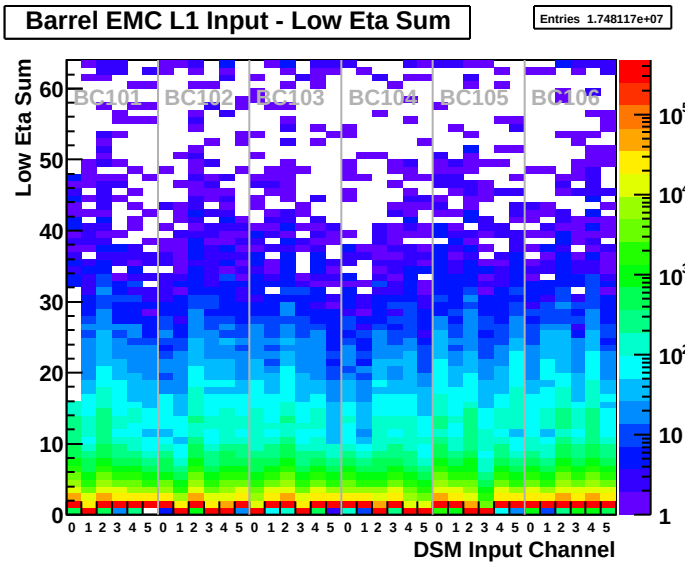
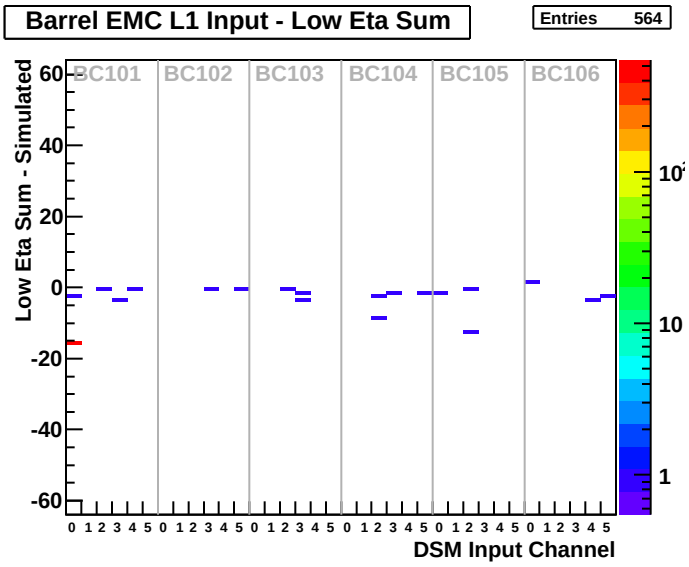
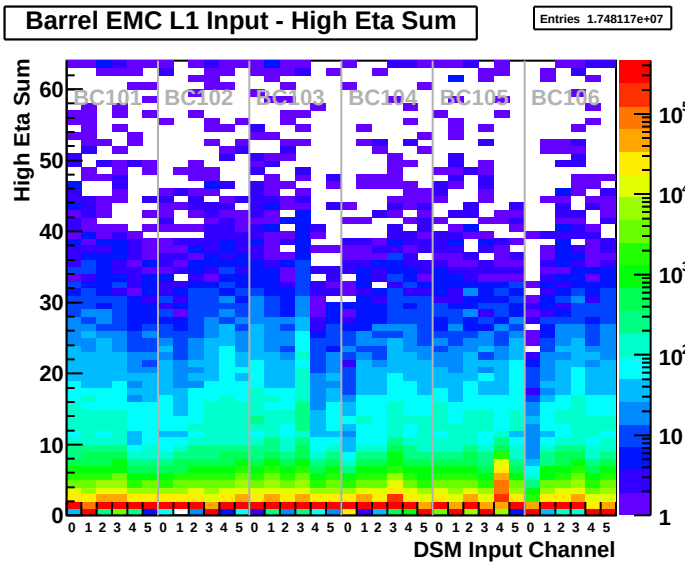
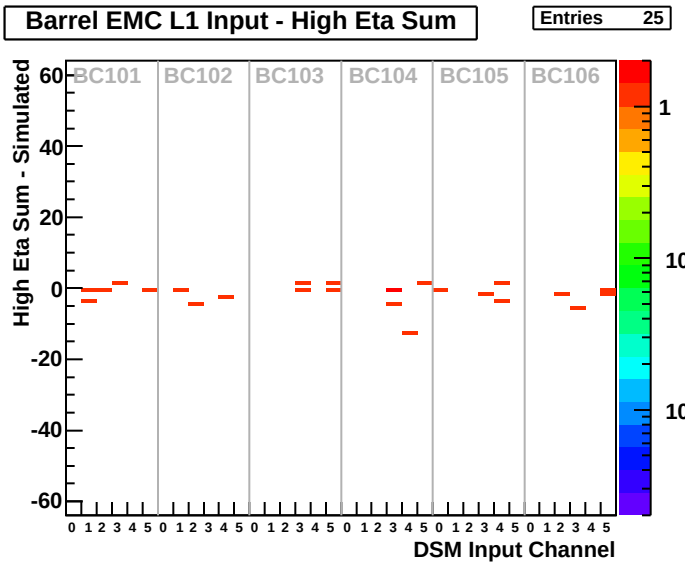
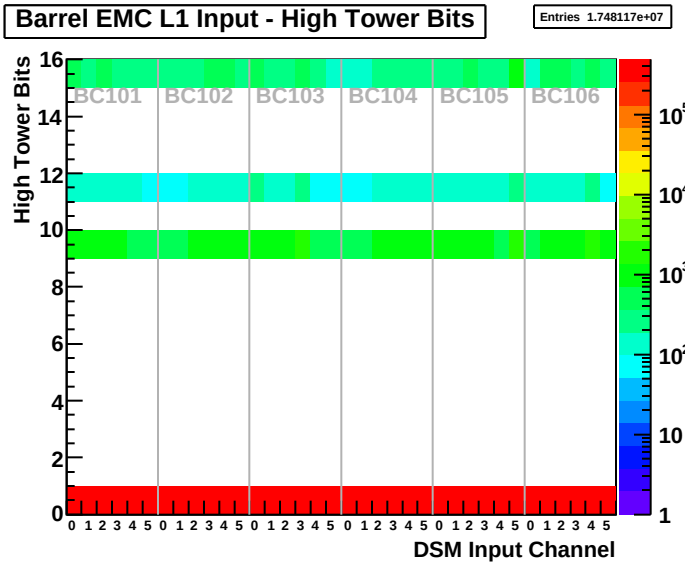
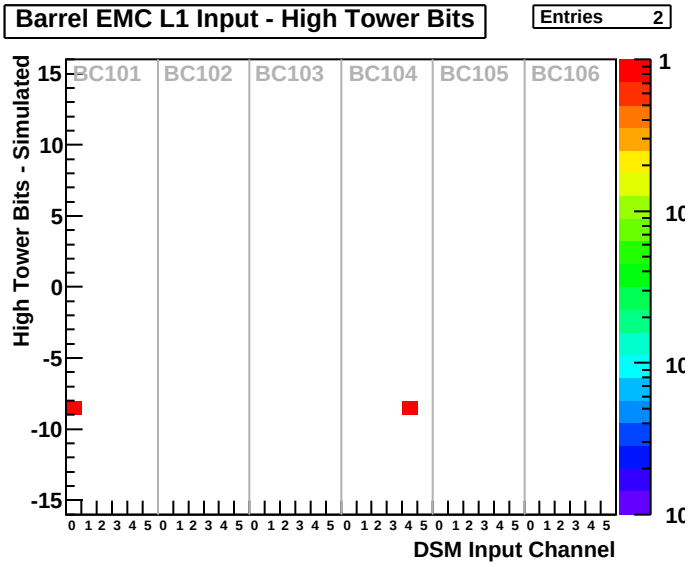

Barrel EMC L1 Input - Low Eta Sum
Entries 1.748117e+07
Low Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

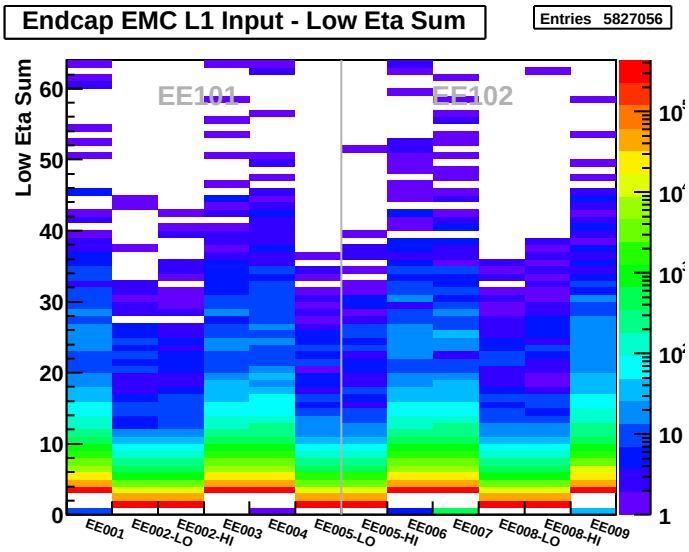

Barrel EMC L1 Input - Low Eta Sum
Entries 564
Low Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

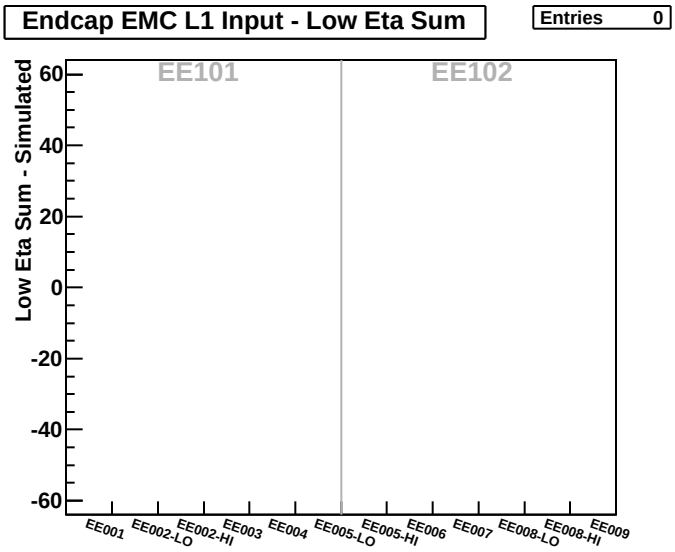

Barrel EMC L1 Input - High Eta Sum
Entries 1.748117e+07
High Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

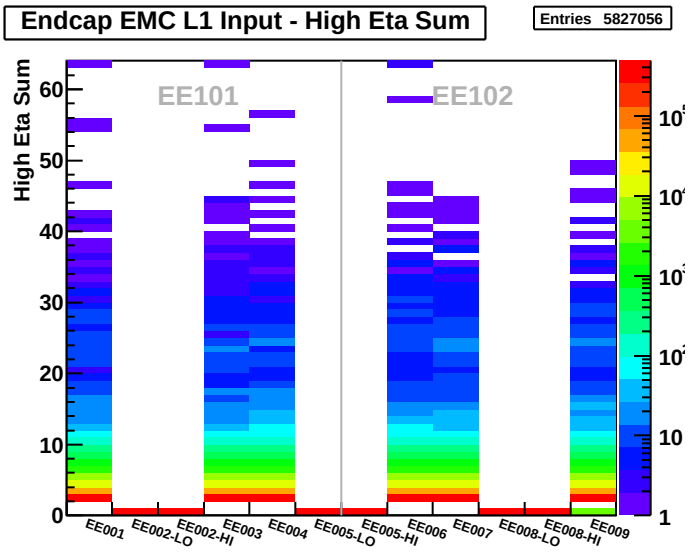

Barrel EMC L1 Input - High Eta Sum
Entries 25
High Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

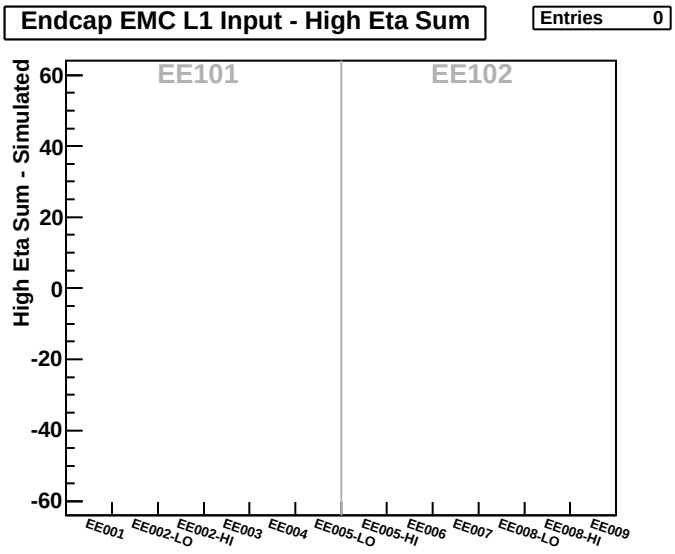

Barrel EMC L1 Input - High Tower Bits
Entries 1.748117e+07
High Tower Bits
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

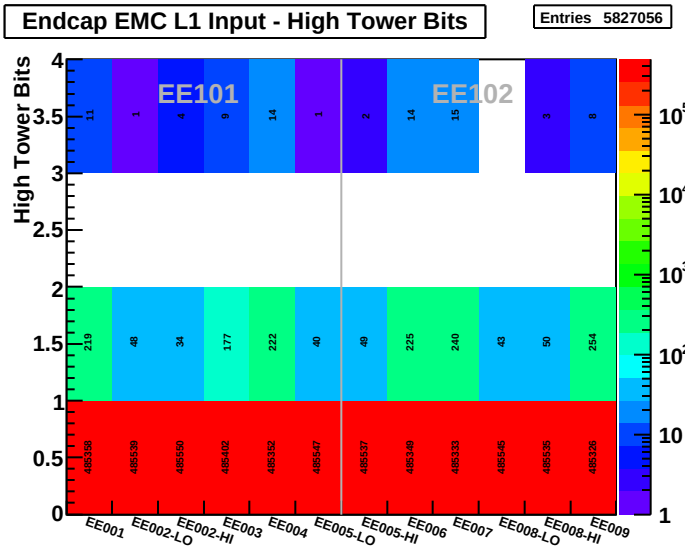

Barrel EMC L1 Input - High Tower Bits
Entries 2
High Tower Bits - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

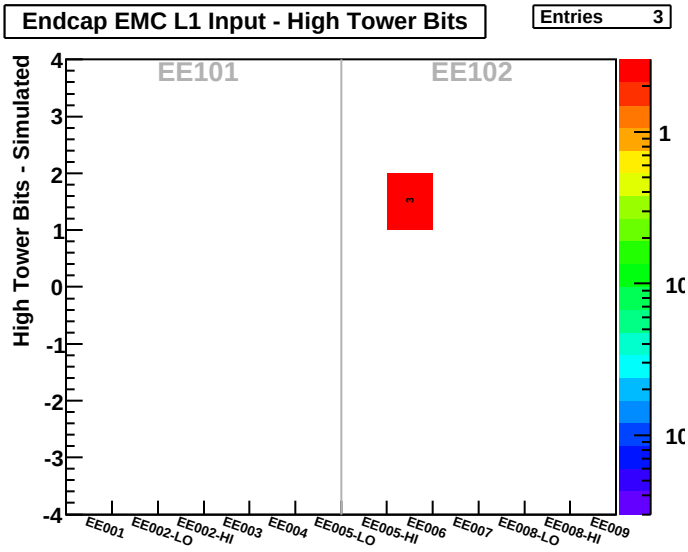

Endcap EMC L1 Input - Low Eta Sum
Entries 5827056
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

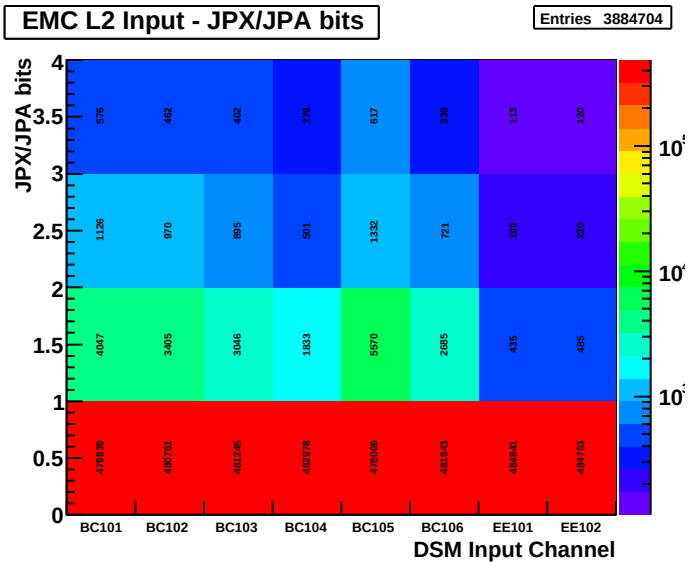

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

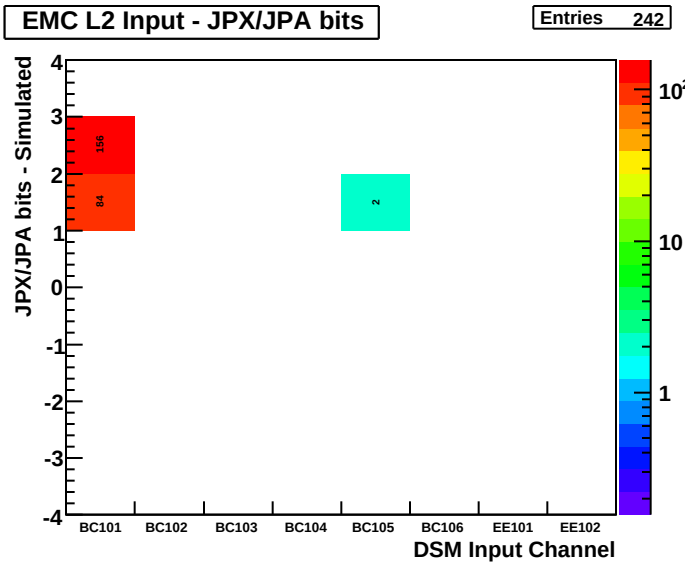

Endcap EMC L1 Input - High Eta Sum
Entries 5827056
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

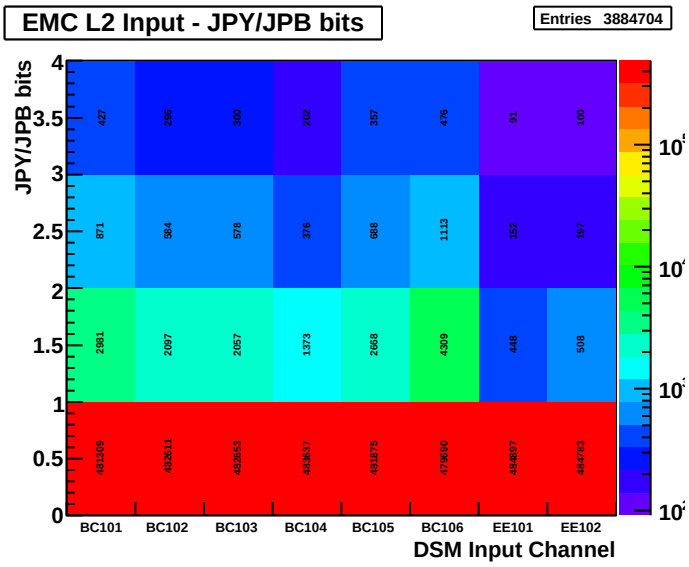

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

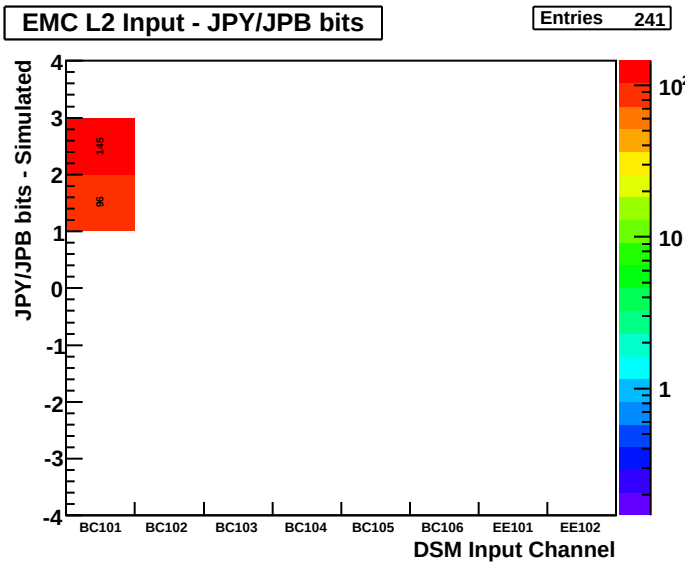

Endcap EMC L1 Input - High Tower Bits
Entries 5827056
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

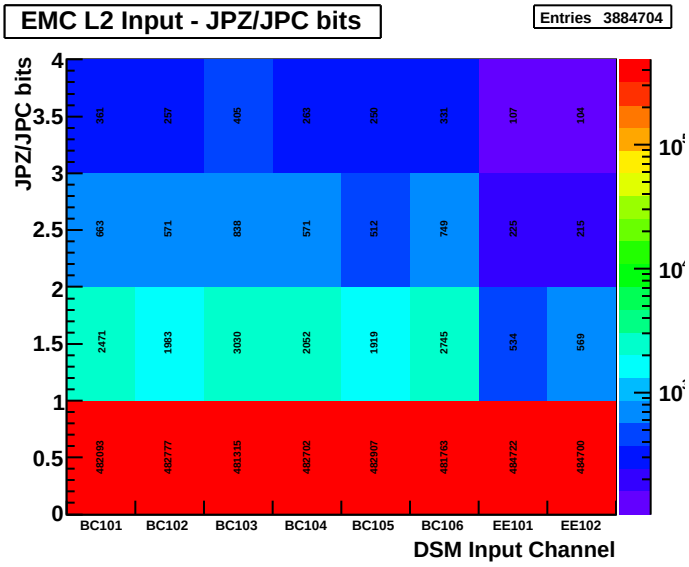

Endcap EMC L1 Input - High Tower Bits
Entries 3
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

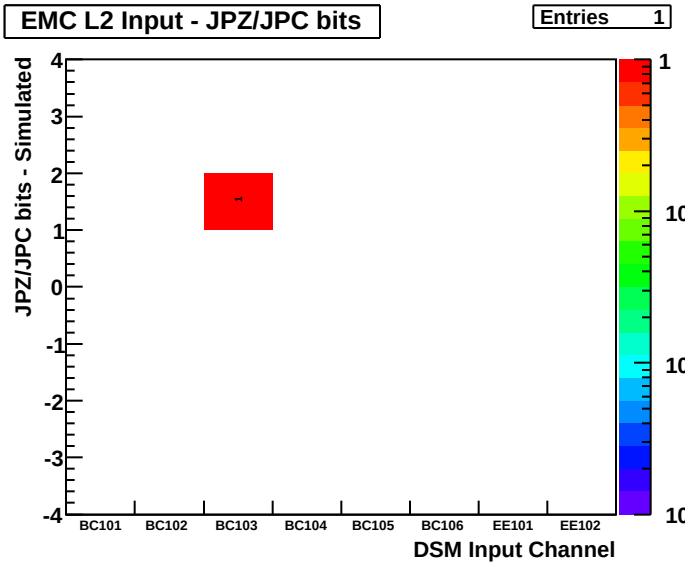

EMC L2 Input - JPX/JPA bits
Entries 3884704
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
576 462 402 276 617 339 113 120
1126 970 895 591 1332 721 199 220
4047 3405 3046 1833 5570 2685 435 485
479639 480751 481245 482978 479069 481843 484841 484763

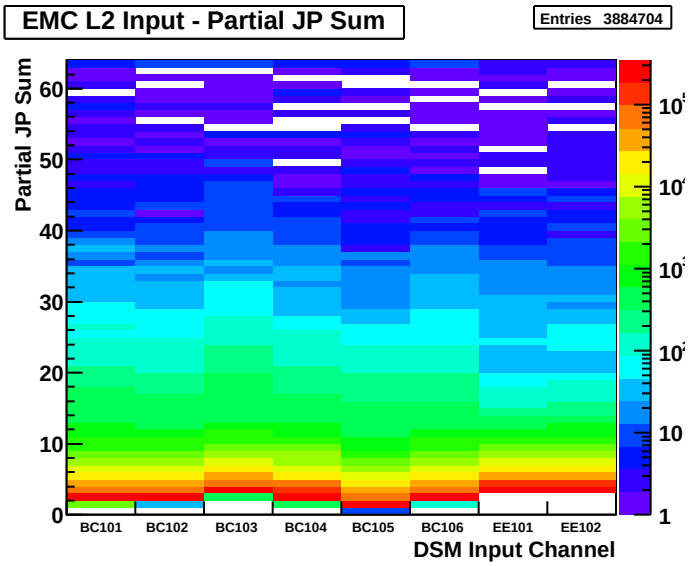

EMC L2 Input - JPX/JPA bits
Entries 242
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
156
84
2

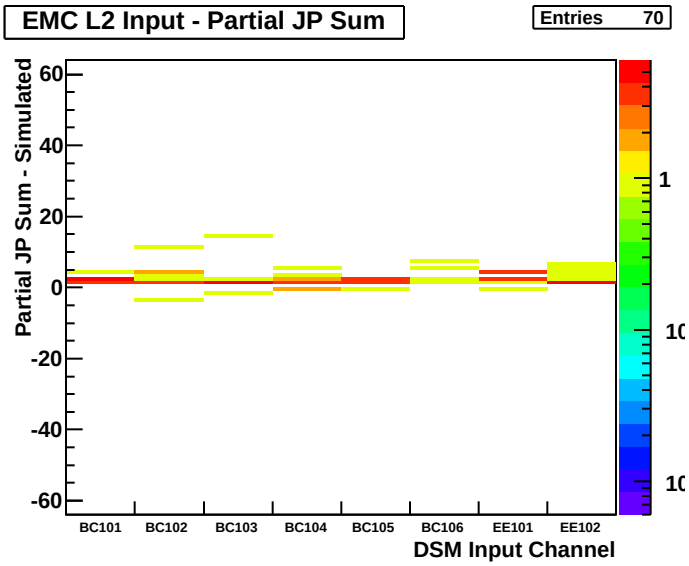

EMC L2 Input - JPY/JPB bits
Entries 3884704
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
427 286 300 202 357 476 91 100
871 584 578 376 688 1113 152 197
2861 2097 2057 1373 2668 4309 448 508
481309 482611 482653 483937 481875 479690 484897 484783

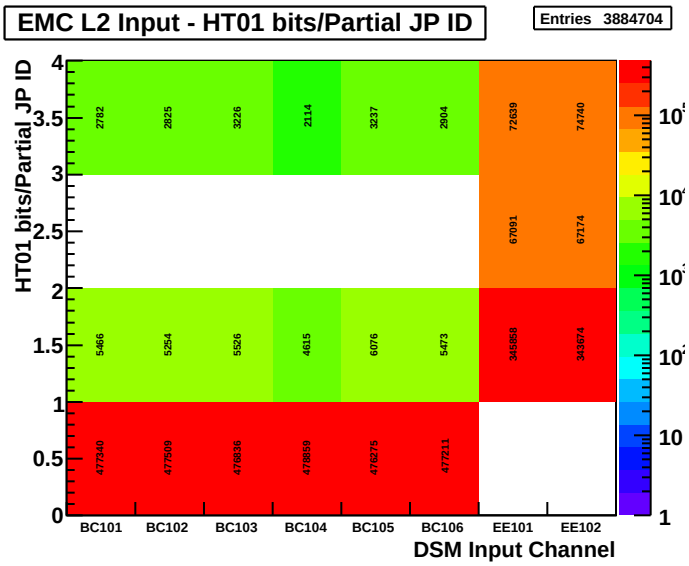

EMC L2 Input - JPY/JPB bits
Entries 241
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
145
96

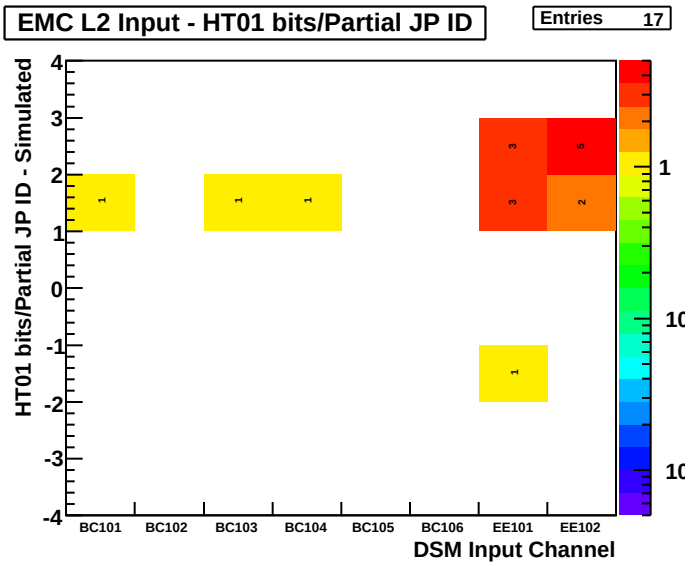

EMC L2 Input - JPZ/JPC bits
Entries 3884704
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
361 257 405 263 250 331 107 104
653 571 838 571 512 749 225 215
2471 1983 3030 2062 1919 2745 534 569
482093 482777 481315 482702 482907 481763 484722 484700

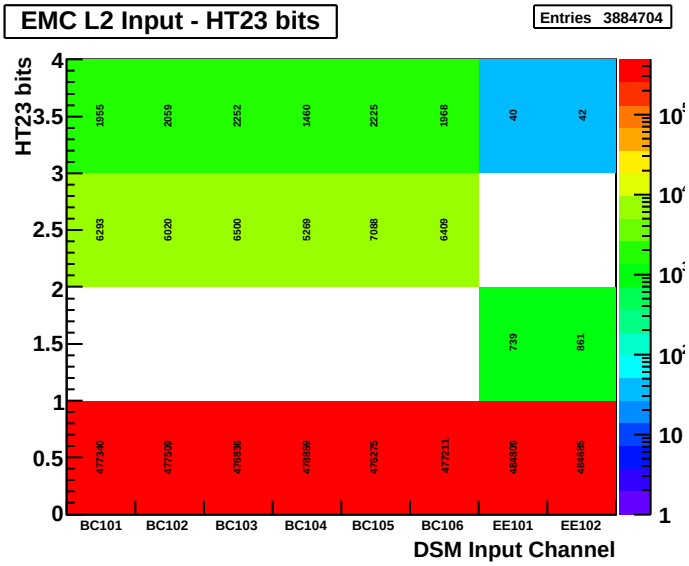

EMC L2 Input - JPZ/JPC bits
Entries 1
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1

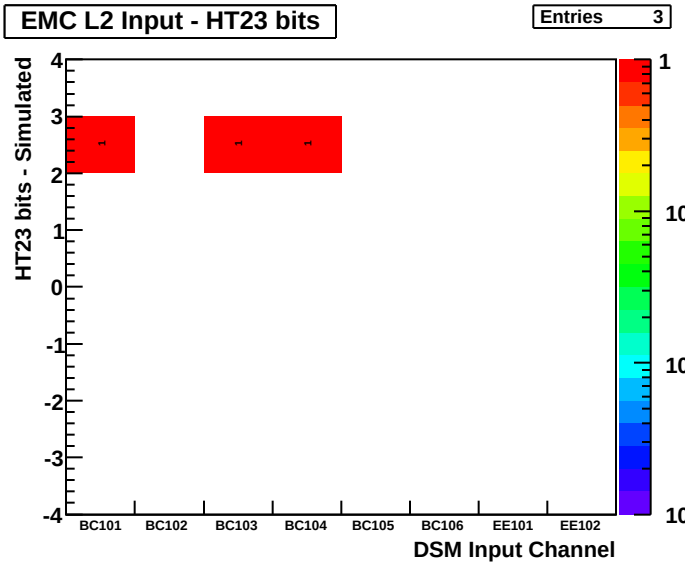

EMC L2 Input - Partial JP Sum
Entries 3884704
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

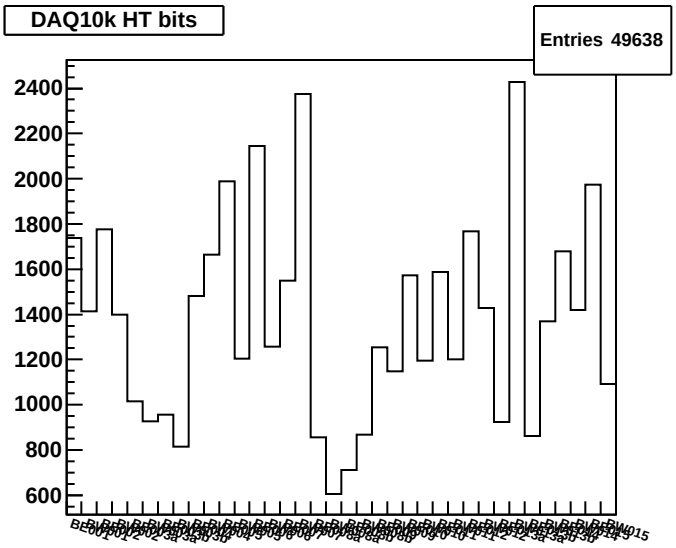

EMC L2 Input - Partial JP Sum
Entries 70
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

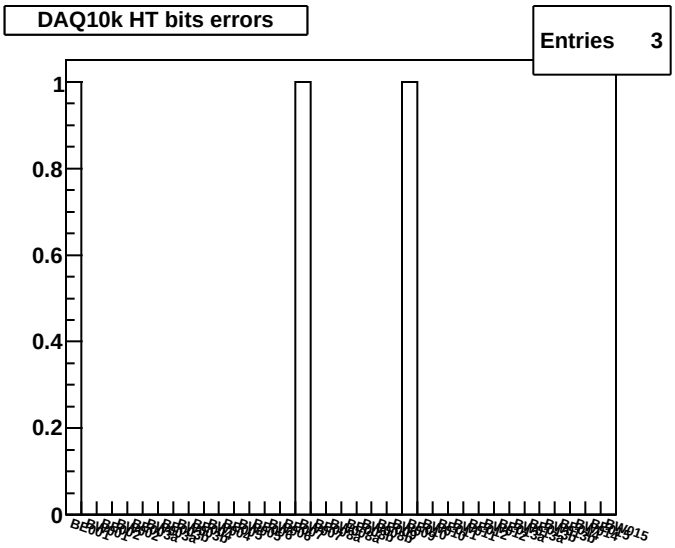

EMC L2 Input - HT01 bits/Partial JP ID
Entries 3884704
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

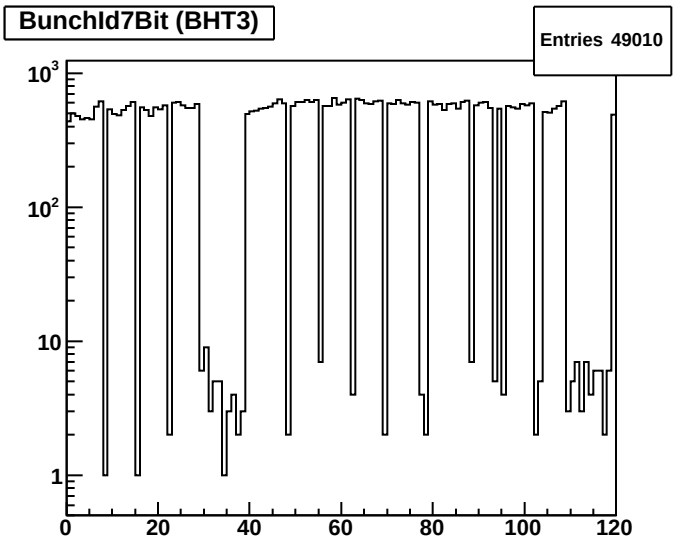

EMC L2 Input - HT01 bits/Partial JP ID
Entries 17
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

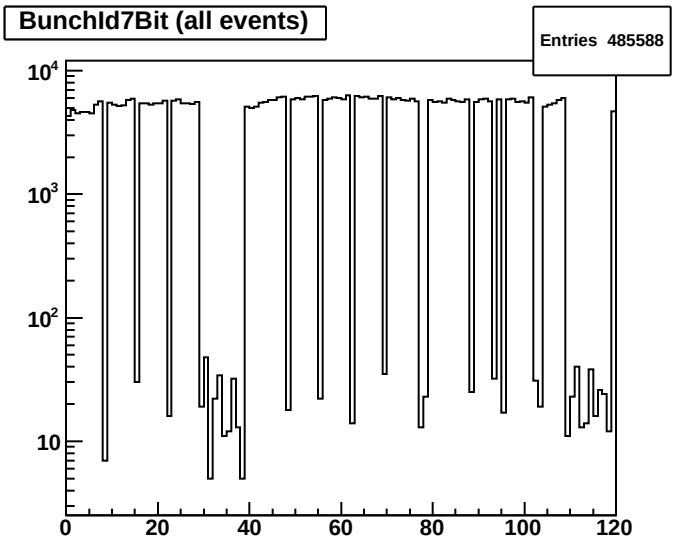

EMC L2 Input - HT23 bits
Entries 3884704
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

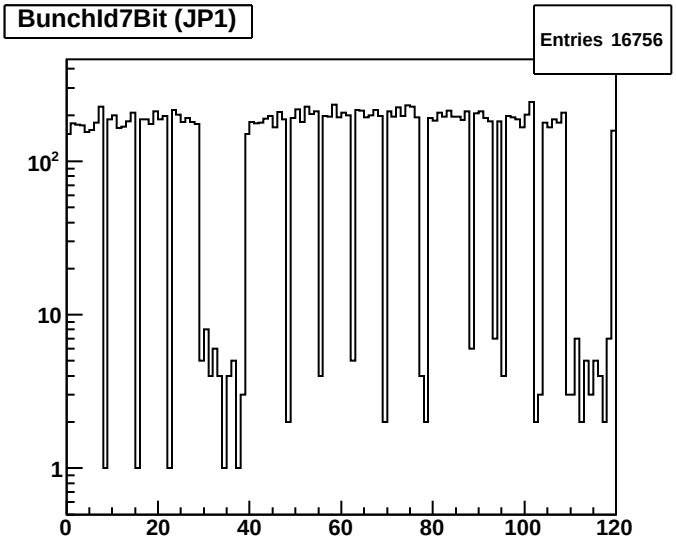

EMC L2 Input - HT23 bits
Entries 3
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

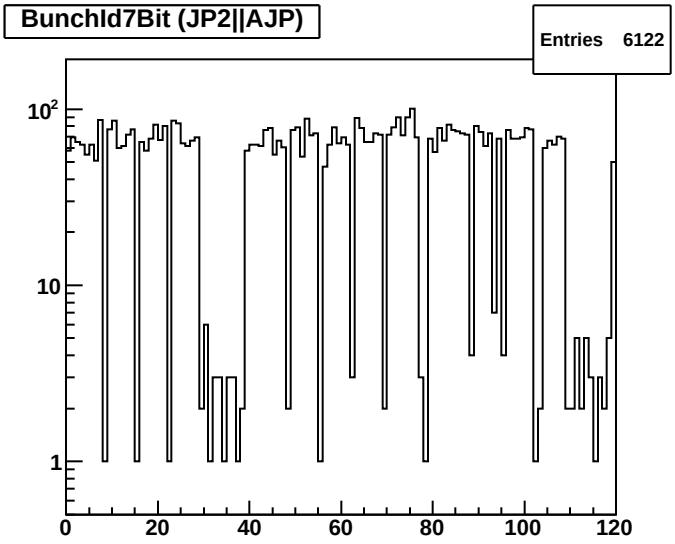

DAQ10k HT bits
Entries 49638

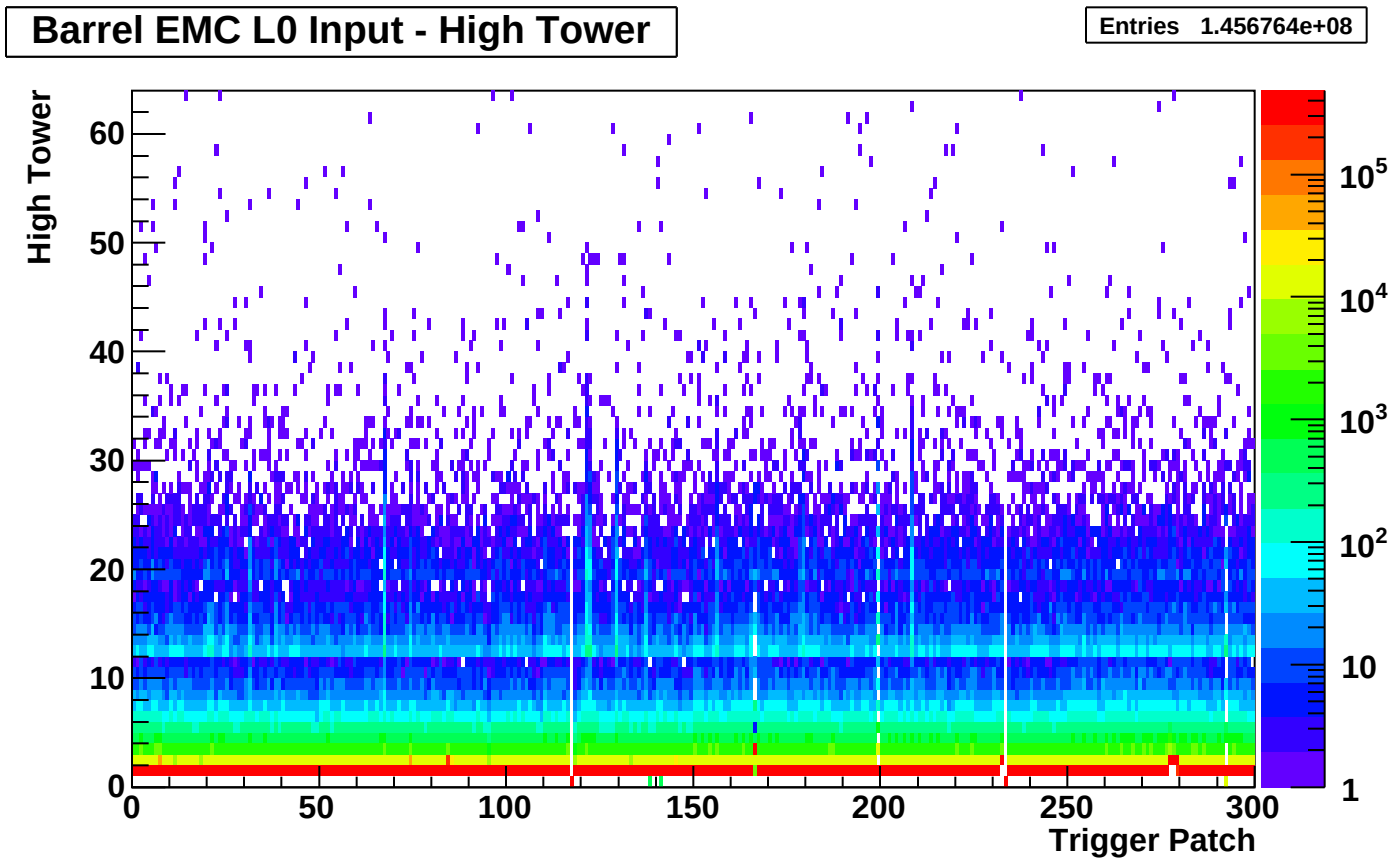

DAQ10k HT bits errors
Entries 3

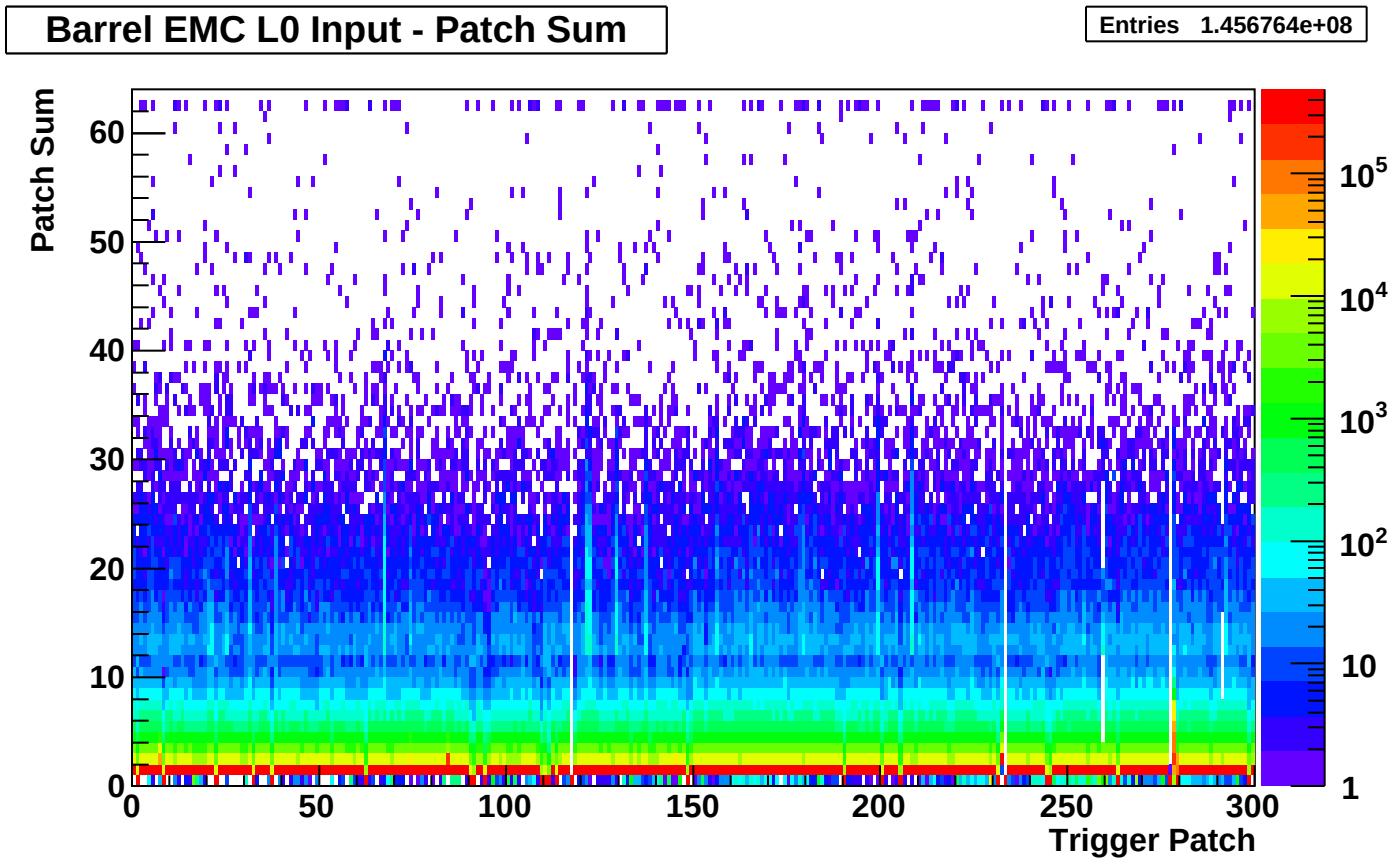

BunchId7Bit (BHT3)
Entries 49010

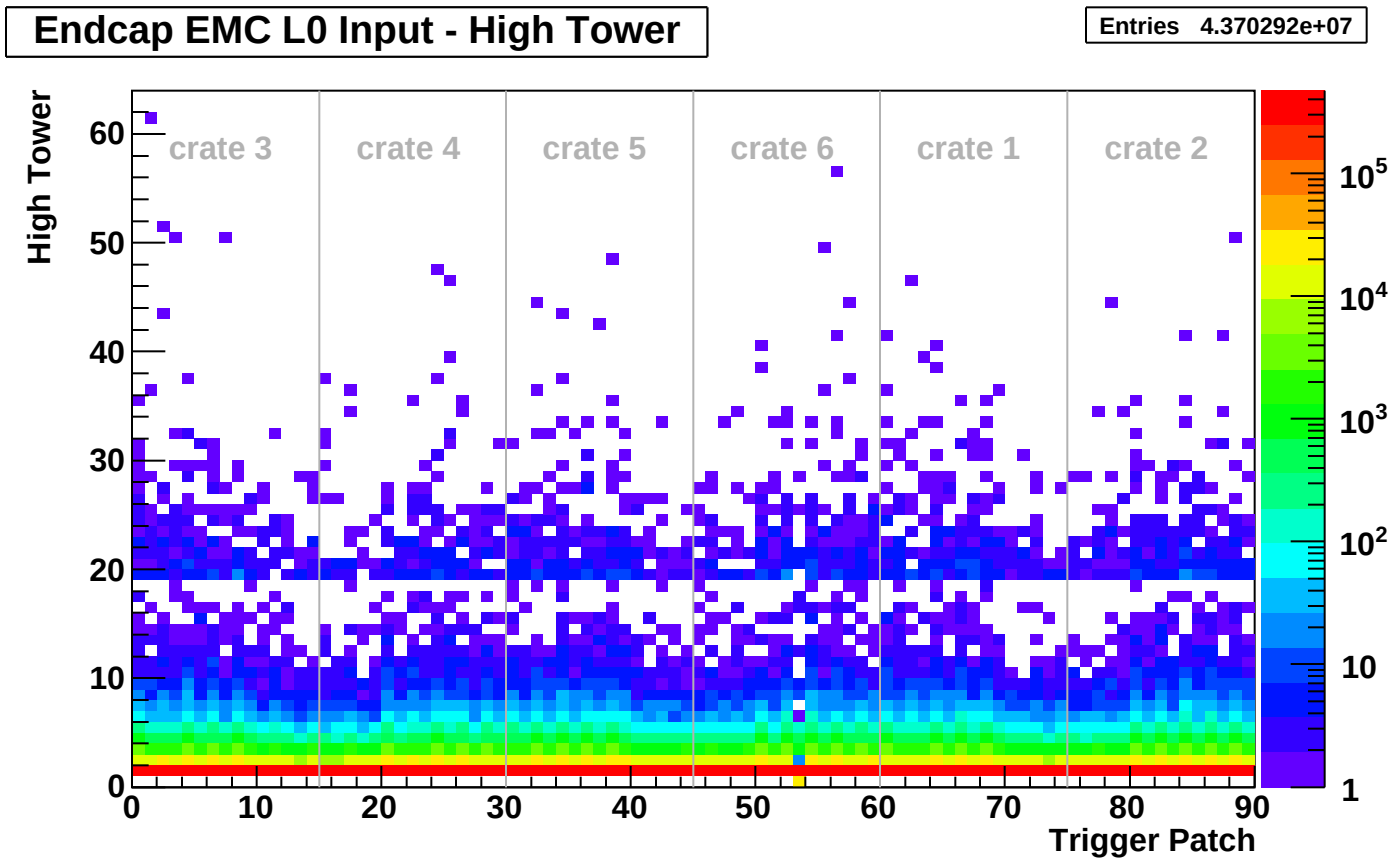

BunchId7Bit (all events)
Entries 485588

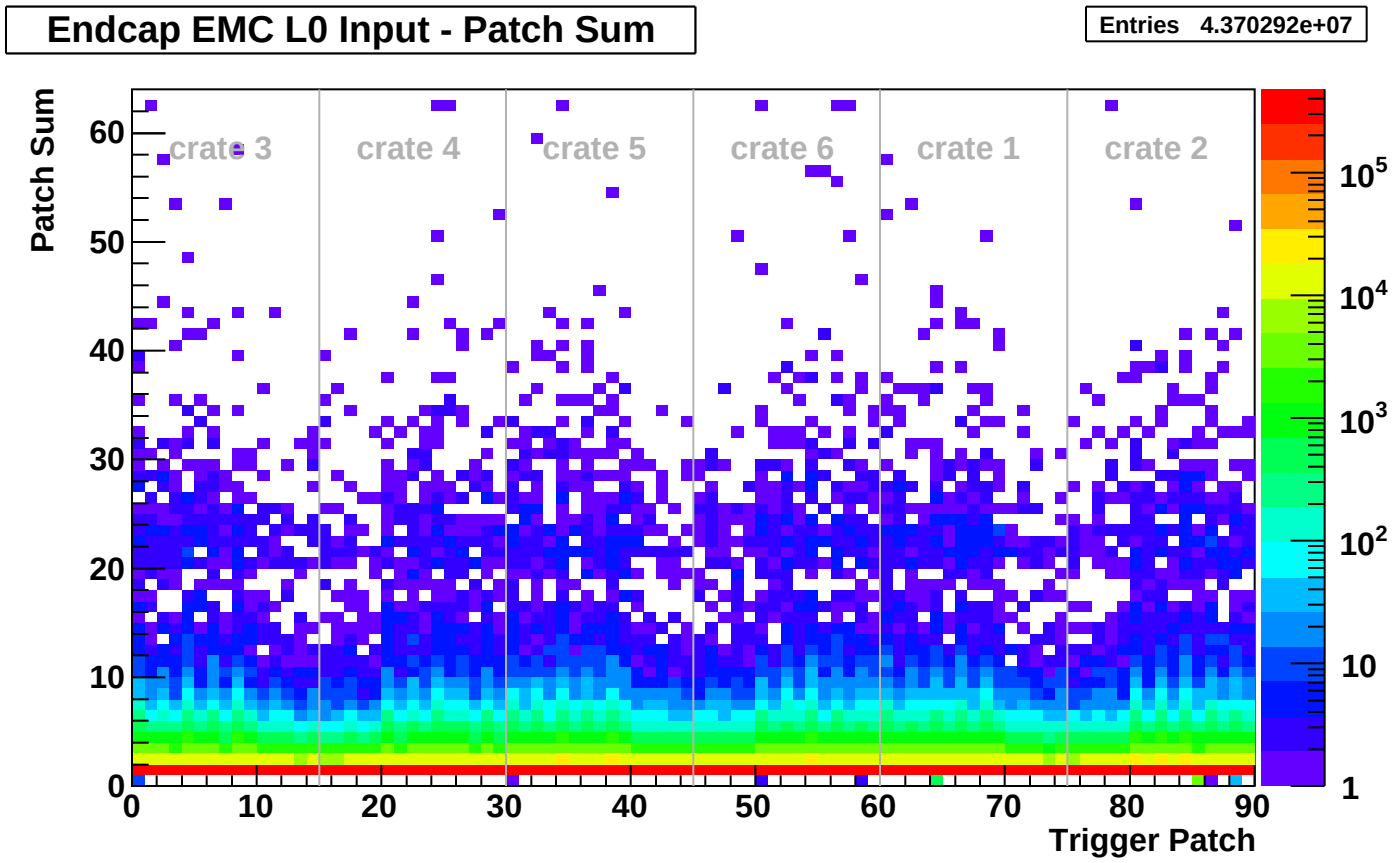

BunchId7Bit (JP1)
Entries 16756

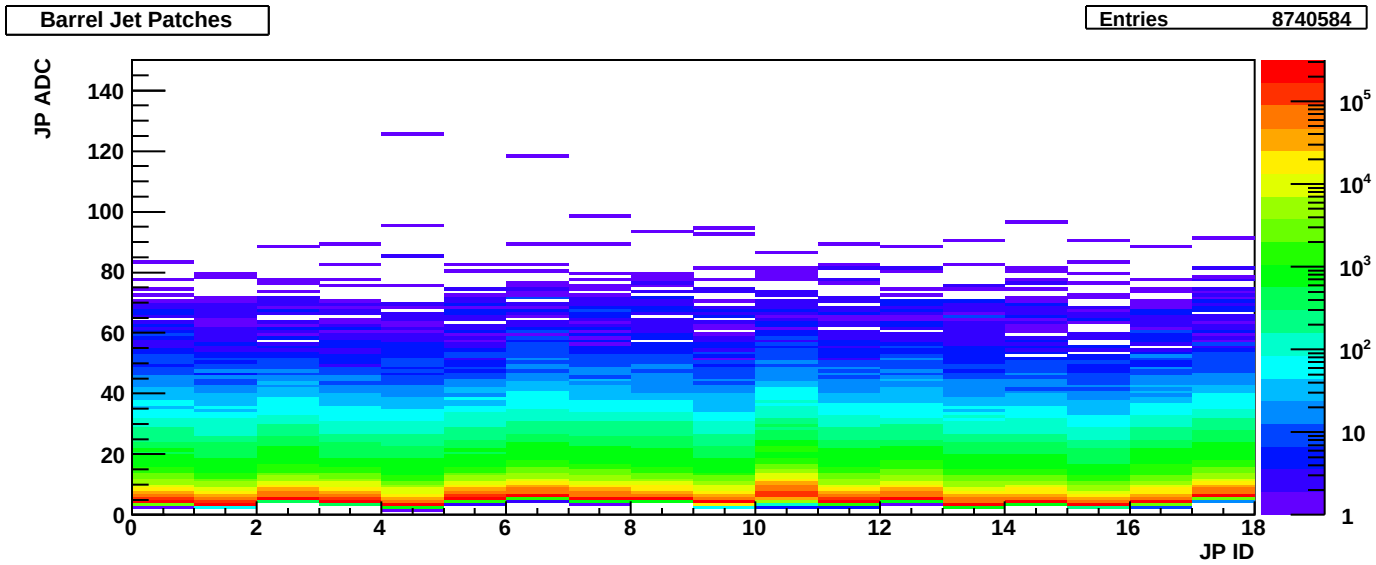

BunchId7Bit (JP2||AJP)
Entries 6122

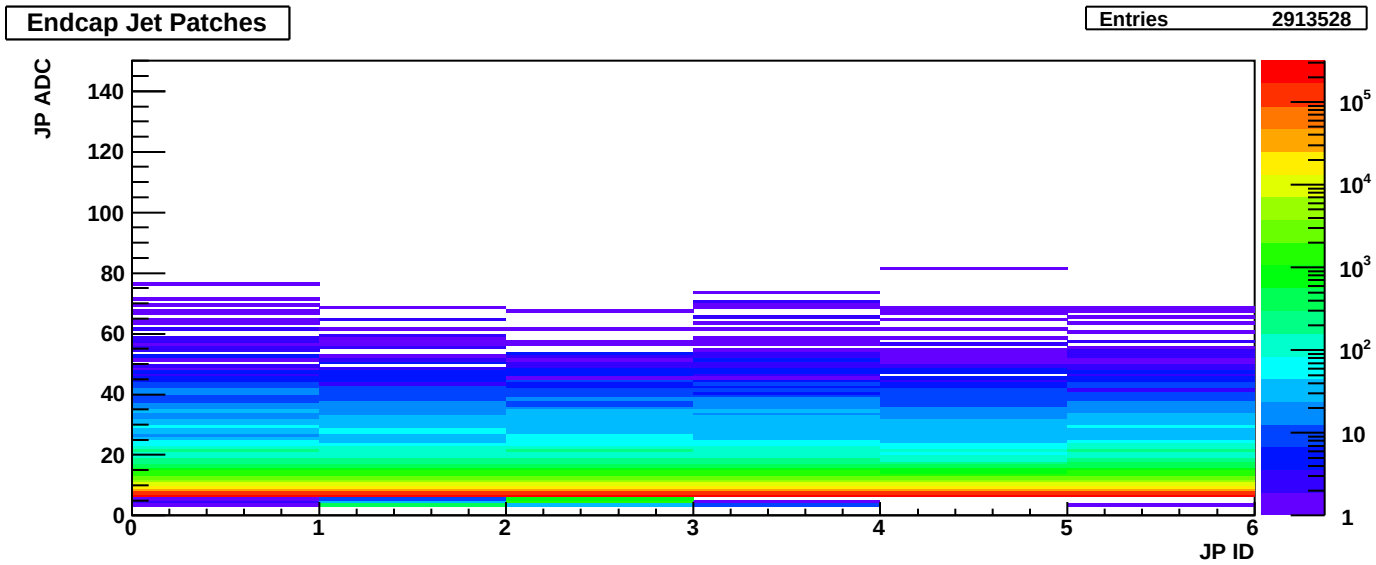

Barrel EMC L0 Input - High Tower
Entries 1.456764e+08
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

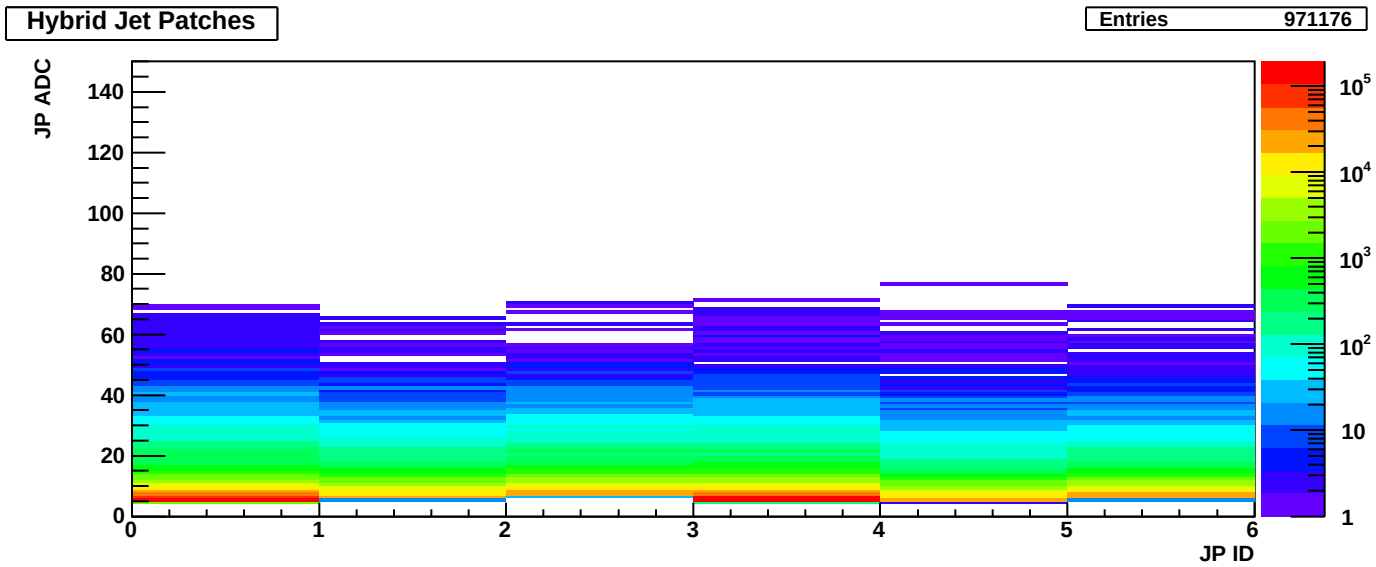

Barrel EMC L0 Input - Patch Sum
Entries 1.456764e+08
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

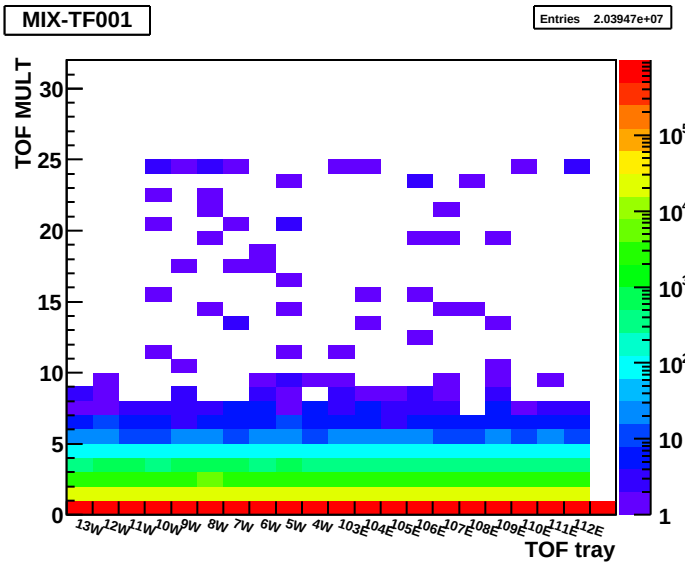

Endcap EMC L0 Input - High Tower
Entries 4.370292e+07
High Tower
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

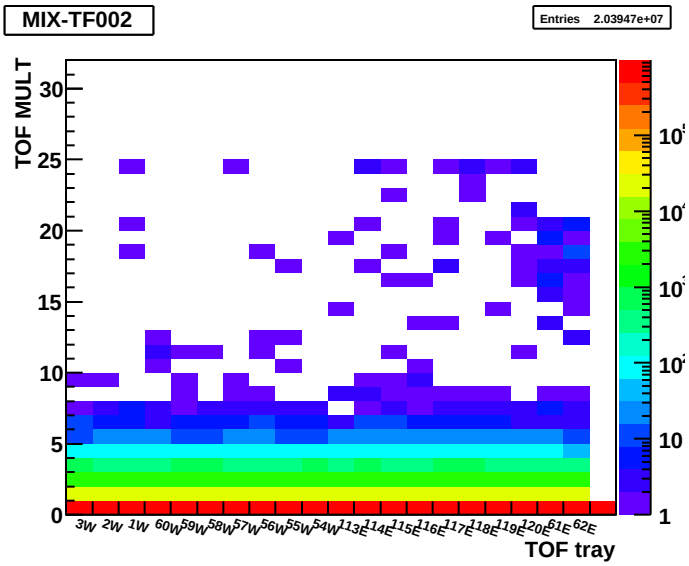

Endcap EMC L0 Input - Patch Sum
Entries 4.370292e+07
Patch Sum
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

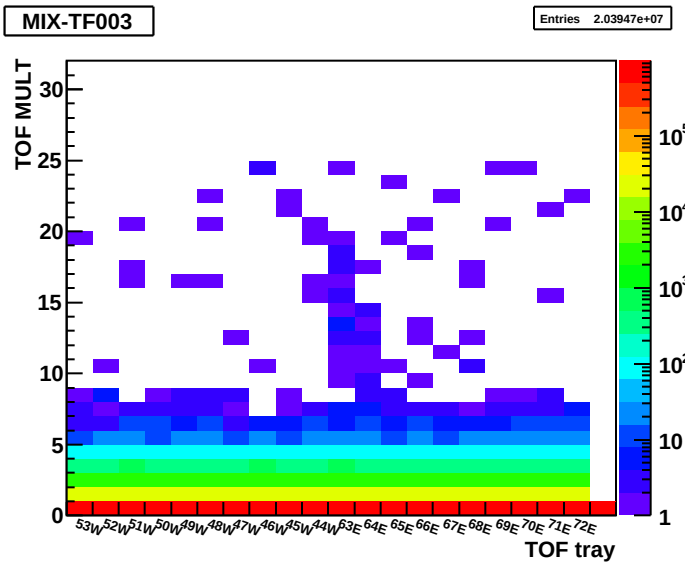

Barrel Jet Patches
Entries 8740584
JP ADC
JP ID

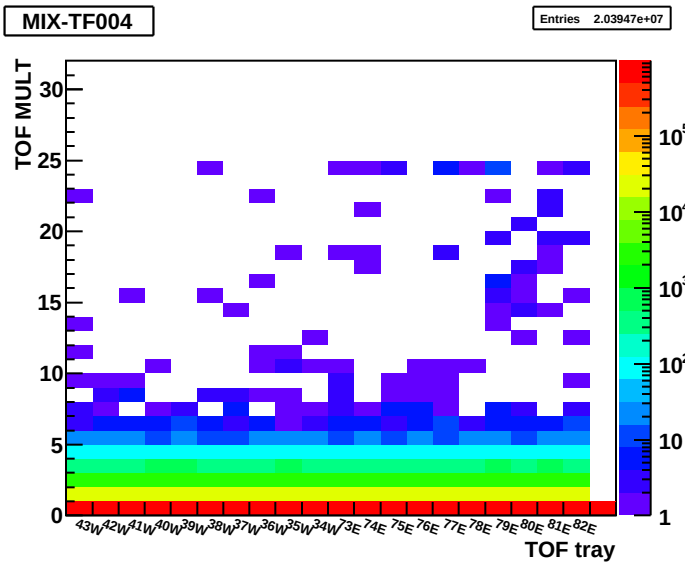

Endcap Jet Patches
Entries 2913528
JP ADC
JP ID

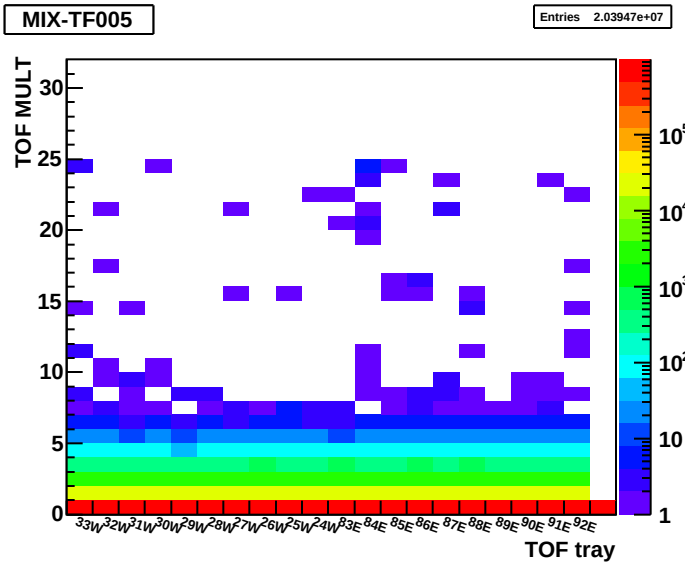

Hybrid Jet Patches
Entries 971176
JP ADC
JP ID

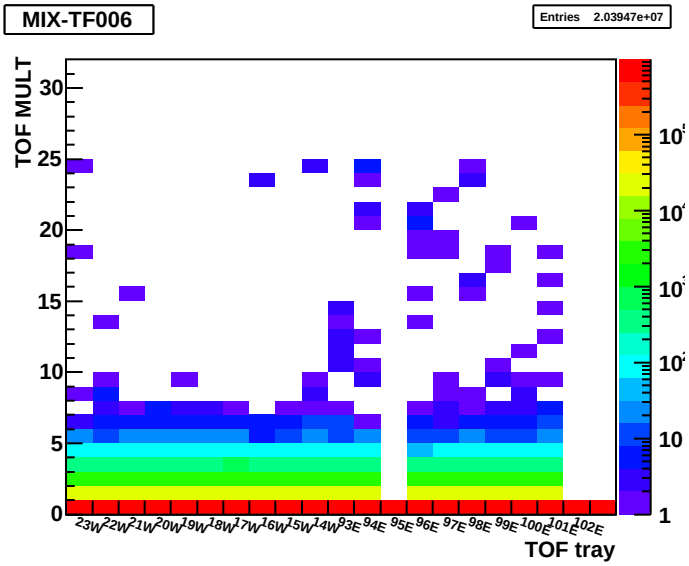

MIX-TF001
Entries 2.03947e+07
TOF MULT
TOF tray

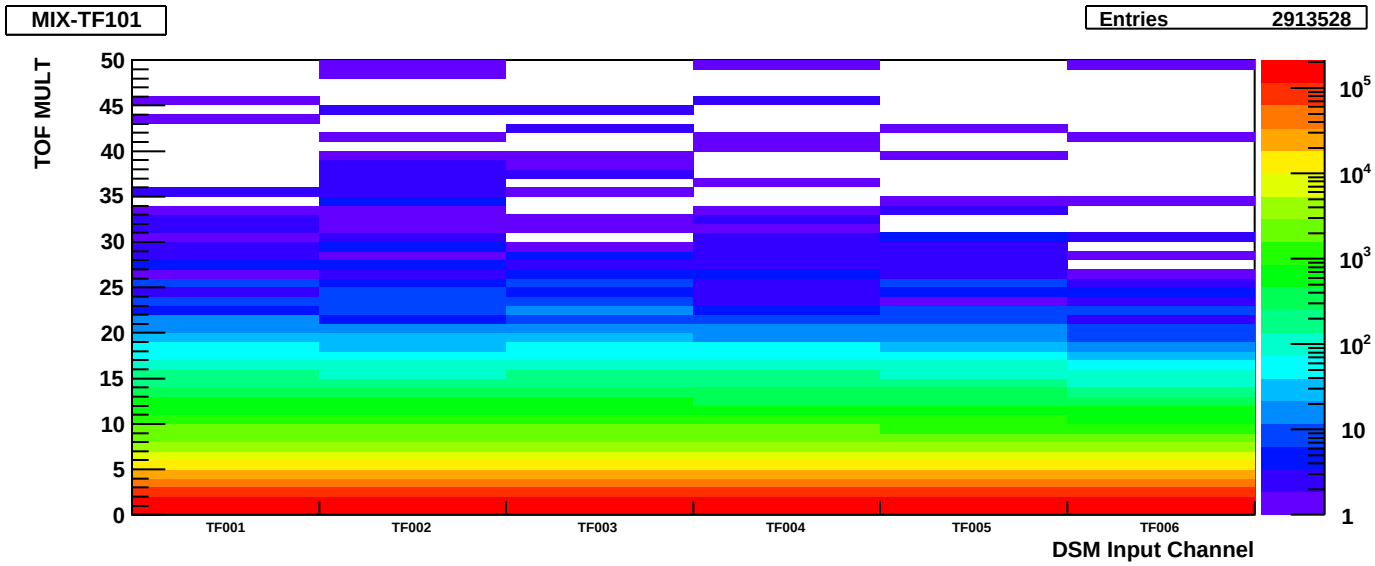

MIX-TF002
Entries 2.03947e+07
TOF MULT
TOF tray

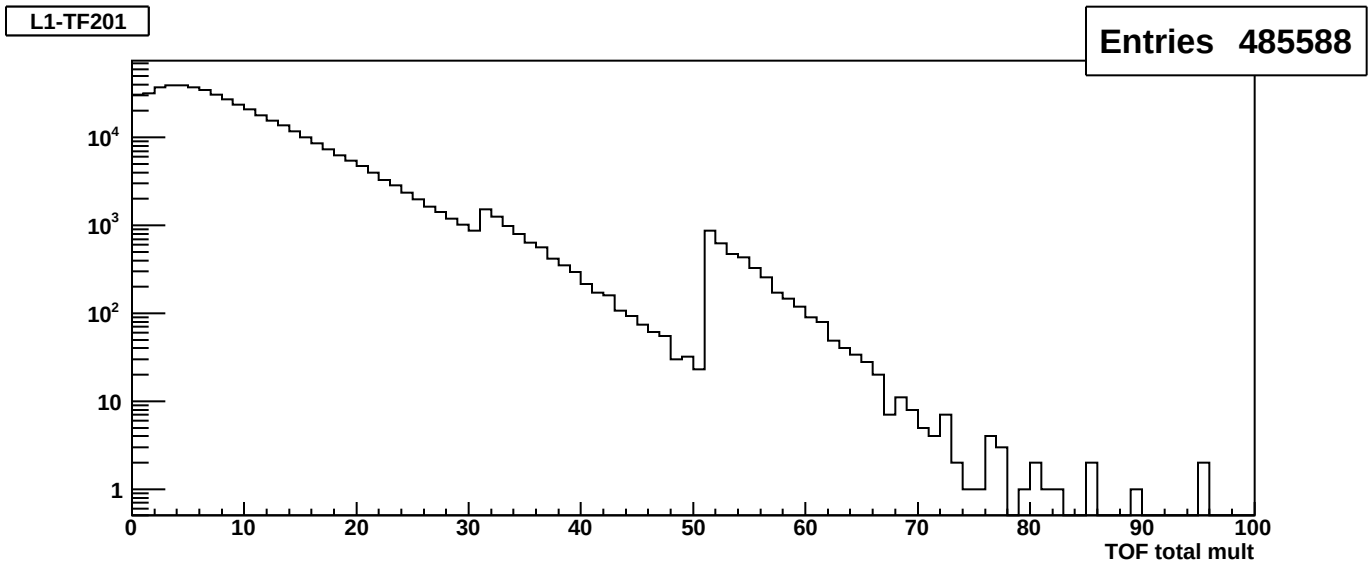

MIX-TF003
Entries 2.03947e+07
TOF MULT
TOF tray

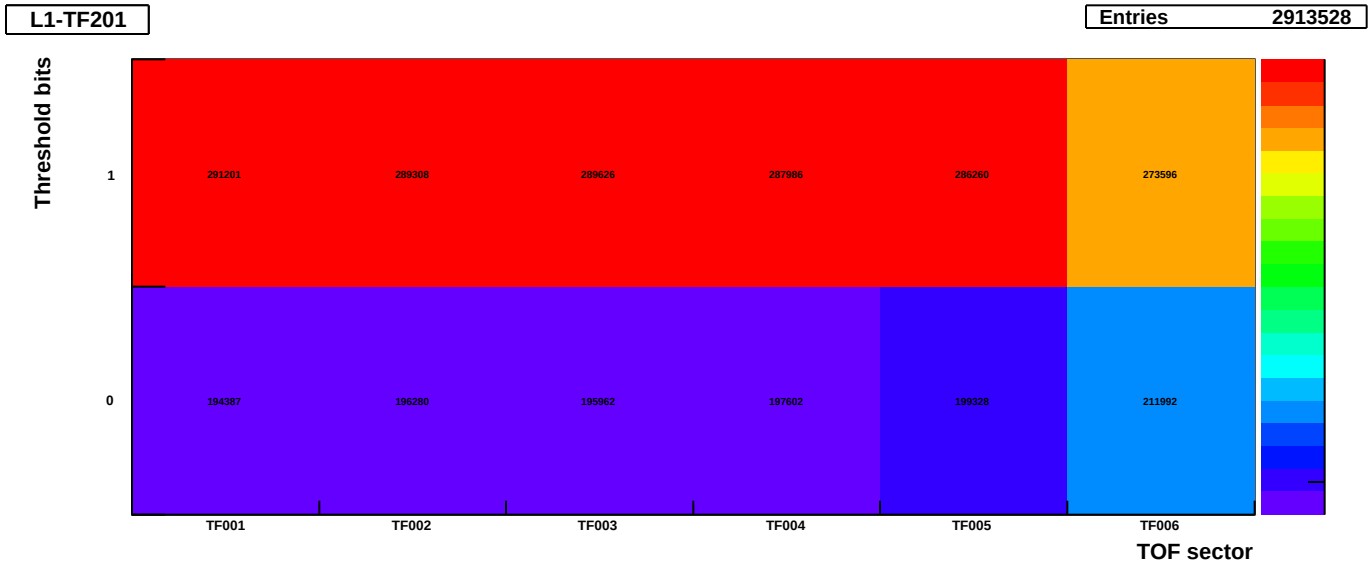

MIX-TF004
Entries 2.03947e+07
TOF MULT
TOF tray

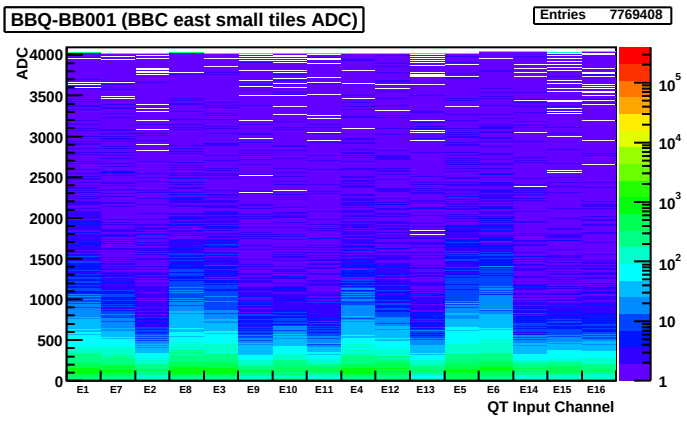

MIX-TF005
Entries 2.03947e+07
TOF MULT
TOF tray

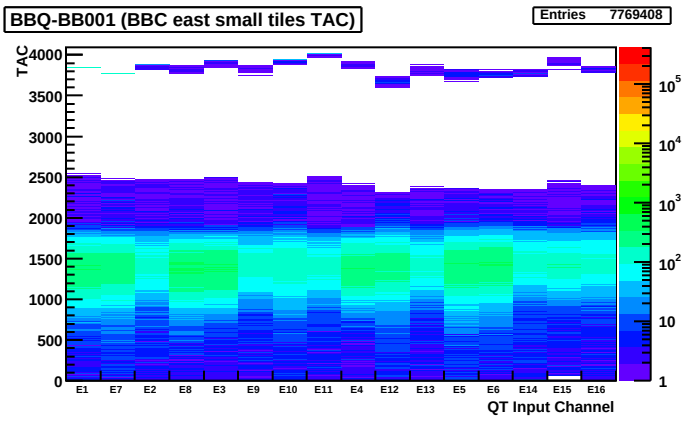

MIX-TF006
Entries 2.03947e+07
TOF MULT
TOF tray

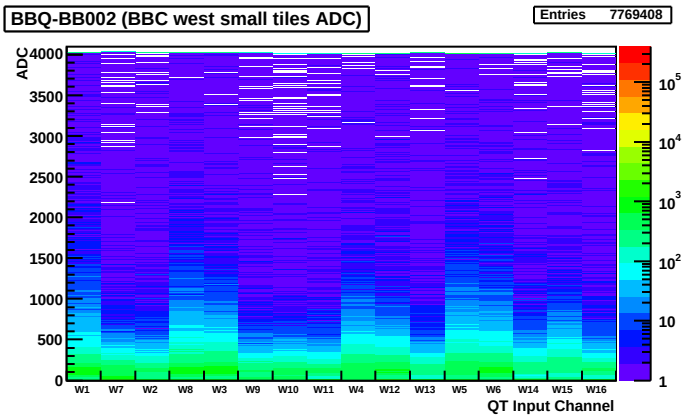

MIX-TF101
Entries 2913528
TOF MULT
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

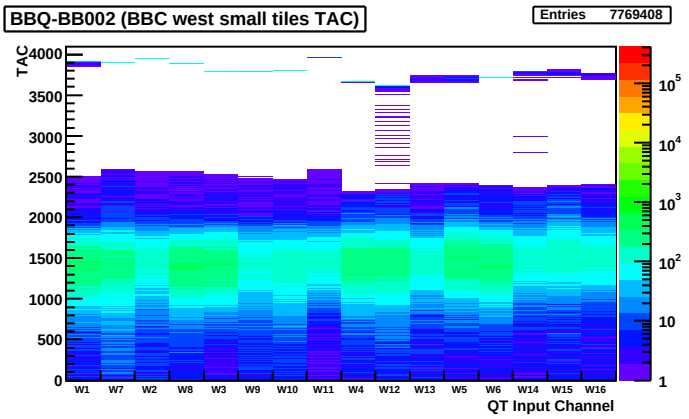

L1-TF201
Entries 485588
TOF total mult

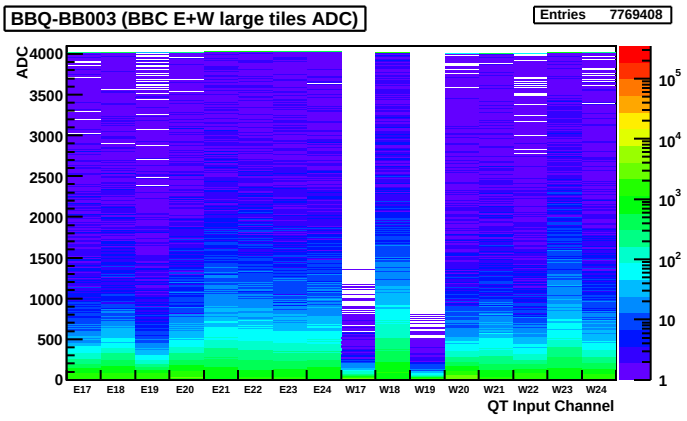

L1-TF201
Entries 2913528
Threshold bits
291201
289308
289626
287986
286260
273596
194387
196280
195962
197602
199328
211992
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector

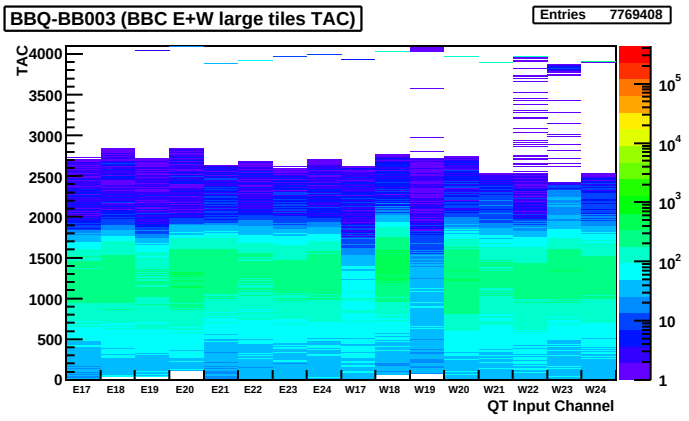

BBQ-BB001 (BBC east small tiles ADC)
Entries 7769408
ADC
QT Input Channel

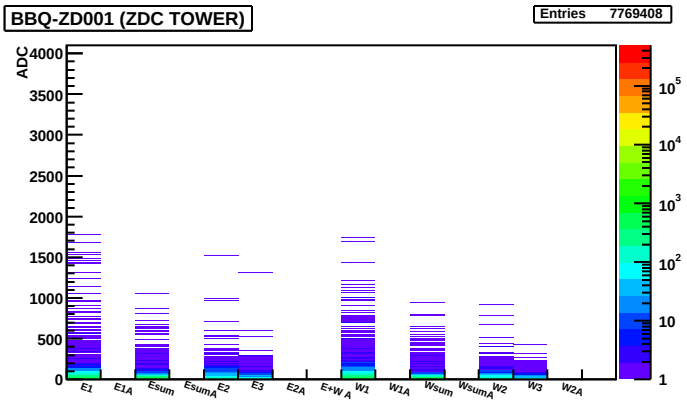

BBQ-BB001 (BBC east small tiles TAC)
Entries 7769408
TAC
QT Input Channel

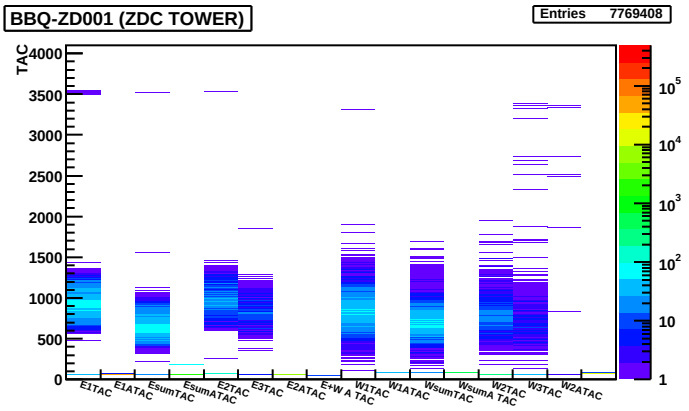

BBQ-BB002 (BBC west small tiles ADC)
Entries 7769408
ADC
QT Input Channel

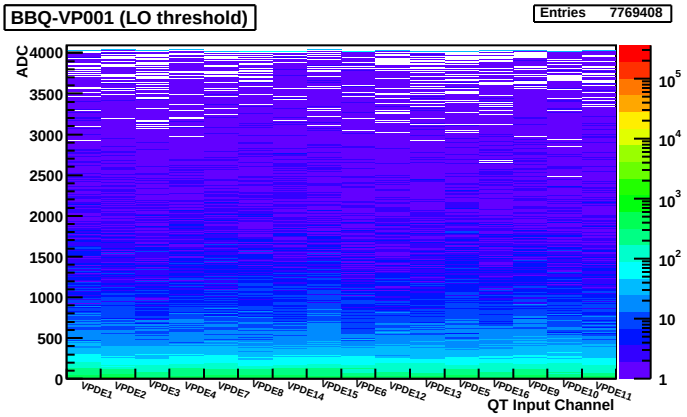

BBQ-BB002 (BBC west small tiles TAC)
Entries 7769408
TAC
QT Input Channel

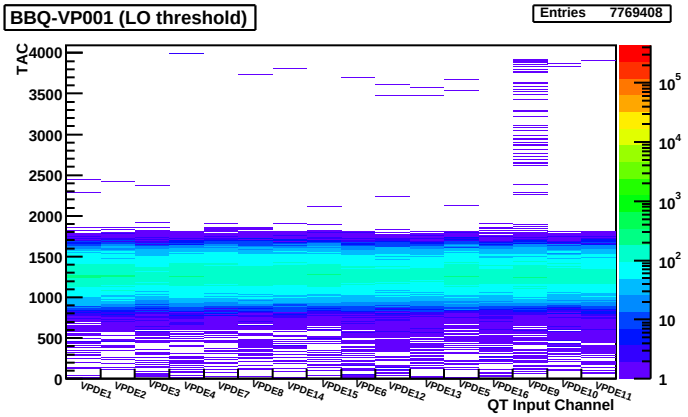

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 7769408
ADC
QT Input Channel

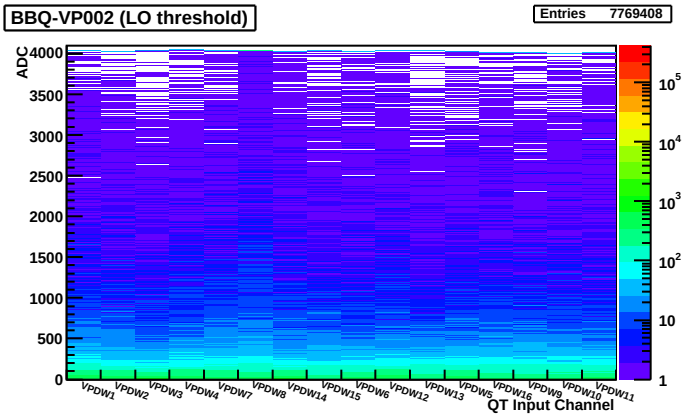

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 7769408
TAC
QT Input Channel

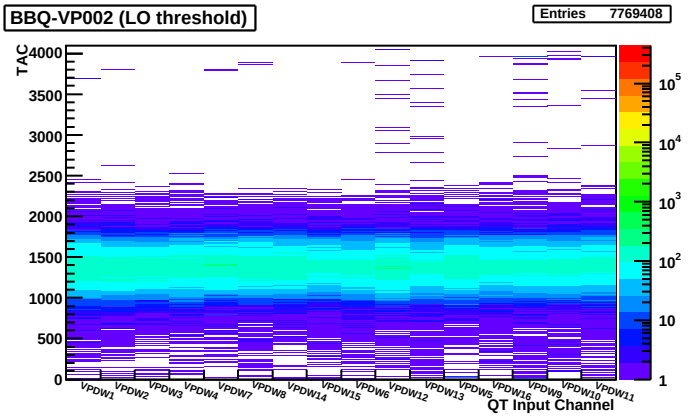

BBQ-ZD001 (ZDC TOWER)
Entries 7769408
ADC

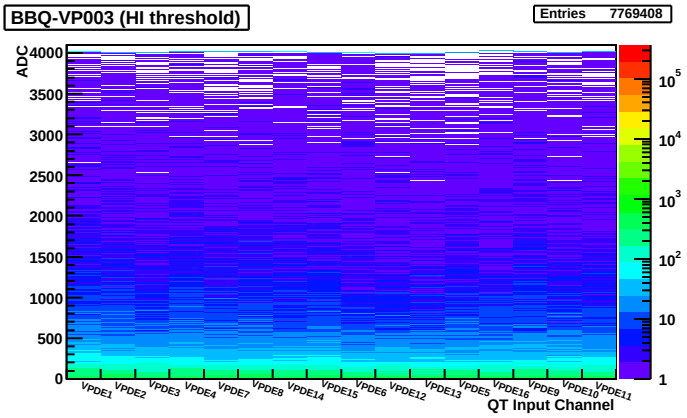

BBQ-ZD001 (ZDC TOWER)
Entries 7769408
TAC

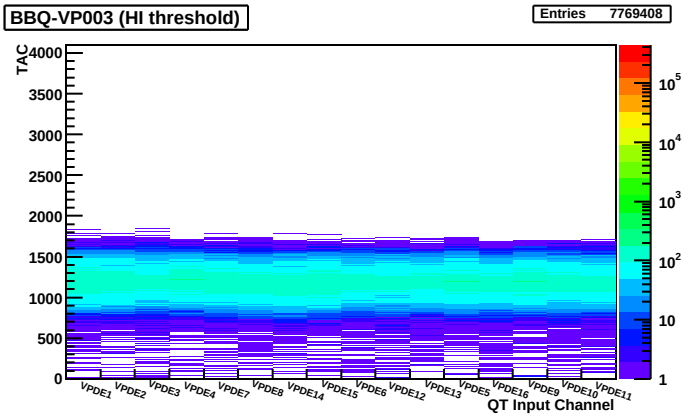

BBQ-VP001 (LO threshold)
Entries 7769408
ADC
QT Input Channel

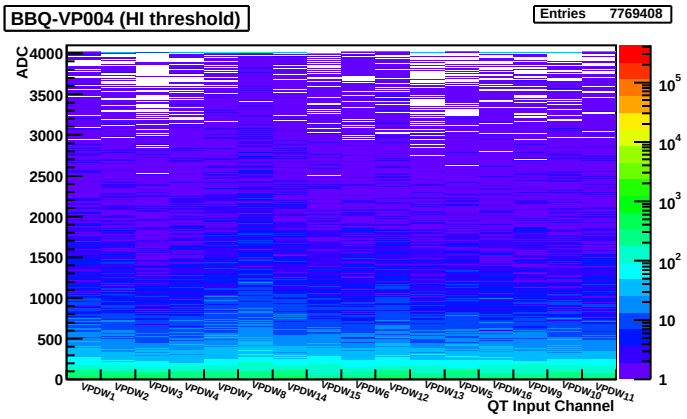

BBQ-VP001 (LO threshold)
Entries 7769408
TAC
QT Input Channel

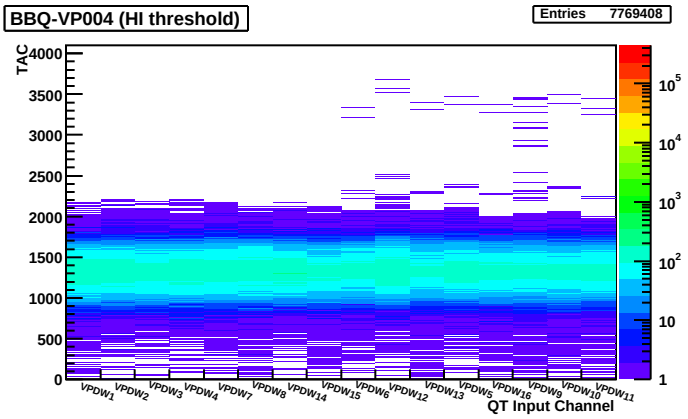

BBQ-VP002 (LO threshold)
Entries 7769408
ADC
QT Input Channel

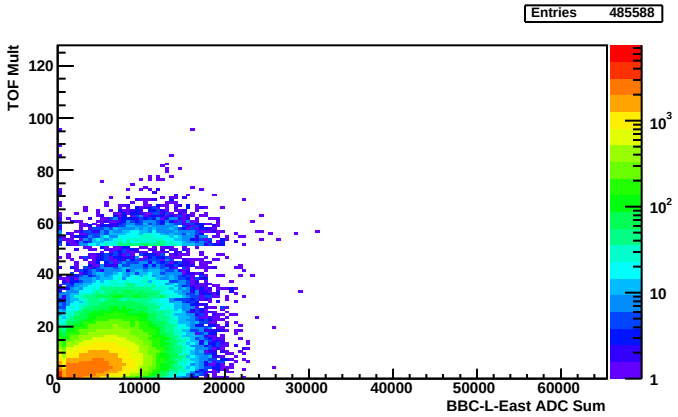

BBQ-VP002 (LO threshold)
Entries 7769408
TAC
QT Input Channel

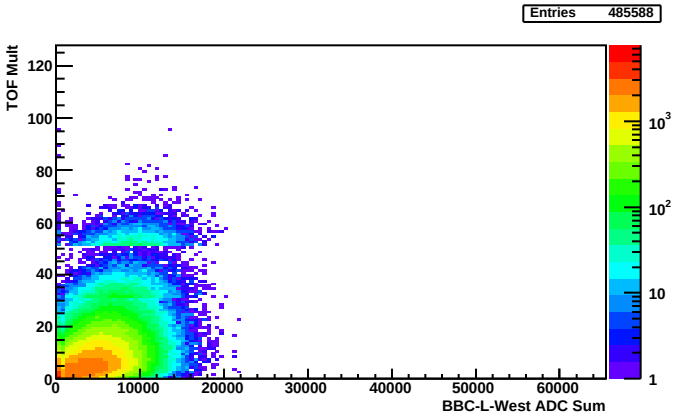

BBQ-VP003 (HI threshold)
Entries 7769408
ADC
QT Input Channel

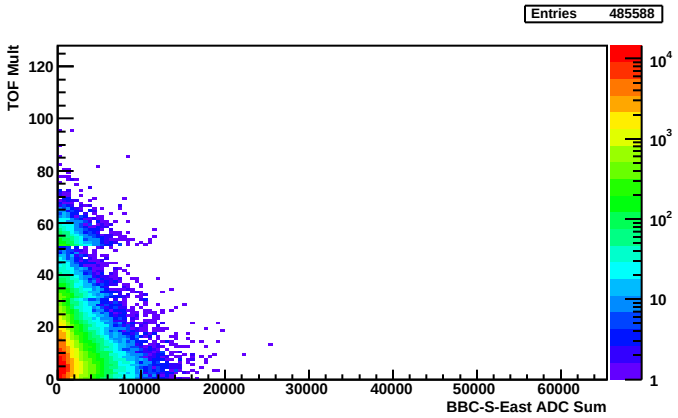

BBQ-VP003 (HI threshold)
Entries 7769408
TAC
QT Input Channel

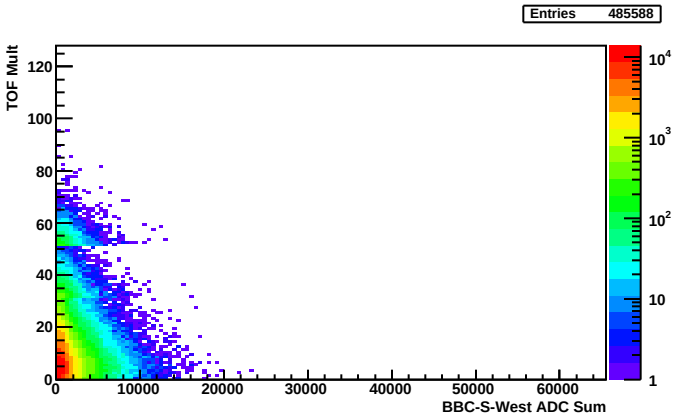

BBQ-VP004 (HI threshold)
Entries 7769408
ADC
QT Input Channel

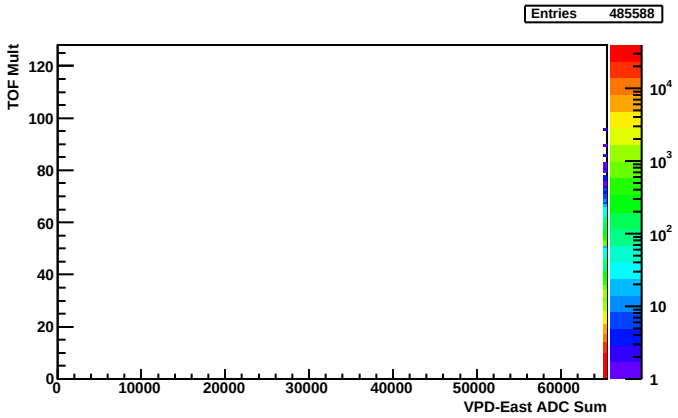

BBQ-VP004 (HI threshold)
Entries 7769408
TAC
QT Input Channel

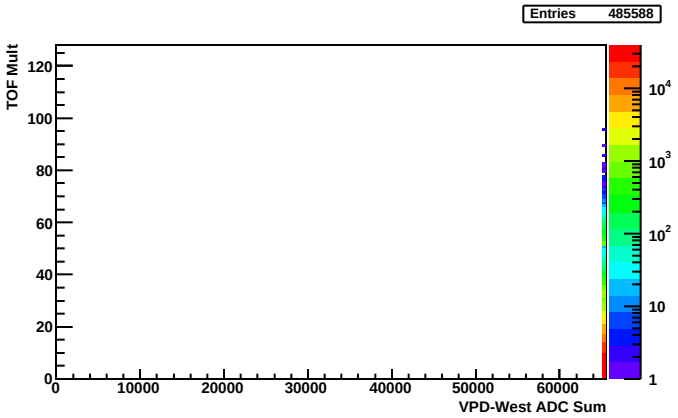

Entries 485588
TOF Mult
BBC-L-East ADC Sum

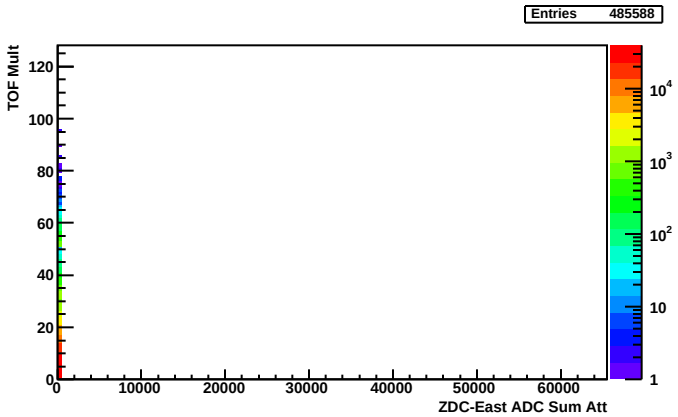

Entries 485588
TOF Mult
BBC-L-West ADC Sum

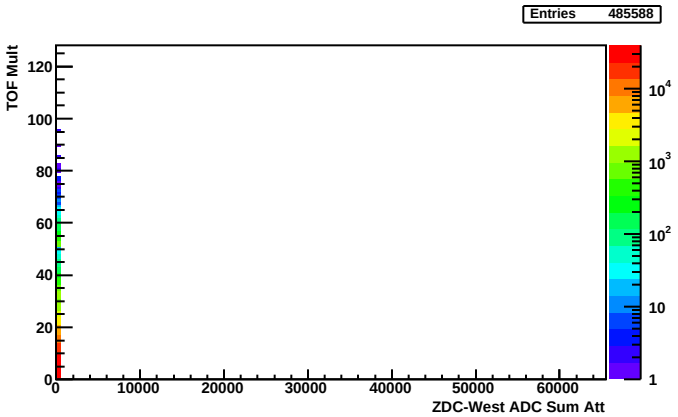

Entries 485588
TOF Mult
BBC-S-East ADC Sum

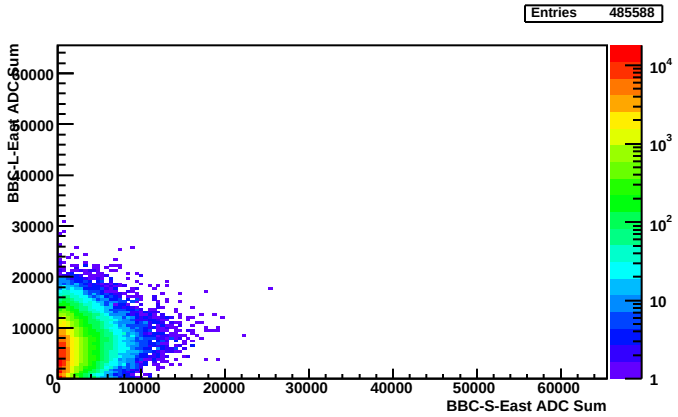

Entries 485588
TOF Mult
BBC-S-West ADC Sum

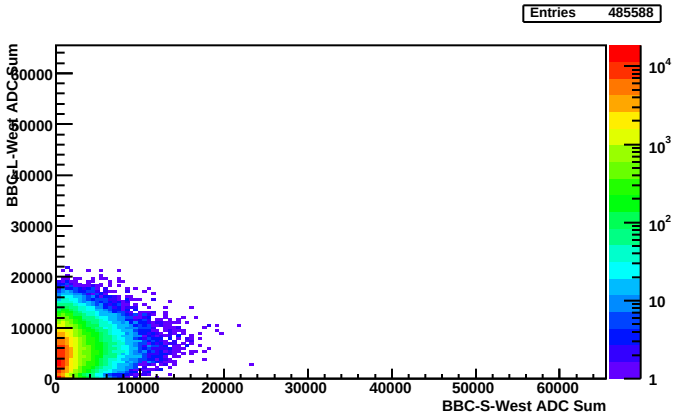

Entries 485588
TOF Mult
VPD-East ADC Sum

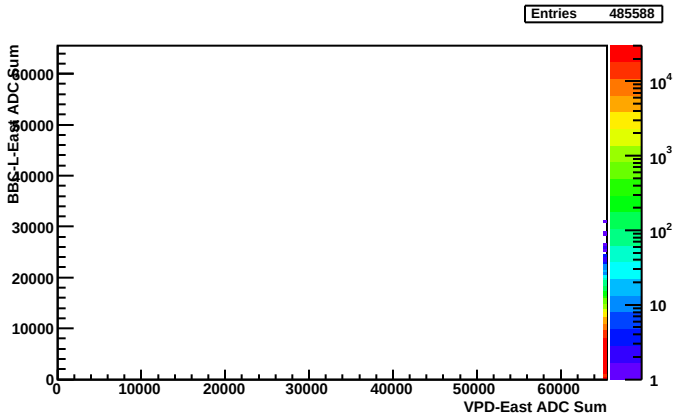

Entries 485588
TOF Mult
VPD-West ADC Sum

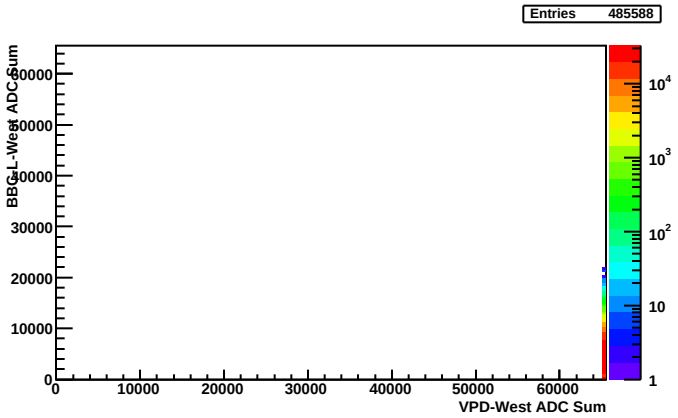

Entries 485588
TOF Mult
ZDC-East ADC Sum Att

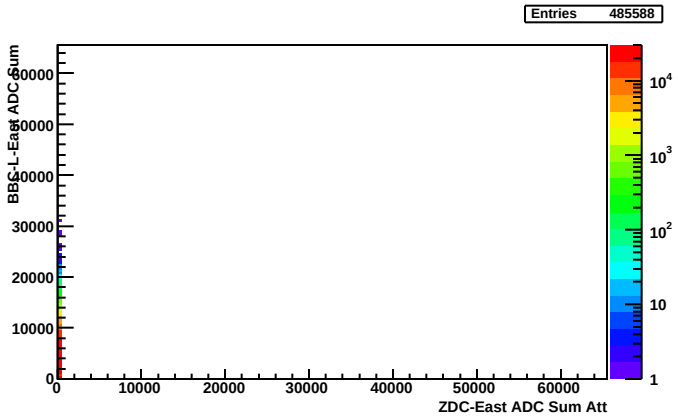

Entries 485588
TOF Mult
ZDC-West ADC Sum Att

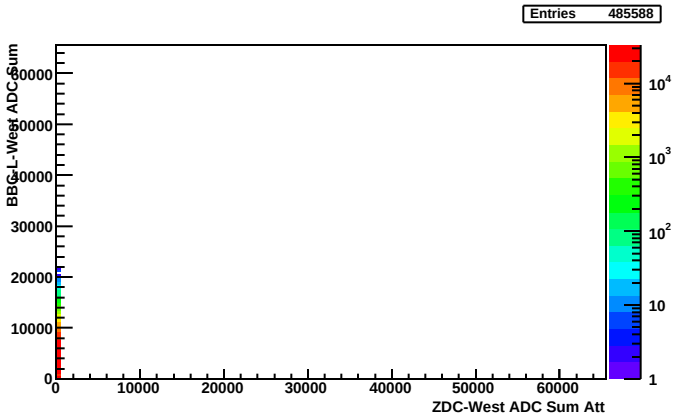

Entries 485588
BBC-L-East ADC Sum
BBC-S-East ADC Sum

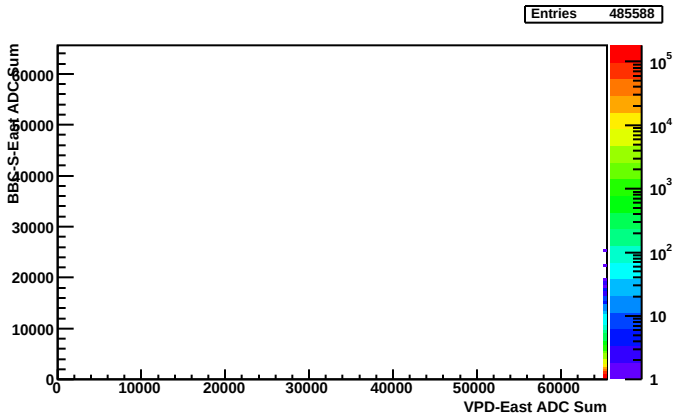

Entries 485588
BBC-L-West ADC Sum
BBC-S-West ADC Sum

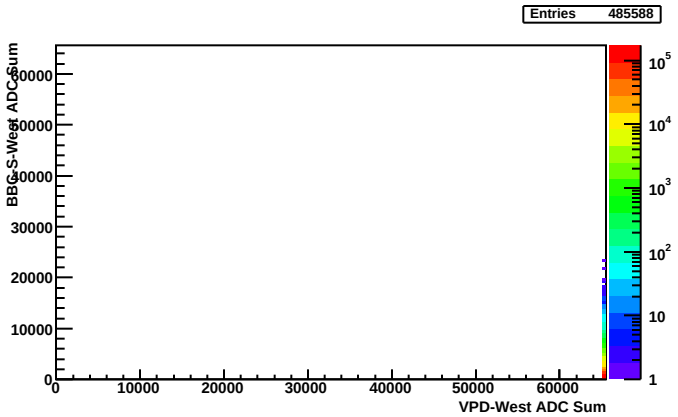

Entries 485588
BBC-L-East ADC Sum
VPD-East ADC Sum

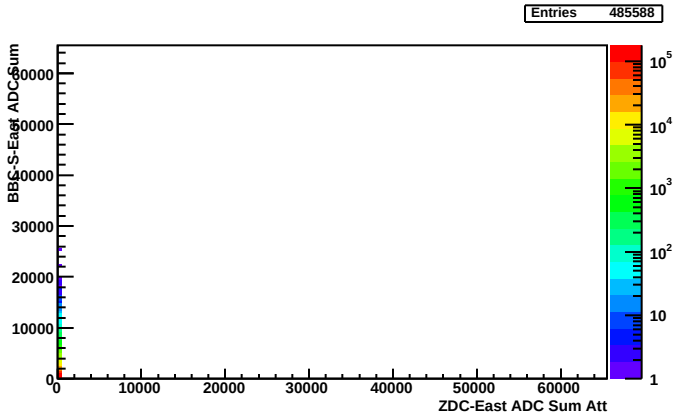

Entries 485588
BBC-L-West ADC Sum
VPD-West ADC Sum

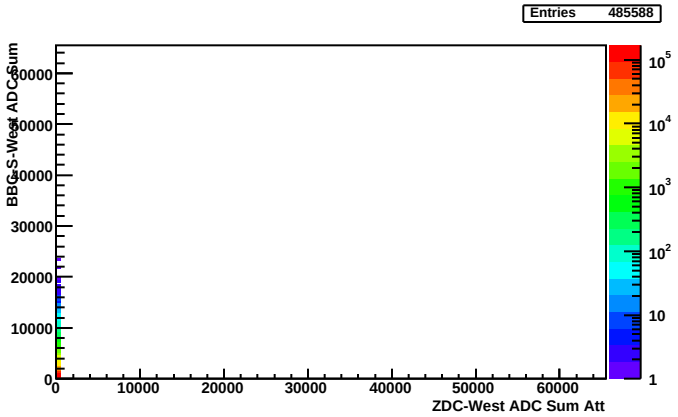

Entries 485588
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

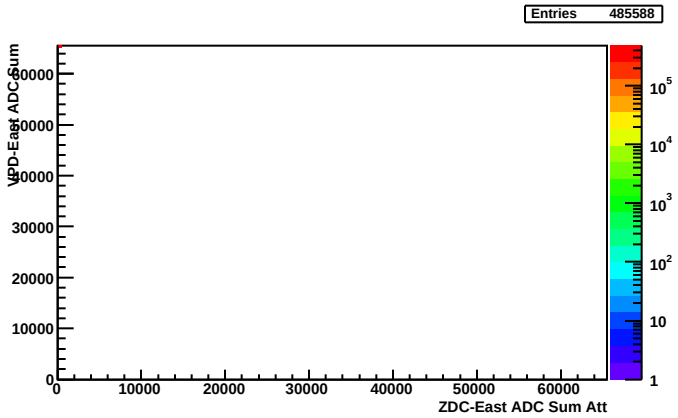

Entries 485588
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

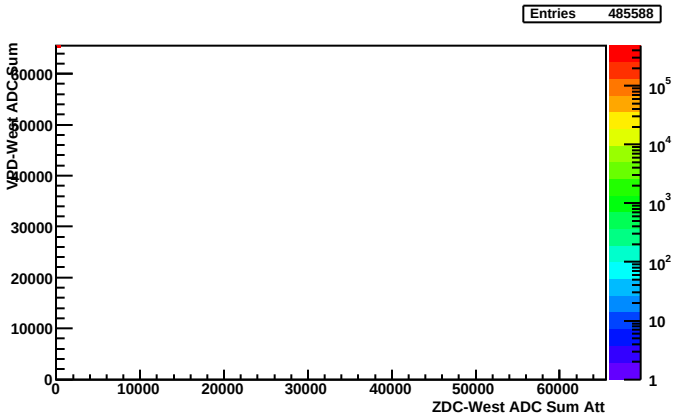

Entries 485588
BBC-S-East ADC Sum
VPD-East ADC Sum

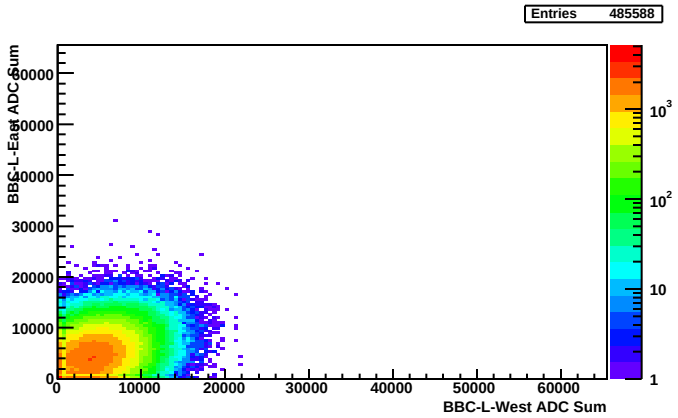

Entries 485588
BBC-S-West ADC Sum
VPD-West ADC Sum

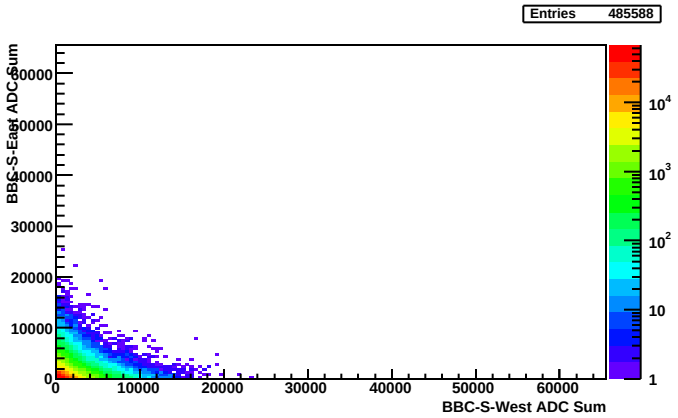

Entries 485588
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

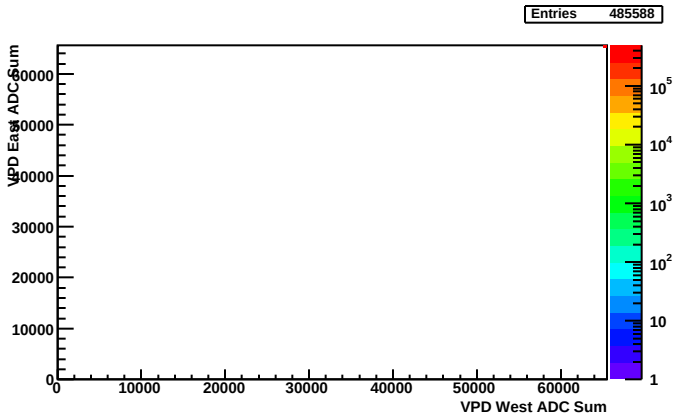

Entries 485588
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

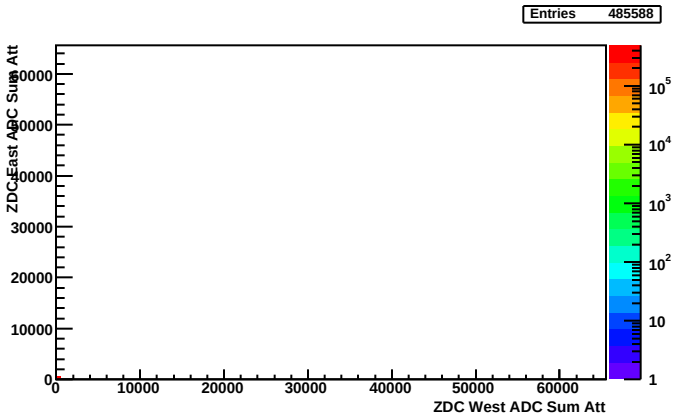

Entries 485588
VPD-East ADC Sum
ZDC-East ADC Sum Att

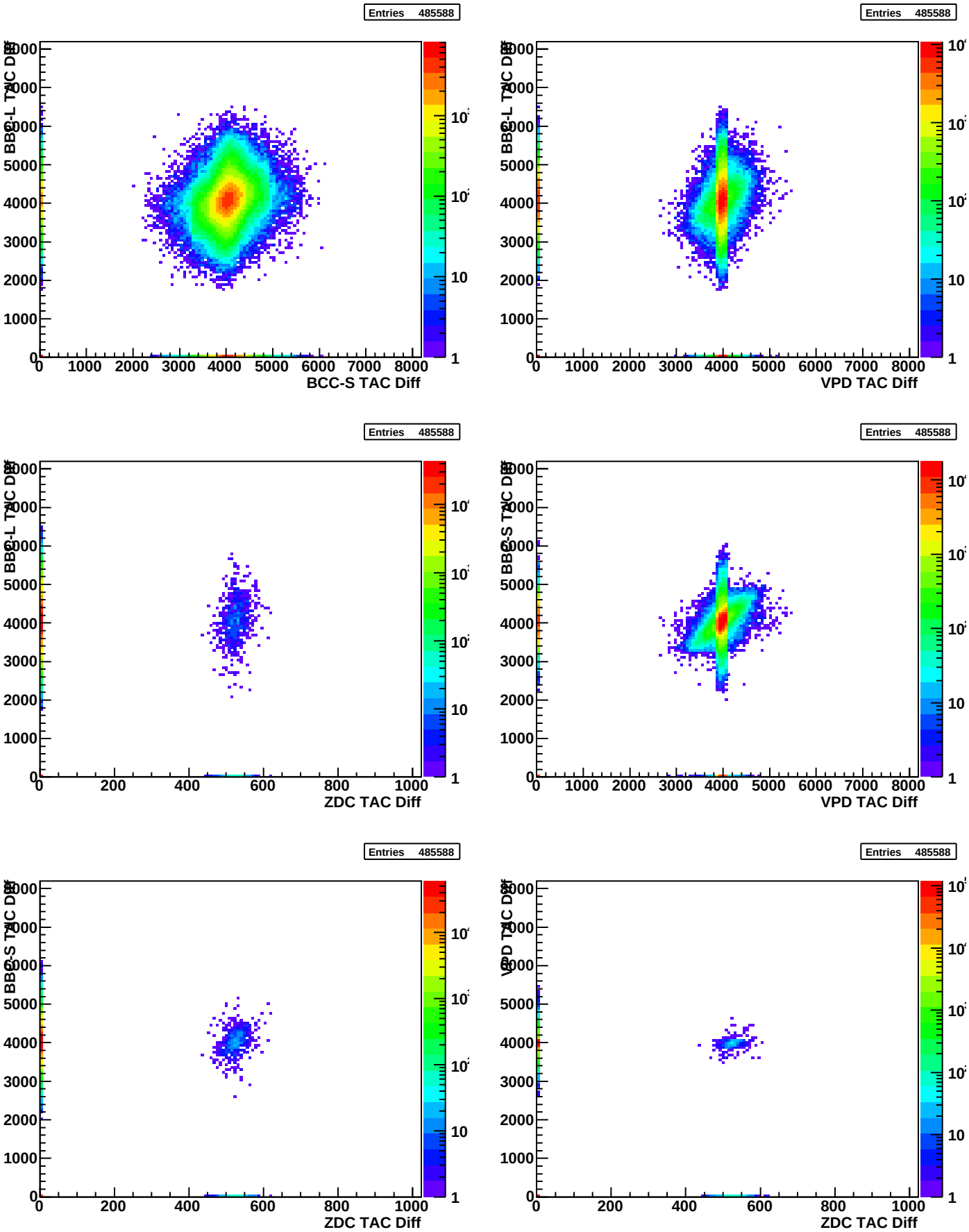

Entries 485588
VPD-West ADC Sum
ZDC-West ADC Sum Att

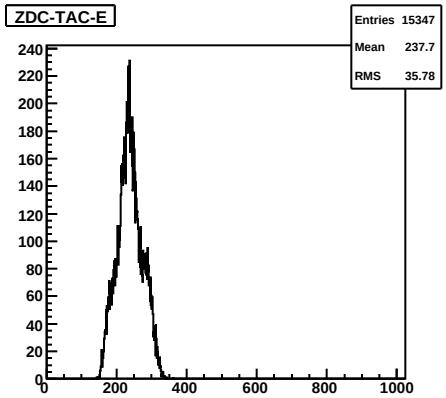

Entries 485588
BBC-L-East ADC Sum
BBC-L-West ADC Sum

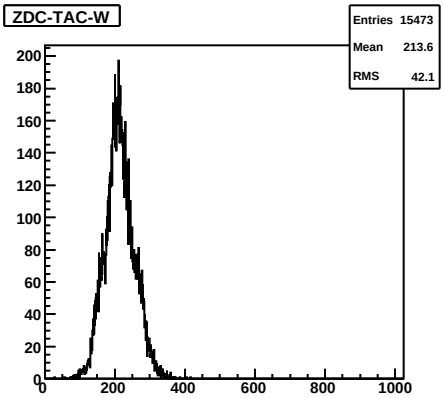

Entries 485588
BBC-S-East ADC Sum
BBC-S-West ADC Sum

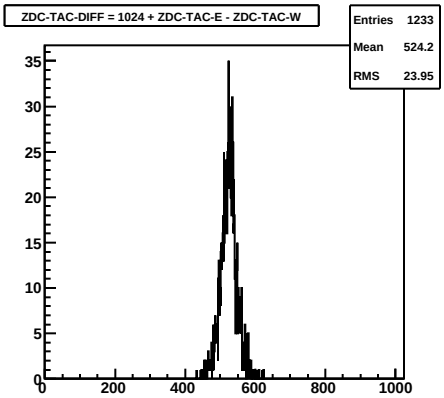

Entries 485588
VPD East ADC Sum
VPD West ADC Sum

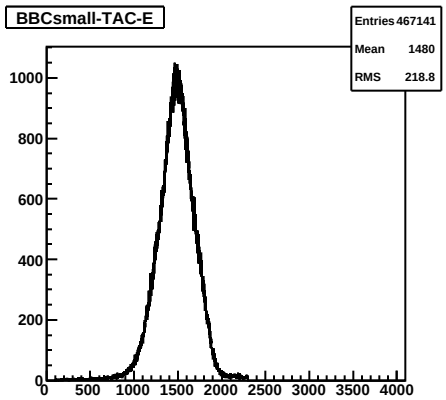

Entries 485588
ZDC East ADC Sum Att
ZDC West ADC Sum Att

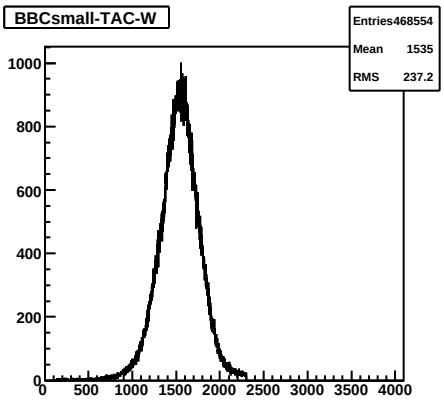

Entries 485588
BBC-L TAC Diff
BCC-S TAC Diff
Entries 485588
BBC-L TAC Diff
VPD TAC Diff
Entries 485588
BBC-L TAC Diff
ZDC TAC Diff
Entries 485588
BBC-S TAC Diff
VPD TAC Diff
Entries 485588
BBC-S TAC Diff
ZDC TAC Diff
Entries 485588
VPD TAC Diff
ZDC TAC Diff

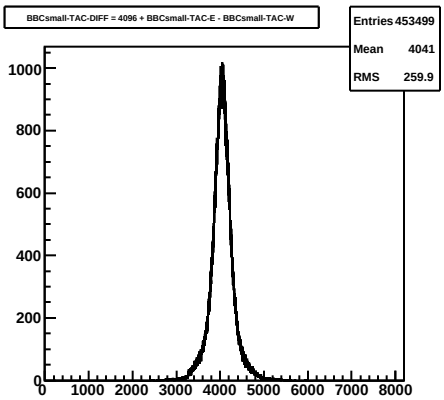

ZDC-TAC-E
Entries 15347
Mean 237.7
RMS 35.78

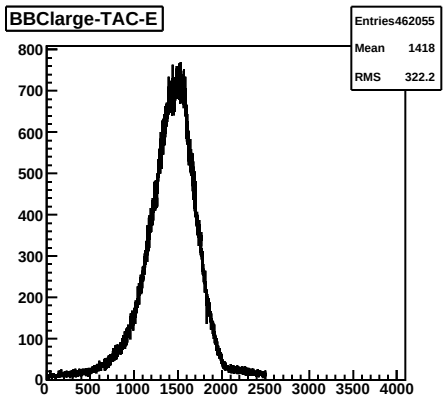

ZDC-TAC-W
Entries 15473
Mean 213.6
RMS 42.1

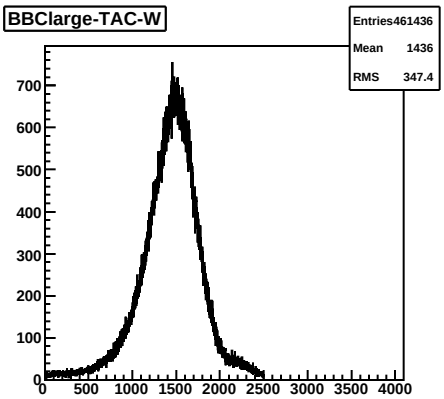

ZDC-TAC-DIFF = 1024 + ZDC-TAC-E - ZDC-TAC-W
Entries 1233
Mean 524.2
RMS 23.95

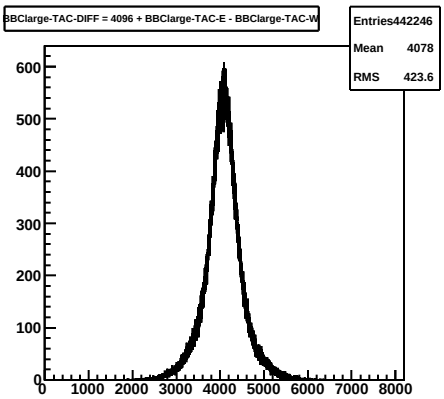

BBCsmall-TAC-E
Entries 467141
Mean 1480
RMS 218.8

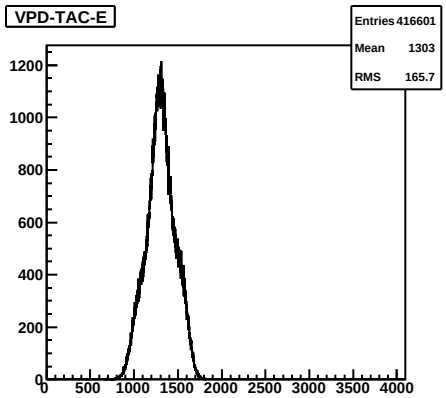

BBCsmall-TAC-W
Entries 468554
Mean 1535
RMS 237.2

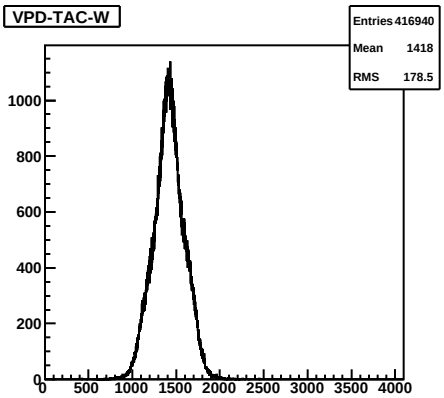

BBCsmall-TAC-DIFF = 4096 + BBCsmall-TAC-E - BBCsmall-TAC-W
Entries 453499
Mean 4041
RMS 259.9

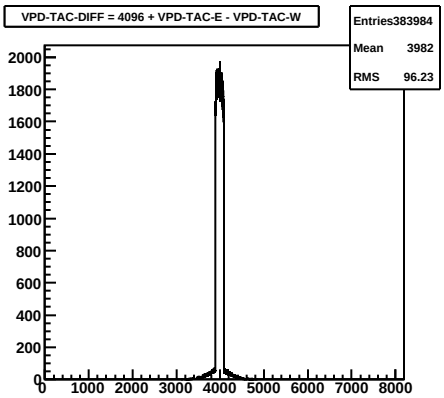

BBClarge-TAC-E
Entries 462055
Mean 1418
RMS 322.2

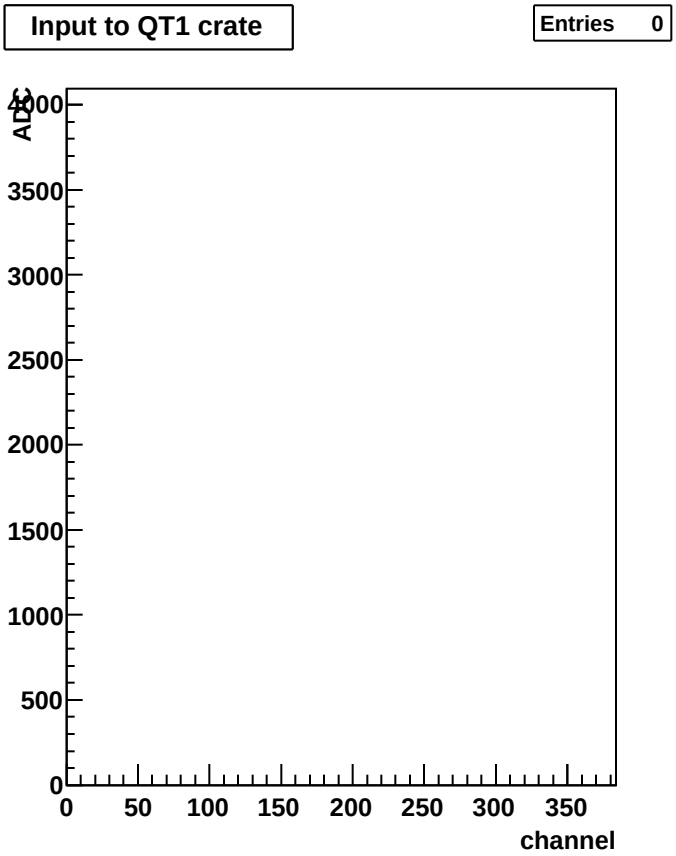

BBClarge-TAC-W
Entries 461436
Mean 1436
RMS 347.4

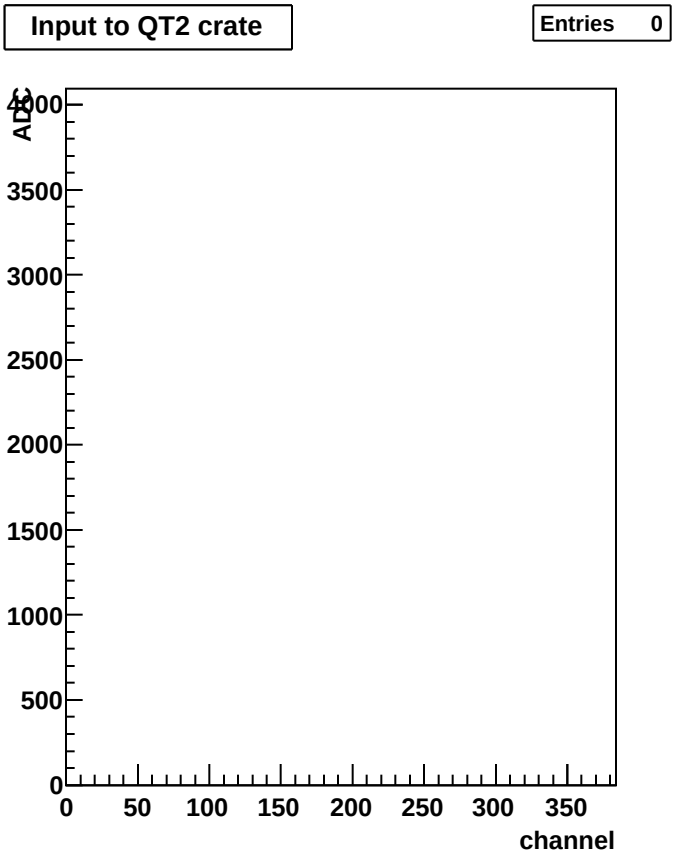

BBClarge-TAC-DIFF = 4096 + BBClarge-TAC-E - BBClarge-TAC-W
Entries 442246
Mean 4078
RMS 423.6

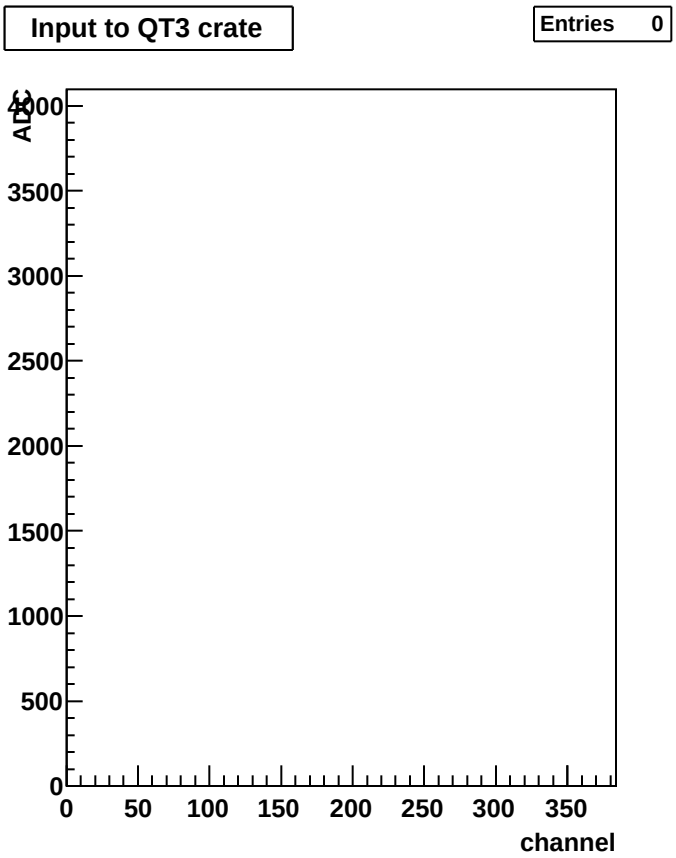

VPD-TAC-E
Entries 416601
Mean 1303
RMS 165.7

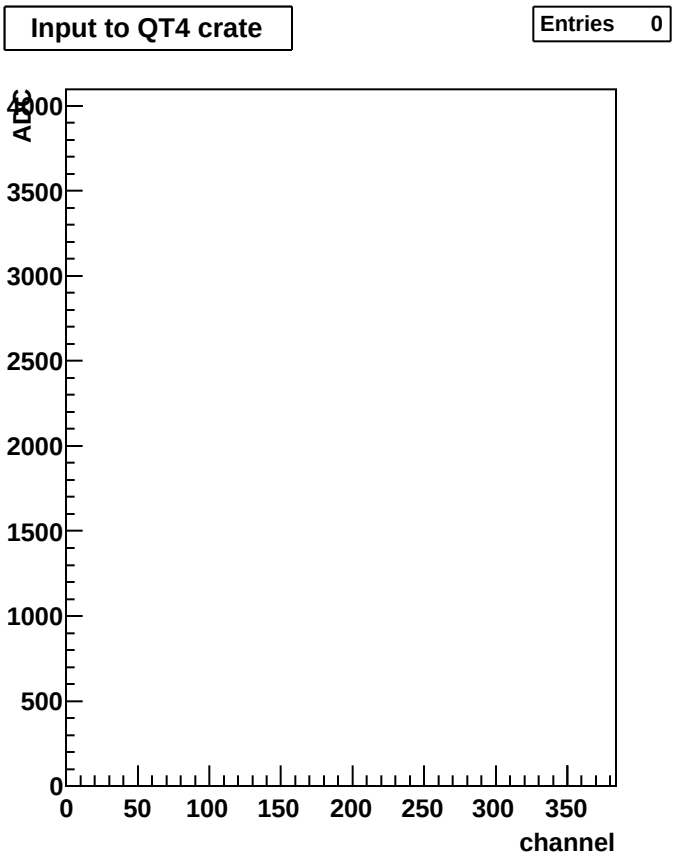

VPD-TAC-W
Entries 416940
Mean 1418
RMS 178.5

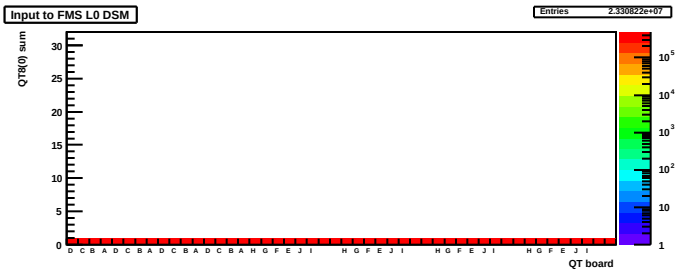

VPD-TAC-DIFF = 4096 + VPD-TAC-E - VPD-TAC-W
Entries 383984
Mean 3982
RMS 96.23

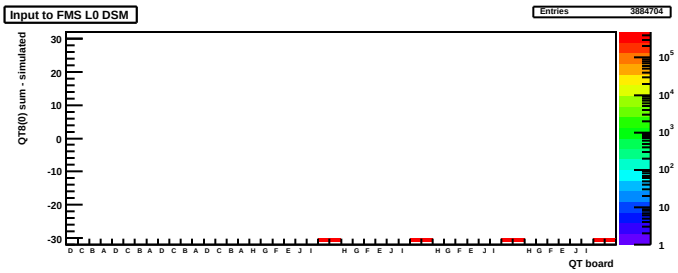

Input to QT1 crate
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

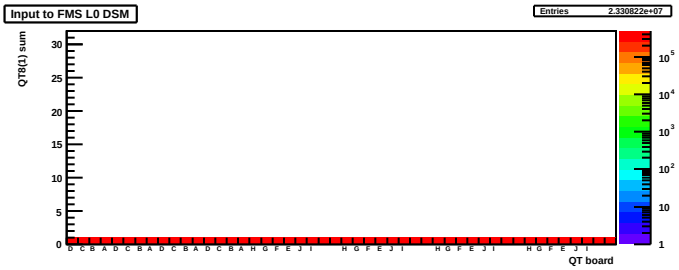

Input to QT2 crate
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

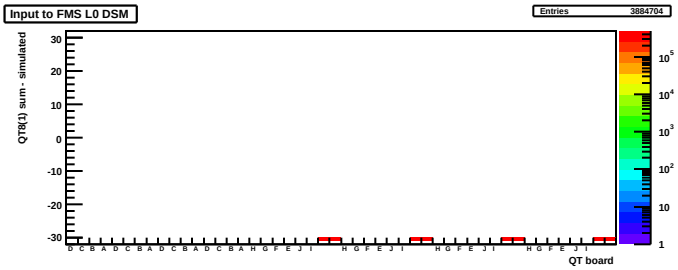

Input to QT3 crate
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

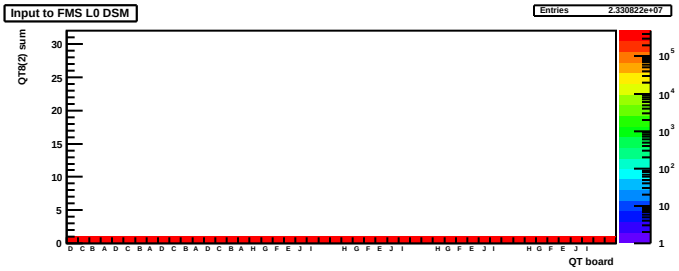

Input to QT4 crate
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

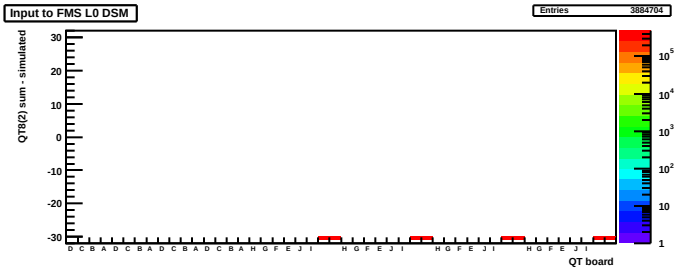

Input to FMS L0 DSM
Entries 2.330822e+07
QT8(0) sum
QT board

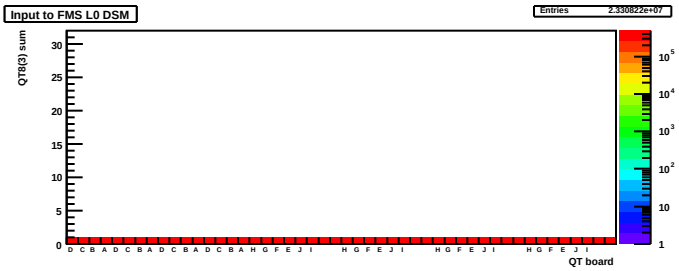

Input to FMS L0 DSM
Entries 3884704
QT8(0) sum - simulated
QT board

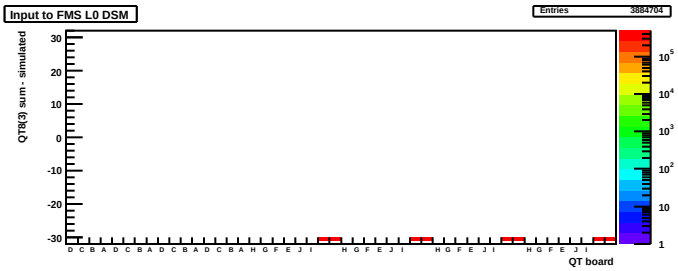

Input to FMS L0 DSM
Entries 2.330822e+07
QT8(1) sum
QT board

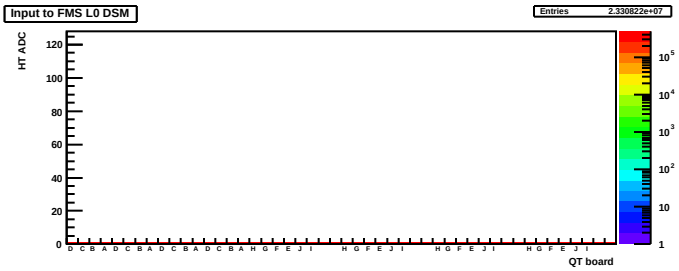

Input to FMS L0 DSM
Entries 3884704
QT8(1) sum - simulated
QT board

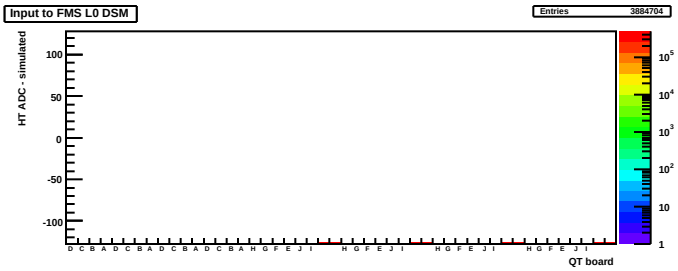

Input to FMS L0 DSM
Entries 2.330822e+07
QT8(2) sum
QT board

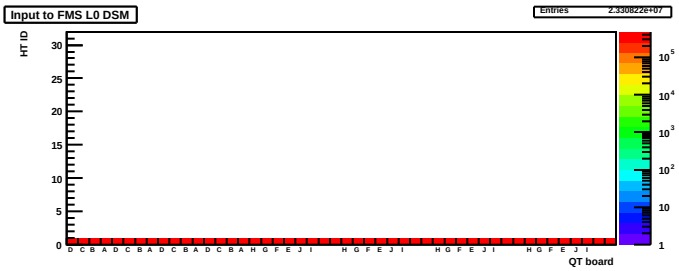

Input to FMS L0 DSM
Entries 3884704
QT8(2) sum - simulated
QT board

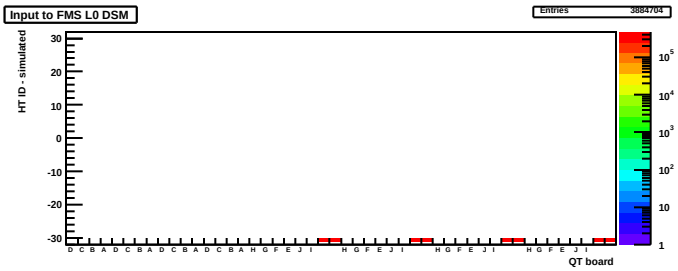

Input to FMS L0 DSM
Entries 2.330822e+07
QT8(3) sum
QT board

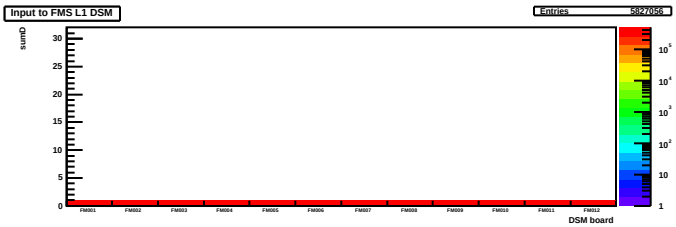

Input to FMS L0 DSM
Entries 3884704
QT8(3) sum - simulated
QT board

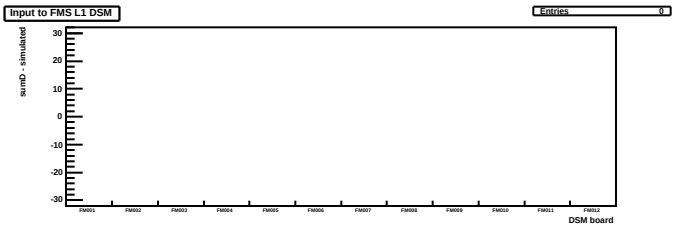

Input to FMS L0 DSM
Entries 2.330822e+07
HT ADC
QT board

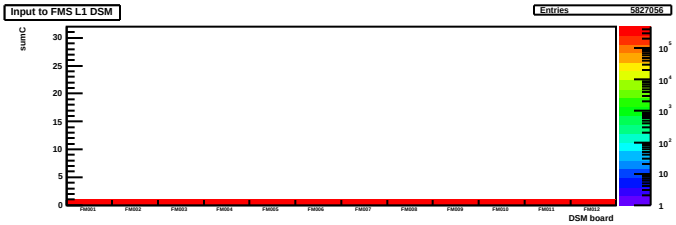

Input to FMS L0 DSM
Entries 3884704
HT ADC - simulated
QT board

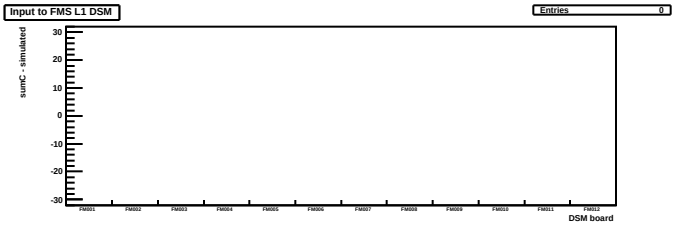

Input to FMS L0 DSM
Entries 2.330822e+07
HT ID
QT board

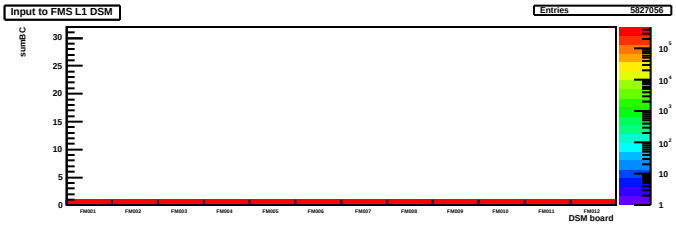

Input to FMS L0 DSM
Entries 3884704
HT ID - simulated
QT board

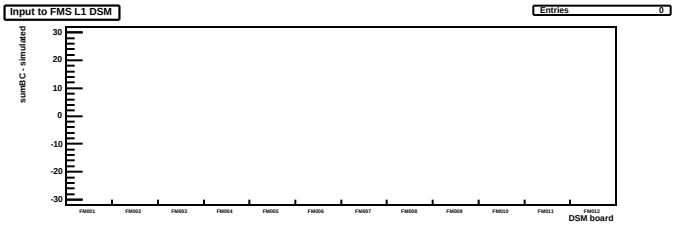

Input to FMS L1 DSM
Entries 5827056
sumD
DSM board

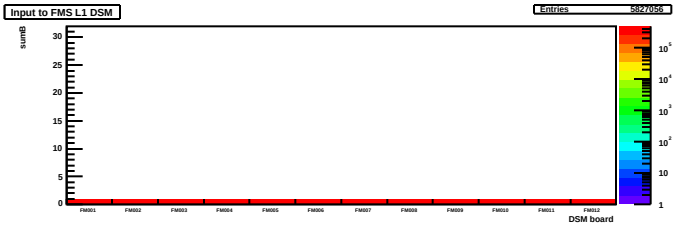

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

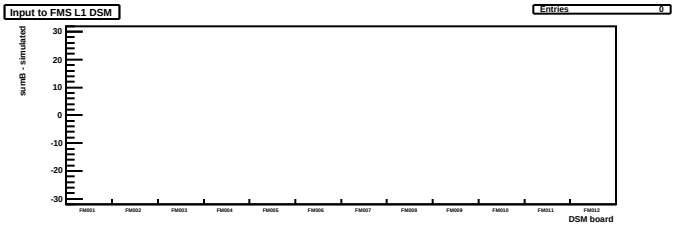

Input to FMS L1 DSM
Entries 5827056
sumC
DSM board

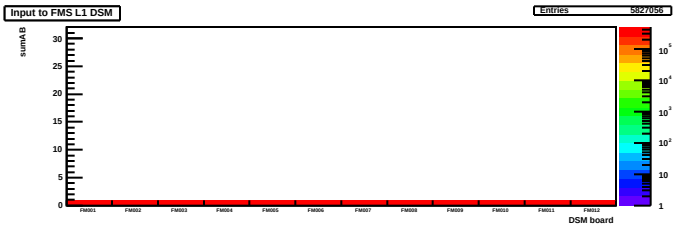

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

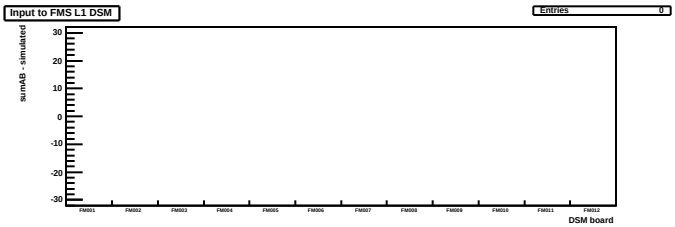

Input to FMS L1 DSM
Entries 5827056
sumBC
DSM board

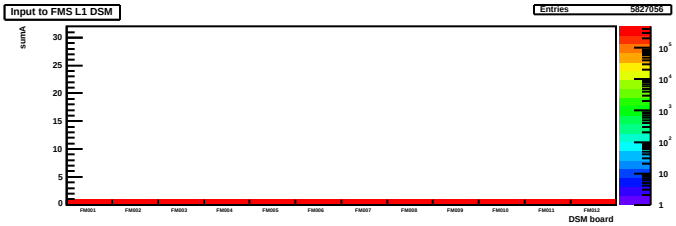

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

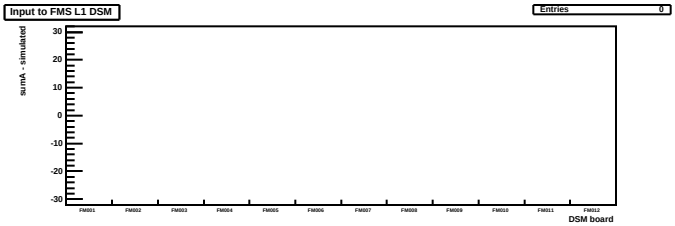

Input to FMS L1 DSM
Entries 5827056
sumB
DSM board

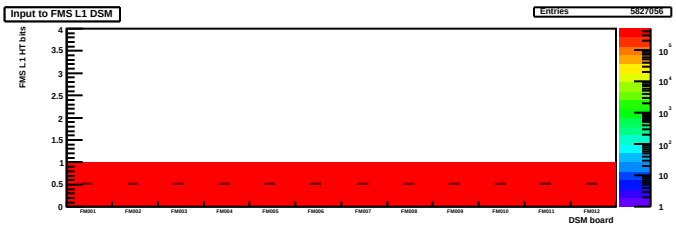

Input to FMS L1 DSM
Entries 0
sumB - simulated
DSM board

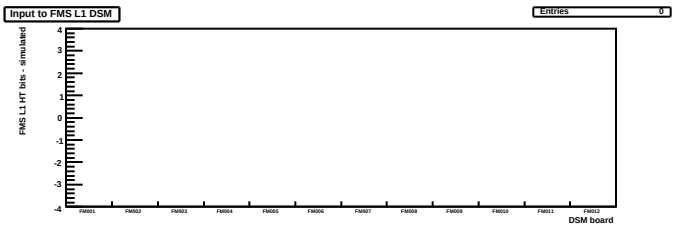

Input to FMS L1 DSM
Entries 5827056
sumAB
DSM board

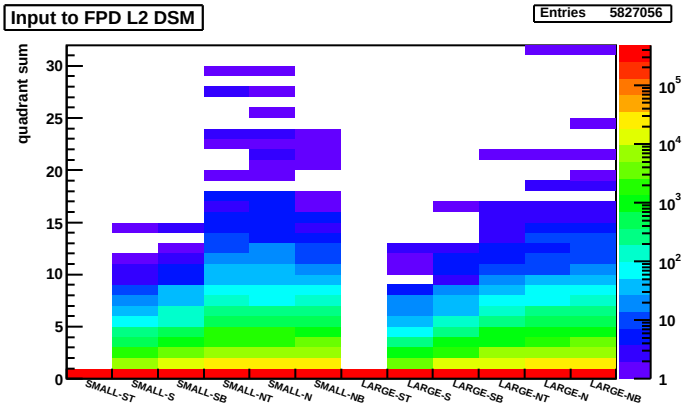

Input to FMS L1 DSM
Entries 0
sumAB - simulated
DSM board

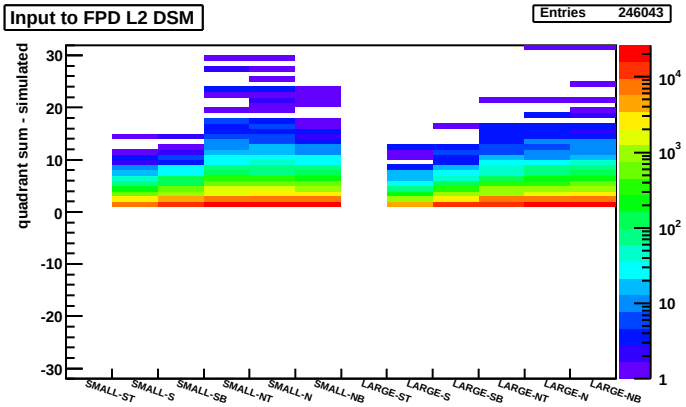

Input to FMS L1 DSM
Entries 5827056
sumA
DSM board

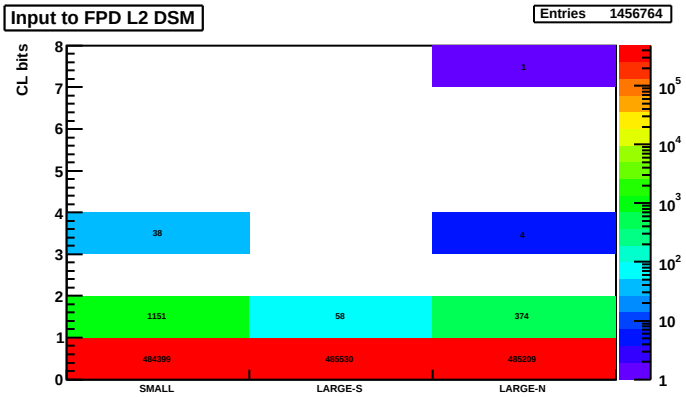

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

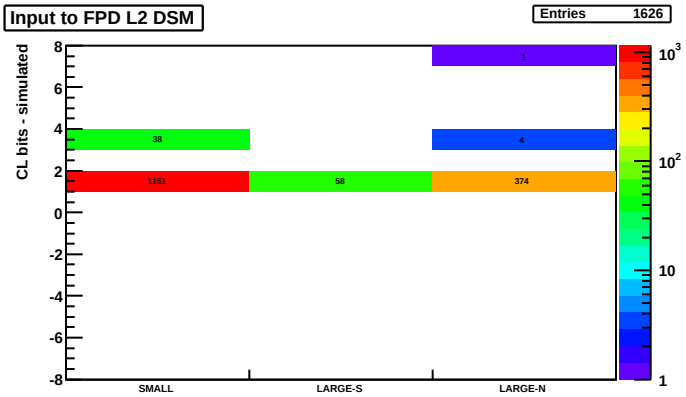

Input to FMS L1 DSM
Entries 5827056
FMS L1 HT bits
DSM board

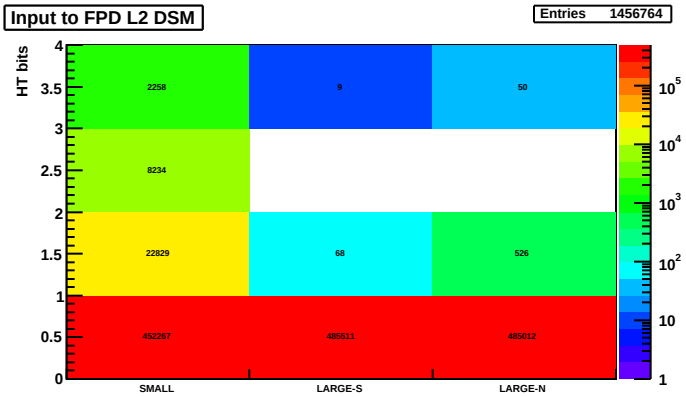

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

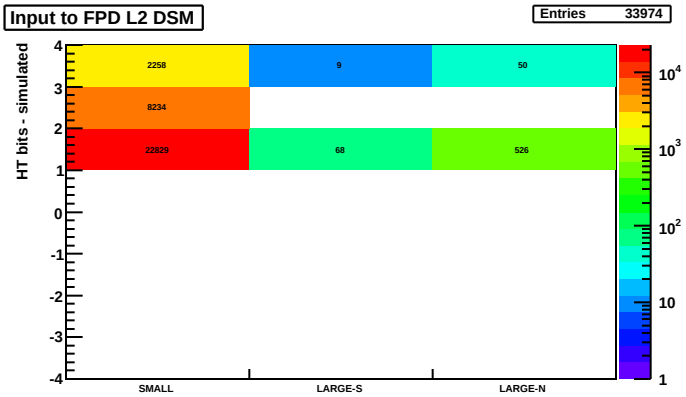

Input to FPD L2 DSM
Entries 5827056
quadrant sum
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

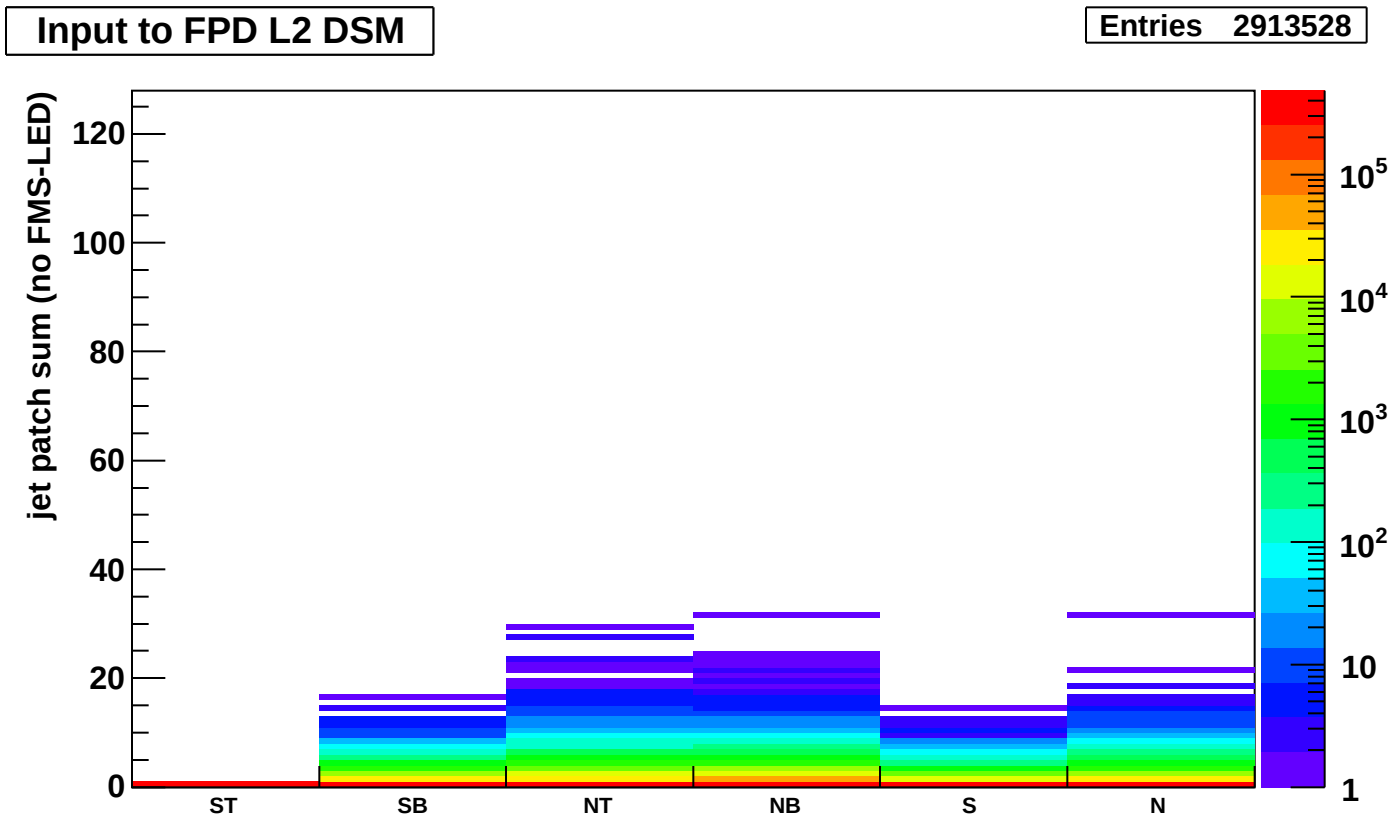

Input to FPD L2 DSM
Entries 246043
quadrant sum - simulated
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

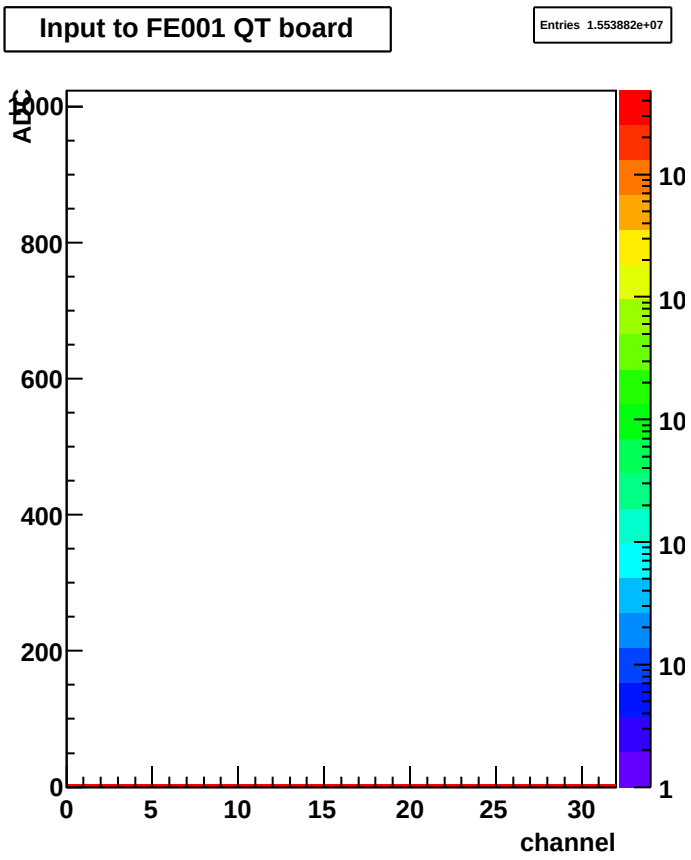

Input to FPD L2 DSM
Entries 1456764
CL bits
1
38
4
1151
58
374
484399
485530
485209
SMALL
LARGE-S
LARGE-N

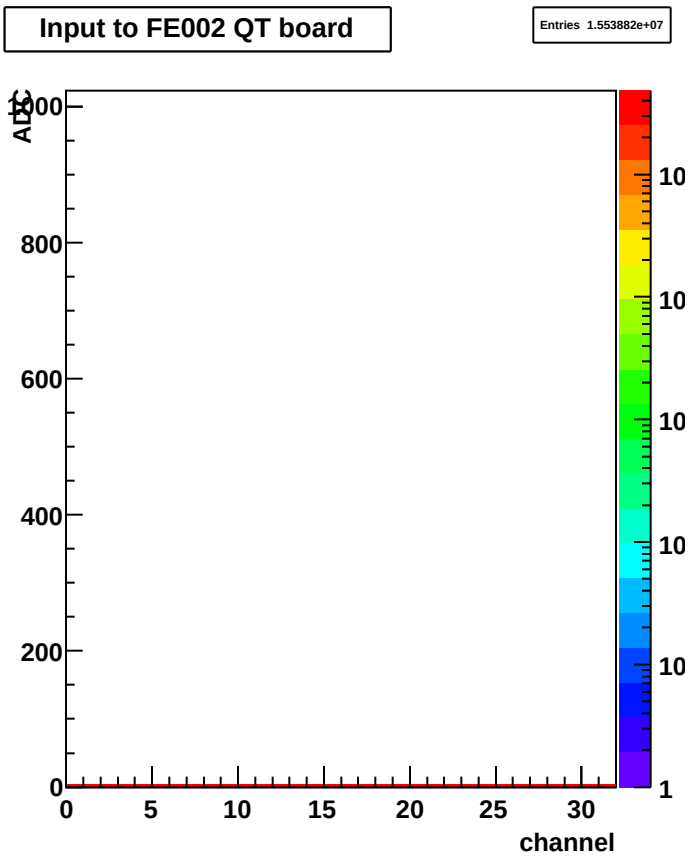

Input to FPD L2 DSM
Entries 1626
CL bits - simulated
1
38
4
1151
58
374
SMALL
LARGE-S
LARGE-N

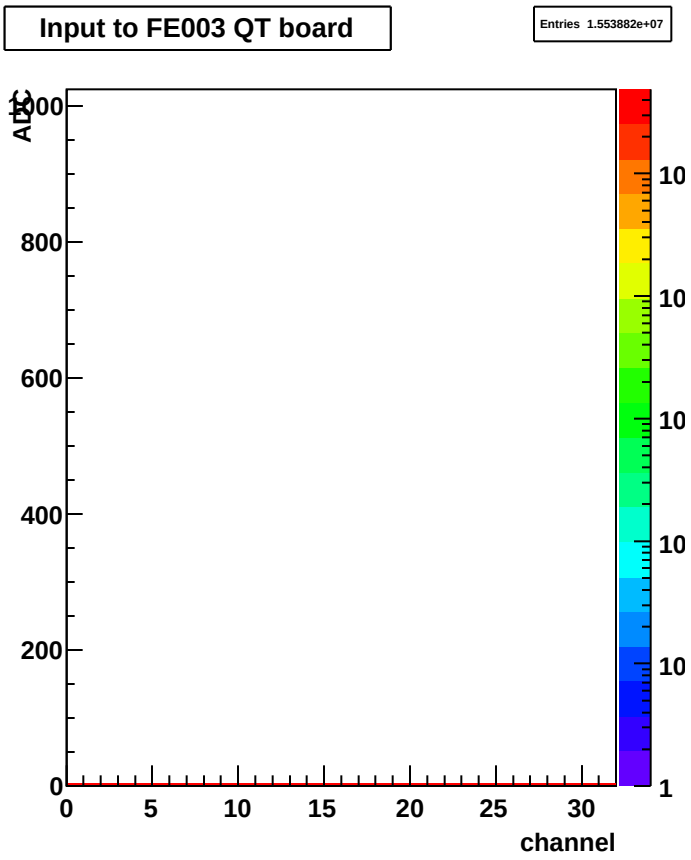

Input to FPD L2 DSM
Entries 1456764
HT bits
2258
9
50
8234
22829
68
526
452267
485511
485012
SMALL
LARGE-S
LARGE-N

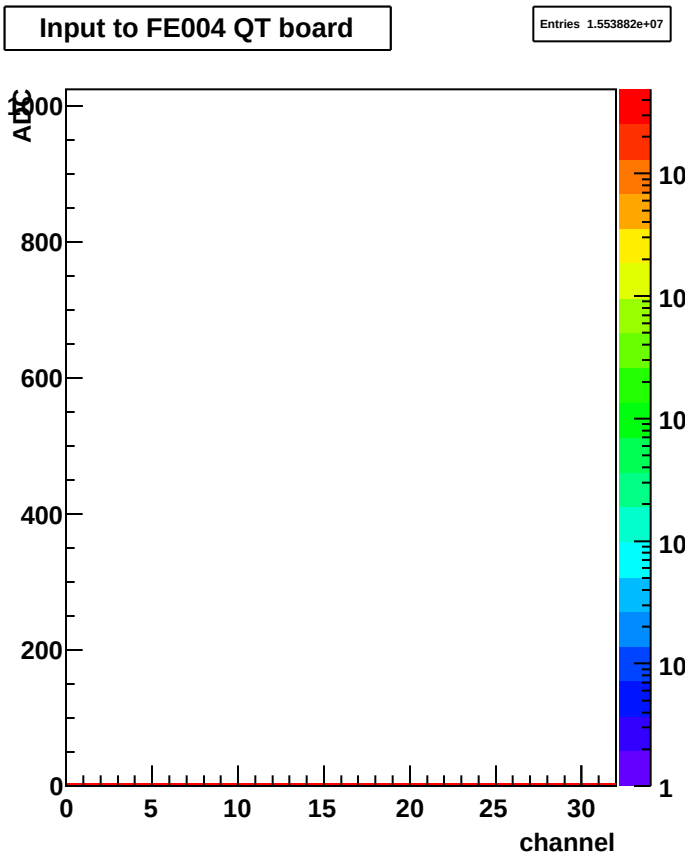

Input to FPD L2 DSM
Entries 33974
HT bits - simulated
2258
9
50
8234
22829
68
526
SMALL
LARGE-S
LARGE-N

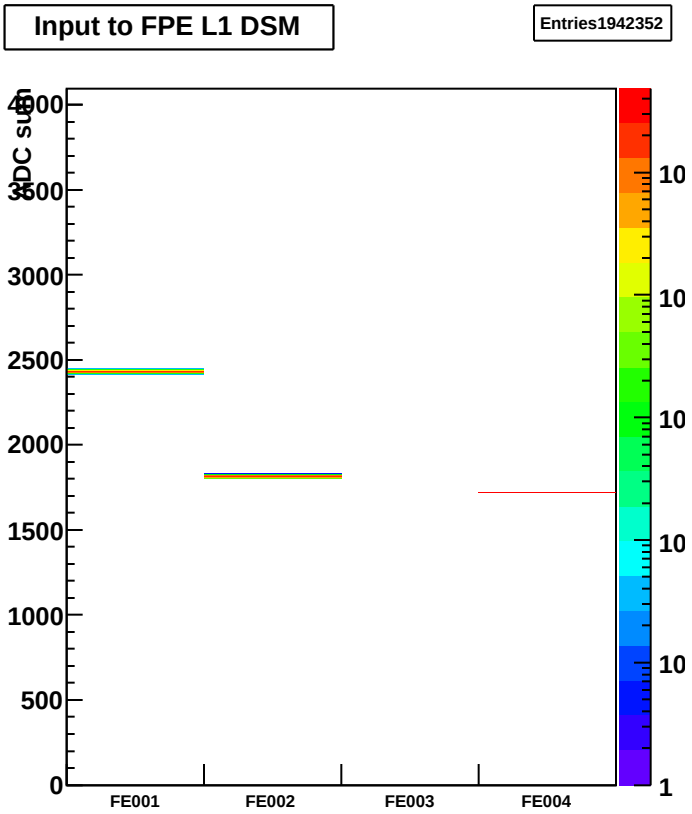

Input to FPD L2 DSM
Entries 2913528
jet patch sum (no FMS-LED)
0
20
40
60
80
100
120
ST
SB
NT
NB
S
N
1
10
10^2
10^3
10^4
10^5

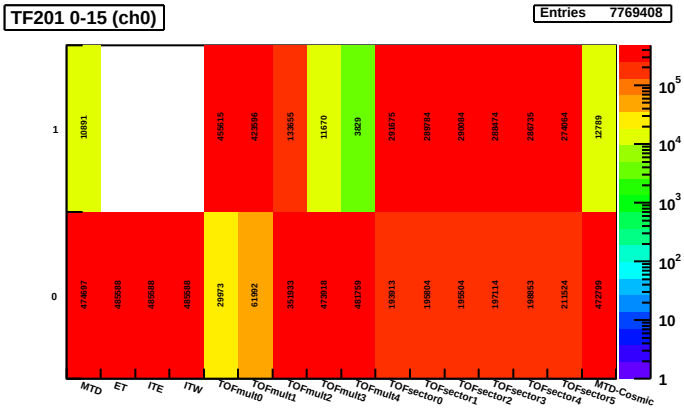

Input to FE001 QT board
Entries 1.553882e+07
ADC
channel

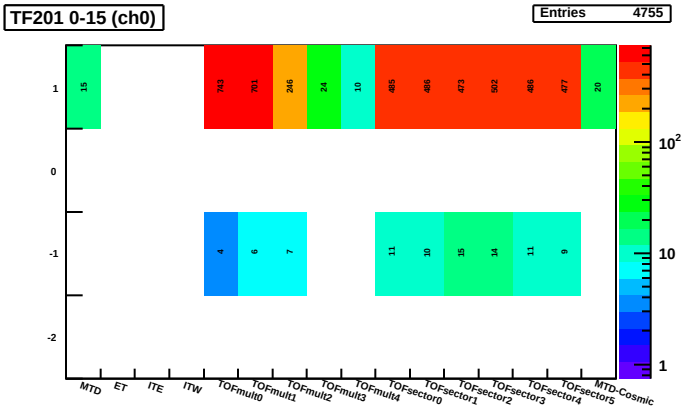

Input to FE002 QT board
Entries 1.553882e+07
ADC
channel

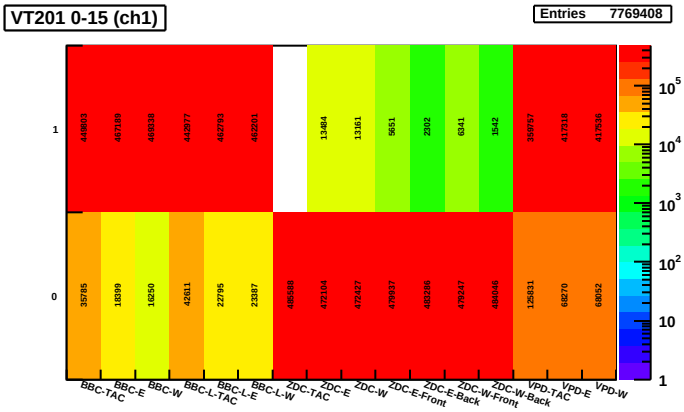

Input to FE003 QT board
Entries 1.553882e+07
ADC
channel

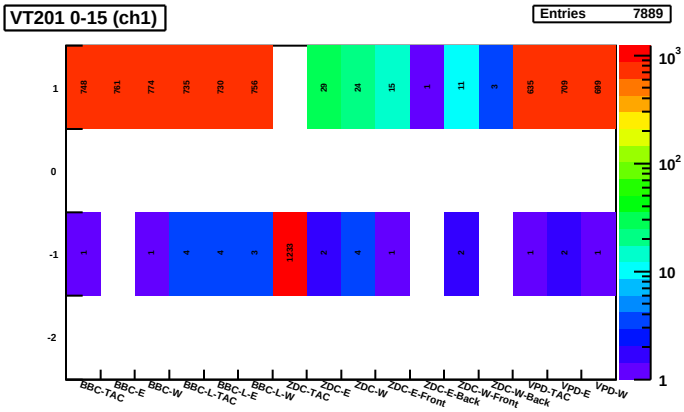

Input to FE004 QT board
Entries 1.553882e+07
ADC
channel

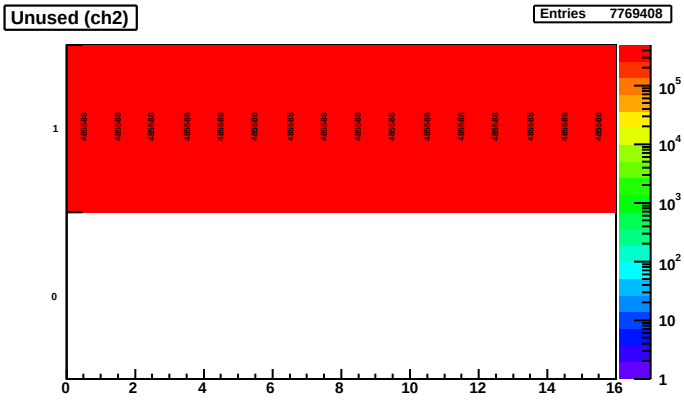

Input to FPE L1 DSM
Entries1942352
ADC sum
4000
3500
3000
2500
2000
1500
1000
500
0
FE001
FE002
FE003
FE004
10
10
10
10
10
1

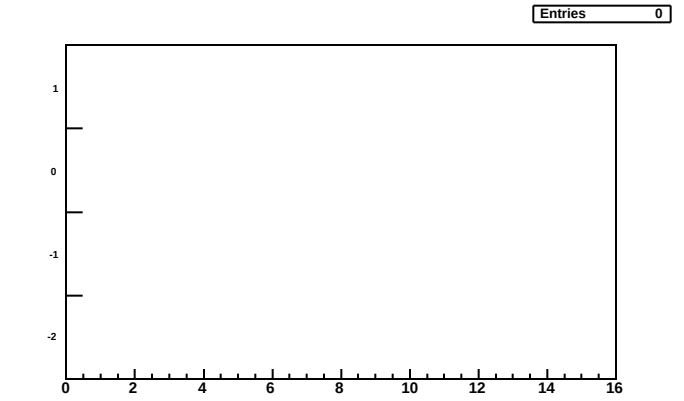

TF201 0-15 (ch0)
Entries 7769408
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic

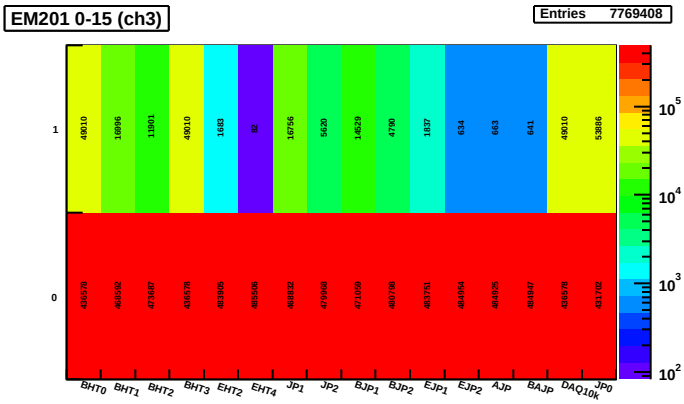

TF201 0-15 (ch0)
Entries 4755
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic

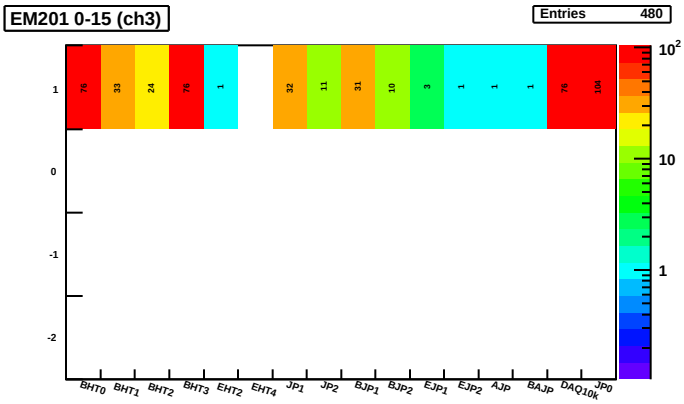

VT201 0-15 (ch1)
Entries 7769408
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-E ZDC-W ZDC-E-Front ZDC-E-Back ZDC-W-Front ZDC-W-Back VPD-TAC VPD-E VPD-W


VT201 0-15 (ch1)
Entries 7889
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

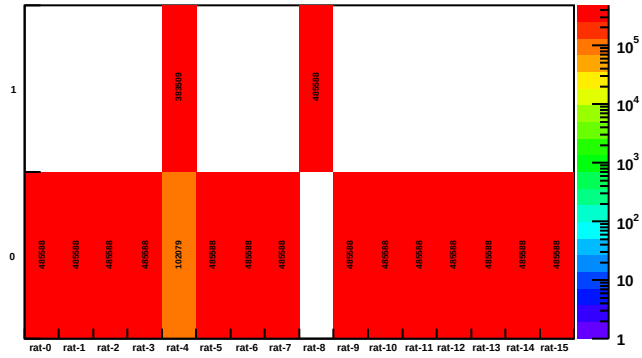

Unused (ch2)
Entries 7769408

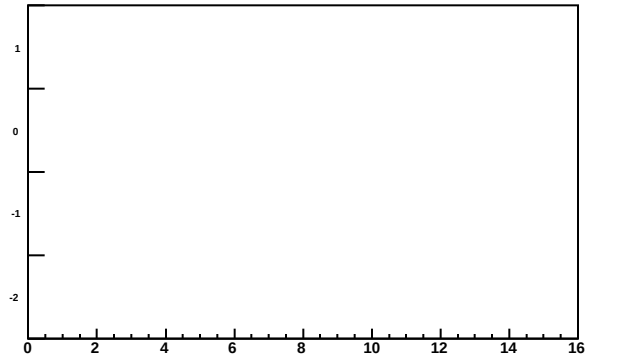

Entries 0


EM201 0-15 (ch3)
Entries 7769408
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP DAQ10k JP0

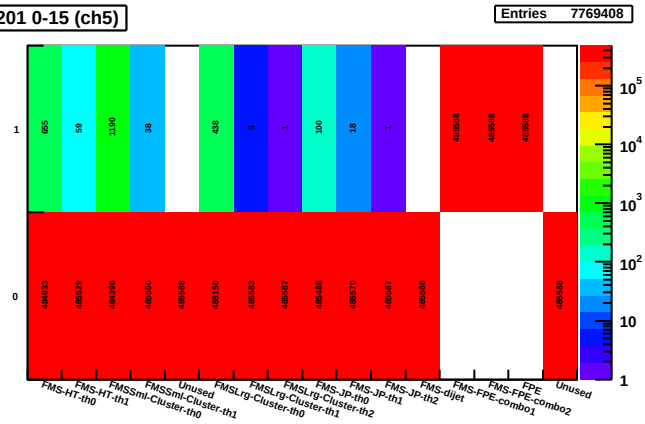

EM201 0-15 (ch3)
Entries 480
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP DAQ10k JP0

RAT board (ch4)

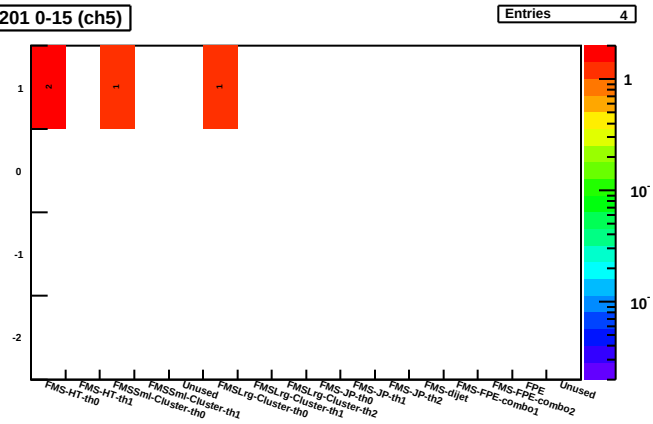




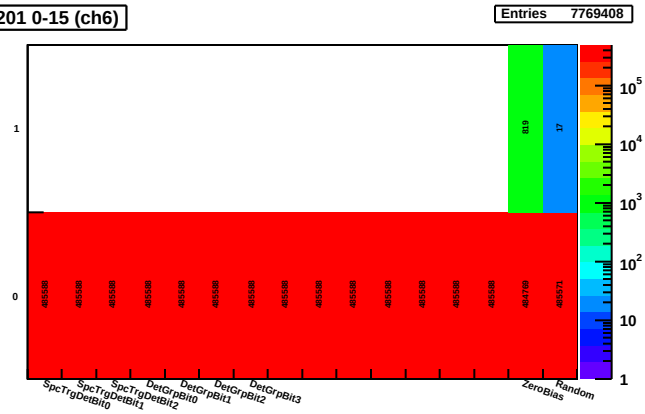
FP201 0-15 (ch5)

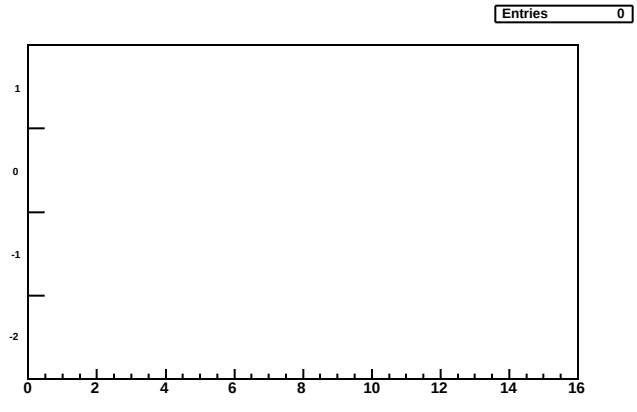
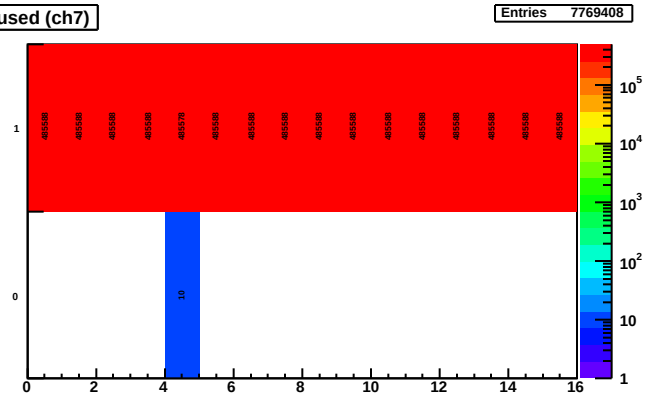
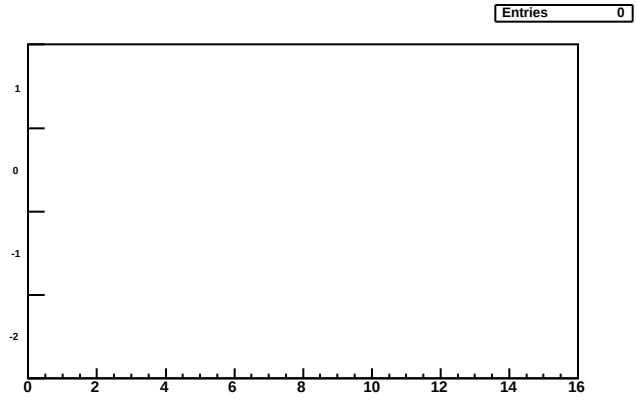


FP201 0-15 (ch5)



ST201 0-15 (ch6)





Unused (ch7)