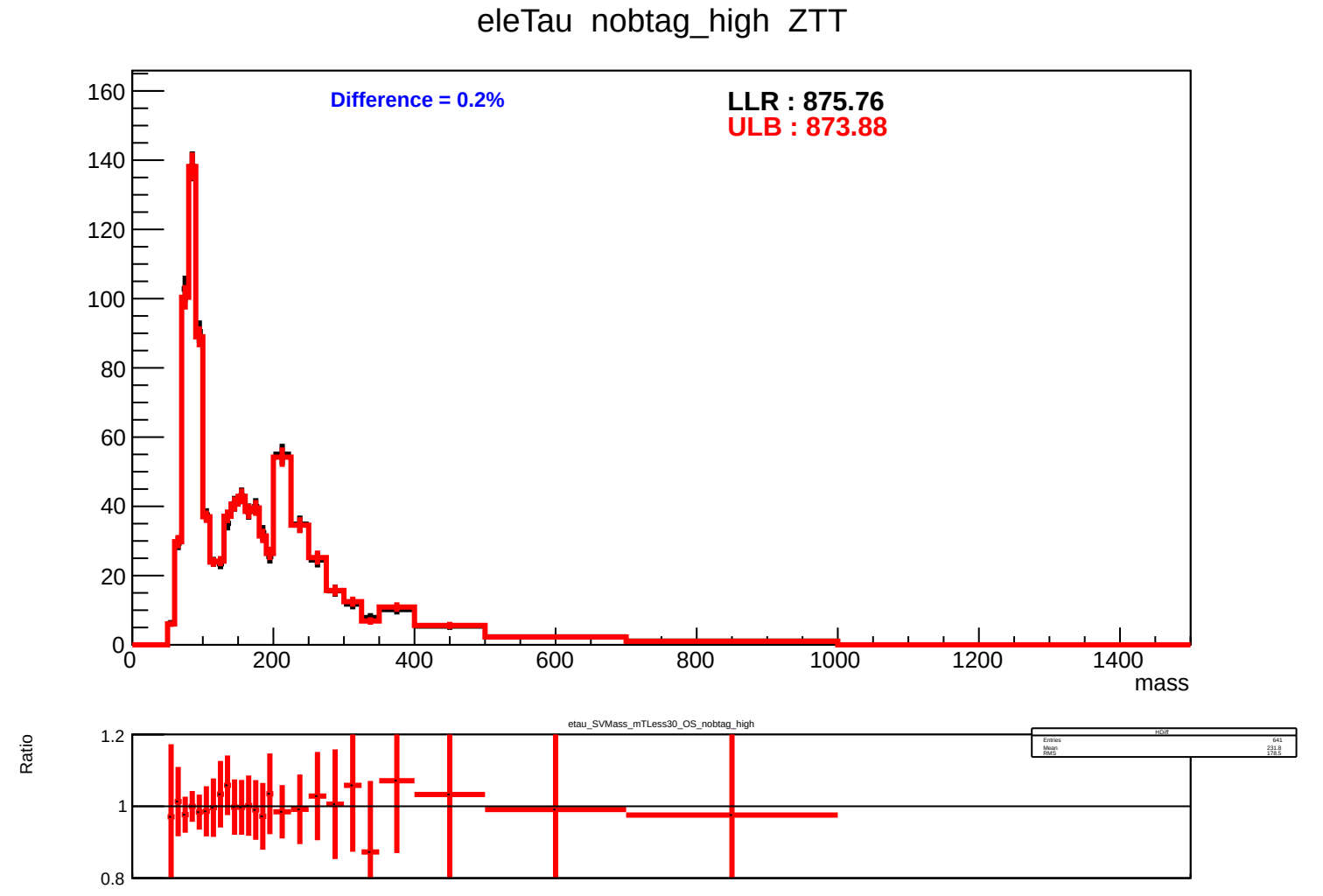

eleTau nobtag_high data_obs
Difference = 1.2%
LLR : 1603.00
ULB : 1622.00
mass
Ratio
etau_SVMass_mTLess30_OS_nobtag_high
HDiff
Entries 259
Mean 232.2
RMS 170.4

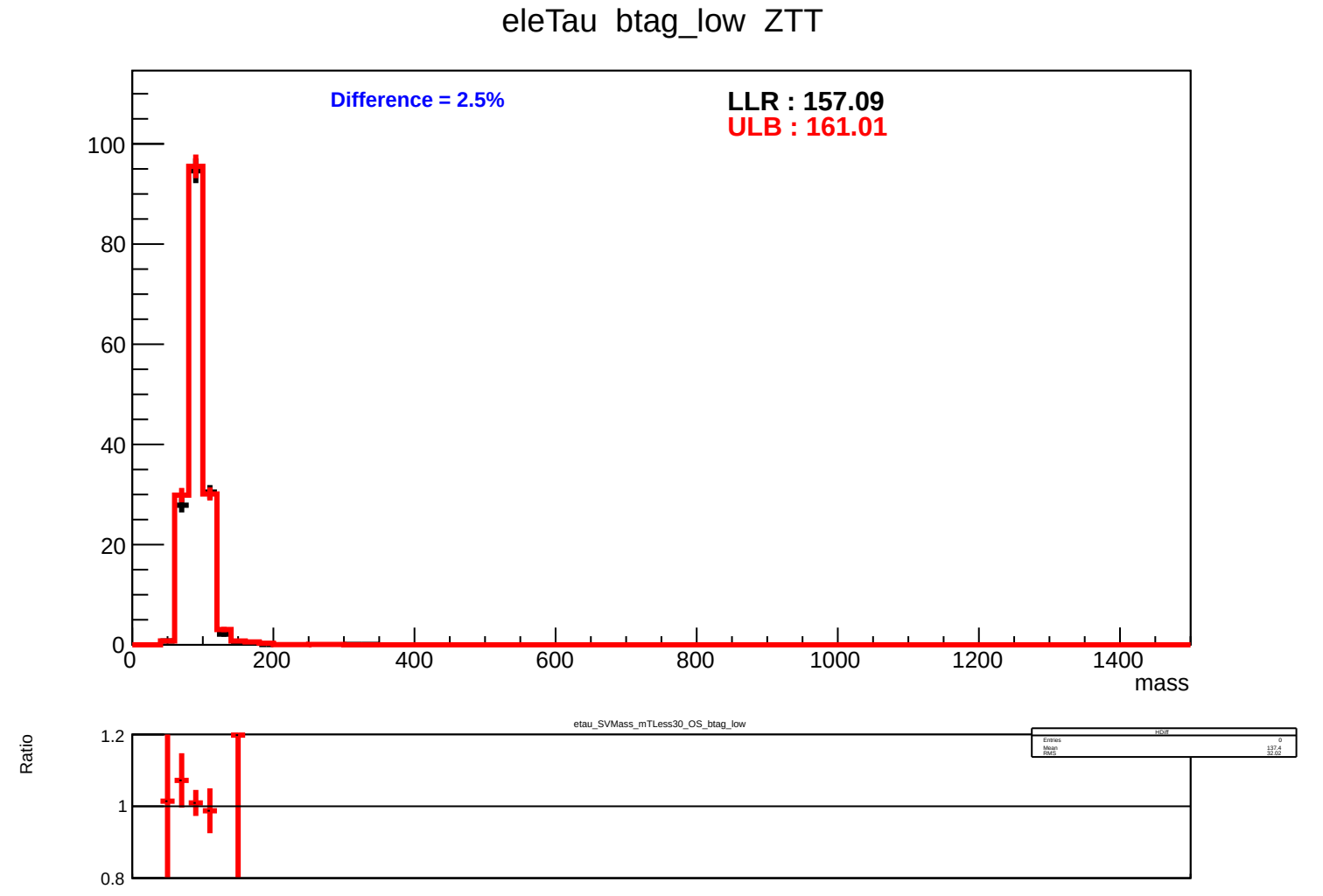

eleTau btag_low data_obs
Difference = 0.0%
LLR : 260.00
ULB : 260.00
160
140
120
100
80
60
40
20
0
0
200
400
600
800
1000
1200
1400
mass
etau_SVMass_mTLess30_OS_btag_low
HDiff
Entries 17
Mean 148
RMS 72.73
Ratio
1.2
1
0.8

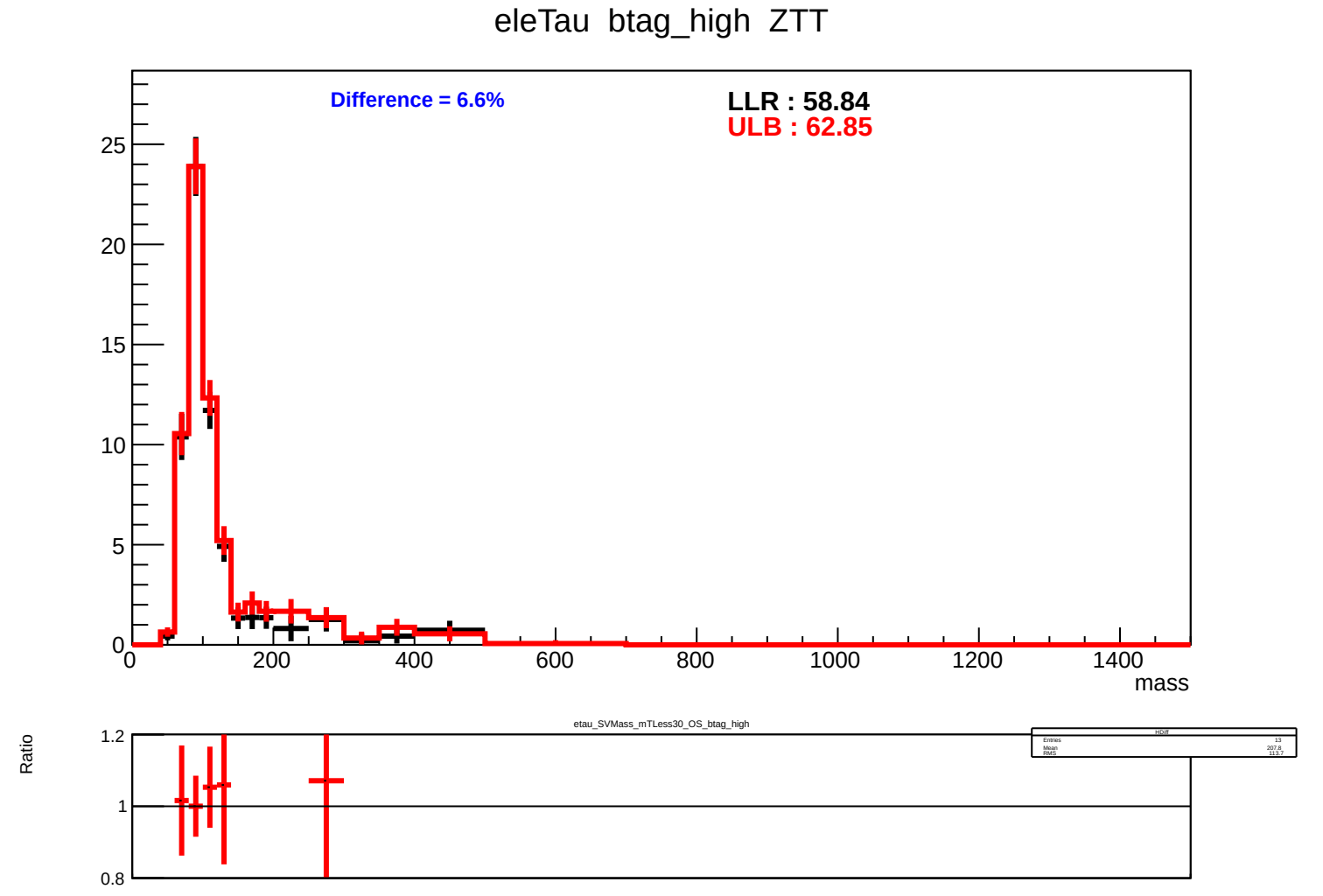

eleTau btag_high data_obs
Difference = 0.8%
LLR : 121.00
ULB : 122.00
mass
Ratio
etau_SVMass_mTLess30_OS_btag_high
HDiff

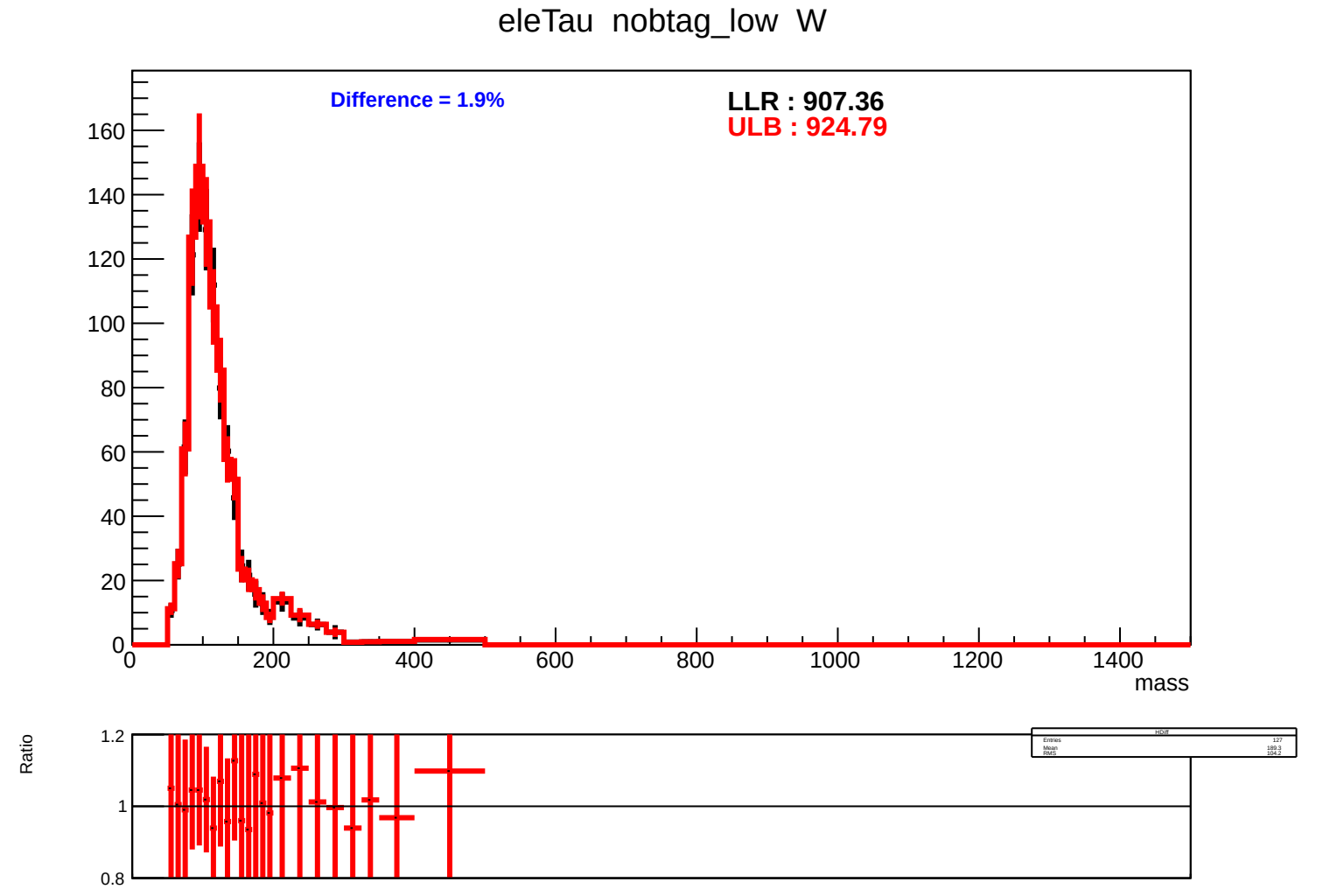

eleTau nobtag_low ZTT
Difference = 3.3%
LLR : 13486.20
ULB : 13940.77
5000
4000
3000
2000
1000
0
0
200
400
600
800
1000
1200
1400
mass
Ratio
1.2
1
0.8
etau_SVMass_mTLess30_OS_nobtag_low
HDiff
Entries 106
Mean 165.1
RMS 83.81

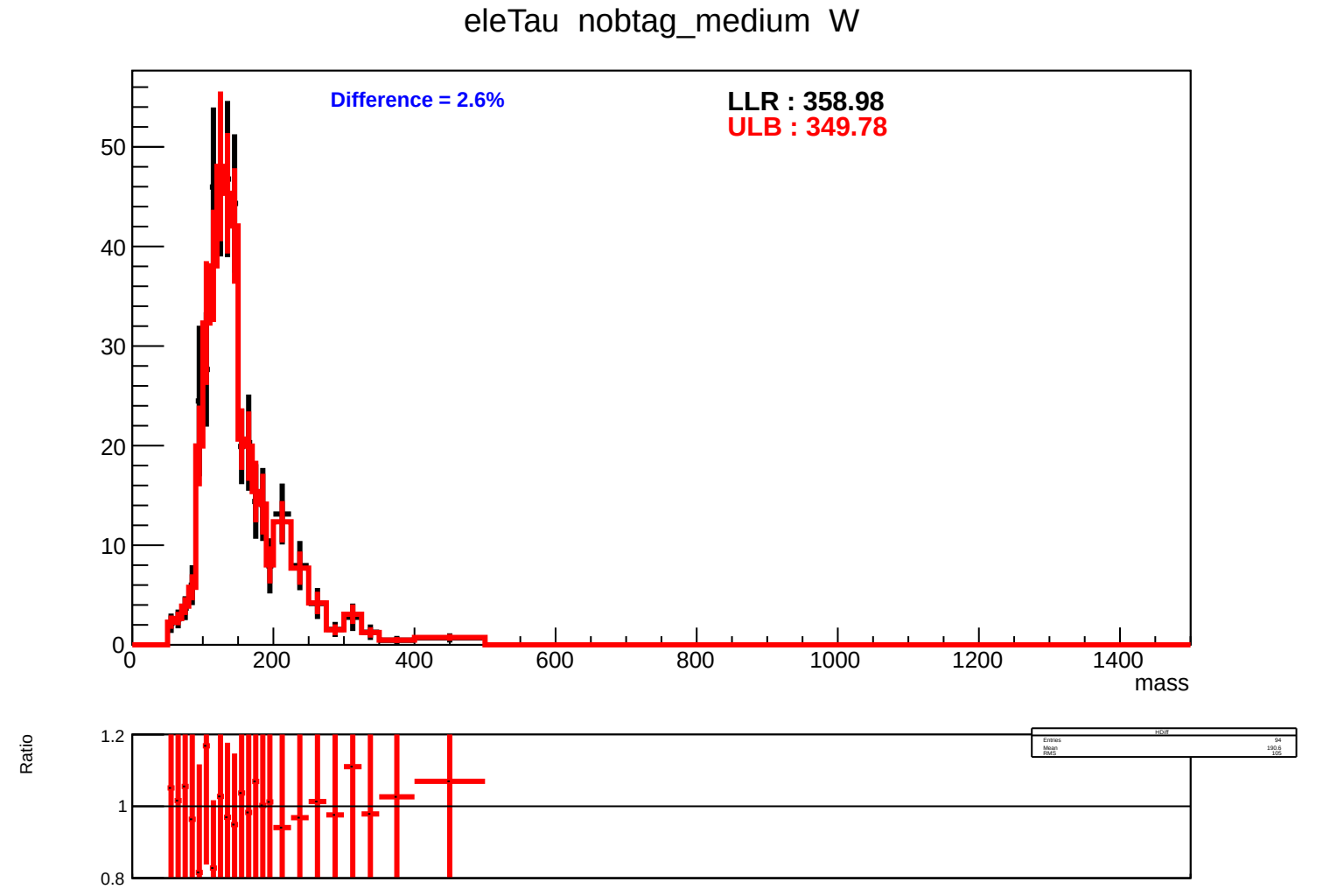

eleTau nobtag_medium ZTT
Difference = 1.5%
LLR : 2015.50
ULB : 2045.54
600
500
400
300
200
100
0
0
200
400
600
800
1000
1200
1400
mass
Ratio
1.2
1
0.8
etau_SVMass_mTLess30_OS_nobtag_medium
HDiff
Entries 0
Mean 283
RMS 70.74

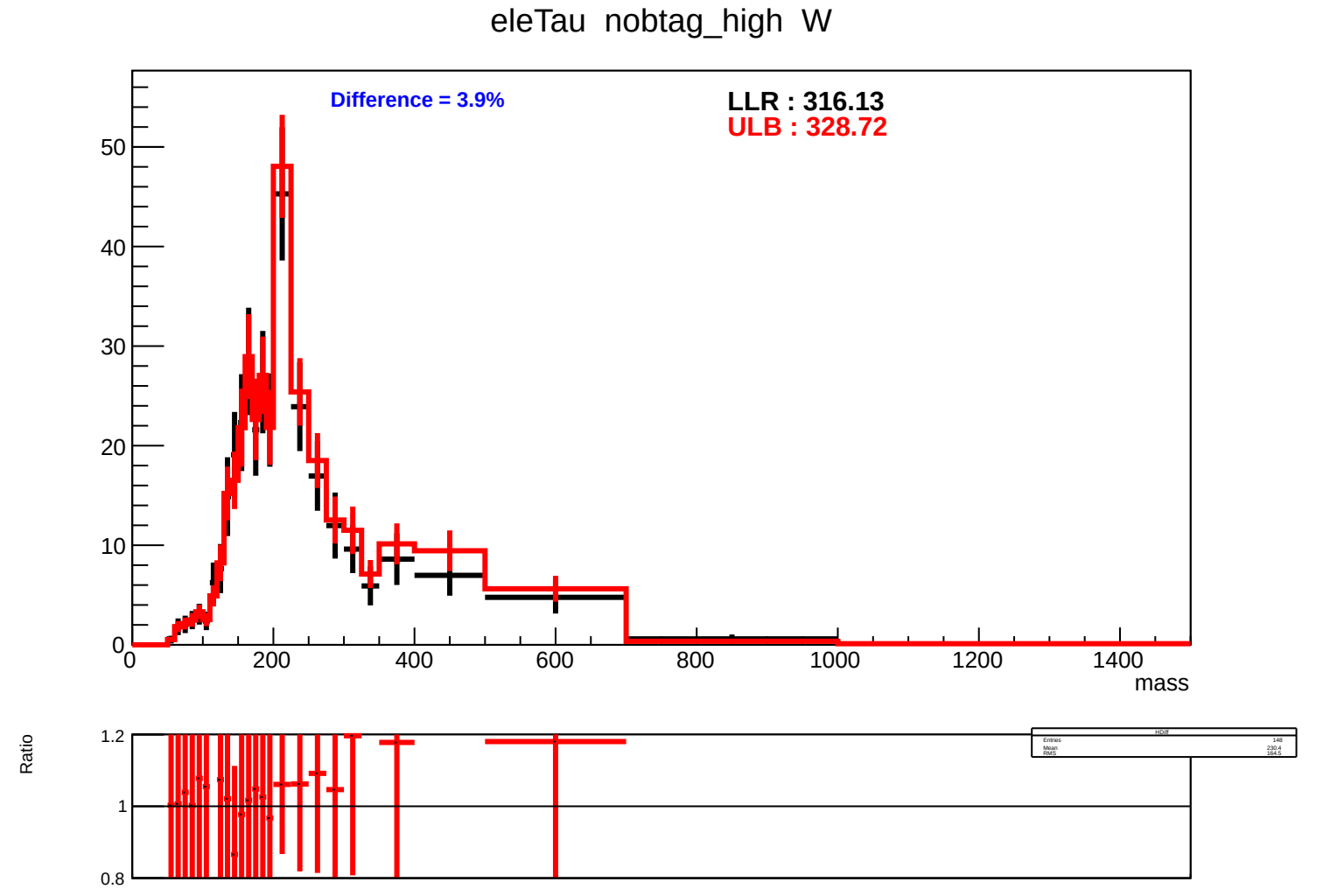

eleTau nobtag_high ZTT
Difference = 0.2%
LLR : 875.76
ULB : 873.88
mass
Ratio
etau_SVMass_mTLess30_OS_nobtag_high
HDiff
Entries 641
Mean 231.8
RMS 178.5

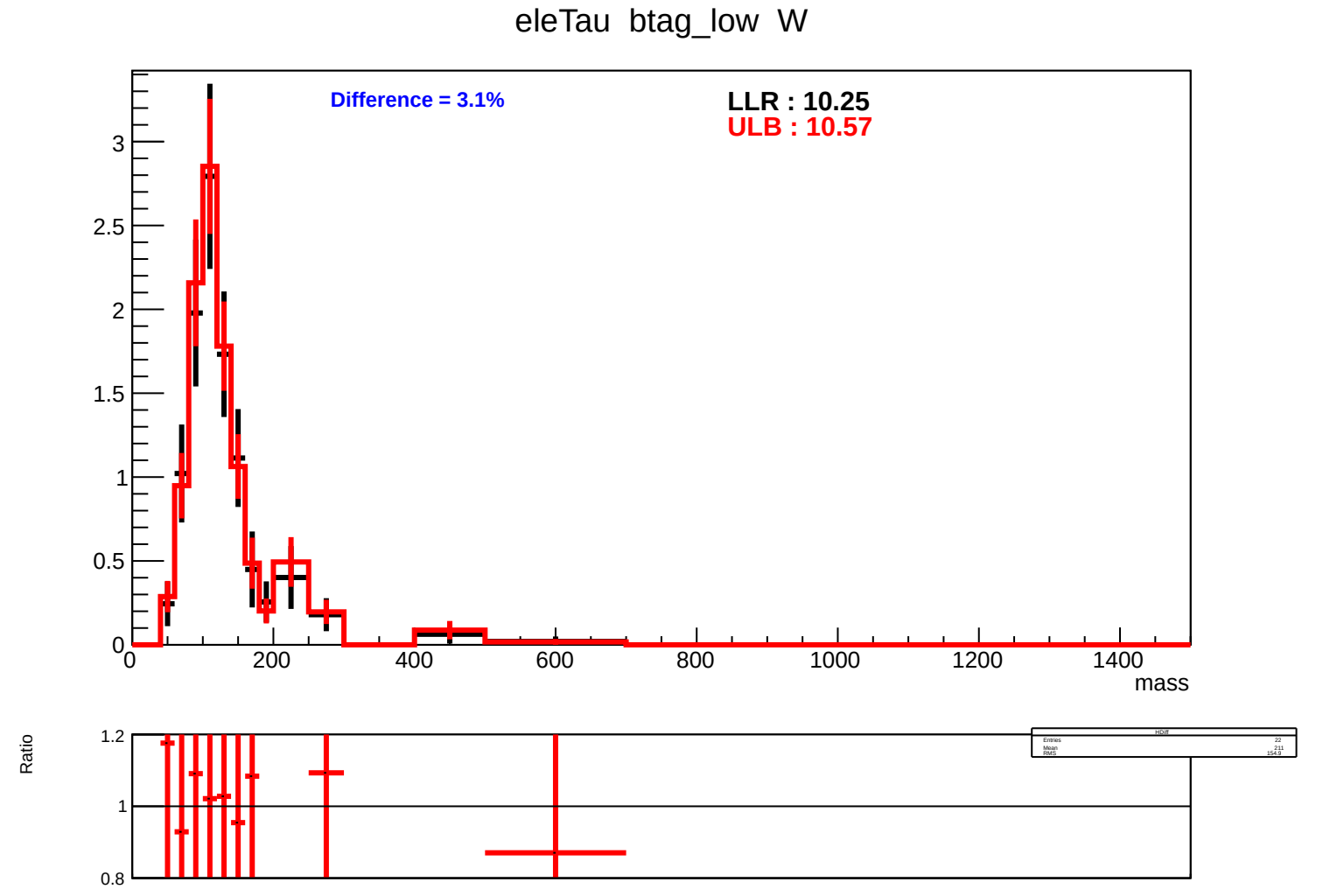

eleTau btag_low ZTT
Difference = 2.5%
LLR : 157.09
ULB : 161.01
100
80
60
40
20
0
0
200
400
600
800
1000
1200
1400
mass
etau_SVMass_mTLess30_OS_btag_low
HDiff
Entries 0
Mean 137.4
RMS 93.62
Ratio
1.2
1
0.8

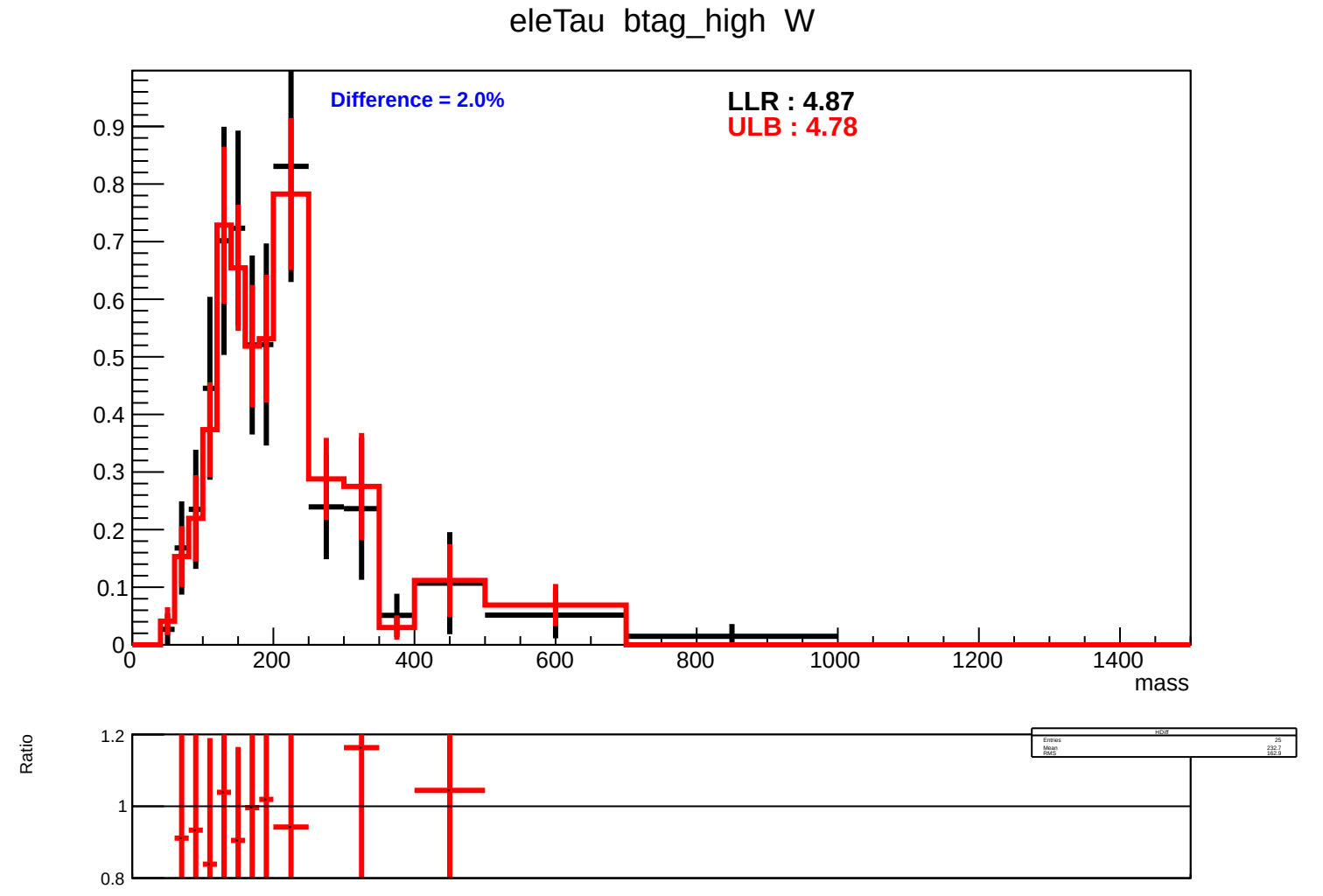

eleTau btag_high ZTT
Difference = 6.6%
LLR : 58.84
ULB : 62.85
25
20
15
10
5
0
0
200
400
600
800
1000
1200
1400
mass
Ratio
1.2
1
0.8
etau_SVMass_mTLess30_OS_btag_high
HDiff
Entries 13
Mean 207.8
RMS 113.7

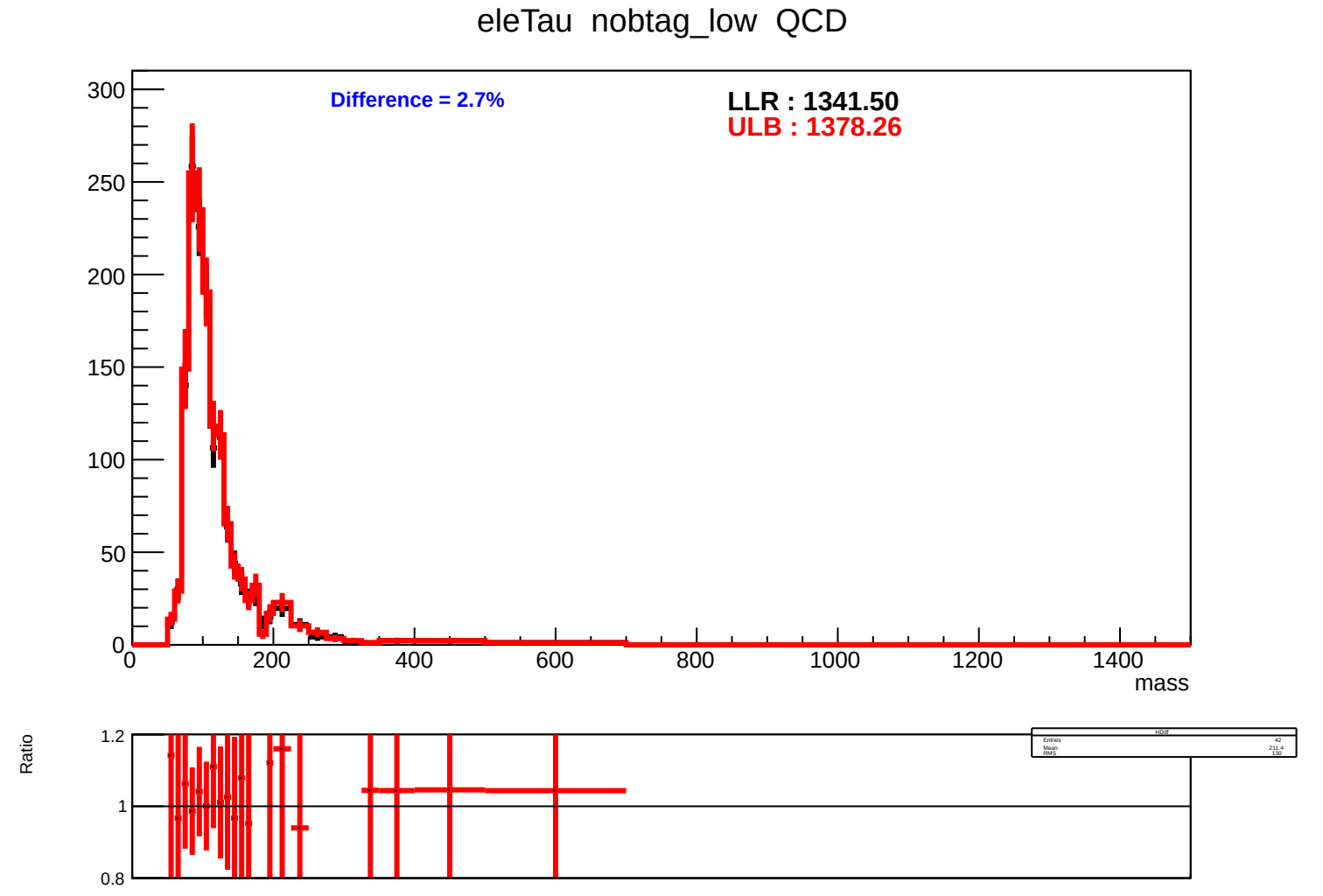

eleTau nobtag_low W
Difference = 1.9%
LLR : 907.36
ULB : 924.79
160
140
120
100
80
60
40
20
0
0
200
400
600
800
1000
1200
1400
mass
Ratio
1.2
1
0.8
HDiff
Entries 127
Mean 180.3
RMS 104.2

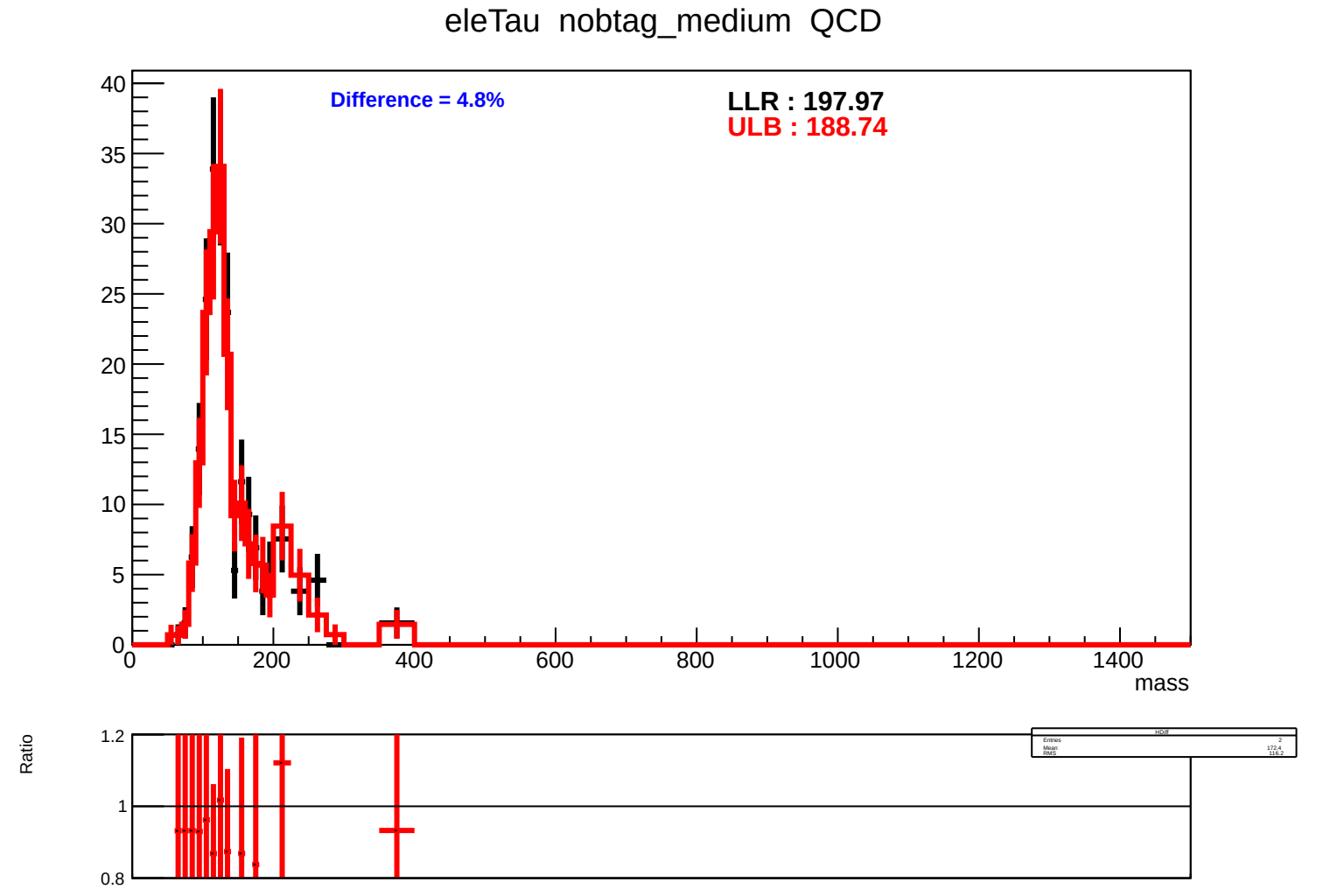

eleTau nobtag_medium W
Difference = 2.6%
LLR : 358.98
ULB : 349.78
mass
Ratio
HDiff
Entries 94
Mean 190.6
RMS 105

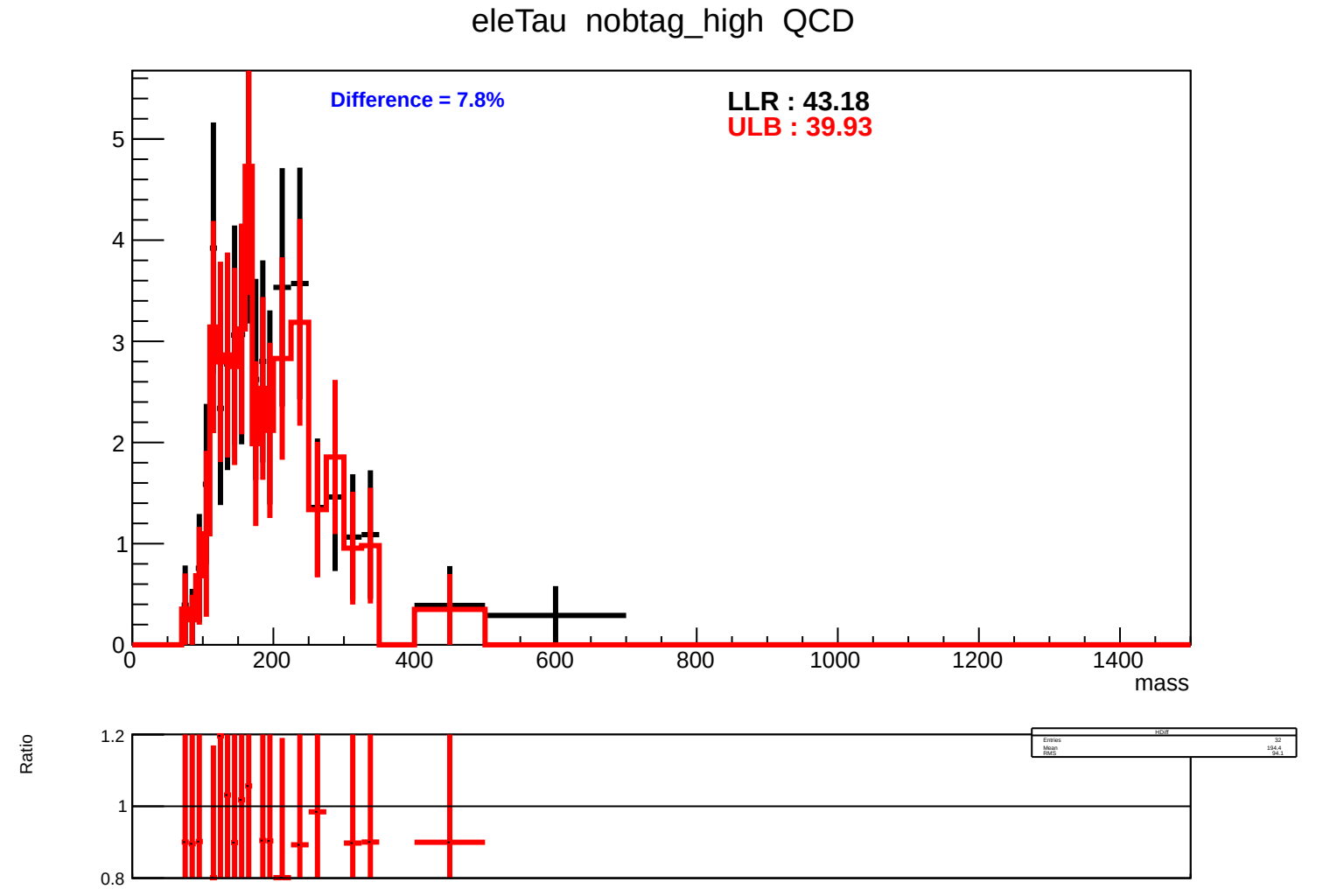

eleTau nobtag_high W
Difference = 3.9%
LLR : 316.13
ULB : 328.72
mass
Ratio
HDiff
Entries 148
Mean 230.4
RMS 164.5

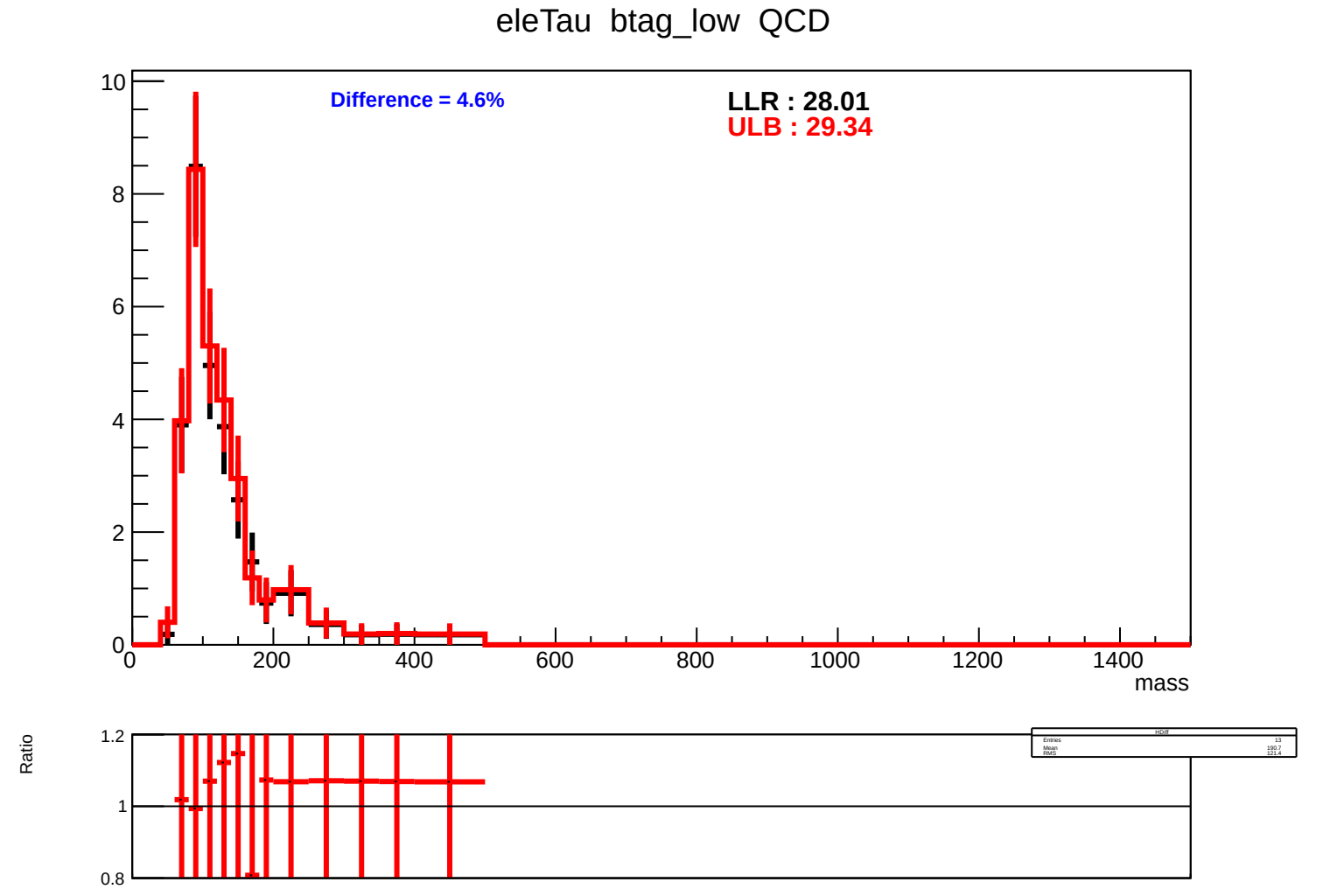

eleTau btag_low W
Difference = 3.1%
LLR : 10.25
ULB : 10.57
mass
Ratio
HDiff
Entries 22
Mean 211
RMS 154.9

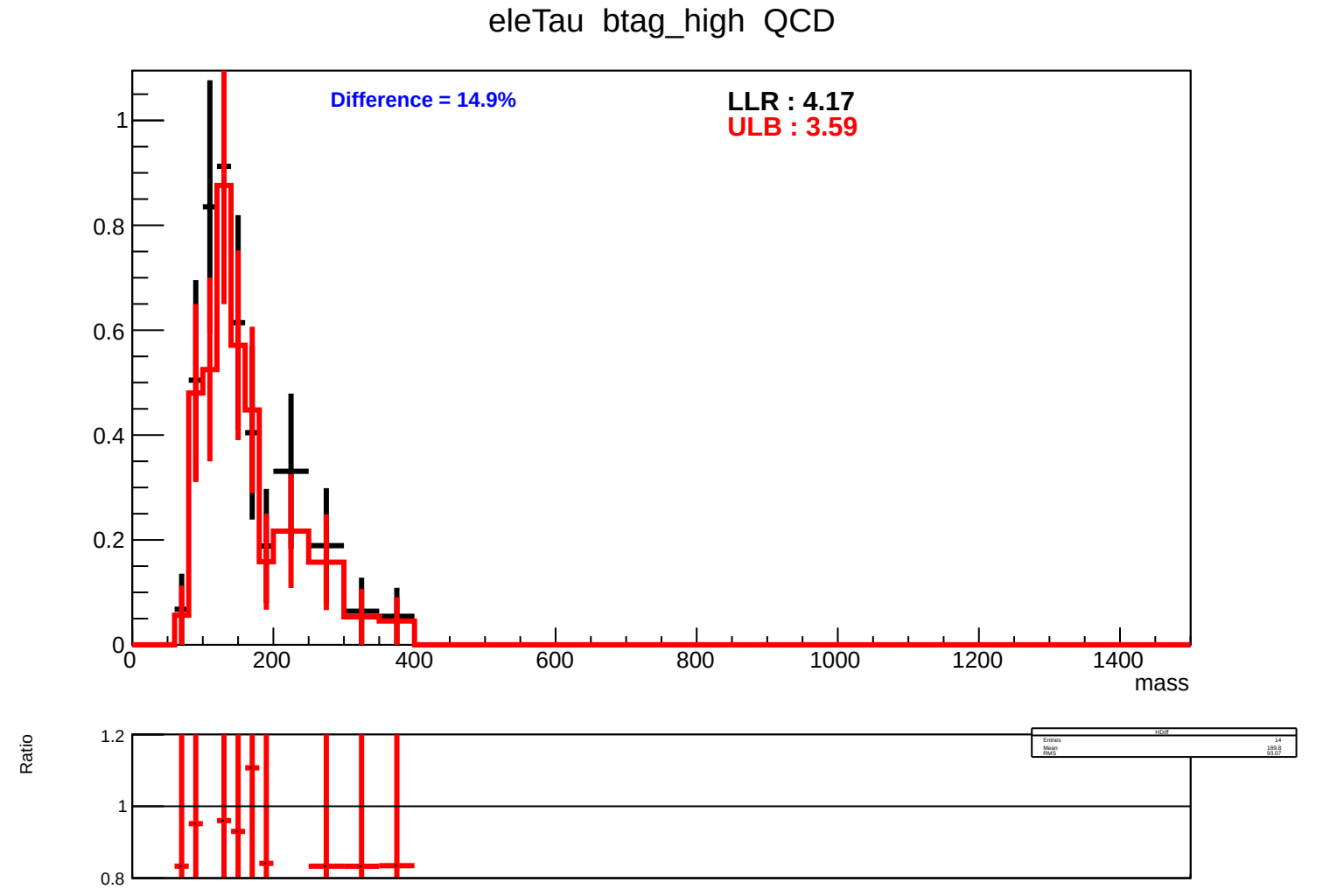

eleTau btag_high W
Difference = 2.0%
LLR : 4.87
ULB : 4.78
mass
Ratio
HDiff
Entries 25
Mean 232.7
RMS 162.9

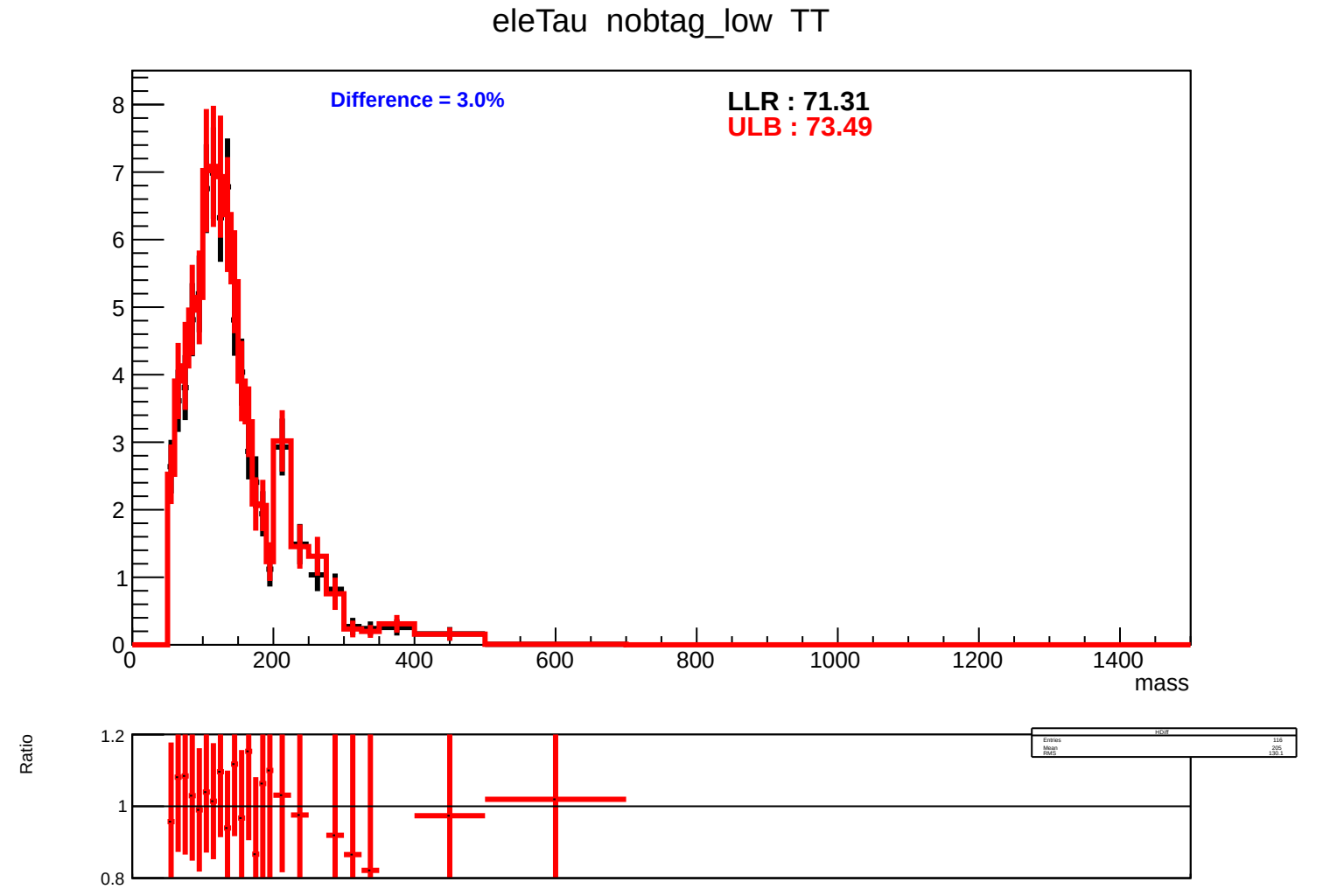

eleTau nobtag_low QCD
Difference = 2.7%
LLR : 1341.50
ULB : 1378.26
300
250
200
150
100
50
0
0
200
400
600
800
1000
1200
1400
mass
Ratio
1.2
1
0.8
HDiff
Entries 42
Mean 211.4
RMS 1.20

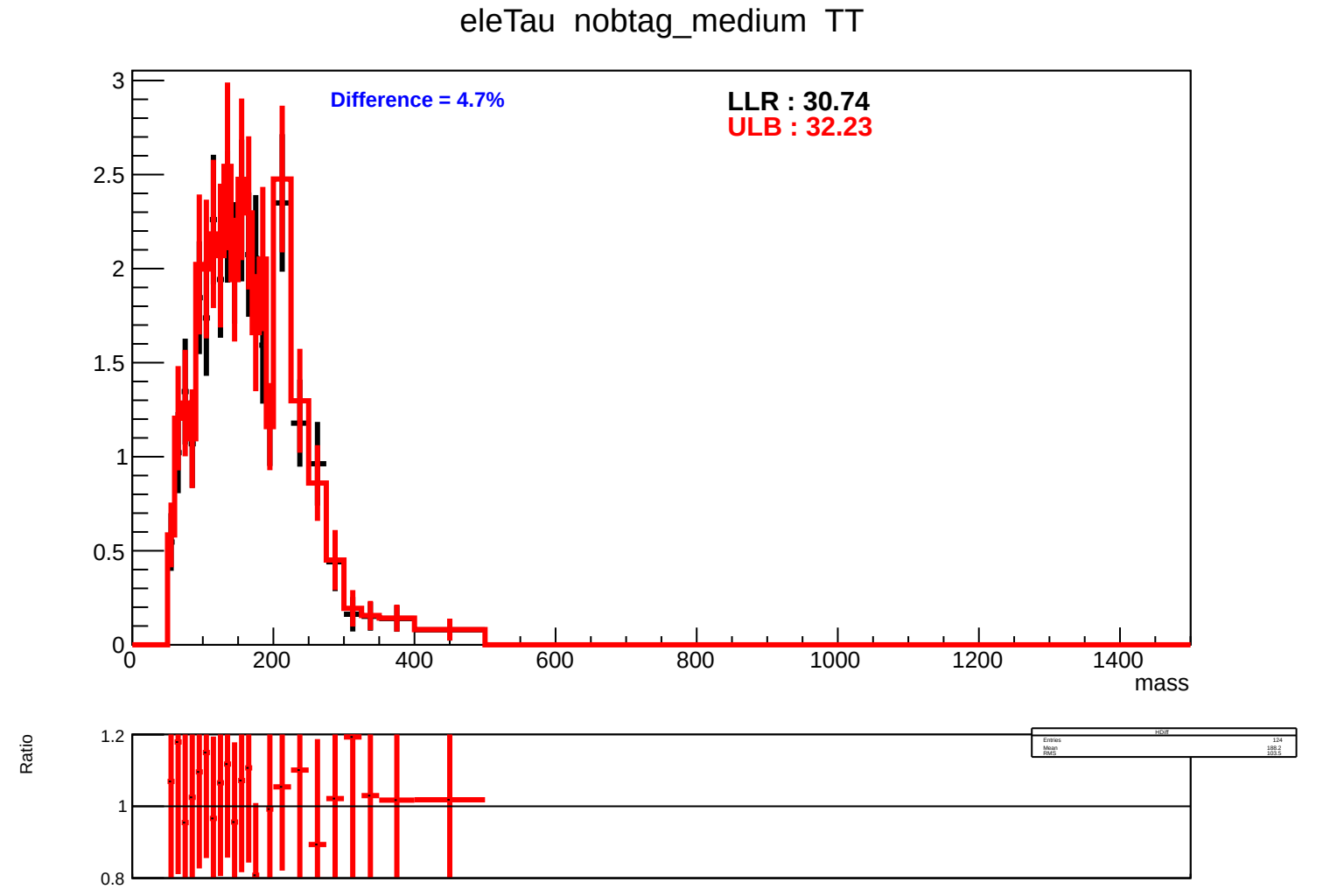

eleTau nobtag_medium QCD
Difference = 4.8%
LLR : 197.97
ULB : 188.74
mass
Ratio
HDiff
Entries 2
Mean 172.4
RMS 118.2

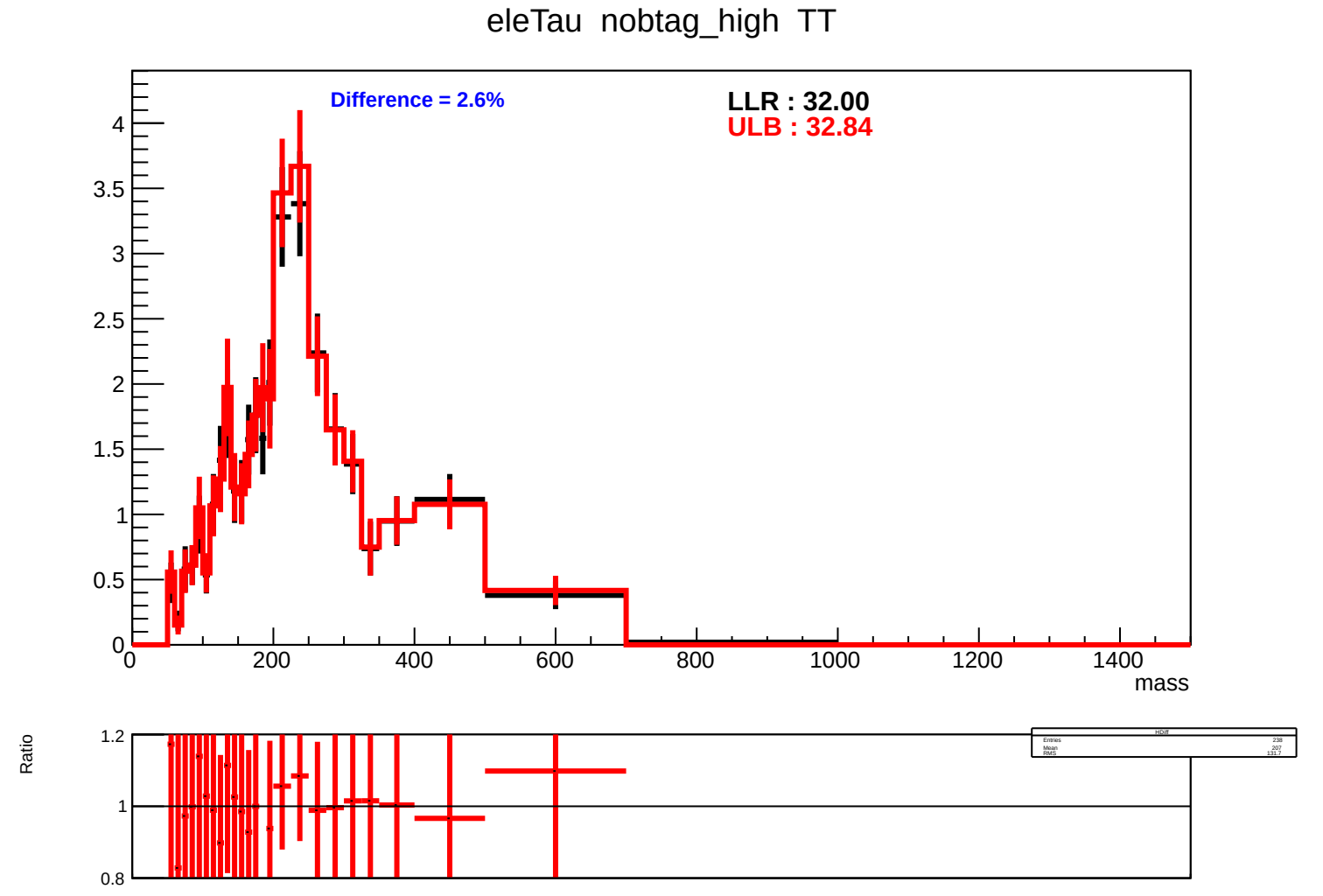

eleTau nobtag_high QCD
Difference = 7.8%
LLR : 43.18
ULB : 39.93
mass
Ratio
HDiff
Entries 32
Mean 194.4
RMS 94.1

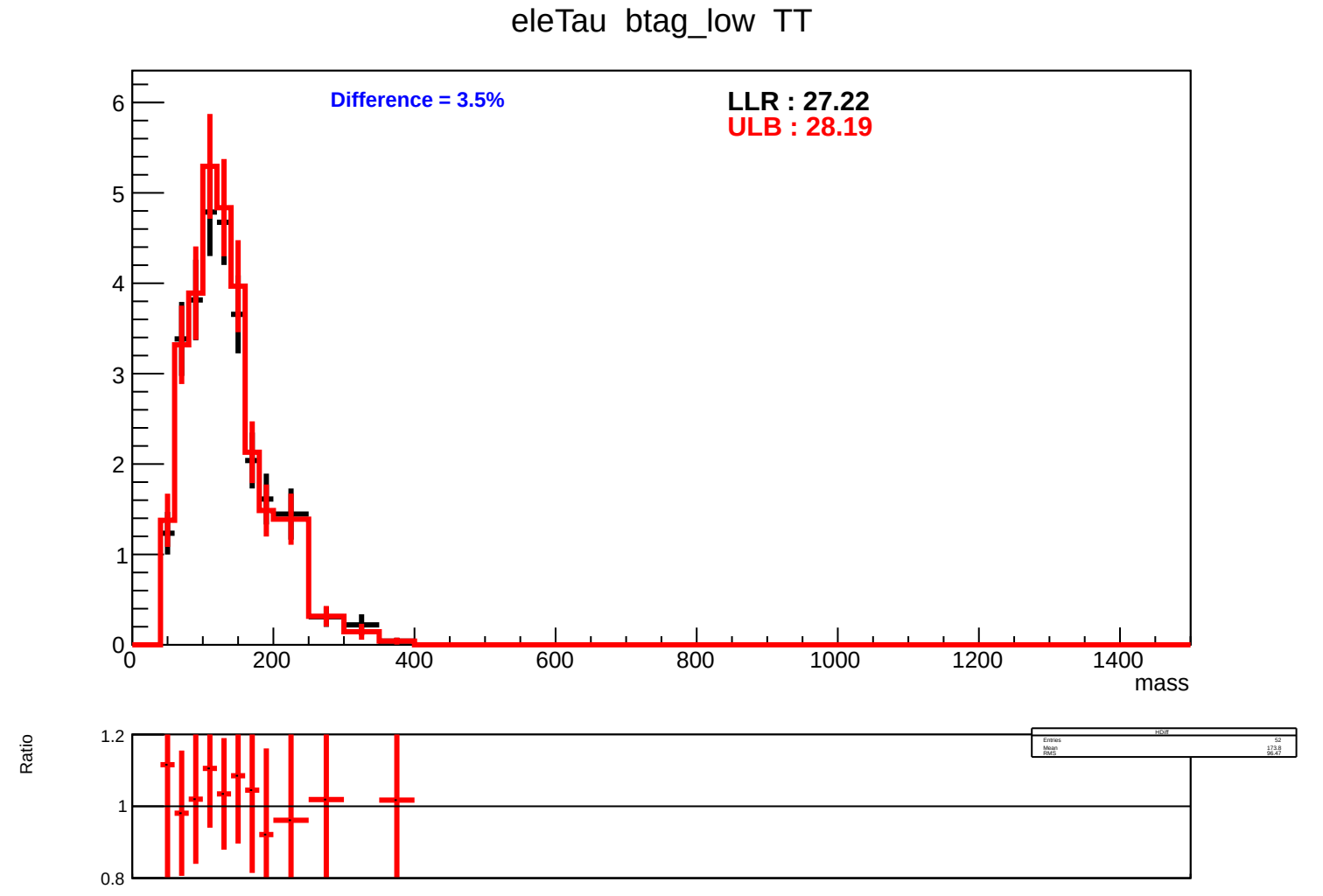

eleTau btag_low QCD
Difference = 4.6%
LLR : 28.01
ULB : 29.34
mass
Ratio
HDiff
Entries 13
Mean 190.7
RMS 121.4

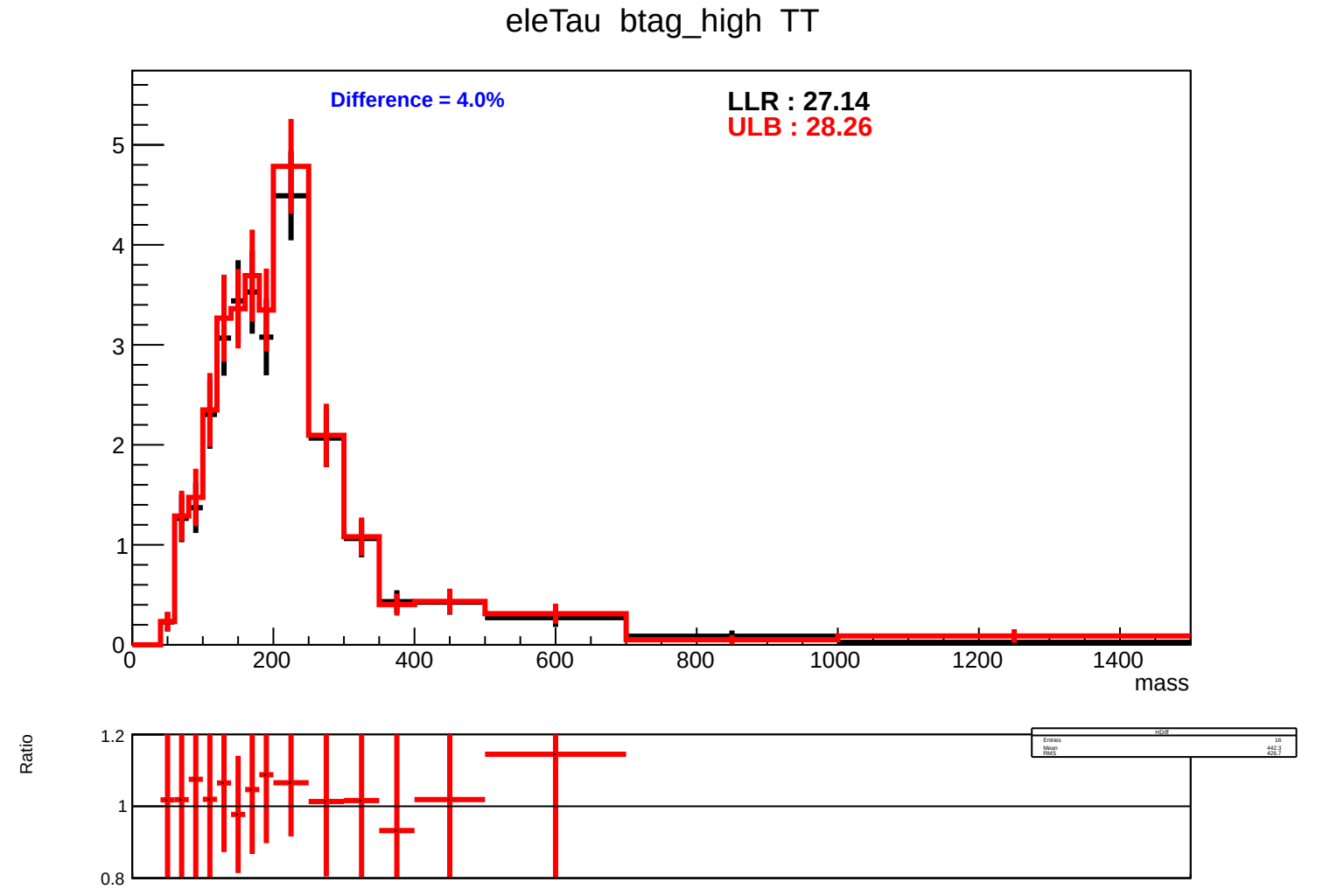

eleTau btag_high QCD
Difference = 14.9%
LLR : 4.17
ULB : 3.59
mass
Ratio
HDiff
Entries 14
Mean 189.8
RMS 93.07

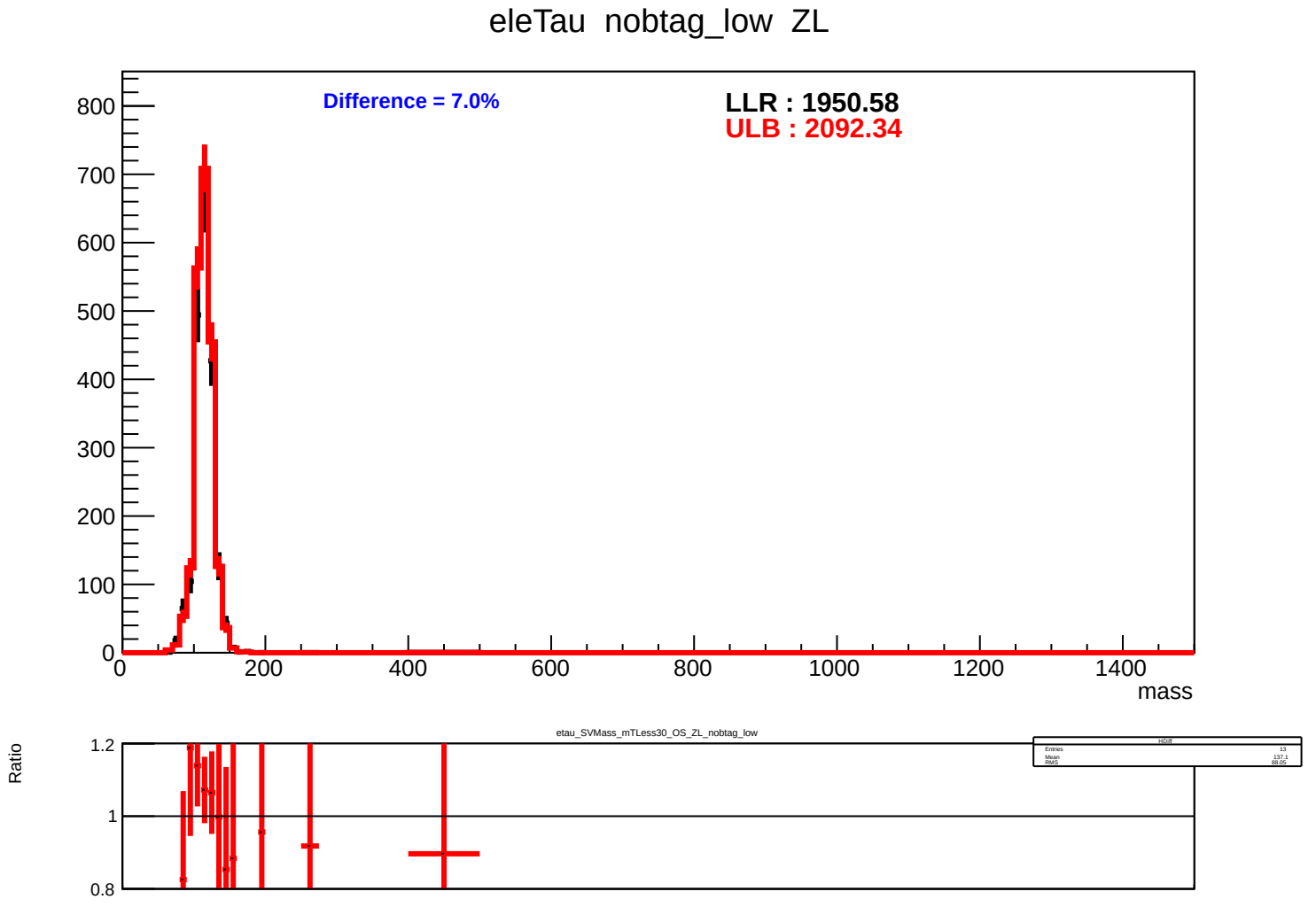

eleTau nobtag_low TT
Difference = 3.0%
LLR : 71.31
ULB : 73.49
mass
Ratio
HDiff
Entries 116
Mean 205
RMS 130.1

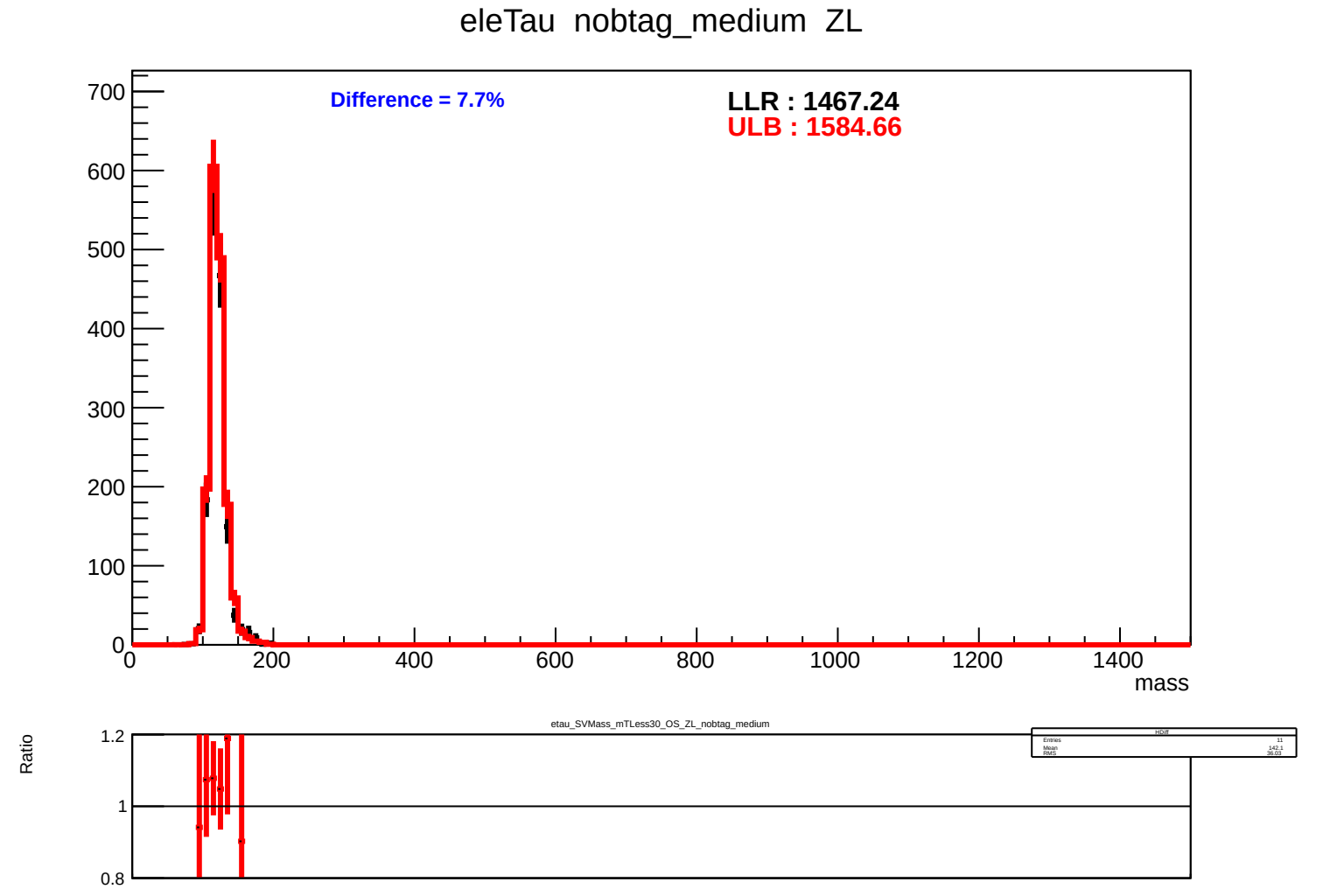

eleTau nobtag_medium TT
Difference = 4.7%
LLR : 30.74
ULB : 32.23
mass
Ratio
HDiff
Entries 124
Mean 185.2
RMS 103.5

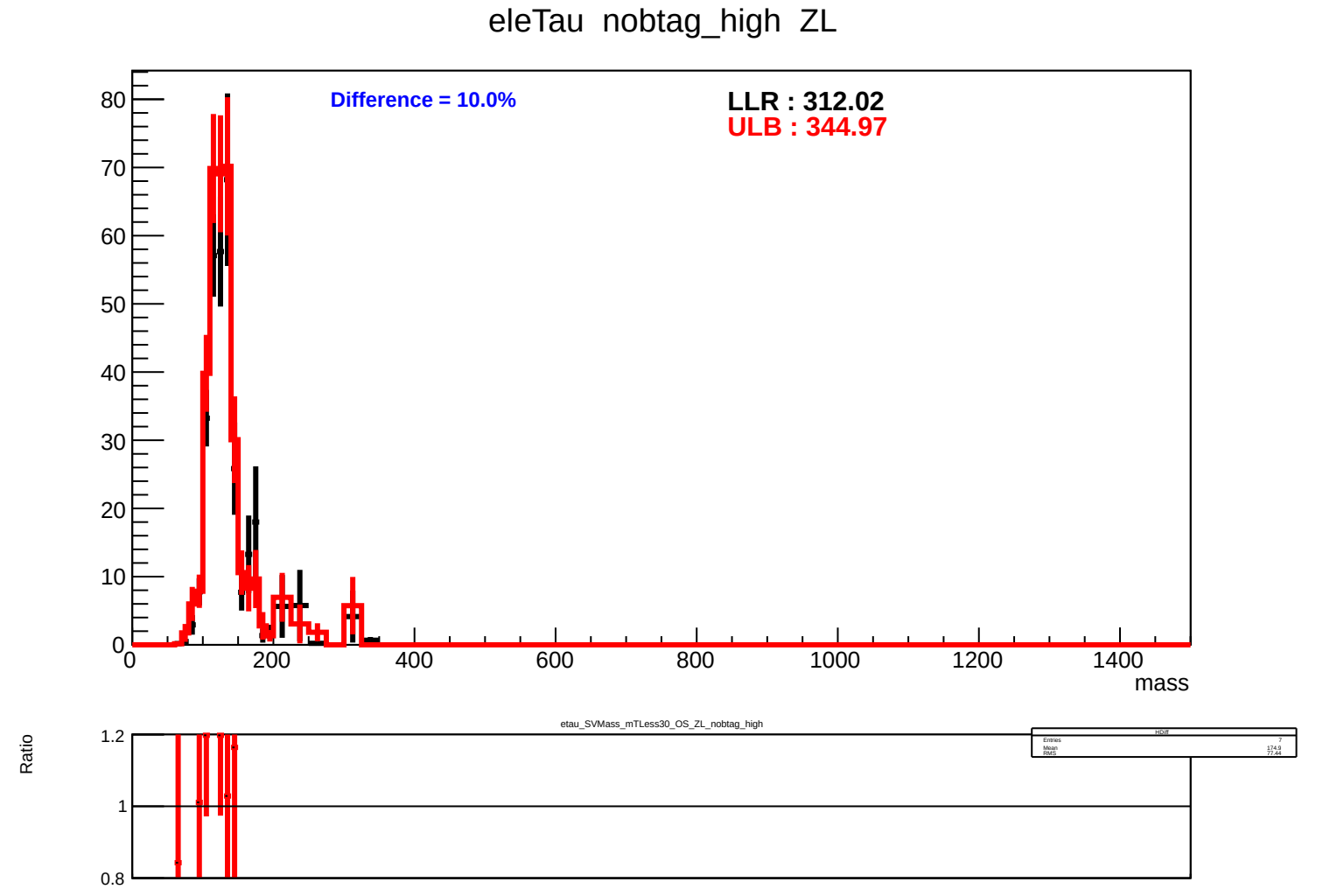

eleTau nobtag_high TT
Difference = 2.6%
LLR : 32.00
ULB : 32.84
mass
Ratio
HDiff
Entries 238
Mean 207
RMS 131.7

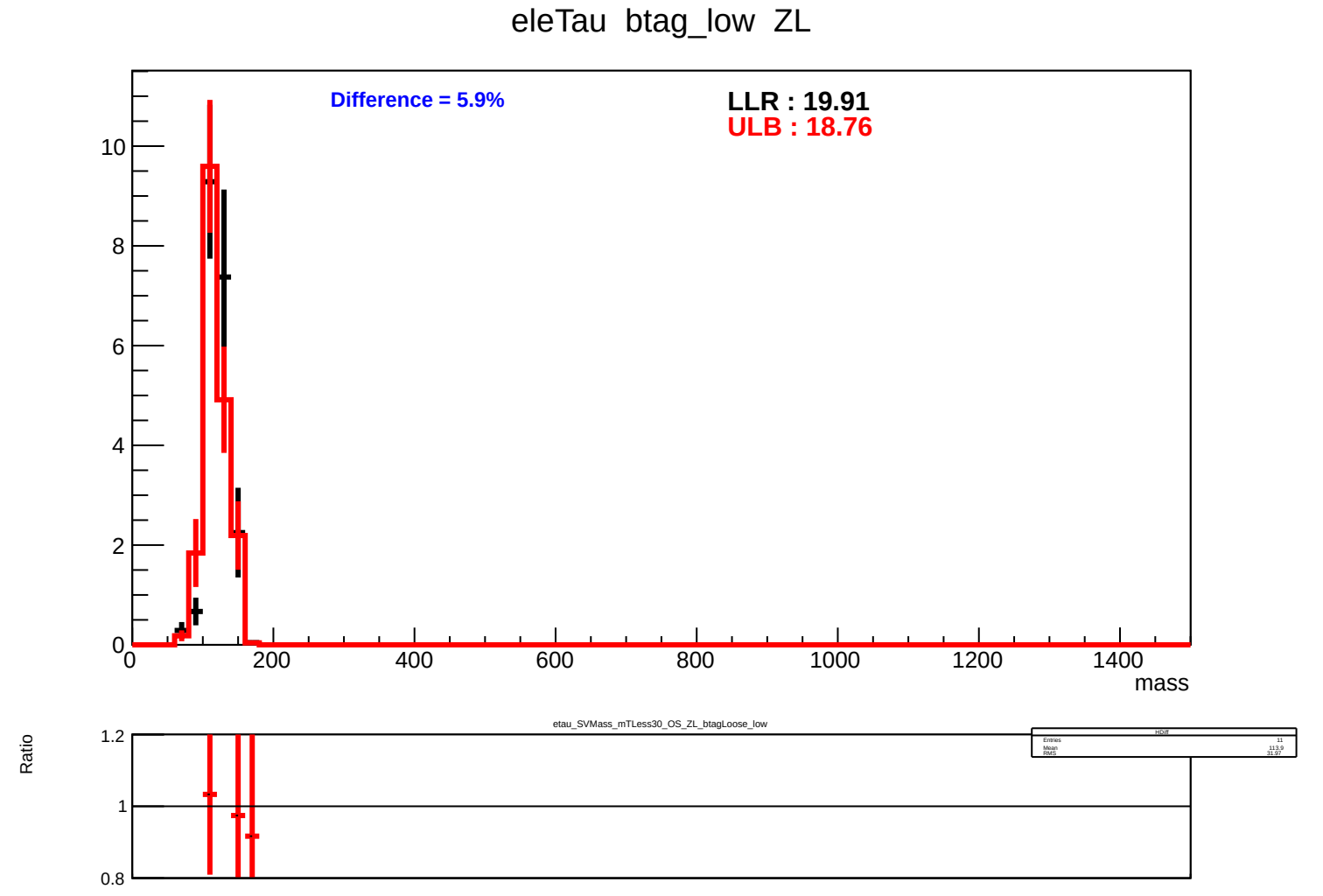

eleTau btag_low TT
Difference = 3.5%
LLR : 27.22
ULB : 28.19
mass
Ratio
HDiff
Entries 52
Mean 173.8
RMS 96.47

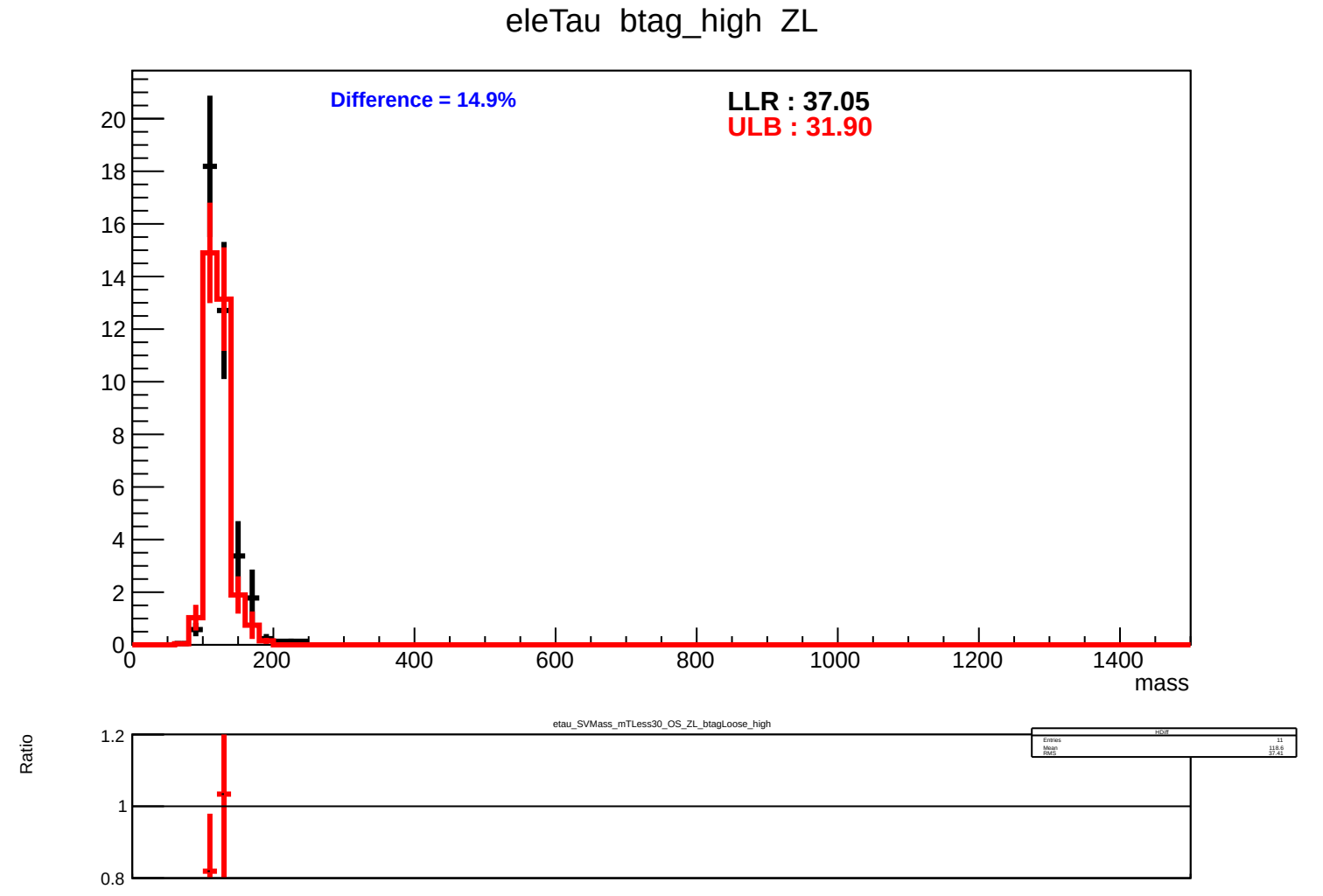

eleTau btag_high TT
Difference = 4.0%
LLR : 27.14
ULB : 28.26
mass
Ratio
HDiff
Entries
Mean
RMS

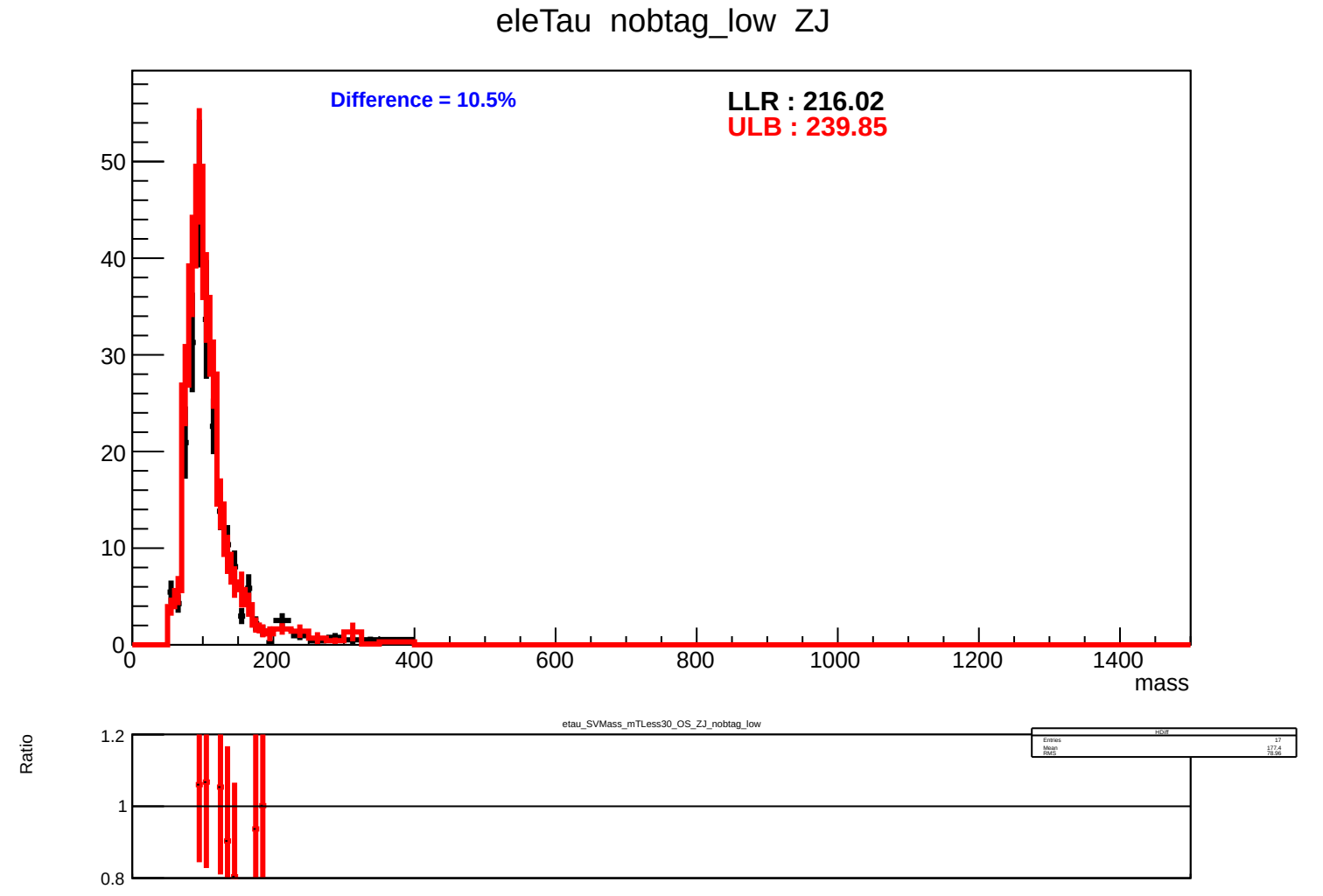

eleTau nobtag_low ZL
Difference = 7.0%
LLR : 1950.58
ULB : 2092.34
800
700
600
500
400
300
200
100
0
0
200
400
600
800
1000
1200
1400
mass
etau_SVMass_mTLess30_OS_ZL_nobtag_low
HDiff
Entries 13
Mean 177.1
RMS 88.05
Ratio
1.2
1
0.8

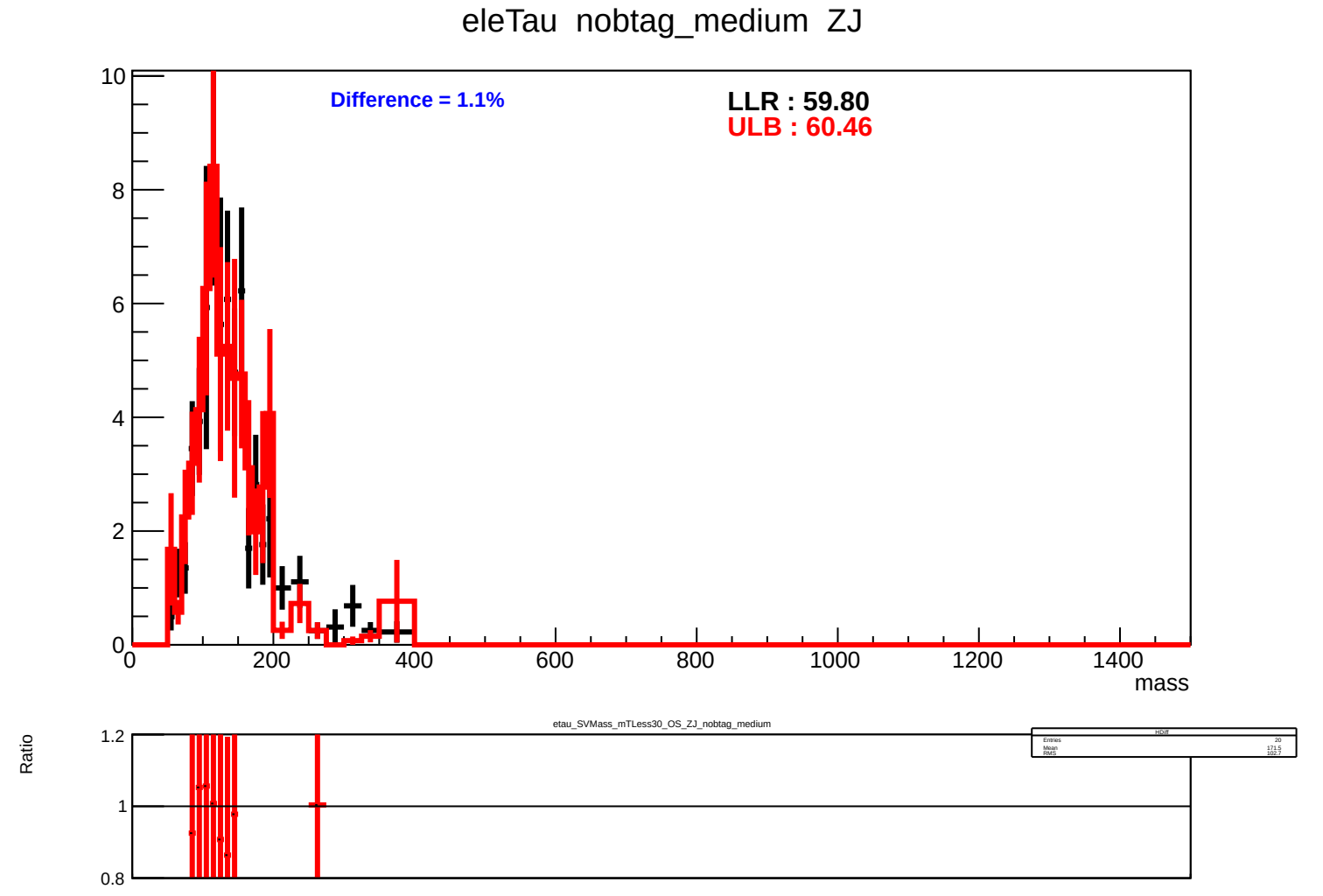

eleTau nobtag_medium ZL
Difference = 7.7%
LLR : 1467.24
ULB : 1584.66
700
600
500
400
300
200
100
0
0
200
400
600
800
1000
1200
1400
mass
etau_SVMass_mTLess30_OS_ZL_nobtag_medium
HDiff
Entries 11
Mean 142.1
RMS 39.03
Ratio
1.2
1
0.8

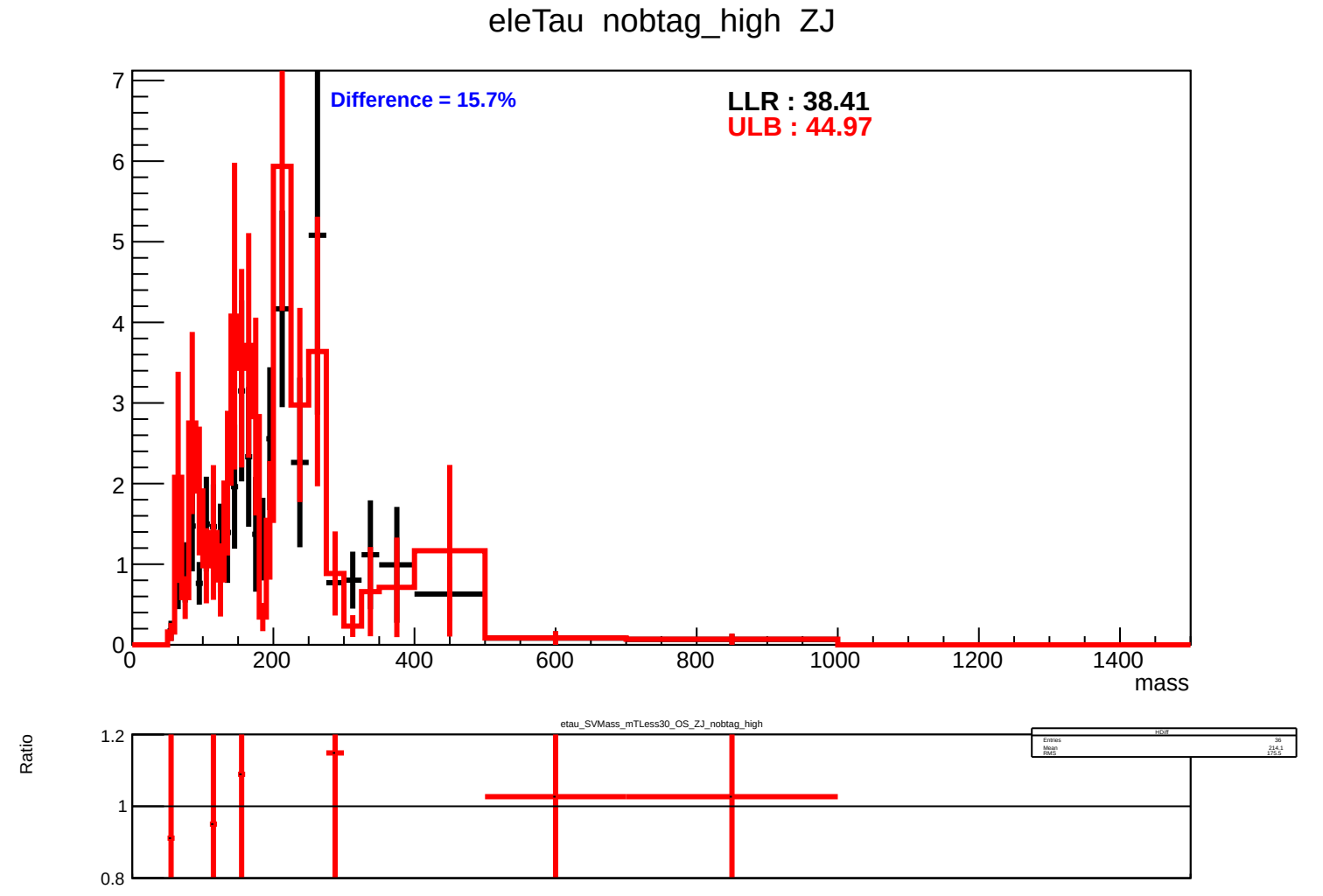

eleTau nobtag_high ZL
Difference = 10.0%
LLR : 312.02
ULB : 344.97
mass
Ratio
etau_SVMass_mTLess30_OS_ZL_nobtag_high
HDiff

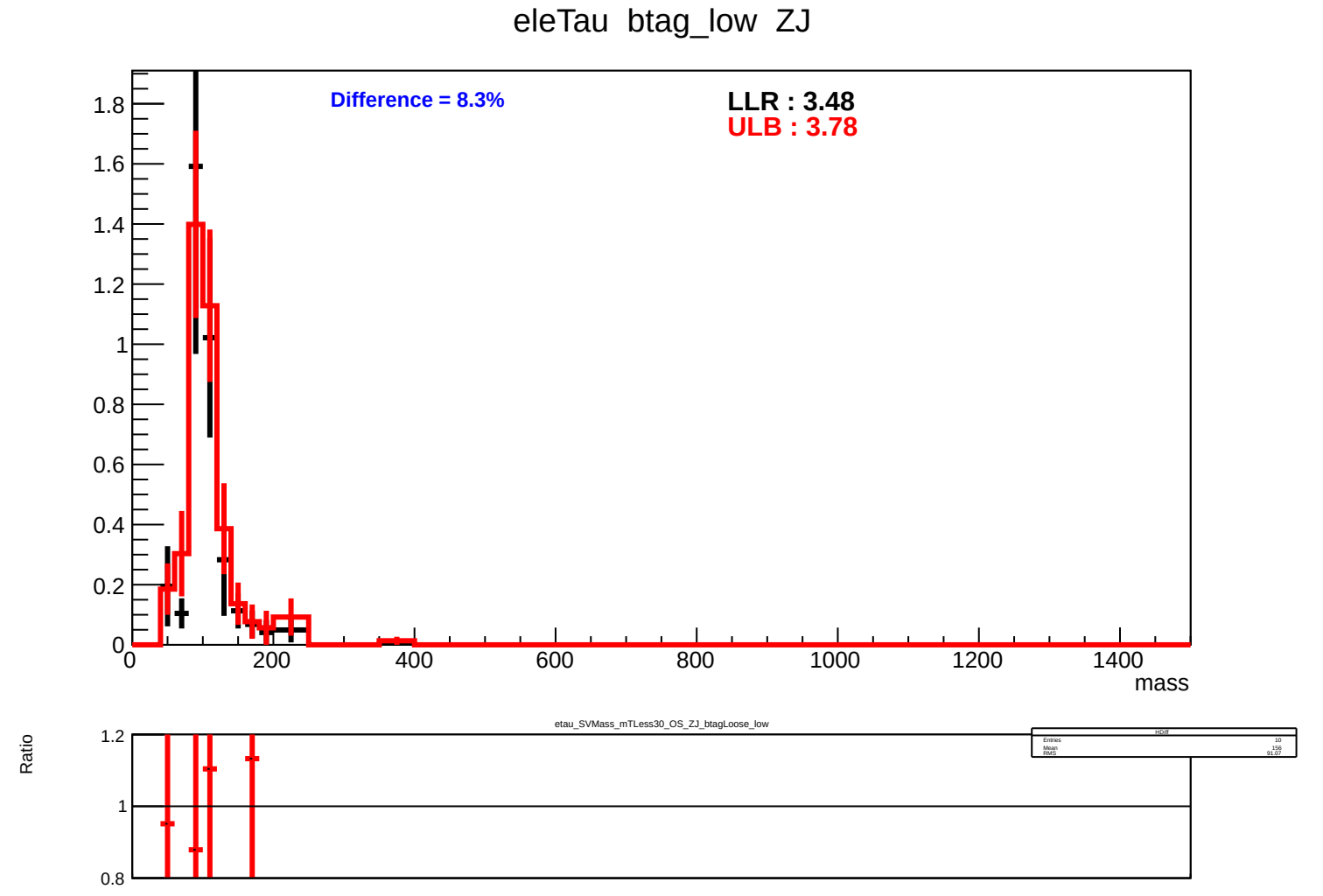

eleTau btag_low ZL
Difference = 5.9%
LLR : 19.91
ULB : 18.76
mass
Ratio
etau_SVMass_mTLess30_OS_ZL_btagLoose_low
HDiff

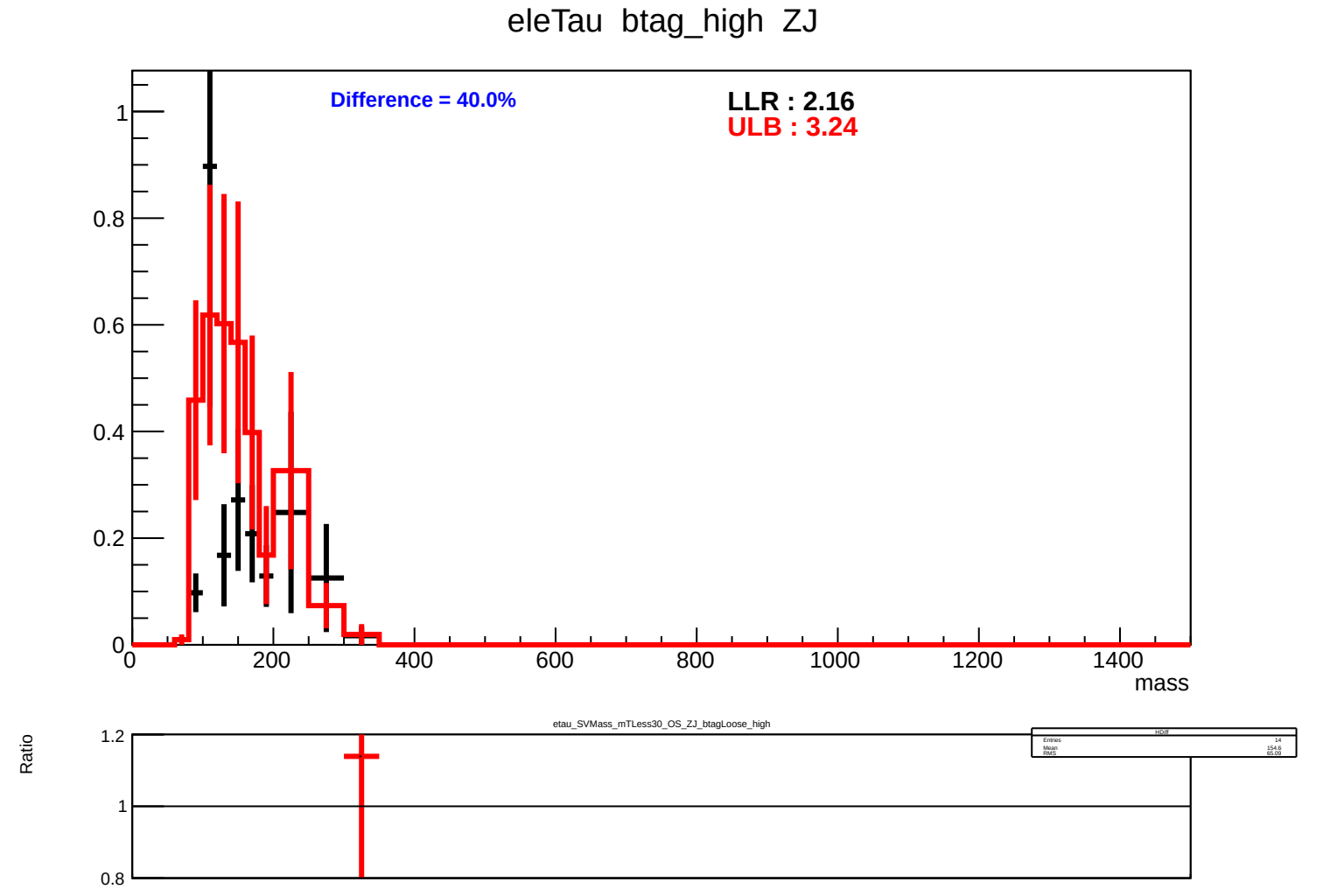

eleTau btag_high ZL
Difference = 14.9%
LLR : 37.05
ULB : 31.90
mass
Ratio
etau_SVMass_mTLess30_OS_ZL_btagLoose_high
HDiff

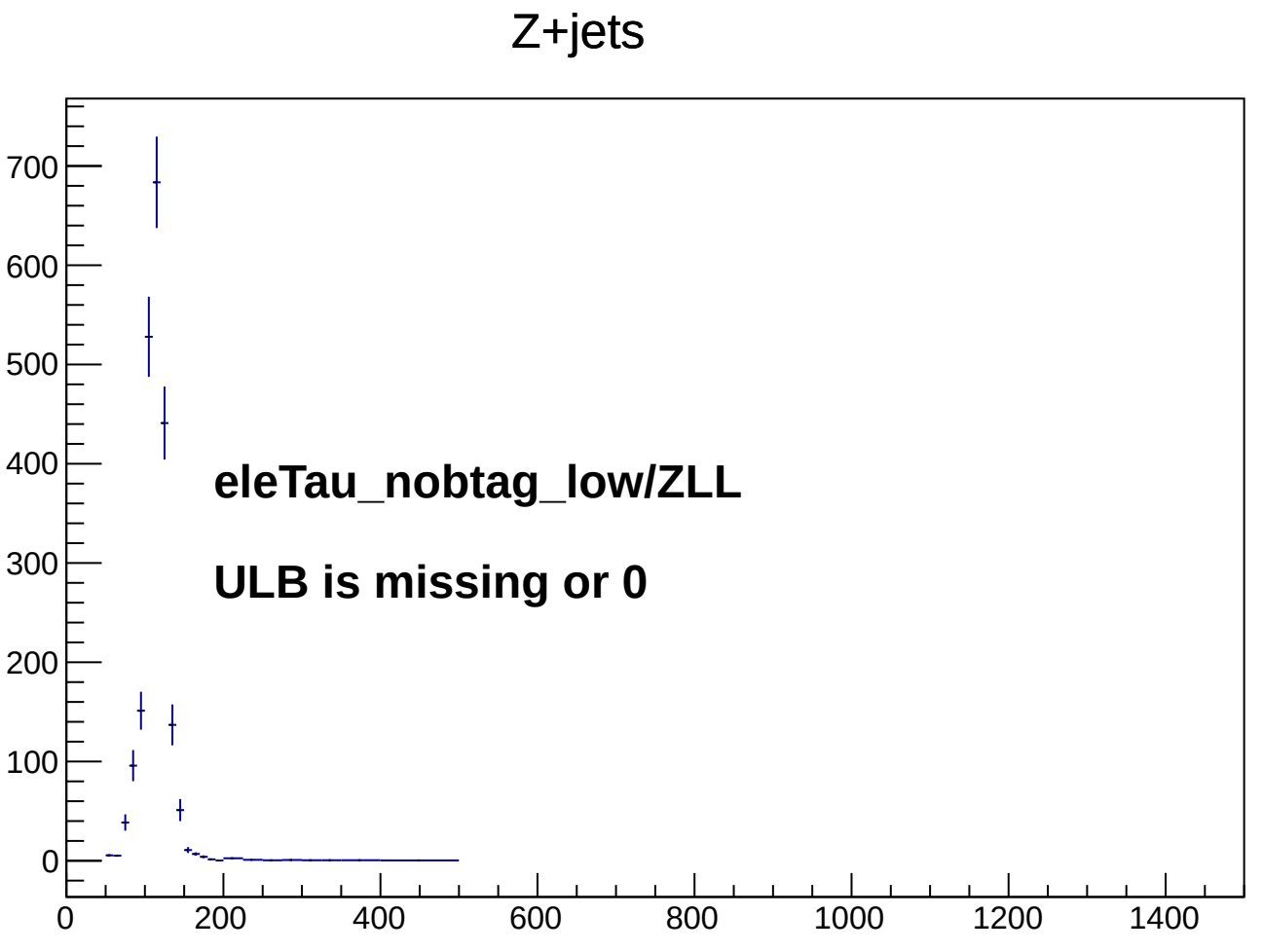

eleTau nobtag_low ZJ
Difference = 10.5%
LLR : 216.02
ULB : 239.85
mass
Ratio
etau_SVMass_mTLess30_OS_ZJ_nobtag_low
HDiff

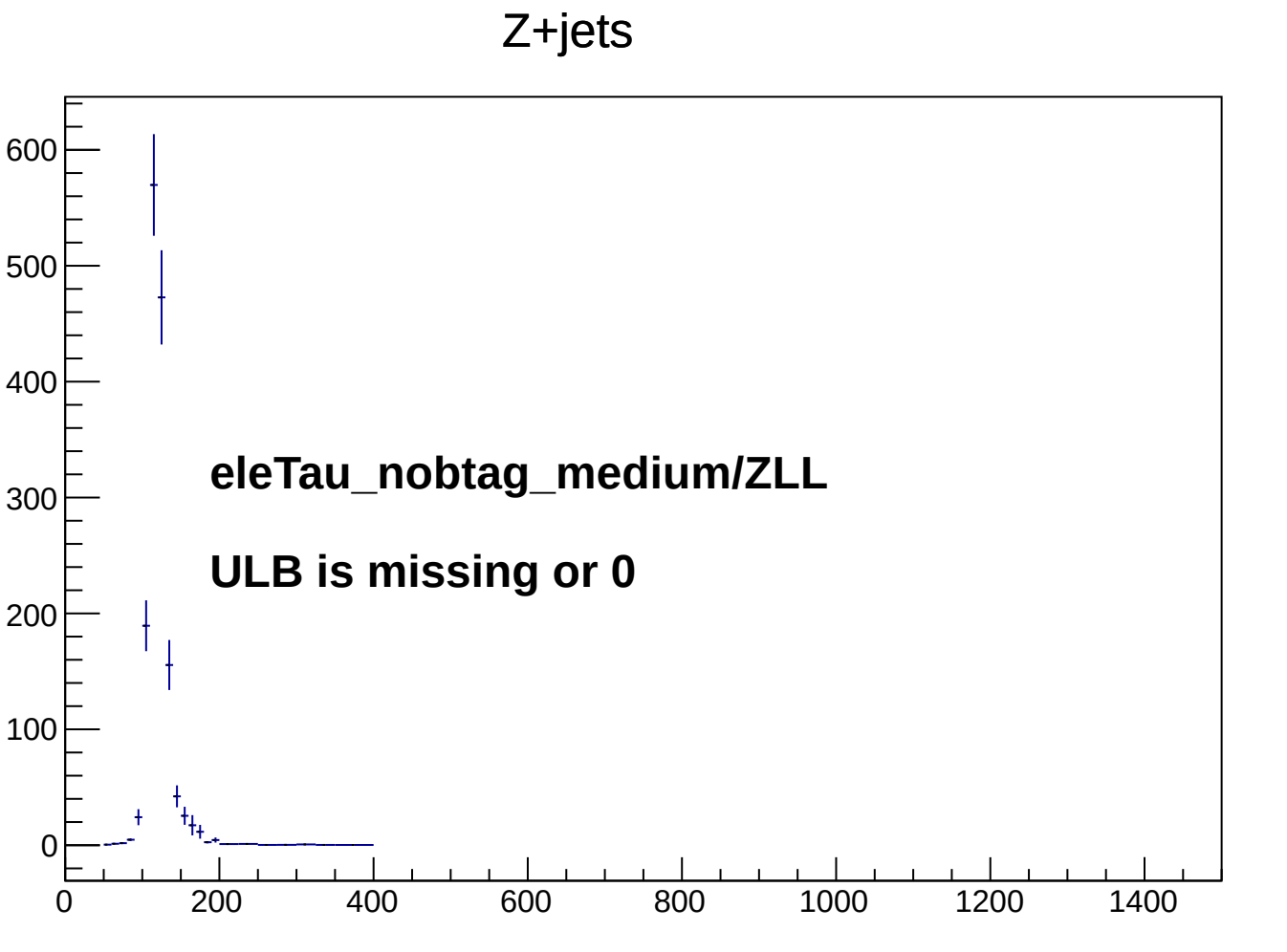

eleTau nobtag_medium ZJ
Difference = 1.1%
LLR : 59.80
ULB : 60.46
mass
Ratio
etau_SVMass_mTLess30_OS_ZJ_nobtag_medium
HDiff

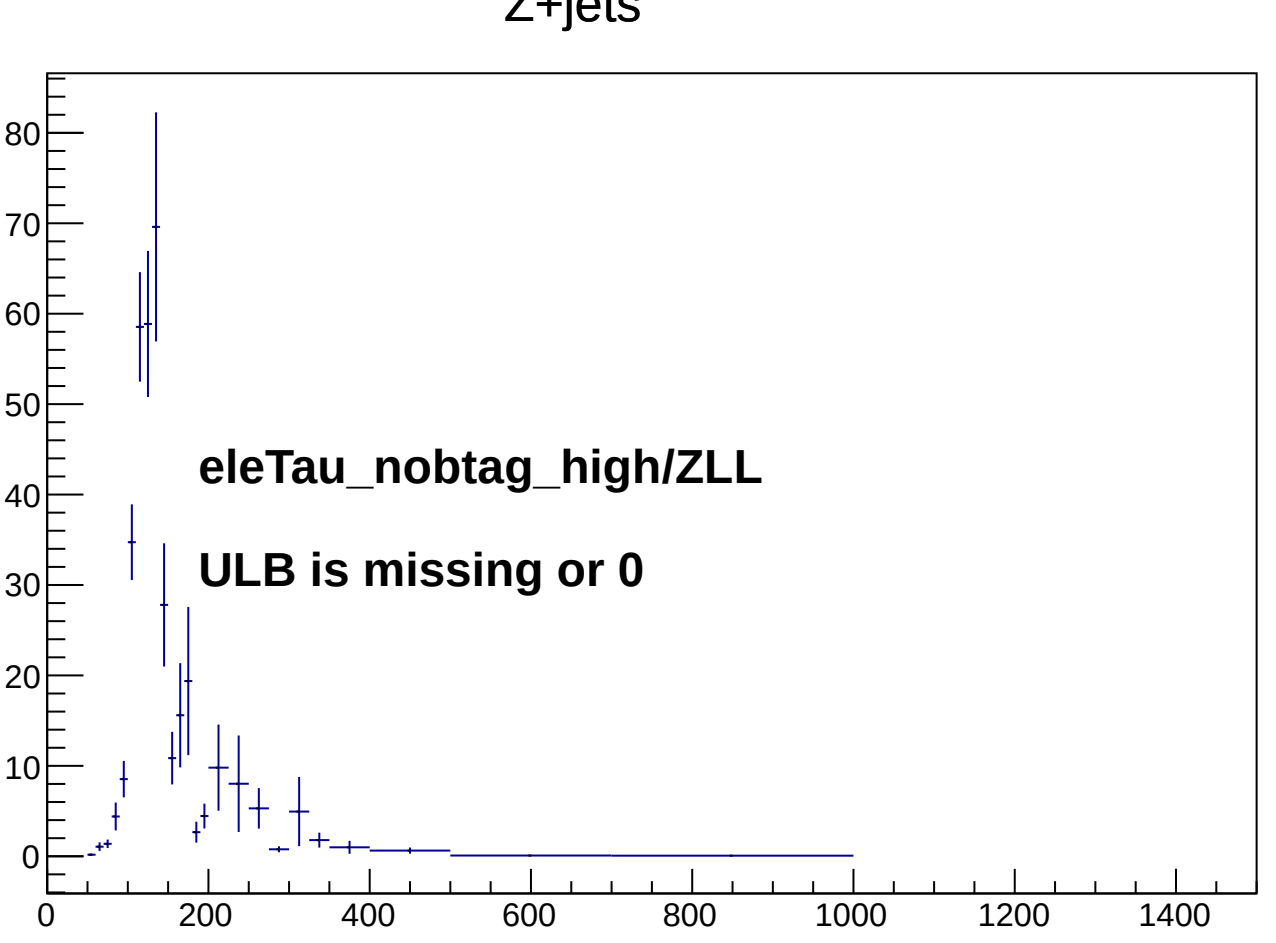

eleTau nobtag_high ZJ
Difference = 15.7%
LLR : 38.41
ULB : 44.97
mass
Ratio
etau_SVMass_mTLess30_OS_ZJ_nobtag_high
HDiff

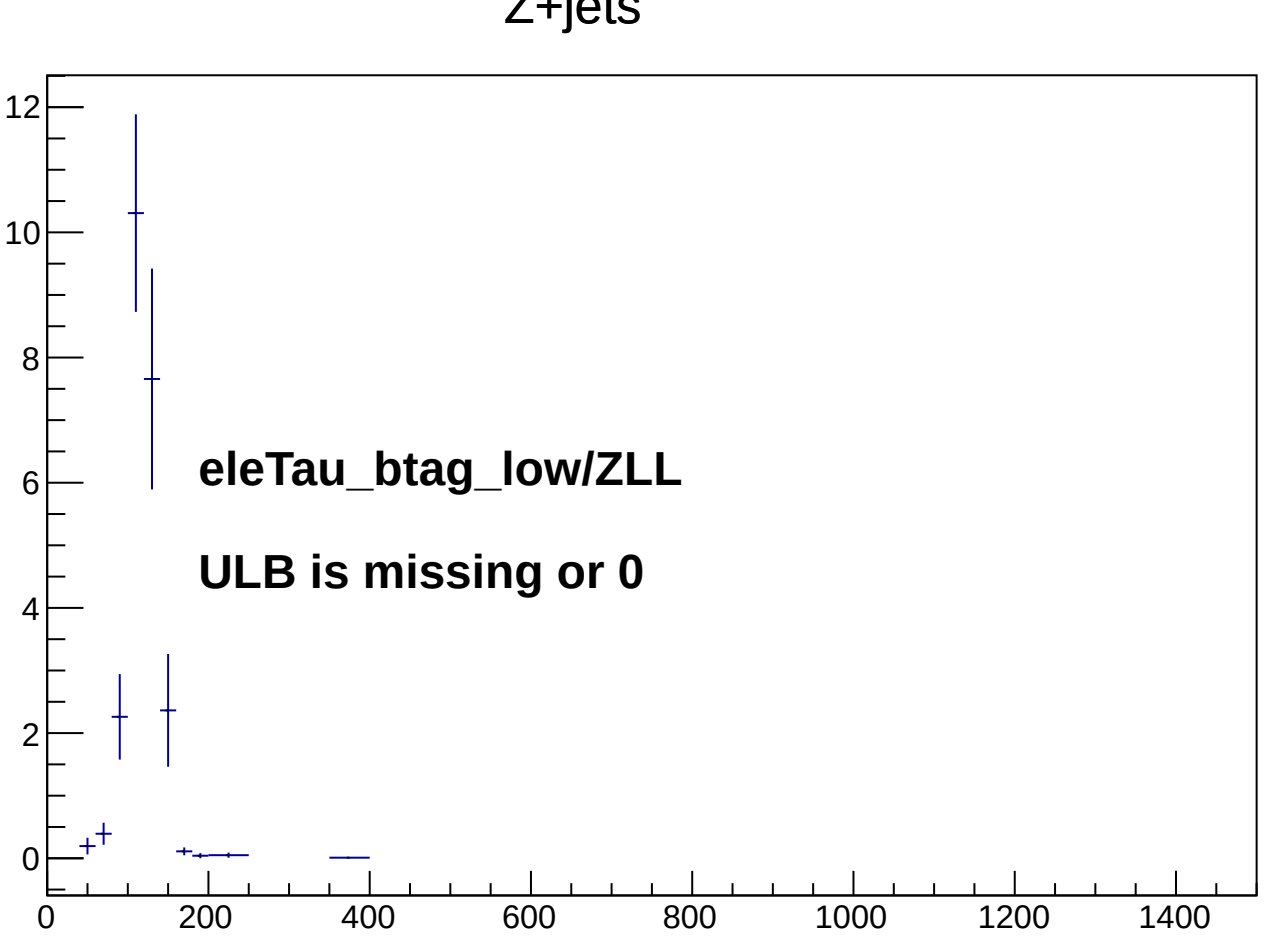

eleTau btag_low ZJ
Difference = 8.3%
LLR : 3.48
ULB : 3.78
mass
Ratio
etau_SVMass_mTLess30_OS_ZJ_btagLoose_low
HDiff

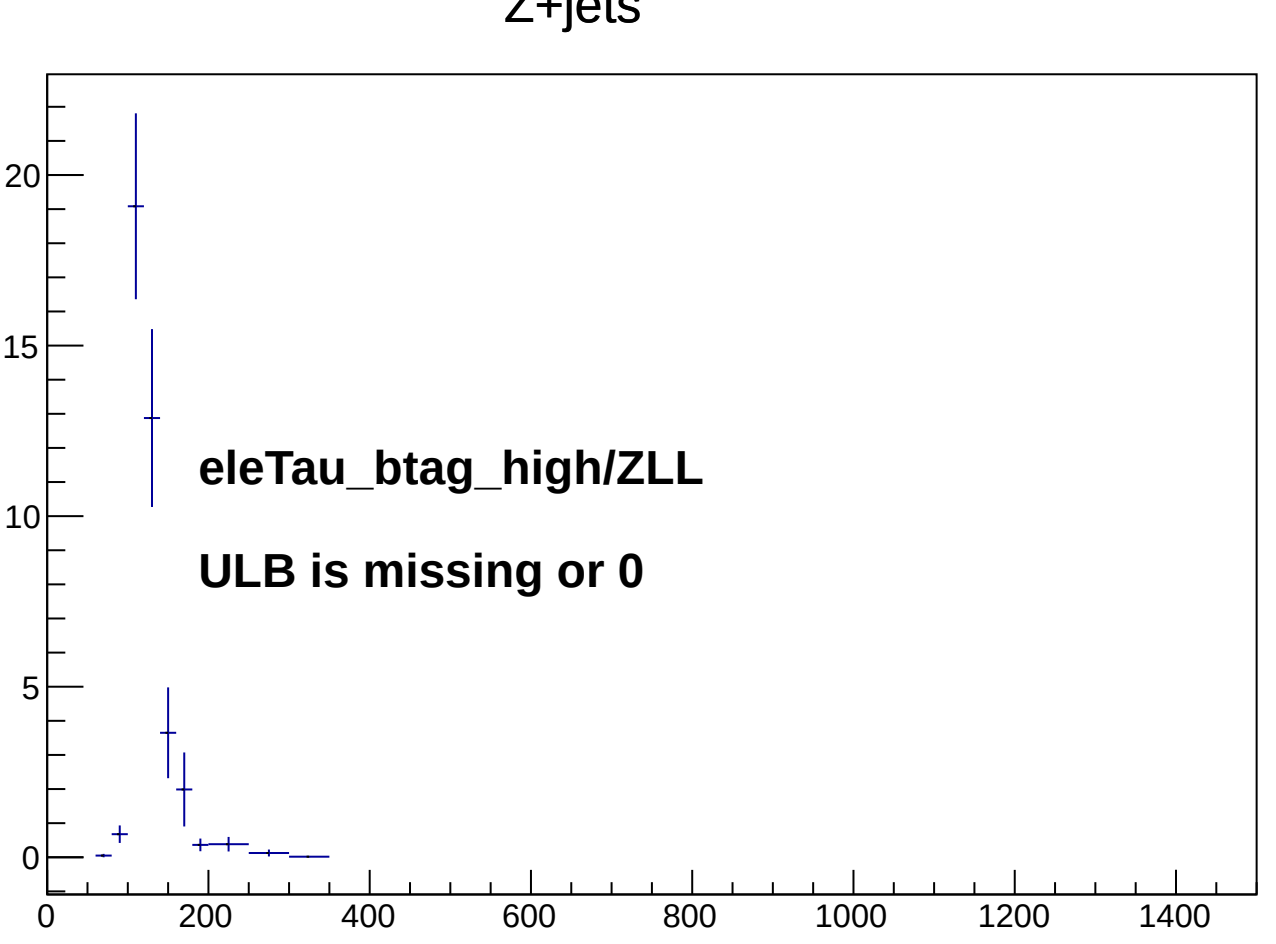

eleTau btag_high ZJ
Difference = 40.0%
LLR : 2.16
ULB : 3.24
mass
Ratio
etau_SVMass_mTLess30_OS_ZJ_btagLoose_high
HDiff

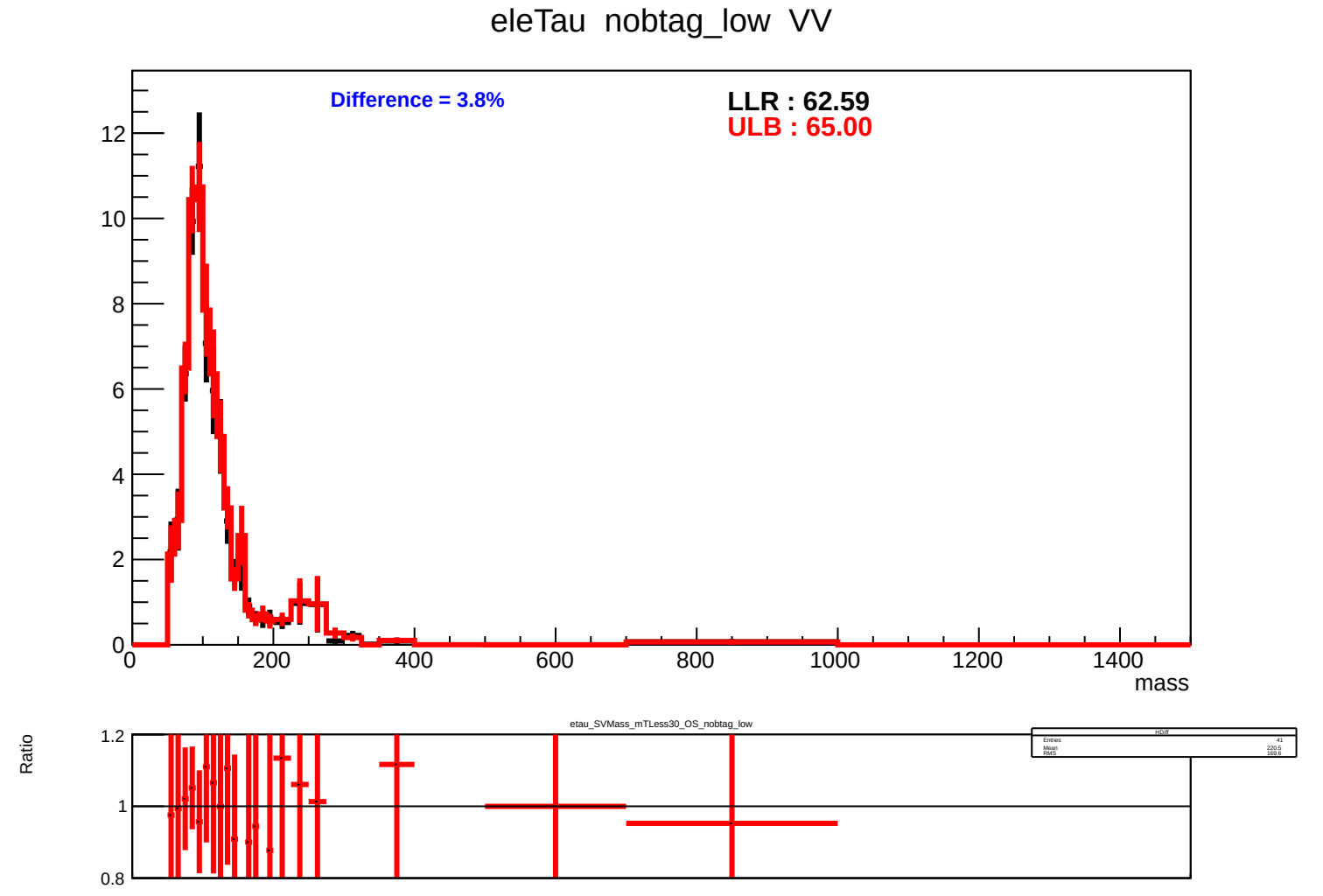

Z+jets
eleTau_nobtag_low/ZLL
ULB is missing or 0
700
600
500
400
300
200
100
0
0
200
400
600
800
1000
1200
1400

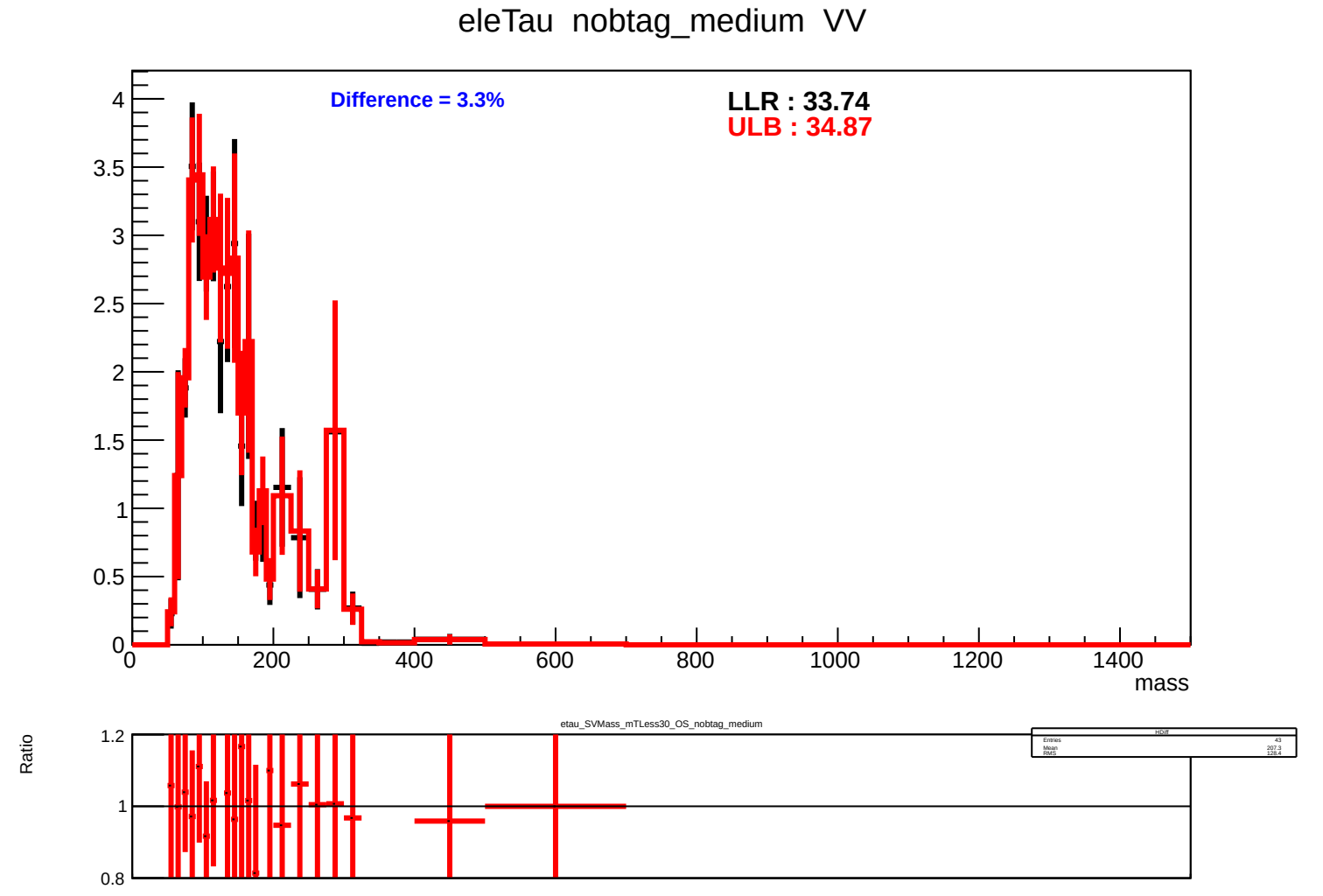

Z+jets
eleTau_nobtag_medium/ZLL
ULB is missing or 0
600
500
400
300
200
100
0
0
200
400
600
800
1000
1200
1400

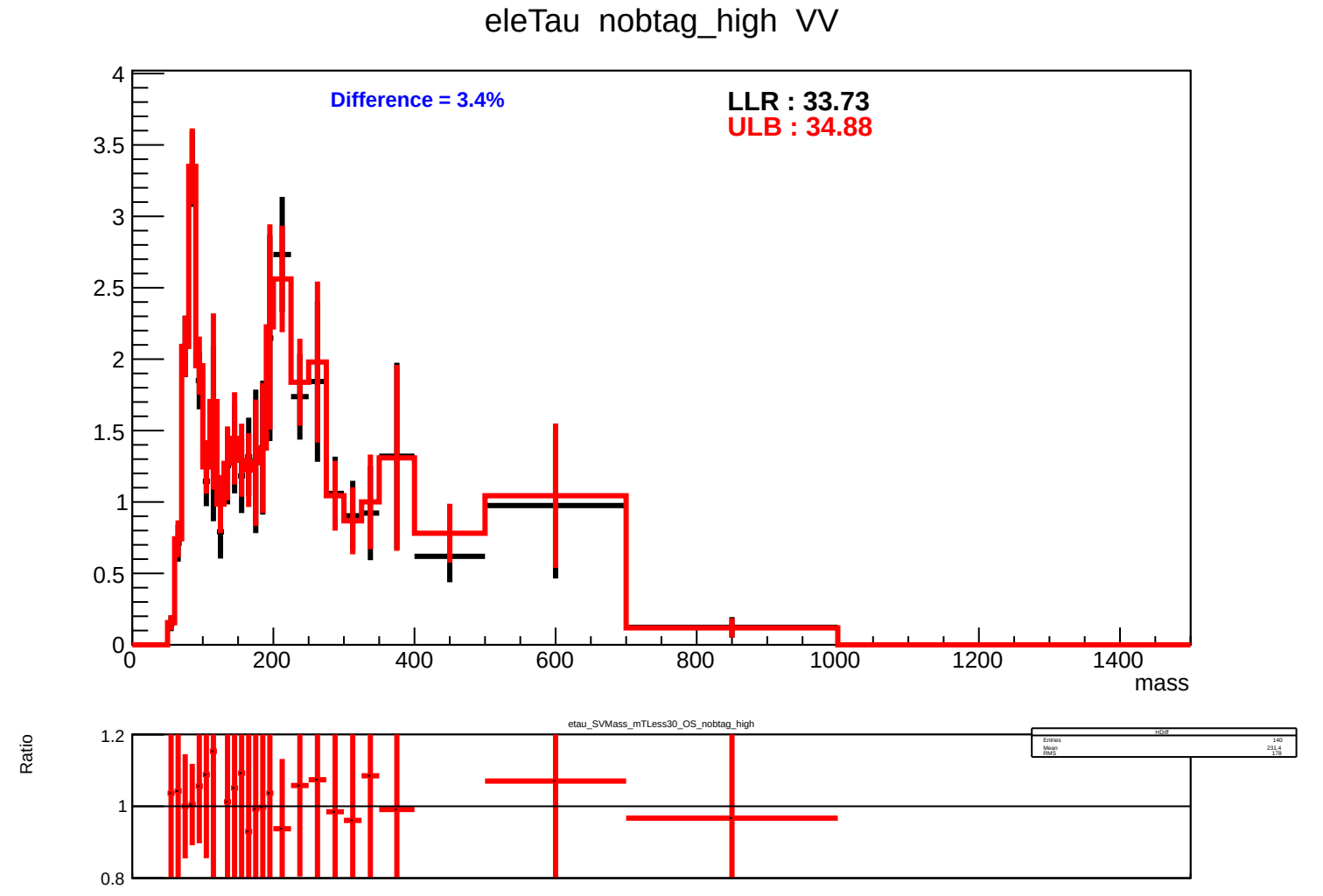

Z+jets
eleTau_nobtag_high/ZLL
ULB is missing or 0
0
10
20
30
40
50
60
70
80
0
200
400
600
800
1000
1200
1400

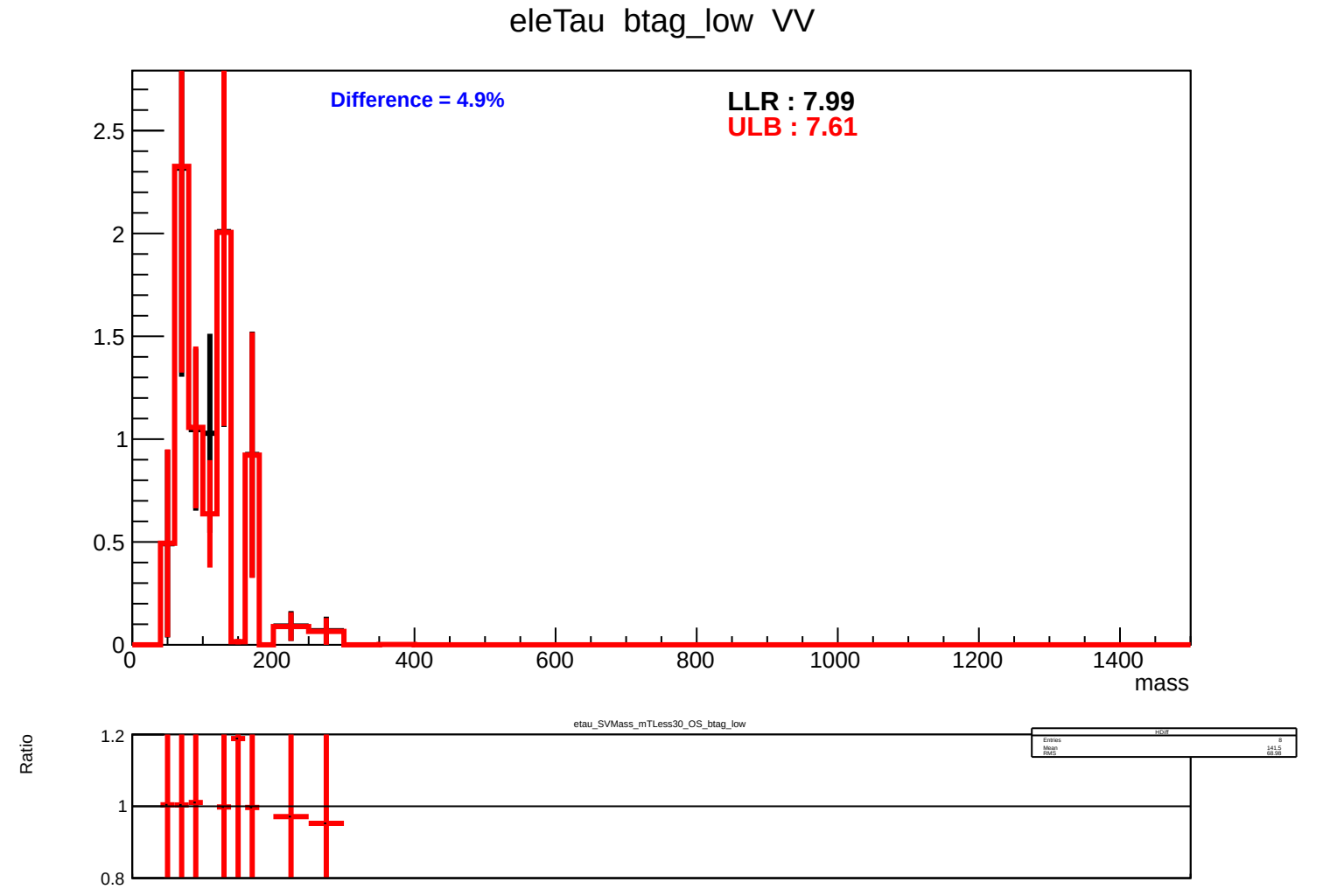

Z+jets
eleTau_btag_low/ZLL
ULB is missing or 0
12
10
8
6
4
2
0
0
200
400
600
800
1000
1200
1400

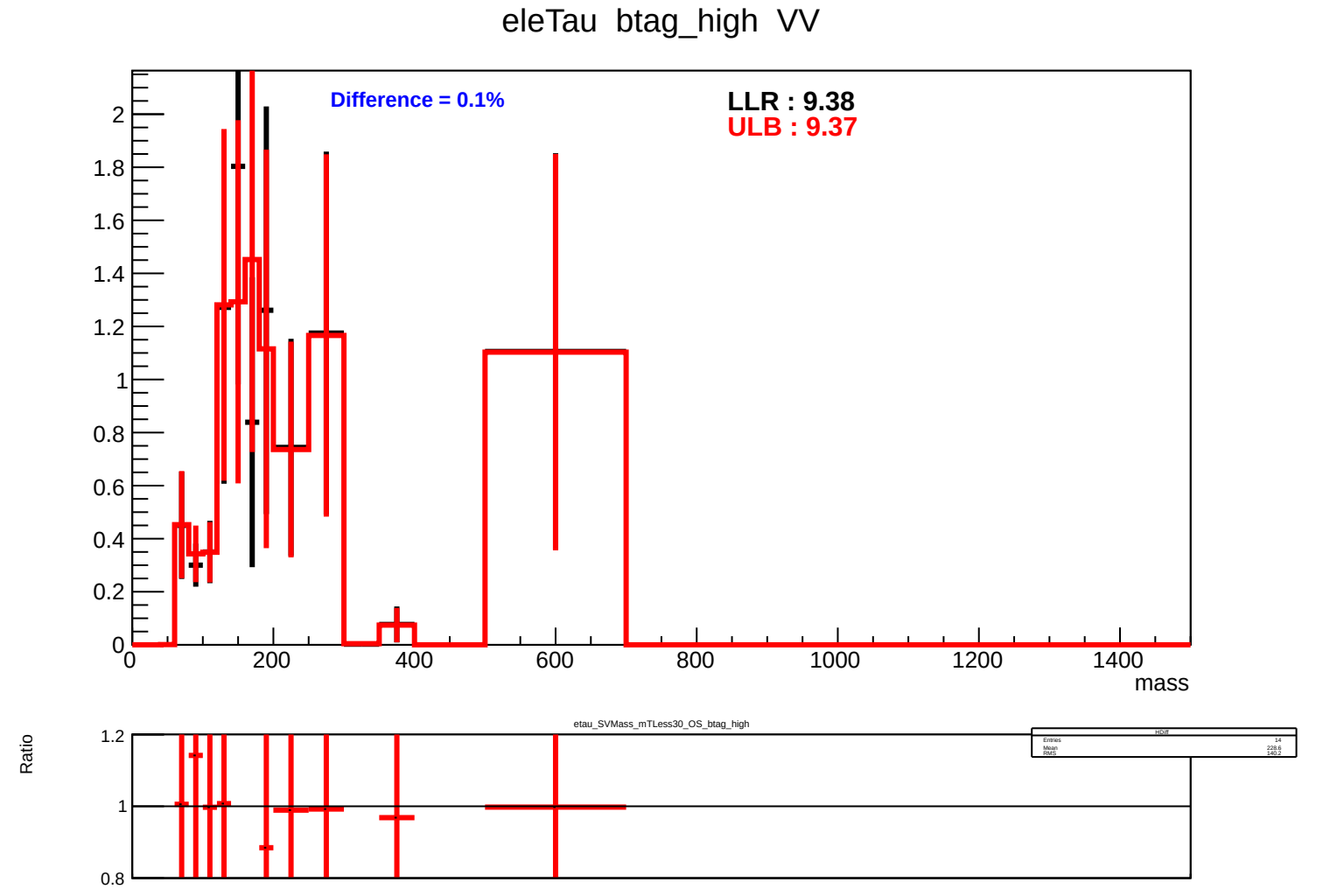

Z+jets
eleTau_btag_high/ZLL
ULB is missing or 0
0
5
10
15
20
0
200
400
600
800
1000
1200
1400


eleTau nobtag_low VV
Difference = 3.8%
LLR : 62.59
ULB : 65.00
mass
Ratio
etau_SVMass_mTLess30_OS_nobtag_low
HDiff


eleTau nobtag_medium VV
Difference = 3.3%
LLR : 33.74
ULB : 34.87
mass
Ratio
etau_SVMass_mTLess30_OS_nobtag_medium
HDiff


eleTau nobtag_high VV
Difference = 3.4%
LLR : 33.73
ULB : 34.88
mass
Ratio
etau_SVMass_mTLess30_OS_nobtag_high
HDiff
Entries 140
Mean 231.4
RMS 178


eleTau btag_low VV
Difference = 4.9%
LLR : 7.99
ULB : 7.61
2.5
2
1.5
1
0.5
0
0
200
400
600
800
1000
1200
1400
mass
etau_SVMass_mTLess30_OS_btag_low
HDiff
Entries 8
Mean 141.5
RMS 68.26
Ratio
1.2
1
0.8


eleTau btag_high VV
Difference = 0.1%
LLR : 9.38
ULB : 9.37
mass
Ratio
etau_SVMass_mTLess30_OS_btag_high
HDiff
Entries 14
Mean 228.6
RMS 140.2

eleTau_nobtag_low/ggH125

ULB is missing or 0

eleTau_nobtag_medium/ggH125

ULB is missing or 0

eleTau_nobtag_high/ggH125

ULB is missing or 0

eleTau_btag_low/ggH125

UL3 is missing or 0

eleTau_btag_high/ggH125

UL18 is missing or 0

eleTau_nobtag_low/qqH125

UL18 is missing or 0

eleTau_nobtag_medium/qqH125

ULB is missing or 0

eleTau_nobtag_high/qqH125

UL3 is missing or 0

eleTau_btag_low/qqH125

UL18 is missing or 0

eleTau_btag_high/qqH125

UL18 is missing or 0

eleTau_nobtag_low/VH125

UL3 is missing or 0

eleTau_nobtag_medium/VH125

ULB is missing or 0

eleTau_nobtag_high/VH125

ULB is missing or 0

eleTau_btag_low/VH125

ULB is missing or 0

eleTau_btag_high/VH125

ULB is missing or 0