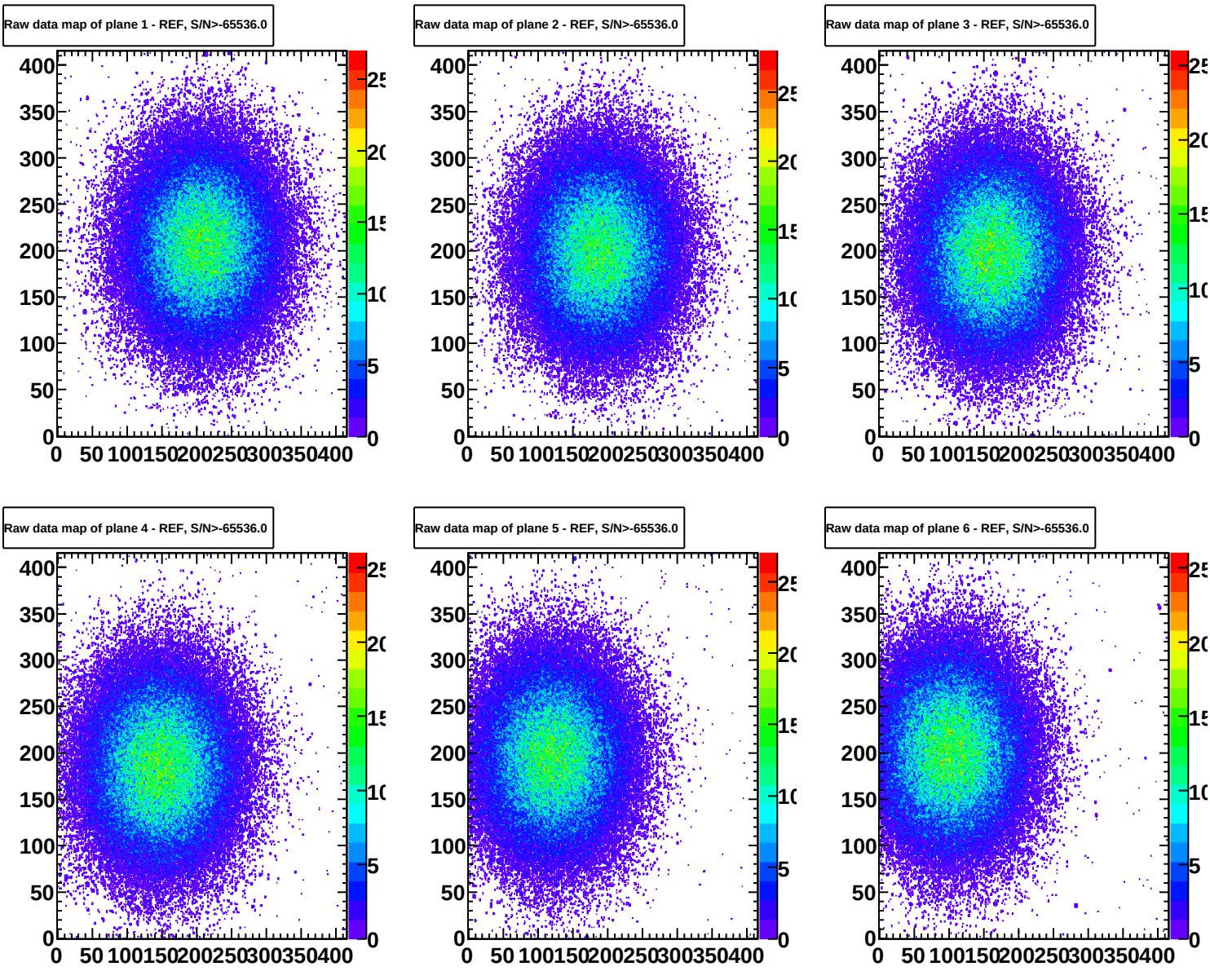
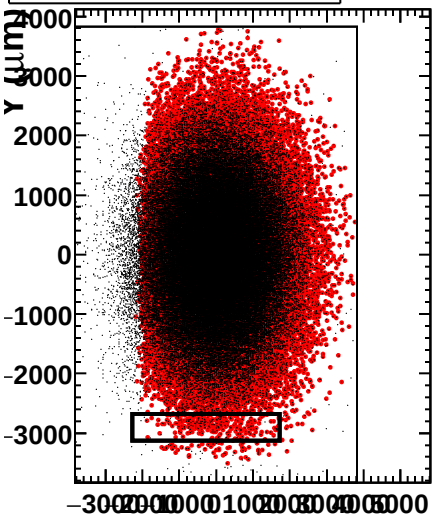
Run 35999, cumul over 10000 events

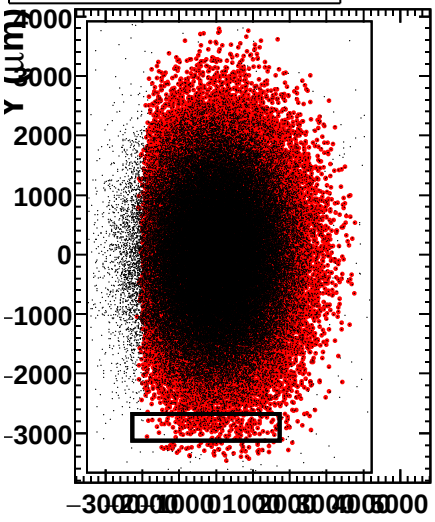


Run 35999, cumul over 10000 events

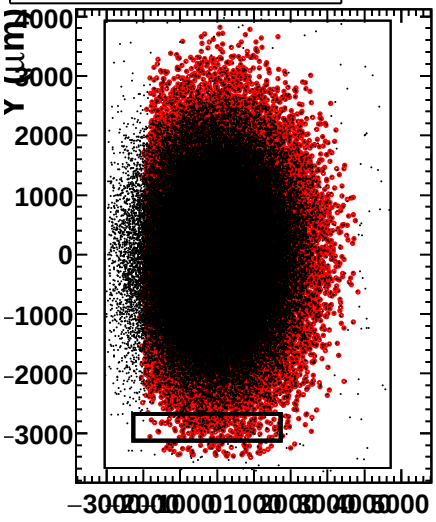
Track map of plane (1) REF



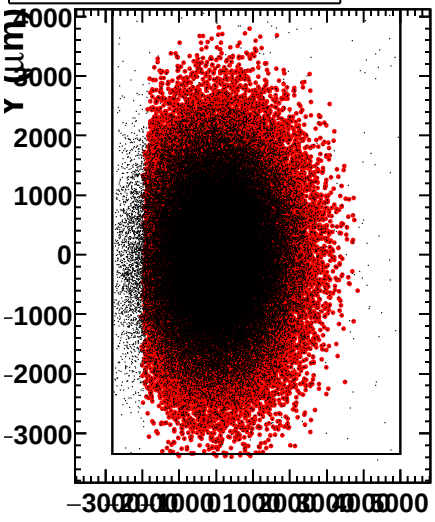
Track map of plane (2) REF



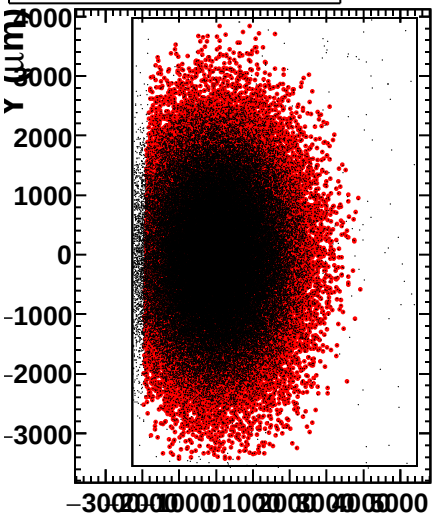
Track map of plane (3) REF



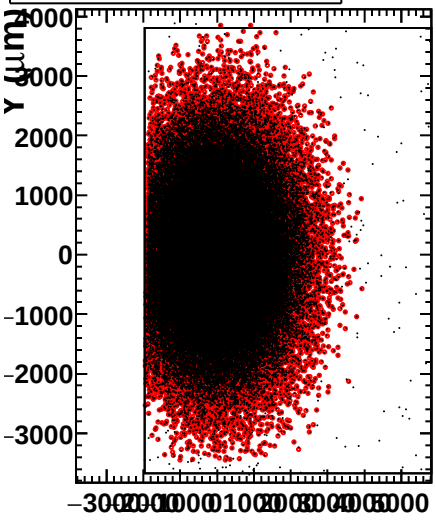
Track map of plane (4) REF



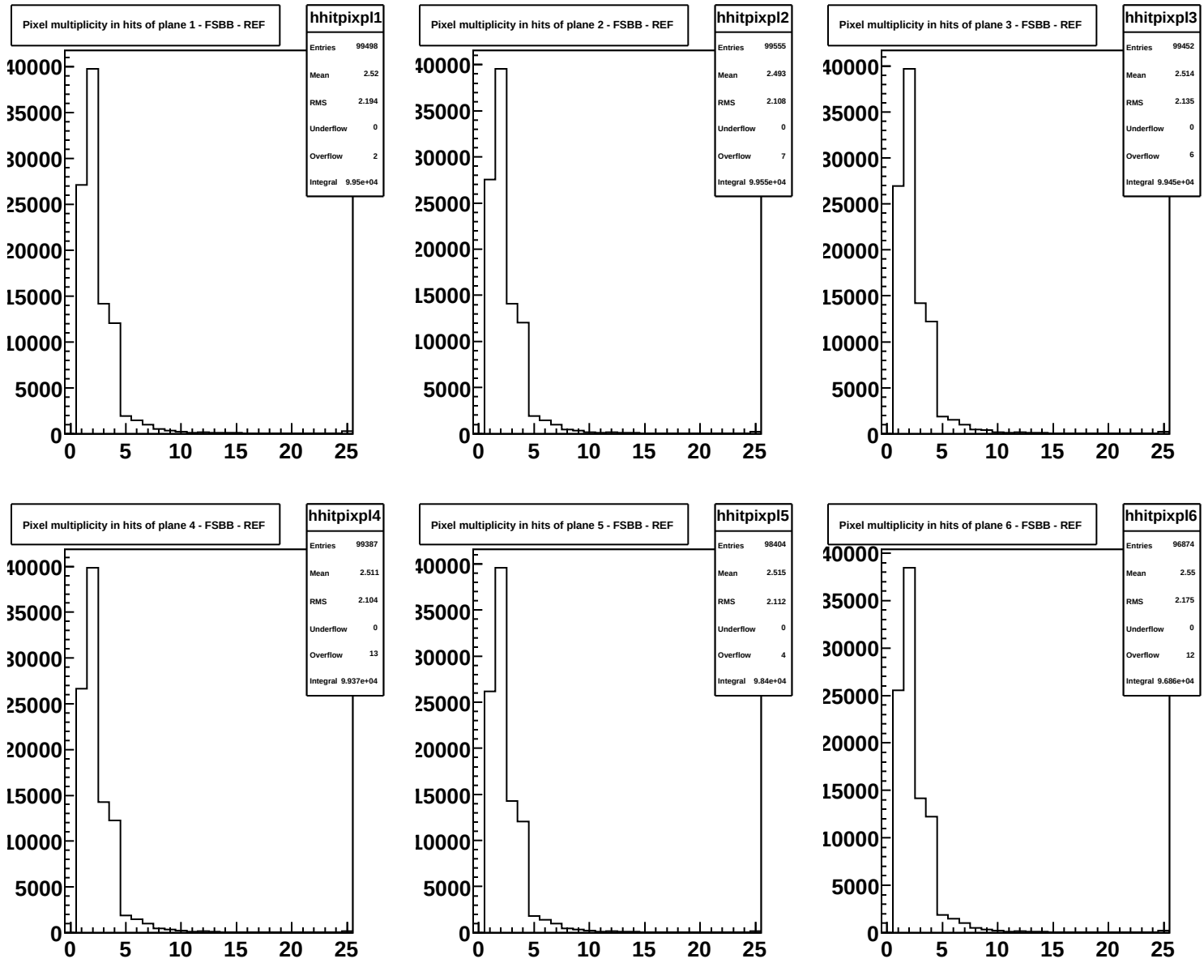
Track map of plane (5) REF



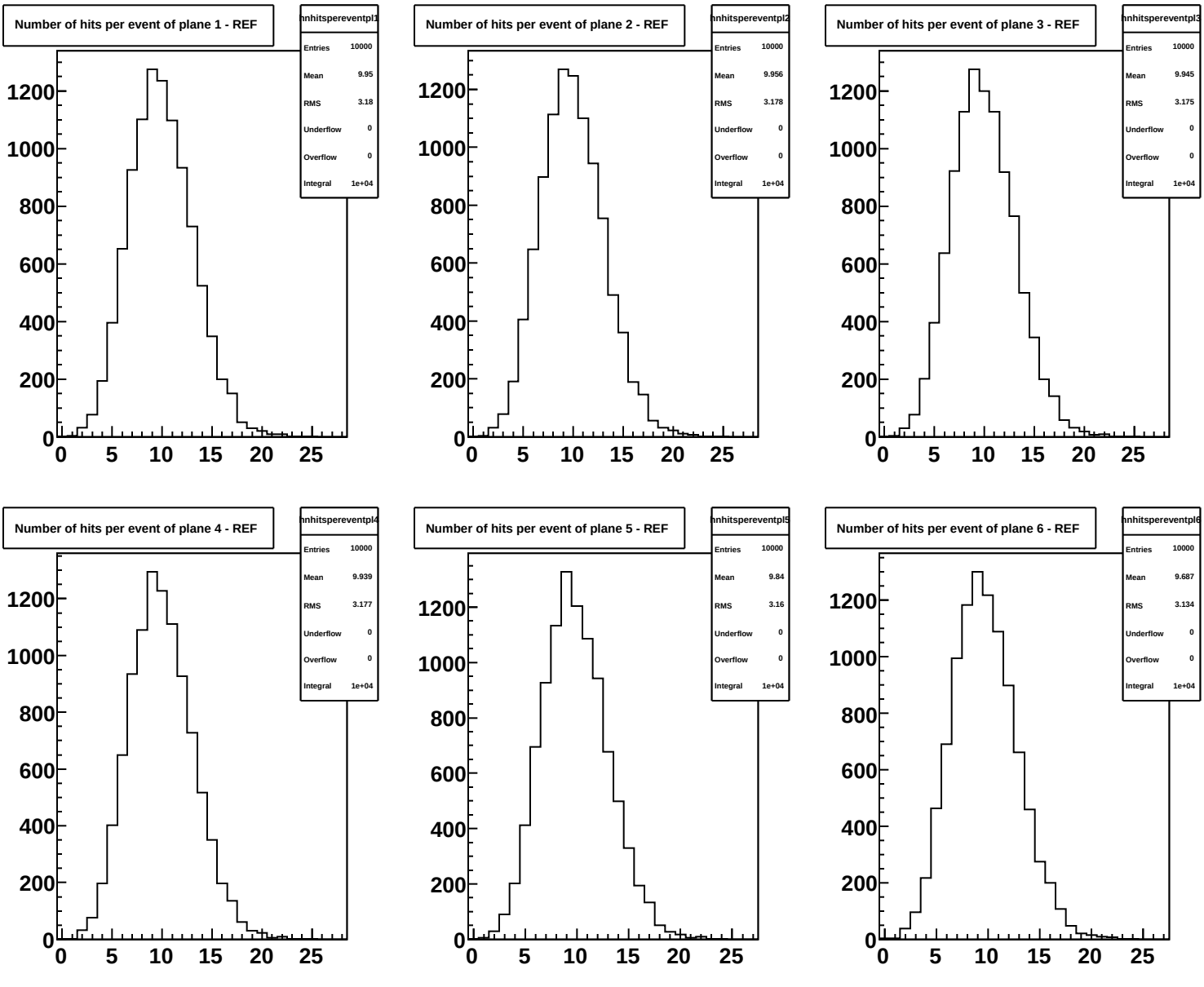
Track map of plane (6) REF

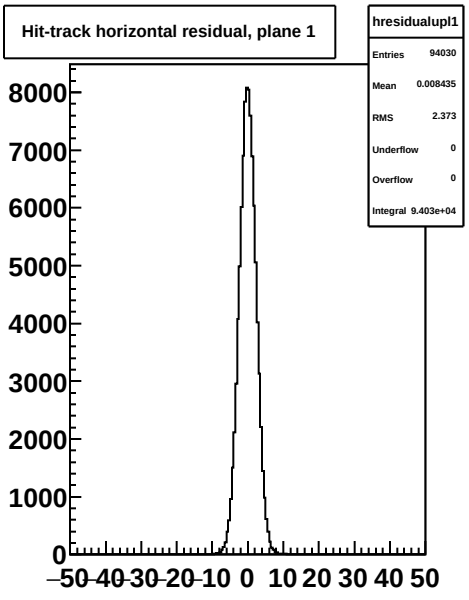


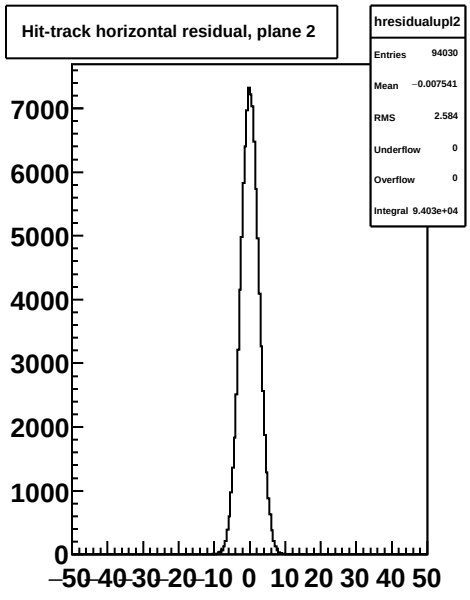
Run 35999, cumul over 10000 events

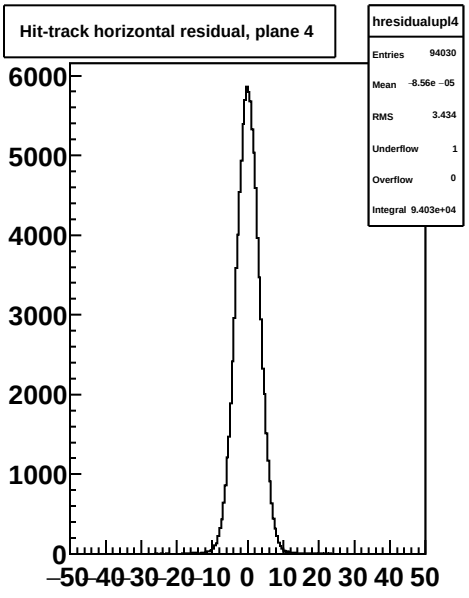


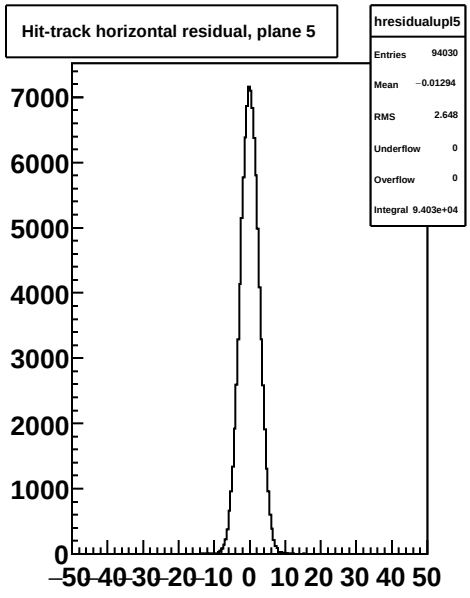
Run 35999, cumul over 10000 events

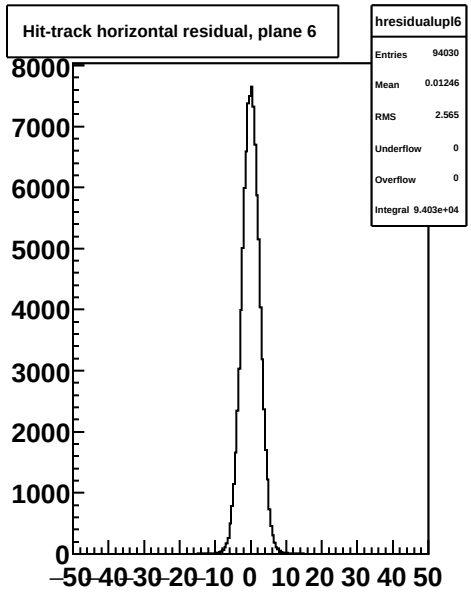


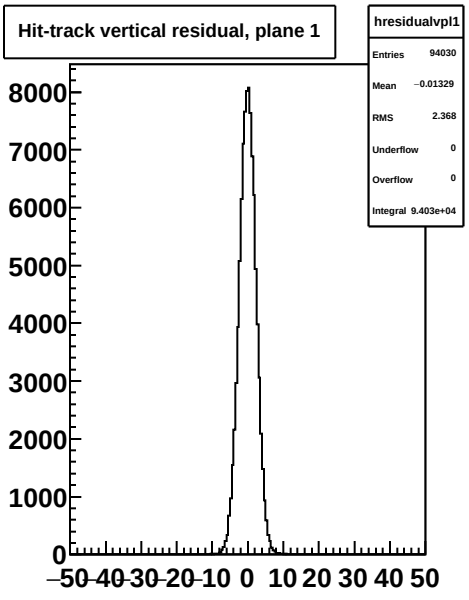

Hit-track horizontal residual, plane 1
hresidualupl1
Entries 94030
Mean 0.008435
RMS 2.373
Underflow 0
Overflow 0
Integral 9.403e+04
8000
7000
6000
5000
4000
3000
2000
1000
0
−50 −40 −30 −20 −10 0 10 20 30 40 50

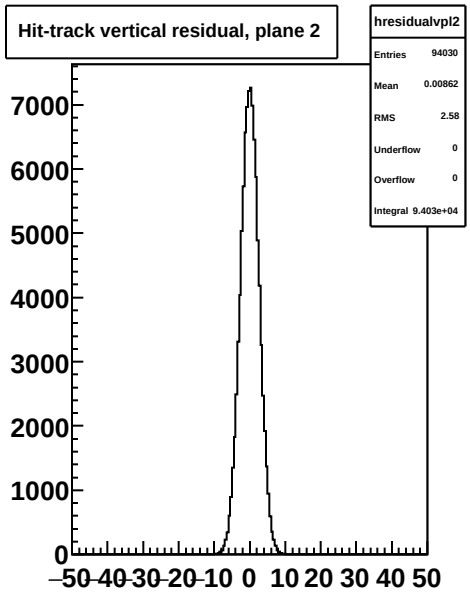

Hit-track horizontal residual, plane 2
hresidualupl2
Entries 94030
Mean −0.007541
RMS 2.584
Underflow 0
Overflow 0
Integral 9.403e+04
7000
6000
5000
4000
3000
2000
1000
0
−50 −40 −30 −20 −10 0 10 20 30 40 50

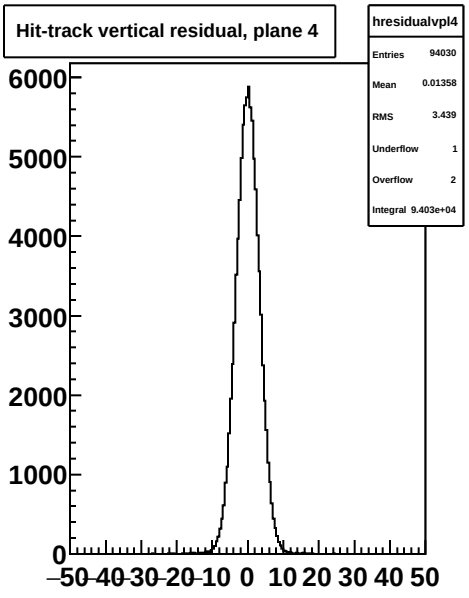

Hit-track horizontal residual, plane 4
hresidualupl4
Entries 94030
Mean −8.56e −05
RMS 3.434
Underflow 1
Overflow 0
Integral 9.403e+04
6000
5000
4000
3000
2000
1000
0
−50 −40 −30 −20 −10 0 10 20 30 40 50

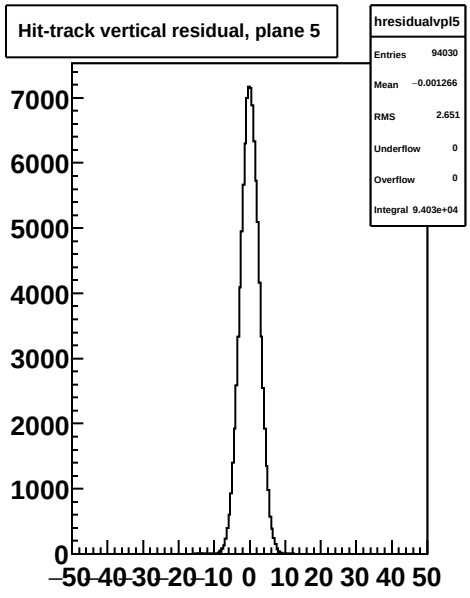

Hit-track horizontal residual, plane 5
hresidualupl5
Entries 94030
Mean −0.01294
RMS 2.648
Underflow 0
Overflow 0
Integral 9.403e+04
7000
6000
5000
4000
3000
2000
1000
0
−50 −40 −30 −20 −10 0 10 20 30 40 50

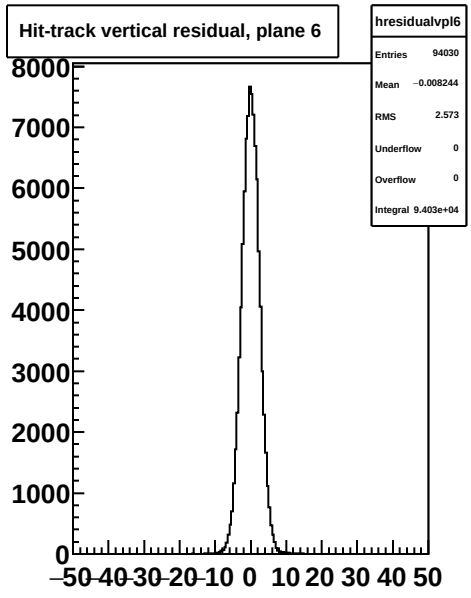

Hit-track horizontal residual, plane 6
hresidualupl6
Entries 94030
Mean 0.01246
RMS 2.565
Underflow 0
Overflow 0
Integral 9.403e+04
8000
7000
6000
5000
4000
3000
2000
1000
0
−50 −40 −30 −20 −10 0 10 20 30 40 50

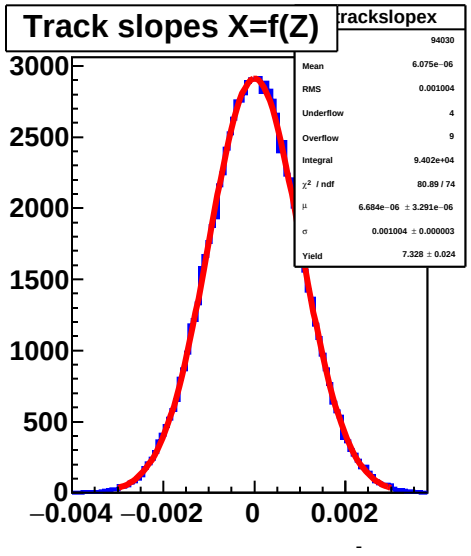

Hit-track vertical residual, plane 1
hresidualvpl1
Entries 94030
Mean −0.01329
RMS 2.368
Underflow 0
Overflow 0
Integral 9.403e+04
8000
7000
6000
5000
4000
3000
2000
1000
0
−50 −40 −30 −20 −10 0 10 20 30 40 50

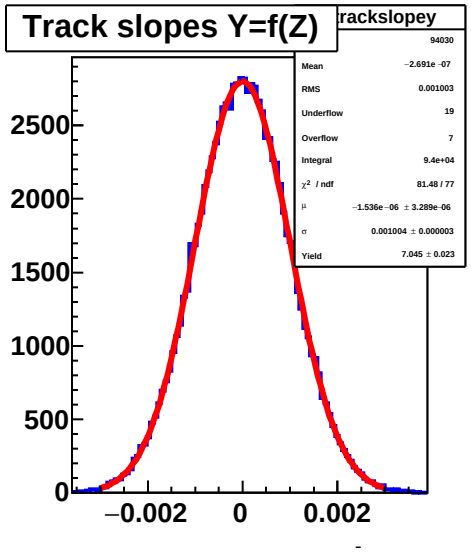

Hit-track vertical residual, plane 2
hresidualvpl2
Entries 94030
Mean 0.00862
RMS 2.58
Underflow 0
Overflow 0
Integral 9.403e+04
7000
6000
5000
4000
3000
2000
1000
0
−50 −40 −30 −20 −10 0 10 20 30 40 50

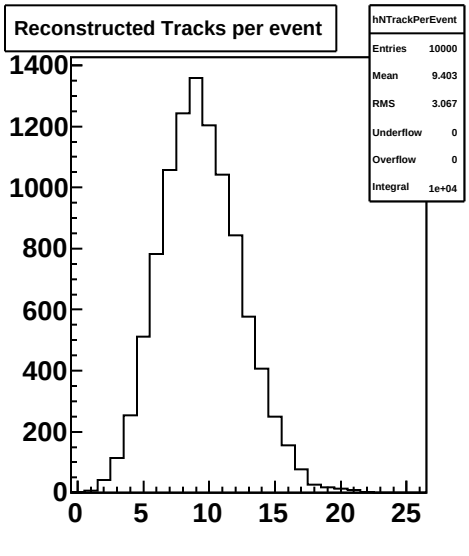

Hit-track vertical residual, plane 4
hresidualvpl4
Entries 94030
Mean 0.01358
RMS 3.439
Underflow 1
Overflow 2
Integral 9.403e+04
6000
5000
4000
3000
2000
1000
0
−50 −40 −30 −20 −10 0 10 20 30 40 50

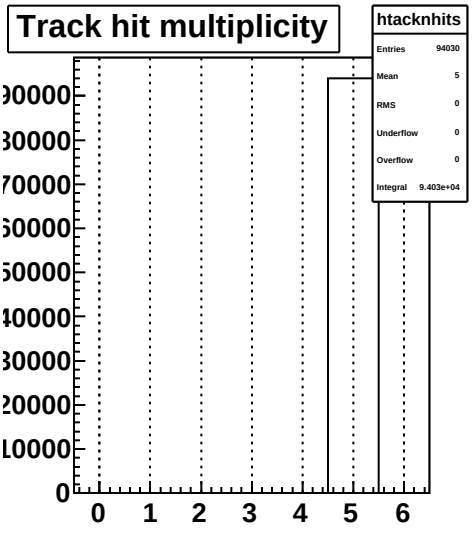

Hit-track vertical residual, plane 5
hresidualvpl5
Entries 94030
Mean −0.001266
RMS 2.651
Underflow 0
Overflow 0
Integral 9.403e+04
7000
6000
5000
4000
3000
2000
1000
0
−50 −40 −30 −20 −10 0 10 20 30 40 50

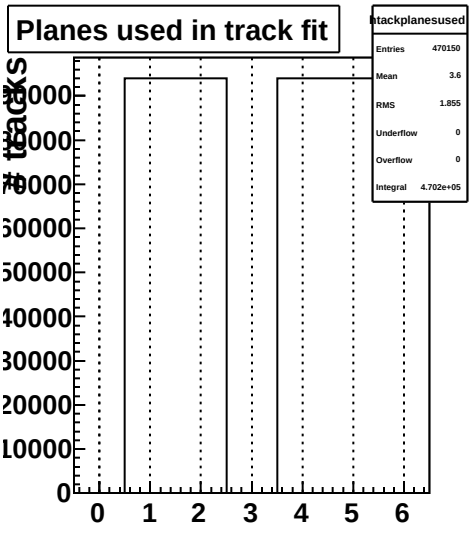

Hit-track vertical residual, plane 6
hresidualvpl6
Entries 94030
Mean −0.008244
RMS 2.573
Underflow 0
Overflow 0
Integral 9.403e+04
8000
7000
6000
5000
4000
3000
2000
1000
0
−50 −40 −30 −20 −10 0 10 20 30 40 50

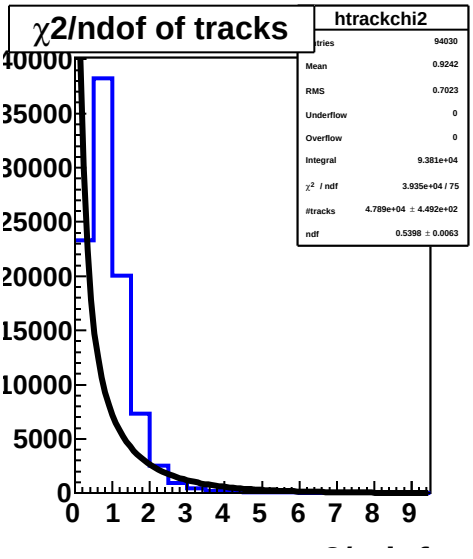

Track slopes X=f(Z)
trackslopex
94030
Mean 6.075e−06
RMS 0.001004
Underflow 4
Overflow 9
Integral 9.402e+04
χ² / ndf 80.89 / 74
μ 6.684e−06 ± 3.291e−06
σ 0.001004 ± 0.000003
Yield 7.328 ± 0.024
3000
2500
2000
1500
1000
500
0
−0.004 −0.002 0 0.002


Track slopes Y=f(Z)
trackslopey
94030
Mean −2.691e−07
RMS 0.001003
Underflow 19
Overflow 7
Integral 9.4e+04
χ² / ndf 81.48 / 77
μ −1.536e−06 ± 3.289e−06
σ 0.001004 ± 0.000003
Yield 7.045 ± 0.023
2500
2000
1500
1000
500
0
−0.002 0 0.002


Reconstructed Tracks per event
hNTrackPerEvent
Entries 10000
Mean 9.403
RMS 3.067
Underflow 0
Overflow 0
Integral 1e+04
1400
1200
1000
800
600
400
200
0
0 5 10 15 20 25


Track hit multiplicity
htacknhits
Entries 94030
Mean 5
RMS 0
Underflow 0
Overflow 0
Integral 9.403e+04
0 1 2 3 4 5 6


Planes used in track fit
htackplanesused
Entries 470150
Mean 3.6
RMS 1.855
Underflow 0
Overflow 0
Integral 4.702e+05
tracks
0 1 2 3 4 5 6


χ2/ndof of tracks
htrackchi2
Entries 94030
Mean 0.9242
RMS 0.7023
Underflow 0
Overflow 0
Integral 9.381e+04
χ² / ndf 3.935e+04 / 75
#tracks 4.789e+04 ± 4.492e+02
ndf 0.5398 ± 0.0063
40000
35000
30000
25000
20000
15000
10000
5000
0
0 1 2 3 4 5 6 7 8 9

Metadata

Wed Aug 10 12:38:07 2016

DSF file used as input:

/home/aperez/TAF_repo/TAF_developments/TAF_Validation_Procedure/TAF_trunk_ValidationProcedure_9Aug201

RUN NUMBER = 35999 Plane number = 3 submatrix Number = 0

Geomatrix = 0 : (-20000.0 < U < 20000.0)μm x (-20000.0 < V < 20000.0)μm

track-Hit dist cut = 50.0μm

χ^2_{max} = 2.0

min # of hits required per tracks = 5

CUTS S/N seed and S/N neighbours = 0.0 and 0.0

MIN and MAX # of hits per event to evaluate effic = 0 and 1000

calibration = 1.000

Summary Results

Total # events processed = 60001

matched/good tracks in DUT = 530087 532752 0.9950

Effic = (99.4998 ± 0.0097) %

Prob(wrong asso.,trk-hit dist = 50.0μm) = (0.0402 ± 0.0028) %

Effic(corr. wrong asso.) = (99.4996 ± 0.0097) %

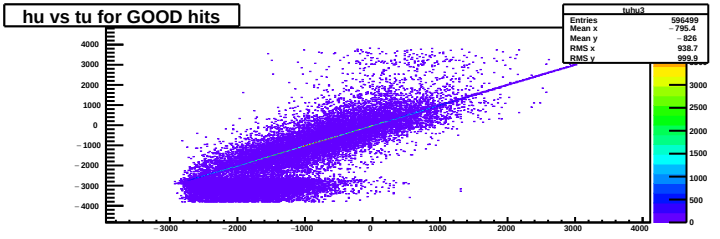
(# good rec tracks in telescope)/event, average = 5.439, RMS = 3.317

# of rec hits in DUT = 596499, good = 596499, average/event = 9.943, RMS = 3.171

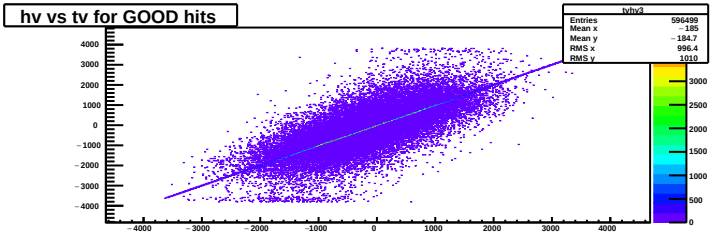
<cluster multiplicity> = 2.511, RMS(cluster multiplicity) = 2.130

 # un-matched tracks = 2665, with thdist > THdist limit 2665.00, without hits in DUT 0

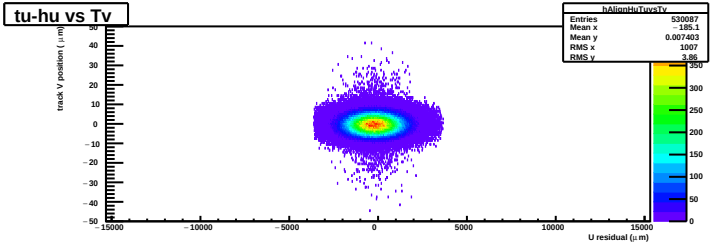
hu vs tu for GOOD hits



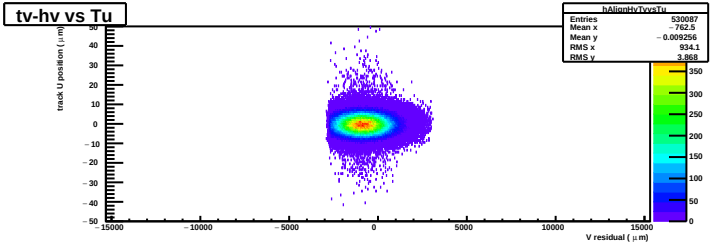
hv vs tv for GOOD hits



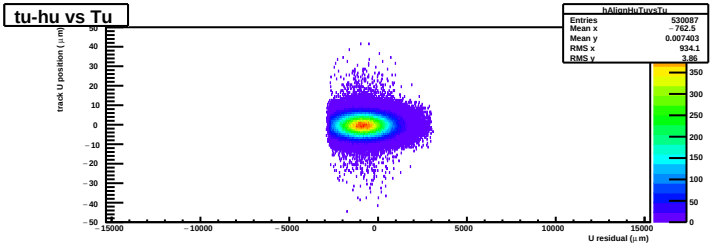
tu-hu vs Tv



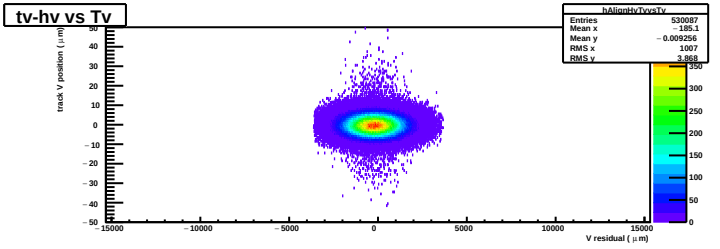
tv-hv vs Tu



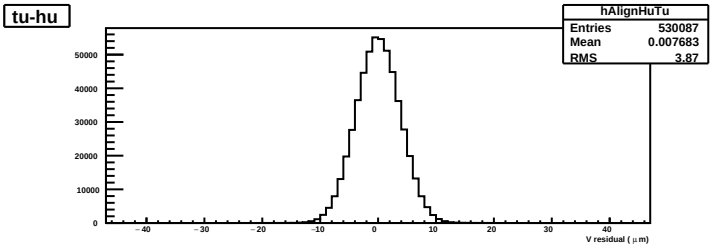
tu-hu vs Tu



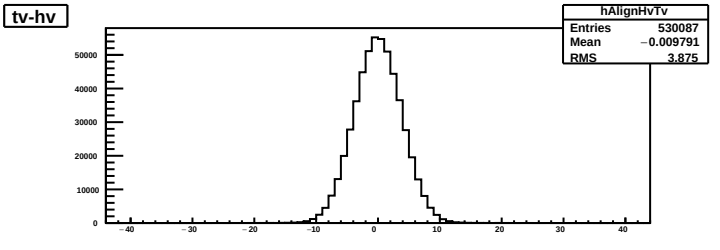
tv-hv vs Tv



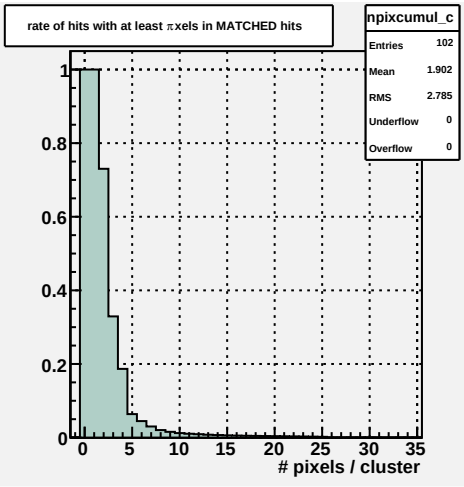
tu-hu

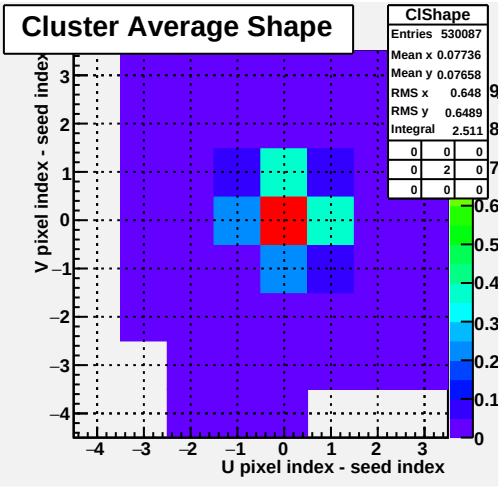


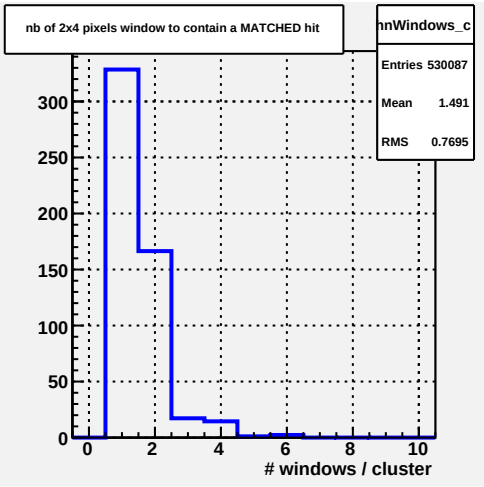
tv-hv

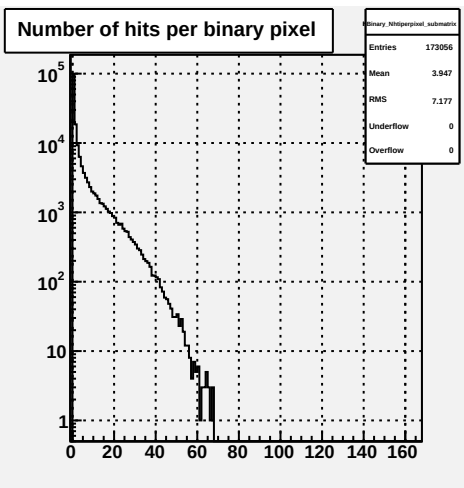


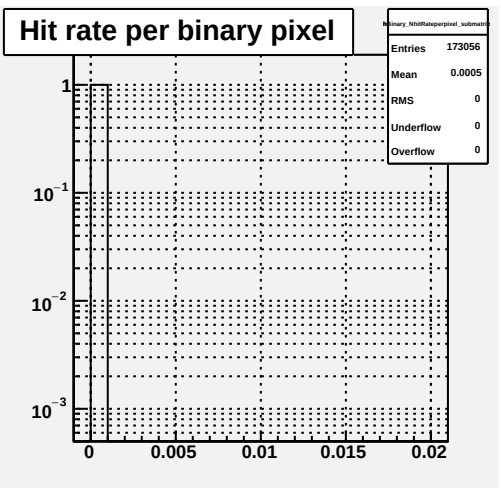
M35 ; run 35999; Pl 3, sub 0, dist 50; Gain 1.00; eff 0.995 +- 0.000; Seed 0.0; Neigh 0.0

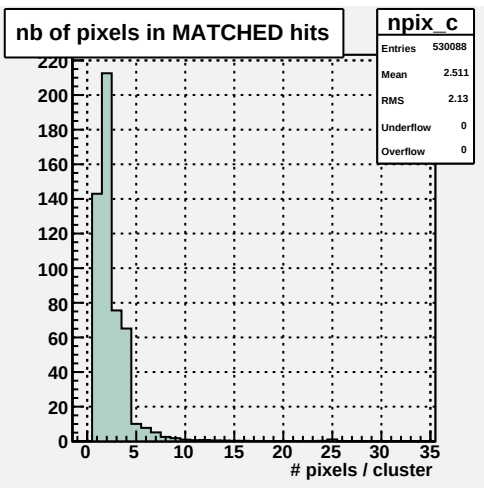


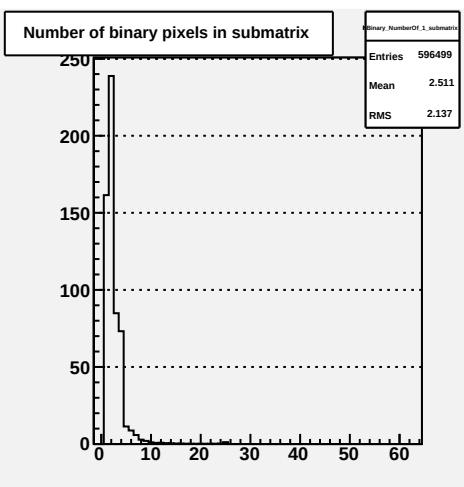


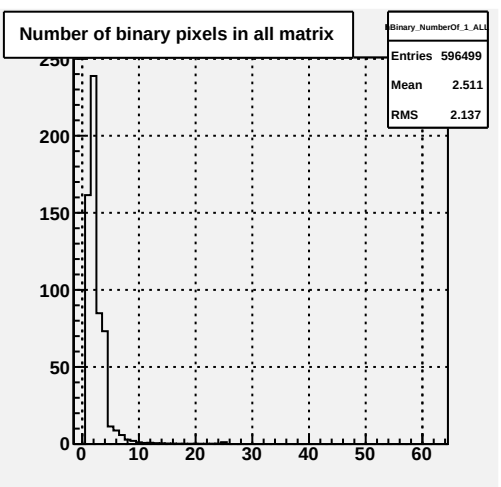


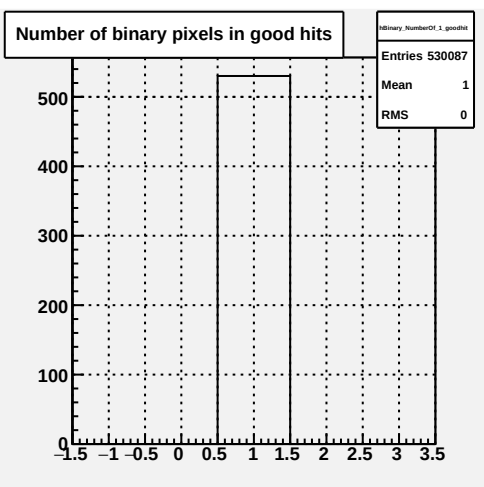




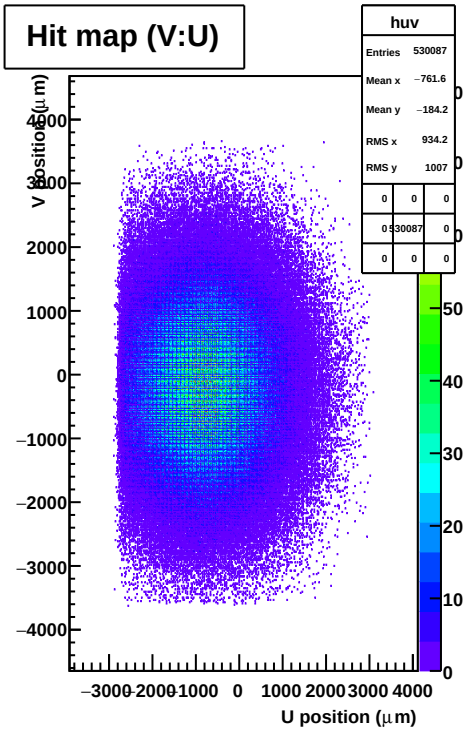


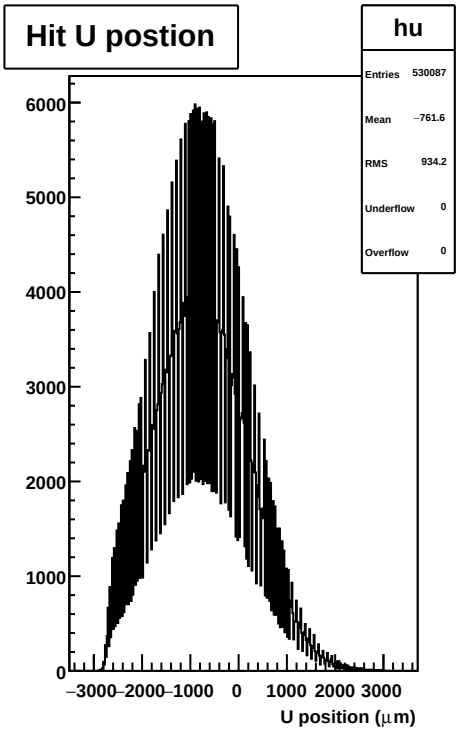


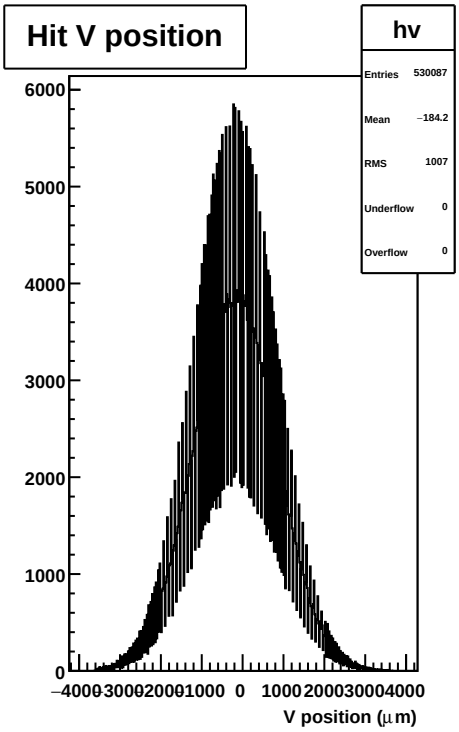


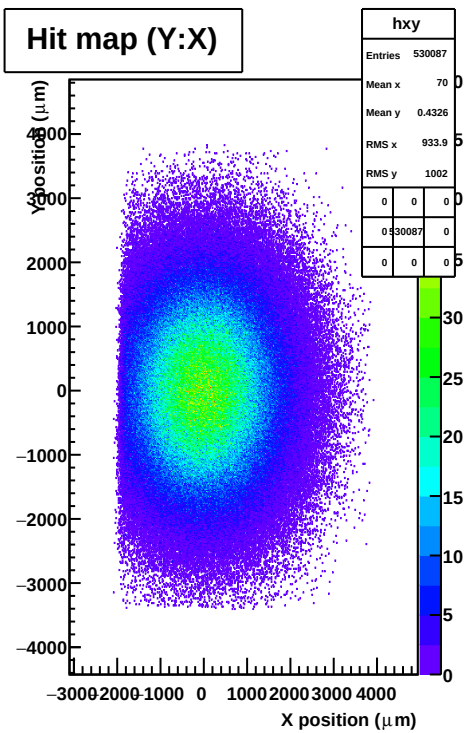


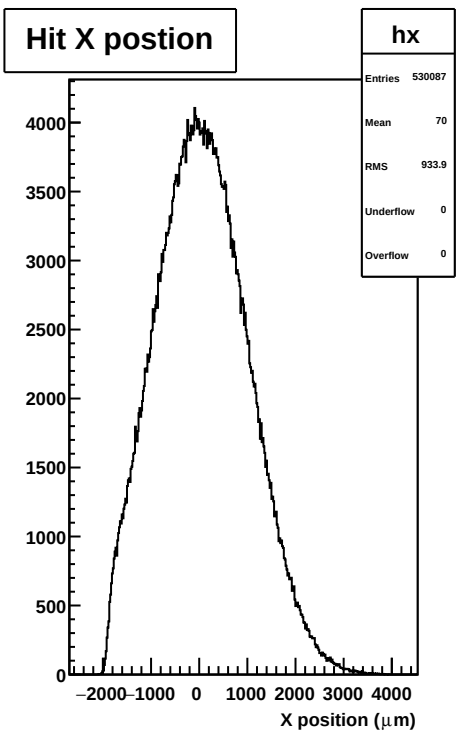
M35 ; run 35999; Pl 3, sub 0; Seed 0.0; Neigh 0.0

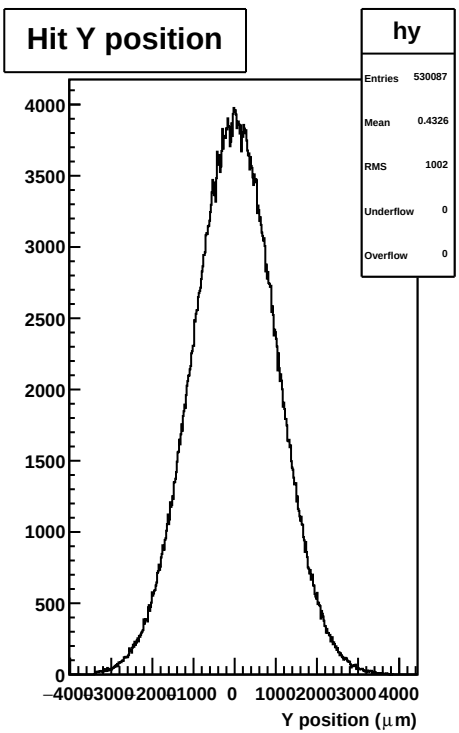


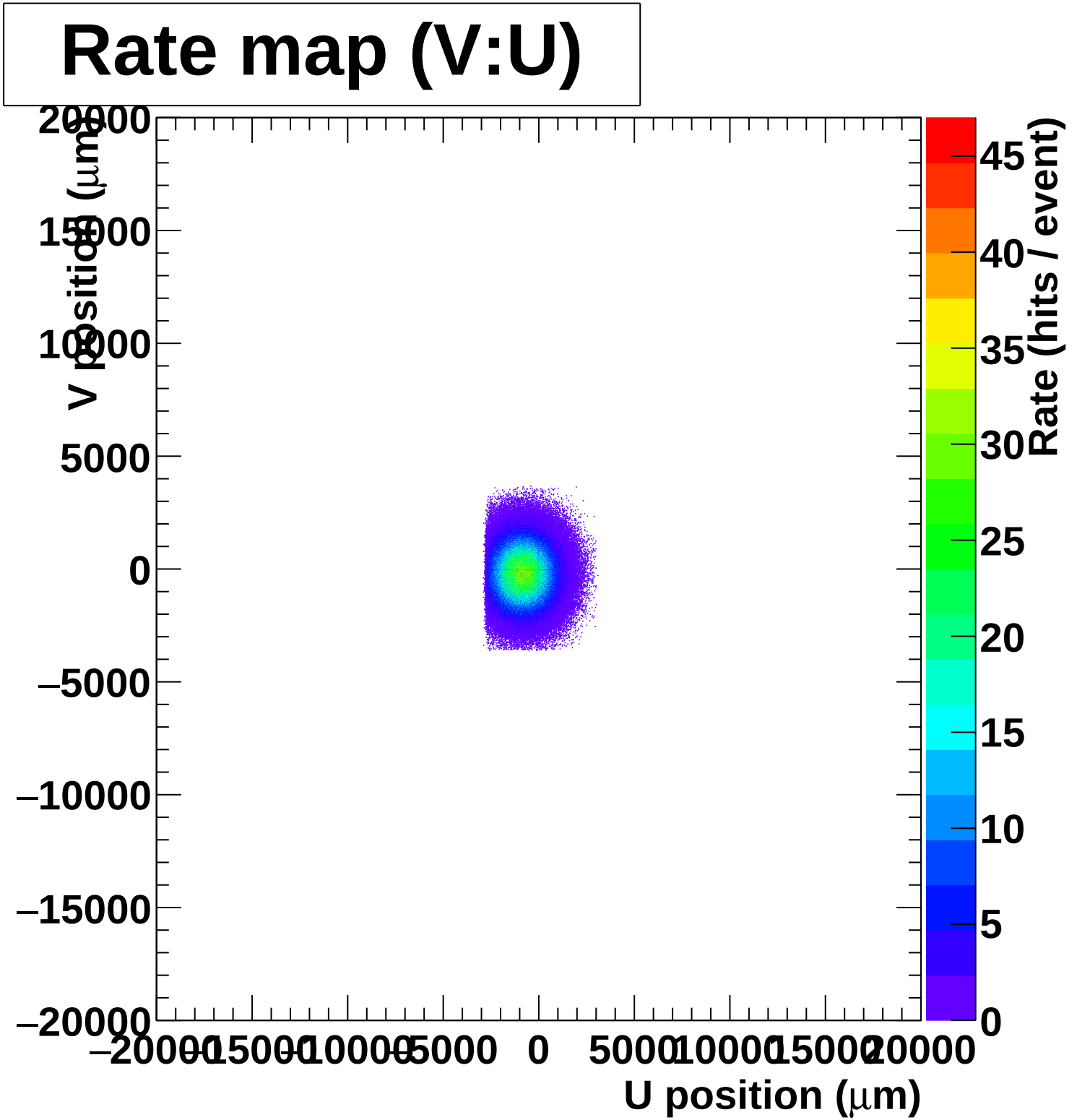


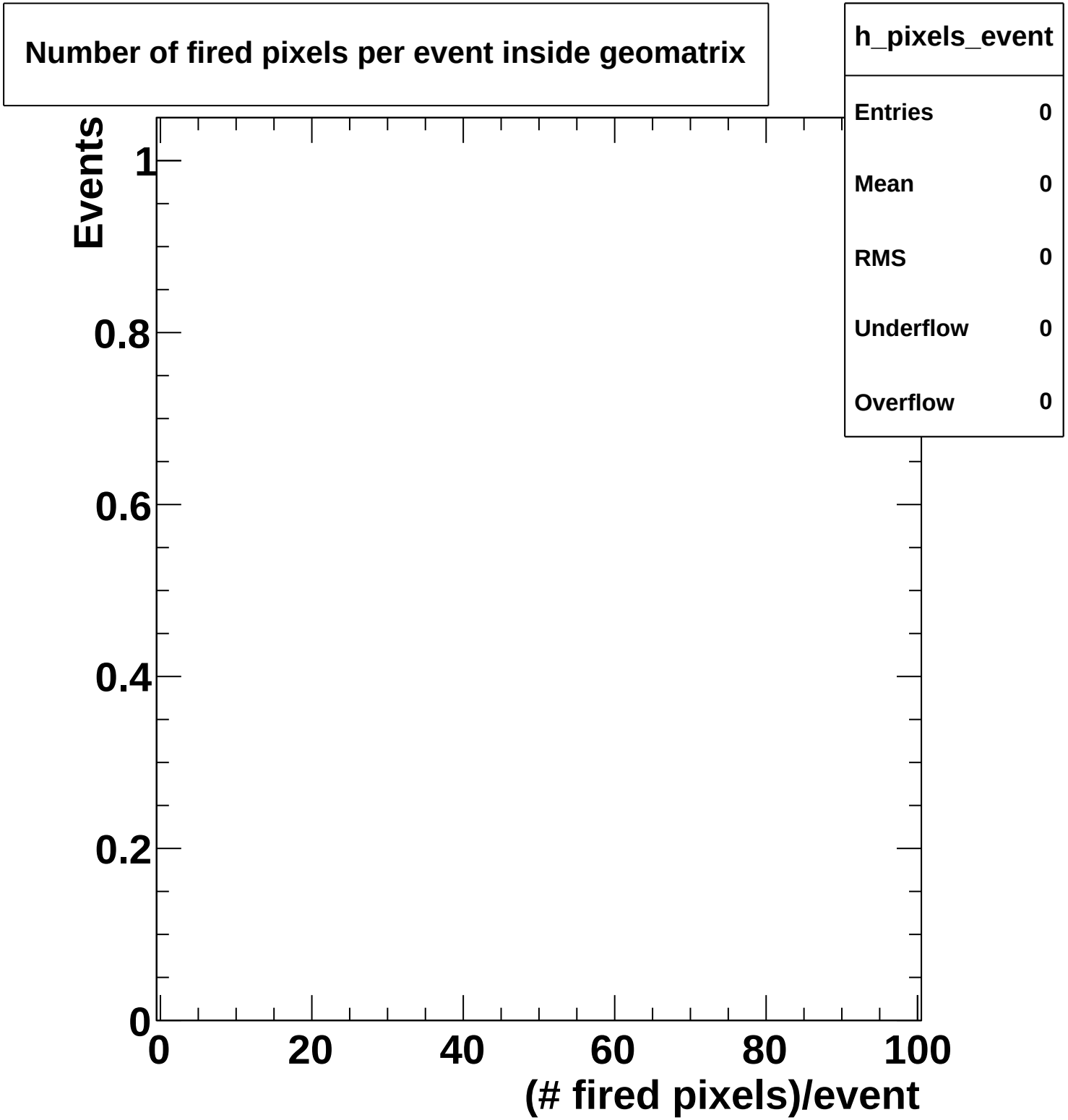


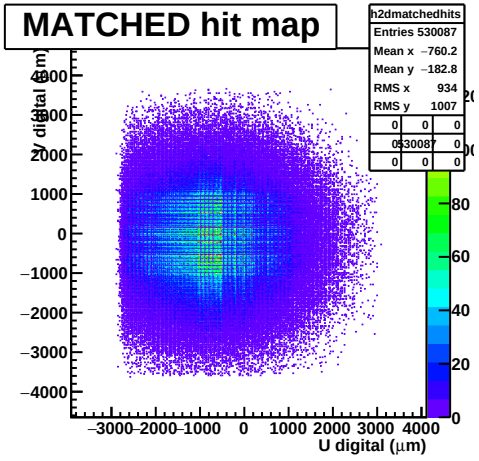


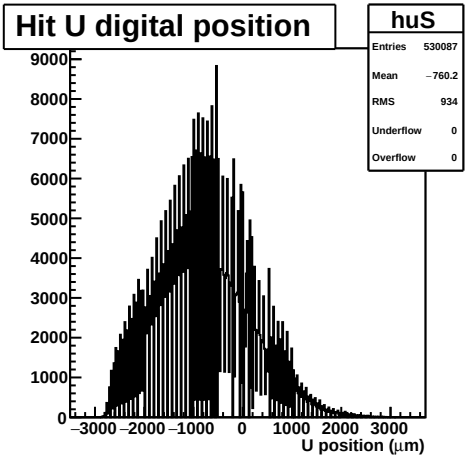


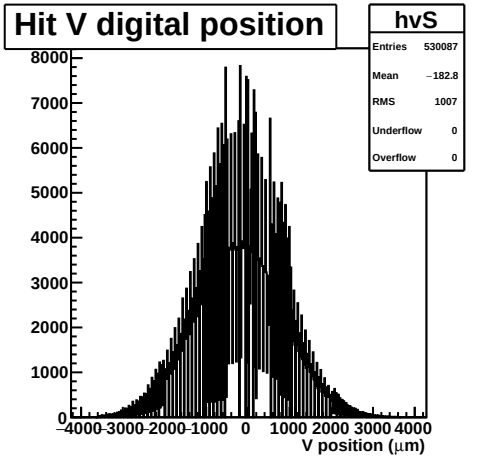


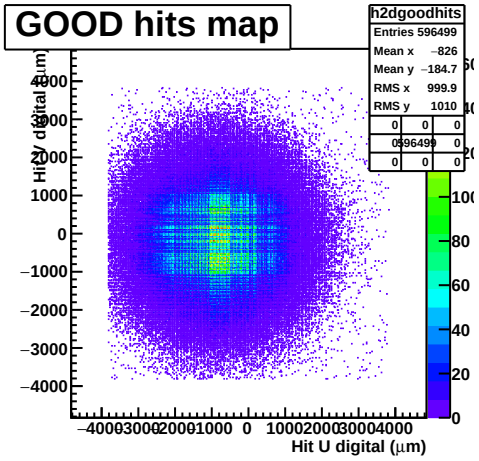

Rate map (V:U)
V position (μm)
U position (μm)
Rate (hits / event)
20000
15000
10000
5000
0
–5000
–10000
–15000
–20000
45
40
35
30
25
20
15
10
5
0

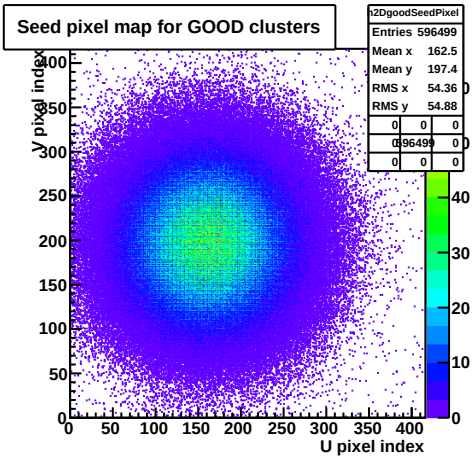

Number of fired pixels per event inside geomatrix
h_pixels_event
Entries 0
Mean 0
RMS 0
Underflow 0
Overflow 0
Events
1
0.8
0.6
0.4
0.2
0
0
20
40
60
80
100
(# fired pixels)/event

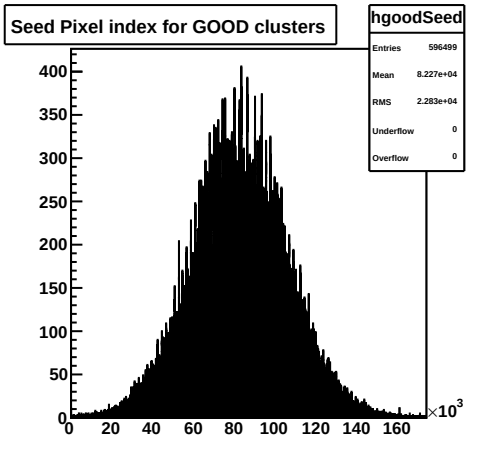

MATCHED hit map
h2dmatchedhits
Entries 530087
Mean x −760.2
Mean y −182.8
RMS x 934
RMS y 1007
V digital (μm)
U digital (μm)

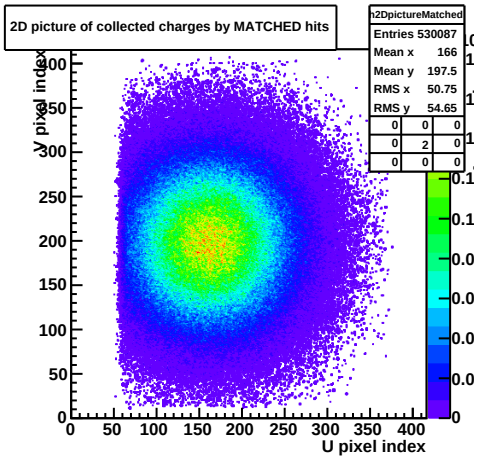

Hit U digital position
huS
Entries 530087
Mean −760.2
RMS 934
Underflow 0
Overflow 0
U position (μm)

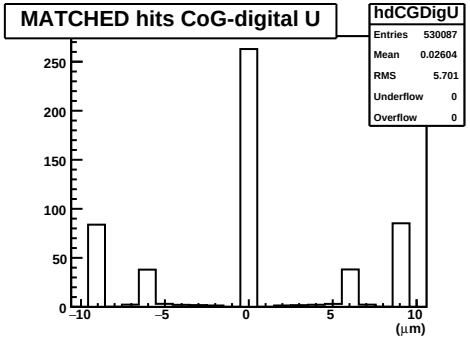

Hit V digital position
hvS
Entries 530087
Mean −182.8
RMS 1007
Underflow 0
Overflow 0
V position (μm)

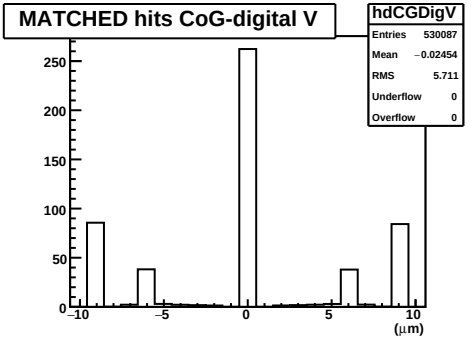

GOOD hits map
h2dgoodhits
Entries 596499
Mean x −826
Mean y −184.7
RMS x 999.9
RMS y 1010
Hit V digital (μm)
Hit U digital (μm)

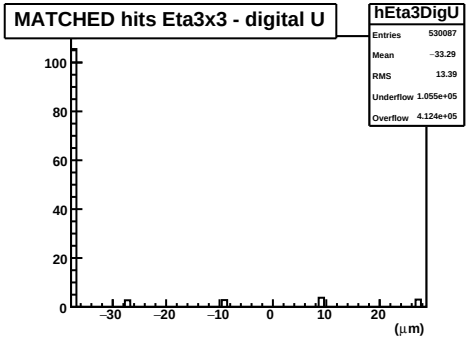

Seed pixel map for GOOD clusters
h2DgoodSeedPixel
Entries 596499
Mean x 162.5
Mean y 197.4
RMS x 54.36
RMS y 54.88
V pixel index
U pixel index

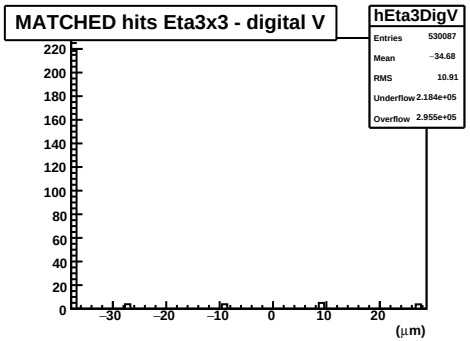

Seed Pixel index for GOOD clusters
hgoodSeed
Entries 596499
Mean 8.227e+04
RMS 2.283e+04
Underflow 0
Overflow 0

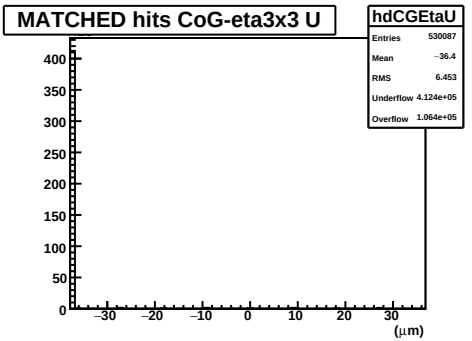

2D picture of collected charges by MATCHED hits
h2DpictureMatched
Entries 530087
Mean x 166
Mean y 197.5
RMS x 50.75
RMS y 54.65
V pixel index
U pixel index

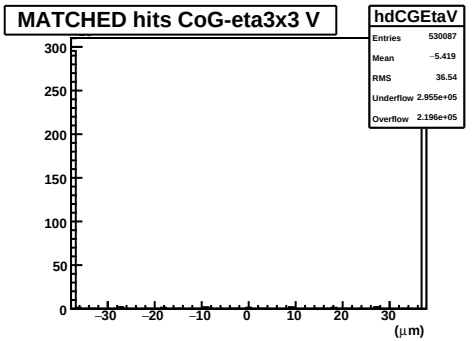

MATCHED hits CoG-digital U
hdCGDigU
Entries 530087
Mean 0.02604
RMS 5.701
Underflow 0
Overflow 0
(μm)

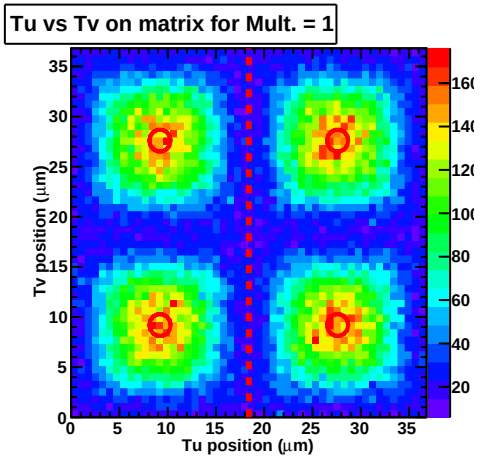

MATCHED hits CoG-digital V
hdCGDigV
Entries 530087
Mean −0.02454
RMS 5.711
Underflow 0
Overflow 0
(μm)

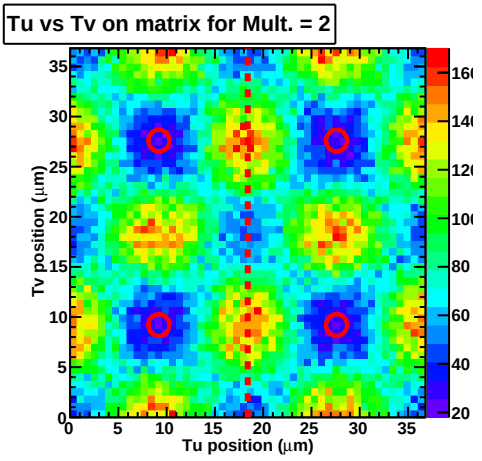

MATCHED hits Eta3x3 - digital U
hEta3DigU
Entries 530087
Mean −33.29
RMS 13.39
Underflow 1.055e+05
Overflow 4.124e+05
(μm)

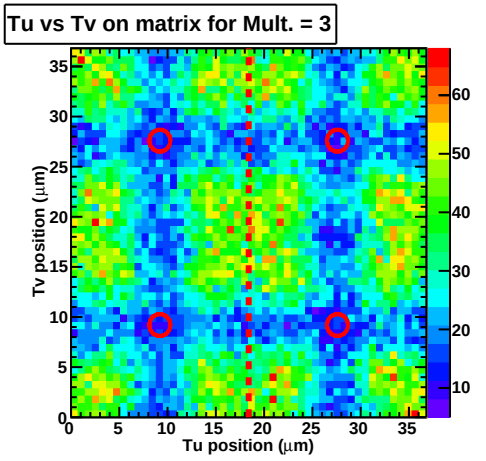

MATCHED hits Eta3x3 - digital V
hEta3DigV
Entries 530087
Mean −34.68
RMS 10.91
Underflow 2.184e+05
Overflow 2.955e+05
(μm)

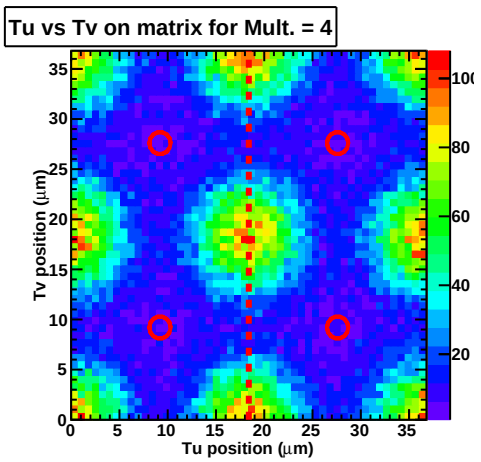

MATCHED hits CoG-eta3x3 U
hdCGEtaU
Entries 530087
Mean −36.4
RMS 6.453
Underflow 4.124e+05
Overflow 1.064e+05
(μm)

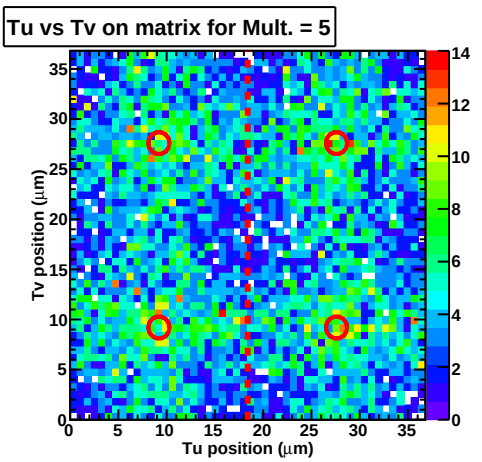

MATCHED hits CoG-eta3x3 V
hdCGEtaV
Entries 530087
Mean −5.419
RMS 36.54
Underflow 2.955e+05
Overflow 2.196e+05
(μm)

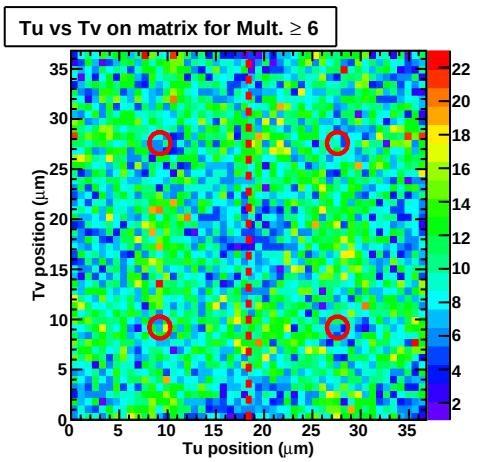

Tu vs Tv on matrix for Mult. = 1
Tv position (μm)
Tu position (μm)

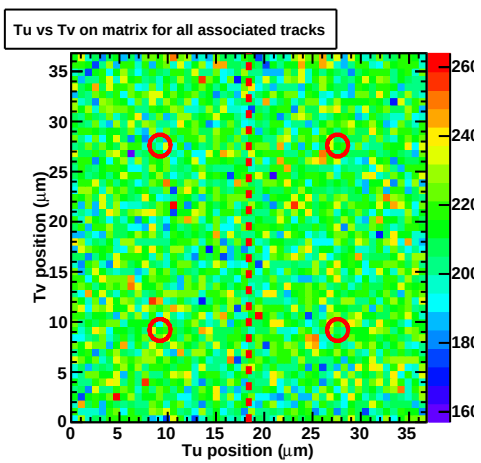

Tu vs Tv on matrix for Mult. = 2
Tv position (μm)
Tu position (μm)

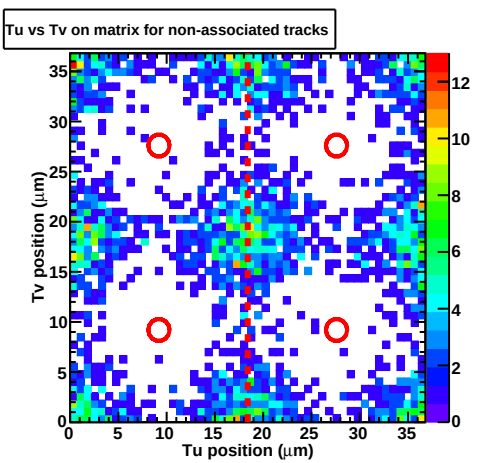

Tu vs Tv on matrix for Mult. = 3
Tv position (μm)
Tu position (μm)

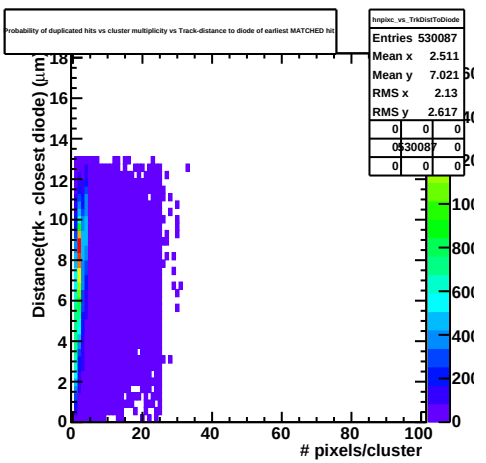

Tu vs Tv on matrix for Mult. = 4
Tv position (μm)
Tu position (μm)

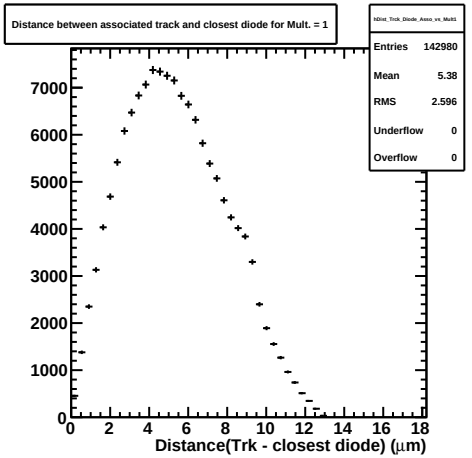

Tu vs Tv on matrix for Mult. = 5
Tv position (μm)
Tu position (μm)

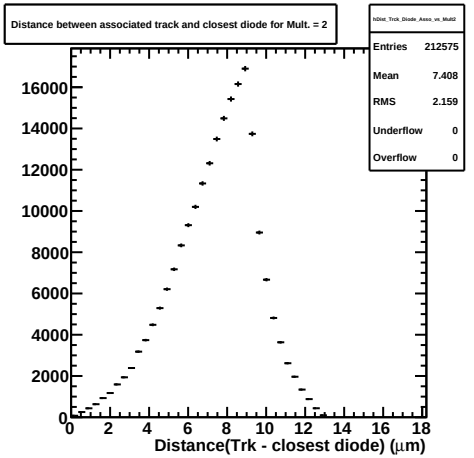

Tu vs Tv on matrix for Mult. ≥ 6
Tv position (μm)
Tu position (μm)

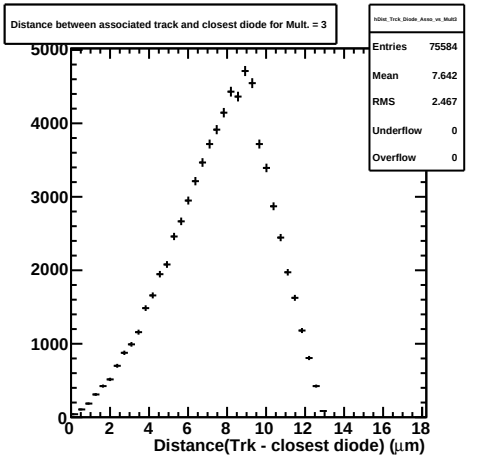

Tu vs Tv on matrix for all associated tracks
Tv position (μm)
Tu position (μm)

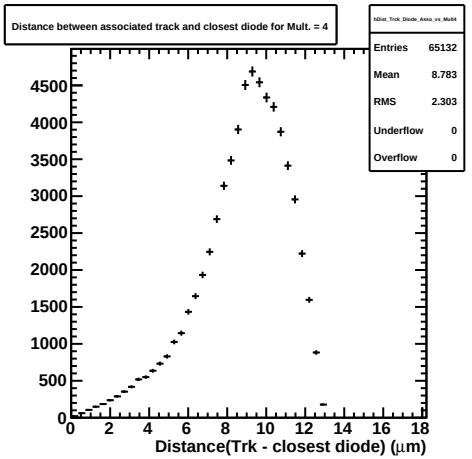

Tu vs Tv on matrix for non-associated tracks
Tv position (μm)
Tu position (μm)

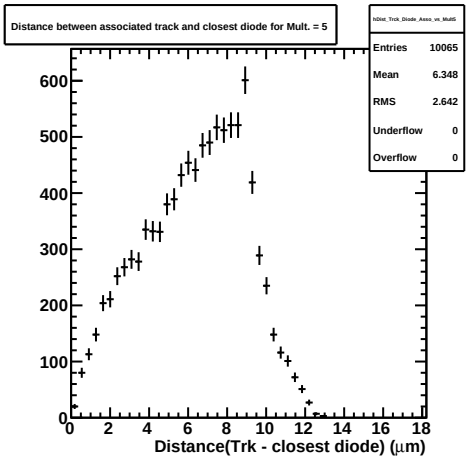

Probability of duplicated hits vs cluster multiplicity vs Track-distance to diode of earliest MATCHED hit
hnpixc_vs_TrkDistToDiode
Entries 530087
Mean x 2.511
Mean y 7.021
RMS x 2.13
RMS y 2.617
Distance(trk - closest diode) (μm)
# pixels/cluster

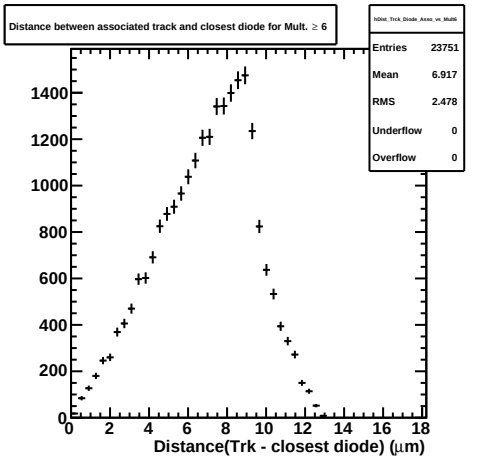

Distance between associated track and closest diode for Mult. = 1
hDist_Trck_Diode_Asso_vs_Mult1
Entries 142980
Mean 5.38
RMS 2.596
Underflow 0
Overflow 0
Distance(Trk - closest diode) (μm)

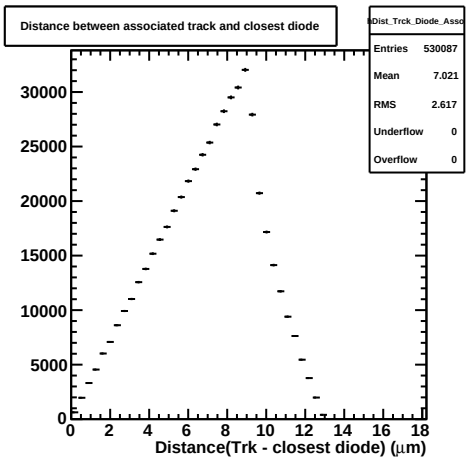

Distance between associated track and closest diode for Mult. = 2
hDist_Trck_Diode_Asso_vs_Mult2
Entries 212575
Mean 7.408
RMS 2.159
Underflow 0
Overflow 0
Distance(Trk - closest diode) (μm)

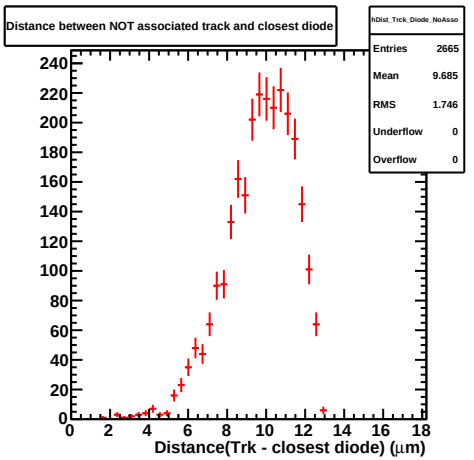

Distance between associated track and closest diode for Mult. = 3
hDist_Trck_Diode_Asso_vs_Mult3
Entries 75584
Mean 7.642
RMS 2.467
Underflow 0
Overflow 0
Distance(Trk - closest diode) (μm)

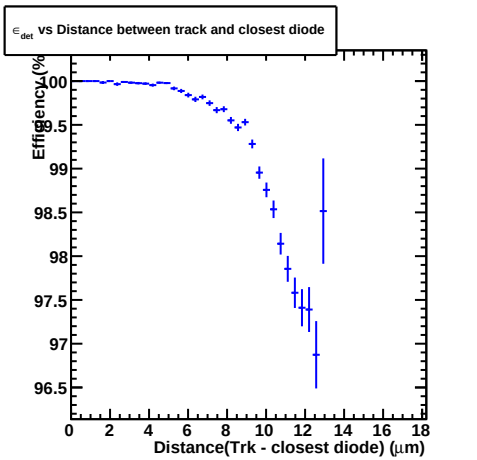

Distance between associated track and closest diode for Mult. = 4
hDist_Trck_Diode_Asso_vs_Mult4
Entries 65132
Mean 8.783
RMS 2.303
Underflow 0
Overflow 0
Distance(Trk - closest diode) (μm)


Distance between associated track and closest diode for Mult. = 5
hDist_Trck_Diode_Asso_vs_Mult5
Entries 10065
Mean 6.348
RMS 2.642
Underflow 0
Overflow 0
Distance(Trk - closest diode) (μm)

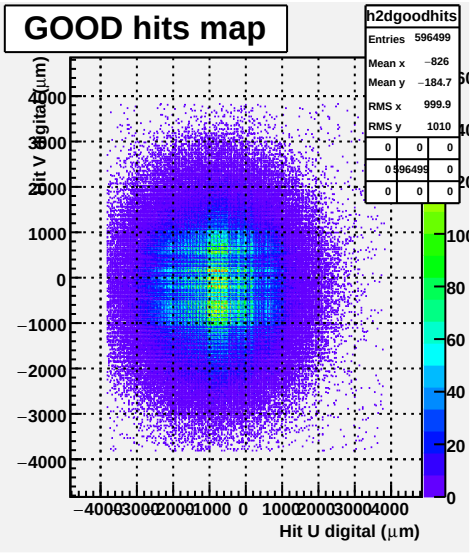

Distance between associated track and closest diode for Mult. ≥ 6
hDist_Trck_Diode_Asso_vs_Mult6
Entries 23751
Mean 6.917
RMS 2.478
Underflow 0
Overflow 0
Distance(Trk - closest diode) (μm)

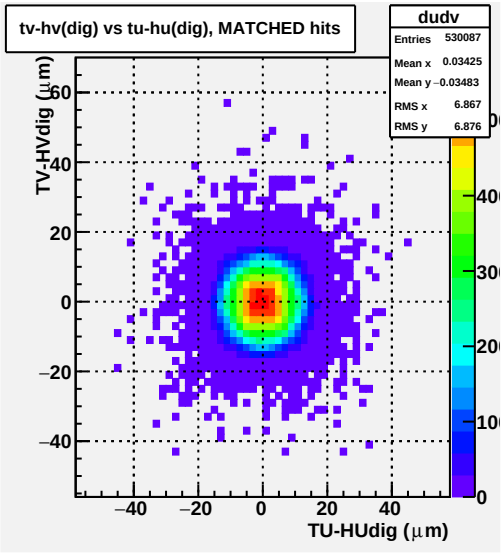

Distance between associated track and closest diode
hDist_Trck_Diode_Asso
Entries 530087
Mean 7.021
RMS 2.617
Underflow 0
Overflow 0
Distance(Trk - closest diode) (μm)

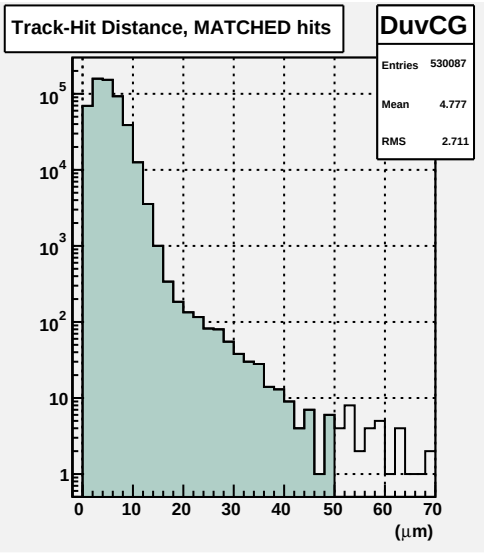

Distance between NOT associated track and closest diode
hDist_Trck_Diode_NoAsso
Entries 2665
Mean 9.685
RMS 1.746
Underflow 0
Overflow 0
Distance(Trk - closest diode) (μm)

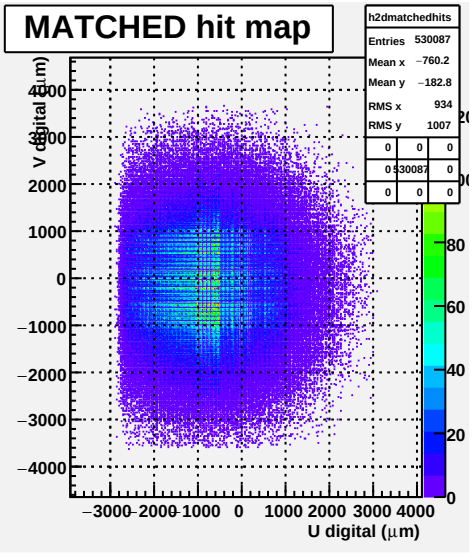

ϵ_{det} vs Distance between track and closest diode
Efficiency (%)
Distance(Trk - closest diode) (μm)

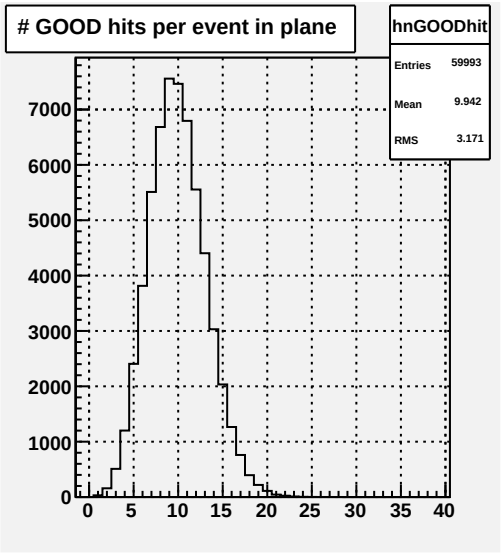
M35 ; run 35999; Pl 3; dist 50; eff 0.995; Seed 0.0; Neigh 0.0

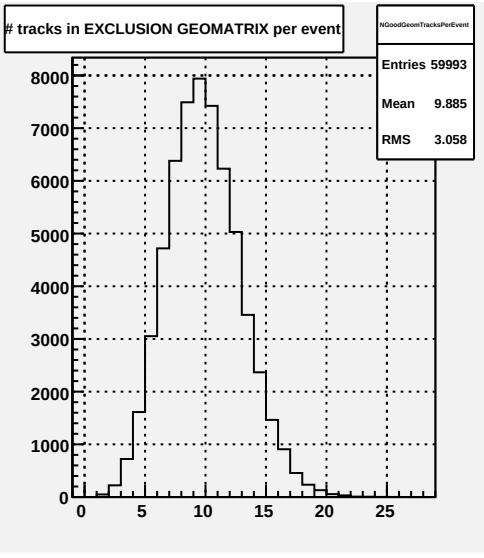


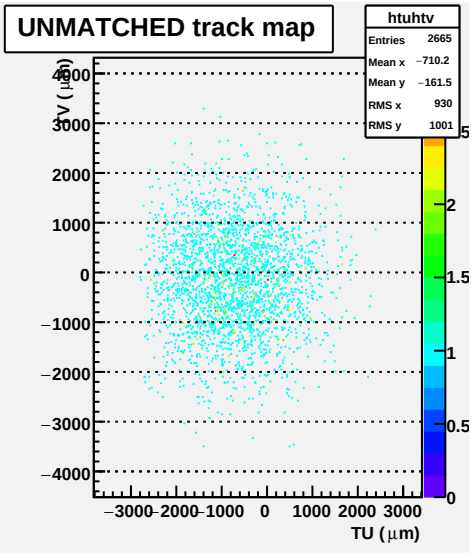


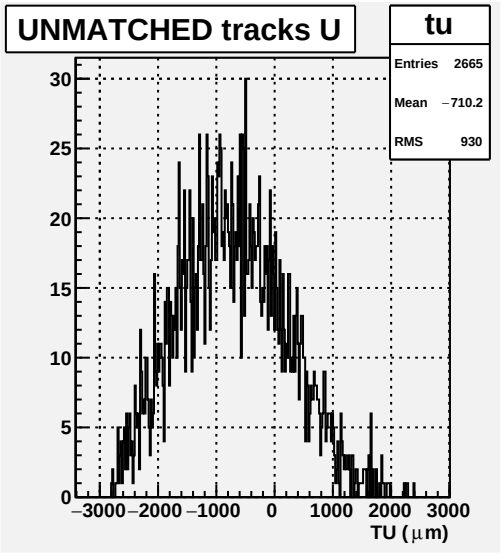


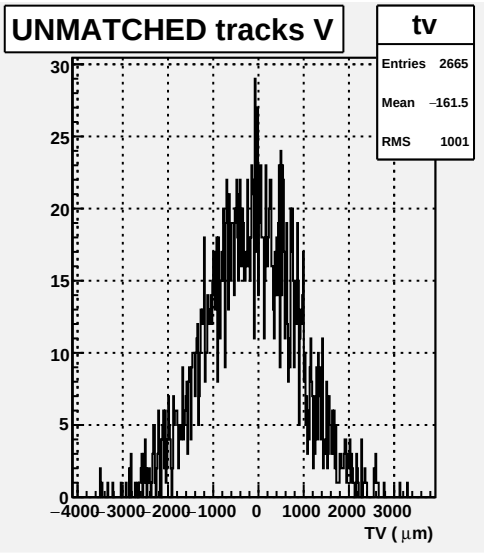


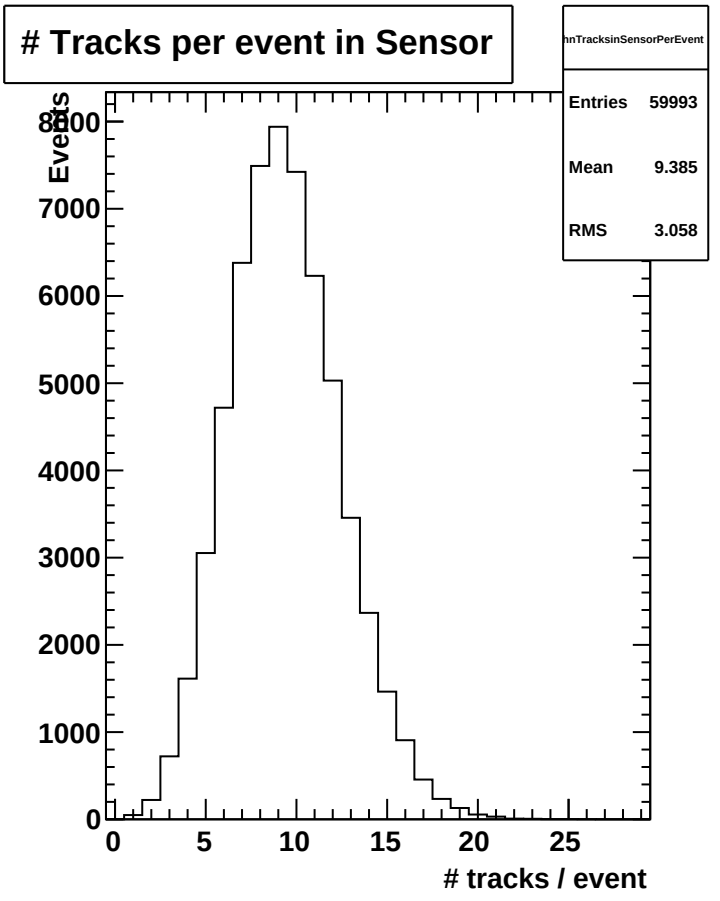


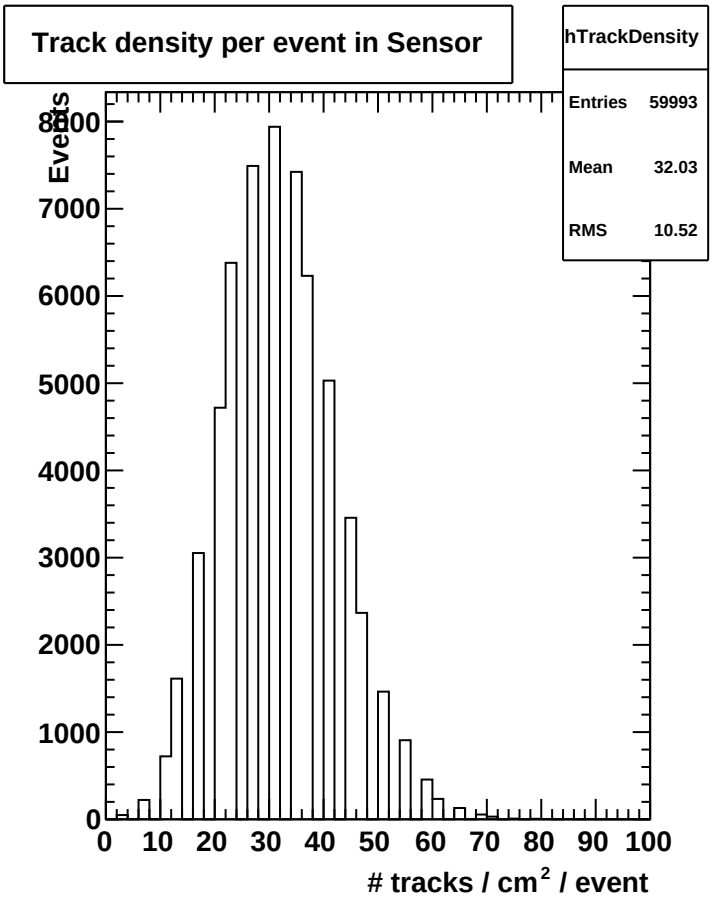


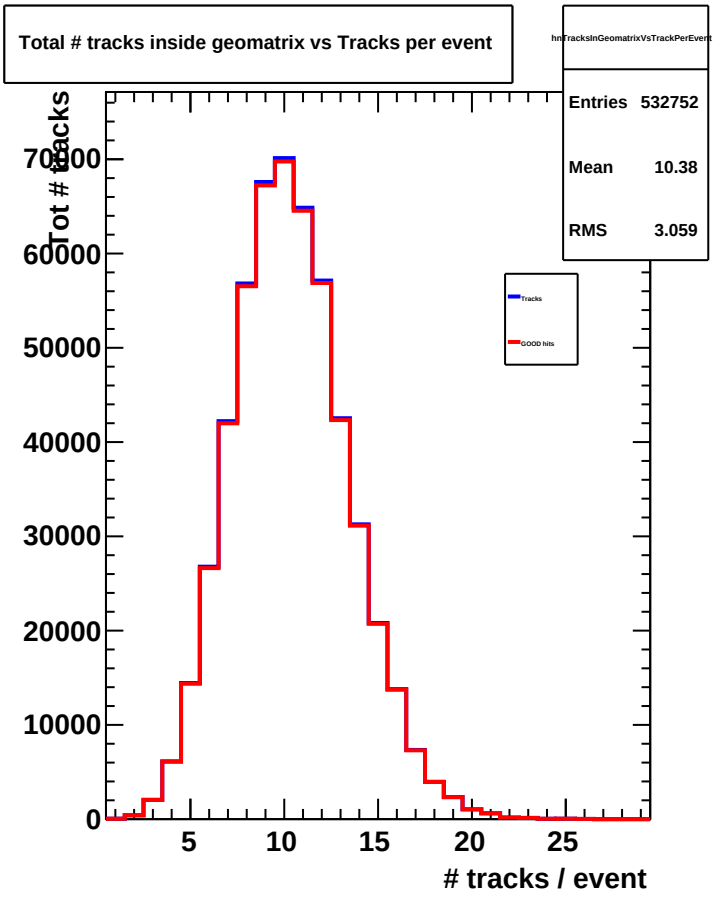


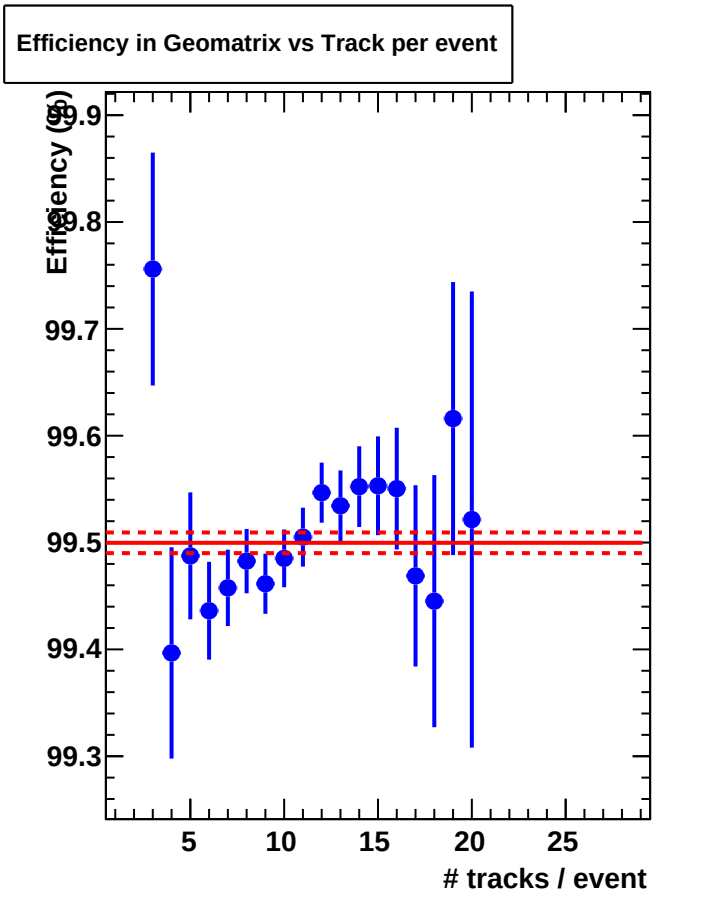




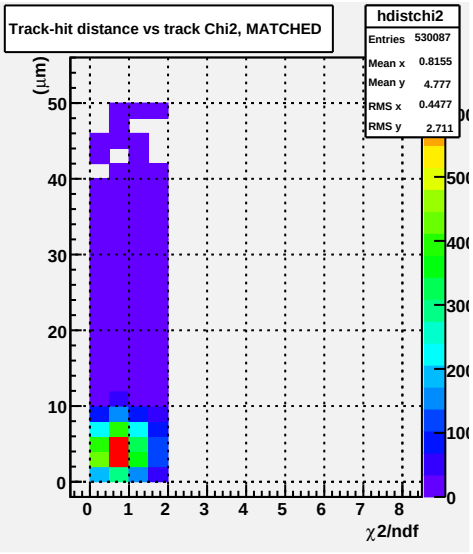

Tracks per event in Sensor
hnTracksinSensorPerEvent
Entries 59993
Mean 9.385
RMS 3.058
Events
tracks / event

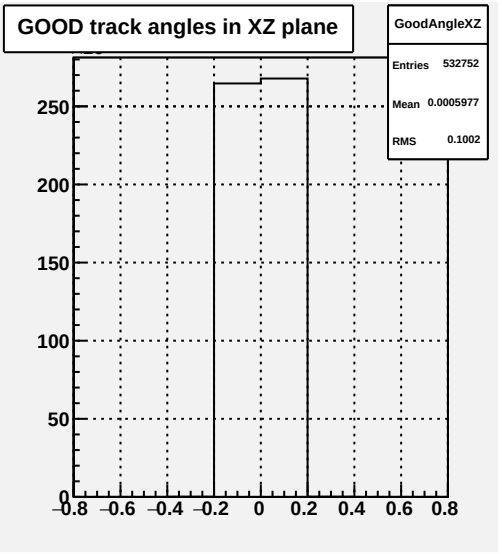

Track density per event in Sensor
hTrackDensity
Entries 59993
Mean 32.03
RMS 10.52
Events
tracks / cm^2 / event

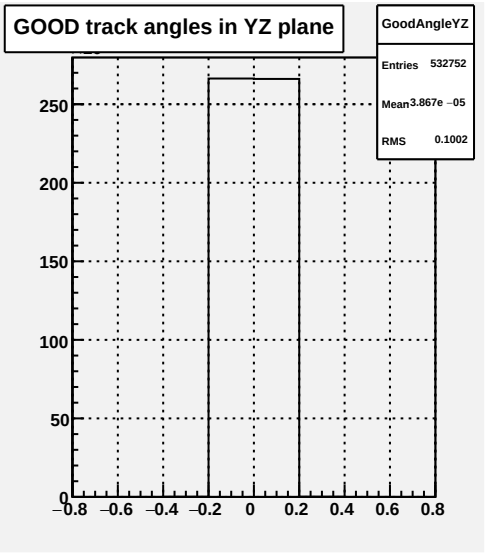

Total # tracks inside geomatrix vs Tracks per event
hnTracksInGeomatrixVsTrackPerEvent
Entries 532752
Mean 10.38
RMS 3.059
Tot # tracks
Tracks
GOOD hits
tracks / event

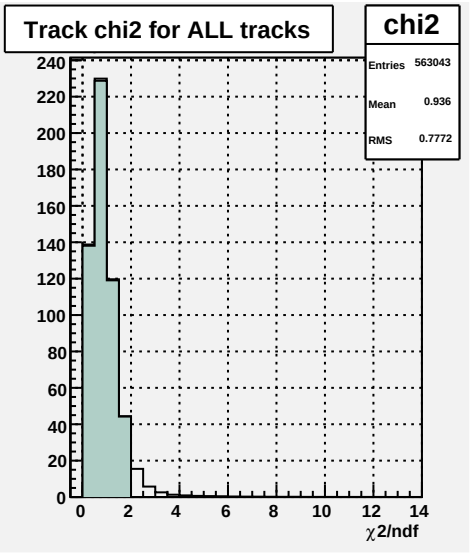

Efficiency in Geomatrix vs Track per event
Efficiency (%)
tracks / event

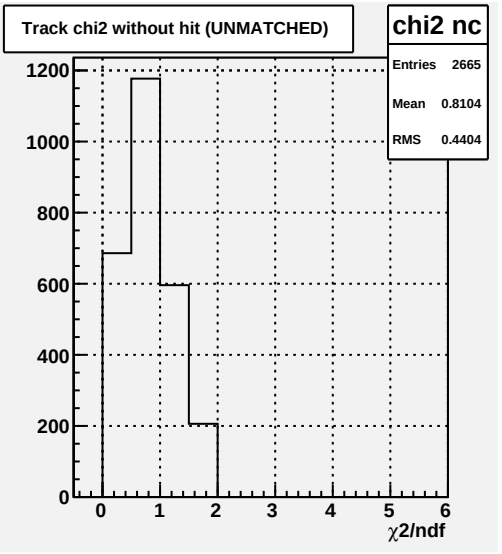
M35 ; run 35999; Pl 3; dist 50; eff 0.995; Seed 0.0; Neigh 0.0

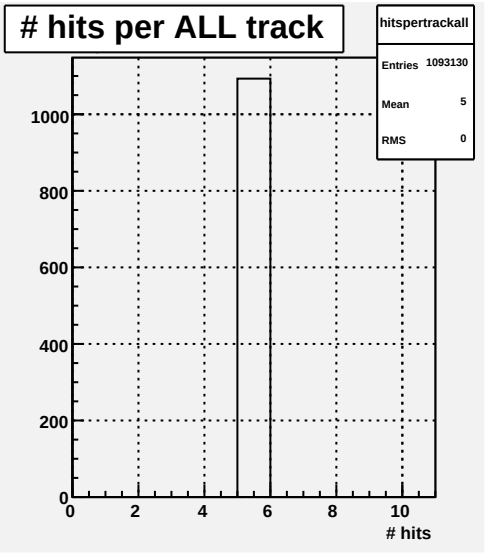


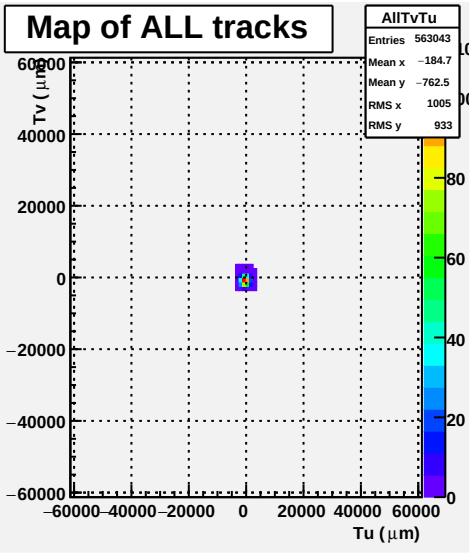


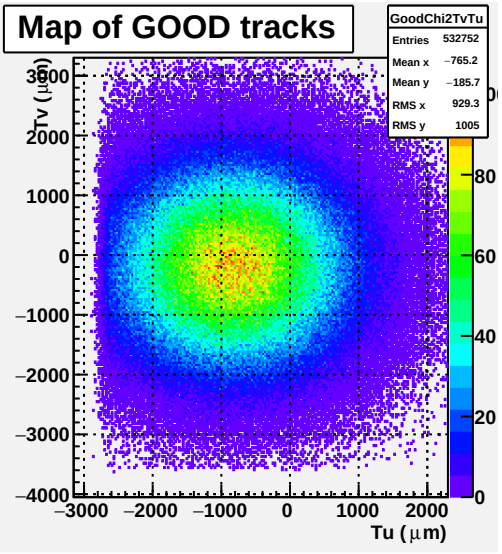


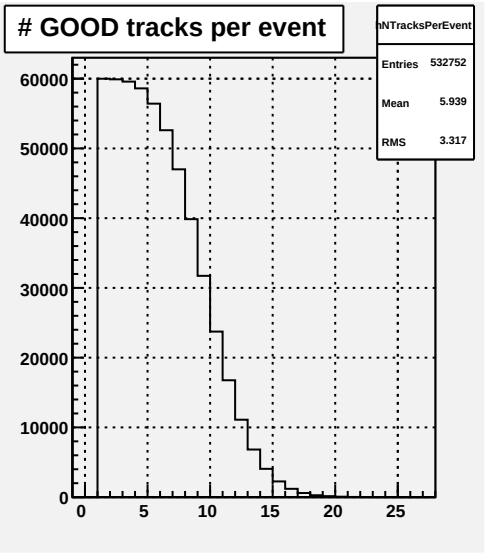




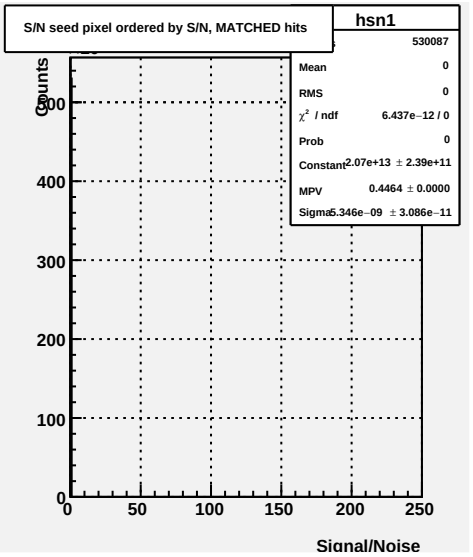


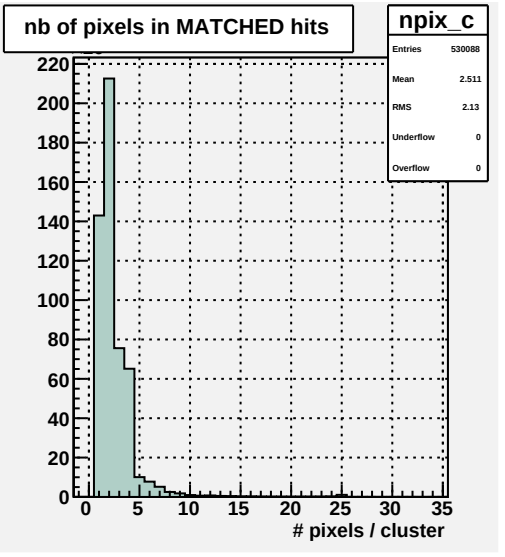


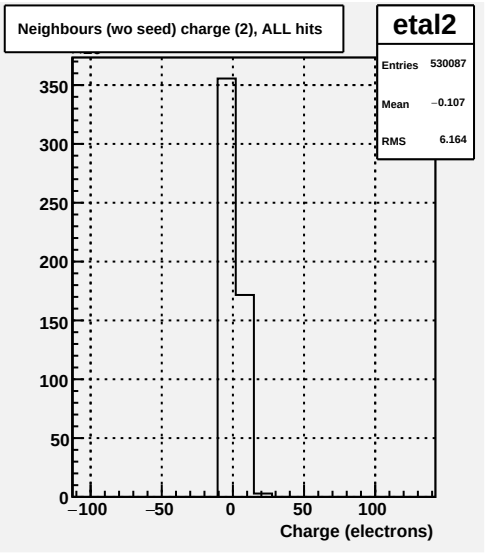


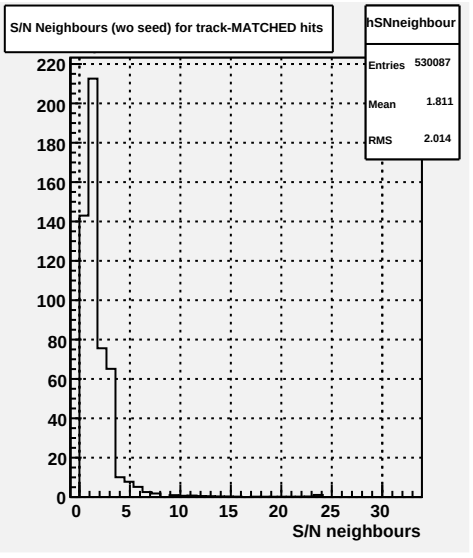


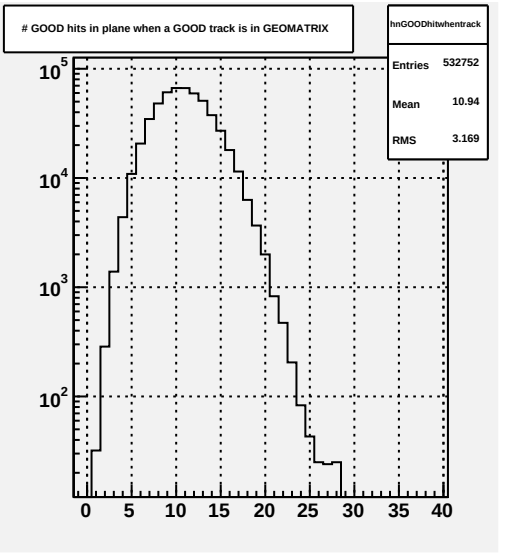
M35 ; run 35999; Pl 3; dist 50; eff 0.995; Seed 0.0; Neigh 0.0

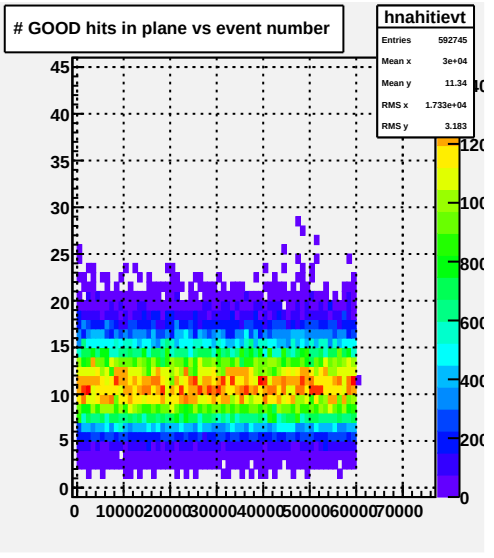


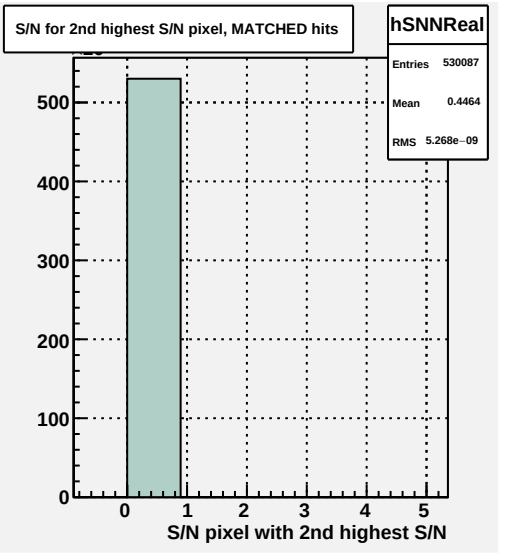


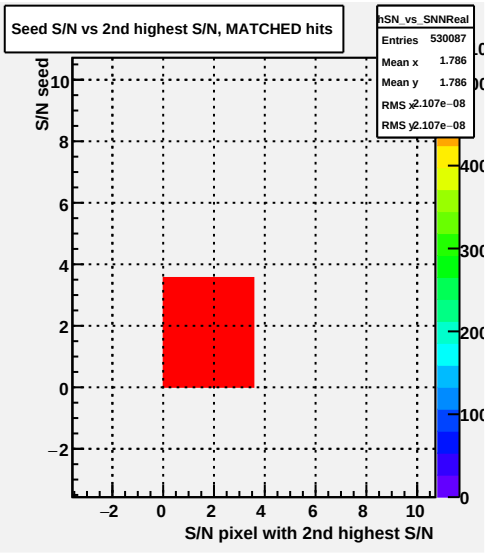




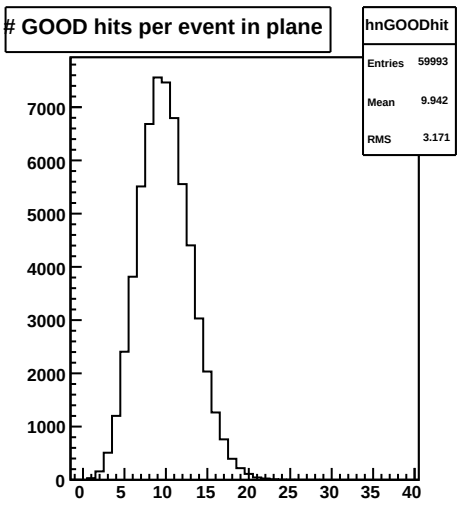


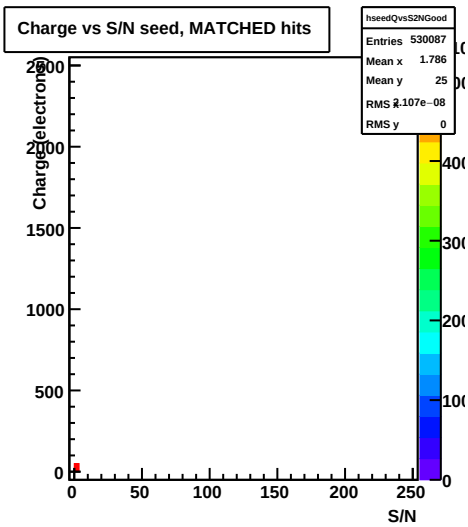


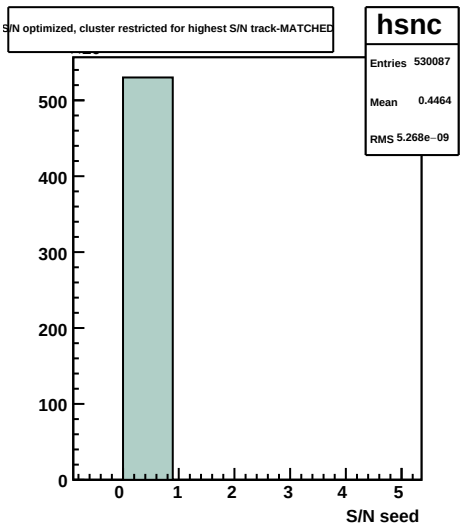


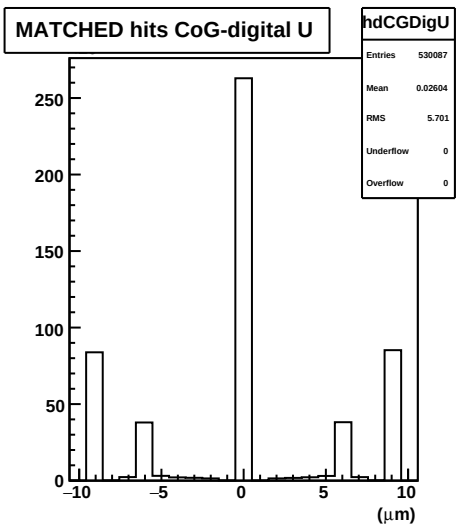


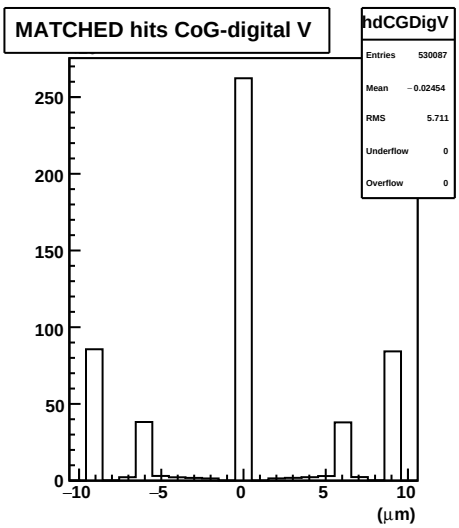
M35 ; run 35999; Pl 3; dist 50; eff 0.995; Seed 0.0; Neigh 0.0

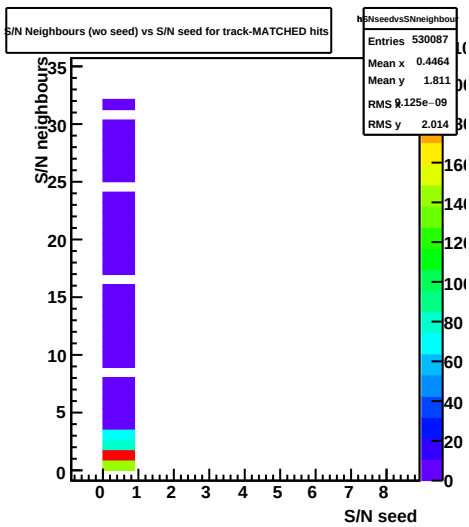


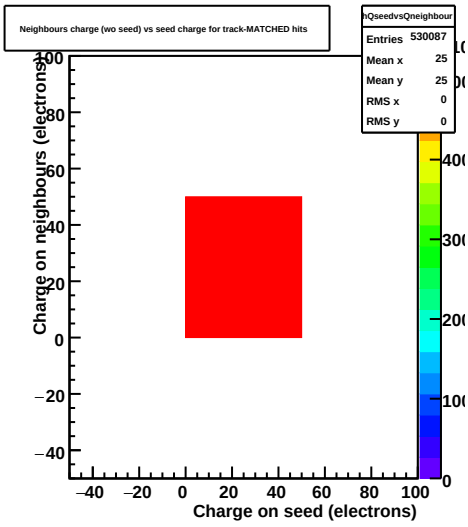


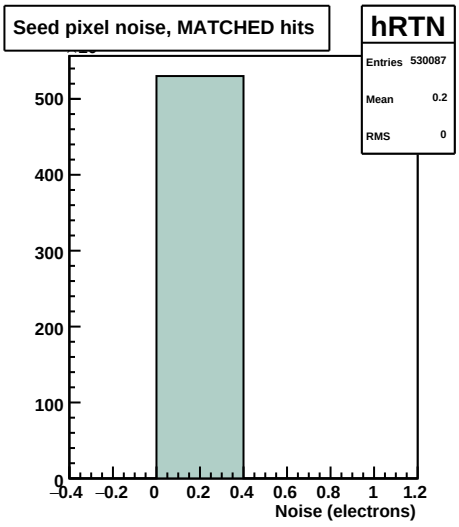


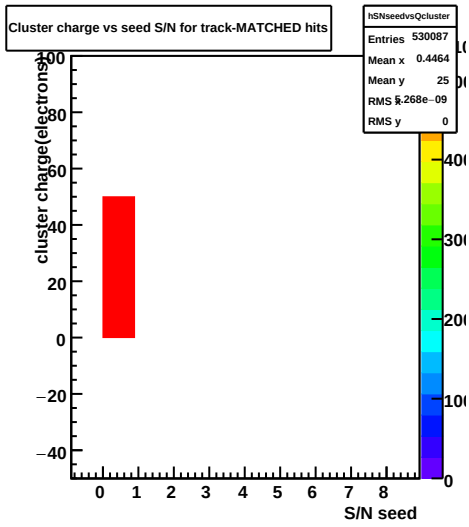




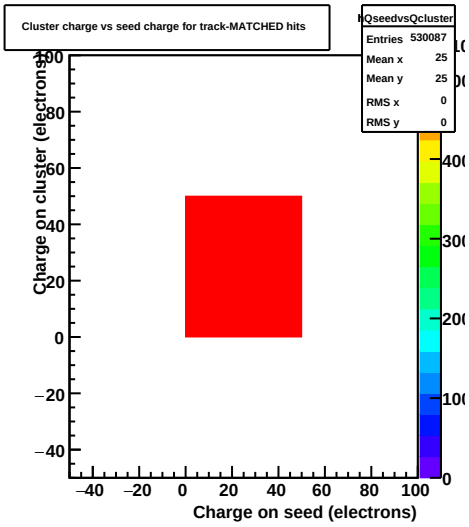


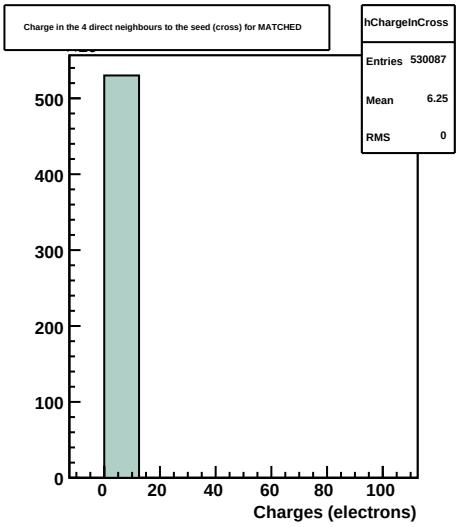


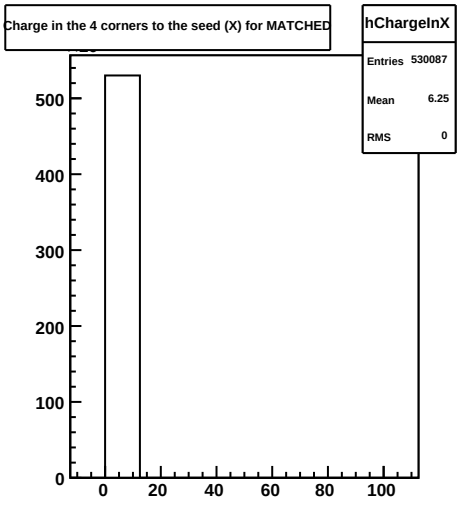


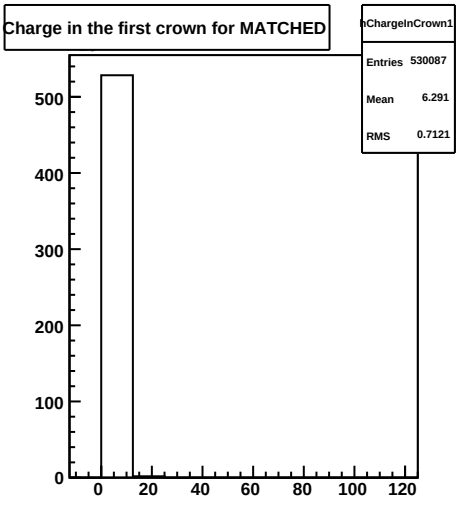


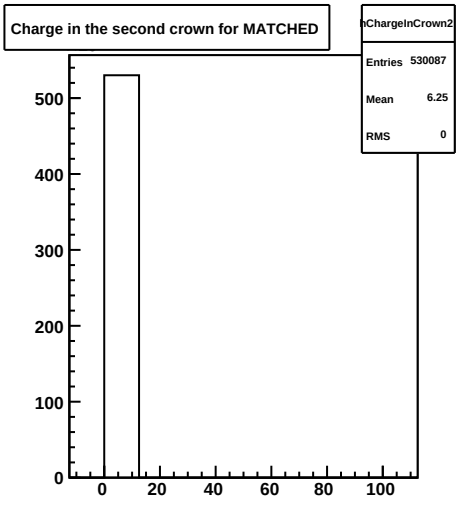
M35 ; run 35999; Pl 3; dist 50; eff 0.995; Seed 0.0; Neigh 0.0

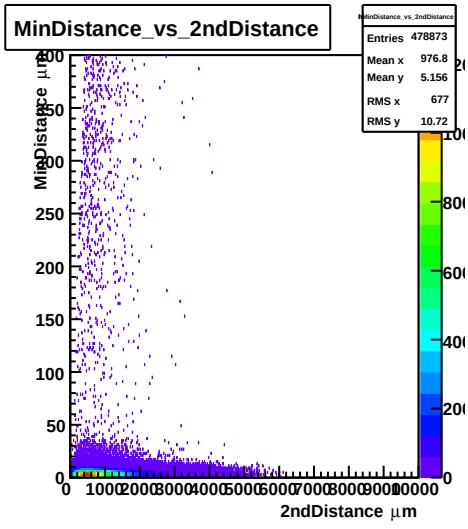


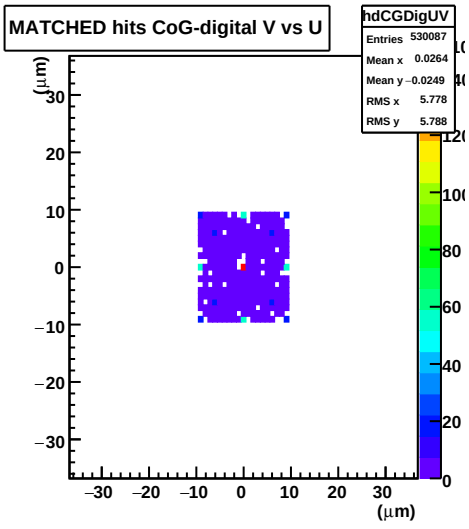


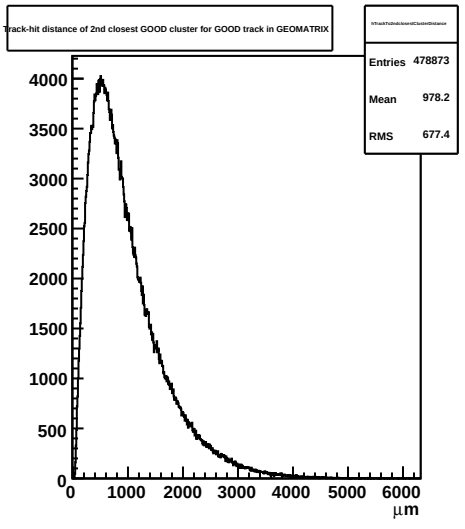


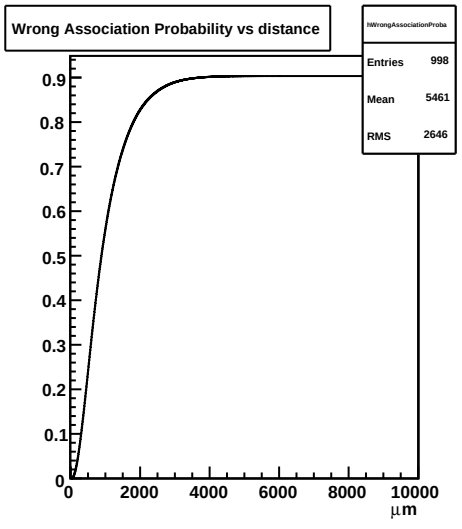




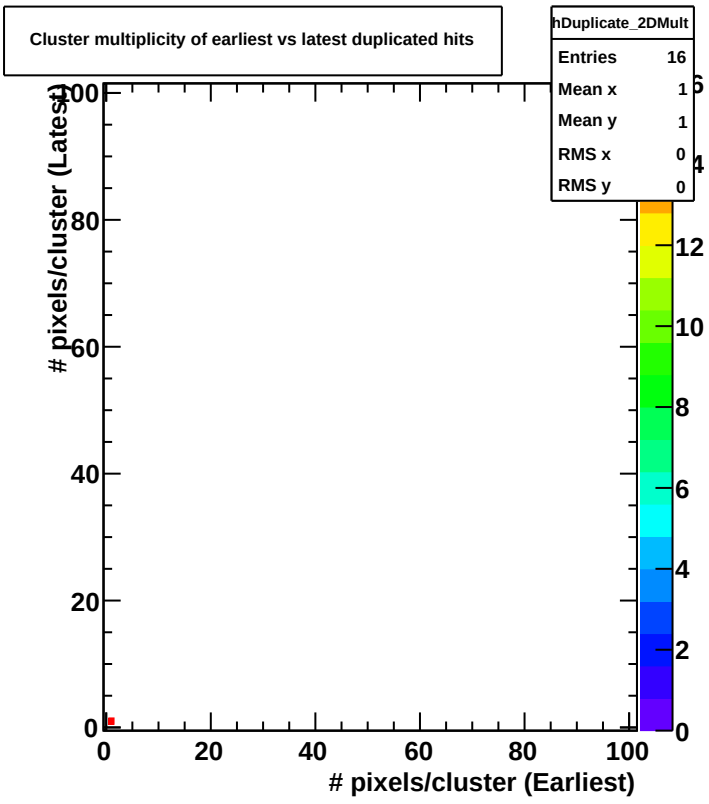


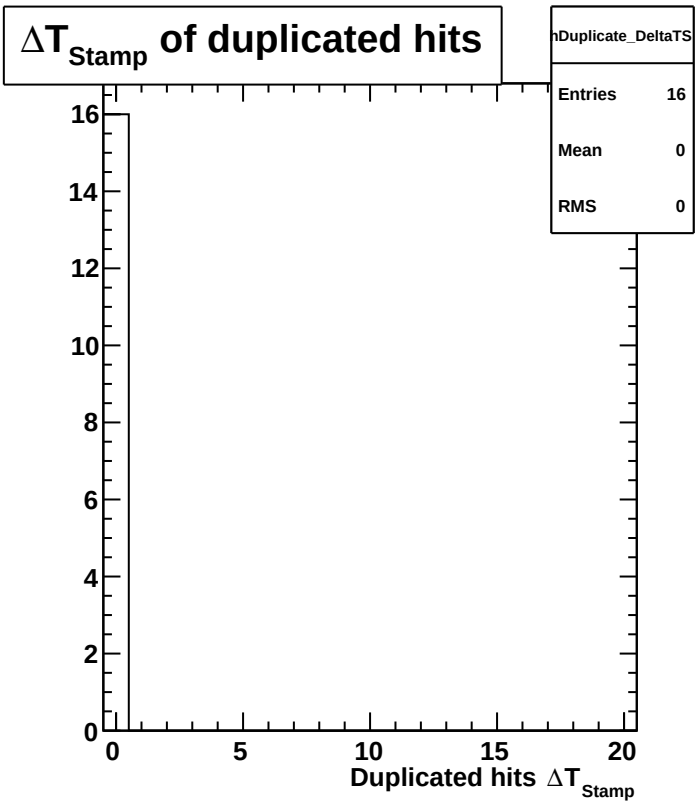


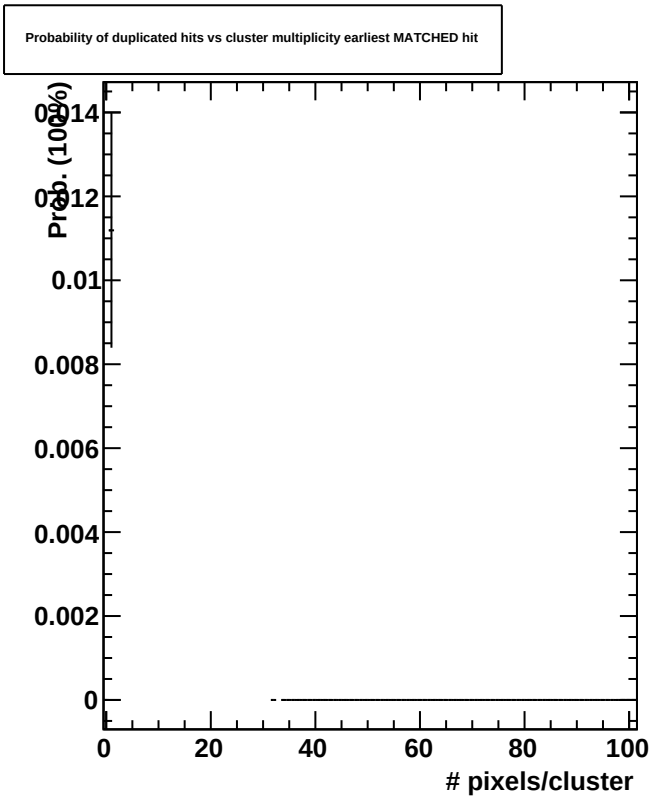


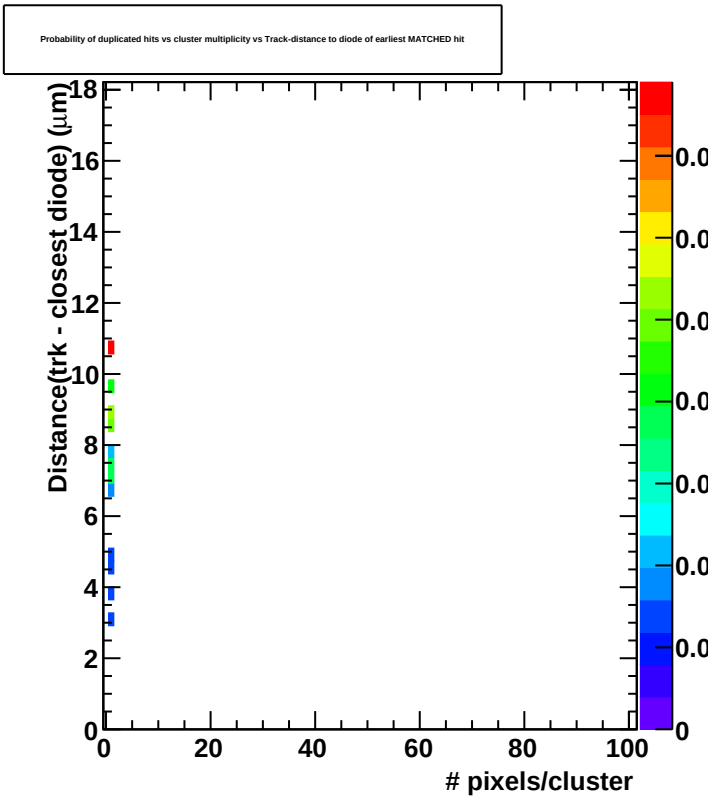


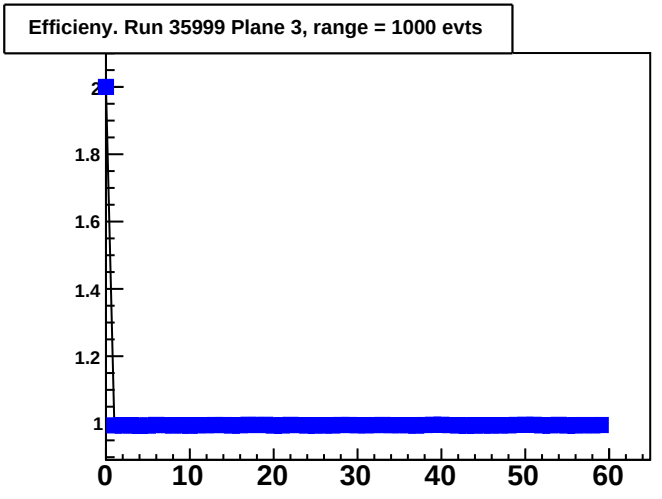
M35 ; run 35999; Pl 3; dist 50; eff 0.995; Seed 0.0; Neigh 0.0

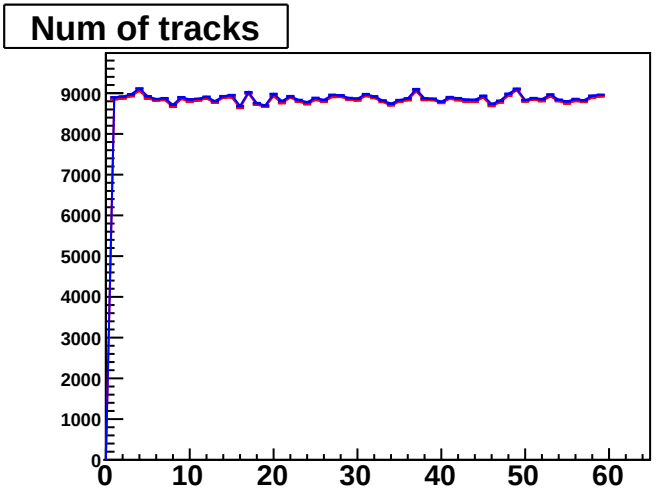


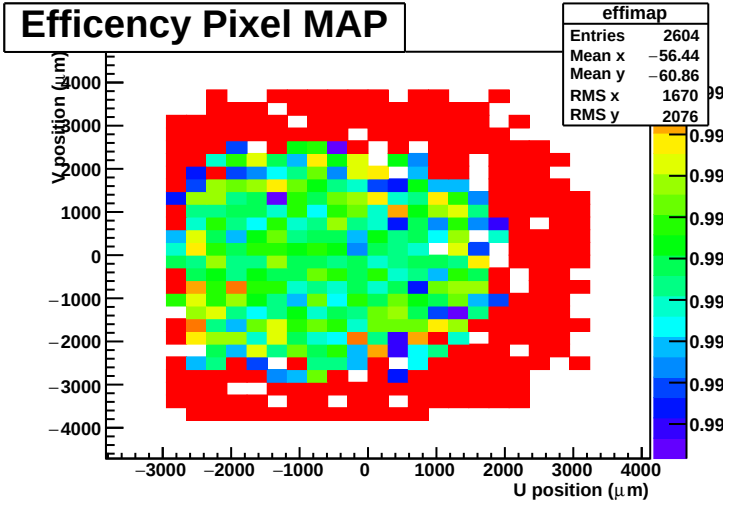


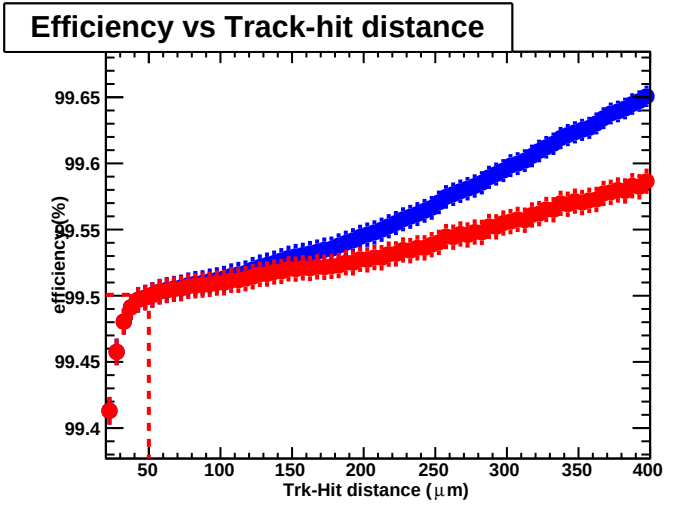


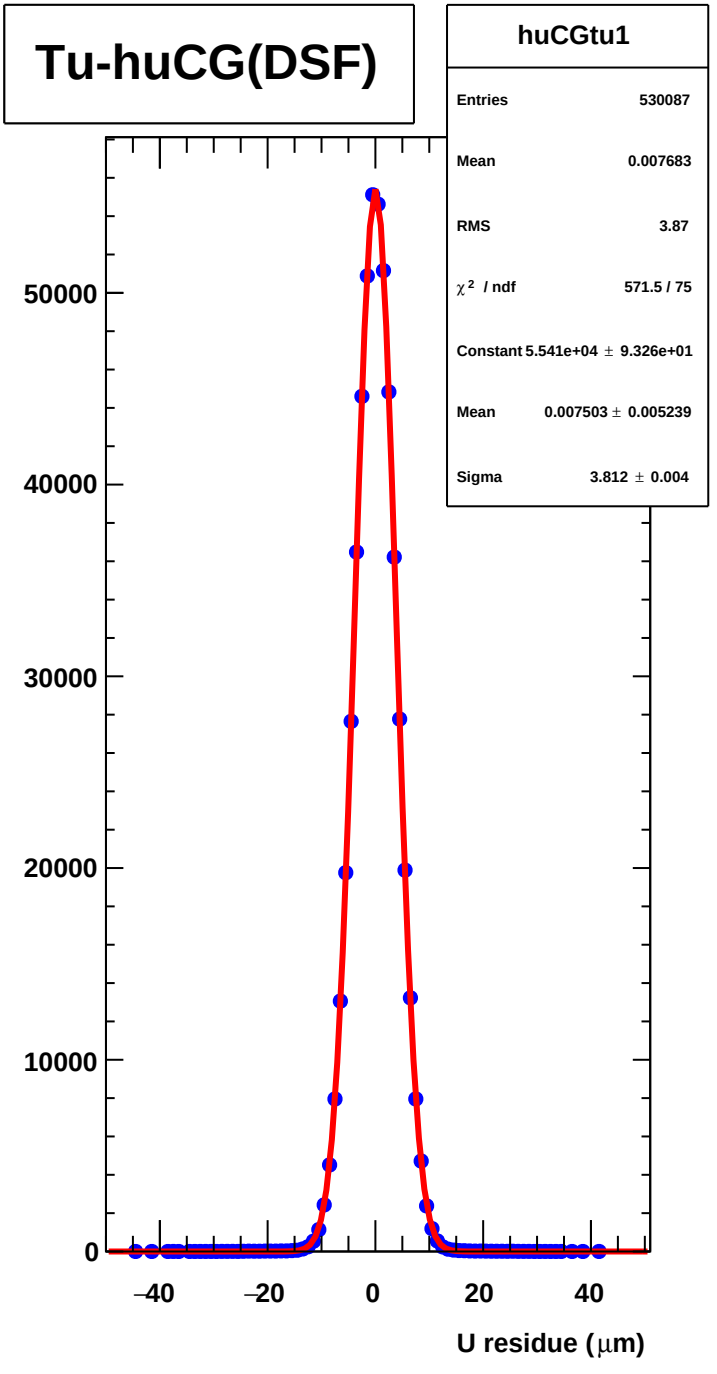


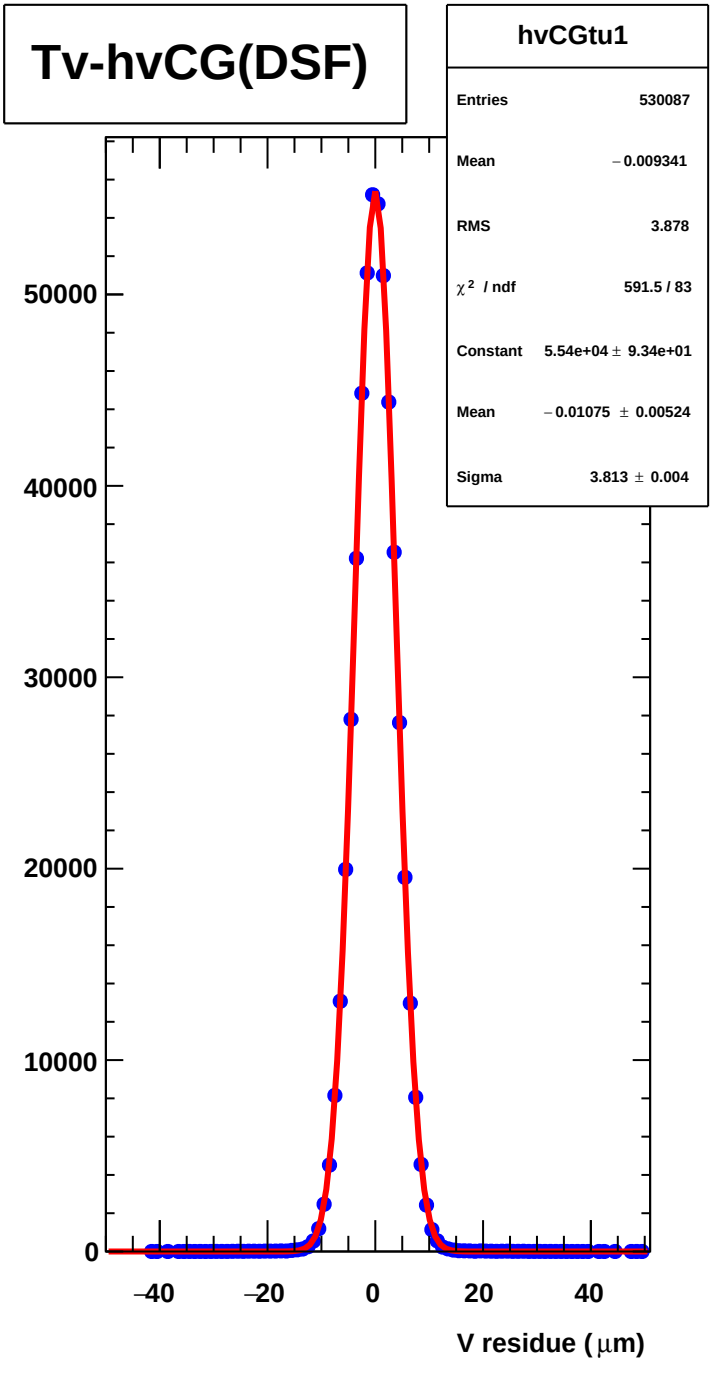

Efficieny. Run 35999 Plane 3, range = 1000 evts
2
1.8
1.6
1.4
1.2
1
0
10
20
30
40
50
60

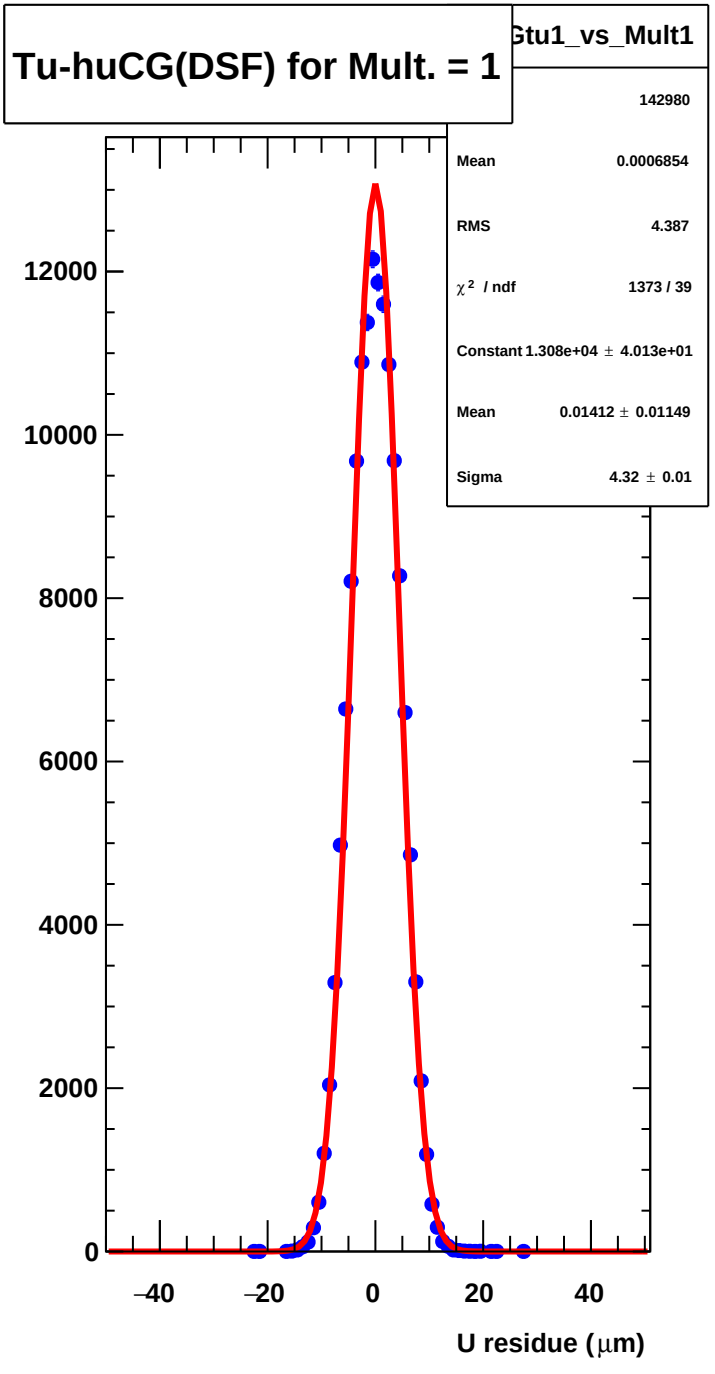

Num of tracks
9000
8000
7000
6000
5000
4000
3000
2000
1000
0
0
10
20
30
40
50
60

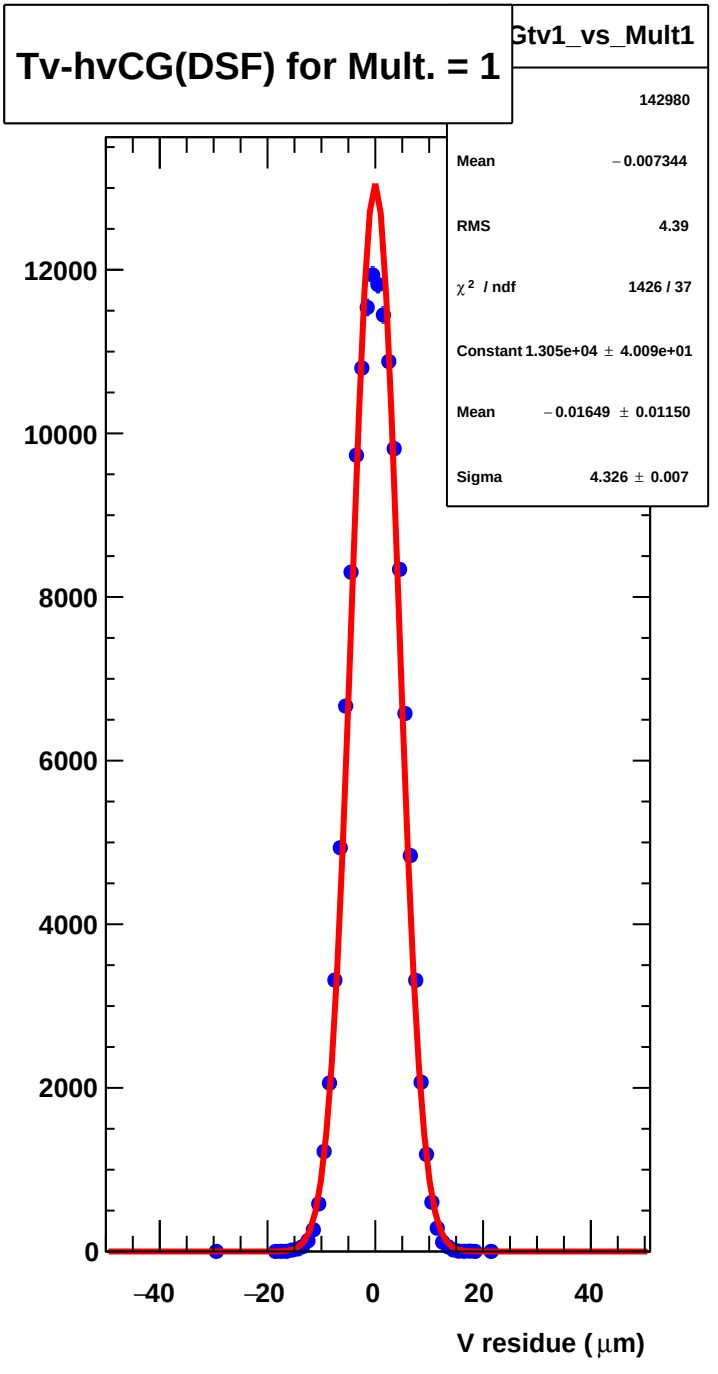

Efficency Pixel MAP
effimap
Entries 2604
Mean x −56.44
Mean y −60.86
RMS x 1670
RMS y 2076
V position (μm)
U position (μm)
4000
3000
2000
1000
0
−1000
−2000
−3000
−4000
−3000
−2000
−1000
0
1000
2000
3000
4000
0.99

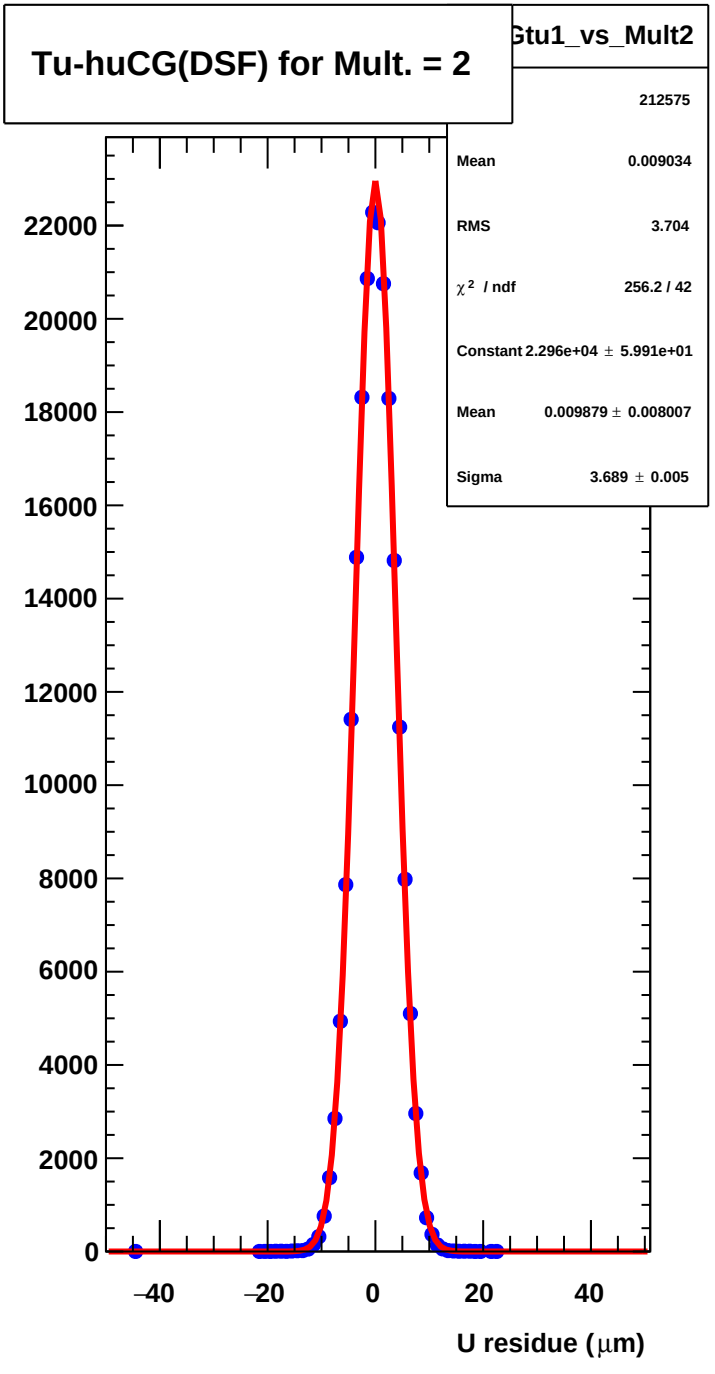

Efficiency vs Track-hit distance
efficiency (%)
99.65
99.6
99.55
99.5
99.45
99.4
50
100
150
200
250
300
350
400
Trk-Hit distance (μm)

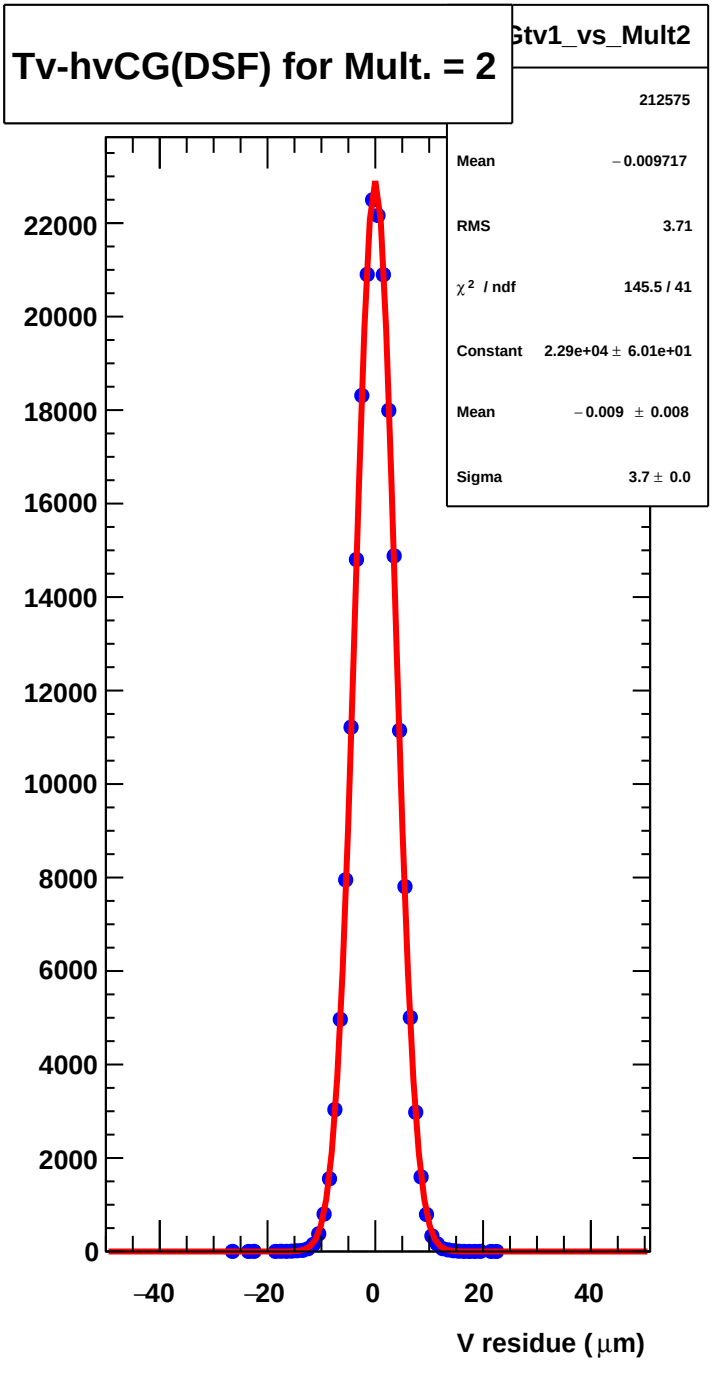

Tu-huCG(DSF)
huCGtu1
Entries 530087
Mean 0.007683
RMS 3.87
χ² / ndf 571.5 / 75
Constant 5.541e+04 ± 9.326e+01
Mean 0.007503 ± 0.005239
Sigma 3.812 ± 0.004
50000
40000
30000
20000
10000
0
−40
−20
0
20
40
U residue (μm)

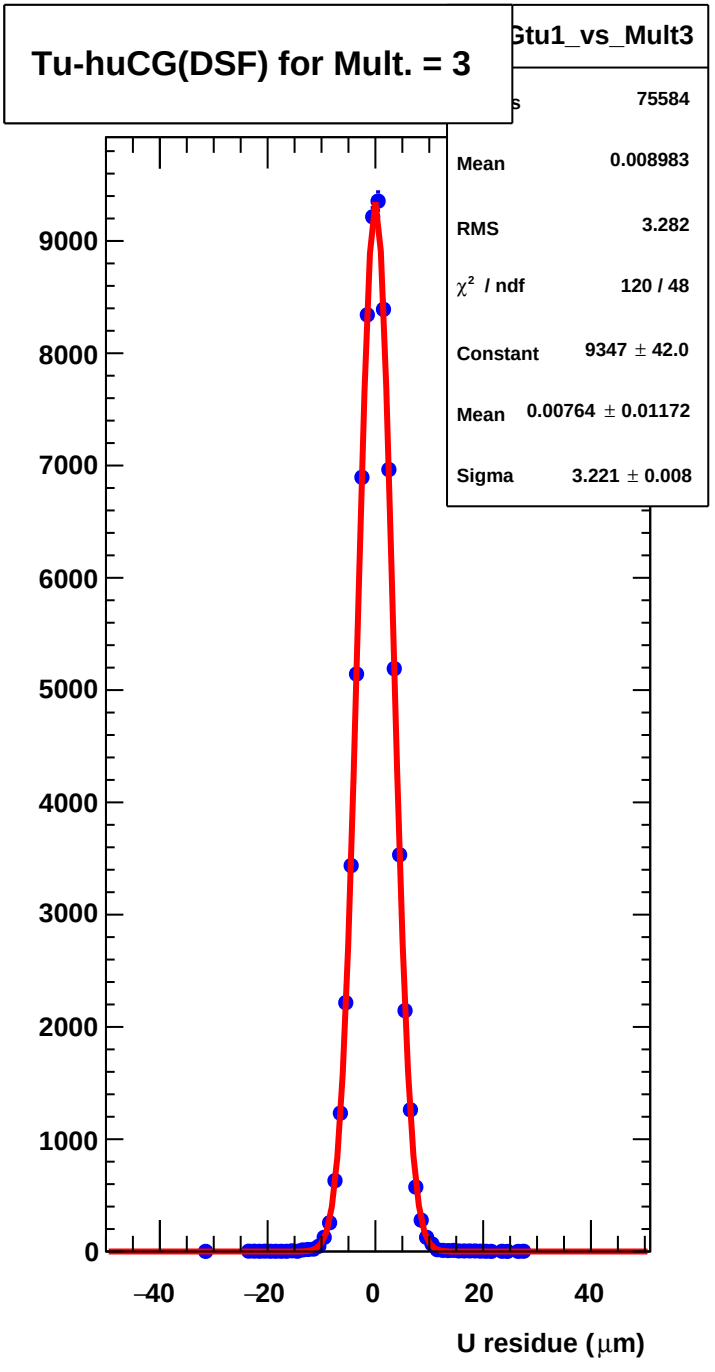

Tv-hvCG(DSF)
hvCGtu1
Entries 530087
Mean −0.009341
RMS 3.878
χ² / ndf 591.5 / 83
Constant 5.54e+04 ± 9.34e+01
Mean −0.01075 ± 0.00524
Sigma 3.813 ± 0.004
50000
40000
30000
20000
10000
0
−40
−20
0
20
40
V residue (μm)

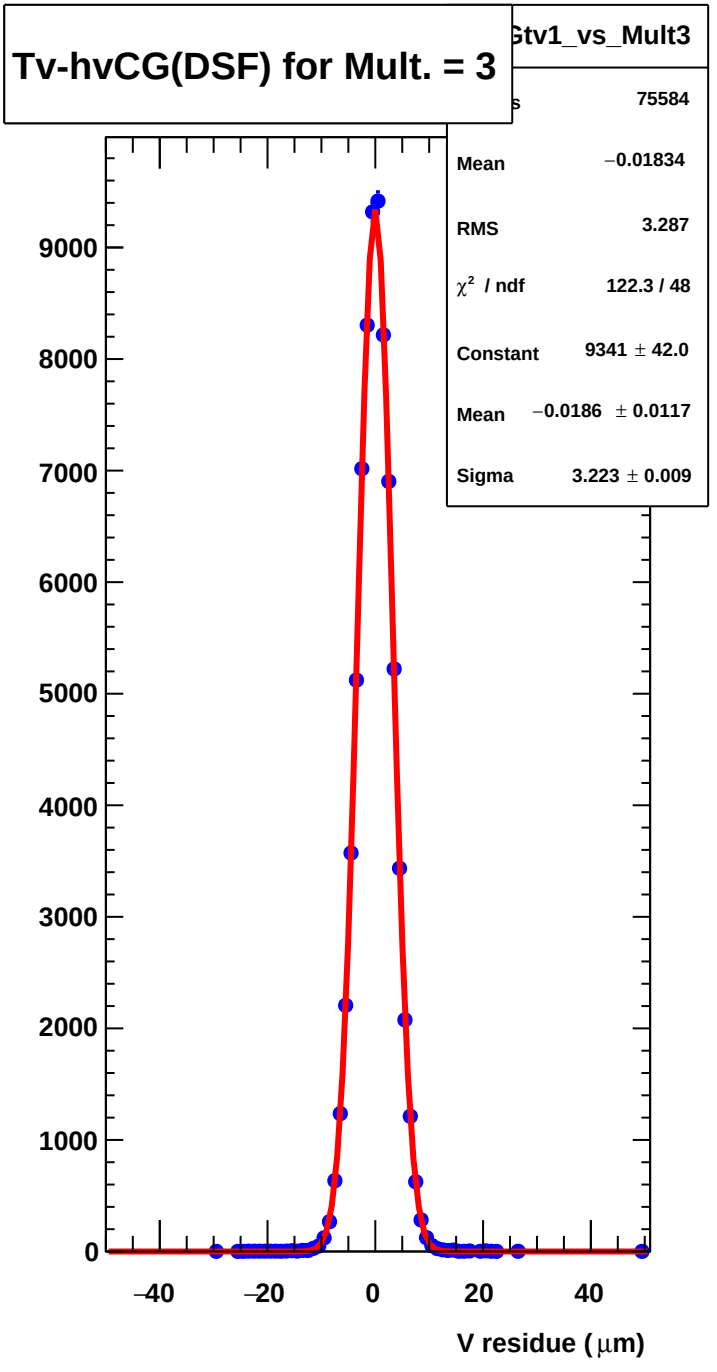

Tu-huCG(DSF) for Mult. = 1
Gtu1_vs_Mult1
142980
Mean 0.0006854
RMS 4.387
χ² / ndf 1373 / 39
Constant 1.308e+04 ± 4.013e+01
Mean 0.01412 ± 0.01149
Sigma 4.32 ± 0.01
12000
10000
8000
6000
4000
2000
0
−40
−20
0
20
40
U residue (μm)

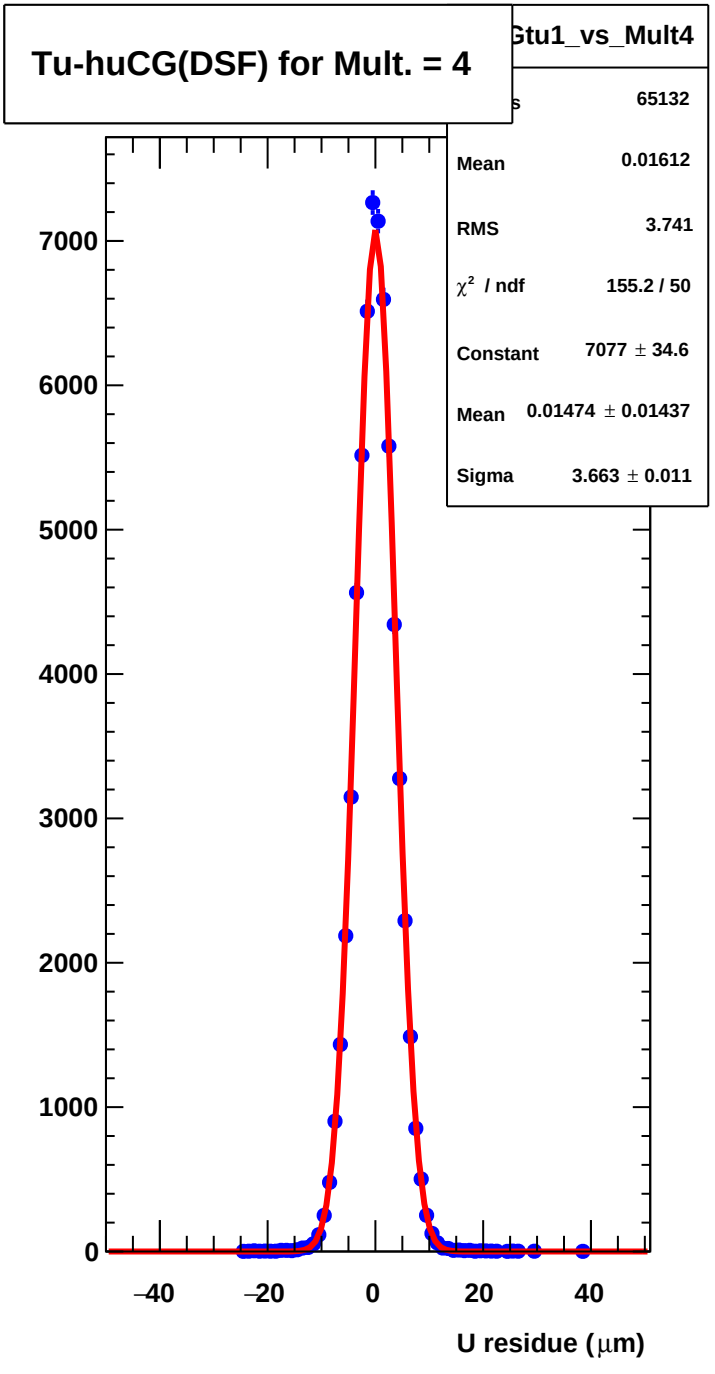

Tv-hvCG(DSF) for Mult. = 1
Gtv1_vs_Mult1
142980
Mean −0.007344
RMS 4.39
χ² / ndf 1426 / 37
Constant 1.305e+04 ± 4.009e+01
Mean −0.01649 ± 0.01150
Sigma 4.326 ± 0.007
12000
10000
8000
6000
4000
2000
0
−40
−20
0
20
40
V residue (μm)

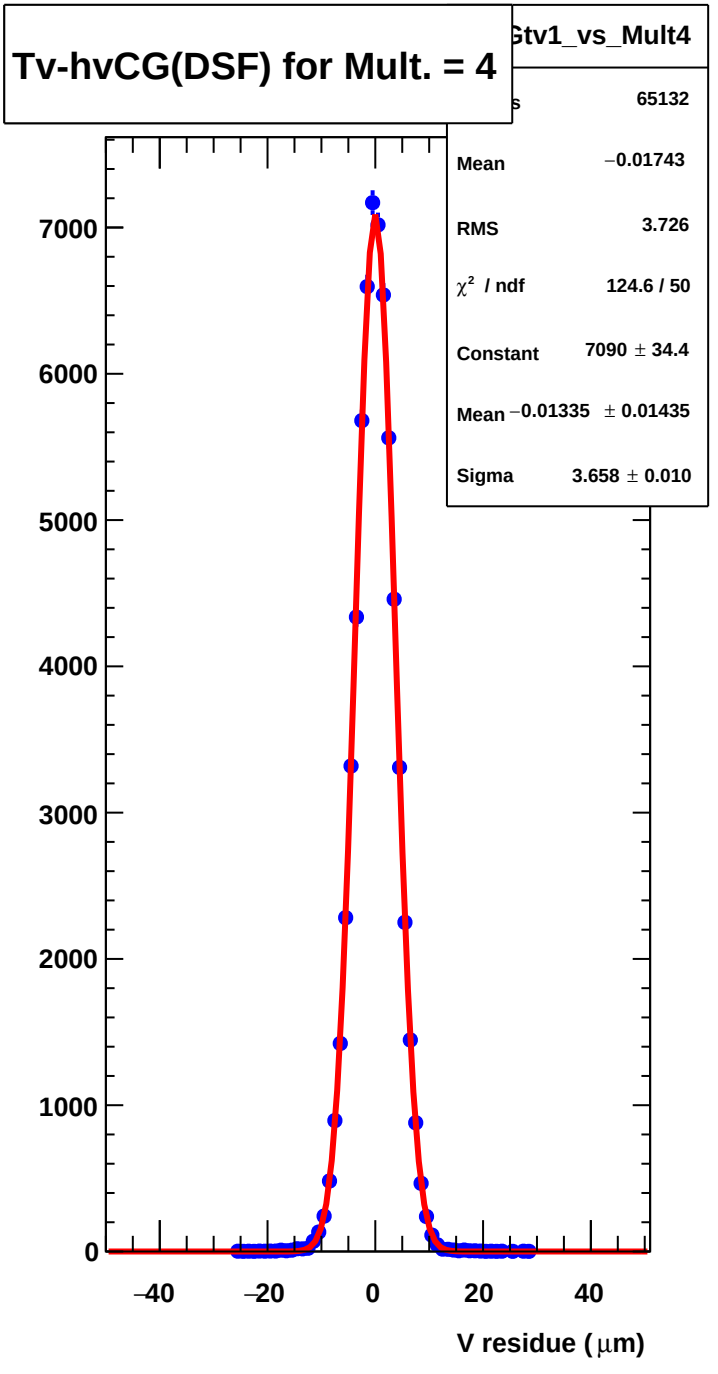

Tu-huCG(DSF) for Mult. = 2
Gtu1_vs_Mult2
212575
Mean 0.009034
RMS 3.704
χ² / ndf 256.2 / 42
Constant 2.296e+04 ± 5.991e+01
Mean 0.009879 ± 0.008007
Sigma 3.689 ± 0.005
22000
20000
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
−40
−20
0
20
40
U residue (μm)

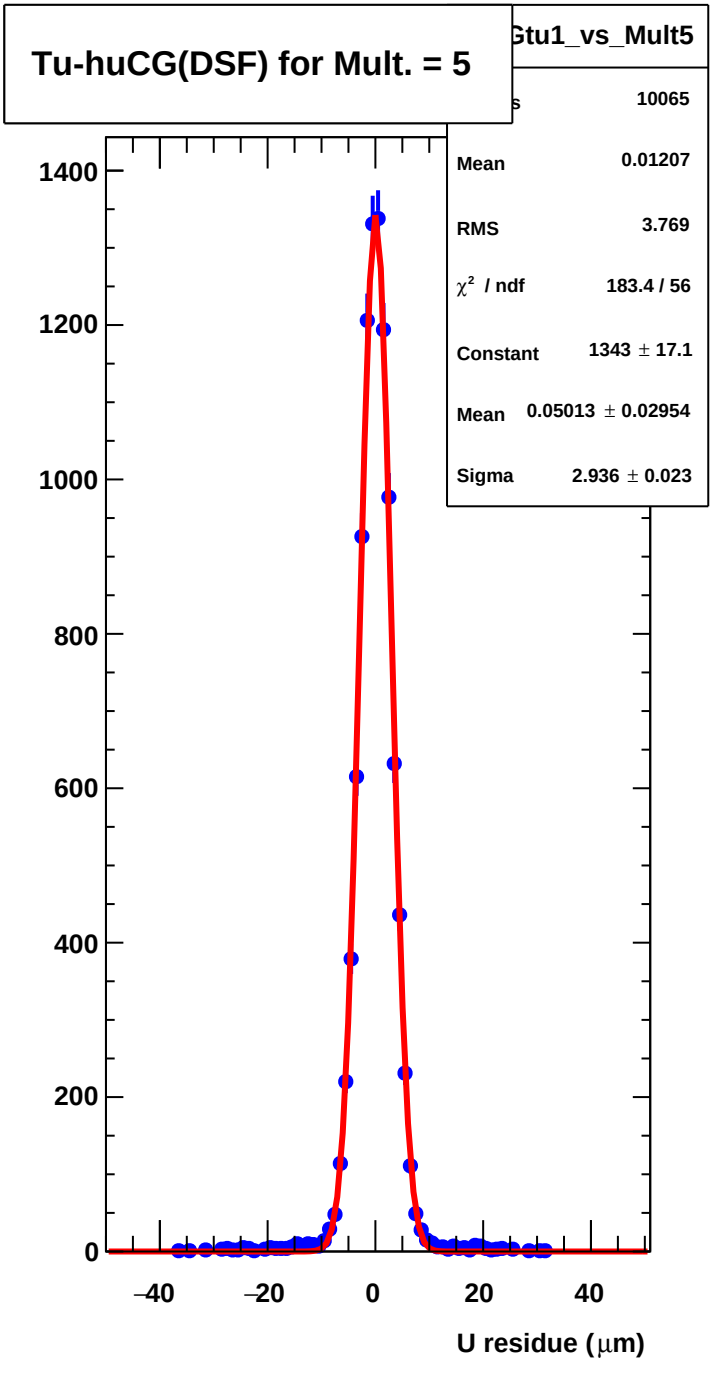

Tv-hvCG(DSF) for Mult. = 2
Gtv1_vs_Mult2
212575
Mean −0.009717
RMS 3.71
χ² / ndf 145.5 / 41
Constant 2.29e+04 ± 6.01e+01
Mean −0.009 ± 0.008
Sigma 3.7 ± 0.0
22000
20000
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
−40
−20
0
20
40
V residue (μm)

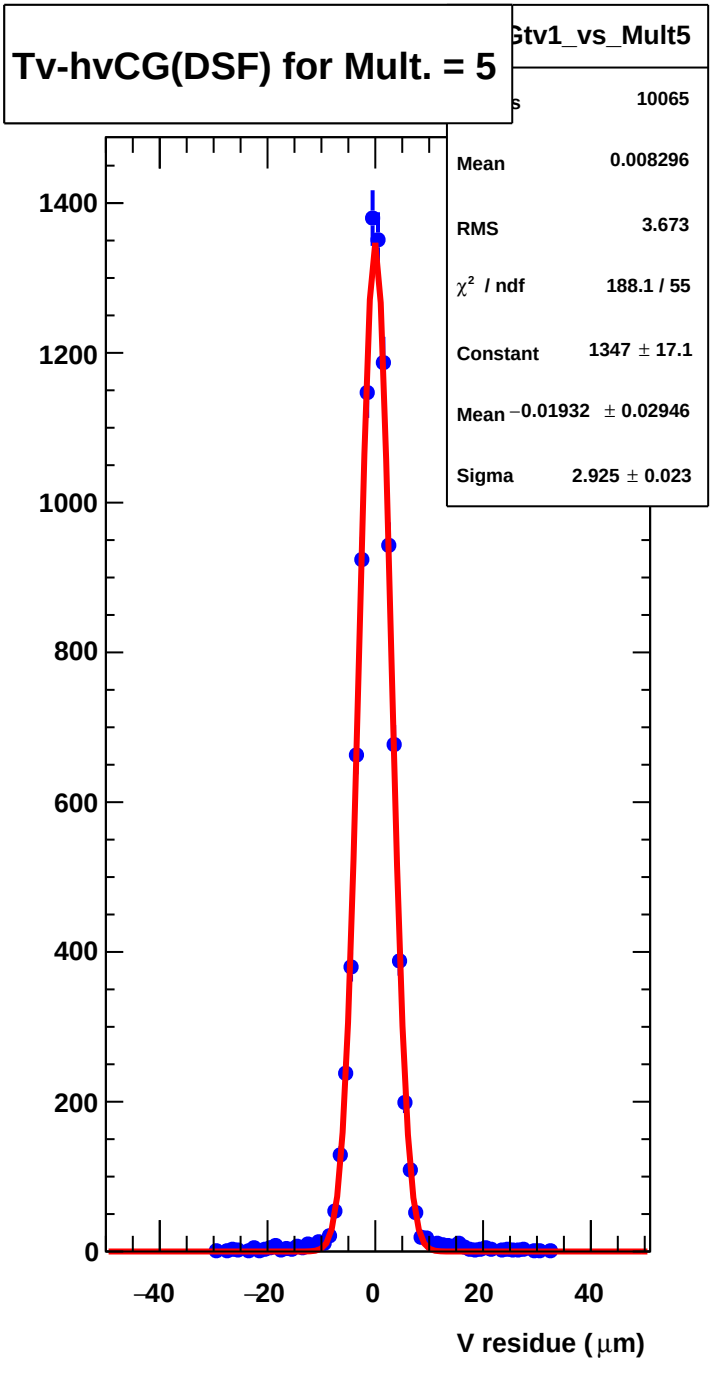

Tu-huCG(DSF) for Mult. = 3
Gtu1_vs_Mult3
s 75584
Mean 0.008983
RMS 3.282
χ² / ndf 120 / 48
Constant 9347 ± 42.0
Mean 0.00764 ± 0.01172
Sigma 3.221 ± 0.008
9000
8000
7000
6000
5000
4000
3000
2000
1000
0
−40
−20
0
20
40
U residue (μm)

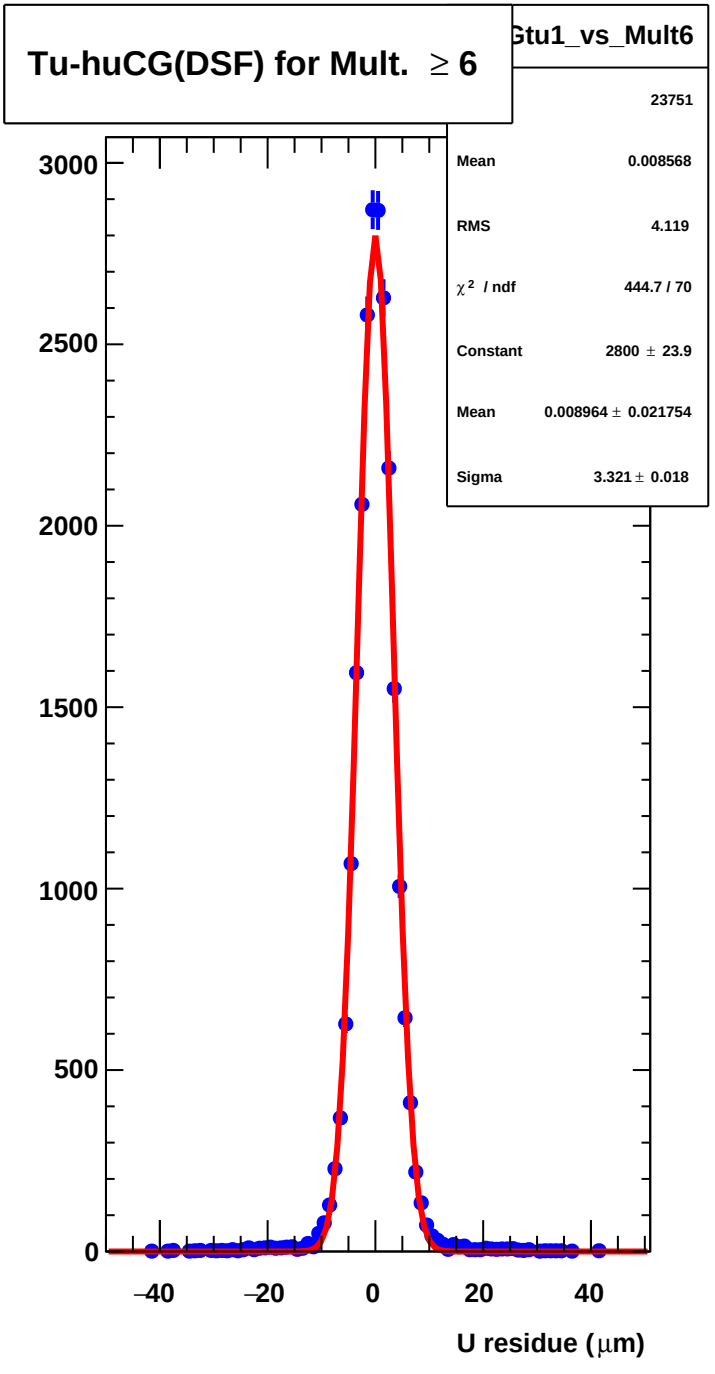

Tv-hvCG(DSF) for Mult. = 3
Gtv1_vs_Mult3
s 75584
Mean −0.01834
RMS 3.287
χ² / ndf 122.3 / 48
Constant 9341 ± 42.0
Mean −0.0186 ± 0.0117
Sigma 3.223 ± 0.009
9000
8000
7000
6000
5000
4000
3000
2000
1000
0
−40
−20
0
20
40
V residue (μm)

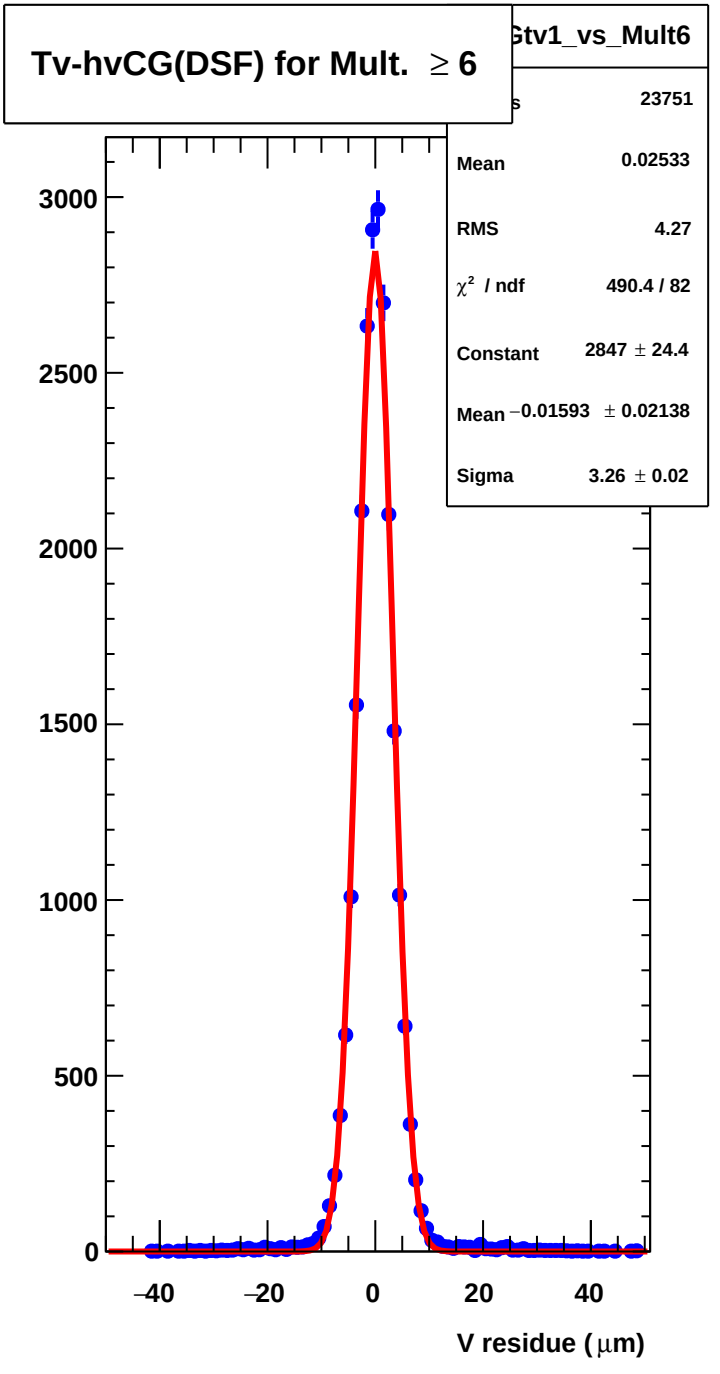

Tu-huCG(DSF) for Mult. = 4
Gtu1_vs_Mult4
65132
Mean 0.01612
RMS 3.741
χ² / ndf 155.2 / 50
Constant 7077 ± 34.6
Mean 0.01474 ± 0.01437
Sigma 3.663 ± 0.011
7000
6000
5000
4000
3000
2000
1000
0
−40
−20
0
20
40
U residue (μm)

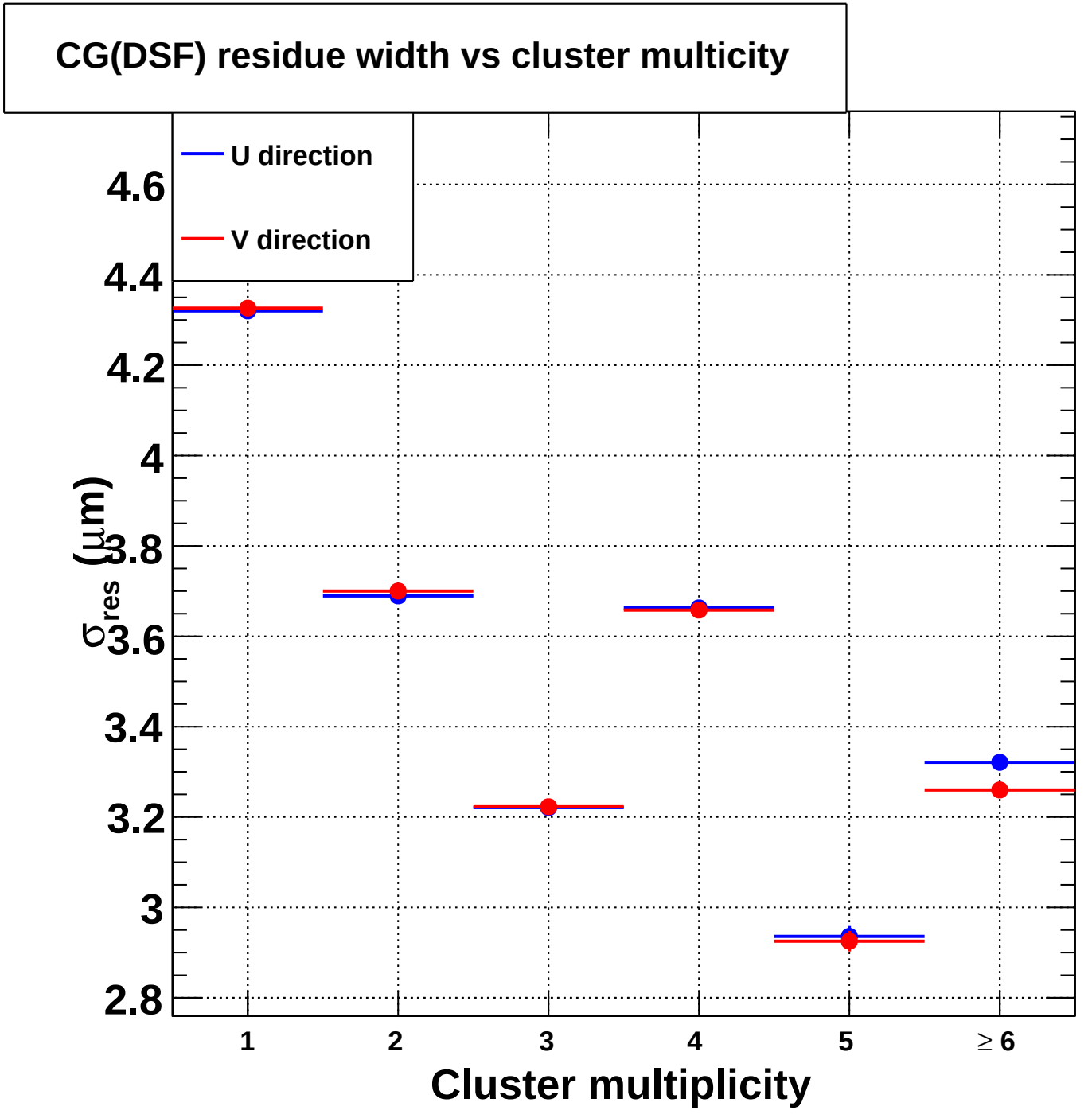

Tv-hvCG(DSF) for Mult. = 4
Gtv1_vs_Mult4
65132
Mean −0.01743
RMS 3.726
χ² / ndf 124.6 / 50
Constant 7090 ± 34.4
Mean −0.01335 ± 0.01435
Sigma 3.658 ± 0.010
7000
6000
5000
4000
3000
2000
1000
0
−40
−20
0
20
40
V residue (μm)

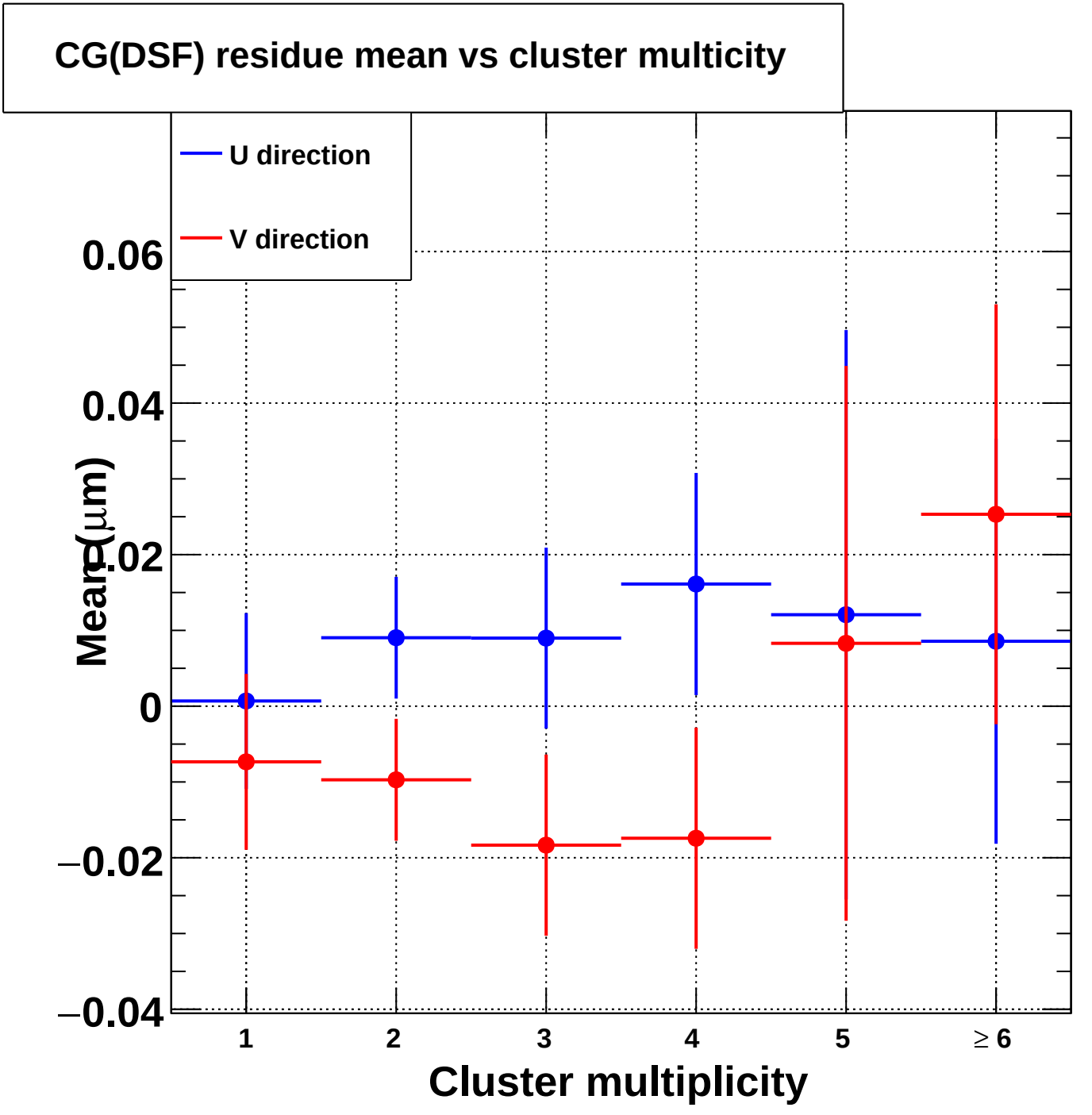

Tu-huCG(DSF) for Mult. = 5
Gtu1_vs_Mult5
10065
Mean 0.01207
RMS 3.769
χ² / ndf 183.4 / 56
Constant 1343 ± 17.1
Mean 0.05013 ± 0.02954
Sigma 2.936 ± 0.023
1400
1200
1000
800
600
400
200
0
−40
−20
0
20
40
U residue (μm)


Tv-hvCG(DSF) for Mult. = 5
Gtv1_vs_Mult5
10065
Mean 0.008296
RMS 3.673
χ² / ndf 188.1 / 55
Constant 1347 ± 17.1
Mean −0.01932 ± 0.02946
Sigma 2.925 ± 0.023
1400
1200
1000
800
600
400
200
0
−40
−20
0
20
40
V residue (μm)

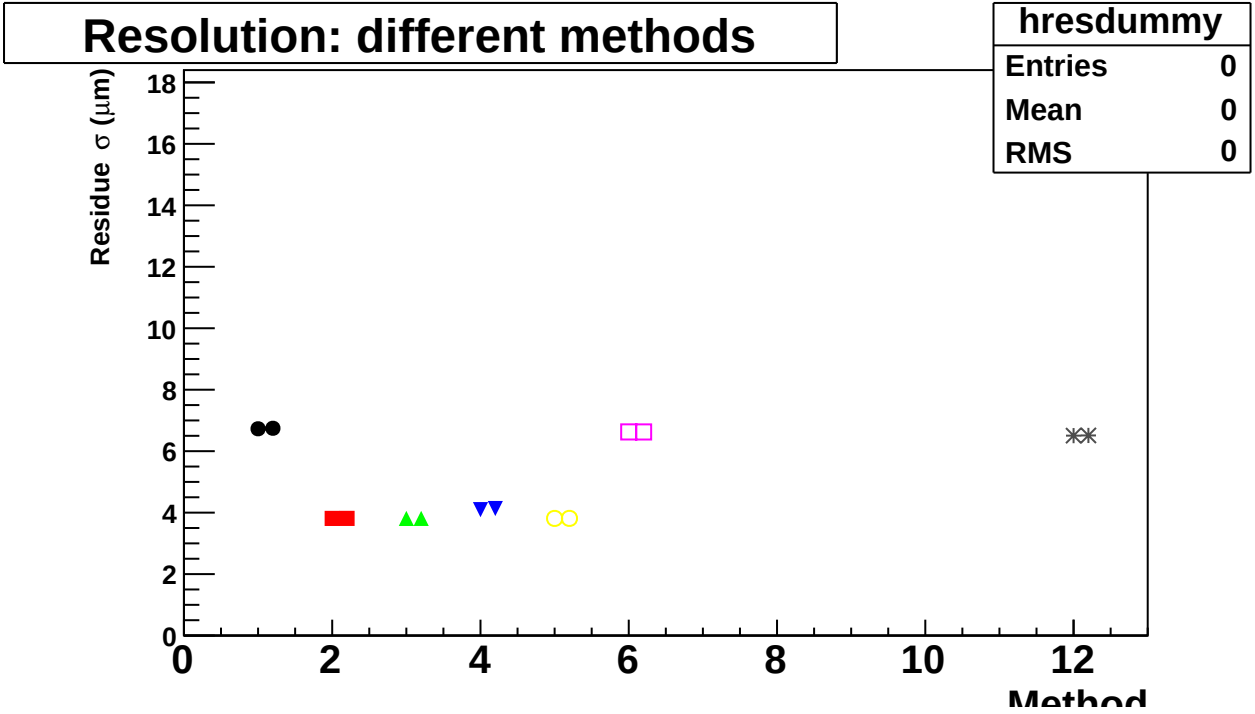

Tu-huCG(DSF) for Mult. ≥ 6
Gtu1_vs_Mult6
23751
Mean 0.008568
RMS 4.119
χ² / ndf 444.7 / 70
Constant 2800 ± 23.9
Mean 0.008964 ± 0.021754
Sigma 3.321 ± 0.018
3000
2500
2000
1500
1000
500
0
−40
−20
0
20
40
U residue (μm)


Tv-hvCG(DSF) for Mult. ≥ 6
Gtv1_vs_Mult6
23751
Mean 0.02533
RMS 4.27
χ² / ndf 490.4 / 82
Constant 2847 ± 24.4
Mean −0.01593 ± 0.02138
Sigma 3.26 ± 0.02
3000
2500
2000
1500
1000
500
0
−40
−20
0
20
40
V residue (μm)


CG(DSF) residue width vs cluster multicity
U direction
V direction
4.6
4.4
4.2
4
3.8
3.6
3.4
3.2
3
2.8
σres (μm)
1
2
3
4
5
≥ 6
Cluster multiplicity


CG(DSF) residue mean vs cluster multicity
U direction
V direction
0.06
0.04
0.02
0
−0.02
−0.04
Mean (μm)
1
2
3
4
5
≥ 6
Cluster multiplicity

Run 35999 Plane 3



Residuals for different methods

Method 1
residue from Tu-huDig algo(0) = (6.7289 ± 0.0065)μm
residue from Tv-hvDig algo(1) = (6.7455 ± 0.0066)μm

Method 2
residue from Tu-huCG algo(2) = (3.8122 ± 0.0037)μm
residue from Tv-hvCG algo(3) = (3.8131 ± 0.0037)μm

Method 3
residue from Tu-huCG(DSF) algo(4) = (3.8122 ± 0.0037)μm
residue from Tv-hvCG(DSF) algo(5) = (3.8131 ± 0.0037)μm

Method 4
residue from Tu-UCG2x2 algo(6) = (4.0975 ± 0.0043)μm
residue from Tv-VCG2x2 algo(7) = (4.1340 ± 0.0045)μm

Method 5
residue from Tu-huCG5 algo(8) = (3.8122 ± 0.0037)μm
residue from Tv-hvCG5 algo(9) = (3.8133 ± 0.0037)μm

Method 6
residue from Tu-Ucorr algo(10) = (6.6267 ± 0.0050)μm
residue from Tv-Vcorr algo(11) = (6.6258 ± 0.0050)μm

Residuals for different methods

Method 7
residue from Tu-UEta algo(12) = (917.5778 ± 157.2821)μm
residue from Tv-VEta algo(13) = (1175.7637 ± 841.0745)μm

Method 8
residue from tu-UEta2x2 algo(14) = (1058.6038 ± 1057.8937)μm
residue from tv-VEta2x2 algo(15) = (1017.5513 ± 855.1531)μm

Method 9
residue from Tu-UEta2x2(list) algo(16) = (917.5566 ± 157.1014)μm
residue from TV-VEta2x2(list) algo(17) = (1175.7634 ± 842.6465)μm

Method 10
residue from Tu-UEta5x5(list) algo(18) = (917.5571 ± 157.1037)μm
residue from Tu-UEta5x5(list) algo(19) = (1175.7637 ± 841.0287)μm

Method 11
residue from Tu-UEta3 algo(20) = (917.5572 ± 157.1019)μm
residue from Tv-VEta3 algo(21) = (1175.7637 ± 841.2330)μm

Method 12
residue from Tu-uAHT algo(22) = (6.5057 ± 0.0050)μm
residue from Tv-vAHT algo(23) = (6.5119 ± 0.0050)μm

Residuals vs cluster multiplicity

residue from Tu-huCG(DSF) algo for mult = 1 = (4.3200 ± 0.0066)μm
residue from Tv-hvCG(DSF) algo for mult = 1 = (4.3263 ± 0.0067)μm

residue from Tu-huCG(DSF) algo for mult = 2 = (3.6894 ± 0.0053)μm
residue from Tv-hvCG(DSF) algo for mult = 2 = (3.7001 ± 0.0055)μm

residue from Tu-huCG(DSF) algo for mult = 3 = (3.2209 ± 0.0085)μm
residue from Tv-hvCG(DSF) algo for mult = 3 = (3.2227 ± 0.0085)μm

residue from Tu-huCG(DSF) algo for mult = 4 = (3.6629 ± 0.0107)μm
residue from Tv-hvCG(DSF) algo for mult = 4 = (3.6580 ± 0.0105)μm

residue from Tu-huCG(DSF) algo for mult = 5 = (2.9359 ± 0.0230)μm
residue from Tv-hvCG(DSF) algo for mult = 5 = (2.9252 ± 0.0227)μm

residue from Tu-huCG(DSF) algo for mult = 6 = (3.3210 ± 0.0182)μm
residue from Tv-hvCG(DSF) algo for mult = 6 = (3.2598 ± 0.0179)μm