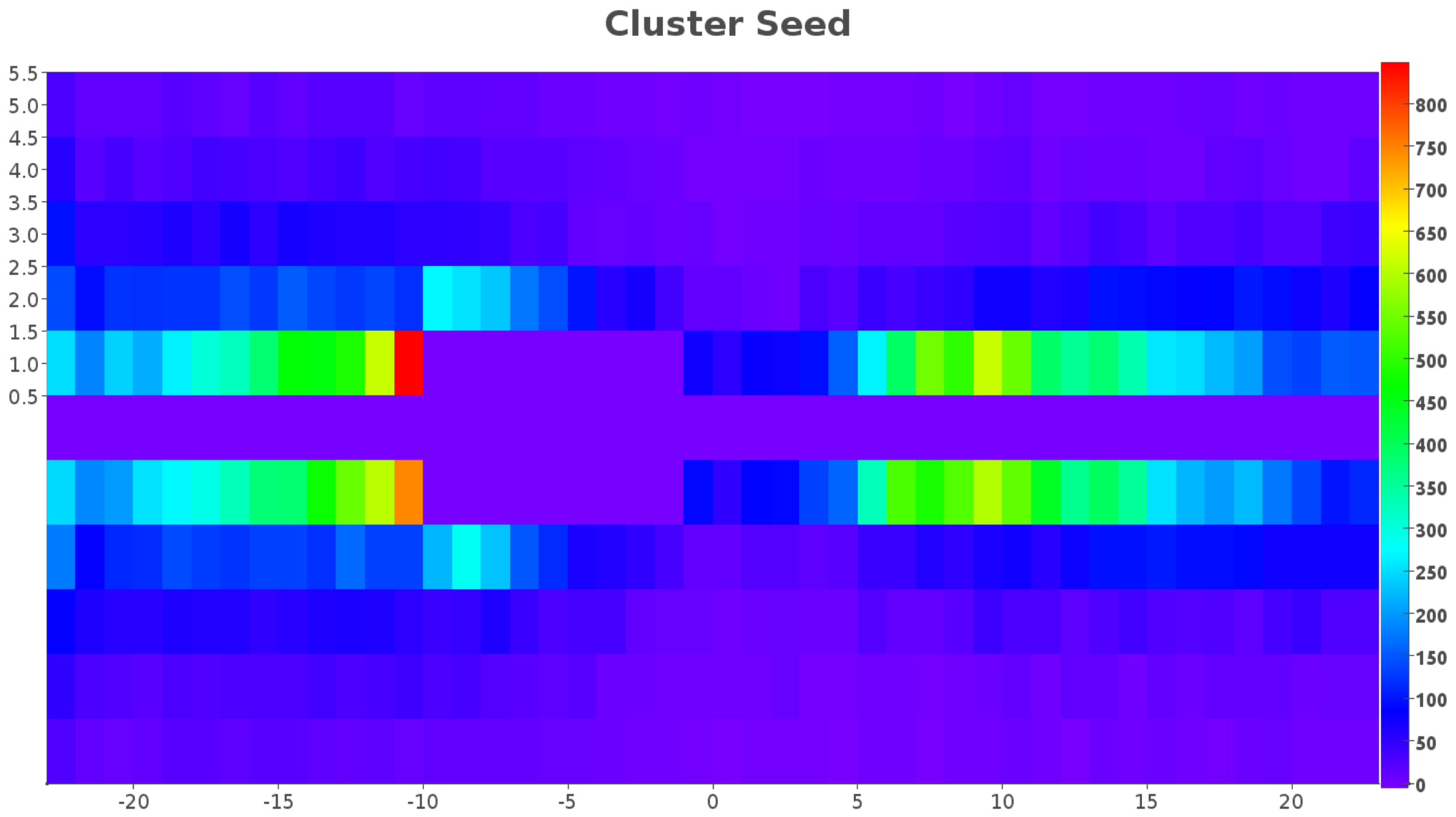
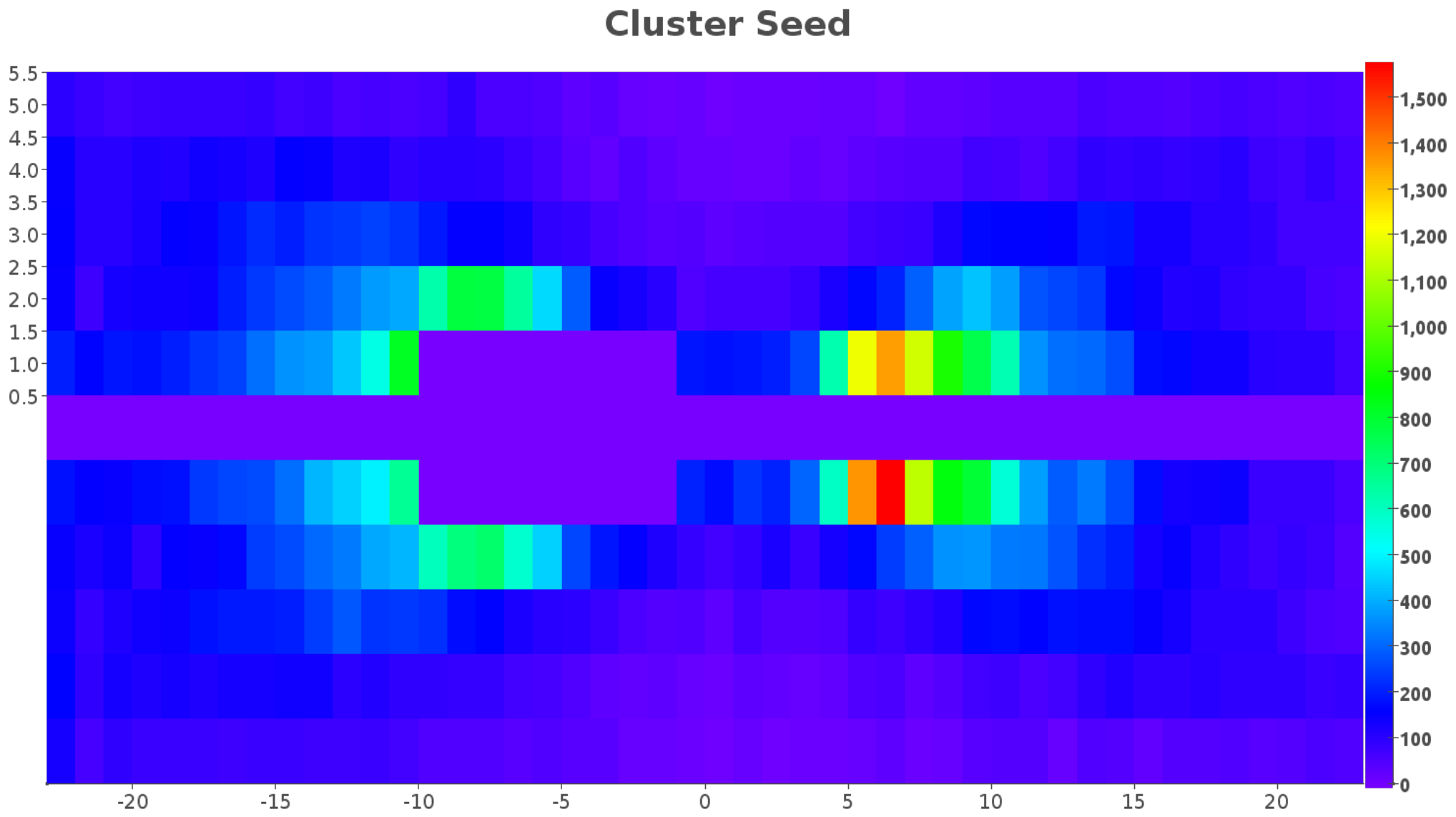
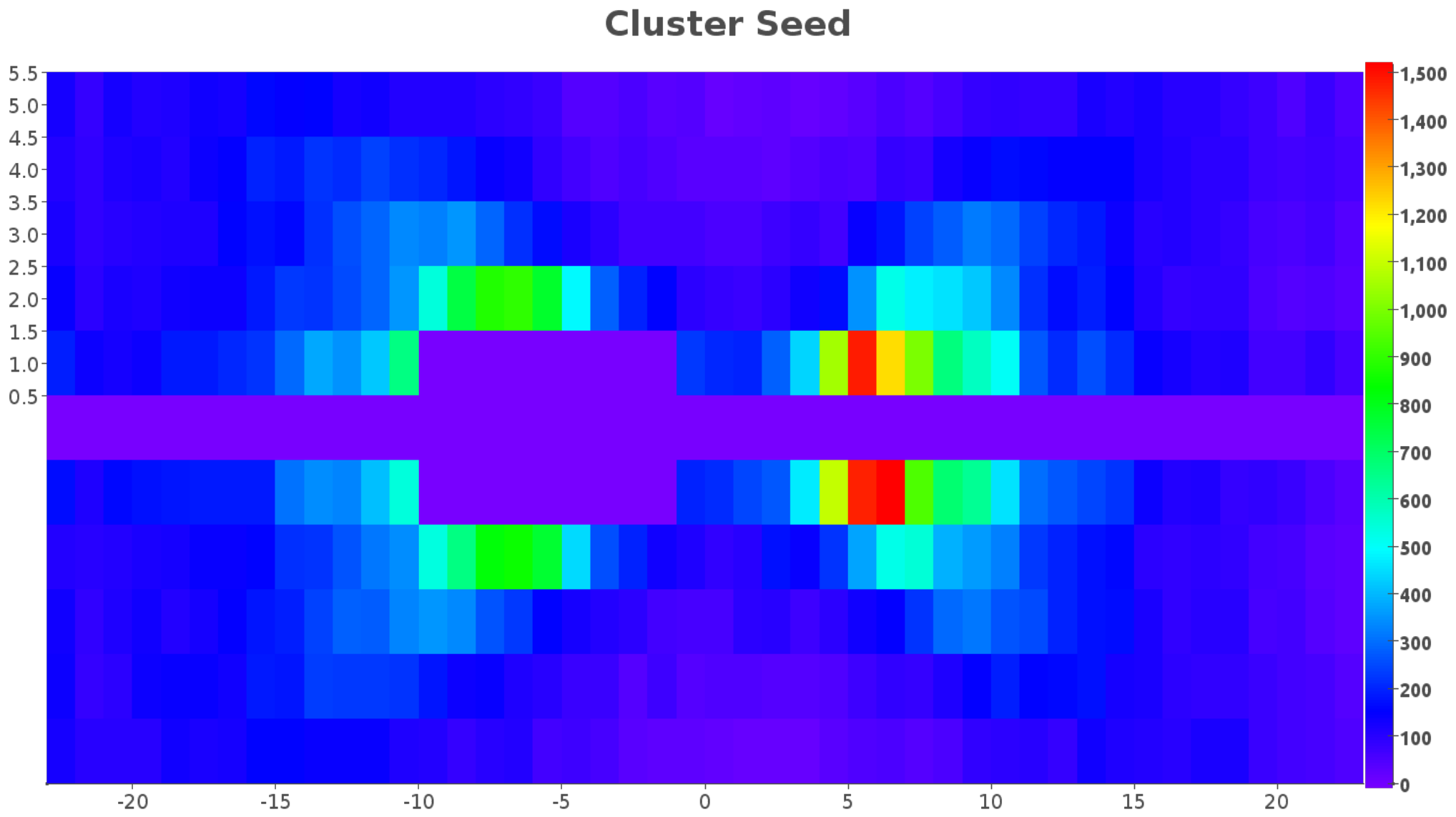
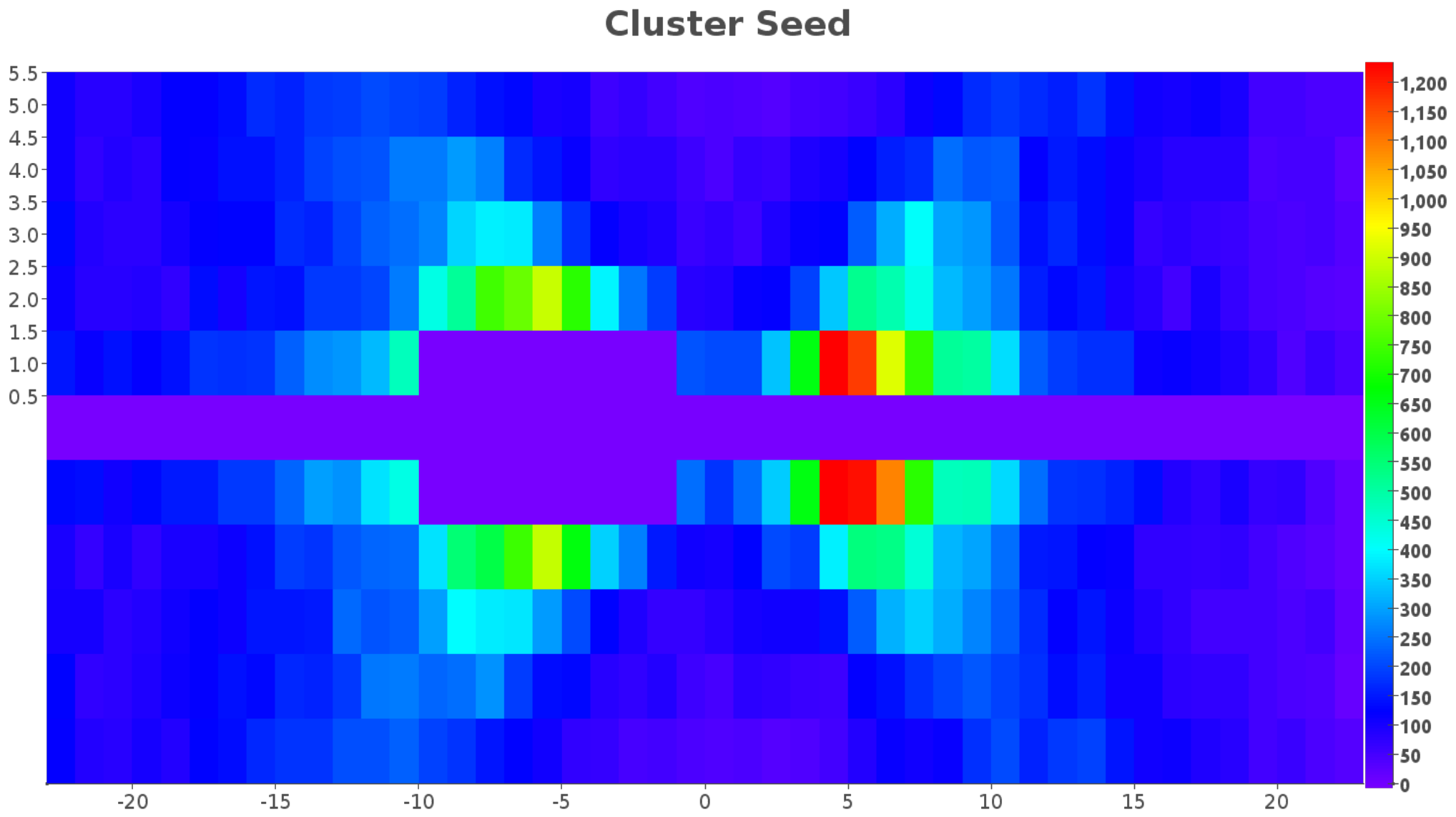
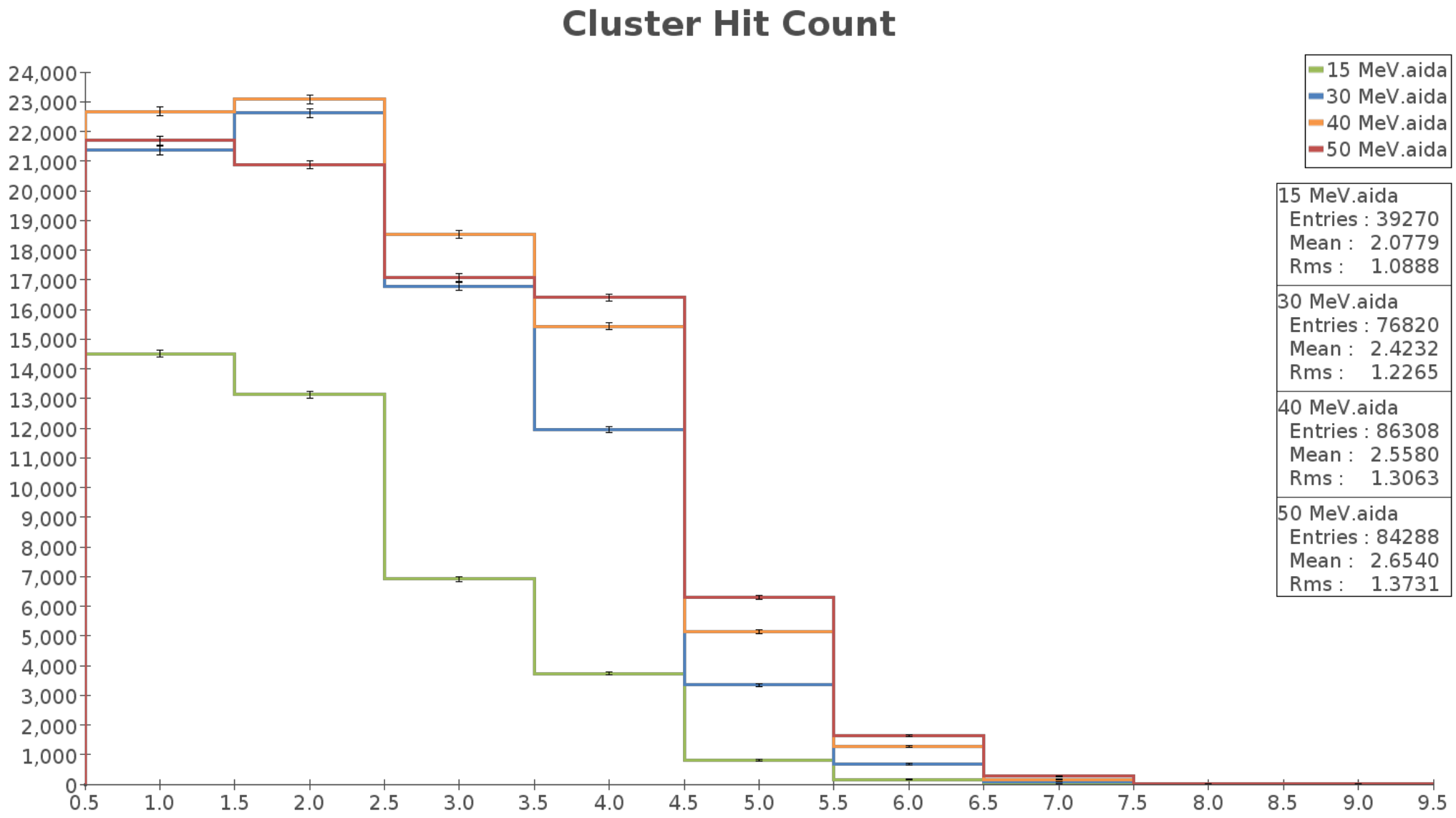
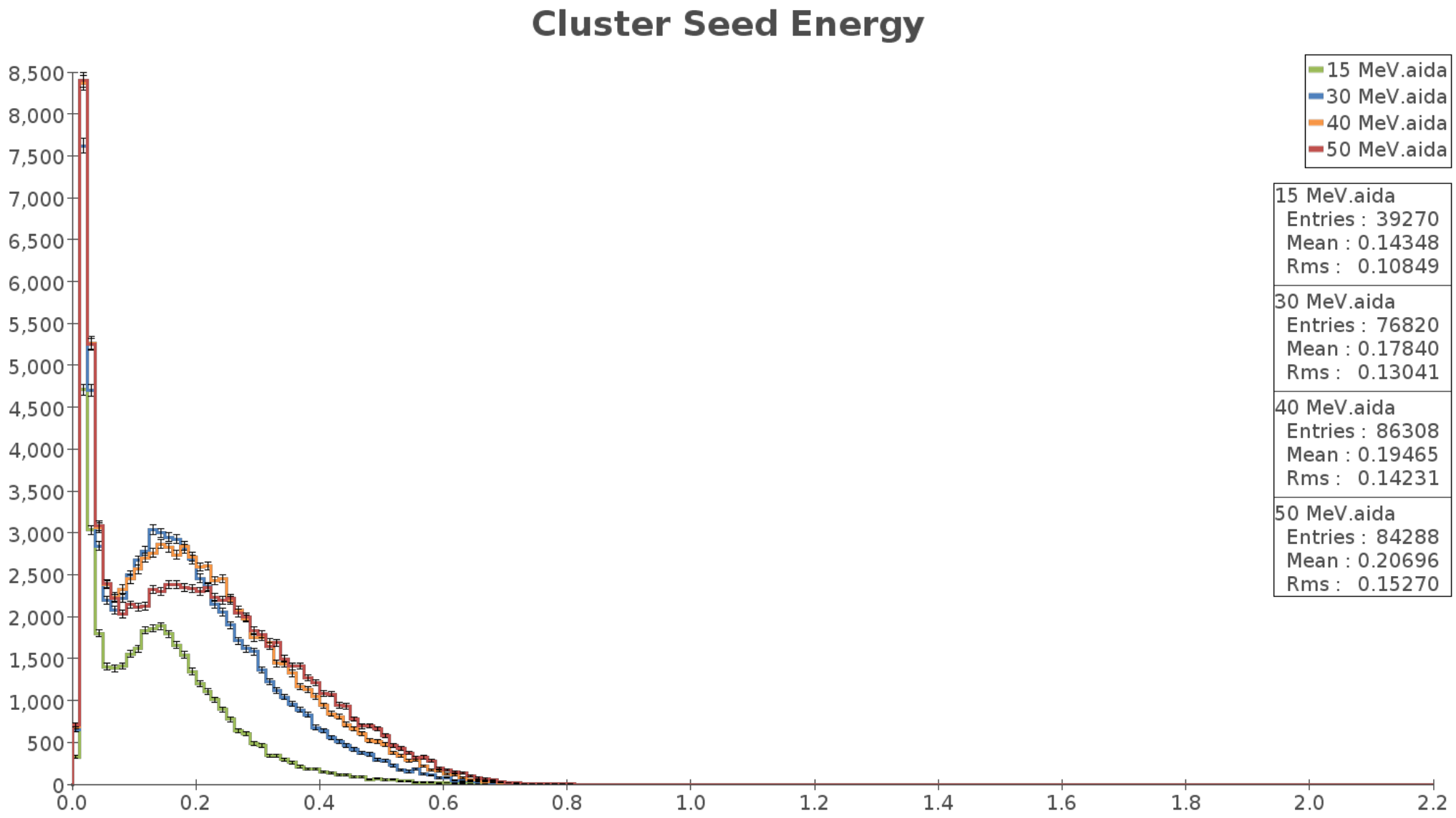

Cluster Seed
5.5
5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
-20
-15
-10
-5
0
5
10
15
20
800
750
700
650
600
550
500
450
400
350
300
250
200
150
100
50
0

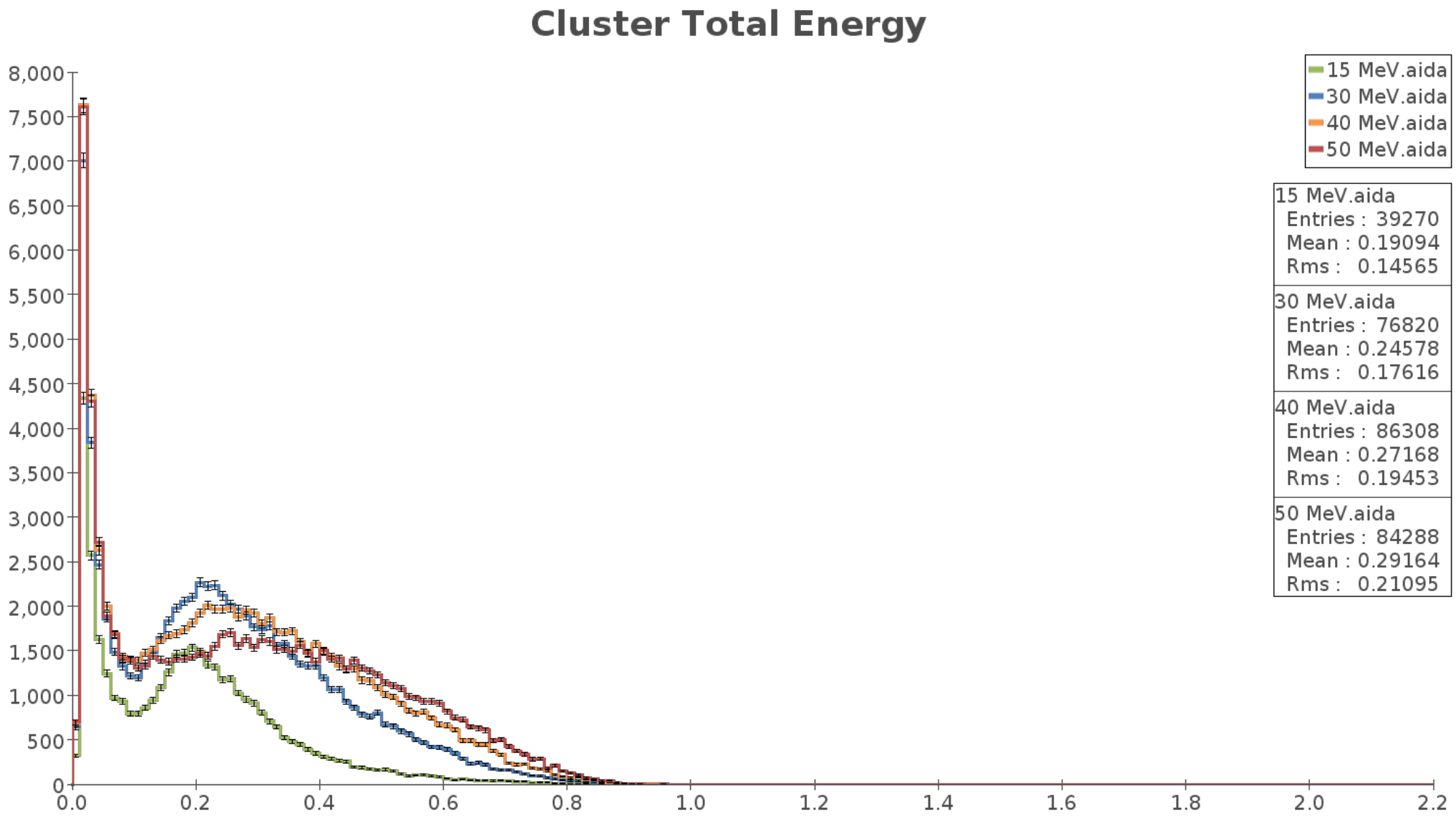

Cluster Seed
5.5
5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
-20
-15
-10
-5
0
5
10
15
20
1,500
1,400
1,300
1,200
1,100
1,000
900
800
700
600
500
400
300
200
100
0


Cluster Seed
5.5
5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
-20
-15
-10
-5
0
5
10
15
20
1,500
1,400
1,300
1,200
1,100
1,000
900
800
700
600
500
400
300
200
100
0

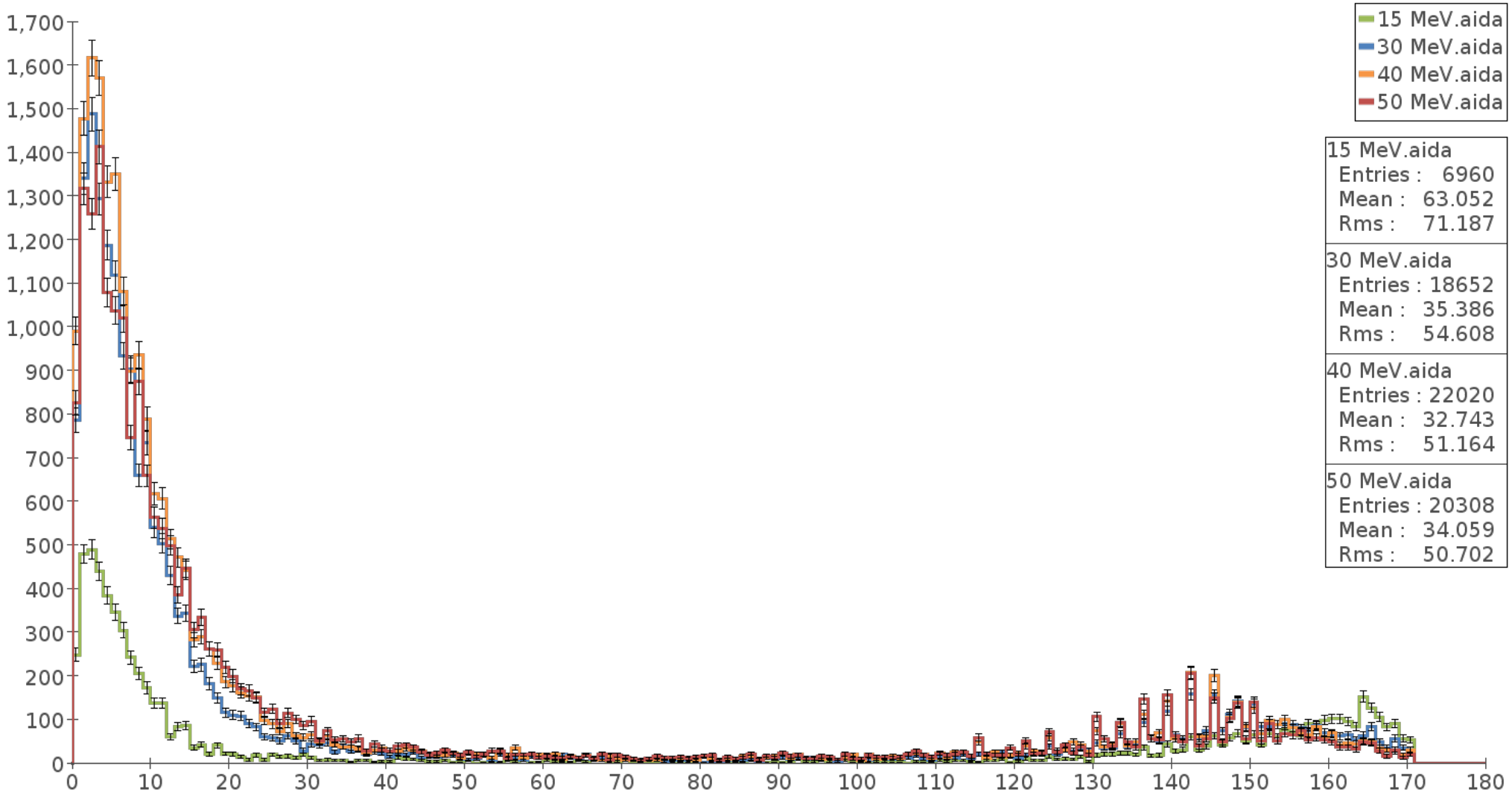

Cluster Seed
5.5
5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
-20
-15
-10
-5
0
5
10
15
20
1,200
1,150
1,100
1,050
1,000
950
900
850
800
750
700
650
600
550
500
450
400
350
300
250
200
150
100
50
0


Cluster Hit Count
15 MeV.aida
30 MeV.aida
40 MeV.aida
50 MeV.aida
15 MeV.aida
Entries : 39270
Mean : 2.0779
Rms : 1.0888
30 MeV.aida
Entries : 76820
Mean : 2.4232
Rms : 1.2265
40 MeV.aida
Entries : 86308
Mean : 2.5580
Rms : 1.3063
50 MeV.aida
Entries : 84288
Mean : 2.6540
Rms : 1.3731
24,000
23,000
22,000
21,000
20,000
19,000
18,000
17,000
16,000
15,000
14,000
13,000
12,000
11,000
10,000
9,000
8,000
7,000
6,000
5,000
4,000
3,000
2,000
1,000
0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
4.5
5.0
5.5
6.0
6.5
7.0
7.5
8.0
8.5
9.0
9.5

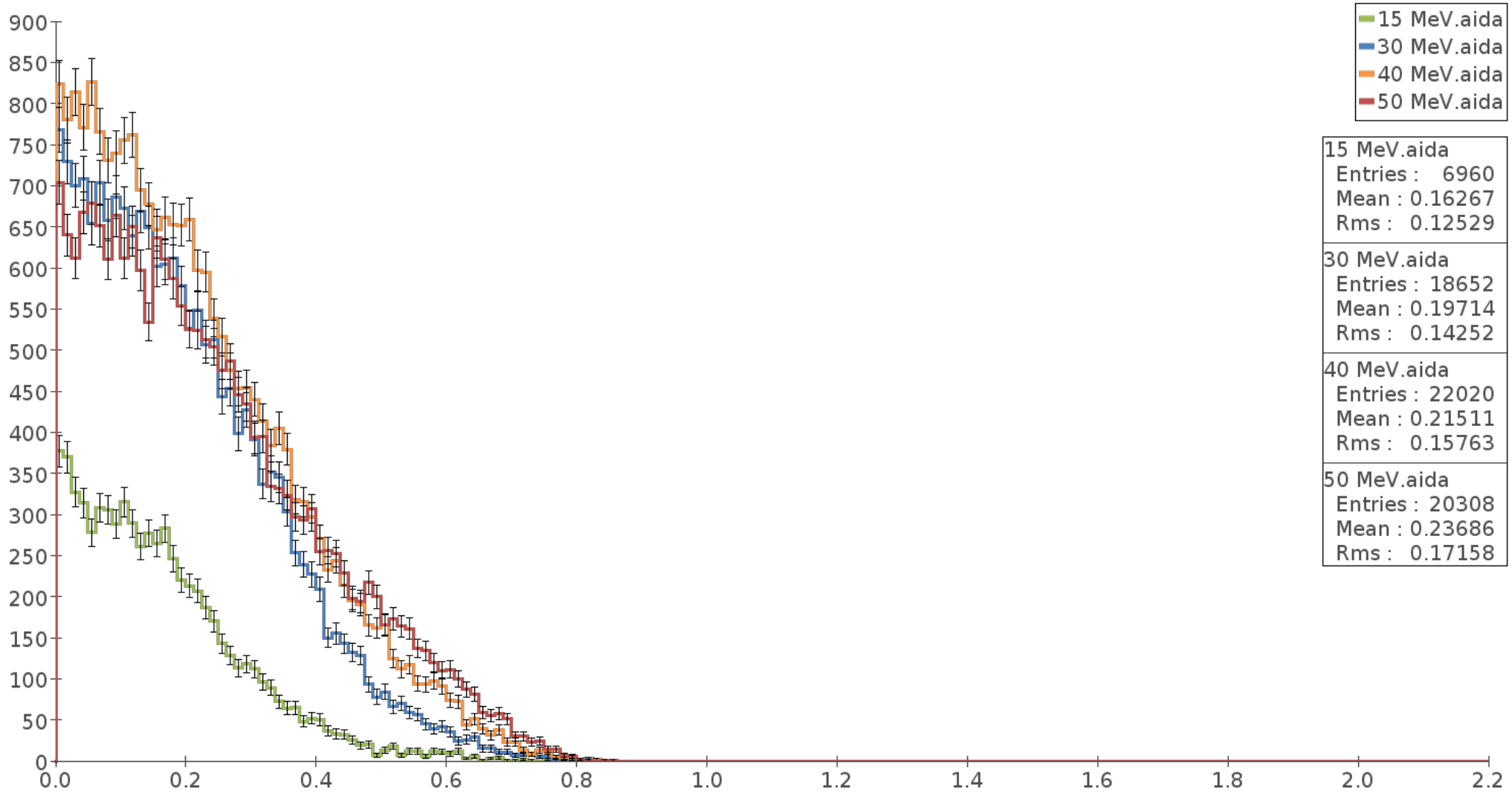

Cluster Seed Energy
15 MeV.aida
30 MeV.aida
40 MeV.aida
50 MeV.aida
15 MeV.aida
Entries : 39270
Mean : 0.14348
Rms : 0.10849
30 MeV.aida
Entries : 76820
Mean : 0.17840
Rms : 0.13041
40 MeV.aida
Entries : 86308
Mean : 0.19465
Rms : 0.14231
50 MeV.aida
Entries : 84288
Mean : 0.20696
Rms : 0.15270
8,500
8,000
7,500
7,000
6,500
6,000
5,500
5,000
4,500
4,000
3,500
3,000
2,500
2,000
1,500
1,000
500
0
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1.8
2.0
2.2

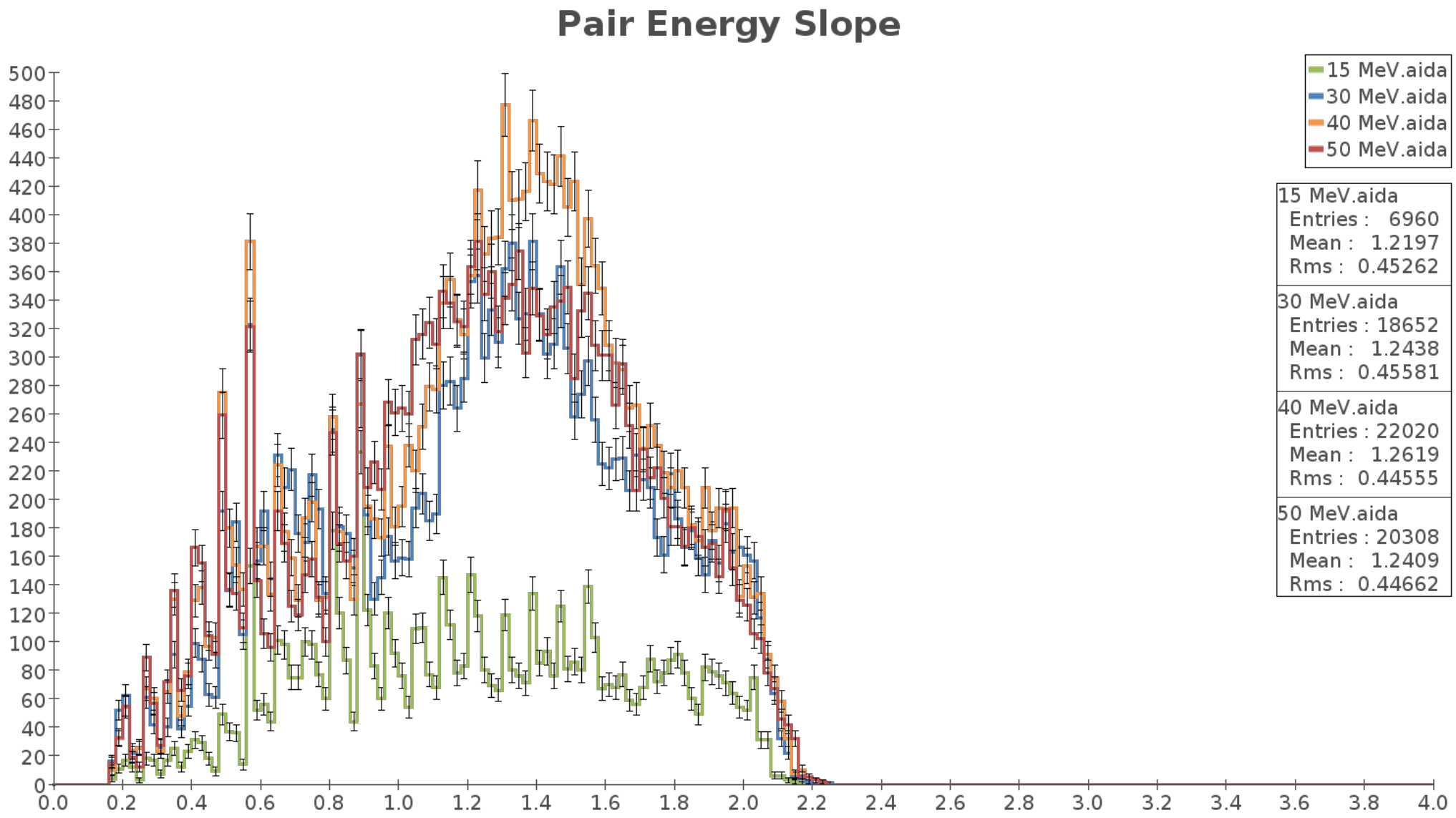

Cluster Total Energy
15 MeV.aida
30 MeV.aida
40 MeV.aida
50 MeV.aida
15 MeV.aida
Entries : 39270
Mean : 0.19094
Rms : 0.14565
30 MeV.aida
Entries : 76820
Mean : 0.24578
Rms : 0.17616
40 MeV.aida
Entries : 86308
Mean : 0.27168
Rms : 0.19453
50 MeV.aida
Entries : 84288
Mean : 0.29164
Rms : 0.21095
8,000
7,500
7,000
6,500
6,000
5,500
5,000
4,500
4,000
3,500
3,000
2,500
2,000
1,500
1,000
500
0
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1.8
2.0
2.2

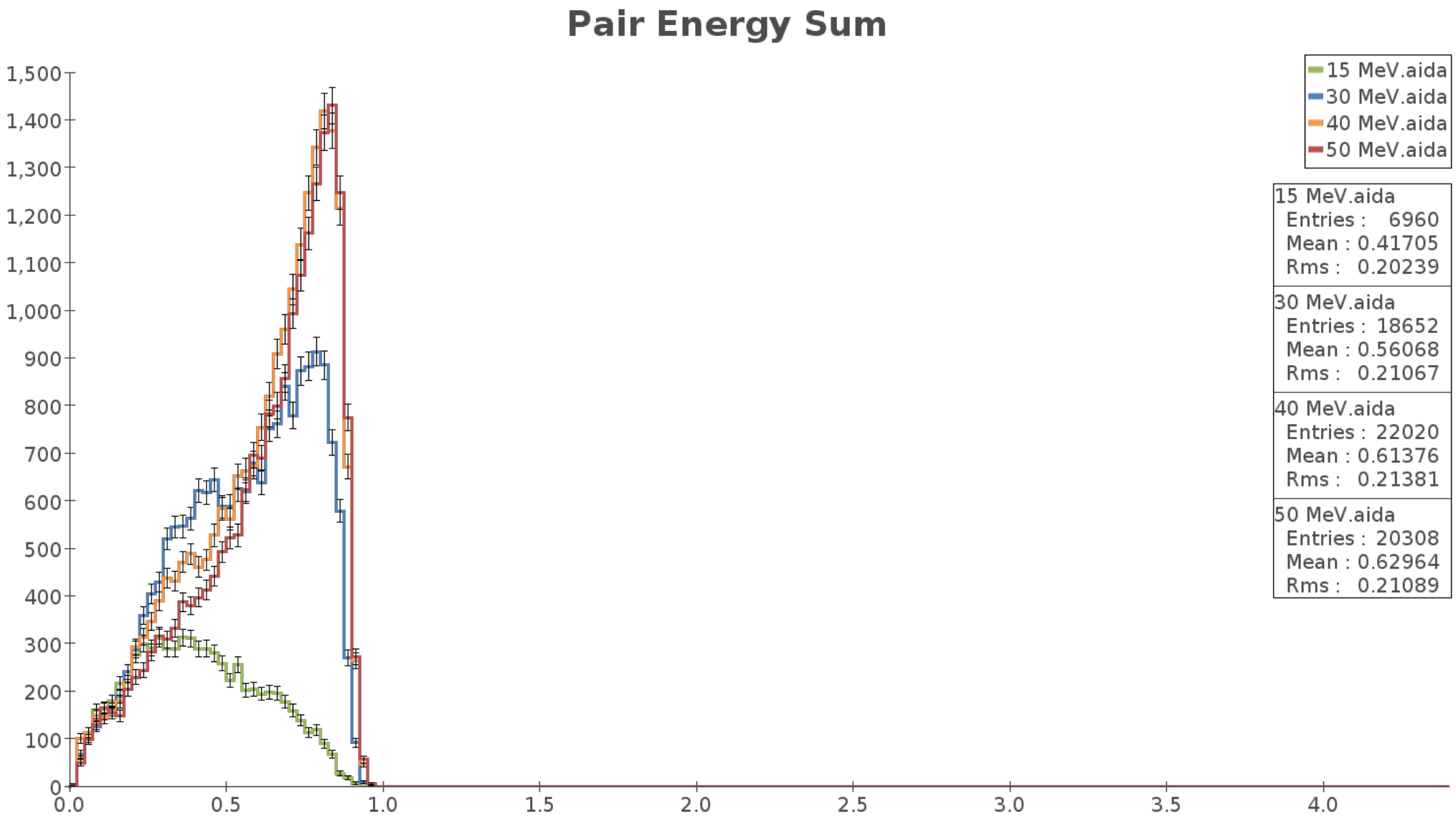
Pair Coplanarity

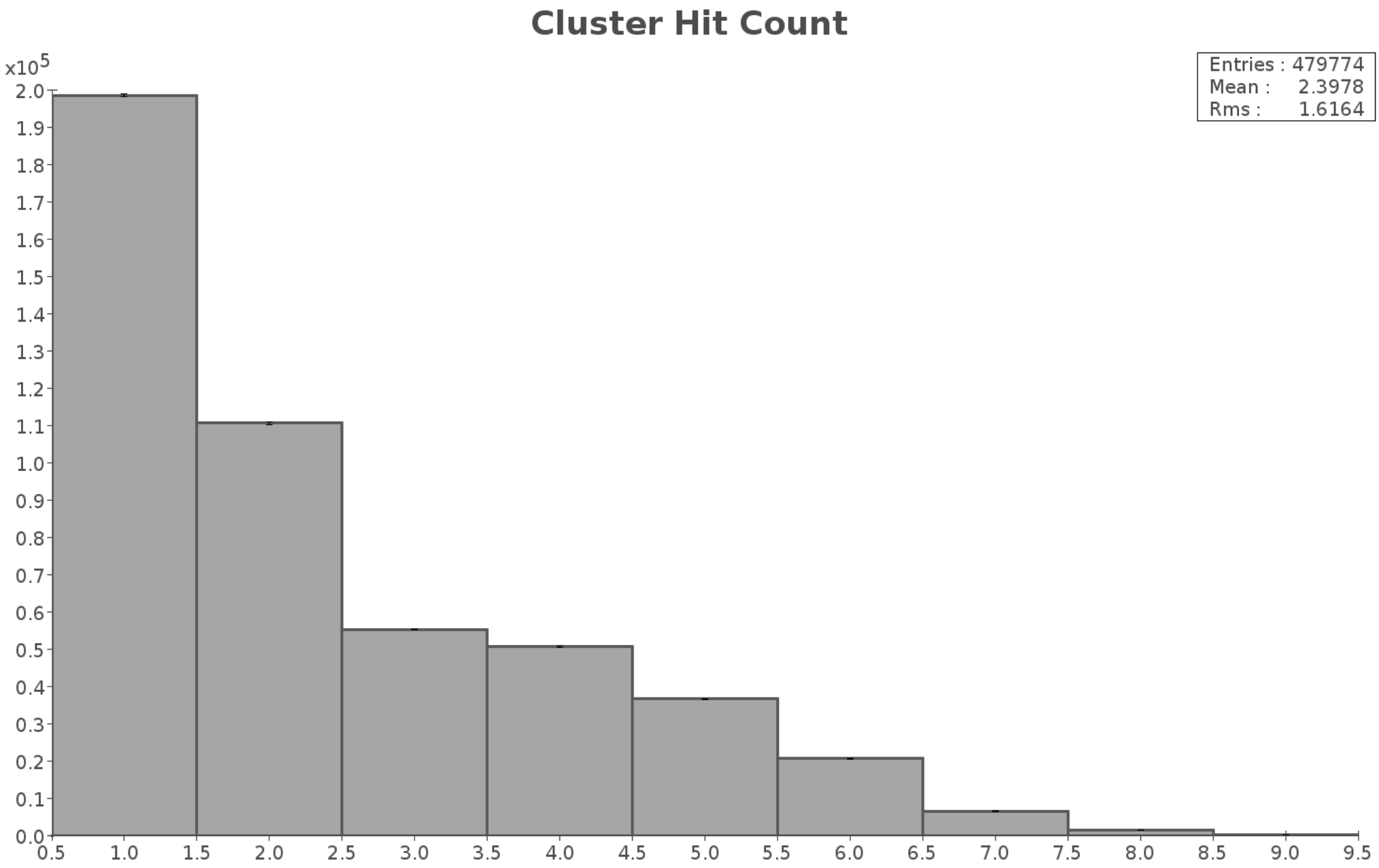


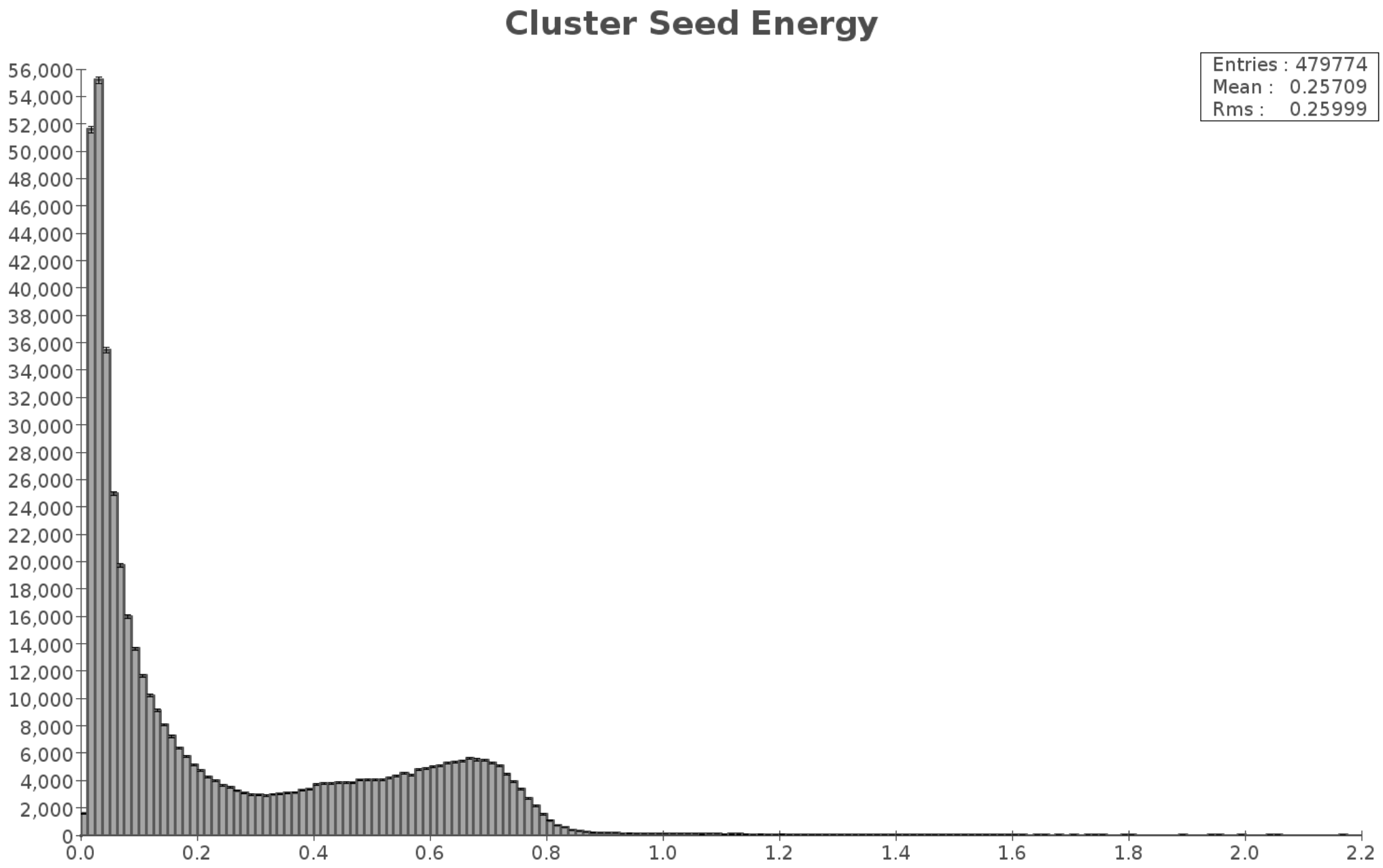
Pair Energy Difference



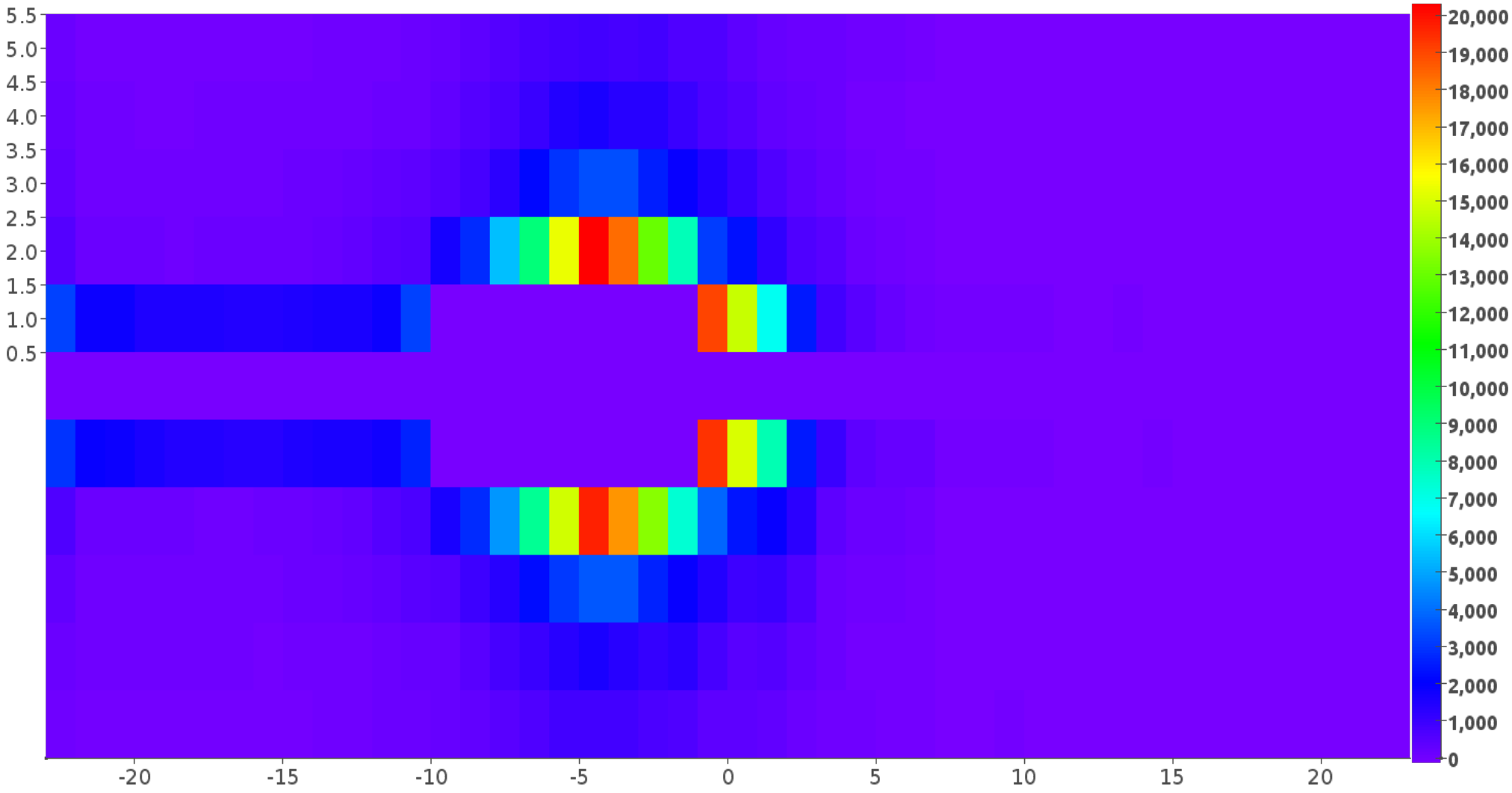

Pair Energy Slope
15 MeV.aida
30 MeV.aida
40 MeV.aida
50 MeV.aida
15 MeV.aida
Entries : 6960
Mean : 1.2197
Rms : 0.45262
30 MeV.aida
Entries : 18652
Mean : 1.2438
Rms : 0.45581
40 MeV.aida
Entries : 22020
Mean : 1.2619
Rms : 0.44555
50 MeV.aida
Entries : 20308
Mean : 1.2409
Rms : 0.44662
0
20
40
60
80
100
120
140
160
180
200
220
240
260
280
300
320
340
360
380
400
420
440
460
480
500
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1.8
2.0
2.2
2.4
2.6
2.8
3.0
3.2
3.4
3.6
3.8
4.0

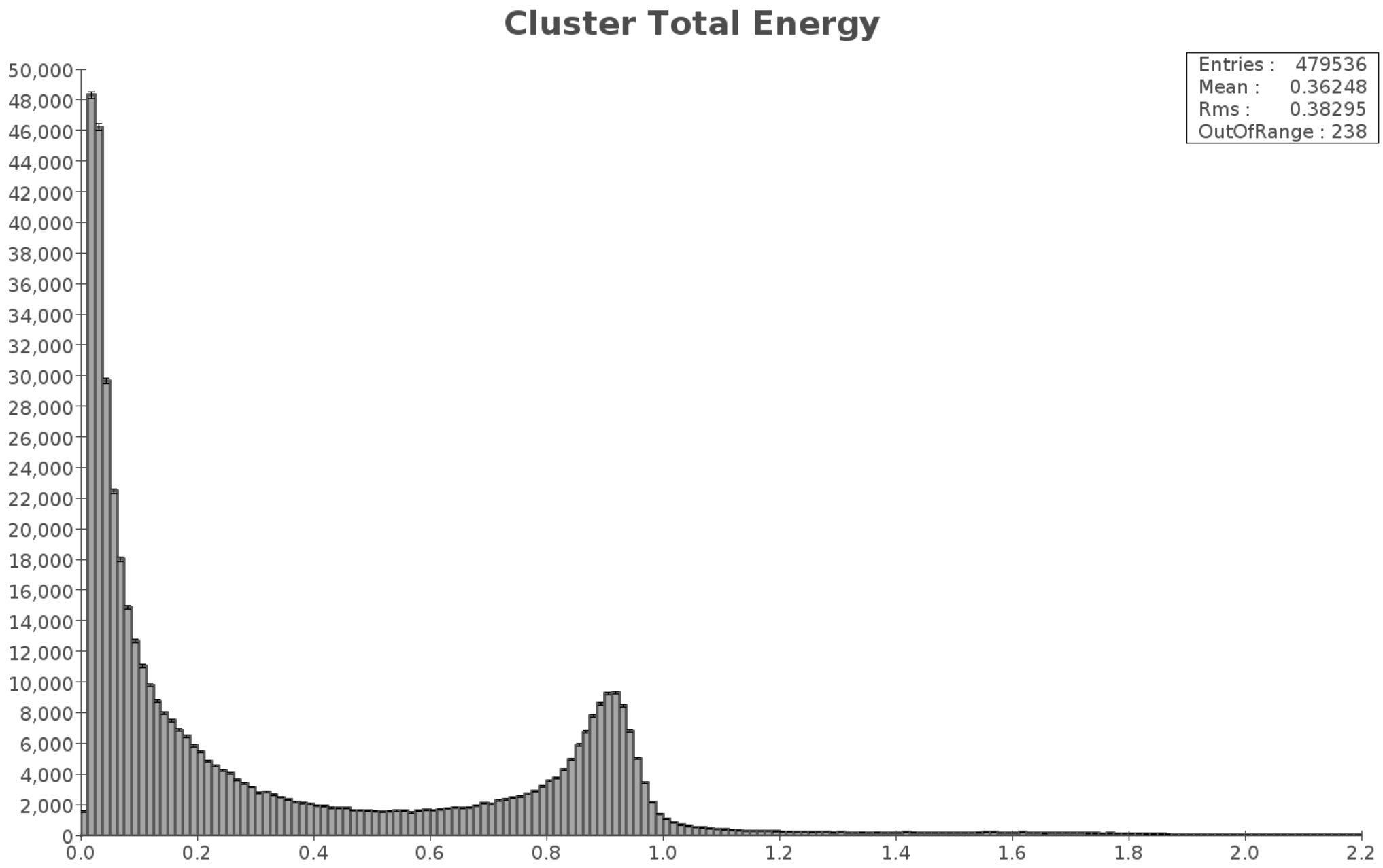

Pair Energy Sum
15 MeV.aida
30 MeV.aida
40 MeV.aida
50 MeV.aida
15 MeV.aida
Entries : 6960
Mean : 0.41705
Rms : 0.20239
30 MeV.aida
Entries : 18652
Mean : 0.56068
Rms : 0.21067
40 MeV.aida
Entries : 22020
Mean : 0.61376
Rms : 0.21381
50 MeV.aida
Entries : 20308
Mean : 0.62964
Rms : 0.21089
1,500
1,400
1,300
1,200
1,100
1,000
900
800
700
600
500
400
300
200
100
0
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0

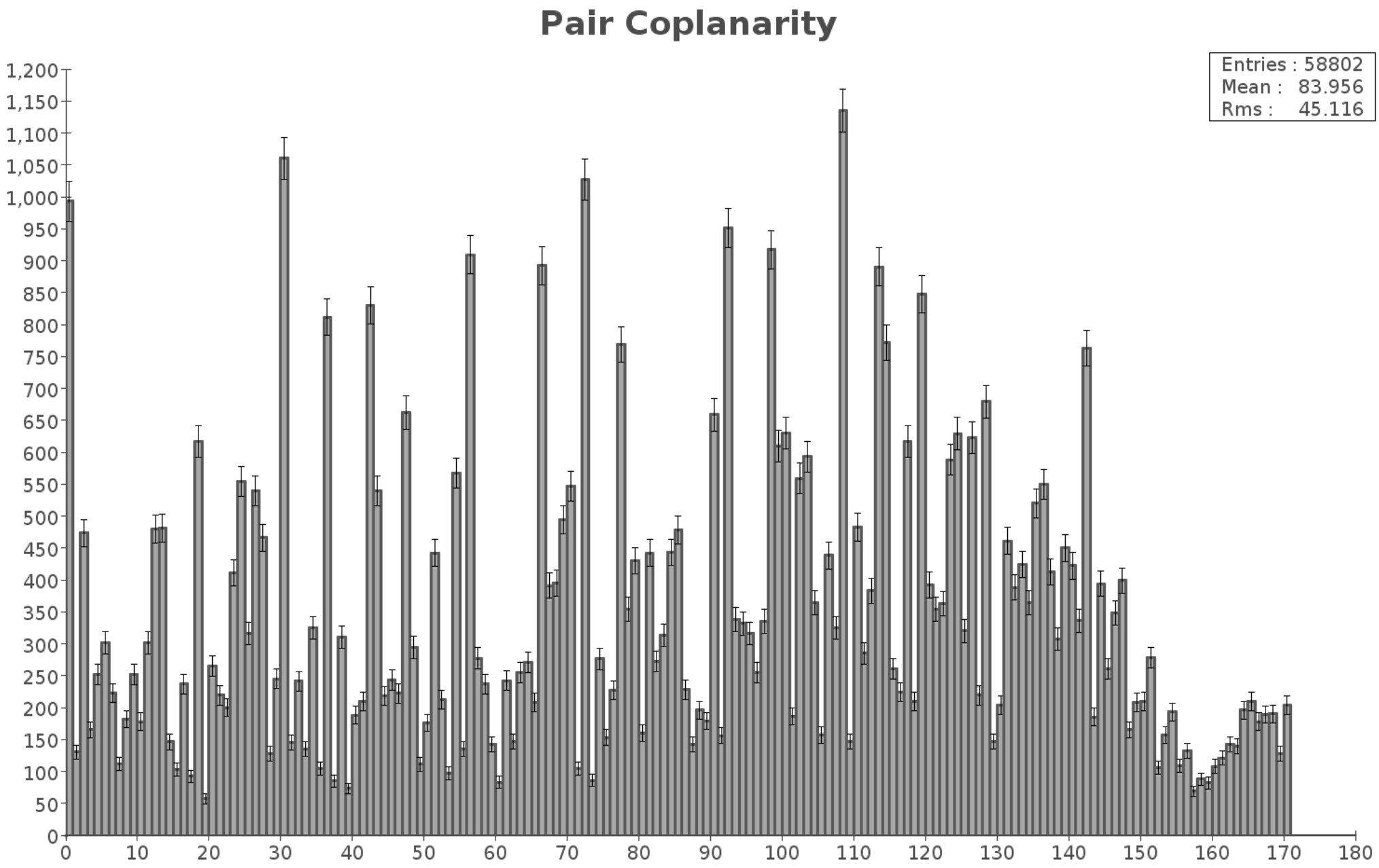

Cluster Hit Count
Entries : 479774
Mean : 2.3978
Rms : 1.6164
x10^5
2.0
1.9
1.8
1.7
1.6
1.5
1.4
1.3
1.2
1.1
1.0
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
4.5
5.0
5.5
6.0
6.5
7.0
7.5
8.0
8.5
9.0
9.5

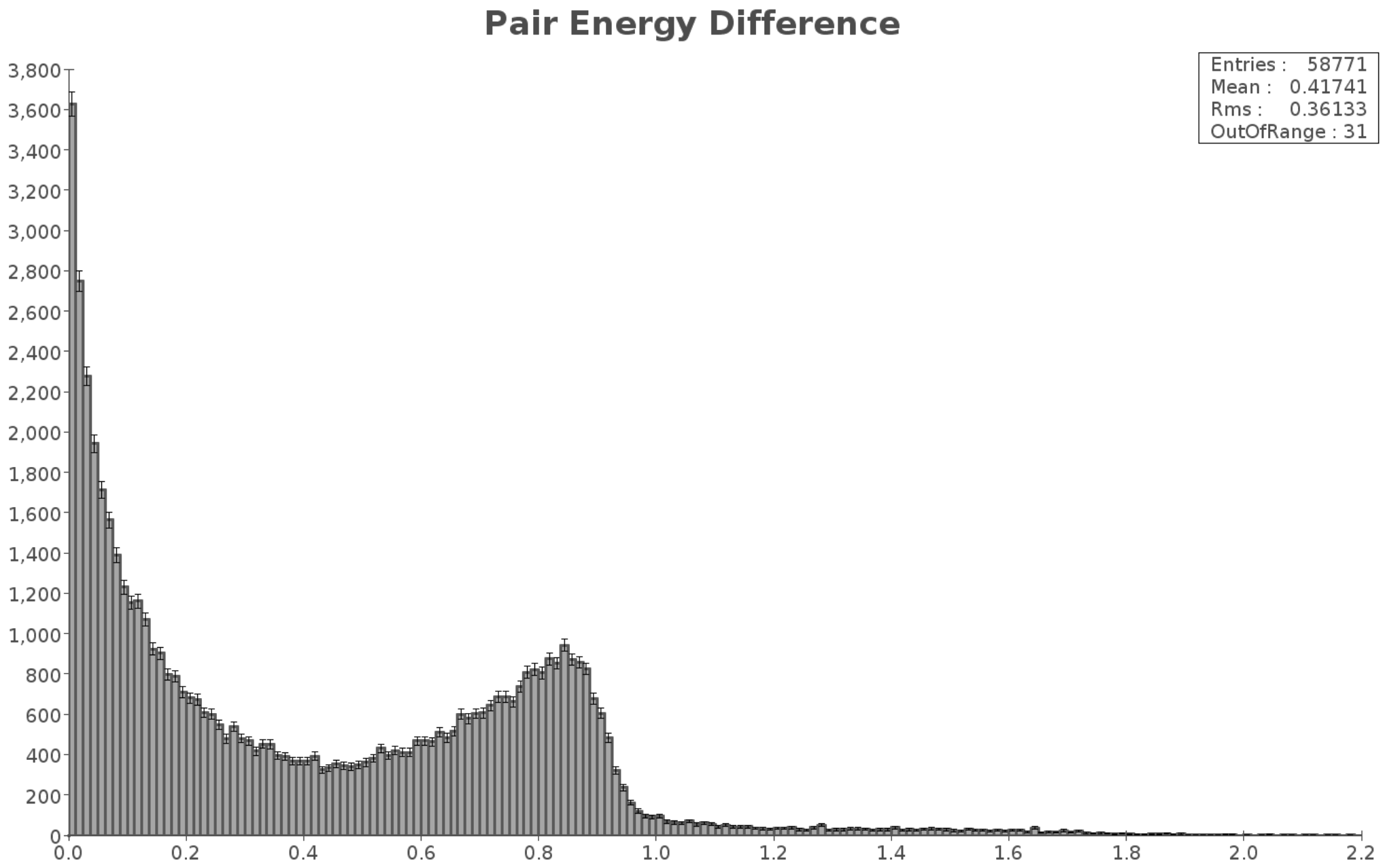

Cluster Seed Energy
Entries : 479774
Mean : 0.25709
Rms : 0.25999
56,000
54,000
52,000
50,000
48,000
46,000
44,000
42,000
40,000
38,000
36,000
34,000
32,000
30,000
28,000
26,000
24,000
22,000
20,000
18,000
16,000
14,000
12,000
10,000
8,000
6,000
4,000
2,000
0
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1.8
2.0
2.2

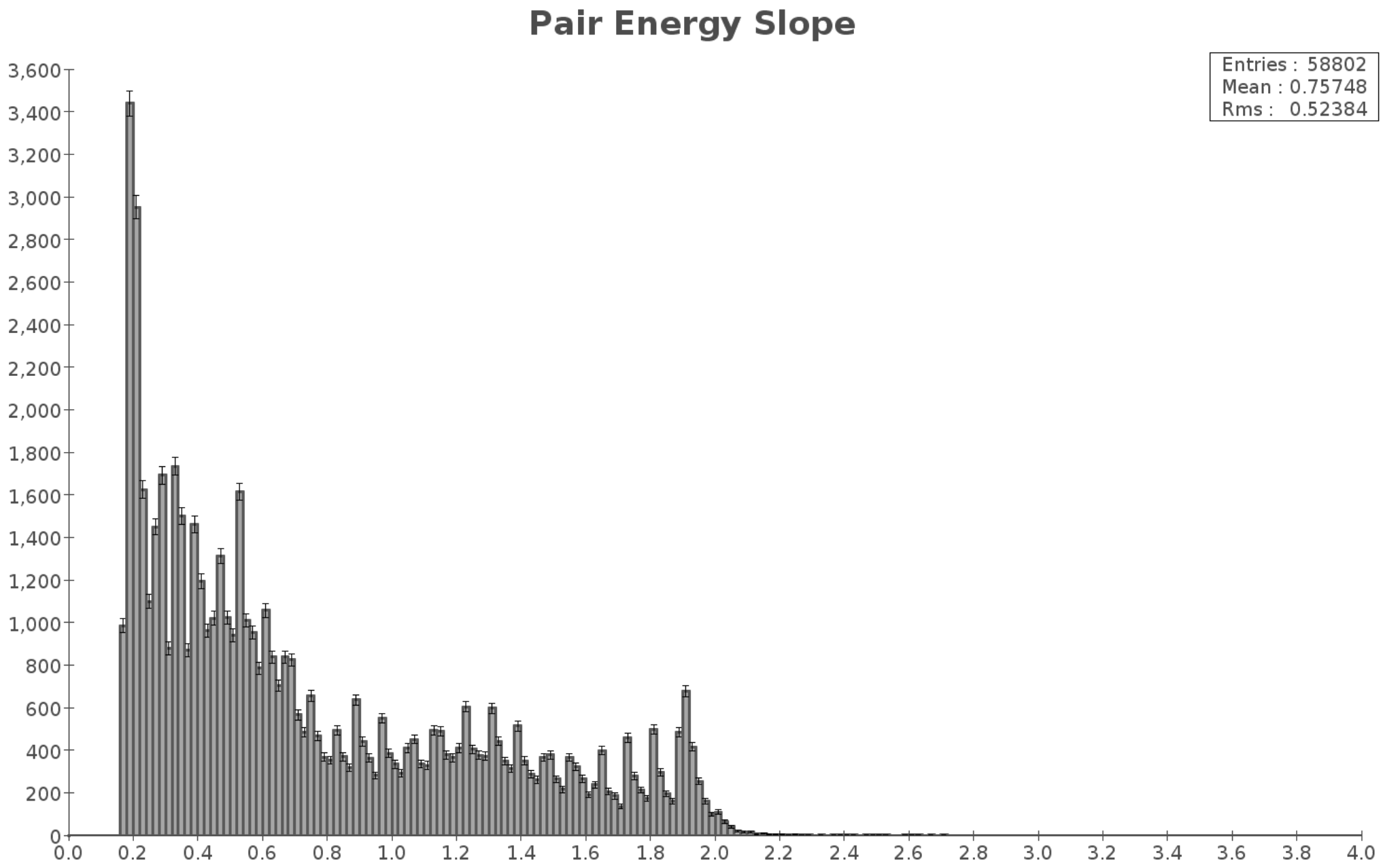
Cluster Seed

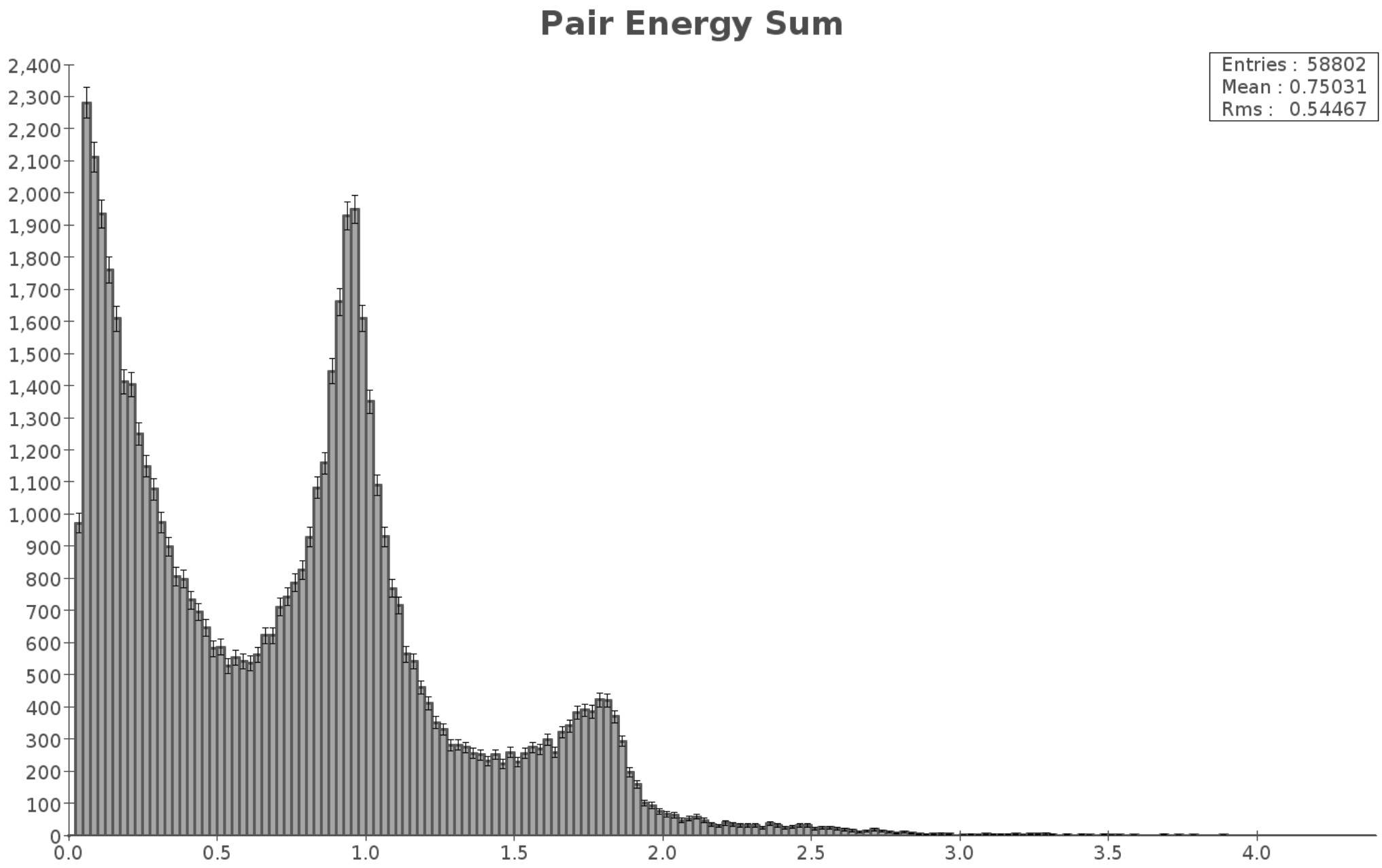



Cluster Total Energy
Entries : 479536
Mean : 0.36248
Rms : 0.38295
OutOfRange : 238
50,000
48,000
46,000
44,000
42,000
40,000
38,000
36,000
34,000
32,000
30,000
28,000
26,000
24,000
22,000
20,000
18,000
16,000
14,000
12,000
10,000
8,000
6,000
4,000
2,000
0
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1.8
2.0
2.2


Pair Coplanarity
Entries : 58802
Mean : 83.956
Rms : 45.116
1,200
1,150
1,100
1,050
1,000
950
900
850
800
750
700
650
600
550
500
450
400
350
300
250
200
150
100
50
0
0
10
20
30
40
50
60
70
80
90
100
110
120
130
140
150
160
170
180


Pair Energy Difference
Entries : 58771
Mean : 0.41741
Rms : 0.36133
OutOfRange : 31
3,800
3,600
3,400
3,200
3,000
2,800
2,600
2,400
2,200
2,000
1,800
1,600
1,400
1,200
1,000
800
600
400
200
0
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1.8
2.0
2.2


Pair Energy Slope
Entries : 58802
Mean : 0.75748
Rms : 0.52384
3,600
3,400
3,200
3,000
2,800
2,600
2,400
2,200
2,000
1,800
1,600
1,400
1,200
1,000
800
600
400
200
0
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1.8
2.0
2.2
2.4
2.6
2.8
3.0
3.2
3.4
3.6
3.8
4.0


Pair Energy Sum
Entries : 58802
Mean : 0.75031
Rms : 0.54467
2,400
2,300
2,200
2,100
2,000
1,900
1,800
1,700
1,600
1,500
1,400
1,300
1,200
1,100
1,000
900
800
700
600
500
400
300
200
100
0
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0