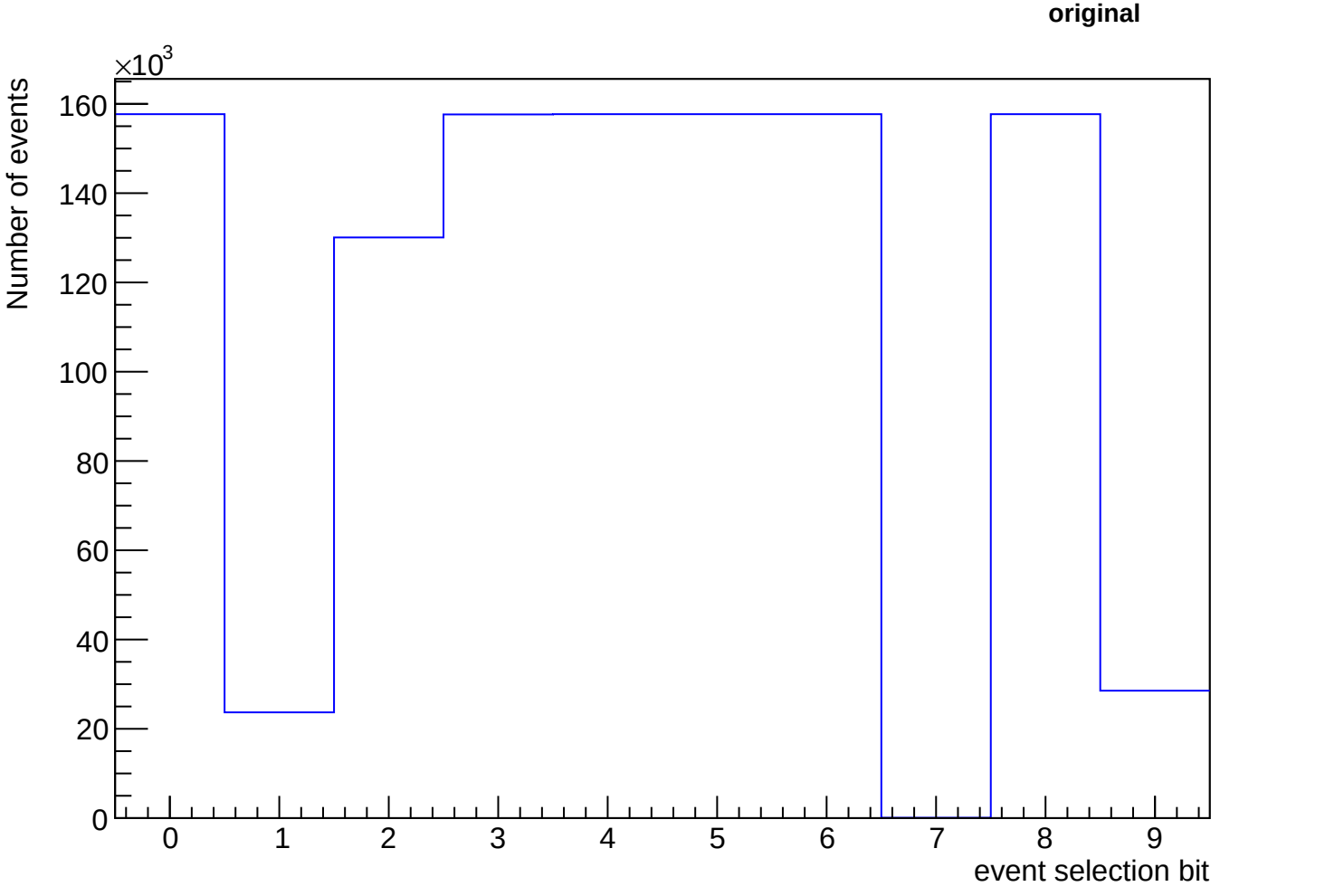
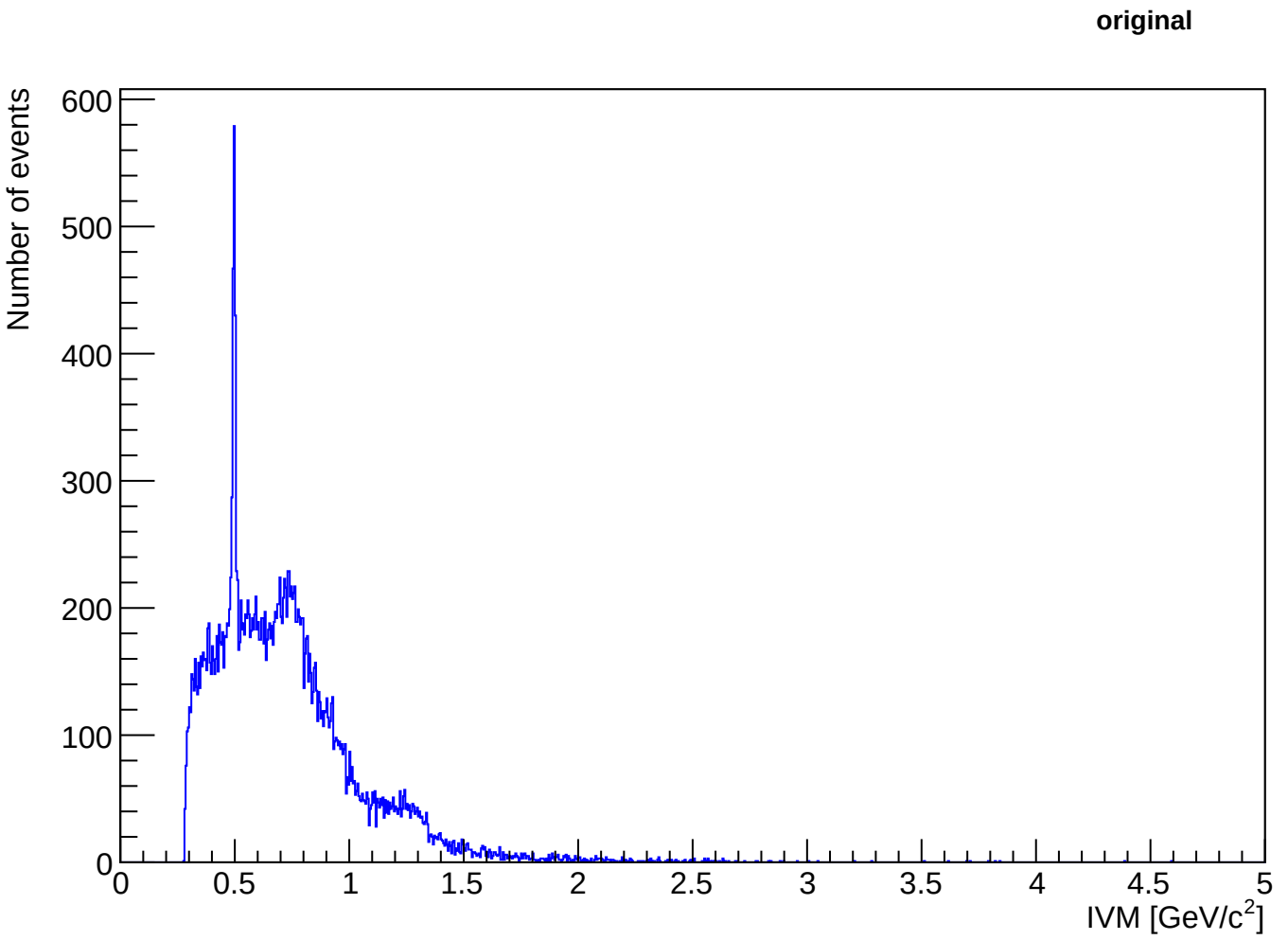
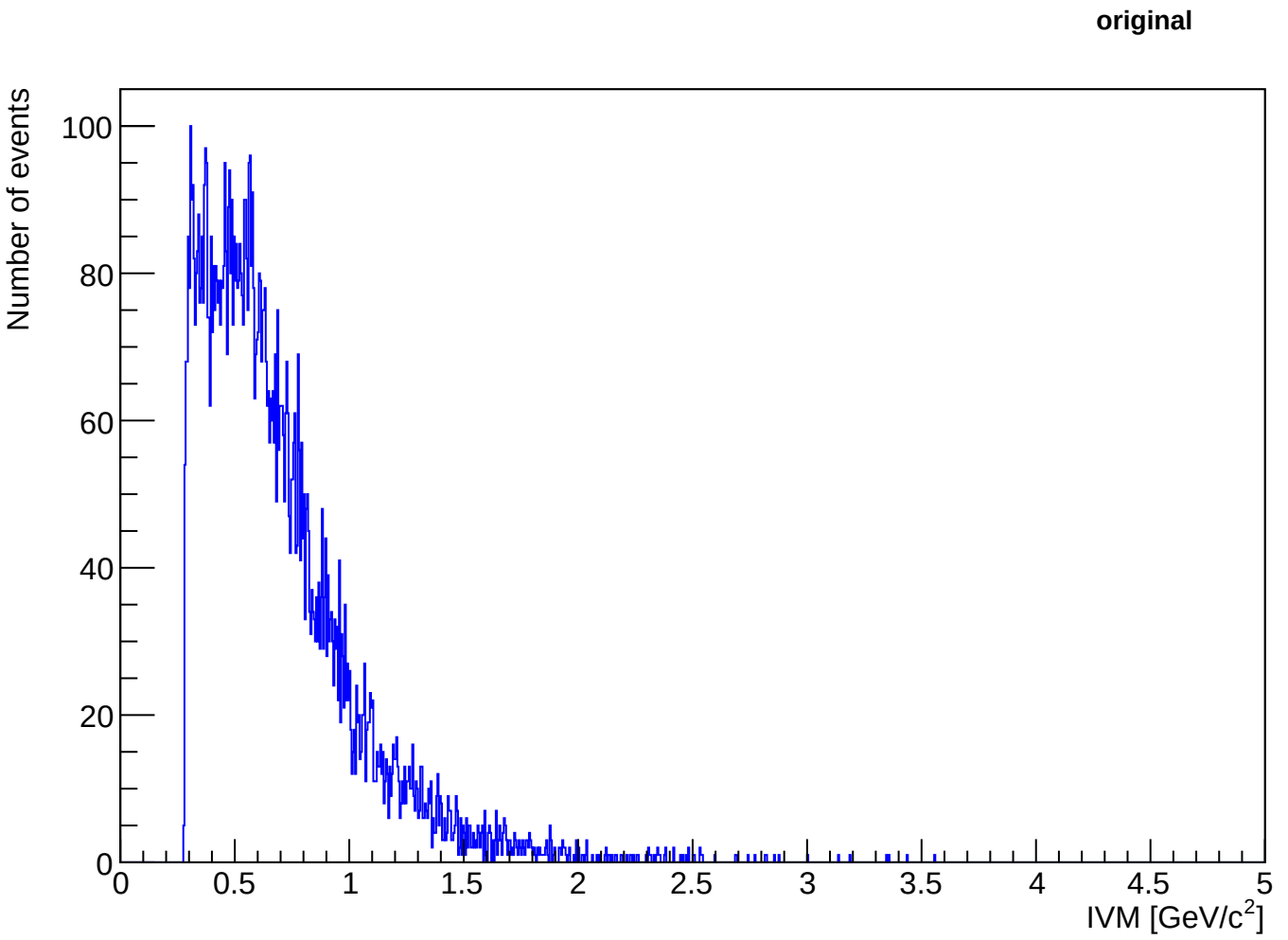
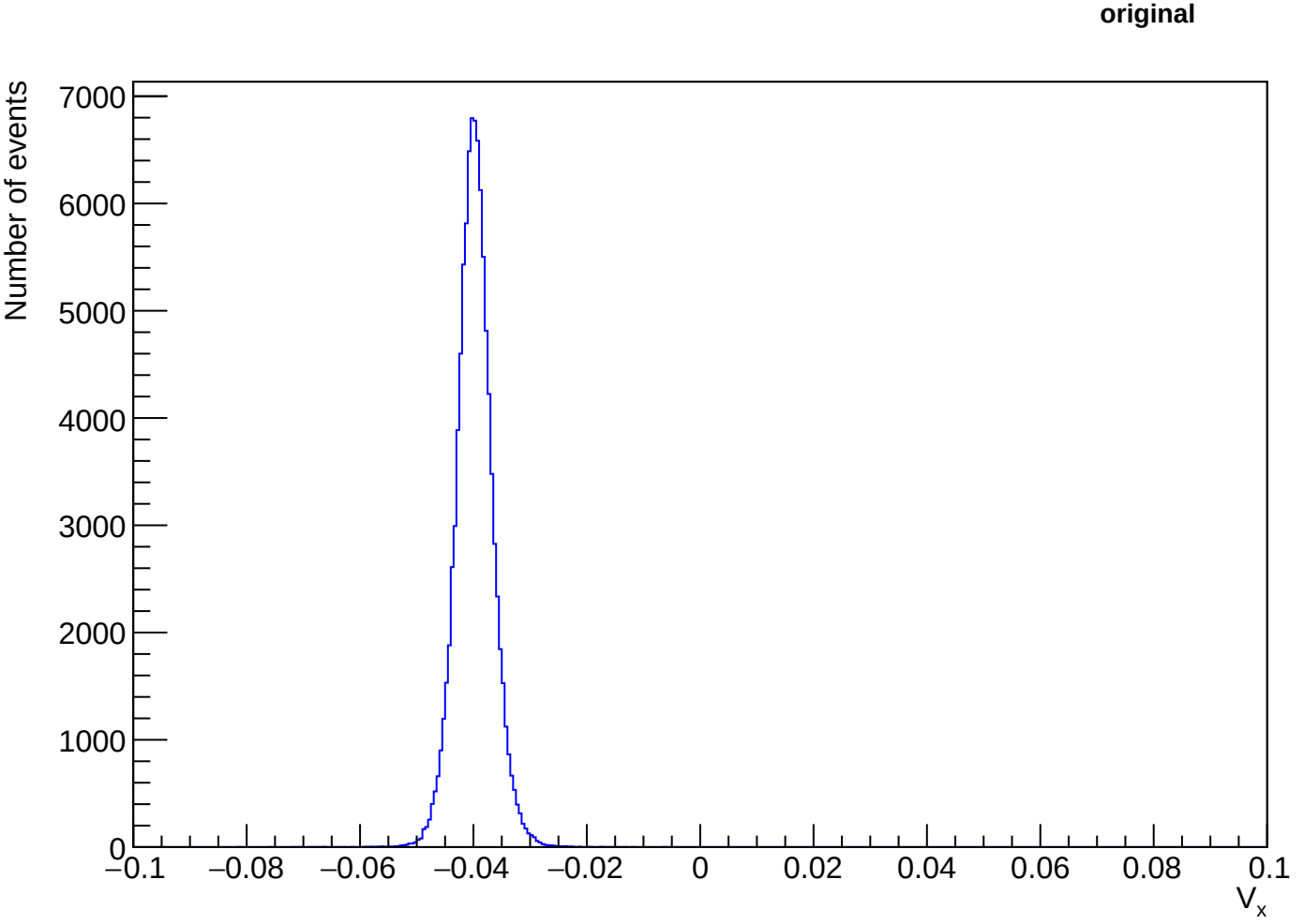
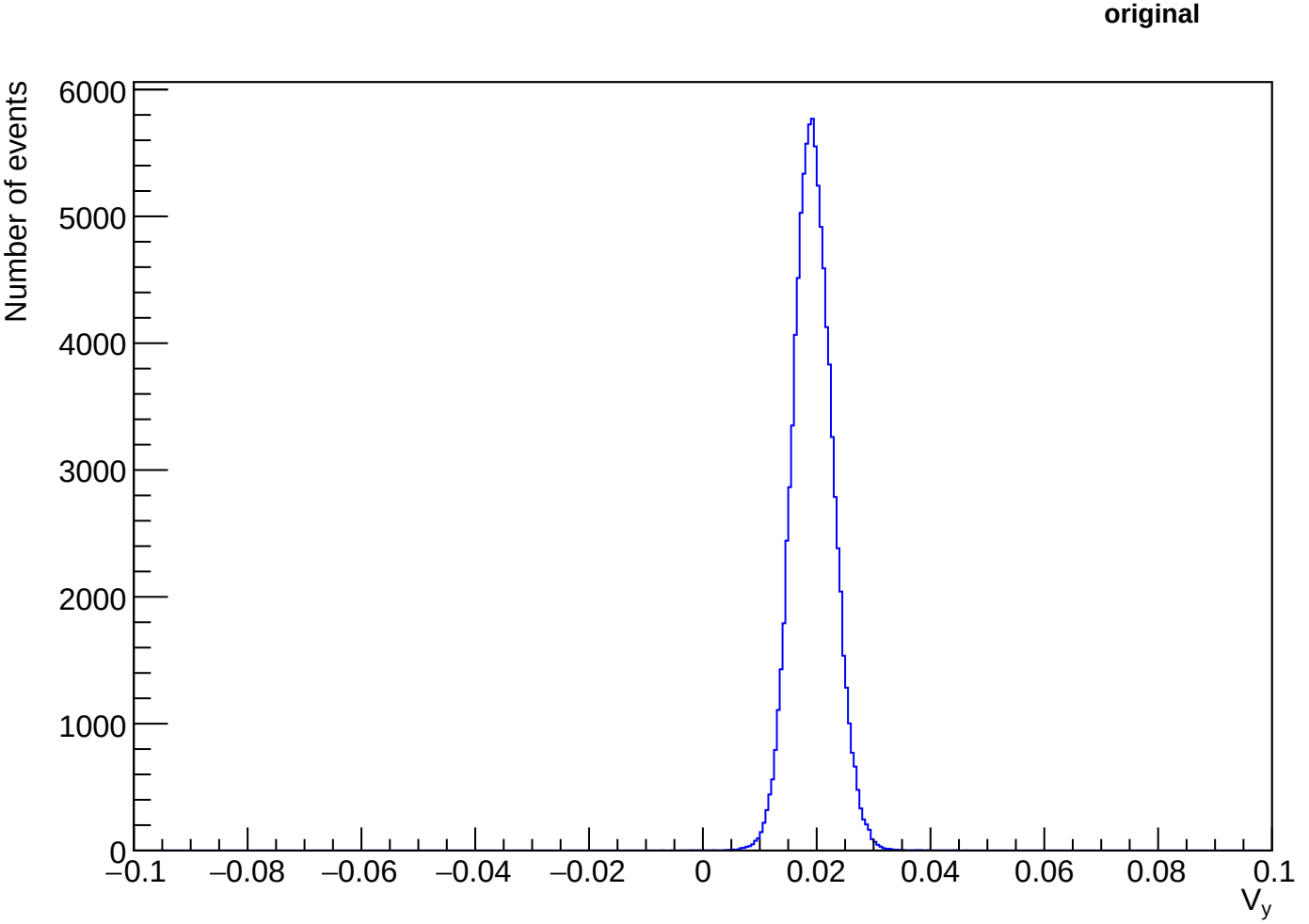
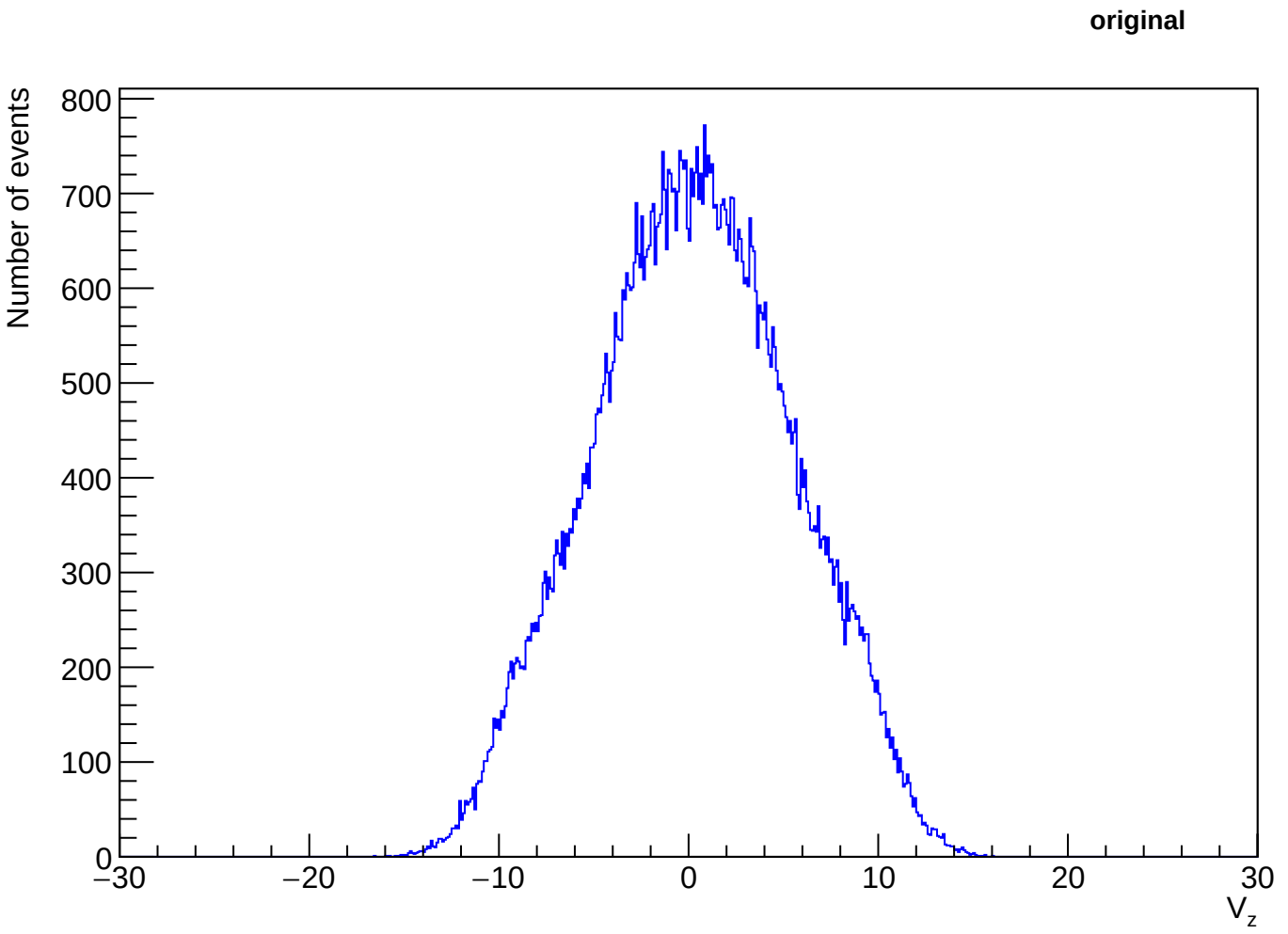

original
×10^3
Number of events
160
140
120
100
80
60
40
20
0
0
1
2
3
4
5
6
7
8
9
event selection bit

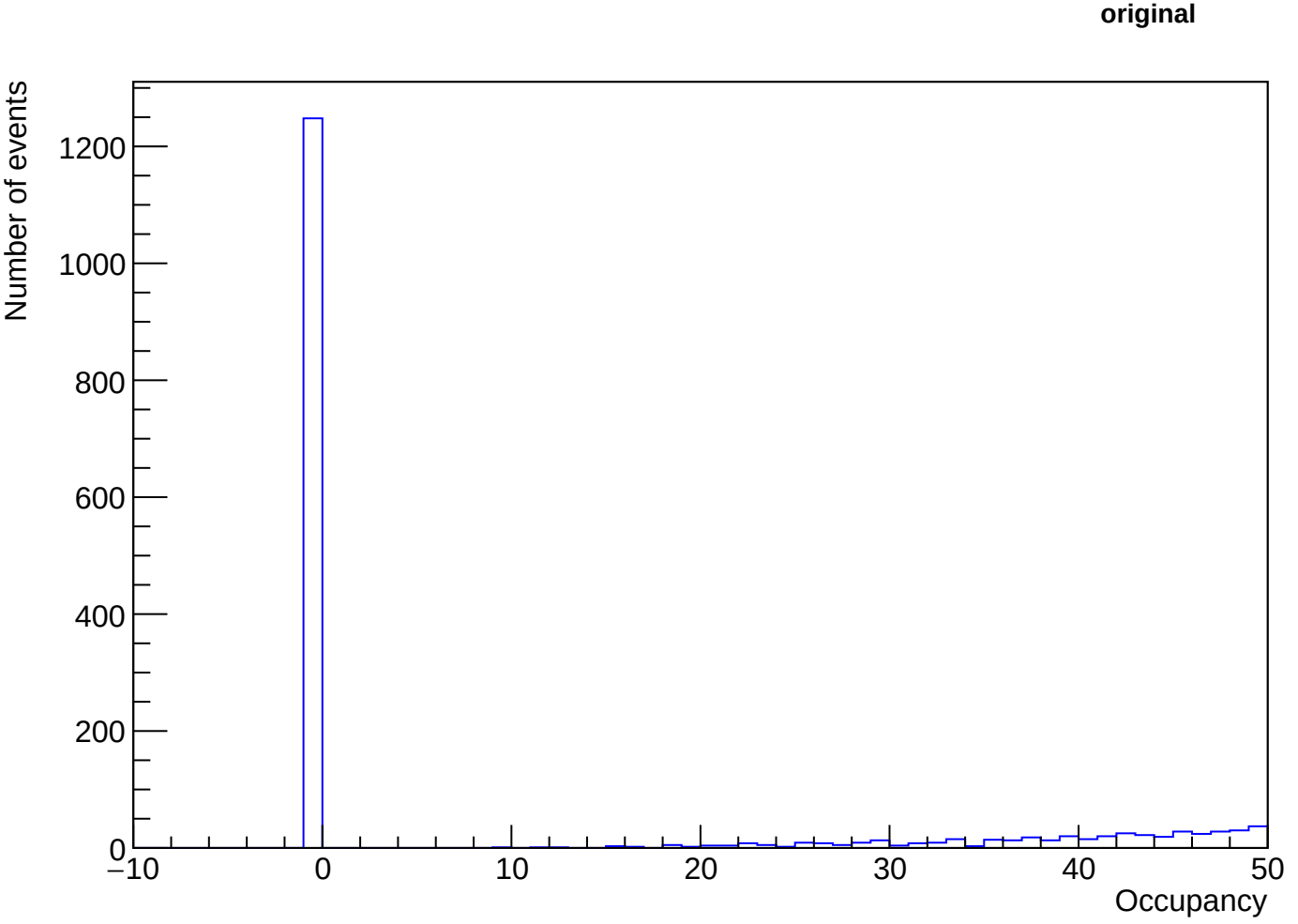

original
Number of events
600
500
400
300
200
100
0
0
0.5
1
1.5
2
2.5
3
3.5
4
4.5
5
IVM [GeV/c^2]

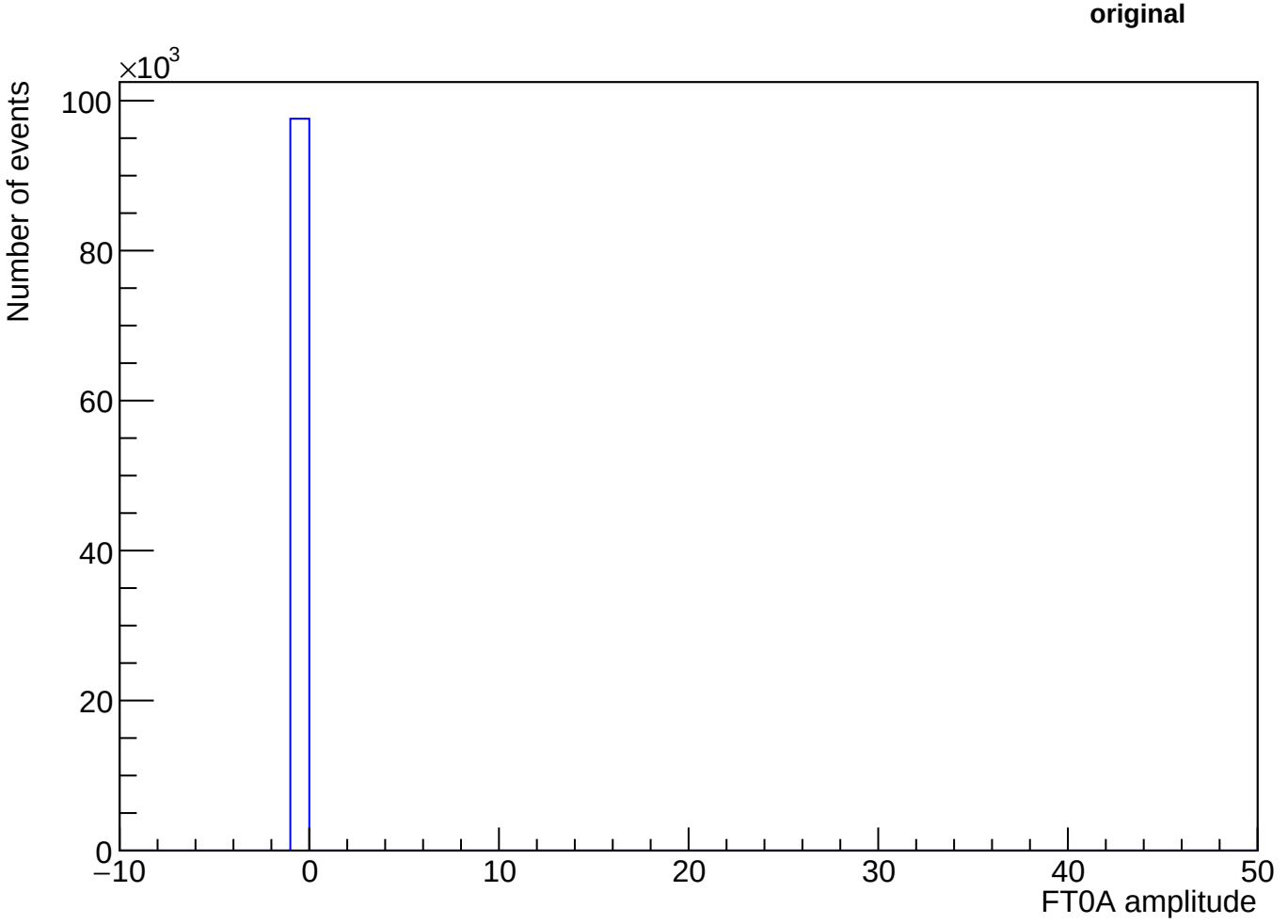

original
Number of events
100
80
60
40
20
0
0
0.5
1
1.5
2
2.5
3
3.5
4
4.5
5
IVM [GeV/c^2]

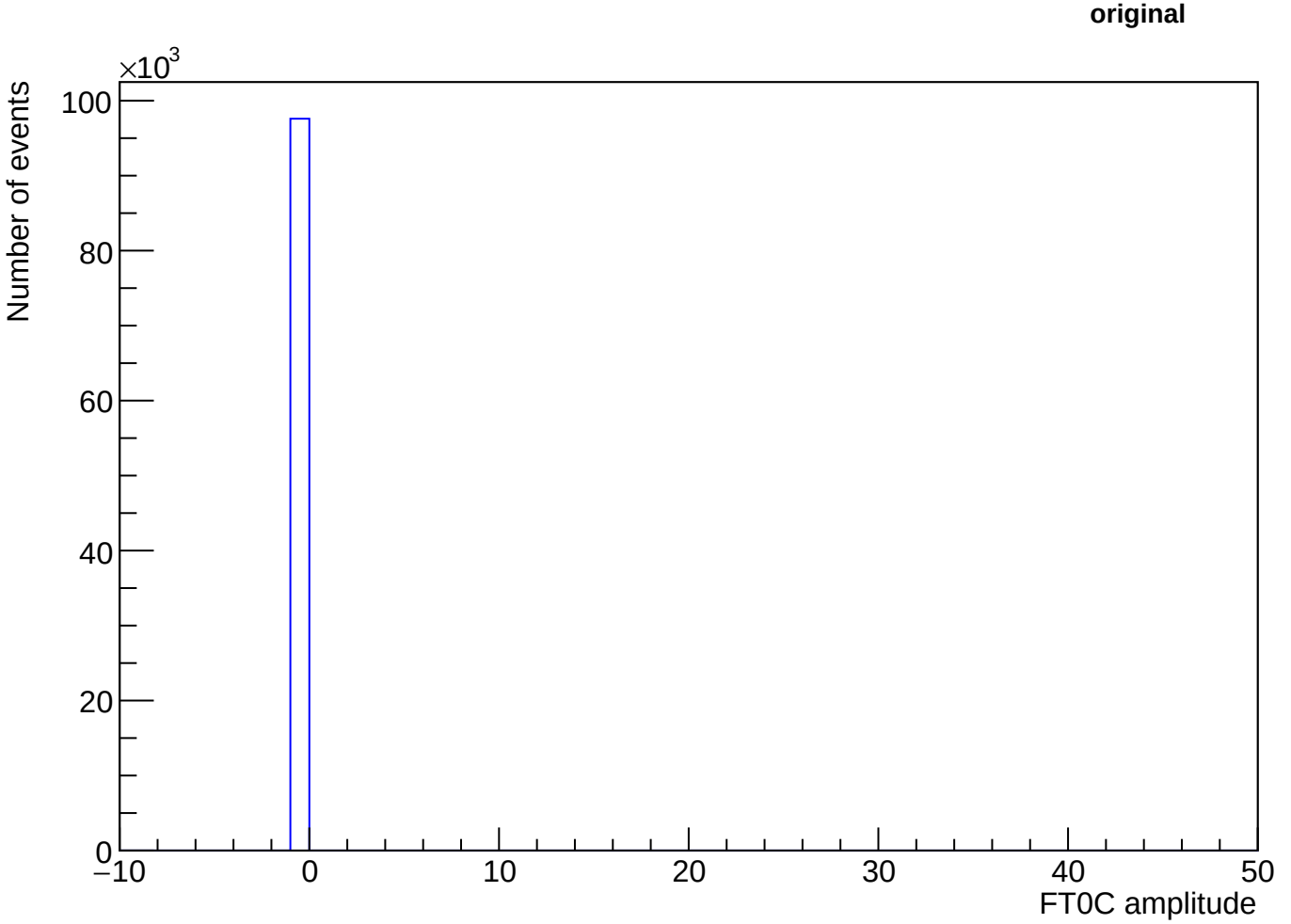

original
Number of events
7000
6000
5000
4000
3000
2000
1000
0
−0.1
−0.08
−0.06
−0.04
−0.02
0
0.02
0.04
0.06
0.08
0.1
V_x

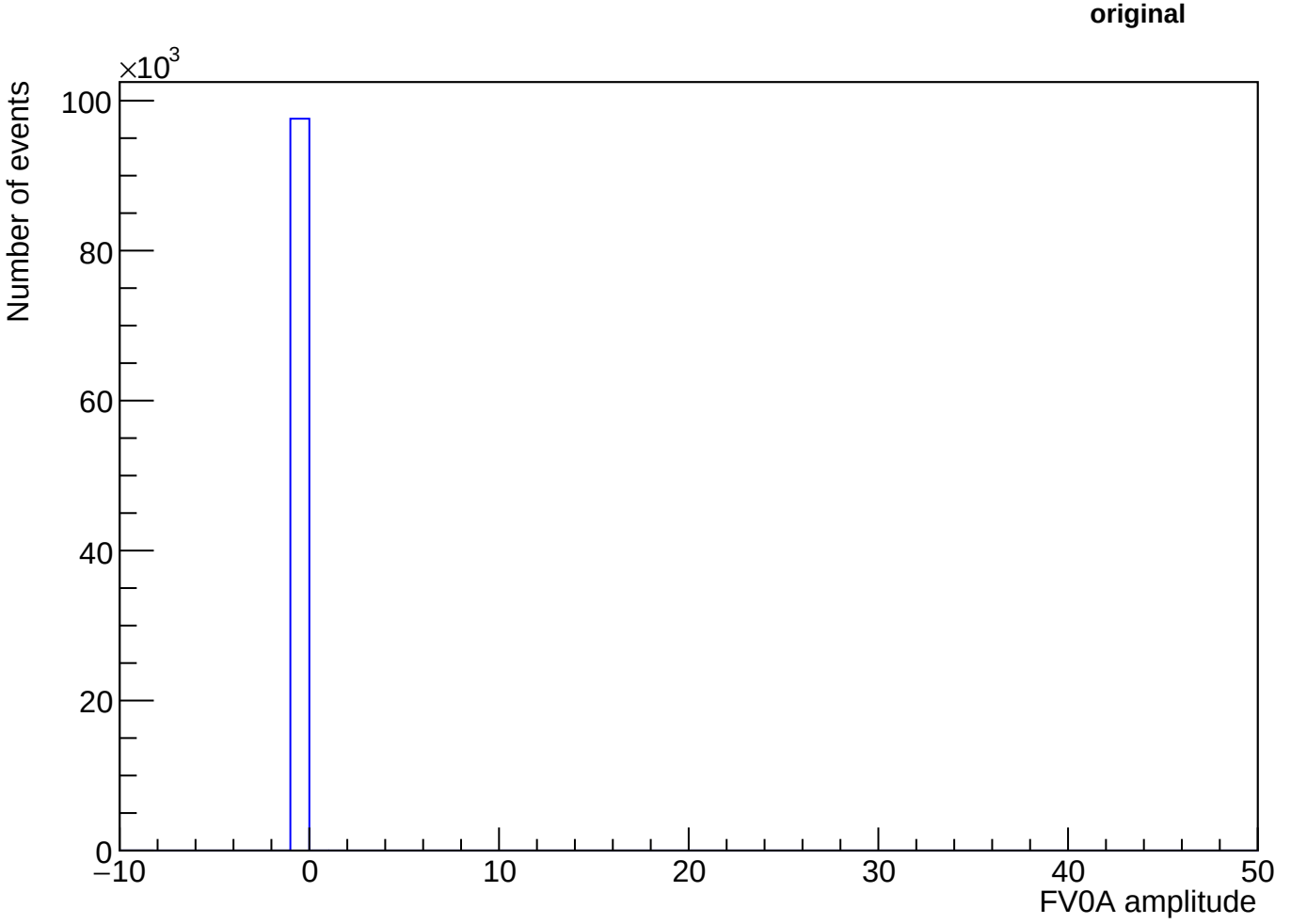

original
Number of events
6000
5000
4000
3000
2000
1000
0
−0.1
−0.08
−0.06
−0.04
−0.02
0
0.02
0.04
0.06
0.08
0.1
V_y

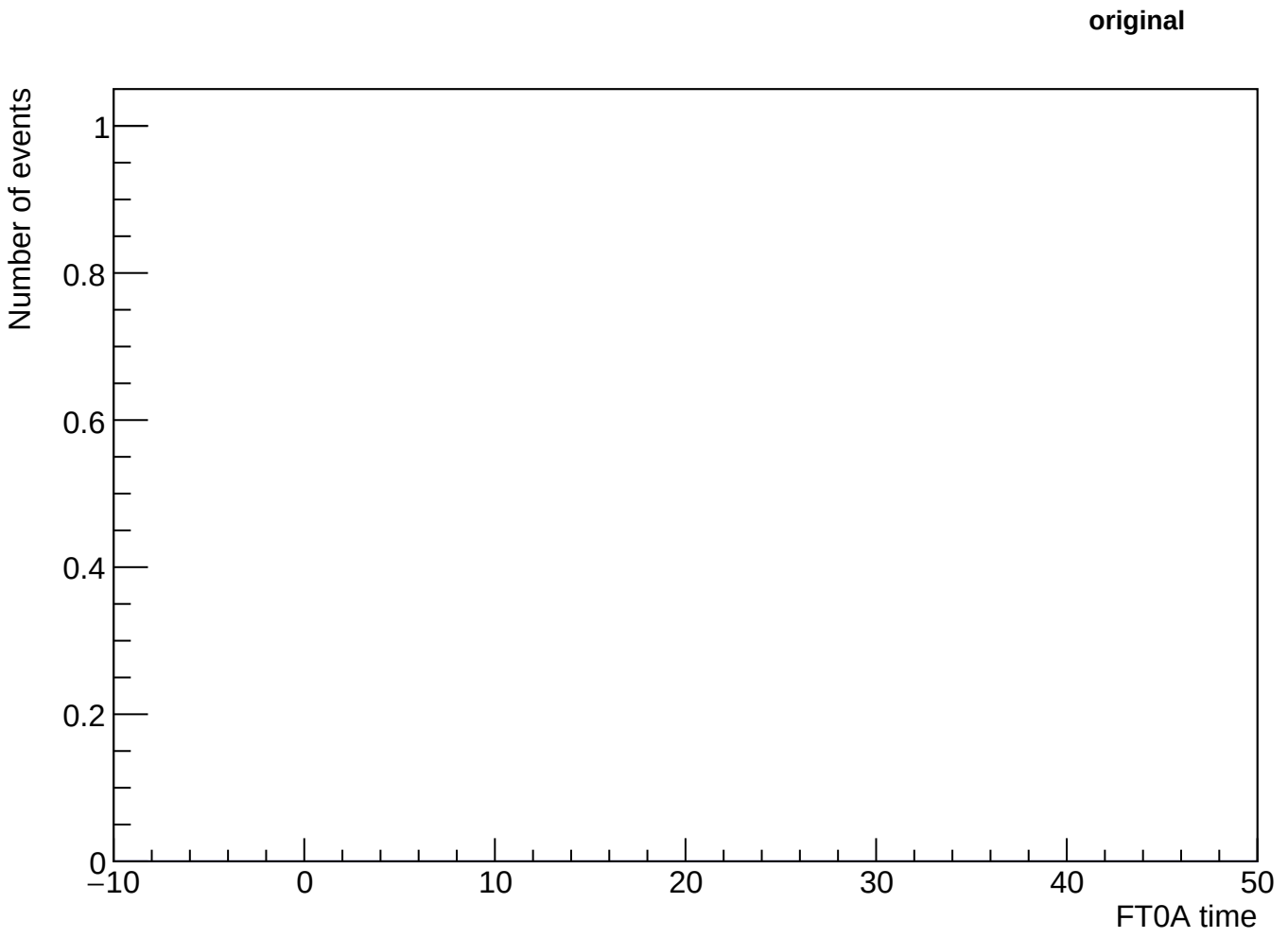

original
Number of events
800
700
600
500
400
300
200
100
0
−30
−20
−10
0
10
20
30
V_z

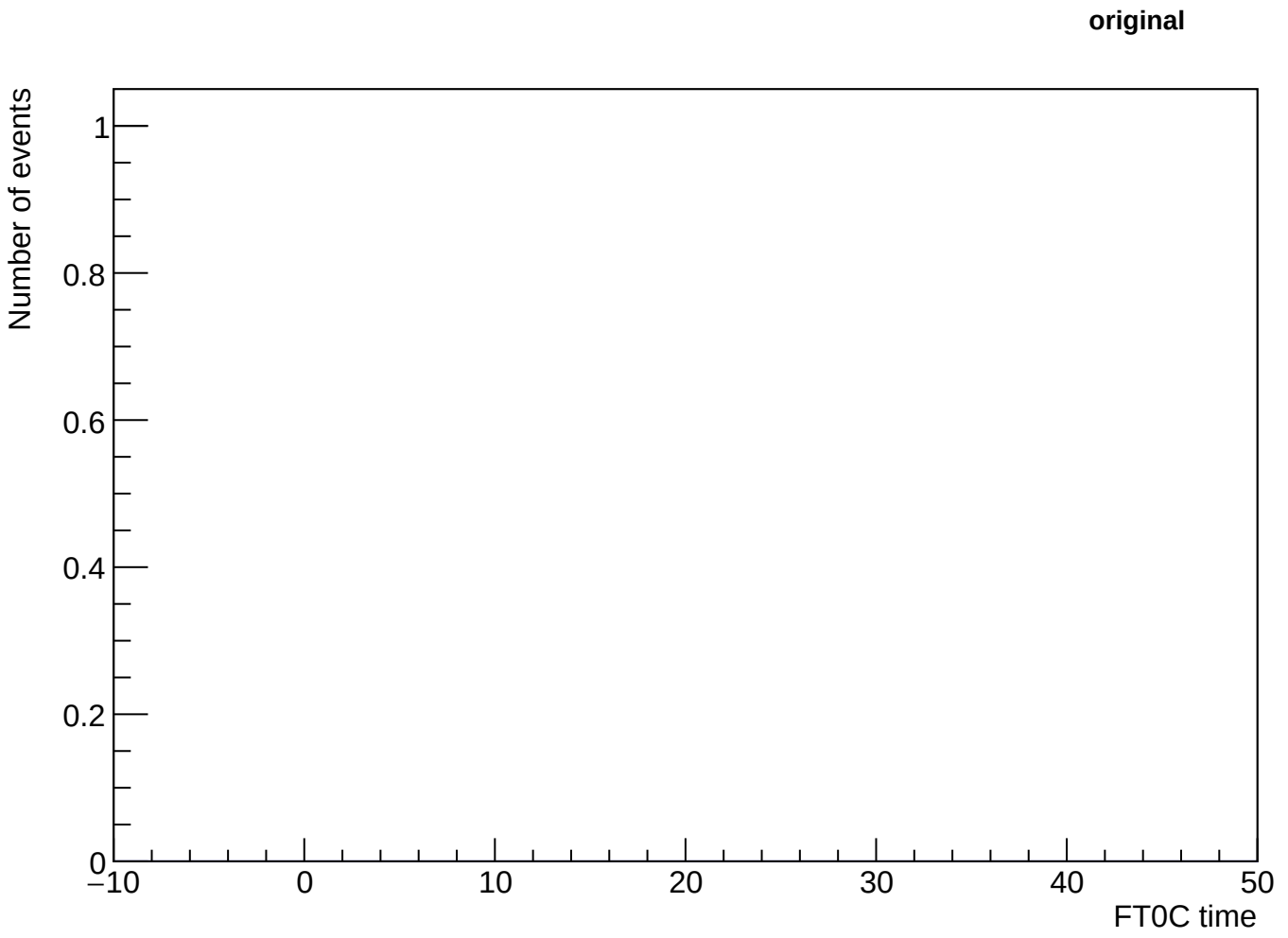

original
Number of events
1200
1000
800
600
400
200
0
−10
0
10
20
30
40
50
Occupancy

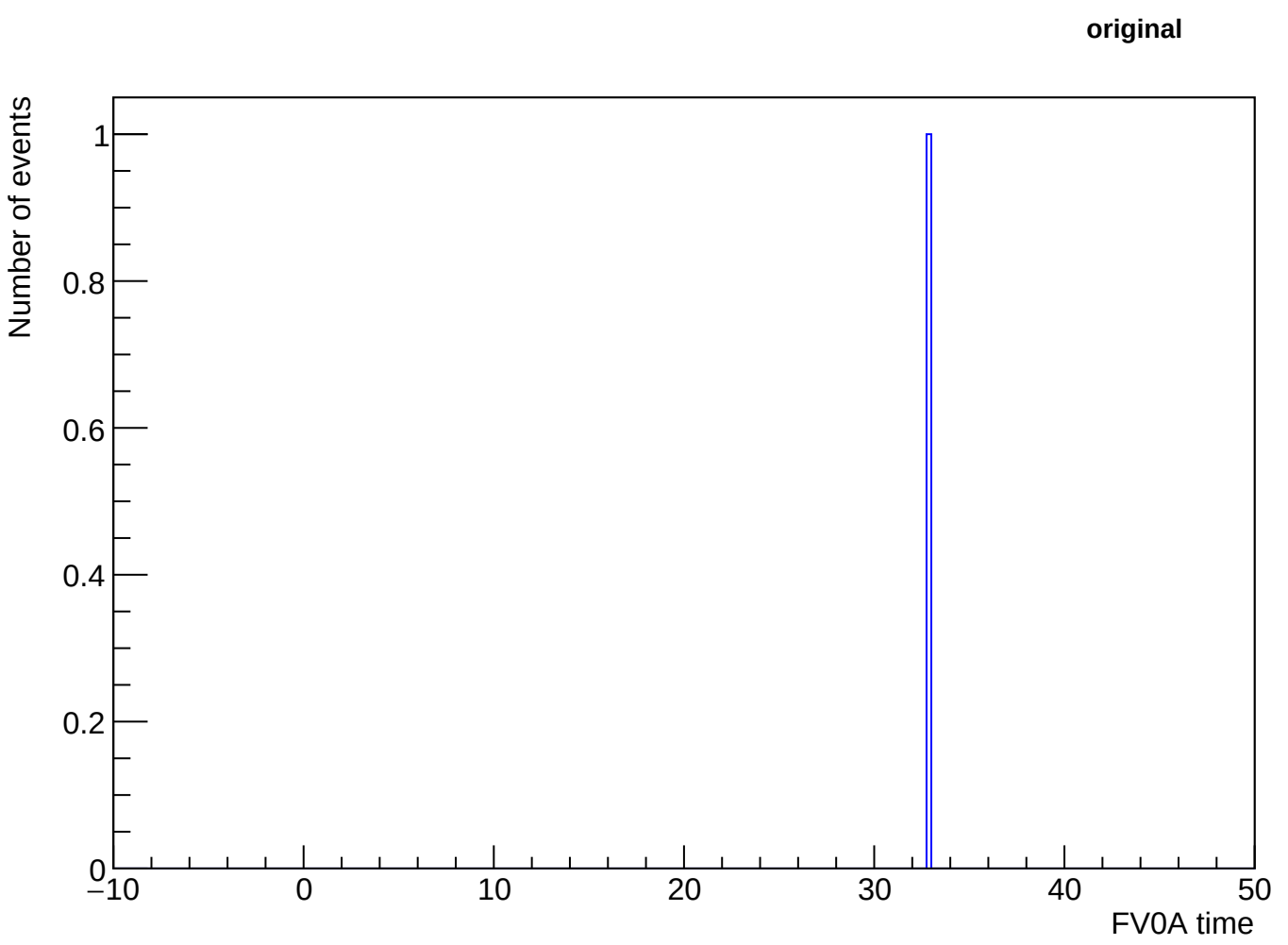

original
×10^3
100
80
60
40
20
0
Number of events
−10
0
10
20
30
40
50
FT0A amplitude

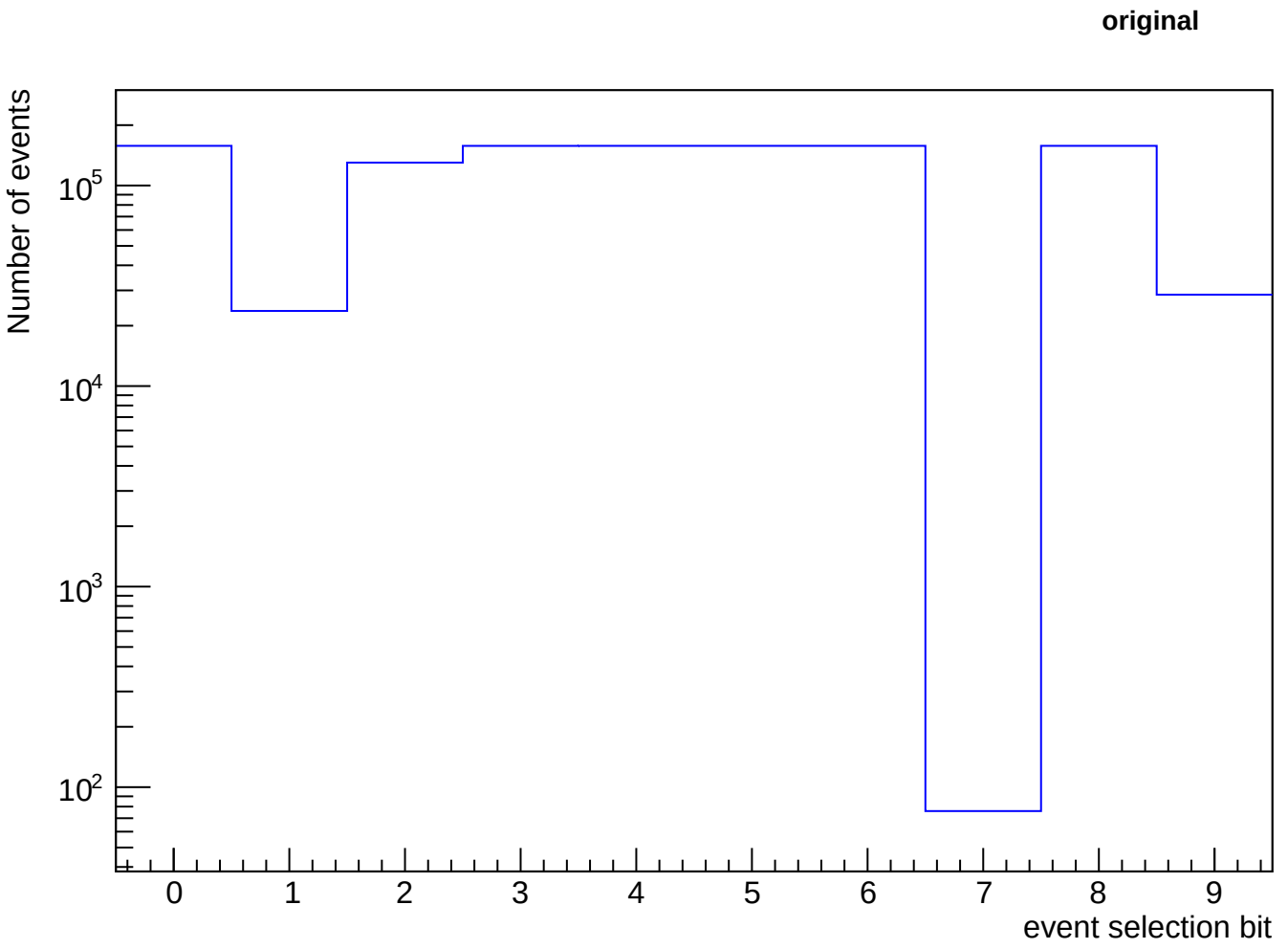

original
×10^3
100
80
60
40
20
0
Number of events
−10
0
10
20
30
40
50
FT0C amplitude

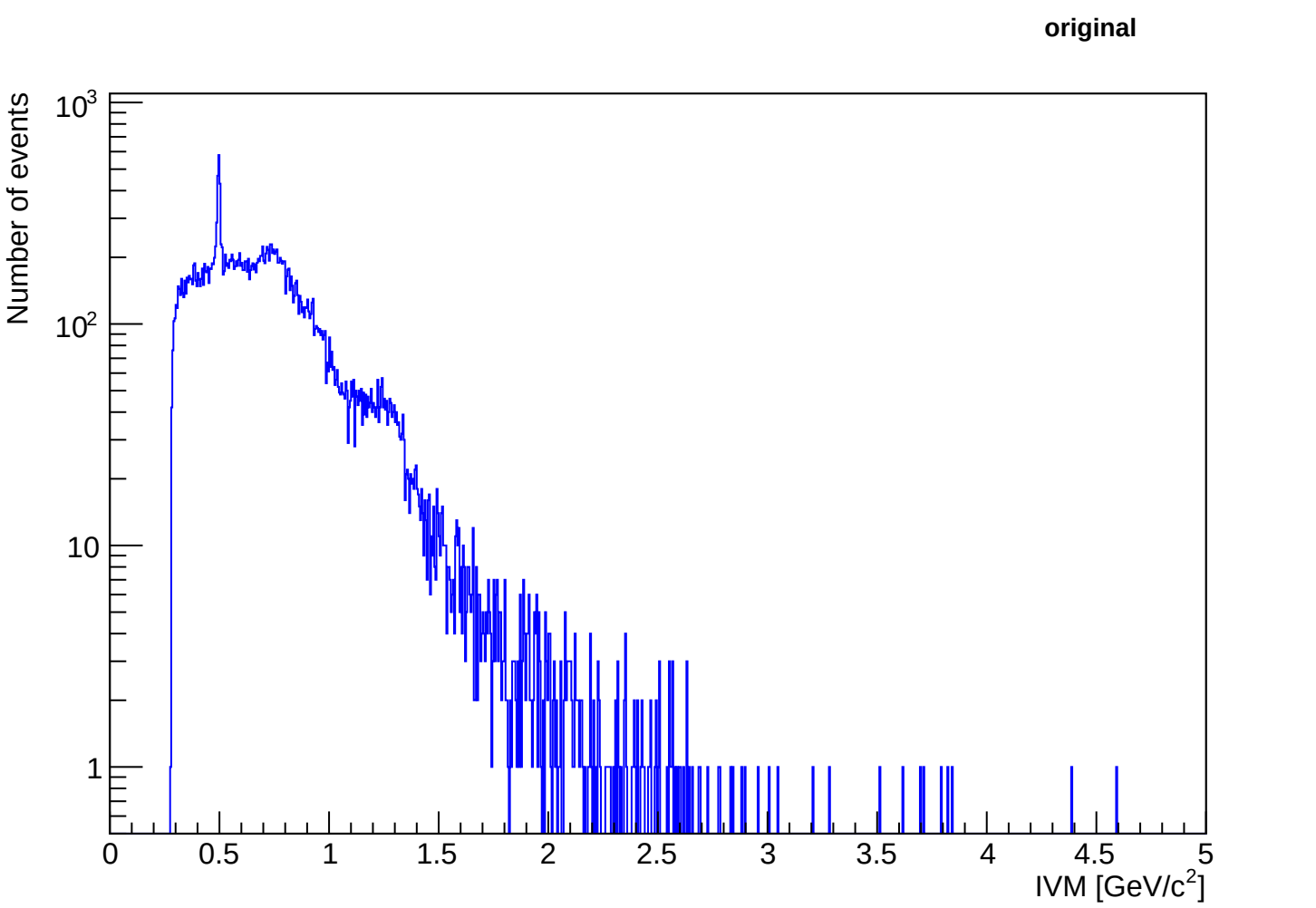

original
×10^3
100
80
60
40
20
0
Number of events
−10
0
10
20
30
40
50
FV0A amplitude

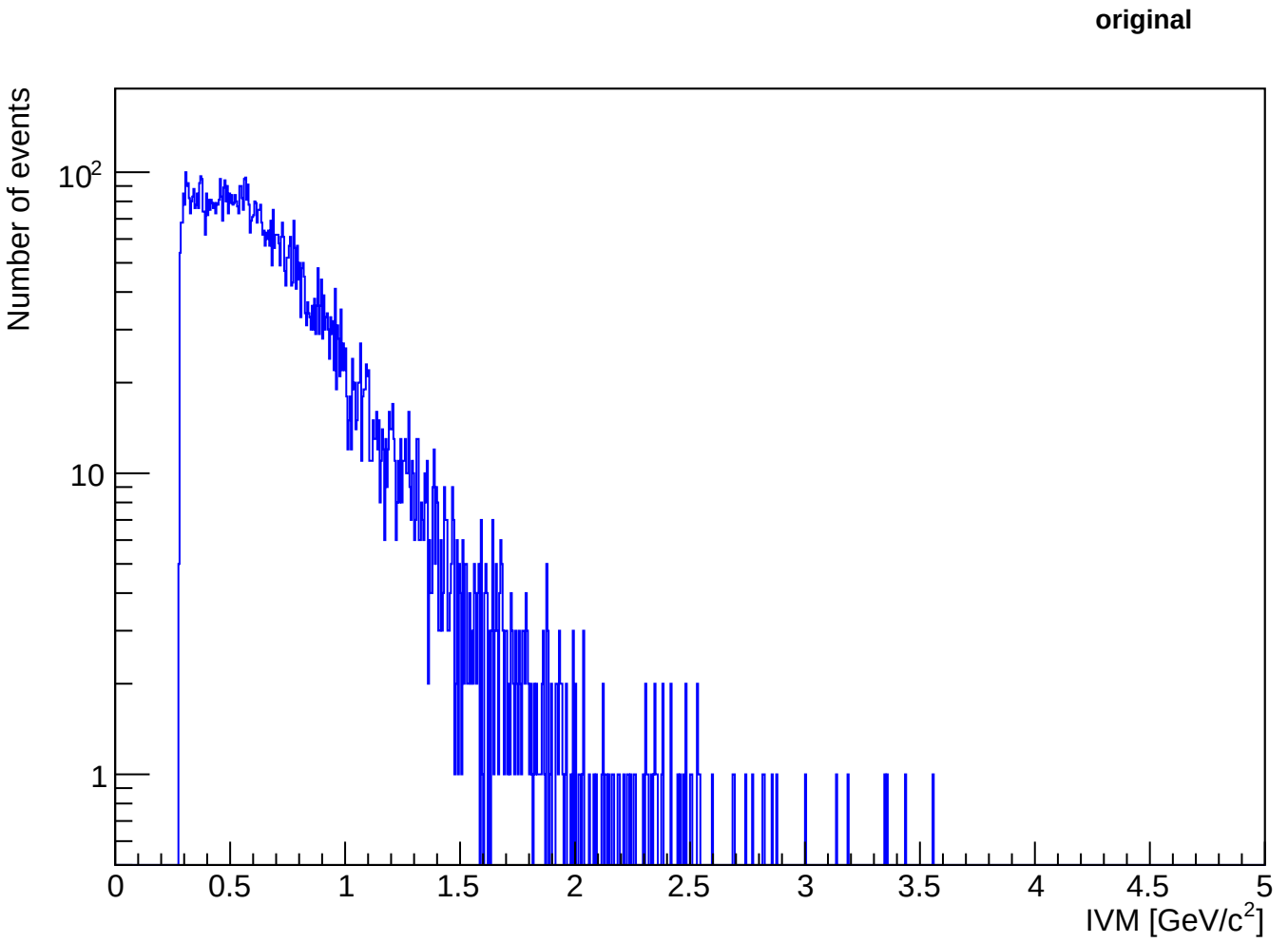

original
Number of events
1
0.8
0.6
0.4
0.2
0
−10
0
10
20
30
40
50
FT0A time

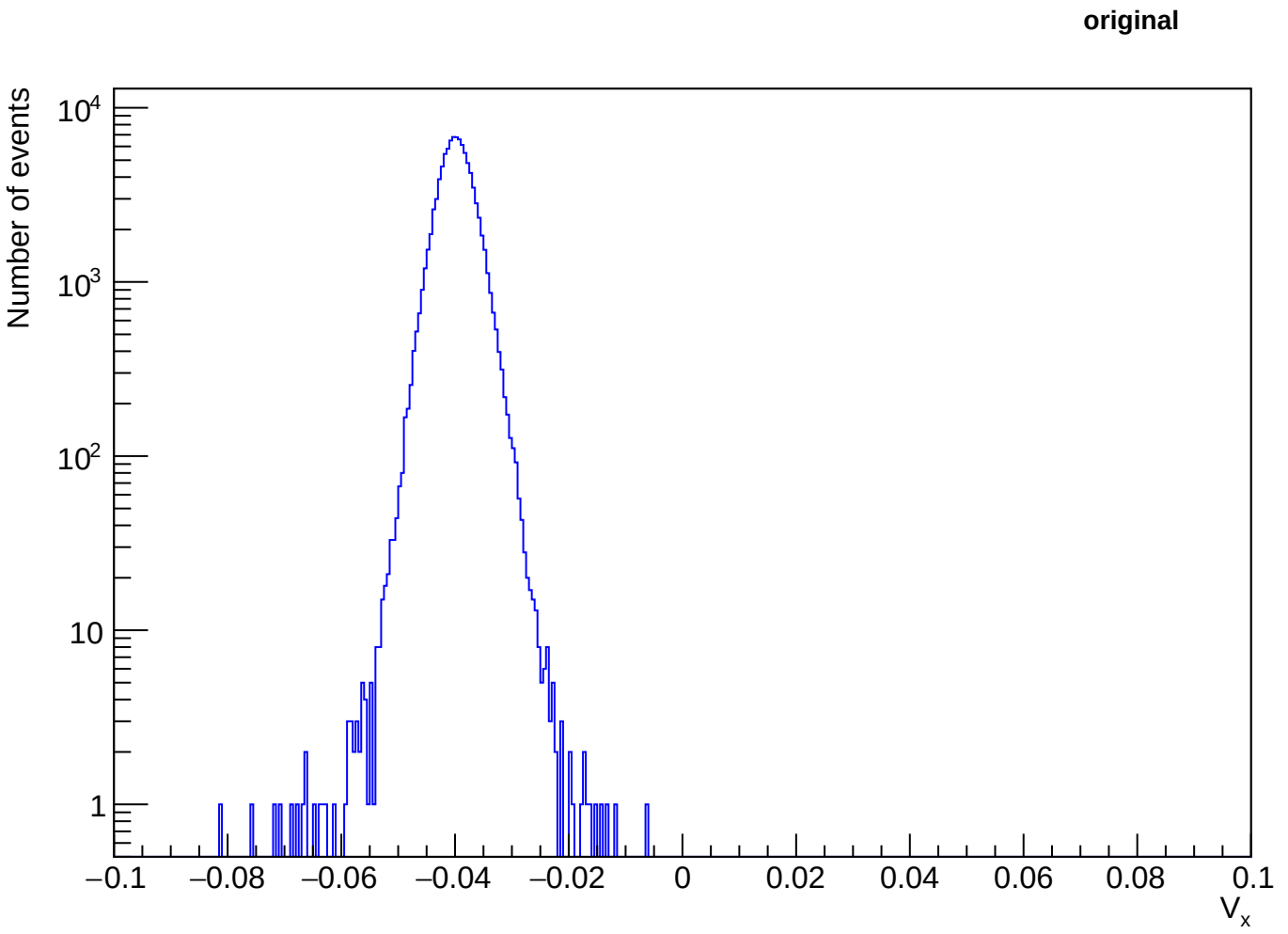

original
Number of events
1
0.8
0.6
0.4
0.2
0
−10
0
10
20
30
40
50
FT0C time

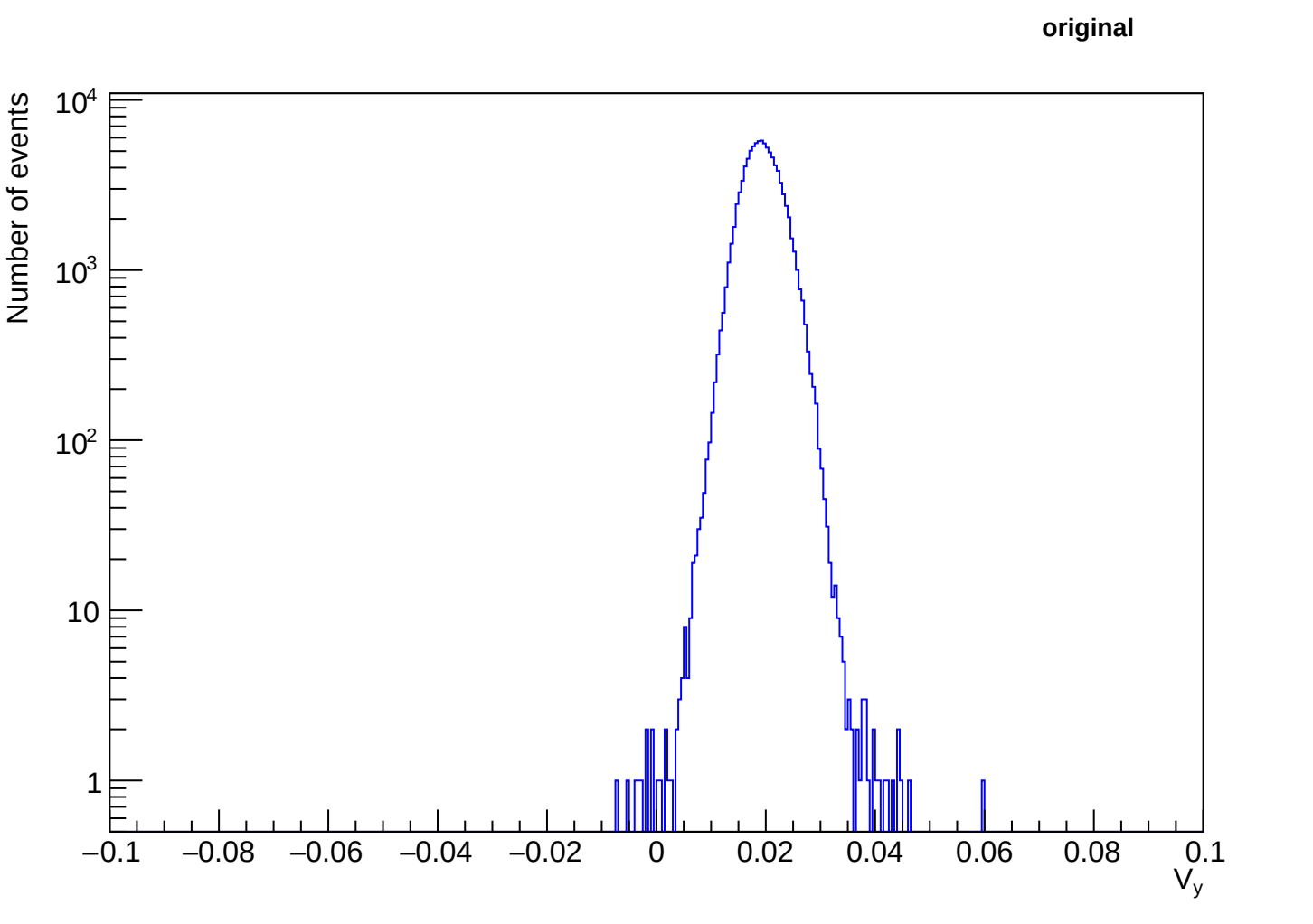

original
Number of events
1
0.8
0.6
0.4
0.2
0
−10
0
10
20
30
40
50
FV0A time

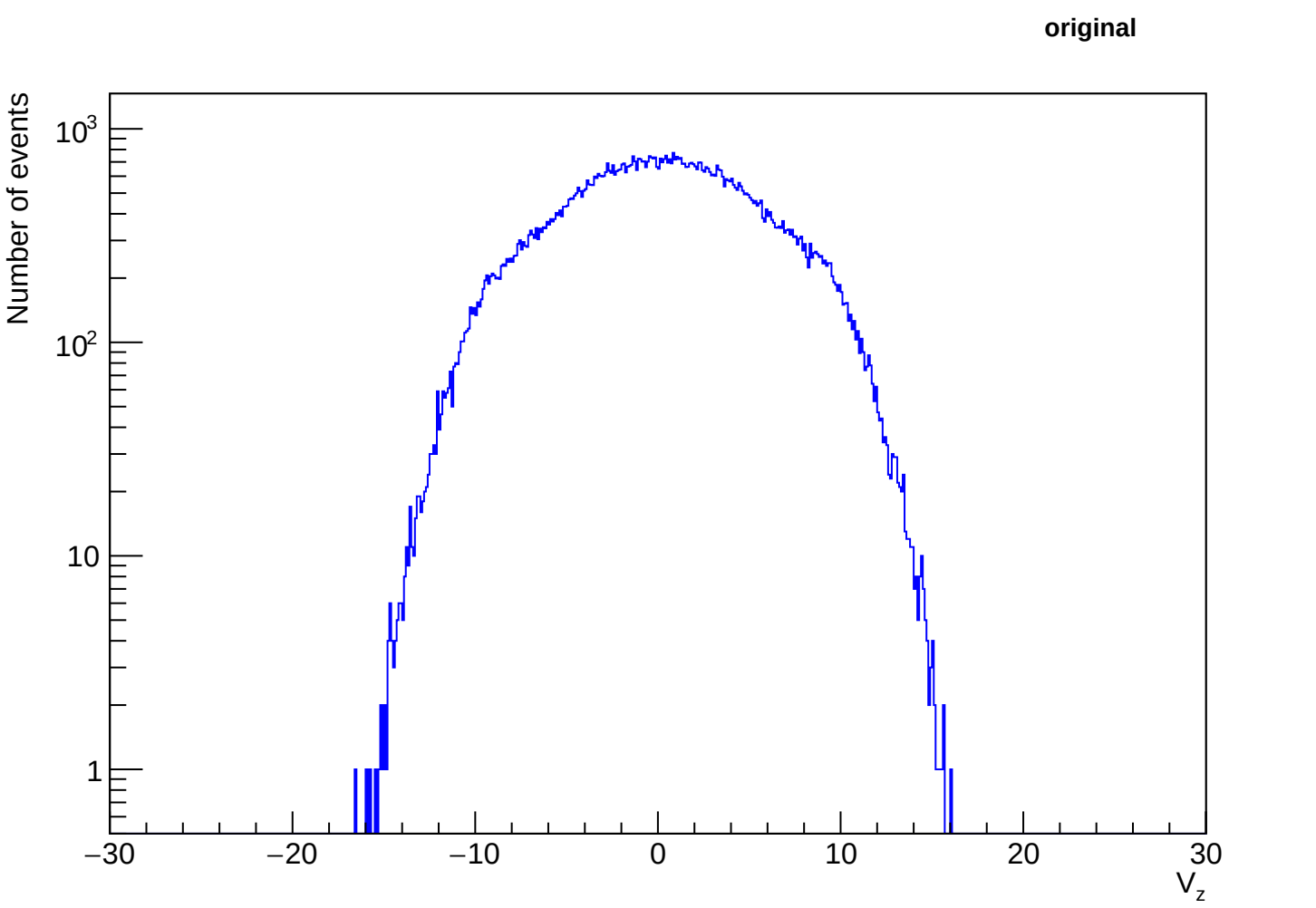

original
Number of events
10^5
10^4
10^3
10^2
0
1
2
3
4
5
6
7
8
9
event selection bit

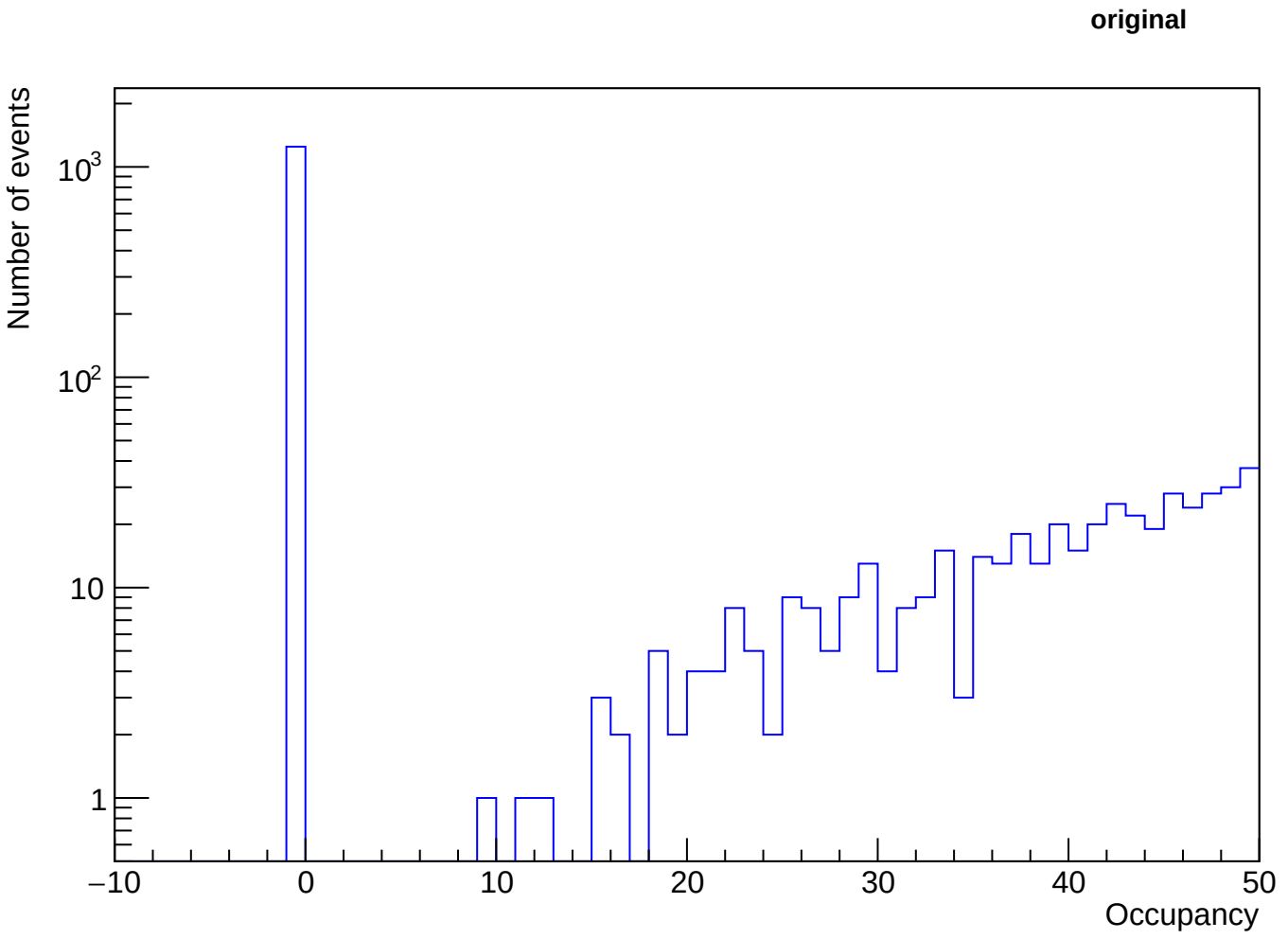

original
Number of events
10^3
10^2
10
1
0
0.5
1
1.5
2
2.5
3
3.5
4
4.5
5
IVM [GeV/c^2]

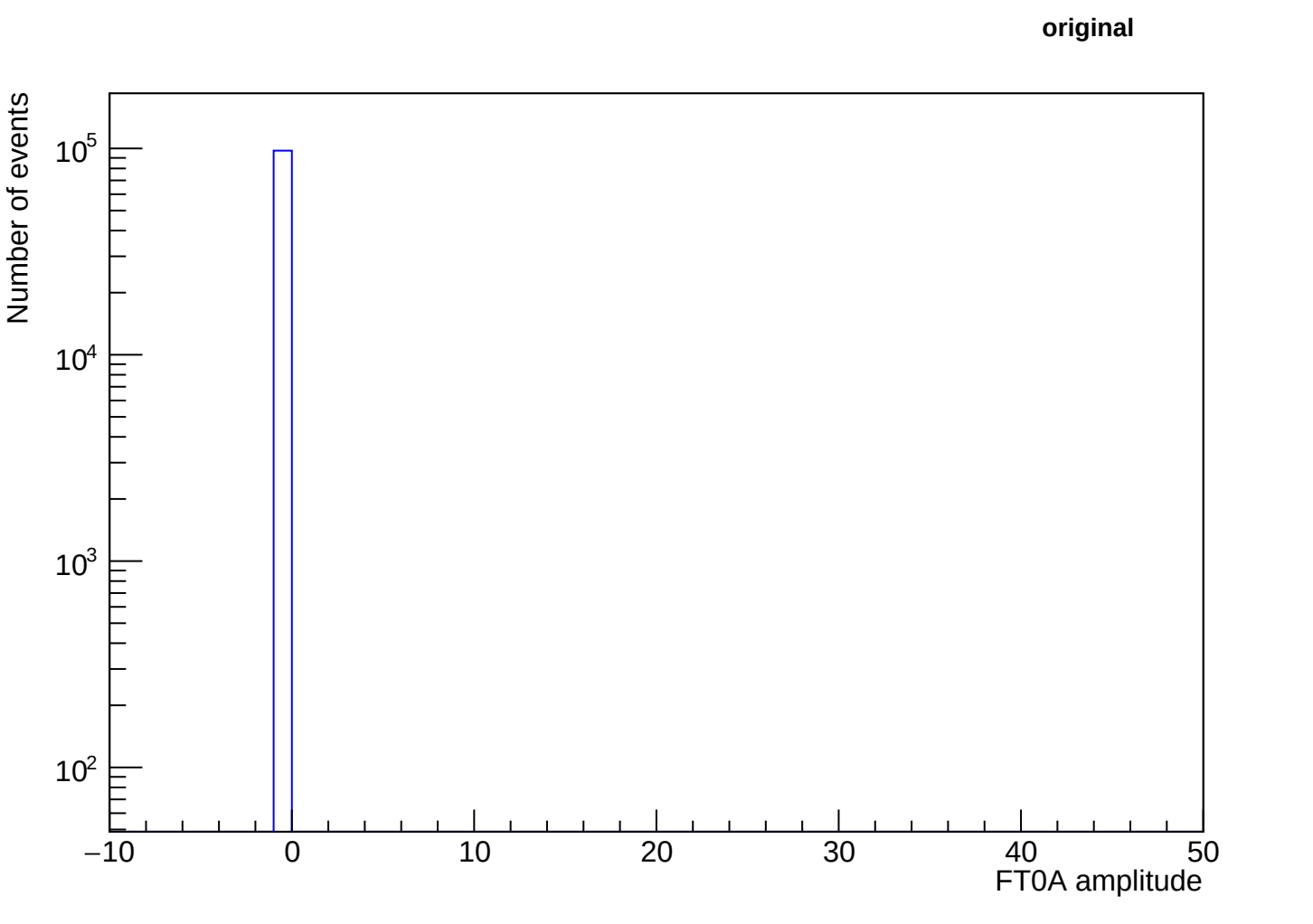

original
Number of events
10^2
10
1
0
0.5
1
1.5
2
2.5
3
3.5
4
4.5
5
IVM [GeV/c^2]

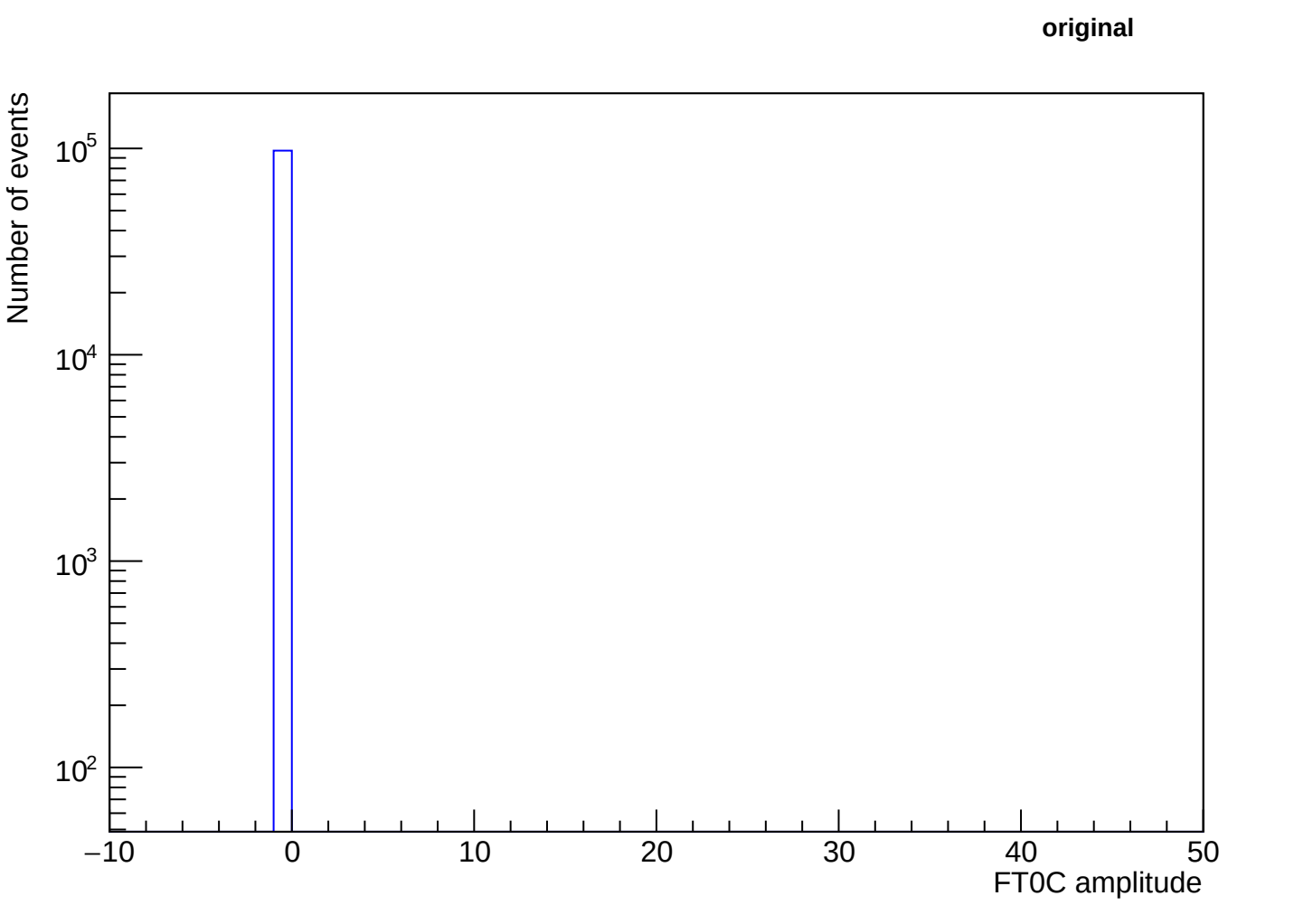

original
Number of events
10^4
10^3
10^2
10
1
−0.1
−0.08
−0.06
−0.04
−0.02
0
0.02
0.04
0.06
0.08
0.1
V_x

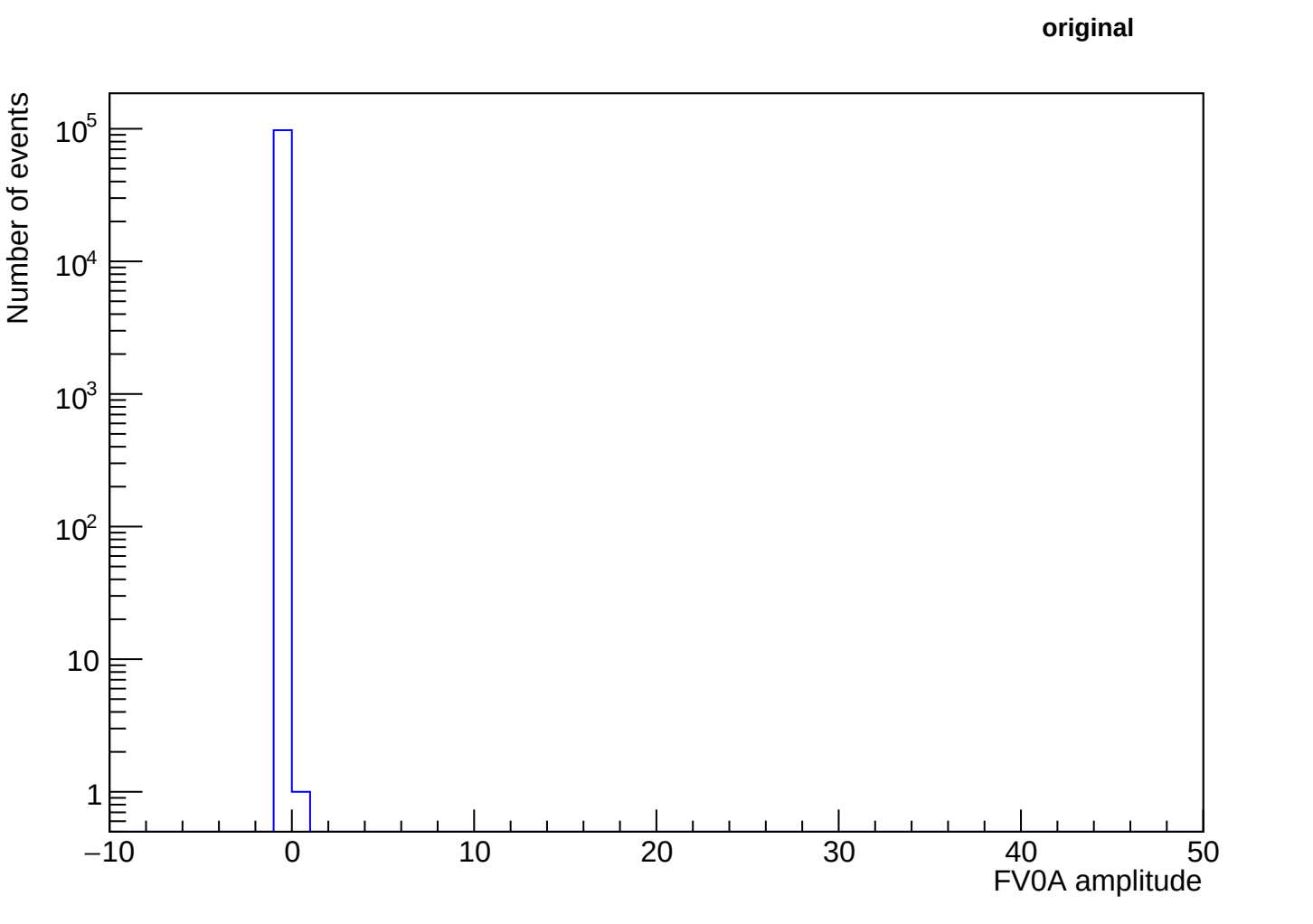

original
Number of events
10^4
10^3
10^2
10
1
−0.1
−0.08
−0.06
−0.04
−0.02
0
0.02
0.04
0.06
0.08
0.1
V_y

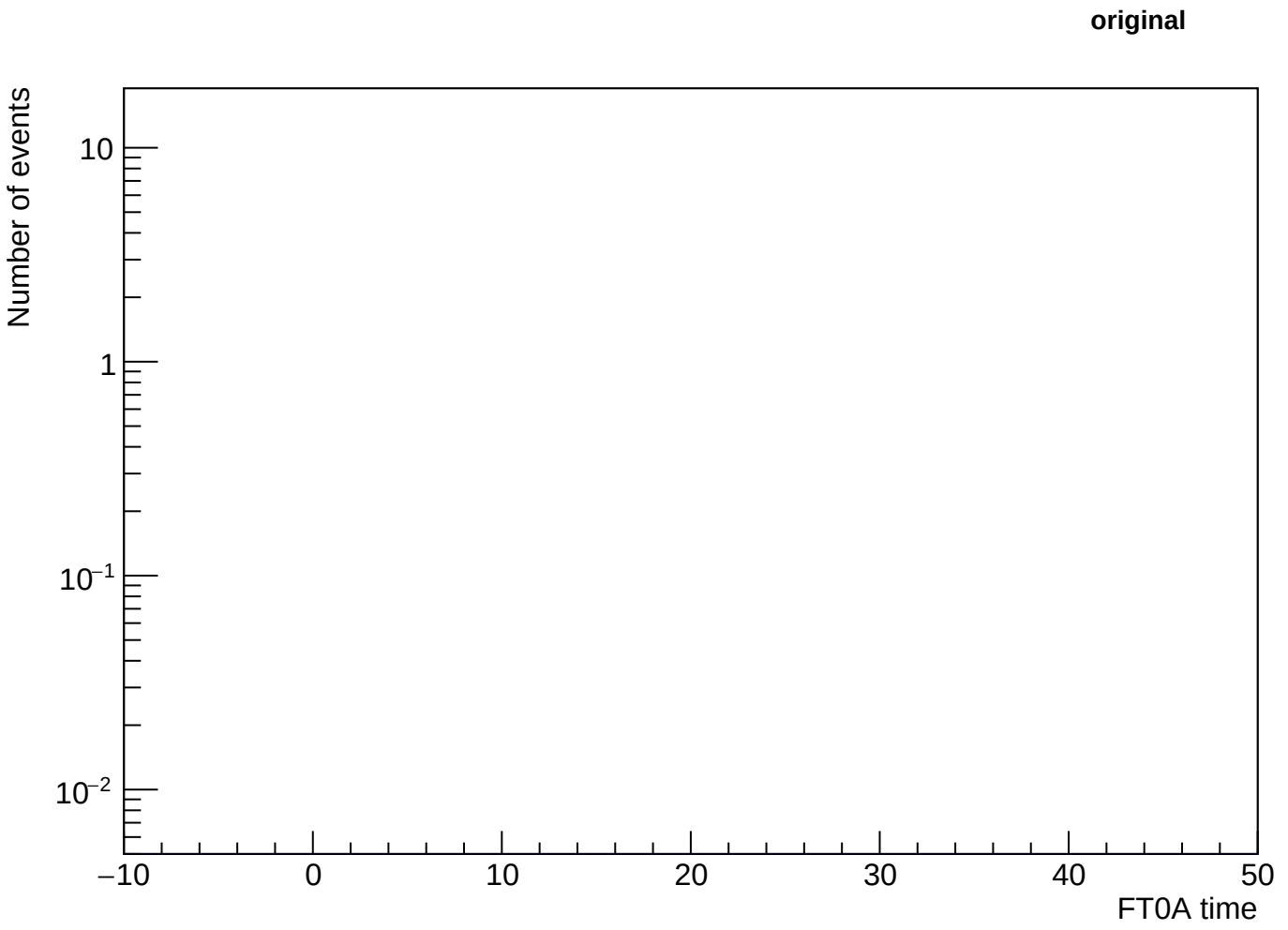

original
Number of events
10^3
10^2
10
1
−30
−20
−10
0
10
20
30
V_z

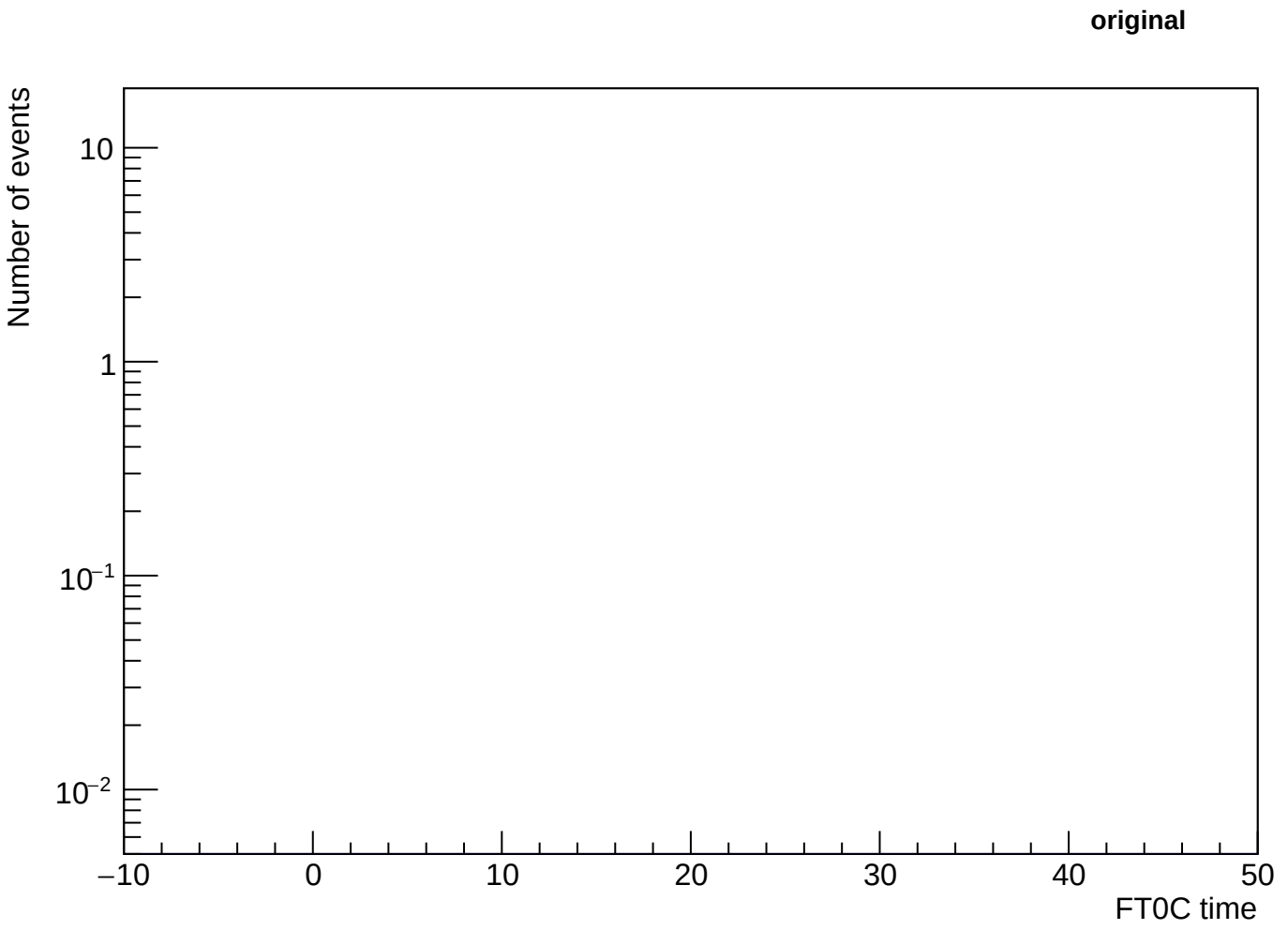

original
Number of events
10^3
10^2
10
1
−10
0
10
20
30
40
50
Occupancy

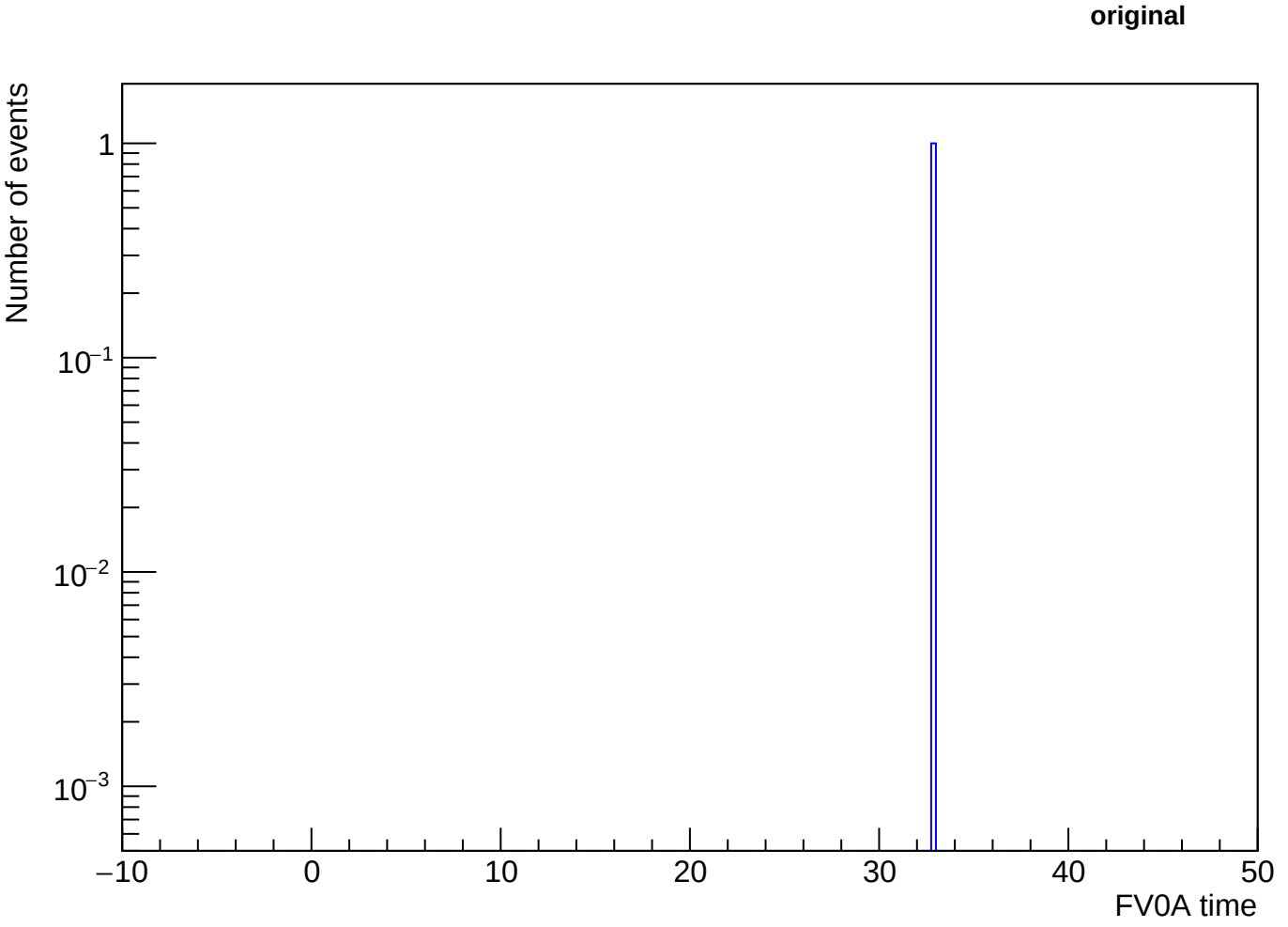

original
Number of events
10^5
10^4
10^3
10^2
−10
0
10
20
30
40
50
FT0A amplitude

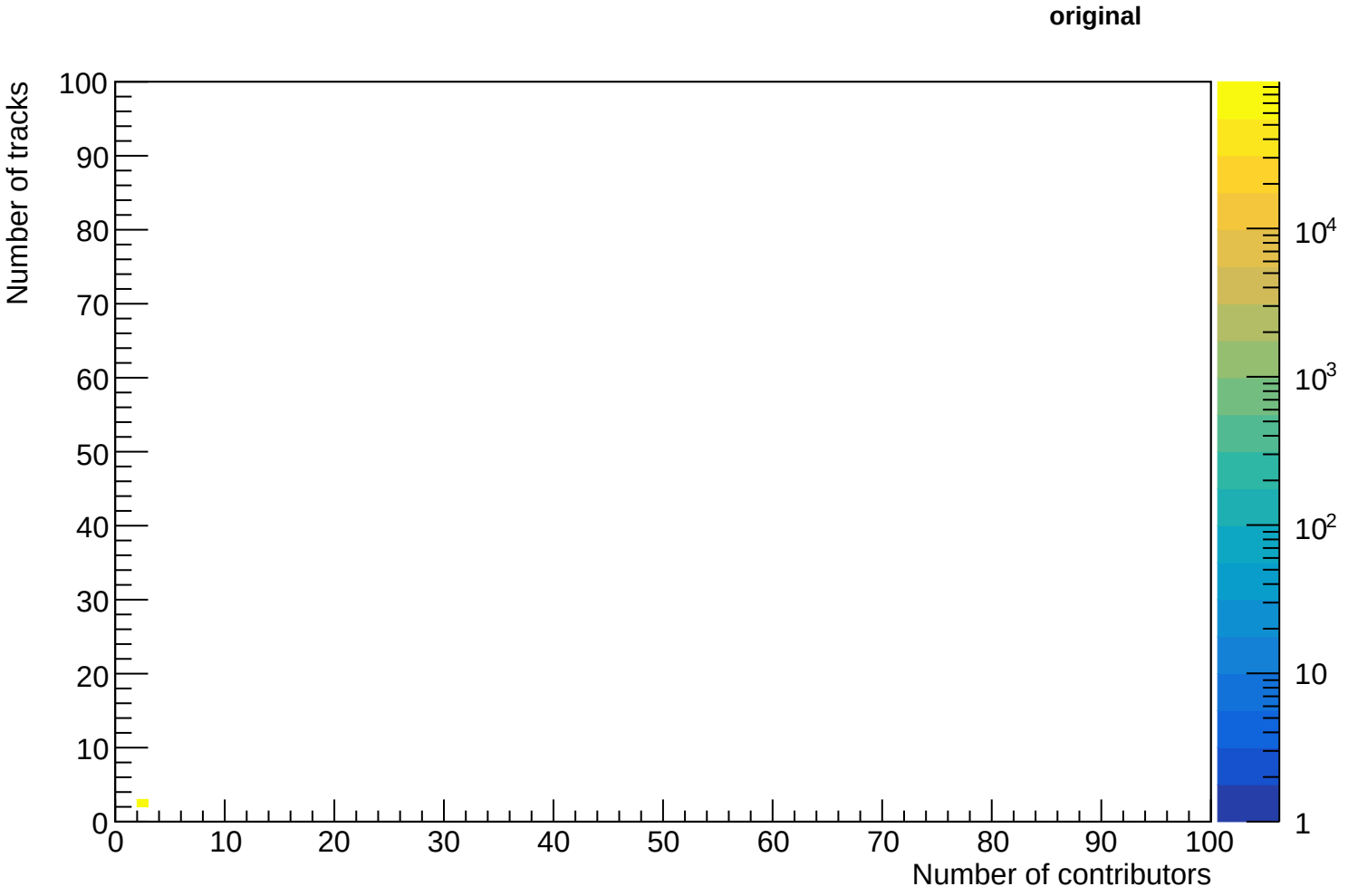

original
Number of events
10^5
10^4
10^3
10^2
−10
0
10
20
30
40
50
FT0C amplitude

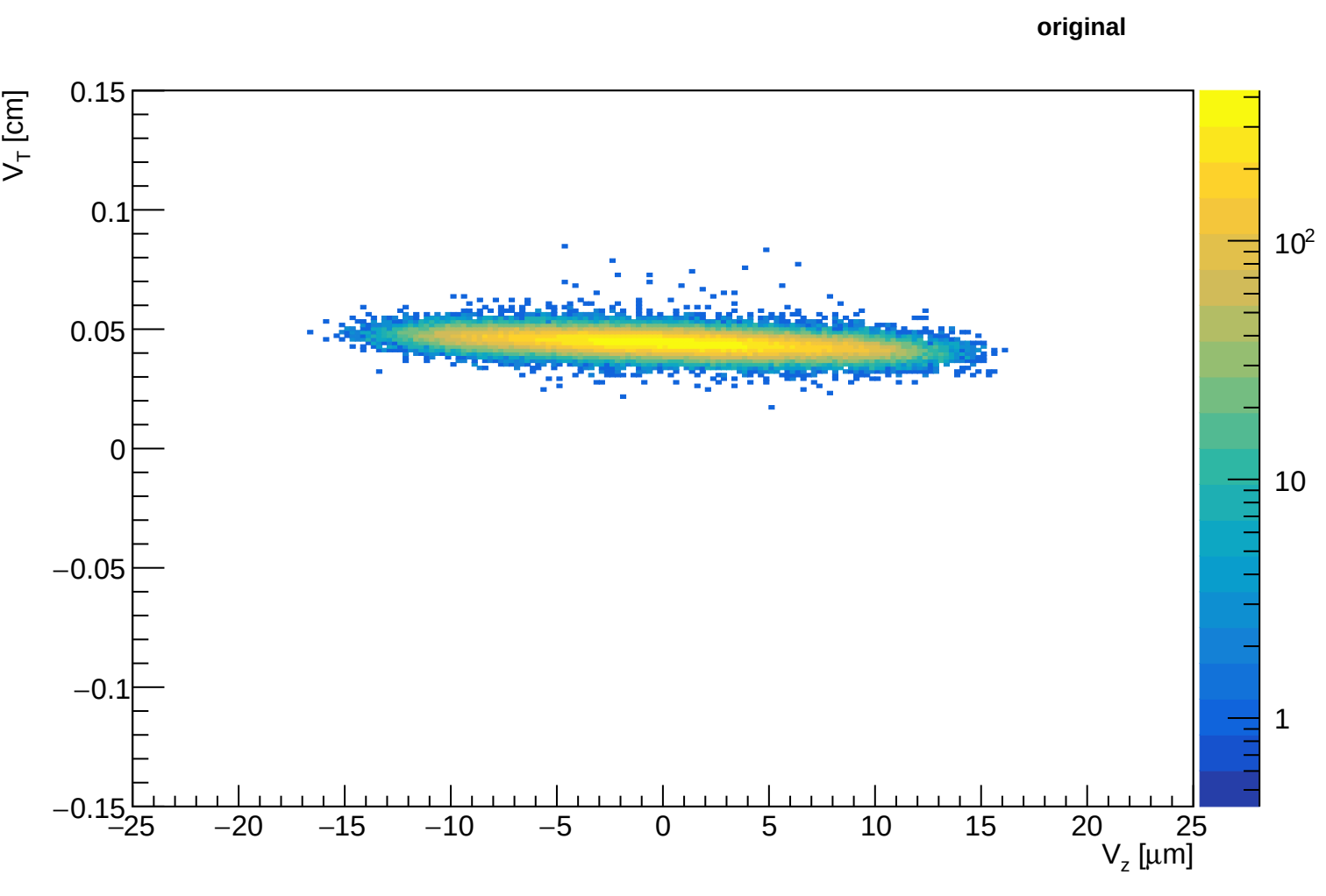

original
Number of events
10^5
10^4
10^3
10^2
10
1
−10
0
10
20
30
40
50
FV0A amplitude

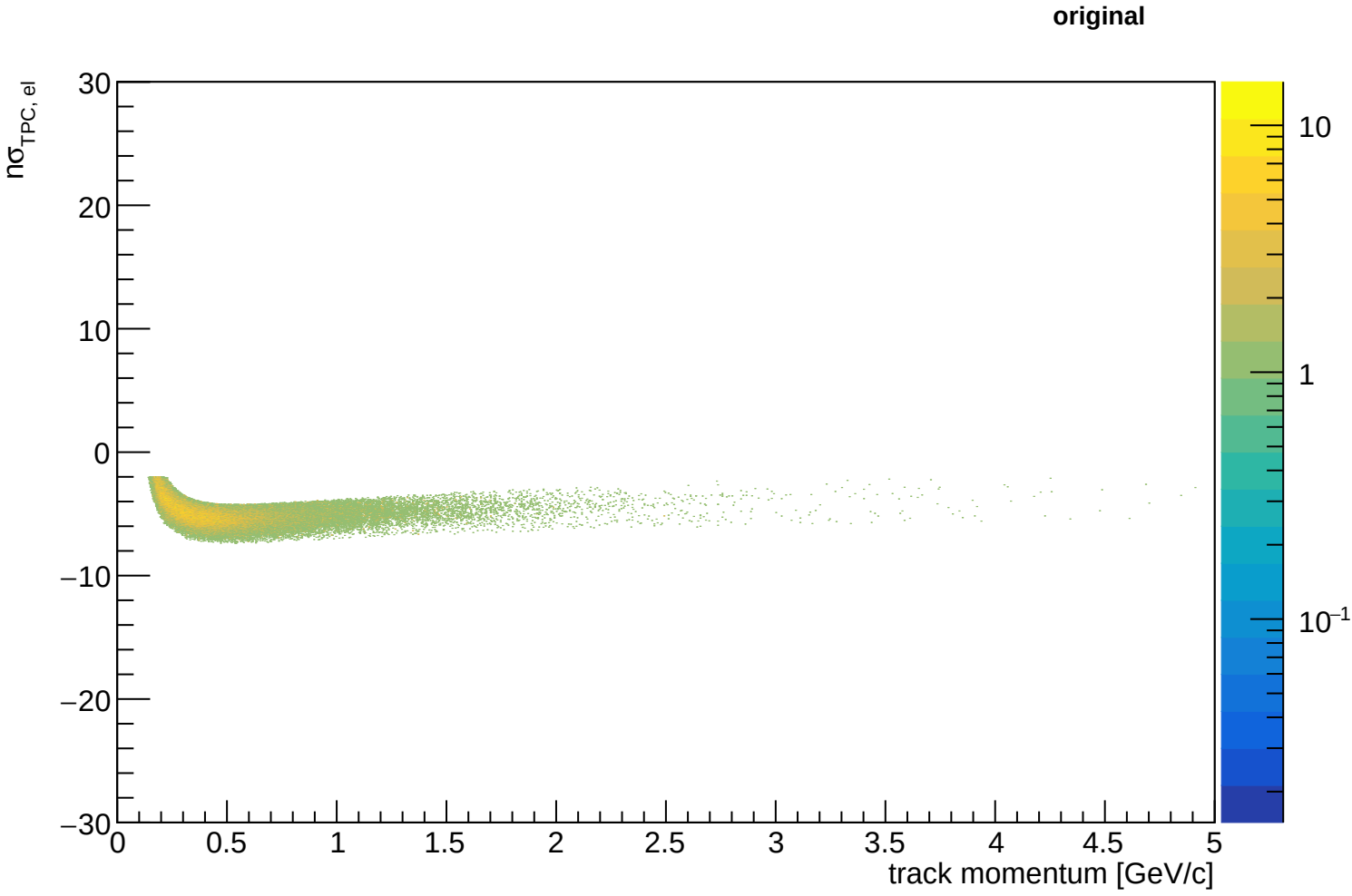

original
Number of events
10
1
10^{-1}
10^{-2}
−10
0
10
20
30
40
50
FT0A time

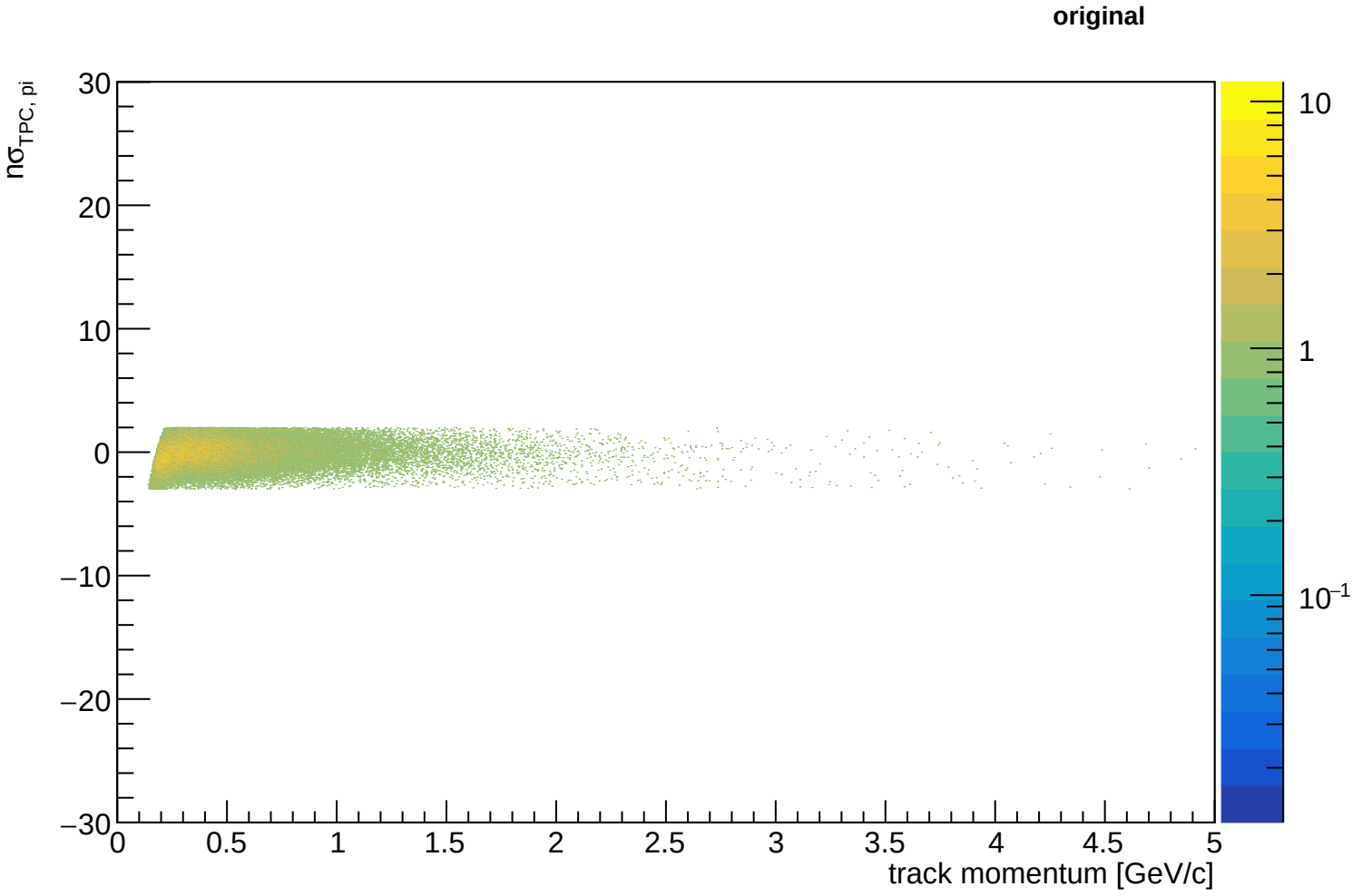

original
Number of events
10
1
10^{-1}
10^{-2}
−10
0
10
20
30
40
50
FT0C time

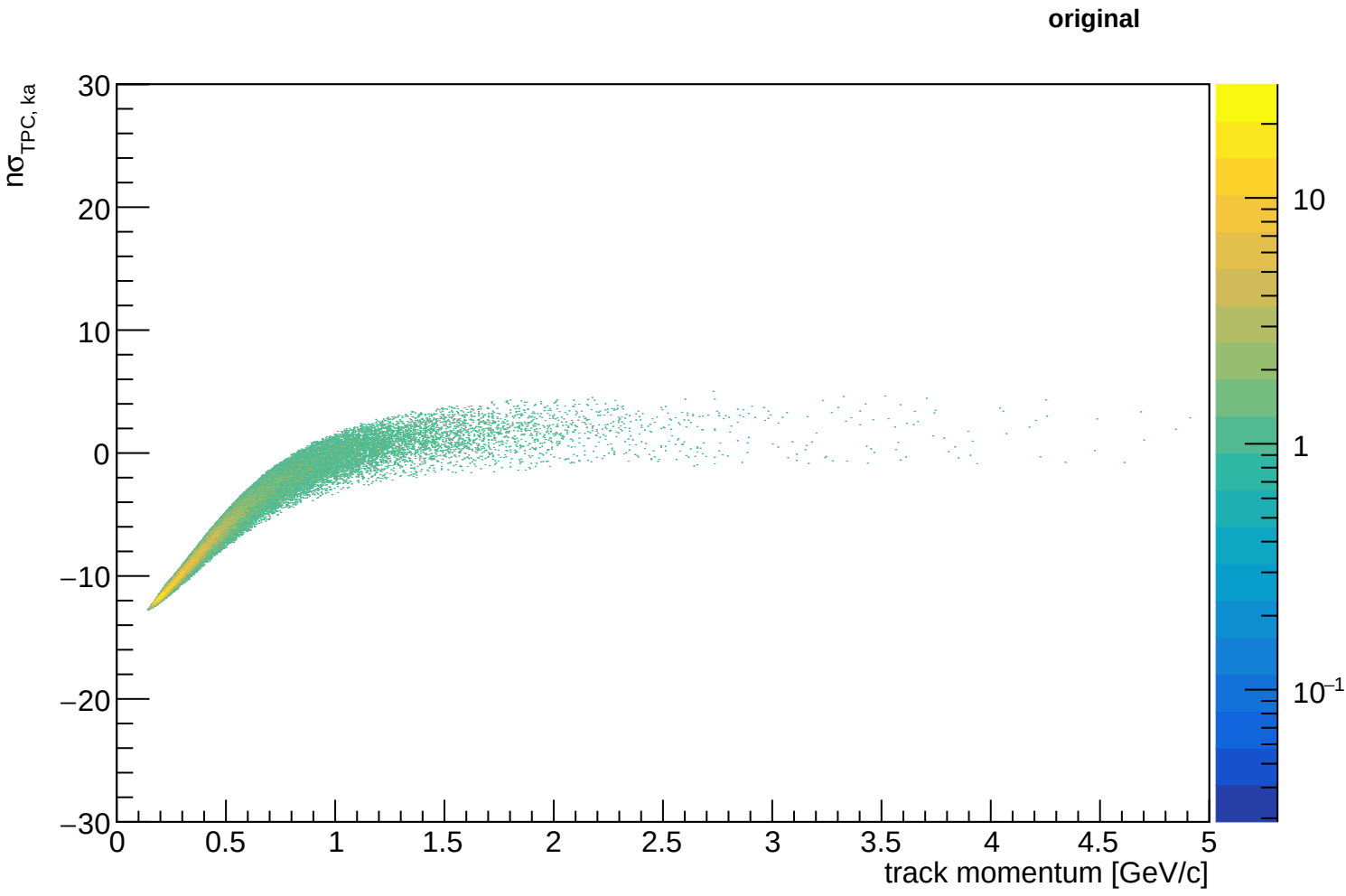

original
Number of events
1
10^{-1}
10^{-2}
10^{-3}
−10
0
10
20
30
40
50
FV0A time

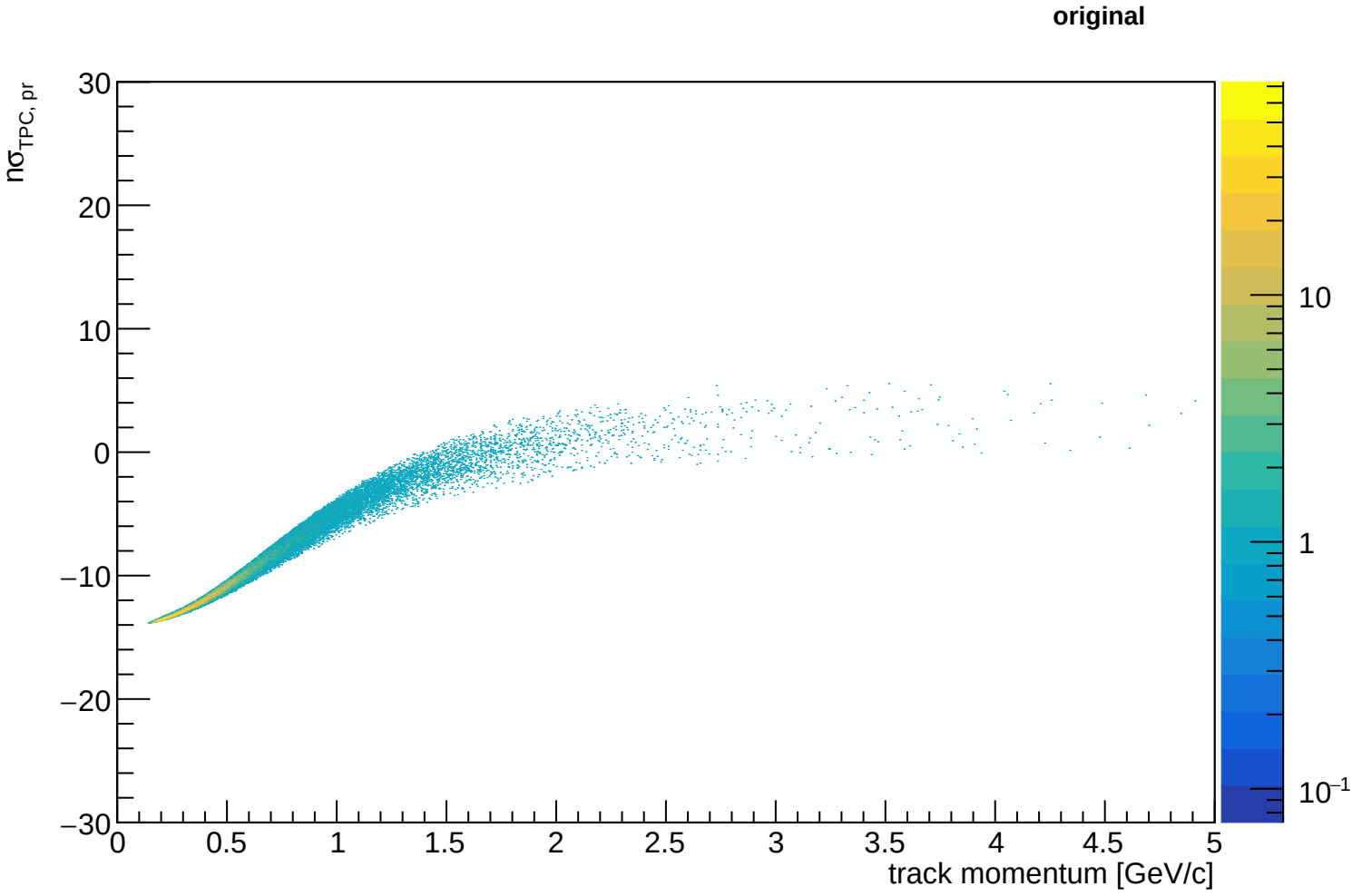

original
Number of tracks
100
90
80
70
60
50
40
30
20
10
0
0
10
20
30
40
50
60
70
80
90
100
Number of contributors
10^4
10^3
10^2
10
1

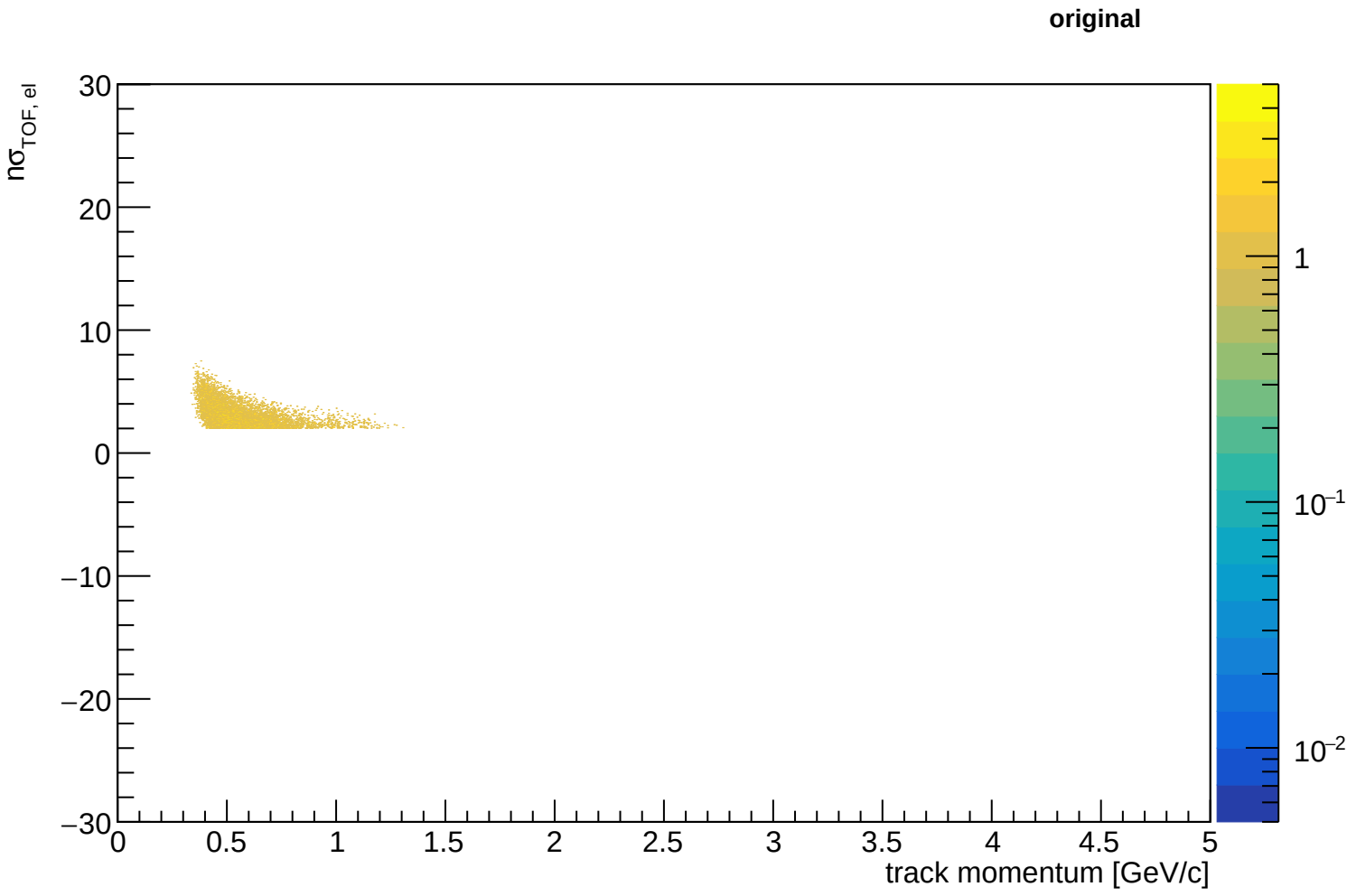

original
V_T [cm]
0.15
0.1
0.05
0
−0.05
−0.1
−0.15
−25
−20
−15
−10
−5
0
5
10
15
20
25
V_z [µm]
10^2
10
1

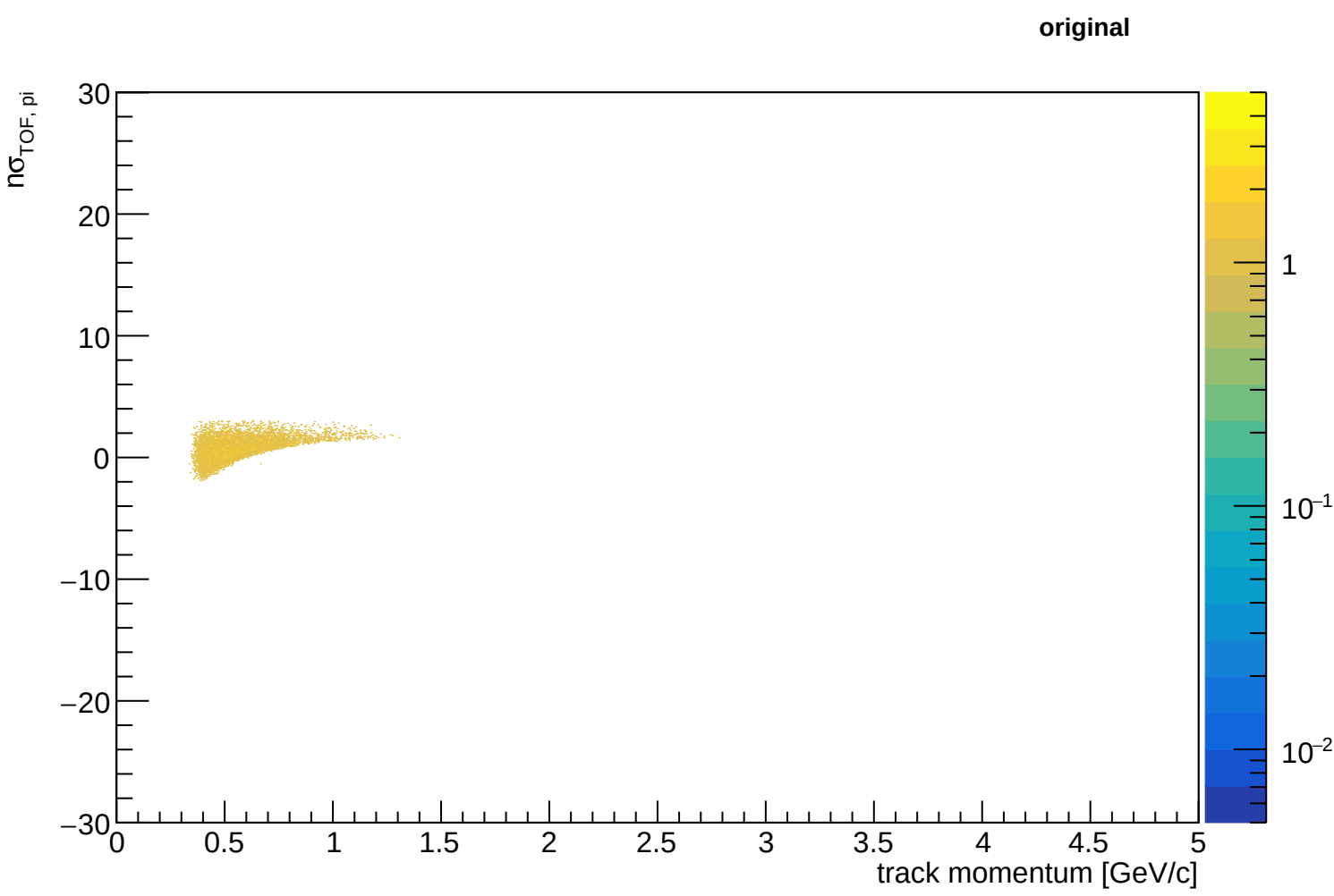

original
$n\sigma_{TPC,\ el}$
30
20
10
0
−10
−20
−30
0
0.5
1
1.5
2
2.5
3
3.5
4
4.5
5
track momentum [GeV/c]
10
1
10^{-1}

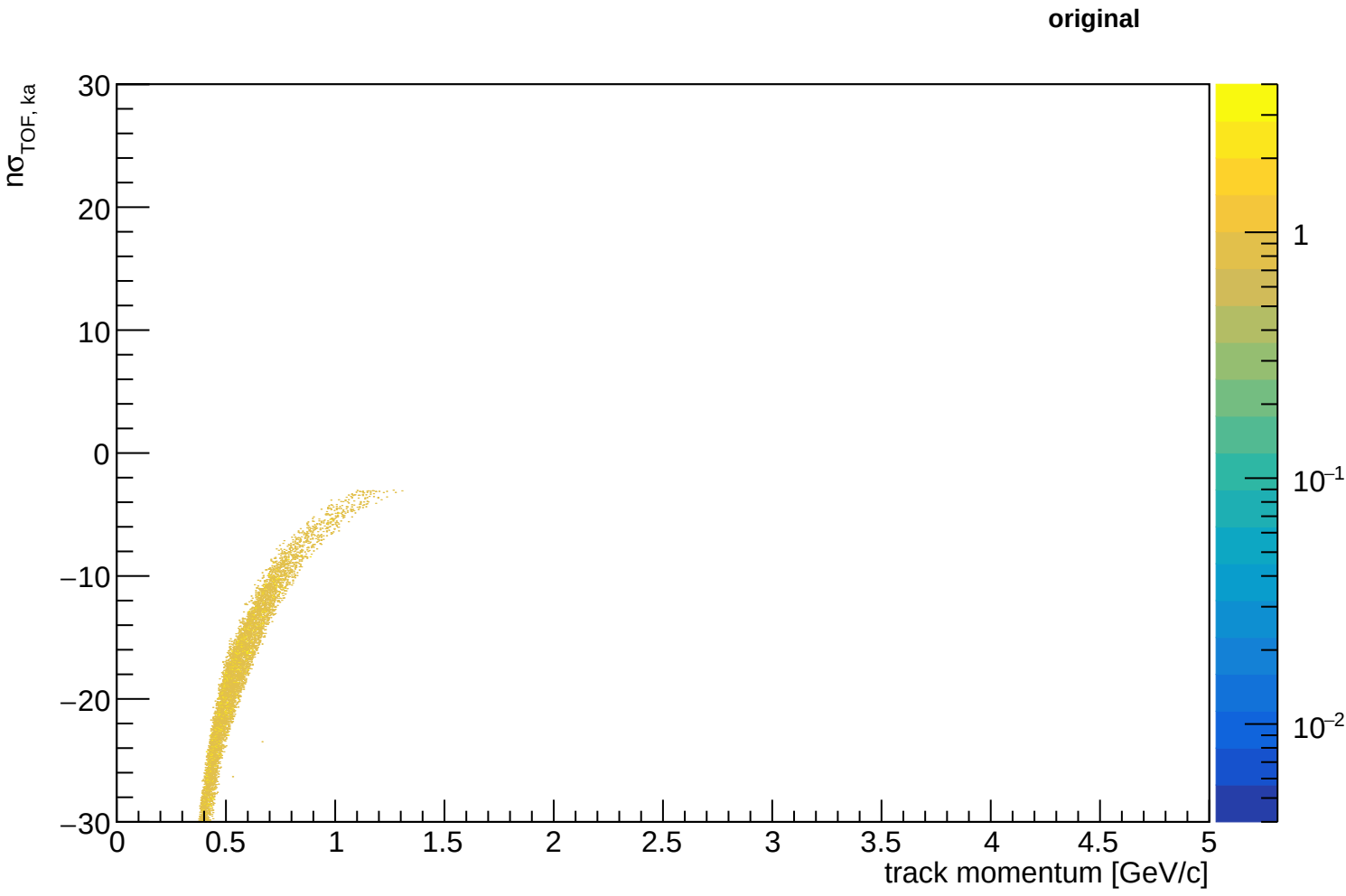

original
$n\sigma_{TPC,\ pi}$
30
20
10
0
−10
−20
−30
0
0.5
1
1.5
2
2.5
3
3.5
4
4.5
5
track momentum [GeV/c]
10
1
10^{-1}

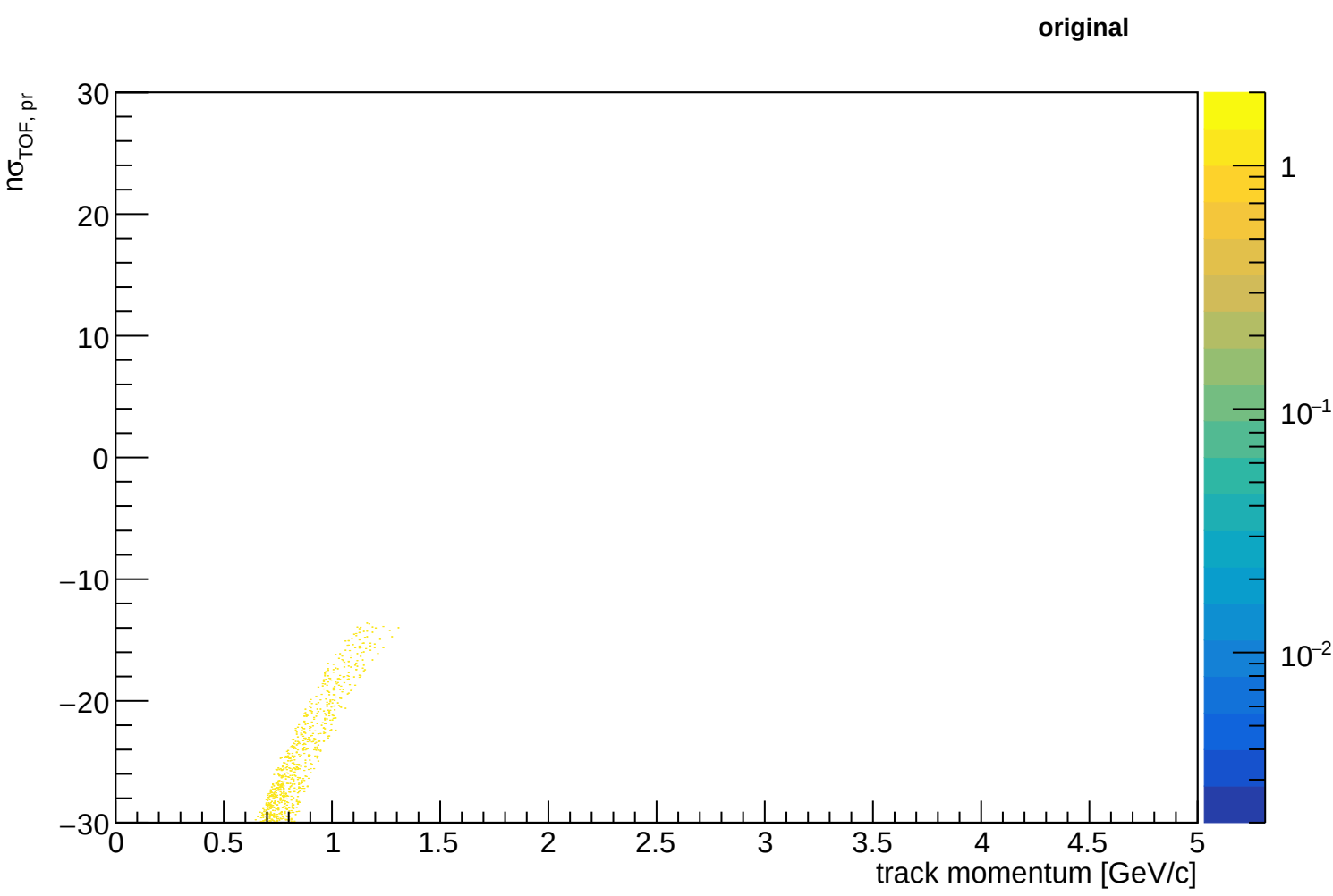

original
$n\sigma_{TPC,\ ka}$
30
20
10
0
−10
−20
−30
0
0.5
1
1.5
2
2.5
3
3.5
4
4.5
5
track momentum [GeV/c]
10
1
10^{-1}

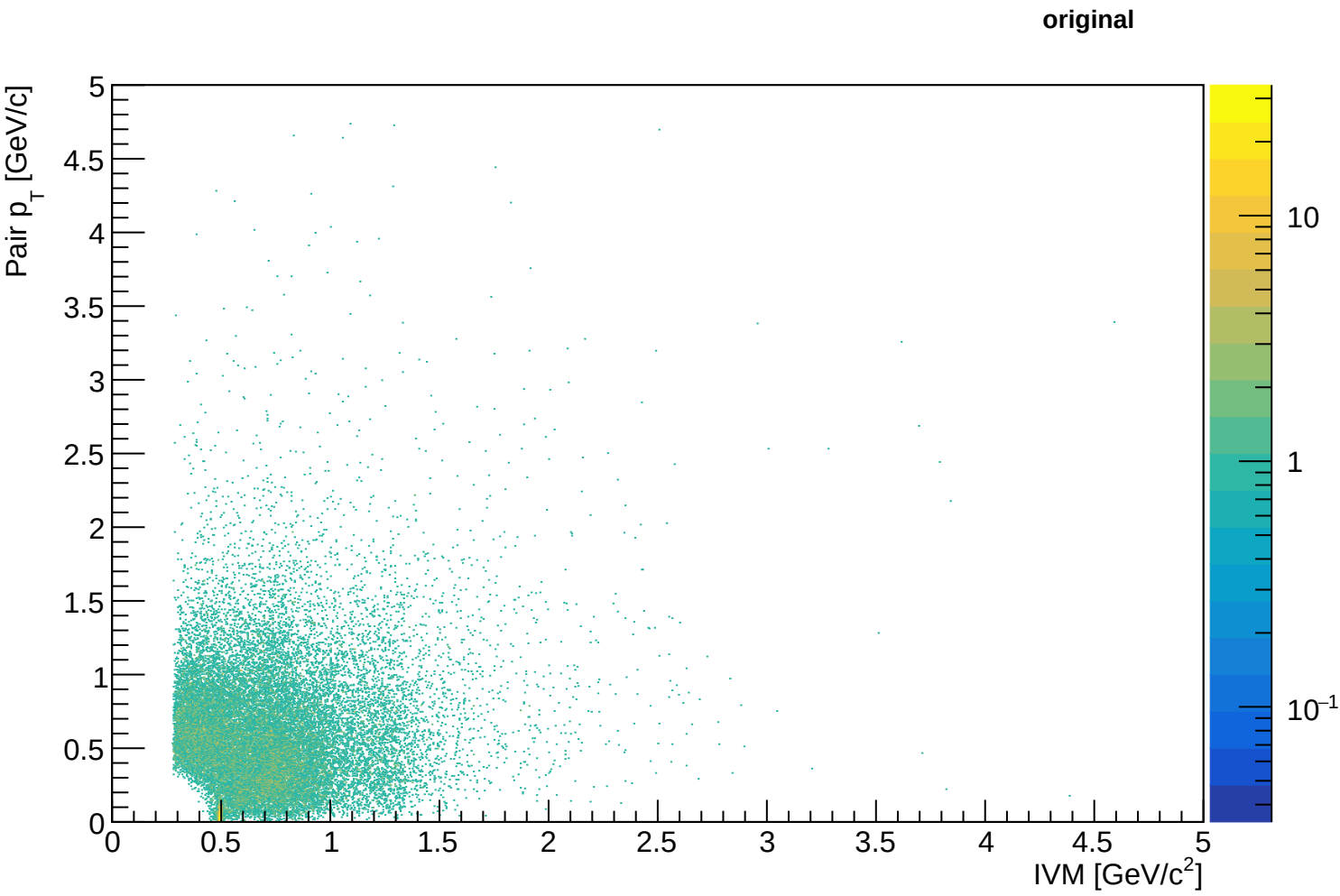

original
nσTPC, pr
30
20
10
0
−10
−20
−30
0
0.5
1
1.5
2
2.5
3
3.5
4
4.5
5
track momentum [GeV/c]
10
1
10−1

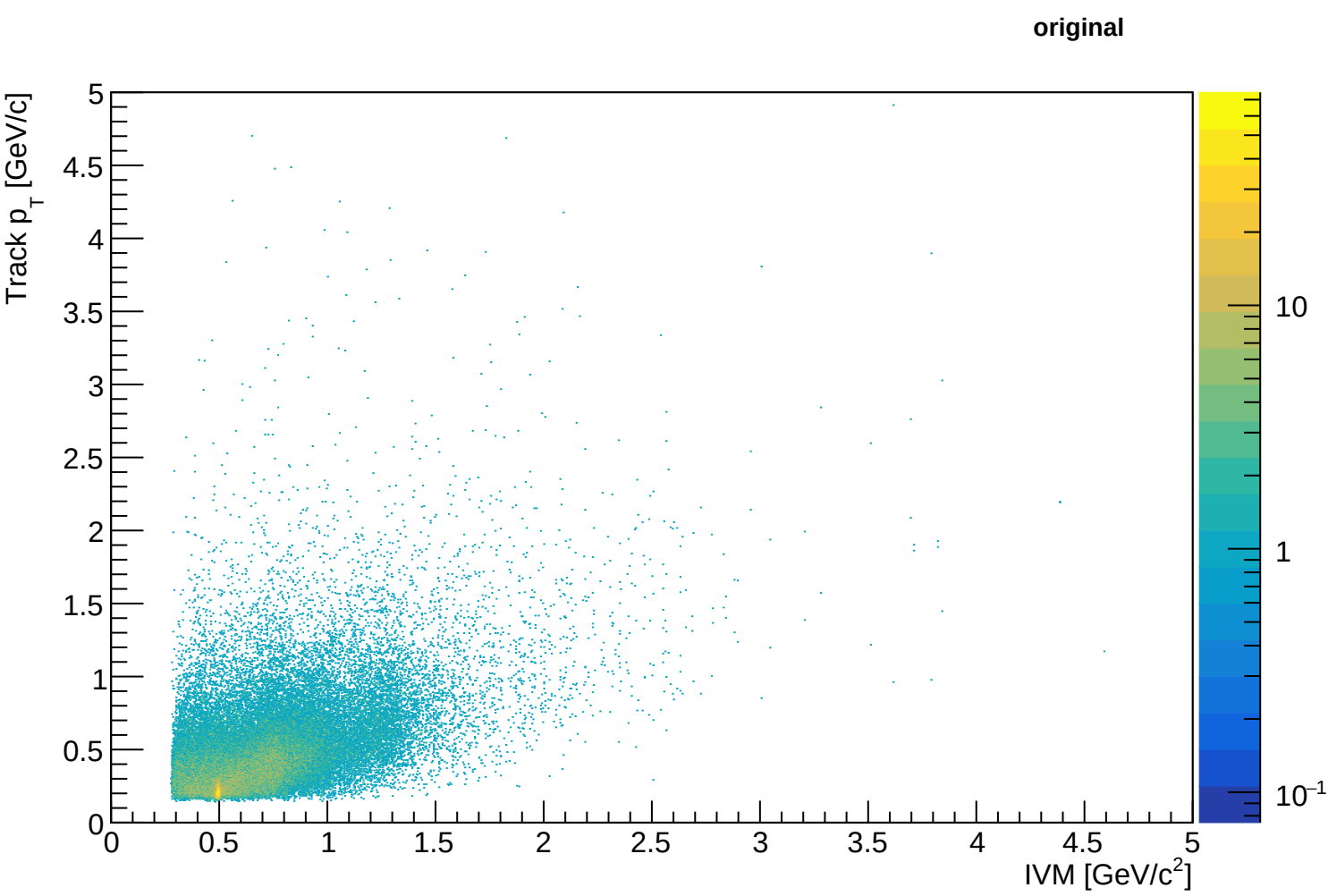

original
nσTOF, el
30
20
10
0
−10
−20
−30
0
0.5
1
1.5
2
2.5
3
3.5
4
4.5
5
track momentum [GeV/c]
1
10−1
10−2

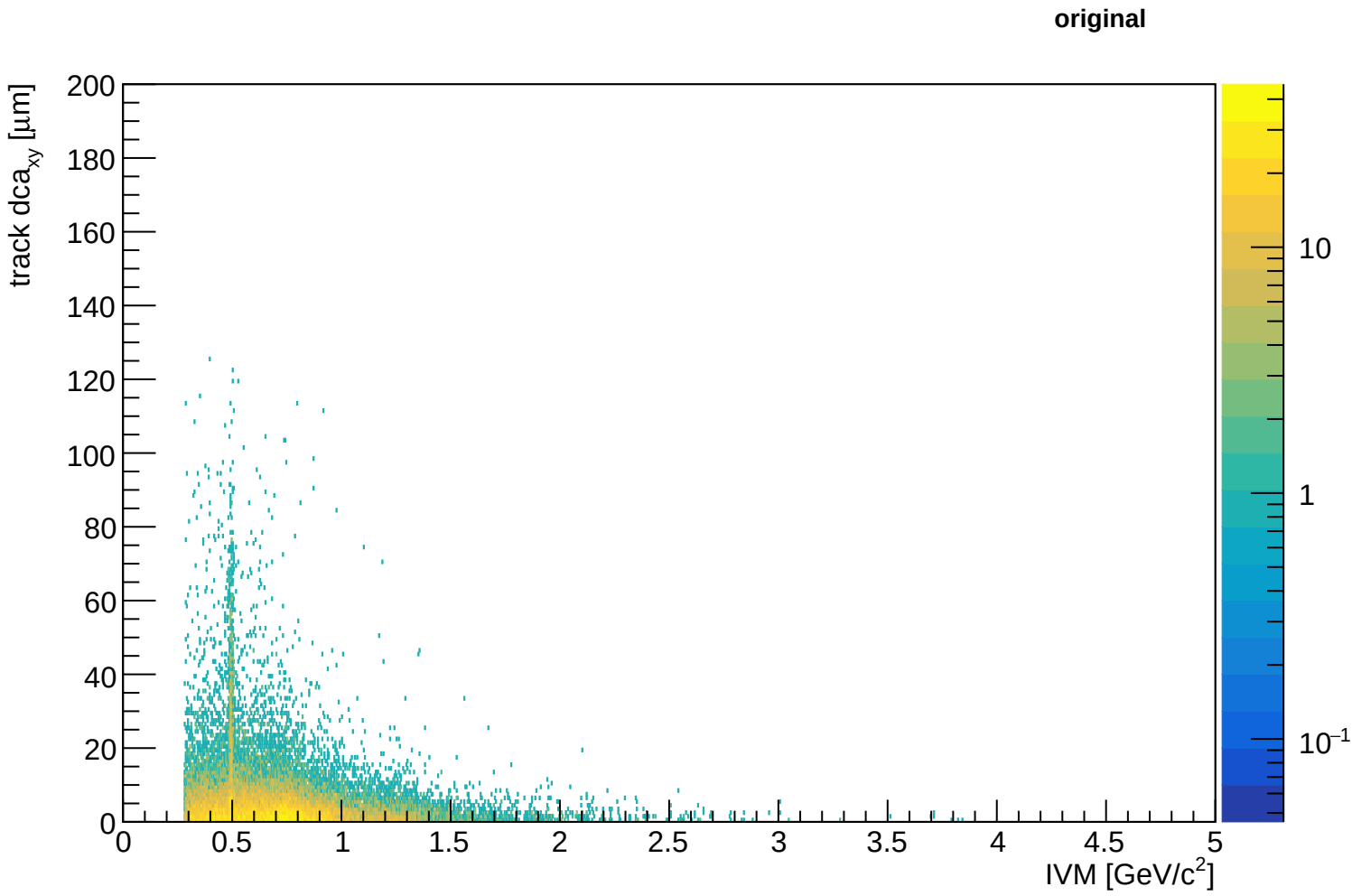

original
nσTOF, pi
30
20
10
0
−10
−20
−30
0
0.5
1
1.5
2
2.5
3
3.5
4
4.5
5
track momentum [GeV/c]
1
10−1
10−2

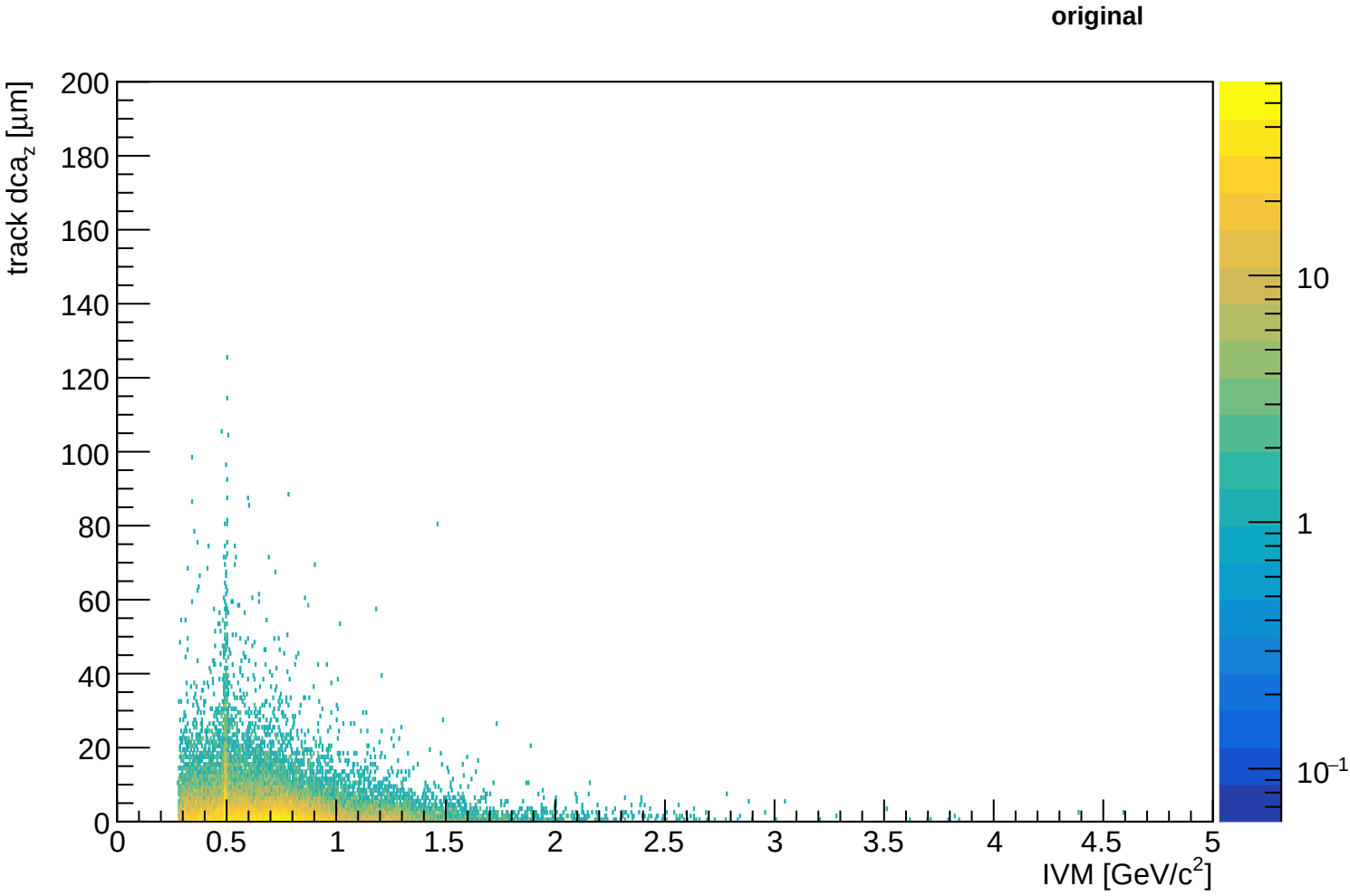

original
nσTOF, ka
30
20
10
0
−10
−20
−30
0
0.5
1
1.5
2
2.5
3
3.5
4
4.5
5
track momentum [GeV/c]
1
10−1
10−2

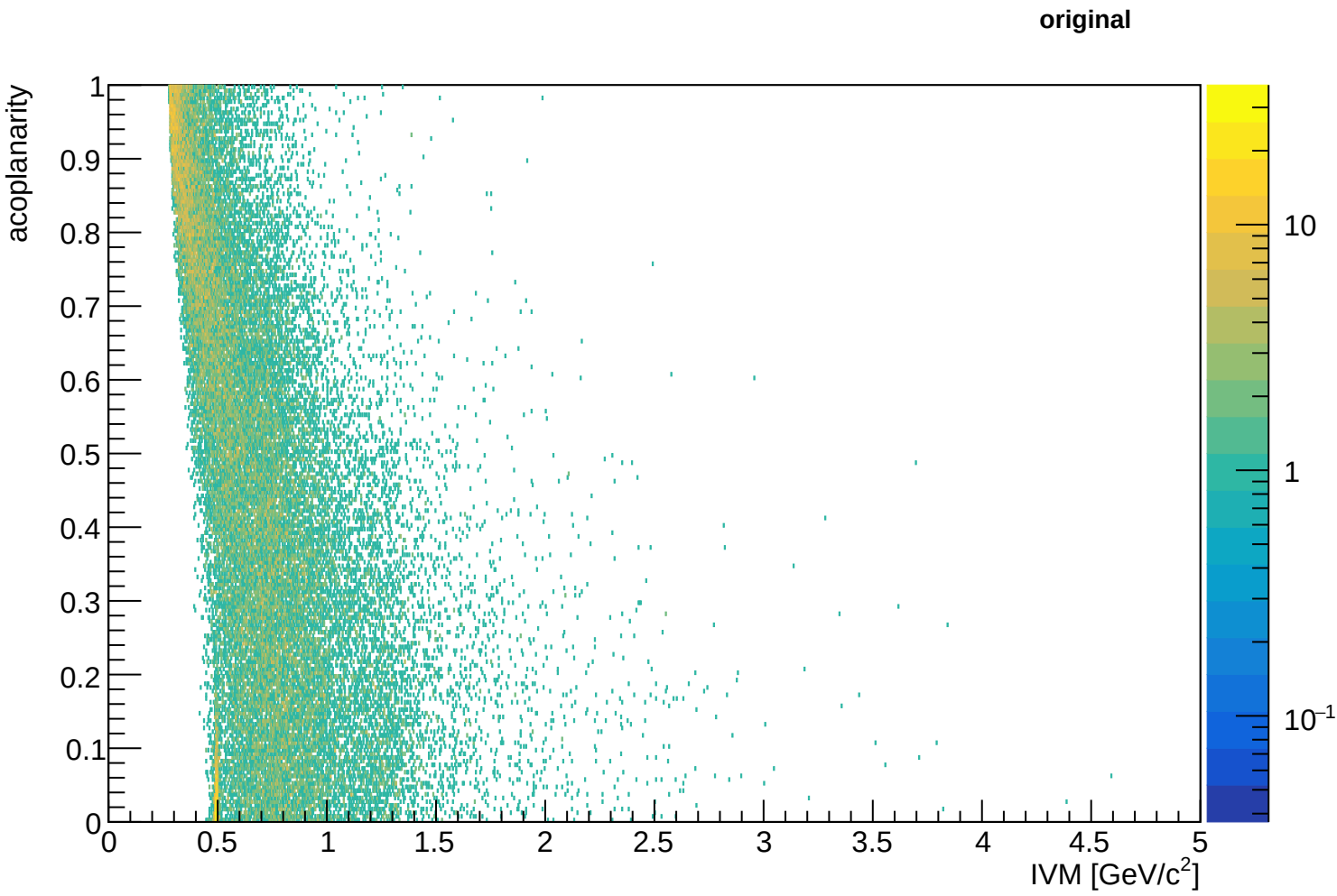

original
nσTOF, pr
30
20
10
0
−10
−20
−30
0
0.5
1
1.5
2
2.5
3
3.5
4
4.5
5
track momentum [GeV/c]
1
10−1
10−2

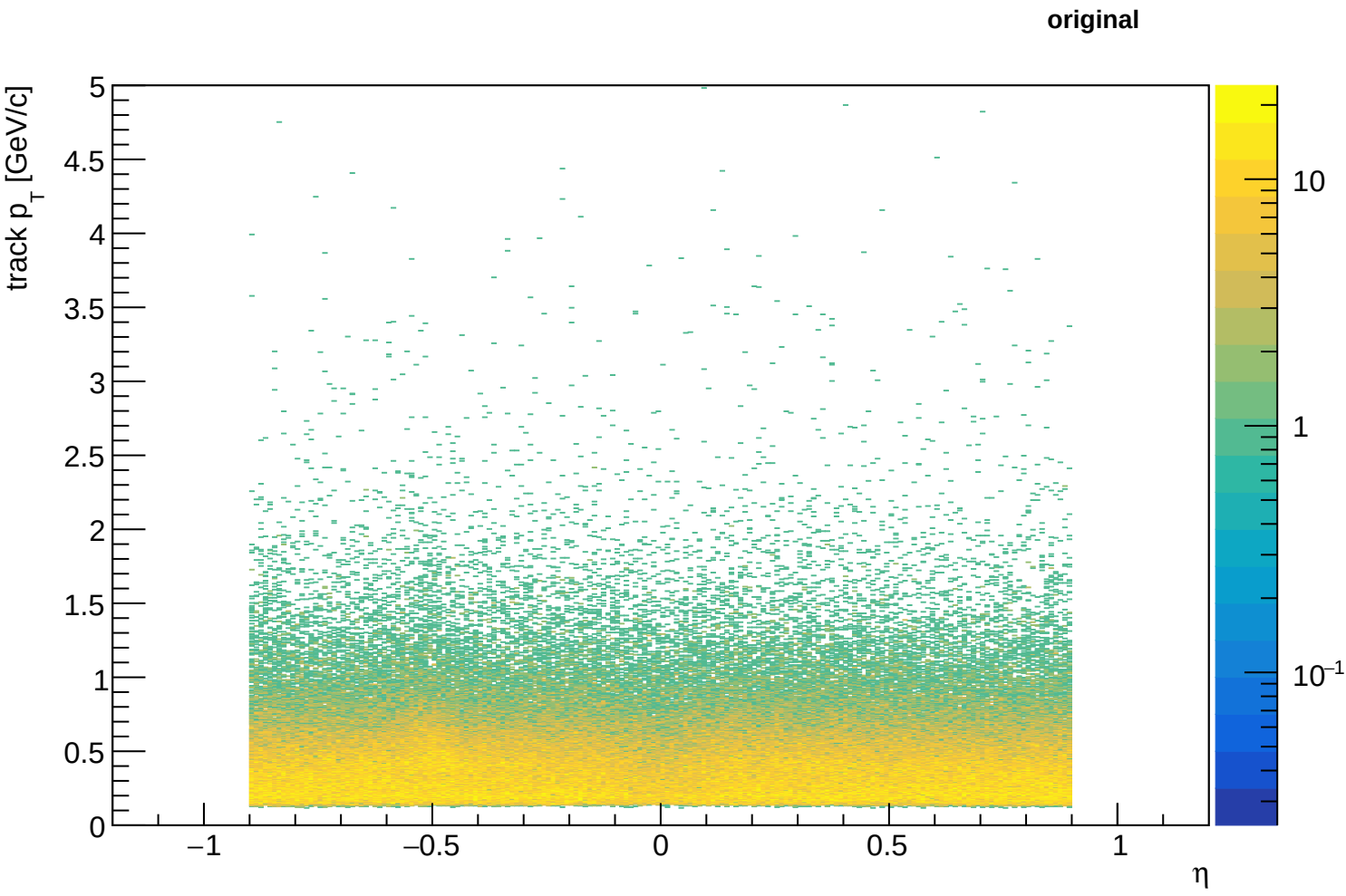

original
Pair p_T [GeV/c]
IVM [GeV/c^2]
0
0.5
1
1.5
2
2.5
3
3.5
4
4.5
5
10
1
10^{-1}

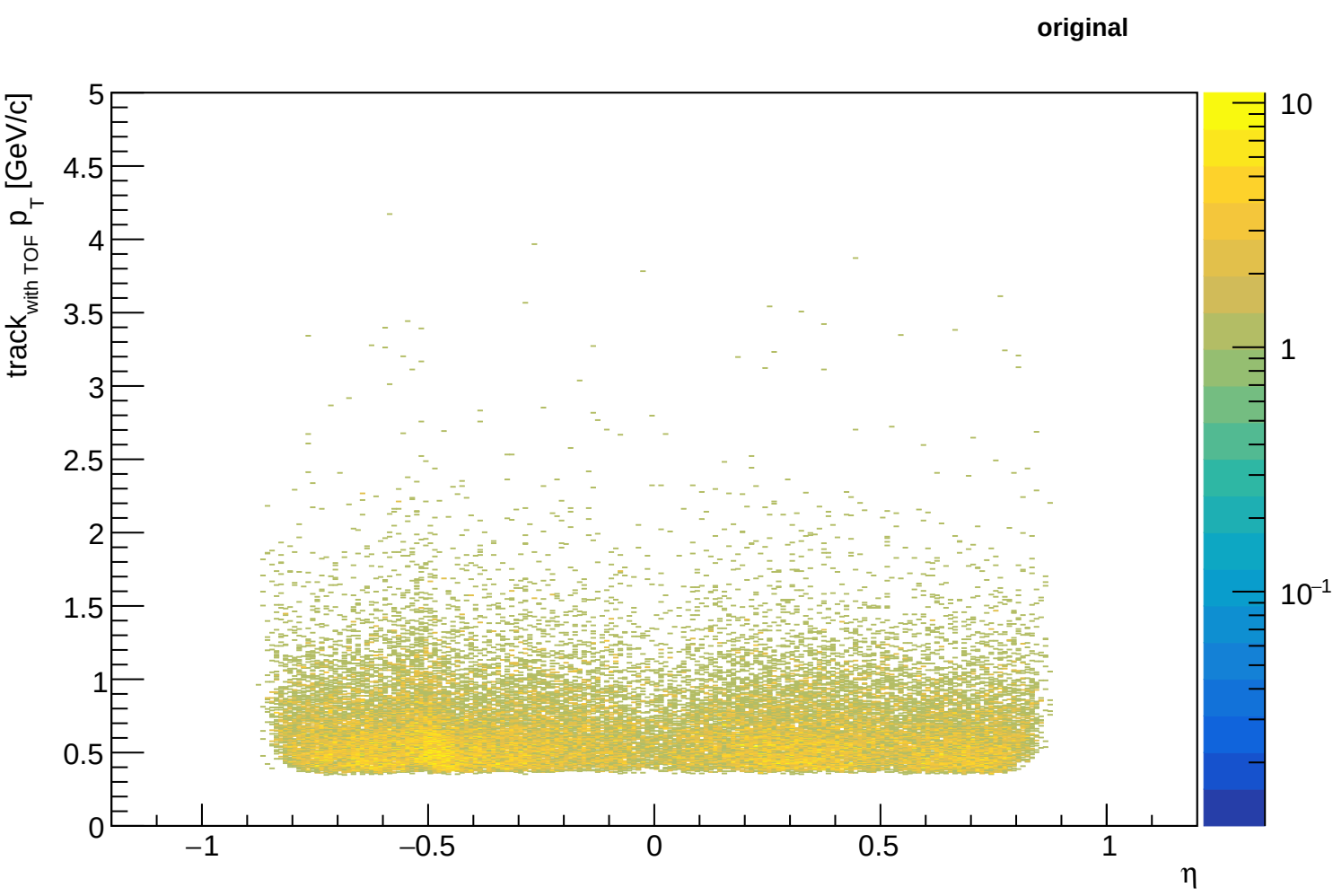

original
Track p_T [GeV/c]
IVM [GeV/c^2]
0
0.5
1
1.5
2
2.5
3
3.5
4
4.5
5
10
1
10^{-1}

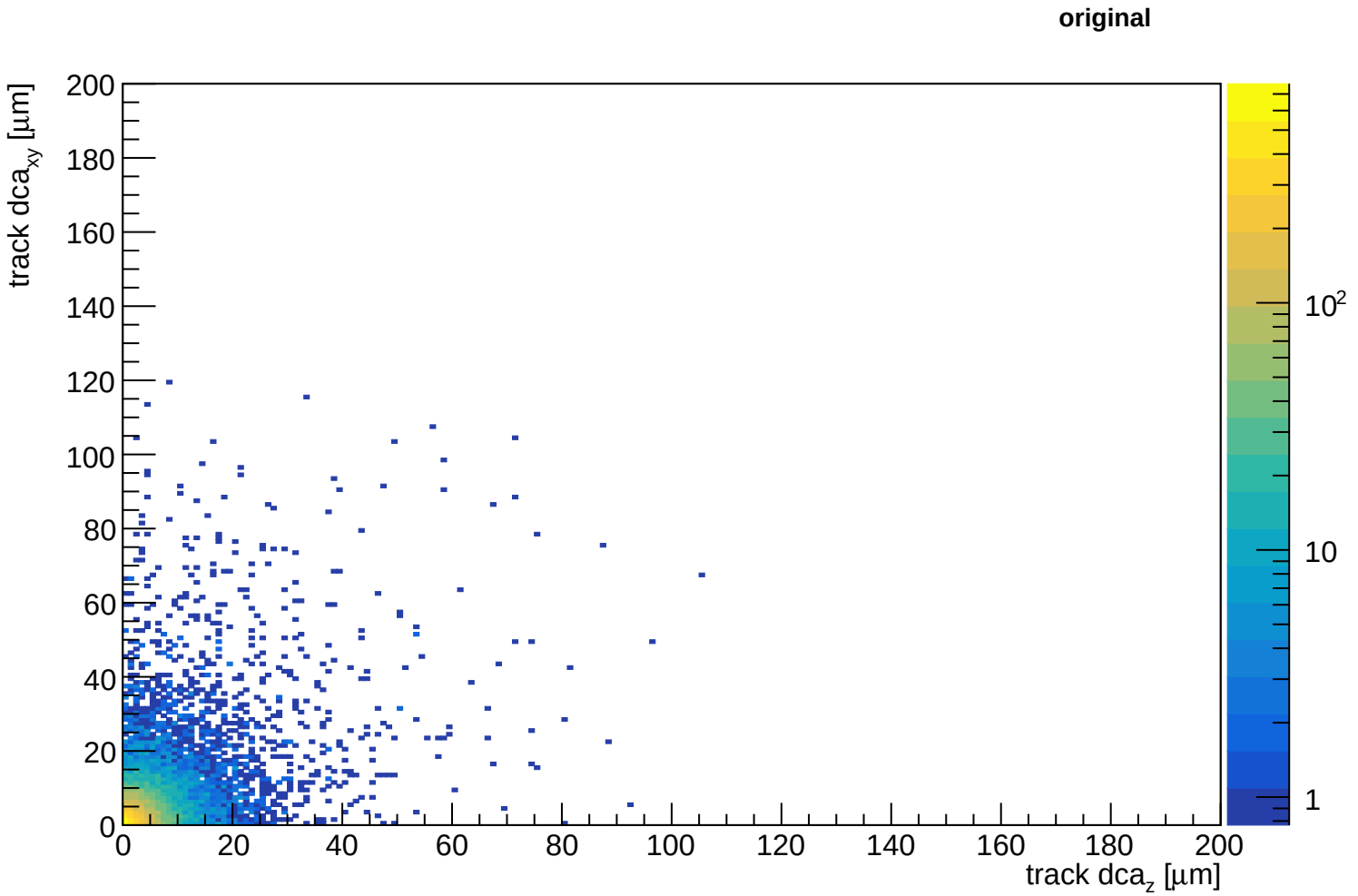

original
track dca$_{xy}$ [µm]
200
180
160
140
120
100
80
60
40
20
0
0
0.5
1
1.5
2
2.5
3
3.5
4
4.5
5
IVM [GeV/c^2]
10
1
10^{-1}

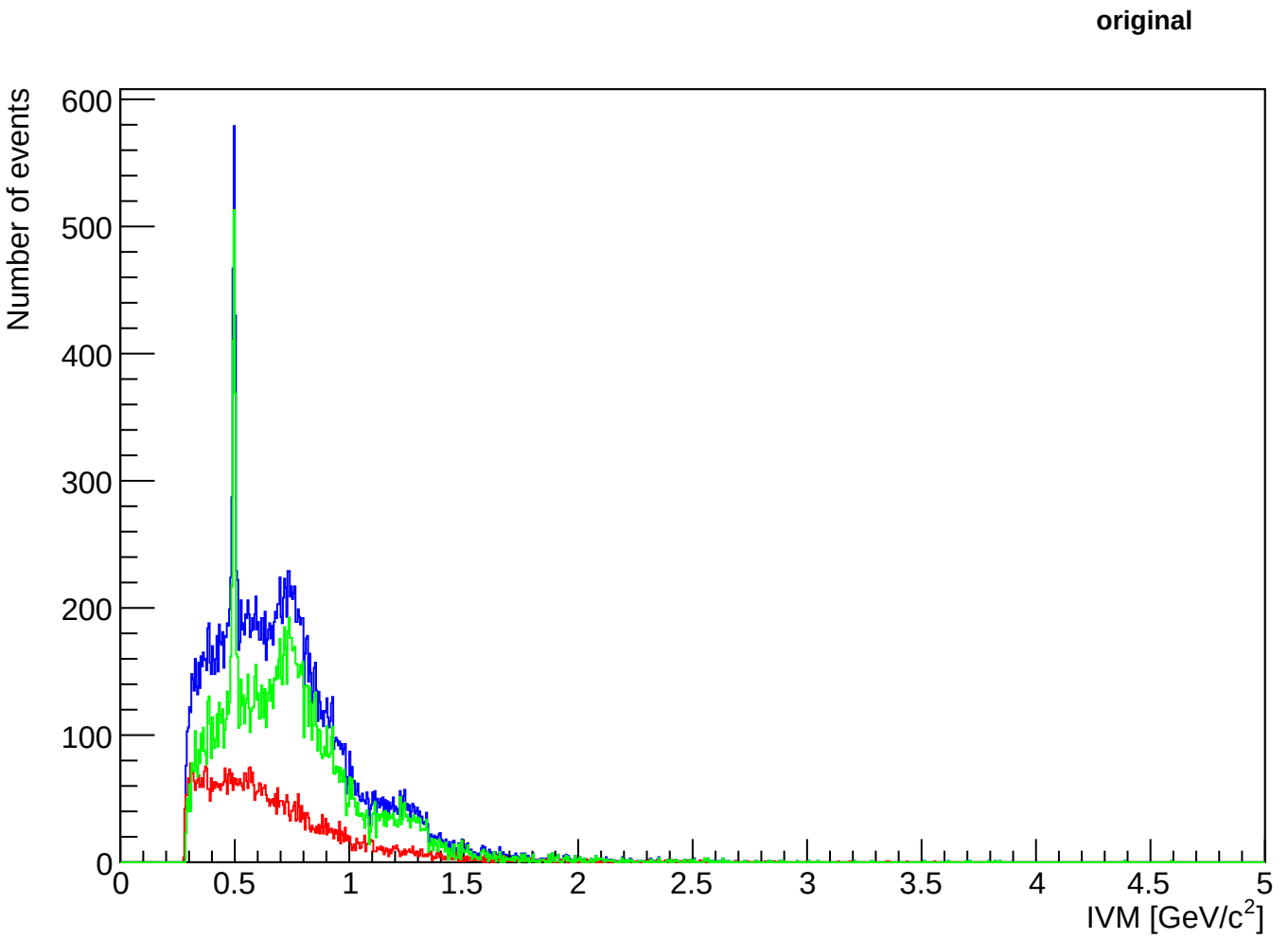

original
track dca$_z$ [µm]
200
180
160
140
120
100
80
60
40
20
0
0
0.5
1
1.5
2
2.5
3
3.5
4
4.5
5
IVM [GeV/c^2]
10
1
10^{-1}

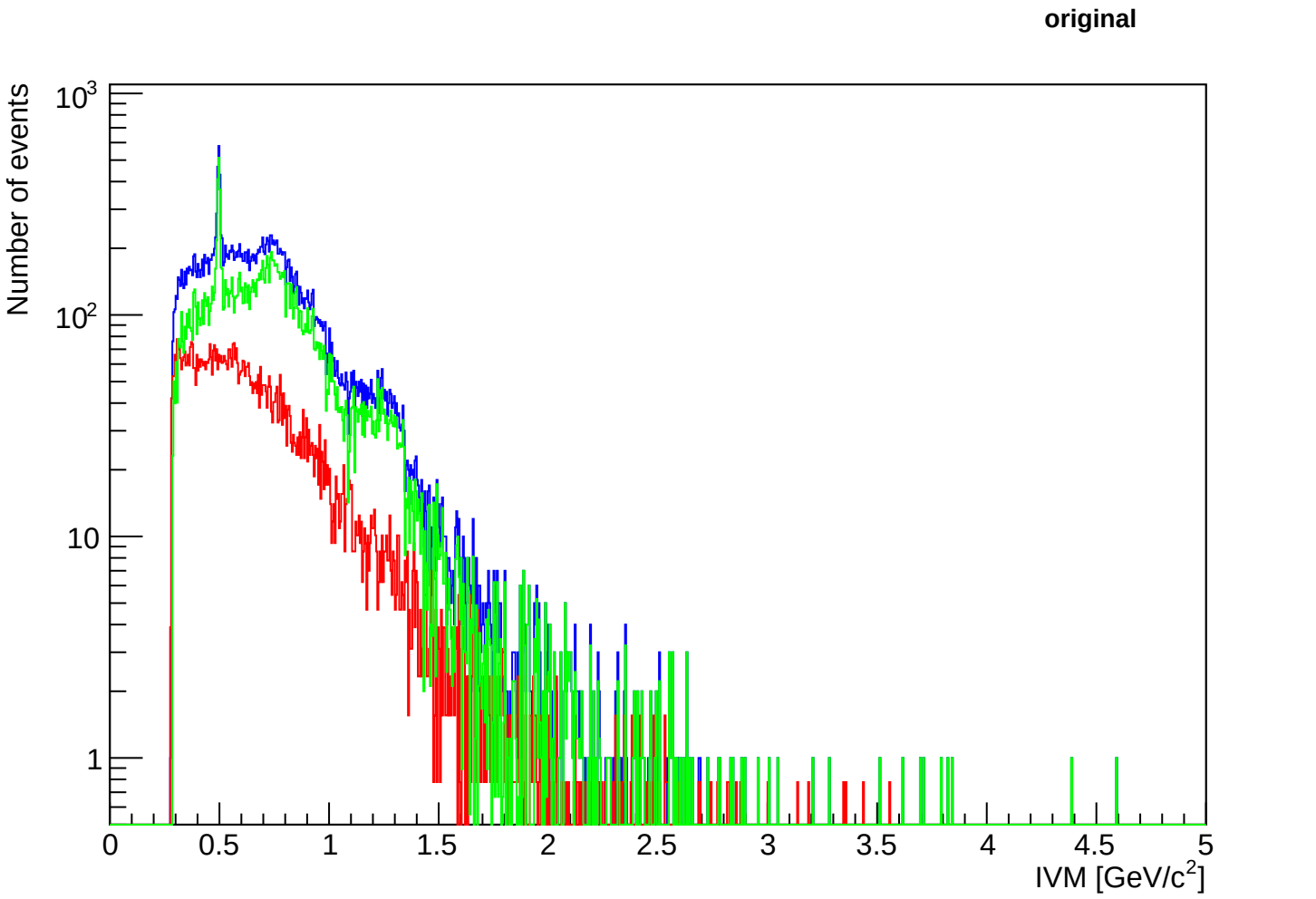

original
acoplanarity
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
0
0.5
1
1.5
2
2.5
3
3.5
4
4.5
5
IVM [GeV/c^2]
10
1
10^{-1}

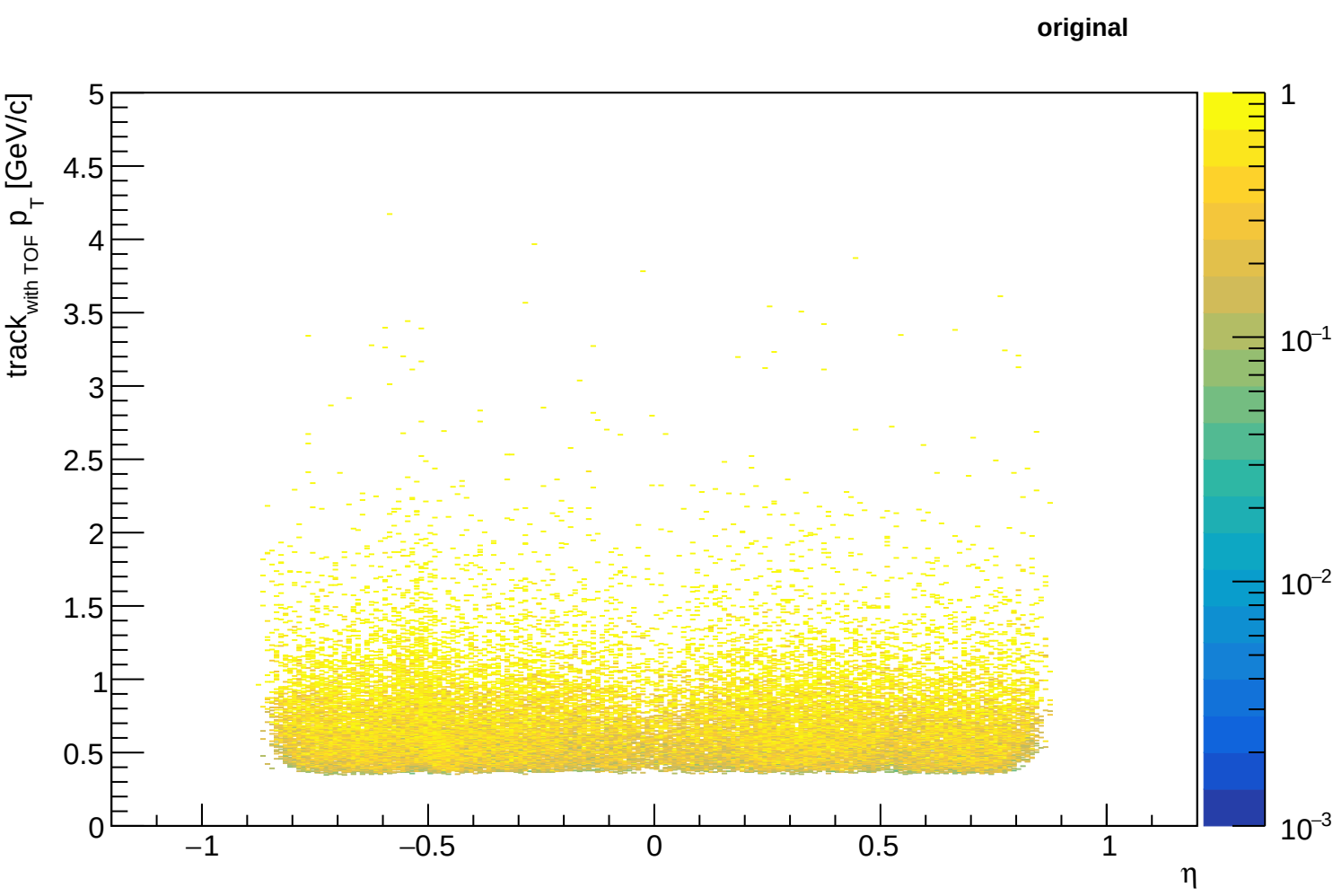

original
track p_T [GeV/c]
5
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
−1
−0.5
0
0.5
1
η
10
1
10^{-1}

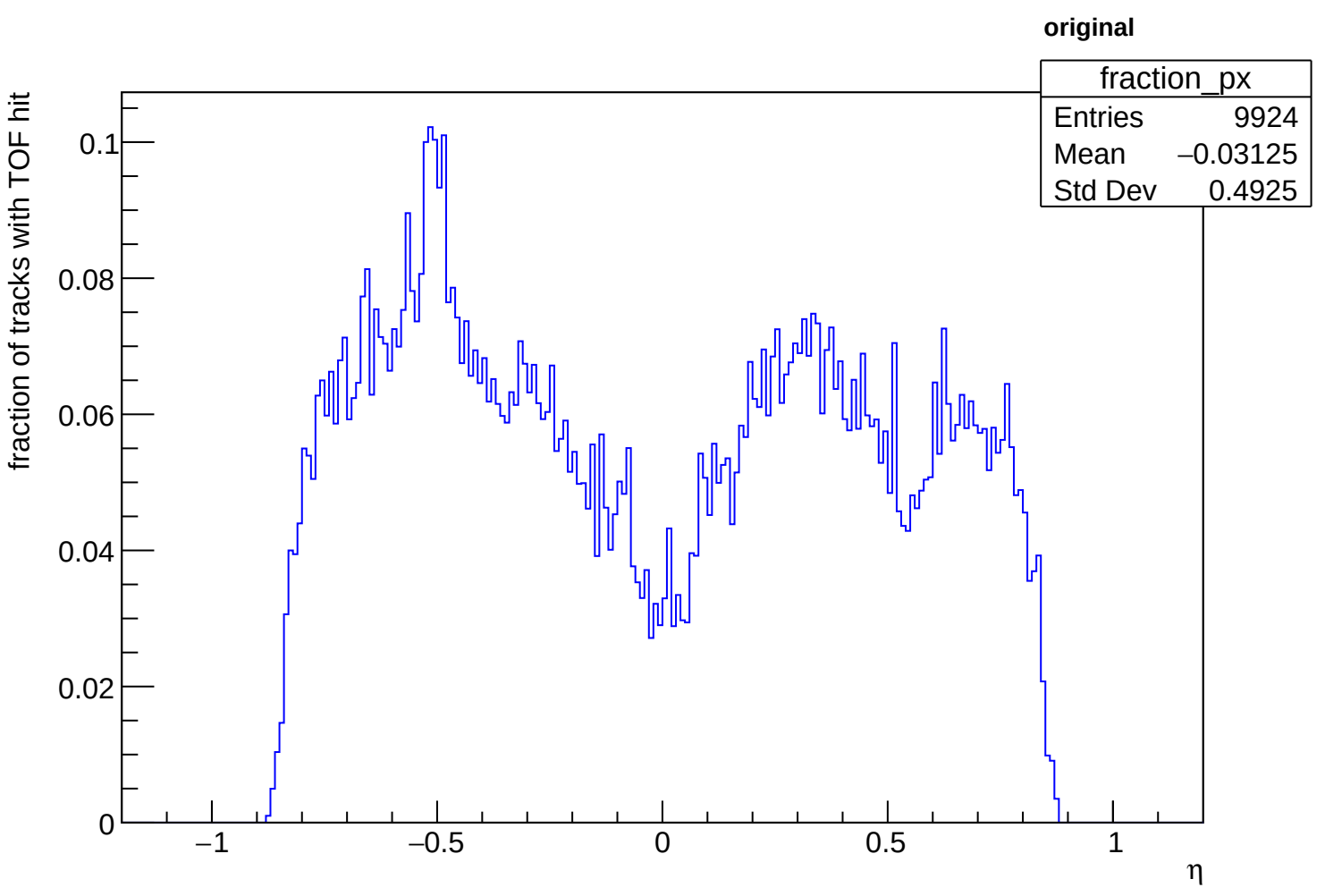

original
track_with TOF p_T [GeV/c]
5
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
−1
−0.5
0
0.5
1
η
10
1
10^−1

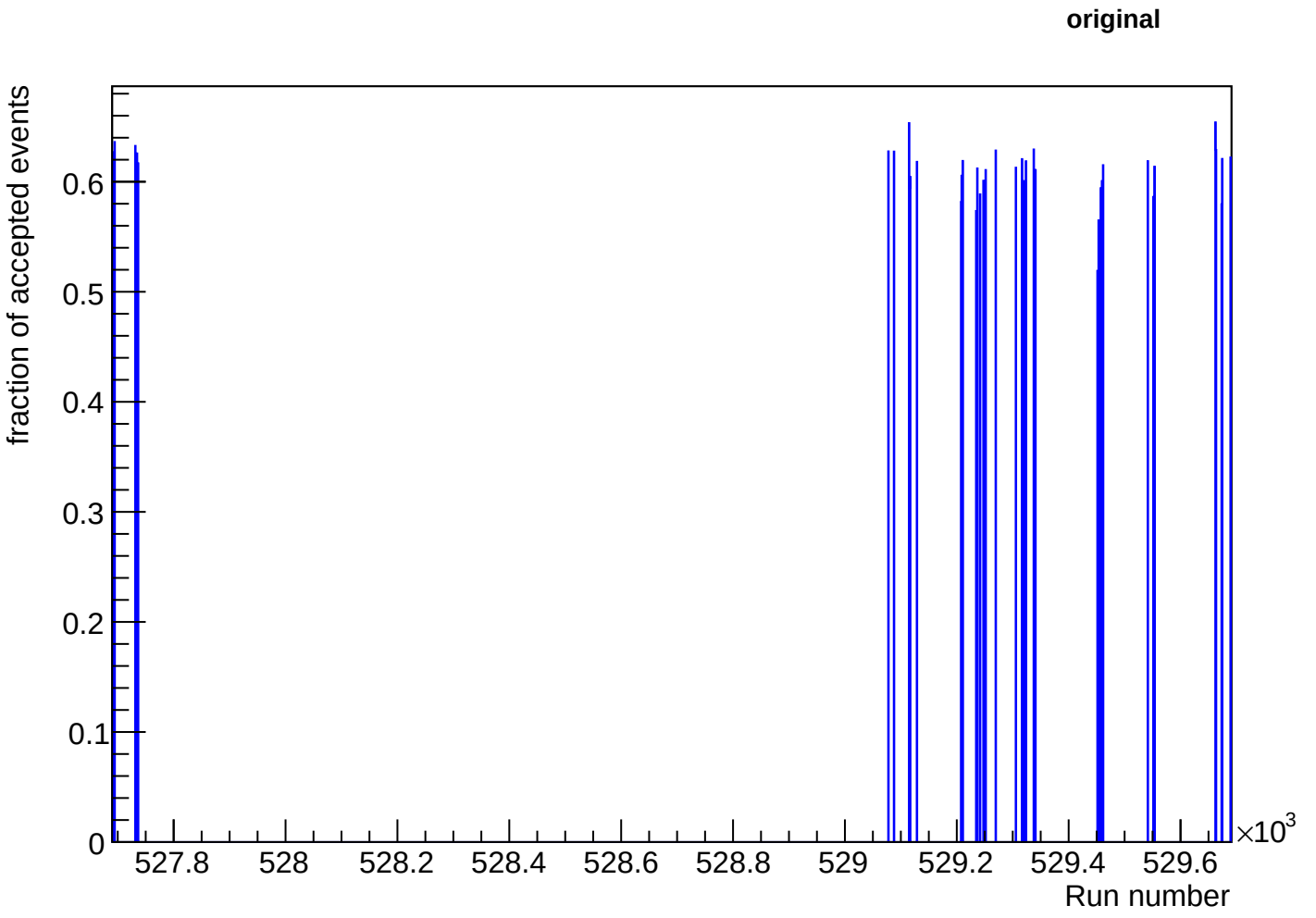

original
track dca$_{xy}$ [µm]
0
20
40
60
80
100
120
140
160
180
200
track dca$_z$ [µm]
0
20
40
60
80
100
120
140
160
180
200
1
10
10^2

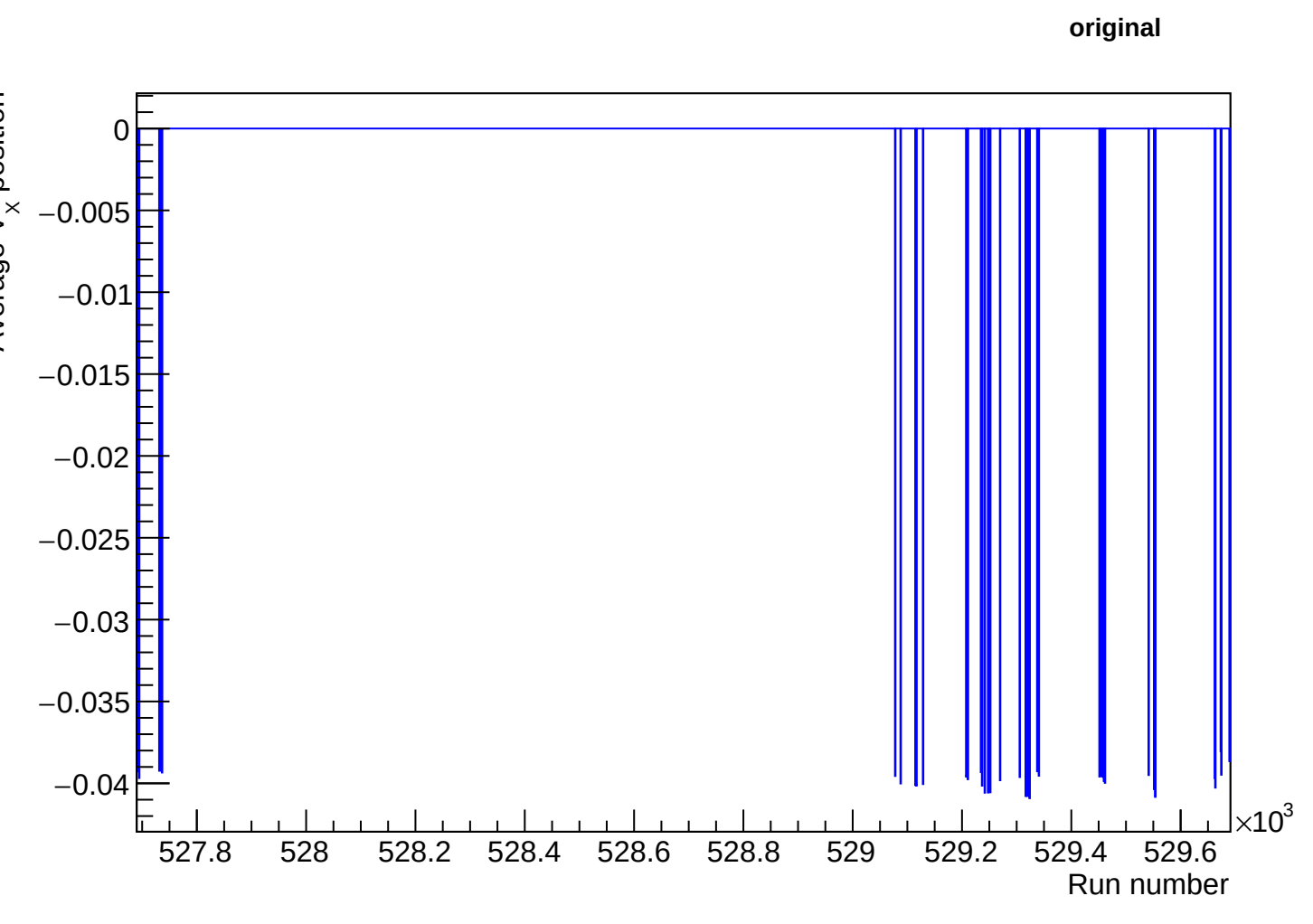

original
Number of events
600
500
400
300
200
100
0
0
0.5
1
1.5
2
2.5
3
3.5
4
4.5
5
IVM [GeV/c^2]

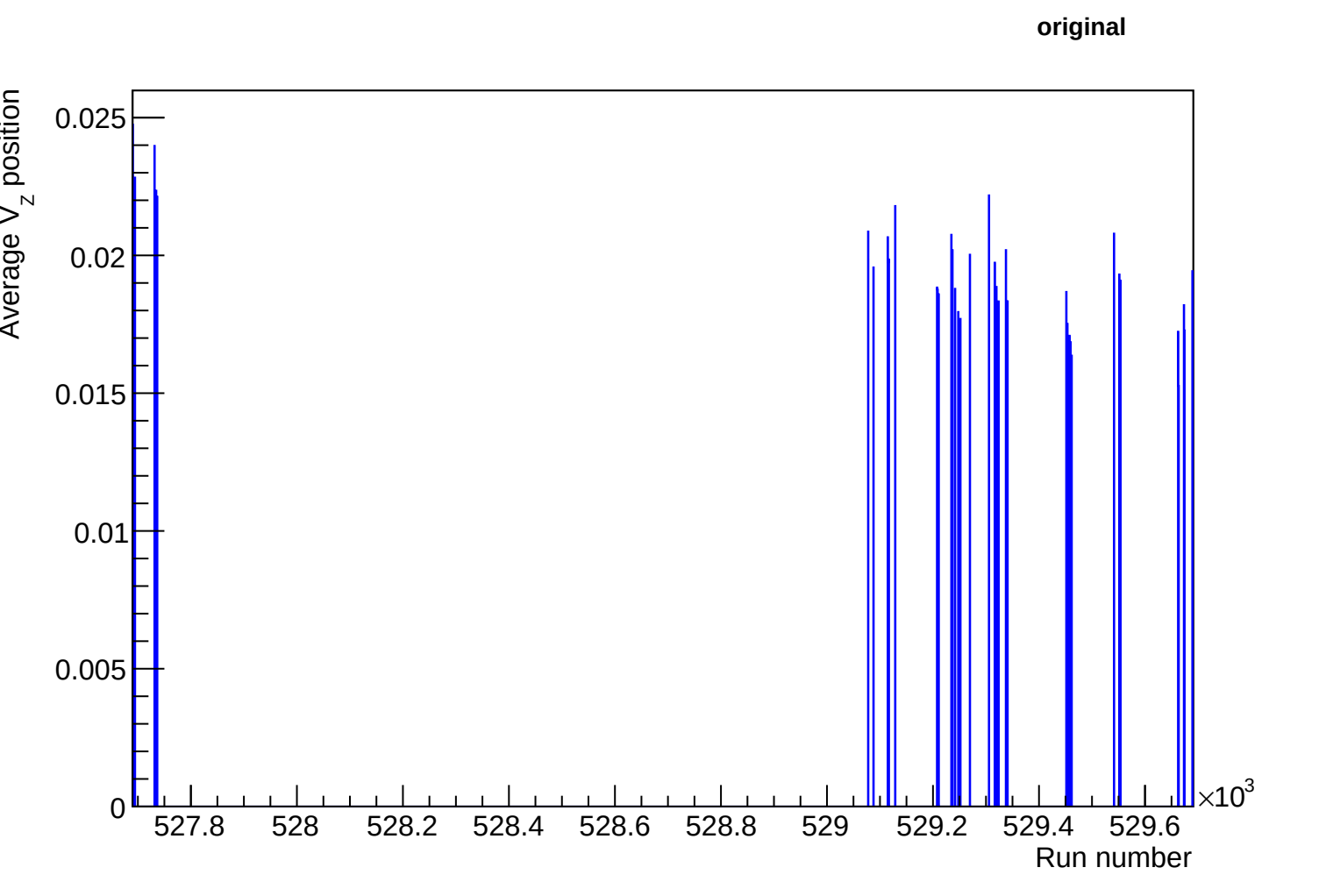

original
Number of events
10^3
10^2
10
1
0
0.5
1
1.5
2
2.5
3
3.5
4
4.5
5
IVM [GeV/c^2]

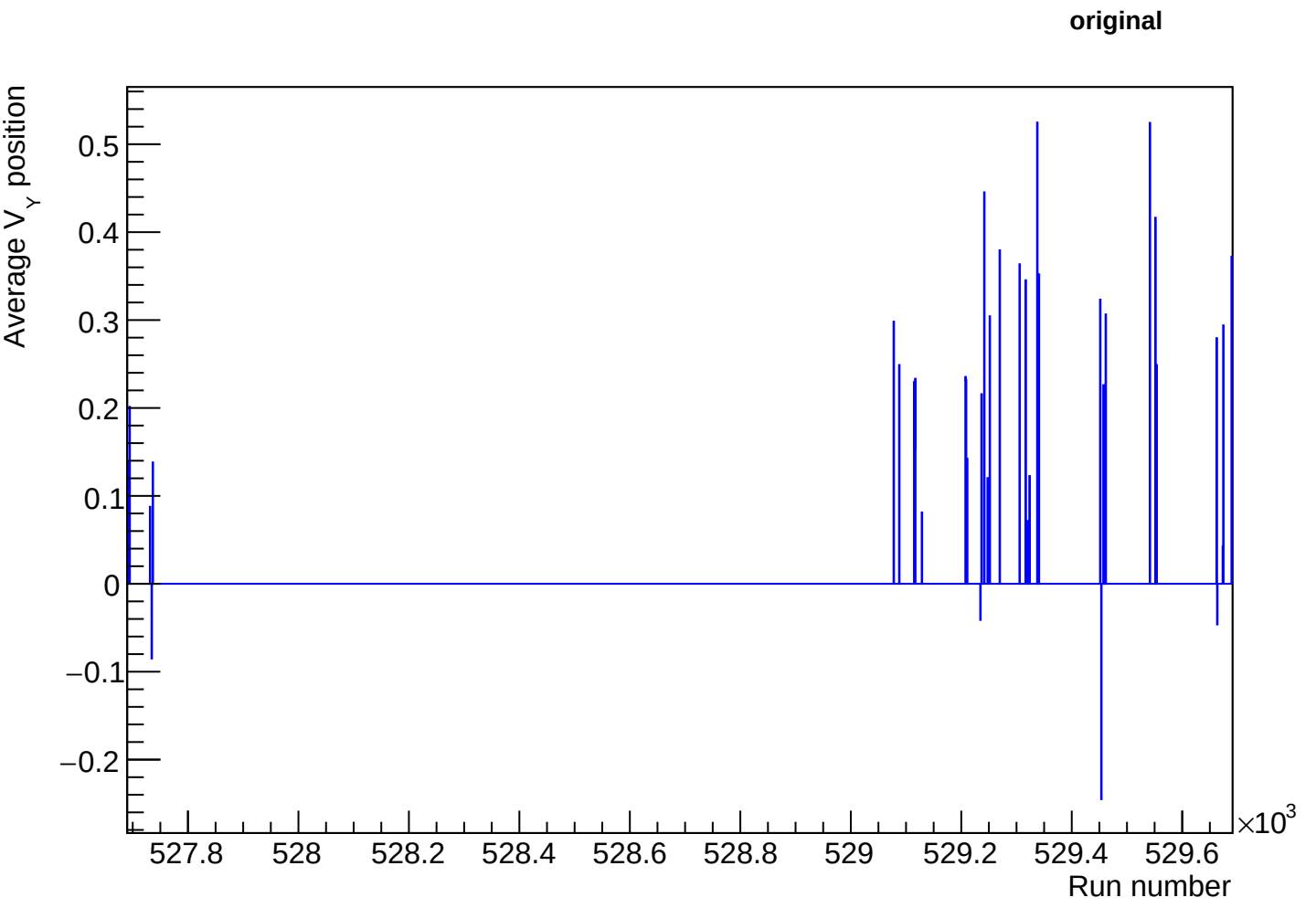

original
track with TOF p T [GeV/c]
5
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
−1
−0.5
0
0.5
1
η
1
10−1
10−2
10−3


original
fraction_px
Entries 9924
Mean –0.03125
Std Dev 0.4925
fraction of tracks with TOF hit
0.1
0.08
0.06
0.04
0.02
0
–1
–0.5
0
0.5
1
η


original
fraction of accepted events
0
0.1
0.2
0.3
0.4
0.5
0.6
527.8
528
528.2
528.4
528.6
528.8
529
529.2
529.4
529.6
×10^3
Run number


original
Average V_x position
0
−0.005
−0.01
−0.015
−0.02
−0.025
−0.03
−0.035
−0.04
527.8
528
528.2
528.4
528.6
528.8
529
529.2
529.4
529.6
×10^3
Run number


original
Average V_z position
0.025
0.02
0.015
0.01
0.005
0
527.8
528
528.2
528.4
528.6
528.8
529
529.2
529.4
529.6
$\times 10^3$
Run number


original
Average V_Y position
0.5
0.4
0.3
0.2
0.1
0
−0.1
−0.2
527.8
528
528.2
528.4
528.6
528.8
529
529.2
529.4
529.6
×10^3
Run number