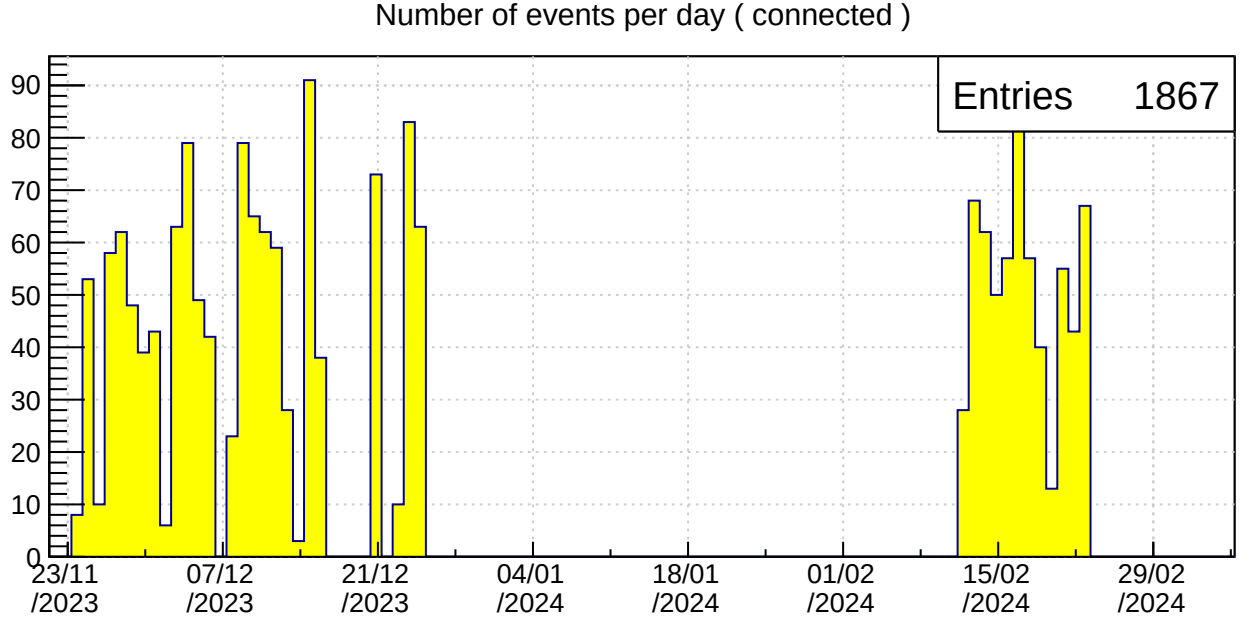
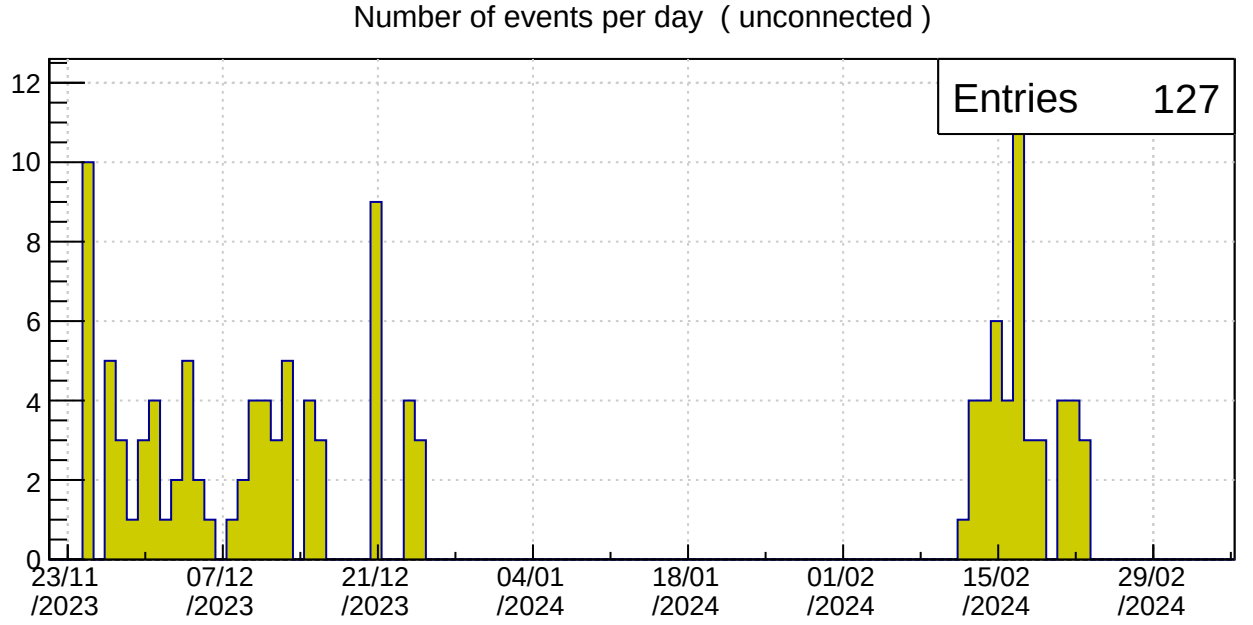
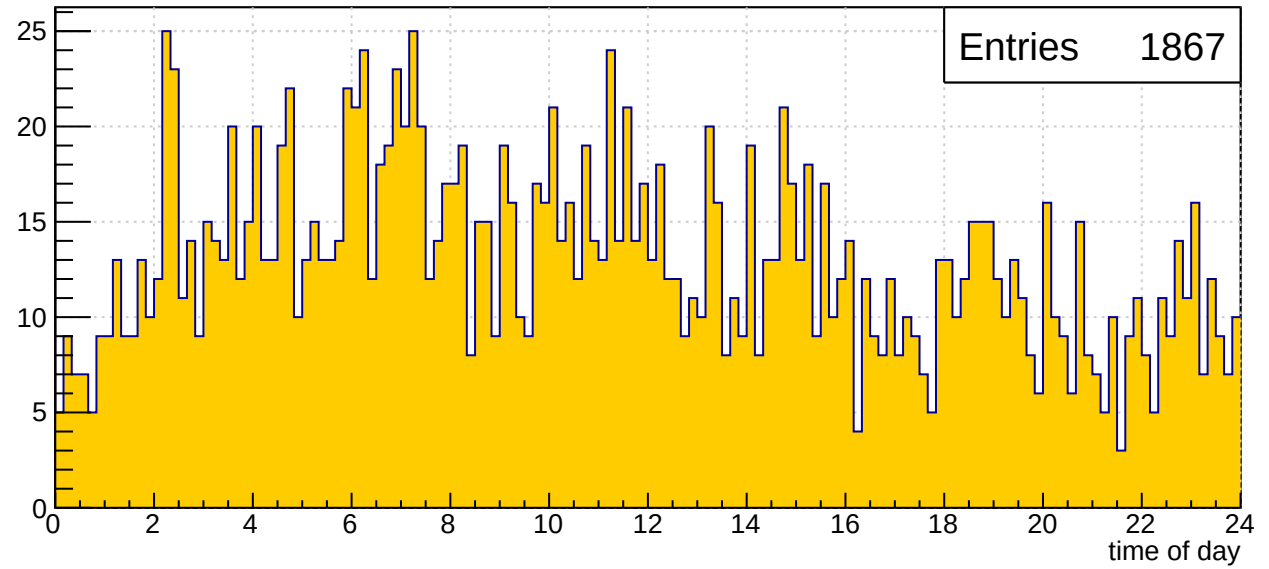
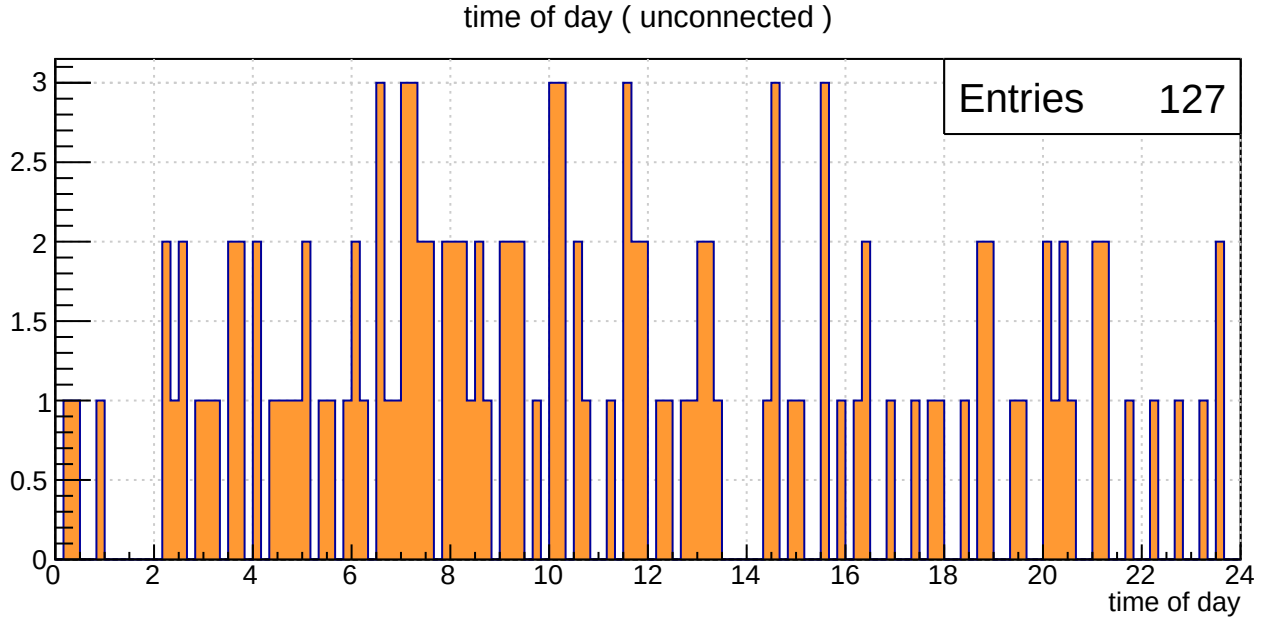
Mode 0 : **Efficiency : 0.9363 (1867 / 1994)**

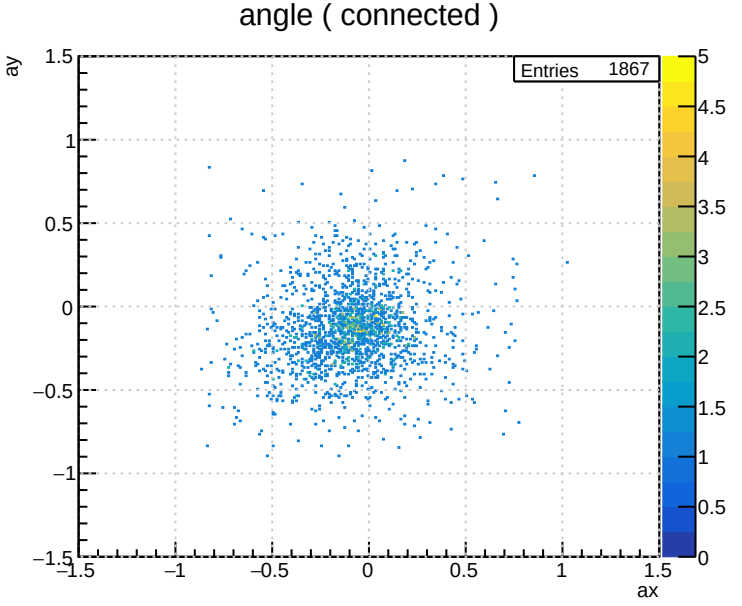
***Area selection : center of the NINJA detecter 30cm square .**

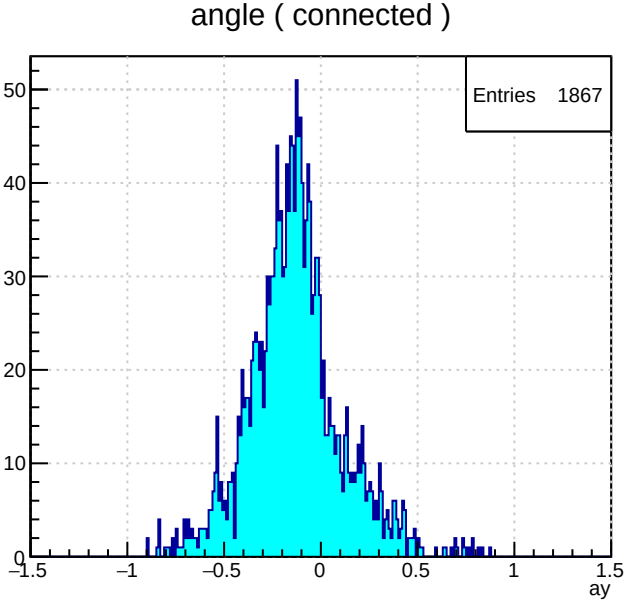

Number of events per day (connected)
Entries 1867
90
80
70
60
50
40
30
20
10
0
23/11 /2023
07/12 /2023
21/12 /2023
04/01 /2024
18/01 /2024
01/02 /2024
15/02 /2024
29/02 /2024

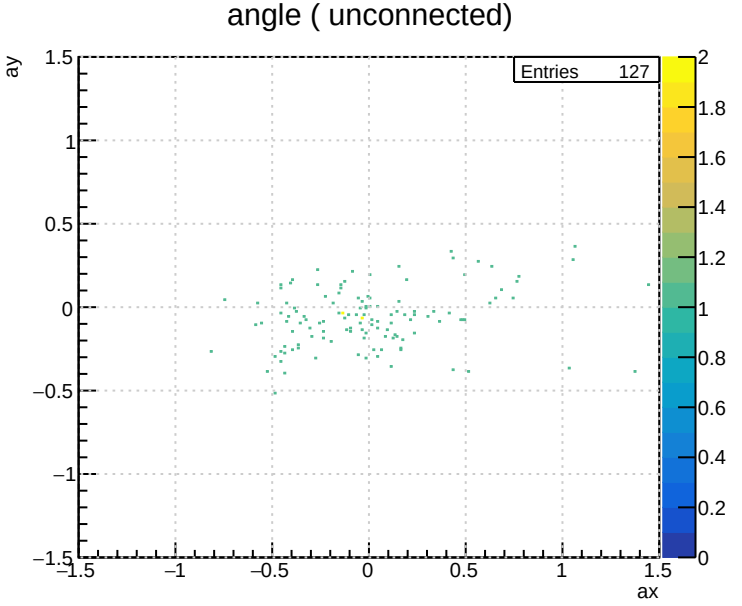

Number of events per day (unconnected)
Entries 127
12
10
8
6
4
2
0
23/11 /2023
07/12 /2023
21/12 /2023
04/01 /2024
18/01 /2024
01/02 /2024
15/02 /2024
29/02 /2024

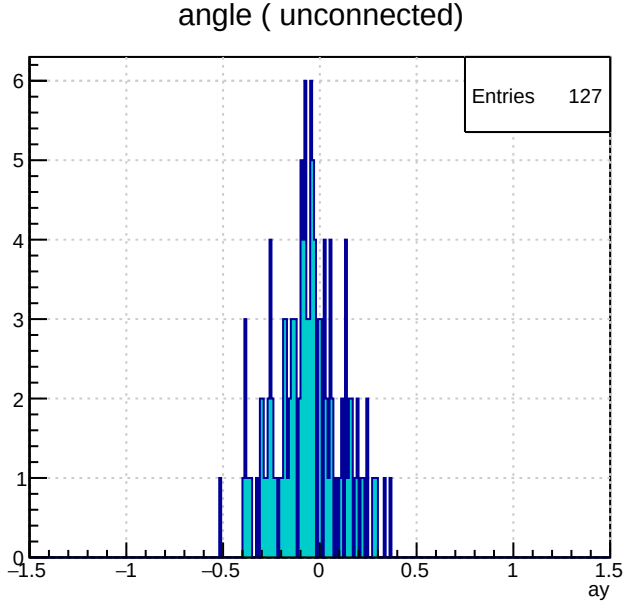

time of day (connected)
Entries 1867
25
20
15
10
5
0
0
2
4
6
8
10
12
14
16
18
20
22
24
time of day

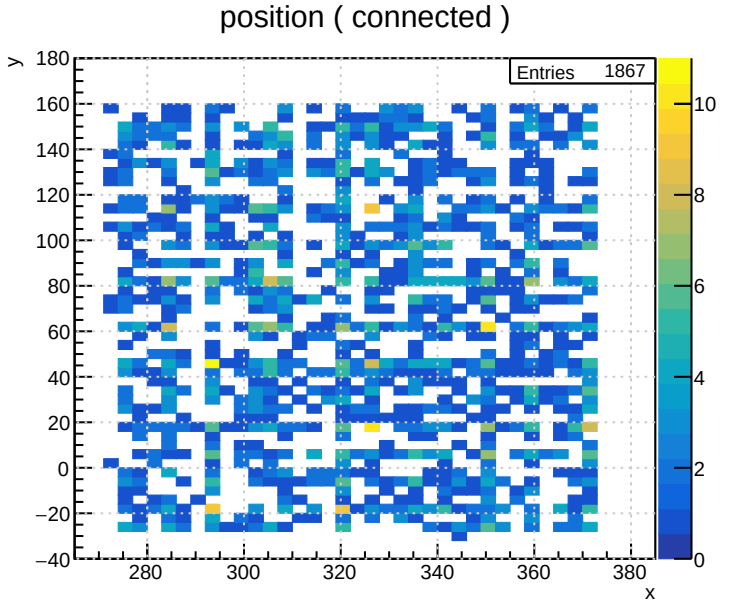

time of day (unconnected)
Entries 127
3
2.5
2
1.5
1
0.5
0
0
2
4
6
8
10
12
14
16
18
20
22
24
time of day

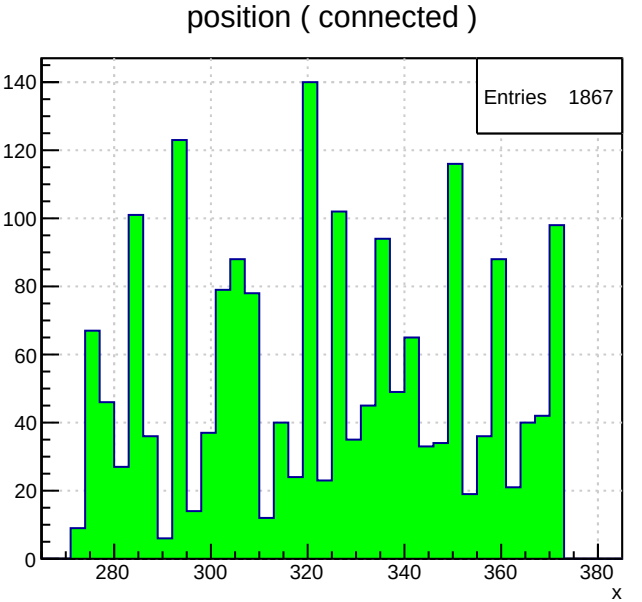

angle (connected)
Entries 1867
ay
ax

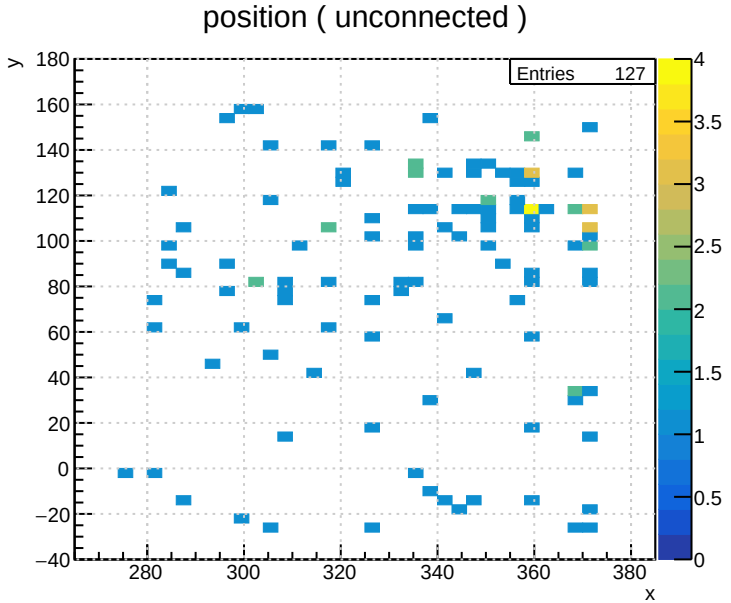

angle (connected)
Entries 1867
ay

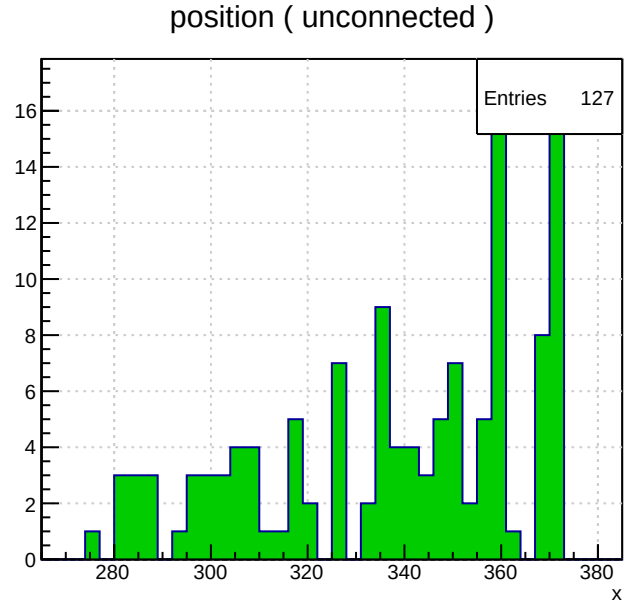

angle (unconnected)
Entries 127
ay
ax

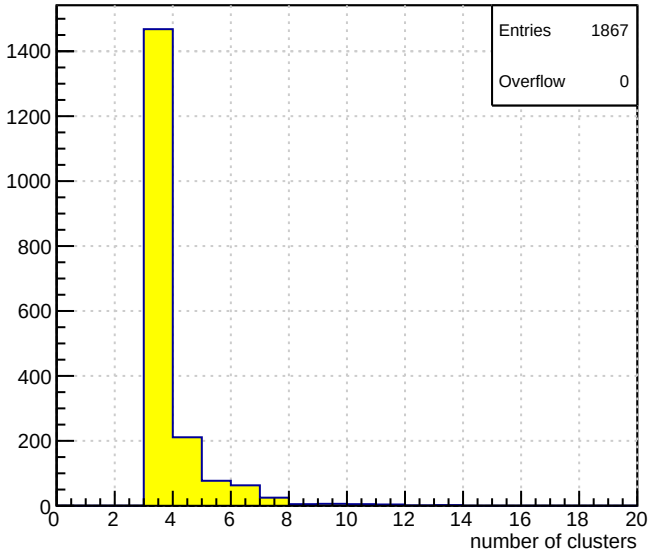

angle (unconnected)
Entries 127
ay

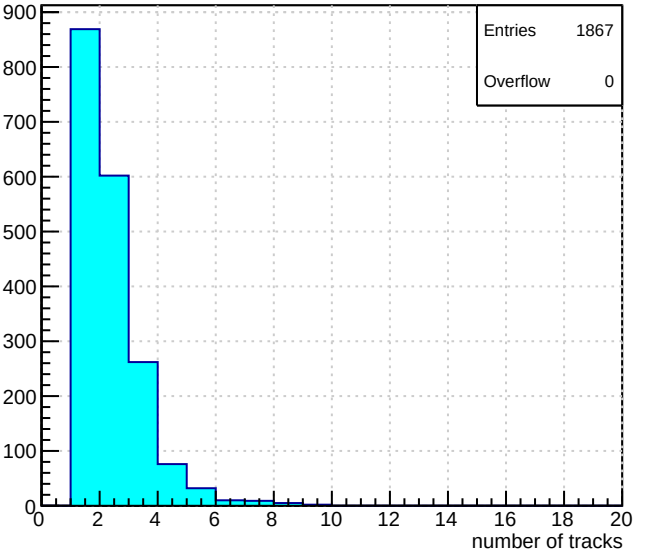

position (connected)
Entries 1867
y
x

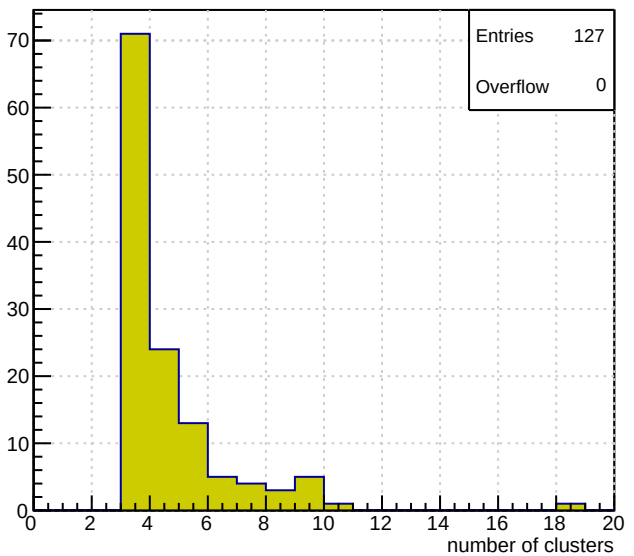

position (connected)
Entries 1867
x

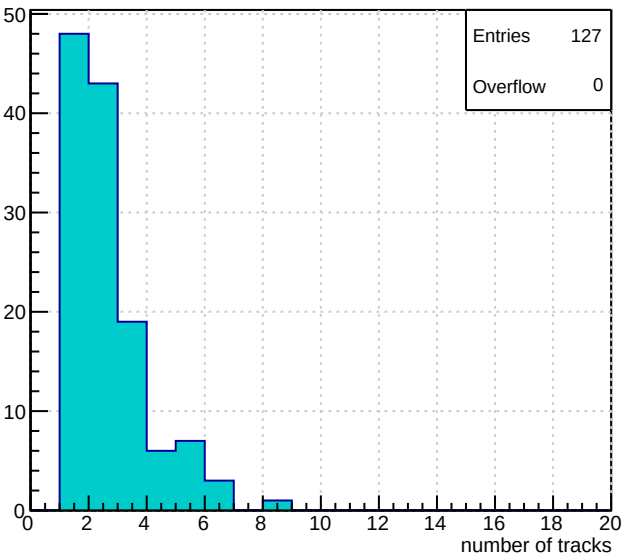

position (unconnected)
Entries 127
y
x


position (unconnected)
Entries 127
x

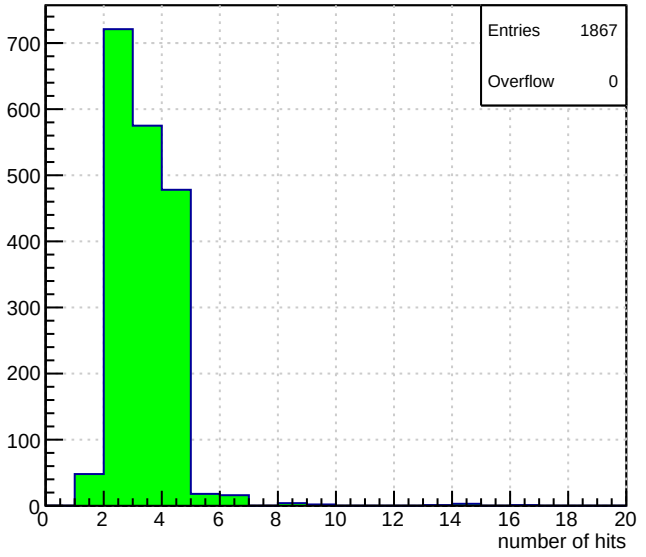

Number of Clusters (connected)
Entries 1867
Overflow 0
number of clusters


Number of BabyMIND tracks (connected)
Entries 1867
Overflow 0
number of tracks

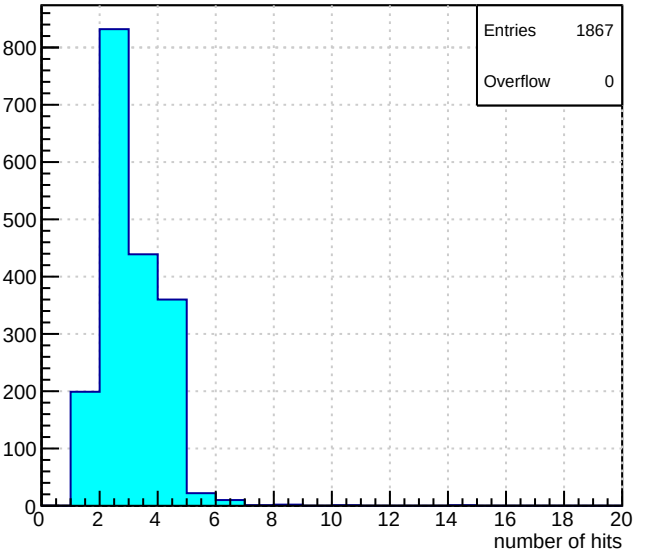

Number of Clusters (unconnected)
Entries 127
Overflow 0
number of clusters


Number of BabyMIND tracks (unconnected)
Entries 127
Overflow 0
number of tracks

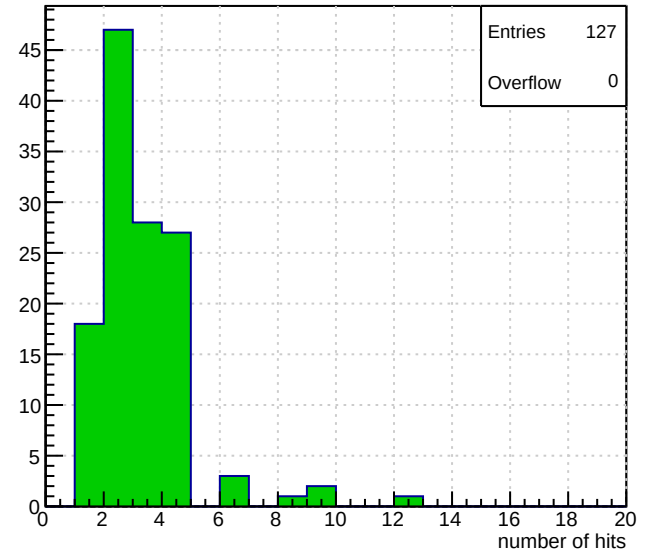
Number of Hits x-projection (connected)



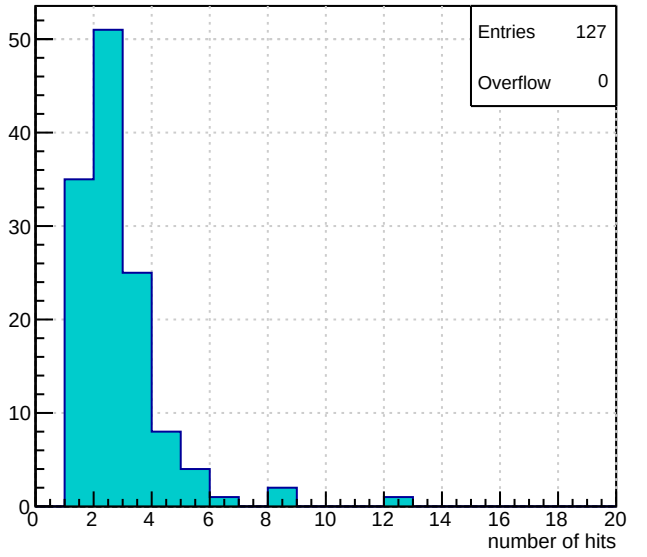
Number of Hits y-projection (connected)

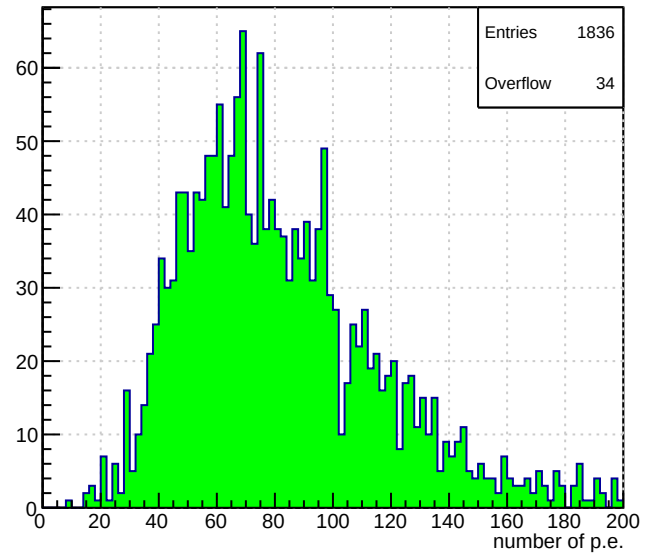


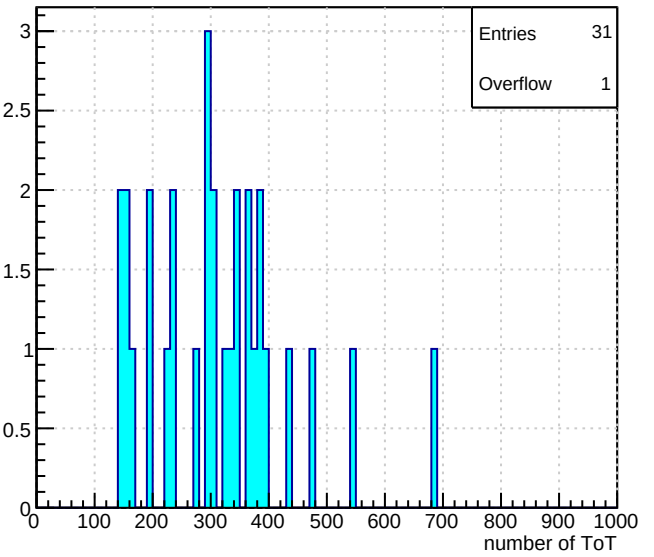
Number of Hits x-projection (unconnected)

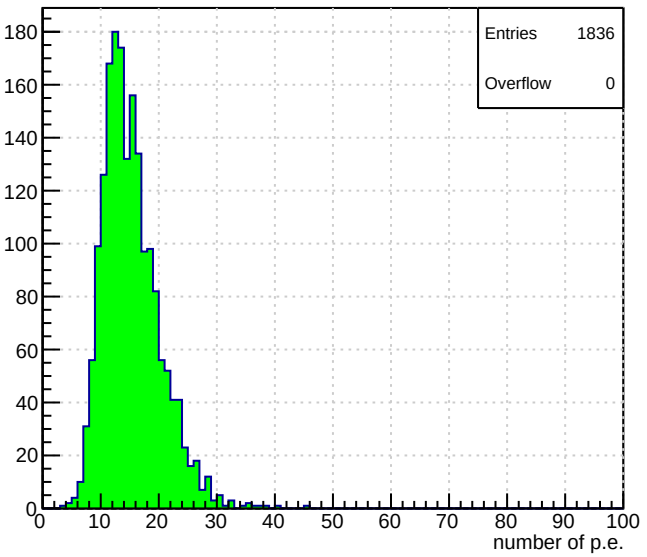


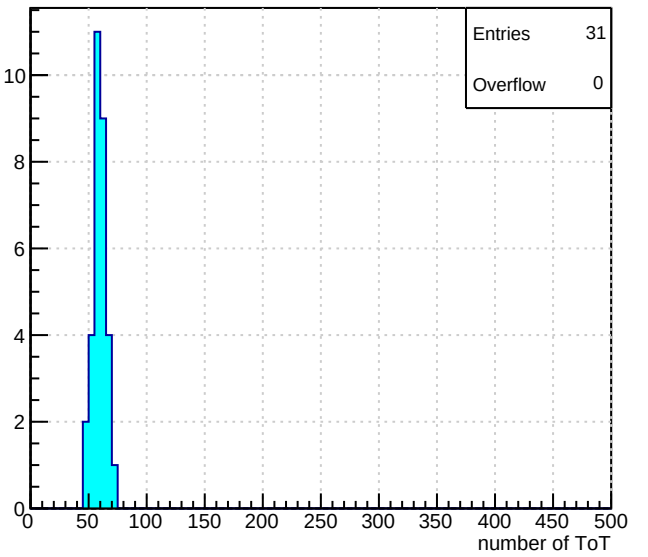
Number of Hits y-projection (unconnected)

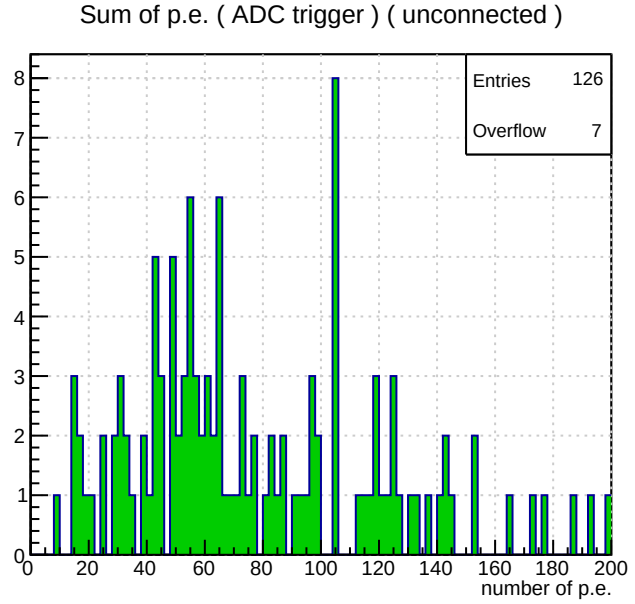


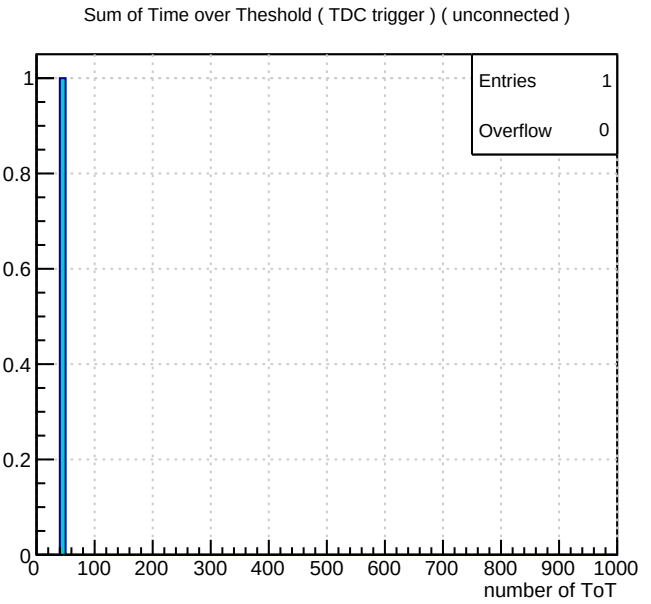

Sum of p.e. (ADC trigger) (connected)
Entries 1836
Overflow 34
number of p.e.

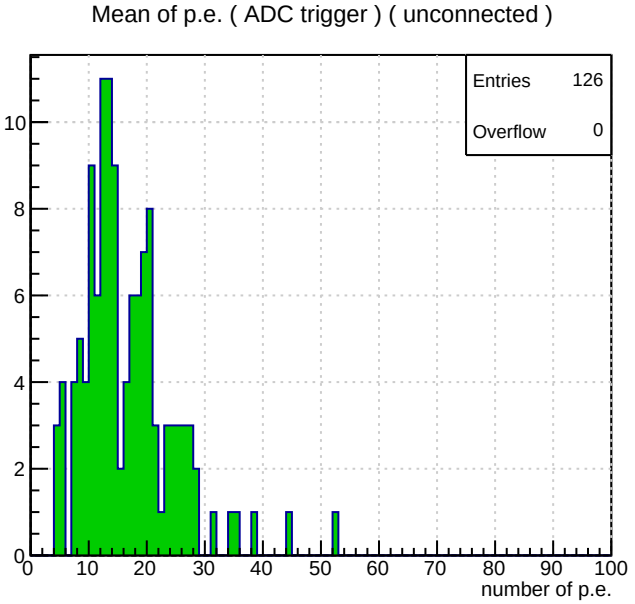

Sum of Time over Threshold (TDC trigger) (connected)
Entries 31
Overflow 1
number of ToT

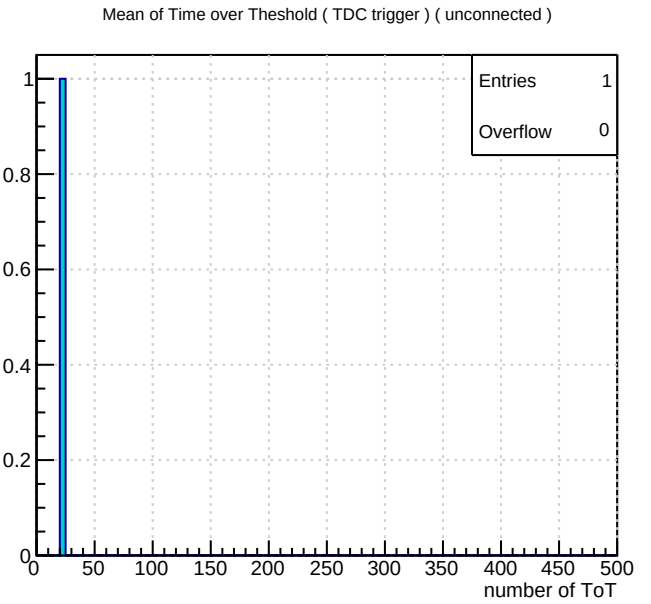

Mean of p.e. (ADC trigger) (connected)
Entries 1836
Overflow 0
number of p.e.

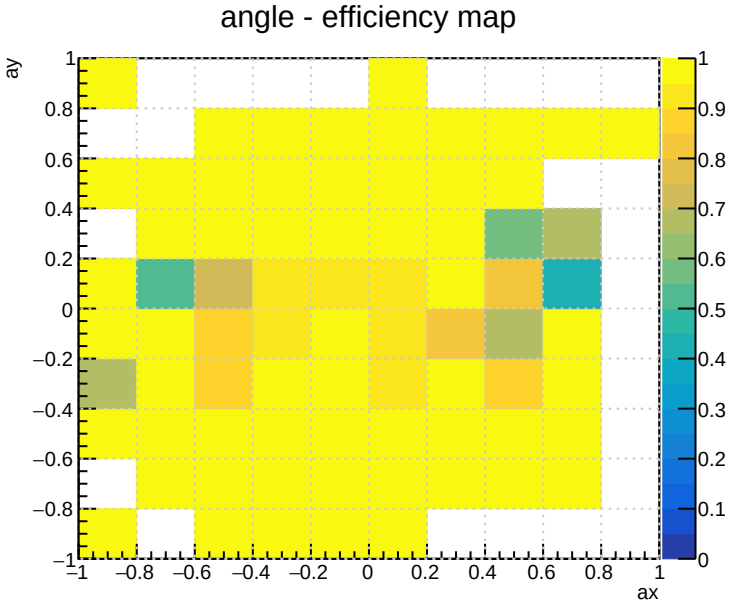

Mean of Time over Threshold (TDC trigger) (connected)
Entries 31
Overflow 0
number of ToT

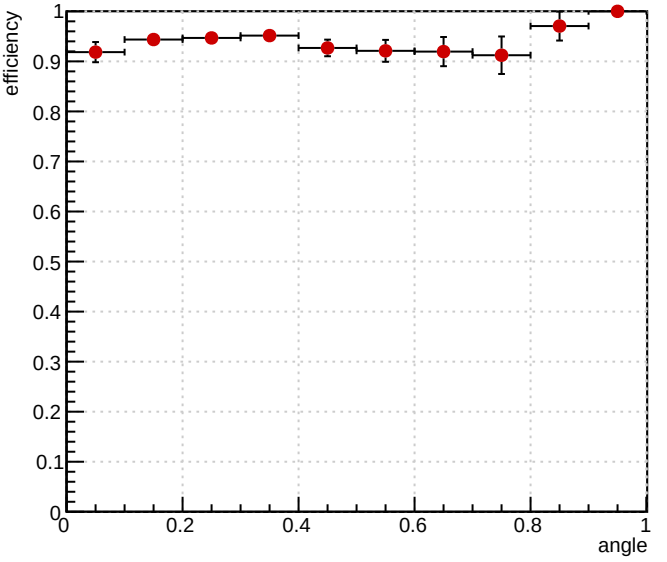

Sum of p.e. (ADC trigger) (unconnected)
Entries 126
Overflow 7
number of p.e.

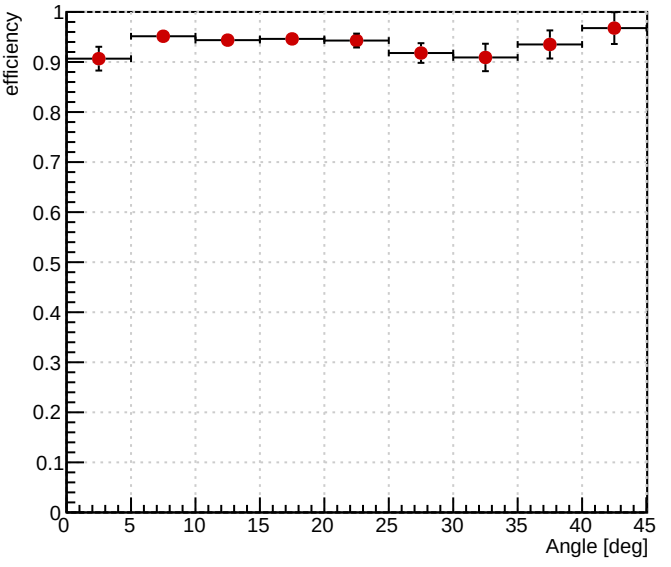

Sum of Time over Theshold (TDC trigger) (unconnected)
Entries 1
Overflow 0
number of ToT

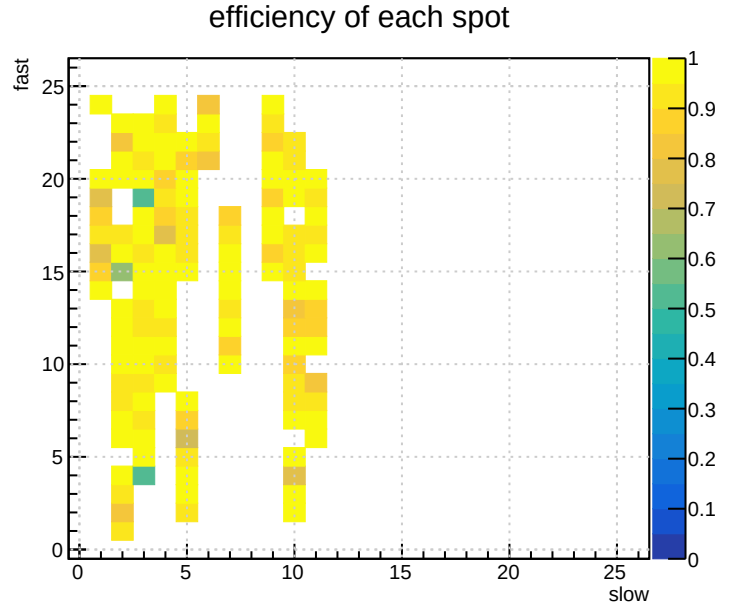

Mean of p.e. (ADC trigger) (unconnected)
Entries 126
Overflow 0
number of p.e.


Mean of Time over Theshold (TDC trigger) (unconnected)
Entries 1
Overflow 0
number of ToT

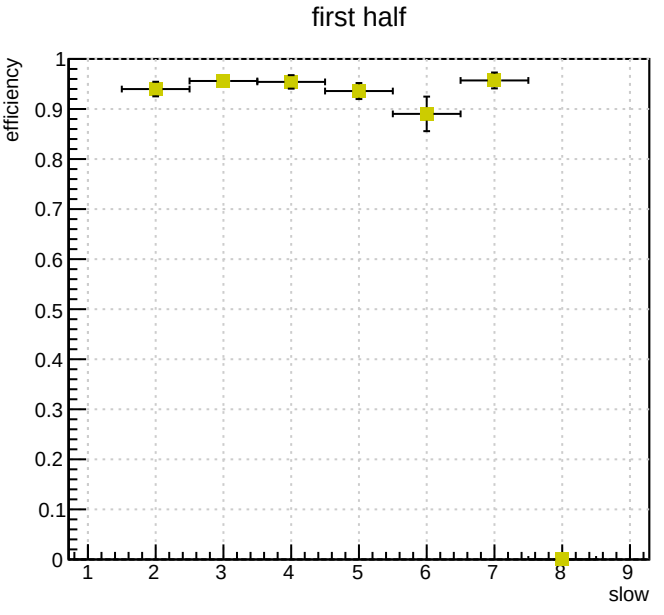

angle - efficiency map
ay
ax
1
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1
0.9
0.7
0.5
0.3
0.1

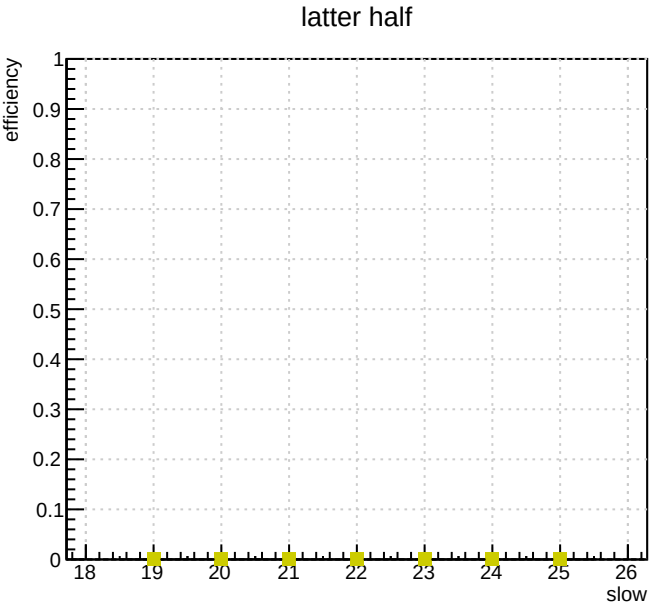

efficiency
angle
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1

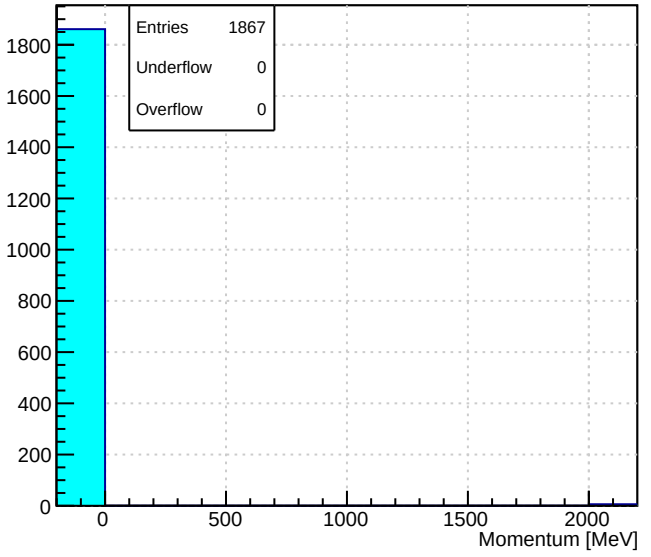

efficiency
Angle [deg]
0
5
10
15
20
25
30
35
40
45

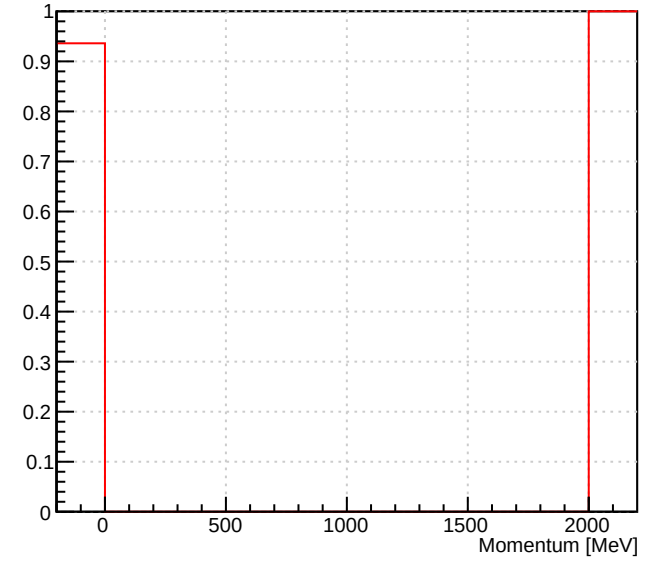

efficiency of each spot
fast
slow
0
5
10
15
20
25
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1

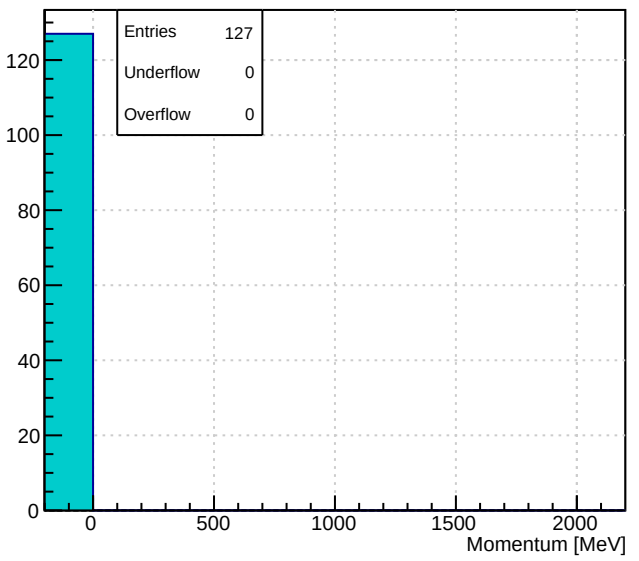
efficiency of slow spot
slow
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
5
10
15
20
25

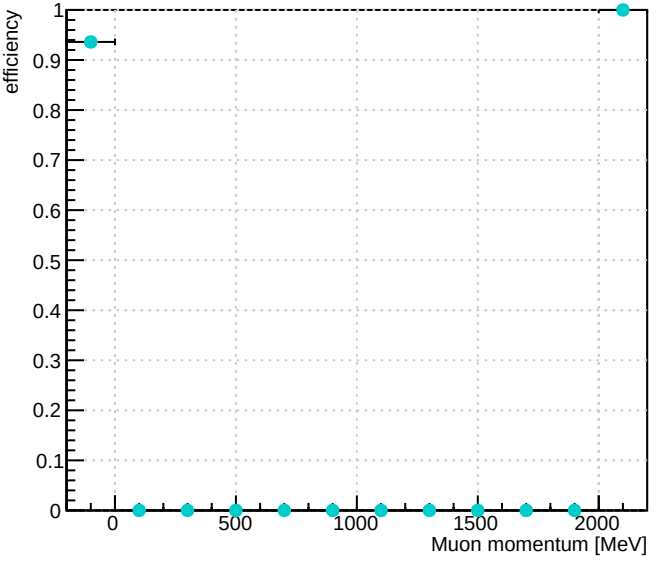

first half
efficiency
slow
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
1
2
3
4
5
6
7
8
9


latter half
efficiency
slow
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
18
19
20
21
22
23
24
25
26


Muon momentum (connected events)
Entries 1867
Underflow 0
Overflow 0
1800
1600
1400
1200
1000
800
600
400
200
0
0
500
1000
1500
2000
Momentum [MeV]


momentum dependence of efficiency
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
0
500
1000
1500
2000
Momentum [MeV]


Muon momentum (inefficiency events)
Entries 127
Underflow 0
Overflow 0
120
100
80
60
40
20
0
0
500
1000
1500
2000
Momentum [MeV]


efficiency
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
0
500
1000
1500
2000
Muon momentum [MeV]