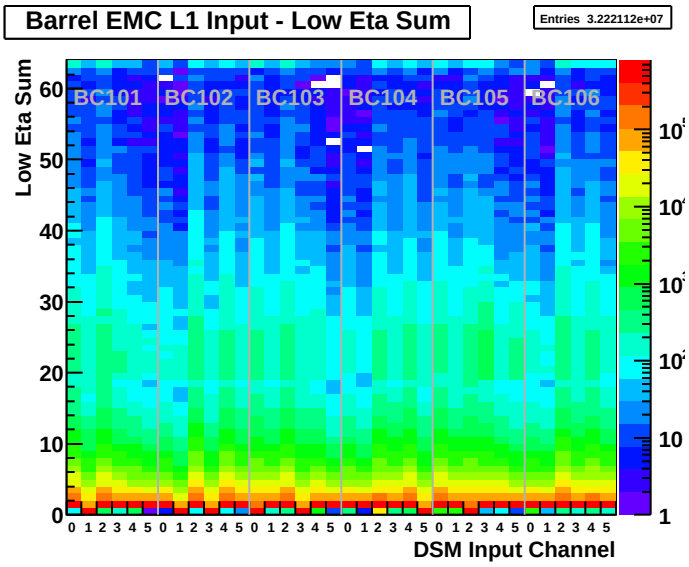
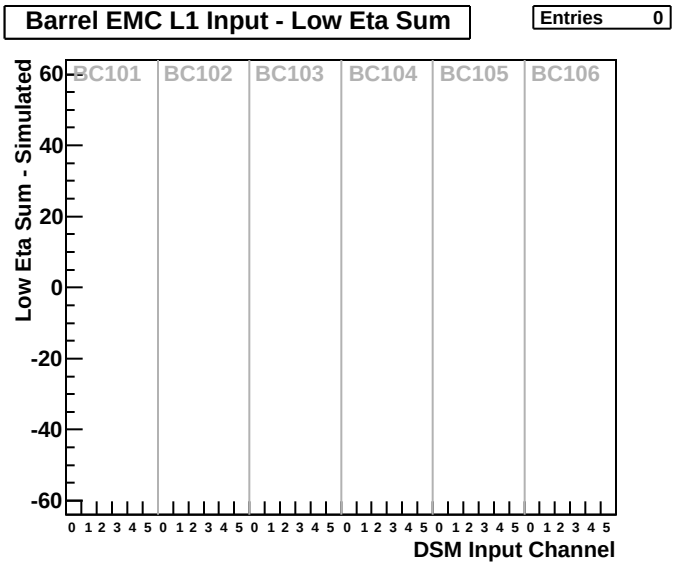
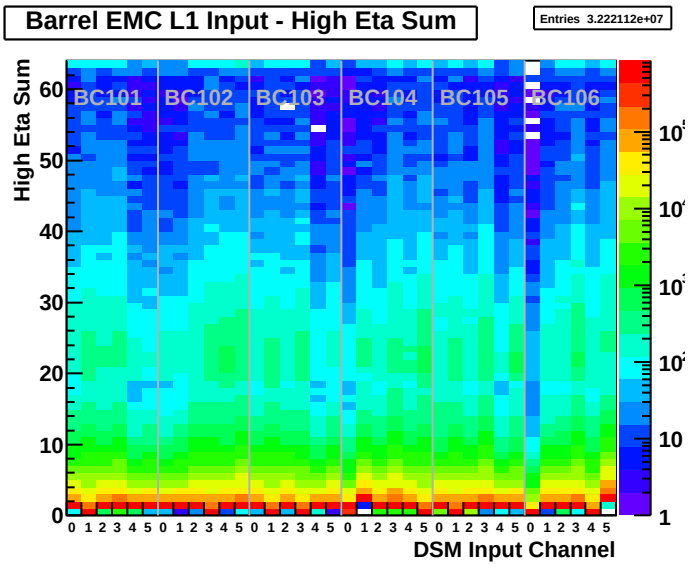
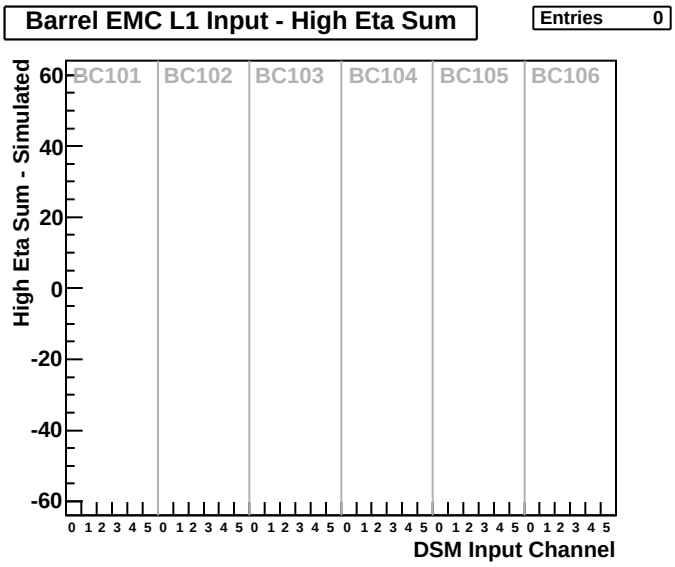
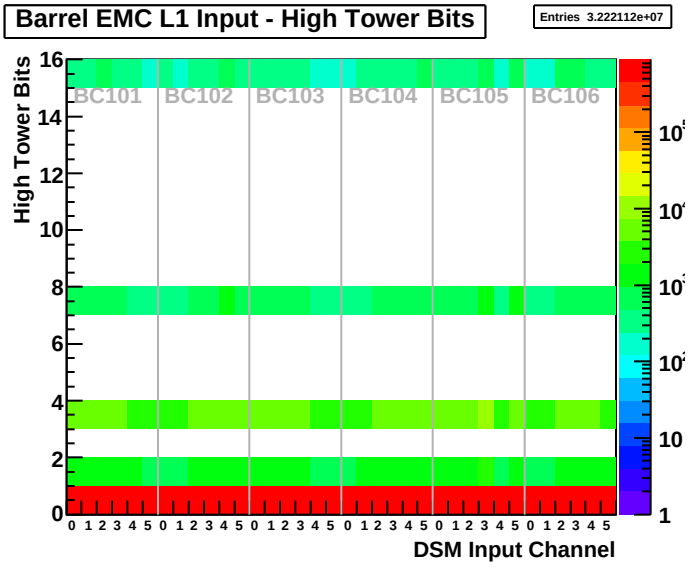
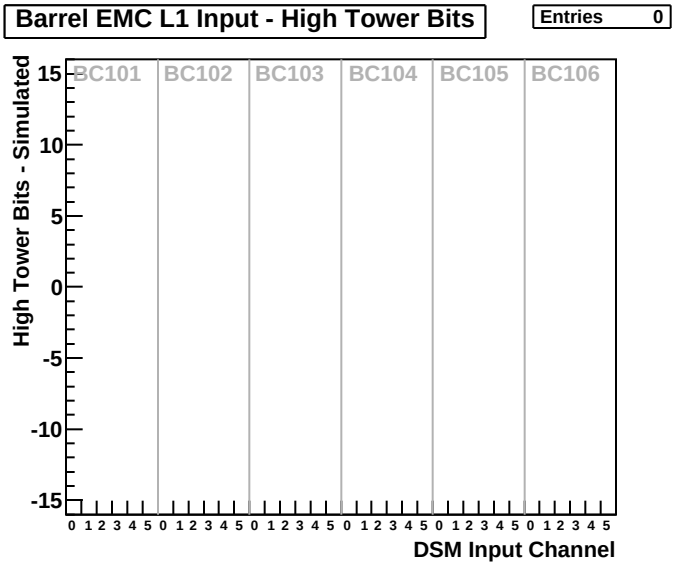

Barrel EMC L1 Input - Low Eta Sum
Entries 3.222112e+07
Low Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

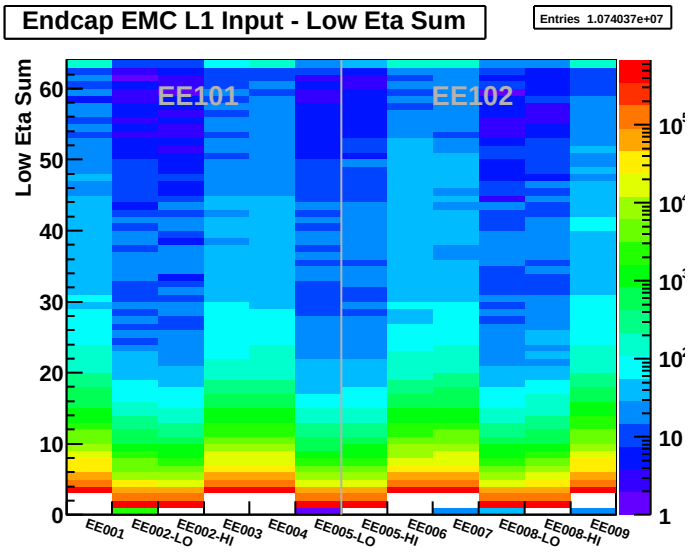

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

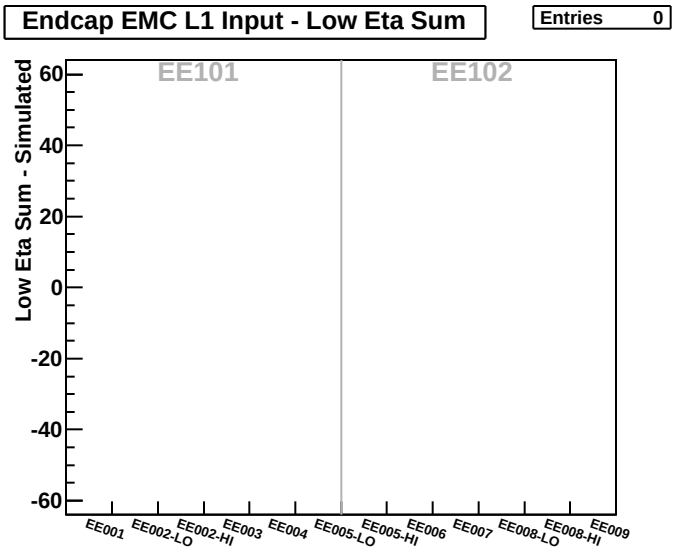

Barrel EMC L1 Input - High Eta Sum
Entries 3.222112e+07
High Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

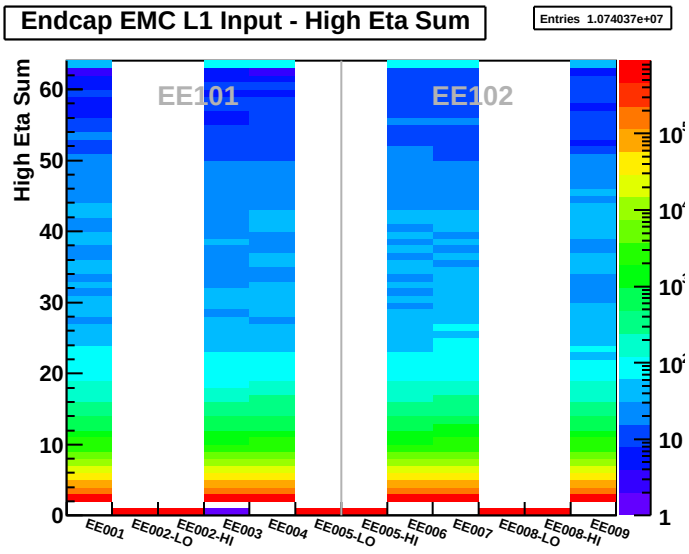

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

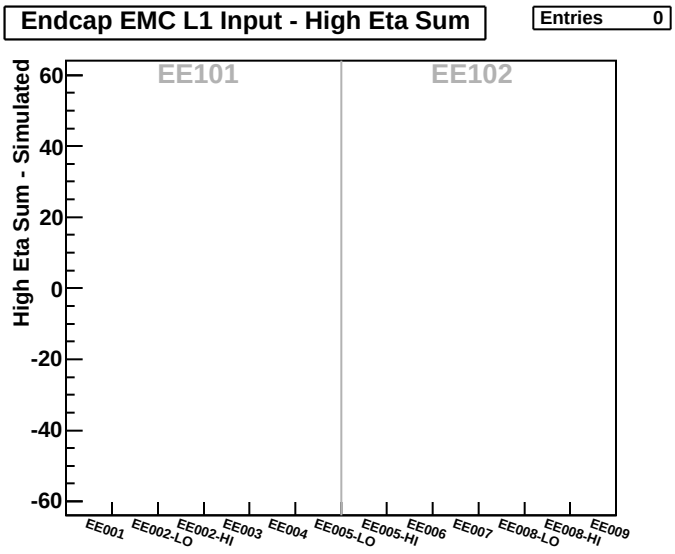

Barrel EMC L1 Input - High Tower Bits
Entries 3.222112e+07
High Tower Bits
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

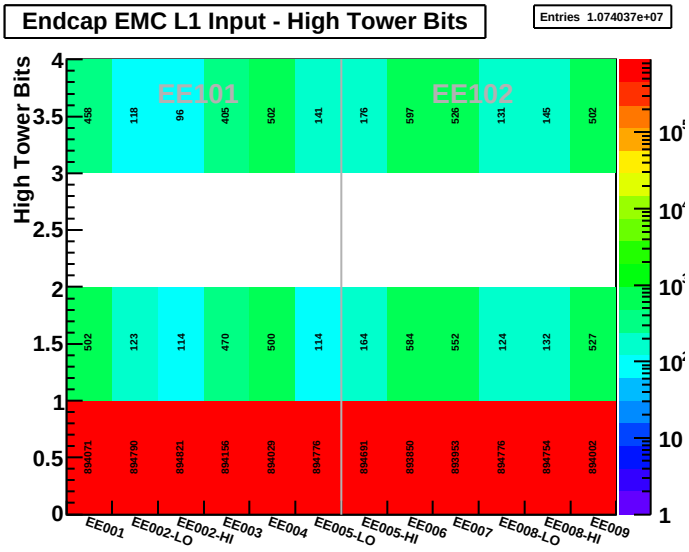

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

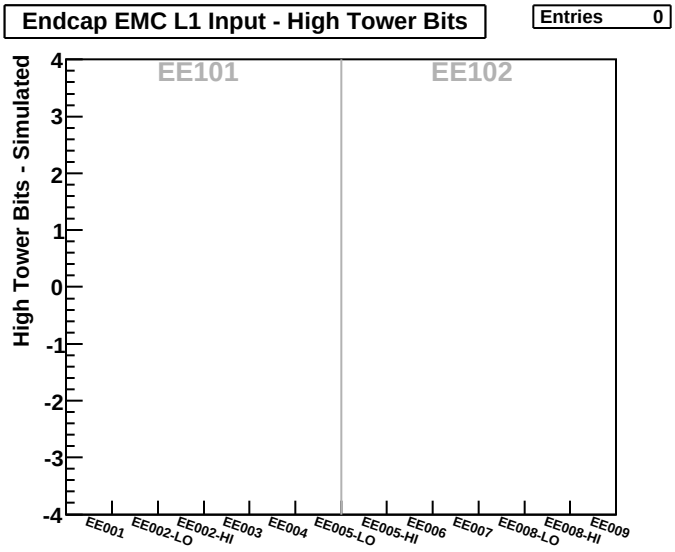

Endcap EMC L1 Input - Low Eta Sum
Entries 1.074037e+07
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

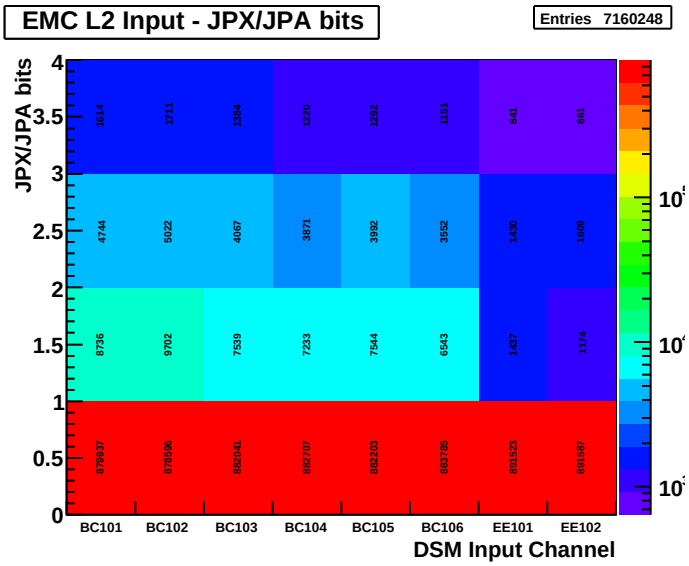

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

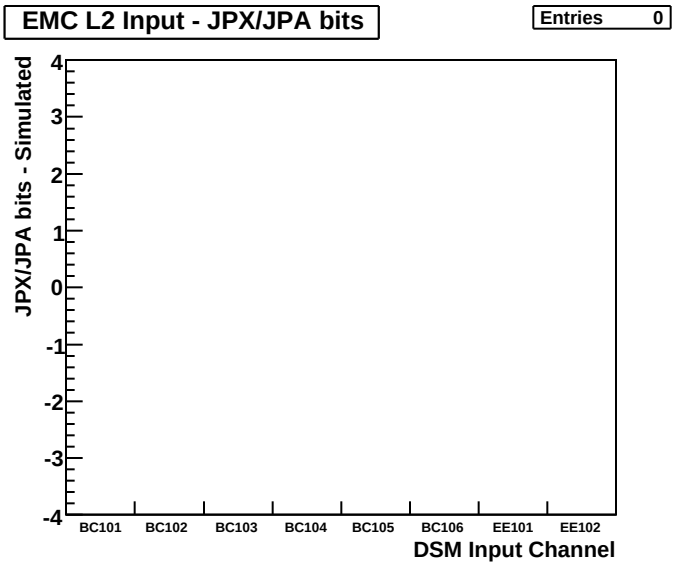

Endcap EMC L1 Input - High Eta Sum
Entries 1.074037e+07
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

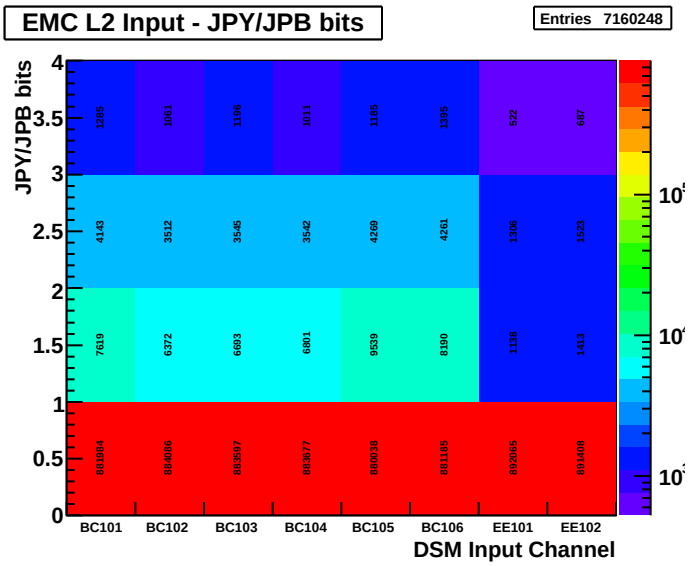

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

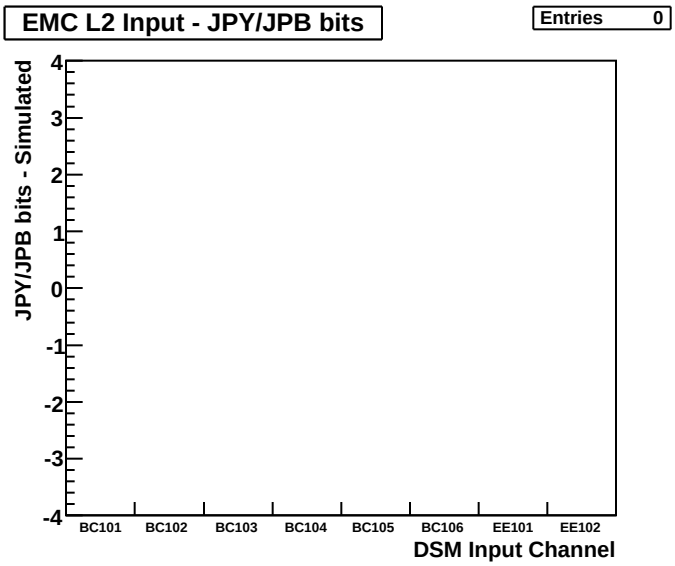

Endcap EMC L1 Input - High Tower Bits
Entries 1.074037e+07
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

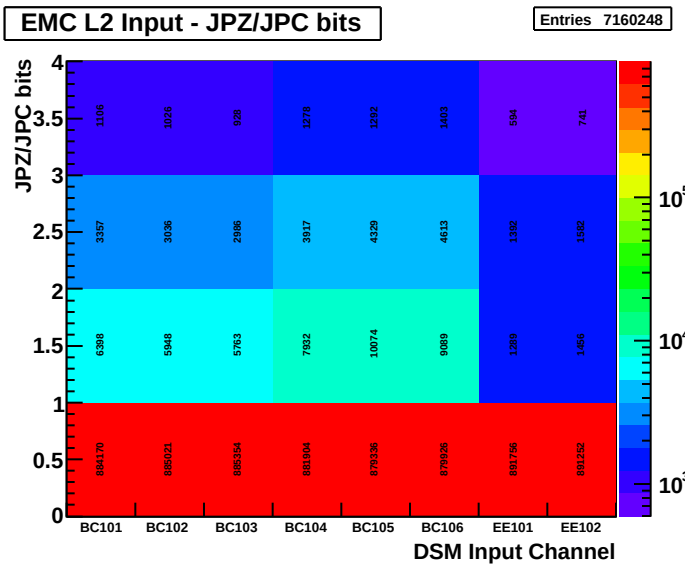

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

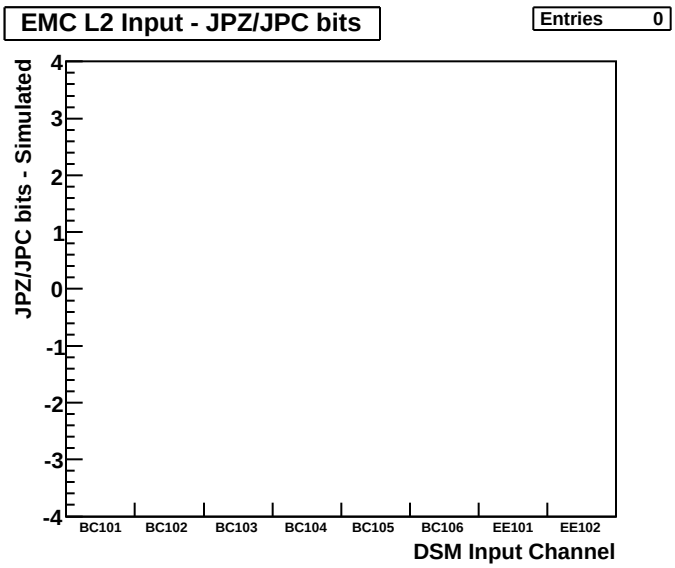

EMC L2 Input - JPX/JPA bits
Entries 7160248
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1614 1711 1384 1220 1292 1151 641 661
4744 5022 4067 3871 3992 3552 1430 1609
8736 9702 7539 7233 7544 6543 1437 1174
879937 878596 882041 882707 882203 883785 891523 891567

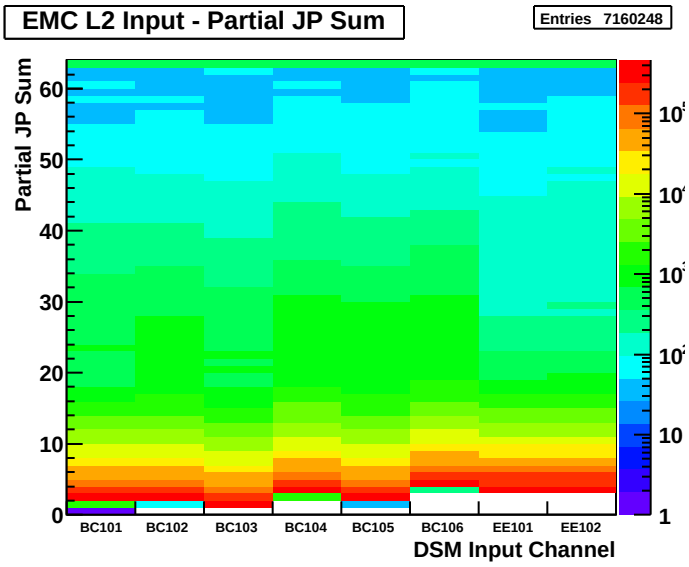

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

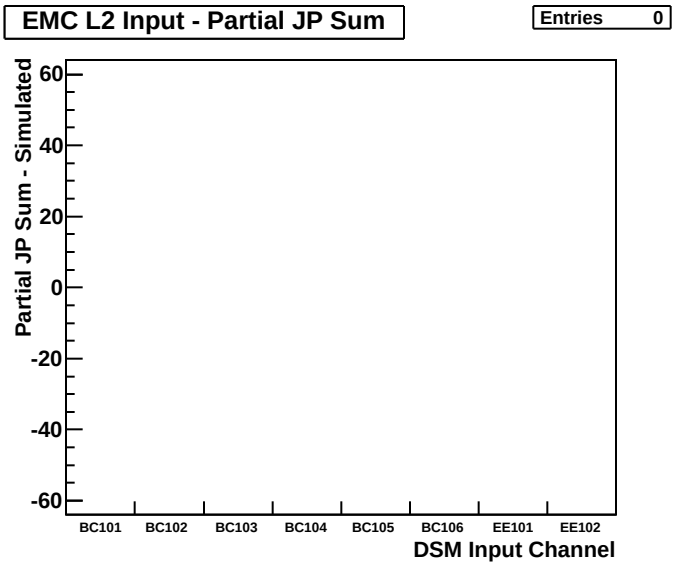

EMC L2 Input - JPY/JPB bits
Entries 7160248
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1285 1061 1196 1011 1185 1395 522 687
4143 3512 3545 3542 4269 4261 1306 1523
7619 6372 6693 6801 9539 8190 1138 1415
881984 884086 883597 883677 880038 881185 892065 891408

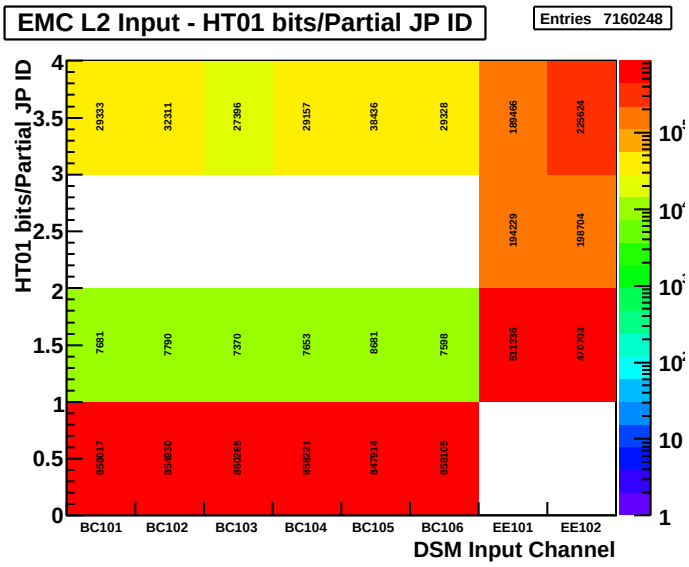

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

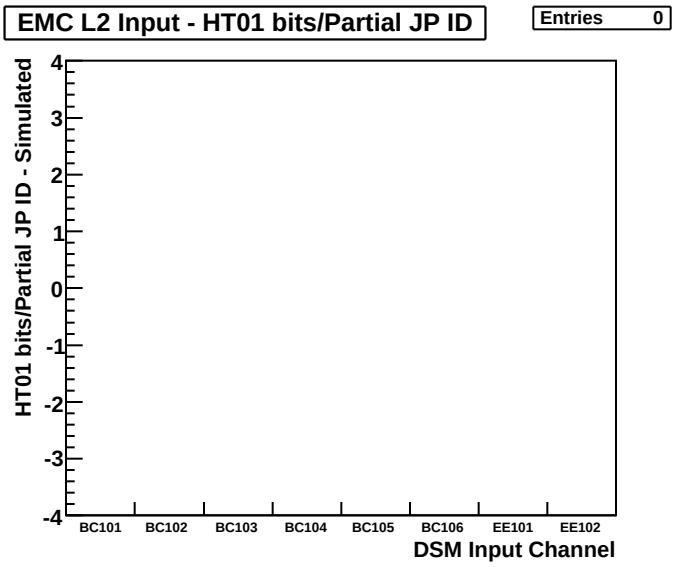

EMC L2 Input - JPZ/JPC bits
Entries 7160248
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1106 1026 928 1278 1292 1403 594 741
3357 3036 2986 3917 4329 4613 1392 1582
6398 5948 5763 7932 10074 9089 1289 1456
884170 885021 885354 881904 879336 879926 891756 891252

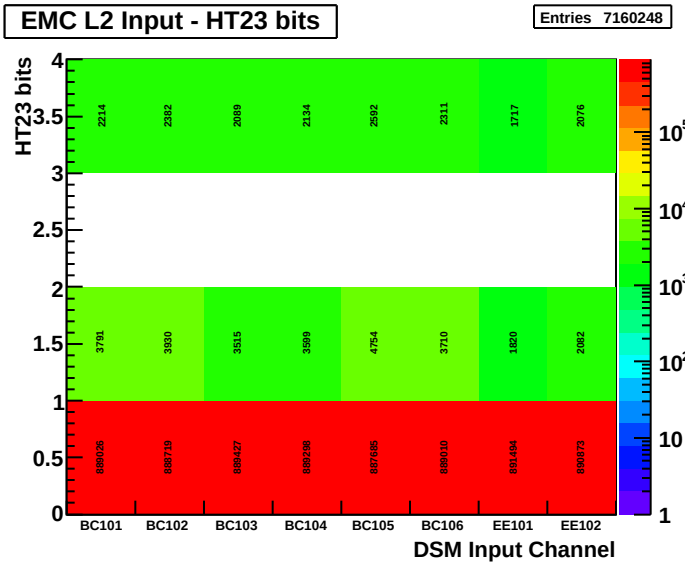

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

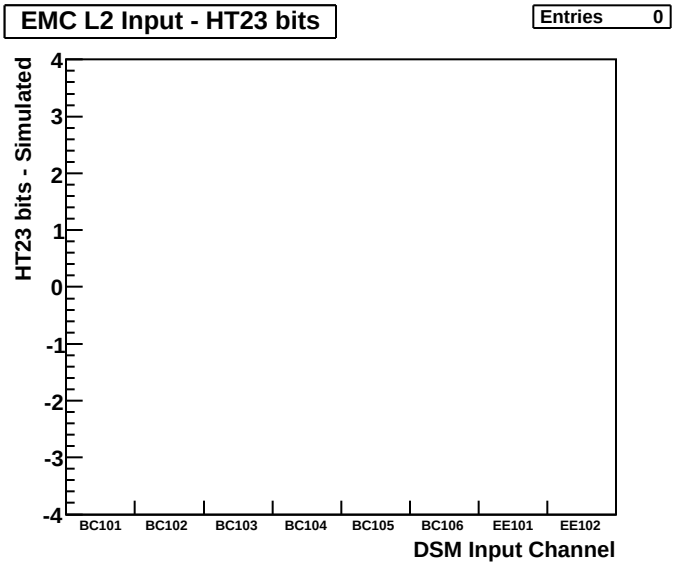

EMC L2 Input - Partial JP Sum
Entries 7160248
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

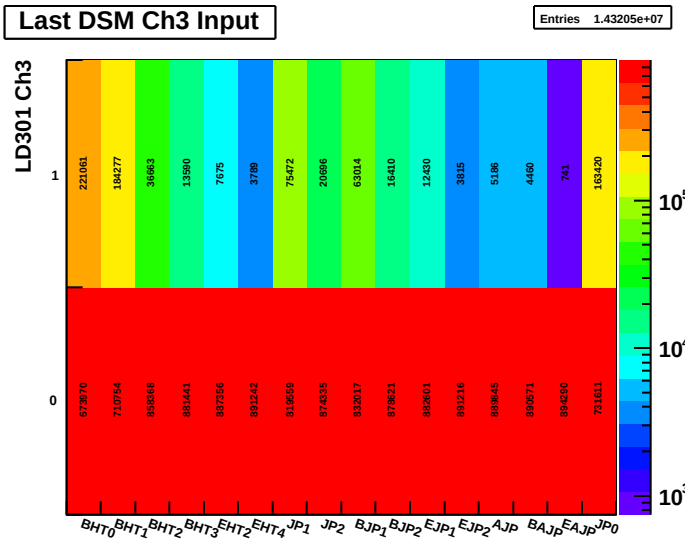

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

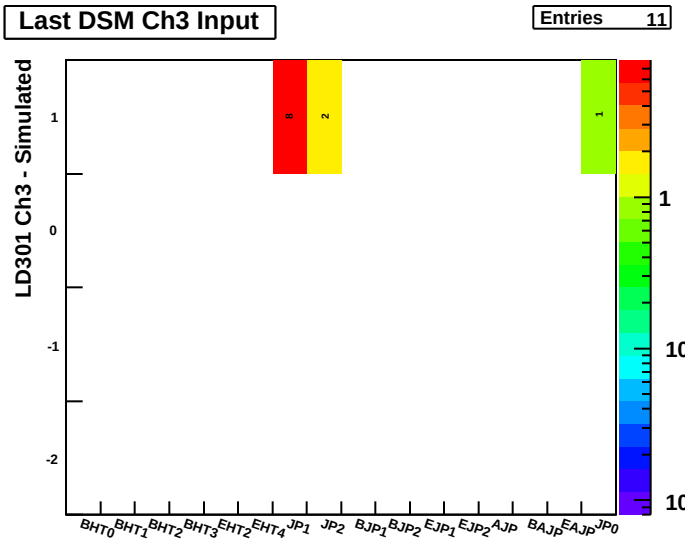

EMC L2 Input - HT01 bits/Partial JP ID
Entries 7160248
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

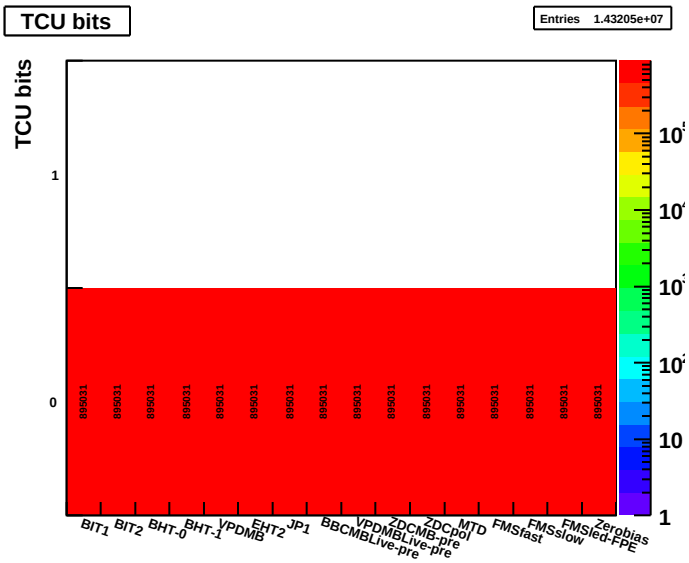

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

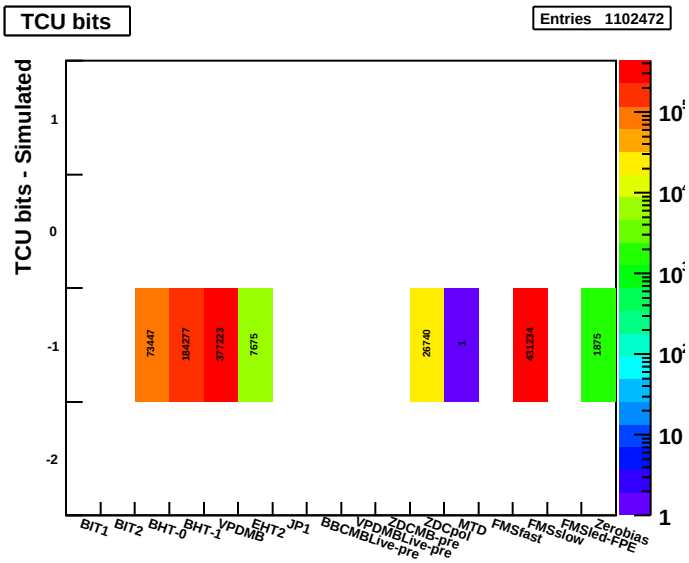

EMC L2 Input - HT23 bits
Entries 7160248
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

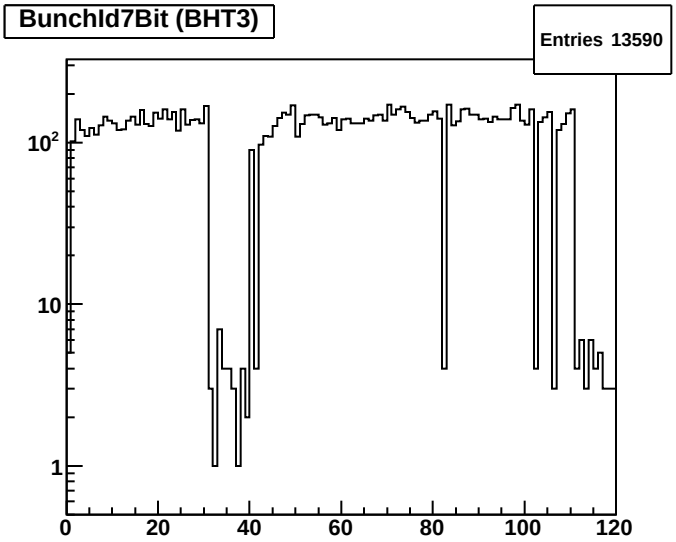

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

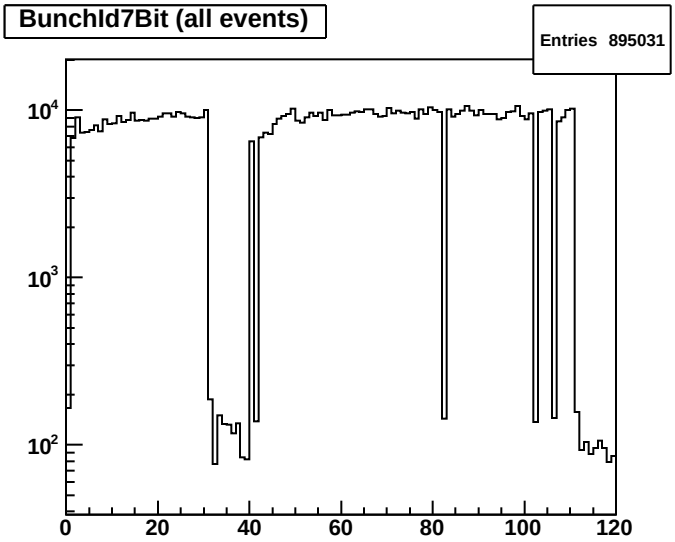

Last DSM Ch3 Input
Entries 1.43205e+07
LD301 Ch3
221061 184277 36663 13590 7675 3789 75472 20696 63014 16410 12450 3815 5186 4460 741 163420
673970 710754 858368 881441 887356 891242 819559 874335 832017 878621 882601 891216 889845 890571 894290 731611
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

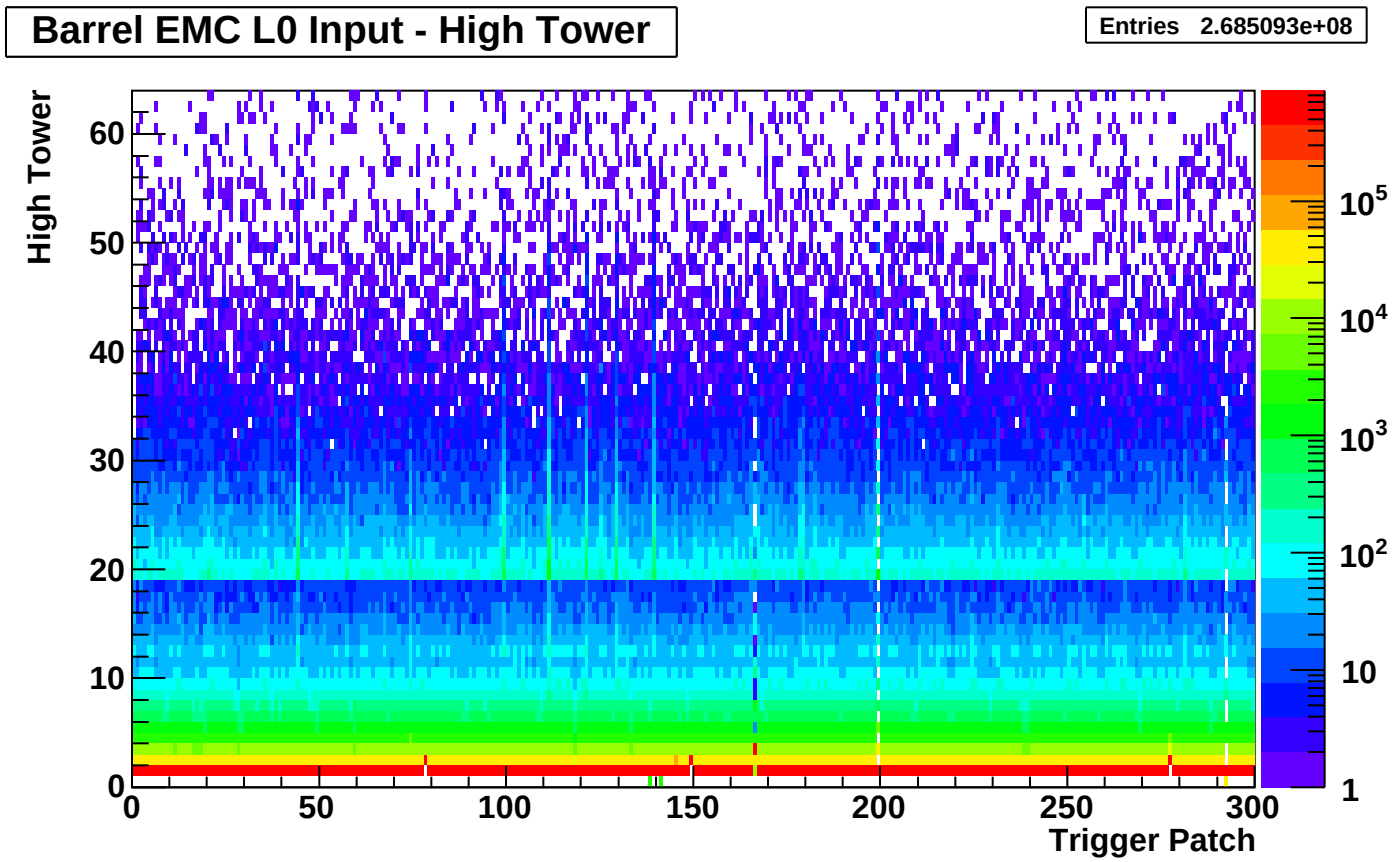

Last DSM Ch3 Input
Entries 11
LD301 Ch3 - Simulated
8 2 1
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

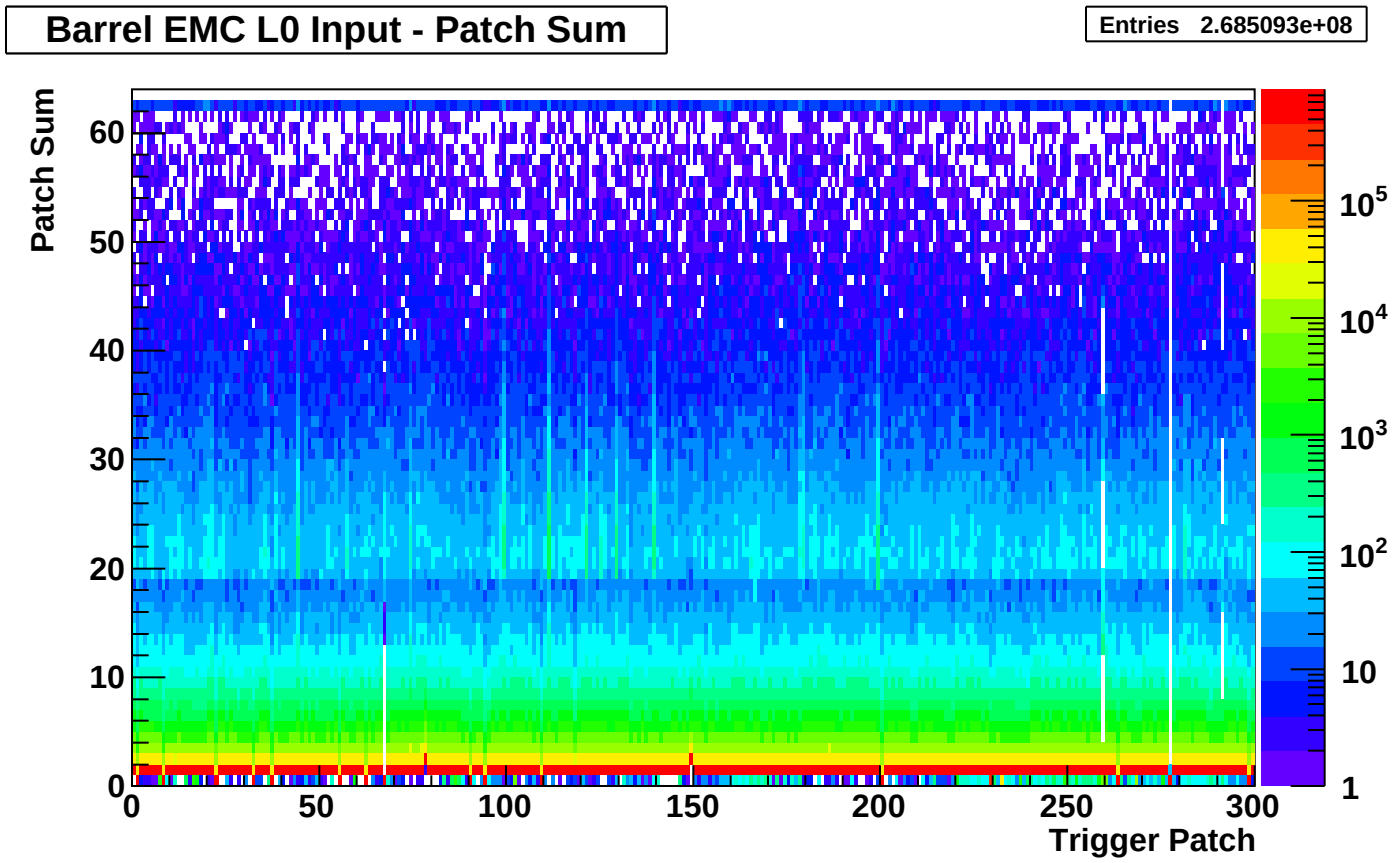

TCU bits
Entries 1.43205e+07
TCU bits
895031
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

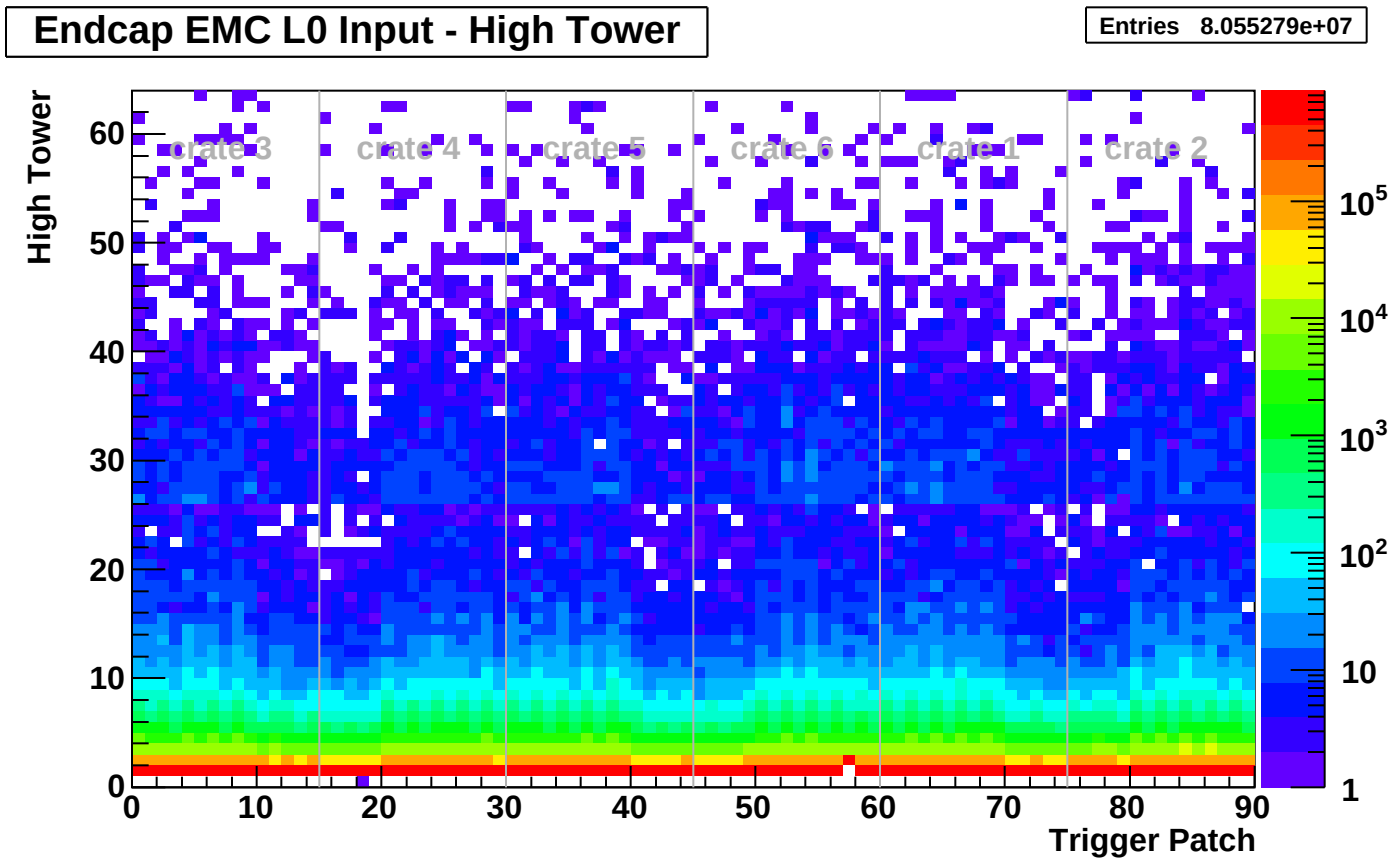

TCU bits
Entries 1102472
TCU bits - Simulated
73447 184277 377223 7675 26740 1 431234 1875
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

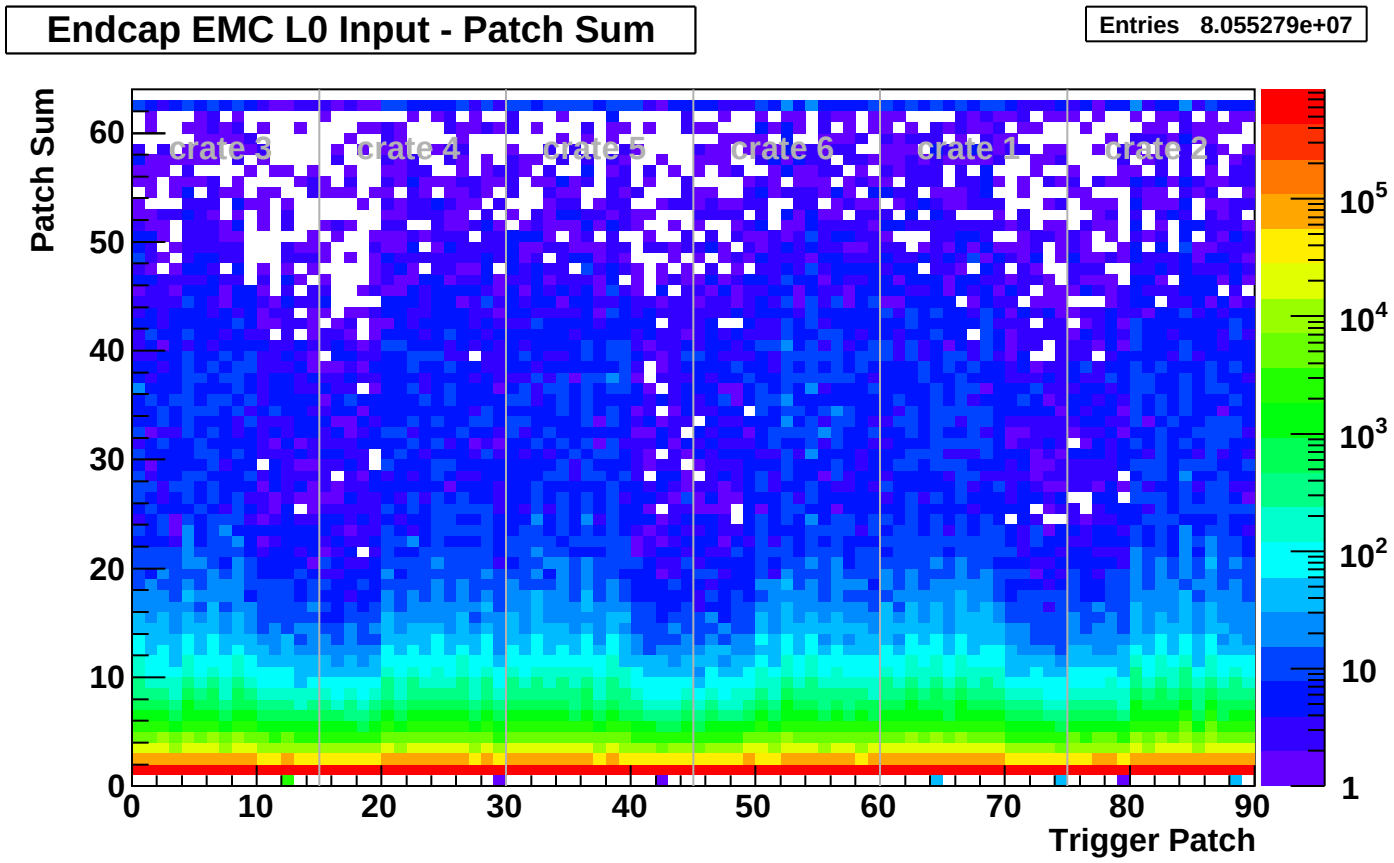

BunchId7Bit (BHT3)
Entries 13590

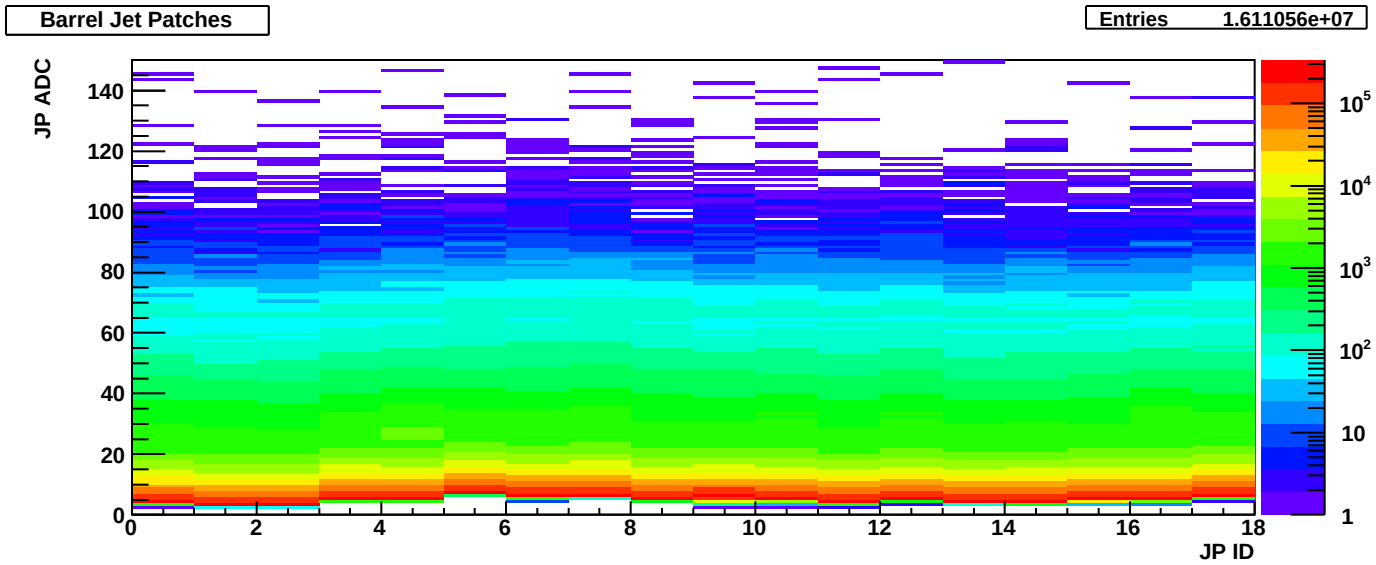

BunchId7Bit (all events)
Entries 895031

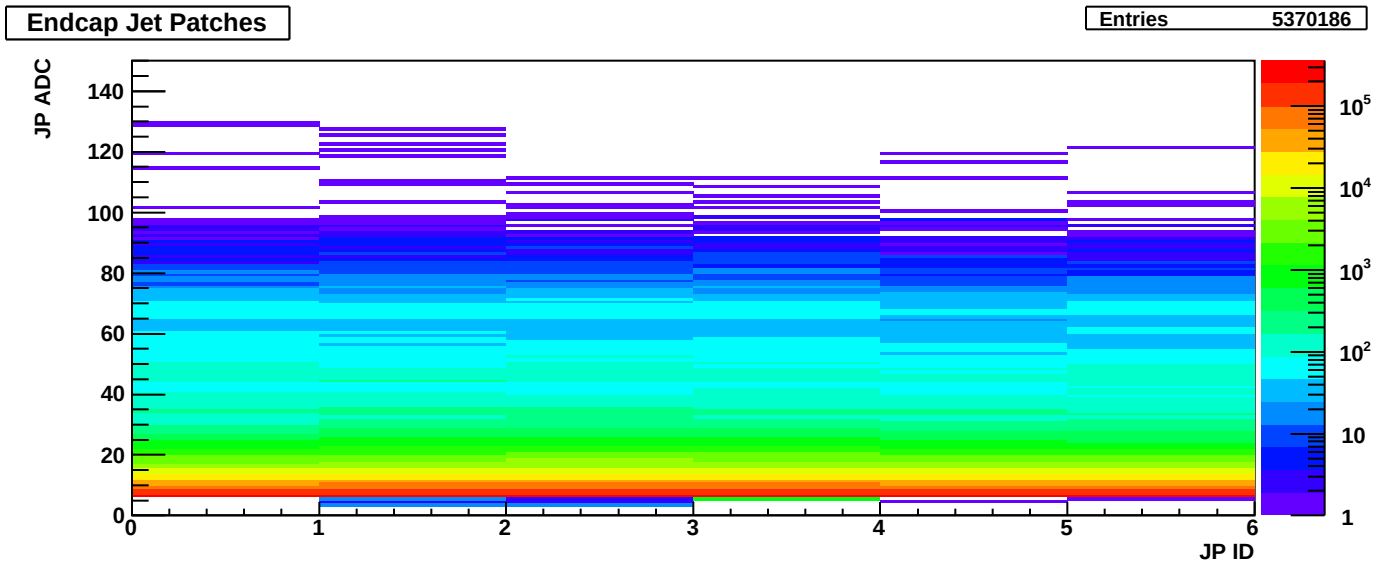

Barrel EMC L0 Input - High Tower
Entries 2.685093e+08
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

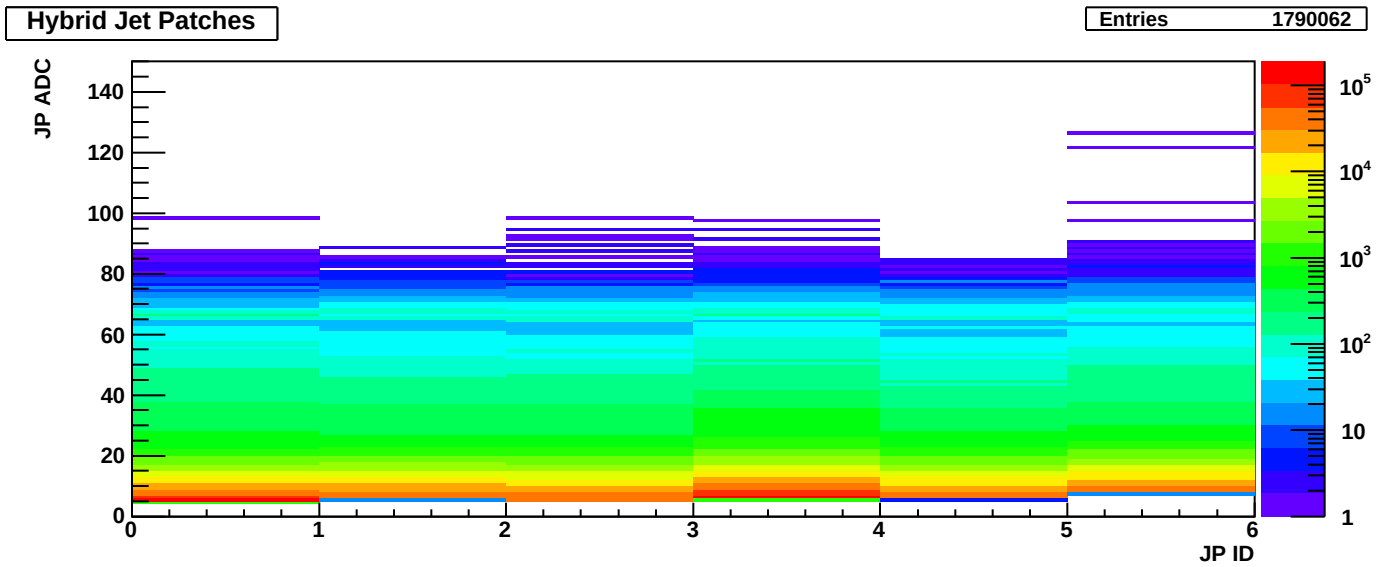

Barrel EMC L0 Input - Patch Sum
Entries 2.685093e+08
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

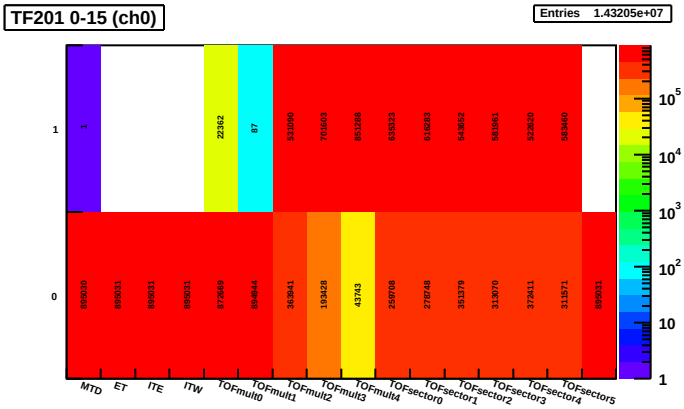

Endcap EMC L0 Input - High Tower
Entries 8.055279e+07
High Tower
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

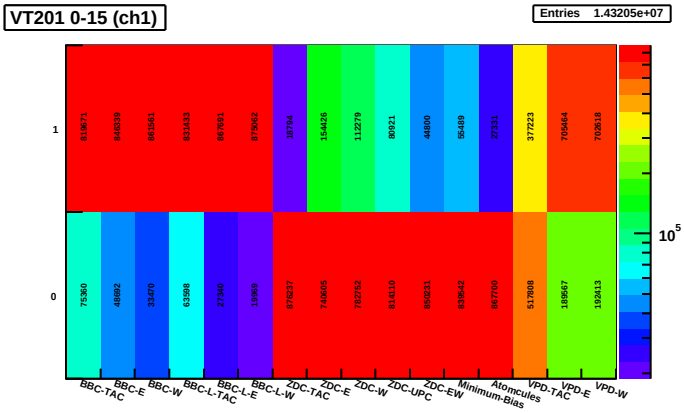

Endcap EMC L0 Input - Patch Sum
Entries 8.055279e+07
Patch Sum
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

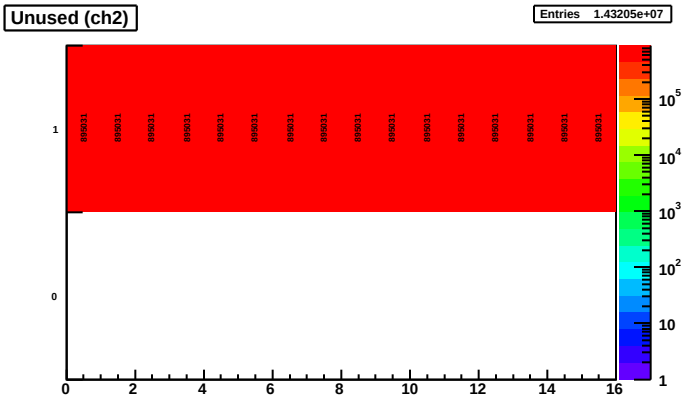

Barrel Jet Patches
Entries 1.611056e+07
JP ADC
JP ID

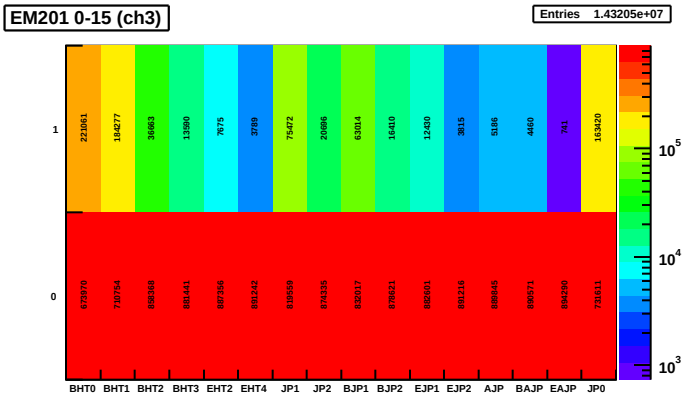

Endcap Jet Patches
Entries 5370186
JP ADC
JP ID

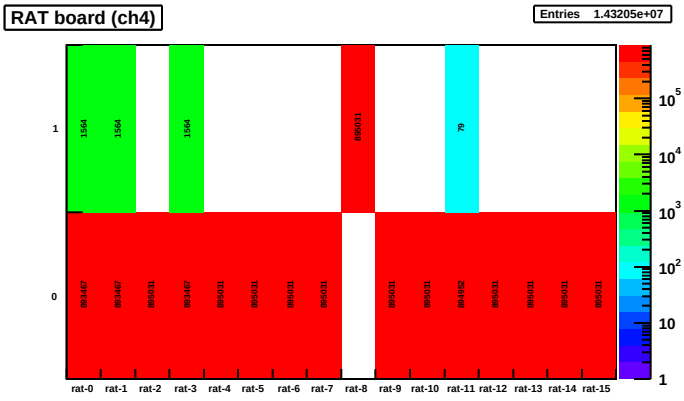

Hybrid Jet Patches
Entries 1790062
JP ADC
JP ID

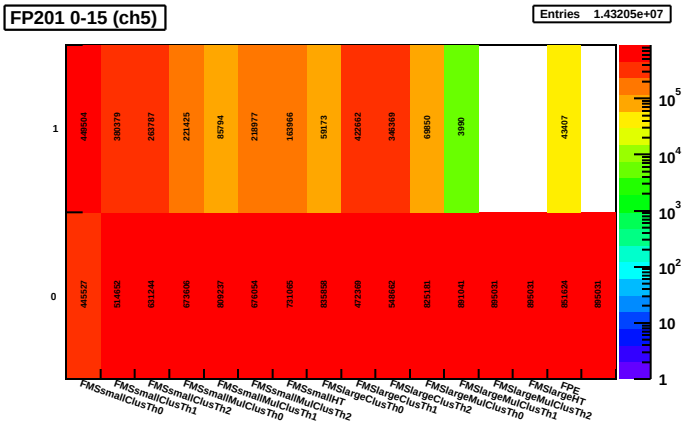

TF201 0-15 (ch0)
Entries 1.43205e+07
MTD
ET
ITE
ITW
TOFmult0
TOFmult1
TOFmult2
TOFmult3
TOFmult4
TOFsector0
TOFsector1
TOFsector2
TOFsector3
TOFsector4
TOFsector5

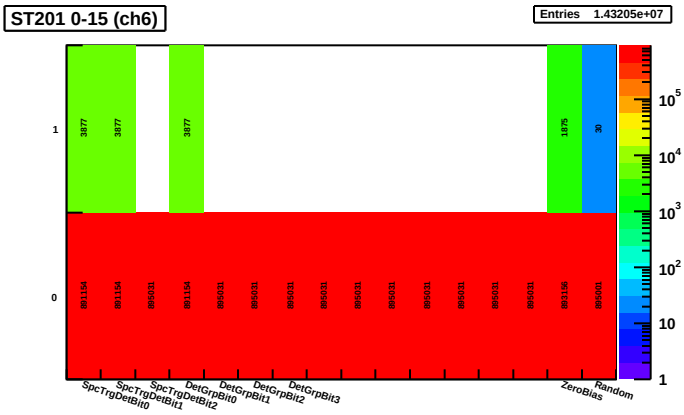

VT201 0-15 (ch1)
Entries 1.43205e+07
BBC-TAC
BBC-E
BBC-W
BBC-L-TAC
BBC-L-E
BBC-L-W
ZDC-TAC
ZDC-E
ZDC-W
ZDC-UPC
ZDC-EW
Minimum-Bias
Atomcules
VPD-TAC
VPD-E
VPD-W

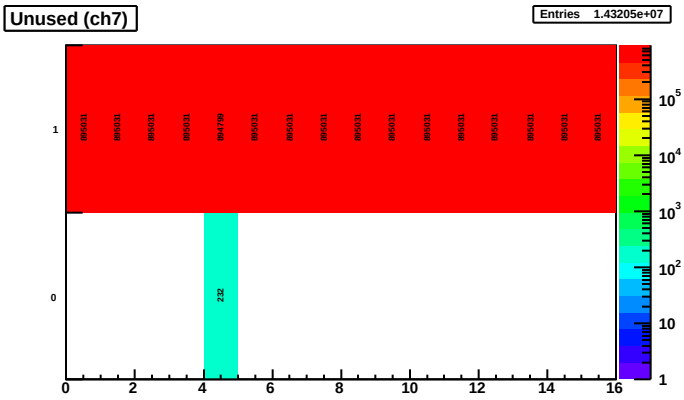

Unused (ch2)
Entries 1.43205e+07

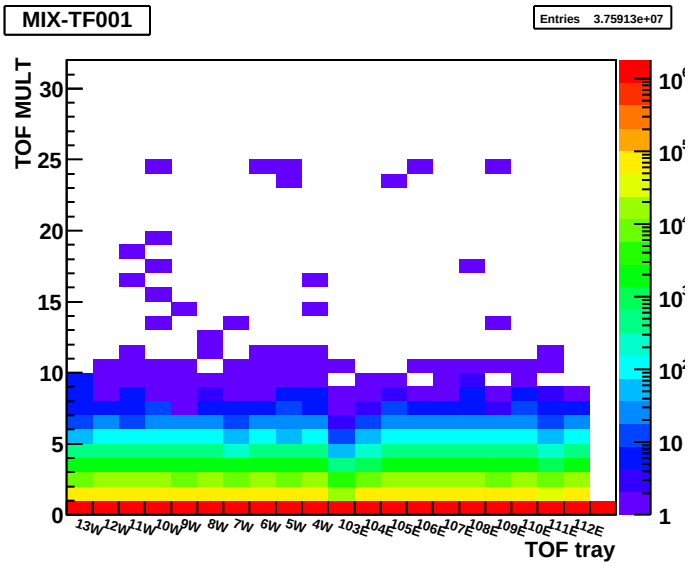

EM201 0-15 (ch3)
Entries 1.43205e+07
BHT0
BHT1
BHT2
BHT3
EHT2
EHT4
JP1
JP2
BJP1
BJP2
EJP1
EJP2
AJP
BAJP
EAJP
JP0

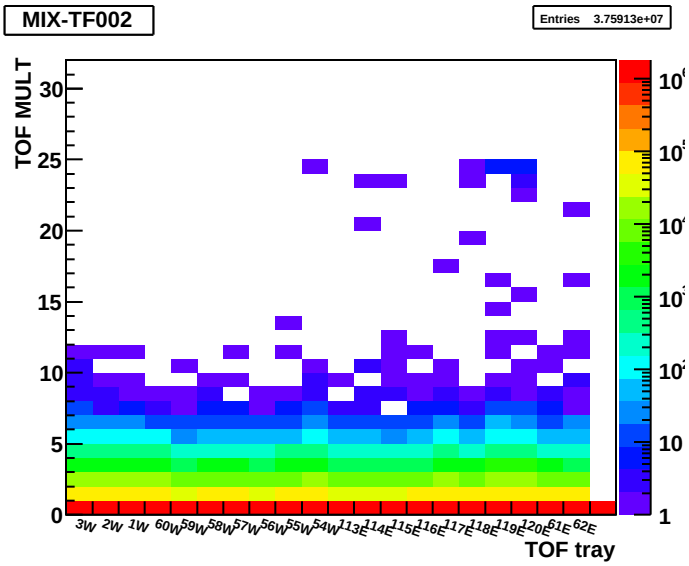

RAT board (ch4)
Entries 1.43205e+07
rat-0
rat-1
rat-2
rat-3
rat-4
rat-5
rat-6
rat-7
rat-8
rat-9
rat-10
rat-11
rat-12
rat-13
rat-14
rat-15

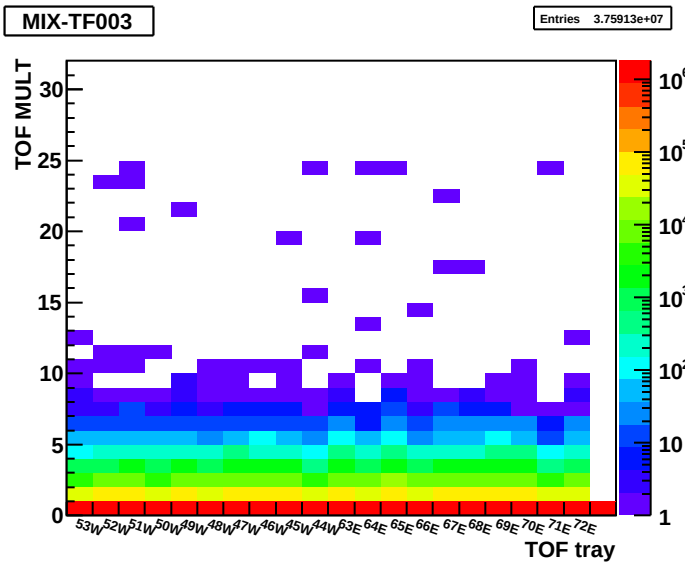

FP201 0-15 (ch5)
Entries 1.43205e+07
FMSsmallClusTh0
FMSsmallClusTh1
FMSsmallClusTh2
FMSsmallMulClusTh0
FMSsmallMulClusTh1
FMSsmallMulClusTh2
FMSsmallHT
FMSlargeClusTh0
FMSlargeClusTh1
FMSlargeClusTh2
FMSlargeMulClusTh0
FMSlargeMulClusTh1
FMSlargeMulClusTh2
FMSlargeHT
FPE

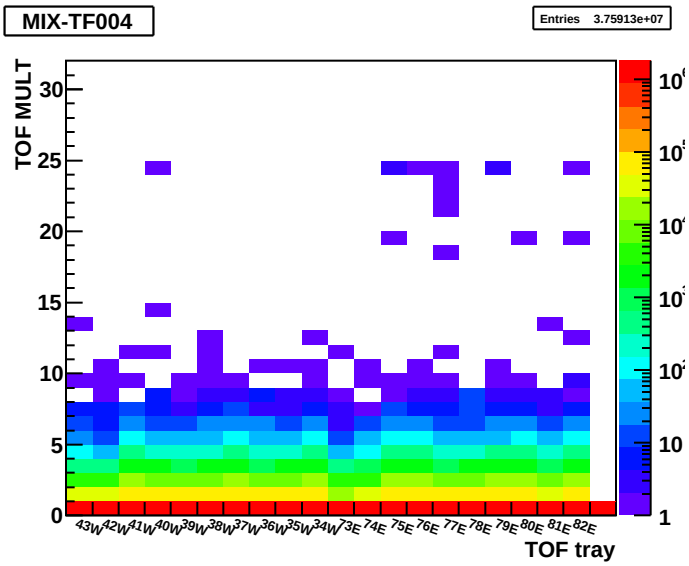

ST201 0-15 (ch6)
Entries 1.43205e+07
SpcTrgDetBit0
SpcTrgDetBit1
SpcTrgDetBit2
DetGrpBit0
DetGrpBit1
DetGrpBit2
DetGrpBit3
ZeroBias
Random

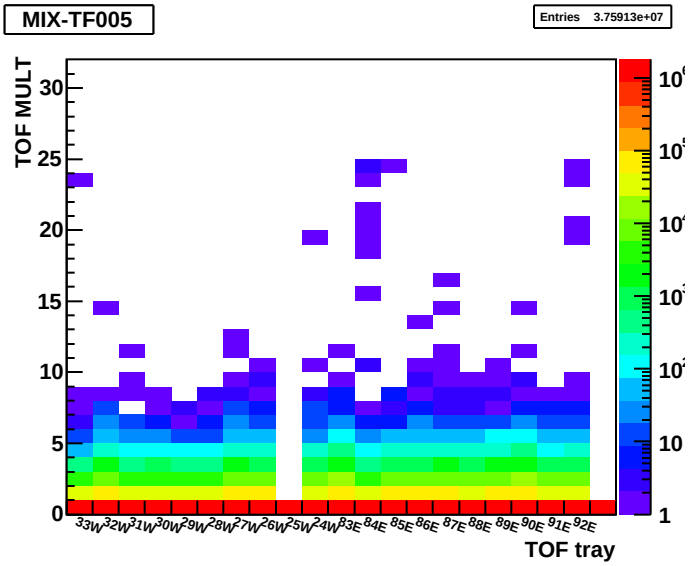

Unused (ch7)
Entries 1.43205e+07

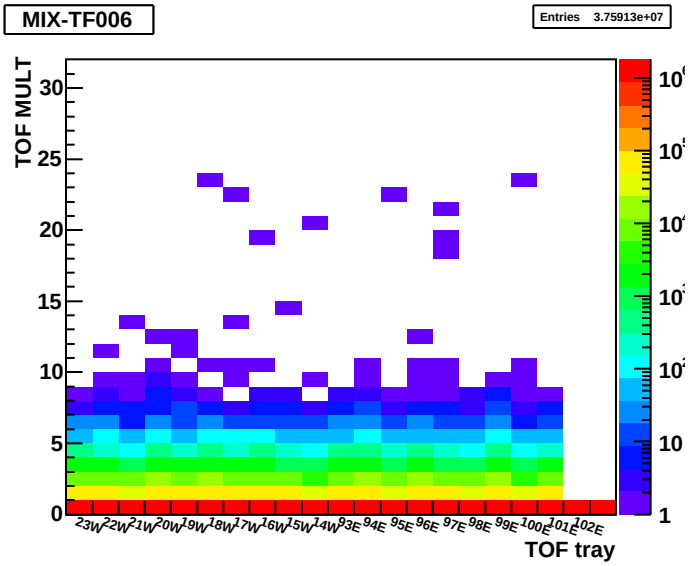

MIX-TF001
Entries 3.75913e+07
TOF MULT
TOF tray

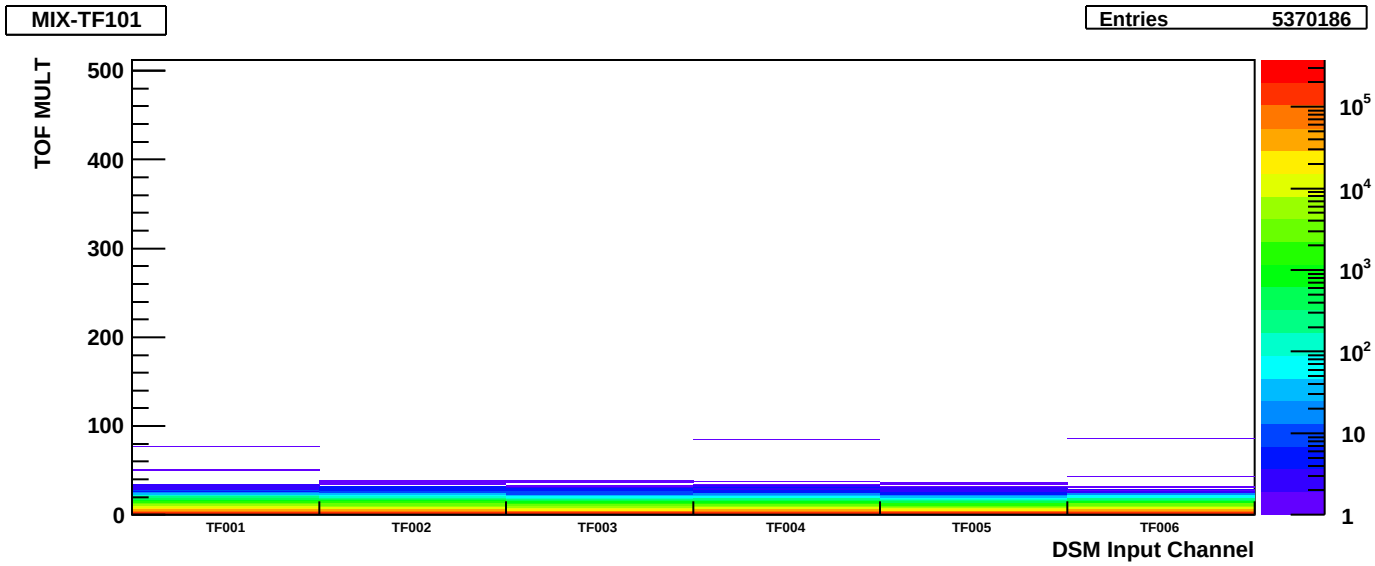

MIX-TF002
Entries 3.75913e+07
TOF MULT
TOF tray

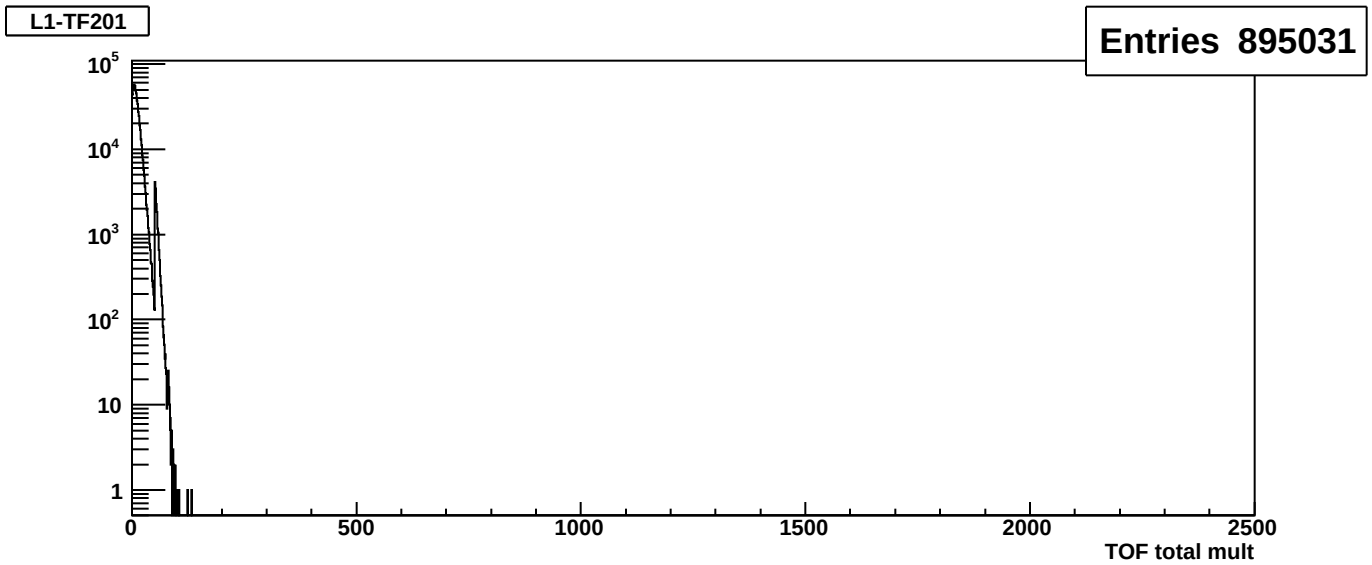

MIX-TF003
Entries 3.75913e+07
TOF MULT
TOF tray

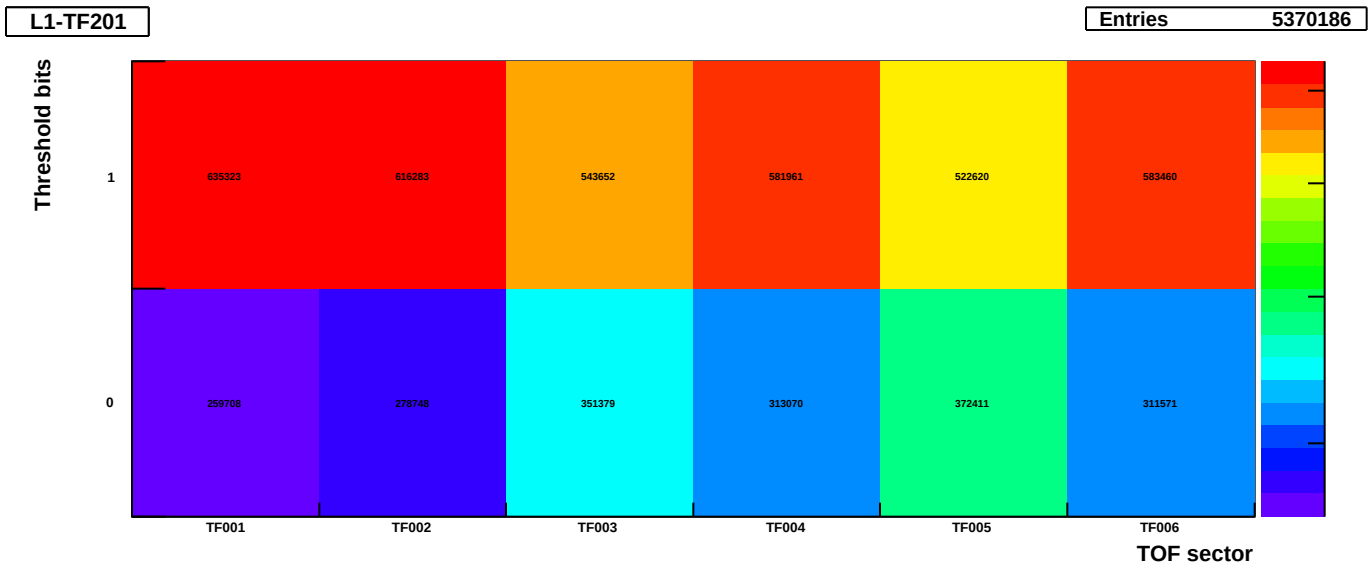

MIX-TF004
Entries 3.75913e+07
TOF MULT
TOF tray

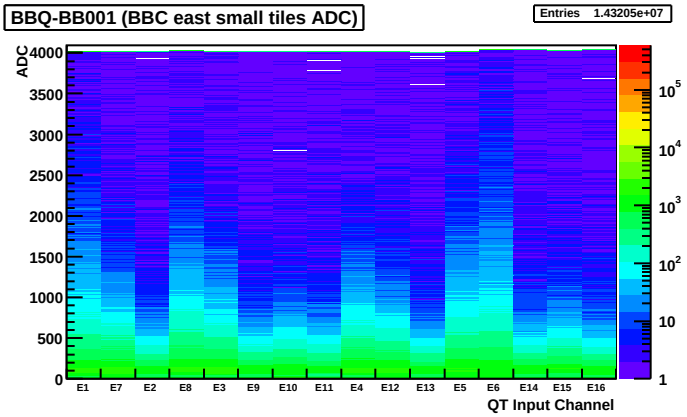

MIX-TF005
Entries 3.75913e+07
TOF MULT
TOF tray

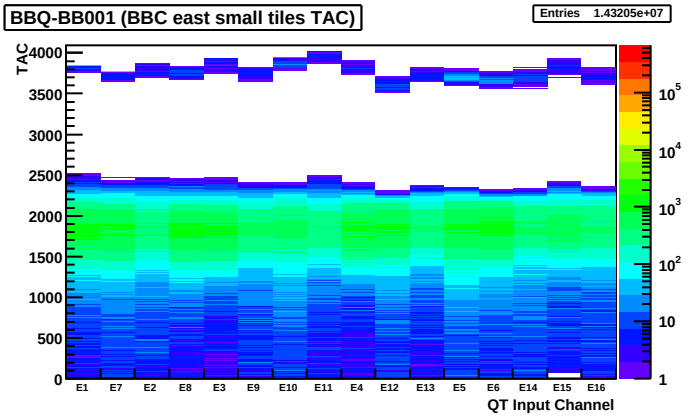

MIX-TF006
Entries 3.75913e+07
TOF MULT
TOF tray

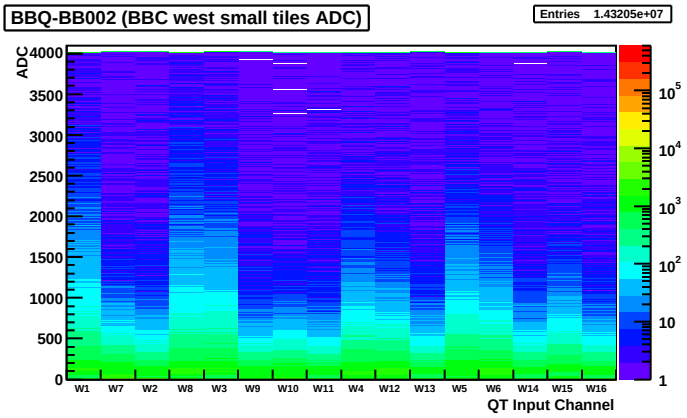

MIX-TF101
Entries 5370186
TOF MULT
500
400
300
200
100
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^5
10^4
10^3
10^2
10
1

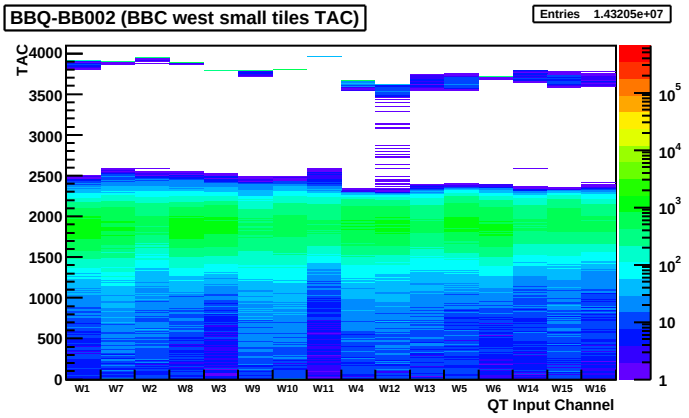

L1-TF201
Entries 895031
10^5
10^4
10^3
10^2
10
1
0
500
1000
1500
2000
2500
TOF total mult

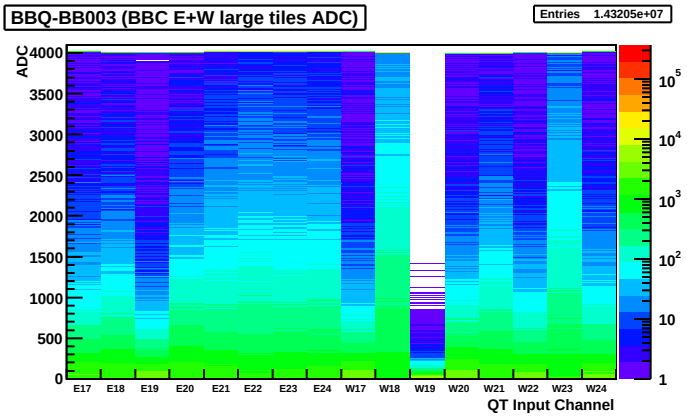

L1-TF201
Entries 5370186
Threshold bits
1
0
635323
616283
543652
581961
522620
583460
259708
278748
351379
313070
372411
311571
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector

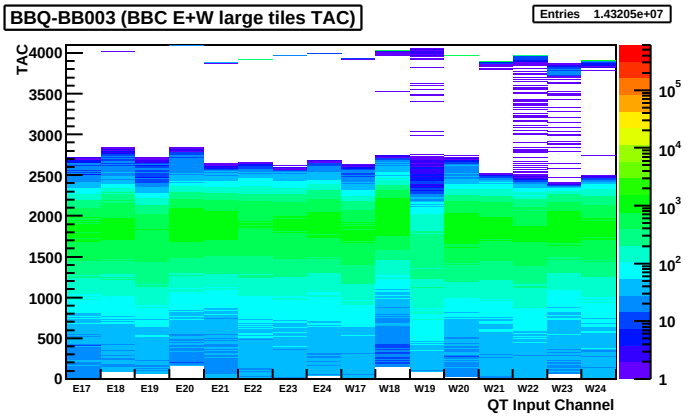

BBQ-BB001 (BBC east small tiles ADC)
Entries 1.43205e+07
ADC
QT Input Channel

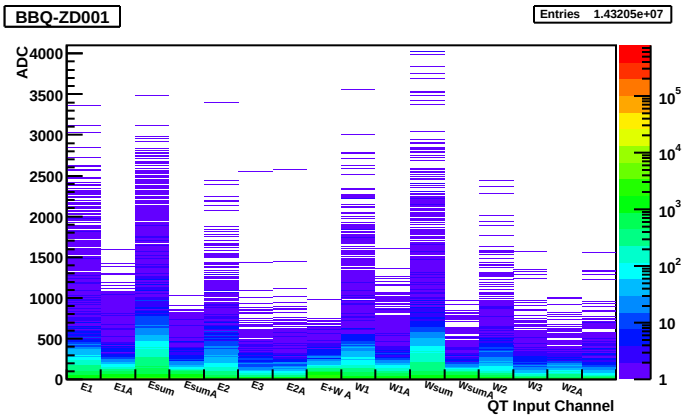

BBQ-BB001 (BBC east small tiles TAC)
Entries 1.43205e+07
TAC
QT Input Channel

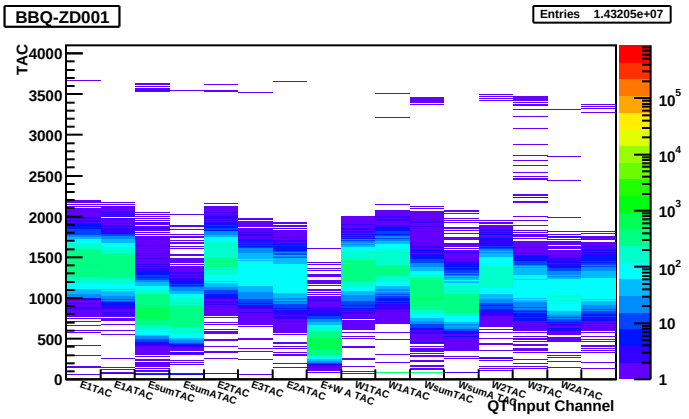

BBQ-BB002 (BBC west small tiles ADC)
Entries 1.43205e+07
ADC
QT Input Channel

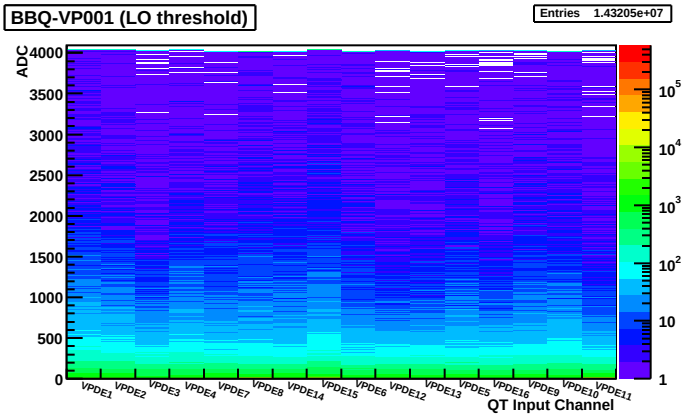

BBQ-BB002 (BBC west small tiles TAC)
Entries 1.43205e+07
TAC
QT Input Channel

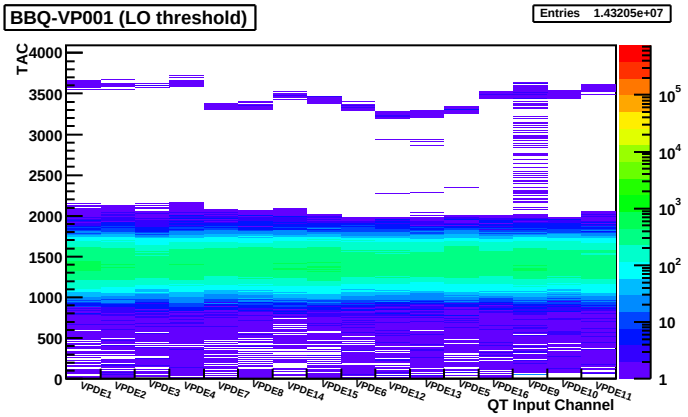

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 1.43205e+07
ADC
QT Input Channel

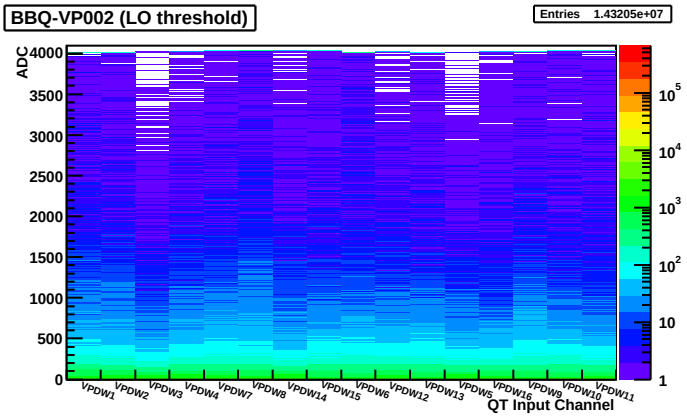

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 1.43205e+07
TAC
QT Input Channel

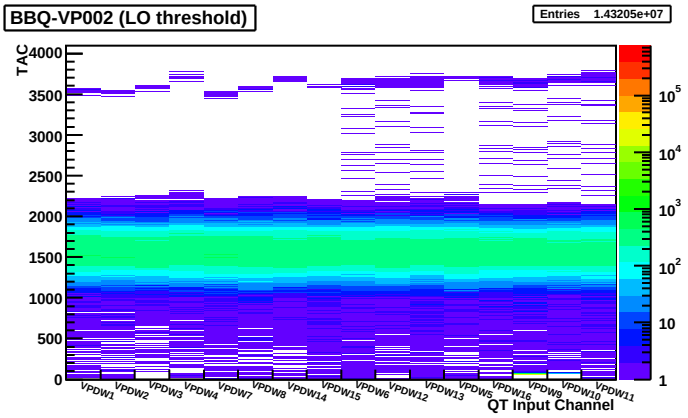

BBQ-ZD001
Entries 1.43205e+07
ADC
QT Input Channel

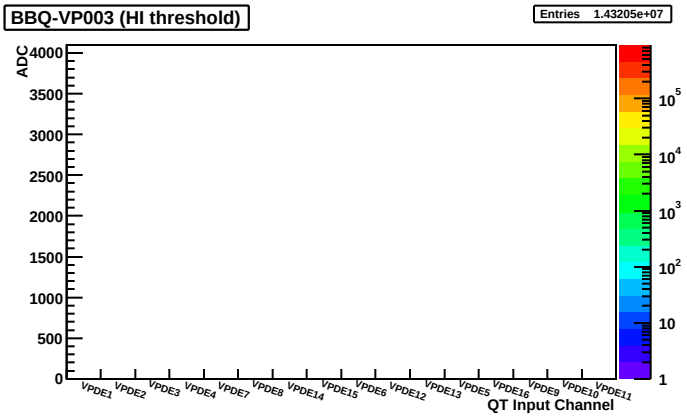

BBQ-ZD001
Entries 1.43205e+07
TAC
QT Input Channel

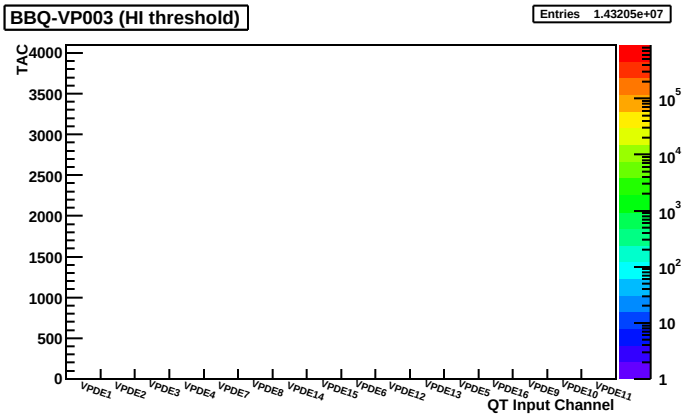

BBQ-VP001 (LO threshold)
Entries 1.43205e+07
ADC
QT Input Channel

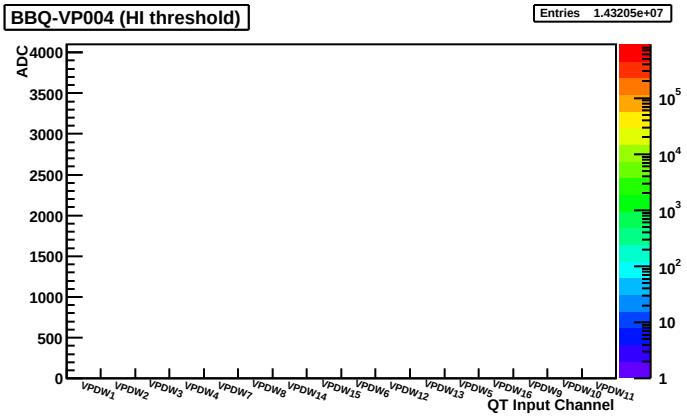

BBQ-VP001 (LO threshold)
Entries 1.43205e+07
TAC
QT Input Channel

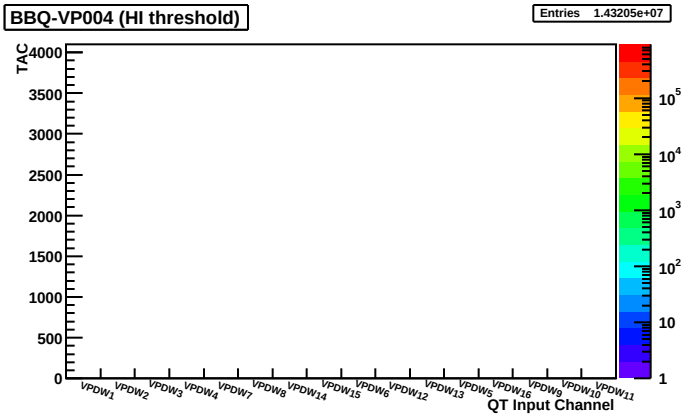

BBQ-VP002 (LO threshold)
Entries 1.43205e+07
ADC
QT Input Channel

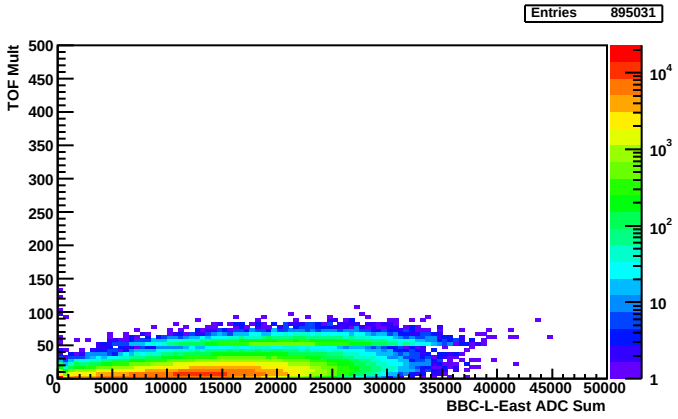

BBQ-VP002 (LO threshold)
Entries 1.43205e+07
TAC
QT Input Channel

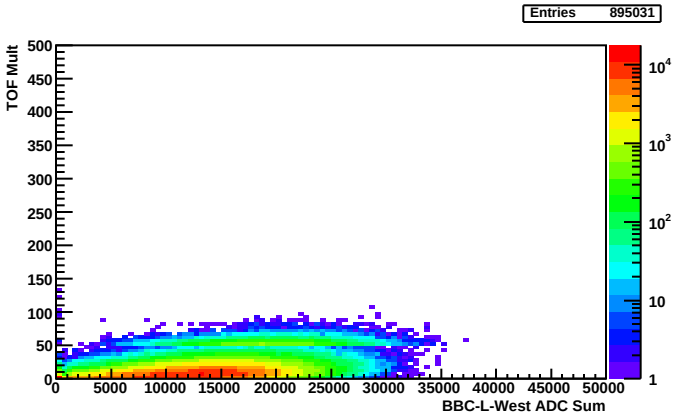

BBQ-VP003 (HI threshold)
Entries 1.43205e+07
ADC
QT Input Channel

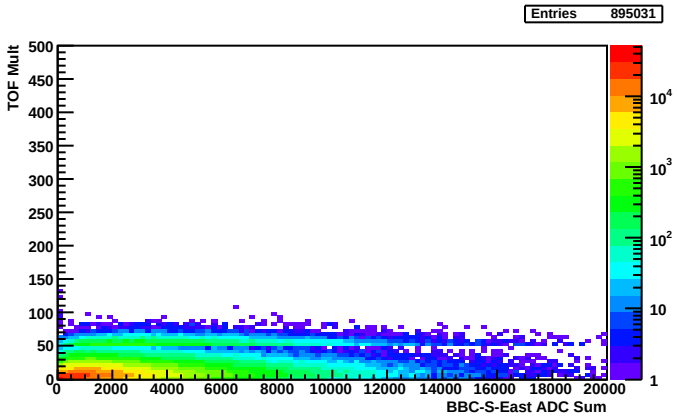

BBQ-VP003 (HI threshold)
Entries 1.43205e+07
TAC
QT Input Channel

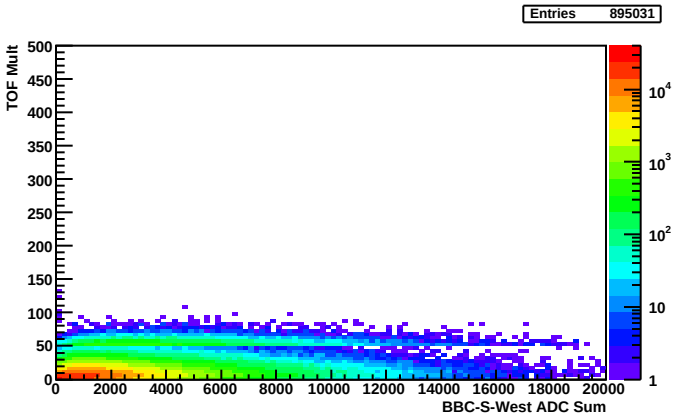

BBQ-VP004 (HI threshold)
Entries 1.43205e+07
ADC
QT Input Channel

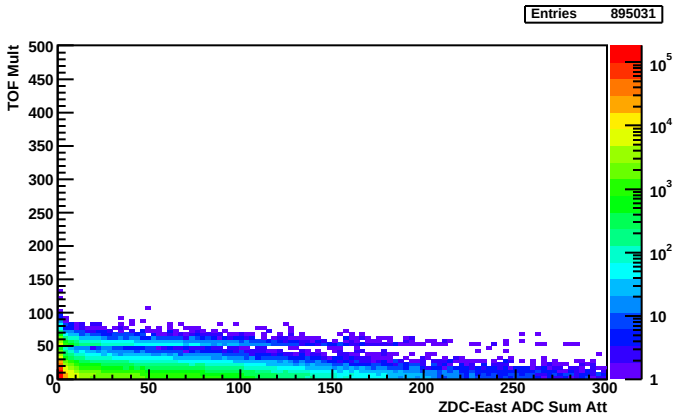

BBQ-VP004 (HI threshold)
Entries 1.43205e+07
TAC
QT Input Channel

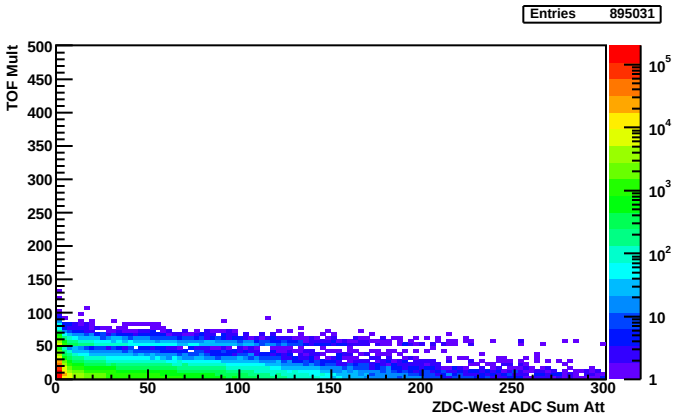

Entries 895031
TOF Mult
BBC-L-East ADC Sum

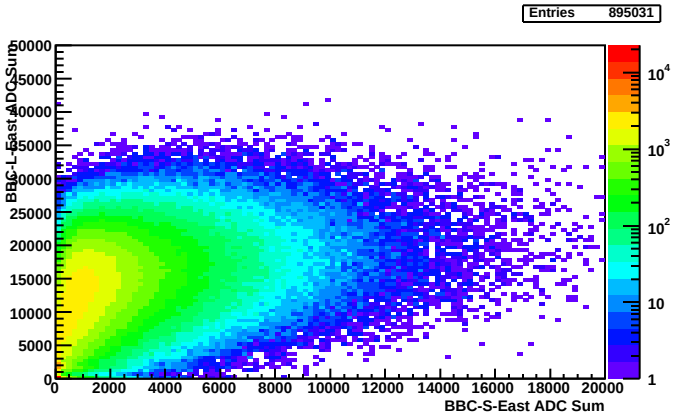

Entries 895031
TOF Mult
BBC-L-West ADC Sum

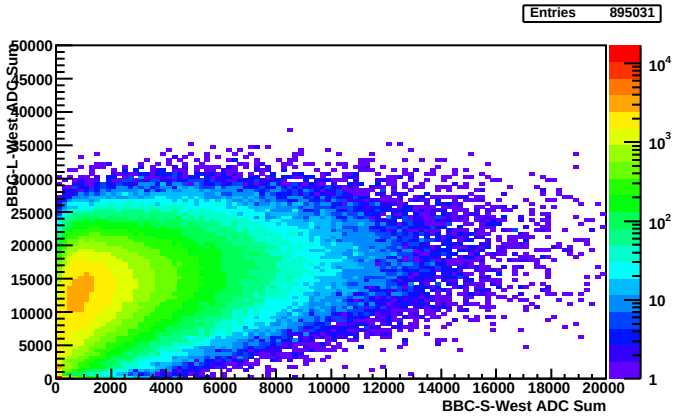

Entries 895031
TOF Mult
BBC-S-East ADC Sum

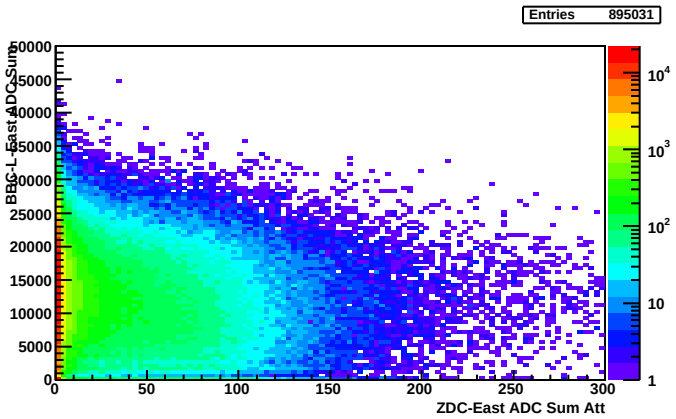

Entries 895031
TOF Mult
BBC-S-West ADC Sum

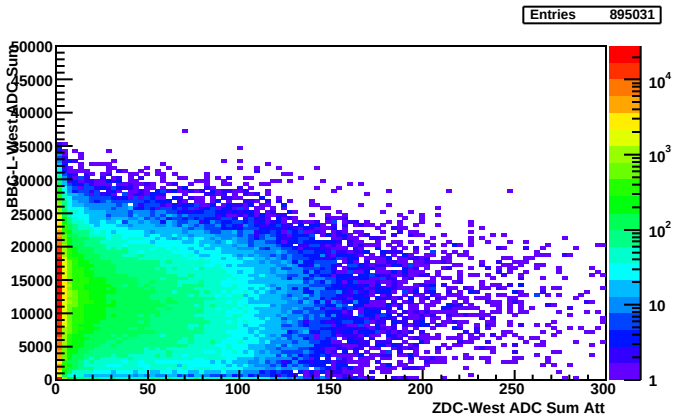

Entries 895031
TOF Mult
ZDC-East ADC Sum Att

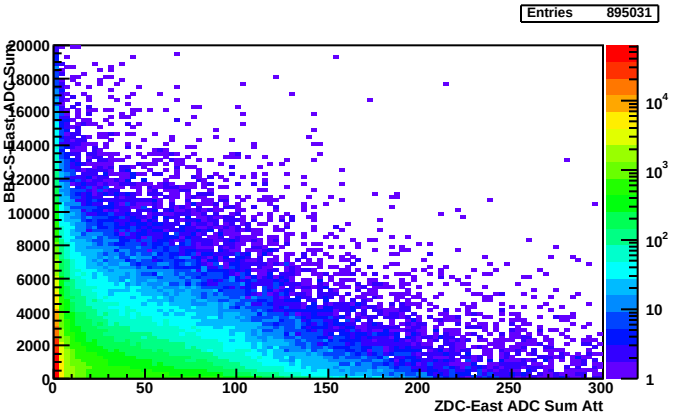

Entries 895031
TOF Mult
ZDC-West ADC Sum Att

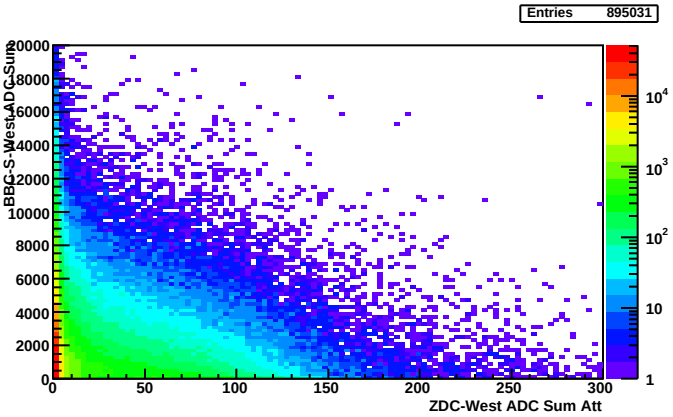

Entries 895031
BBC-L-East ADC Sum
BBC-S-East ADC Sum

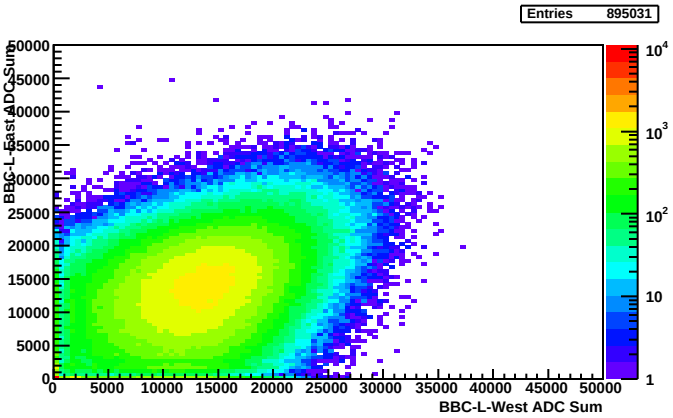

Entries 895031
BBC-L-West ADC Sum
BBC-S-West ADC Sum

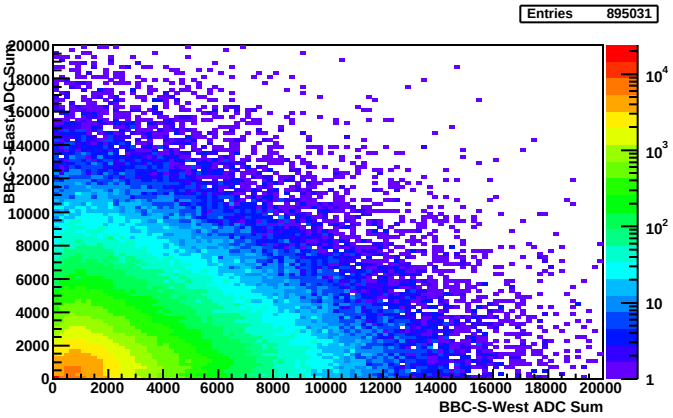

Entries 895031
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

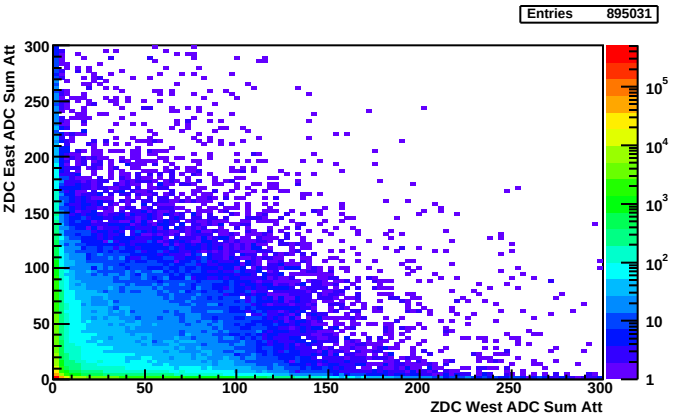

Entries 895031
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

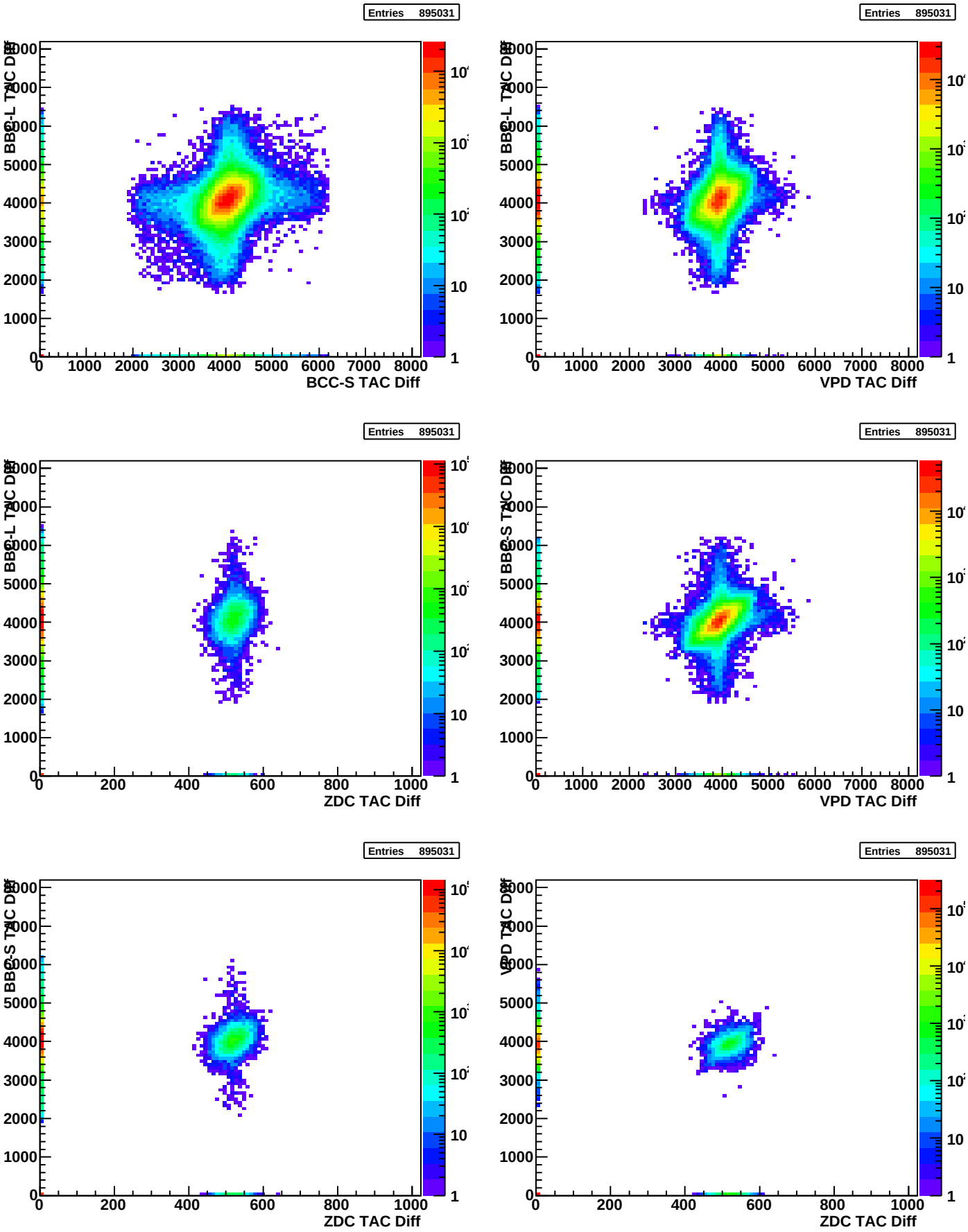

Entries 895031
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

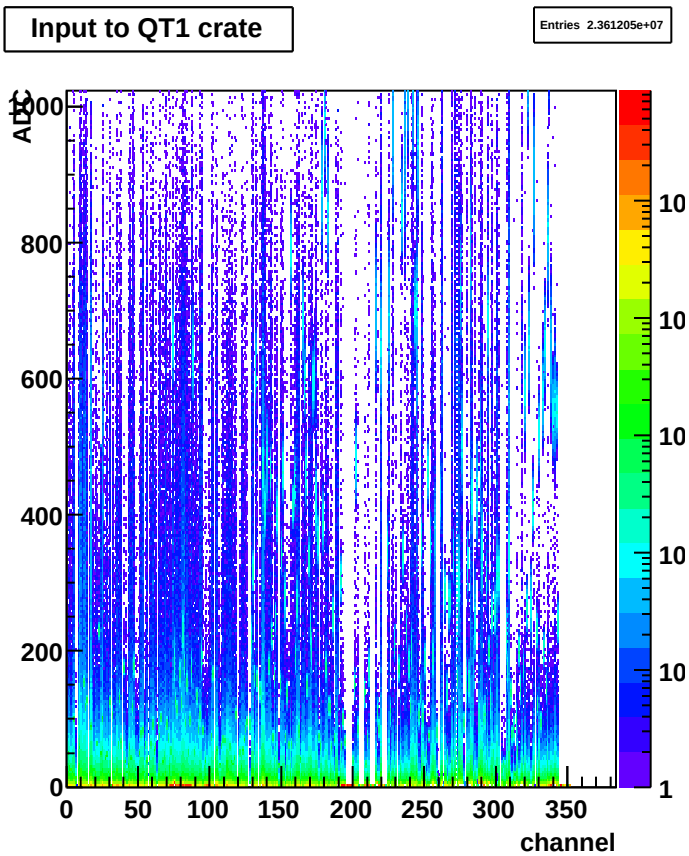

Entries 895031
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

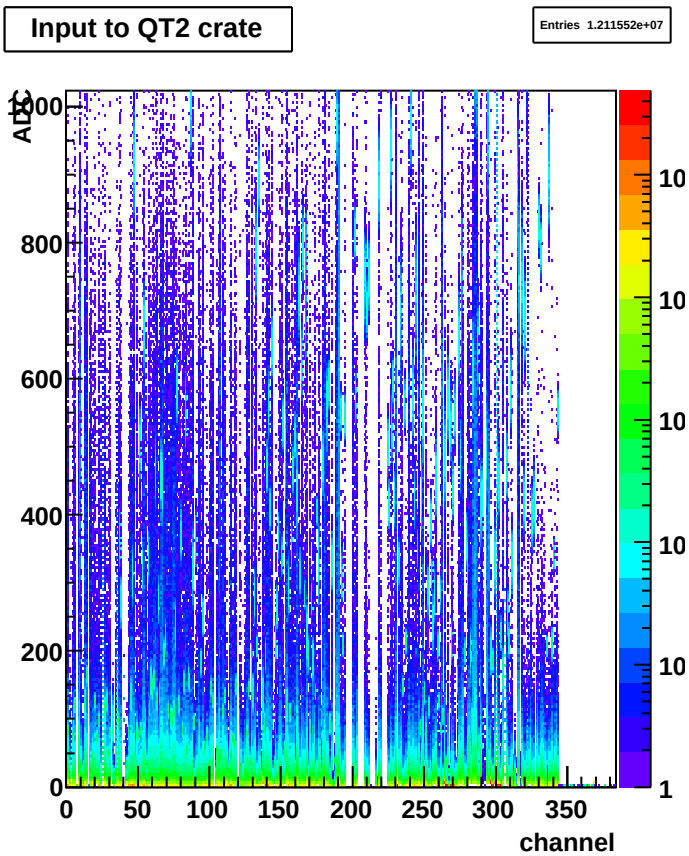

Entries 895031
BBC-L-East ADC Sum
BBC-L-West ADC Sum

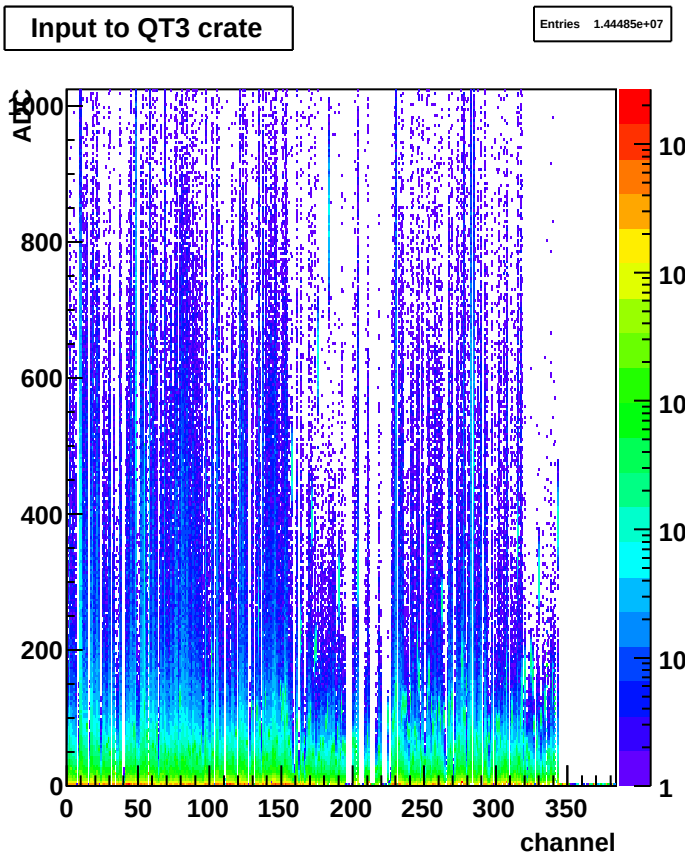

Entries 895031
BBC-S-East ADC Sum
BBC-S-West ADC Sum

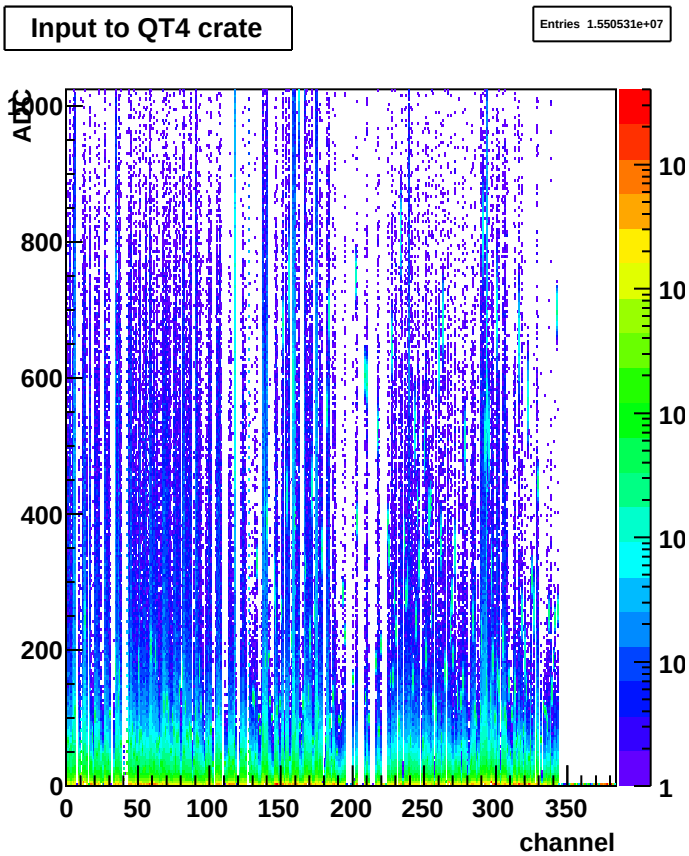

Entries 895031
ZDC East ADC Sum Att
ZDC West ADC Sum Att

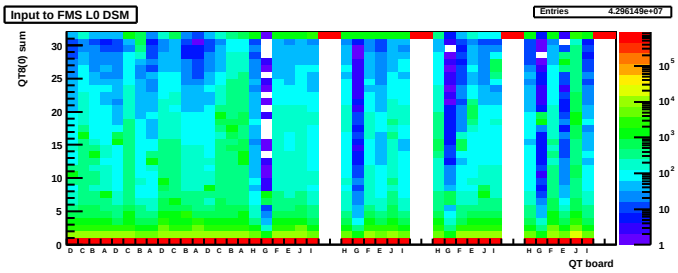

Entries 895031
BBC-L TAC Diff
BCC-S TAC Diff
Entries 895031
BBC-L TAC Diff
VPD TAC Diff
Entries 895031
BBC-L TAC Diff
ZDC TAC Diff
Entries 895031
BBC-S TAC Diff
VPD TAC Diff
Entries 895031
BBC-S TAC Diff
ZDC TAC Diff
Entries 895031
VPD TAC Diff
ZDC TAC Diff

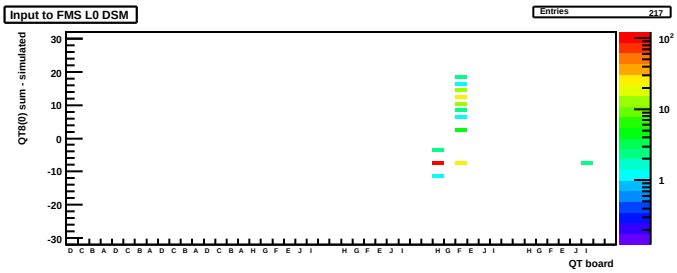

Input to QT1 crate
Entries 2.361205e+07
ADC
channel

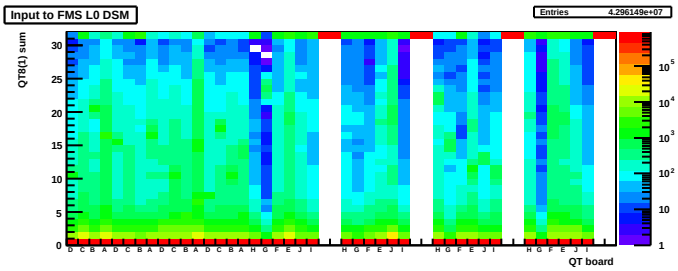

Input to QT2 crate
Entries 1.211552e+07
ADC
channel

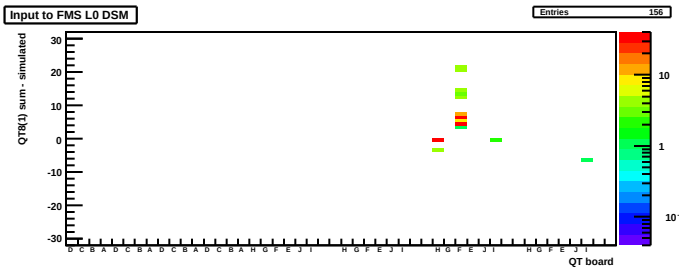

Input to QT3 crate
Entries 1.44485e+07
ADC
channel

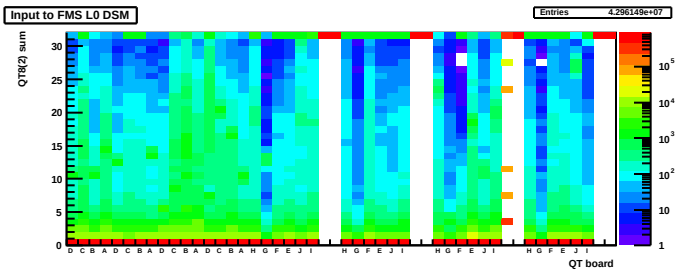

Input to QT4 crate
Entries 1.550531e+07
ADC
channel

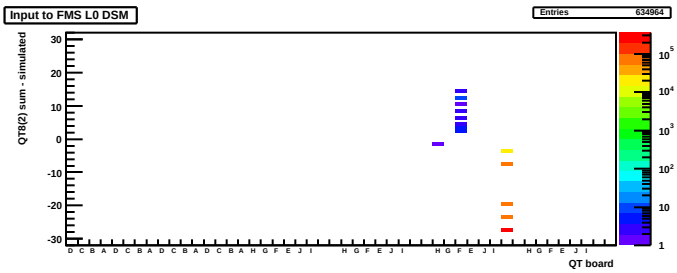

Input to FMS L0 DSM
Entries 4.296149e+07
QT8(0) sum
QT board

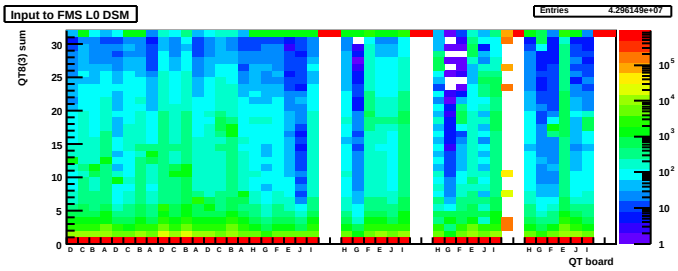

Input to FMS L0 DSM
Entries 217
QT8(0) sum - simulated
QT board

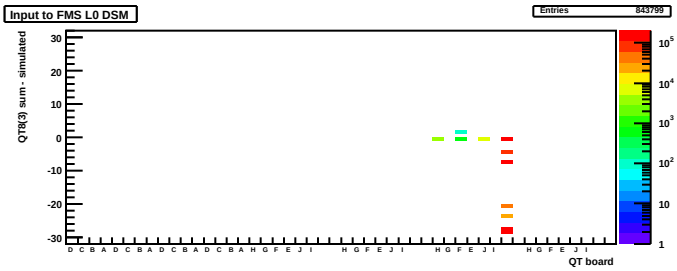

Input to FMS L0 DSM
Entries 4.296149e+07
QT8(1) sum
QT board

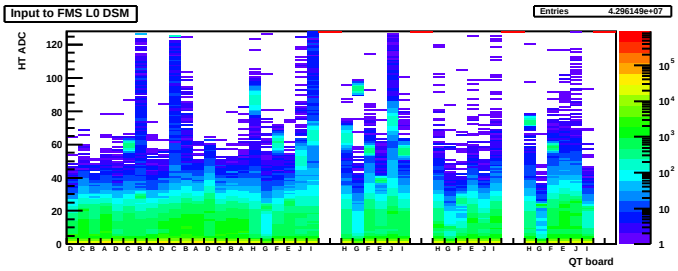

Input to FMS L0 DSM
Entries 156
QT8(1) sum - simulated
QT board

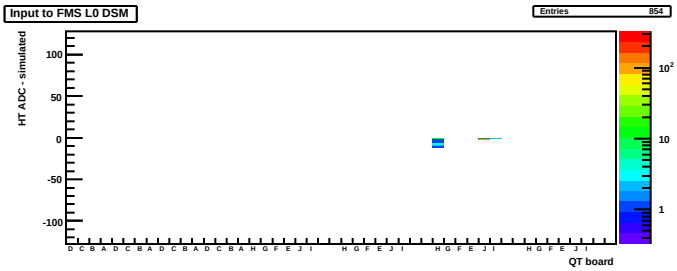

Input to FMS L0 DSM
Entries 4.296149e+07
QT8(2) sum
QT board

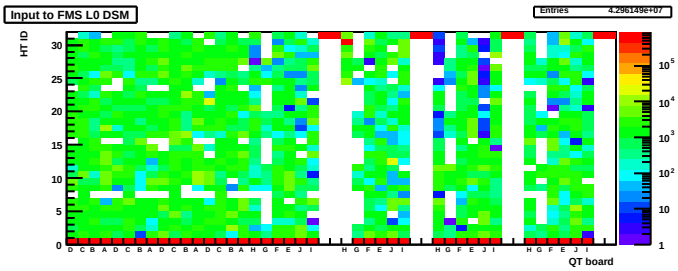

Input to FMS L0 DSM
Entries 634964
QT8(2) sum - simulated
QT board

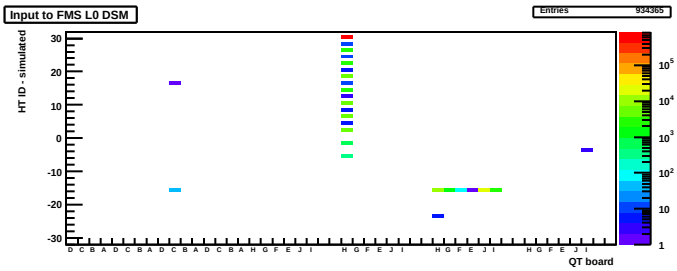

Input to FMS L0 DSM
Entries 4.296149e+07
QT8(3) sum
QT board

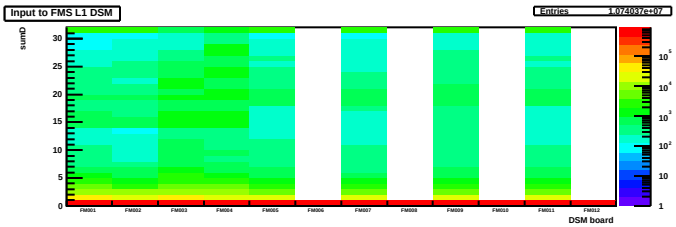

Input to FMS L0 DSM
Entries 843799
QT8(3) sum - simulated
QT board

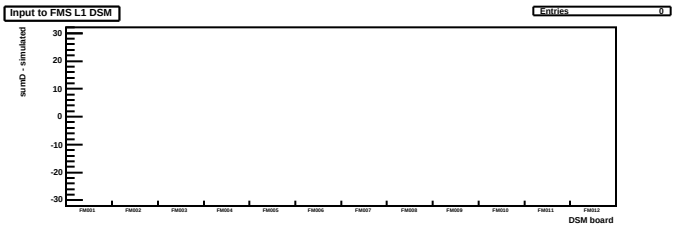

Input to FMS L0 DSM
Entries 4.296149e+07
HT ADC
QT board

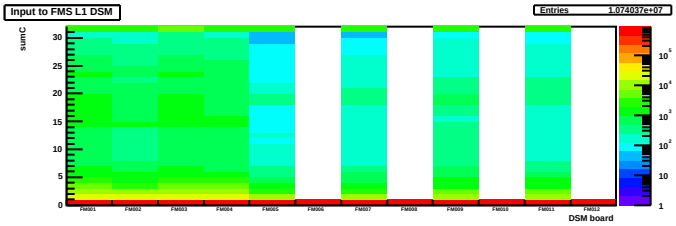

Input to FMS L0 DSM
Entries 854
HT ADC - simulated
QT board

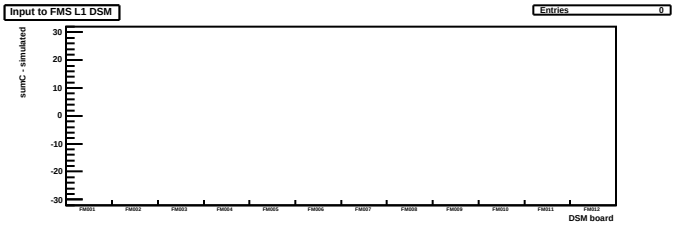

Input to FMS L0 DSM
Entries 4.296149e+07
HT ID
QT board

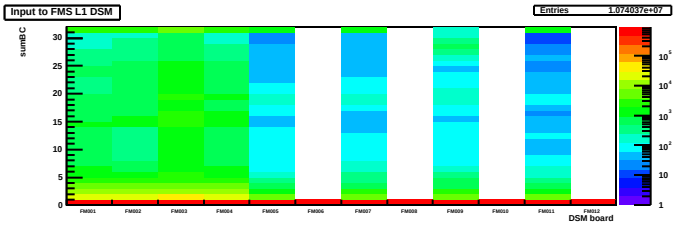

Input to FMS L0 DSM
Entries 934365
HT ID - simulated
QT board

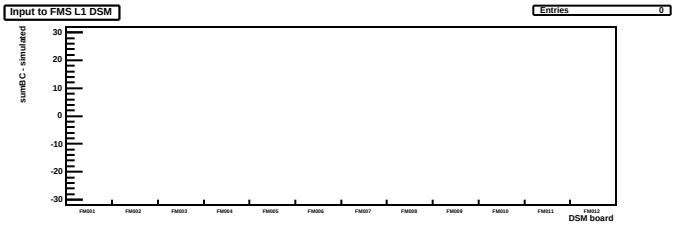

Input to FMS L1 DSM
Entries 1.074037e+07
sumD
DSM board

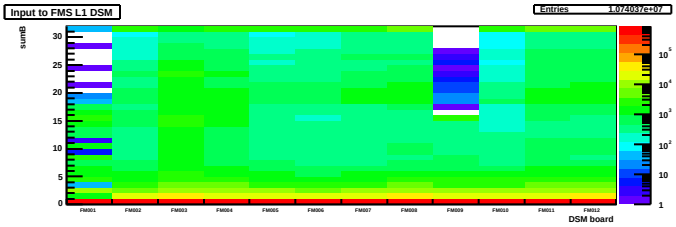

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

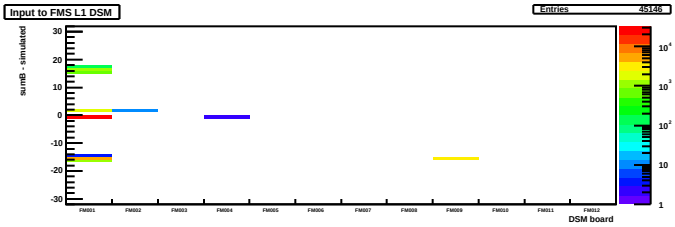

Input to FMS L1 DSM
Entries 1.074037e+07
sumC
DSM board

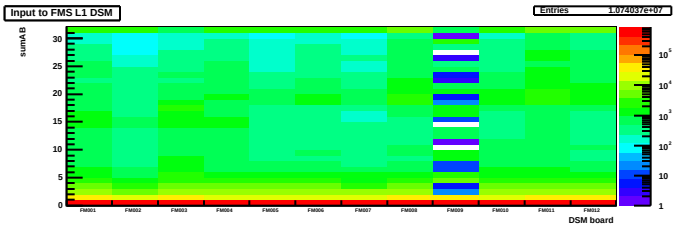

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

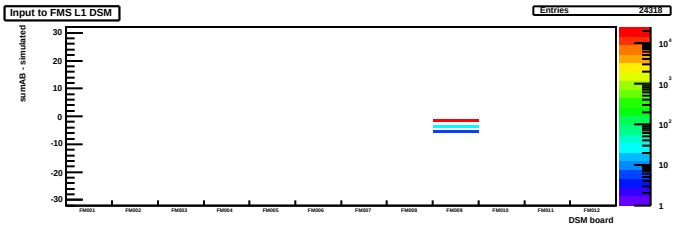

Input to FMS L1 DSM
Entries 1.074037e+07
sumBC
DSM board

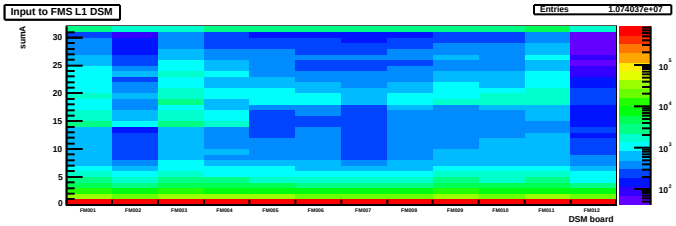

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

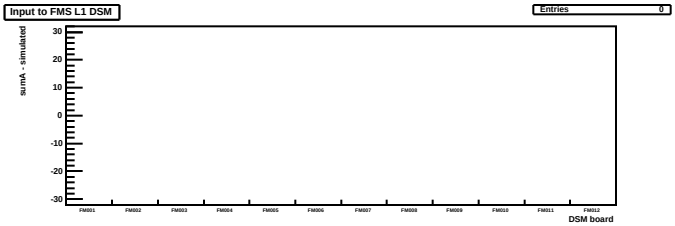

Input to FMS L1 DSM
Entries 1.074037e+07
sumB
DSM board

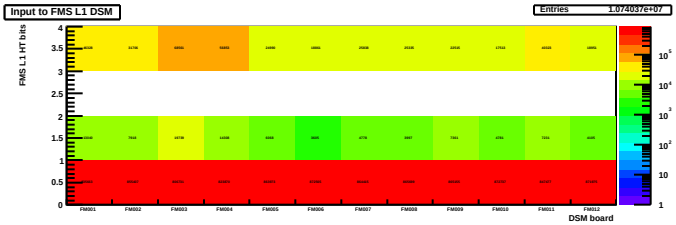

Input to FMS L1 DSM
Entries 45146
sumB - simulated
DSM board

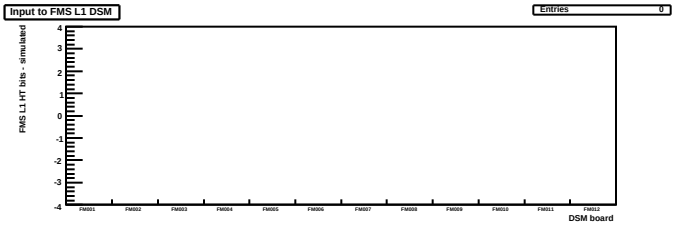

Input to FMS L1 DSM
Entries 1.074037e+07
sumAB
DSM board

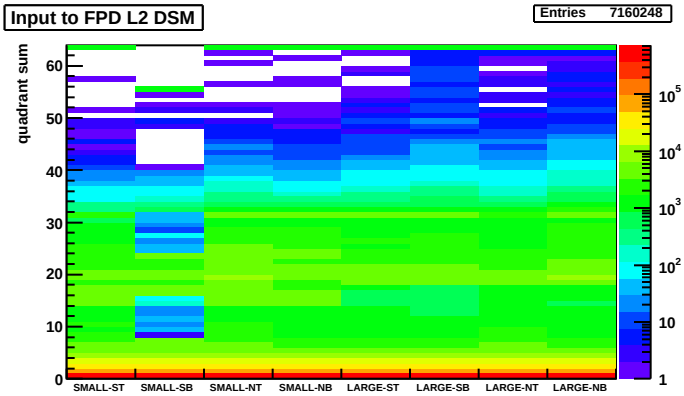

Input to FMS L1 DSM
Entries 24318
sumAB - simulated
DSM board

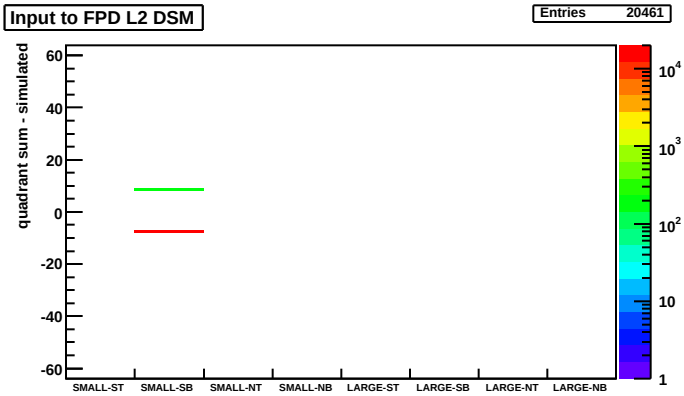

Input to FMS L1 DSM
Entries 1.074037e+07
sumA
DSM board

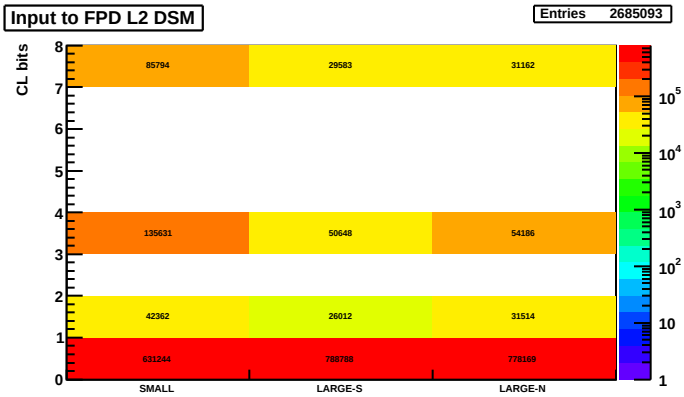

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

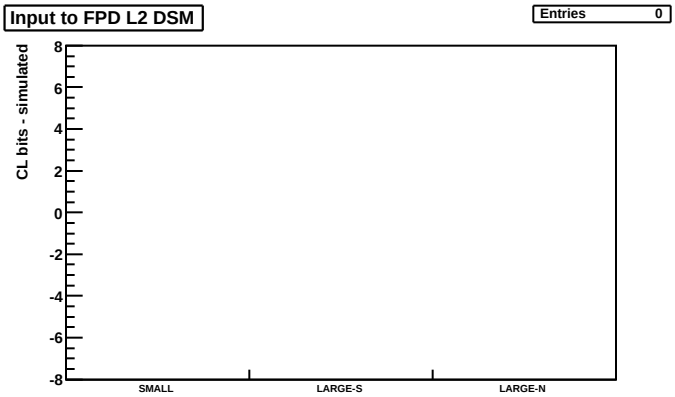

Input to FMS L1 DSM
Entries 1.074037e+07
FMS L1 HT bits
DSM board

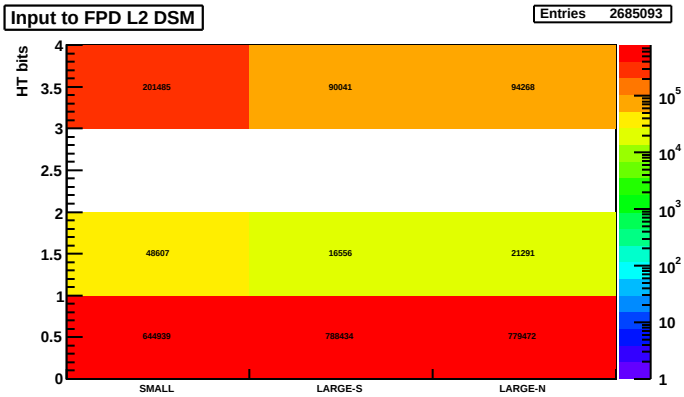

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

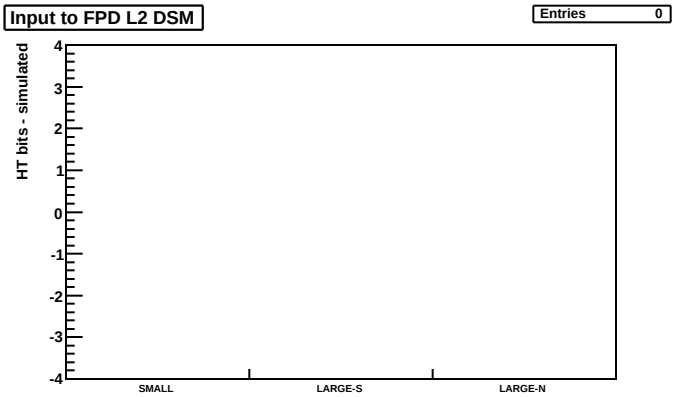

Input to FPD L2 DSM
Entries 7160248
quadrant sum
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

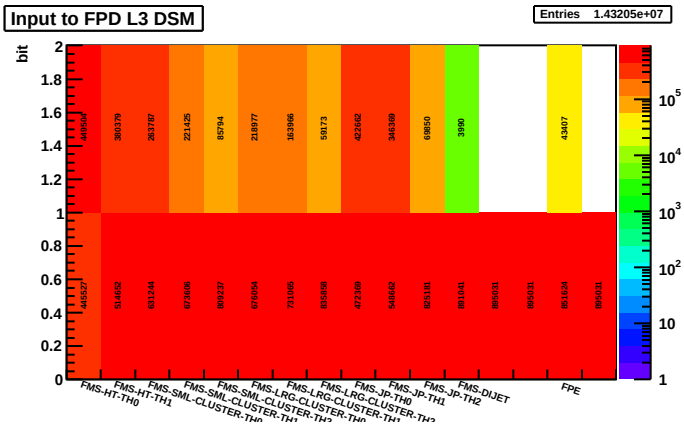

Input to FPD L2 DSM
Entries 20461
quadrant sum - simulated
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

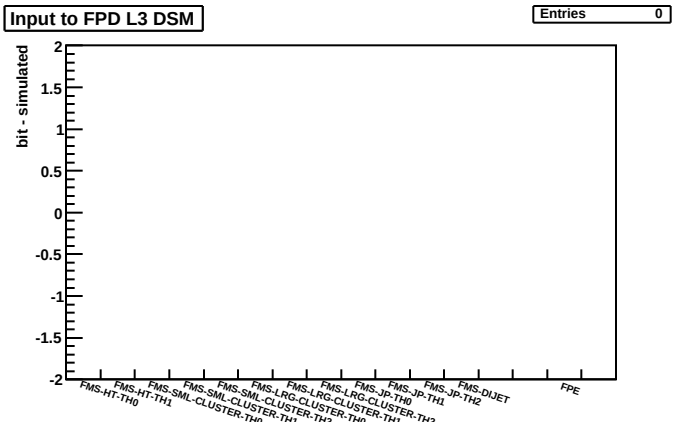

Input to FPD L2 DSM
Entries 2685093
CL bits
85794
29583
31162
135631
50648
54186
42362
26012
31514
631244
788788
778169
SMALL
LARGE-S
LARGE-N

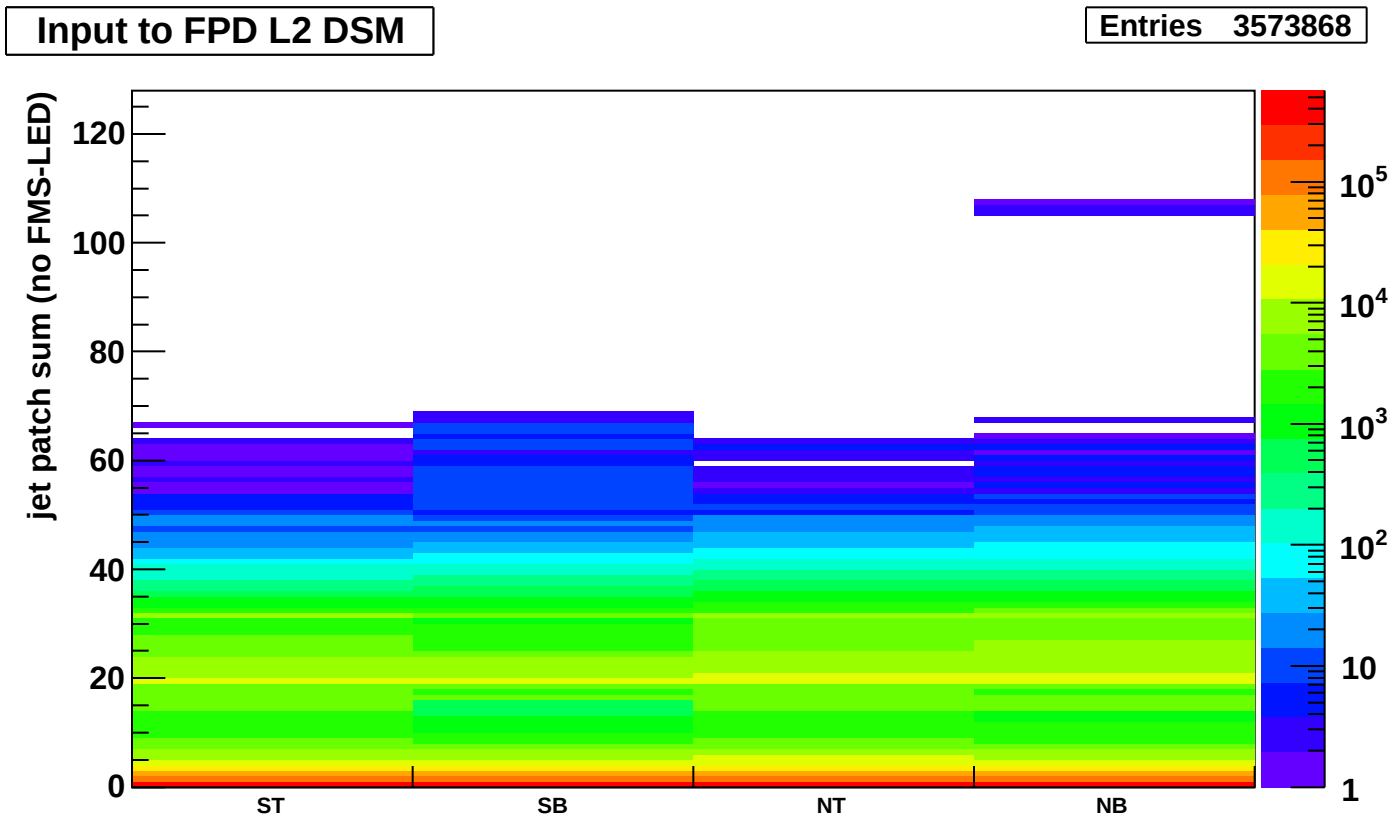

Input to FPD L2 DSM
Entries 0
CL bits - simulated
SMALL
LARGE-S
LARGE-N

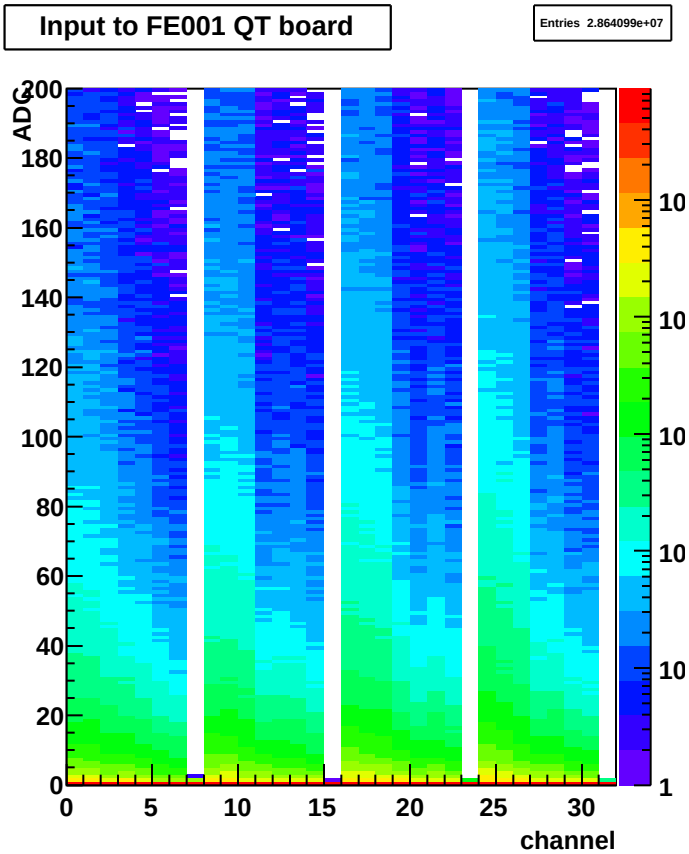

Input to FPD L2 DSM
Entries 2685093
HT bits
201485
90041
94268
48607
16556
21291
644939
788434
779472
SMALL
LARGE-S
LARGE-N

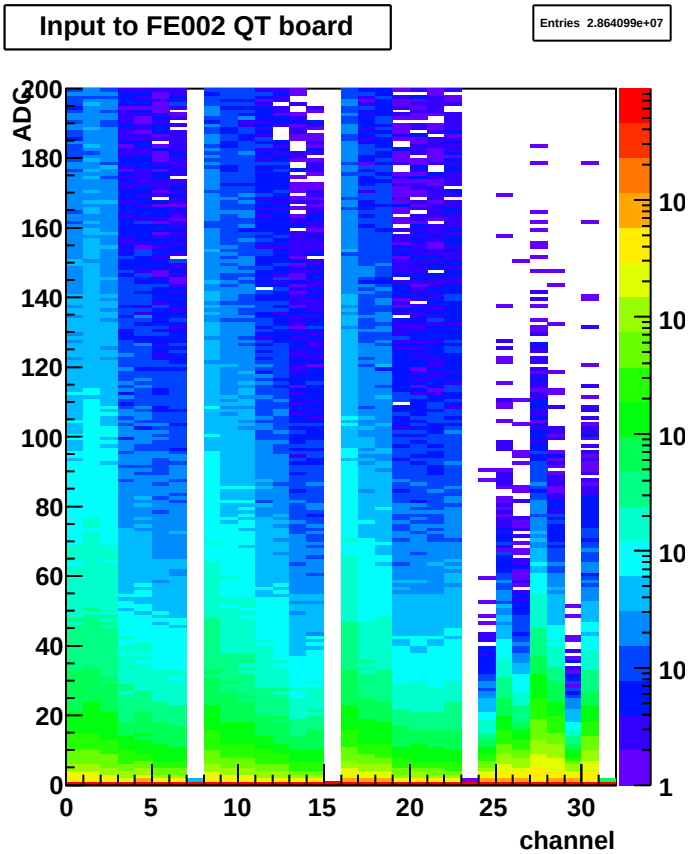

Input to FPD L2 DSM
Entries 0
HT bits - simulated
SMALL
LARGE-S
LARGE-N

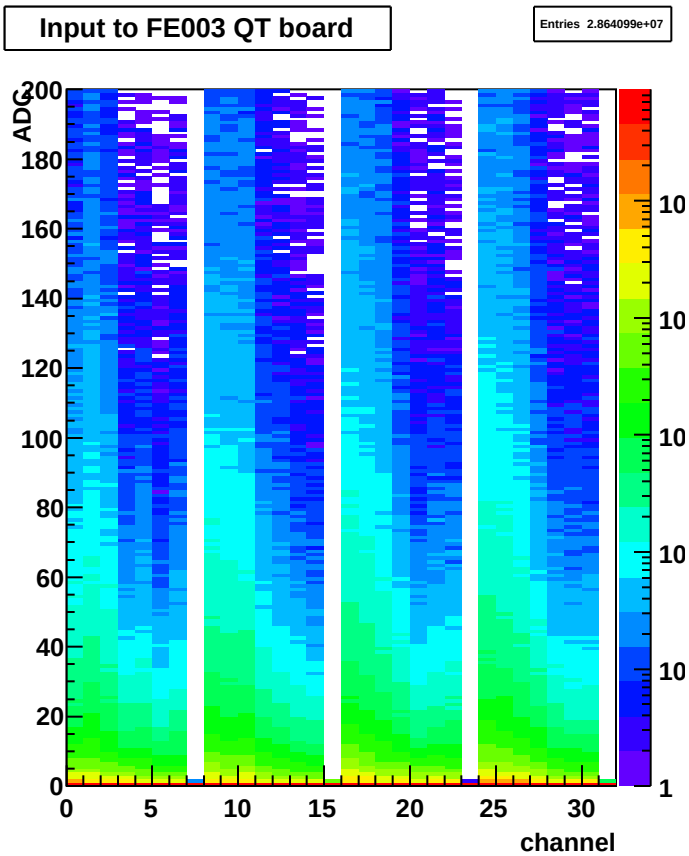

Input to FPD L3 DSM
Entries 1.43205e+07
bit
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

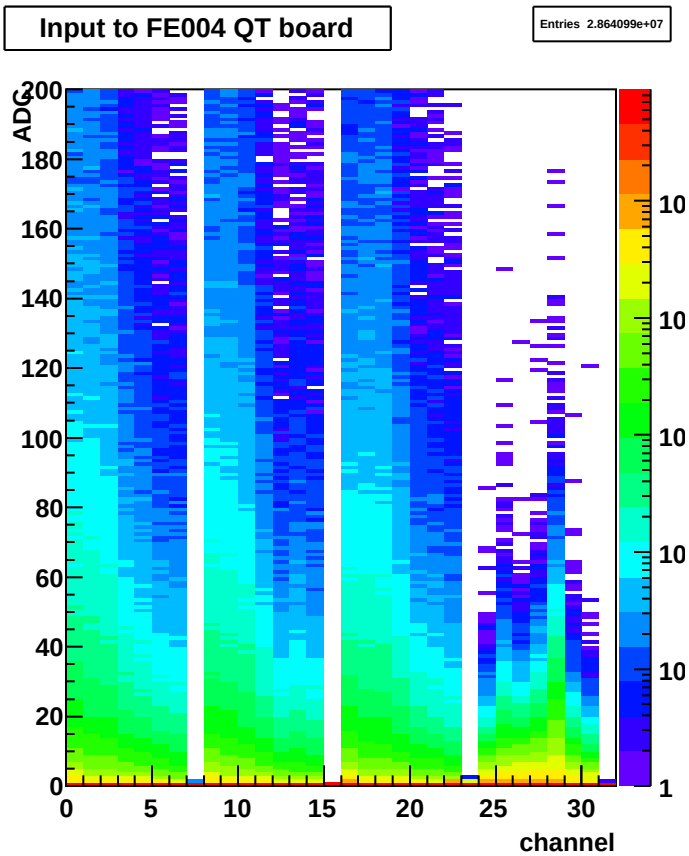

Input to FPD L3 DSM
Entries 0
bit - simulated
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

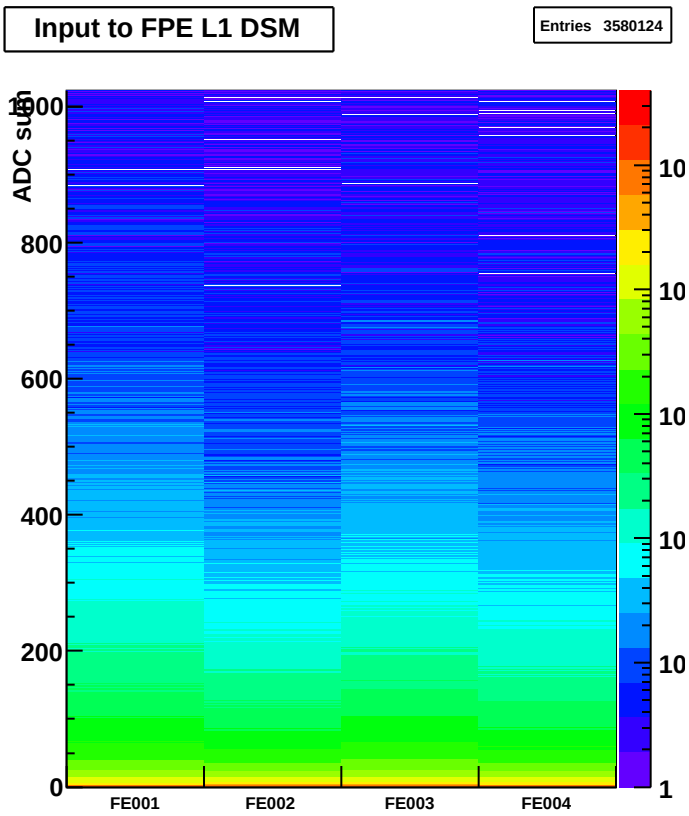

Input to FPD L2 DSM
Entries 3573868
jet patch sum (no FMS-LED)
0
20
40
60
80
100
120
ST
SB
NT
NB
1
10
10^2
10^3
10^4
10^5

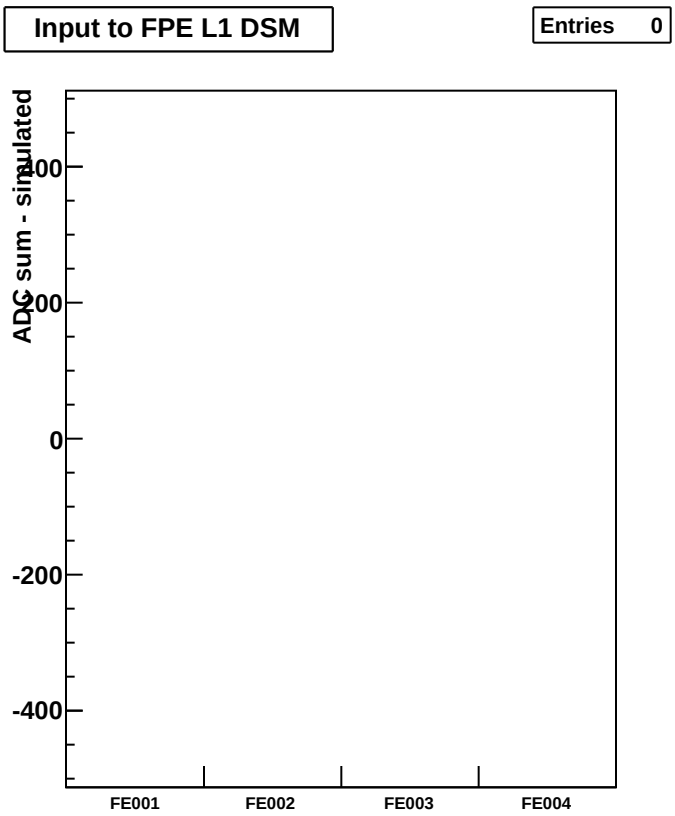

Input to FE001 QT board
Entries 2.864099e+07
ADC
channel

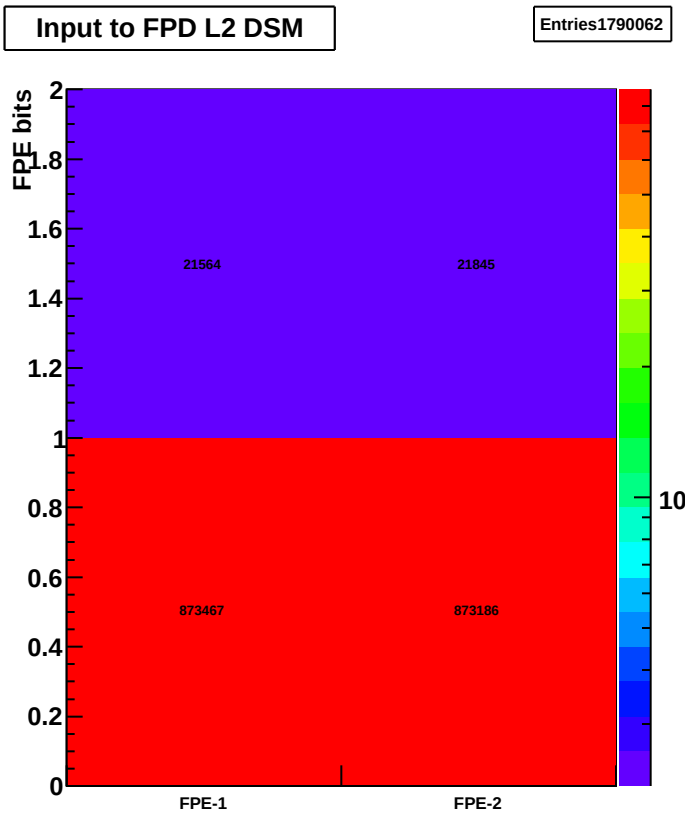

Input to FE002 QT board
Entries 2.864099e+07
ADC
channel

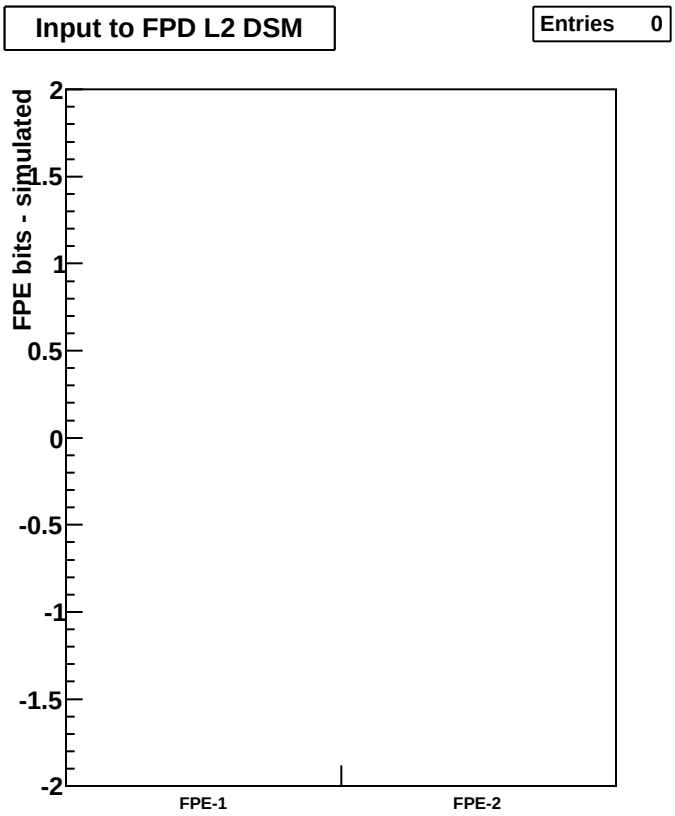

Input to FE003 QT board
Entries 2.864099e+07
ADC
channel


Input to FE004 QT board
Entries 2.864099e+07
ADC
channel


Input to FPE L1 DSM
Entries 3580124
ADC sum
1000
800
600
400
200
0
FE001
FE002
FE003
FE004
10
10
10
10
10
1


Input to FPE L1 DSM
Entries 0
ADC sum - simulated
400
200
0
-200
-400
FE001
FE002
FE003
FE004


Input to FPD L2 DSM
Entries1790062
FPE bits
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
21564
21845
873467
873186
FPE-1
FPE-2
10


Input to FPD L2 DSM
Entries 0
FPE bits - simulated
2
1.5
1
0.5
0
-0.5
-1
-1.5
-2
FPE-1
FPE-2