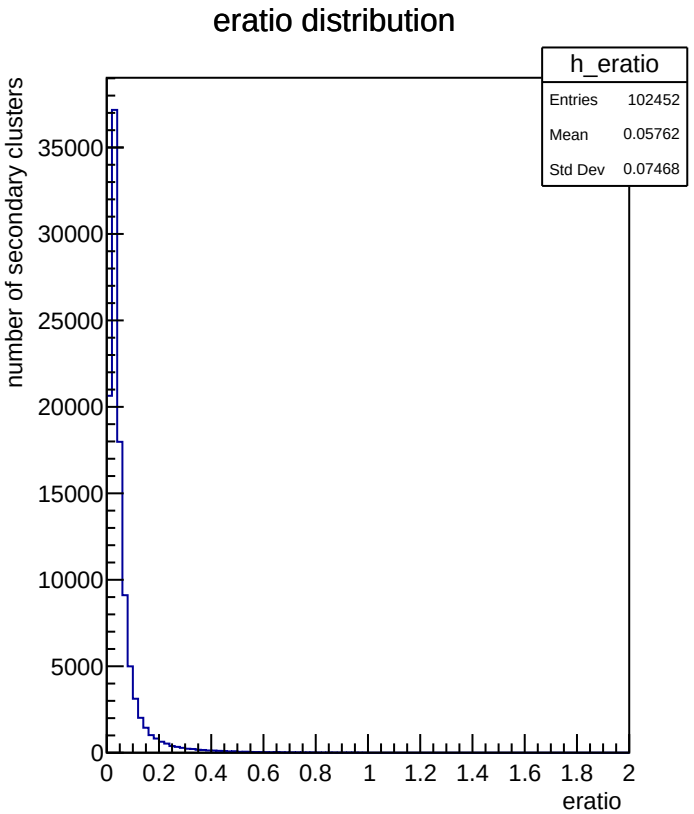
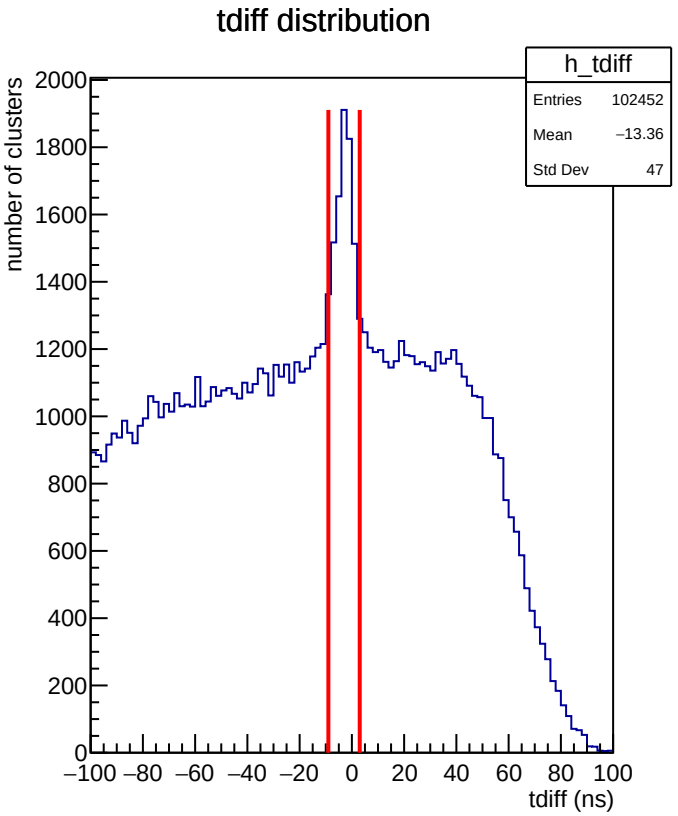
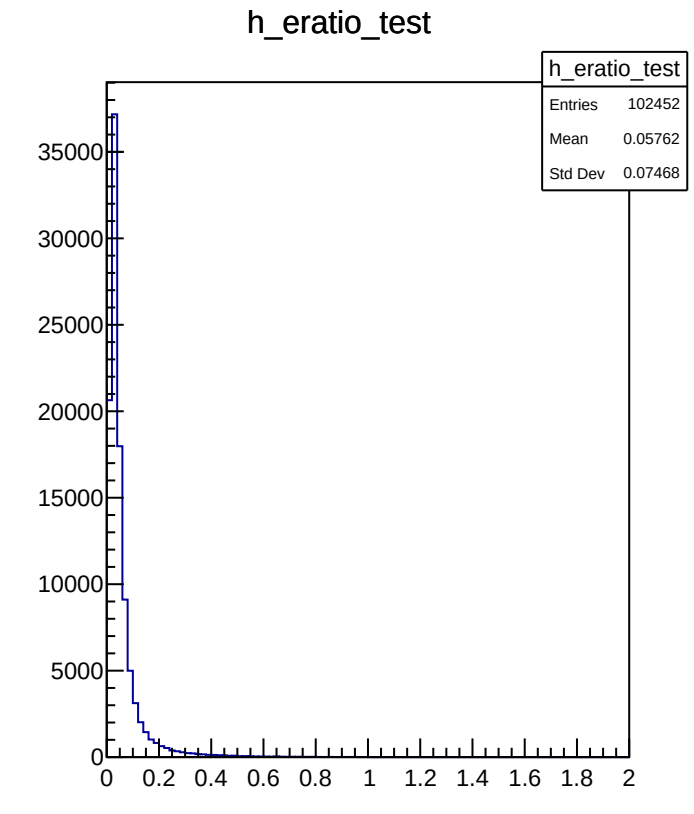
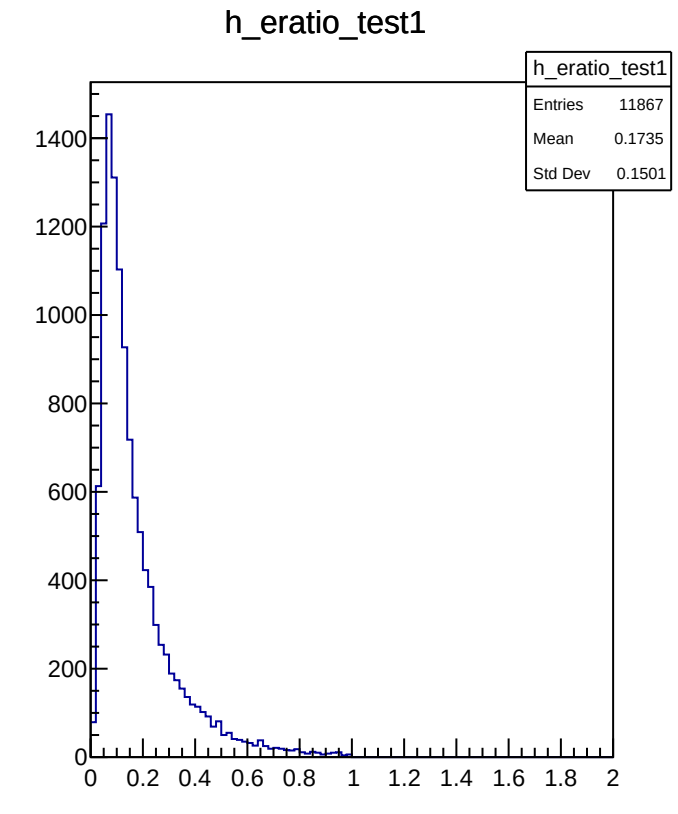
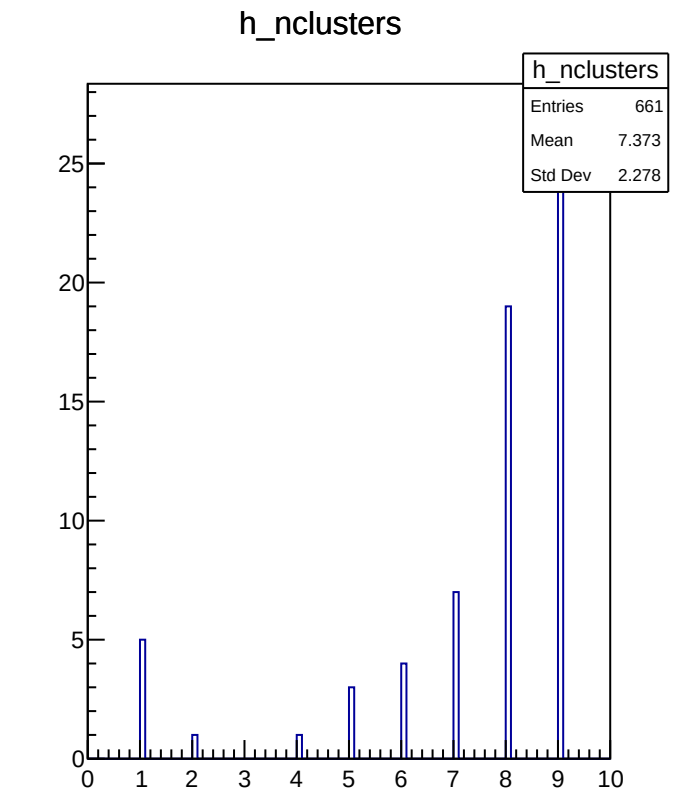
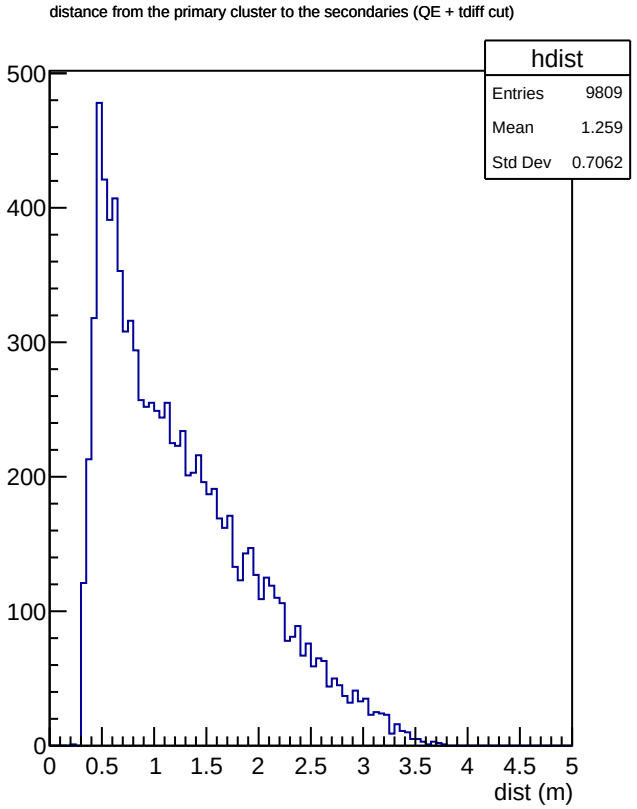

eratio distribution
h_eratio
Entries 102452
Mean 0.05762
Std Dev 0.07468
number of secondary clusters
eratio

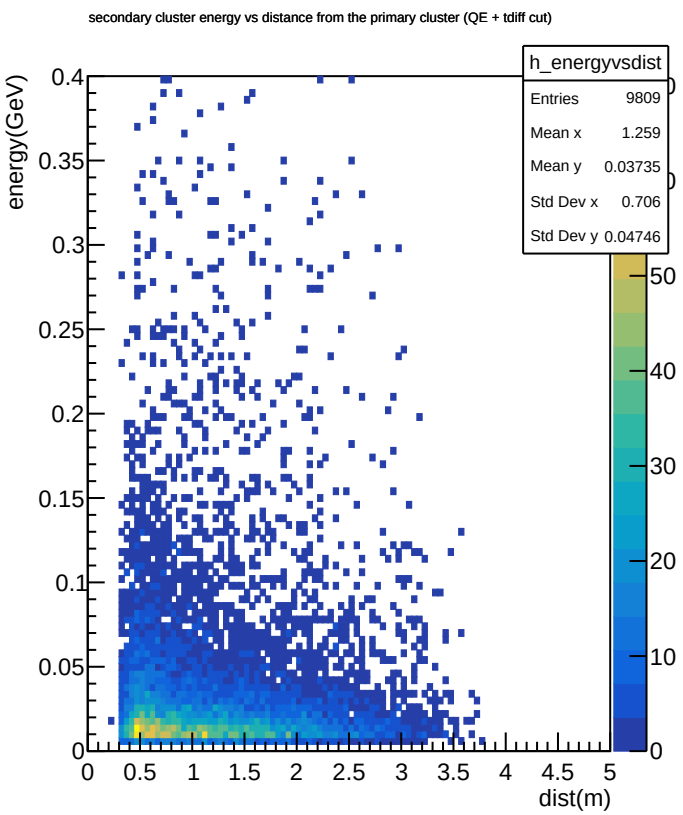

tdiff distribution
h_tdiff
Entries 102452
Mean −13.36
Std Dev 47
number of clusters
tdiff (ns)

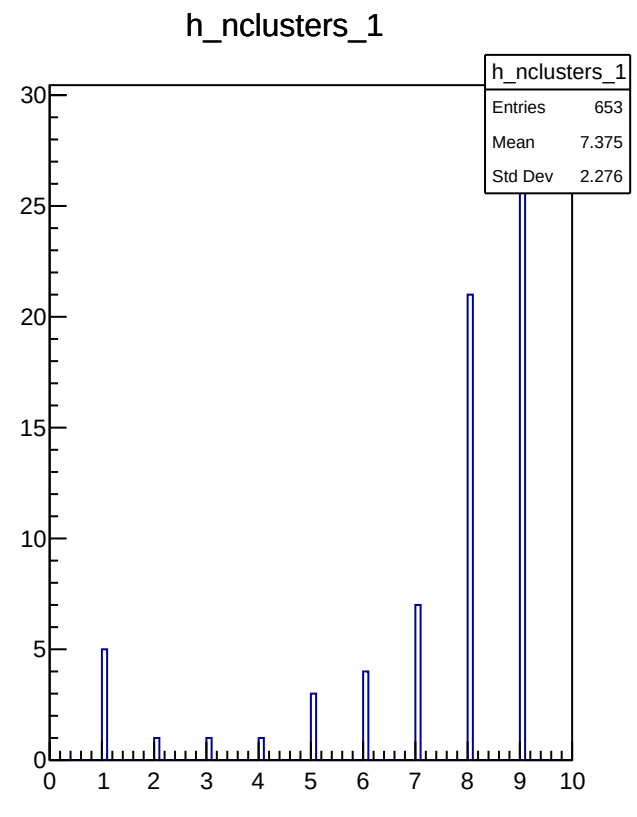

h_eratio_test
h_eratio_test
Entries 102452
Mean 0.05762
Std Dev 0.07468

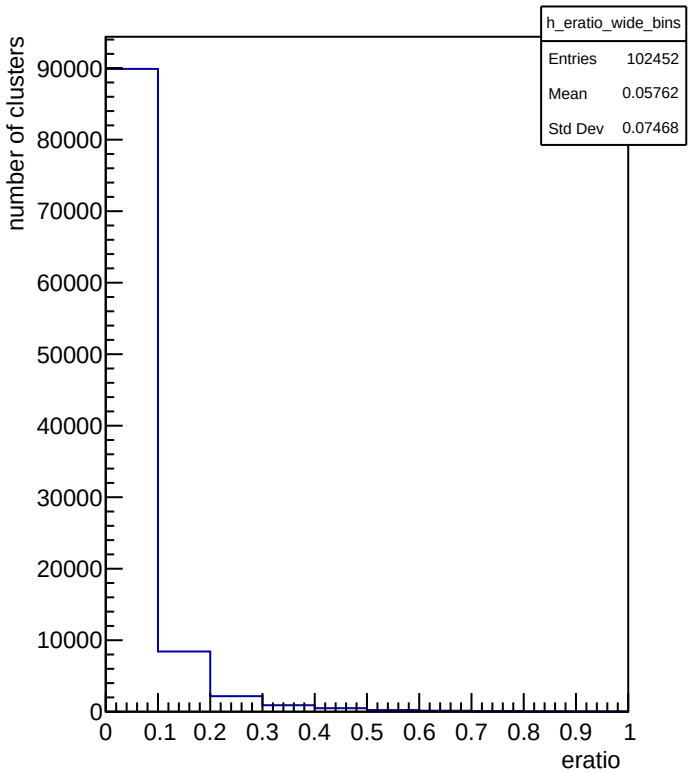

h_eratio_test1
h_eratio_test1
Entries 11867
Mean 0.1735
Std Dev 0.1501

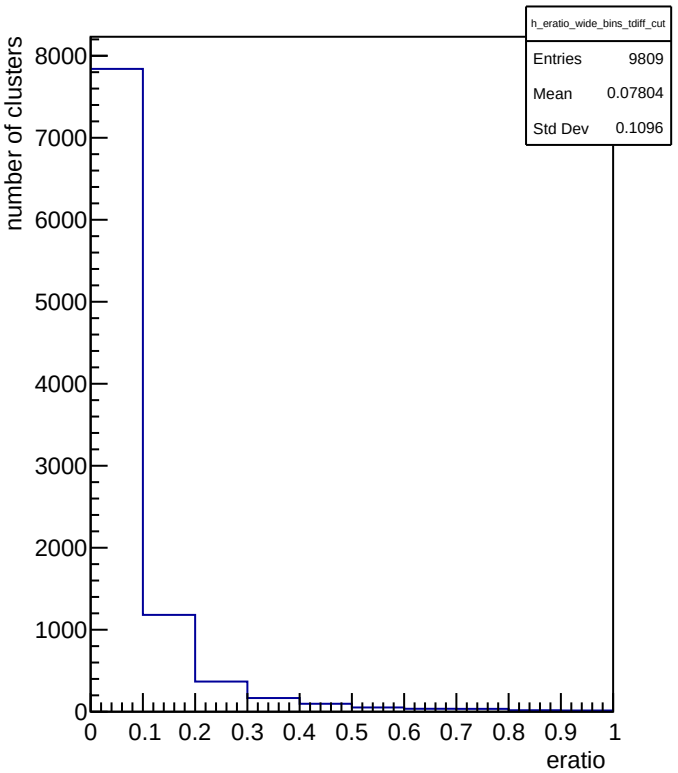

h_nclusters
h_nclusters
Entries 661
Mean 7.373
Std Dev 2.278

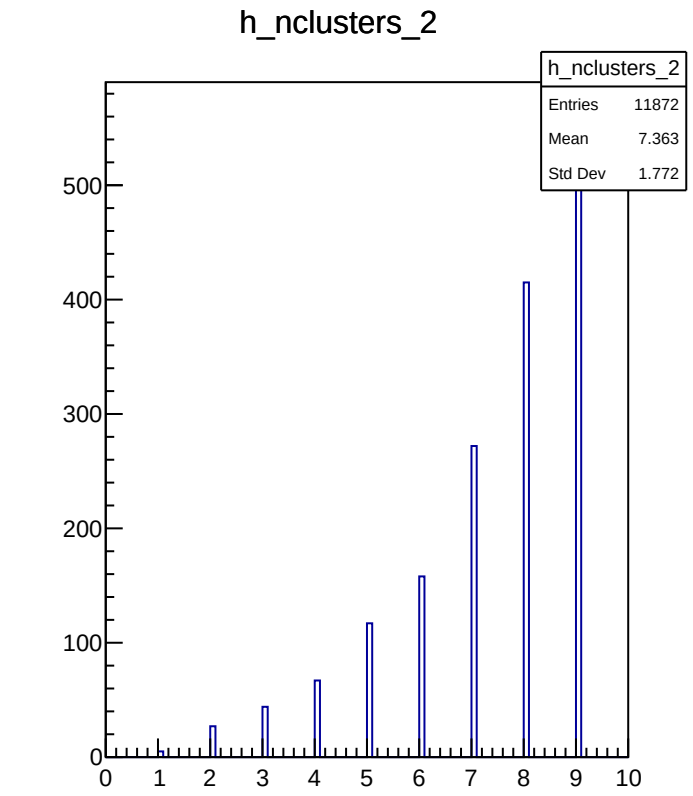

distance from the primary cluster to the secondaries (QE + tdiff cut)
hdist
Entries 9809
Mean 1.259
Std Dev 0.7062
dist (m)

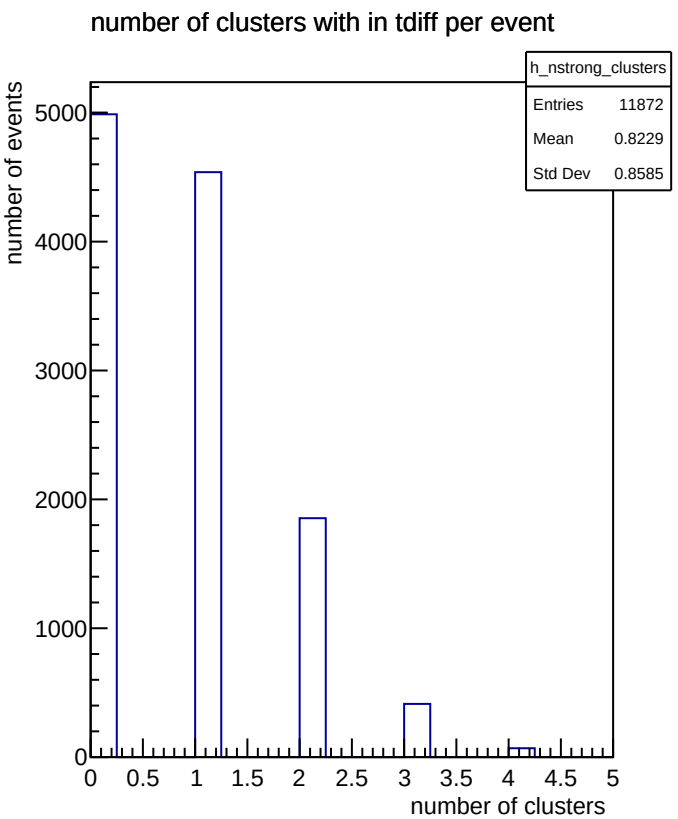

secondary cluster energy vs distance from the primary cluster (QE + tdiff cut)
h_energyvsdist
Entries 9809
Mean x 1.259
Mean y 0.03735
Std Dev x 0.706
Std Dev y 0.04746
energy(GeV)
dist(m)

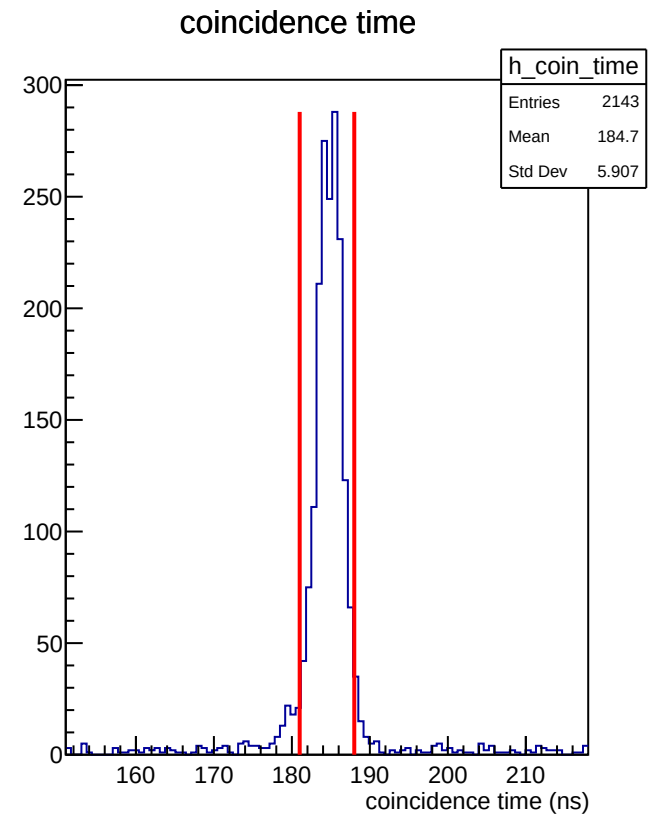

h_nclusters_1
h_nclusters_1
Entries 653
Mean 7.375
Std Dev 2.276

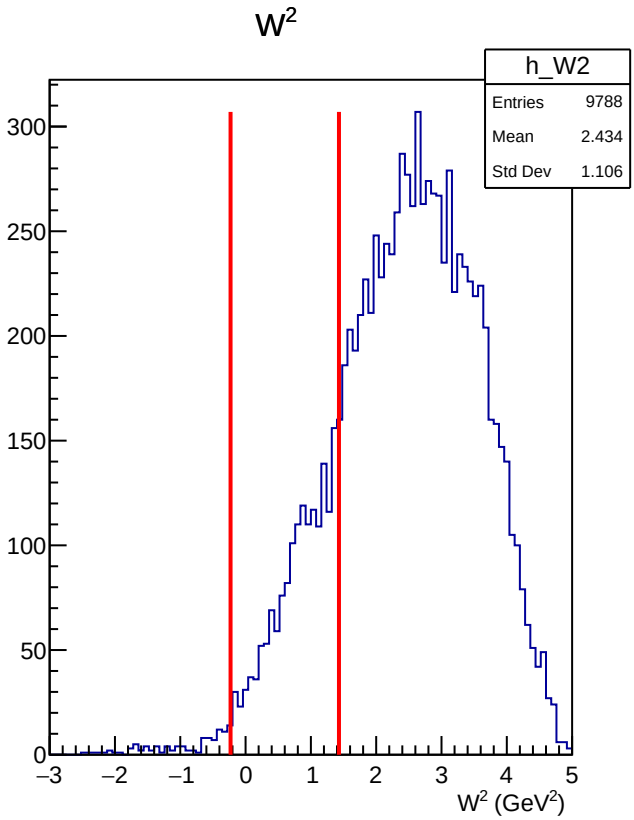

eratio distribution
h_eratio_wide_bins
Entries 102452
Mean 0.05762
Std Dev 0.07468
number of clusters
eratio

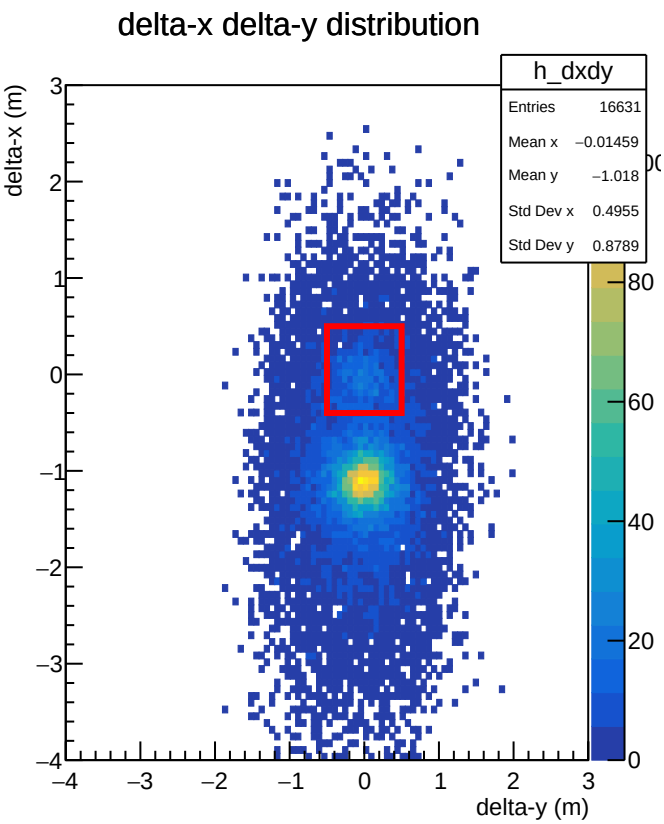

eratio distribution with a tdiff cut
h_eratio_wide_bins_tdiff_cut
Entries 9809
Mean 0.07804
Std Dev 0.1096
number of clusters
eratio


h_nclusters_2
h_nclusters_2
Entries 11872
Mean 7.363
Std Dev 1.772

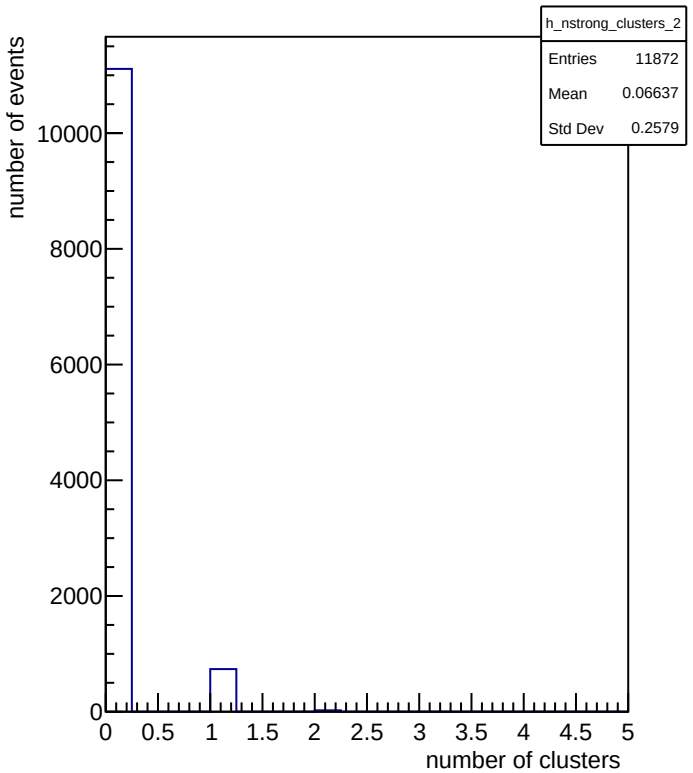

number of clusters with in tdiff per event
h_nstrong_clusters
Entries 11872
Mean 0.8229
Std Dev 0.8585
number of events
number of clusters


coincidence time
h_coin_time
Entries 2143
Mean 184.7
Std Dev 5.907
300
250
200
150
100
50
0
160
170
180
190
200
210
coincidence time (ns)

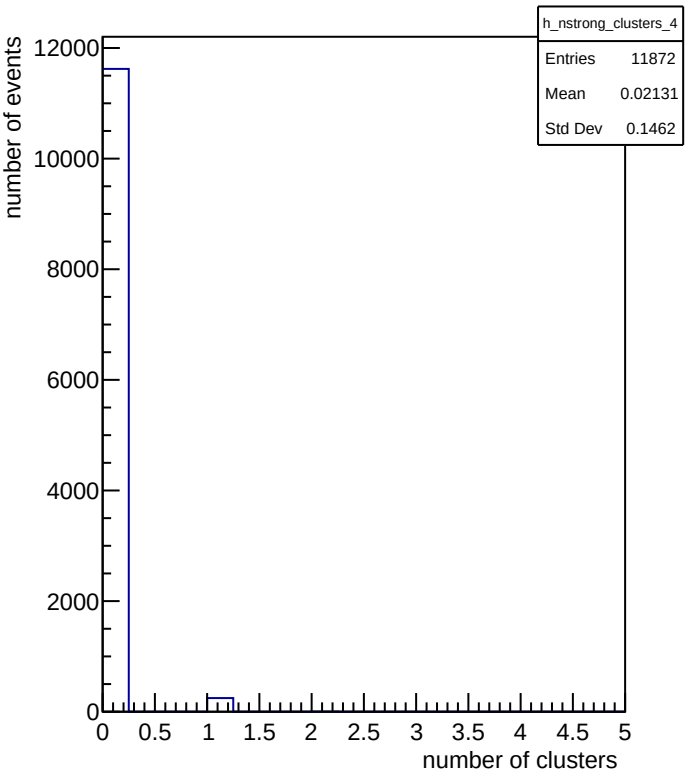

W2
h_W2
Entries 9788
Mean 2.434
Std Dev 1.106
300
250
200
150
100
50
0
−3
−2
−1
0
1
2
3
4
5
W2 (GeV2)


delta-x delta-y distribution
h_dxdy
Entries 16631
Mean x −0.01459
Mean y −1.018
Std Dev x 0.4955
Std Dev y 0.8789
delta-x (m)
delta-y (m)
80
60
40
20
0

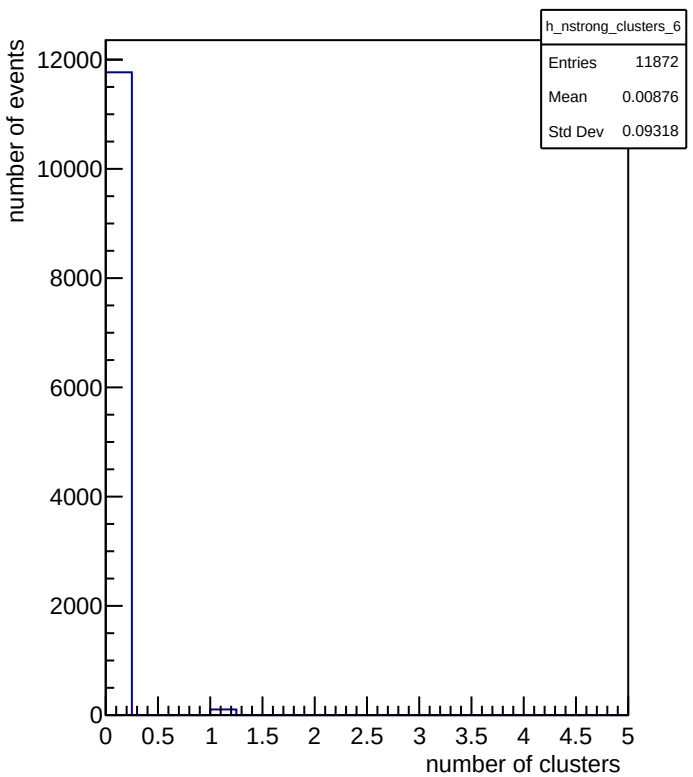
number of clusters with in tdiff with eratio>0.2 per event



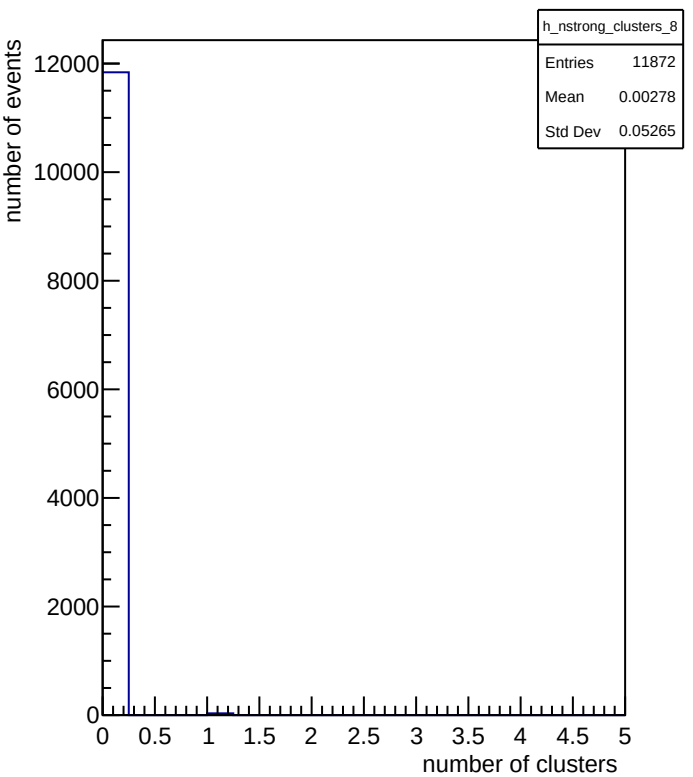
number of clusters with in tdiff with eratio>0.4 per event

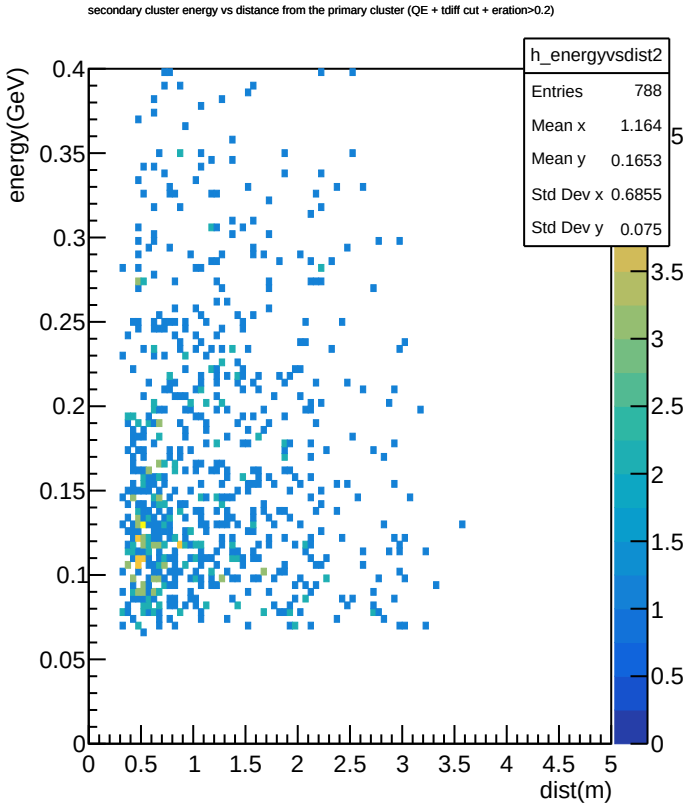


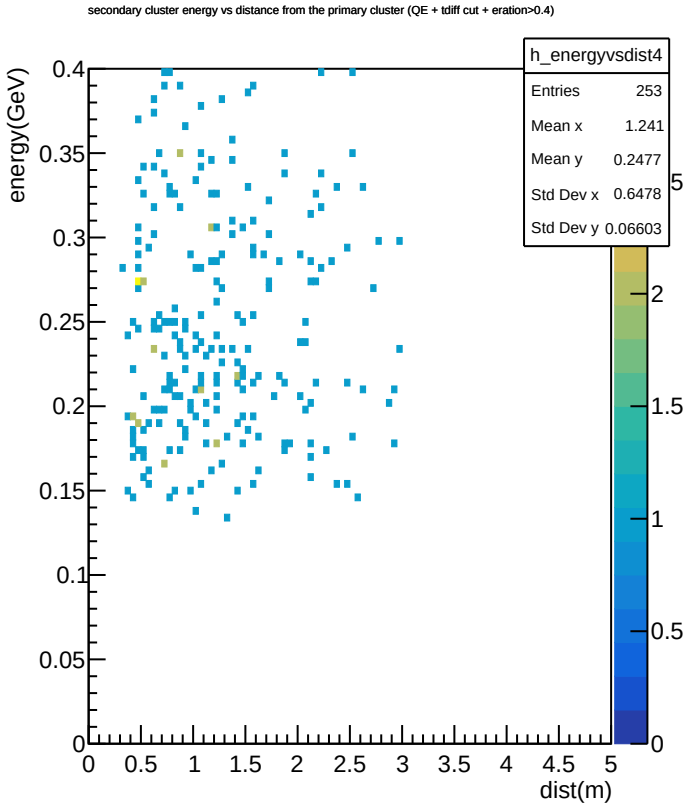
number of clusters with in tdiff with eratio>0.6 per event

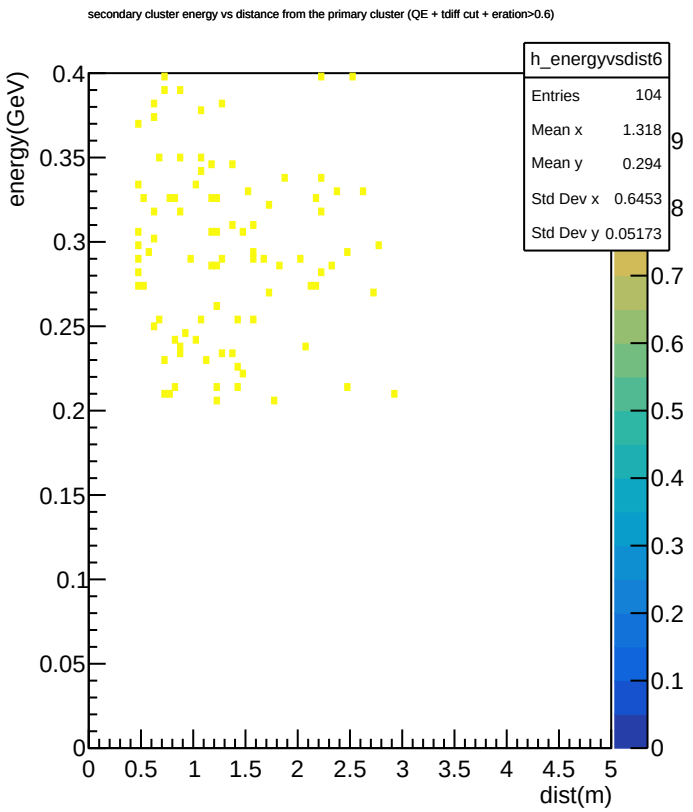


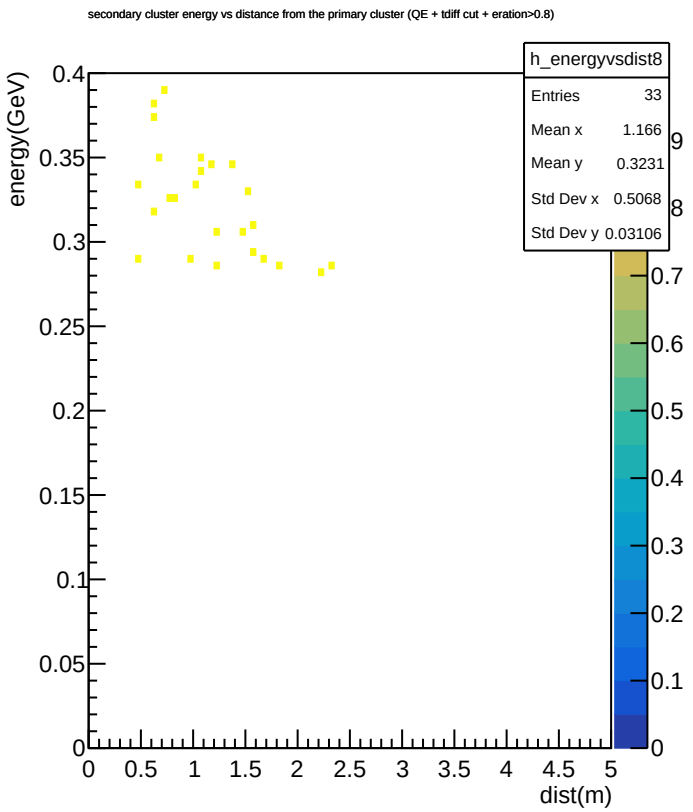
number of clusters with in tdiff with eratio>0.8 per event



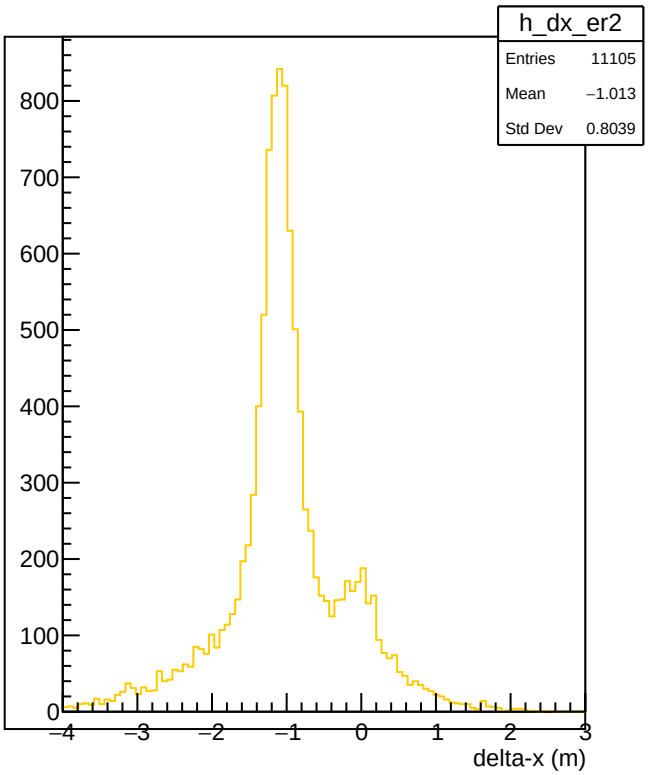

secondary cluster energy vs distance from the primary cluster (QE + tdiff cut + eration>0.2)
h_energyvsdist2
Entries 788
Mean x 1.164
Mean y 0.1653
Std Dev x 0.6855
Std Dev y 0.075
energy(GeV)
dist(m)


secondary cluster energy vs distance from the primary cluster (QE + tdiff cut + eration>0.4)
h_energyvsdist4
Entries 253
Mean x 1.241
Mean y 0.2477
Std Dev x 0.6478
Std Dev y 0.06603
energy(GeV)
dist(m)

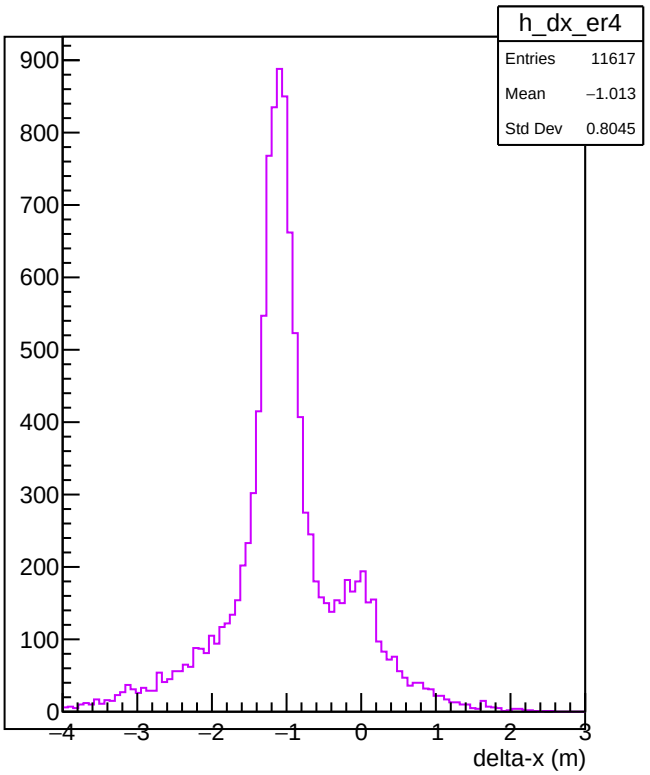

secondary cluster energy vs distance from the primary cluster (QE + tdiff cut + eration>0.6)
h_energyvsdist6
Entries 104
Mean x 1.318
Mean y 0.294
Std Dev x 0.6453
Std Dev y 0.05173
energy(GeV)
dist(m)


secondary cluster energy vs distance from the primary cluster (QE + tdiff cut + eration>0.8)
h_energyvsdist8
Entries 33
Mean x 1.166
Mean y 0.3231
Std Dev x 0.5068
Std Dev y 0.03106
energy(GeV)
dist(m)

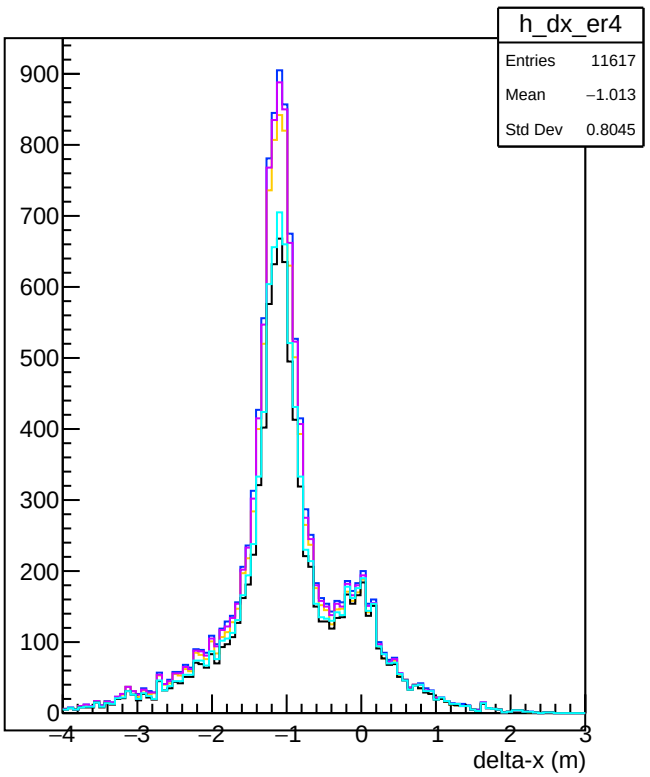
delta-x distribution for eratio<0.2 with other QE cuts



delta-x distribution for eratio<0.4 with other QE cuts



delta-x distribution with QE cuts

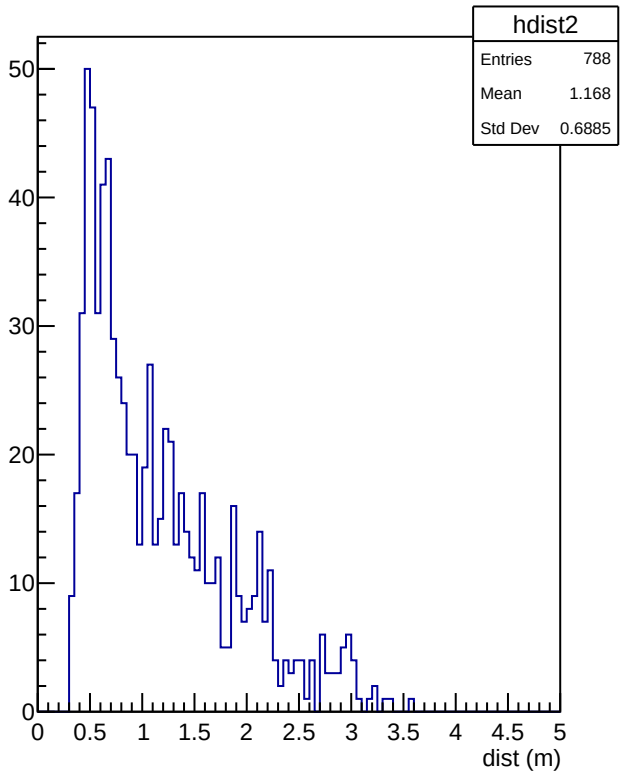


primary clusters

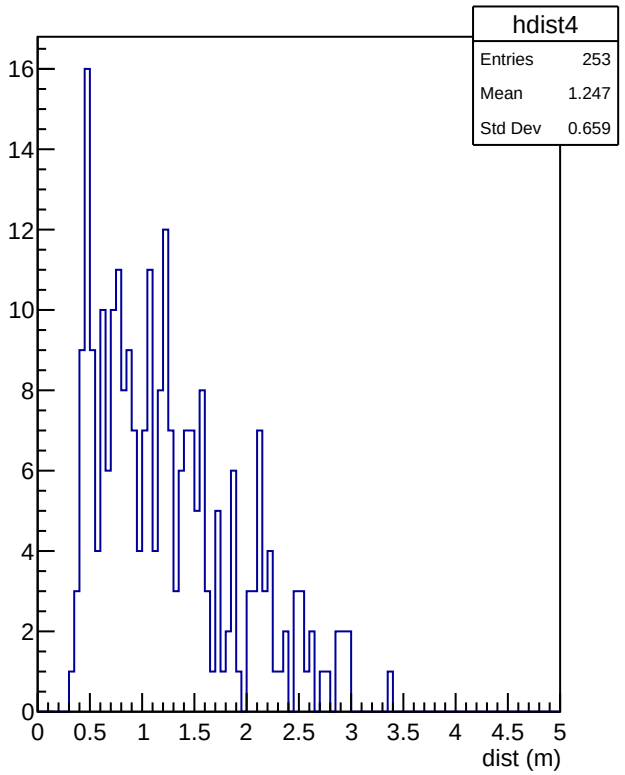
$E_{sec}/E_{prim} > 0.2$

$E_{sec}/E_{prim} > 0.4$

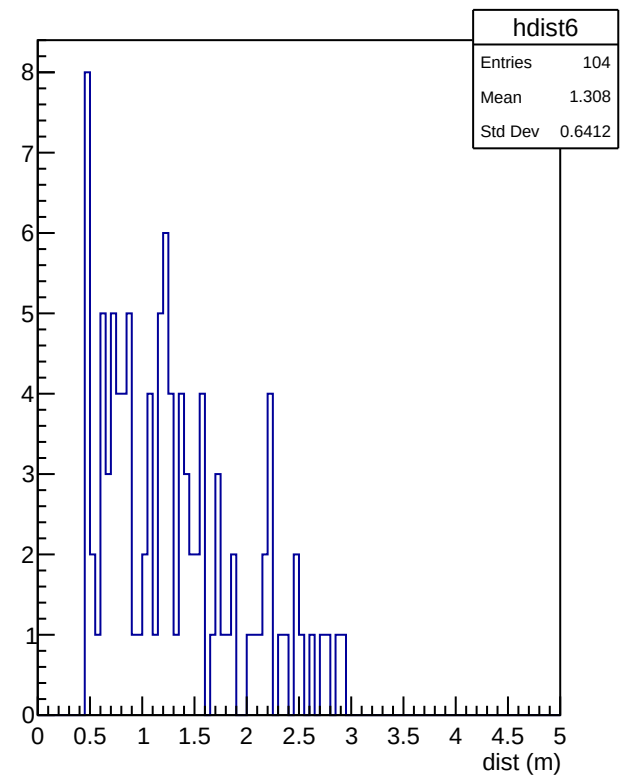
distance from the primary cluster to the secondaries (QE + tdiff cut + eration>0.2)



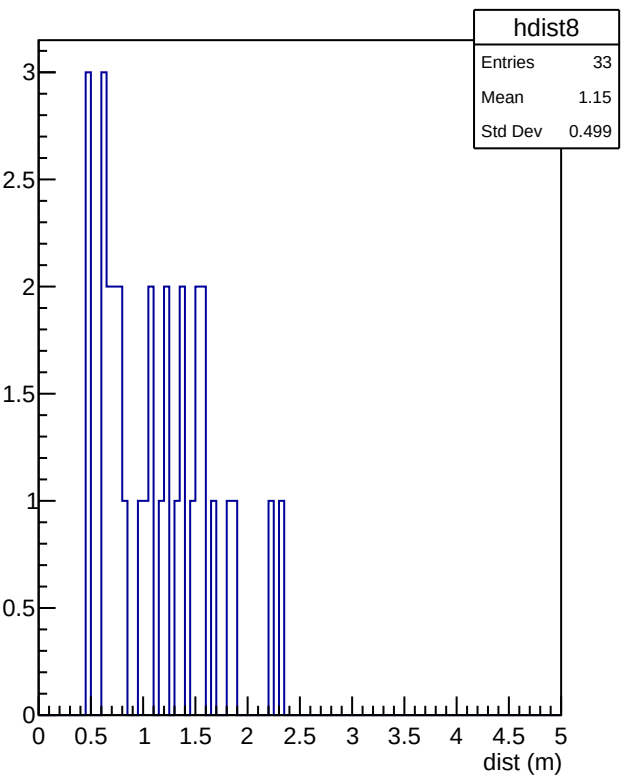
distance from the primary cluster to the secondaries (QE + tdiff cut + eration>0.4)

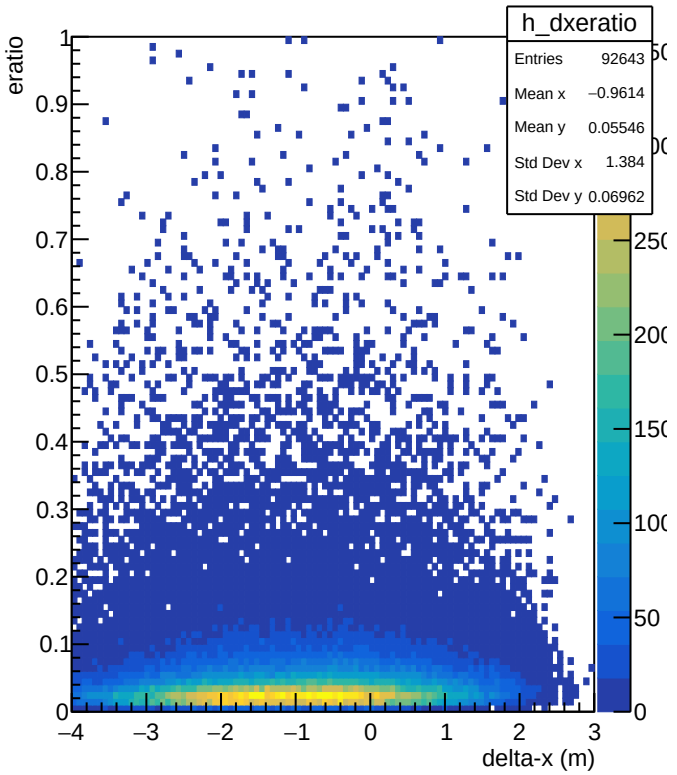


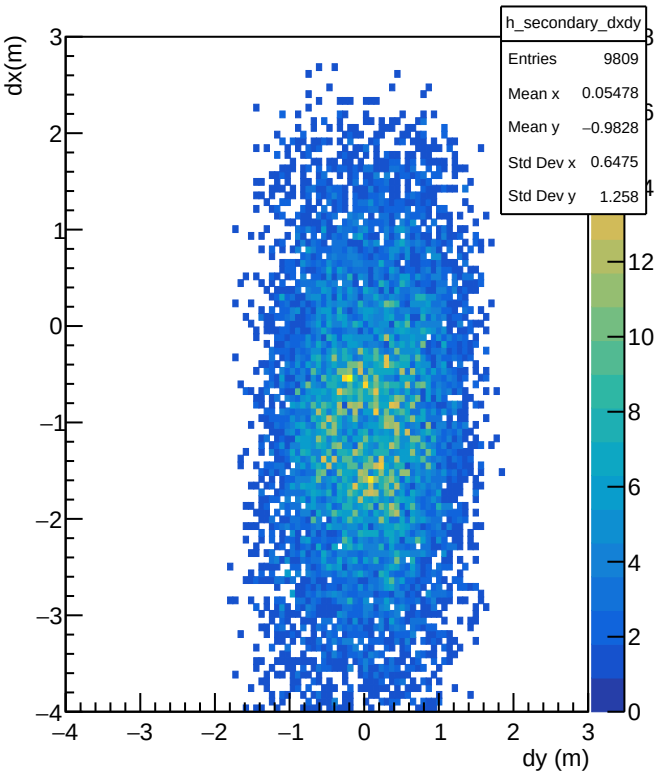
distance from the primary cluster to the secondaries (QE + tdiff cut + eration>0.6)

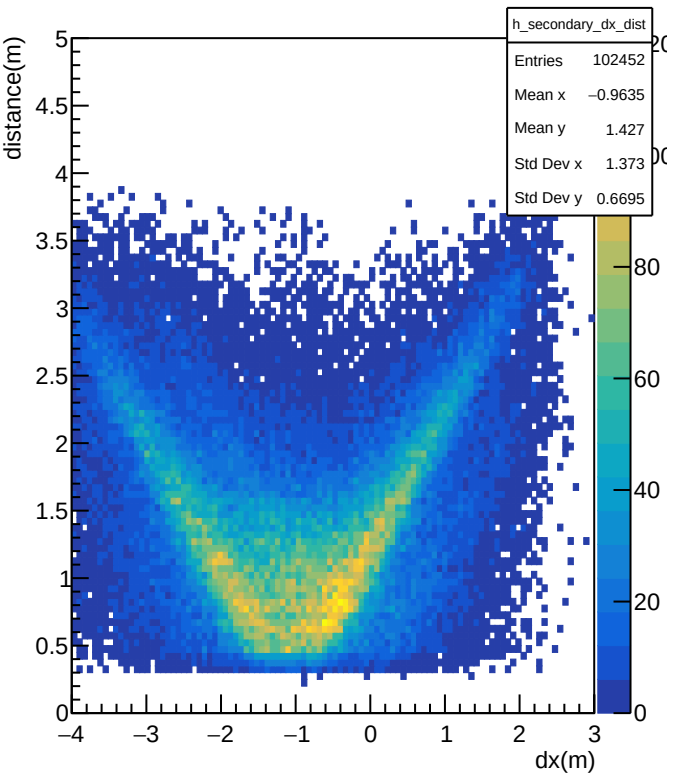


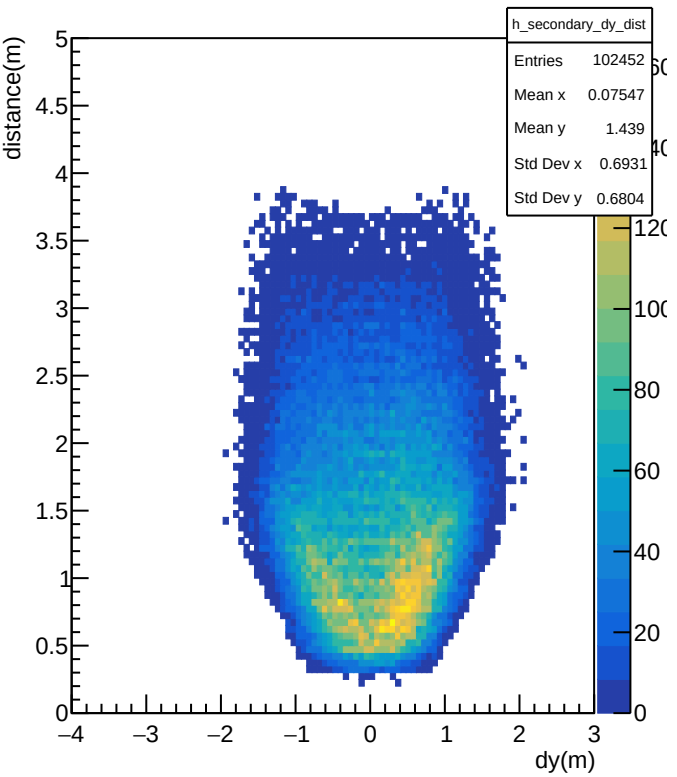
distance from the primary cluster to the secondaries (QE + tdiff cut + eration>0.8)

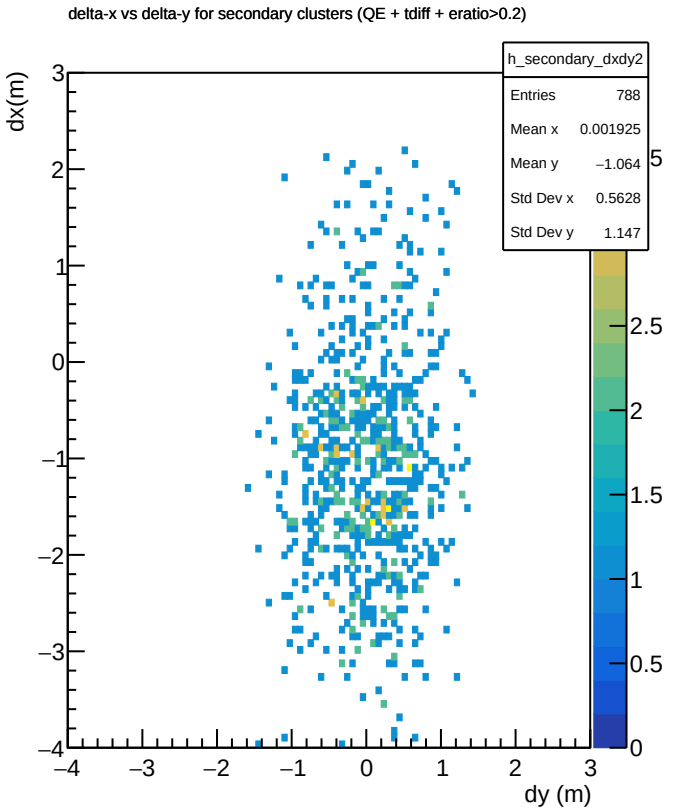


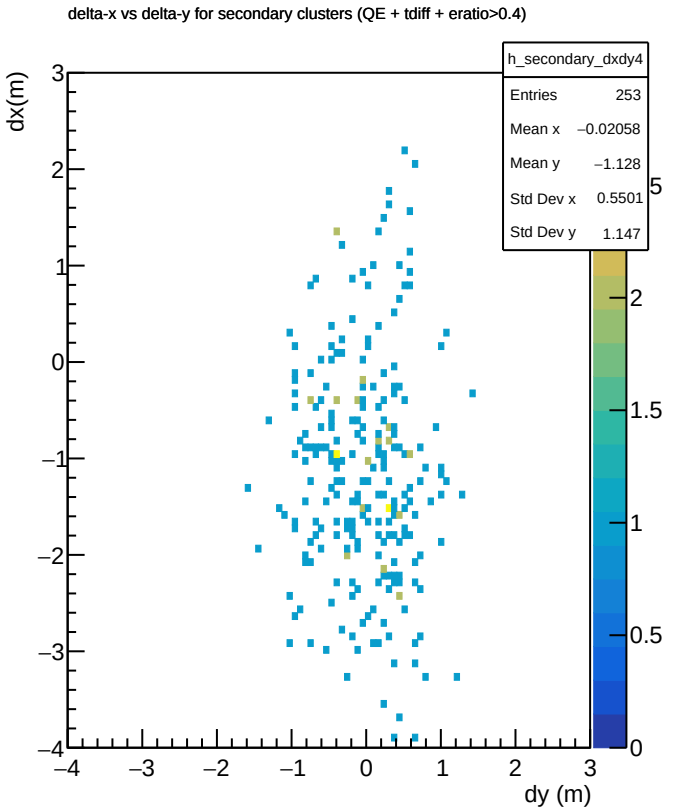

eratio vs delta-x
h_dxeratio
Entries 92643
Mean x −0.9614
Mean y 0.05546
Std Dev x 1.384
Std Dev y 0.06962
eratio
delta-x (m)

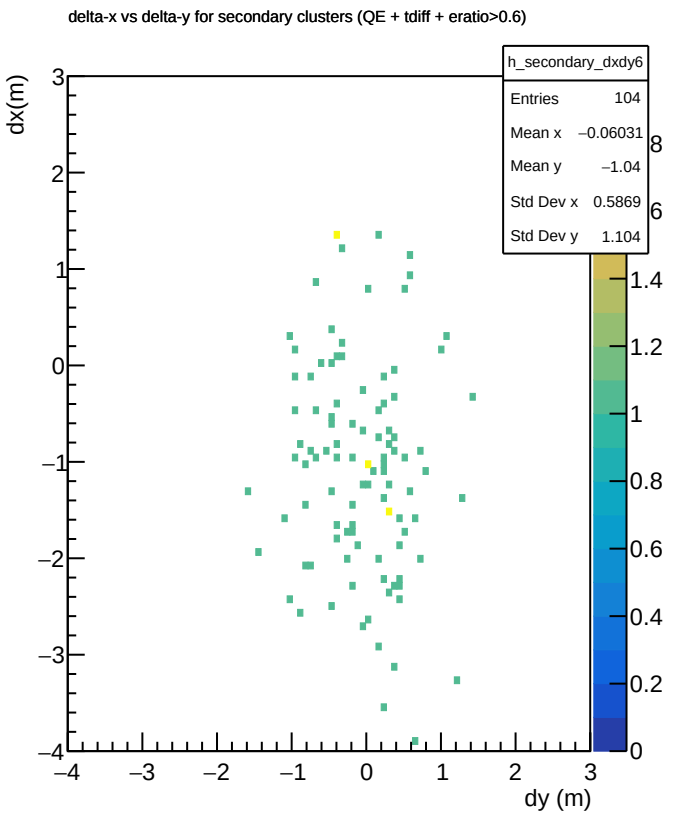

delta-x vs delta-y for secondary clusters (QE + tdiff)
h_secondary_dxdy
Entries 9809
Mean x 0.05478
Mean y −0.9828
Std Dev x 0.6475
Std Dev y 1.258
dx(m)
dy (m)

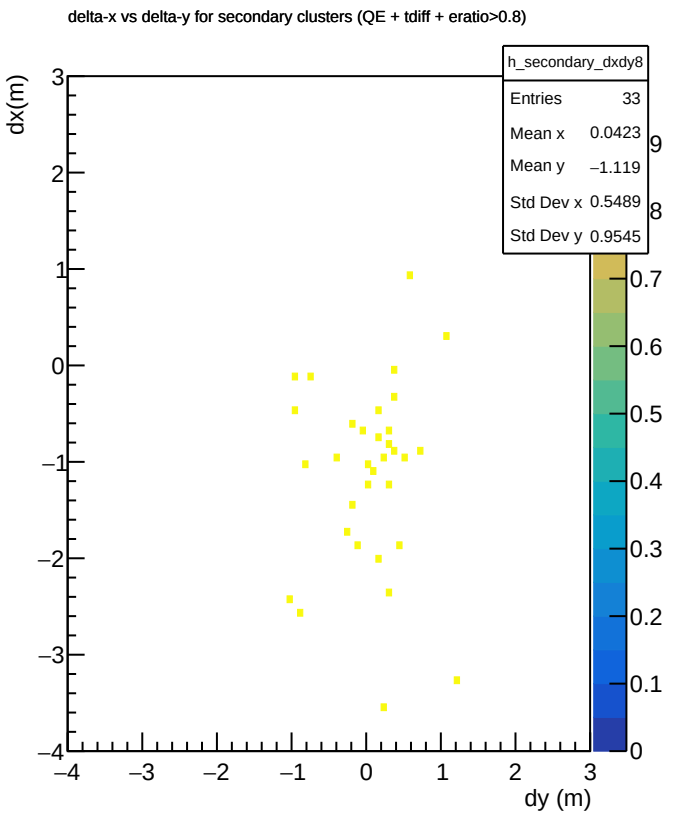

distance vs delta-x (QE cuts)
h_secondary_dx_dist
Entries 102452
Mean x −0.9635
Mean y 1.427
Std Dev x 1.373
Std Dev y 0.6695
distance(m)
dx(m)

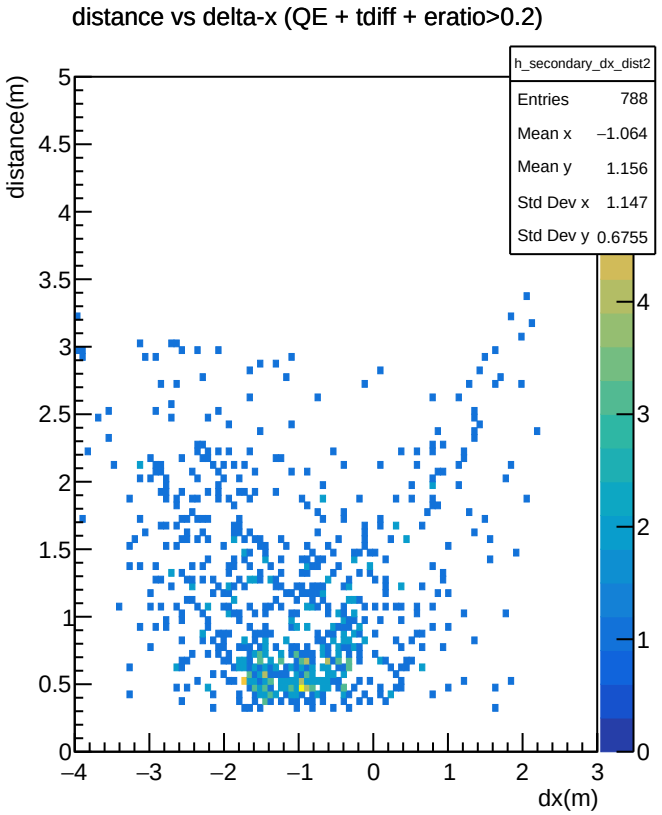

distance vs delta-y (QE cuts)
h_secondary_dy_dist
Entries 102452
Mean x 0.07547
Mean y 1.439
Std Dev x 0.6931
Std Dev y 0.6804
distance(m)
dy(m)

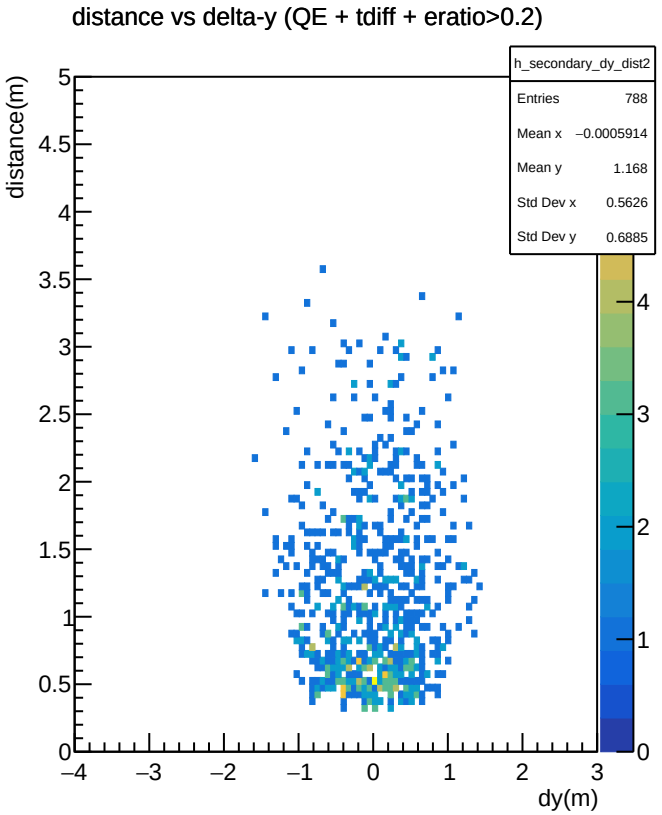

delta-x vs delta-y for secondary clusters (QE + tdiff + eratio>0.2)
h_secondary_dxdy2
Entries 788
Mean x 0.001925
Mean y −1.064
Std Dev x 0.5628
Std Dev y 1.147
dx(m)
dy (m)

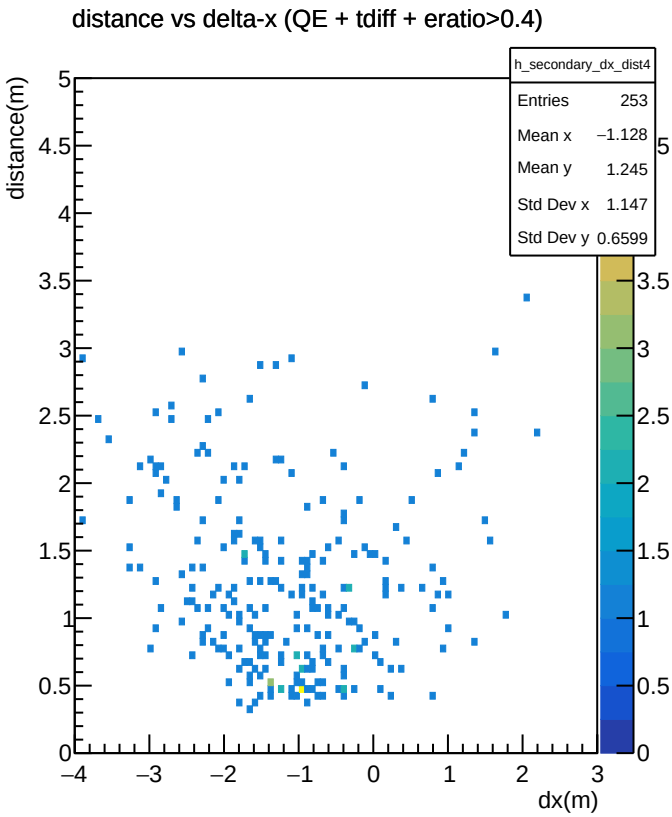

delta-x vs delta-y for secondary clusters (QE + tdiff + eratio>0.4)
h_secondary_dxdy4
Entries 253
Mean x −0.02058
Mean y −1.128
Std Dev x 0.5501
Std Dev y 1.147
dx(m)
dy (m)

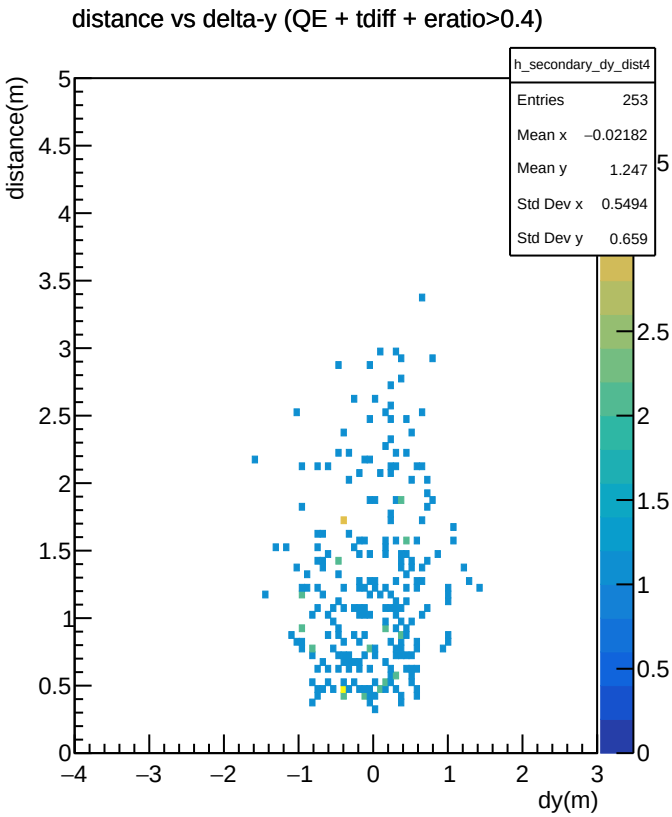

delta-x vs delta-y for secondary clusters (QE + tdiff + eratio>0.6)
h_secondary_dxdy6
Entries 104
Mean x −0.06031
Mean y −1.04
Std Dev x 0.5869
Std Dev y 1.104
dx(m)
dy (m)


delta-x vs delta-y for secondary clusters (QE + tdiff + eratio>0.8)
h_secondary_dxdy8
Entries 33
Mean x 0.0423
Mean y −1.119
Std Dev x 0.5489
Std Dev y 0.9545
dx(m)
dy (m)

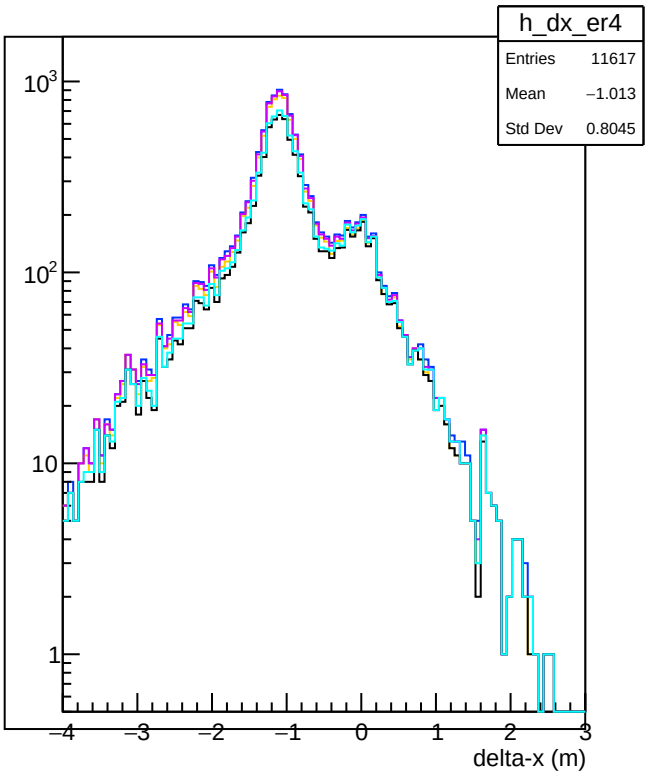

distance vs delta-x (QE + tdiff + eratio>0.2)
h_secondary_dx_dist2
Entries 788
Mean x −1.064
Mean y 1.156
Std Dev x 1.147
Std Dev y 0.6755
distance(m)
dx(m)


distance vs delta-y (QE + tdiff + eratio>0.2)
h_secondary_dy_dist2
Entries 788
Mean x −0.0005914
Mean y 1.168
Std Dev x 0.5626
Std Dev y 0.6885
distance(m)
dy(m)


distance vs delta-x (QE + tdiff + eratio>0.4)
h_secondary_dx_dist4
Entries 253
Mean x −1.128
Mean y 1.245
Std Dev x 1.147
Std Dev y 0.6599
distance(m)
dx(m)


distance vs delta-y (QE + tdiff + eratio>0.4)
h_secondary_dy_dist4
Entries 253
Mean x −0.02182
Mean y 1.247
Std Dev x 0.5494
Std Dev y 0.659
distance(m)
dy(m)

delta-x distribution with QE cuts



primary clusters

$E_{sec}/E_{prim} > 0.2$

$E_{sec}/E_{prim} > 0.4$

$E_{sec}/E_{prim} > 0.2$ && antisbs

$E_{sec}/E_{prim} > 0.4$ && antisbs