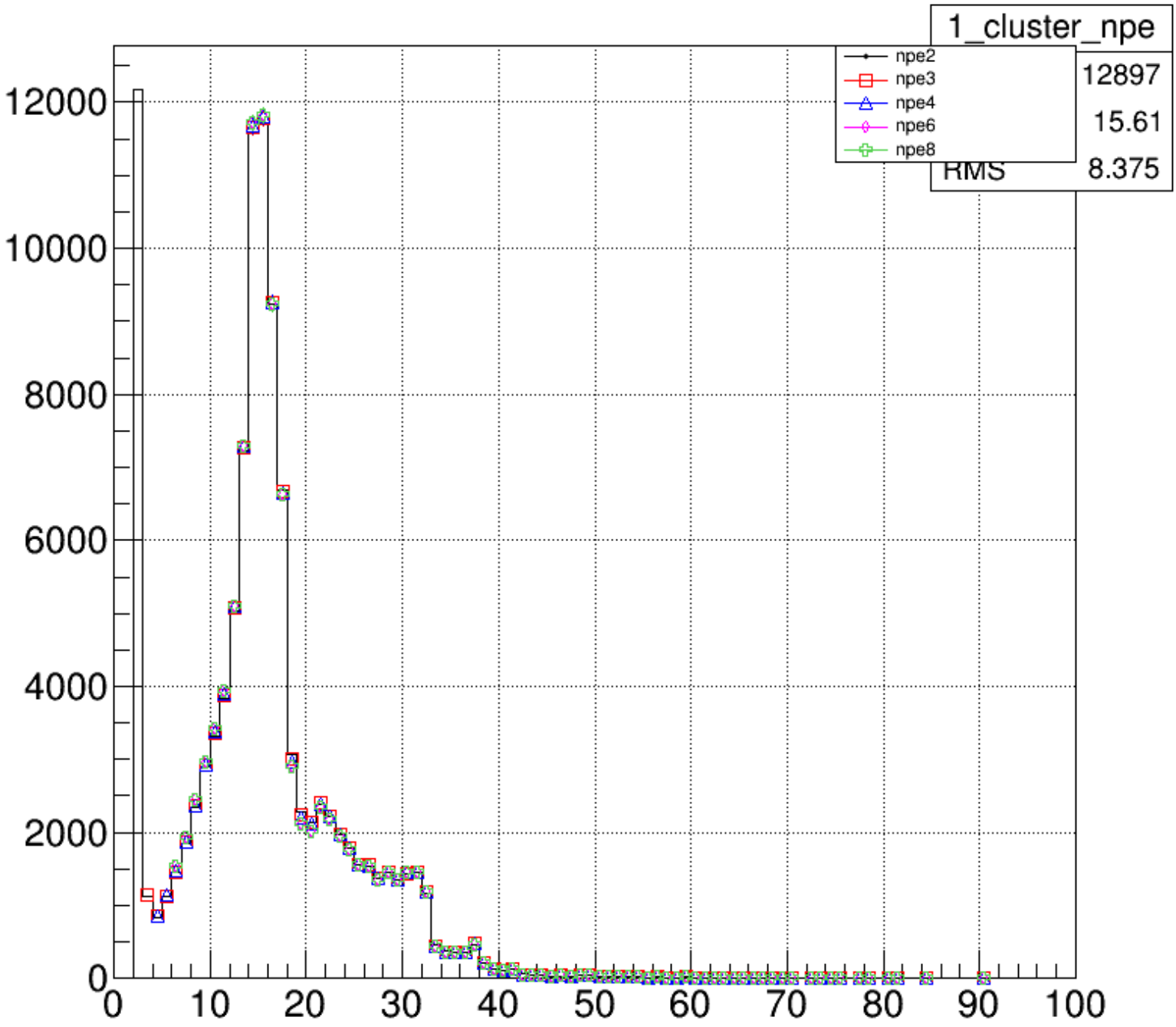
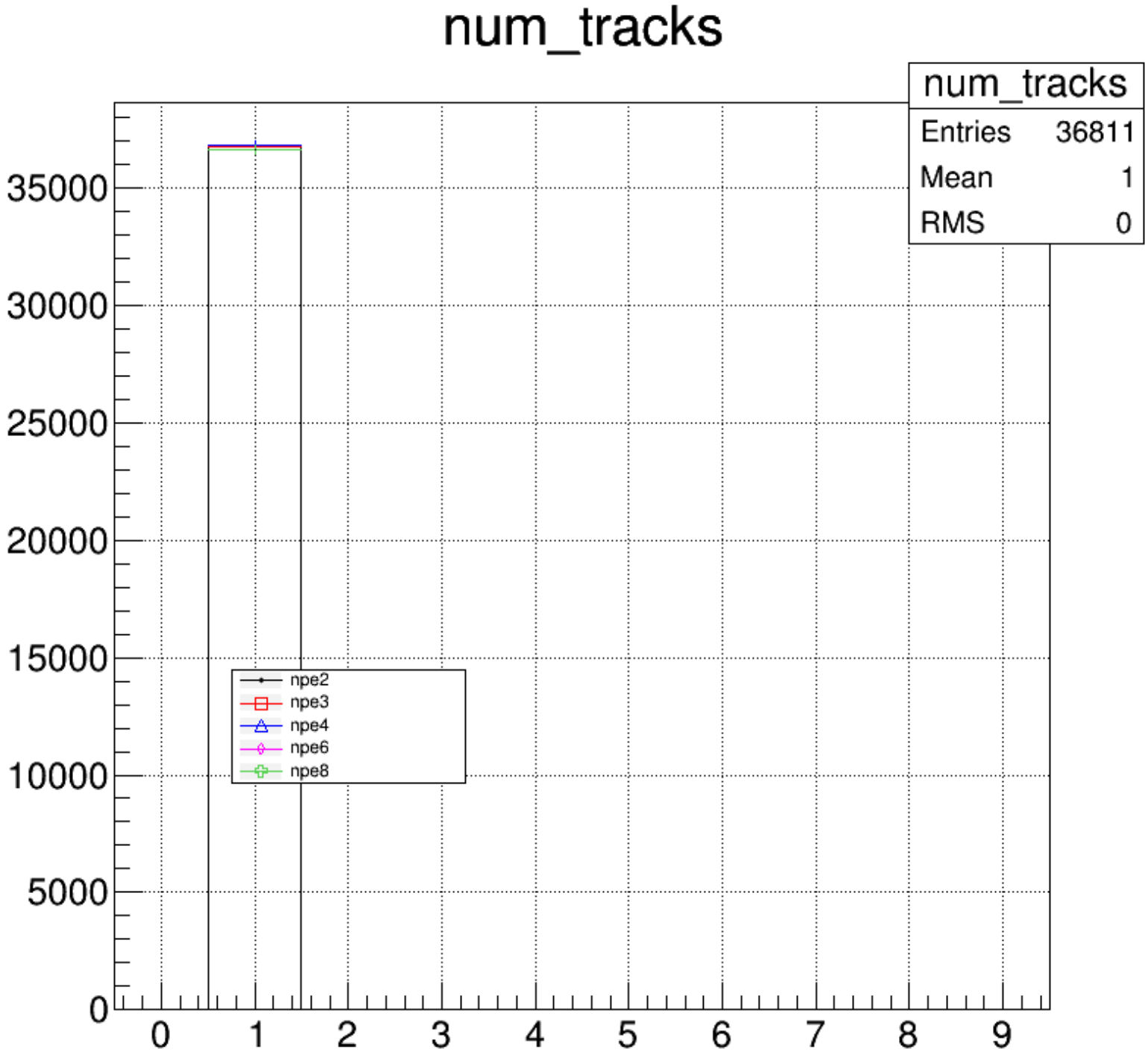
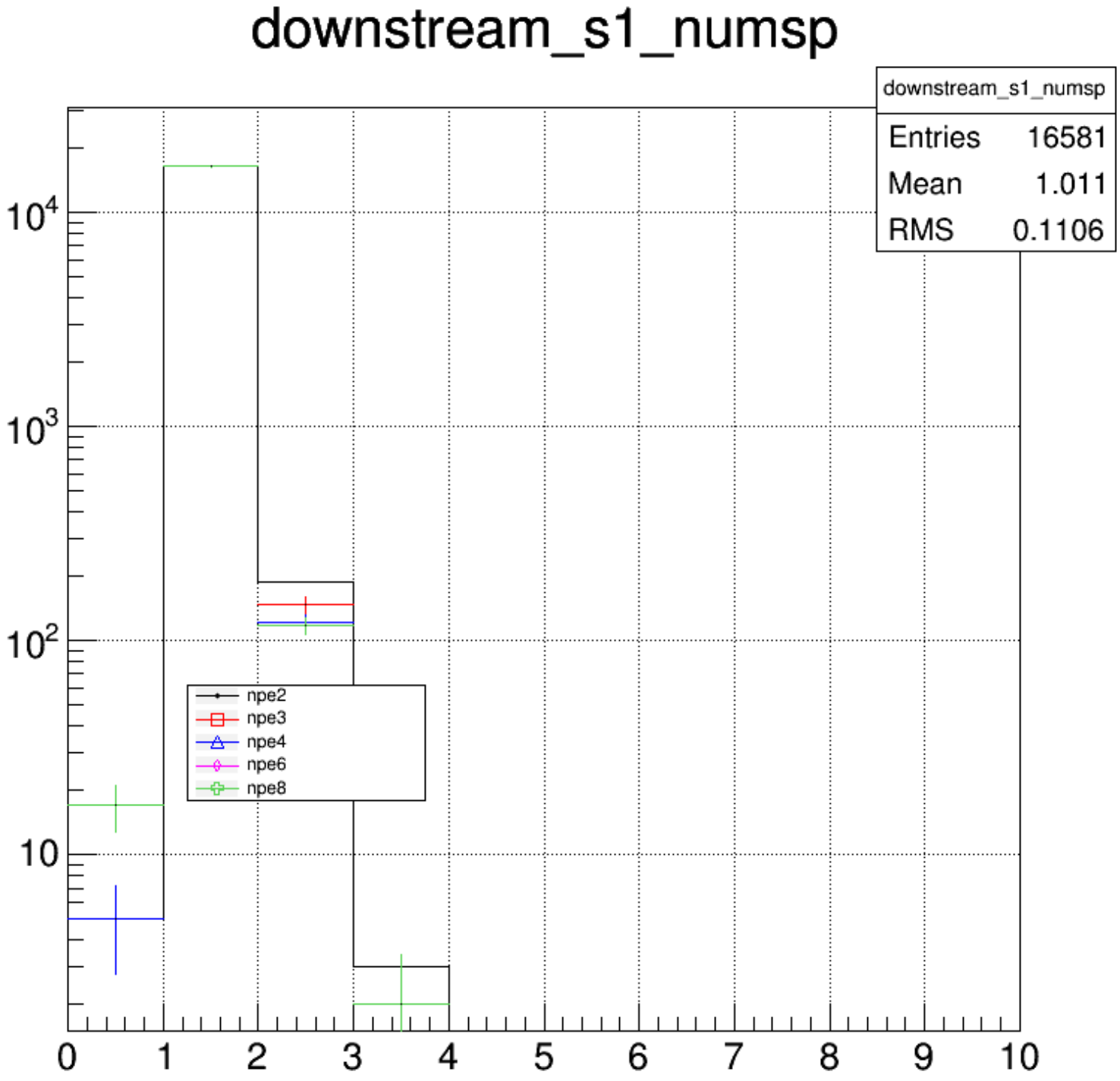
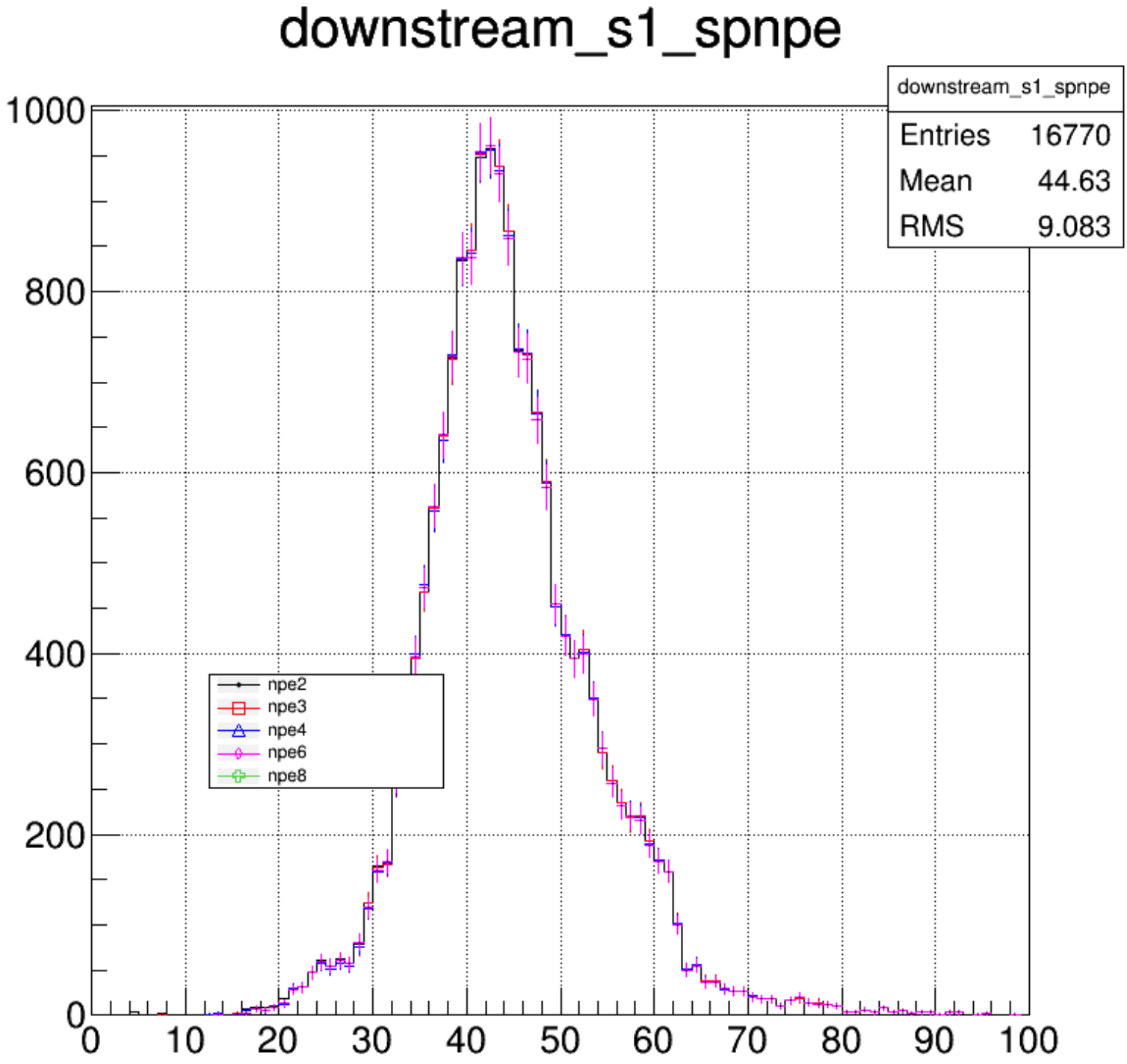
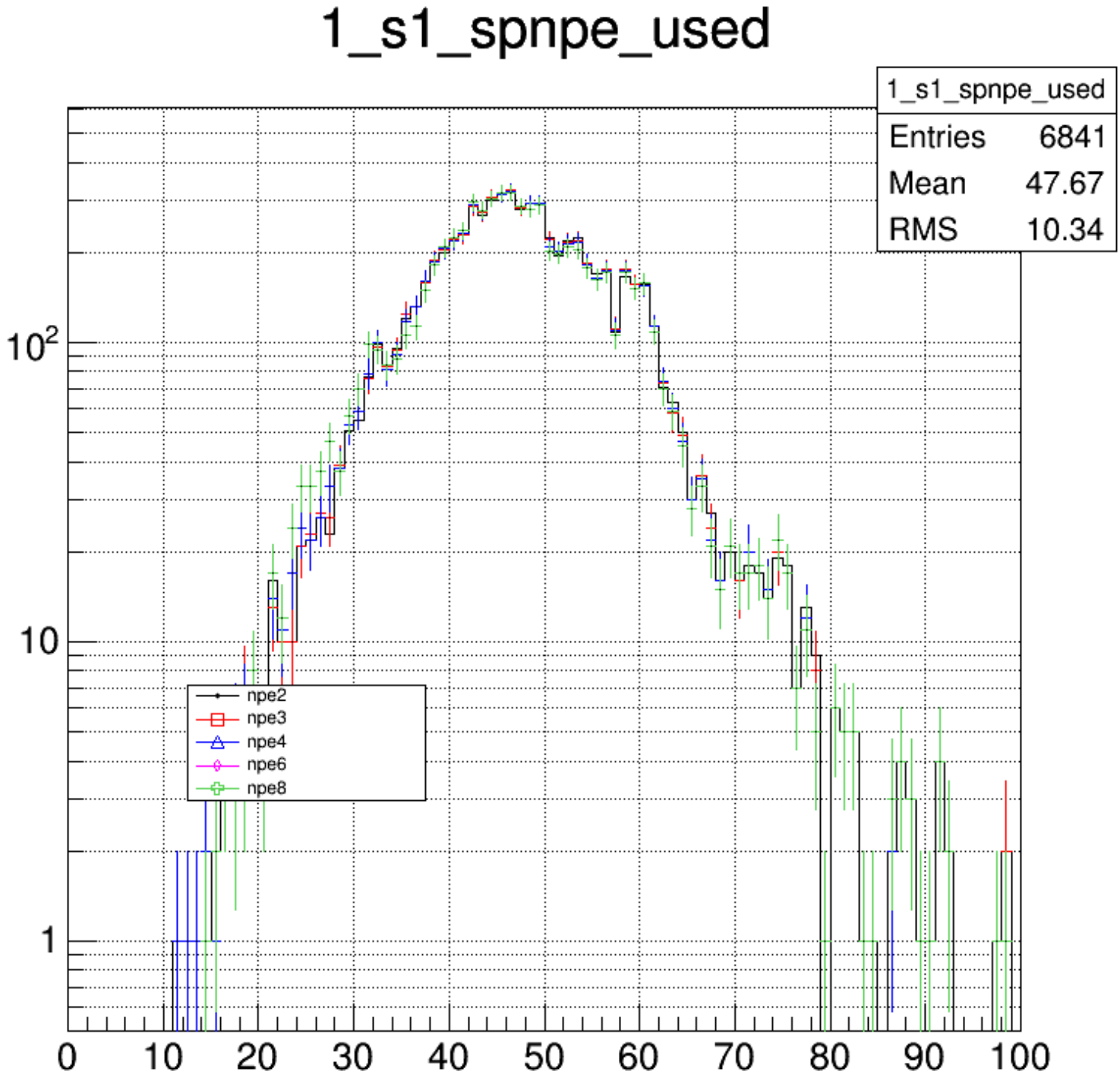
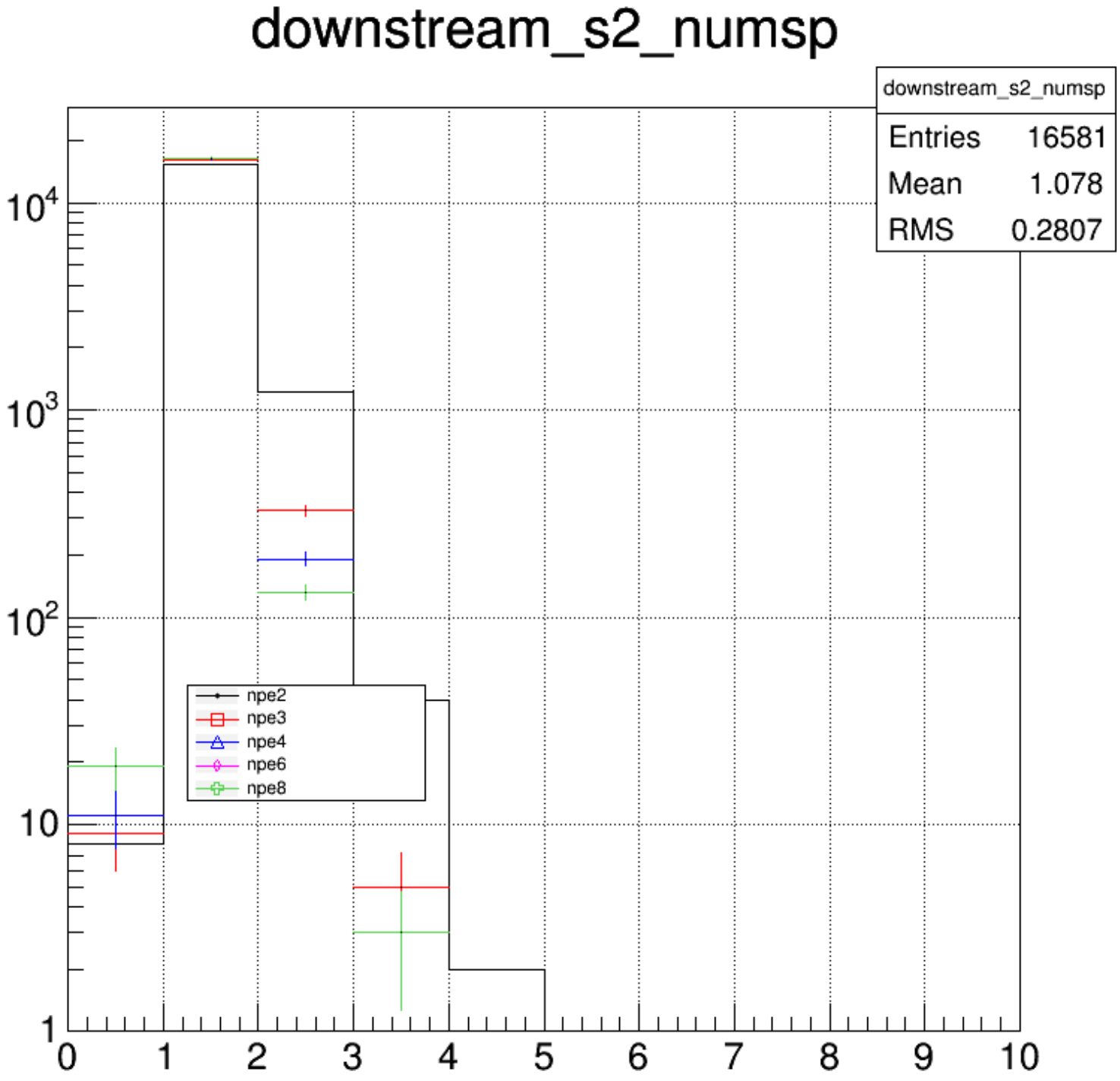

1_cluster_npe
npe2
npe3
npe4
npe6
npe8
12897
15.61
RMS
8.375
12000
10000
8000
6000
4000
2000
0
0
10
20
30
40
50
60
70
80
90
100

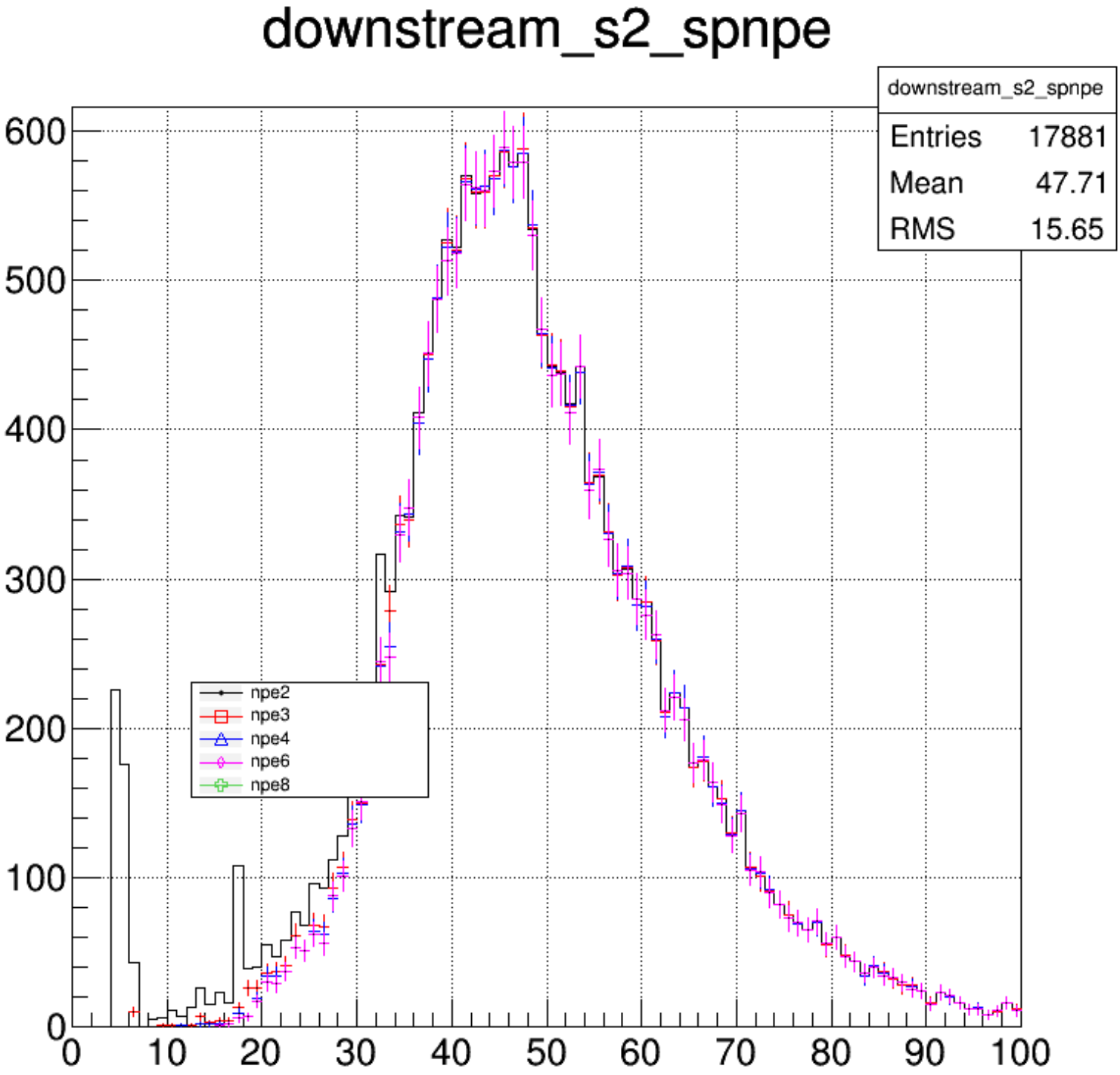

num_tracks
num_tracks
Entries 36811
Mean 1
RMS 0
35000
30000
25000
20000
15000
10000
5000
0
0 1 2 3 4 5 6 7 8 9
npe2
npe3
npe4
npe6
npe8

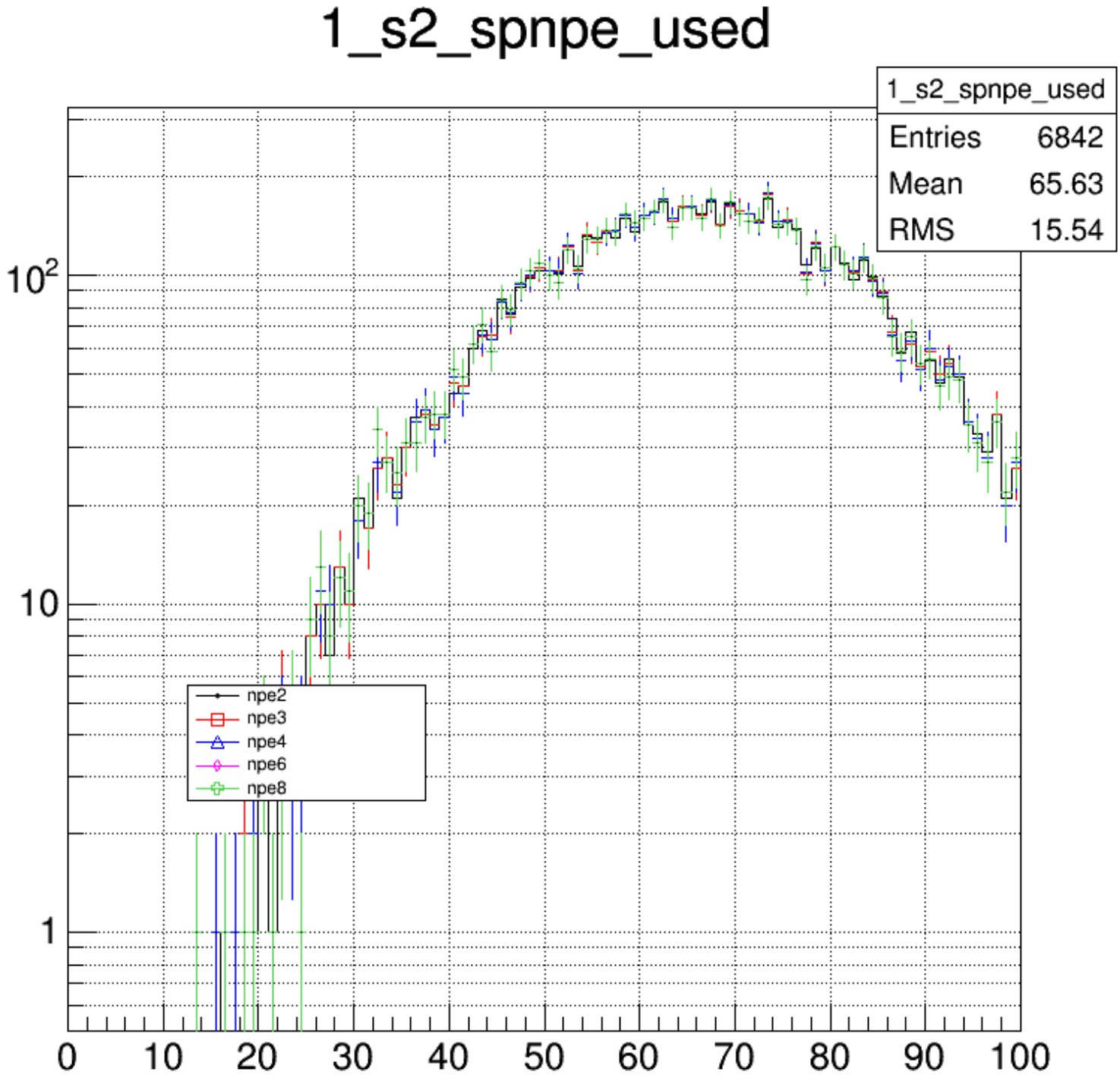

downstream_s1_numsp
downstream_s1_numsp
Entries 16581
Mean 1.011
RMS 0.1106
10^4
10^3
10^2
10
0 1 2 3 4 5 6 7 8 9 10
npe2
npe3
npe4
npe6
npe8

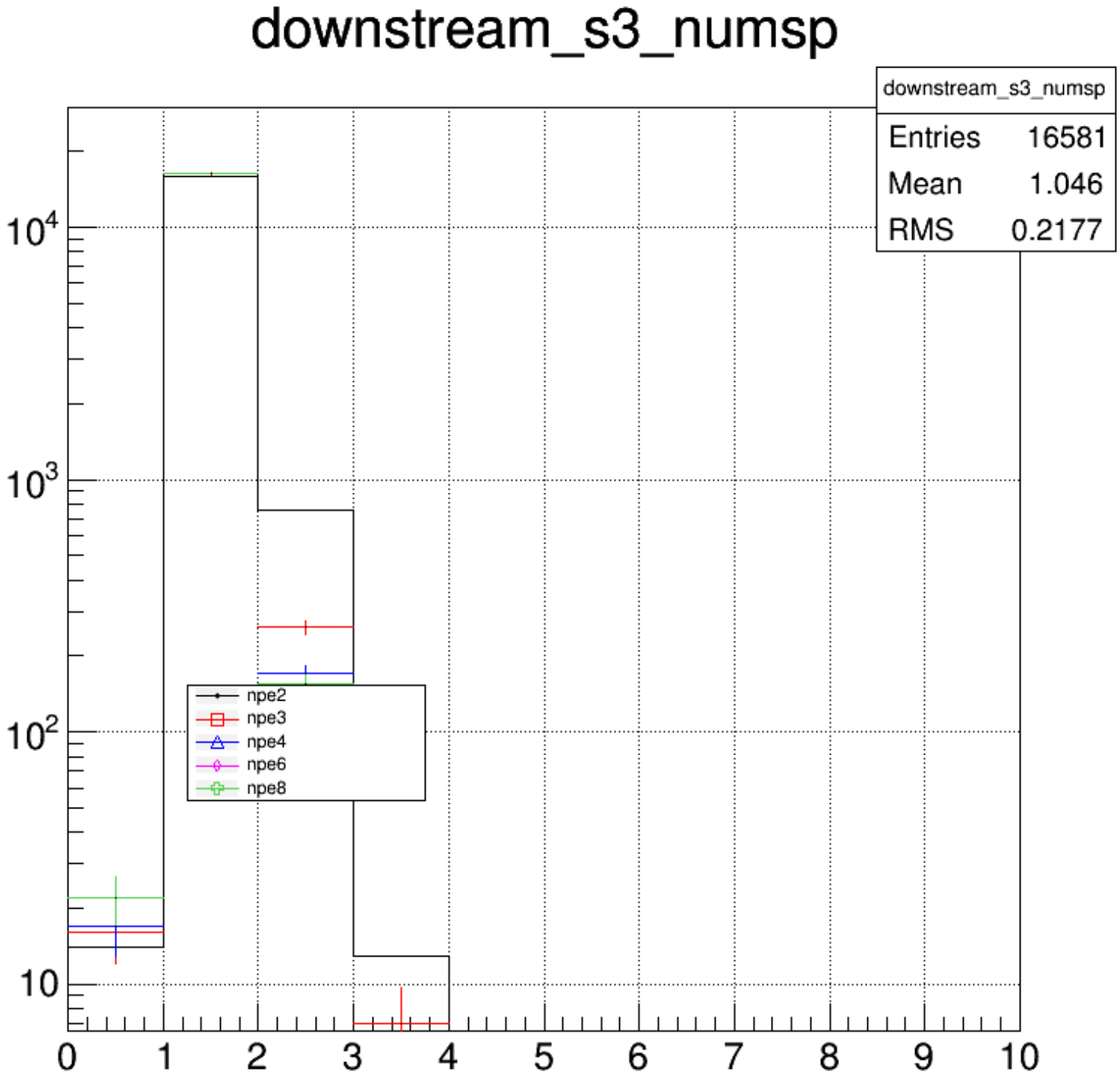

downstream_s1_spnpe
downstream_s1_spnpe
Entries 16770
Mean 44.63
RMS 9.083
npe2
npe3
npe4
npe6
npe8
0
200
400
600
800
1000
0
10
20
30
40
50
60
70
80
90
100

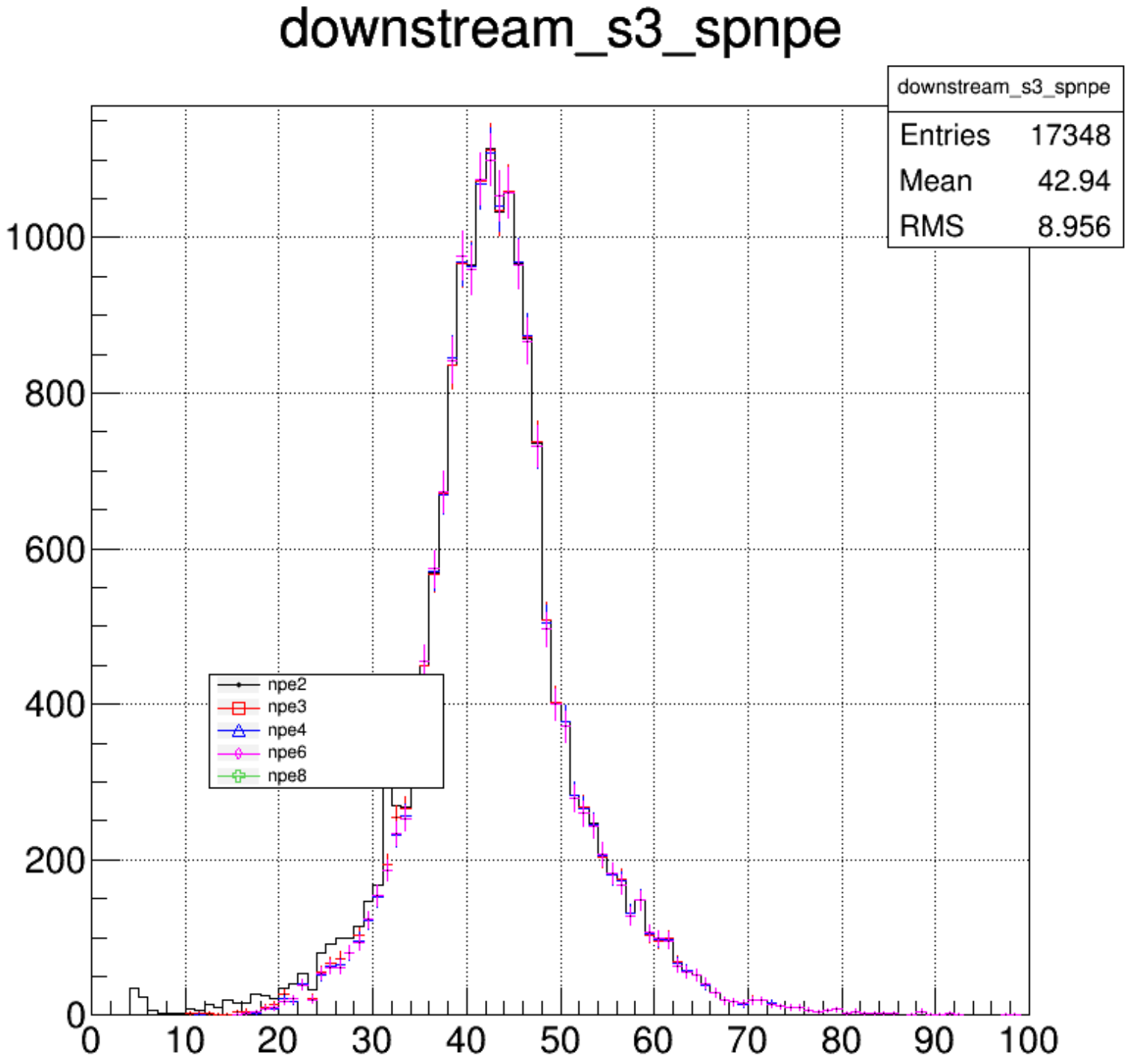

1_s1_spnpe_used
1_s1_spnpe_used
Entries 6841
Mean 47.67
RMS 10.34
10^2
10
1
npe2
npe3
npe4
npe6
npe8
0
10
20
30
40
50
60
70
80
90
100

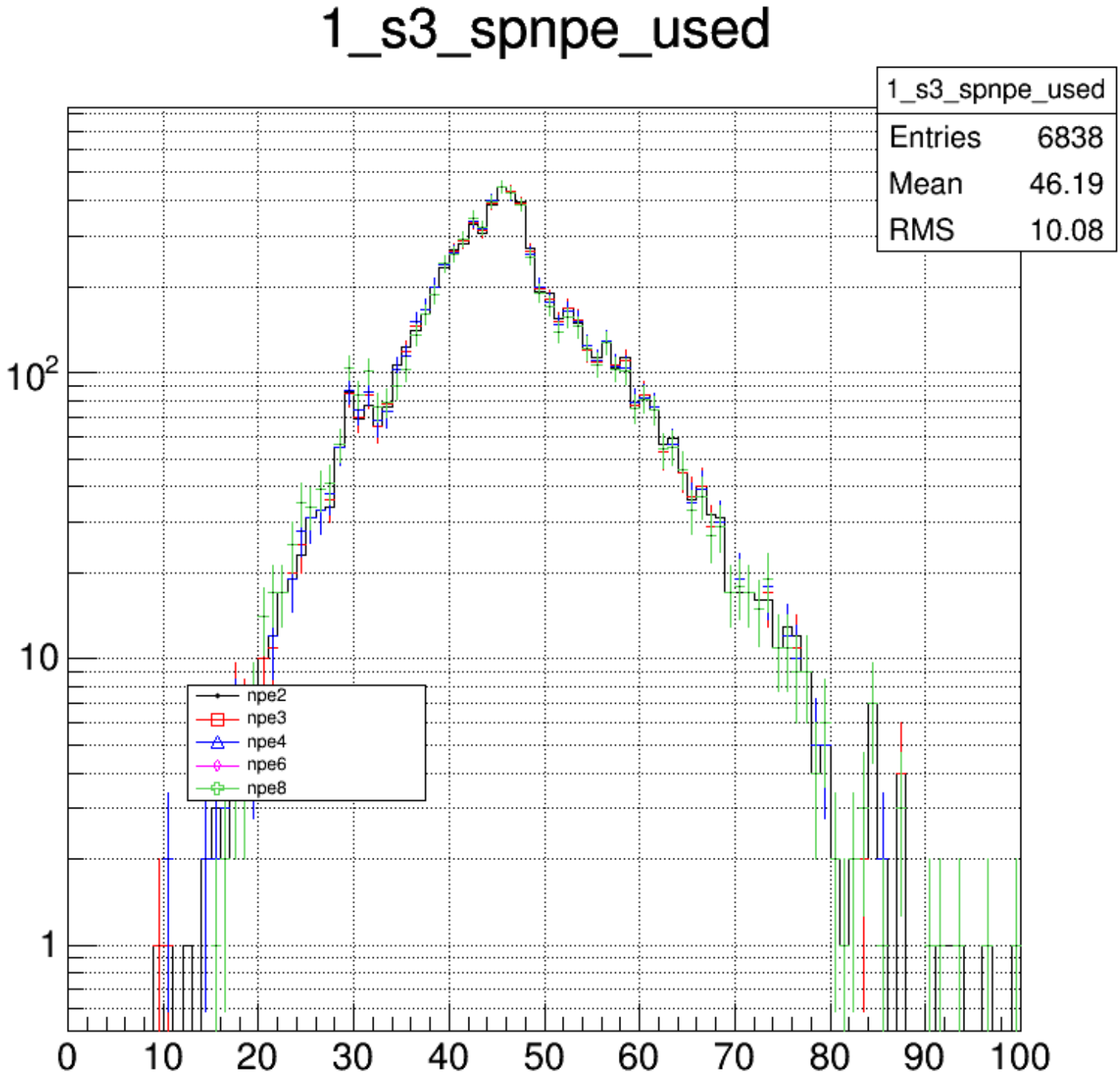

downstream_s2_numsp
downstream_s2_numsp
Entries 16581
Mean 1.078
RMS 0.2807
10^4
10^3
10^2
10
1
0 1 2 3 4 5 6 7 8 9 10
npe2
npe3
npe4
npe6
npe8

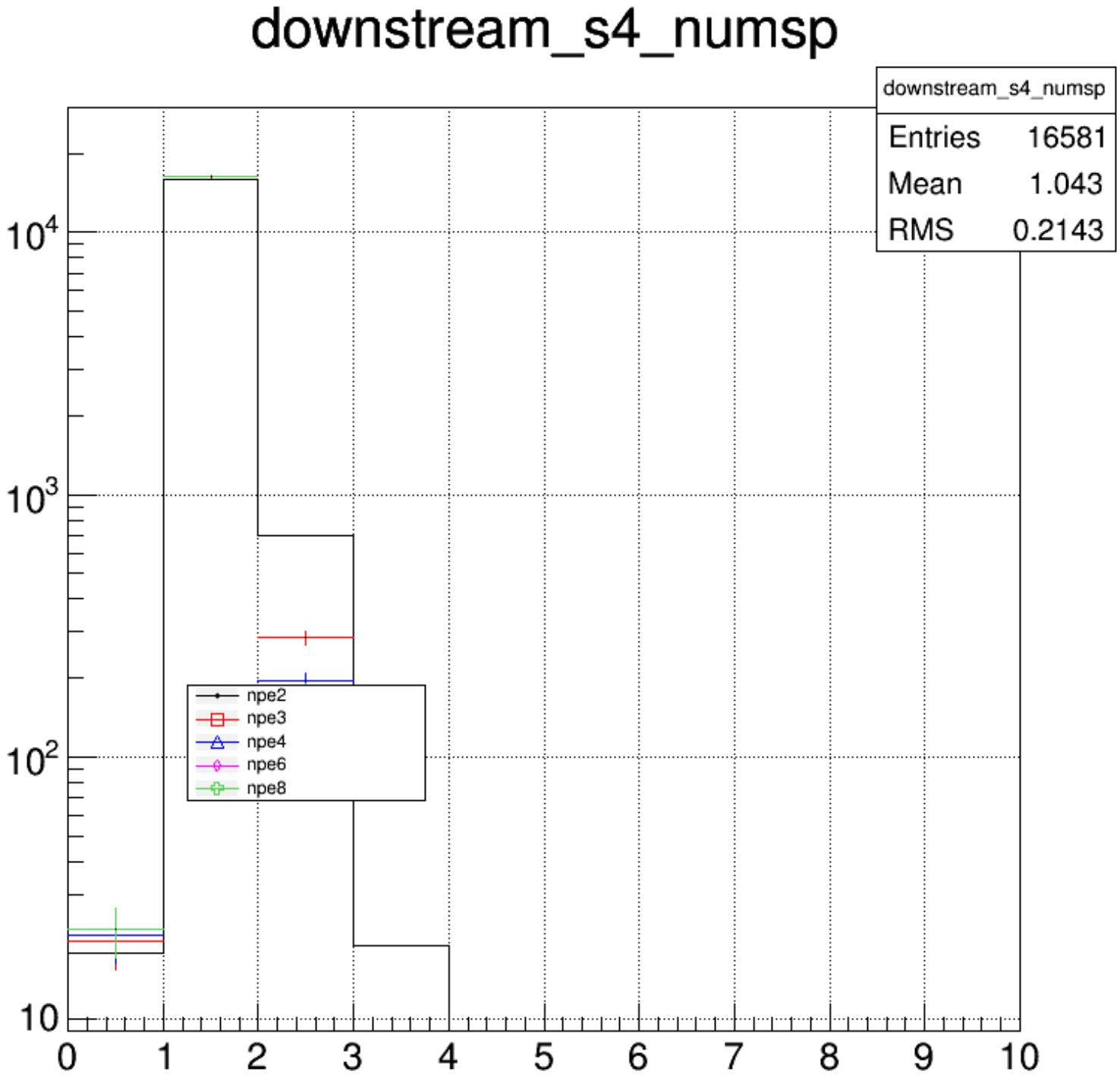

downstream_s2_spnpe
downstream_s2_spnpe
Entries 17881
Mean 47.71
RMS 15.65
npe2
npe3
npe4
npe6
npe8
0
100
200
300
400
500
600
0
10
20
30
40
50
60
70
80
90
100

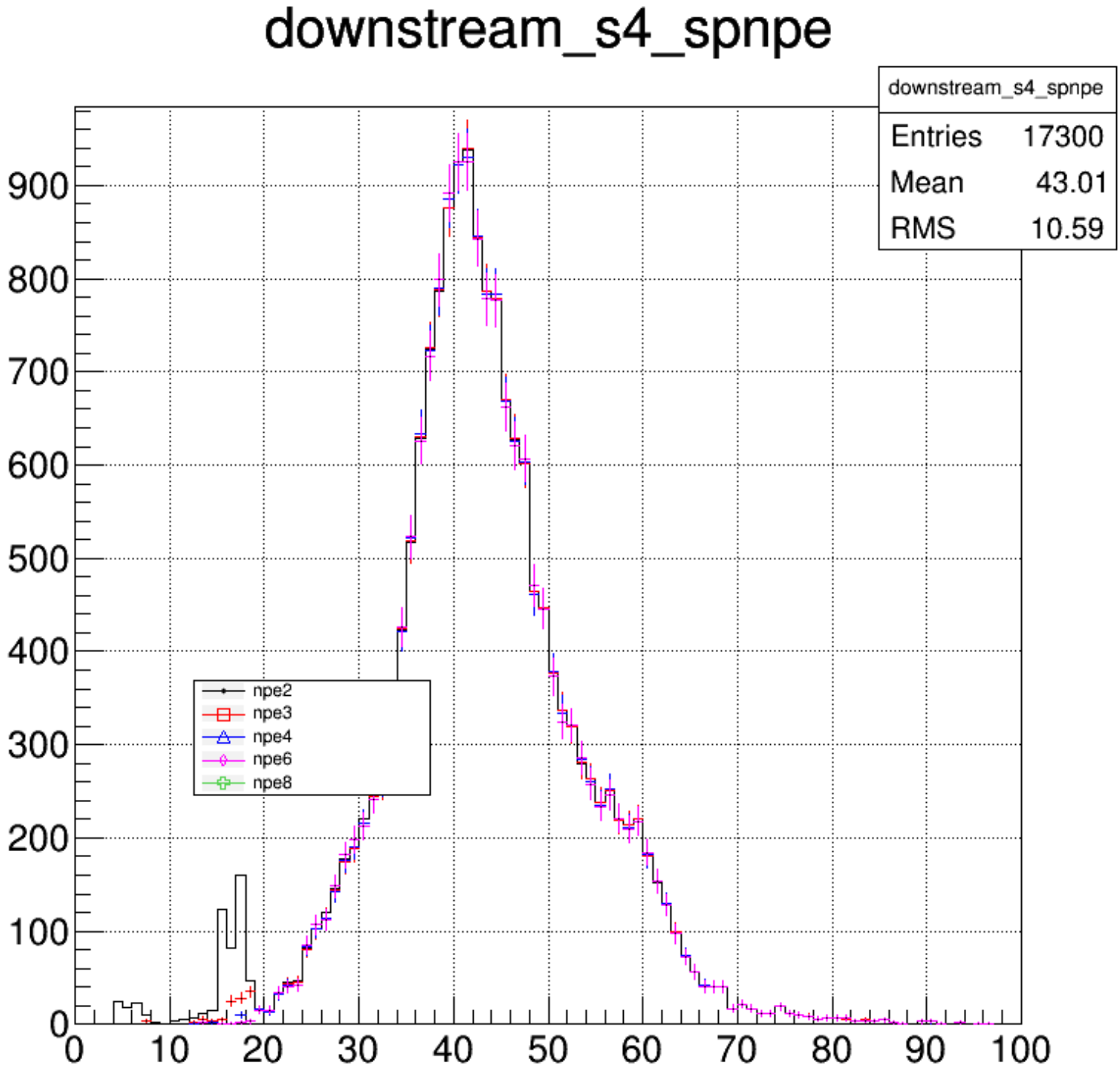

1_s2_spnpe_used
1_s2_spnpe_used
Entries 6842
Mean 65.63
RMS 15.54
10^2
10
1
0 10 20 30 40 50 60 70 80 90 100
npe2
npe3
npe4
npe6
npe8

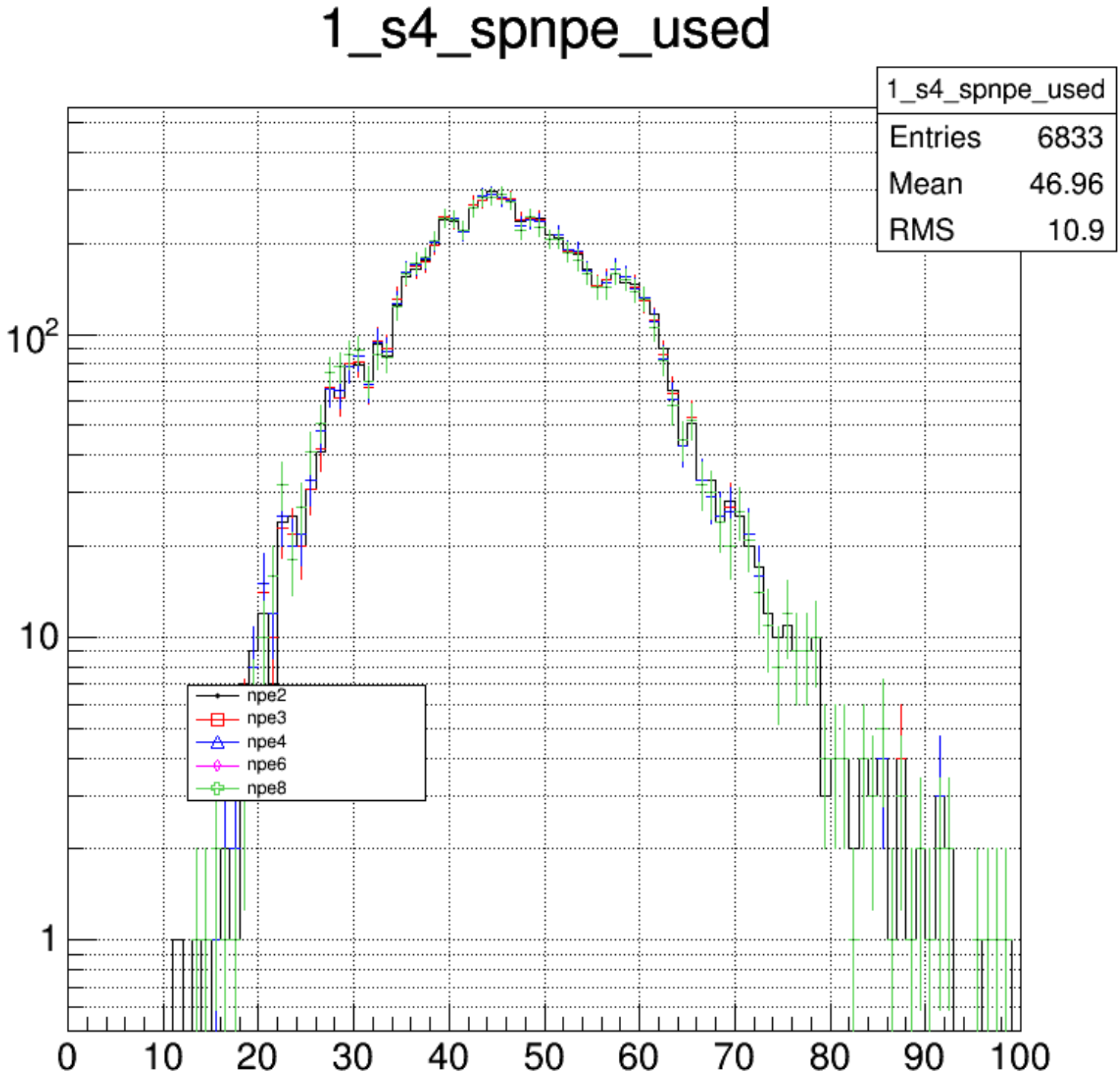

downstream_s3_numsp
downstream_s3_numsp
Entries 16581
Mean 1.046
RMS 0.2177
10^4
10^3
10^2
10
0 1 2 3 4 5 6 7 8 9 10
npe2
npe3
npe4
npe6
npe8

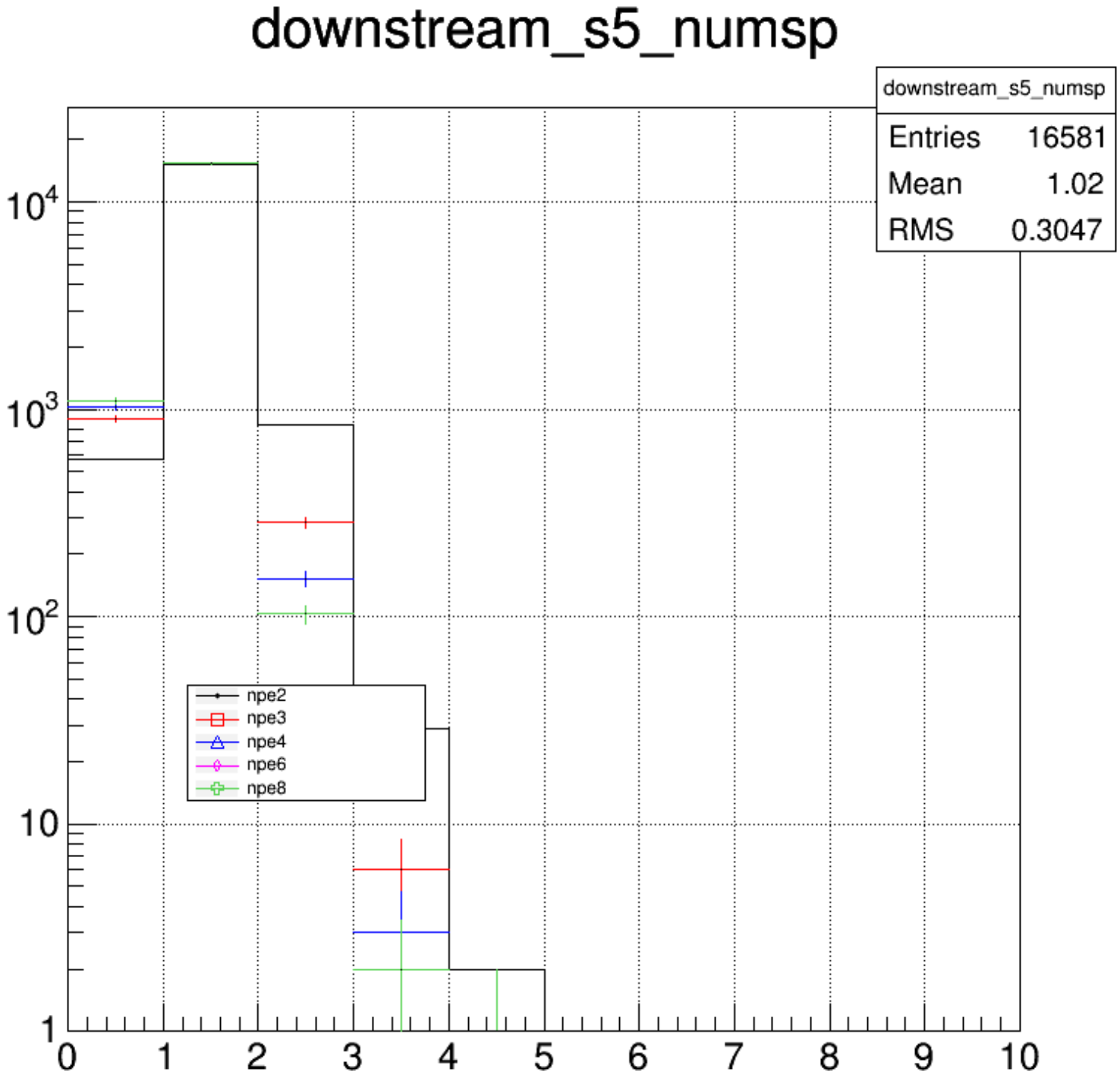

downstream_s3_spnpe
downstream_s3_spnpe
Entries 17348
Mean 42.94
RMS 8.956
npe2
npe3
npe4
npe6
npe8
0
200
400
600
800
1000
0
10
20
30
40
50
60
70
80
90
100

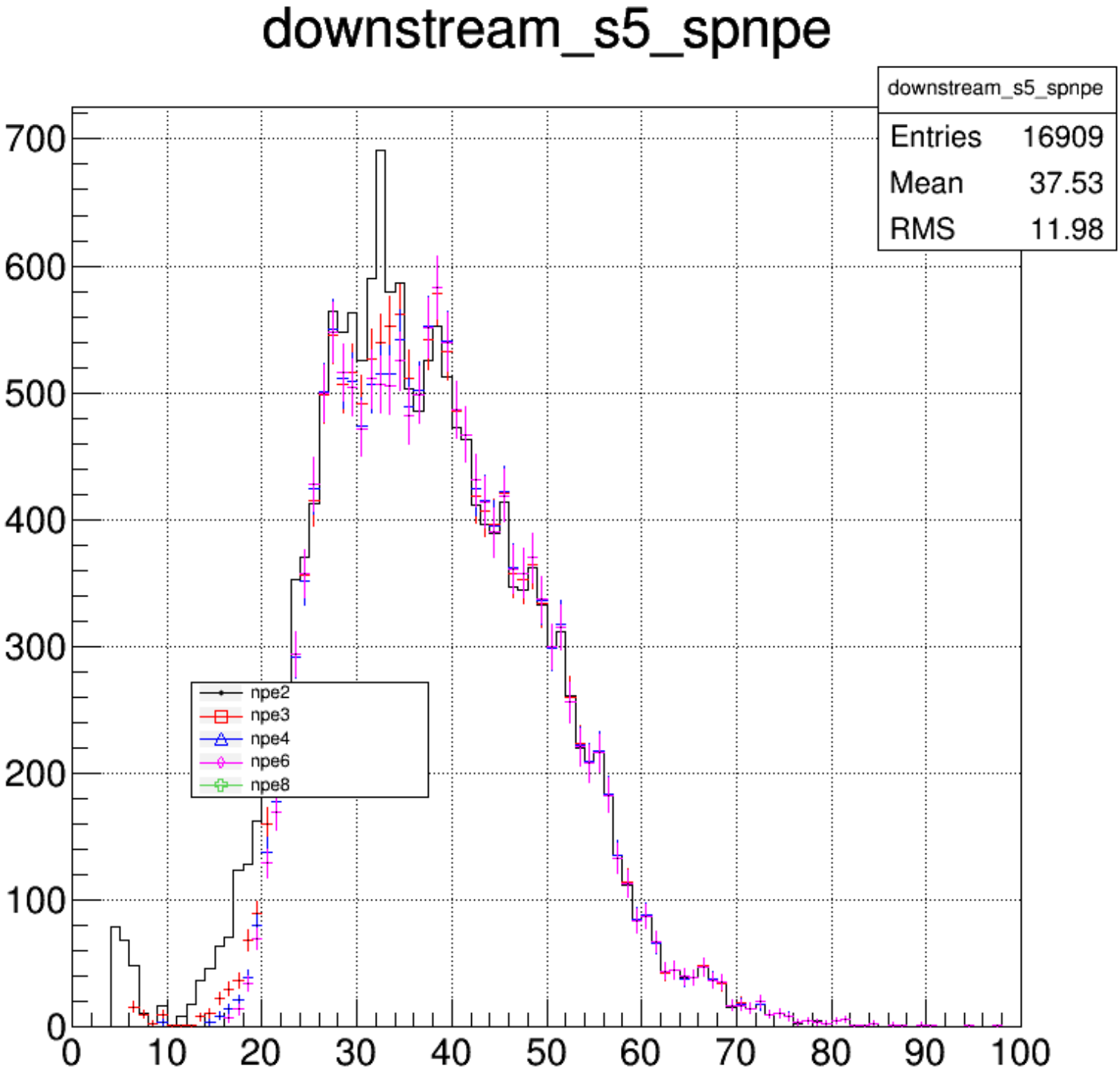

1_s3_spnpe_used
1_s3_spnpe_used
Entries 6838
Mean 46.19
RMS 10.08
10^2
10
1
npe2
npe3
npe4
npe6
npe8
0
10
20
30
40
50
60
70
80
90
100

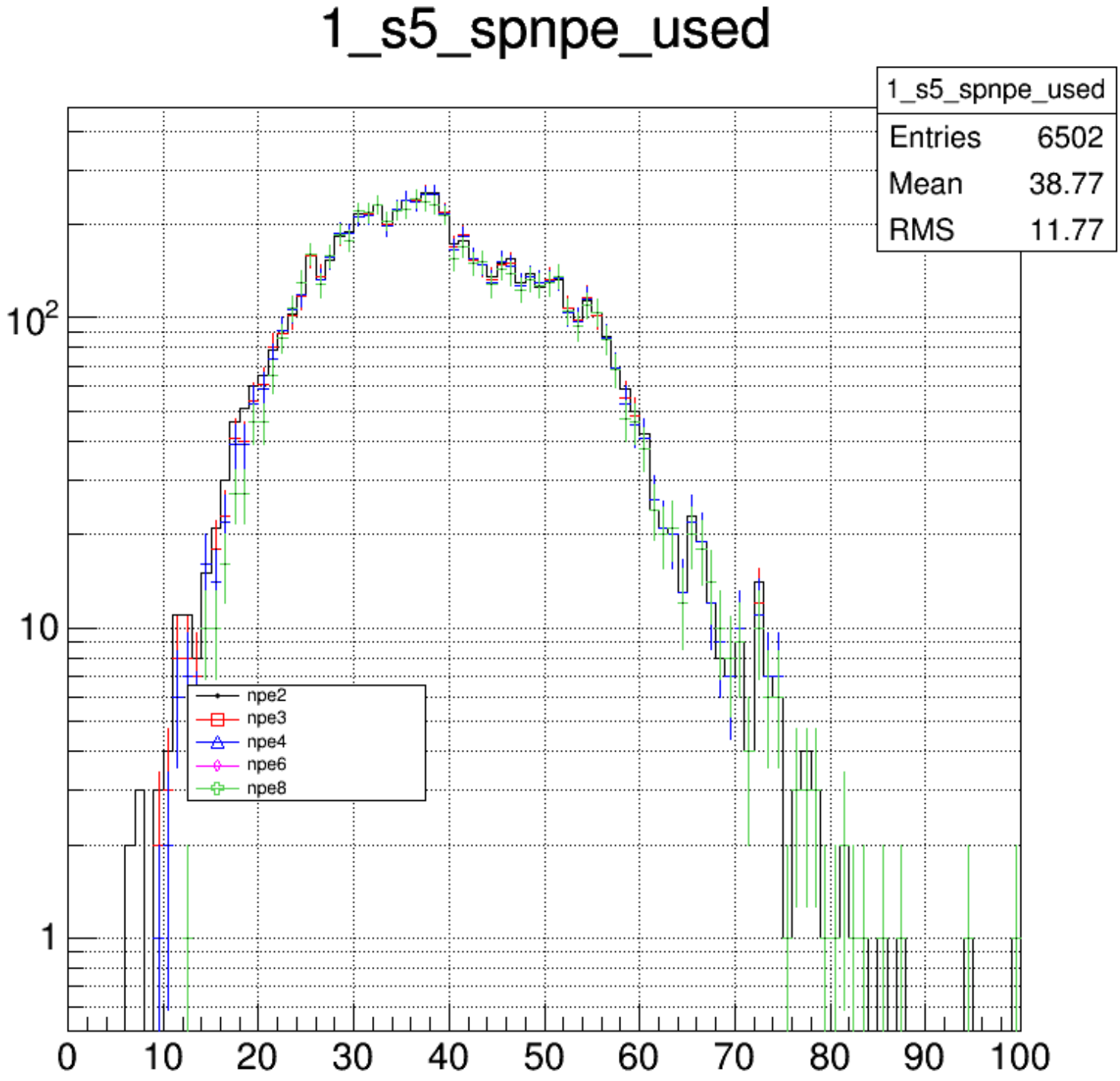

downstream_s4_numsp
downstream_s4_numsp
Entries 16581
Mean 1.043
RMS 0.2143
10^4
10^3
10^2
10
0 1 2 3 4 5 6 7 8 9 10
npe2
npe3
npe4
npe6
npe8

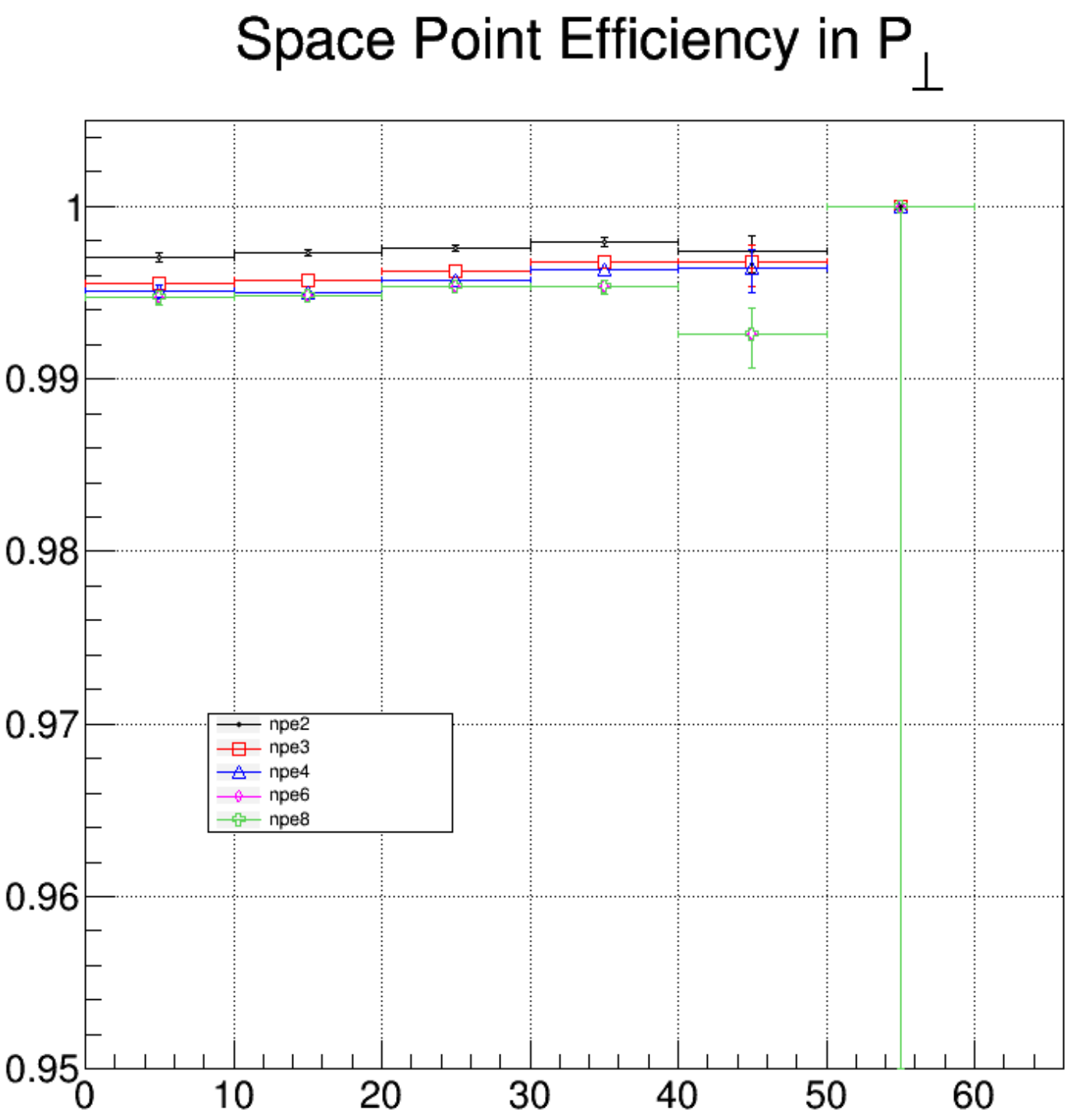

downstream_s4_spnpe
downstream_s4_spnpe
Entries 17300
Mean 43.01
RMS 10.59
npe2
npe3
npe4
npe6
npe8
0
100
200
300
400
500
600
700
800
900
0
10
20
30
40
50
60
70
80
90
100

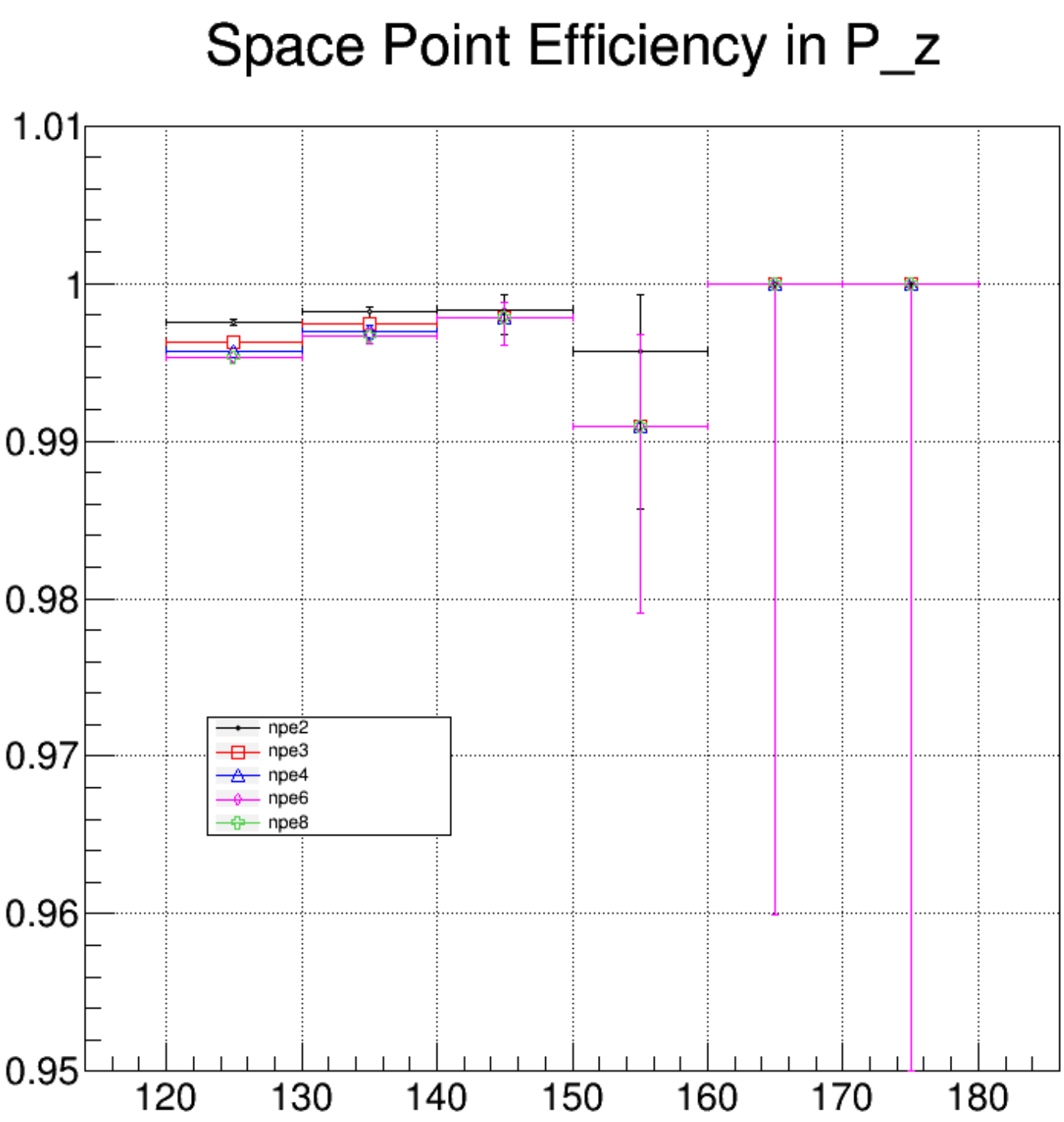

1_s4_spnpe_used
1_s4_spnpe_used
Entries 6833
Mean 46.96
RMS 10.9
npe2
npe3
npe4
npe6
npe8
10^2
10
1
0
10
20
30
40
50
60
70
80
90
100

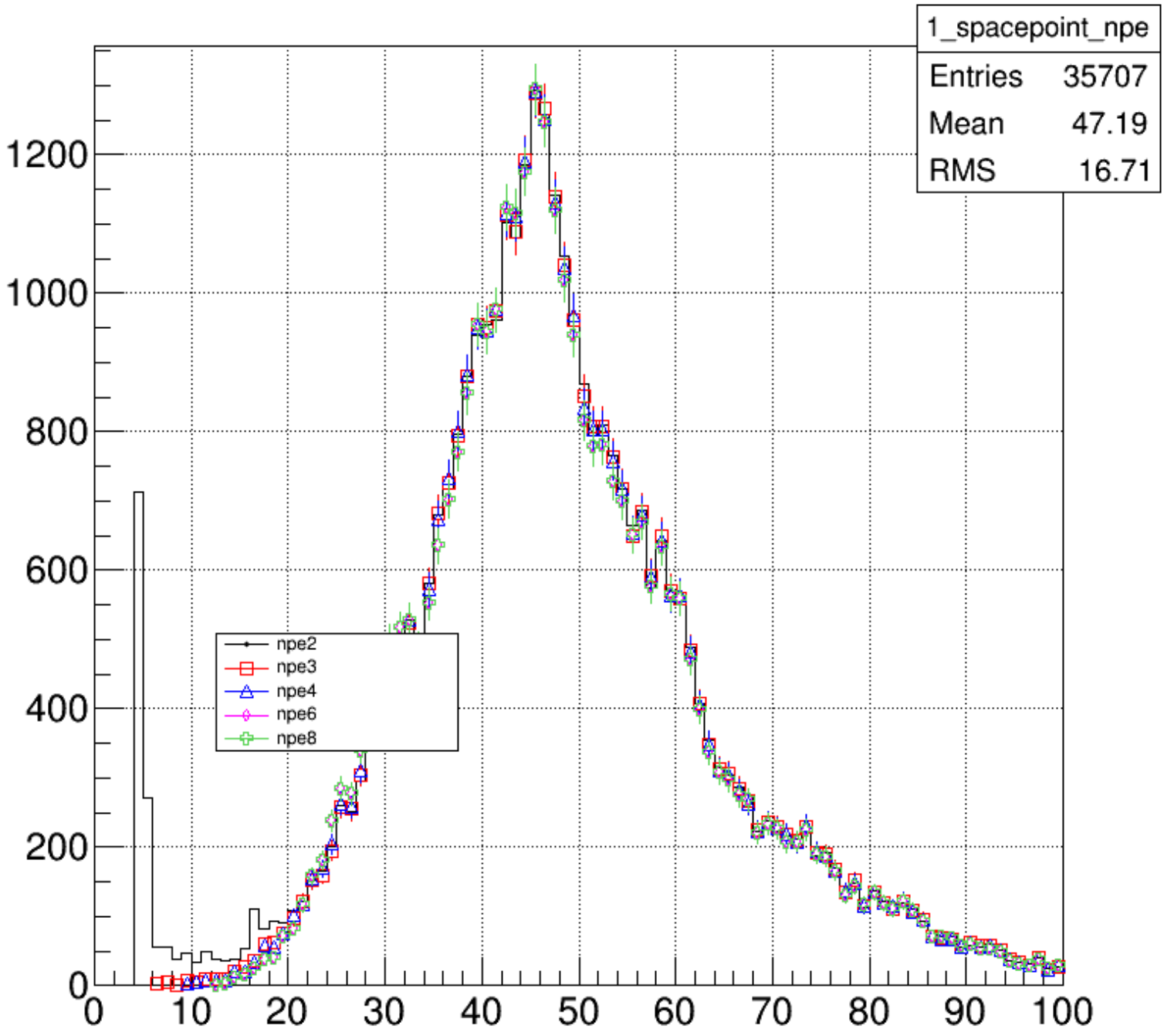

downstream_s5_numsp
downstream_s5_numsp
Entries 16581
Mean 1.02
RMS 0.3047
npe2
npe3
npe4
npe6
npe8
10^4
10^3
10^2
10
1
0
1
2
3
4
5
6
7
8
9
10

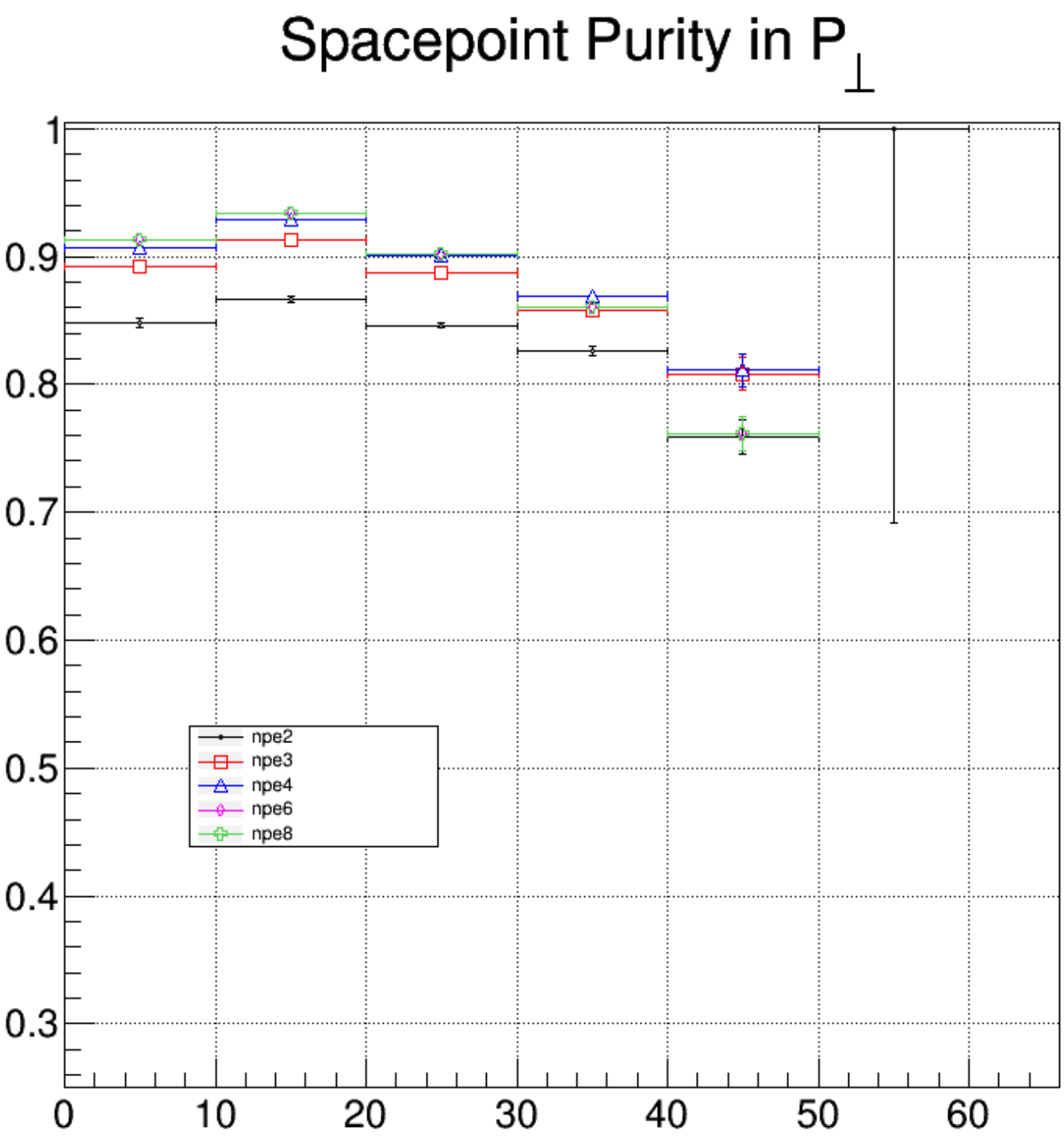

downstream_s5_spnpe
downstream_s5_spnpe
Entries 16909
Mean 37.53
RMS 11.98
npe2
npe3
npe4
npe6
npe8
0
100
200
300
400
500
600
700
0
10
20
30
40
50
60
70
80
90
100


1_s5_spnpe_used
1_s5_spnpe_used
Entries 6502
Mean 38.77
RMS 11.77
10^2
10
1
npe2
npe3
npe4
npe6
npe8
0
10
20
30
40
50
60
70
80
90
100

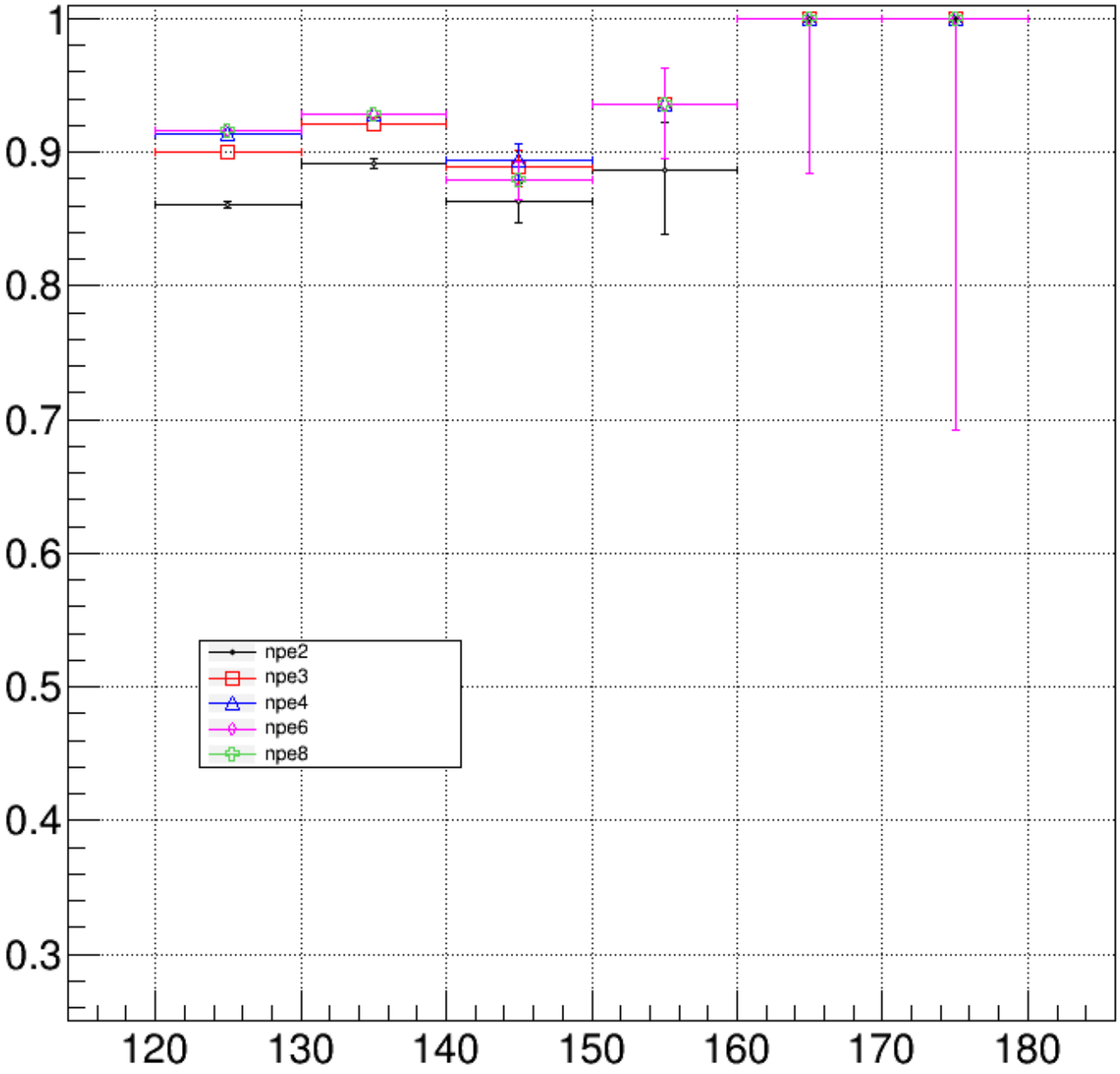

Space Point Efficiency in P⊥
1
0.99
0.98
0.97
0.96
0.95
0
10
20
30
40
50
60
npe2
npe3
npe4
npe6
npe8

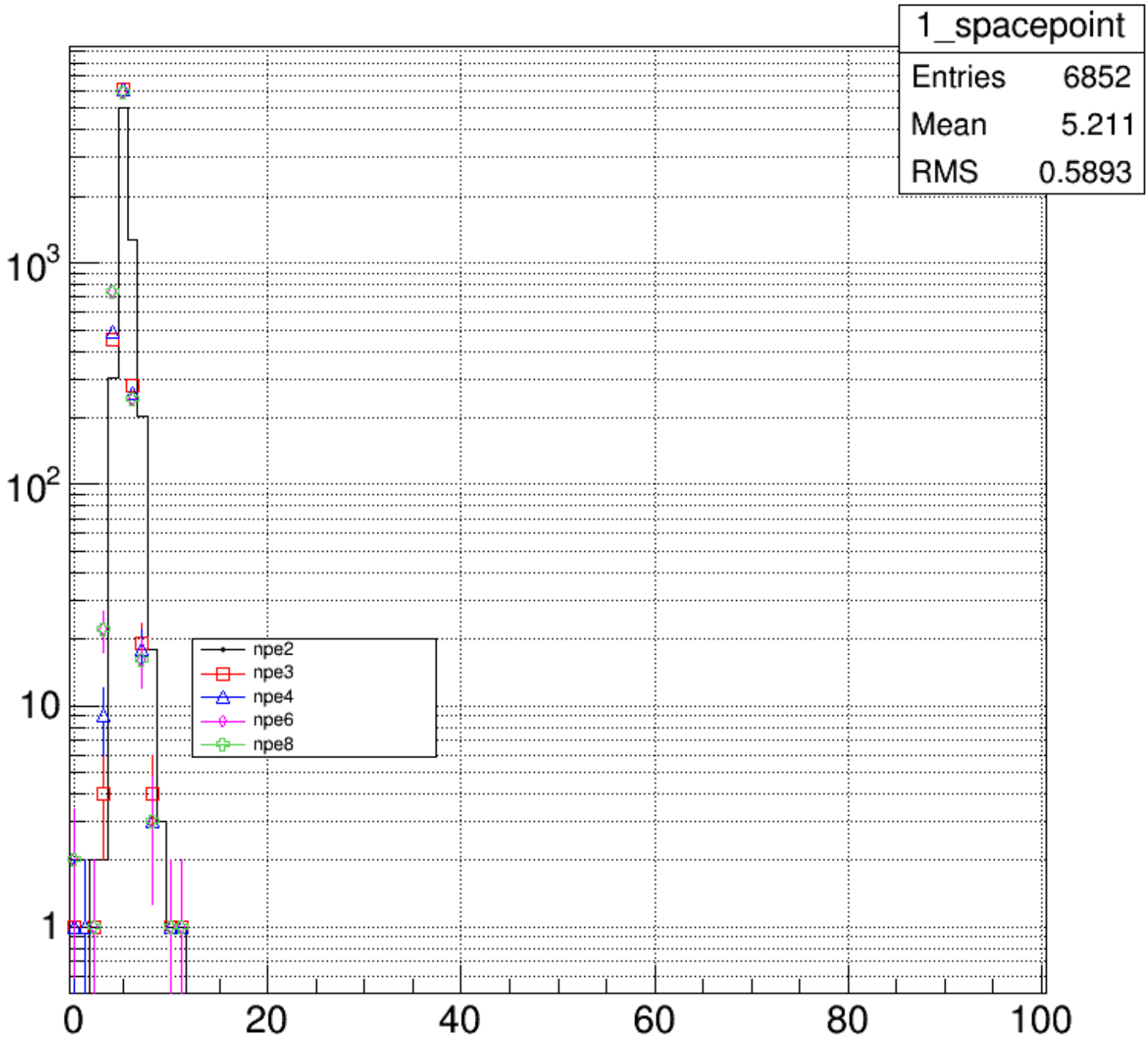

Space Point Efficiency in P_z
1.01
1
0.99
0.98
0.97
0.96
0.95
120
130
140
150
160
170
180
npe2
npe3
npe4
npe6
npe8

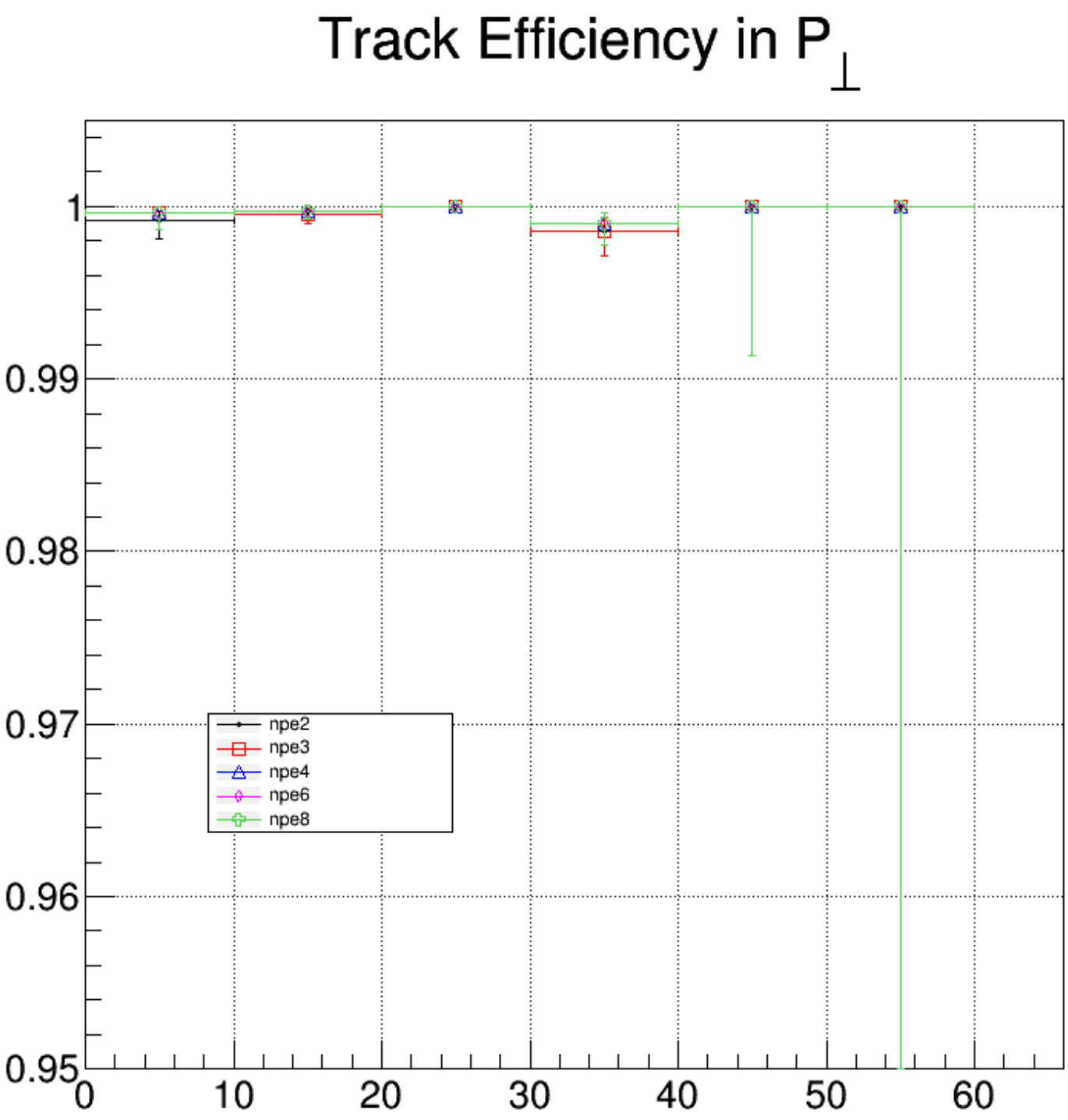

1_spacepoint_npe
Entries 35707
Mean 47.19
RMS 16.71
npe2
npe3
npe4
npe6
npe8
0
200
400
600
800
1000
1200
0
10
20
30
40
50
60
70
80
90
100

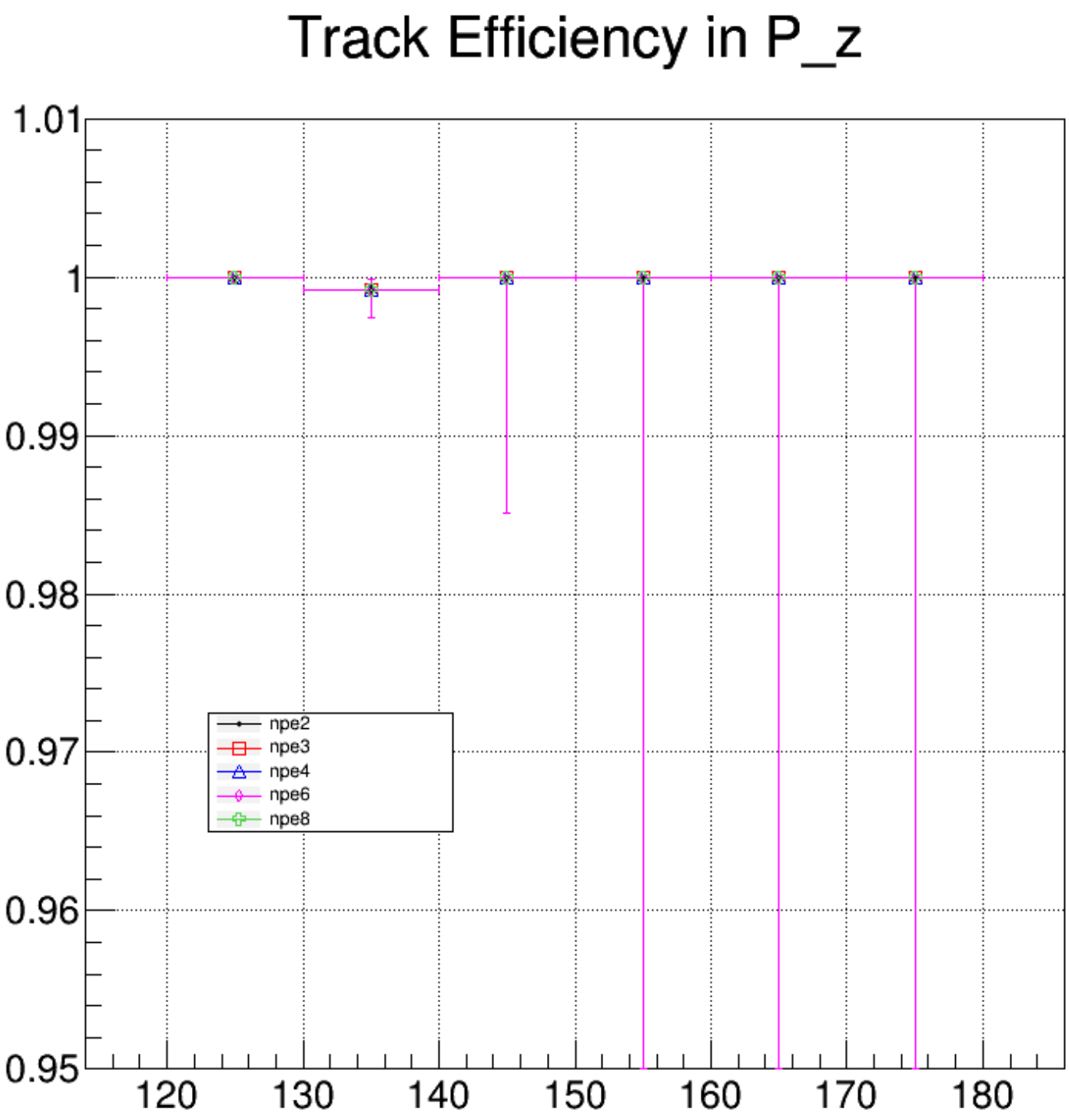

Spacepoint Purity in P⊥
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0
10
20
30
40
50
60
npe2
npe3
npe4
npe6
npe8

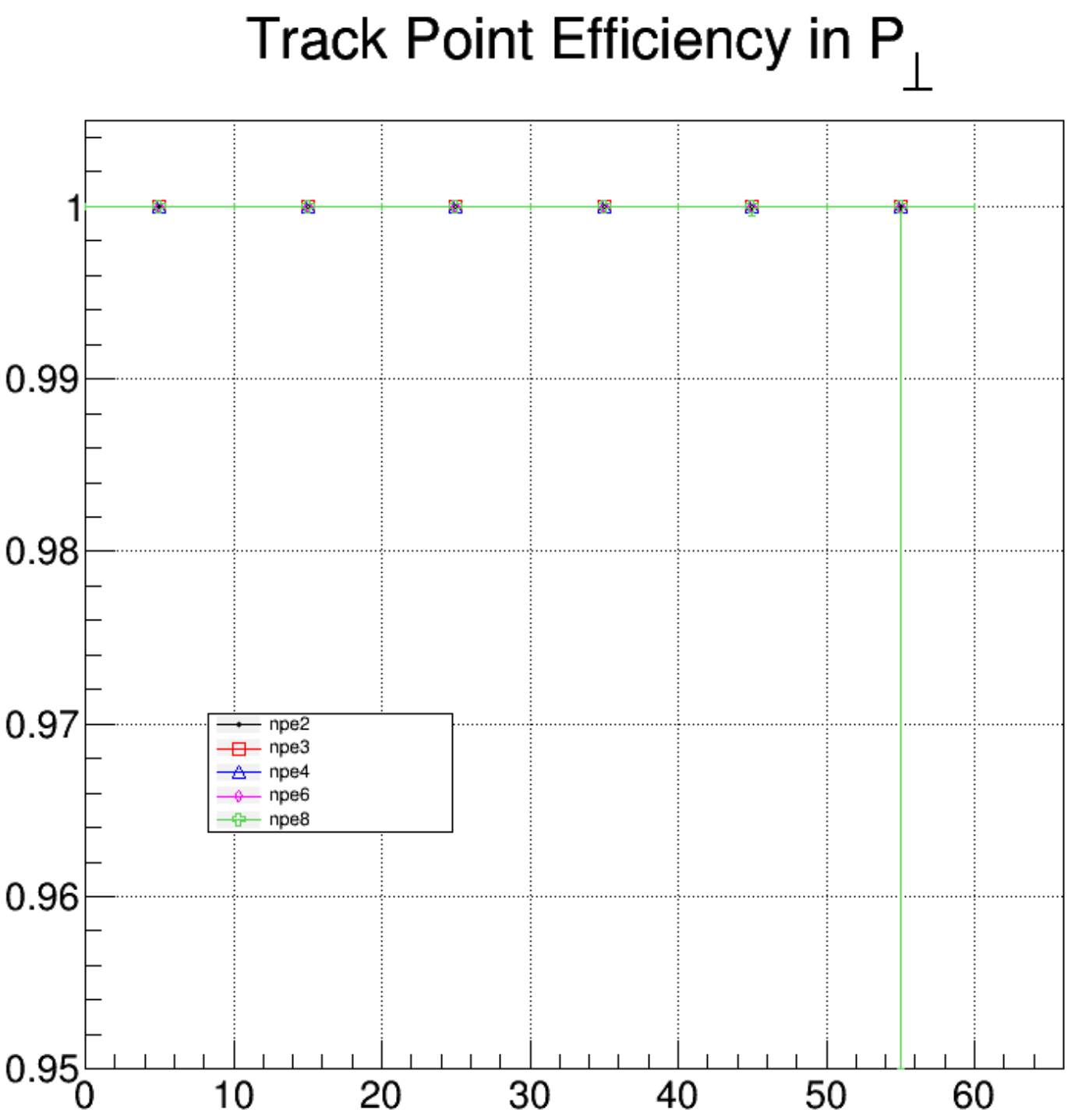
Spacepoint Purity in P_z

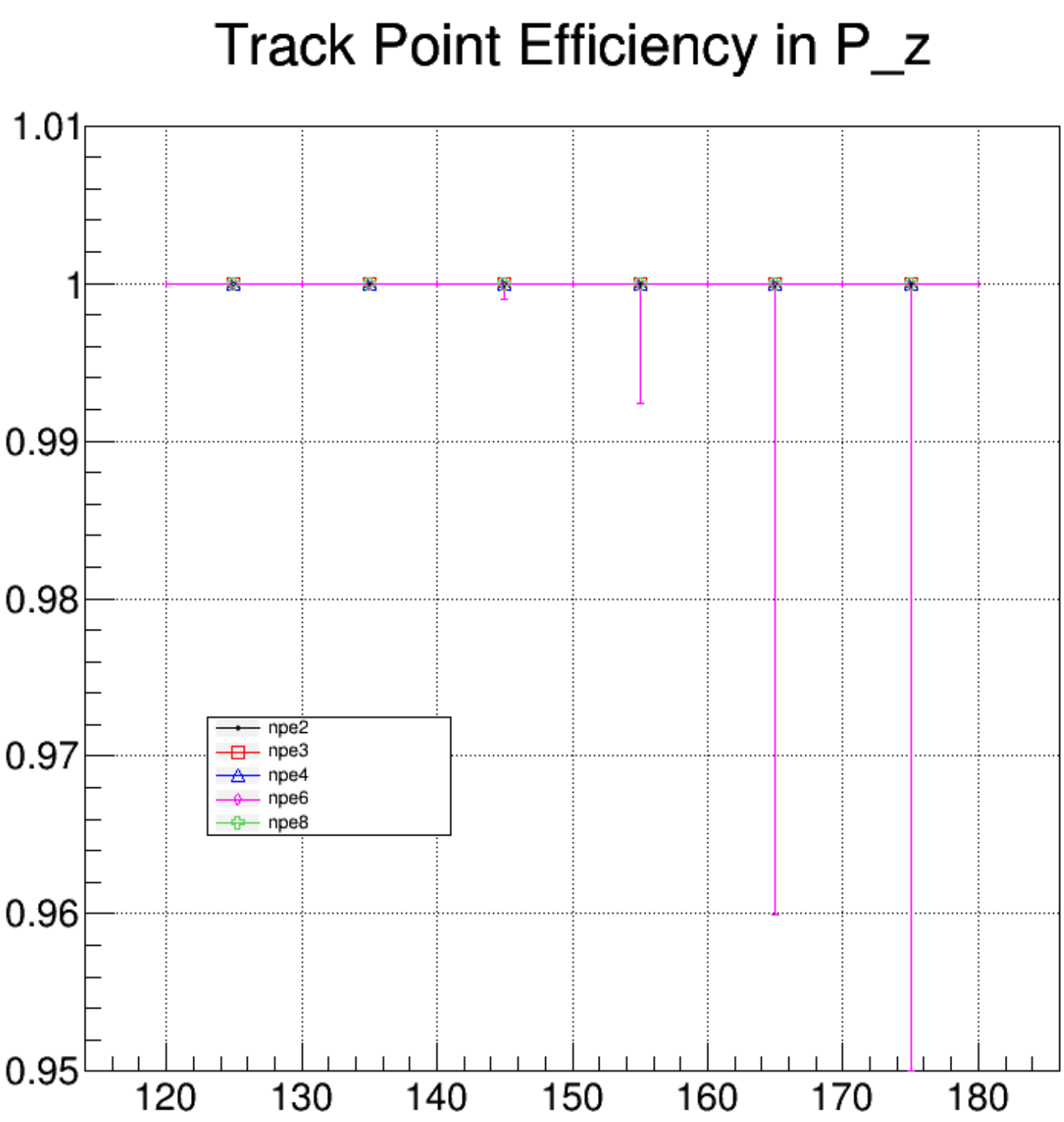


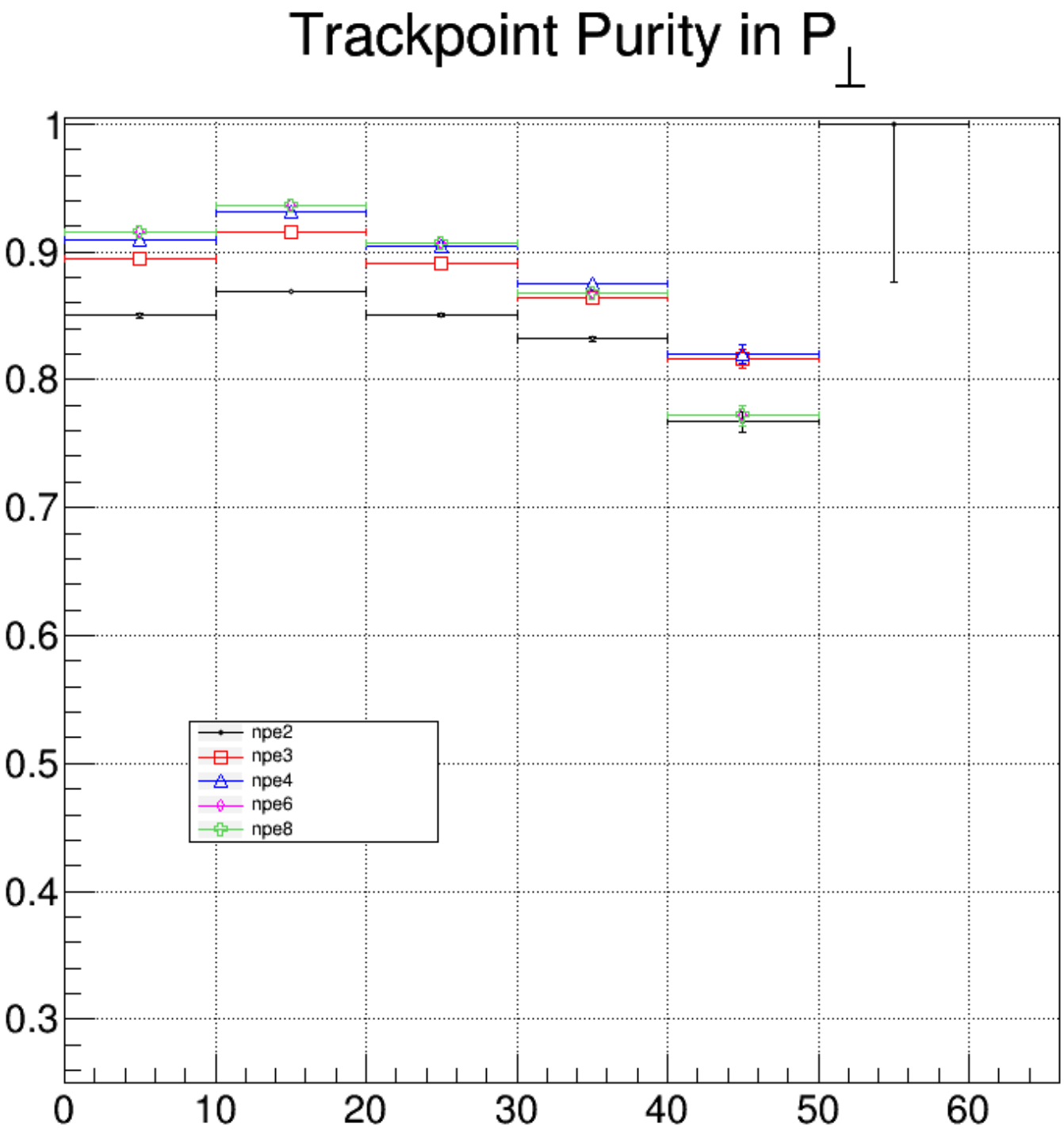

1_spacepoint
Entries 6852
Mean 5.211
RMS 0.5893
10^3
10^2
10
1
0
20
40
60
80
100
npe2
npe3
npe4
npe6
npe8


Track Efficiency in P⊥
1
0.99
0.98
0.97
0.96
0.95
0
10
20
30
40
50
60
npe2
npe3
npe4
npe6
npe8

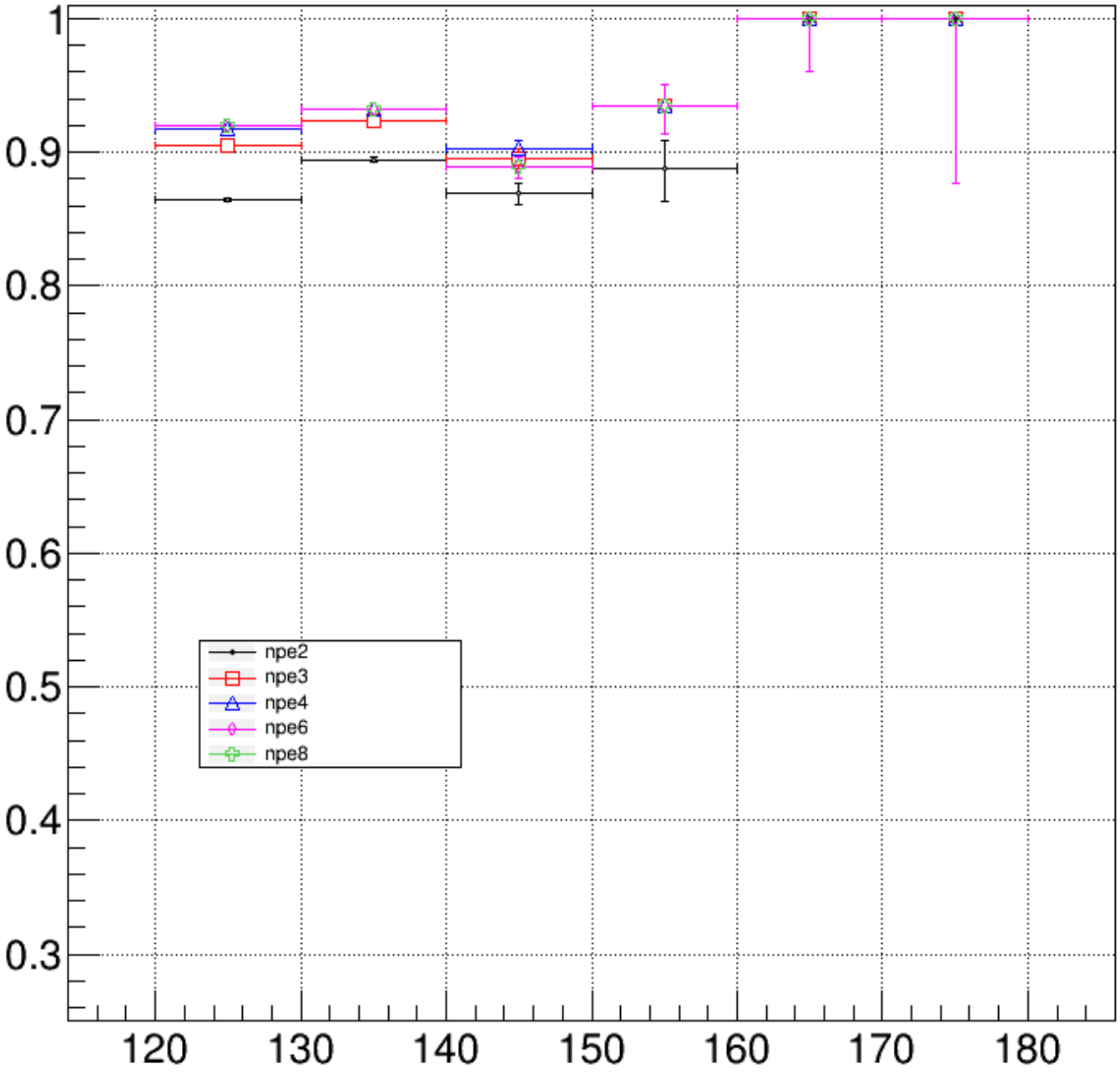

Track Efficiency in P_z
1.01
1
0.99
0.98
0.97
0.96
0.95
120
130
140
150
160
170
180
npe2
npe3
npe4
npe6
npe8

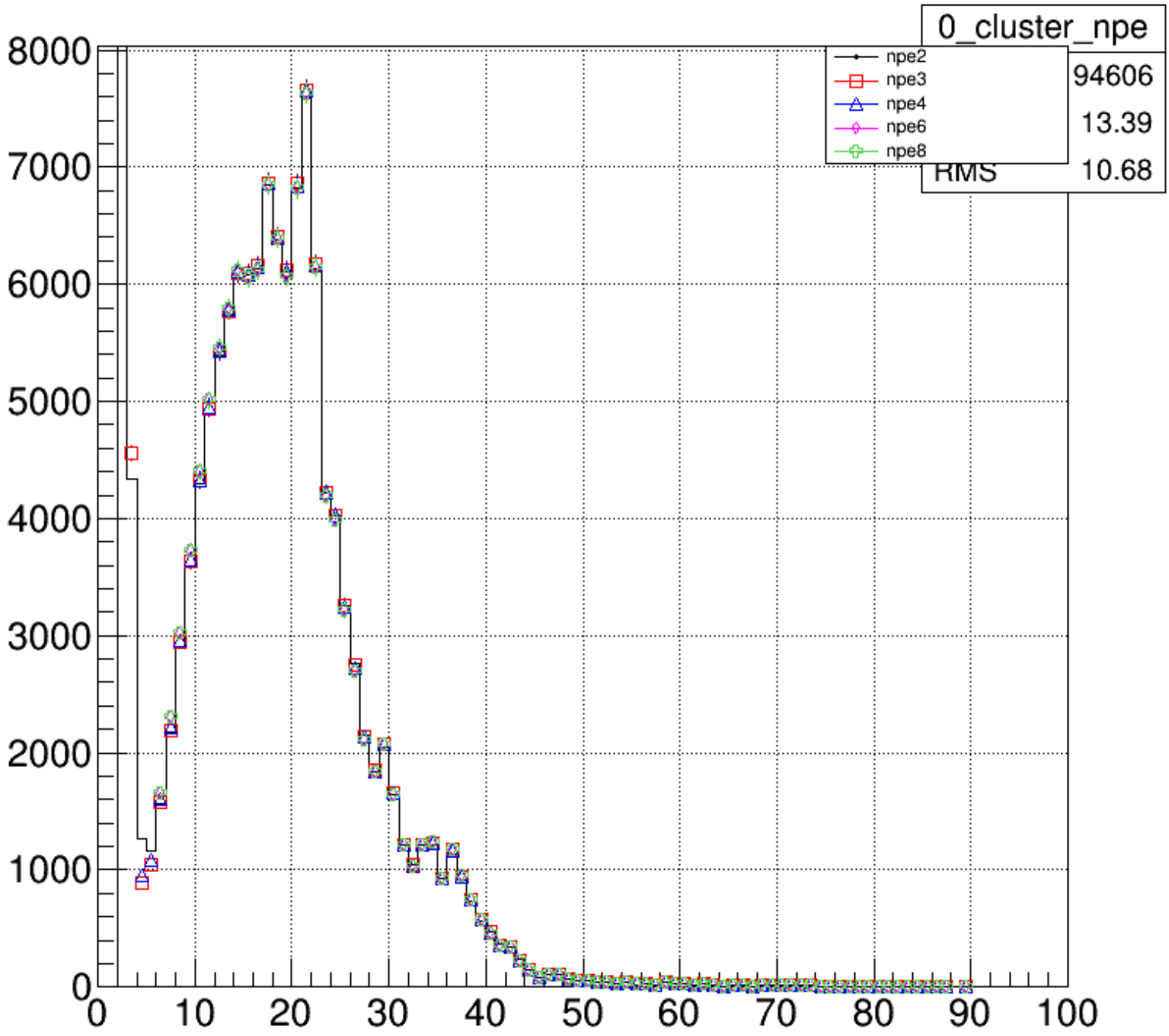

Track Point Efficiency in P⊥
1
0.99
0.98
0.97
0.96
0.95
0
10
20
30
40
50
60
npe2
npe3
npe4
npe6
npe8

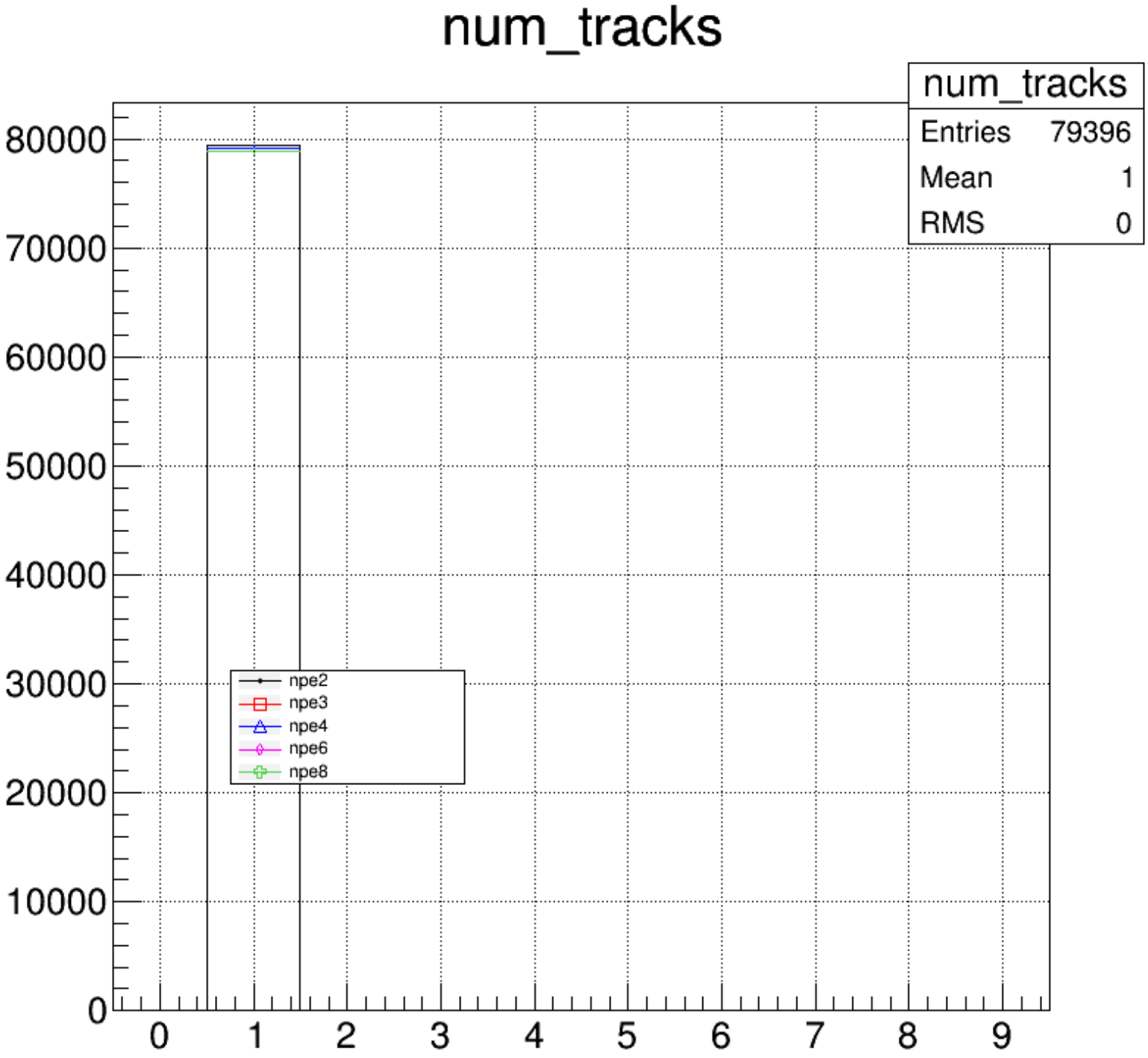

Track Point Efficiency in P_z
1.01
1
0.99
0.98
0.97
0.96
0.95
120
130
140
150
160
170
180
npe2
npe3
npe4
npe6
npe8

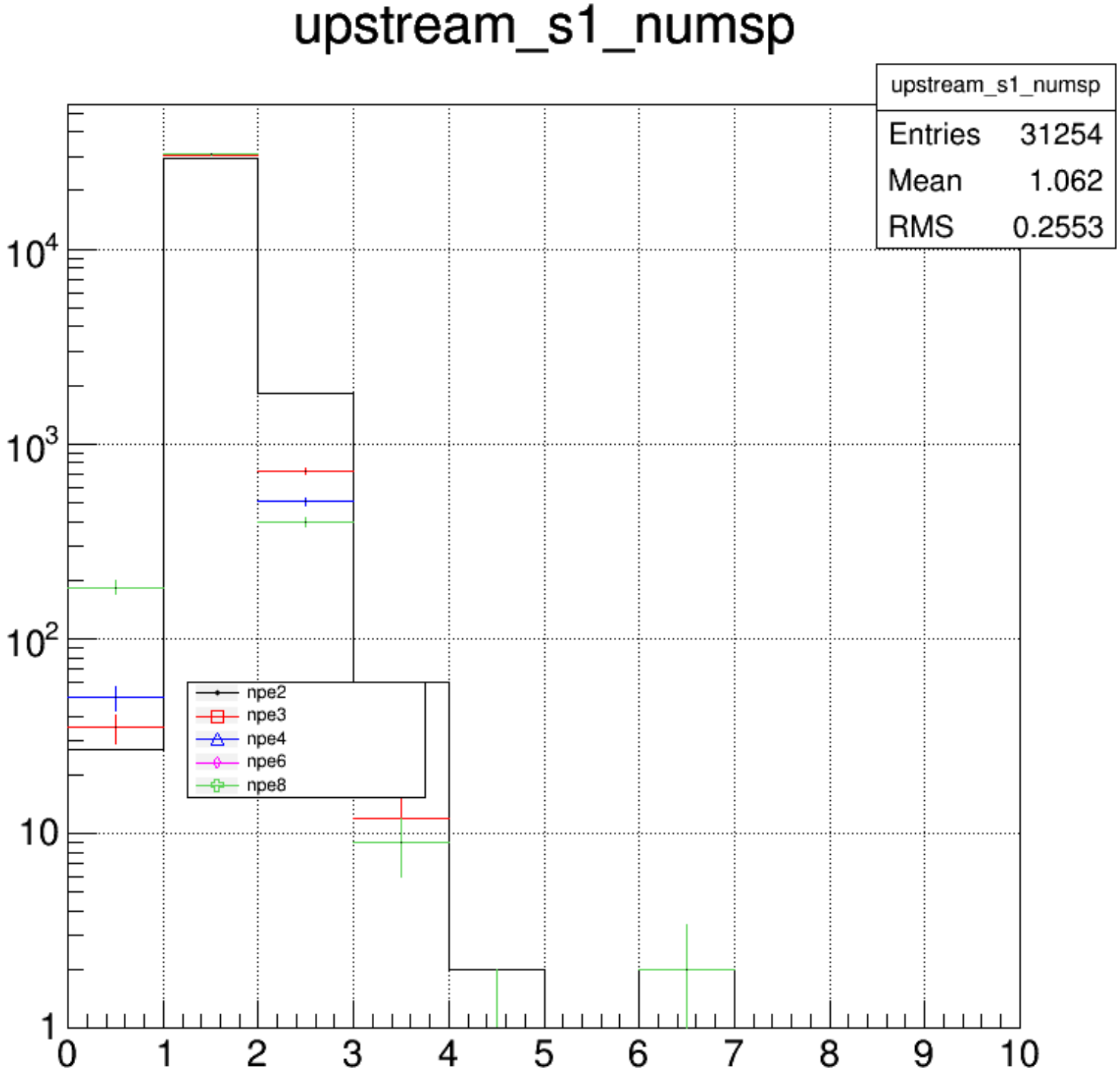

Trackpoint Purity in P⊥
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0
10
20
30
40
50
60
npe2
npe3
npe4
npe6
npe8

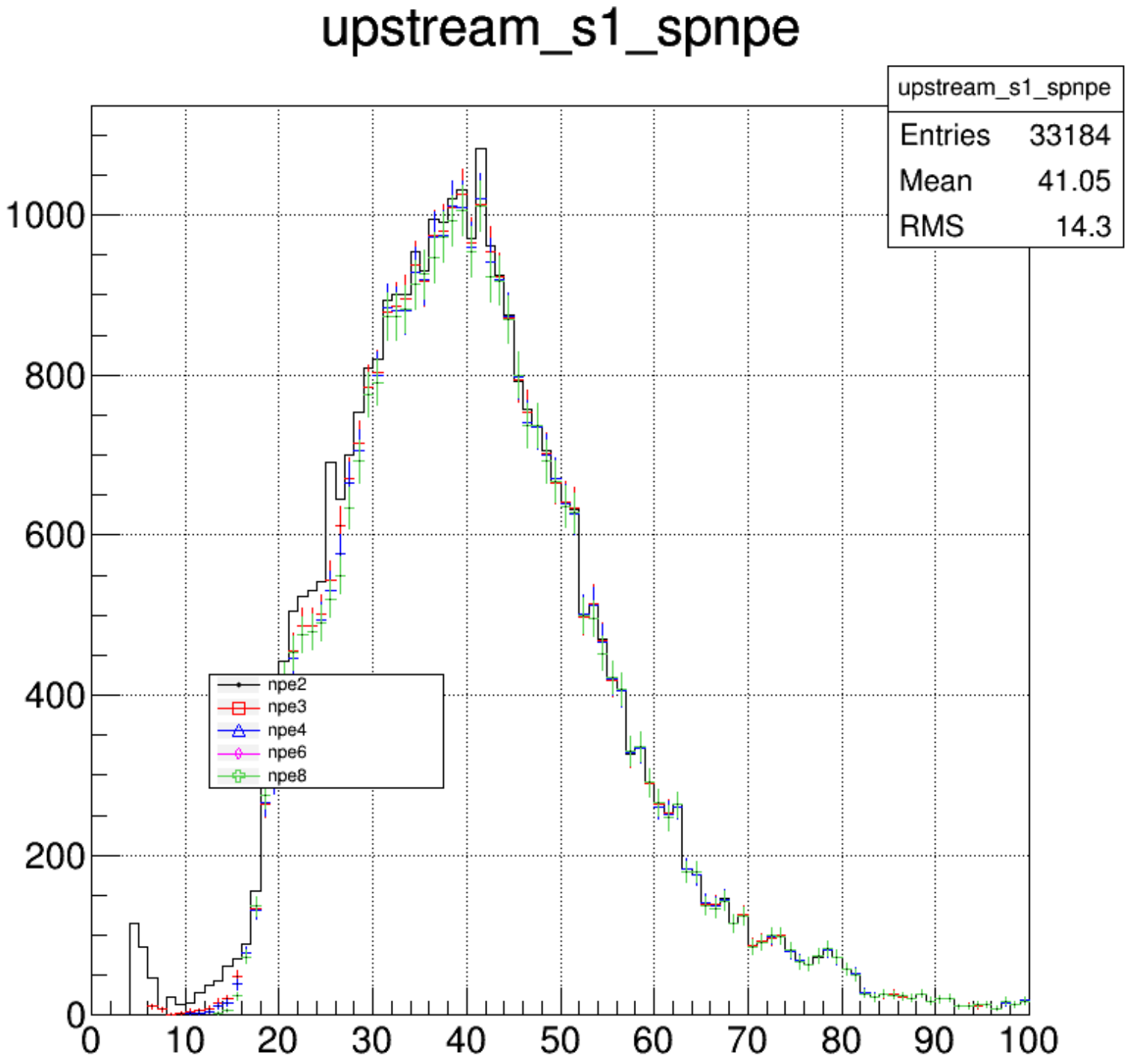
Trackpoint Purity in P_z

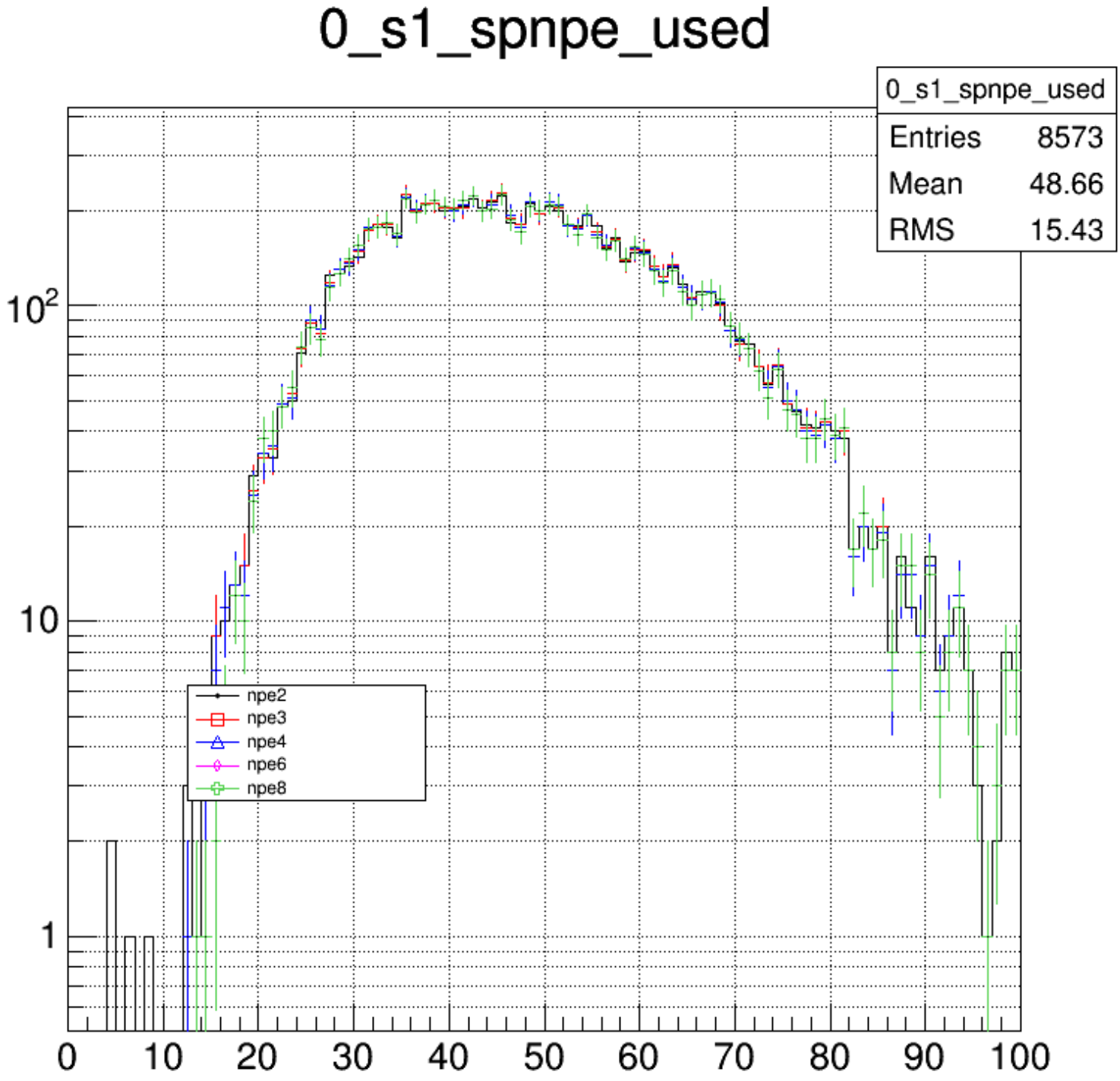


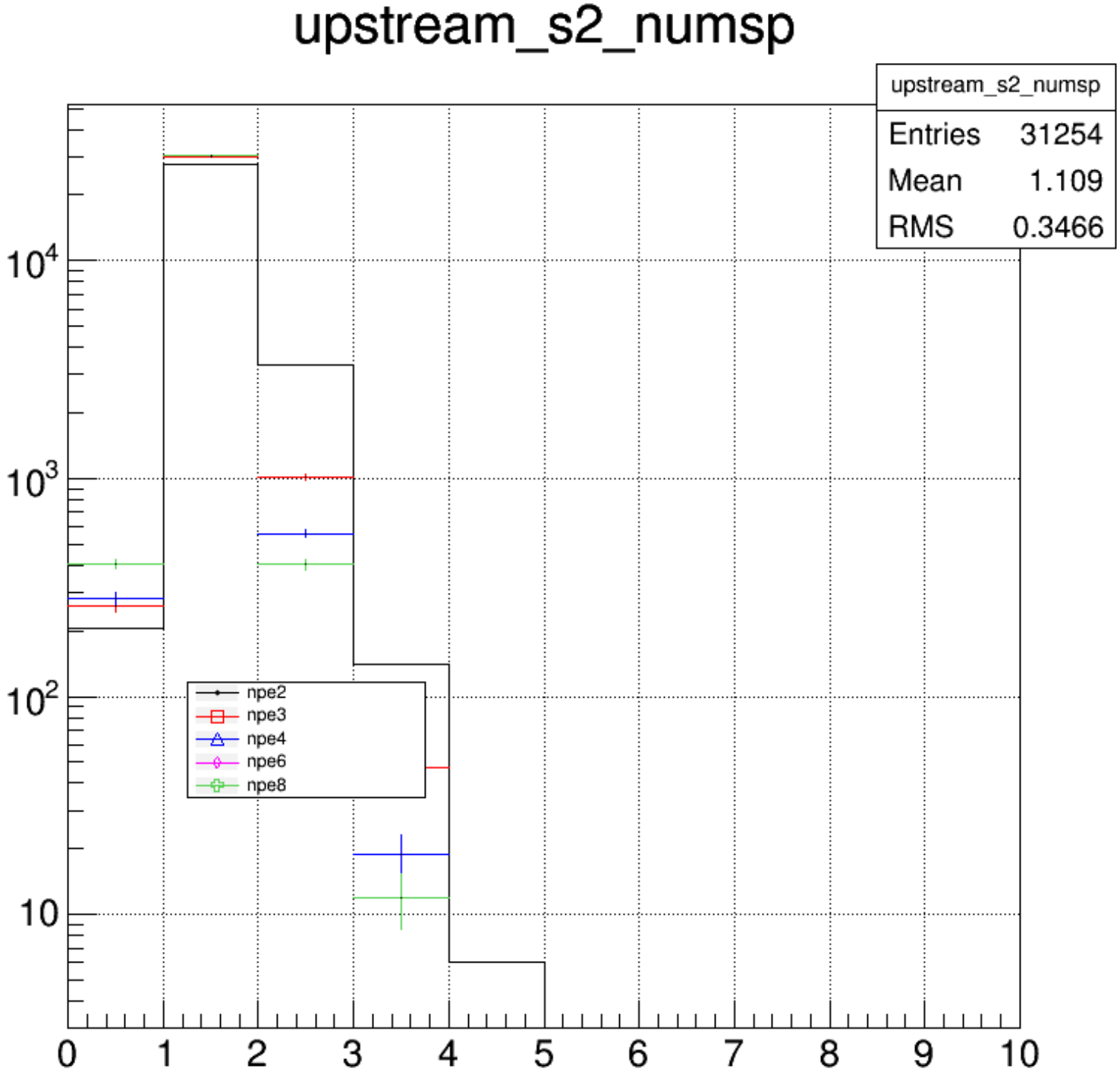

0_cluster_npe
npe2
npe3
npe4
npe6
npe8
94606
13.39
RMS
10.68
8000
7000
6000
5000
4000
3000
2000
1000
0
0
10
20
30
40
50
60
70
80
90
100

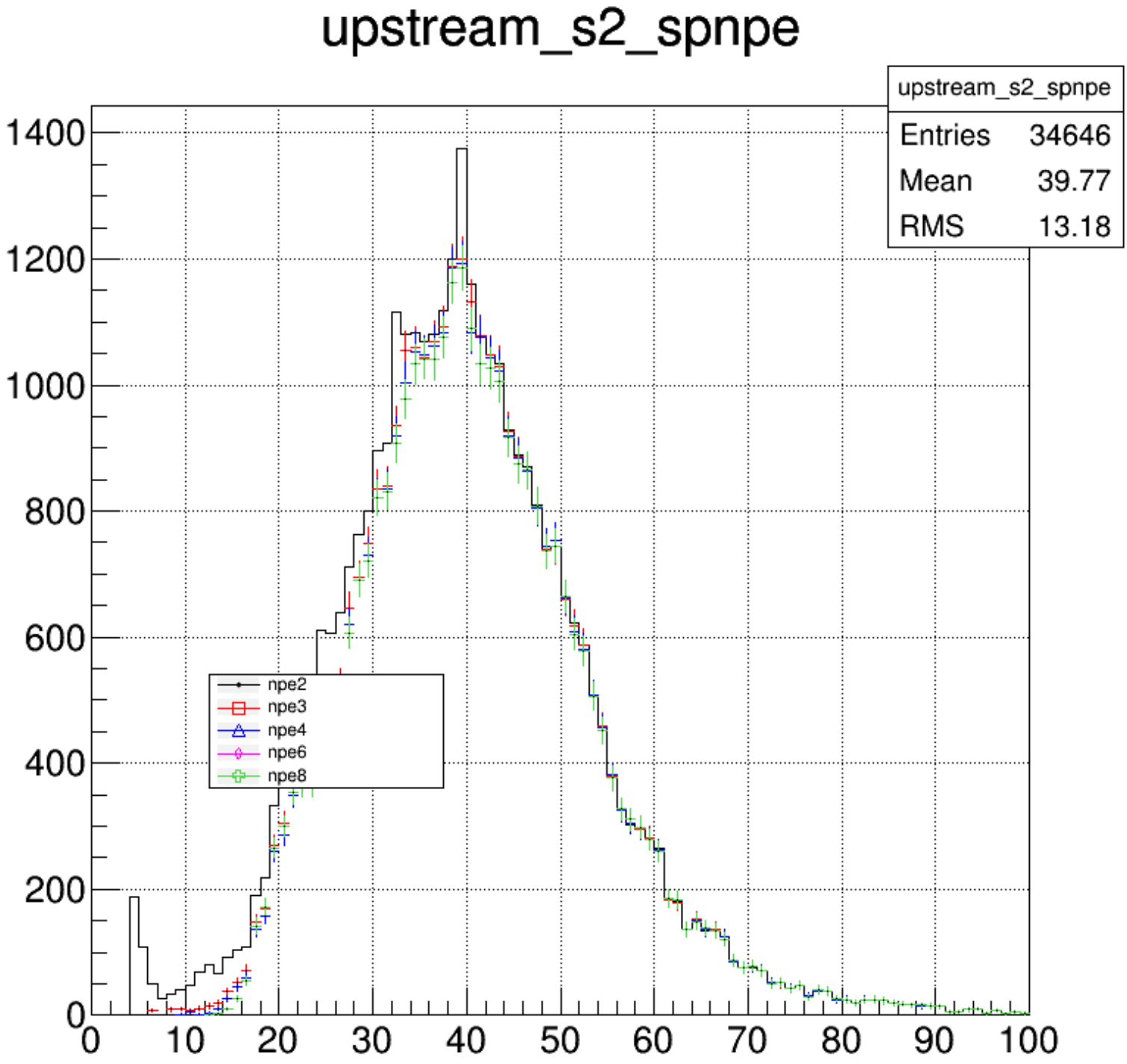

num_tracks
num_tracks
Entries 79396
Mean 1
RMS 0
80000
70000
60000
50000
40000
30000
20000
10000
0
0 1 2 3 4 5 6 7 8 9
npe2
npe3
npe4
npe6
npe8

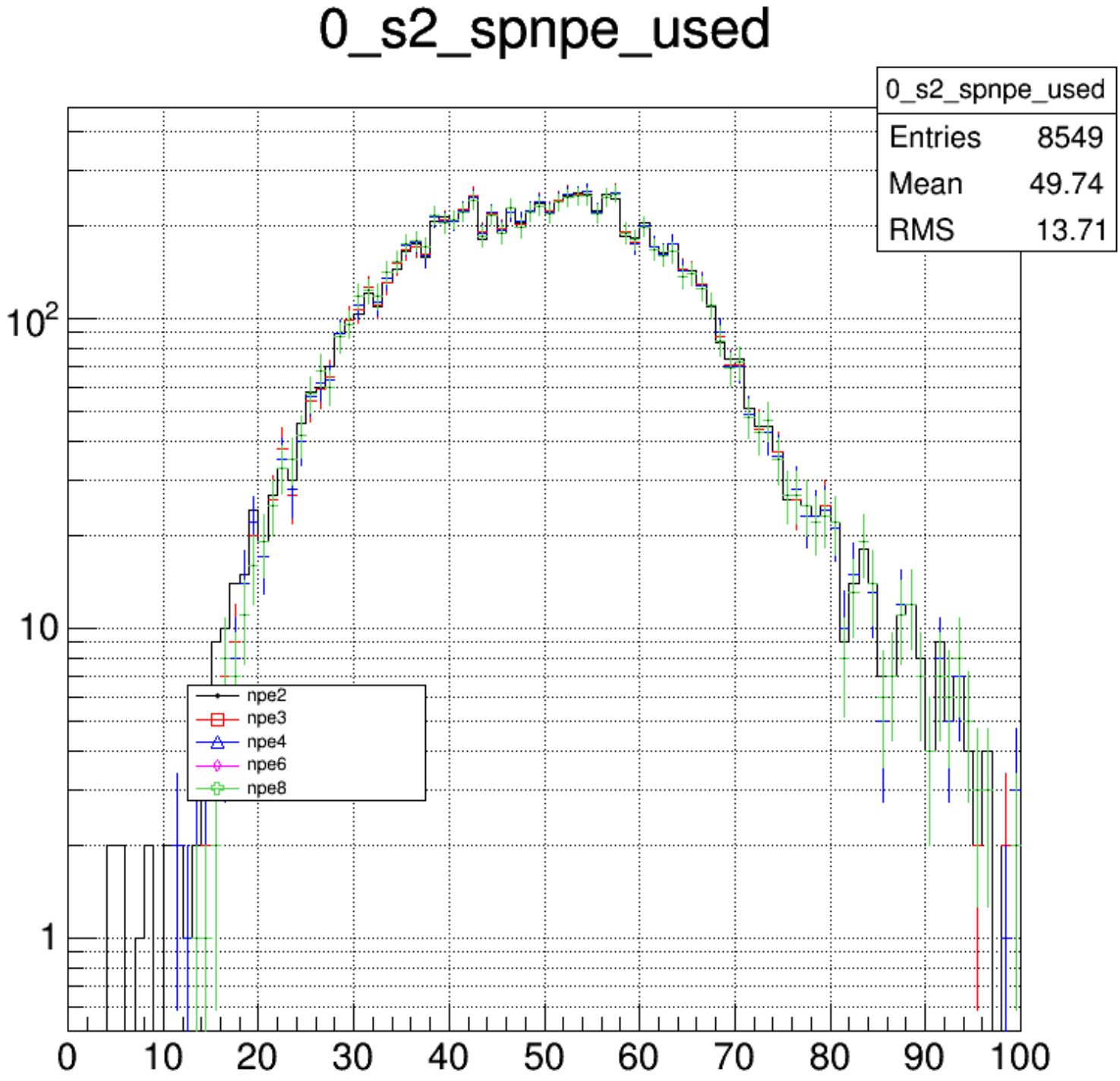

upstream_s1_numsp
upstream_s1_numsp
Entries 31254
Mean 1.062
RMS 0.2553
10^4
10^3
10^2
10
1
0 1 2 3 4 5 6 7 8 9 10
npe2
npe3
npe4
npe6
npe8

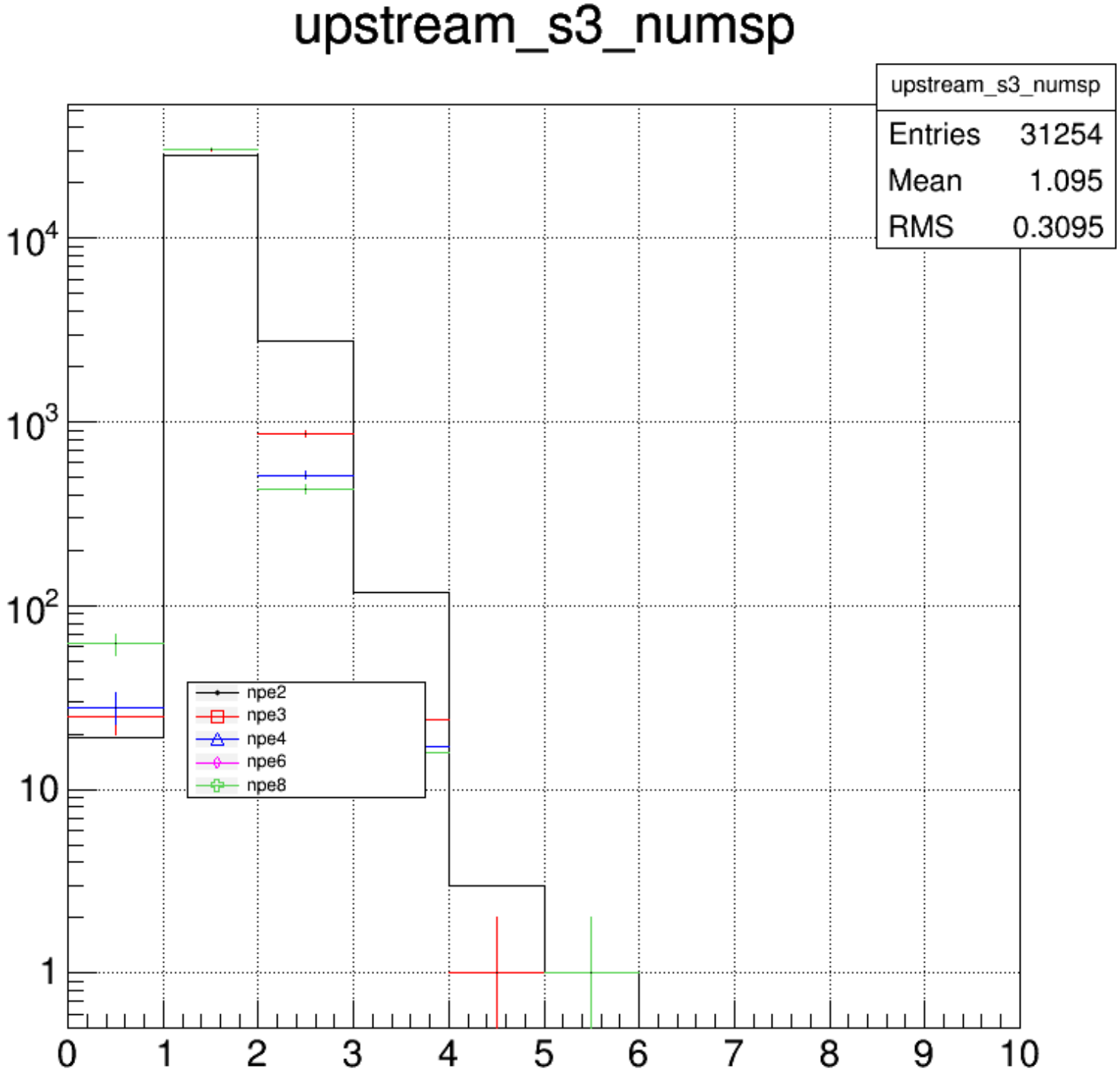

upstream_s1_spnpe
upstream_s1_spnpe
Entries 33184
Mean 41.05
RMS 14.3
npe2
npe3
npe4
npe6
npe8
0
200
400
600
800
1000
0
10
20
30
40
50
60
70
80
90
100

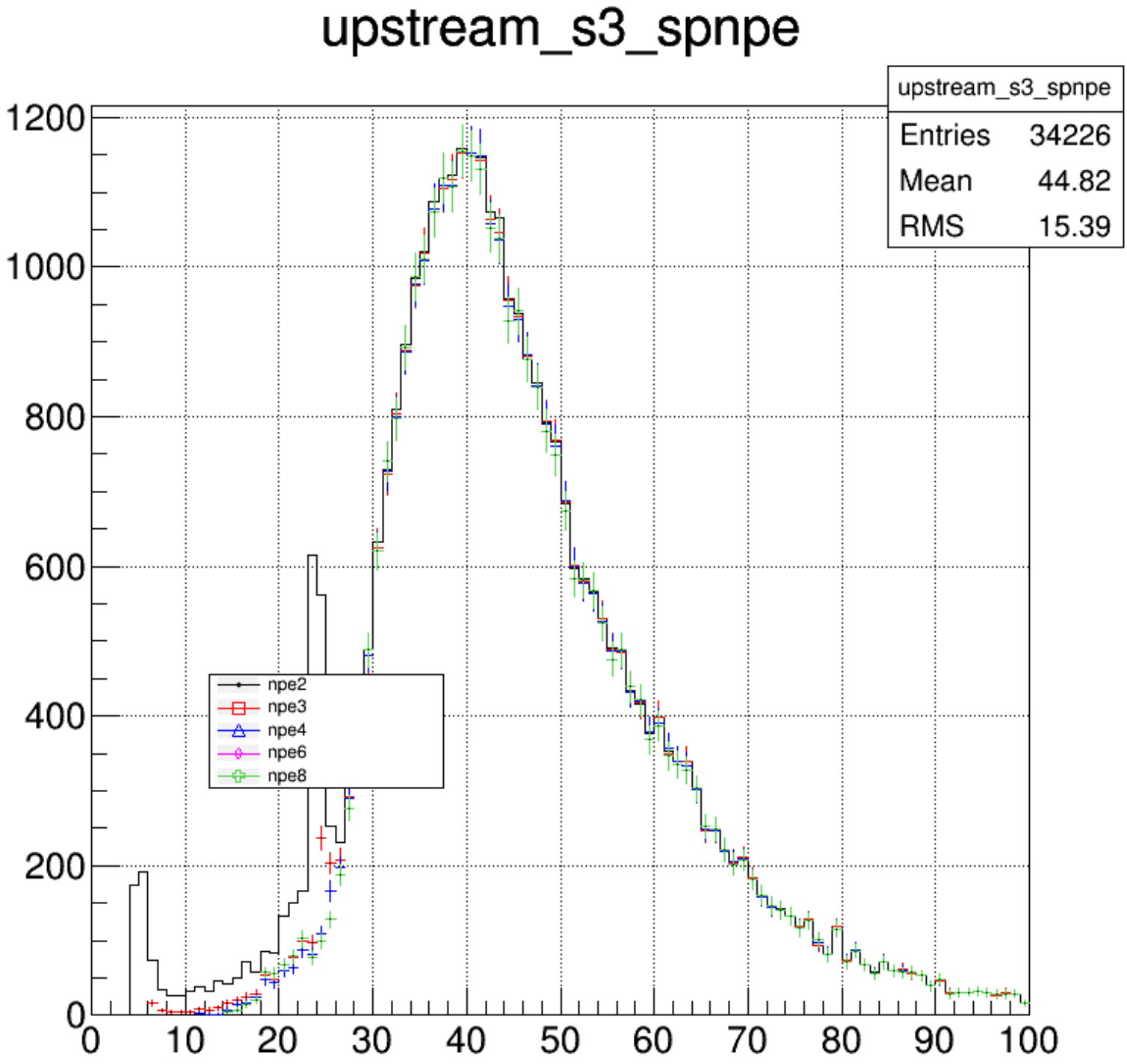

0_s1_spnpe_used
0_s1_spnpe_used
Entries 8573
Mean 48.66
RMS 15.43
10^2
10
1
0
10
20
30
40
50
60
70
80
90
100
npe2
npe3
npe4
npe6
npe8

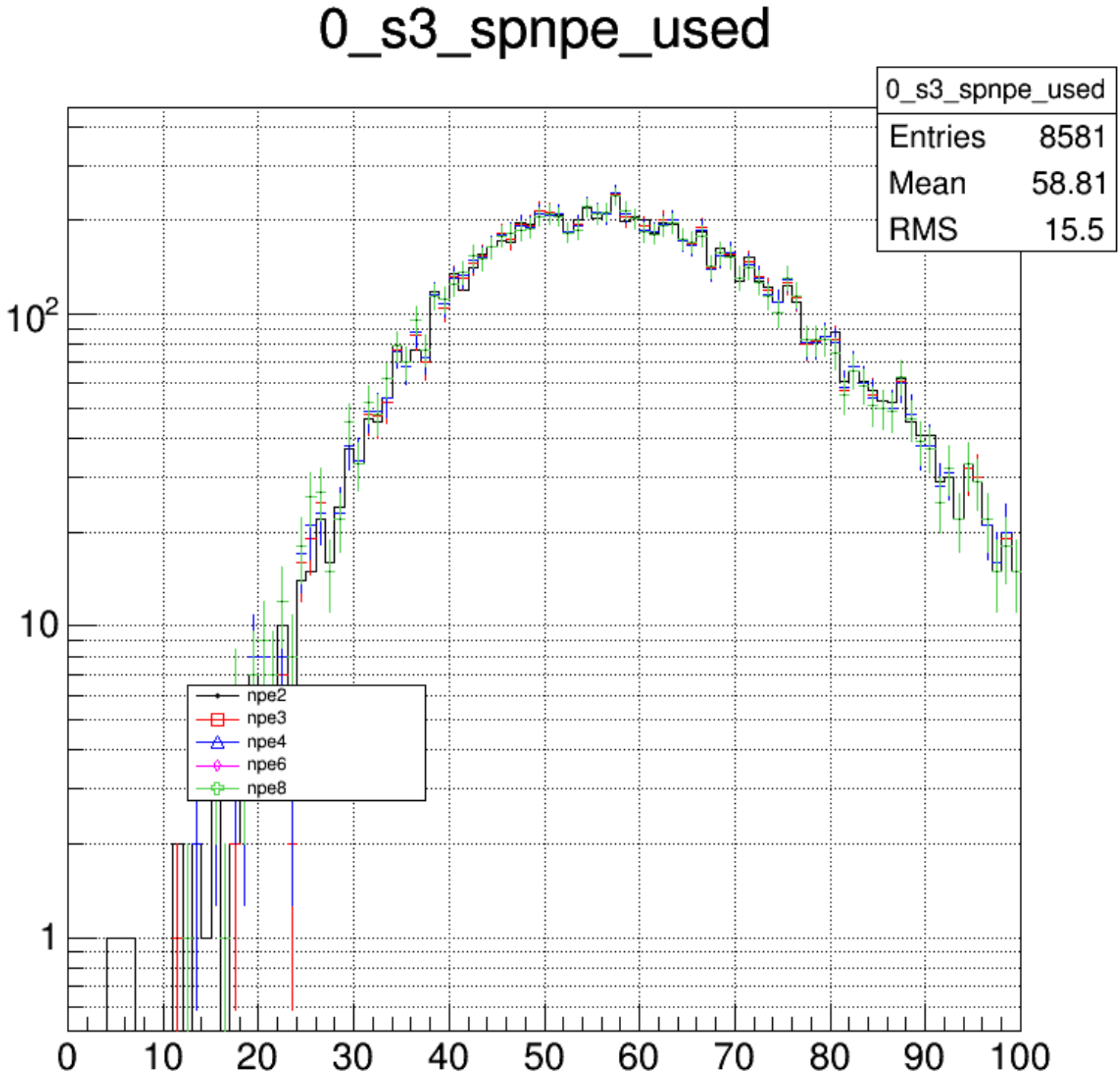

upstream_s2_numsp
upstream_s2_numsp
Entries 31254
Mean 1.109
RMS 0.3466
10^4
10^3
10^2
10
0 1 2 3 4 5 6 7 8 9 10
npe2
npe3
npe4
npe6
npe8

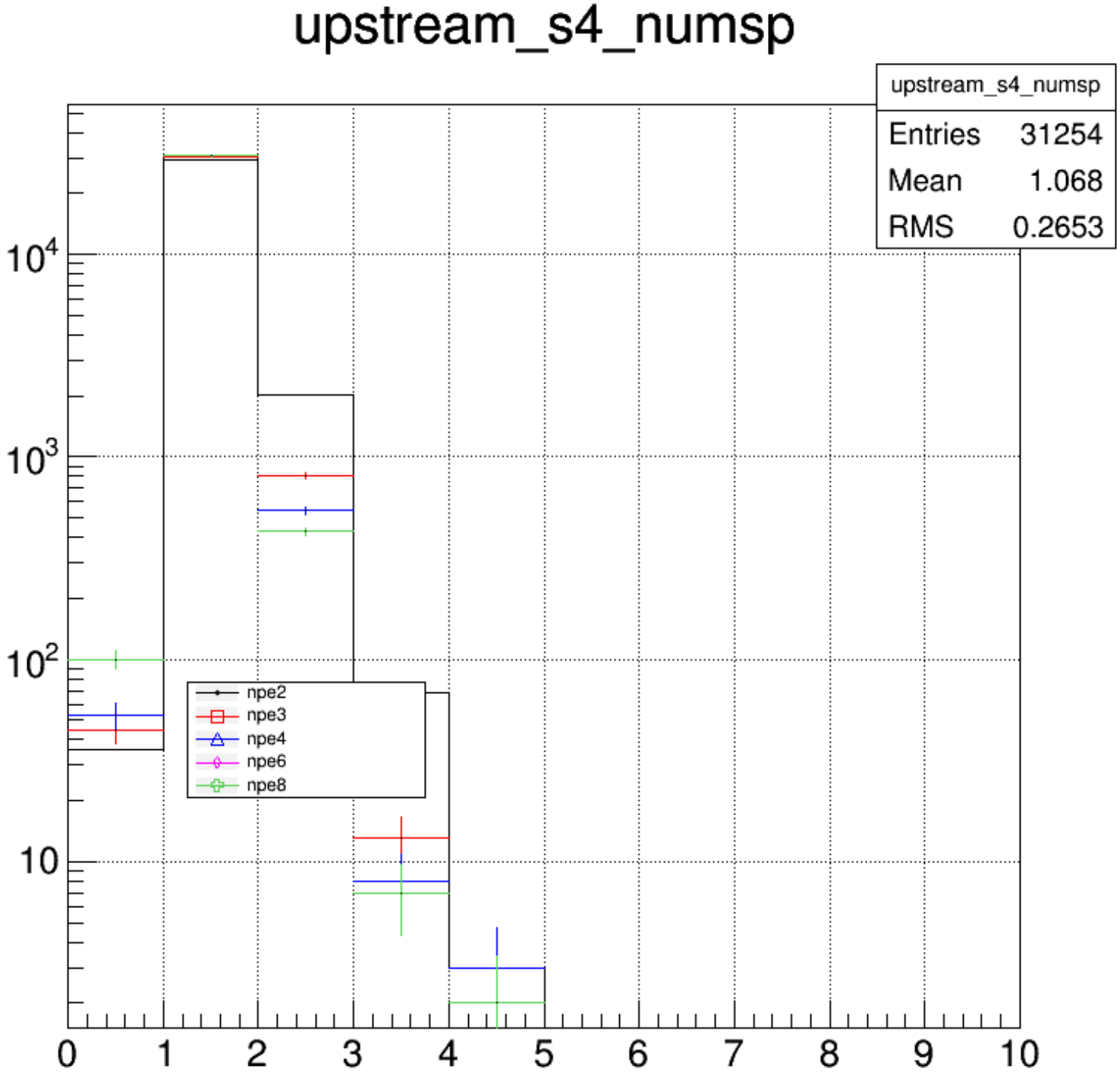

upstream_s2_spnpe
upstream_s2_spnpe
Entries 34646
Mean 39.77
RMS 13.18
npe2
npe3
npe4
npe6
npe8
0
200
400
600
800
1000
1200
1400
0
10
20
30
40
50
60
70
80
90
100

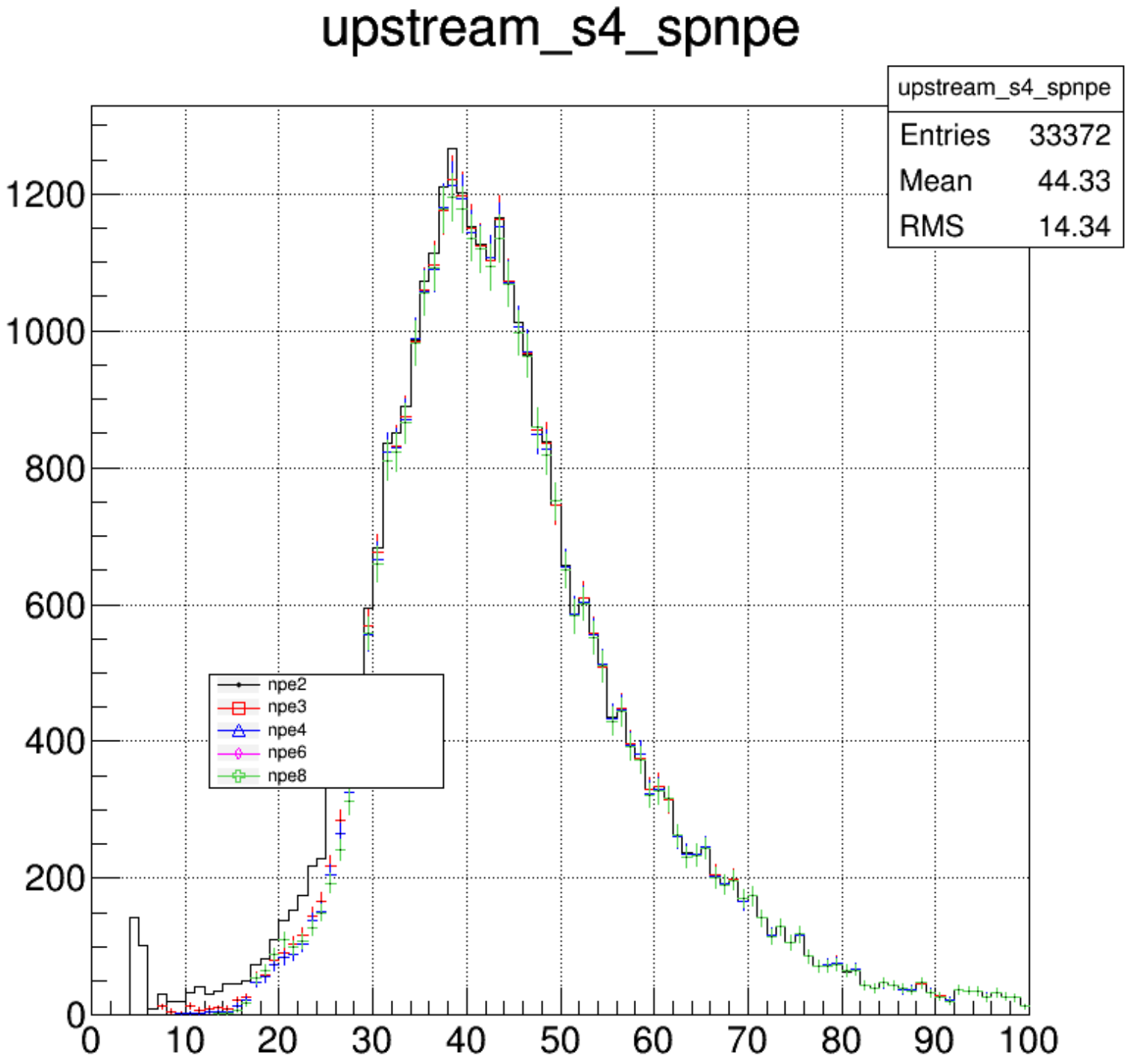

0_s2_spnpe_used
0_s2_spnpe_used
Entries 8549
Mean 49.74
RMS 13.71
10^2
10
1
npe2
npe3
npe4
npe6
npe8
0
10
20
30
40
50
60
70
80
90
100

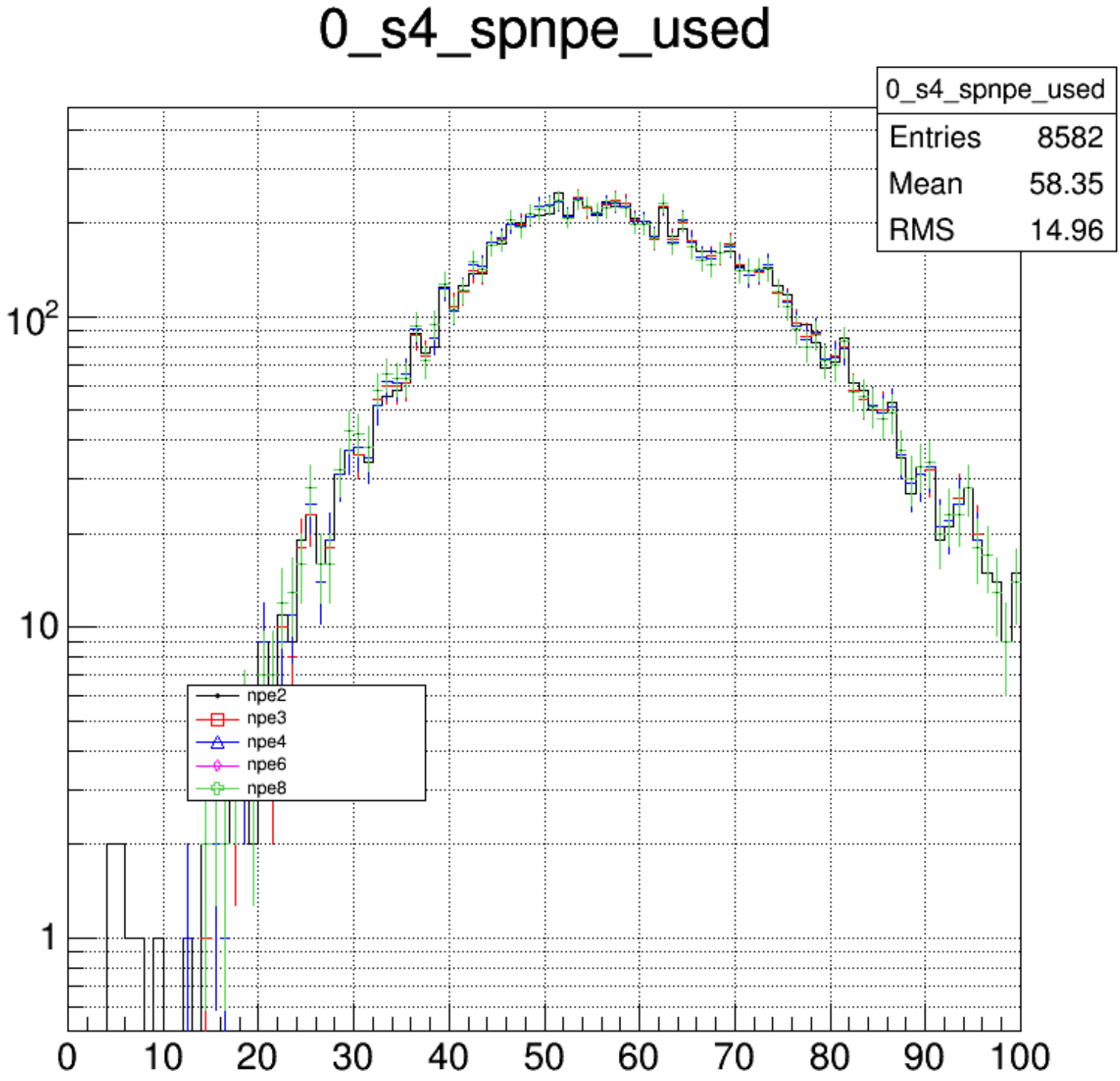

upstream_s3_numsp
upstream_s3_numsp
Entries 31254
Mean 1.095
RMS 0.3095
10^4
10^3
10^2
10
1
0 1 2 3 4 5 6 7 8 9 10
npe2
npe3
npe4
npe6
npe8

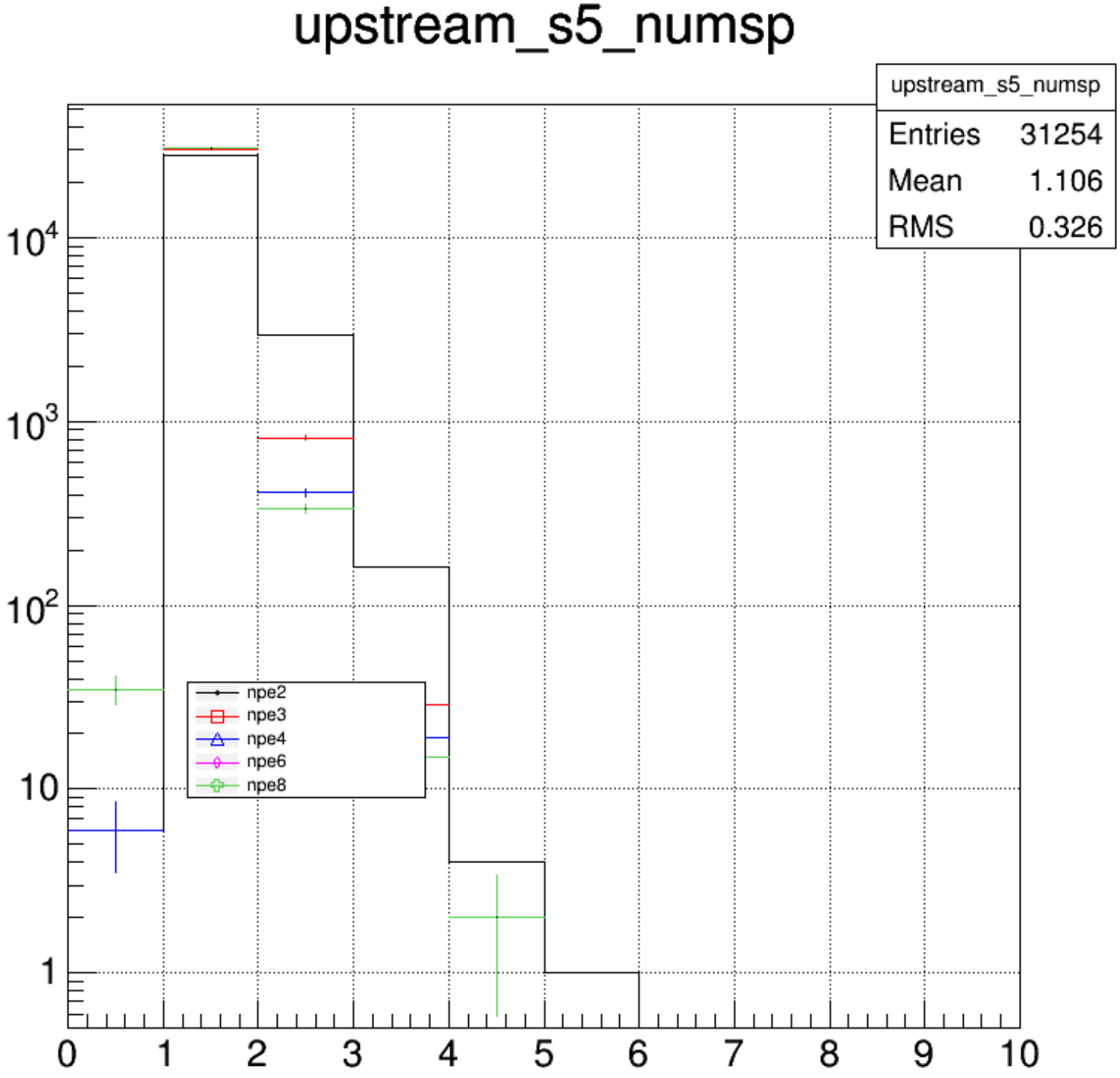

upstream_s3_spnpe
upstream_s3_spnpe
Entries 34226
Mean 44.82
RMS 15.39
npe2
npe3
npe4
npe6
npe8
0
200
400
600
800
1000
1200
0
10
20
30
40
50
60
70
80
90
100

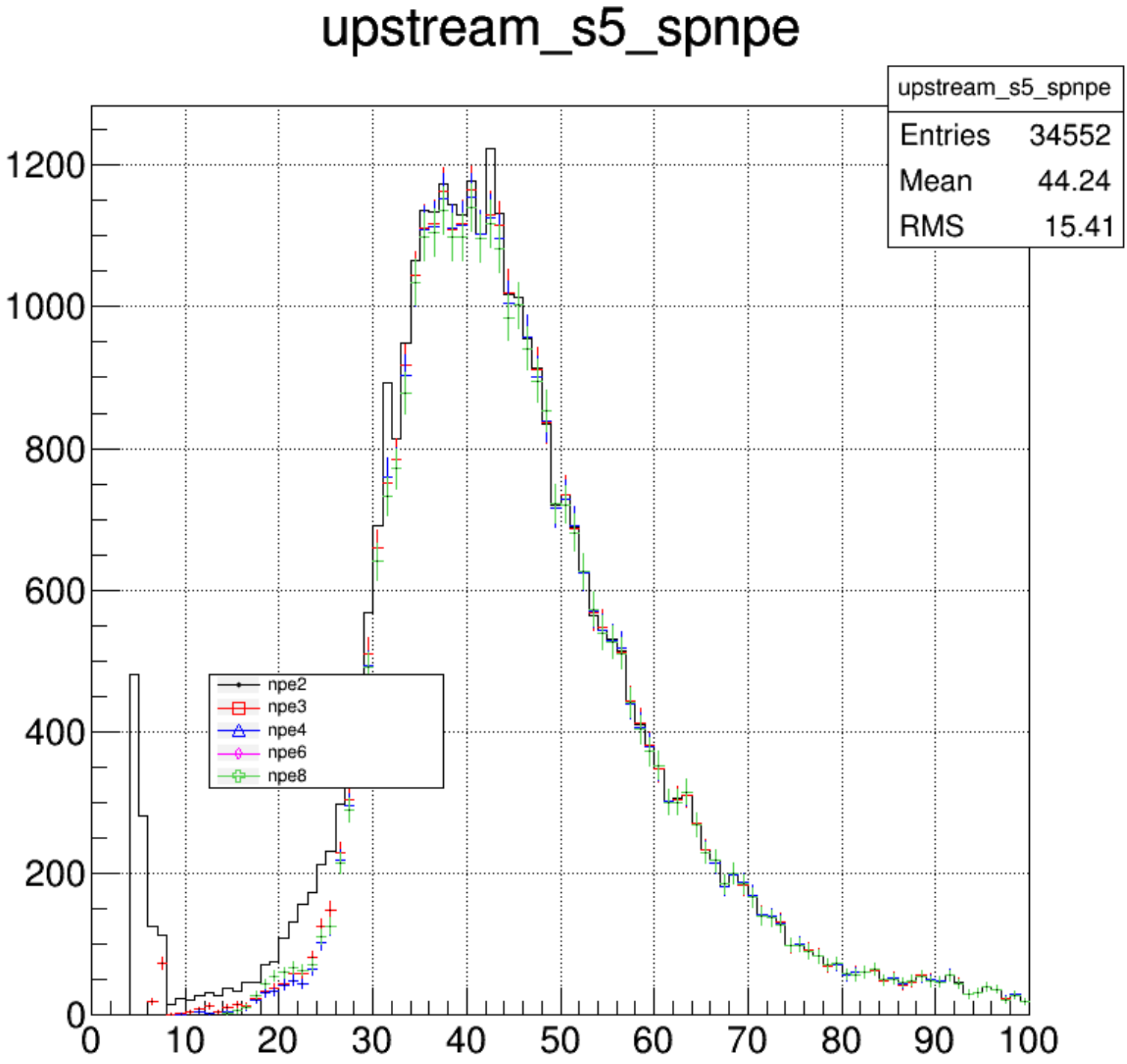

0_s3_spnpe_used
0_s3_spnpe_used
Entries 8581
Mean 58.81
RMS 15.5
10^2
10
1
0
10
20
30
40
50
60
70
80
90
100
npe2
npe3
npe4
npe6
npe8

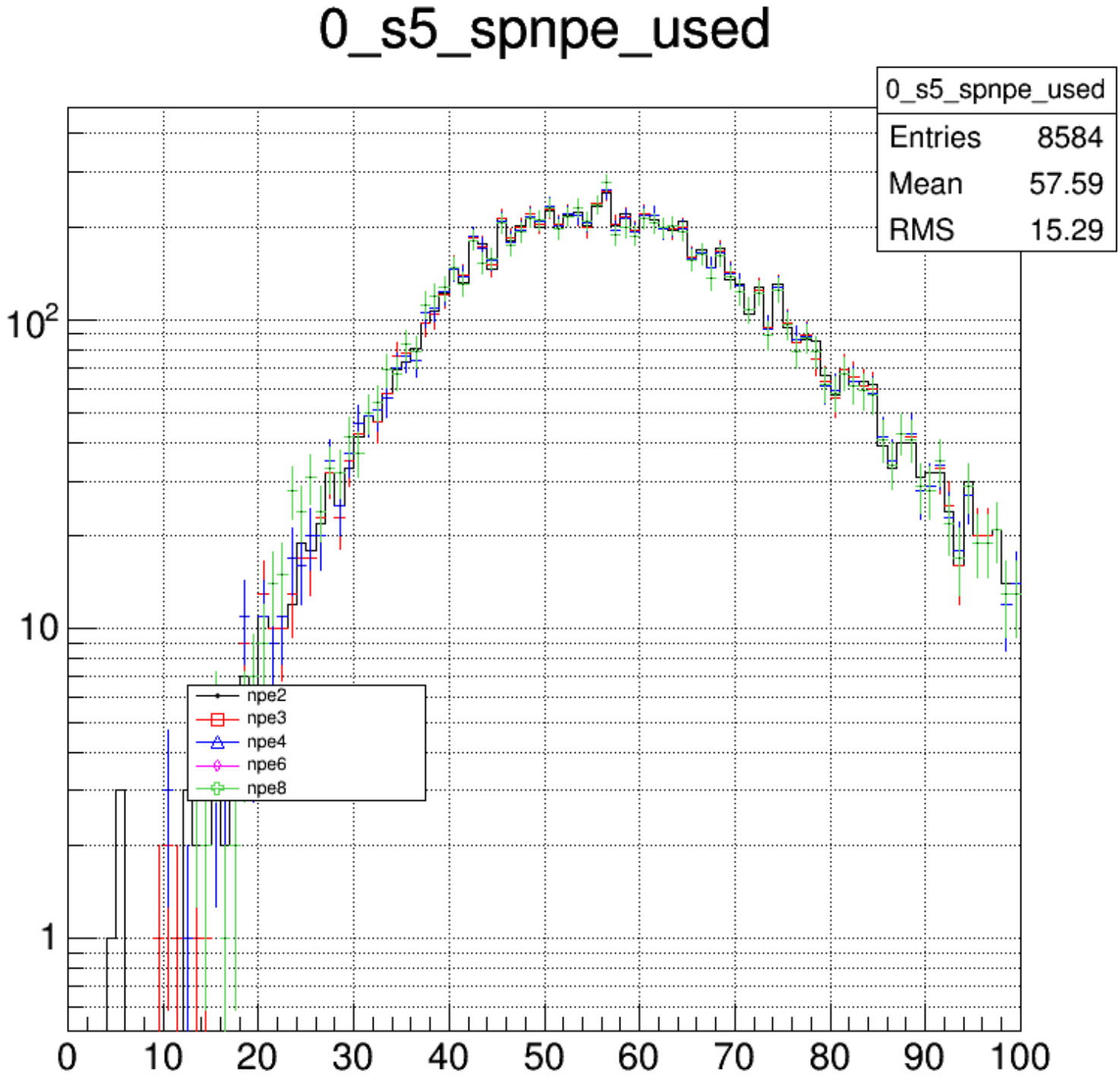

upstream_s4_numsp
upstream_s4_numsp
Entries 31254
Mean 1.068
RMS 0.2653
10^4
10^3
10^2
10
0 1 2 3 4 5 6 7 8 9 10
npe2
npe3
npe4
npe6
npe8

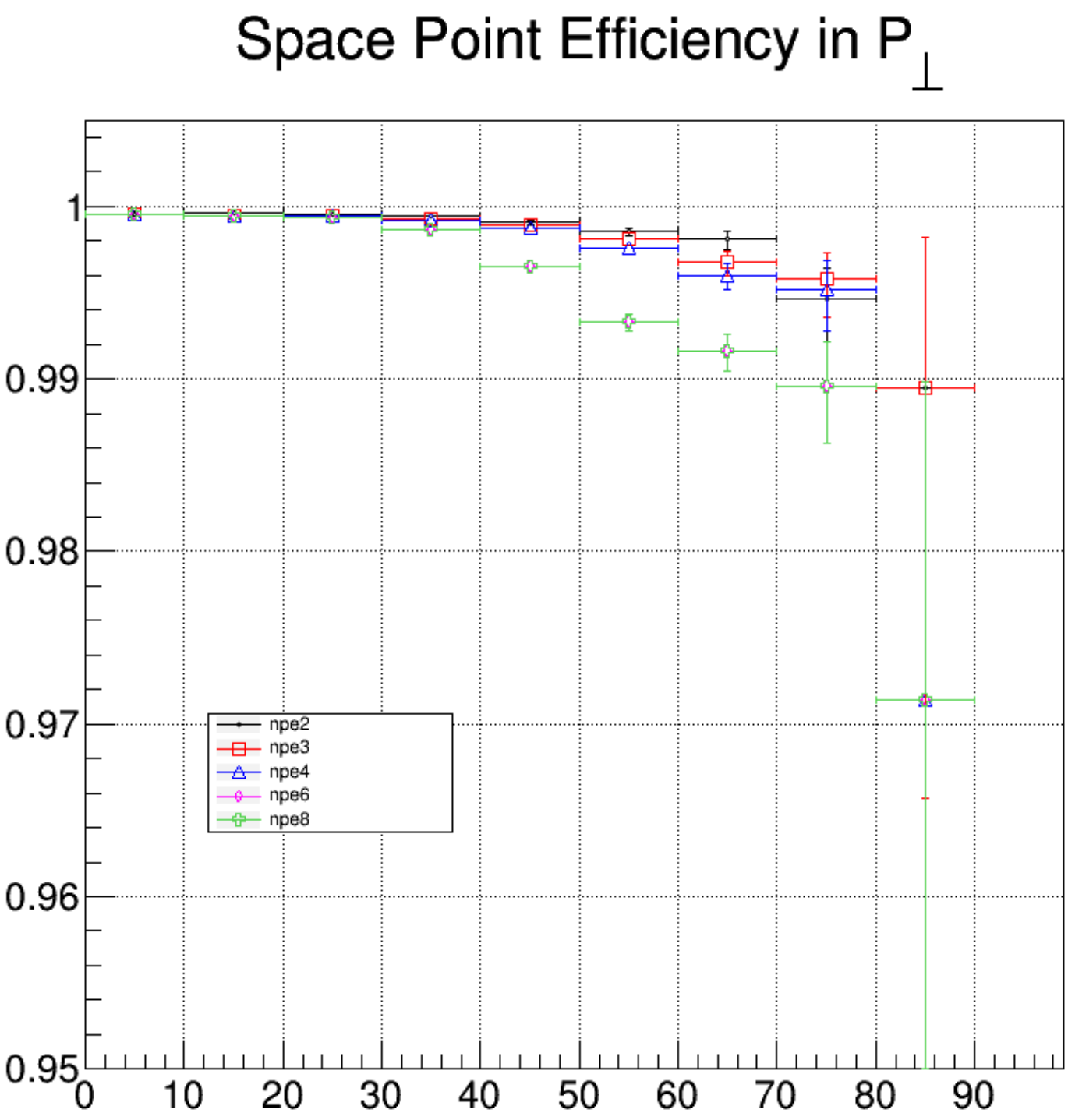

upstream_s4_spnpe
upstream_s4_spnpe
Entries 33372
Mean 44.33
RMS 14.34
npe2
npe3
npe4
npe6
npe8
0
200
400
600
800
1000
1200
0
10
20
30
40
50
60
70
80
90
100

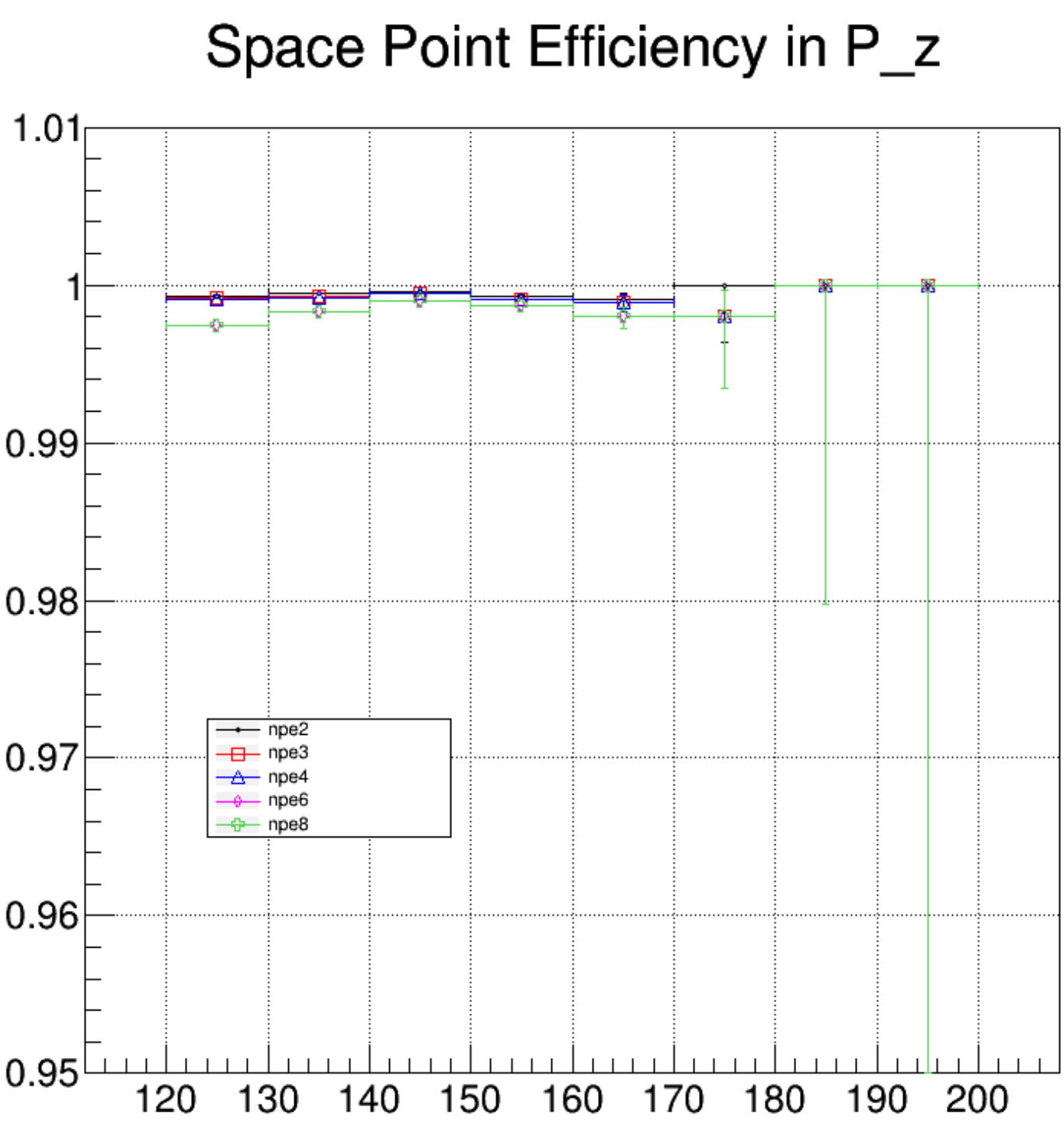

0_s4_spnpe_used
0_s4_spnpe_used
Entries 8582
Mean 58.35
RMS 14.96
10^2
10
1
0
10
20
30
40
50
60
70
80
90
100
npe2
npe3
npe4
npe6
npe8

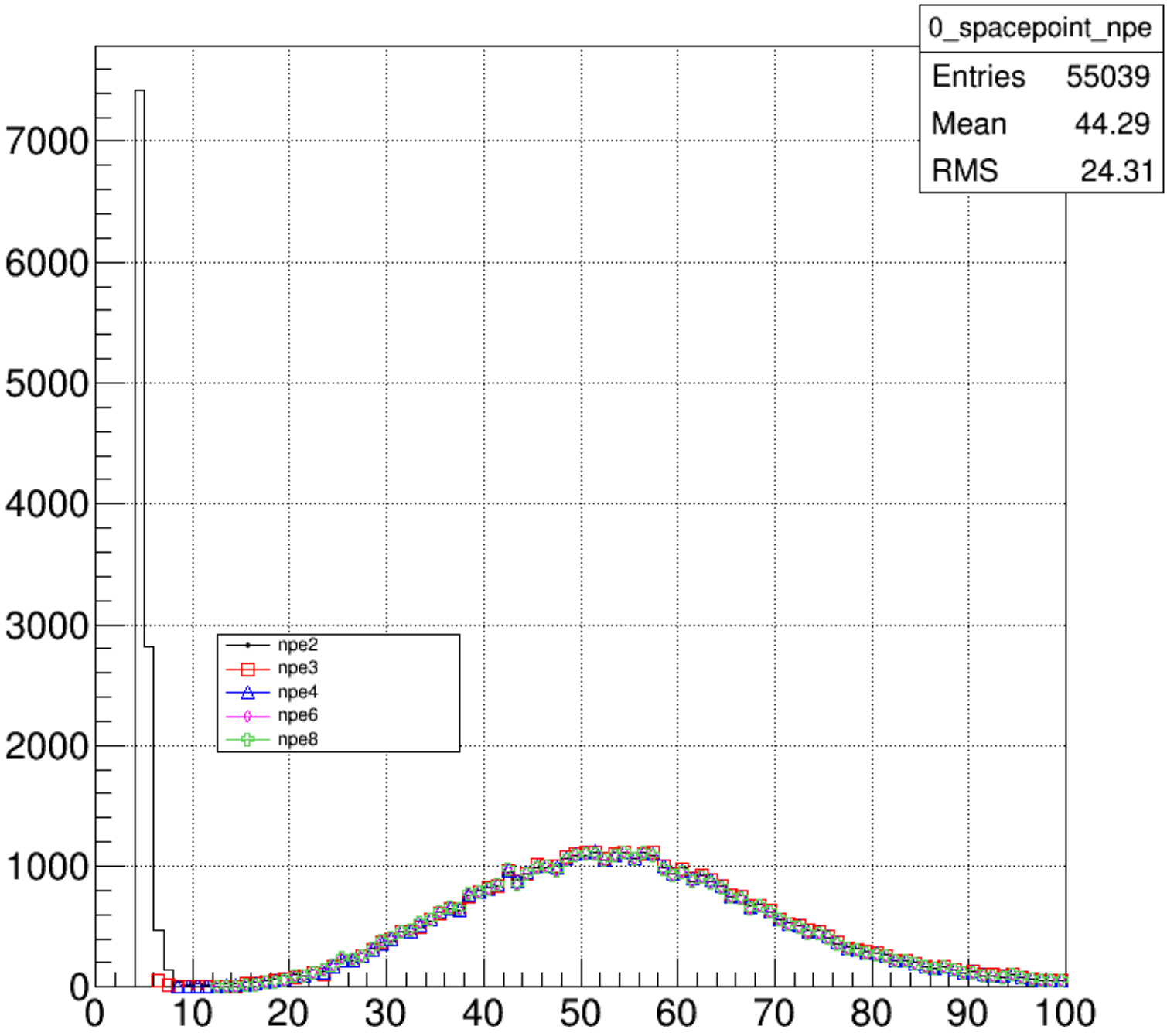

upstream_s5_numsp
upstream_s5_numsp
Entries 31254
Mean 1.106
RMS 0.326
npe2
npe3
npe4
npe6
npe8
10^4
10^3
10^2
10
1
0 1 2 3 4 5 6 7 8 9 10

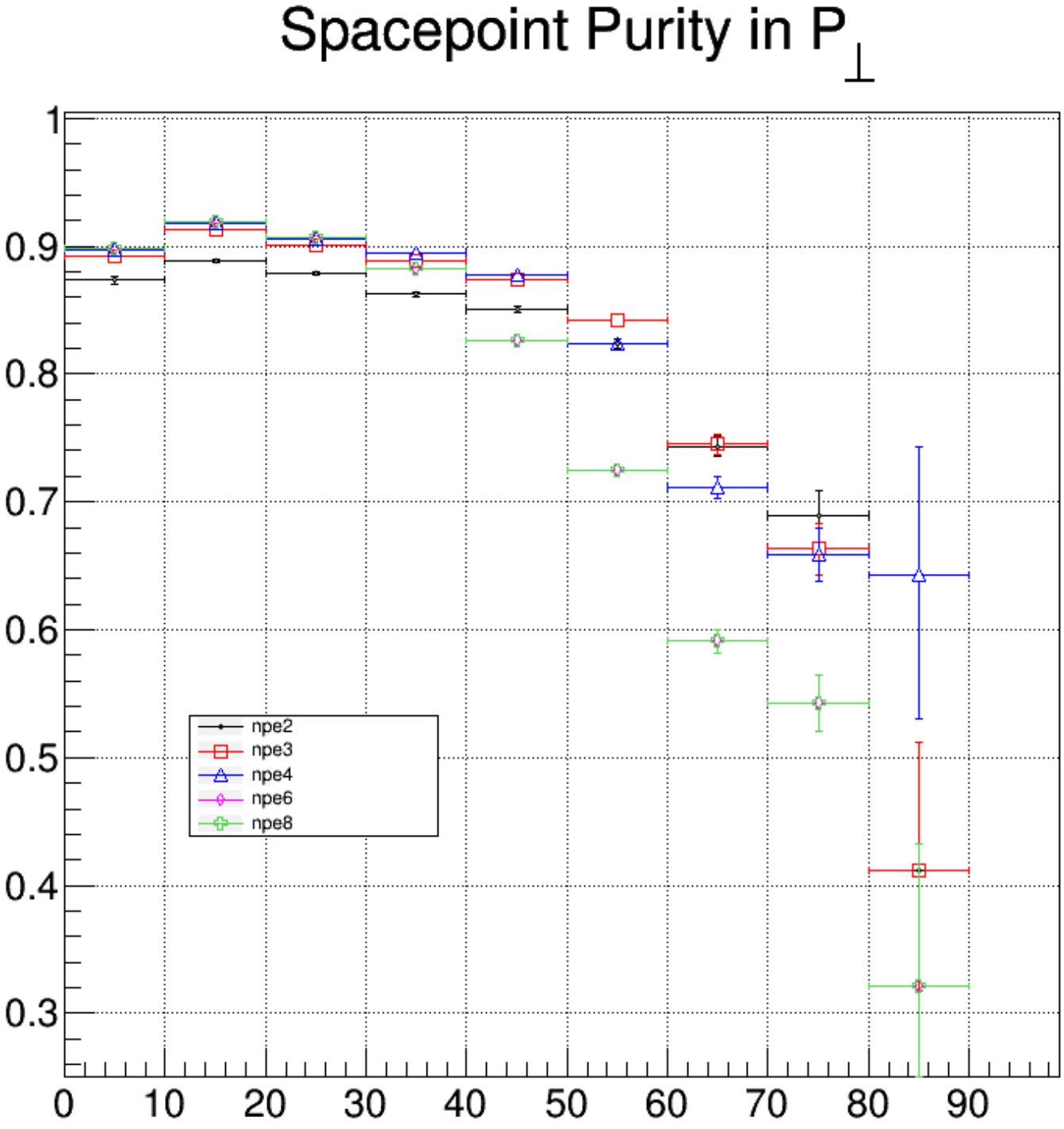

upstream_s5_spnpe
upstream_s5_spnpe
Entries 34552
Mean 44.24
RMS 15.41
npe2
npe3
npe4
npe6
npe8
0
200
400
600
800
1000
1200
0
10
20
30
40
50
60
70
80
90
100


0_s5_spnpe_used
0_s5_spnpe_used
Entries 8584
Mean 57.59
RMS 15.29
10^2
10
1
0
10
20
30
40
50
60
70
80
90
100
npe2
npe3
npe4
npe6
npe8

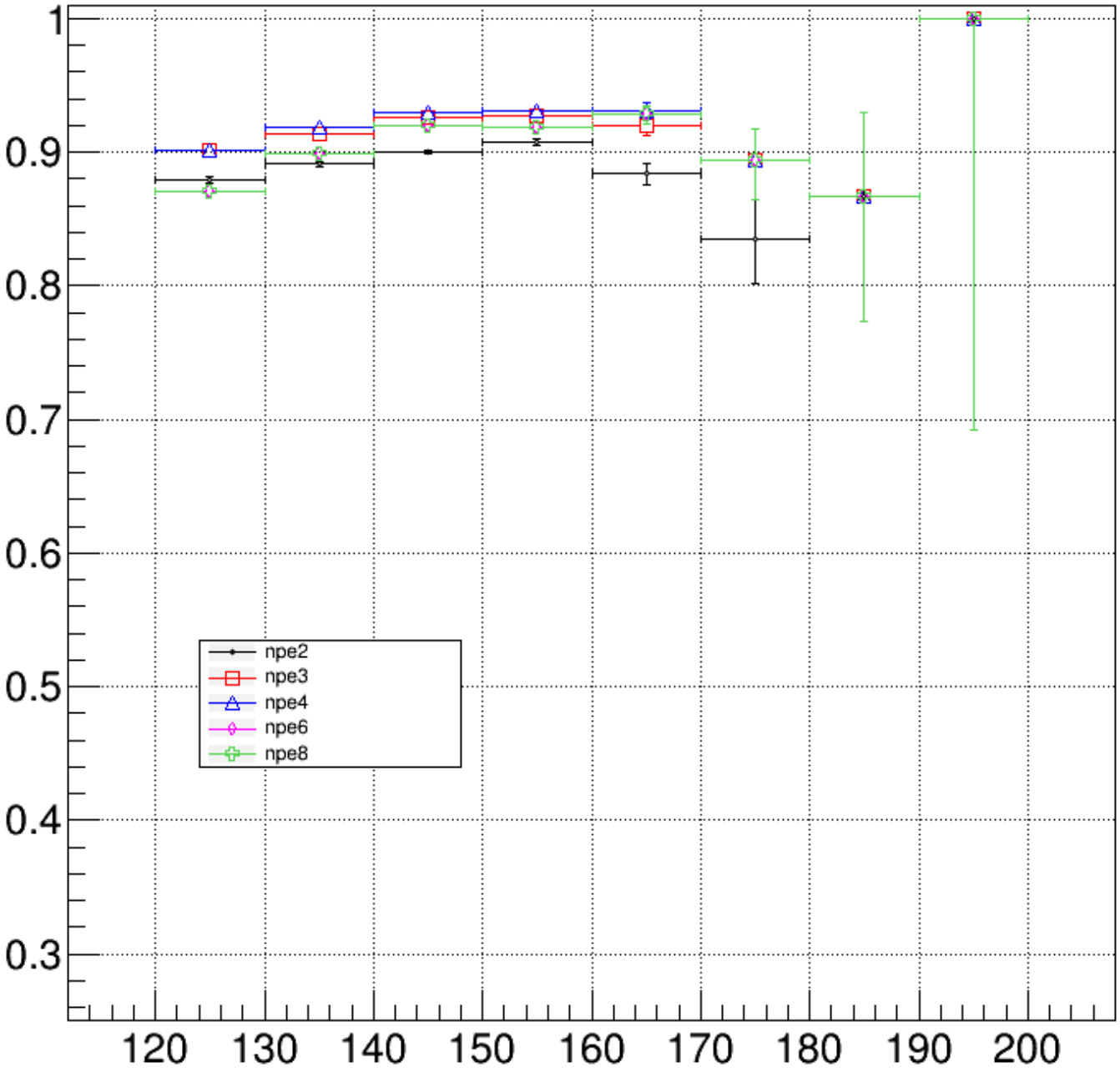

Space Point Efficiency in P⊥
1
0.99
0.98
0.97
0.96
0.95
0
10
20
30
40
50
60
70
80
90
npe2
npe3
npe4
npe6
npe8

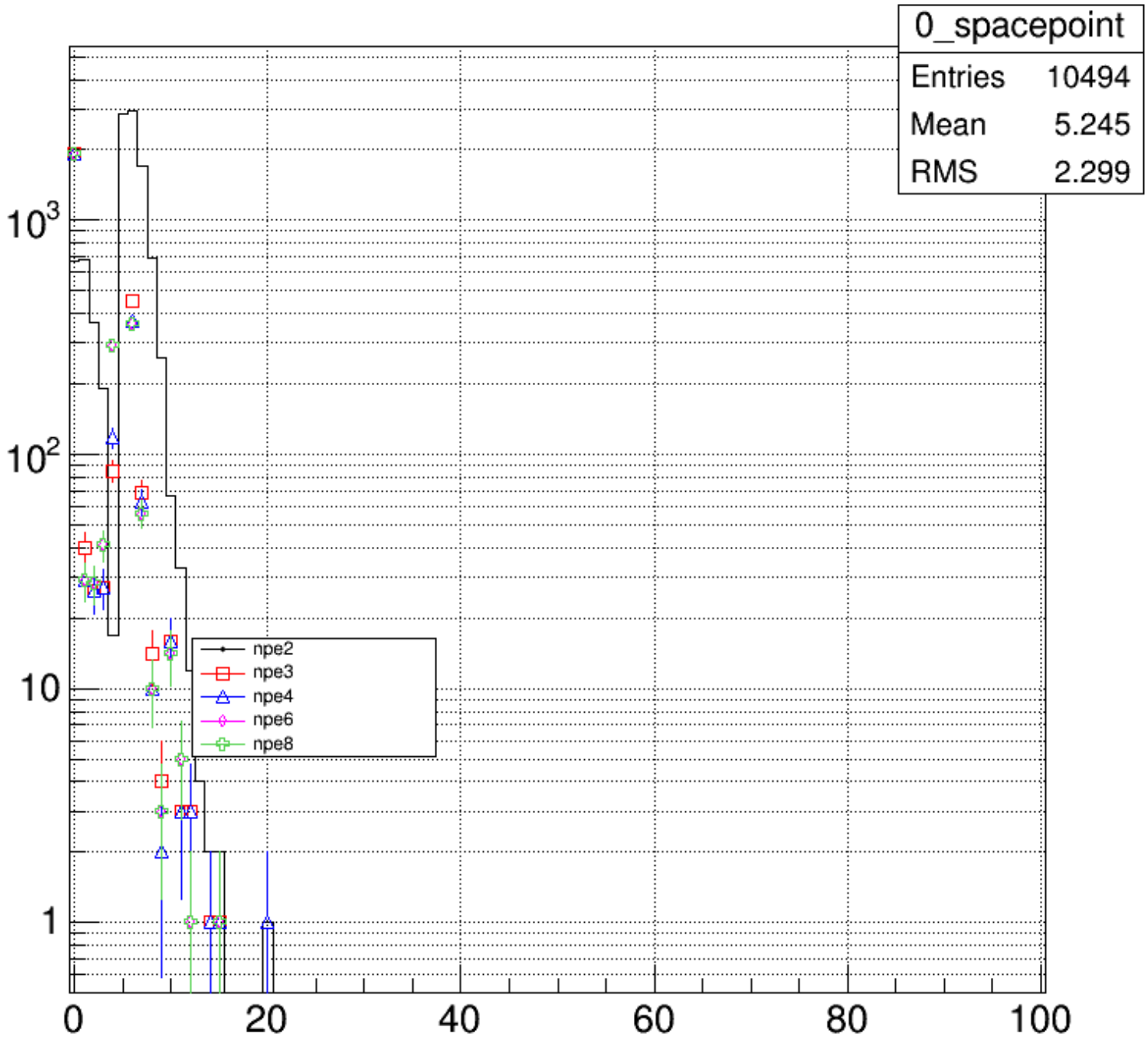

Space Point Efficiency in P_z
1.01
1
0.99
0.98
0.97
0.96
0.95
120
130
140
150
160
170
180
190
200
npe2
npe3
npe4
npe6
npe8

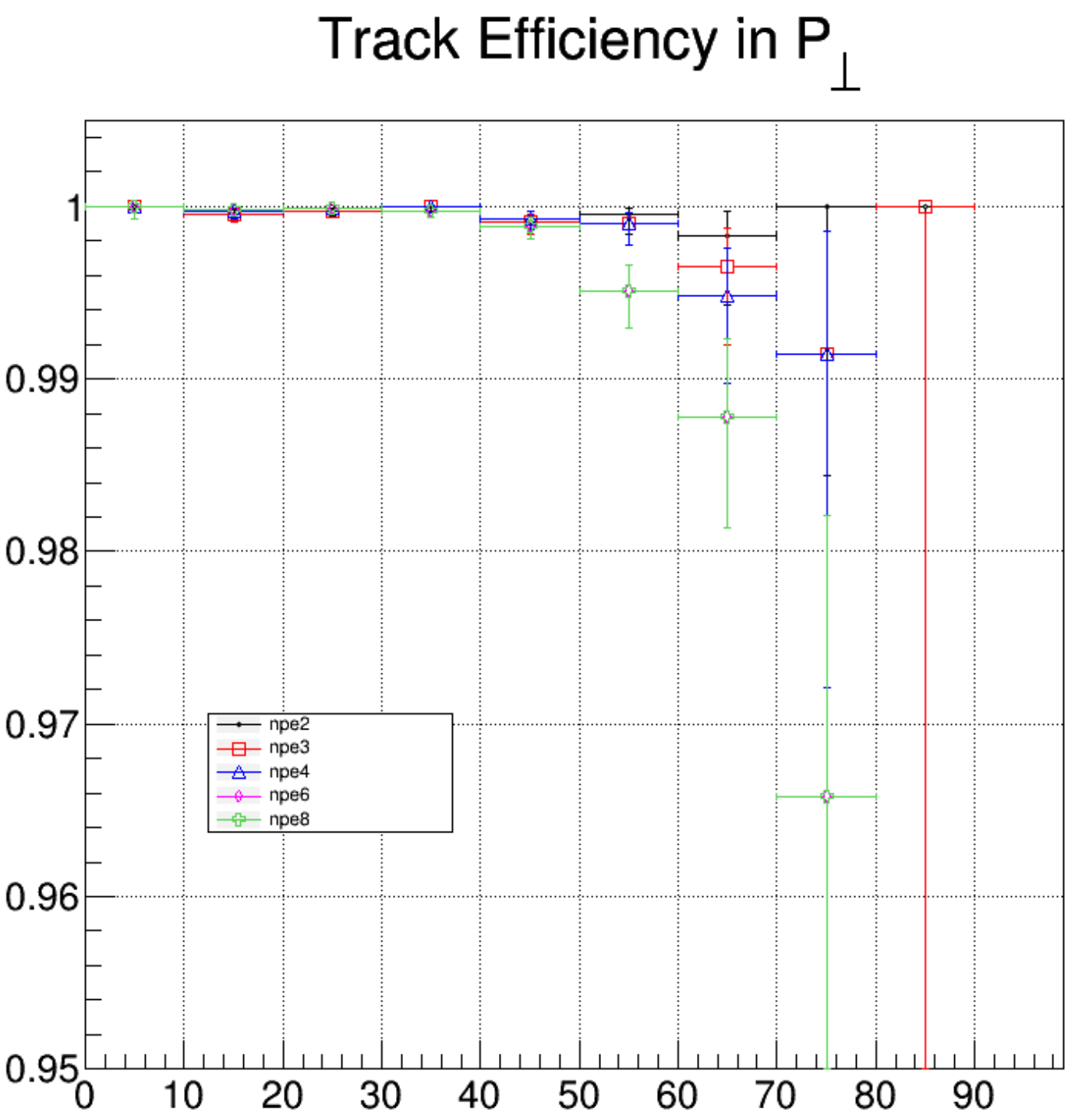

0_spacepoint_npe
Entries 55039
Mean 44.29
RMS 24.31
npe2
npe3
npe4
npe6
npe8
0
1000
2000
3000
4000
5000
6000
7000
0
10
20
30
40
50
60
70
80
90
100

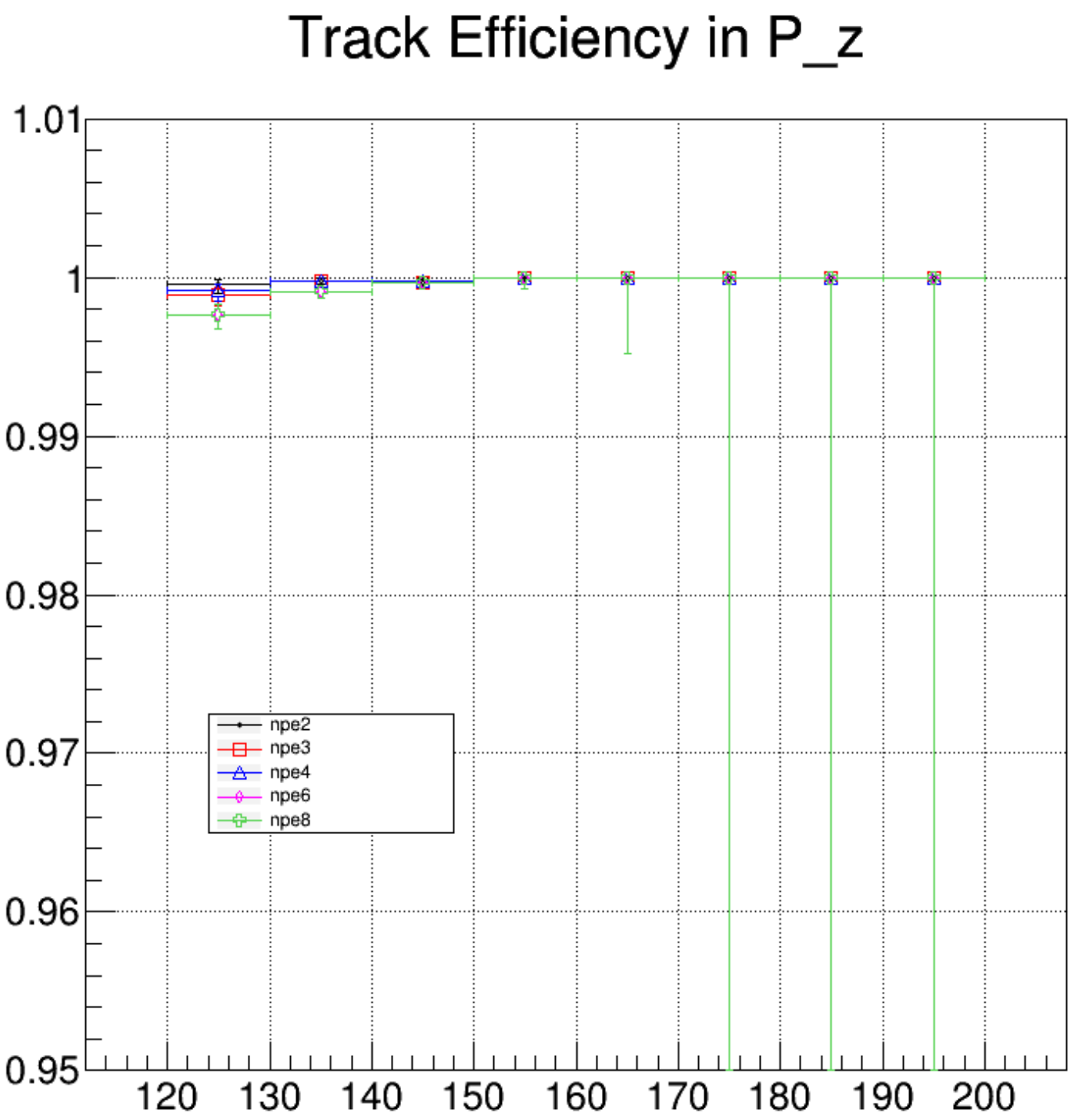

Spacepoint Purity in P⊥
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0
10
20
30
40
50
60
70
80
90
npe2
npe3
npe4
npe6
npe8

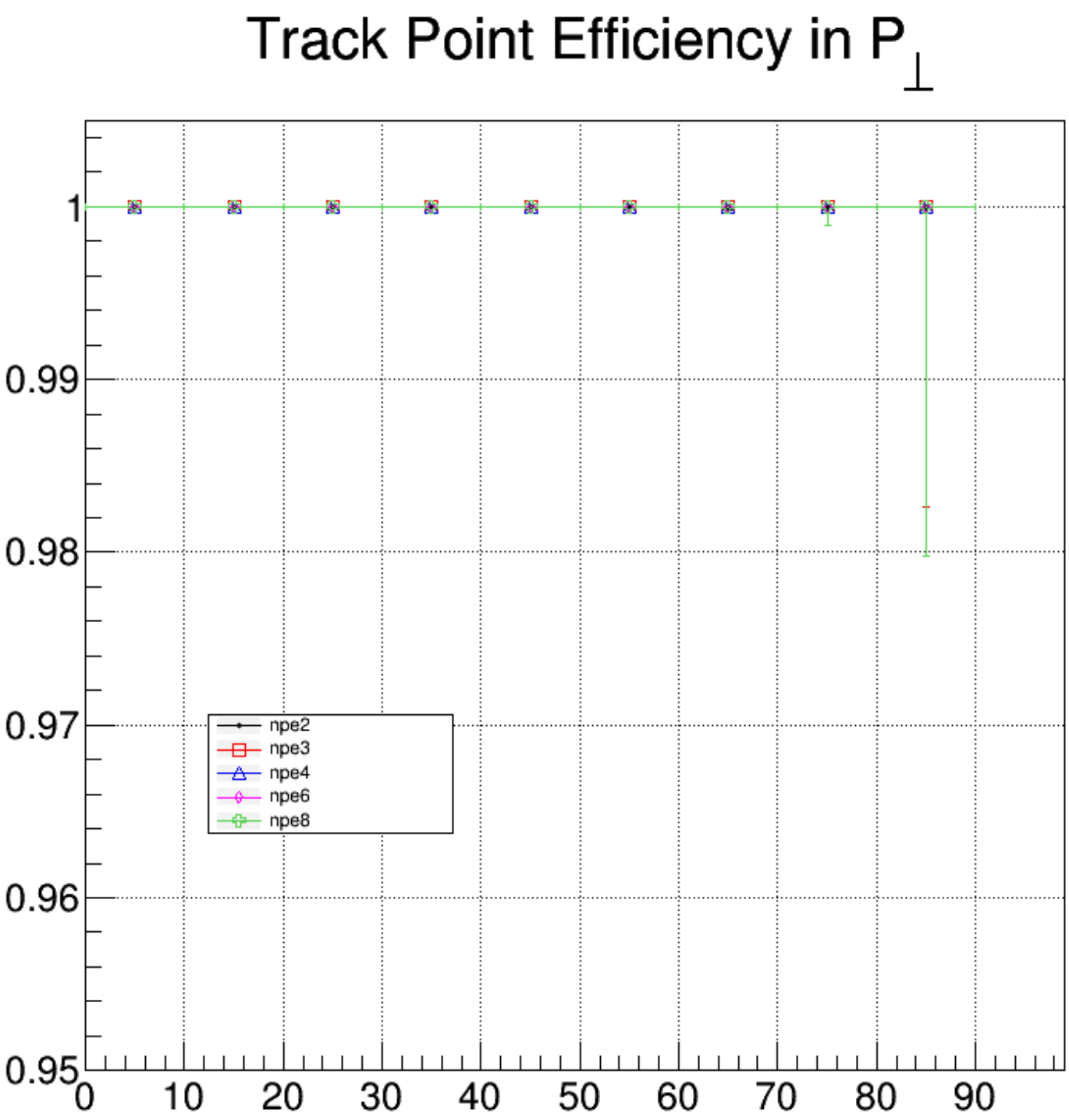
Spacepoint Purity in P_z

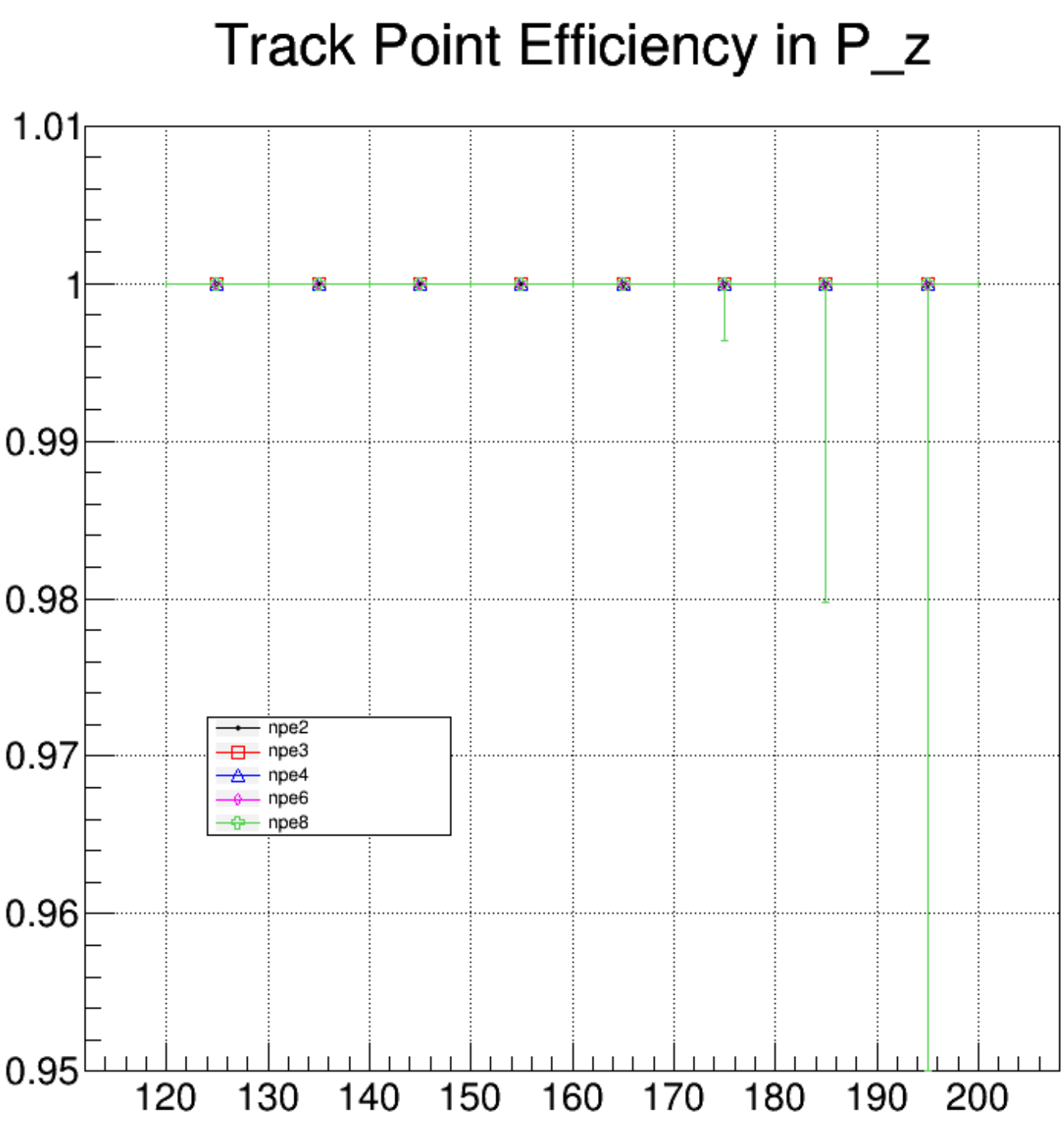


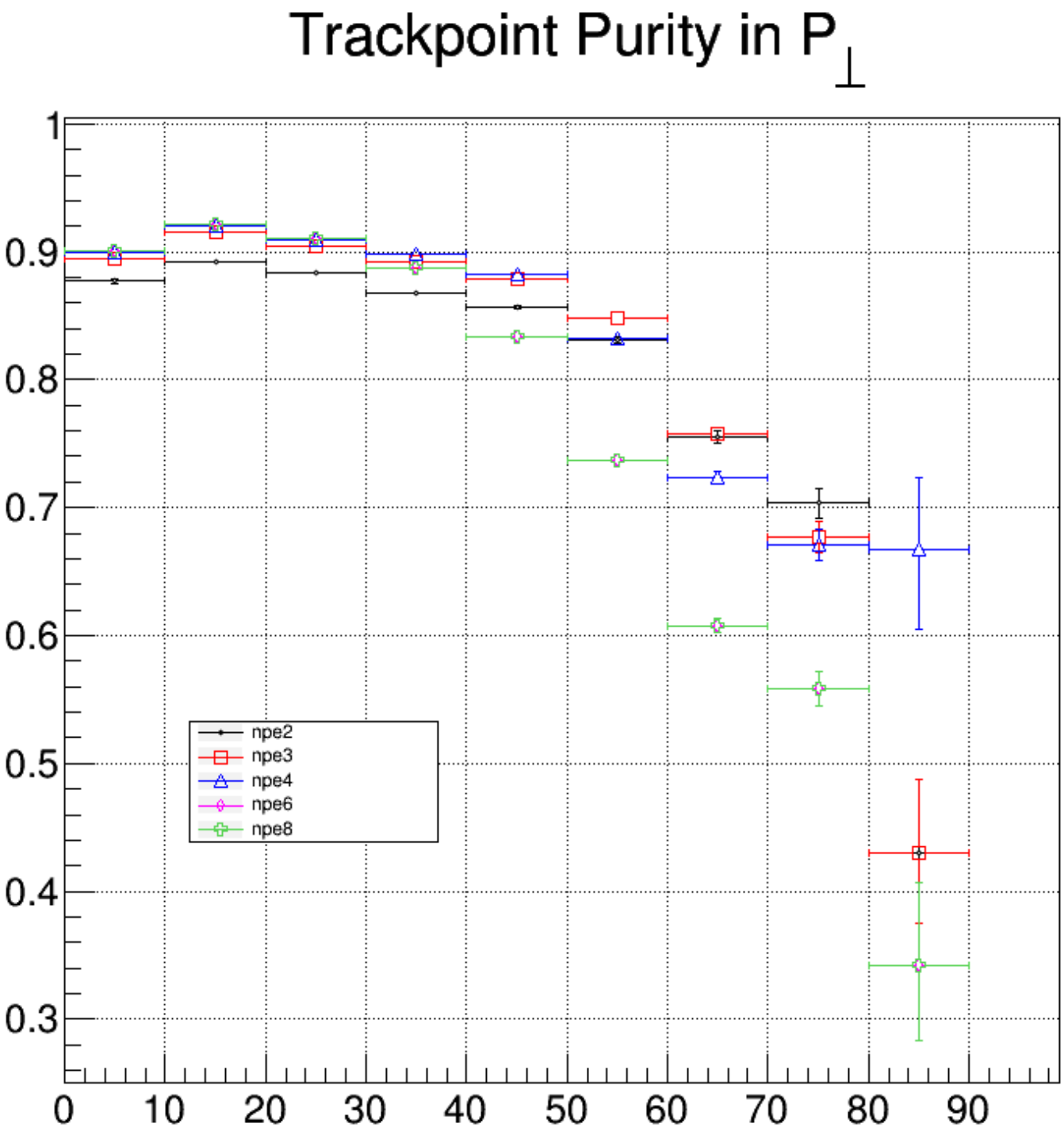
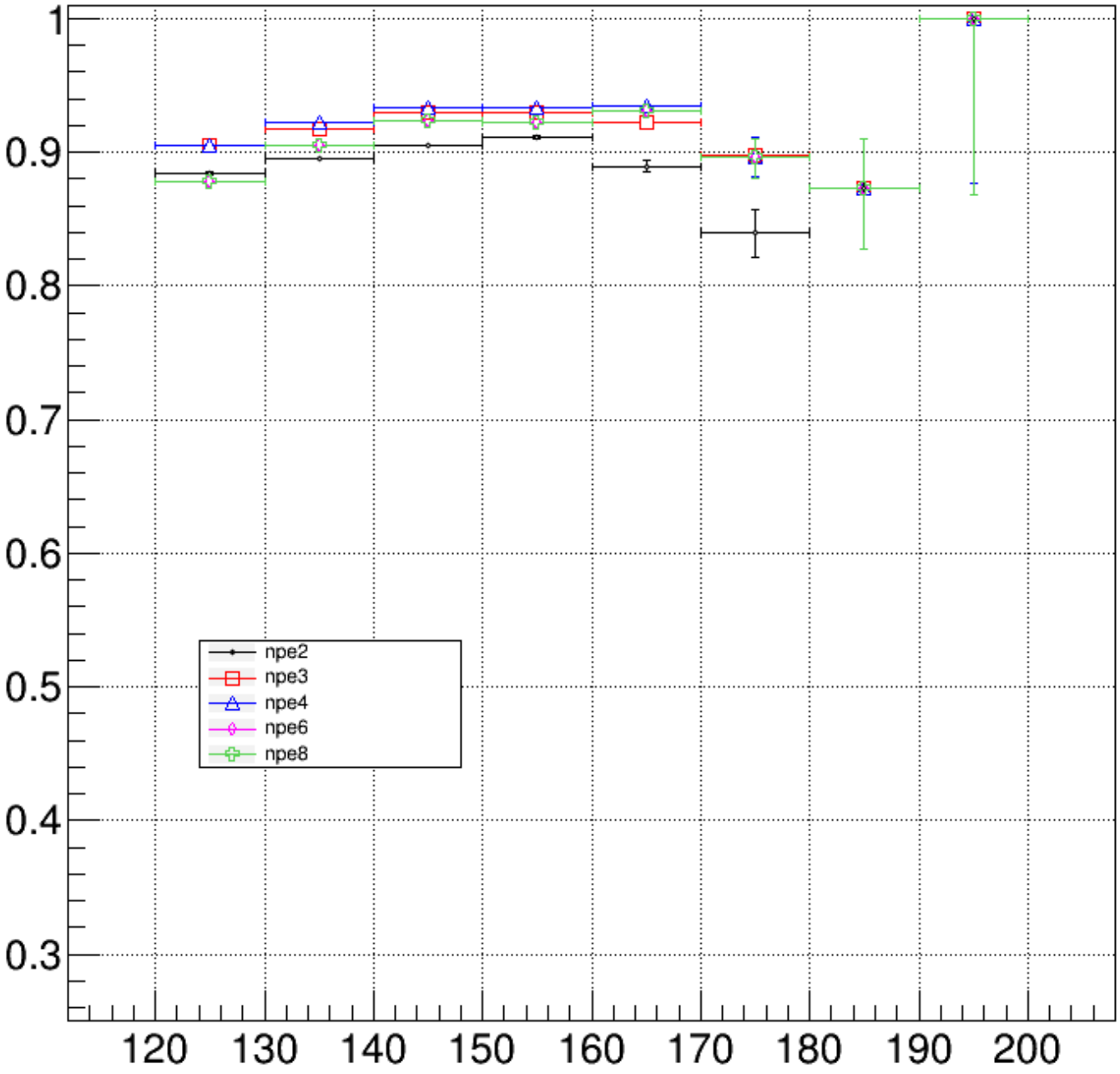

0_spacepoint
Entries 10494
Mean 5.245
RMS 2.299
10^3
10^2
10
1
0
20
40
60
80
100
npe2
npe3
npe4
npe6
npe8


Track Efficiency in P⊥
1
0.99
0.98
0.97
0.96
0.95
0
10
20
30
40
50
60
70
80
90
npe2
npe3
npe4
npe6
npe8


Track Efficiency in P_z
1.01
1
0.99
0.98
0.97
0.96
0.95
120
130
140
150
160
170
180
190
200
npe2
npe3
npe4
npe6
npe8


Track Point Efficiency in P⊥
1
0.99
0.98
0.97
0.96
0.95
0
10
20
30
40
50
60
70
80
90
npe2
npe3
npe4
npe6
npe8


Track Point Efficiency in P_z
1.01
1
0.99
0.98
0.97
0.96
0.95
120
130
140
150
160
170
180
190
200
npe2
npe3
npe4
npe6
npe8


Trackpoint Purity in P⊥
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0
10
20
30
40
50
60
70
80
90
npe2
npe3
npe4
npe6
npe8

Trackpoint Purity in P_z