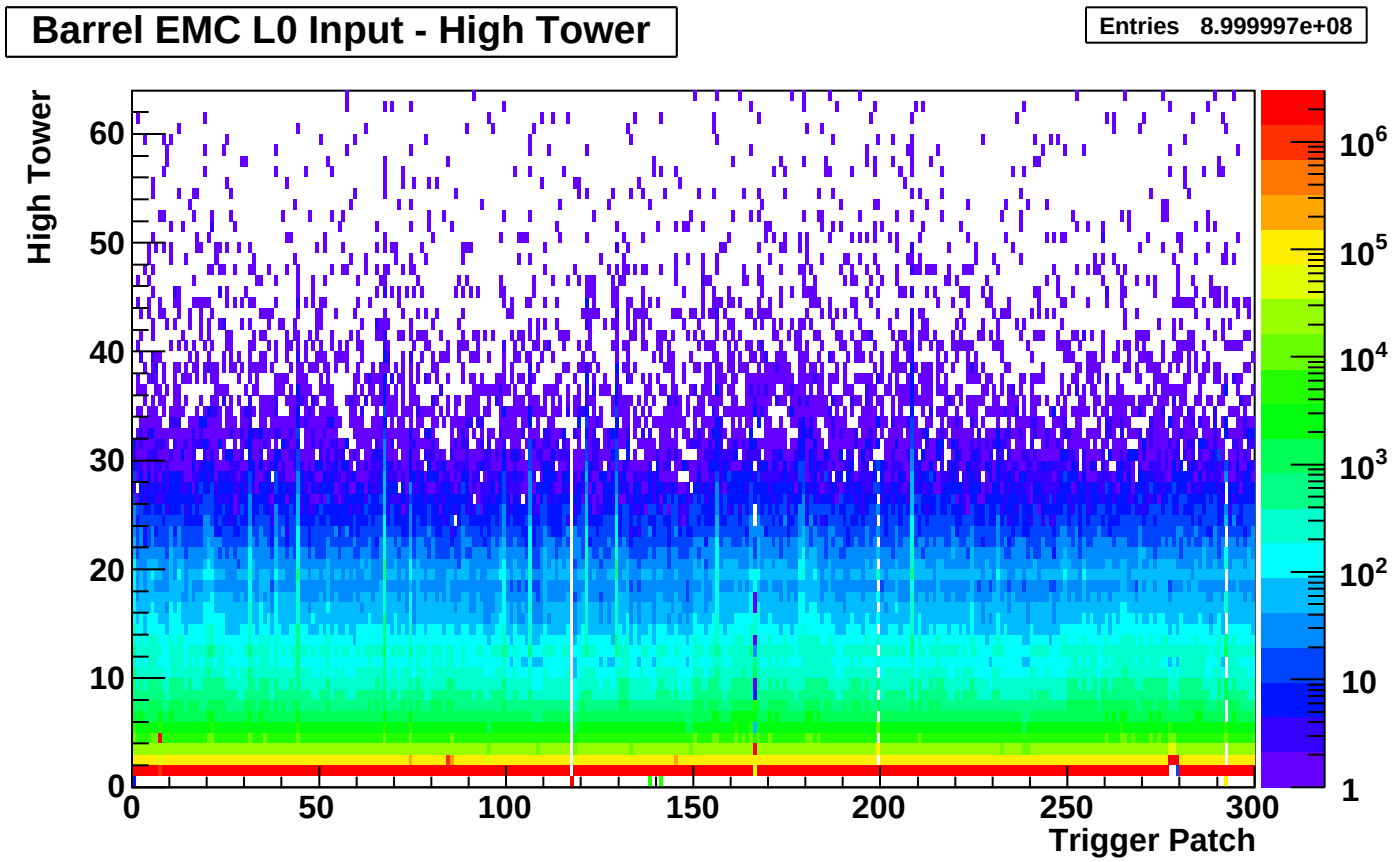
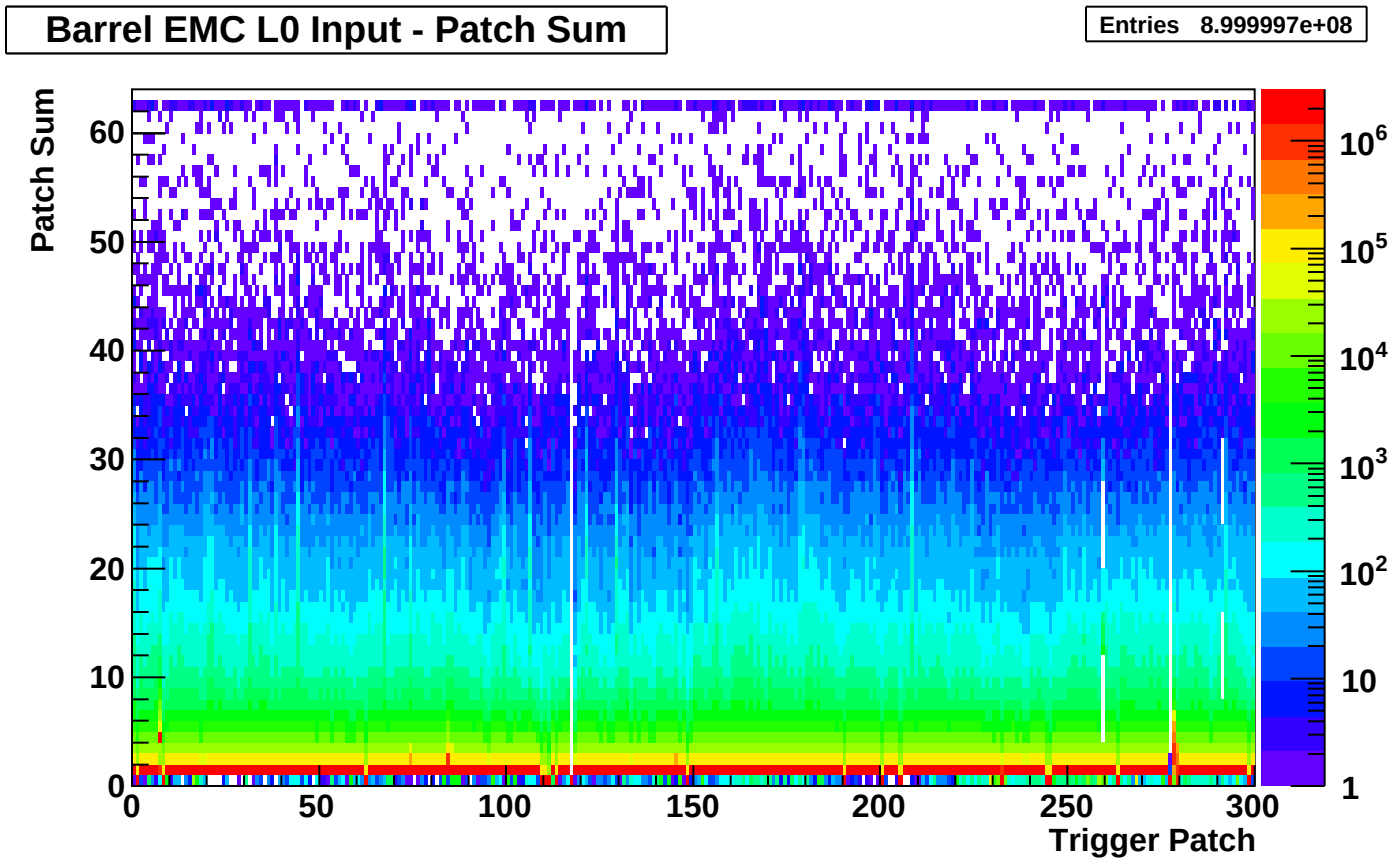
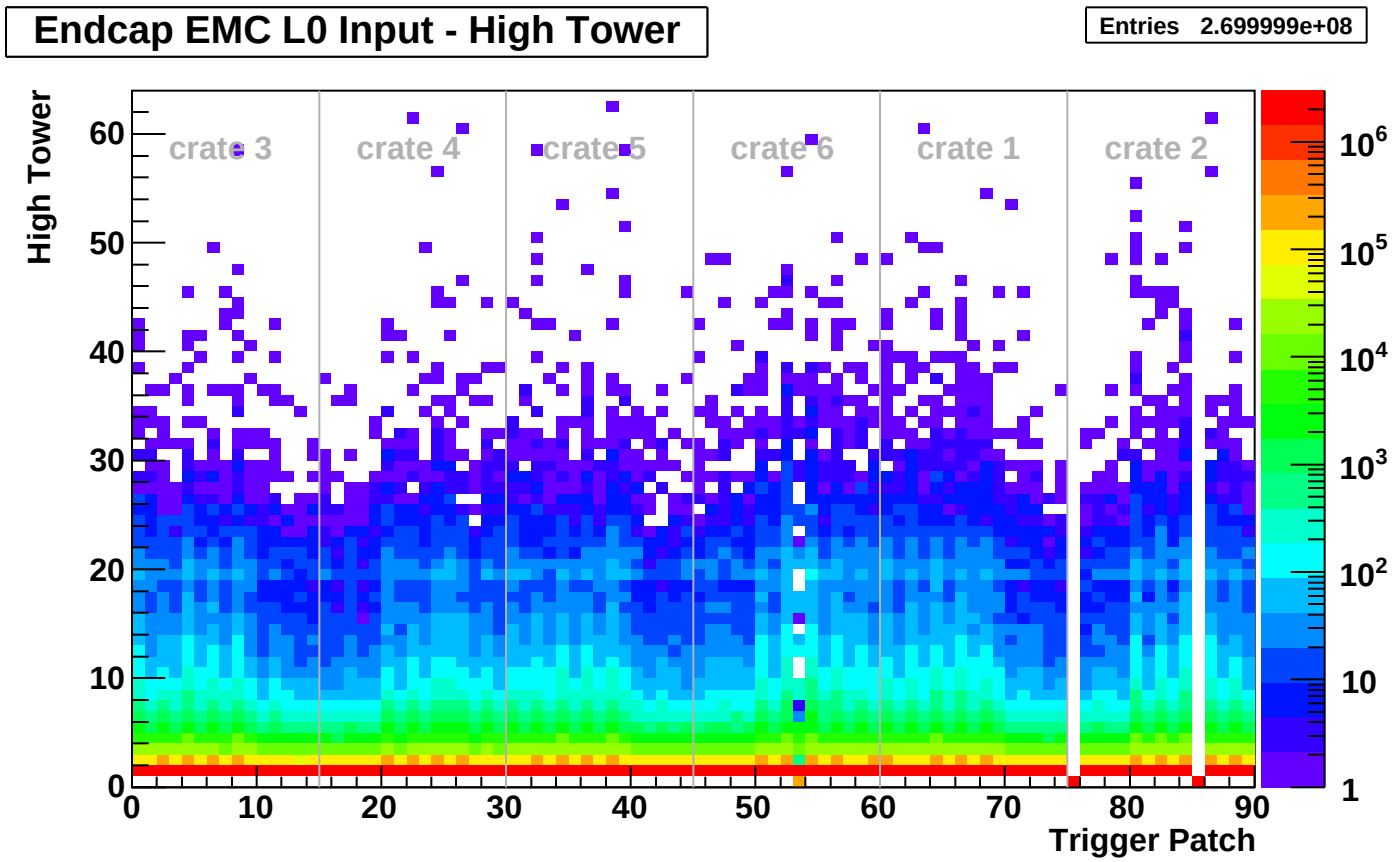
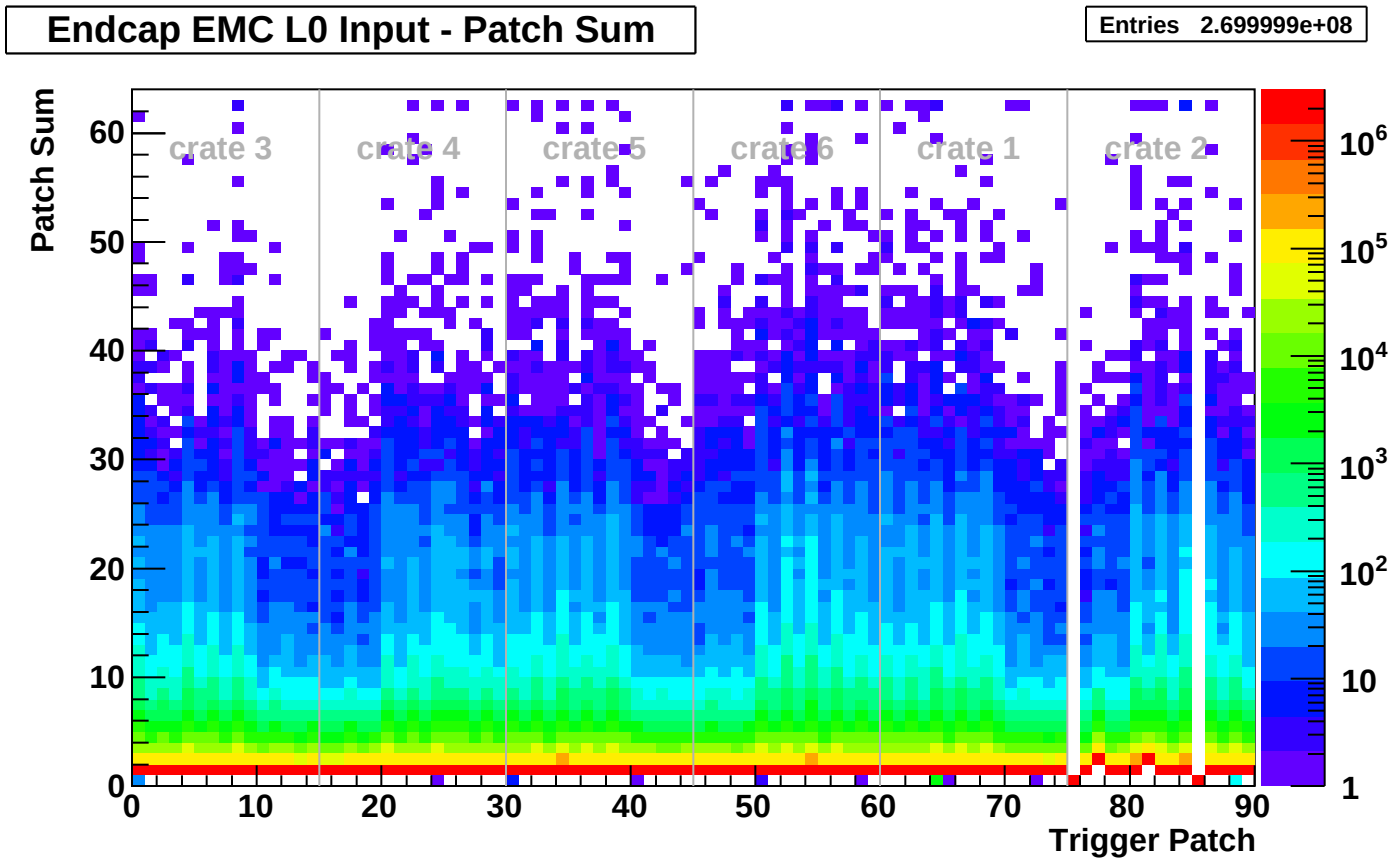
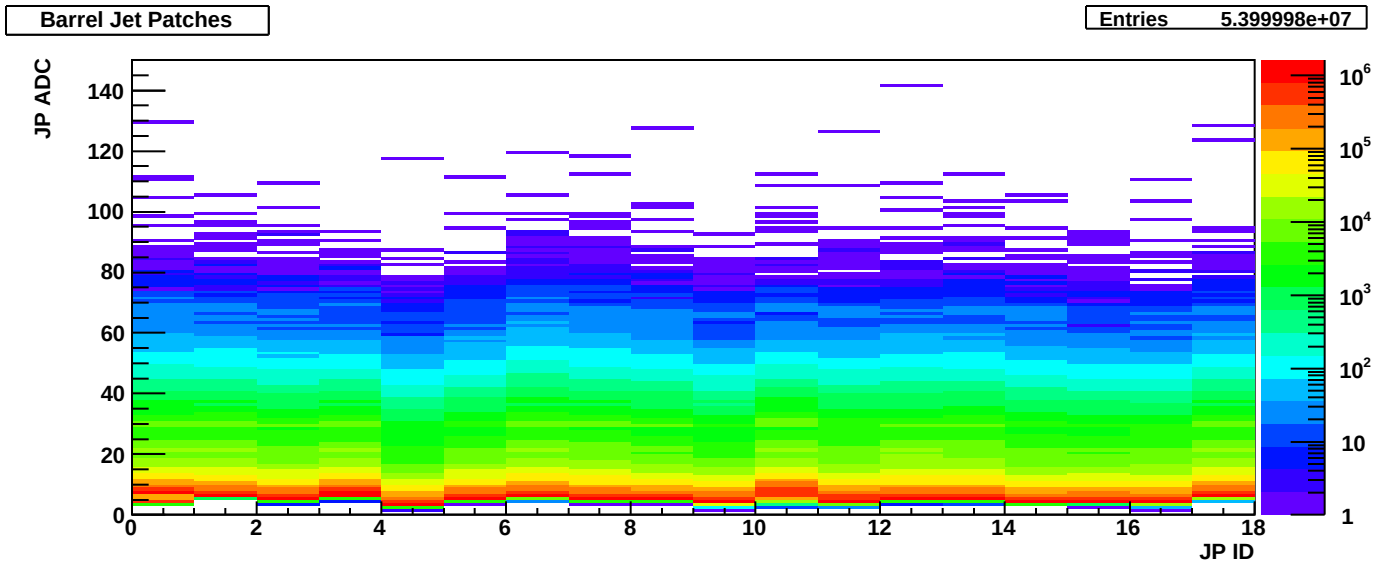
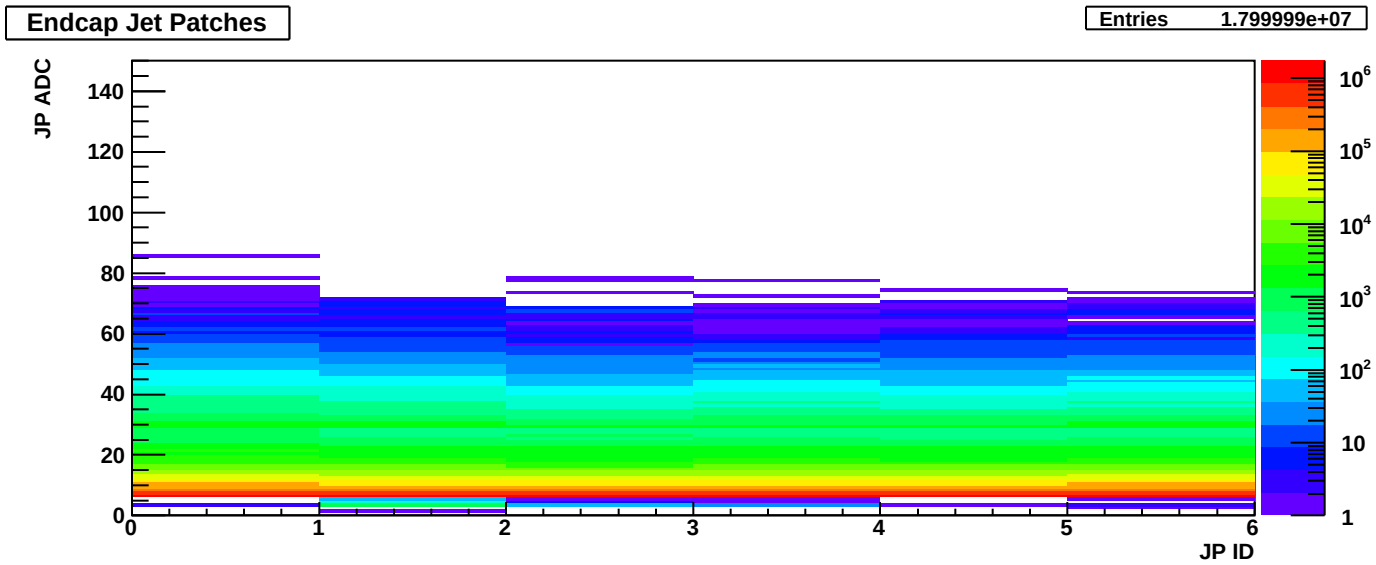

Barrel EMC L0 Input - High Tower
Entries 8.999997e+08
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5
10^6

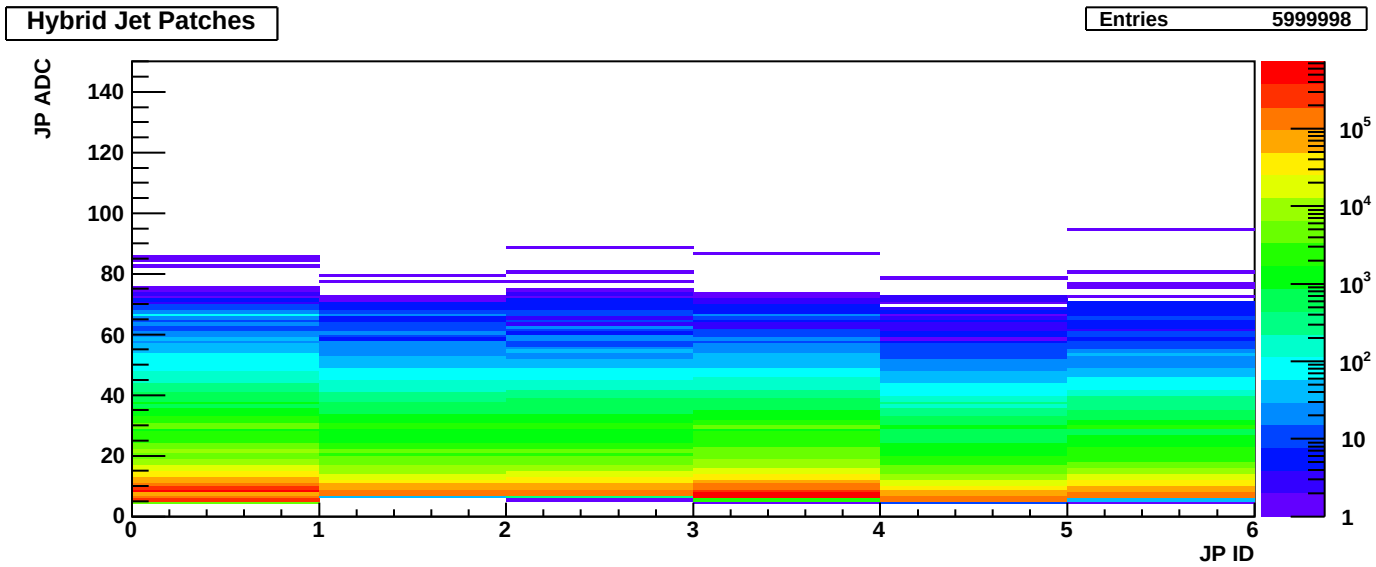

Barrel EMC L0 Input - Patch Sum
Entries 8.999997e+08
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5
10^6

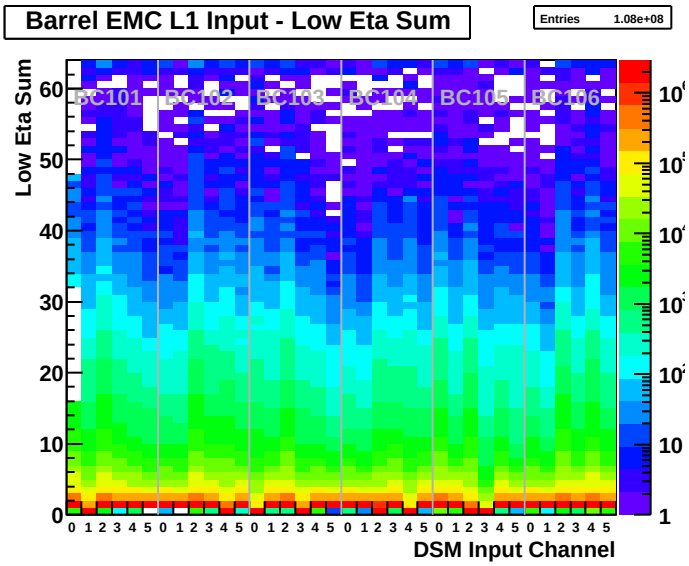

Endcap EMC L0 Input - High Tower
Entries 2.699999e+08
High Tower
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

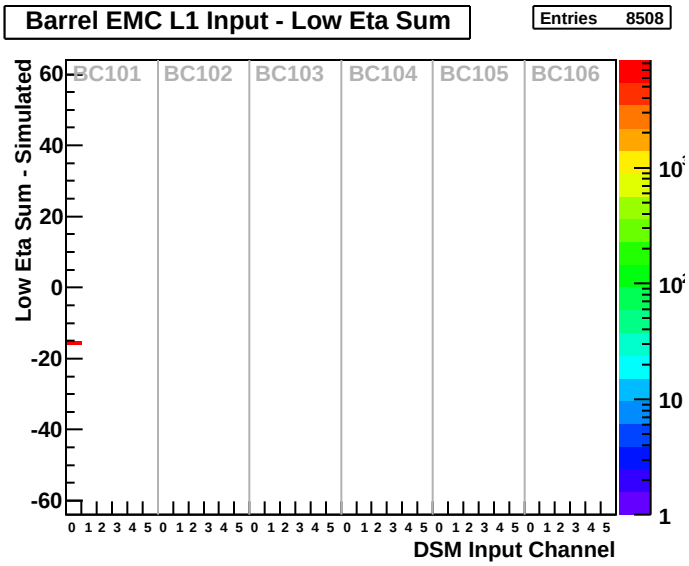

Endcap EMC L0 Input - Patch Sum
Entries 2.699999e+08
Patch Sum
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

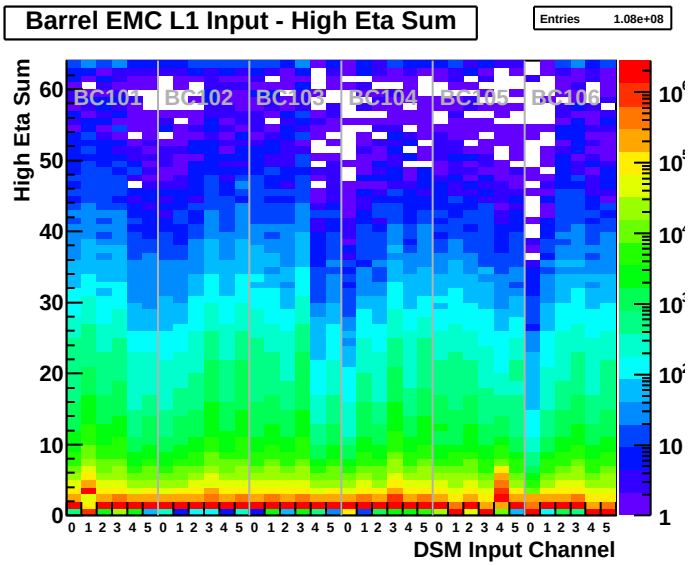

Barrel Jet Patches
Entries 5.399998e+07
JP ADC
JP ID

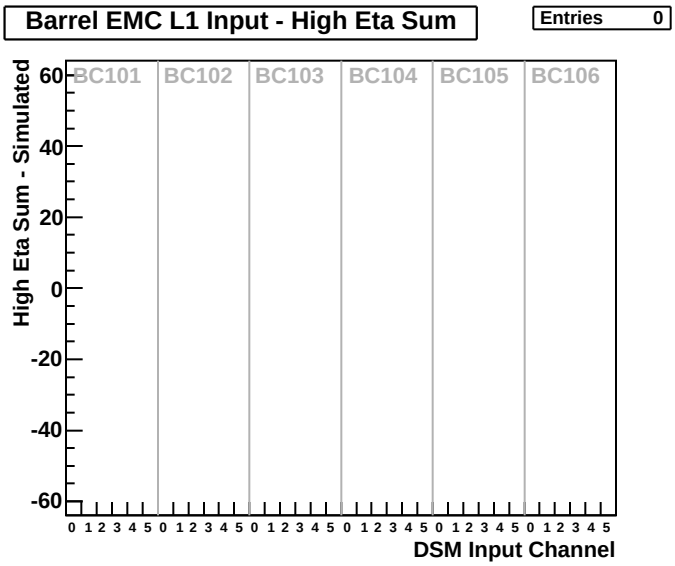

Endcap Jet Patches
Entries 1.799999e+07
JP ADC
JP ID

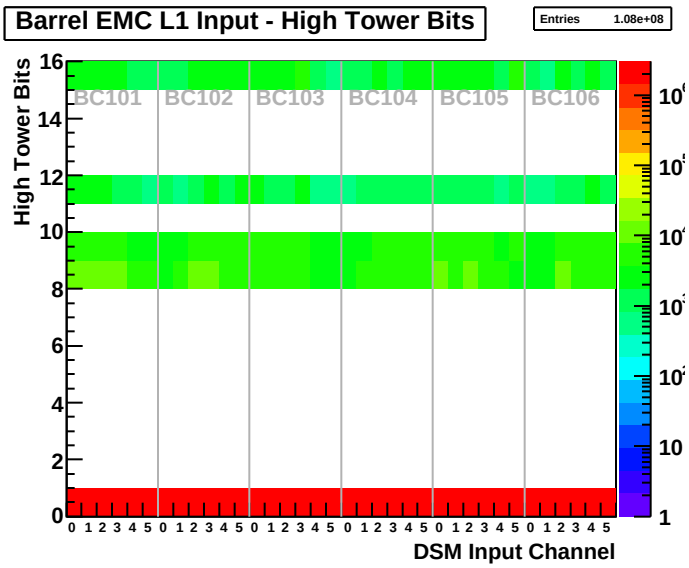

Hybrid Jet Patches
Entries 5999998
JP ADC
JP ID

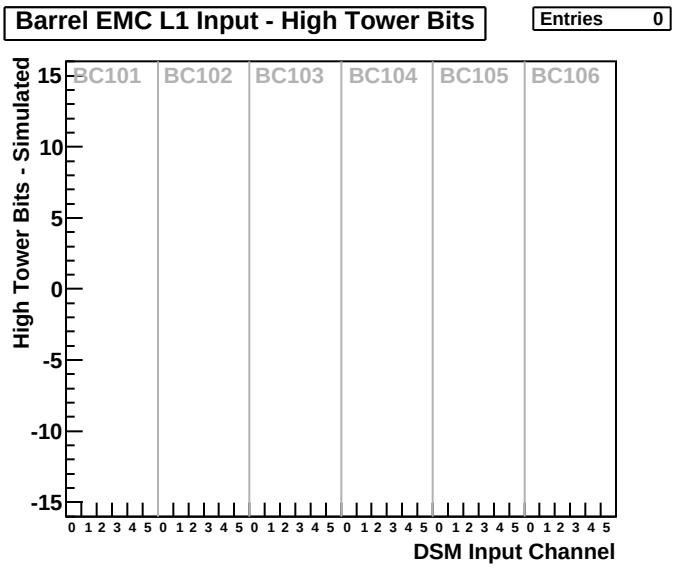

Barrel EMC L1 Input - Low Eta Sum
Entries 1.08e+08
Low Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

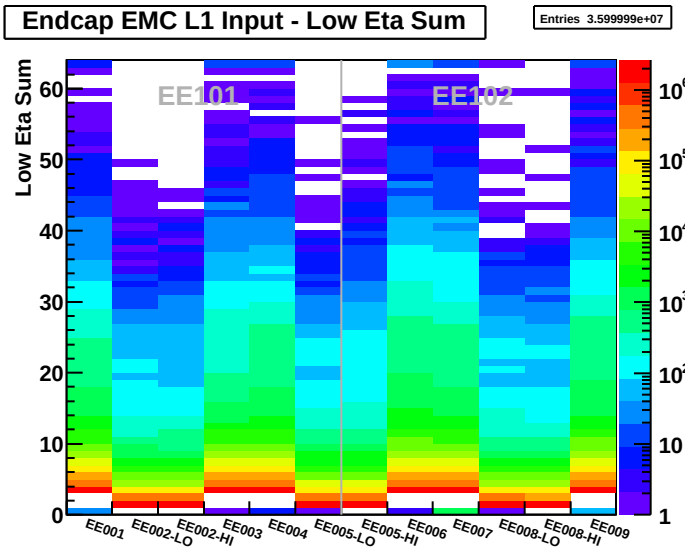

Barrel EMC L1 Input - Low Eta Sum
Entries 8508
Low Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

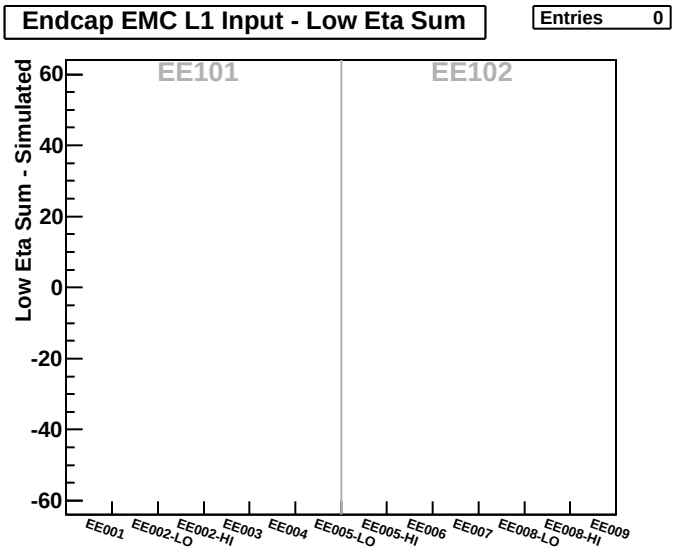

Barrel EMC L1 Input - High Eta Sum
Entries 1.08e+08
High Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

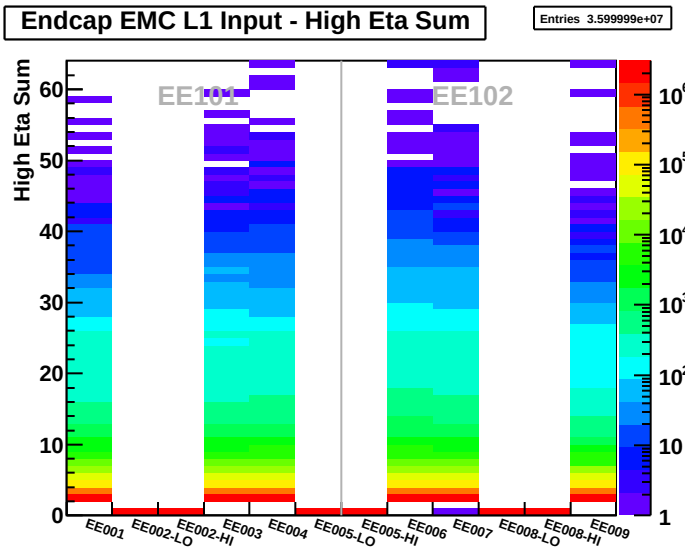

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

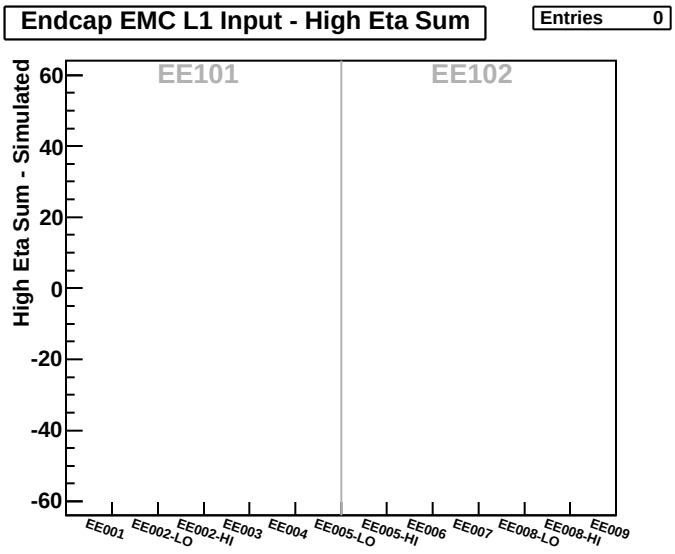

Barrel EMC L1 Input - High Tower Bits
Entries 1.08e+08
High Tower Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

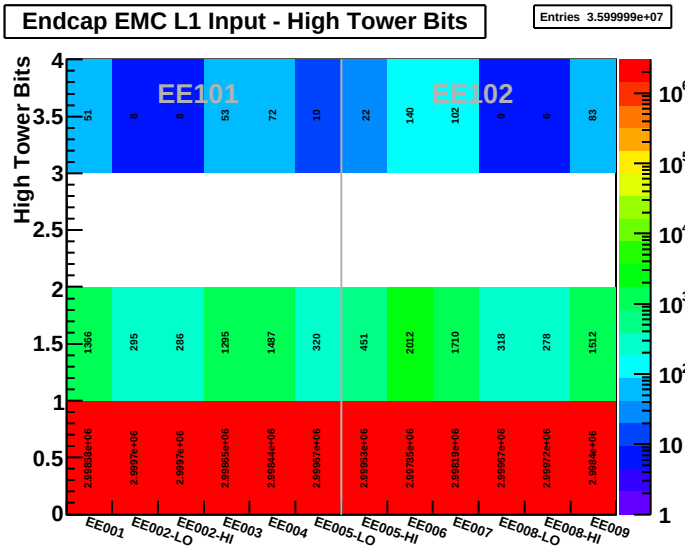

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

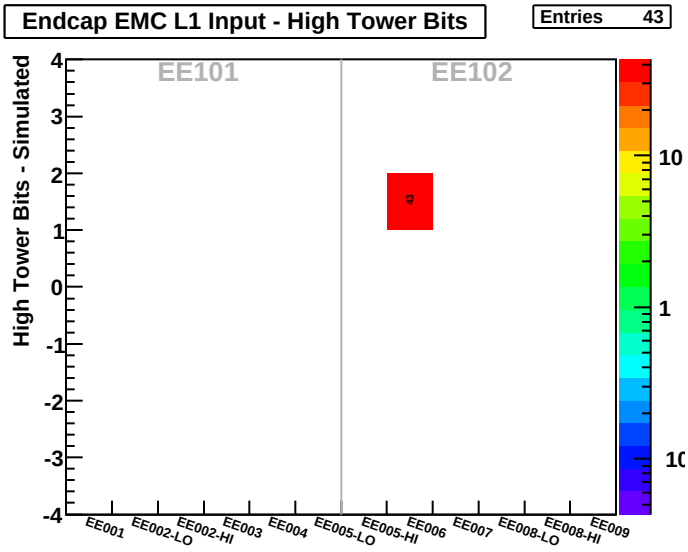

Endcap EMC L1 Input - Low Eta Sum
Entries 3.599999e+07
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

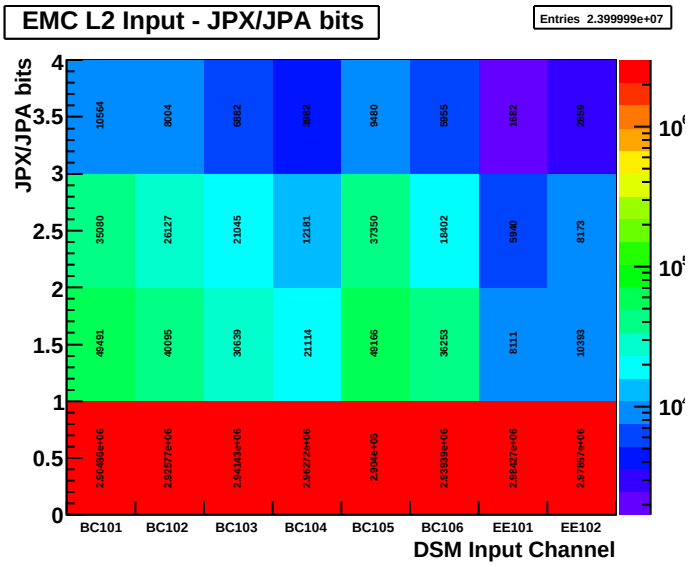

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

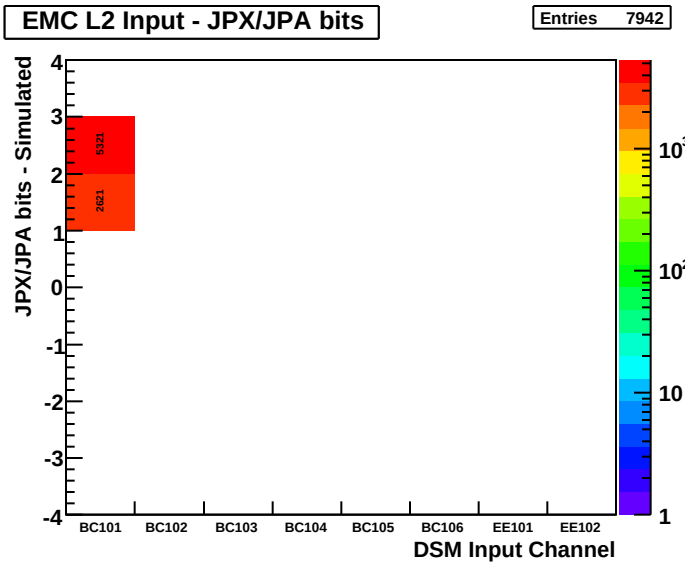

Endcap EMC L1 Input - High Eta Sum
Entries 3.599999e+07
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

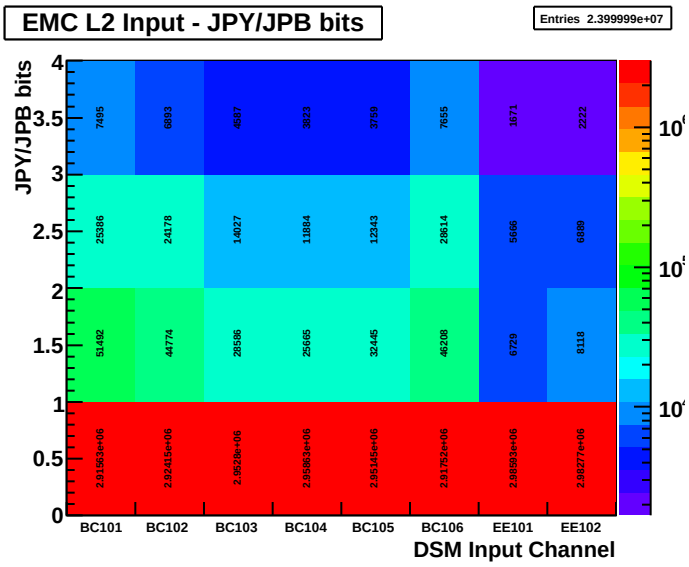

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

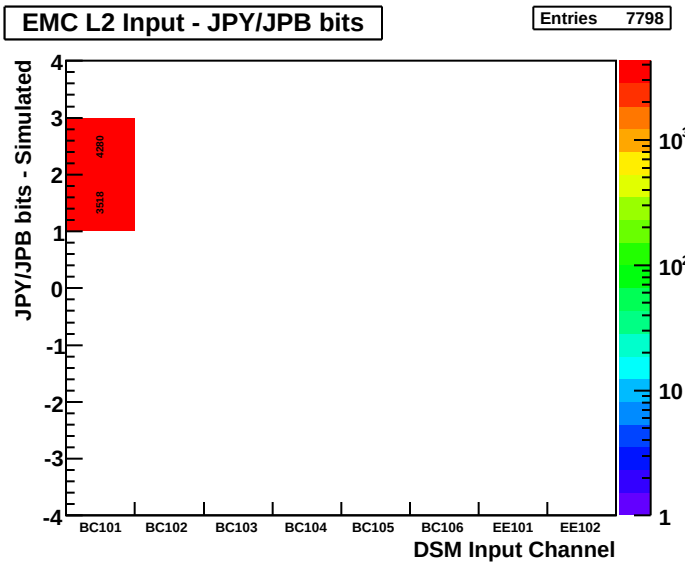

Endcap EMC L1 Input - High Tower Bits
Entries 3.599999e+07
High Tower Bits
EE101
EE102
51 8 8 53 72 10 22 140 102 9 6 83
1366 295 286 1295 1487 320 451 2012 1710 318 278 1512
2.99859e+06 2.9997e+06 2.9997e+06 2.99865e+06 2.99844e+06 2.99967e+06 2.99953e+06 2.99785e+06 2.99819e+06 2.99967e+06 2.99972e+06 2.9984e+06
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

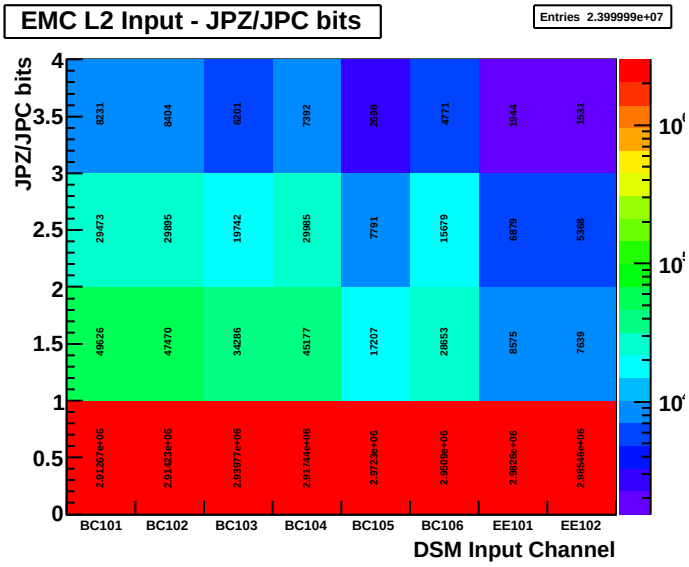

Endcap EMC L1 Input - High Tower Bits
Entries 43
High Tower Bits - Simulated
EE101
EE102
43
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

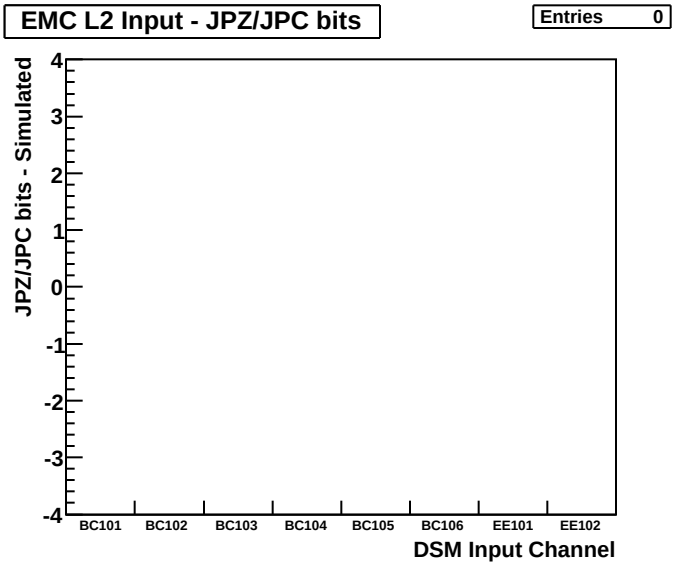

EMC L2 Input - JPX/JPA bits
Entries 2.399999e+07
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
10564 8004 6882 3882 9490 5955 1682 2859
35080 26127 21045 12181 37350 18402 5940 8173
49491 40095 30639 21114 49166 36253 8111 10393
2.90486e+06 2.92577e+06 2.94143e+06 2.96272e+06 2.904e+06 2.93939e+06 2.98427e+06 2.97857e+06

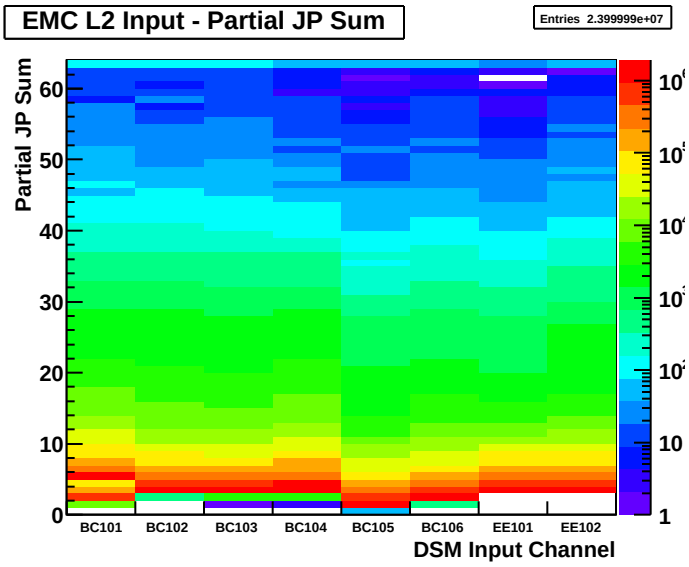

EMC L2 Input - JPX/JPA bits
Entries 7942
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
5321
2621

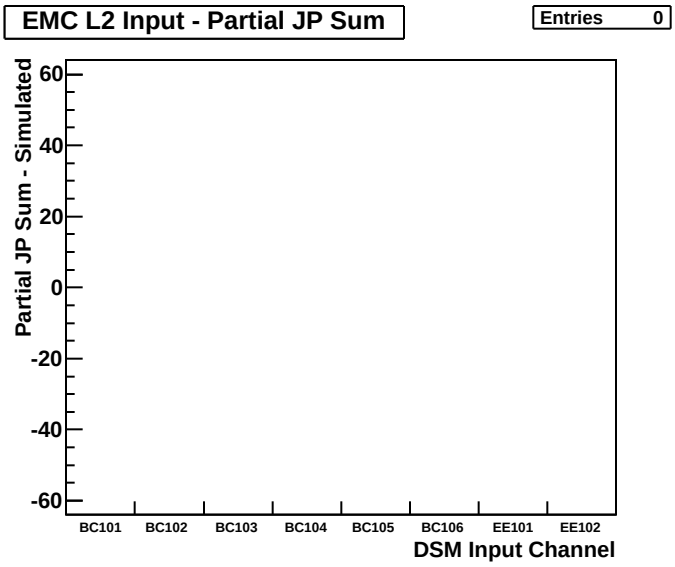

EMC L2 Input - JPY/JPB bits
Entries 2.399999e+07
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
7495 6893 4587 3823 3759 7655 1671 2222
25386 24178 14027 11884 12343 28614 5666 6889
51492 44774 28586 25665 32445 46208 6729 8118
2.91503e+06 2.92415e+06 2.9528e+06 2.95863e+06 2.95145e+06 2.91752e+06 2.98593e+06 2.98277e+06

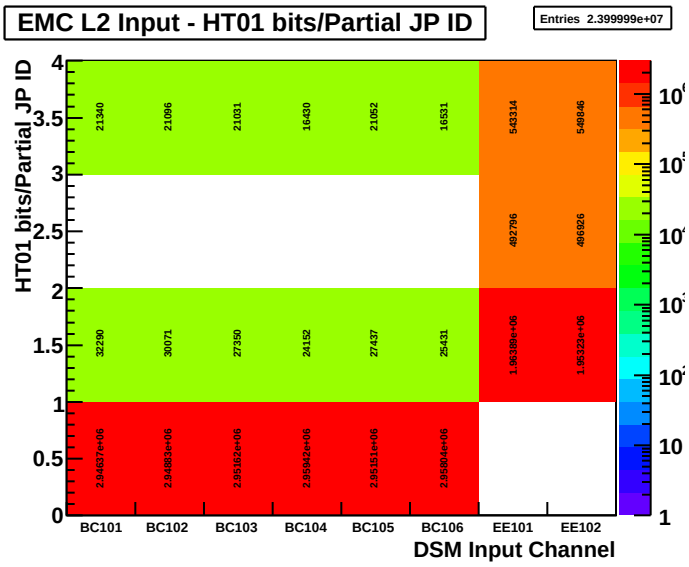

EMC L2 Input - JPY/JPB bits
Entries 7798
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
4280
3518

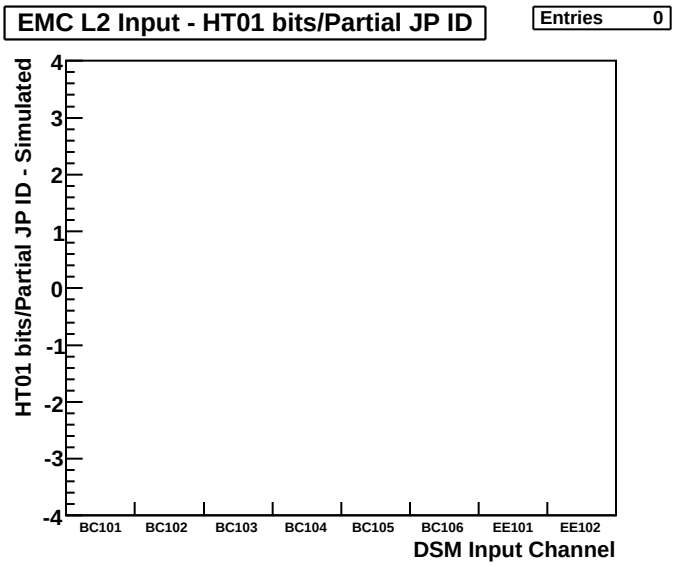

EMC L2 Input - JPZ/JPC bits
Entries 2.399999e+07
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
8231 8404 6201 7392 2698 4771 1944 1531
29473 29895 19742 29985 7791 15679 6879 5368
49626 47470 34286 45177 17207 28653 8575 7639
2.91267e+06 2.91423e+06 2.93977e+06 2.91744e+06 2.9723e+06 2.9509e+06 2.98266e+06 2.98546e+06

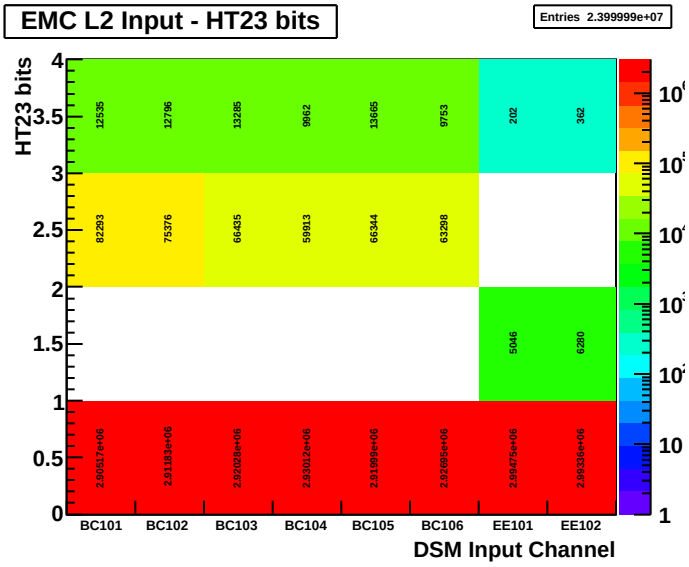

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

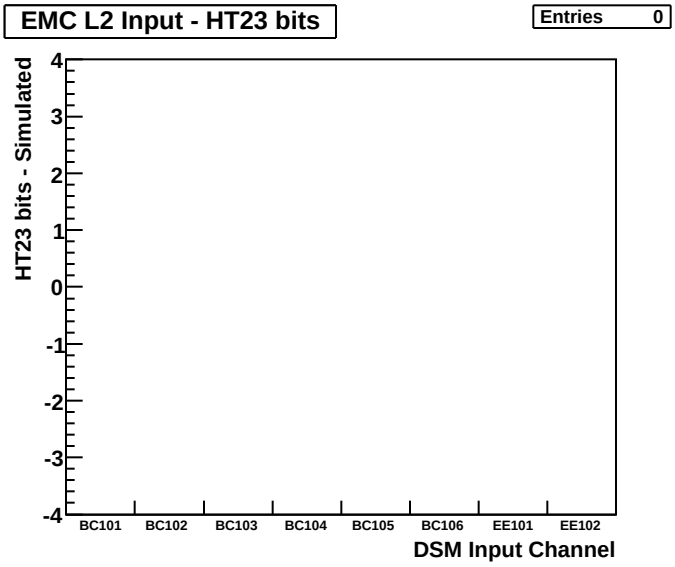

EMC L2 Input - Partial JP Sum
Entries 2.399999e+07
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

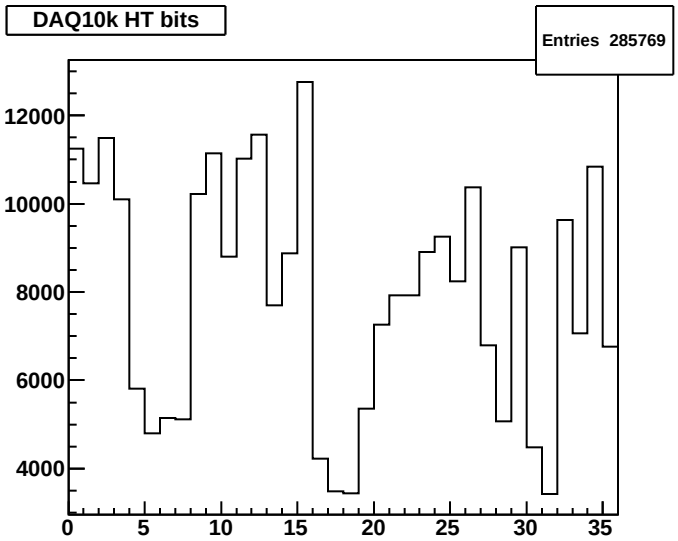

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

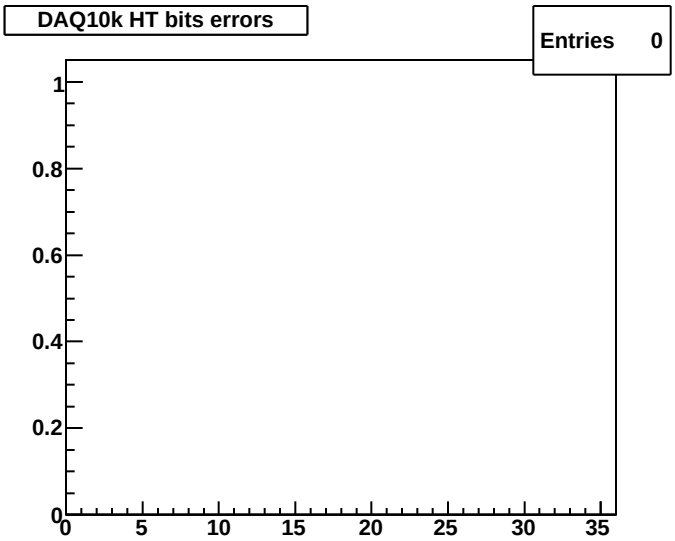

EMC L2 Input - HT01 bits/Partial JP ID
Entries 2.399999e+07
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

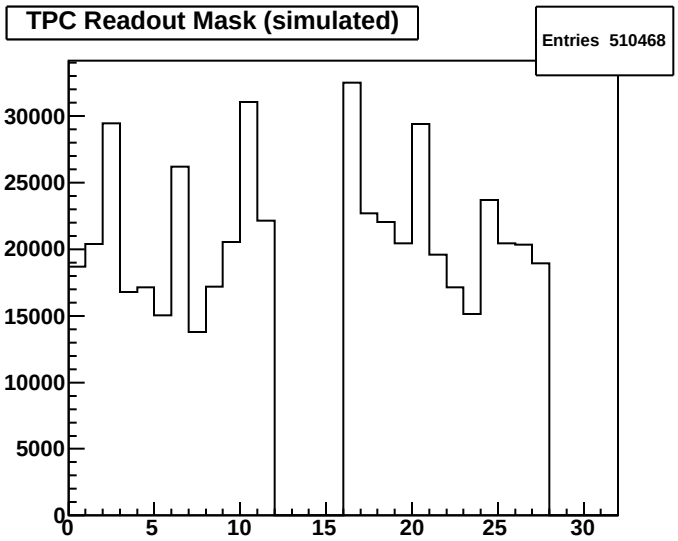

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

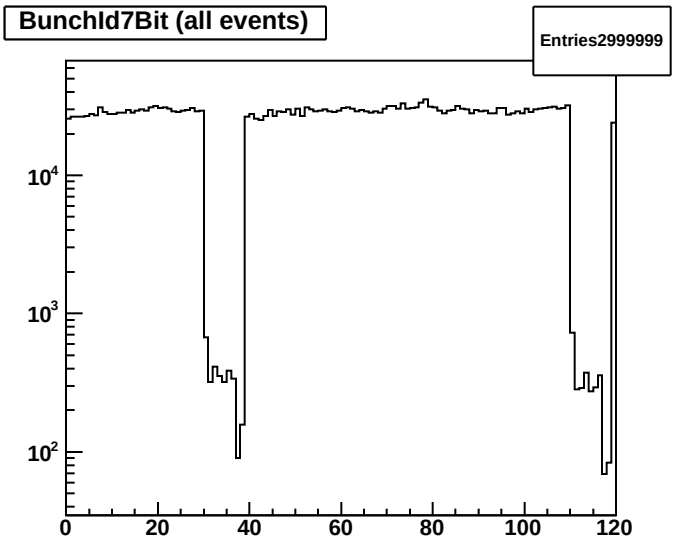

EMC L2 Input - HT23 bits
Entries 2.399999e+07
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

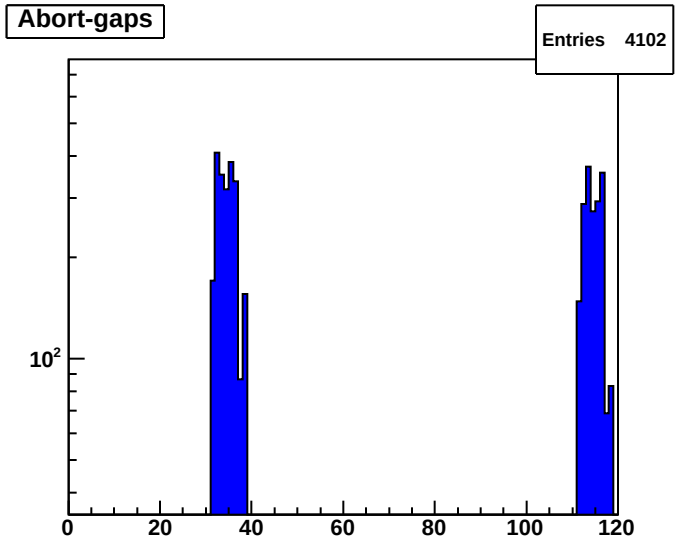

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

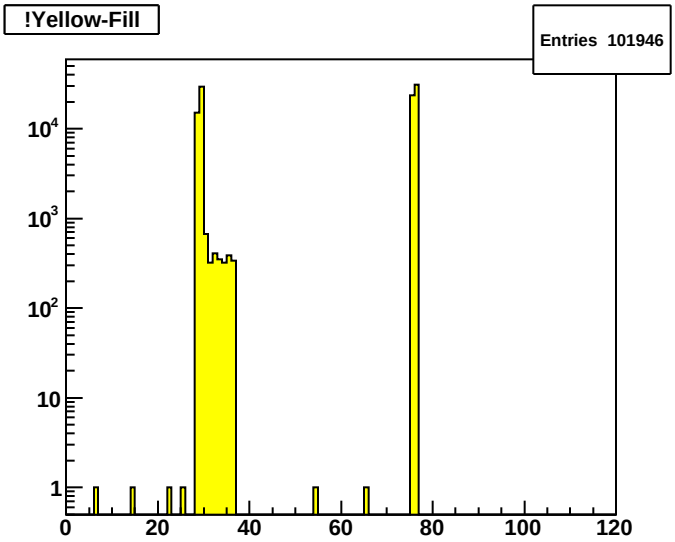

DAQ10k HT bits
Entries 285769
12000
10000
8000
6000
4000
0 5 10 15 20 25 30 35

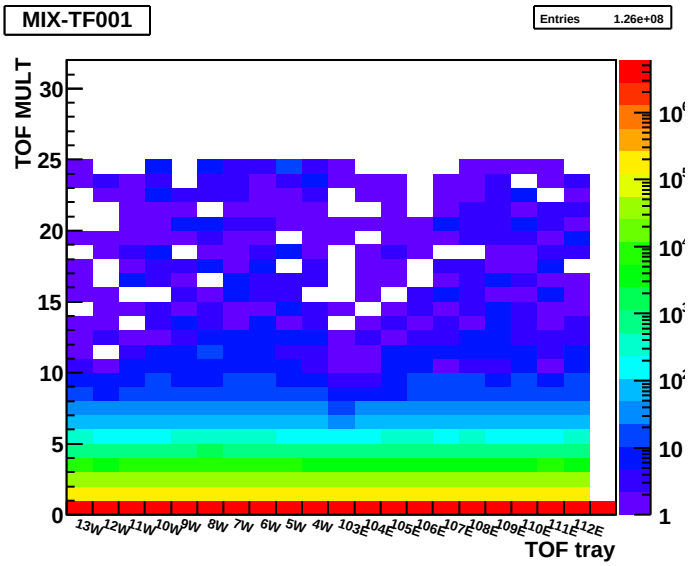

DAQ10k HT bits errors
Entries 0
1
0.8
0.6
0.4
0.2
0
0 5 10 15 20 25 30 35

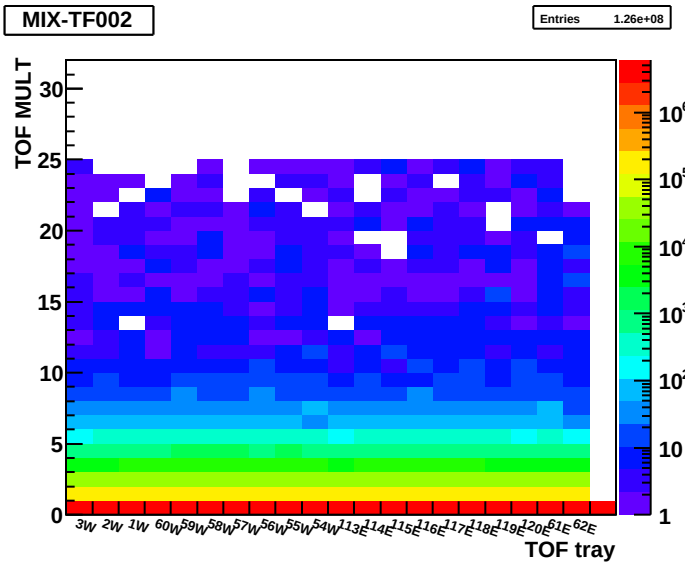

TPC Readout Mask (simulated)
Entries 510468
30000
25000
20000
15000
10000
5000
0
0 5 10 15 20 25 30

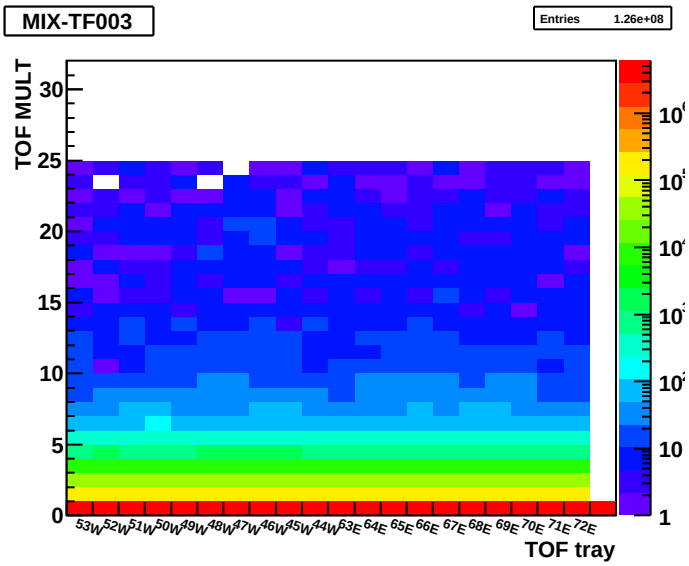

BunchId7Bit (all events)
Entries2999999
10^4
10^3
10^2
0 20 40 60 80 100 120

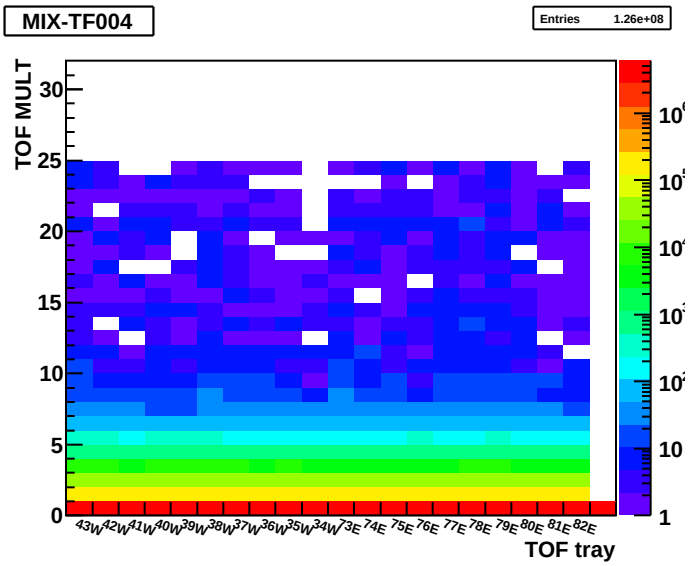

Abort-gaps
Entries 4102
10^2
0 20 40 60 80 100 120

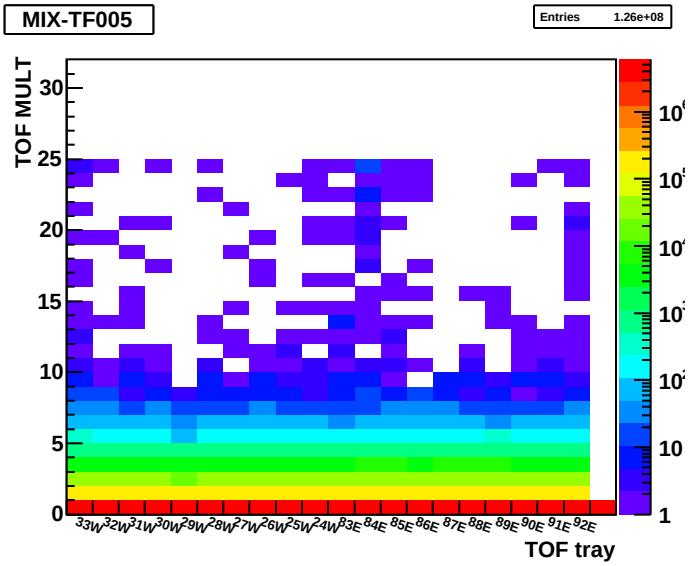

!Yellow-Fill
Entries 101946
10^4
10^3
10^2
10
1
0 20 40 60 80 100 120

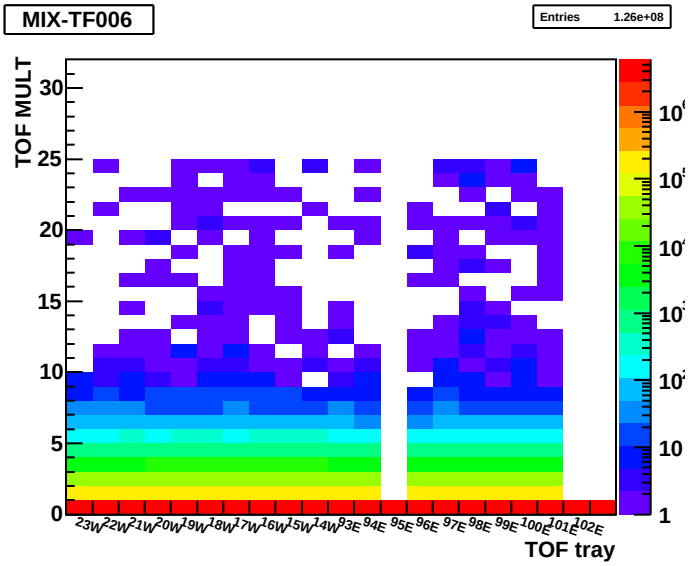

MIX-TF001
Entries 1.26e+08
TOF MULT
TOF tray

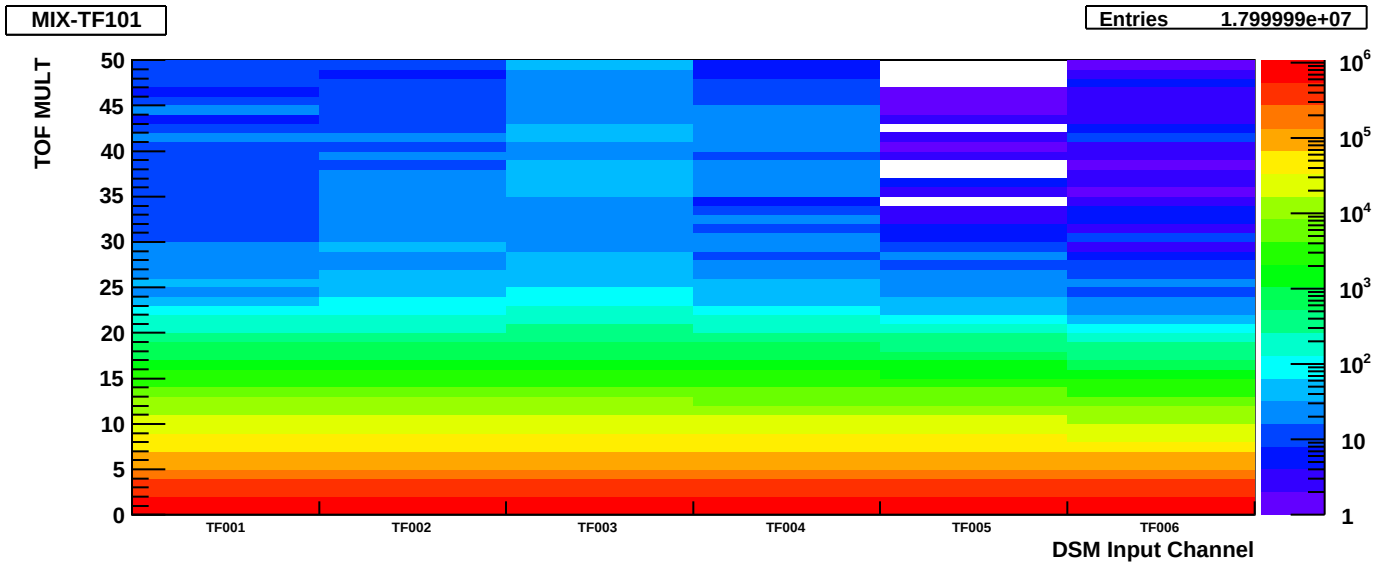

MIX-TF002
Entries 1.26e+08
TOF MULT
TOF tray

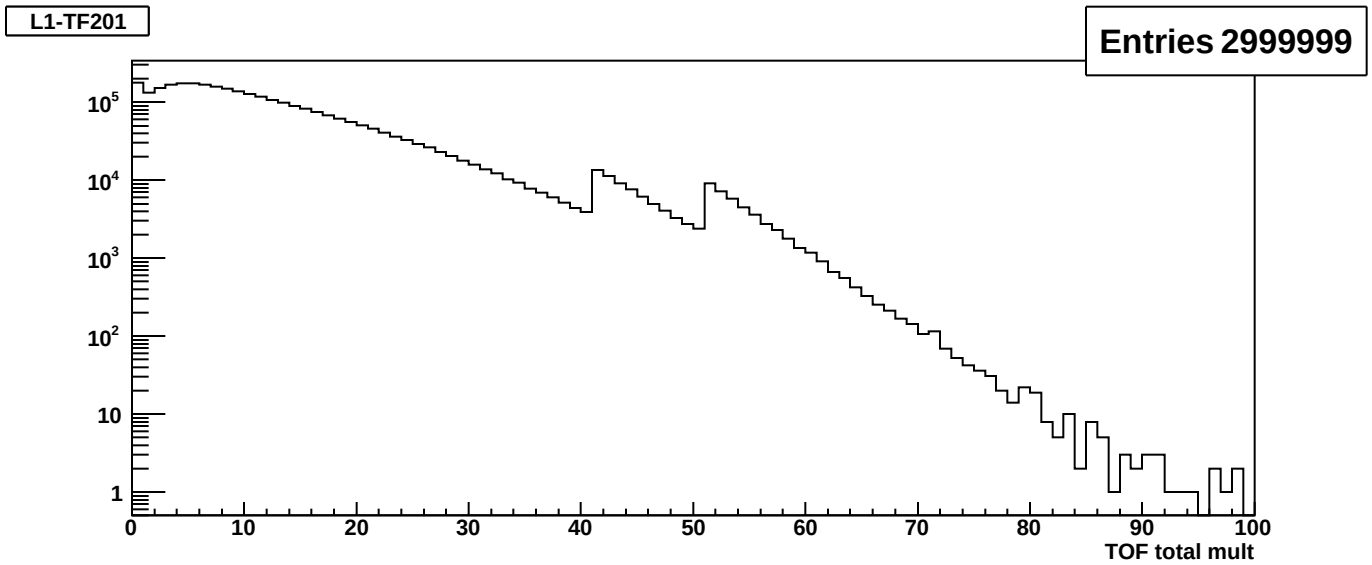

MIX-TF003
Entries 1.26e+08
TOF MULT
TOF tray

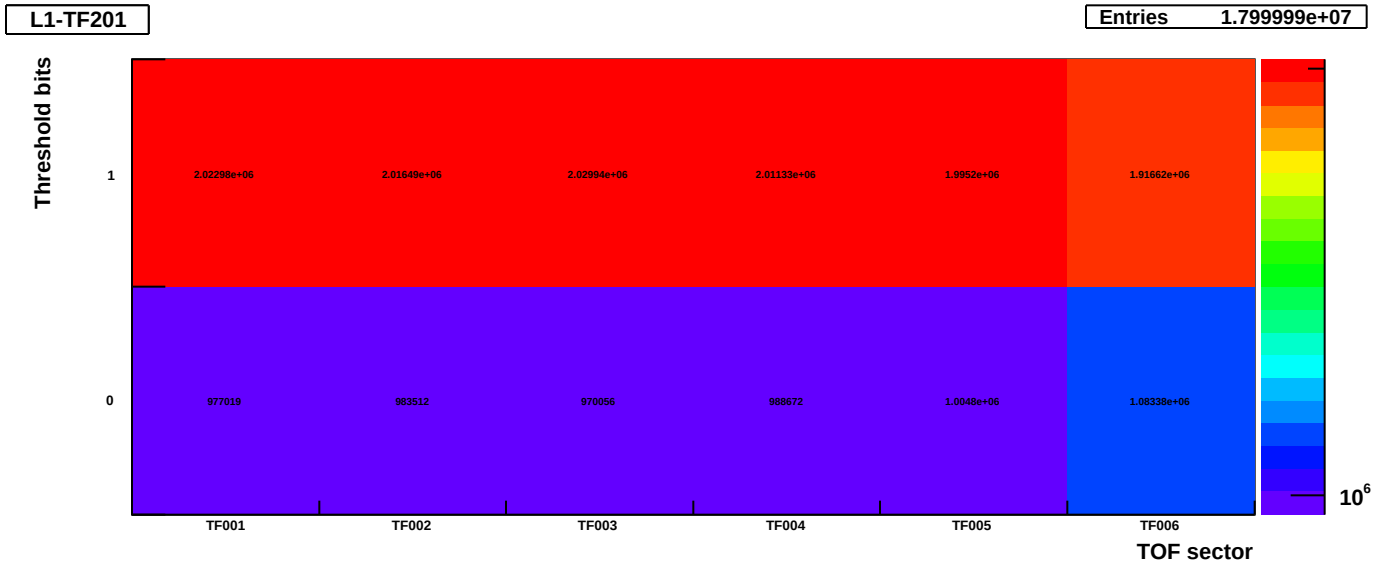

MIX-TF004
Entries 1.26e+08
TOF MULT
TOF tray

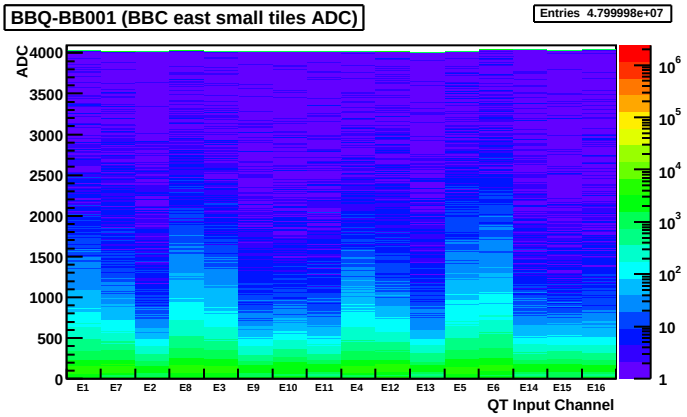

MIX-TF005
Entries 1.26e+08
TOF MULT
TOF tray

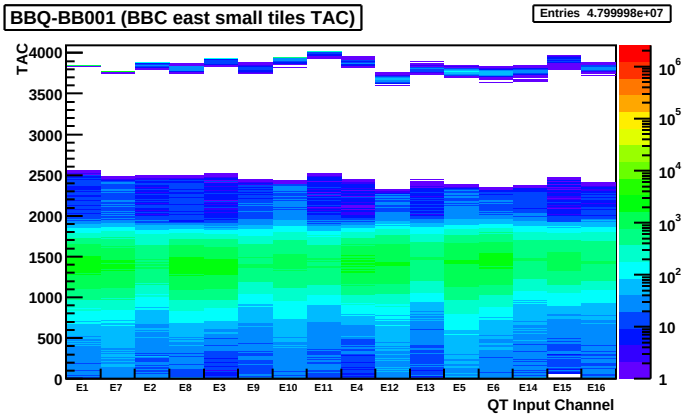

MIX-TF006
Entries 1.26e+08
TOF MULT
TOF tray

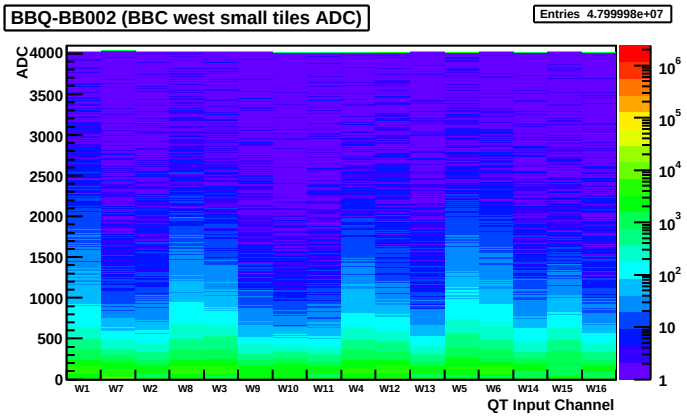

MIX-TF101
Entries 1.799999e+07
TOF MULT
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

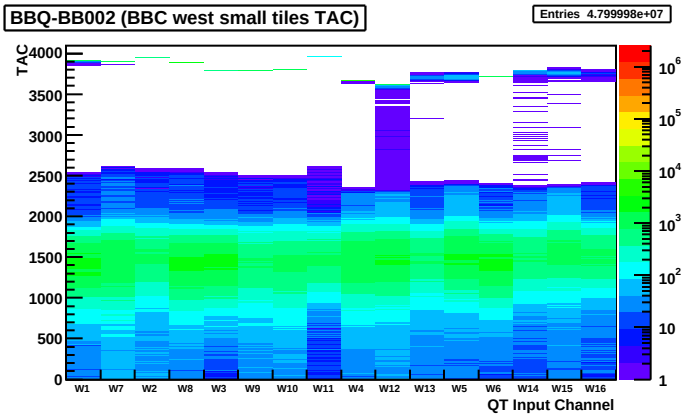

L1-TF201
Entries 2999999
TOF total mult

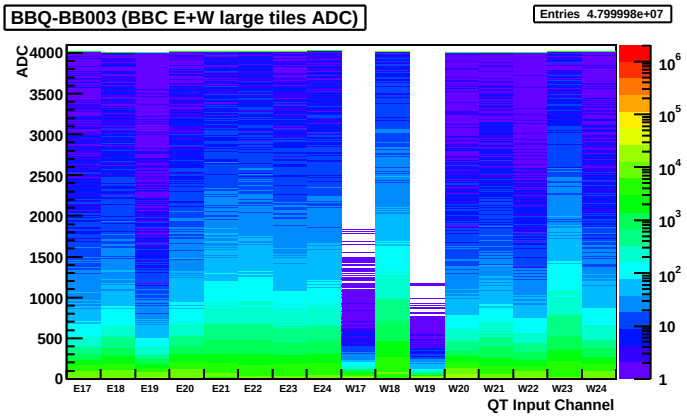

L1-TF201
Entries 1.799999e+07
Threshold bits
2.02298e+06
2.01649e+06
2.02994e+06
2.01133e+06
1.9952e+06
1.91662e+06
977019
983512
970056
988672
1.0048e+06
1.08338e+06
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector

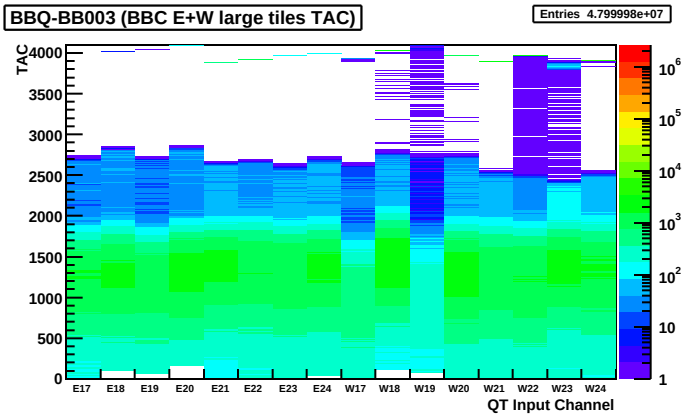

BBQ-BB001 (BBC east small tiles ADC)
Entries 4.799998e+07
ADC
QT Input Channel

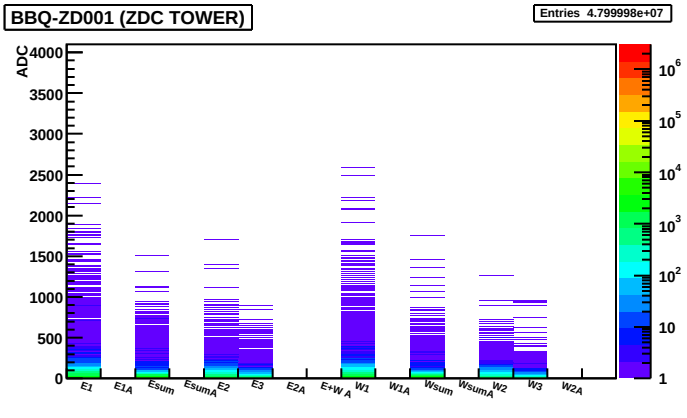

BBQ-BB001 (BBC east small tiles TAC)
Entries 4.799998e+07
TAC
QT Input Channel

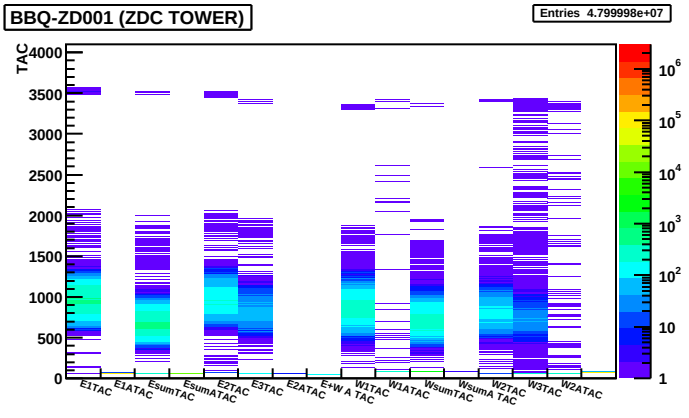

BBQ-BB002 (BBC west small tiles ADC)
Entries 4.799998e+07
ADC
QT Input Channel

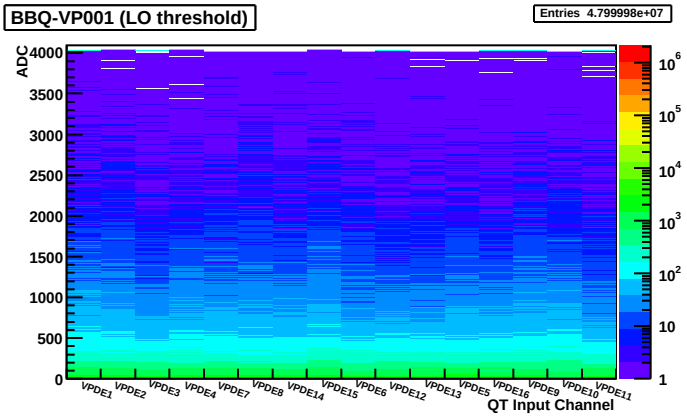

BBQ-BB002 (BBC west small tiles TAC)
Entries 4.799998e+07
TAC
QT Input Channel

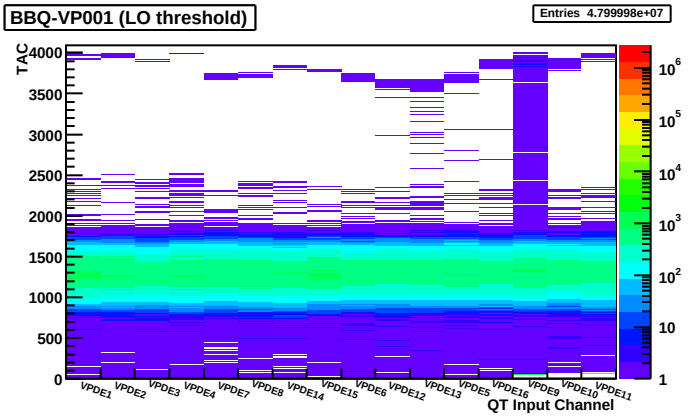

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 4.799998e+07
ADC
QT Input Channel

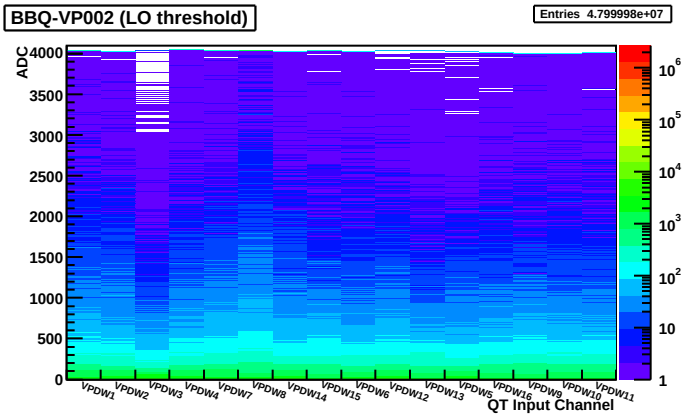

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 4.799998e+07
TAC
QT Input Channel

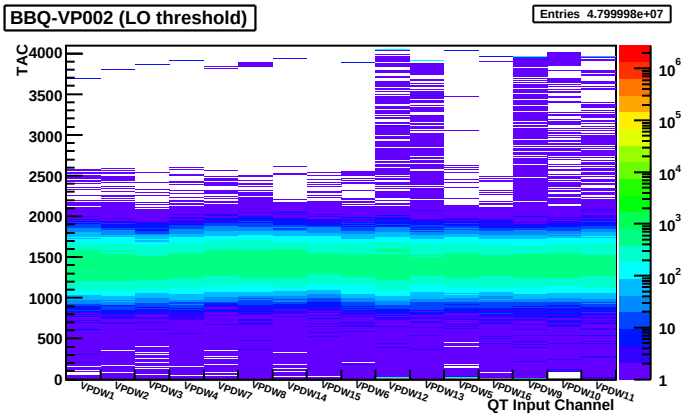

BBQ-ZD001 (ZDC TOWER)
Entries 4.799998e+07
ADC

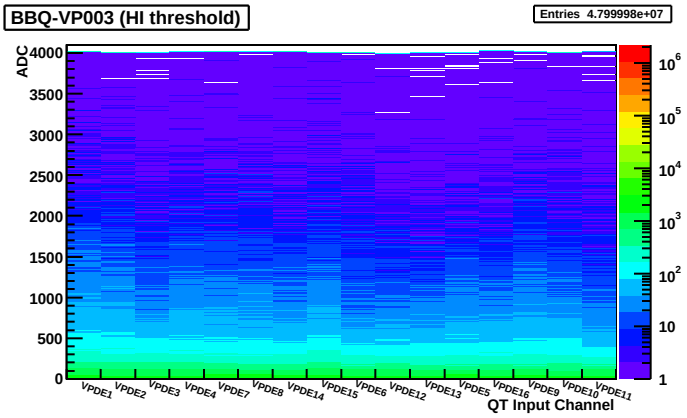

BBQ-ZD001 (ZDC TOWER)
Entries 4.799998e+07
TAC

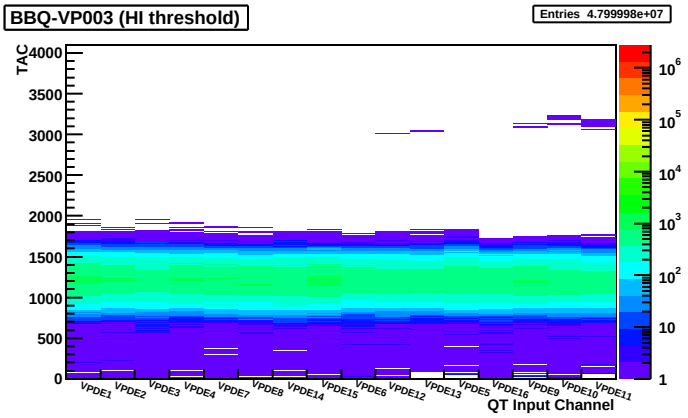

BBQ-VP001 (LO threshold)
Entries 4.799998e+07
ADC
QT Input Channel

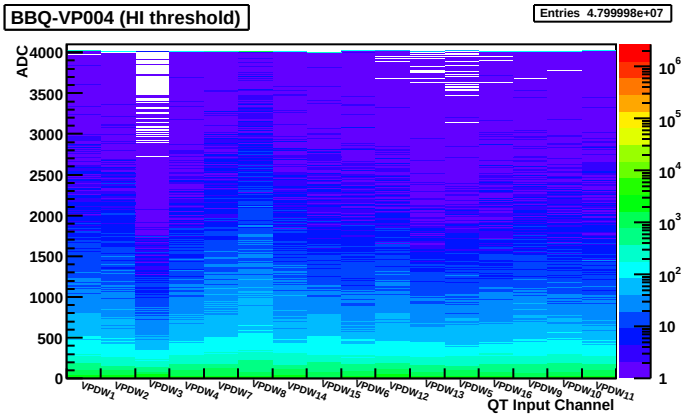

BBQ-VP001 (LO threshold)
Entries 4.799998e+07
TAC
QT Input Channel

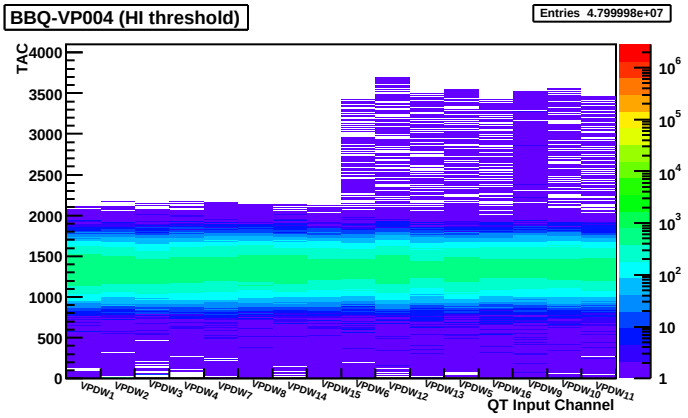

BBQ-VP002 (LO threshold)
Entries 4.799998e+07
ADC
QT Input Channel

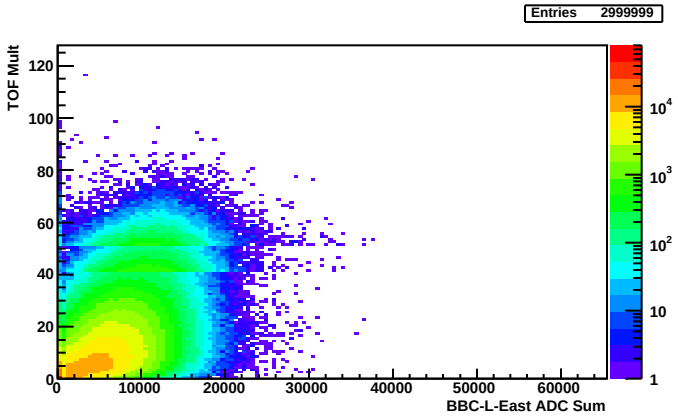

BBQ-VP002 (LO threshold)
Entries 4.799998e+07
TAC
QT Input Channel

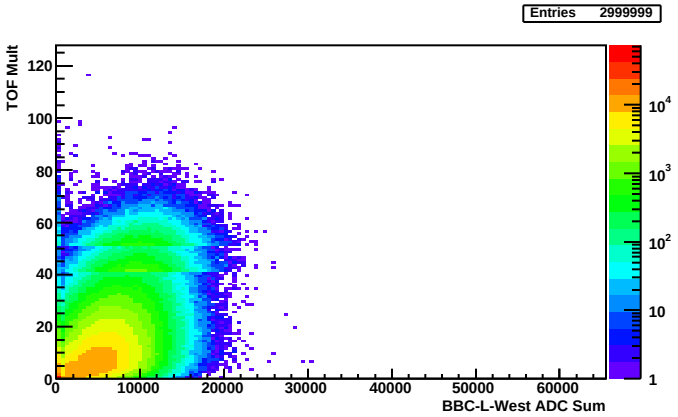

BBQ-VP003 (HI threshold)
Entries 4.799998e+07
ADC
QT Input Channel

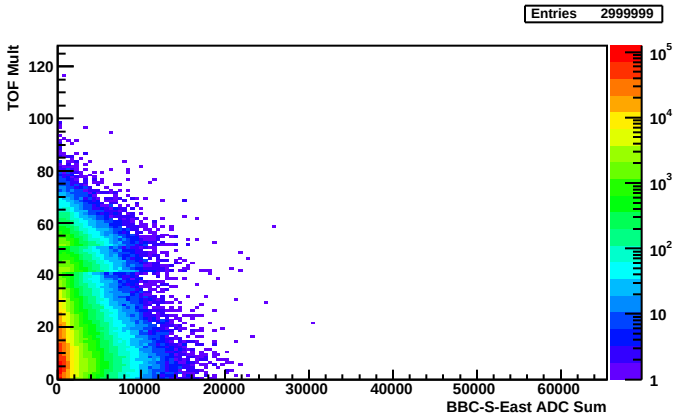

BBQ-VP003 (HI threshold)
Entries 4.799998e+07
TAC
QT Input Channel

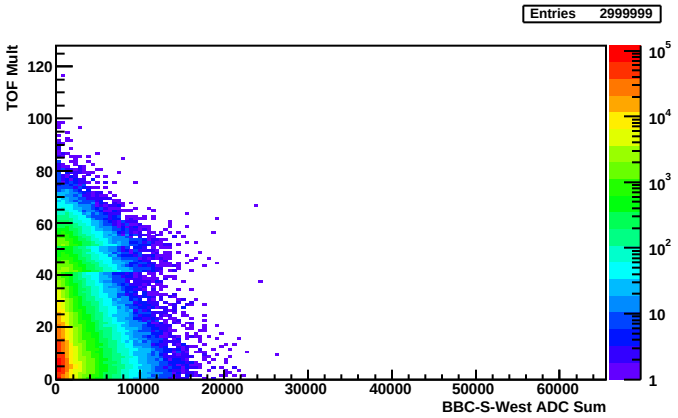

BBQ-VP004 (HI threshold)
Entries 4.799998e+07
ADC
QT Input Channel

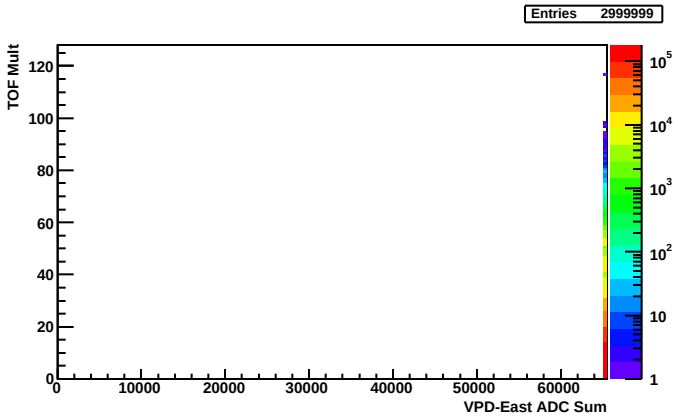

BBQ-VP004 (HI threshold)
Entries 4.799998e+07
TAC
QT Input Channel

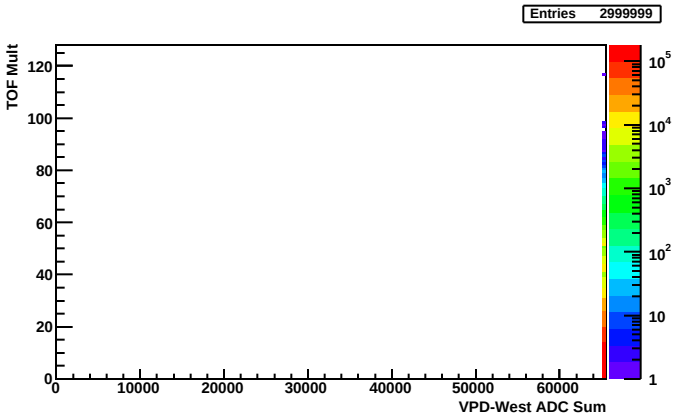

Entries 2999999
TOF Mult
BBC-L-East ADC Sum

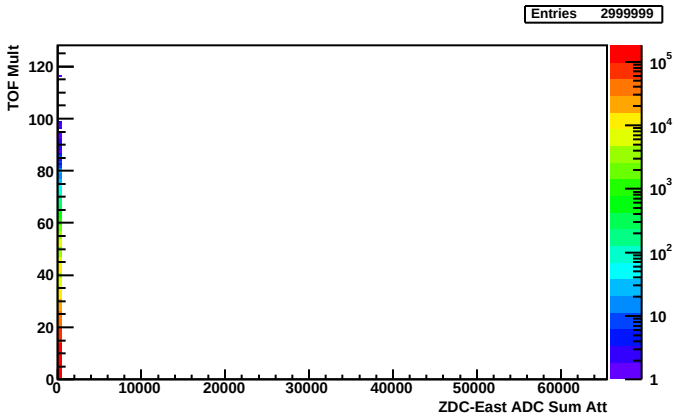

Entries 2999999
TOF Mult
BBC-L-West ADC Sum

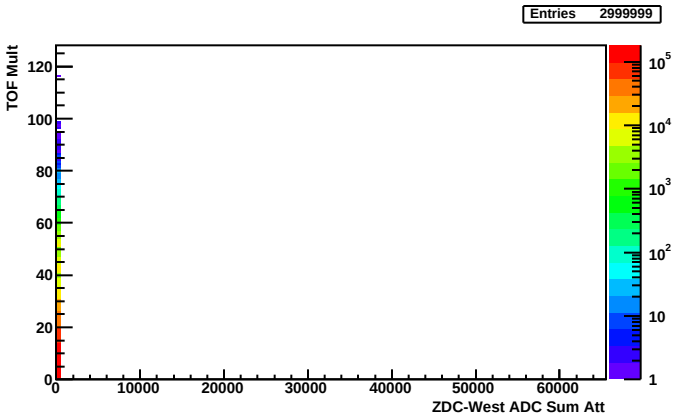

Entries 2999999
TOF Mult
BBC-S-East ADC Sum

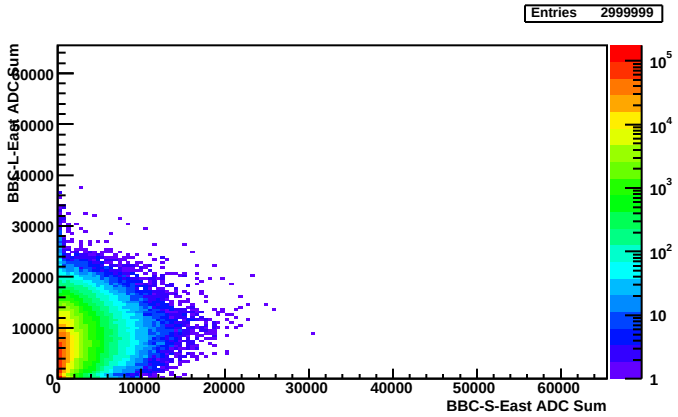

Entries 2999999
TOF Mult
BBC-S-West ADC Sum

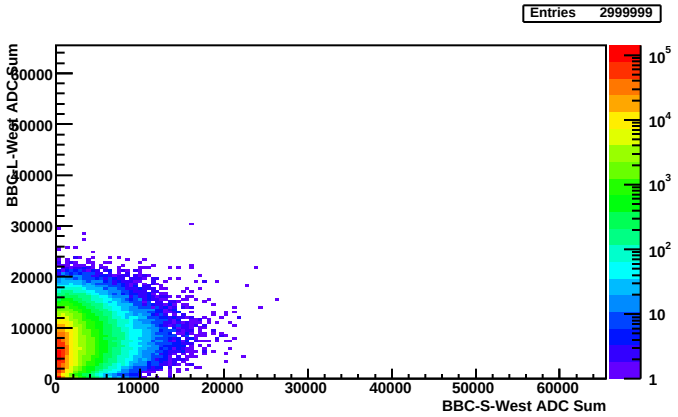

Entries 2999999
TOF Mult
VPD-East ADC Sum

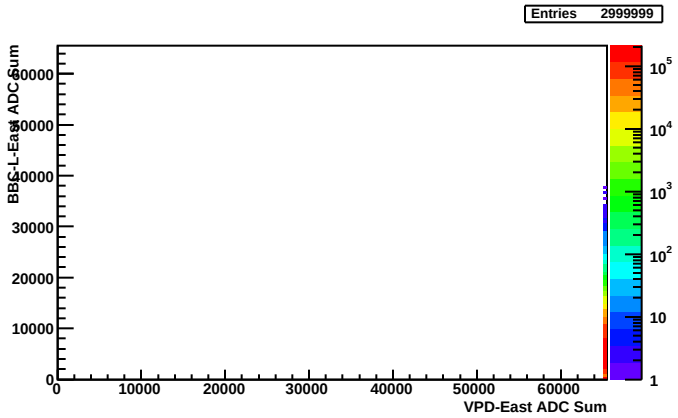

Entries 2999999
TOF Mult
VPD-West ADC Sum

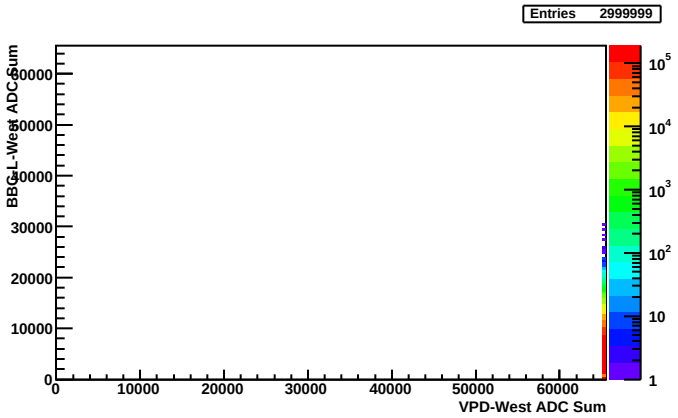

Entries 2999999
TOF Mult
ZDC-East ADC Sum Att

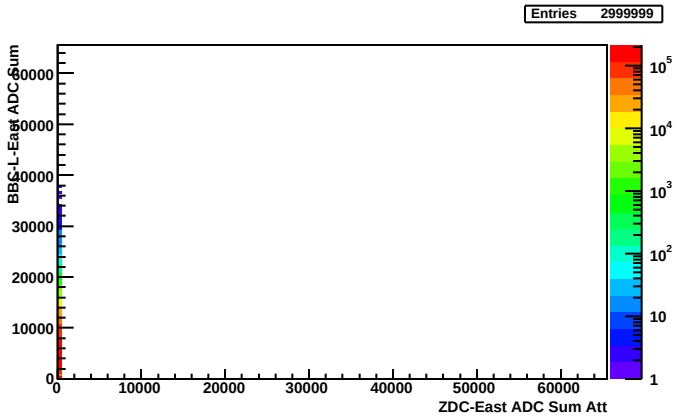

Entries 2999999
TOF Mult
ZDC-West ADC Sum Att

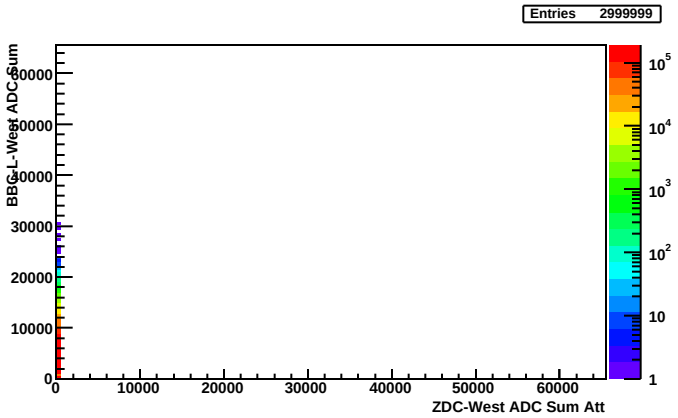

Entries 2999999
BBC-L-East ADC Sum
BBC-S-East ADC Sum

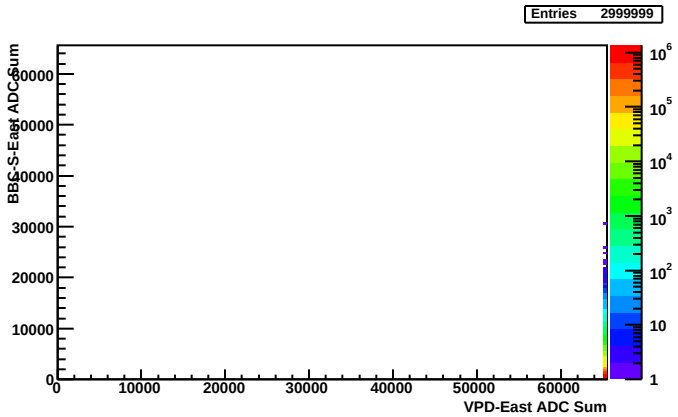

Entries 2999999
BBC-L-West ADC Sum
BBC-S-West ADC Sum

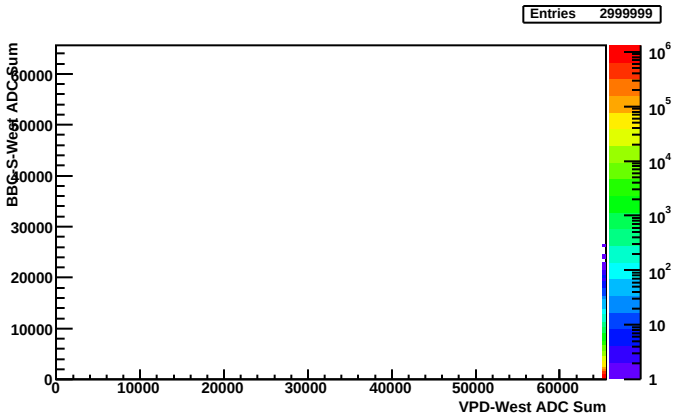

Entries 2999999
BBC-L-East ADC Sum
VPD-East ADC Sum

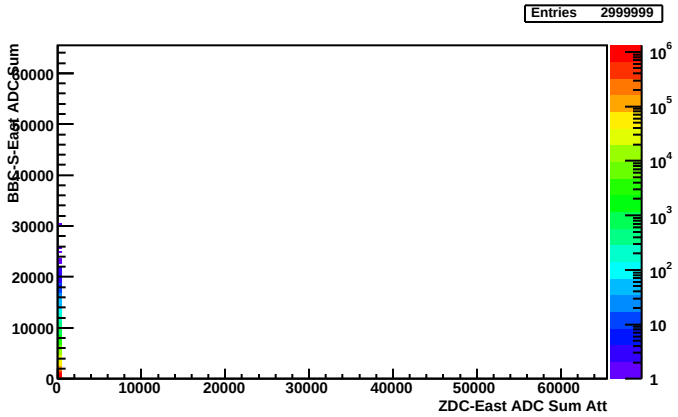

Entries 2999999
BBC-L-West ADC Sum
VPD-West ADC Sum

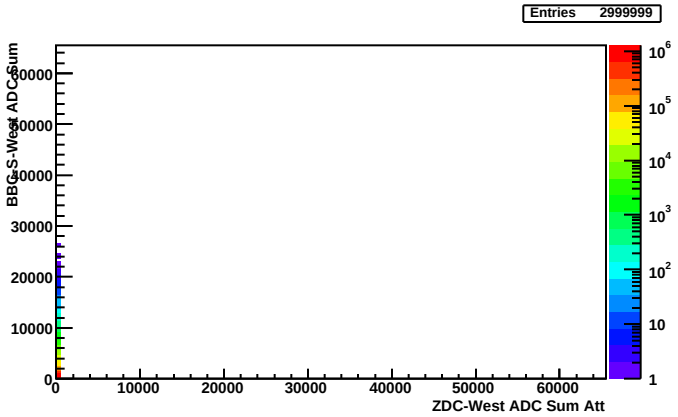

Entries 2999999
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

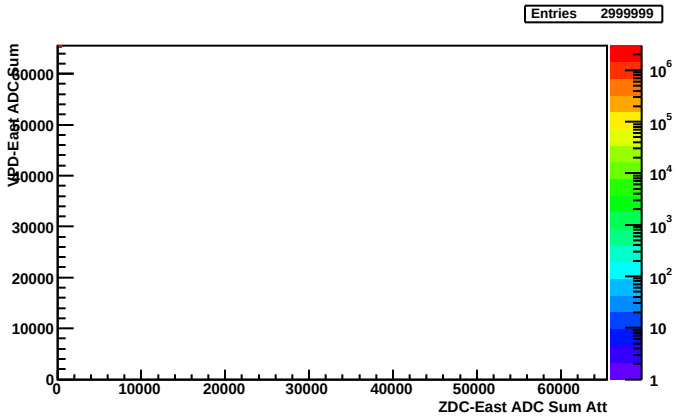

Entries 2999999
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

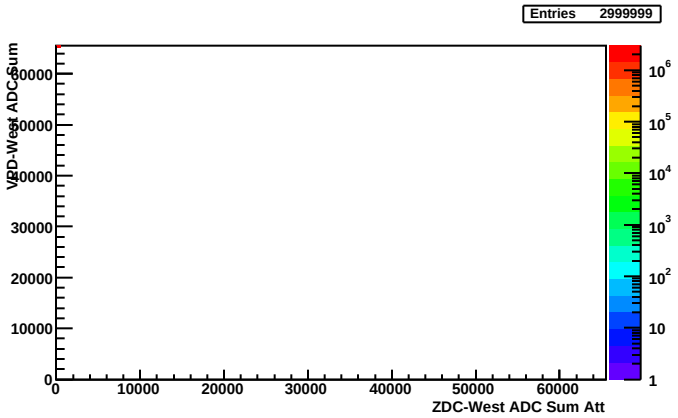

Entries 2999999
BBC-S-East ADC Sum
VPD-East ADC Sum

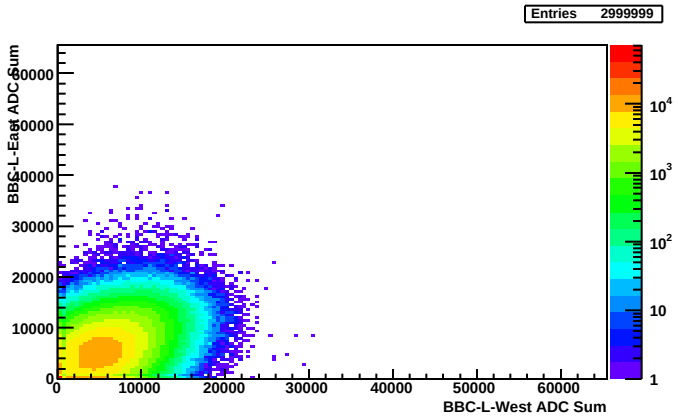

Entries 2999999
BBC-S-West ADC Sum
VPD-West ADC Sum

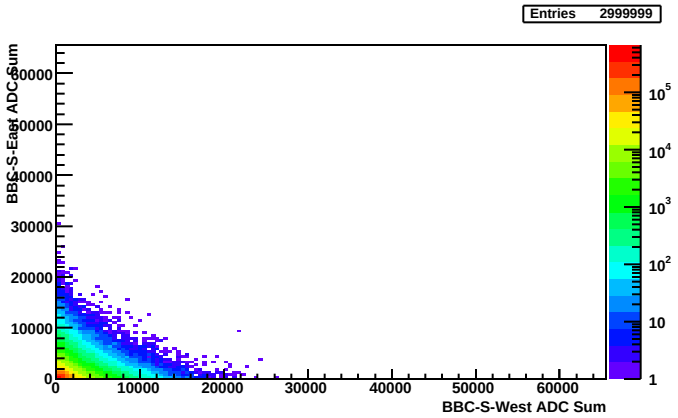

Entries 2999999
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

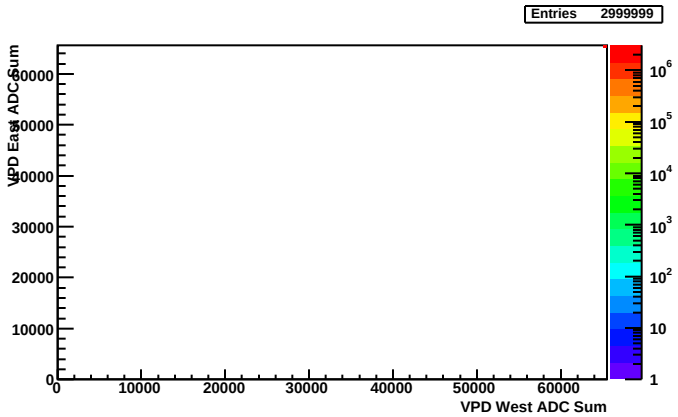

Entries 2999999
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

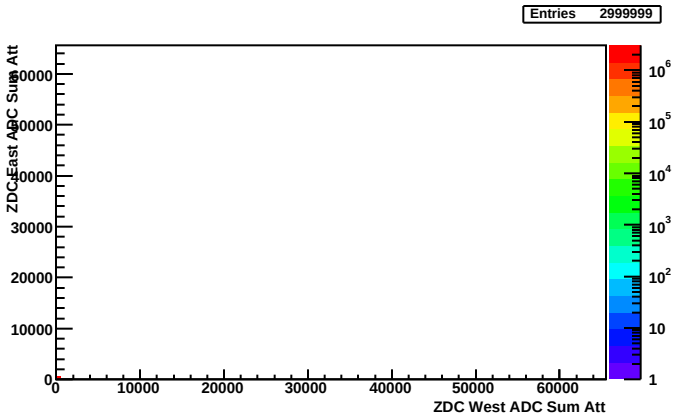

Entries 2999999
VPD-East ADC Sum
ZDC-East ADC Sum Att

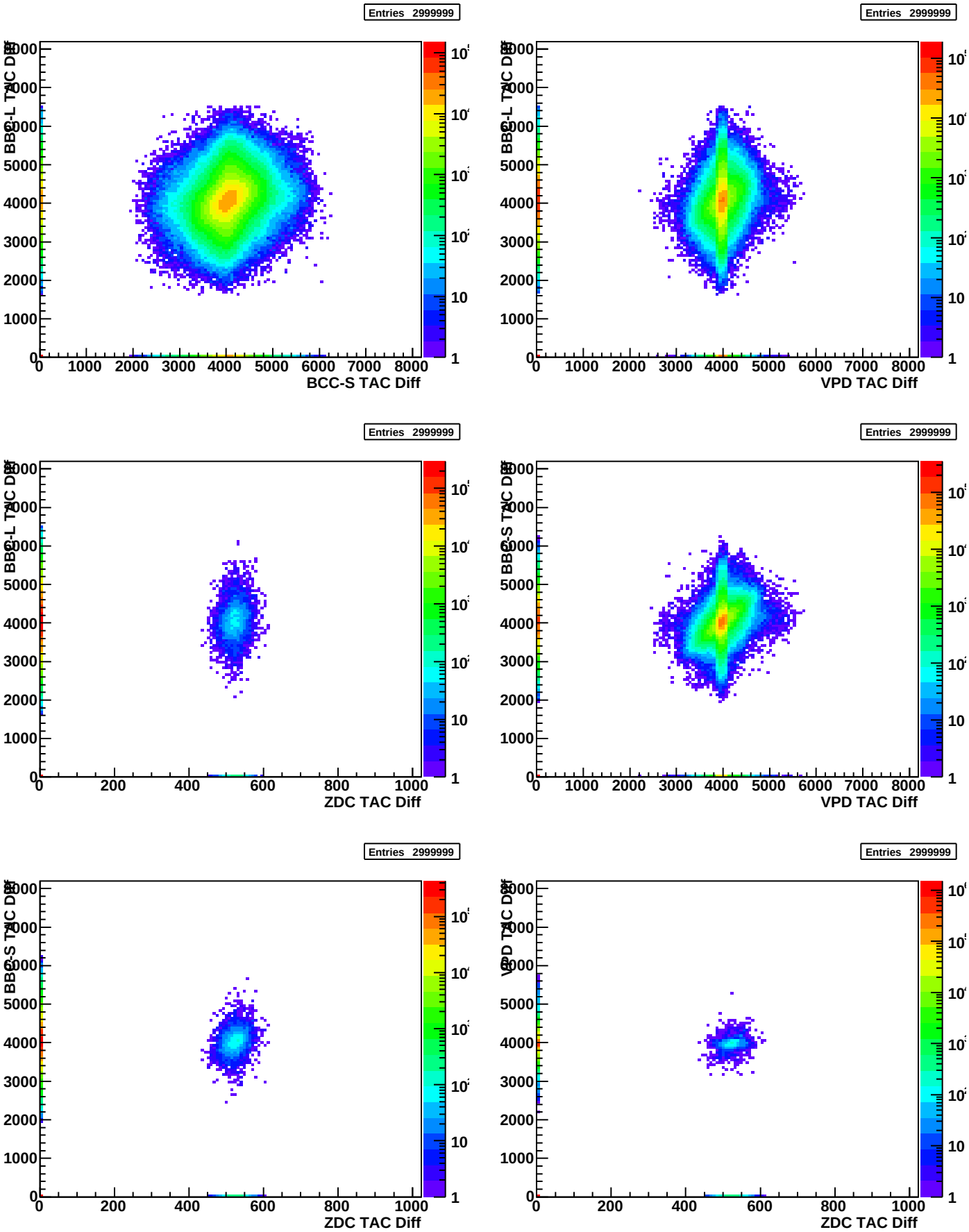

Entries 2999999
VPD-West ADC Sum
ZDC-West ADC Sum Att


Entries 2999999
BBC-L-East ADC Sum
BBC-L-West ADC Sum


Entries 2999999
BBC-S-East ADC Sum
BBC-S-West ADC Sum


Entries 2999999
VPD East ADC Sum
VPD West ADC Sum


Entries 2999999
ZDC East ADC Sum Att
ZDC West ADC Sum Att


Entries 2999999
BBC-L TAC Diff
BCC-S TAC Diff
Entries 2999999
BBC-L TAC Diff
VPD TAC Diff
Entries 2999999
BBC-L TAC Diff
ZDC TAC Diff
Entries 2999999
BBC-S TAC Diff
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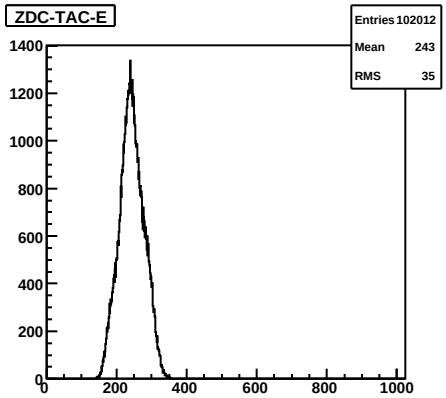
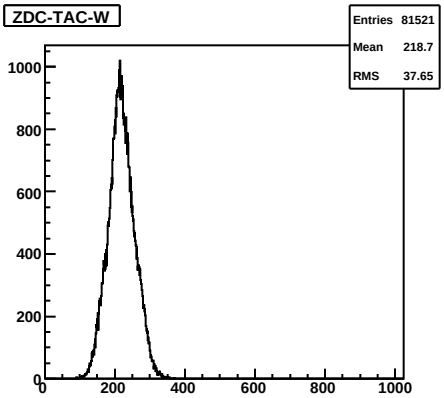
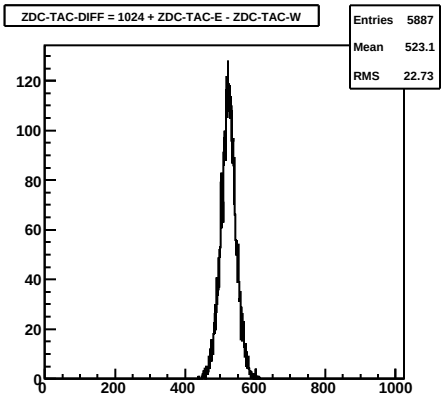
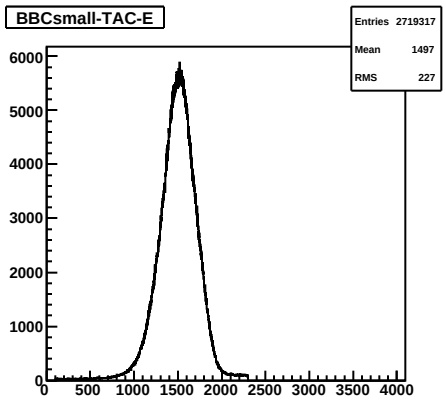
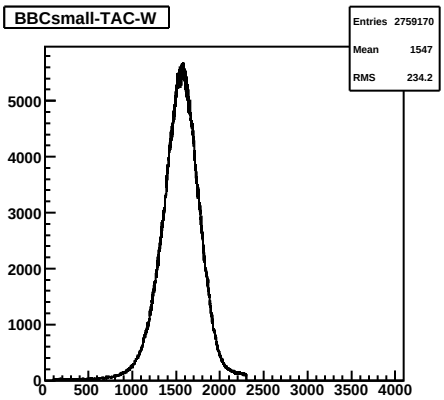
Entries 2999999
BBC-S TAC Diff
ZDC TAC Diff
Entries 2999999
VPD TAC Diff
ZDC TAC Diff

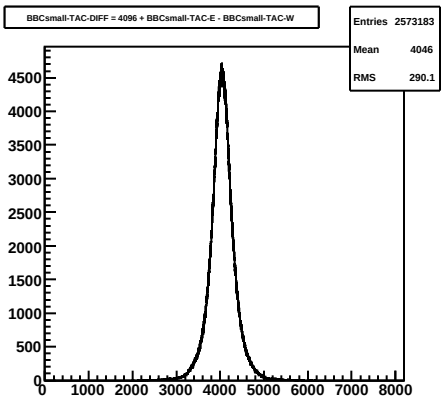

ZDC-TAC-E
Entries 102012
Mean 243
RMS 35

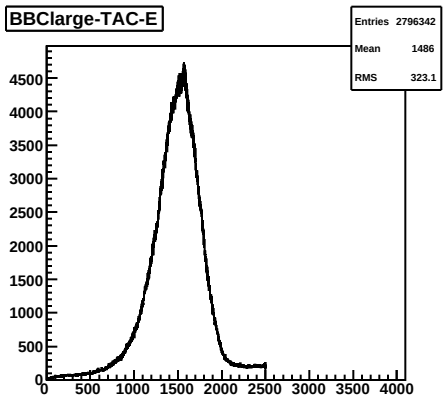

ZDC-TAC-W
Entries 81521
Mean 218.7
RMS 37.65

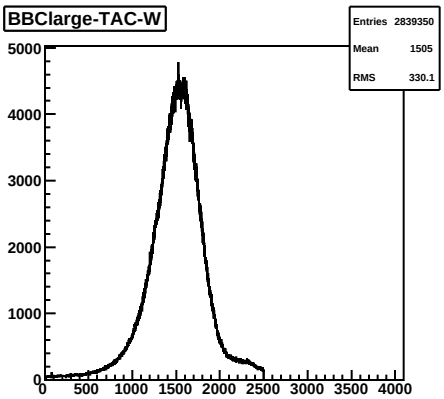

ZDC-TAC-DIFF = 1024 + ZDC-TAC-E - ZDC-TAC-W
Entries 5887
Mean 523.1
RMS 22.73

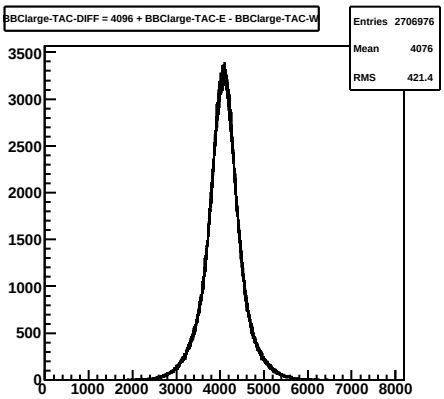

BBCsmall-TAC-E
Entries 2719317
Mean 1497
RMS 227

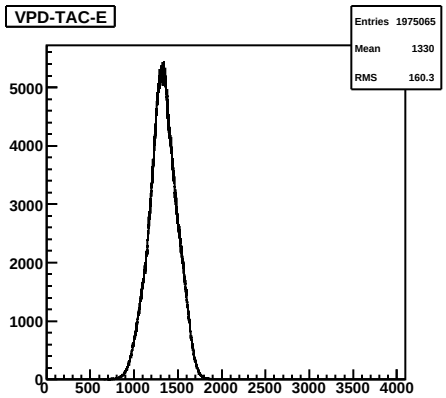

BBCsmall-TAC-W
Entries 2759170
Mean 1547
RMS 234.2

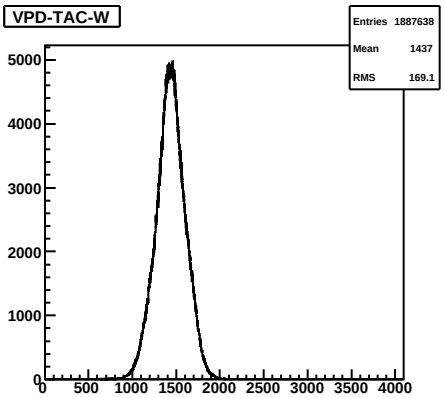

BBCsmall-TAC-DIFF = 4096 + BBCsmall-TAC-E - BBCsmall-TAC-W
Entries 2573183
Mean 4046
RMS 290.1

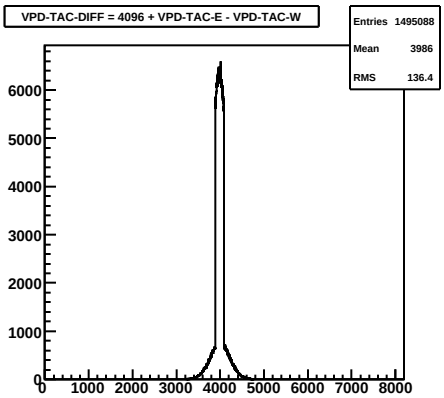

BBClarge-TAC-E
Entries 2796342
Mean 1486
RMS 323.1

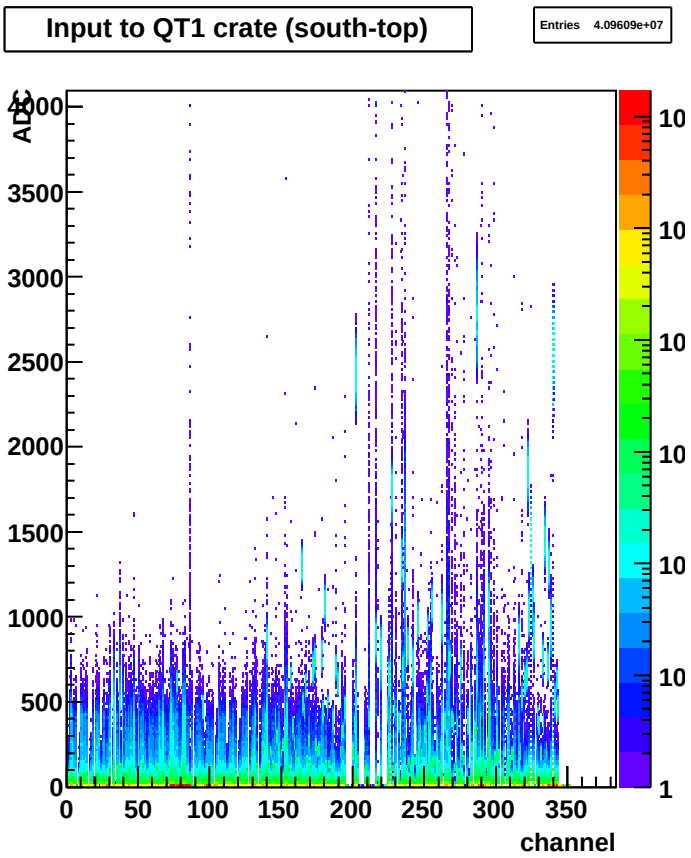

BBClarge-TAC-W
Entries 2839350
Mean 1505
RMS 330.1

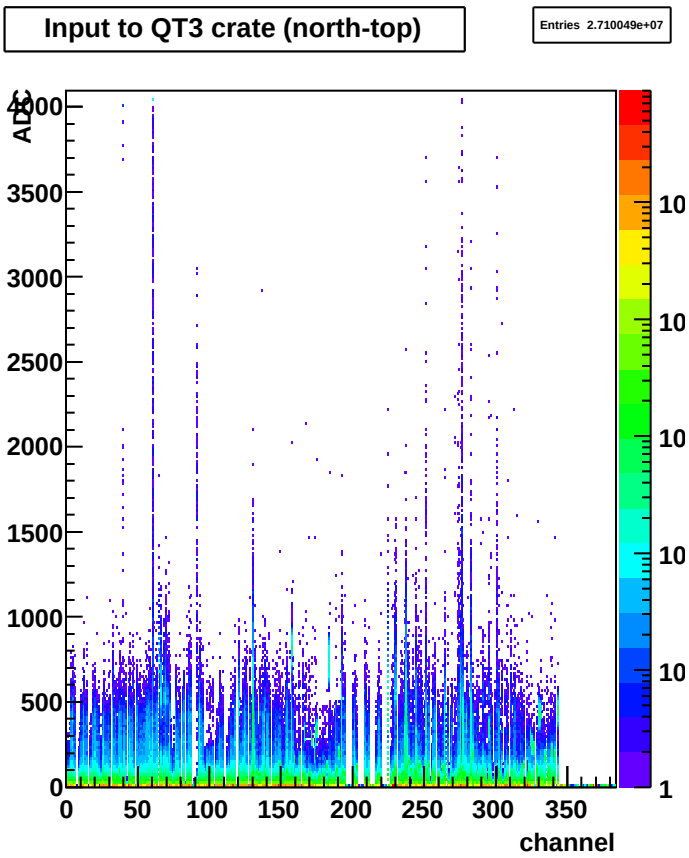

BBClarge-TAC-DIFF = 4096 + BBClarge-TAC-E - BBClarge-TAC-W
Entries 2706976
Mean 4076
RMS 421.4

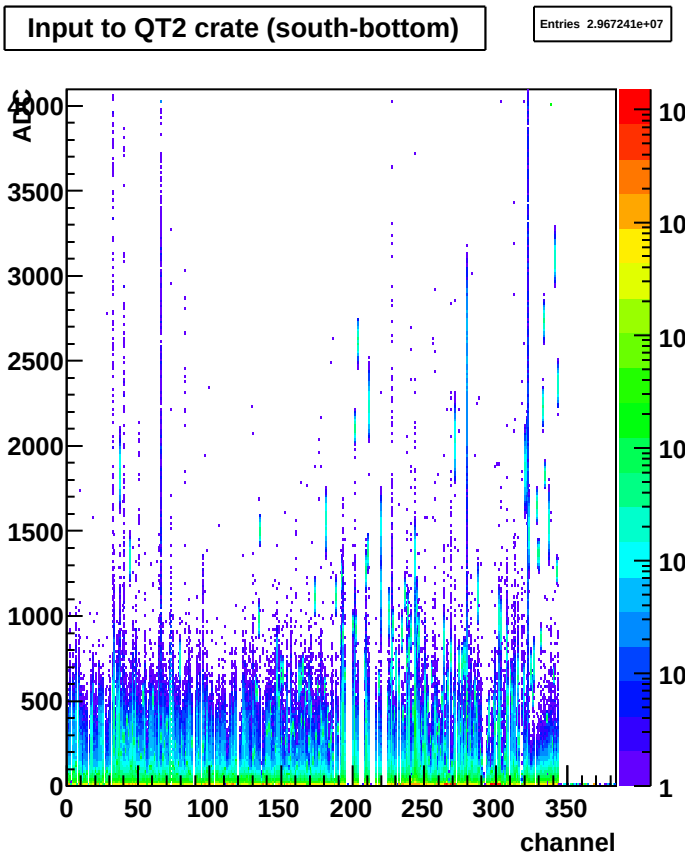

VPD-TAC-E
Entries 1975065
Mean 1330
RMS 160.3

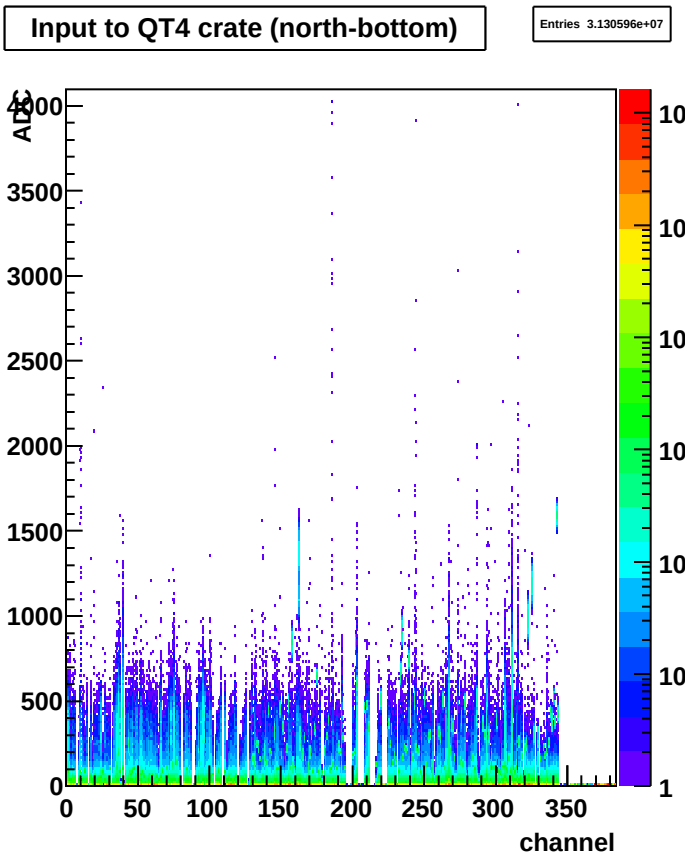

VPD-TAC-W
Entries 1887638
Mean 1437
RMS 169.1

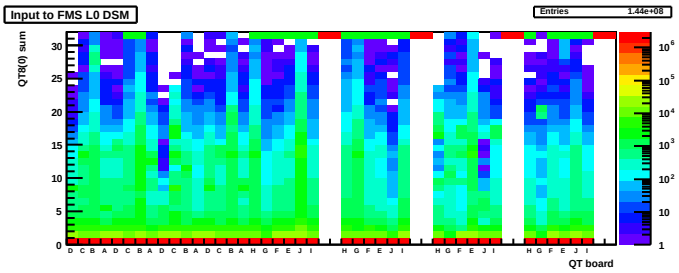

VPD-TAC-DIFF = 4096 + VPD-TAC-E - VPD-TAC-W
Entries 1495088
Mean 3986
RMS 136.4

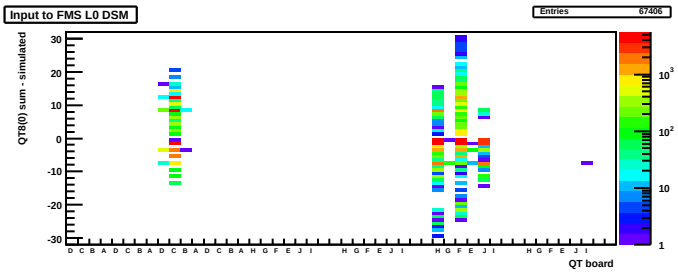

Input to QT1 crate (south-top)
Entries 4.09609e+07
ADC
channel

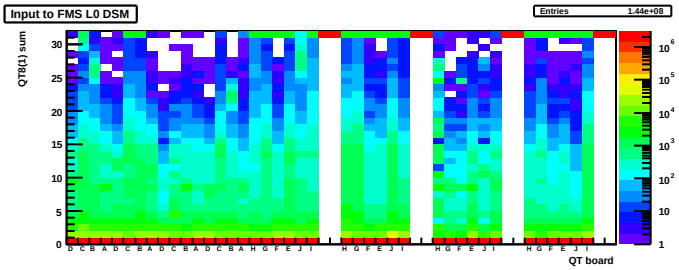

Input to QT3 crate (north-top)
Entries 2.710049e+07
ADC
channel

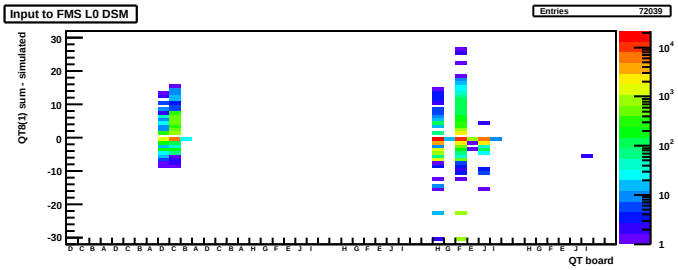

Input to QT2 crate (south-bottom)
Entries 2.967241e+07
ADC
channel

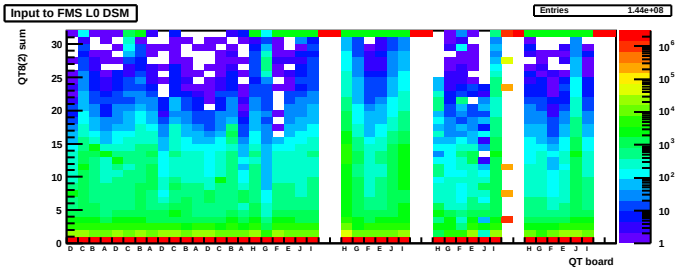

Input to QT4 crate (north-bottom)
Entries 3.130596e+07
ADC
channel

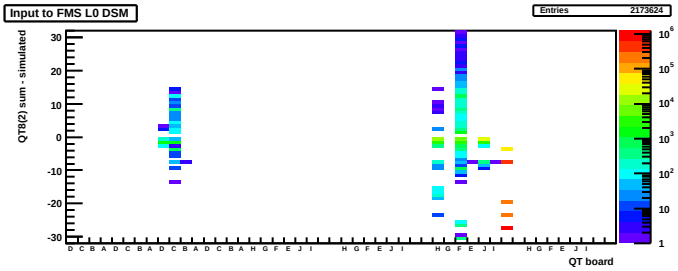

Input to FMS L0 DSM
Entries 1.44e+08
QT8(0) sum
QT board

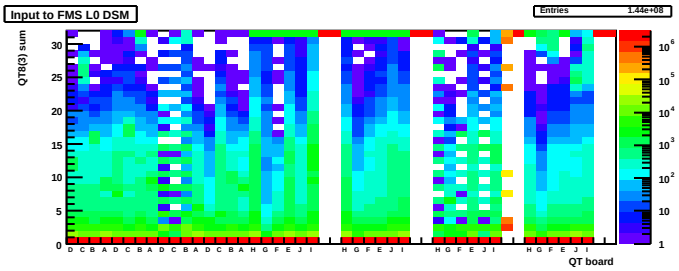

Input to FMS L0 DSM
Entries 67406
QT8(0) sum - simulated
QT board

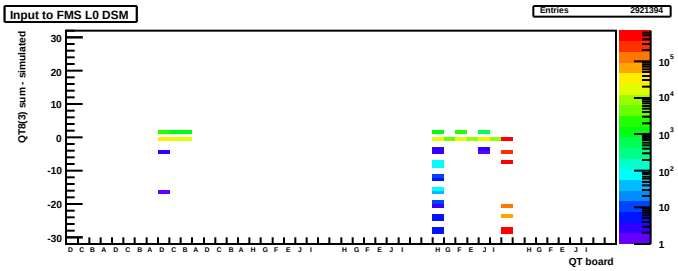

Input to FMS L0 DSM
Entries 1.44e+08
QT8(1) sum
QT board

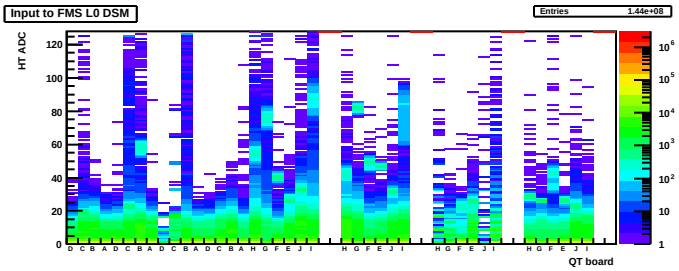

Input to FMS L0 DSM
Entries 72039
QT8(1) sum - simulated
QT board

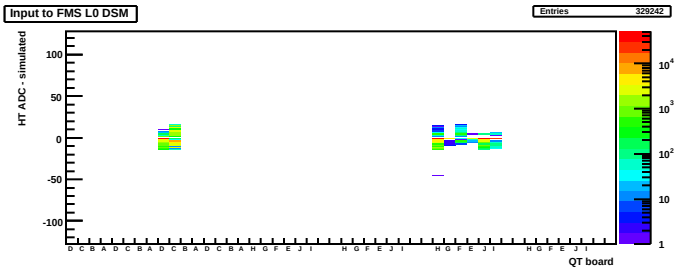

Input to FMS L0 DSM
Entries 1.44e+08
QT8(2) sum
QT board

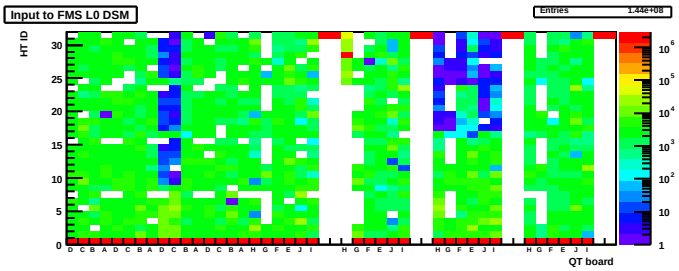

Input to FMS L0 DSM
Entries 2173624
QT8(2) sum - simulated
QT board

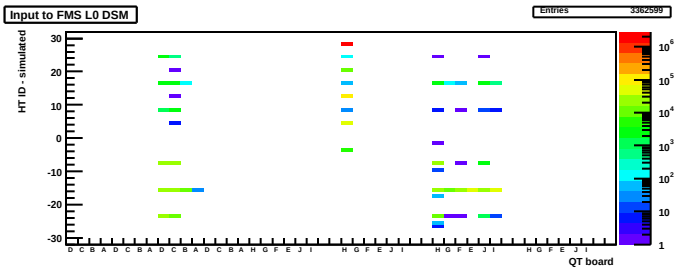

Input to FMS L0 DSM
Entries 1.44e+08
QT8(3) sum
QT board

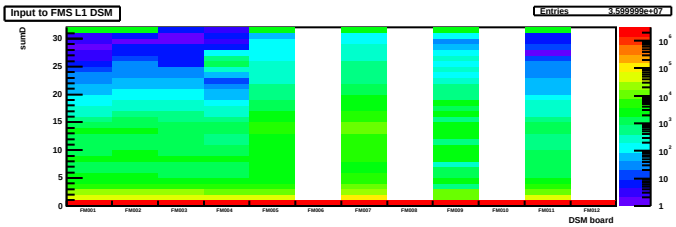

Input to FMS L0 DSM
Entries 2921394
QT8(3) sum - simulated
QT board

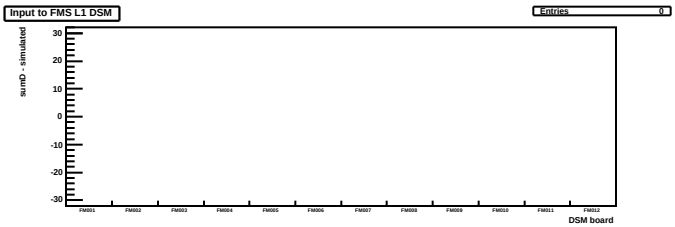

Input to FMS L0 DSM
Entries 1.44e+08
HT ADC
QT board

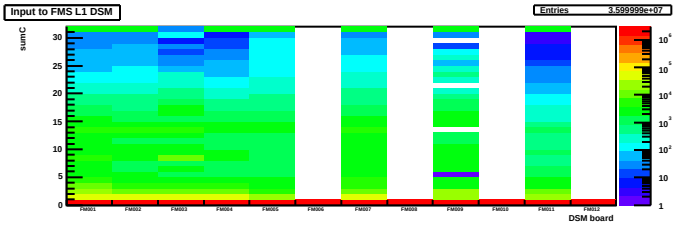

Input to FMS L0 DSM
Entries 329242
HT ADC - simulated
QT board

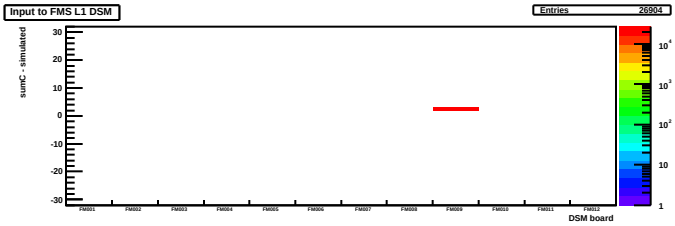

Input to FMS L0 DSM
Entries 1.44e+08
HT ID
QT board

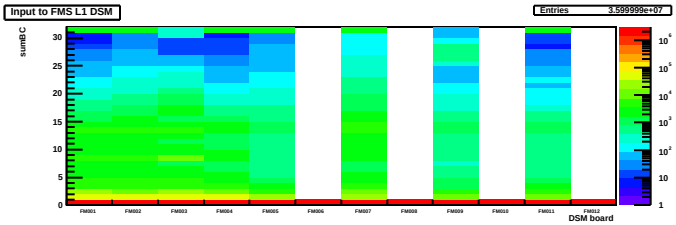

Input to FMS L0 DSM
Entries 3362599
HT ID - simulated
QT board

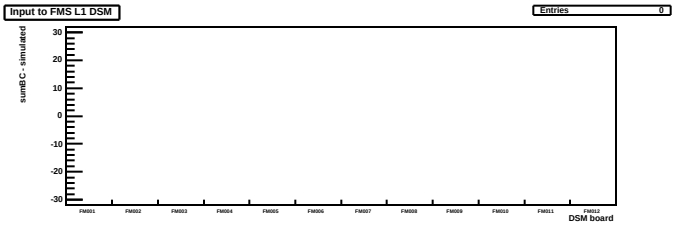

Input to FMS L1 DSM
Entries 3.599999e+07
sumD
DSM board

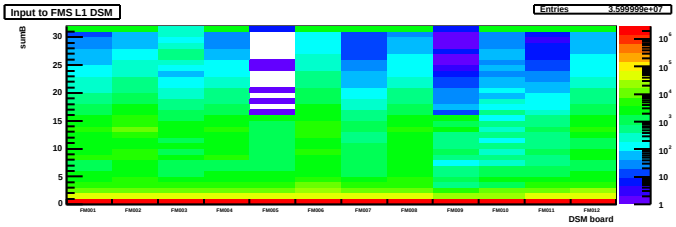

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

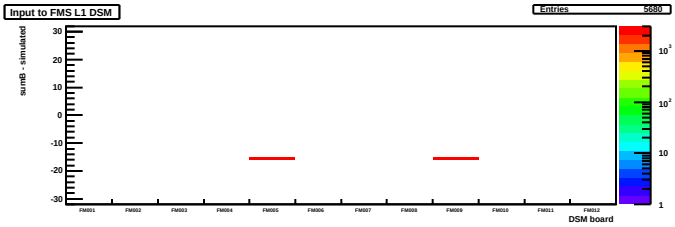

Input to FMS L1 DSM
Entries 3.599999e+07
sumC
DSM board

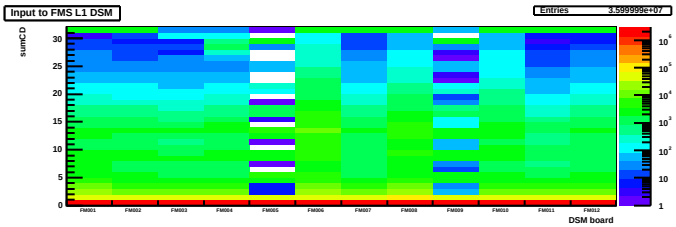

Input to FMS L1 DSM
Entries 26904
sumC - simulated
DSM board

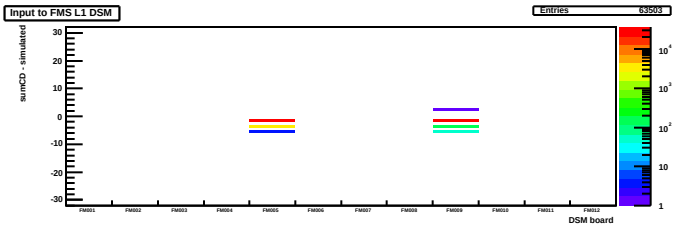

Input to FMS L1 DSM
Entries 3.599999e+07
sumBC
DSM board

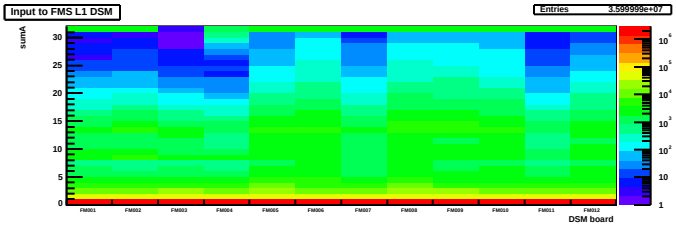

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

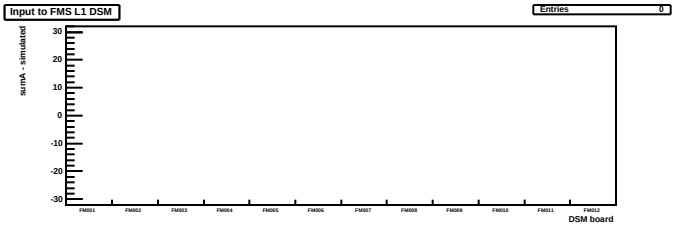

Input to FMS L1 DSM
Entries 3.599999e+07
sumB
DSM board

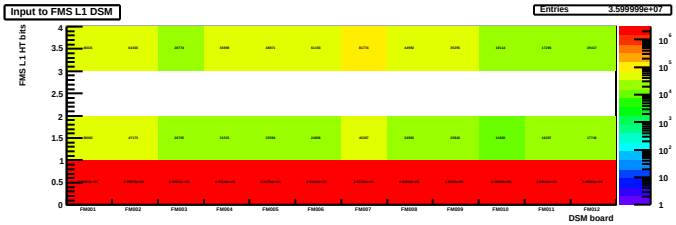

Input to FMS L1 DSM
Entries 5680
sumB - simulated
DSM board

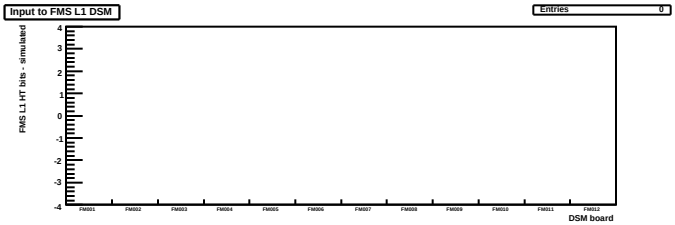

Input to FMS L1 DSM
Entries 3.599999e+07
sumCD
DSM board

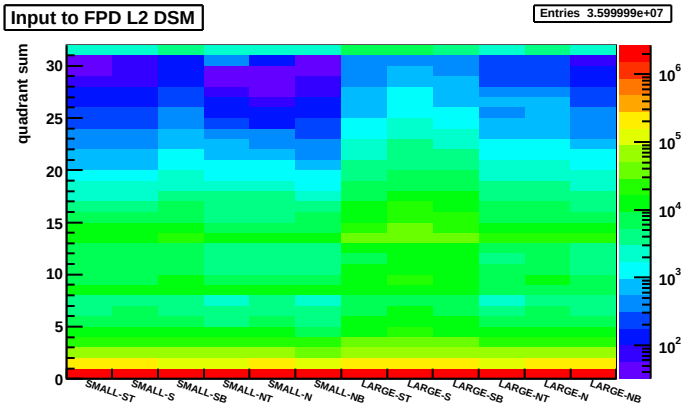

Input to FMS L1 DSM
Entries 63503
sumCD - simulated
DSM board

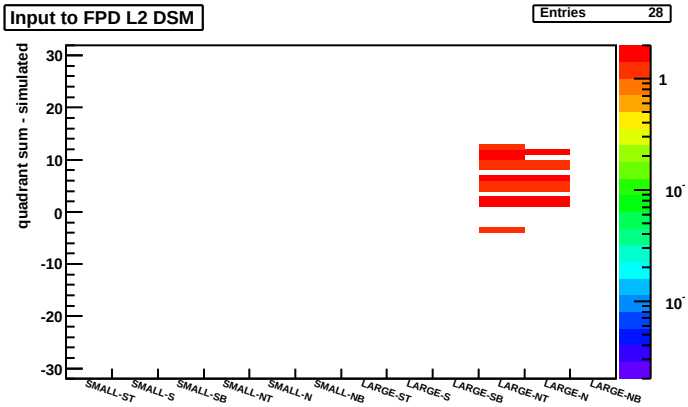

Input to FMS L1 DSM
Entries 3.599999e+07
sumA
DSM board

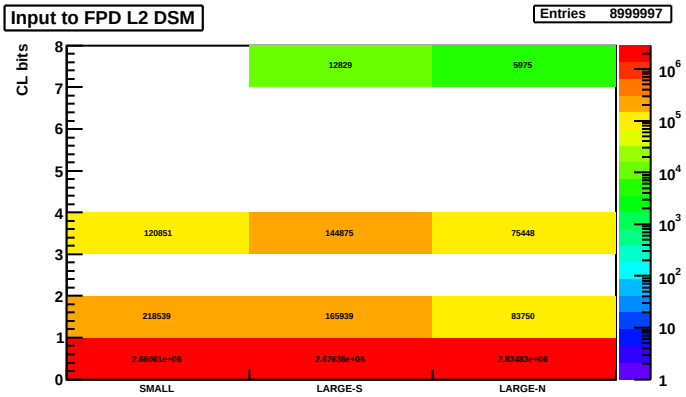

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

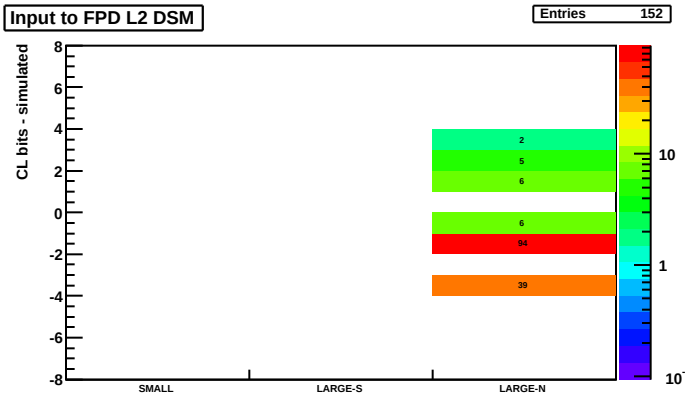

Input to FMS L1 DSM
Entries 3.599999e+07
FMS L1 HT bits
DSM board

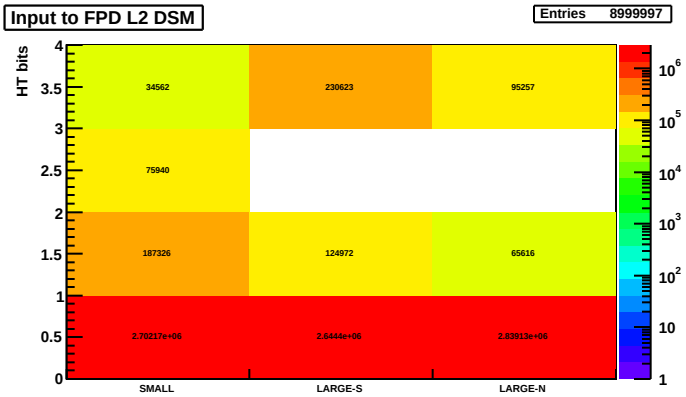

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

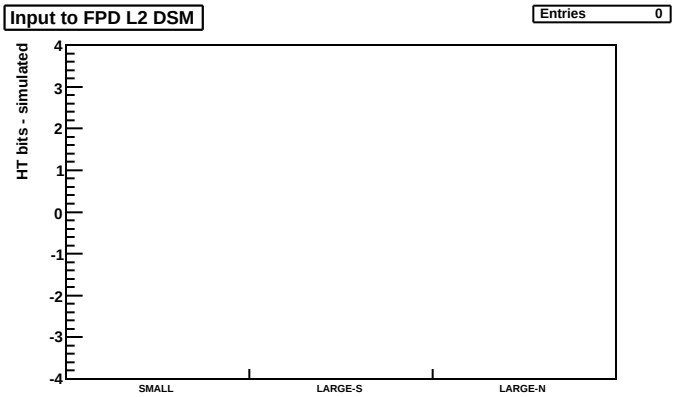

Input to FPD L2 DSM
Entries 3.599999e+07
quadrant sum
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

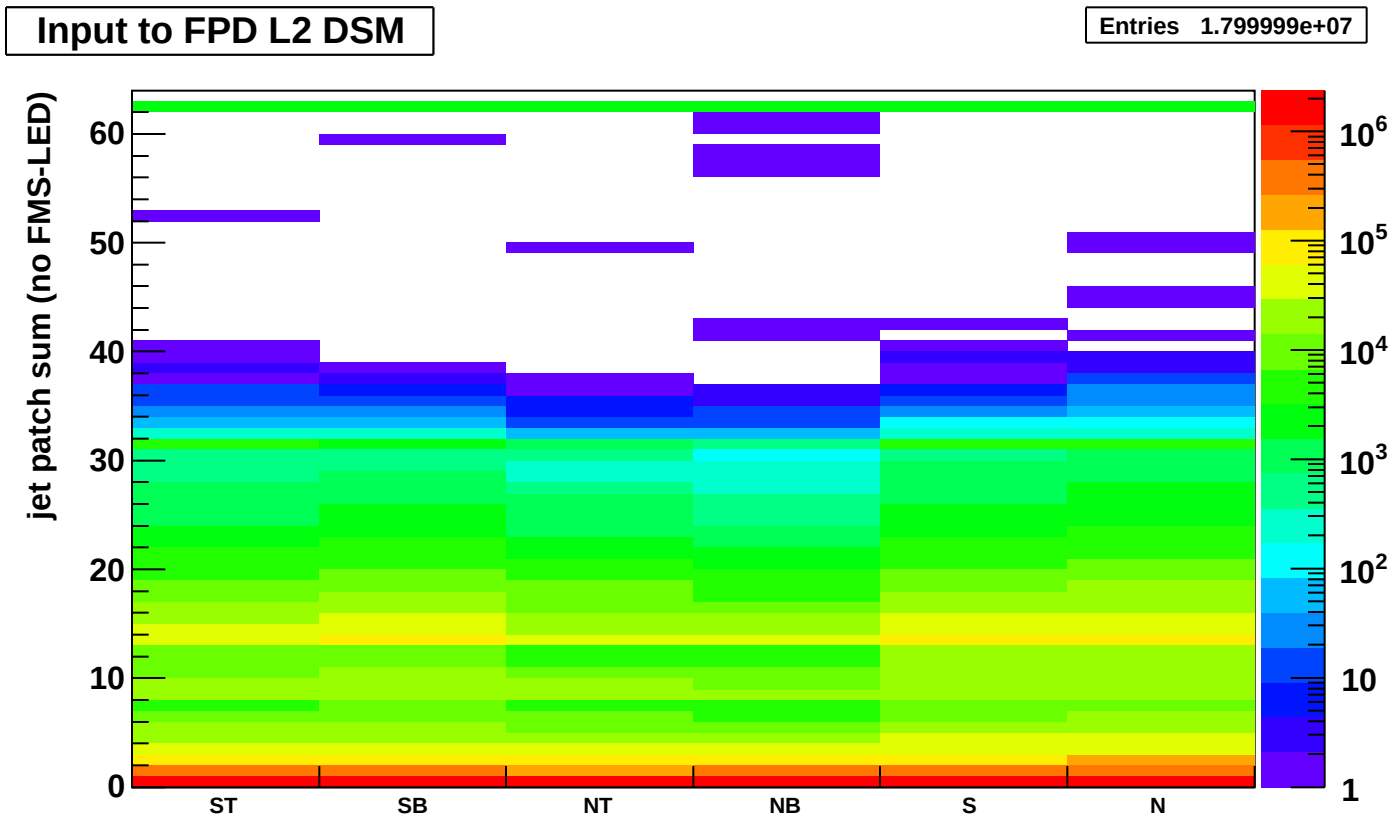

Input to FPD L2 DSM
Entries 28
quadrant sum - simulated
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

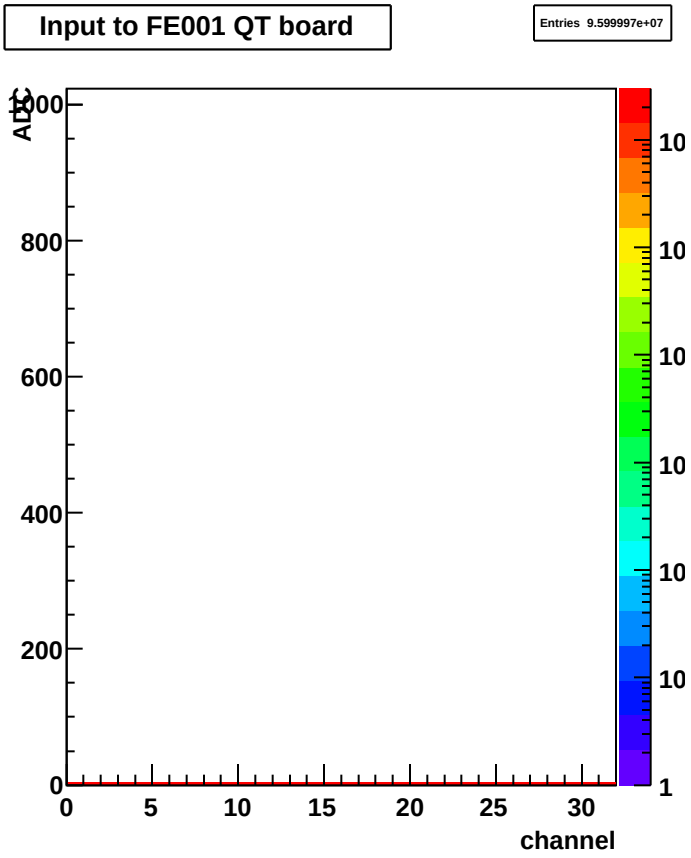

Input to FPD L2 DSM
Entries 8999997
CL bits
12829
5975
120851
144875
75448
218539
165939
83750
2.66061e+06
2.67636e+06
2.83483e+06
SMALL
LARGE-S
LARGE-N

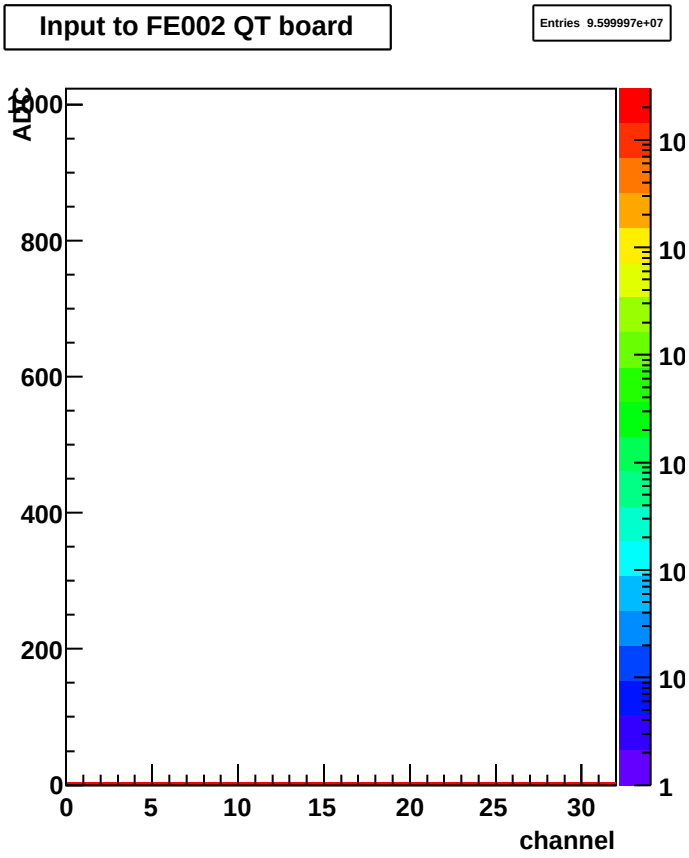

Input to FPD L2 DSM
Entries 152
CL bits - simulated
2
5
6
6
94
39
SMALL
LARGE-S
LARGE-N

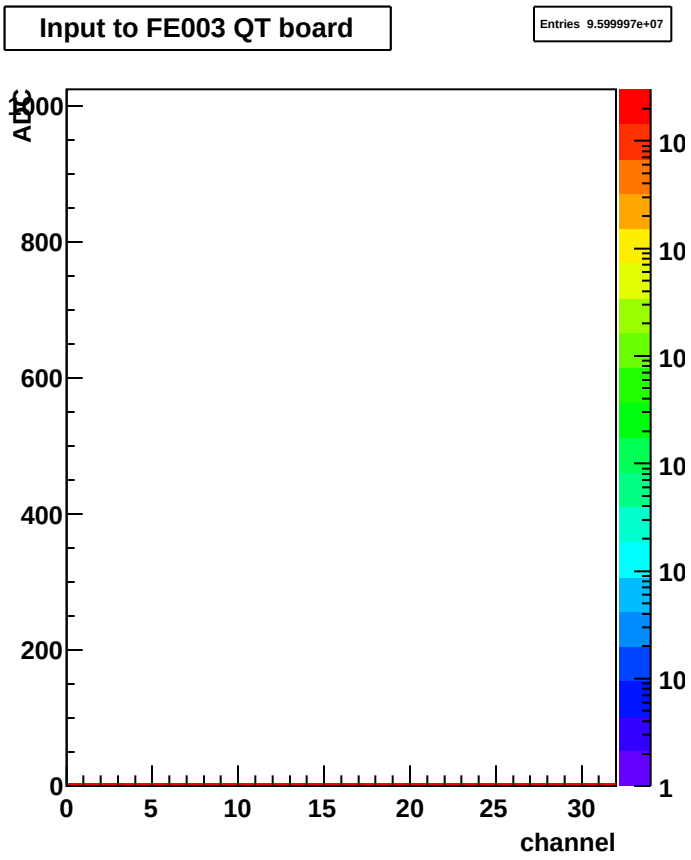

Input to FPD L2 DSM
Entries 8999997
HT bits
34562
230623
95257
75940
187326
124972
65616
2.70217e+06
2.6444e+06
2.83913e+06
SMALL
LARGE-S
LARGE-N

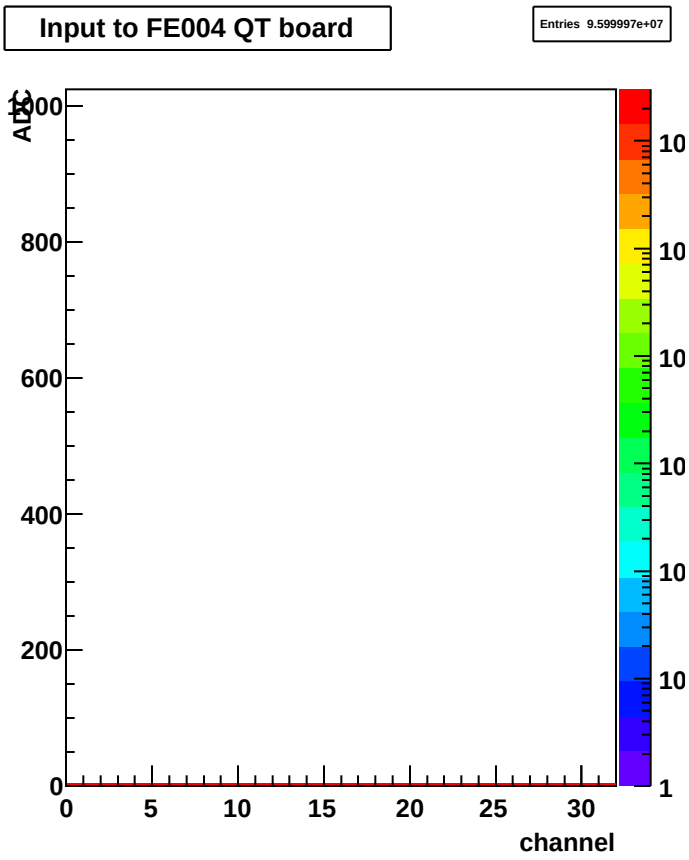

Input to FPD L2 DSM
Entries 0
HT bits - simulated
SMALL
LARGE-S
LARGE-N

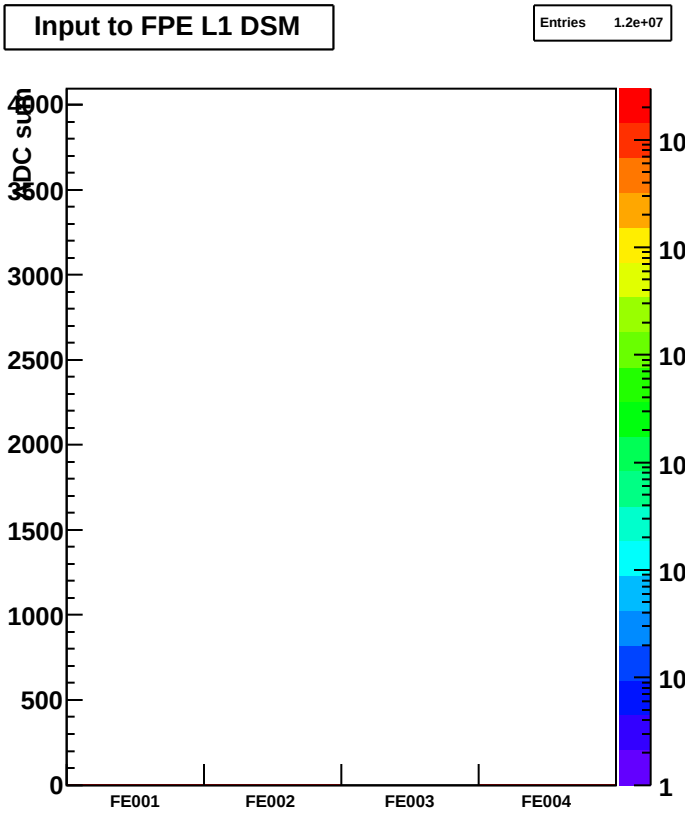

Input to FPD L2 DSM
Entries 1.799999e+07
jet patch sum (no FMS-LED)
0
10
20
30
40
50
60
ST
SB
NT
NB
S
N
1
10
10^2
10^3
10^4
10^5
10^6

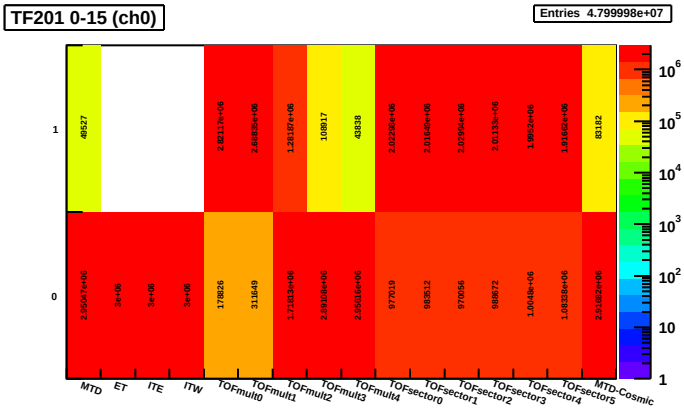

Input to FE001 QT board
Entries 9.599997e+07
ADC
channel

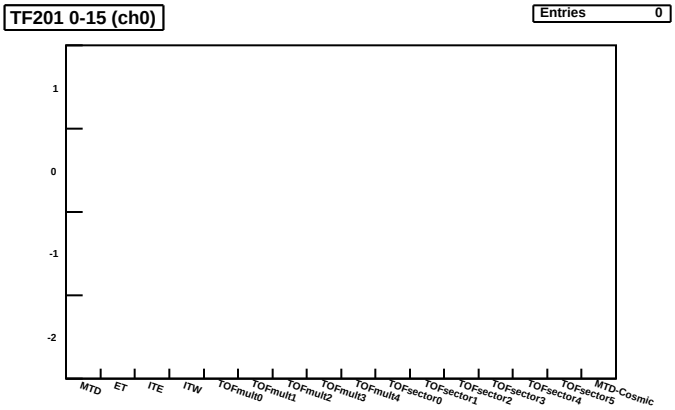

Input to FE002 QT board
Entries 9.599997e+07
ADC
channel


Input to FE003 QT board
Entries 9.599997e+07
ADC
channel


Input to FE004 QT board
Entries 9.599997e+07
ADC
channel


Input to FPE L1 DSM
Entries 1.2e+07
ADC sum
4000
3500
3000
2500
2000
1500
1000
500
0
FE001
FE002
FE003
FE004
10
10
10
10
10
10
1


TF201 0-15 (ch0)
Entries 4.799998e+07
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic


TF201 0-15 (ch0)
Entries 0
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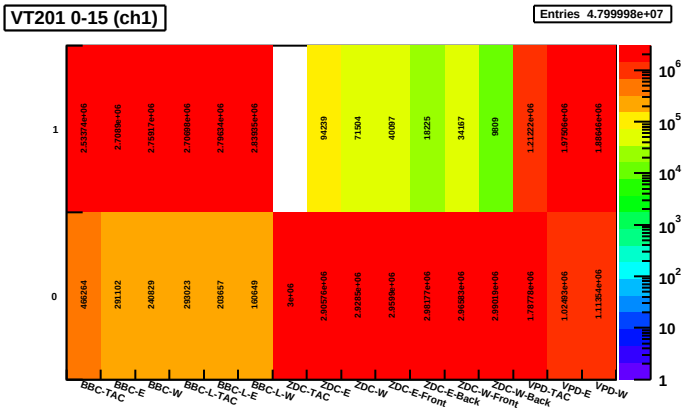
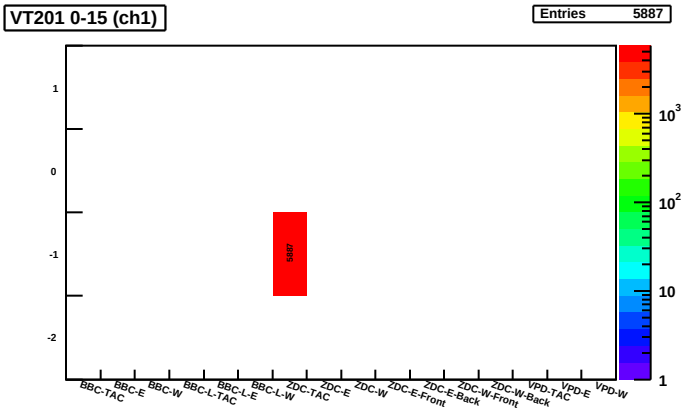

VT201 0-15 (ch1)
Entries 4.799998e+07
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-E ZDC-W ZDC-E-Front ZDC-E-Back ZDC-W-Front ZDC-W-Back VPD-TAC VPD-E VPD-W


VT201 0-15 (ch1)
Entries 5887
5887
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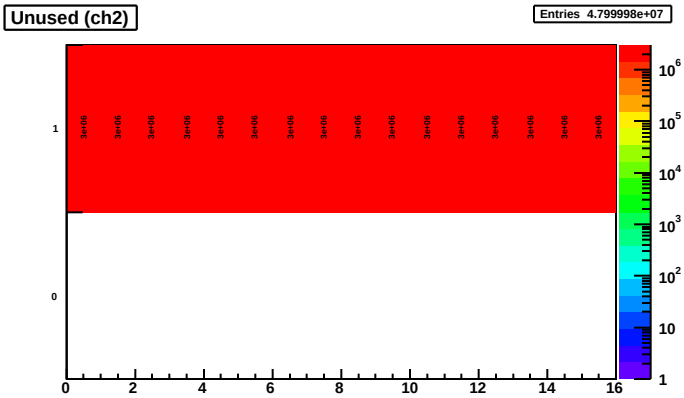
Unused (ch2)
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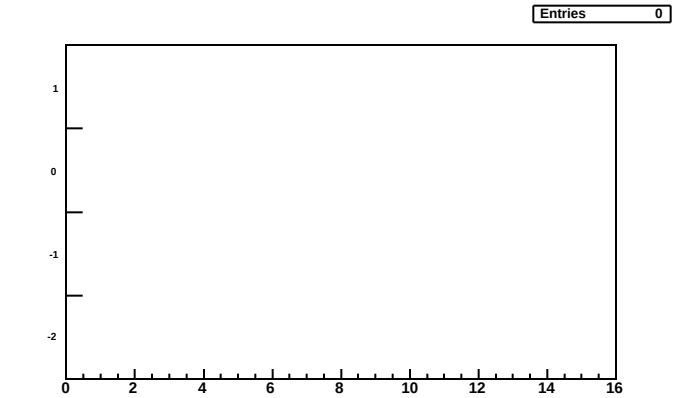
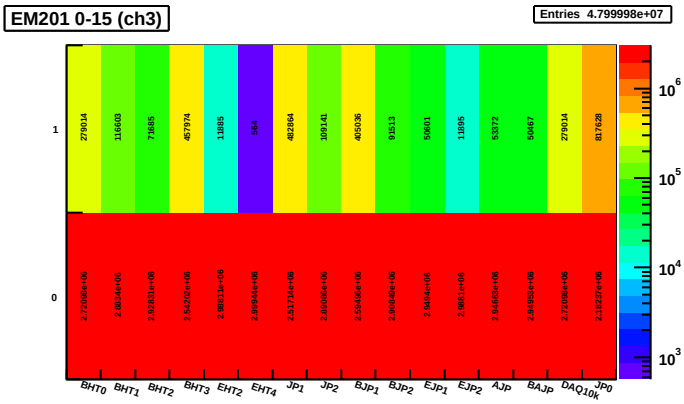
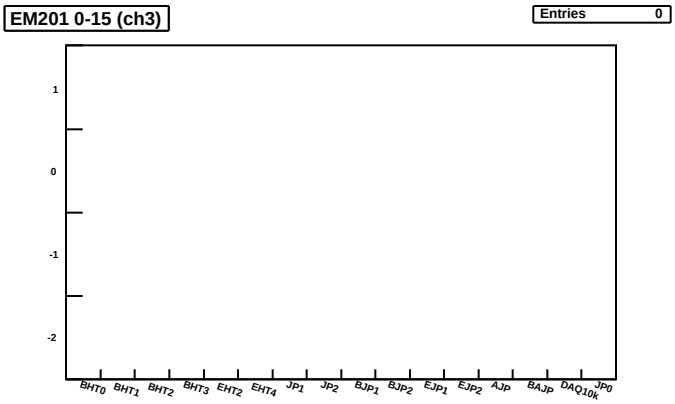

Entries 0


EM201 0-15 (ch3)
Entries 4.799998e+07
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJp BAJp DAQ10k JP0


EM201 0-15 (ch3)
Entries 0
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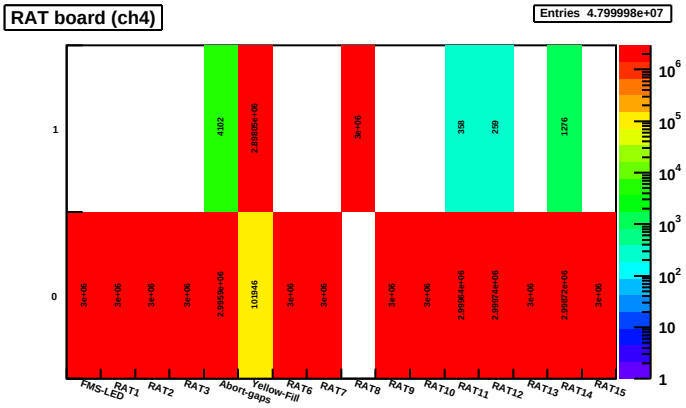
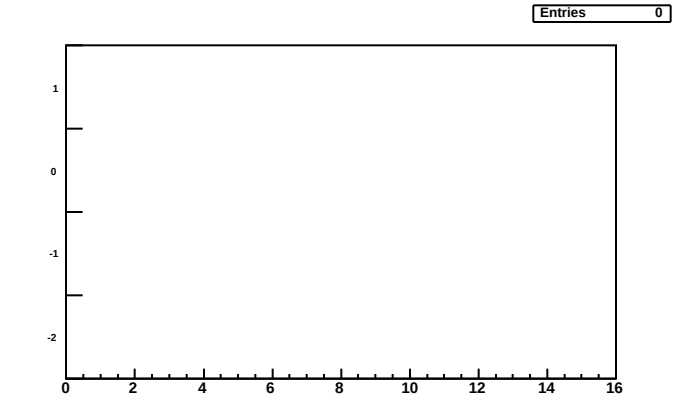
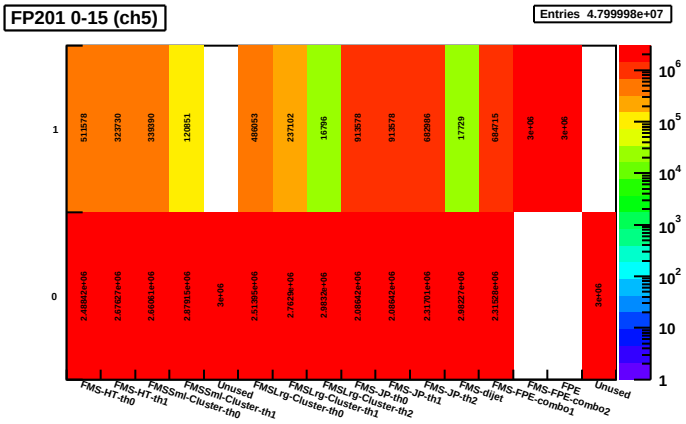
RAT board (ch4)





FP201 0-15 (ch5)



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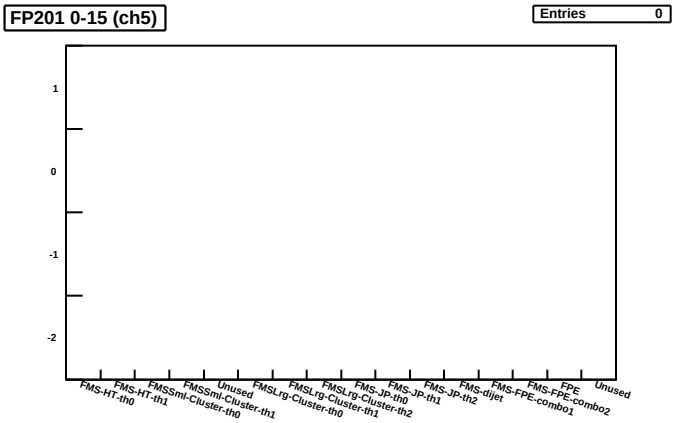
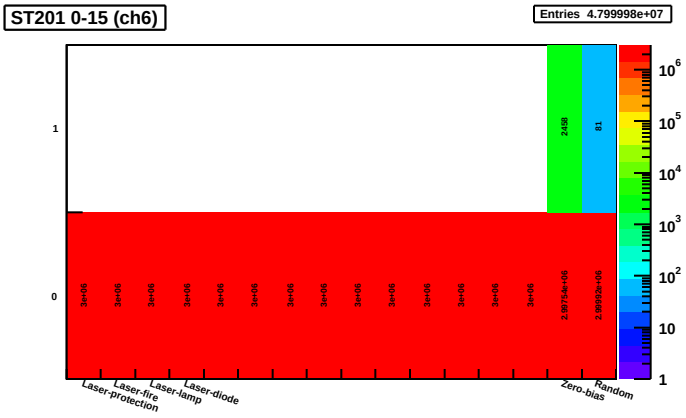
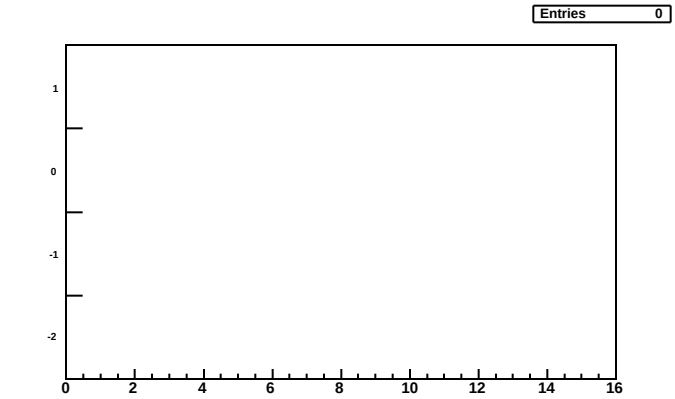
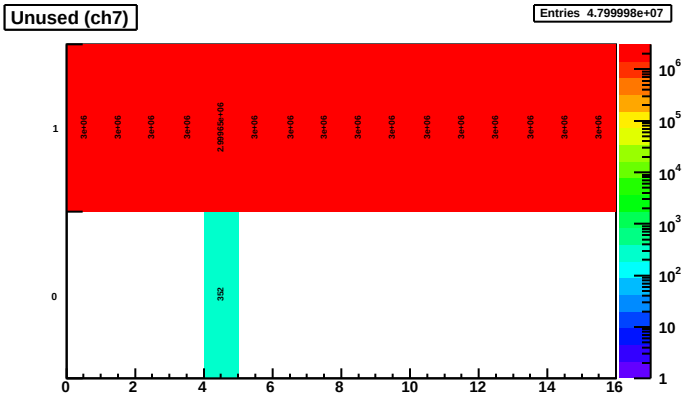
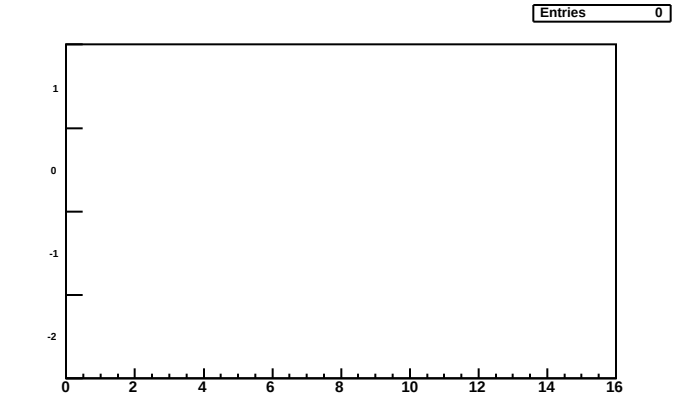


ST201 0-15 (ch6)





Unused (ch7)