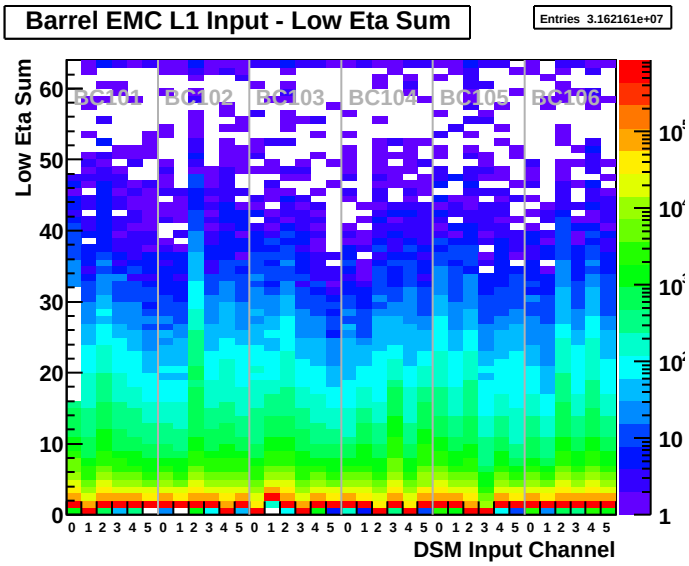
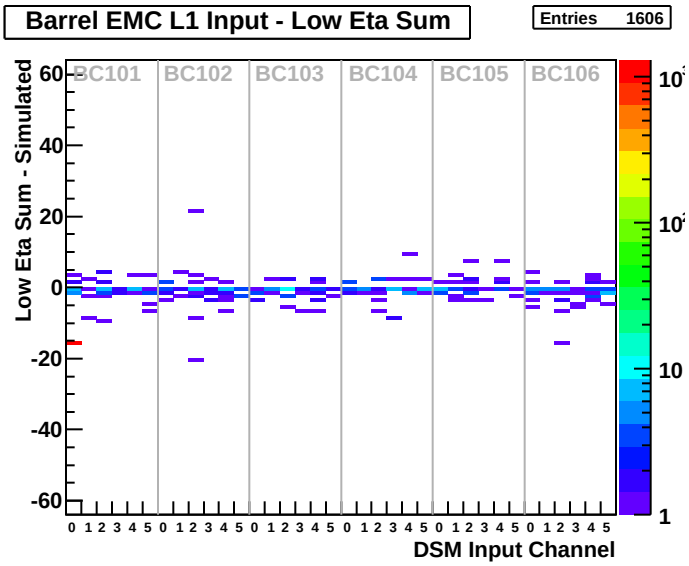
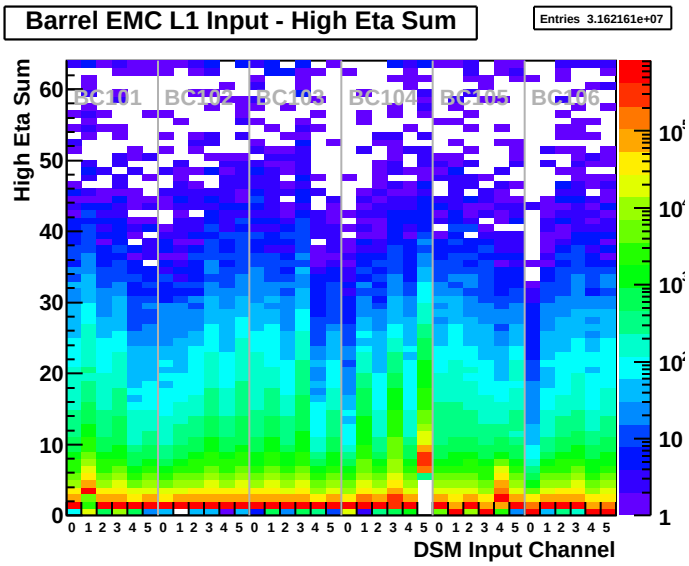
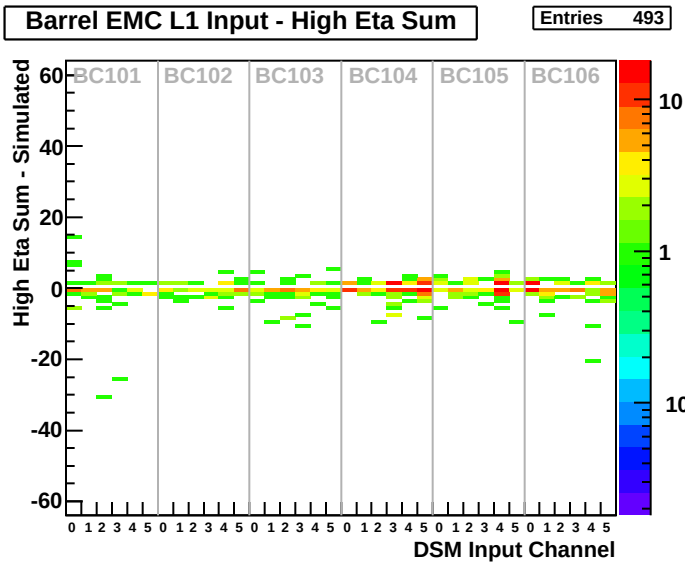
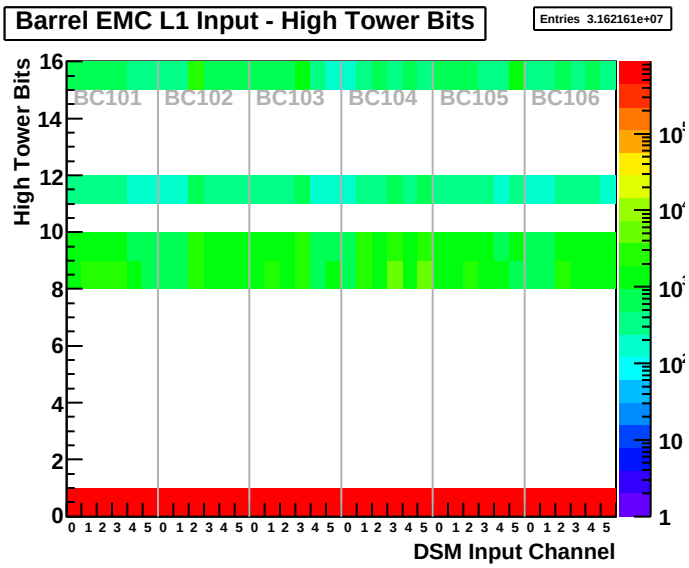
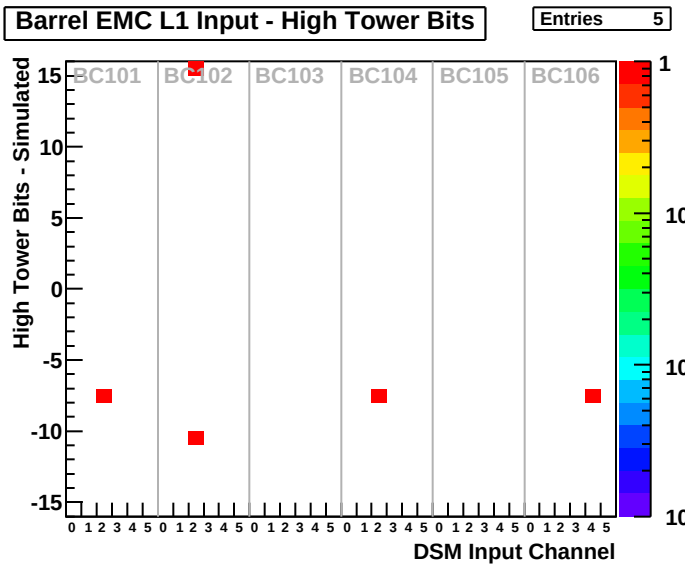

Barrel EMC L1 Input - Low Eta Sum
Entries 3.162161e+07
Low Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

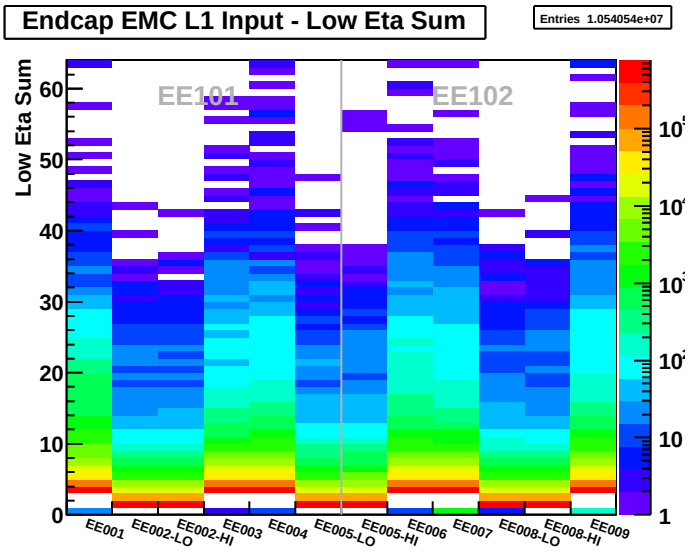

Barrel EMC L1 Input - Low Eta Sum
Entries 1606
Low Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

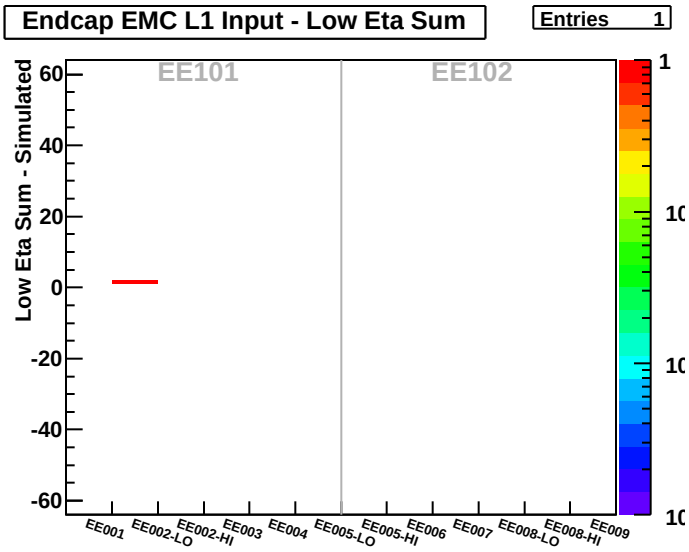

Barrel EMC L1 Input - High Eta Sum
Entries 3.162161e+07
High Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

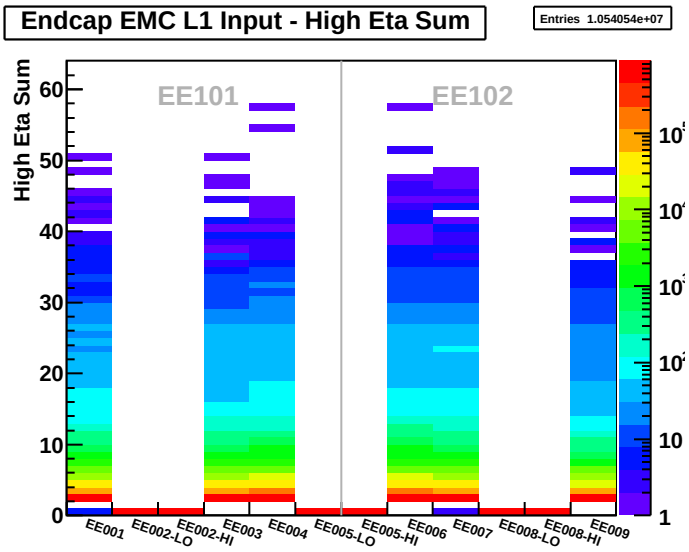

Barrel EMC L1 Input - High Eta Sum
Entries 493
High Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

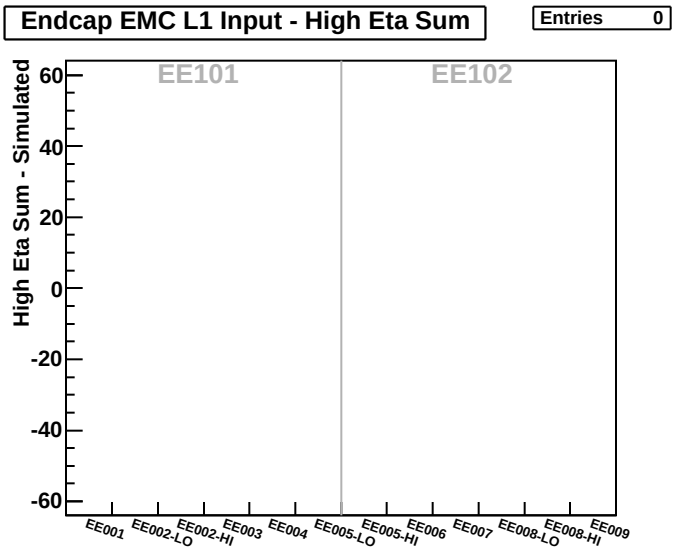

Barrel EMC L1 Input - High Tower Bits
Entries 3.162161e+07
High Tower Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

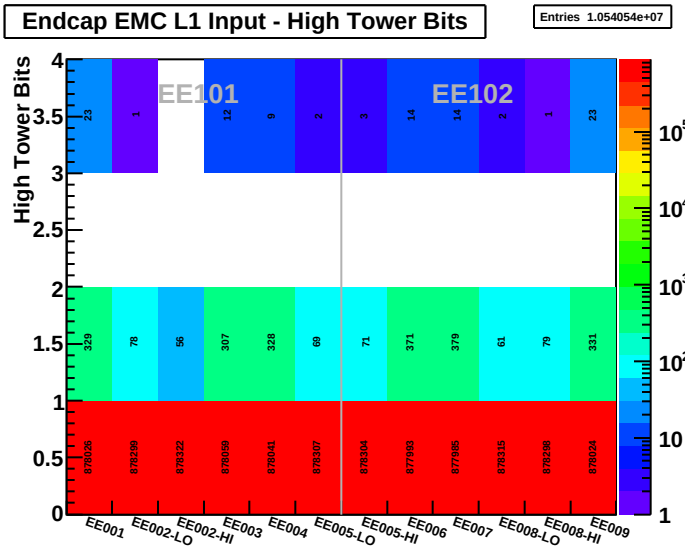

Barrel EMC L1 Input - High Tower Bits
Entries 5
High Tower Bits - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

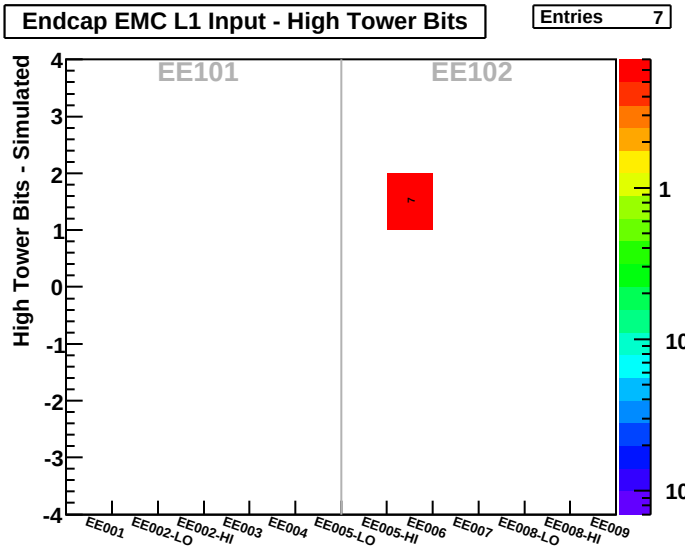

Endcap EMC L1 Input - Low Eta Sum
Entries 1.054054e+07
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

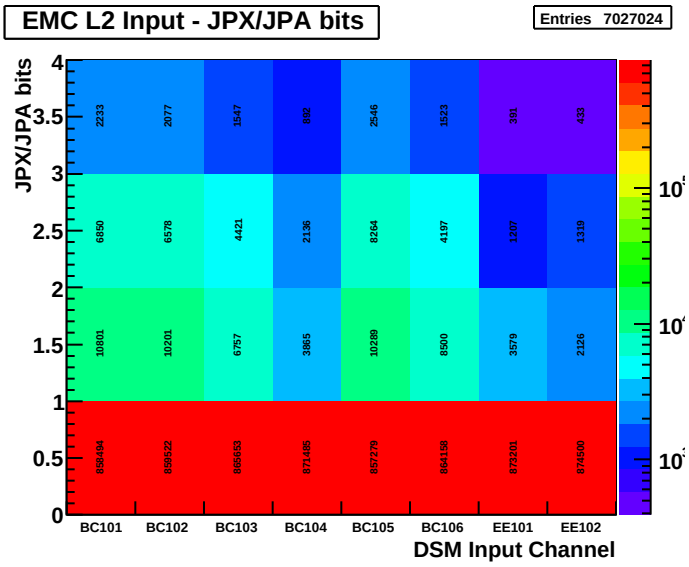

Endcap EMC L1 Input - Low Eta Sum
Entries 1
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

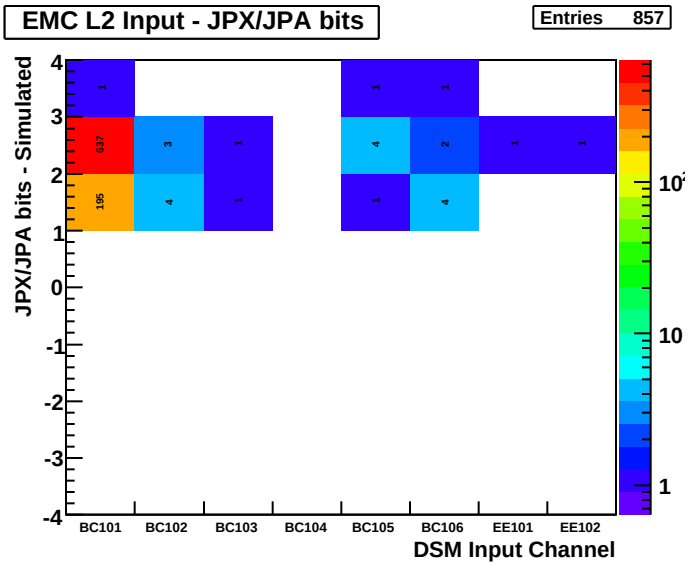

Endcap EMC L1 Input - High Eta Sum
Entries 1.054054e+07
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

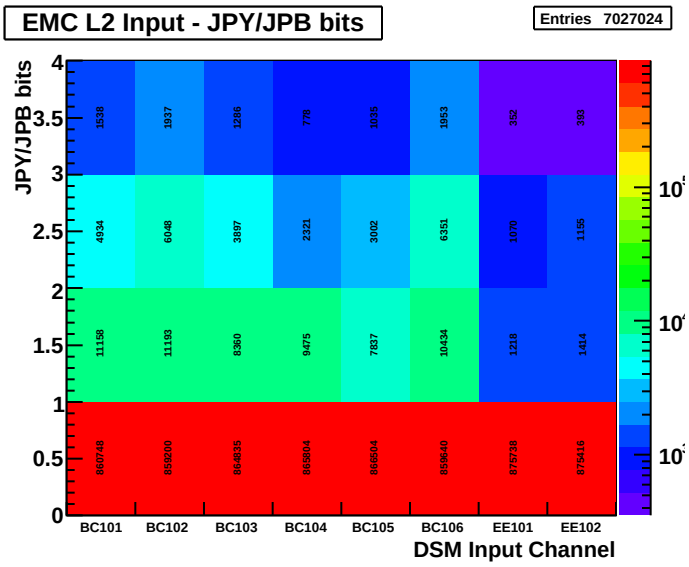

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

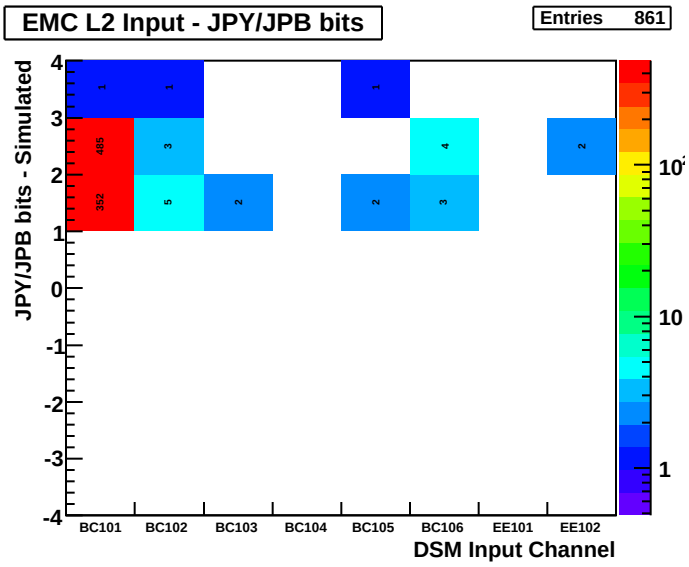

Endcap EMC L1 Input - High Tower Bits
Entries 1.054054e+07
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

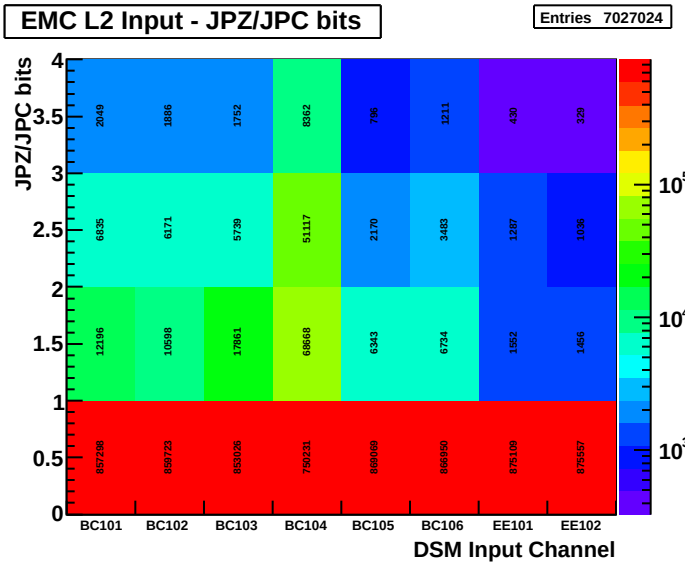

Endcap EMC L1 Input - High Tower Bits
Entries 7
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

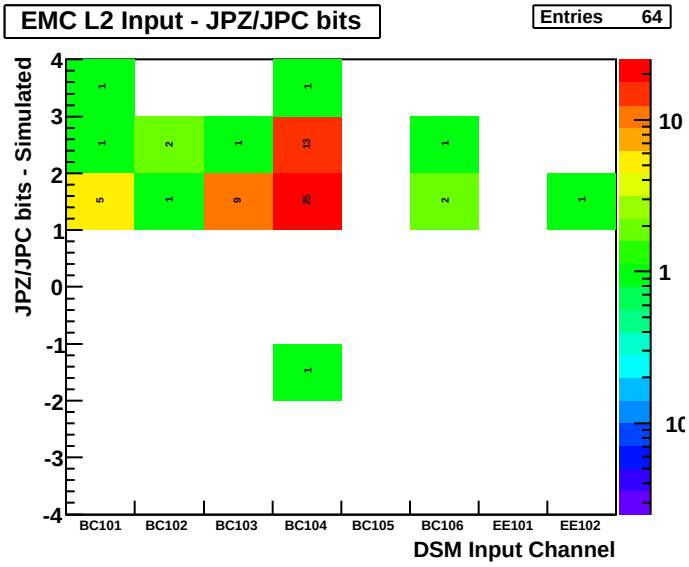

EMC L2 Input - JPX/JPA bits
Entries 7027024
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
2233 2077 1547 892 2546 1523 391 433
6850 6578 4421 2136 8264 4197 1207 1319
10801 10201 6757 3865 10289 8500 3579 2126
858494 859522 865653 871485 857279 864158 873201 874500

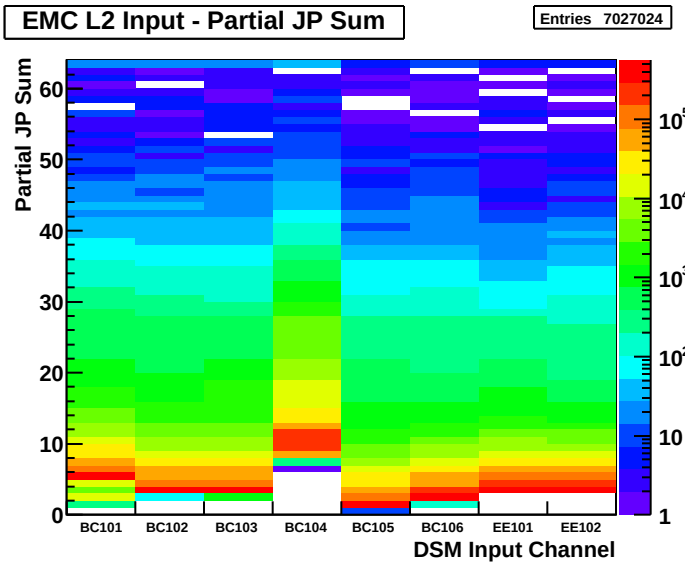

EMC L2 Input - JPX/JPA bits
Entries 857
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1 1 1 1
637 3 1 4 2 1 1
195 4 1 1 4

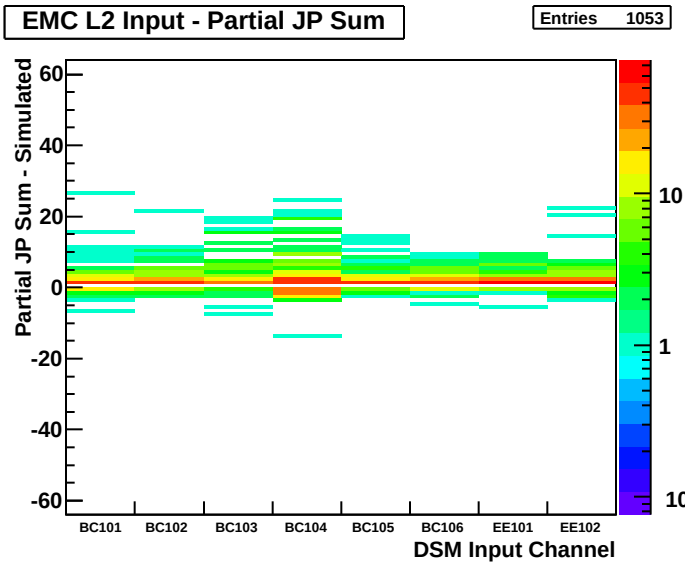

EMC L2 Input - JPY/JPB bits
Entries 7027024
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1538 1937 1286 778 1035 1953 352 393
4934 6048 3897 2321 3002 6351 1070 1155
11158 11193 8360 9475 7837 10434 1218 1414
860748 859200 864835 865804 866504 859640 875738 875416

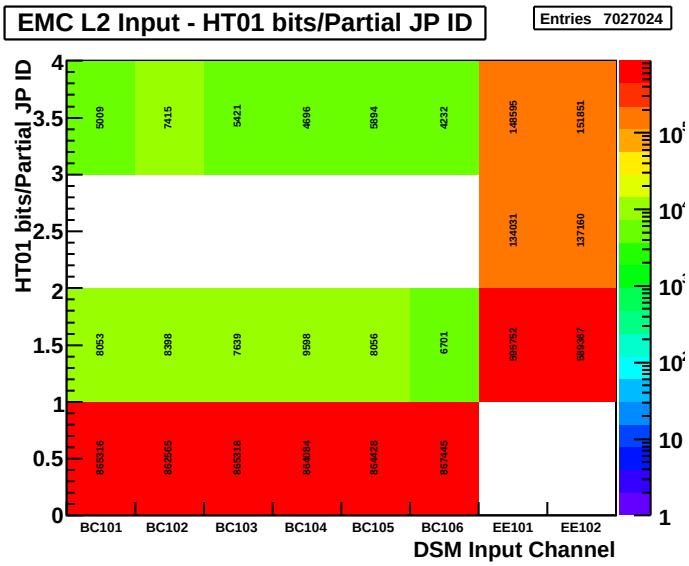

EMC L2 Input - JPY/JPB bits
Entries 861
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1 1 1
485 3 4 2
352 5 2 2 3

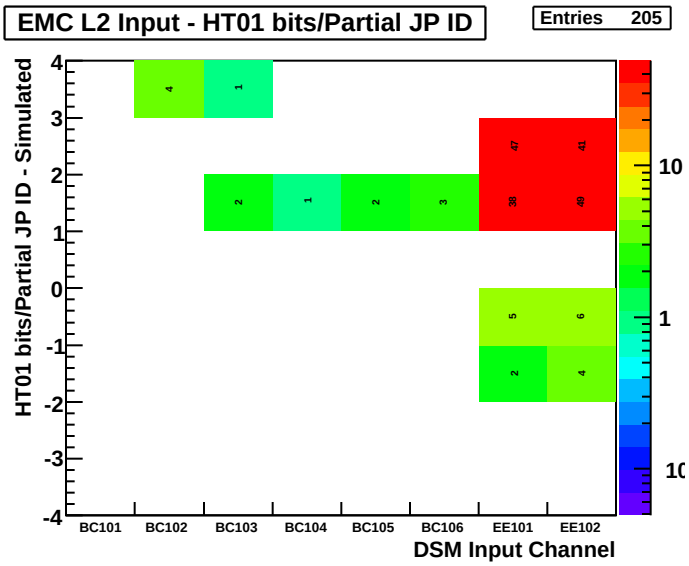

EMC L2 Input - JPZ/JPC bits
Entries 7027024
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
2049 1986 1752 8362 796 1211 430 329
6835 6171 5730 51117 2170 3483 1287 1036
12196 10598 17861 68668 6343 6734 1552 1456
857298 859723 853026 750231 859069 866950 875109 875557

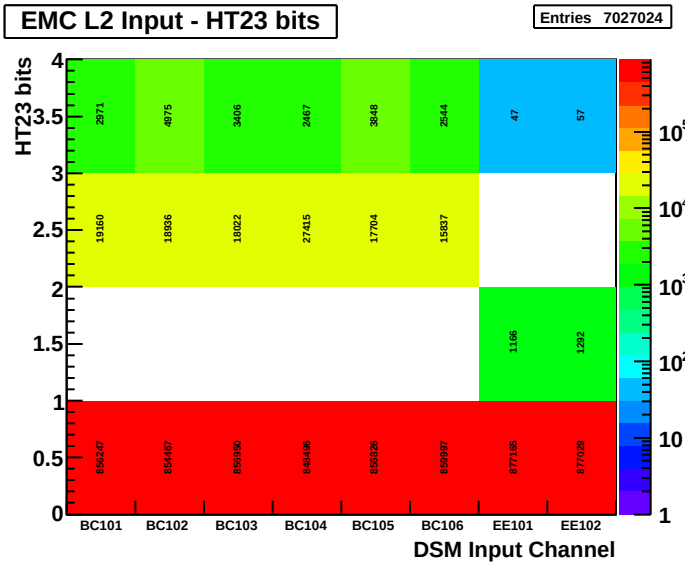

EMC L2 Input - JPZ/JPC bits
Entries 64
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1 1
1 2 1 13 1
5 1 9 25 2 1
1

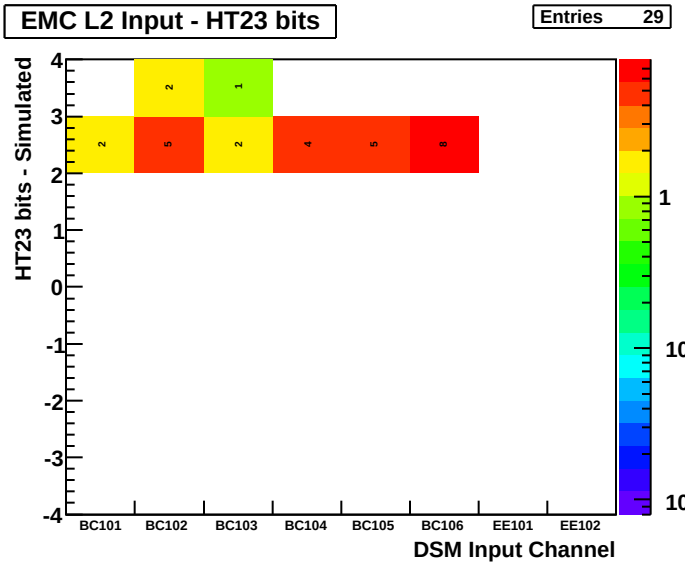

EMC L2 Input - Partial JP Sum
Entries 7027024
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

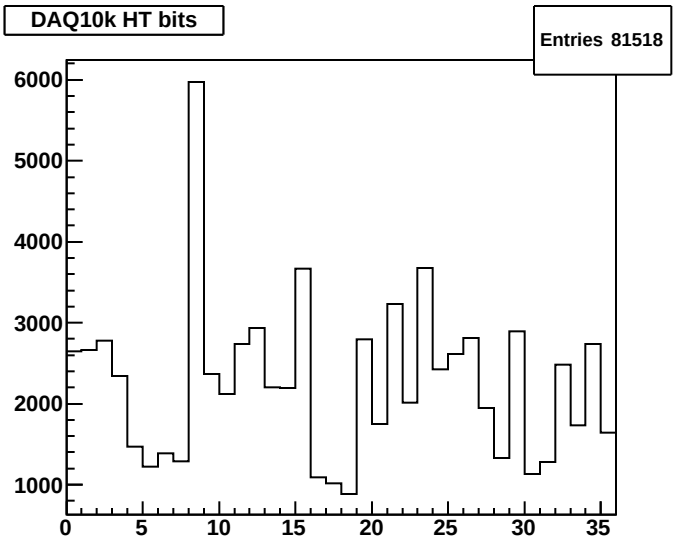

EMC L2 Input - Partial JP Sum
Entries 1053
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

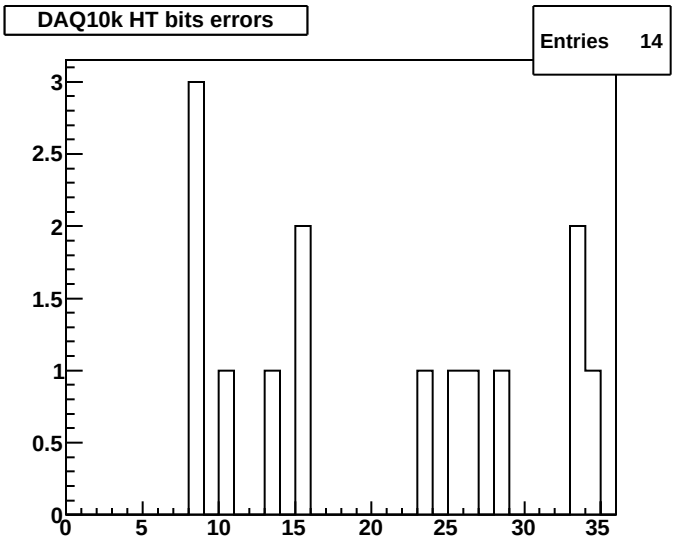

EMC L2 Input - HT01 bits/Partial JP ID
Entries 7027024
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

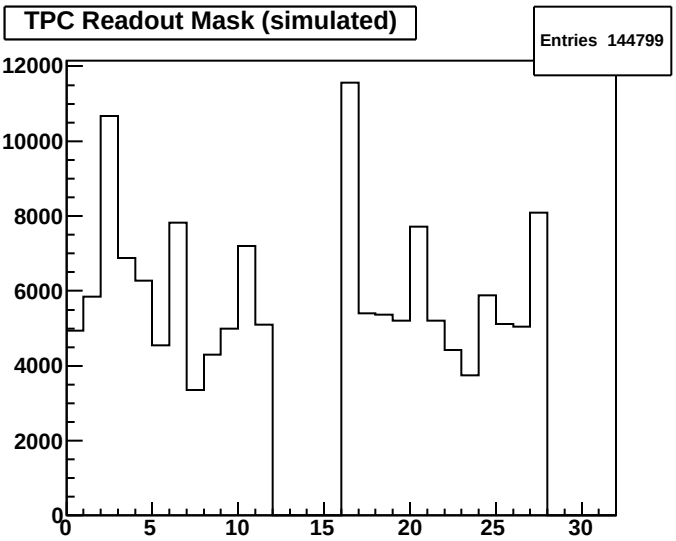

EMC L2 Input - HT01 bits/Partial JP ID
Entries 205
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

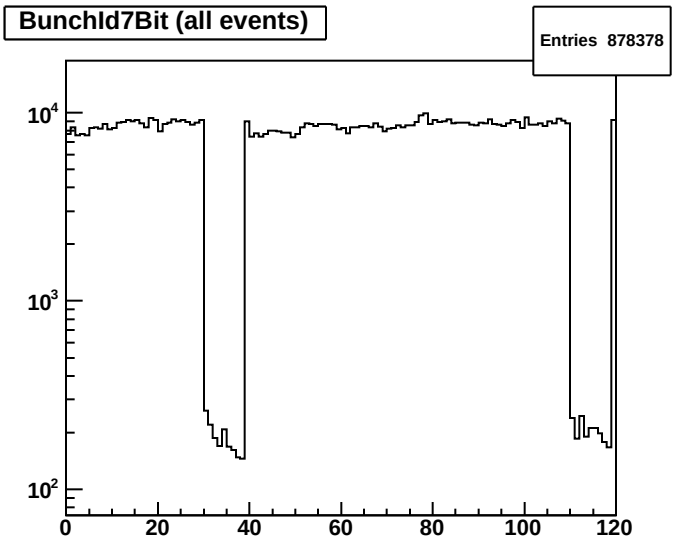

EMC L2 Input - HT23 bits
Entries 7027024
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

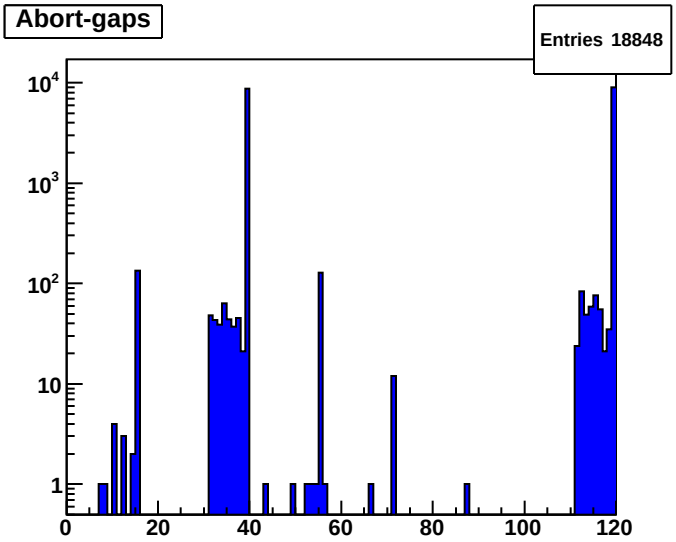

EMC L2 Input - HT23 bits
Entries 29
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

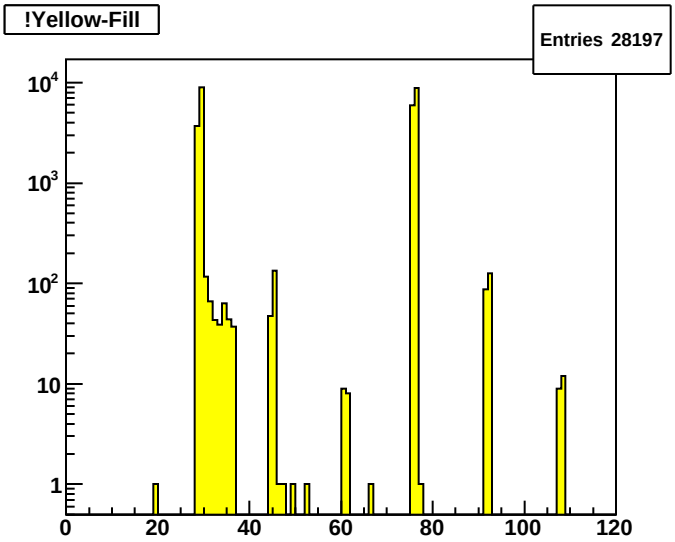

DAQ10k HT bits
Entries 81518

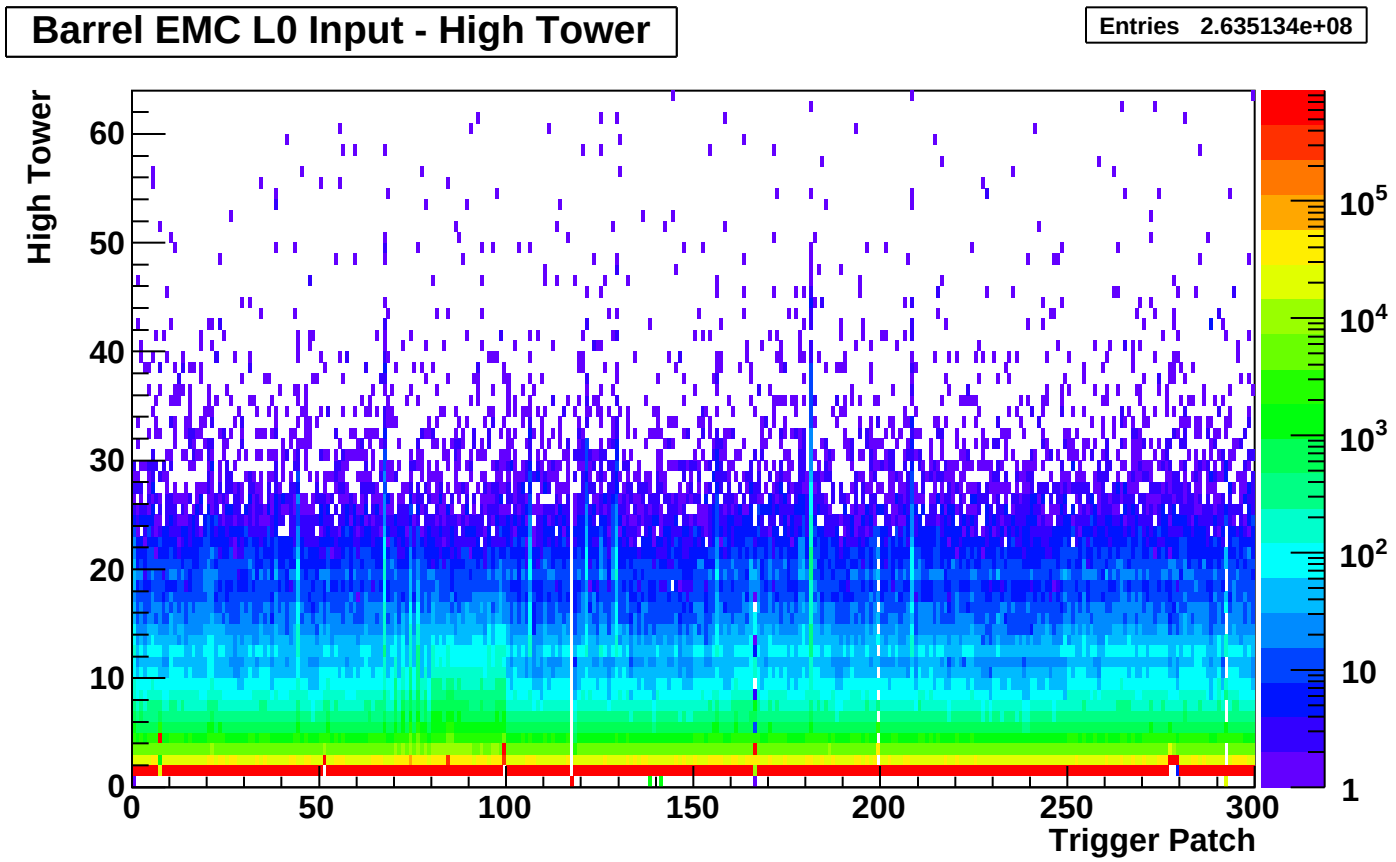

DAQ10k HT bits errors
Entries 14

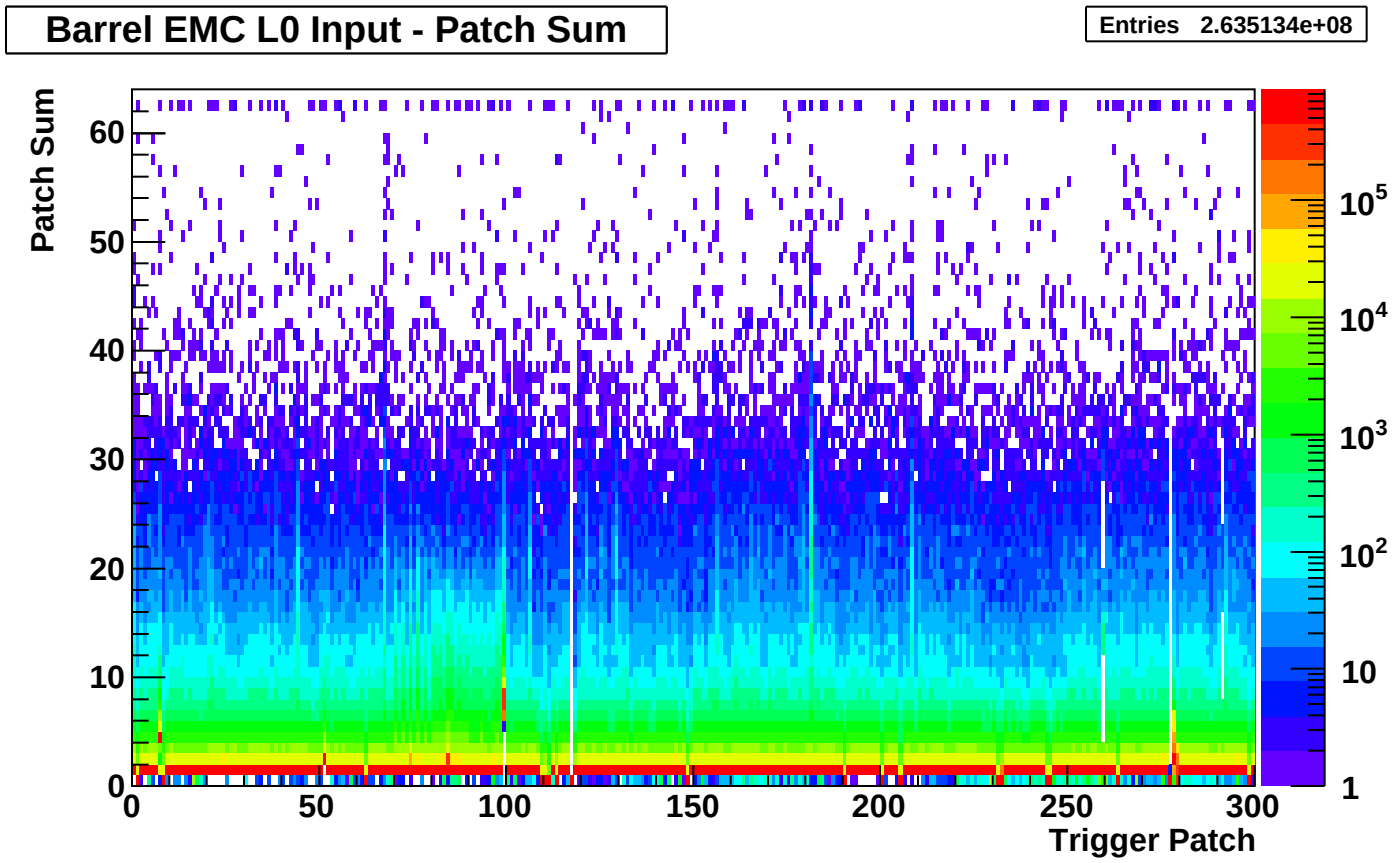

TPC Readout Mask (simulated)
Entries 144799

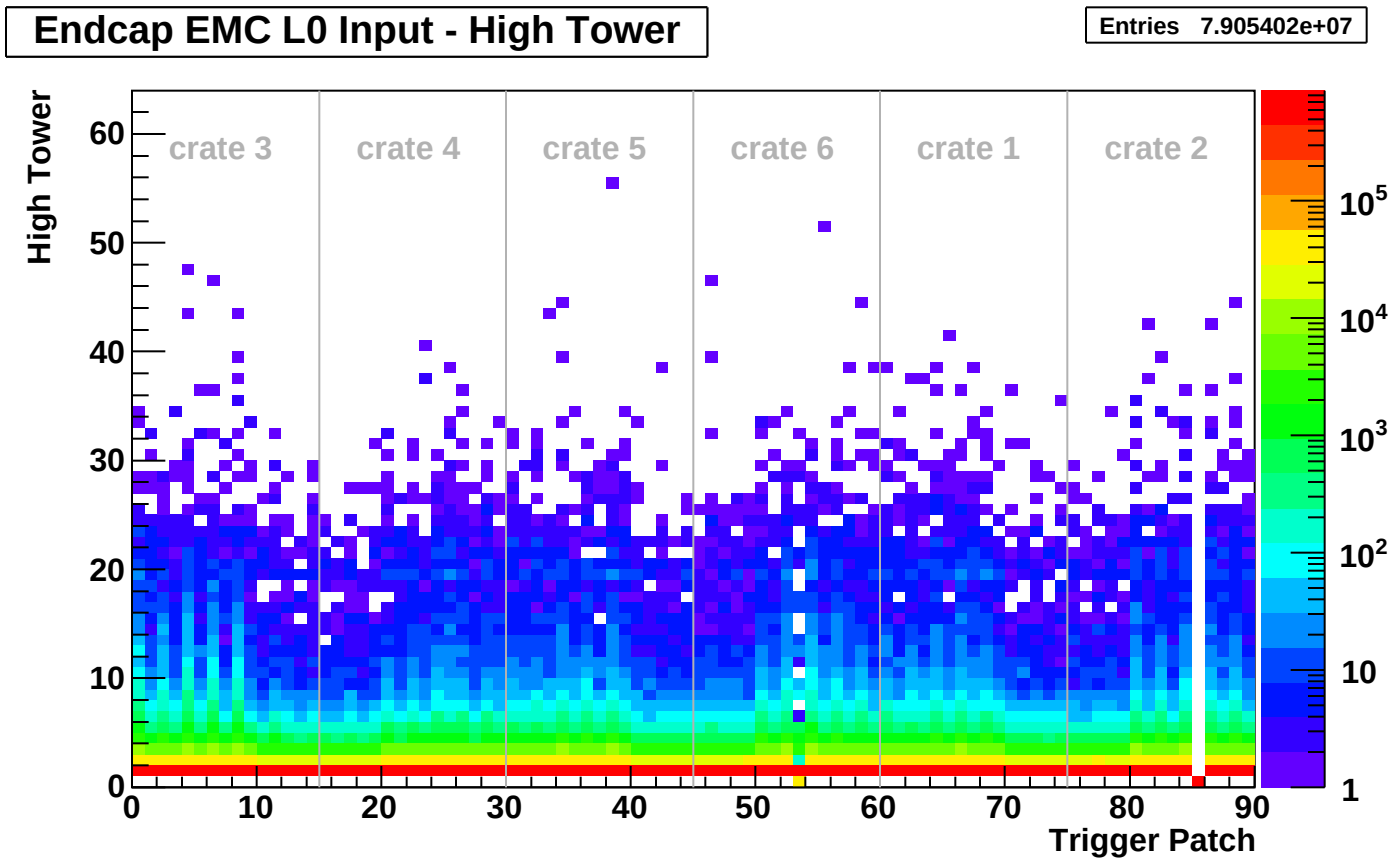

BunchId7Bit (all events)
Entries 878378

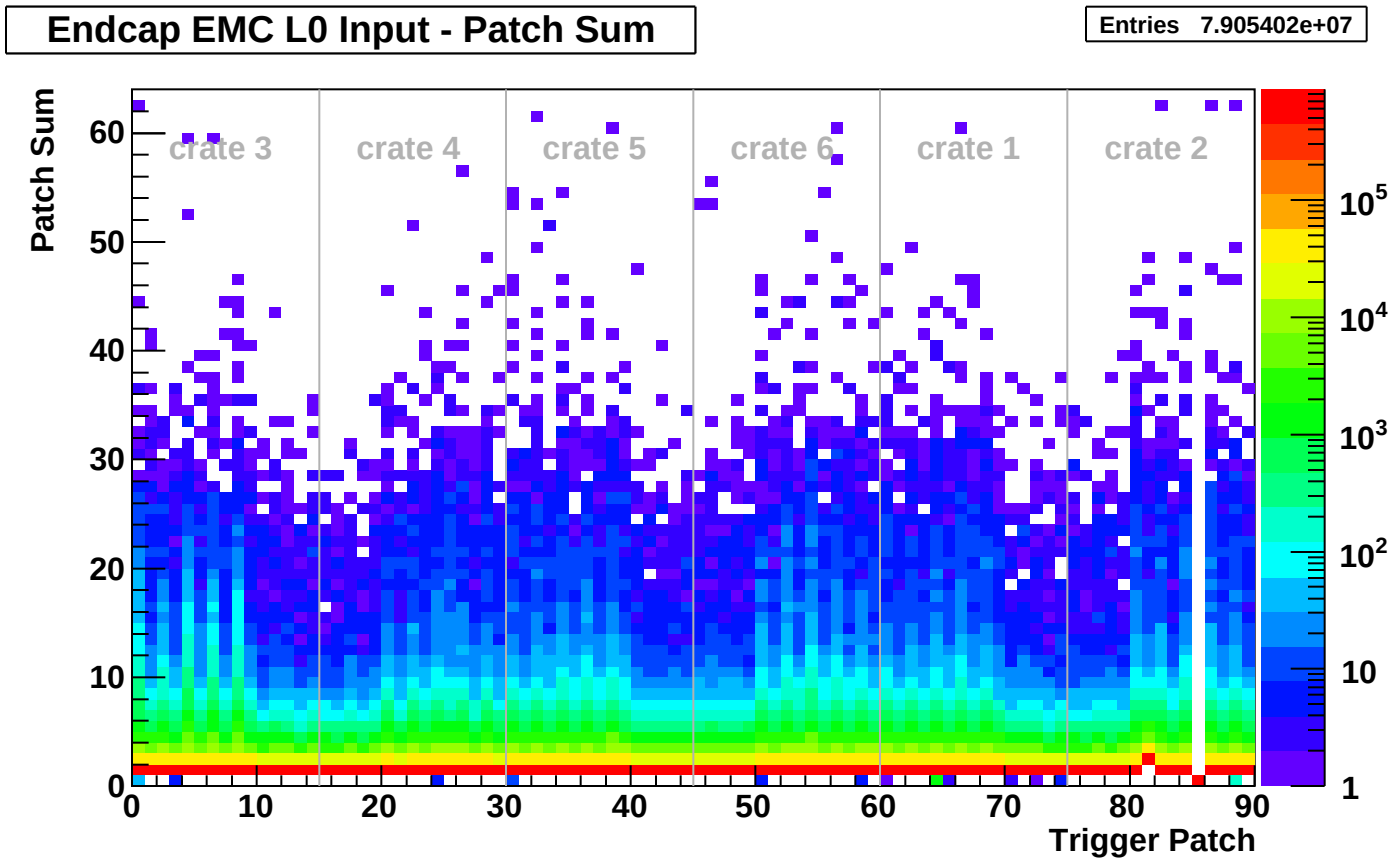

Abort-gaps
Entries 18848

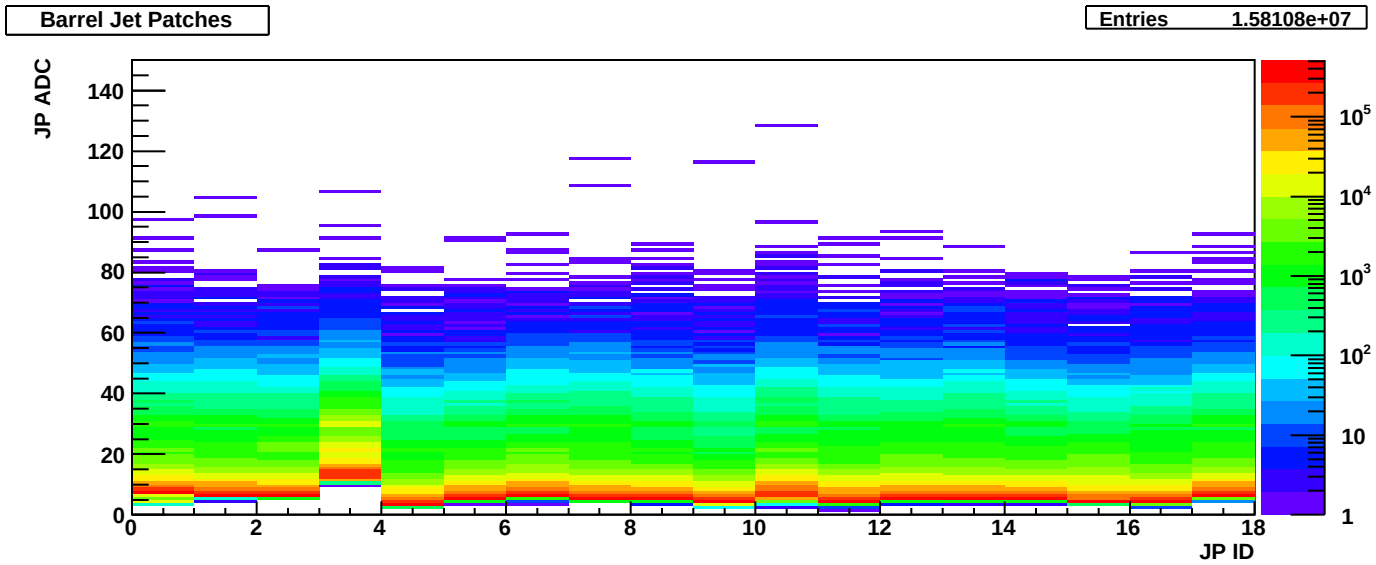

!Yellow-Fill
Entries 28197

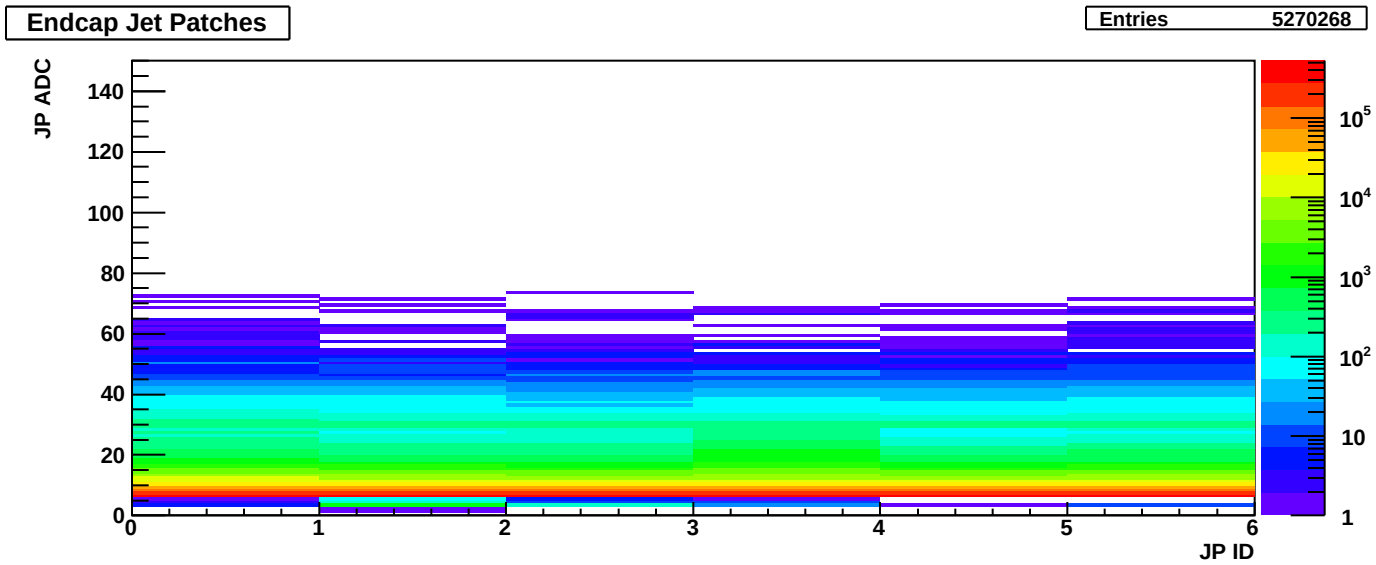

Barrel EMC L0 Input - High Tower
Entries 2.635134e+08
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

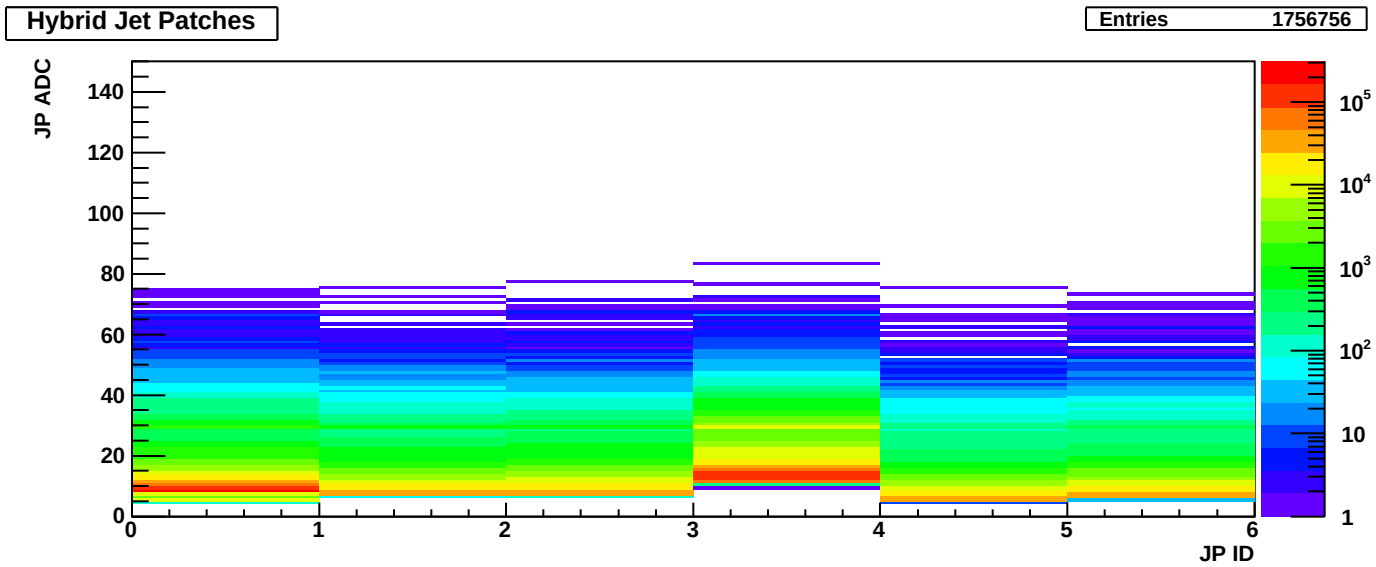

Barrel EMC L0 Input - Patch Sum
Entries 2.635134e+08
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

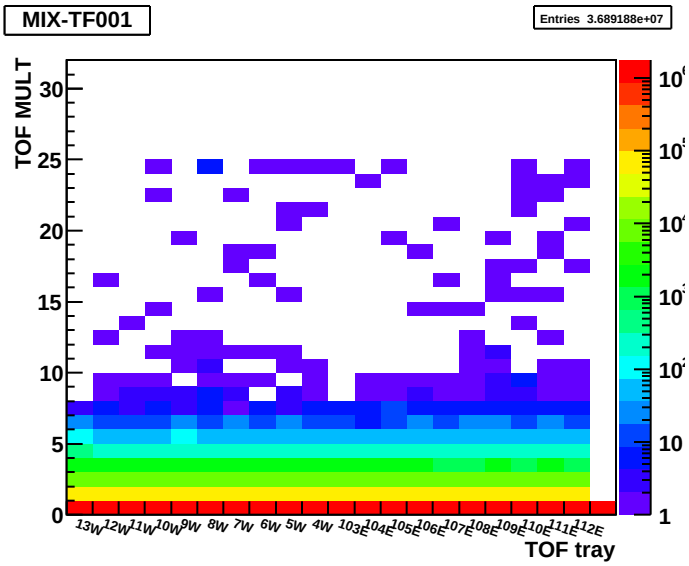

Endcap EMC L0 Input - High Tower
Entries 7.905402e+07
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

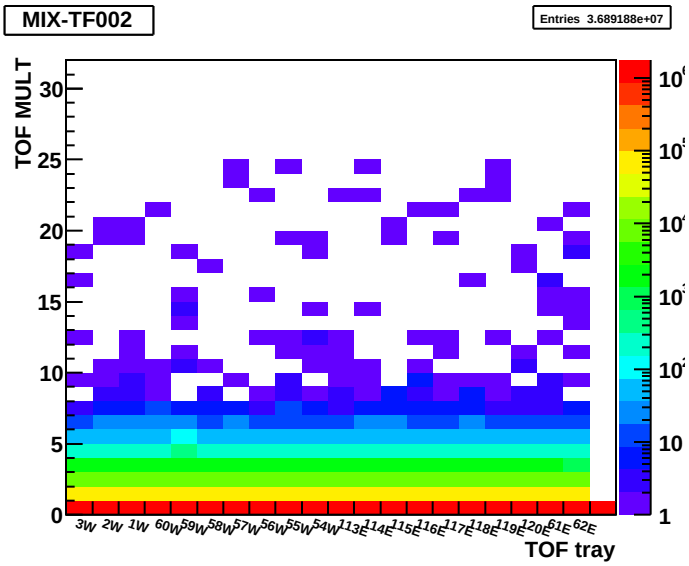

Endcap EMC L0 Input - Patch Sum
Entries 7.905402e+07
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

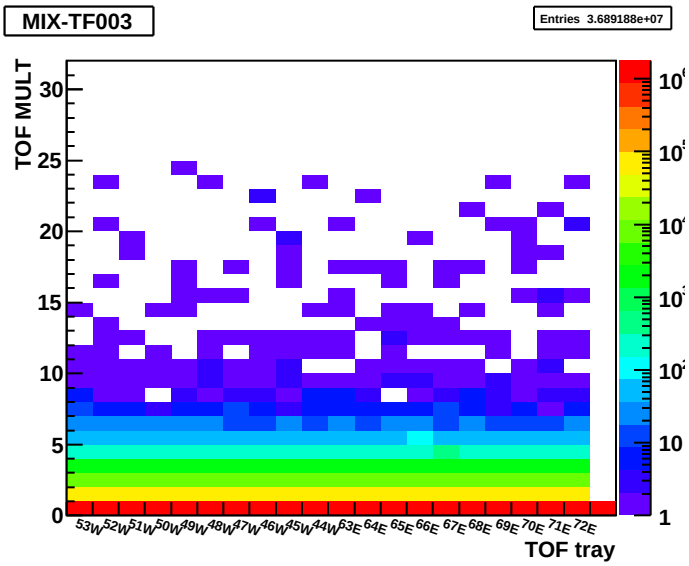

Barrel Jet Patches
Entries 1.58108e+07
JP ADC
JP ID

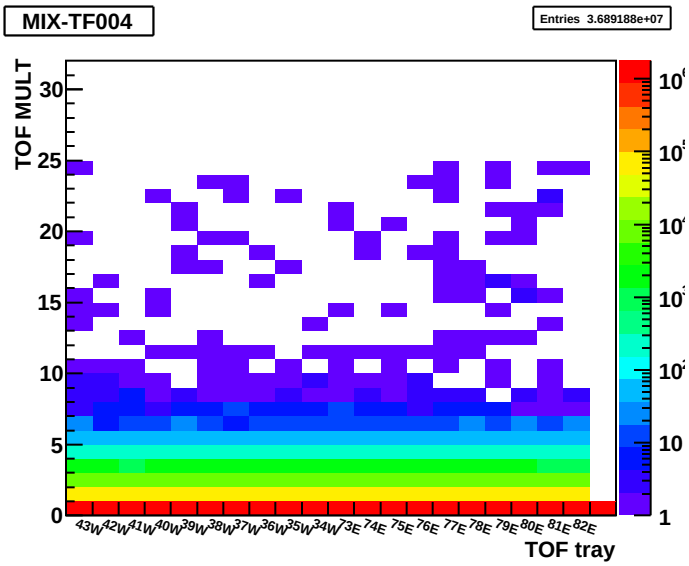

Endcap Jet Patches
Entries 5270268
JP ADC
JP ID

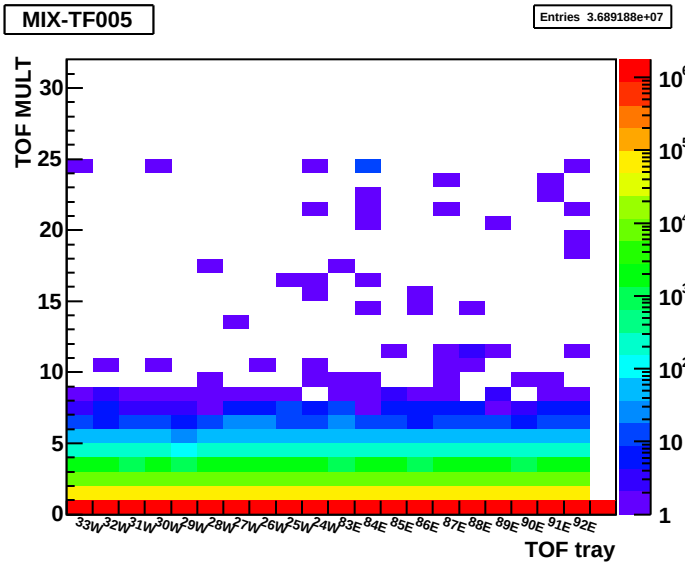

Hybrid Jet Patches
Entries 1756756
JP ADC
JP ID

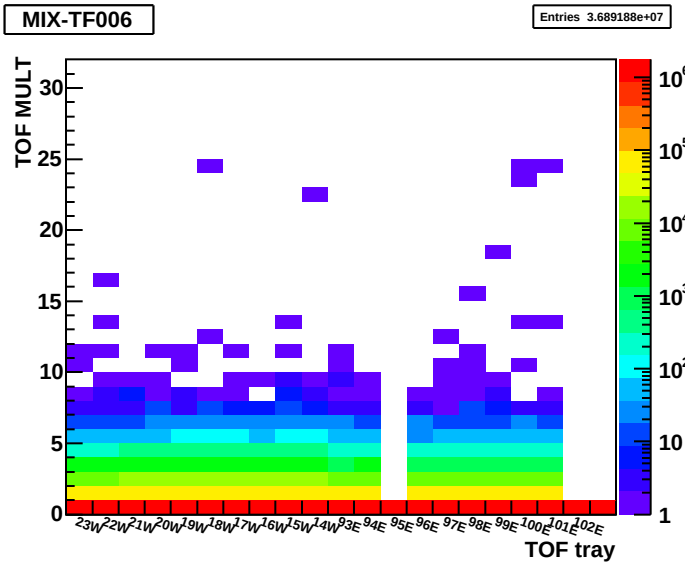

MIX-TF001
Entries 3.689188e+07
TOF MULT
TOF tray

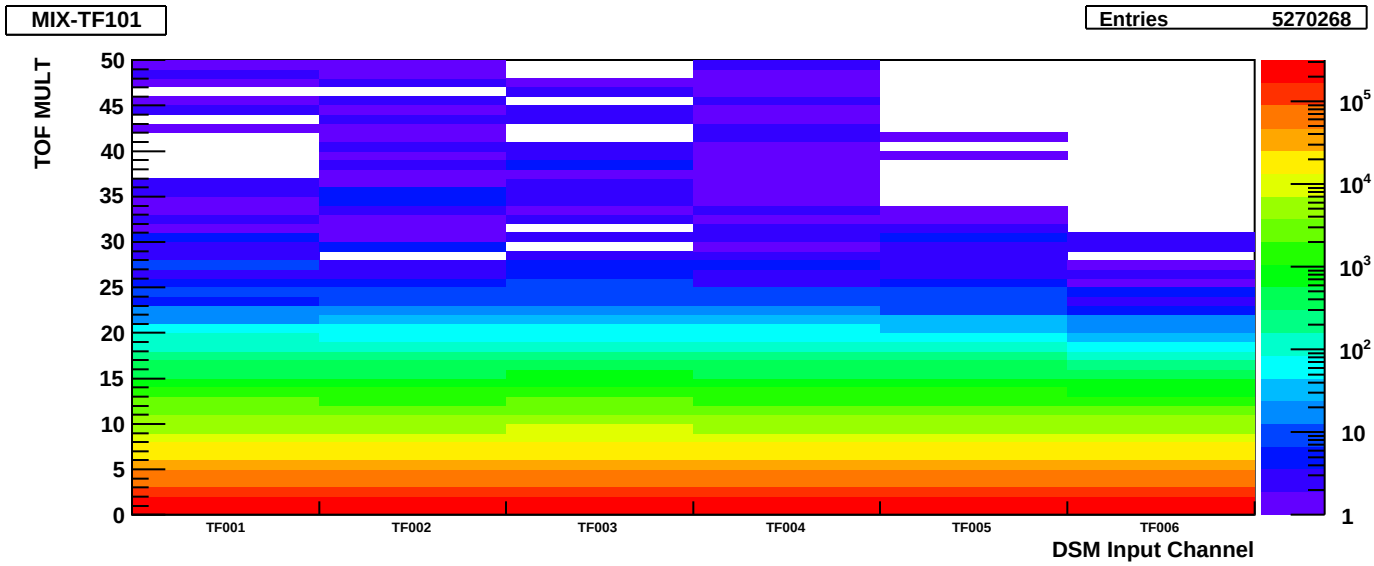

MIX-TF002
Entries 3.689188e+07
TOF MULT
TOF tray

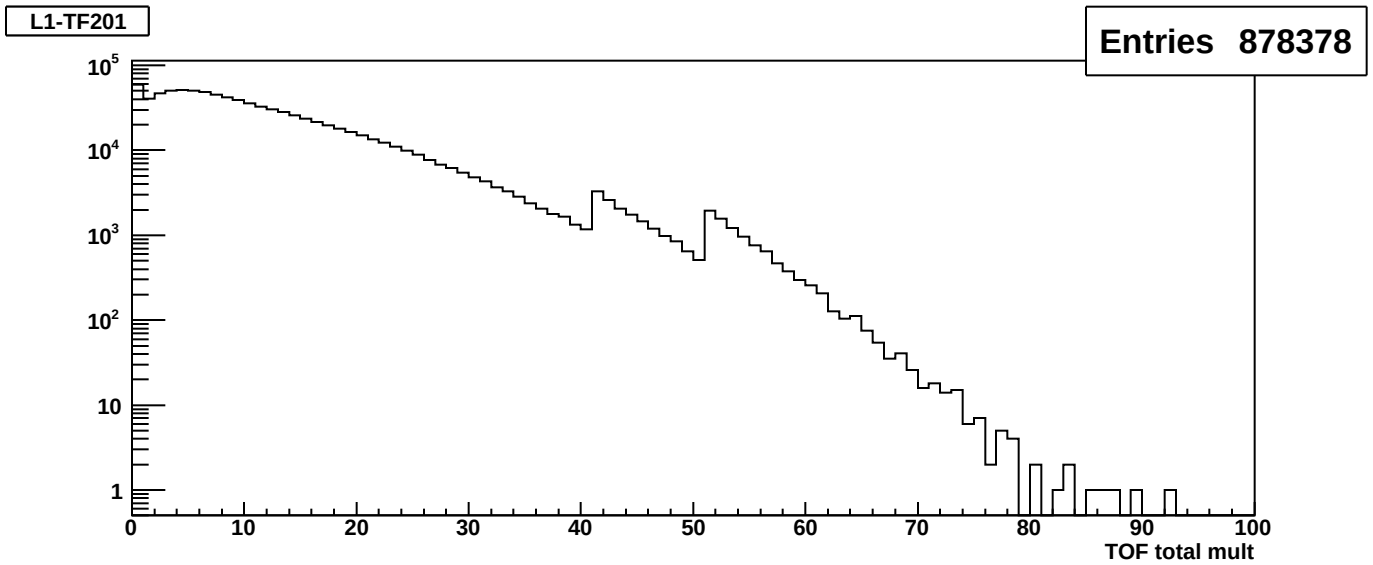

MIX-TF003
Entries 3.689188e+07
TOF MULT
TOF tray

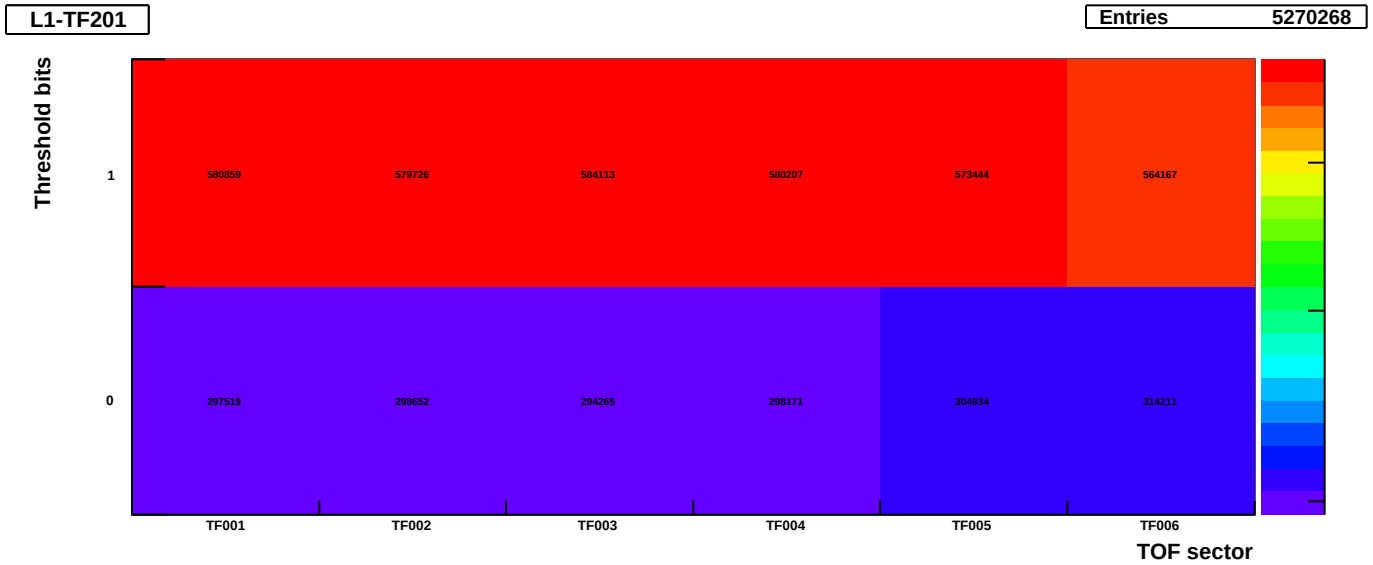

MIX-TF004
Entries 3.689188e+07
TOF MULT
TOF tray

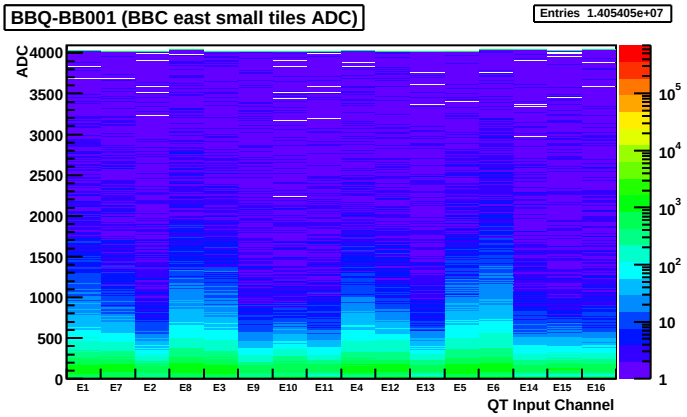

MIX-TF005
Entries 3.689188e+07
TOF MULT
TOF tray

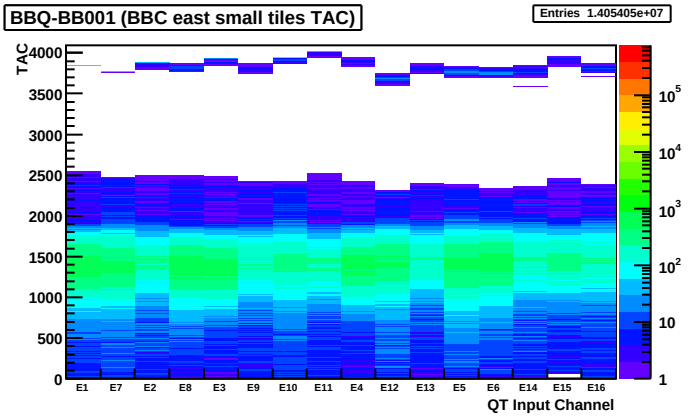

MIX-TF006
Entries 3.689188e+07
TOF MULT
TOF tray

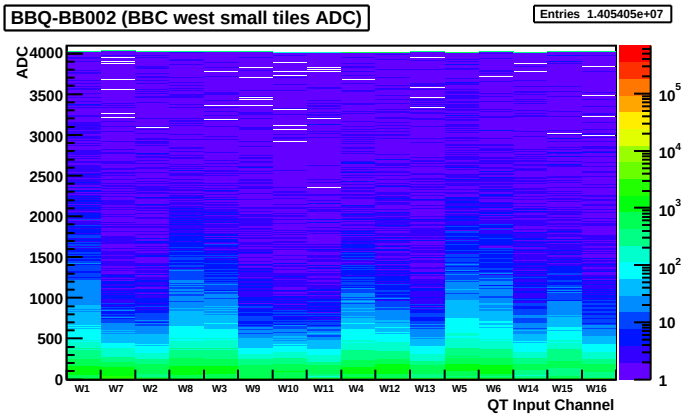

MIX-TF101
Entries 5270268
TOF MULT
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

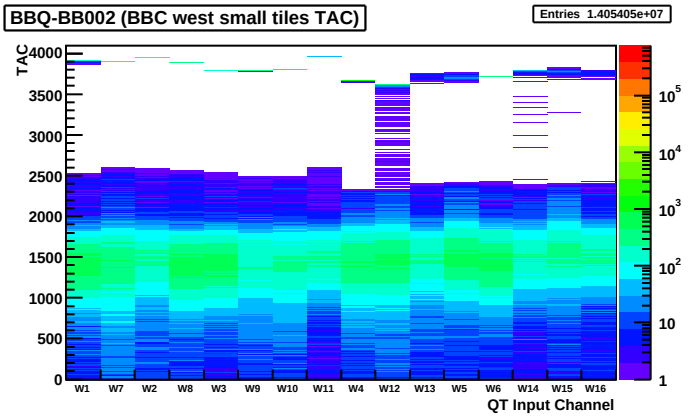

L1-TF201
Entries 878378
TOF total mult

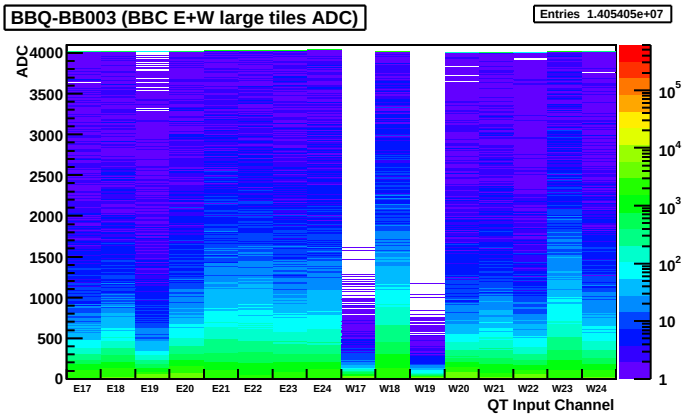

L1-TF201
Entries 5270268
Threshold bits
580859
579726
584113
580207
573444
564167
297519
298652
294265
298171
304934
314211
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector

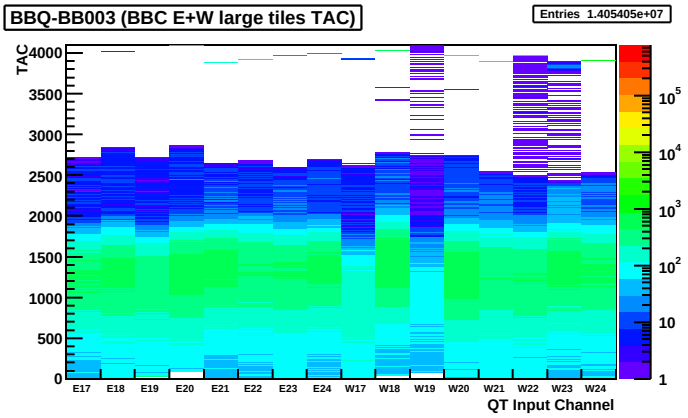

BBQ-BB001 (BBC east small tiles ADC)
Entries 1.405405e+07
ADC
QT Input Channel

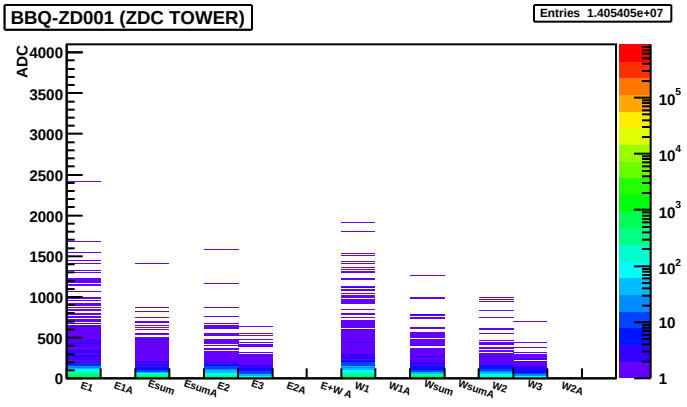

BBQ-BB001 (BBC east small tiles TAC)
Entries 1.405405e+07
TAC
QT Input Channel

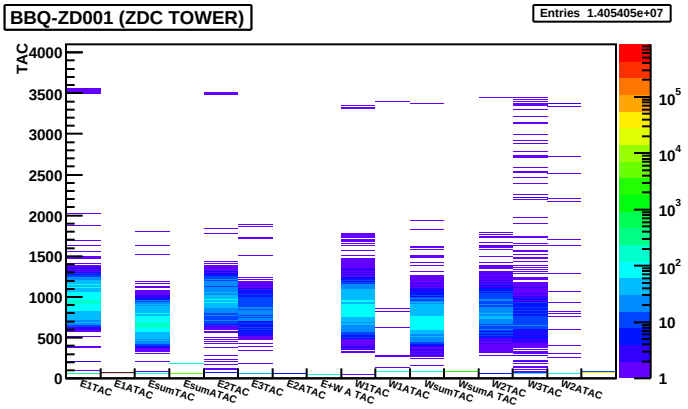

BBQ-BB002 (BBC west small tiles ADC)
Entries 1.405405e+07
ADC
QT Input Channel

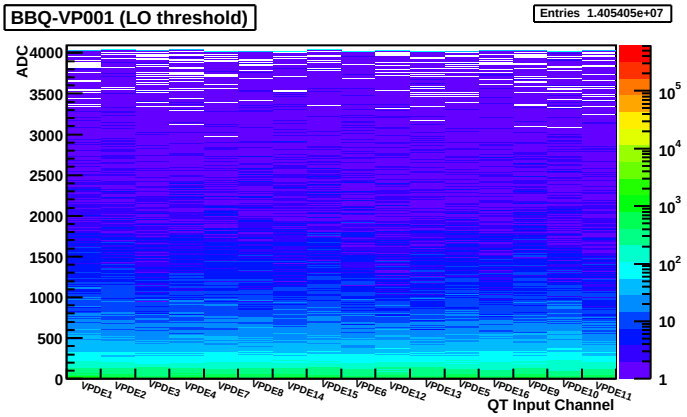

BBQ-BB002 (BBC west small tiles TAC)
Entries 1.405405e+07
TAC
QT Input Channel

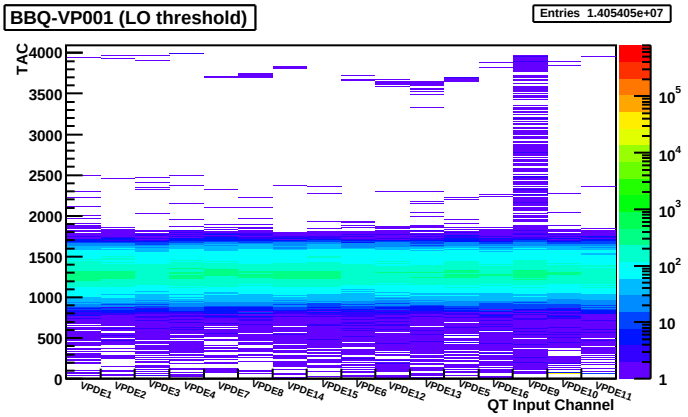

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 1.405405e+07
ADC
QT Input Channel

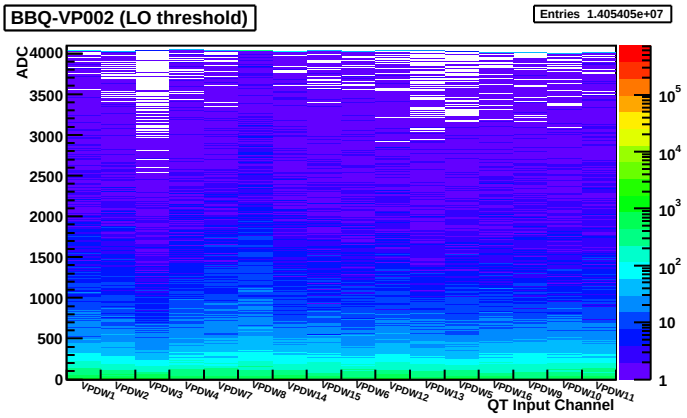

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 1.405405e+07
TAC
QT Input Channel

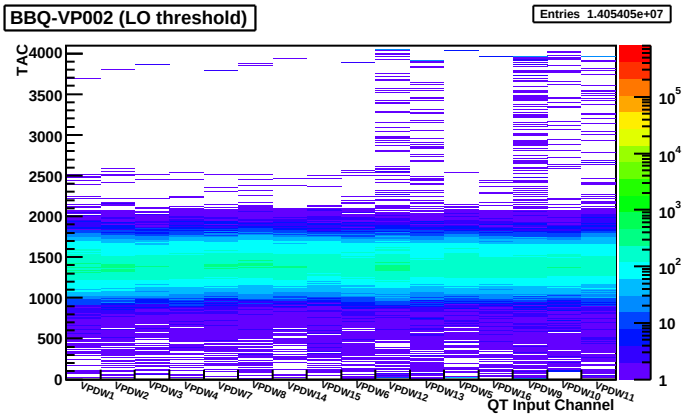

BBQ-ZD001 (ZDC TOWER)
Entries 1.405405e+07
ADC

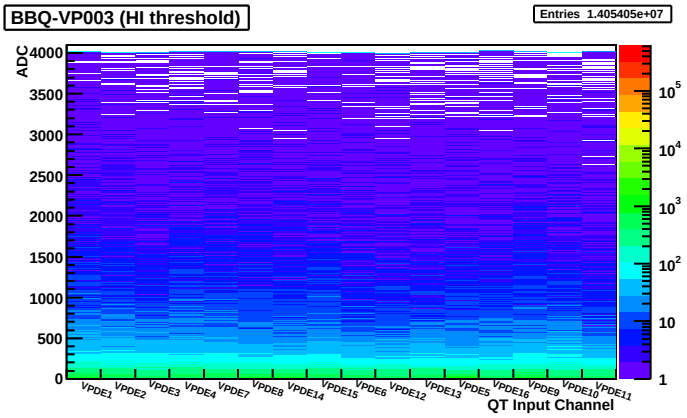

BBQ-ZD001 (ZDC TOWER)
Entries 1.405405e+07
TAC

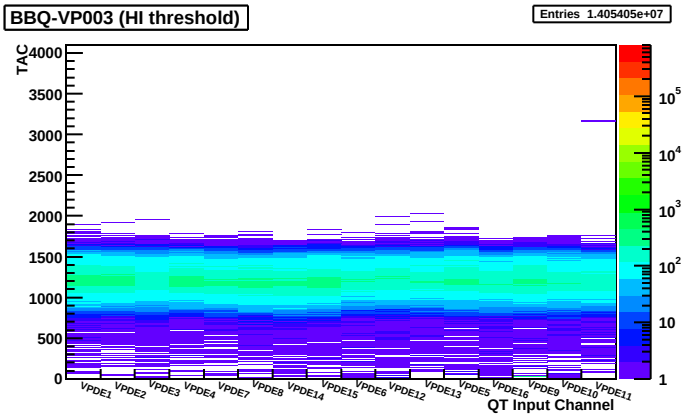

BBQ-VP001 (LO threshold)
Entries 1.405405e+07
ADC
QT Input Channel

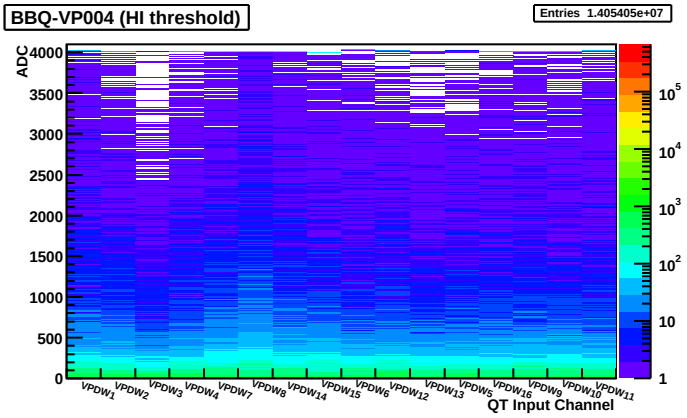

BBQ-VP001 (LO threshold)
Entries 1.405405e+07
TAC
QT Input Channel

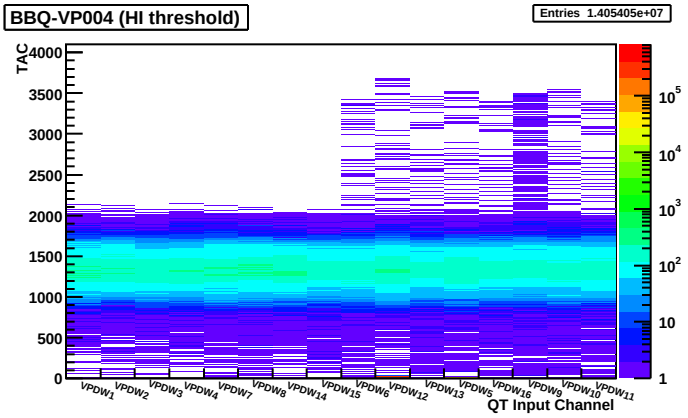

BBQ-VP002 (LO threshold)
Entries 1.405405e+07
ADC
QT Input Channel

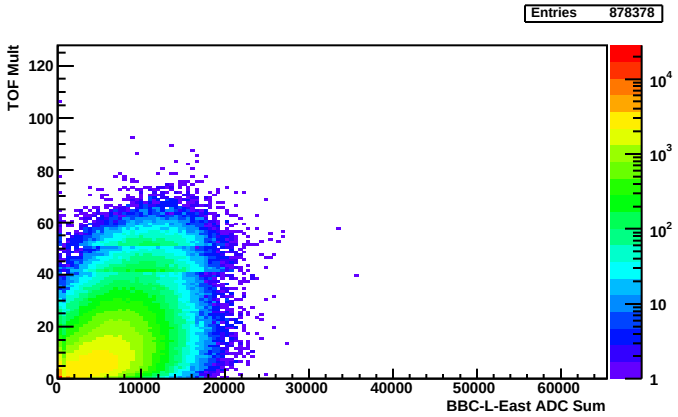

BBQ-VP002 (LO threshold)
Entries 1.405405e+07
TAC
QT Input Channel

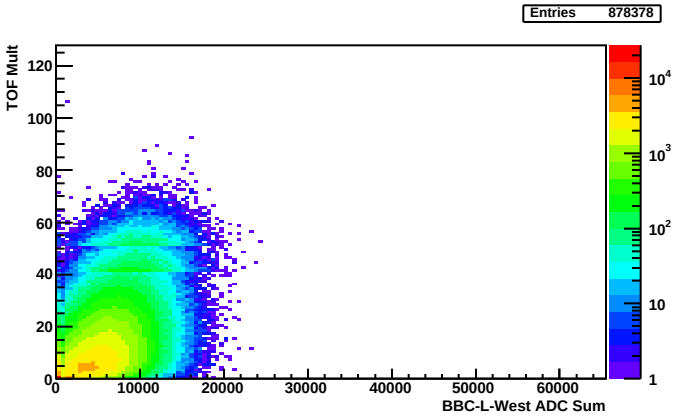

BBQ-VP003 (HI threshold)
Entries 1.405405e+07
ADC
QT Input Channel

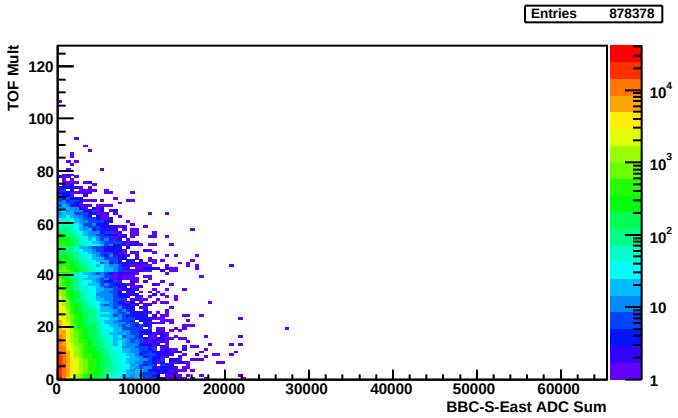

BBQ-VP003 (HI threshold)
Entries 1.405405e+07
TAC
QT Input Channel

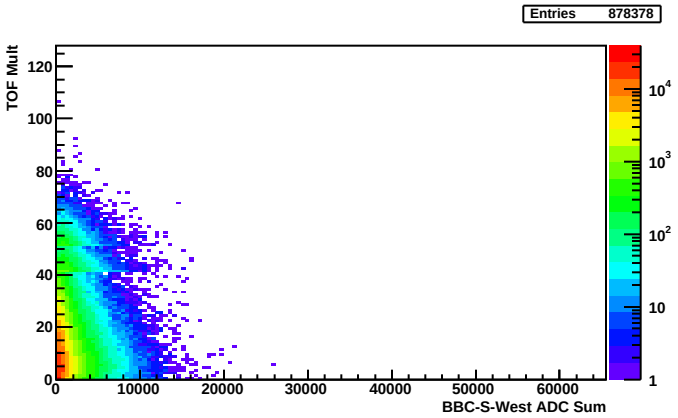

BBQ-VP004 (HI threshold)
Entries 1.405405e+07
ADC
QT Input Channel

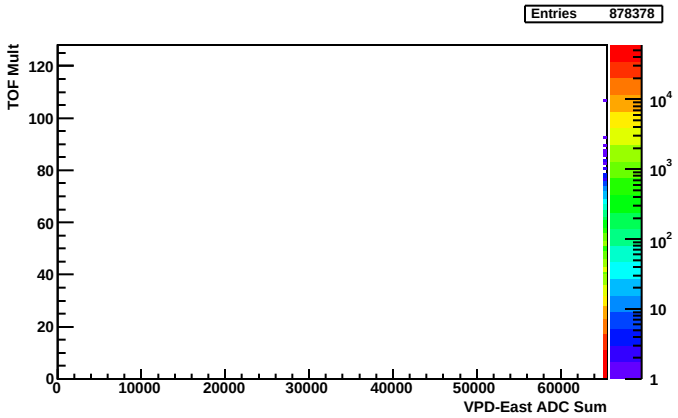

BBQ-VP004 (HI threshold)
Entries 1.405405e+07
TAC
QT Input Channel

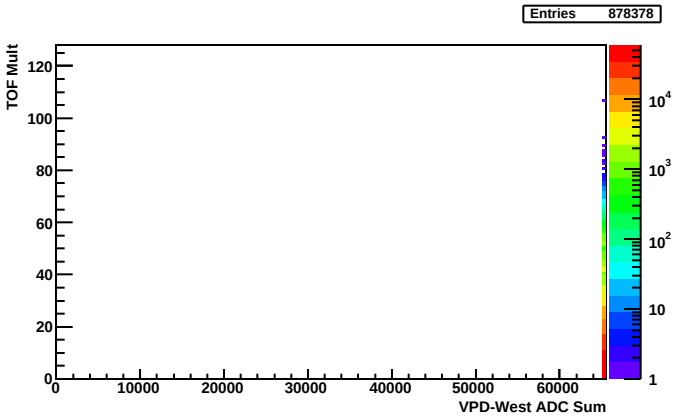

Entries 878378
TOF Mult
BBC-L-East ADC Sum

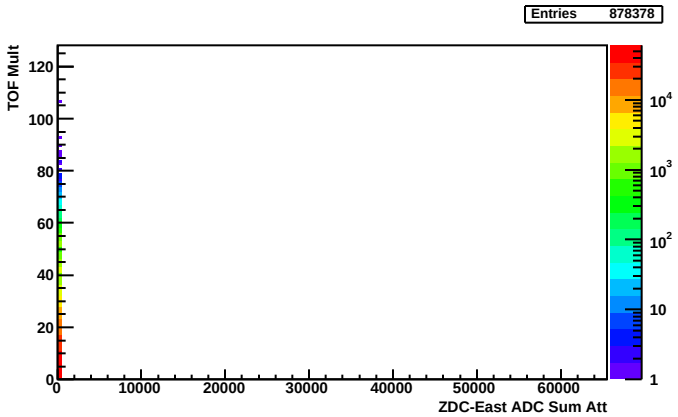

Entries 878378
TOF Mult
BBC-L-West ADC Sum

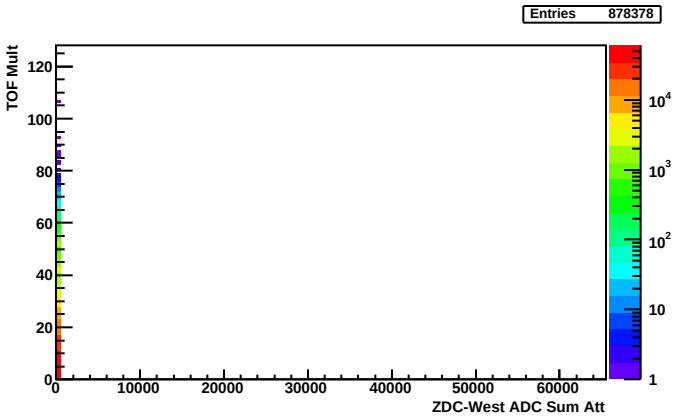

Entries 878378
TOF Mult
BBC-S-East ADC Sum

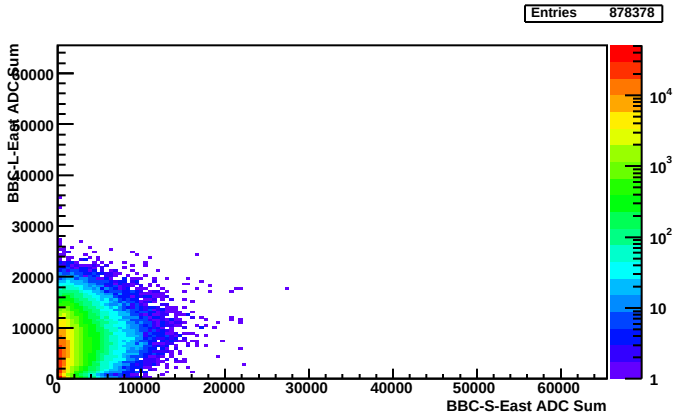

Entries 878378
TOF Mult
BBC-S-West ADC Sum

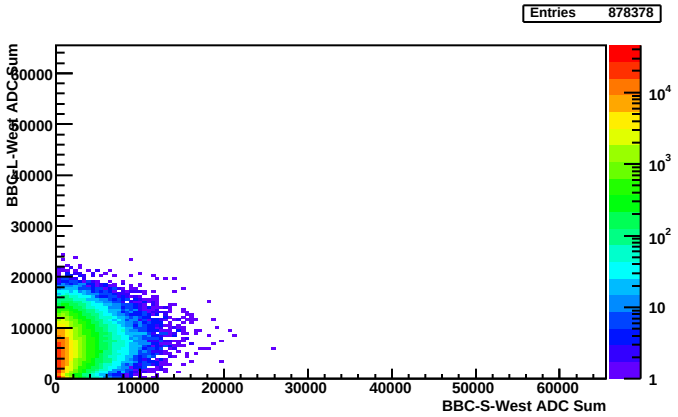

Entries 878378
TOF Mult
VPD-East ADC Sum

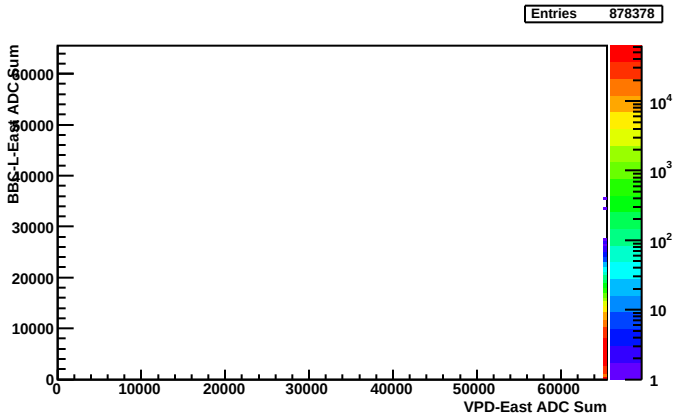

Entries 878378
TOF Mult
VPD-West ADC Sum

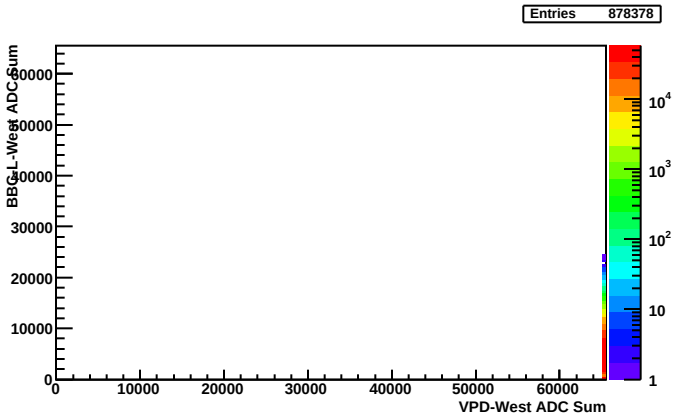

Entries 878378
TOF Mult
ZDC-East ADC Sum Att

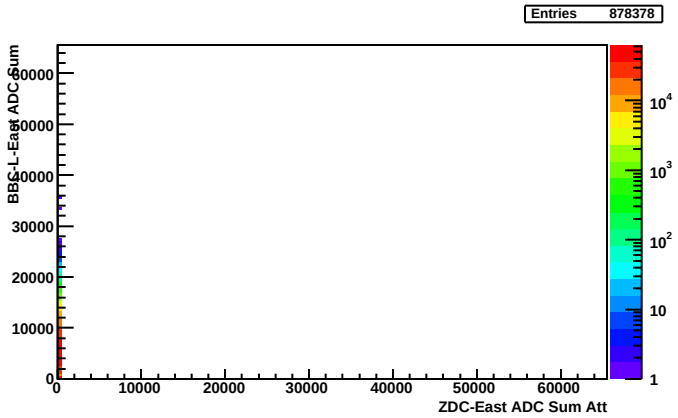

Entries 878378
TOF Mult
ZDC-West ADC Sum Att

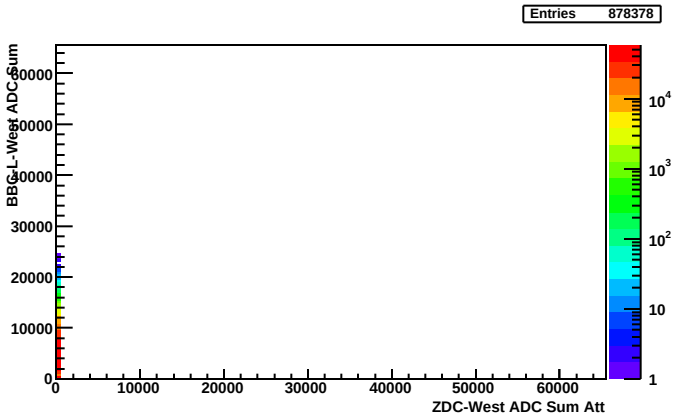

Entries 878378
BBC-L-East ADC Sum
BBC-S-East ADC Sum

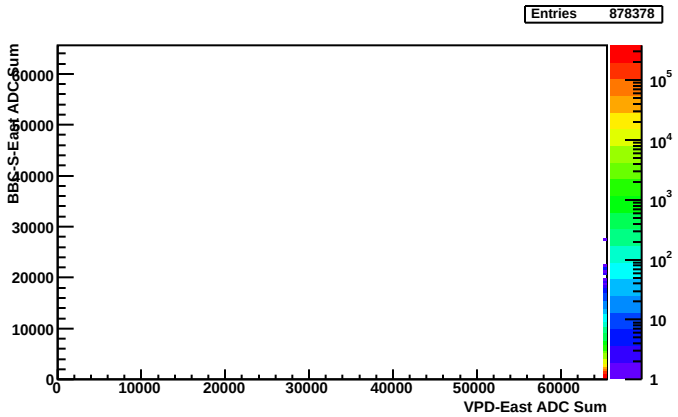

Entries 878378
BBC-L-West ADC Sum
BBC-S-West ADC Sum

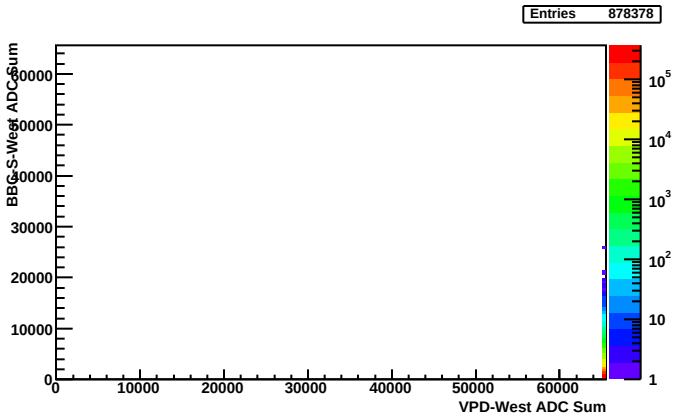

Entries 878378
BBC-L-East ADC Sum
VPD-East ADC Sum

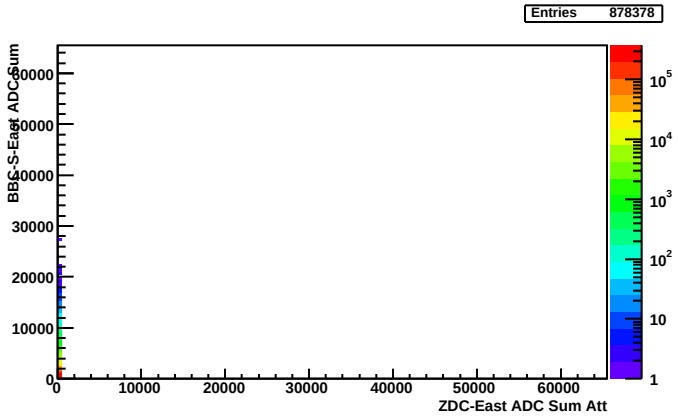

Entries 878378
BBC-L-West ADC Sum
VPD-West ADC Sum

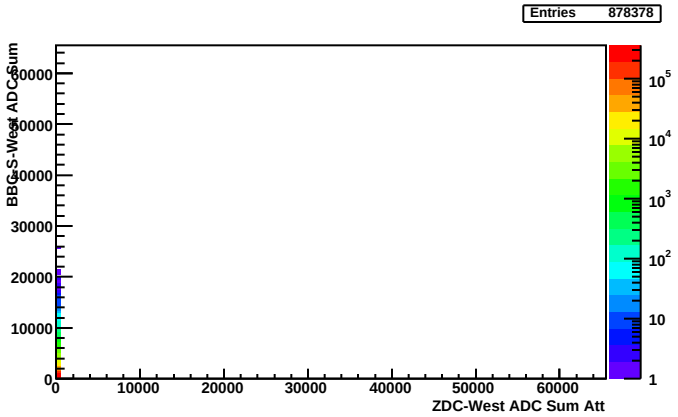

Entries 878378
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

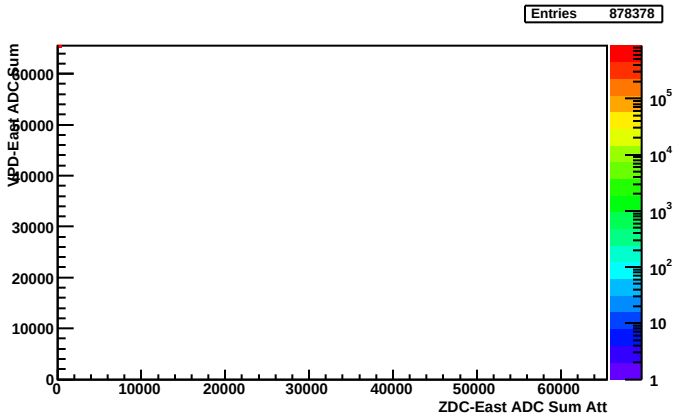

Entries 878378
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

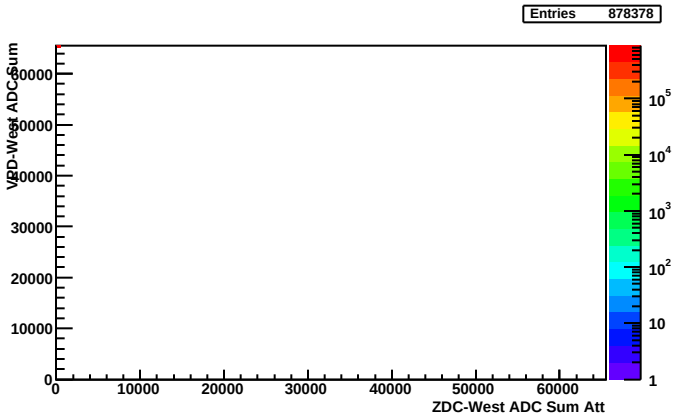

Entries 878378
BBC-S-East ADC Sum
VPD-East ADC Sum

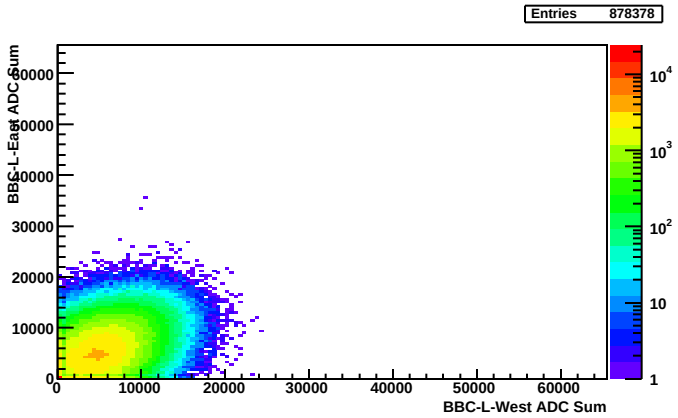

Entries 878378
BBC-S-West ADC Sum
VPD-West ADC Sum

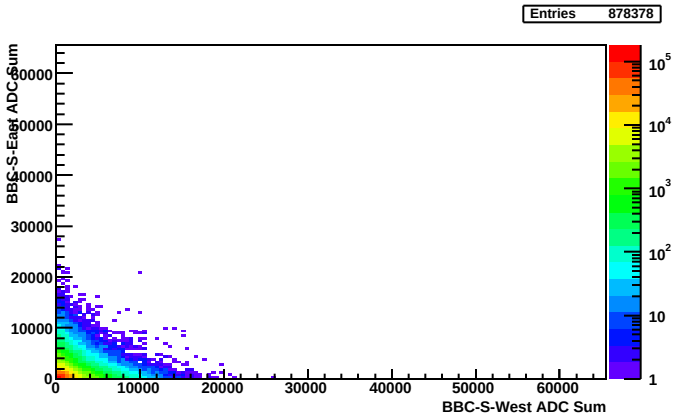

Entries 878378
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

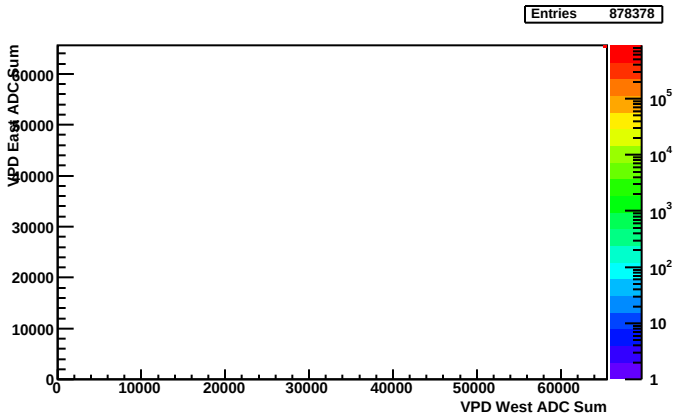

Entries 878378
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

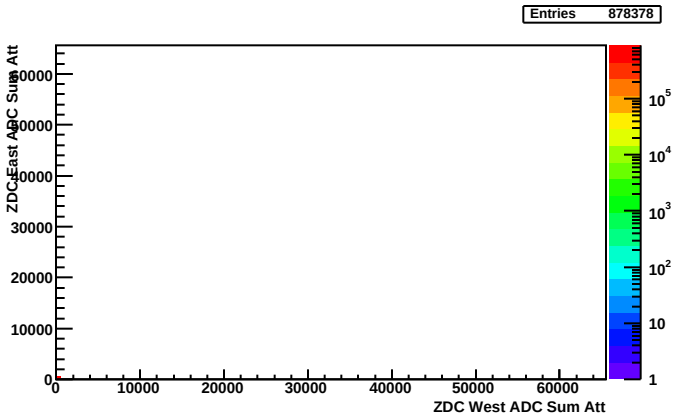

Entries 878378
VPD-East ADC Sum
ZDC-East ADC Sum Att

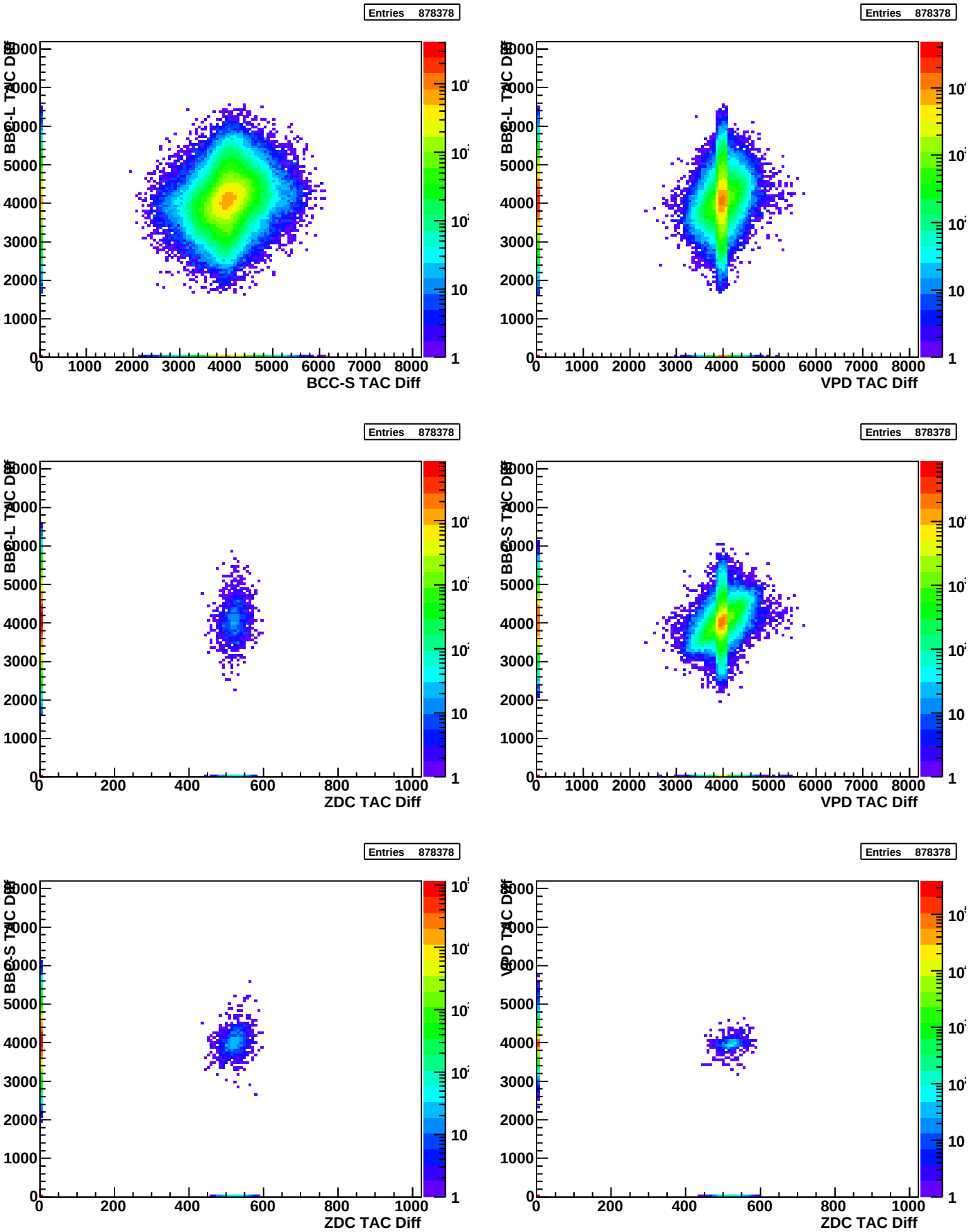

Entries 878378
VPD-West ADC Sum
ZDC-West ADC Sum Att

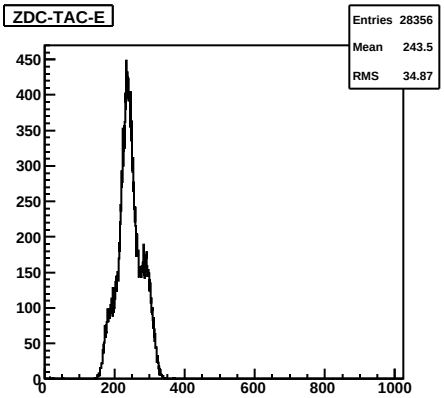

Entries 878378
BBC-L-East ADC Sum
BBC-L-West ADC Sum

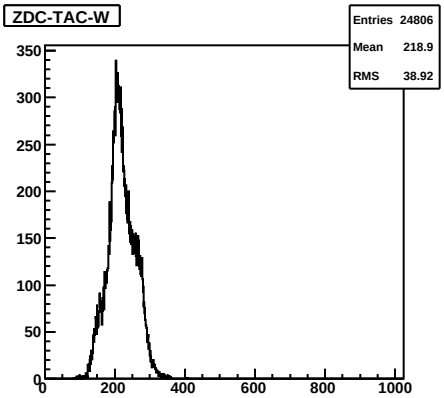

Entries 878378
BBC-S-East ADC Sum
BBC-S-West ADC Sum

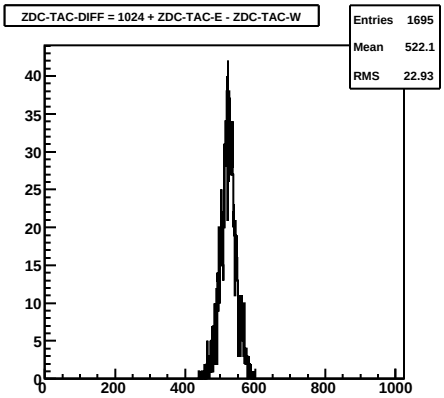

Entries 878378
VPD East ADC Sum
VPD West ADC Sum

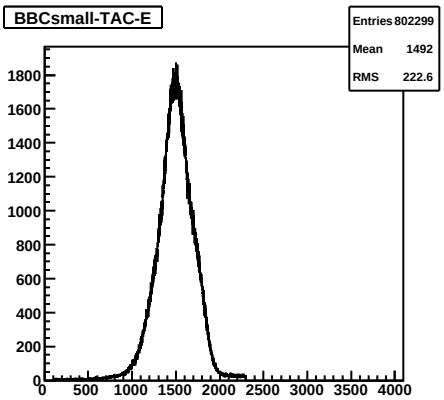

Entries 878378
ZDC East ADC Sum Att
ZDC West ADC Sum Att

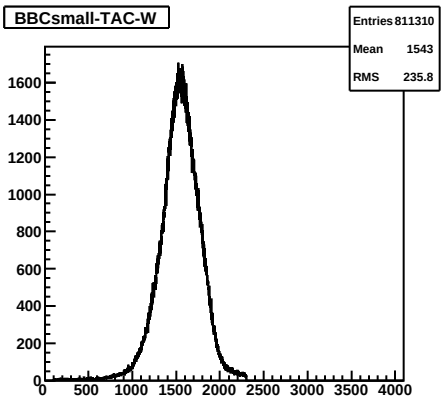

Entries 878378
BBC-L TAC Diff
BCC-S TAC Diff
Entries 878378
BBC-L TAC Diff
VPD TAC Diff
Entries 878378
BBC-L TAC Diff
ZDC TAC Diff
Entries 878378
BBC-S TAC Diff
VPD TAC Diff
Entries 878378
BBC-S TAC Diff
ZDC TAC Diff
Entries 878378
VPD TAC Diff
ZDC TAC Diff

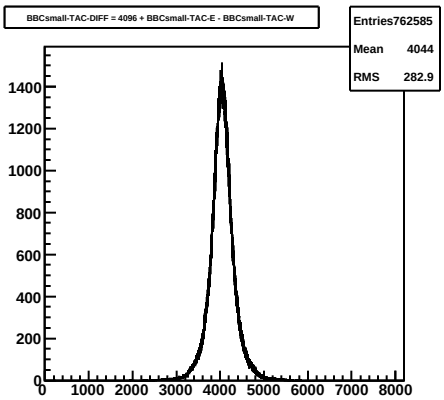

ZDC-TAC-E
Entries 28356
Mean 243.5
RMS 34.87

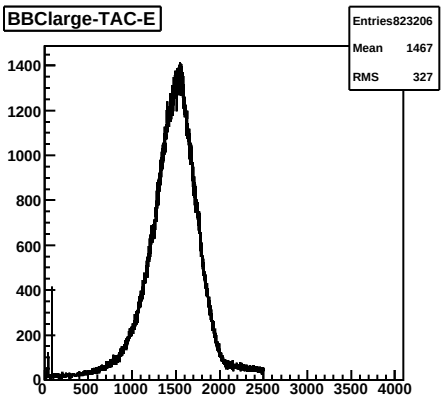

ZDC-TAC-W
Entries 24806
Mean 218.9
RMS 38.92

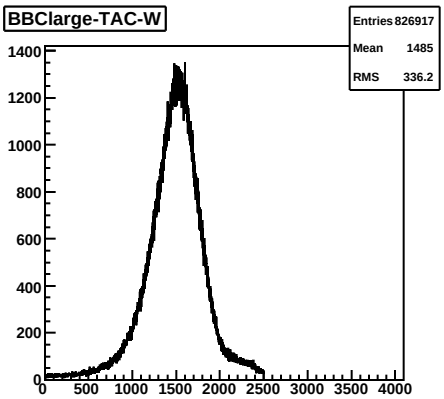

ZDC-TAC-DIFF = 1024 + ZDC-TAC-E - ZDC-TAC-W
Entries 1695
Mean 522.1
RMS 22.93

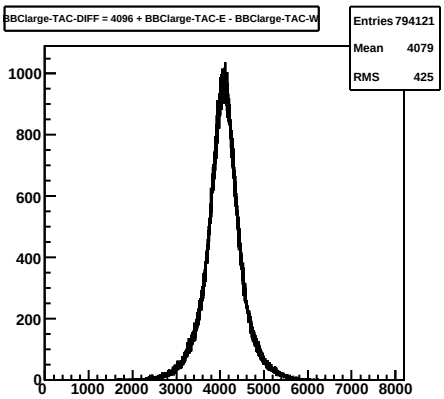

BBCsmall-TAC-E
Entries 802299
Mean 1492
RMS 222.6

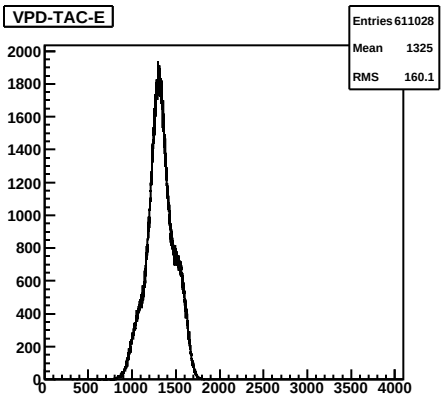

BBCsmall-TAC-W
Entries 811310
Mean 1543
RMS 235.8

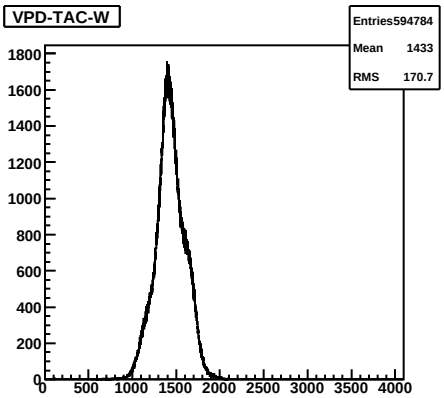

BBCsmall-TAC-DIFF = 4096 + BBCsmall-TAC-E - BBCsmall-TAC-W
Entries 762585
Mean 4044
RMS 282.9

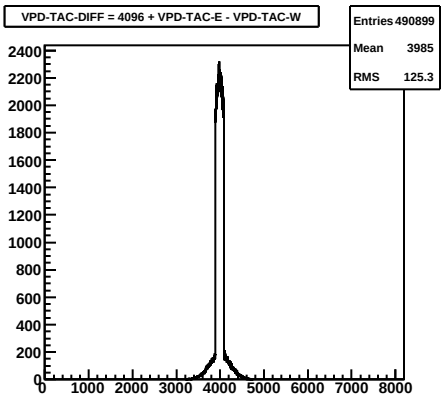

BBClarge-TAC-E
Entries 823206
Mean 1467
RMS 327

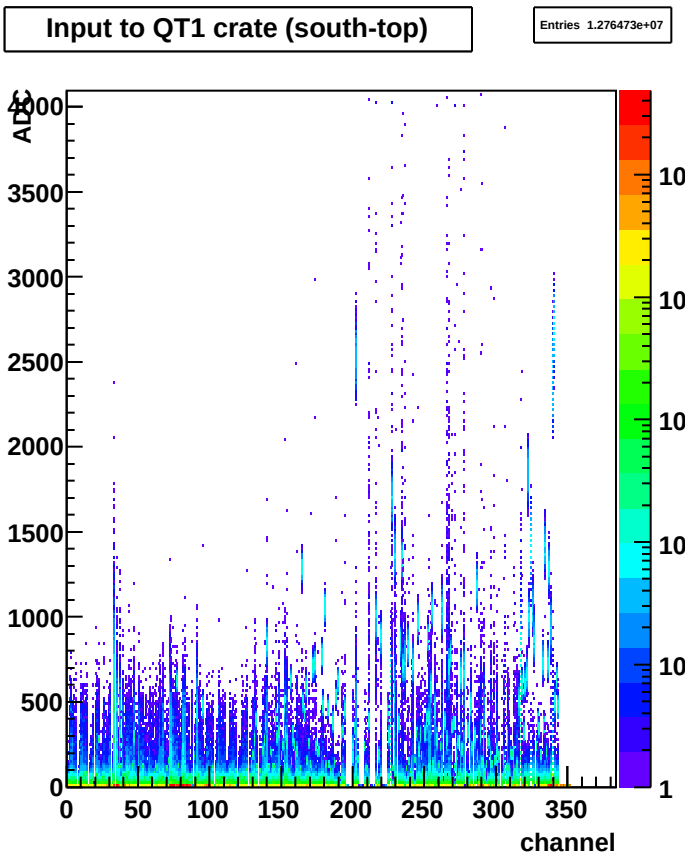

BBClarge-TAC-W
Entries 826917
Mean 1485
RMS 336.2

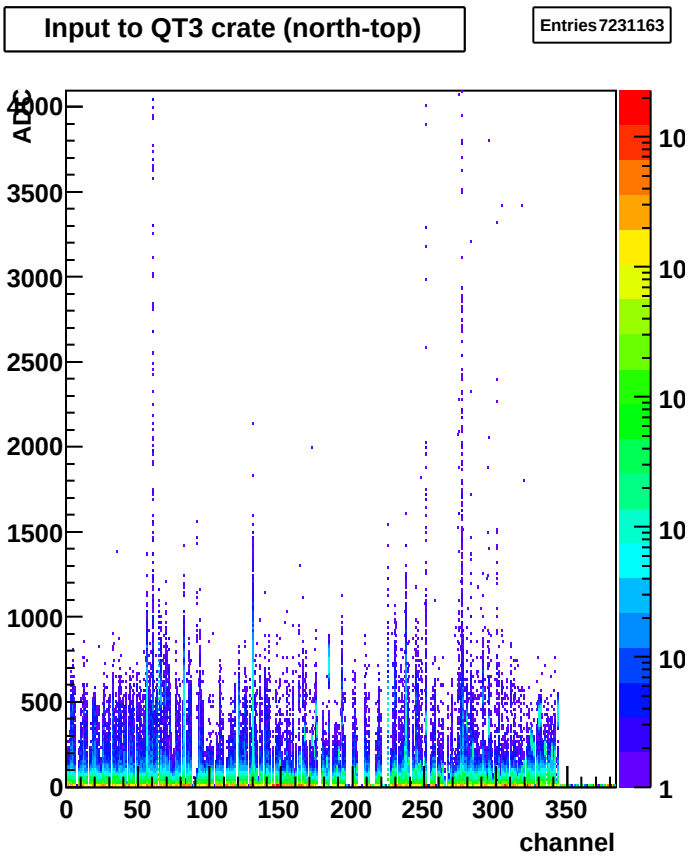

BBClarge-TAC-DIFF = 4096 + BBClarge-TAC-E - BBClarge-TAC-W
Entries 794121
Mean 4079
RMS 425

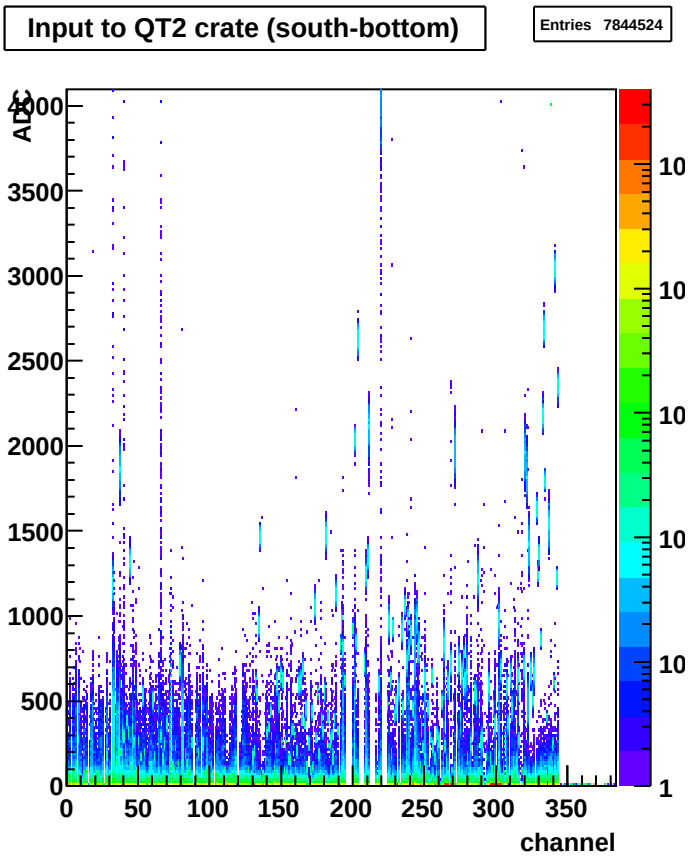

VPD-TAC-E
Entries 611028
Mean 1325
RMS 160.1

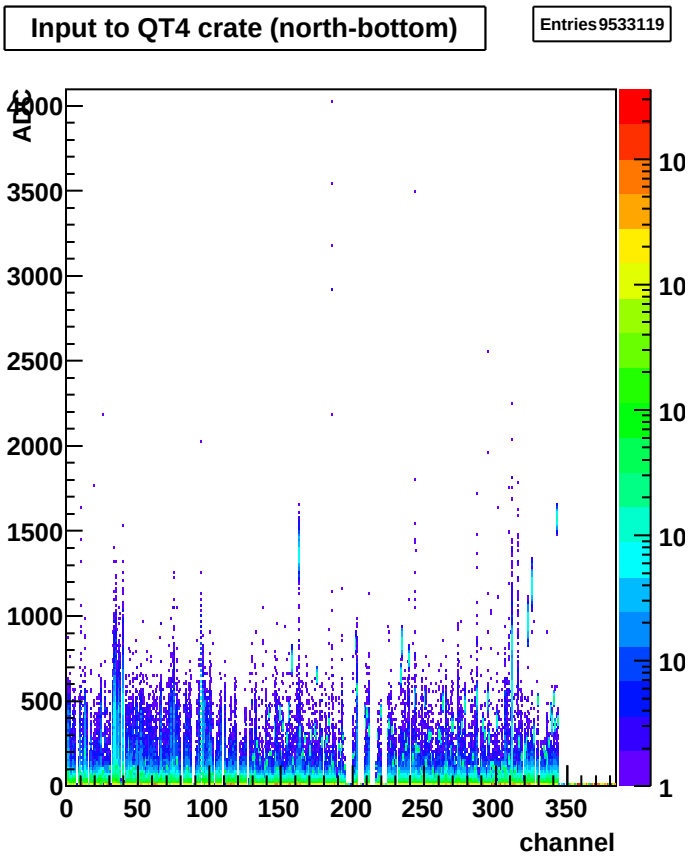

VPD-TAC-W
Entries 594784
Mean 1433
RMS 170.7

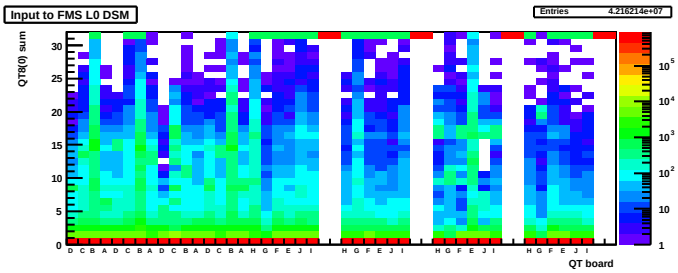

VPD-TAC-DIFF = 4096 + VPD-TAC-E - VPD-TAC-W
Entries 490899
Mean 3985
RMS 125.3

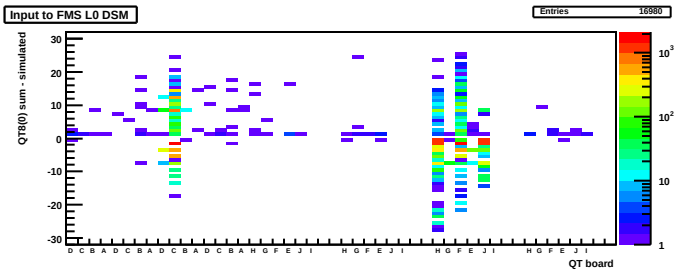

Input to QT1 crate (south-top)
Entries 1.276473e+07
ADC
channel

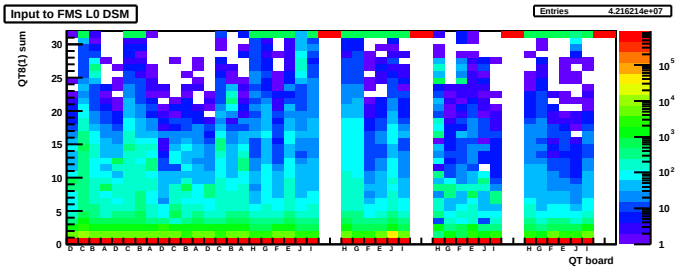

Input to QT3 crate (north-top)
Entries 7231163
ADC
channel

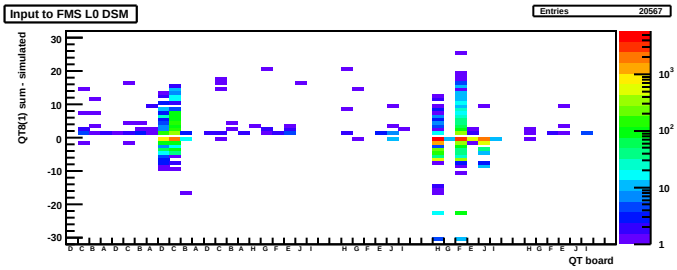

Input to QT2 crate (south-bottom)
Entries 7844524
ADC
channel

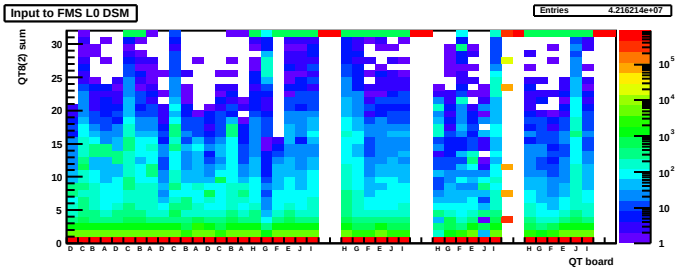

Input to QT4 crate (north-bottom)
Entries 9533119
ADC
channel

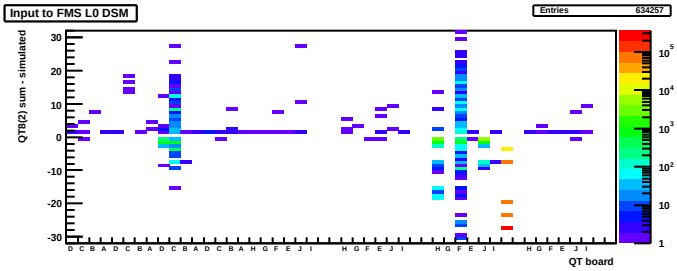

Input to FMS L0 DSM
Entries 4.216214e+07
QT8(0) sum
QT board

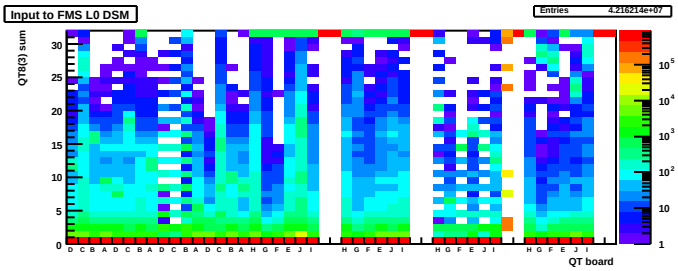

Input to FMS L0 DSM
Entries 16980
QT8(0) sum - simulated
QT board

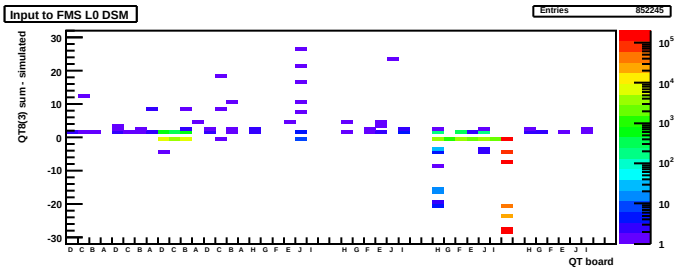

Input to FMS L0 DSM
Entries 4.216214e+07
QT8(1) sum
QT board

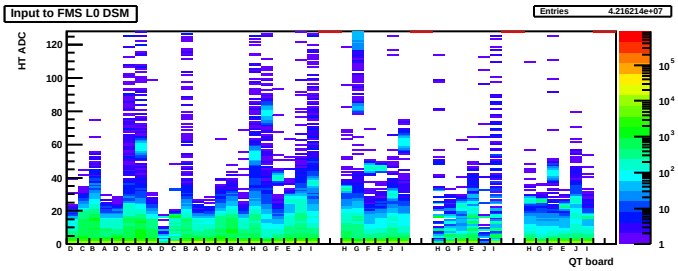

Input to FMS L0 DSM
Entries 20567
QT8(1) sum - simulated
QT board

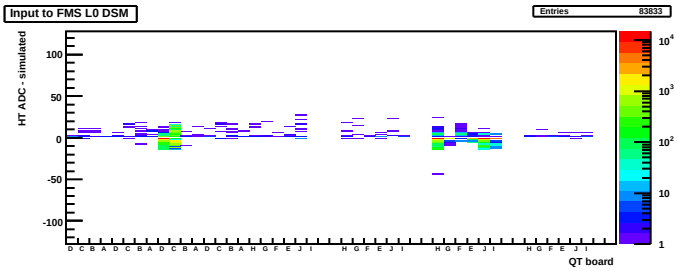

Input to FMS L0 DSM
Entries 4.216214e+07
QT8(2) sum
QT board

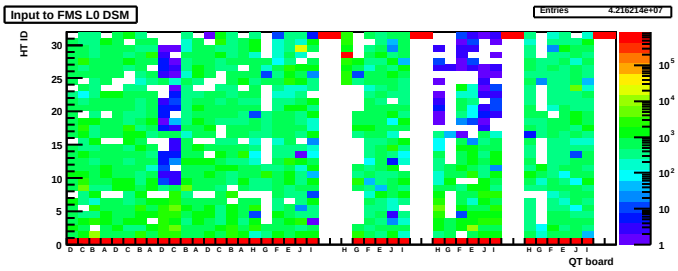

Input to FMS L0 DSM
Entries 634257
QT8(2) sum - simulated
QT board

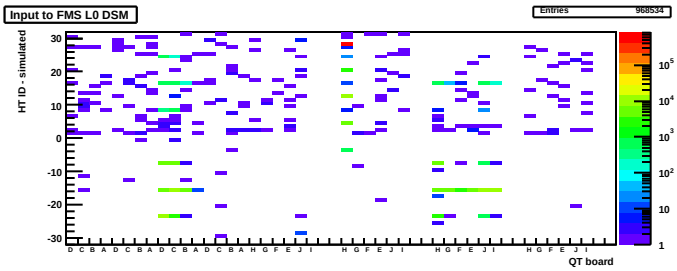

Input to FMS L0 DSM
Entries 4.216214e+07
QT8(3) sum
QT board

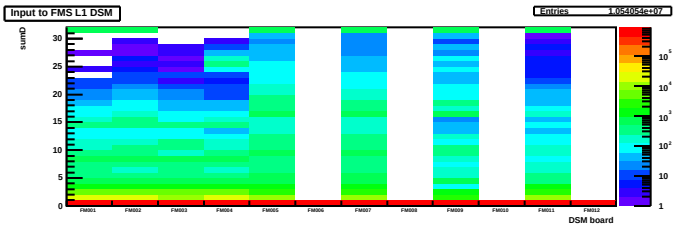

Input to FMS L0 DSM
Entries 852245
QT8(3) sum - simulated
QT board

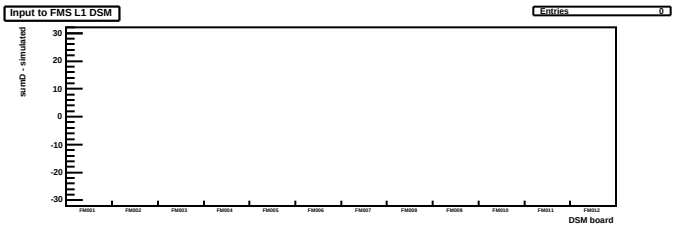

Input to FMS L0 DSM
Entries 4.216214e+07
HT ADC
QT board

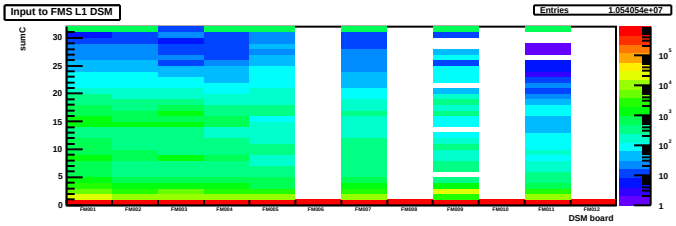

Input to FMS L0 DSM
Entries 83833
HT ADC - simulated
QT board

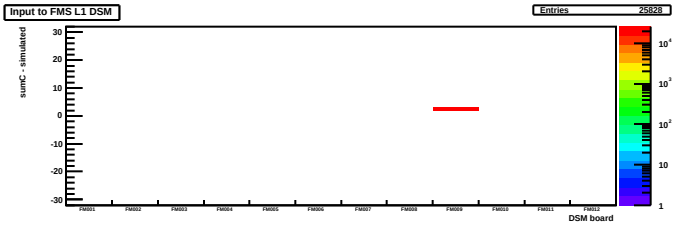

Input to FMS L0 DSM
Entries 4.216214e+07
HT ID
QT board

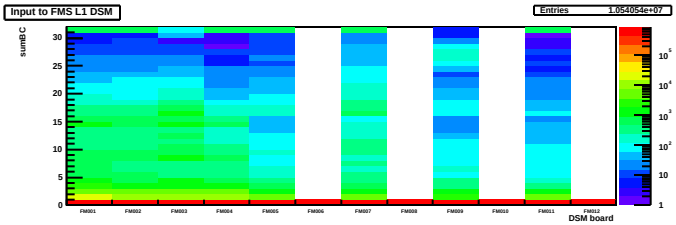

Input to FMS L0 DSM
Entries 968534
HT ID - simulated
QT board

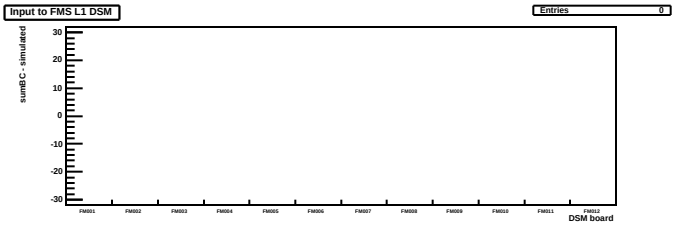

Input to FMS L1 DSM
Entries 1.054054e+07
sumD
DSM board

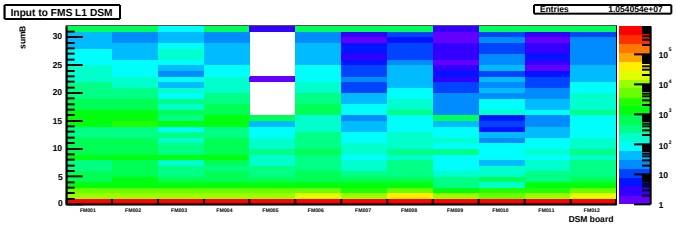

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

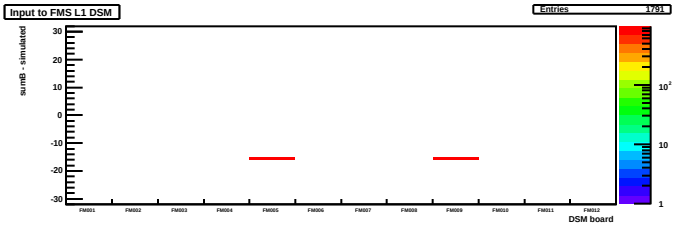

Input to FMS L1 DSM
Entries 1.054054e+07
sumC
DSM board

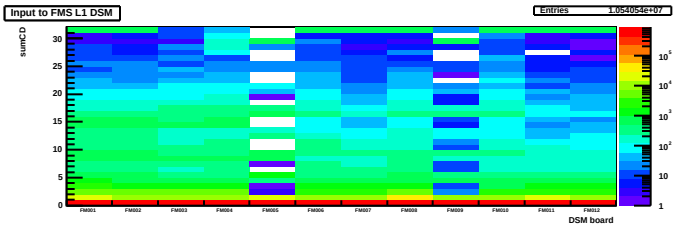

Input to FMS L1 DSM
Entries 25828
sumC - simulated
DSM board

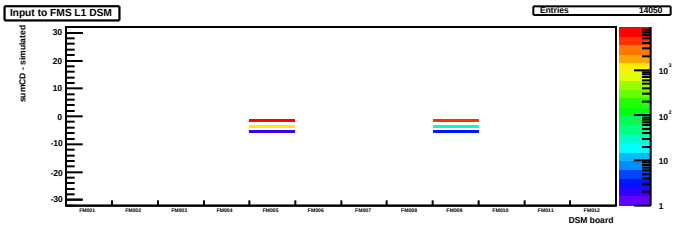

Input to FMS L1 DSM
Entries 1.054054e+07
sumBC
DSM board

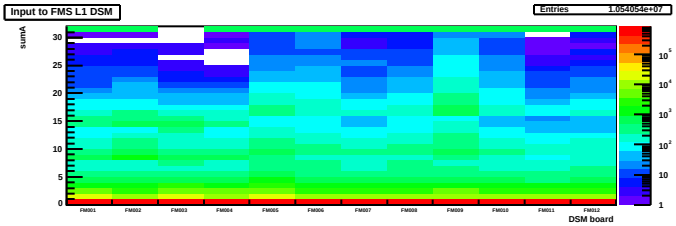

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

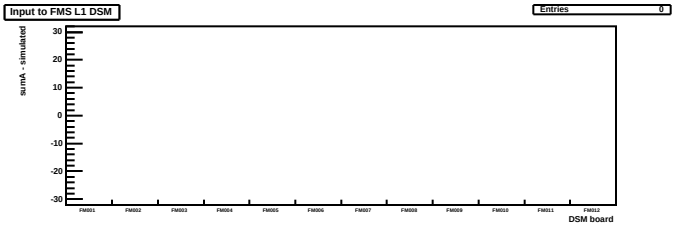

Input to FMS L1 DSM
Entries 1.054054e+07
sumB
DSM board

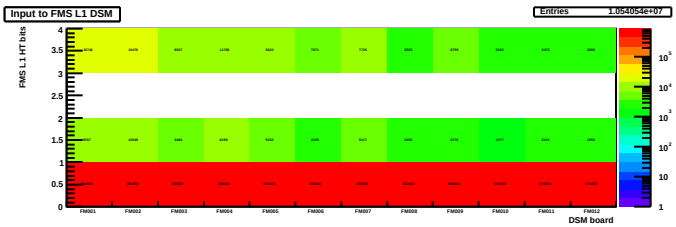

Input to FMS L1 DSM
Entries 1791
sumB - simulated
DSM board

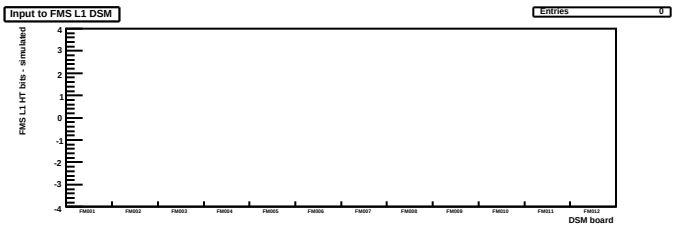

Input to FMS L1 DSM
Entries 1.054054e+07
sumCD
DSM board

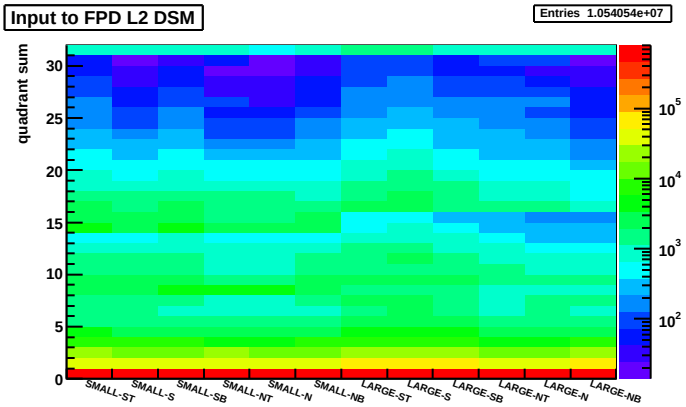

Input to FMS L1 DSM
Entries 14050
sumCD - simulated
DSM board

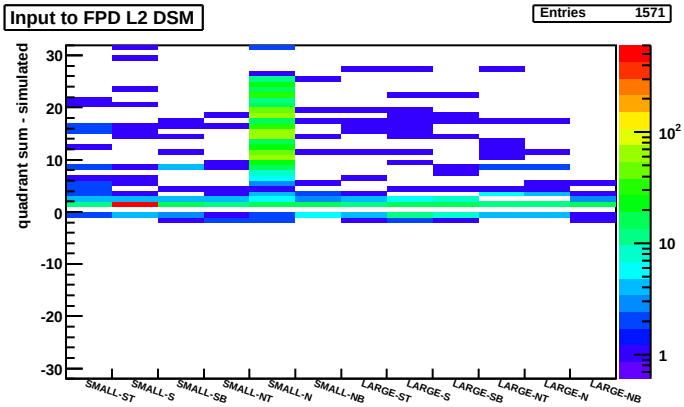

Input to FMS L1 DSM
Entries 1.054054e+07
sumA
DSM board

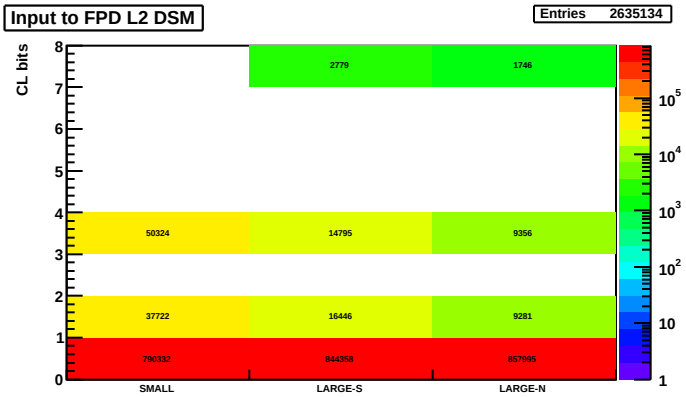

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

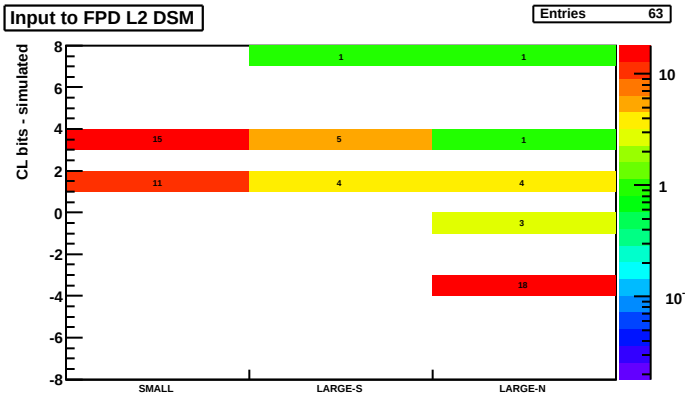

Input to FMS L1 DSM
Entries 1.054054e+07
FMS L1 HT bits
DSM board

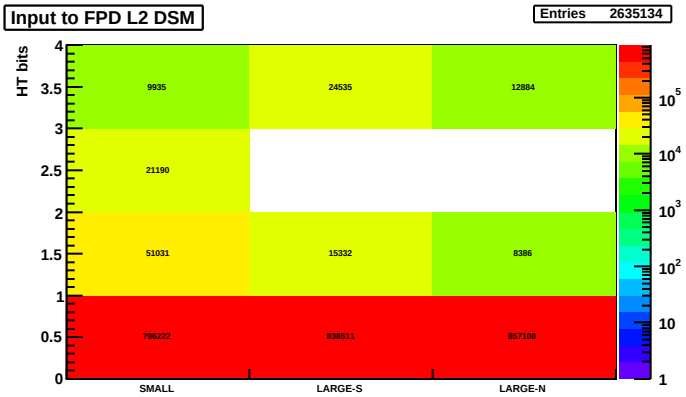

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

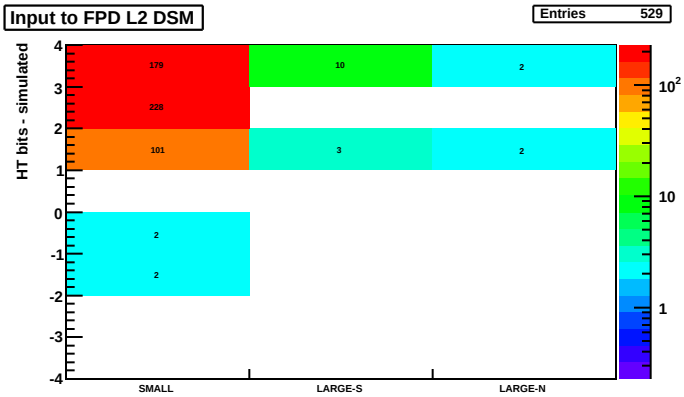

Input to FPD L2 DSM
Entries 1.054054e+07
quadrant sum
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

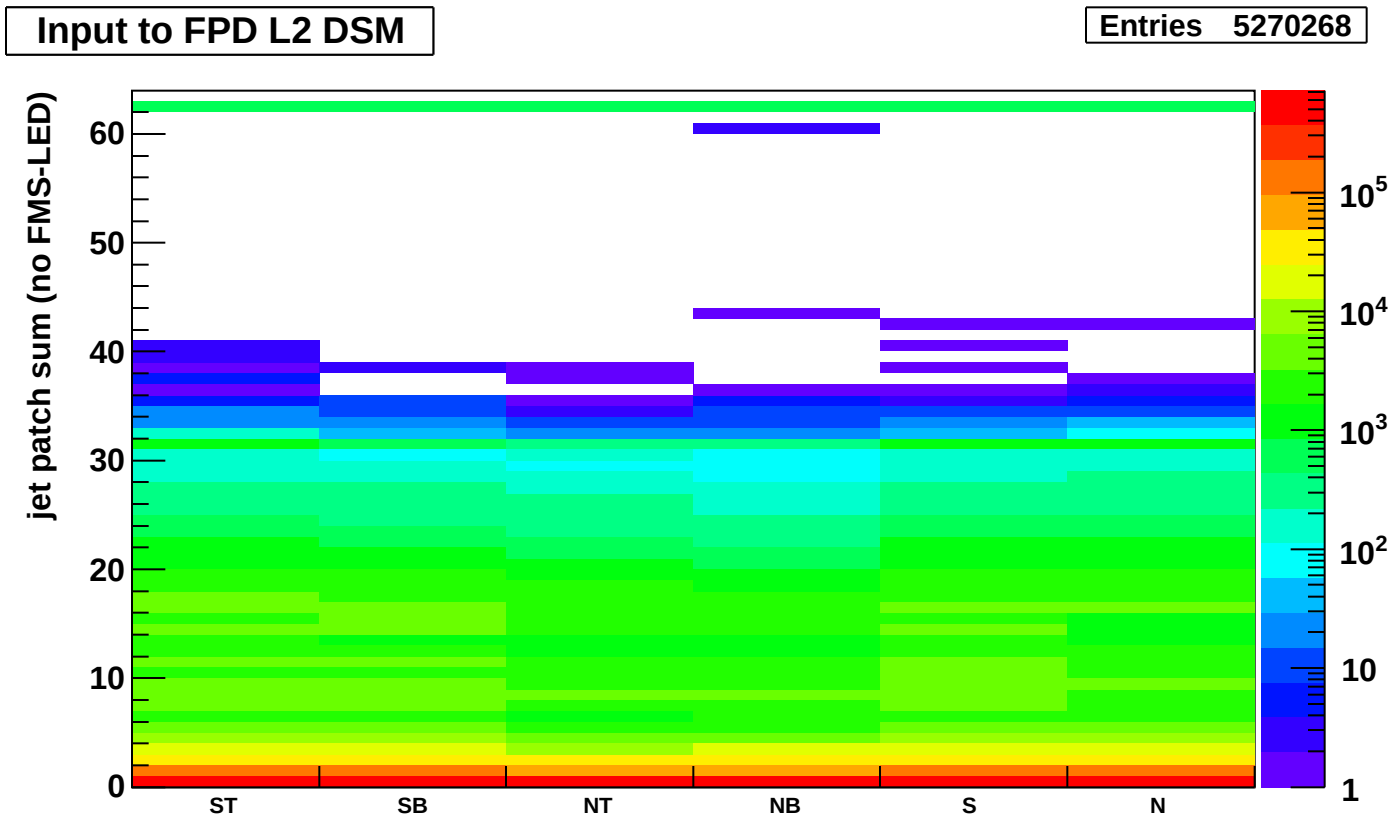

Input to FPD L2 DSM
Entries 1571
quadrant sum - simulated
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

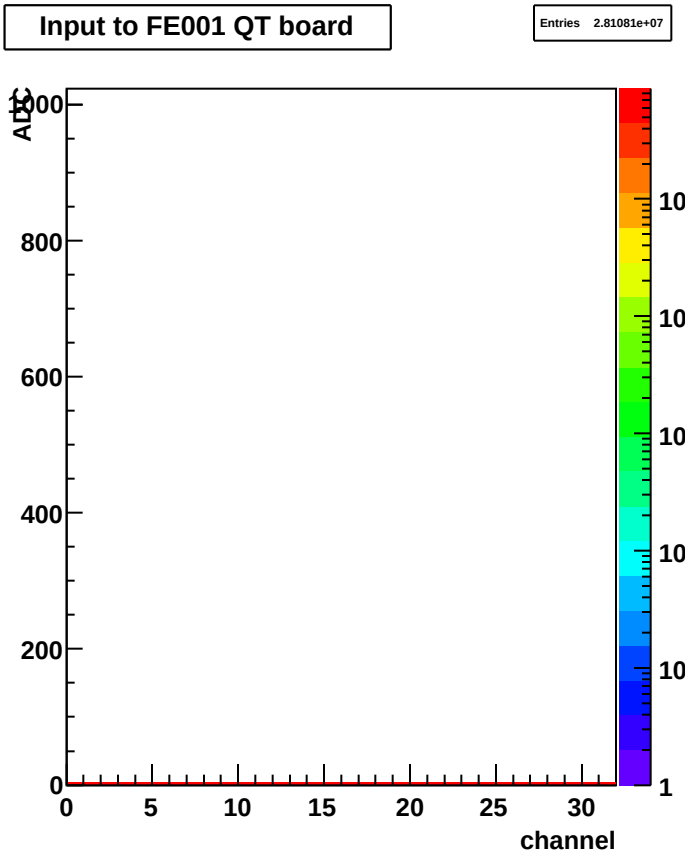

Input to FPD L2 DSM
Entries 2635134
CL bits
2779
1746
50324
14795
9356
37722
16446
9281
790332
844358
857995
SMALL
LARGE-S
LARGE-N

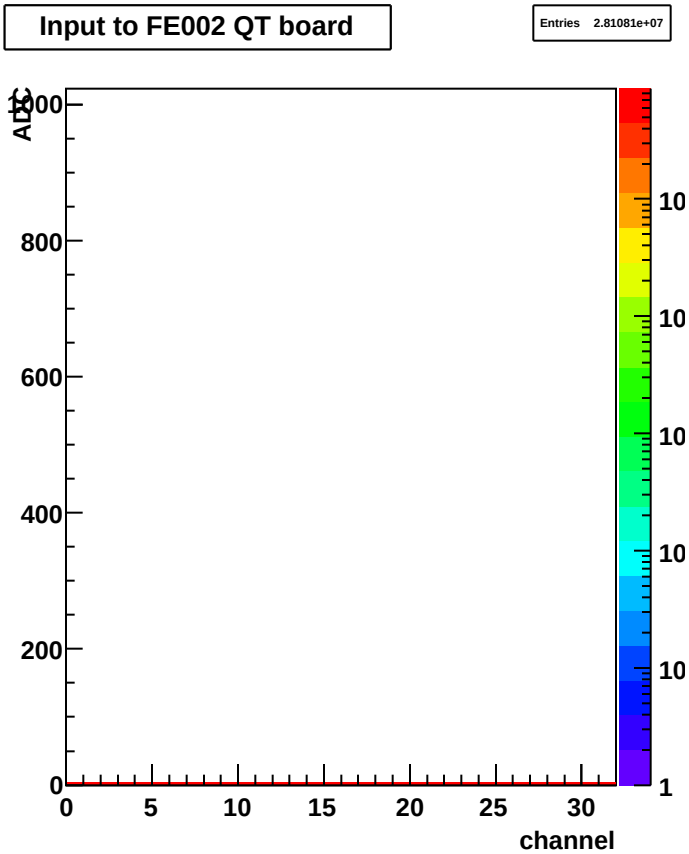

Input to FPD L2 DSM
Entries 63
CL bits - simulated
1
1
15
5
1
11
4
4
3
18
SMALL
LARGE-S
LARGE-N

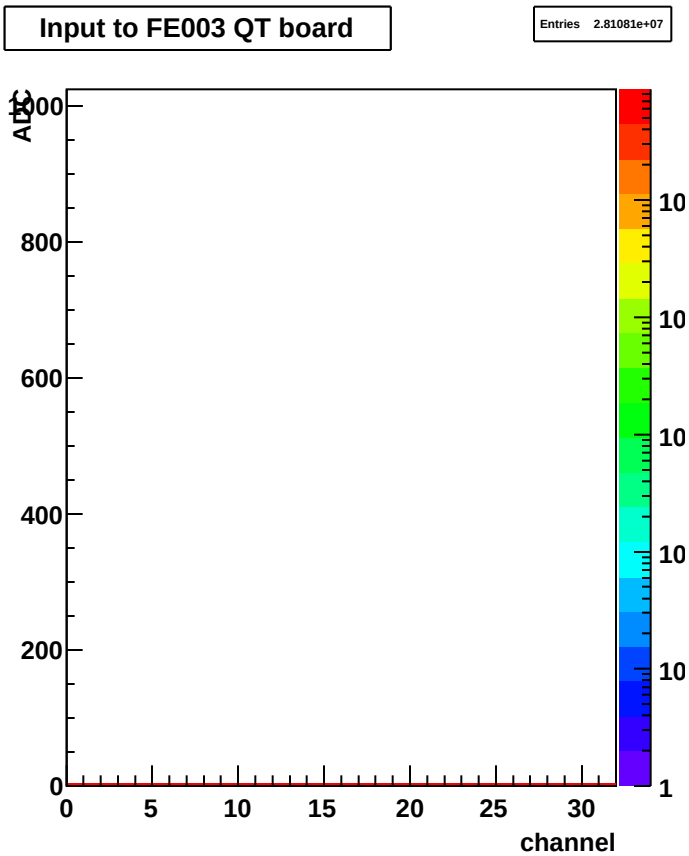

Input to FPD L2 DSM
Entries 2635134
HT bits
9935
24535
12884
21190
51031
15332
8386
796222
838511
857108
SMALL
LARGE-S
LARGE-N

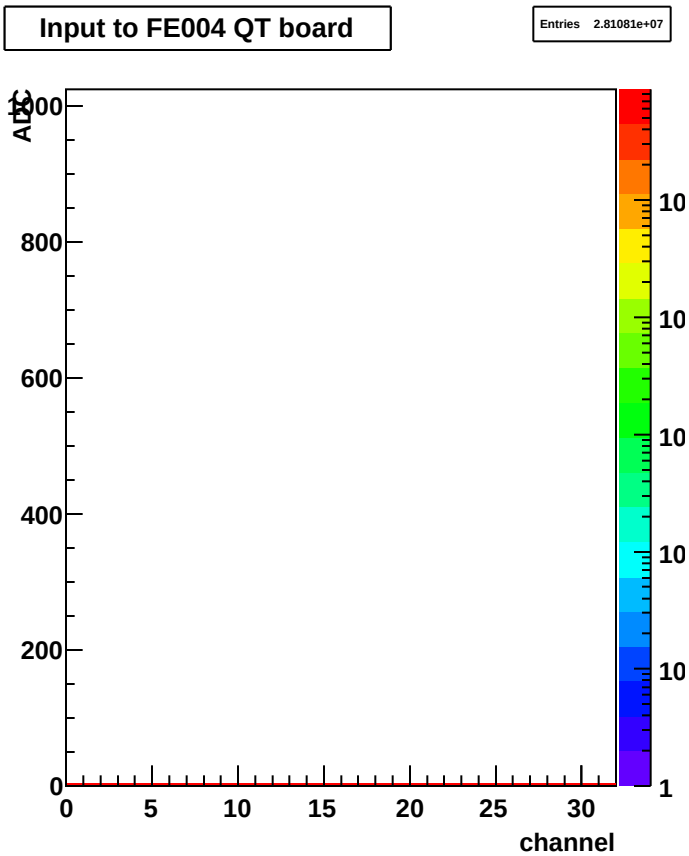

Input to FPD L2 DSM
Entries 529
HT bits - simulated
179
10
2
228
101
3
2
2
2
SMALL
LARGE-S
LARGE-N

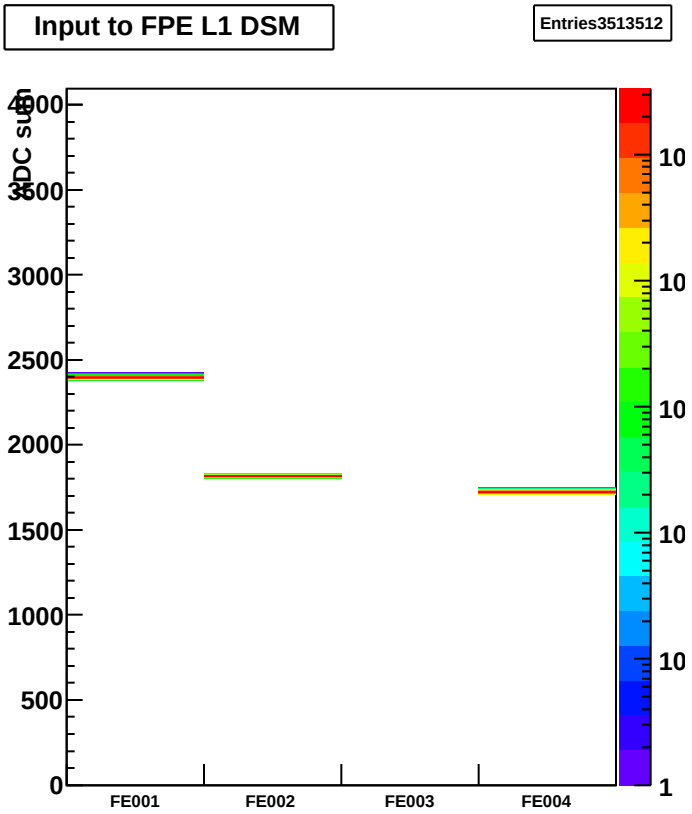

Input to FPD L2 DSM
Entries 5270268
jet patch sum (no FMS-LED)
0
10
20
30
40
50
60
ST
SB
NT
NB
S
N
1
10
10^2
10^3
10^4
10^5

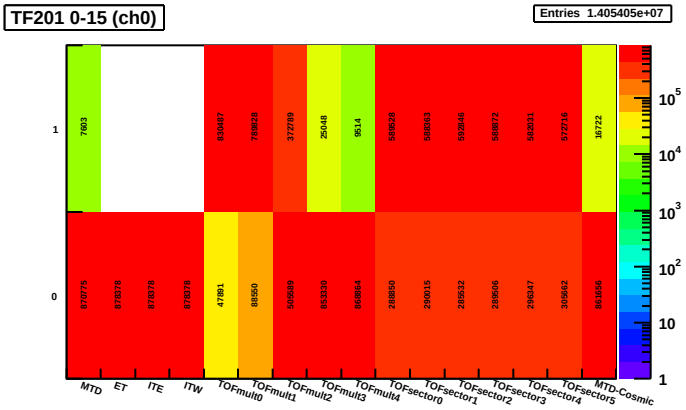

Input to FE001 QT board
Entries 2.81081e+07
ADC
channel

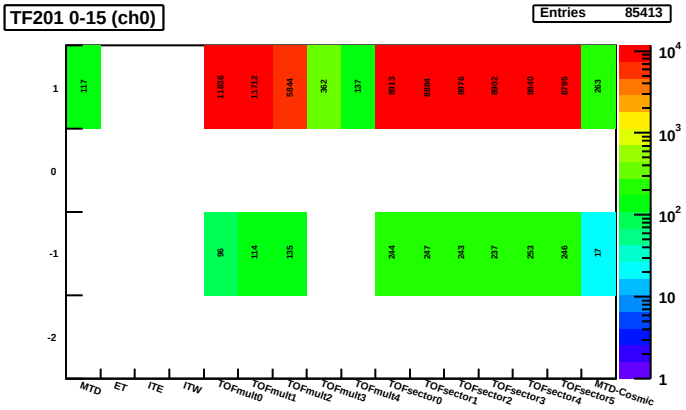

Input to FE002 QT board
Entries 2.81081e+07
ADC
channel

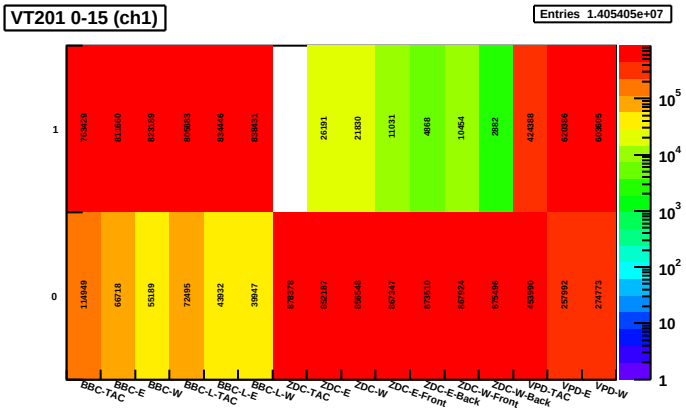

Input to FE003 QT board
Entries 2.81081e+07
ADC
channel

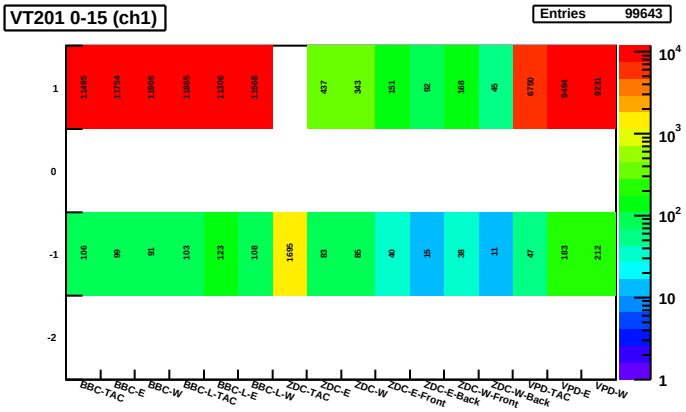

Input to FE004 QT board
Entries 2.81081e+07
ADC
channel


Input to FPE L1 DSM
Entries3513512
ADC sum
4000
3500
3000
2500
2000
1500
1000
500
0
FE001
FE002
FE003
FE004
10
10
10
10
10
1


TF201 0-15 (ch0)
Entries 1.405405e+07
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic


TF201 0-15 (ch0)
Entries 85413
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic


VT201 0-15 (ch1)
Entries 1.405405e+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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Entries 99643
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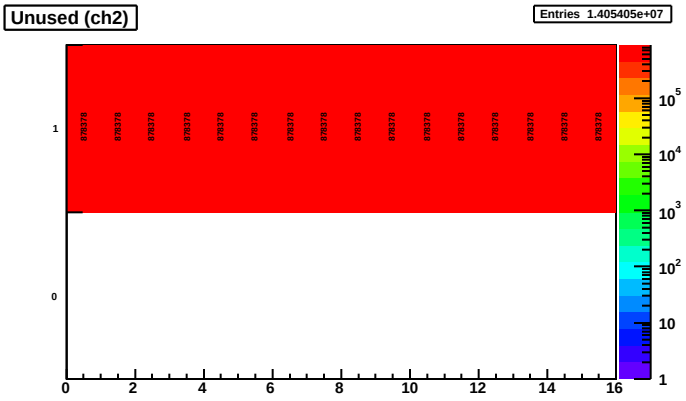
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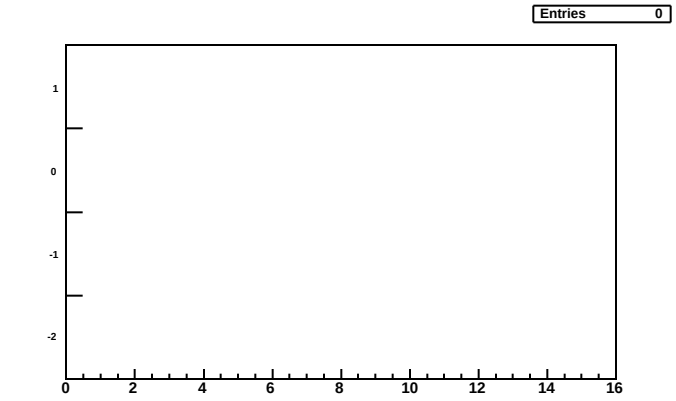
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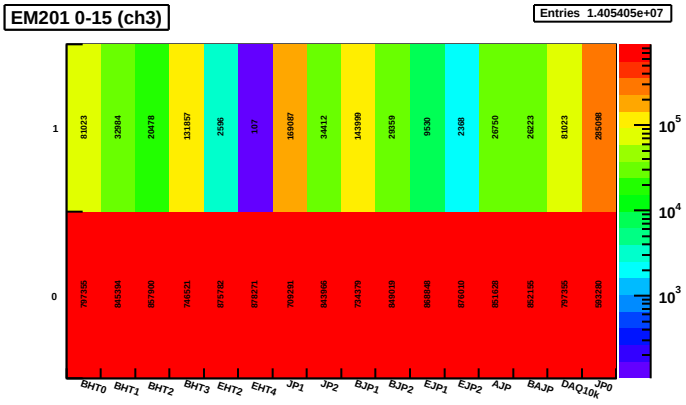
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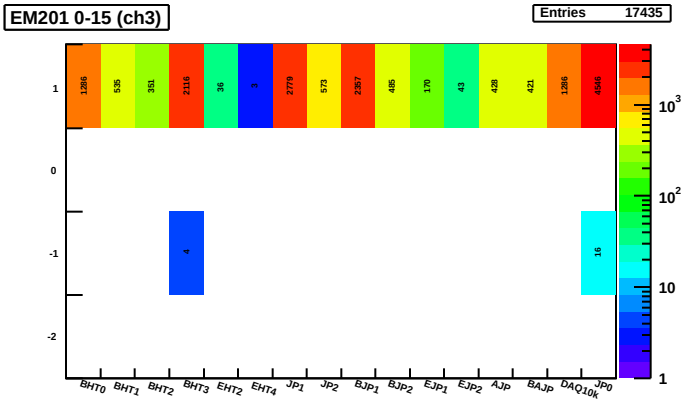
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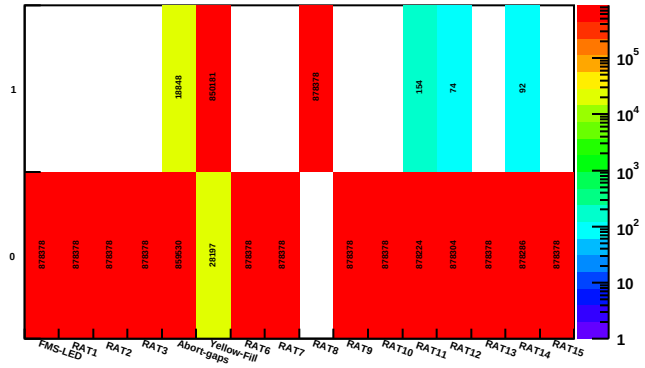
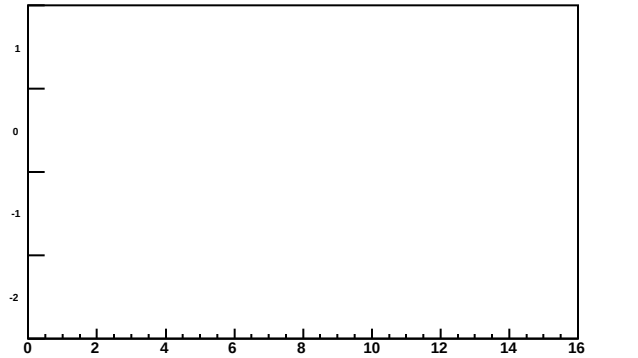
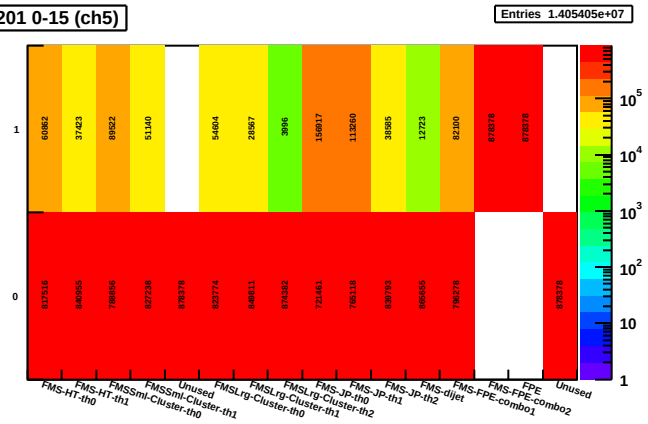
RAT board (ch4)





FP201 0-15 (ch5)



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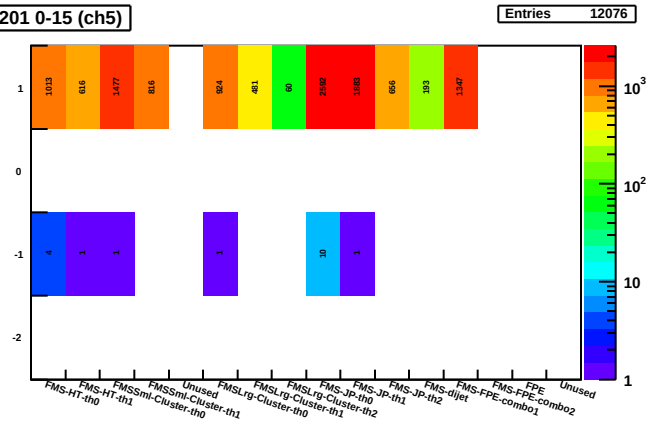
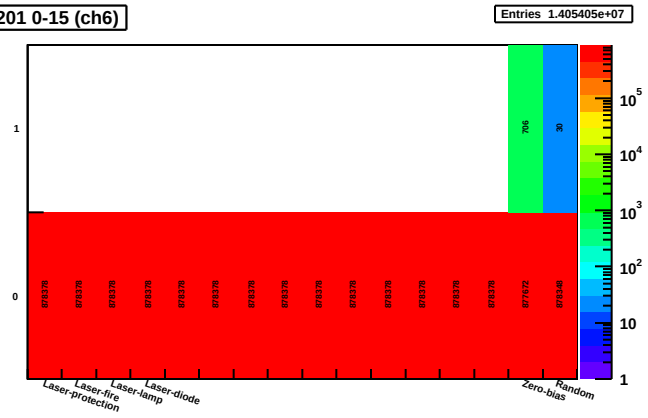
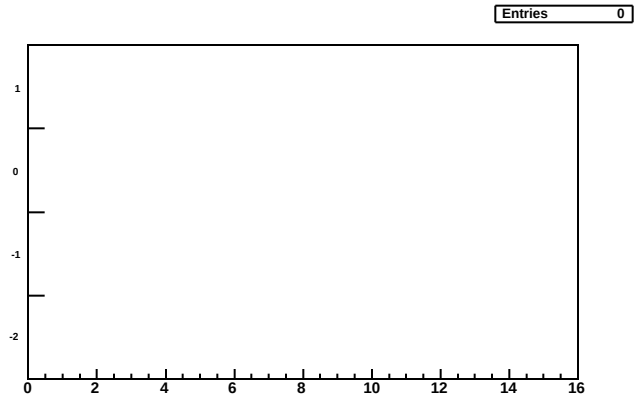
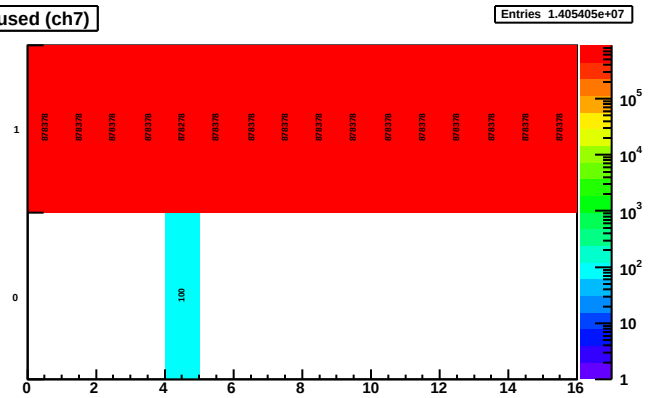
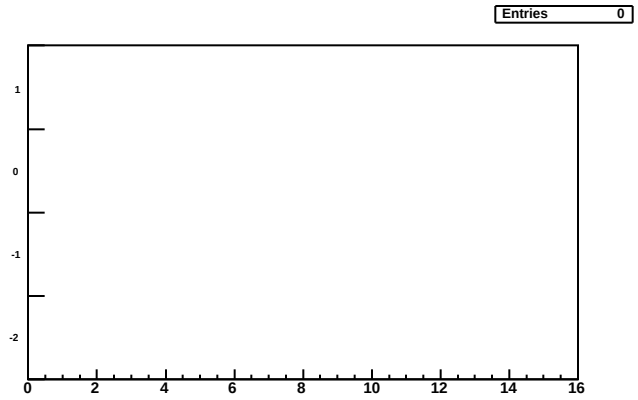


ST201 0-15 (ch6)





Unused (ch7)