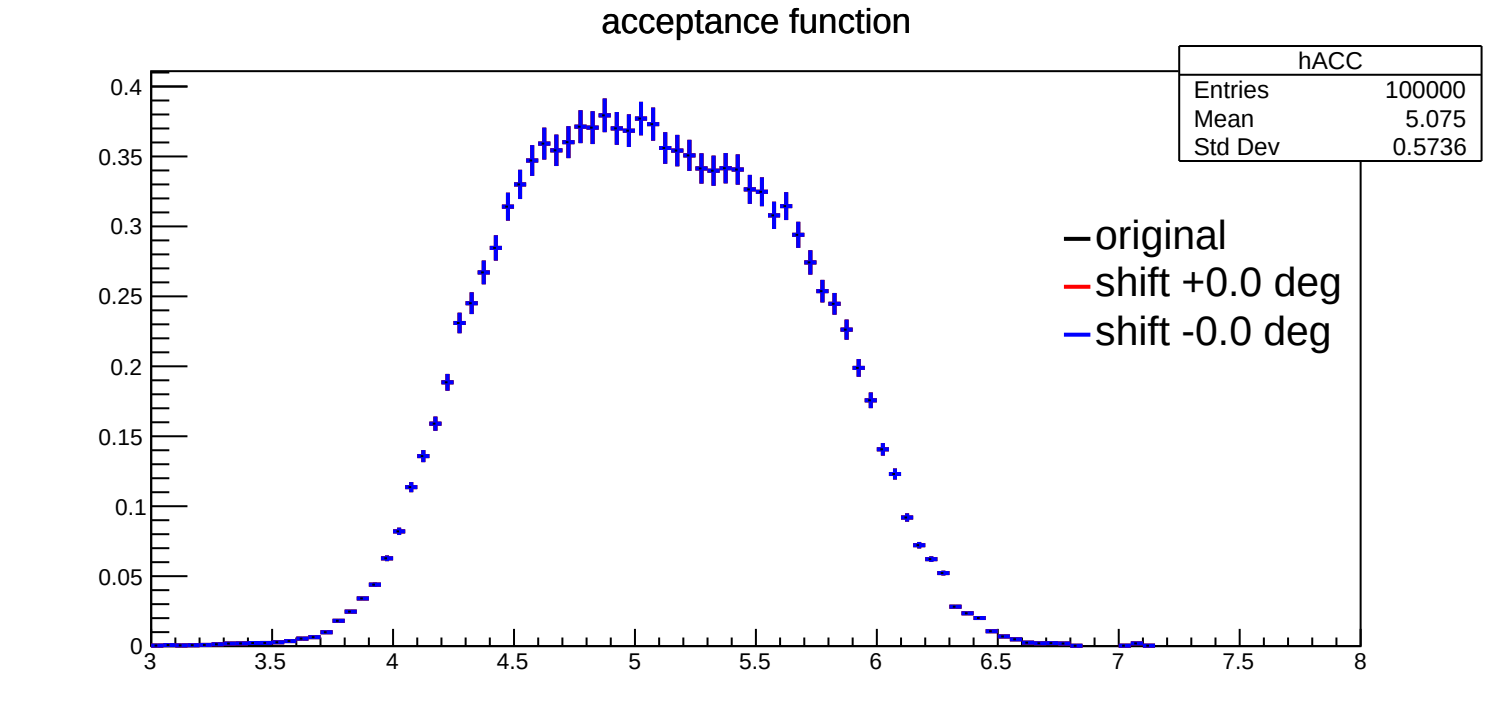
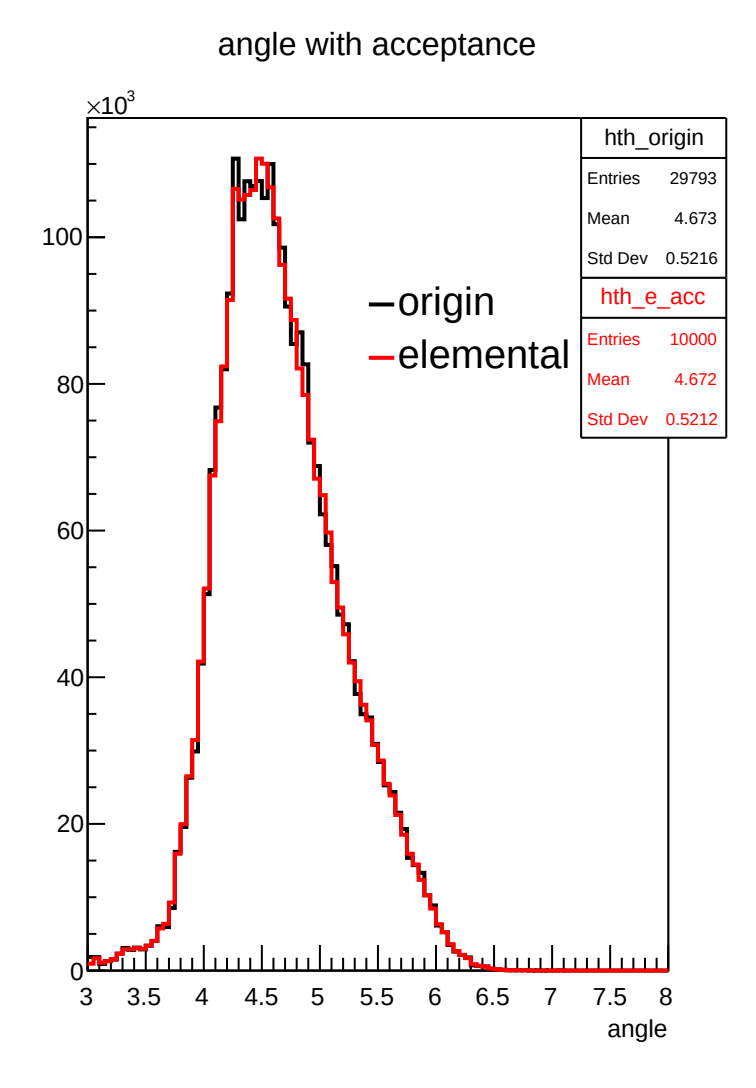
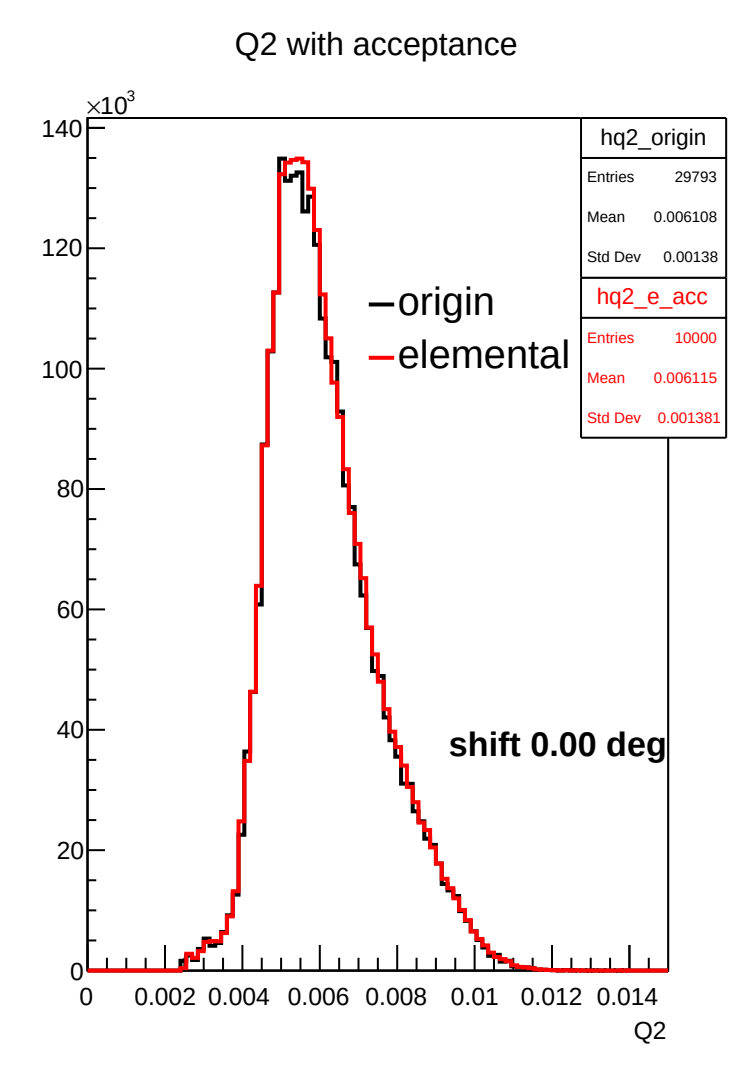
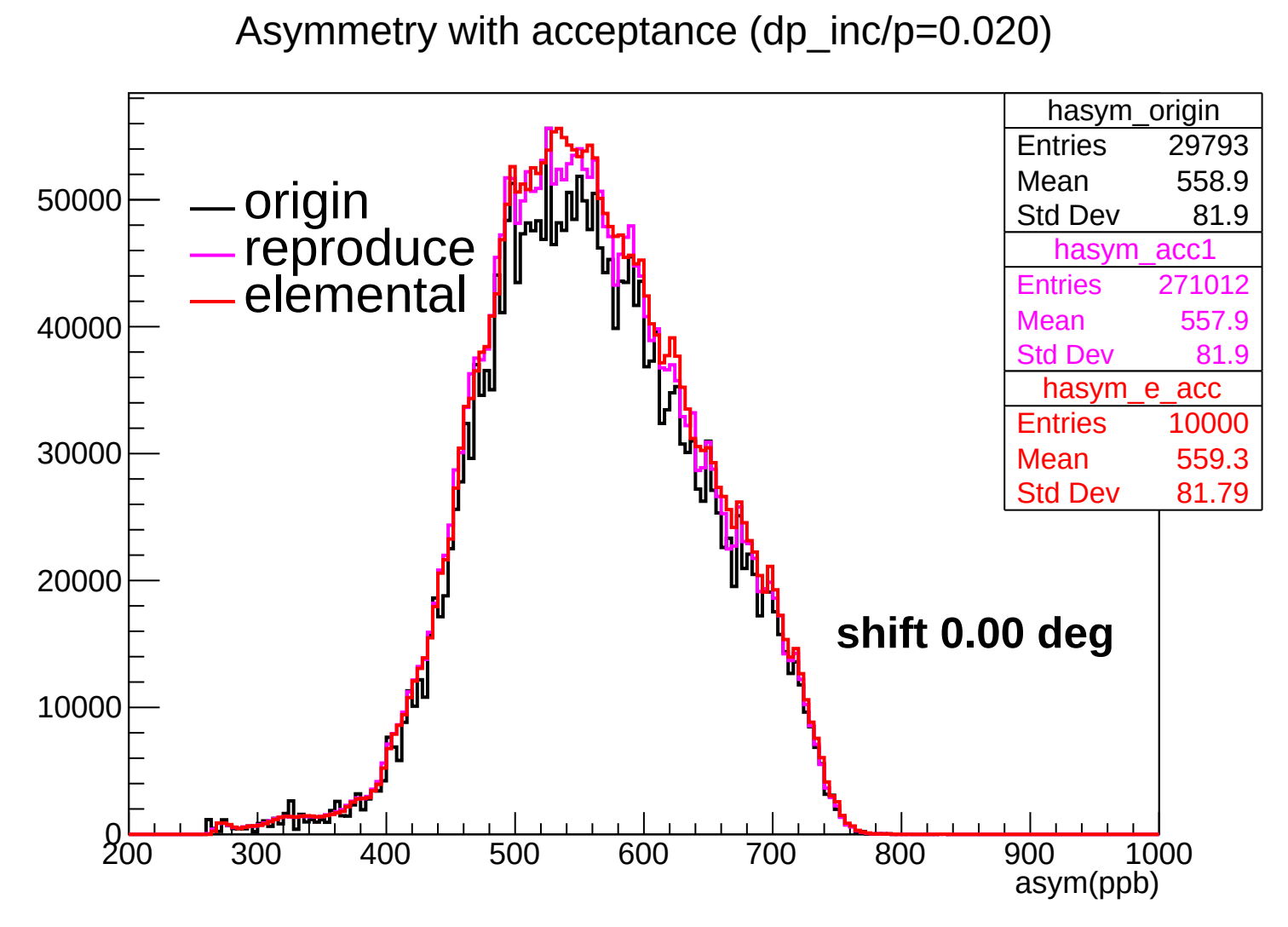
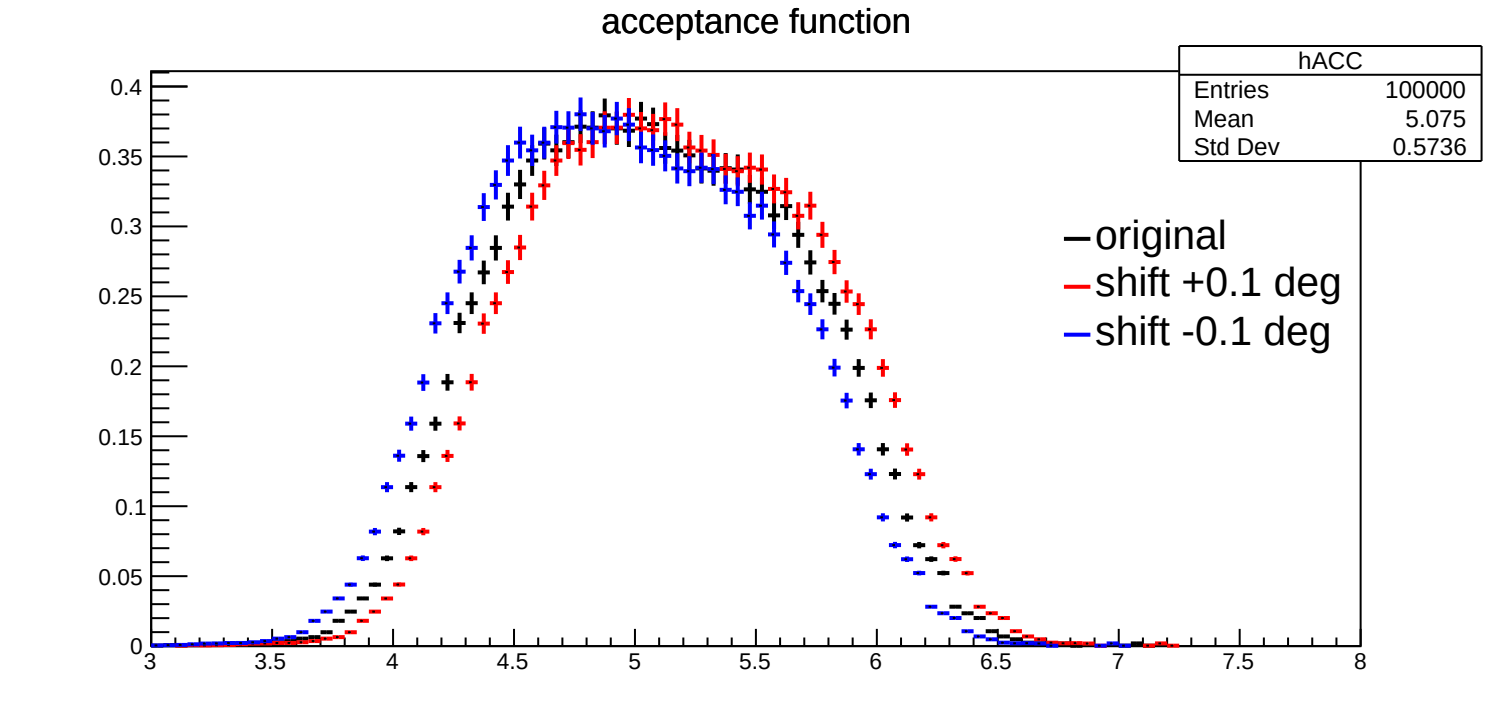
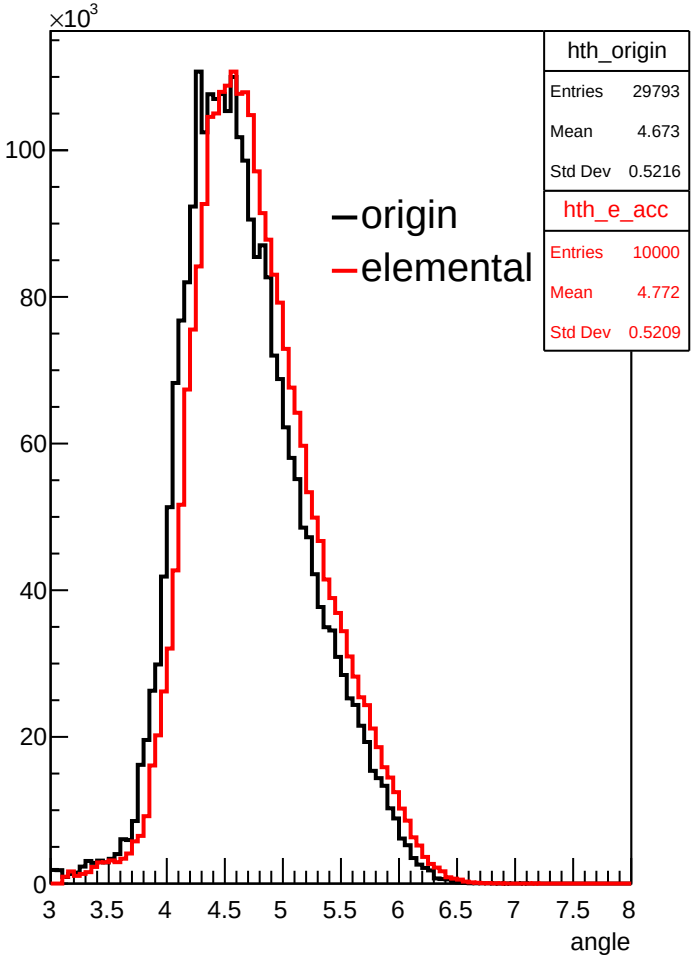

acceptance function
hACC
Entries 100000
Mean 5.075
Std Dev 0.5736
original
shift +0.0 deg
shift -0.0 deg
0.4
0.35
0.3
0.25
0.2
0.15
0.1
0.05
0
3
3.5
4
4.5
5
5.5
6
6.5
7
7.5
8

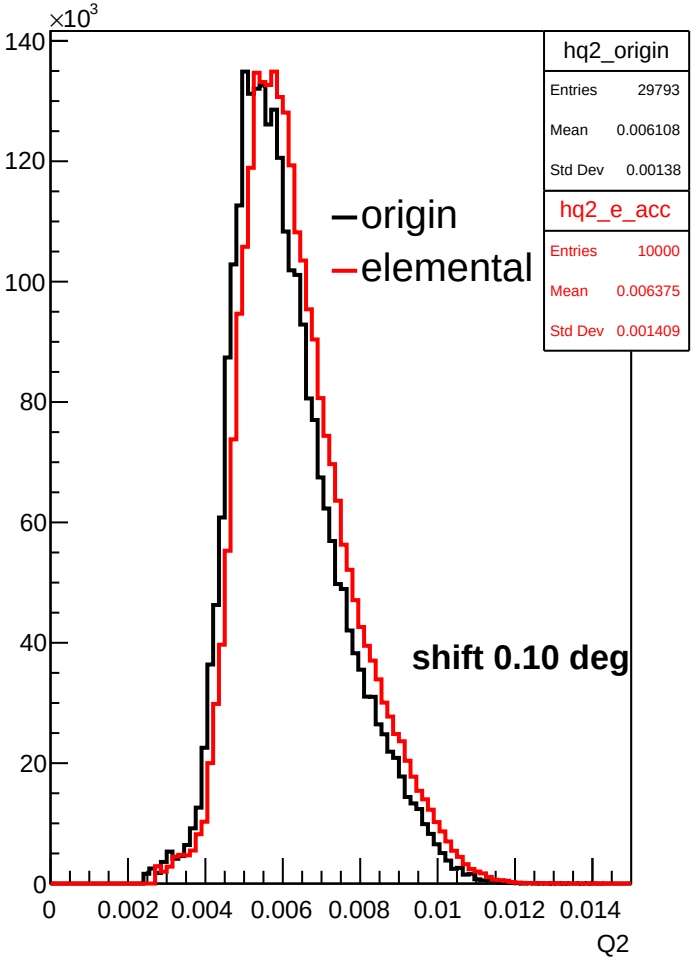

angle with acceptance
×10^3
100
80
60
40
20
0
3
3.5
4
4.5
5
5.5
6
6.5
7
7.5
8
angle
origin
elemental
hth_origin
Entries 29793
Mean 4.673
Std Dev 0.5216
hth_e_acc
Entries 10000
Mean 4.672
Std Dev 0.5212

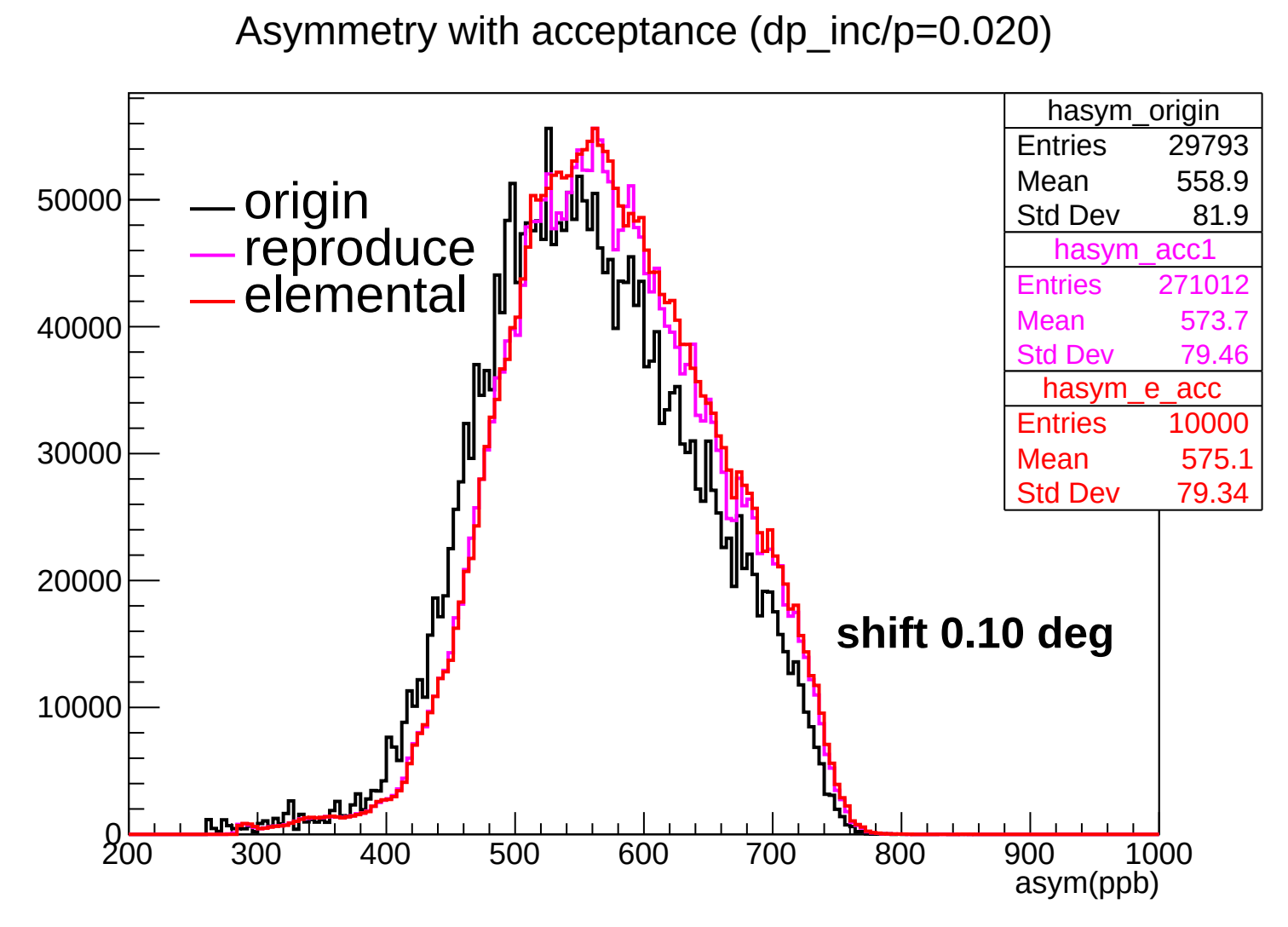

Q2 with acceptance
×10^3
140
120
100
80
60
40
20
0
0
0.002
0.004
0.006
0.008
0.01
0.012
0.014
Q2
origin
elemental
shift 0.00 deg
hq2_origin
Entries 29793
Mean 0.006108
Std Dev 0.00138
hq2_e_acc
Entries 10000
Mean 0.006115
Std Dev 0.001381

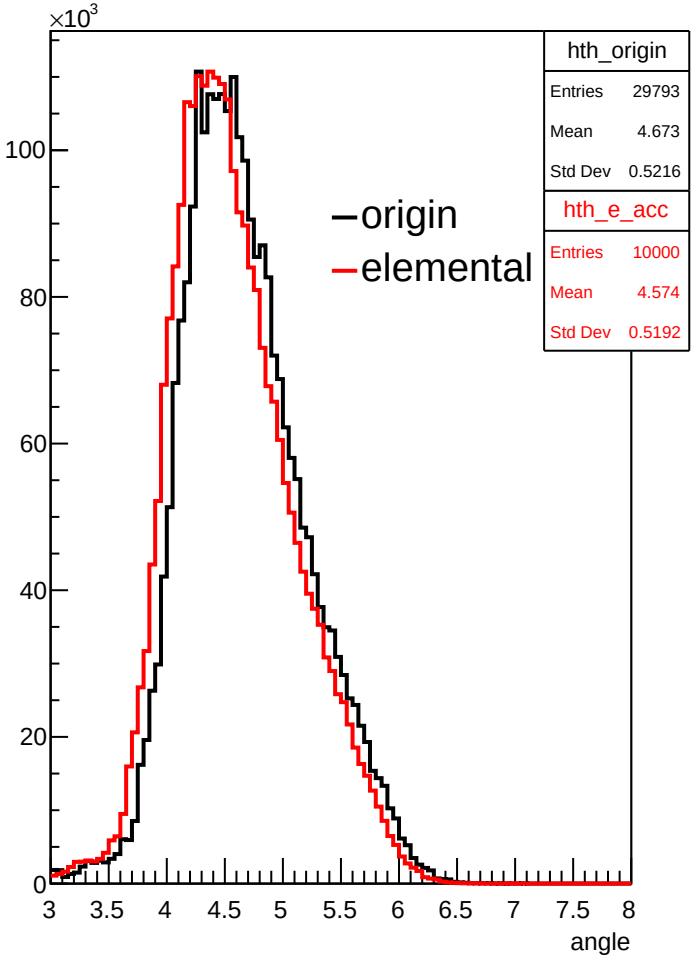

Asymmetry with acceptance (dp_inc/p=0.020)
origin
reproduce
elemental
hasym_origin
Entries 29793
Mean 558.9
Std Dev 81.9
hasym_acc1
Entries 271012
Mean 557.9
Std Dev 81.9
hasym_e_acc
Entries 10000
Mean 559.3
Std Dev 81.79
shift 0.00 deg
50000
40000
30000
20000
10000
0
200
300
400
500
600
700
800
900
1000
asym(ppb)

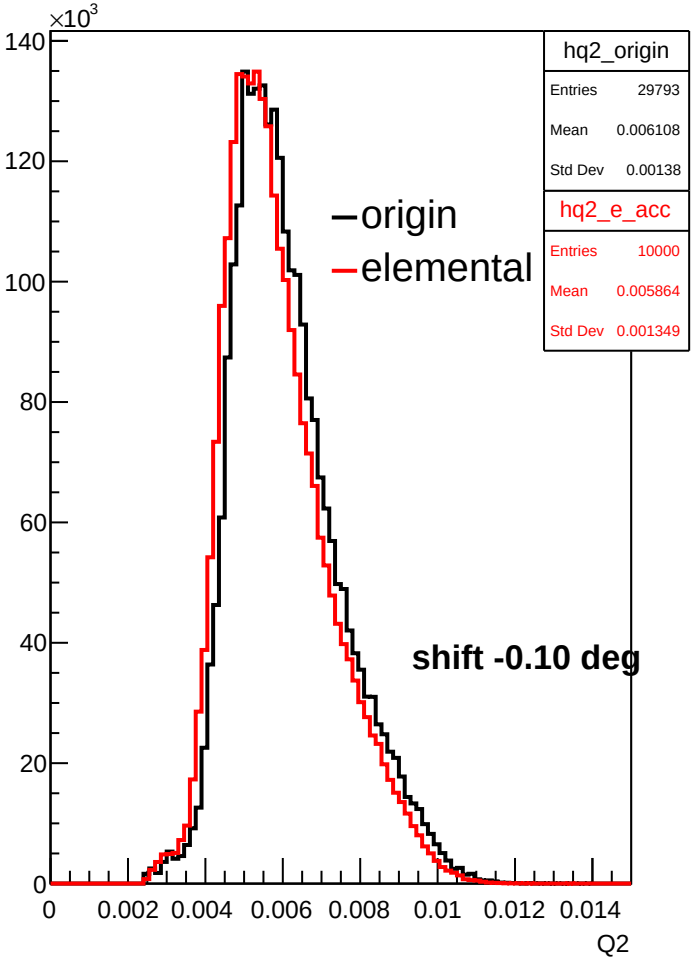

acceptance function
hACC
Entries 100000
Mean 5.075
Std Dev 0.5736
original
shift +0.1 deg
shift -0.1 deg
0.4
0.35
0.3
0.25
0.2
0.15
0.1
0.05
0
3
3.5
4
4.5
5
5.5
6
6.5
7
7.5
8

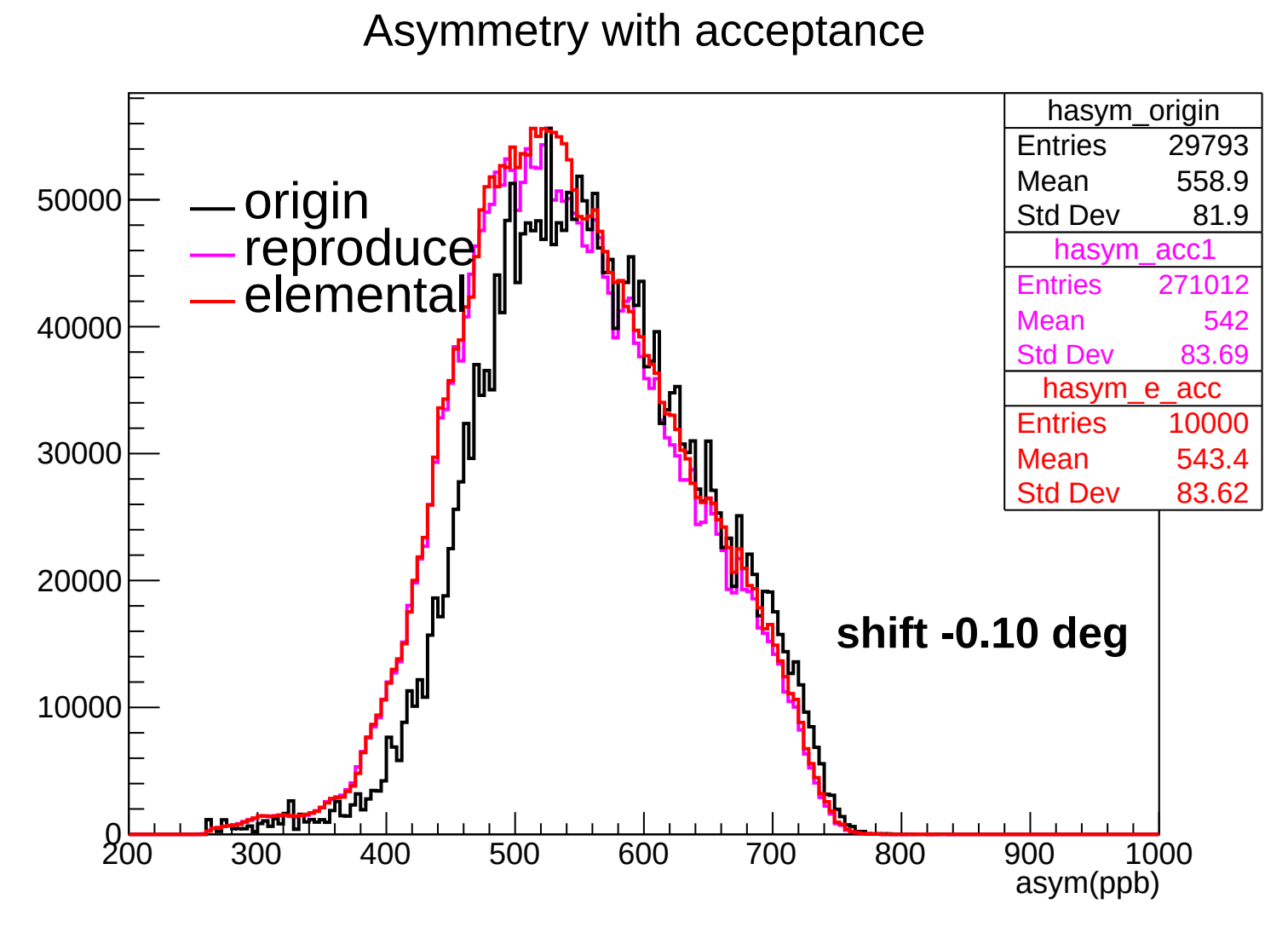

angle with acceptance
×10^3
100
80
60
40
20
0
3
3.5
4
4.5
5
5.5
6
6.5
7
7.5
8
angle
origin
elemental
hth_origin
Entries 29793
Mean 4.673
Std Dev 0.5216
hth_e_acc
Entries 10000
Mean 4.772
Std Dev 0.5209

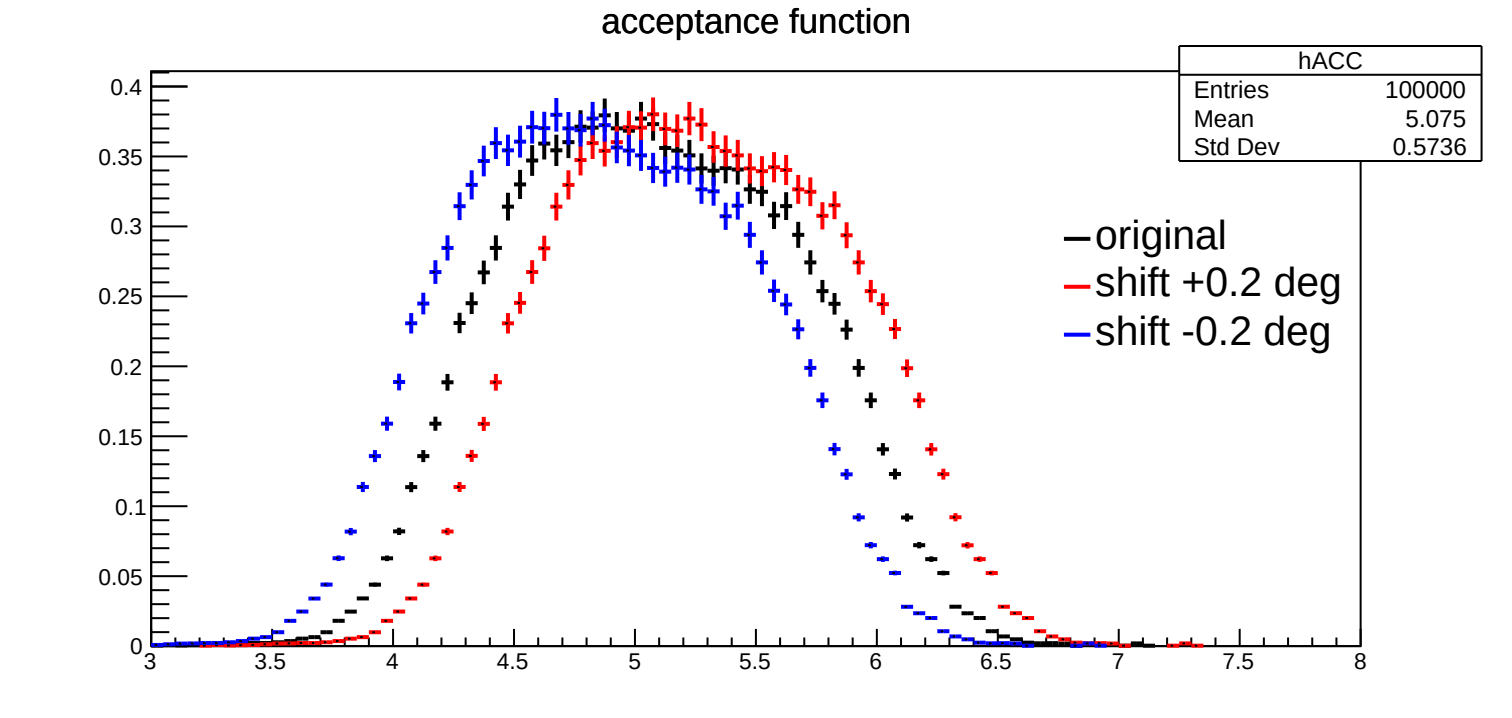

Q2 with acceptance
×10^3
140
120
100
80
60
40
20
0
0
0.002
0.004
0.006
0.008
0.01
0.012
0.014
Q2
origin
elemental
shift 0.10 deg
hq2_origin
Entries 29793
Mean 0.006108
Std Dev 0.00138
hq2_e_acc
Entries 10000
Mean 0.006375
Std Dev 0.001409

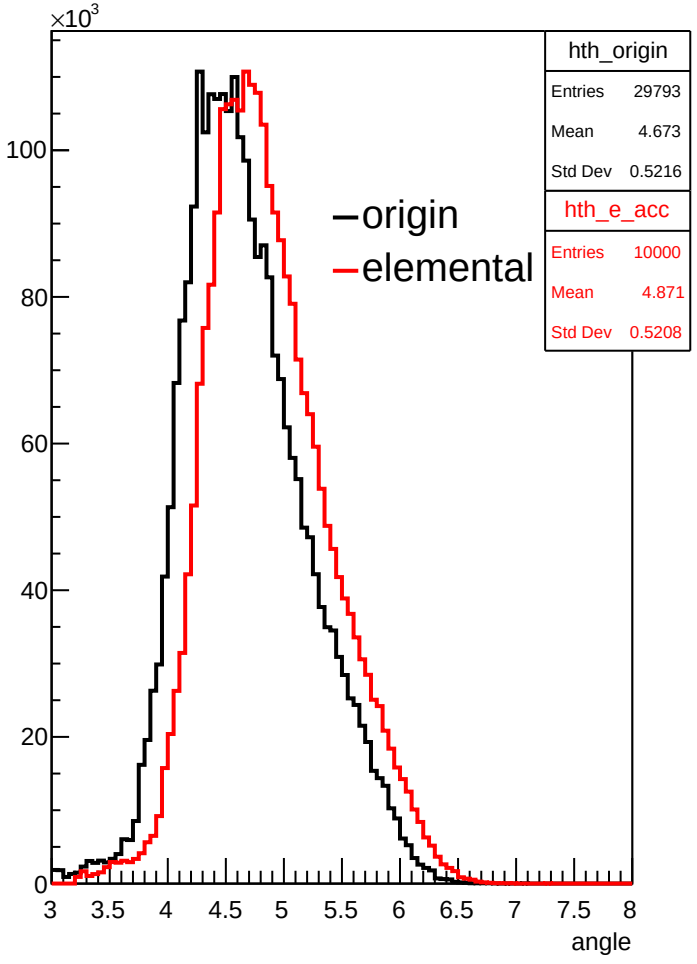

Asymmetry with acceptance (dp_inc/p=0.020)
origin
reproduce
elemental
hasym_origin
Entries 29793
Mean 558.9
Std Dev 81.9
hasym_acc1
Entries 271012
Mean 573.7
Std Dev 79.46
hasym_e_acc
Entries 10000
Mean 575.1
Std Dev 79.34
shift 0.10 deg
50000
40000
30000
20000
10000
0
200
300
400
500
600
700
800
900
1000
asym(ppb)

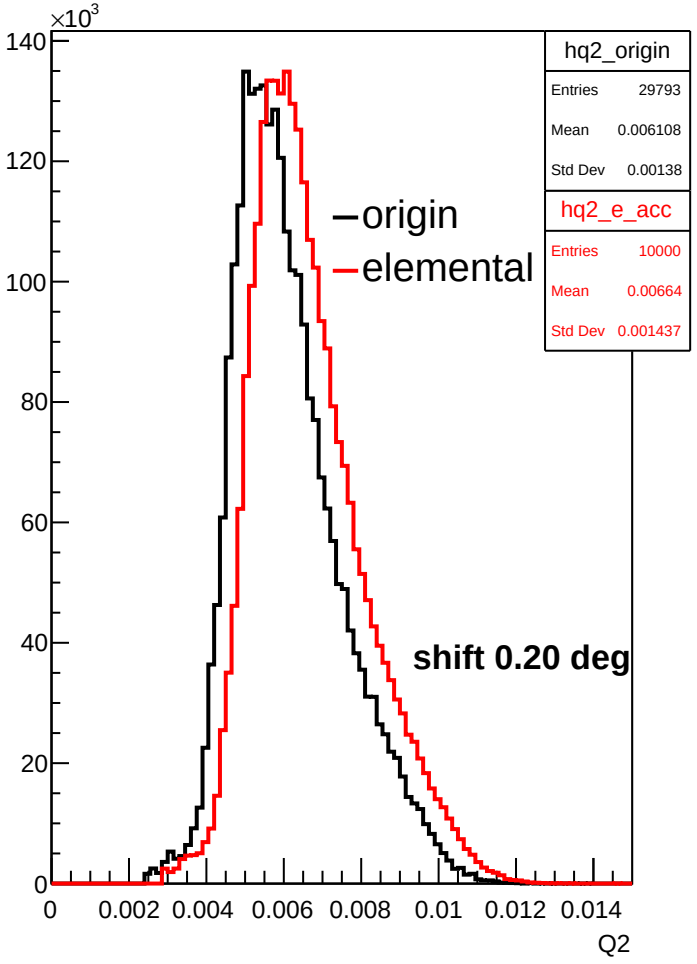

angle with acceptance
×10^3
100
80
60
40
20
0
3
3.5
4
4.5
5
5.5
6
6.5
7
7.5
8
angle
origin
elemental
hth_origin
Entries 29793
Mean 4.673
Std Dev 0.5216
hth_e_acc
Entries 10000
Mean 4.574
Std Dev 0.5192

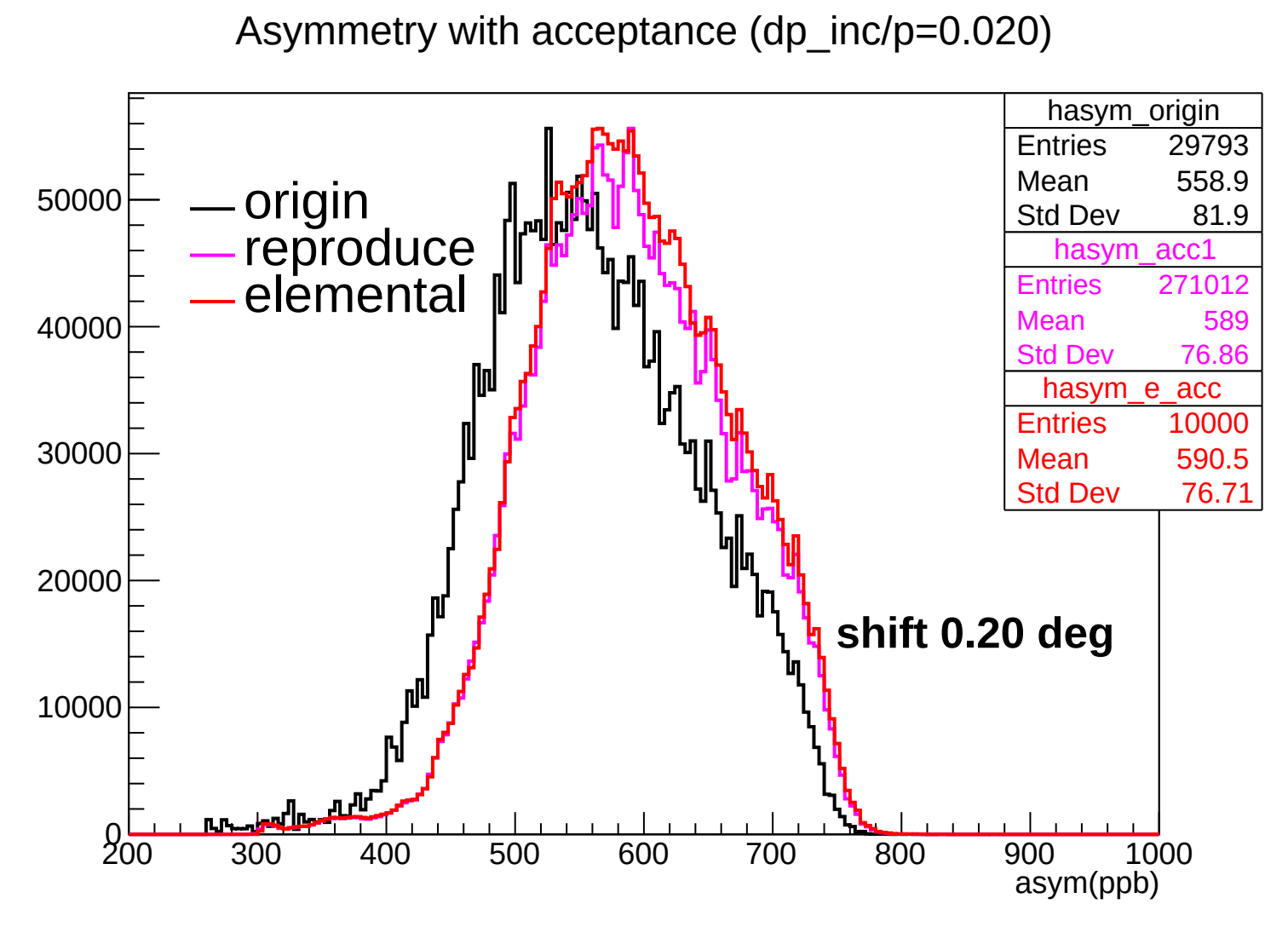

Q2 with acceptance
×10^3
140
120
100
80
60
40
20
0
0
0.002
0.004
0.006
0.008
0.01
0.012
0.014
Q2
origin
elemental
shift -0.10 deg
hq2_origin
Entries 29793
Mean 0.006108
Std Dev 0.00138
hq2_e_acc
Entries 10000
Mean 0.005864
Std Dev 0.001349

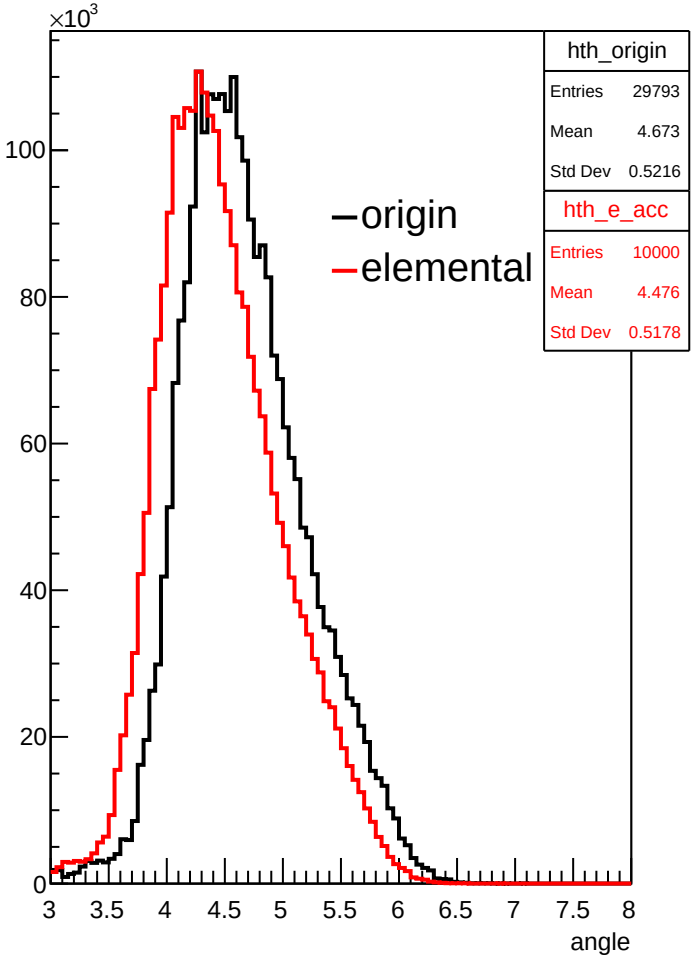

Asymmetry with acceptance
origin
reproduce
elemental
hasym_origin
Entries 29793
Mean 558.9
Std Dev 81.9
hasym_acc1
Entries 271012
Mean 542
Std Dev 83.69
hasym_e_acc
Entries 10000
Mean 543.4
Std Dev 83.62
shift -0.10 deg
50000
40000
30000
20000
10000
0
200
300
400
500
600
700
800
900
1000
asym(ppb)

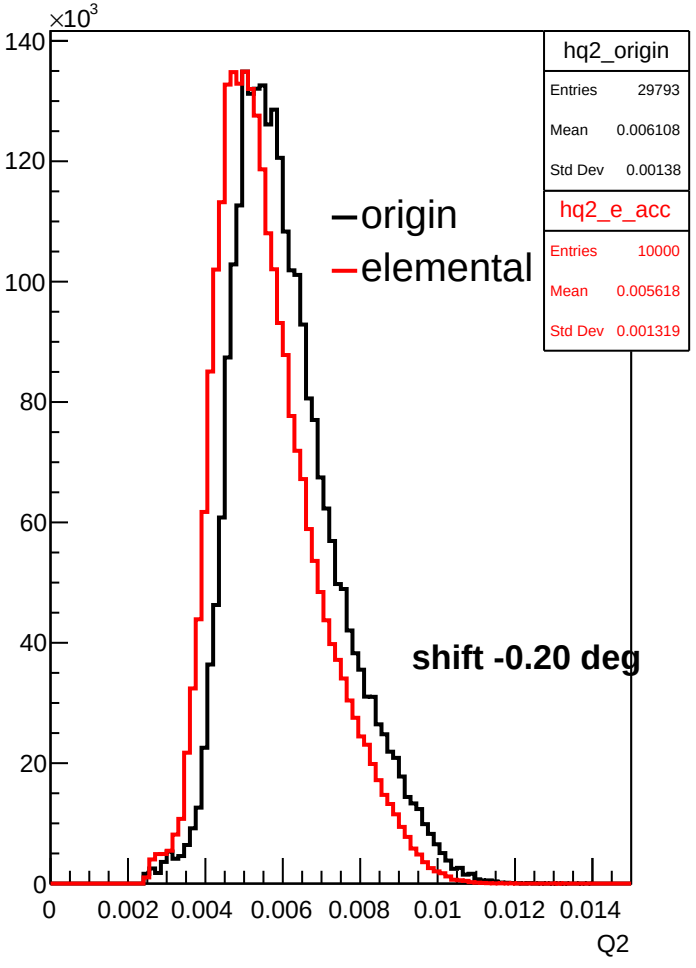

acceptance function
hACC
Entries 100000
Mean 5.075
Std Dev 0.5736
original
shift +0.2 deg
shift -0.2 deg
0.4
0.35
0.3
0.25
0.2
0.15
0.1
0.05
0
3
3.5
4
4.5
5
5.5
6
6.5
7
7.5
8


angle with acceptance
×10^3
100
80
60
40
20
0
3
3.5
4
4.5
5
5.5
6
6.5
7
7.5
8
angle
origin
elemental
hth_origin
Entries 29793
Mean 4.673
Std Dev 0.5216
hth_e_acc
Entries 10000
Mean 4.871
Std Dev 0.5208

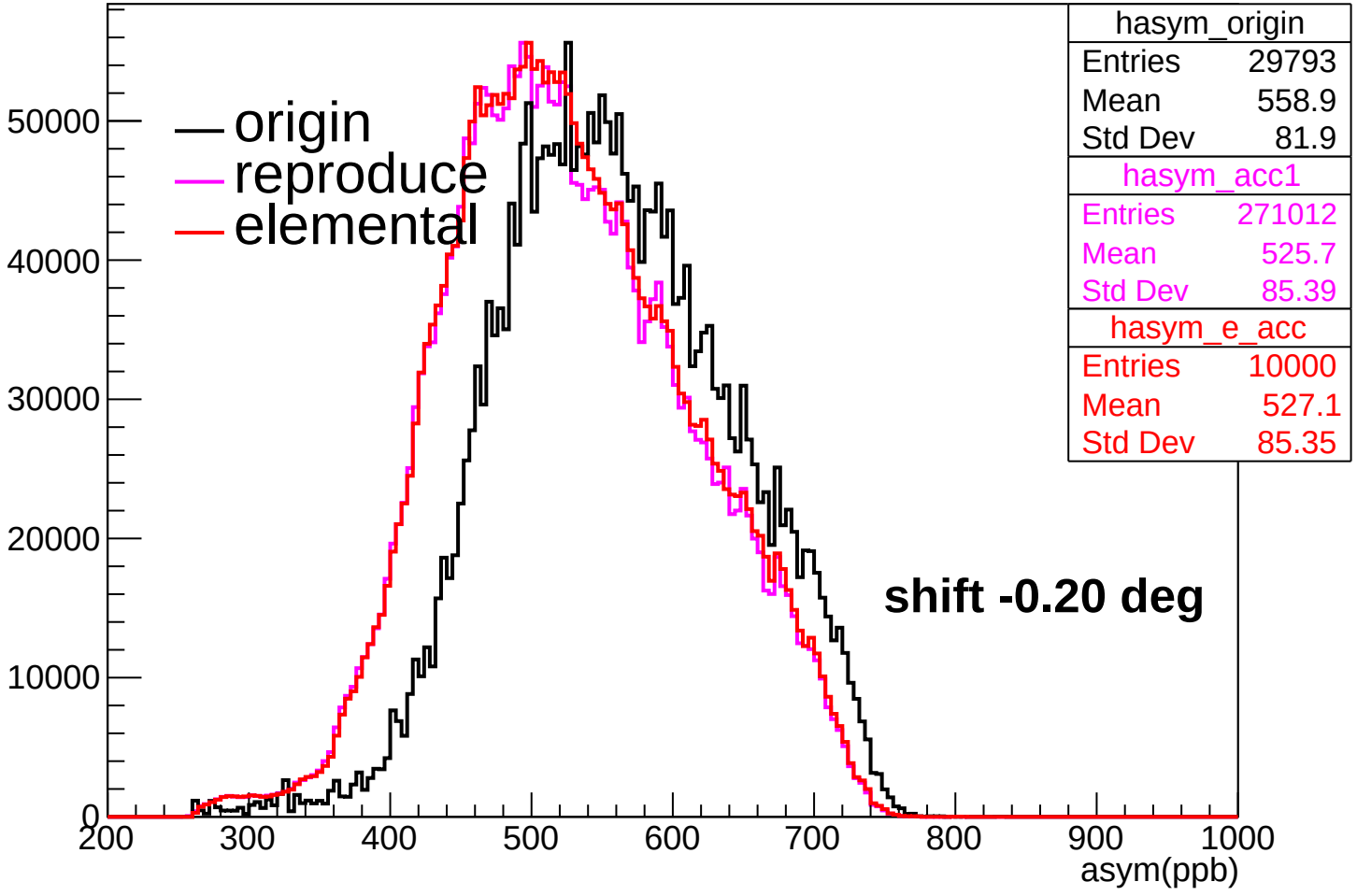

Q2 with acceptance
×10^3
140
120
100
80
60
40
20
0
0
0.002
0.004
0.006
0.008
0.01
0.012
0.014
Q2
origin
elemental
shift 0.20 deg
hq2_origin
Entries 29793
Mean 0.006108
Std Dev 0.00138
hq2_e_acc
Entries 10000
Mean 0.00664
Std Dev 0.001437

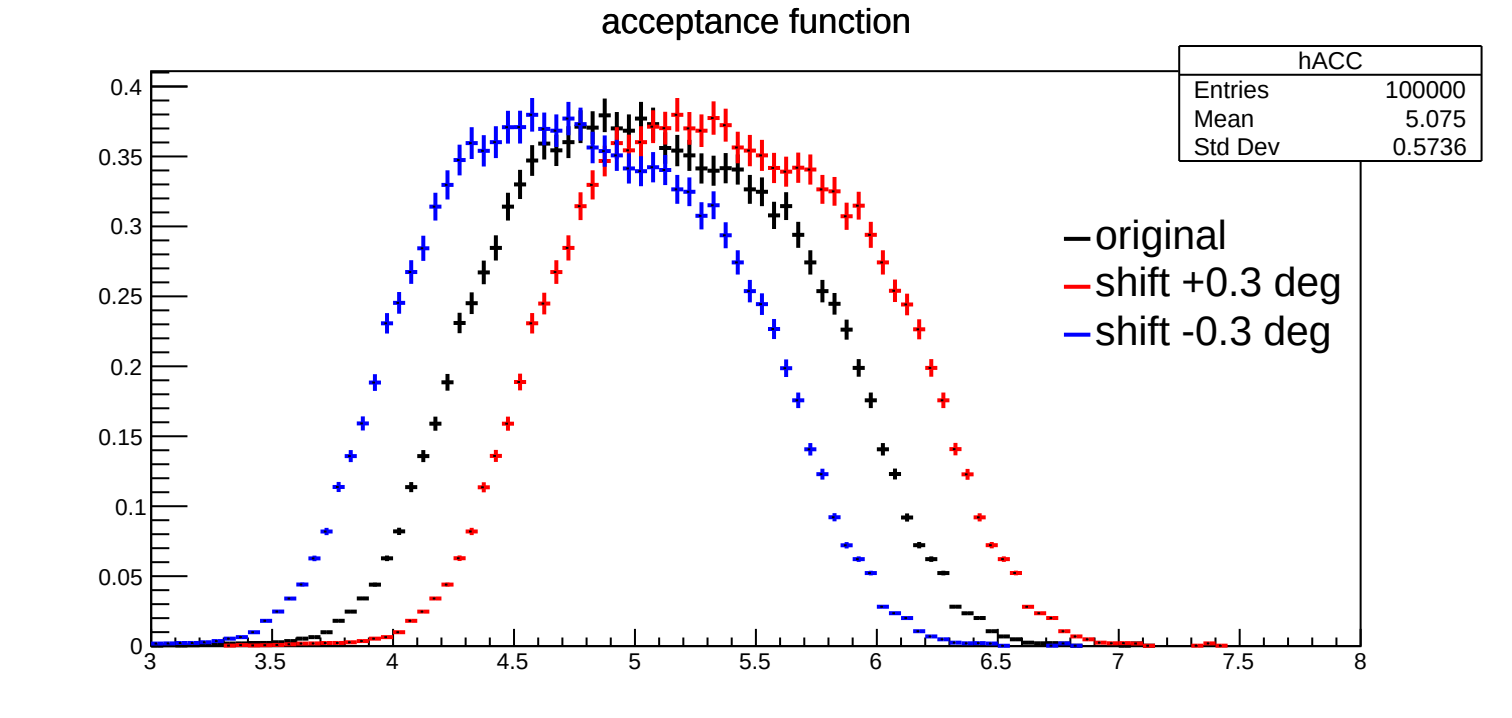

Asymmetry with acceptance (dp_inc/p=0.020)
origin
reproduce
elemental
shift 0.20 deg
hasym_origin
Entries 29793
Mean 558.9
Std Dev 81.9
hasym_acc1
Entries 271012
Mean 589
Std Dev 76.86
hasym_e_acc
Entries 10000
Mean 590.5
Std Dev 76.71
50000
40000
30000
20000
10000
0
200
300
400
500
600
700
800
900
1000
asym(ppb)

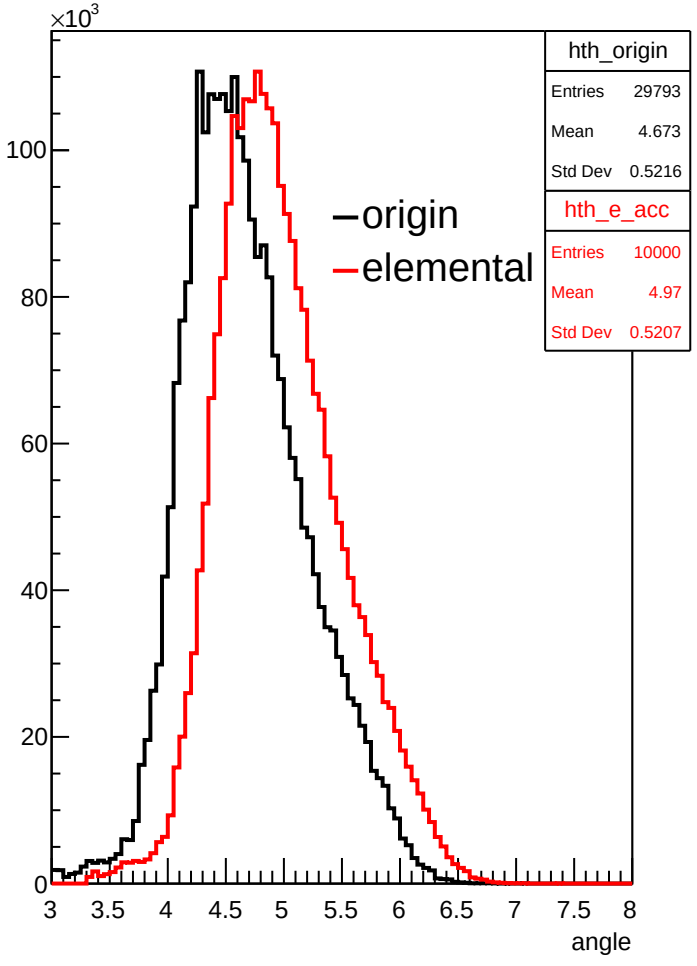

angle with acceptance
×10^3
hth_origin
Entries 29793
Mean 4.673
Std Dev 0.5216
hth_e_acc
Entries 10000
Mean 4.476
Std Dev 0.5178
origin
elemental
angle

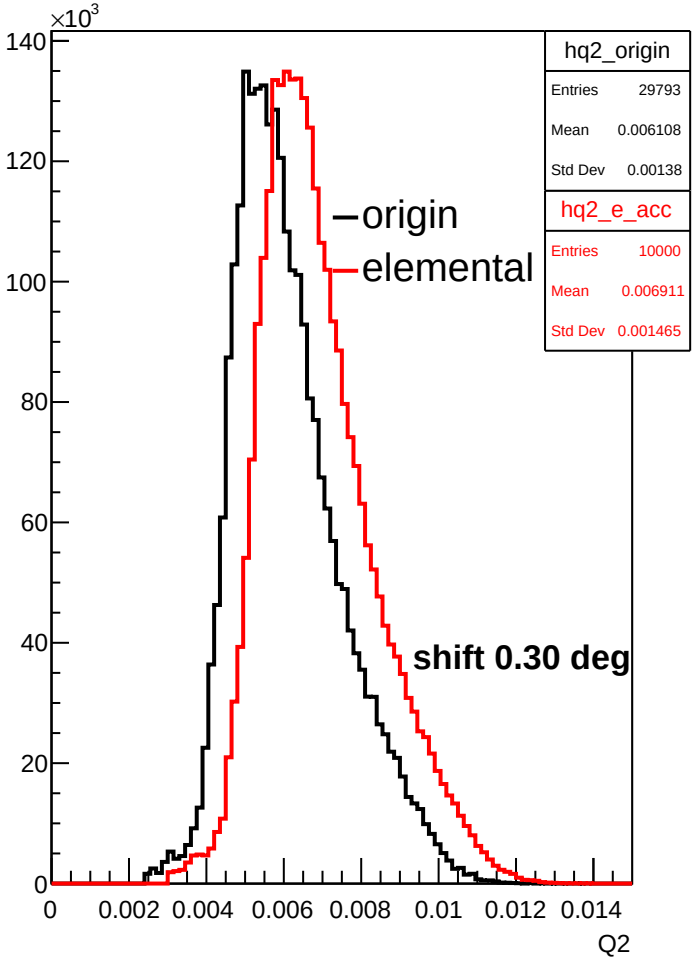

Q2 with acceptance
×10^3
hq2_origin
Entries 29793
Mean 0.006108
Std Dev 0.00138
hq2_e_acc
Entries 10000
Mean 0.005618
Std Dev 0.001319
origin
elemental
shift -0.20 deg
Q2

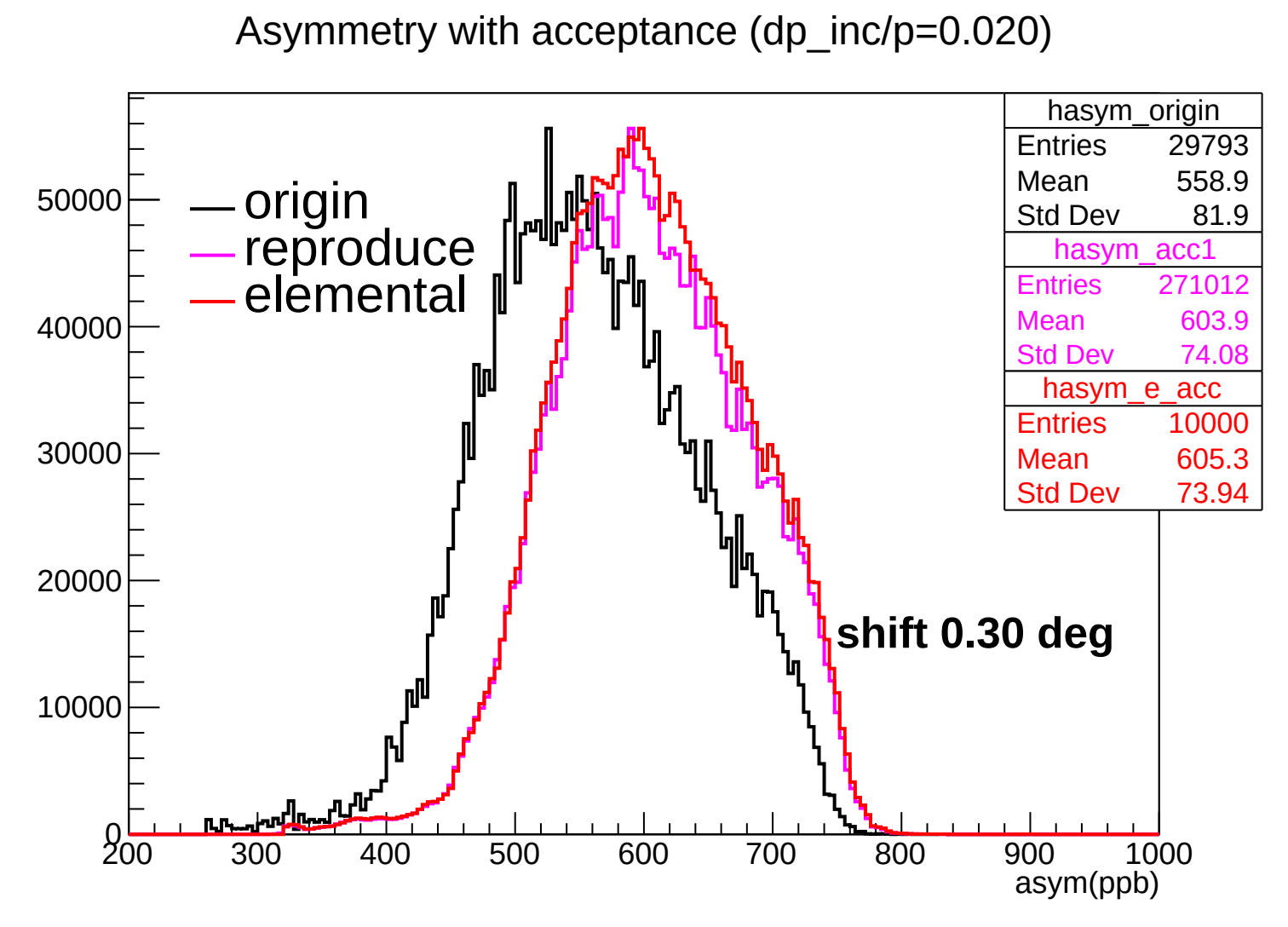
Asymmetry with acceptance

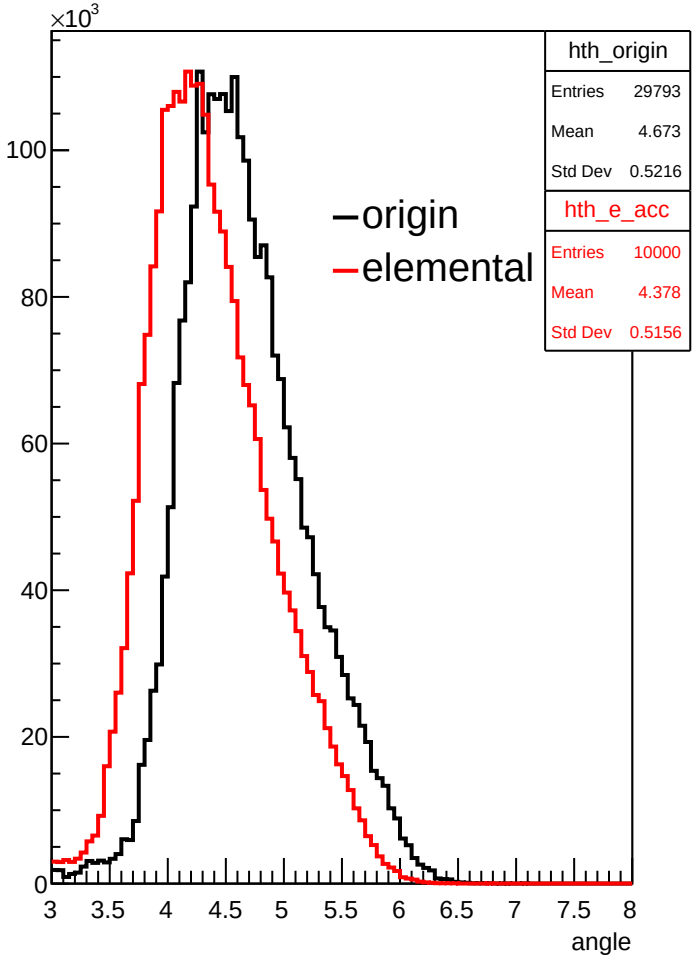


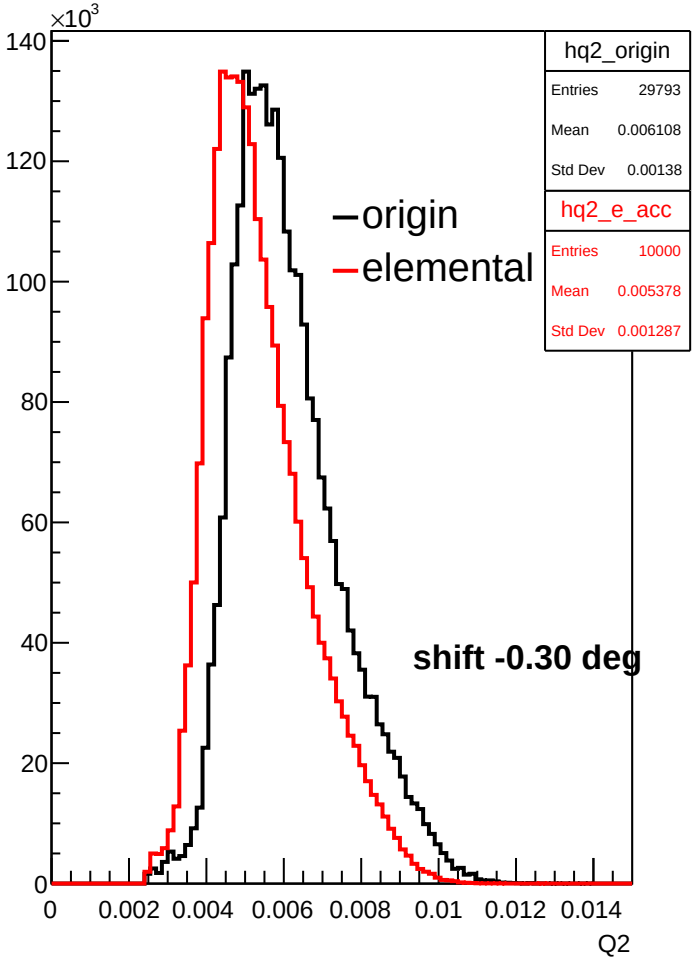

acceptance function
hACC
Entries 100000
Mean 5.075
Std Dev 0.5736
original
shift +0.3 deg
shift -0.3 deg
0.4
0.35
0.3
0.25
0.2
0.15
0.1
0.05
0
3
3.5
4
4.5
5
5.5
6
6.5
7
7.5
8


angle with acceptance
×10^3
hth_origin
Entries 29793
Mean 4.673
Std Dev 0.5216
hth_e_acc
Entries 10000
Mean 4.97
Std Dev 0.5207
origin
elemental
angle

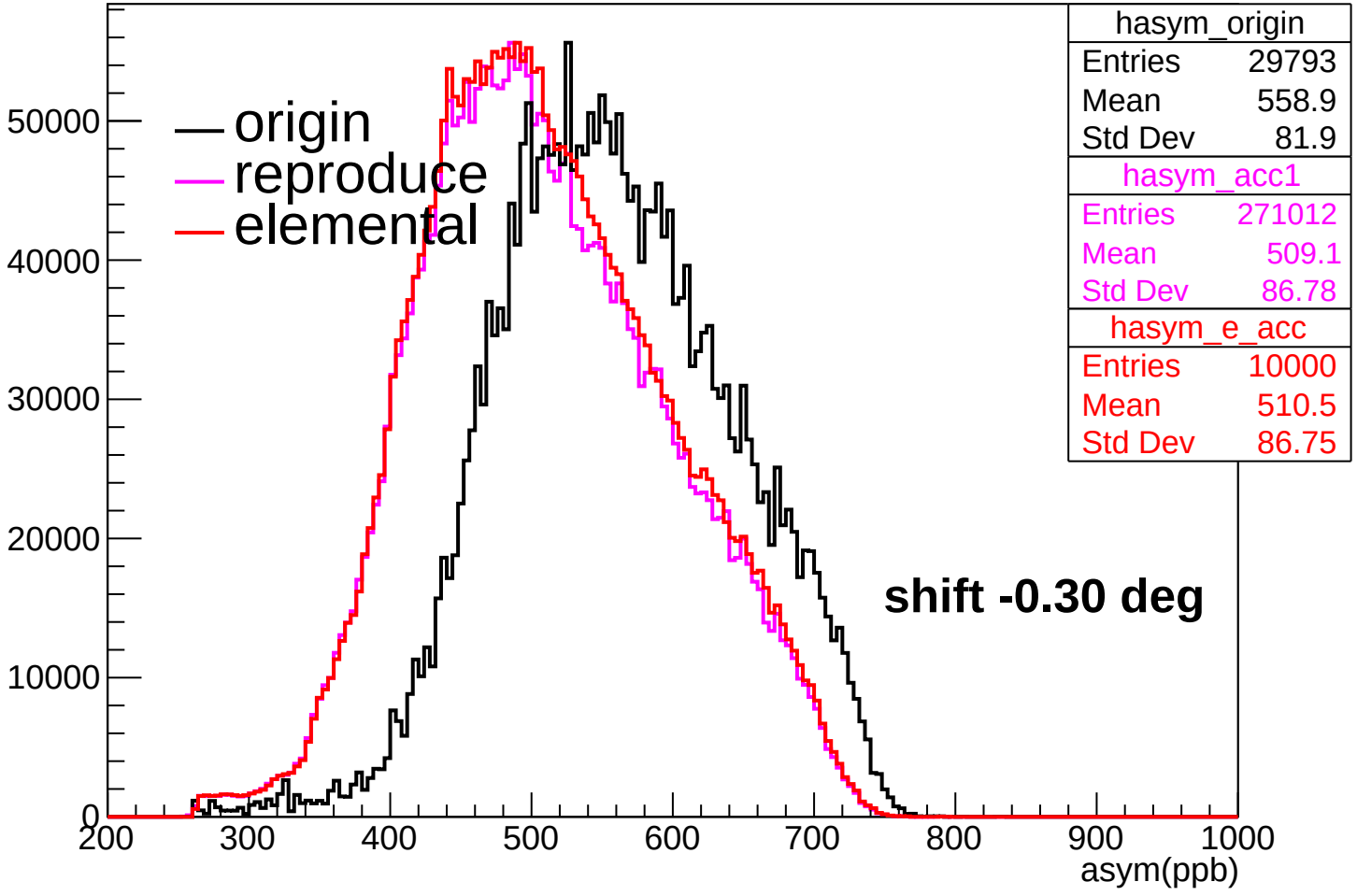

Q2 with acceptance
×10^3
hq2_origin
Entries 29793
Mean 0.006108
Std Dev 0.00138
hq2_e_acc
Entries 10000
Mean 0.006911
Std Dev 0.001465
origin
elemental
shift 0.30 deg
Q2

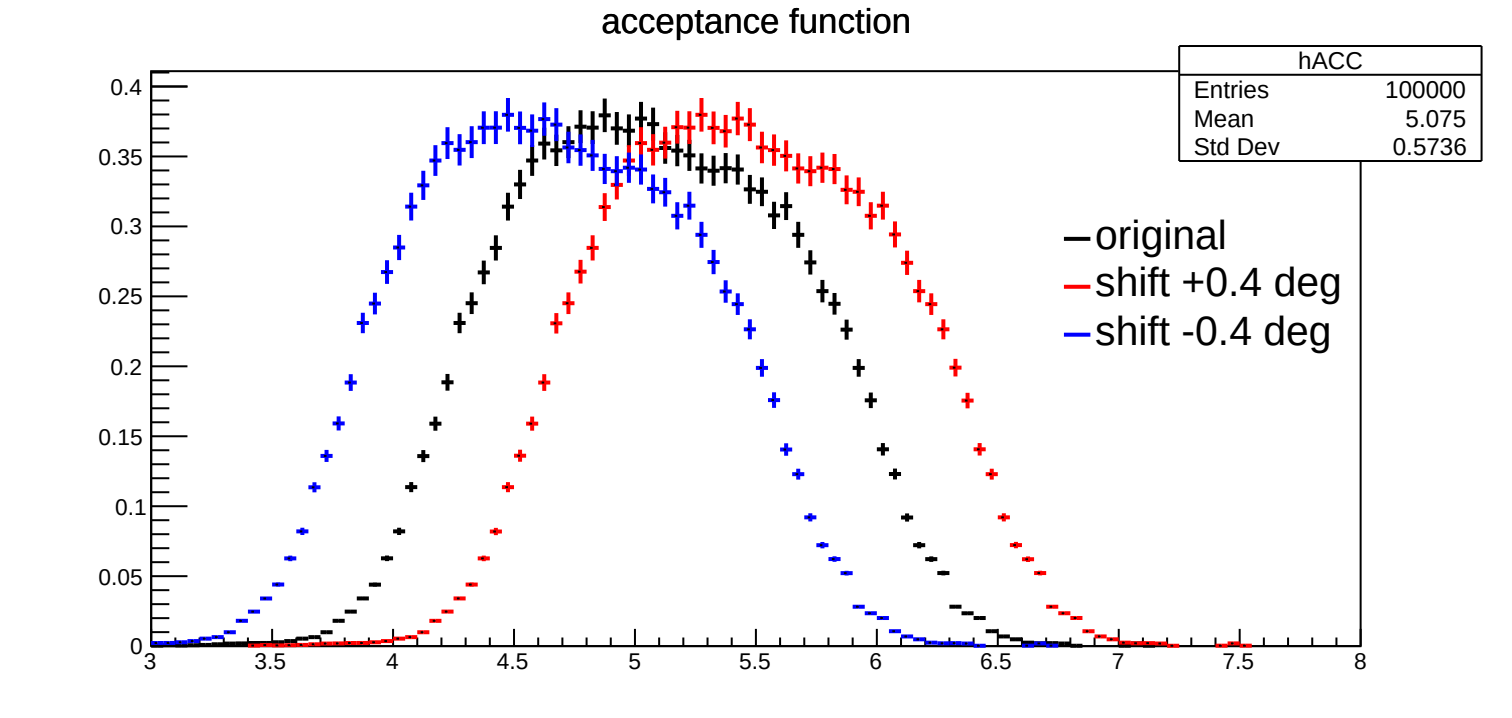

Asymmetry with acceptance (dp_inc/p=0.020)
origin
reproduce
elemental
hasym_origin
Entries 29793
Mean 558.9
Std Dev 81.9
hasym_acc1
Entries 271012
Mean 603.9
Std Dev 74.08
hasym_e_acc
Entries 10000
Mean 605.3
Std Dev 73.94
shift 0.30 deg
50000
40000
30000
20000
10000
0
200
300
400
500
600
700
800
900
1000
asym(ppb)

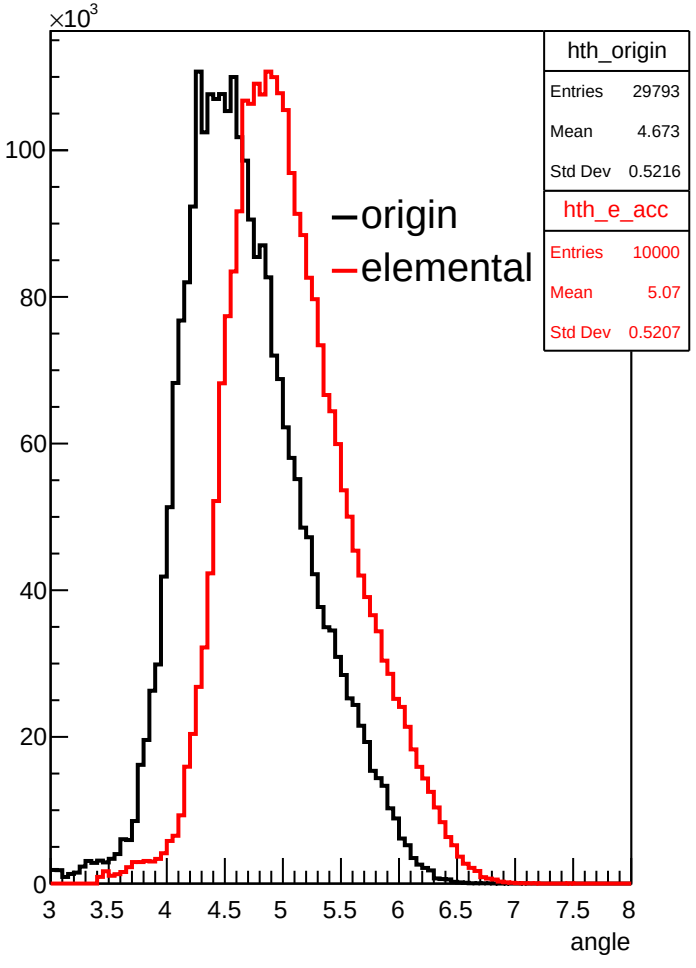

angle with acceptance
×10^3
hth_origin
Entries 29793
Mean 4.673
Std Dev 0.5216
hth_e_acc
Entries 10000
Mean 4.378
Std Dev 0.5156
origin
elemental
angle

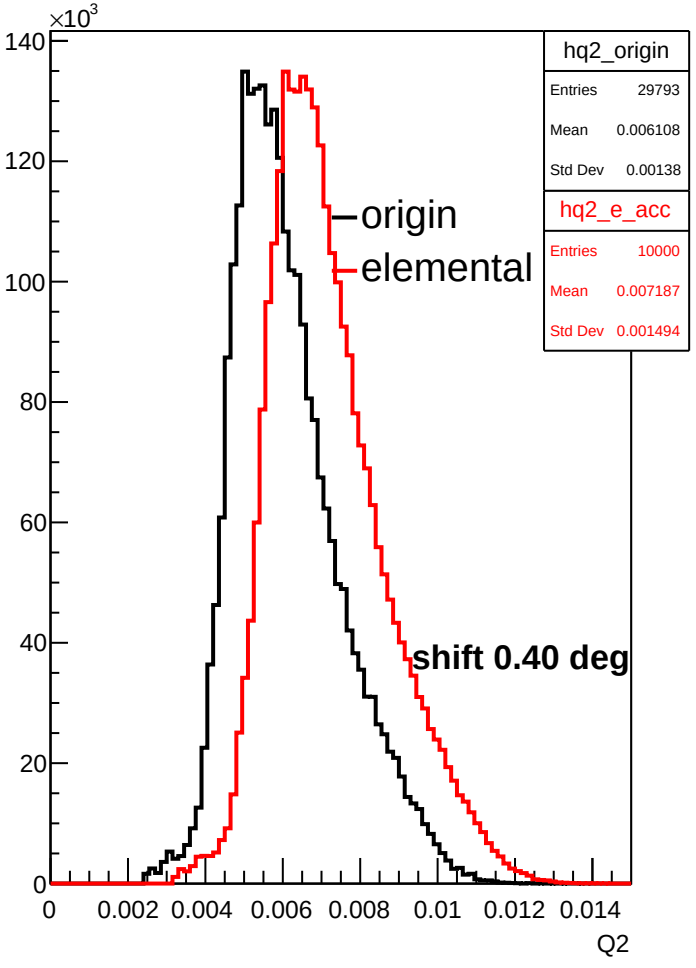

Q2 with acceptance
×10^3
hq2_origin
Entries 29793
Mean 0.006108
Std Dev 0.00138
hq2_e_acc
Entries 10000
Mean 0.005378
Std Dev 0.001287
origin
elemental
shift -0.30 deg
Q2

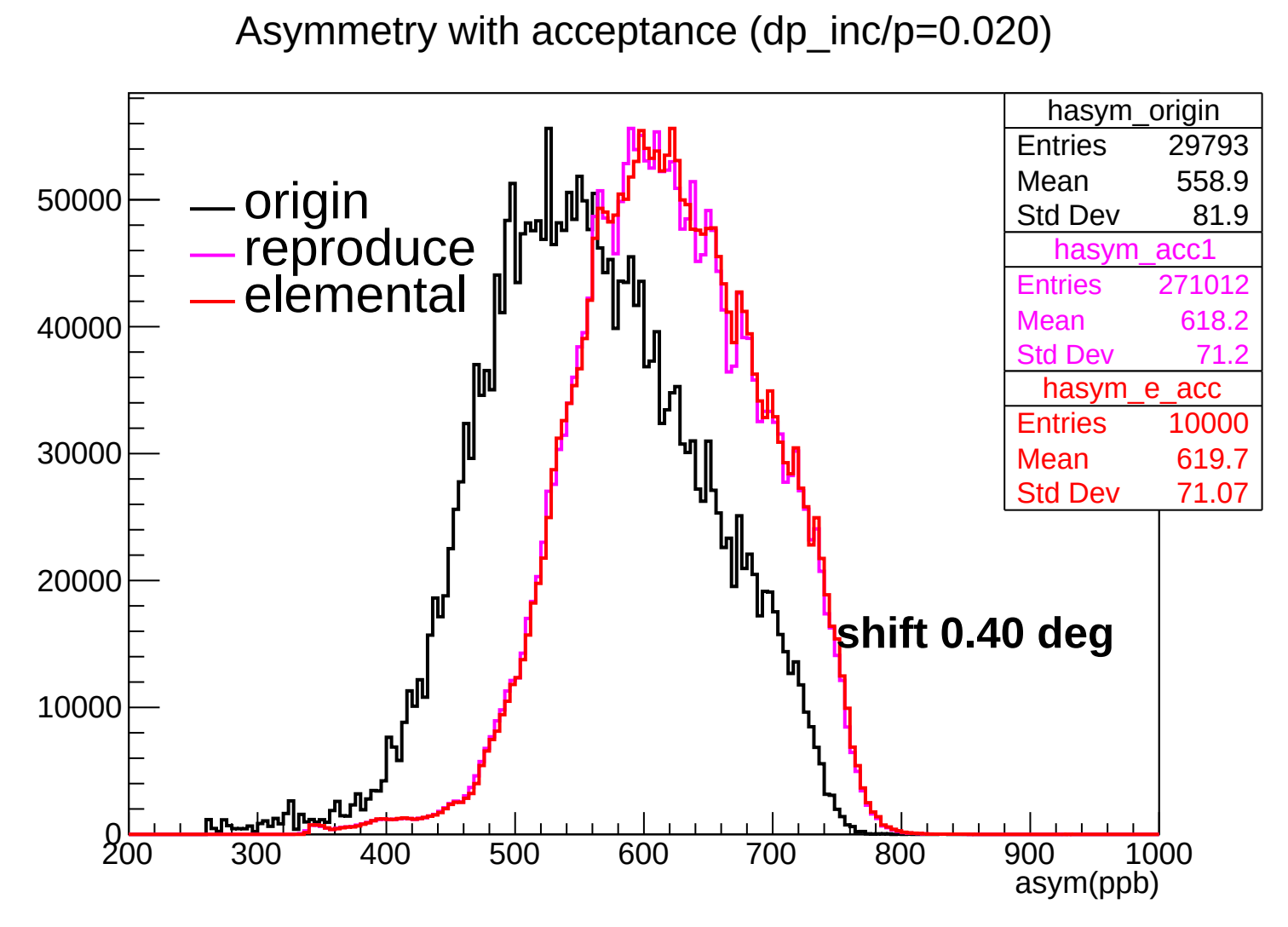
Asymmetry with acceptance

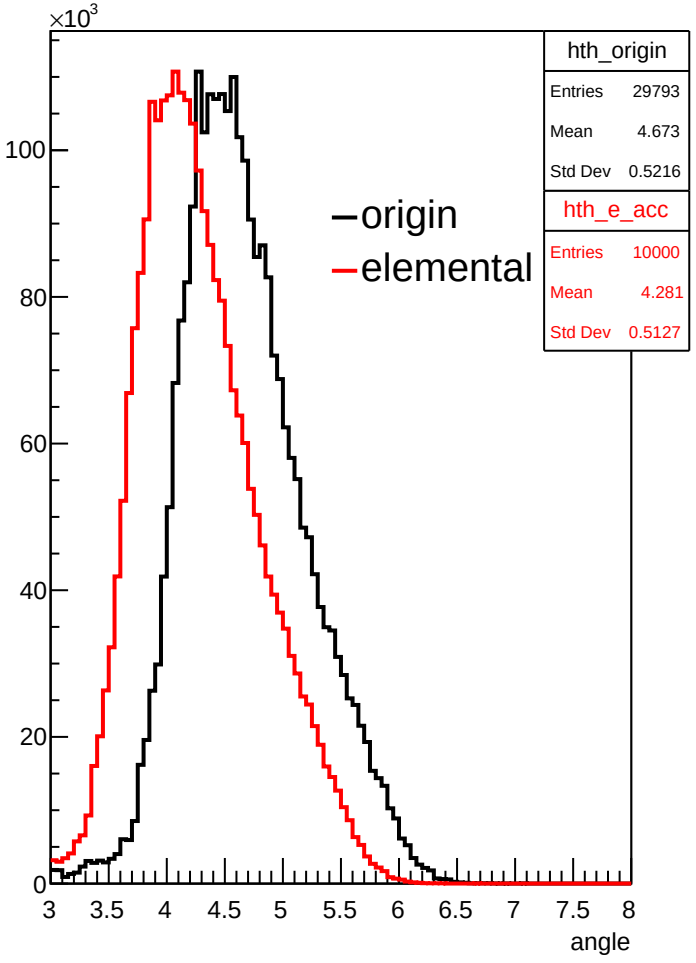


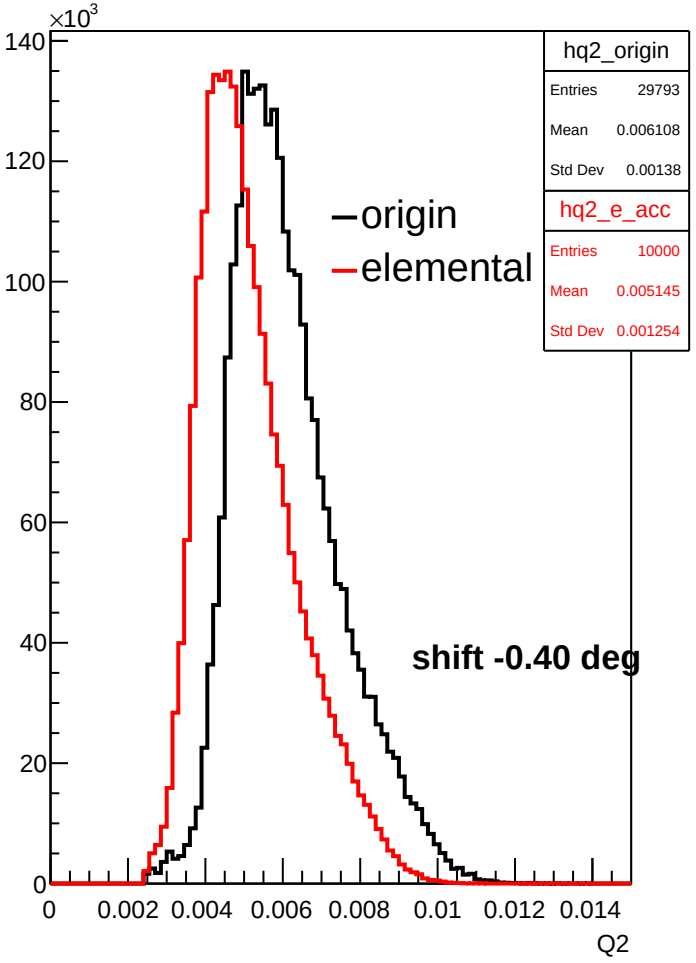

acceptance function
hACC
Entries 100000
Mean 5.075
Std Dev 0.5736
original
shift +0.4 deg
shift -0.4 deg
0.4
0.35
0.3
0.25
0.2
0.15
0.1
0.05
0
3
3.5
4
4.5
5
5.5
6
6.5
7
7.5
8


angle with acceptance
×10^3
100
80
60
40
20
0
3
3.5
4
4.5
5
5.5
6
6.5
7
7.5
8
angle
origin
elemental
hth_origin
Entries 29793
Mean 4.673
Std Dev 0.5216
hth_e_acc
Entries 10000
Mean 5.07
Std Dev 0.5207

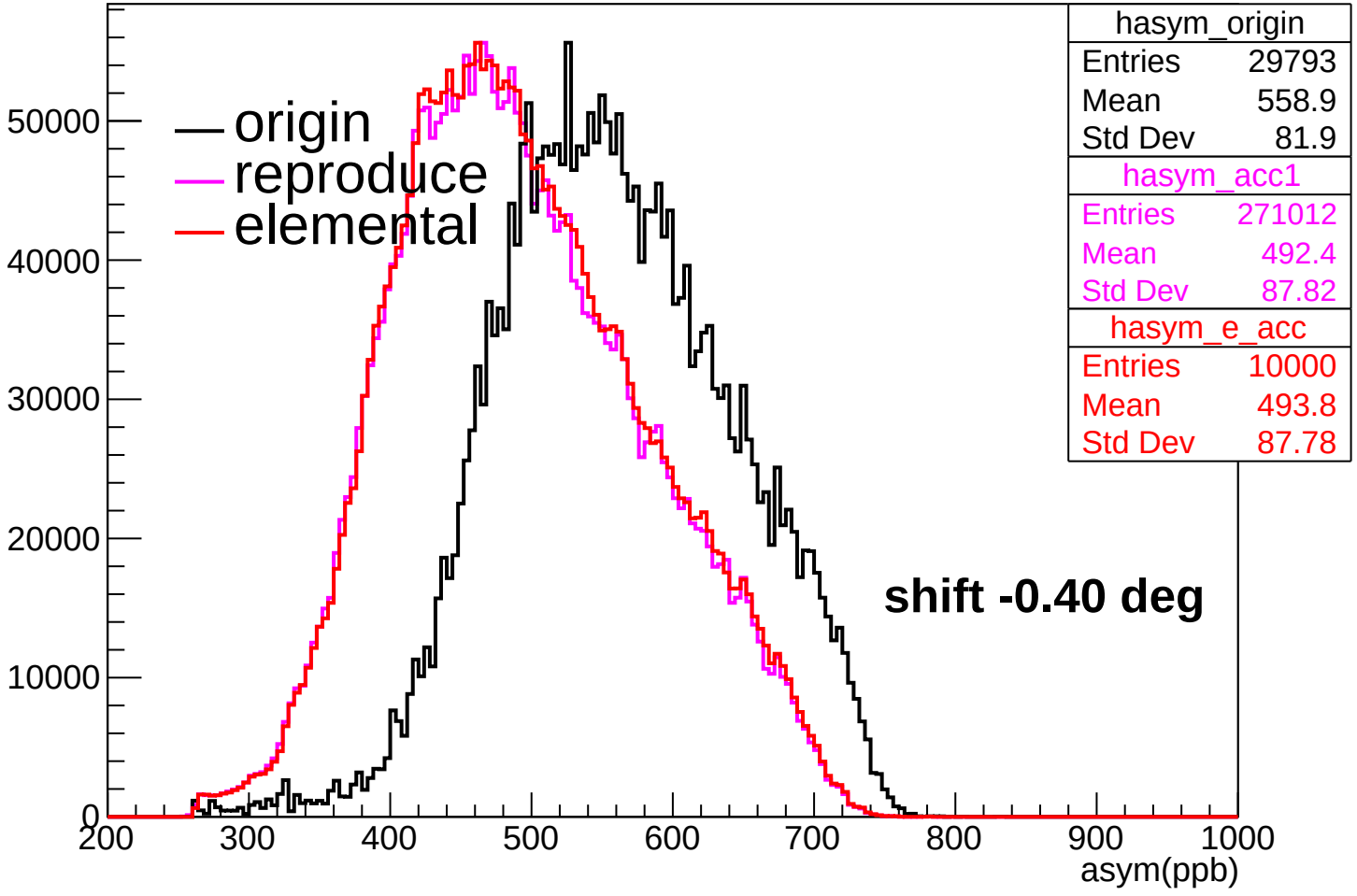

Q2 with acceptance
×10^3
140
120
100
80
60
40
20
0
0
0.002
0.004
0.006
0.008
0.01
0.012
0.014
Q2
origin
elemental
shift 0.40 deg
hq2_origin
Entries 29793
Mean 0.006108
Std Dev 0.00138
hq2_e_acc
Entries 10000
Mean 0.007187
Std Dev 0.001494

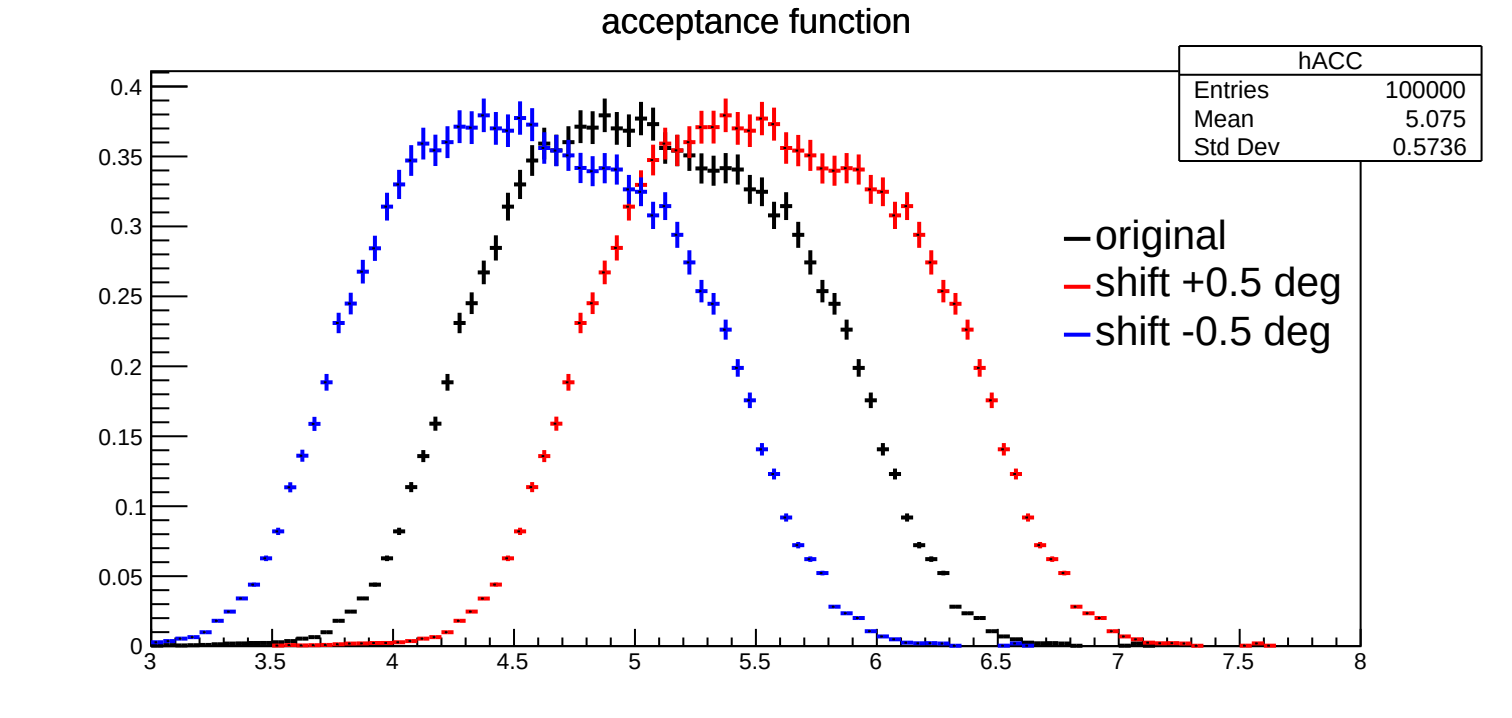

Asymmetry with acceptance (dp_inc/p=0.020)
origin
reproduce
elemental
hasym_origin
Entries 29793
Mean 558.9
Std Dev 81.9
hasym_acc1
Entries 271012
Mean 618.2
Std Dev 71.2
hasym_e_acc
Entries 10000
Mean 619.7
Std Dev 71.07
shift 0.40 deg
50000
40000
30000
20000
10000
0
200
300
400
500
600
700
800
900
1000
asym(ppb)

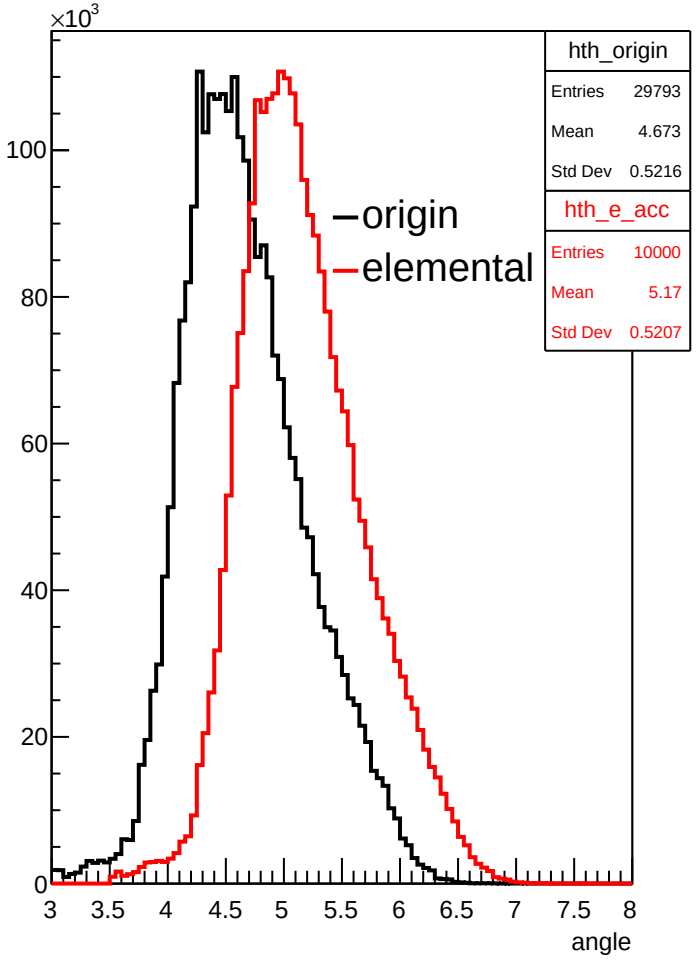

angle with acceptance
×10^3
hth_origin
Entries 29793
Mean 4.673
Std Dev 0.5216
hth_e_acc
Entries 10000
Mean 4.281
Std Dev 0.5127
origin
elemental
angle

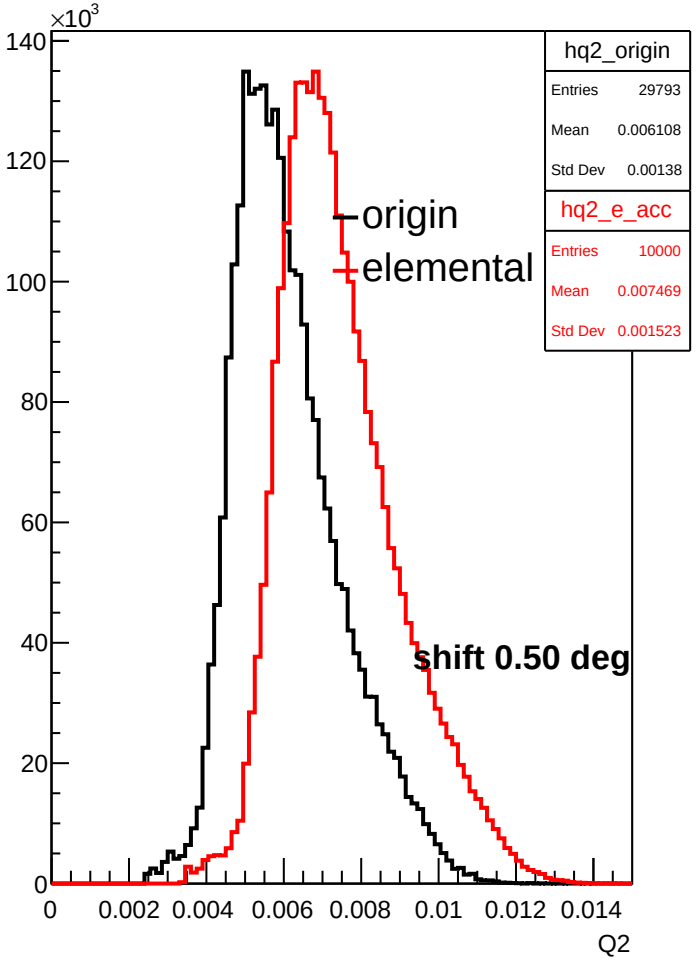

Q2 with acceptance
×10^3
hq2_origin
Entries 29793
Mean 0.006108
Std Dev 0.00138
hq2_e_acc
Entries 10000
Mean 0.005145
Std Dev 0.001254
origin
elemental
shift -0.40 deg
Q2

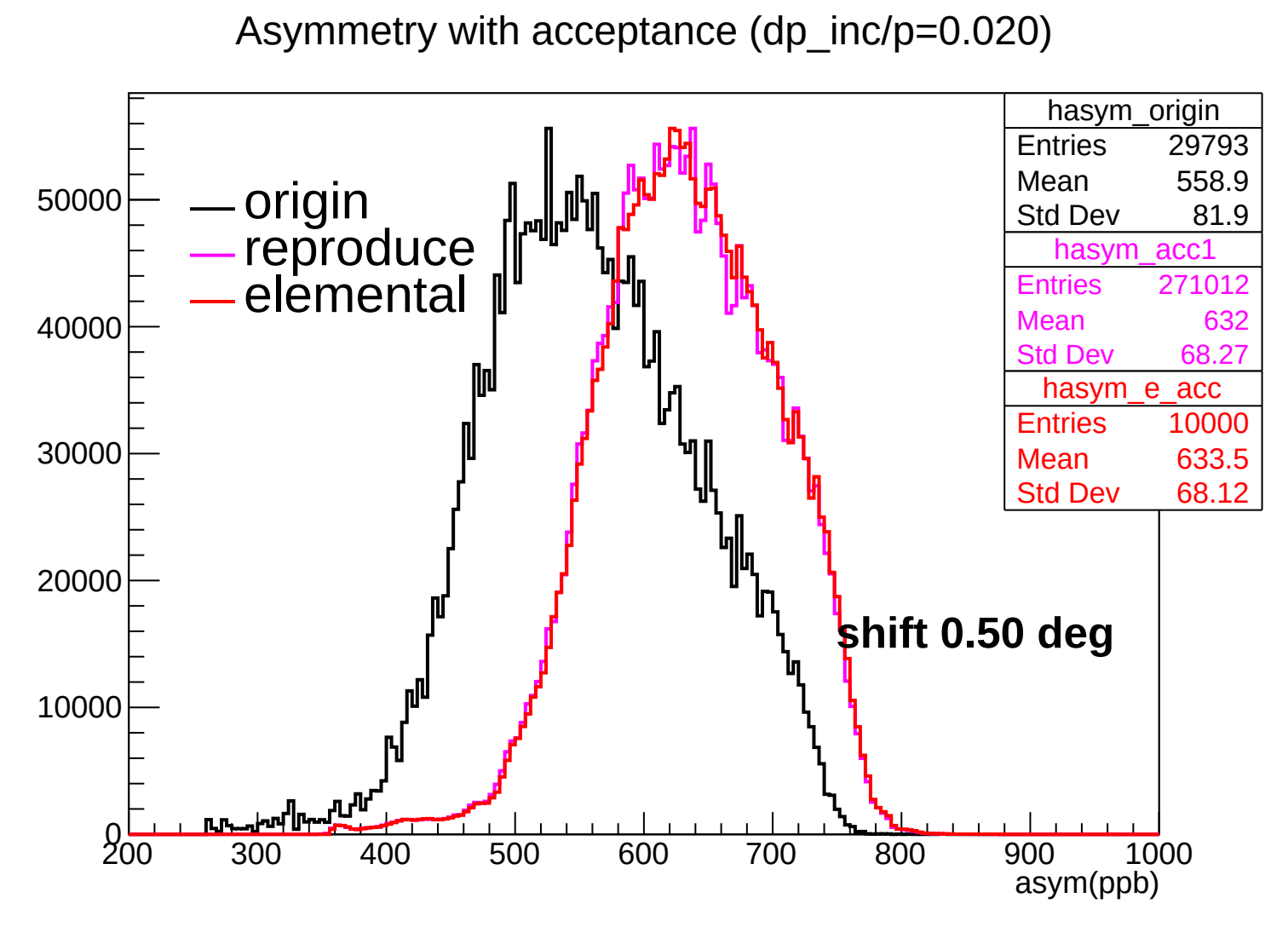
Asymmetry with acceptance

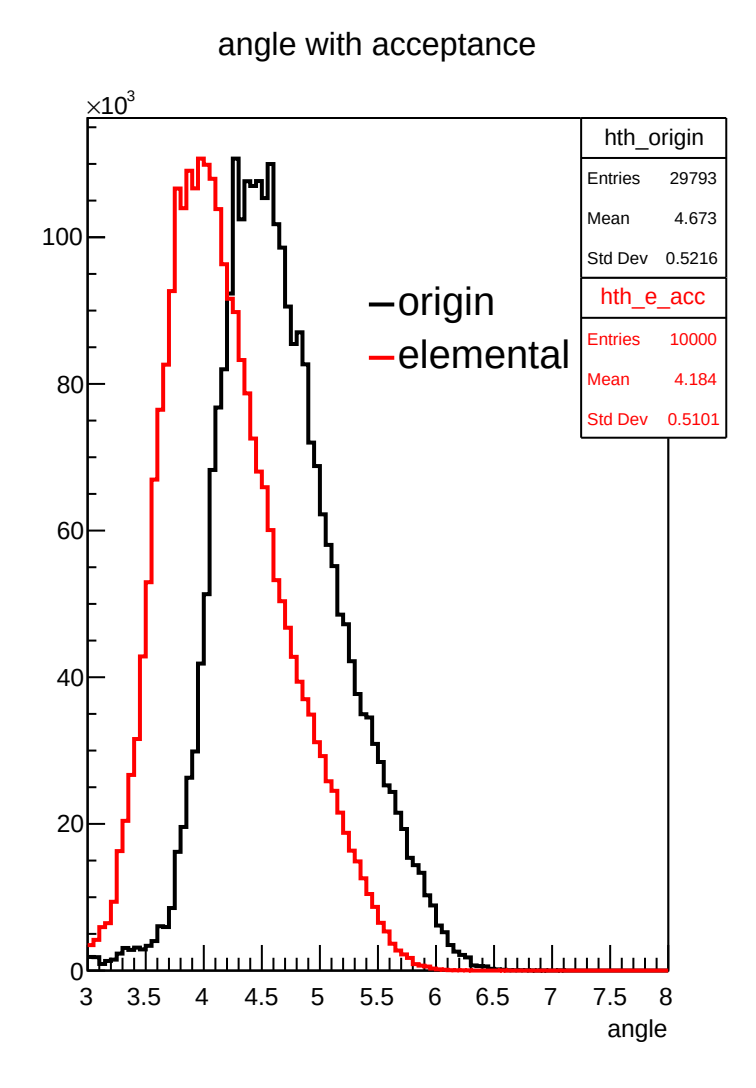


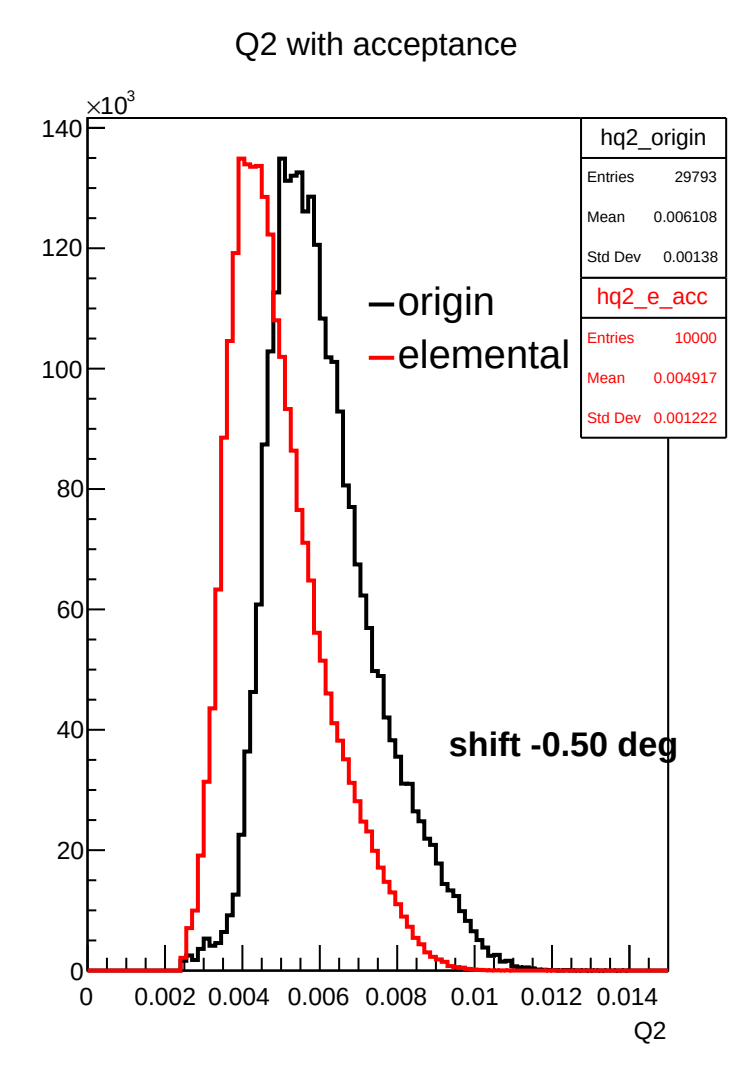

acceptance function
hACC
Entries 100000
Mean 5.075
Std Dev 0.5736
original
shift +0.5 deg
shift -0.5 deg
0.4
0.35
0.3
0.25
0.2
0.15
0.1
0.05
0
3
3.5
4
4.5
5
5.5
6
6.5
7
7.5
8

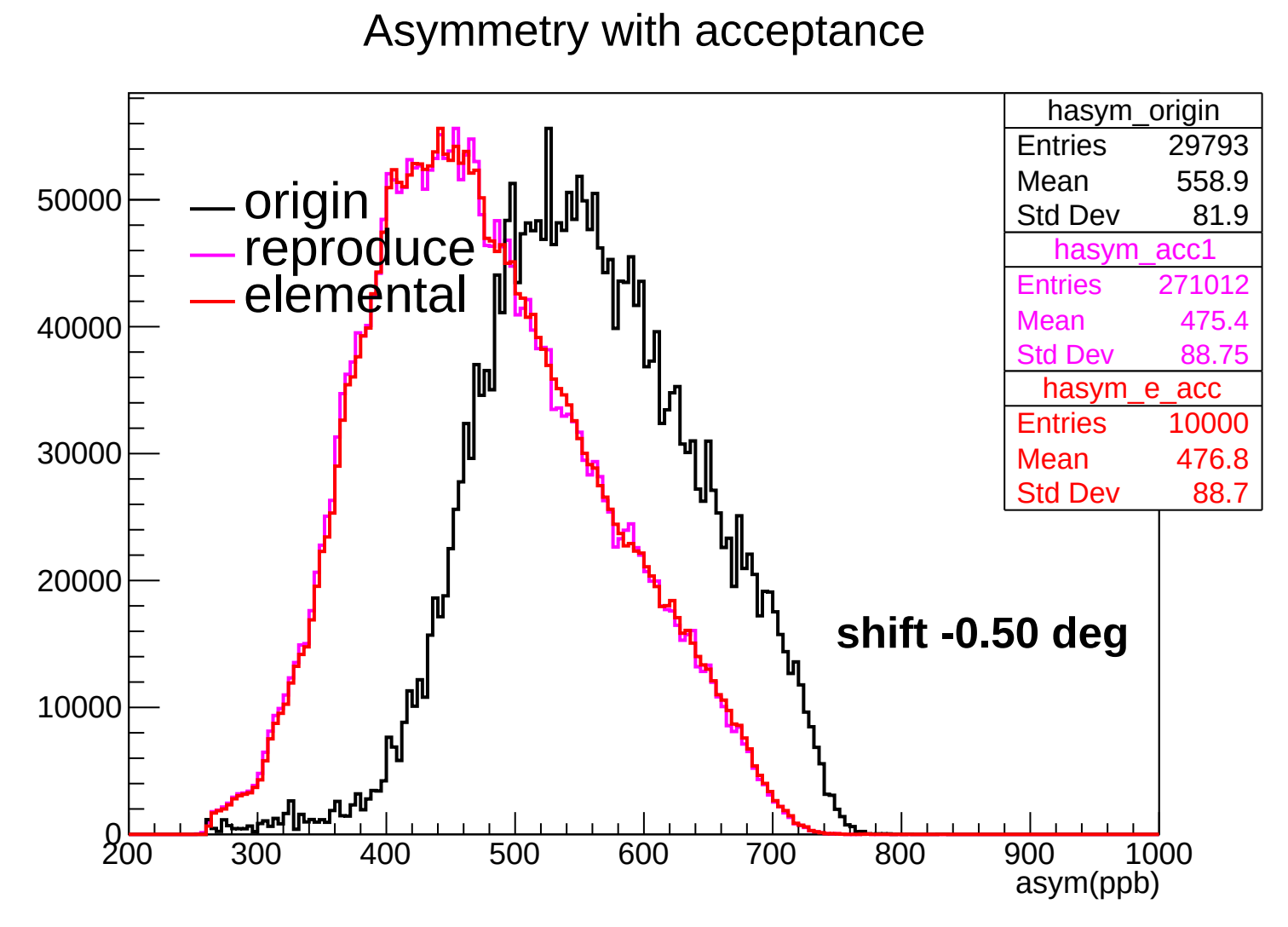

angle with acceptance
×10^3
100
80
60
40
20
0
3
3.5
4
4.5
5
5.5
6
6.5
7
7.5
8
angle
origin
elemental
hth_origin
Entries 29793
Mean 4.673
Std Dev 0.5216
hth_e_acc
Entries 10000
Mean 5.17
Std Dev 0.5207


Q2 with acceptance
×10^3
140
120
100
80
60
40
20
0
0
0.002
0.004
0.006
0.008
0.01
0.012
0.014
Q2
origin
elemental
shift 0.50 deg
hq2_origin
Entries 29793
Mean 0.006108
Std Dev 0.00138
hq2_e_acc
Entries 10000
Mean 0.007469
Std Dev 0.001523


Asymmetry with acceptance (dp_inc/p=0.020)
origin
reproduce
elemental
hasym_origin
Entries 29793
Mean 558.9
Std Dev 81.9
hasym_acc1
Entries 271012
Mean 632
Std Dev 68.27
hasym_e_acc
Entries 10000
Mean 633.5
Std Dev 68.12
shift 0.50 deg
50000
40000
30000
20000
10000
0
200
300
400
500
600
700
800
900
1000
asym(ppb)


angle with acceptance
×10^3
100
80
60
40
20
0
3
3.5
4
4.5
5
5.5
6
6.5
7
7.5
8
angle
origin
elemental
hth_origin
Entries 29793
Mean 4.673
Std Dev 0.5216
hth_e_acc
Entries 10000
Mean 4.184
Std Dev 0.5101


Q2 with acceptance
×10^3
140
120
100
80
60
40
20
0
0
0.002
0.004
0.006
0.008
0.01
0.012
0.014
Q2
origin
elemental
shift -0.50 deg
hq2_origin
Entries 29793
Mean 0.006108
Std Dev 0.00138
hq2_e_acc
Entries 10000
Mean 0.004917
Std Dev 0.001222


Asymmetry with acceptance
origin
reproduce
elemental
hasym_origin
Entries 29793
Mean 558.9
Std Dev 81.9
hasym_acc1
Entries 271012
Mean 475.4
Std Dev 88.75
hasym_e_acc
Entries 10000
Mean 476.8
Std Dev 88.7
shift -0.50 deg
50000
40000
30000
20000
10000
0
200
300
400
500
600
700
800
900
1000
asym(ppb)