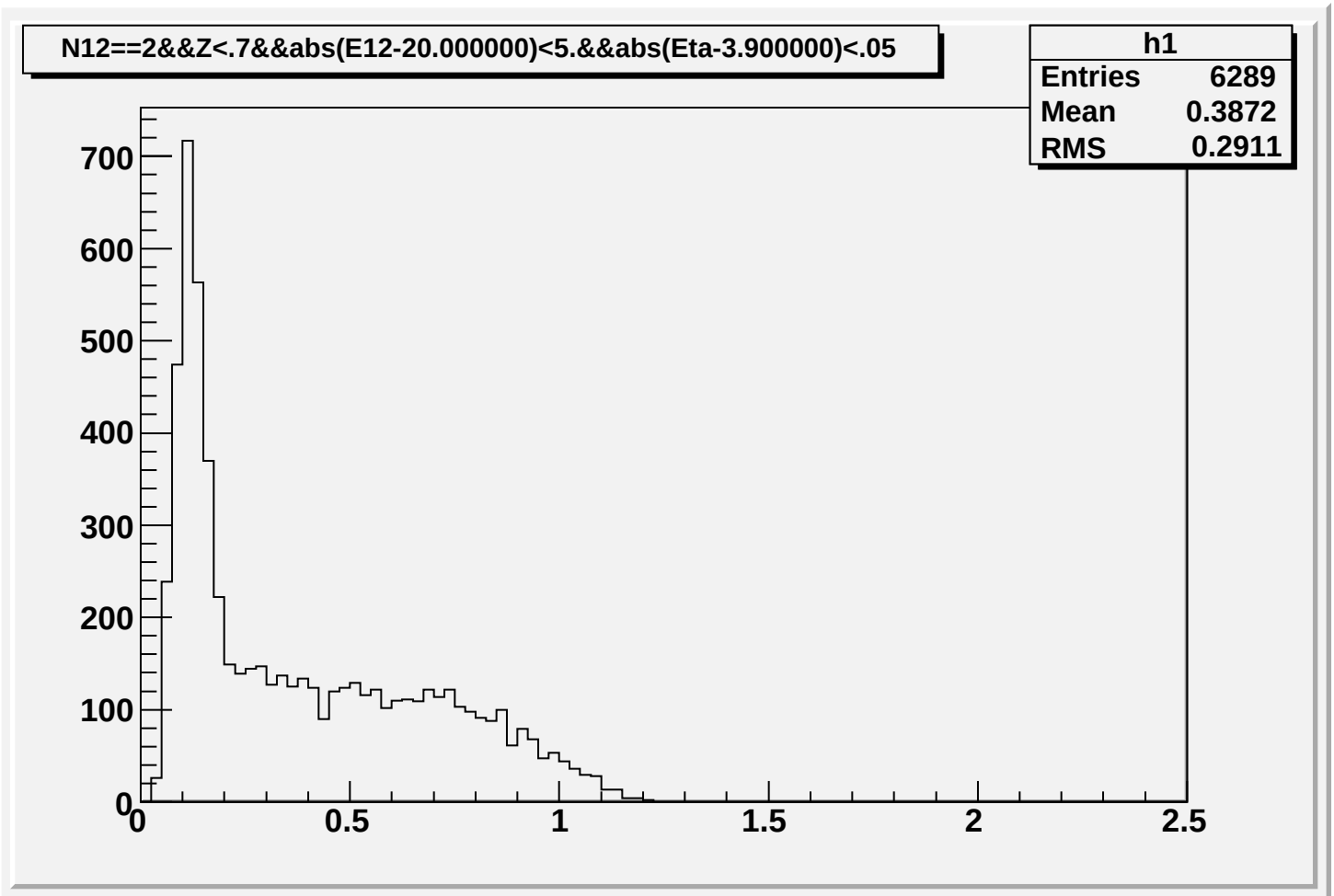
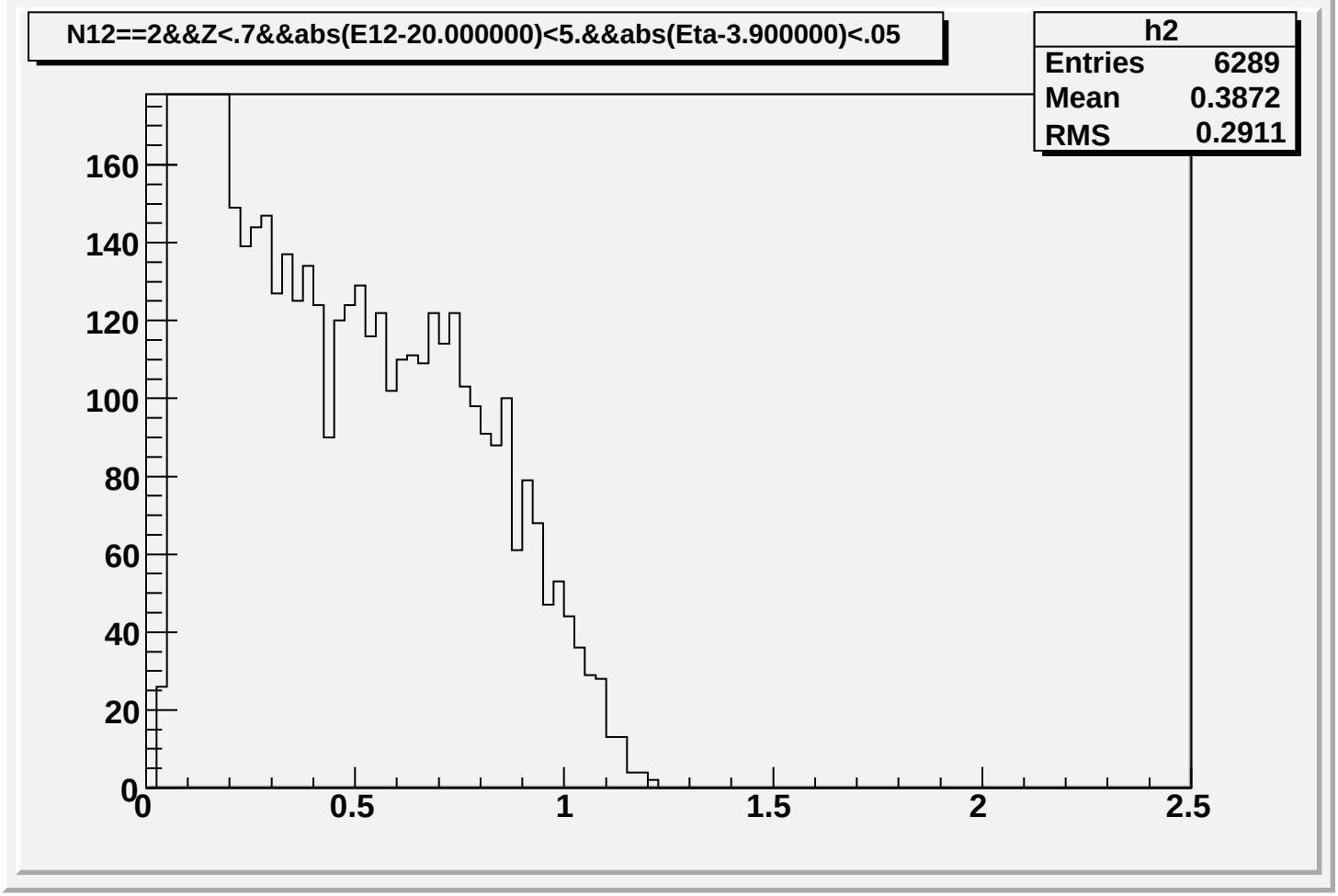
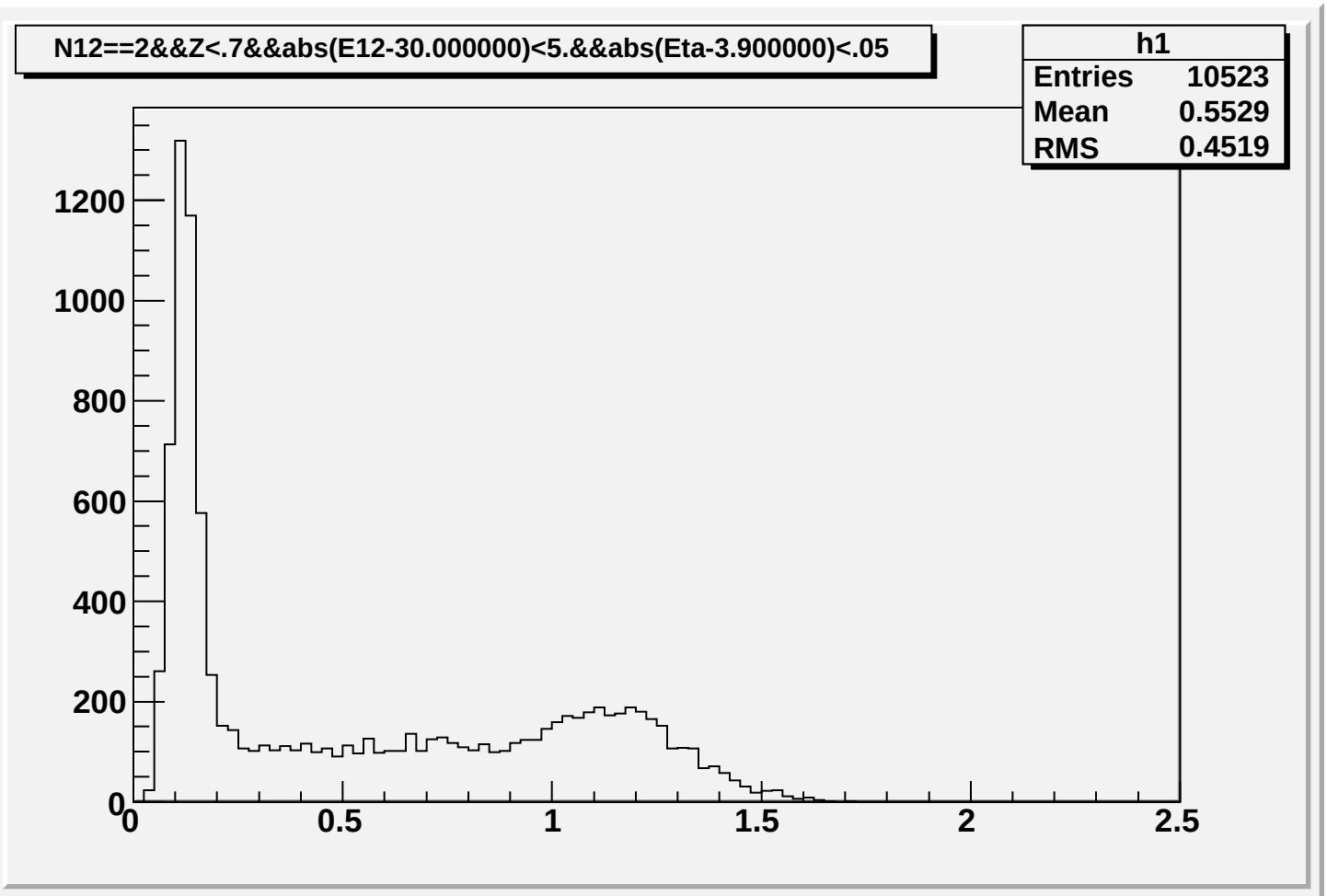
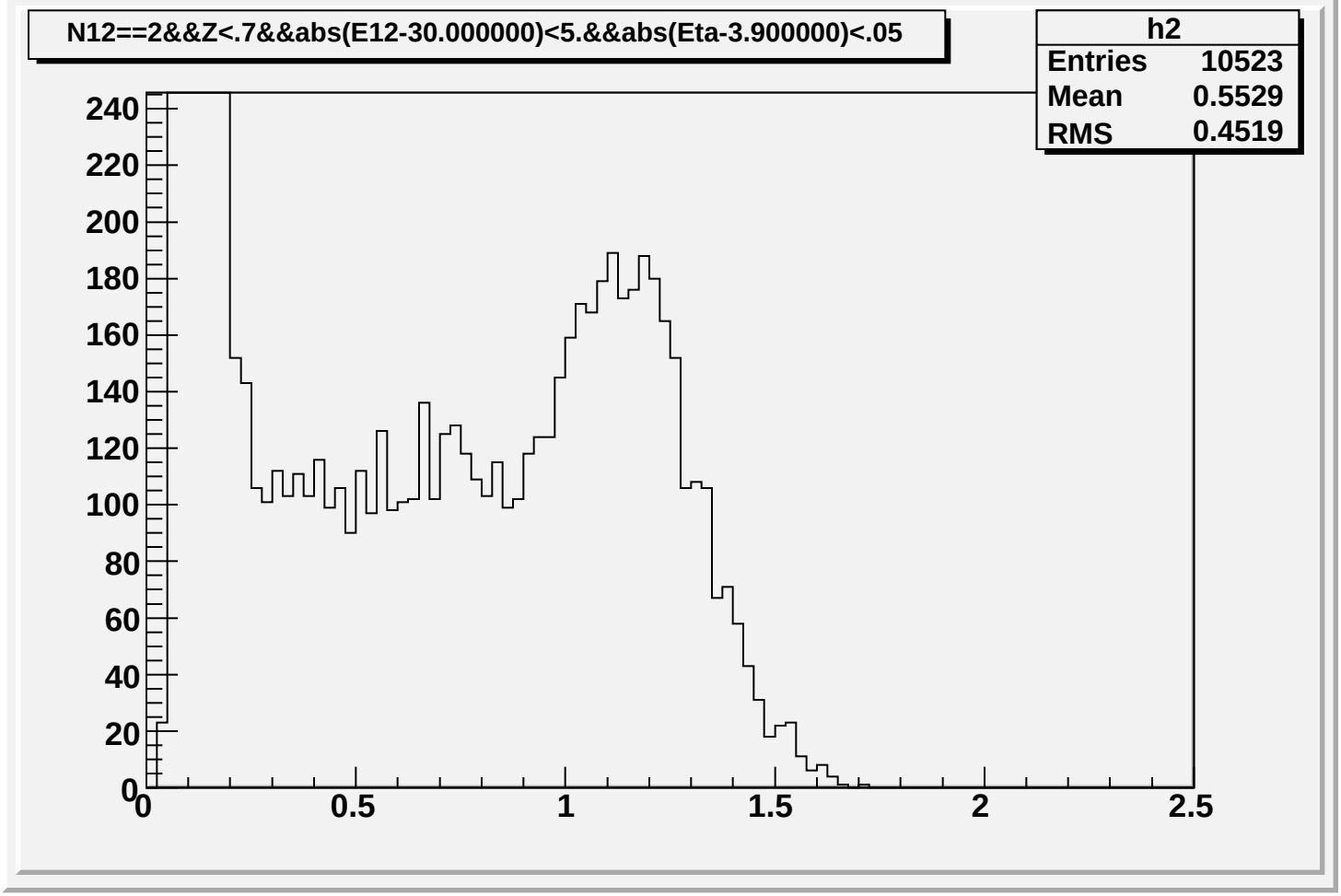
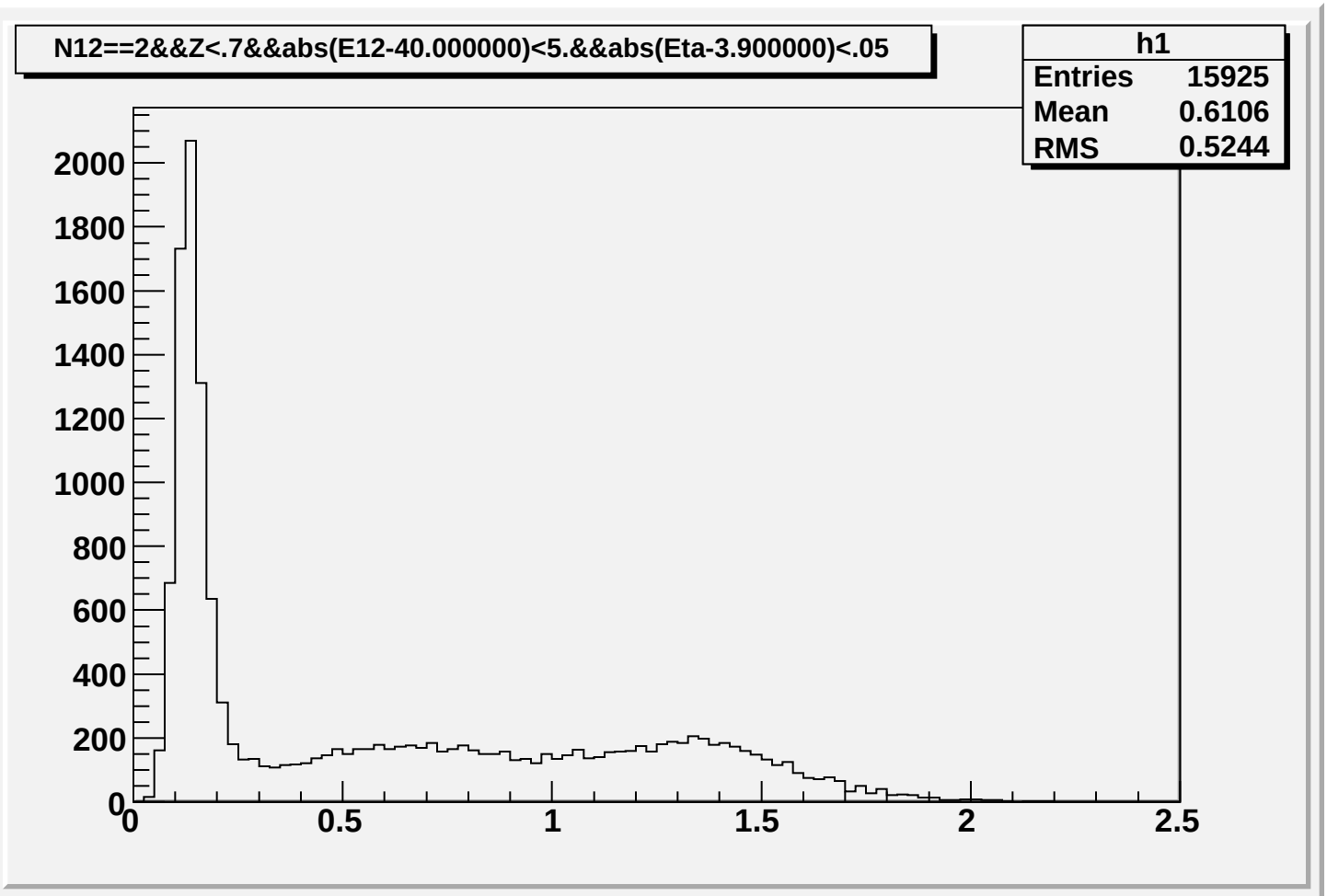
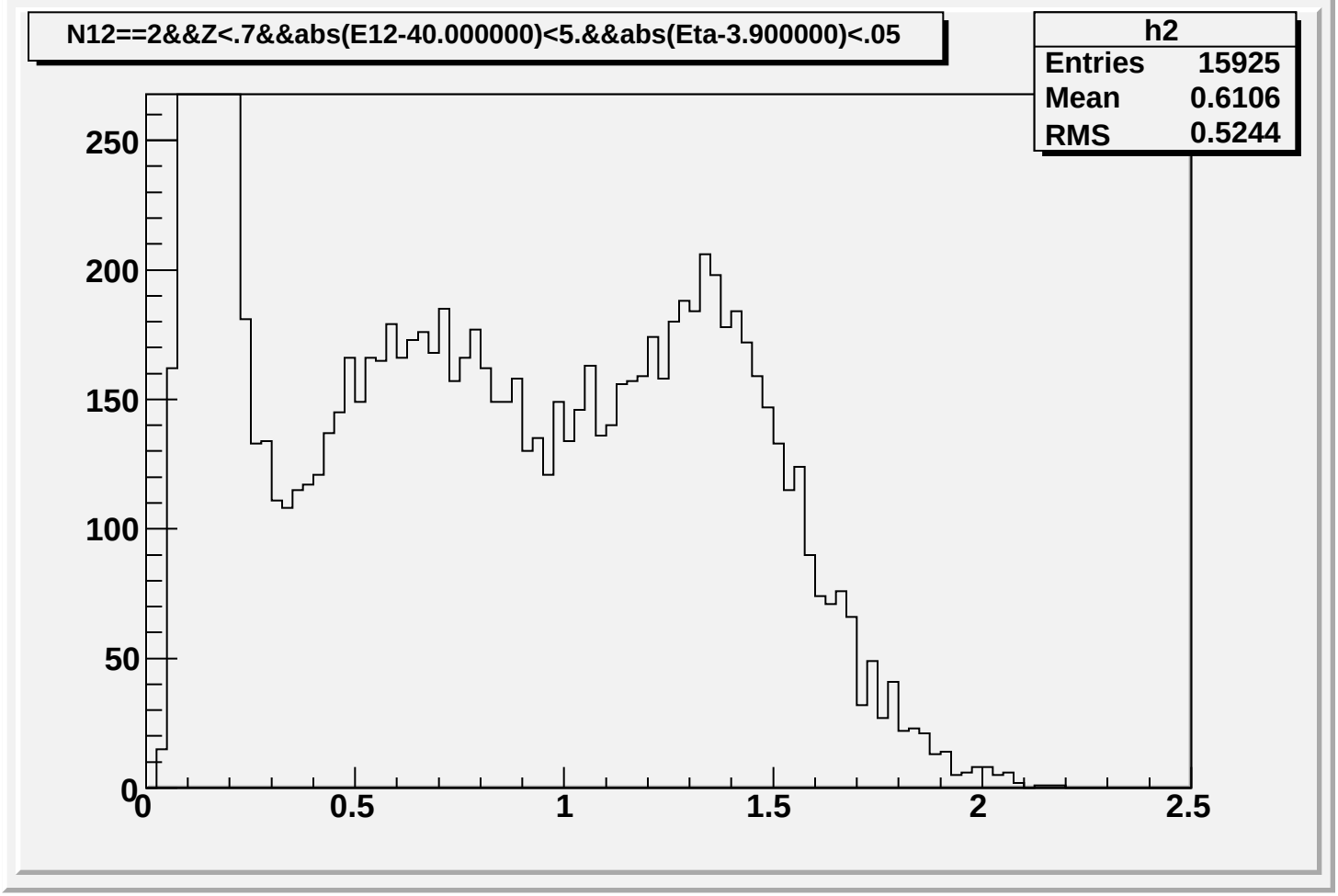

N12==2&&Z<.7&&abs(E12-20.000000)<5.&&abs(Eta-3.900000)<.05
h1
Entries 6289
Mean 0.3872
RMS 0.2911
700
600
500
400
300
200
100
0
0
0.5
1
1.5
2
2.5

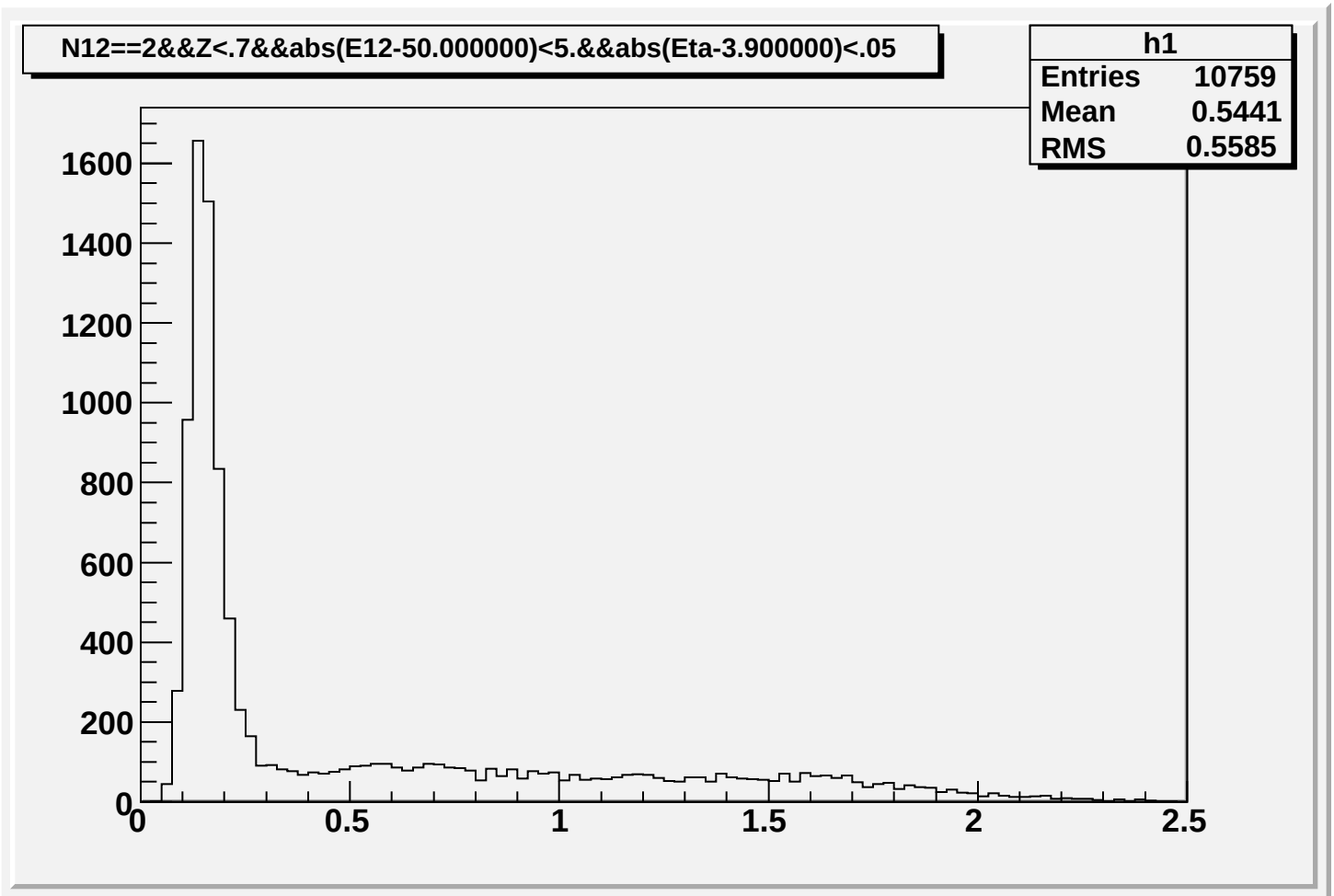

N12==2&&Z<.7&&abs(E12-20.000000)<5.&&abs(Eta-3.900000)<.05
h2
Entries 6289
Mean 0.3872
RMS 0.2911
160
140
120
100
80
60
40
20
0
0
0.5
1
1.5
2
2.5

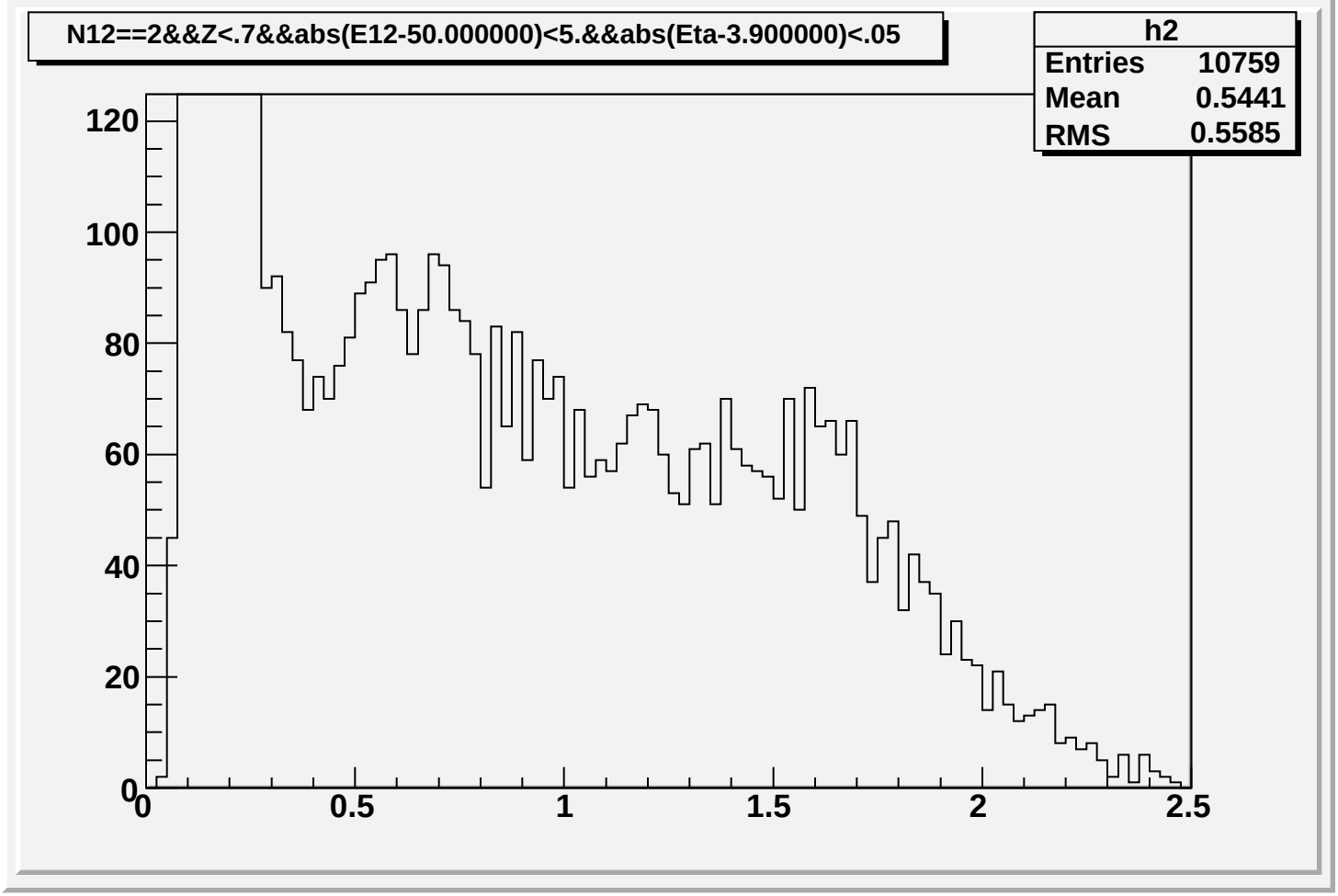

N12==2&&Z<.7&&abs(E12-30.000000)<5.&&abs(Eta-3.900000)<.05
h1
Entries 10523
Mean 0.5529
RMS 0.4519
1200
1000
800
600
400
200
0
0
0.5
1
1.5
2
2.5

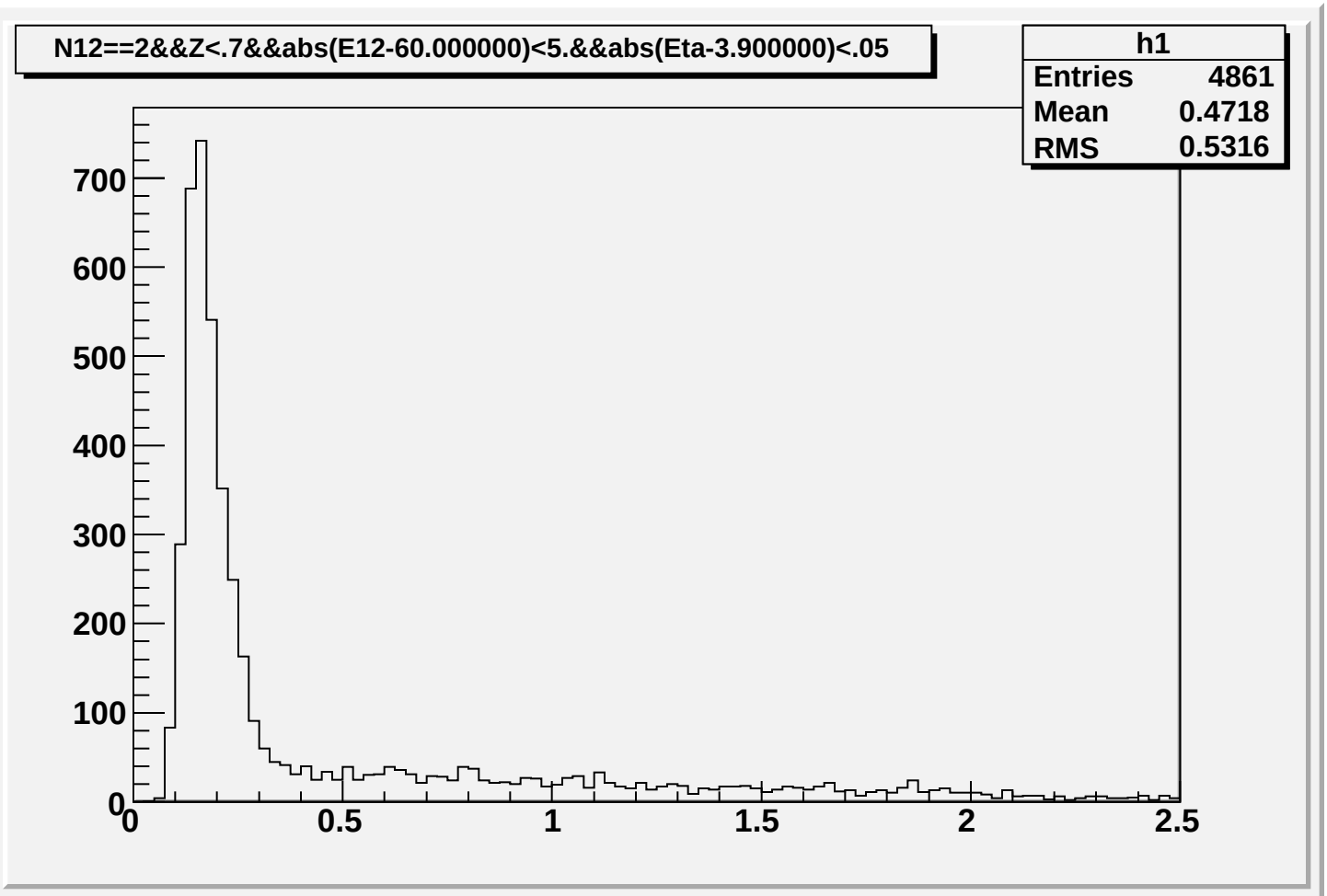

N12==2&&Z<.7&&abs(E12-30.000000)<5.&&abs(Eta-3.900000)<.05
h2
Entries 10523
Mean 0.5529
RMS 0.4519
240
220
200
180
160
140
120
100
80
60
40
20
0
0
0.5
1
1.5
2
2.5

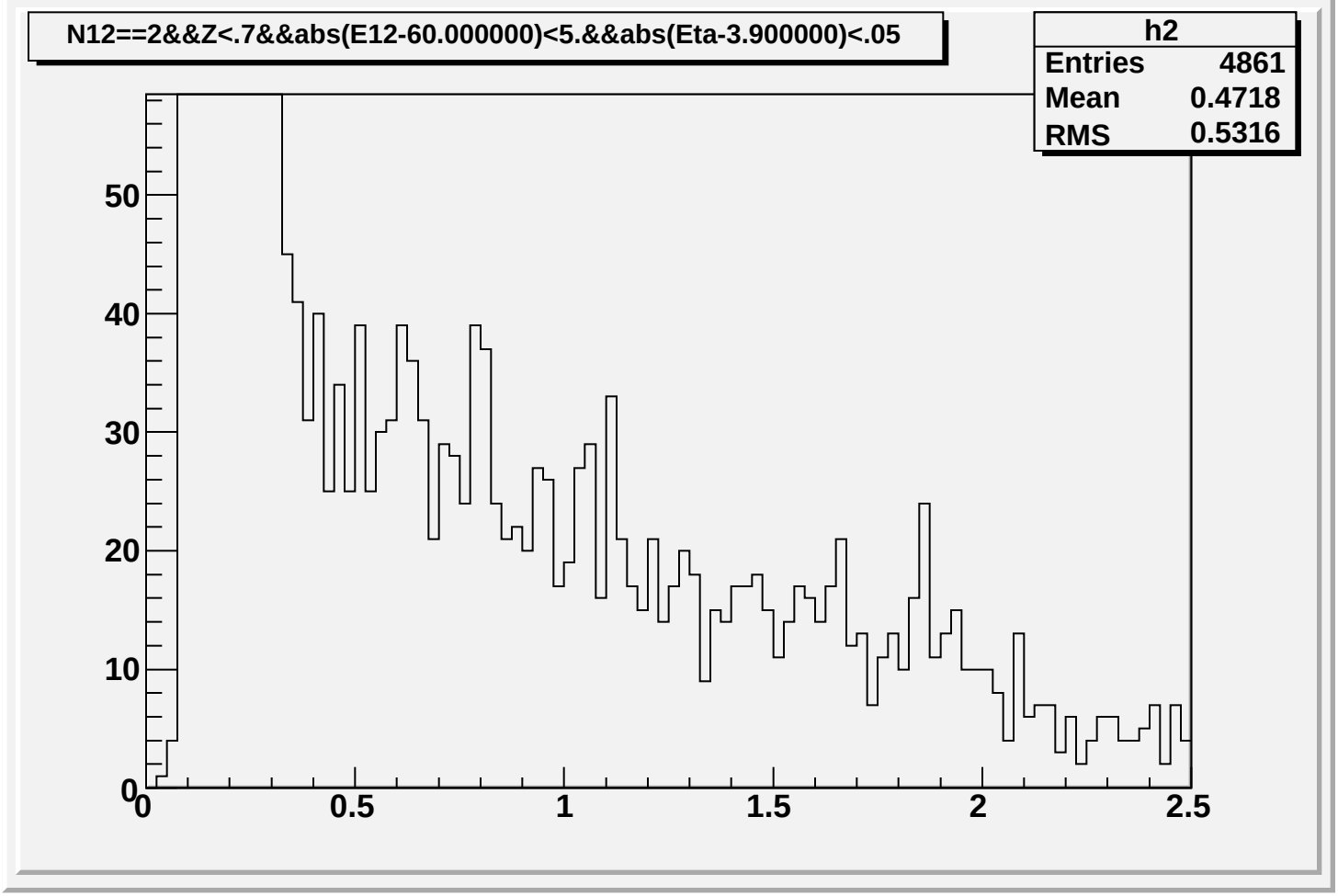

N12==2&&Z<.7&&abs(E12-40.000000)<5.&&abs(Eta-3.900000)<.05
h1
Entries 15925
Mean 0.6106
RMS 0.5244
2000
1800
1600
1400
1200
1000
800
600
400
200
0
0
0.5
1
1.5
2
2.5

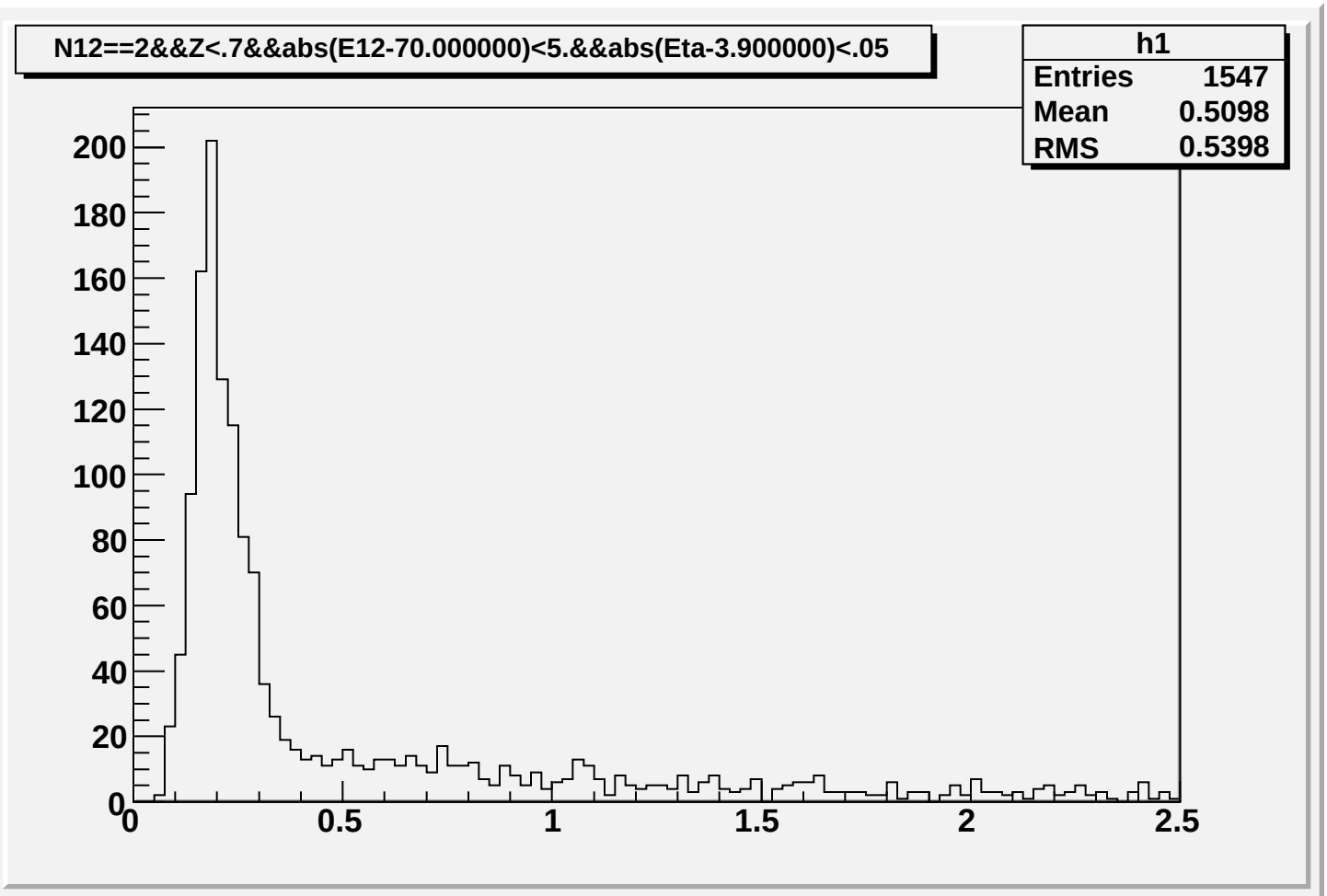

N12==2&&Z<.7&&abs(E12-40.000000)<5.&&abs(Eta-3.900000)<.05
h2
Entries 15925
Mean 0.6106
RMS 0.5244
250
200
150
100
50
0
0
0.5
1
1.5
2
2.5

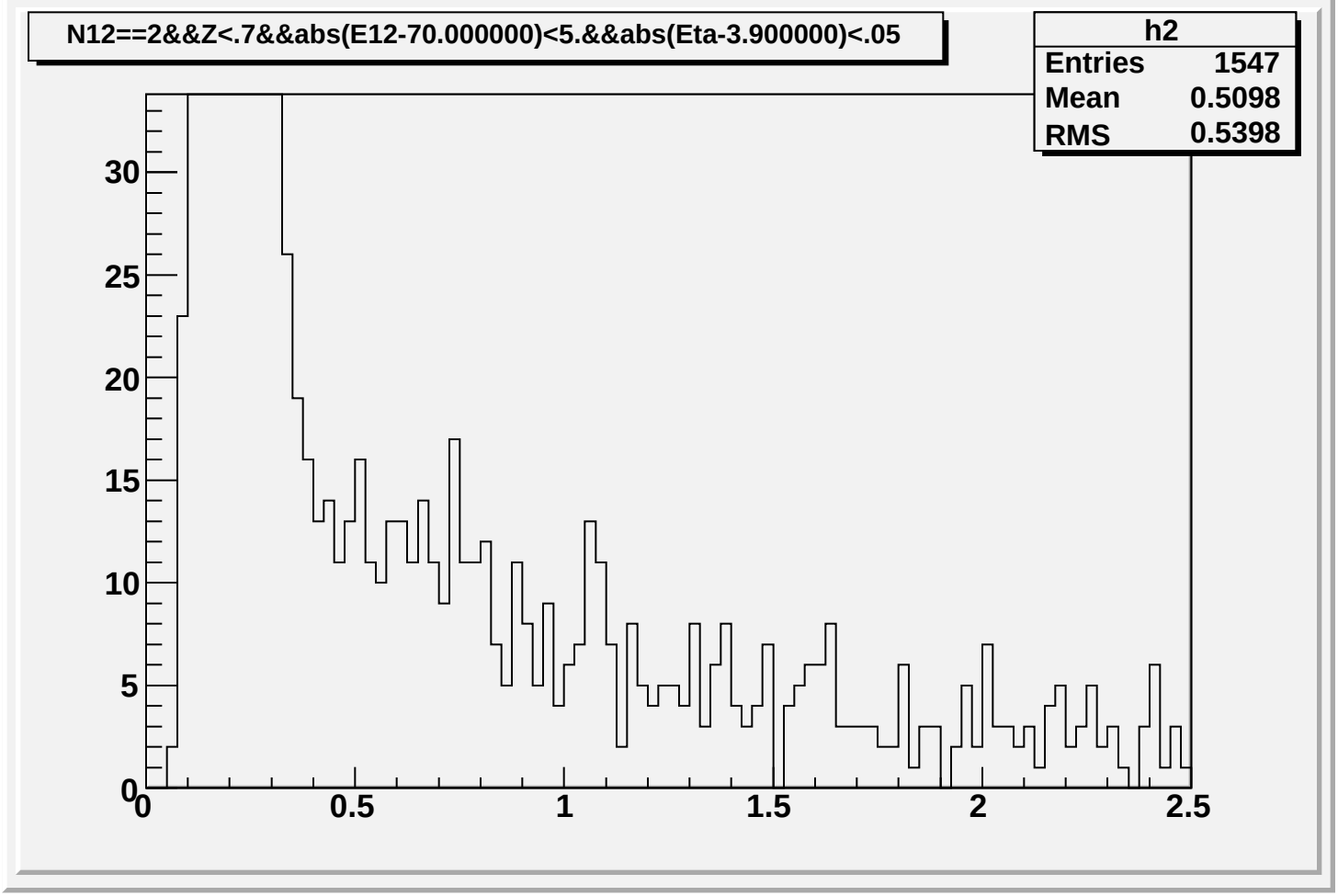

N12==2&&Z<.7&&abs(E12-50.000000)<5.&&abs(Eta-3.900000)<.05
h1
Entries 10759
Mean 0.5441
RMS 0.5585
1600
1400
1200
1000
800
600
400
200
0
0
0.5
1
1.5
2
2.5

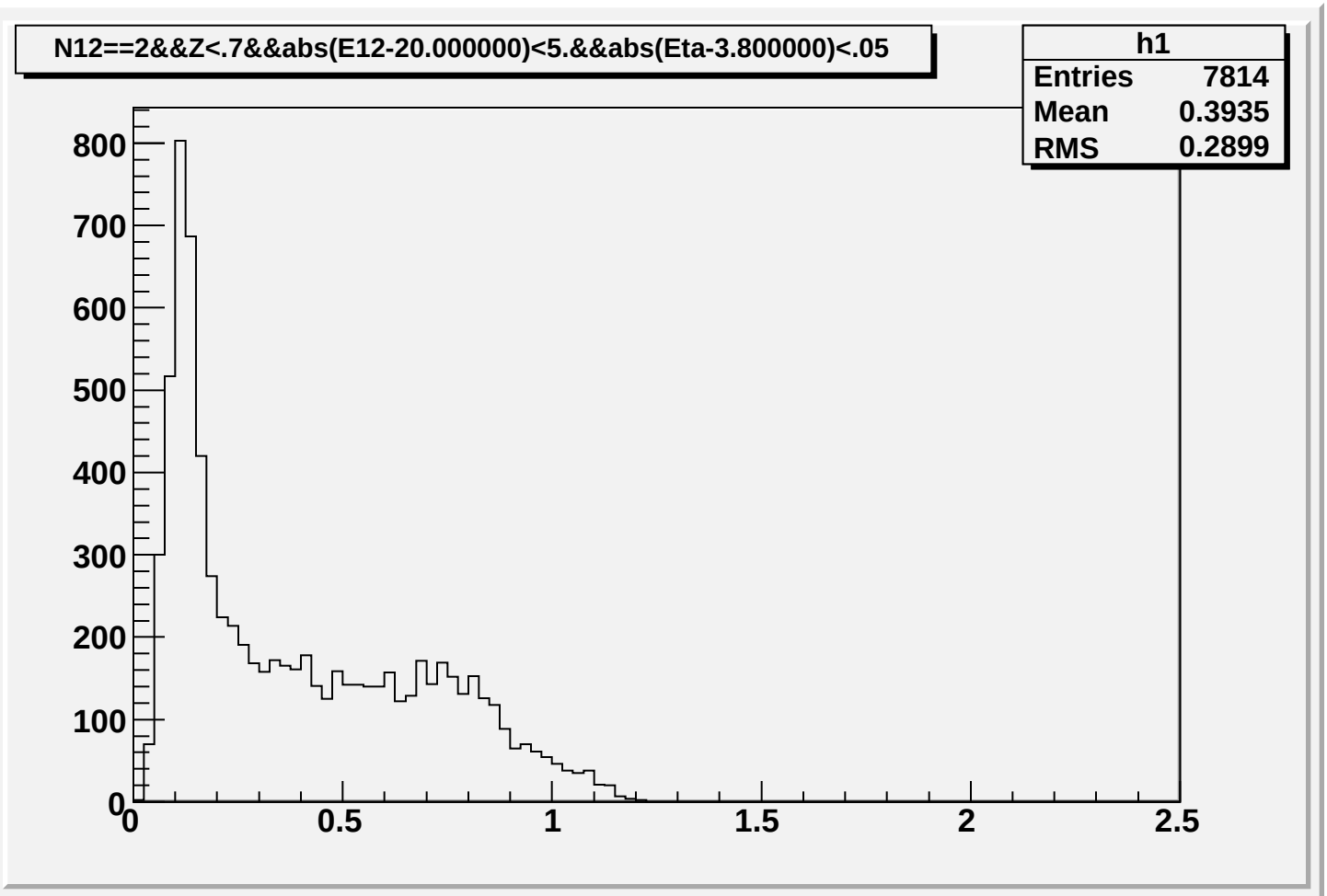

N12==2&&Z<.7&&abs(E12-50.000000)<5.&&abs(Eta-3.900000)<.05
h2
Entries 10759
Mean 0.5441
RMS 0.5585
120
100
80
60
40
20
0
0
0.5
1
1.5
2
2.5

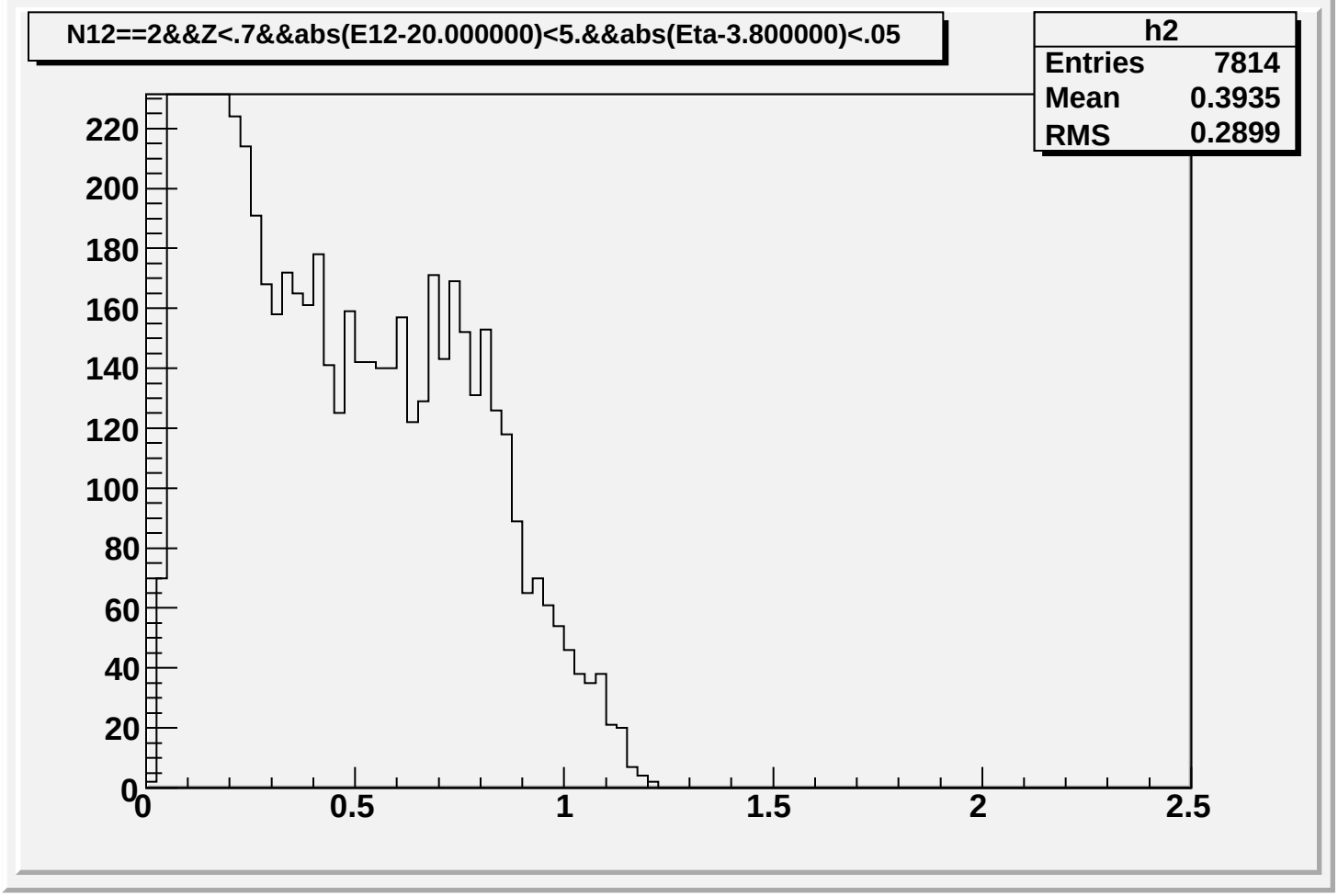

N12==2&&Z<.7&&abs(E12-60.000000)<5.&&abs(Eta-3.900000)<.05
h1
Entries 4861
Mean 0.4718
RMS 0.5316
700
600
500
400
300
200
100
0
0
0.5
1
1.5
2
2.5

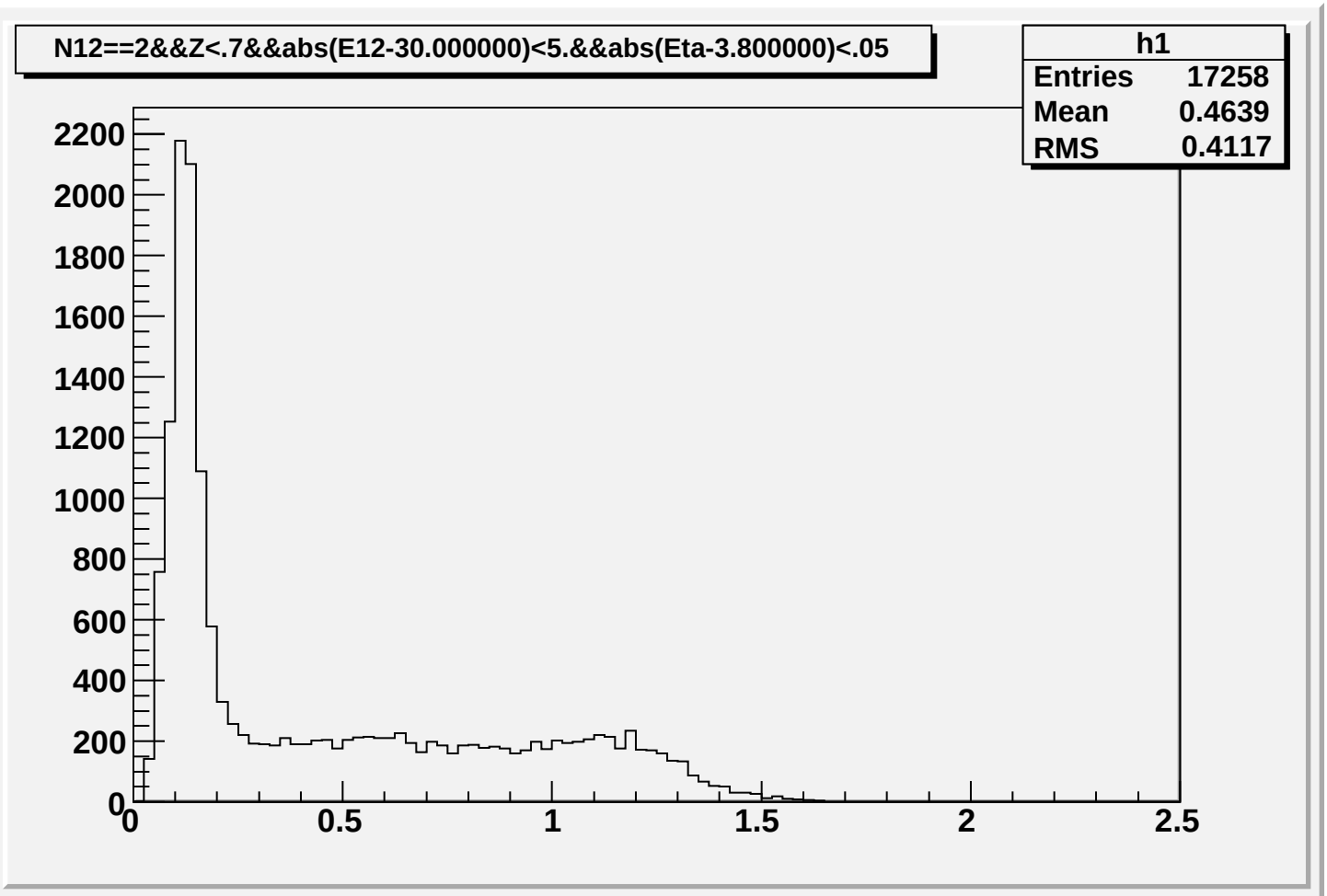

N12==2&&Z<.7&&abs(E12-60.000000)<5.&&abs(Eta-3.900000)<.05
h2
Entries 4861
Mean 0.4718
RMS 0.5316
50
40
30
20
10
0
0
0.5
1
1.5
2
2.5

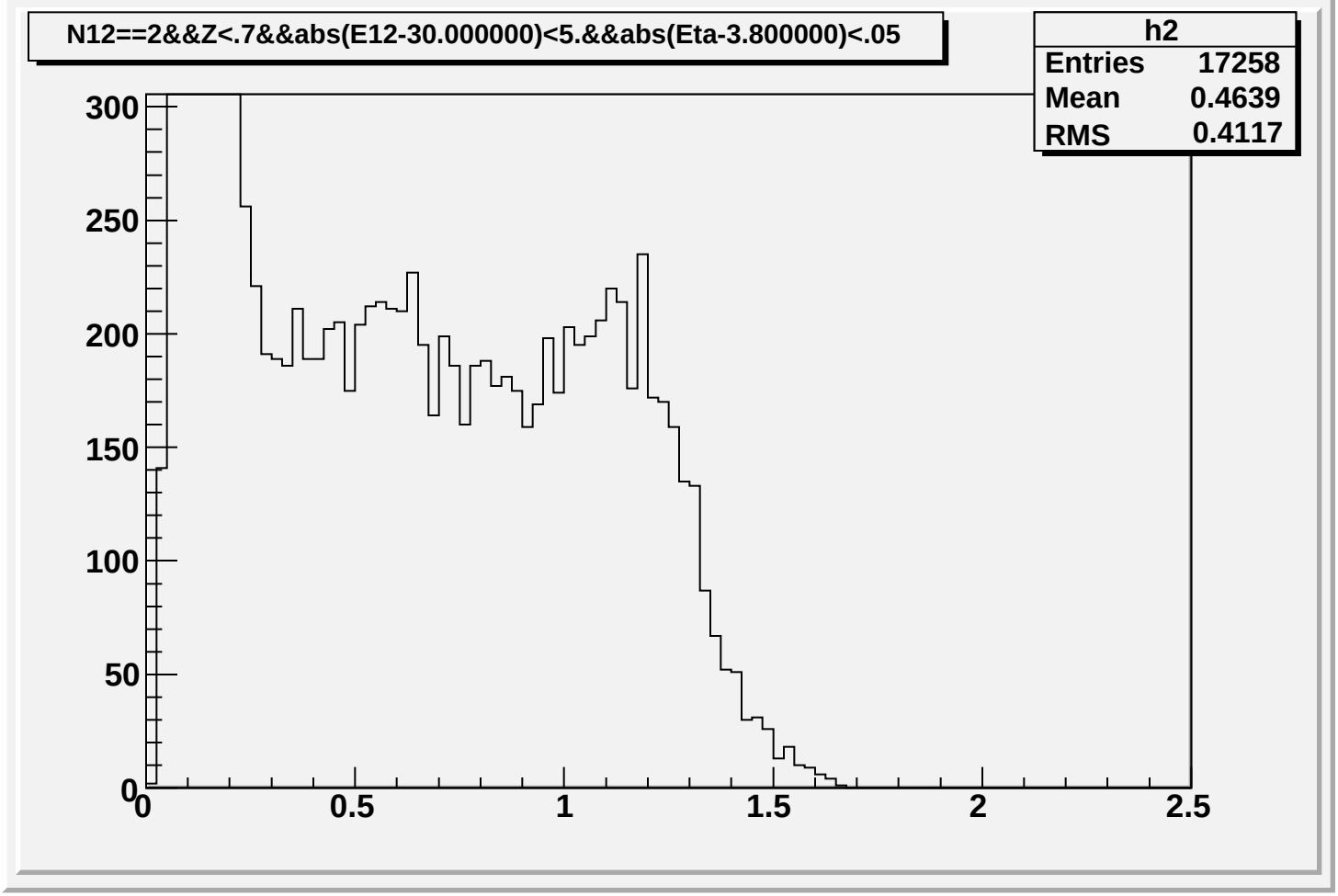

N12==2&&Z<.7&&abs(E12-70.000000)<5.&&abs(Eta-3.900000)<.05
h1
Entries 1547
Mean 0.5098
RMS 0.5398
200
180
160
140
120
100
80
60
40
20
0
0
0.5
1
1.5
2
2.5

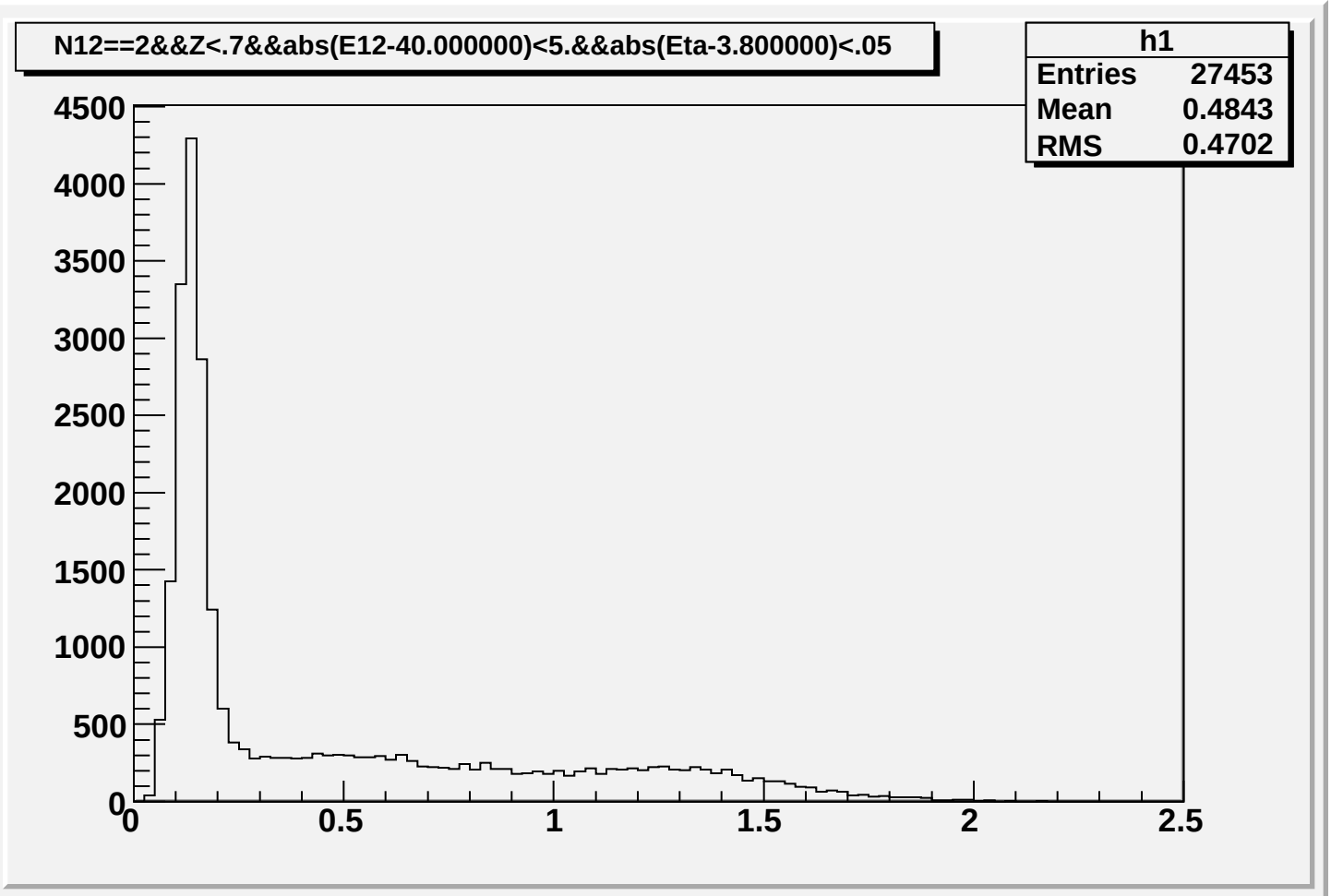

N12==2&&Z<.7&&abs(E12-70.000000)<5.&&abs(Eta-3.900000)<.05
h2
Entries 1547
Mean 0.5098
RMS 0.5398
30
25
20
15
10
5
0
0
0.5
1
1.5
2
2.5

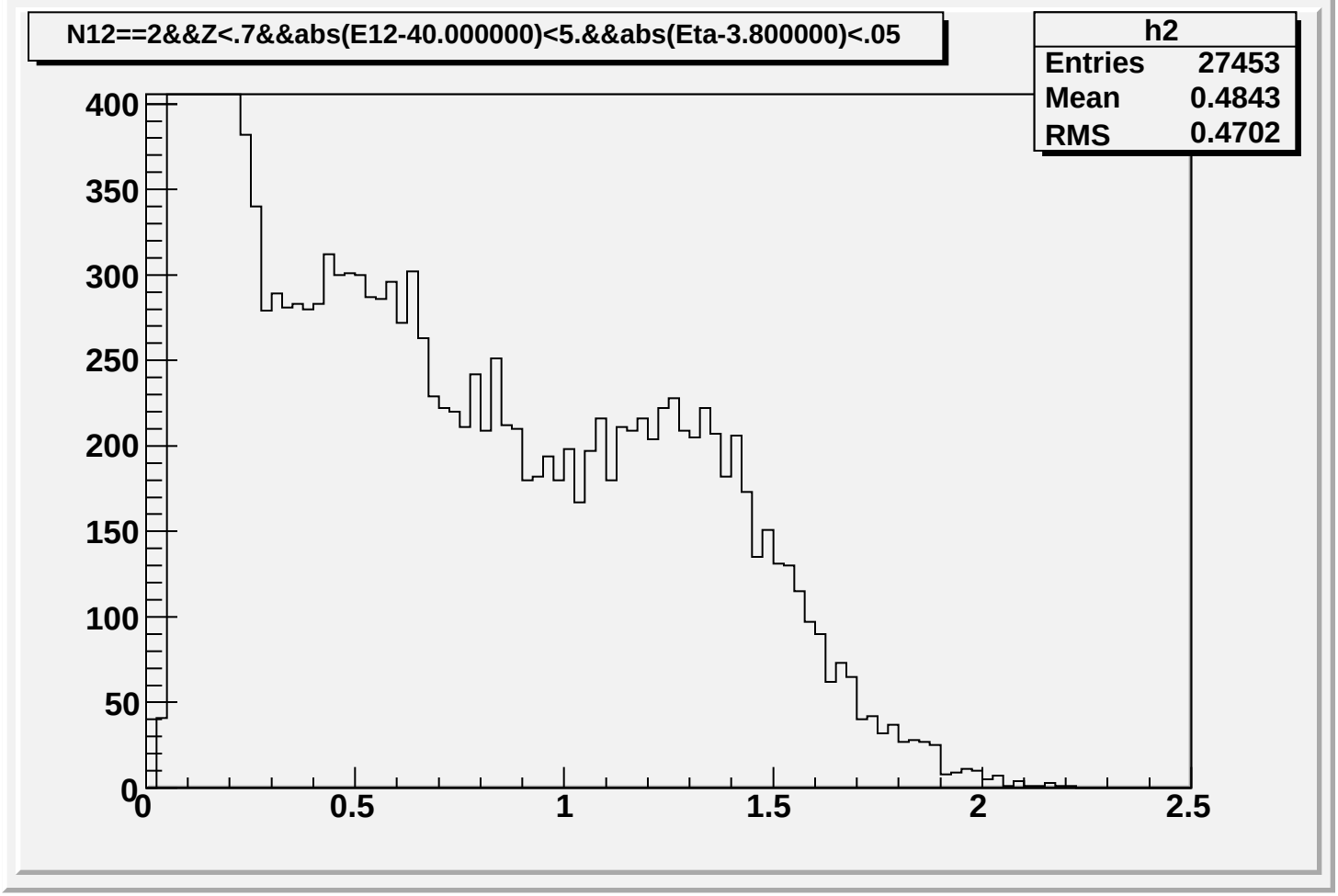

N12==2&&Z<.7&&abs(E12-20.000000)<5.&&abs(Eta-3.800000)<.05
h1
Entries 7814
Mean 0.3935
RMS 0.2899
800
700
600
500
400
300
200
100
0
0
0.5
1
1.5
2
2.5

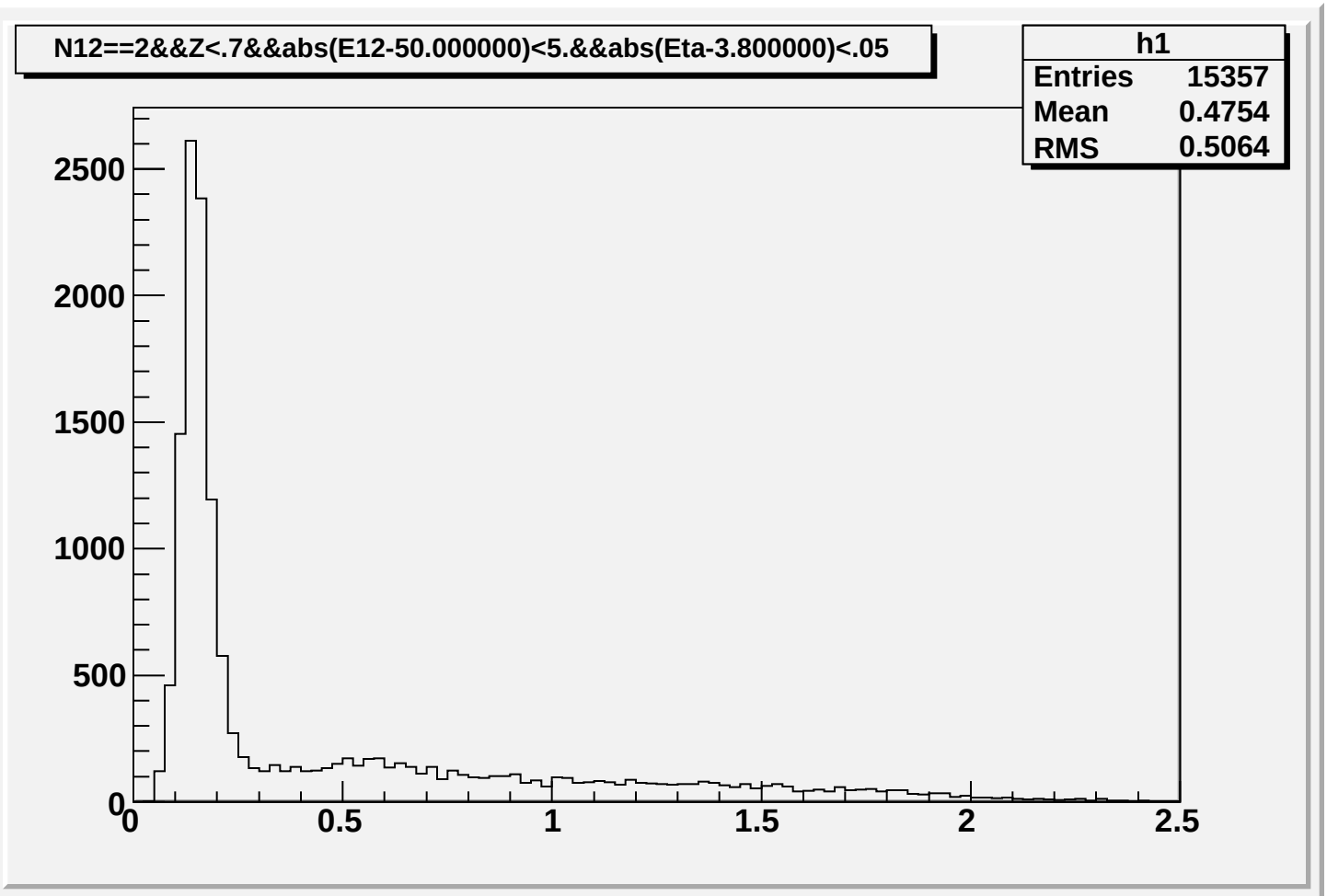

N12==2&&Z<.7&&abs(E12-20.000000)<5.&&abs(Eta-3.800000)<.05
h2
Entries 7814
Mean 0.3935
RMS 0.2899
220
200
180
160
140
120
100
80
60
40
20
0
0
0.5
1
1.5
2
2.5

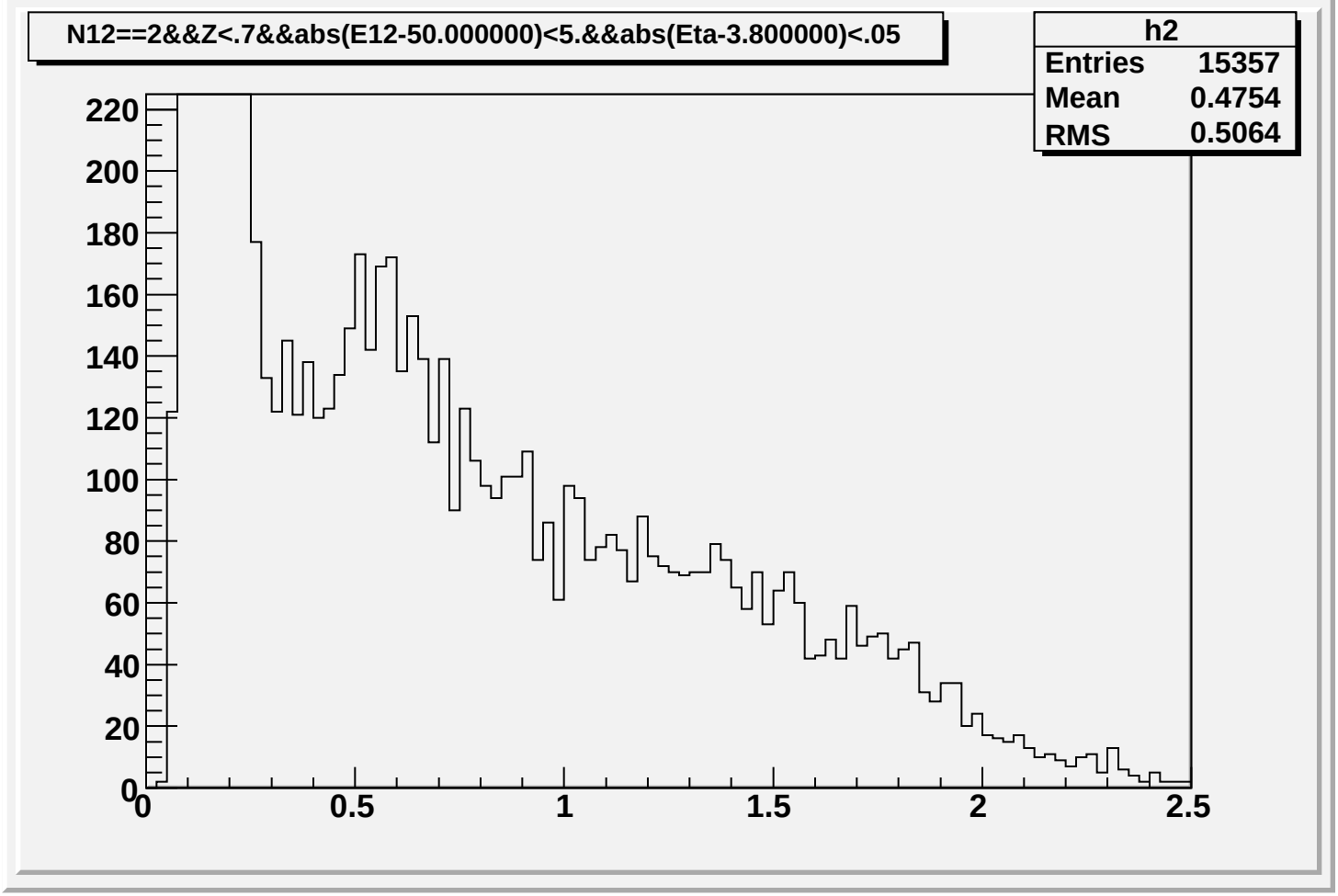

N12==2&&Z<.7&&abs(E12-30.000000)<5.&&abs(Eta-3.800000)<.05
h1
Entries 17258
Mean 0.4639
RMS 0.4117
2200
2000
1800
1600
1400
1200
1000
800
600
400
200
0
0
0.5
1
1.5
2
2.5

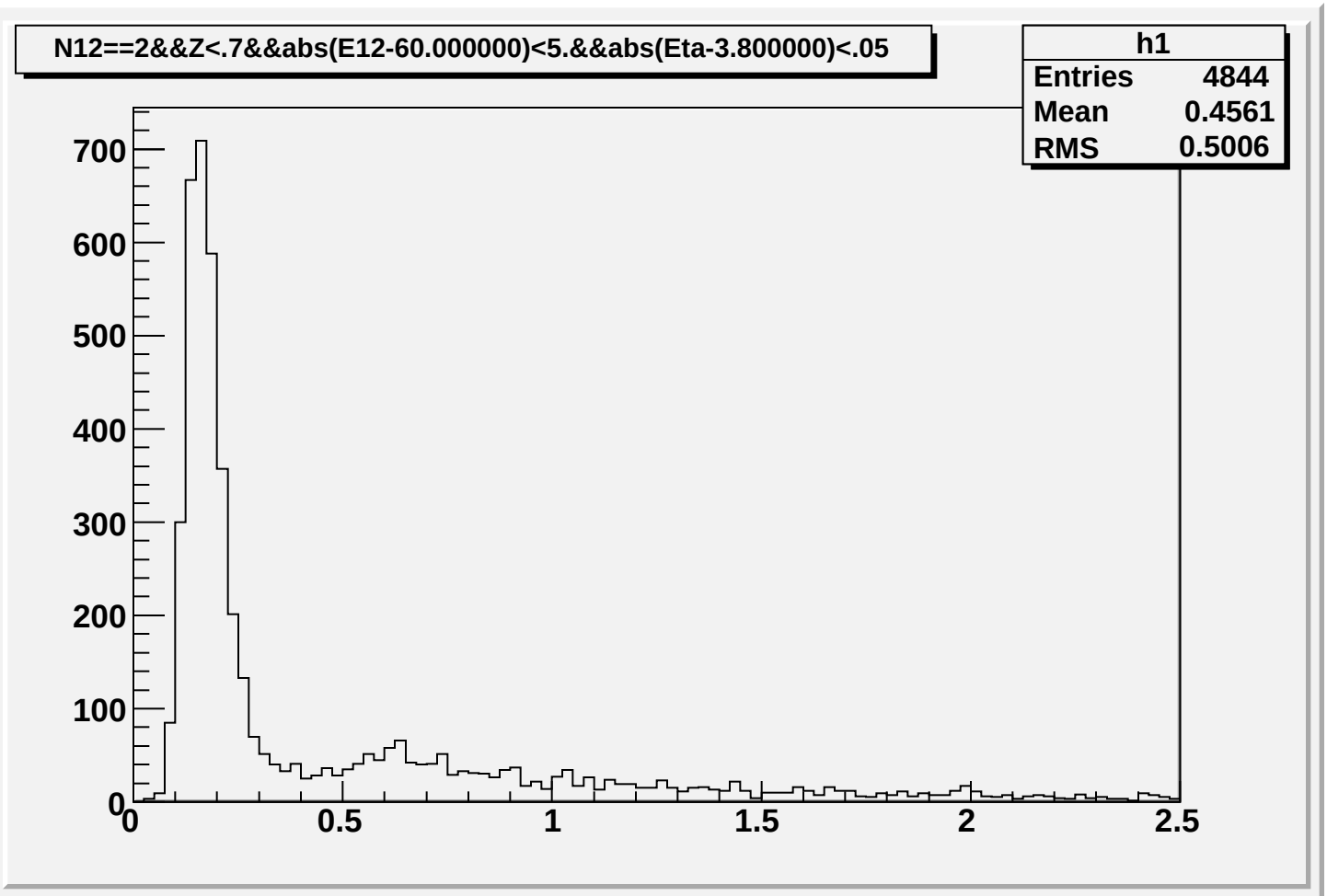

N12==2&&Z<.7&&abs(E12-30.000000)<5.&&abs(Eta-3.800000)<.05
h2
Entries 17258
Mean 0.4639
RMS 0.4117
300
250
200
150
100
50
0
0
0.5
1
1.5
2
2.5

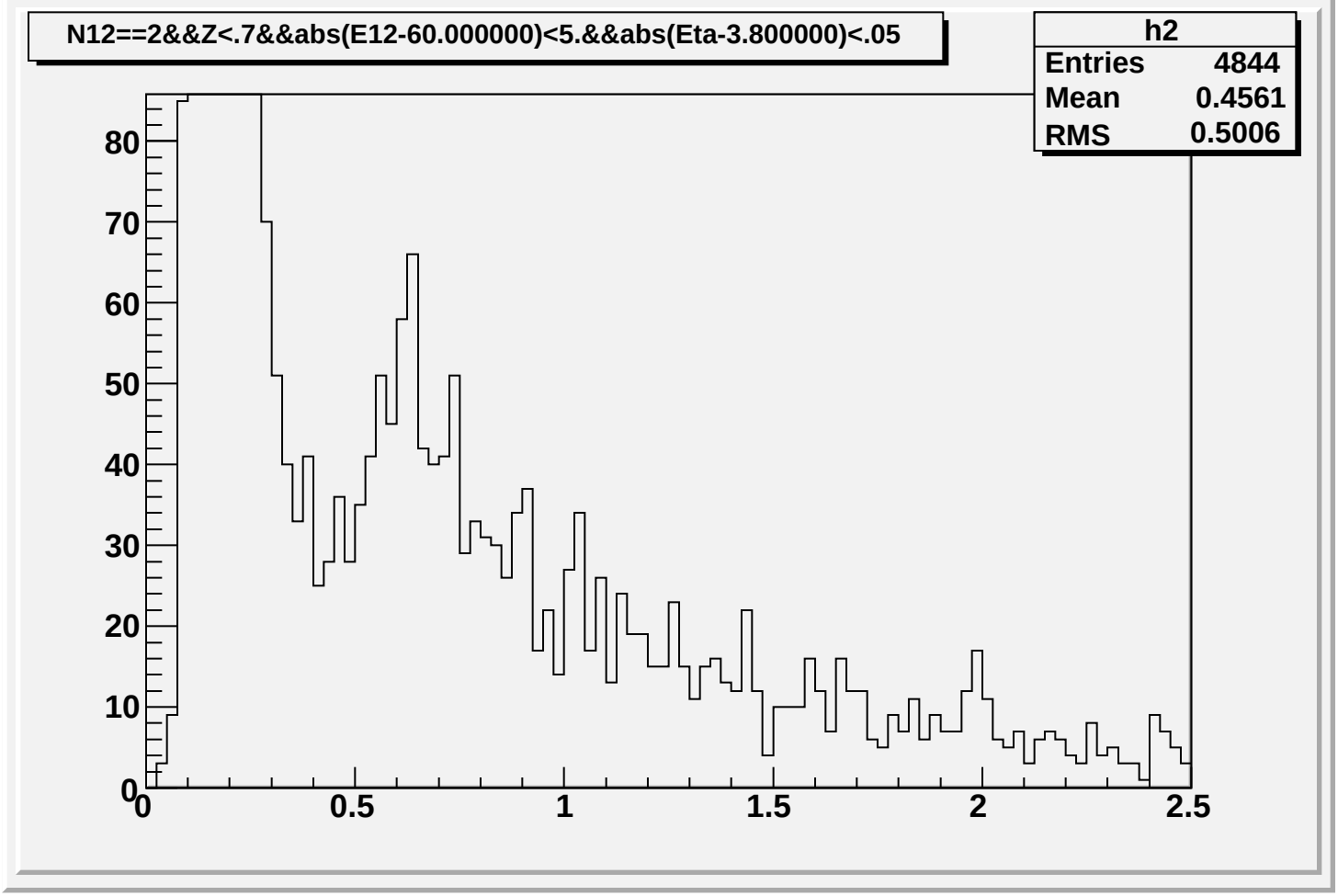

N12==2&&Z<.7&&abs(E12-40.000000)<5.&&abs(Eta-3.800000)<.05
h1
Entries 27453
Mean 0.4843
RMS 0.4702
4500
4000
3500
3000
2500
2000
1500
1000
500
0
0
0.5
1
1.5
2
2.5

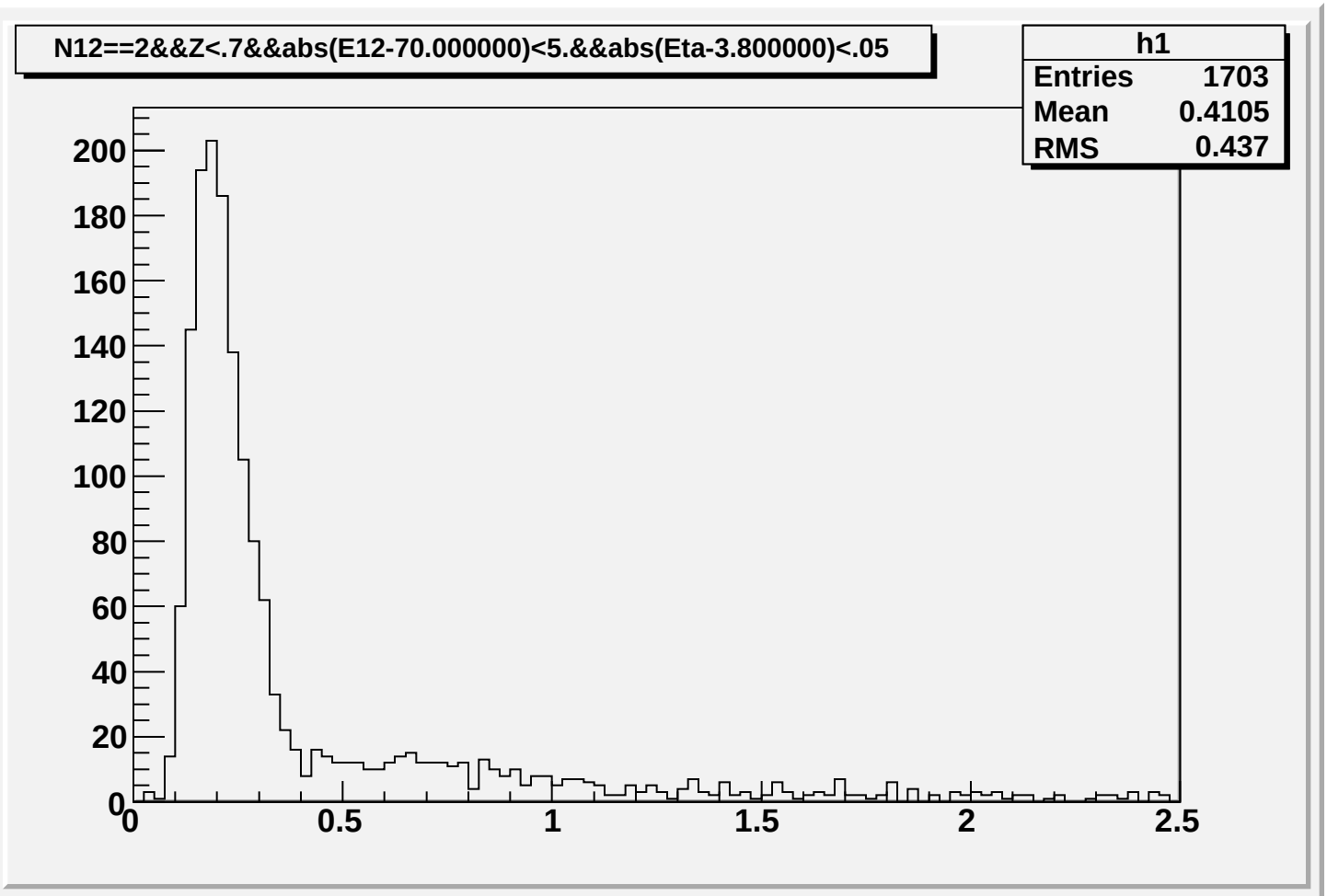

N12==2&&Z<.7&&abs(E12-40.000000)<5.&&abs(Eta-3.800000)<.05
h2
Entries 27453
Mean 0.4843
RMS 0.4702
400
350
300
250
200
150
100
50
0
0
0.5
1
1.5
2
2.5

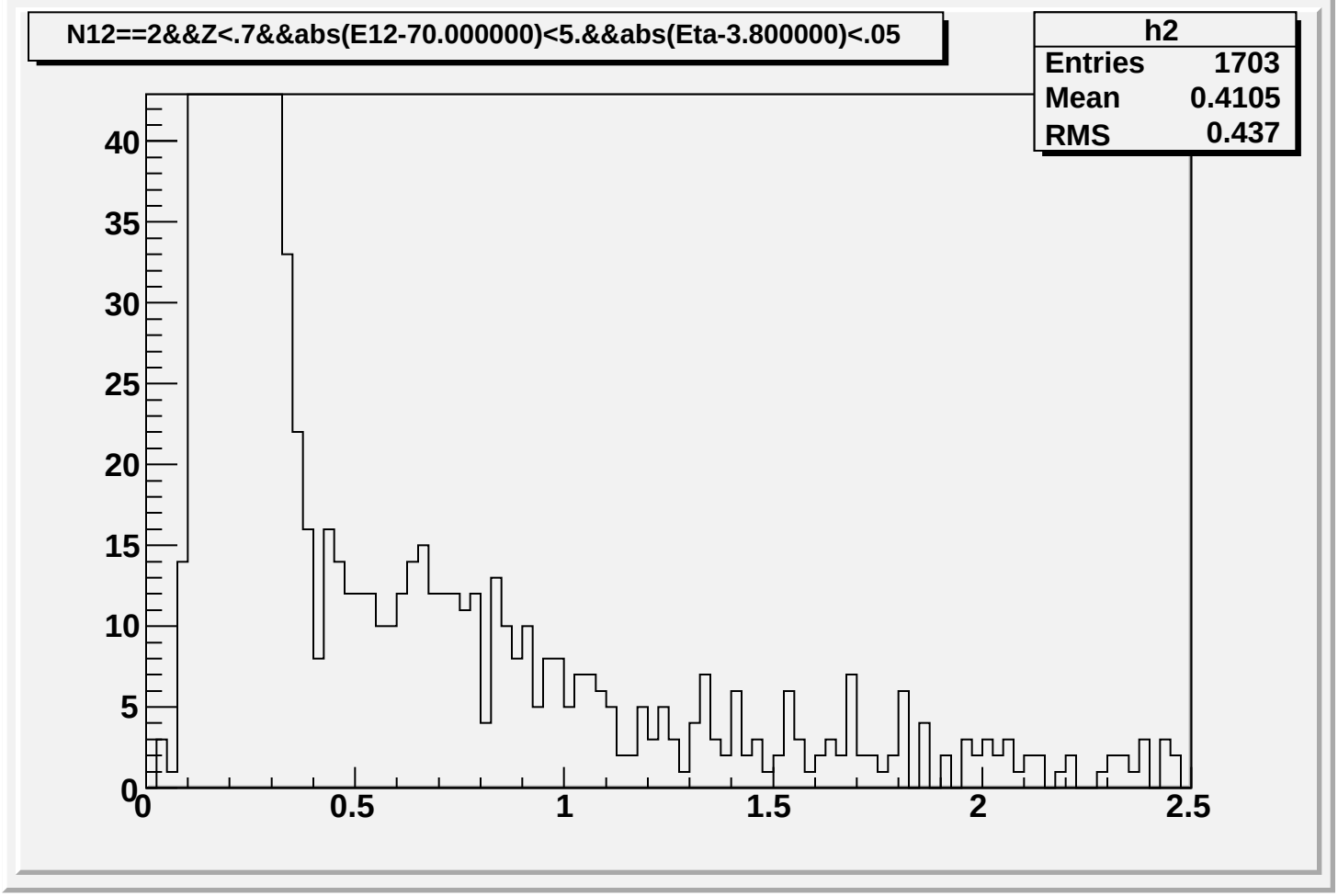

N12==2&&Z<.7&&abs(E12-50.000000)<5.&&abs(Eta-3.800000)<.05
h1
Entries 15357
Mean 0.4754
RMS 0.5064
2500
2000
1500
1000
500
0
0
0.5
1
1.5
2
2.5

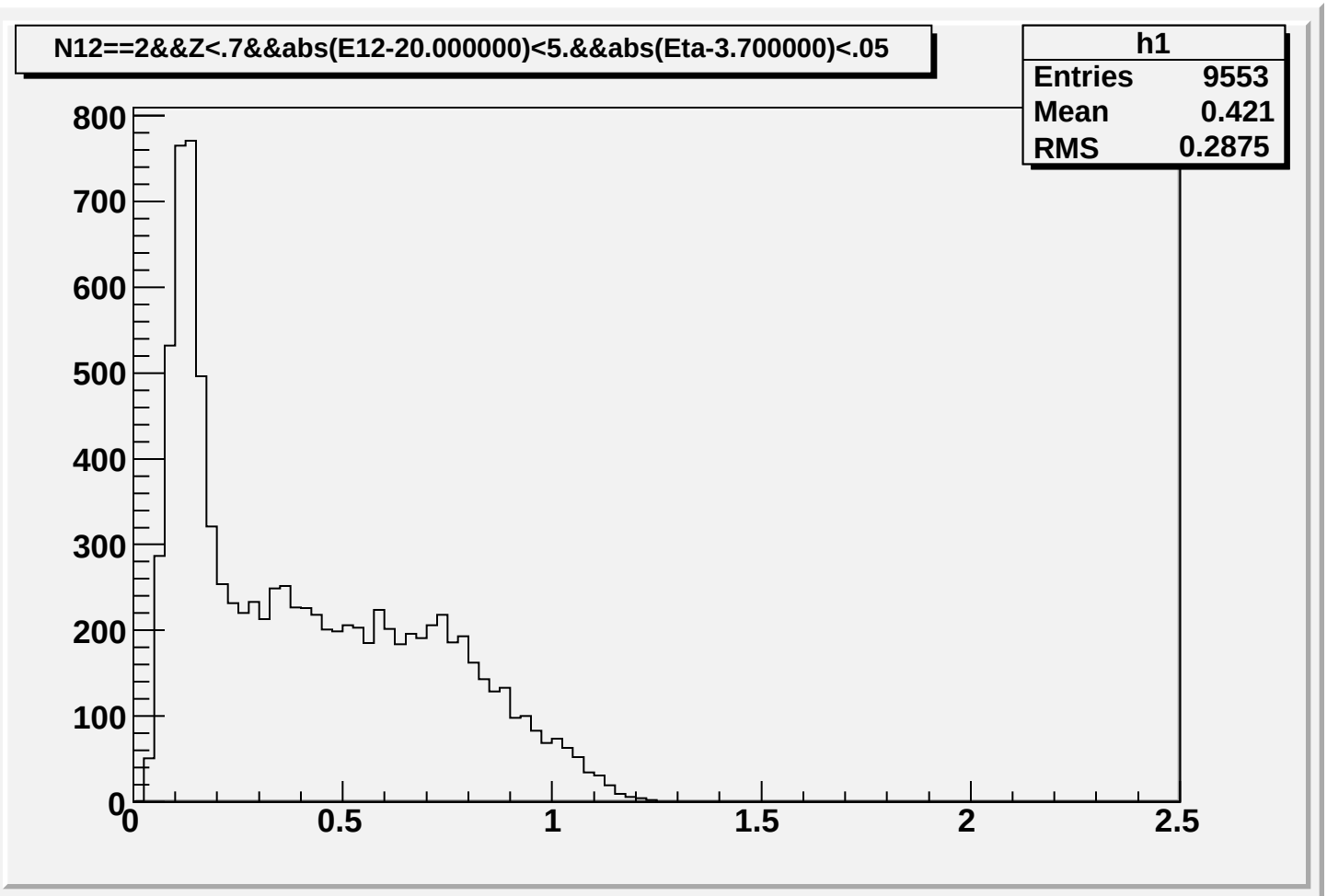

N12==2&&Z<.7&&abs(E12-50.000000)<5.&&abs(Eta-3.800000)<.05
h2
Entries 15357
Mean 0.4754
RMS 0.5064
220
200
180
160
140
120
100
80
60
40
20
0
0
0.5
1
1.5
2
2.5

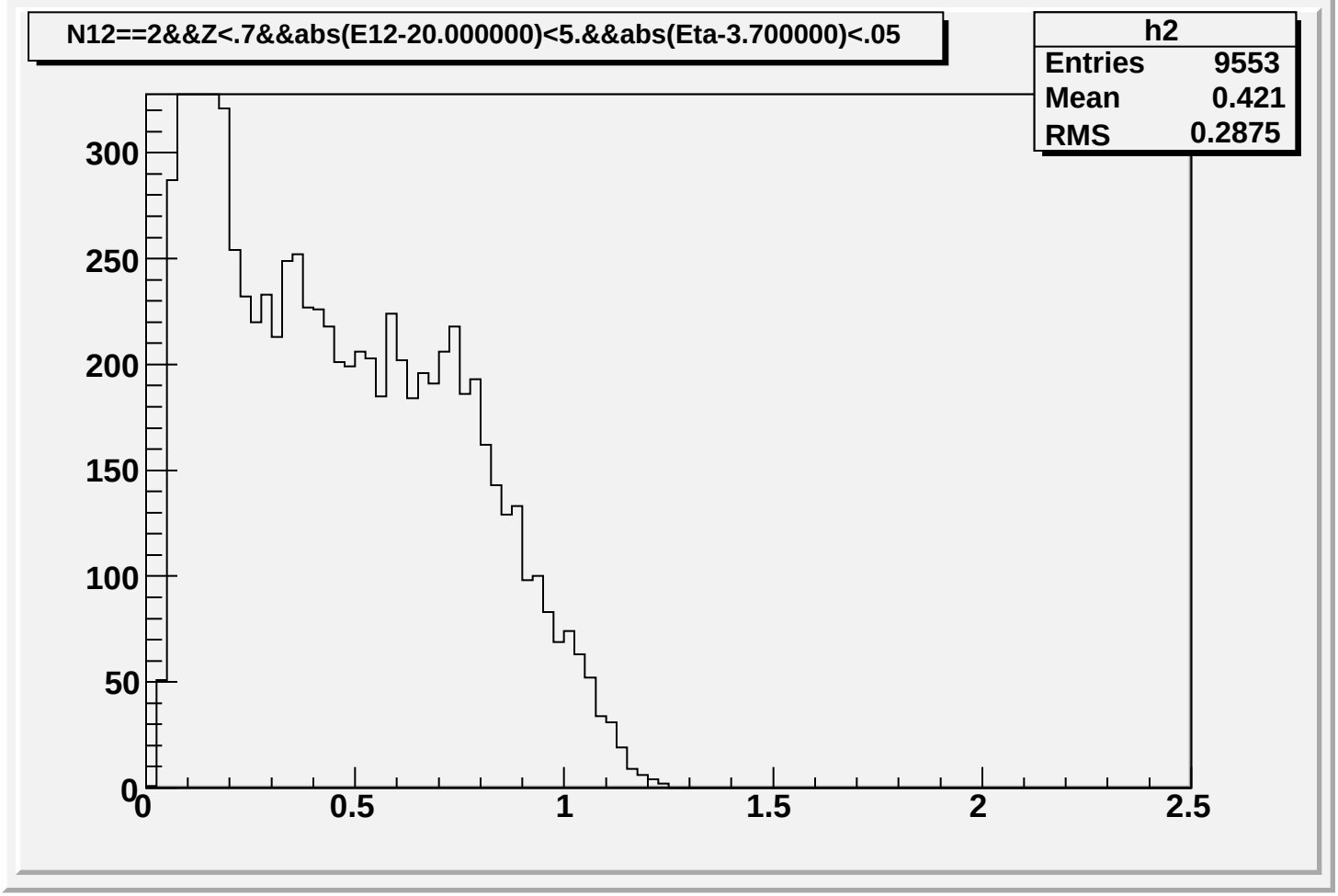

N12==2&&Z<.7&&abs(E12-60.000000)<5.&&abs(Eta-3.800000)<.05
h1
Entries 4844
Mean 0.4561
RMS 0.5006
700
600
500
400
300
200
100
0
0
0.5
1
1.5
2
2.5

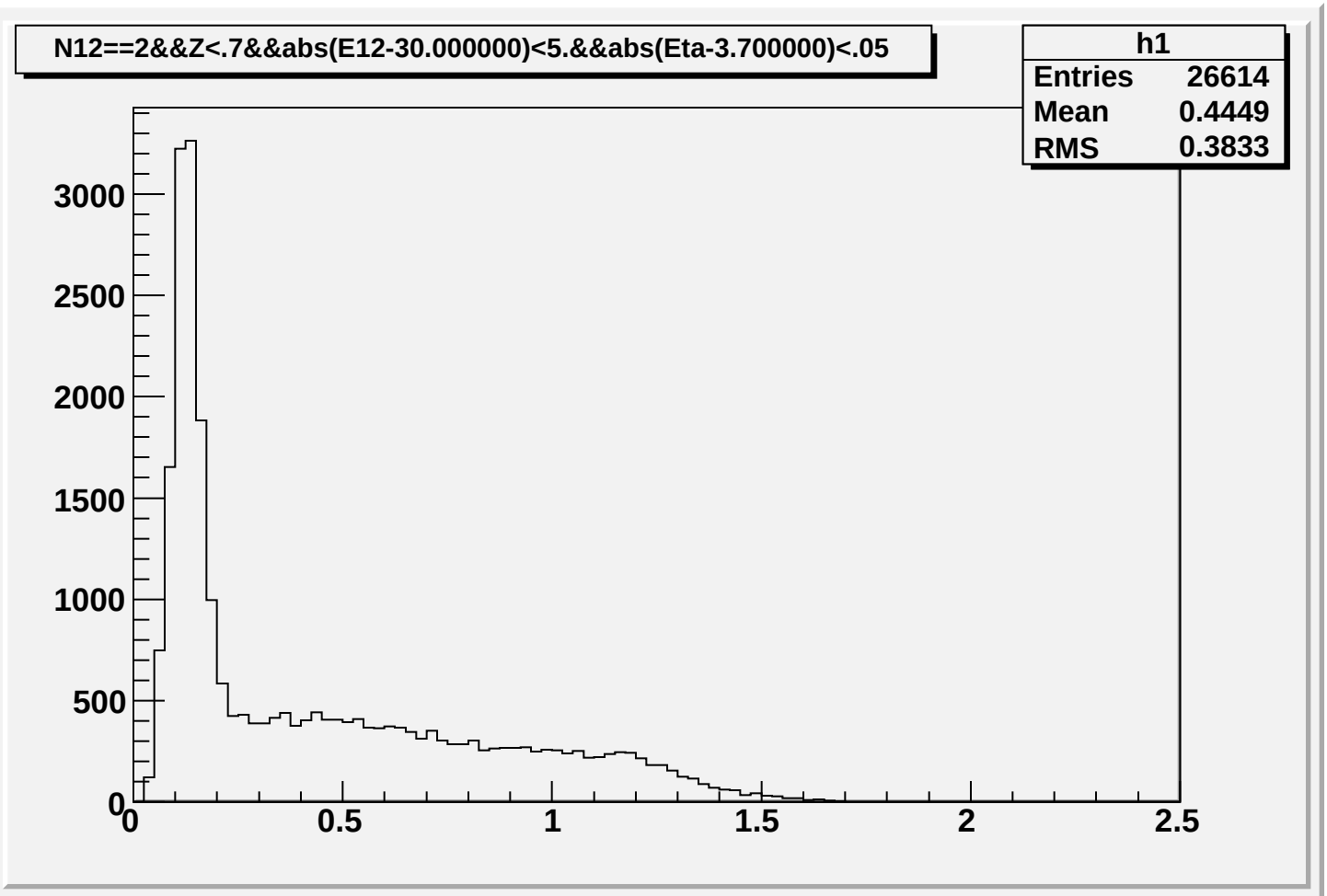

N12==2&&Z<.7&&abs(E12-60.000000)<5.&&abs(Eta-3.800000)<.05
h2
Entries 4844
Mean 0.4561
RMS 0.5006
80
70
60
50
40
30
20
10
0
0
0.5
1
1.5
2
2.5

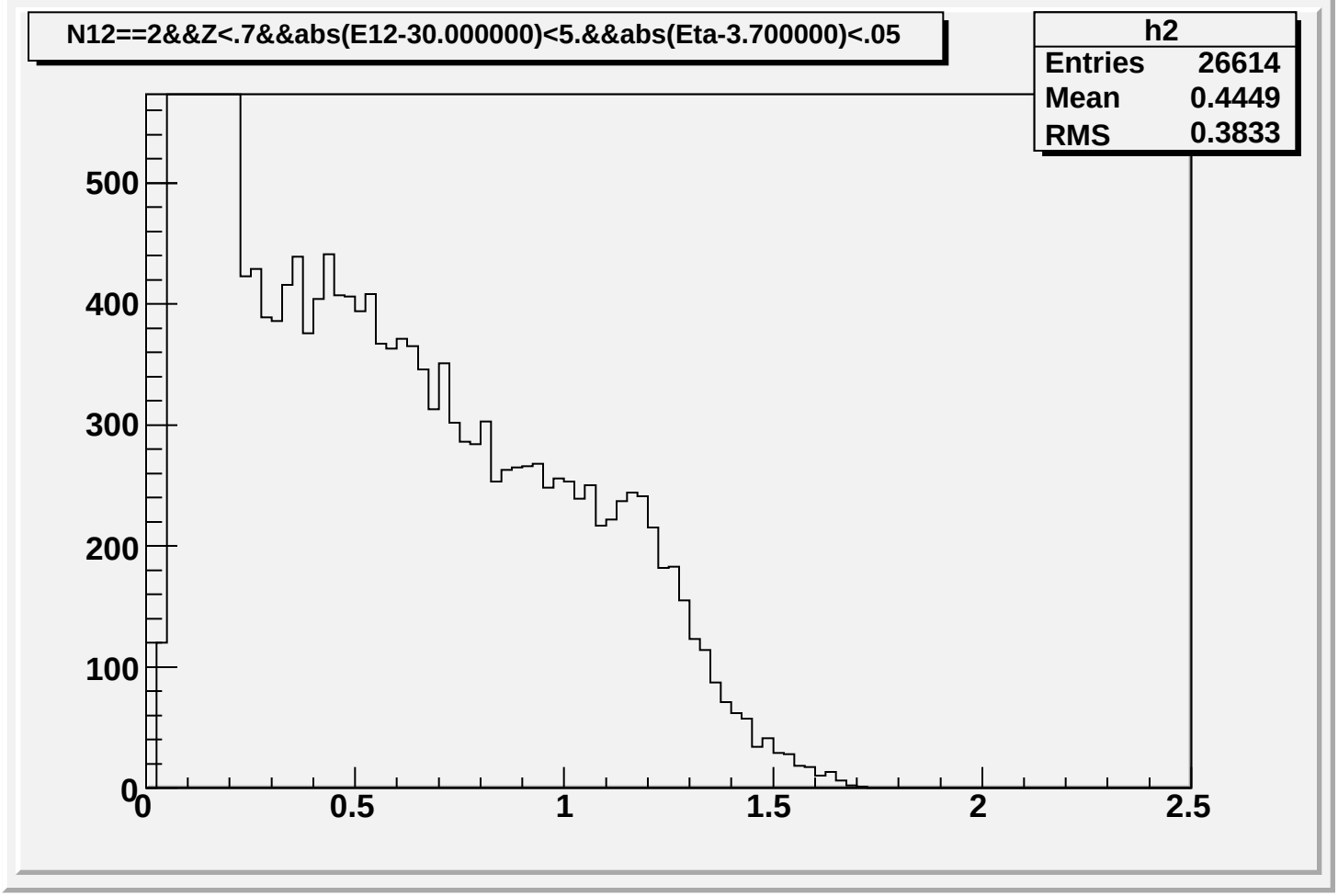

N12==2&&Z<.7&&abs(E12-70.000000)<5.&&abs(Eta-3.800000)<.05
h1
Entries 1703
Mean 0.4105
RMS 0.437
200
180
160
140
120
100
80
60
40
20
0
0
0.5
1
1.5
2
2.5

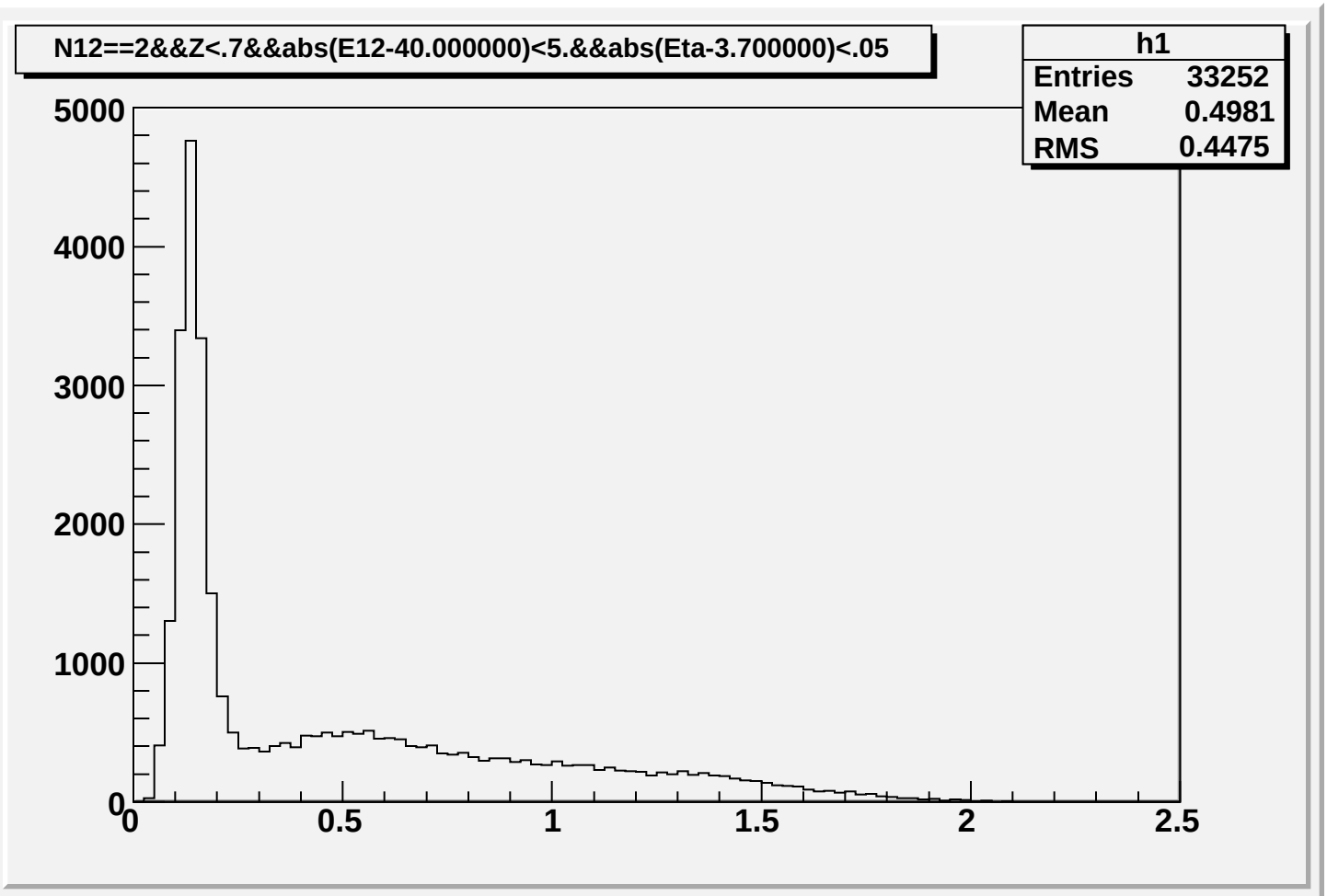

N12==2&&Z<.7&&abs(E12-70.000000)<5.&&abs(Eta-3.800000)<.05
h2
Entries 1703
Mean 0.4105
RMS 0.437
40
35
30
25
20
15
10
5
0
0
0.5
1
1.5
2
2.5

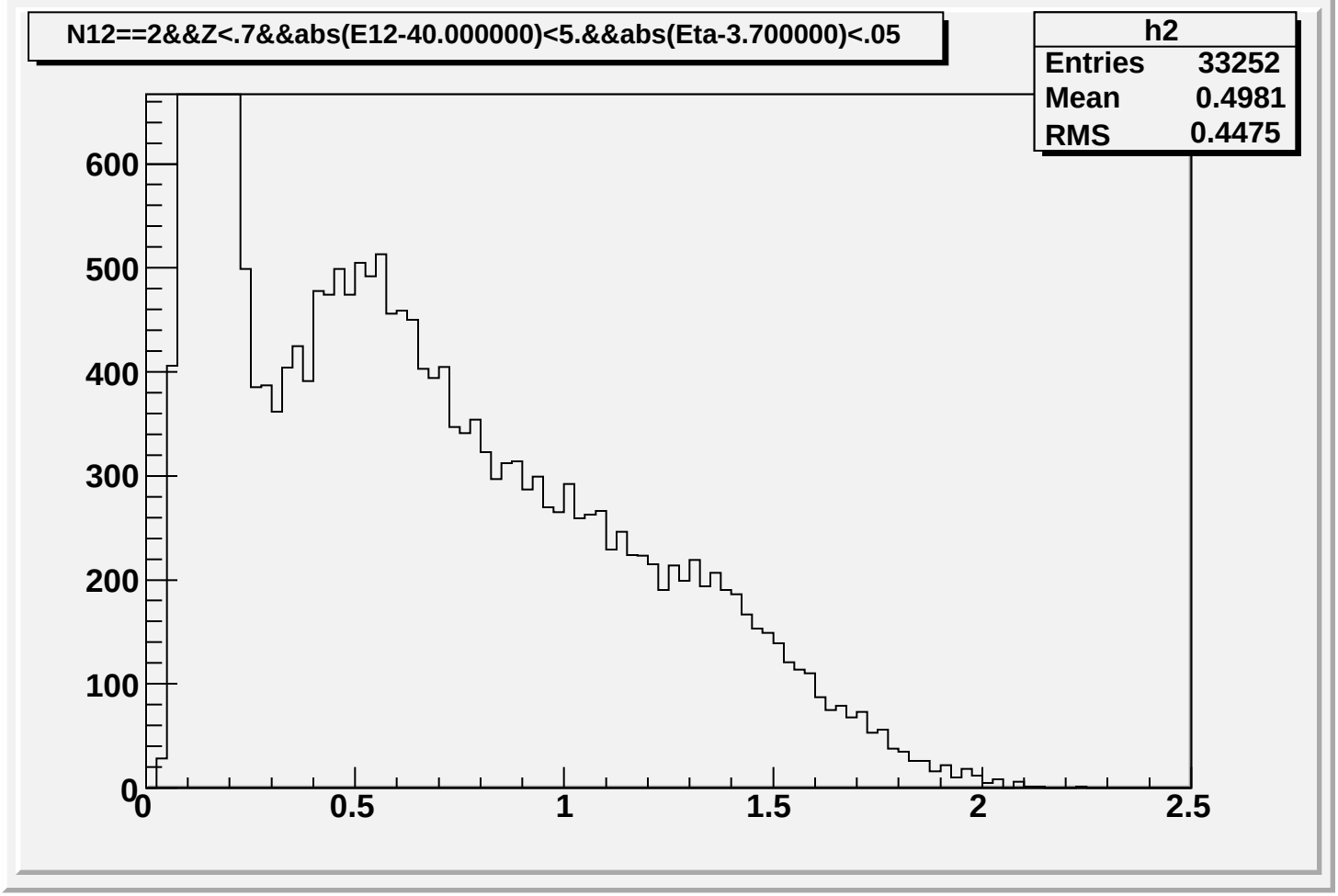

N12==2&&Z<.7&&abs(E12-20.000000)<5.&&abs(Eta-3.700000)<.05
h1
Entries 9553
Mean 0.421
RMS 0.2875
800
700
600
500
400
300
200
100
0
0
0.5
1
1.5
2
2.5

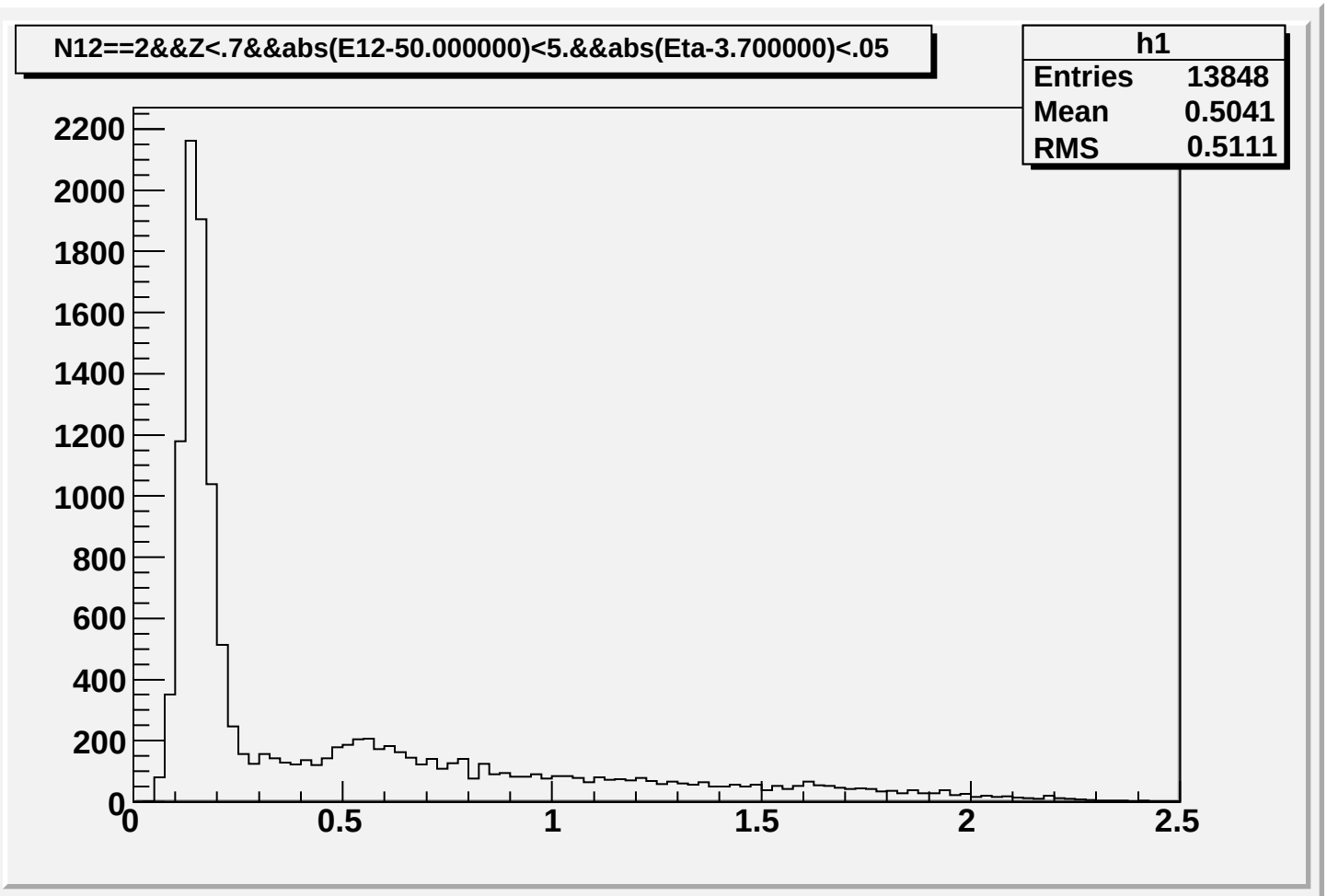

N12==2&&Z<.7&&abs(E12-20.000000)<5.&&abs(Eta-3.700000)<.05
h2
Entries 9553
Mean 0.421
RMS 0.2875
300
250
200
150
100
50
0
0
0.5
1
1.5
2
2.5

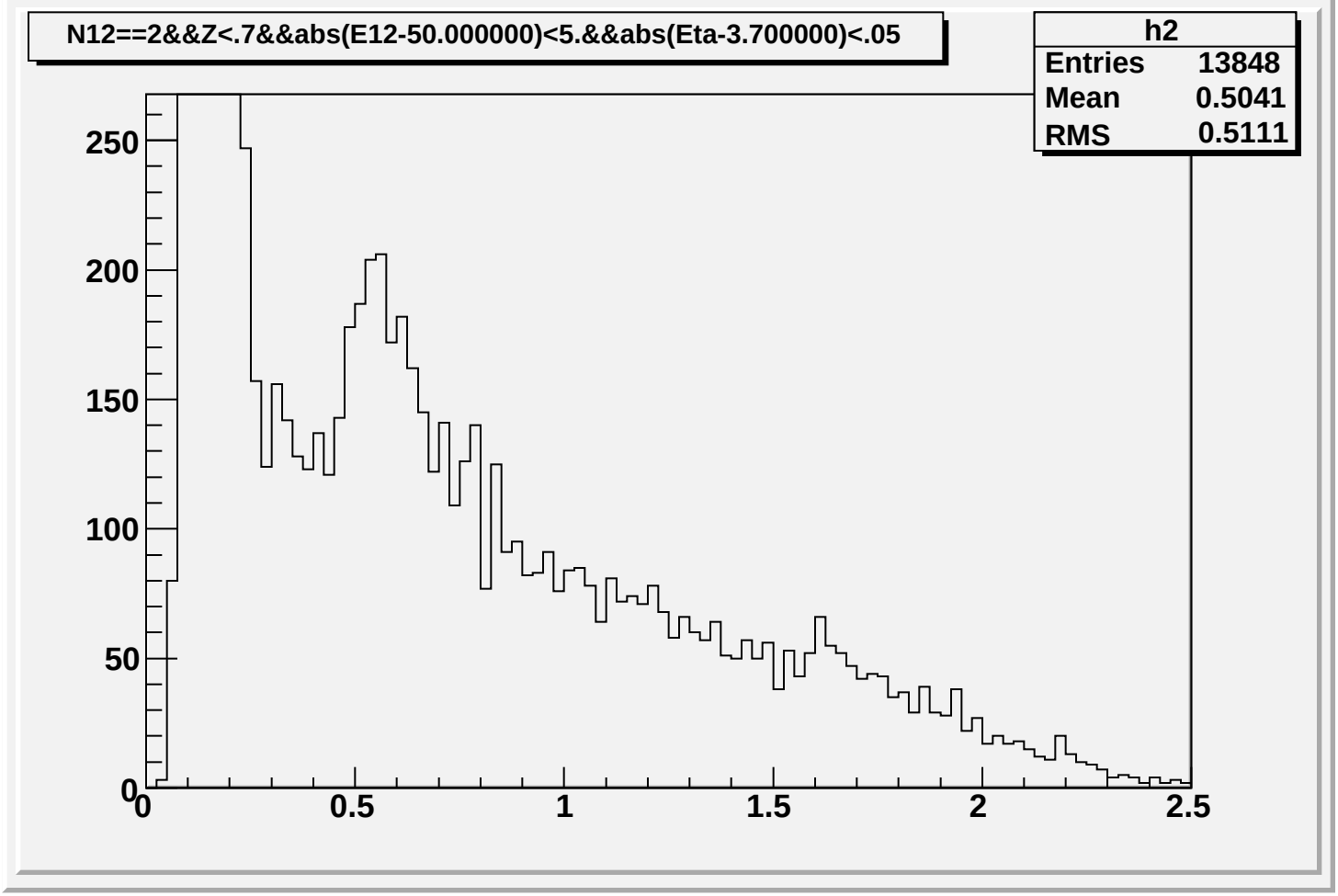

N12==2&&Z<.7&&abs(E12-30.000000)<5.&&abs(Eta-3.700000)<.05
h1
Entries 26614
Mean 0.4449
RMS 0.3833
3000
2500
2000
1500
1000
500
0
0
0.5
1
1.5
2
2.5

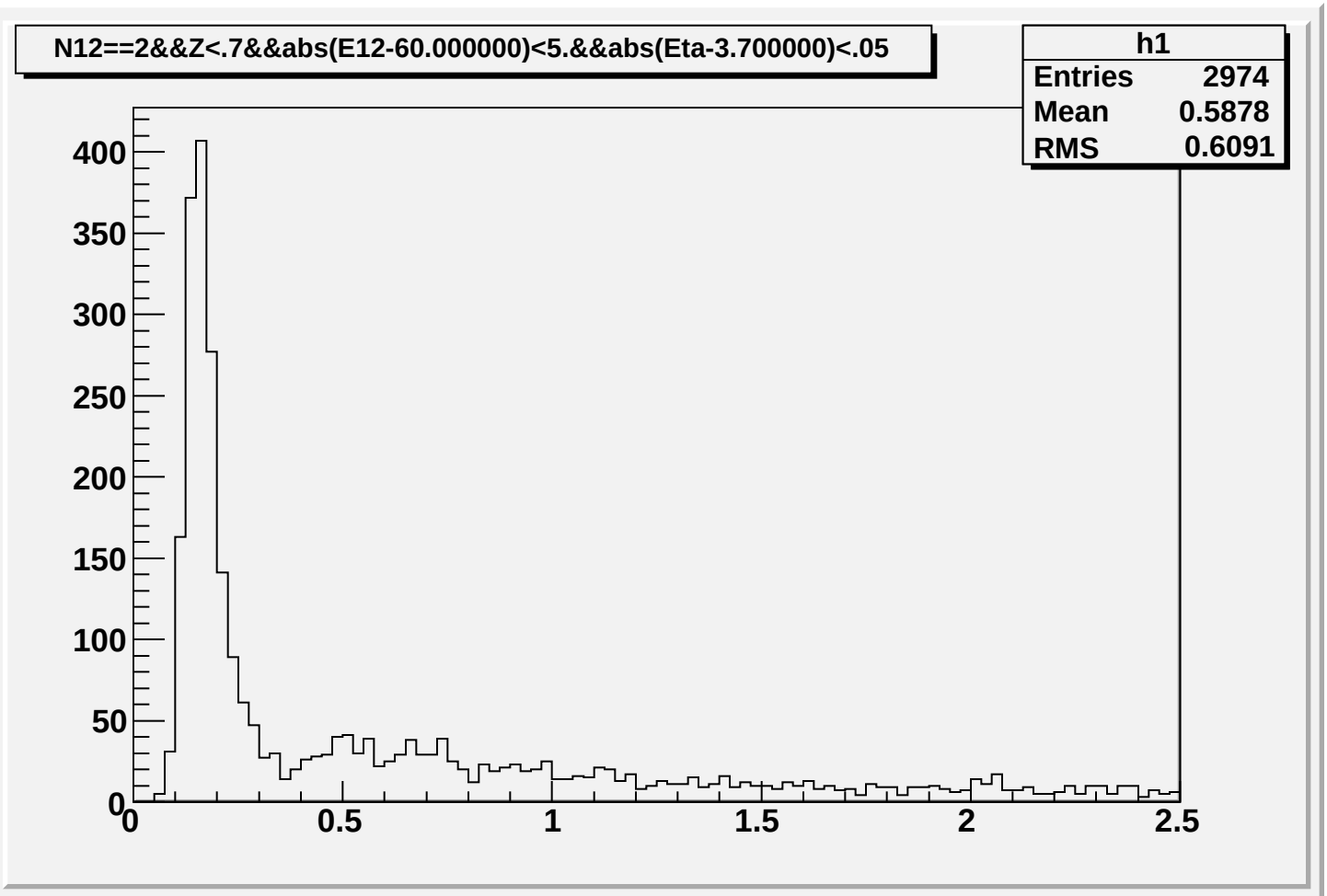

N12==2&&Z<.7&&abs(E12-30.000000)<5.&&abs(Eta-3.700000)<.05
h2
Entries 26614
Mean 0.4449
RMS 0.3833
500
400
300
200
100
0
0
0.5
1
1.5
2
2.5

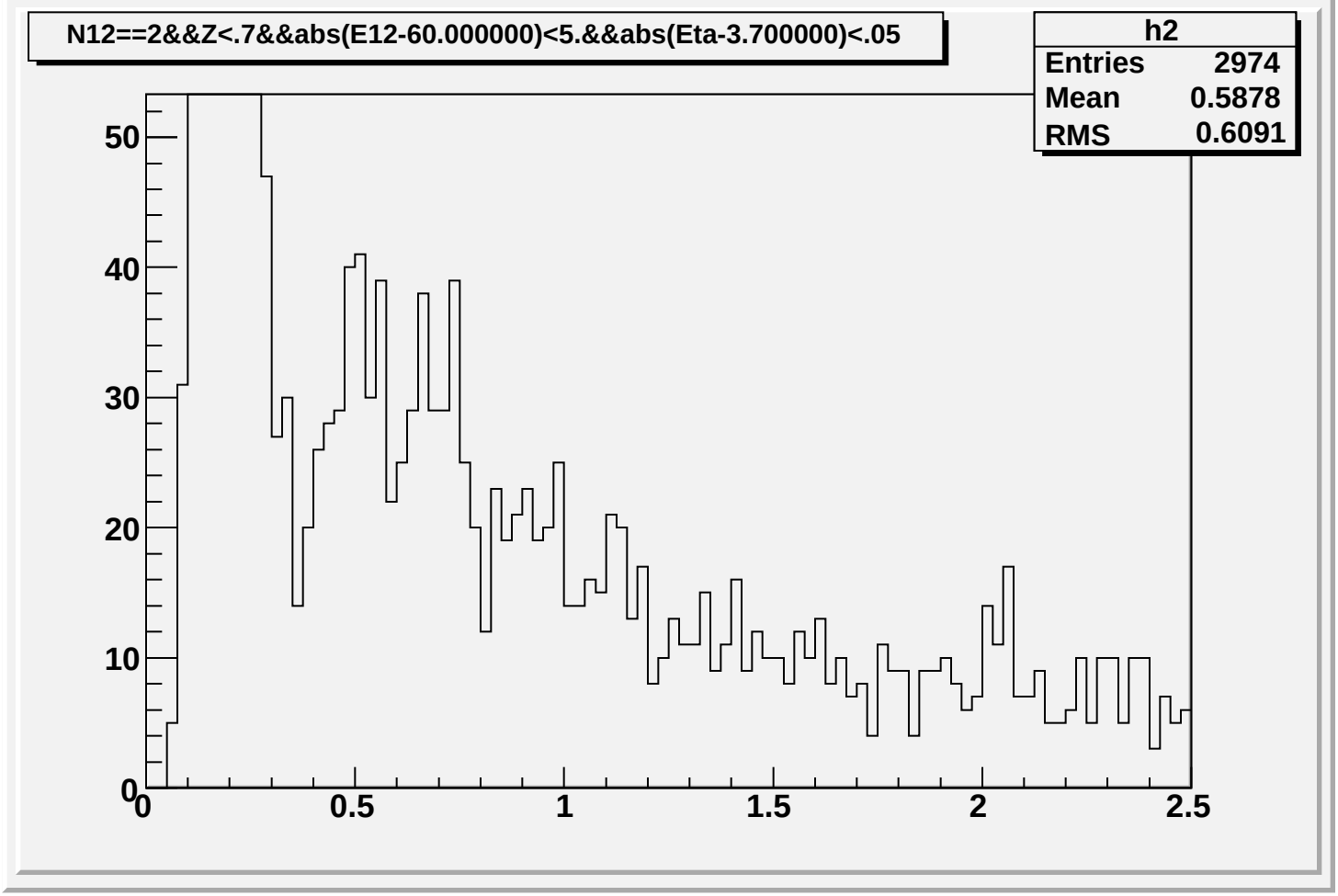

N12==2&&Z<.7&&abs(E12-40.000000)<5.&&abs(Eta-3.700000)<.05
h1
Entries 33252
Mean 0.4981
RMS 0.4475
5000
4000
3000
2000
1000
0
0
0.5
1
1.5
2
2.5

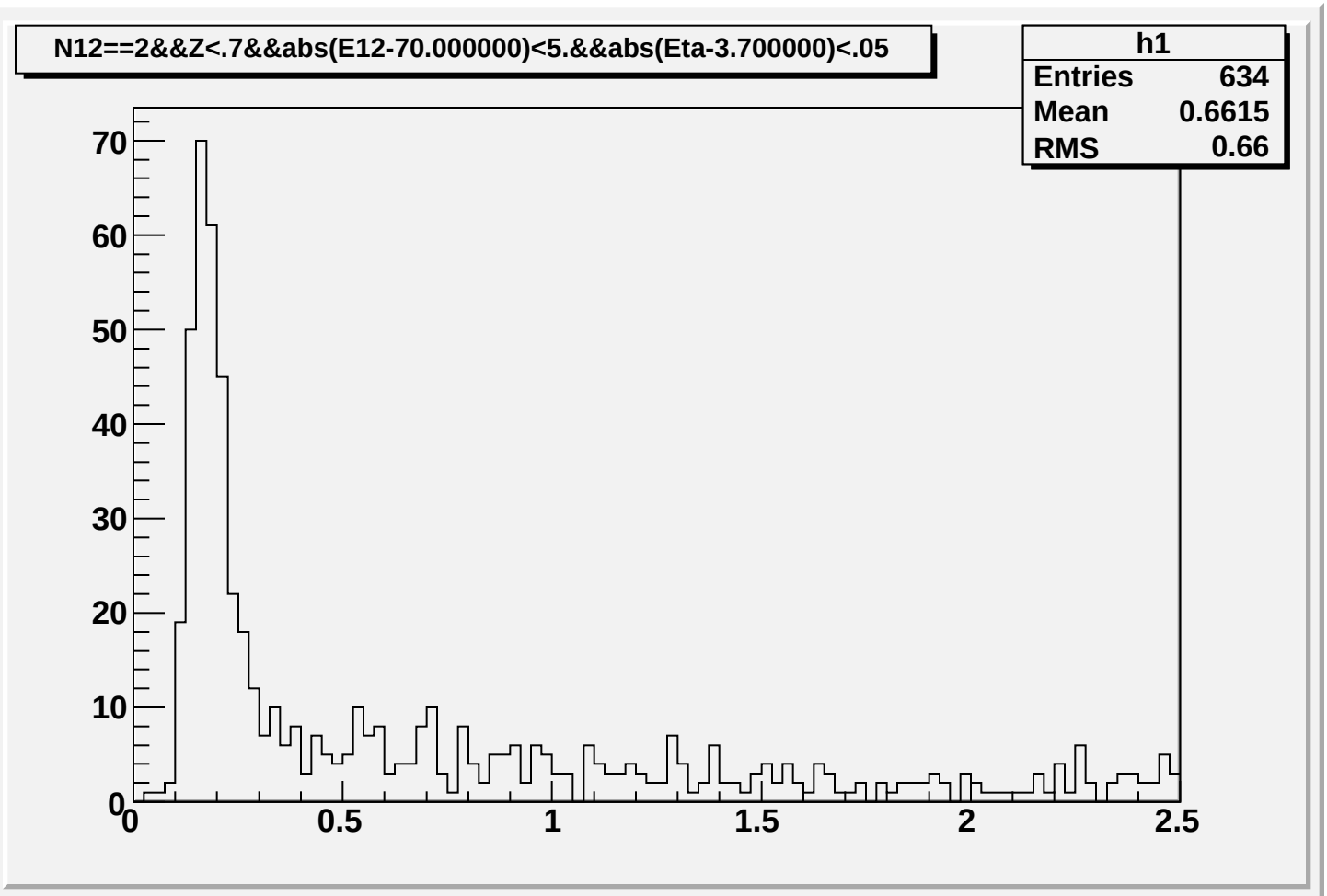

N12==2&&Z<.7&&abs(E12-40.000000)<5.&&abs(Eta-3.700000)<.05
h2
Entries 33252
Mean 0.4981
RMS 0.4475
600
500
400
300
200
100
0
0
0.5
1
1.5
2
2.5

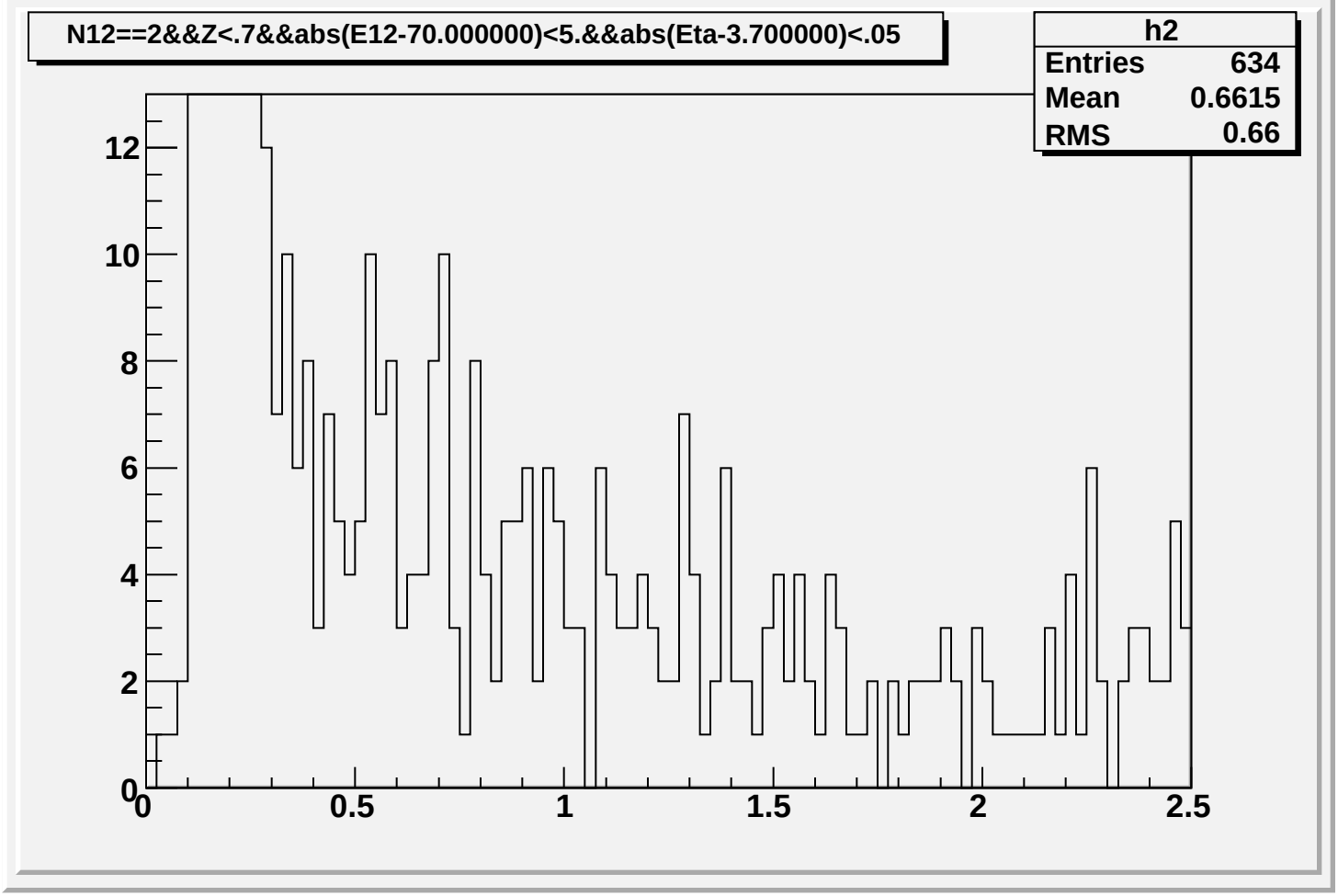

N12==2&&Z<.7&&abs(E12-50.000000)<5.&&abs(Eta-3.700000)<.05
h1
Entries 13848
Mean 0.5041
RMS 0.5111
2200
2000
1800
1600
1400
1200
1000
800
600
400
200
0
0
0.5
1
1.5
2
2.5

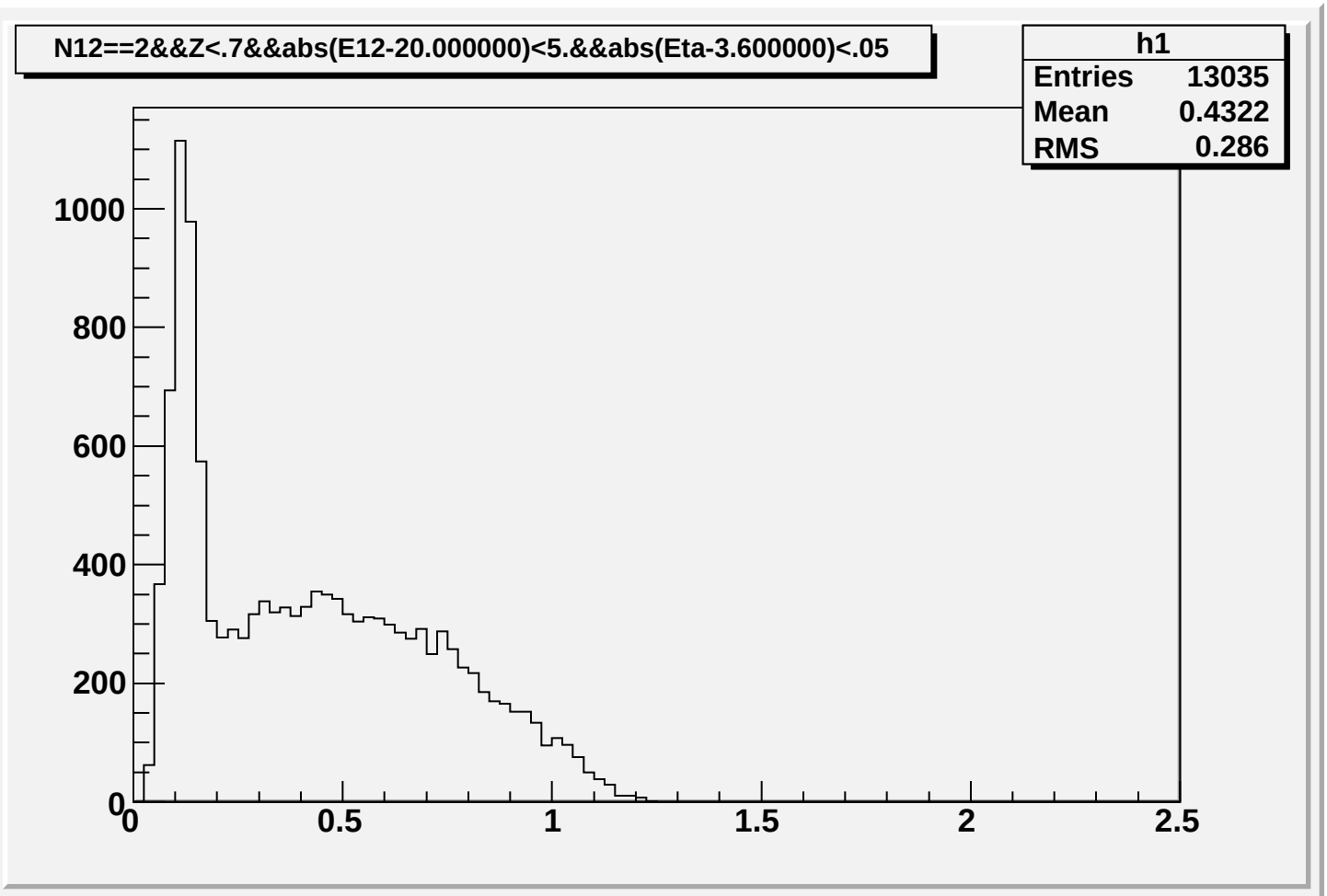

N12==2&&Z<.7&&abs(E12-50.000000)<5.&&abs(Eta-3.700000)<.05
h2
Entries 13848
Mean 0.5041
RMS 0.5111
250
200
150
100
50
0
0
0.5
1
1.5
2
2.5

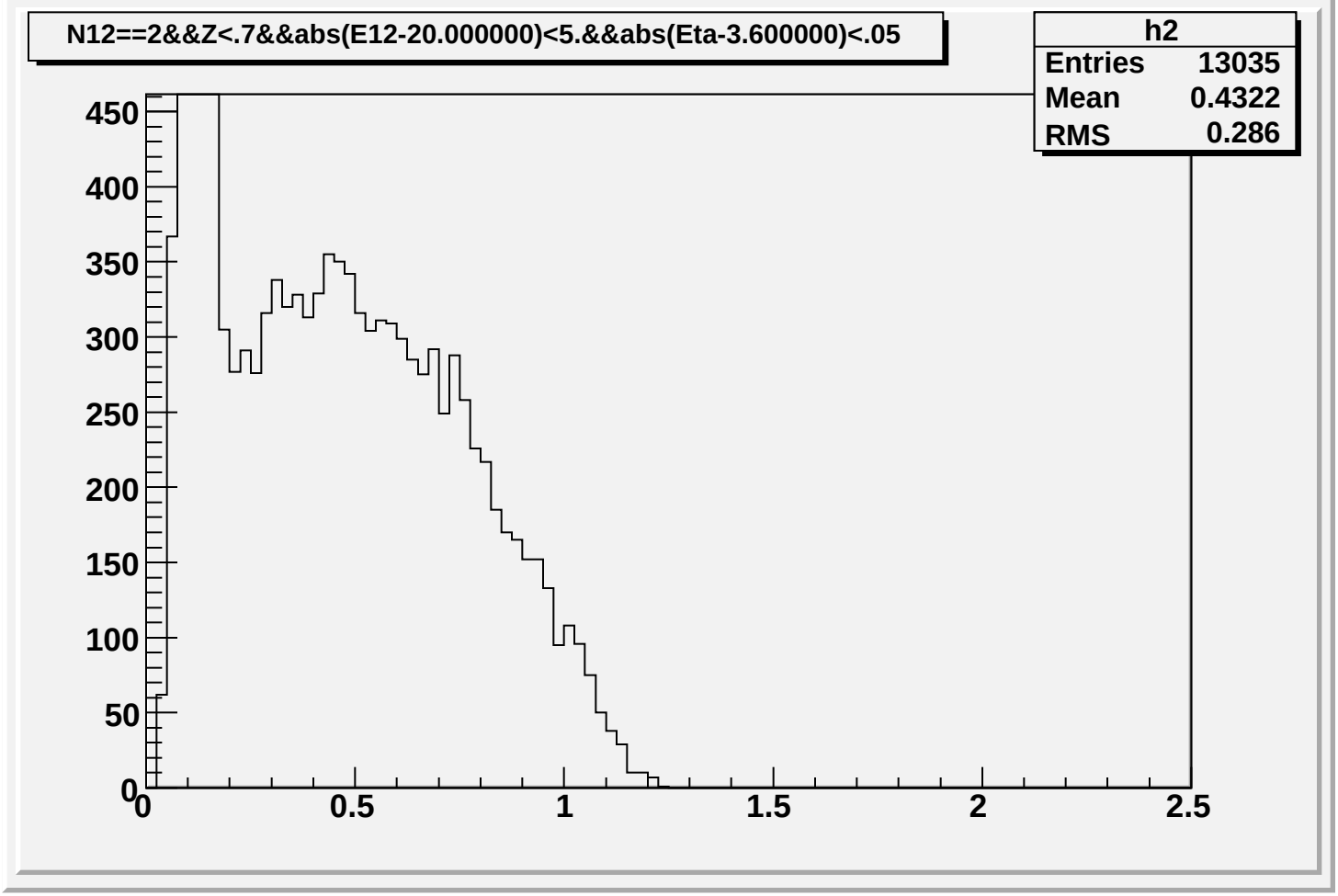

N12==2&&Z<.7&&abs(E12-60.000000)<5.&&abs(Eta-3.700000)<.05
h1
Entries 2974
Mean 0.5878
RMS 0.6091
400
350
300
250
200
150
100
50
0
0
0.5
1
1.5
2
2.5

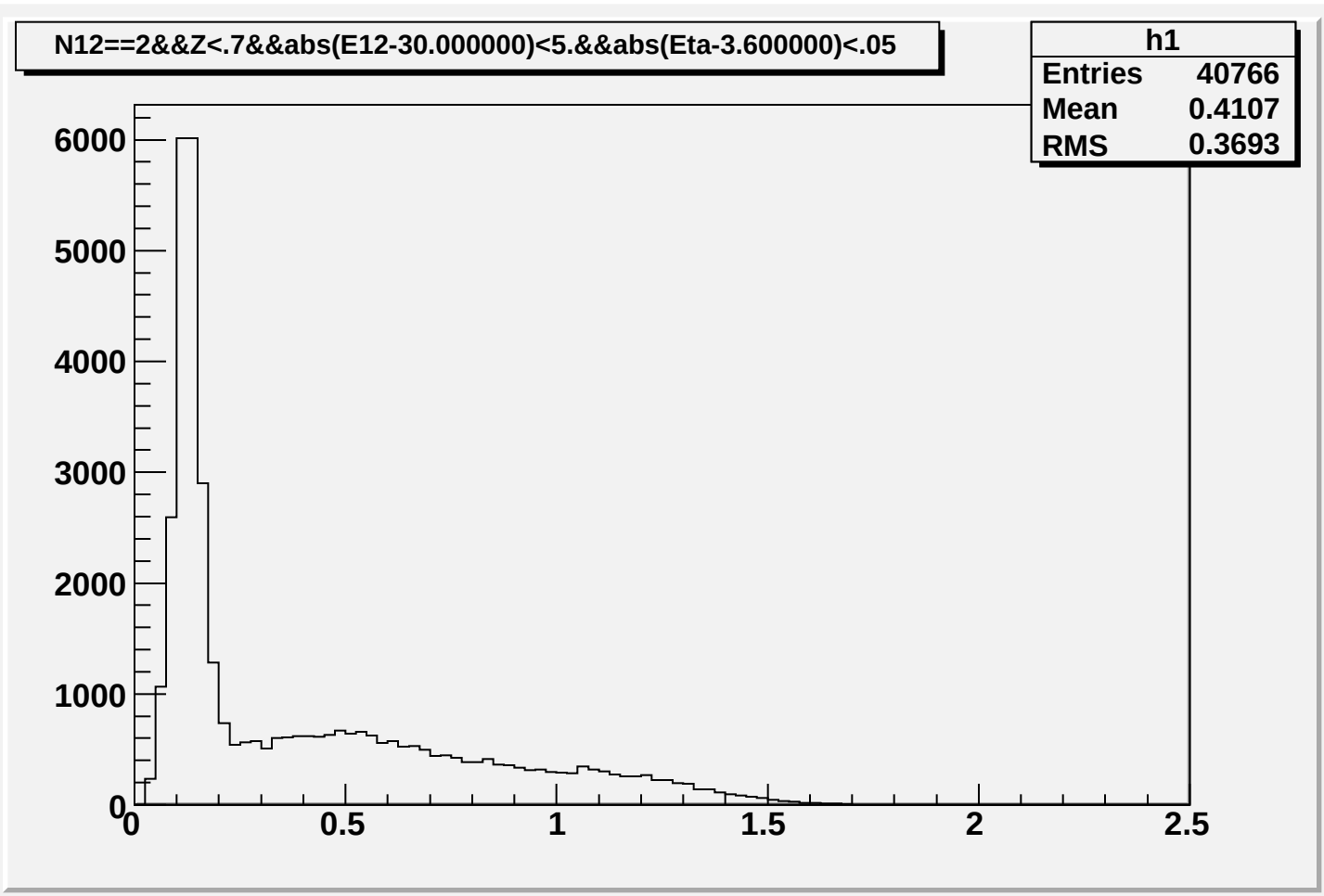

N12==2&&Z<.7&&abs(E12-60.000000)<5.&&abs(Eta-3.700000)<.05
h2
Entries 2974
Mean 0.5878
RMS 0.6091
50
40
30
20
10
0
0
0.5
1
1.5
2
2.5

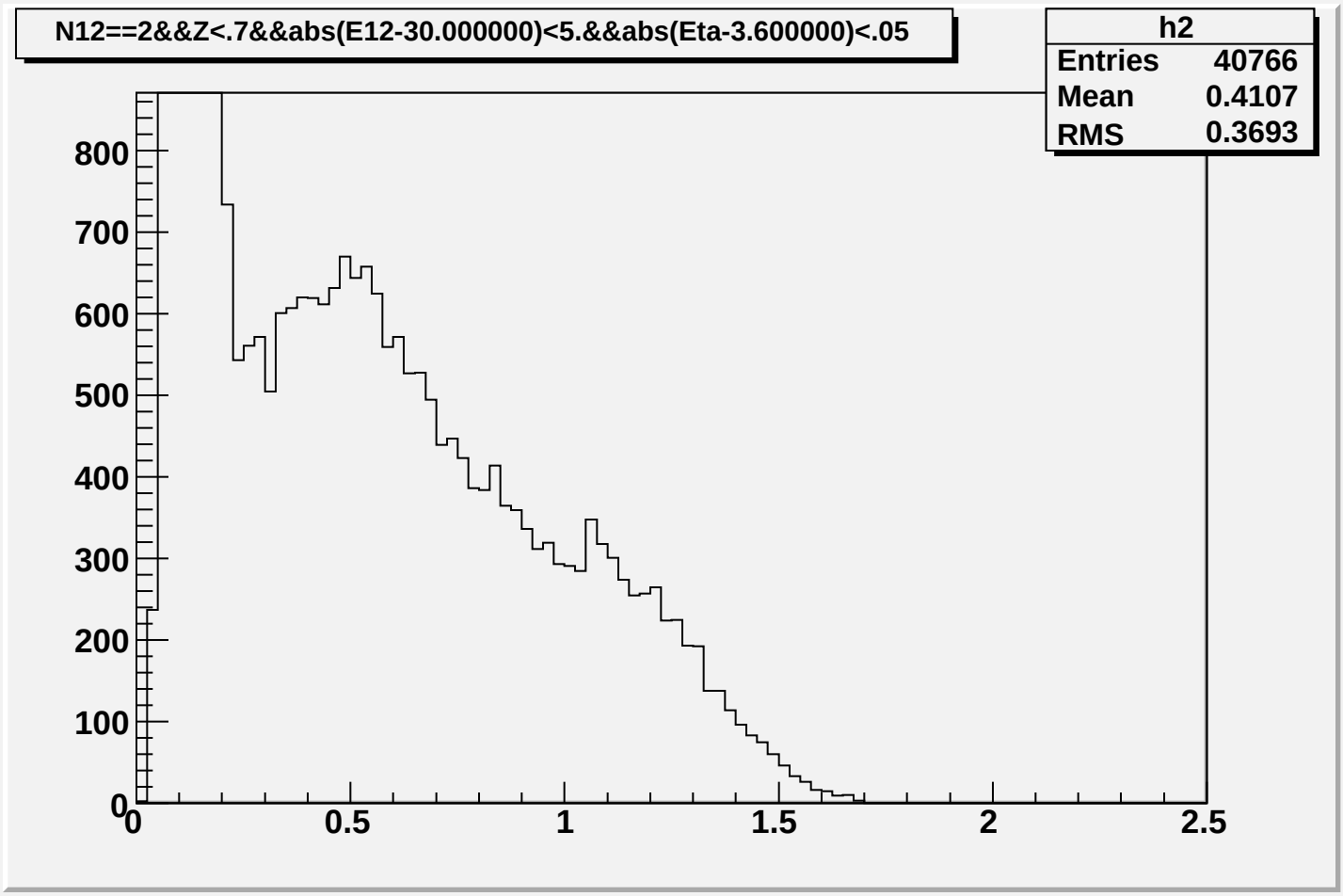

N12==2&&Z<.7&&abs(E12-70.000000)<5.&&abs(Eta-3.700000)<.05
h1
Entries 634
Mean 0.6615
RMS 0.66
70
60
50
40
30
20
10
0
0
0.5
1
1.5
2
2.5

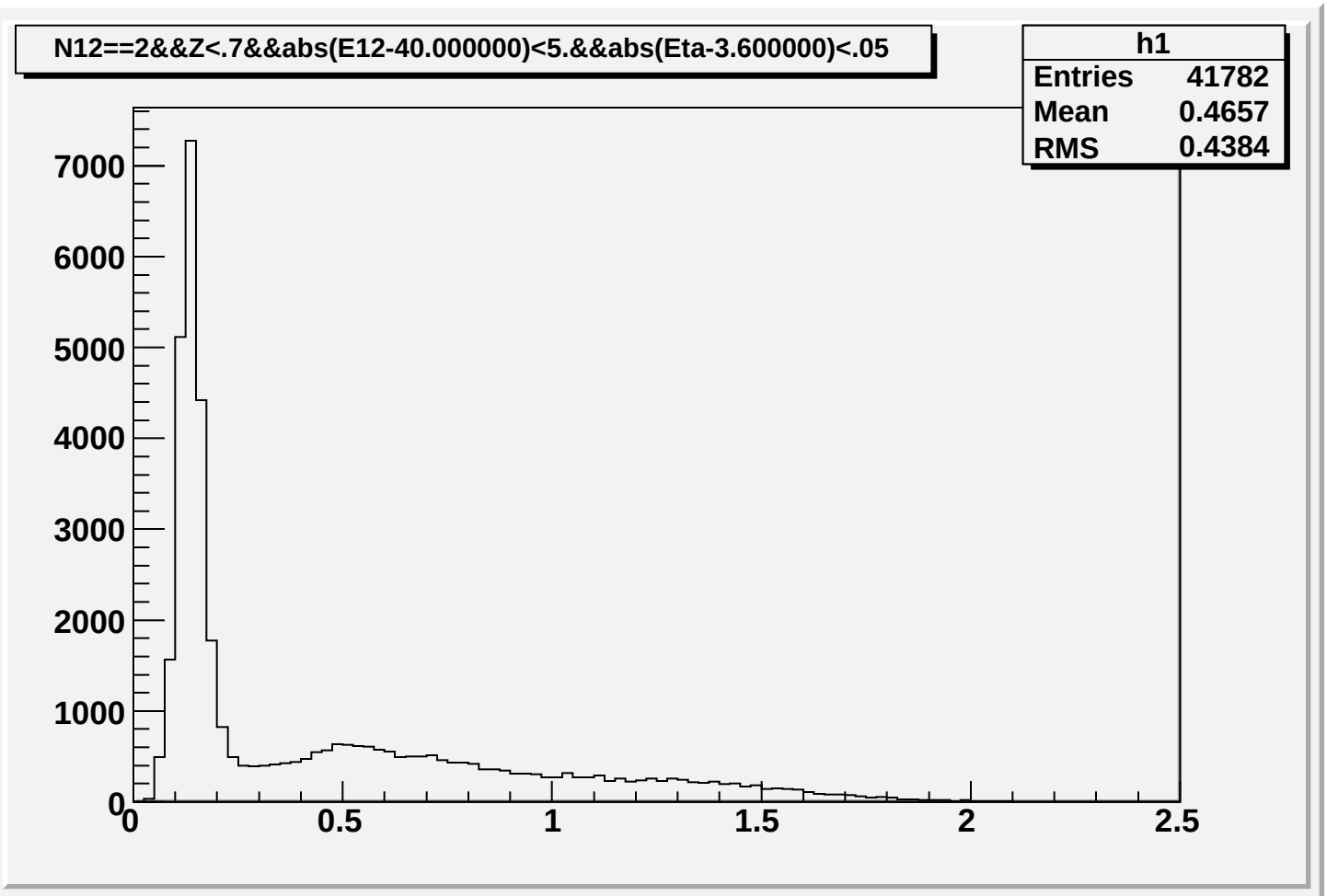

N12==2&&Z<.7&&abs(E12-70.000000)<5.&&abs(Eta-3.700000)<.05
h2
Entries 634
Mean 0.6615
RMS 0.66
12
10
8
6
4
2
0
0
0.5
1
1.5
2
2.5

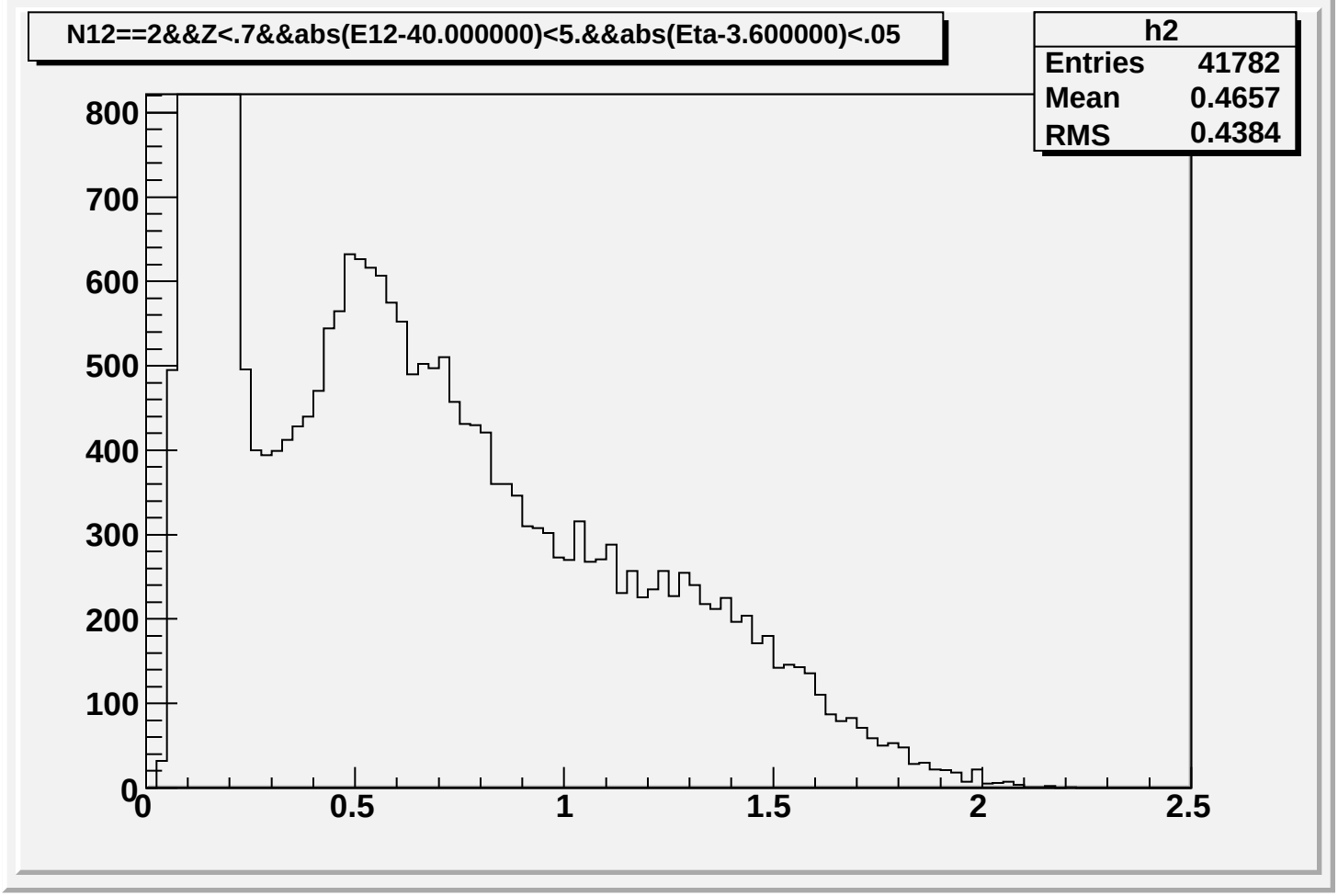

N12==2&&Z<.7&&abs(E12-20.000000)<5.&&abs(Eta-3.600000)<.05
h1
Entries 13035
Mean 0.4322
RMS 0.286
1000
800
600
400
200
0
0
0.5
1
1.5
2
2.5

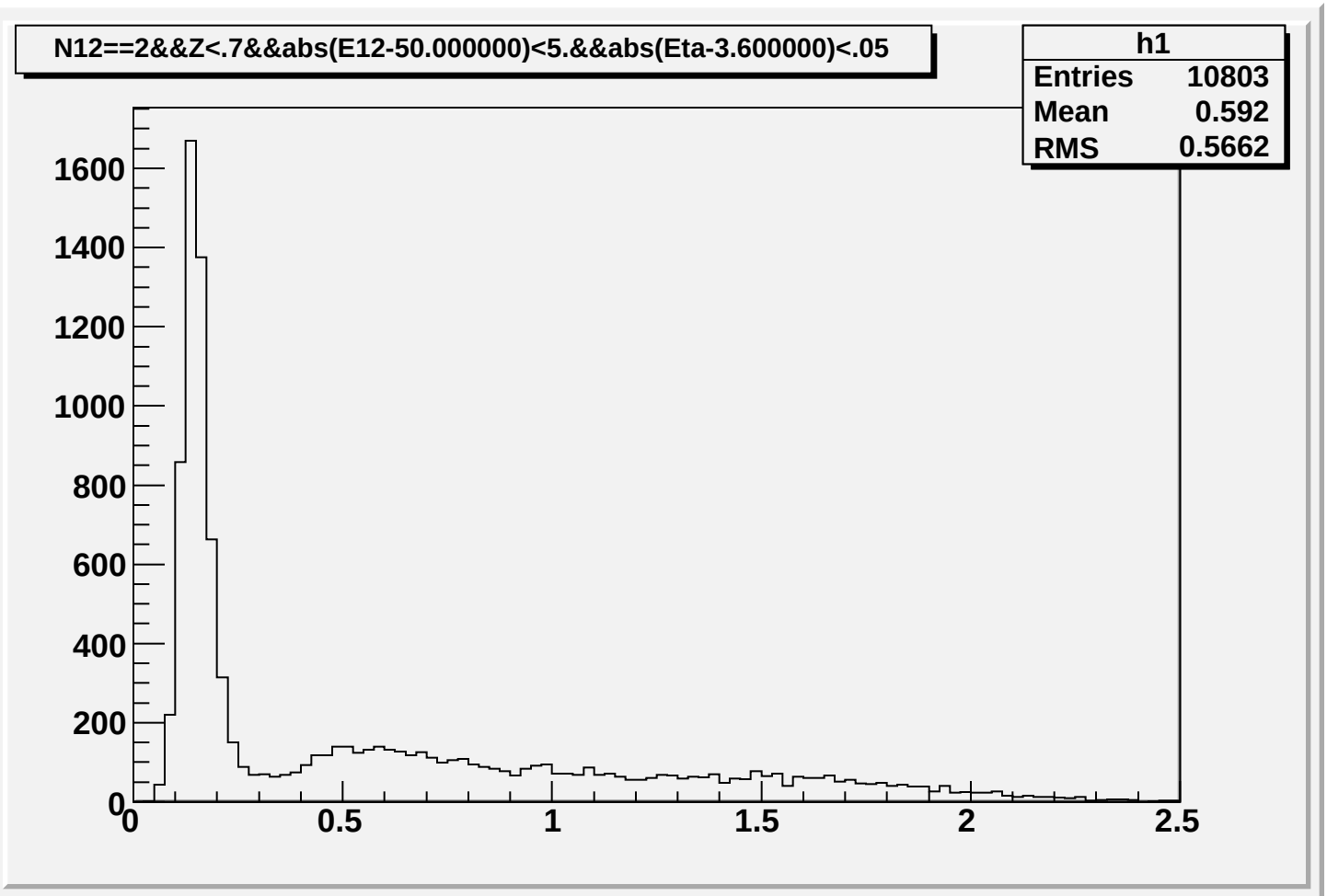

N12==2&&Z<.7&&abs(E12-20.000000)<5.&&abs(Eta-3.600000)<.05
h2
Entries 13035
Mean 0.4322
RMS 0.286
450
400
350
300
250
200
150
100
50
0
0
0.5
1
1.5
2
2.5

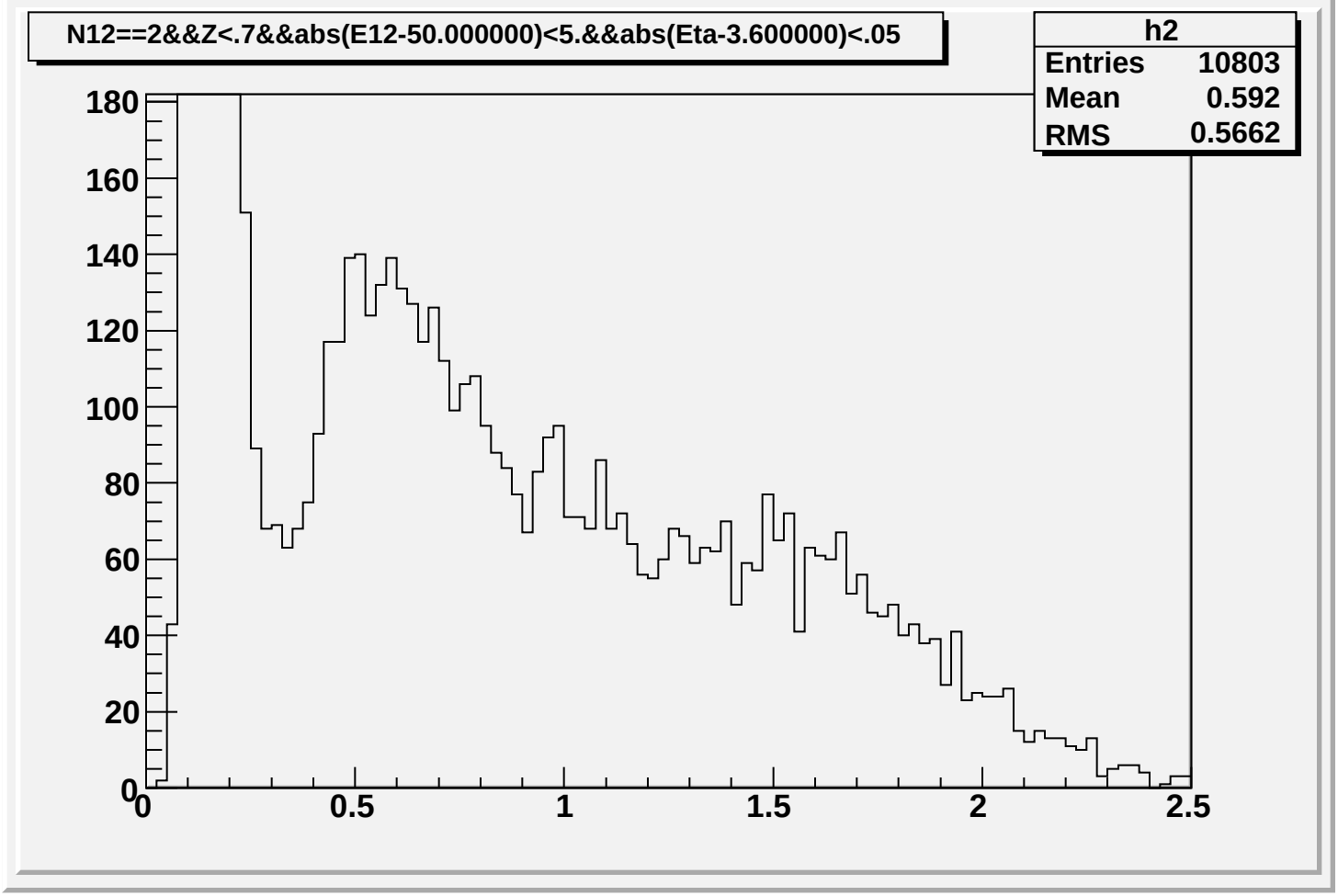

N12==2&&Z<.7&&abs(E12-30.000000)<5.&&abs(Eta-3.600000)<.05
h1
Entries 40766
Mean 0.4107
RMS 0.3693
6000
5000
4000
3000
2000
1000
0
0
0.5
1
1.5
2
2.5

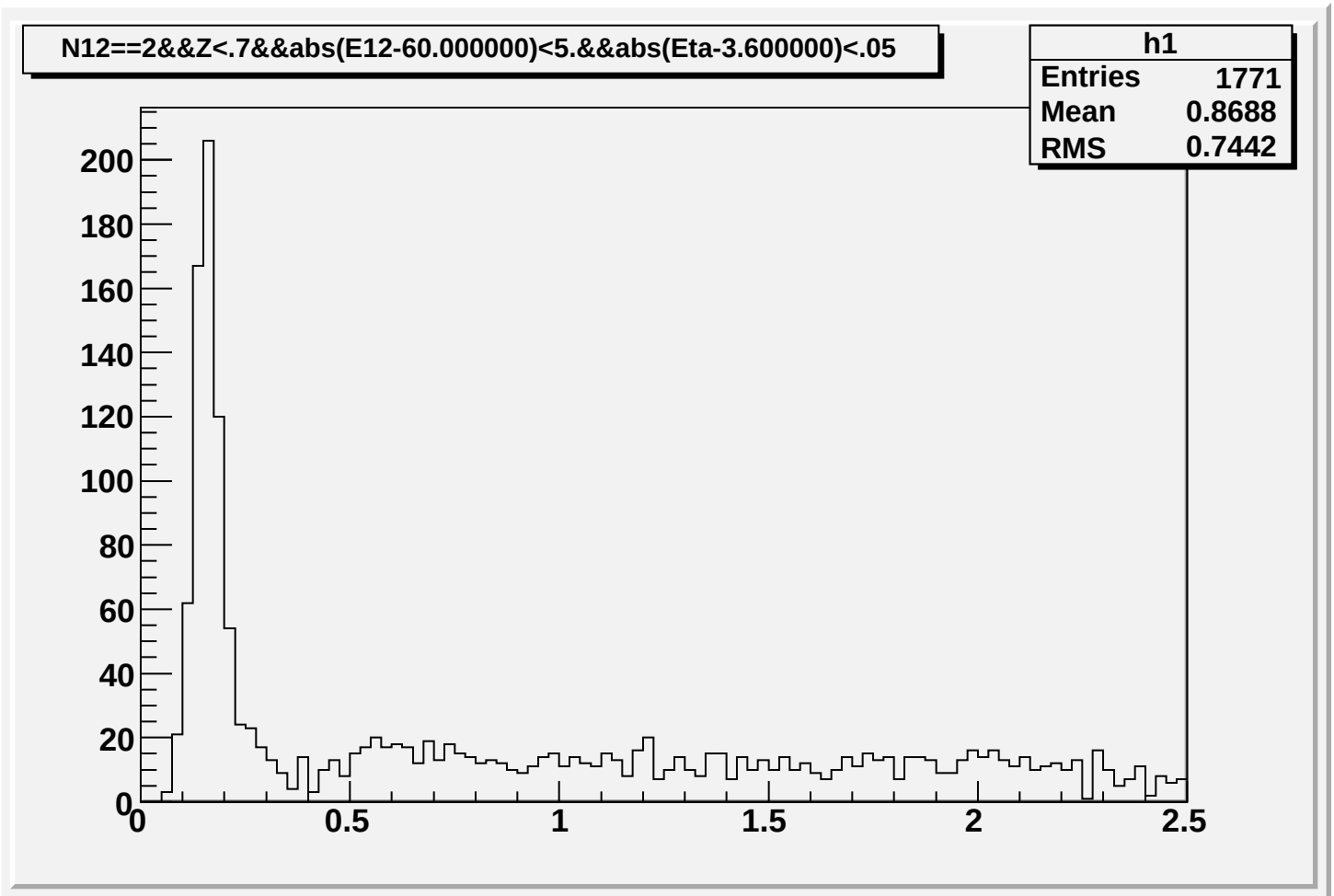

N12==2&&Z<.7&&abs(E12-30.000000)<5.&&abs(Eta-3.600000)<.05
h2
Entries 40766
Mean 0.4107
RMS 0.3693
800
700
600
500
400
300
200
100
0
0
0.5
1
1.5
2
2.5

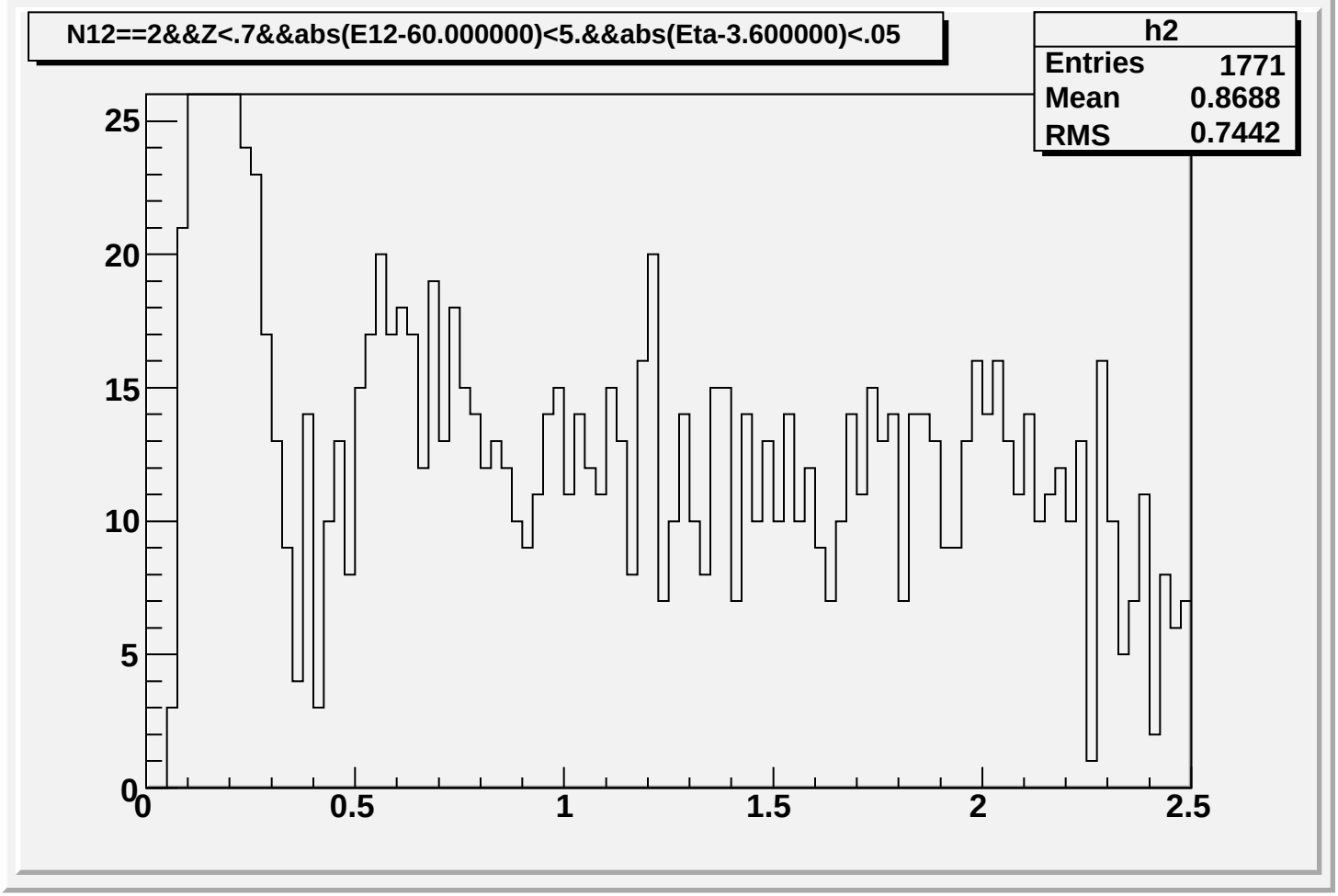

N12==2&&Z<.7&&abs(E12-40.000000)<5.&&abs(Eta-3.600000)<.05
h1
Entries 41782
Mean 0.4657
RMS 0.4384
7000
6000
5000
4000
3000
2000
1000
0
0
0.5
1
1.5
2
2.5

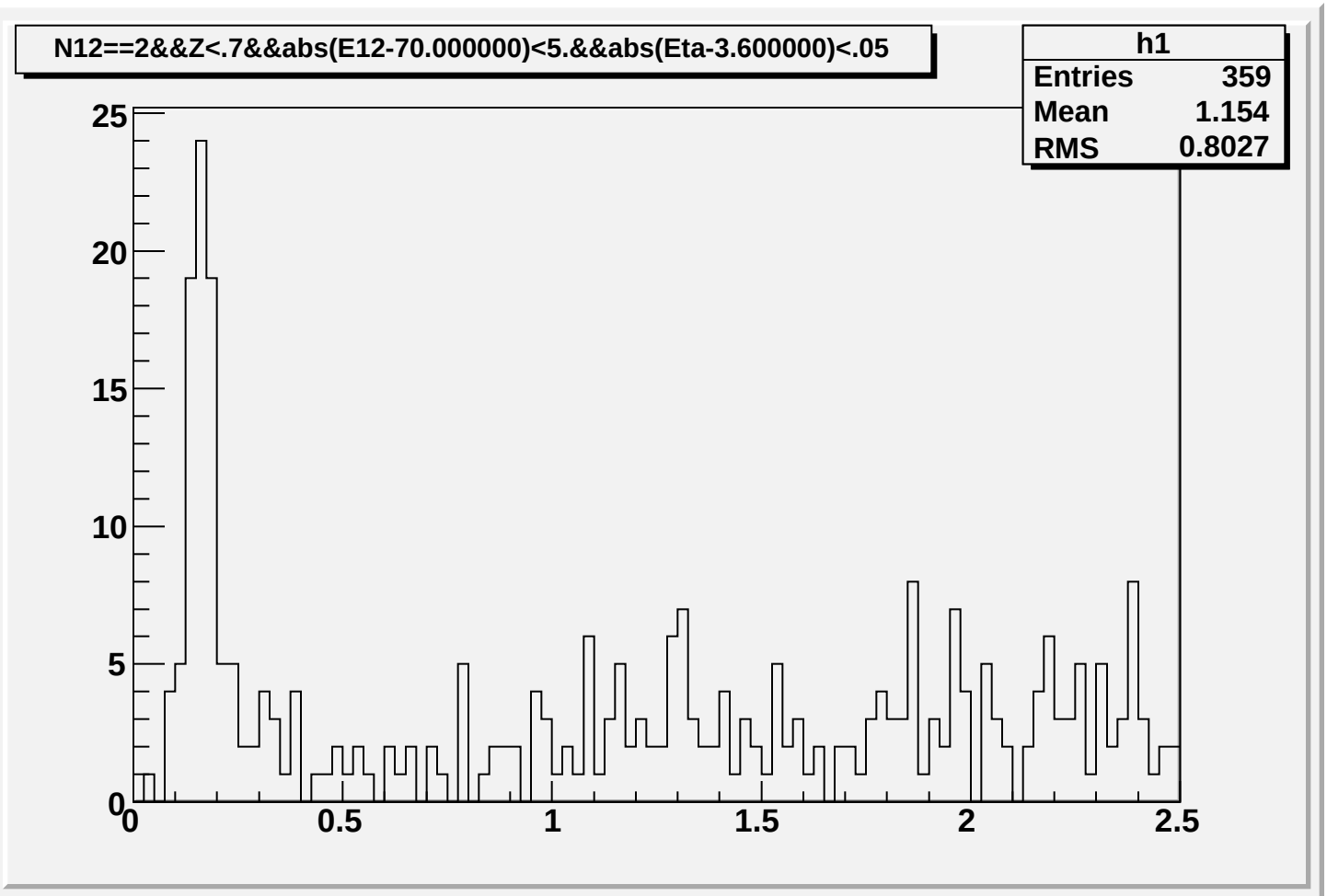

N12==2&&Z<.7&&abs(E12-40.000000)<5.&&abs(Eta-3.600000)<.05
h2
Entries 41782
Mean 0.4657
RMS 0.4384
800
700
600
500
400
300
200
100
0
0
0.5
1
1.5
2
2.5

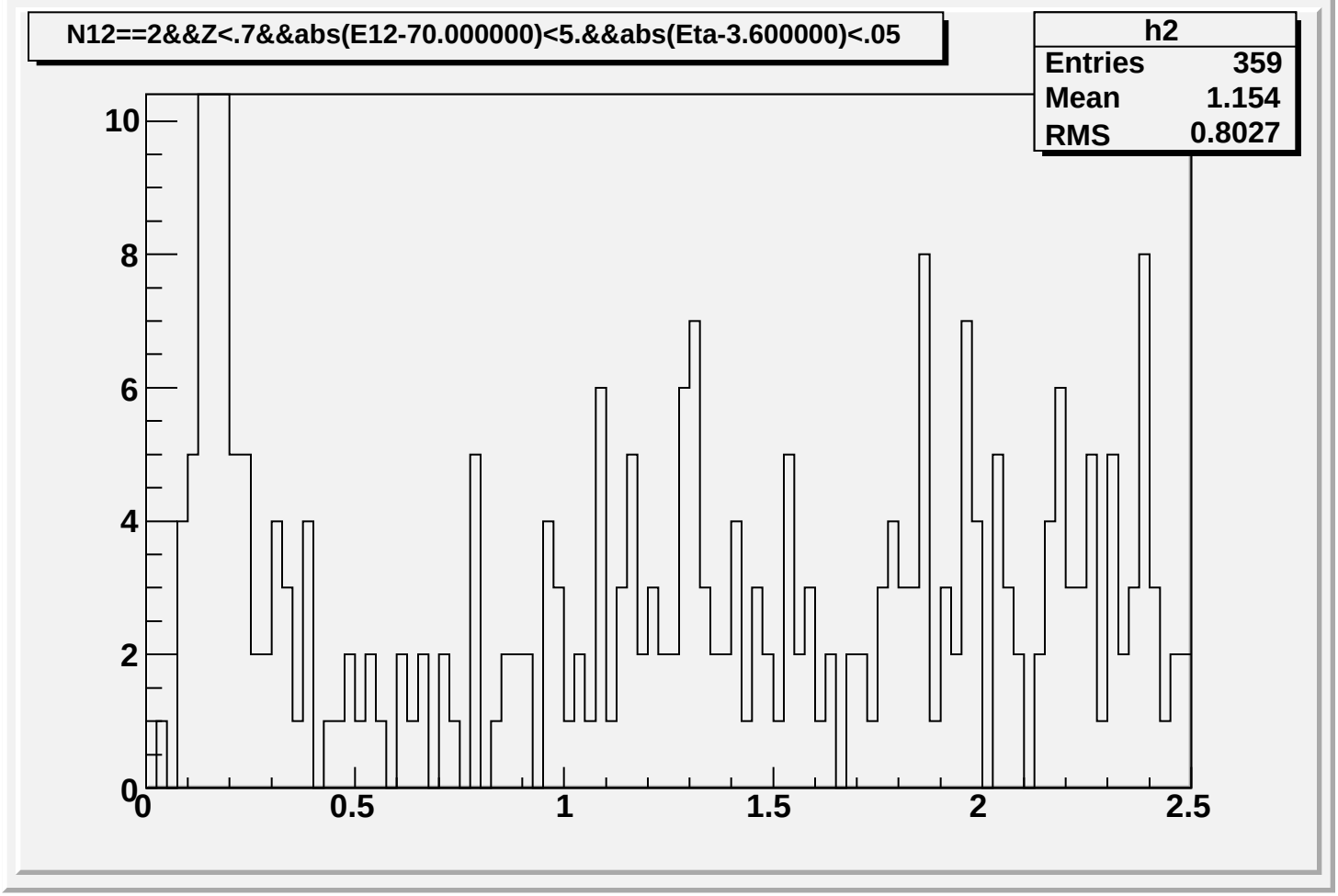

N12==2&&Z<.7&&abs(E12-50.000000)<5.&&abs(Eta-3.600000)<.05
h1
Entries 10803
Mean 0.592
RMS 0.5662
1600
1400
1200
1000
800
600
400
200
0
0
0.5
1
1.5
2
2.5

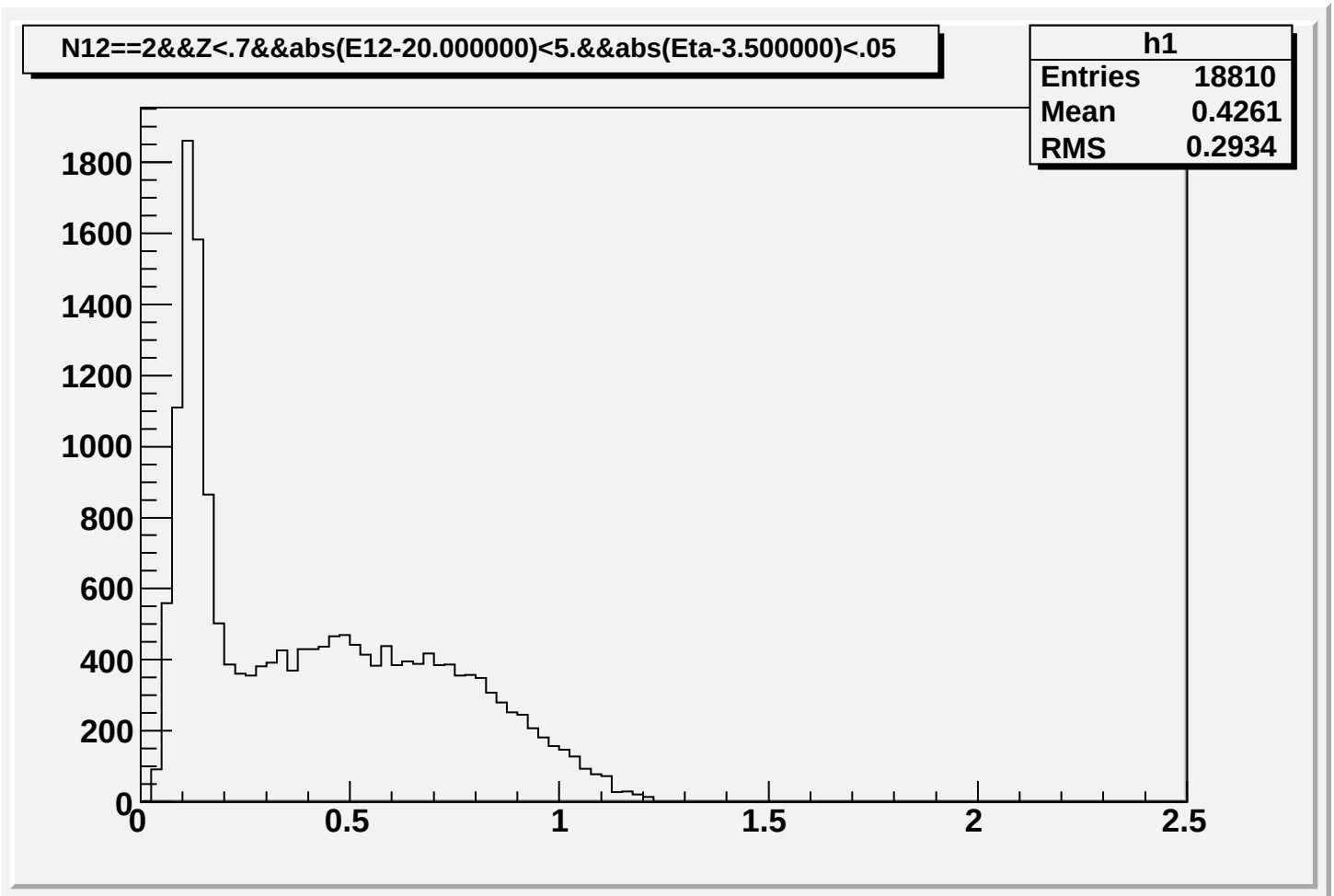

N12==2&&Z<.7&&abs(E12-50.000000)<5.&&abs(Eta-3.600000)<.05
h2
Entries 10803
Mean 0.592
RMS 0.5662
180
160
140
120
100
80
60
40
20
0
0
0.5
1
1.5
2
2.5

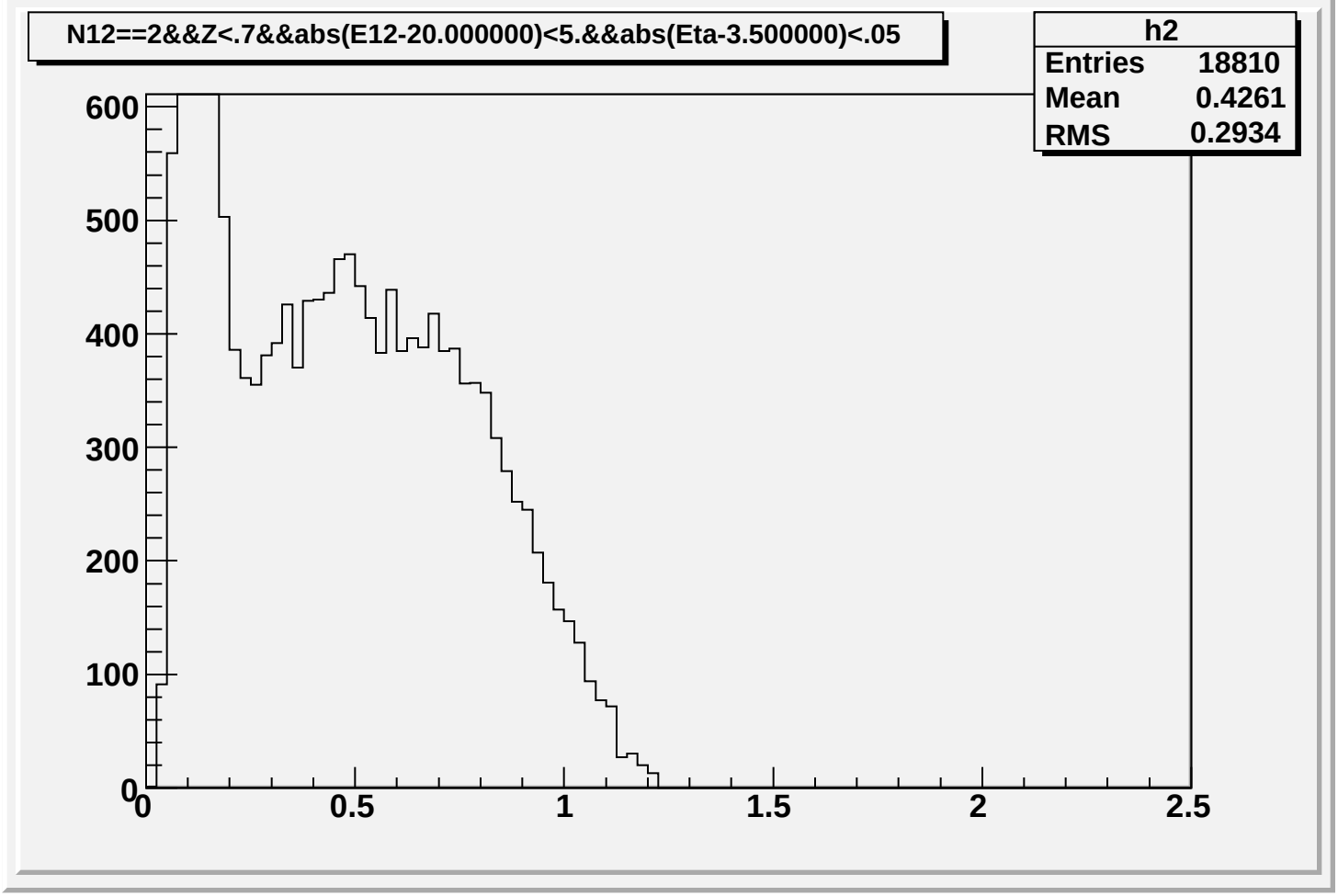

N12==2&&Z<.7&&abs(E12-60.000000)<5.&&abs(Eta-3.600000)<.05
h1
Entries 1771
Mean 0.8688
RMS 0.7442
200
180
160
140
120
100
80
60
40
20
0
0
0.5
1
1.5
2
2.5

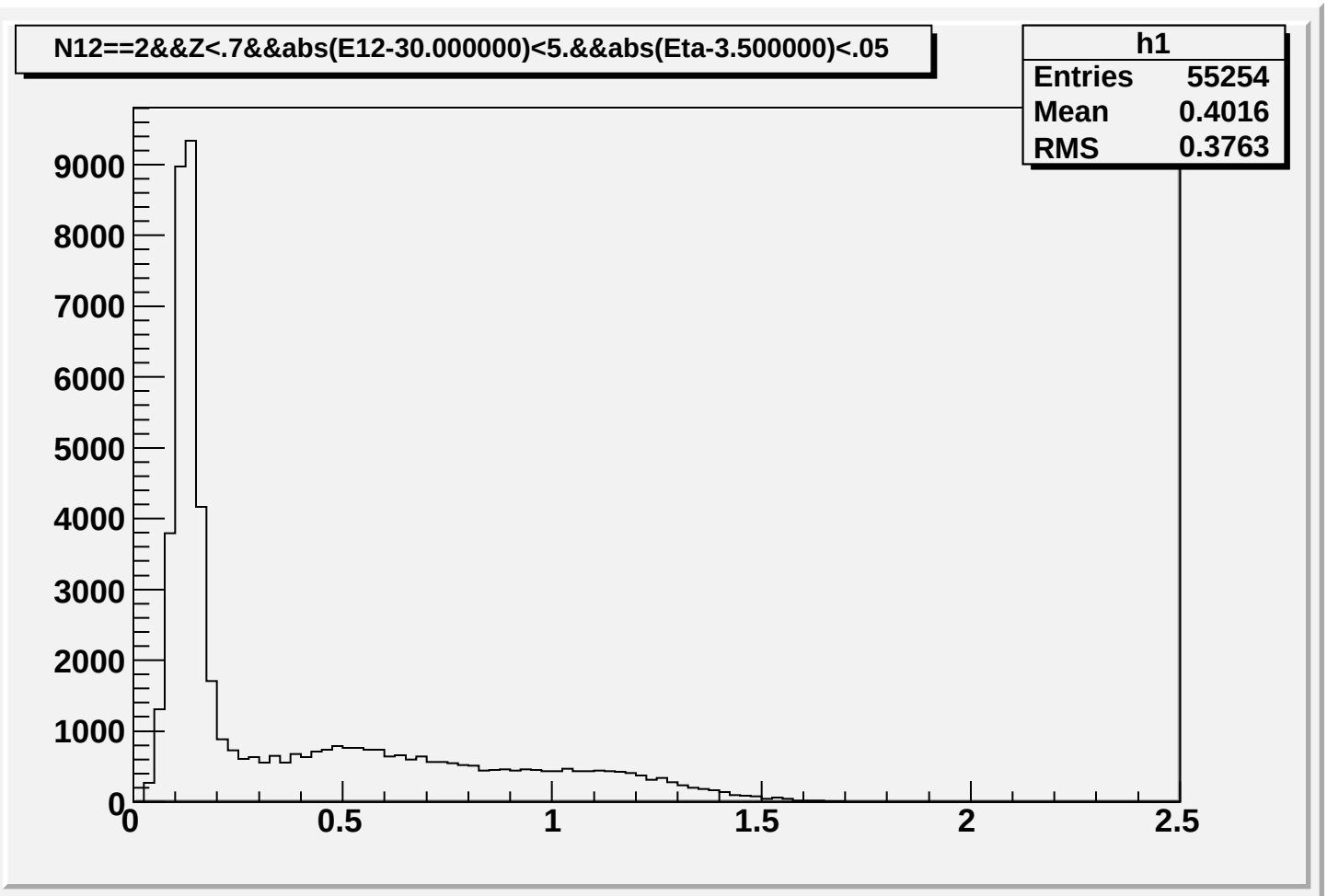

N12==2&&Z<.7&&abs(E12-60.000000)<5.&&abs(Eta-3.600000)<.05
h2
Entries 1771
Mean 0.8688
RMS 0.7442
25
20
15
10
5
0
0
0.5
1
1.5
2
2.5

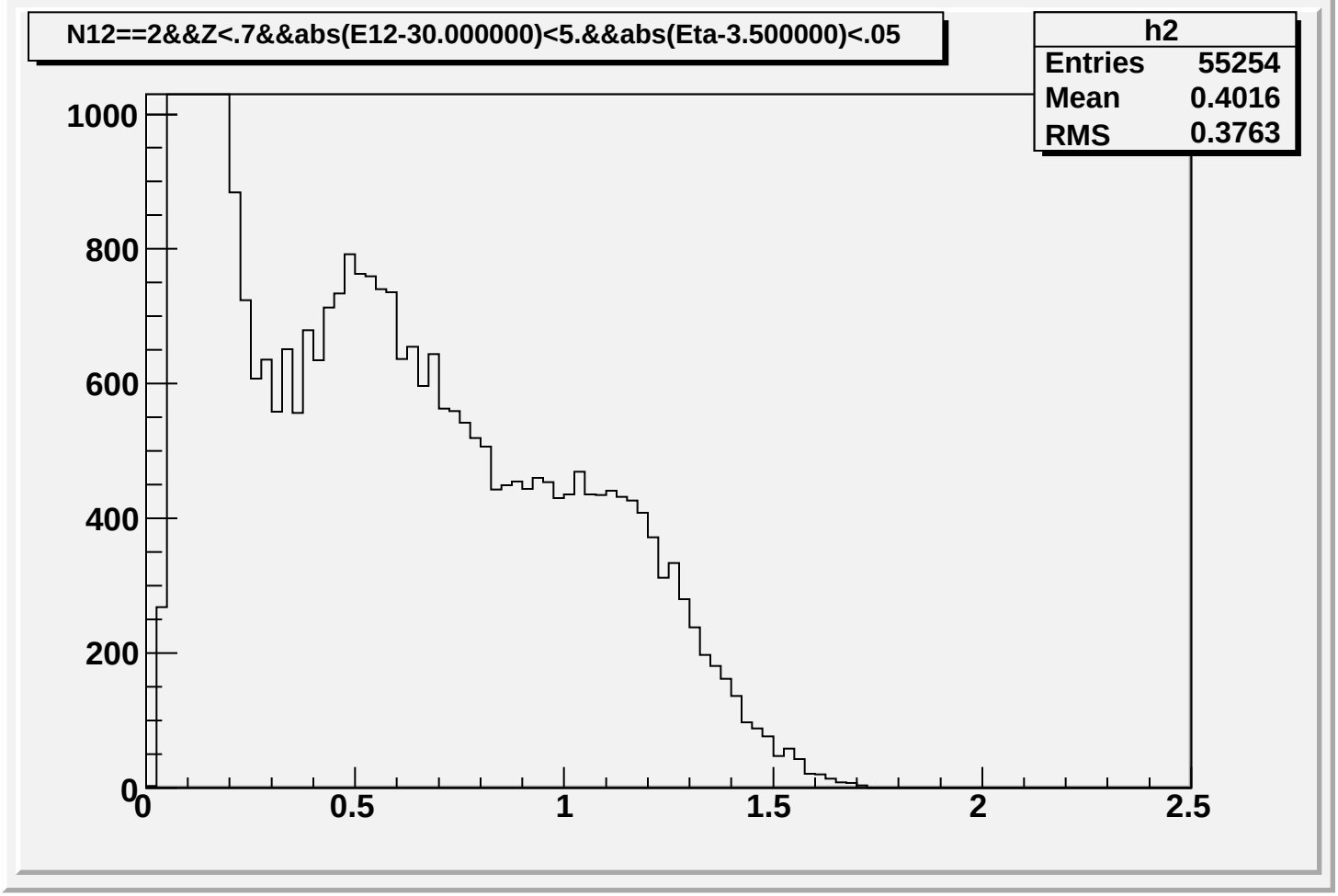

N12==2&&Z<.7&&abs(E12-70.000000)<5.&&abs(Eta-3.600000)<.05
h1
Entries 359
Mean 1.154
RMS 0.8027
25
20
15
10
5
0
0
0.5
1
1.5
2
2.5

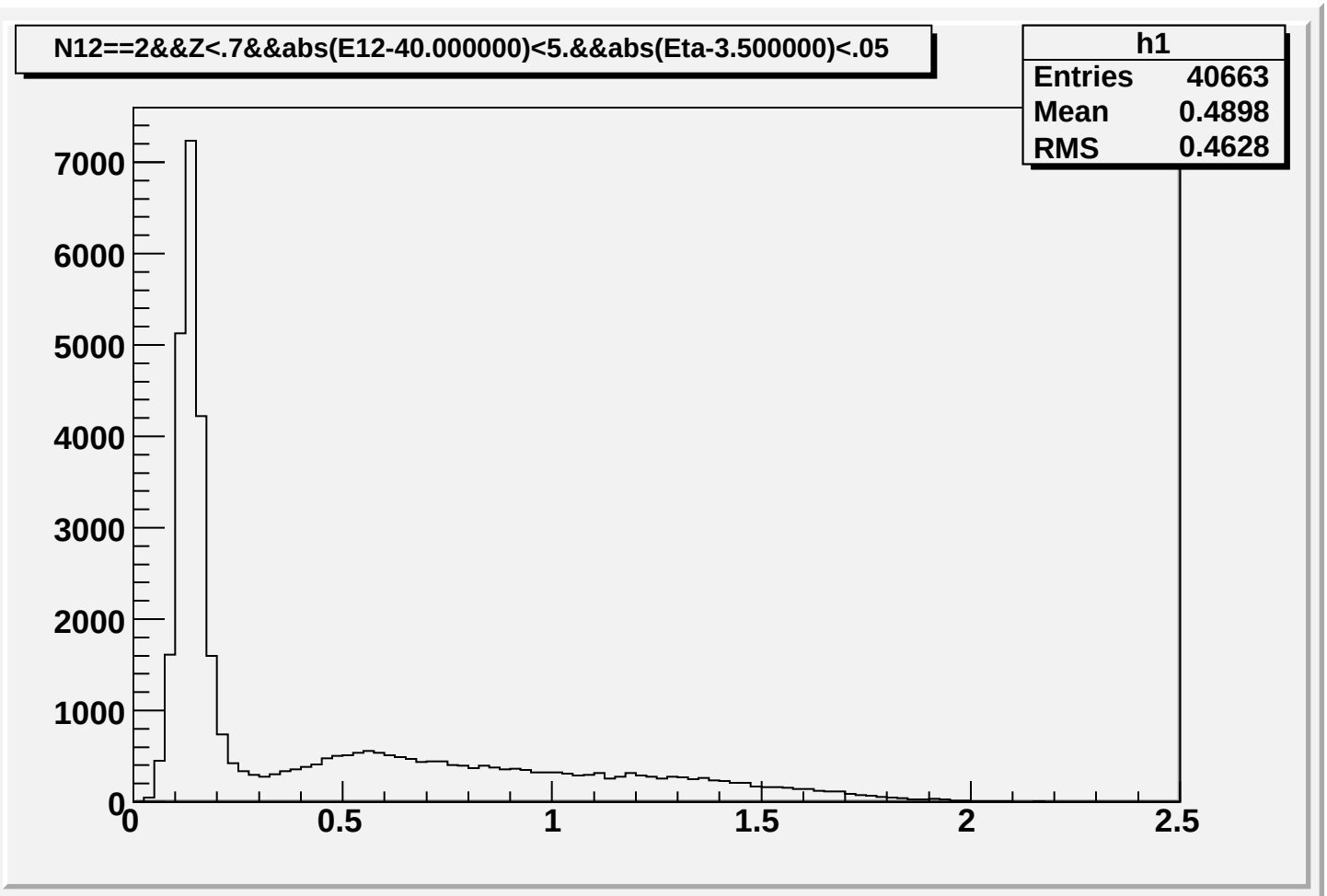

N12==2&&Z<.7&&abs(E12-70.000000)<5.&&abs(Eta-3.600000)<.05
h2
Entries 359
Mean 1.154
RMS 0.8027
10
8
6
4
2
0
0
0.5
1
1.5
2
2.5

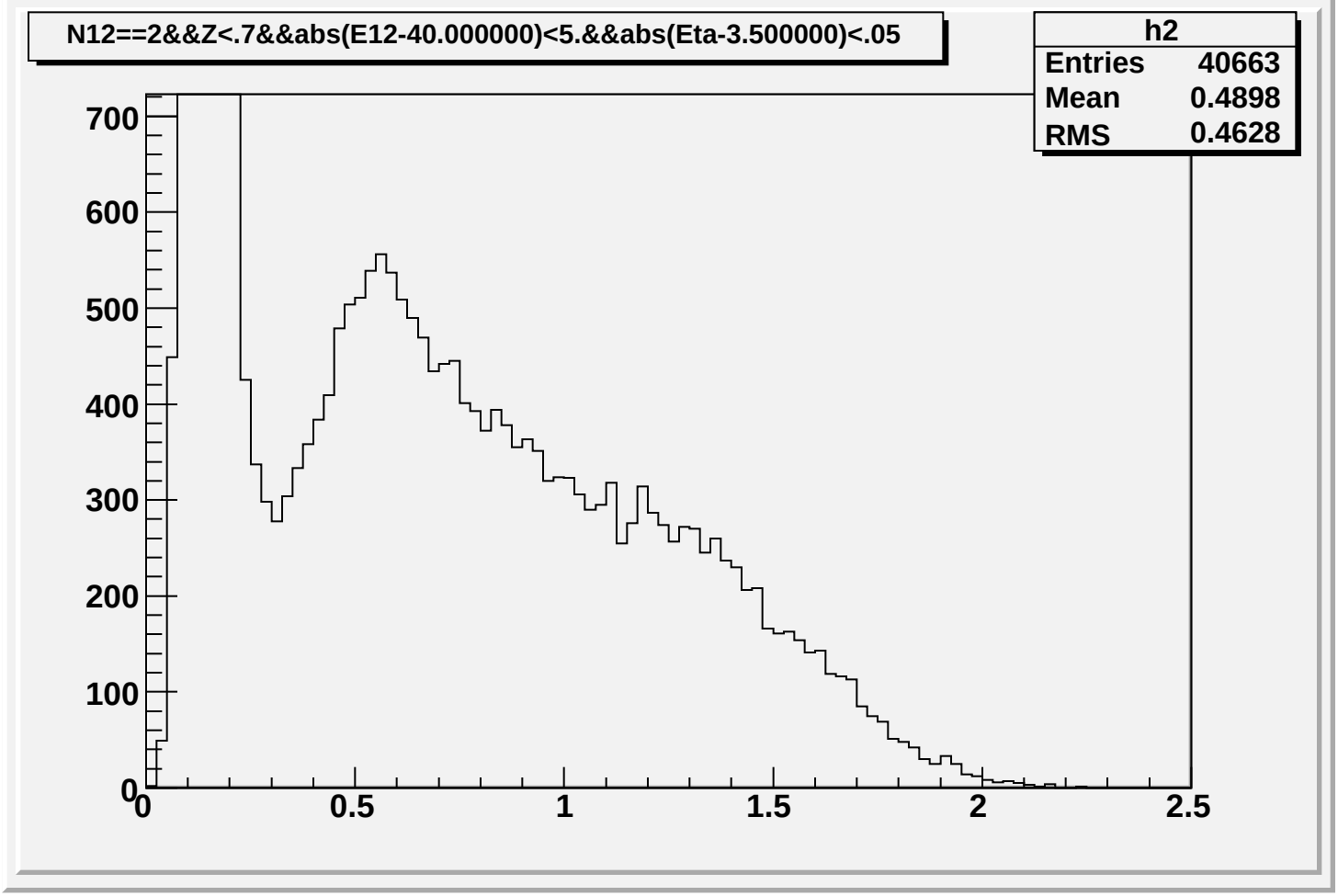

N12==2&&Z<.7&&abs(E12-20.000000)<5.&&abs(Eta-3.500000)<.05
h1
Entries 18810
Mean 0.4261
RMS 0.2934
1800
1600
1400
1200
1000
800
600
400
200
0
0
0.5
1
1.5
2
2.5

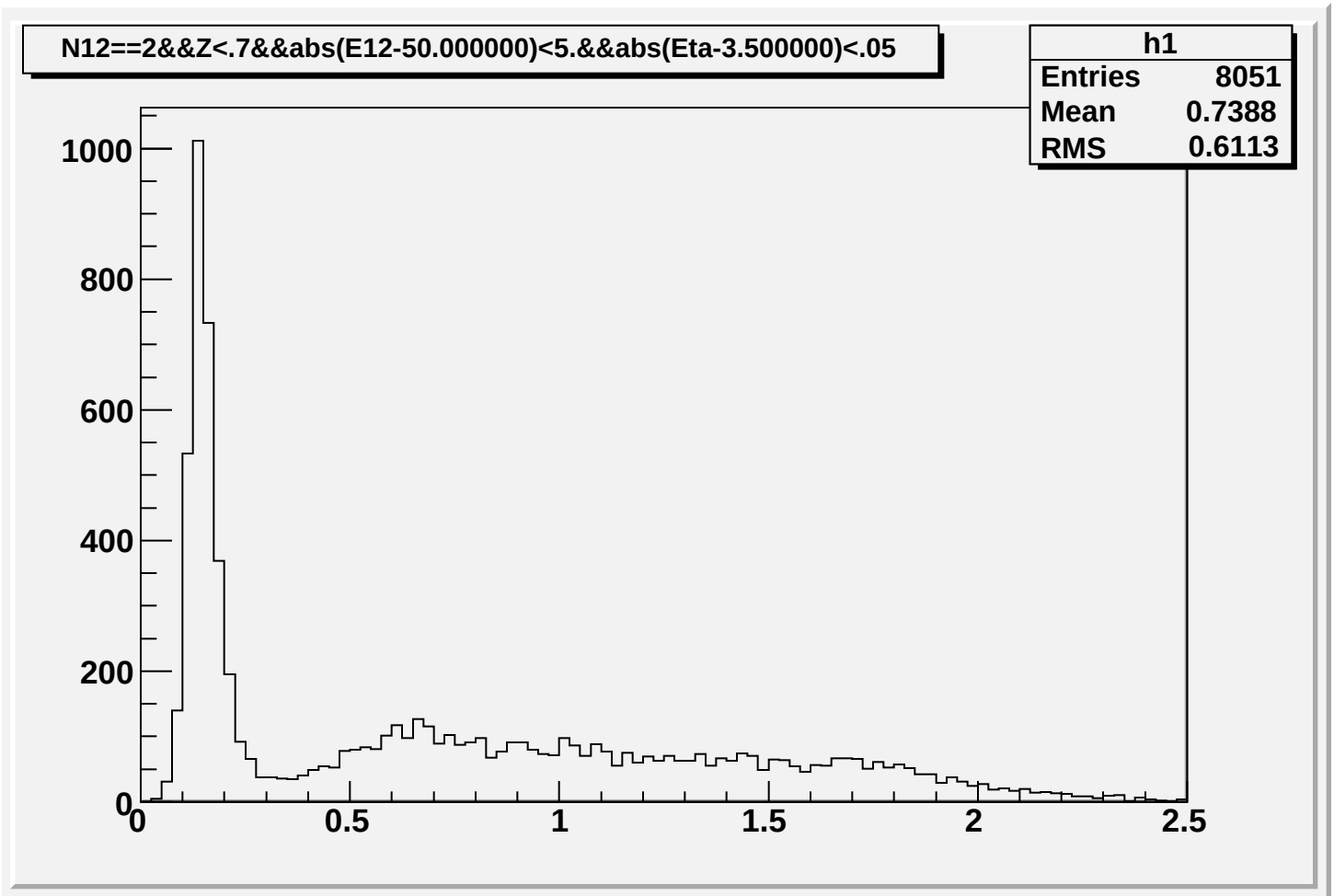

N12==2&&Z<.7&&abs(E12-20.000000)<5.&&abs(Eta-3.500000)<.05
h2
Entries 18810
Mean 0.4261
RMS 0.2934
600
500
400
300
200
100
0
0
0.5
1
1.5
2
2.5

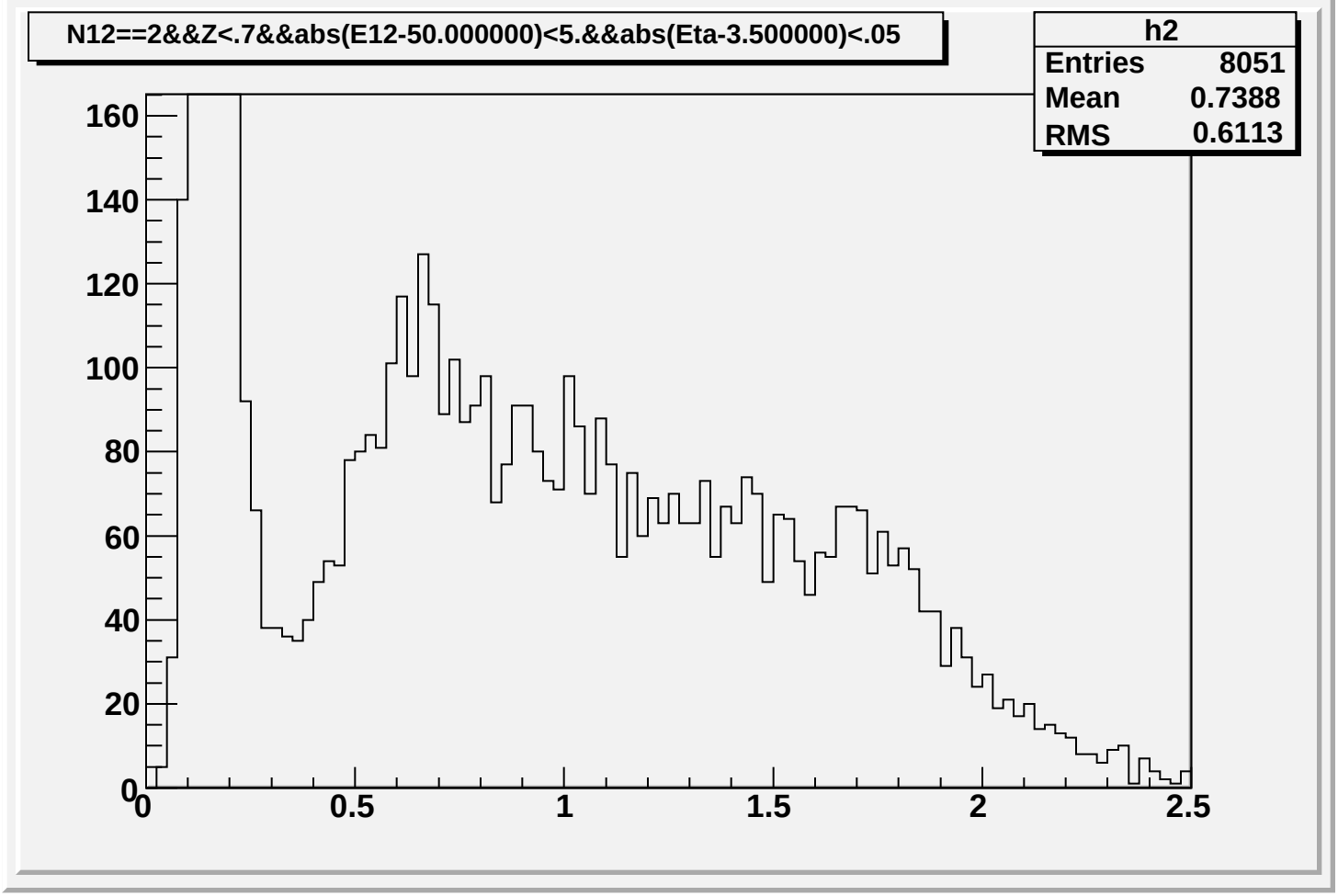

N12==2&&Z<.7&&abs(E12-30.000000)<5.&&abs(Eta-3.500000)<.05
h1
Entries 55254
Mean 0.4016
RMS 0.3763
9000
8000
7000
6000
5000
4000
3000
2000
1000
0
0
0.5
1
1.5
2
2.5

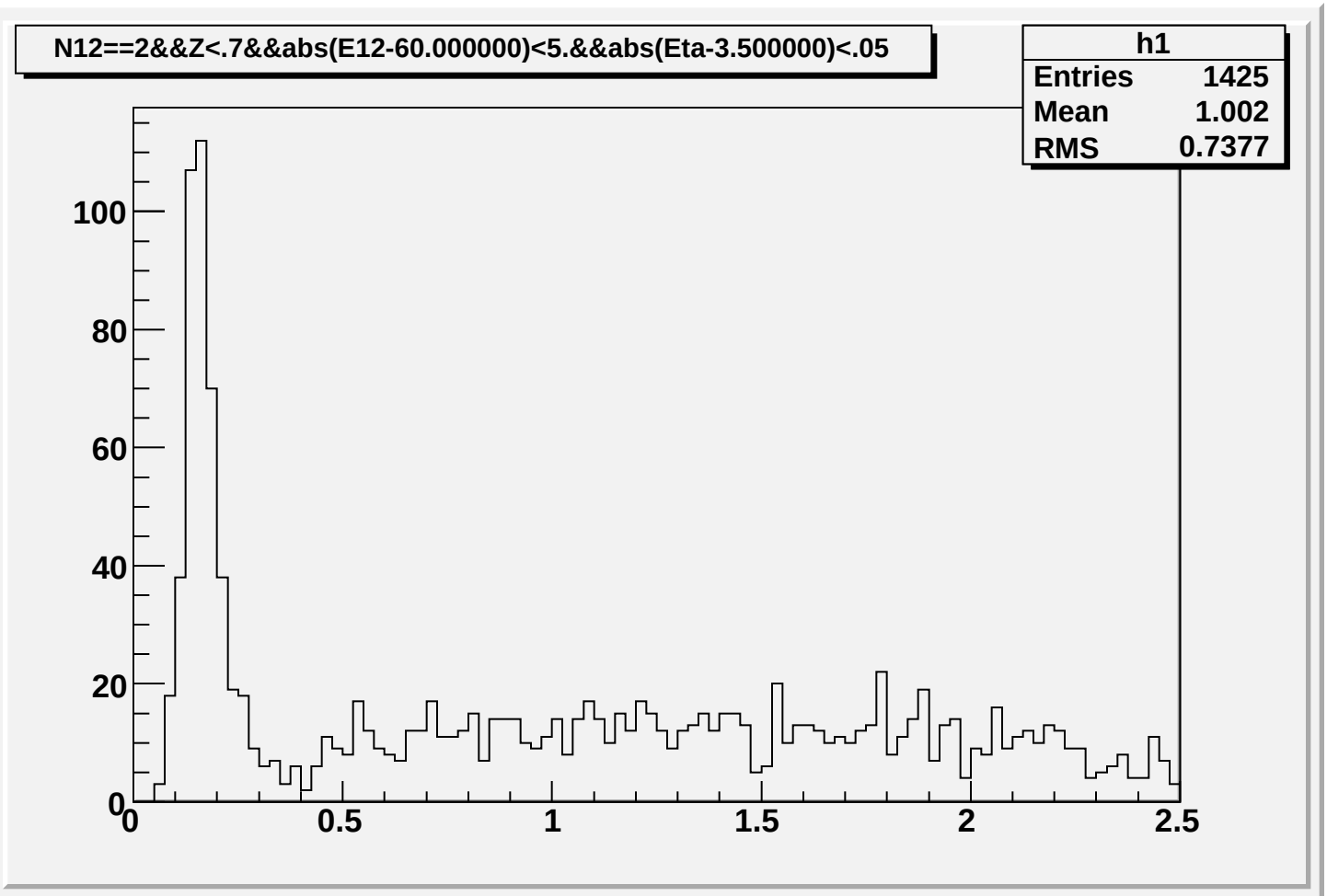

N12==2&&Z<.7&&abs(E12-30.000000)<5.&&abs(Eta-3.500000)<.05
h2
Entries 55254
Mean 0.4016
RMS 0.3763
1000
800
600
400
200
0
0
0.5
1
1.5
2
2.5

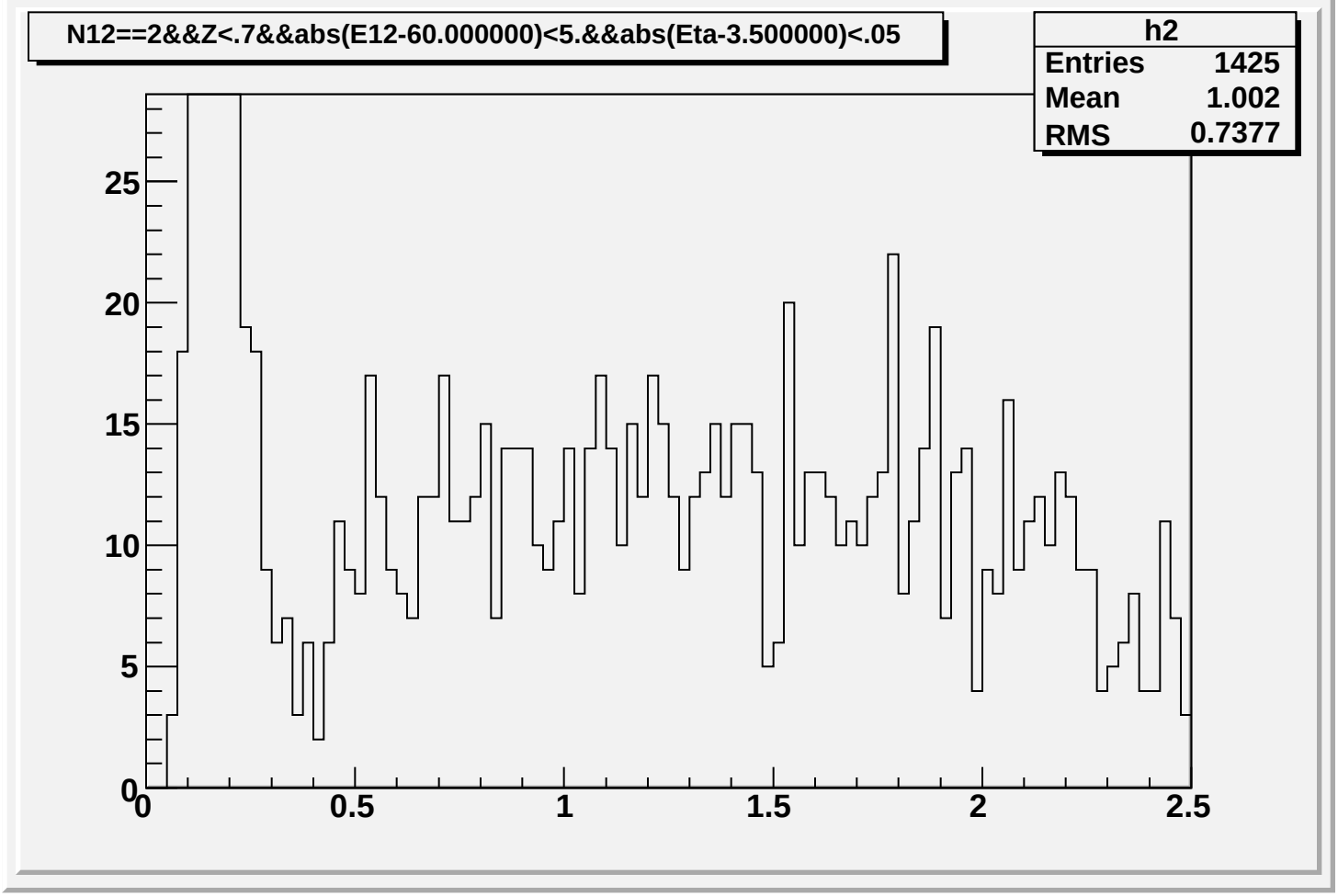

N12==2&&Z<.7&&abs(E12-40.000000)<5.&&abs(Eta-3.500000)<.05
h1
Entries 40663
Mean 0.4898
RMS 0.4628
7000
6000
5000
4000
3000
2000
1000
0
0
0.5
1
1.5
2
2.5

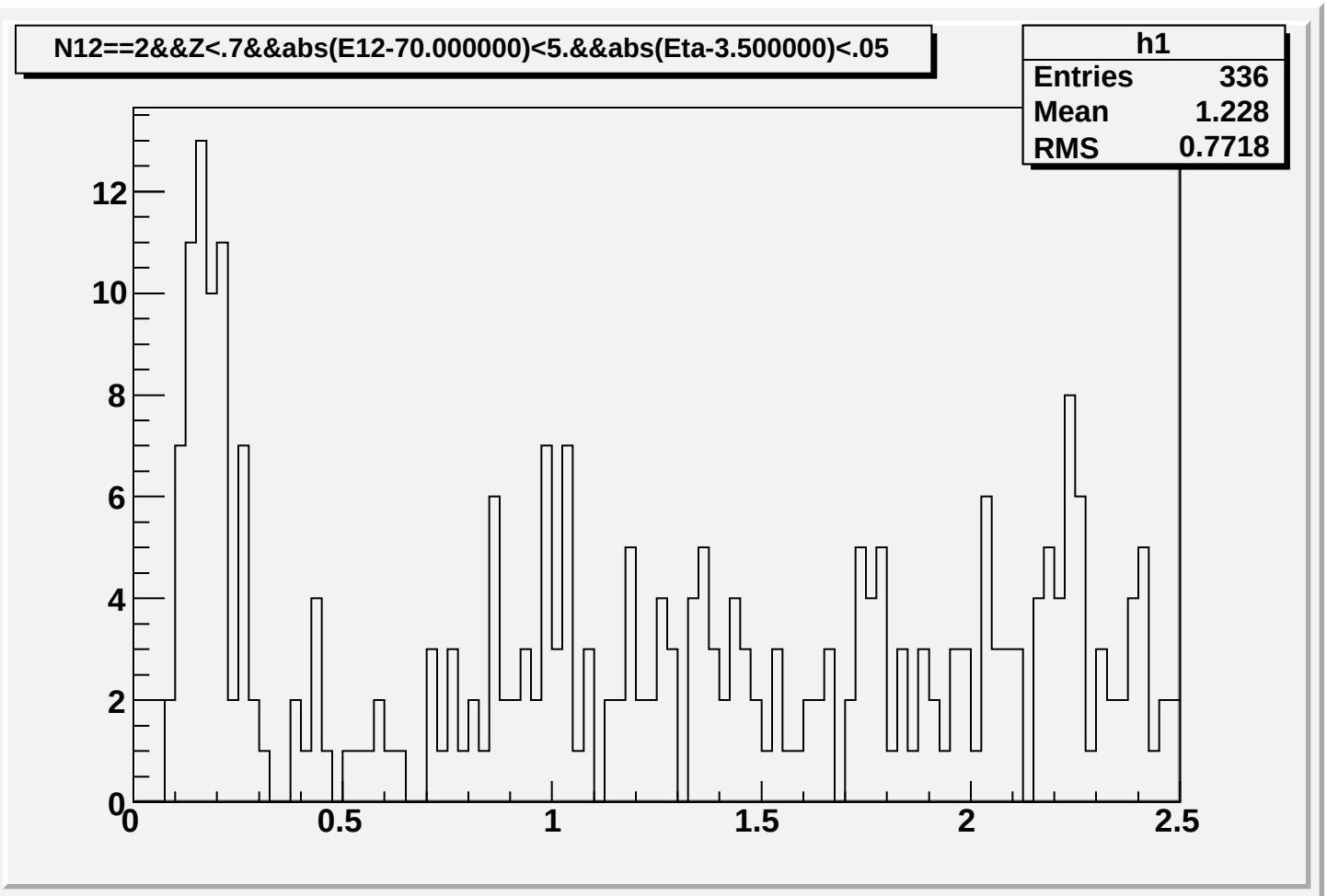

N12==2&&Z<.7&&abs(E12-40.000000)<5.&&abs(Eta-3.500000)<.05
h2
Entries 40663
Mean 0.4898
RMS 0.4628
700
600
500
400
300
200
100
0
0
0.5
1
1.5
2
2.5

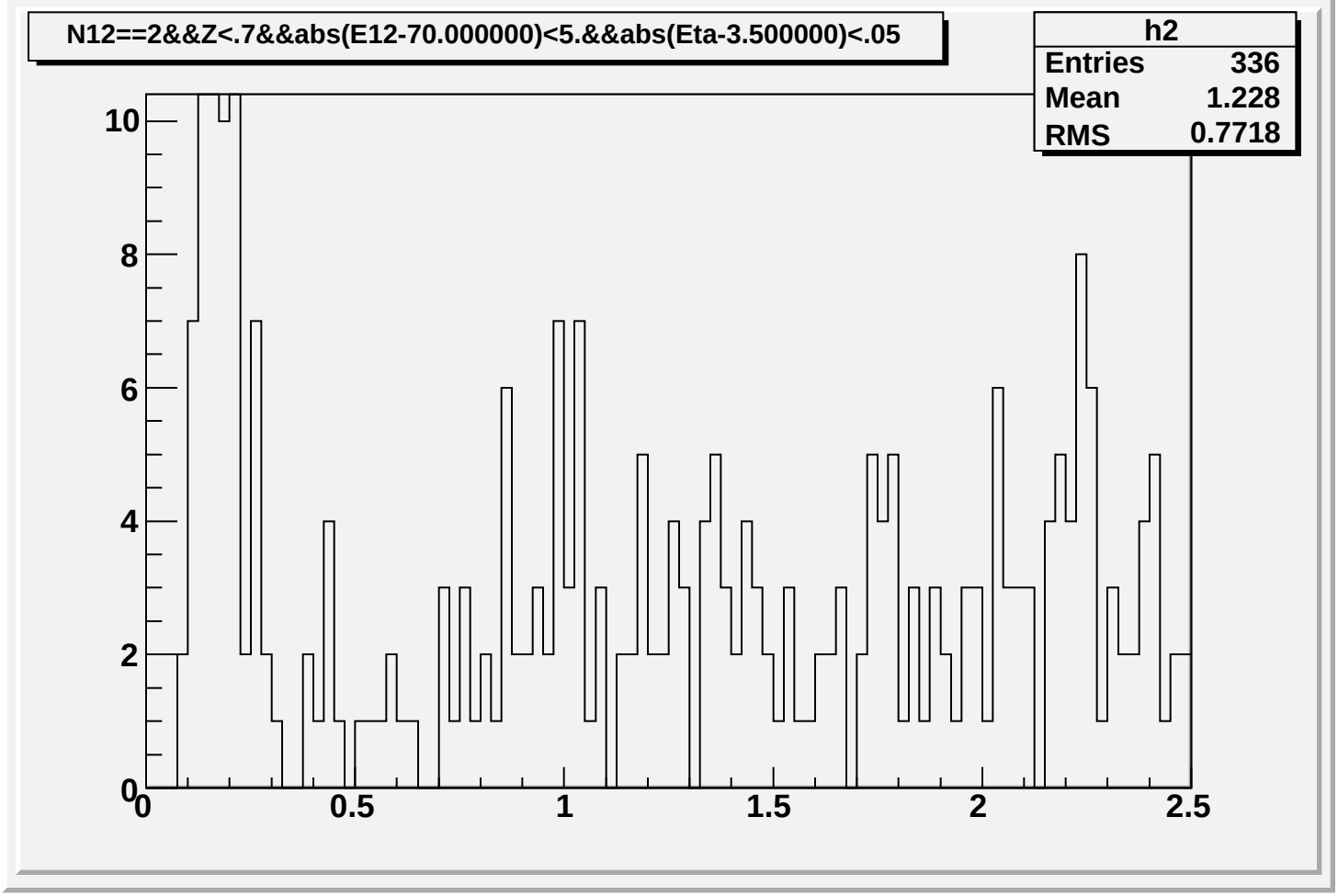

N12==2&&Z<.7&&abs(E12-50.000000)<5.&&abs(Eta-3.500000)<.05
h1
Entries 8051
Mean 0.7388
RMS 0.6113
1000
800
600
400
200
0
0
0.5
1
1.5
2
2.5

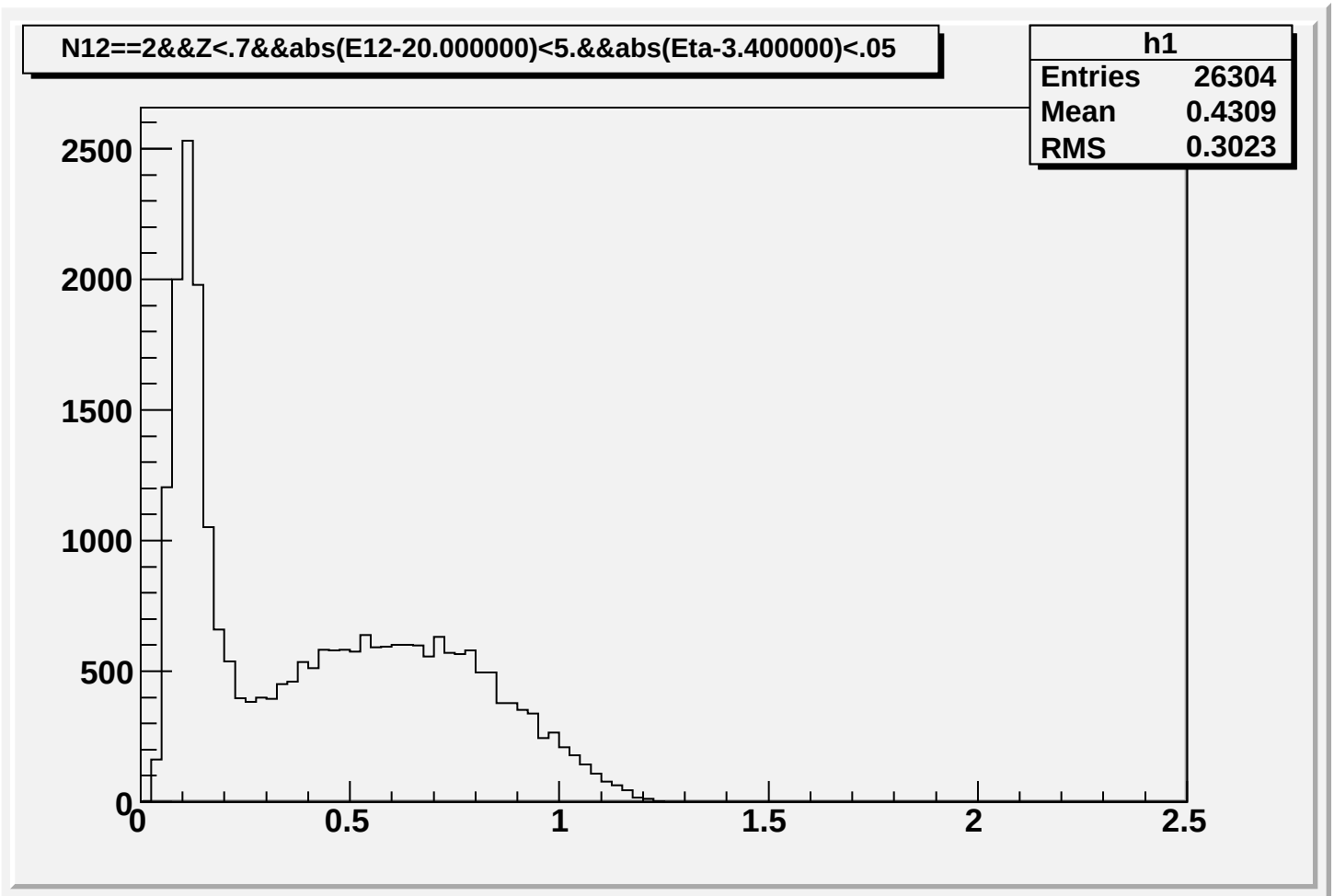

N12==2&&Z<.7&&abs(E12-50.000000)<5.&&abs(Eta-3.500000)<.05
h2
Entries 8051
Mean 0.7388
RMS 0.6113
160
140
120
100
80
60
40
20
0
0
0.5
1
1.5
2
2.5

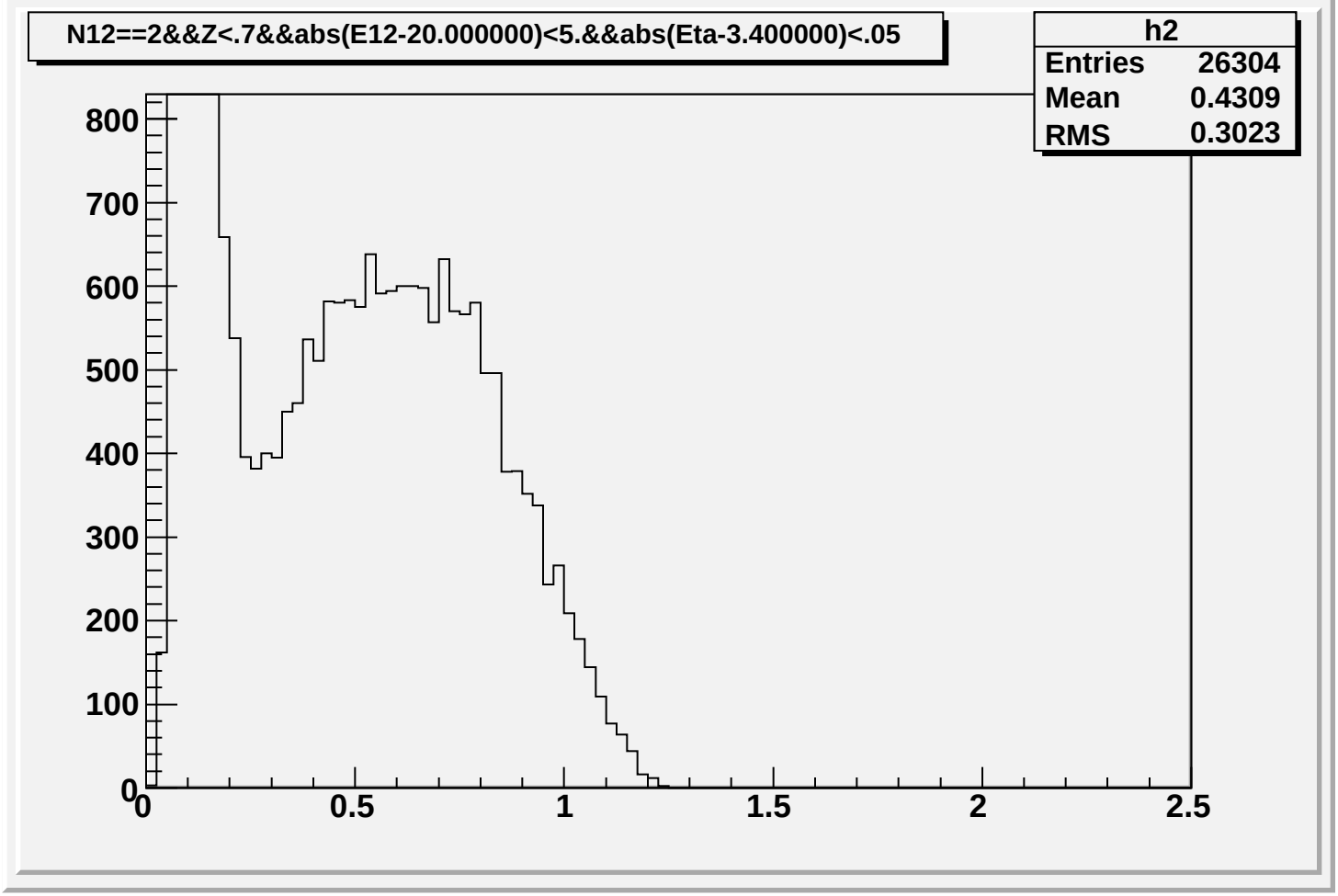

N12==2&&Z<.7&&abs(E12-60.000000)<5.&&abs(Eta-3.500000)<.05
h1
Entries 1425
Mean 1.002
RMS 0.7377
100
80
60
40
20
0
0
0.5
1
1.5
2
2.5

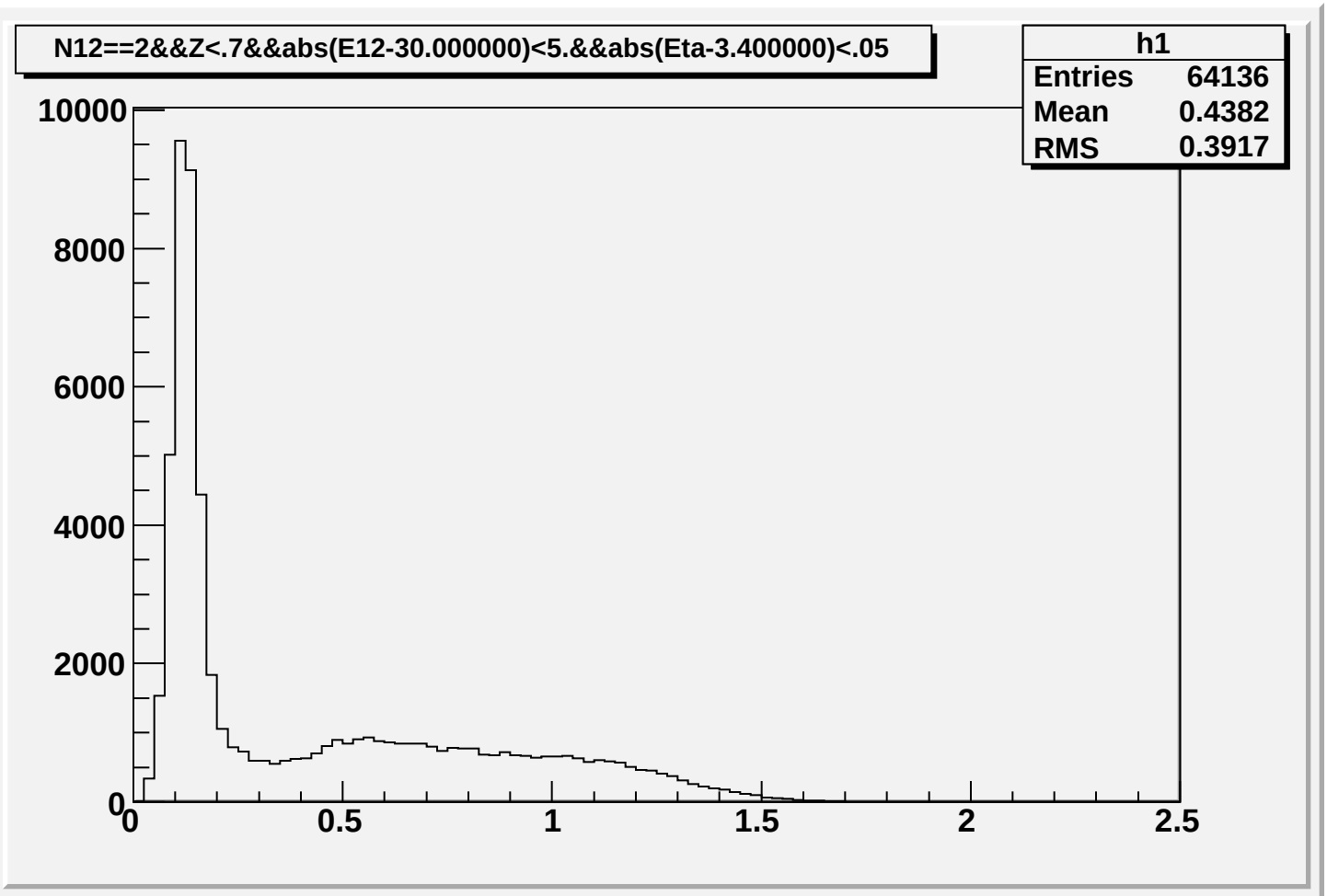

N12==2&&Z<.7&&abs(E12-60.000000)<5.&&abs(Eta-3.500000)<.05
h2
Entries 1425
Mean 1.002
RMS 0.7377
25
20
15
10
5
0
0
0.5
1
1.5
2
2.5

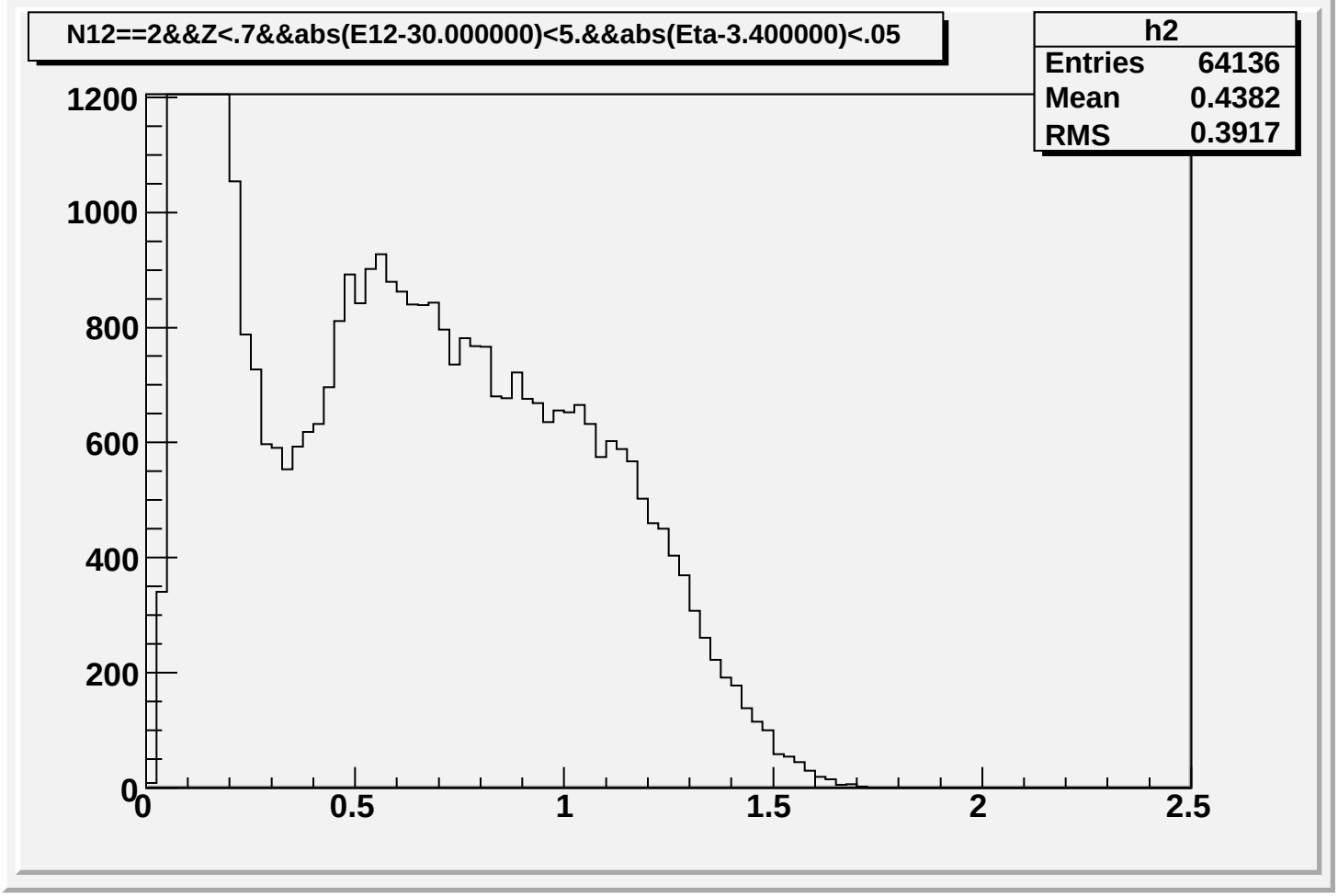

N12==2&&Z<.7&&abs(E12-70.000000)<5.&&abs(Eta-3.500000)<.05
h1
Entries 336
Mean 1.228
RMS 0.7718
0
2
4
6
8
10
12
0
0.5
1
1.5
2
2.5

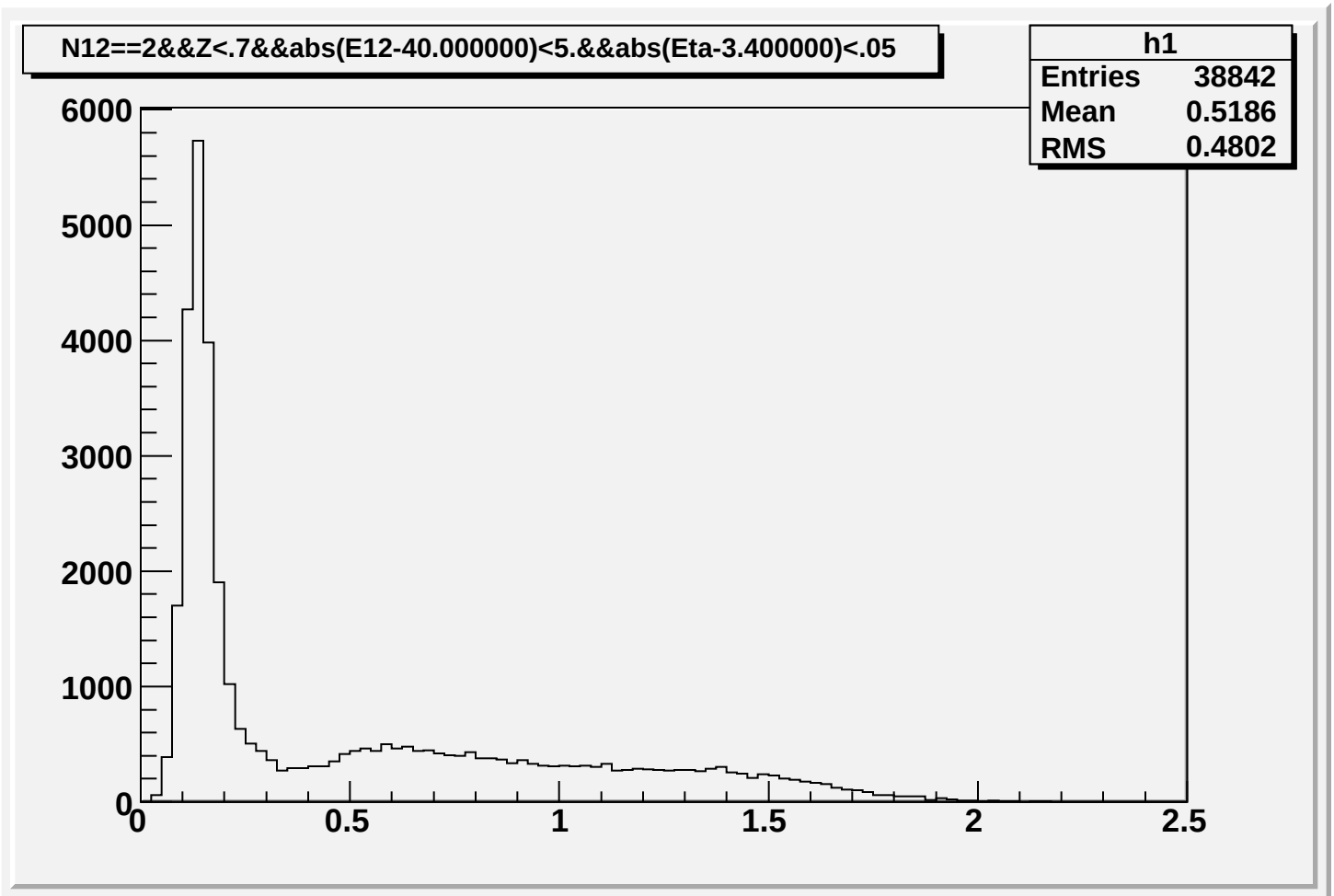

N12==2&&Z<.7&&abs(E12-70.000000)<5.&&abs(Eta-3.500000)<.05
h2
Entries 336
Mean 1.228
RMS 0.7718
0
2
4
6
8
10
0
0.5
1
1.5
2
2.5

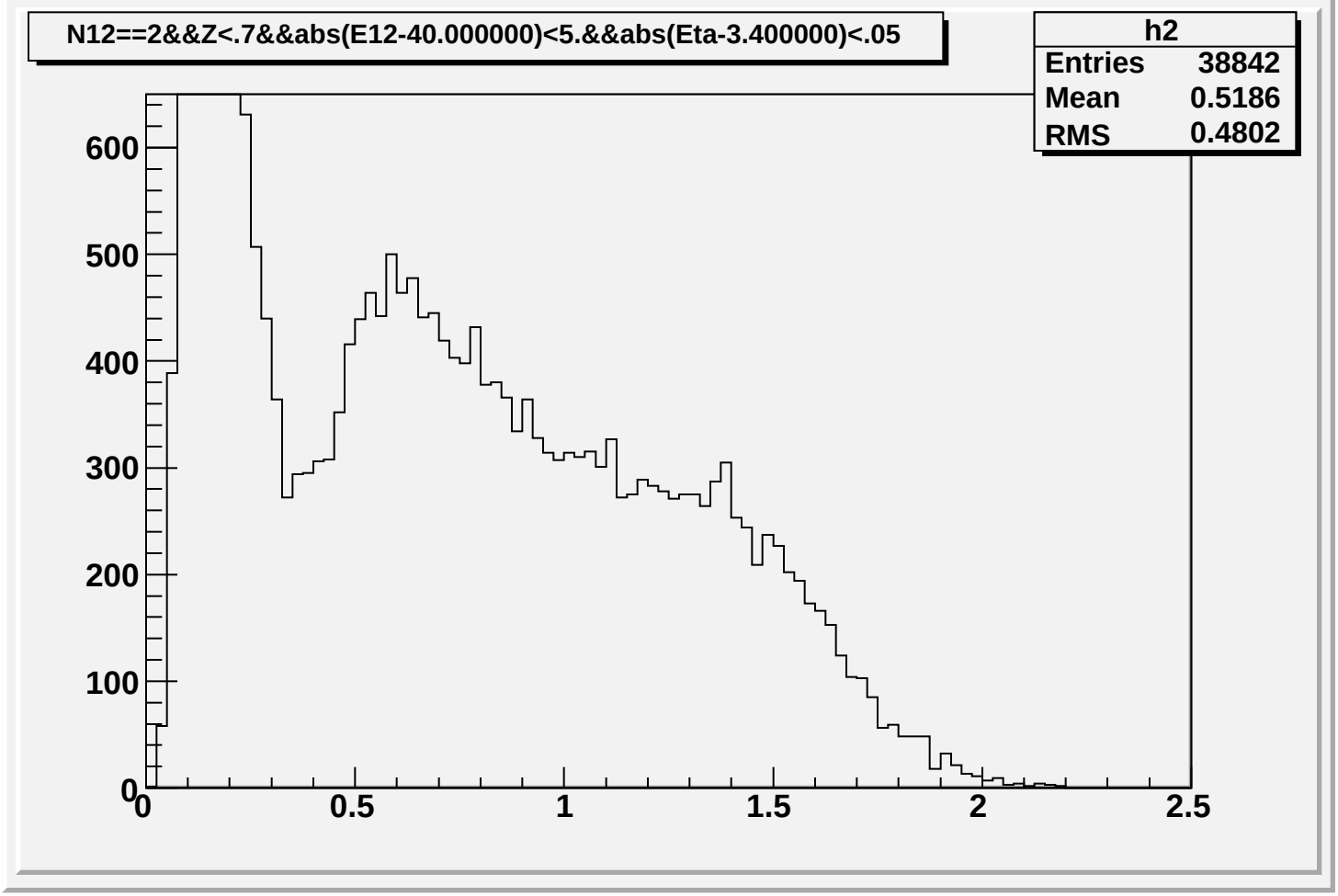

N12==2&&Z<.7&&abs(E12-20.000000)<5.&&abs(Eta-3.400000)<.05
h1
Entries 26304
Mean 0.4309
RMS 0.3023
2500
2000
1500
1000
500
0
0
0.5
1
1.5
2
2.5

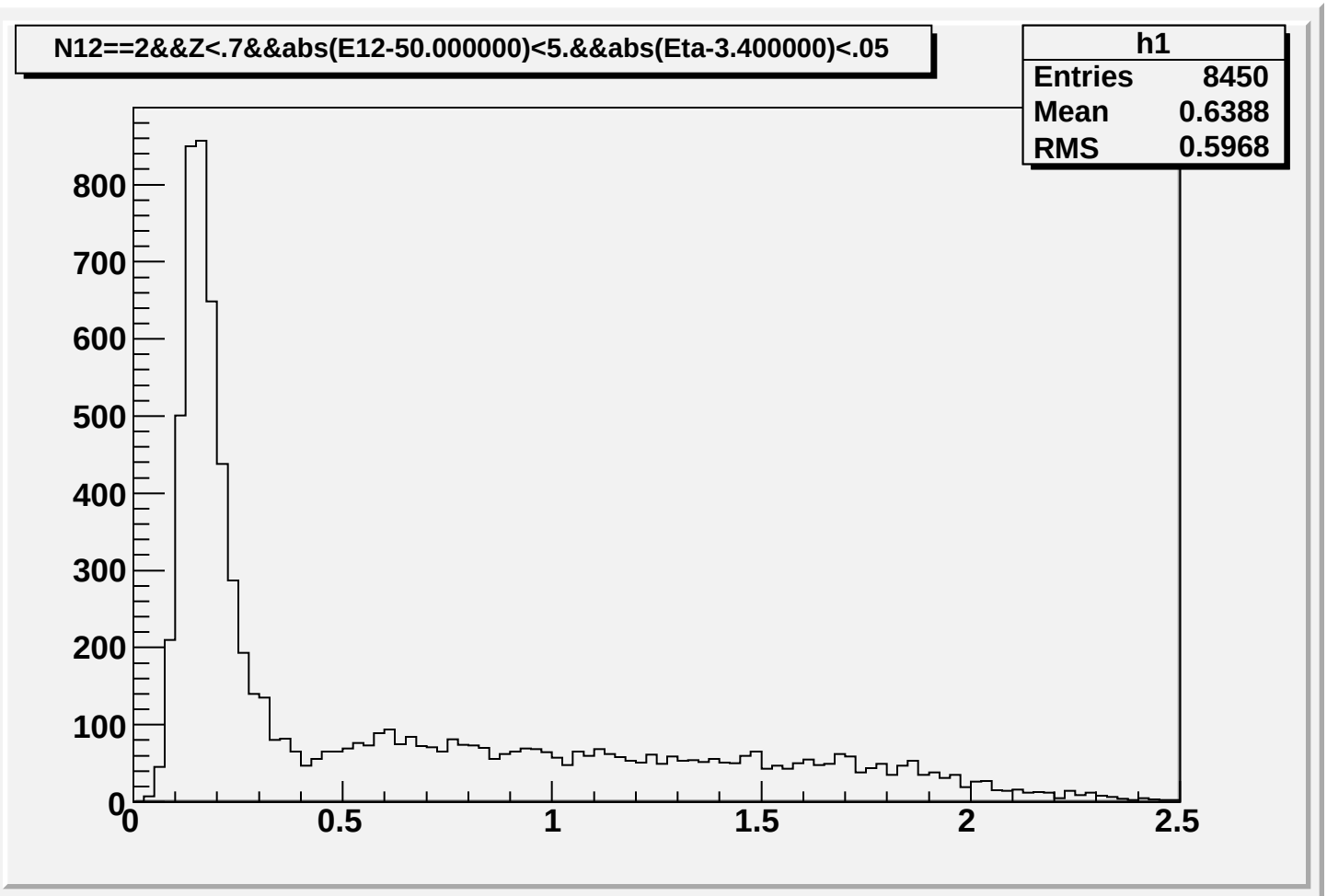

N12==2&&Z<.7&&abs(E12-20.000000)<5.&&abs(Eta-3.400000)<.05
h2
Entries 26304
Mean 0.4309
RMS 0.3023
800
700
600
500
400
300
200
100
0
0
0.5
1
1.5
2
2.5

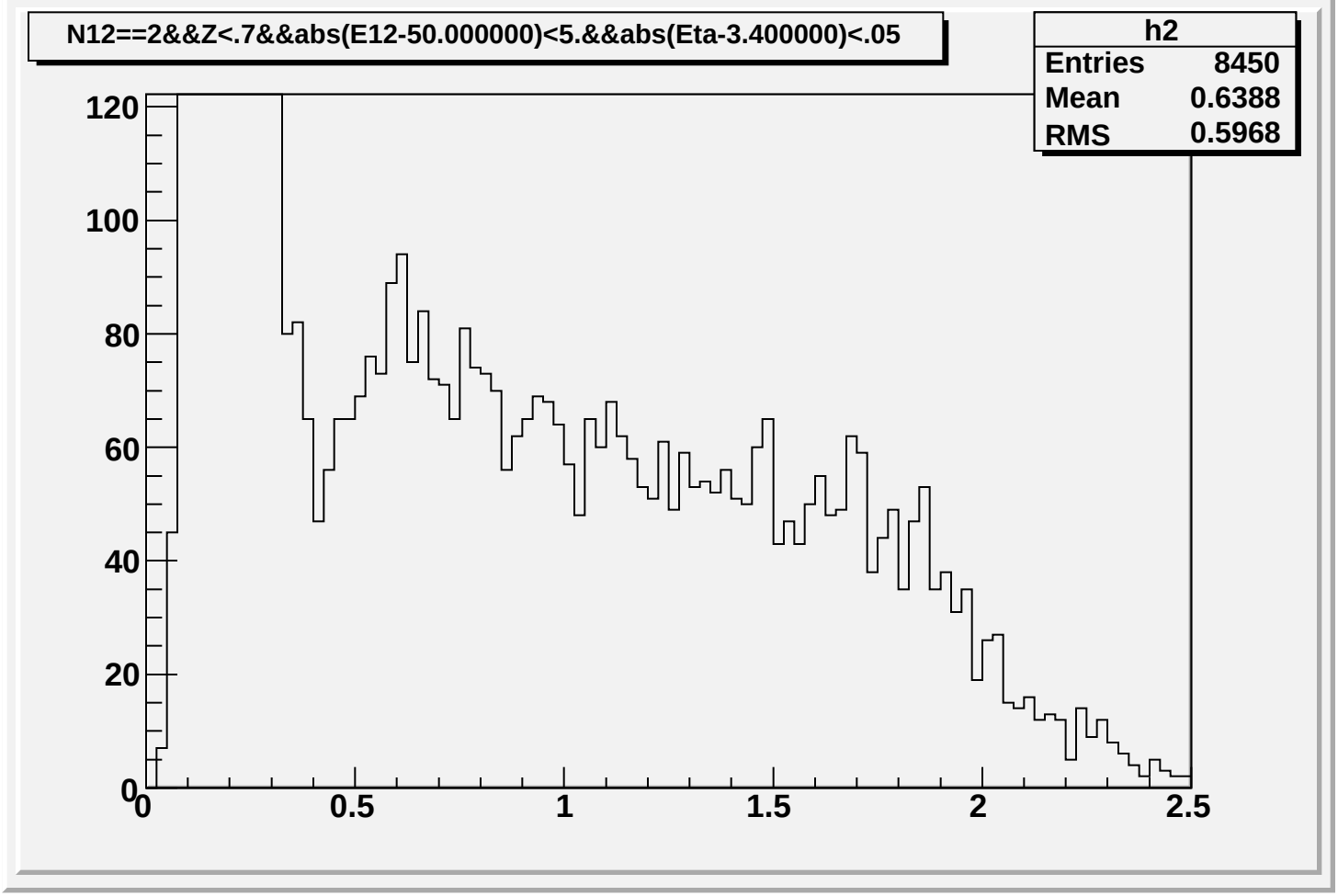

N12==2&&Z<.7&&abs(E12-30.000000)<5.&&abs(Eta-3.400000)<.05
h1
Entries 64136
Mean 0.4382
RMS 0.3917
10000
8000
6000
4000
2000
0
0
0.5
1
1.5
2
2.5

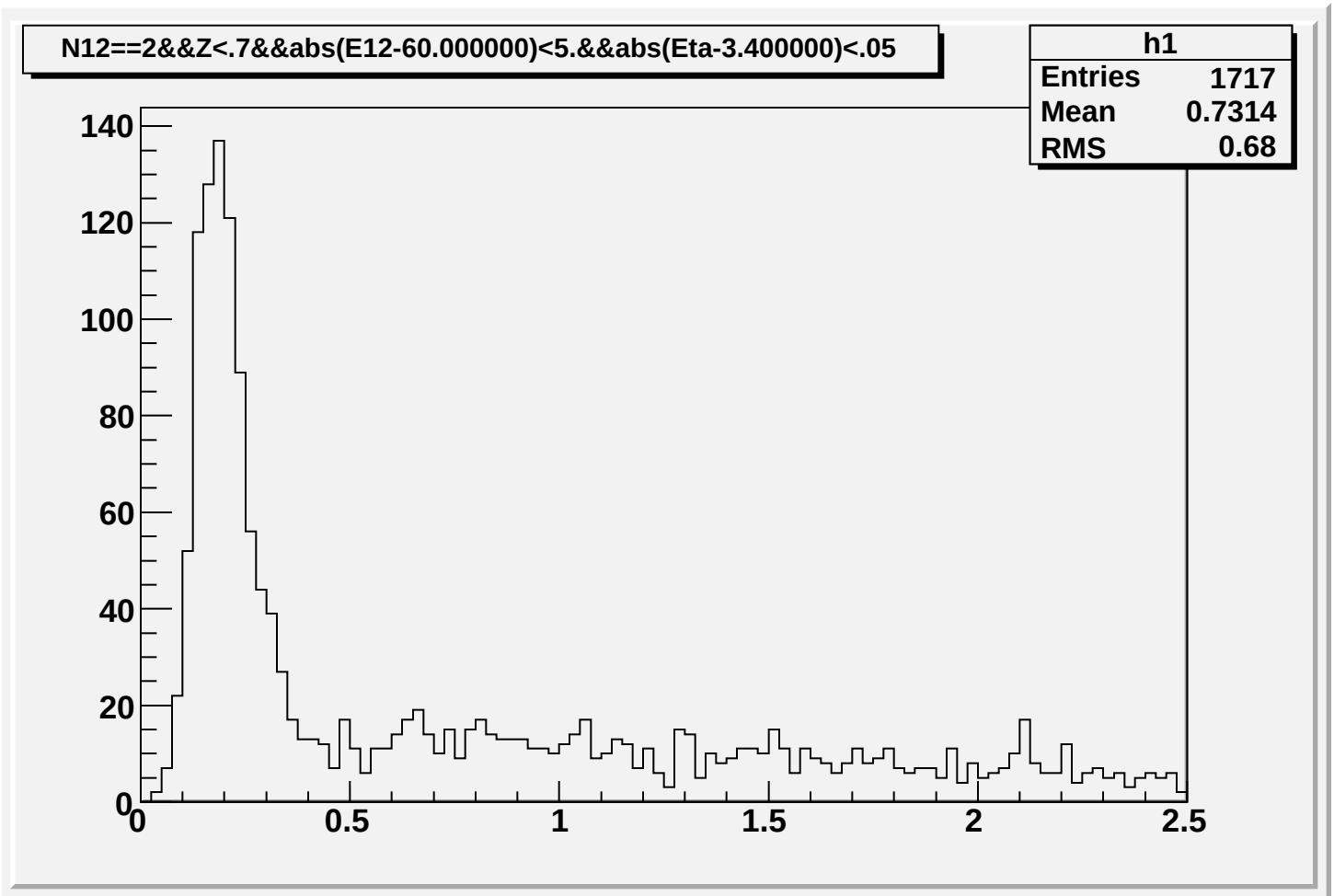

N12==2&&Z<.7&&abs(E12-30.000000)<5.&&abs(Eta-3.400000)<.05
h2
Entries 64136
Mean 0.4382
RMS 0.3917
1200
1000
800
600
400
200
0
0
0.5
1
1.5
2
2.5

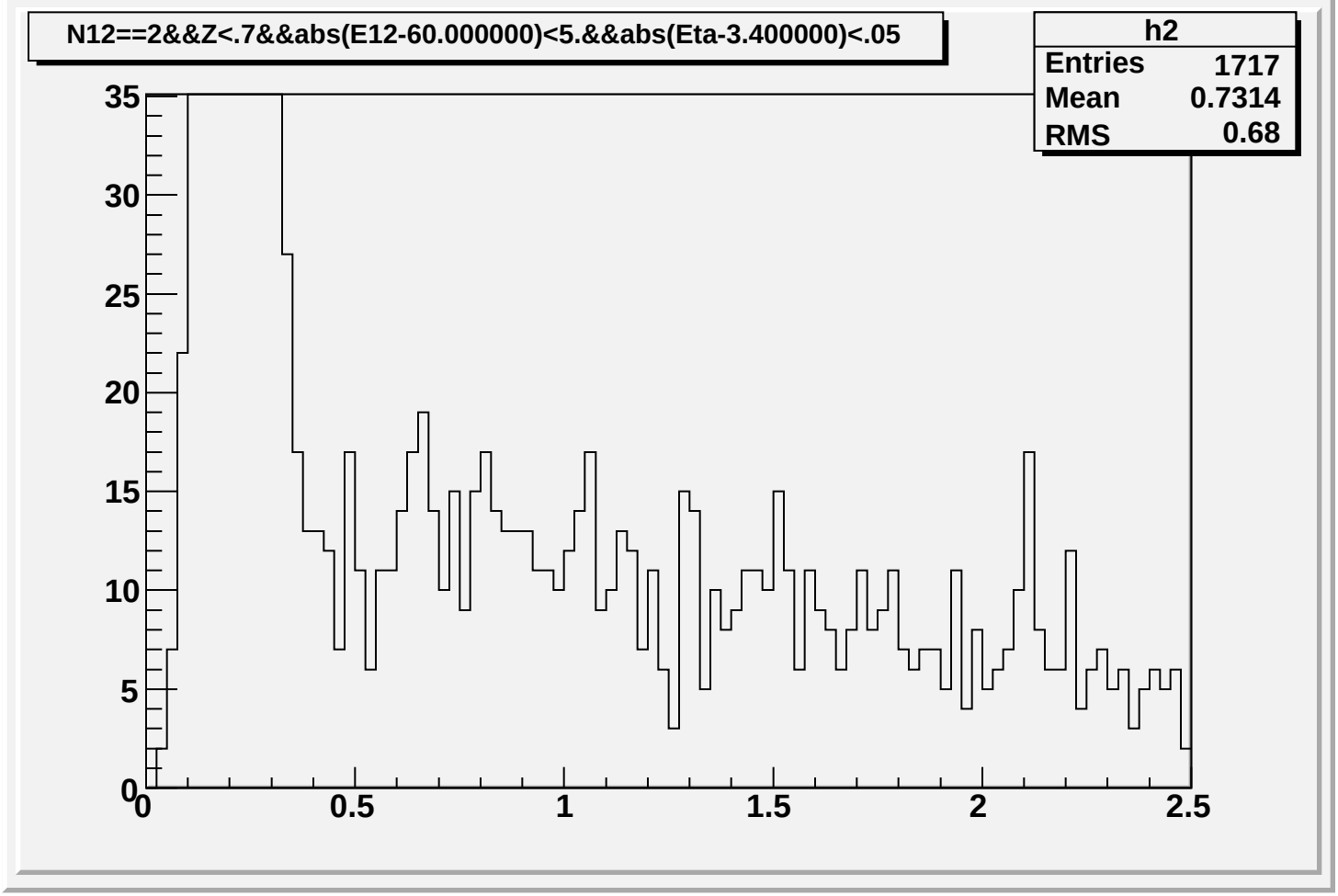

N12==2&&Z<.7&&abs(E12-40.000000)<5.&&abs(Eta-3.400000)<.05
h1
Entries 38842
Mean 0.5186
RMS 0.4802
6000
5000
4000
3000
2000
1000
0
0
0.5
1
1.5
2
2.5

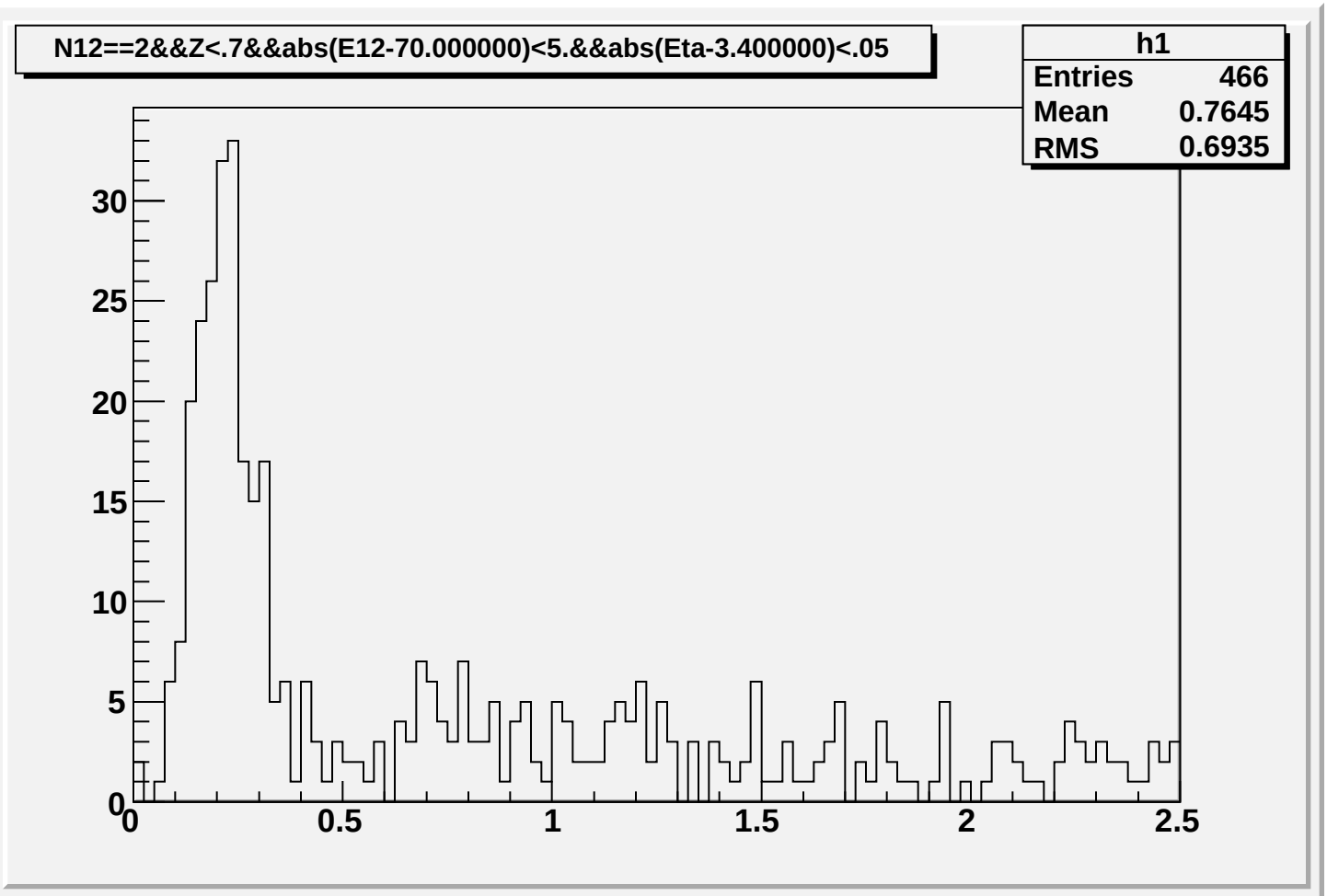

N12==2&&Z<.7&&abs(E12-40.000000)<5.&&abs(Eta-3.400000)<.05
h2
Entries 38842
Mean 0.5186
RMS 0.4802
600
500
400
300
200
100
0
0
0.5
1
1.5
2
2.5

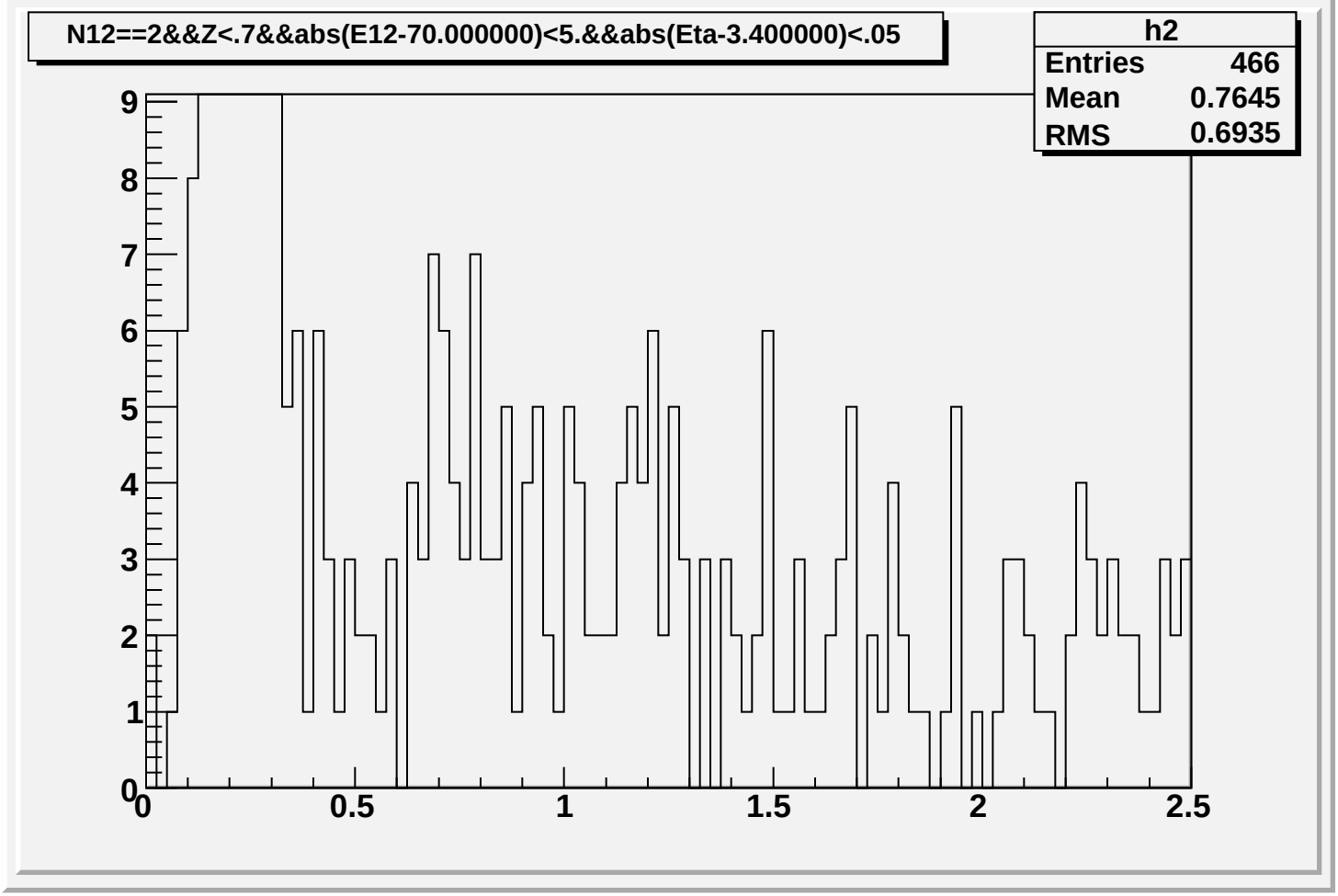

N12==2&&Z<.7&&abs(E12-50.000000)<5.&&abs(Eta-3.400000)<.05
h1
Entries 8450
Mean 0.6388
RMS 0.5968
800
700
600
500
400
300
200
100
0
0
0.5
1
1.5
2
2.5

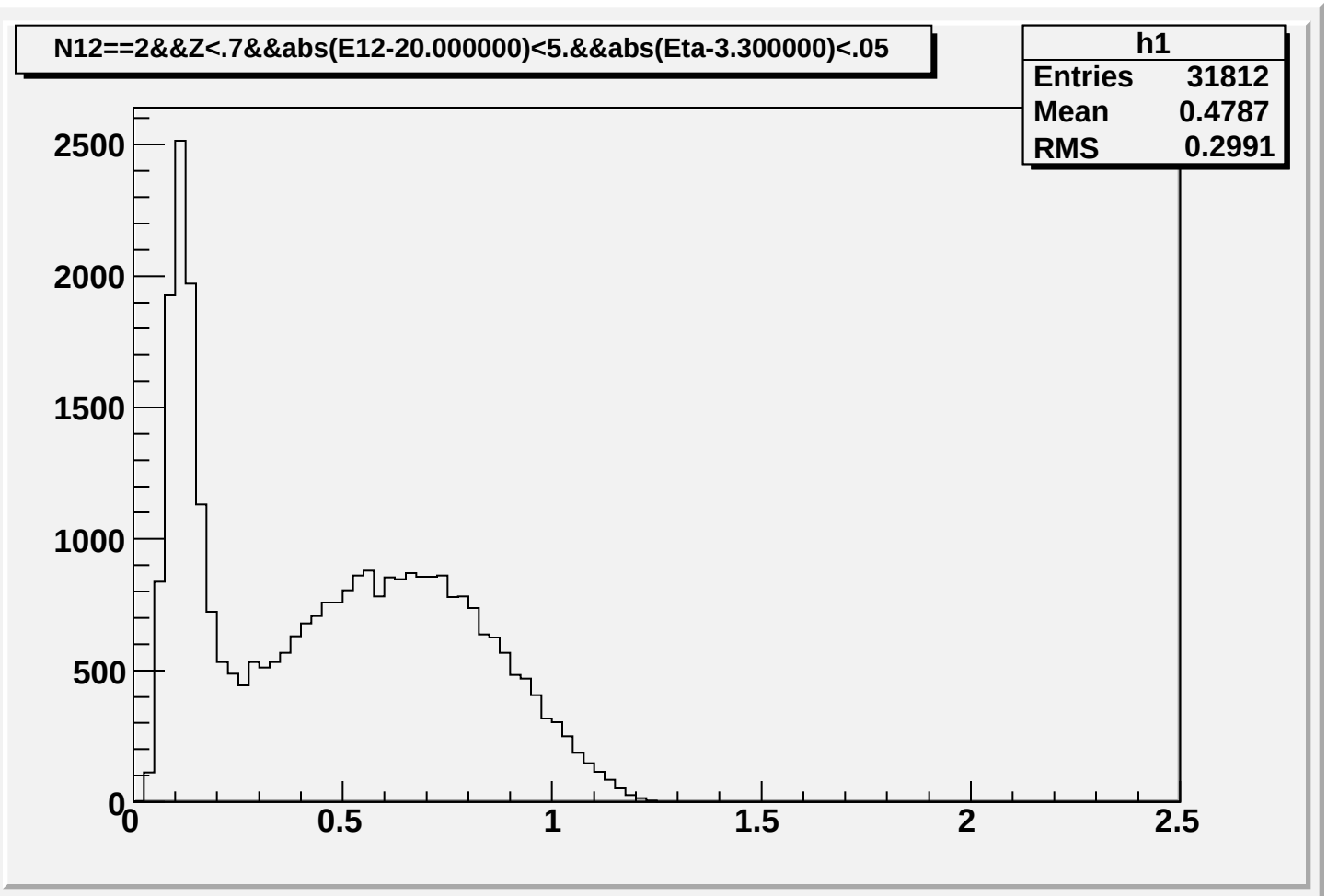

N12==2&&Z<.7&&abs(E12-50.000000)<5.&&abs(Eta-3.400000)<.05
h2
Entries 8450
Mean 0.6388
RMS 0.5968
120
100
80
60
40
20
0
0
0.5
1
1.5
2
2.5

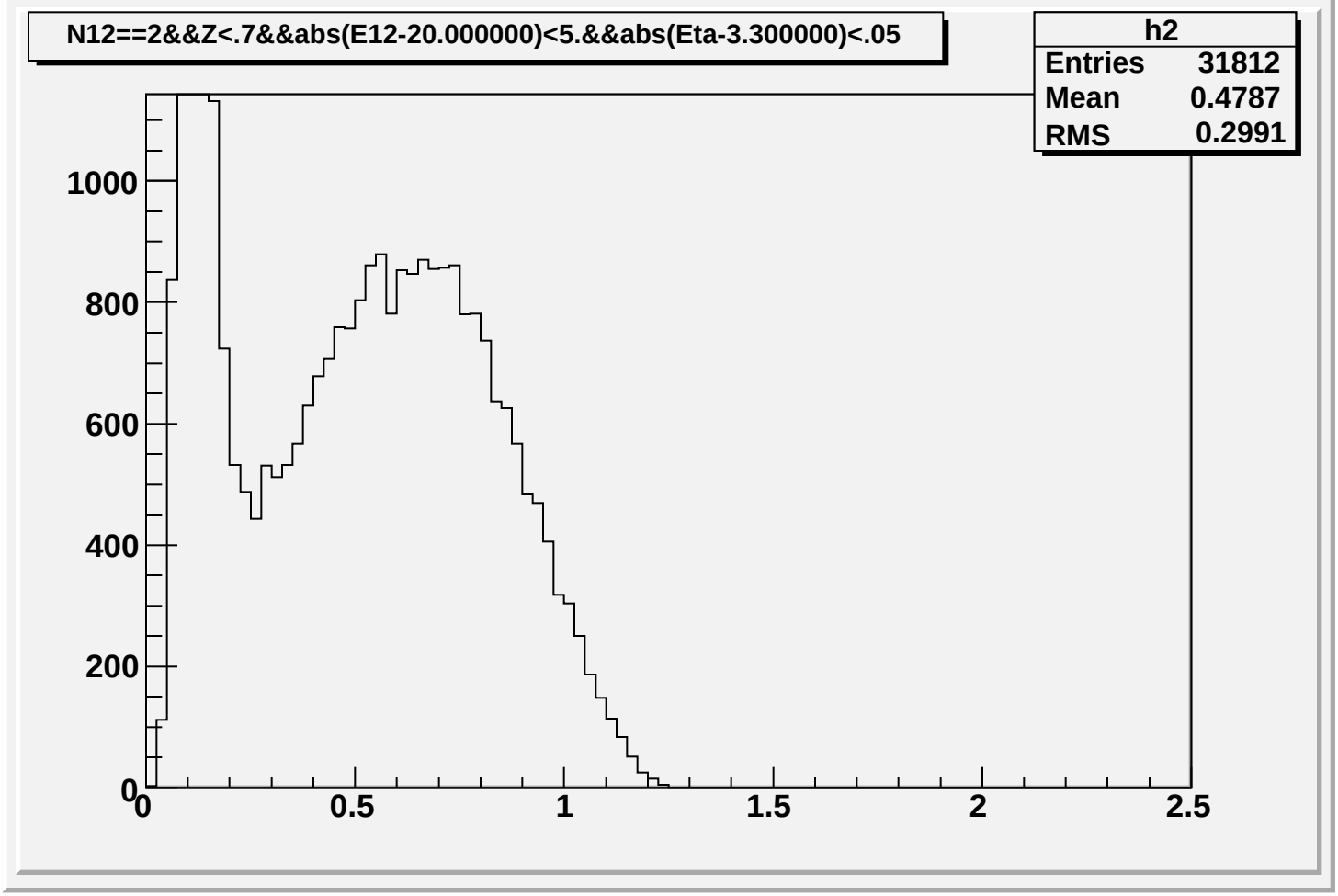

N12==2&&Z<.7&&abs(E12-60.000000)<5.&&abs(Eta-3.400000)<.05
h1
Entries 1717
Mean 0.7314
RMS 0.68
140
120
100
80
60
40
20
0
0
0.5
1
1.5
2
2.5

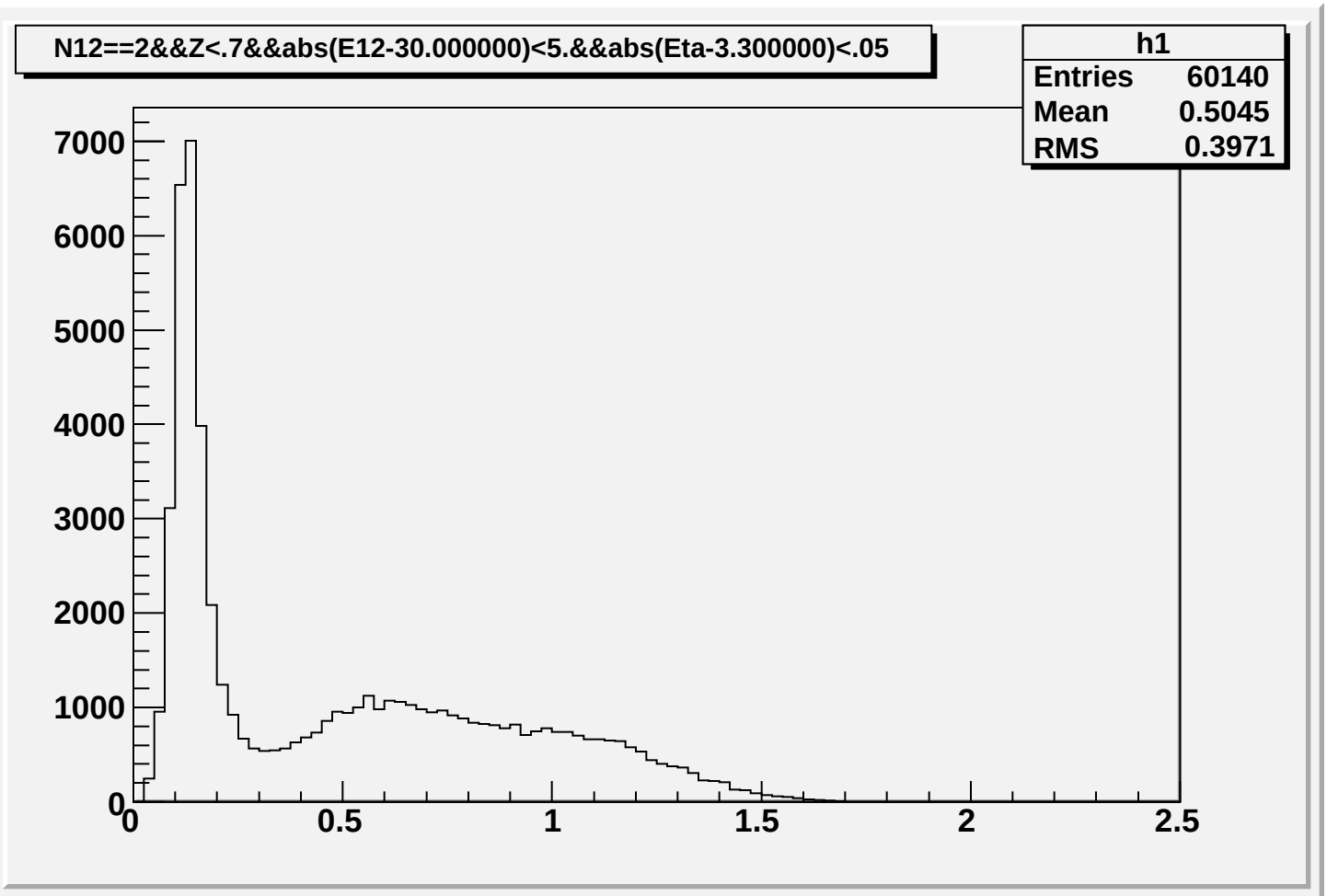

N12==2&&Z<.7&&abs(E12-60.000000)<5.&&abs(Eta-3.400000)<.05
h2
Entries 1717
Mean 0.7314
RMS 0.68
35
30
25
20
15
10
5
0
0
0.5
1
1.5
2
2.5

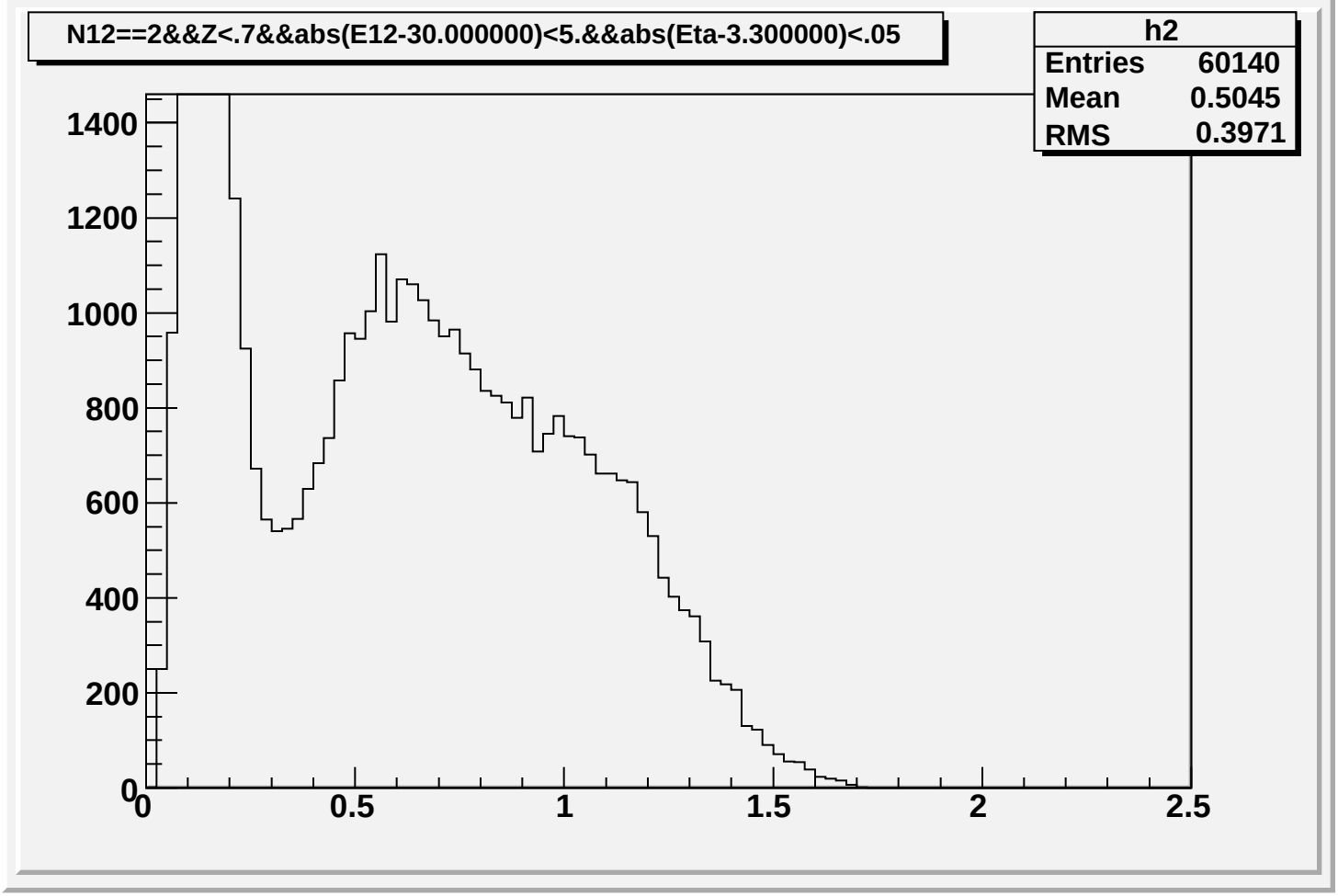

N12==2&&Z<.7&&abs(E12-70.000000)<5.&&abs(Eta-3.400000)<.05
h1
Entries 466
Mean 0.7645
RMS 0.6935
30
25
20
15
10
5
0
0
0.5
1
1.5
2
2.5

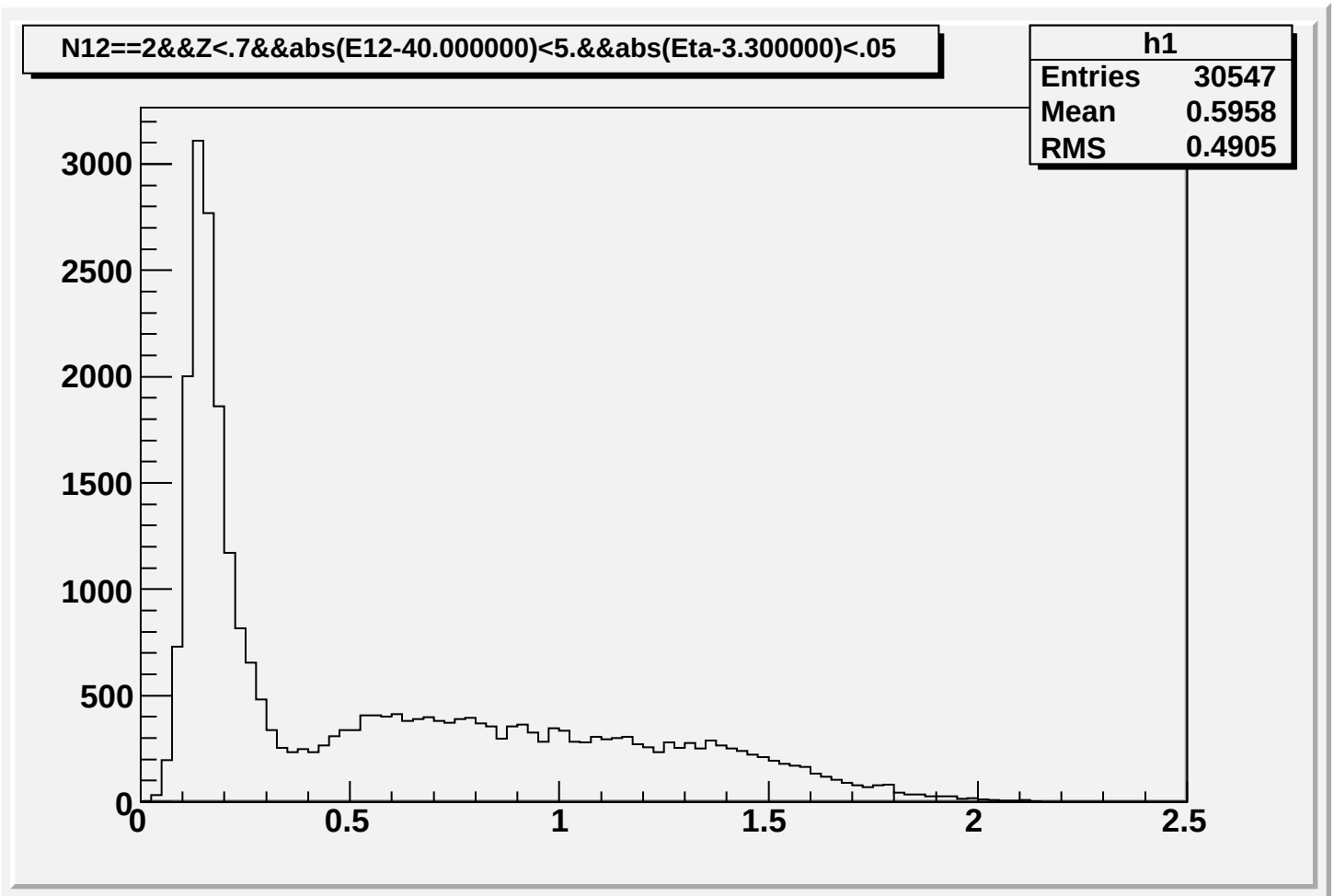

N12==2&&Z<.7&&abs(E12-70.000000)<5.&&abs(Eta-3.400000)<.05
h2
Entries 466
Mean 0.7645
RMS 0.6935
9
8
7
6
5
4
3
2
1
0
0
0.5
1
1.5
2
2.5

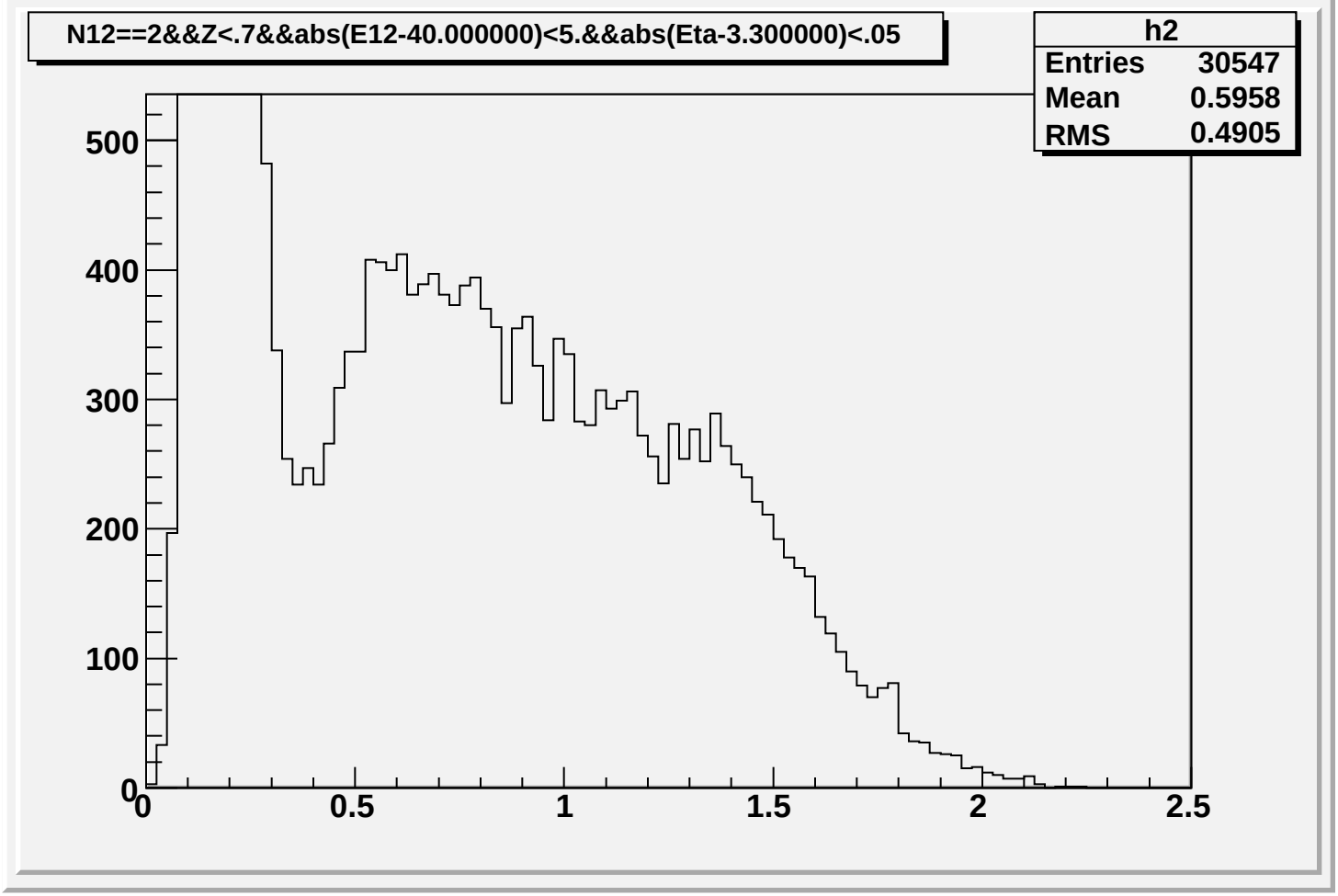

N12==2&&Z<.7&&abs(E12-20.000000)<5.&&abs(Eta-3.300000)<.05
h1
Entries 31812
Mean 0.4787
RMS 0.2991
2500
2000
1500
1000
500
0
0
0.5
1
1.5
2
2.5

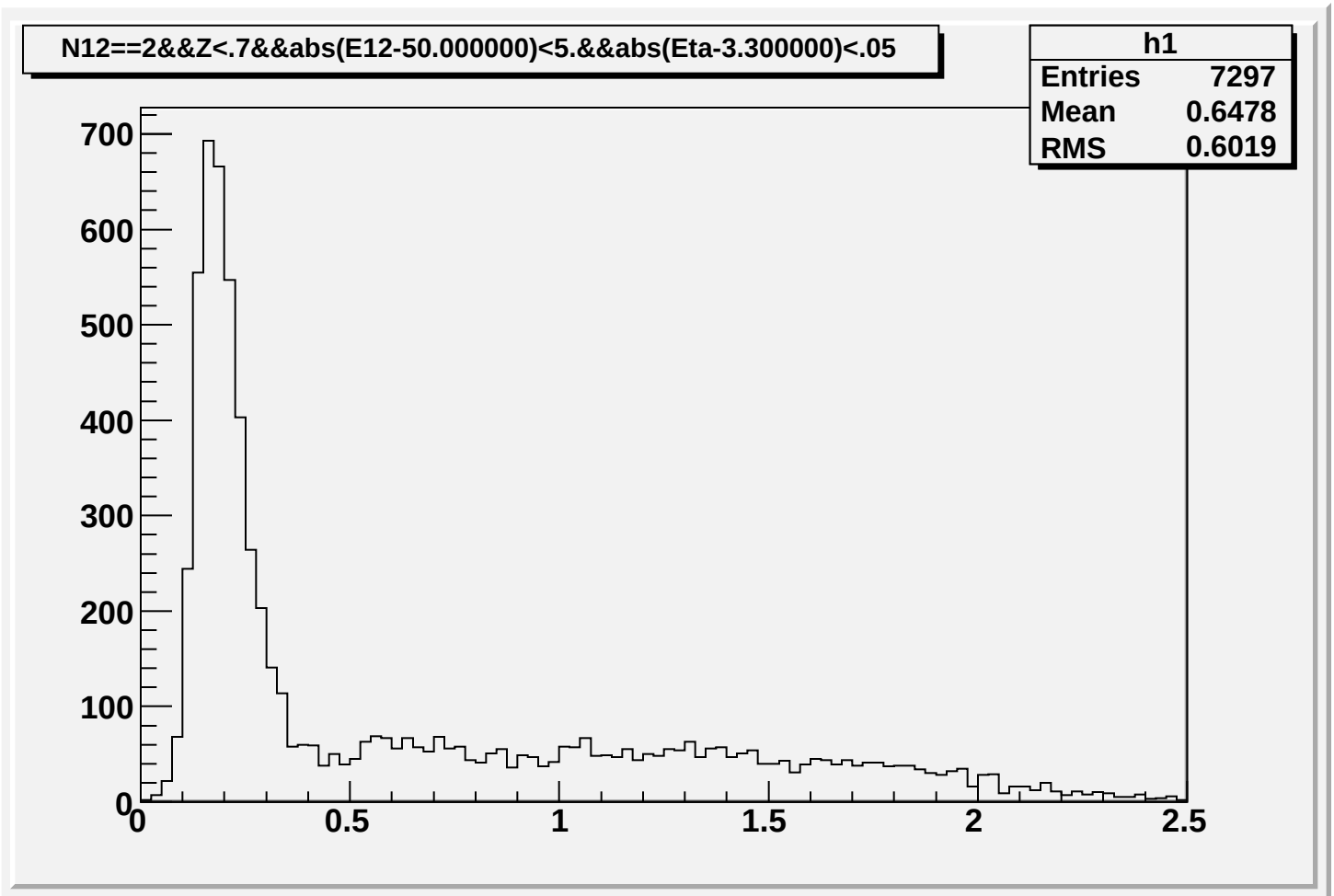

N12==2&&Z<.7&&abs(E12-20.000000)<5.&&abs(Eta-3.300000)<.05
h2
Entries 31812
Mean 0.4787
RMS 0.2991
1000
800
600
400
200
0
0
0.5
1
1.5
2
2.5

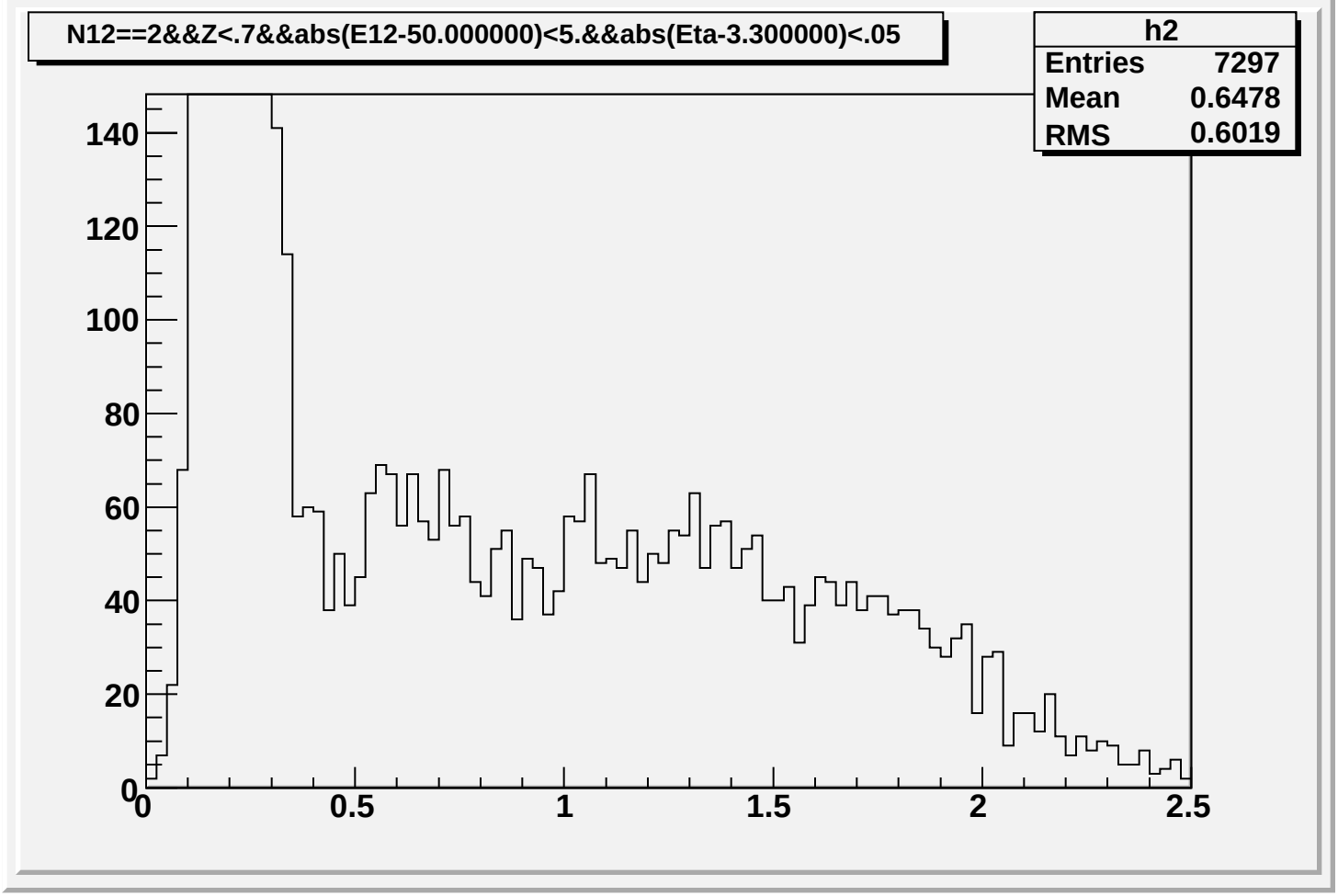

N12==2&&Z<.7&&abs(E12-30.000000)<5.&&abs(Eta-3.300000)<.05
h1
Entries 60140
Mean 0.5045
RMS 0.3971
7000
6000
5000
4000
3000
2000
1000
0
0
0.5
1
1.5
2
2.5

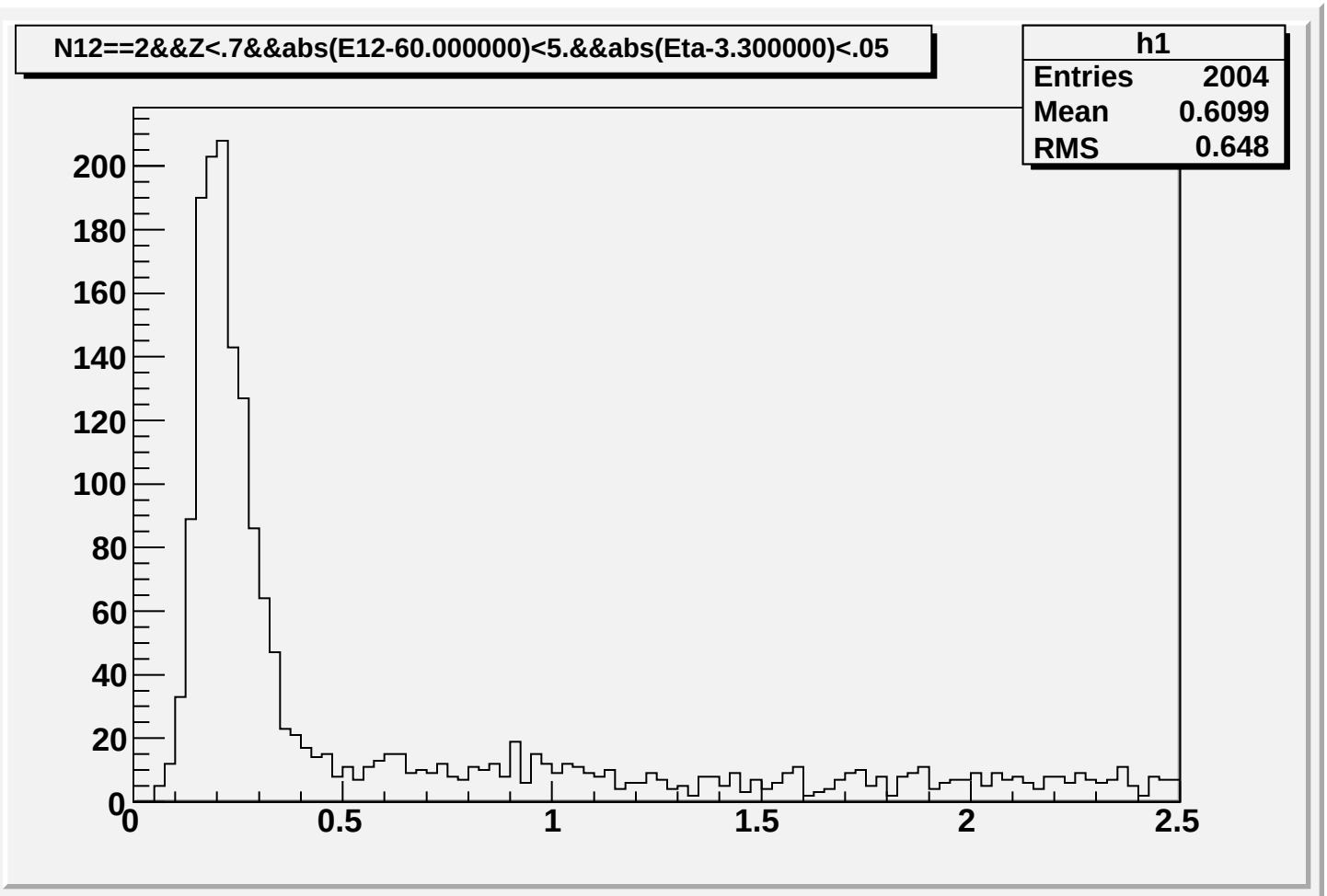

N12==2&&Z<.7&&abs(E12-30.000000)<5.&&abs(Eta-3.300000)<.05
h2
Entries 60140
Mean 0.5045
RMS 0.3971
1400
1200
1000
800
600
400
200
0
0
0.5
1
1.5
2
2.5

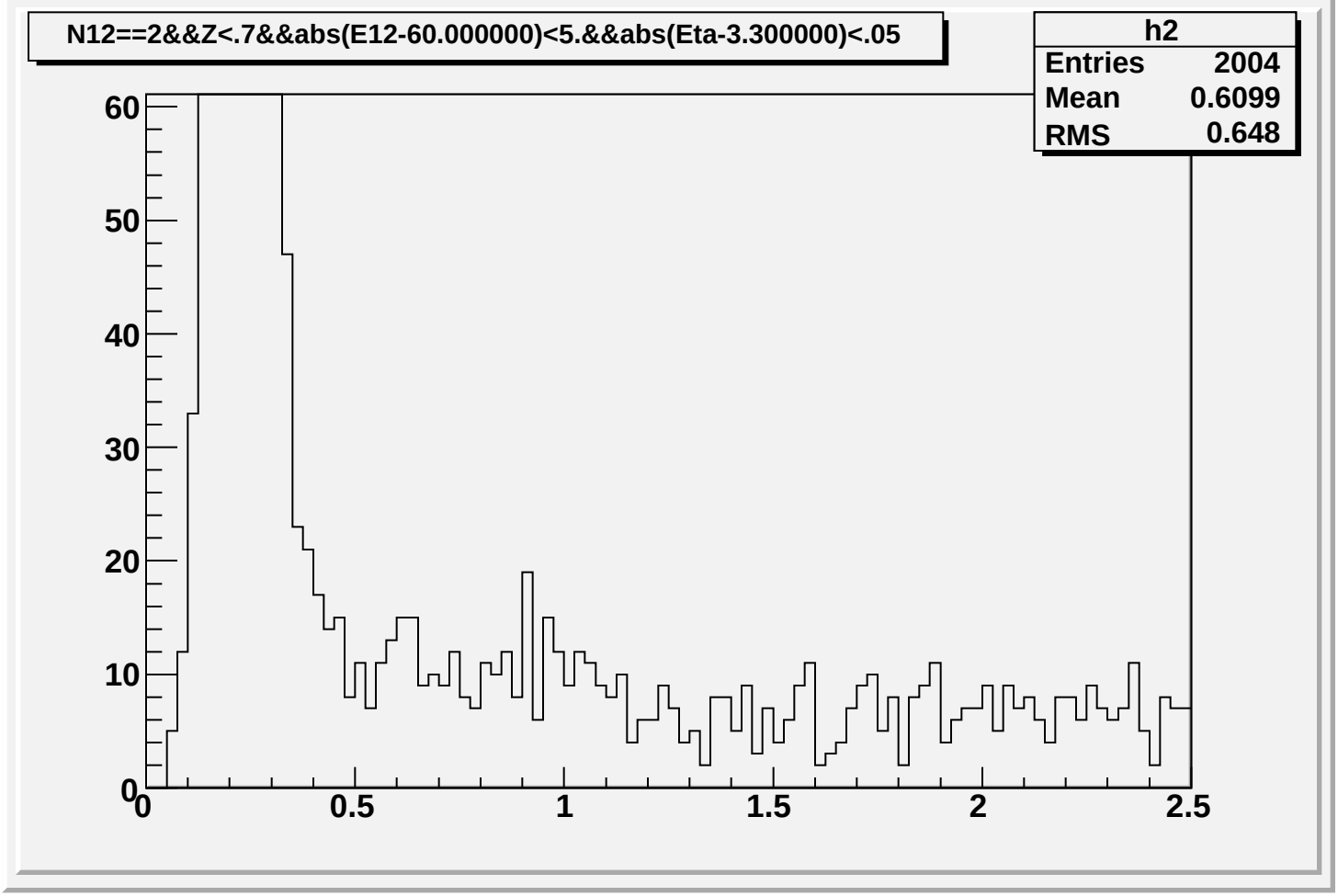

N12==2&&Z<.7&&abs(E12-40.000000)<5.&&abs(Eta-3.300000)<.05
h1
Entries 30547
Mean 0.5958
RMS 0.4905
3000
2500
2000
1500
1000
500
0
0
0.5
1
1.5
2
2.5

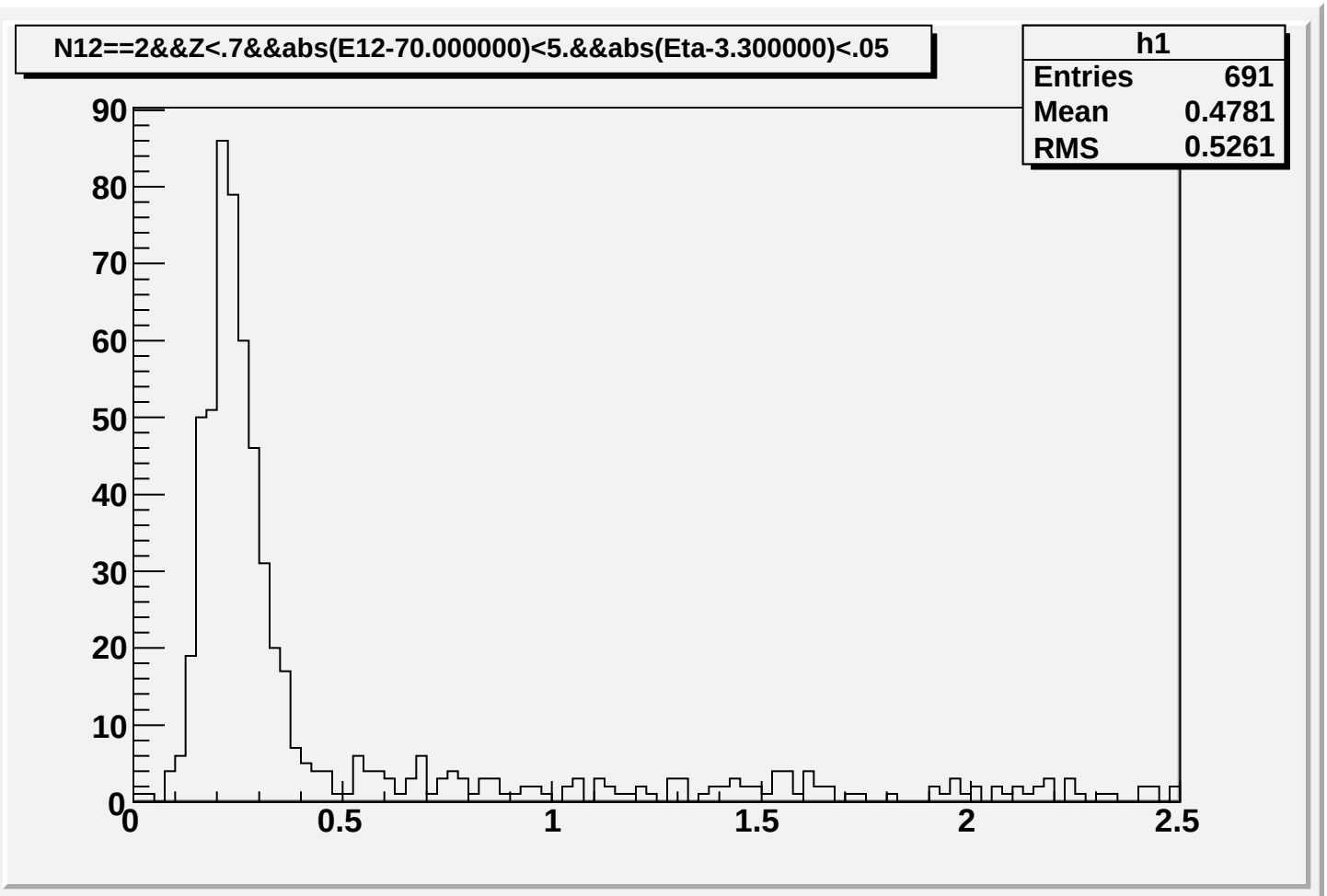

N12==2&&Z<.7&&abs(E12-40.000000)<5.&&abs(Eta-3.300000)<.05
h2
Entries 30547
Mean 0.5958
RMS 0.4905
500
400
300
200
100
0
0
0.5
1
1.5
2
2.5

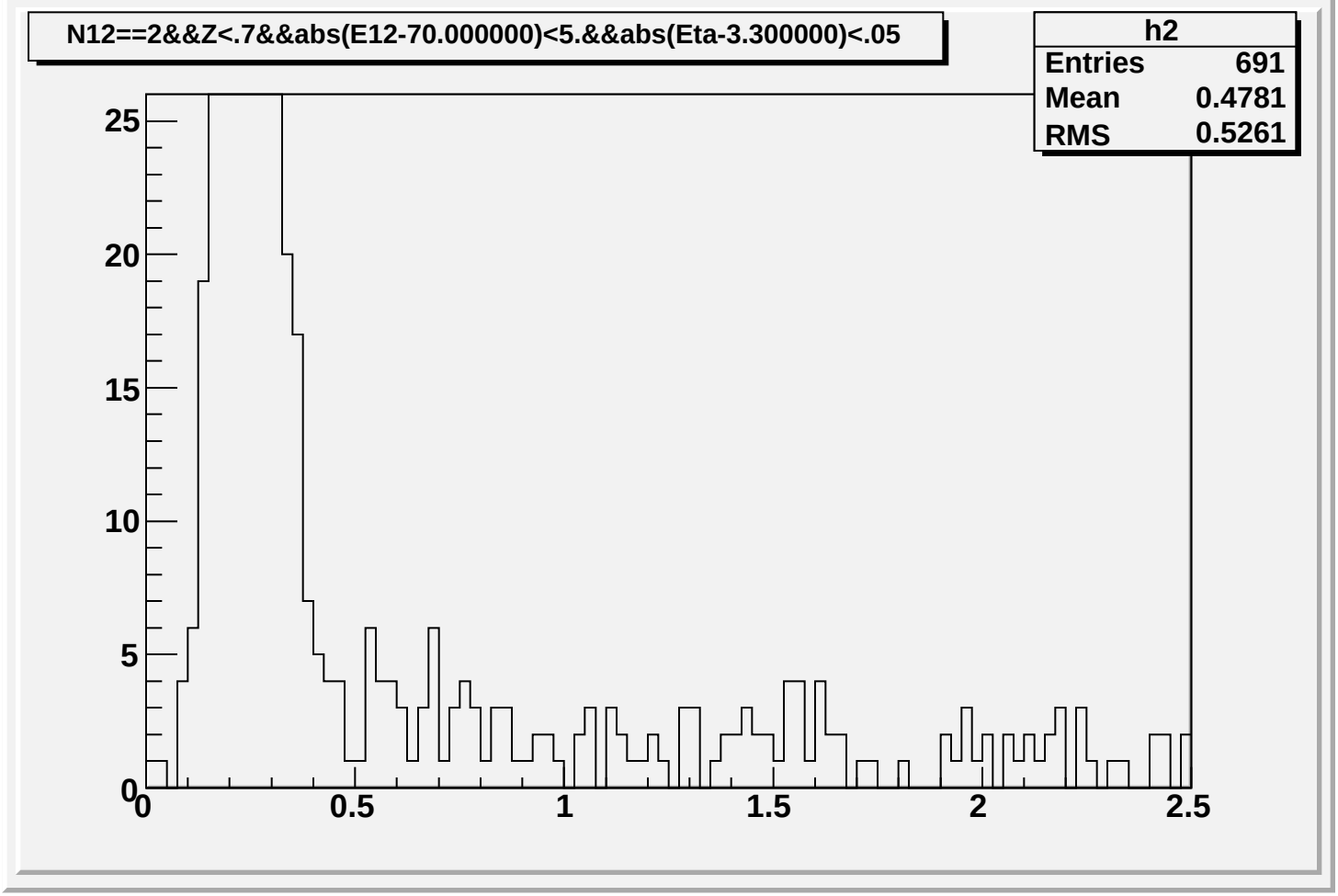

N12==2&&Z<.7&&abs(E12-50.000000)<5.&&abs(Eta-3.300000)<.05
h1
Entries 7297
Mean 0.6478
RMS 0.6019
700
600
500
400
300
200
100
0
0
0.5
1
1.5
2
2.5

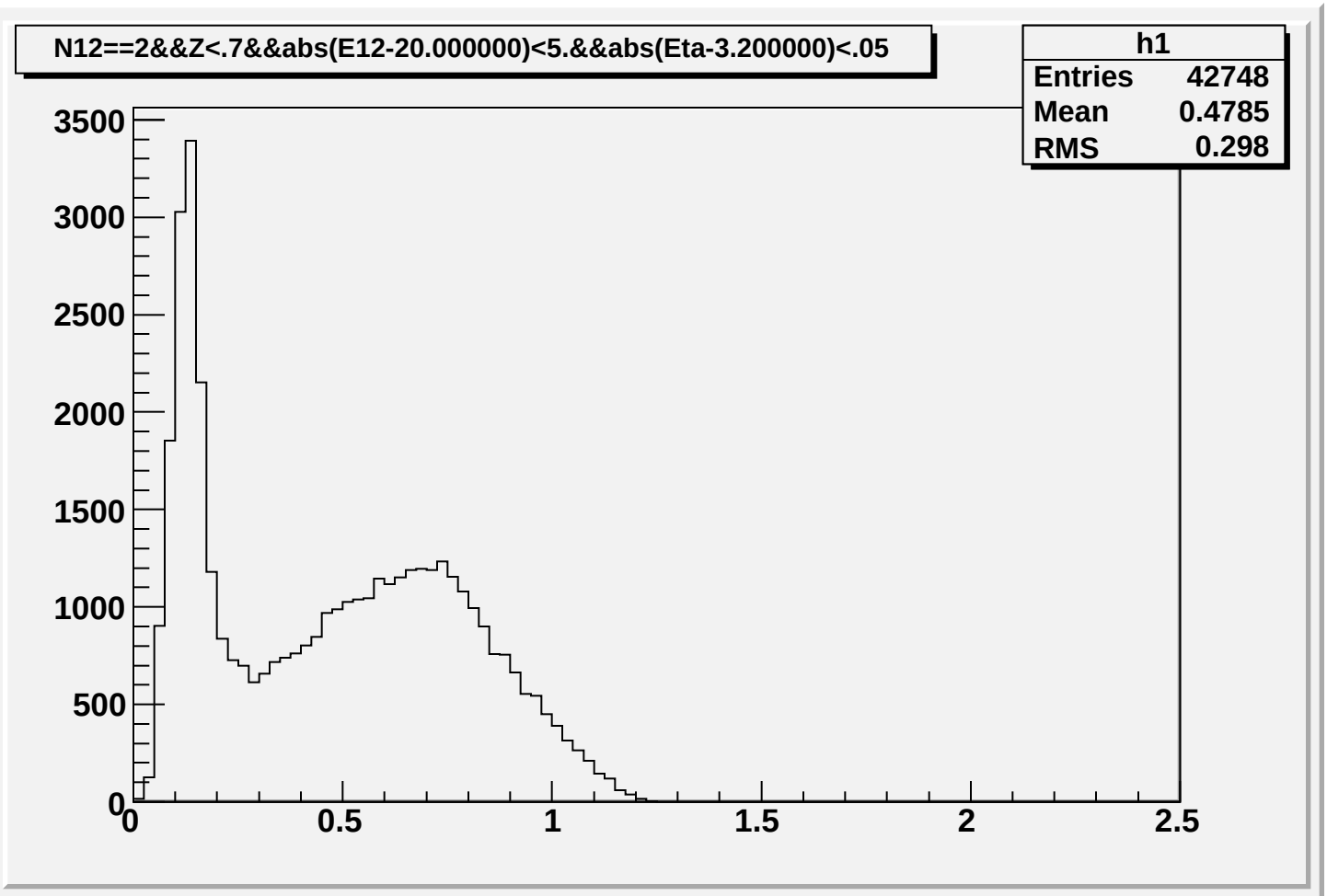

N12==2&&Z<.7&&abs(E12-50.000000)<5.&&abs(Eta-3.300000)<.05
h2
Entries 7297
Mean 0.6478
RMS 0.6019
140
120
100
80
60
40
20
0
0
0.5
1
1.5
2
2.5

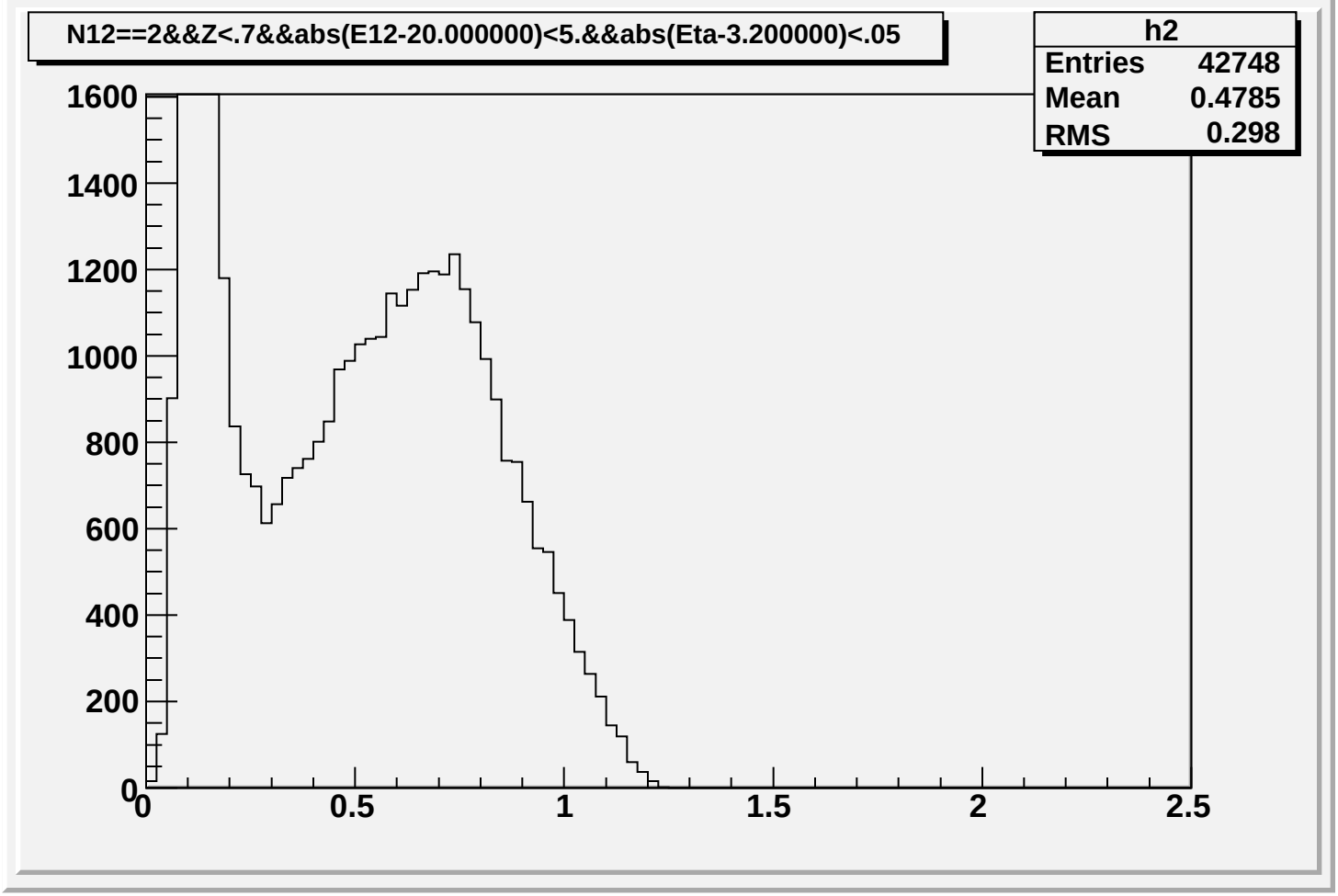

N12==2&&Z<.7&&abs(E12-60.000000)<5.&&abs(Eta-3.300000)<.05
h1
Entries 2004
Mean 0.6099
RMS 0.648
200
180
160
140
120
100
80
60
40
20
0
0
0.5
1
1.5
2
2.5

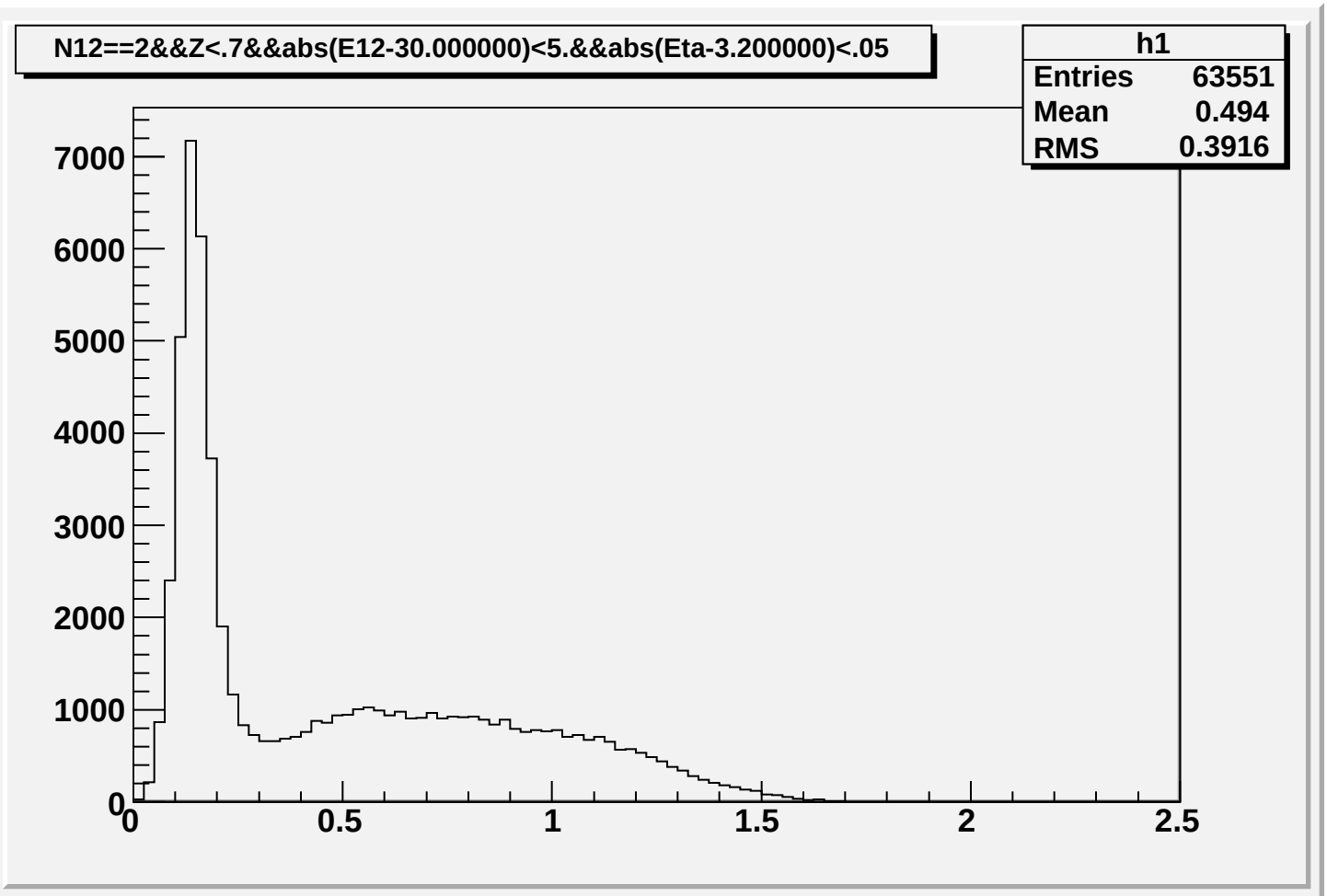

N12==2&&Z<.7&&abs(E12-60.000000)<5.&&abs(Eta-3.300000)<.05
h2
Entries 2004
Mean 0.6099
RMS 0.648
60
50
40
30
20
10
0
0
0.5
1
1.5
2
2.5

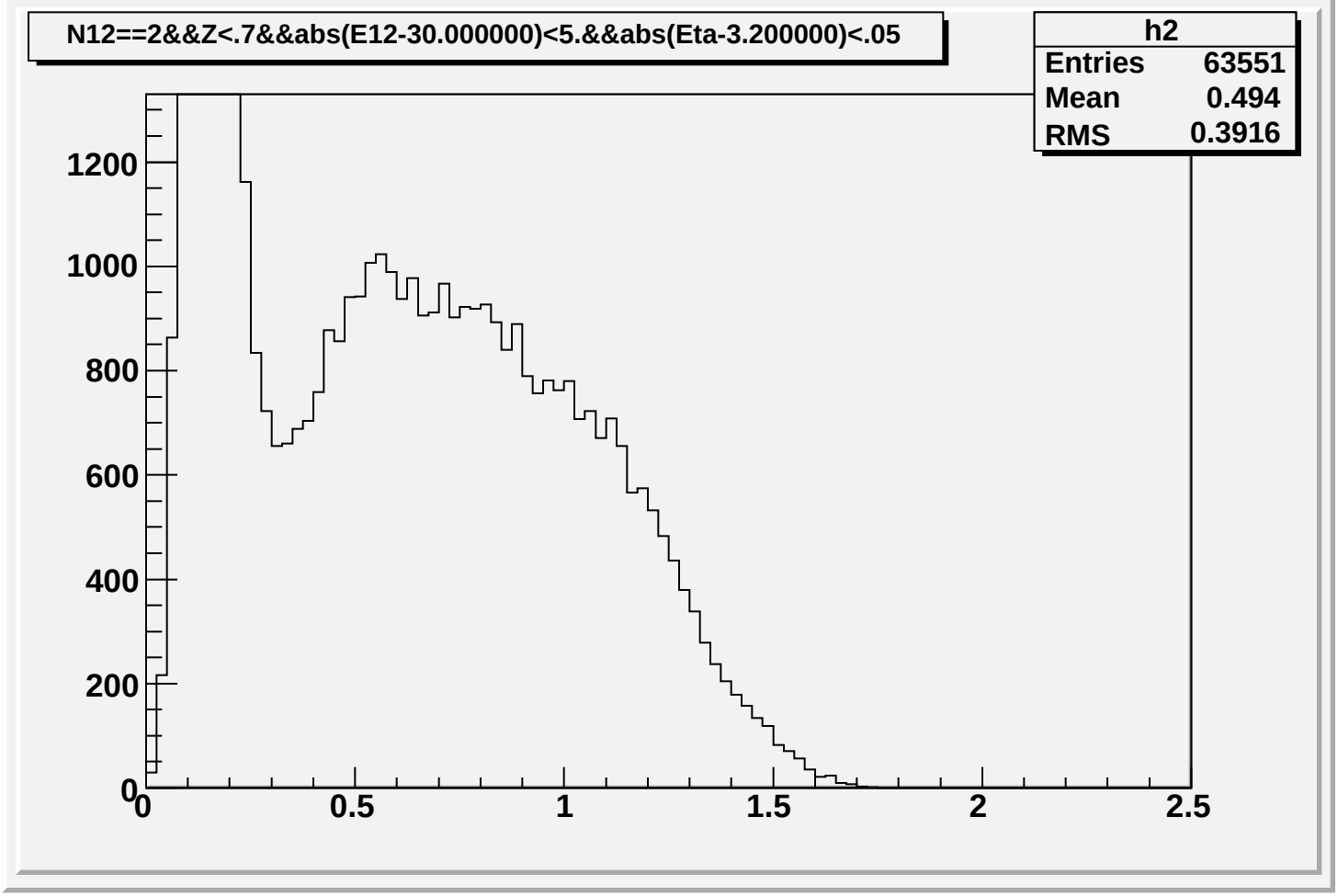

N12==2&&Z<.7&&abs(E12-70.000000)<5.&&abs(Eta-3.300000)<.05
h1
Entries 691
Mean 0.4781
RMS 0.5261
90
80
70
60
50
40
30
20
10
0
0
0.5
1
1.5
2
2.5

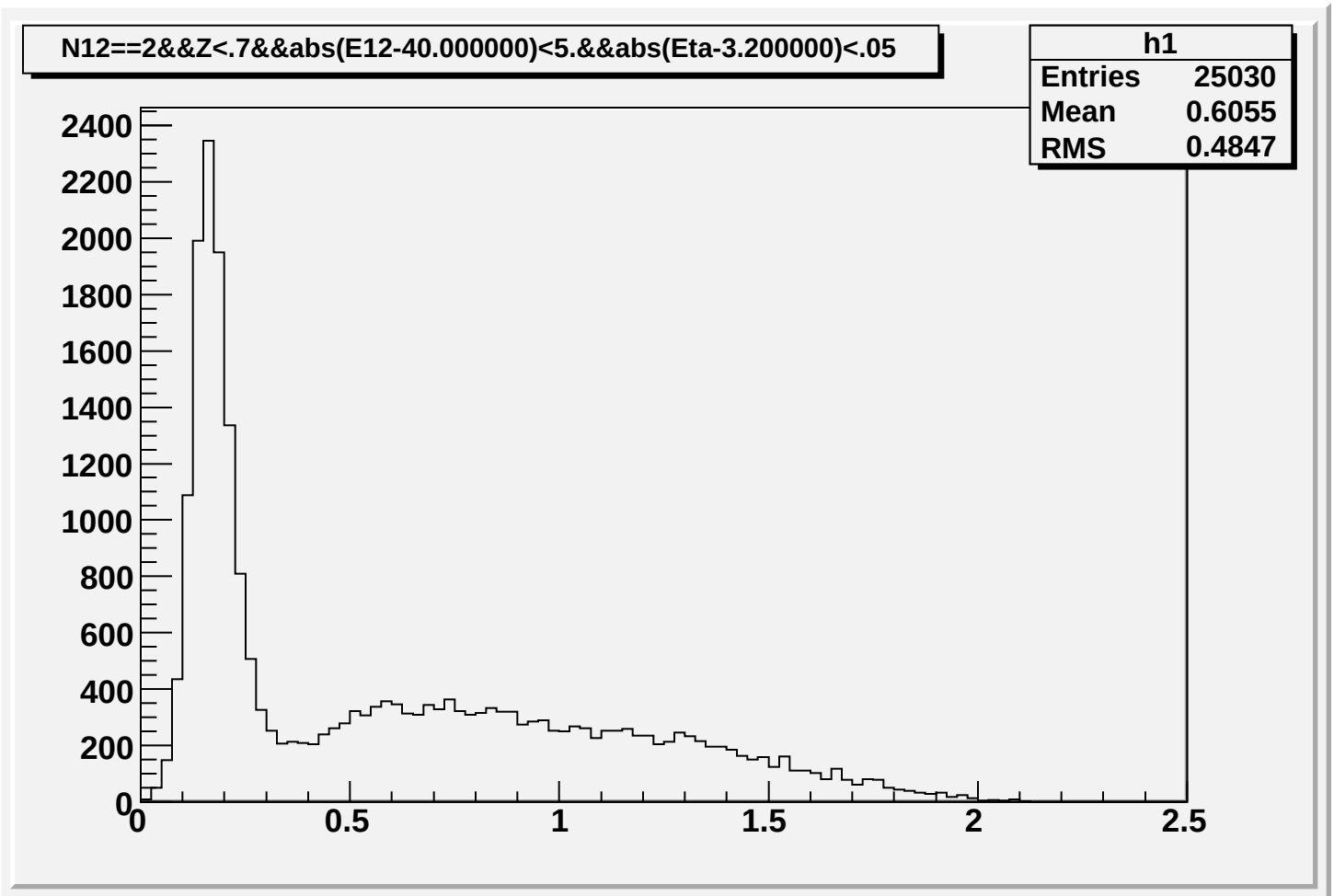

N12==2&&Z<.7&&abs(E12-70.000000)<5.&&abs(Eta-3.300000)<.05
h2
Entries 691
Mean 0.4781
RMS 0.5261
25
20
15
10
5
0
0
0.5
1
1.5
2
2.5

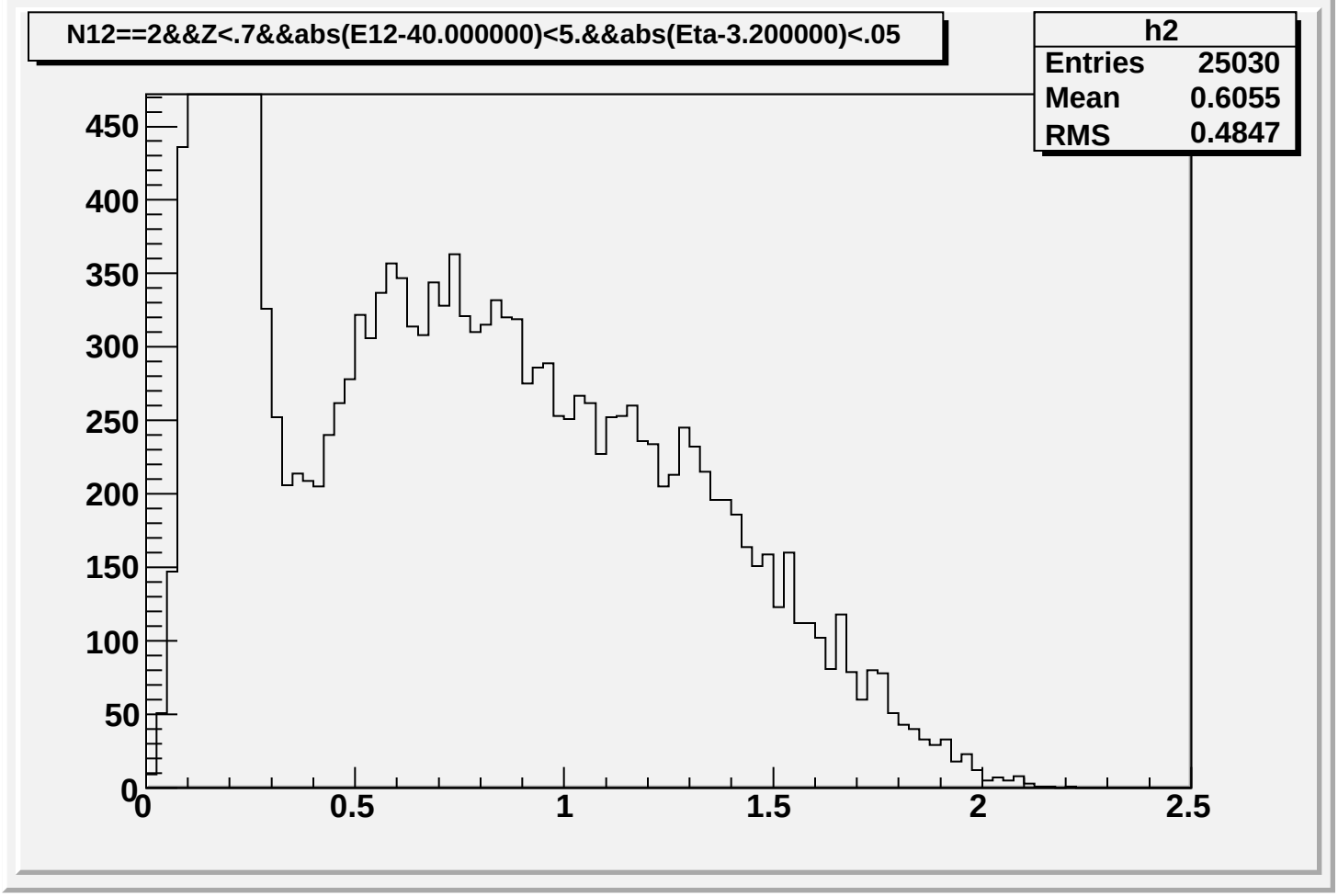

N12==2&&Z<.7&&abs(E12-20.000000)<5.&&abs(Eta-3.200000)<.05
h1
Entries 42748
Mean 0.4785
RMS 0.298
3500
3000
2500
2000
1500
1000
500
0
0
0.5
1
1.5
2
2.5

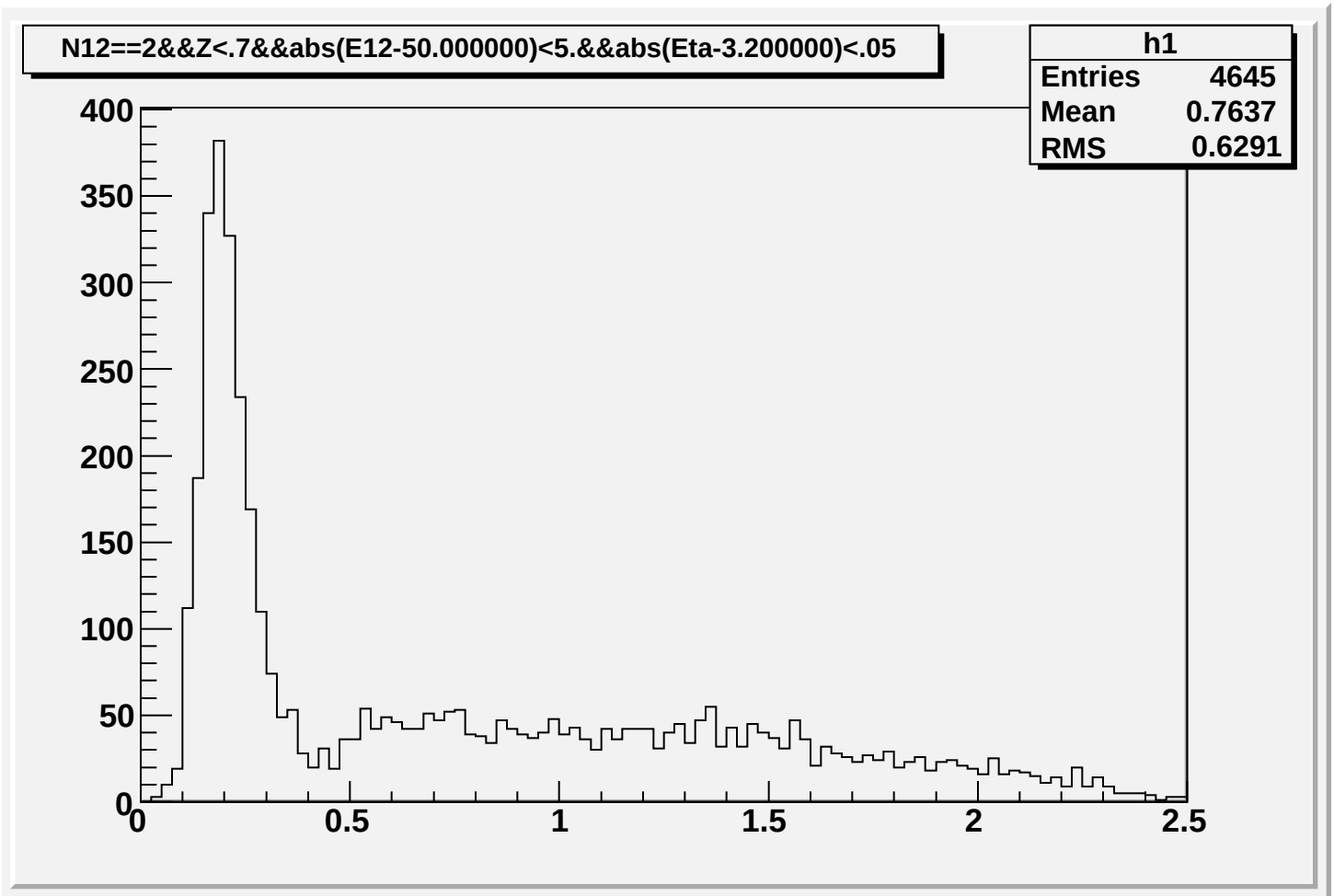

N12==2&&Z<.7&&abs(E12-20.000000)<5.&&abs(Eta-3.200000)<.05
h2
Entries 42748
Mean 0.4785
RMS 0.298
1600
1400
1200
1000
800
600
400
200
0
0
0.5
1
1.5
2
2.5

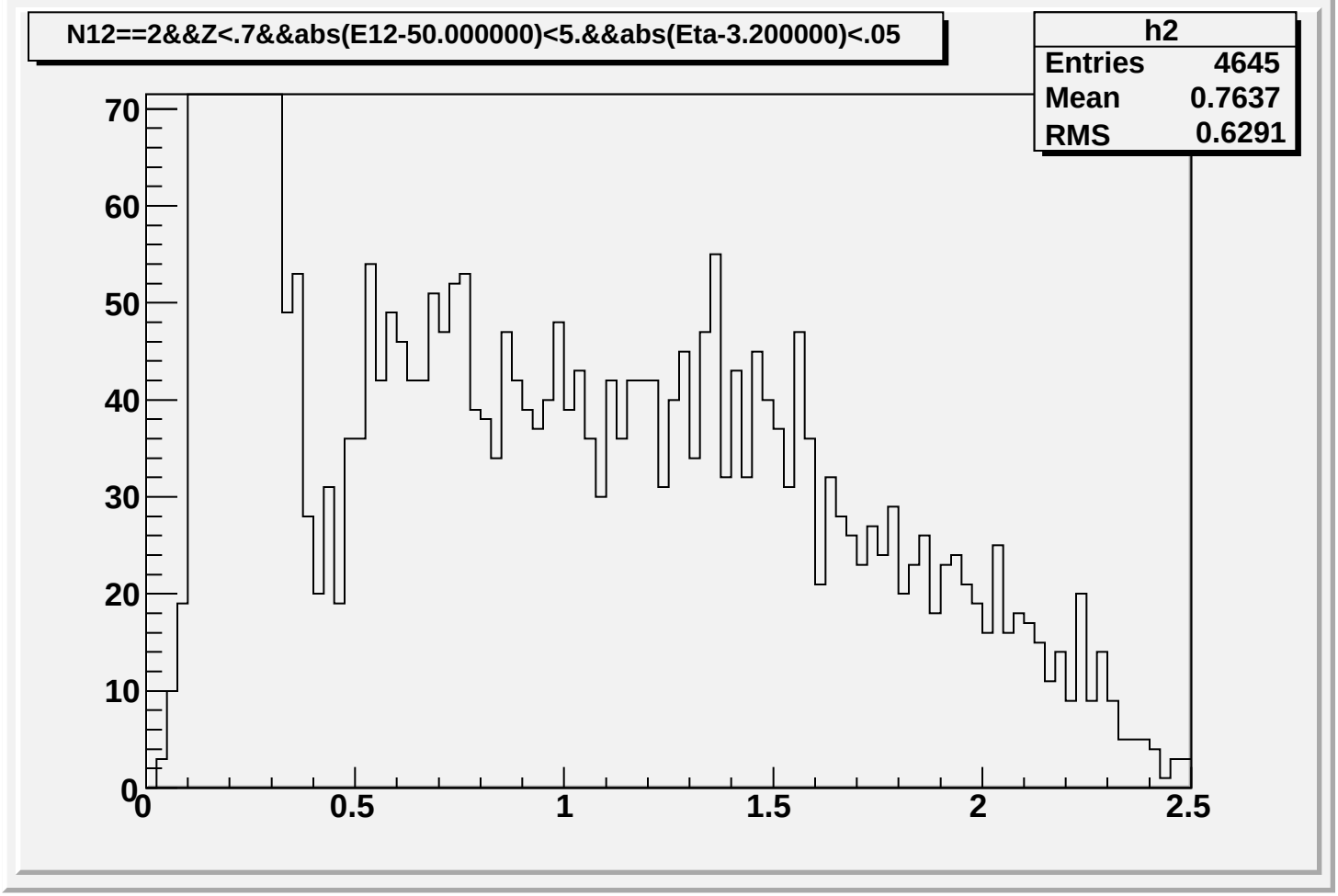

N12==2&&Z<.7&&abs(E12-30.000000)<5.&&abs(Eta-3.200000)<.05
h1
Entries 63551
Mean 0.494
RMS 0.3916
7000
6000
5000
4000
3000
2000
1000
0
0
0.5
1
1.5
2
2.5

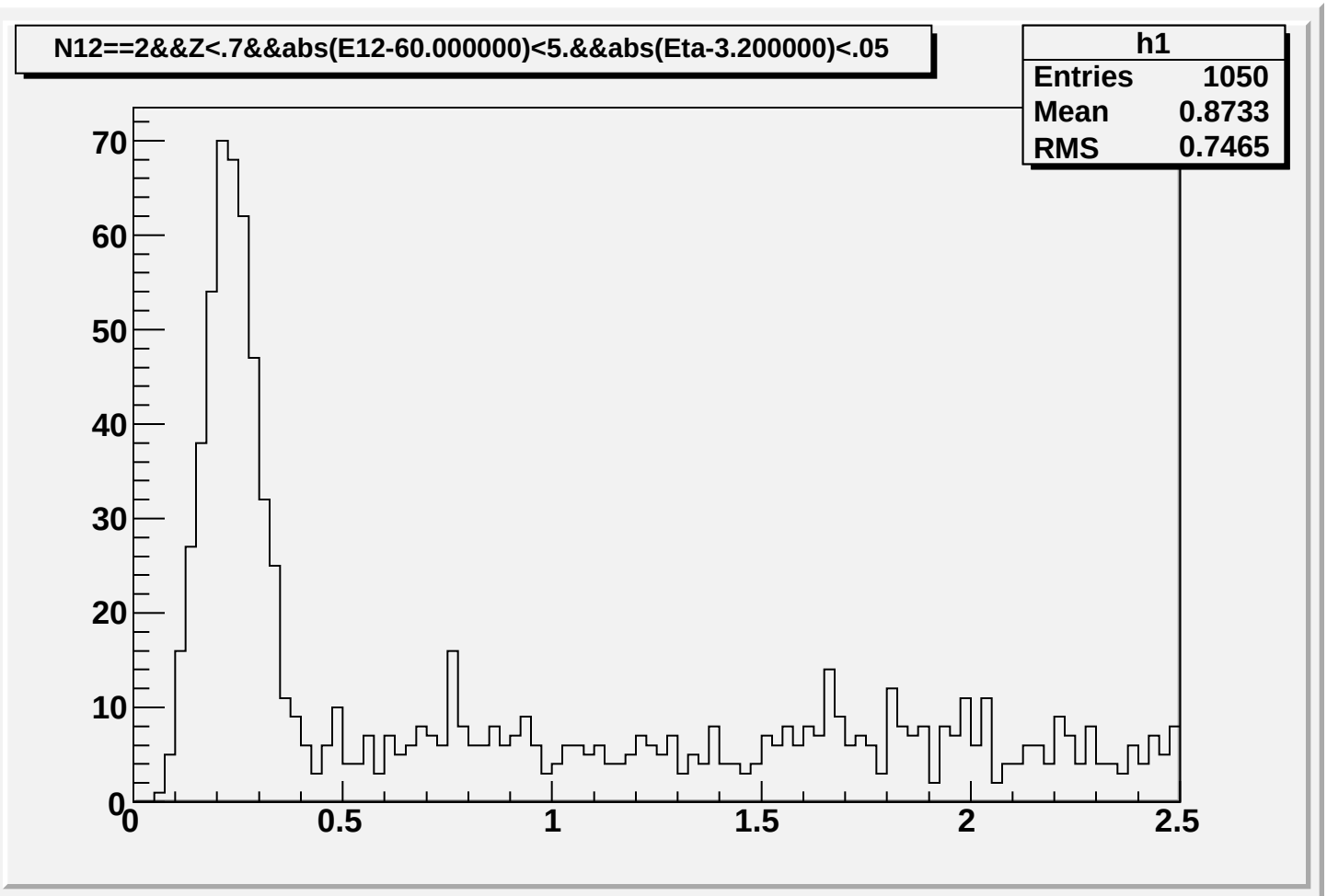

N12==2&&Z<.7&&abs(E12-30.000000)<5.&&abs(Eta-3.200000)<.05
h2
Entries 63551
Mean 0.494
RMS 0.3916
1200
1000
800
600
400
200
0
0
0.5
1
1.5
2
2.5

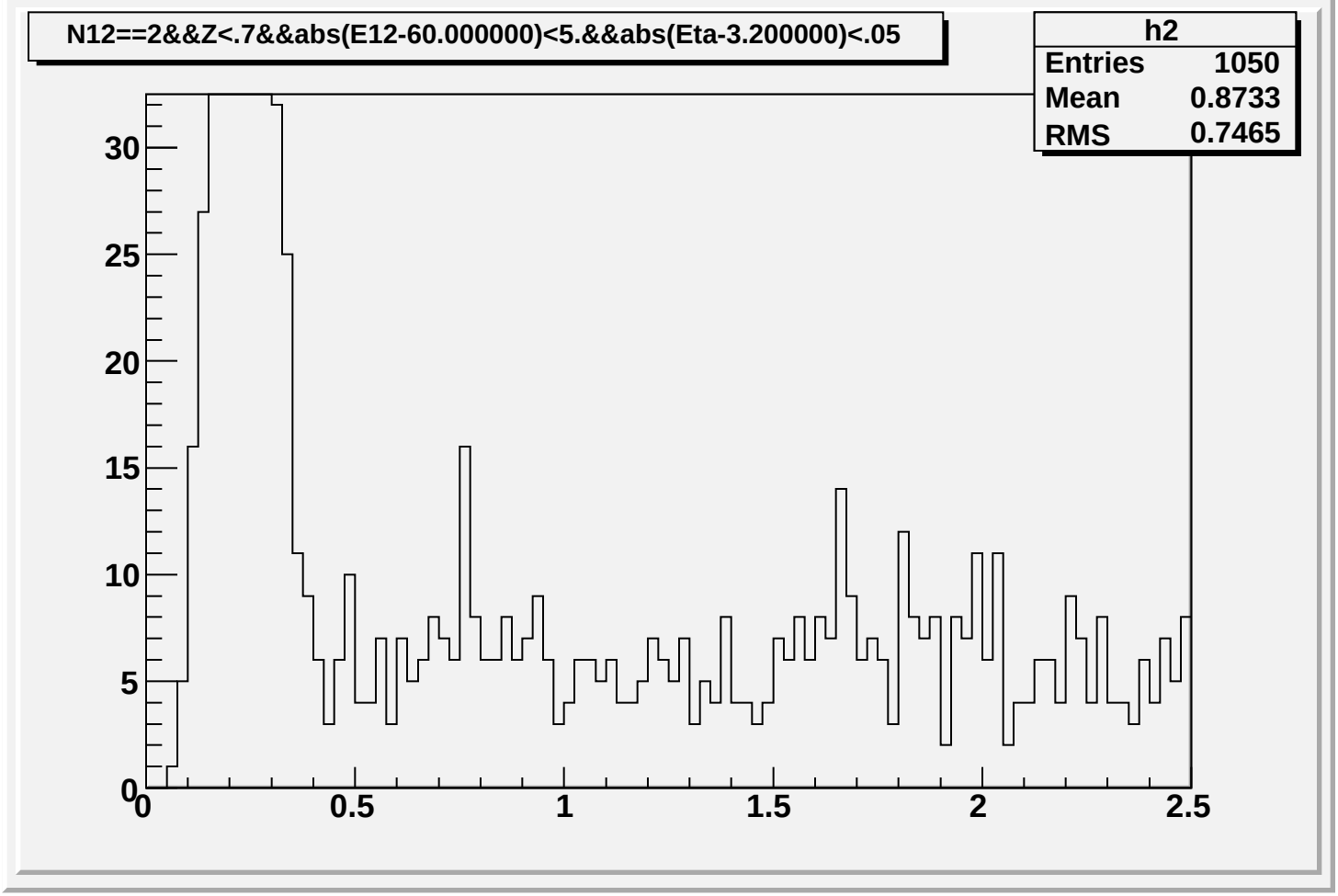

N12==2&&Z<.7&&abs(E12-40.000000)<5.&&abs(Eta-3.200000)<.05
h1
Entries 25030
Mean 0.6055
RMS 0.4847
2400
2200
2000
1800
1600
1400
1200
1000
800
600
400
200
0
0
0.5
1
1.5
2
2.5

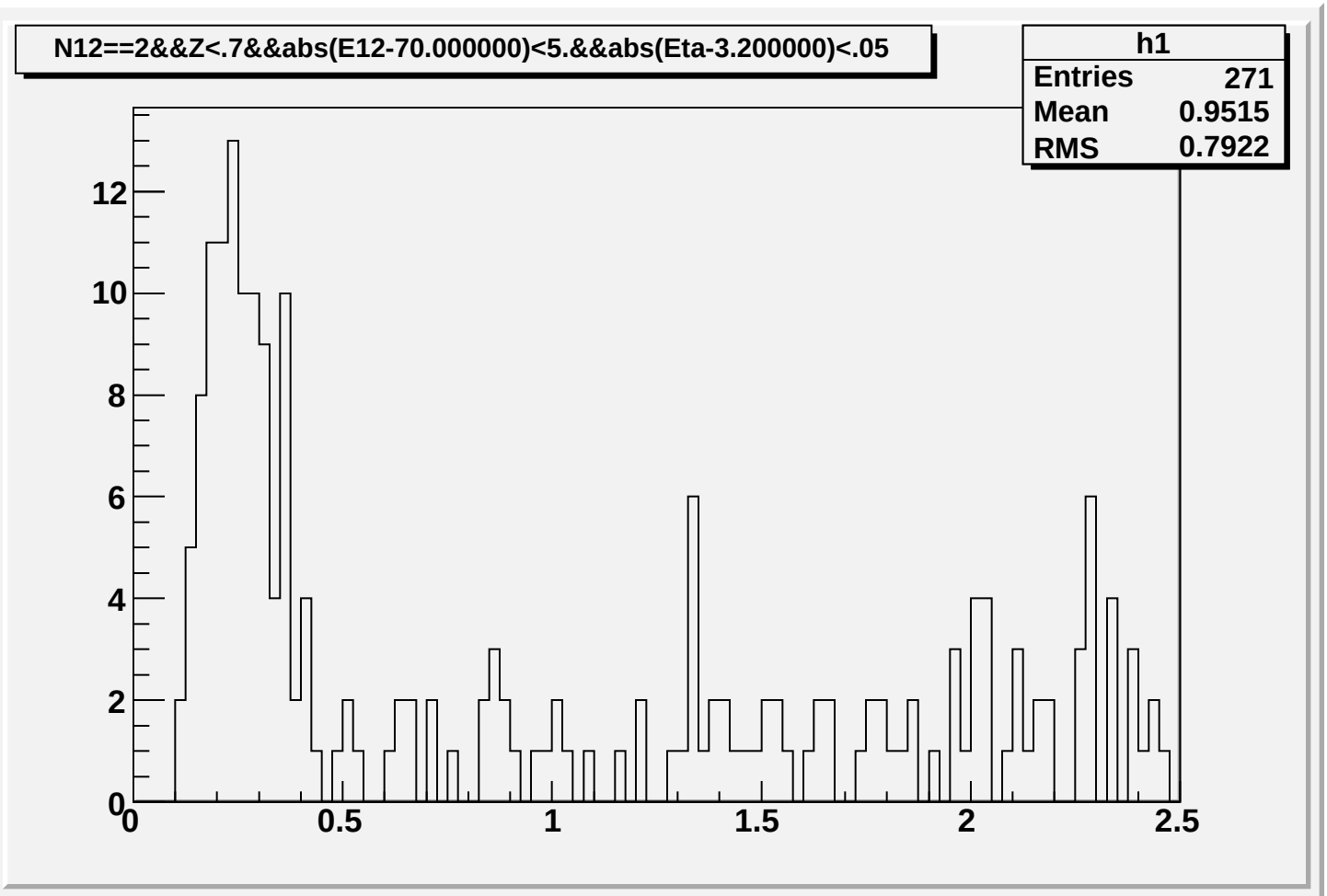

N12==2&&Z<.7&&abs(E12-40.000000)<5.&&abs(Eta-3.200000)<.05
h2
Entries 25030
Mean 0.6055
RMS 0.4847
450
400
350
300
250
200
150
100
50
0
0
0.5
1
1.5
2
2.5

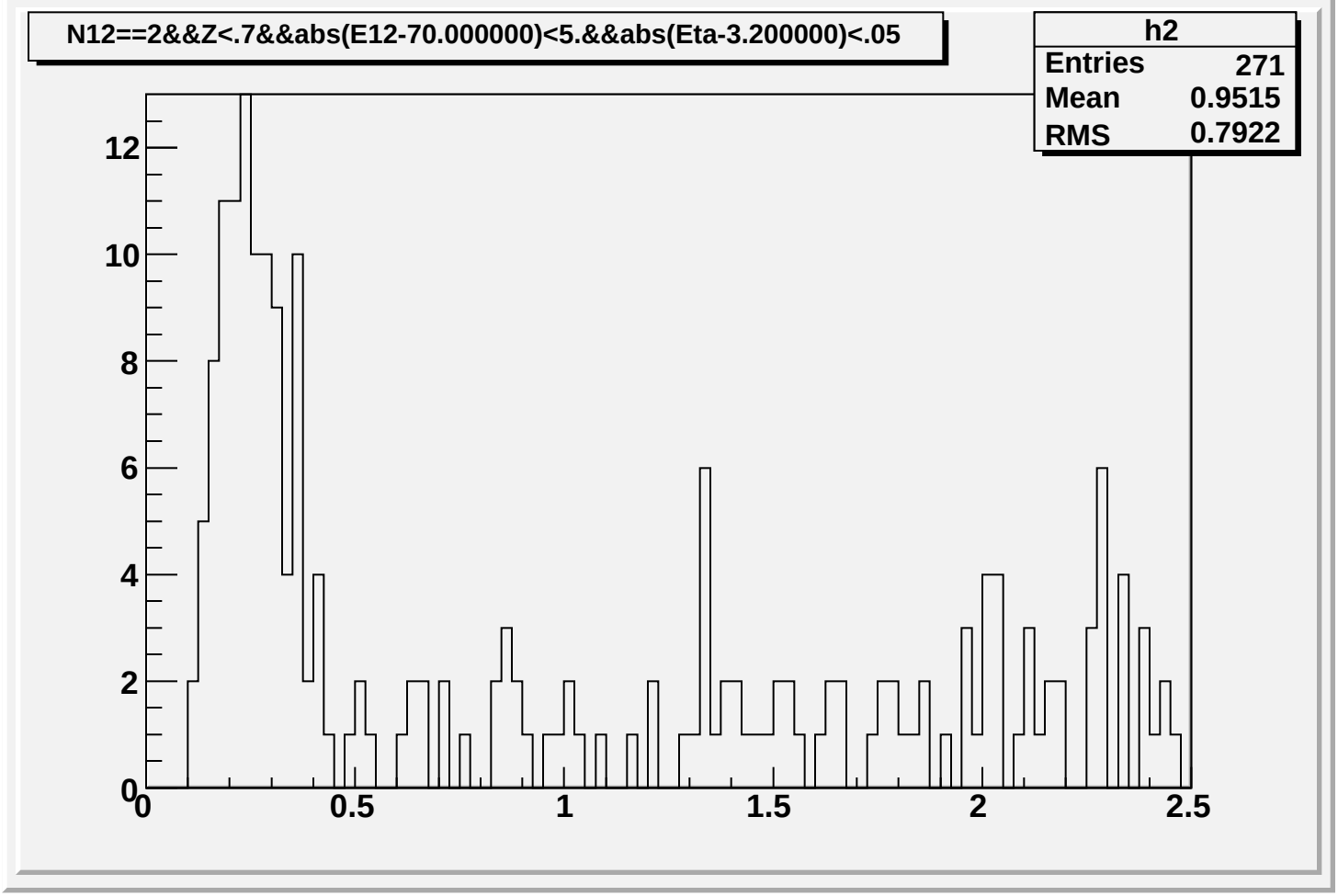

N12==2&&Z<.7&&abs(E12-50.000000)<5.&&abs(Eta-3.200000)<.05
h1
Entries 4645
Mean 0.7637
RMS 0.6291
400
350
300
250
200
150
100
50
0
0
0.5
1
1.5
2
2.5

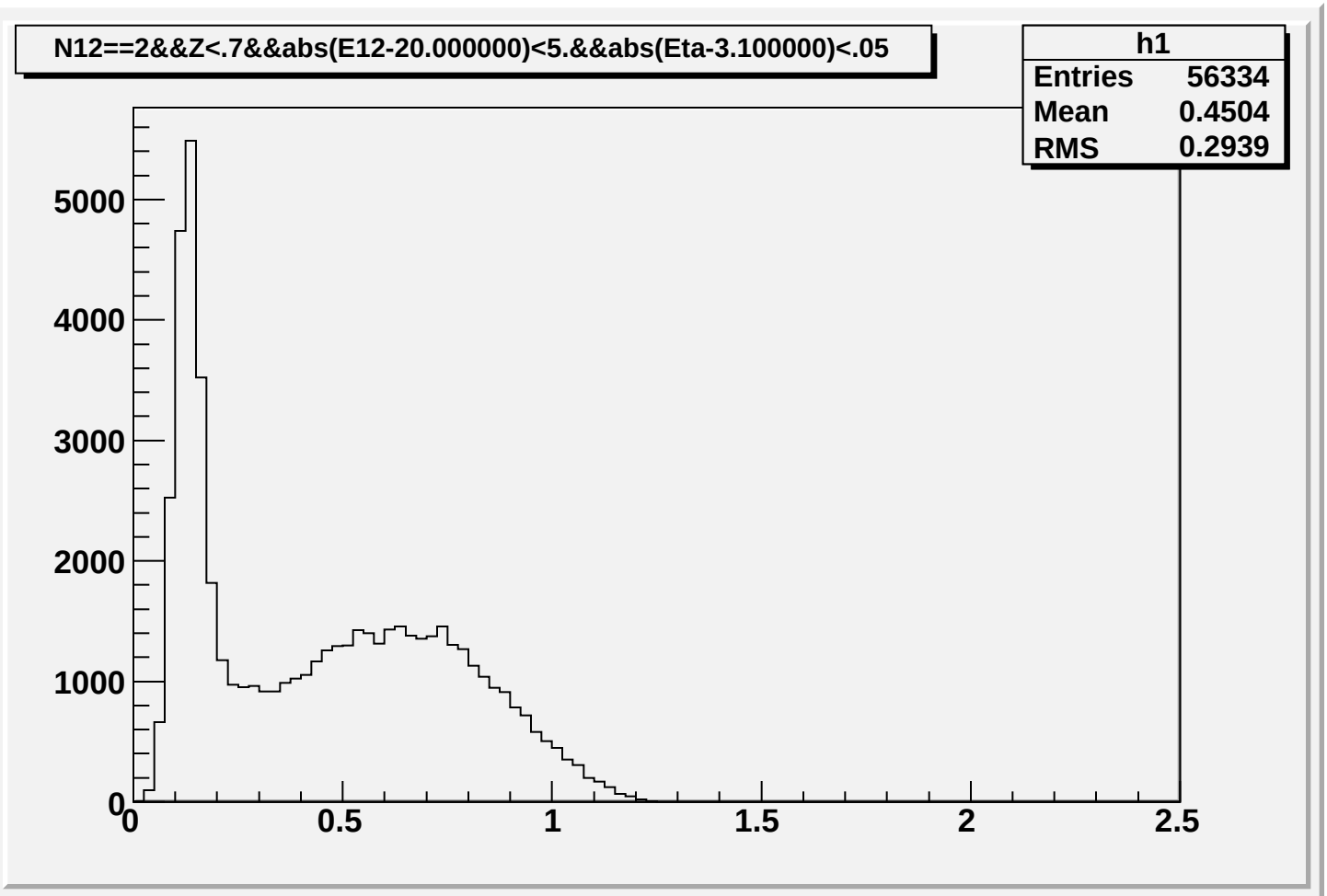

N12==2&&Z<.7&&abs(E12-50.000000)<5.&&abs(Eta-3.200000)<.05
h2
Entries 4645
Mean 0.7637
RMS 0.6291
70
60
50
40
30
20
10
0
0
0.5
1
1.5
2
2.5

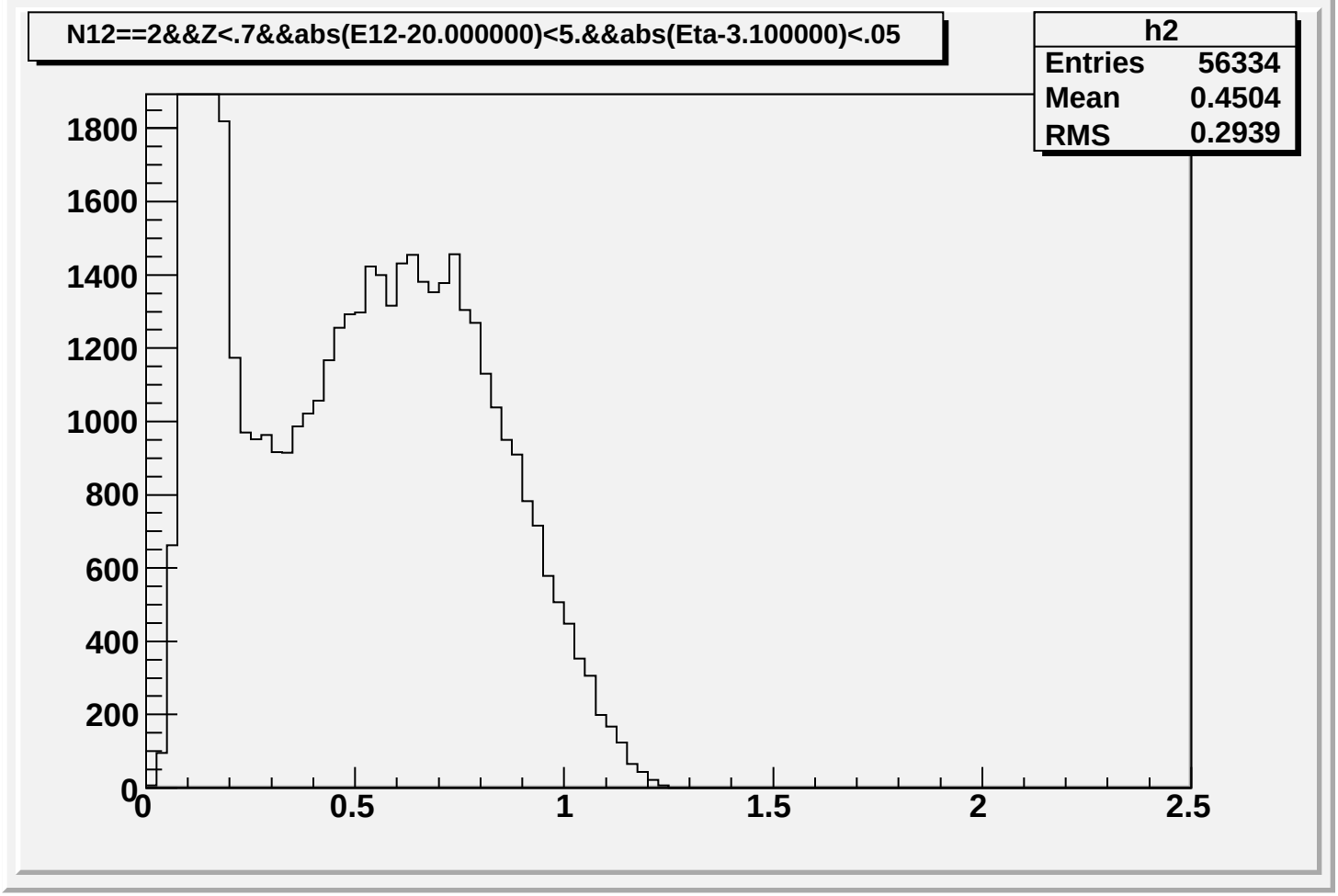

N12==2&&Z<.7&&abs(E12-60.000000)<5.&&abs(Eta-3.200000)<.05
h1
Entries 1050
Mean 0.8733
RMS 0.7465
70
60
50
40
30
20
10
0
0
0.5
1
1.5
2
2.5

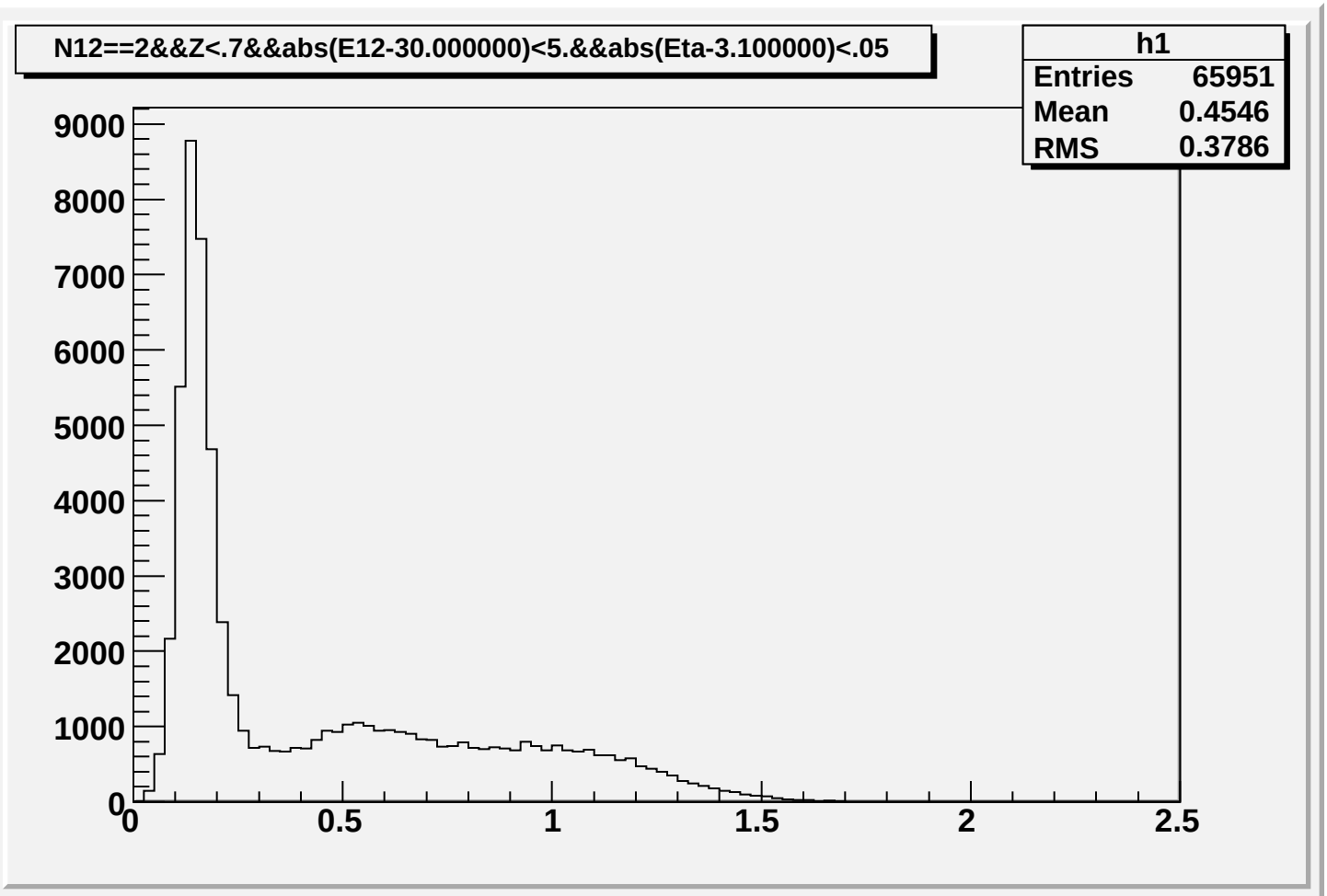

N12==2&&Z<.7&&abs(E12-60.000000)<5.&&abs(Eta-3.200000)<.05
h2
Entries 1050
Mean 0.8733
RMS 0.7465
30
25
20
15
10
5
0
0
0.5
1
1.5
2
2.5

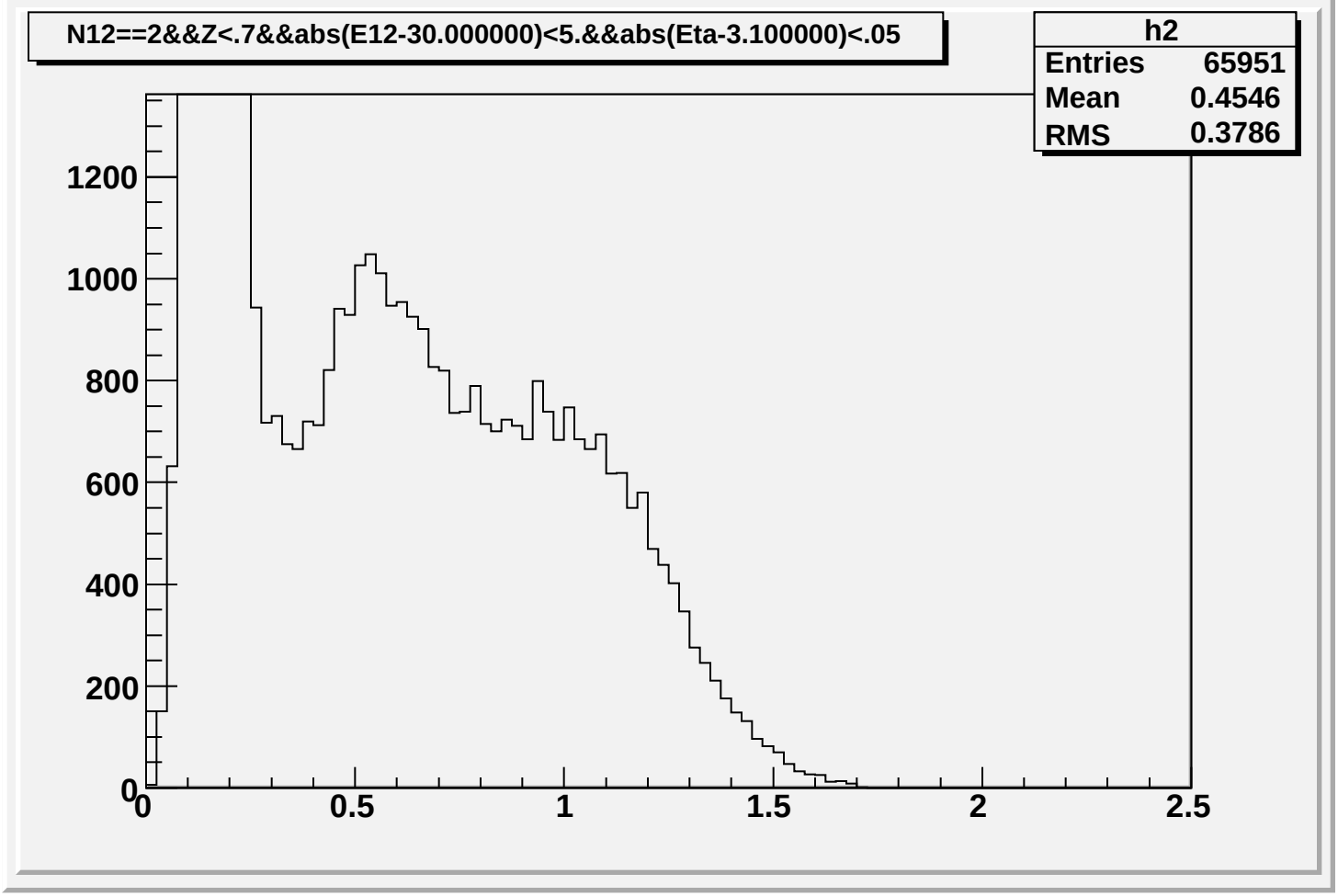

N12==2&&Z<.7&&abs(E12-70.000000)<5.&&abs(Eta-3.200000)<.05
h1
Entries 271
Mean 0.9515
RMS 0.7922
0
2
4
6
8
10
12
0
0.5
1
1.5
2
2.5

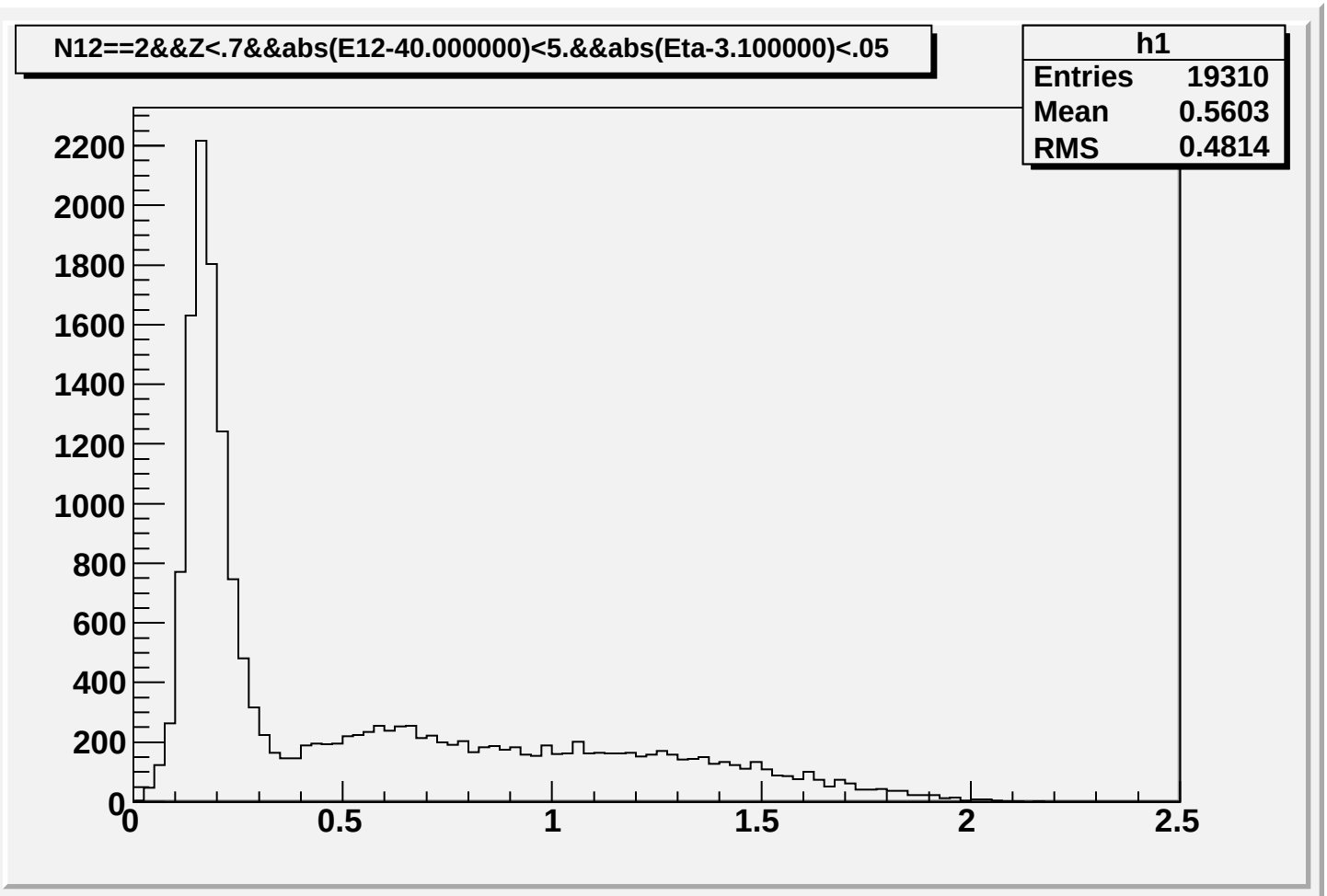

N12==2&&Z<.7&&abs(E12-70.000000)<5.&&abs(Eta-3.200000)<.05
h2
Entries 271
Mean 0.9515
RMS 0.7922
0
2
4
6
8
10
12
0
0.5
1
1.5
2
2.5

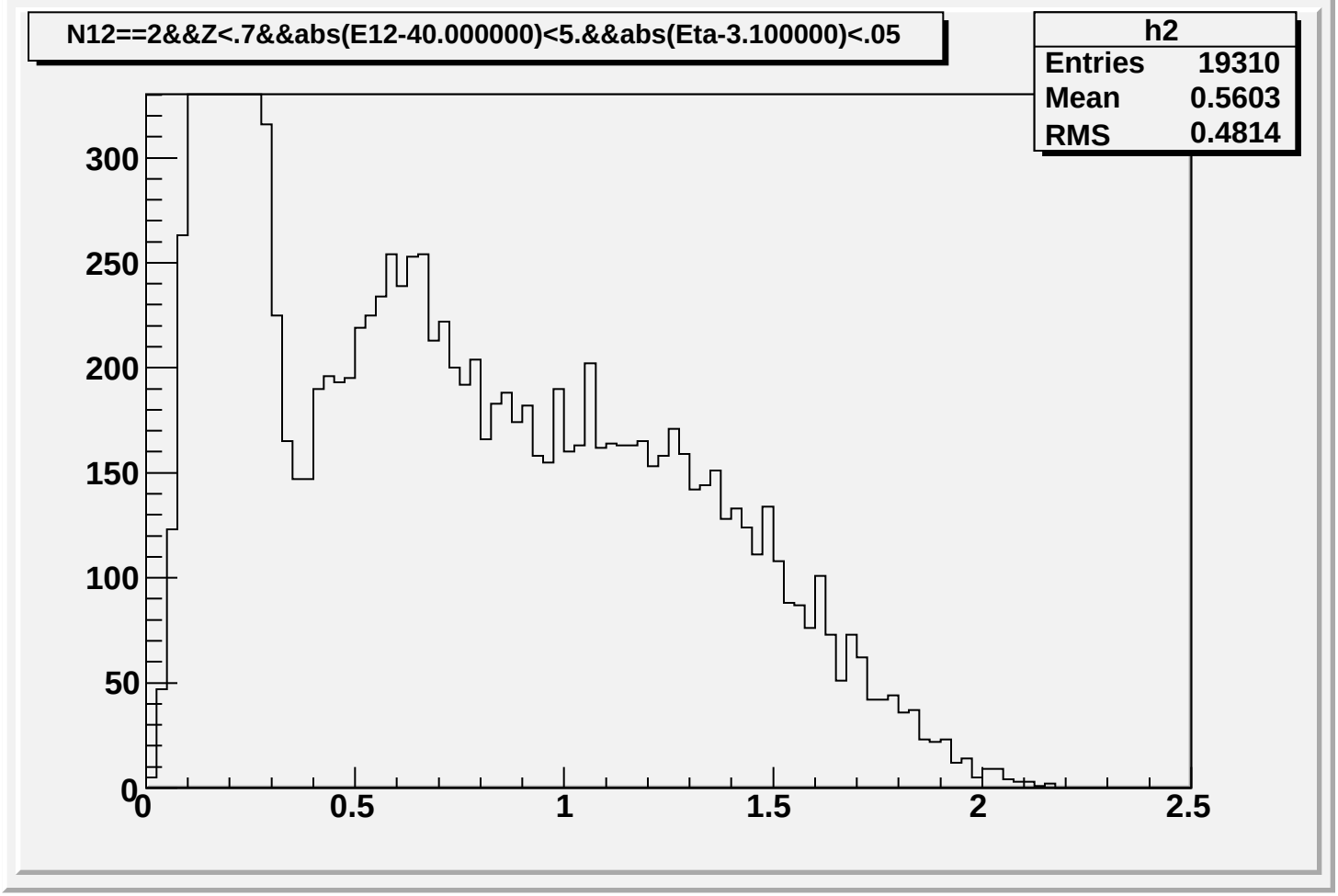

N12==2&&Z<.7&&abs(E12-20.000000)<5.&&abs(Eta-3.100000)<.05
h1
Entries 56334
Mean 0.4504
RMS 0.2939
5000
4000
3000
2000
1000
0
0
0.5
1
1.5
2
2.5

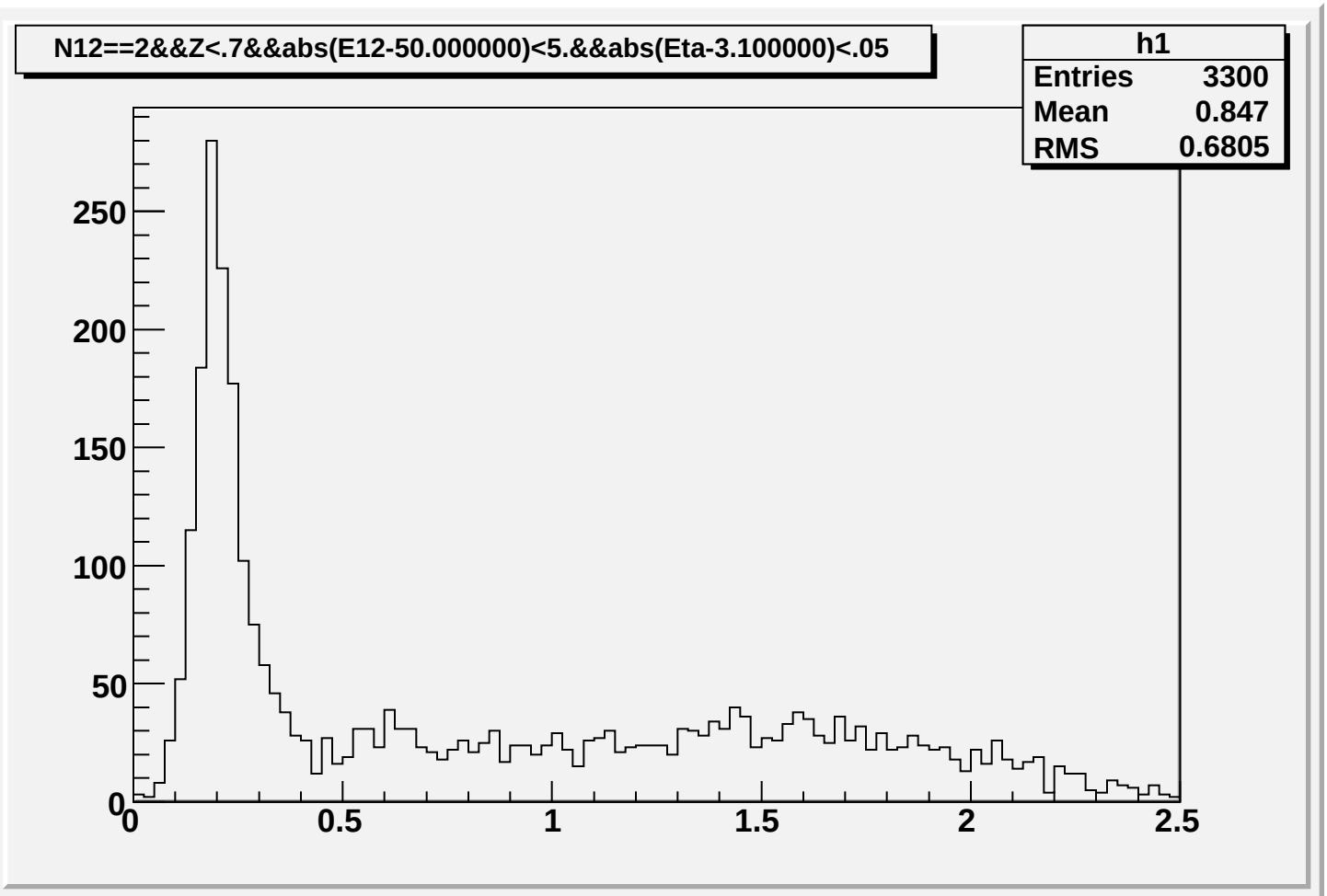

N12==2&&Z<.7&&abs(E12-20.000000)<5.&&abs(Eta-3.100000)<.05
h2
Entries 56334
Mean 0.4504
RMS 0.2939
1800
1600
1400
1200
1000
800
600
400
200
0
0
0.5
1
1.5
2
2.5

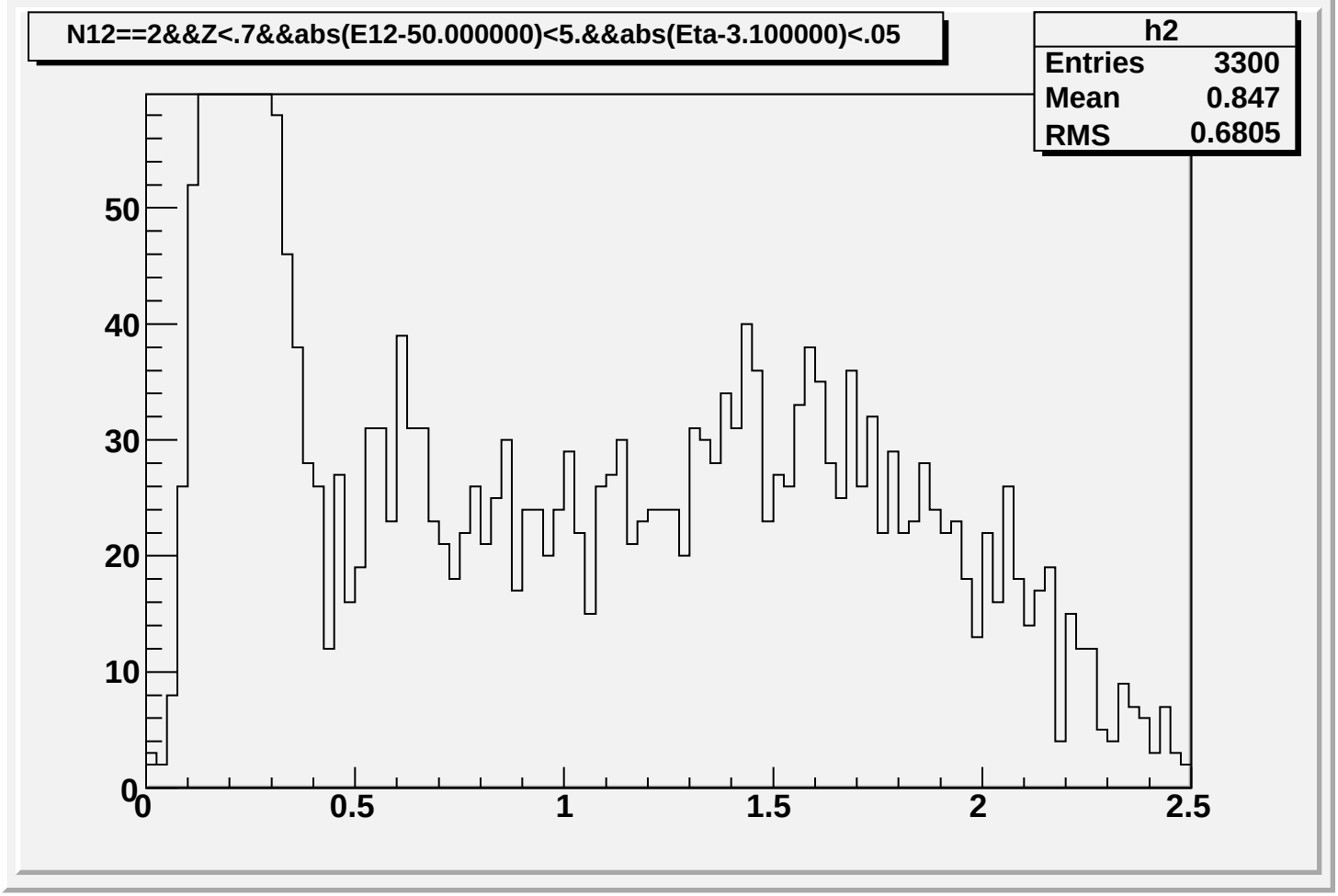

N12==2&&Z<.7&&abs(E12-30.000000)<5.&&abs(Eta-3.100000)<.05
h1
Entries 65951
Mean 0.4546
RMS 0.3786
9000
8000
7000
6000
5000
4000
3000
2000
1000
0
0
0.5
1
1.5
2
2.5

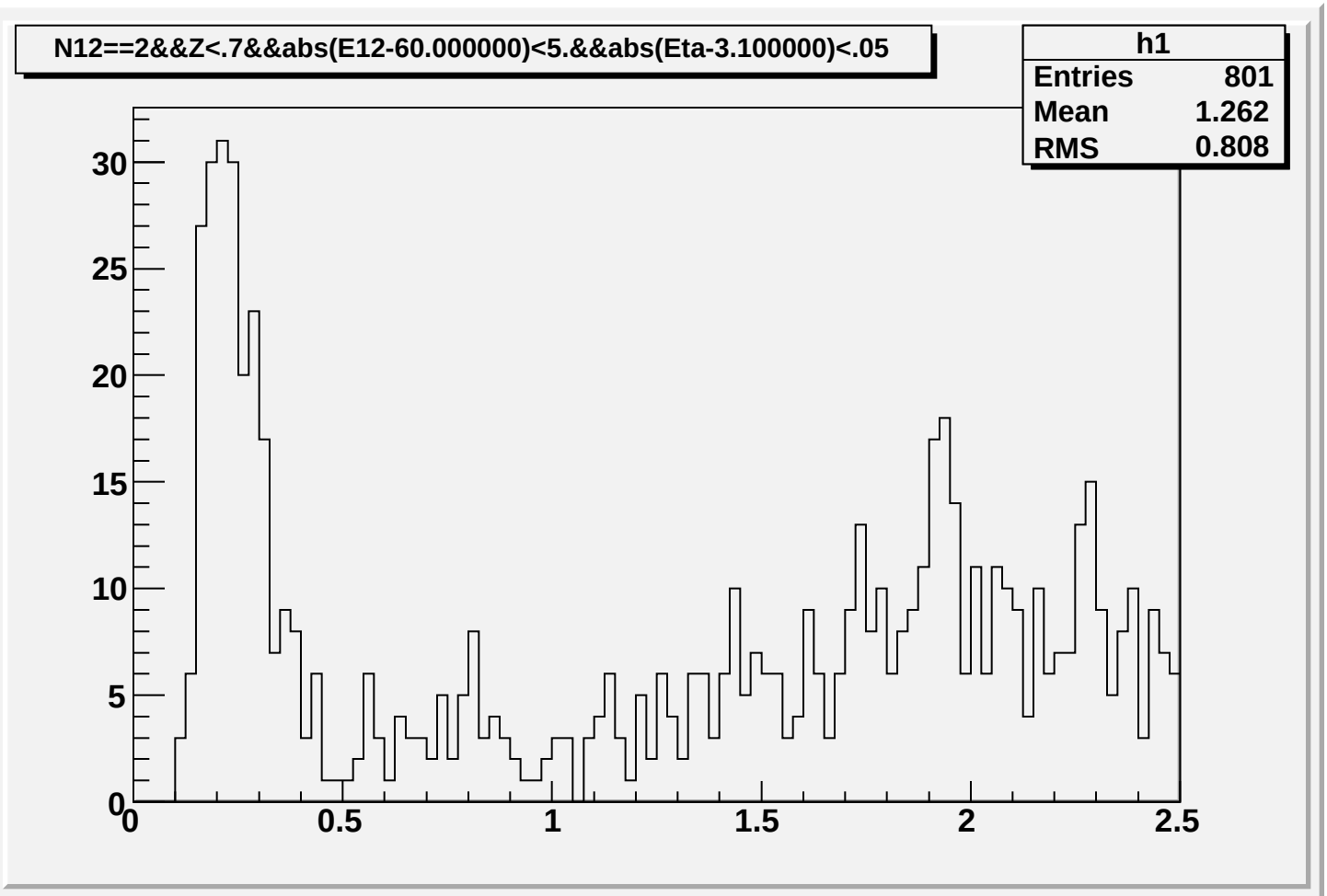

N12==2&&Z<.7&&abs(E12-30.000000)<5.&&abs(Eta-3.100000)<.05
h2
Entries 65951
Mean 0.4546
RMS 0.3786
1200
1000
800
600
400
200
0
0
0.5
1
1.5
2
2.5

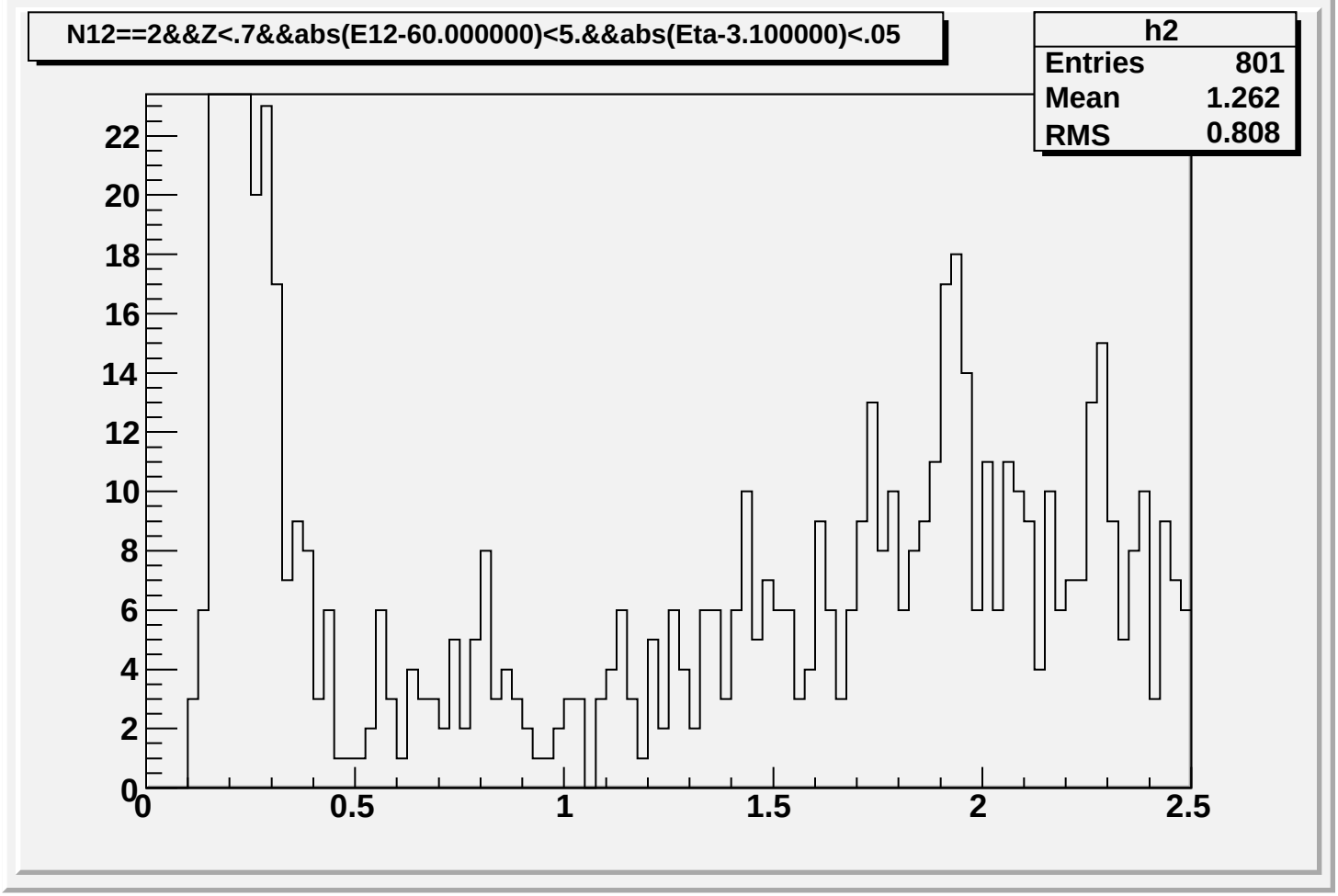

N12==2&&Z<.7&&abs(E12-40.000000)<5.&&abs(Eta-3.100000)<.05
h1
Entries 19310
Mean 0.5603
RMS 0.4814
2200
2000
1800
1600
1400
1200
1000
800
600
400
200
0
0
0.5
1
1.5
2
2.5

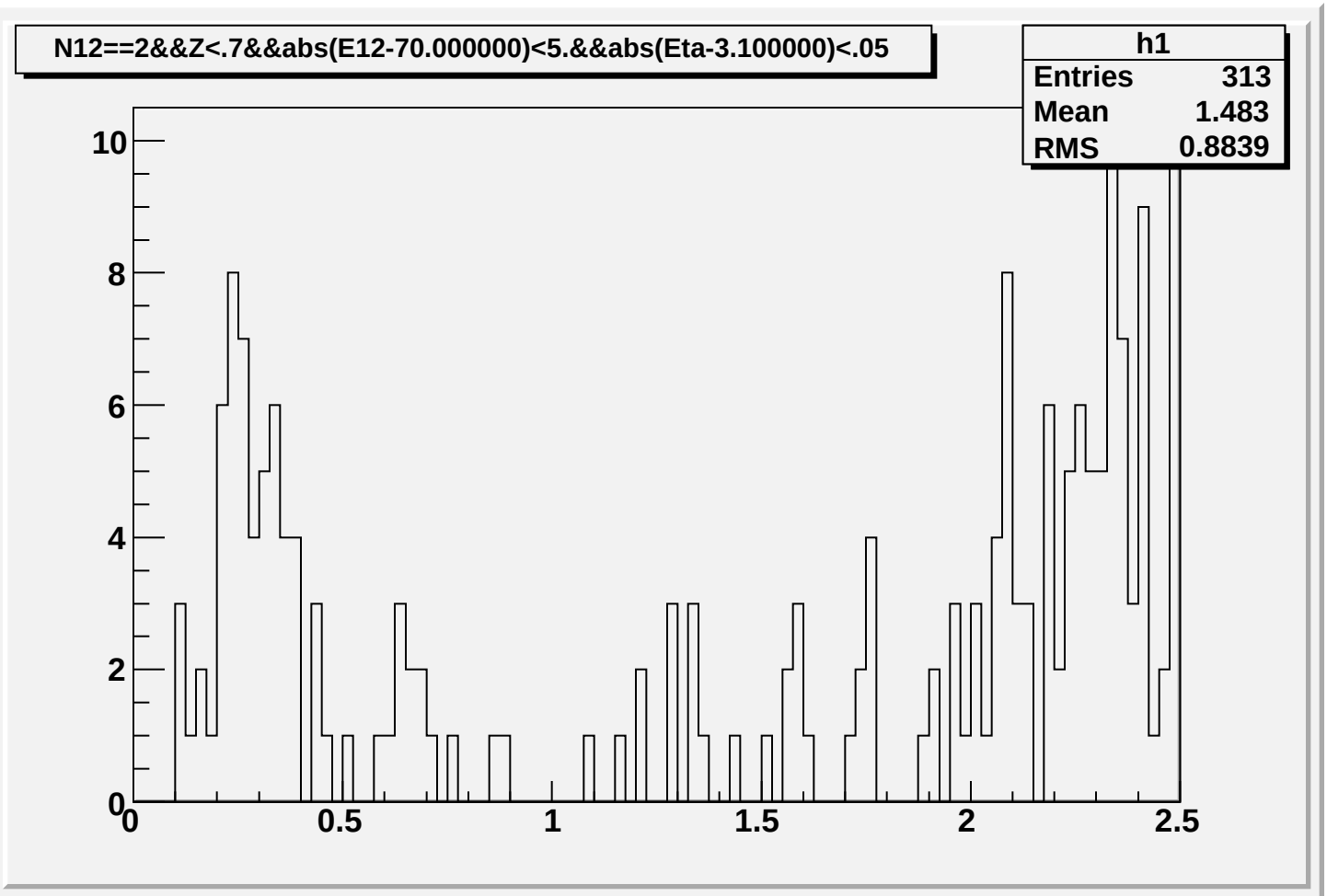

N12==2&&Z<.7&&abs(E12-40.000000)<5.&&abs(Eta-3.100000)<.05
h2
Entries 19310
Mean 0.5603
RMS 0.4814
300
250
200
150
100
50
0
0
0.5
1
1.5
2
2.5

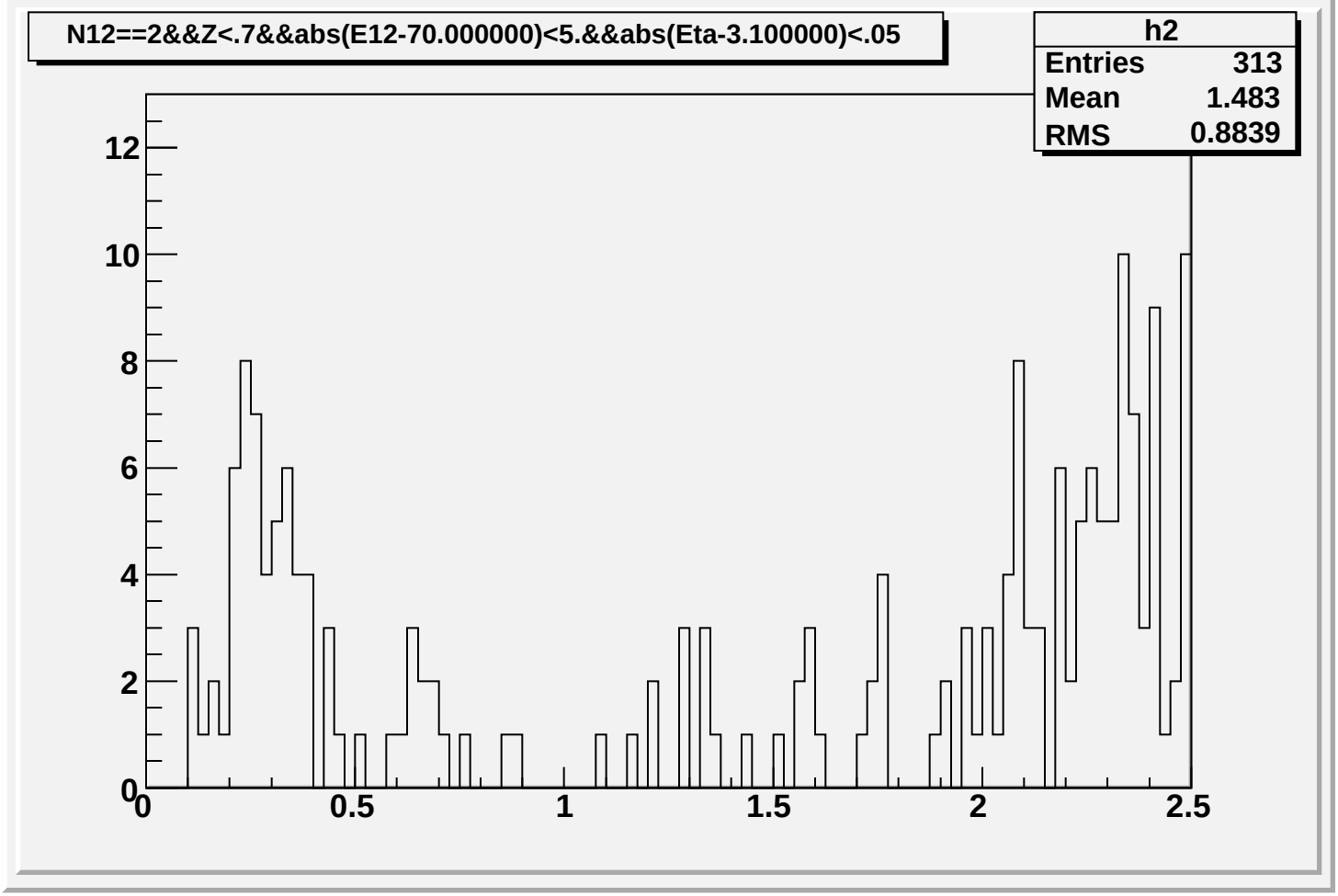

N12==2&&Z<.7&&abs(E12-50.000000)<5.&&abs(Eta-3.100000)<.05
h1
Entries 3300
Mean 0.847
RMS 0.6805
250
200
150
100
50
0
0
0.5
1
1.5
2
2.5

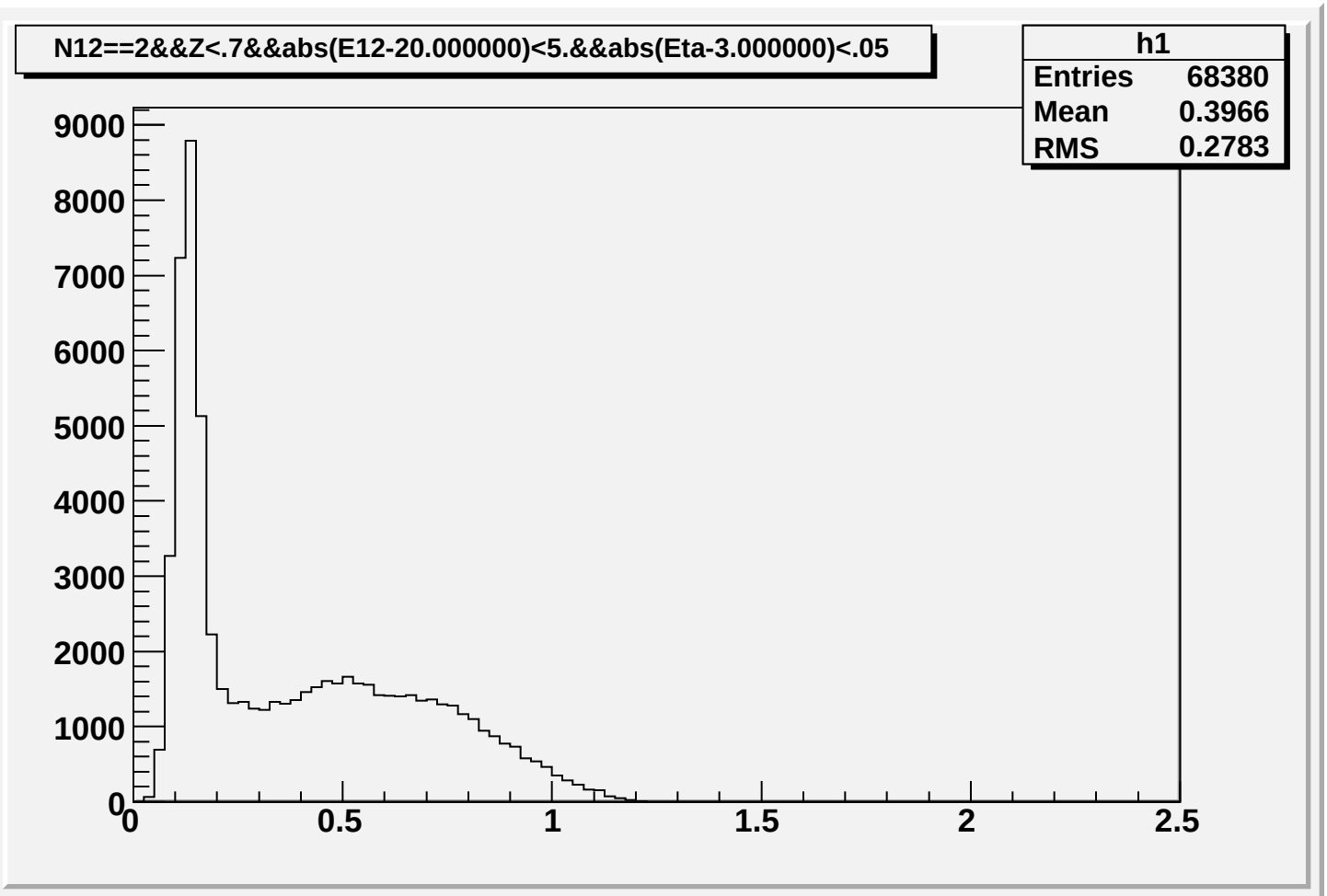

N12==2&&Z<.7&&abs(E12-50.000000)<5.&&abs(Eta-3.100000)<.05
h2
Entries 3300
Mean 0.847
RMS 0.6805
50
40
30
20
10
0
0
0.5
1
1.5
2
2.5

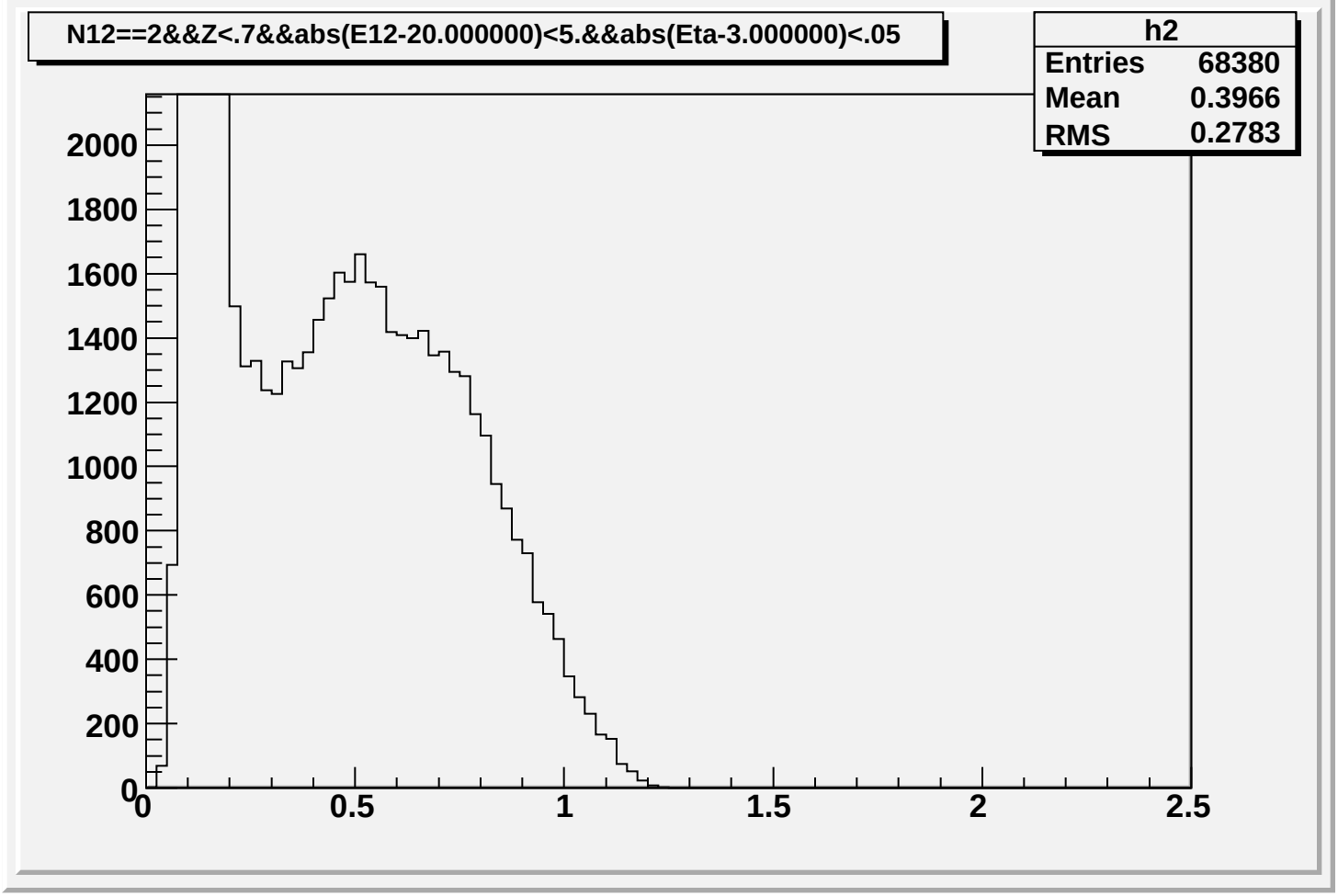

N12==2&&Z<.7&&abs(E12-60.000000)<5.&&abs(Eta-3.100000)<.05
h1
Entries 801
Mean 1.262
RMS 0.808
30
25
20
15
10
5
0
0
0.5
1
1.5
2
2.5

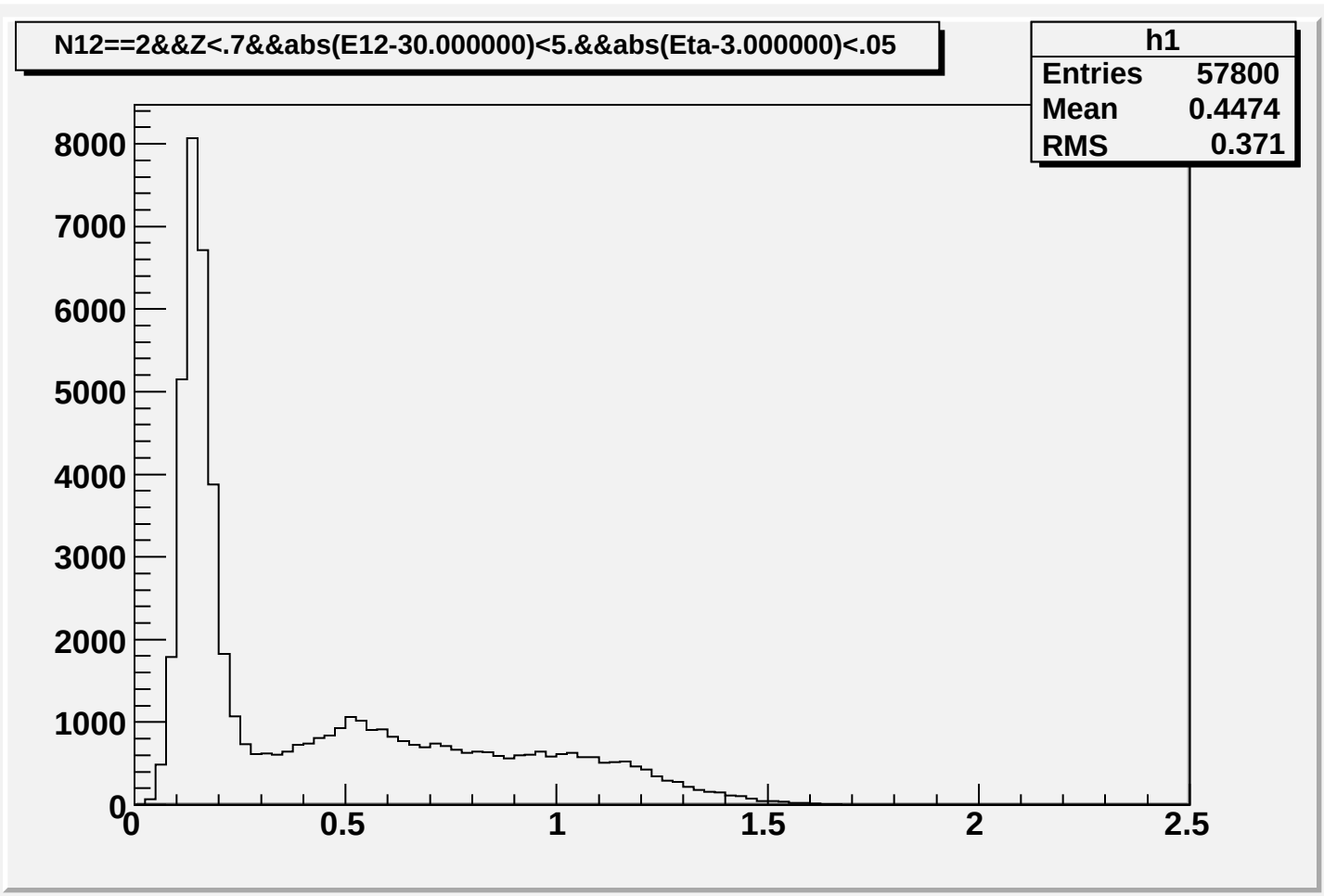

N12==2&&Z<.7&&abs(E12-60.000000)<5.&&abs(Eta-3.100000)<.05
h2
Entries 801
Mean 1.262
RMS 0.808
22
20
18
16
14
12
10
8
6
4
2
0
0
0.5
1
1.5
2
2.5

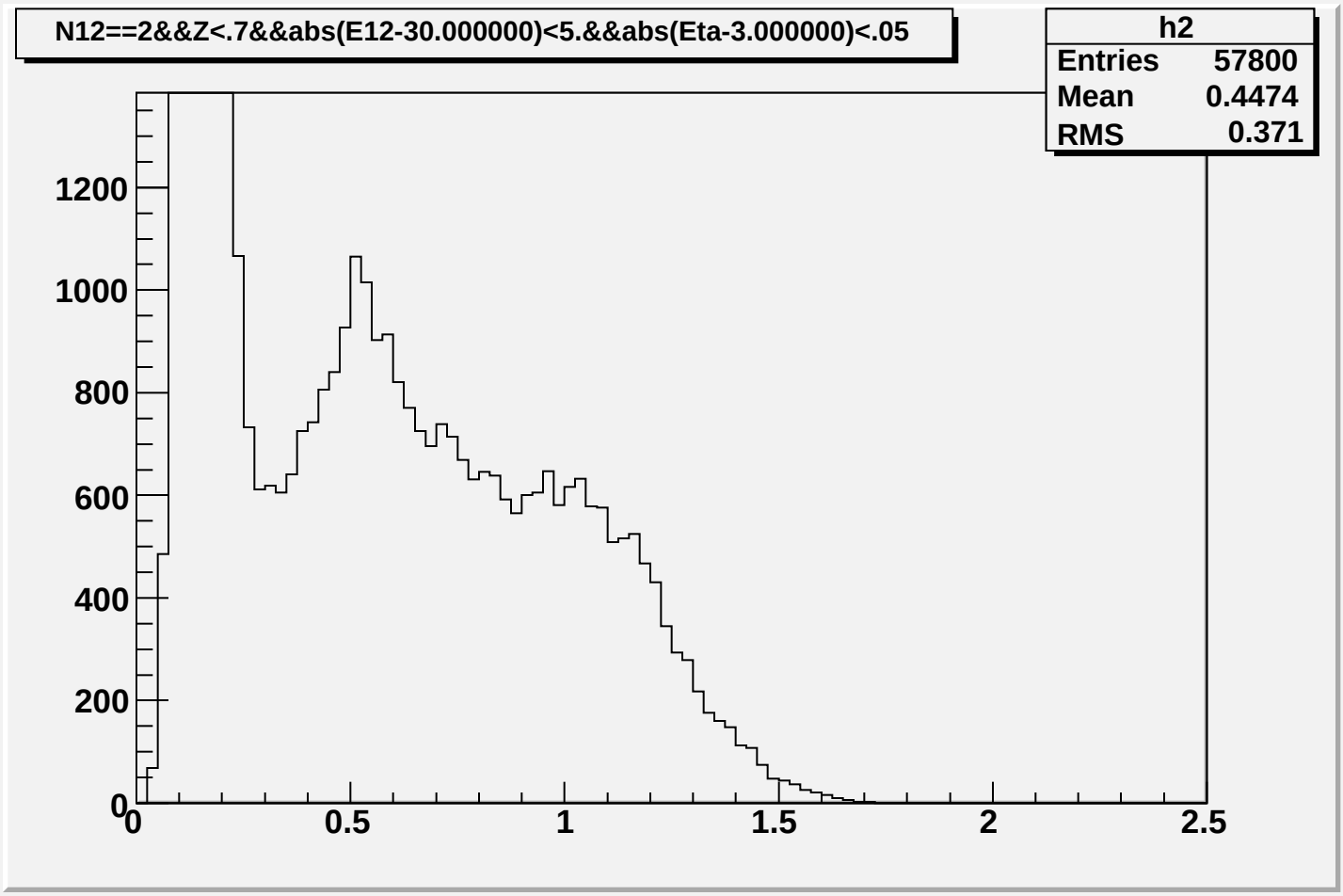

N12==2&&Z<.7&&abs(E12-70.000000)<5.&&abs(Eta-3.100000)<.05
h1
Entries 313
Mean 1.483
RMS 0.8839
10
8
6
4
2
0
0
0.5
1
1.5
2
2.5

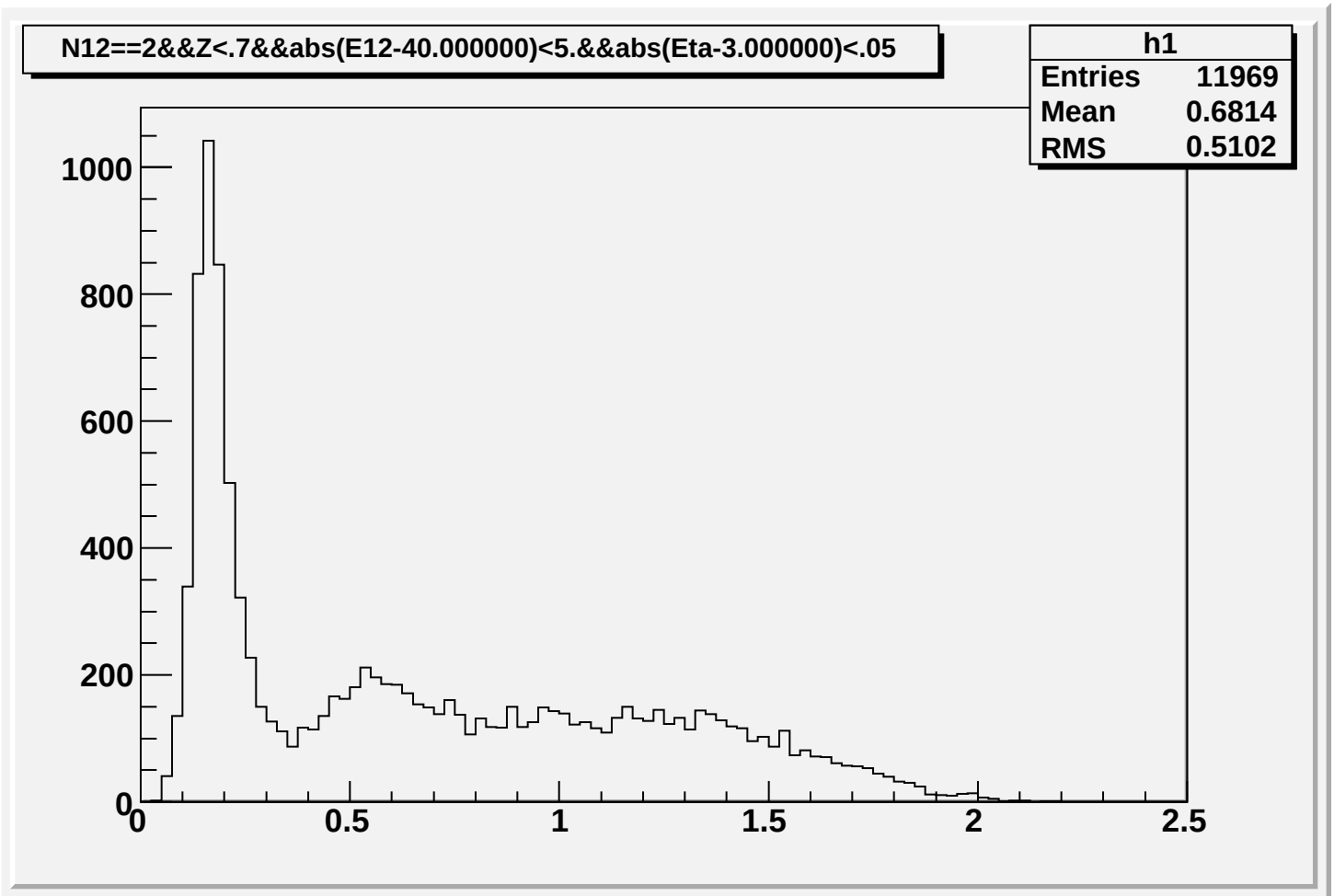

N12==2&&Z<.7&&abs(E12-70.000000)<5.&&abs(Eta-3.100000)<.05
h2
Entries 313
Mean 1.483
RMS 0.8839
12
10
8
6
4
2
0
0
0.5
1
1.5
2
2.5

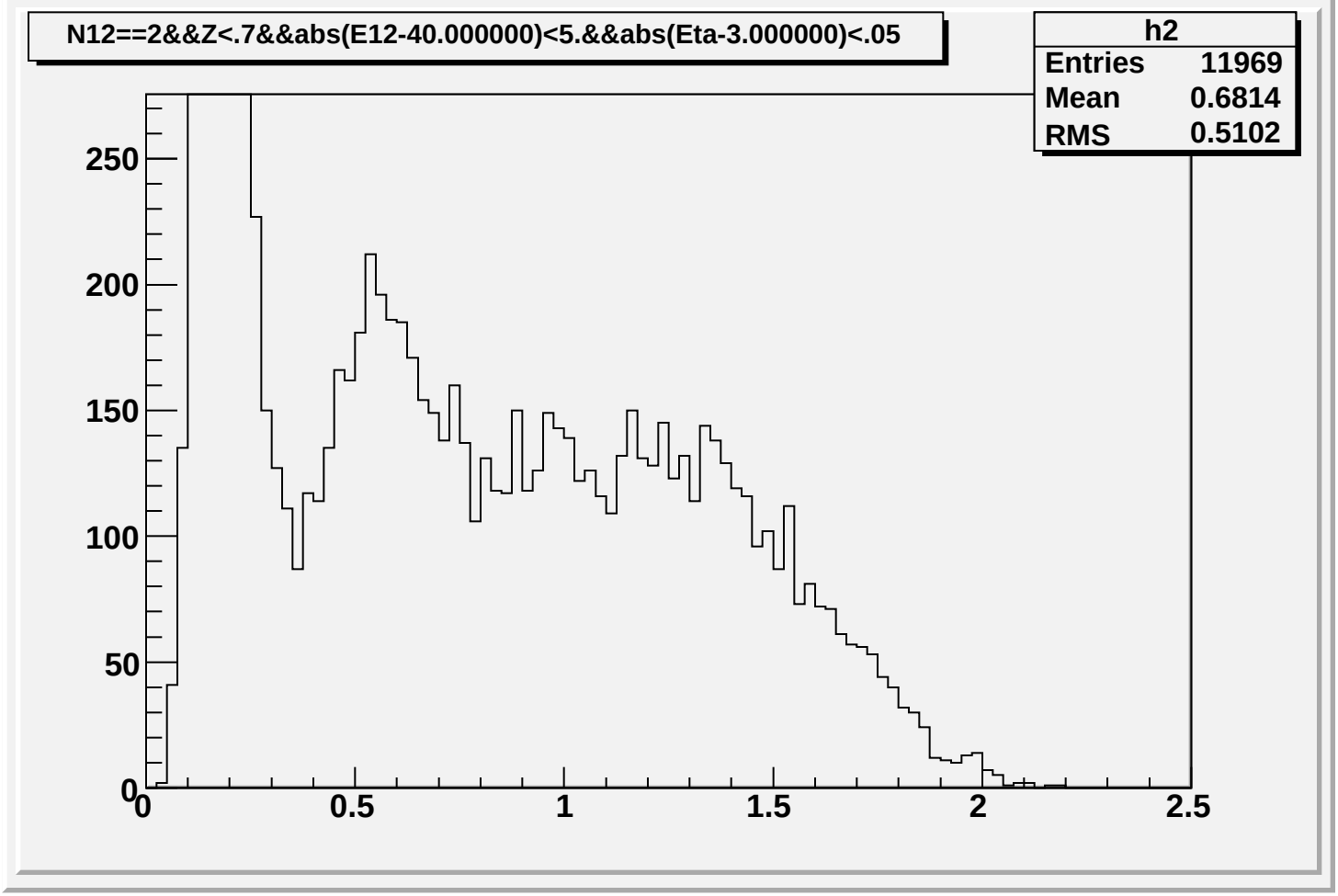

N12==2&&Z<.7&&abs(E12-20.000000)<5.&&abs(Eta-3.000000)<.05
h1
Entries 68380
Mean 0.3966
RMS 0.2783
9000
8000
7000
6000
5000
4000
3000
2000
1000
0
0
0.5
1
1.5
2
2.5

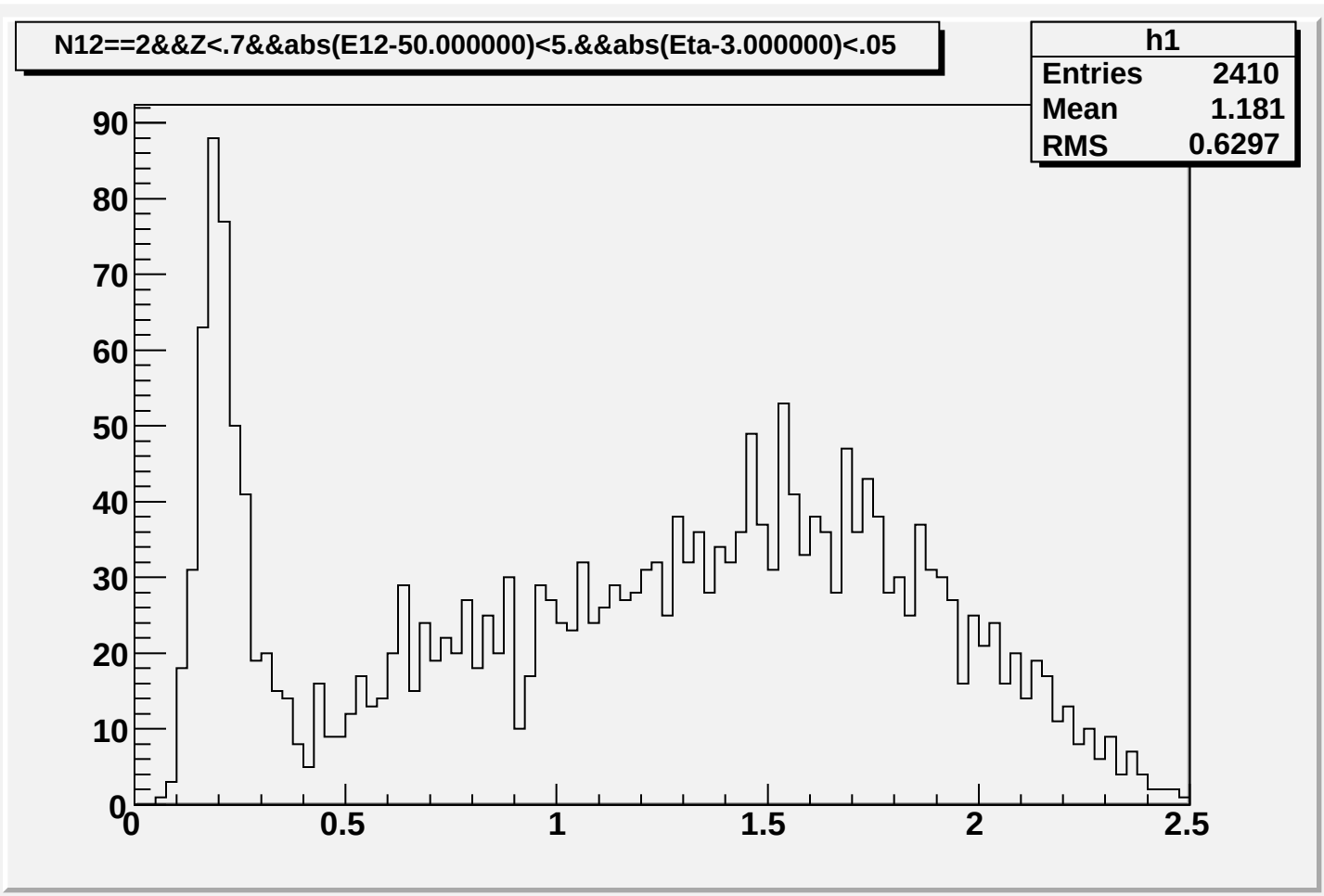

N12==2&&Z<.7&&abs(E12-20.000000)<5.&&abs(Eta-3.000000)<.05
h2
Entries 68380
Mean 0.3966
RMS 0.2783
2000
1800
1600
1400
1200
1000
800
600
400
200
0
0
0.5
1
1.5
2
2.5

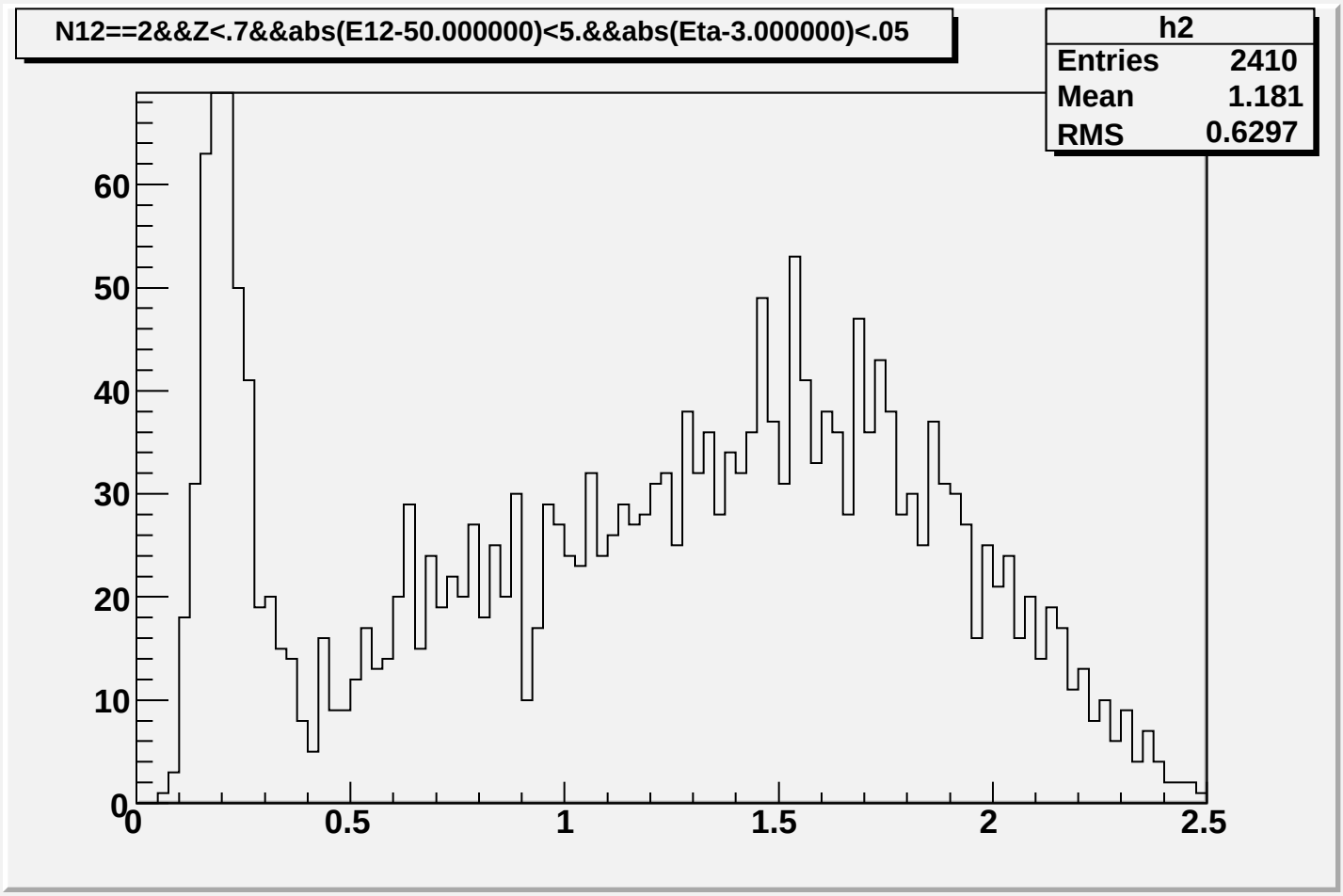

N12==2&&Z<.7&&abs(E12-30.000000)<5.&&abs(Eta-3.000000)<.05
h1
Entries 57800
Mean 0.4474
RMS 0.371
8000
7000
6000
5000
4000
3000
2000
1000
0
0
0.5
1
1.5
2
2.5

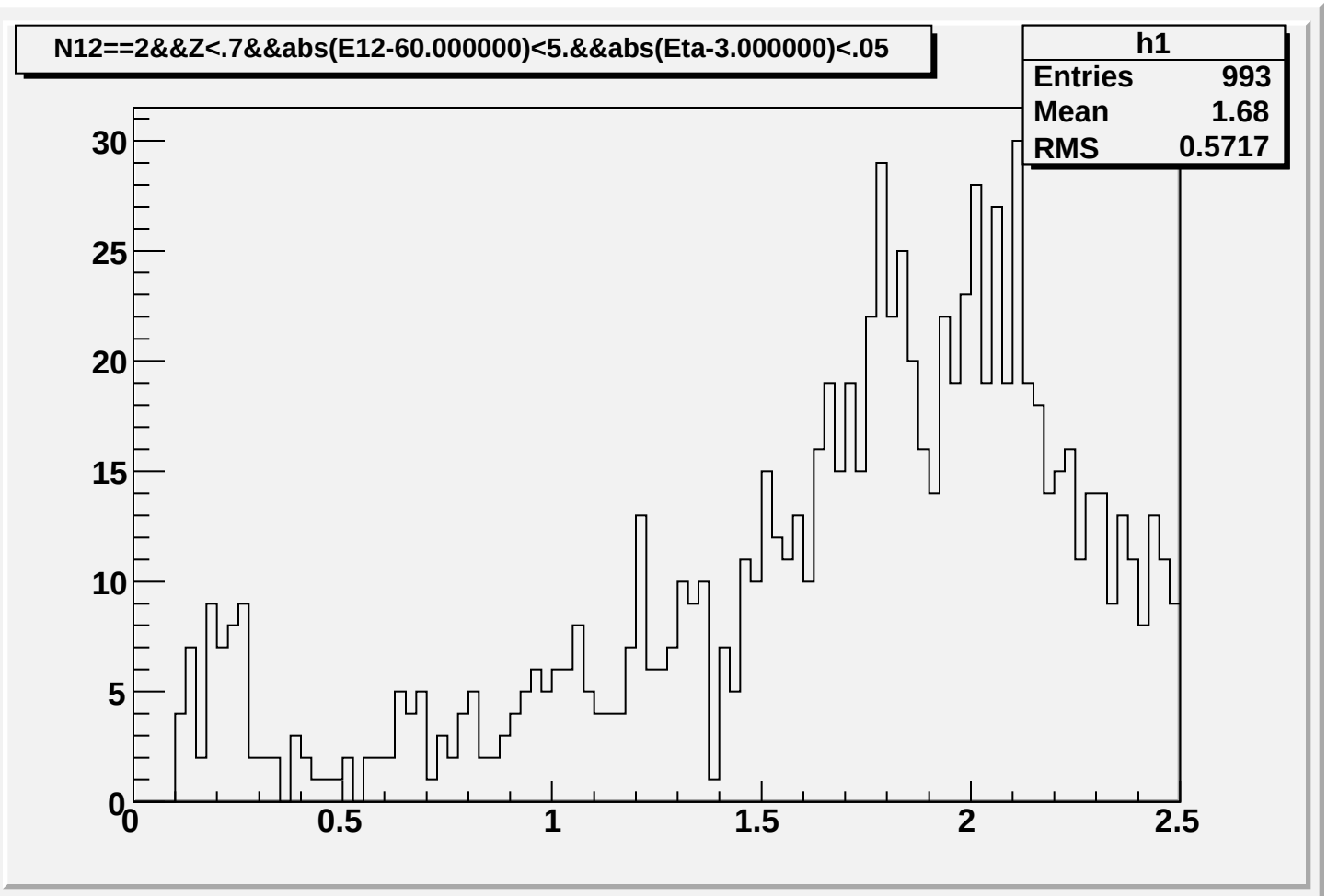

N12==2&&Z<.7&&abs(E12-30.000000)<5.&&abs(Eta-3.000000)<.05
h2
Entries 57800
Mean 0.4474
RMS 0.371
1200
1000
800
600
400
200
0
0
0.5
1
1.5
2
2.5

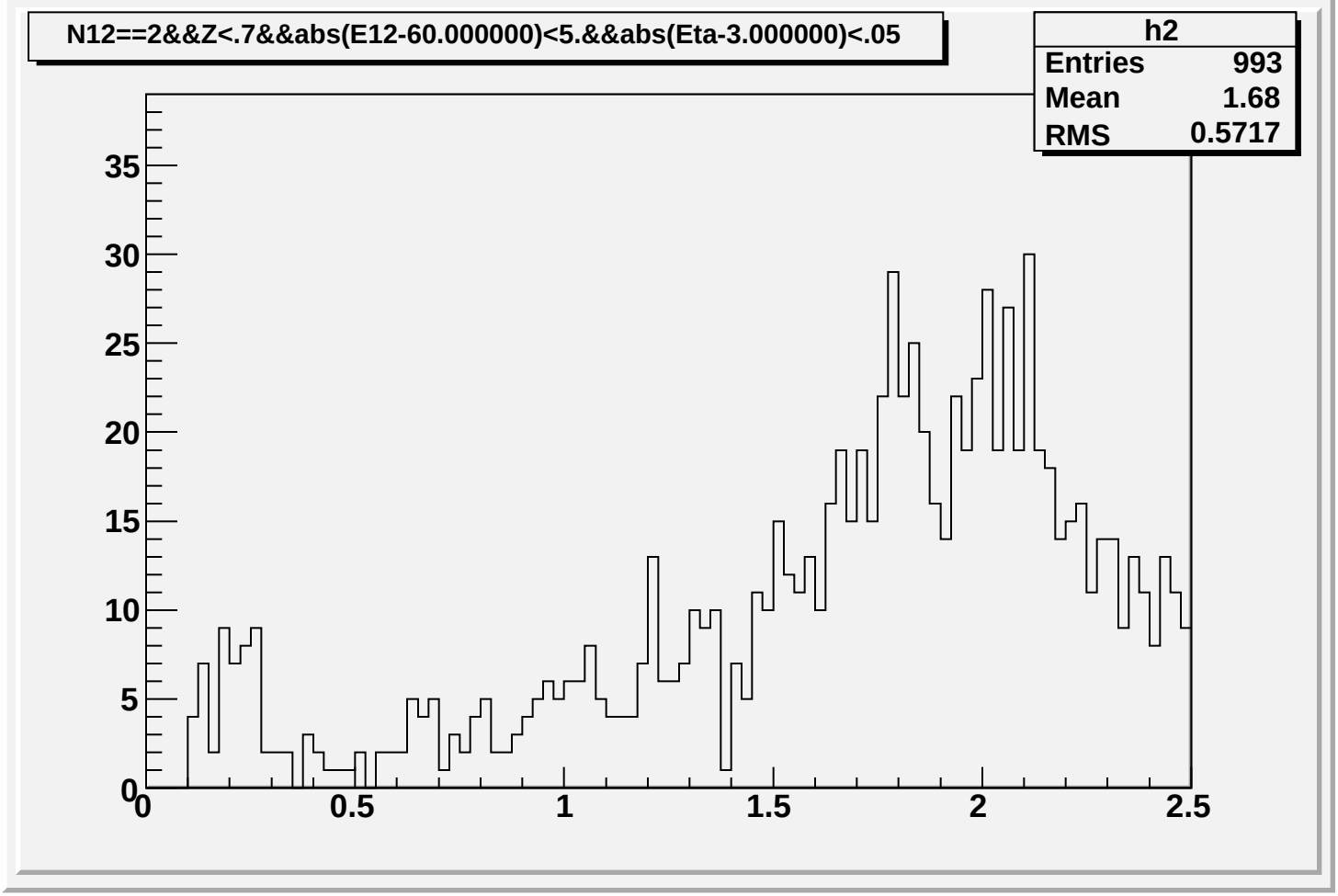

N12==2&&Z<.7&&abs(E12-40.000000)<5.&&abs(Eta-3.000000)<.05
h1
Entries 11969
Mean 0.6814
RMS 0.5102
1000
800
600
400
200
0
0
0.5
1
1.5
2
2.5

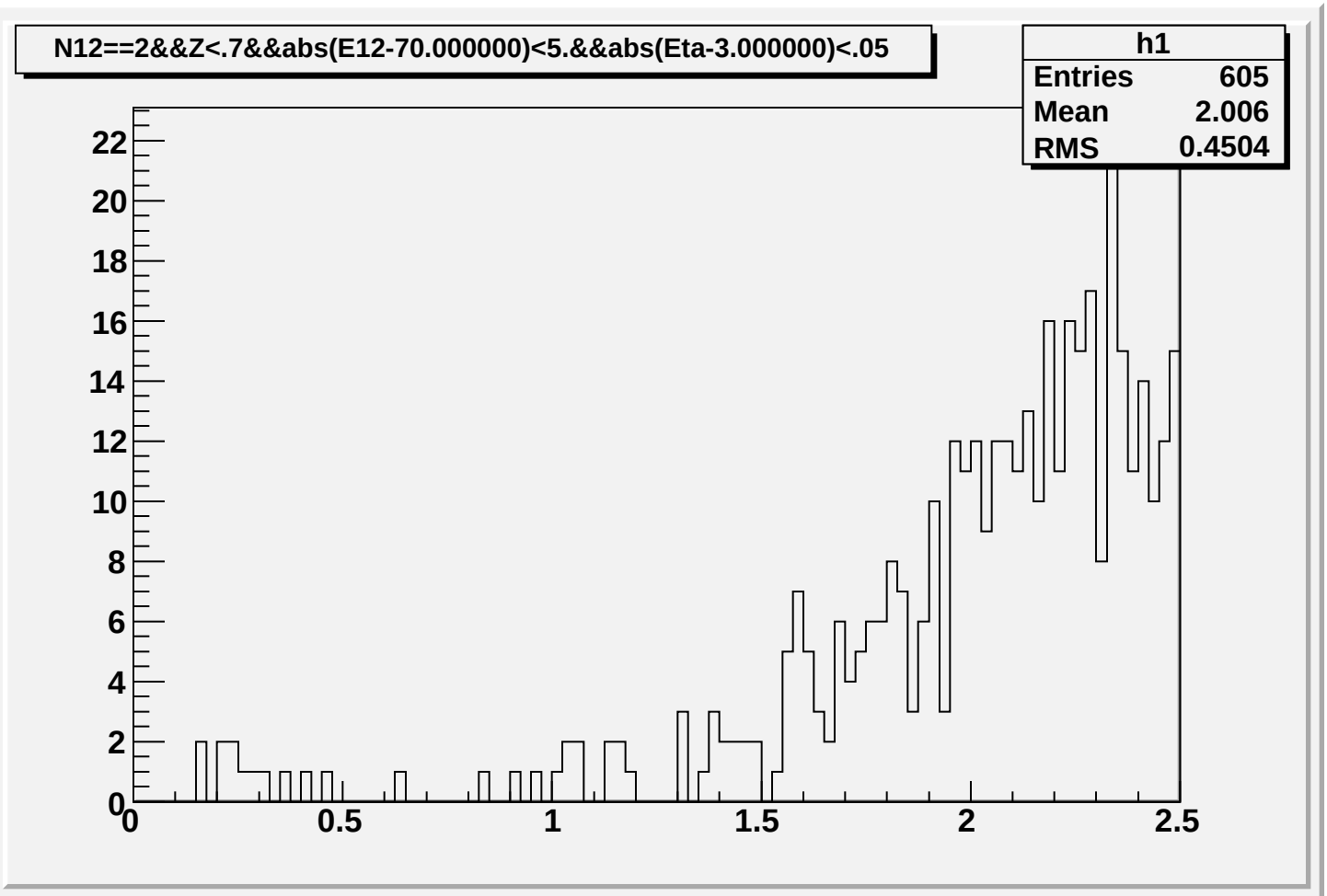

N12==2&&Z<.7&&abs(E12-40.000000)<5.&&abs(Eta-3.000000)<.05
h2
Entries 11969
Mean 0.6814
RMS 0.5102
250
200
150
100
50
0
0
0.5
1
1.5
2
2.5

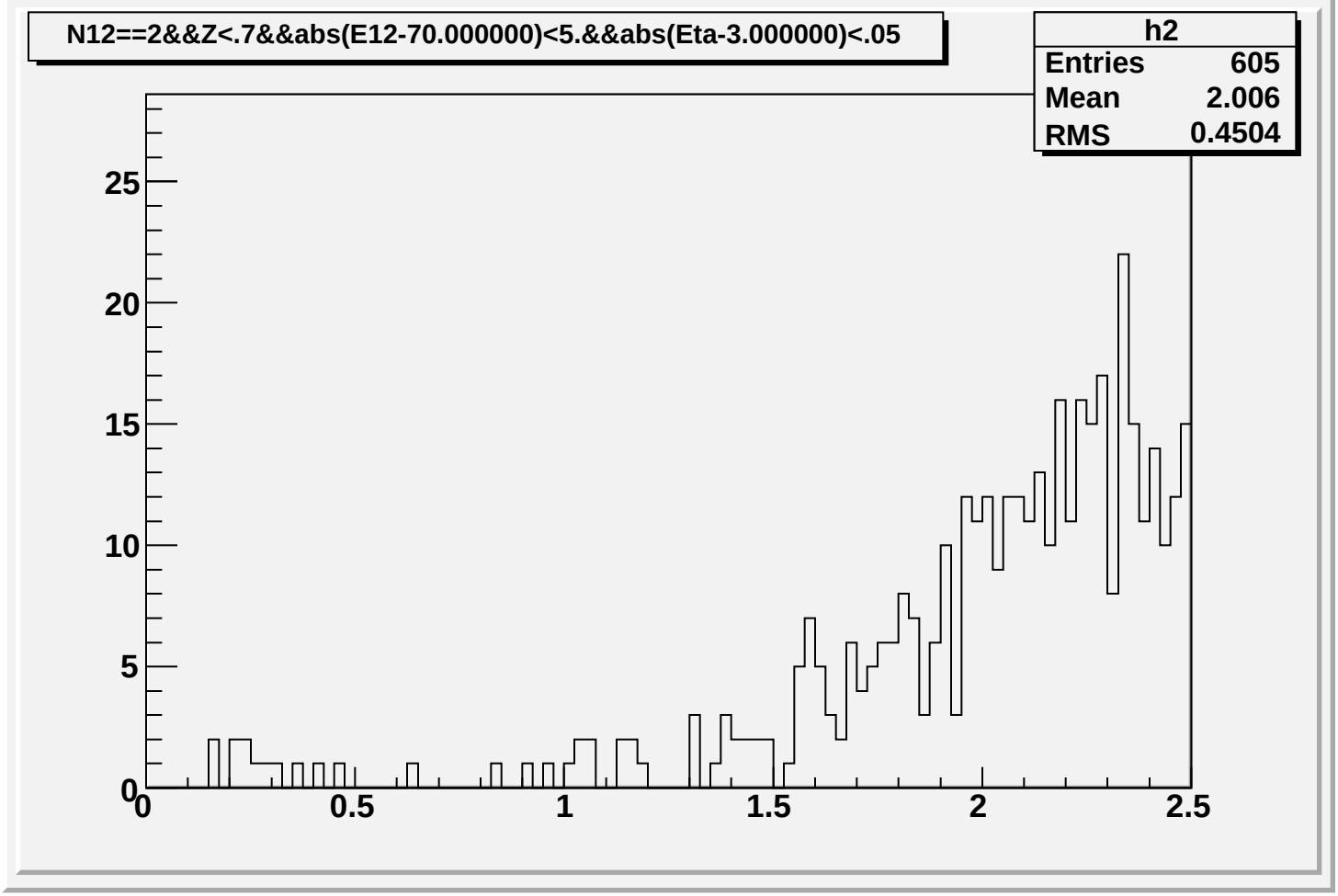

N12==2&&Z<.7&&abs(E12-50.000000)<5.&&abs(Eta-3.000000)<.05
h1
Entries 2410
Mean 1.181
RMS 0.6297
90
80
70
60
50
40
30
20
10
0
0
0.5
1
1.5
2
2.5

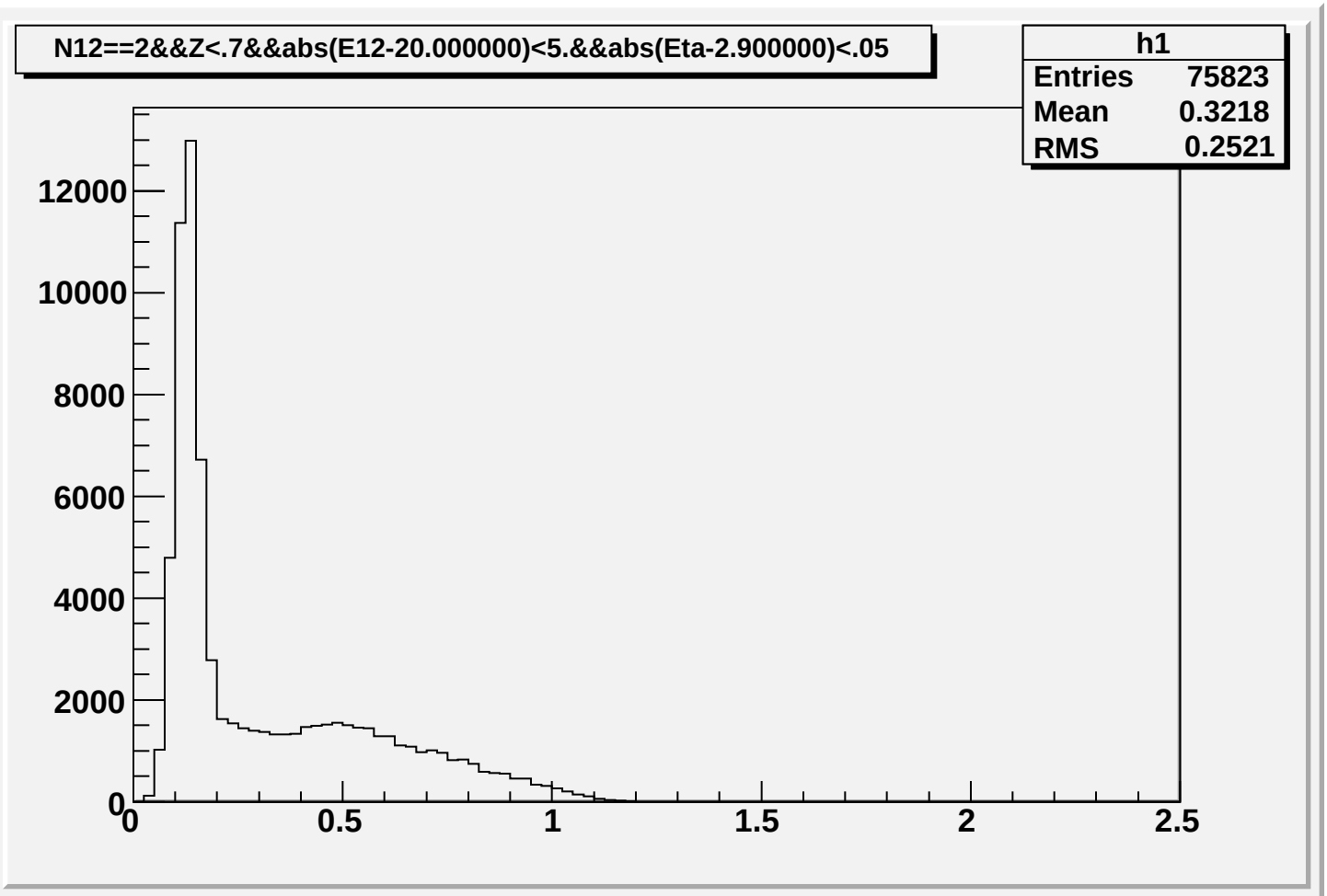

N12==2&&Z<.7&&abs(E12-50.000000)<5.&&abs(Eta-3.000000)<.05
h2
Entries 2410
Mean 1.181
RMS 0.6297
60
50
40
30
20
10
0
0
0.5
1
1.5
2
2.5

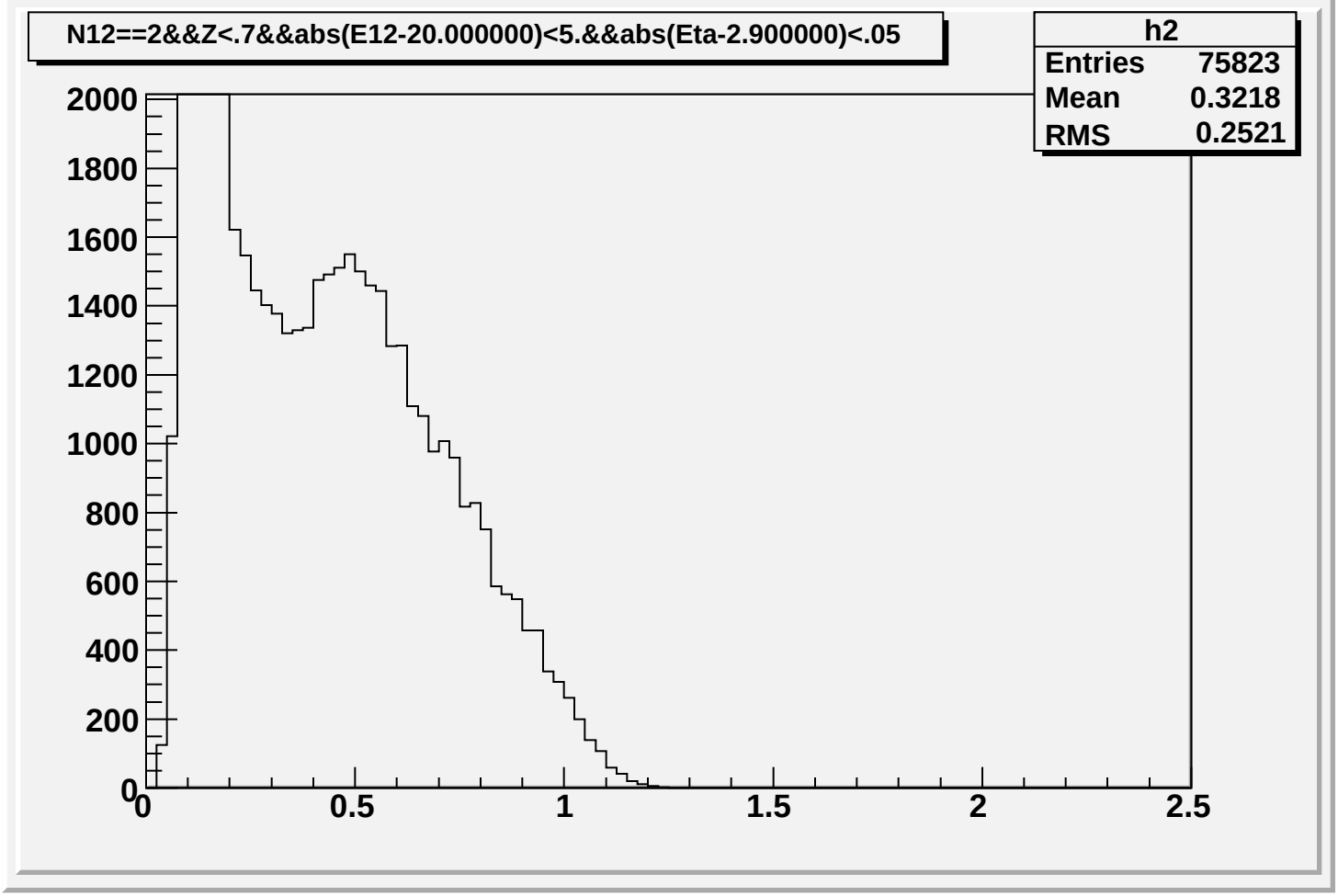

N12==2&&Z<.7&&abs(E12-60.000000)<5.&&abs(Eta-3.000000)<.05
h1
Entries 993
Mean 1.68
RMS 0.5717
30
25
20
15
10
5
0
0
0.5
1
1.5
2
2.5

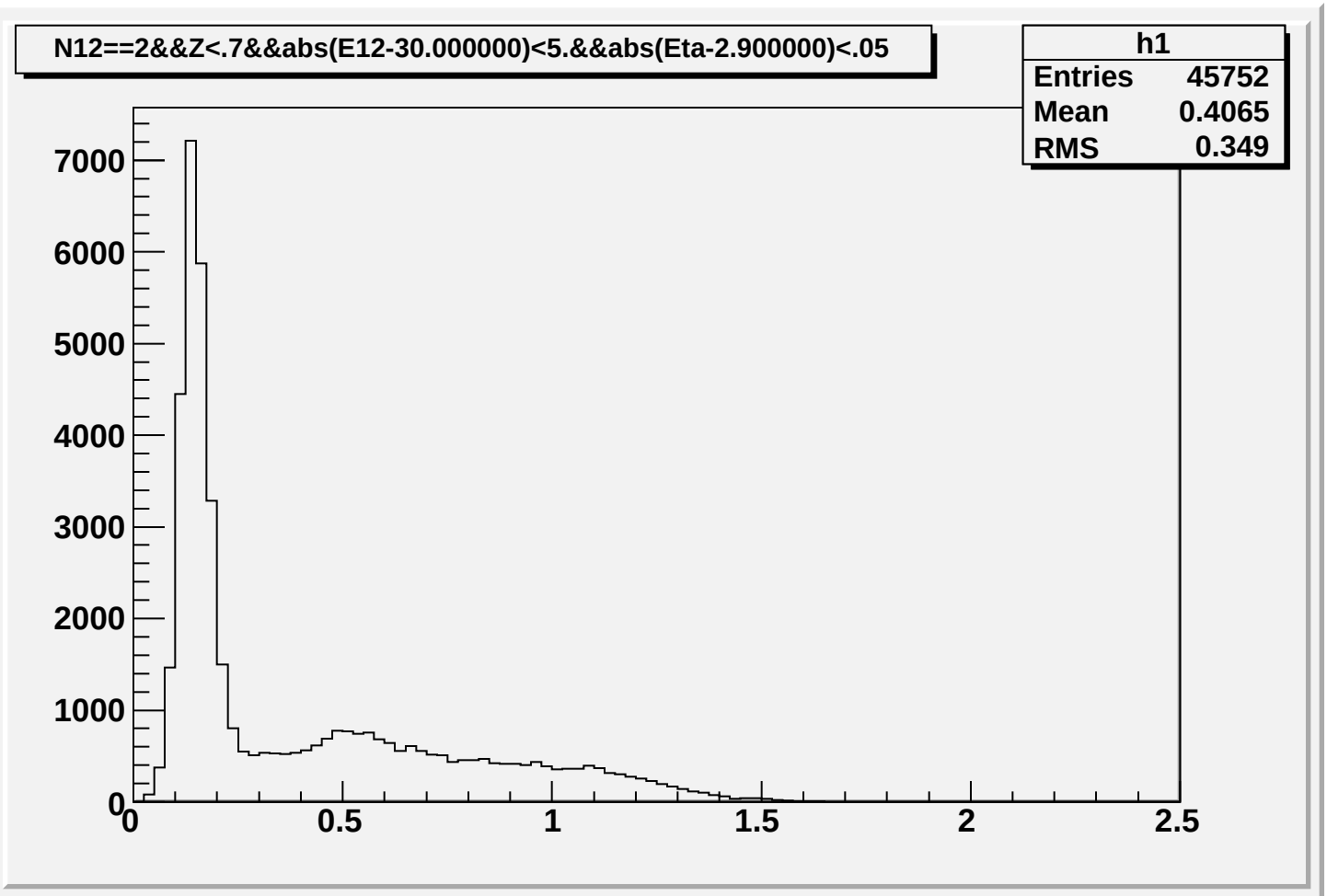

N12==2&&Z<.7&&abs(E12-60.000000)<5.&&abs(Eta-3.000000)<.05
h2
Entries 993
Mean 1.68
RMS 0.5717
35
30
25
20
15
10
5
0
0
0.5
1
1.5
2
2.5

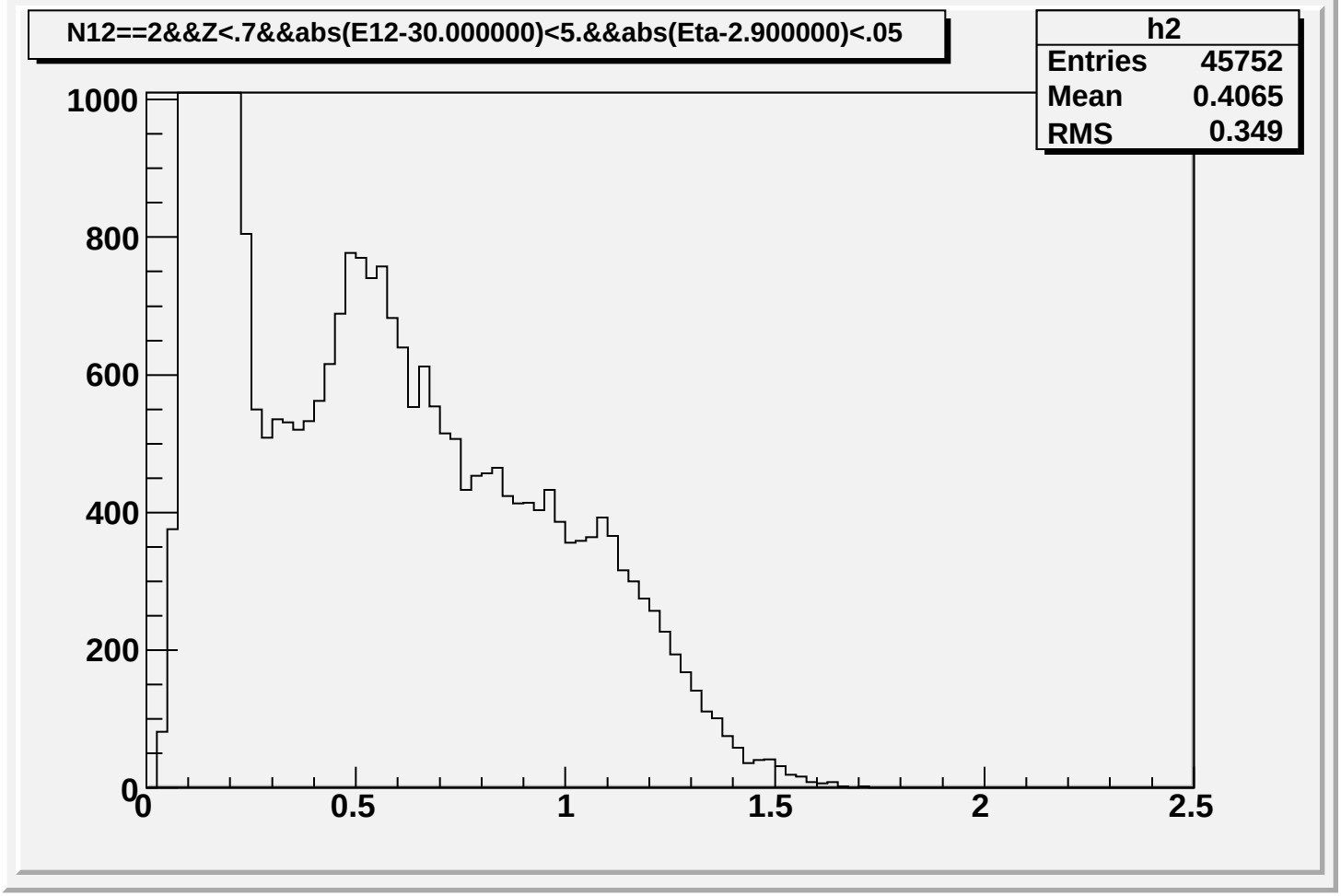

N12==2&&Z<.7&&abs(E12-70.000000)<5.&&abs(Eta-3.000000)<.05
h1
Entries 605
Mean 2.006
RMS 0.4504
0 2 4 6 8 10 12 14 16 18 20 22
0 0.5 1 1.5 2 2.5

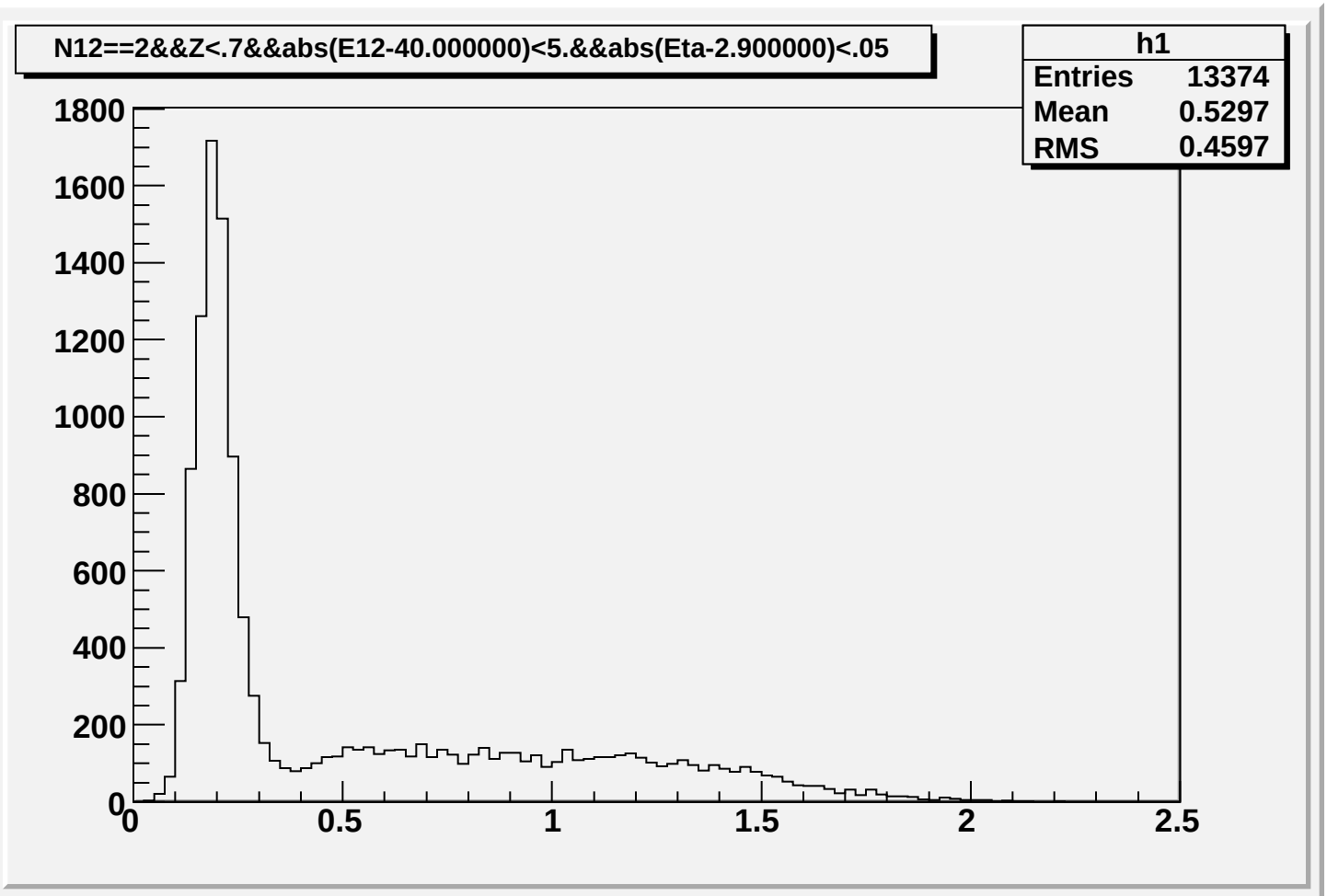

N12==2&&Z<.7&&abs(E12-70.000000)<5.&&abs(Eta-3.000000)<.05
h2
Entries 605
Mean 2.006
RMS 0.4504
0 5 10 15 20 25
0 0.5 1 1.5 2 2.5

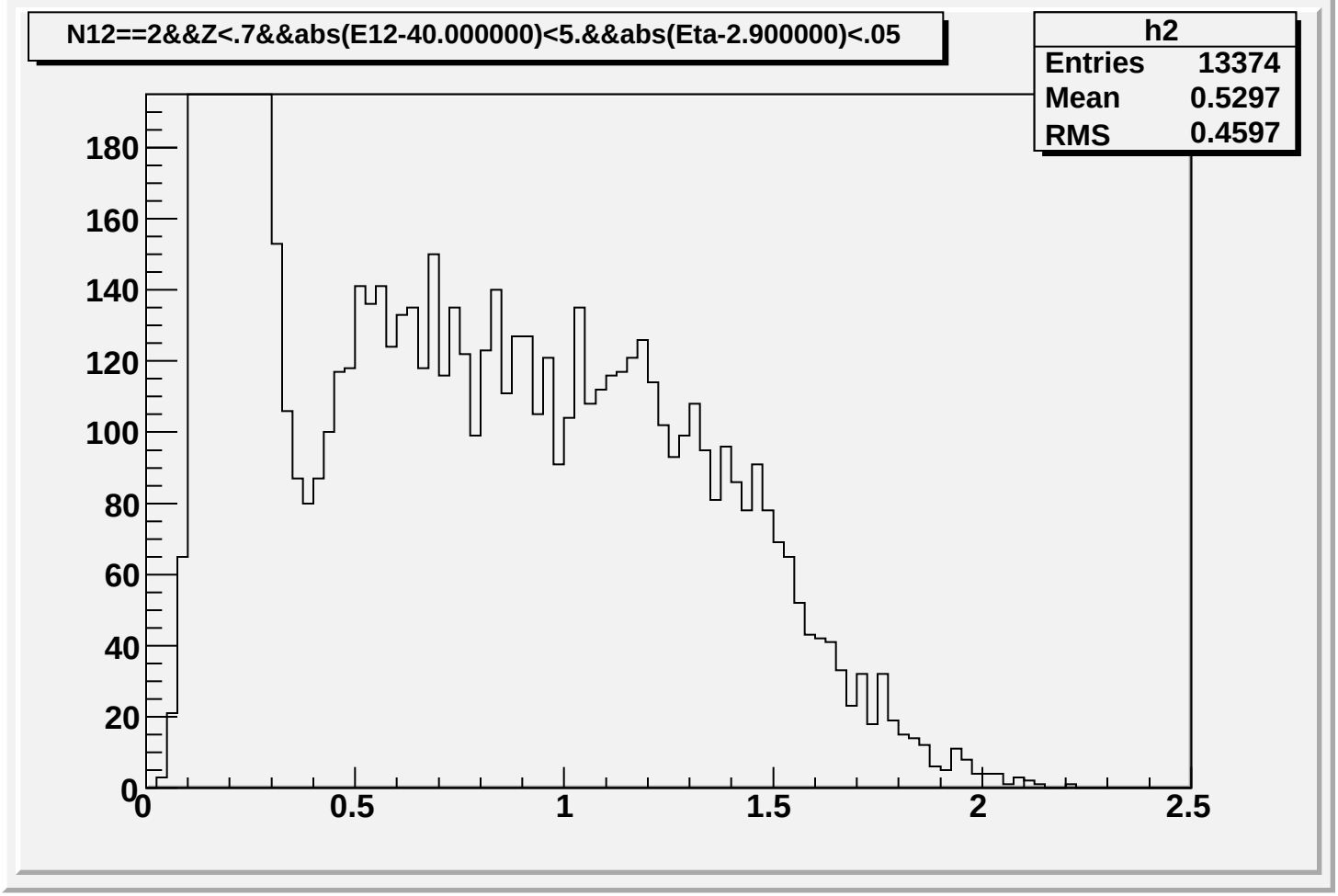

N12==2&&Z<.7&&abs(E12-20.000000)<5.&&abs(Eta-2.900000)<.05
h1
Entries 75823
Mean 0.3218
RMS 0.2521
12000
10000
8000
6000
4000
2000
0
0
0.5
1
1.5
2
2.5

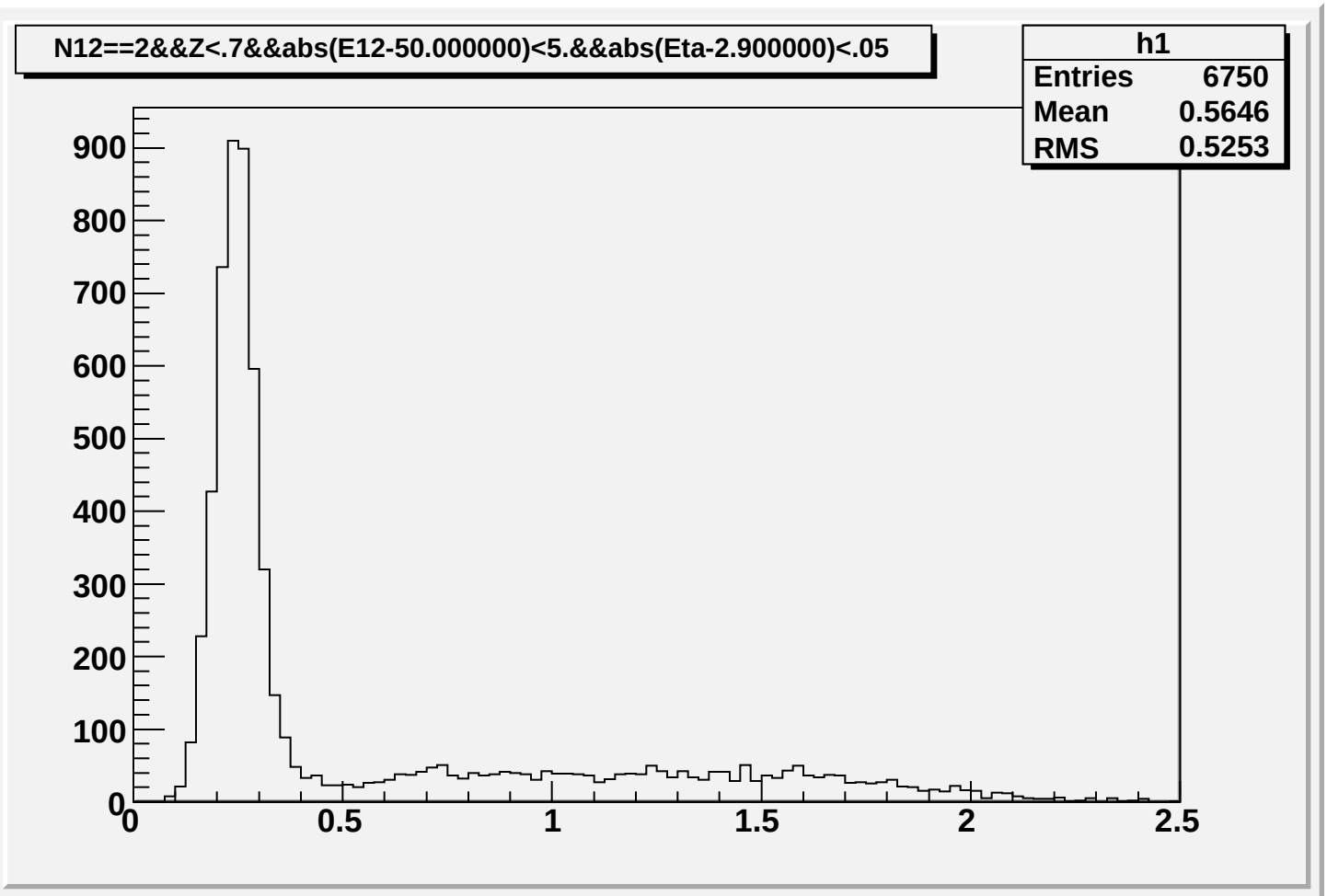

N12==2&&Z<.7&&abs(E12-20.000000)<5.&&abs(Eta-2.900000)<.05
h2
Entries 75823
Mean 0.3218
RMS 0.2521
2000
1800
1600
1400
1200
1000
800
600
400
200
0
0
0.5
1
1.5
2
2.5

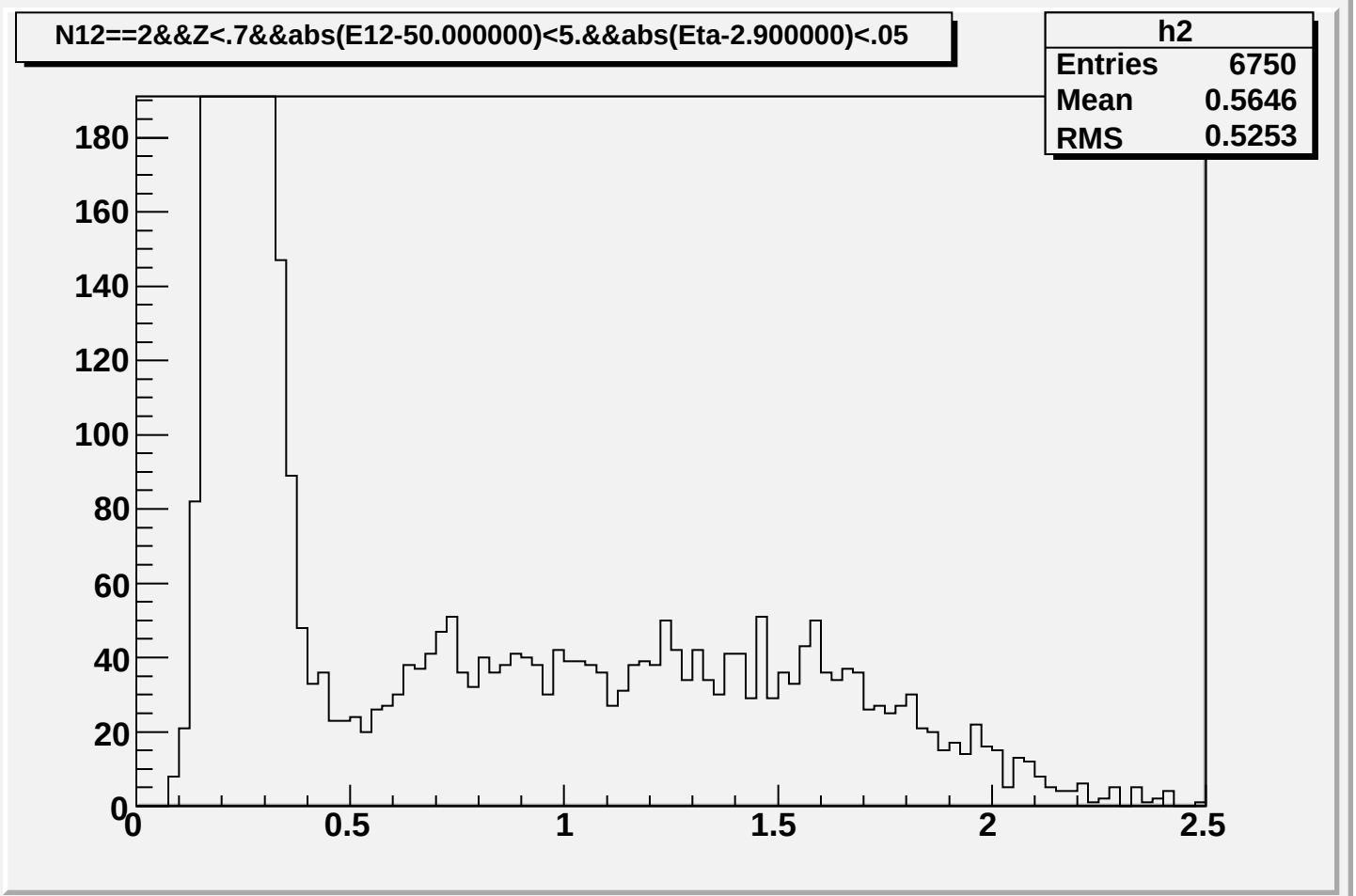

N12==2&&Z<.7&&abs(E12-30.000000)<5.&&abs(Eta-2.900000)<.05
h1
Entries 45752
Mean 0.4065
RMS 0.349
7000
6000
5000
4000
3000
2000
1000
0
0
0.5
1
1.5
2
2.5

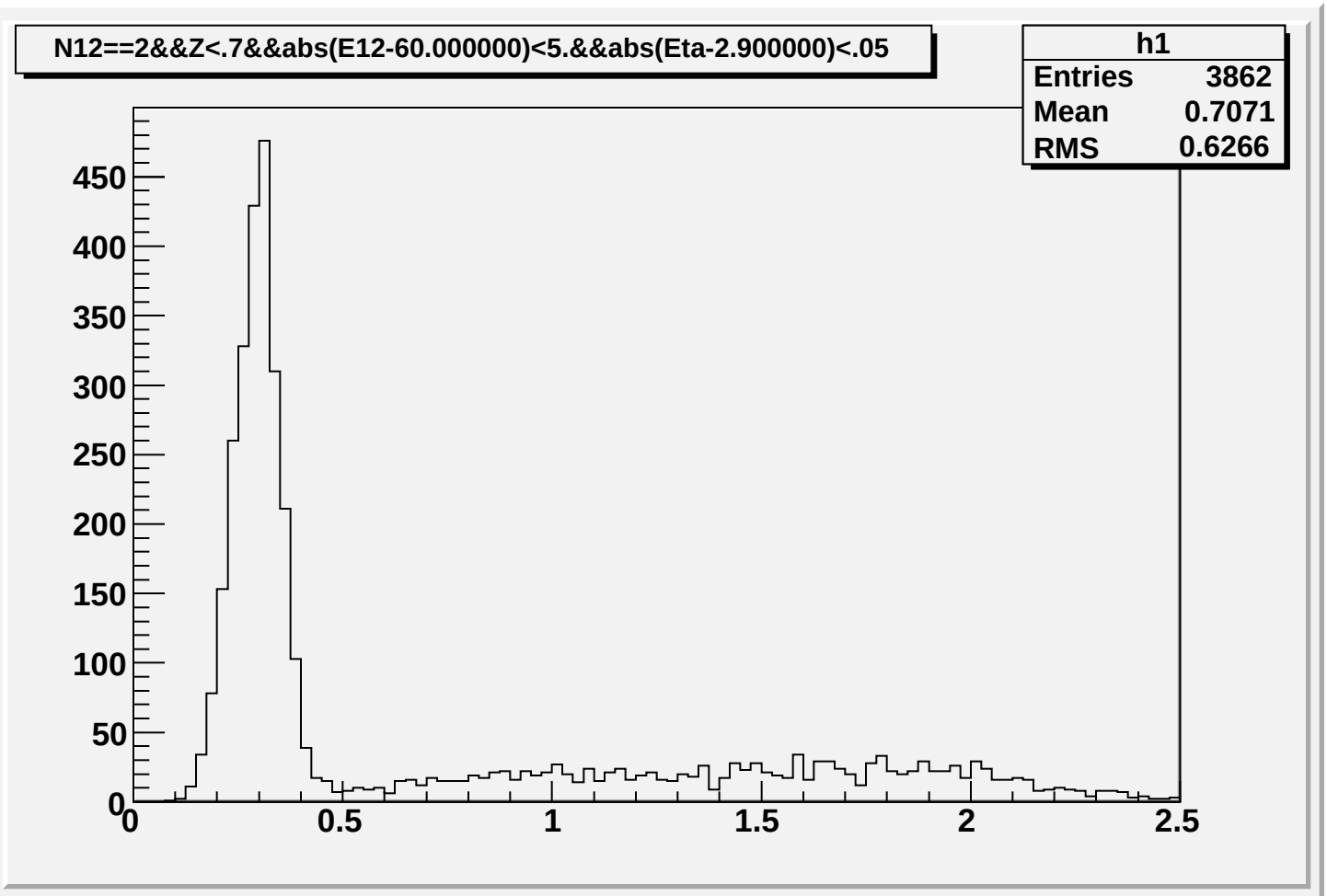

N12==2&&Z<.7&&abs(E12-30.000000)<5.&&abs(Eta-2.900000)<.05
h2
Entries 45752
Mean 0.4065
RMS 0.349
1000
800
600
400
200
0
0
0.5
1
1.5
2
2.5

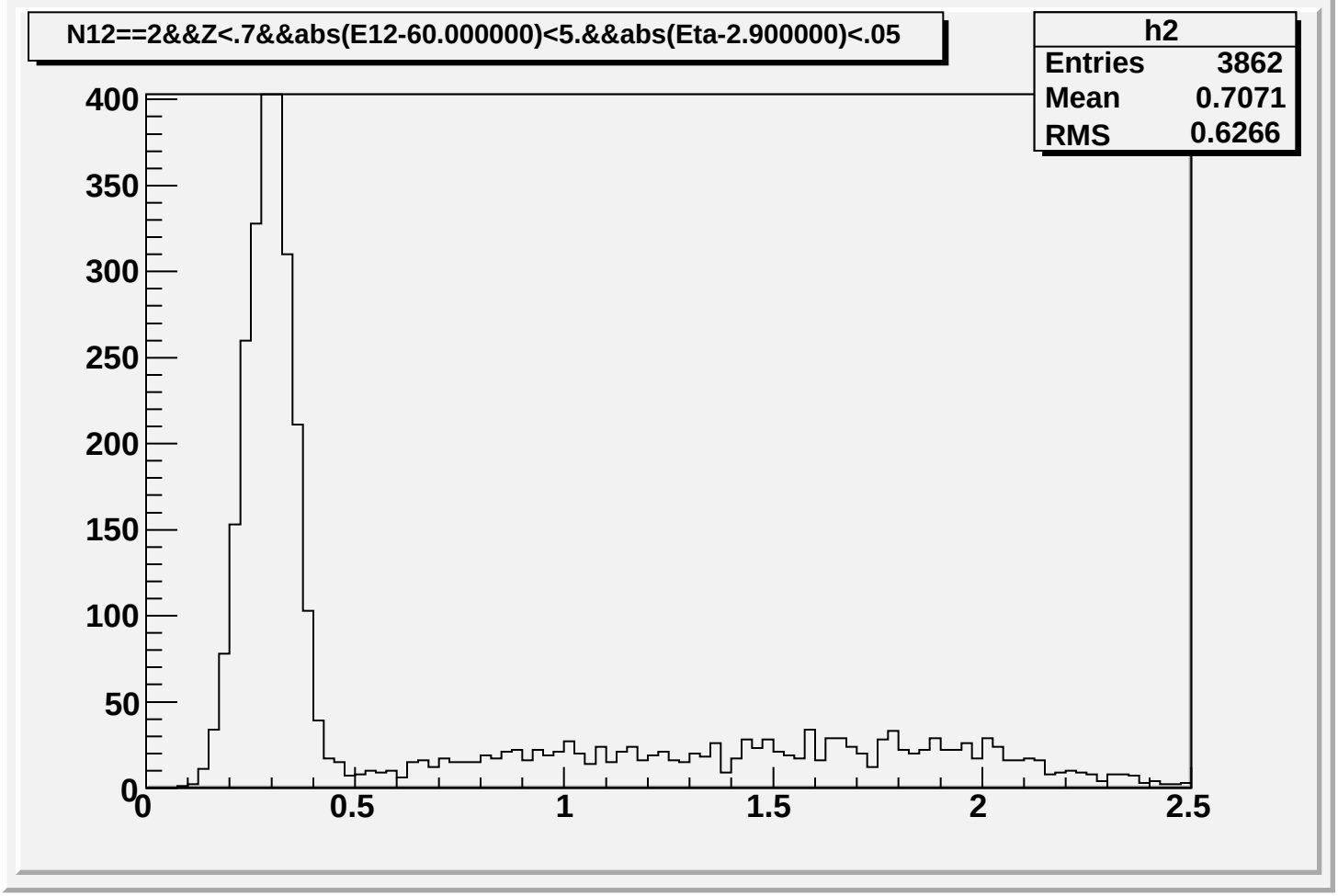

N12==2&&Z<.7&&abs(E12-40.000000)<5.&&abs(Eta-2.900000)<.05
h1
Entries 13374
Mean 0.5297
RMS 0.4597
1800
1600
1400
1200
1000
800
600
400
200
0
0
0.5
1
1.5
2
2.5

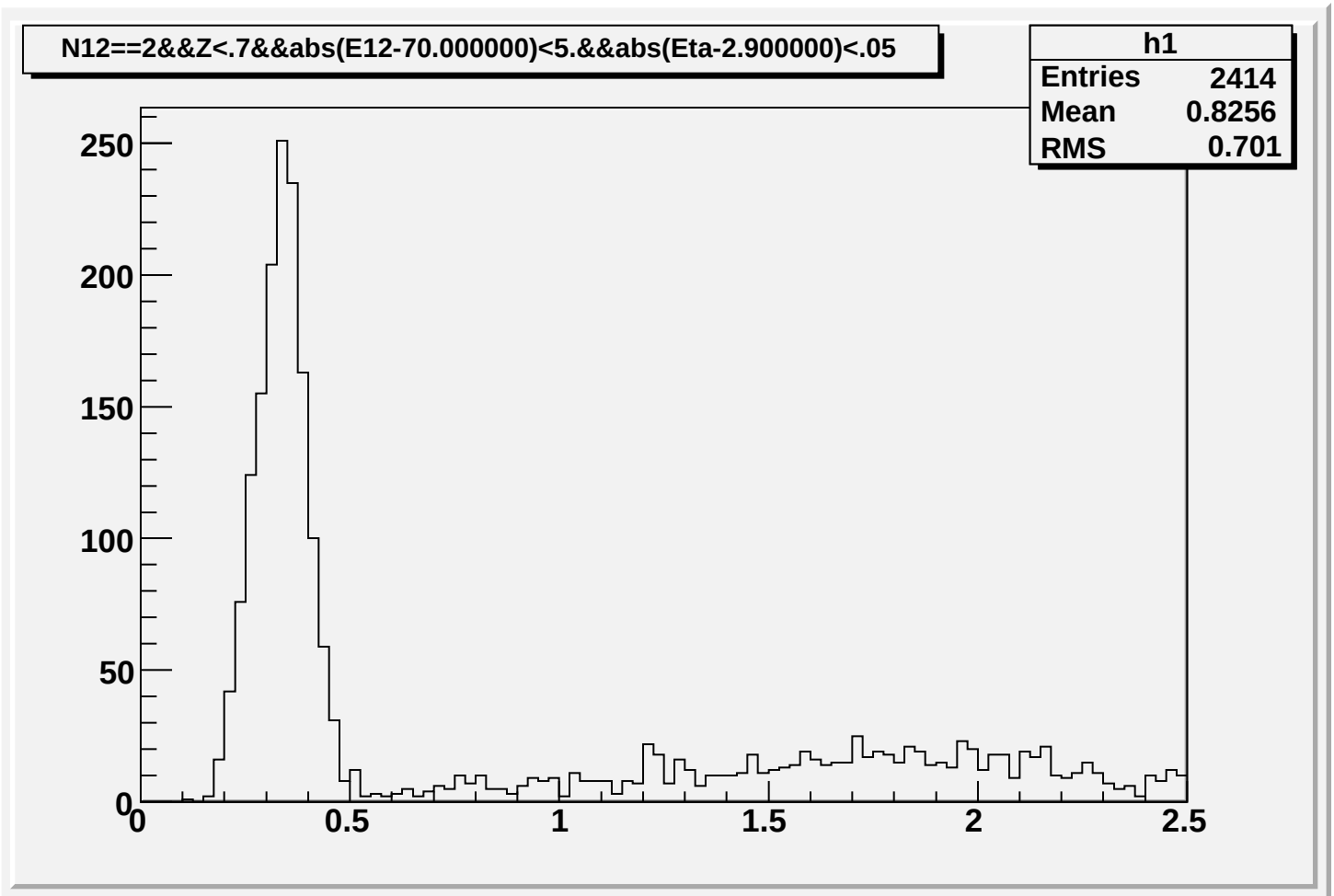

N12==2&&Z<.7&&abs(E12-40.000000)<5.&&abs(Eta-2.900000)<.05
h2
Entries 13374
Mean 0.5297
RMS 0.4597
180
160
140
120
100
80
60
40
20
0
0
0.5
1
1.5
2
2.5

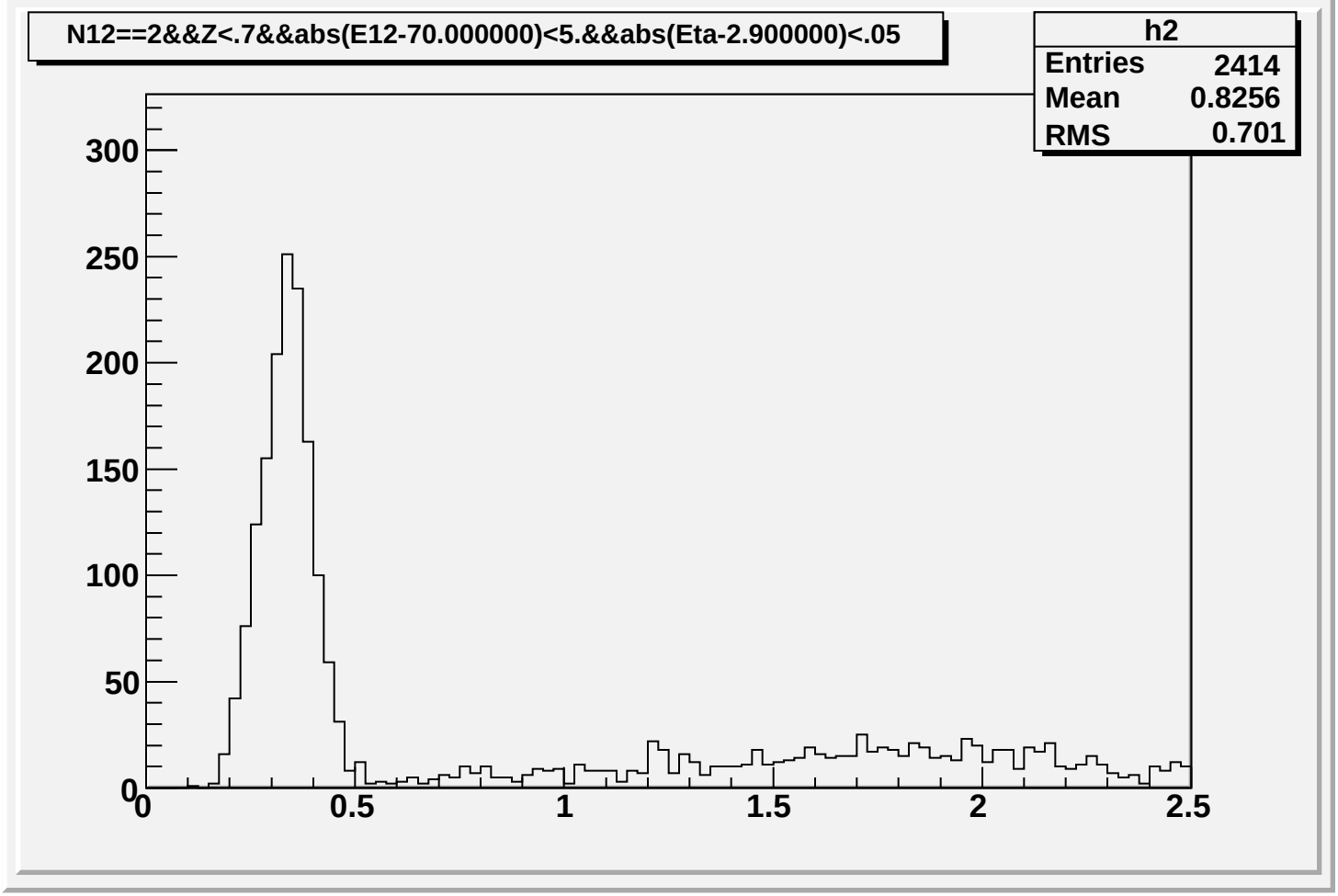

N12==2&&Z<.7&&abs(E12-50.000000)<5.&&abs(Eta-2.900000)<.05
h1
Entries 6750
Mean 0.5646
RMS 0.5253
900
800
700
600
500
400
300
200
100
0
0
0.5
1
1.5
2
2.5

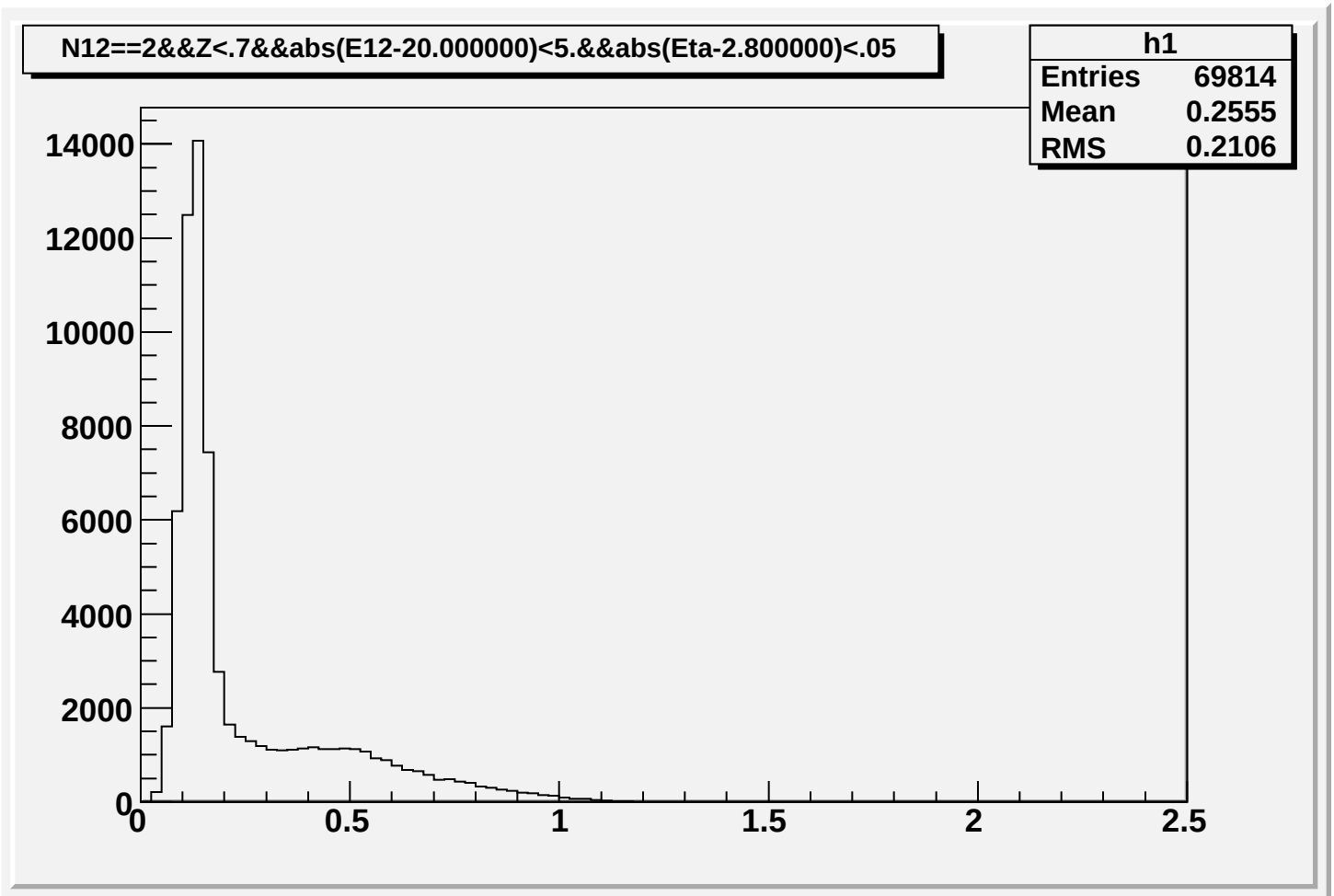

N12==2&&Z<.7&&abs(E12-50.000000)<5.&&abs(Eta-2.900000)<.05
h2
Entries 6750
Mean 0.5646
RMS 0.5253
180
160
140
120
100
80
60
40
20
0
0
0.5
1
1.5
2
2.5

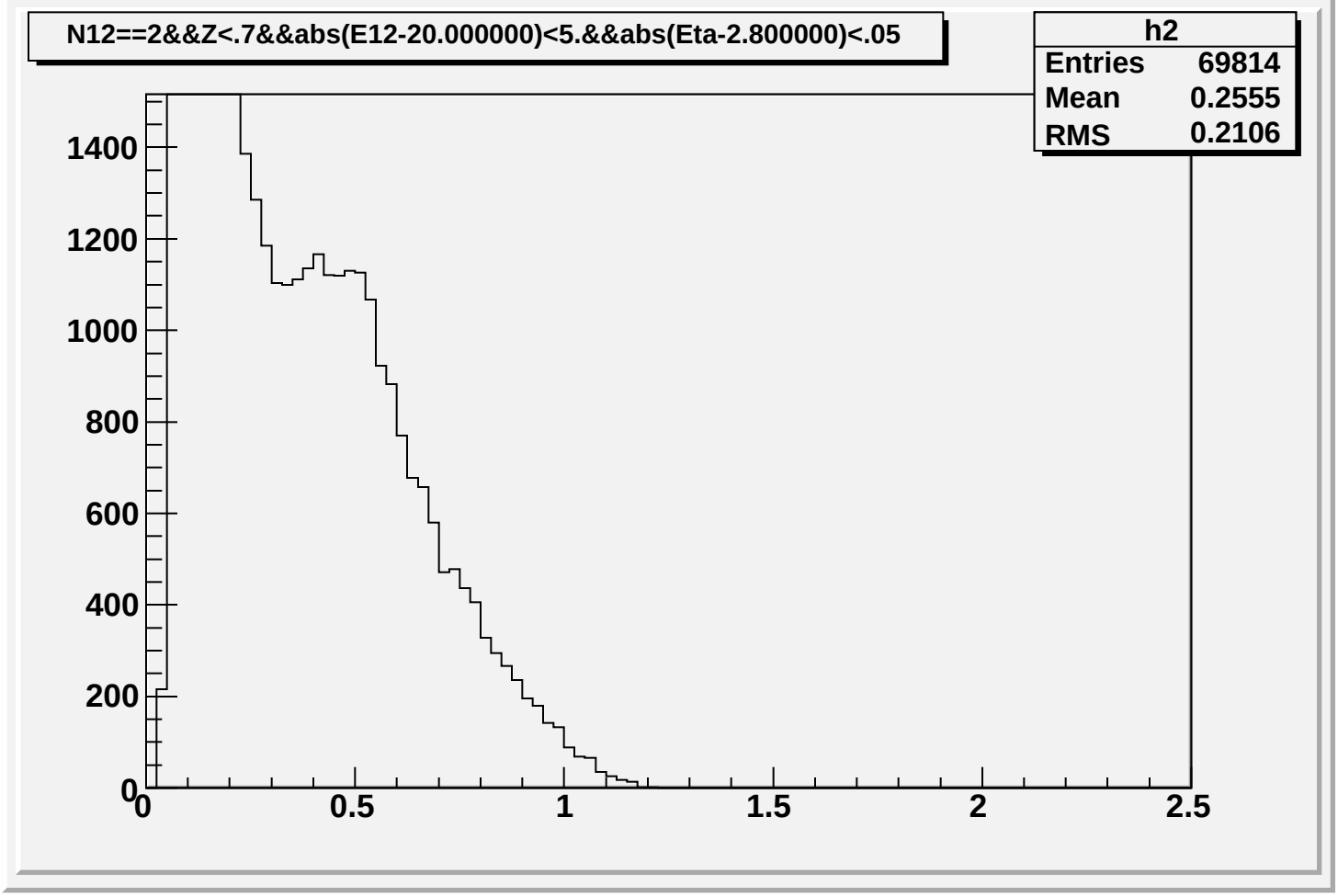

N12==2&&Z<.7&&abs(E12-60.000000)<5.&&abs(Eta-2.900000)<.05
h1
Entries 3862
Mean 0.7071
RMS 0.6266
450
400
350
300
250
200
150
100
50
0
0
0.5
1
1.5
2
2.5

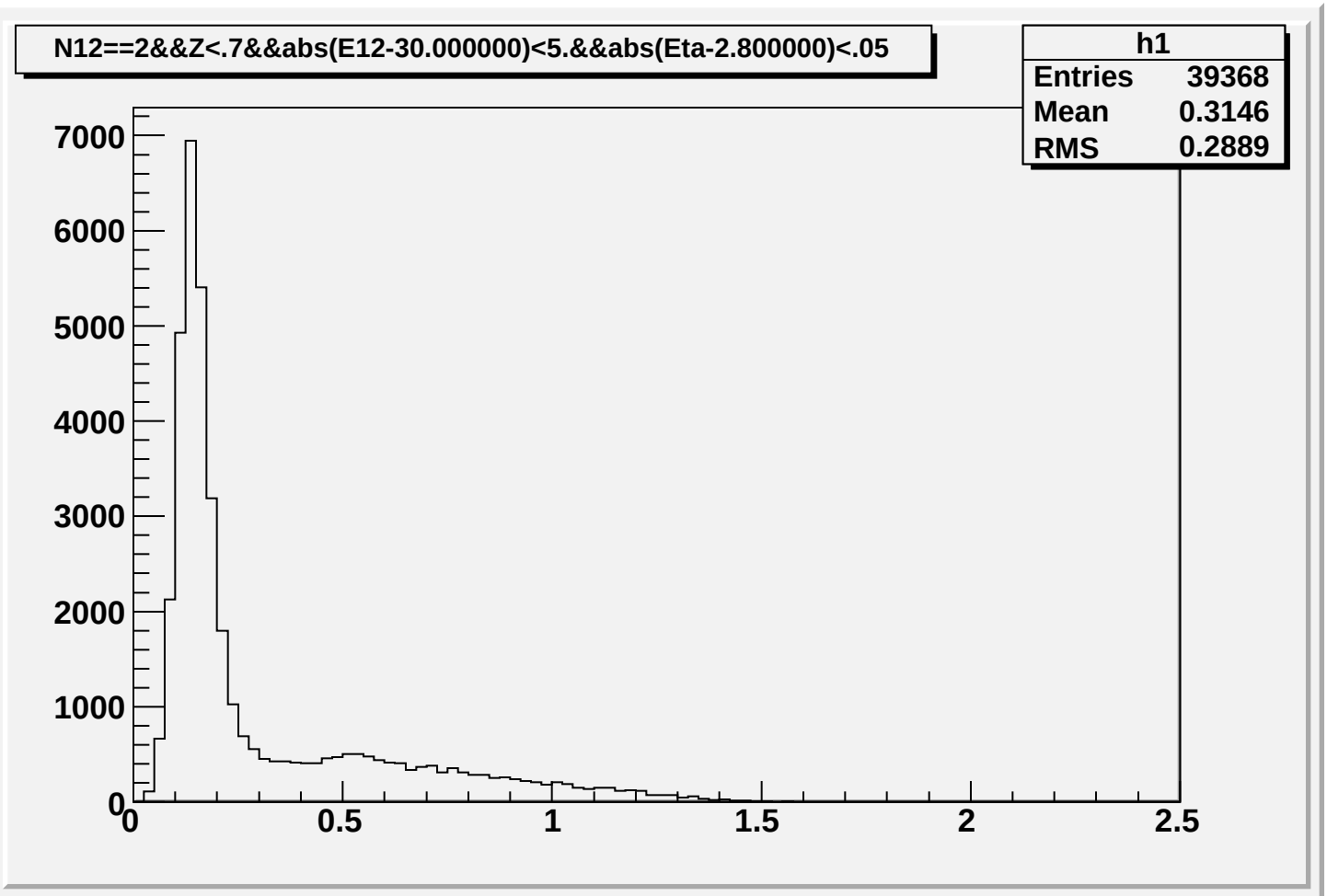

N12==2&&Z<.7&&abs(E12-60.000000)<5.&&abs(Eta-2.900000)<.05
h2
Entries 3862
Mean 0.7071
RMS 0.6266
400
350
300
250
200
150
100
50
0
0
0.5
1
1.5
2
2.5

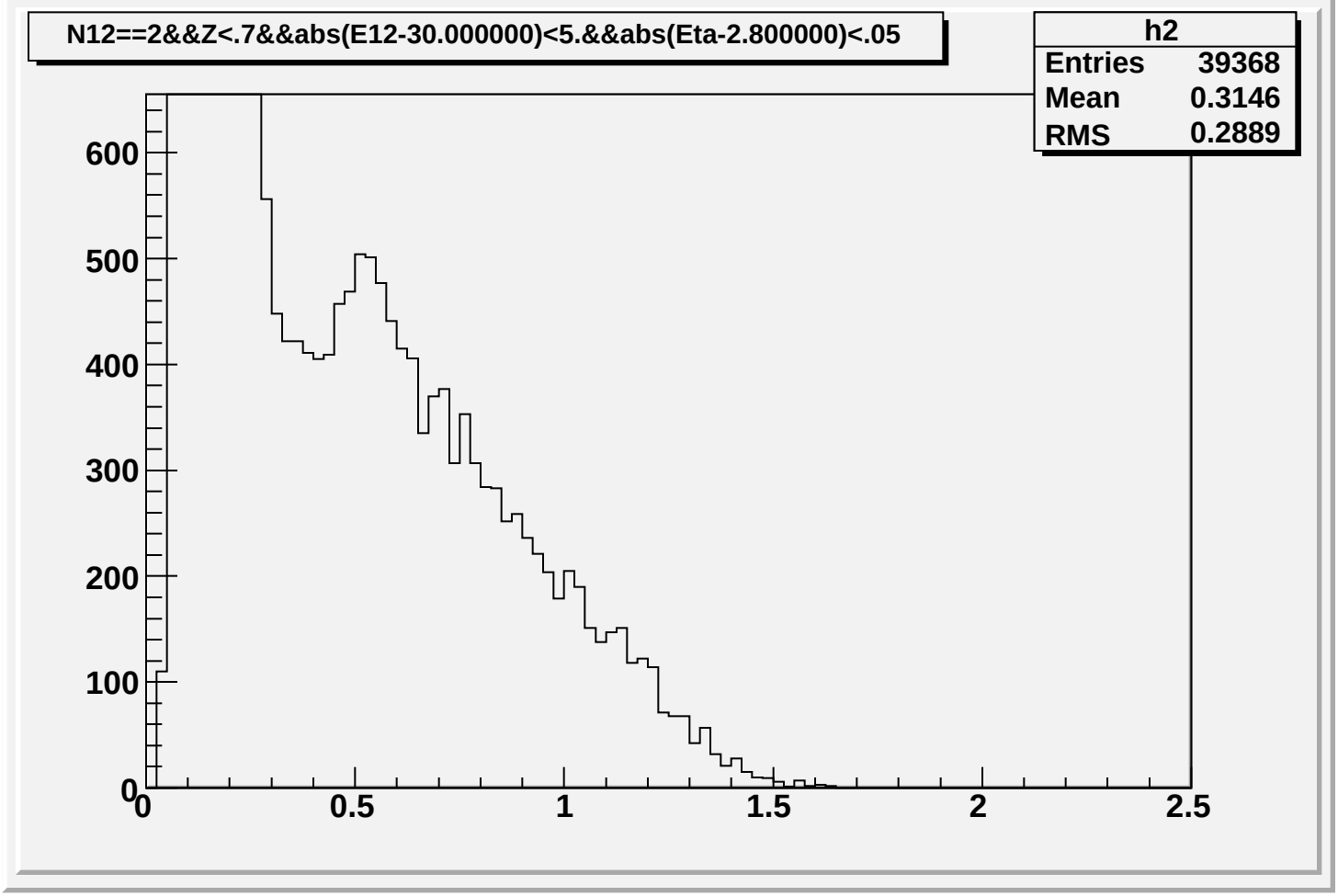

N12==2&&Z<.7&&abs(E12-70.000000)<5.&&abs(Eta-2.900000)<.05
h1
Entries 2414
Mean 0.8256
RMS 0.701
250
200
150
100
50
0
0
0.5
1
1.5
2
2.5

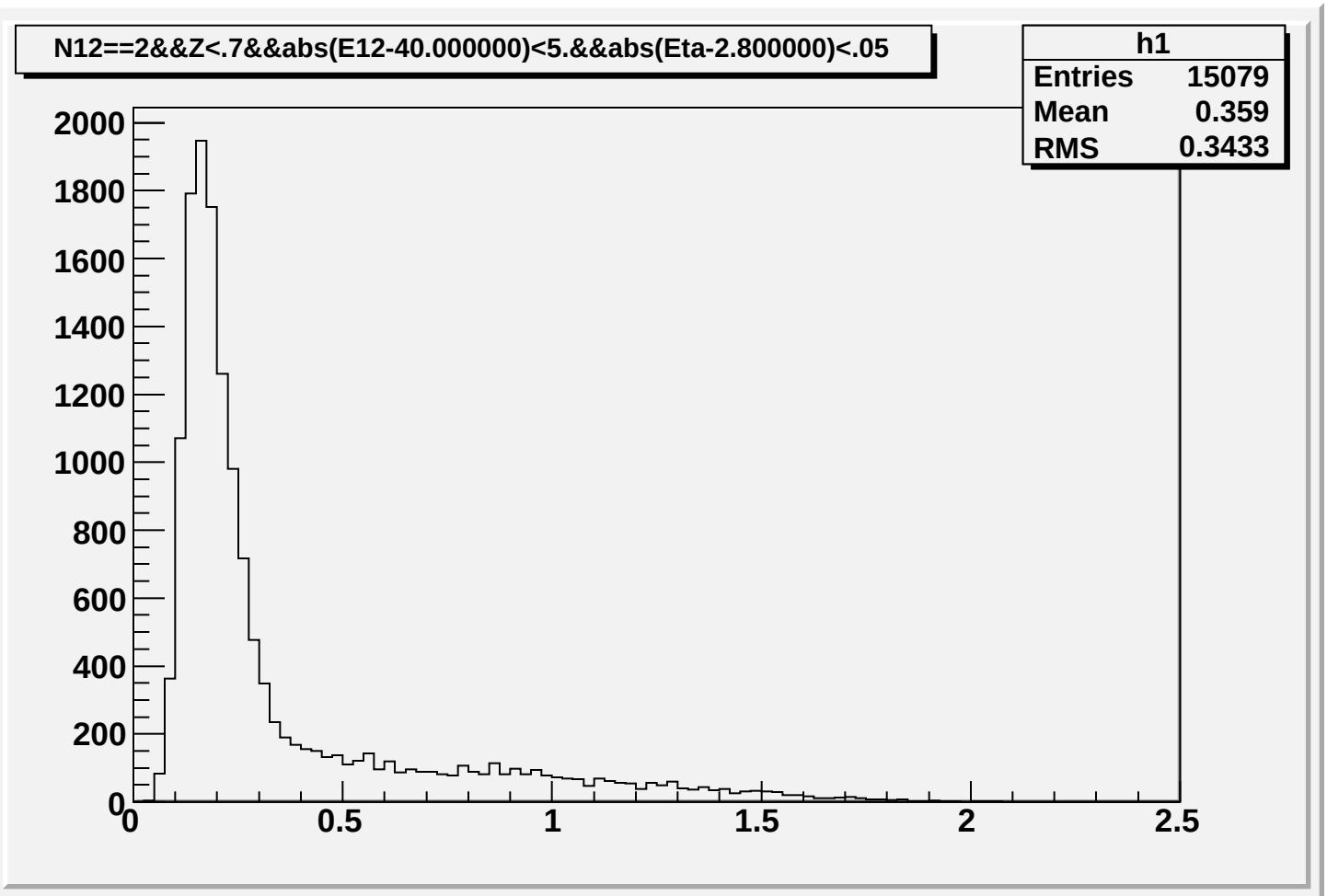

N12==2&&Z<.7&&abs(E12-70.000000)<5.&&abs(Eta-2.900000)<.05
h2
Entries 2414
Mean 0.8256
RMS 0.701
300
250
200
150
100
50
0
0
0.5
1
1.5
2
2.5

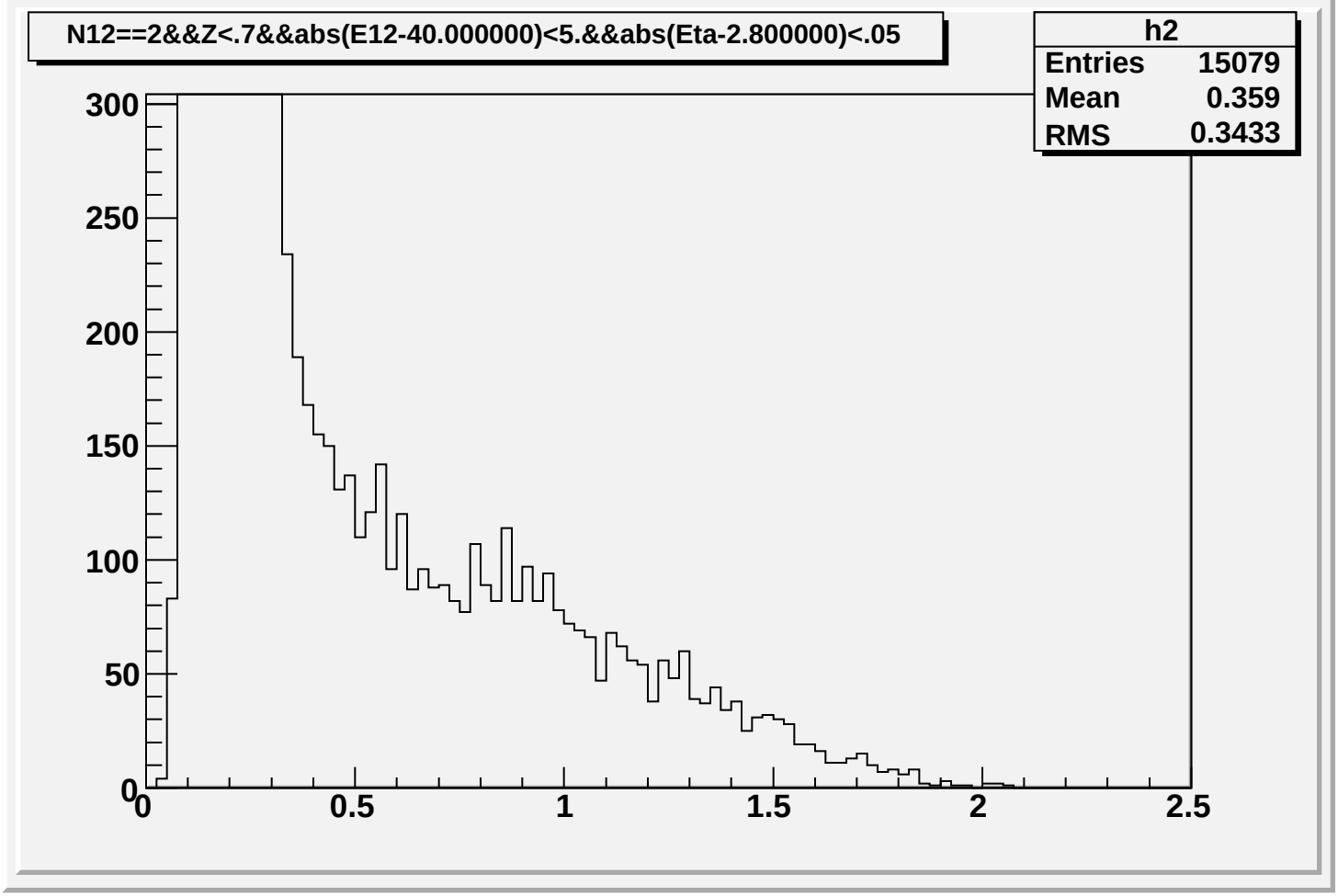

N12==2&&Z<.7&&abs(E12-20.000000)<5.&&abs(Eta-2.800000)<.05
h1
Entries 69814
Mean 0.2555
RMS 0.2106
14000
12000
10000
8000
6000
4000
2000
0
0
0.5
1
1.5
2
2.5

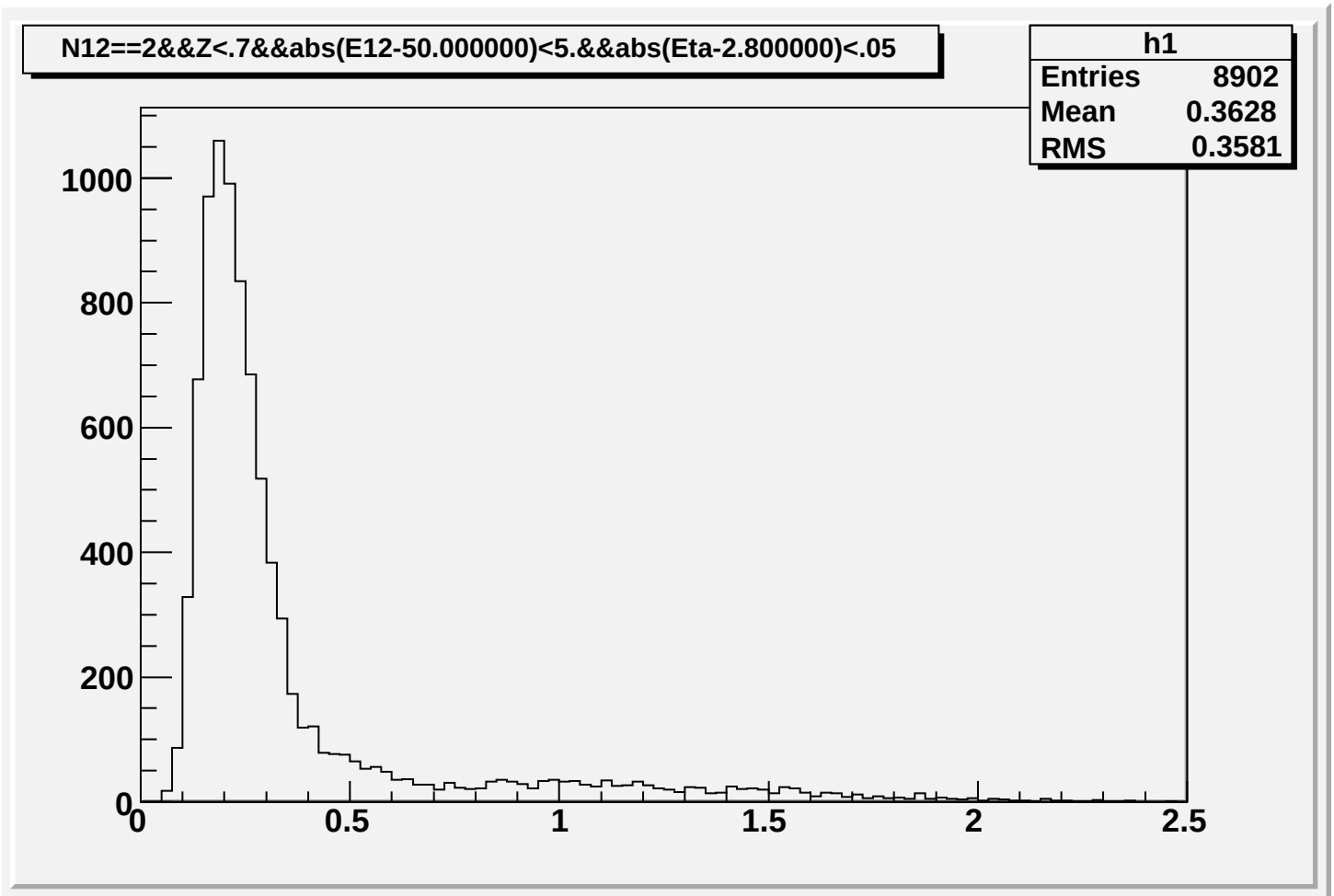

N12==2&&Z<.7&&abs(E12-20.000000)<5.&&abs(Eta-2.800000)<.05
h2
Entries 69814
Mean 0.2555
RMS 0.2106
1400
1200
1000
800
600
400
200
0
0
0.5
1
1.5
2
2.5

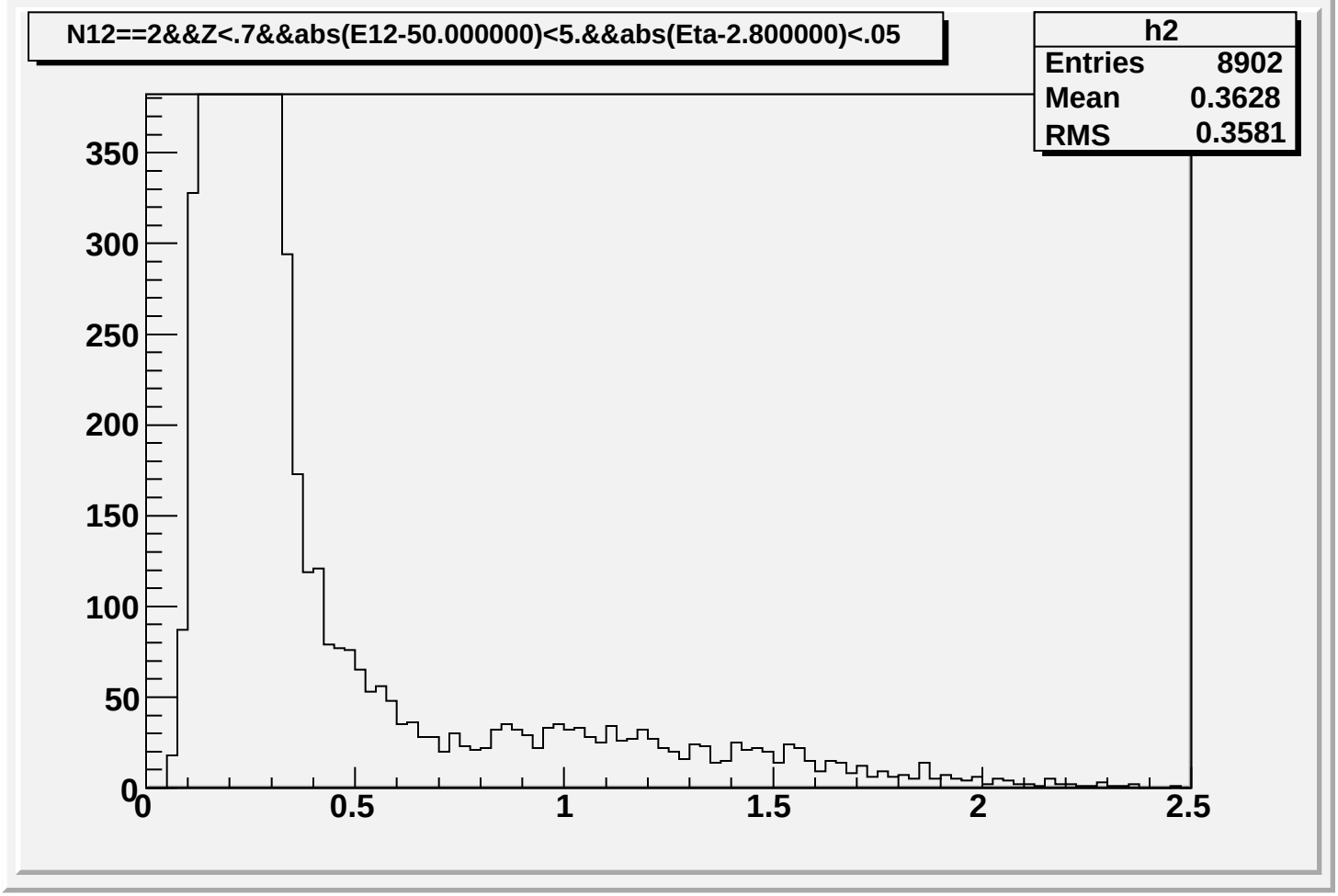

N12==2&&Z<.7&&abs(E12-30.000000)<5.&&abs(Eta-2.800000)<.05
h1
Entries 39368
Mean 0.3146
RMS 0.2889
7000
6000
5000
4000
3000
2000
1000
0
0
0.5
1
1.5
2
2.5

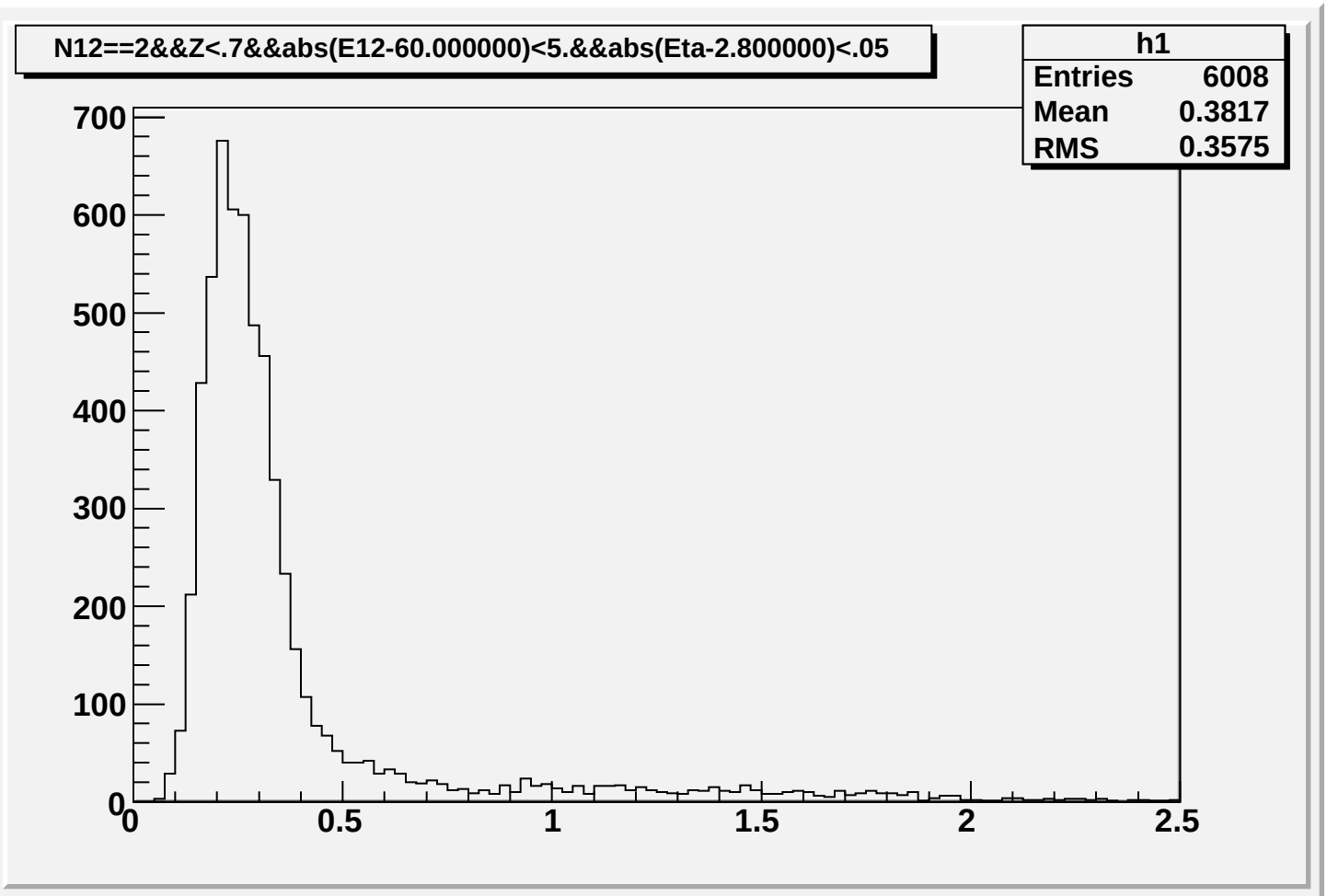

N12==2&&Z<.7&&abs(E12-30.000000)<5.&&abs(Eta-2.800000)<.05
h2
Entries 39368
Mean 0.3146
RMS 0.2889
600
500
400
300
200
100
0
0
0.5
1
1.5
2
2.5

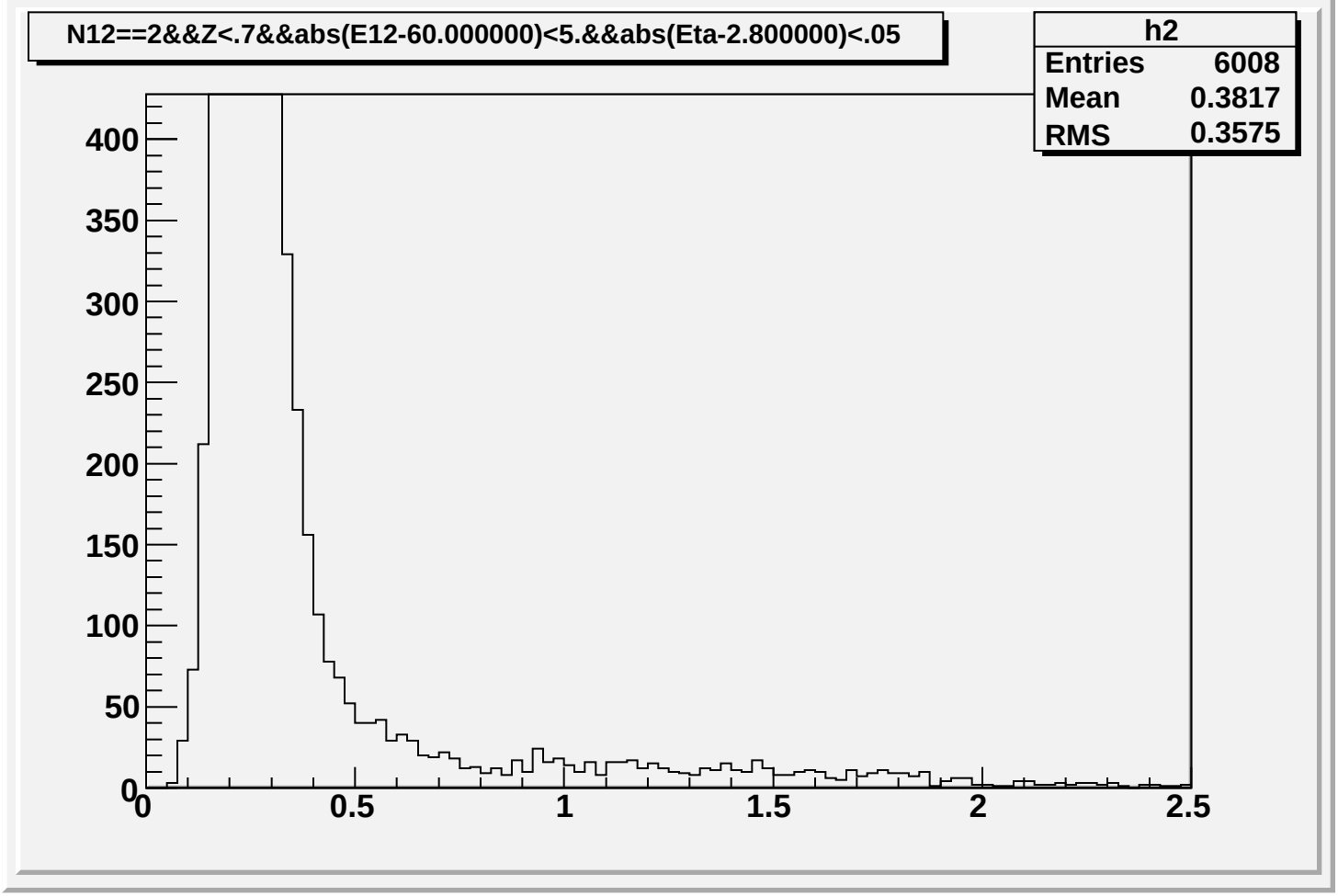

N12==2&&Z<.7&&abs(E12-40.000000)<5.&&abs(Eta-2.800000)<.05
h1
Entries 15079
Mean 0.359
RMS 0.3433
2000
1800
1600
1400
1200
1000
800
600
400
200
0
0
0.5
1
1.5
2
2.5

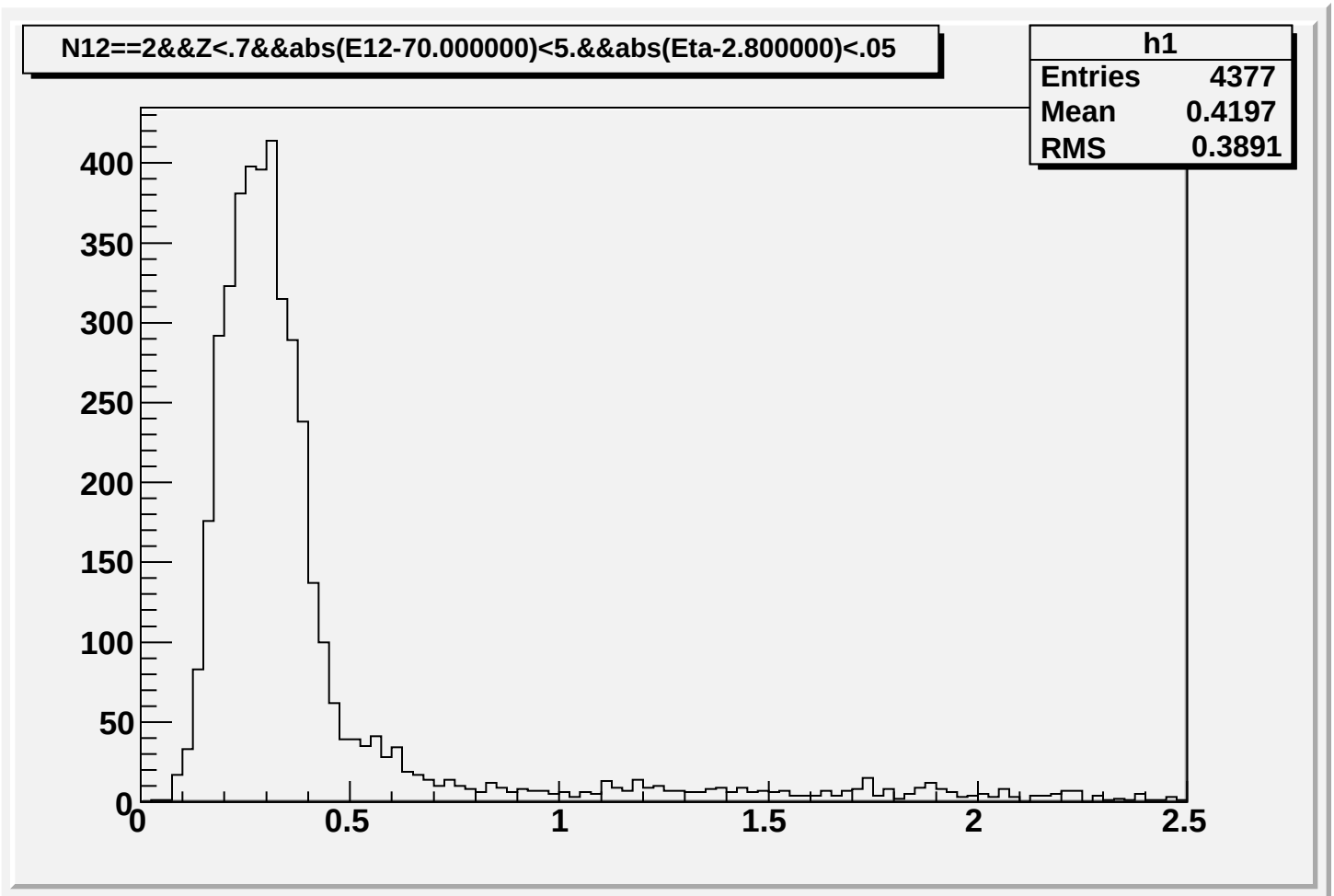

N12==2&&Z<.7&&abs(E12-40.000000)<5.&&abs(Eta-2.800000)<.05
h2
Entries 15079
Mean 0.359
RMS 0.3433
300
250
200
150
100
50
0
0
0.5
1
1.5
2
2.5

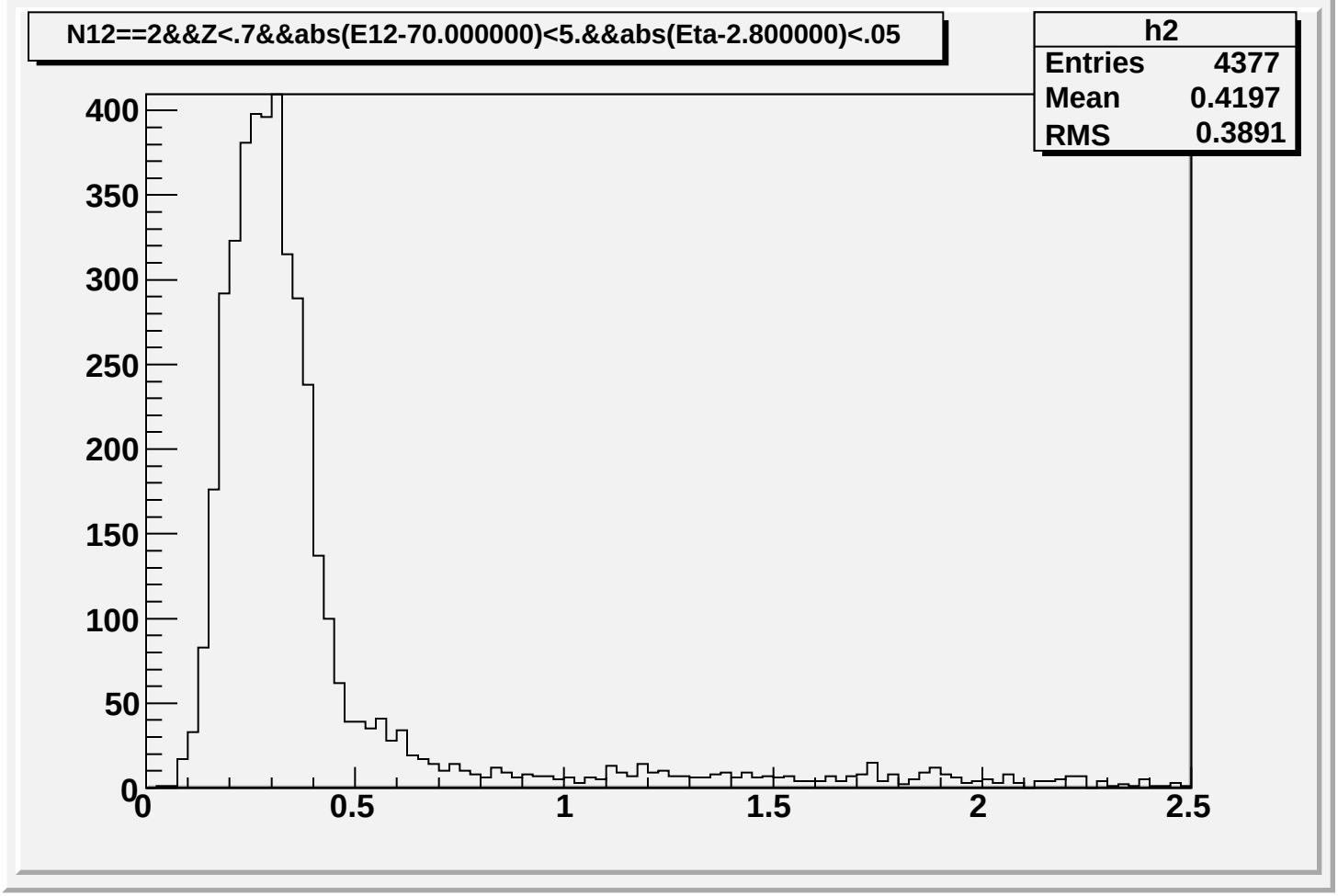

N12==2&&Z<.7&&abs(E12-50.000000)<5.&&abs(Eta-2.800000)<.05
h1
Entries 8902
Mean 0.3628
RMS 0.3581
1000
800
600
400
200
0
0
0.5
1
1.5
2
2.5

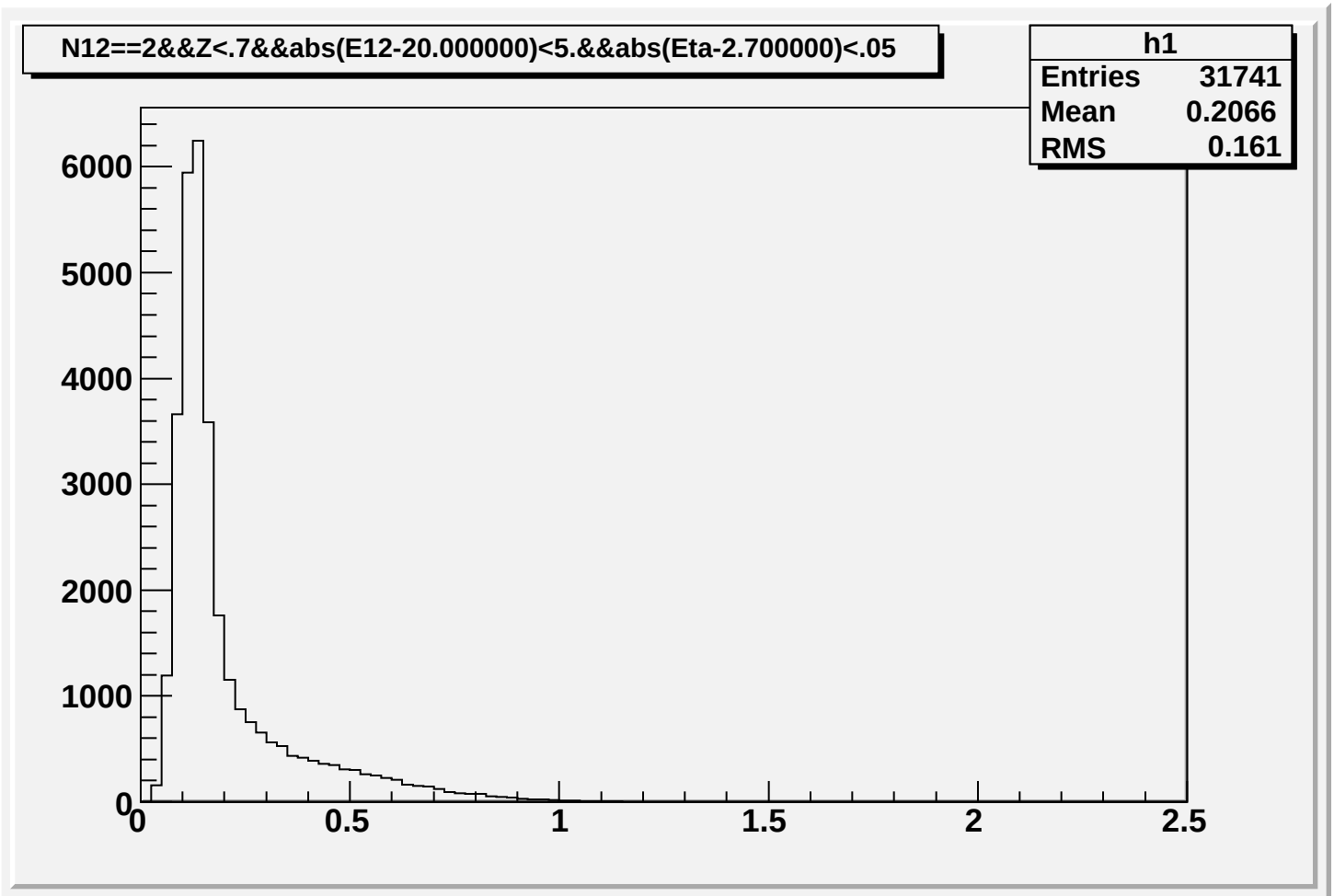

N12==2&&Z<.7&&abs(E12-50.000000)<5.&&abs(Eta-2.800000)<.05
h2
Entries 8902
Mean 0.3628
RMS 0.3581
350
300
250
200
150
100
50
0
0
0.5
1
1.5
2
2.5

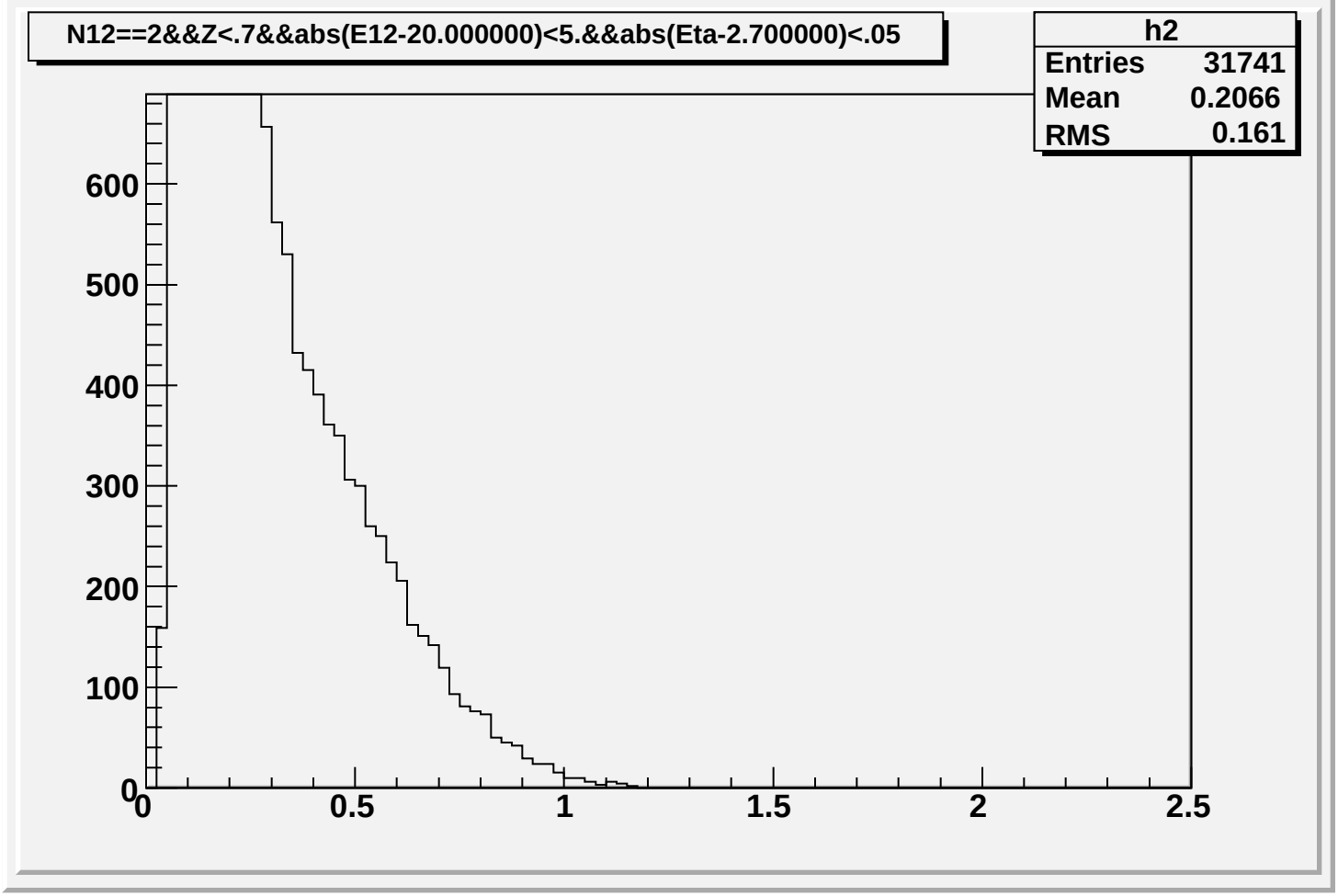

N12==2&&Z<.7&&abs(E12-60.000000)<5.&&abs(Eta-2.800000)<.05
h1
Entries 6008
Mean 0.3817
RMS 0.3575
700
600
500
400
300
200
100
0
0
0.5
1
1.5
2
2.5

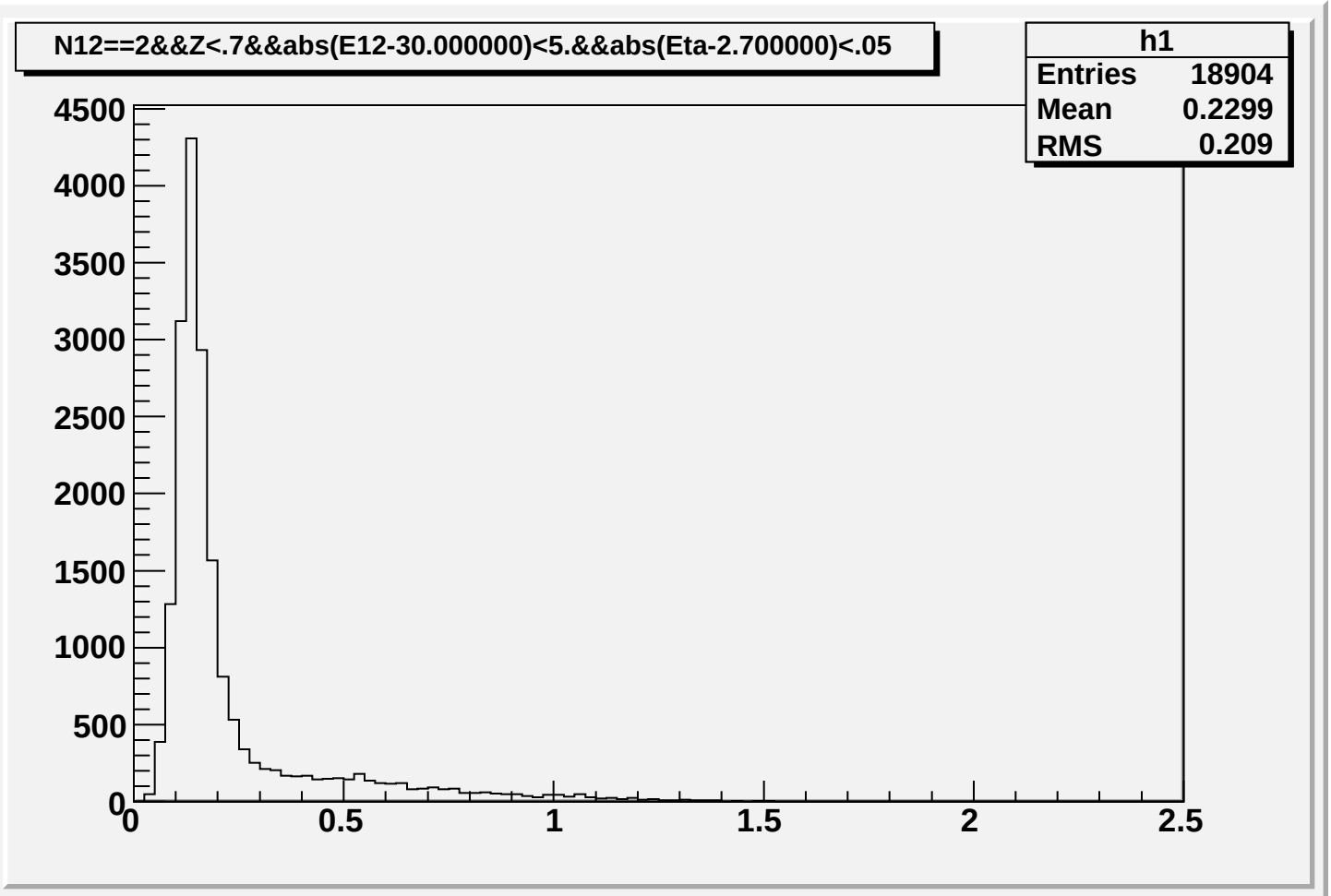

N12==2&&Z<.7&&abs(E12-60.000000)<5.&&abs(Eta-2.800000)<.05
h2
Entries 6008
Mean 0.3817
RMS 0.3575
400
350
300
250
200
150
100
50
0
0
0.5
1
1.5
2
2.5

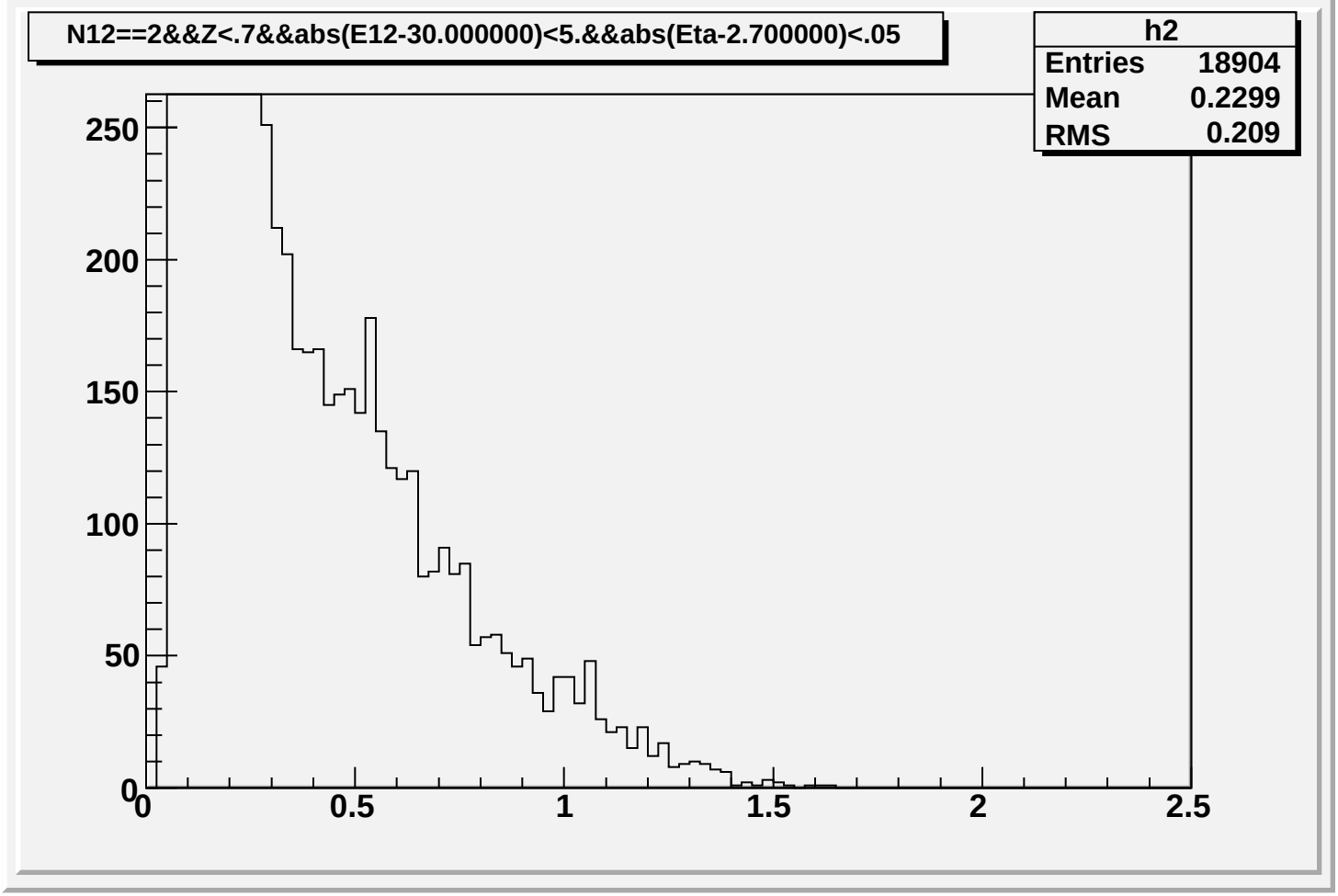

N12==2&&Z<.7&&abs(E12-70.000000)<5.&&abs(Eta-2.800000)<.05
h1
Entries 4377
Mean 0.4197
RMS 0.3891
400
350
300
250
200
150
100
50
0
0
0.5
1
1.5
2
2.5

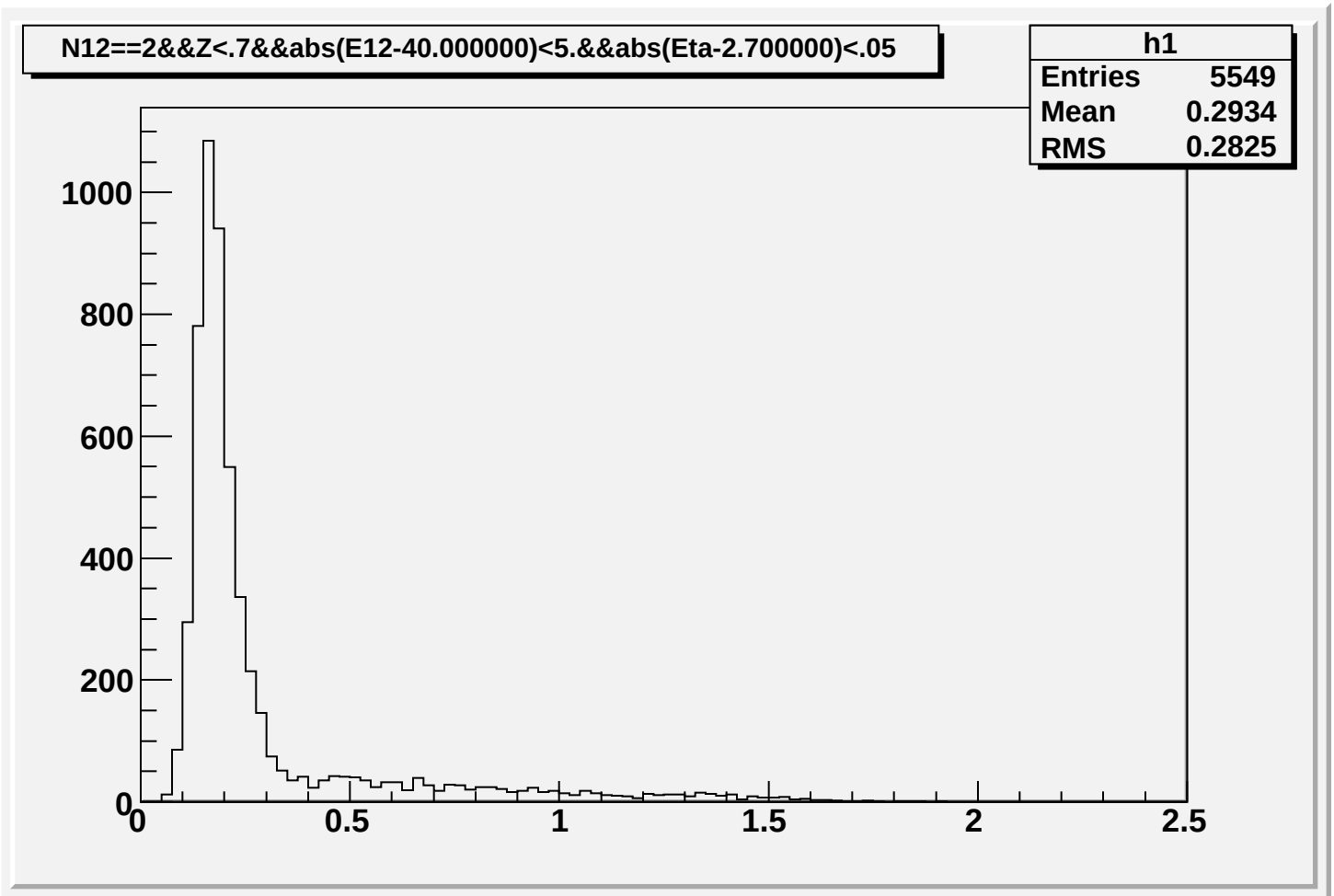

N12==2&&Z<.7&&abs(E12-70.000000)<5.&&abs(Eta-2.800000)<.05
h2
Entries 4377
Mean 0.4197
RMS 0.3891
400
350
300
250
200
150
100
50
0
0
0.5
1
1.5
2
2.5

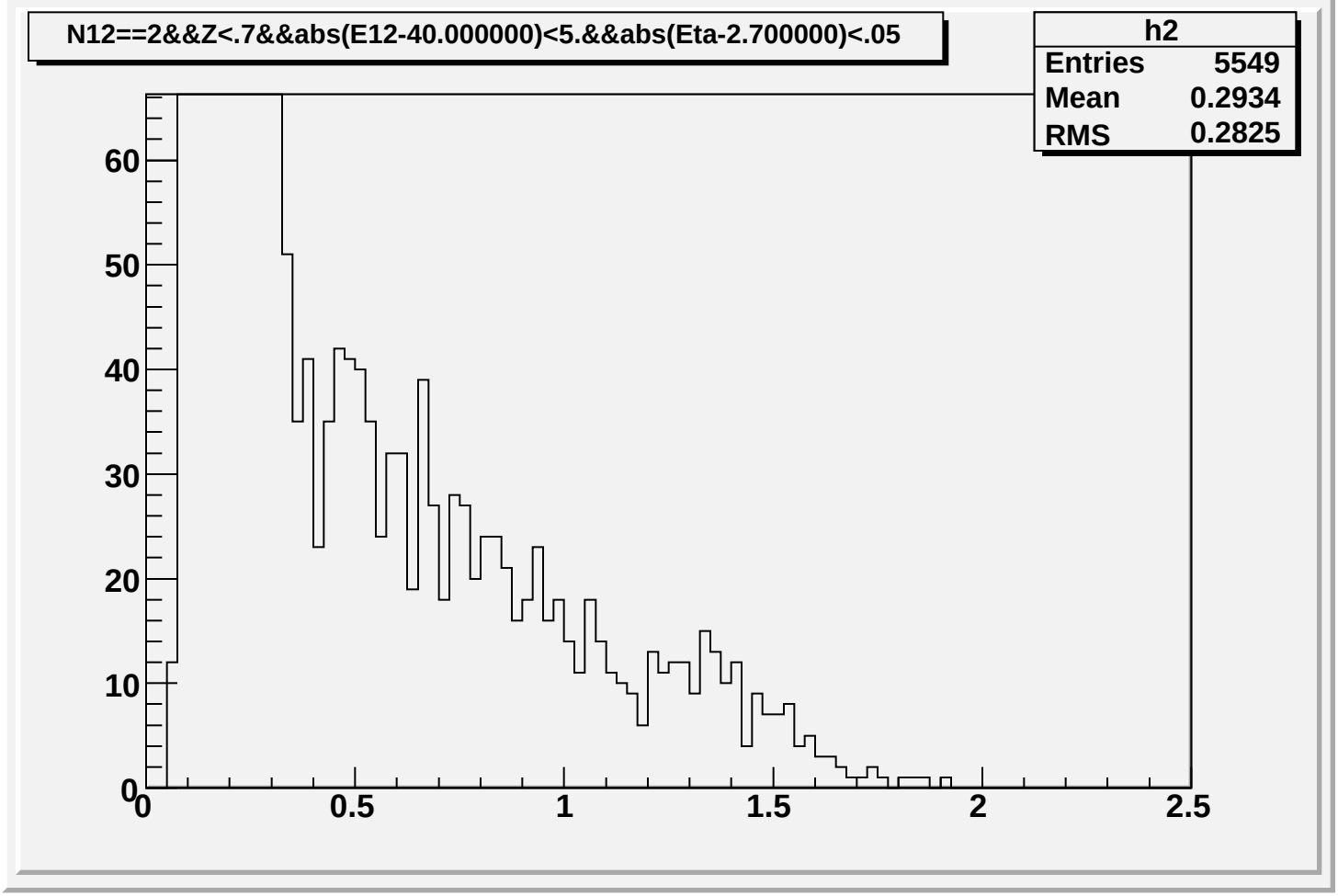

N12==2&&Z<.7&&abs(E12-20.000000)<5.&&abs(Eta-2.700000)<.05
h1
Entries 31741
Mean 0.2066
RMS 0.161
6000
5000
4000
3000
2000
1000
0
0
0.5
1
1.5
2
2.5

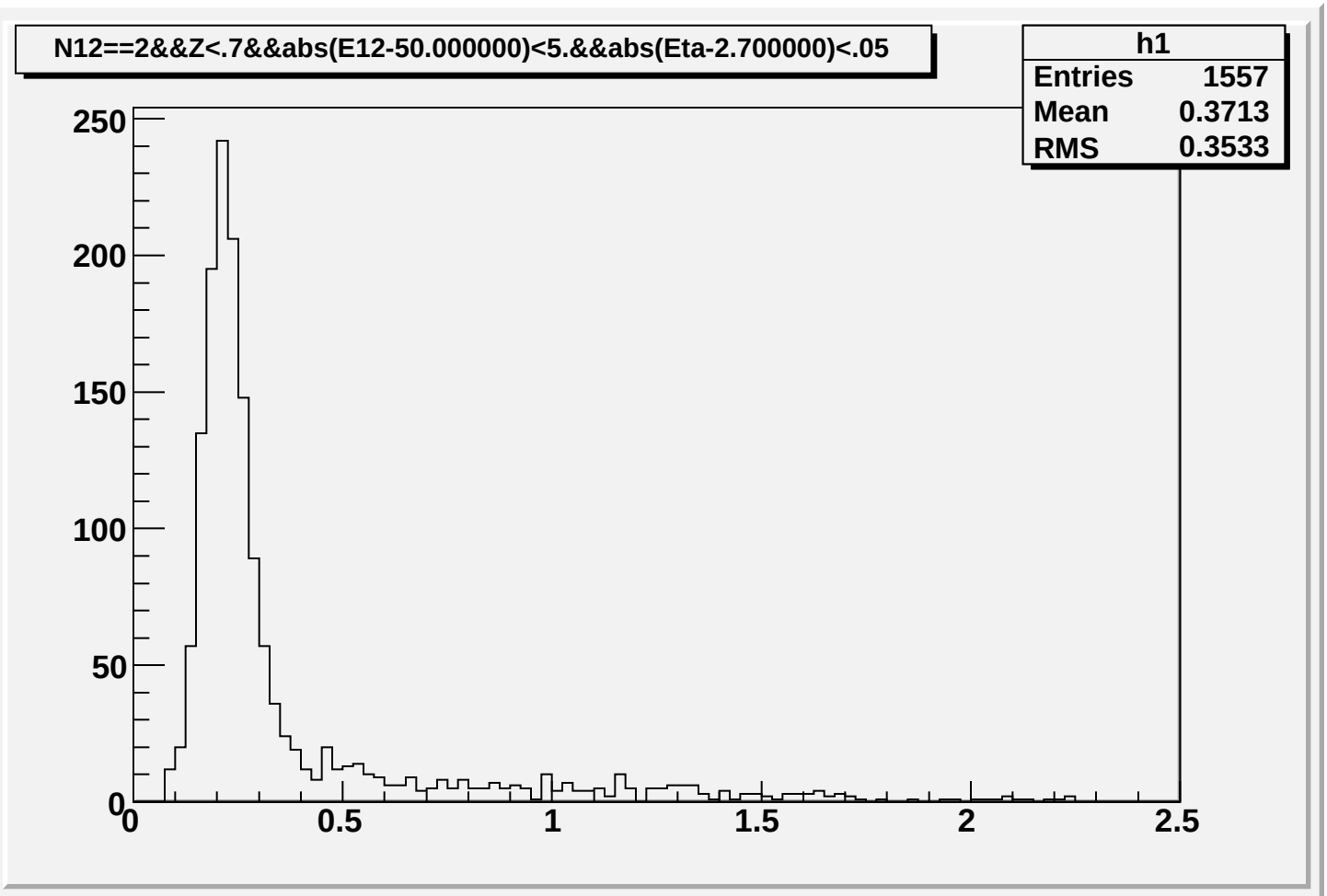

N12==2&&Z<.7&&abs(E12-20.000000)<5.&&abs(Eta-2.700000)<.05
h2
Entries 31741
Mean 0.2066
RMS 0.161
600
500
400
300
200
100
0
0
0.5
1
1.5
2
2.5

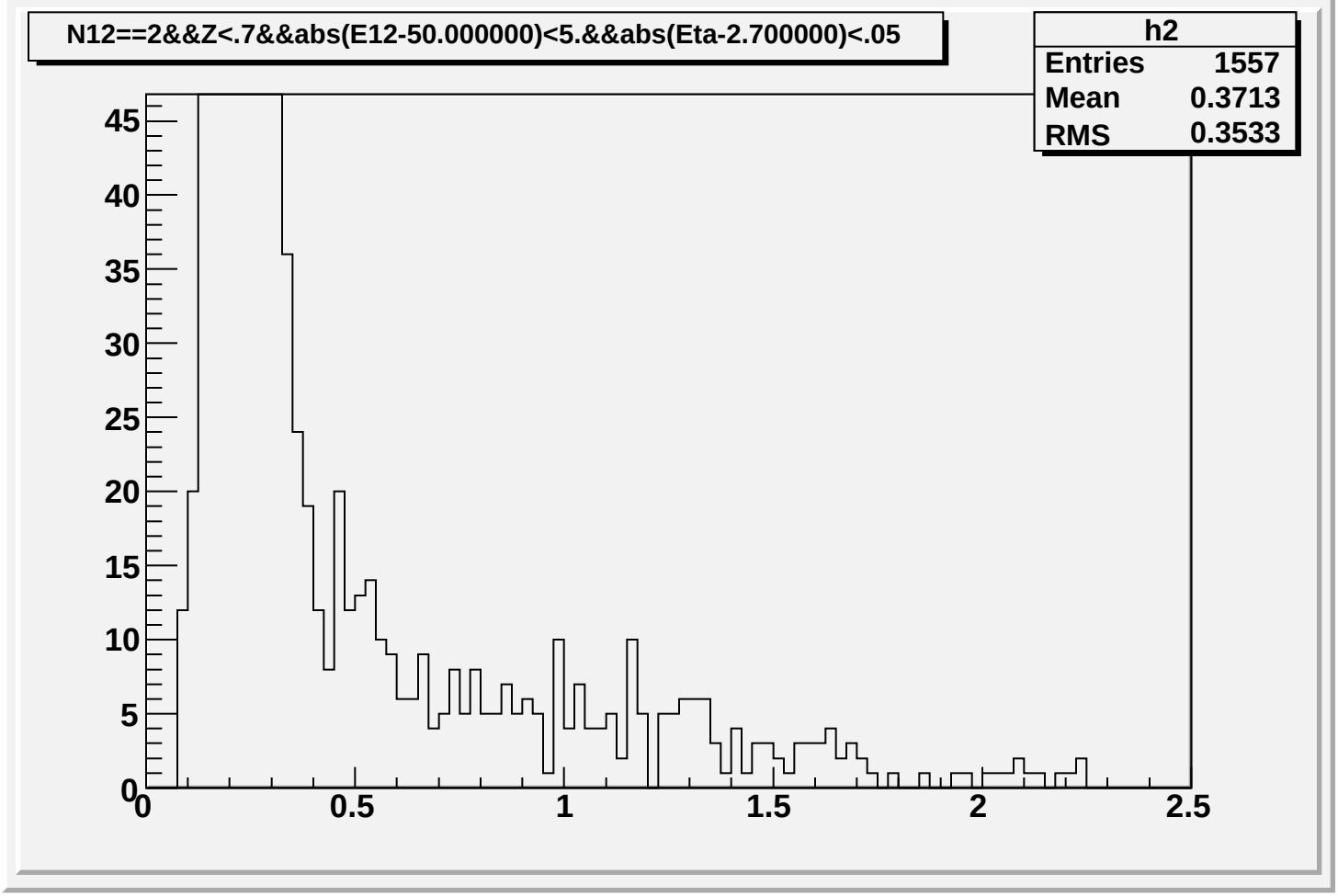

N12==2&&Z<.7&&abs(E12-30.000000)<5.&&abs(Eta-2.700000)<.05
h1
Entries 18904
Mean 0.2299
RMS 0.209
4500
4000
3500
3000
2500
2000
1500
1000
500
0
0
0.5
1
1.5
2
2.5

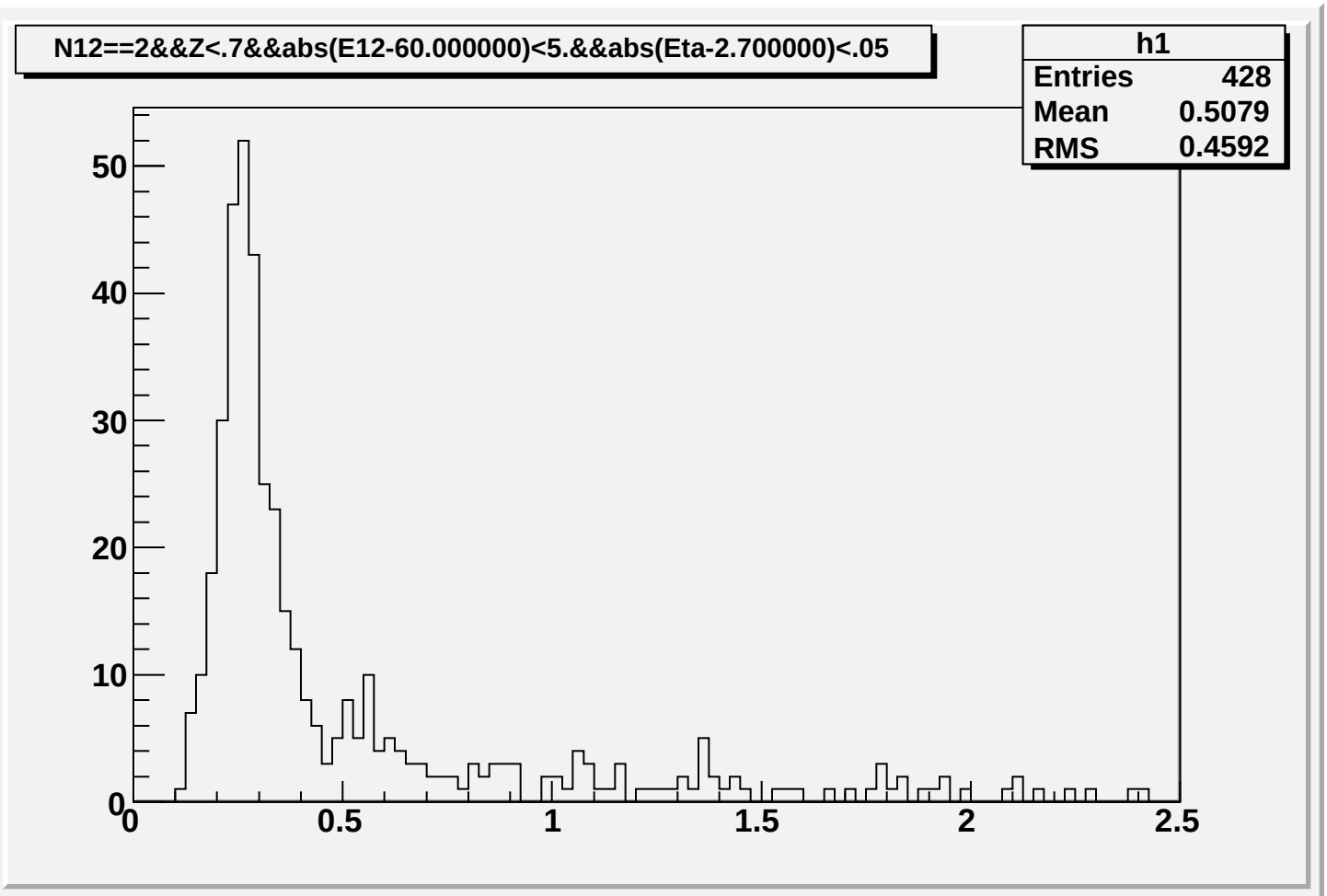

N12==2&&Z<.7&&abs(E12-30.000000)<5.&&abs(Eta-2.700000)<.05
h2
Entries 18904
Mean 0.2299
RMS 0.209
250
200
150
100
50
0
0
0.5
1
1.5
2
2.5

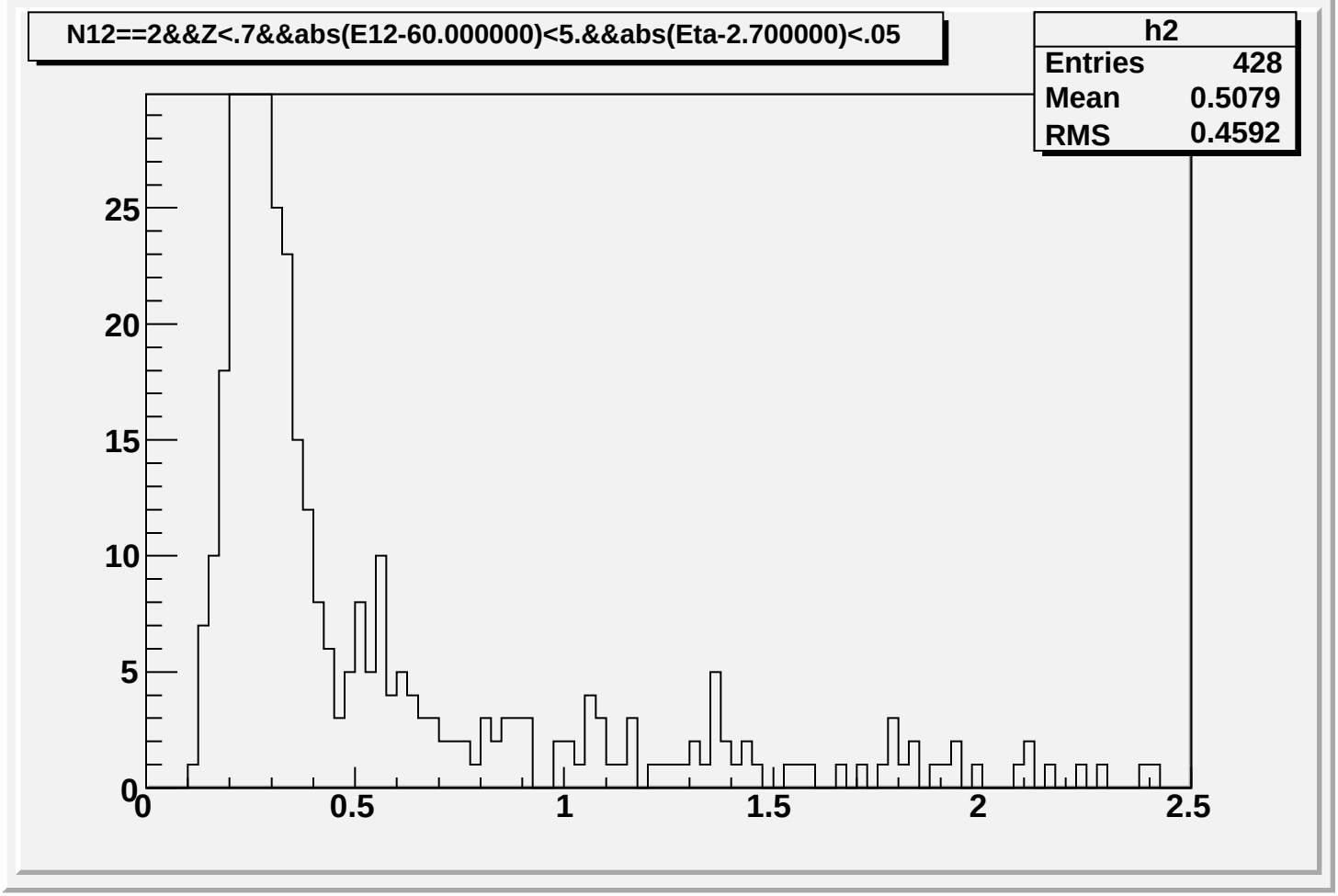

N12==2&&Z<.7&&abs(E12-40.000000)<5.&&abs(Eta-2.700000)<.05
h1
Entries 5549
Mean 0.2934
RMS 0.2825
1000
800
600
400
200
0
0
0.5
1
1.5
2
2.5

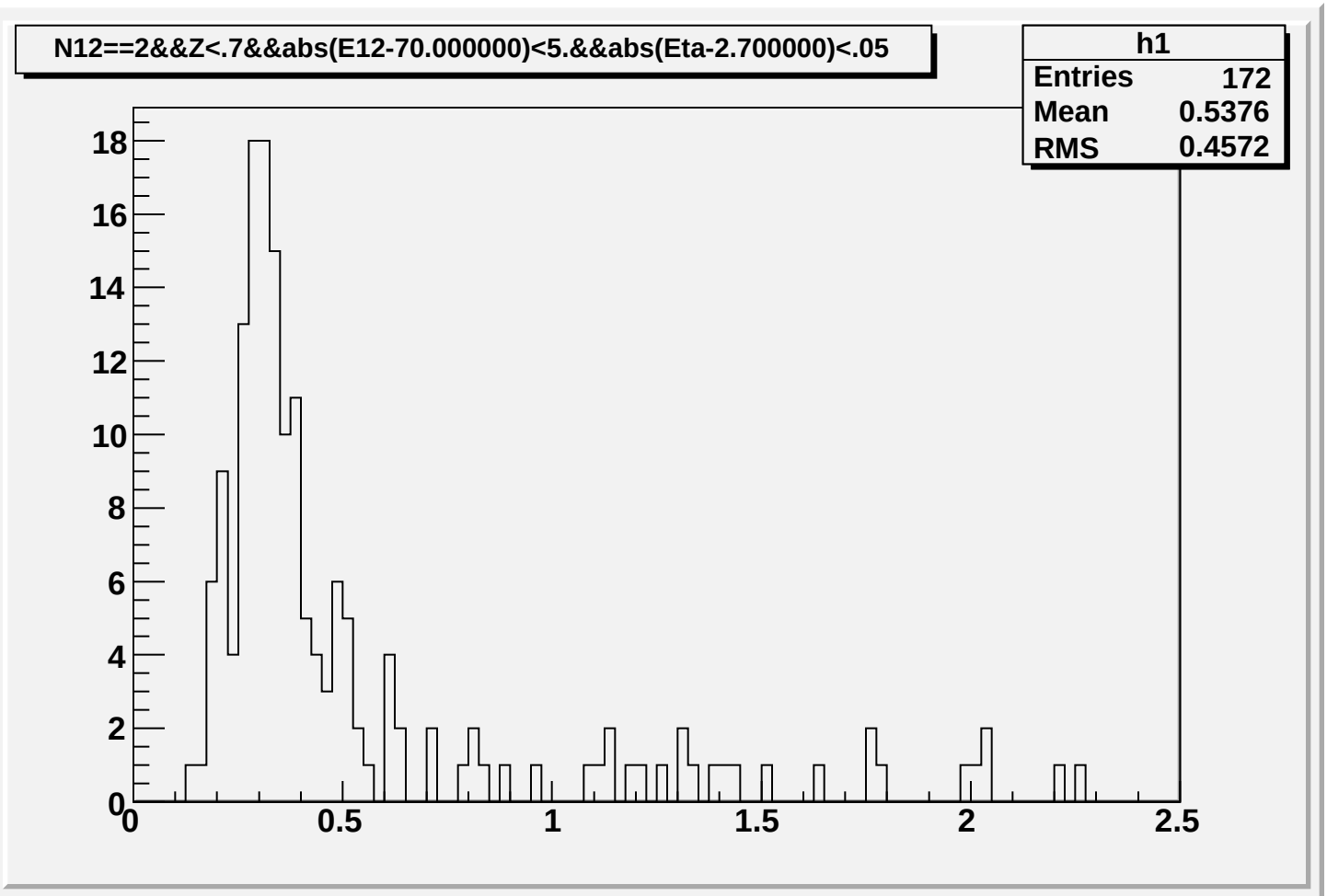

N12==2&&Z<.7&&abs(E12-40.000000)<5.&&abs(Eta-2.700000)<.05
h2
Entries 5549
Mean 0.2934
RMS 0.2825
60
50
40
30
20
10
0
0
0.5
1
1.5
2
2.5

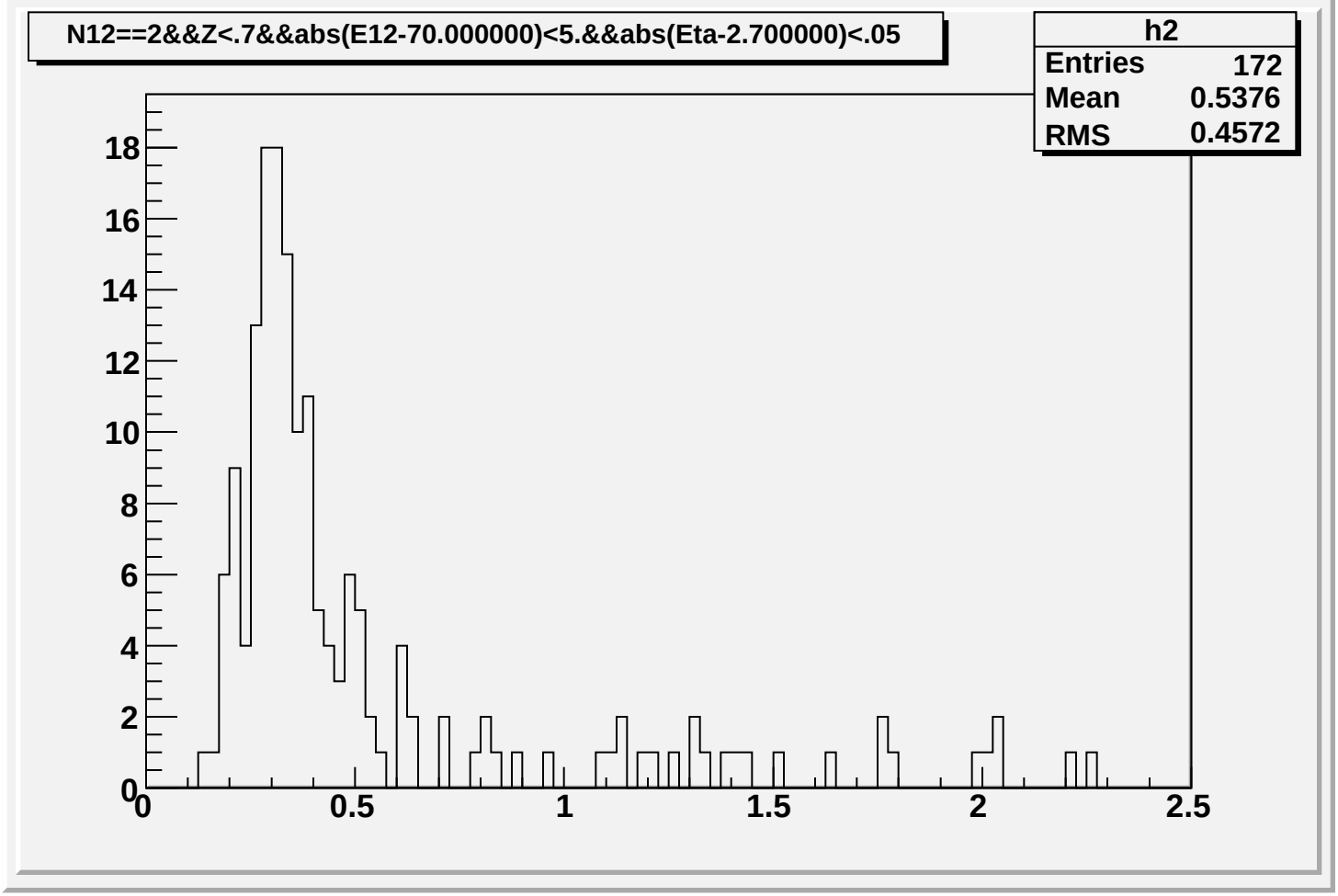

N12==2&&Z<.7&&abs(E12-50.000000)<5.&&abs(Eta-2.700000)<.05
h1
Entries 1557
Mean 0.3713
RMS 0.3533
250
200
150
100
50
0
0
0.5
1
1.5
2
2.5

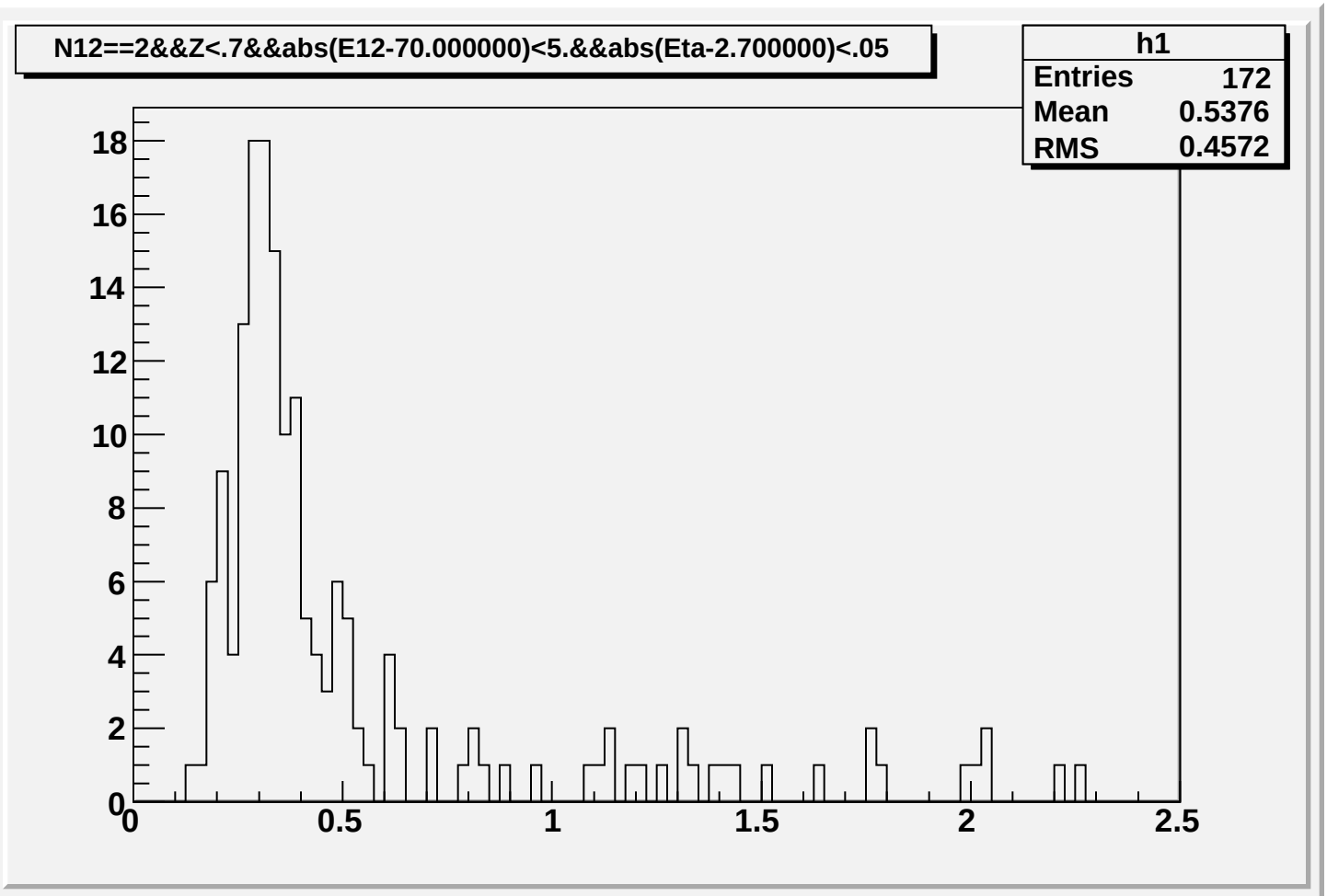

N12==2&&Z<.7&&abs(E12-50.000000)<5.&&abs(Eta-2.700000)<.05
h2
Entries 1557
Mean 0.3713
RMS 0.3533
45
40
35
30
25
20
15
10
5
0
0
0.5
1
1.5
2
2.5

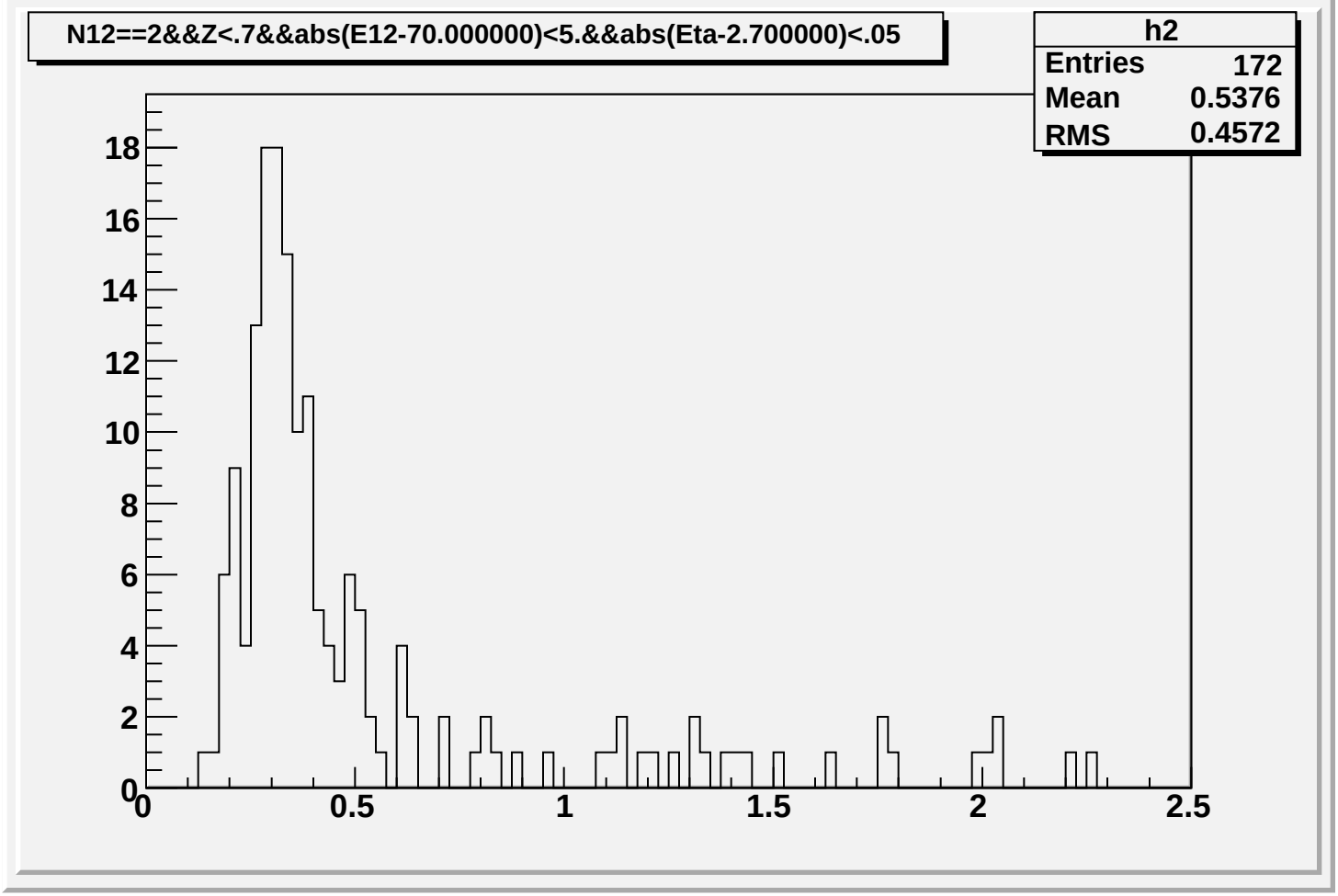

N12==2&&Z<.7&&abs(E12-60.000000)<5.&&abs(Eta-2.700000)<.05
h1
Entries 428
Mean 0.5079
RMS 0.4592
50
40
30
20
10
0
0
0.5
1
1.5
2
2.5


N12==2&&Z<.7&&abs(E12-60.000000)<5.&&abs(Eta-2.700000)<.05
h2
Entries 428
Mean 0.5079
RMS 0.4592
25
20
15
10
5
0
0
0.5
1
1.5
2
2.5


N12==2&&Z<.7&&abs(E12-70.000000)<5.&&abs(Eta-2.700000)<.05
h1
Entries 172
Mean 0.5376
RMS 0.4572
0
2
4
6
8
10
12
14
16
18
0
0.5
1
1.5
2
2.5


N12==2&&Z<.7&&abs(E12-70.000000)<5.&&abs(Eta-2.700000)<.05
h2
Entries 172
Mean 0.5376
RMS 0.4572
0
2
4
6
8
10
12
14
16
18
0
0.5
1
1.5
2
2.5


N12==2&&Z<.7&&abs(E12-70.000000)<5.&&abs(Eta-2.700000)<.05
h1
Entries 172
Mean 0.5376
RMS 0.4572
0
2
4
6
8
10
12
14
16
18
0
0.5
1
1.5
2
2.5


N12==2&&Z<.7&&abs(E12-70.000000)<5.&&abs(Eta-2.700000)<.05
h2
Entries 172
Mean 0.5376
RMS 0.4572
0
2
4
6
8
10
12
14
16
18
0
0.5
1
1.5
2
2.5