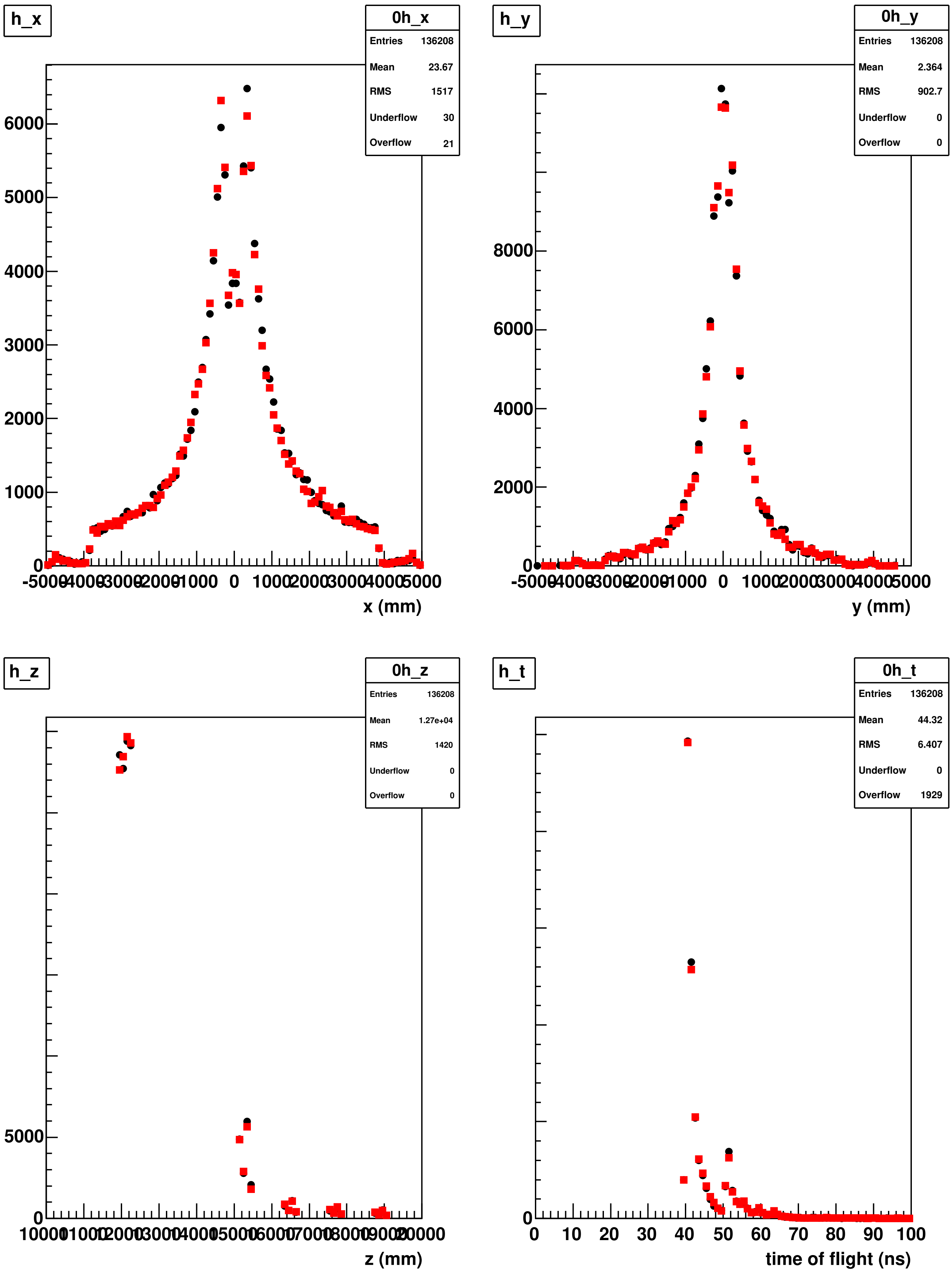
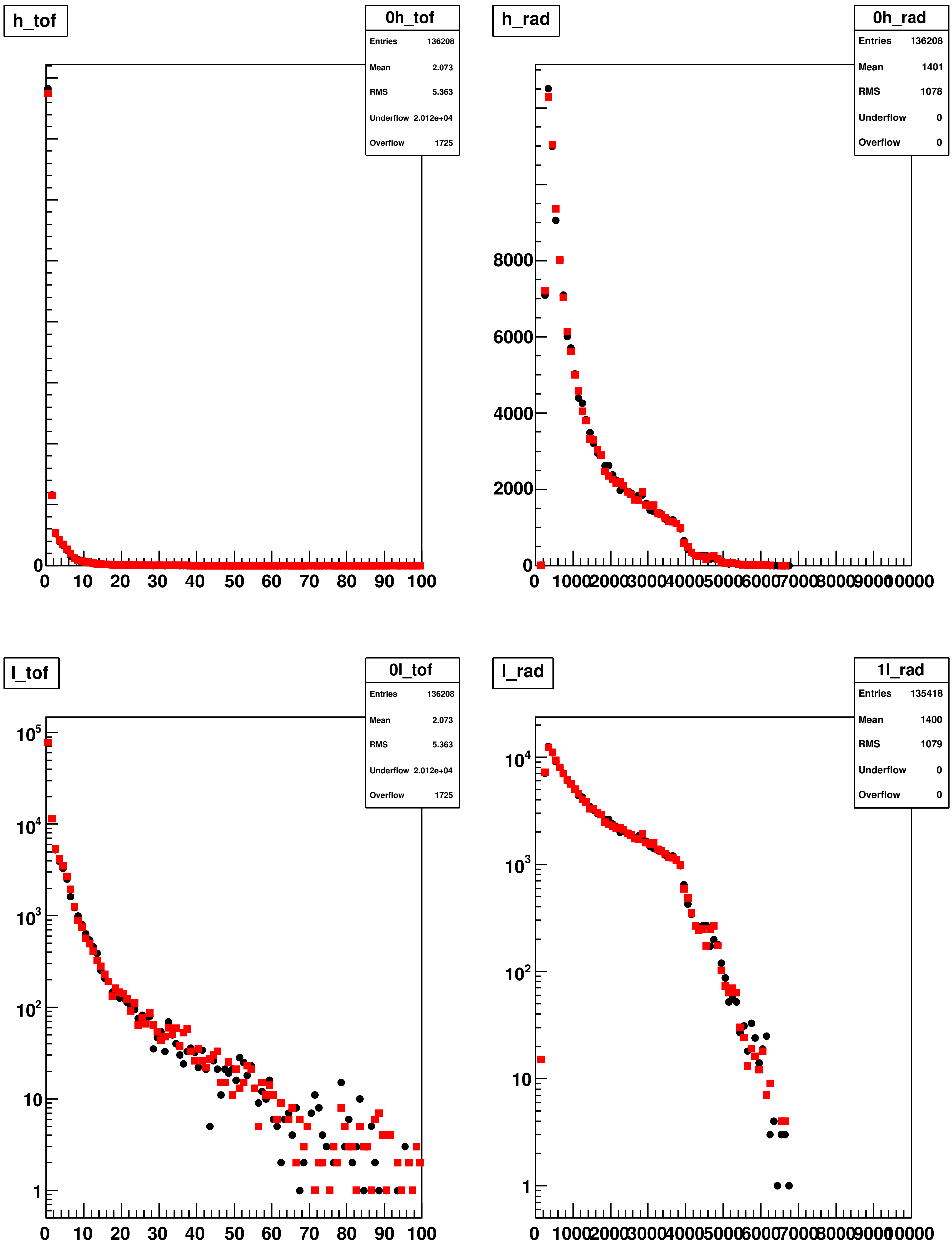
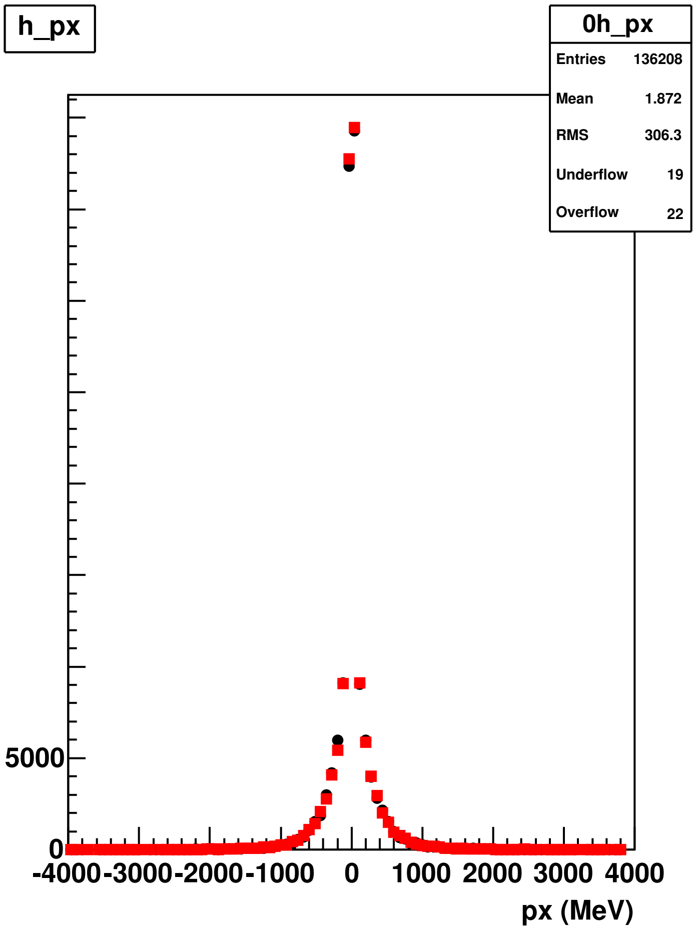
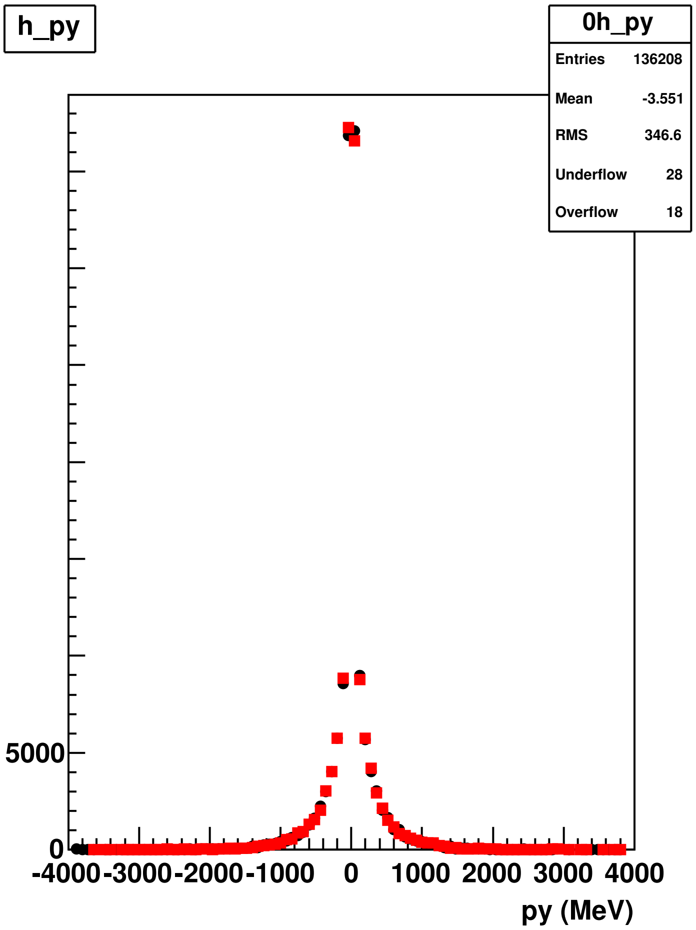
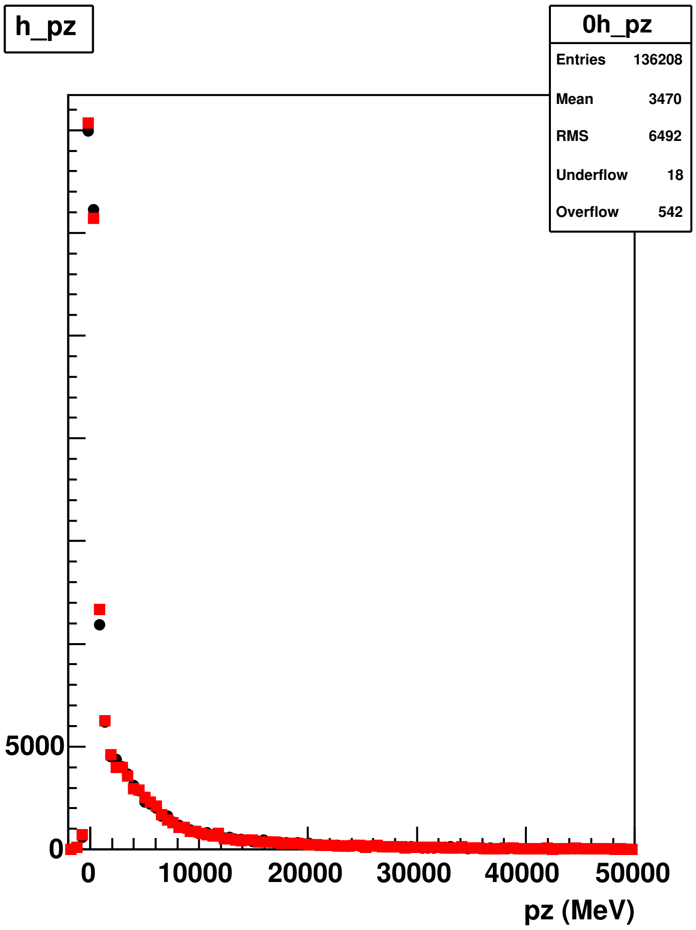
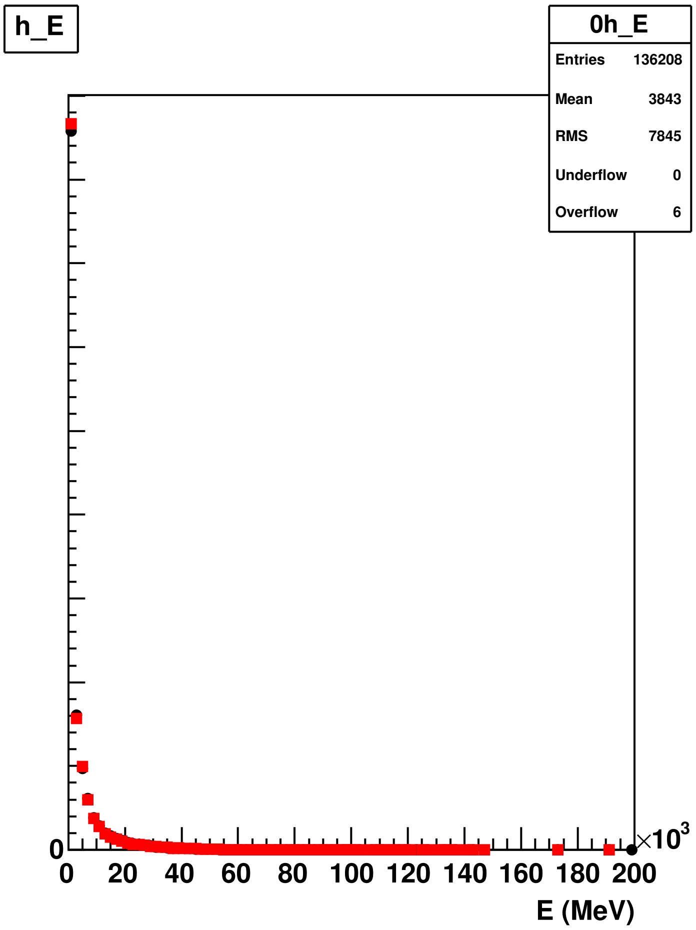

h_x
0h_x
Entries 136208
Mean 23.67
RMS 1517
Underflow 30
Overflow 21
0
1000
2000
3000
4000
5000
6000
-5000 -4000 -3000 -2000 -1000 0 1000 2000 3000 4000 5000
x (mm)
h_y
0h_y
Entries 136208
Mean 2.364
RMS 902.7
Underflow 0
Overflow 0
0
2000
4000
6000
8000
-5000 -4000 -3000 -2000 -1000 0 1000 2000 3000 4000 5000
y (mm)
h_z
0h_z
Entries 136208
Mean 1.27e+04
RMS 1420
Underflow 0
Overflow 0
0
5000
10000 11000 12000 13000 14000 15000 16000 17000 18000 19000 20000
z (mm)
h_t
0h_t
Entries 136208
Mean 44.32
RMS 6.407
Underflow 0
Overflow 1929
0
0 10 20 30 40 50 60 70 80 90 100
time of flight (ns)

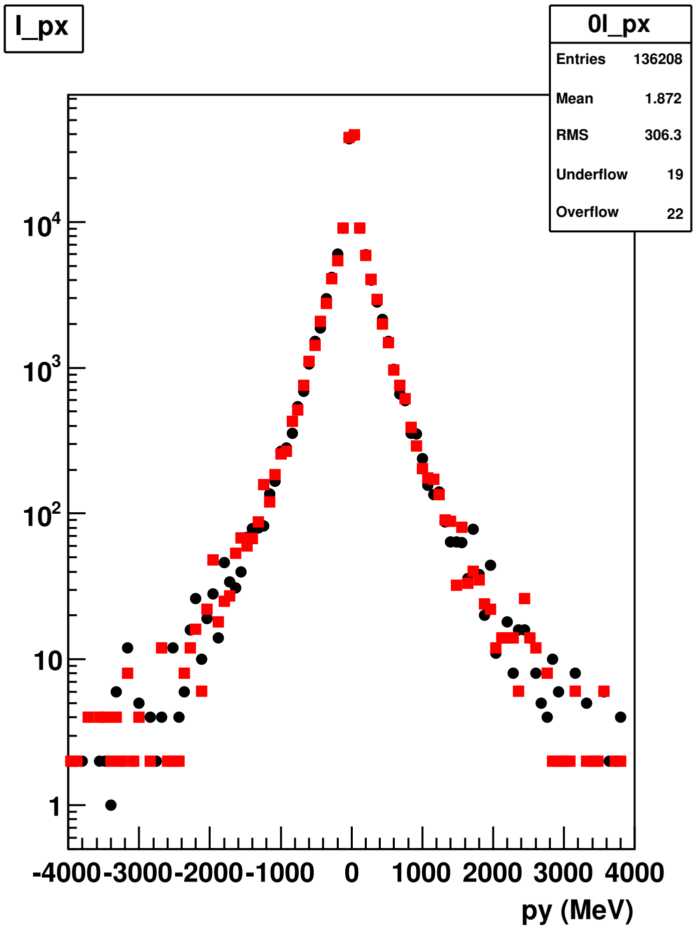

h_tof
0h_tof
Entries 136208
Mean 2.073
RMS 5.363
Underflow 2.012e+04
Overflow 1725
0 10 20 30 40 50 60 70 80 90 100
h_rad
0h_rad
Entries 136208
Mean 1401
RMS 1078
Underflow 0
Overflow 0
0 2000 4000 6000 8000
0 1000 2000 3000 4000 5000 6000 7000 8000 9000 10000
l_tof
0l_tof
Entries 136208
Mean 2.073
RMS 5.363
Underflow 2.012e+04
Overflow 1725
1 10 10^2 10^3 10^4 10^5
0 10 20 30 40 50 60 70 80 90 100
l_rad
1l_rad
Entries 135418
Mean 1400
RMS 1079
Underflow 0
Overflow 0
1 10 10^2 10^3 10^4
0 1000 2000 3000 4000 5000 6000 7000 8000 9000 10000

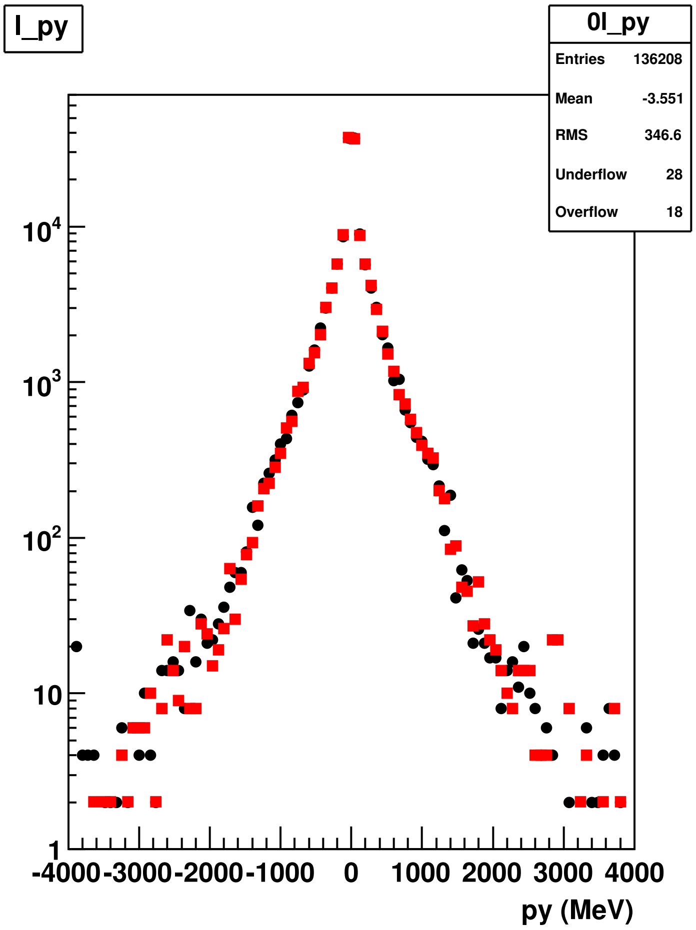

h_px
0h_px
Entries 136208
Mean 1.872
RMS 306.3
Underflow 19
Overflow 22
5000
0
-4000 -3000 -2000 -1000 0 1000 2000 3000 4000
px (MeV)

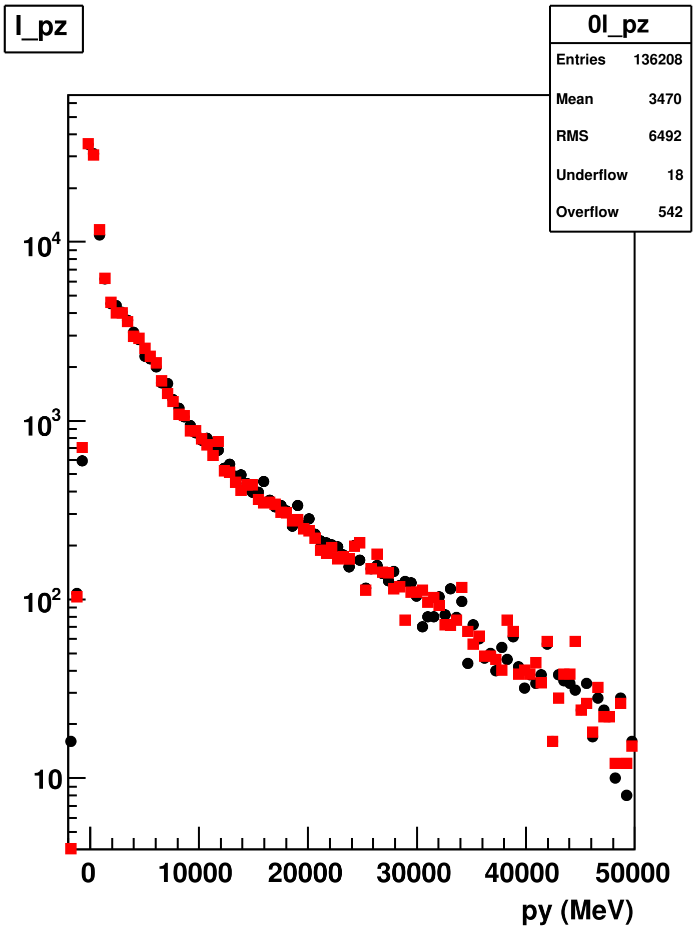

h_py
0h_py
Entries 136208
Mean -3.551
RMS 346.6
Underflow 28
Overflow 18
5000
0
-4000 -3000 -2000 -1000 0 1000 2000 3000 4000
py (MeV)

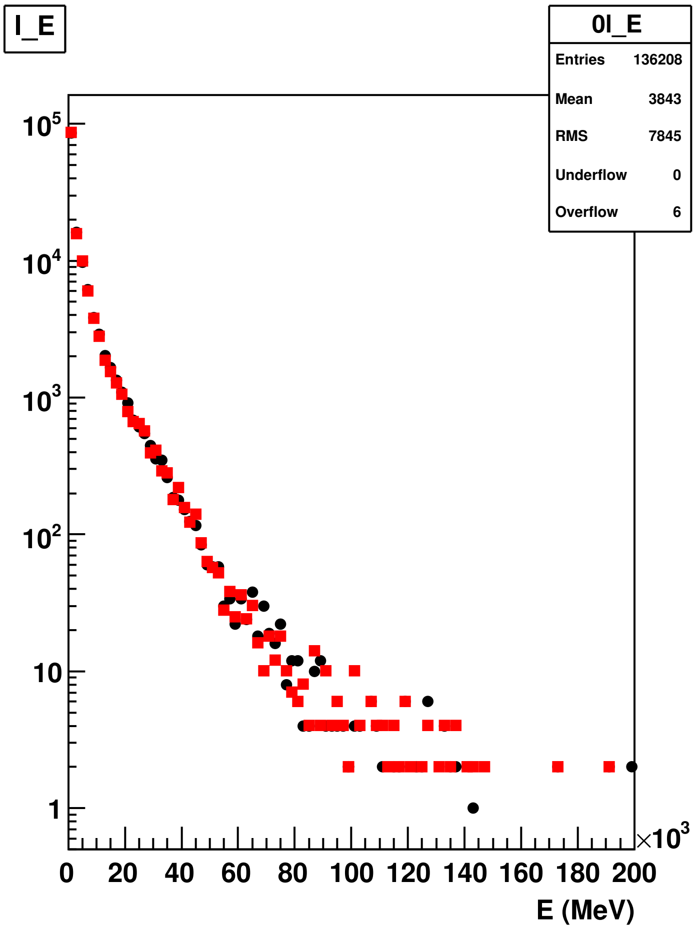

h_pz
0h_pz
Entries 136208
Mean 3470
RMS 6492
Underflow 18
Overflow 542
5000
0
0 10000 20000 30000 40000 50000
pz (MeV)

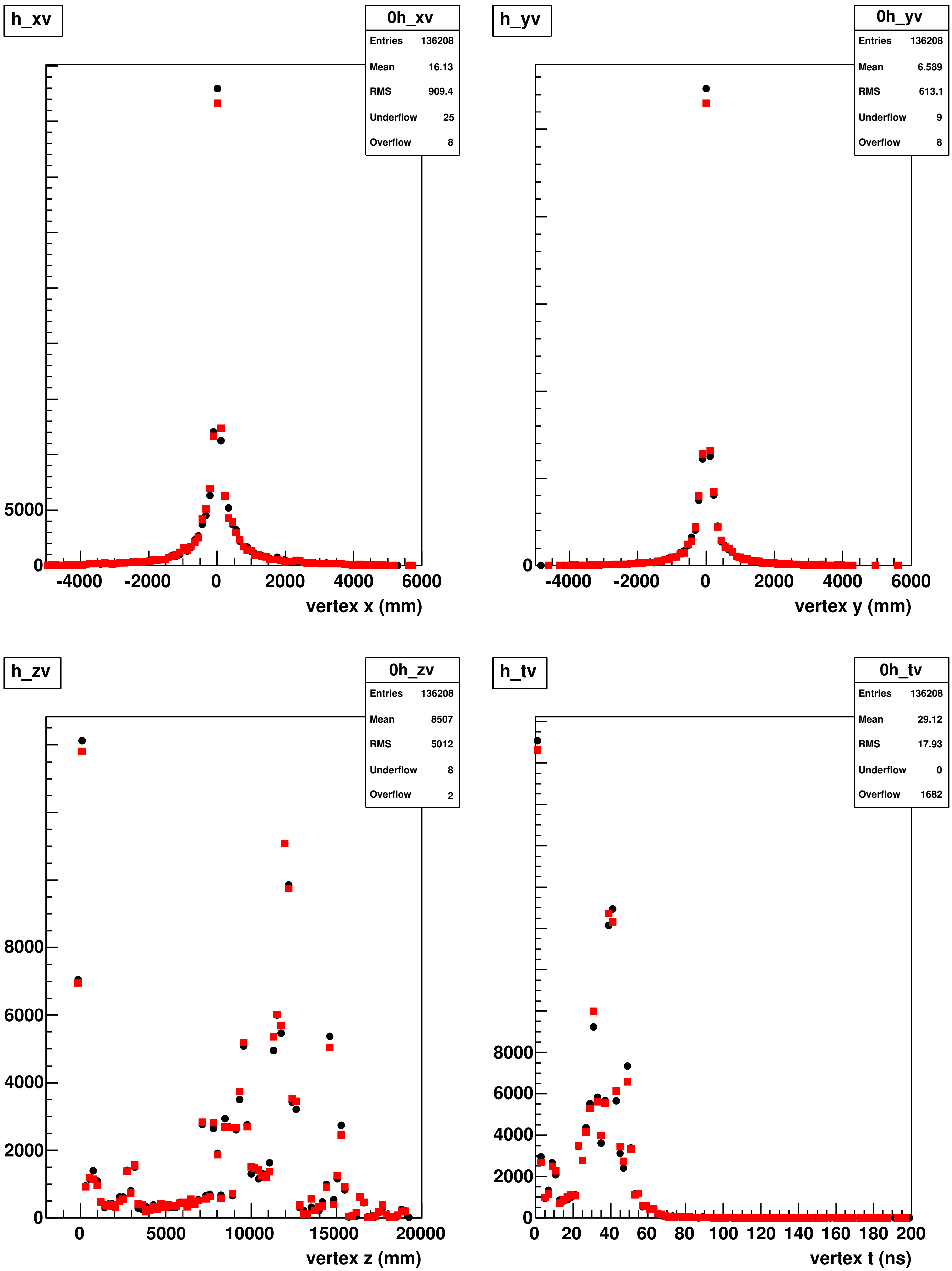

h_E
0h_E
Entries 136208
Mean 3843
RMS 7845
Underflow 0
Overflow 6
0
0 20 40 60 80 100 120 140 160 180 200
×10^3
E (MeV)

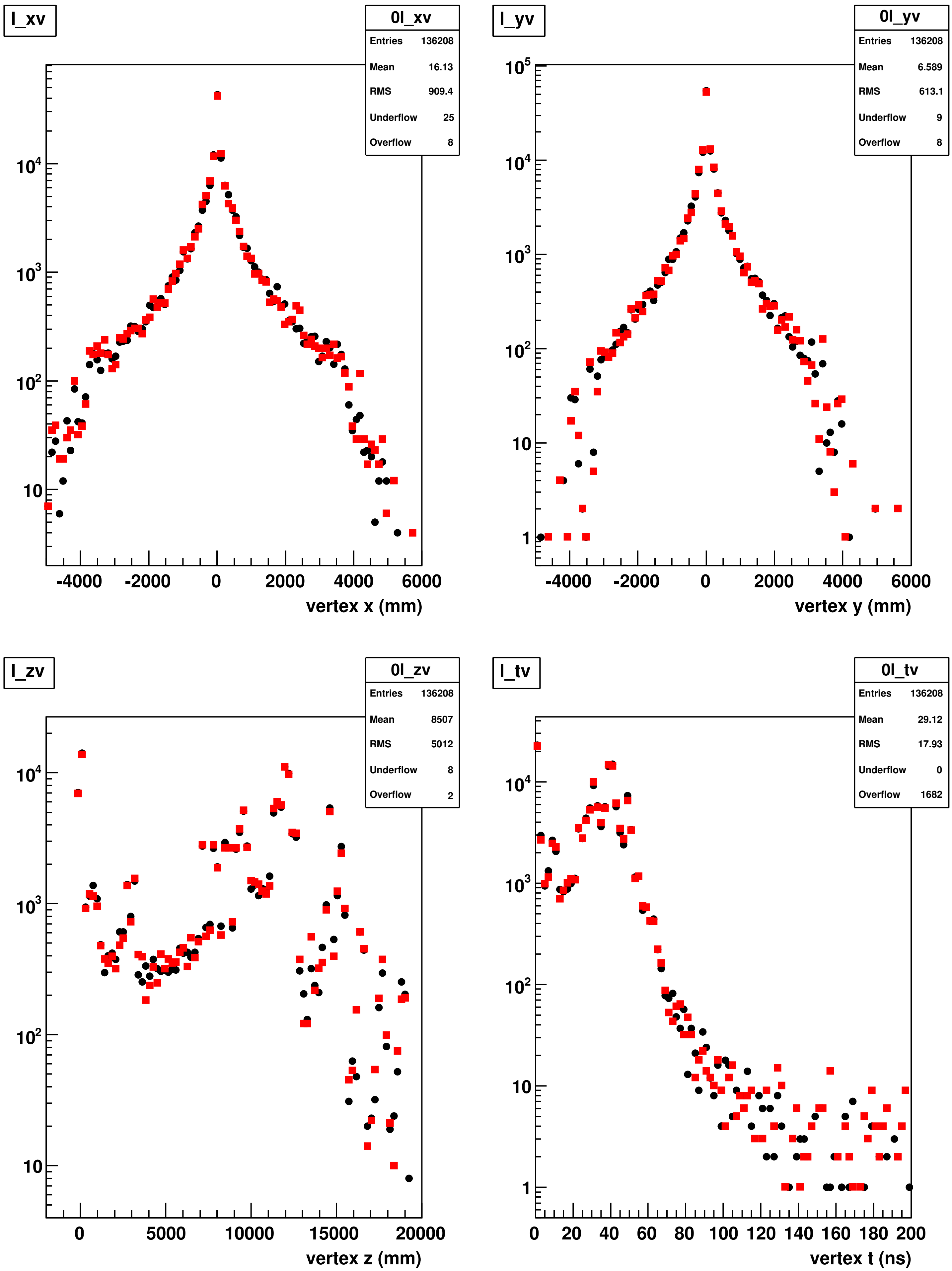

l_px
0l_px
Entries 136208
Mean 1.872
RMS 306.3
Underflow 19
Overflow 22
1
10
10^2
10^3
10^4
-4000 -3000 -2000 -1000 0 1000 2000 3000 4000
py (MeV)


l_py
0l_py
Entries 136208
Mean -3.551
RMS 346.6
Underflow 28
Overflow 18
1
10
10^2
10^3
10^4
-4000 -3000 -2000 -1000 0 1000 2000 3000 4000
py (MeV)

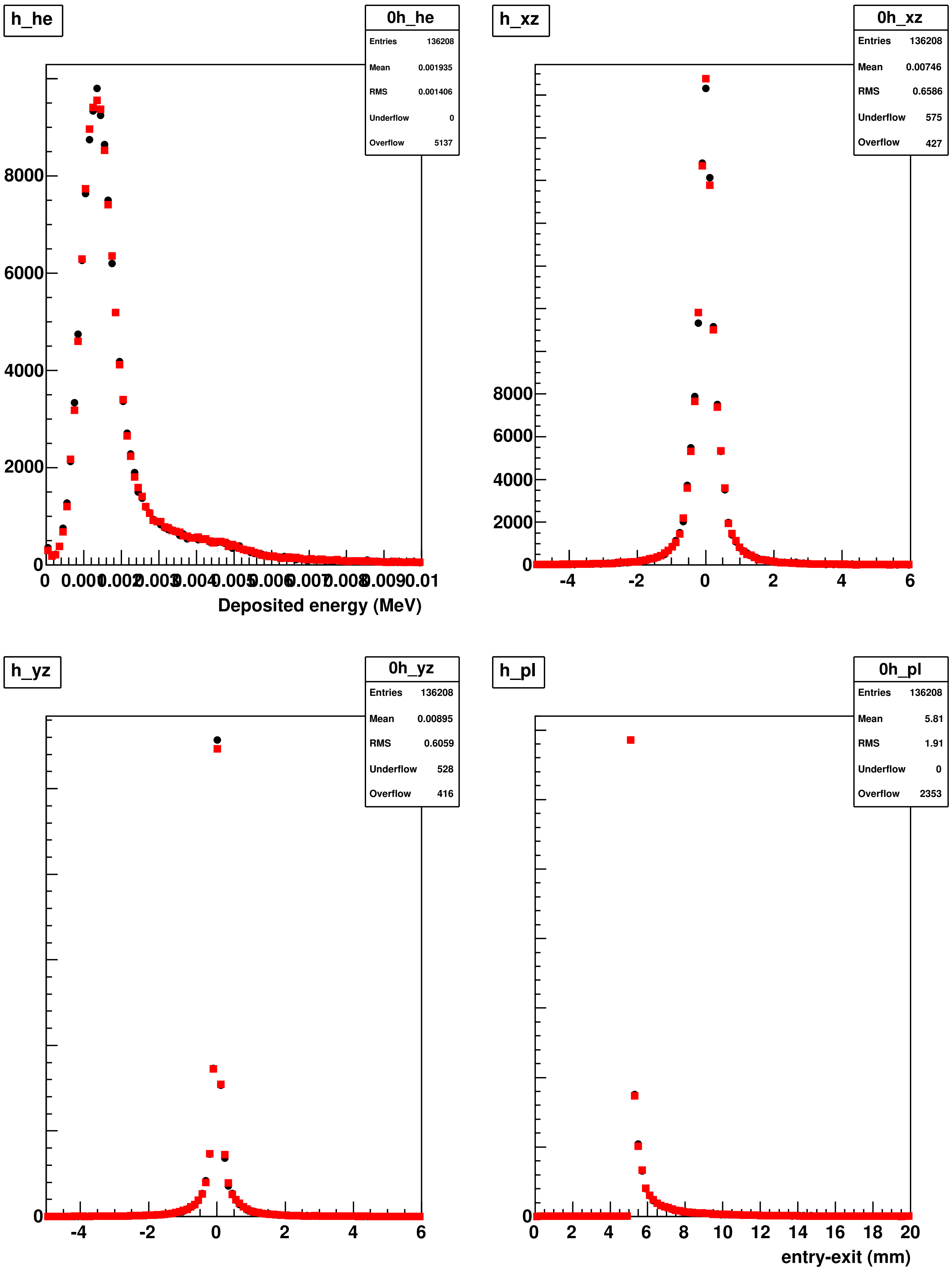

l_pz
0l_pz
Entries 136208
Mean 3470
RMS 6492
Underflow 18
Overflow 542
10
10^2
10^3
10^4
0 10000 20000 30000 40000 50000
py (MeV)


l_E
0l_E
Entries 136208
Mean 3843
RMS 7845
Underflow 0
Overflow 6
1
10
10^2
10^3
10^4
10^5
$\times 10^3$
0 20 40 60 80 100 120 140 160 180 200
E (MeV)

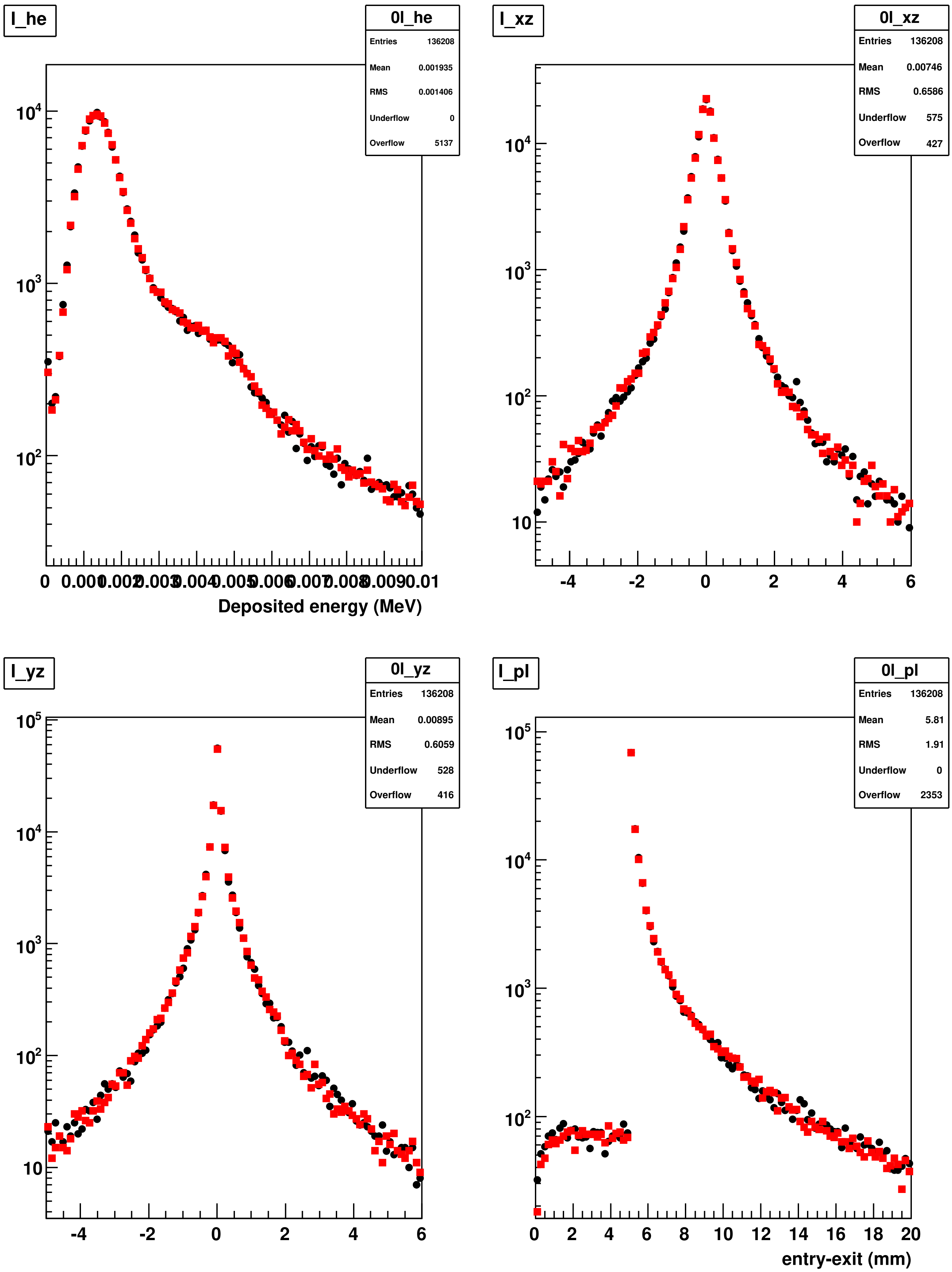

h_xv
0h_xv
Entries 136208
Mean 16.13
RMS 909.4
Underflow 25
Overflow 8
vertex x (mm)
h_yv
0h_yv
Entries 136208
Mean 6.589
RMS 613.1
Underflow 9
Overflow 8
vertex y (mm)
h_zv
0h_zv
Entries 136208
Mean 8507
RMS 5012
Underflow 8
Overflow 2
vertex z (mm)
h_tv
0h_tv
Entries 136208
Mean 29.12
RMS 17.93
Underflow 0
Overflow 1682
vertex t (ns)

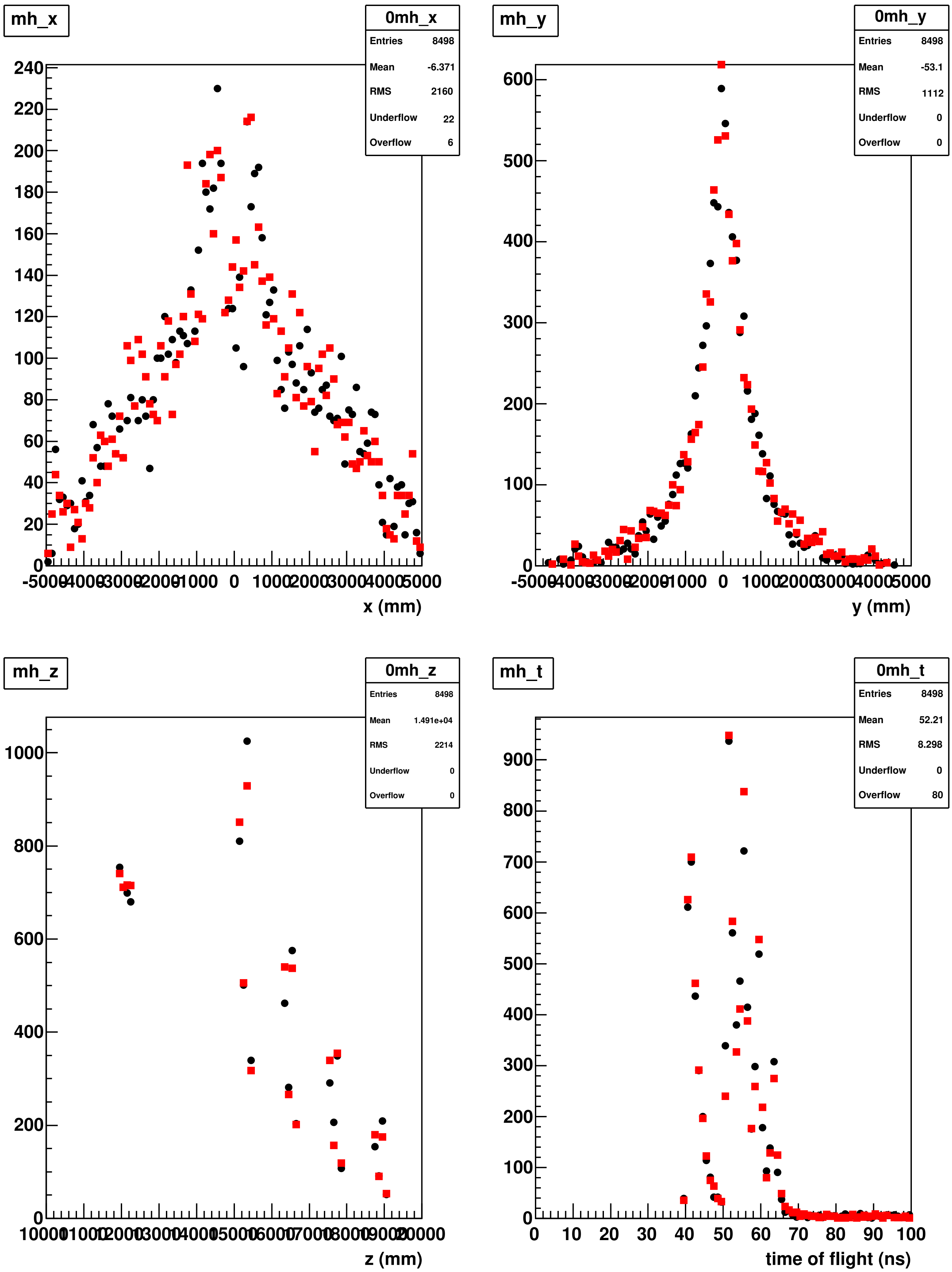


l_xv
0l_xv
Entries 136208
Mean 16.13
RMS 909.4
Underflow 25
Overflow 8
vertex x (mm)
l_yv
0l_yv
Entries 136208
Mean 6.589
RMS 613.1
Underflow 9
Overflow 8
vertex y (mm)
l_zv
0l_zv
Entries 136208
Mean 8507
RMS 5012
Underflow 8
Overflow 2
vertex z (mm)
l_tv
0l_tv
Entries 136208
Mean 29.12
RMS 17.93
Underflow 0
Overflow 1682
vertex t (ns)

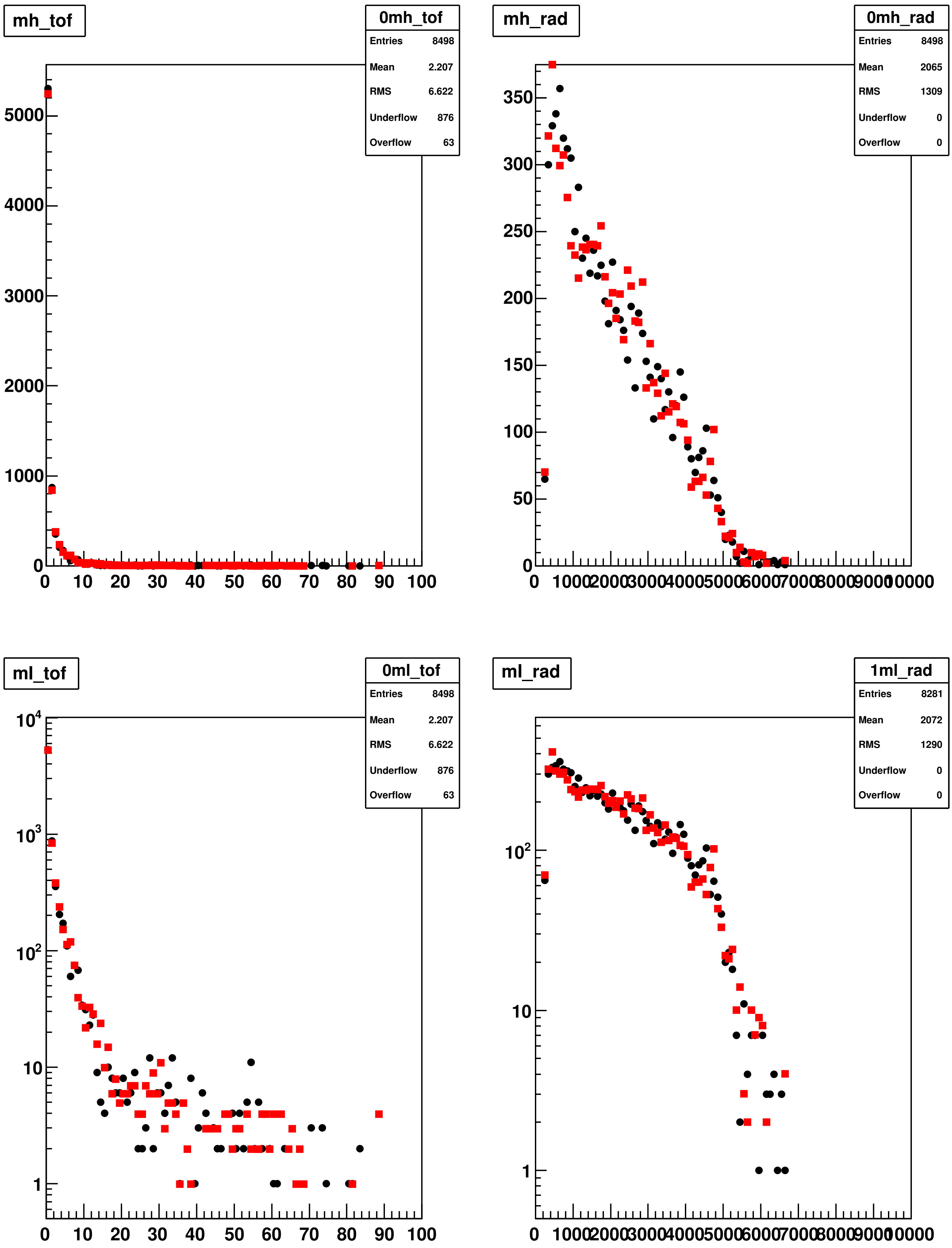


h_he
0h_he
Entries 136208
Mean 0.001935
RMS 0.001406
Underflow 0
Overflow 5137
8000
6000
4000
2000
0
0 0.001 0.002 0.003 0.004 0.005 0.006 0.007 0.008 0.009 0.01
Deposited energy (MeV)
h_xz
0h_xz
Entries 136208
Mean 0.00746
RMS 0.6586
Underflow 575
Overflow 427
8000
6000
4000
2000
0
-4 -2 0 2 4 6
h_yz
0h_yz
Entries 136208
Mean 0.00895
RMS 0.6059
Underflow 528
Overflow 416
0
-4 -2 0 2 4 6
h_pl
0h_pl
Entries 136208
Mean 5.81
RMS 1.91
Underflow 0
Overflow 2353
0
0 2 4 6 8 10 12 14 16 18 20
entry-exit (mm)

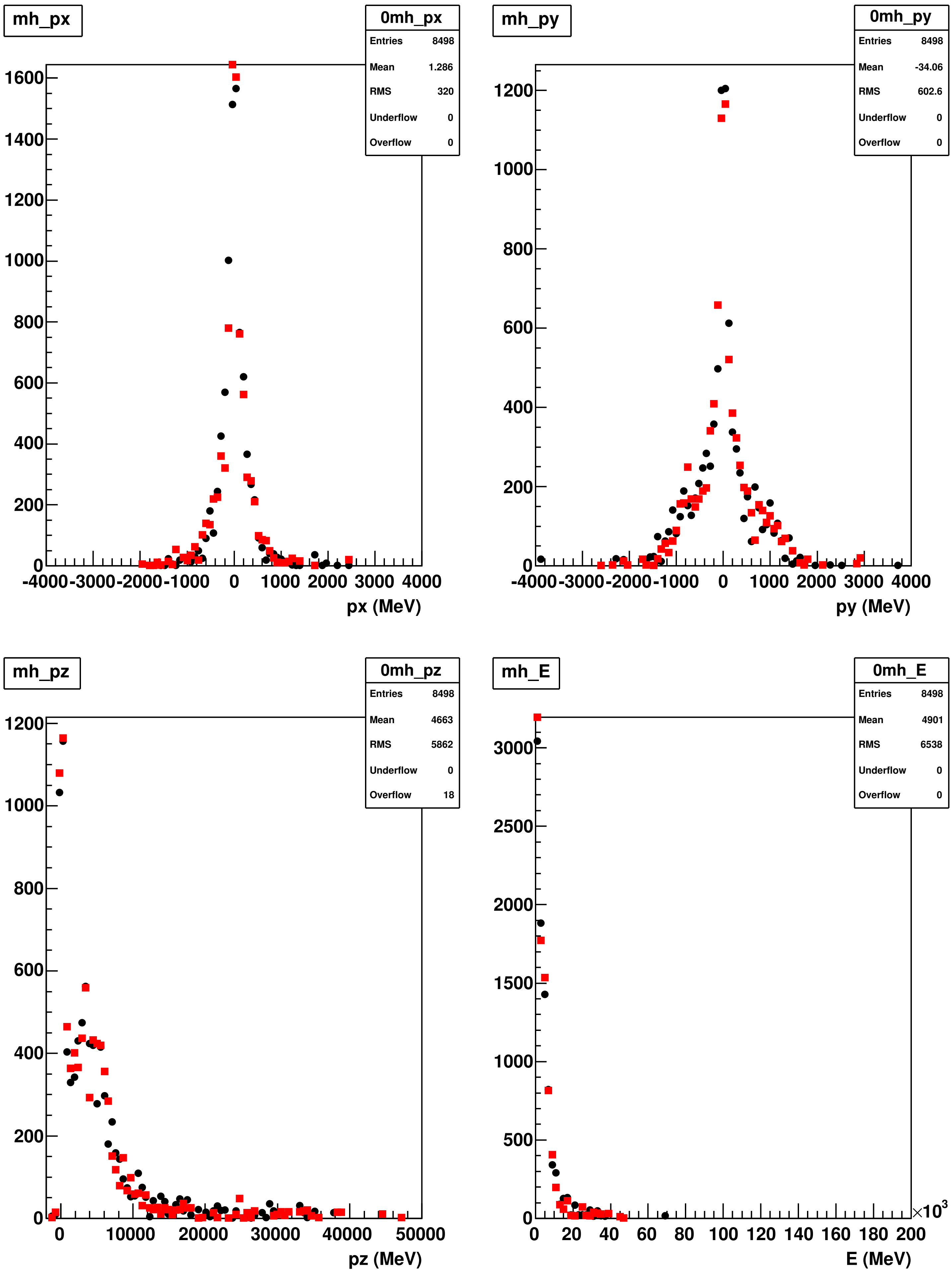

l_he
0l_he
Entries 136208
Mean 0.001935
RMS 0.001406
Underflow 0
Overflow 5137
Deposited energy (MeV)
l_xz
0l_xz
Entries 136208
Mean 0.00746
RMS 0.6586
Underflow 575
Overflow 427
l_yz
0l_yz
Entries 136208
Mean 0.00895
RMS 0.6059
Underflow 528
Overflow 416
l_pl
0l_pl
Entries 136208
Mean 5.81
RMS 1.91
Underflow 0
Overflow 2353
entry-exit (mm)

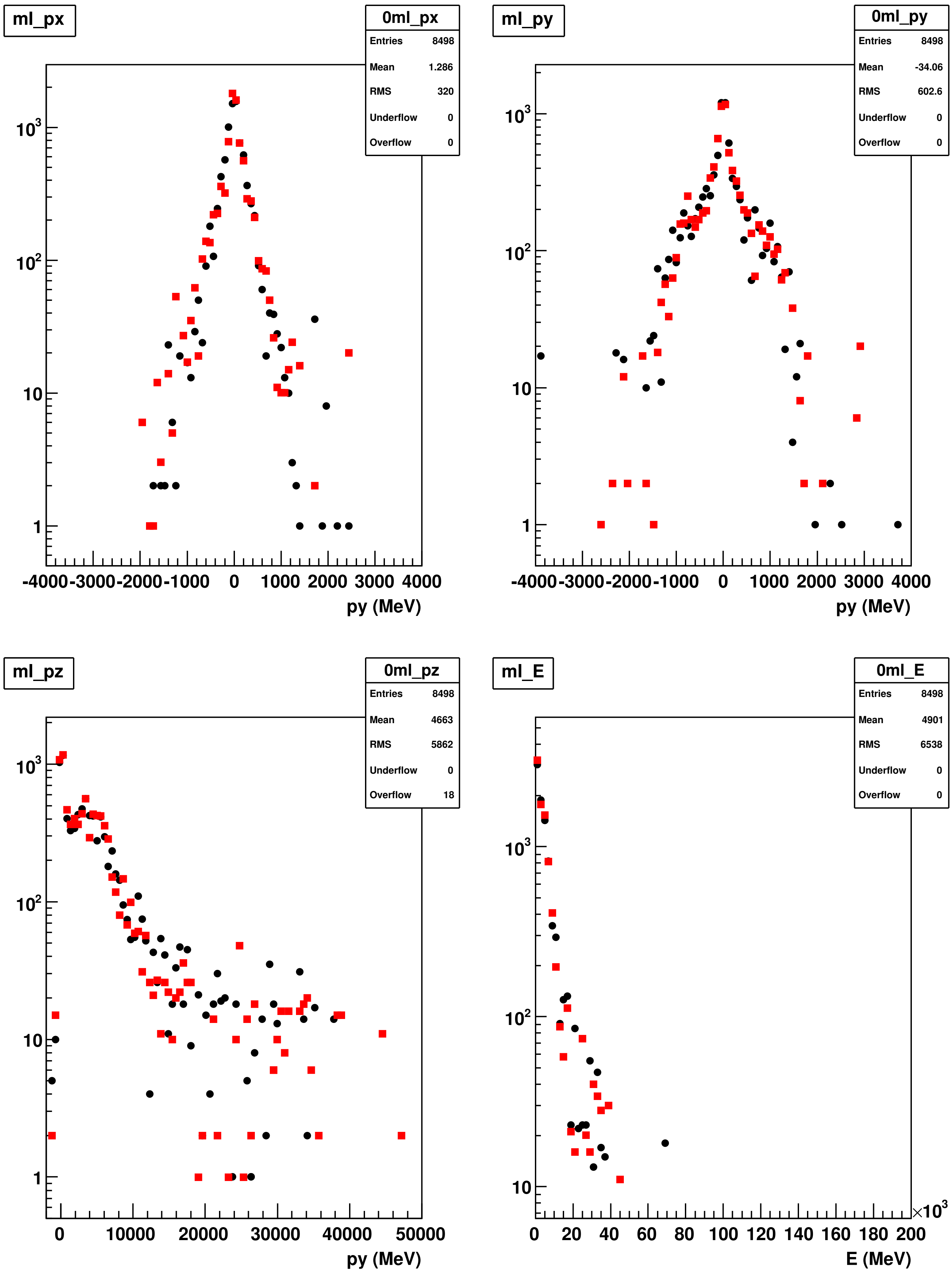


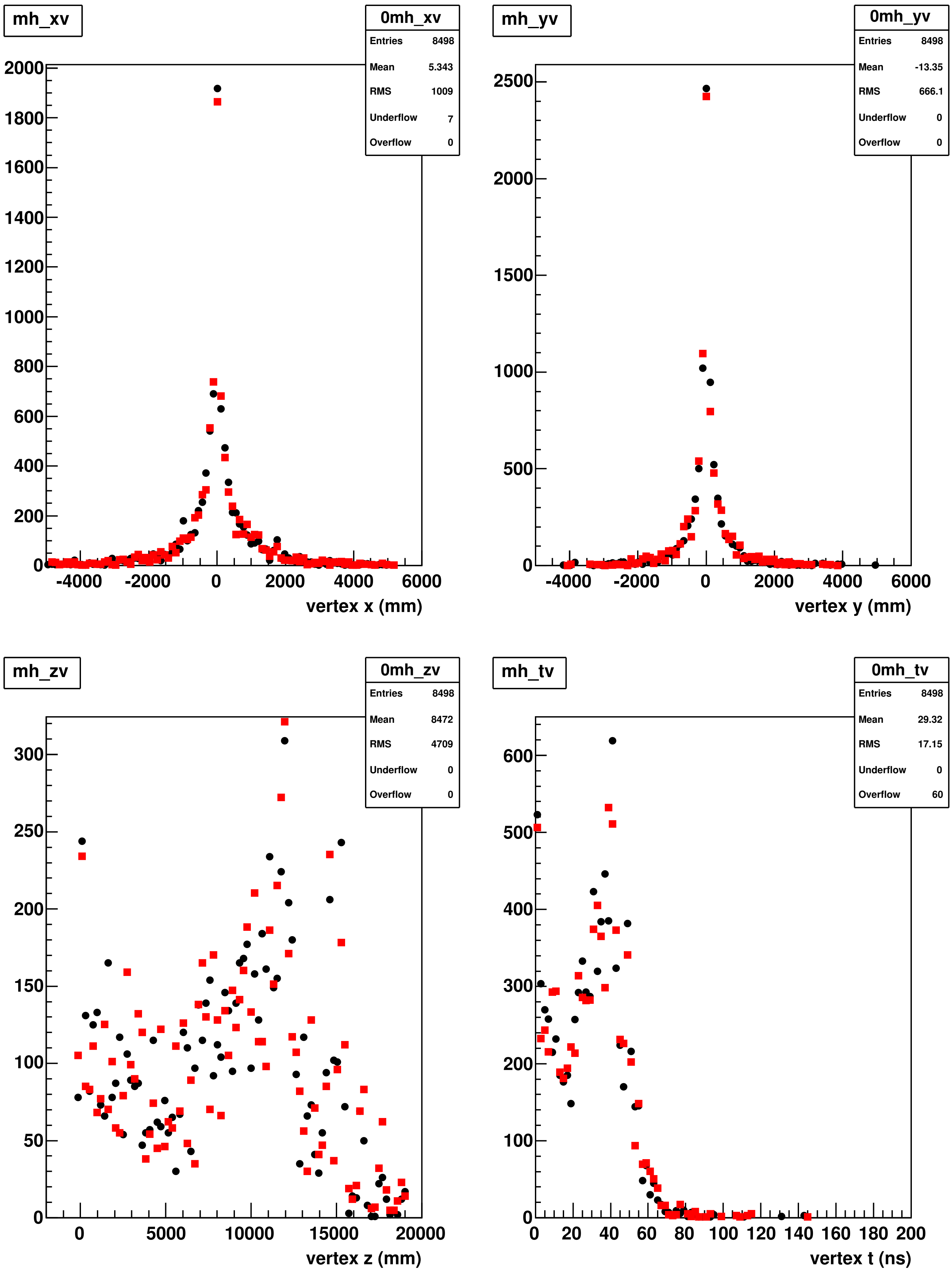
mh_x
0mh_x
Entries 8498
Mean -6.371
RMS 2160
Underflow 22
Overflow 6
x (mm)
mh_y
0mh_y
Entries 8498
Mean -53.1
RMS 1112
Underflow 0
Overflow 0
y (mm)
mh_z
0mh_z
Entries 8498
Mean 1.491e+04
RMS 2214
Underflow 0
Overflow 0
z (mm)
mh_t
0mh_t
Entries 8498
Mean 52.21
RMS 8.298
Underflow 0
Overflow 80
time of flight (ns)

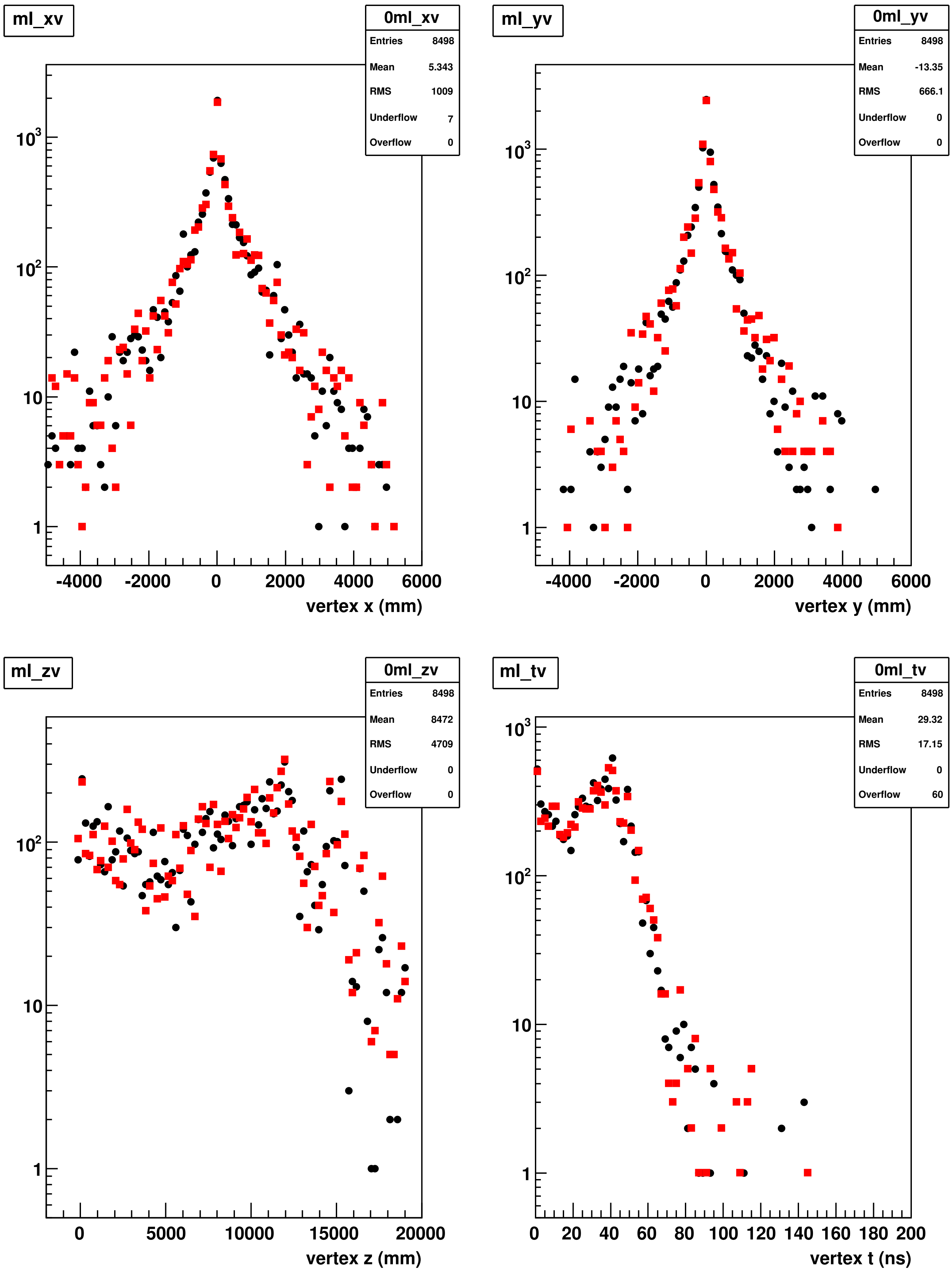


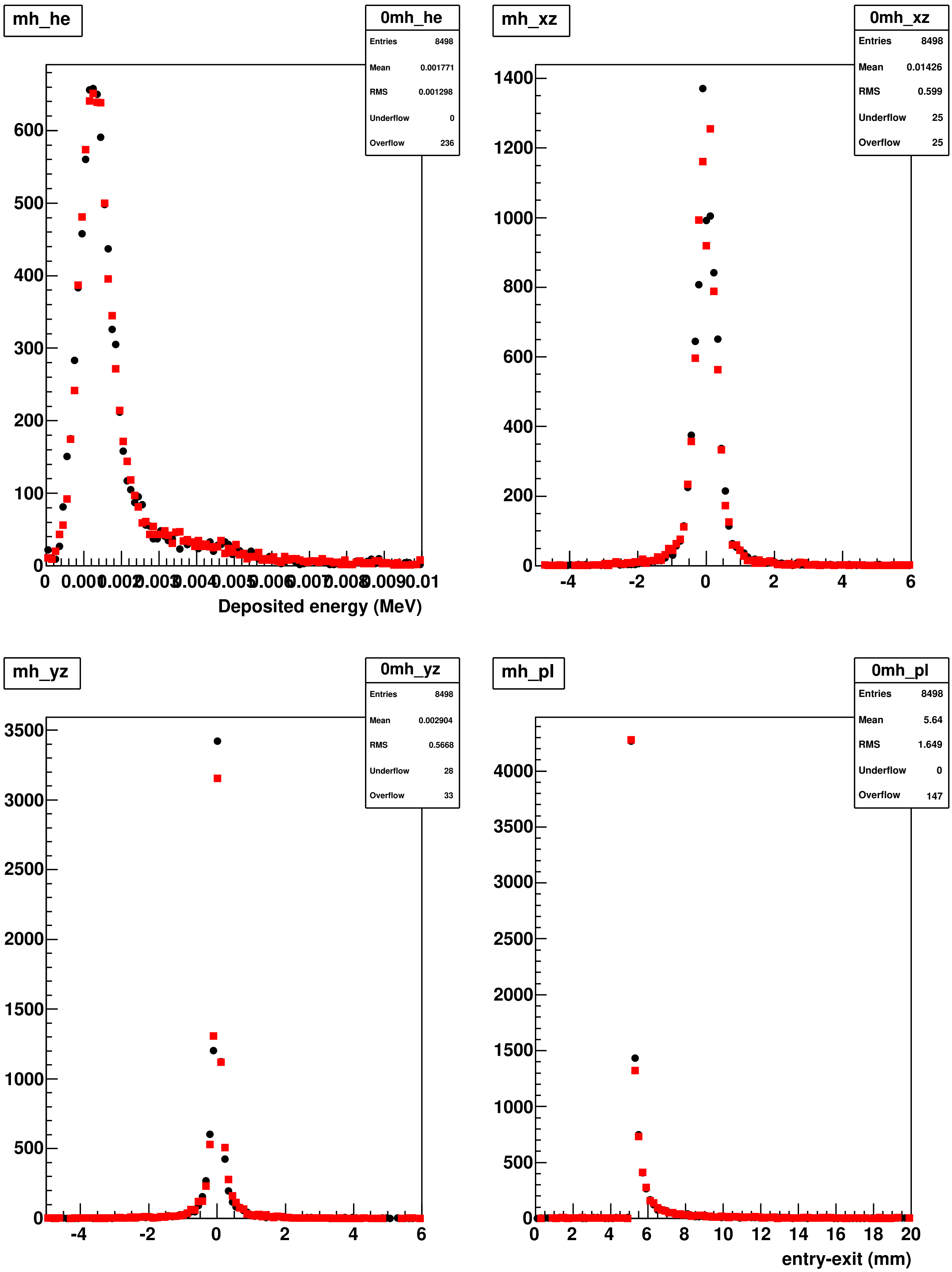
mh_tof
0mh_tof
Entries 8498
Mean 2.207
RMS 6.622
Underflow 876
Overflow 63
0
1000
2000
3000
4000
5000
0 10 20 30 40 50 60 70 80 90 100
mh_rad
0mh_rad
Entries 8498
Mean 2065
RMS 1309
Underflow 0
Overflow 0
0
50
100
150
200
250
300
350
0 1000 2000 3000 4000 5000 6000 7000 8000 9000 10000
ml_tof
0ml_tof
Entries 8498
Mean 2.207
RMS 6.622
Underflow 876
Overflow 63
1
10
10^2
10^3
10^4
0 10 20 30 40 50 60 70 80 90 100
ml_rad
1ml_rad
Entries 8281
Mean 2072
RMS 1290
Underflow 0
Overflow 0
1
10
10^2
0 1000 2000 3000 4000 5000 6000 7000 8000 9000 10000


mh_px
0mh_px
Entries 8498
Mean 1.286
RMS 320
Underflow 0
Overflow 0
px (MeV)
mh_py
0mh_py
Entries 8498
Mean -34.06
RMS 602.6
Underflow 0
Overflow 0
py (MeV)
mh_pz
0mh_pz
Entries 8498
Mean 4663
RMS 5862
Underflow 0
Overflow 18
pz (MeV)
mh_E
0mh_E
Entries 8498
Mean 4901
RMS 6538
Underflow 0
Overflow 0
×10^3
E (MeV)

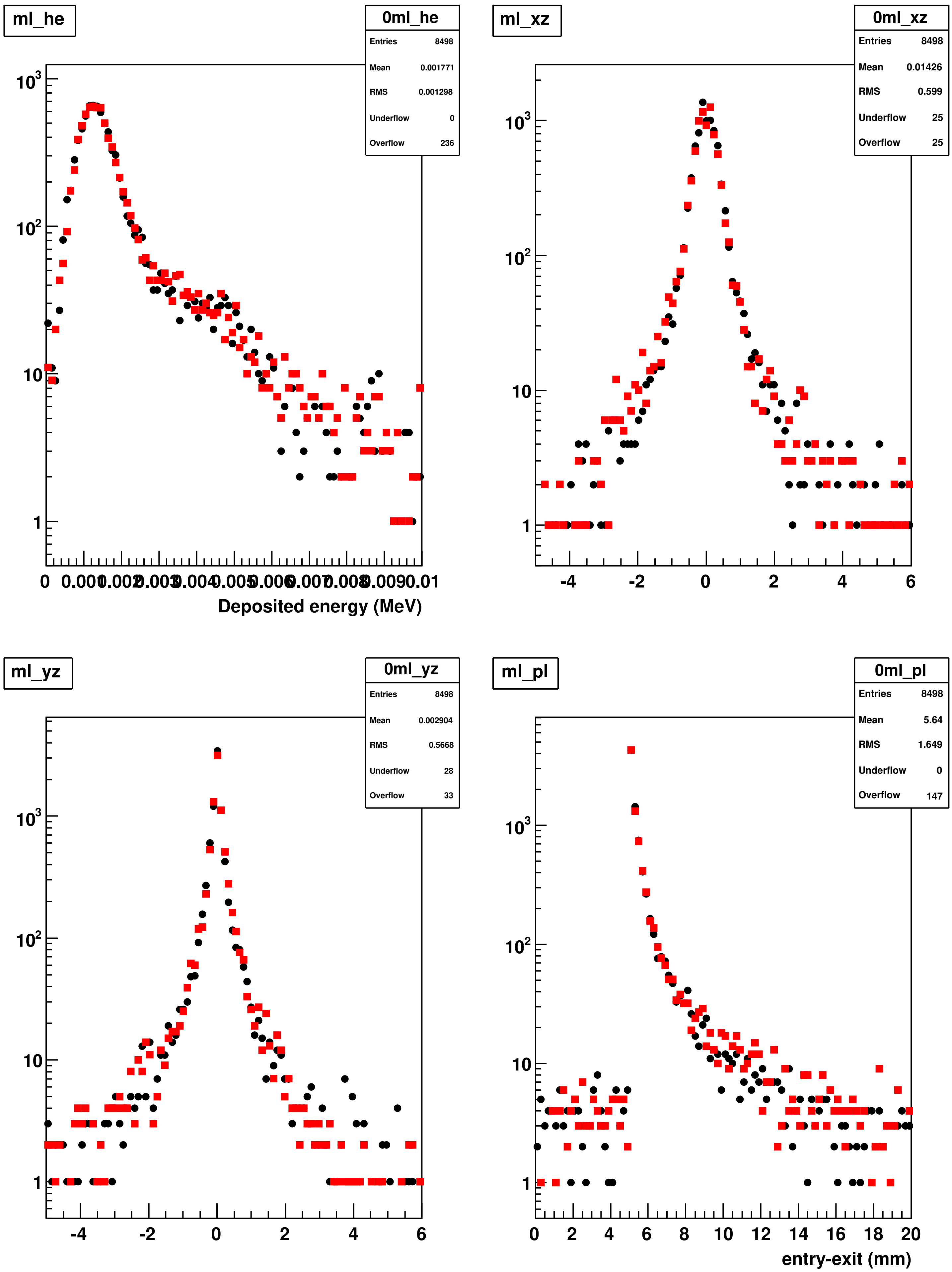

ml_px
0ml_px
Entries 8498
Mean 1.286
RMS 320
Underflow 0
Overflow 0
py (MeV)
ml_py
0ml_py
Entries 8498
Mean -34.06
RMS 602.6
Underflow 0
Overflow 0
py (MeV)
ml_pz
0ml_pz
Entries 8498
Mean 4663
RMS 5862
Underflow 0
Overflow 18
py (MeV)
ml_E
0ml_E
Entries 8498
Mean 4901
RMS 6538
Underflow 0
Overflow 0
E (MeV)
×10^3


mh_xv
0mh_xv
Entries 8498
Mean 5.343
RMS 1009
Underflow 7
Overflow 0
vertex x (mm)
mh_yv
0mh_yv
Entries 8498
Mean -13.35
RMS 666.1
Underflow 0
Overflow 0
vertex y (mm)
mh_zv
0mh_zv
Entries 8498
Mean 8472
RMS 4709
Underflow 0
Overflow 0
vertex z (mm)
mh_tv
0mh_tv
Entries 8498
Mean 29.32
RMS 17.15
Underflow 0
Overflow 60
vertex t (ns)

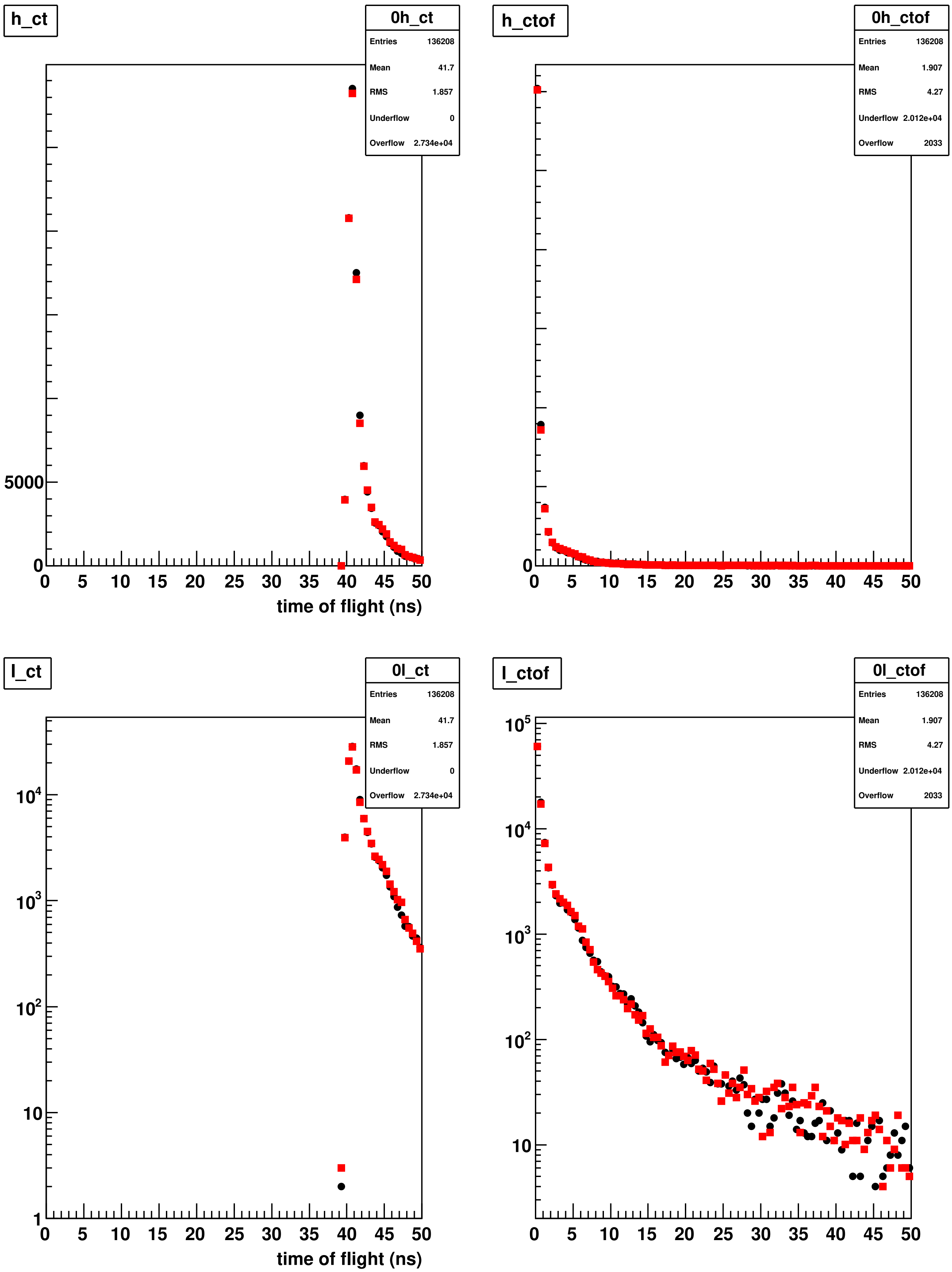

ml_xv
0ml_xv
Entries 8498
Mean 5.343
RMS 1009
Underflow 7
Overflow 0
vertex x (mm)
ml_yv
0ml_yv
Entries 8498
Mean -13.35
RMS 666.1
Underflow 0
Overflow 0
vertex y (mm)
ml_zv
0ml_zv
Entries 8498
Mean 8472
RMS 4709
Underflow 0
Overflow 0
vertex z (mm)
ml_tv
0ml_tv
Entries 8498
Mean 29.32
RMS 17.15
Underflow 0
Overflow 60
vertex t (ns)

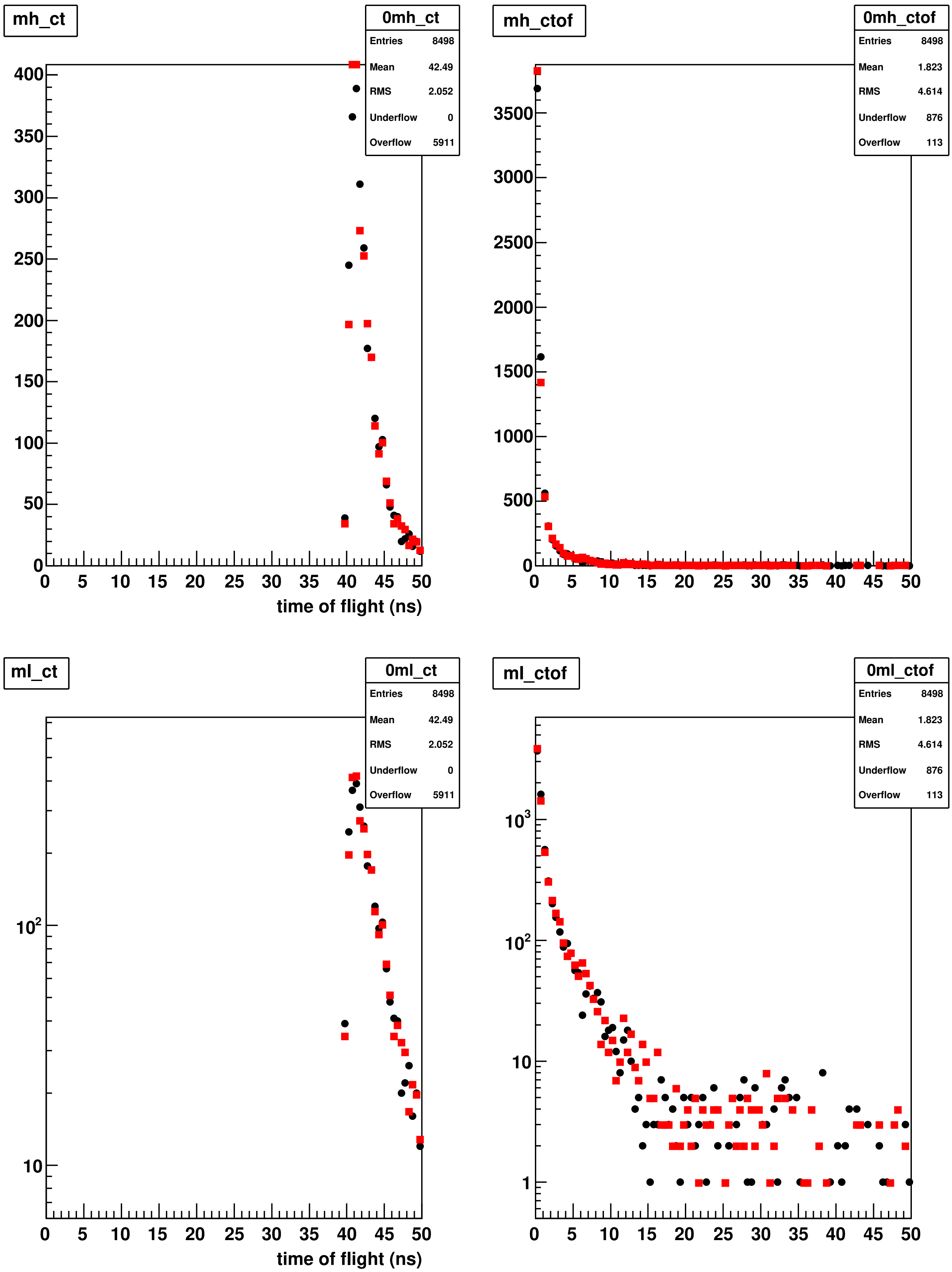


mh_he
0mh_he
Entries 8498
Mean 0.001771
RMS 0.001298
Underflow 0
Overflow 236
Deposited energy (MeV)
mh_xz
0mh_xz
Entries 8498
Mean 0.01426
RMS 0.599
Underflow 25
Overflow 25
mh_yz
0mh_yz
Entries 8498
Mean 0.002904
RMS 0.5668
Underflow 28
Overflow 33
mh_pl
0mh_pl
Entries 8498
Mean 5.64
RMS 1.649
Underflow 0
Overflow 147
entry-exit (mm)



ml_he
0ml_he
Entries 8498
Mean 0.001771
RMS 0.001298
Underflow 0
Overflow 236
Deposited energy (MeV)
ml_xz
0ml_xz
Entries 8498
Mean 0.01426
RMS 0.599
Underflow 25
Overflow 25
ml_yz
0ml_yz
Entries 8498
Mean 0.002904
RMS 0.5668
Underflow 28
Overflow 33
ml_pl
0ml_pl
Entries 8498
Mean 5.64
RMS 1.649
Underflow 0
Overflow 147
entry-exit (mm)


h_ct
0h_ct
Entries 136208
Mean 41.7
RMS 1.857
Underflow 0
Overflow 2.734e+04
5000
0
0 5 10 15 20 25 30 35 40 45 50
time of flight (ns)
h_ctof
0h_ctof
Entries 136208
Mean 1.907
RMS 4.27
Underflow 2.012e+04
Overflow 2033
0
0 5 10 15 20 25 30 35 40 45 50
l_ct
0l_ct
Entries 136208
Mean 41.7
RMS 1.857
Underflow 0
Overflow 2.734e+04
10^4
10^3
10^2
10
1
0 5 10 15 20 25 30 35 40 45 50
time of flight (ns)
l_ctof
0l_ctof
Entries 136208
Mean 1.907
RMS 4.27
Underflow 2.012e+04
Overflow 2033
10^5
10^4
10^3
10^2
10
0 5 10 15 20 25 30 35 40 45 50



mh_ct
0mh_ct
Entries 8498
Mean 42.49
RMS 2.052
Underflow 0
Overflow 5911
time of flight (ns)
mh_ctof
0mh_ctof
Entries 8498
Mean 1.823
RMS 4.614
Underflow 876
Overflow 113
ml_ct
0ml_ct
Entries 8498
Mean 42.49
RMS 2.052
Underflow 0
Overflow 5911
time of flight (ns)
ml_ctof
0ml_ctof
Entries 8498
Mean 1.823
RMS 4.614
Underflow 876
Overflow 113