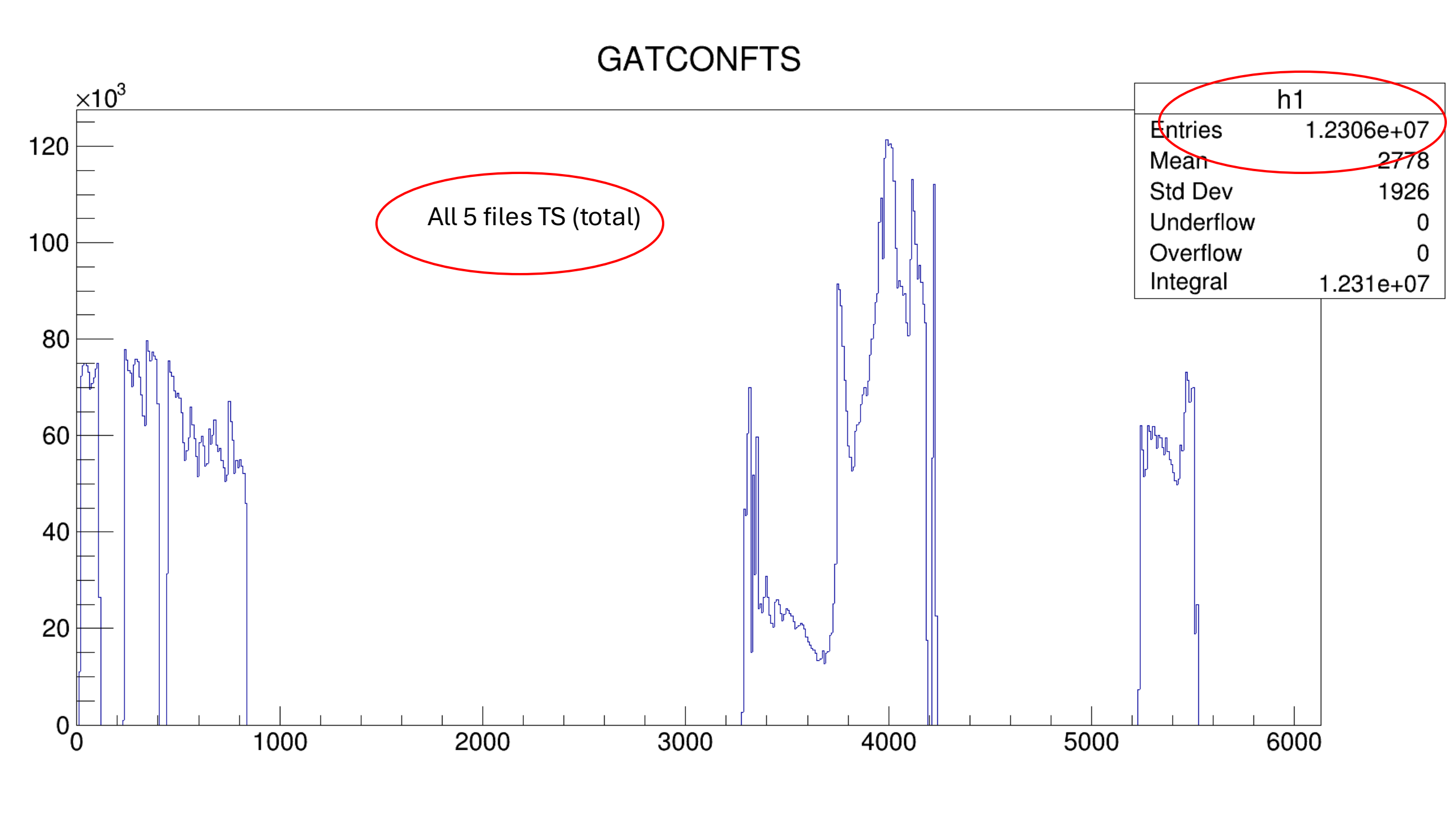
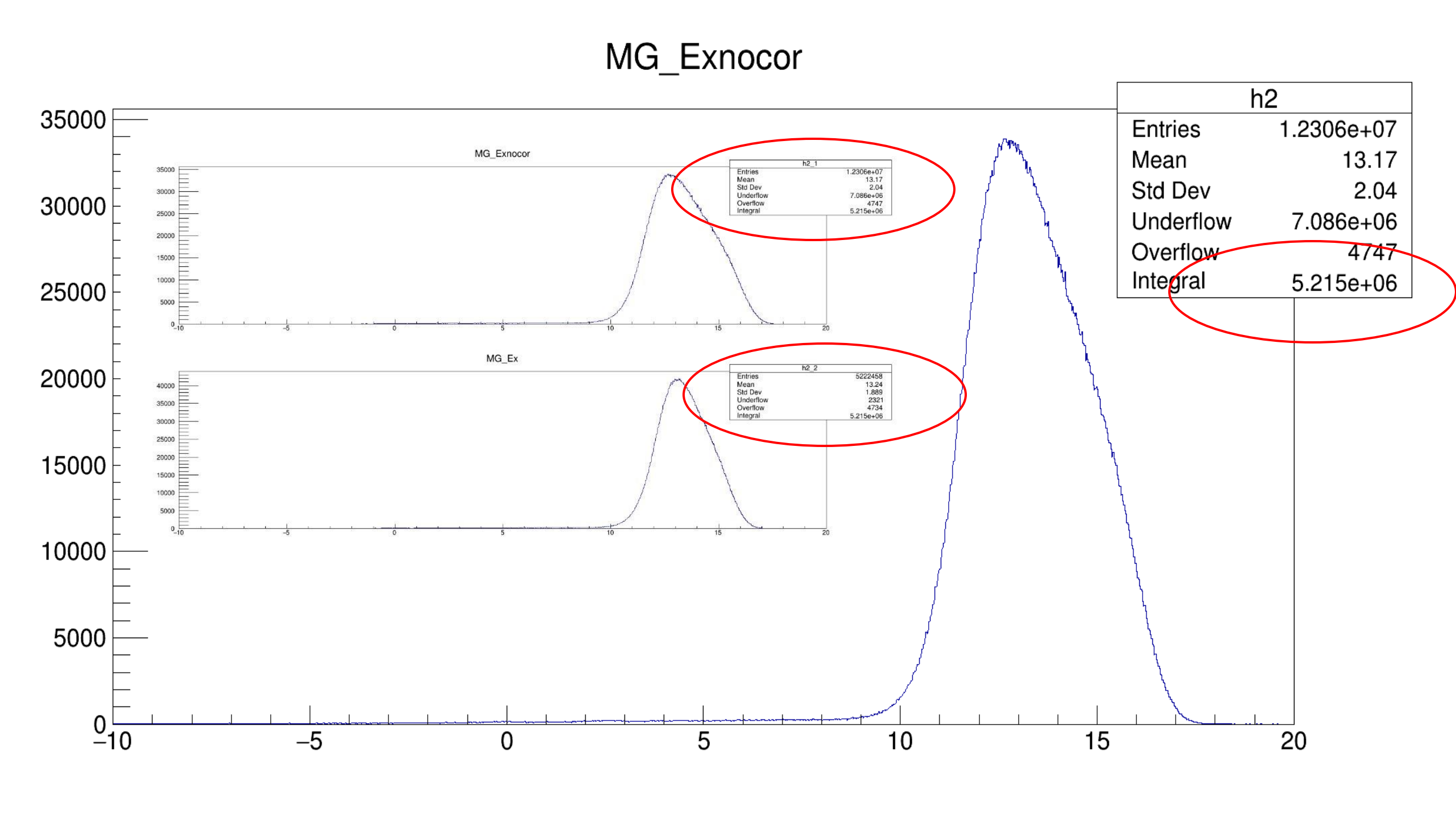
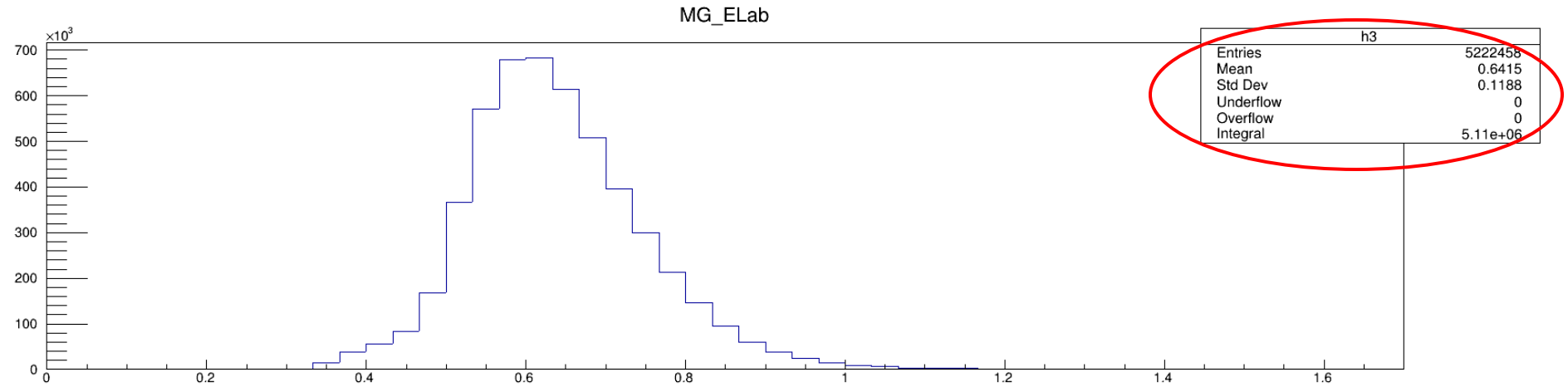
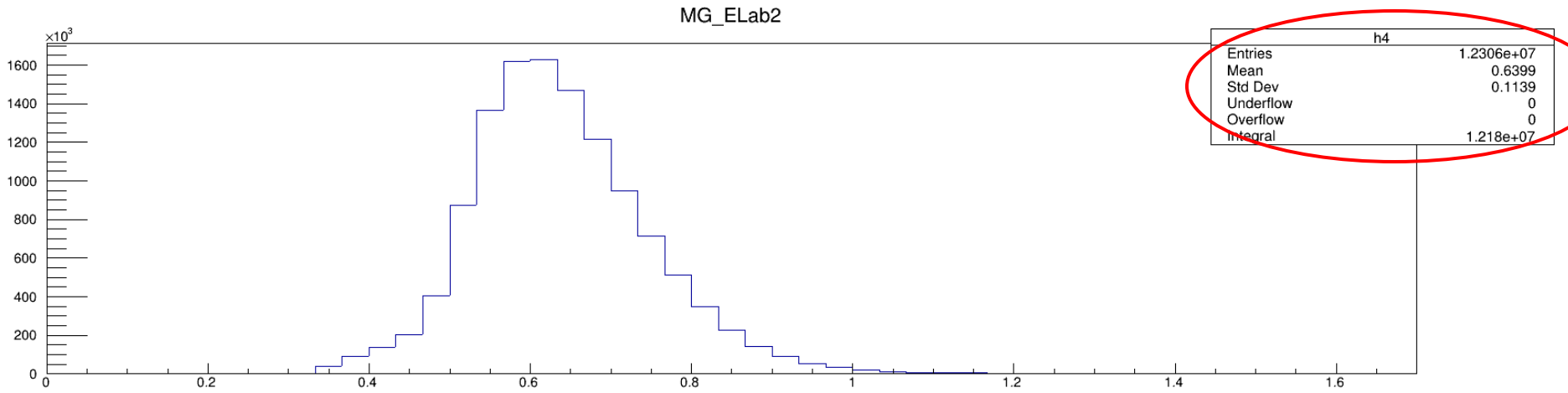

GATCONFTS
×10^3
120
100
80
60
40
20
0
0
1000
2000
3000
4000
5000
6000
All 5 files TS (total)
h1
Entries 1.2306e+07
Mean 2778
Std Dev 1926
Underflow 0
Overflow 0
Integral 1.231e+07

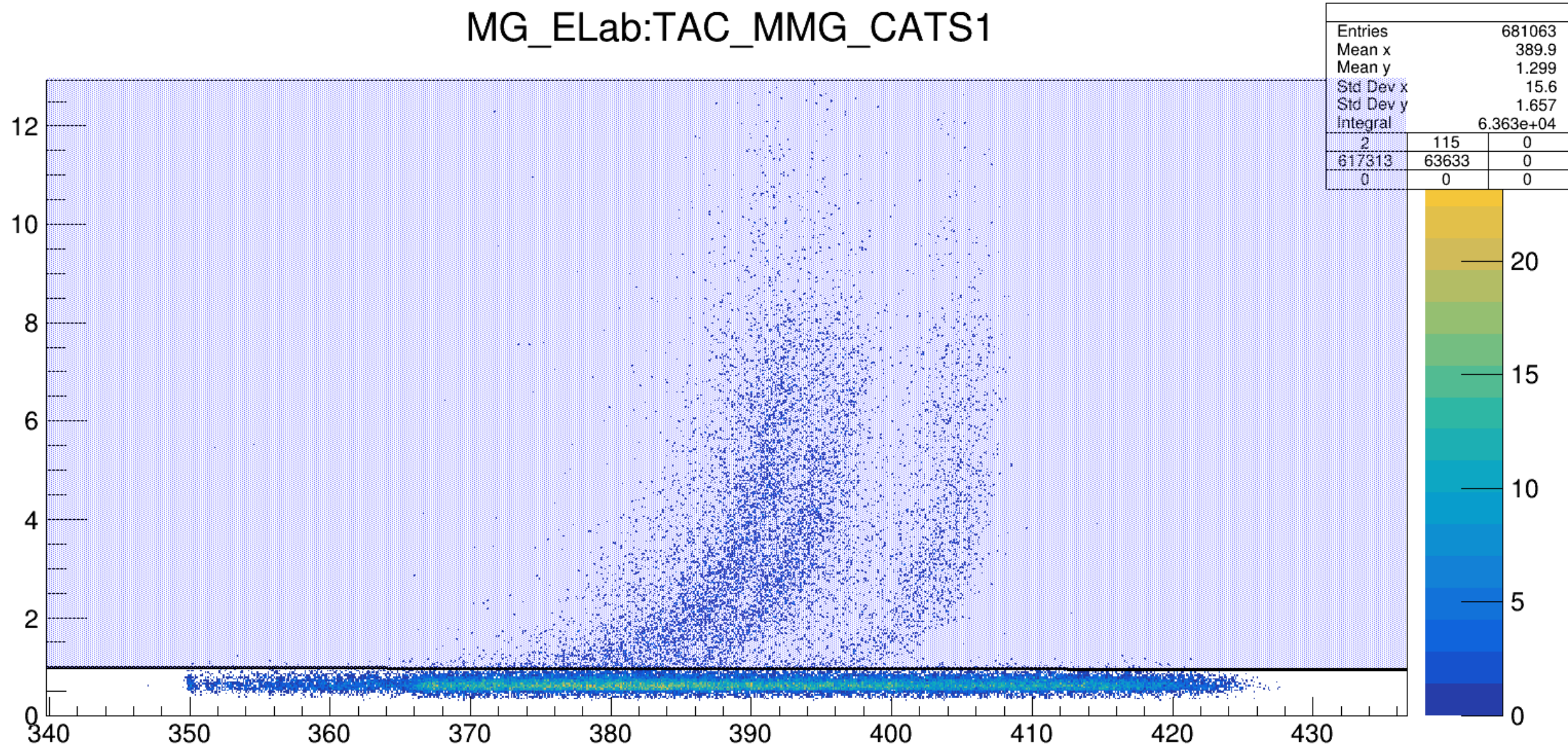

MG_Exnocor
h2
Entries 1.2306e+07
Mean 13.17
Std Dev 2.04
Underflow 7.086e+06
Overflow 4747
Integral 5.215e+06
MG_Exnocor
h2_1
Entries 1.2306e+07
Mean 13.17
Std Dev 2.04
Underflow 7.086e+06
Overflow 4747
Integral 5.215e+06
MG_Ex
h2_2
Entries 5222458
Mean 13.24
Std Dev 1.889
Underflow 2321
Overflow 4734
Integral 5.215e+06

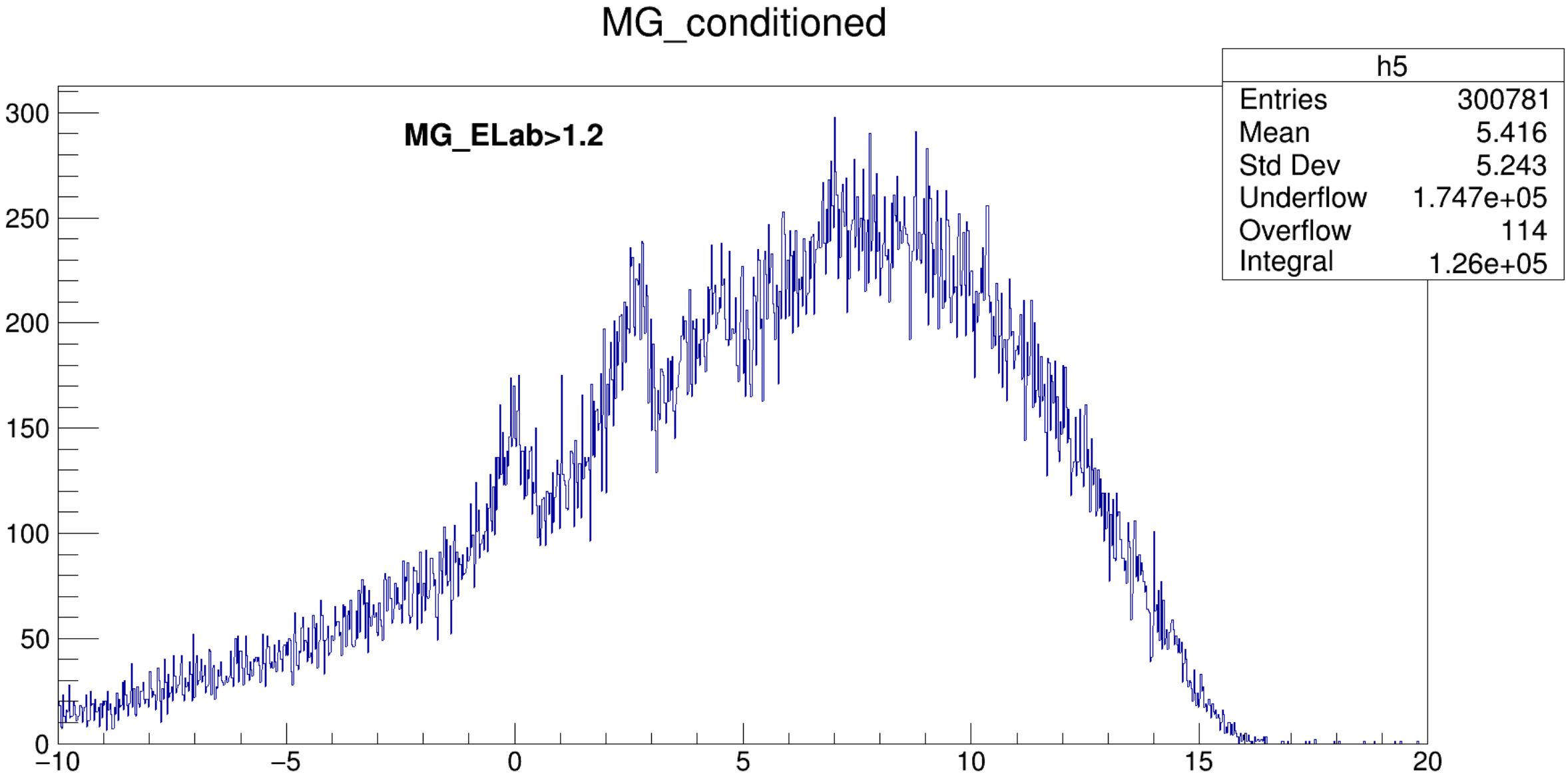
There are 2 branches MG_ELab and MG_ELab2.
In my version of the code they seem to be the same but maybe different in Ozge's version...
But for some reason MG_ELab2 have the same #entries as E* but not MG_ELab

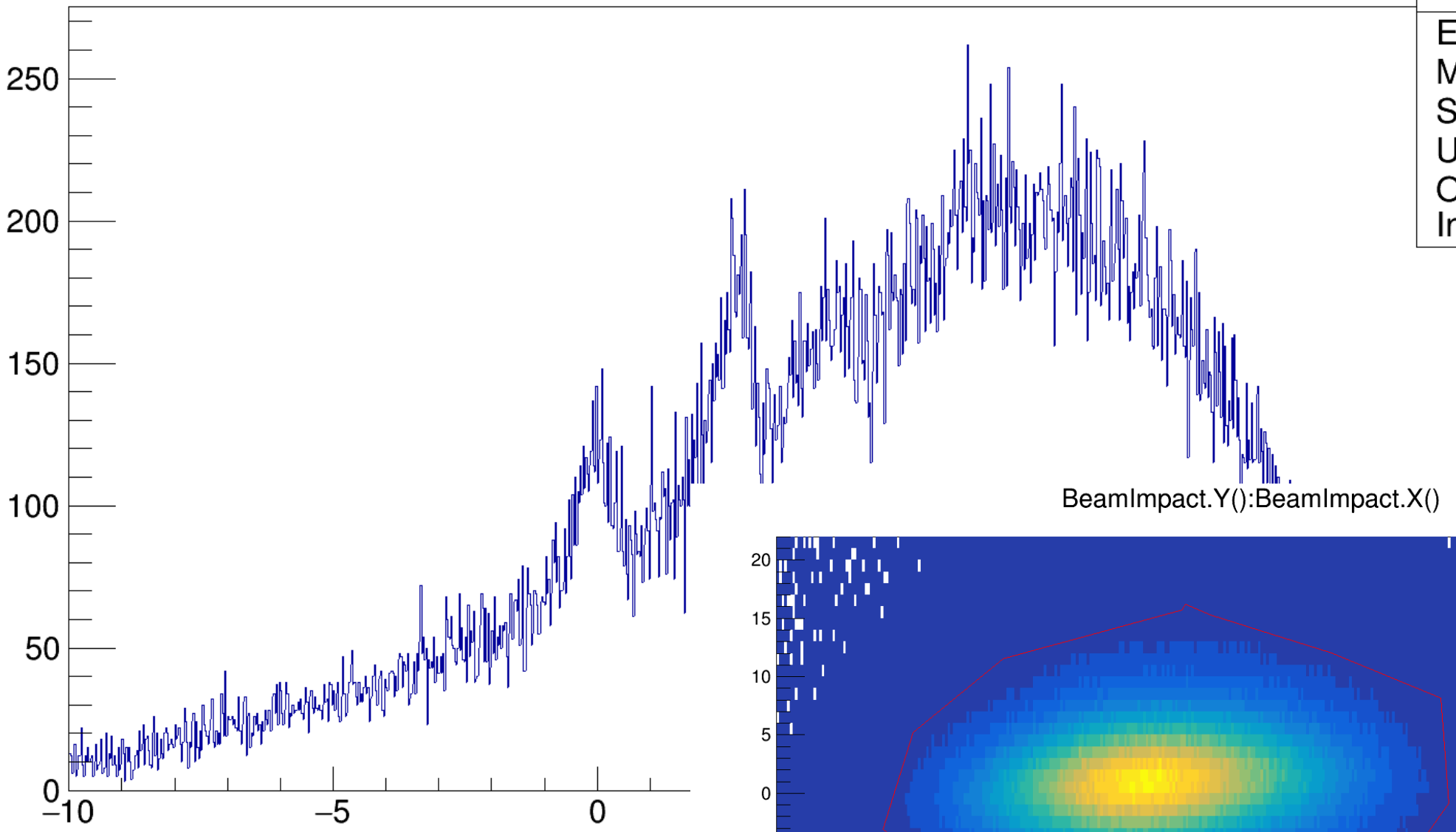


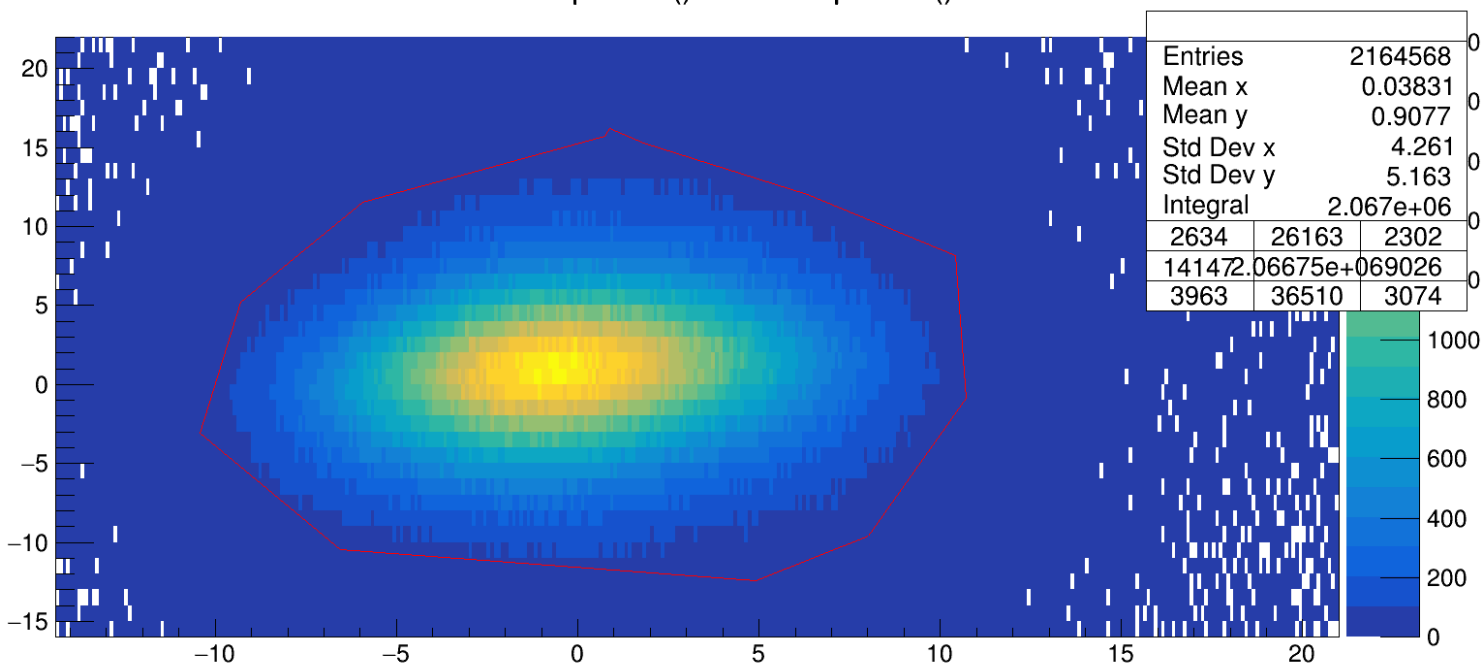


A way to see the cut on MG_ELab value>1.0

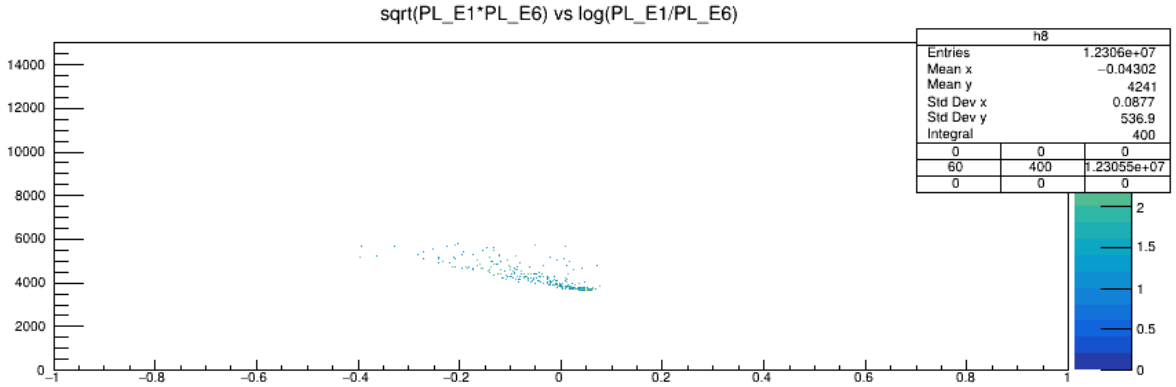


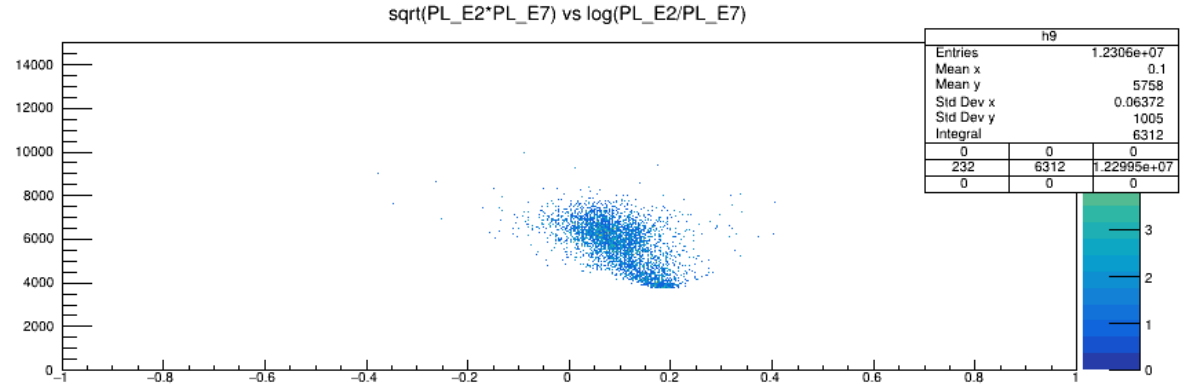

MG_conditioned
MG_ELab>1.2
h5
Entries 300781
Mean 5.416
Std Dev 5.243
Underflow 1.747e+05
Overflow 114
Integral 1.26e+05
300
250
200
150
100
50
0
−10
−5
0
5
10
15
20

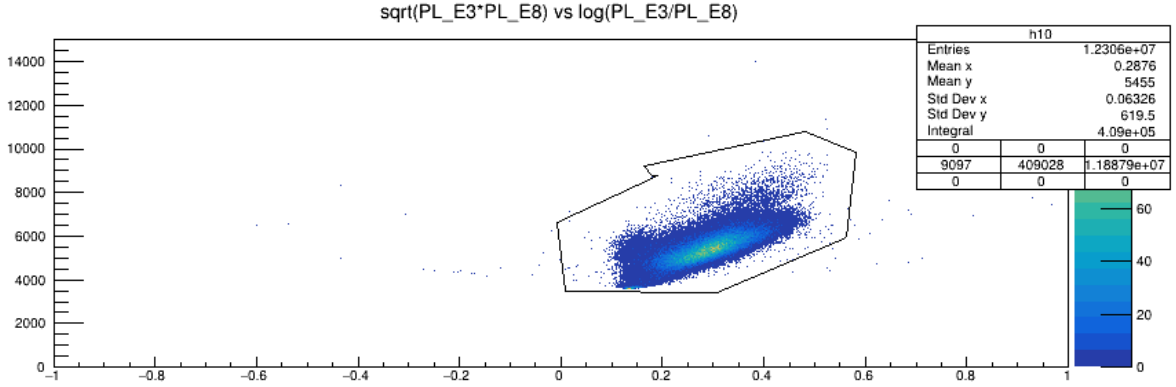


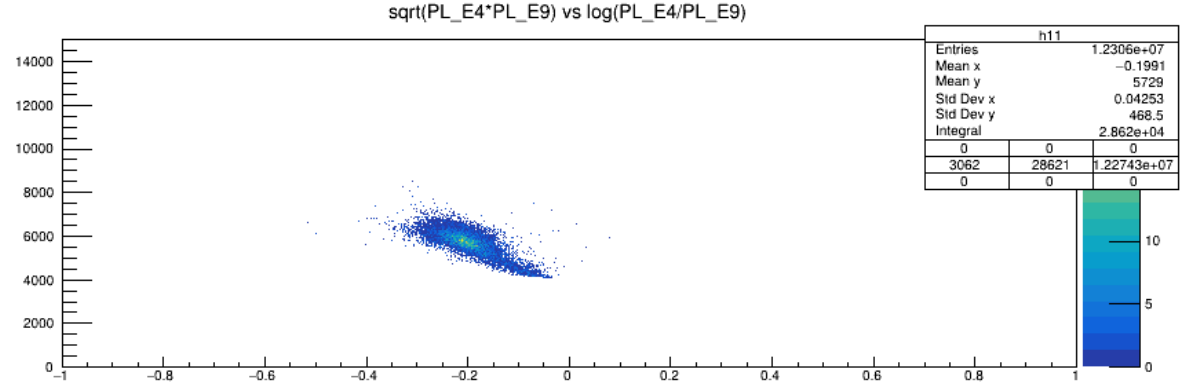


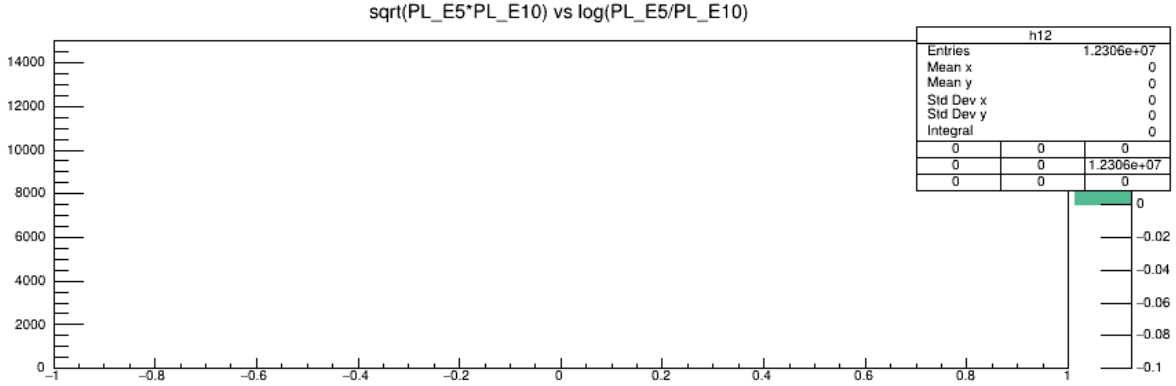
This CATS cut along with ELab>1.2



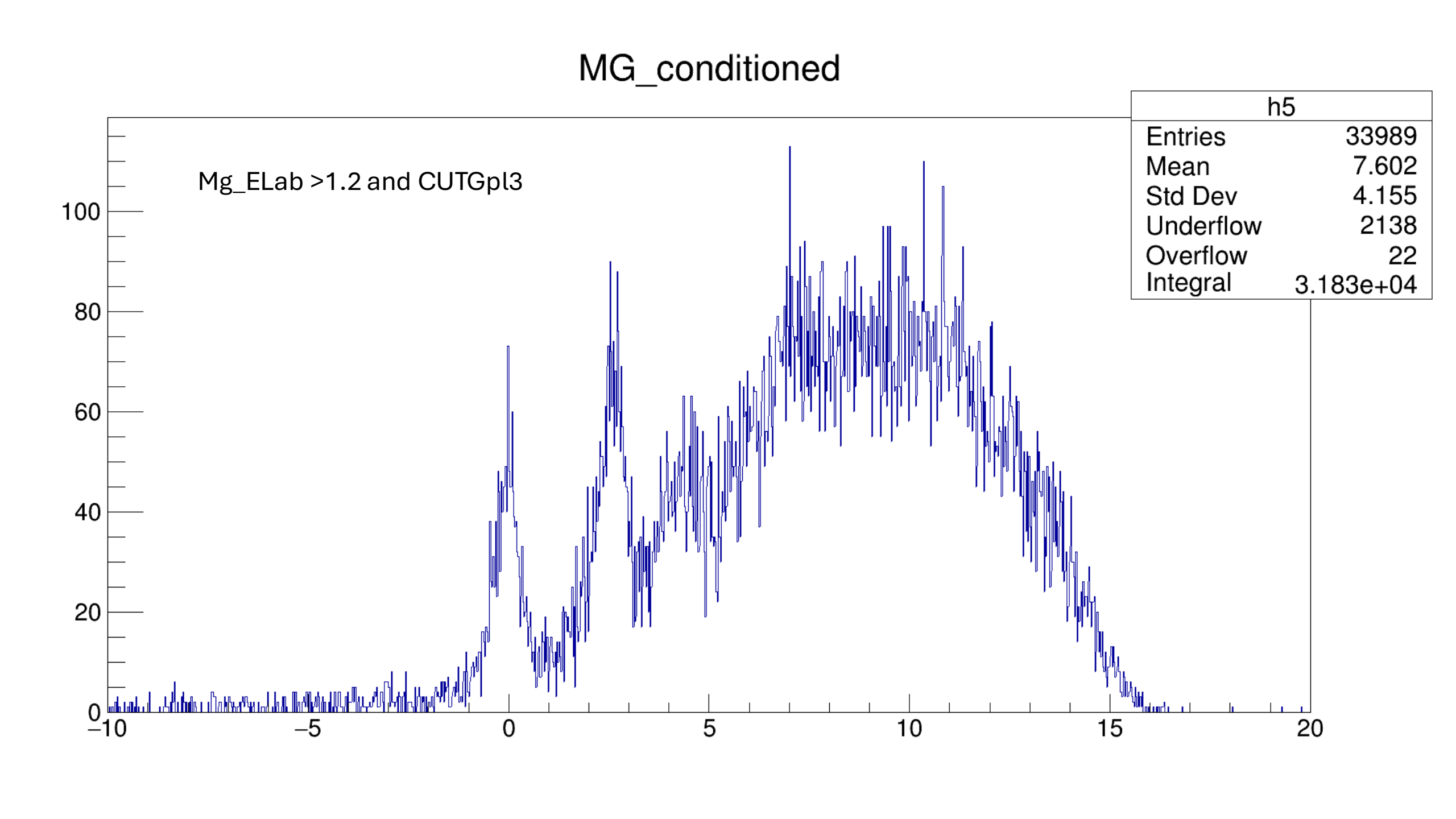


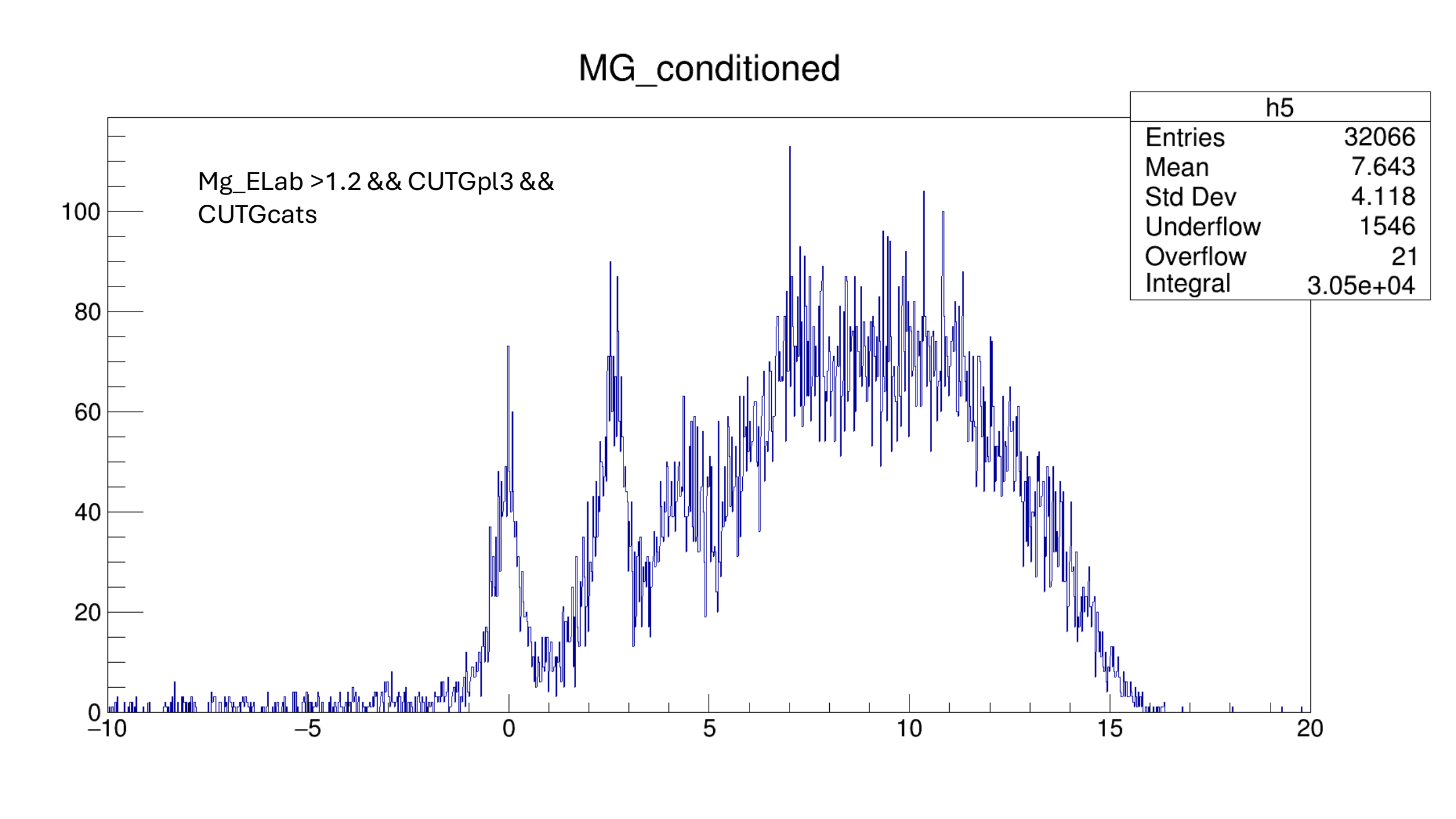






Drawing SQRT(E3*E8) vs log (E3/E8)
Gating on the same

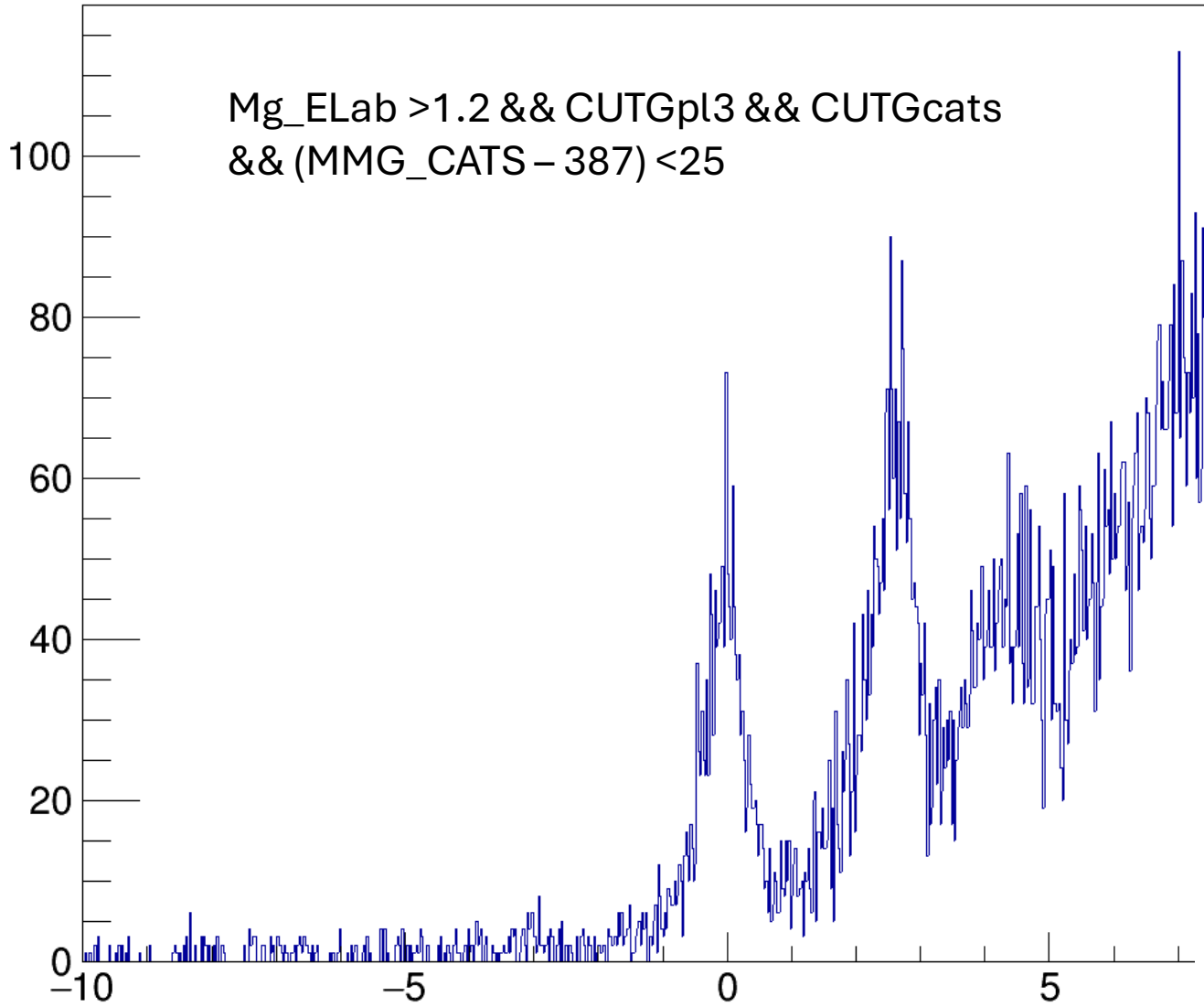

MG_conditioned
Mg_ELab >1.2 and CUTGpl3
h5
Entries 33989
Mean 7.602
Std Dev 4.155
Underflow 2138
Overflow 22
Integral 3.183e+04
100
80
60
40
20
0
−10
−5
0
5
10
15
20


MG_conditioned
Mg_ELab >1.2 && CUTGpl3 &&
CUTGcats
h5
Entries 32066
Mean 7.643
Std Dev 4.118
Underflow 1546
Overflow 21
Integral 3.05e+04
100
80
60
40
20
0
−10
−5
0
5
10
15
20

MG_conditioned

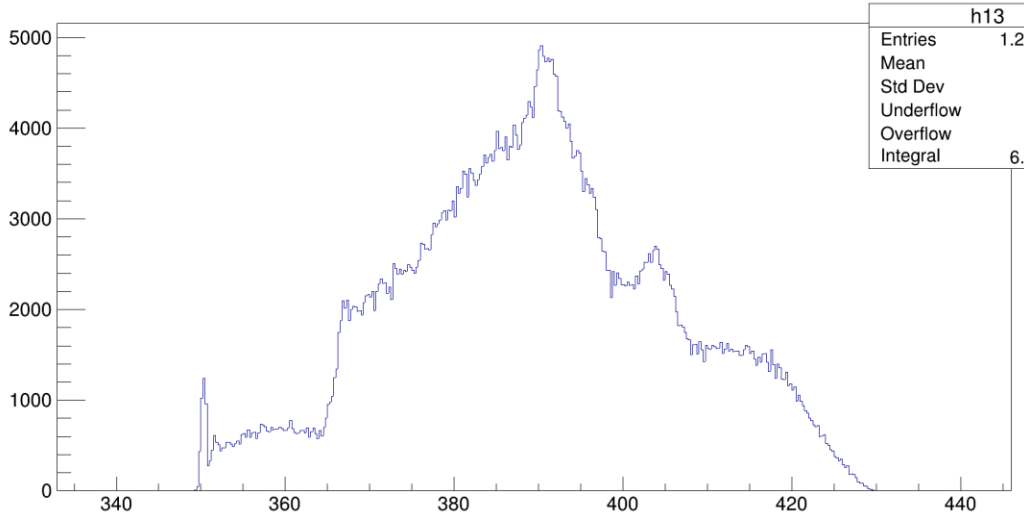
Mg_ELab >1.2 && CUTGpl3 && CUTGcats
&& (MMG_CATS – 387) <25

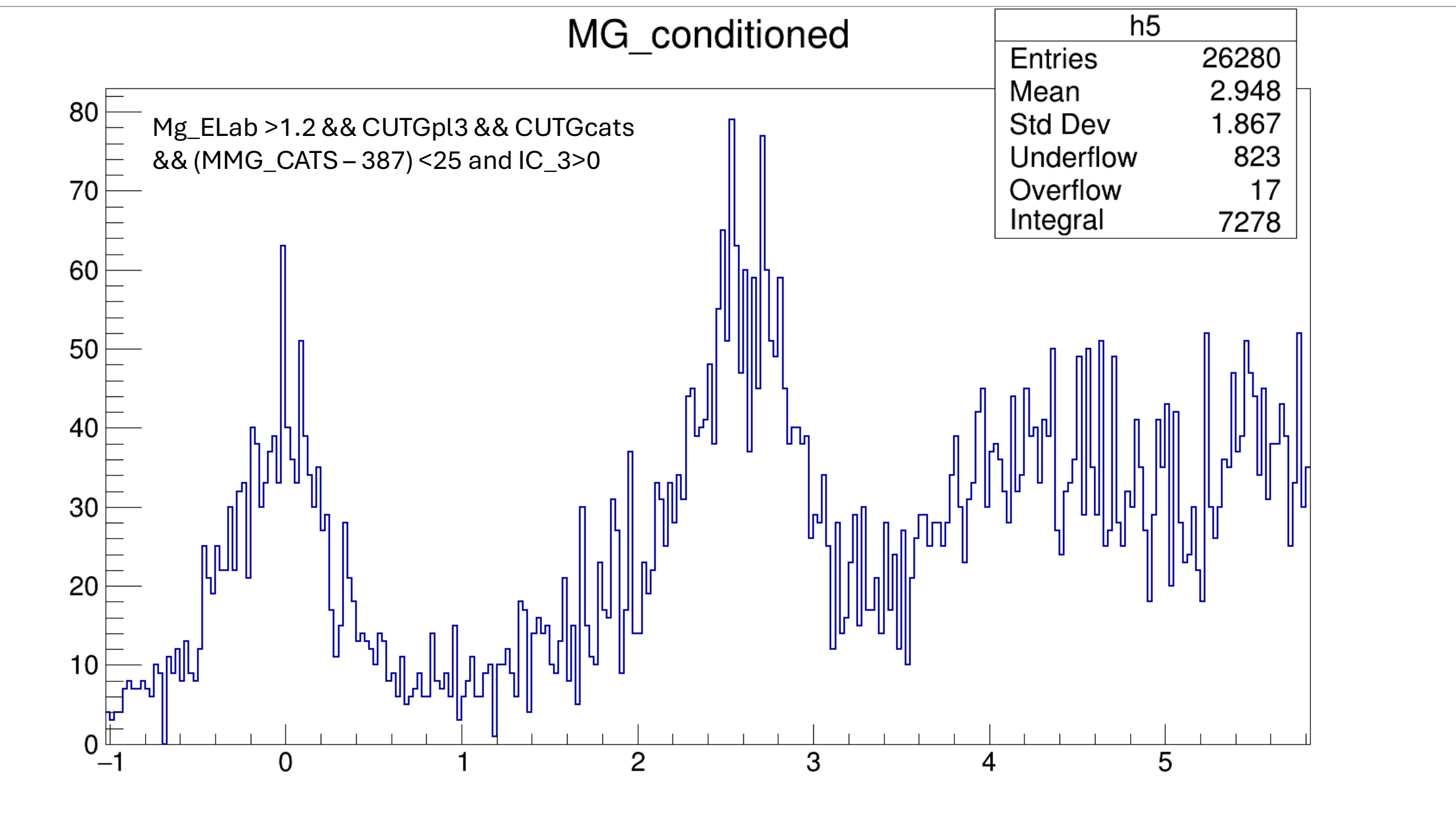
h5	
Entries	31307
Mean	7.642
Std Dev	4.119
Underflow	998
Overflow	21
Integral	3.029e+04



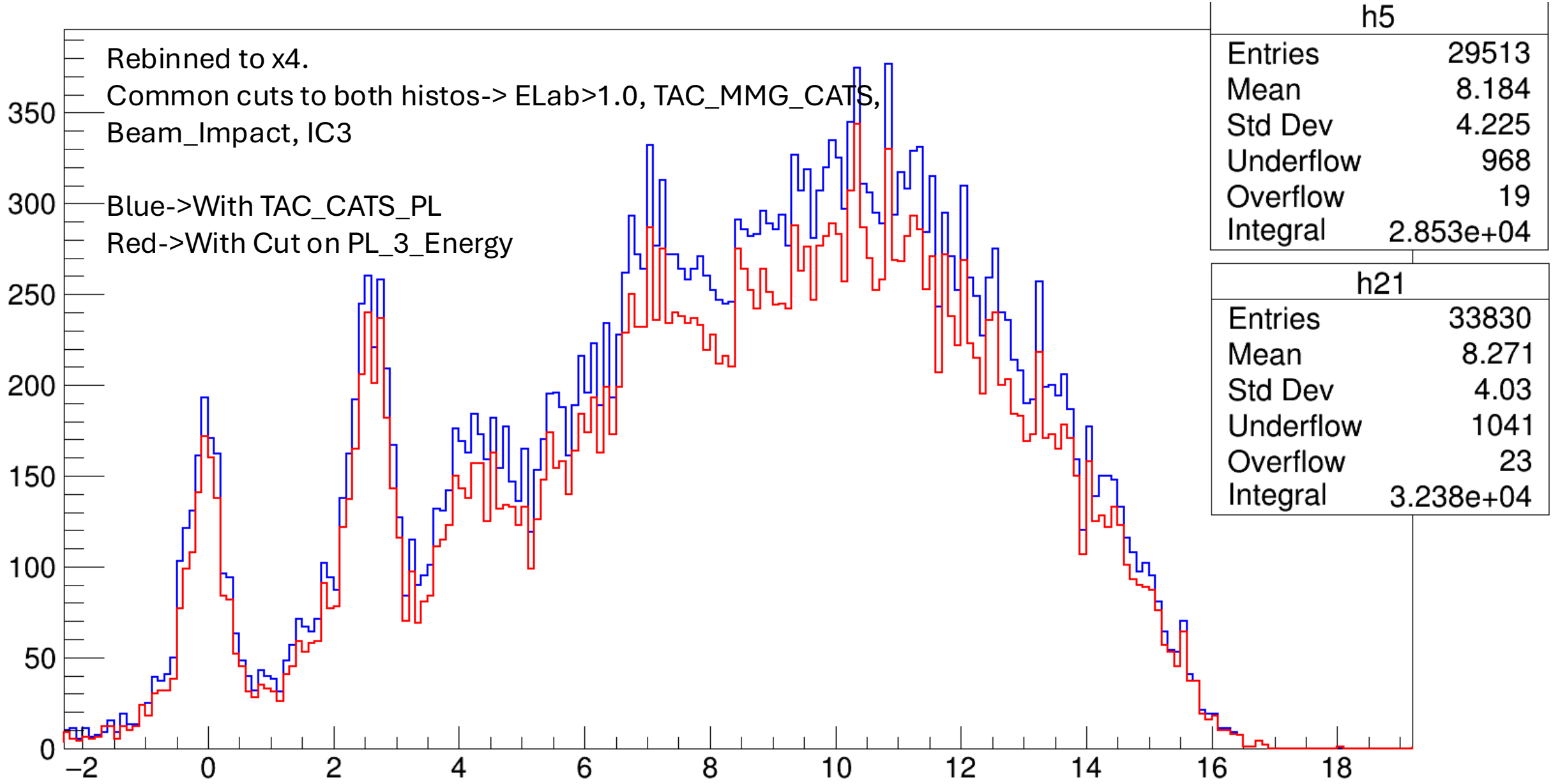
TAC_MMG_CATS1

h13	
Entries	1.2306e+07
Mean	389.5
Std Dev	16.22
Underflow	0
Overflow	0
Integral	6.316e+05

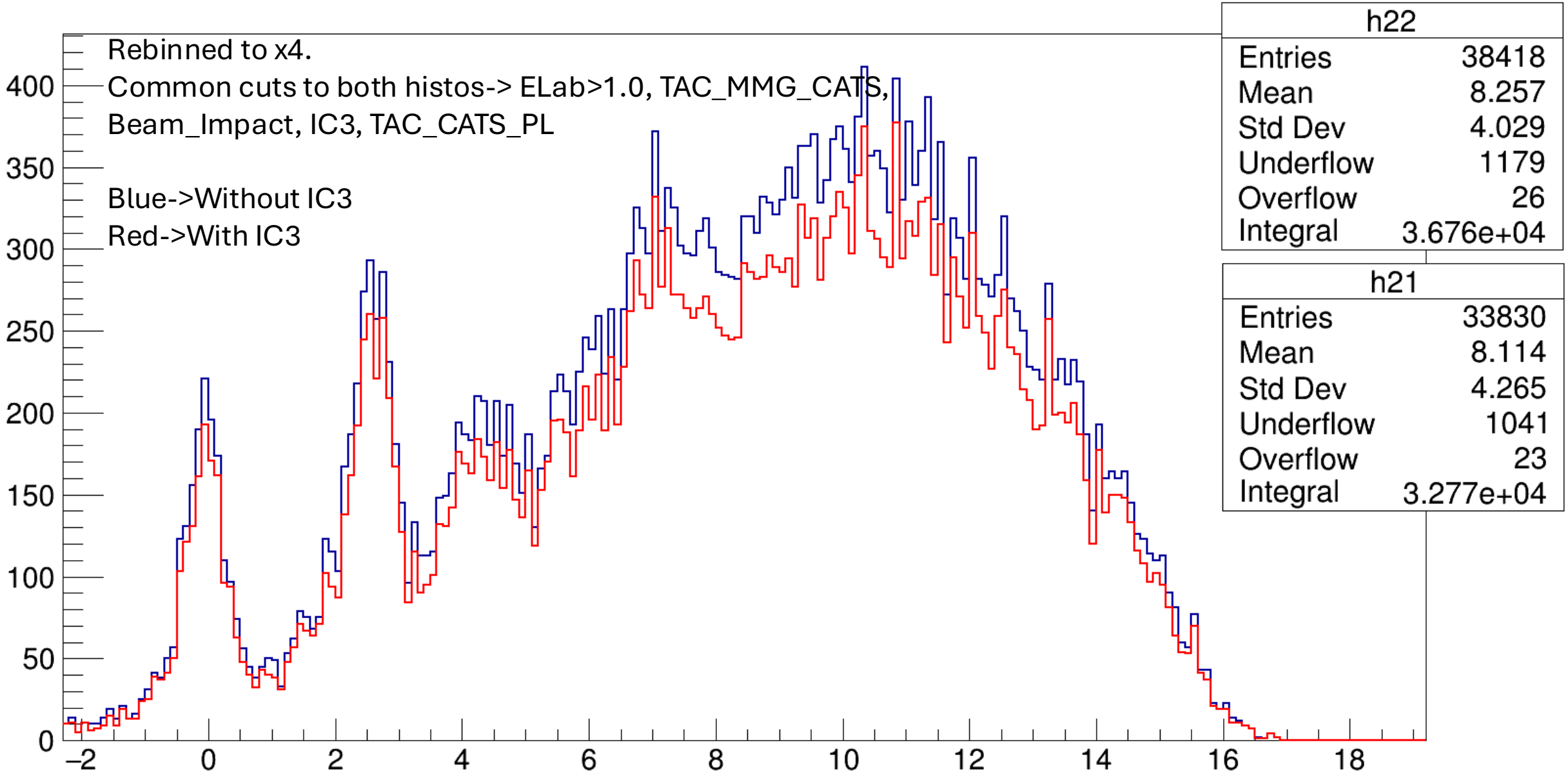


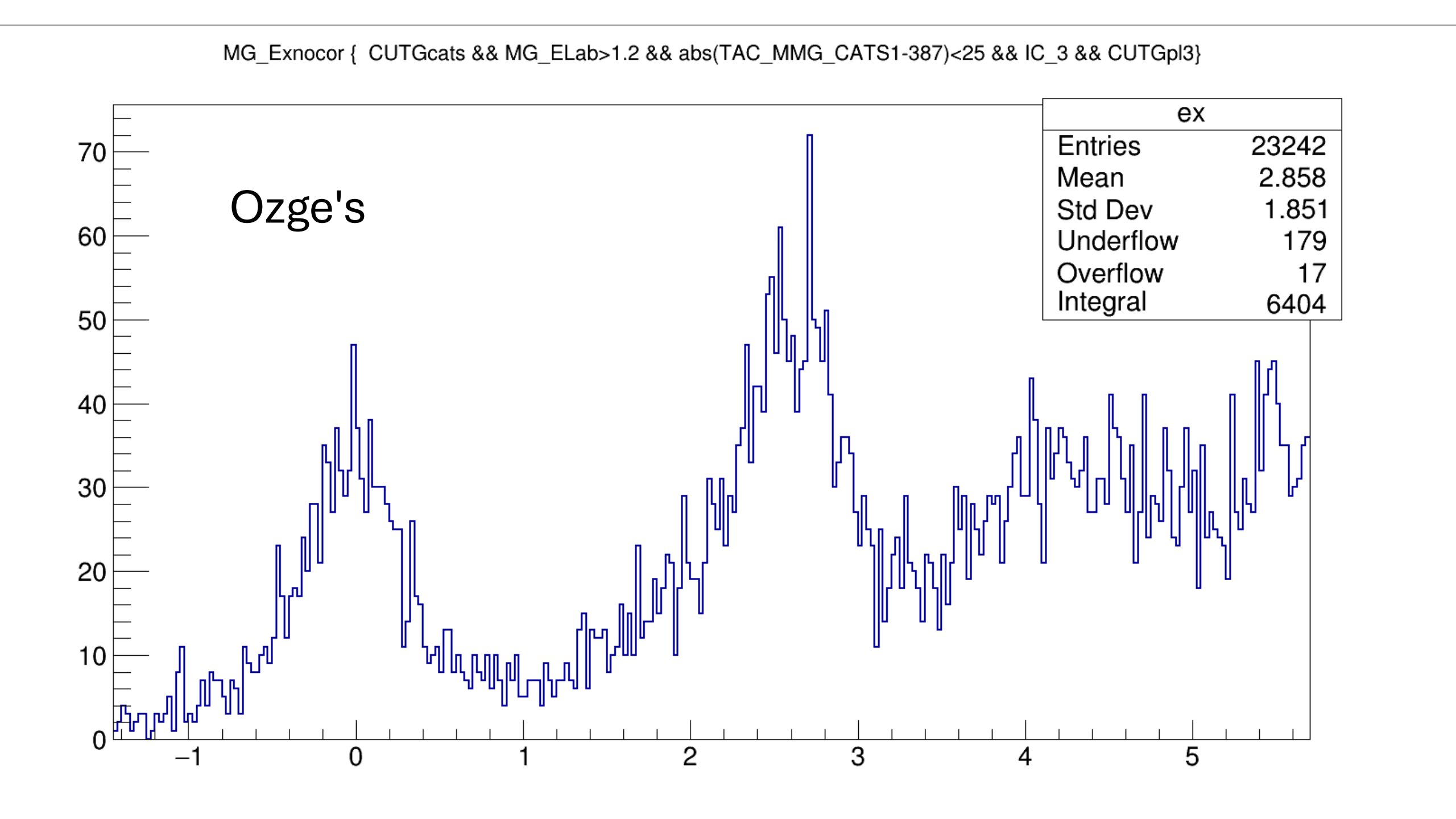

MG_conditioned
h5
Entries 26280
Mean 2.948
Std Dev 1.867
Underflow 823
Overflow 17
Integral 7278
Mg_ELab >1.2 && CUTGpl3 && CUTGcats
&& (MMG_CATS – 387) <25 and IC_3>0
80
70
60
50
40
30
20
10
0
–1
0
1
2
3
4
5

MG_conditioned with TAC_CATS_PL vs Energy of PL3



MG_conditioned_with TAC_CATS_PL w/ and w/o IC cut




MG_Exnocor { CUTGcats && MG_ELab>1.2 && abs(TAC_MMG_CATS1-387)<25 && IC_3 && CUTGpl3}
Ozge's
ex
Entries 23242
Mean 2.858
Std Dev 1.851
Underflow 179
Overflow 17
Integral 6404
70
60
50
40
30
20
10
0
−1
0
1
2
3
4
5