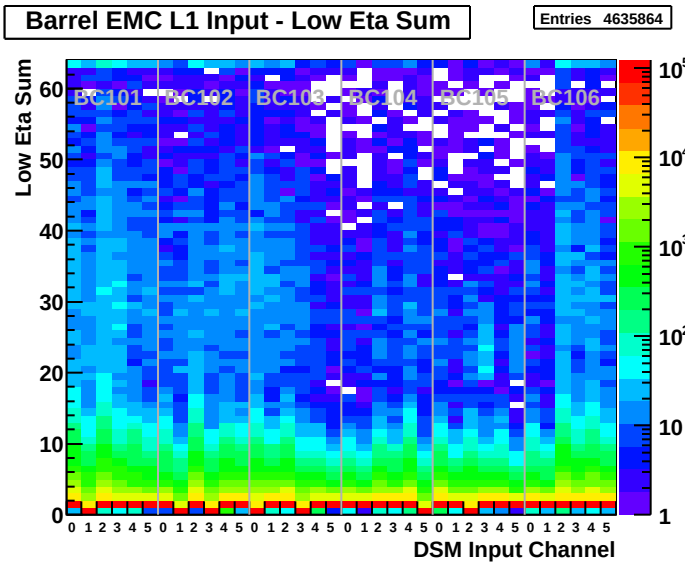
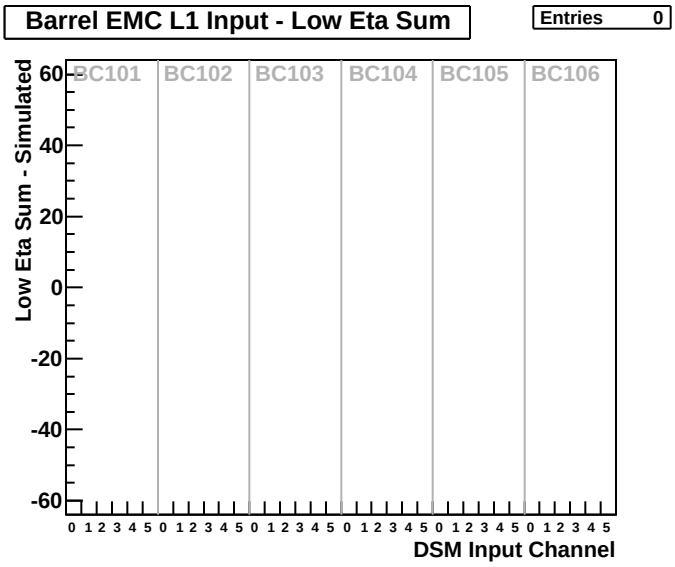
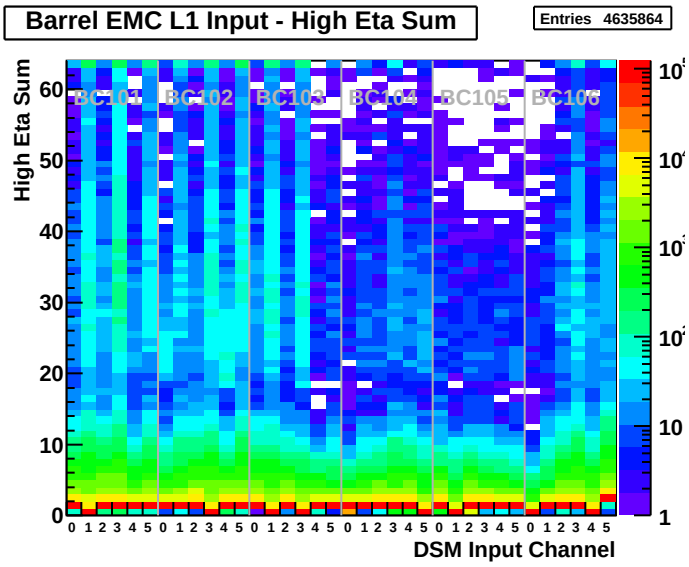
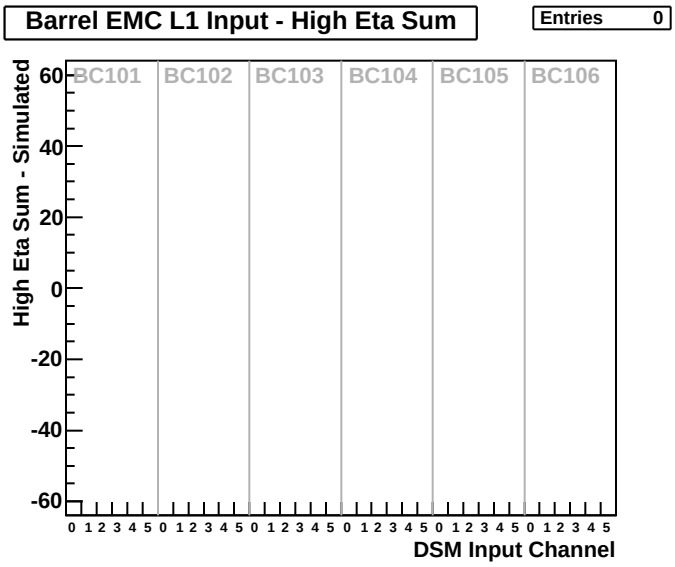
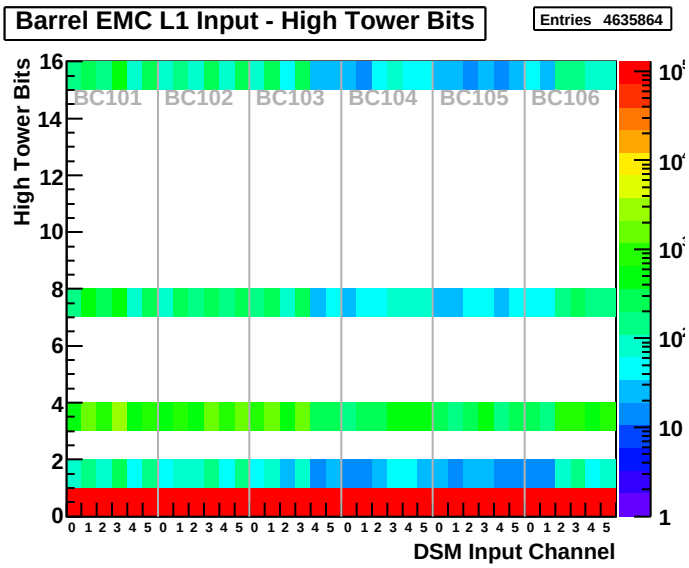
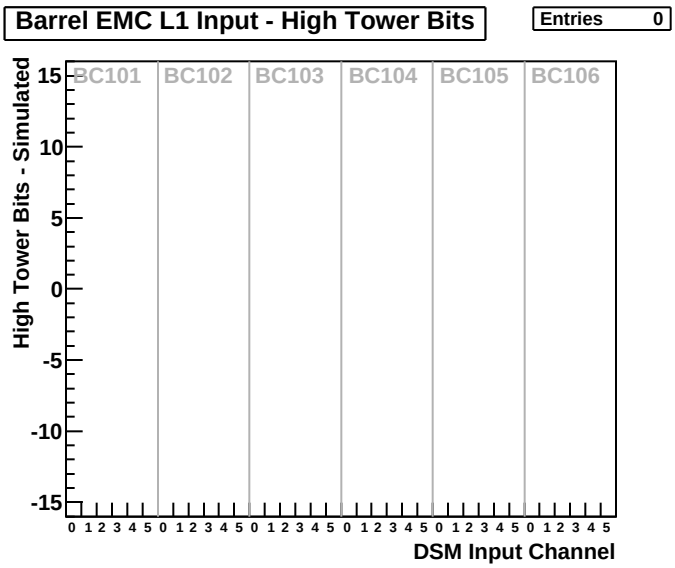

Barrel EMC L1 Input - Low Eta Sum
Entries 4635864
Low Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

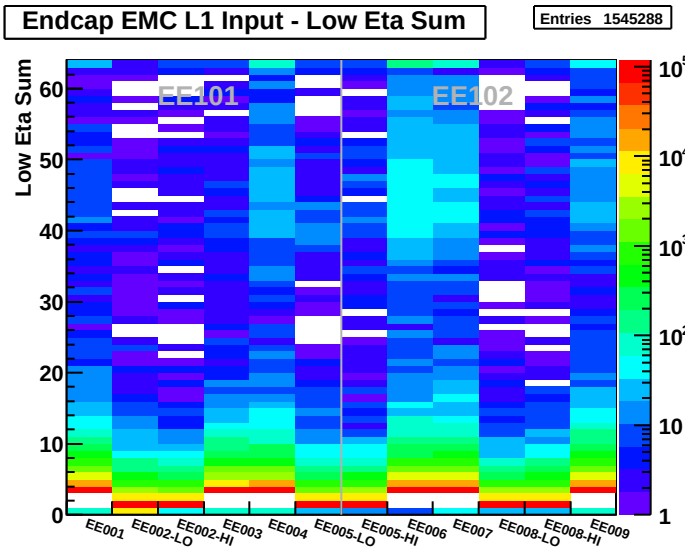

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

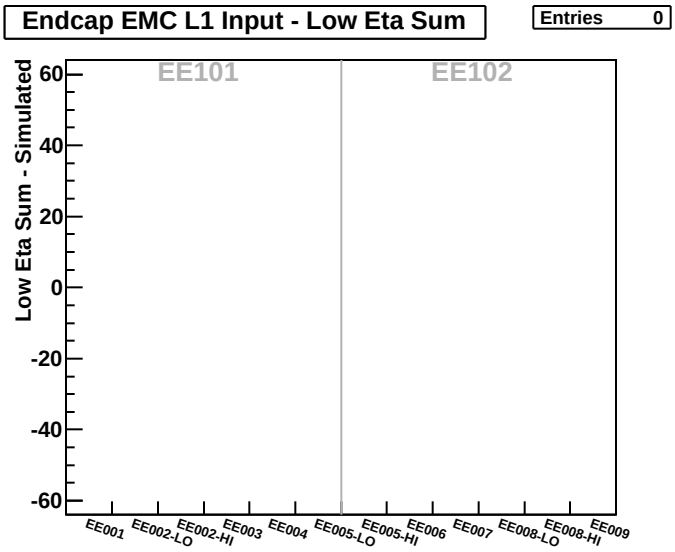

Barrel EMC L1 Input - High Eta Sum
Entries 4635864
High Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

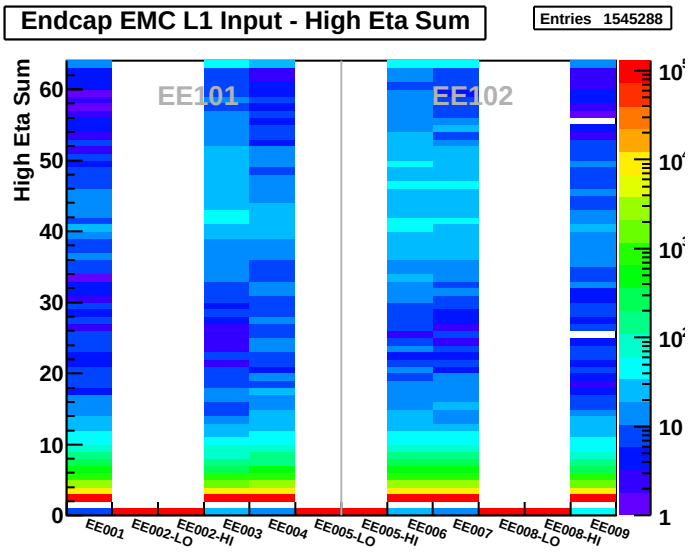

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

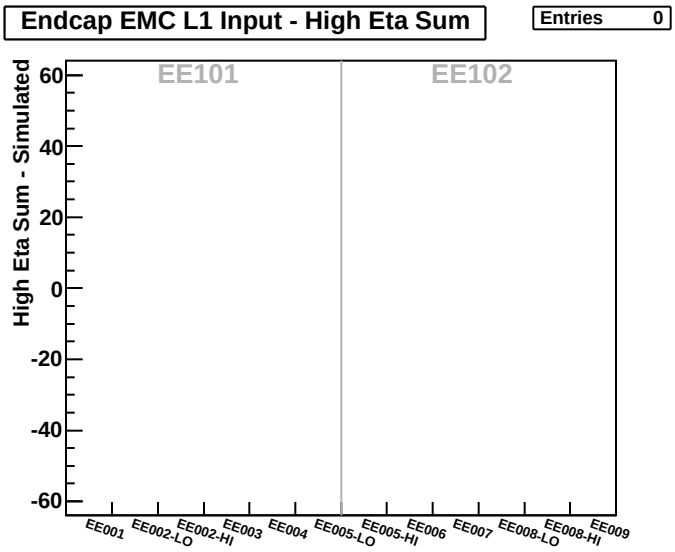

Barrel EMC L1 Input - High Tower Bits
Entries 4635864
High Tower Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

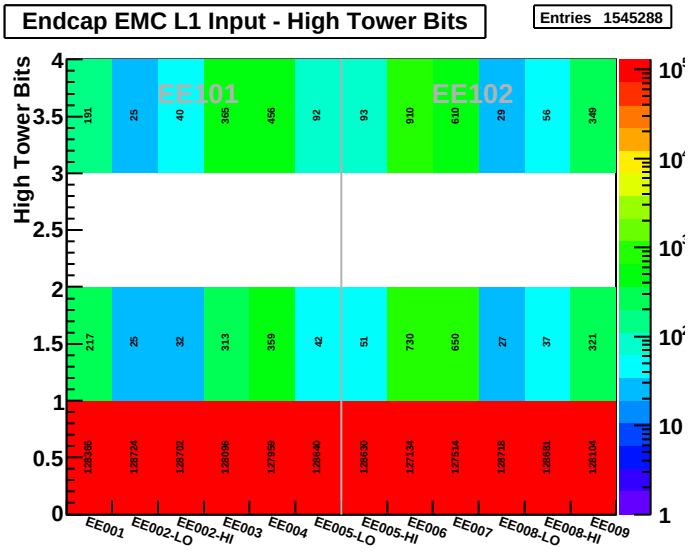

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

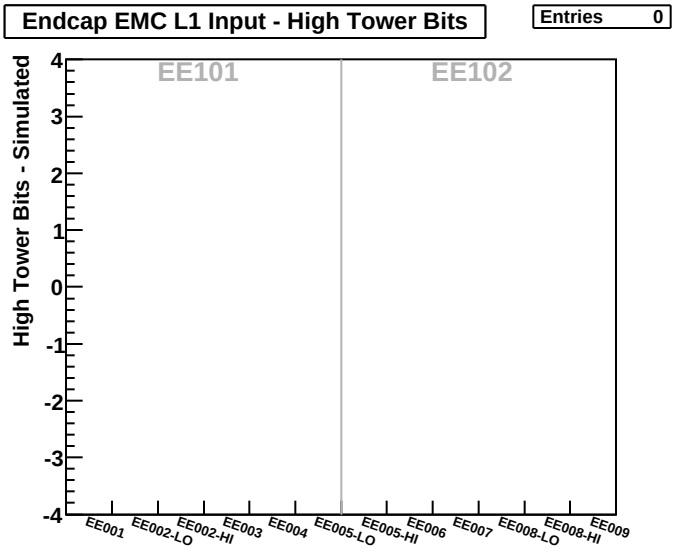

Endcap EMC L1 Input - Low Eta Sum
Entries 1545288
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

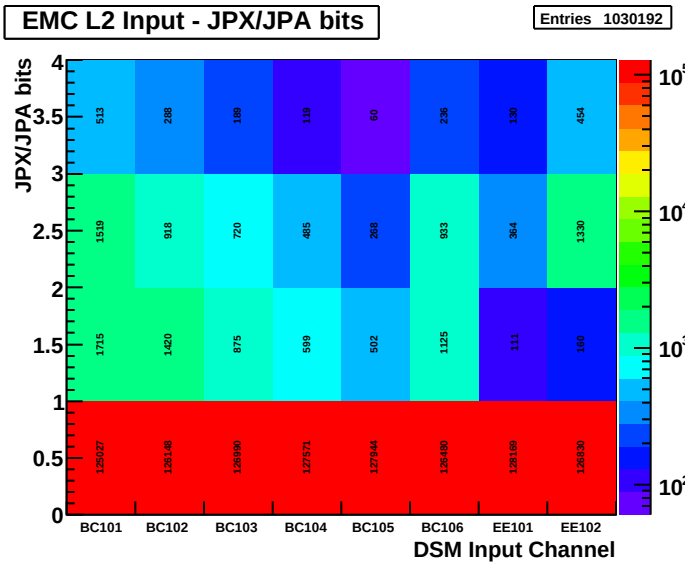

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

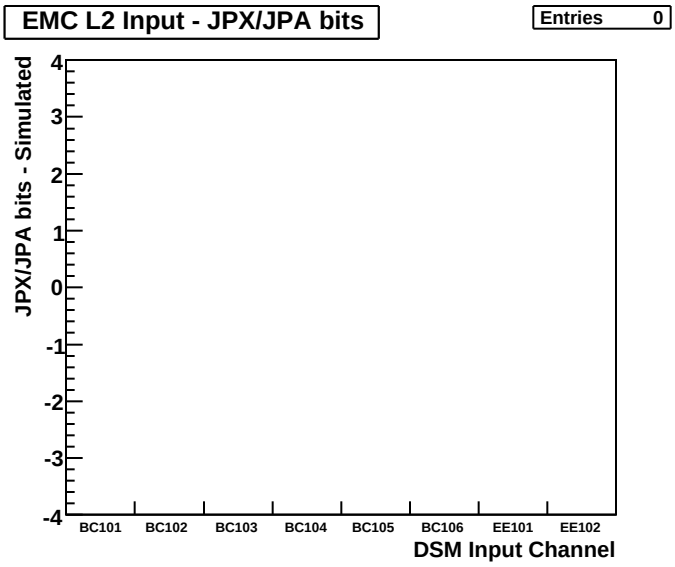

Endcap EMC L1 Input - High Eta Sum
Entries 1545288
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

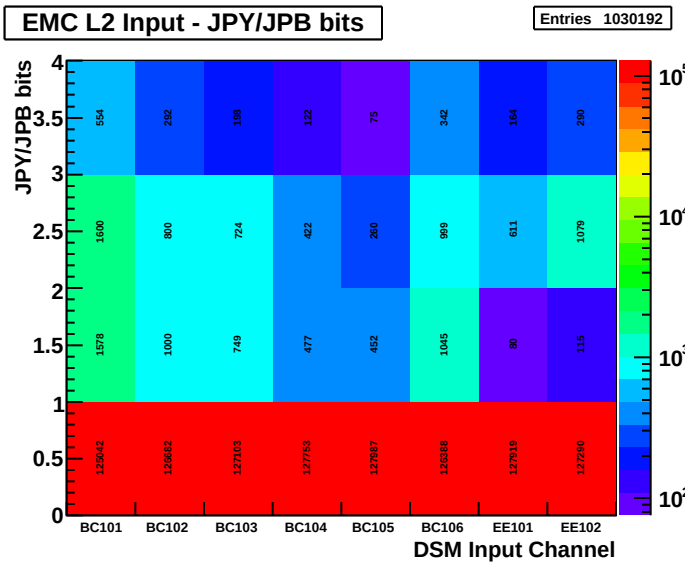

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

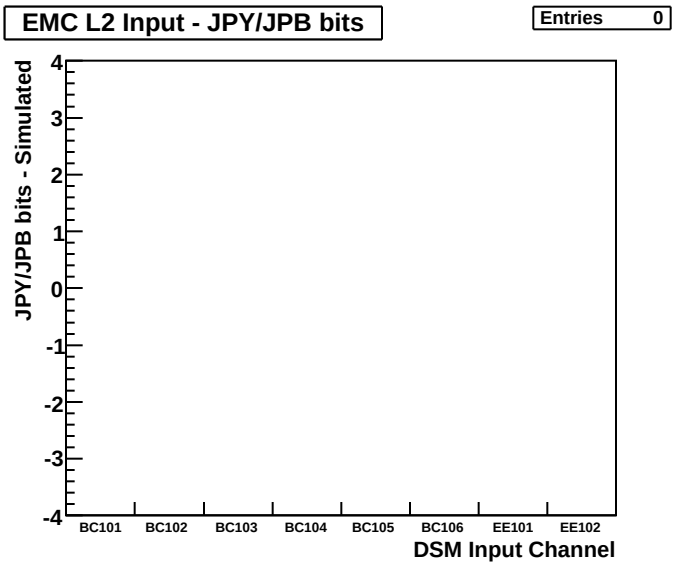

Endcap EMC L1 Input - High Tower Bits
Entries 1545288
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

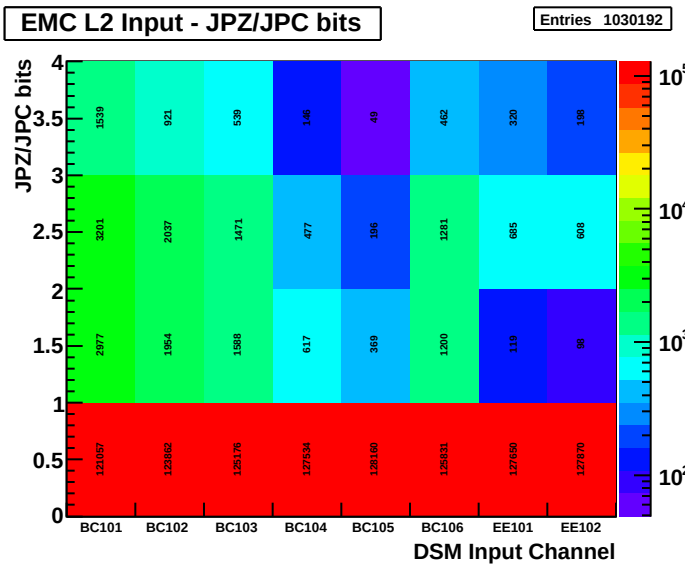

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

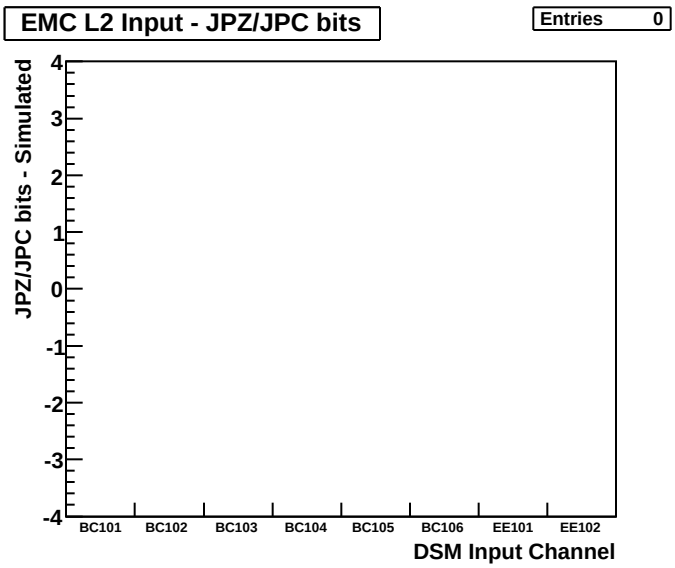

EMC L2 Input - JPX/JPA bits
Entries 1030192
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
513 288 189 119 60 236 130 454
1519 918 720 485 268 933 364 1330
1715 1420 875 599 502 1125 111 160
125027 126148 126990 127571 127944 128480 128169 128830

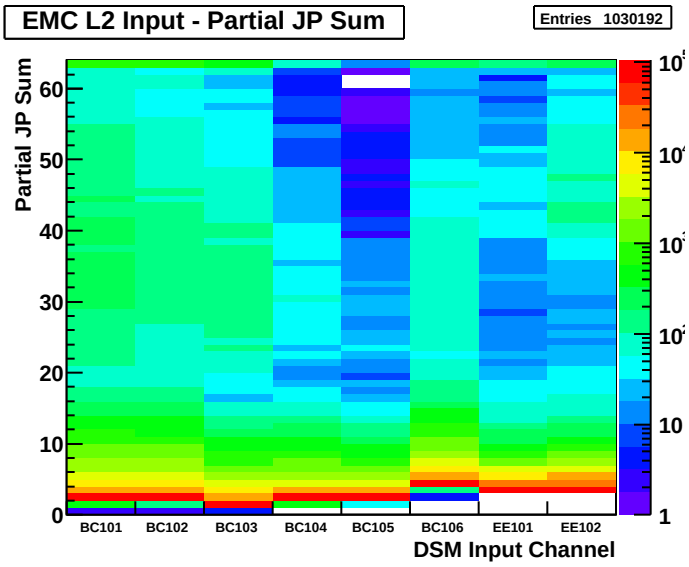

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

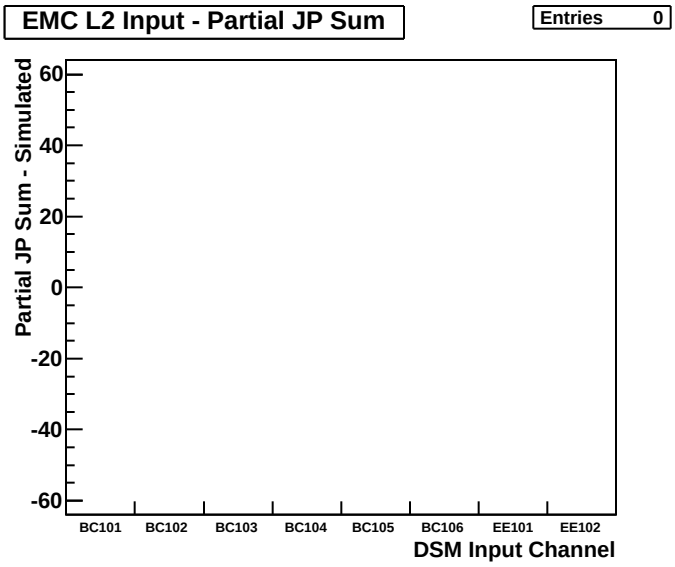

EMC L2 Input - JPY/JPB bits
Entries 1030192
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
554 292 198 122 75 342 164 290
1600 800 724 422 260 999 611 1079
1578 1000 749 477 452 1045 80 115
125042 126682 127103 127753 127987 128388 127919 127290

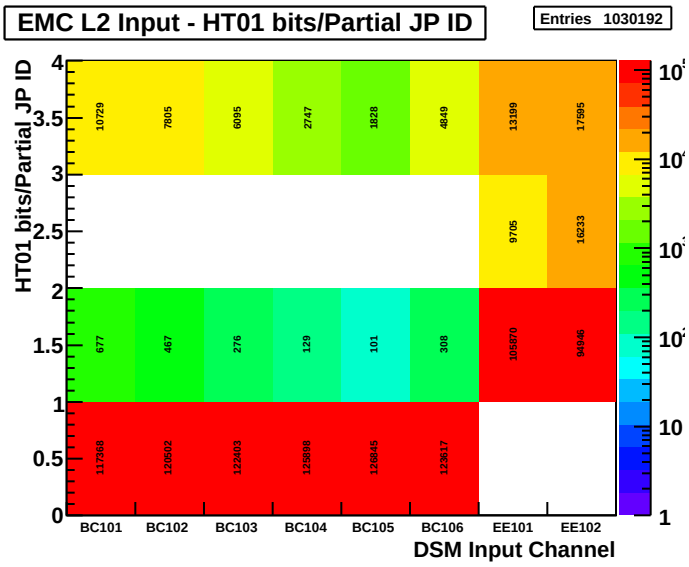

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

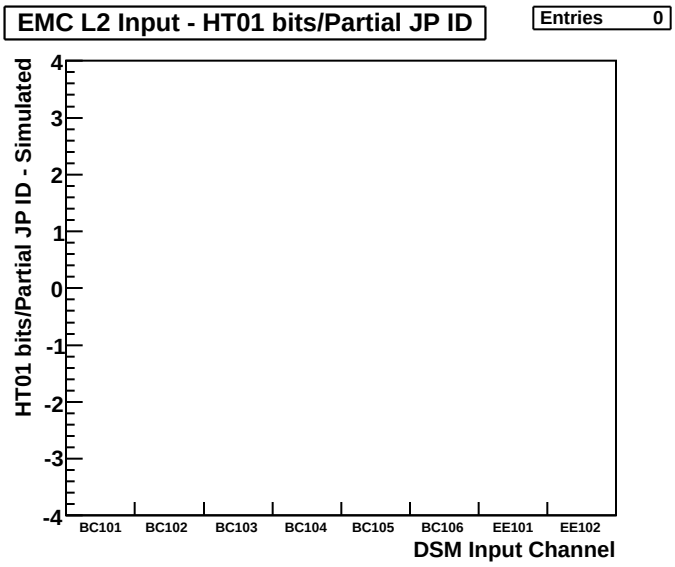

EMC L2 Input - JPZ/JPC bits
Entries 1030192
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1539 921 539 146 49 462 320 198
3201 2037 1471 477 196 1281 685 608
2977 1954 1588 617 369 1200 119 98
121057 123862 125176 127534 128160 125831 127650 127870

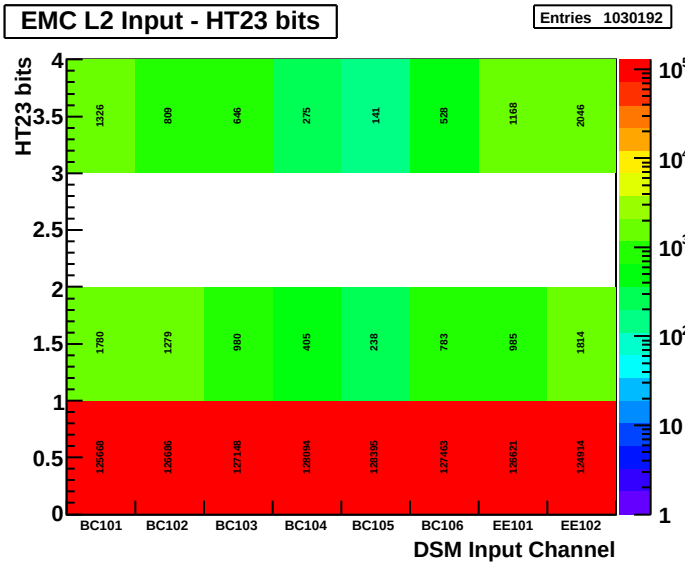

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

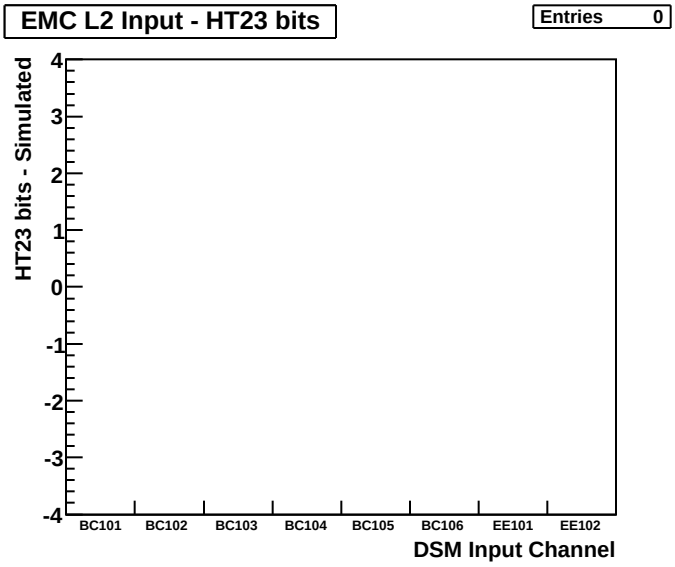

EMC L2 Input - Partial JP Sum
Entries 1030192
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

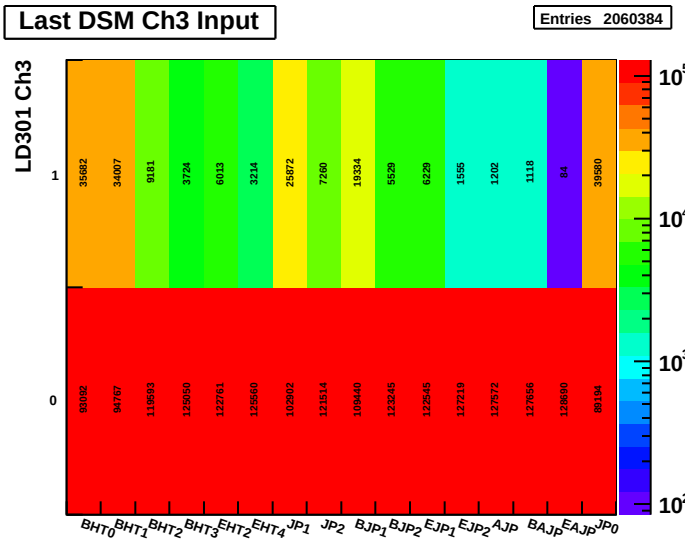

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

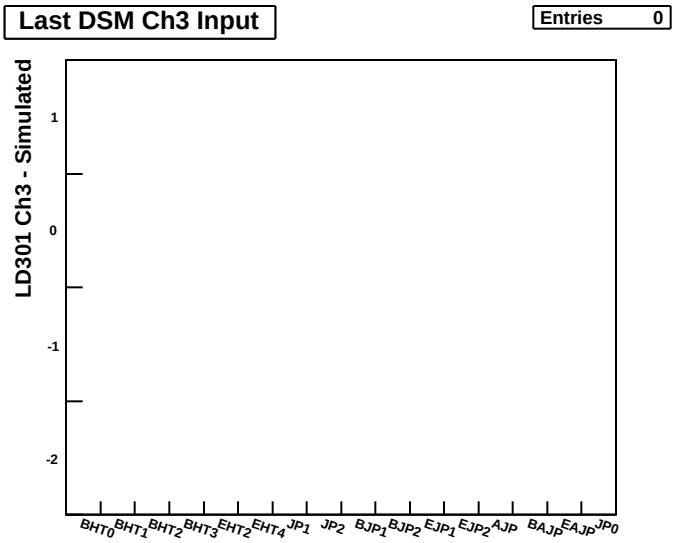

EMC L2 Input - HT01 bits/Partial JP ID
Entries 1030192
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

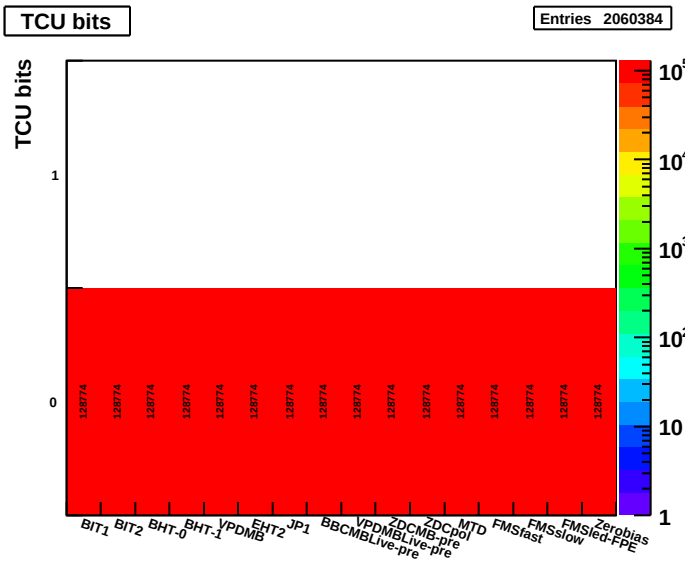

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

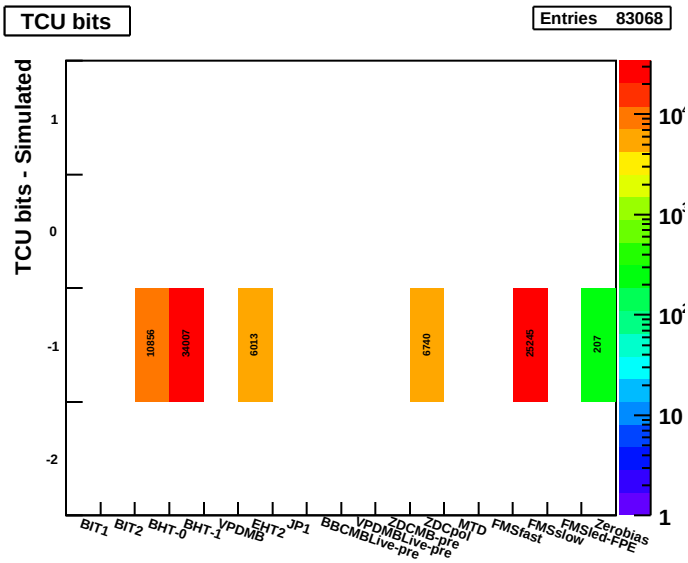

EMC L2 Input - HT23 bits
Entries 1030192
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

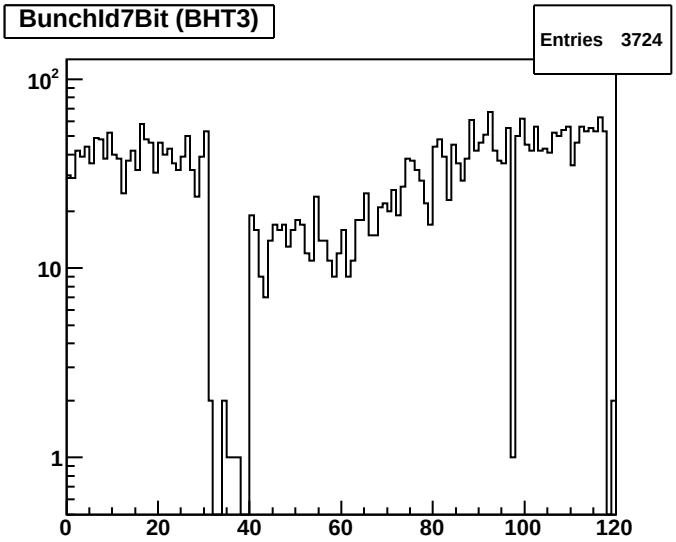

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

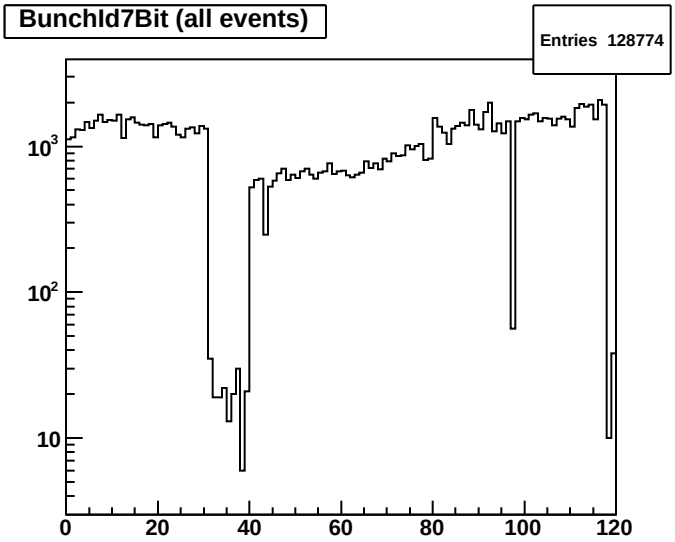

Last DSM Ch3 Input
Entries 2060384
LD301 Ch3
35682 34007 9181 3724 6013 3214 25872 7260 19334 5529 6229 1555 1202 1118 84 39580
93092 94767 115593 125050 122761 125560 102902 121514 109440 123245 122545 127219 127572 127656 128690 89194
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

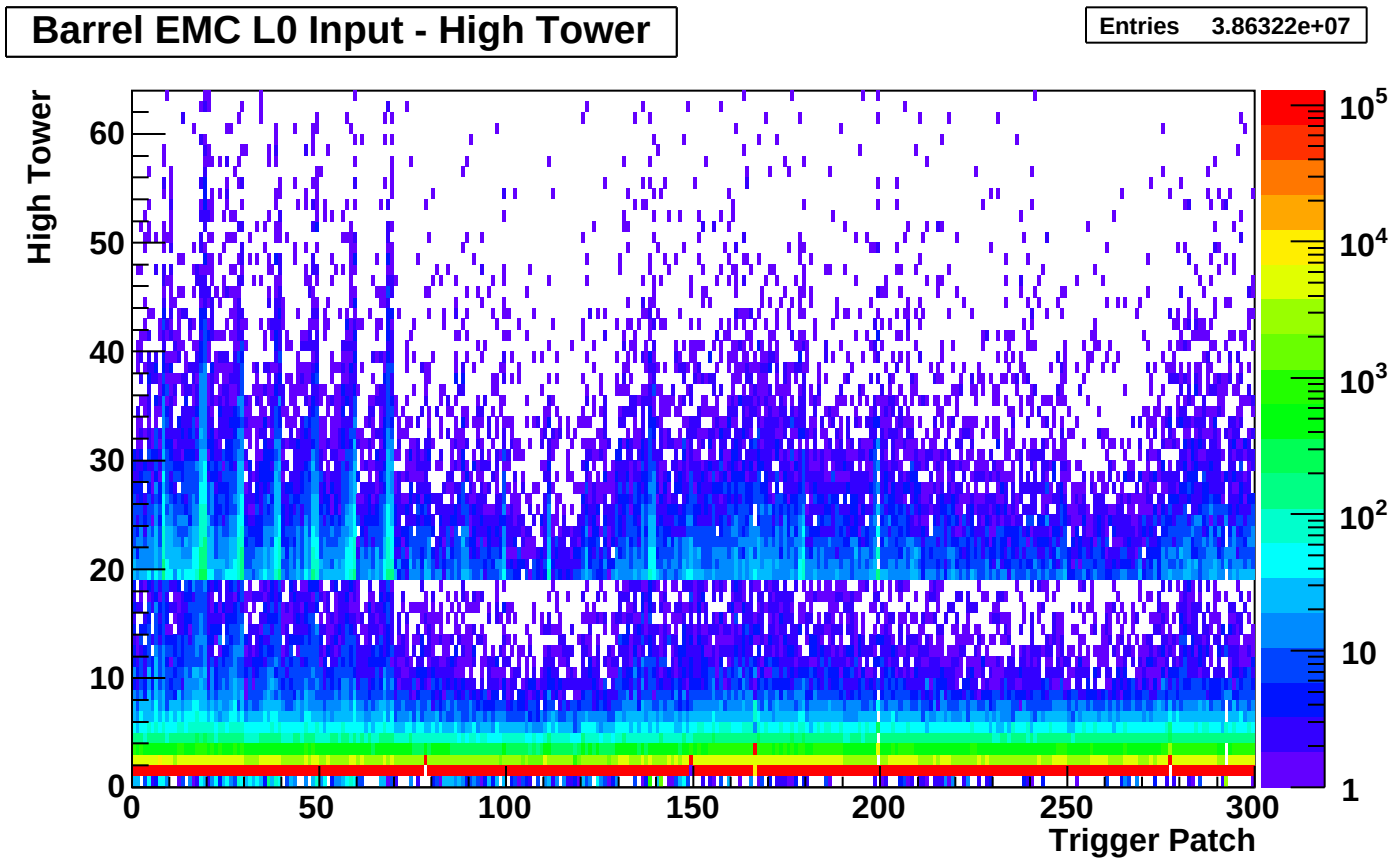

Last DSM Ch3 Input
Entries 0
LD301 Ch3 - Simulated
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

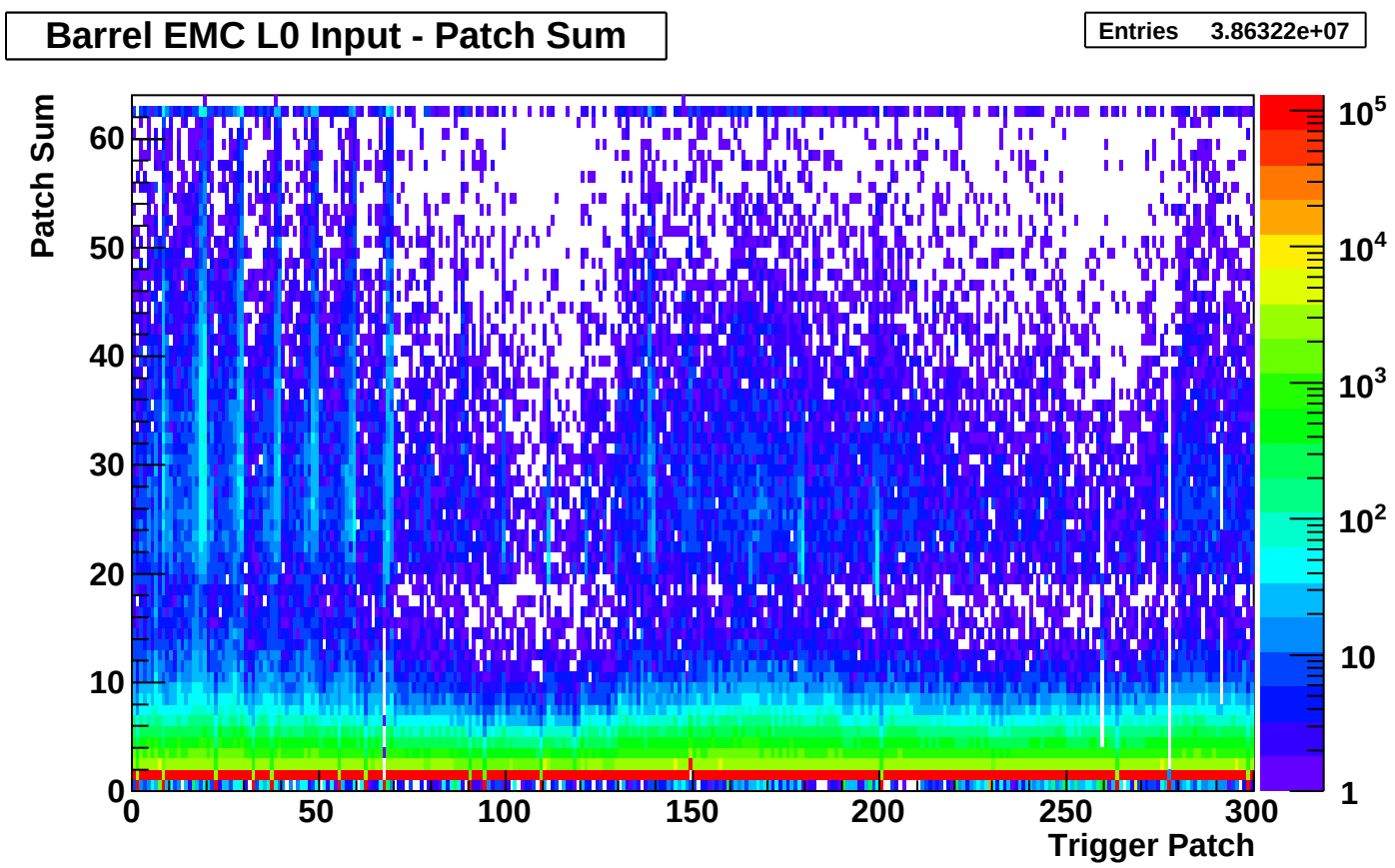

TCU bits
Entries 2060384
TCU bits
128774 128774 128774 128774 128774 128774 128774 128774 128774 128774 128774 128774 128774 128774 128774 128774
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

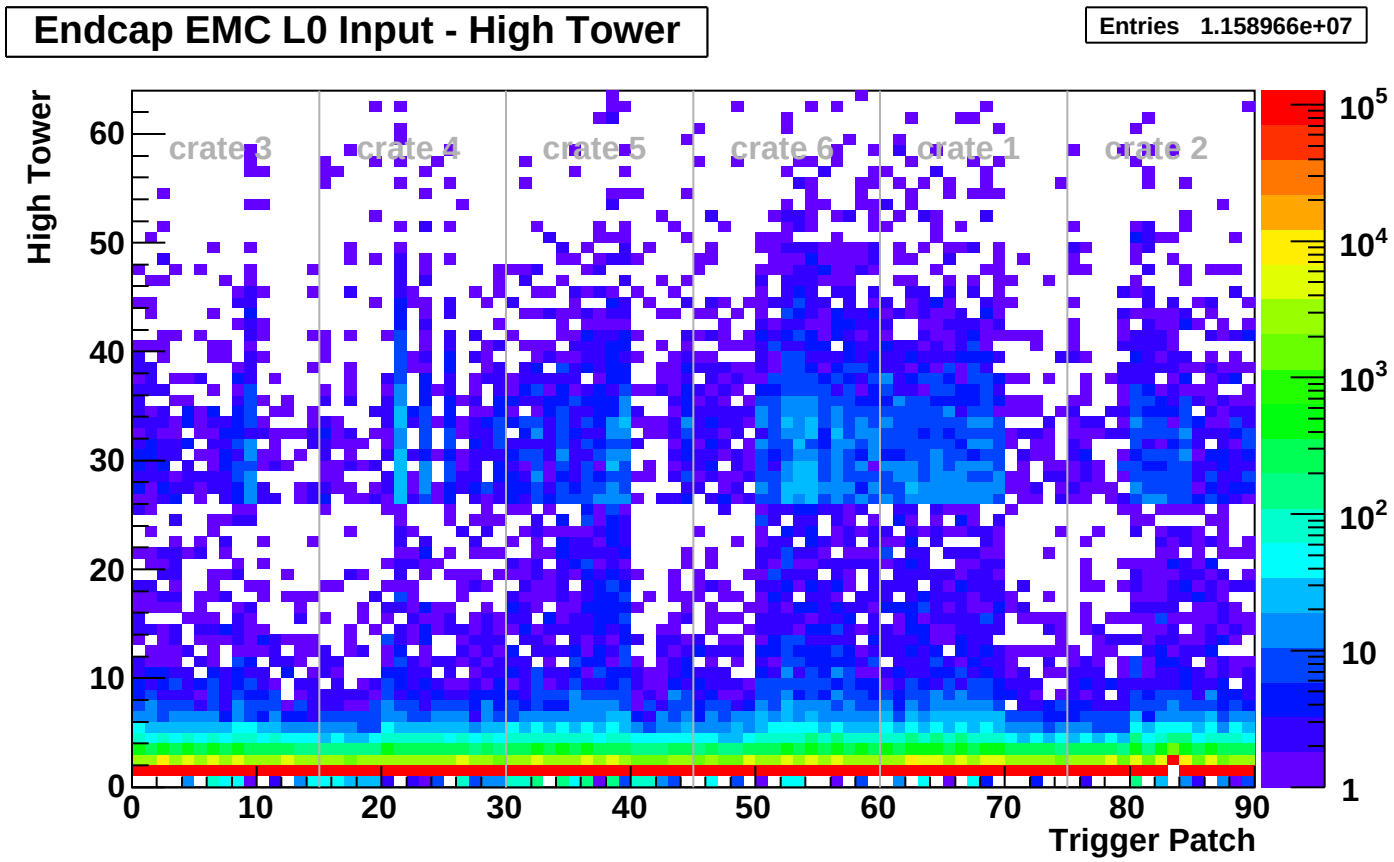

TCU bits
Entries 83068
TCU bits - Simulated
10856 34007 6013 6740 25245 207
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

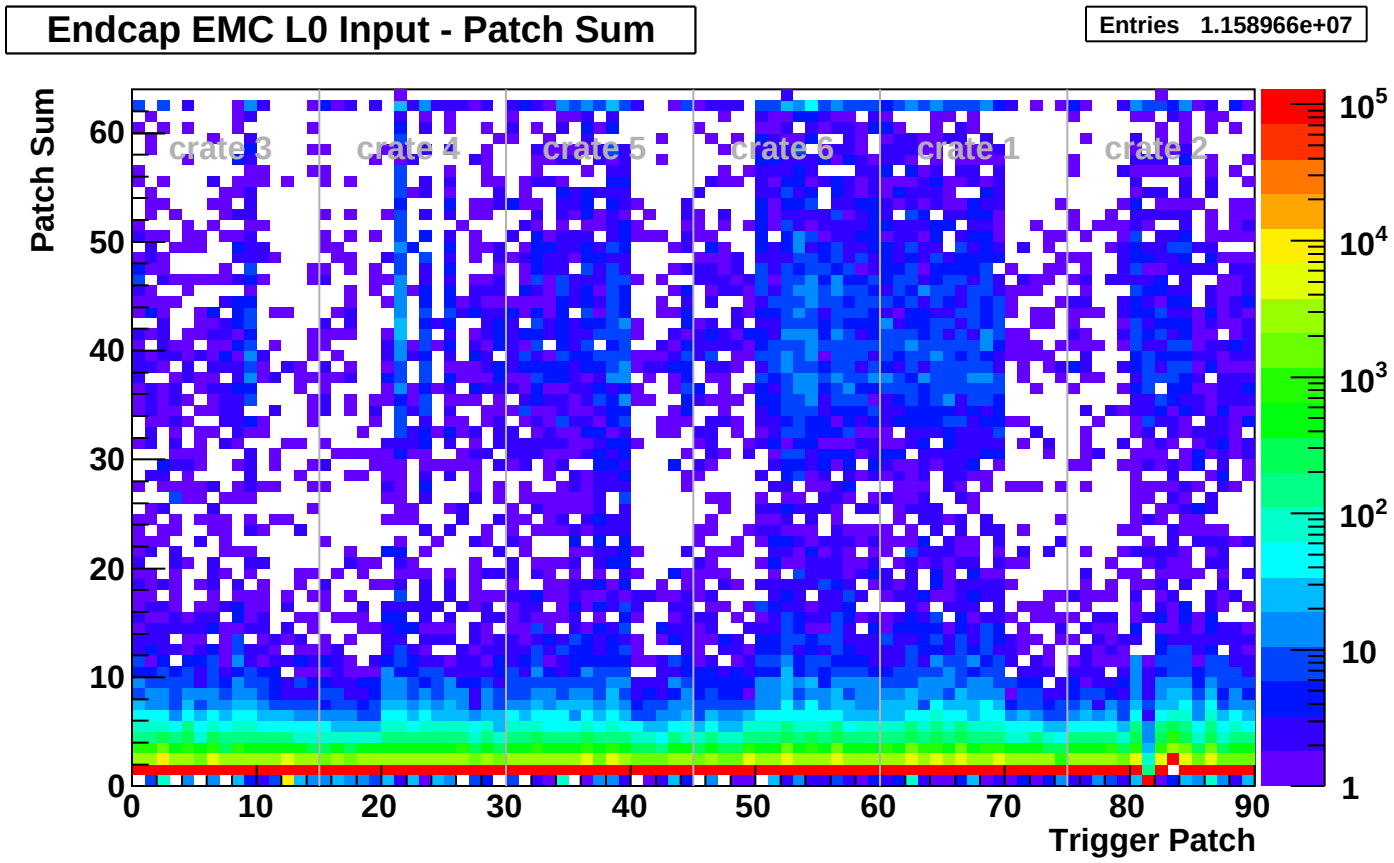

BunchId7Bit (BHT3)
Entries 3724

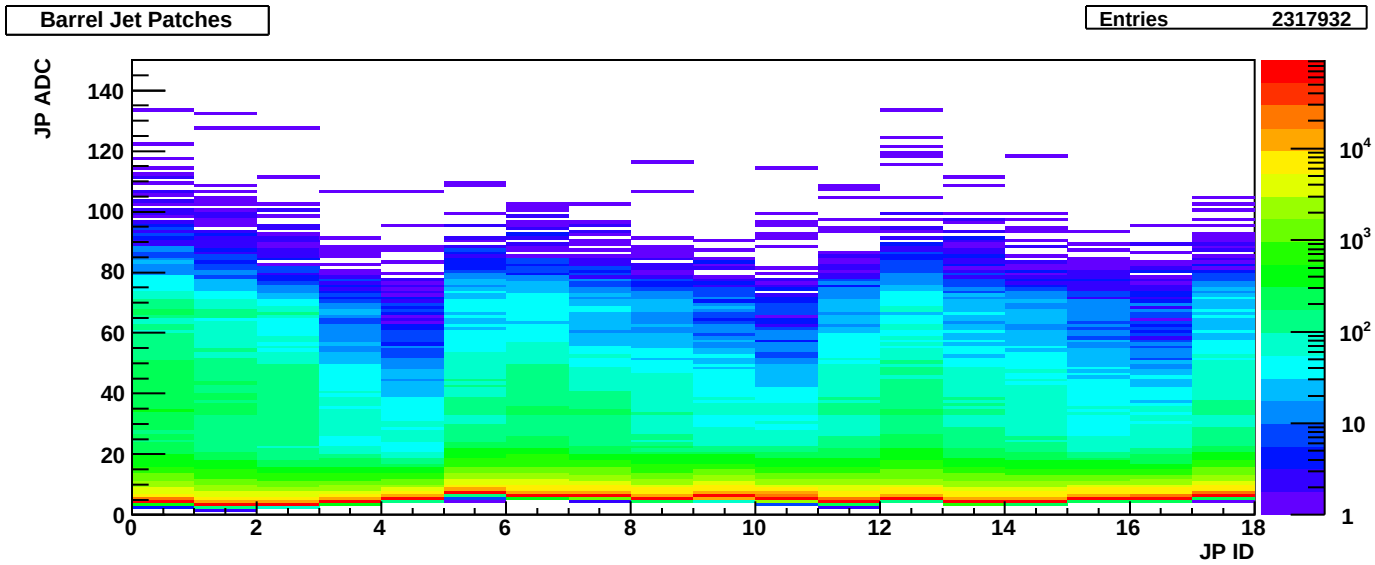

BunchId7Bit (all events)
Entries 128774

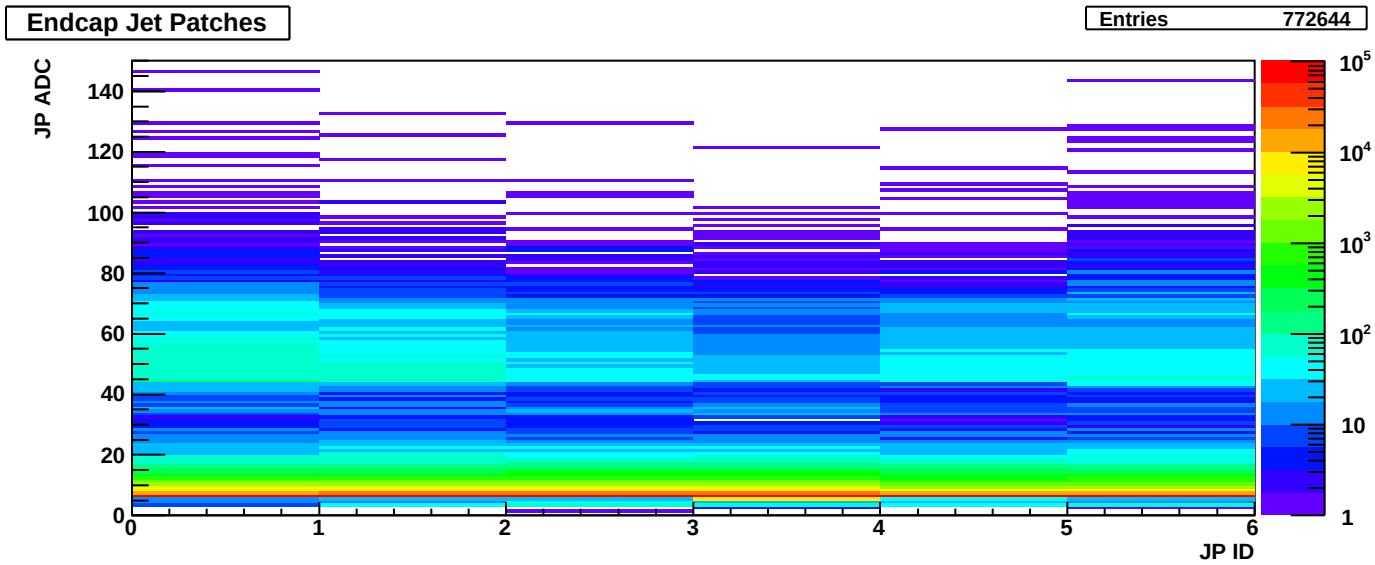

Barrel EMC L0 Input - High Tower
Entries 3.86322e+07
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

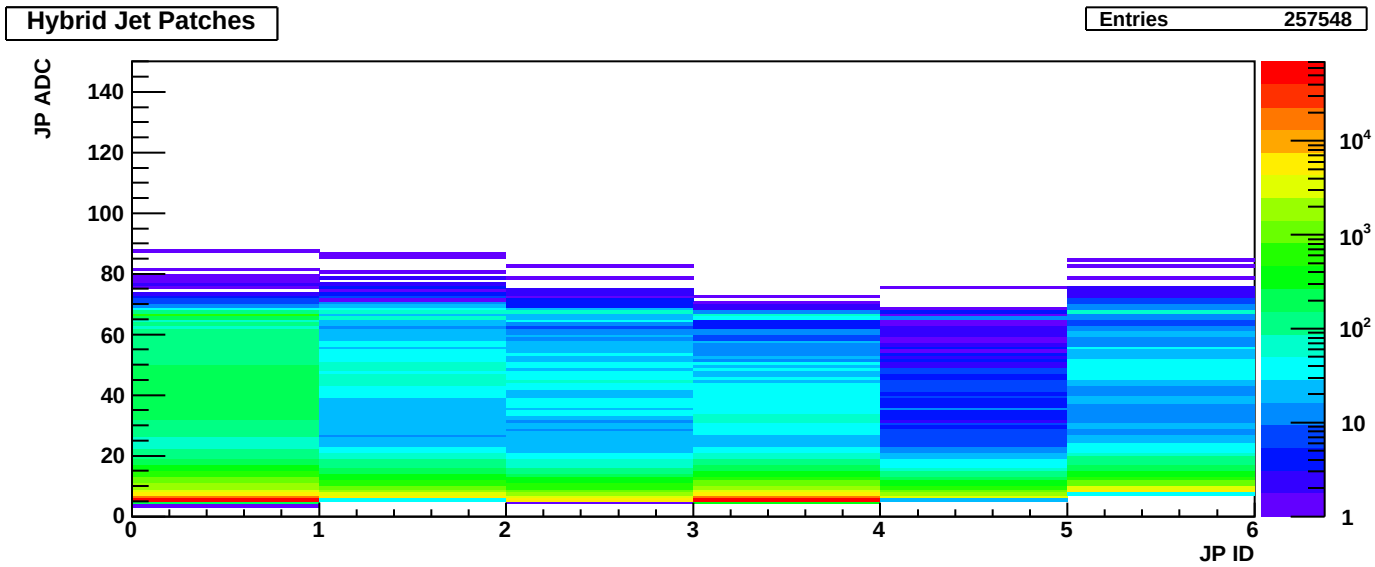

Barrel EMC L0 Input - Patch Sum
Entries 3.86322e+07
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

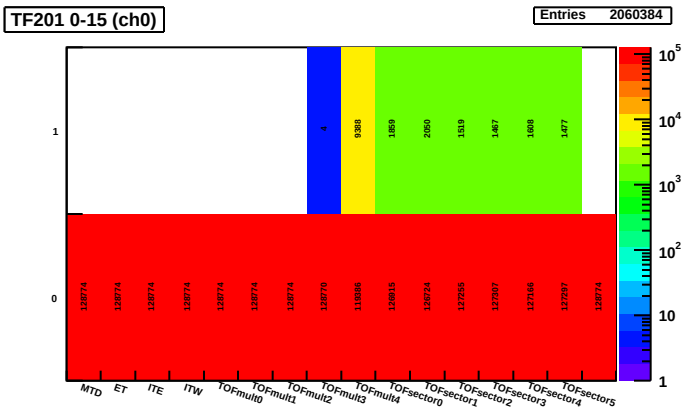

Endcap EMC L0 Input - High Tower
Entries 1.158966e+07
High Tower
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

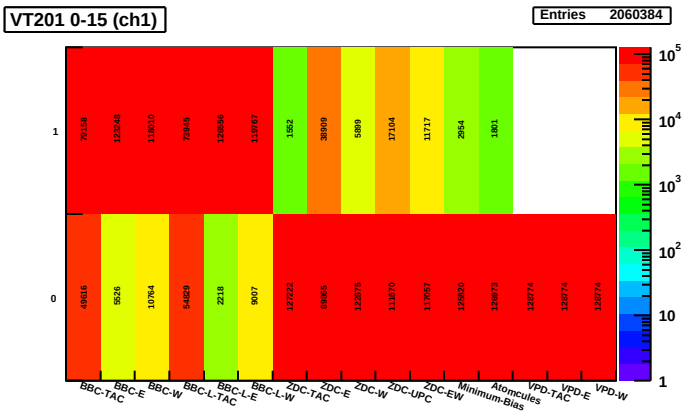

Endcap EMC L0 Input - Patch Sum
Entries 1.158966e+07
Patch Sum
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

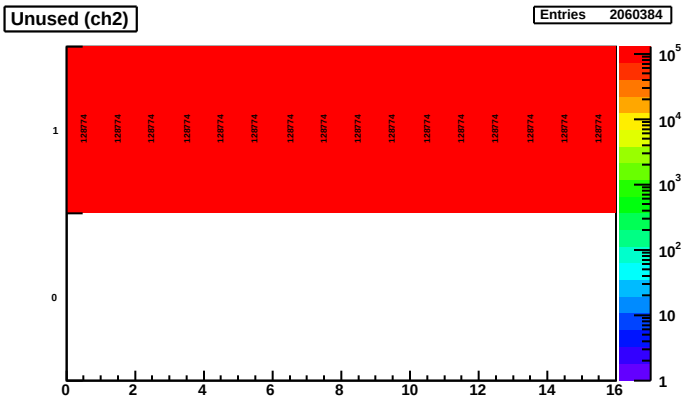

Barrel Jet Patches
Entries 2317932
JP ADC
JP ID

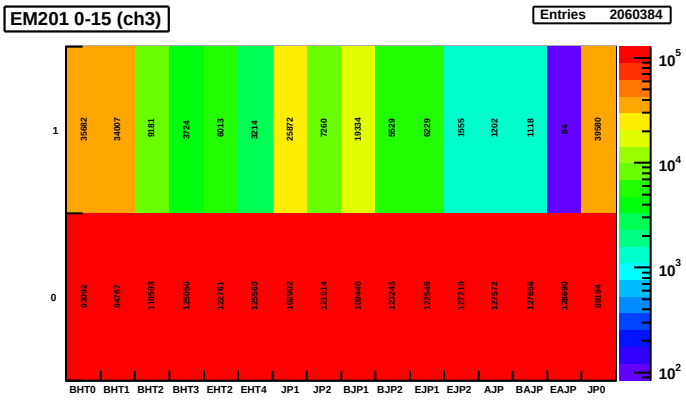

Endcap Jet Patches
Entries 772644
JP ADC
JP ID

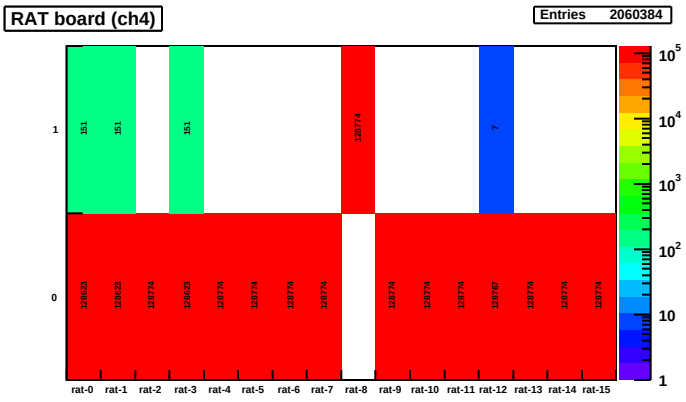

Hybrid Jet Patches
Entries 257548
JP ADC
JP ID

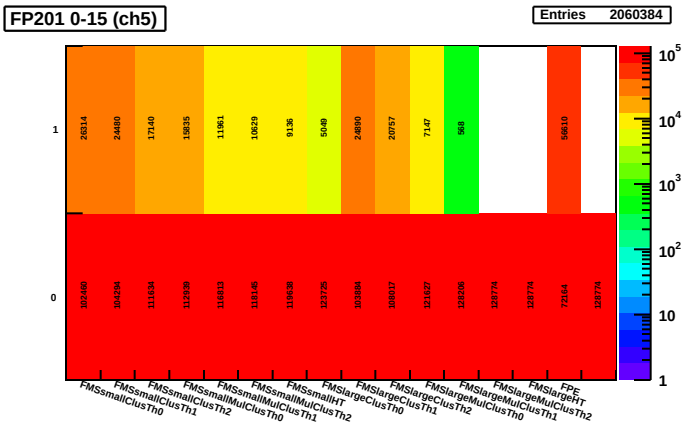

TF201 0-15 (ch0)
Entries 2060384
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5

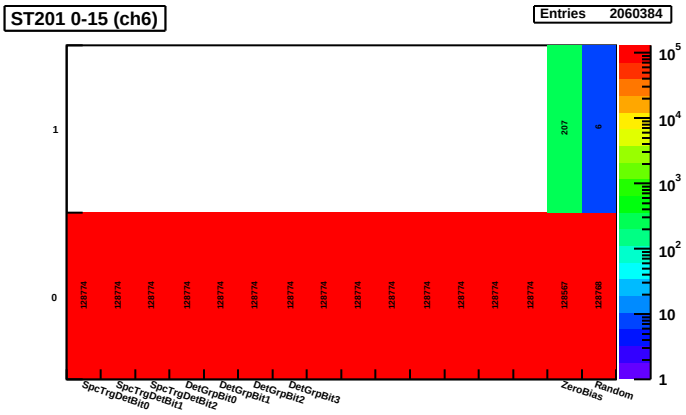

VT201 0-15 (ch1)
Entries 2060384
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-E ZDC-W ZDC-UPC ZDC-EW Minimum-Bias Atomcules VPD-TAC VPD-E VPD-W

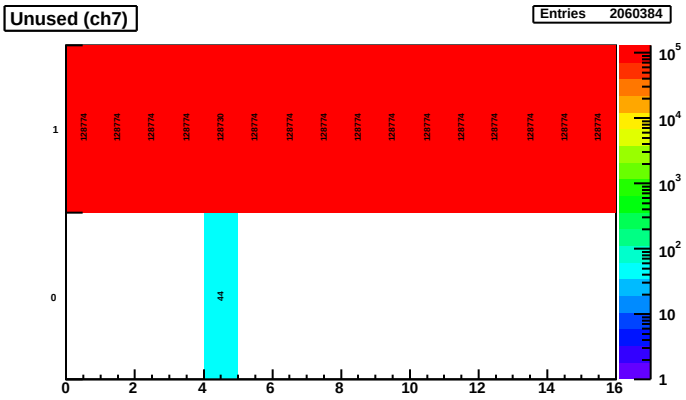

Unused (ch2)
Entries 2060384

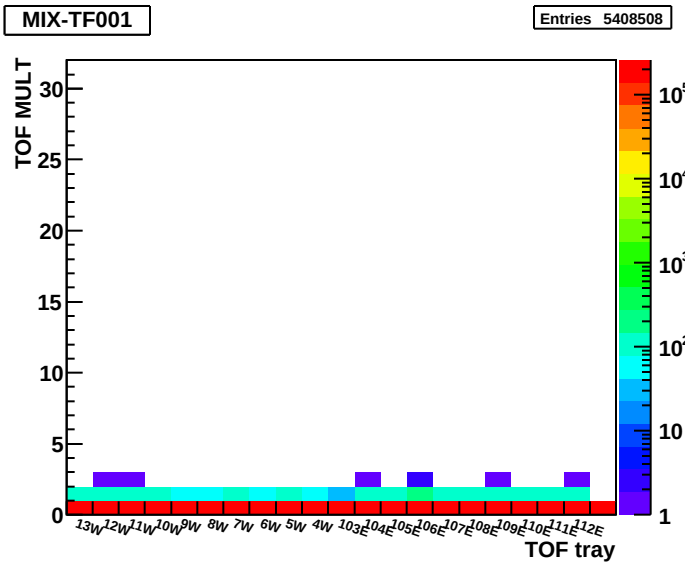

EM201 0-15 (ch3)
Entries 2060384
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

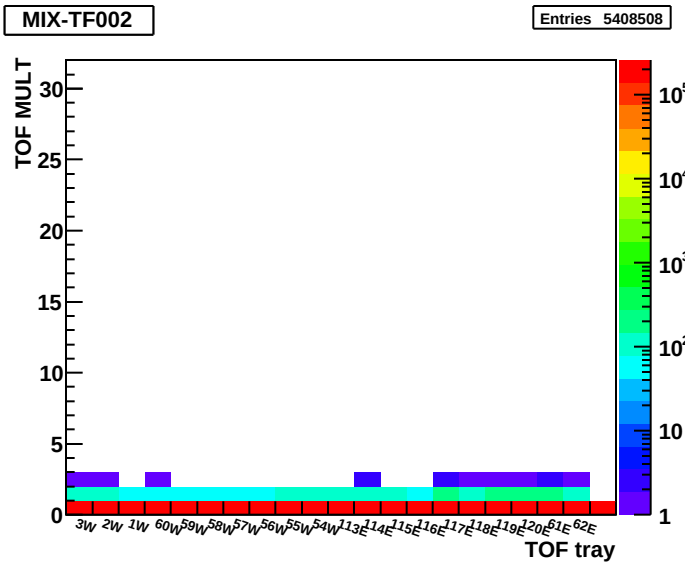

RAT board (ch4)
Entries 2060384
rat-0 rat-1 rat-2 rat-3 rat-4 rat-5 rat-6 rat-7 rat-8 rat-9 rat-10 rat-11 rat-12 rat-13 rat-14 rat-15

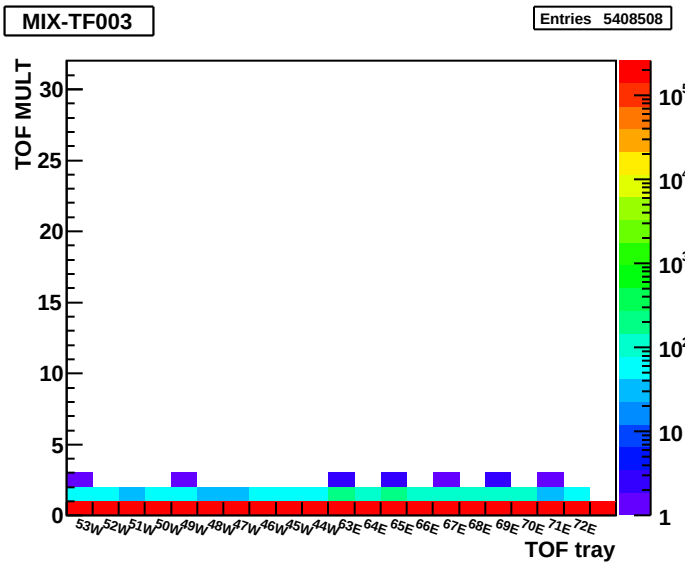

FP201 0-15 (ch5)
Entries 2060384
FMSsmallClusTh0 FMSsmallClusTh1 FMSsmallClusTh2 FMSsmallMulClusTh0 FMSsmallMulClusTh1 FMSsmallMulClusTh2 FMSsmallHT FMSlargeClusTh0 FMSlargeClusTh1 FMSlargeClusTh2 FMSlargeMulClusTh0 FMSlargeMulClusTh1 FMSlargeMulClusTh2 FMSlargeHT FPE

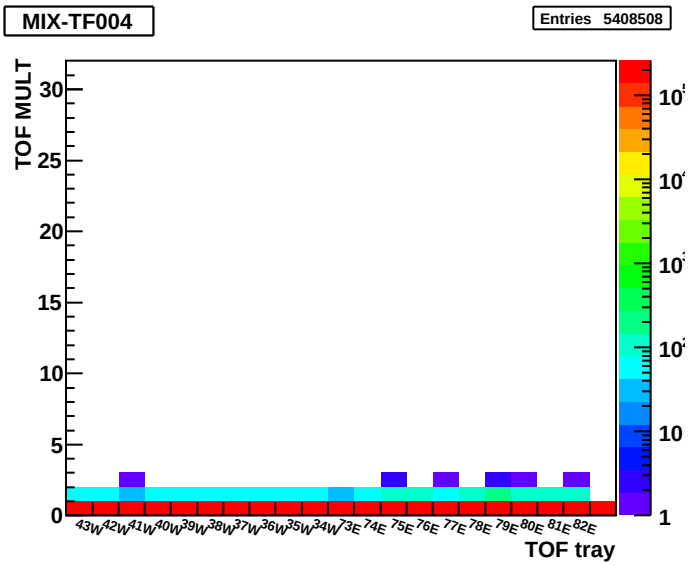

ST201 0-15 (ch6)
Entries 2060384
SpcTrgDetBit0 SpcTrgDetBit1 SpcTrgDetBit2 DetCrpBit0 DetCrpBit1 DetCrpBit2 DetCrpBit3 ZeroBias Random

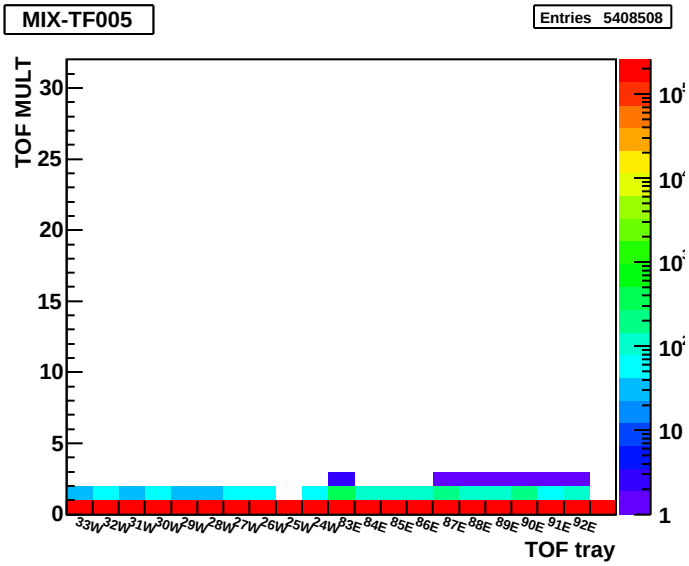

Unused (ch7)
Entries 2060384

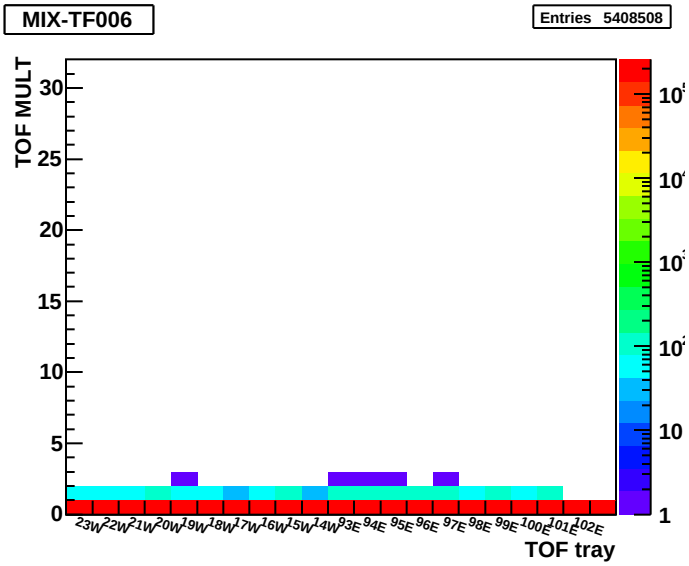

MIX-TF001
Entries 5408508
TOF MULT
TOF tray

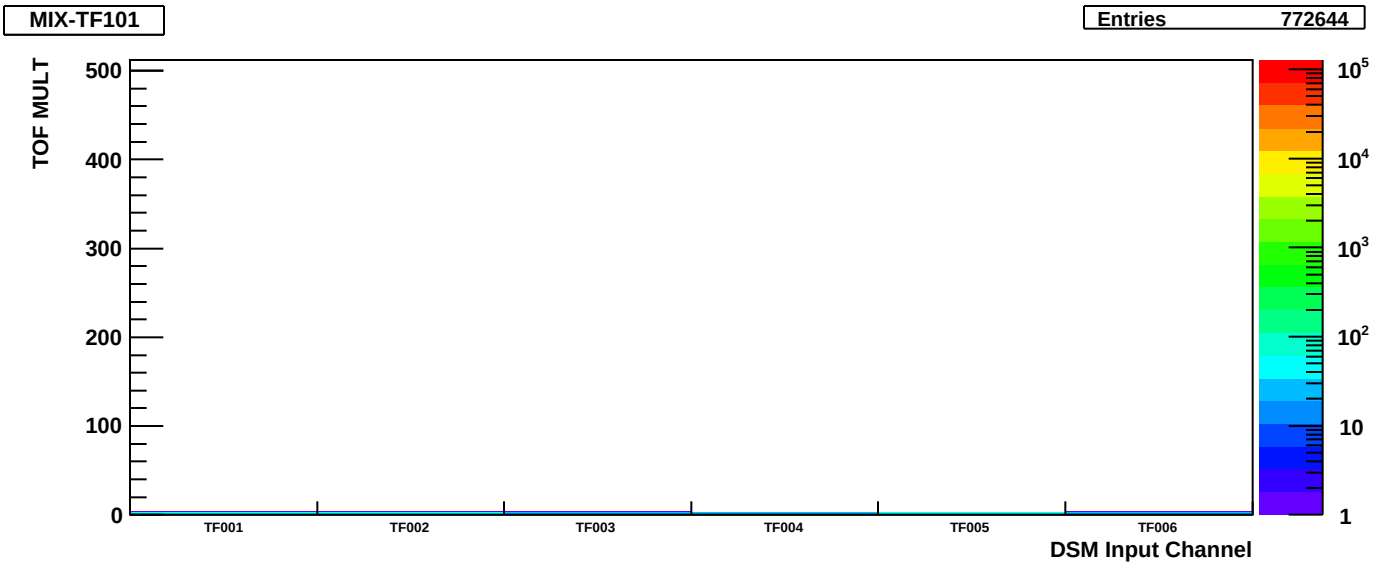

MIX-TF002
Entries 5408508
TOF MULT
TOF tray

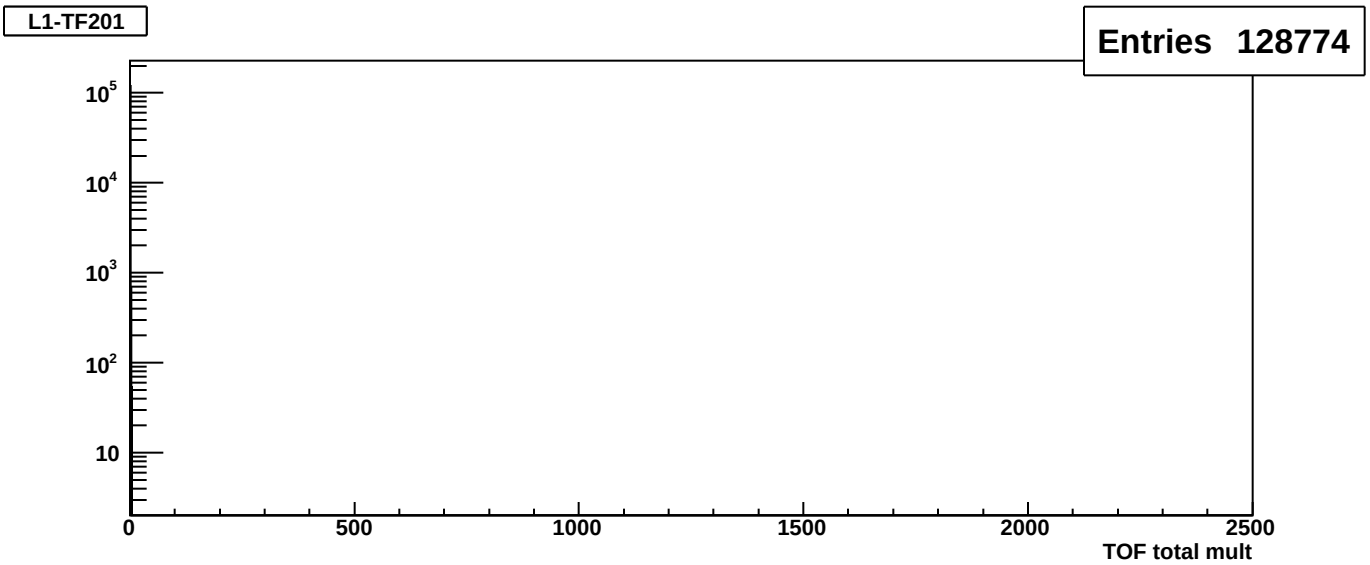

MIX-TF003
Entries 5408508
TOF MULT
TOF tray

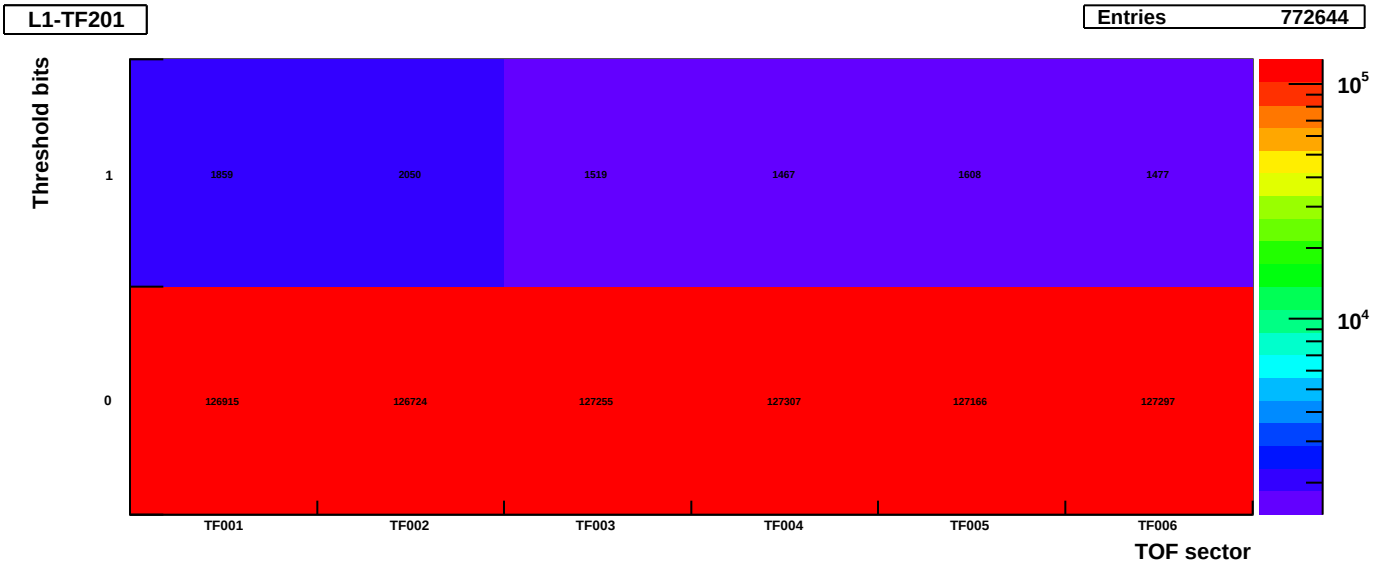

MIX-TF004
Entries 5408508
TOF MULT
TOF tray

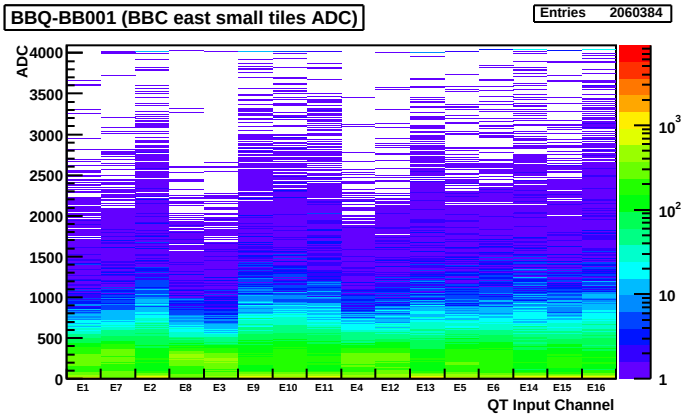

MIX-TF005
Entries 5408508
TOF MULT
TOF tray

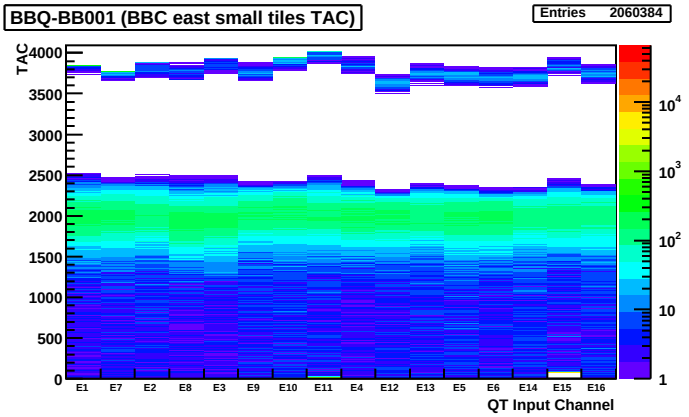

MIX-TF006
Entries 5408508
TOF MULT
TOF tray

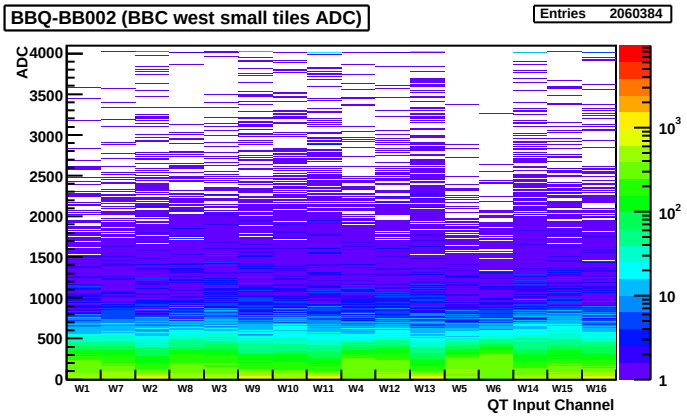

MIX-TF101
Entries 772644
TOF MULT
500
400
300
200
100
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^5
10^4
10^3
10^2
10
1

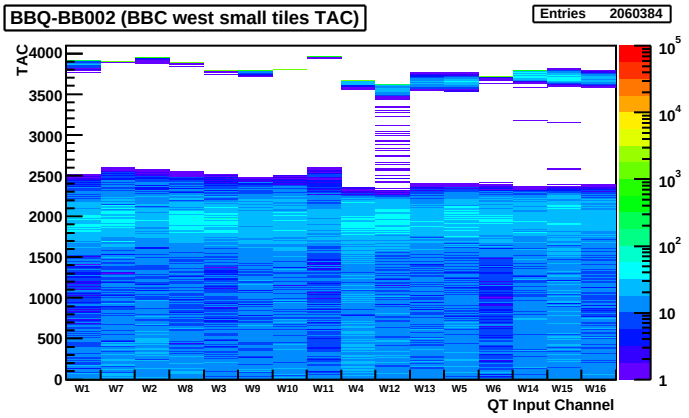

L1-TF201
Entries 128774
10^5
10^4
10^3
10^2
10
0
500
1000
1500
2000
2500
TOF total mult

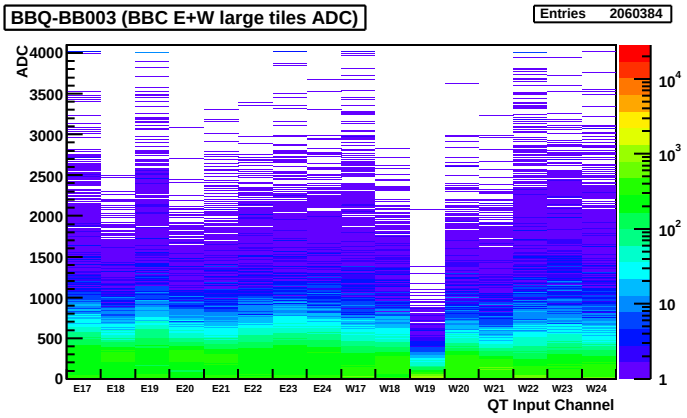

L1-TF201
Entries 772644
Threshold bits
1
0
1859
2050
1519
1467
1608
1477
126915
126724
127255
127307
127166
127297
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector
10^5
10^4

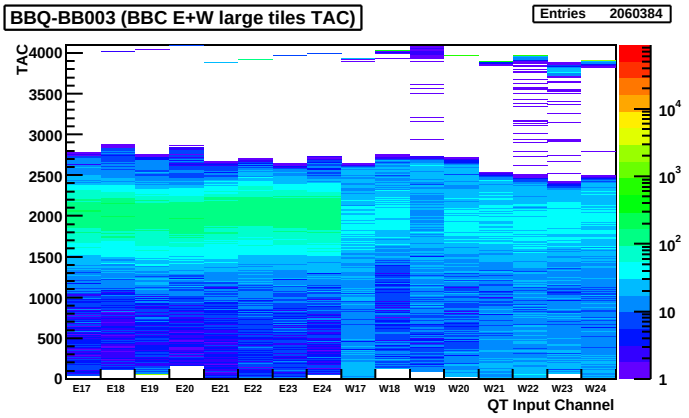

BBQ-BB001 (BBC east small tiles ADC)
Entries 2060384
ADC
QT Input Channel

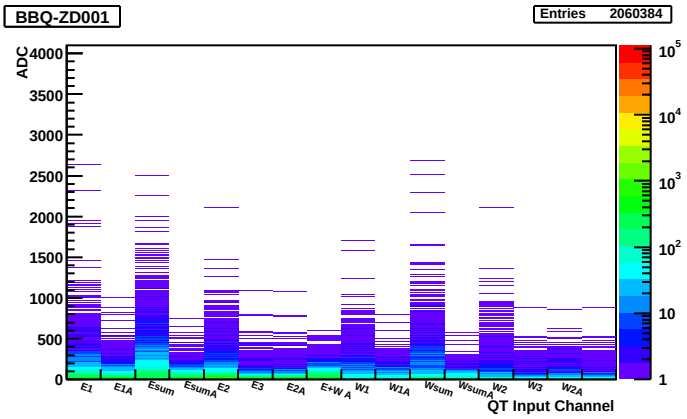

BBQ-BB001 (BBC east small tiles TAC)
Entries 2060384
TAC
QT Input Channel

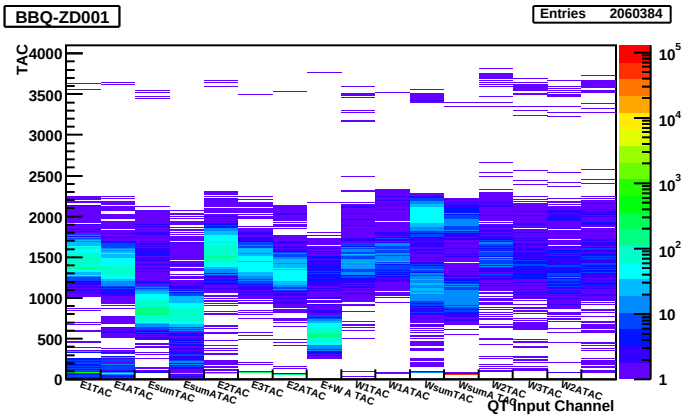

BBQ-BB002 (BBC west small tiles ADC)
Entries 2060384
ADC
QT Input Channel

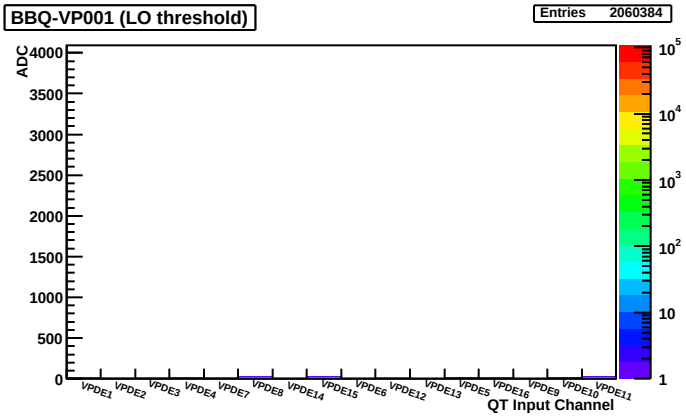

BBQ-BB002 (BBC west small tiles TAC)
Entries 2060384
TAC
QT Input Channel

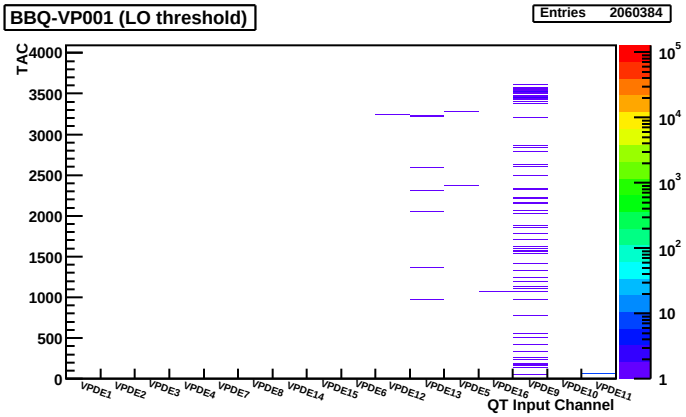

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 2060384
ADC
QT Input Channel

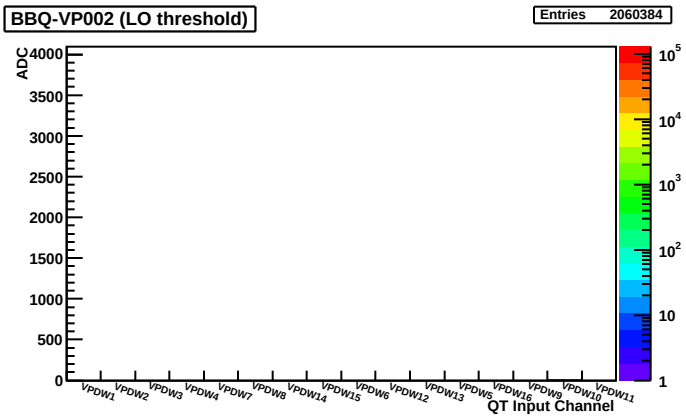

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 2060384
TAC
QT Input Channel

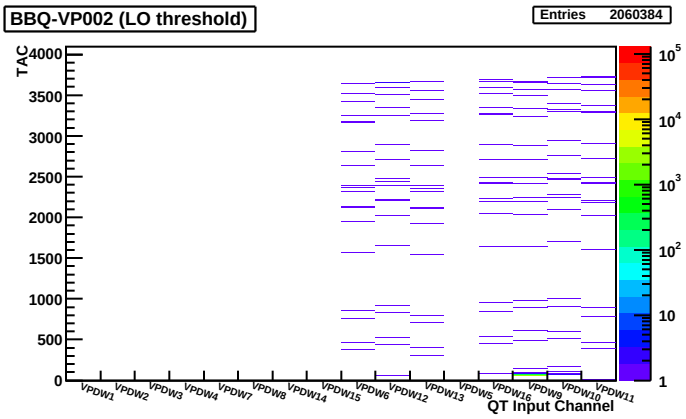

BBQ-ZD001
Entries 2060384
ADC
QT Input Channel

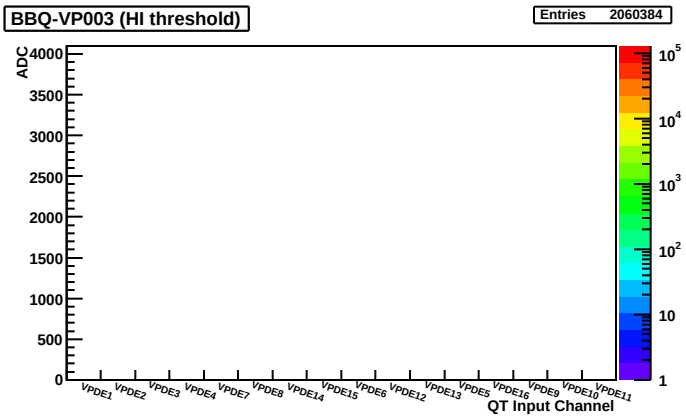

BBQ-ZD001
Entries 2060384
TAC
QT Input Channel

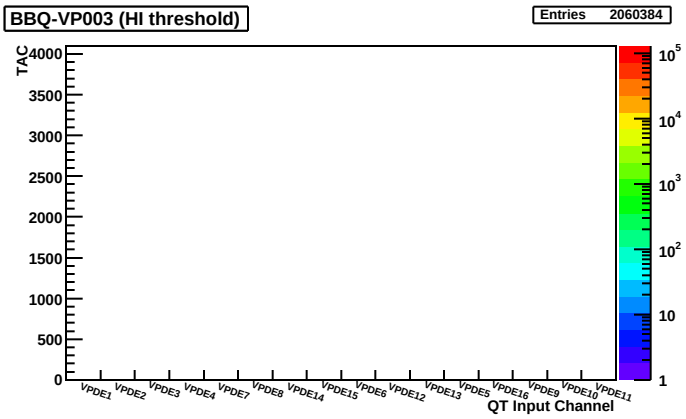

BBQ-VP001 (LO threshold)
Entries 2060384
ADC
QT Input Channel

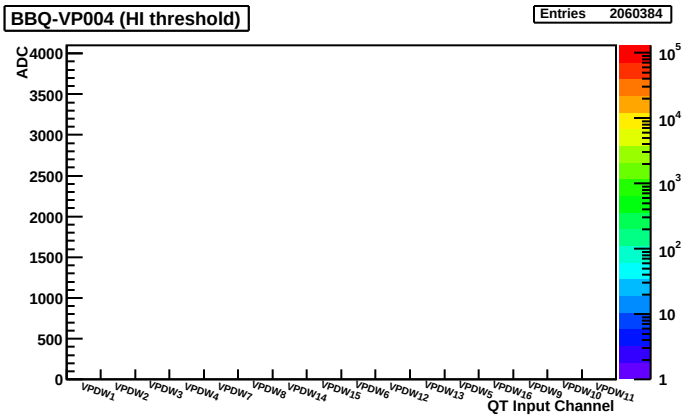

BBQ-VP001 (LO threshold)
Entries 2060384
TAC
QT Input Channel

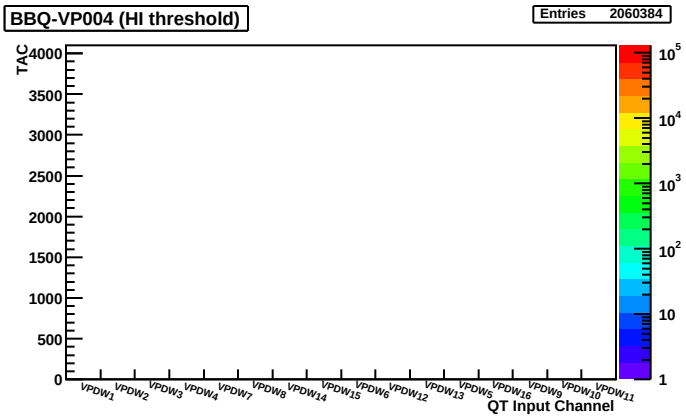

BBQ-VP002 (LO threshold)
Entries 2060384
ADC
QT Input Channel

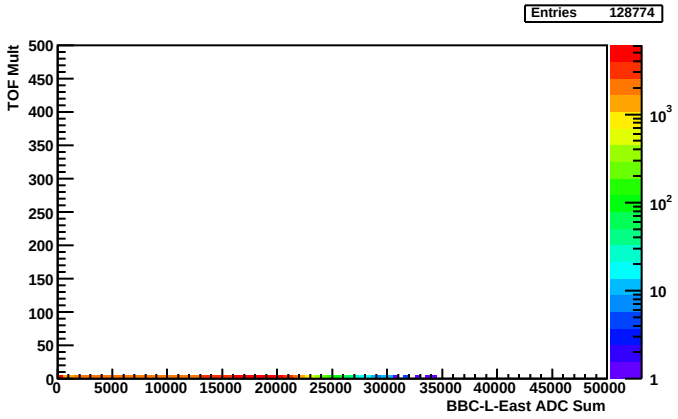

BBQ-VP002 (LO threshold)
Entries 2060384
TAC
QT Input Channel

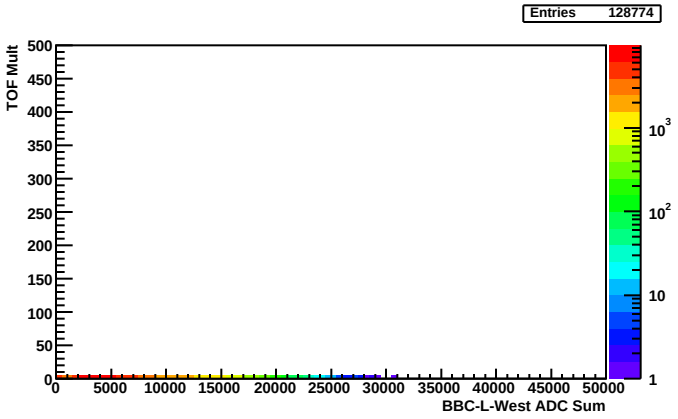

BBQ-VP003 (HI threshold)
Entries 2060384
ADC
QT Input Channel

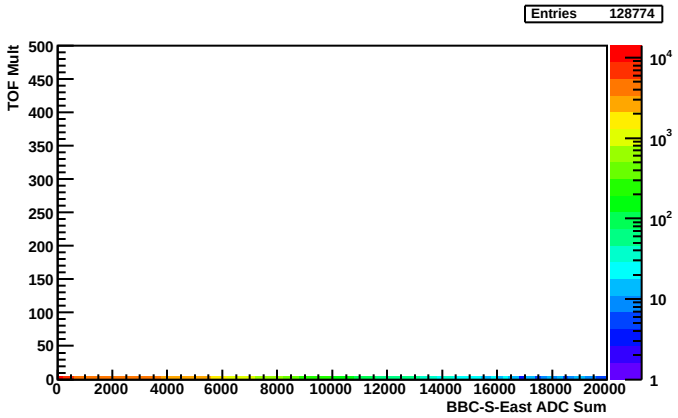

BBQ-VP003 (HI threshold)
Entries 2060384
TAC
QT Input Channel

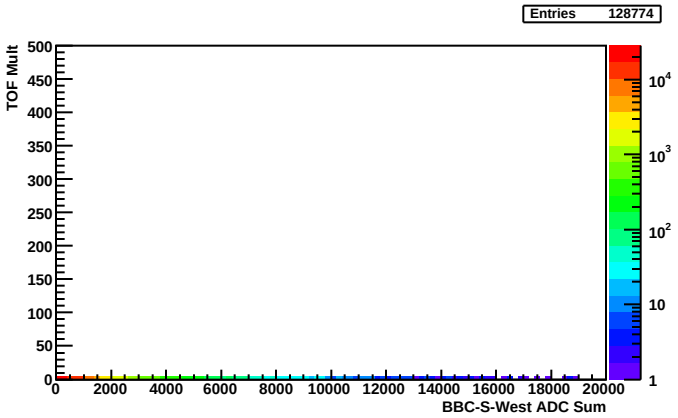

BBQ-VP004 (HI threshold)
Entries 2060384
ADC
QT Input Channel

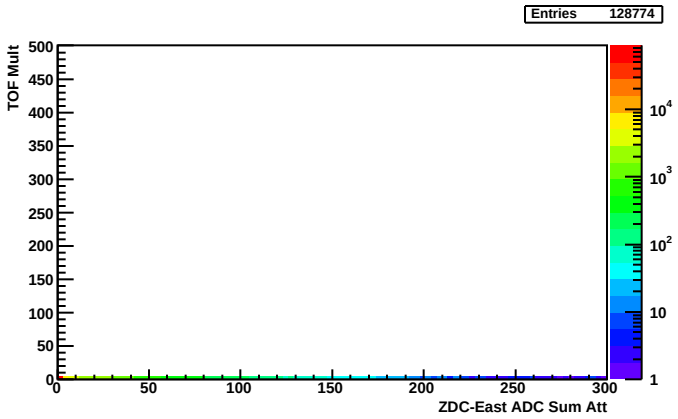

BBQ-VP004 (HI threshold)
Entries 2060384
TAC
QT Input Channel

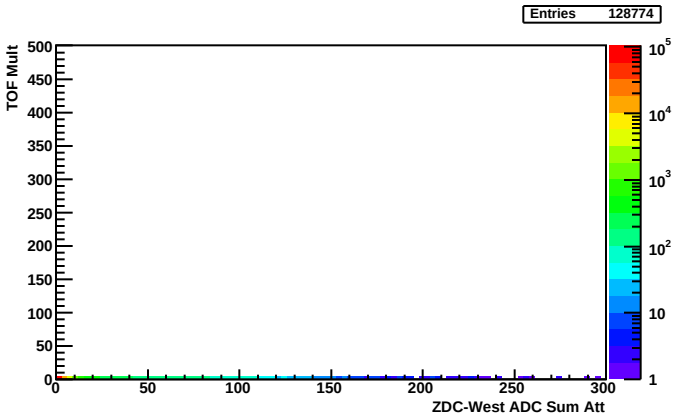

Entries 128774
TOF Mult
BBC-L-East ADC Sum

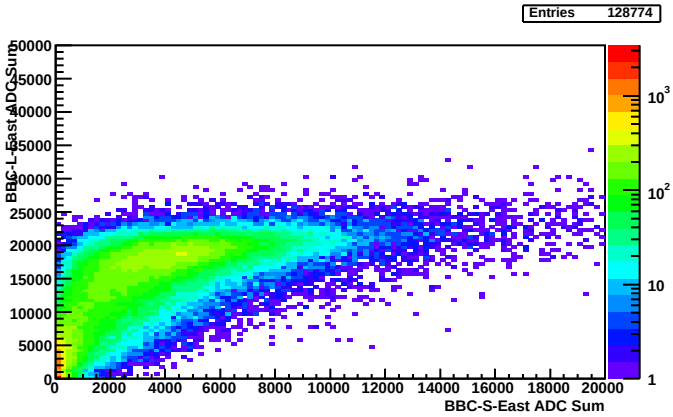

Entries 128774
TOF Mult
BBC-L-West ADC Sum

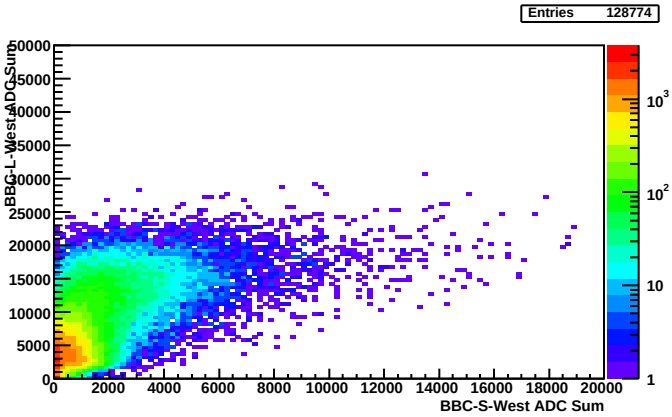

Entries 128774
TOF Mult
BBC-S-East ADC Sum

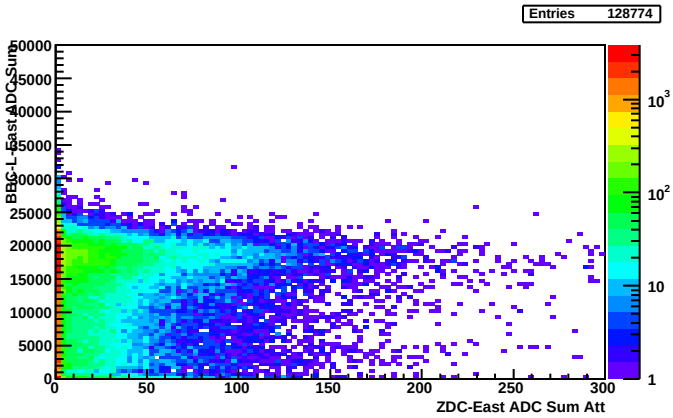

Entries 128774
TOF Mult
BBC-S-West ADC Sum

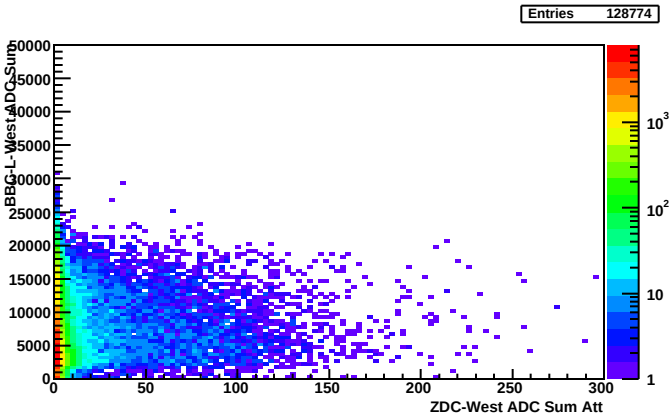

Entries 128774
TOF Mult
ZDC-East ADC Sum Att

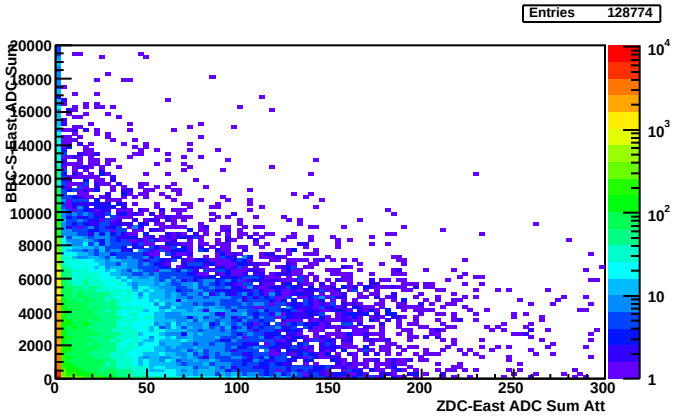

Entries 128774
TOF Mult
ZDC-West ADC Sum Att

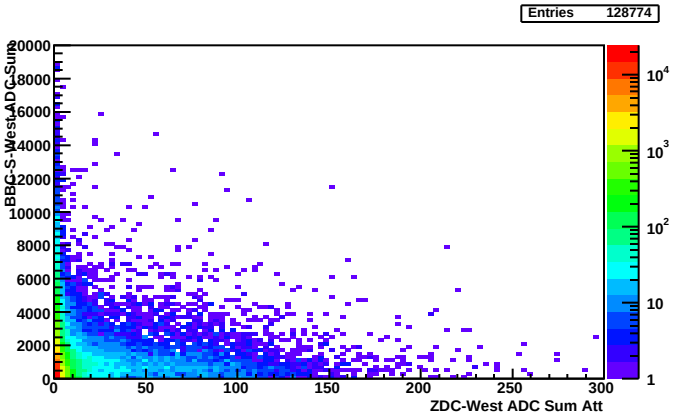

Entries 128774
BBC-L-East ADC Sum
BBC-S-East ADC Sum

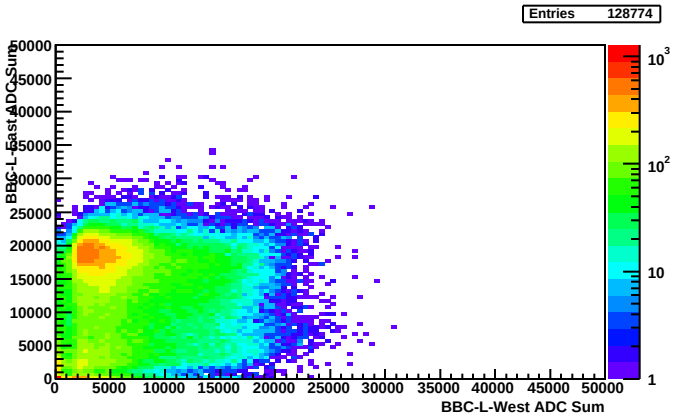

Entries 128774
BBC-L-West ADC Sum
BBC-S-West ADC Sum

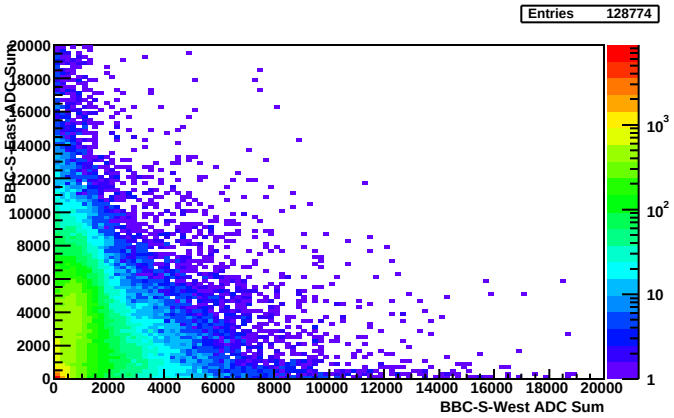

Entries 128774
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

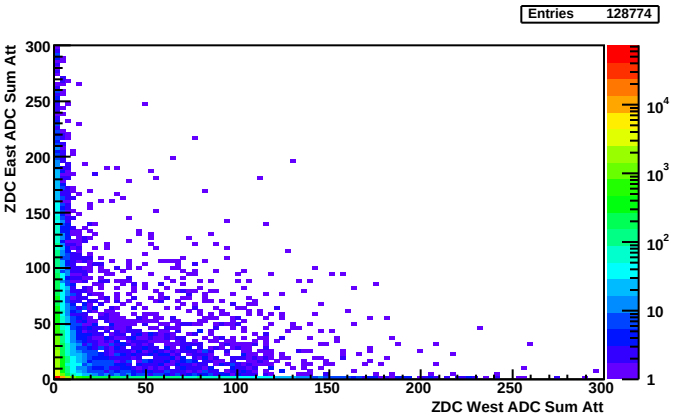

Entries 128774
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

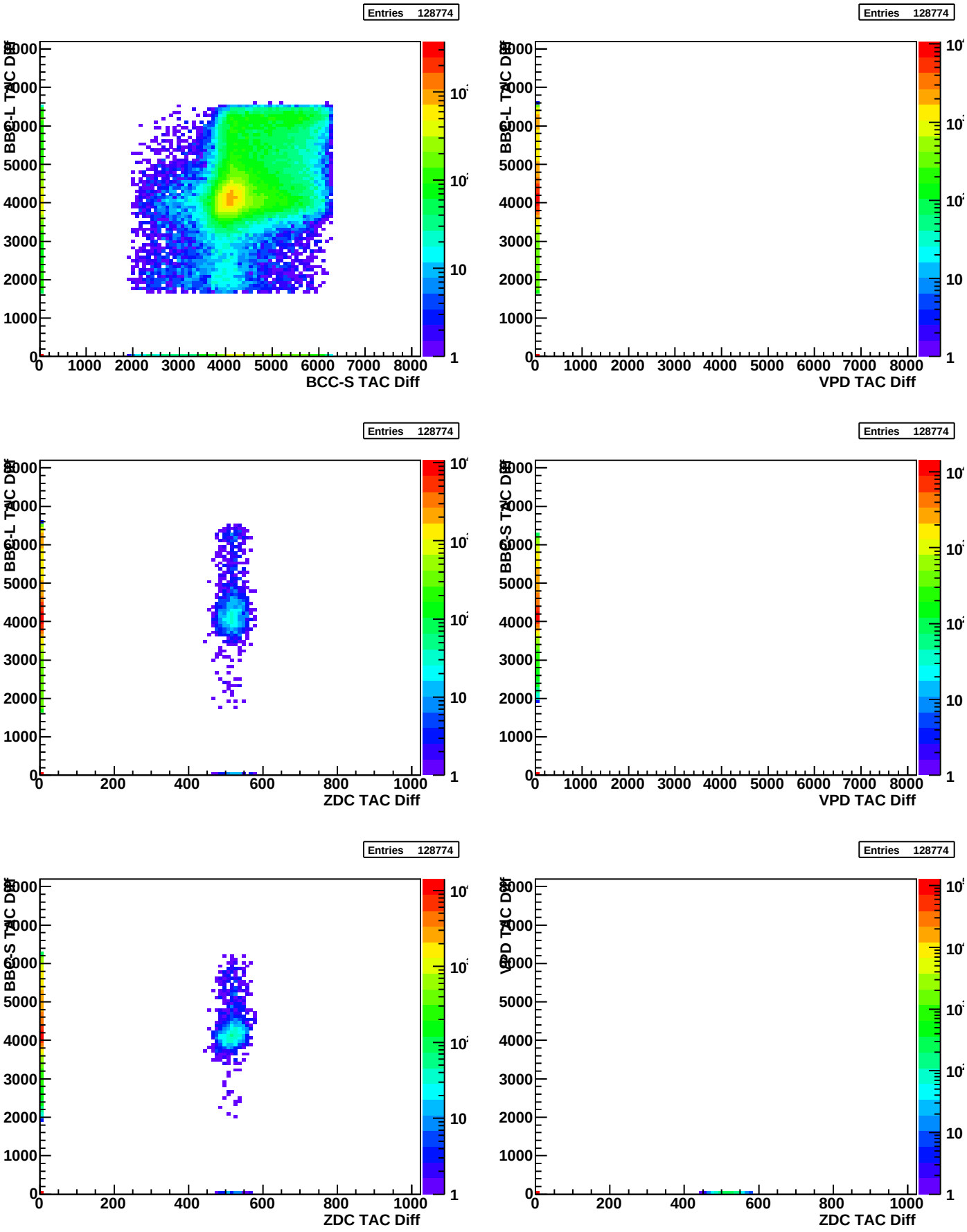

Entries 128774
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

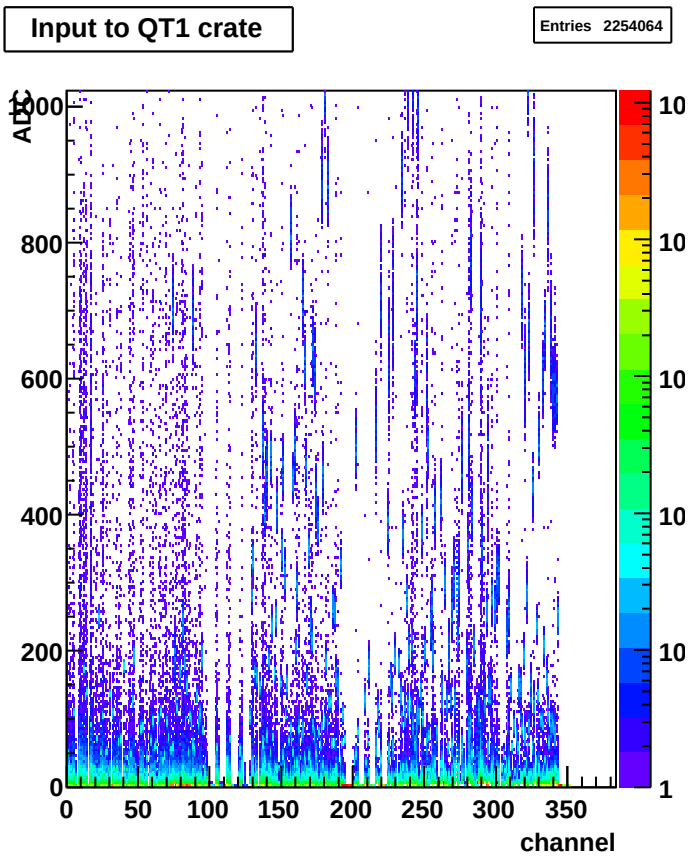

Entries 128774
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

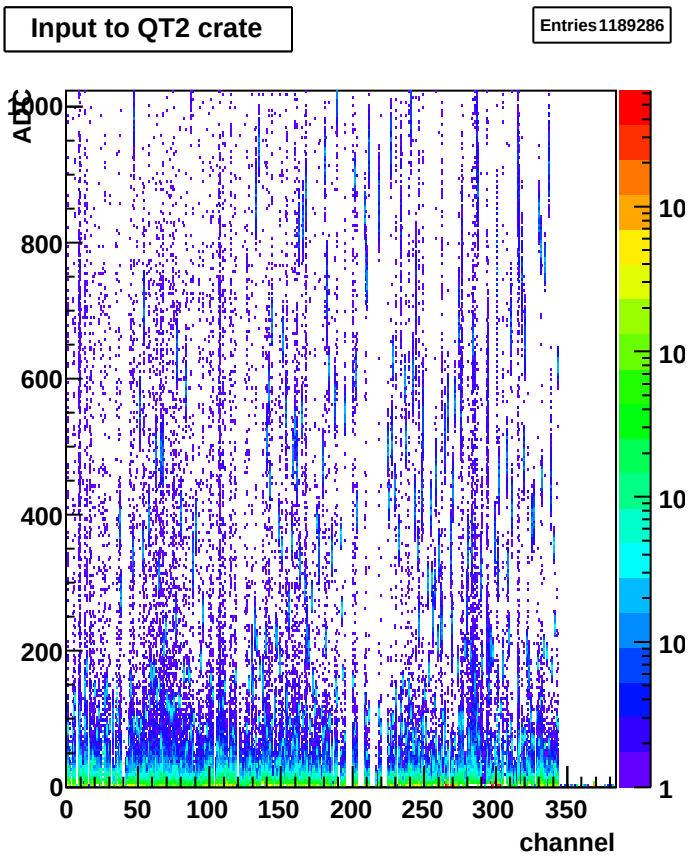

Entries 128774
BBC-L-East ADC Sum
BBC-L-West ADC Sum

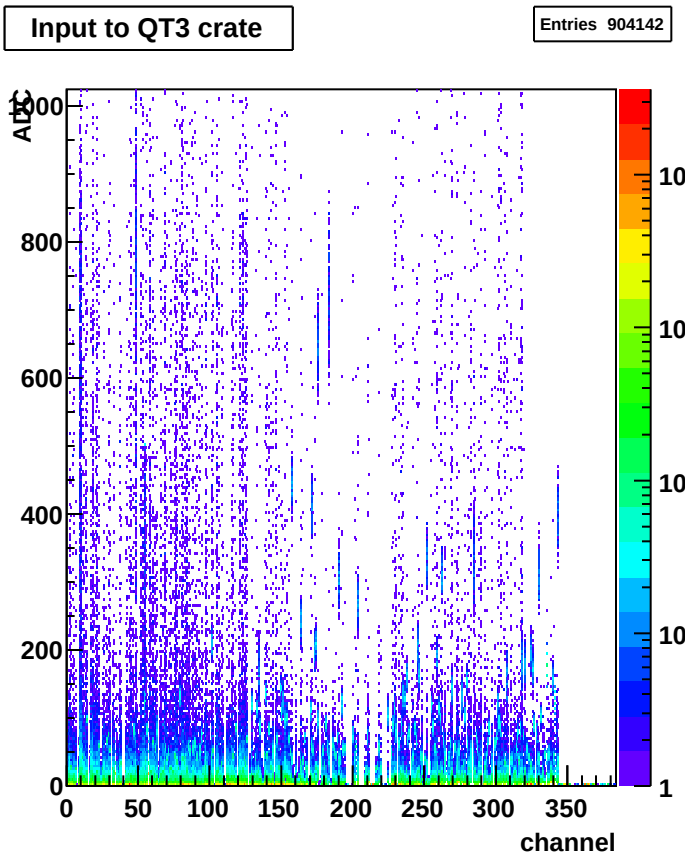

Entries 128774
BBC-S-East ADC Sum
BBC-S-West ADC Sum

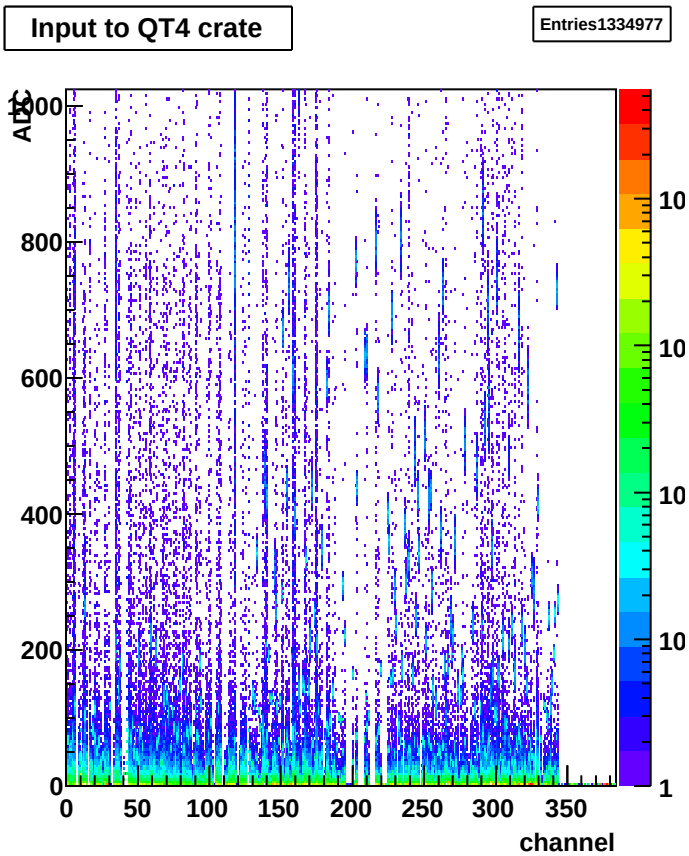

Entries 128774
ZDC East ADC Sum Att
ZDC West ADC Sum Att

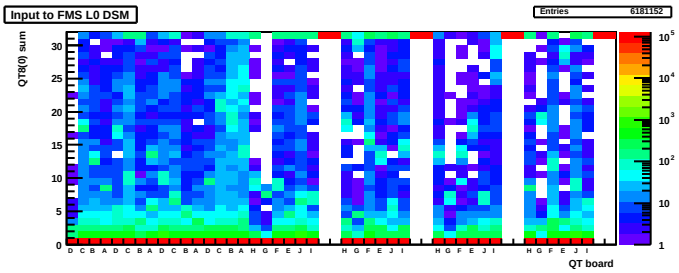

Entries 128774
BBC-L TAC Diff
BCC-S TAC Diff
Entries 128774
BBC-L TAC Diff
VPD TAC Diff
Entries 128774
BBC-L TAC Diff
ZDC TAC Diff
Entries 128774
BBC-S TAC Diff
VPD TAC Diff
Entries 128774
BBC-S TAC Diff
ZDC TAC Diff
Entries 128774
VPD TAC Diff
ZDC TAC Diff

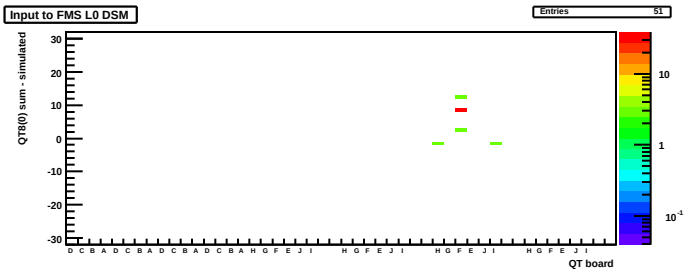

Input to QT1 crate
Entries 2254064
ADC
channel

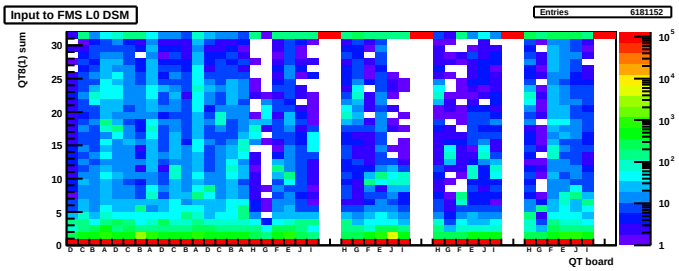

Input to QT2 crate
Entries 1189286
ADC
channel

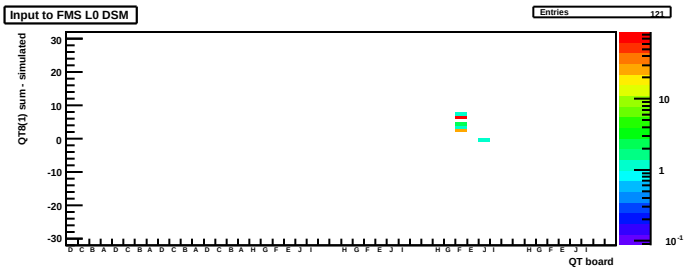

Input to QT3 crate
Entries 904142
ADC
channel

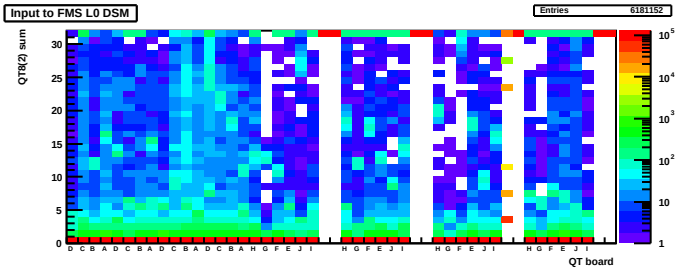

Input to QT4 crate
Entries 1334977
ADC
channel

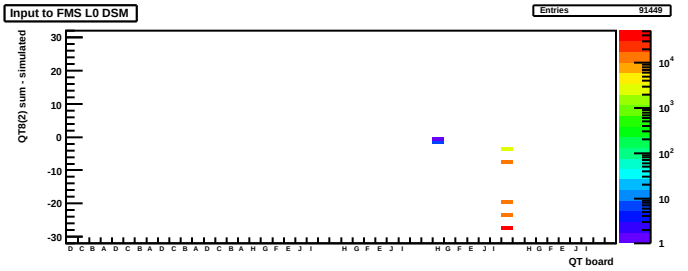

Input to FMS L0 DSM
Entries 6181152
QT8(0) sum
QT board

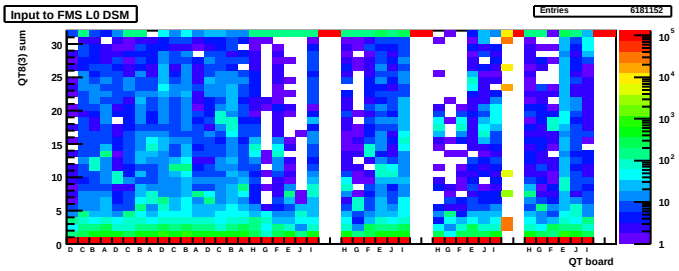

Input to FMS L0 DSM
Entries 51
QT8(0) sum - simulated
QT board

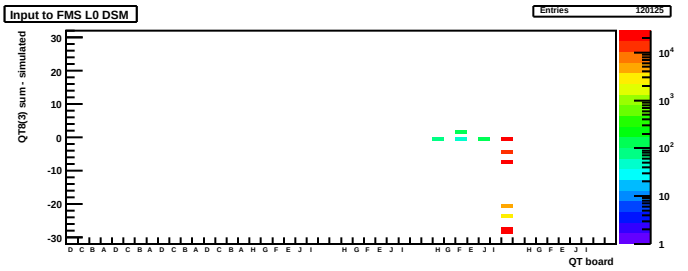

Input to FMS L0 DSM
Entries 6181152
QT8(1) sum
QT board

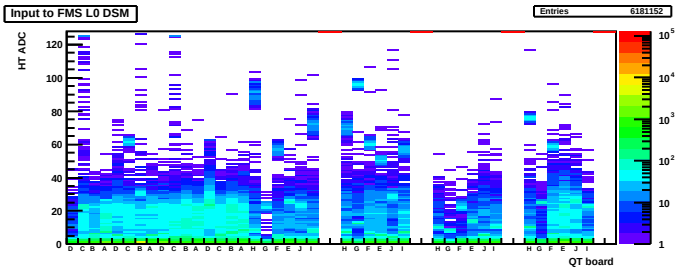

Input to FMS L0 DSM
Entries 121
QT8(1) sum - simulated
QT board

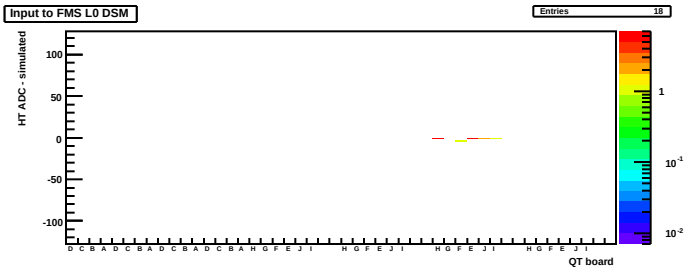

Input to FMS L0 DSM
Entries 6181152
QT8(2) sum
QT board

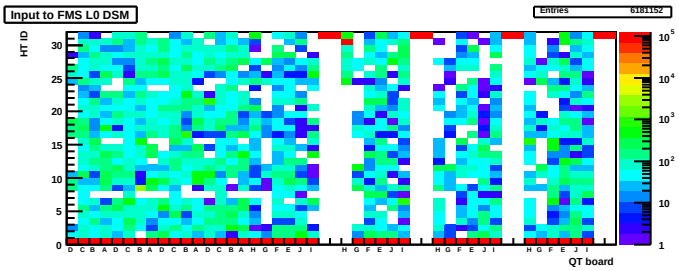

Input to FMS L0 DSM
Entries 91449
QT8(2) sum - simulated
QT board

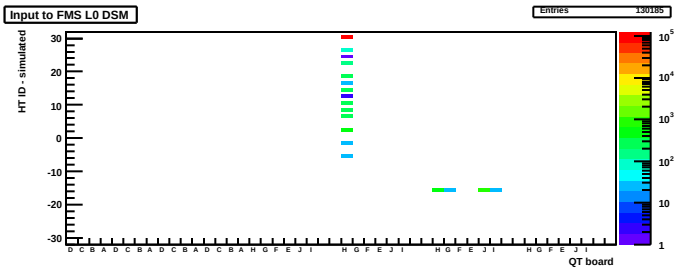

Input to FMS L0 DSM
Entries 6181152
QT8(3) sum
QT board

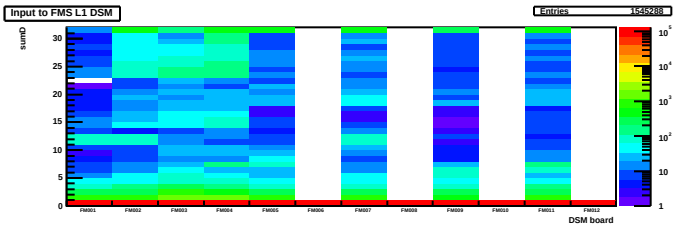

Input to FMS L0 DSM
Entries 120125
QT8(3) sum - simulated
QT board

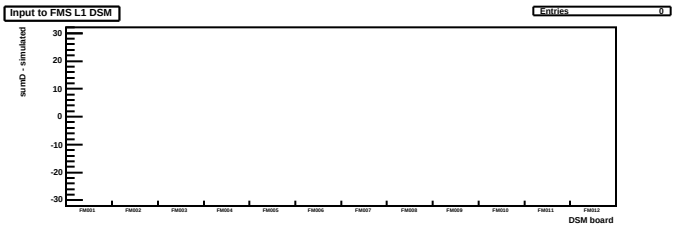

Input to FMS L0 DSM
Entries 6181152
HT ADC
QT board

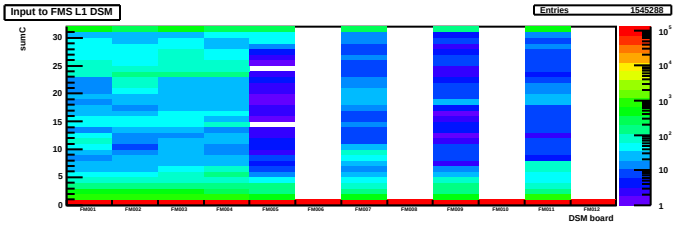

Input to FMS L0 DSM
Entries 18
HT ADC - simulated
QT board

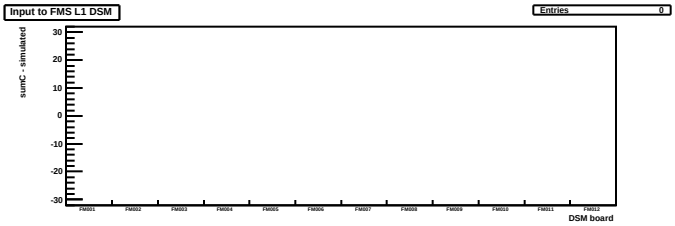

Input to FMS L0 DSM
Entries 6181152
HT ID
QT board

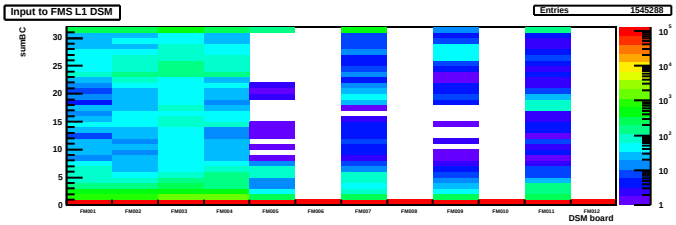

Input to FMS L0 DSM
Entries 130185
HT ID - simulated
QT board

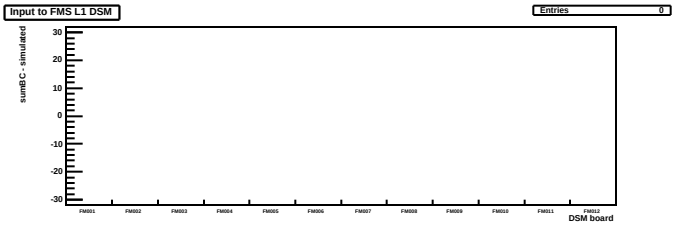

Input to FMS L1 DSM
Entries 1545288
sumD
DSM board

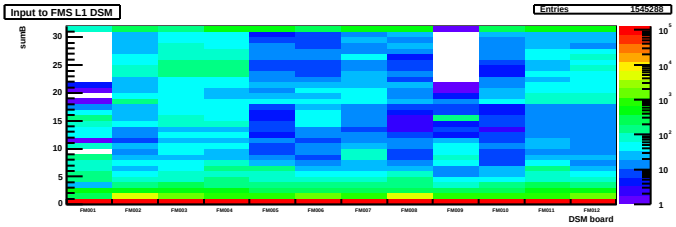

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

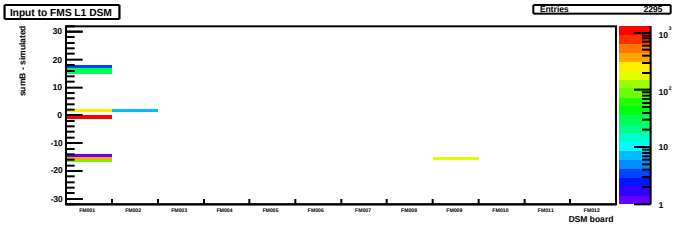

Input to FMS L1 DSM
Entries 1545288
sumC
DSM board

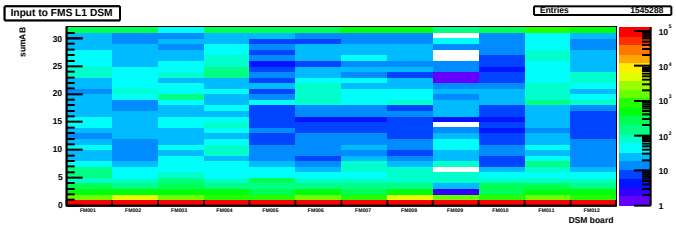

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

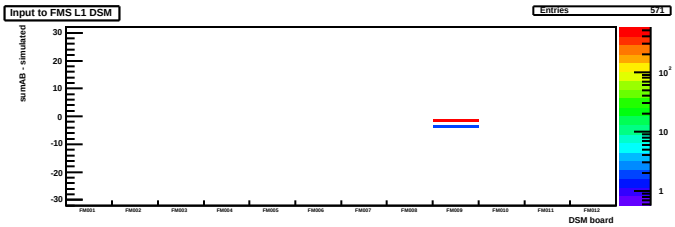

Input to FMS L1 DSM
Entries 1545288
sumBC
DSM board

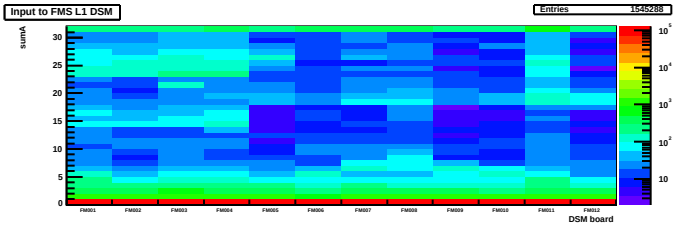

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

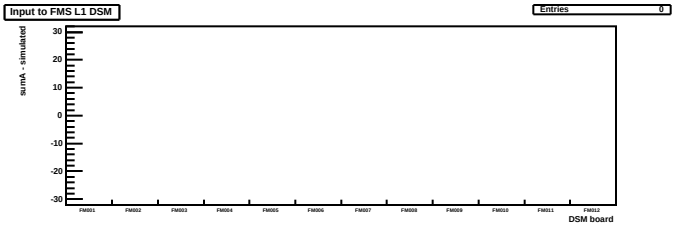

Input to FMS L1 DSM
Entries 1545288
sumB
DSM board

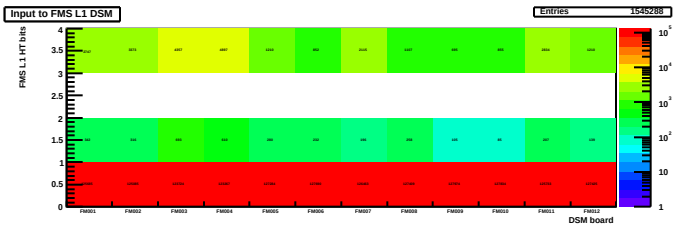

Input to FMS L1 DSM
Entries 2295
sumB - simulated
DSM board

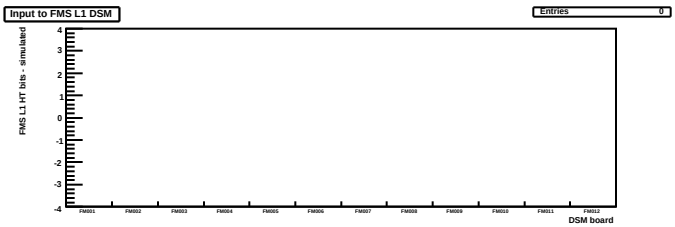

Input to FMS L1 DSM
Entries 1545288
sumAB
DSM board

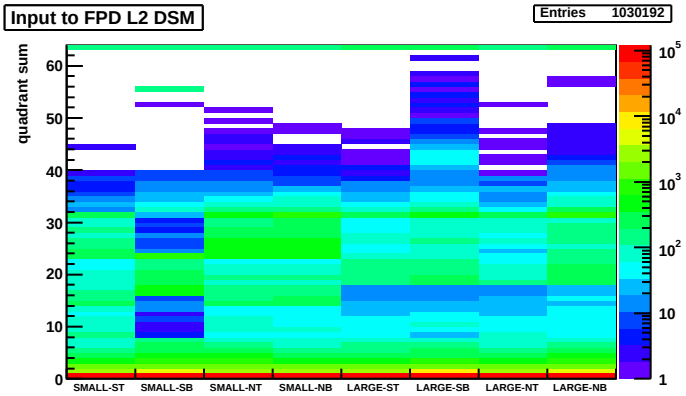

Input to FMS L1 DSM
Entries 571
sumAB - simulated
DSM board

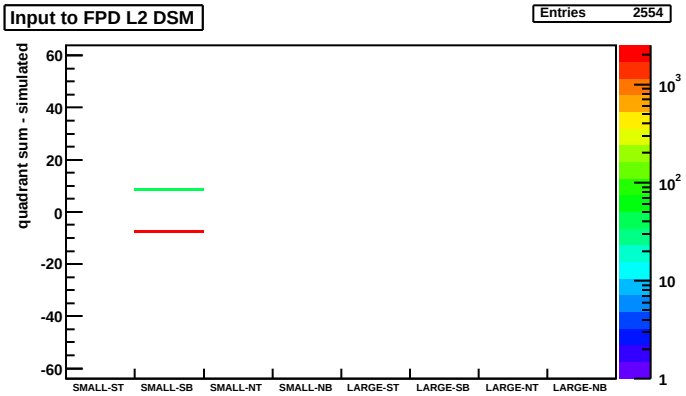

Input to FMS L1 DSM
Entries 1545288
sumA
DSM board

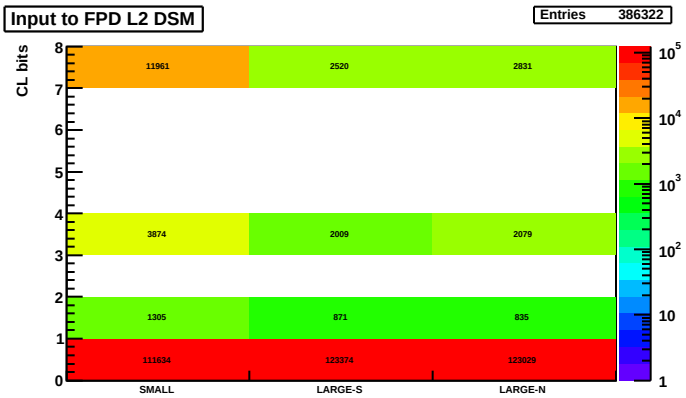

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

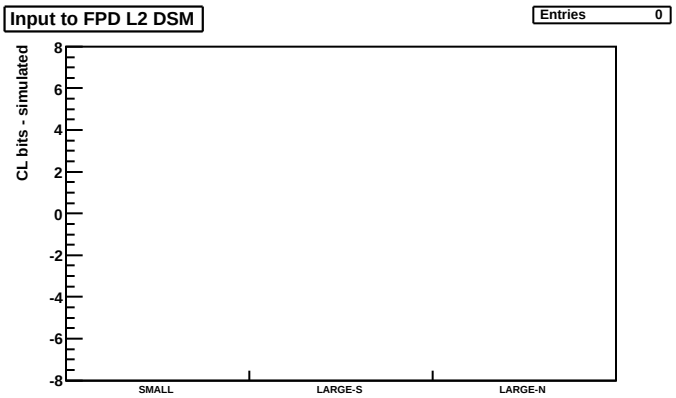

Input to FMS L1 DSM
Entries 1545288
FMS L1 HT bits
DSM board

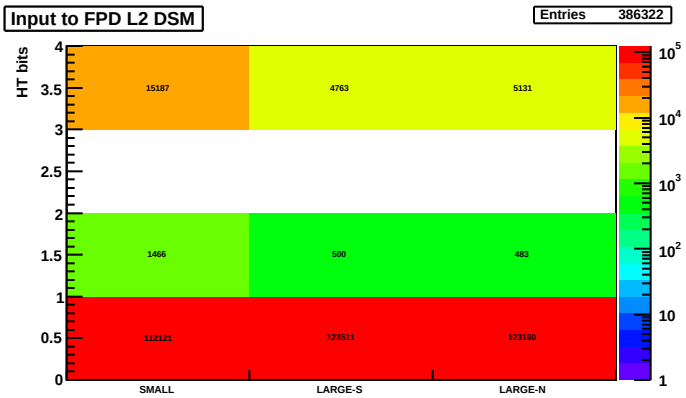

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

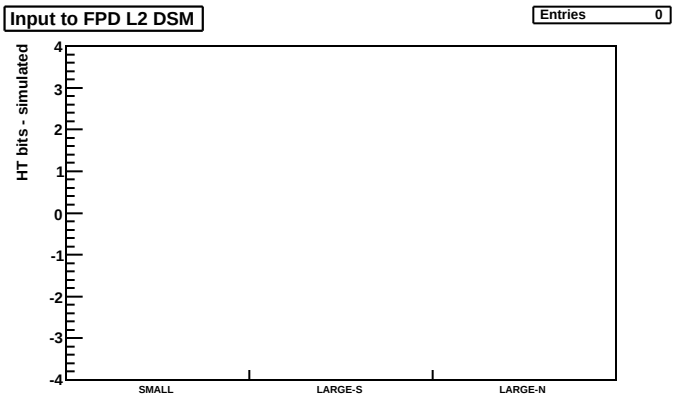

Input to FPD L2 DSM
Entries 1030192
quadrant sum
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

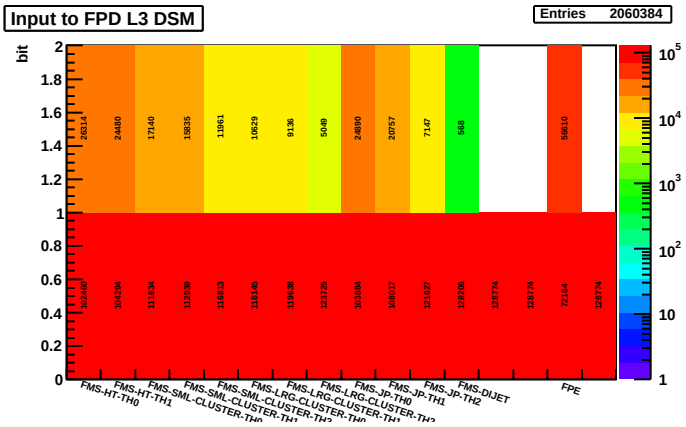

Input to FPD L2 DSM
Entries 2554
quadrant sum - simulated
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

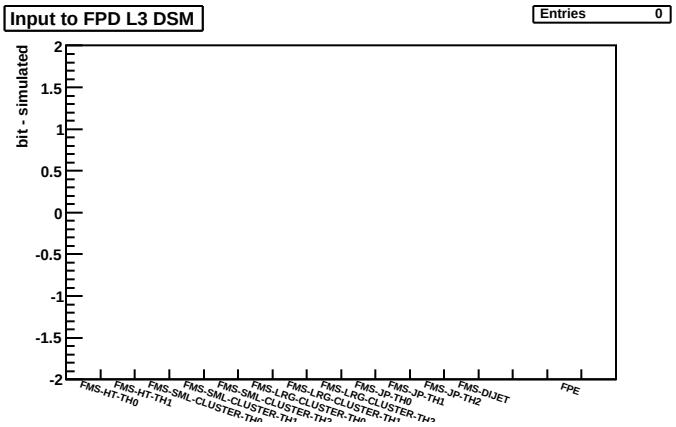

Input to FPD L2 DSM
Entries 386322
CL bits
11961
2520
2831
3874
2009
2079
1305
871
835
111634
123374
123029
SMALL
LARGE-S
LARGE-N

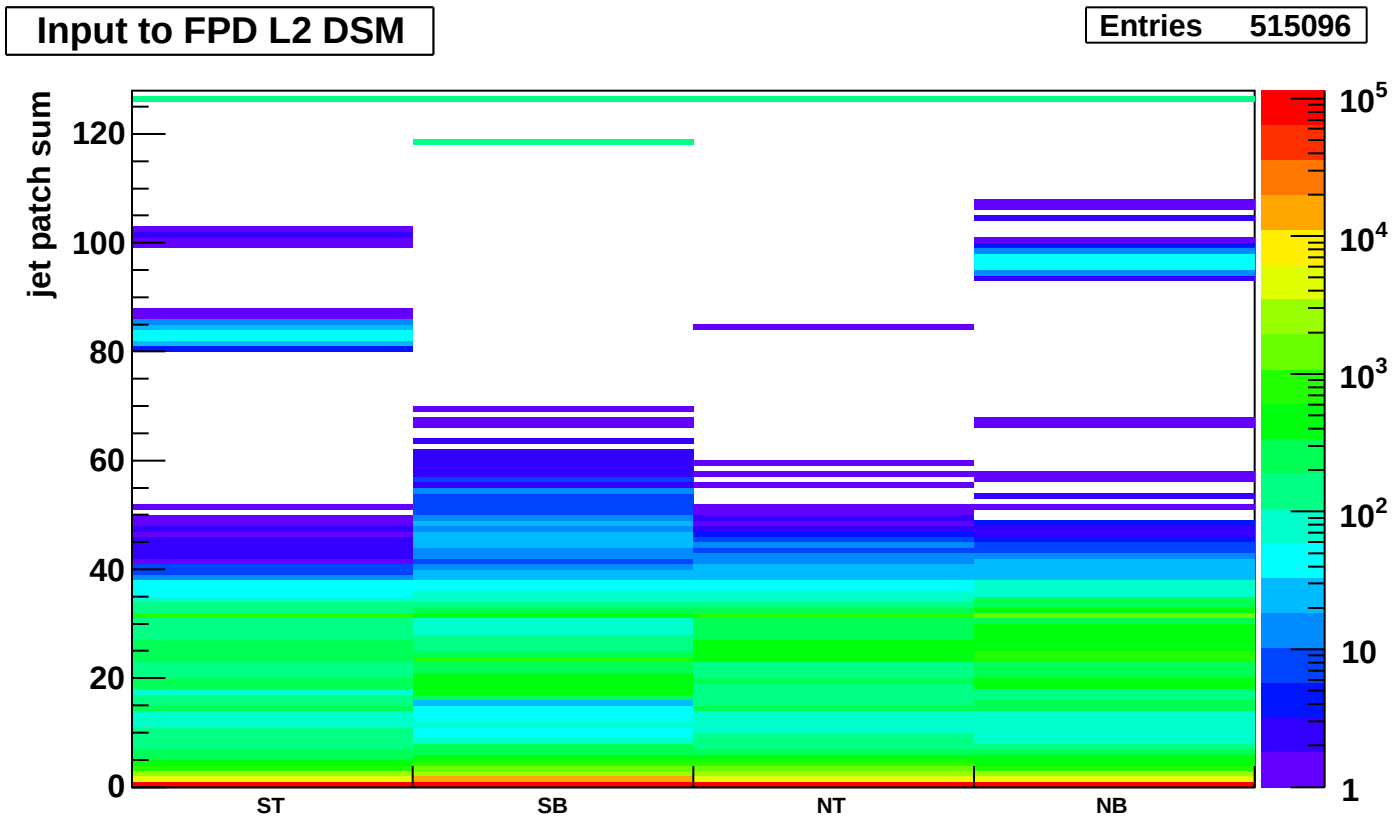

Input to FPD L2 DSM
Entries 0
CL bits - simulated
SMALL
LARGE-S
LARGE-N

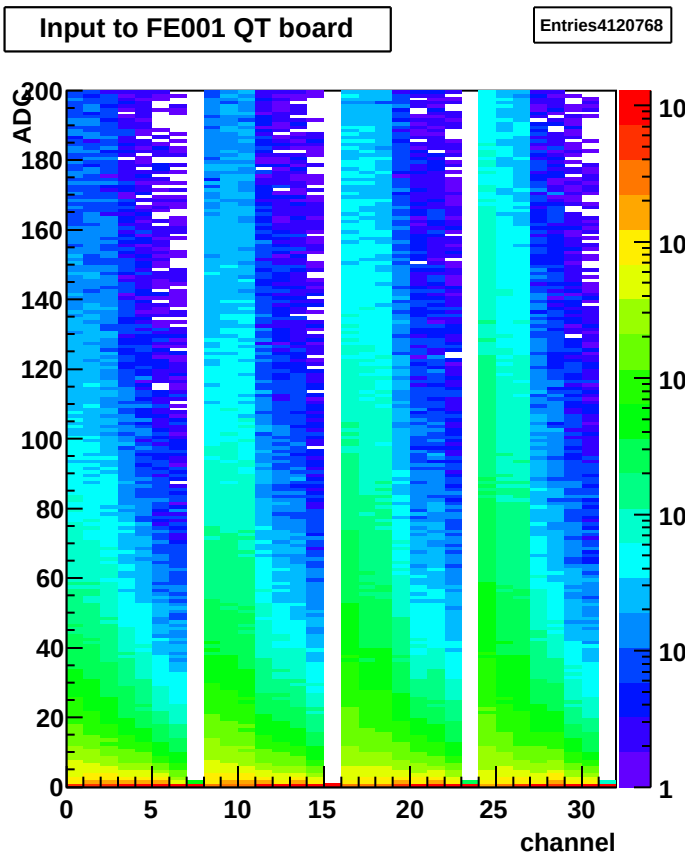

Input to FPD L2 DSM
Entries 386322
HT bits
15187
4763
5131
1466
500
483
112121
123511
123160
SMALL
LARGE-S
LARGE-N

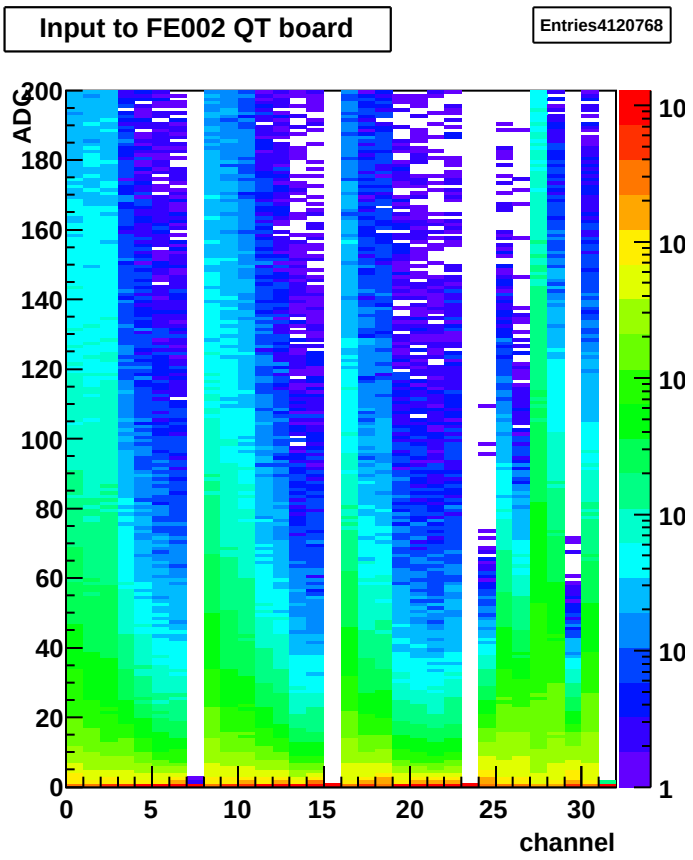

Input to FPD L2 DSM
Entries 0
HT bits - simulated
SMALL
LARGE-S
LARGE-N

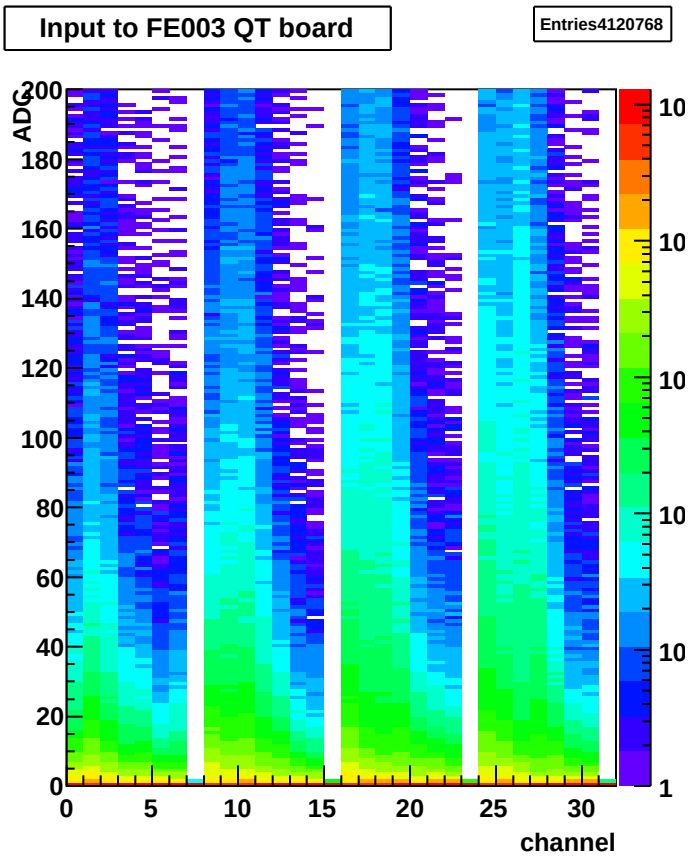

Input to FPD L3 DSM
Entries 2060384
bit
26314
24480
17140
15835
11961
10629
9136
5049
24890
20757
7147
568
56610
122485
104294
111634
112939
116813
118145
119538
123725
103884
109017
121627
123206
123774
123774
72154
123774
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

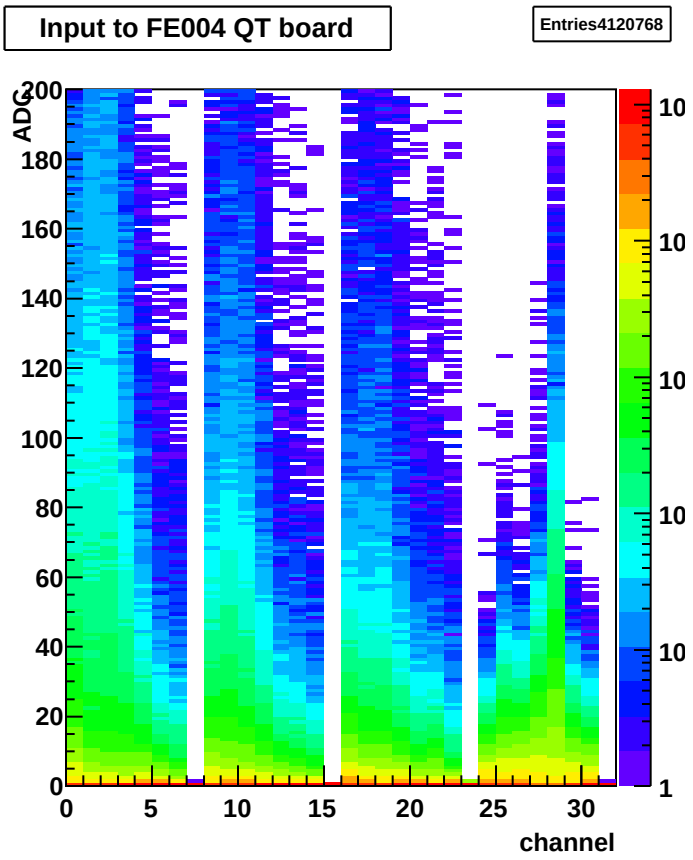

Input to FPD L3 DSM
Entries 0
bit - simulated
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

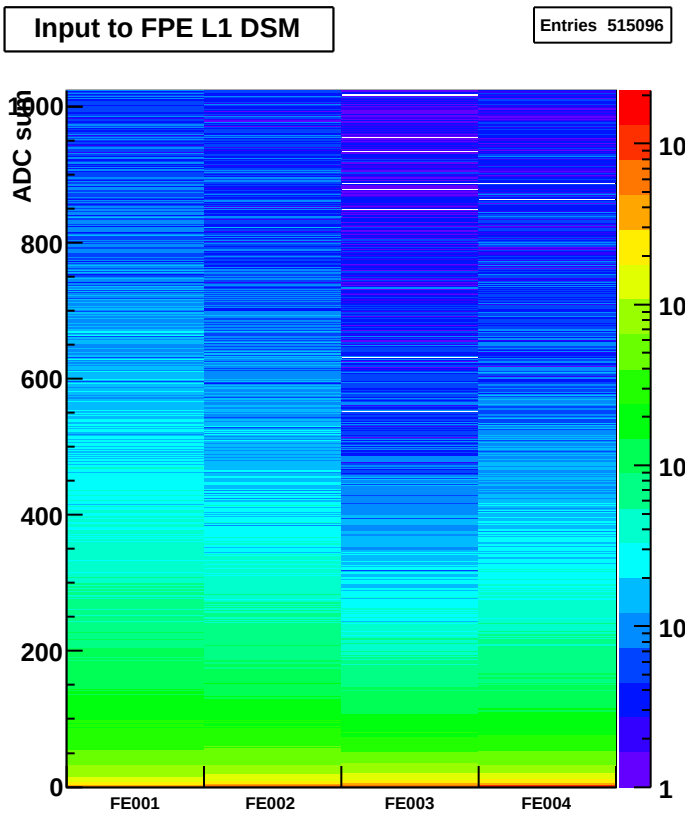

Input to FPD L2 DSM
Entries 515096
jet patch sum
0
20
40
60
80
100
120
ST
SB
NT
NB
1
10
10^2
10^3
10^4
10^5

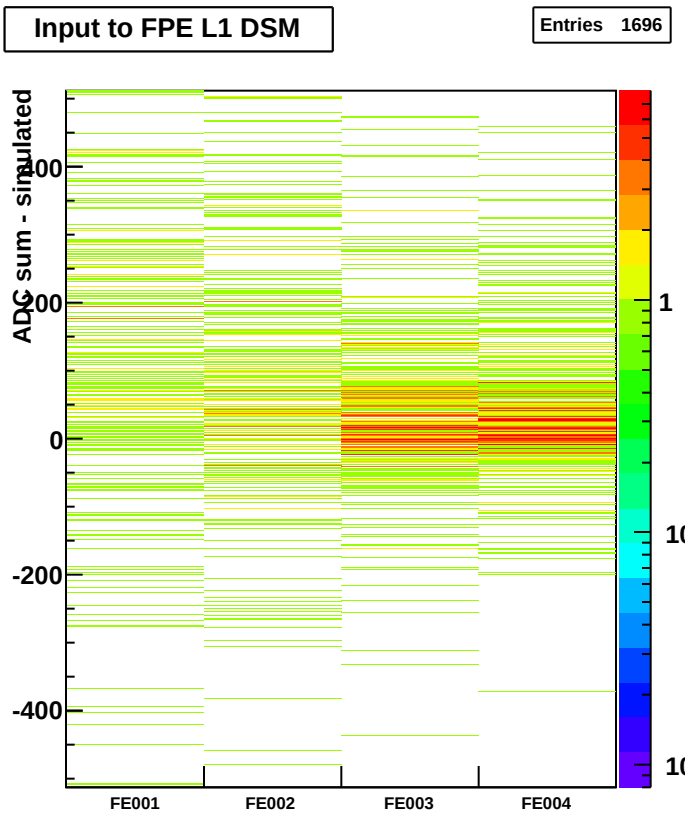

Input to FE001 QT board
Entries4120768
ADC
channel

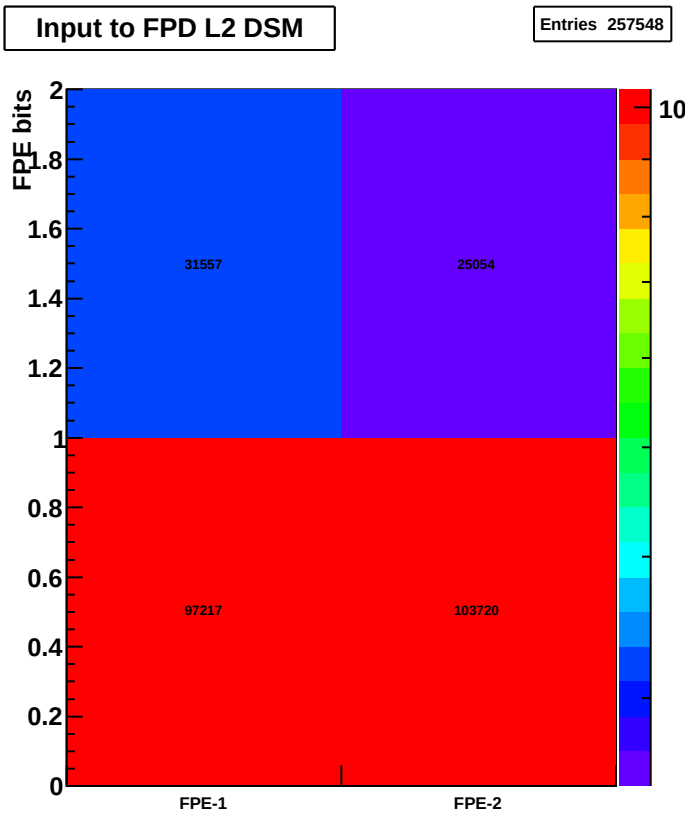

Input to FE002 QT board
Entries4120768
ADC
channel

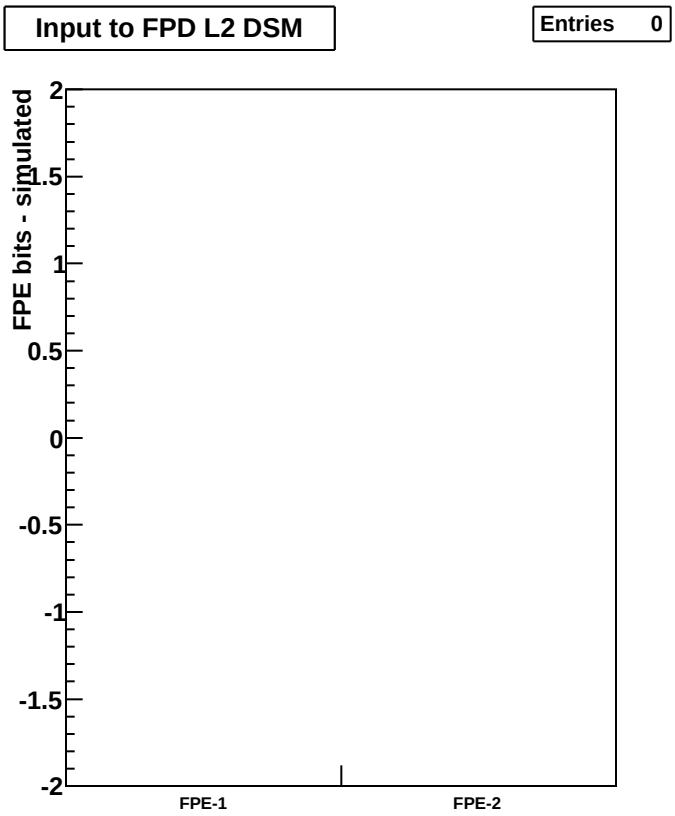

Input to FE003 QT board
Entries4120768
ADC
channel


Input to FE004 QT board
Entries4120768
ADC
channel


Input to FPE L1 DSM
Entries 515096
ADC sum
1000
800
600
400
200
0
FE001
FE002
FE003
FE004
10
10
10
10
1


Input to FPE L1 DSM
Entries 1696
ADC sum - simulated
400
200
0
-200
-400
FE001
FE002
FE003
FE004
1


Input to FPD L2 DSM
Entries 257548
FPE bits
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
31557
25054
97217
103720
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