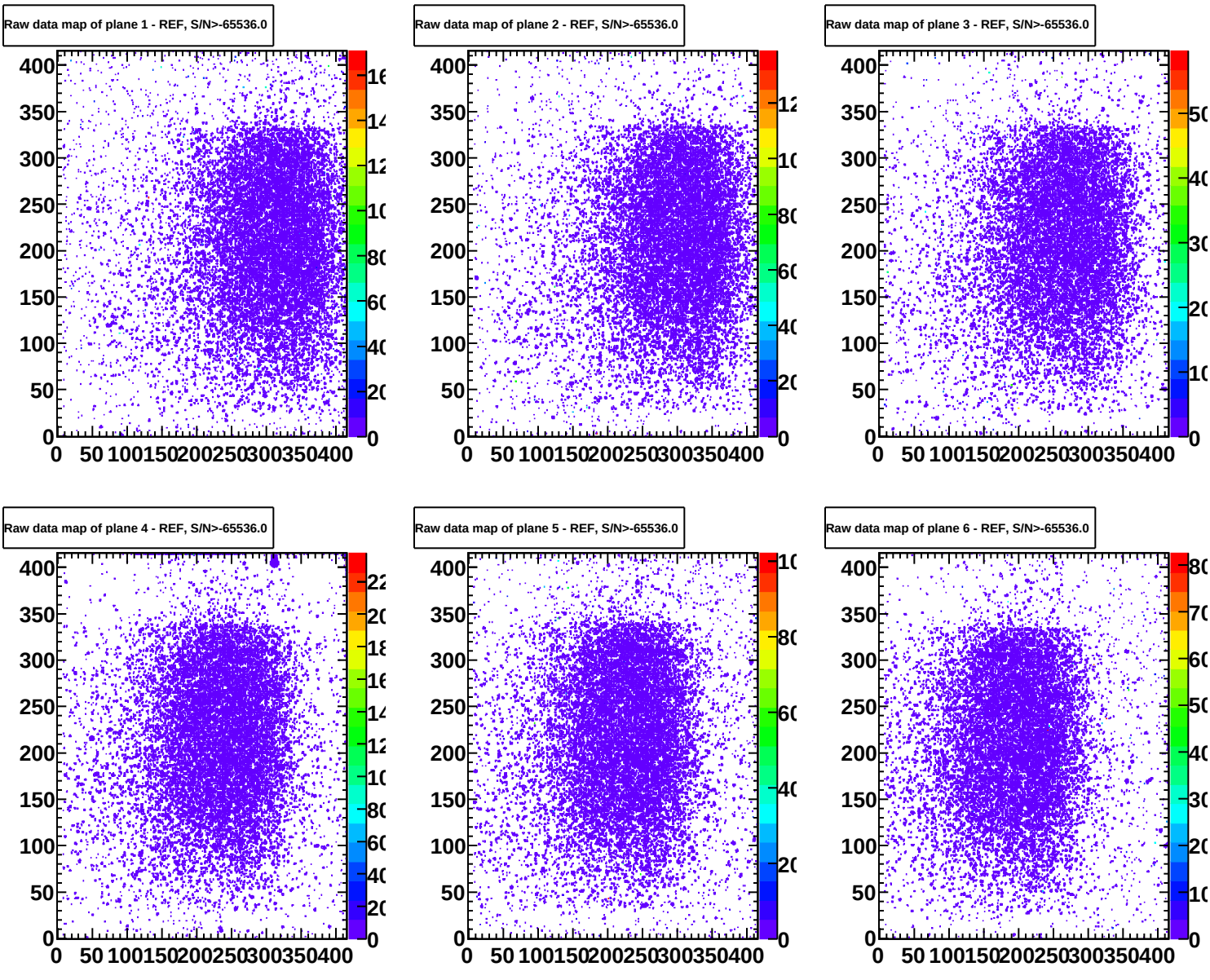
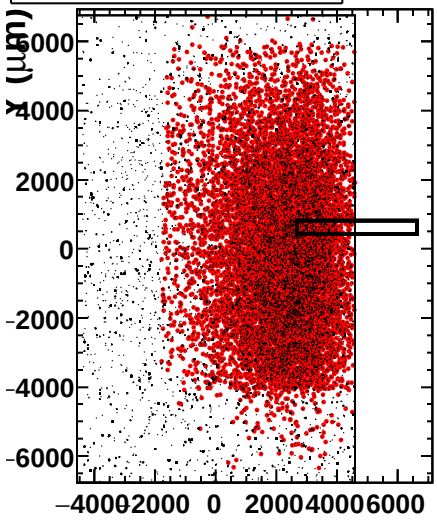
Run 35807, cumul over 10000 events

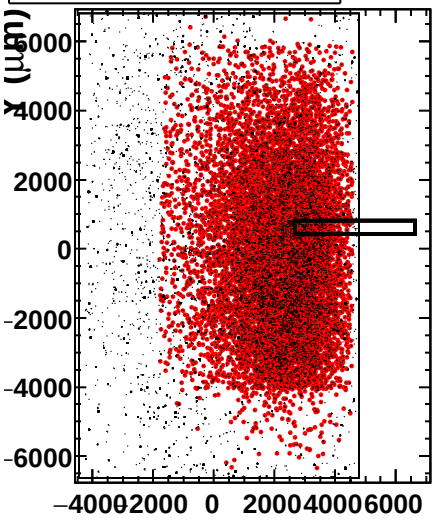


Run 35807, cumul over 10000 events

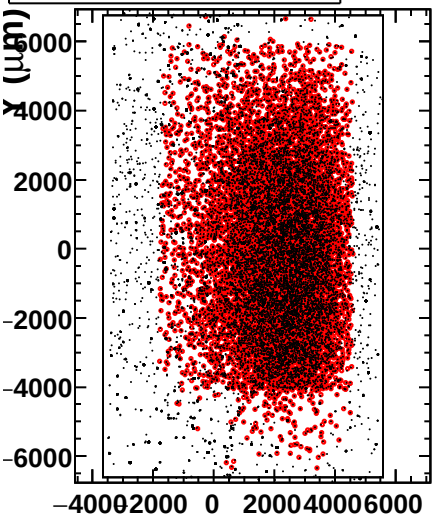
Track map of plane (1) REF



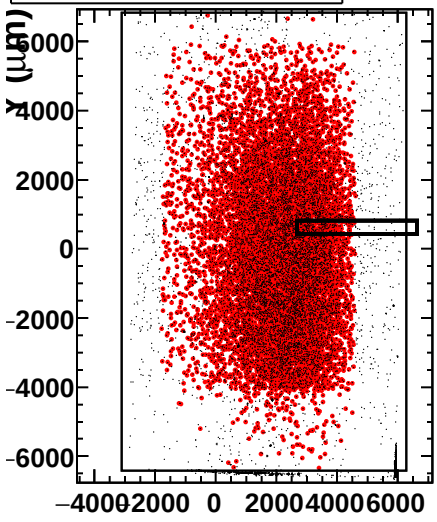
Track map of plane (2) REF



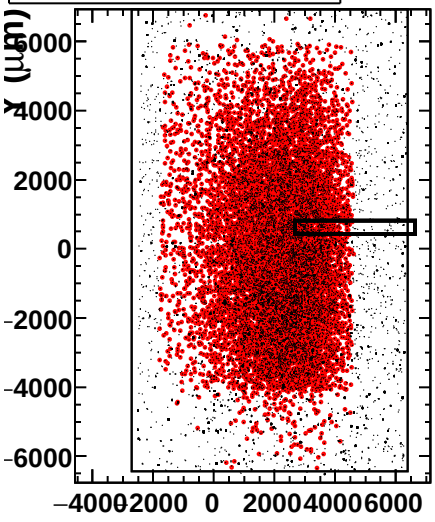
Track map of plane (3) REF



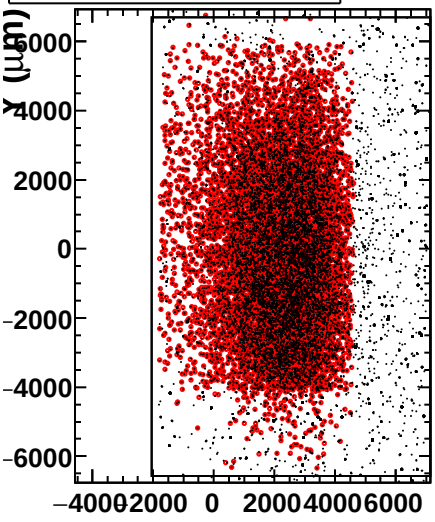
Track map of plane (4) REF



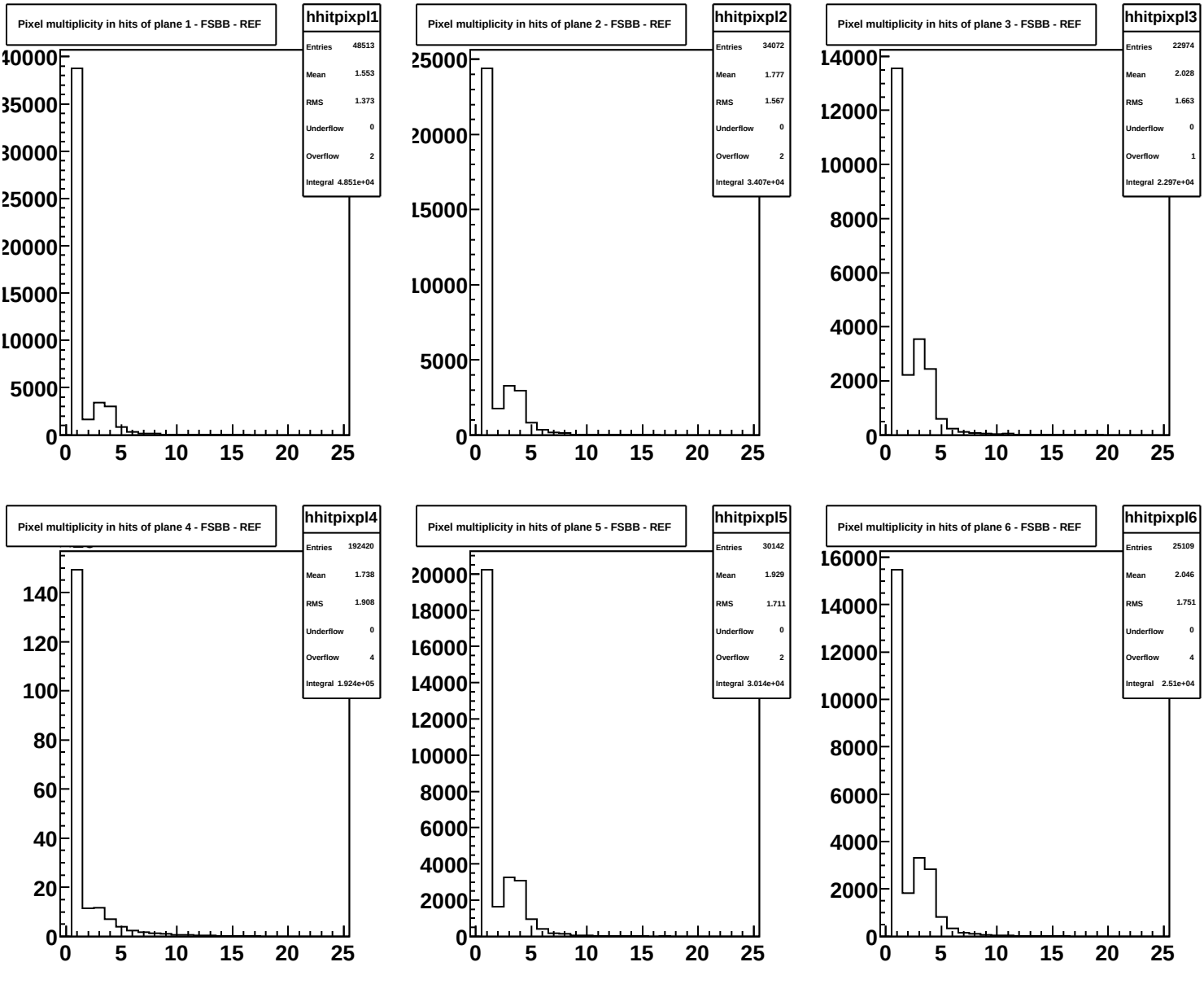
Track map of plane (5) REF



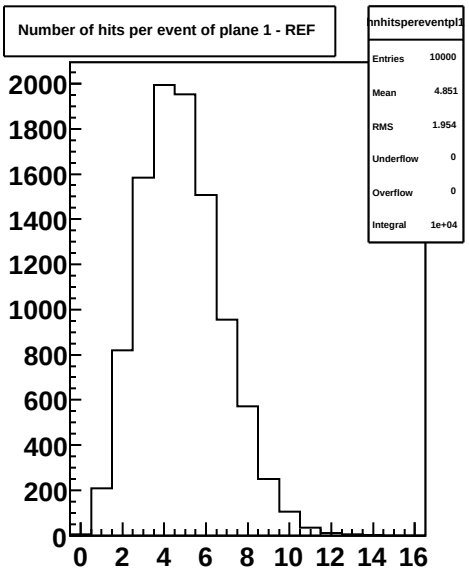
Track map of plane (6) REF

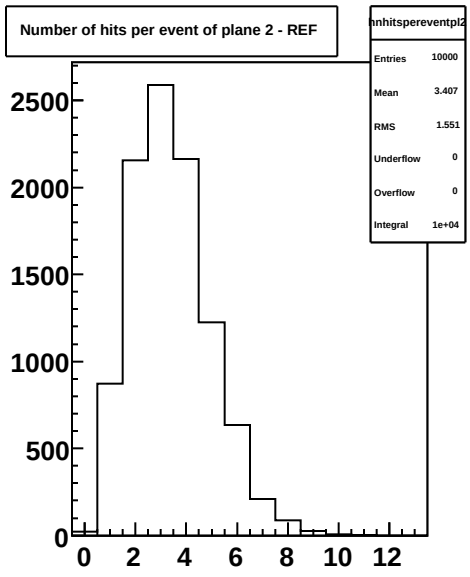


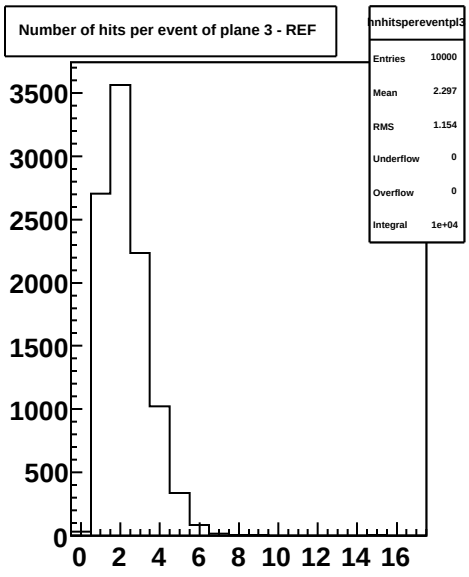
Run 35807, cumul over 10000 events

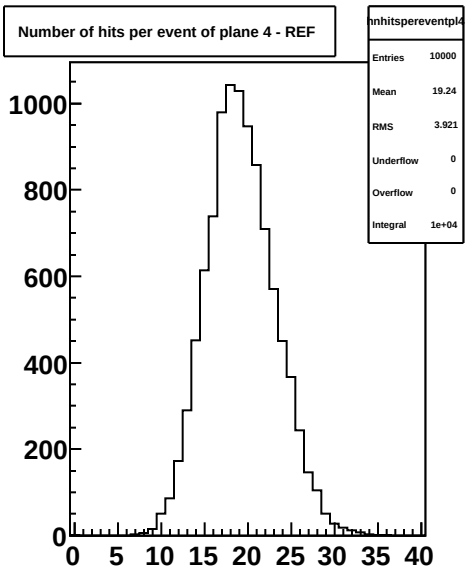


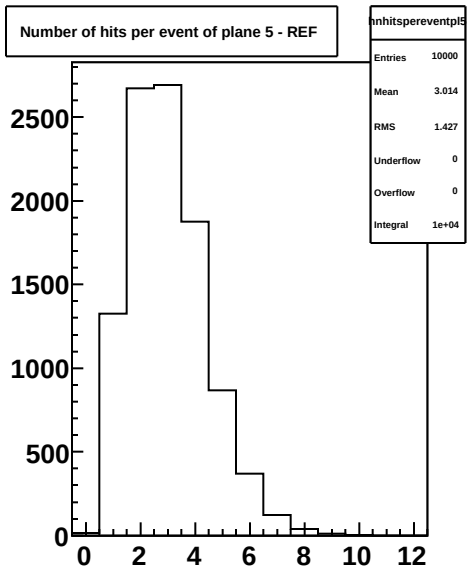
Run 35807, cumul over 10000 events

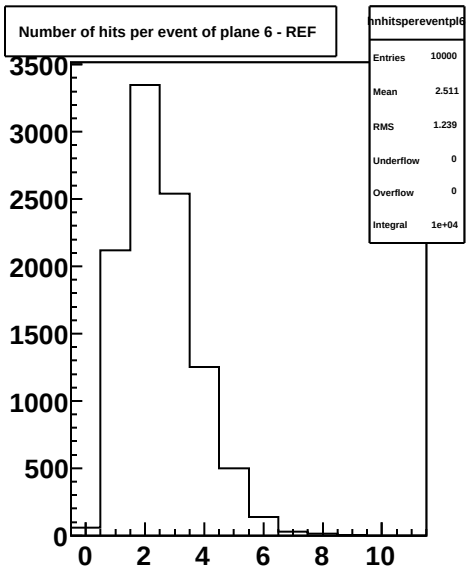


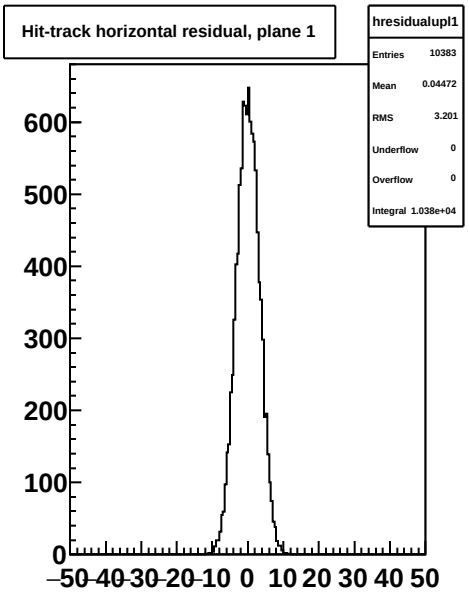


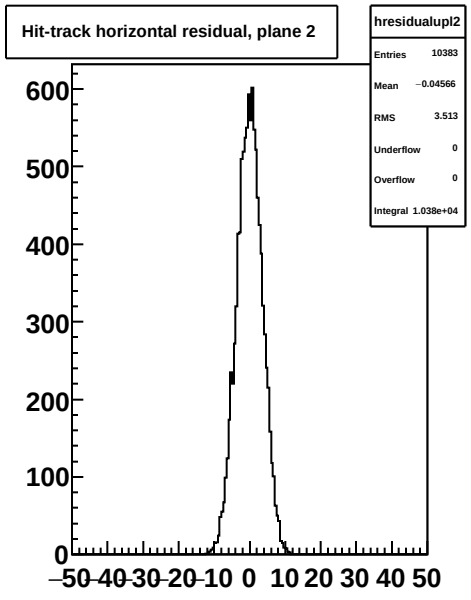


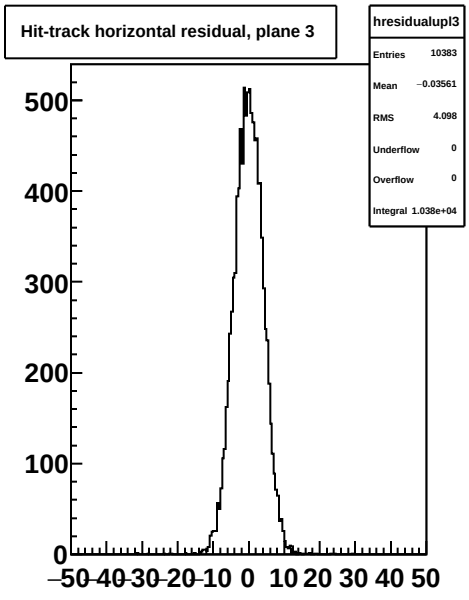


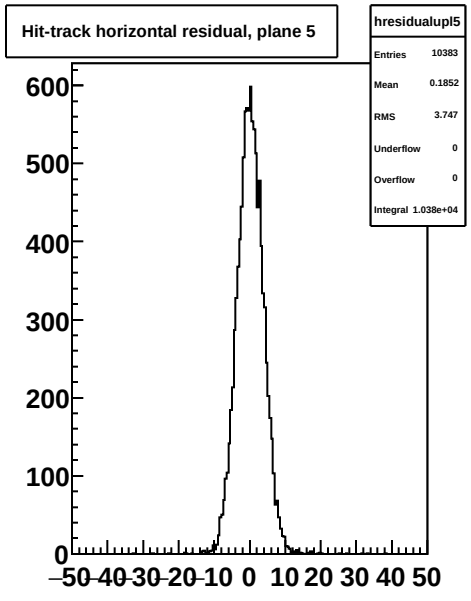


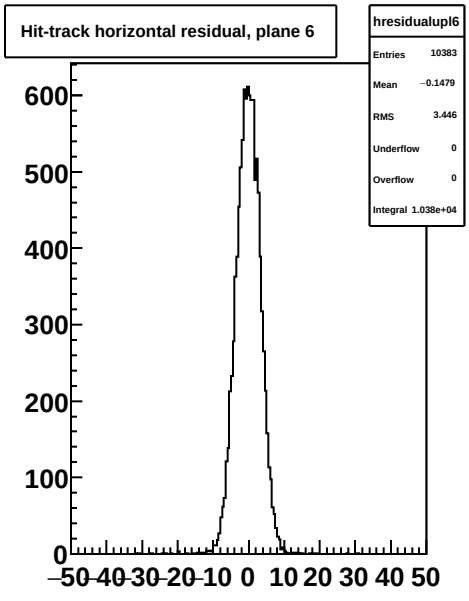


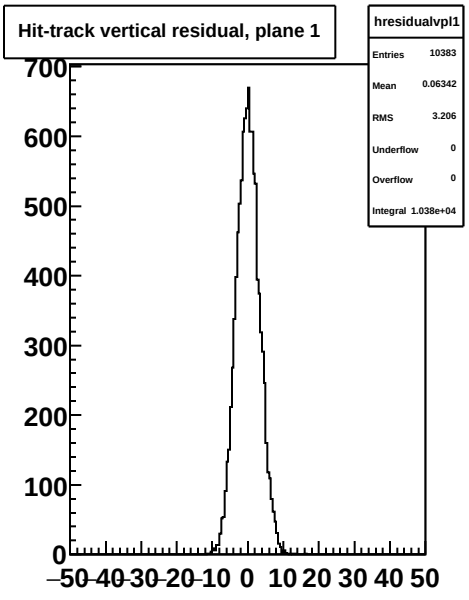

Hit-track horizontal residual, plane 1
hresidualupl1
Entries 10383
Mean 0.04472
RMS 3.201
Underflow 0
Overflow 0
Integral 1.038e+04

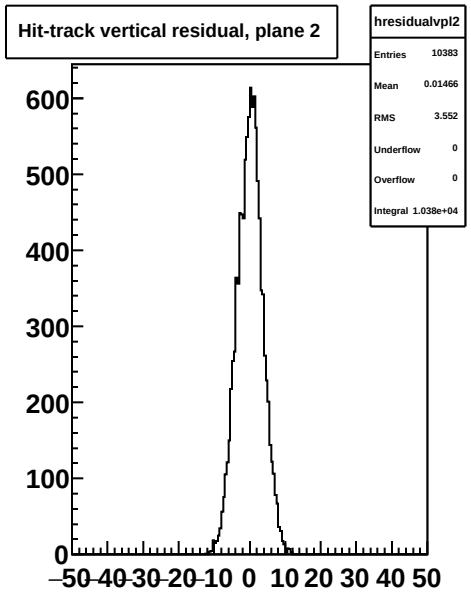

Hit-track horizontal residual, plane 2
hresidualupl2
Entries 10383
Mean −0.04566
RMS 3.513
Underflow 0
Overflow 0
Integral 1.038e+04

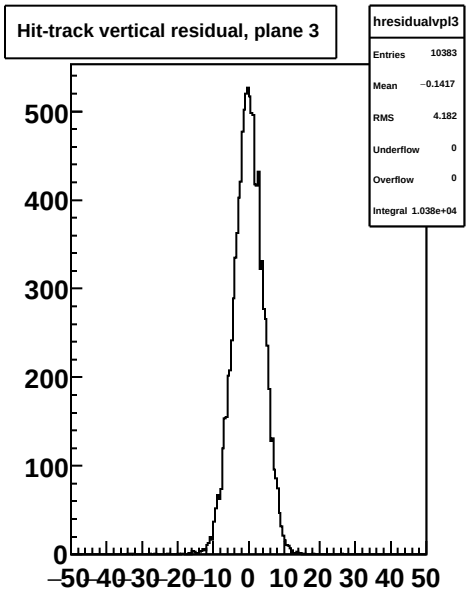

Hit-track horizontal residual, plane 3
hresidualupl3
Entries 10383
Mean −0.03561
RMS 4.098
Underflow 0
Overflow 0
Integral 1.038e+04

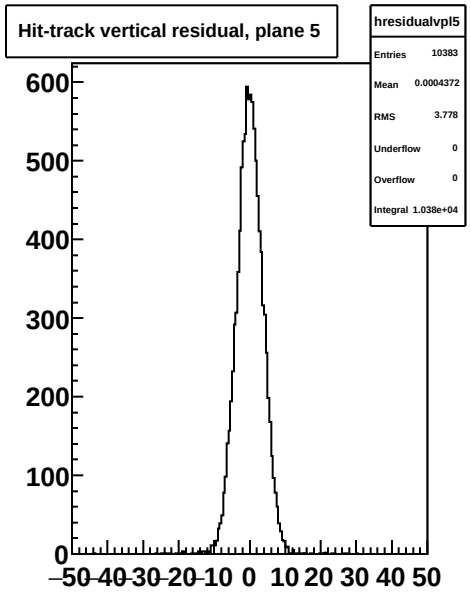

Hit-track horizontal residual, plane 5
hresidualupl5
Entries 10383
Mean 0.1852
RMS 3.747
Underflow 0
Overflow 0
Integral 1.038e+04

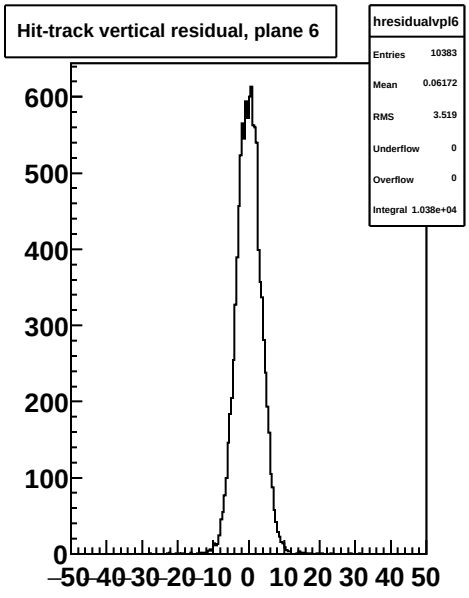

Hit-track horizontal residual, plane 6
hresidualupl6
Entries 10383
Mean −0.1479
RMS 3.446
Underflow 0
Overflow 0
Integral 1.038e+04

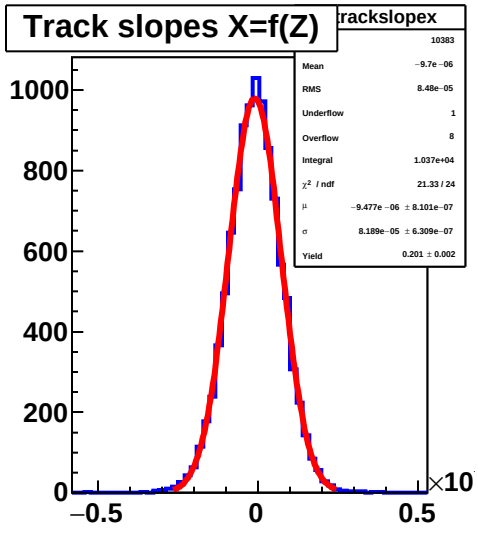

Hit-track vertical residual, plane 1
hresidualvpl1
Entries 10383
Mean 0.06342
RMS 3.206
Underflow 0
Overflow 0
Integral 1.038e+04

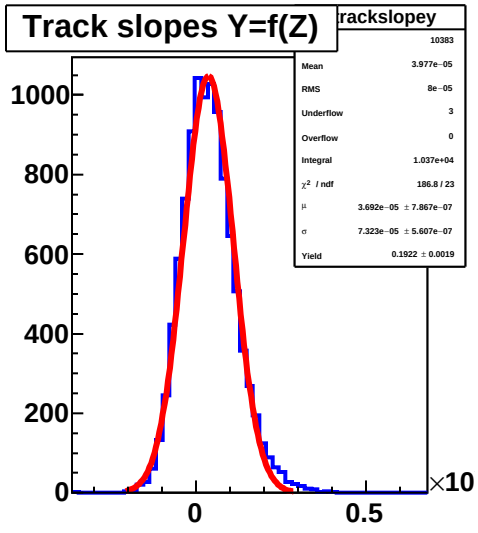

Hit-track vertical residual, plane 2
hresidualvpl2
Entries 10383
Mean 0.01466
RMS 3.552
Underflow 0
Overflow 0
Integral 1.038e+04

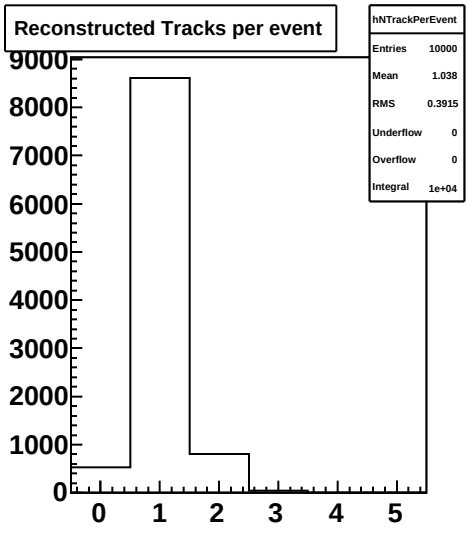

Hit-track vertical residual, plane 3
hresidualvpl3
Entries 10383
Mean −0.1417
RMS 4.182
Underflow 0
Overflow 0
Integral 1.038e+04

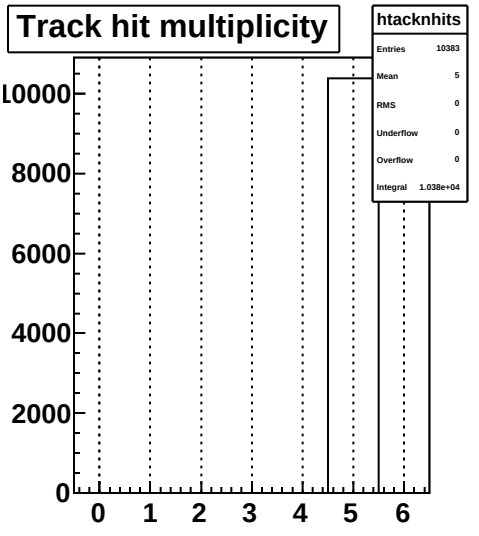

Hit-track vertical residual, plane 5
hresidualvpl5
Entries 10383
Mean 0.0004372
RMS 3.778
Underflow 0
Overflow 0
Integral 1.038e+04

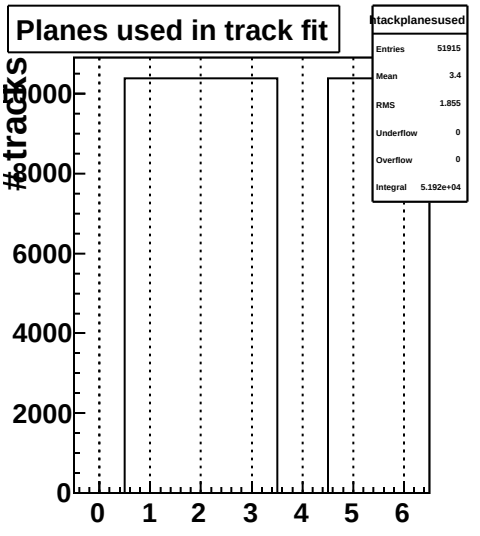

Hit-track vertical residual, plane 6
hresidualvpl6
Entries 10383
Mean 0.06172
RMS 3.519
Underflow 0
Overflow 0
Integral 1.038e+04

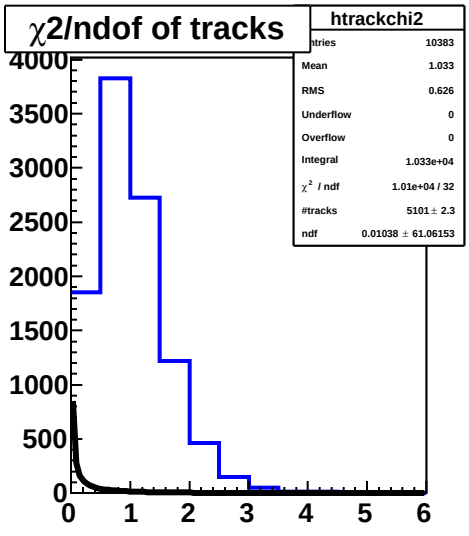

Track slopes X=f(Z)
trackslopex
10383
Mean −9.7e−06
RMS 8.48e−05
Underflow 1
Overflow 8
Integral 1.037e+04
χ² / ndf 21.33 / 24
μ −9.477e−06 ± 8.101e−07
σ 8.189e−05 ± 6.309e−07
Yield 0.201 ± 0.002
1000
800
600
400
200
0
−0.5
0
0.5
×10


Track slopes Y=f(Z)
trackslopey
10383
Mean 3.977e−05
RMS 8e−05
Underflow 3
Overflow 0
Integral 1.037e+04
χ² / ndf 186.8 / 23
μ 3.692e−05 ± 7.867e−07
σ 7.323e−05 ± 5.607e−07
Yield 0.1922 ± 0.0019
1000
800
600
400
200
0
0
0.5
×10


Reconstructed Tracks per event
hNTrackPerEvent
Entries 10000
Mean 1.038
RMS 0.3915
Underflow 0
Overflow 0
Integral 1e+04
9000
8000
7000
6000
5000
4000
3000
2000
1000
0
0
1
2
3
4
5


Track hit multiplicity
htacknhits
Entries 10383
Mean 5
RMS 0
Underflow 0
Overflow 0
Integral 1.038e+04
10000
8000
6000
4000
2000
0
0
1
2
3
4
5
6


Planes used in track fit
htackplanesused
Entries 51915
Mean 3.4
RMS 1.855
Underflow 0
Overflow 0
Integral 5.192e+04
#tracks
6000
4000
2000
0
0
1
2
3
4
5
6


χ2/ndof of tracks
htrackchi2
Entries 10383
Mean 1.033
RMS 0.626
Underflow 0
Overflow 0
Integral 1.033e+04
χ² / ndf 1.01e+04 / 32
#tracks 5101 ± 2.3
ndf 0.01038 ± 61.06153
4000
3500
3000
2500
2000
1500
1000
500
0
0
1
2
3
4
5
6

Metadata

Tue Aug 9 17:42:48 2016

DSF file used as input:

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

RUN NUMBER = 35807 Plane number = 4 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 = 100001

matched/good tracks in DUT = 96189 96290 0.9990

Effic = (99.8951 ± 0.0104) %

Prob(wrong asso.,trk-hit dist = 50.0μm) = (0.0010 ± 0.0010) %

Effic(corr. wrong asso.) = (99.8951 ± 0.0104) %

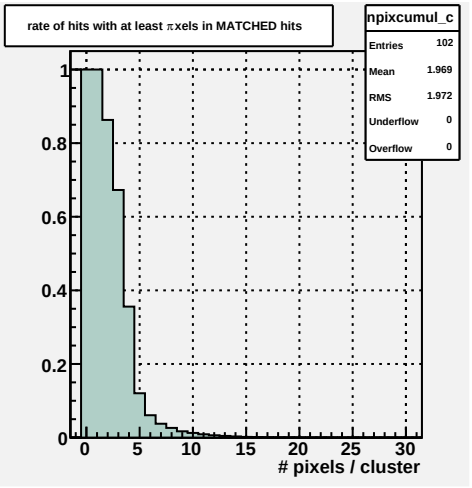
(# good rec tracks in telescope)/event, average = 1.081, RMS = 0.289

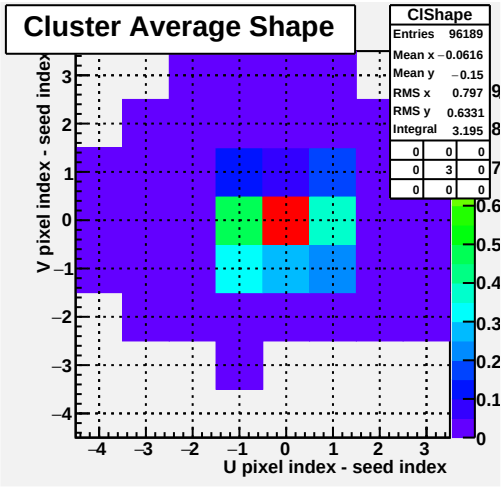
# of rec hits in DUT = 1880468, good = 1880468, average/event = 19.793, RMS = 3.977

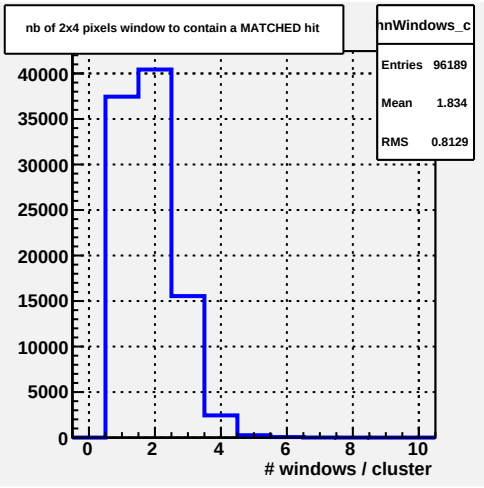
<cluster multiplicity> = 3.195, RMS(cluster multiplicity) = 1.765

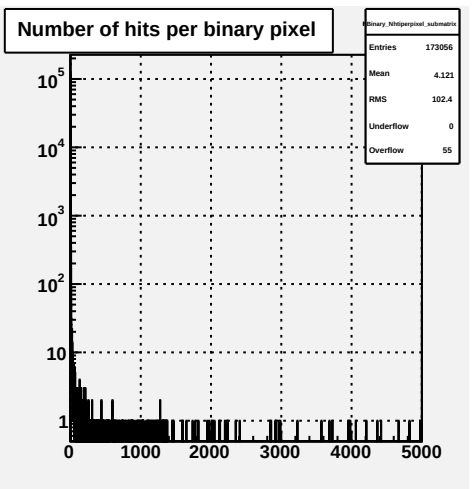
 # un-matched tracks = 101, with thdist > THdist limit 101.00, without hits in DUT 0

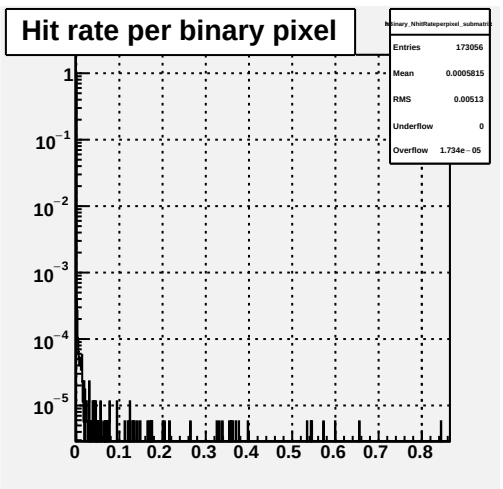
M35 ; run 35807; Pl 4, sub 0, dist 50; Gain 1.00; eff 0.999 +- 0.000; Seed 0.0; Neigh 0.0

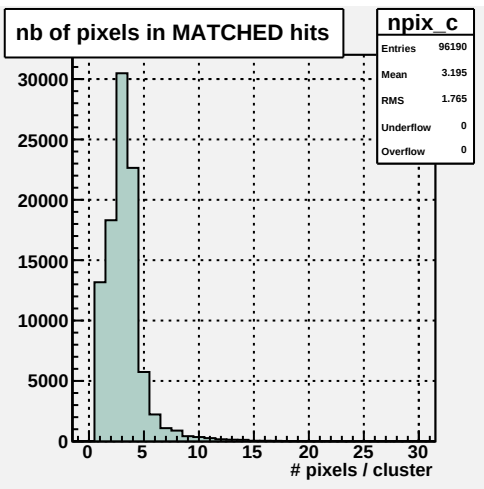


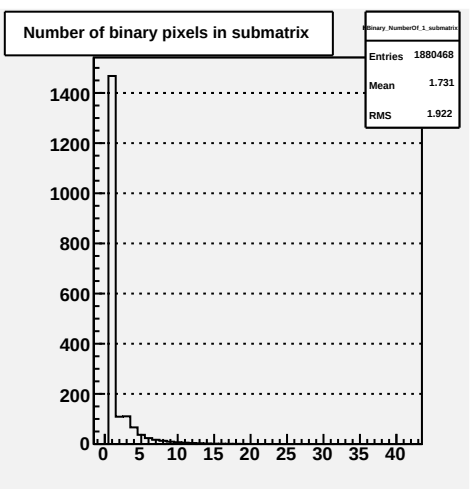


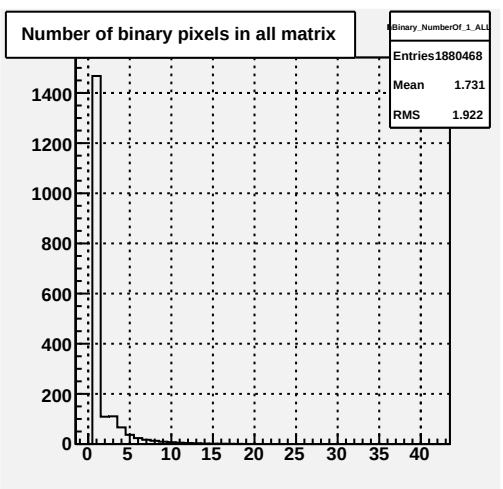


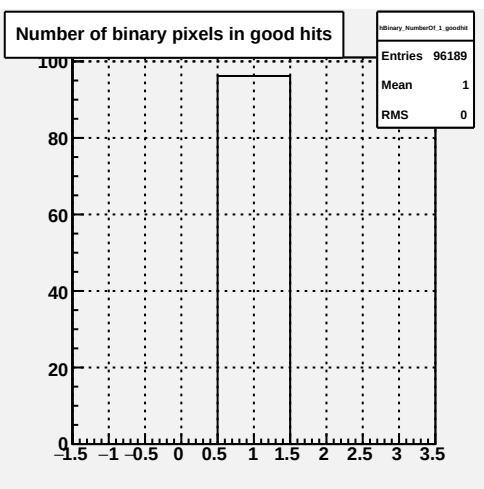




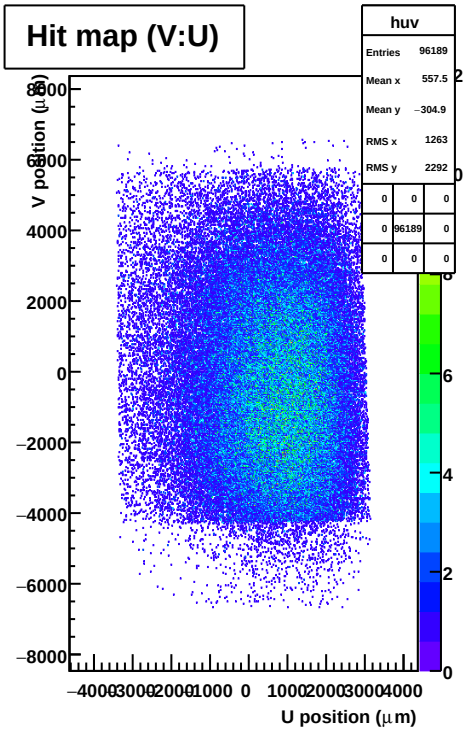


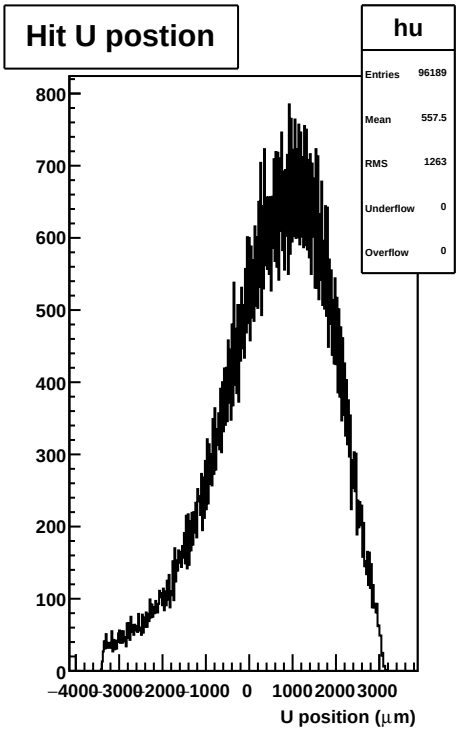


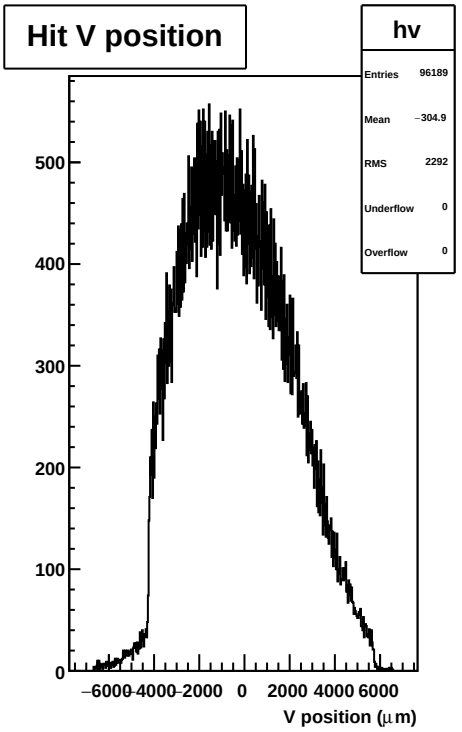


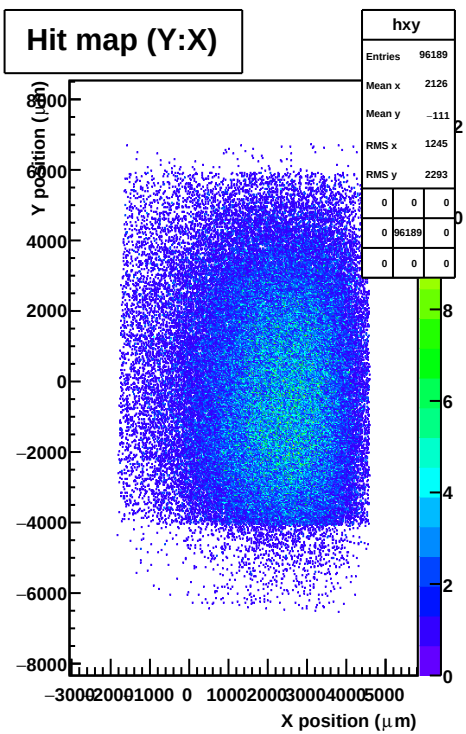


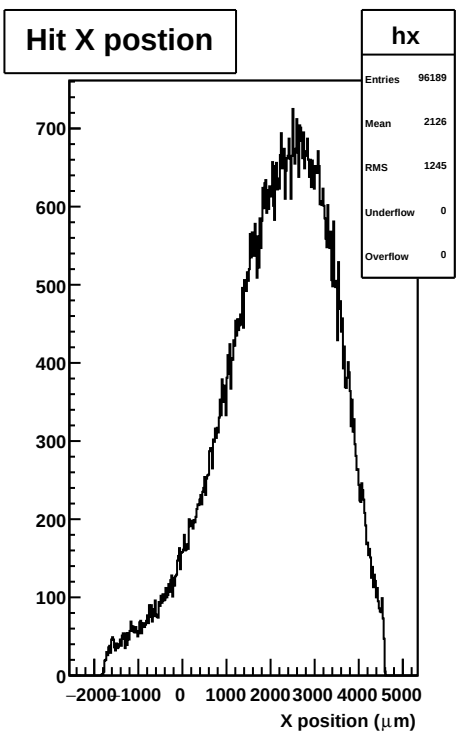
M35 ; run 35807; Pl 4, sub 0; Seed 0.0; Neigh 0.0

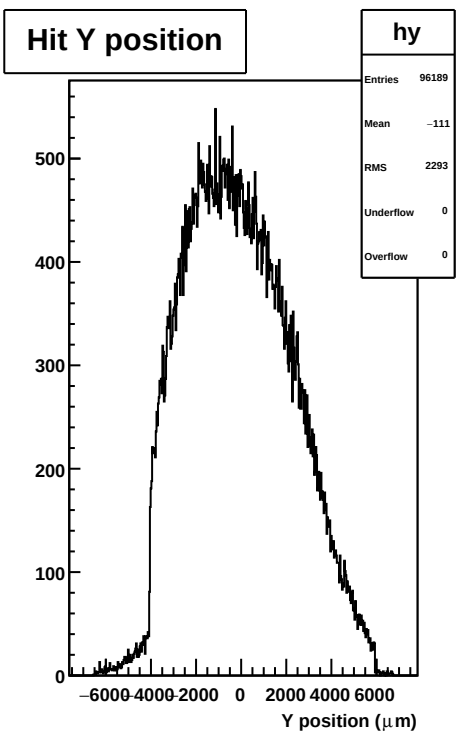


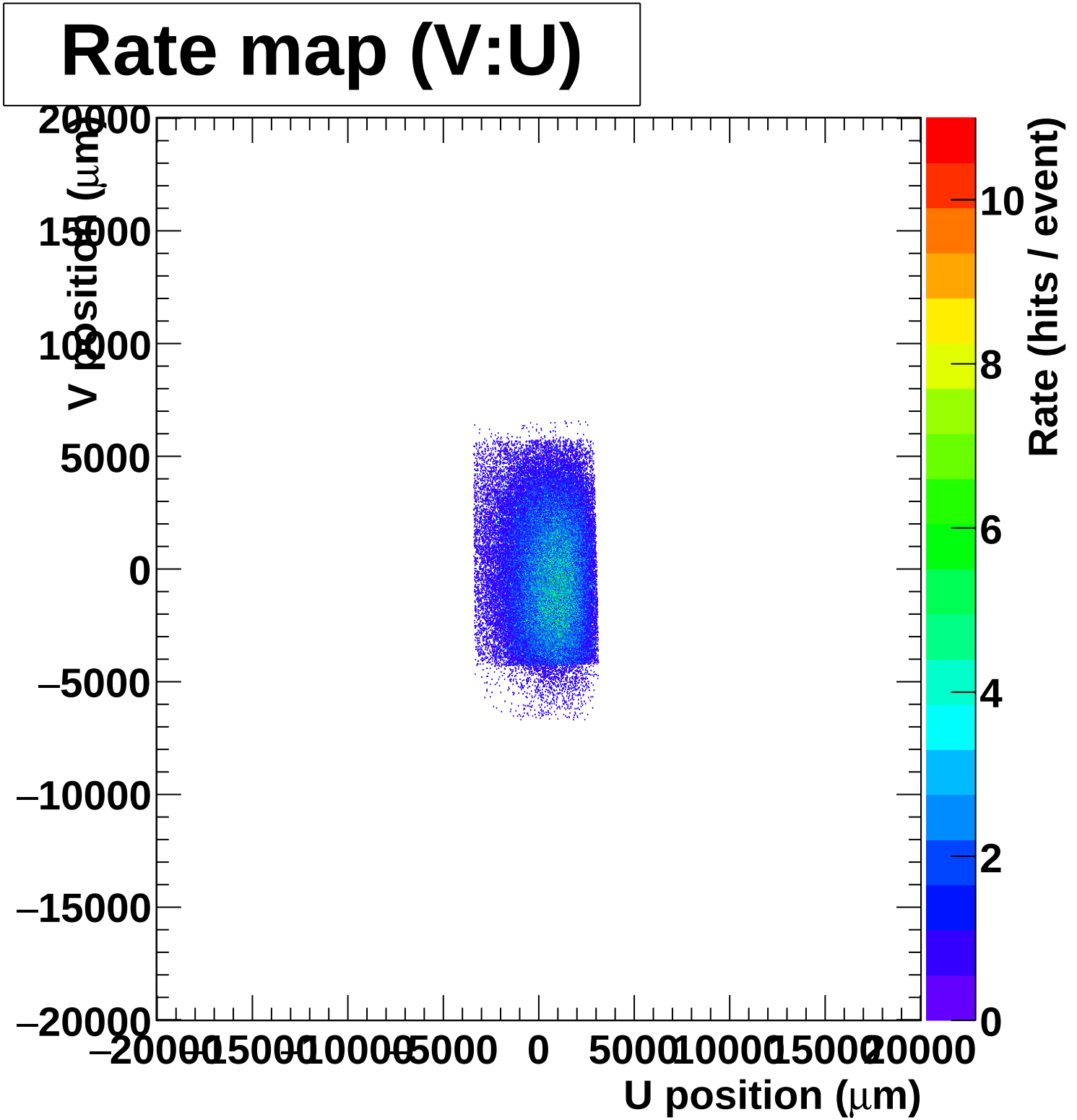


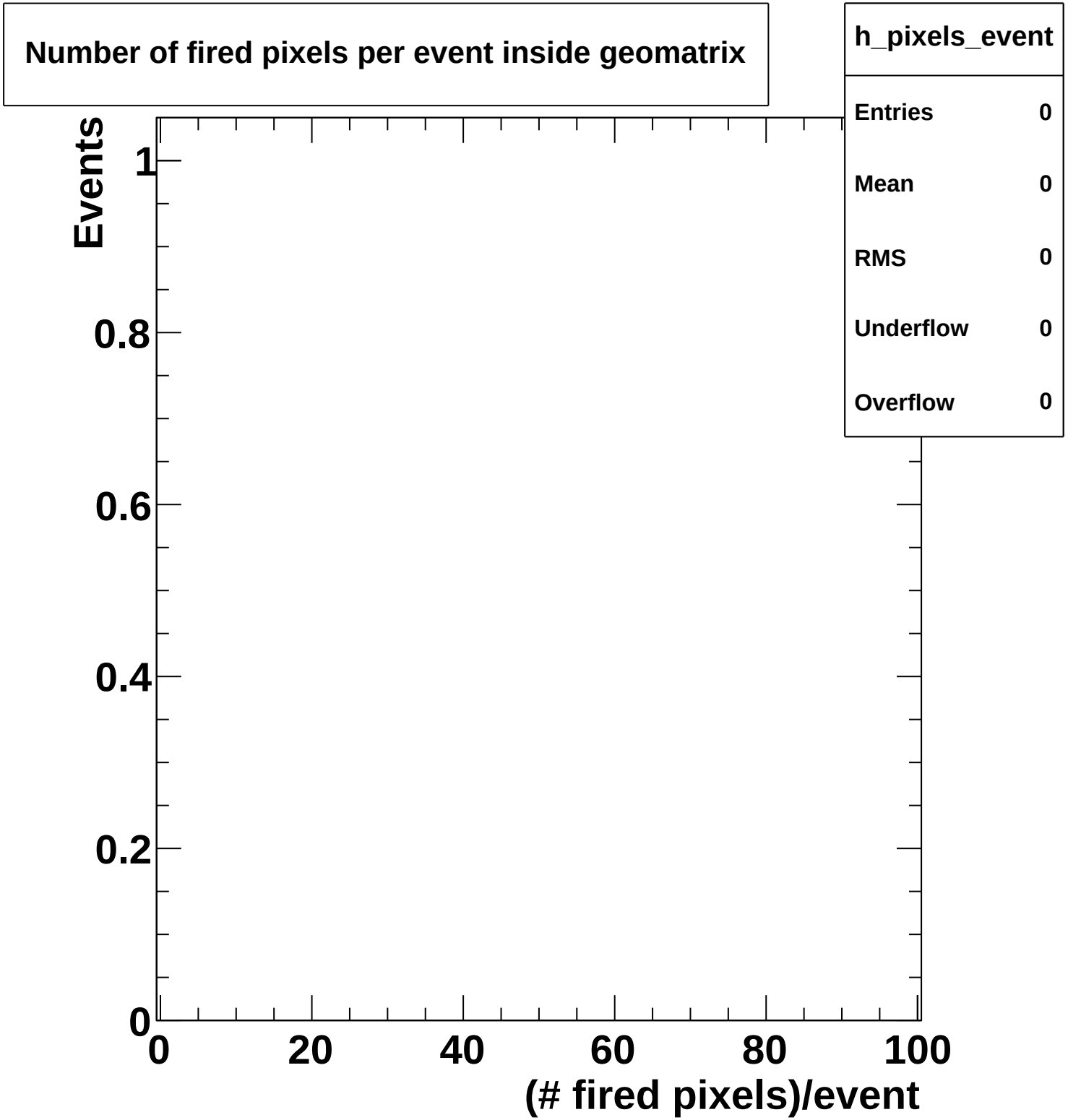


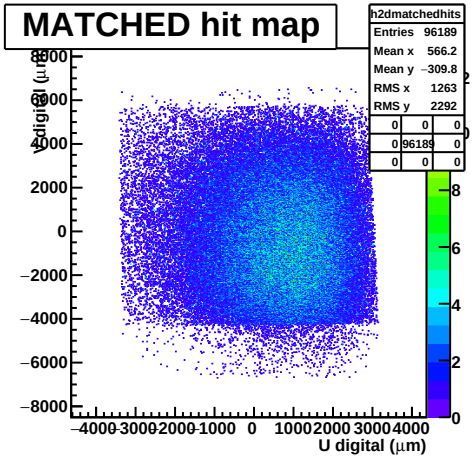


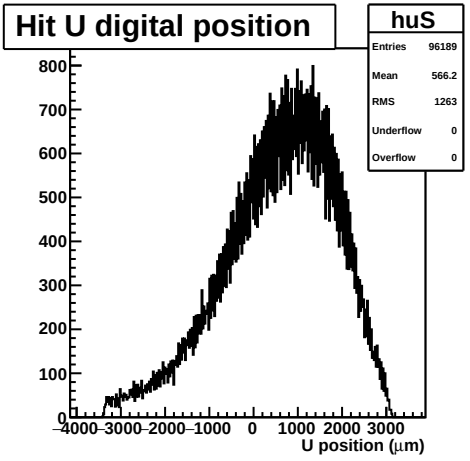


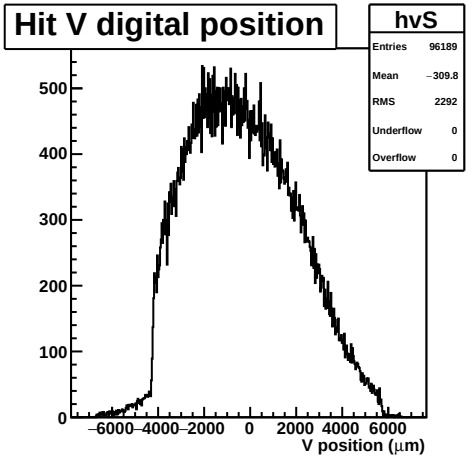


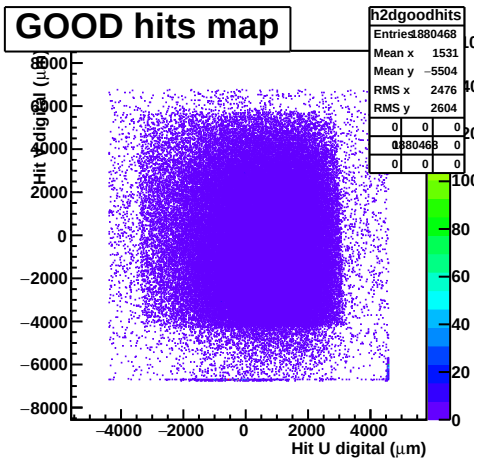

Rate map (V:U)
V position (μm)
U position (μm)
Rate (hits / event)
20000
15000
10000
5000
0
–5000
–10000
–15000
–20000
–20000
–15000
–10000
–5000
0
5000
10000
15000
20000
10
8
6
4
2
0

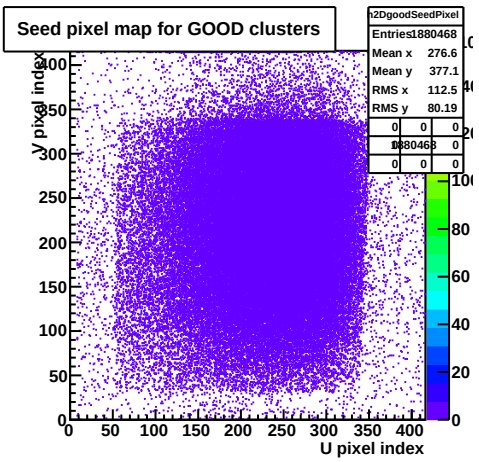

Number of fired pixels per event inside geomatrix
h_pixels_event
Entries 0
Mean 0
RMS 0
Underflow 0
Overflow 0
Events
1
0.8
0.6
0.4
0.2
0
0
20
40
60
80
100
(# fired pixels)/event

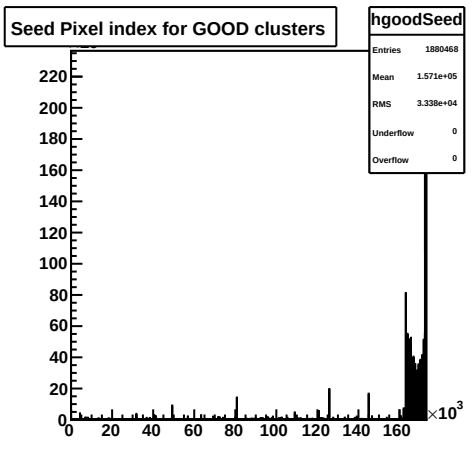

MATCHED hit map
h2dmatchedhits
Entries 96189
Mean x 566.2
Mean y −309.8
RMS x 1263
RMS y 2292
U digital (μm)
V digital (μm)

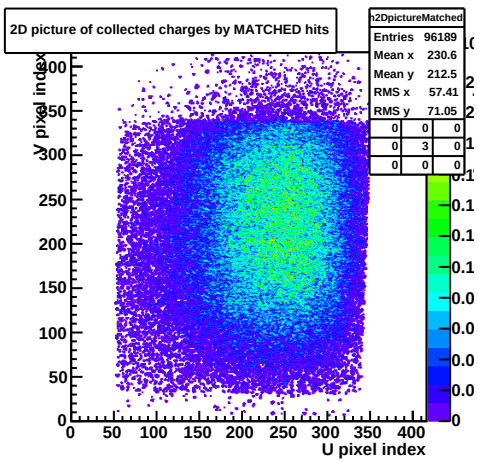

Hit U digital position
huS
Entries 96189
Mean 566.2
RMS 1263
Underflow 0
Overflow 0
U position (μm)

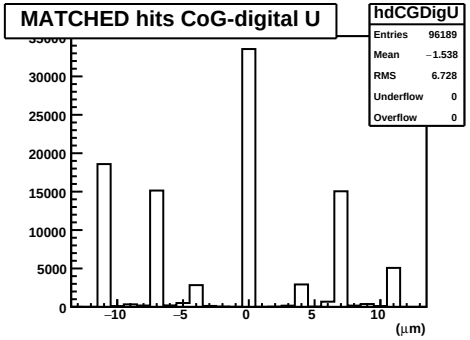

Hit V digital position
hvS
Entries 96189
Mean −309.8
RMS 2292
Underflow 0
Overflow 0
V position (μm)

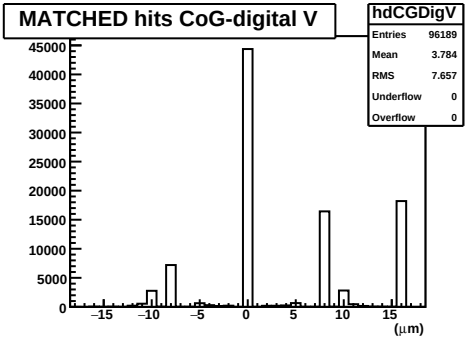

GOOD hits map
h2dgoodhits
Entries 1880468
Mean x 1531
Mean y −5504
RMS x 2476
RMS y 2604
Hit U digital (μm)
Hit V digital (μm)

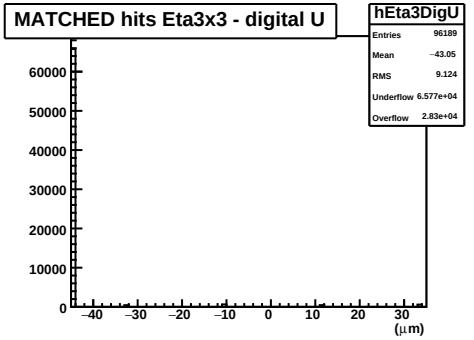

Seed pixel map for GOOD clusters
h2DgoodSeedPixel
Entries 1880468
Mean x 276.6
Mean y 377.1
RMS x 112.5
RMS y 80.19
U pixel index
V pixel index

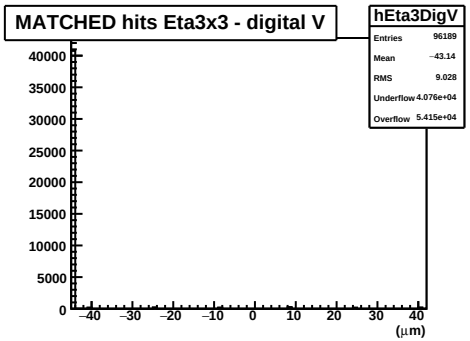

Seed Pixel index for GOOD clusters
hgoodSeed
Entries 1880468
Mean 1.571e+05
RMS 3.338e+04
Underflow 0
Overflow 0

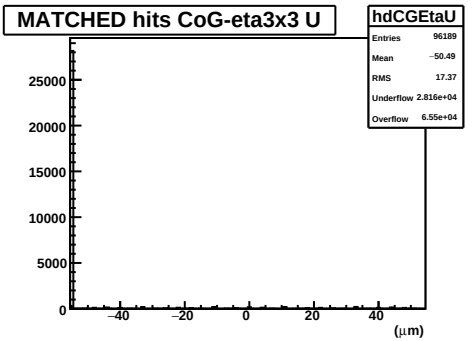

2D picture of collected charges by MATCHED hits
h2DpictureMatched
Entries 96189
Mean x 230.6
Mean y 212.5
RMS x 57.41
RMS y 71.05
U pixel index
V pixel index

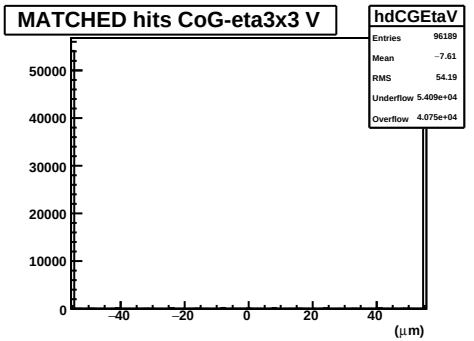

MATCHED hits CoG-digital U
hdCGDigU
Entries 96189
Mean −1.538
RMS 6.728
Underflow 0
Overflow 0
(μm)


MATCHED hits CoG-digital V
hdCGDigV
Entries 96189
Mean 3.784
RMS 7.657
Underflow 0
Overflow 0
(μm)

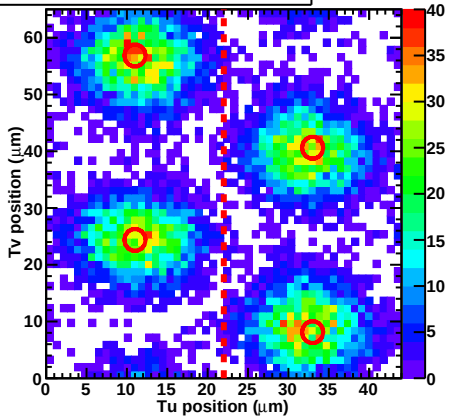

MATCHED hits Eta3x3 - digital U
hEta3DigU
Entries 96189
Mean −43.05
RMS 9.124
Underflow 6.577e+04
Overflow 2.83e+04
(μm)


MATCHED hits Eta3x3 - digital V
hEta3DigV
Entries 96189
Mean −43.14
RMS 9.028
Underflow 4.076e+04
Overflow 5.415e+04
(μm)

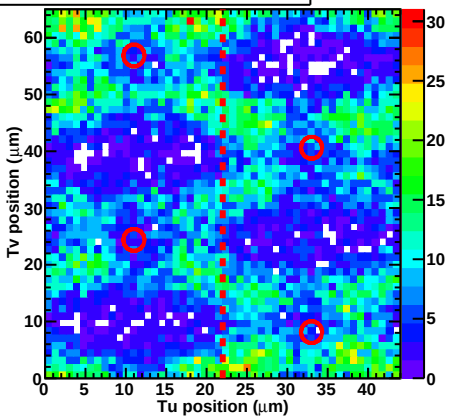

MATCHED hits CoG-eta3x3 U
hdCGEtaU
Entries 96189
Mean −50.49
RMS 17.37
Underflow 2.816e+04
Overflow 6.55e+04
(μm)


MATCHED hits CoG-eta3x3 V
hdCGEtaV
Entries 96189
Mean −7.61
RMS 54.19
Underflow 5.409e+04
Overflow 4.075e+04
(μm)

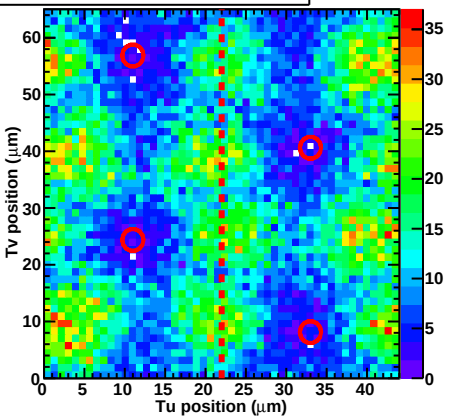
Tu vs Tv on matrix for Mult. = 1



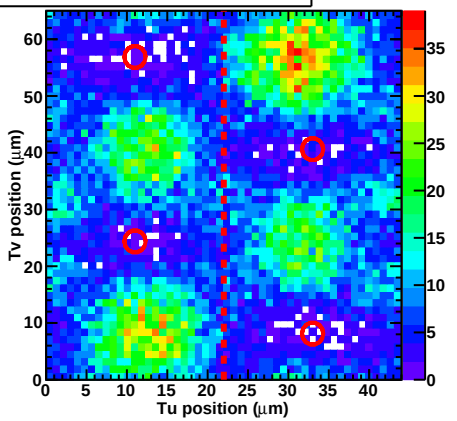
Tu vs Tv on matrix for Mult. = 2



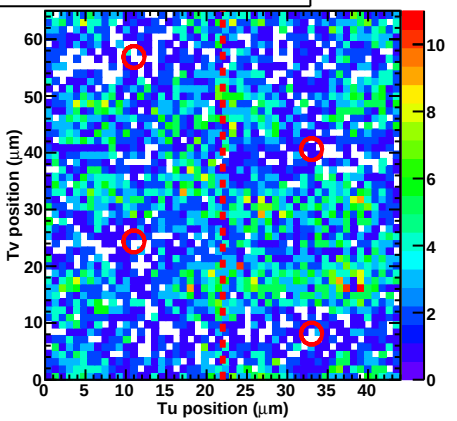
Tu vs Tv on matrix for Mult. = 3



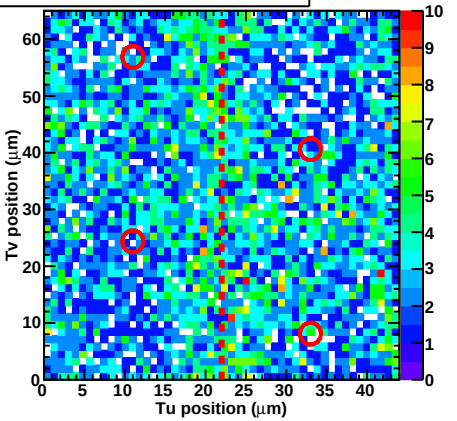
Tu vs Tv on matrix for Mult. = 4



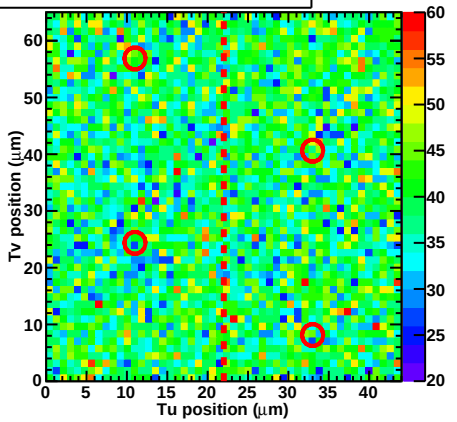
Tu vs Tv on matrix for Mult. = 5



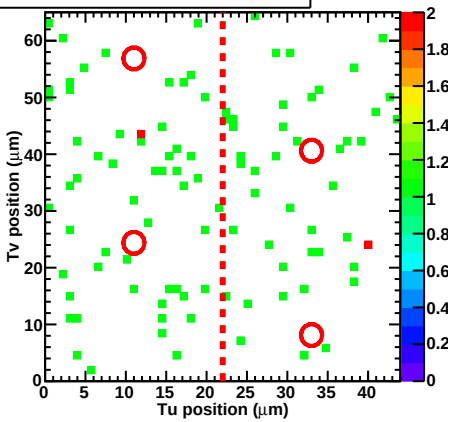
Tu vs Tv on matrix for Mult. ≥ 6



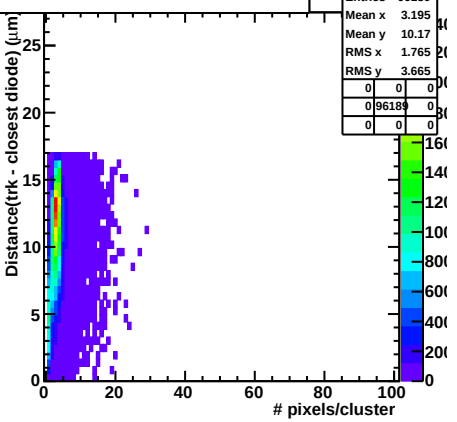
Tu vs Tv on matrix for all associated tracks

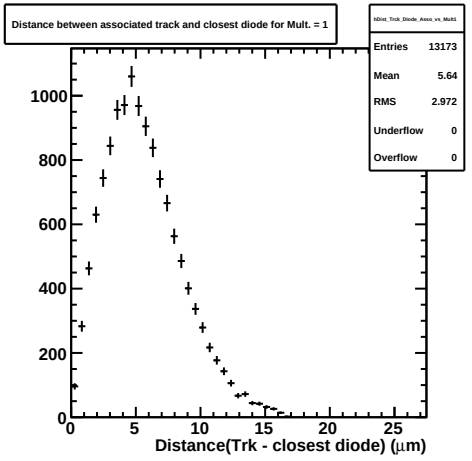


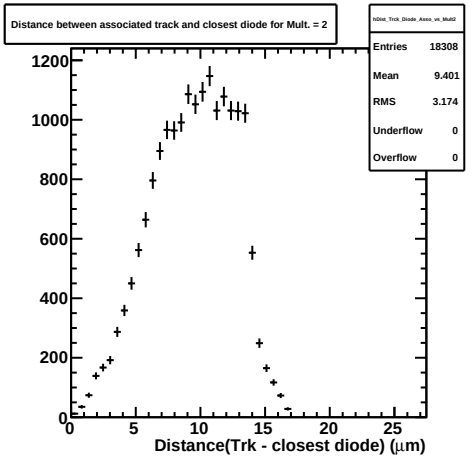
Tu vs Tv on matrix for non-associated tracks

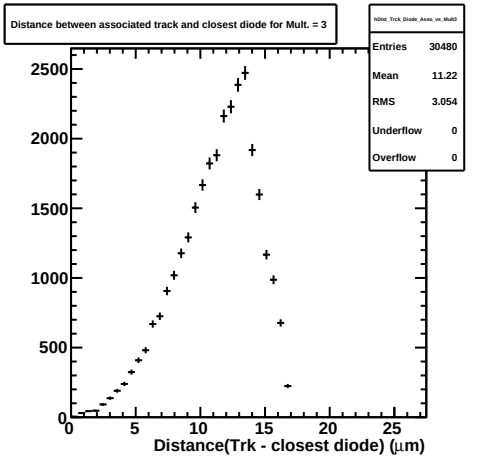


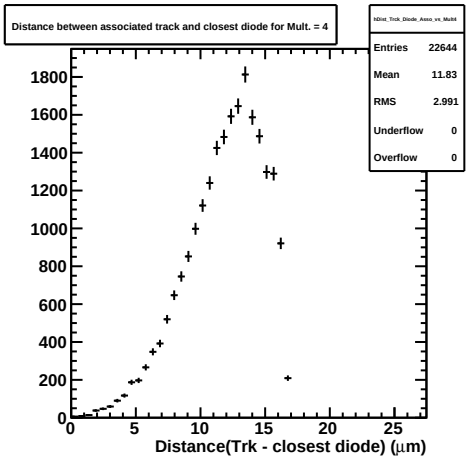
Probability of duplicated hits vs cluster multiplicity vs Track-distance to diode of earliest MATCHED hit

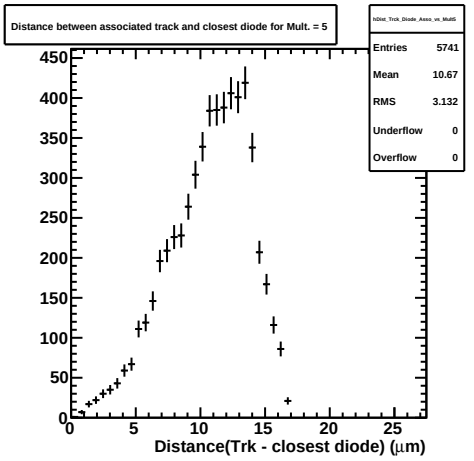


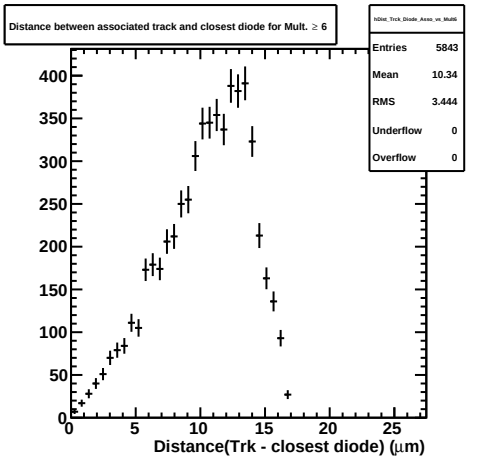

Distance between associated track and closest diode for Mult. = 1
hDist_Trck_Diode_Asso_vs_Mult1
Entries 13173
Mean 5.64
RMS 2.972
Underflow 0
Overflow 0
Distance(Trk - closest diode) (μm)

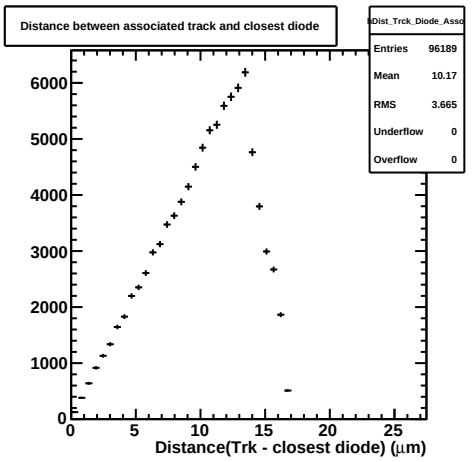

Distance between associated track and closest diode for Mult. = 2
hDist_Trck_Diode_Asso_vs_Mult2
Entries 18308
Mean 9.401
RMS 3.174
Underflow 0
Overflow 0
Distance(Trk - closest diode) (μm)

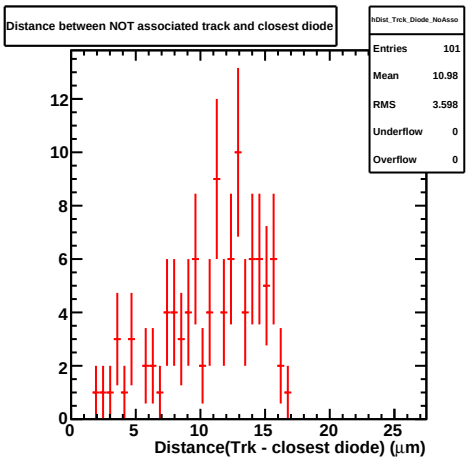

Distance between associated track and closest diode for Mult. = 3
hDist_Trck_Diode_Asso_vs_Mult3
Entries 30480
Mean 11.22
RMS 3.054
Underflow 0
Overflow 0
Distance(Trk - closest diode) (μm)

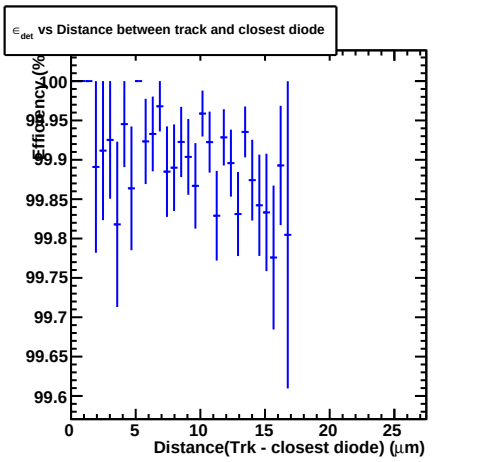

Distance between associated track and closest diode for Mult. = 4
hDist_Trck_Diode_Asso_vs_Mult4
Entries 22644
Mean 11.83
RMS 2.991
Underflow 0
Overflow 0
Distance(Trk - closest diode) (μm)


Distance between associated track and closest diode for Mult. = 5
hDist_Trck_Diode_Asso_vs_Mult5
Entries 5741
Mean 10.67
RMS 3.132
Underflow 0
Overflow 0
Distance(Trk - closest diode) (μm)

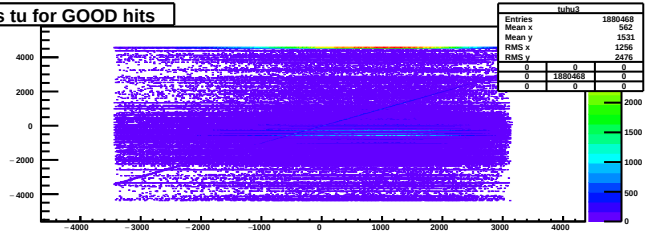

Distance between associated track and closest diode for Mult. ≥ 6
hDist_Trck_Diode_Asso_vs_Mult6
Entries 5843
Mean 10.34
RMS 3.444
Underflow 0
Overflow 0
Distance(Trk - closest diode) (μm)


Distance between associated track and closest diode
hDist_Trck_Diode_Asso
Entries 96189
Mean 10.17
RMS 3.665
Underflow 0
Overflow 0
Distance(Trk - closest diode) (μm)

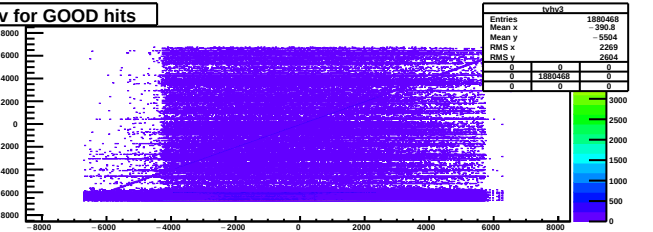

Distance between NOT associated track and closest diode
hDist_Trck_Diode_NoAsso
Entries 101
Mean 10.98
RMS 3.598
Underflow 0
Overflow 0
Distance(Trk - closest diode) (μm)


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

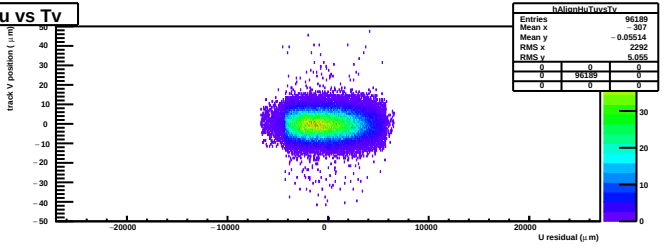
hu vs tu for GOOD hits



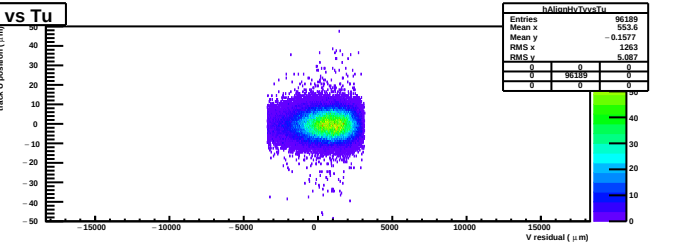
hv vs tv for GOOD hits



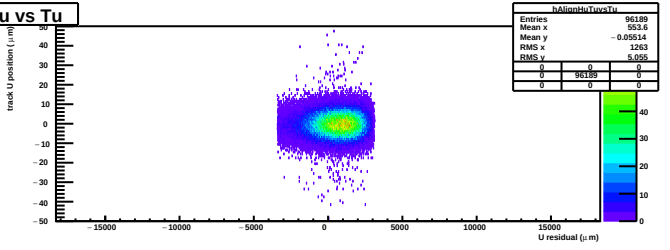
tu-hu vs Tv



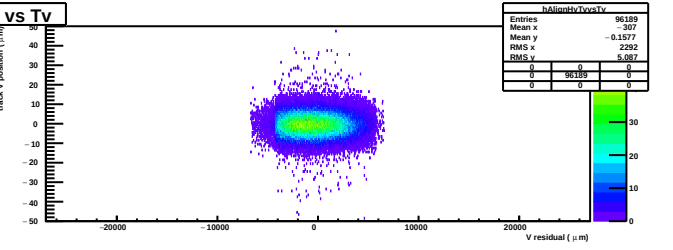
tv-hv vs Tu



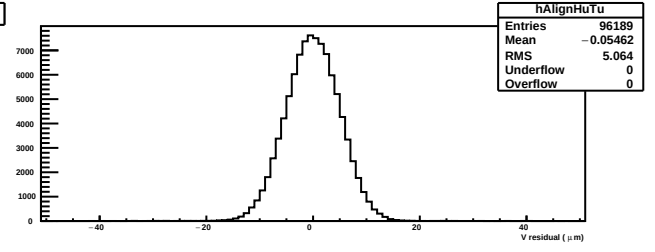
tu-hu vs Tu



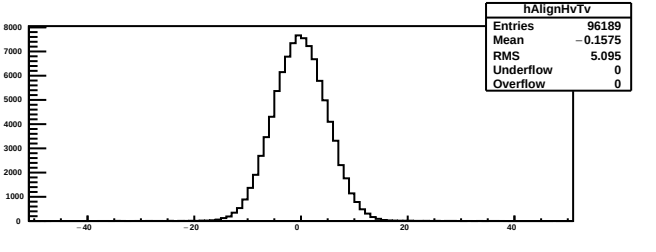
tv-hv vs Tv

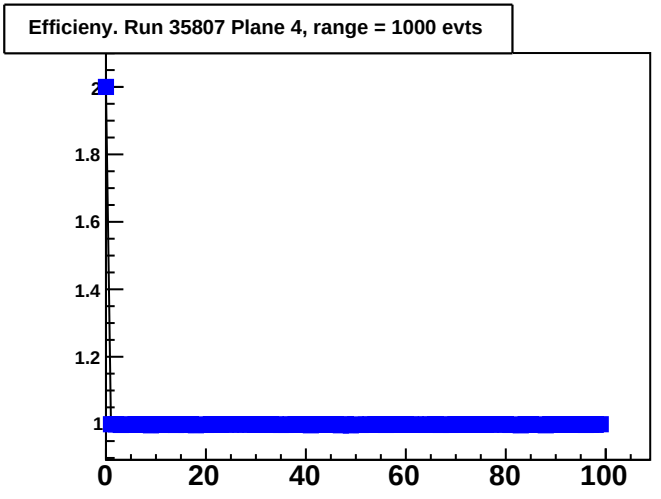


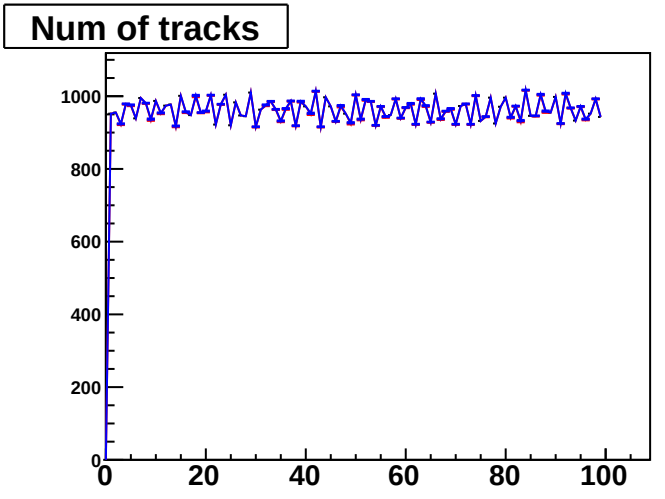
tu-hu

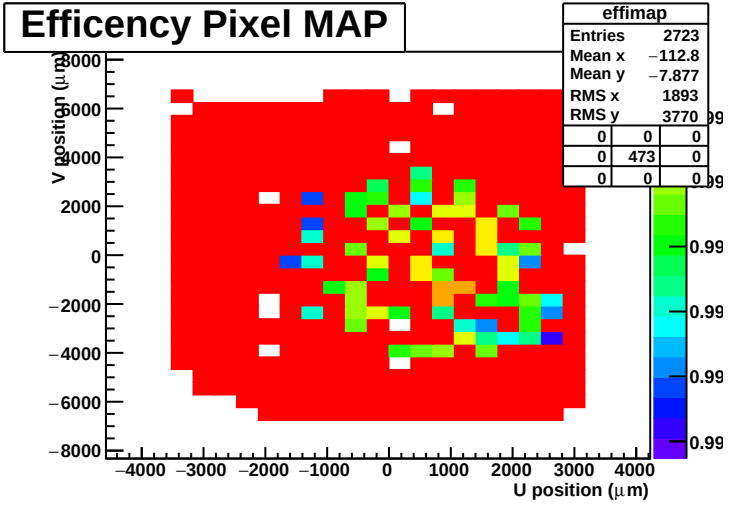


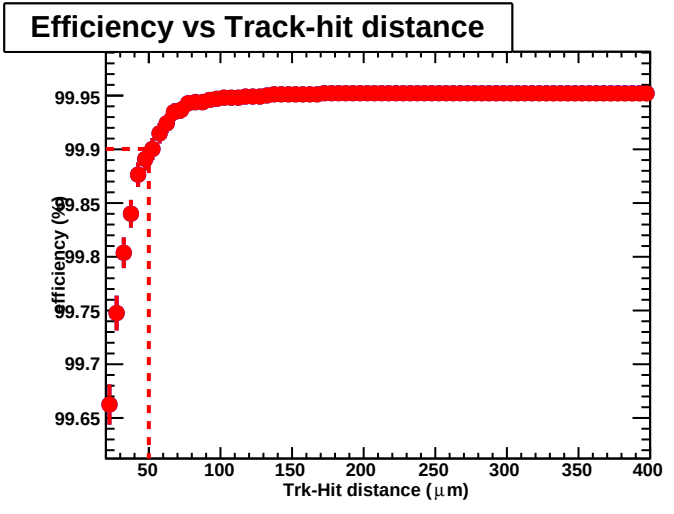
tv-hv



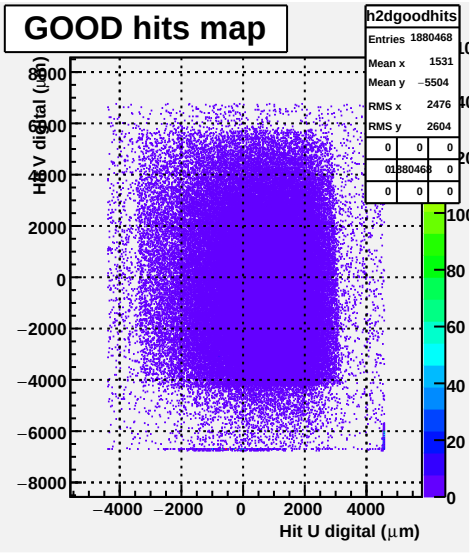

Efficieny. Run 35807 Plane 4, range = 1000 evts
2
1.8
1.6
1.4
1.2
1
0
20
40
60
80
100

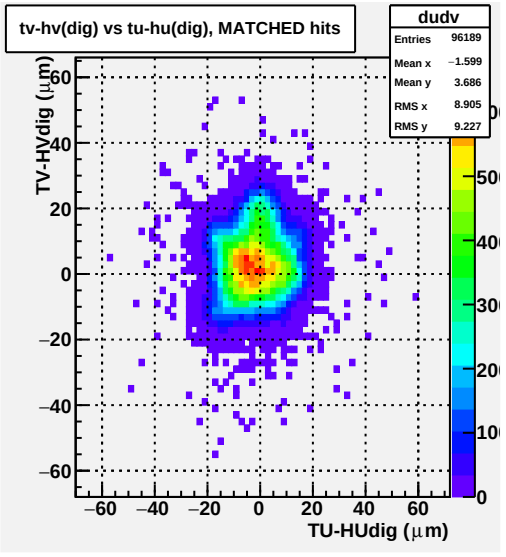

Num of tracks
1000
800
600
400
200
0
0
20
40
60
80
100

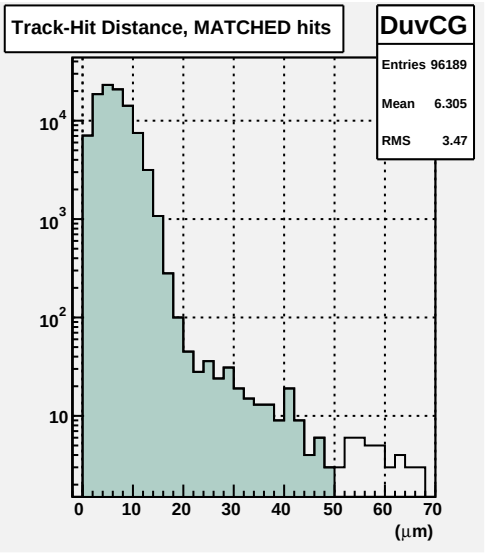

Efficency Pixel MAP
effimap
Entries 2723
Mean x −112.8
Mean y −7.877
RMS x 1893
RMS y 3770
0 0 0
0 473 0
0 0 0
V position (μm)
8000
6000
4000
2000
0
−2000
−4000
−6000
−8000
−4000 −3000 −2000 −1000 0 1000 2000 3000 4000
U position (μm)
0.99
0.99
0.99
0.99

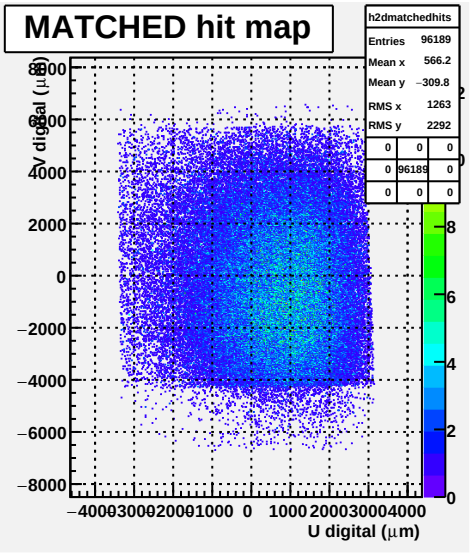

Efficiency vs Track-hit distance
Efficiency (%)
99.95
99.9
99.85
99.8
99.75
99.7
99.65
50 100 150 200 250 300 350 400
Trk-Hit distance (μm)

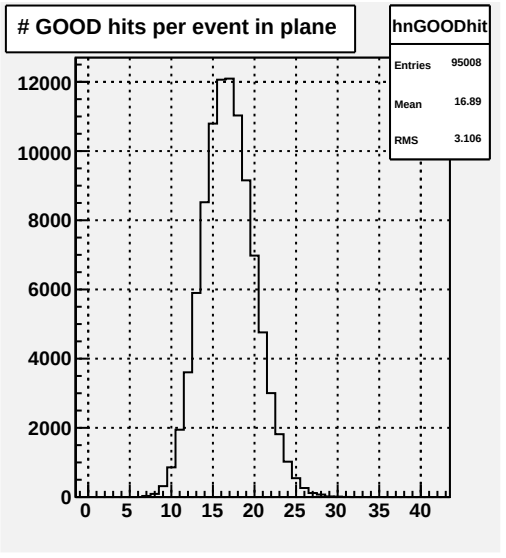
M35 ; run 35807; Pl 4; dist 50; eff 0.999; Seed 0.0; Neigh 0.0

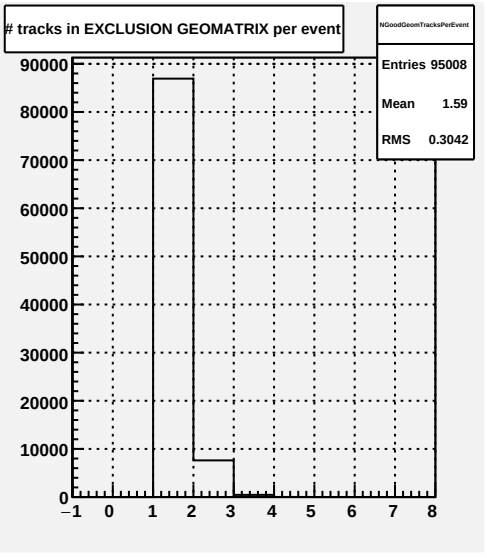


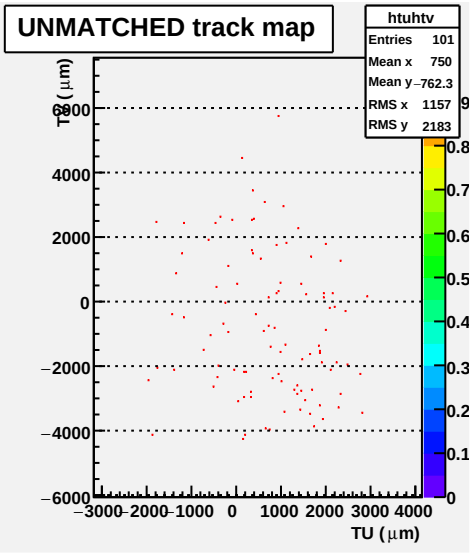


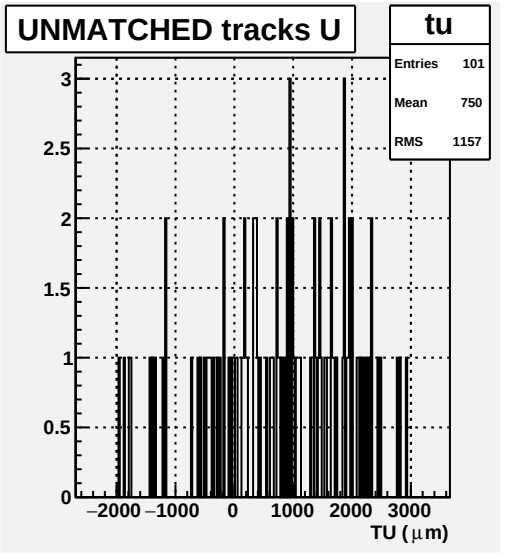


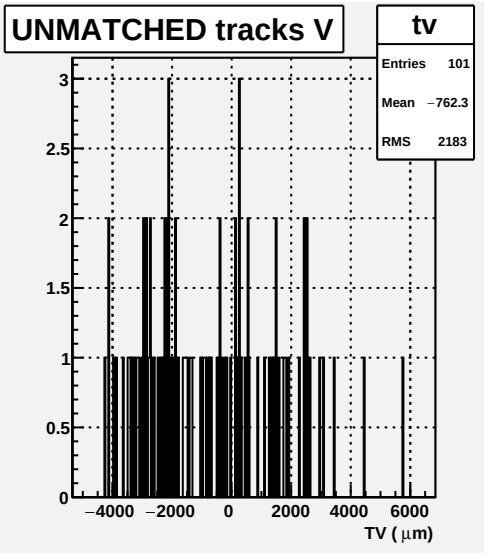


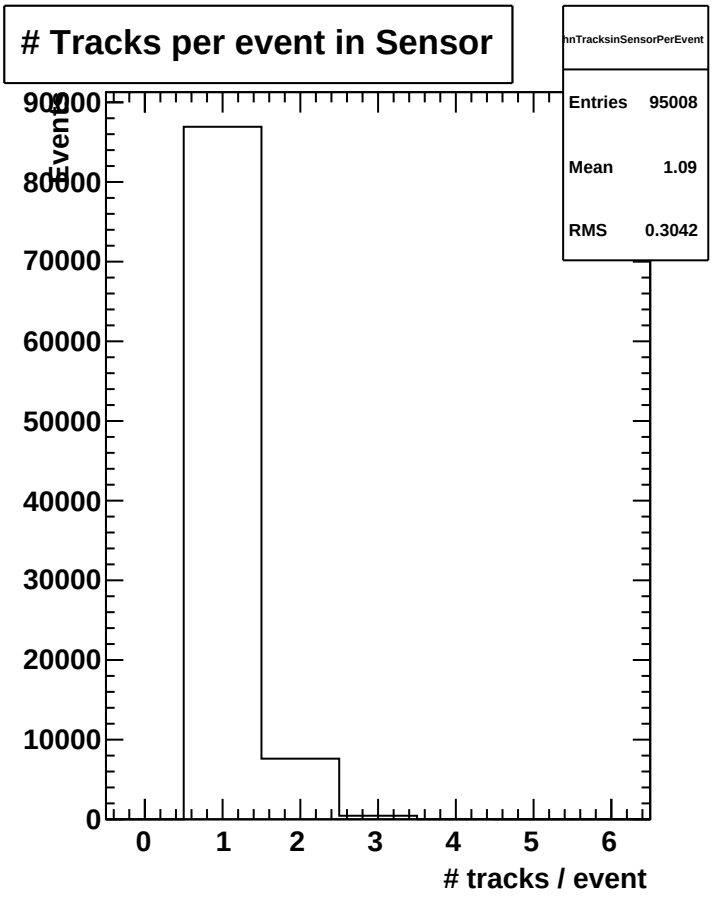


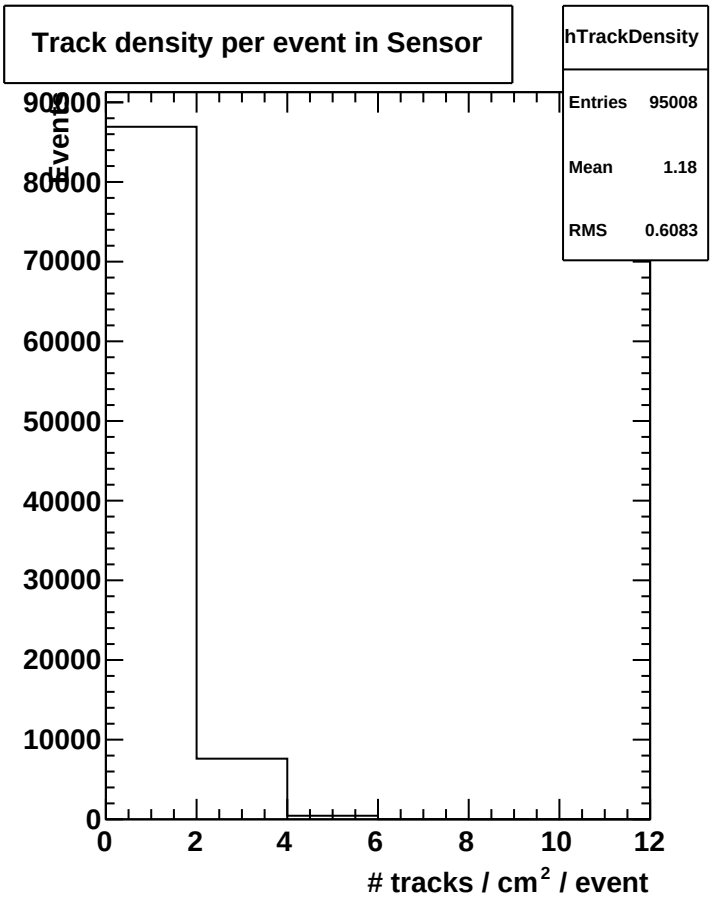


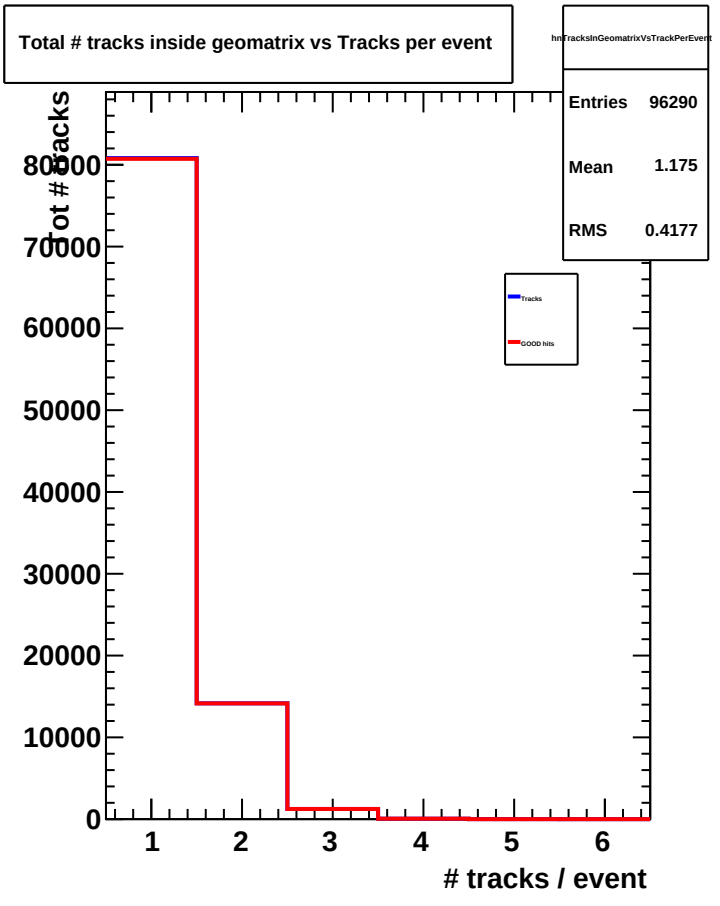


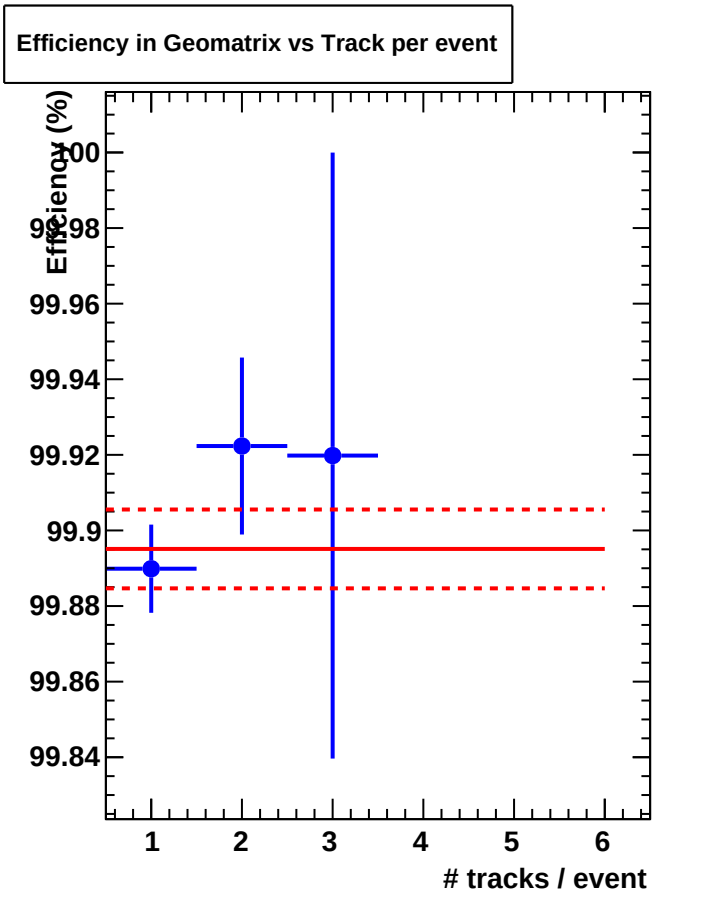




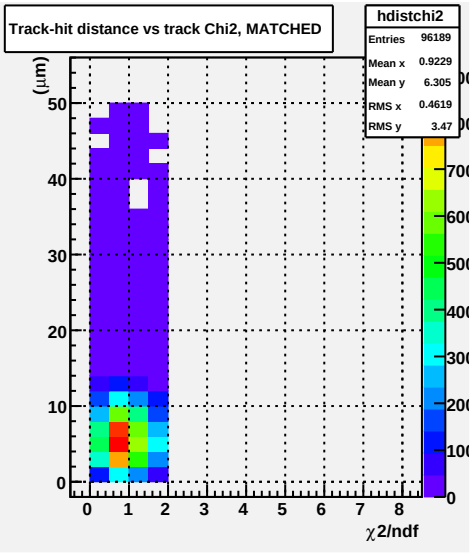

Tracks per event in Sensor
hnTracksinSensorPerEvent
Entries 95008
Mean 1.09
RMS 0.3042
Events
tracks / event

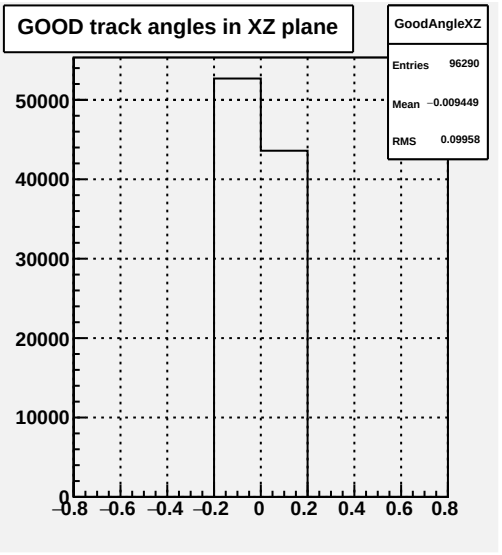

Track density per event in Sensor
hTrackDensity
Entries 95008
Mean 1.18
RMS 0.6083
Events
tracks / cm^2 / event

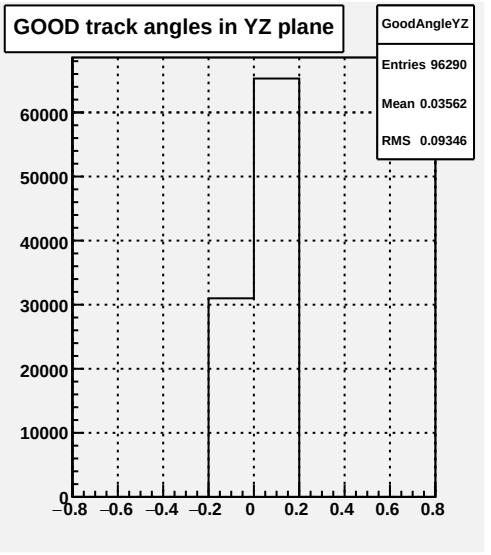

Total # tracks inside geomatrix vs Tracks per event
hnTracksInGeomatrixVsTrackPerEvent
Entries 96290
Mean 1.175
RMS 0.4177
Tracks
GOOD hits
Tot # tracks
tracks / event

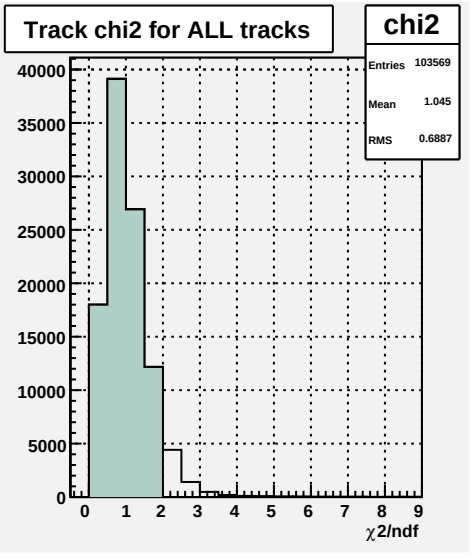

Efficiency in Geomatrix vs Track per event
Efficiency (%)
tracks / event

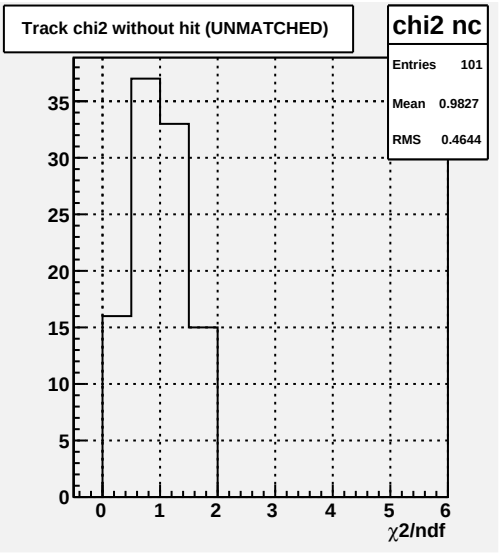
M35 ; run 35807; Pl 4; dist 50; eff 0.999; Seed 0.0; Neigh 0.0

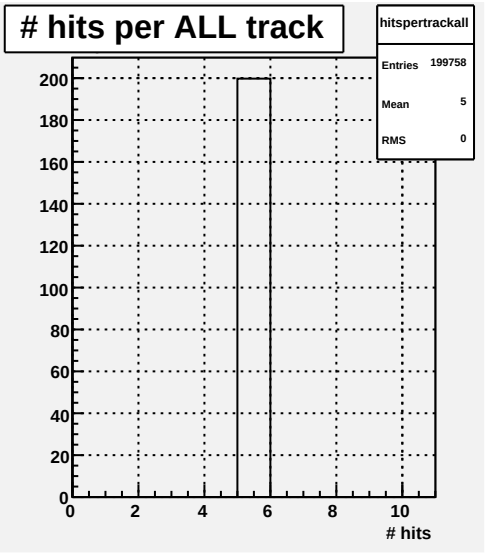


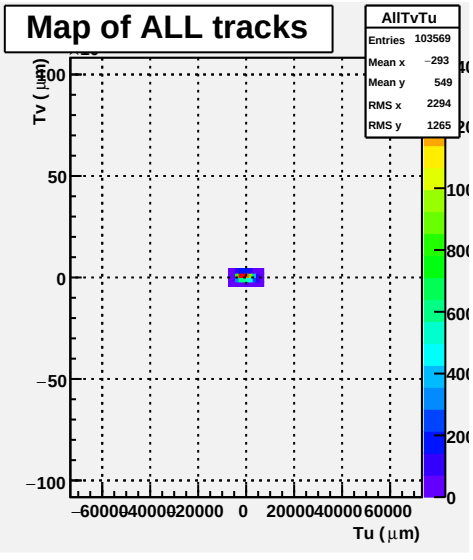


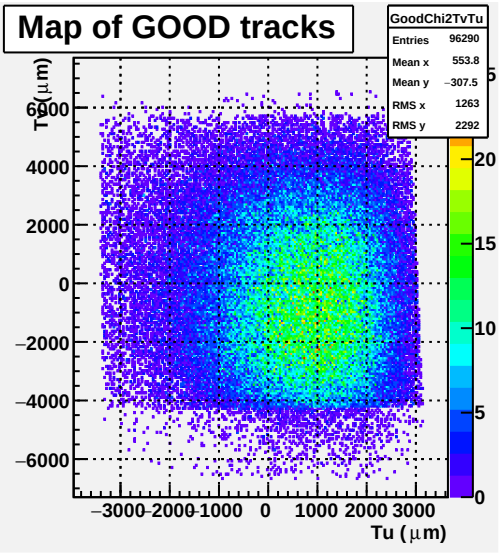


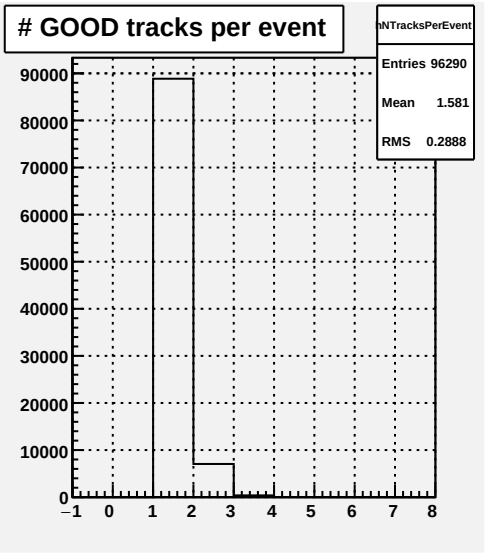




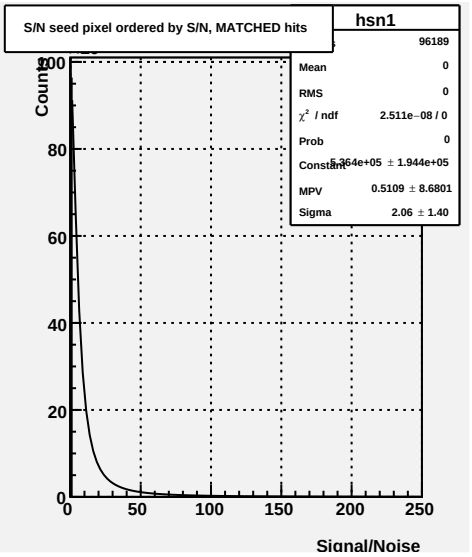


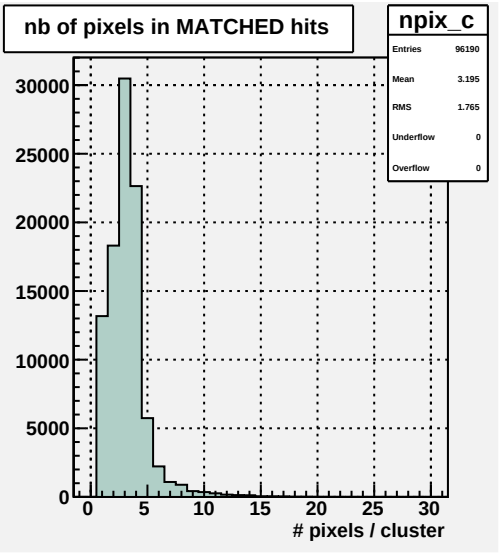


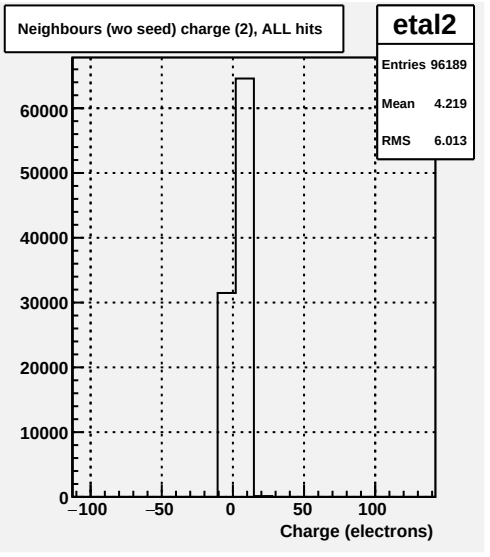


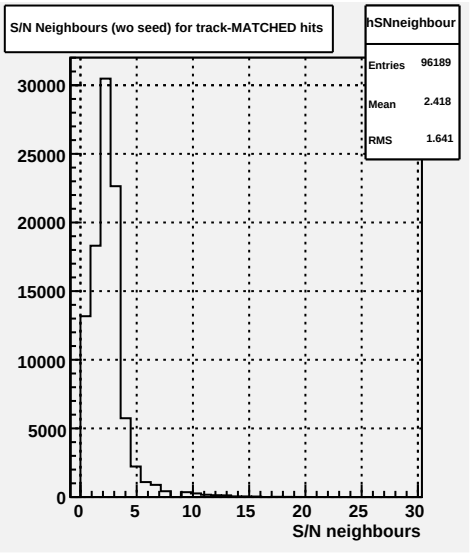


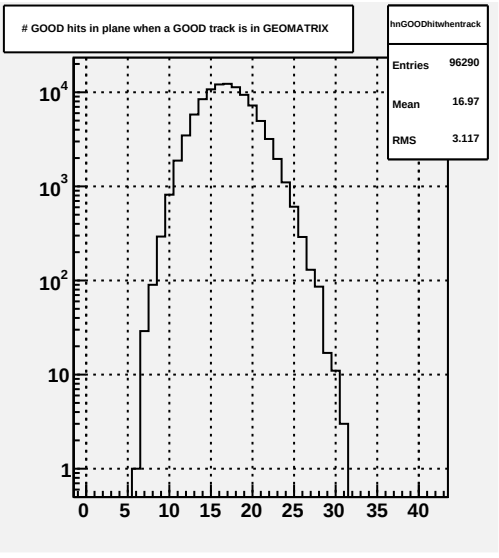
M35 ; run 35807; Pl 4; dist 50; eff 0.999; Seed 0.0; Neigh 0.0

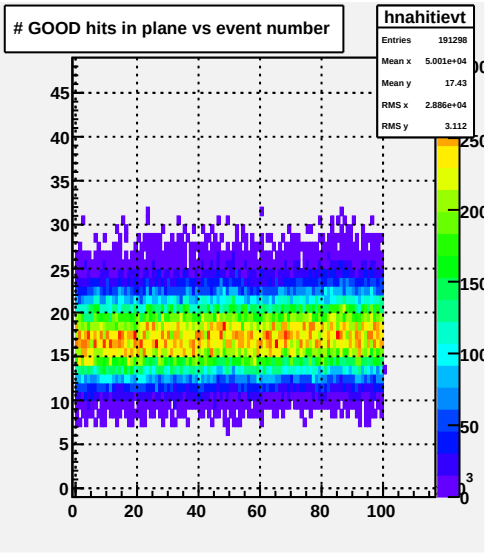


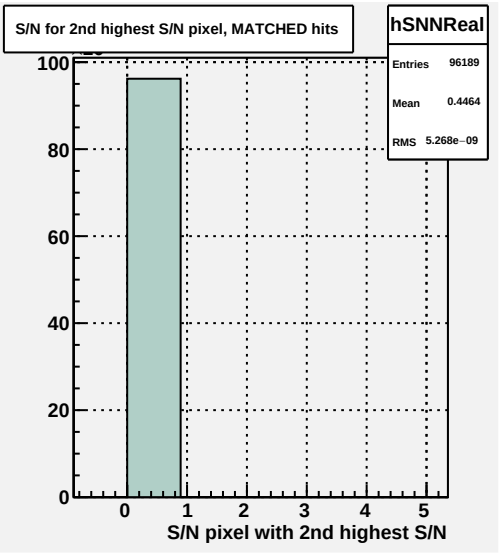


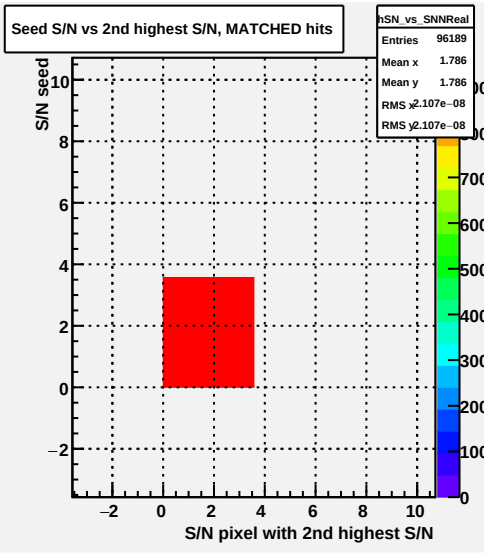




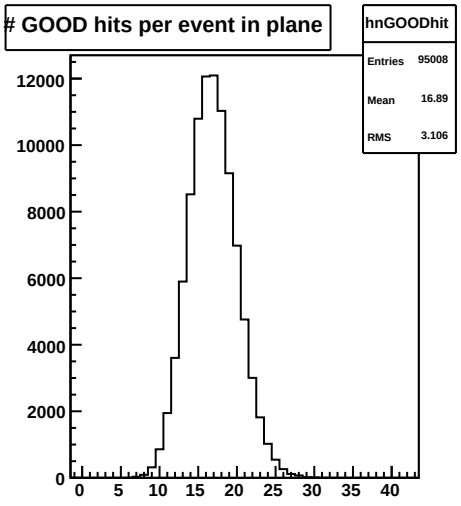


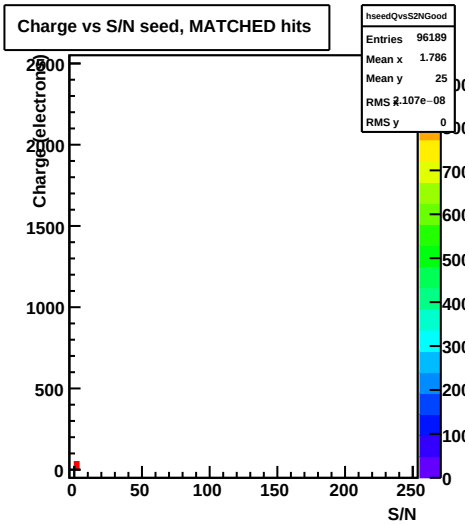


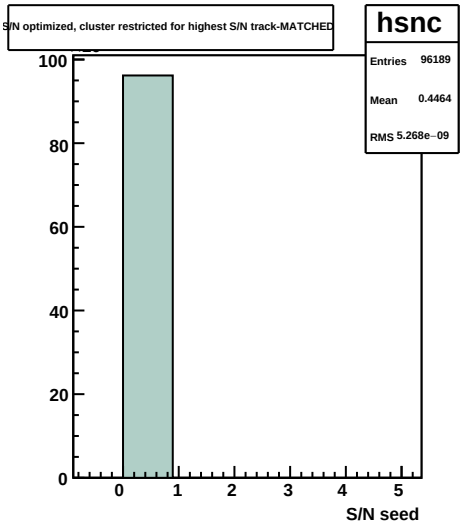


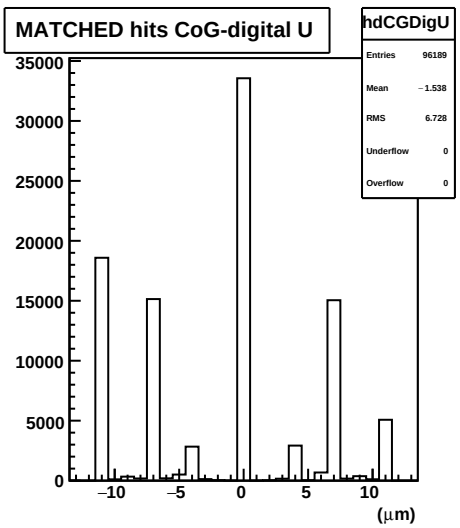


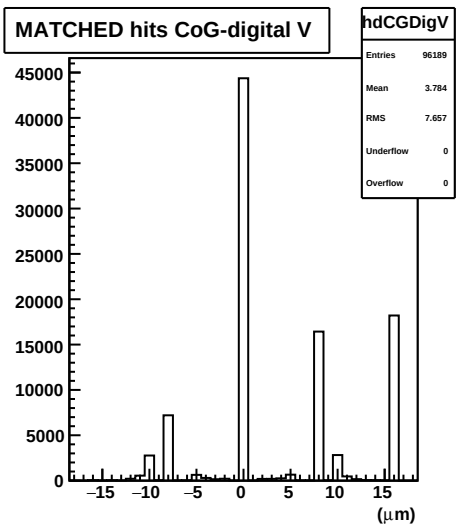
M35 ; run 35807; Pl 4; dist 50; eff 0.999; Seed 0.0; Neigh 0.0

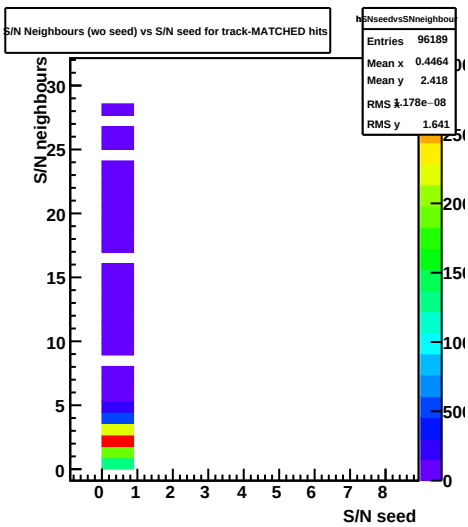


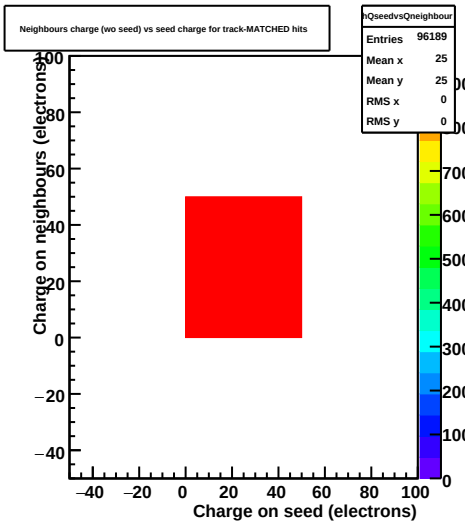


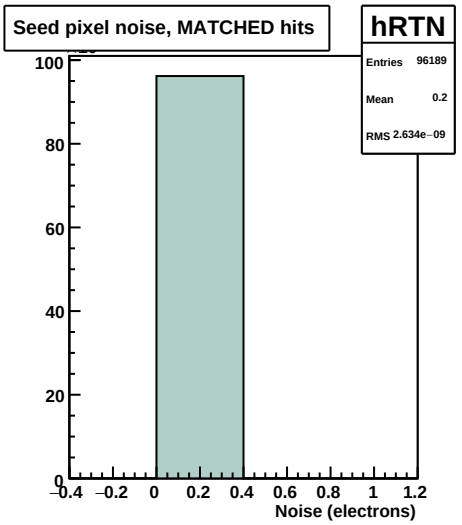


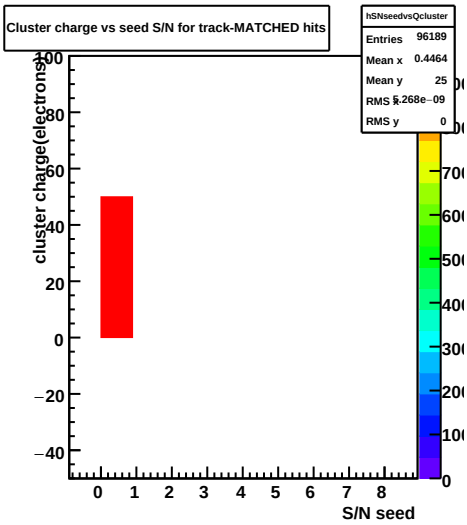




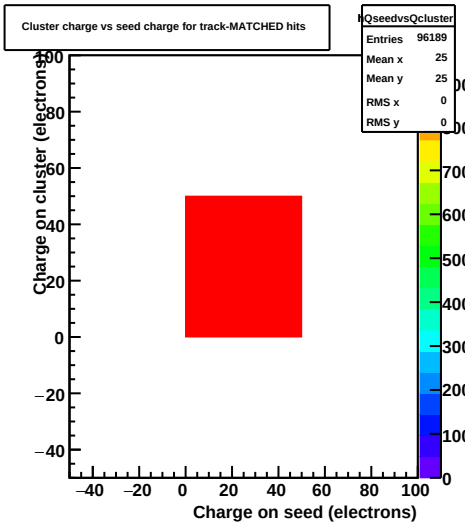


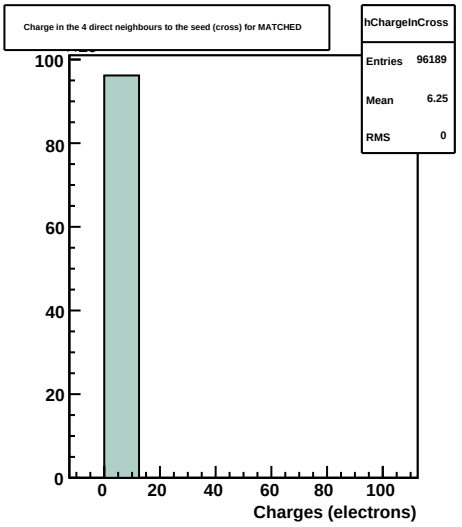


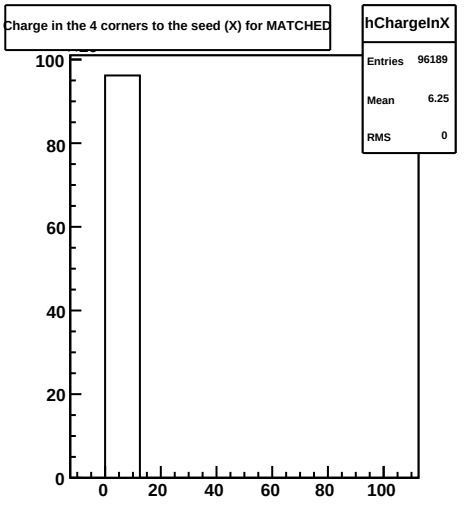


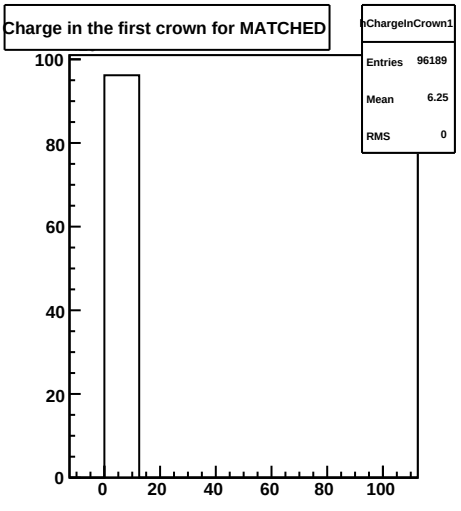


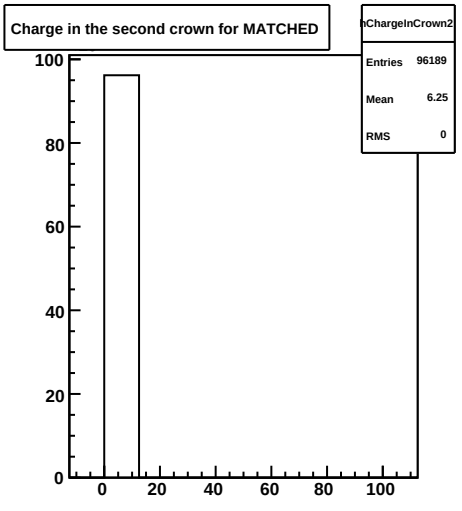
M35 ; run 35807; Pl 4; dist 50; eff 0.999; Seed 0.0; Neigh 0.0

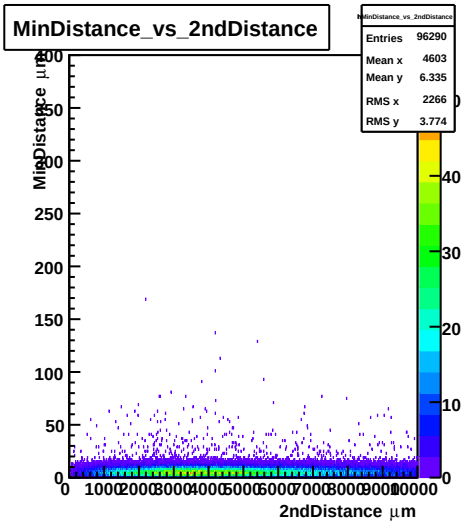


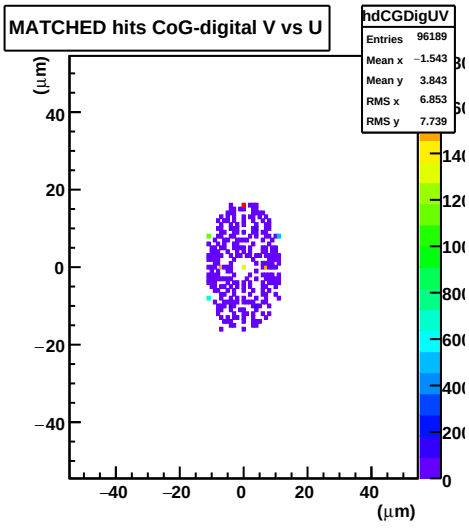


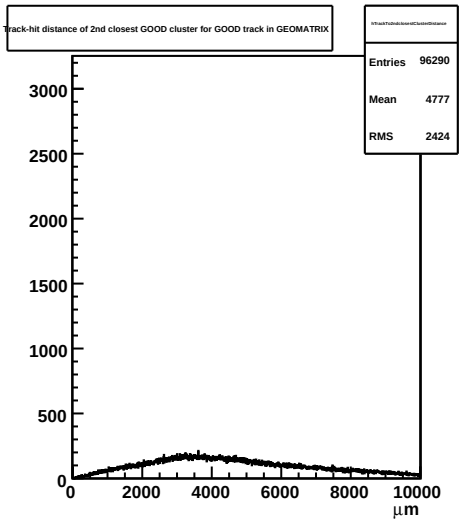


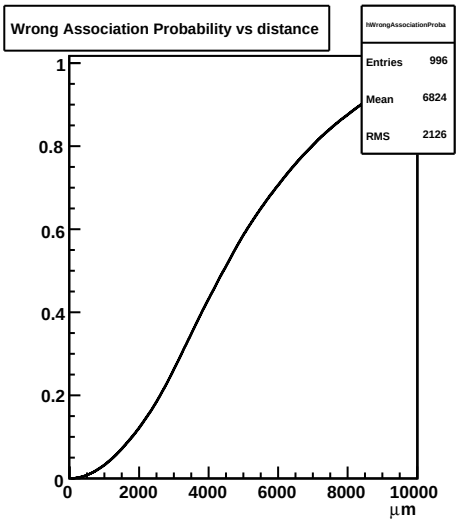




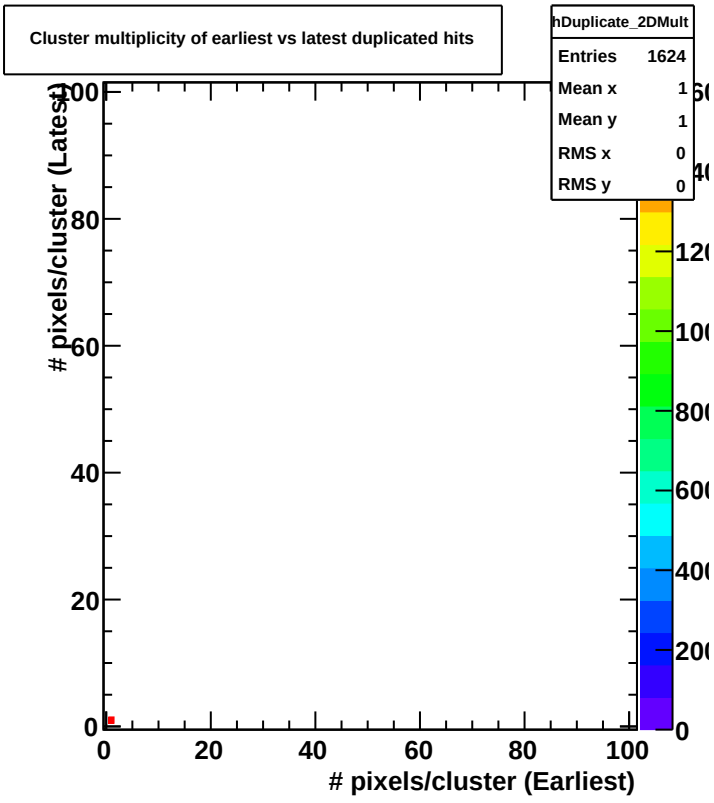


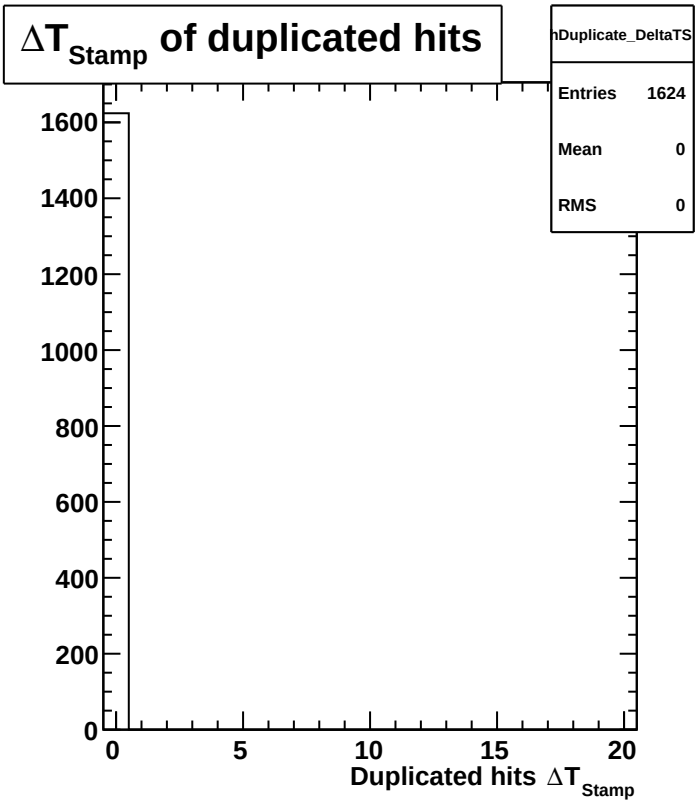


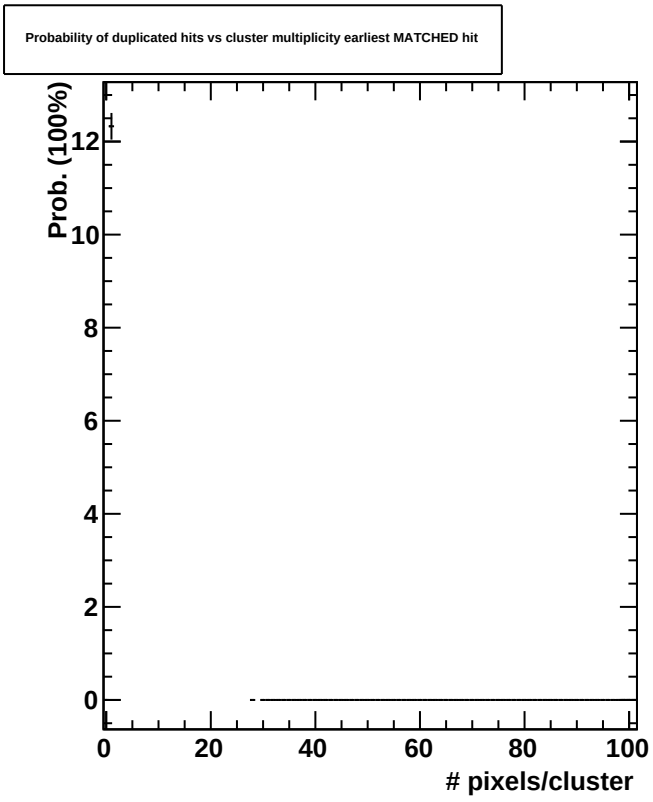


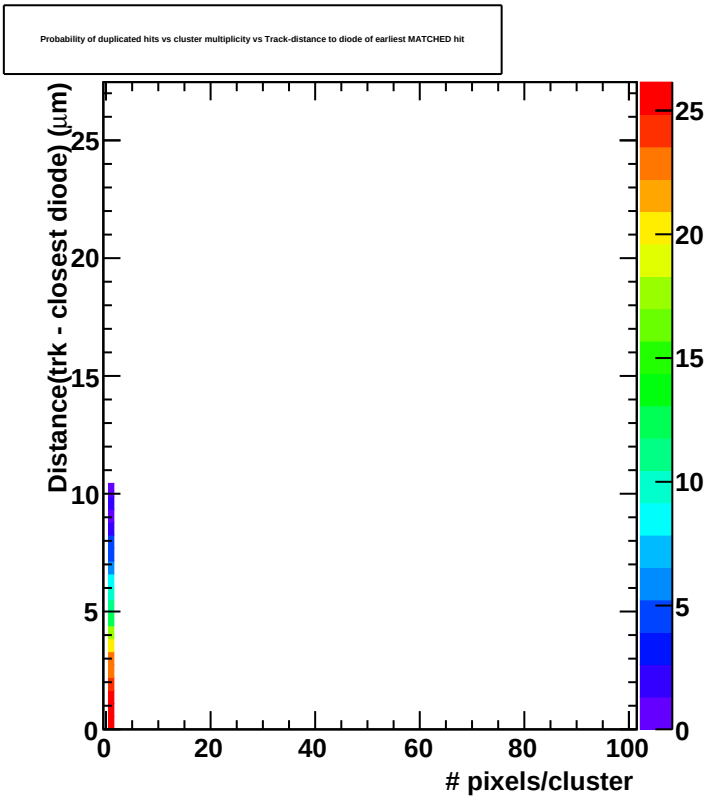


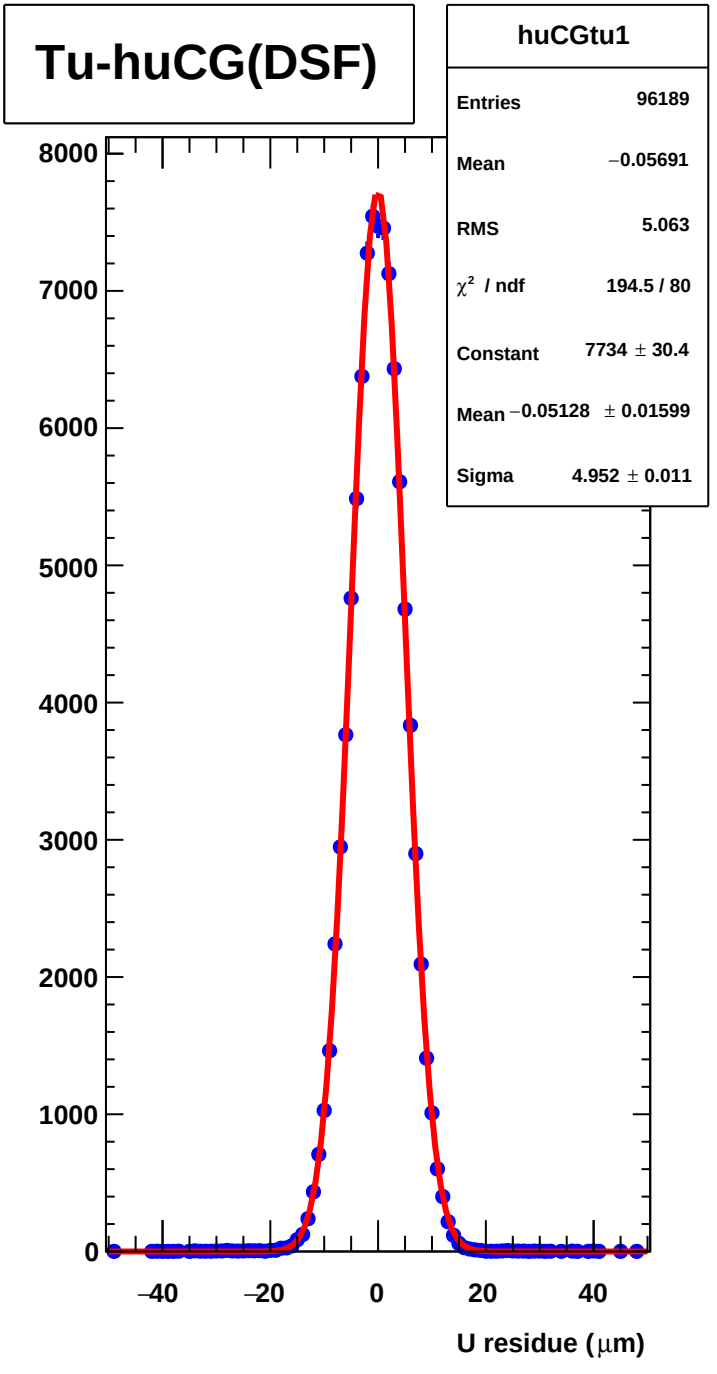
M35 ; run 35807; Pl 4; dist 50; eff 0.999; Seed 0.0; Neigh 0.0

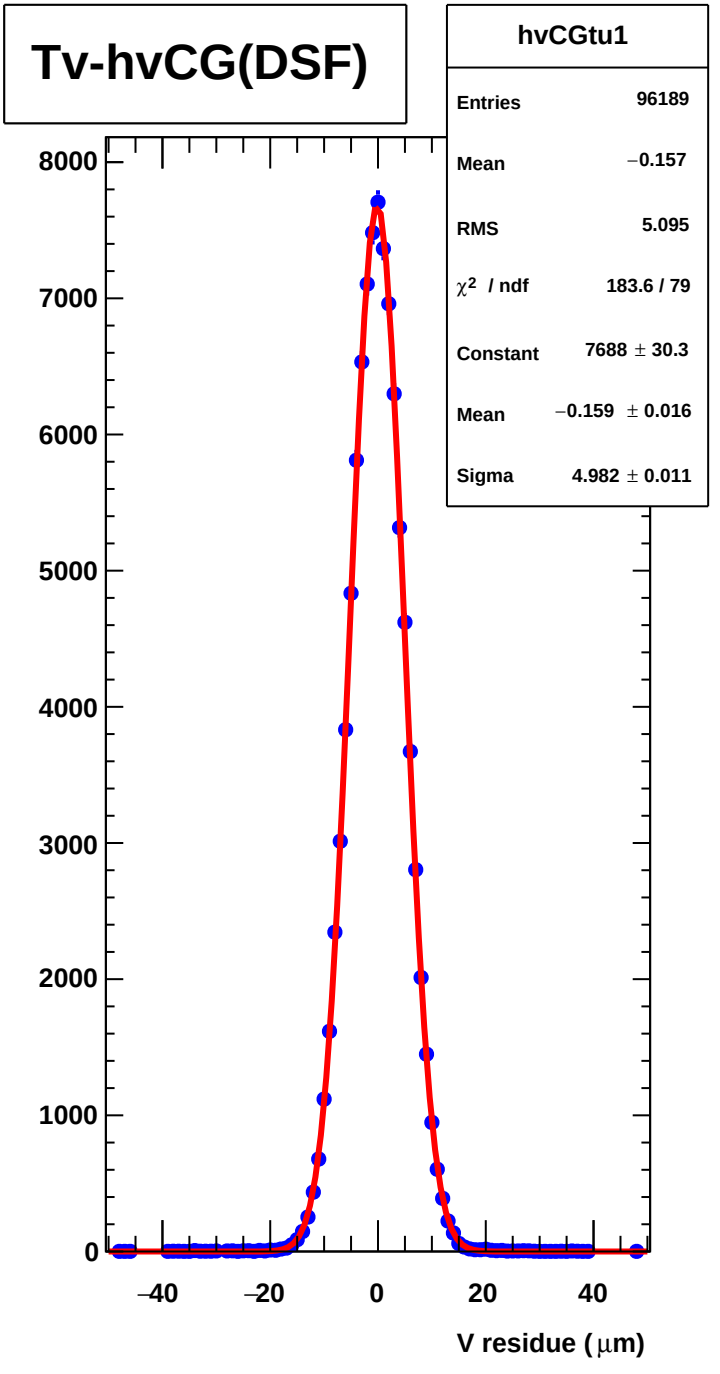


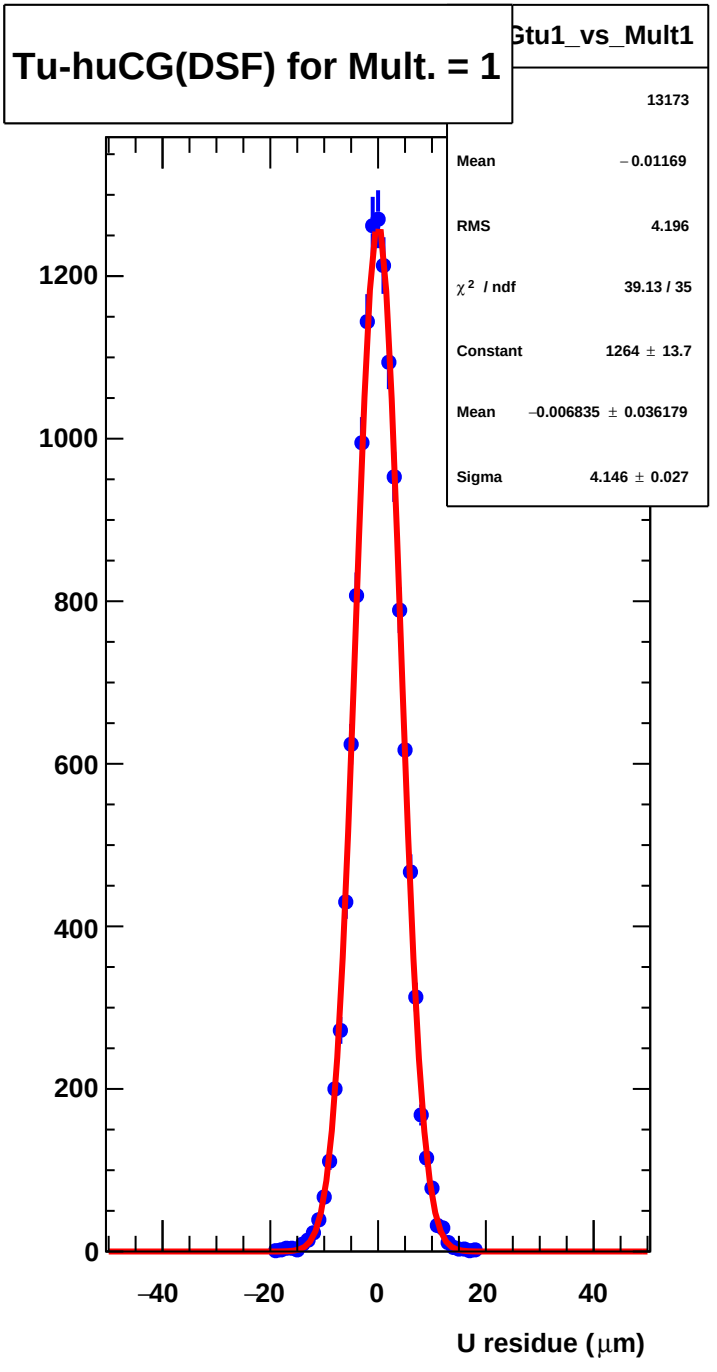


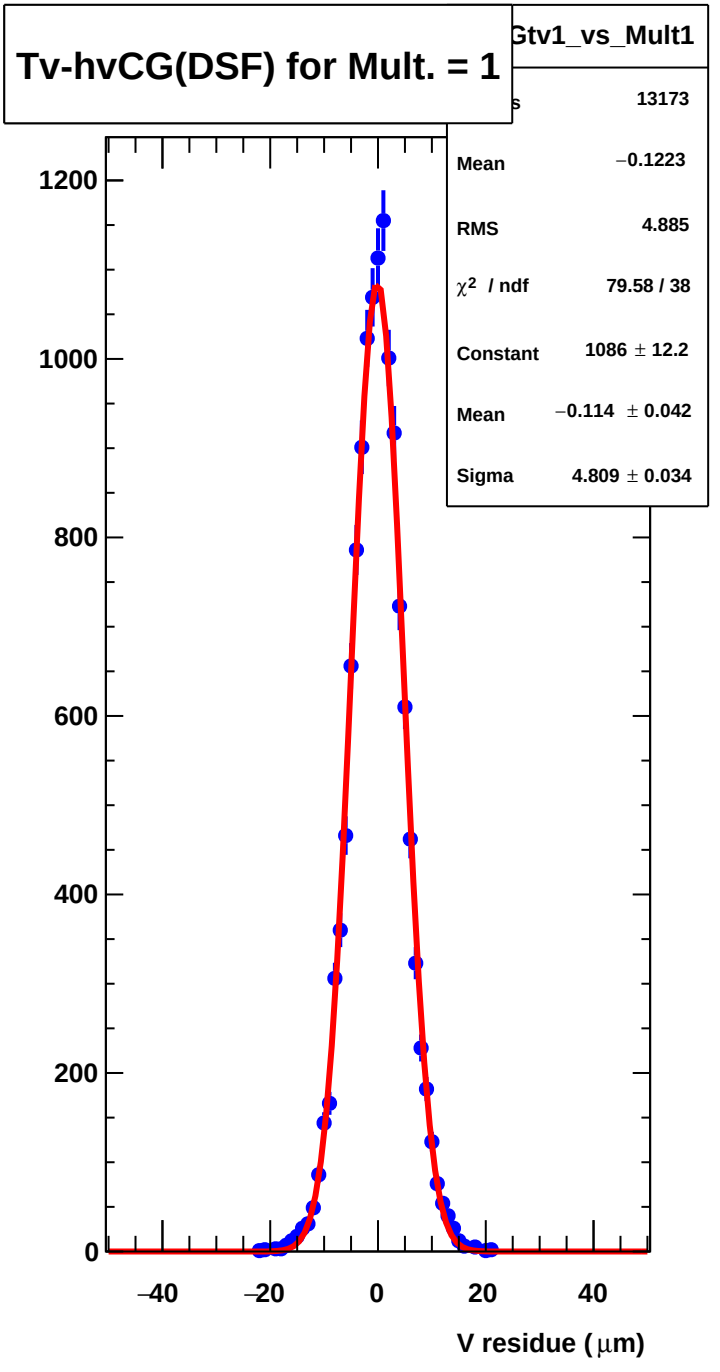


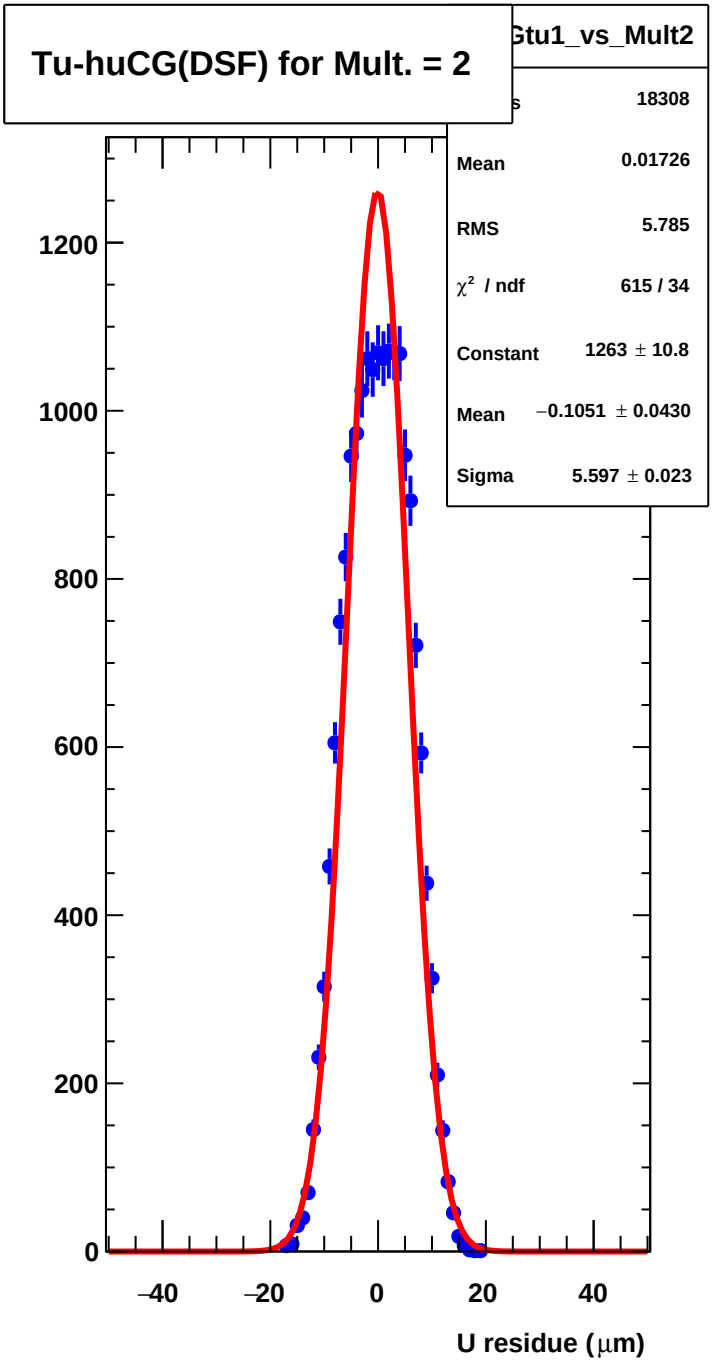


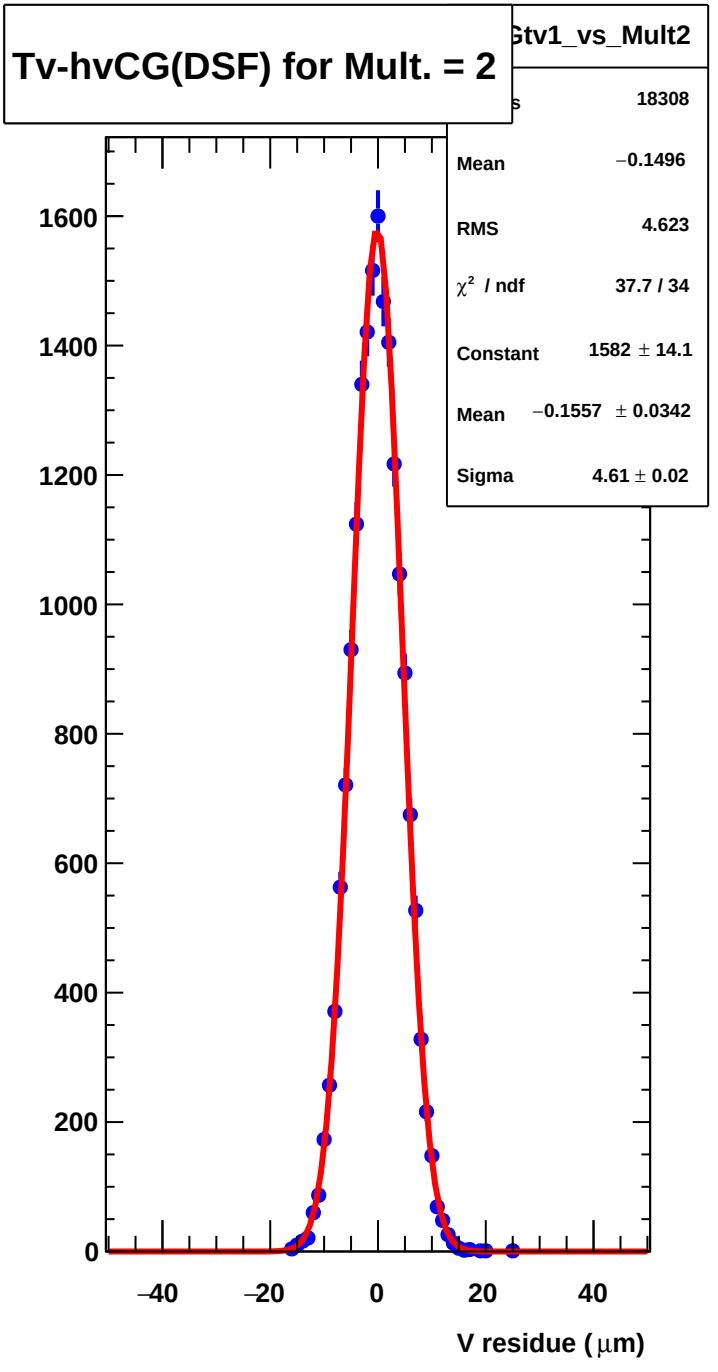

Tu-huCG(DSF)
huCGtu1
Entries 96189
Mean −0.05691
RMS 5.063
χ² / ndf 194.5 / 80
Constant 7734 ± 30.4
Mean −0.05128 ± 0.01599
Sigma 4.952 ± 0.011
8000
7000
6000
5000
4000
3000
2000
1000
0
−40
−20
0
20
40
U residue (μm)

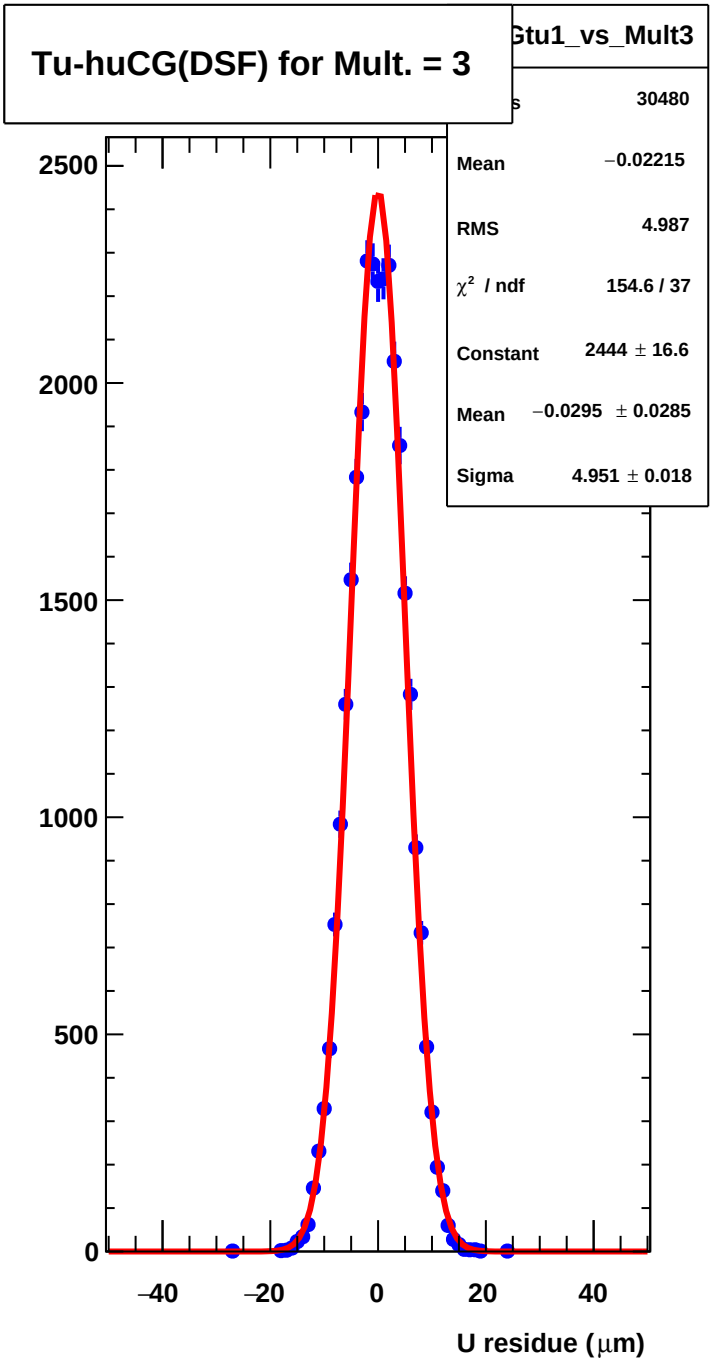

Tv-hvCG(DSF)
hvCGtu1
Entries 96189
Mean −0.157
RMS 5.095
χ² / ndf 183.6 / 79
Constant 7688 ± 30.3
Mean −0.159 ± 0.016
Sigma 4.982 ± 0.011
8000
7000
6000
5000
4000
3000
2000
1000
0
−40
−20
0
20
40
V residue (μm)

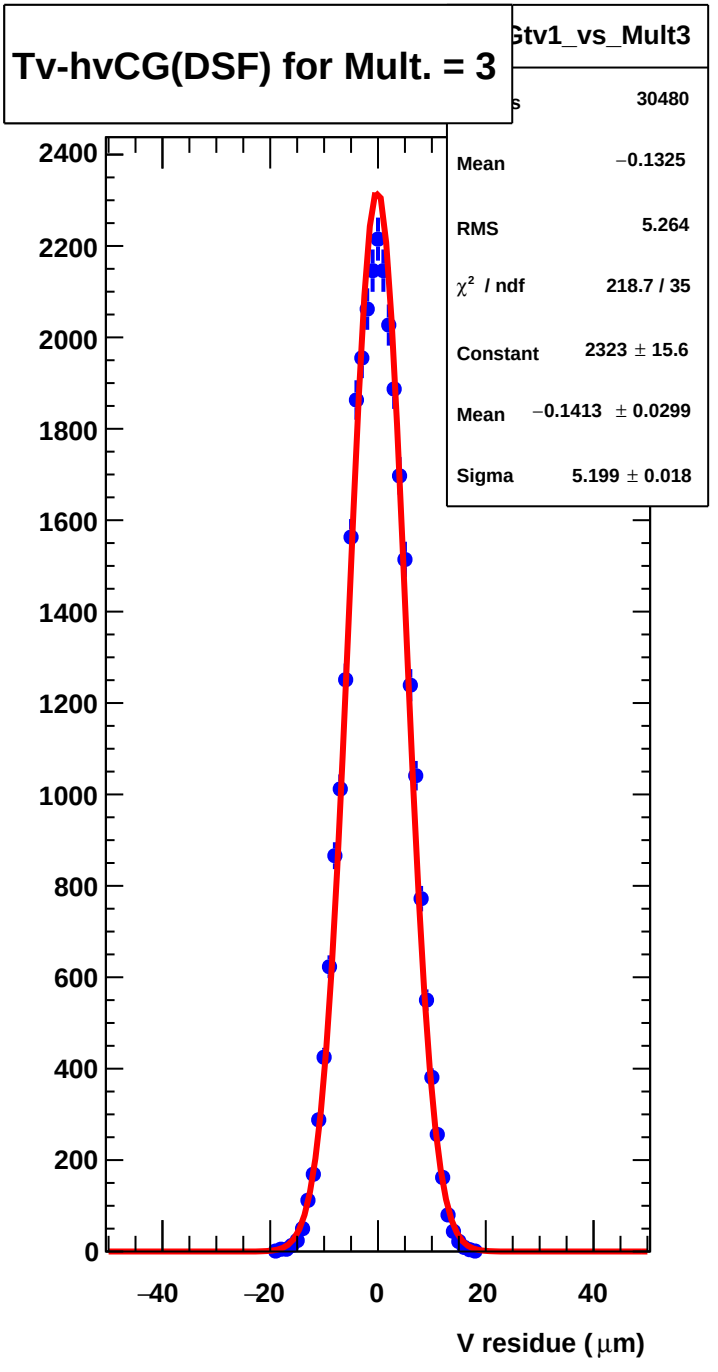

Tu-huCG(DSF) for Mult. = 1
Gtu1_vs_Mult1
13173
Mean −0.01169
RMS 4.196
χ² / ndf 39.13 / 35
Constant 1264 ± 13.7
Mean −0.006835 ± 0.036179
Sigma 4.146 ± 0.027
1200
1000
800
600
400
200
0
−40
−20
0
20
40
U residue (μm)

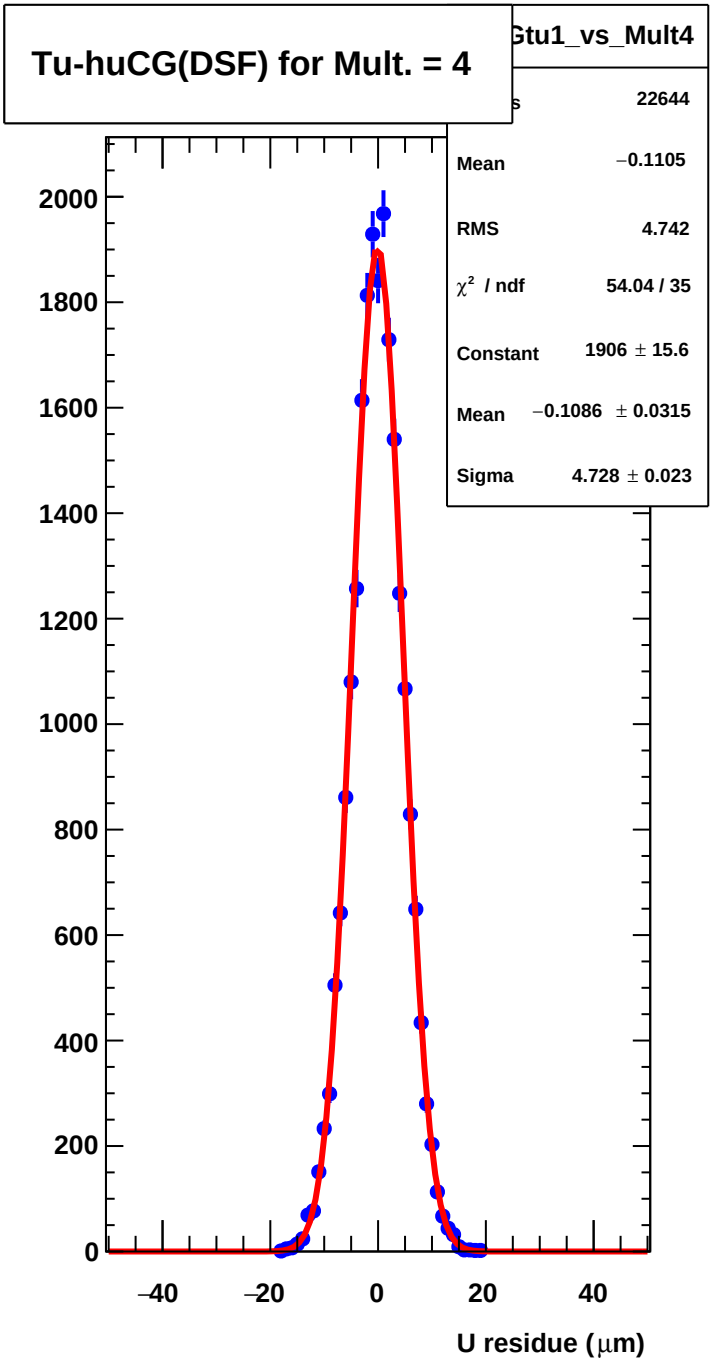

Tv-hvCG(DSF) for Mult. = 1
Gtv1_vs_Mult1
13173
Mean −0.1223
RMS 4.885
χ² / ndf 79.58 / 38
Constant 1086 ± 12.2
Mean −0.114 ± 0.042
Sigma 4.809 ± 0.034
1200
1000
800
600
400
200
0
−40
−20
0
20
40
V residue (μm)

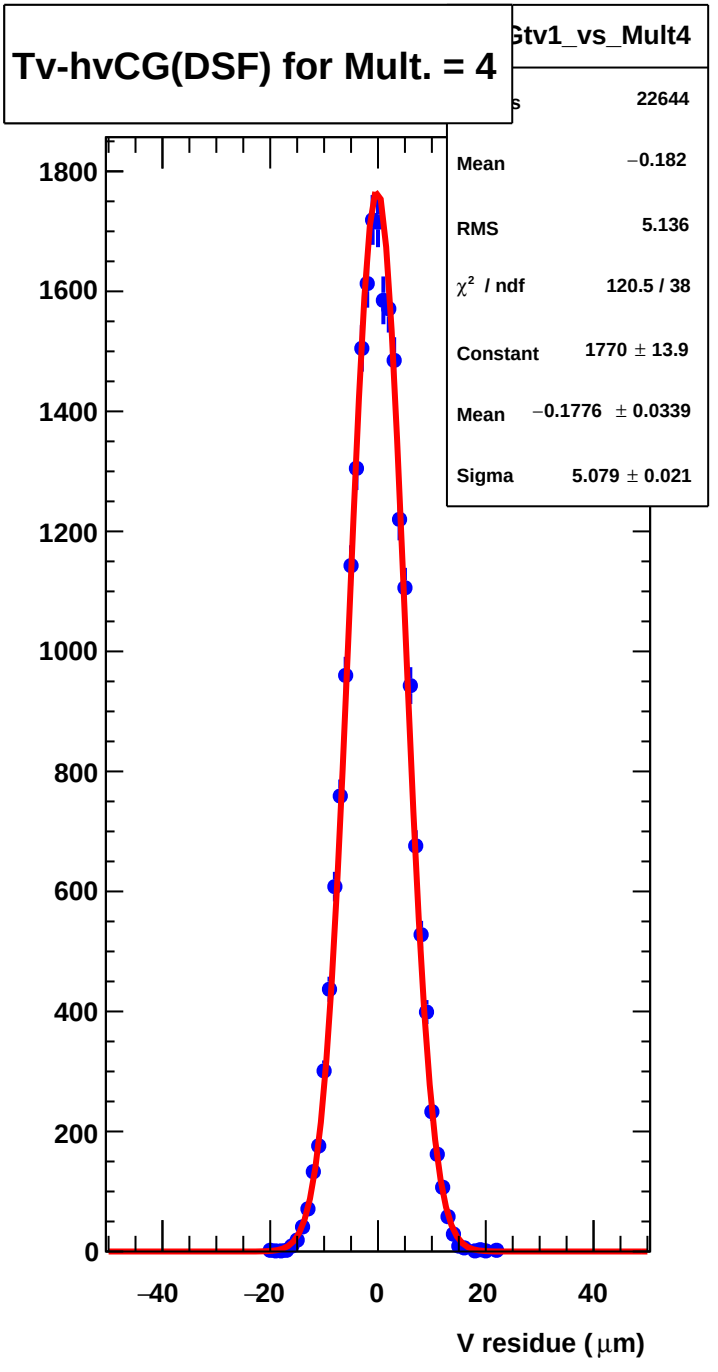

Tu-huCG(DSF) for Mult. = 2
Gtu1_vs_Mult2
18308
Mean 0.01726
RMS 5.785
χ² / ndf 615 / 34
Constant 1263 ± 10.8
Mean −0.1051 ± 0.0430
Sigma 5.597 ± 0.023
1200
1000
800
600
400
200
0
−40
−20
0
20
40
U residue (μm)

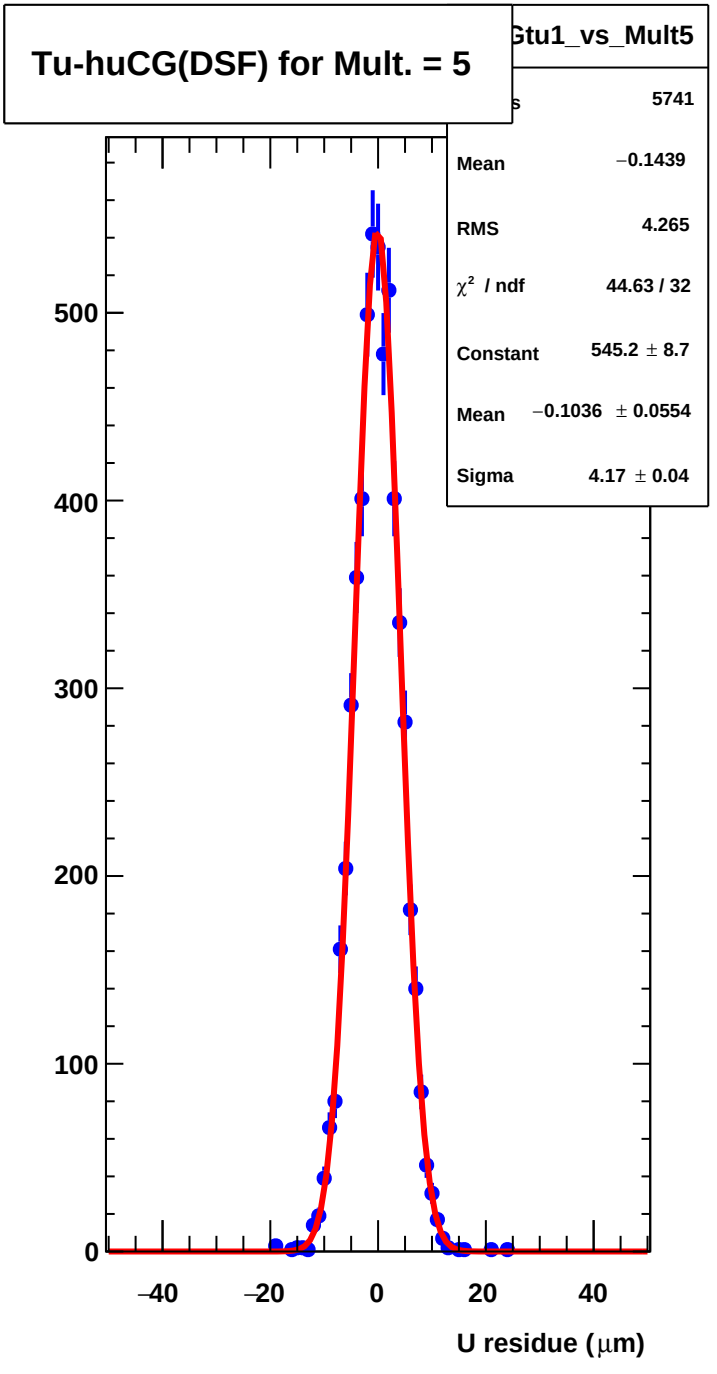

Tv-hvCG(DSF) for Mult. = 2
Gtv1_vs_Mult2
18308
Mean −0.1496
RMS 4.623
χ² / ndf 37.7 / 34
Constant 1582 ± 14.1
Mean −0.1557 ± 0.0342
Sigma 4.61 ± 0.02
1600
1400
1200
1000
800
600
400
200
0
−40
−20
0
20
40
V residue (μm)

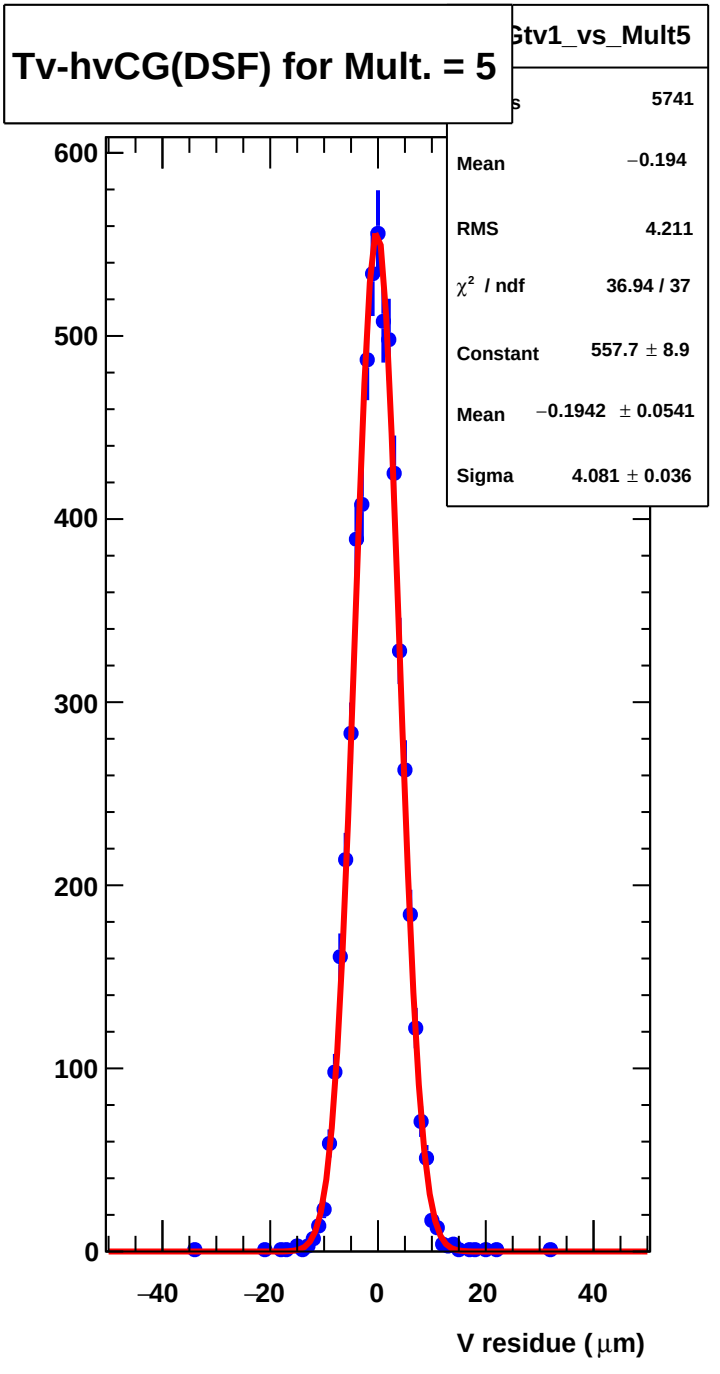

Tu-huCG(DSF) for Mult. = 3
Gtu1_vs_Mult3
s 30480
Mean −0.02215
RMS 4.987
χ² / ndf 154.6 / 37
Constant 2444 ± 16.6
Mean −0.0295 ± 0.0285
Sigma 4.951 ± 0.018
2500
2000
1500
1000
500
0
−40
−20
0
20
40
U residue (μm)

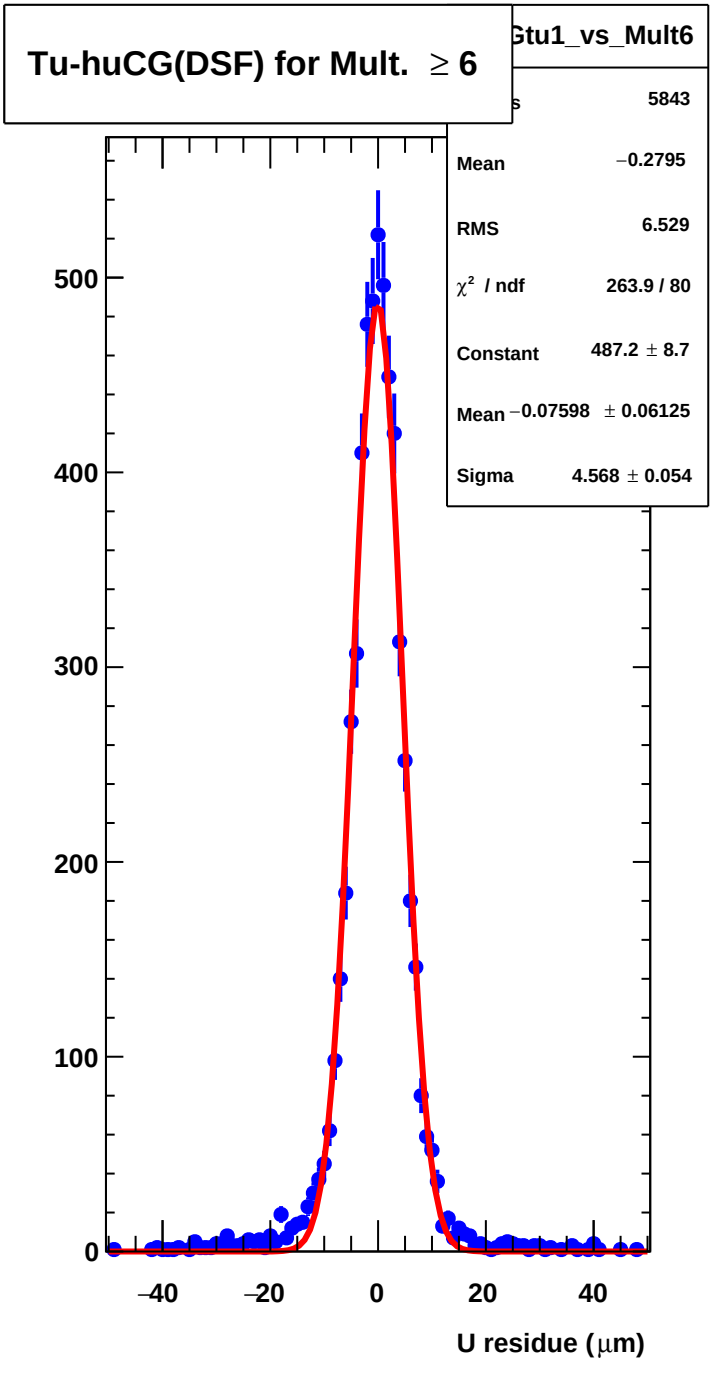

Tv-hvCG(DSF) for Mult. = 3
Gtv1_vs_Mult3
s 30480
Mean −0.1325
RMS 5.264
χ² / ndf 218.7 / 35
Constant 2323 ± 15.6
Mean −0.1413 ± 0.0299
Sigma 5.199 ± 0.018
2400
2200
2000
1800
1600
1400
1200
1000
800
600
400
200
0
−40
−20
0
20
40
V residue (μm)

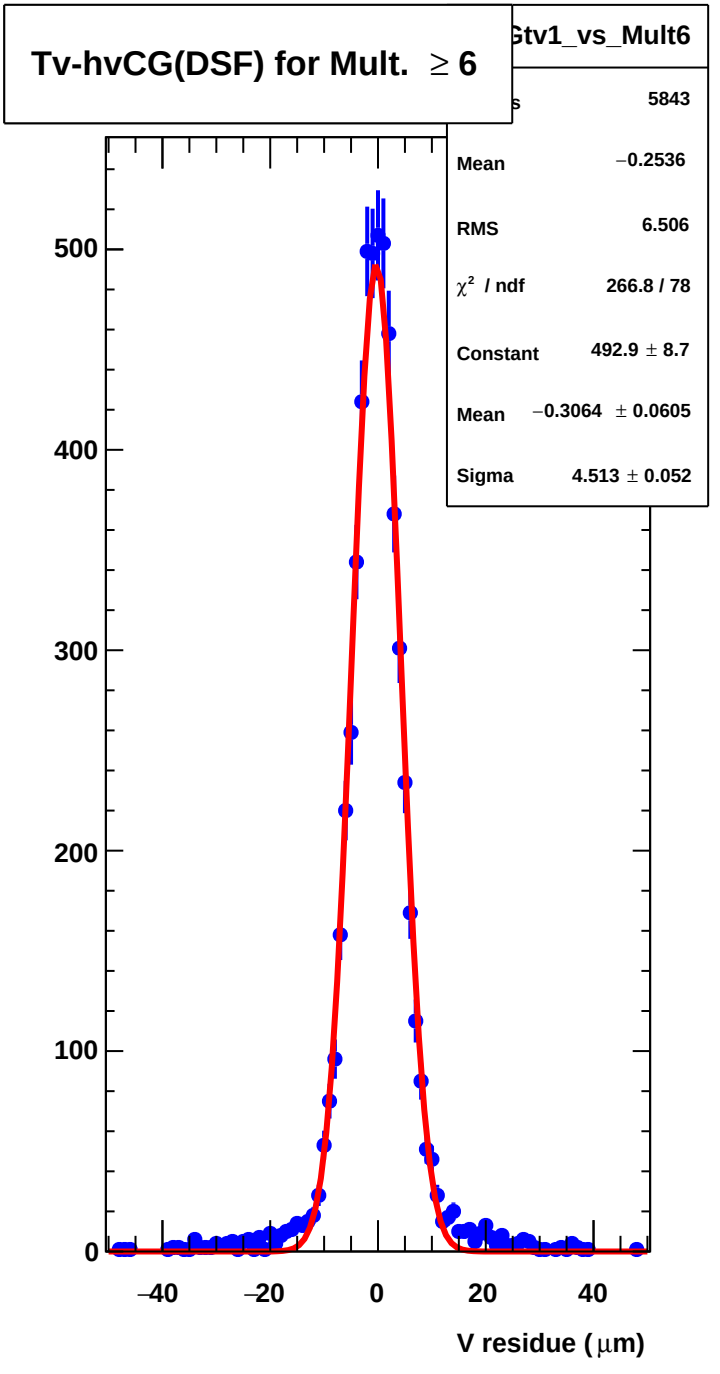

Tu-huCG(DSF) for Mult. = 4
Gtu1_vs_Mult4
22644
Mean −0.1105
RMS 4.742
χ² / ndf 54.04 / 35
Constant 1906 ± 15.6
Mean −0.1086 ± 0.0315
Sigma 4.728 ± 0.023
2000
1800
1600
1400
1200
1000
800
600
400
200
0
−40
−20
0
20
40
U residue (μm)

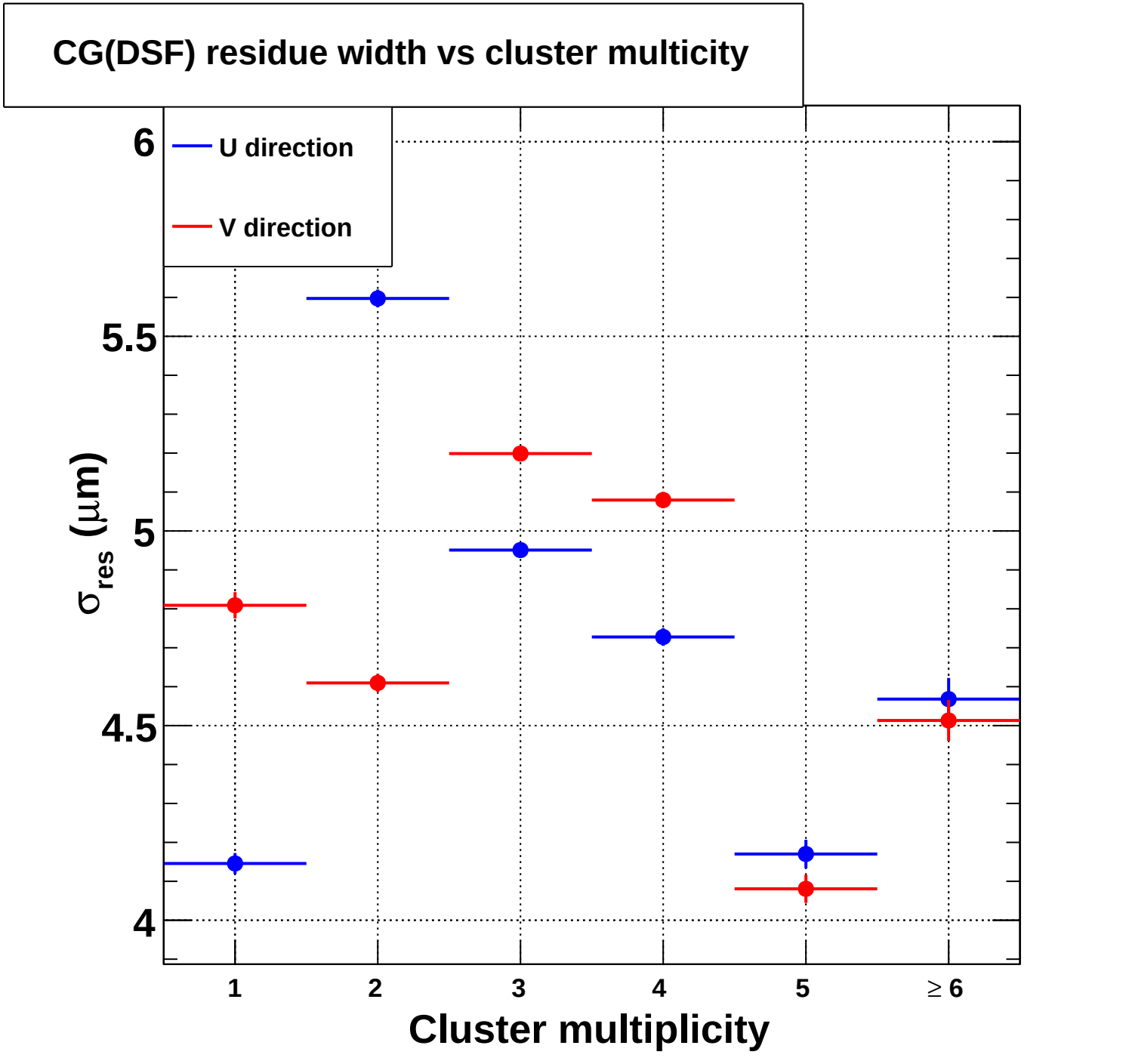

Tv-hvCG(DSF) for Mult. = 4
Gtv1_vs_Mult4
22644
Mean −0.182
RMS 5.136
χ² / ndf 120.5 / 38
Constant 1770 ± 13.9
Mean −0.1776 ± 0.0339
Sigma 5.079 ± 0.021
1800
1600
1400
1200
1000
800
600
400
200
0
−40
−20
0
20
40
V residue (μm)

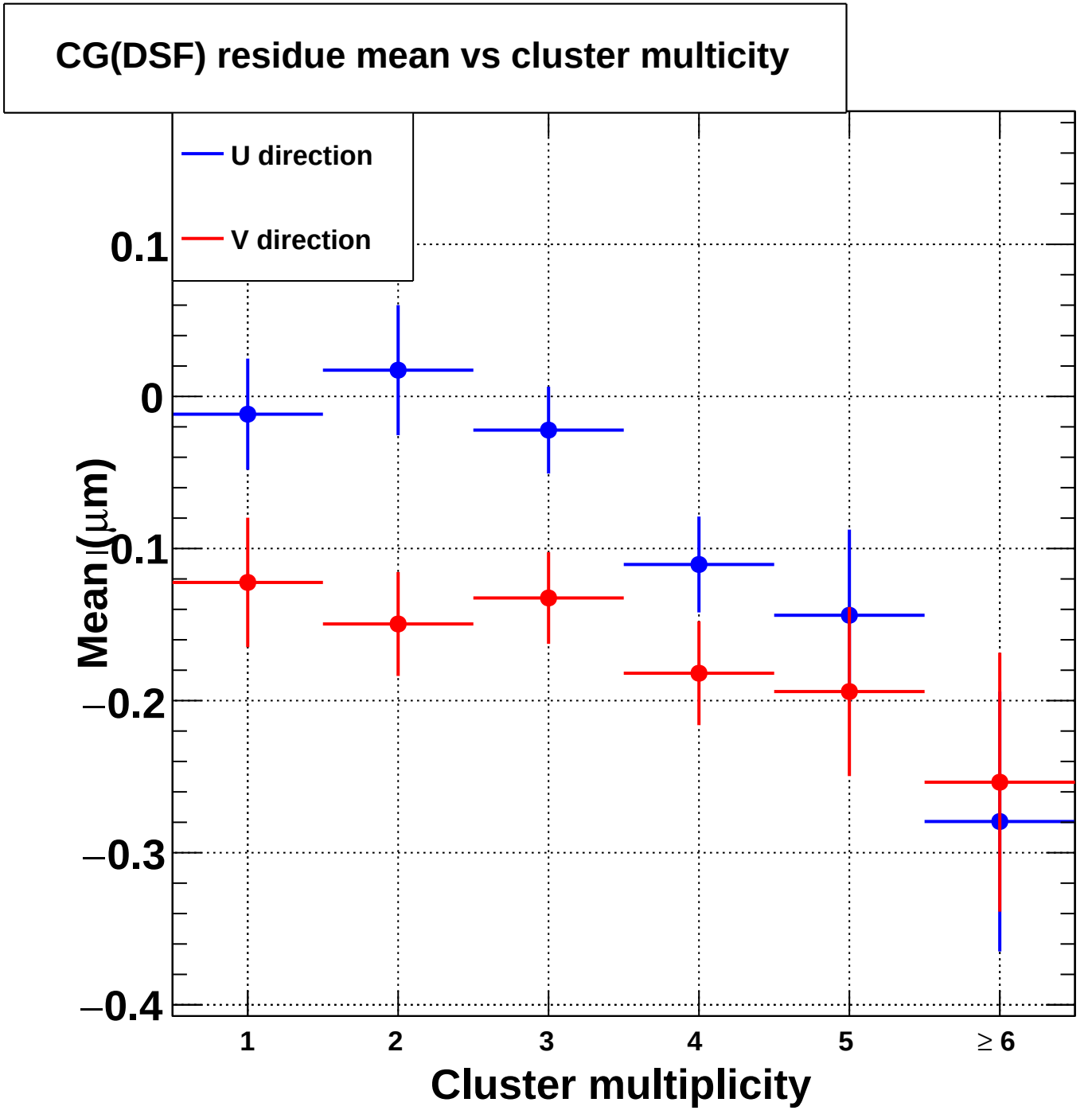

Tu-huCG(DSF) for Mult. = 5
Gtu1_vs_Mult5
5741
Mean −0.1439
RMS 4.265
χ² / ndf 44.63 / 32
Constant 545.2 ± 8.7
Mean −0.1036 ± 0.0554
Sigma 4.17 ± 0.04
500
400
300
200
100
0
−40
−20
0
20
40
U residue (μm)


Tv-hvCG(DSF) for Mult. = 5
Gtv1_vs_Mult5
5741
Mean −0.194
RMS 4.211
χ² / ndf 36.94 / 37
Constant 557.7 ± 8.9
Mean −0.1942 ± 0.0541
Sigma 4.081 ± 0.036
600
500
400
300
200
100
0
−40
−20
0
20
40
V residue (μm)

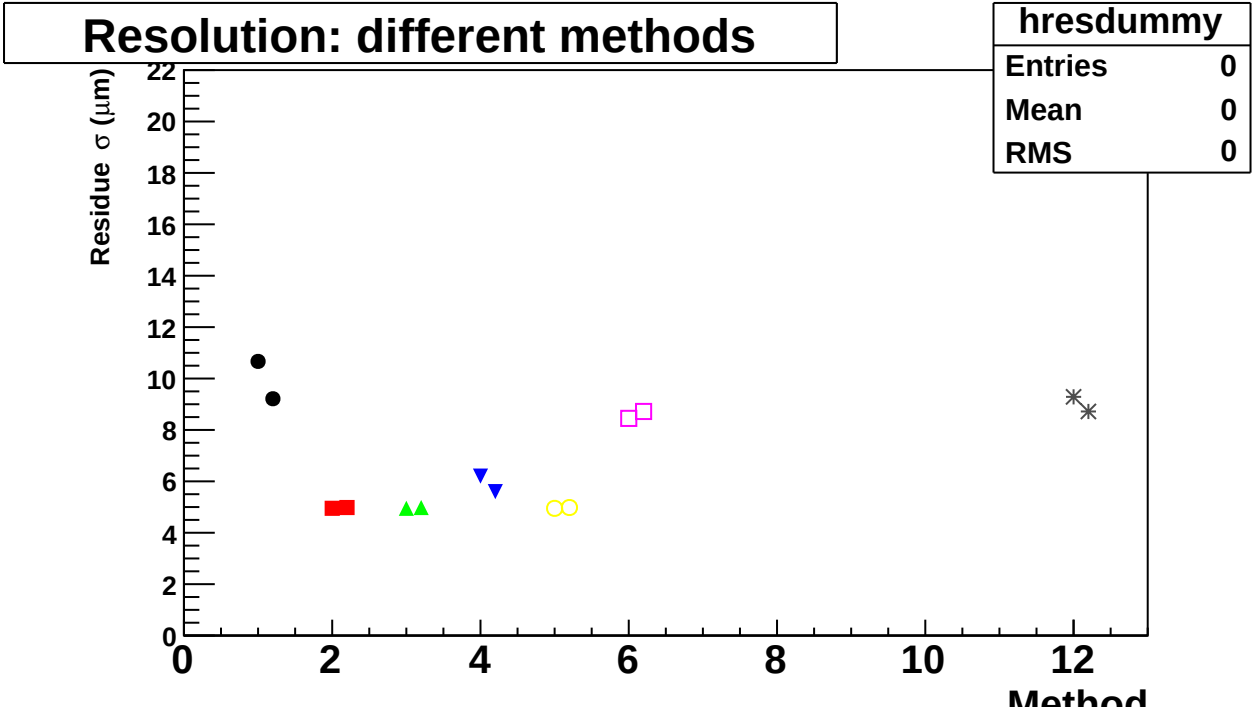

Tu-huCG(DSF) for Mult. ≥ 6
Gtu1_vs_Mult6
s 5843
Mean −0.2795
RMS 6.529
χ² / ndf 263.9 / 80
Constant 487.2 ± 8.7
Mean −0.07598 ± 0.06125
Sigma 4.568 ± 0.054
500
400
300
200
100
0
−40
−20
0
20
40
U residue (μm)


Tv-hvCG(DSF) for Mult. ≥ 6
Gtv1_vs_Mult6
s 5843
Mean −0.2536
RMS 6.506
χ² / ndf 266.8 / 78
Constant 492.9 ± 8.7
Mean −0.3064 ± 0.0605
Sigma 4.513 ± 0.052
500
400
300
200
100
0
−40
−20
0
20
40
V residue (μm)


CG(DSF) residue width vs cluster multicity
U direction
V direction
6
5.5
5
4.5
4
σ_{res} (μm)
1
2
3
4
5
≥ 6
Cluster multiplicity


CG(DSF) residue mean vs cluster multicity
U direction
V direction
0.1
0
−0.1
−0.2
−0.3
−0.4
Mean (μm)
1
2
3
4
5
≥ 6
Cluster multiplicity

Run 35807 Plane 4



Residuals for different methods

Method 1
residue from Tu-huDig algo(0) = (10.6666 ± 0.0243)μm
residue from Tv-hvDig algo(1) = (9.2139 ± 0.0210)μm

Method 2
residue from Tu-huCG algo(2) = (4.9517 ± 0.0111)μm
residue from Tv-hvCG algo(3) = (4.9816 ± 0.0113)μm

Method 3
residue from Tu-huCG(DSF) algo(4) = (4.9518 ± 0.0111)μm
residue from Tv-hvCG(DSF) algo(5) = (4.9816 ± 0.0113)μm

Method 4
residue from Tu-UCG2x2 algo(6) = (6.2036 ± 0.0146)μm
residue from Tv-VCG2x2 algo(7) = (5.6000 ± 0.0137)μm

Method 5
residue from Tu-huCG5 algo(8) = (4.9492 ± 0.0110)μm
residue from Tv-hvCG5 algo(9) = (4.9819 ± 0.0113)μm

Method 6
residue from Tu-Ucorr algo(10) = (8.4498 ± 0.0143)μm
residue from Tv-Vcorr algo(11) = (8.7186 ± 0.0169)μm

Residuals for different methods

Method 7
residue from Tu-UEta algo(12) = (1287.6122 ± 486.3122)μm
residue from Tv-VEta algo(13) = (1697.5942 ± 1123.7164)μm

Method 8
residue from tu-UEta2x2 algo(14) = (1566.7185 ± 1511.2704)μm
residue from tv-VEta2x2 algo(15) = (1584.5421 ± 1019.8734)μm

Method 9
residue from Tu-UEta2x2(list) algo(16) = (1287.5989 ± 486.3020)μm
residue from TV-VEta2x2(list) algo(17) = (1697.5942 ± 1123.7192)μm

Method 10
residue from Tu-UEta5x5(list) algo(18) = (1287.5969 ± 486.3056)μm
residue from Tu-UEta5x5(list) algo(19) = (1697.5942 ± 1123.7177)μm

Method 11
residue from Tu-UEta3 algo(20) = (1287.5969 ± 486.3013)μm
residue from Tv-VEta3 algo(21) = (1697.5942 ± 1123.7214)μm

Method 12
residue from Tu-uAHT algo(22) = (9.2876 ± 0.0155)μm
residue from Tv-vAHT algo(23) = (8.7186 ± 0.0169)μm

Residuals vs cluster multiplicity

residue from Tu-huCG(DSF) algo for mult = 1 = (4.1458 $\pm$ 0.0269)μm
residue from Tv-hvCG(DSF) algo for mult = 1 = (4.8090 $\pm$ 0.0338)μm

residue from Tu-huCG(DSF) algo for mult = 2 = (5.5973 $\pm$ 0.0228)μm
residue from Tv-hvCG(DSF) algo for mult = 2 = (4.6096 $\pm$ 0.0232)μm

residue from Tu-huCG(DSF) algo for mult = 3 = (4.9509 $\pm$ 0.0180)μm
residue from Tv-hvCG(DSF) algo for mult = 3 = (5.1988 $\pm$ 0.0180)μm

residue from Tu-huCG(DSF) algo for mult = 4 = (4.7276 $\pm$ 0.0227)μm
residue from Tv-hvCG(DSF) algo for mult = 4 = (5.0794 $\pm$ 0.0210)μm

residue from Tu-huCG(DSF) algo for mult = 5 = (4.1701 $\pm$ 0.0366)μm
residue from Tv-hvCG(DSF) algo for mult = 5 = (4.0807 $\pm$ 0.0361)μm

residue from Tu-huCG(DSF) algo for mult = 6 = (4.5681 $\pm$ 0.0543)μm
residue from Tv-hvCG(DSF) algo for mult = 6 = (4.5131 $\pm$ 0.0524)μm