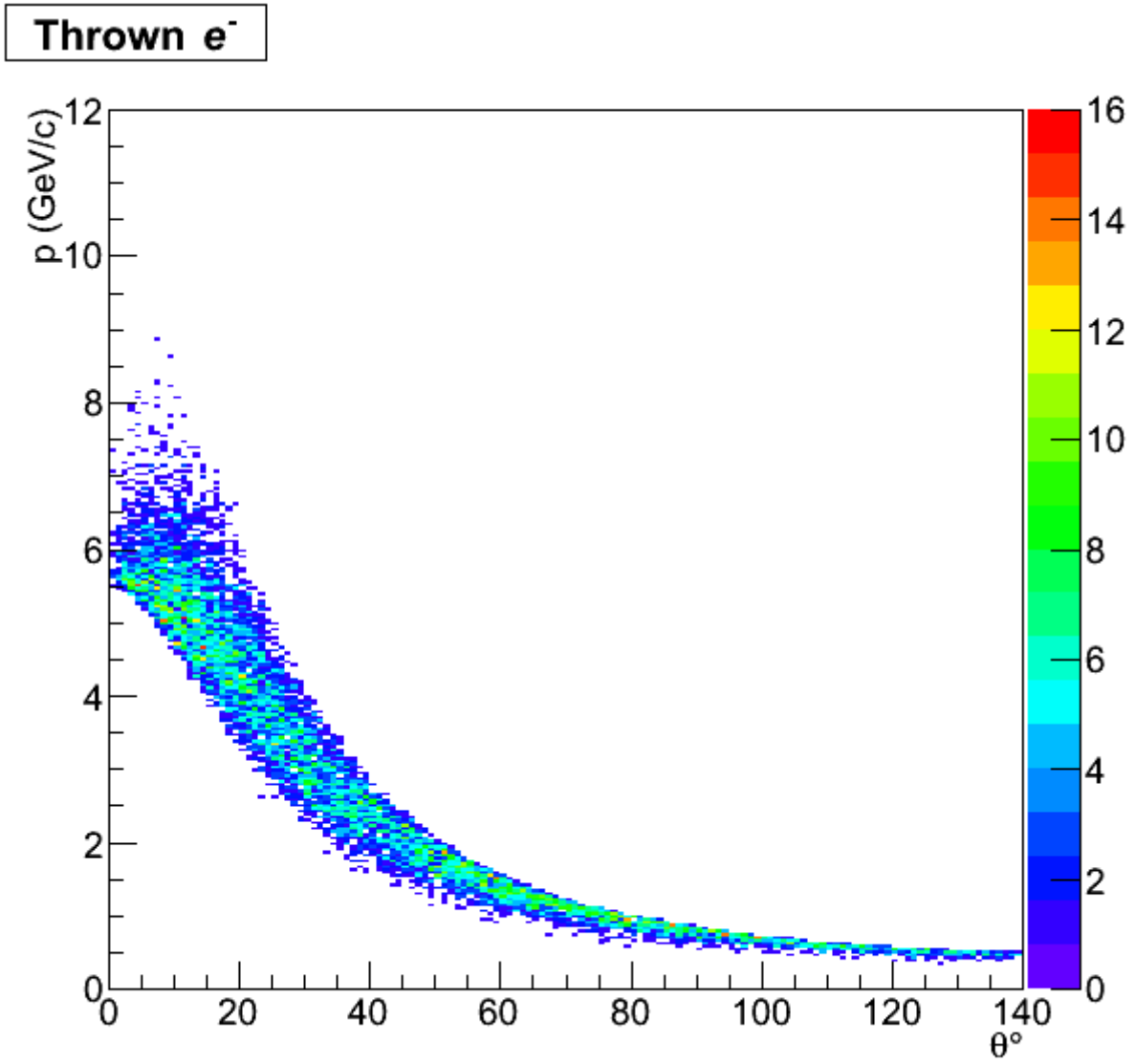
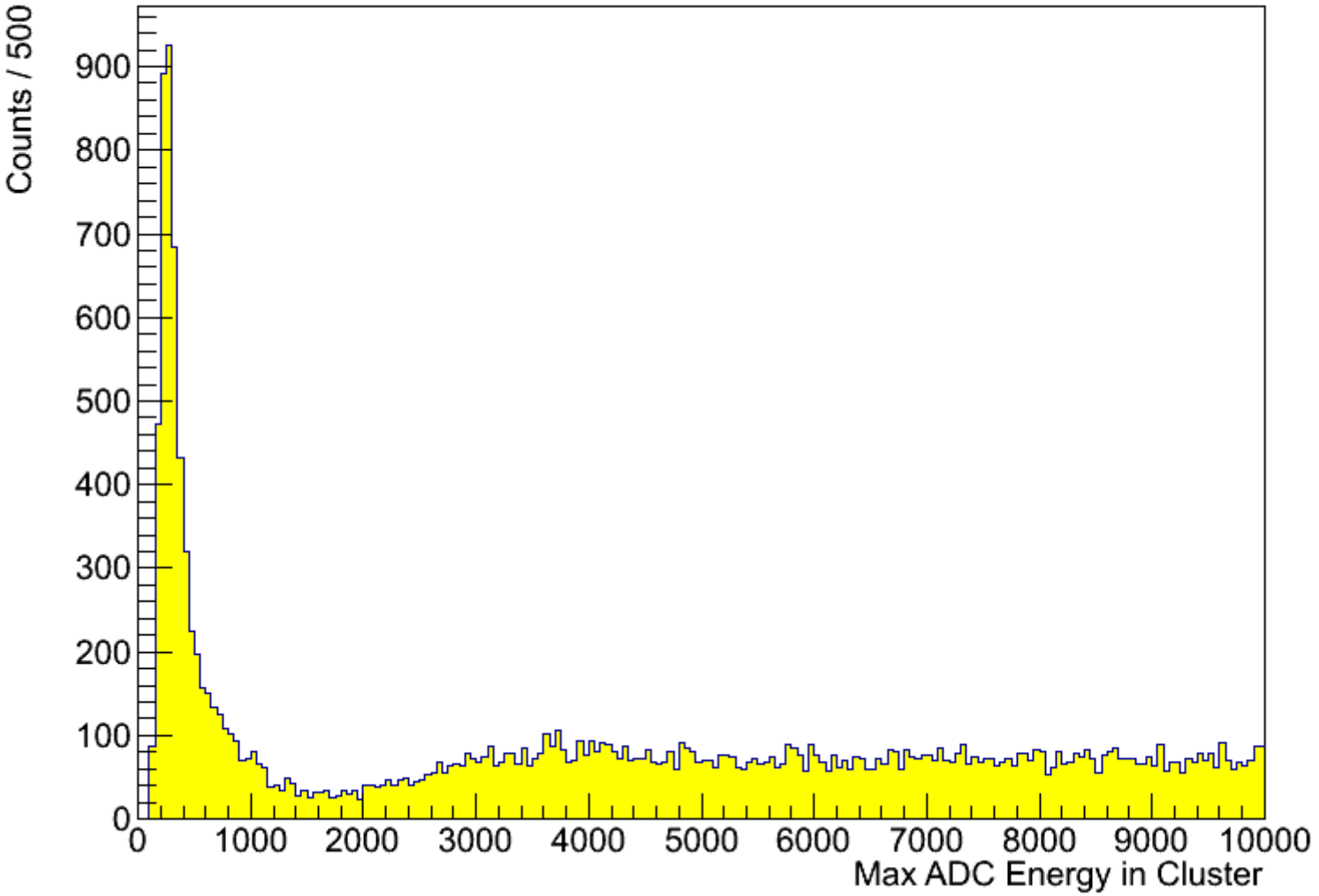
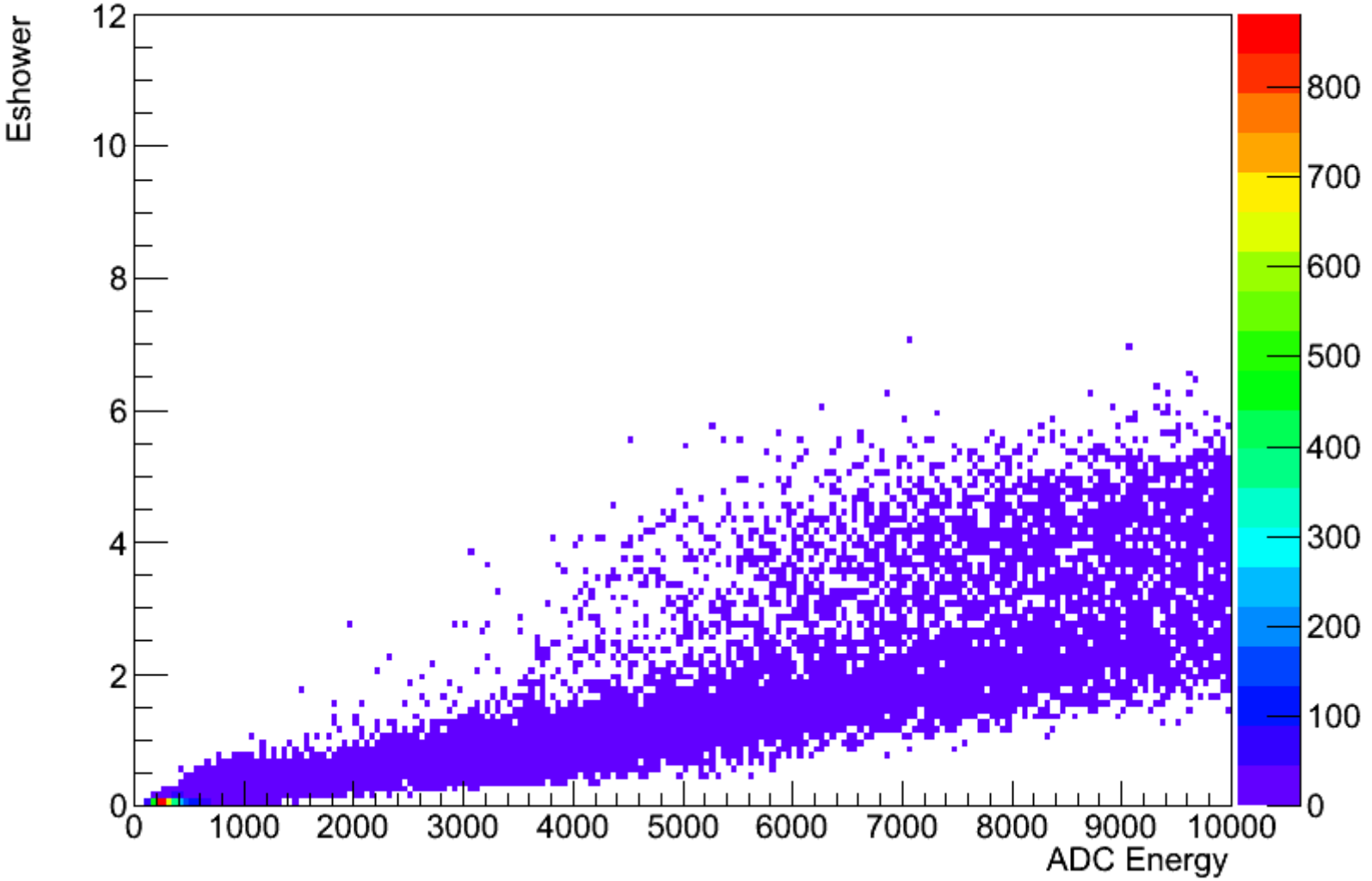
Electrons from J/ψ

- The e+e- from photoproduced J/ψ → e+e- go primarily into the BCAL (~75%) and have a wide range of momenta (p=0-6 GeV/c)
- Current simulations show that electrons with momenta of over about 2-3 GeV begin to have enough energy to deposit to have saturated at least one BCAL cell.

- Question: How much can the BCAL gains be adjusted to account for these higher energy electrons, or how difficult will it be to model these effects in simulation?


Thrown e-
p (GeV/c)
θ°
0
2
4
6
8
10
12
0
20
40
60
80
100
120
140
0
2
4
6
8
10
12
14
16


Counts / 500
900
800
700
600
500
400
300
200
100
0
0
1000
2000
3000
4000
5000
6000
7000
8000
9000
10000
Max ADC Energy in Cluster


Eshower
12
10
8
6
4
2
0
0
1000
2000
3000
4000
5000
6000
7000
8000
9000
10000
ADC Energy
800
700
600
500
400
300
200
100
0