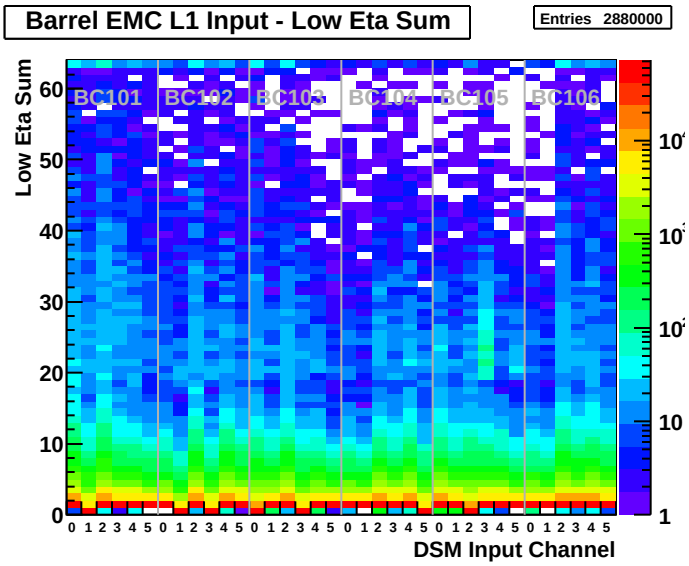
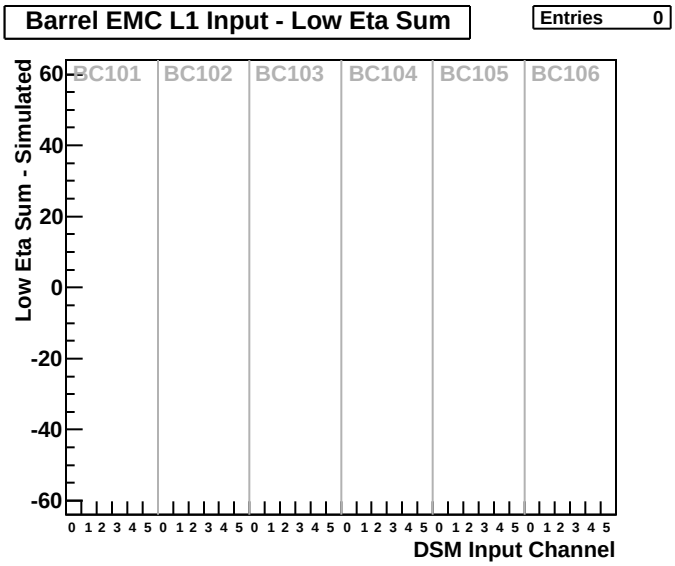
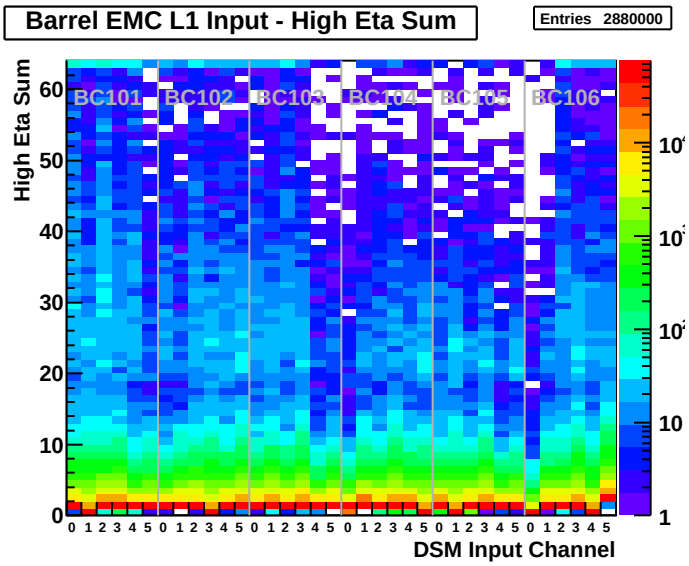
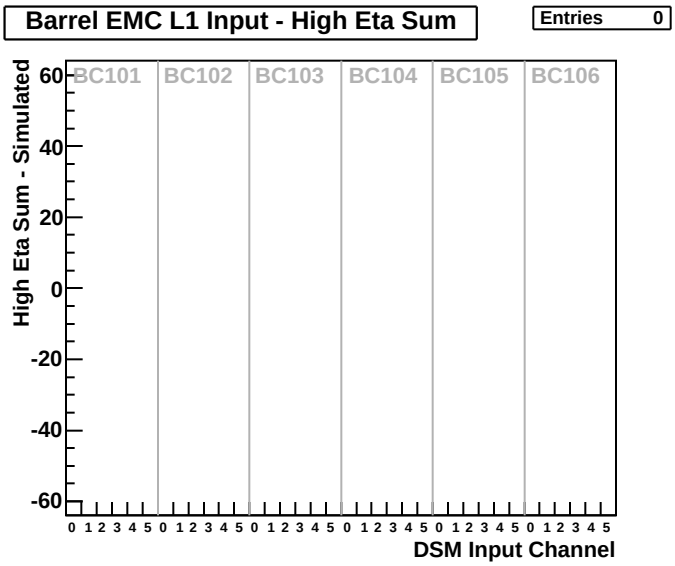
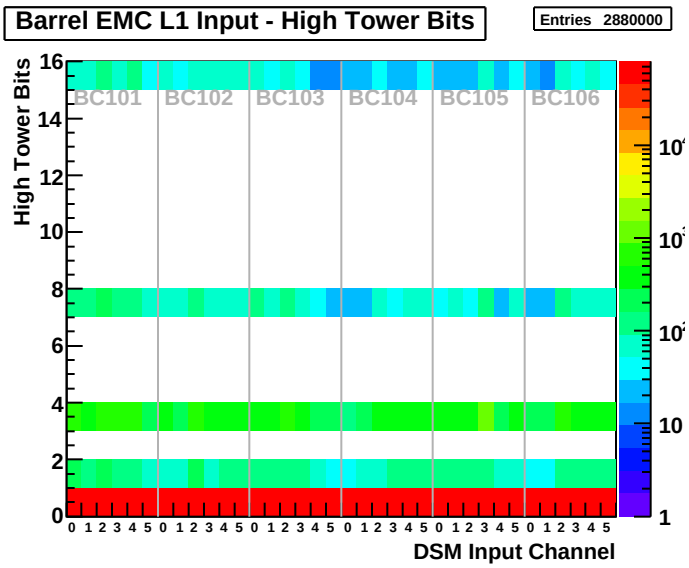
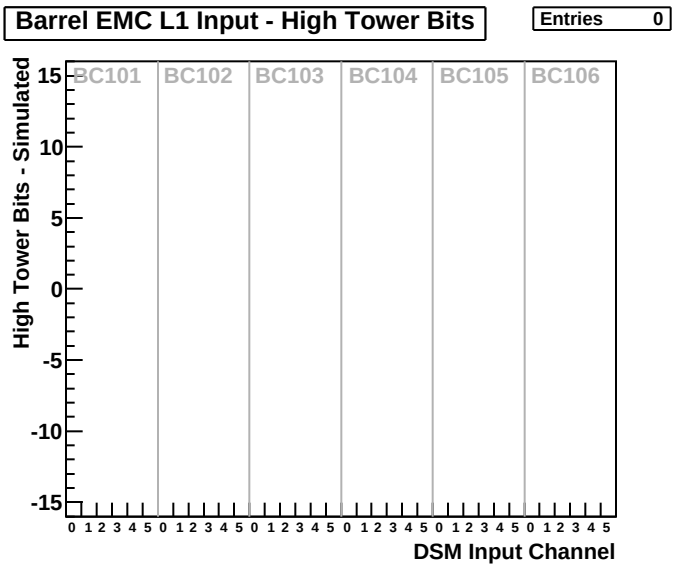

Barrel EMC L1 Input - Low Eta Sum
Entries 2880000
Low Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

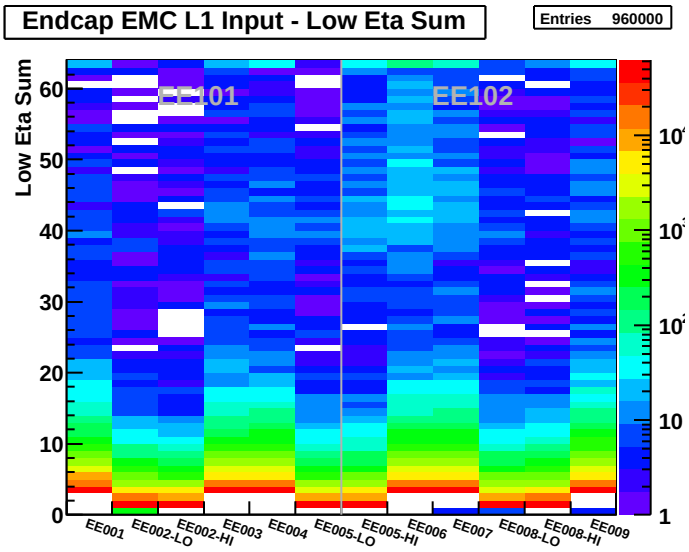

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

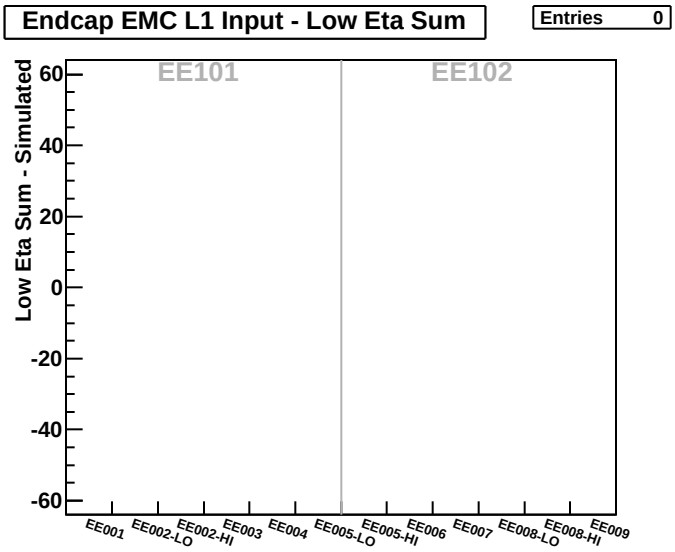

Barrel EMC L1 Input - High Eta Sum
Entries 2880000
High Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

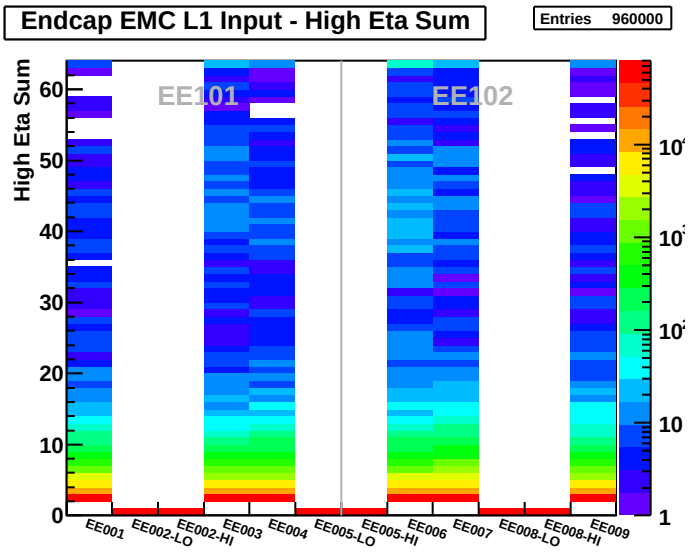

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

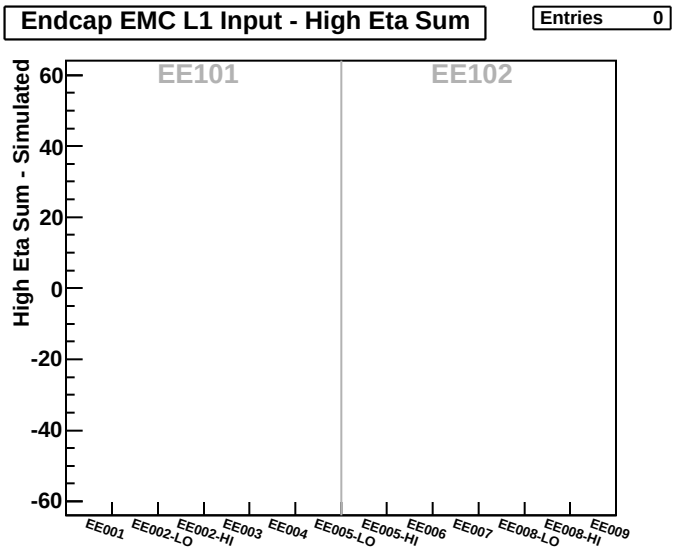

Barrel EMC L1 Input - High Tower Bits
Entries 2880000
High Tower Bits
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

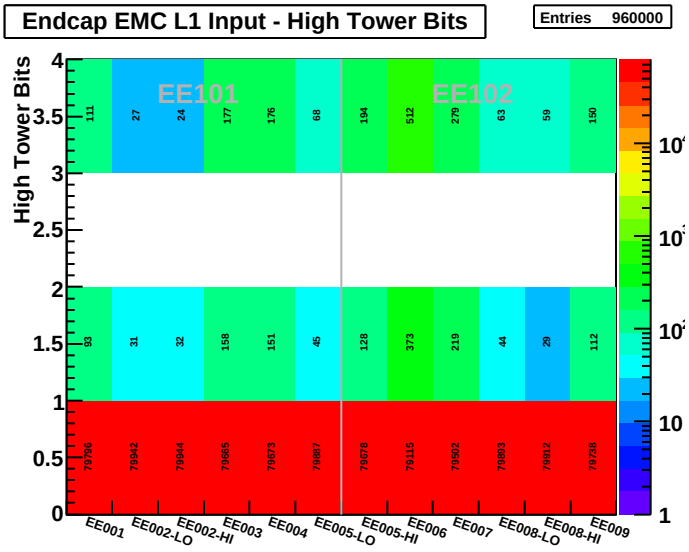

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

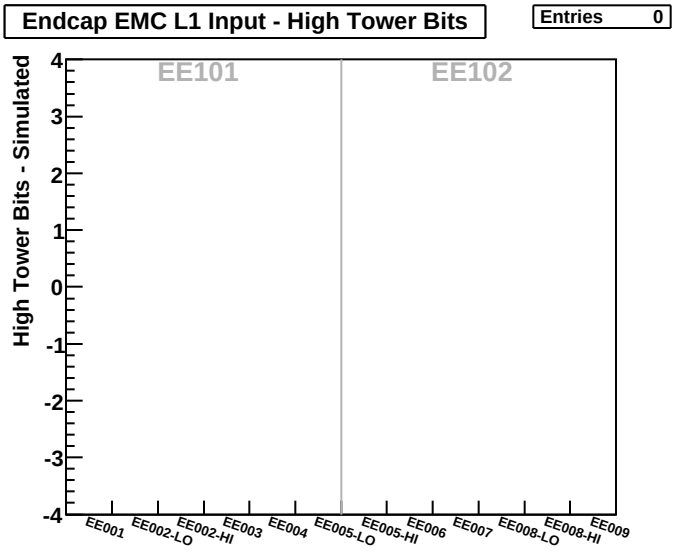

Endcap EMC L1 Input - Low Eta Sum
Entries 960000
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

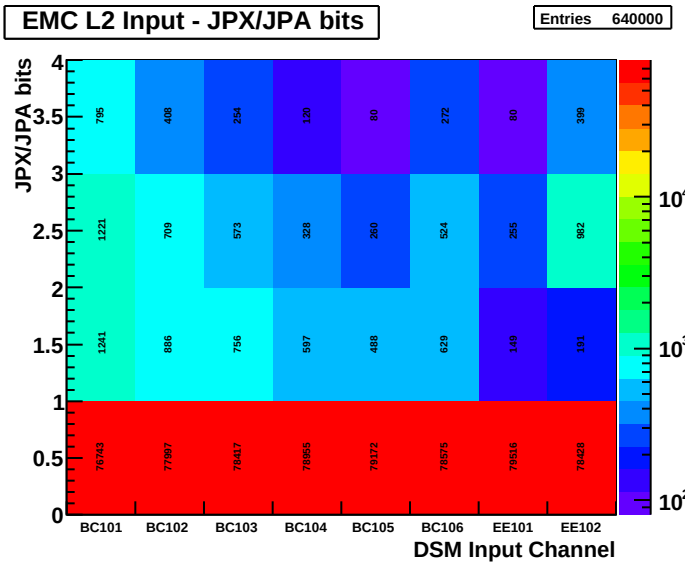

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

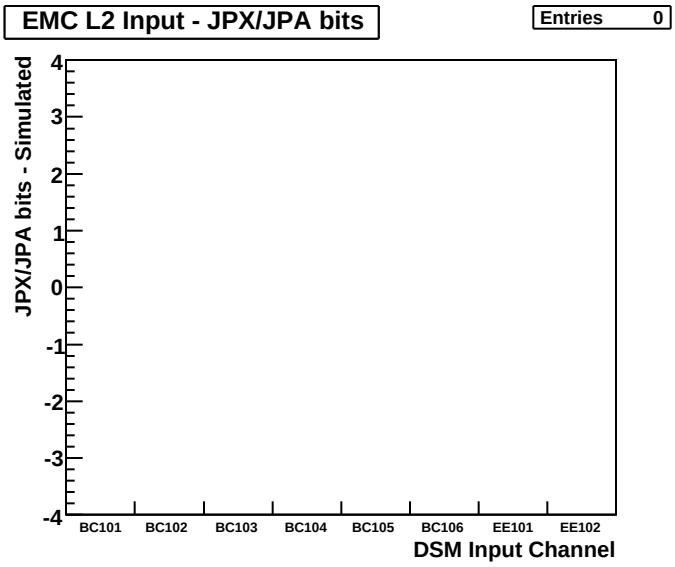

Endcap EMC L1 Input - High Eta Sum
Entries 960000
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

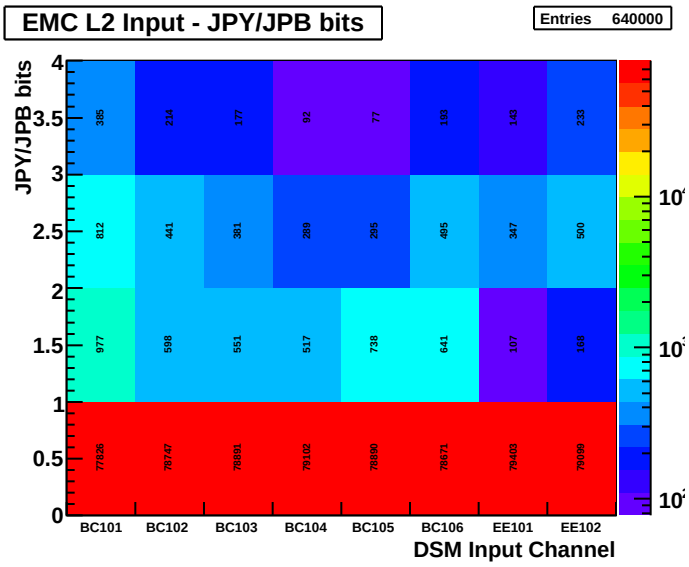

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

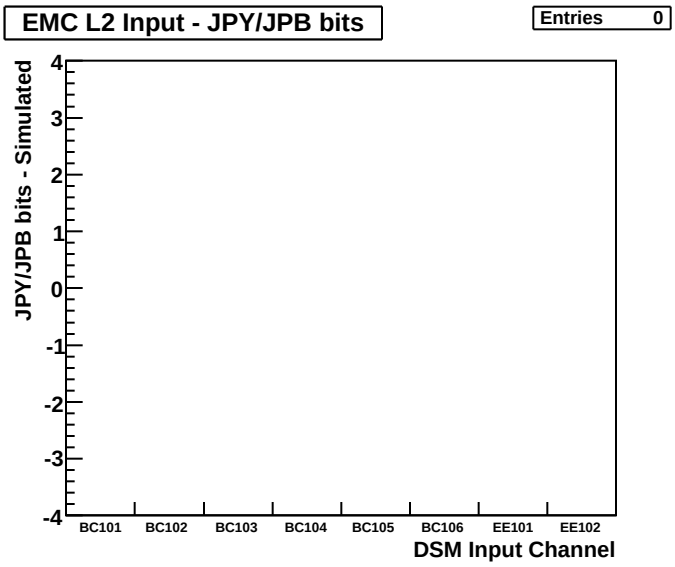

Endcap EMC L1 Input - High Tower Bits
Entries 960000
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

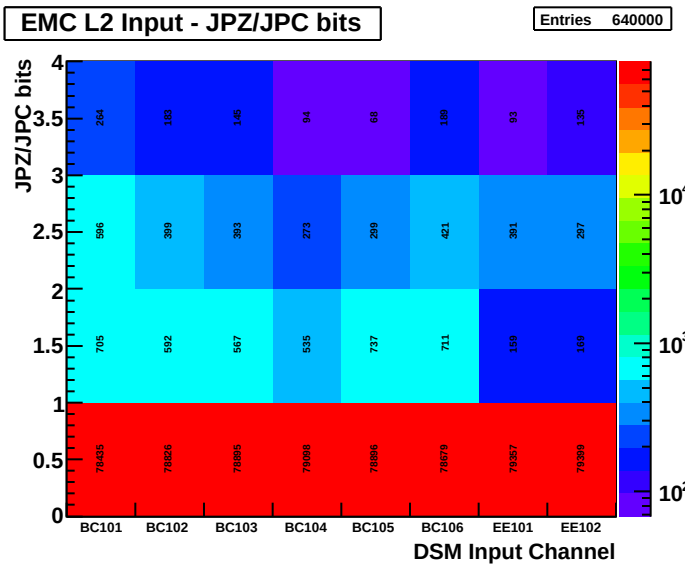

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

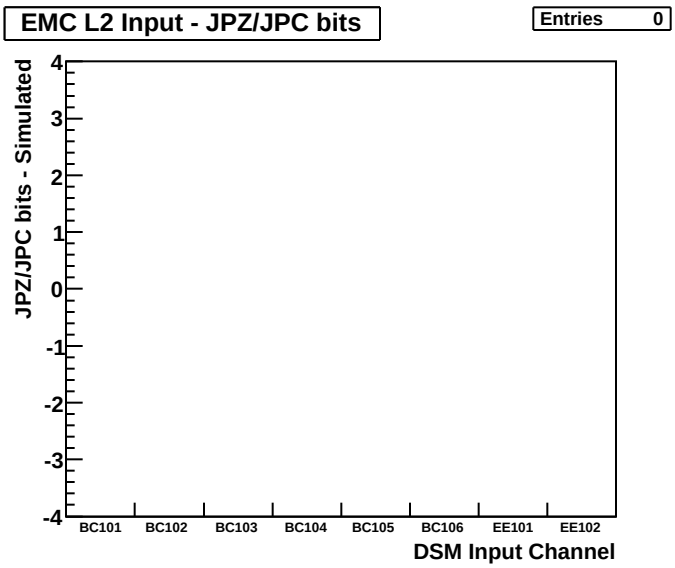

EMC L2 Input - JPX/JPA bits
Entries 640000
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
795 408 254 120 80 272 80 399
1221 709 573 328 260 524 255 982
1241 886 756 597 488 629 149 191
76743 77997 78417 78955 79172 78575 79516 78428

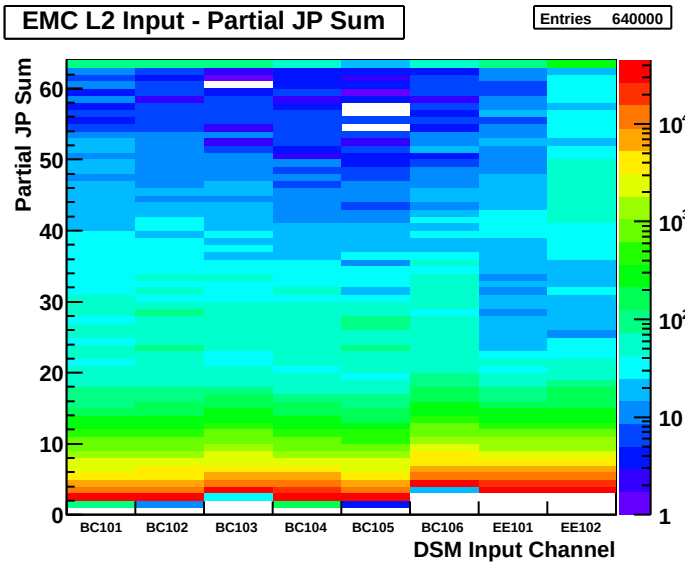

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

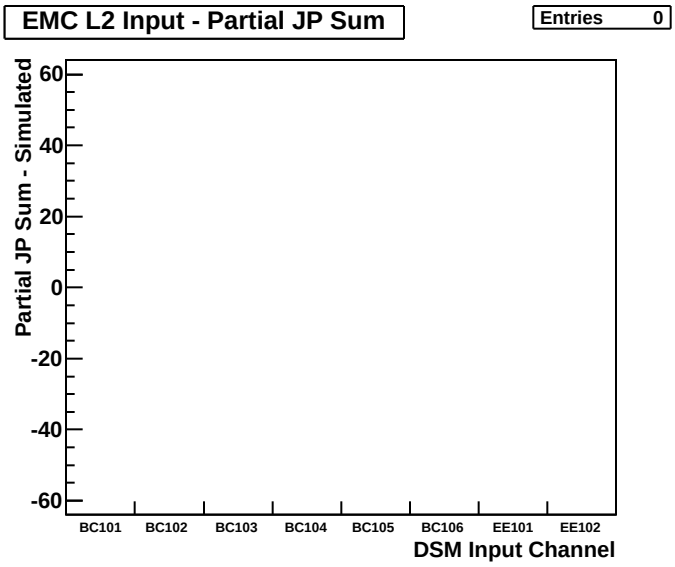

EMC L2 Input - JPY/JPB bits
Entries 640000
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
385 214 177 92 77 193 143 233
812 441 381 289 295 495 347 500
977 598 551 517 738 641 107 168
77826 78747 78891 79102 78890 78671 79403 79099

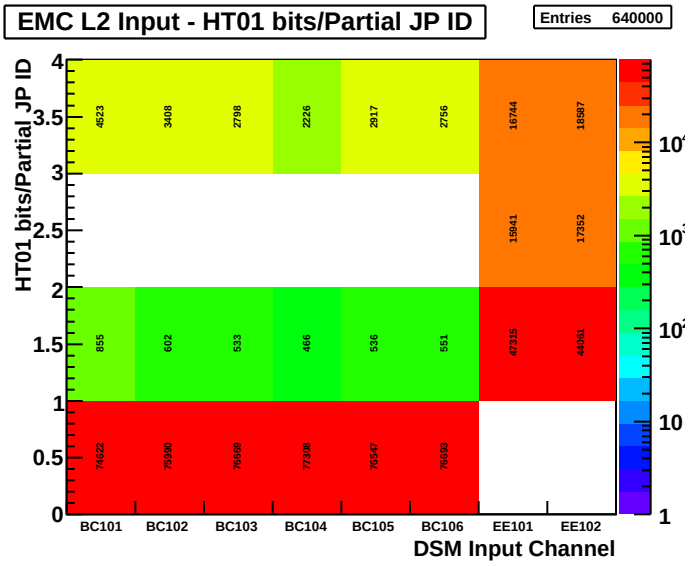

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

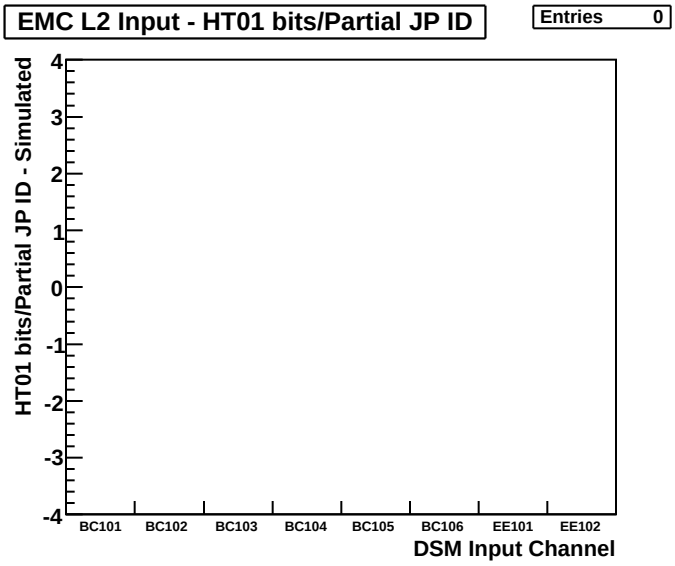

EMC L2 Input - JPZ/JPC bits
Entries 640000
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
284 183 145 94 68 189 93 135
596 399 393 273 299 421 391 297
705 592 567 535 737 711 159 169
78435 78826 78895 79098 78896 78679 79357 79399

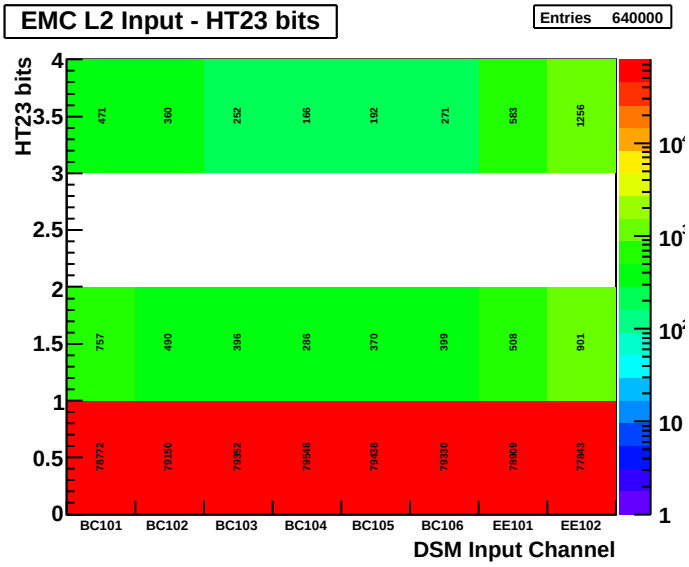

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

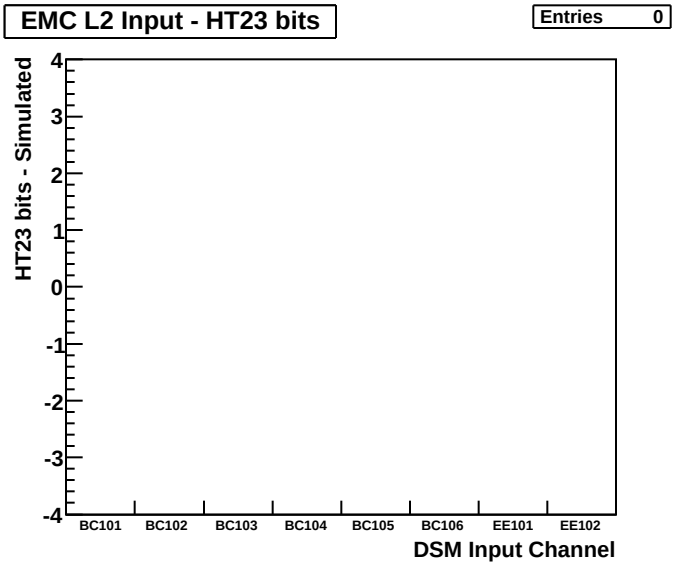

EMC L2 Input - Partial JP Sum
Entries 640000
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

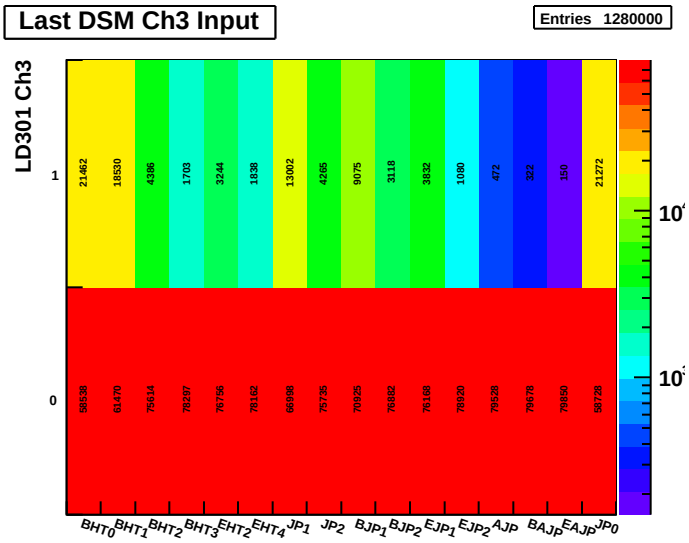

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

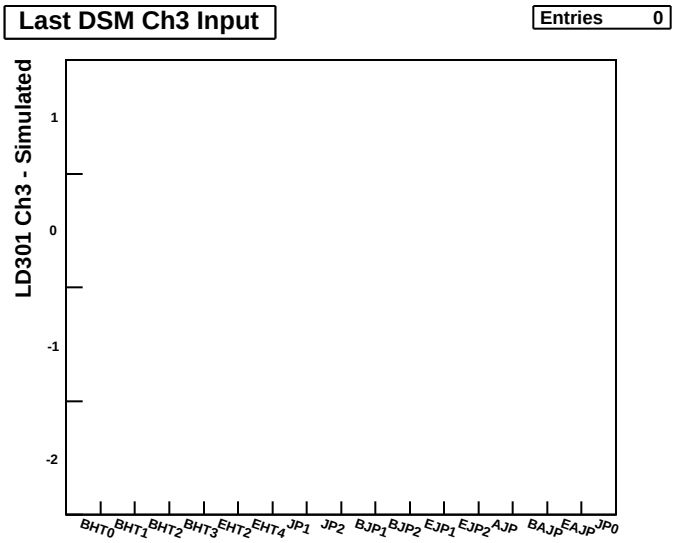

EMC L2 Input - HT01 bits/Partial JP ID
Entries 640000
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

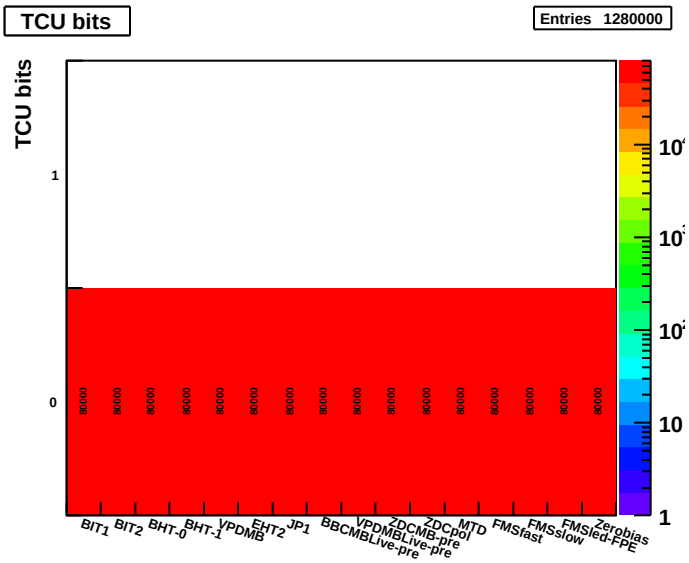

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

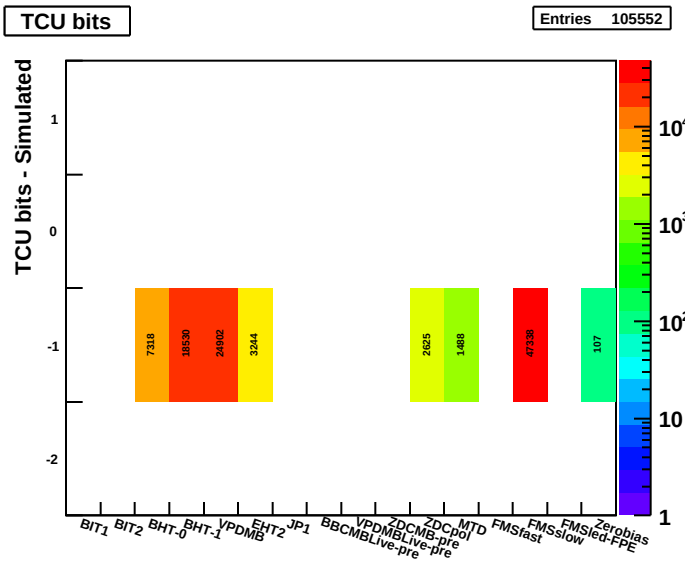

EMC L2 Input - HT23 bits
Entries 640000
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

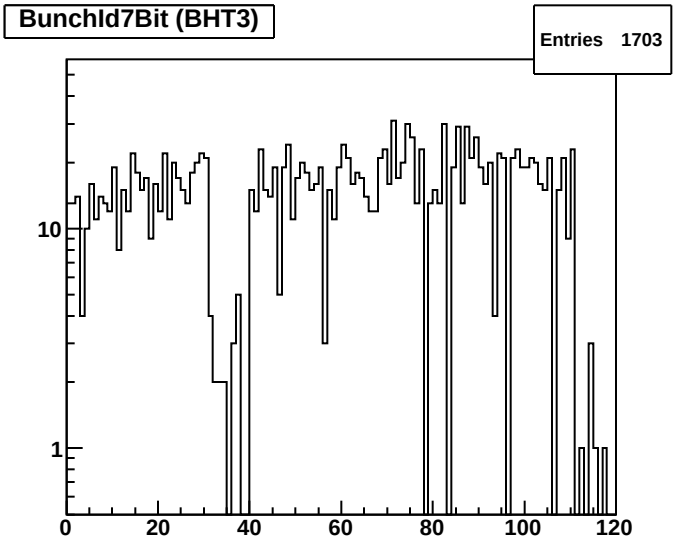

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

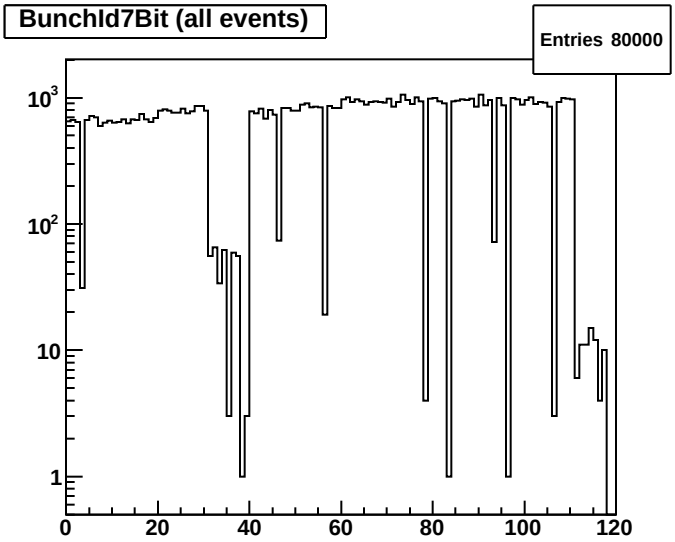

Last DSM Ch3 Input
Entries 1280000
LD301 Ch3
21462 18530 4386 1703 3244 1838 13002 4265 9075 3118 3832 1080 472 322 150 21272
58538 61470 75614 79297 76756 78162 66998 75735 70925 76882 76168 78920 79528 79678 79850 58728
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

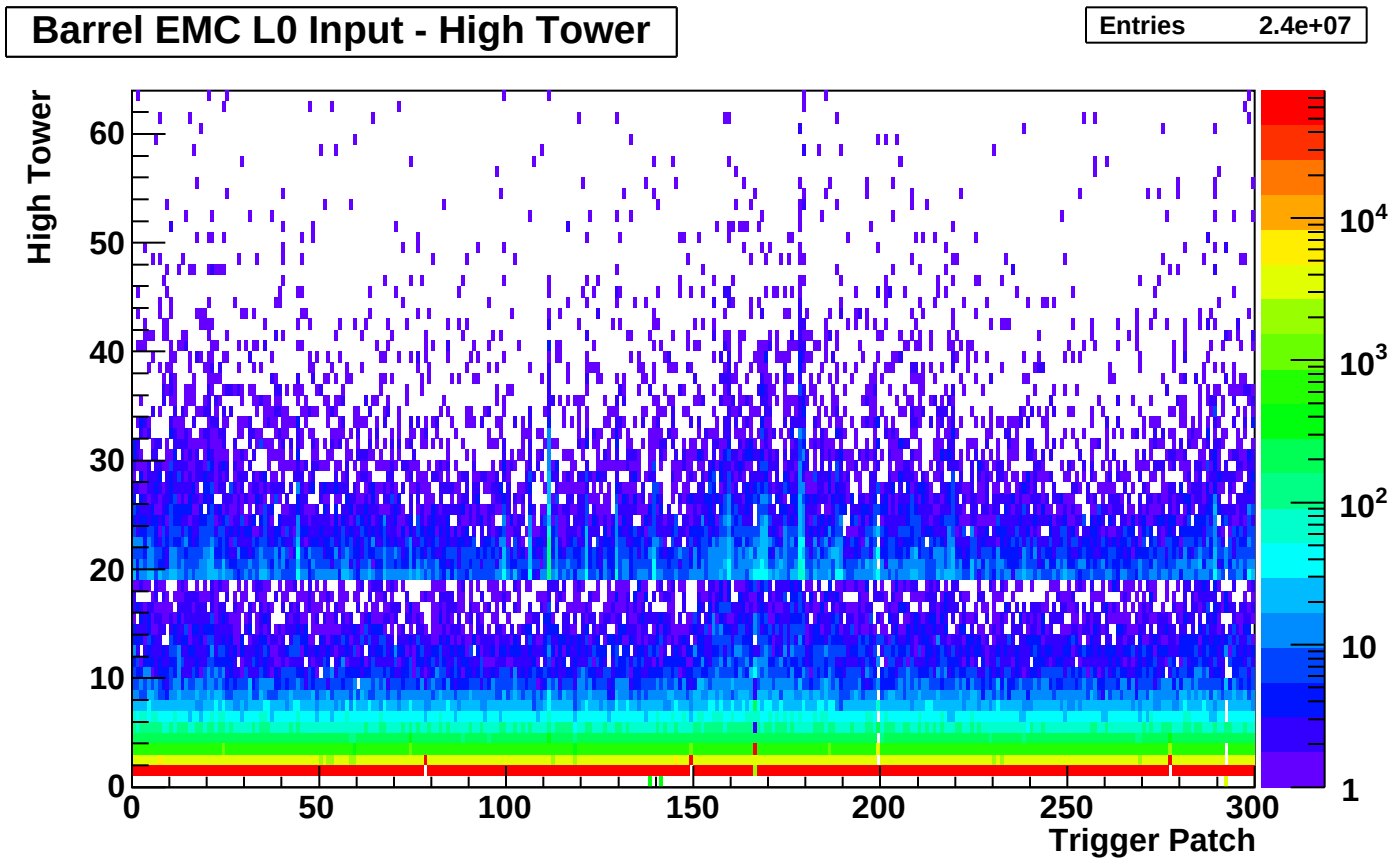

Last DSM Ch3 Input
Entries 0
LD301 Ch3 - Simulated
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

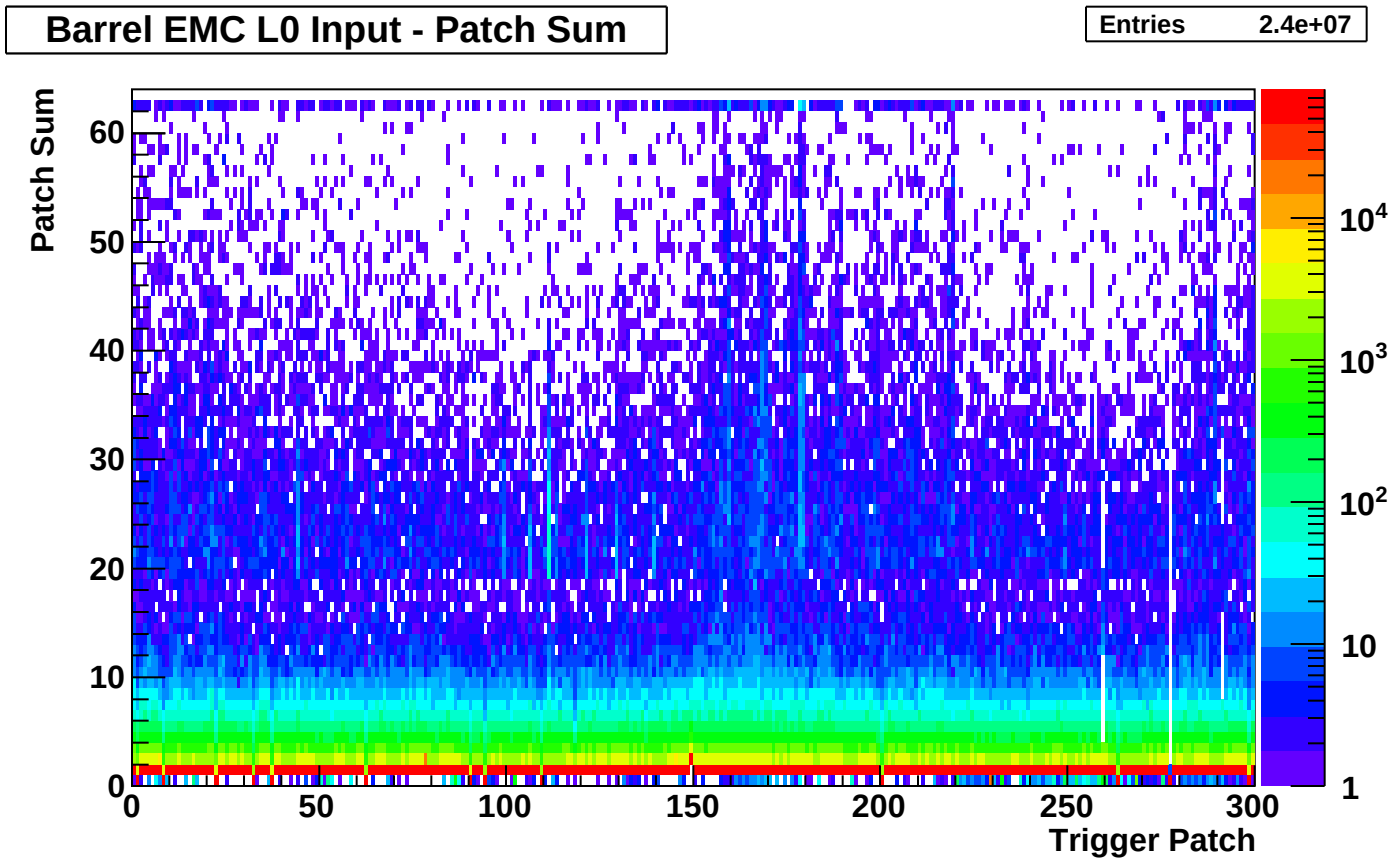

TCU bits
Entries 1280000
TCU bits
80000 80000 80000 80000 80000 80000 80000 80000 80000 80000 80000 80000 80000 80000 80000 80000
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDC-pol MTD FMSfast FMSslow FMSled-FPE Zerobias

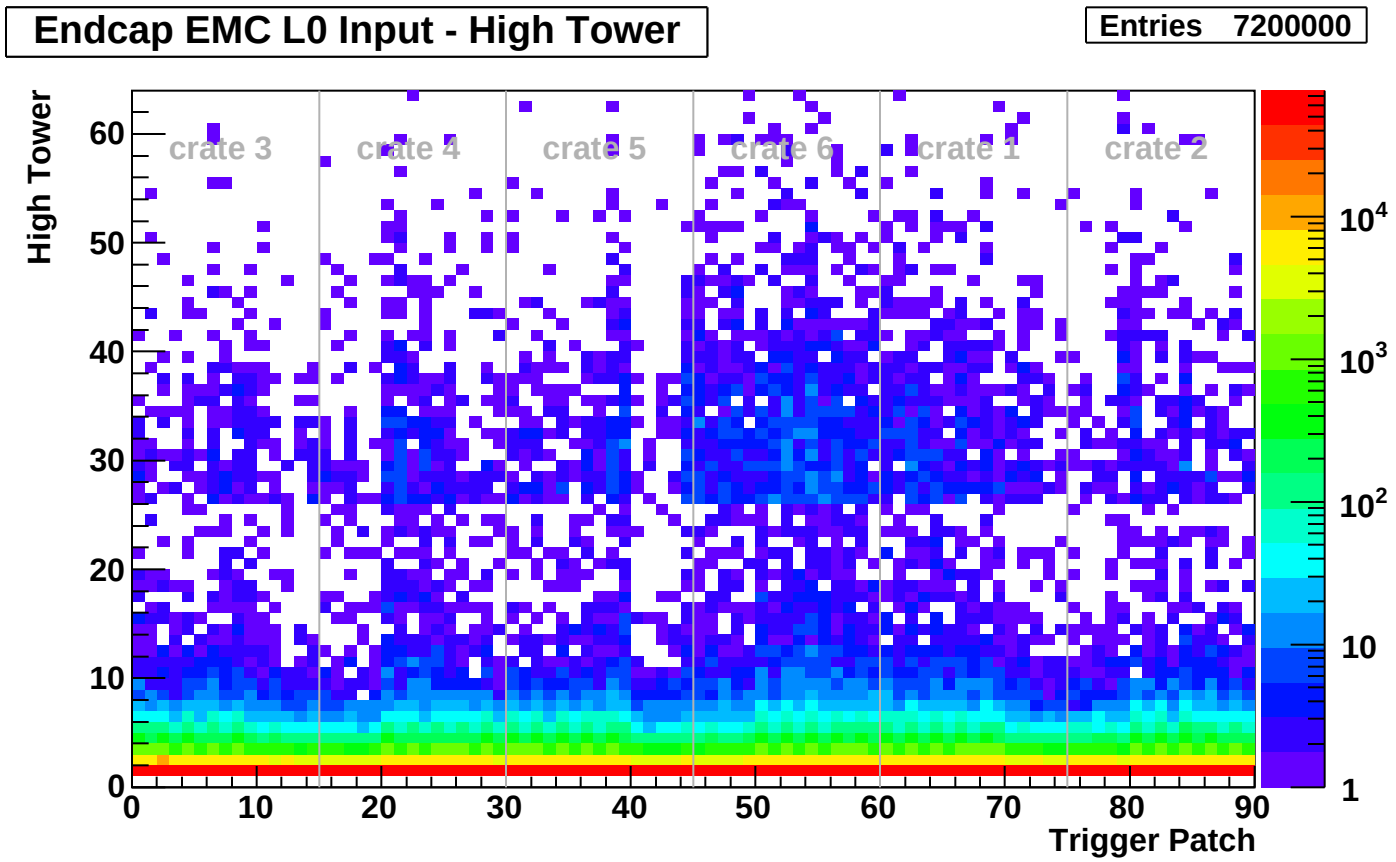

TCU bits
Entries 105552
TCU bits - Simulated
7318 18530 24902 3244 2625 1488 47338 107
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDC-pol MTD FMSfast FMSslow FMSled-FPE Zerobias

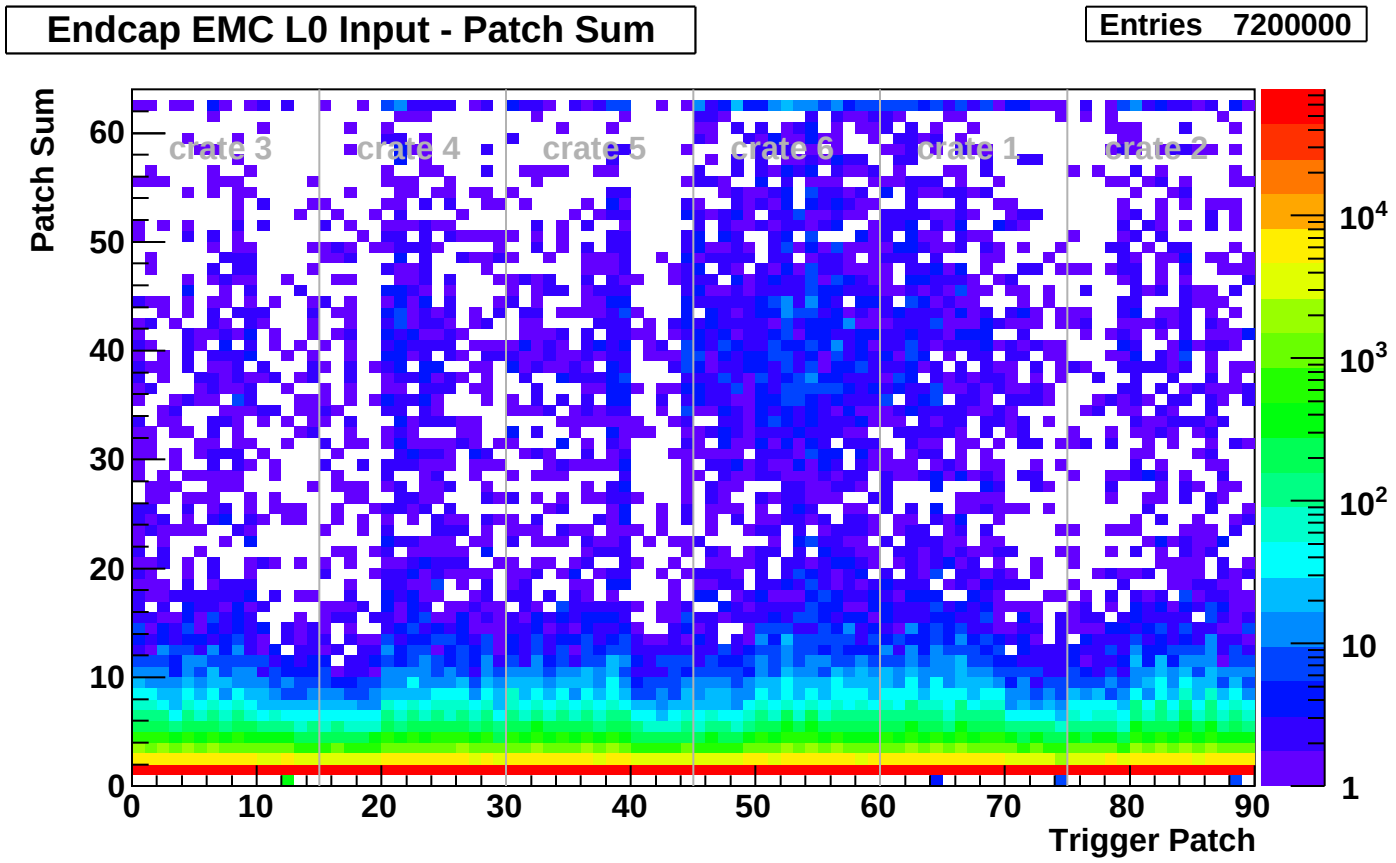

BunchId7Bit (BHT3)
Entries 1703

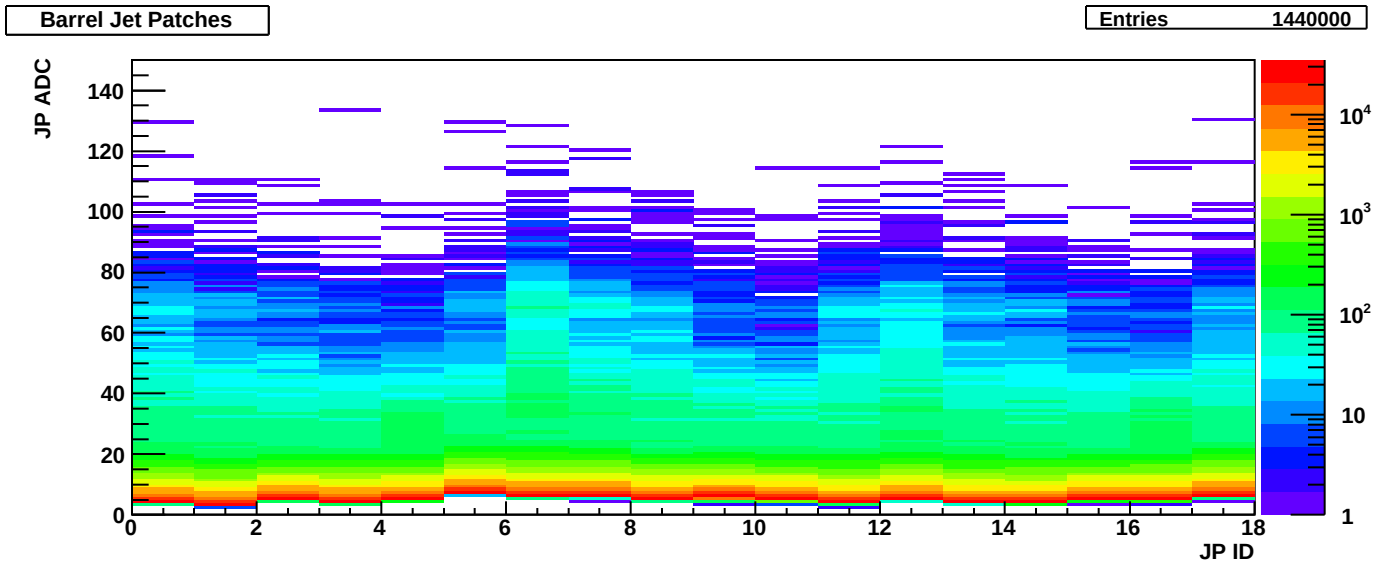

BunchId7Bit (all events)
Entries 80000

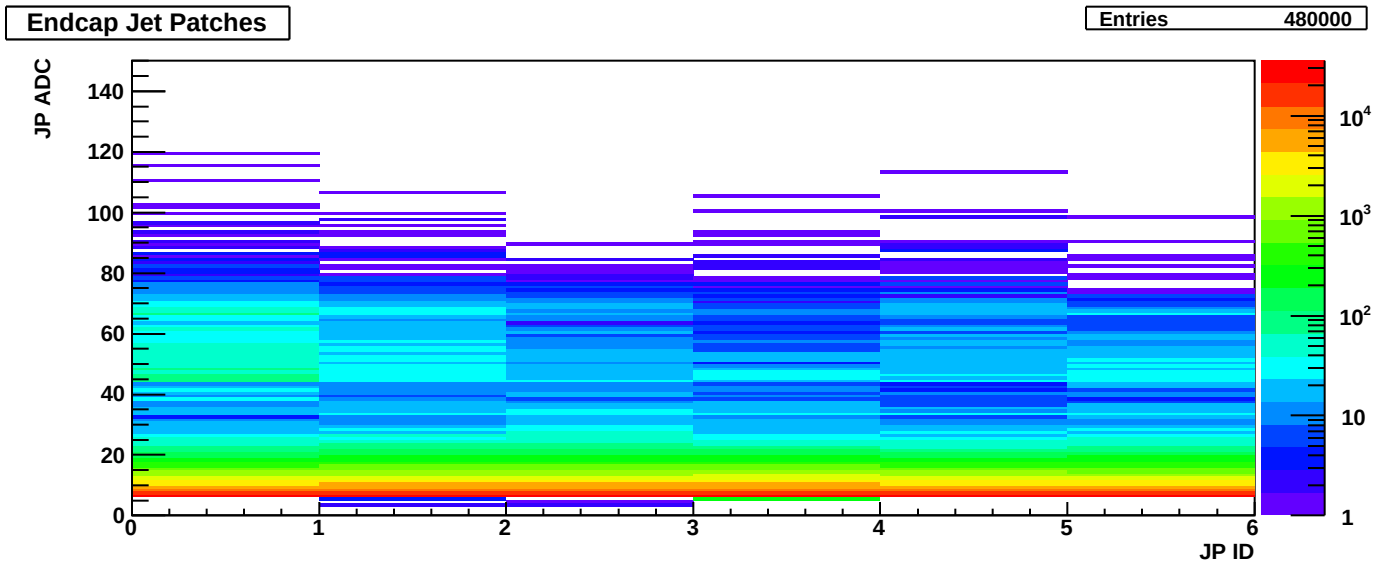

Barrel EMC L0 Input - High Tower
Entries 2.4e+07
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4

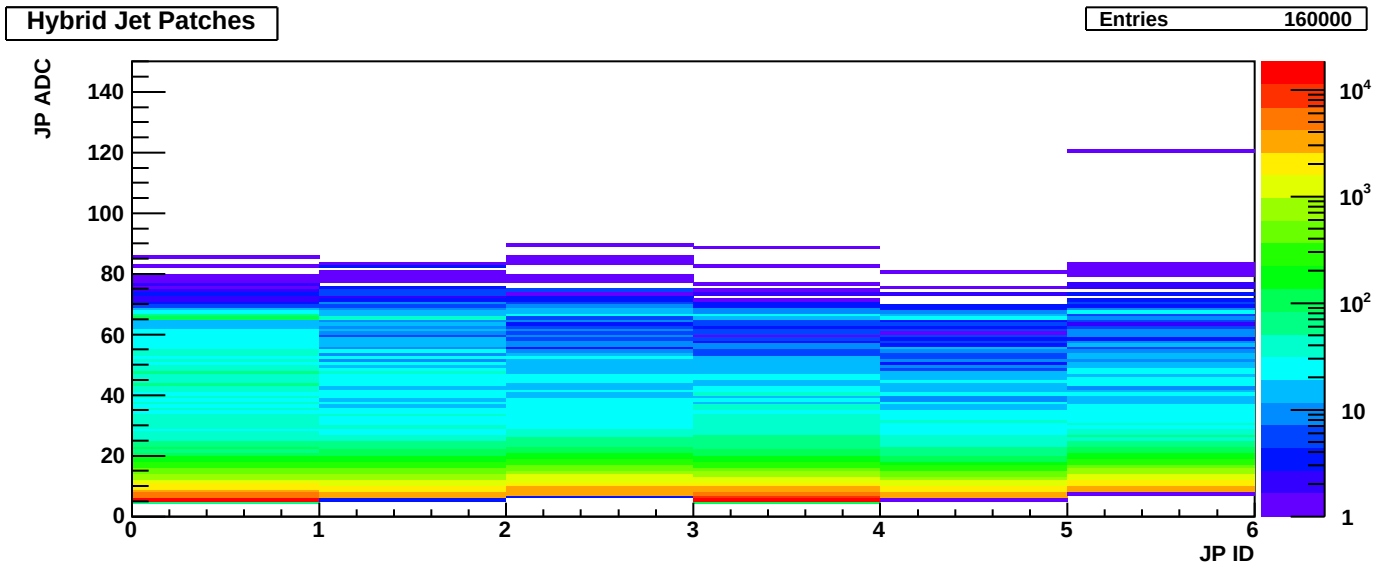

Barrel EMC L0 Input - Patch Sum
Entries 2.4e+07
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4

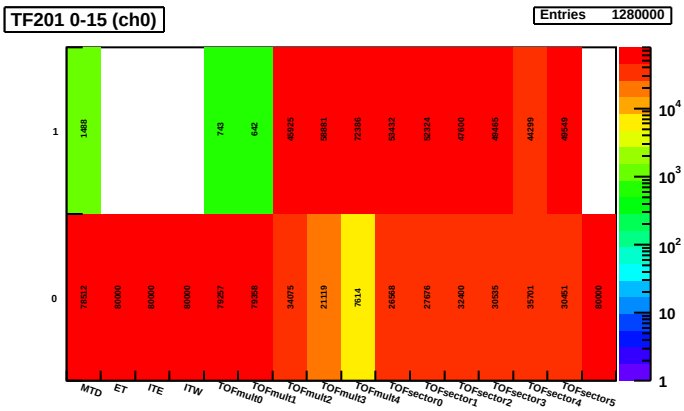

Endcap EMC L0 Input - High Tower
Entries 7200000
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

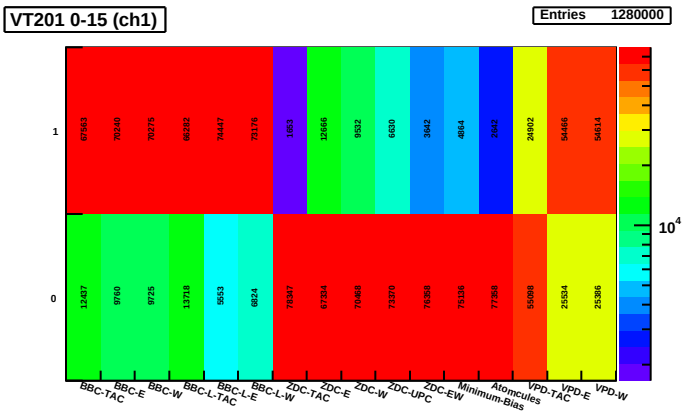

Endcap EMC L0 Input - Patch Sum
Entries 7200000
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

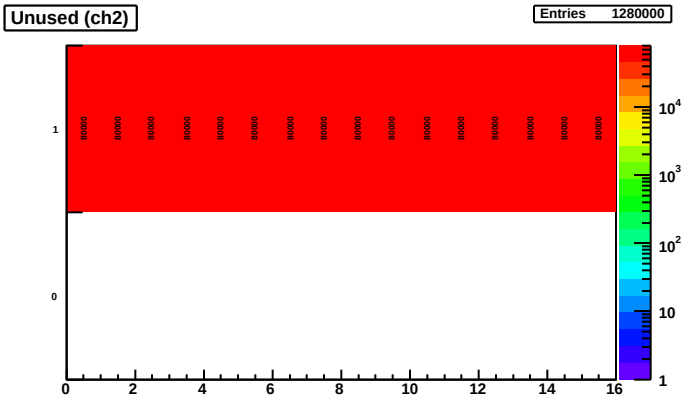

Barrel Jet Patches
Entries 1440000
JP ADC
JP ID

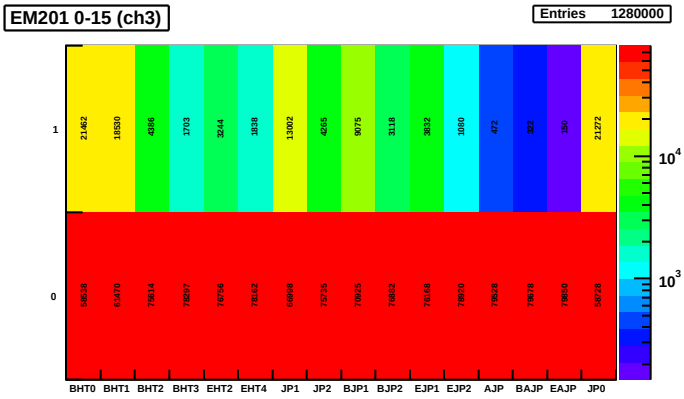

Endcap Jet Patches
Entries 480000
JP ADC
JP ID

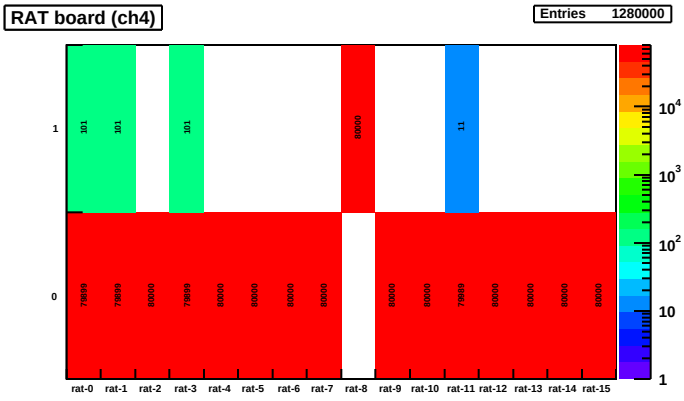

Hybrid Jet Patches
Entries 160000
JP ADC
JP ID

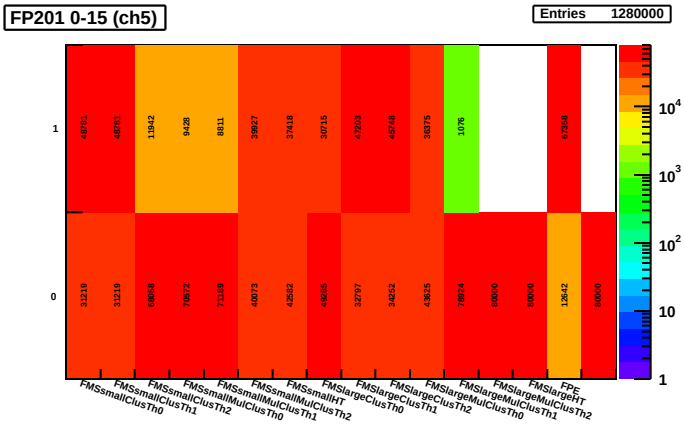

TF201 0-15 (ch0)
Entries 1280000
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5

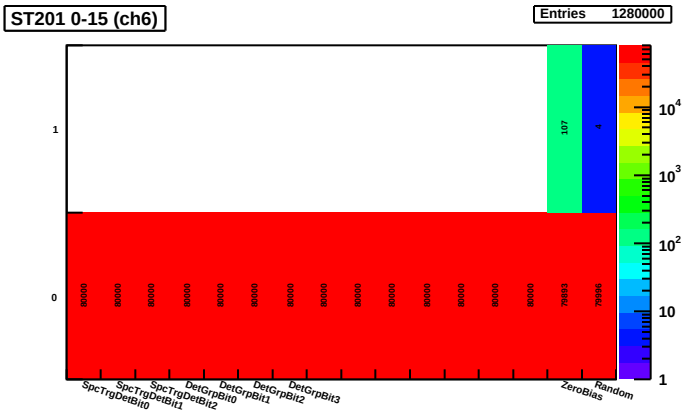

VT201 0-15 (ch1)
Entries 1280000
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-E ZDC-W ZDC-UPC ZDC-EW Minimum-Bias Atomcules VPD-TAC VPD-E VPD-W

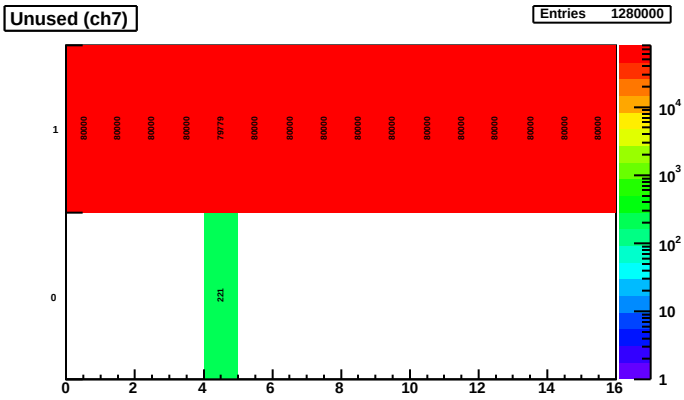

Unused (ch2)
Entries 1280000

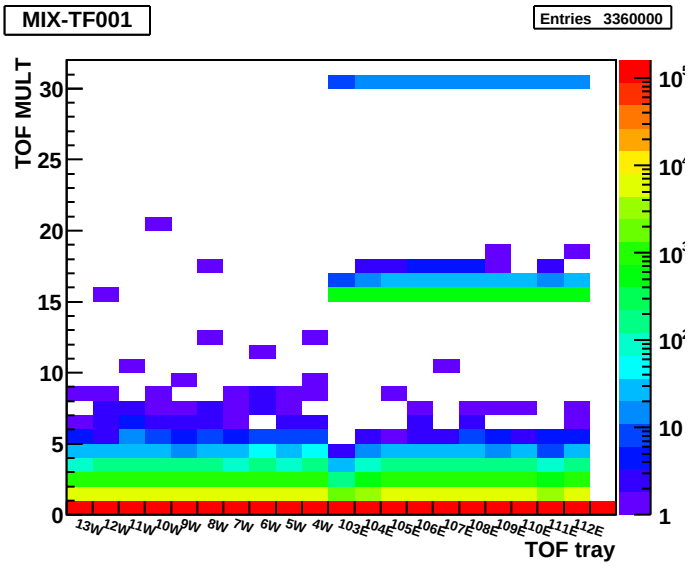

EM201 0-15 (ch3)
Entries 1280000
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

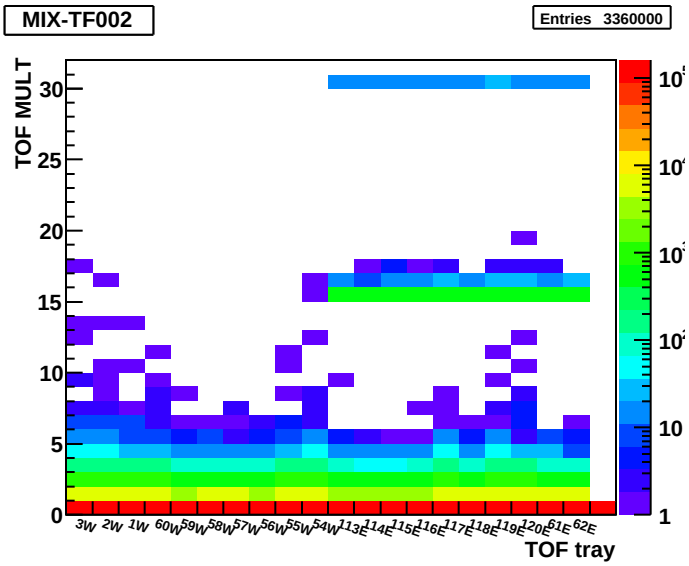

RAT board (ch4)
Entries 1280000
rat-0 rat-1 rat-2 rat-3 rat-4 rat-5 rat-6 rat-7 rat-8 rat-9 rat-10 rat-11 rat-12 rat-13 rat-14 rat-15

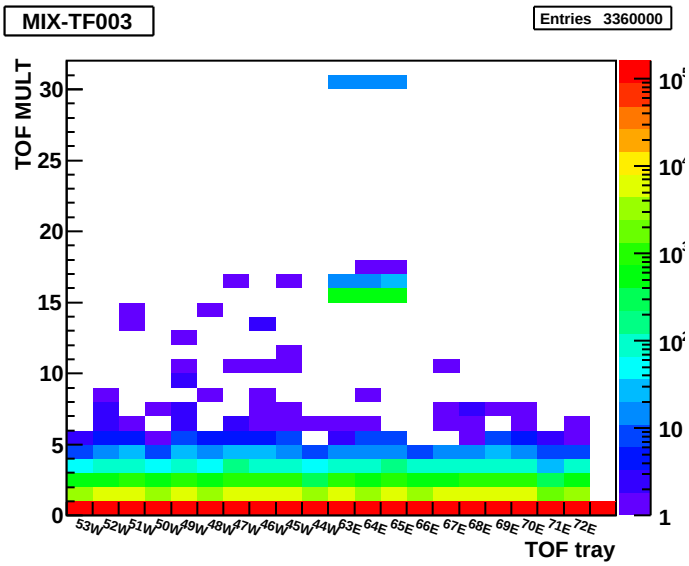

FP201 0-15 (ch5)
Entries 1280000
FMSsmallClusTh0 FMSsmallClusTh1 FMSsmallClusTh2 FMSsmallMulClusTh0 FMSsmallMulClusTh1 FMSsmallMulClusTh2 FMSsmallHT FMSlargeClusTh0 FMSlargeClusTh1 FMSlargeClusTh2 FMSlargeMulClusTh0 FMSlargeMulClusTh1 FMSlargeMulClusTh2 FMSlargeHT FPE

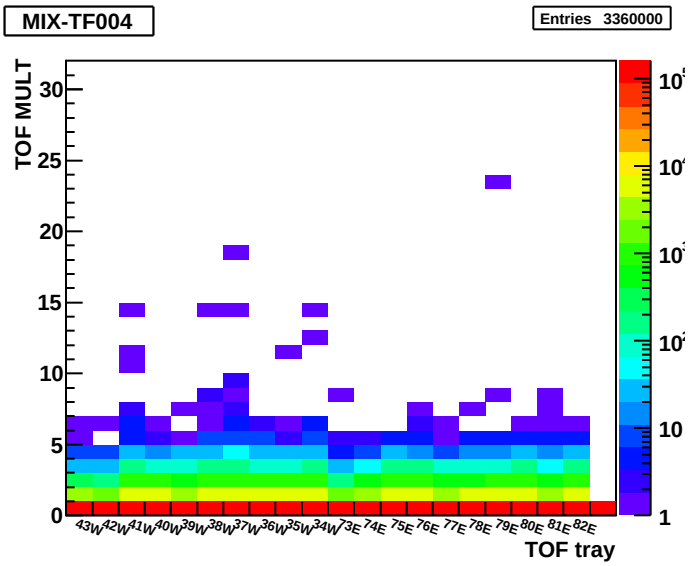

ST201 0-15 (ch6)
Entries 1280000
SpcTrgDetBit0 SpcTrgDetBit1 SpcTrgDetBit2 DetCrpBit0 DetCrpBit1 DetCrpBit2 DetCrpBit3 ZeroBias Random

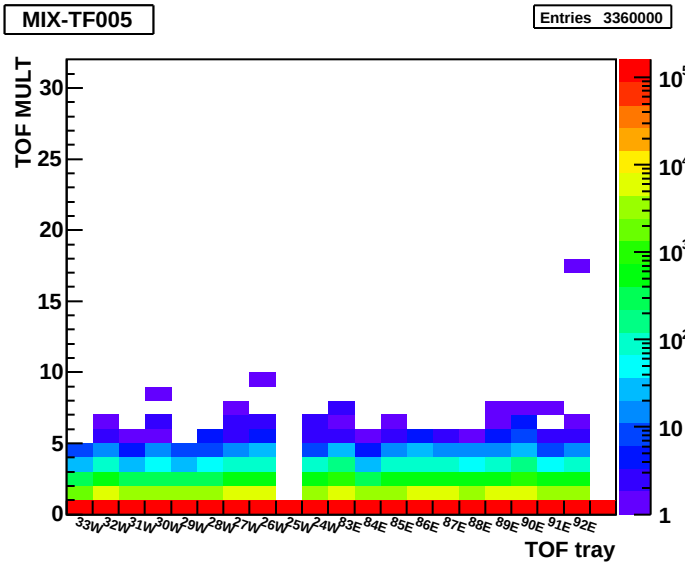

Unused (ch7)
Entries 1280000

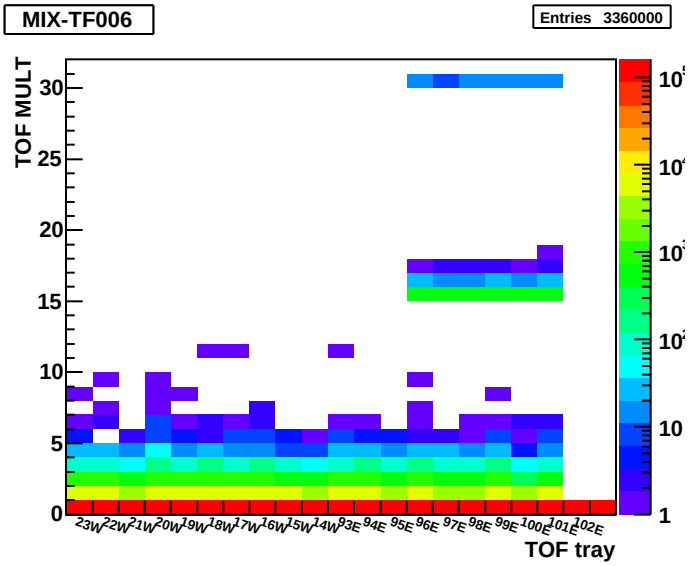

MIX-TF001
Entries 3360000
TOF MULT
TOF tray

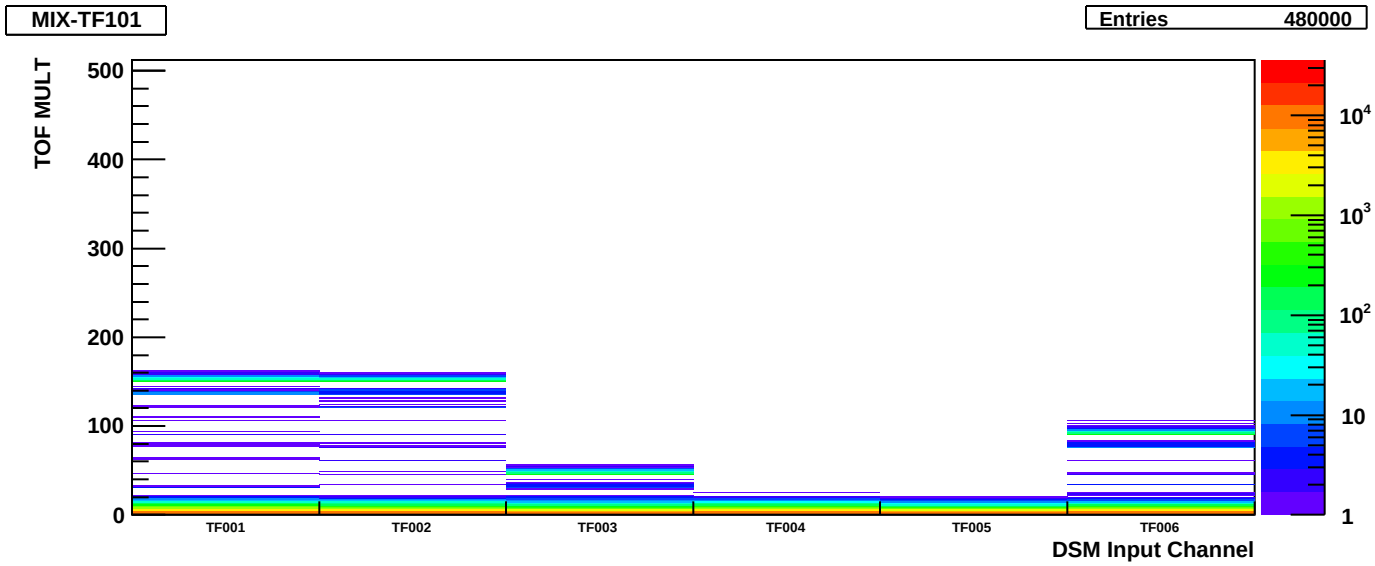

MIX-TF002
Entries 3360000
TOF MULT
TOF tray

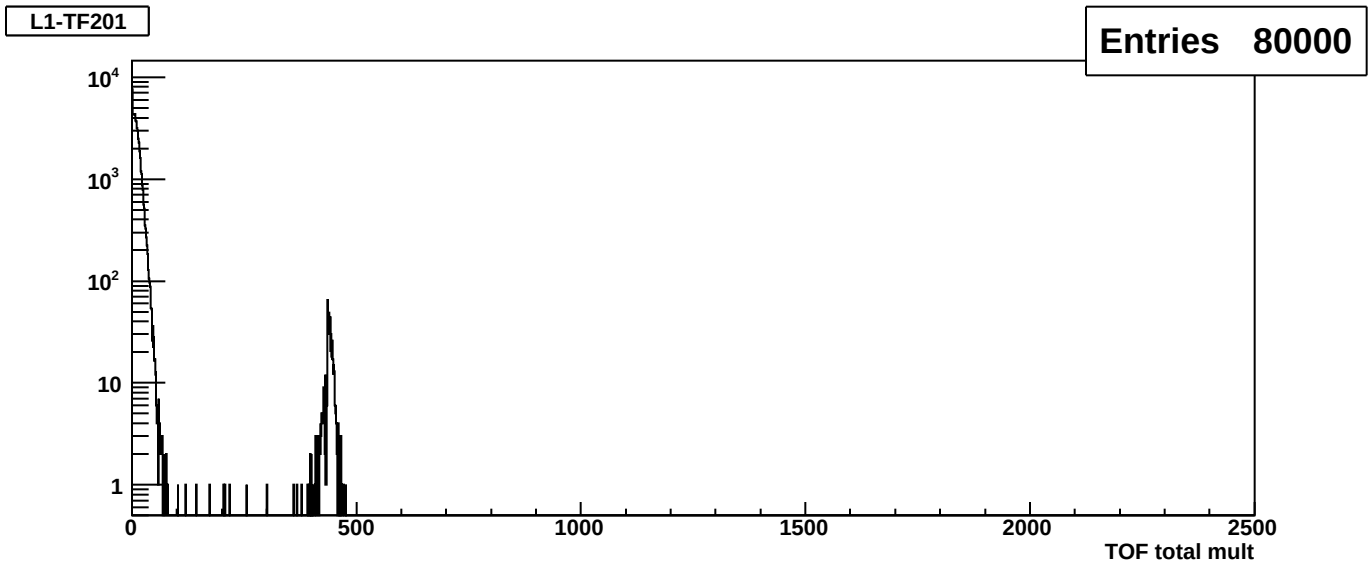

MIX-TF003
Entries 3360000
TOF MULT
TOF tray

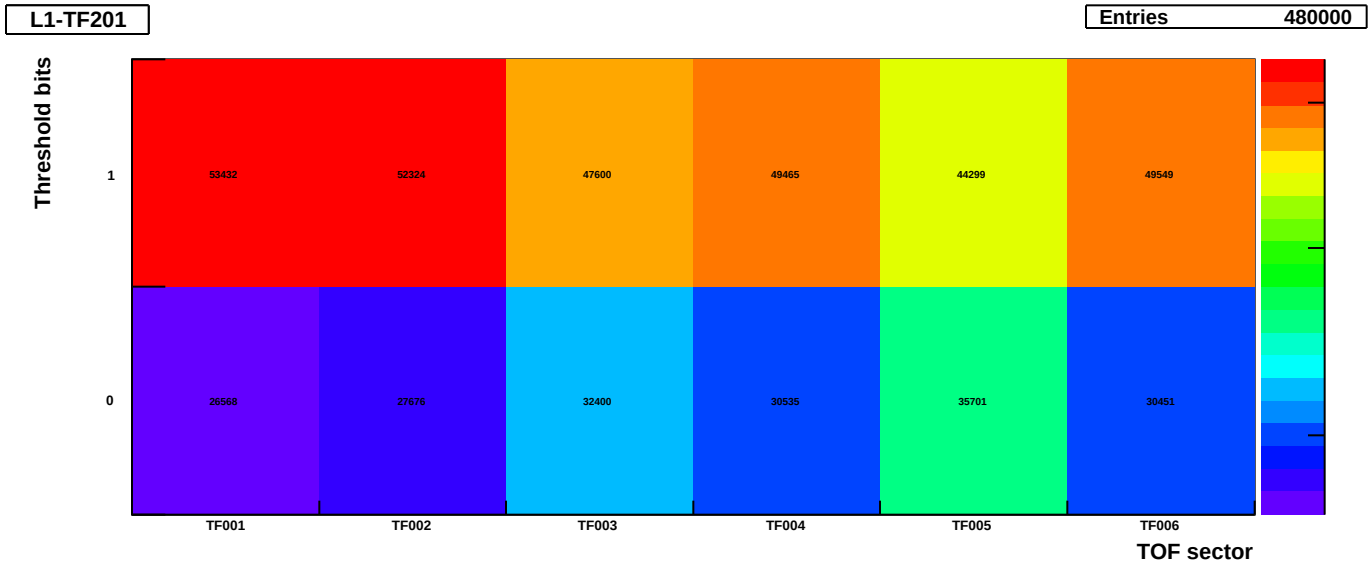

MIX-TF004
Entries 3360000
TOF MULT
TOF tray

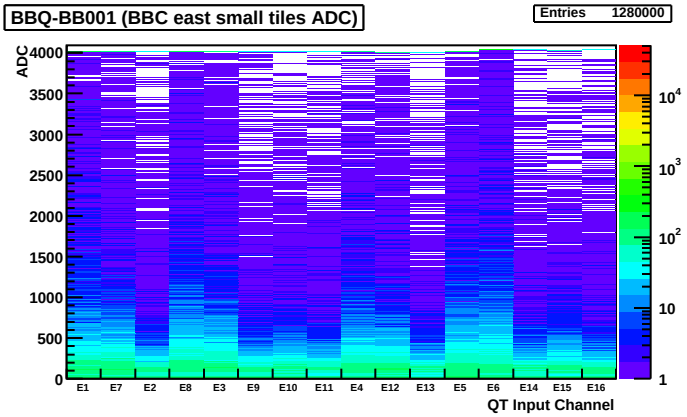

MIX-TF005
Entries 3360000
TOF MULT
TOF tray

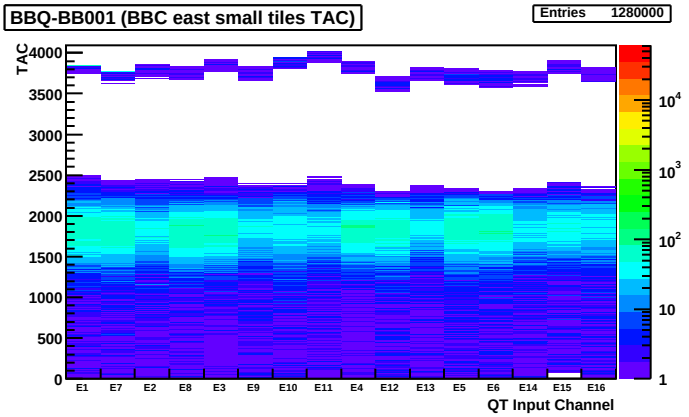

MIX-TF006
Entries 3360000
TOF MULT
TOF tray

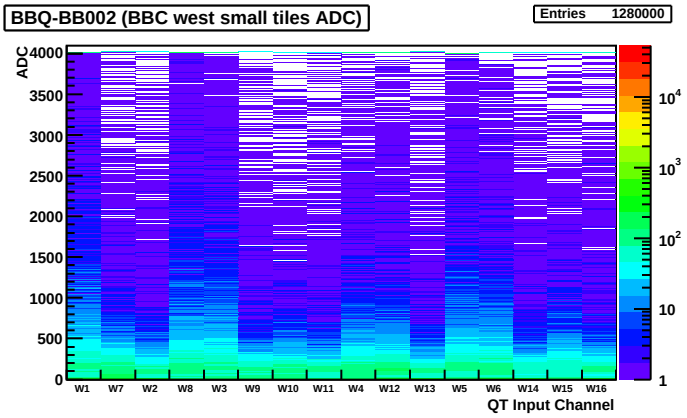

MIX-TF101
Entries 480000
TOF MULT
500
400
300
200
100
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^4
10^3
10^2
10
1

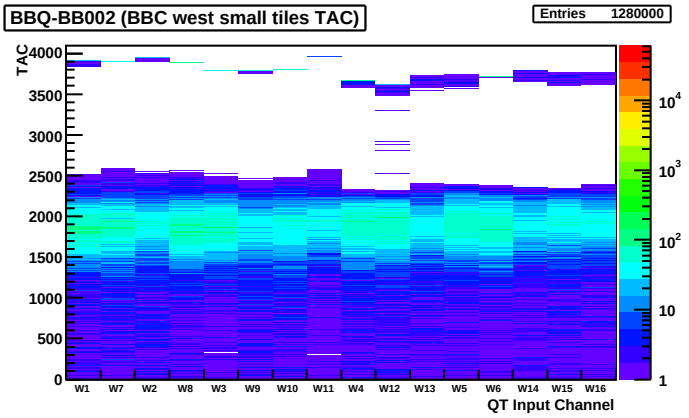

L1-TF201
Entries 80000
10^4
10^3
10^2
10
1
0
500
1000
1500
2000
2500
TOF total mult

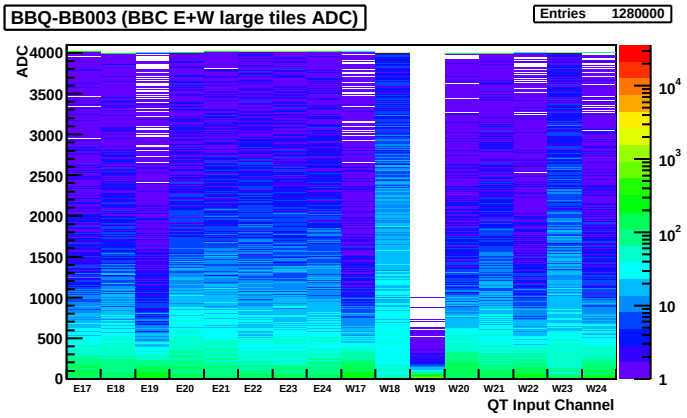

L1-TF201
Entries 480000
Threshold bits
1
0
53432
52324
47600
49465
44299
49549
26568
27676
32400
30535
35701
30451
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector

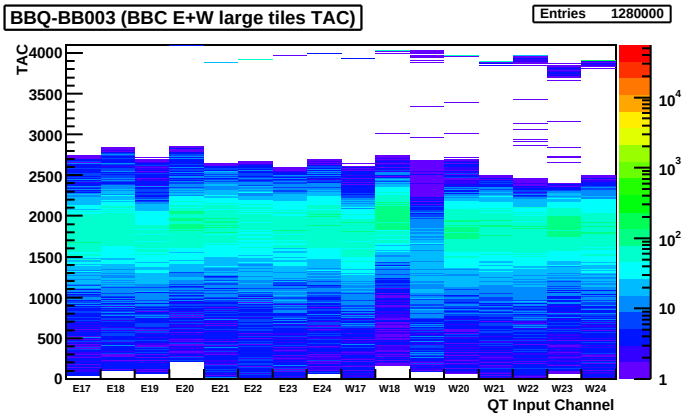

BBQ-BB001 (BBC east small tiles ADC)
Entries 1280000
ADC
QT Input Channel

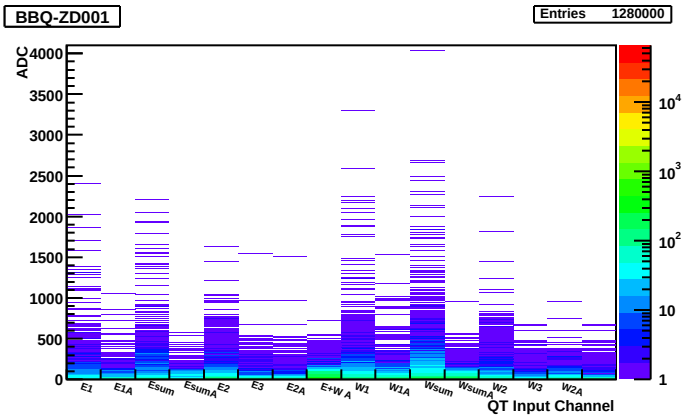

BBQ-BB001 (BBC east small tiles TAC)
Entries 1280000
TAC
QT Input Channel

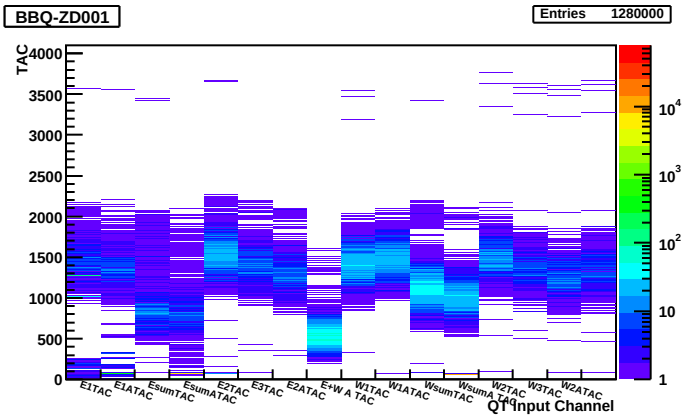

BBQ-BB002 (BBC west small tiles ADC)
Entries 1280000
ADC
QT Input Channel

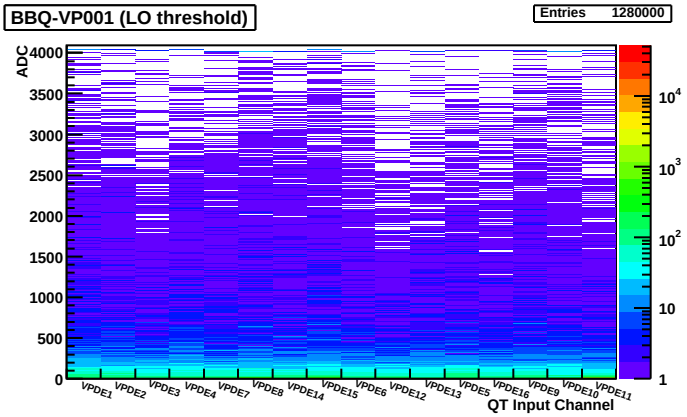

BBQ-BB002 (BBC west small tiles TAC)
Entries 1280000
TAC
QT Input Channel

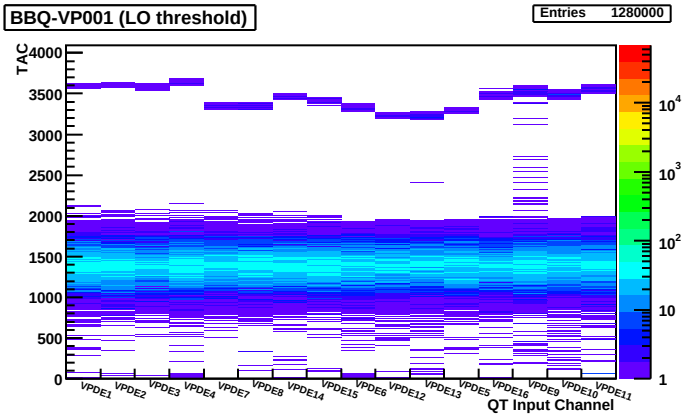

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 1280000
ADC
QT Input Channel

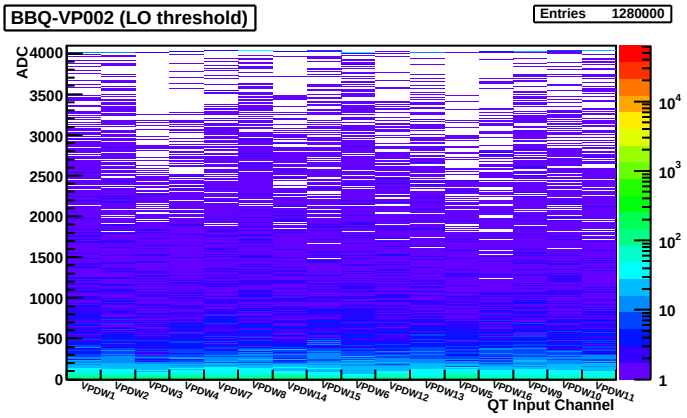

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 1280000
TAC
QT Input Channel

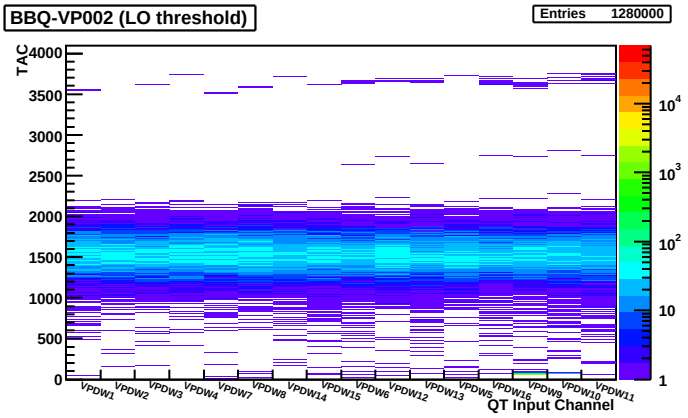

BBQ-ZD001
Entries 1280000
ADC
QT Input Channel

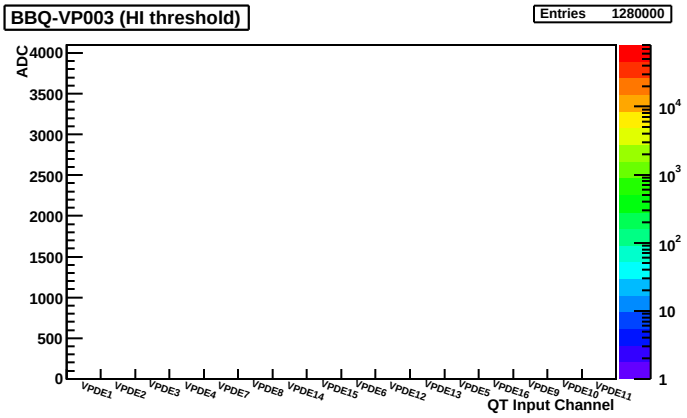

BBQ-ZD001
Entries 1280000
TAC
QT Input Channel

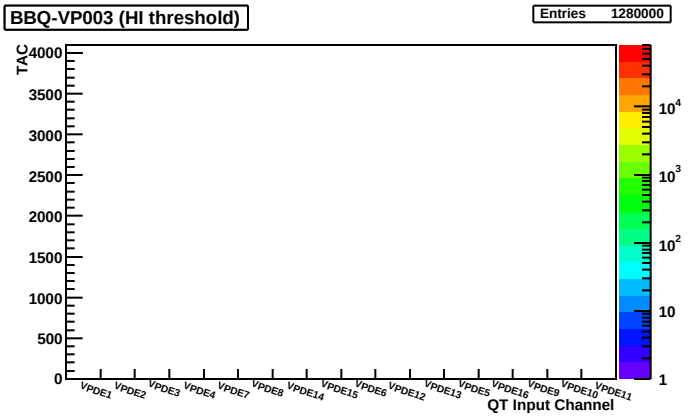

BBQ-VP001 (LO threshold)
Entries 1280000
ADC
QT Input Channel

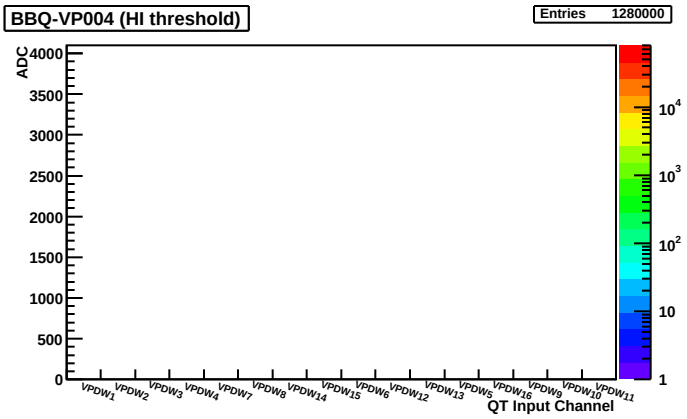

BBQ-VP001 (LO threshold)
Entries 1280000
TAC
QT Input Channel

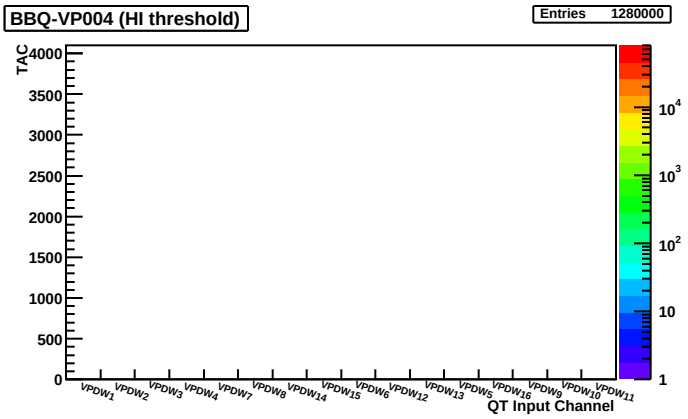

BBQ-VP002 (LO threshold)
Entries 1280000
ADC
QT Input Channel

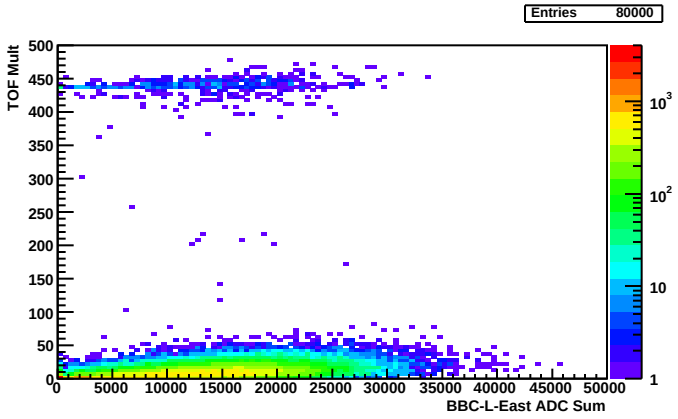

BBQ-VP002 (LO threshold)
Entries 1280000
TAC
QT Input Channel

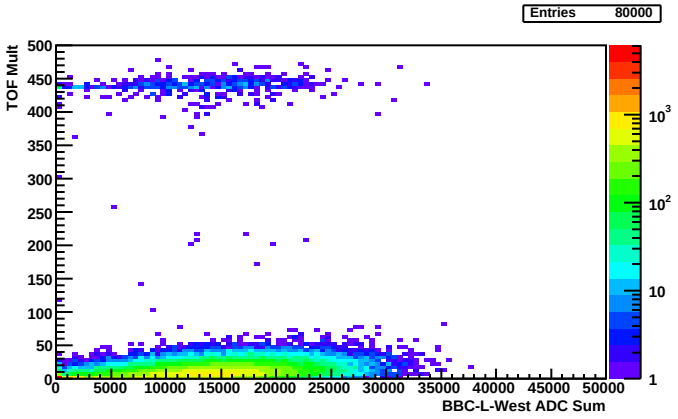

BBQ-VP003 (HI threshold)
Entries 1280000
ADC
QT Input Channel

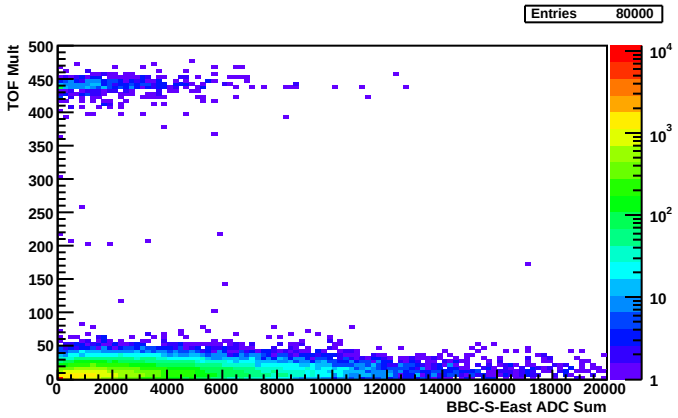

BBQ-VP003 (HI threshold)
Entries 1280000
TAC
QT Input Channel

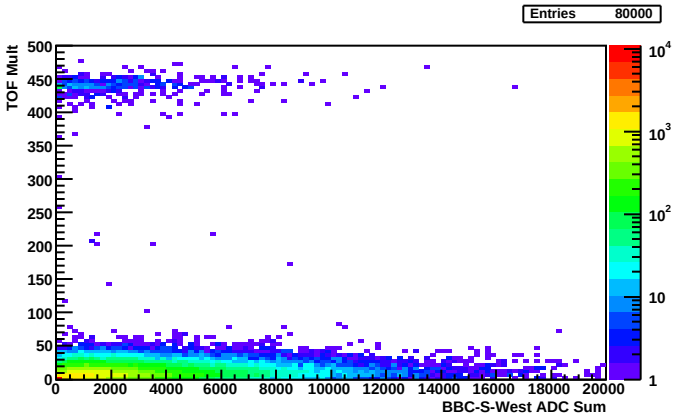

BBQ-VP004 (HI threshold)
Entries 1280000
ADC
QT Input Channel

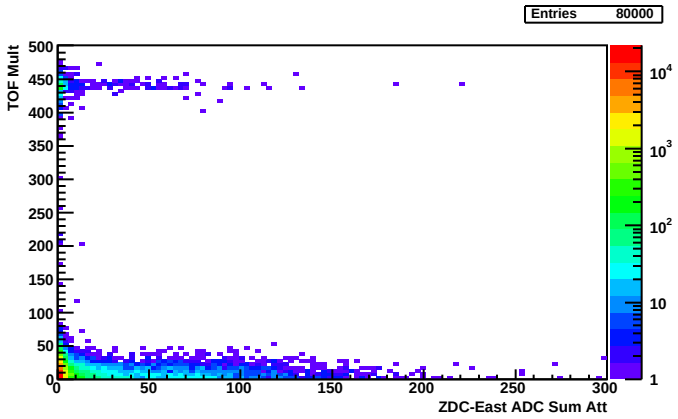

BBQ-VP004 (HI threshold)
Entries 1280000
TAC
QT Input Channel

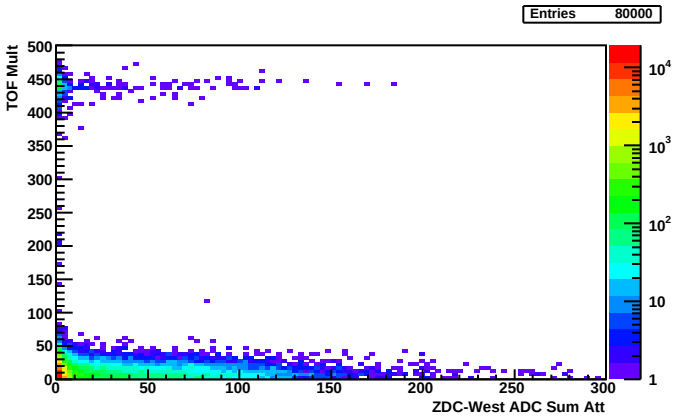

Entries 80000
TOF Mult
BBC-L-East ADC Sum

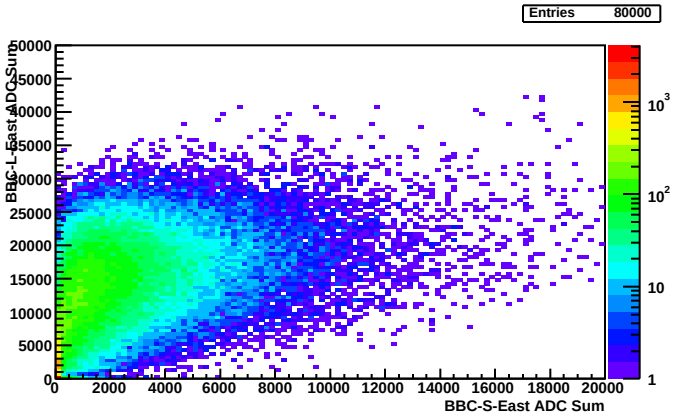

Entries 80000
TOF Mult
BBC-L-West ADC Sum

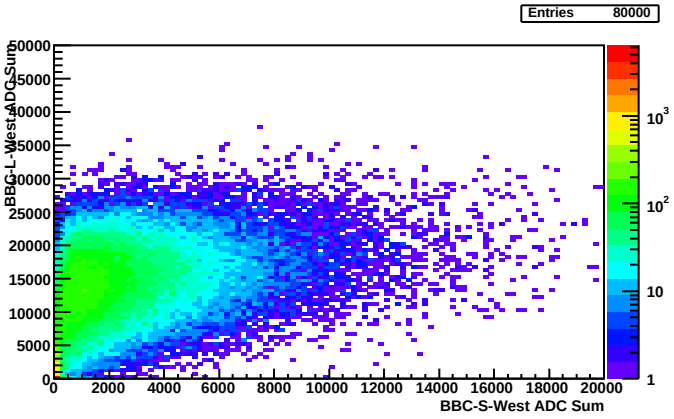

Entries 80000
TOF Mult
BBC-S-East ADC Sum

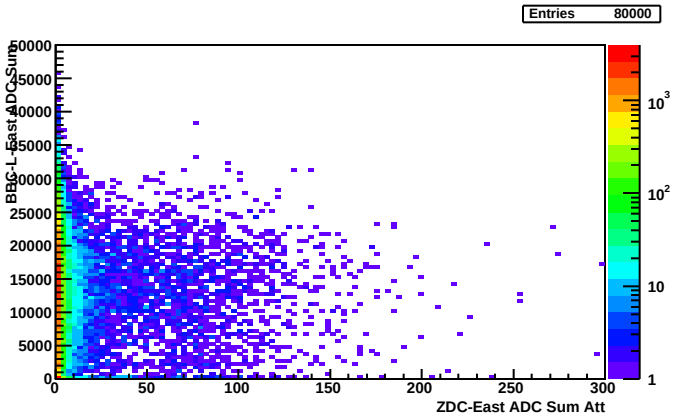

Entries 80000
TOF Mult
BBC-S-West ADC Sum

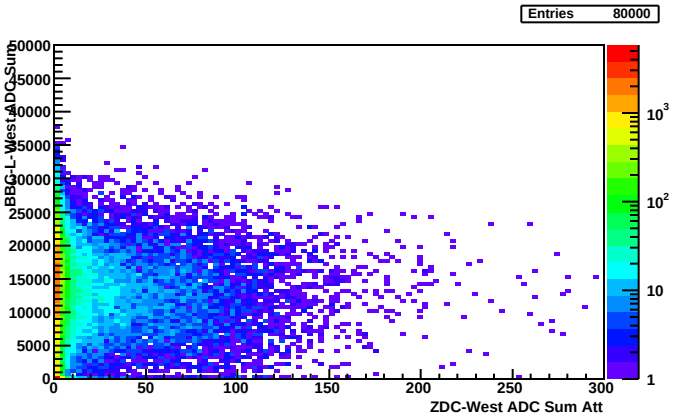

Entries 80000
TOF Mult
ZDC-East ADC Sum Att

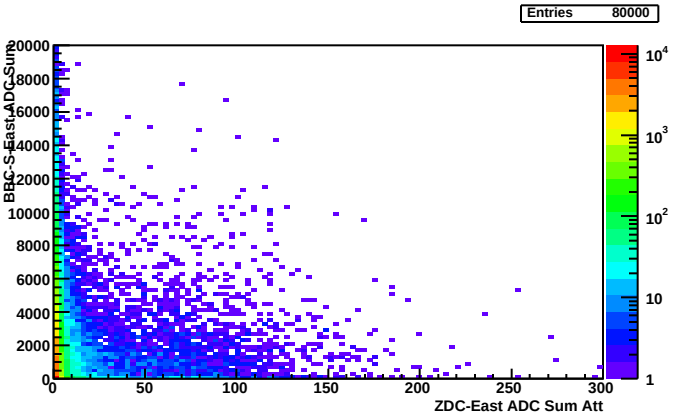

Entries 80000
TOF Mult
ZDC-West ADC Sum Att

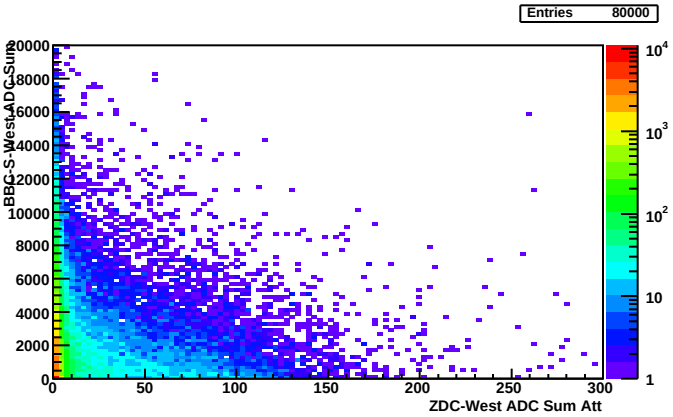

Entries 80000
BBC-L-East ADC Sum
BBC-S-East ADC Sum

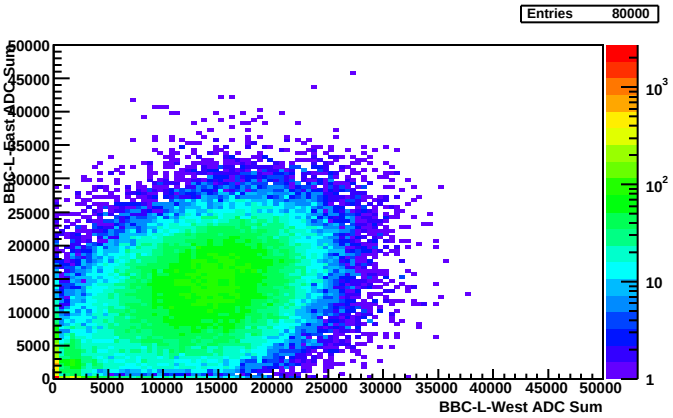

Entries 80000
BBC-L-West ADC Sum
BBC-S-West ADC Sum

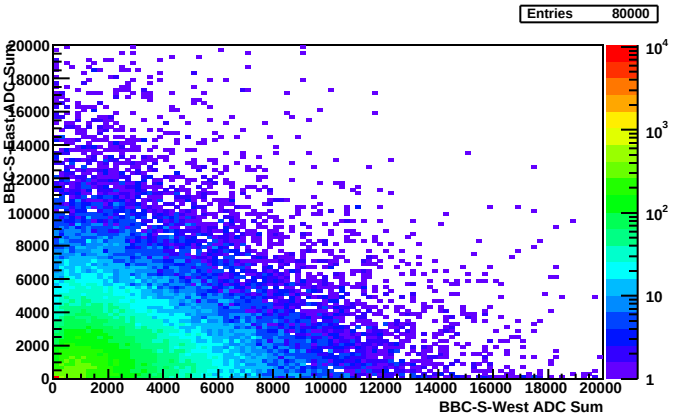

Entries 80000
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

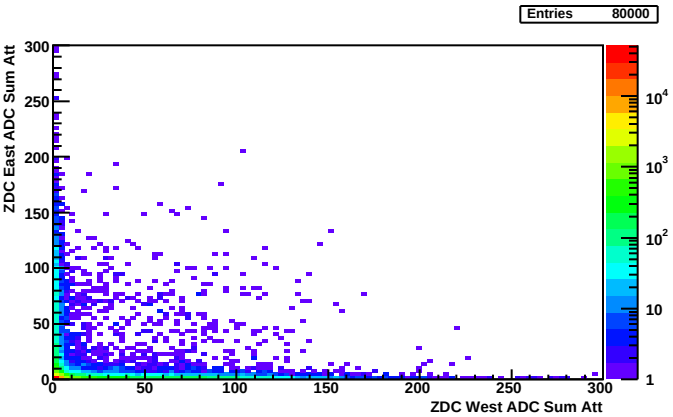

Entries 80000
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

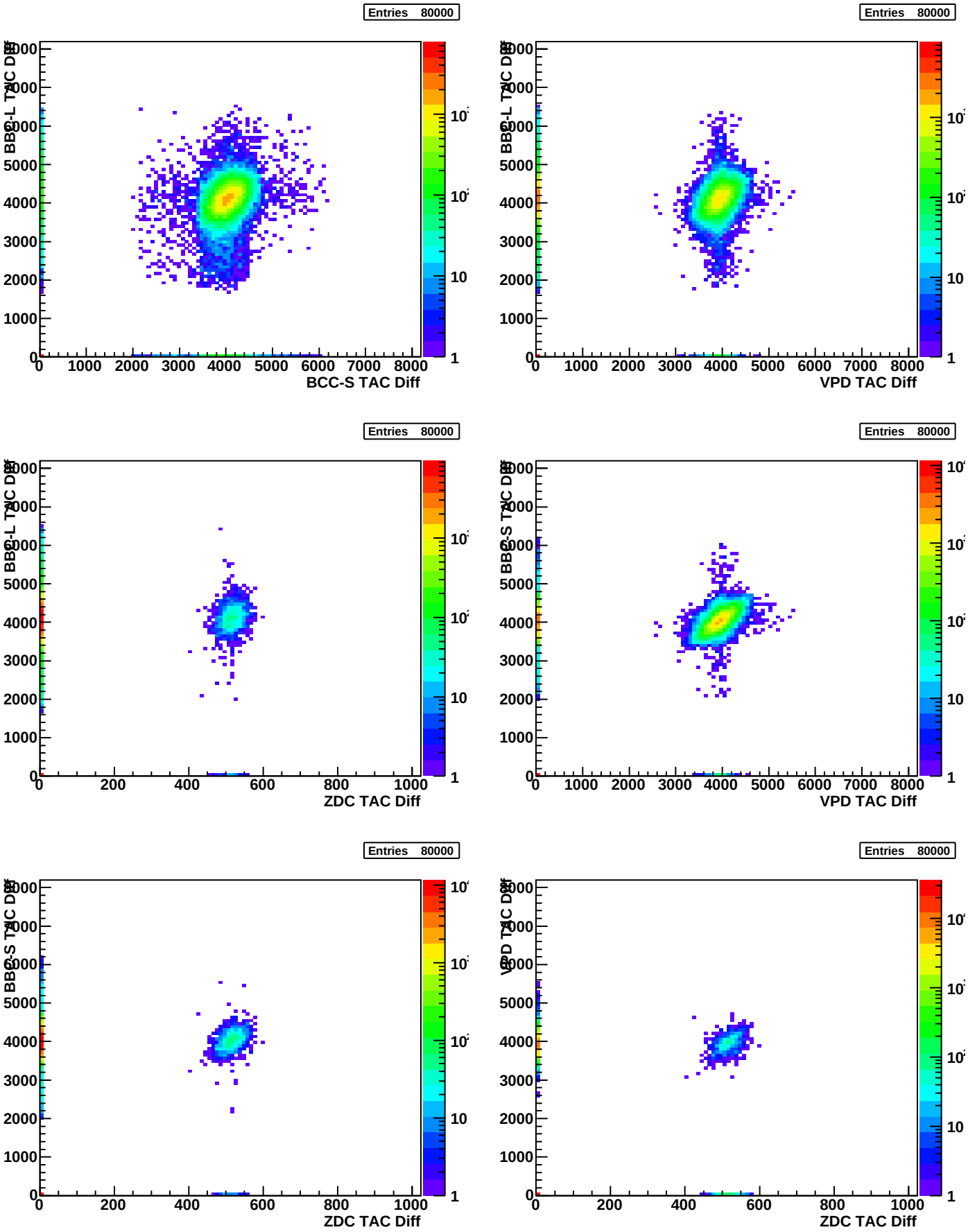

Entries 80000
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

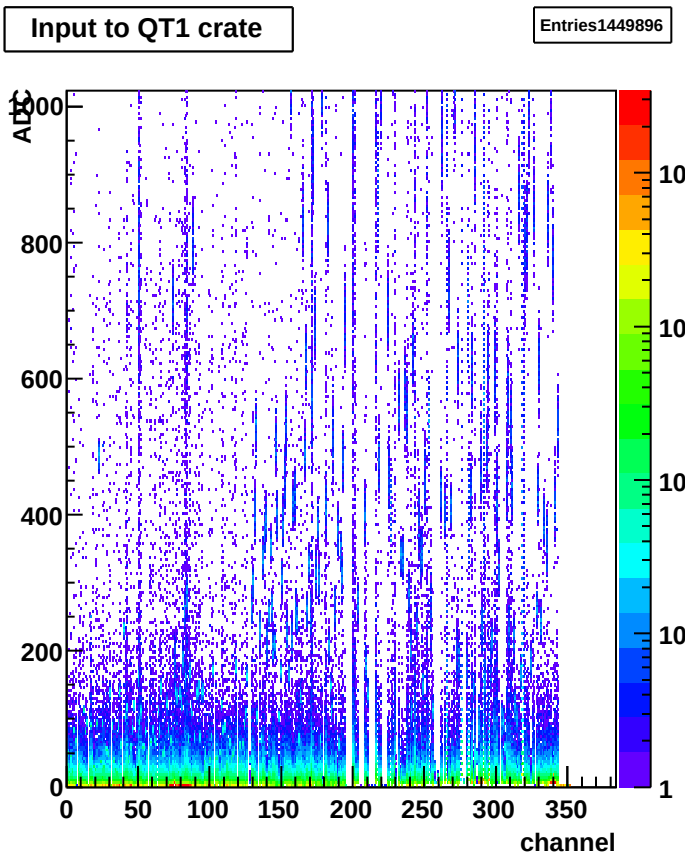

Entries 80000
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

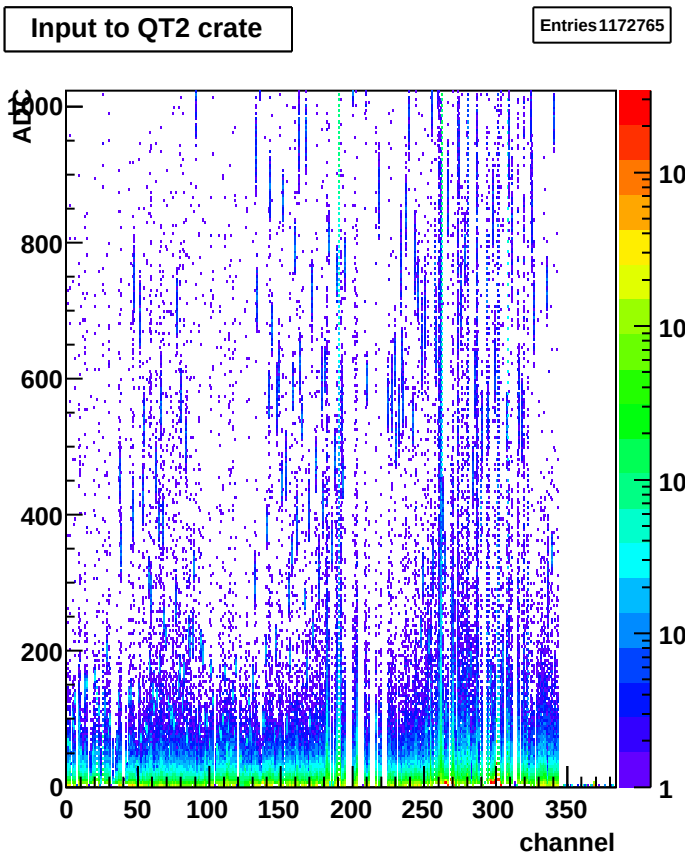

Entries 80000
BBC-L-East ADC Sum
BBC-L-West ADC Sum

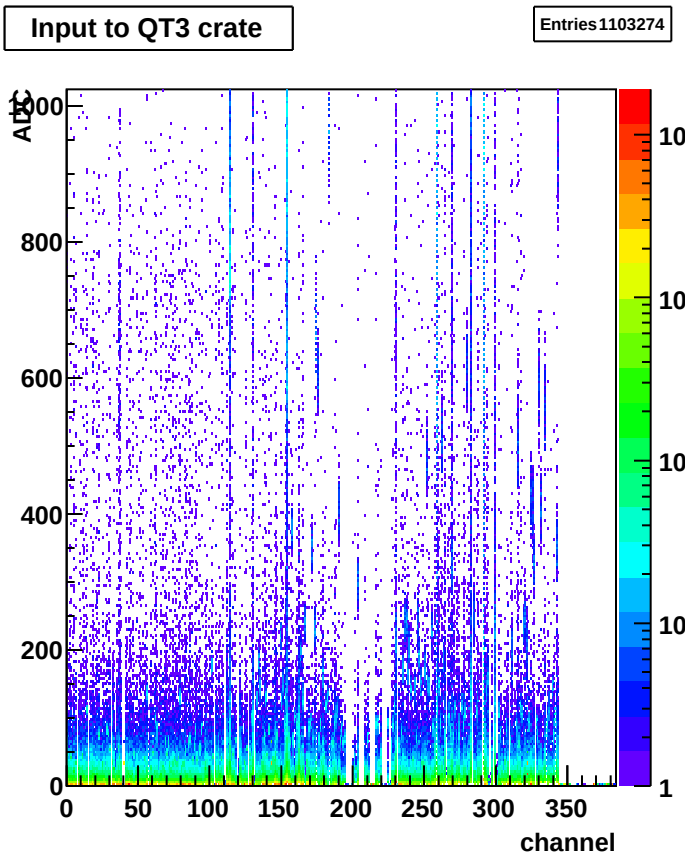

Entries 80000
BBC-S-East ADC Sum
BBC-S-West ADC Sum

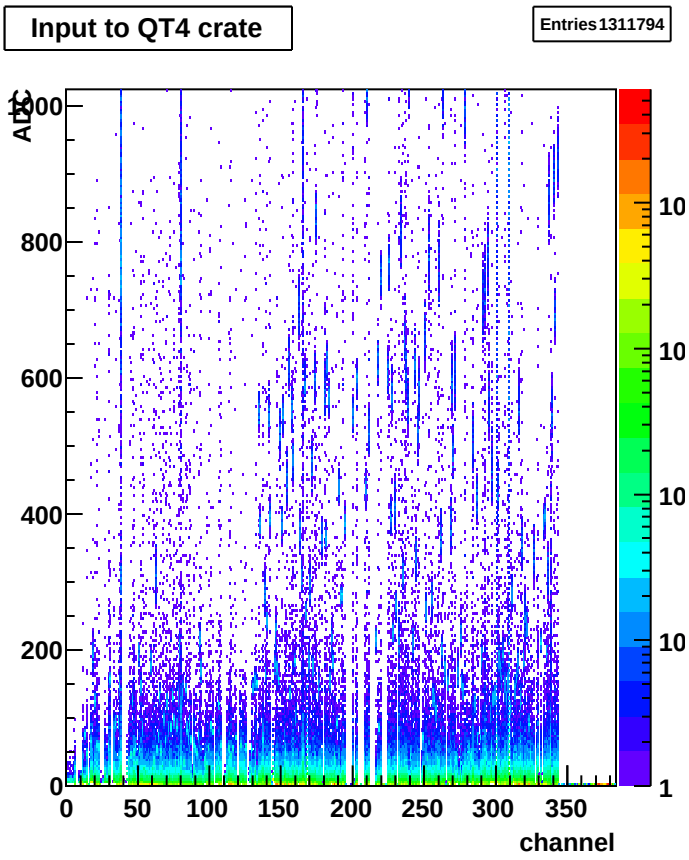

Entries 80000
ZDC East ADC Sum Att
ZDC West ADC Sum Att

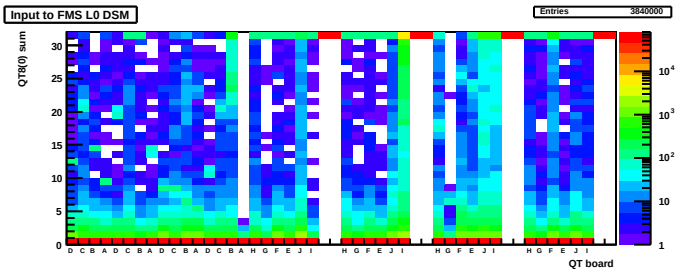

Entries 80000
BBC-L TAC Diff
BCC-S TAC Diff
Entries 80000
BBC-L TAC Diff
VPD TAC Diff
Entries 80000
BBC-L TAC Diff
ZDC TAC Diff
Entries 80000
BBC-S TAC Diff
VPD TAC Diff
Entries 80000
BBC-S TAC Diff
ZDC TAC Diff
Entries 80000
VPD TAC Diff
ZDC TAC Diff

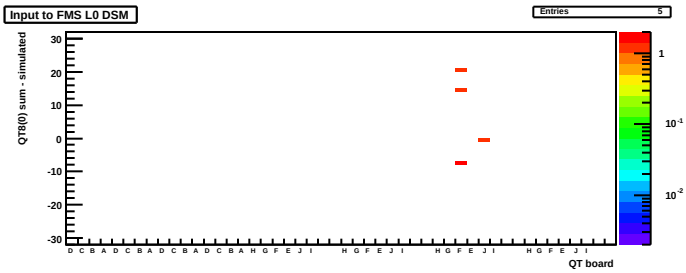

Input to QT1 crate
Entries 1449896
ADC
channel

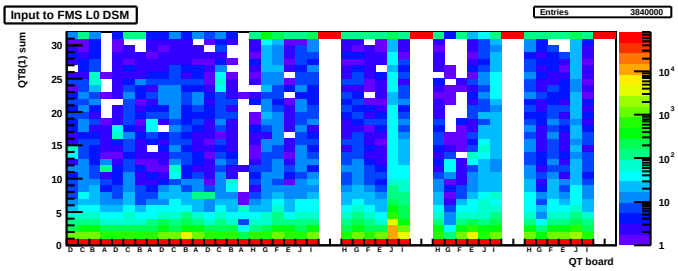

Input to QT2 crate
Entries 1172765
ADC
channel

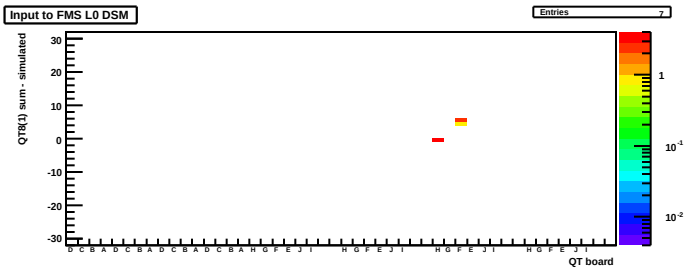

Input to QT3 crate
Entries 1103274
ADC
channel

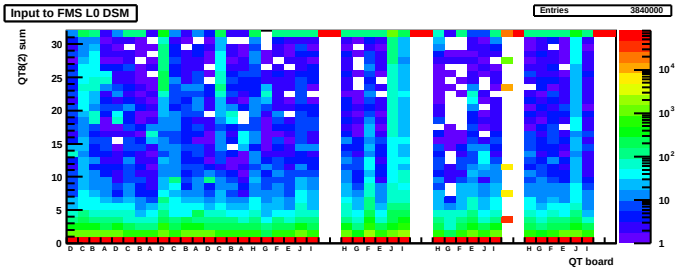

Input to QT4 crate
Entries 1311794
ADC
channel

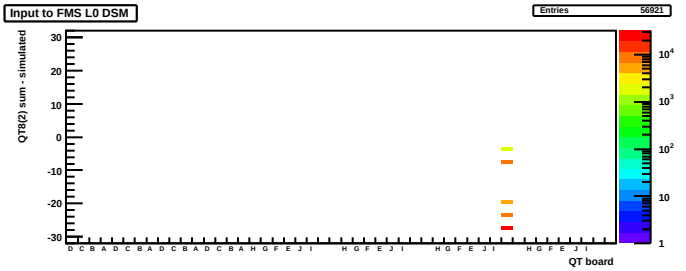

Input to FMS L0 DSM
Entries 3840000
QT8(0) sum
QT board

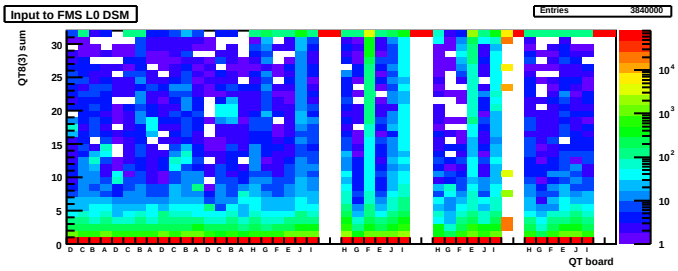

Input to FMS L0 DSM
Entries 5
QT8(0) sum - simulated
QT board

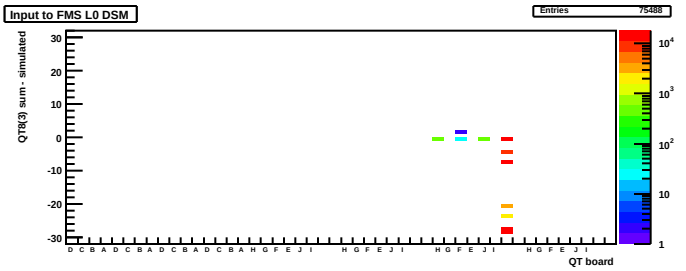

Input to FMS L0 DSM
Entries 3840000
QT8(1) sum
QT board

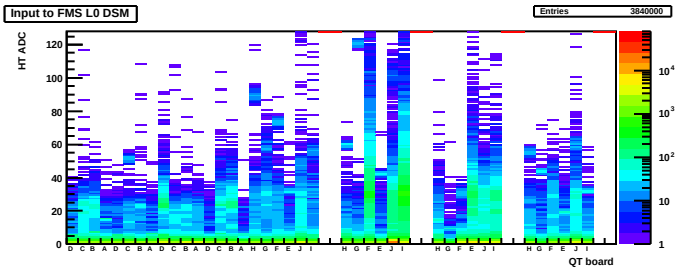

Input to FMS L0 DSM
Entries 7
QT8(1) sum - simulated
QT board

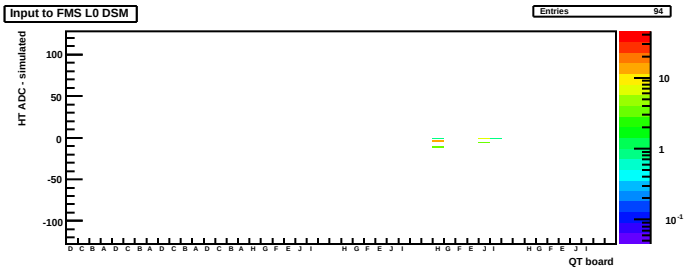

Input to FMS L0 DSM
Entries 3840000
QT8(2) sum
QT board

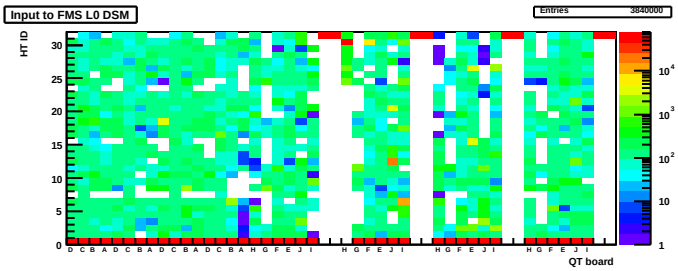

Input to FMS L0 DSM
Entries 56921
QT8(2) sum - simulated
QT board

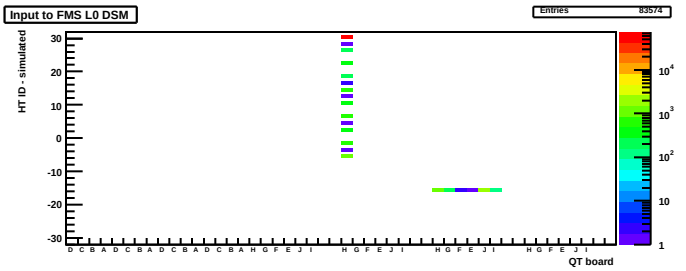

Input to FMS L0 DSM
Entries 3840000
QT8(3) sum
QT board

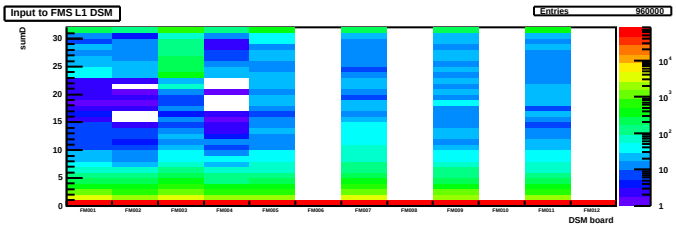

Input to FMS L0 DSM
Entries 75488
QT8(3) sum - simulated
QT board

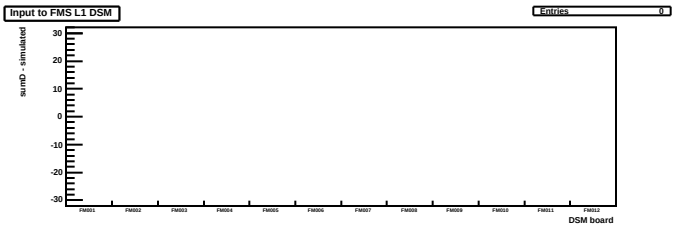

Input to FMS L0 DSM
Entries 3840000
HT ADC
QT board

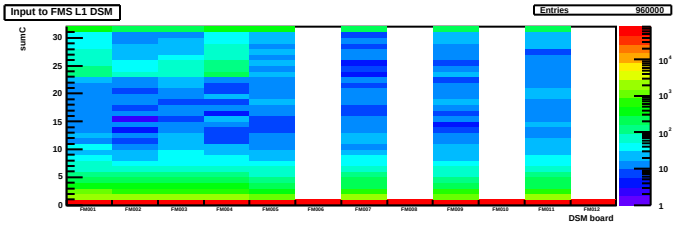

Input to FMS L0 DSM
Entries 94
HT ADC - simulated
QT board

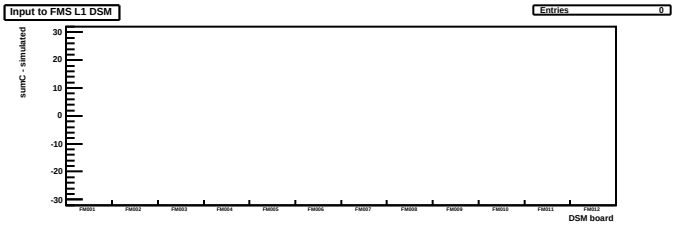

Input to FMS L0 DSM
Entries 3840000
HT ID
QT board

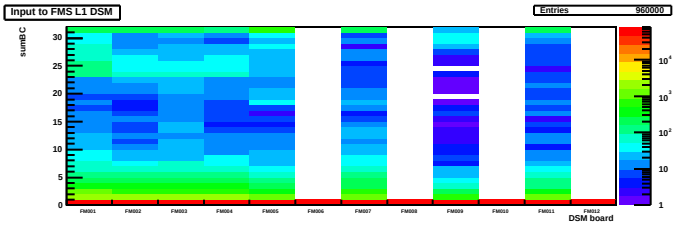

Input to FMS L0 DSM
Entries 83574
HT ID - simulated
QT board

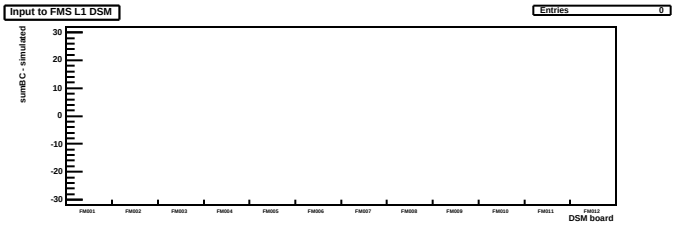

Input to FMS L1 DSM
Entries 960000
sumD
DSM board

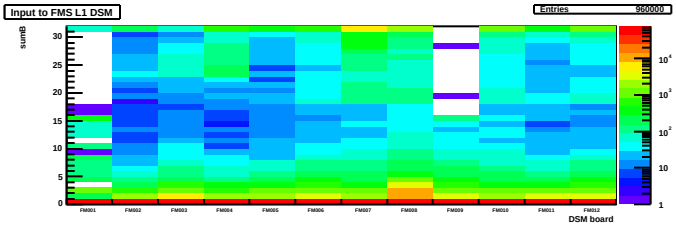

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

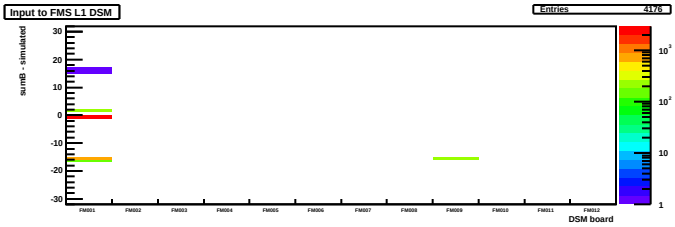

Input to FMS L1 DSM
Entries 960000
sumC
DSM board

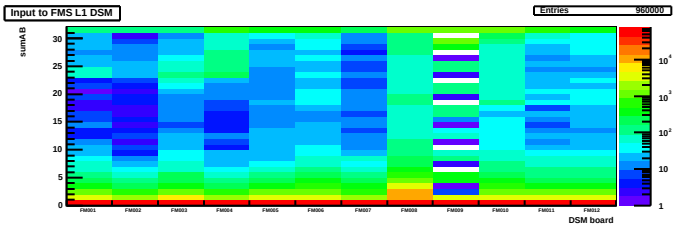

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

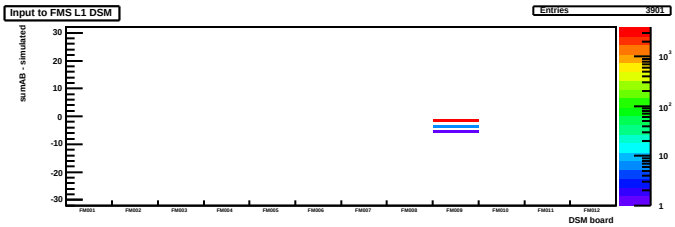

Input to FMS L1 DSM
Entries 960000
sumBC
DSM board

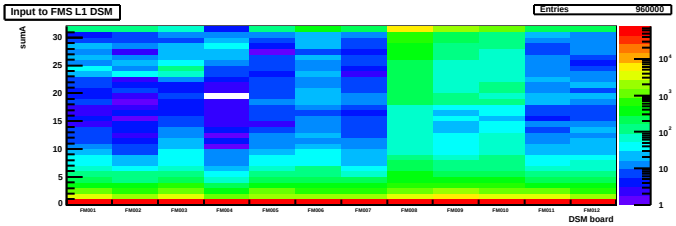

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

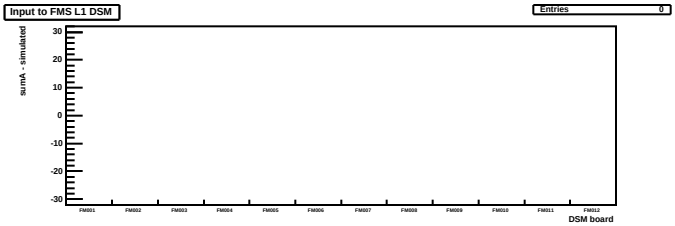

Input to FMS L1 DSM
Entries 960000
sumB
DSM board

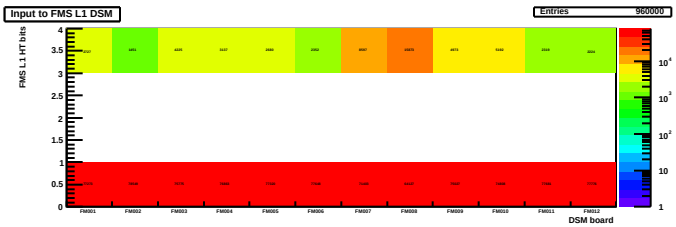

Input to FMS L1 DSM
Entries 4176
sumB - simulated
DSM board

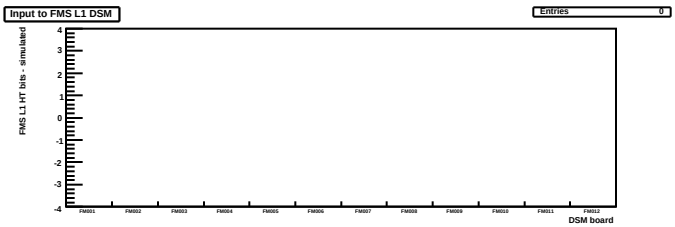

Input to FMS L1 DSM
Entries 960000
sumAB
DSM board

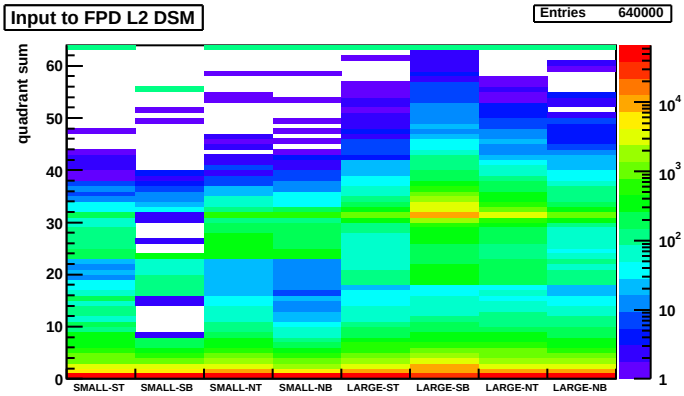

Input to FMS L1 DSM
Entries 3901
sumAB - simulated
DSM board

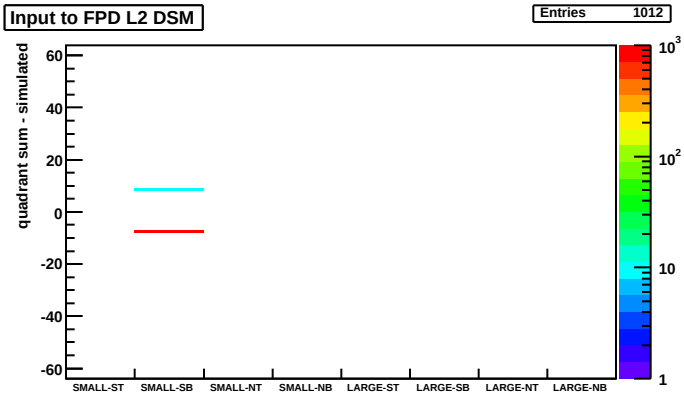

Input to FMS L1 DSM
Entries 960000
sumA
DSM board

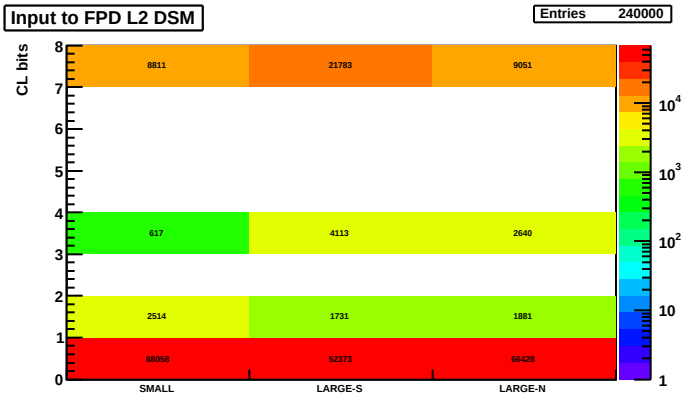

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

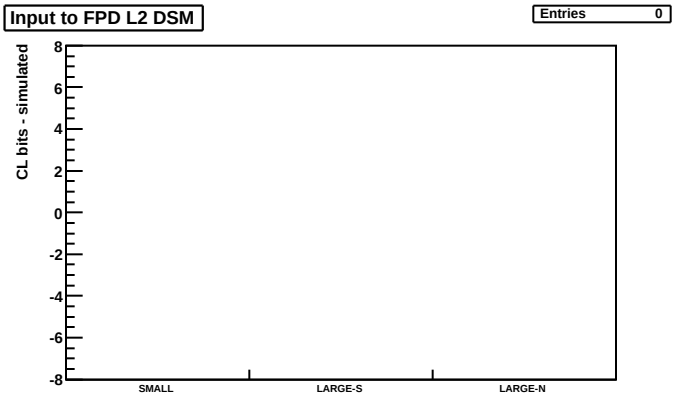

Input to FMS L1 DSM
Entries 960000
FMS L1 HT bits
DSM board

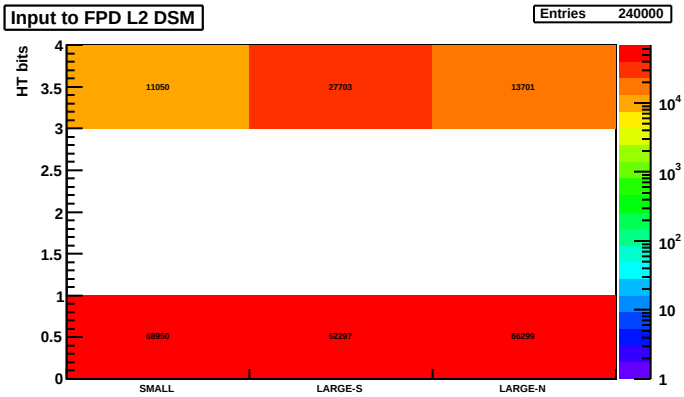

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

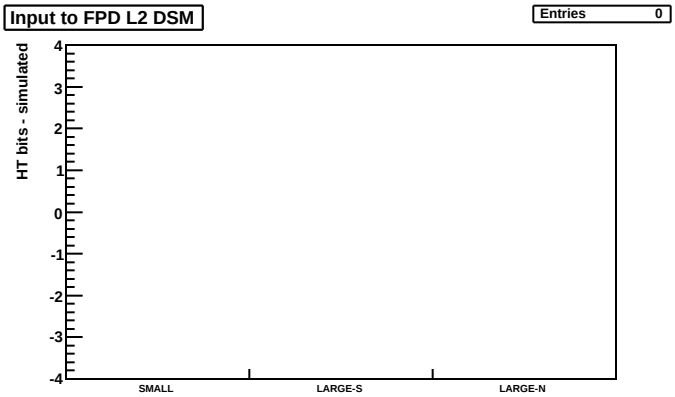

Input to FPD L2 DSM
Entries 640000
quadrant sum
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

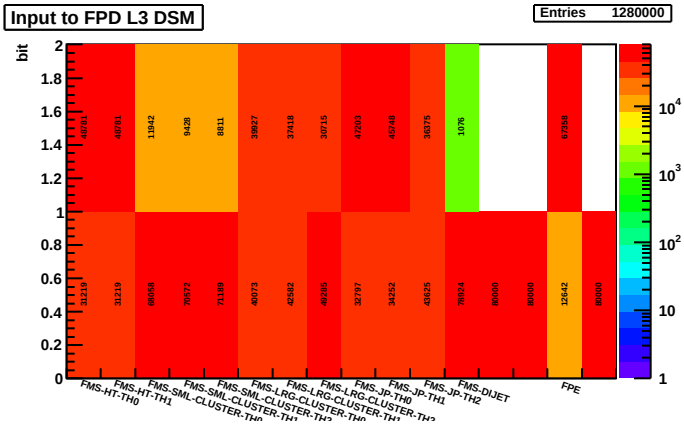

Input to FPD L2 DSM
Entries 1012
quadrant sum - simulated
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

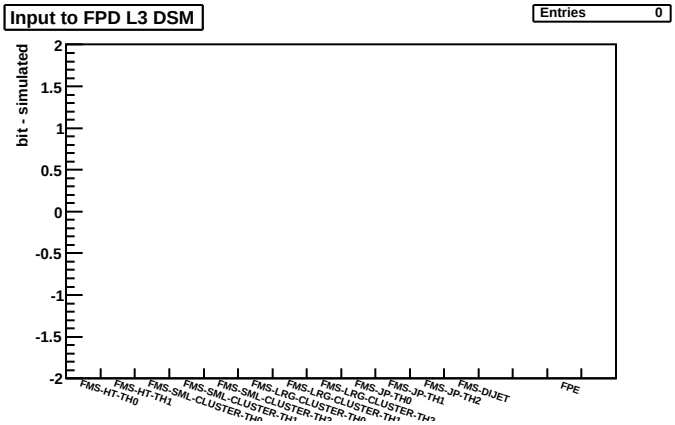

Input to FPD L2 DSM
Entries 240000
CL bits
8811
21783
9051
617
4113
2640
2514
1731
1881
68058
52373
66428
SMALL
LARGE-S
LARGE-N

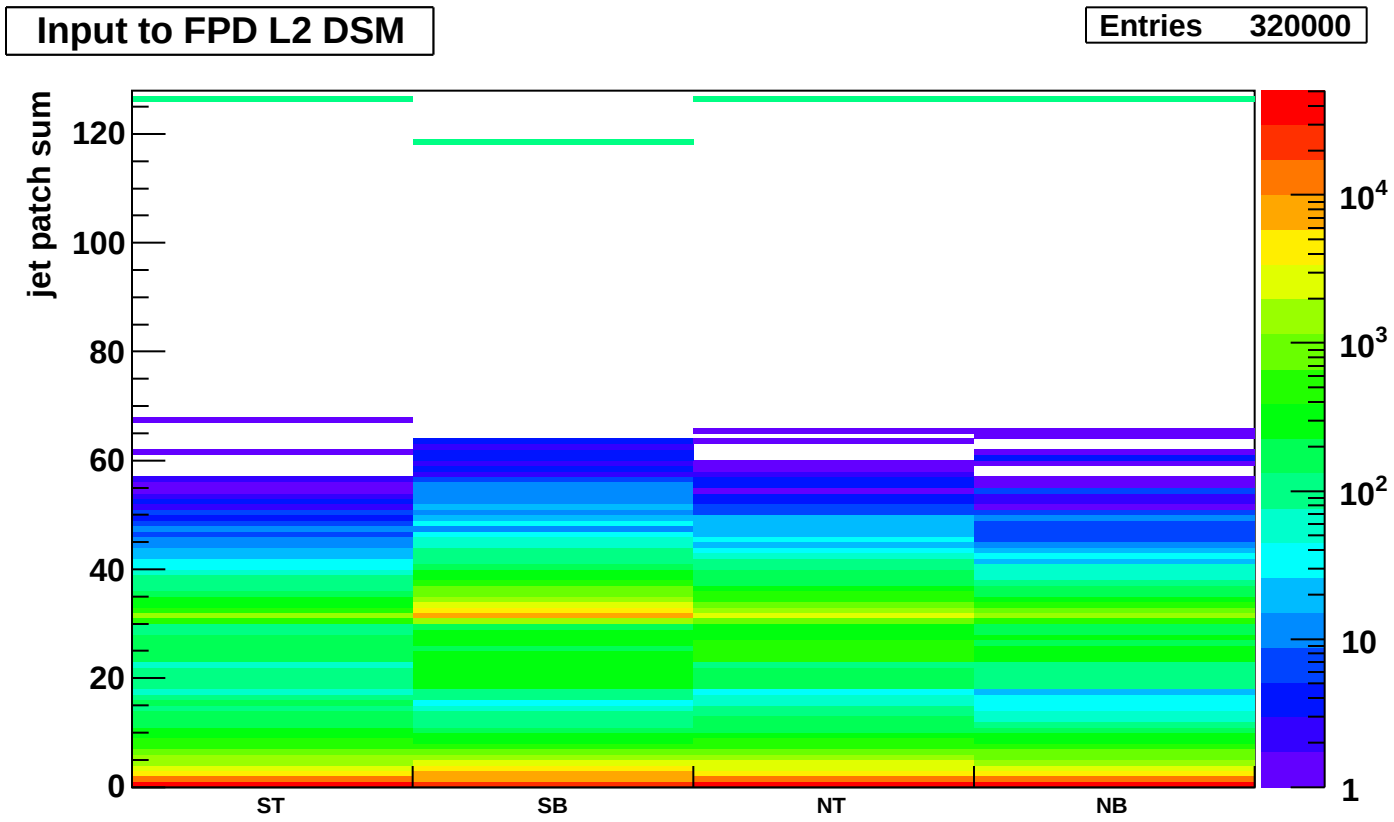

Input to FPD L2 DSM
Entries 0
CL bits - simulated
SMALL
LARGE-S
LARGE-N

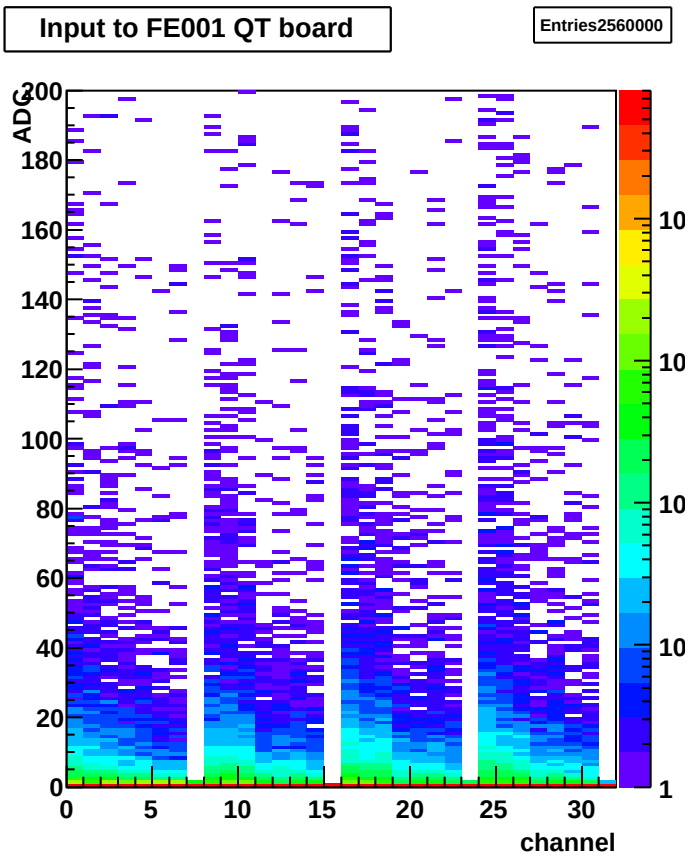

Input to FPD L2 DSM
Entries 240000
HT bits
11050
27703
13701
68950
52297
66299
SMALL
LARGE-S
LARGE-N

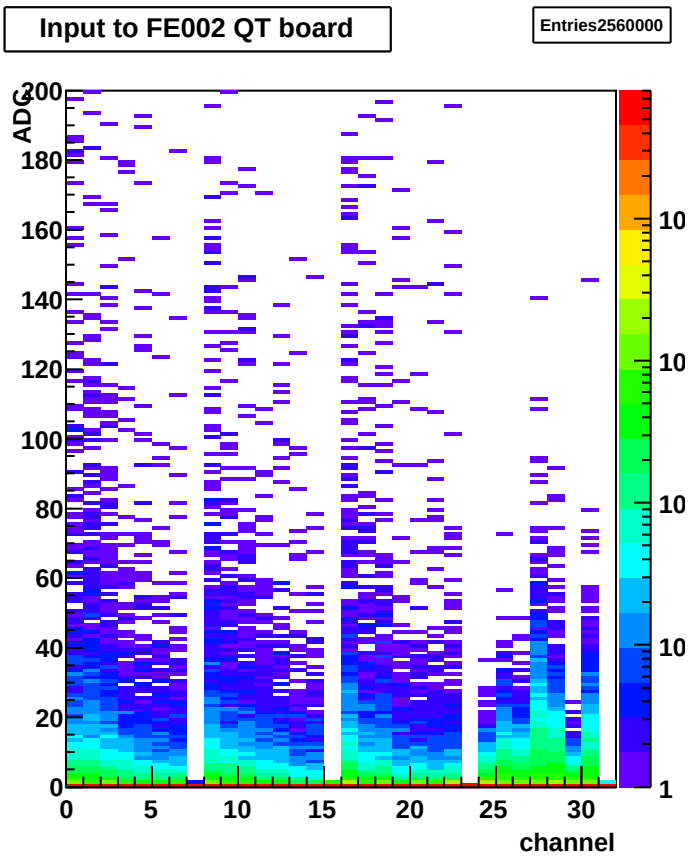

Input to FPD L2 DSM
Entries 0
HT bits - simulated
SMALL
LARGE-S
LARGE-N

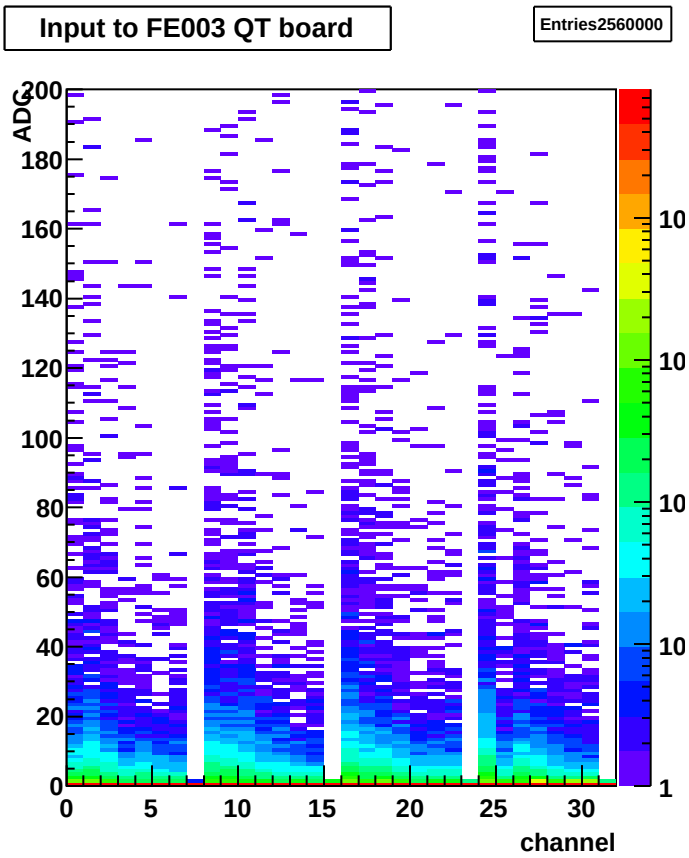

Input to FPD L3 DSM
Entries 1280000
bit
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

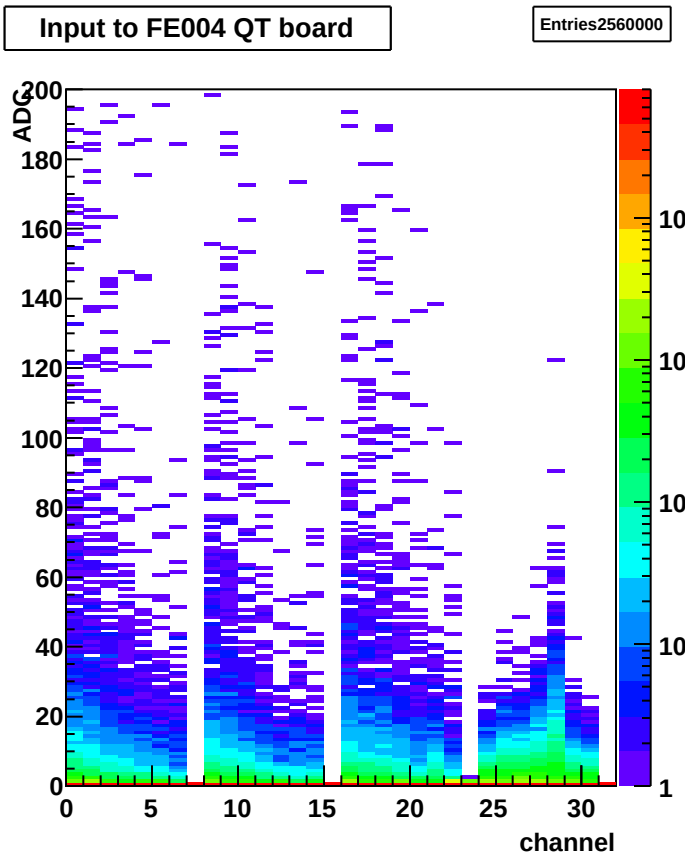

Input to FPD L3 DSM
Entries 0
bit - simulated
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

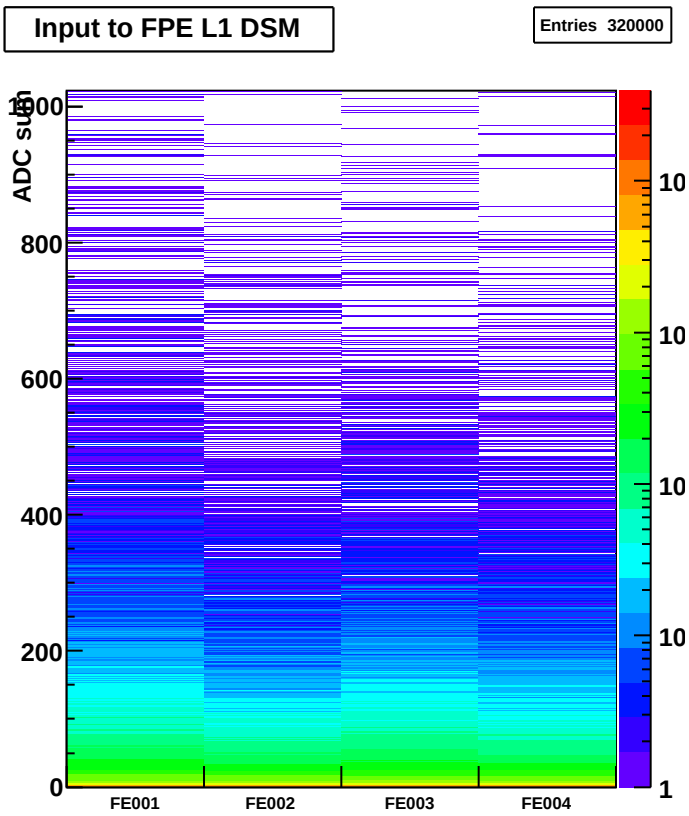

Input to FPD L2 DSM
Entries 320000
jet patch sum
0
20
40
60
80
100
120
ST
SB
NT
NB
1
10
10^2
10^3
10^4

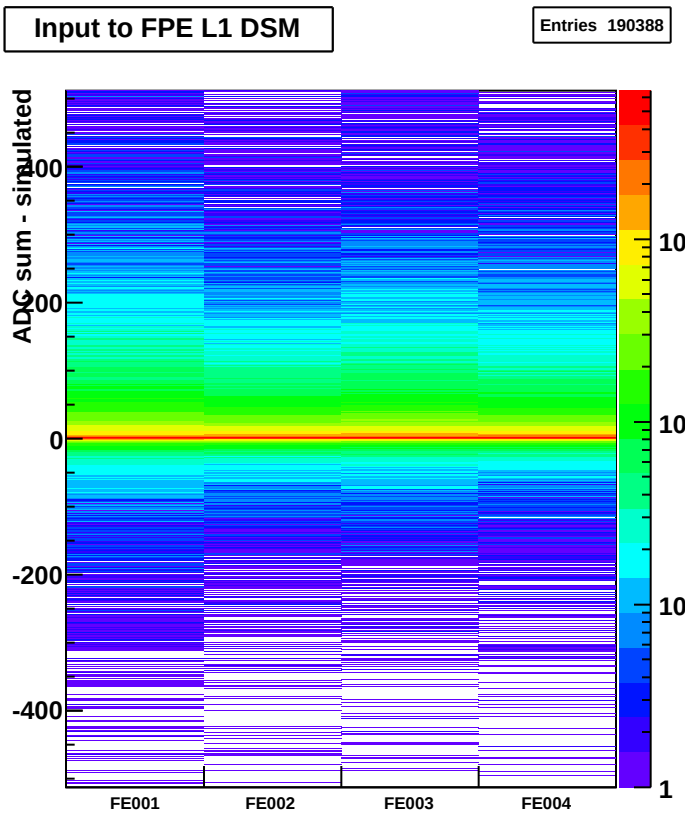

Input to FE001 QT board
Entries2560000
ADC
channel

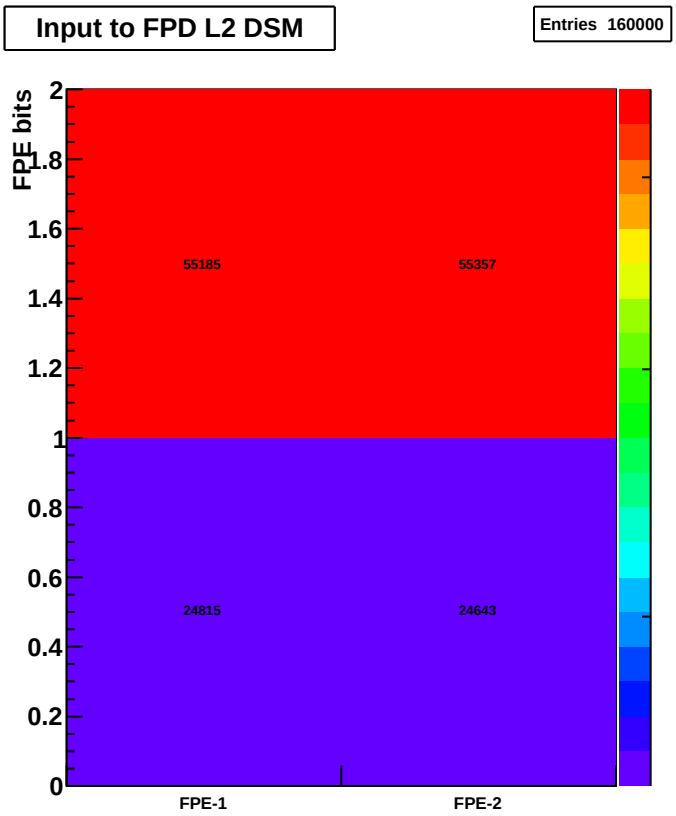

Input to FE002 QT board
Entries2560000
ADC
channel

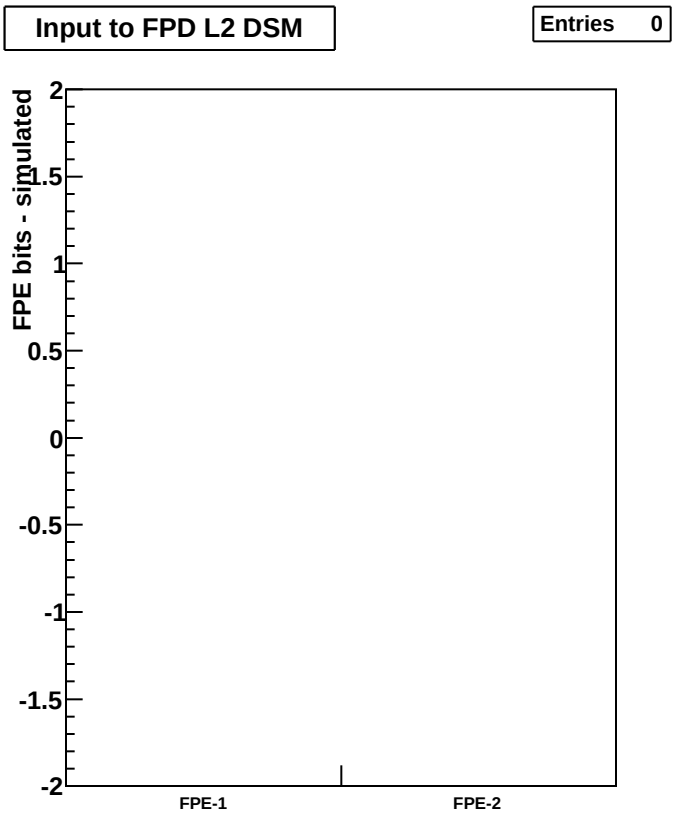

Input to FE003 QT board
Entries2560000
ADC
channel


Input to FE004 QT board
Entries2560000
ADC
channel


Input to FPE L1 DSM
Entries 320000
ADC sum
1000
800
600
400
200
0
FE001
FE002
FE003
FE004
10
10
10
10
1


Input to FPE L1 DSM
Entries 190388
ADC sum - simulated
400
200
0
-200
-400
FE001
FE002
FE003
FE004
10
10
10
10
1


Input to FPD L2 DSM
Entries 160000
FPE bits
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
55185
55357
24815
24643
FPE-1
FPE-2


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