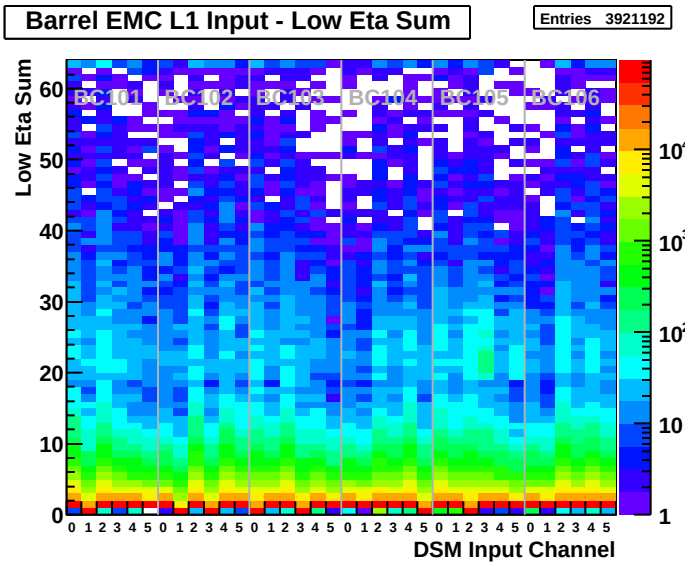
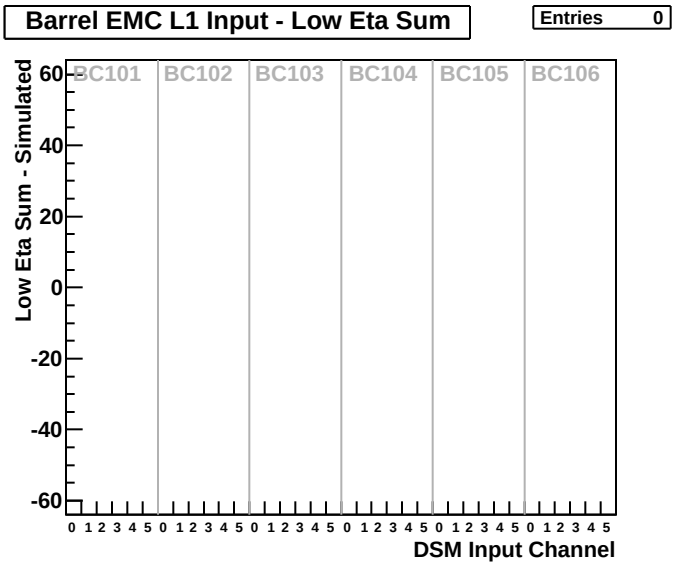
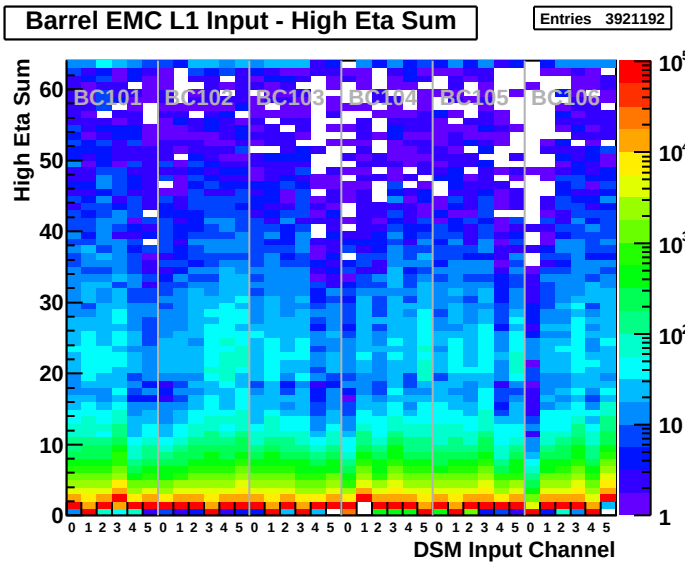
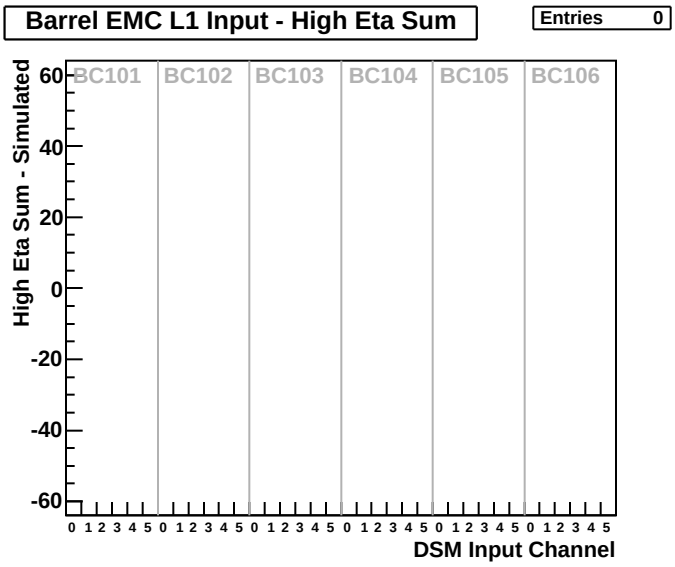
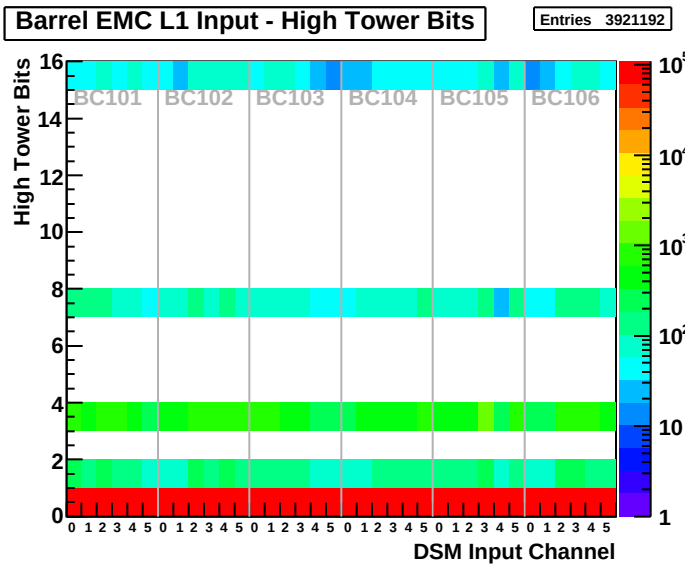
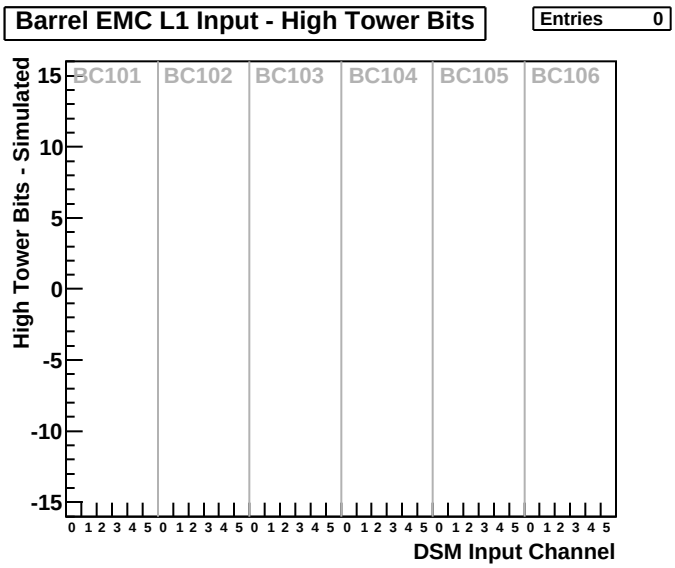

Barrel EMC L1 Input - Low Eta Sum
Entries 3921192
Low Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

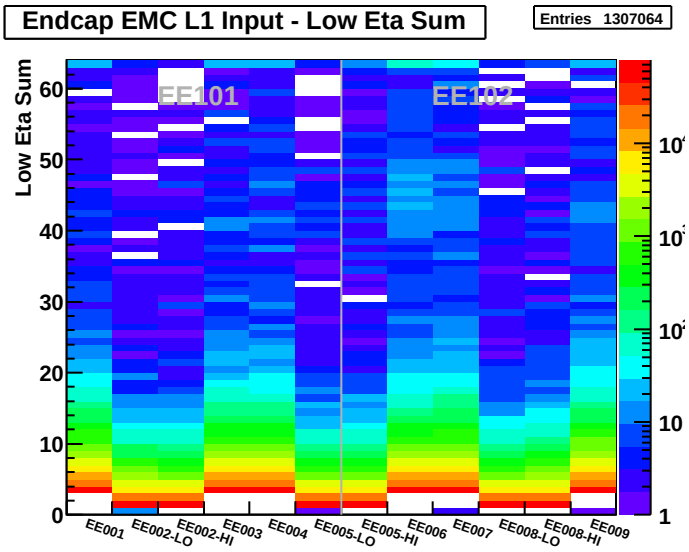

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

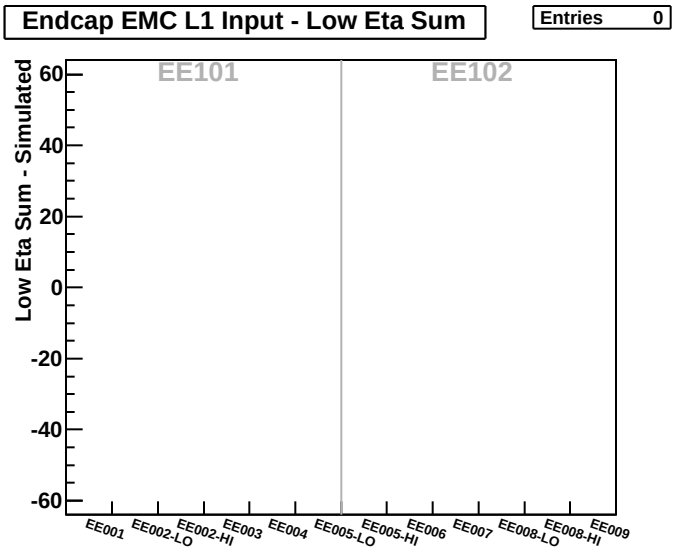

Barrel EMC L1 Input - High Eta Sum
Entries 3921192
High Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

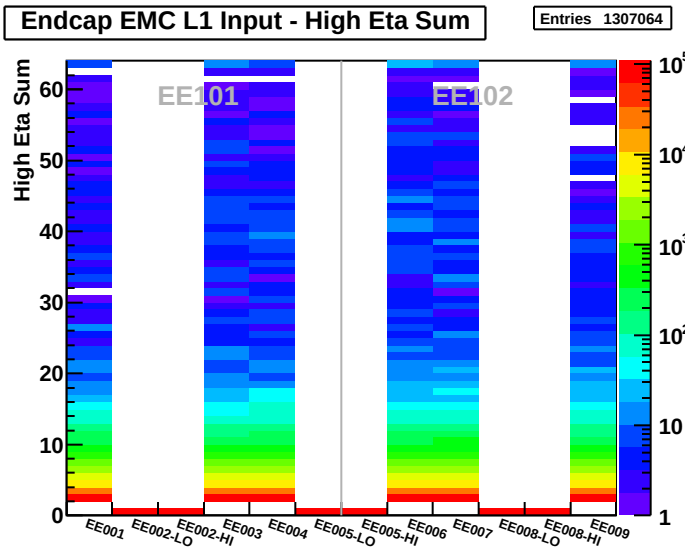

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

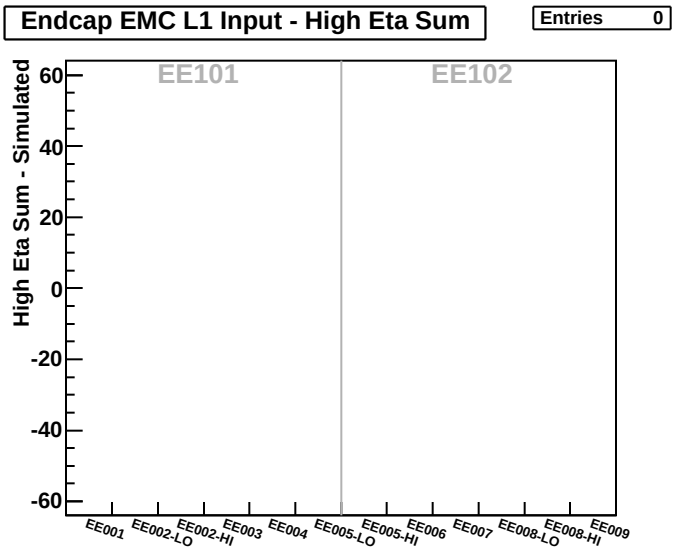

Barrel EMC L1 Input - High Tower Bits
Entries 3921192
High Tower Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

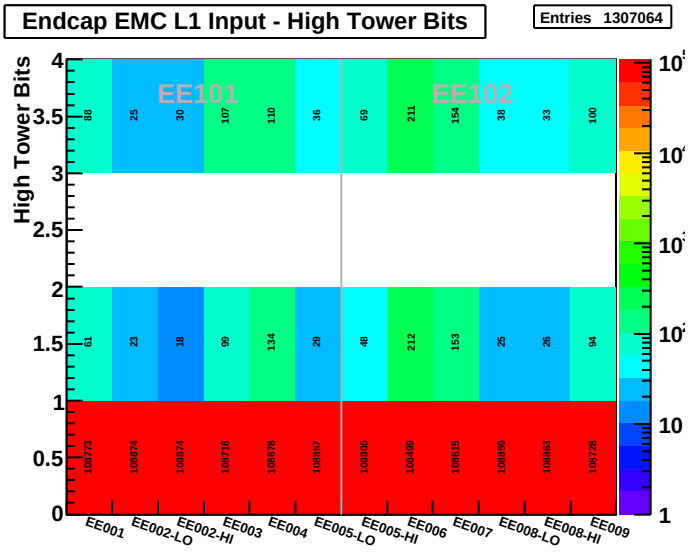

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

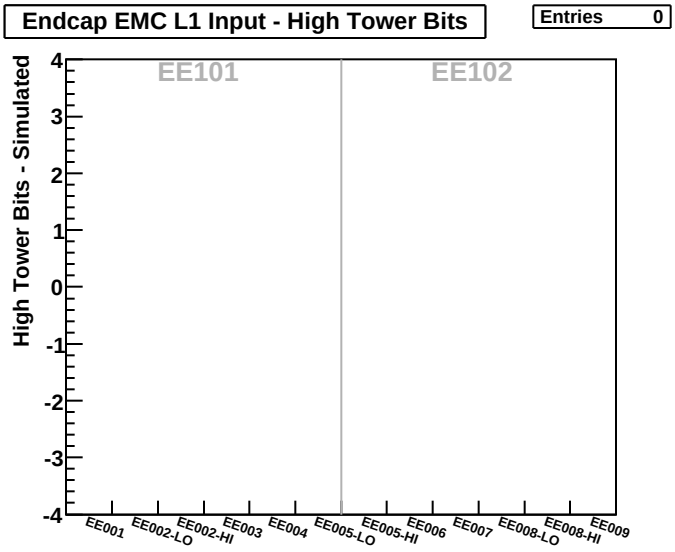

Endcap EMC L1 Input - Low Eta Sum
Entries 1307064
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

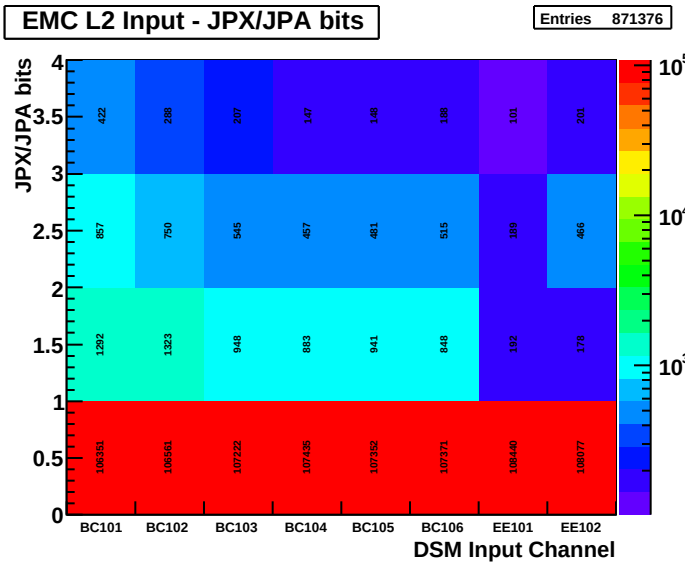

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

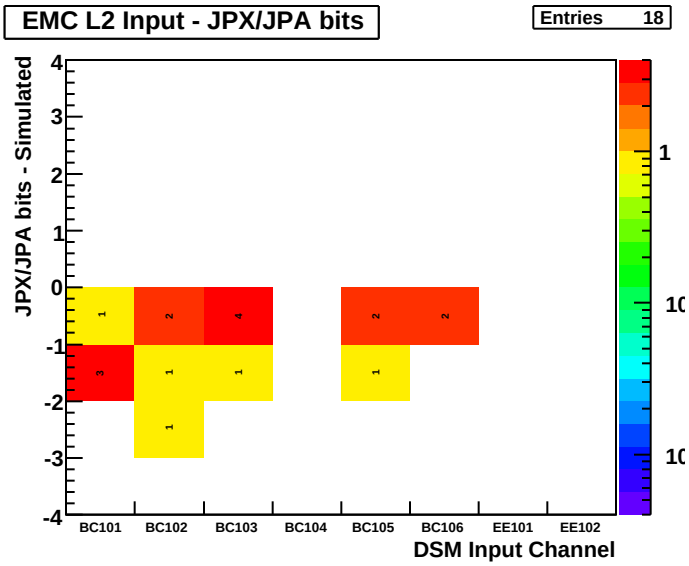

Endcap EMC L1 Input - High Eta Sum
Entries 1307064
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

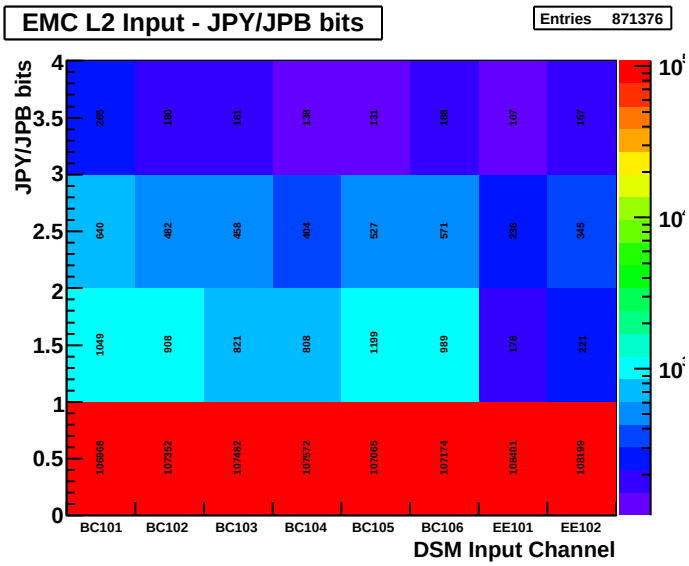

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

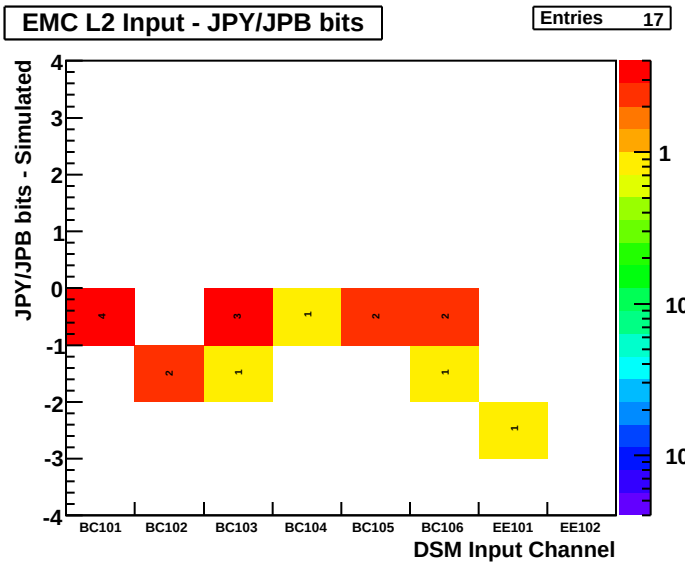

Endcap EMC L1 Input - High Tower Bits
Entries 1307064
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

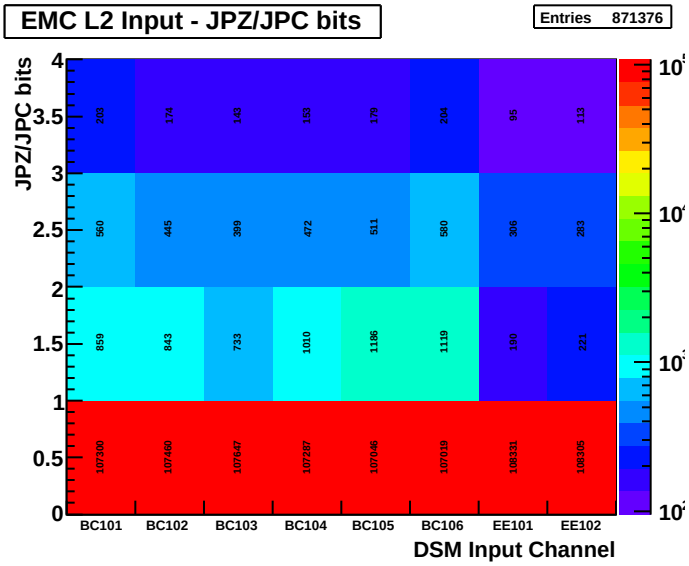

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

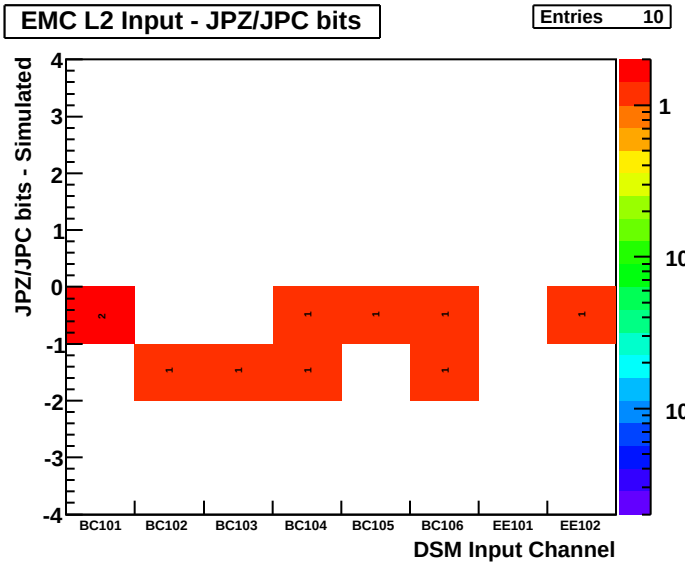

EMC L2 Input - JPX/JPA bits
Entries 871376
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
422 288 207 147 148 188 101 201
857 750 545 457 481 515 189 466
1292 1323 948 883 941 848 192 178
106351 106561 107222 107435 107352 107371 108440 108077

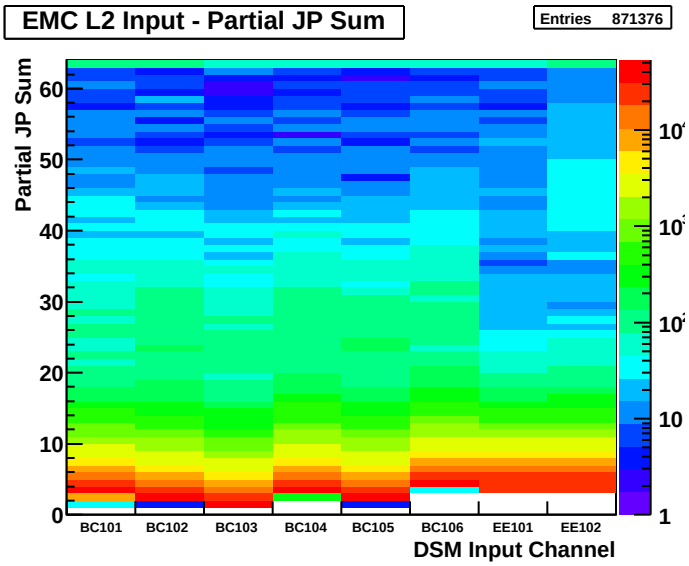

EMC L2 Input - JPX/JPA bits
Entries 18
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

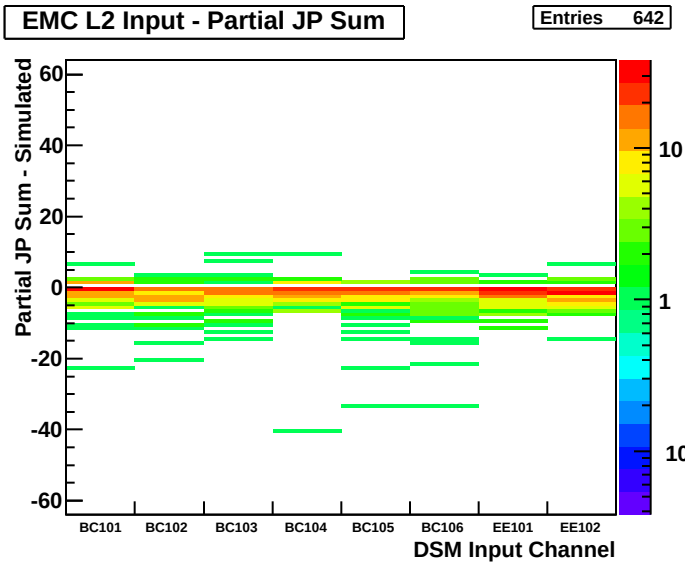

EMC L2 Input - JPY/JPB bits
Entries 871376
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
265 180 161 138 131 188 107 157
640 482 458 404 527 571 238 345
1049 908 821 808 1199 989 178 221
106868 107352 107482 107572 107065 107174 108401 108199

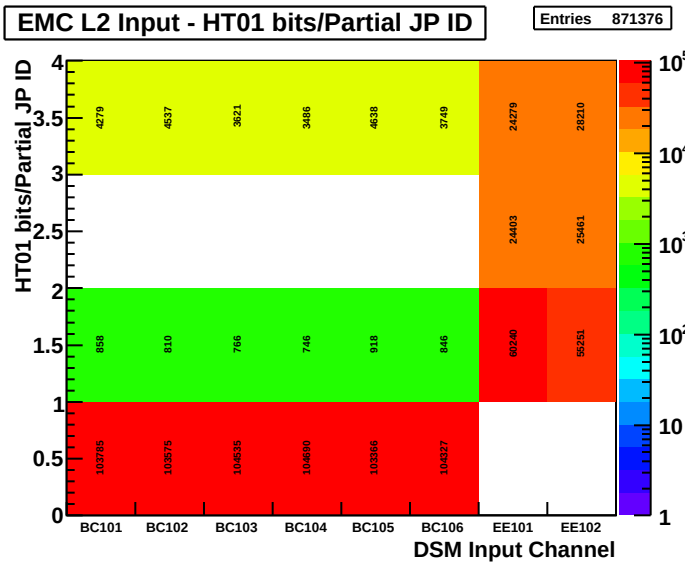

EMC L2 Input - JPY/JPB bits
Entries 17
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

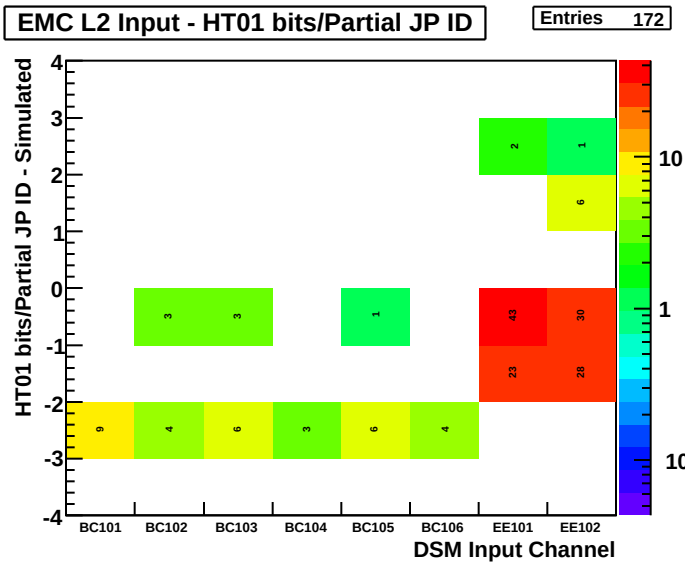

EMC L2 Input - JPZ/JPC bits
Entries 871376
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
235 174 143 153 179 204 95 113
560 445 399 472 511 580 306 283
859 843 733 1010 1186 1119 190 221
107300 107460 107647 107287 107046 107019 108331 108305

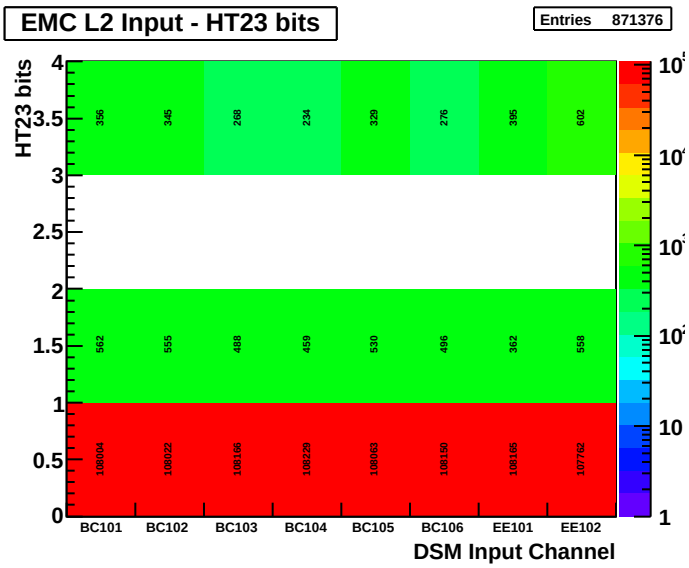

EMC L2 Input - JPZ/JPC bits
Entries 10
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

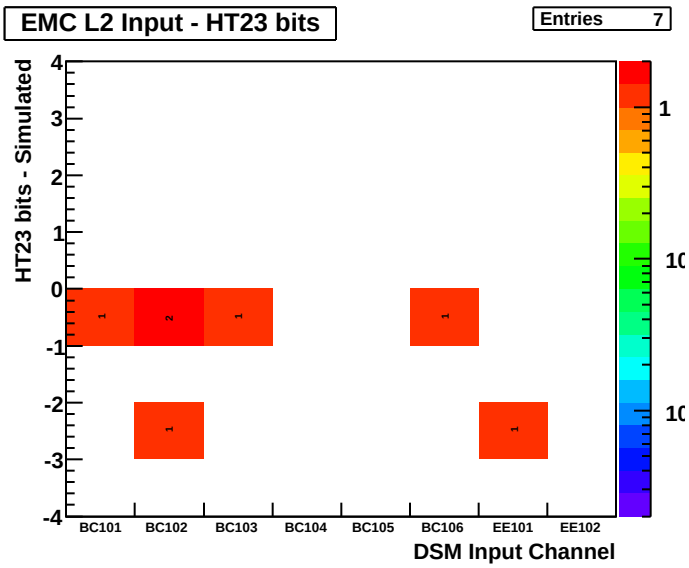

EMC L2 Input - Partial JP Sum
Entries 871376
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

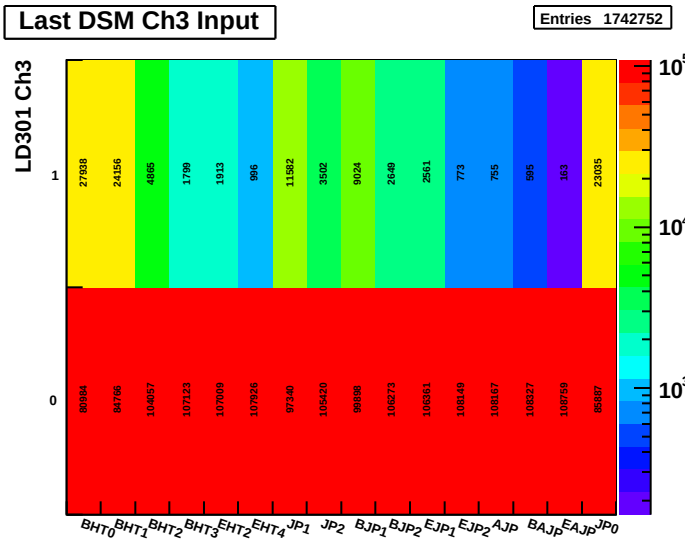

EMC L2 Input - Partial JP Sum
Entries 642
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

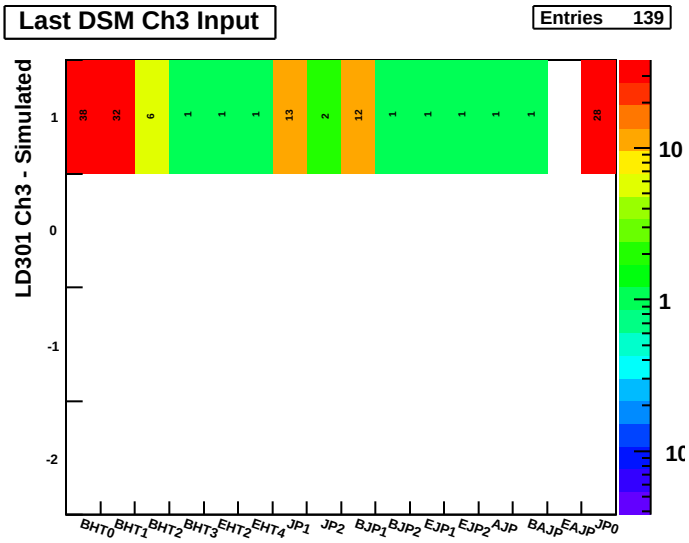

EMC L2 Input - HT01 bits/Partial JP ID
Entries 871376
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

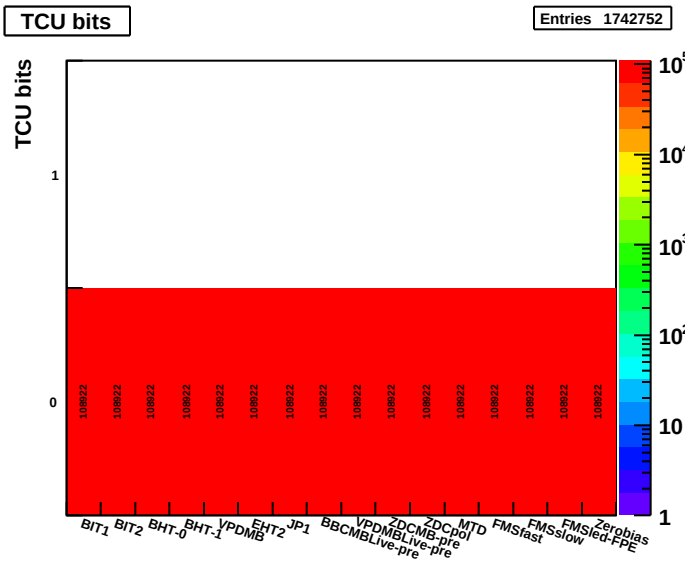

EMC L2 Input - HT01 bits/Partial JP ID
Entries 172
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

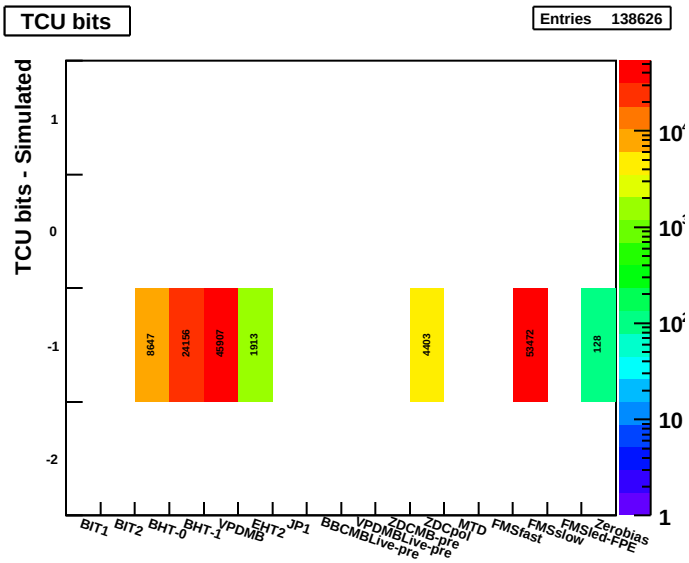

EMC L2 Input - HT23 bits
Entries 871376
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

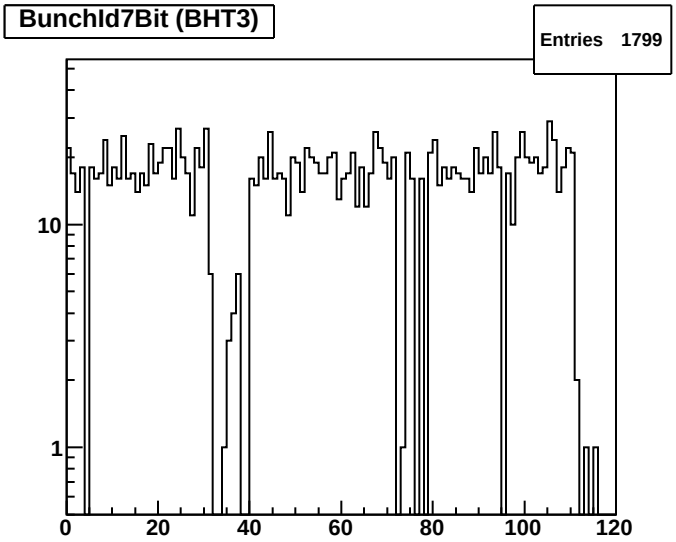

EMC L2 Input - HT23 bits
Entries 7
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

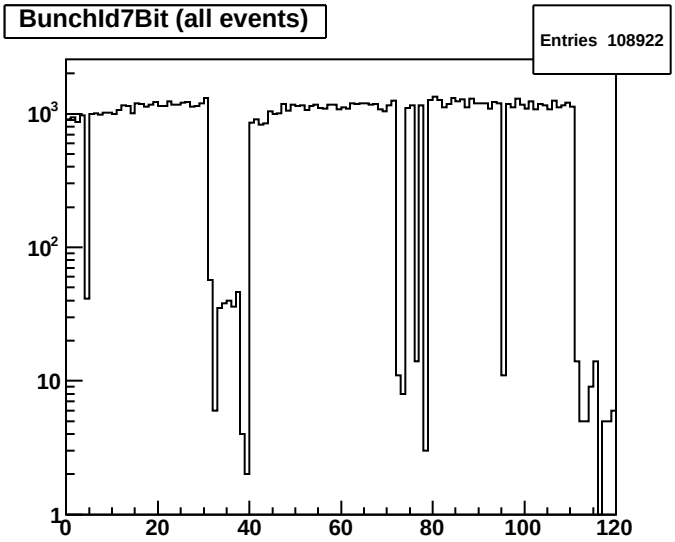

Last DSM Ch3 Input
Entries 1742752
LD301 Ch3
27938 24156 4865 1799 1913 996 11582 3502 9024 2649 2561 773 755 595 163 23035
80984 84766 104057 107123 107009 107926 97340 105420 99898 106273 106361 108149 108167 108327 108759 85887
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

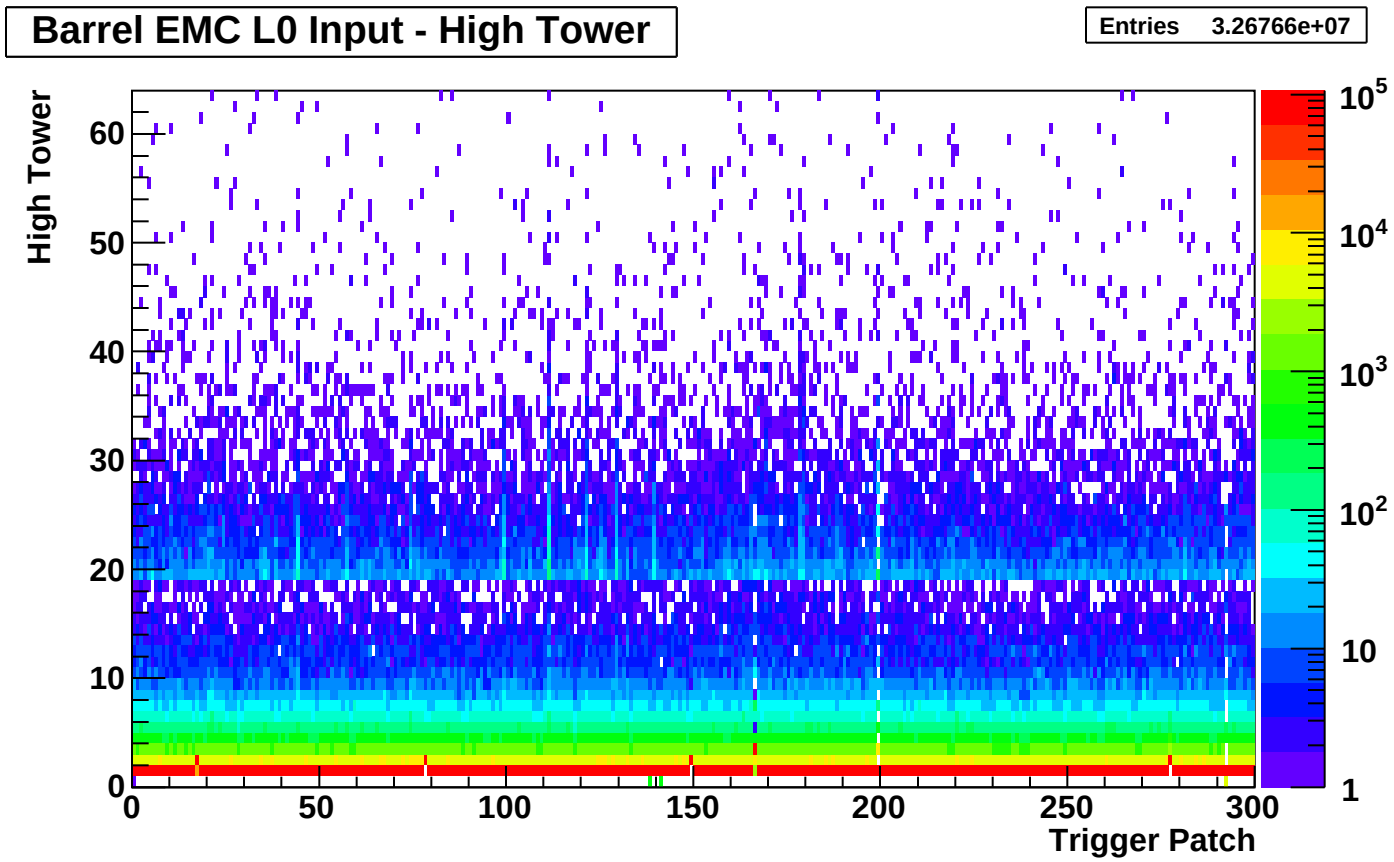

Last DSM Ch3 Input
Entries 139
LD301 Ch3 - Simulated
38 32 6 1 1 1 13 2 12 1 1 1 1 1 28
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

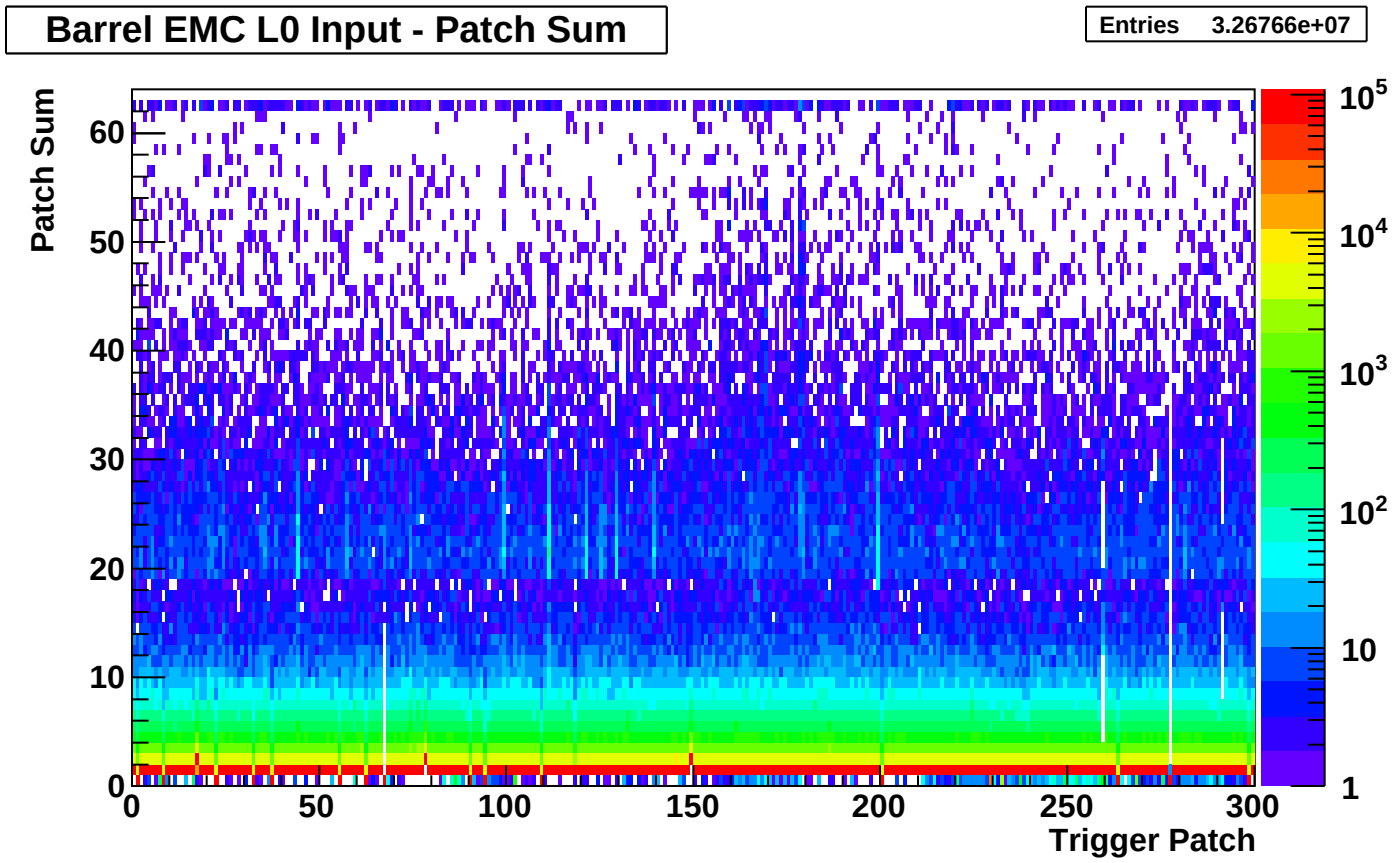

TCU bits
Entries 1742752
TCU bits
108922 108922 108922 108922 108922 108922 108922 108922 108922 108922 108922 108922 108922 108922 108922 108922
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

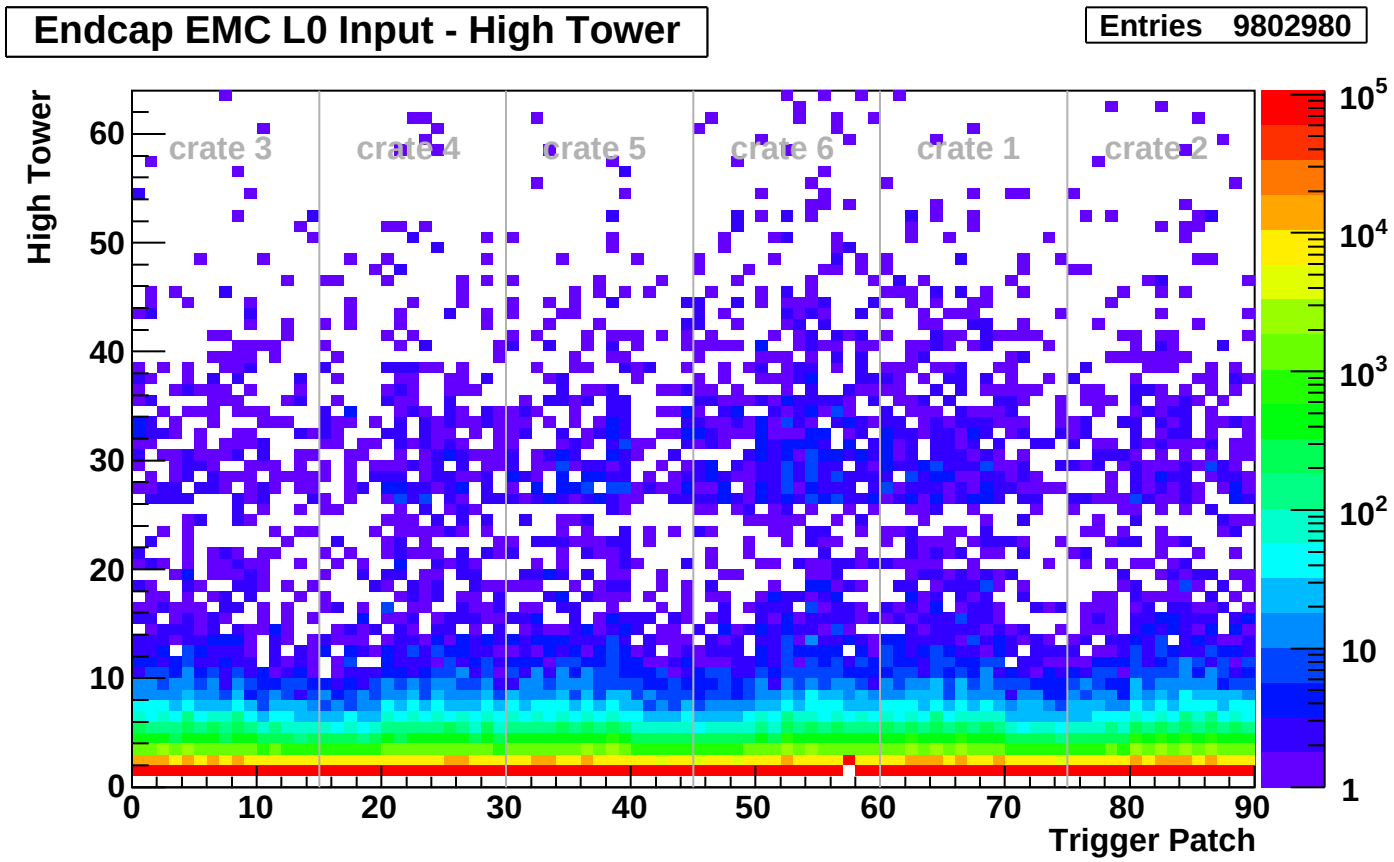

TCU bits
Entries 138626
TCU bits - Simulated
8647 24156 45907 1913 4403 53472 128
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

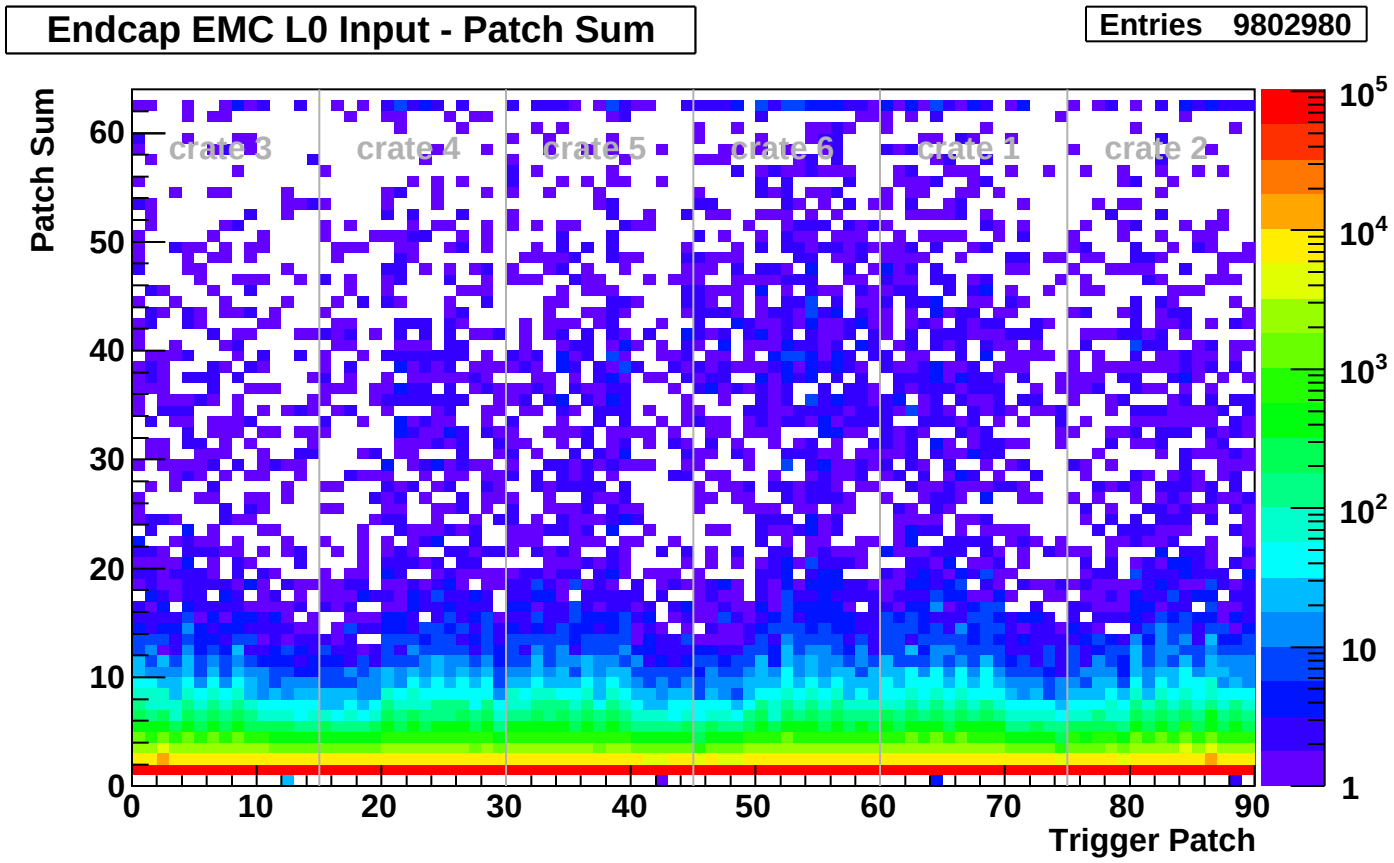

BunchId7Bit (BHT3)
Entries 1799

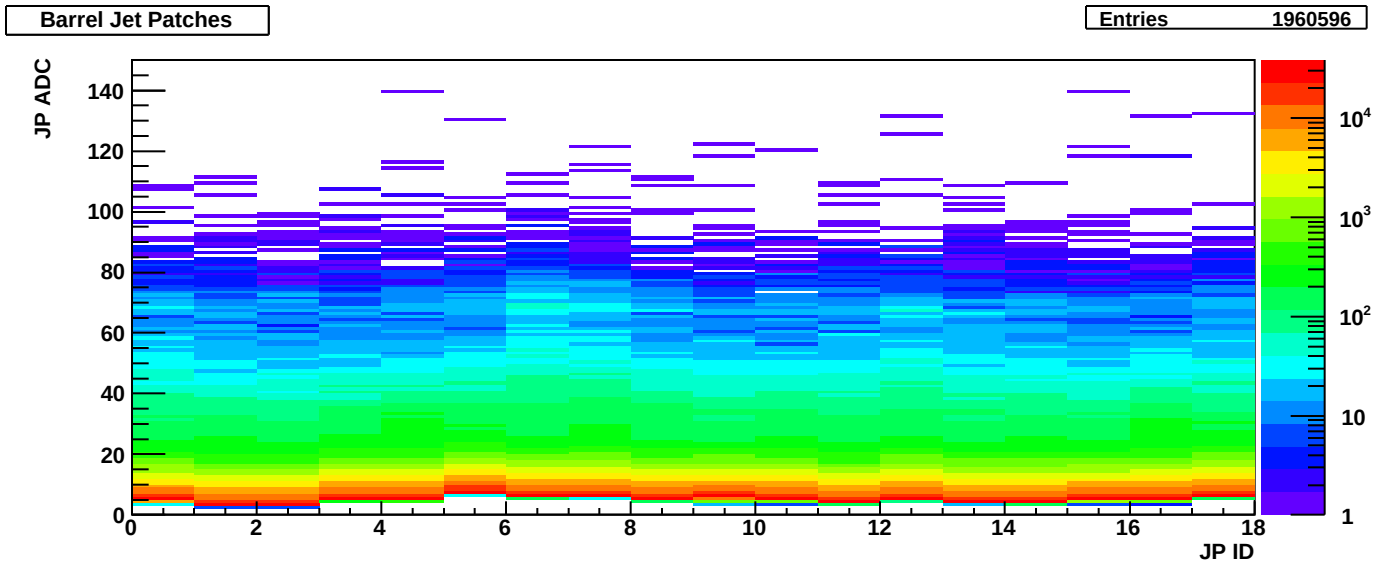

BunchId7Bit (all events)
Entries 108922

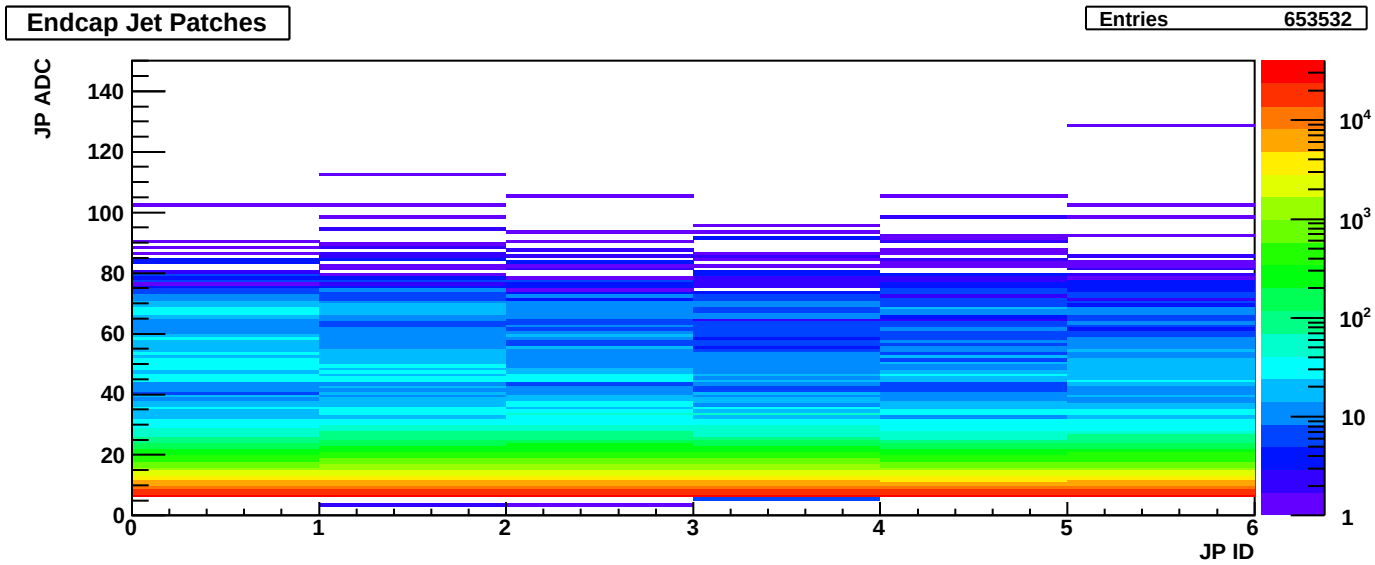

Barrel EMC L0 Input - High Tower
Entries 3.26766e+07
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

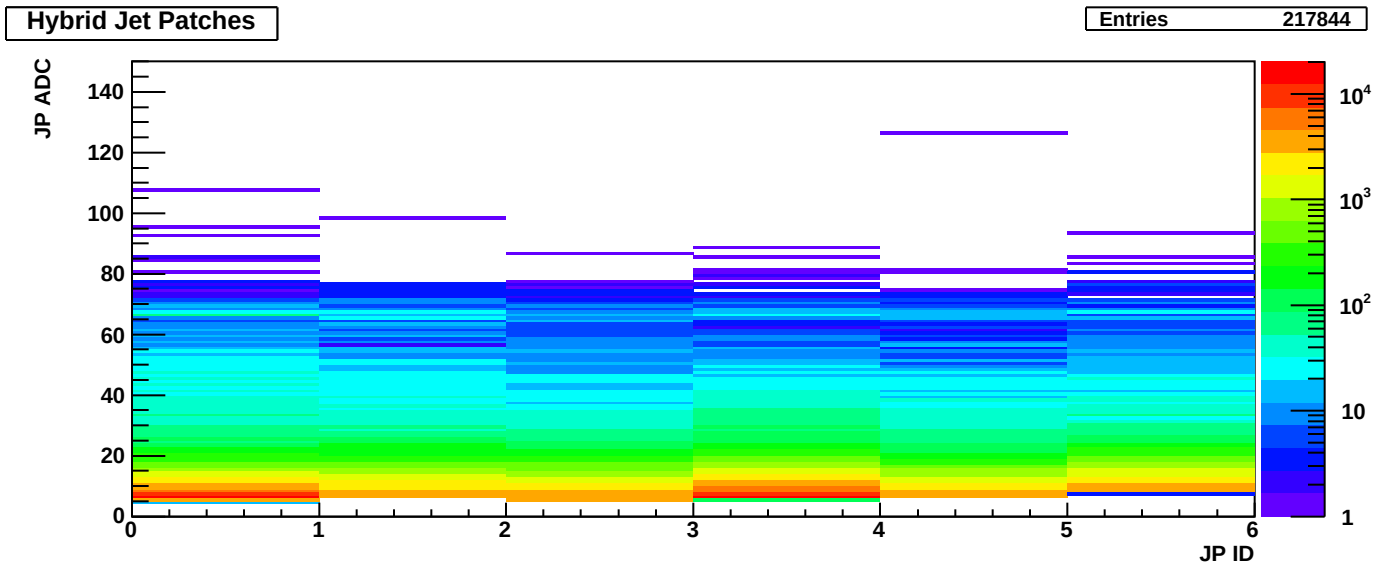

Barrel EMC L0 Input - Patch Sum
Entries 3.26766e+07
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

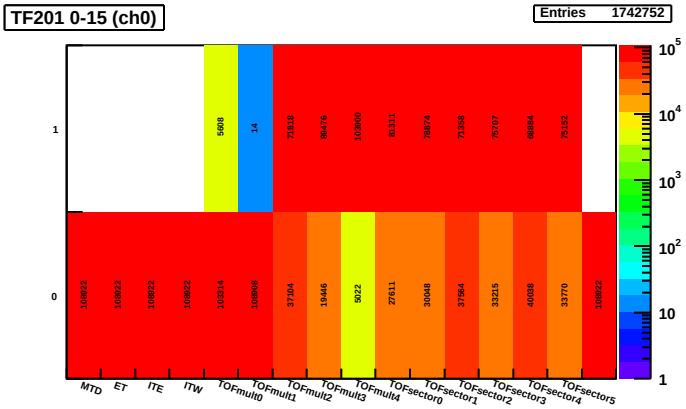

Endcap EMC L0 Input - High Tower
Entries 9802980
High Tower
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

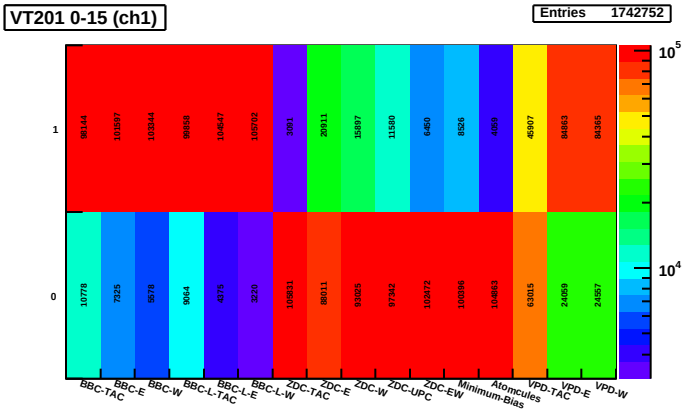

Endcap EMC L0 Input - Patch Sum
Entries 9802980
Patch Sum
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

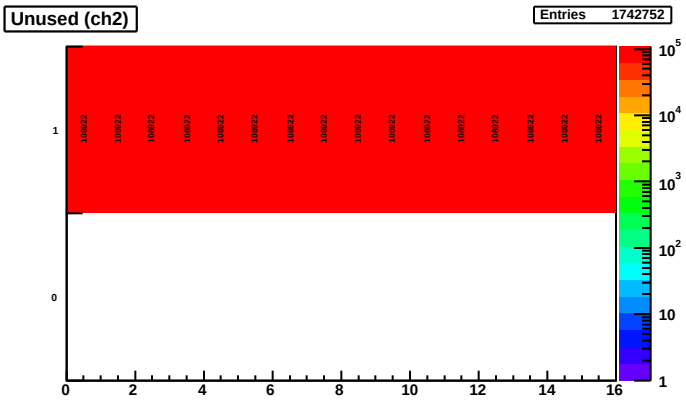

Barrel Jet Patches
Entries 1960596
JP ADC
JP ID

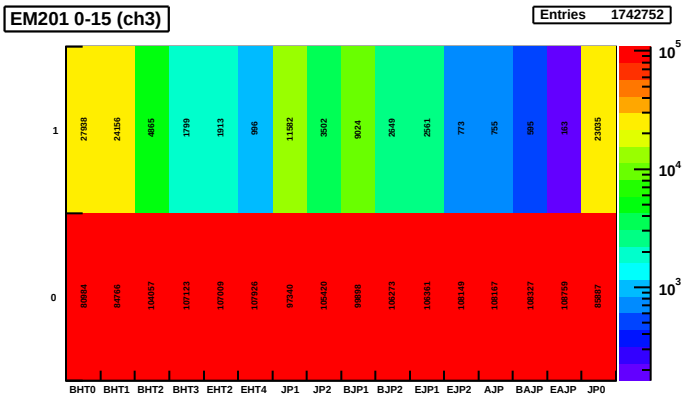

Endcap Jet Patches
Entries 653532
JP ADC
JP ID

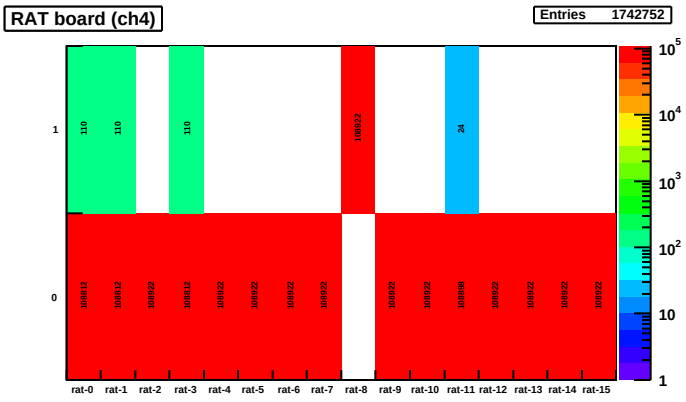

Hybrid Jet Patches
Entries 217844
JP ADC
JP ID

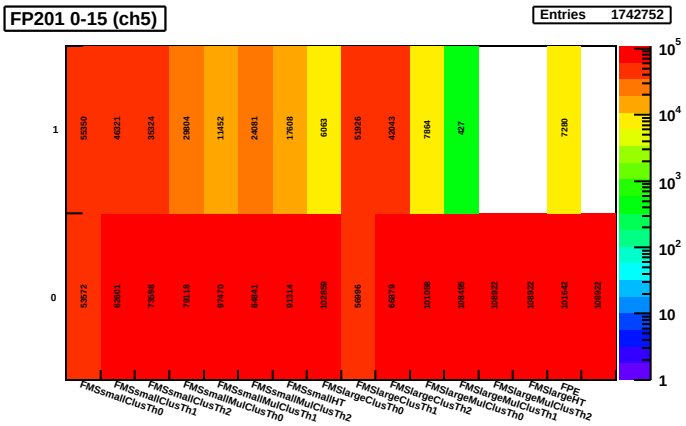

TF201 0-15 (ch0)
Entries 1742752
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5

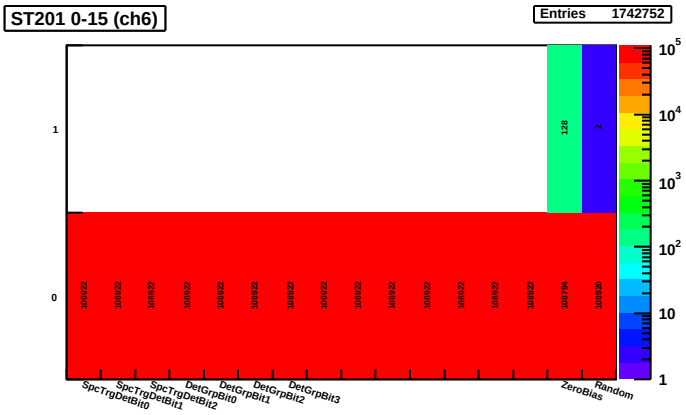

VT201 0-15 (ch1)
Entries 1742752
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-E ZDC-W ZDC-UPC ZDC-EW Minimum-Bias Atomcules VPD-TAC VPD-E VPD-W

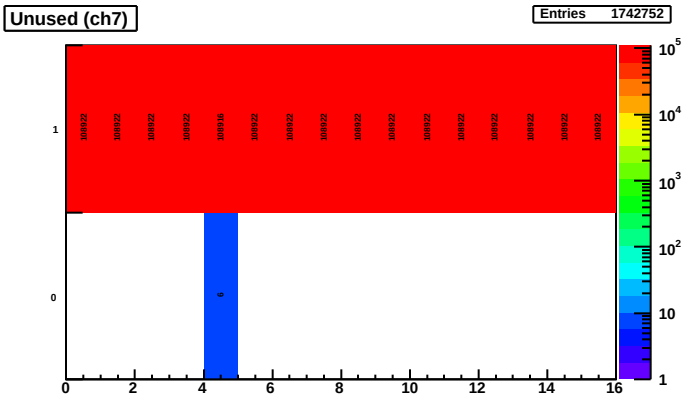

Unused (ch2)
Entries 1742752

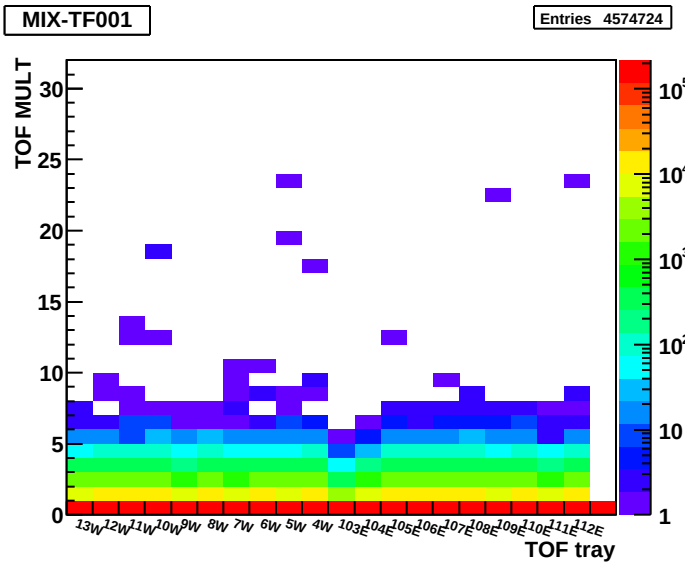

EM201 0-15 (ch3)
Entries 1742752
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

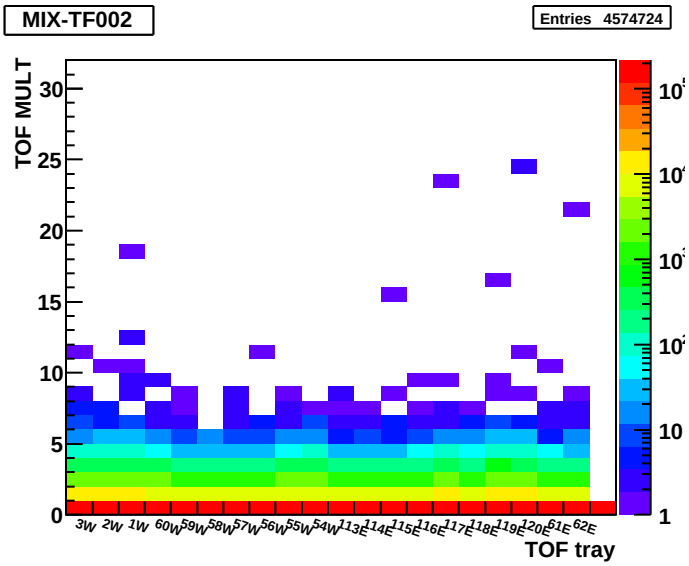

RAT board (ch4)
Entries 1742752
rat-0 rat-1 rat-2 rat-3 rat-4 rat-5 rat-6 rat-7 rat-8 rat-9 rat-10 rat-11 rat-12 rat-13 rat-14 rat-15

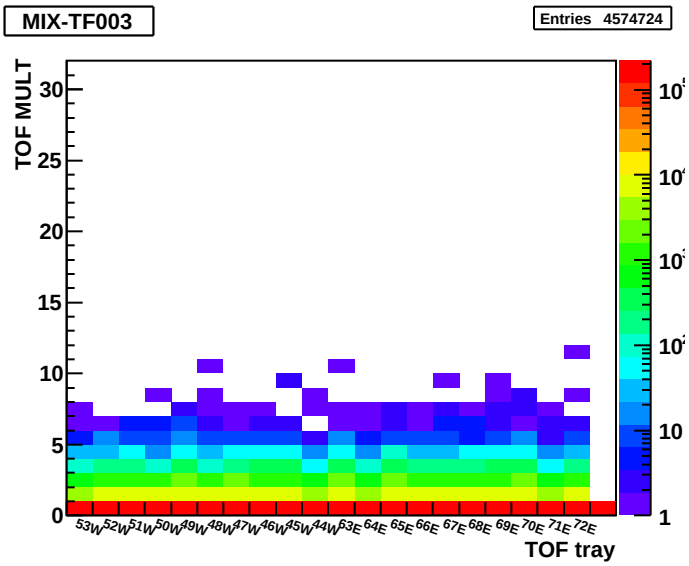

FP201 0-15 (ch5)
Entries 1742752
FMSsmallClusTh0 FMSsmallClusTh1 FMSsmallClusTh2 FMSsmallMulClusTh0 FMSsmallMulClusTh1 FMSsmallMulClusTh2 FMSsmallHT FMSlargeClusTh0 FMSlargeClusTh1 FMSlargeClusTh2 FMSlargeMulClusTh0 FMSlargeMulClusTh1 FMSlargeMulClusTh2 FMSlargeHT FPE

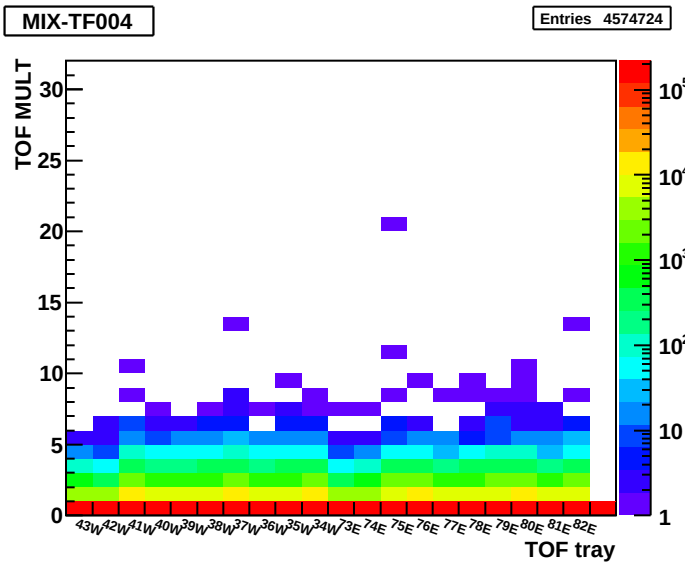

ST201 0-15 (ch6)
Entries 1742752
SpcTrgDetBit0 SpcTrgDetBit1 SpcTrgDetBit2 DetCrpBit0 DetCrpBit1 DetCrpBit2 DetCrpBit3 ZeroBias Random

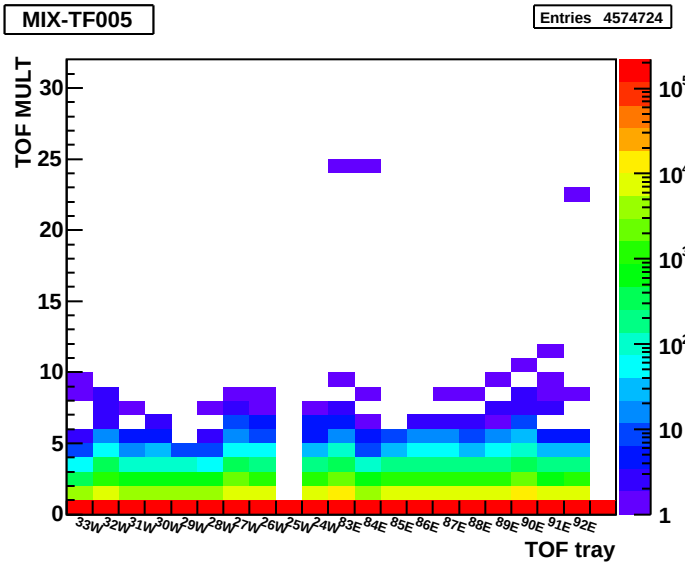

Unused (ch7)
Entries 1742752

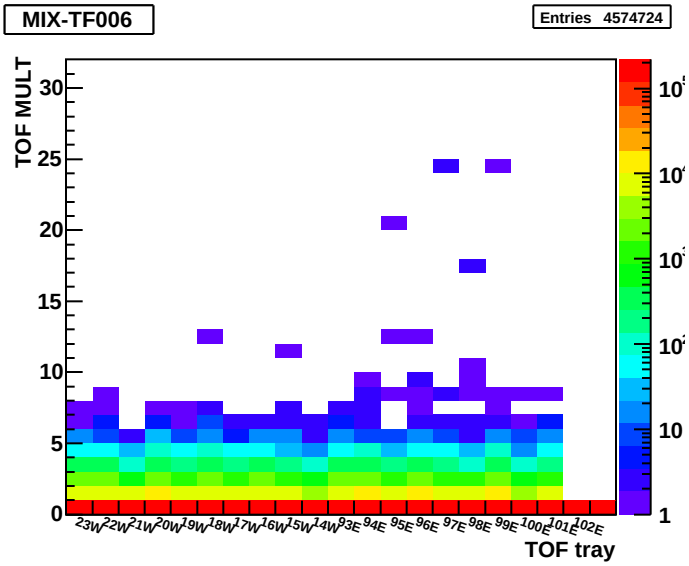

MIX-TF001
Entries 4574724
TOF MULT
TOF tray

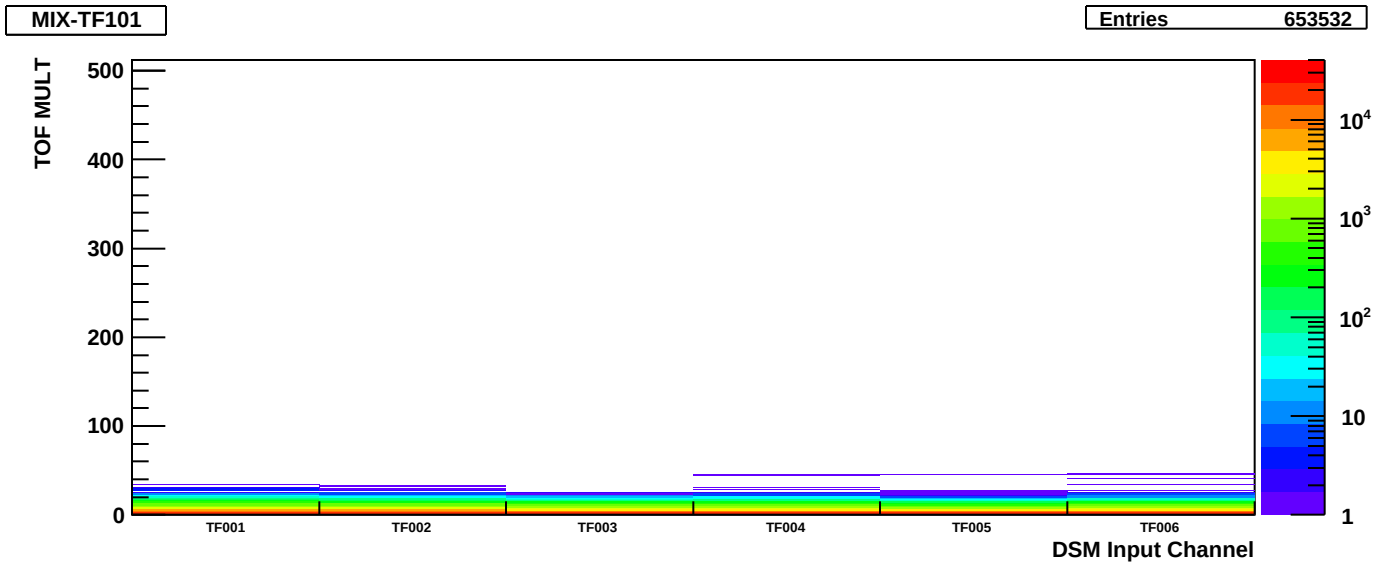

MIX-TF002
Entries 4574724
TOF MULT
TOF tray

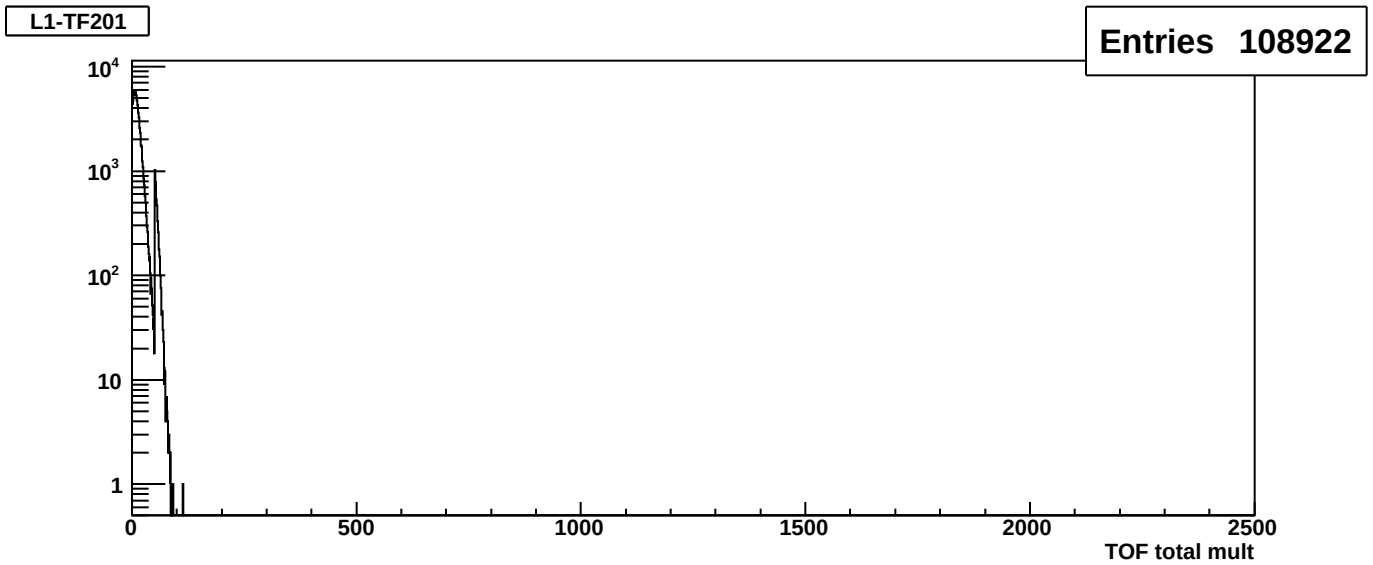

MIX-TF003
Entries 4574724
TOF MULT
TOF tray

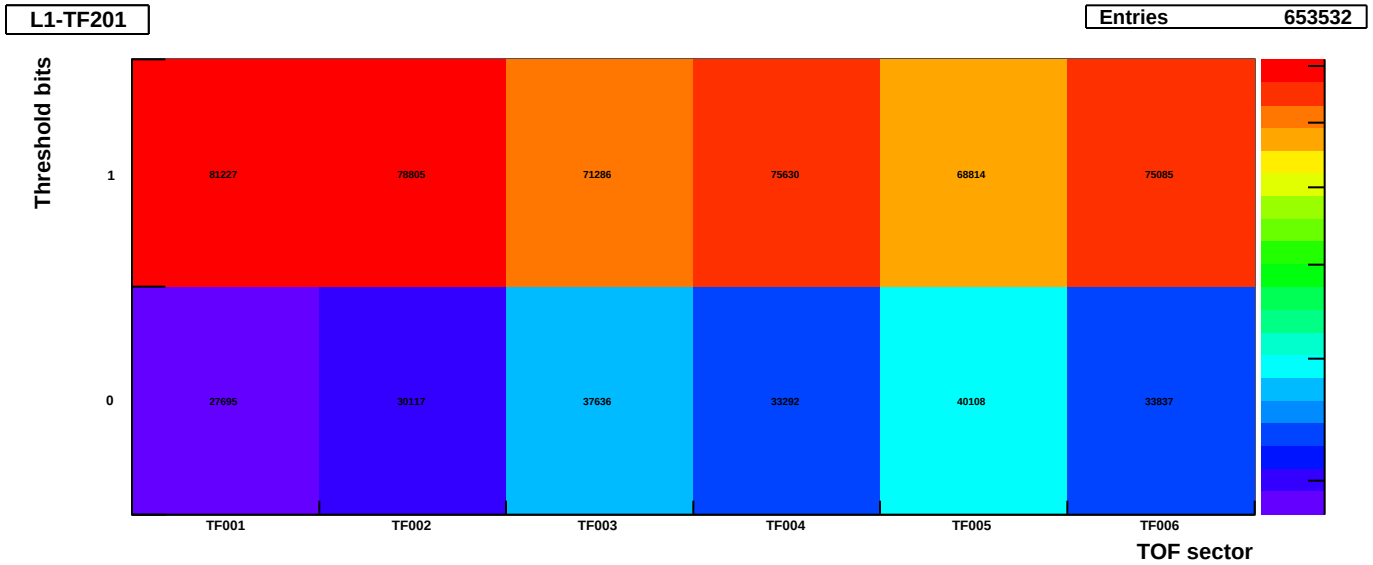

MIX-TF004
Entries 4574724
TOF MULT
TOF tray

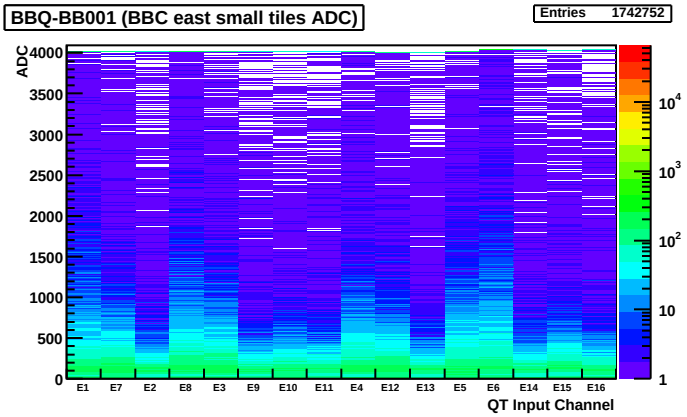

MIX-TF005
Entries 4574724
TOF MULT
TOF tray

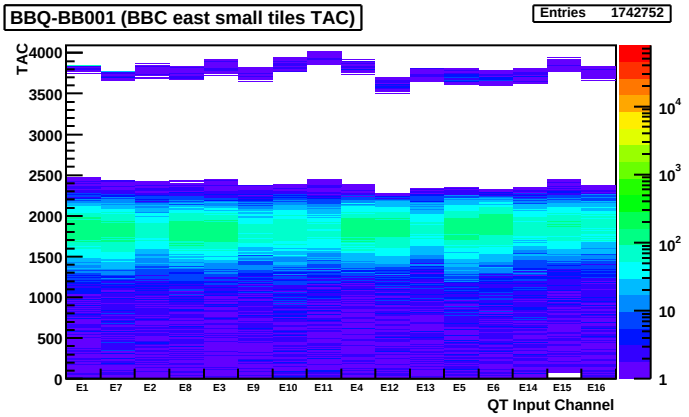

MIX-TF006
Entries 4574724
TOF MULT
TOF tray

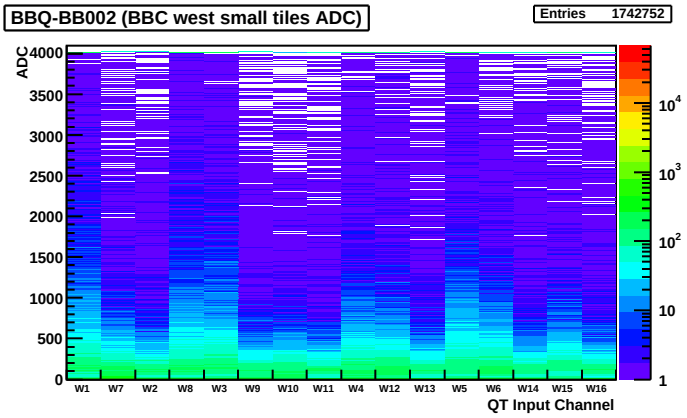

MIX-TF101
Entries 653532
TOF MULT
500
400
300
200
100
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^4
10^3
10^2
10
1

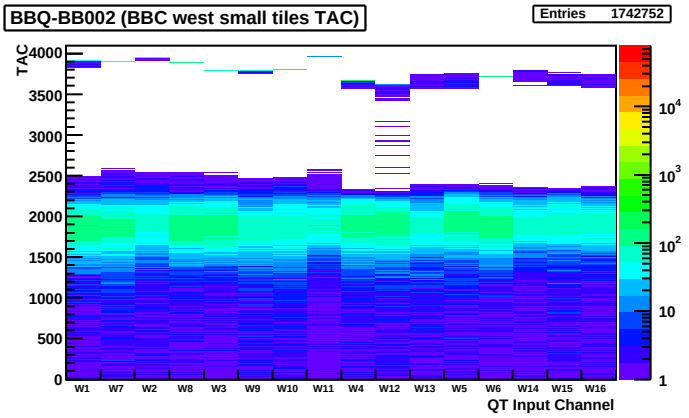

L1-TF201
Entries 108922
10^4
10^3
10^2
10
1
0
500
1000
1500
2000
2500
TOF total mult

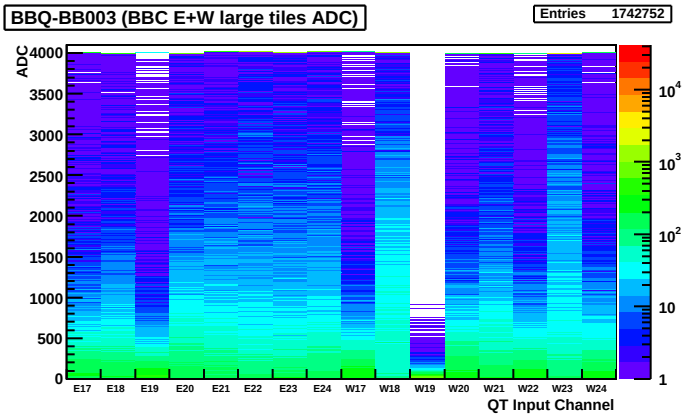

L1-TF201
Entries 653532
Threshold bits
1
0
81227
78805
71286
75630
68814
75085
27695
30117
37636
33292
40108
33837
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector

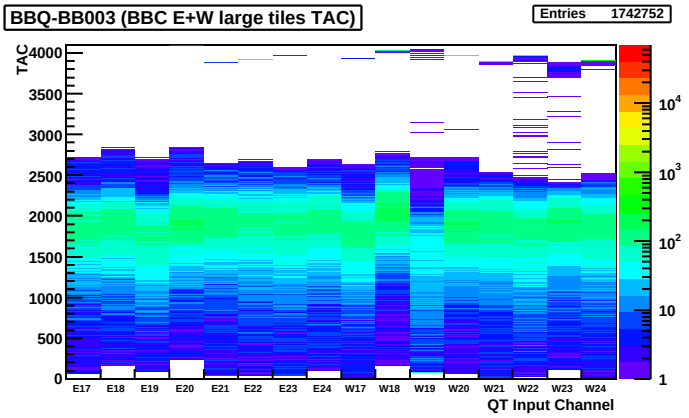

BBQ-BB001 (BBC east small tiles ADC)
Entries 1742752
ADC
QT Input Channel

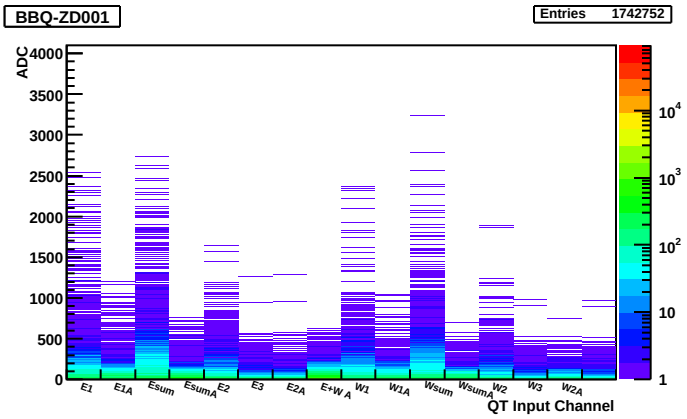

BBQ-BB001 (BBC east small tiles TAC)
Entries 1742752
TAC
QT Input Channel

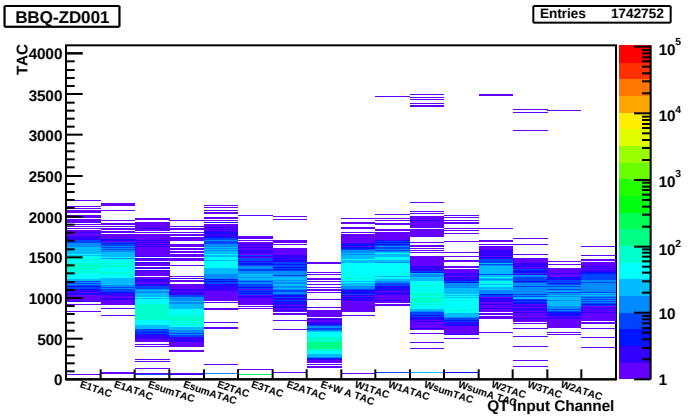

BBQ-BB002 (BBC west small tiles ADC)
Entries 1742752
ADC
QT Input Channel

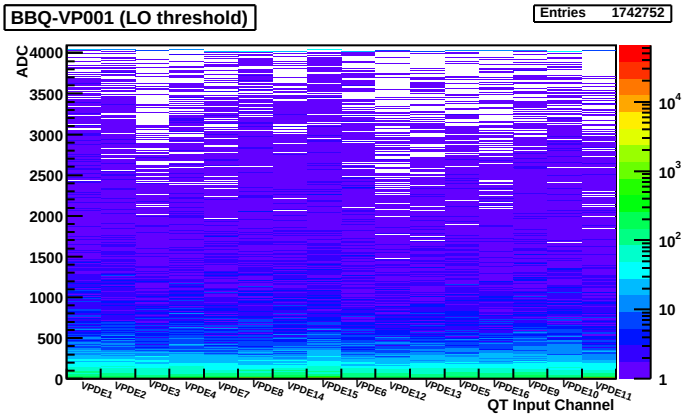

BBQ-BB002 (BBC west small tiles TAC)
Entries 1742752
TAC
QT Input Channel

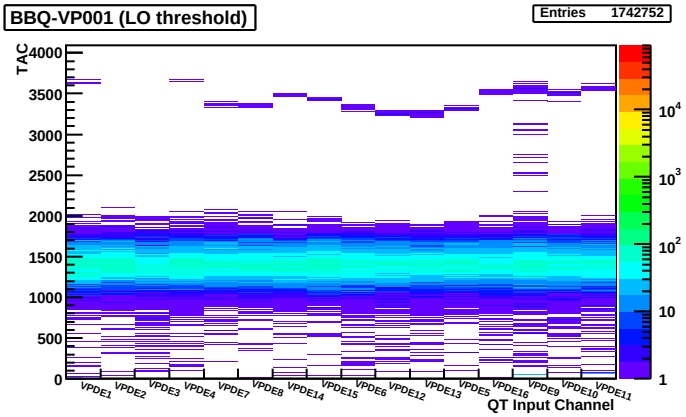

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 1742752
ADC
QT Input Channel

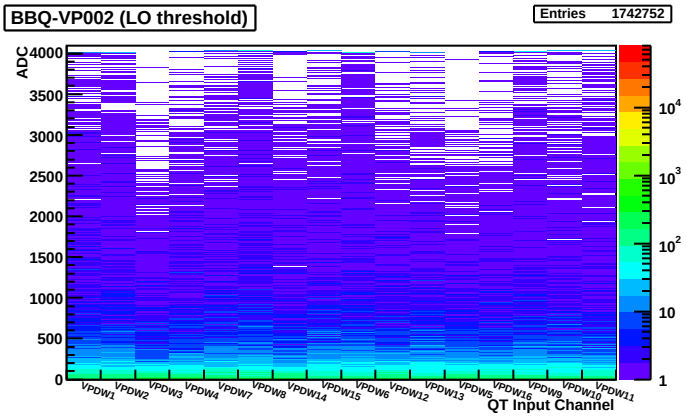

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 1742752
TAC
QT Input Channel

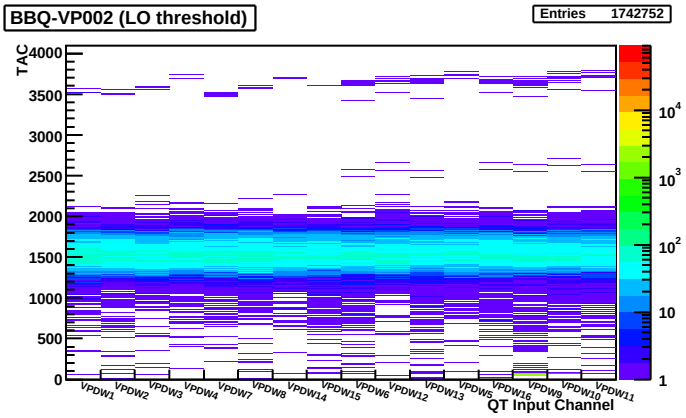

BBQ-ZD001
Entries 1742752
ADC
QT Input Channel

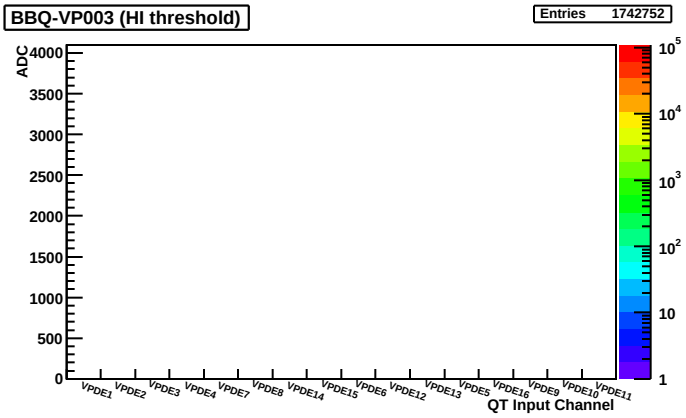

BBQ-ZD001
Entries 1742752
TAC
QT Input Channel

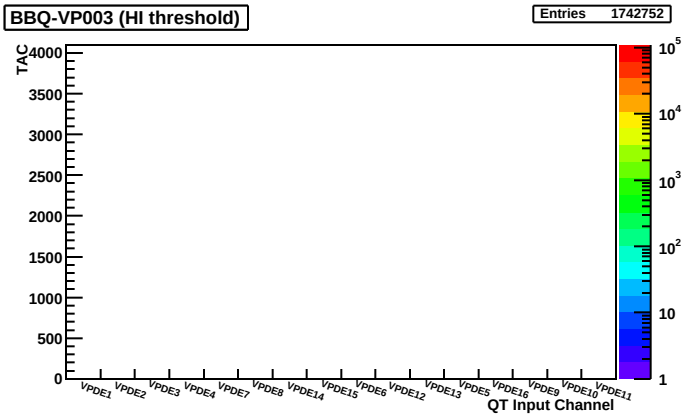

BBQ-VP001 (LO threshold)
Entries 1742752
ADC
QT Input Channel

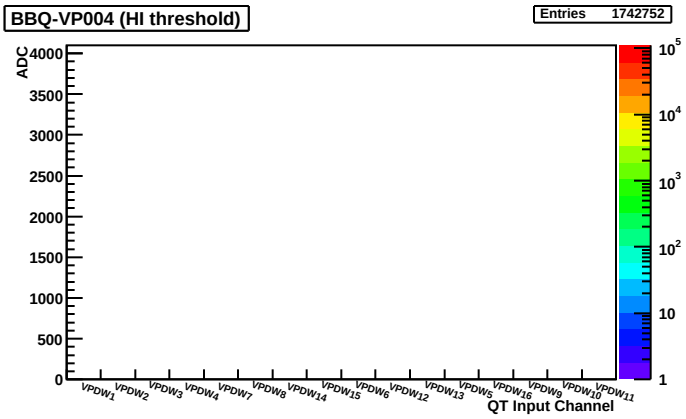

BBQ-VP001 (LO threshold)
Entries 1742752
TAC
QT Input Channel

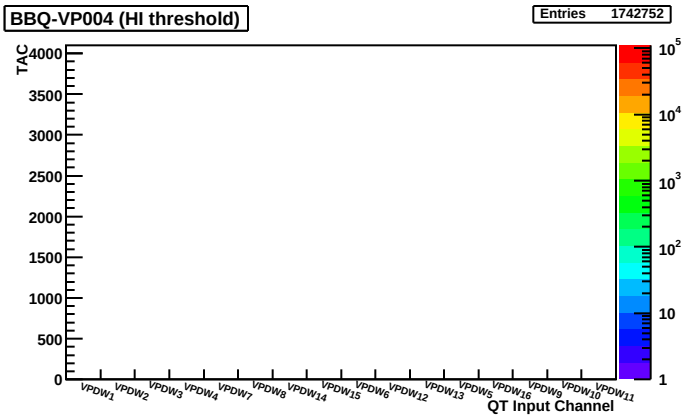

BBQ-VP002 (LO threshold)
Entries 1742752
ADC
QT Input Channel

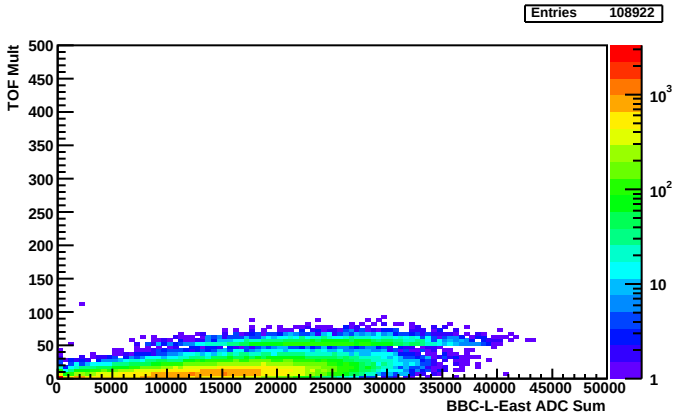

BBQ-VP002 (LO threshold)
Entries 1742752
TAC
QT Input Channel

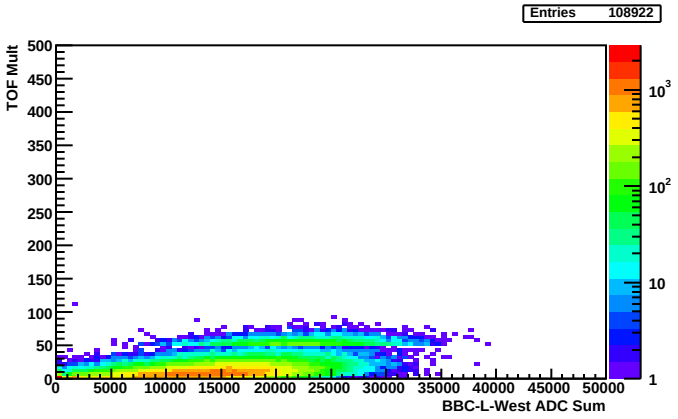

BBQ-VP003 (HI threshold)
Entries 1742752
ADC
QT Input Channel

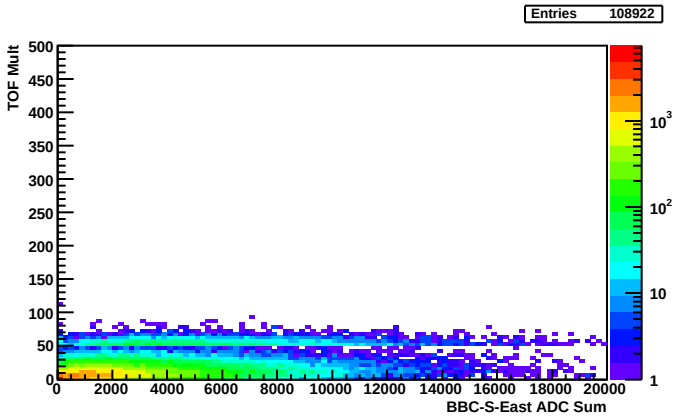

BBQ-VP003 (HI threshold)
Entries 1742752
TAC
QT Input Channel

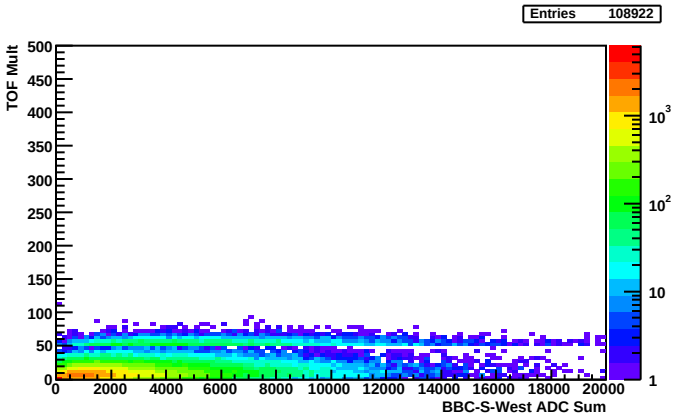

BBQ-VP004 (HI threshold)
Entries 1742752
ADC
QT Input Channel

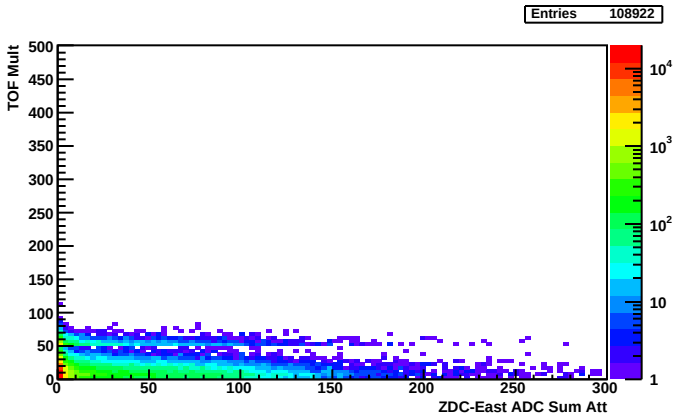

BBQ-VP004 (HI threshold)
Entries 1742752
TAC
QT Input Channel

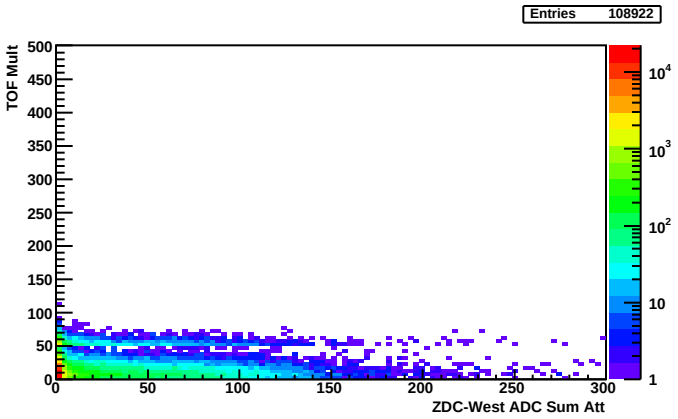

Entries 108922
TOF Mult
BBC-L-East ADC Sum

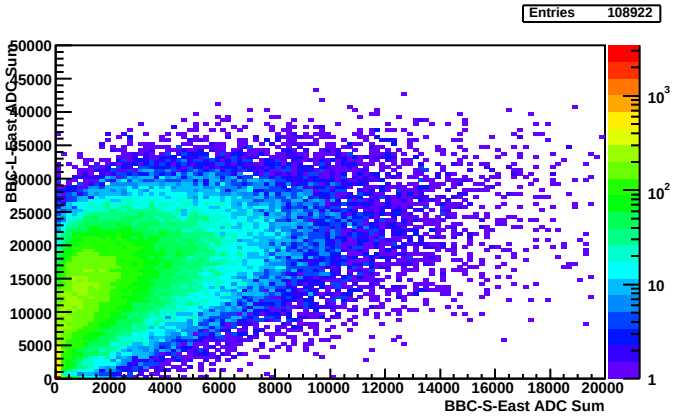

Entries 108922
TOF Mult
BBC-L-West ADC Sum

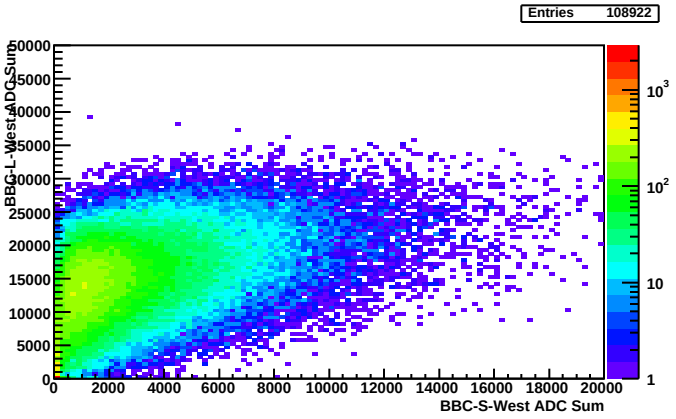

Entries 108922
TOF Mult
BBC-S-East ADC Sum

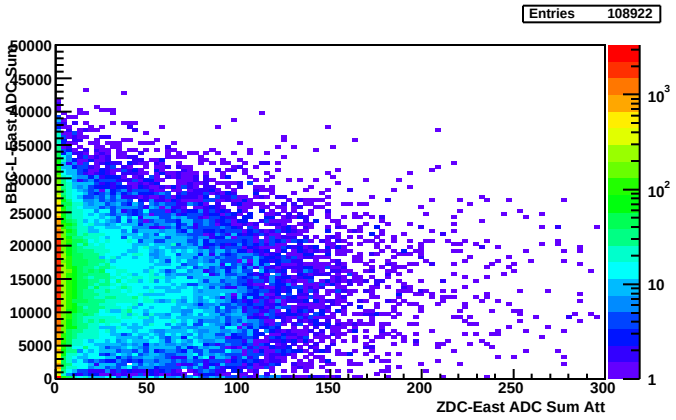

Entries 108922
TOF Mult
BBC-S-West ADC Sum

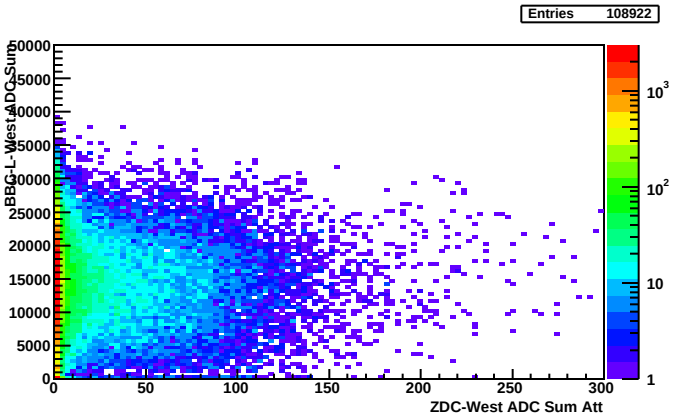

Entries 108922
TOF Mult
ZDC-East ADC Sum Att

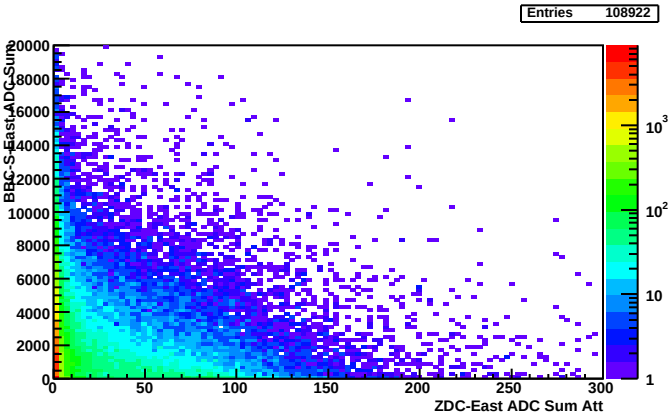

Entries 108922
TOF Mult
ZDC-West ADC Sum Att

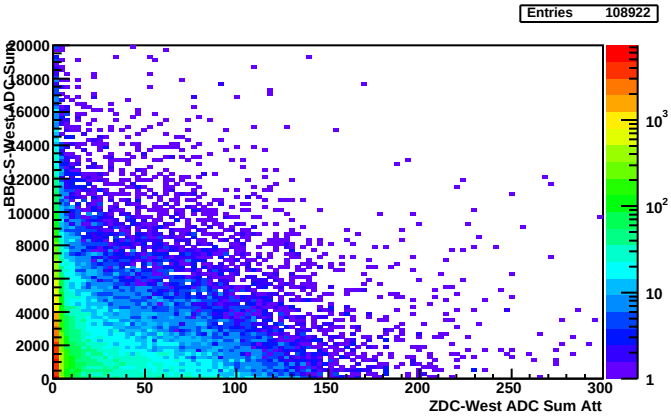

Entries 108922
BBC-L-East ADC Sum
BBC-S-East ADC Sum

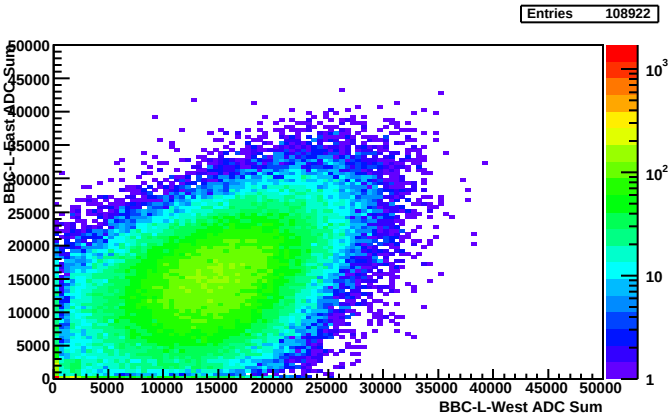

Entries 108922
BBC-L-West ADC Sum
BBC-S-West ADC Sum

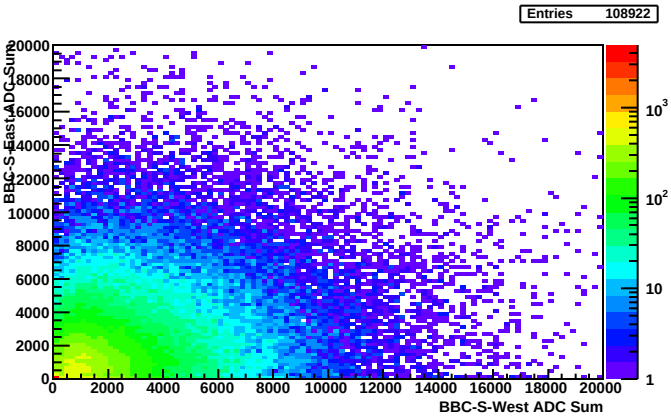

Entries 108922
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

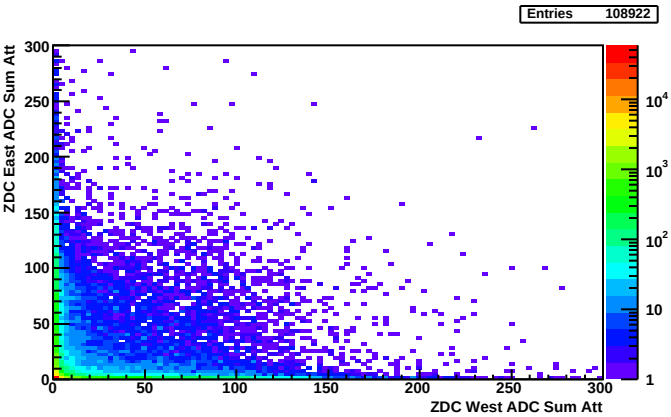

Entries 108922
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

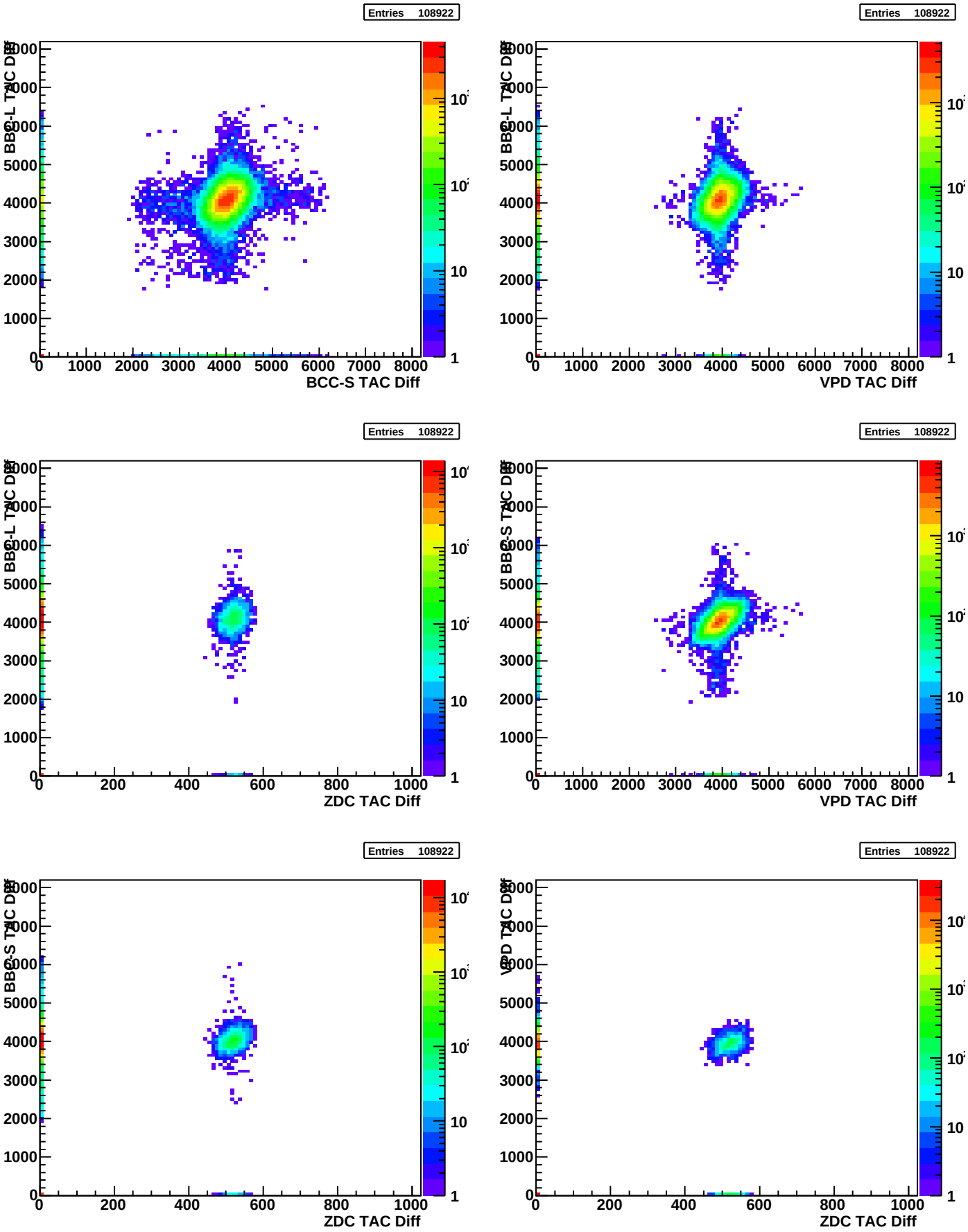

Entries 108922
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

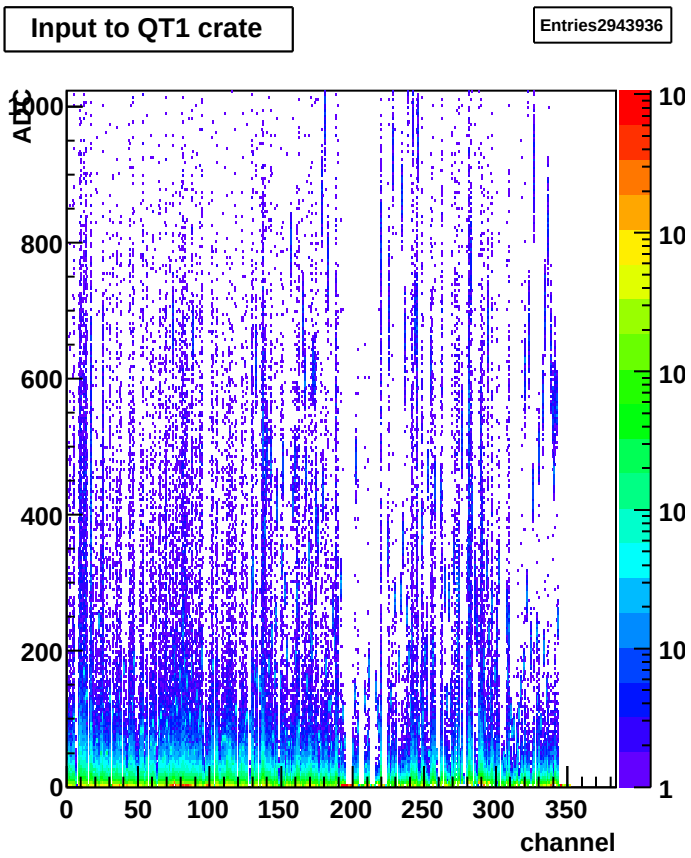

Entries 108922
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

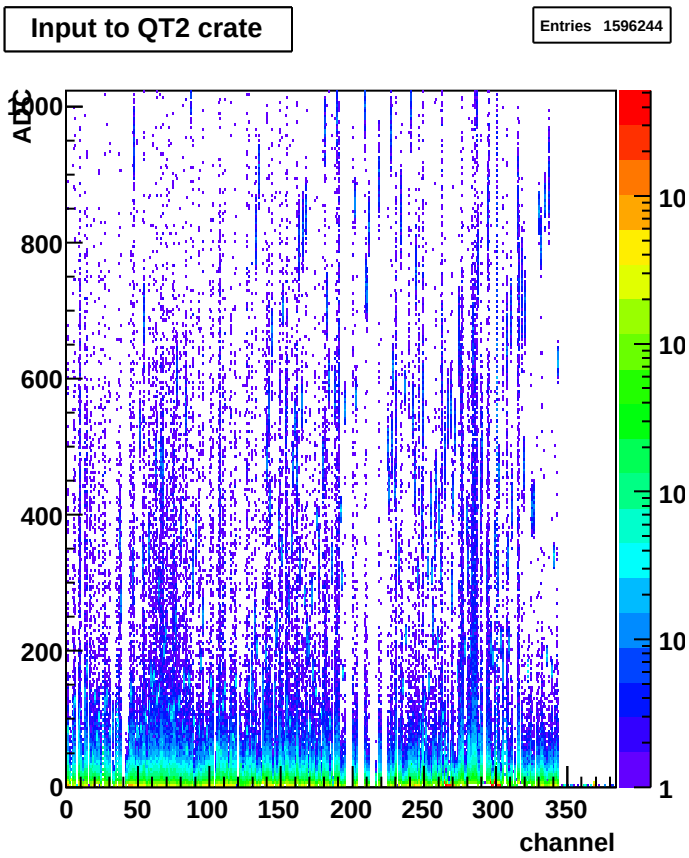

Entries 108922
BBC-L-East ADC Sum
BBC-L-West ADC Sum

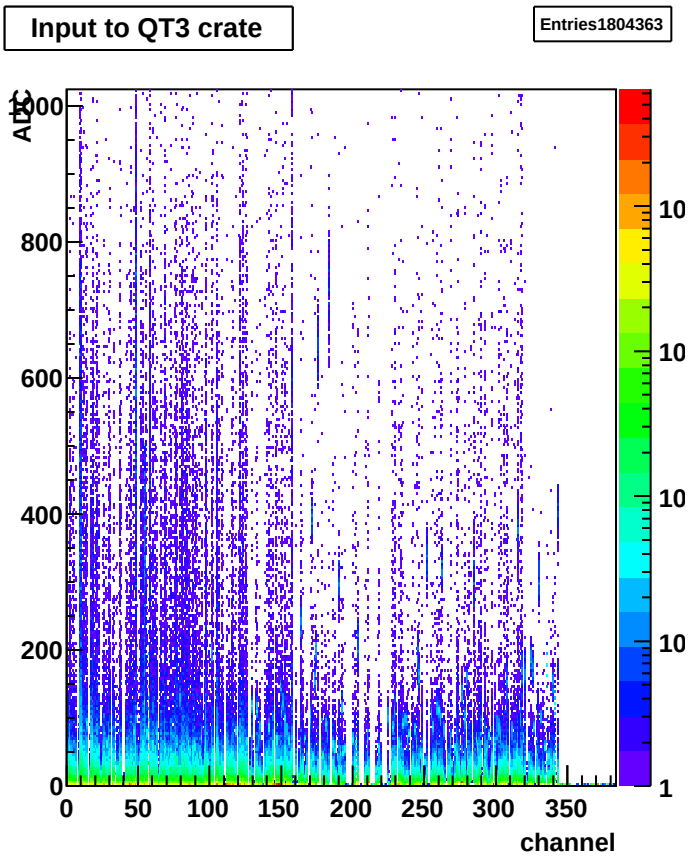

Entries 108922
BBC-S-East ADC Sum
BBC-S-West ADC Sum

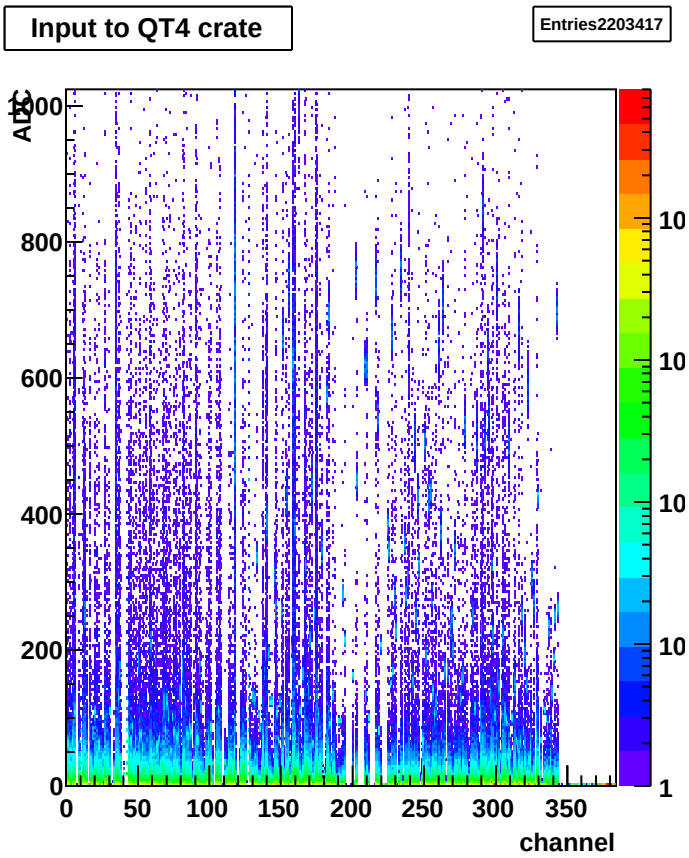

Entries 108922
ZDC East ADC Sum Att
ZDC West ADC Sum Att

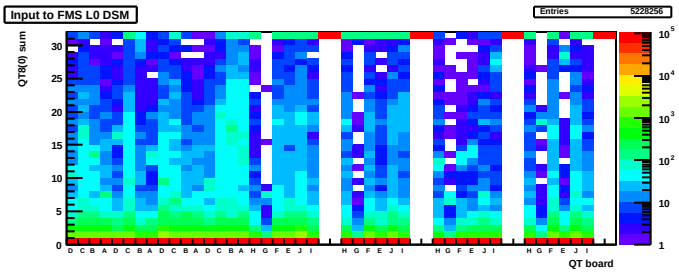

Entries 108922
BBC-L TAC Diff
BCC-S TAC Diff
Entries 108922
BBC-L TAC Diff
VPD TAC Diff
Entries 108922
BBC-L TAC Diff
ZDC TAC Diff
Entries 108922
BBC-S TAC Diff
VPD TAC Diff
Entries 108922
BBC-S TAC Diff
ZDC TAC Diff
Entries 108922
VPD TAC Diff
ZDC TAC Diff

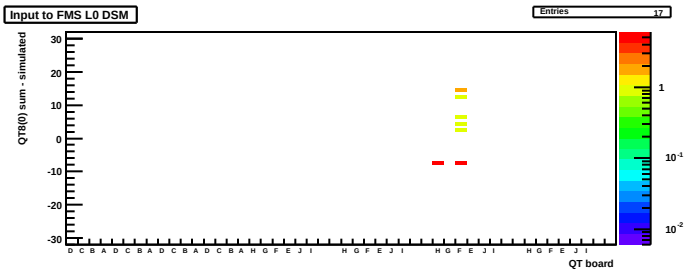

Input to QT1 crate
Entries2943936
ADC
channel

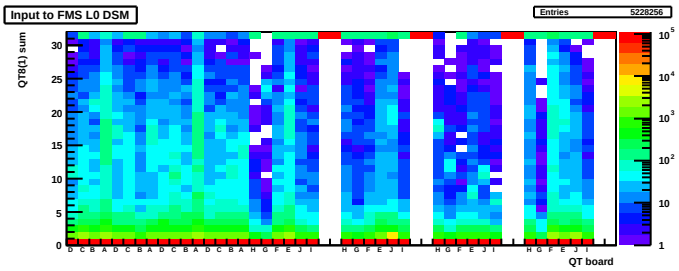

Input to QT2 crate
Entries 1596244
ADC
channel

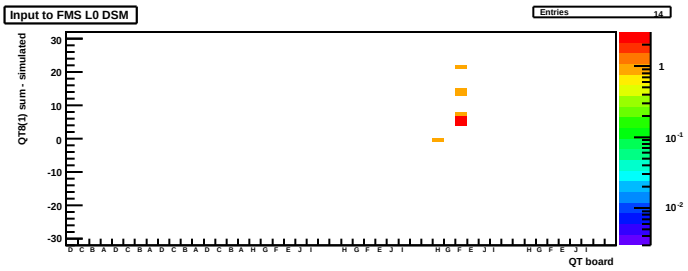

Input to QT3 crate
Entries1804363
ADC
channel

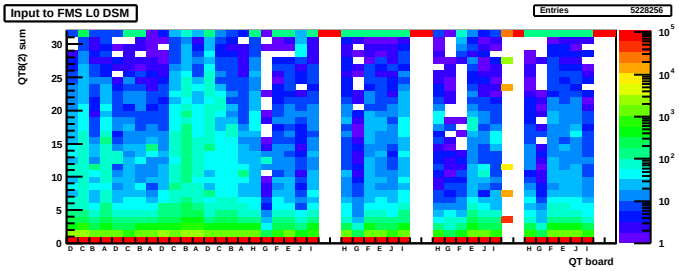

Input to QT4 crate
Entries2203417
ADC
channel

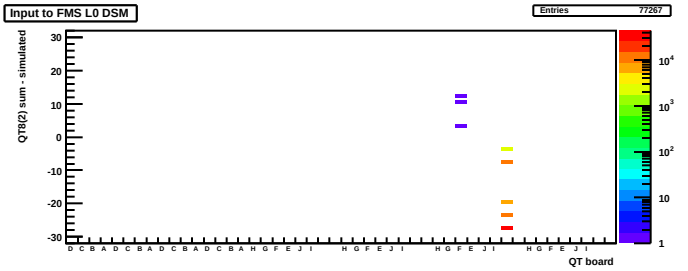

Input to FMS L0 DSM
Entries 5228256
QT8(0) sum
QT board

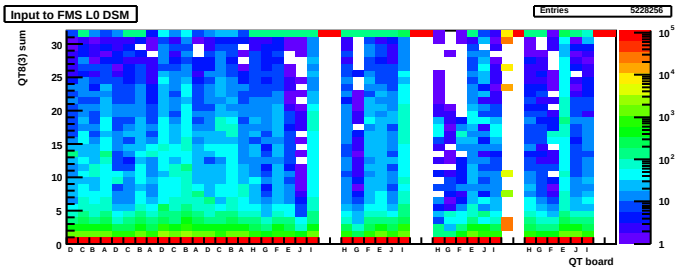

Input to FMS L0 DSM
Entries 17
QT8(0) sum - simulated
QT board

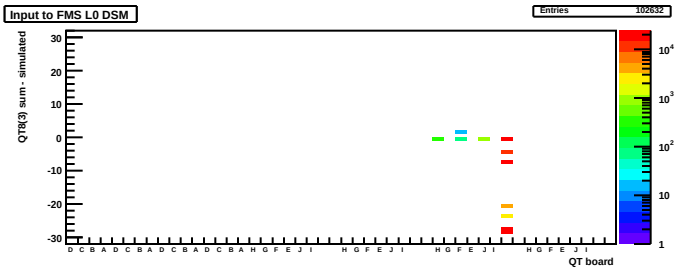

Input to FMS L0 DSM
Entries 5228256
QT8(1) sum
QT board

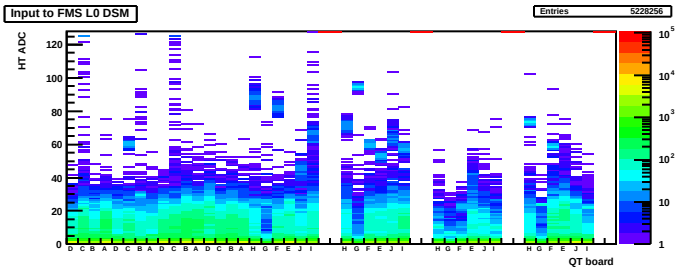

Input to FMS L0 DSM
Entries 14
QT8(1) sum - simulated
QT board

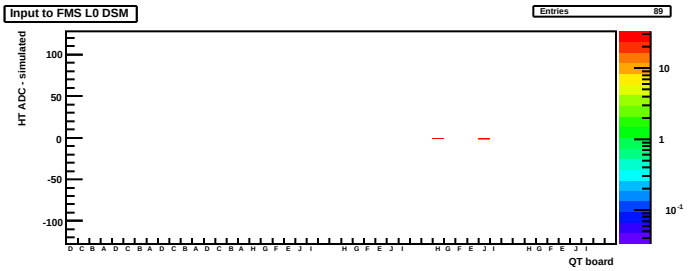

Input to FMS L0 DSM
Entries 5228256
QT8(2) sum
QT board

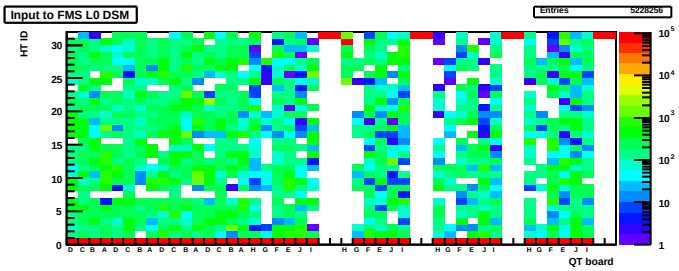

Input to FMS L0 DSM
Entries 77267
QT8(2) sum - simulated
QT board

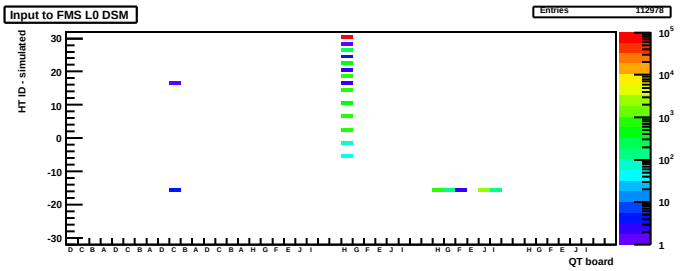

Input to FMS L0 DSM
Entries 5228256
QT8(3) sum
QT board

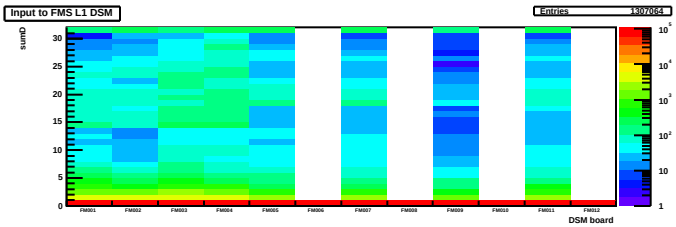

Input to FMS L0 DSM
Entries 102632
QT8(3) sum - simulated
QT board

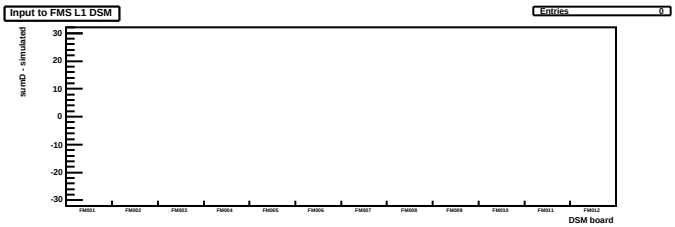

Input to FMS L0 DSM
Entries 5228256
HT ADC
QT board

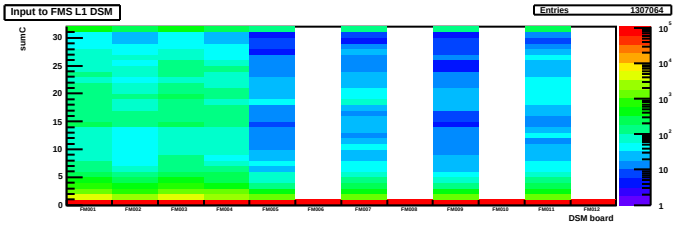

Input to FMS L0 DSM
Entries 89
HT ADC - simulated
QT board

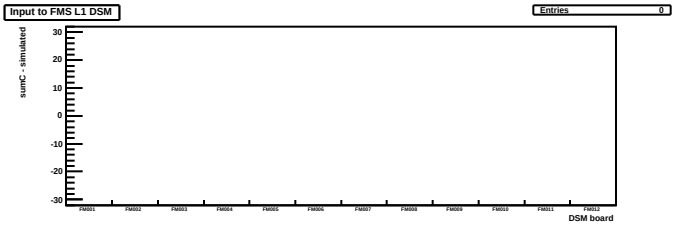

Input to FMS L0 DSM
Entries 5228256
HT ID
QT board

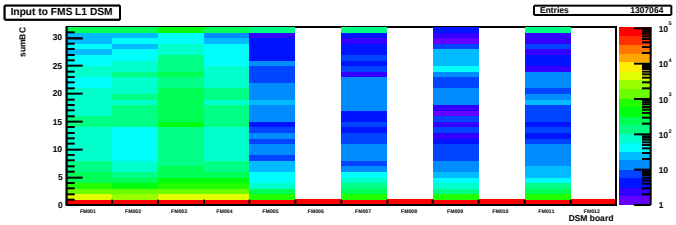

Input to FMS L0 DSM
Entries 112978
HT ID - simulated
QT board

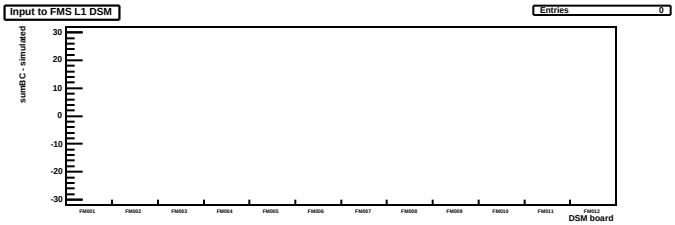

Input to FMS L1 DSM
Entries 1307064
sumD
DSM board

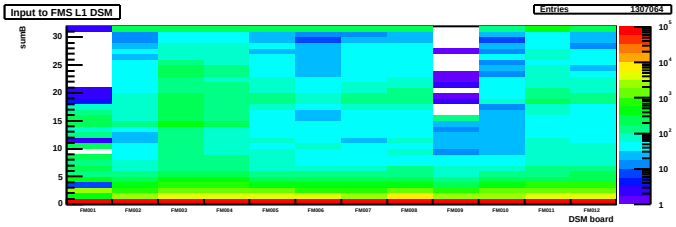

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

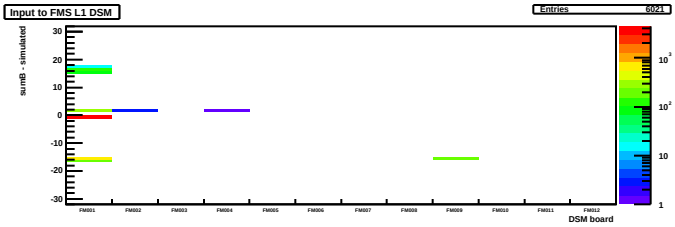

Input to FMS L1 DSM
Entries 1307064
sumC
DSM board

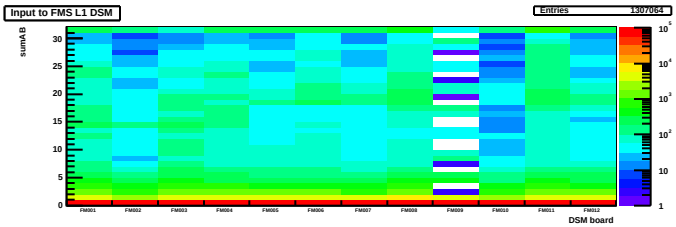

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

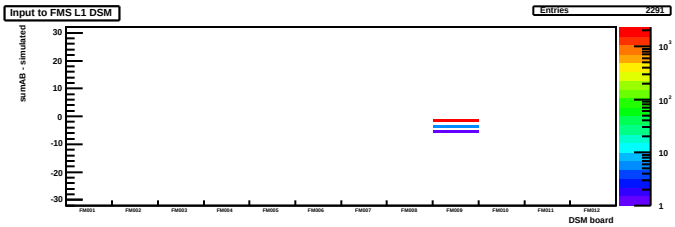

Input to FMS L1 DSM
Entries 1307064
sumBC
DSM board

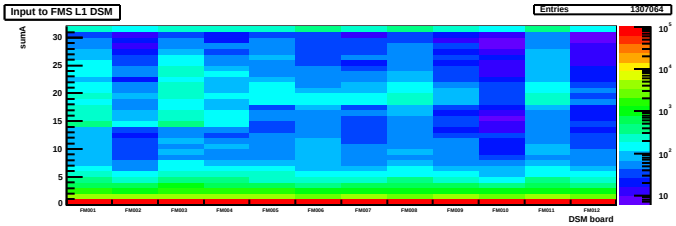

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

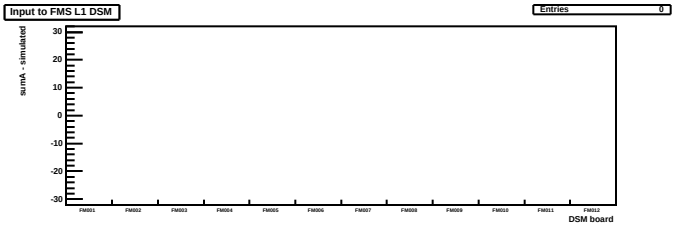

Input to FMS L1 DSM
Entries 1307064
sumB
DSM board

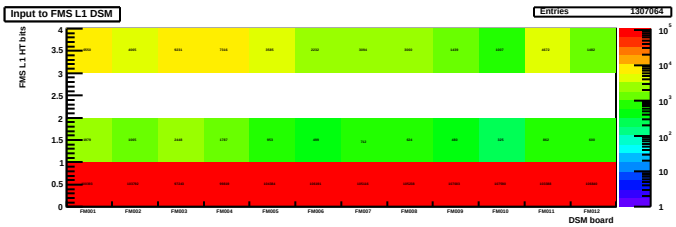

Input to FMS L1 DSM
Entries 6021
sumB - simulated
DSM board

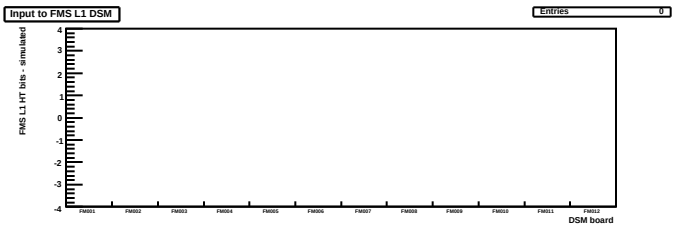

Input to FMS L1 DSM
Entries 1307064
sumAB
DSM board

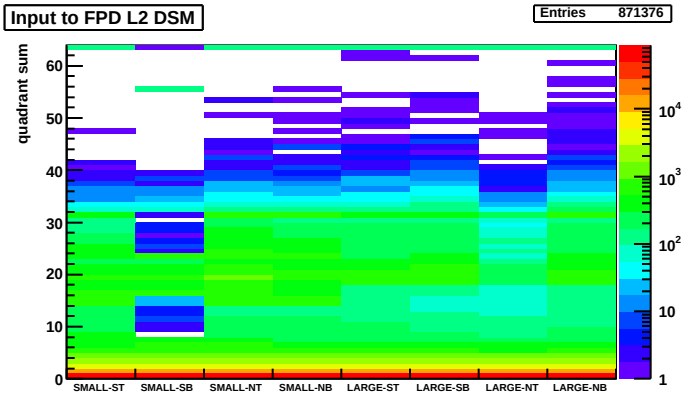

Input to FMS L1 DSM
Entries 2291
sumAB - simulated
DSM board

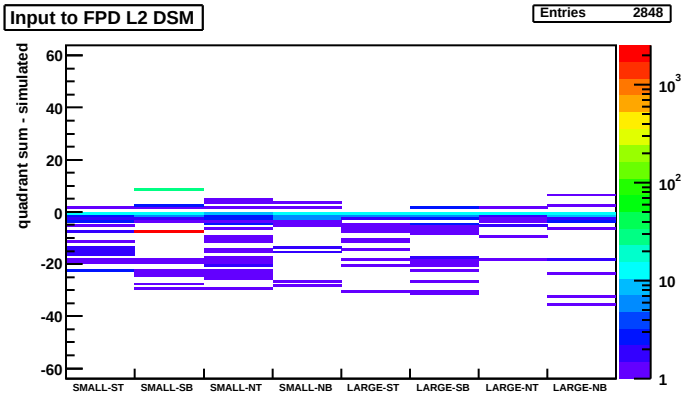

Input to FMS L1 DSM
Entries 1307064
sumA
DSM board

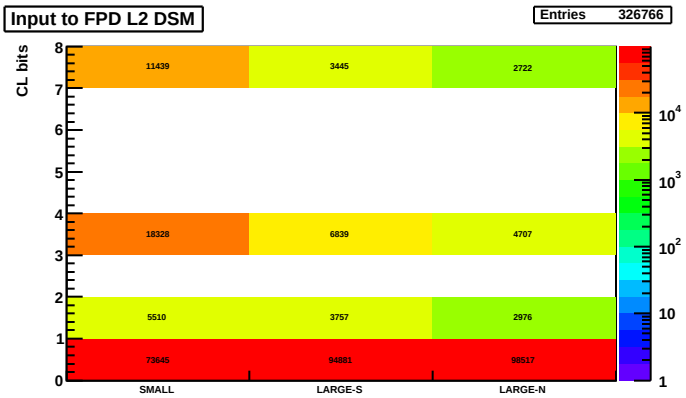

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

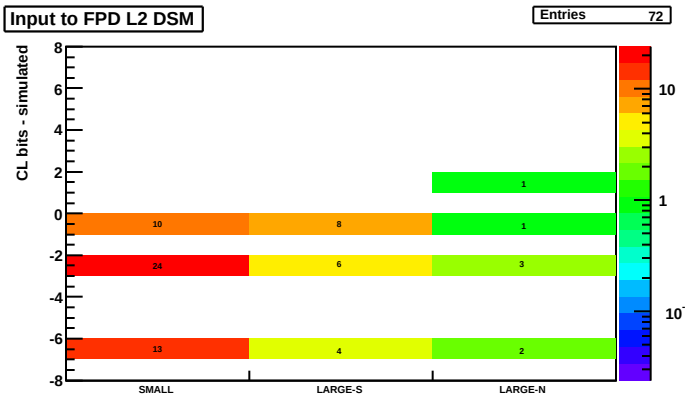

Input to FMS L1 DSM
Entries 1307064
FMS L1 HT bits
DSM board

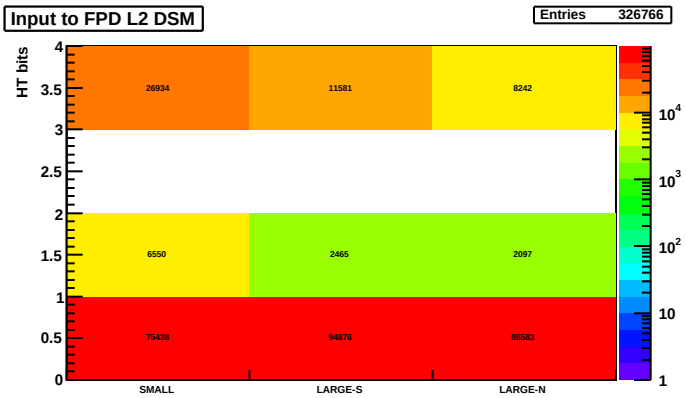

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

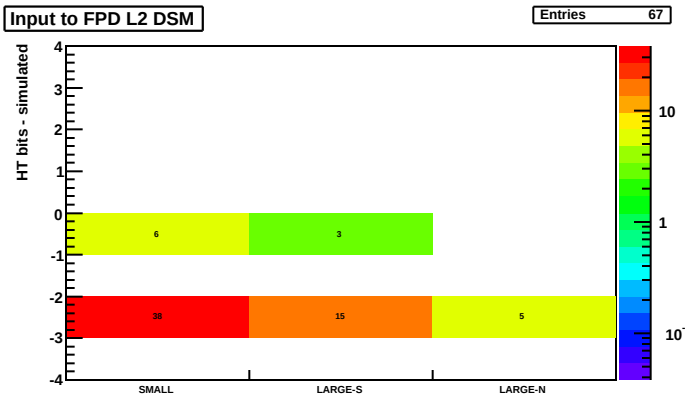

Input to FPD L2 DSM
Entries 871376
quadrant sum
SMALL-ST SMALL-SB SMALL-NT SMALL-NB LARGE-ST LARGE-SB LARGE-NT LARGE-NB

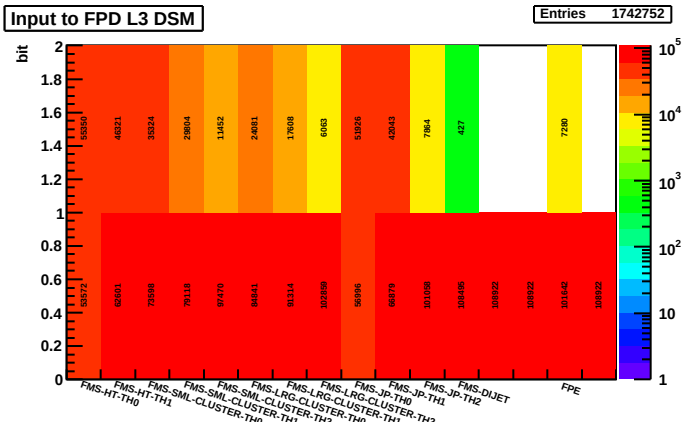

Input to FPD L2 DSM
Entries 2848
quadrant sum - simulated
SMALL-ST SMALL-SB SMALL-NT SMALL-NB LARGE-ST LARGE-SB LARGE-NT LARGE-NB

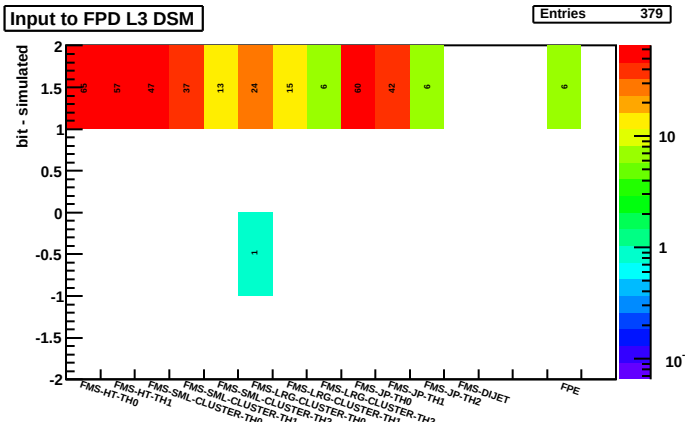

Input to FPD L2 DSM
Entries 326766
CL bits
11439 3445 2722
18328 6839 4707
5510 3757 2976
73645 94881 98517
SMALL LARGE-S LARGE-N

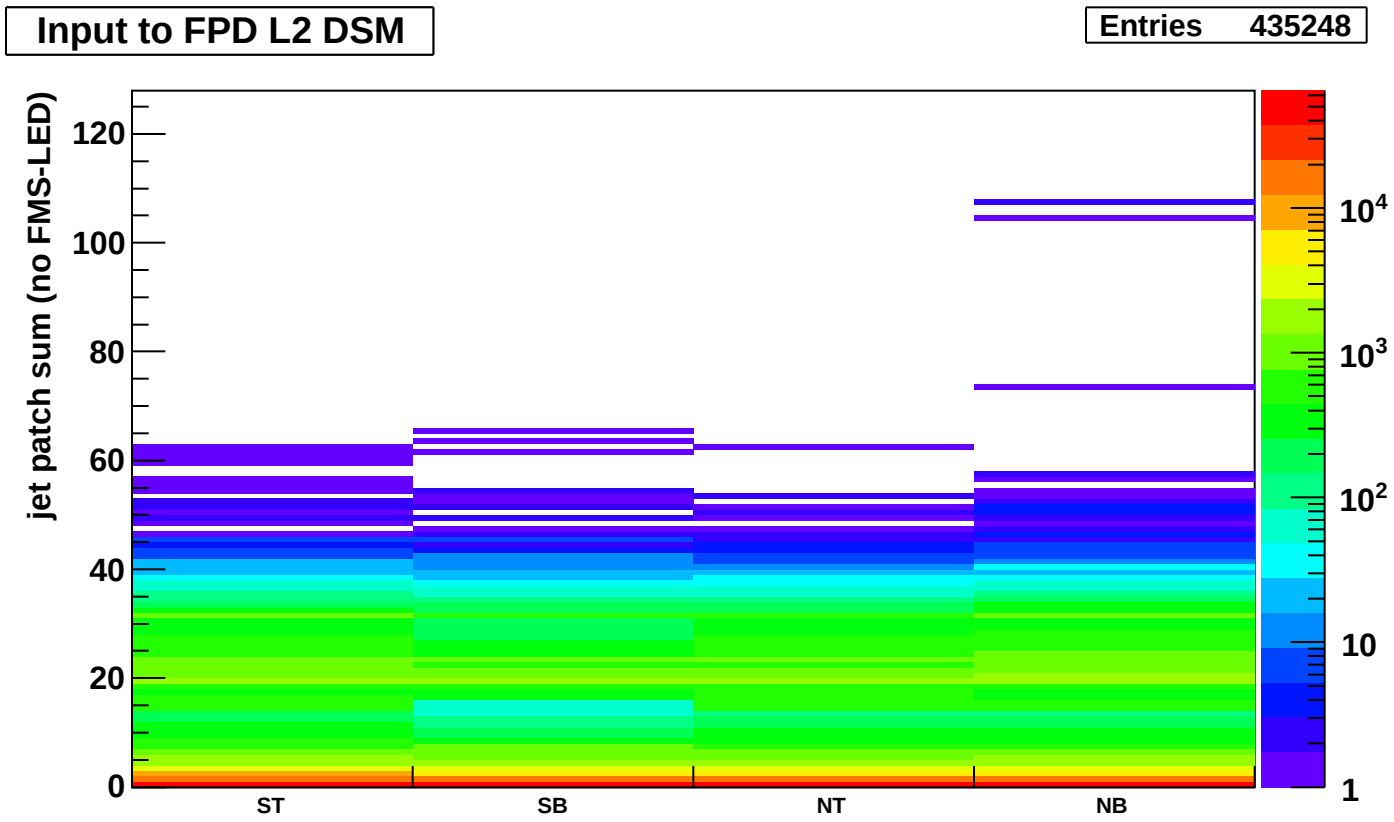

Input to FPD L2 DSM
Entries 72
CL bits - simulated
1
10 8 1
24 6 3
13 4 2
SMALL LARGE-S LARGE-N

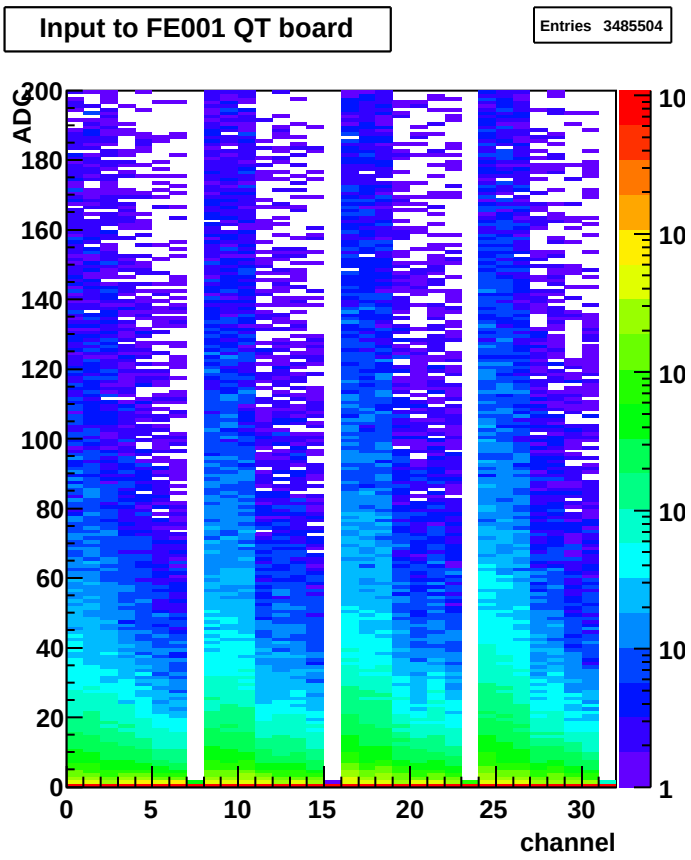

Input to FPD L2 DSM
Entries 326766
HT bits
26934 11581 8242
6550 2465 2097
75438 94876 98583
SMALL LARGE-S LARGE-N

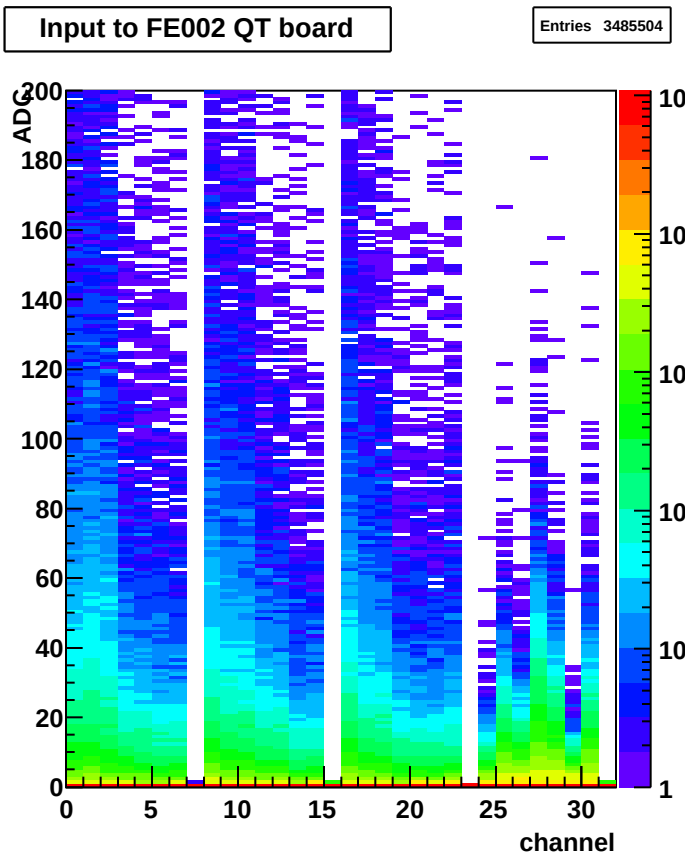

Input to FPD L2 DSM
Entries 67
HT bits - simulated
6 3
38 15 5
SMALL LARGE-S LARGE-N

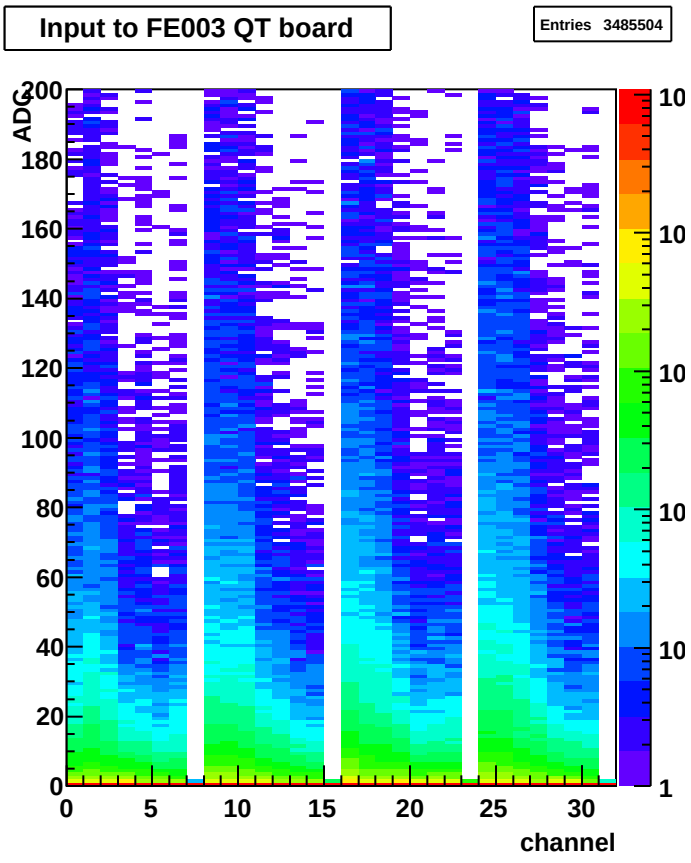

Input to FPD L3 DSM
Entries 1742752
bit
FMS-HT-TH0 FMS-HT-TH1 FMS-SML-CLUSTER-TH0 FMS-SML-CLUSTER-TH1 FMS-SML-CLUSTER-TH2 FMS-LRG-CLUSTER-TH0 FMS-LRG-CLUSTER-TH1 FMS-LRG-CLUSTER-TH2 FMS-JP-TH0 FMS-JP-TH1 FMS-JP-TH2 FMS-DIJET FPE

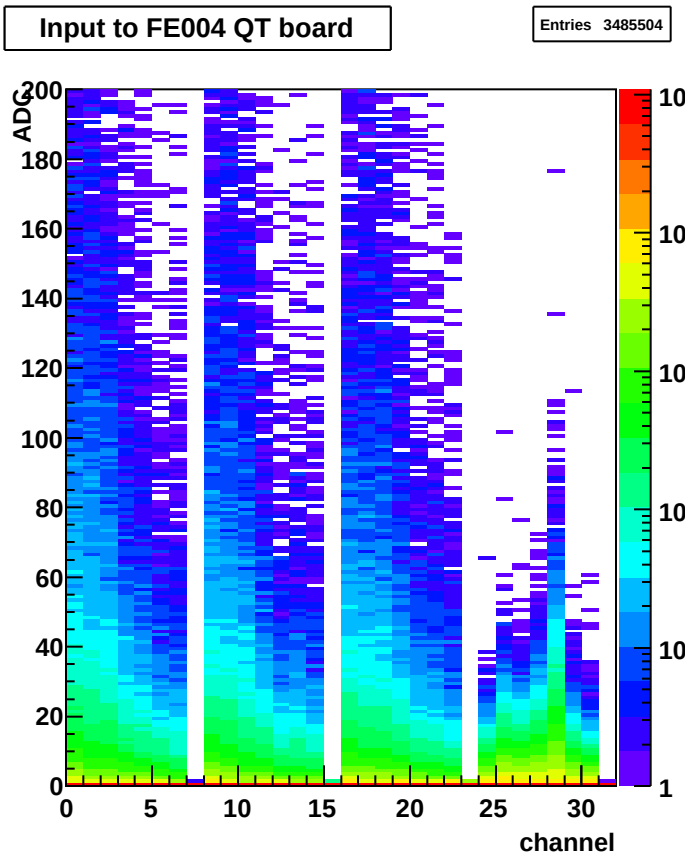

Input to FPD L3 DSM
Entries 379
bit - simulated
FMS-HT-TH0 FMS-HT-TH1 FMS-SML-CLUSTER-TH0 FMS-SML-CLUSTER-TH1 FMS-SML-CLUSTER-TH2 FMS-LRG-CLUSTER-TH0 FMS-LRG-CLUSTER-TH1 FMS-LRG-CLUSTER-TH2 FMS-JP-TH0 FMS-JP-TH1 FMS-JP-TH2 FMS-DIJET FPE

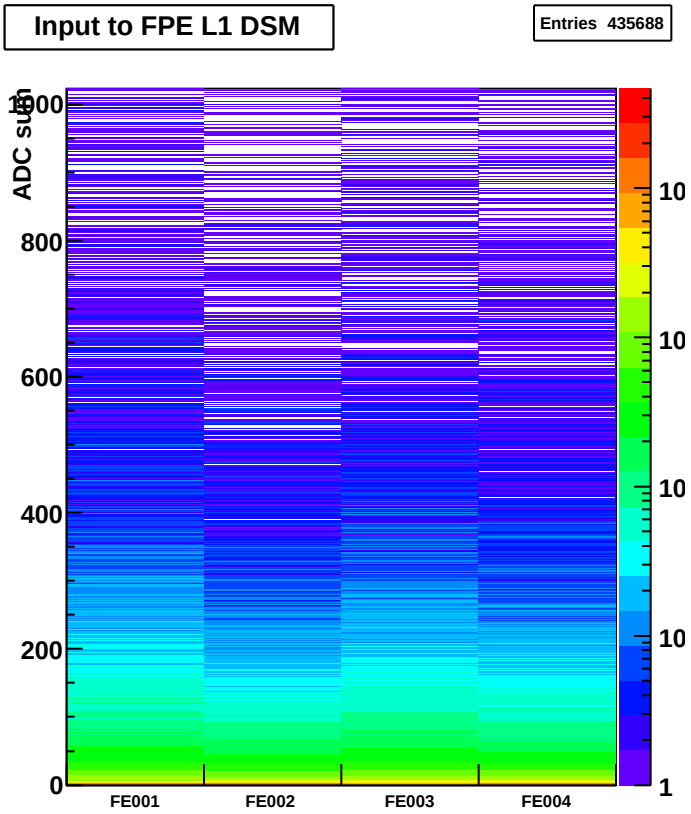

Input to FPD L2 DSM
Entries 435248
jet patch sum (no FMS-LED)
0
20
40
60
80
100
120
ST
SB
NT
NB
1
10
10^2
10^3
10^4

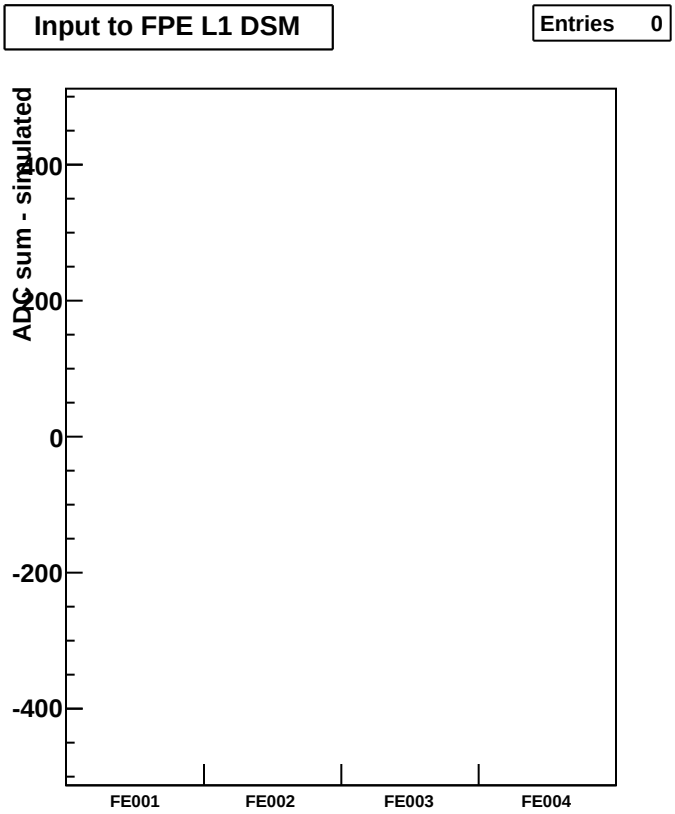

Input to FE001 QT board
Entries 3485504
ADC
channel

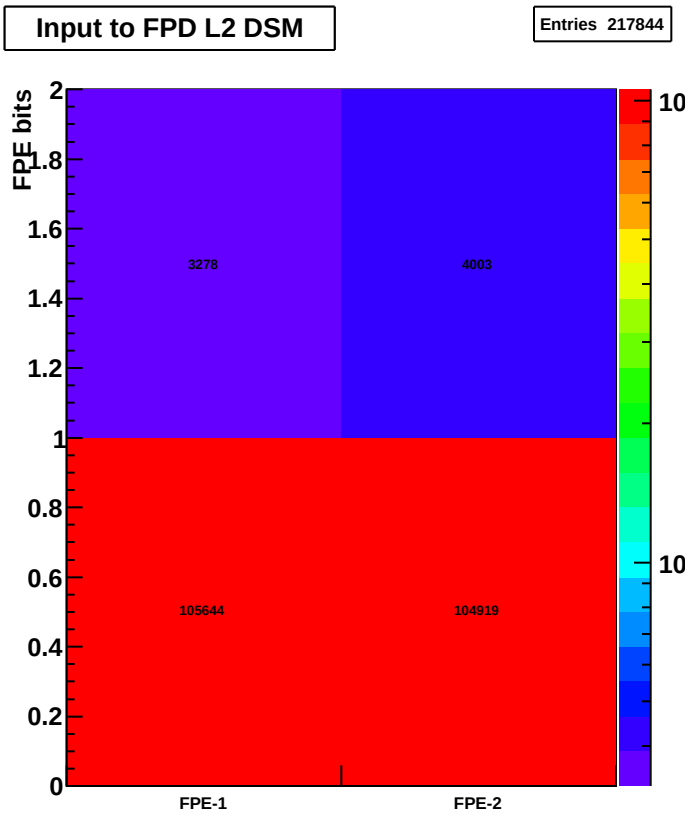

Input to FE002 QT board
Entries 3485504
ADC
channel

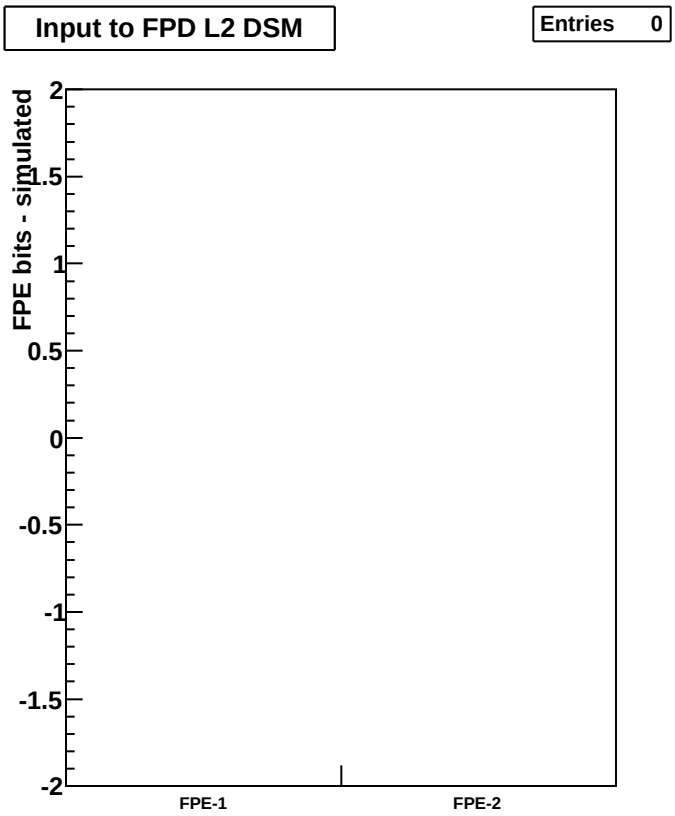

Input to FE003 QT board
Entries 3485504
ADC
channel


Input to FE004 QT board
Entries 3485504
ADC
channel


Input to FPE L1 DSM
Entries 435688
ADC sum
1000
800
600
400
200
0
FE001
FE002
FE003
FE004
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
Entries 217844
FPE bits
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
3278
4003
105644
104919
FPE-1
FPE-2
10
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