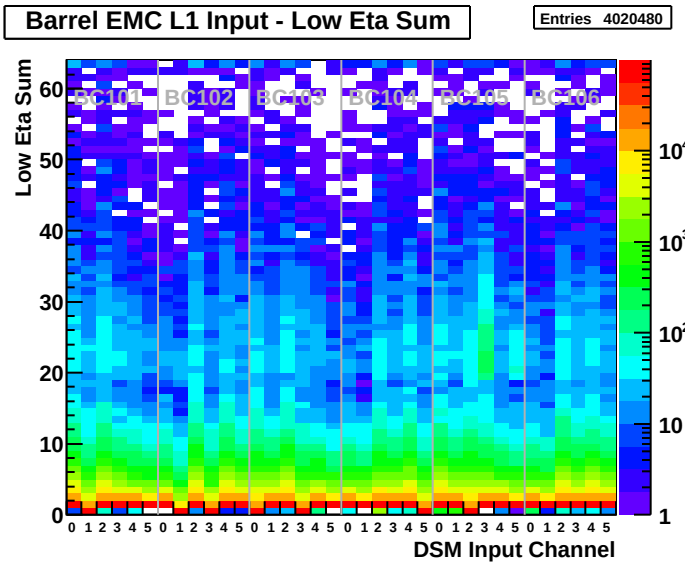
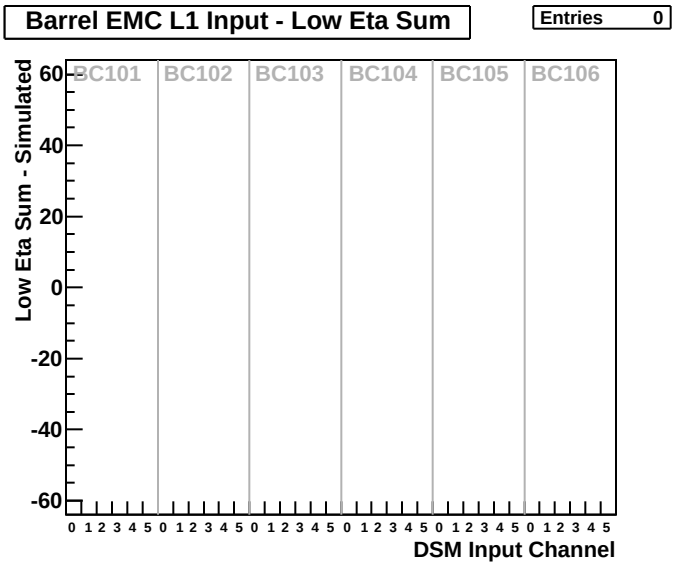
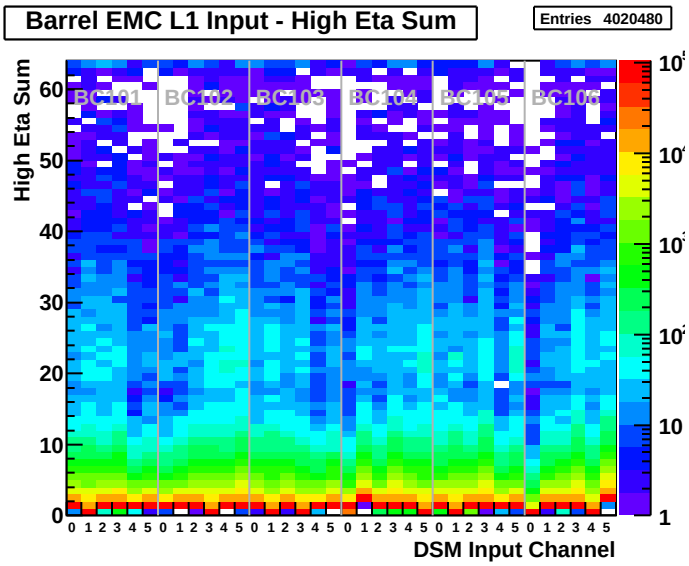
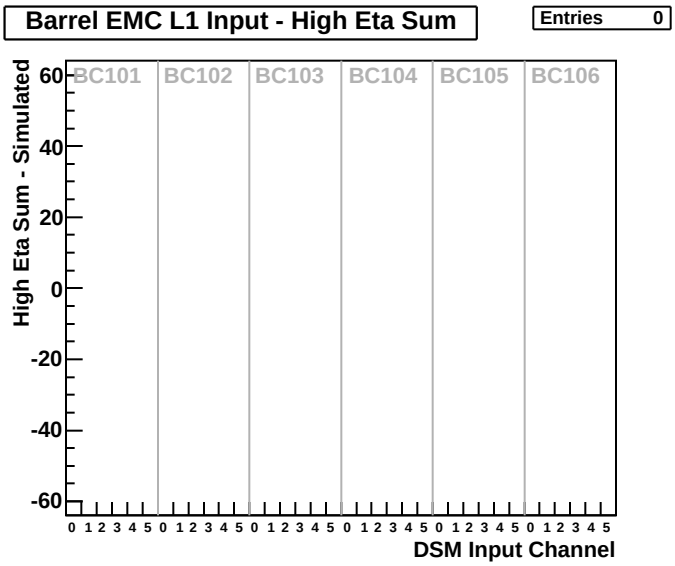
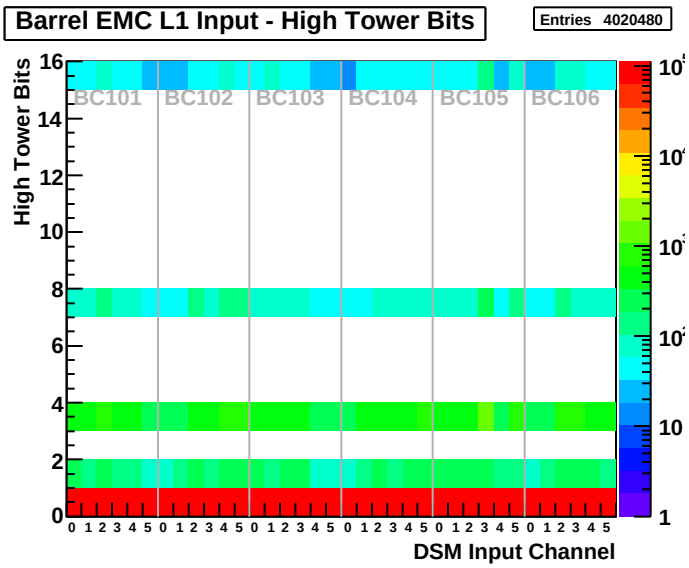
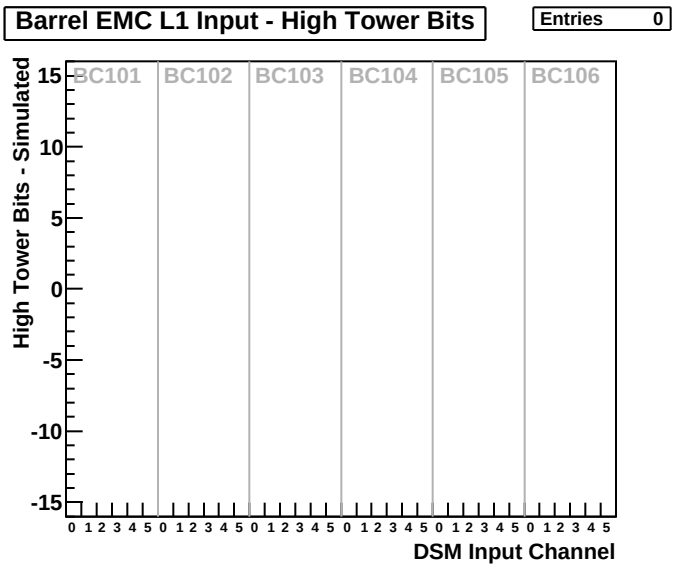

Barrel EMC L1 Input - Low Eta Sum
Entries 4020480
Low Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

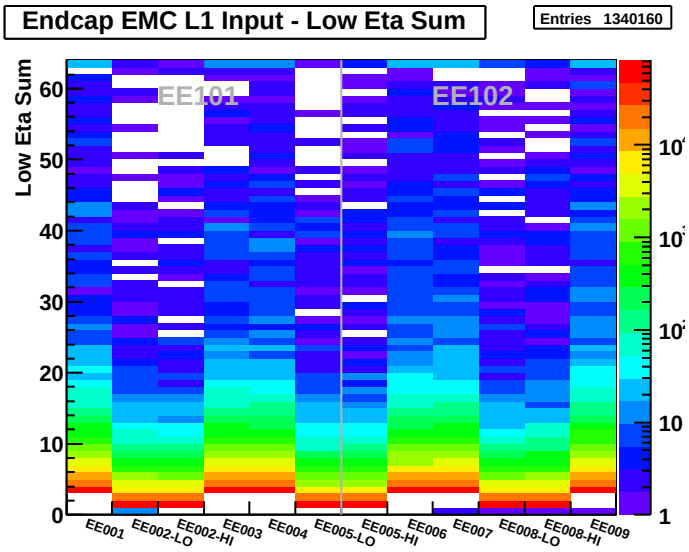

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

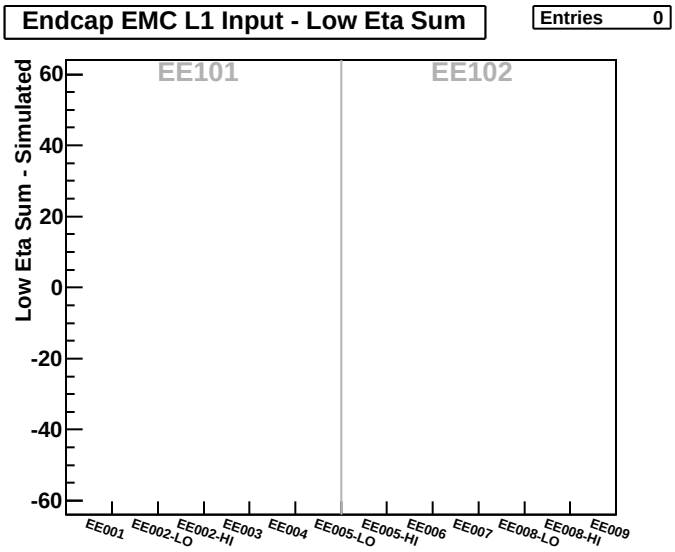

Barrel EMC L1 Input - High Eta Sum
Entries 4020480
High Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

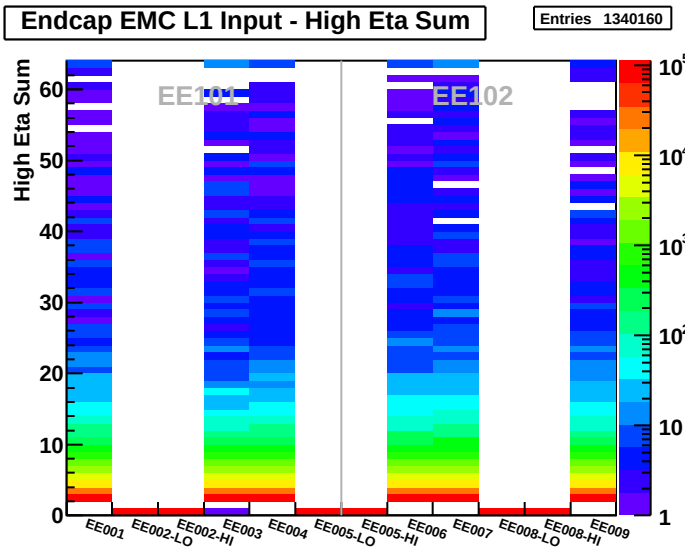

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

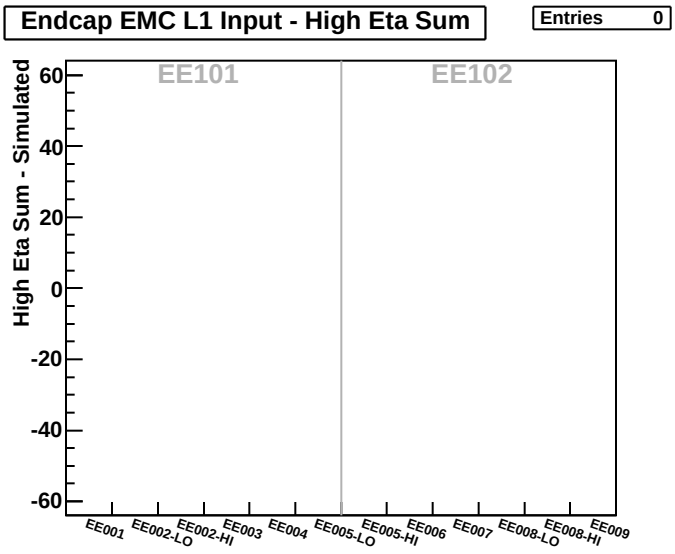

Barrel EMC L1 Input - High Tower Bits
Entries 4020480
High Tower Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

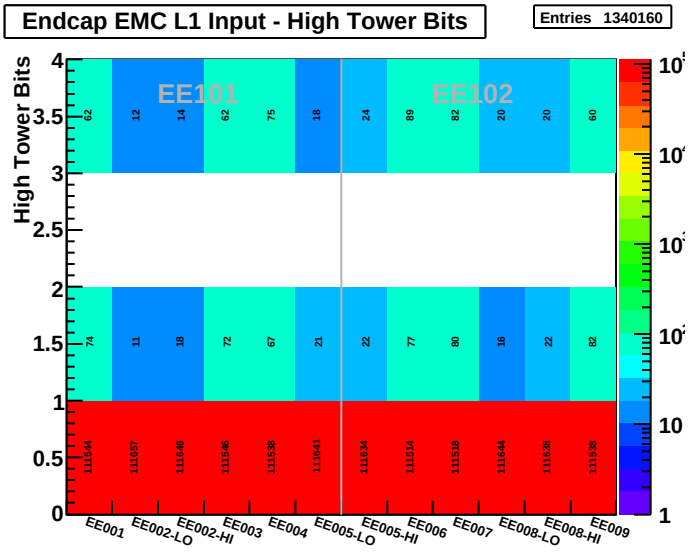

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

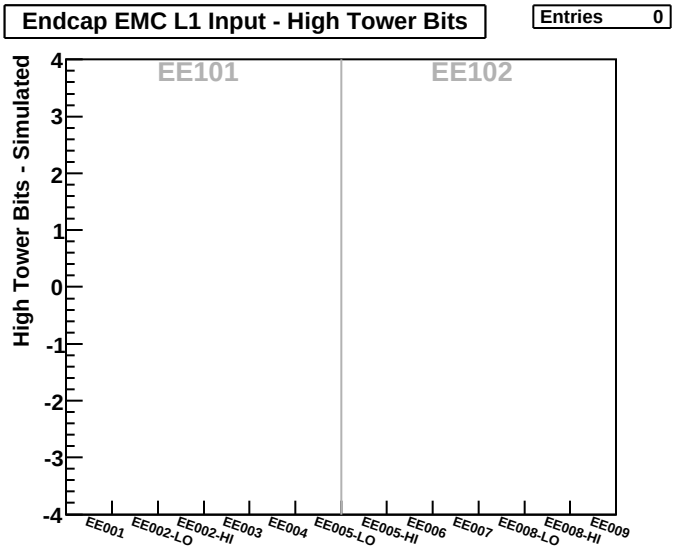

Endcap EMC L1 Input - Low Eta Sum
Entries 1340160
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

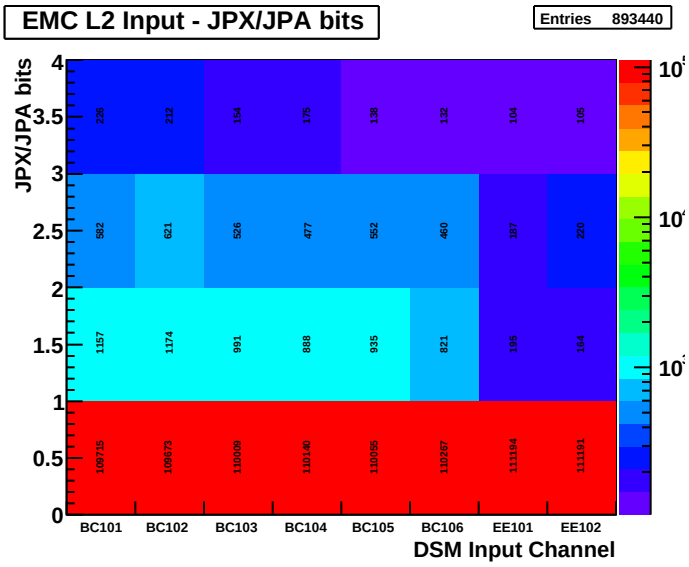

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

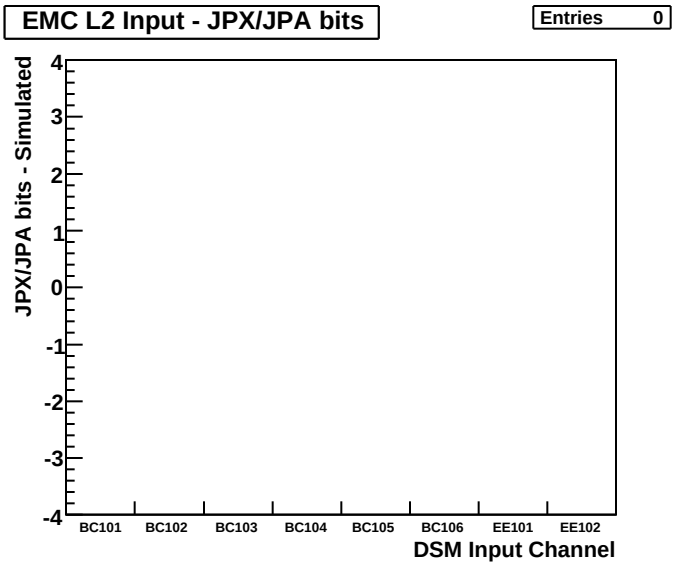

Endcap EMC L1 Input - High Eta Sum
Entries 1340160
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

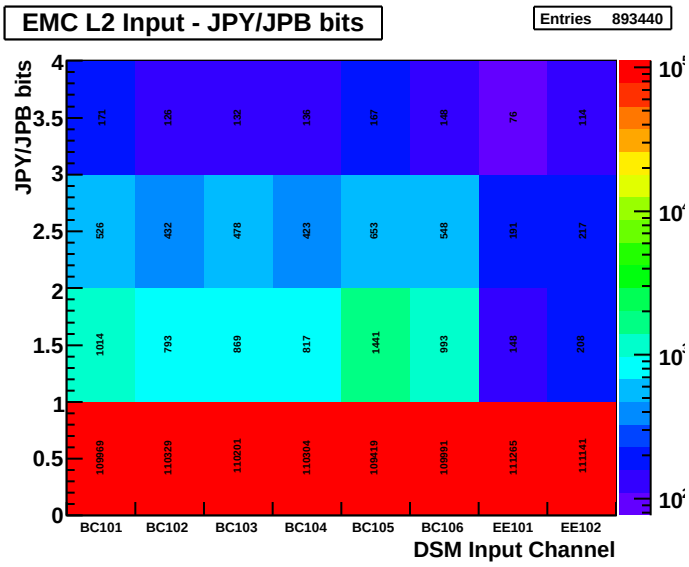

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

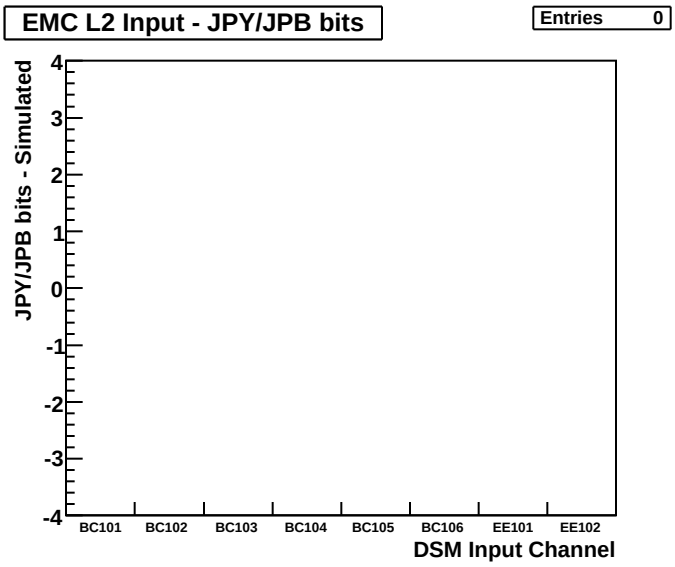

Endcap EMC L1 Input - High Tower Bits
Entries 1340160
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

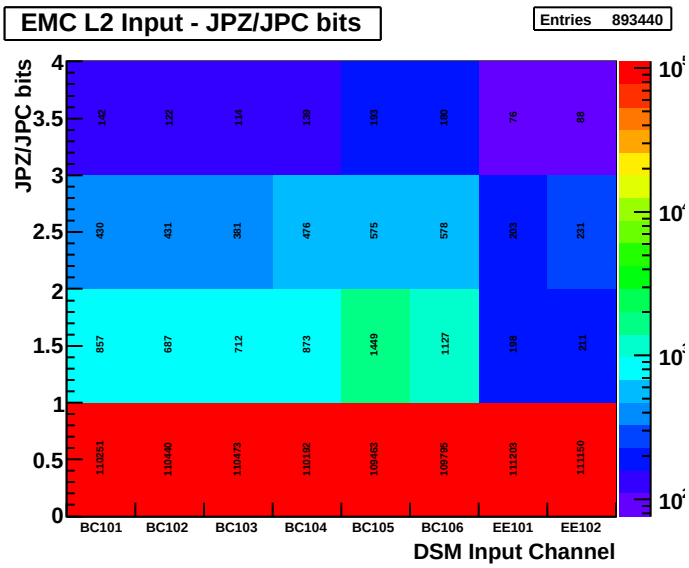

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

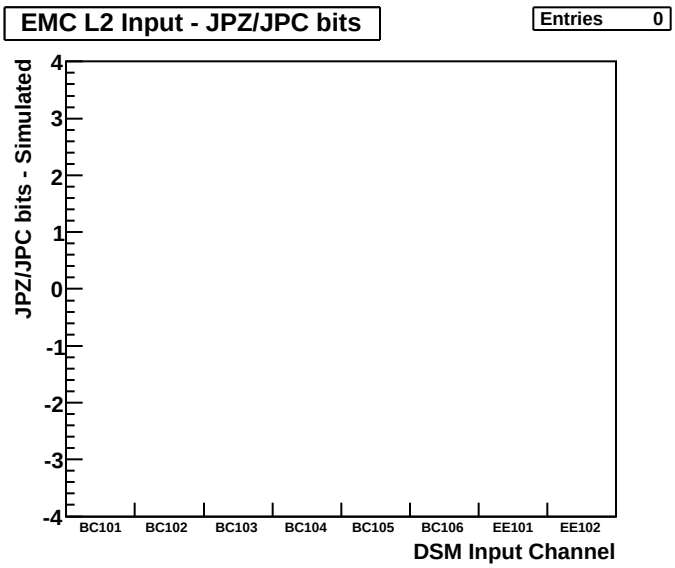

EMC L2 Input - JPX/JPA bits
Entries 893440
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
226 212 154 175 138 132 104 105
582 621 526 477 552 460 187 220
1157 1174 991 888 935 821 195 164
109715 109673 110009 110140 110095 110267 111194 111191

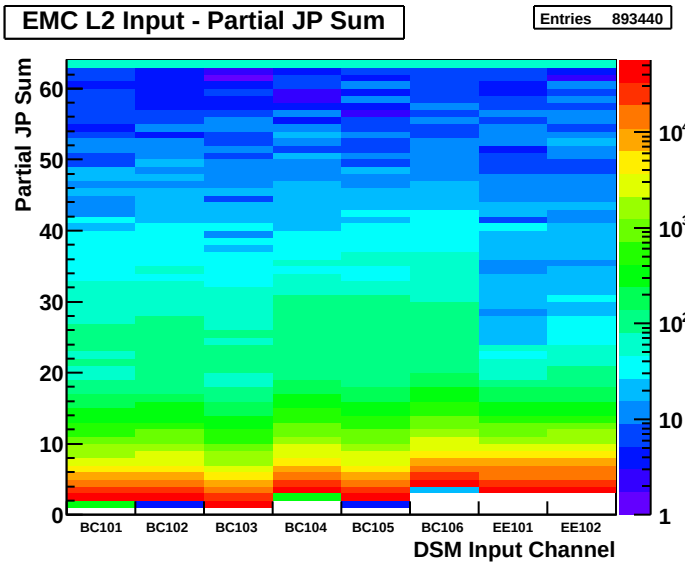

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

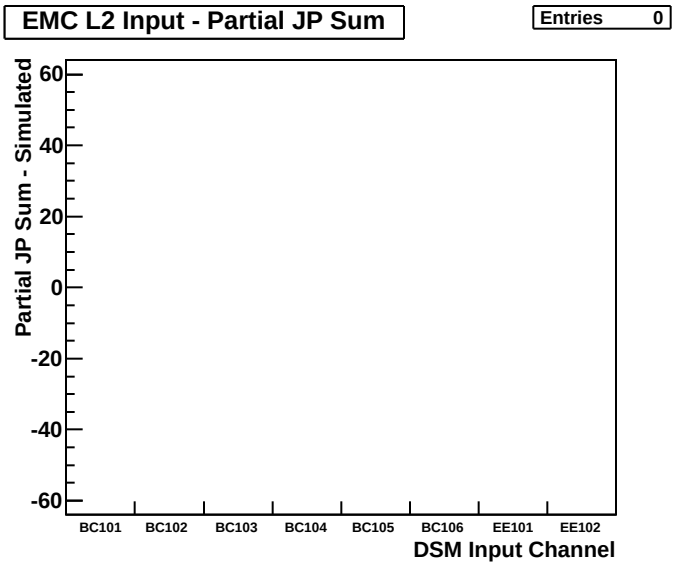

EMC L2 Input - JPY/JPB bits
Entries 893440
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
171 126 122 136 167 149 76 114
526 432 478 423 653 548 191 217
1014 793 869 817 1441 993 148 208
109869 110329 110201 110304 109419 109991 111265 111141

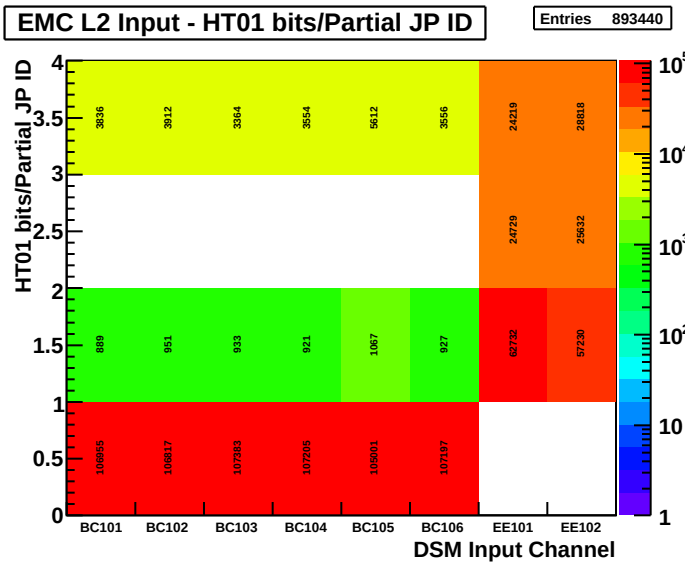

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

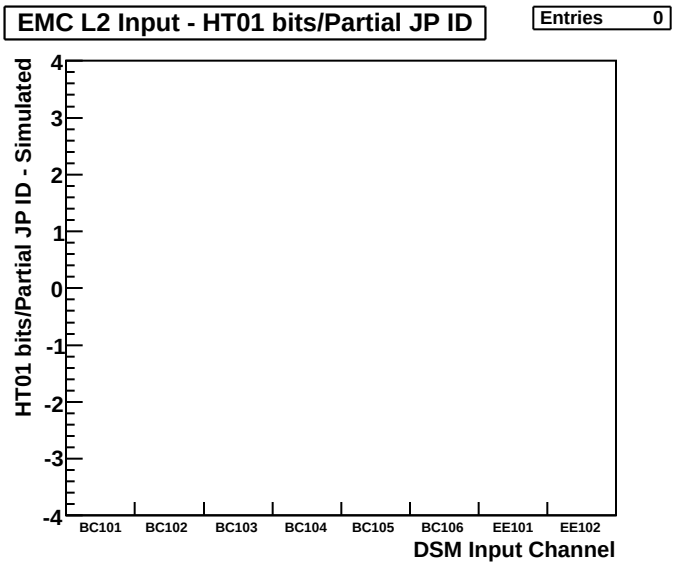

EMC L2 Input - JPZ/JPC bits
Entries 893440
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
142 122 114 139 133 130 76 88
430 431 381 476 575 578 203 231
857 687 712 873 1449 1127 198 211
110251 110440 110473 110192 109463 109795 111203 111150

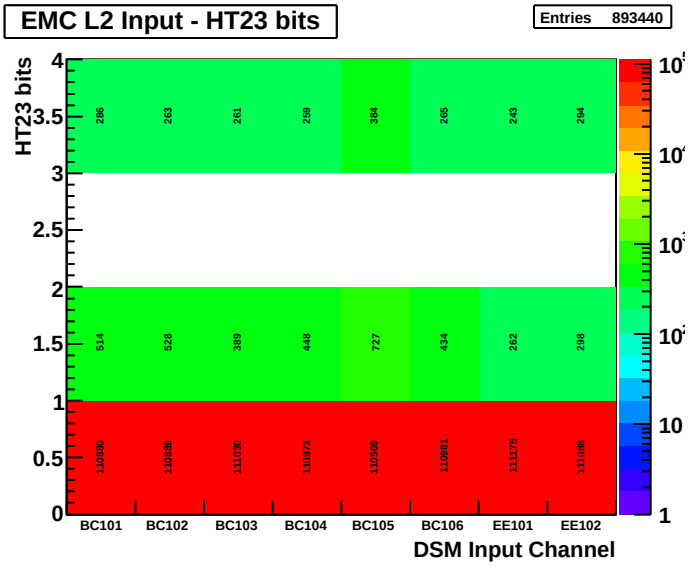

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

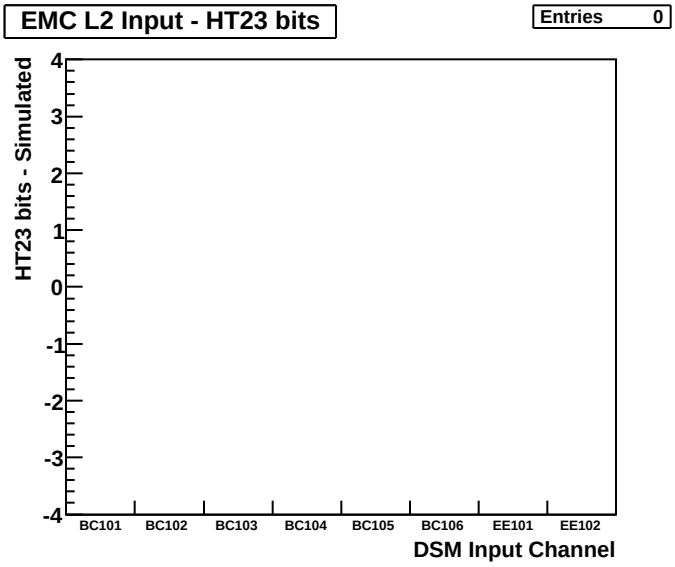

EMC L2 Input - Partial JP Sum
Entries 893440
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

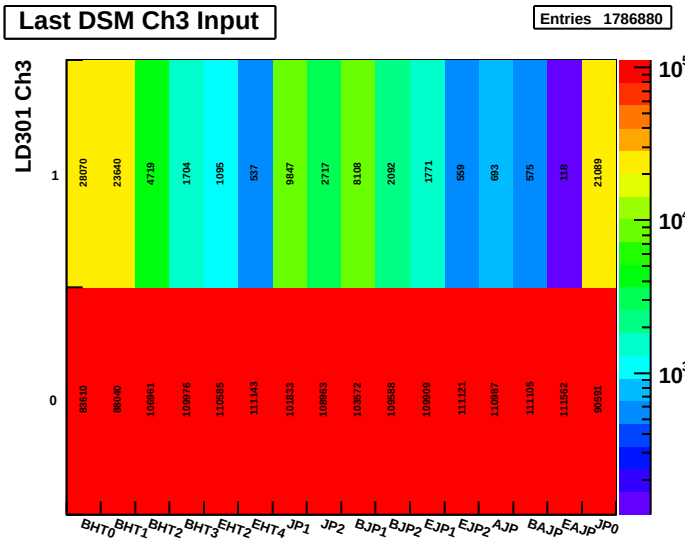

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

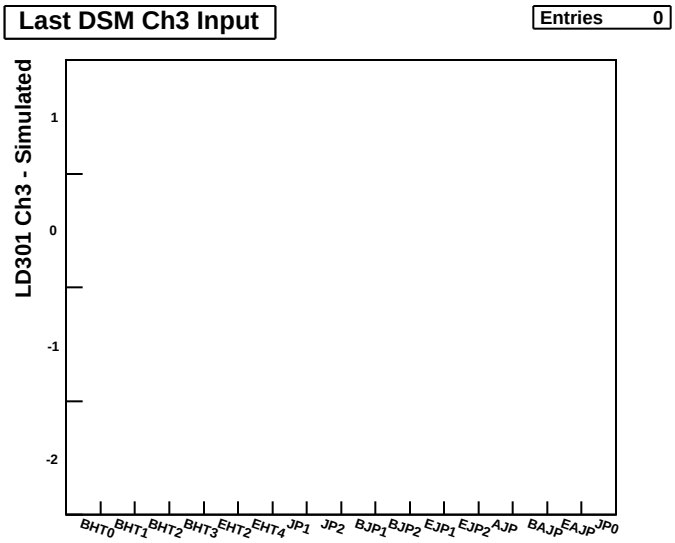

EMC L2 Input - HT01 bits/Partial JP ID
Entries 893440
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

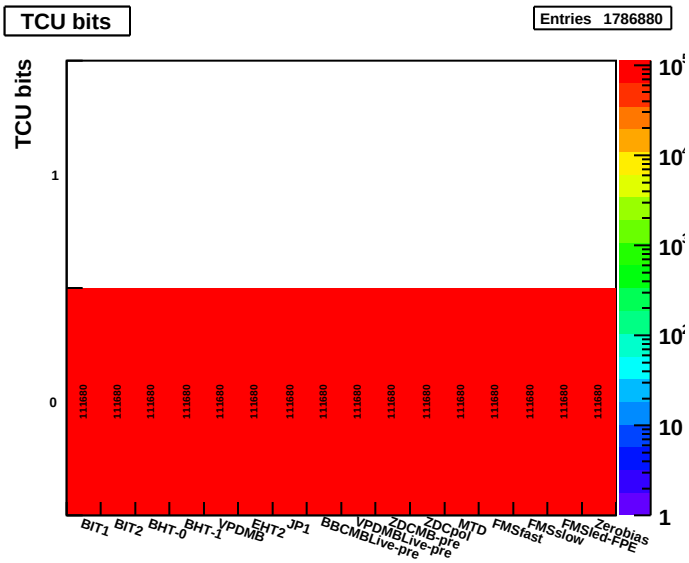

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

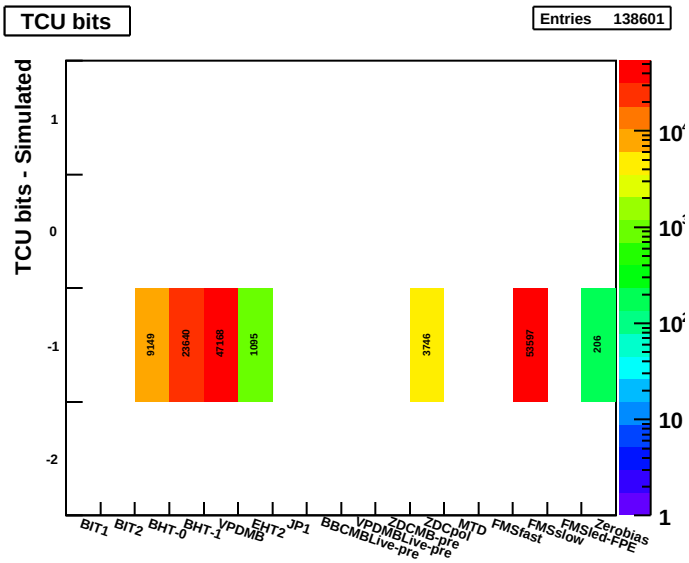

EMC L2 Input - HT23 bits
Entries 893440
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

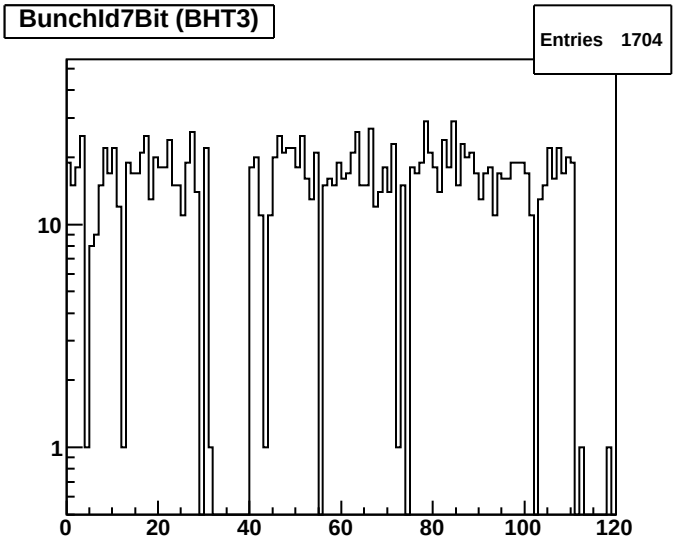

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

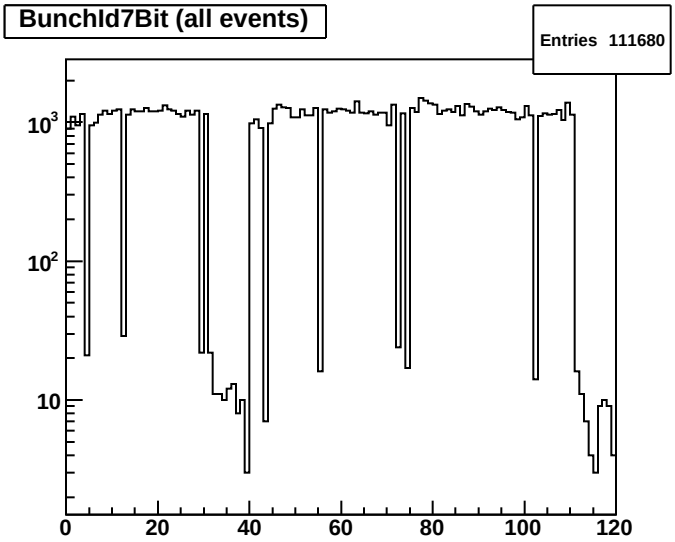

Last DSM Ch3 Input
Entries 1786880
LD301 Ch3
1
0
28070 23640 4719 1704 1095 537 9847 2717 8108 2092 1771 559 693 575 118 21089
83610 88040 106961 109976 110585 111143 101833 108963 103572 109588 109909 111121 110987 111105 111562 90591
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

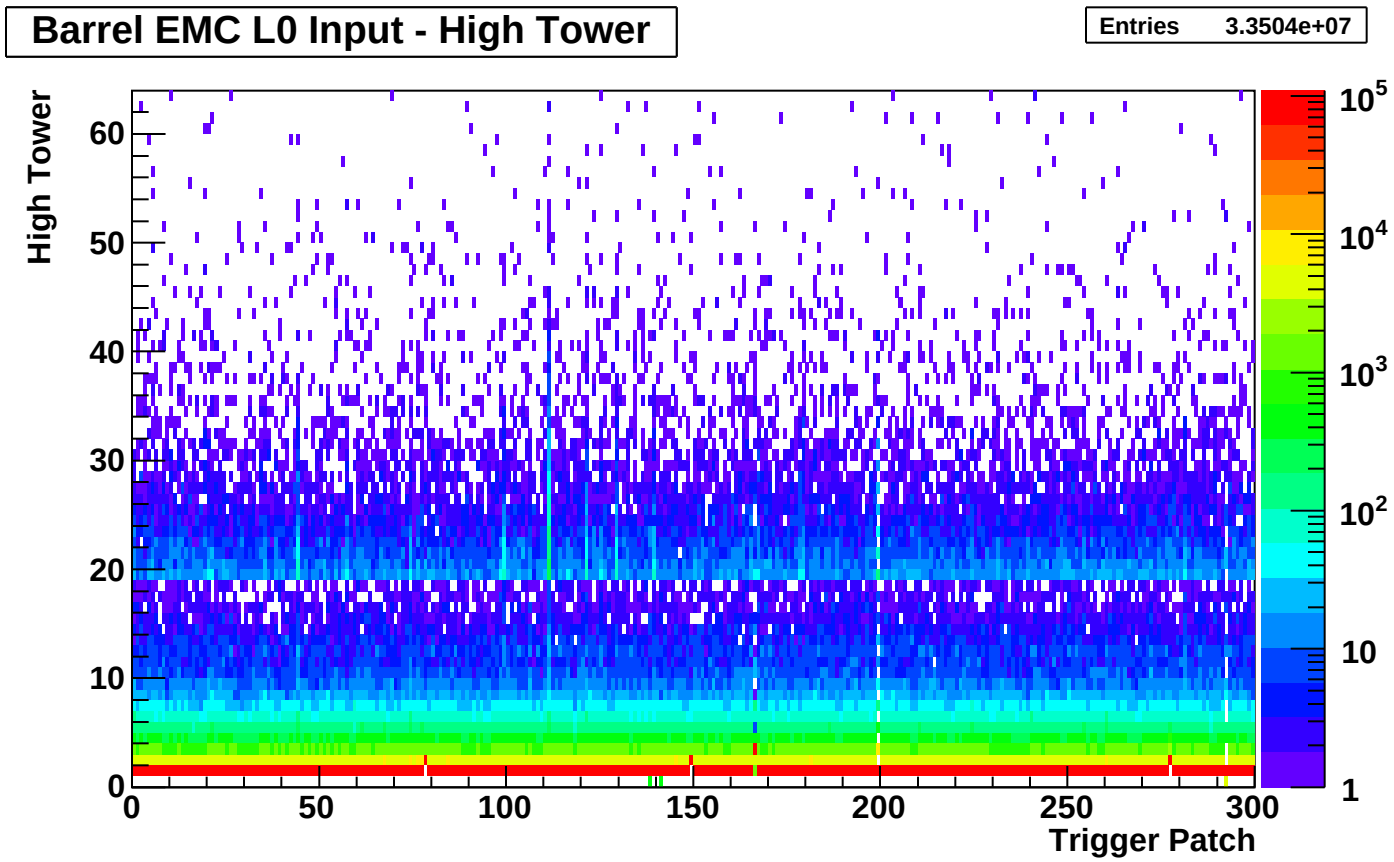

Last DSM Ch3 Input
Entries 0
LD301 Ch3 - Simulated
1
0
-1
-2
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

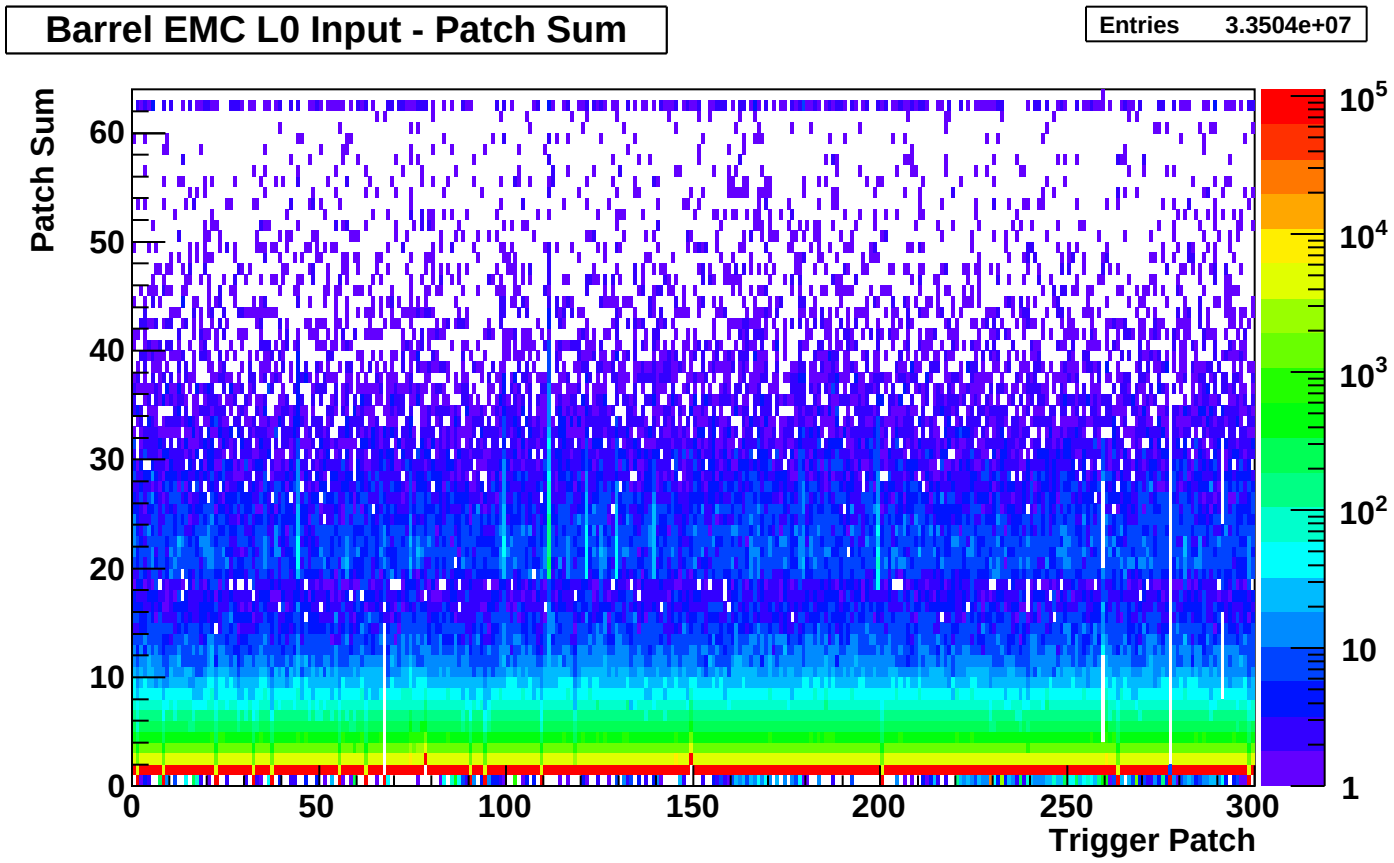

TCU bits
Entries 1786880
TCU bits
1
0
111680 111680 111680 111680 111680 111680 111680 111680 111680 111680 111680 111680 111680 111680 111680 111680
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

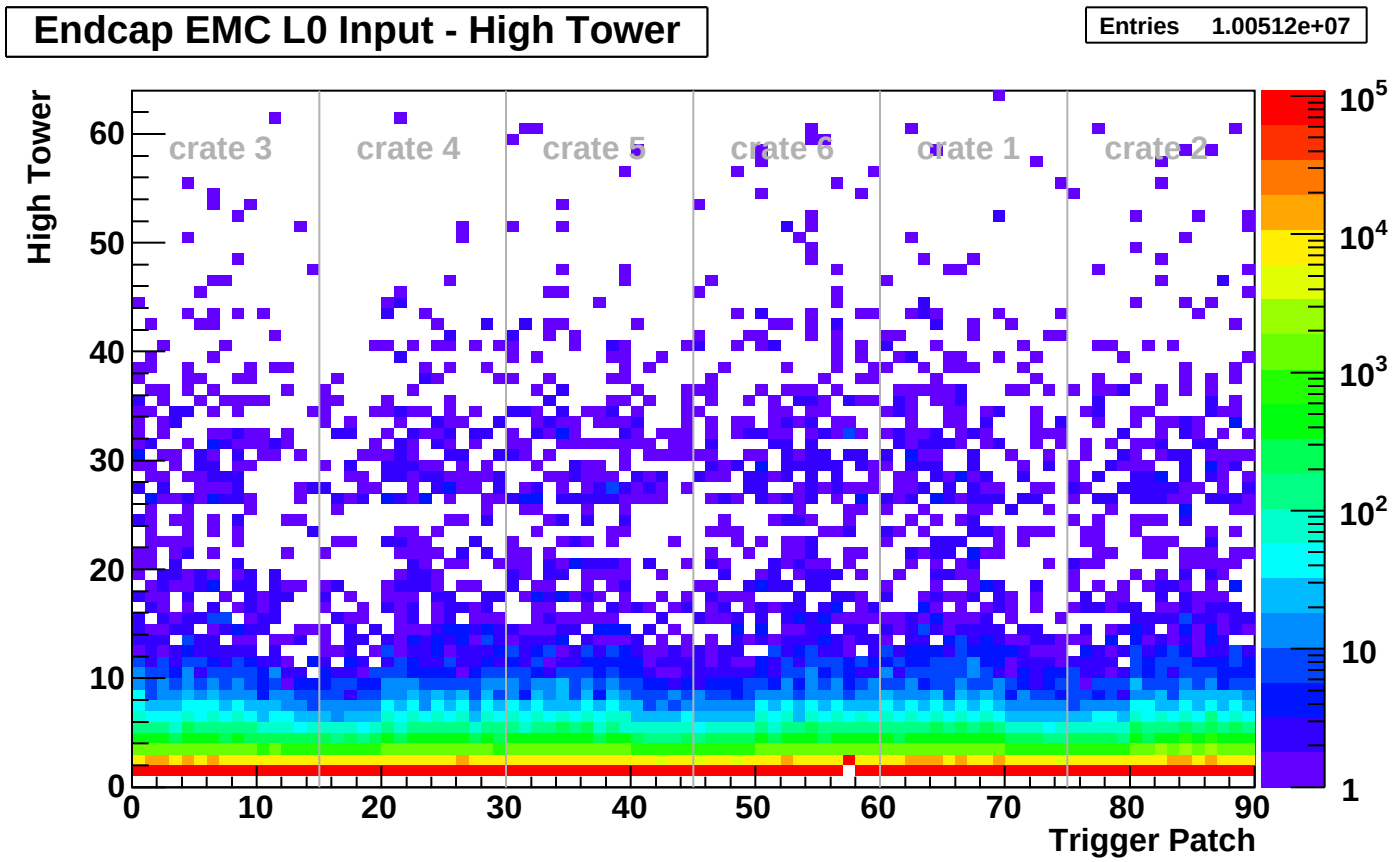

TCU bits
Entries 138601
TCU bits - Simulated
1
0
-1
-2
9149 23640 47168 1095 3746 53597 206
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

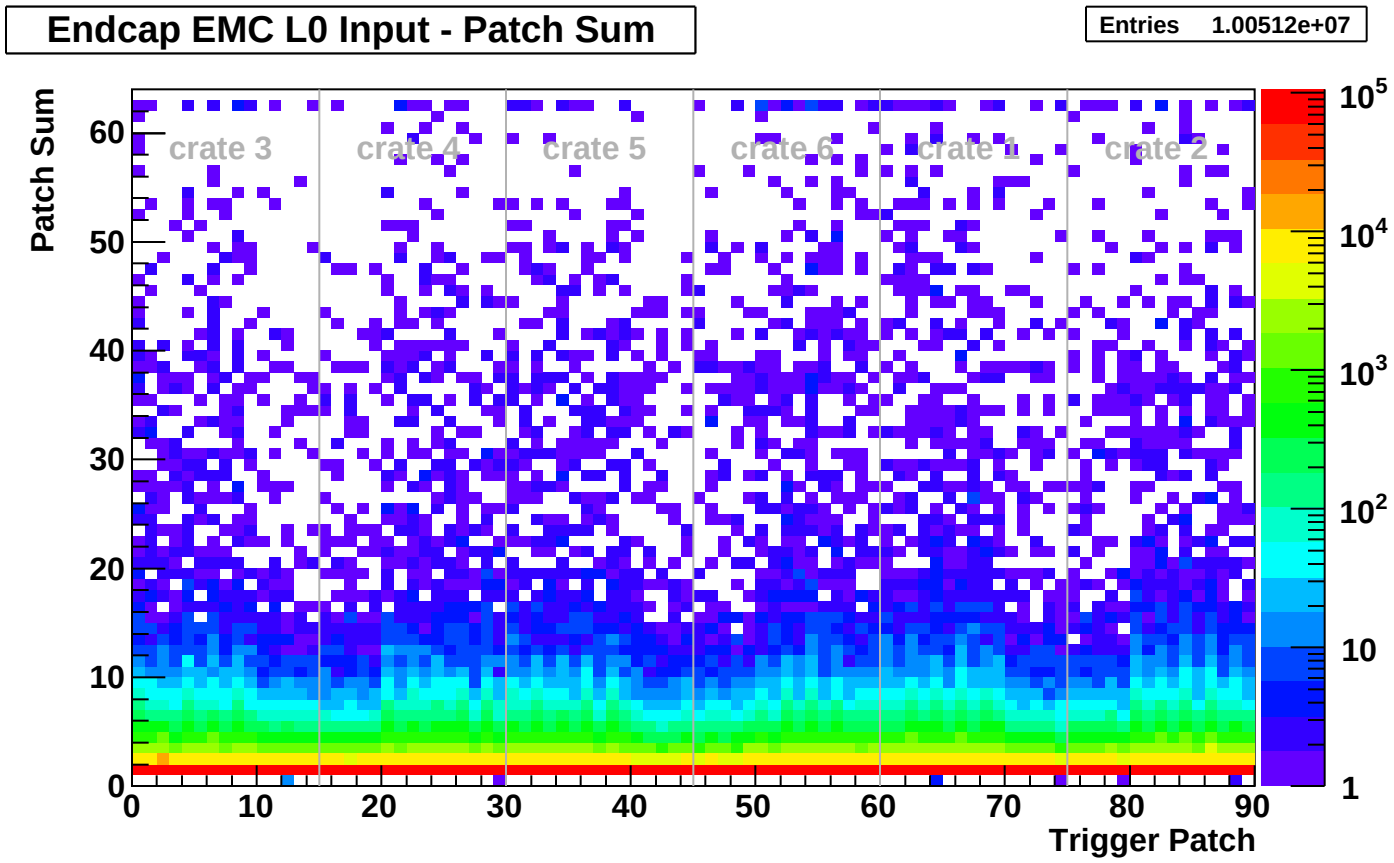

BunchId7Bit (BHT3)
Entries 1704
10
1
0 20 40 60 80 100 120

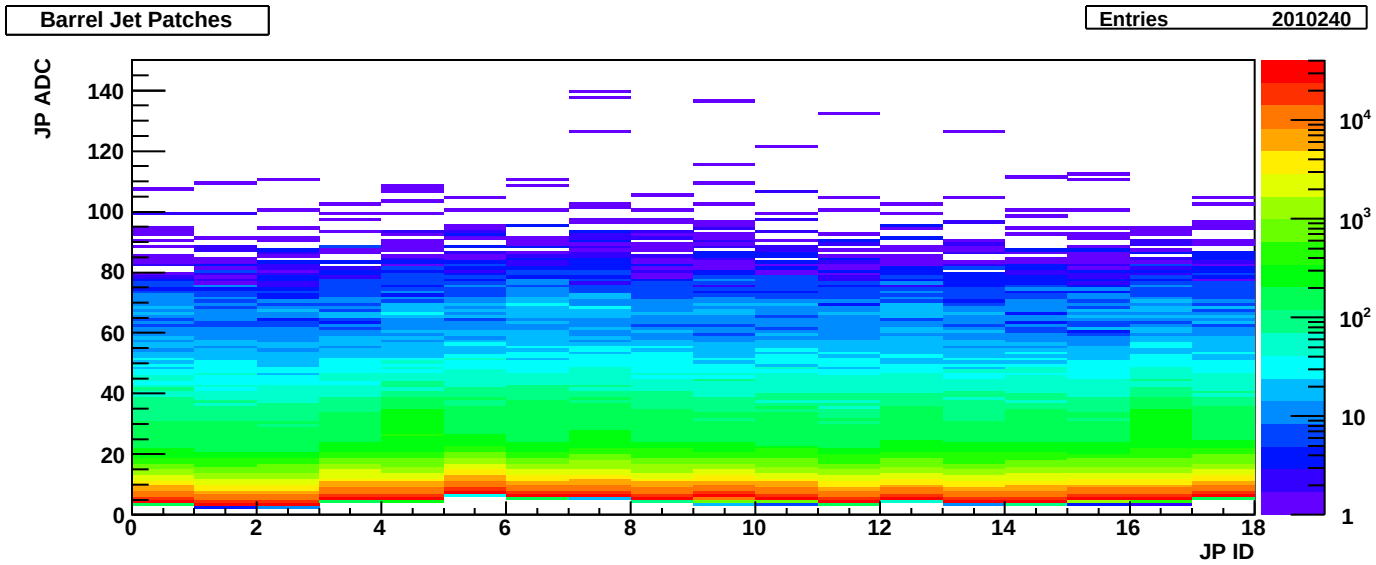

BunchId7Bit (all events)
Entries 111680
10^3
10^2
10
0 20 40 60 80 100 120

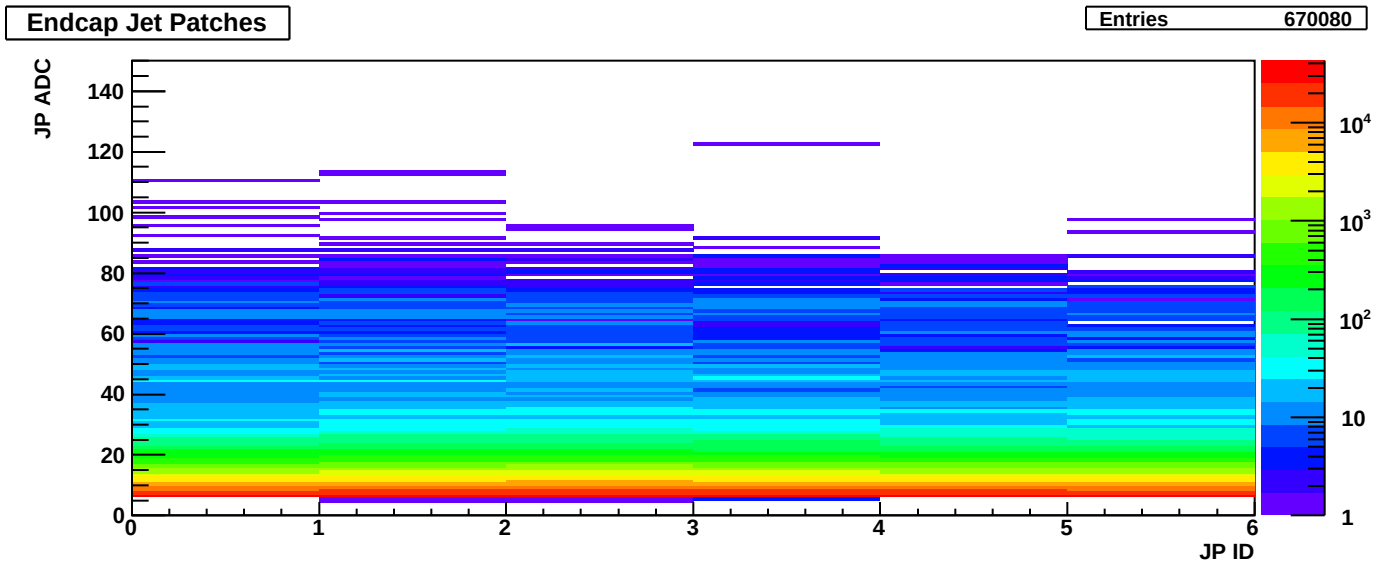

Barrel EMC L0 Input - High Tower
Entries 3.3504e+07
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

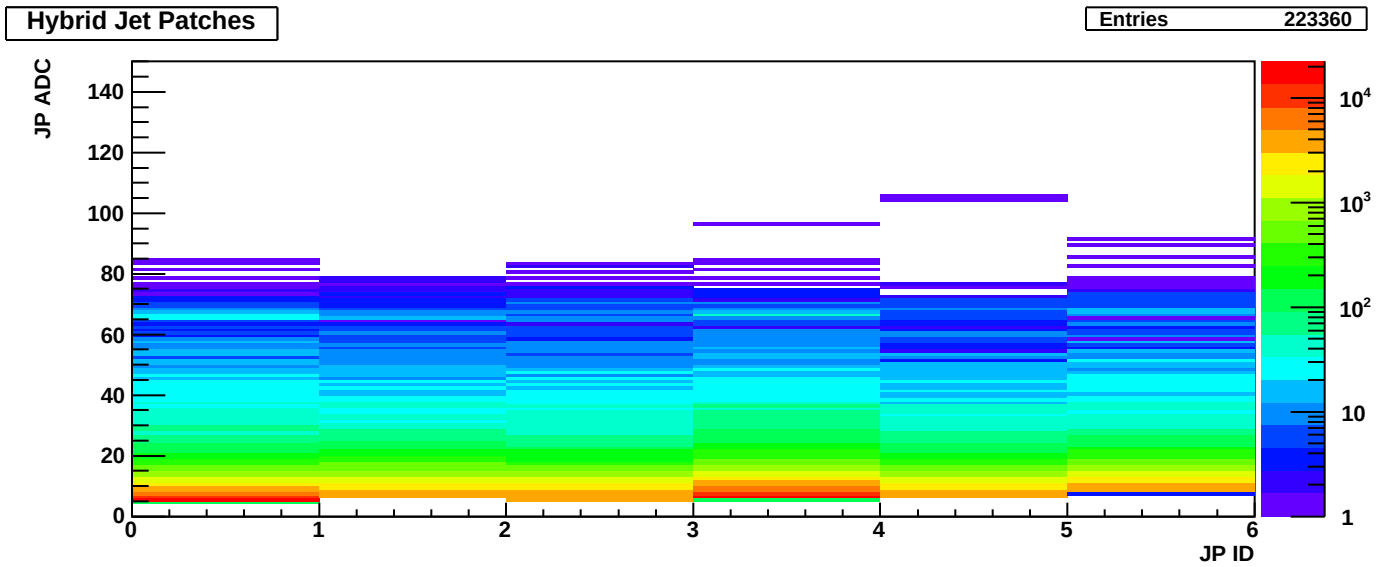

Barrel EMC L0 Input - Patch Sum
Entries 3.3504e+07
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

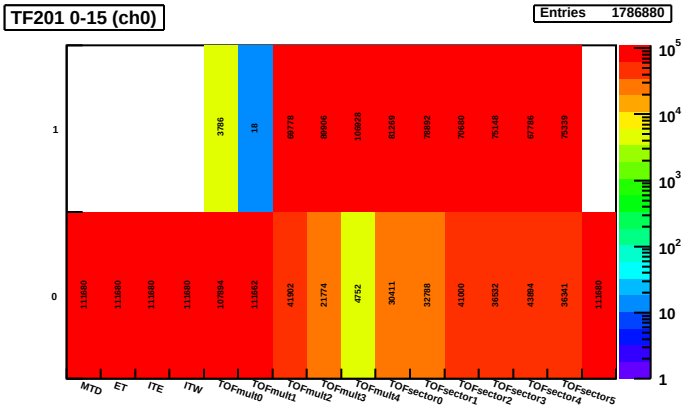

Endcap EMC L0 Input - High Tower
Entries 1.00512e+07
High Tower
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

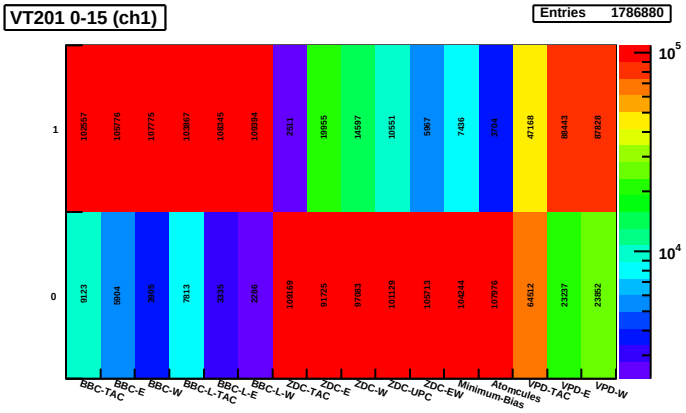

Endcap EMC L0 Input - Patch Sum
Entries 1.00512e+07
Patch Sum
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

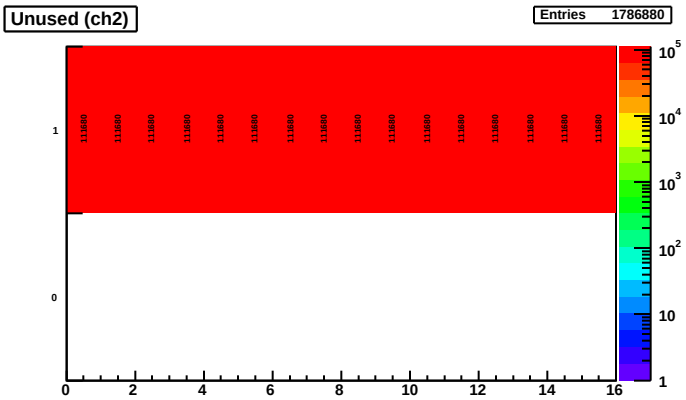

Barrel Jet Patches
Entries 2010240
JP ADC
JP ID

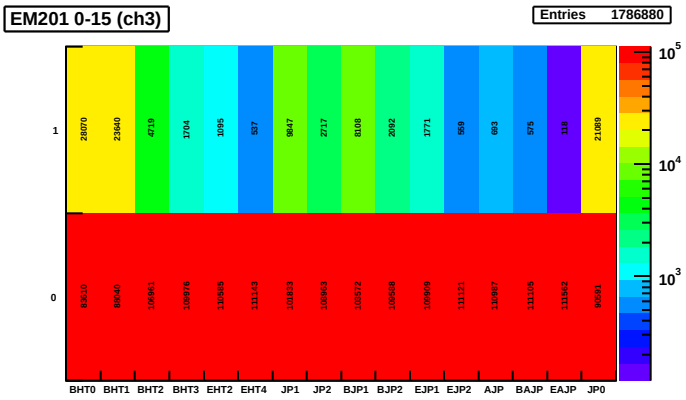

Endcap Jet Patches
Entries 670080
JP ADC
JP ID

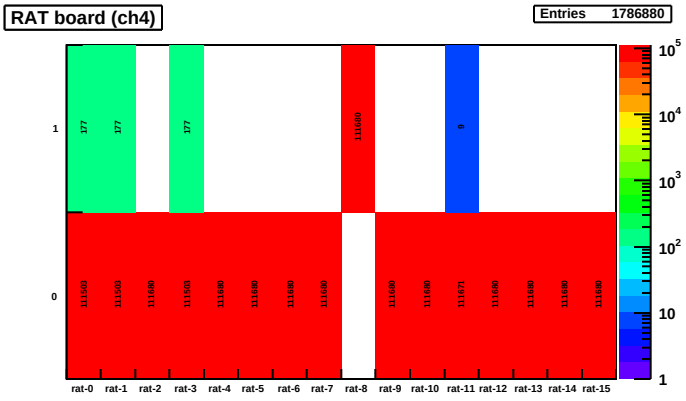

Hybrid Jet Patches
Entries 223360
JP ADC
JP ID

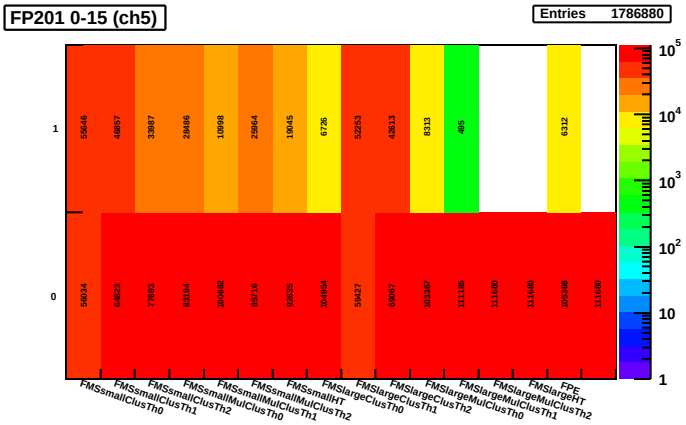

TF201 0-15 (ch0)
Entries 1786880
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5

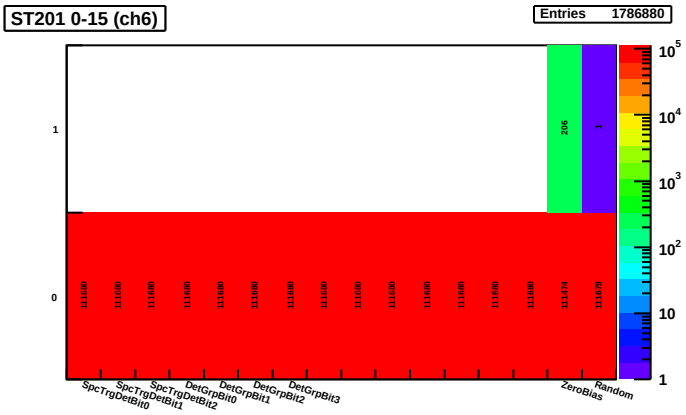

VT201 0-15 (ch1)
Entries 1786880
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-E ZDC-W ZDC-UPC ZDC-EW Atomcules Minimum-Bias VPD-TAC VPD-E VPD-W

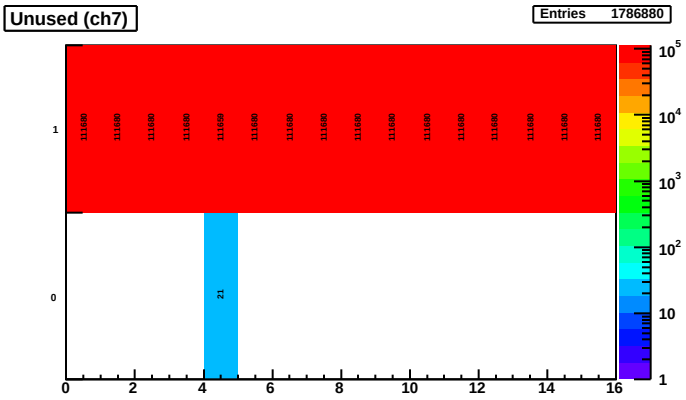

Unused (ch2)
Entries 1786880

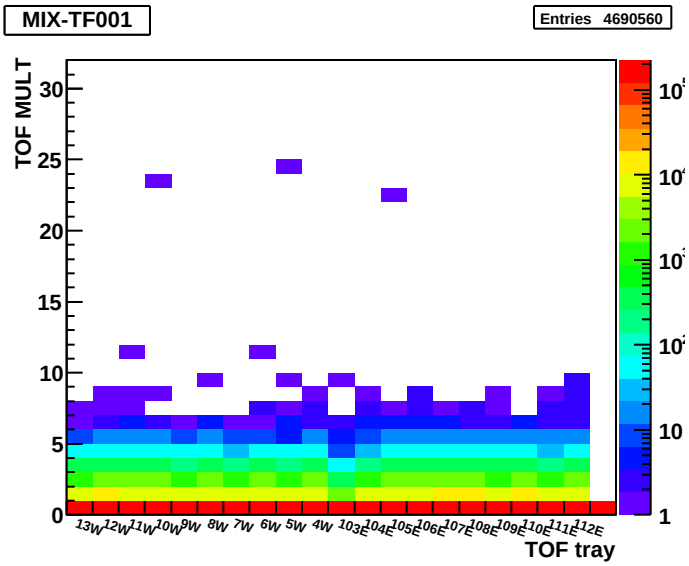

EM201 0-15 (ch3)
Entries 1786880
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

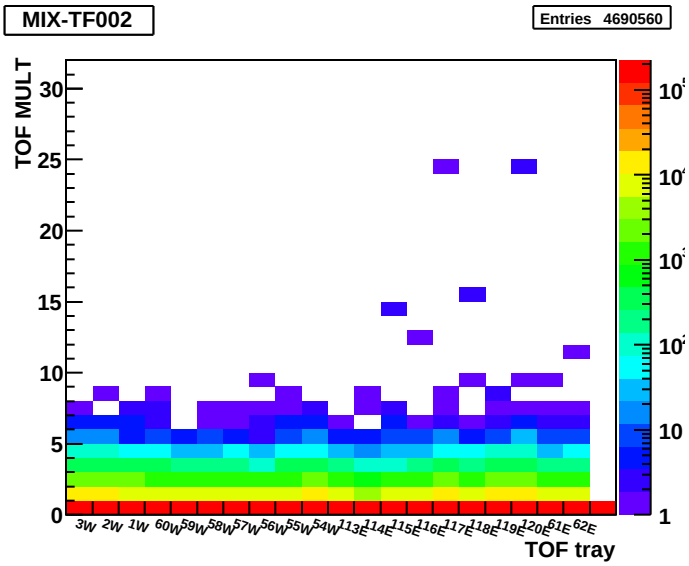

RAT board (ch4)
Entries 1786880
rat-0 rat-1 rat-2 rat-3 rat-4 rat-5 rat-6 rat-7 rat-8 rat-9 rat-10 rat-11 rat-12 rat-13 rat-14 rat-15

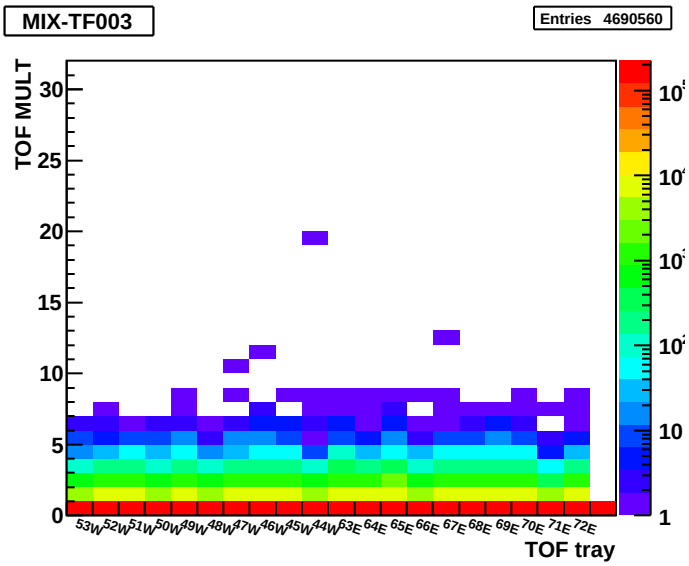

FP201 0-15 (ch5)
Entries 1786880
FMSsmallClusTh0 FMSsmallClusTh1 FMSsmallClusTh2 FMSsmallMulClusTh0 FMSsmallMulClusTh1 FMSsmallMulClusTh2 FMSsmallHT FMSlargeClusTh0 FMSlargeClusTh1 FMSlargeClusTh2 FMSlargeMulClusTh0 FMSlargeMulClusTh1 FMSlargeMulClusTh2 FMSlargeHT FPE

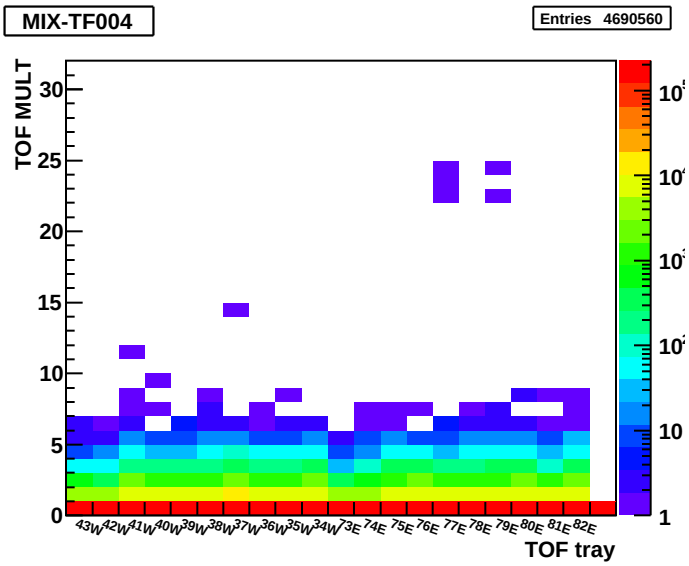

ST201 0-15 (ch6)
Entries 1786880
SpcTrgDetBit0 SpcTrgDetBit1 SpcTrgDetBit2 DetCrpBit0 DetCrpBit1 DetCrpBit2 DetCrpBit3 ZeroBias Random

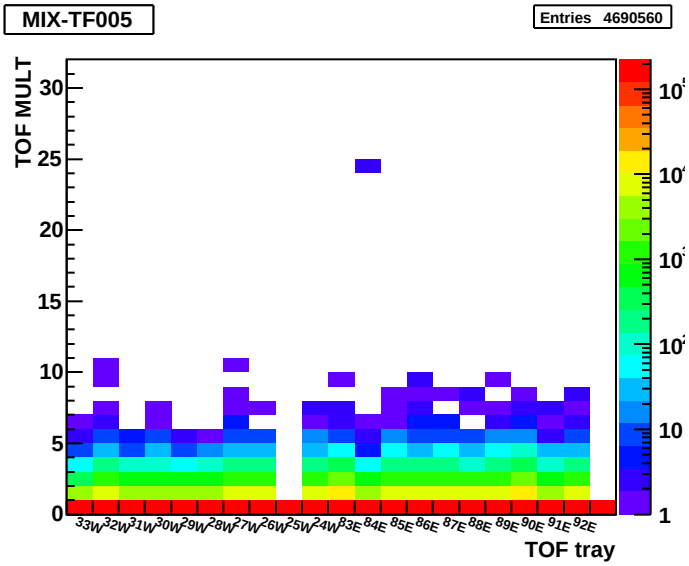

Unused (ch7)
Entries 1786880

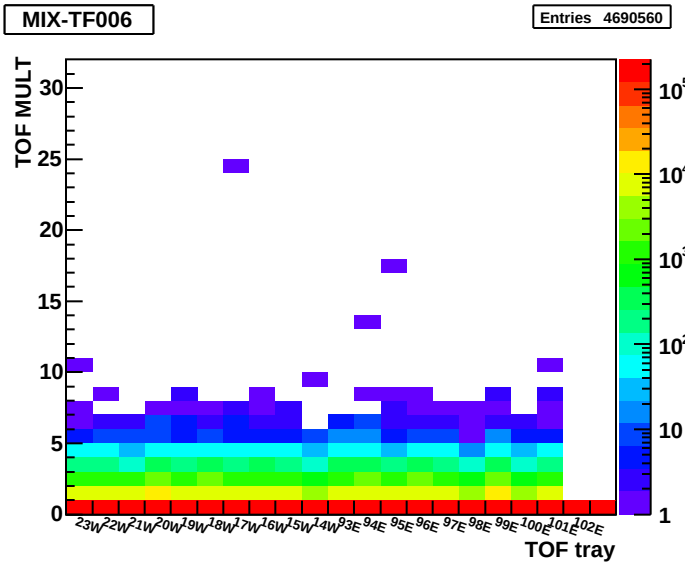

MIX-TF001
Entries 4690560
TOF MULT
TOF tray

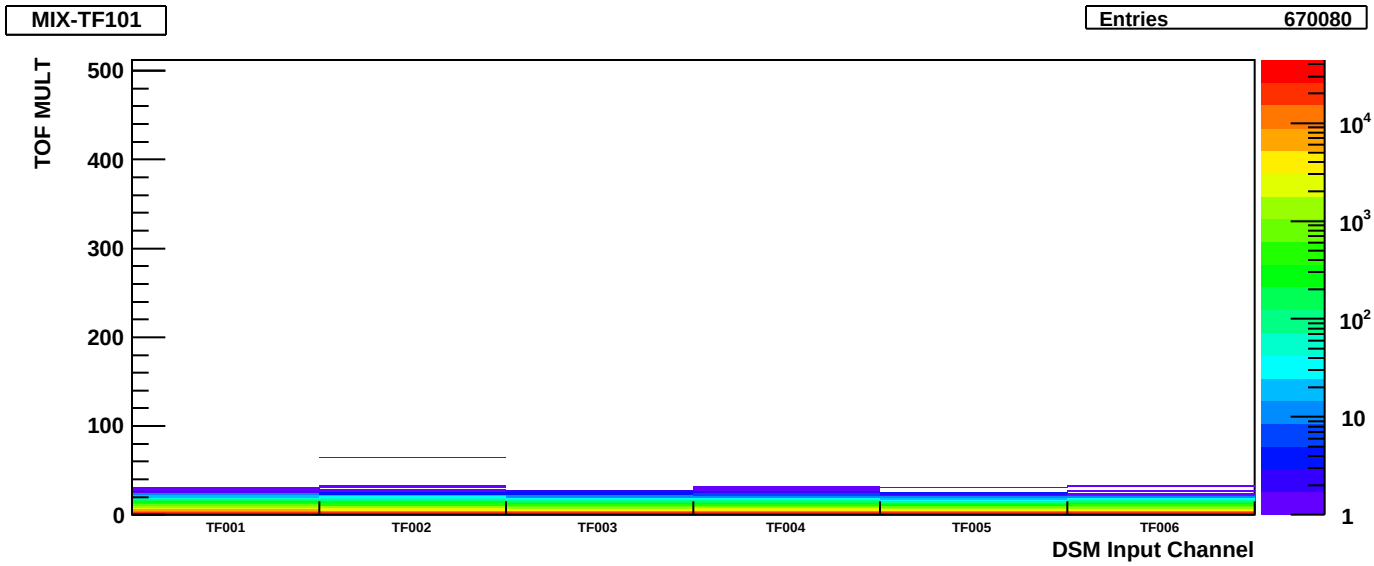

MIX-TF002
Entries 4690560
TOF MULT
TOF tray

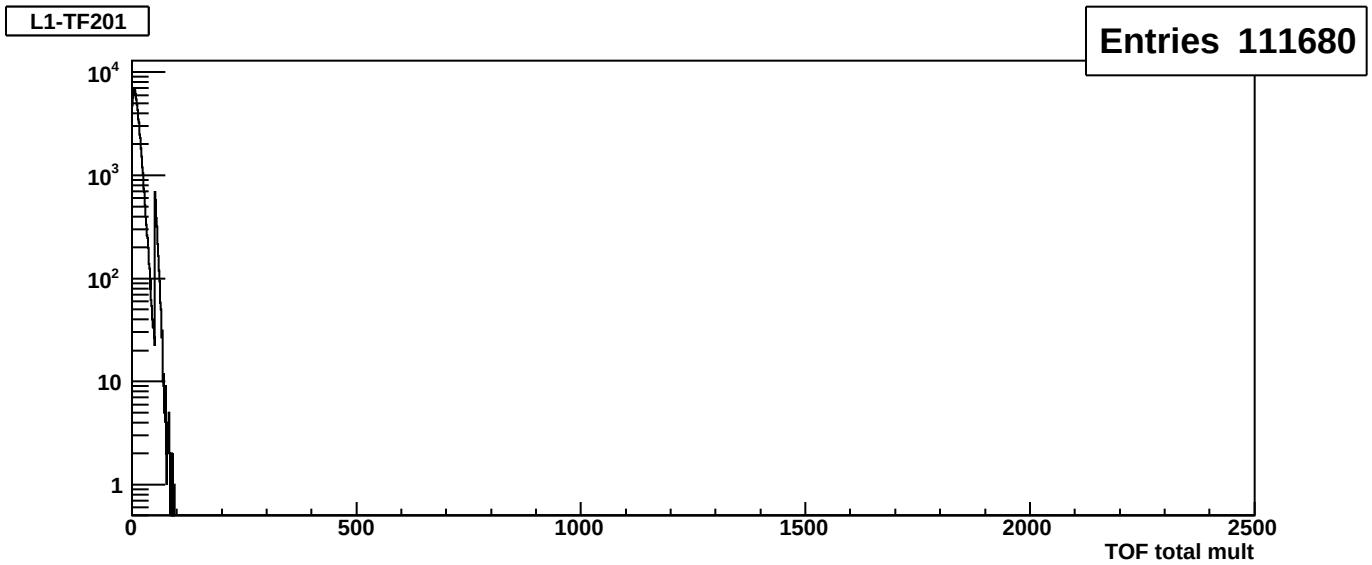

MIX-TF003
Entries 4690560
TOF MULT
TOF tray

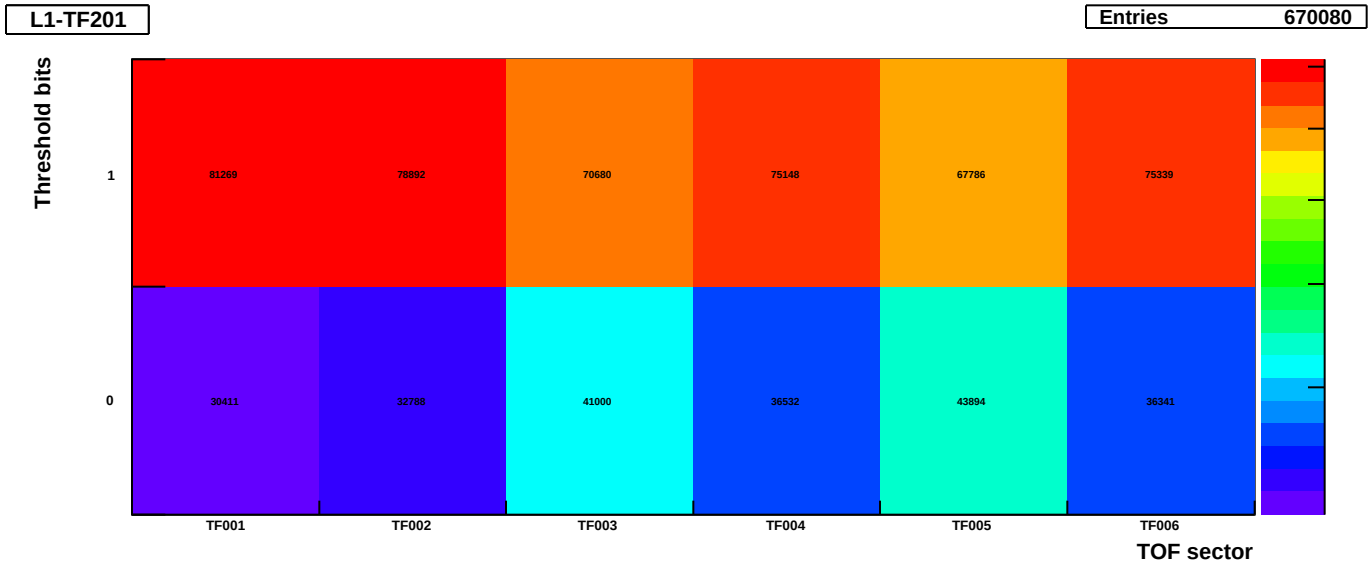

MIX-TF004
Entries 4690560
TOF MULT
TOF tray

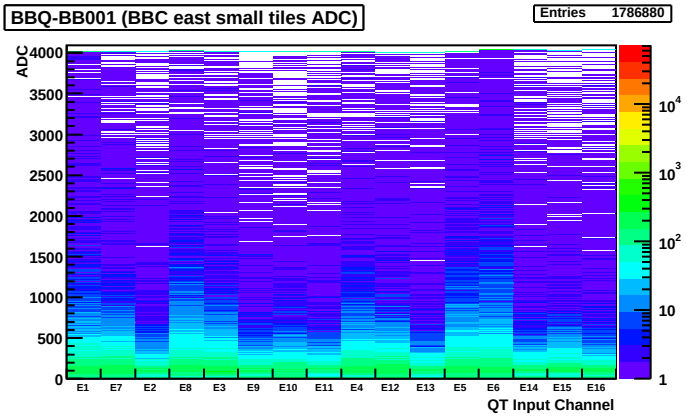

MIX-TF005
Entries 4690560
TOF MULT
TOF tray

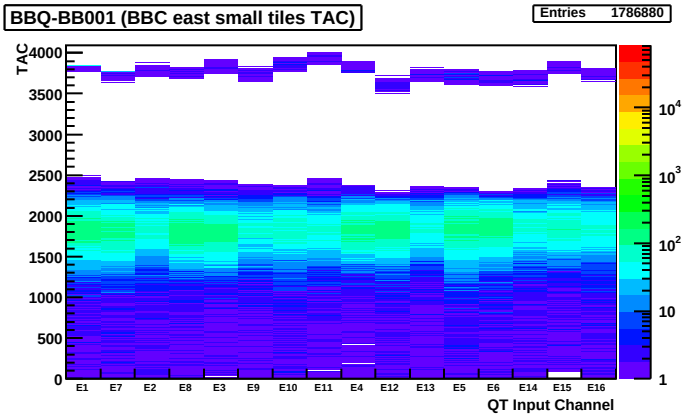

MIX-TF006
Entries 4690560
TOF MULT
TOF tray

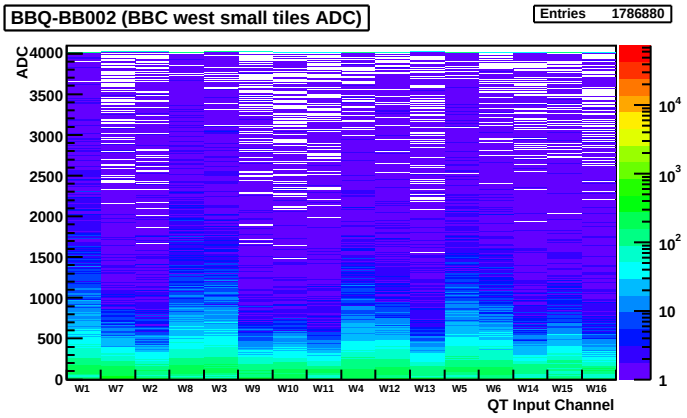

MIX-TF101
Entries 670080
TOF MULT
500
400
300
200
100
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^4
10^3
10^2
10
1

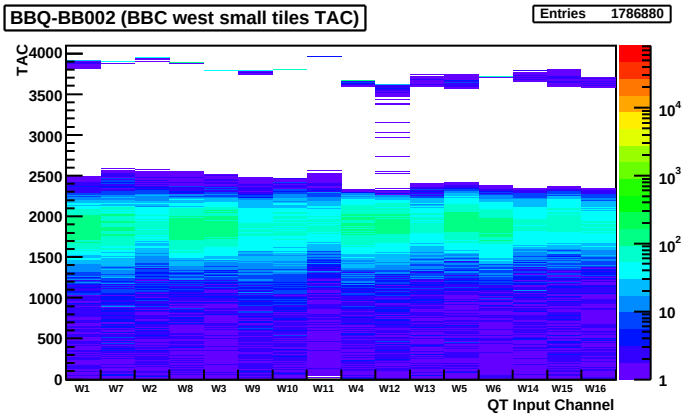

L1-TF201
Entries 111680
10^4
10^3
10^2
10
1
0
500
1000
1500
2000
2500
TOF total mult

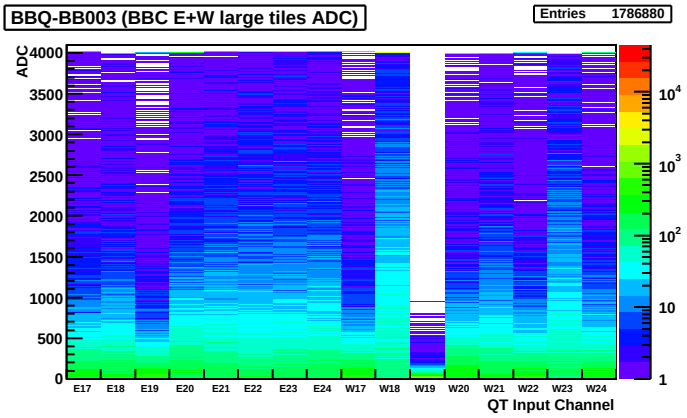

L1-TF201
Entries 670080
Threshold bits
1
0
81269
78892
70680
75148
67786
75339
30411
32788
41000
36532
43894
36341
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector

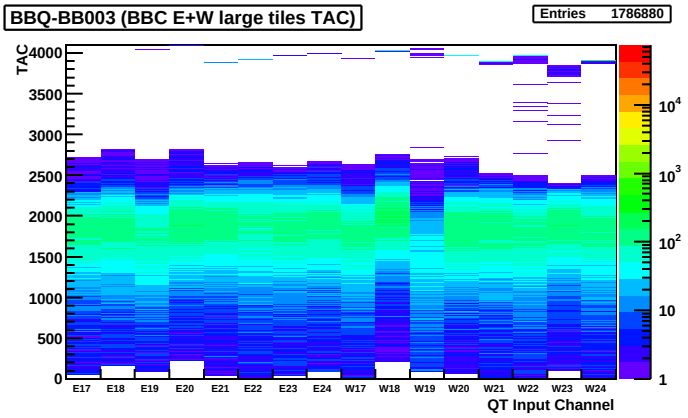

BBQ-BB001 (BBC east small tiles ADC)
Entries 1786880
ADC
QT Input Channel

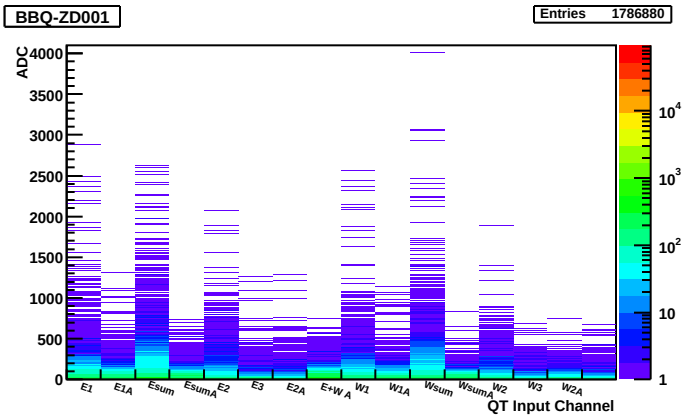

BBQ-BB001 (BBC east small tiles TAC)
Entries 1786880
TAC
QT Input Channel

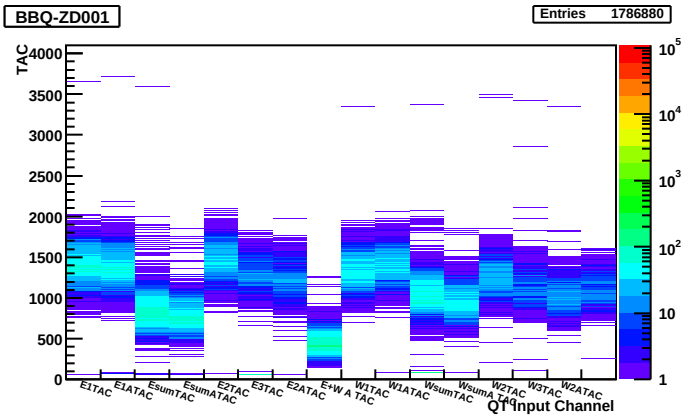

BBQ-BB002 (BBC west small tiles ADC)
Entries 1786880
ADC
QT Input Channel

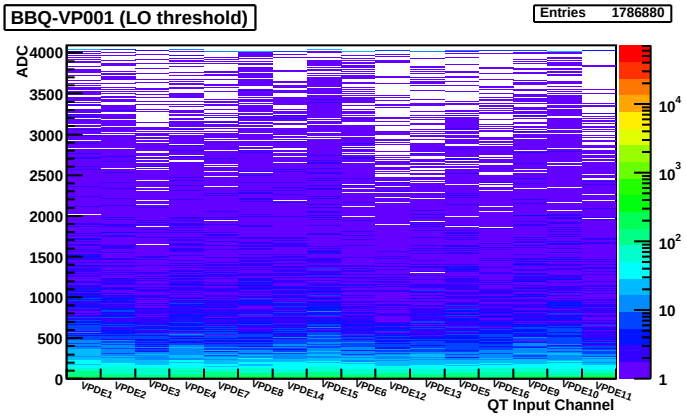

BBQ-BB002 (BBC west small tiles TAC)
Entries 1786880
TAC
QT Input Channel

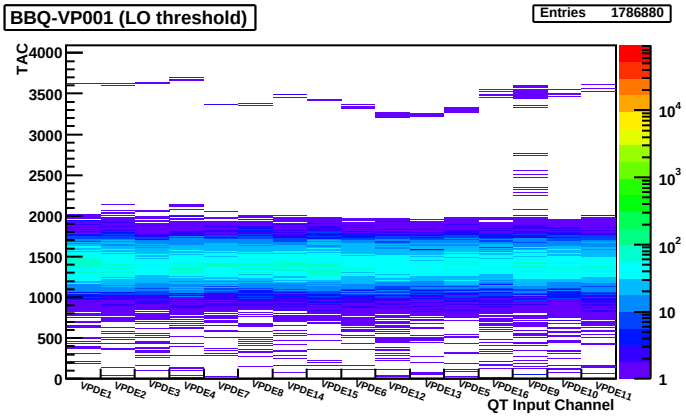

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 1786880
ADC
QT Input Channel

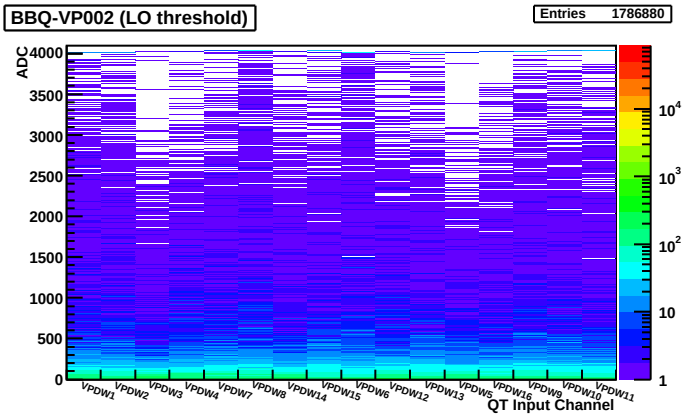

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 1786880
TAC
QT Input Channel

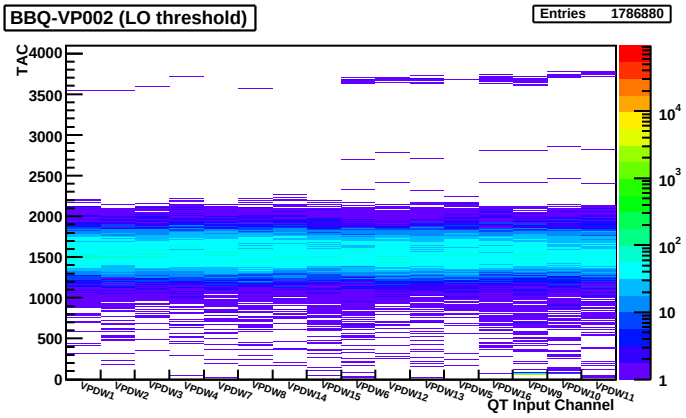

BBQ-ZD001
Entries 1786880
ADC
QT Input Channel

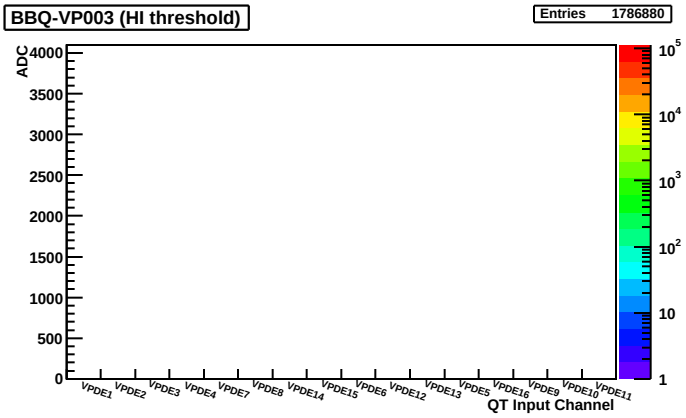

BBQ-ZD001
Entries 1786880
TAC
QT Input Channel

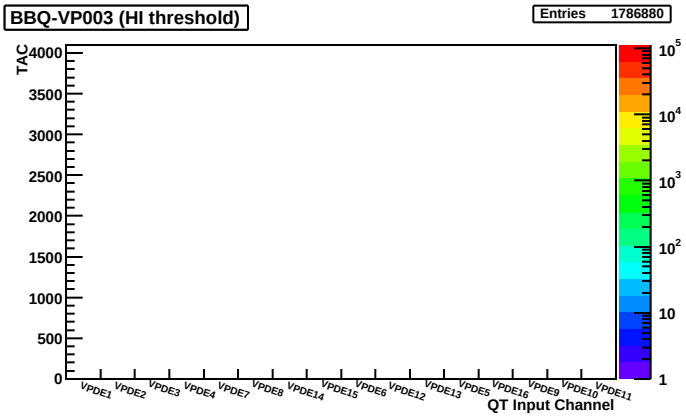

BBQ-VP001 (LO threshold)
Entries 1786880
ADC
QT Input Channel

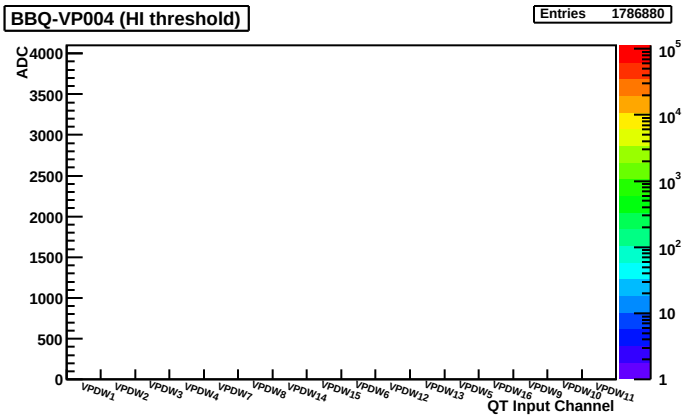

BBQ-VP001 (LO threshold)
Entries 1786880
TAC
QT Input Channel

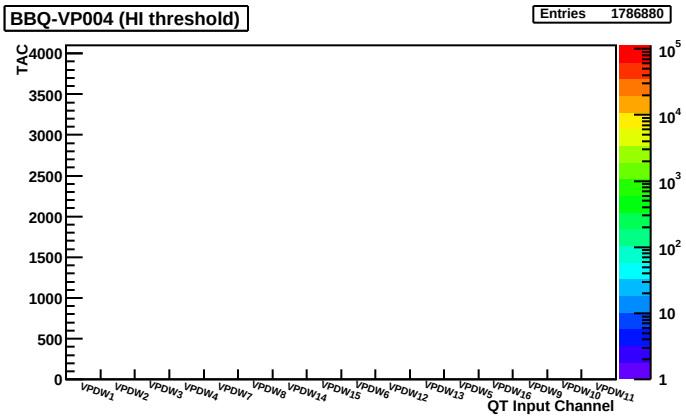

BBQ-VP002 (LO threshold)
Entries 1786880
ADC
QT Input Channel

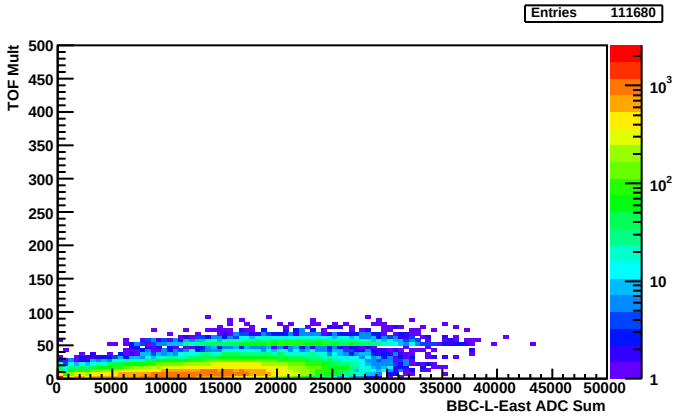

BBQ-VP002 (LO threshold)
Entries 1786880
TAC
QT Input Channel

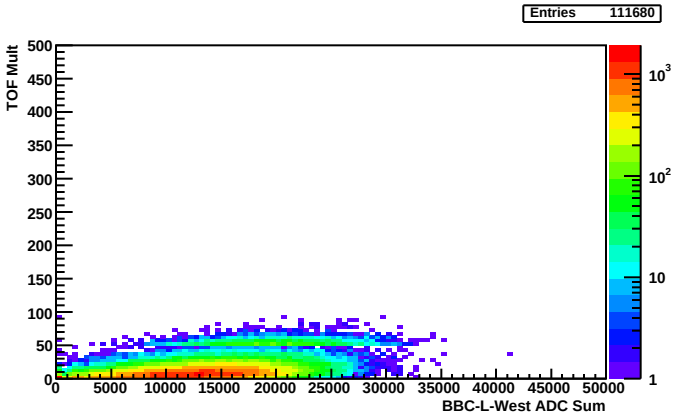

BBQ-VP003 (HI threshold)
Entries 1786880
ADC
QT Input Channel

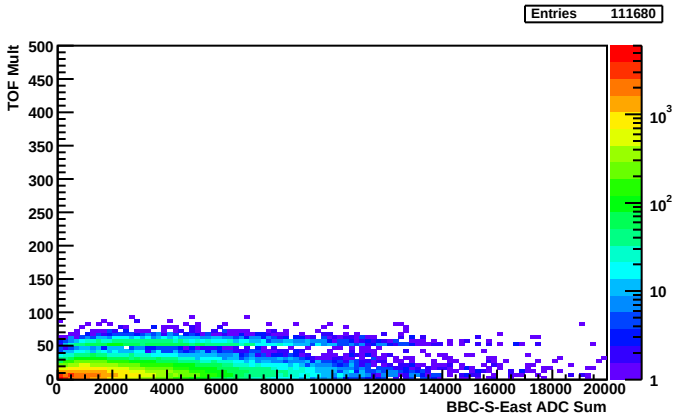

BBQ-VP003 (HI threshold)
Entries 1786880
TAC
QT Input Channel

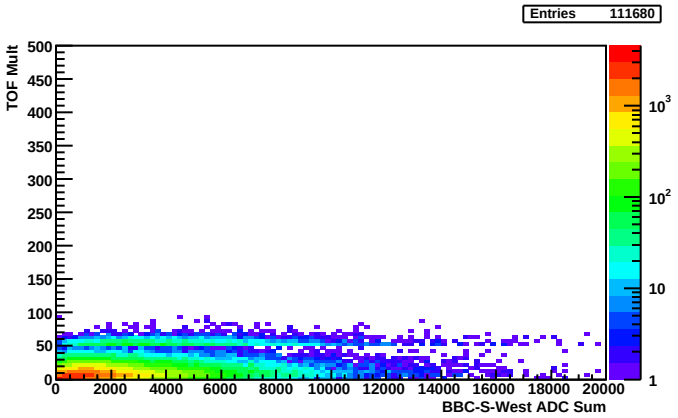

BBQ-VP004 (HI threshold)
Entries 1786880
ADC
QT Input Channel

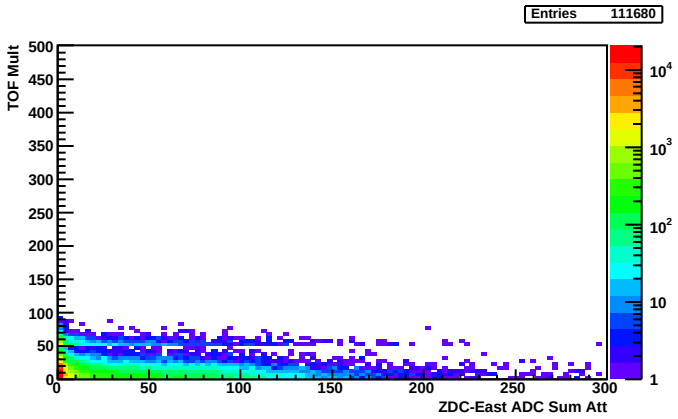

BBQ-VP004 (HI threshold)
Entries 1786880
TAC
QT Input Channel

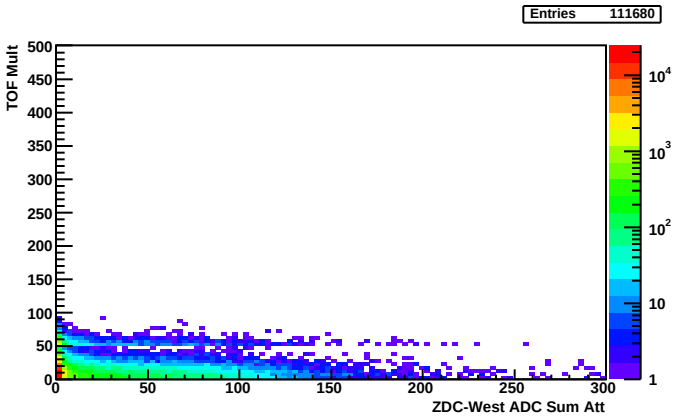

Entries 111680
TOF Mult
BBC-L-East ADC Sum

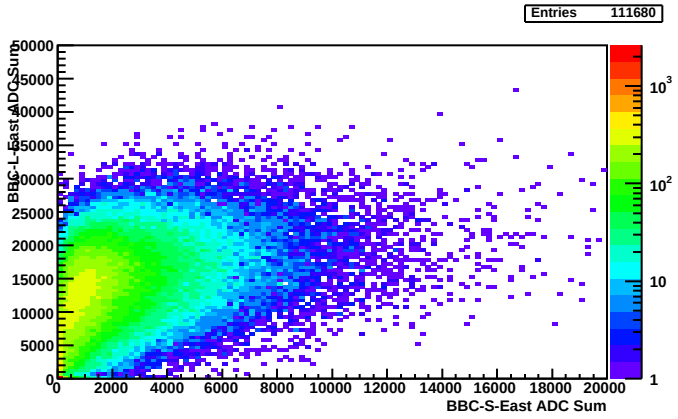

Entries 111680
TOF Mult
BBC-L-West ADC Sum

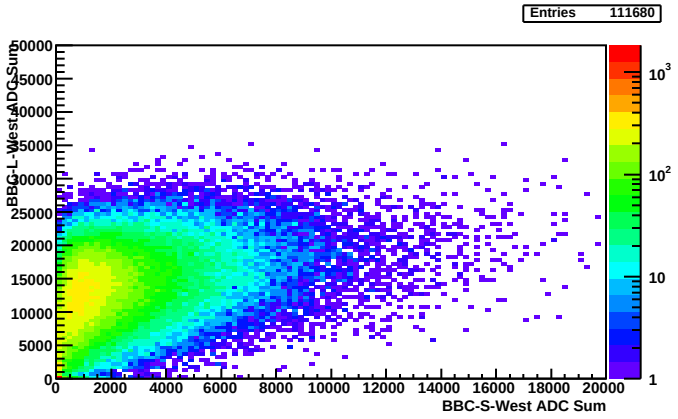

Entries 111680
TOF Mult
BBC-S-East ADC Sum

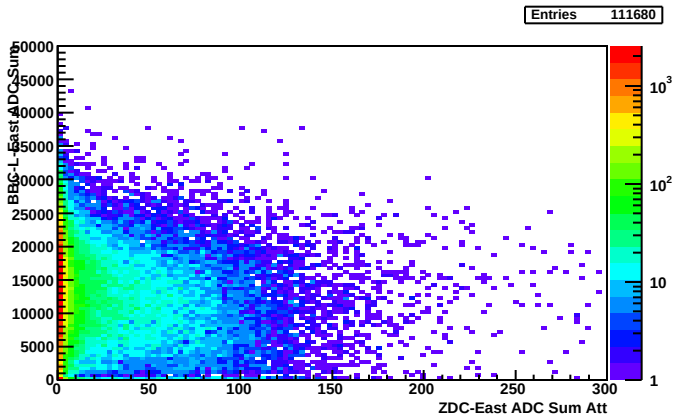

Entries 111680
TOF Mult
BBC-S-West ADC Sum

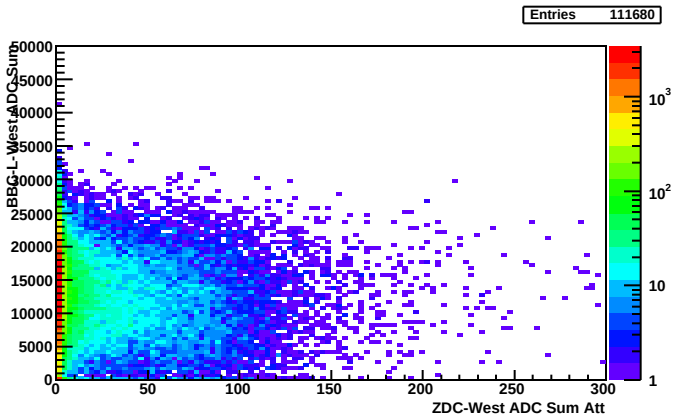

Entries 111680
TOF Mult
ZDC-East ADC Sum Att

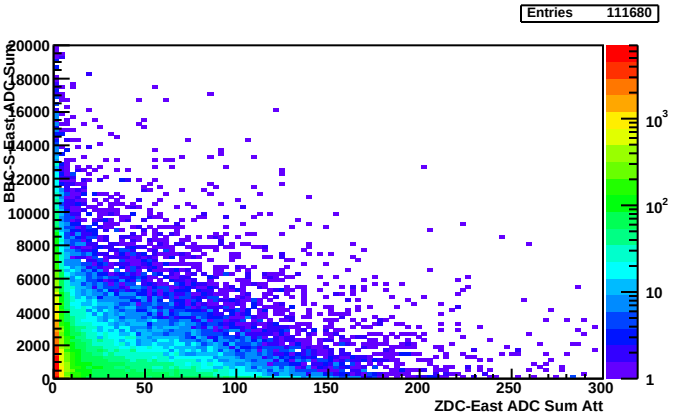

Entries 111680
TOF Mult
ZDC-West ADC Sum Att

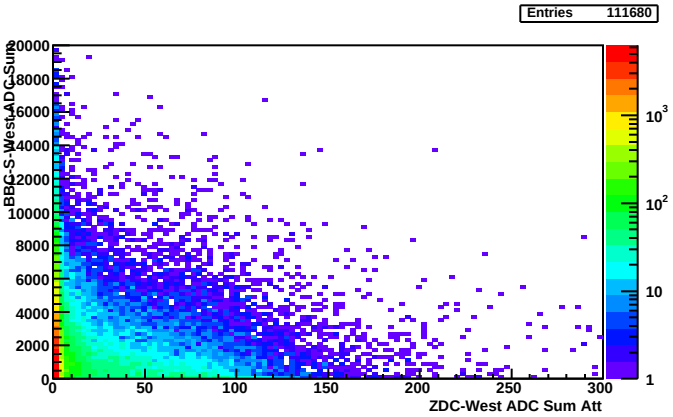

Entries 111680
BBC-L-East ADC Sum
BBC-S-East ADC Sum

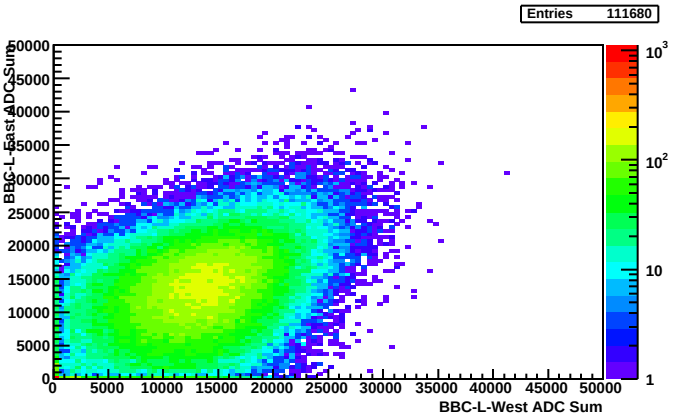

Entries 111680
BBC-L-West ADC Sum
BBC-S-West ADC Sum

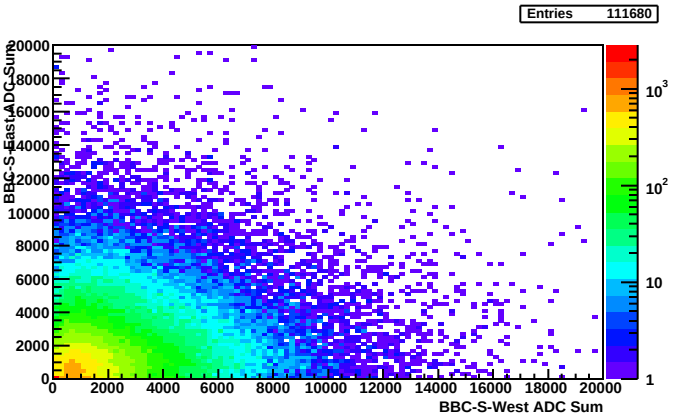

Entries 111680
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

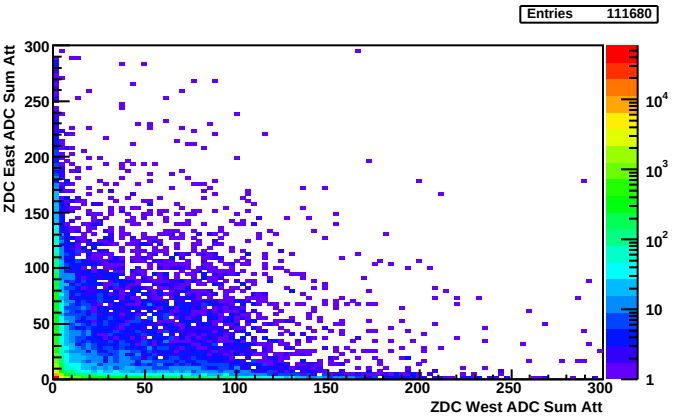

Entries 111680
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

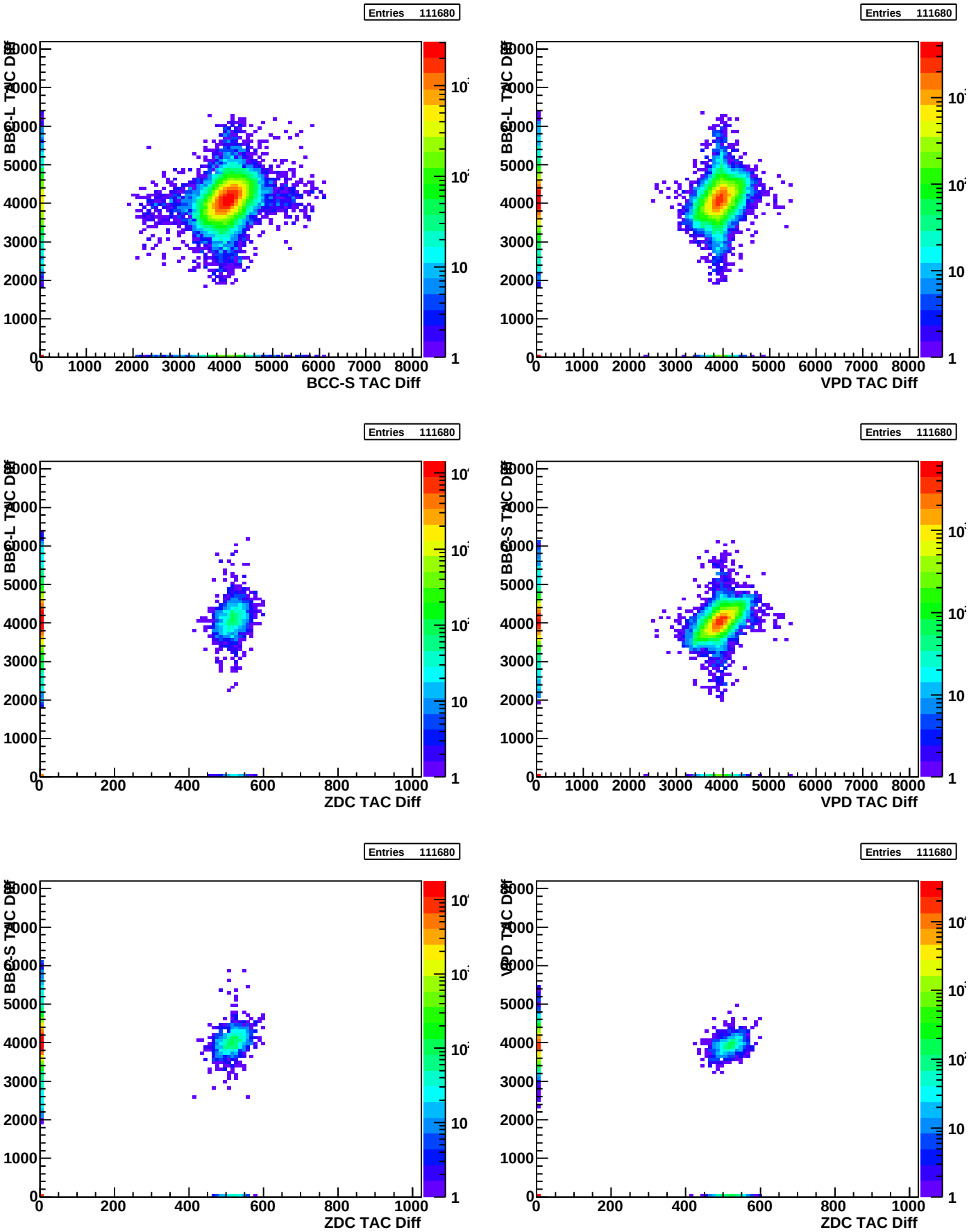

Entries 111680
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

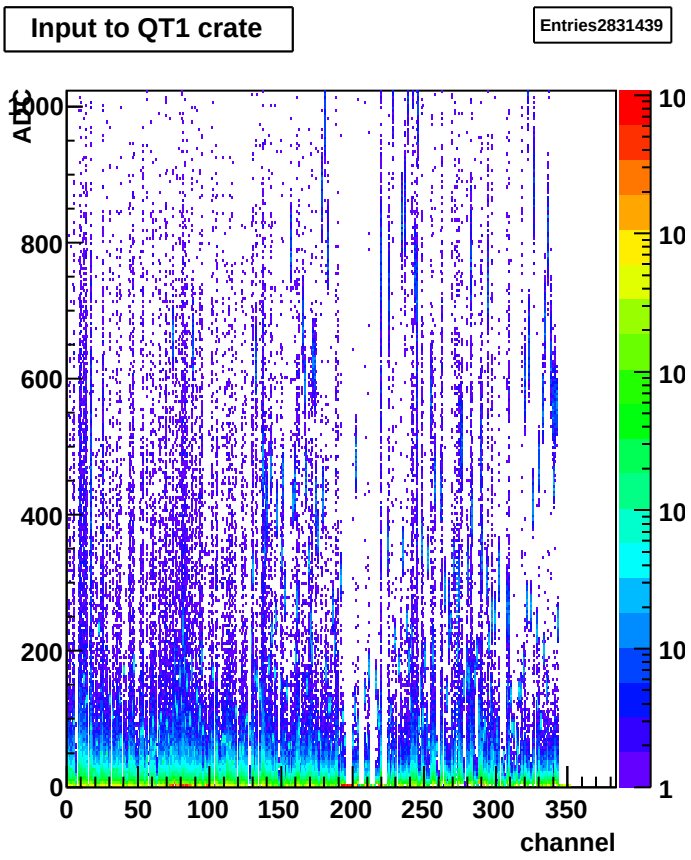

Entries 111680
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

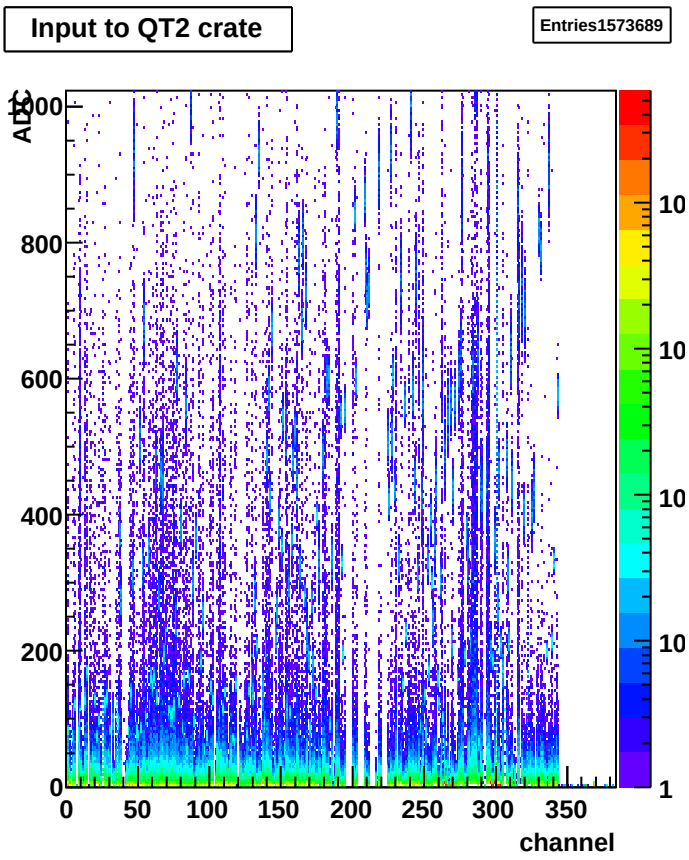

Entries 111680
BBC-L-East ADC Sum
BBC-L-West ADC Sum

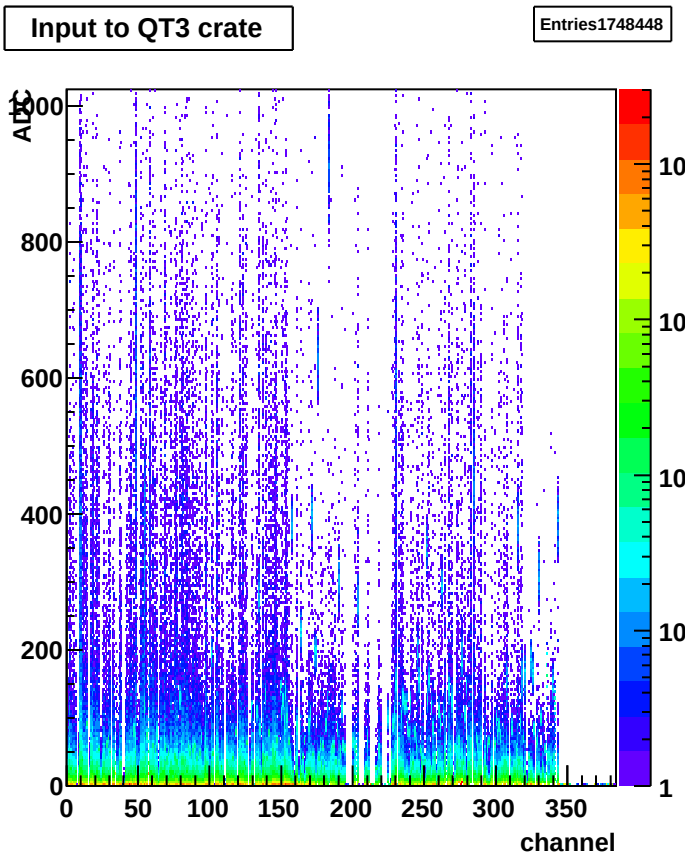

Entries 111680
BBC-S-East ADC Sum
BBC-S-West ADC Sum

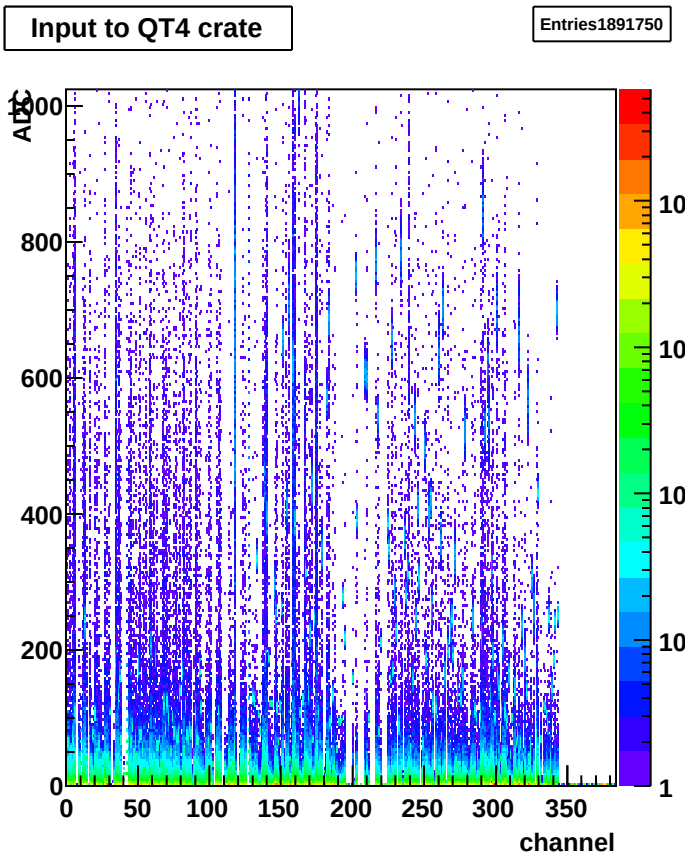

Entries 111680
ZDC East ADC Sum Att
ZDC West ADC Sum Att

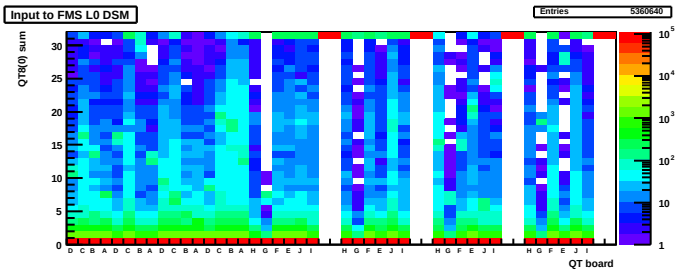

Entries 111680
BBC-L TAC Diff
BCC-S TAC Diff
Entries 111680
BBC-L TAC Diff
VPD TAC Diff
Entries 111680
BBC-L TAC Diff
ZDC TAC Diff
Entries 111680
BBC-S TAC Diff
VPD TAC Diff
Entries 111680
BBC-S TAC Diff
ZDC TAC Diff
Entries 111680
VPD TAC Diff
ZDC TAC Diff

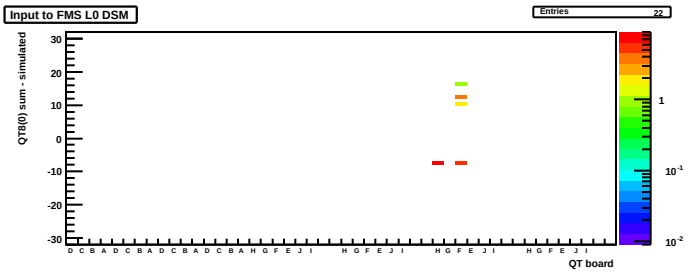

Input to QT1 crate
Entries2831439
ADC
channel

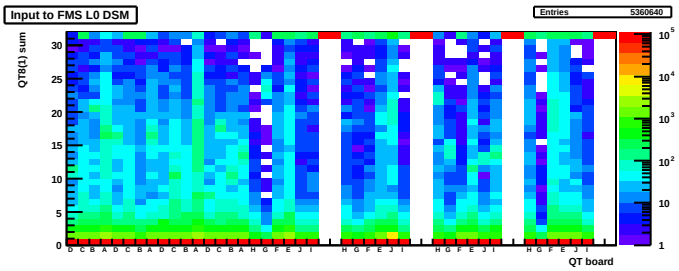

Input to QT2 crate
Entries1573689
ADC
channel

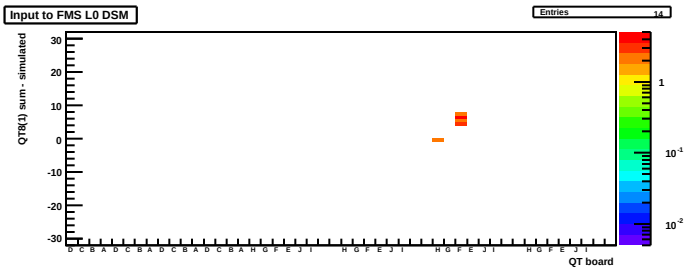

Input to QT3 crate
Entries1748448
ADC
channel

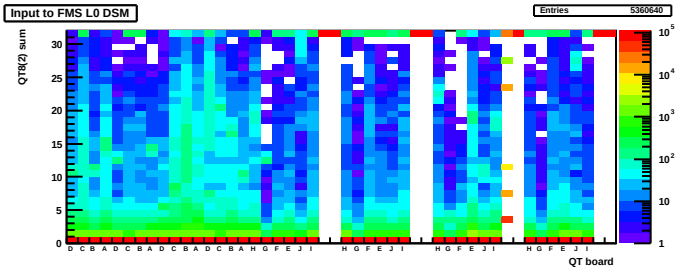

Input to QT4 crate
Entries1891750
ADC
channel

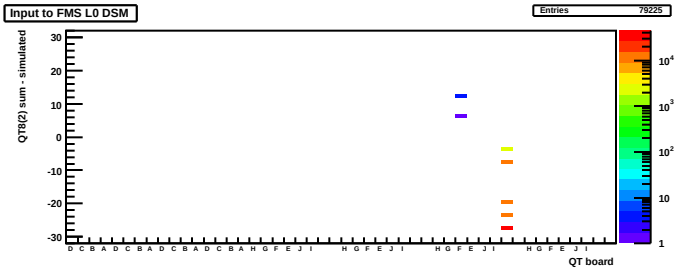

Input to FMS L0 DSM
Entries 5360640
QT8(0) sum
QT board

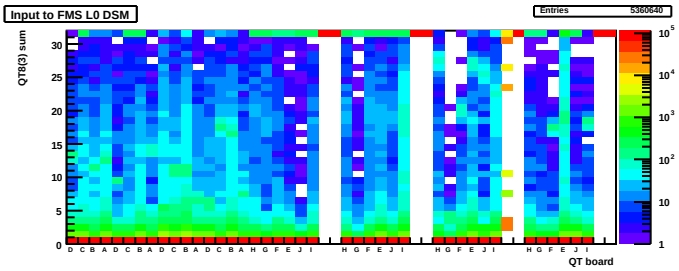

Input to FMS L0 DSM
Entries 22
QT8(0) sum - simulated
QT board

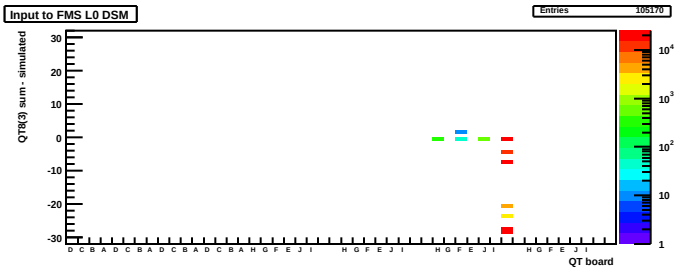

Input to FMS L0 DSM
Entries 5360640
QT8(1) sum
QT board

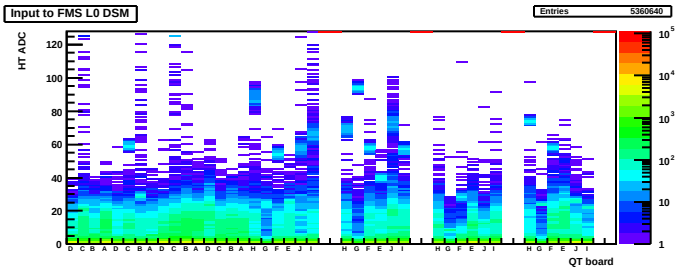

Input to FMS L0 DSM
Entries 14
QT8(1) sum - simulated
QT board

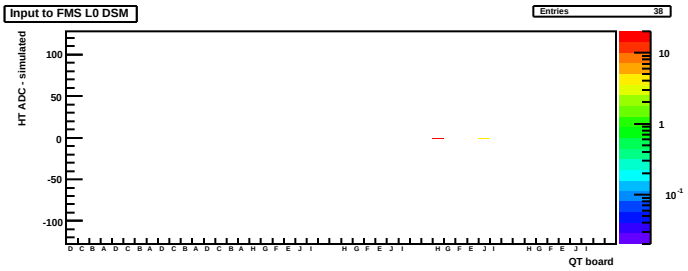

Input to FMS L0 DSM
Entries 5360640
QT8(2) sum
QT board

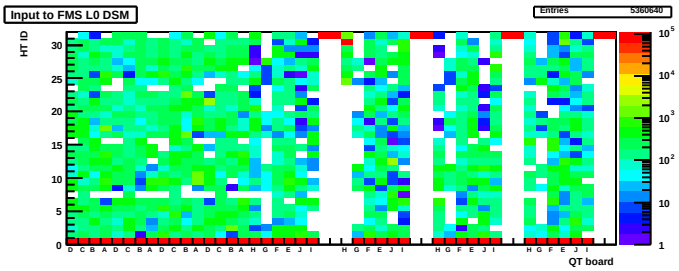

Input to FMS L0 DSM
Entries 79225
QT8(2) sum - simulated
QT board

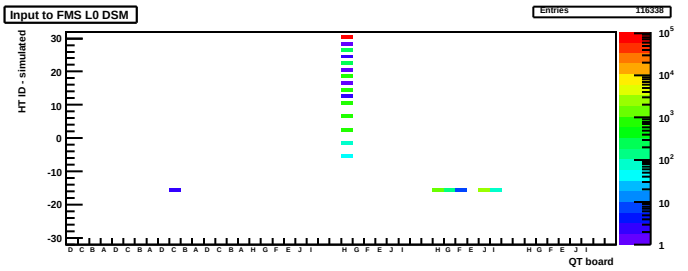

Input to FMS L0 DSM
Entries 5360640
QT8(3) sum
QT board

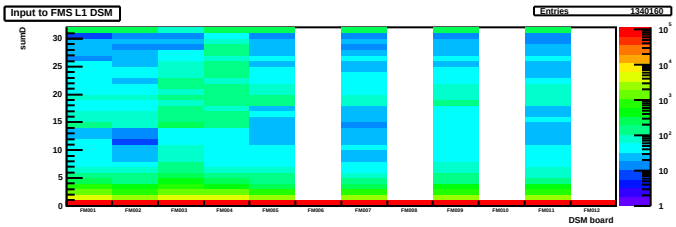

Input to FMS L0 DSM
Entries 105170
QT8(3) sum - simulated
QT board

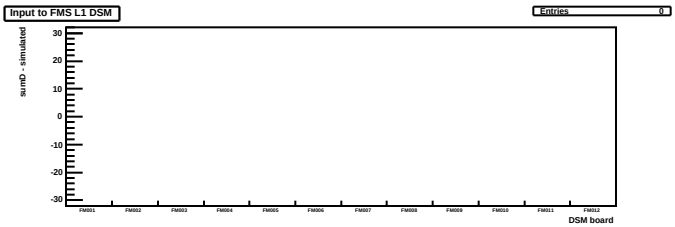

Input to FMS L0 DSM
Entries 5360640
HT ADC
QT board

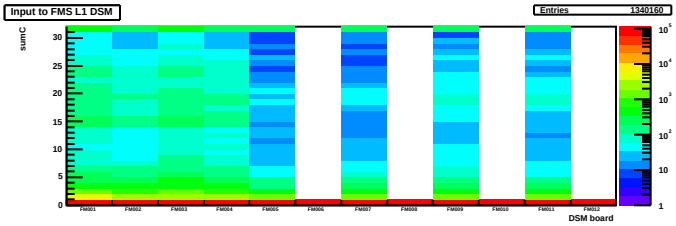

Input to FMS L0 DSM
Entries 38
HT ADC - simulated
QT board

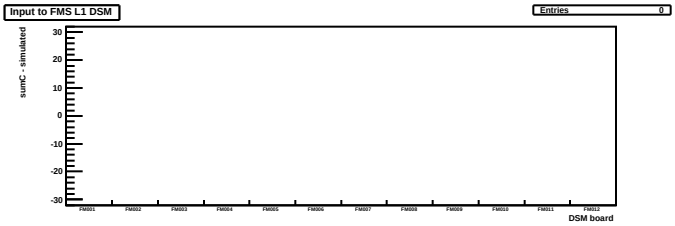

Input to FMS L0 DSM
Entries 5360640
HT ID
QT board

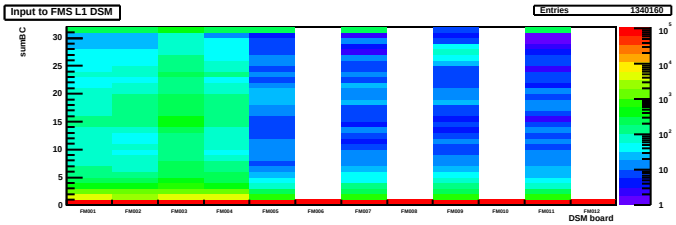

Input to FMS L0 DSM
Entries 116338
HT ID - simulated
QT board

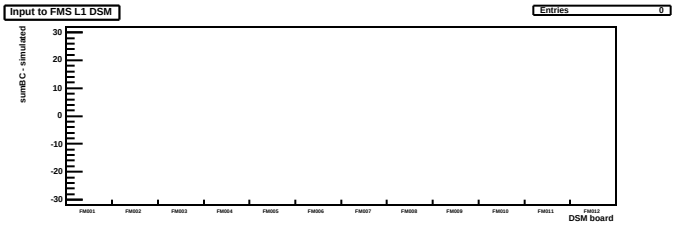

Input to FMS L1 DSM
Entries 1340160
sumD
DSM board

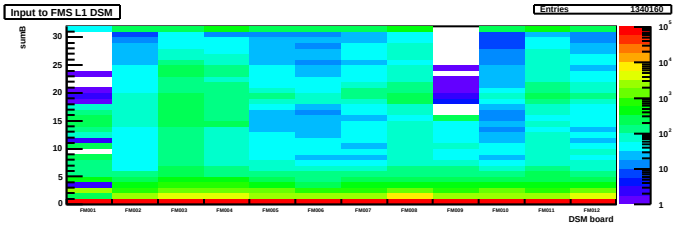

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

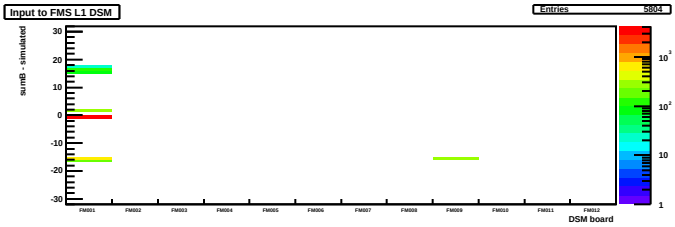

Input to FMS L1 DSM
Entries 1340160
sumC
DSM board

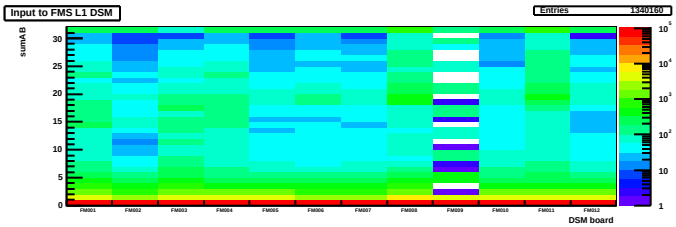

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

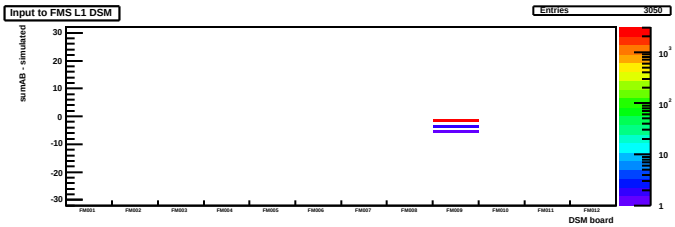

Input to FMS L1 DSM
Entries 1340160
sumBC
DSM board

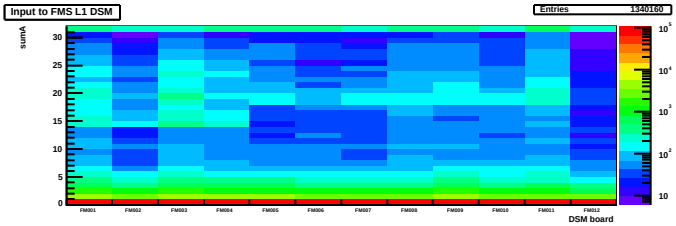

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

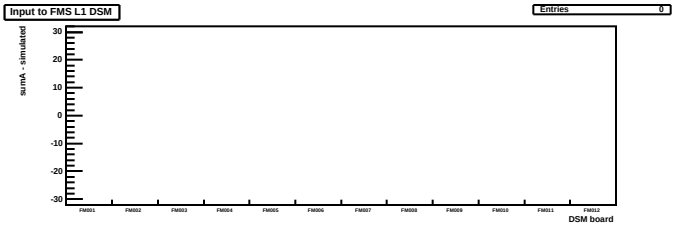

Input to FMS L1 DSM
Entries 1340160
sumB
DSM board

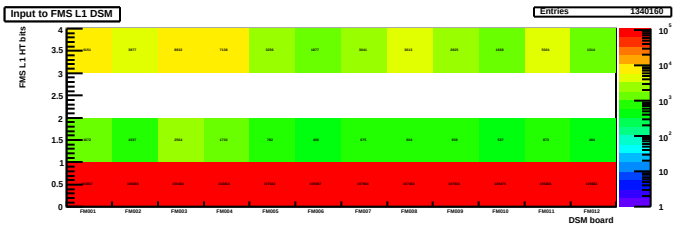

Input to FMS L1 DSM
Entries 5804
sumB - simulated
DSM board

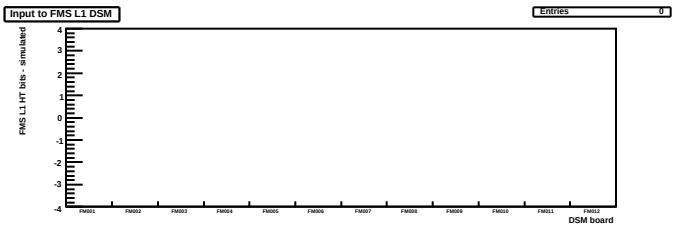

Input to FMS L1 DSM
Entries 1340160
sumAB
DSM board

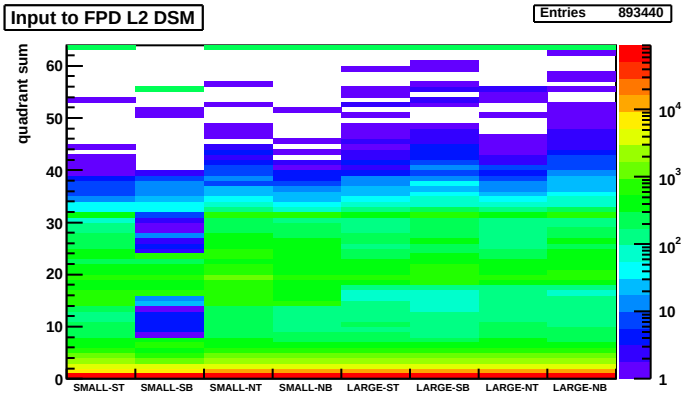

Input to FMS L1 DSM
Entries 3050
sumAB - simulated
DSM board

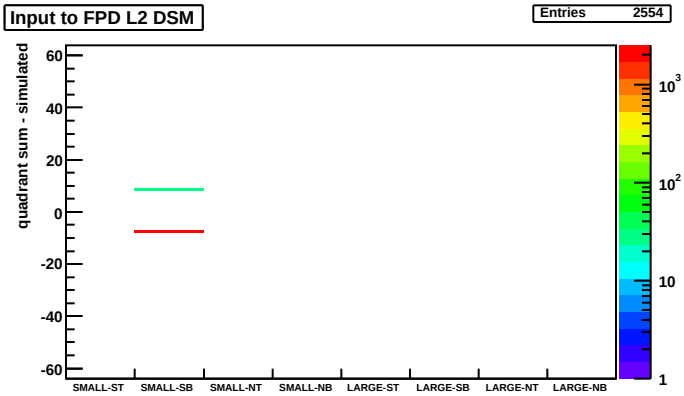

Input to FMS L1 DSM
Entries 1340160
sumA
DSM board

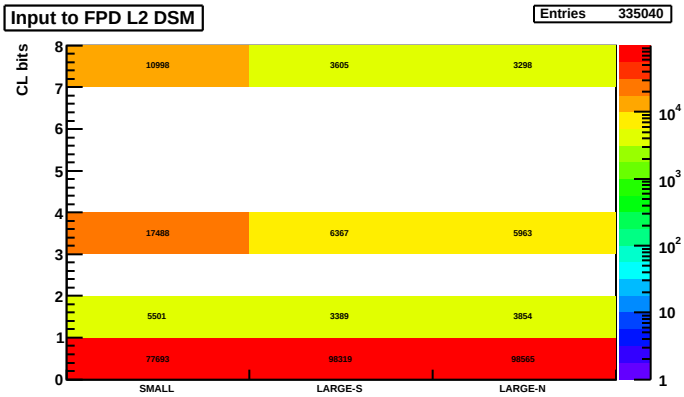

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

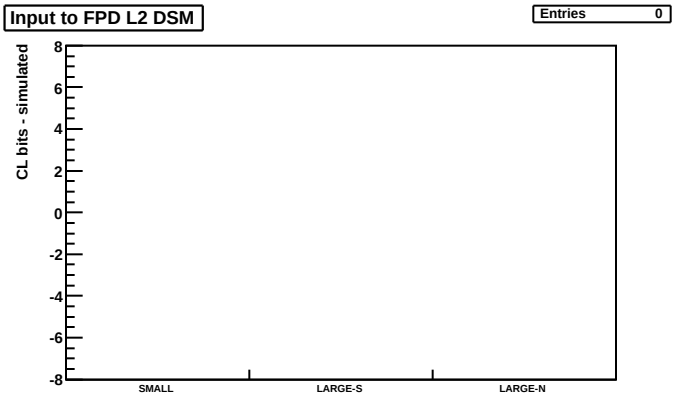

Input to FMS L1 DSM
Entries 1340160
FMS L1 HT bits
DSM board

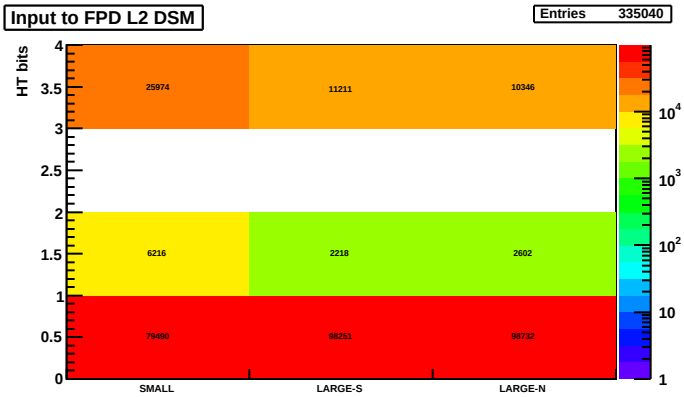

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

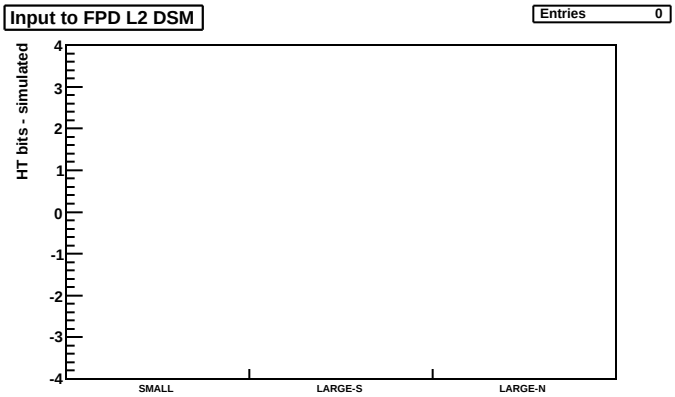

Input to FPD L2 DSM
Entries 893440
quadrant sum
SMALL-ST SMALL-SB SMALL-NT SMALL-NB LARGE-ST LARGE-SB LARGE-NT LARGE-NB

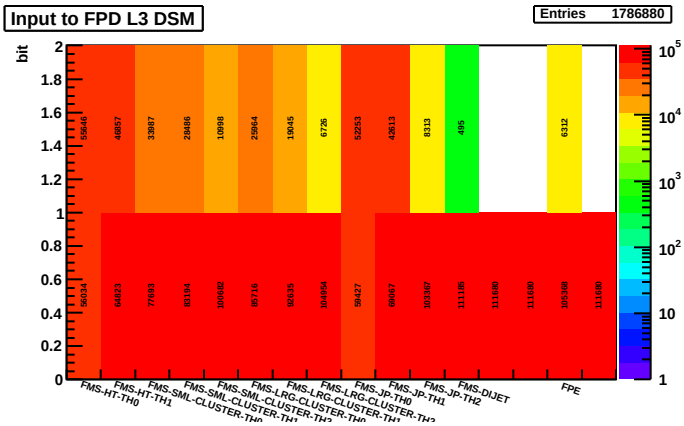

Input to FPD L2 DSM
Entries 2554
quadrant sum - simulated
SMALL-ST SMALL-SB SMALL-NT SMALL-NB LARGE-ST LARGE-SB LARGE-NT LARGE-NB

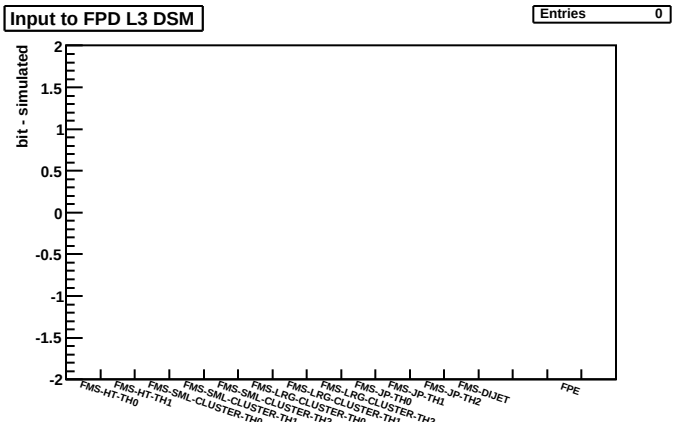

Input to FPD L2 DSM
Entries 335040
CL bits
10998 3605 3298
17488 6367 5963
5501 3389 3854
77693 98319 98565
SMALL LARGE-S LARGE-N

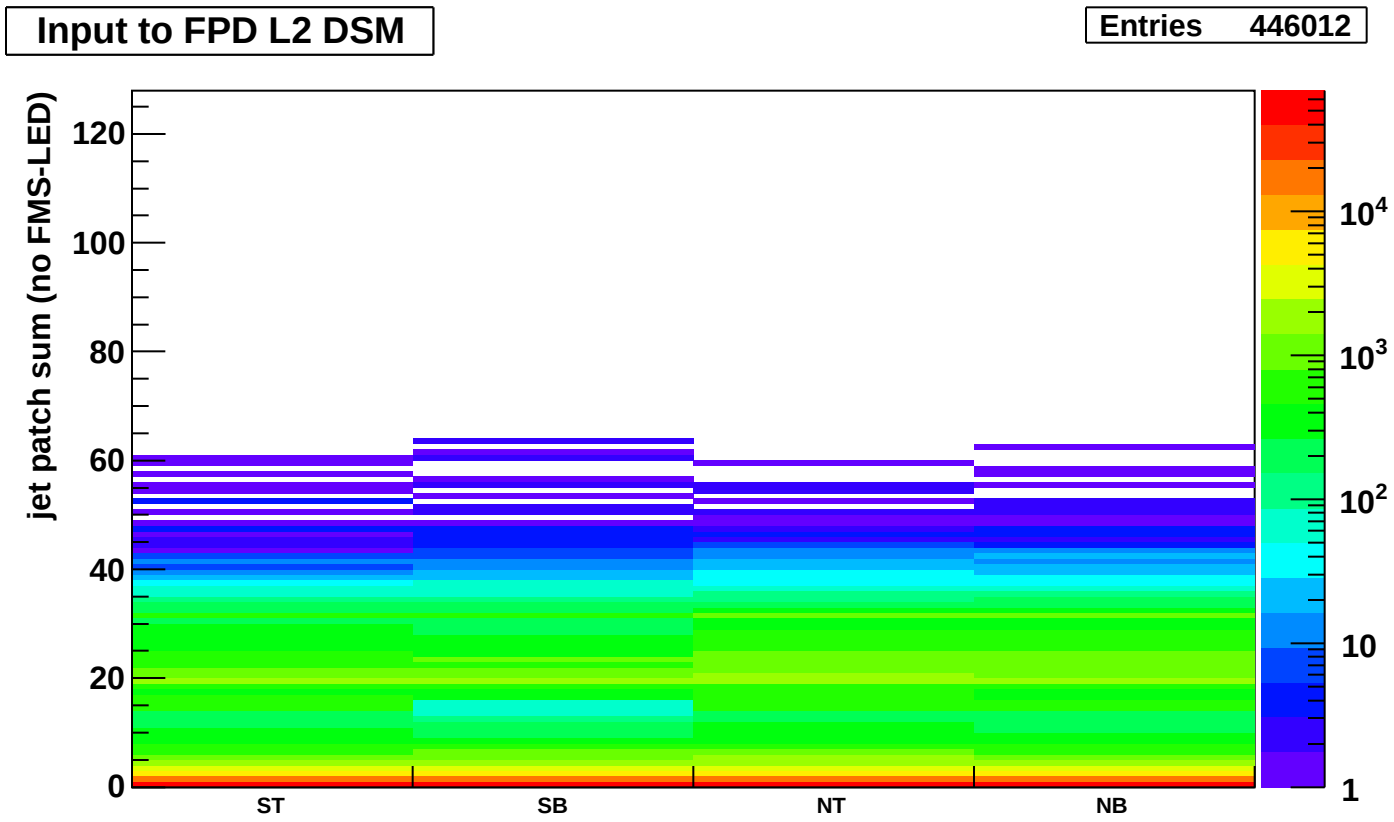

Input to FPD L2 DSM
Entries 0
CL bits - simulated
SMALL LARGE-S LARGE-N

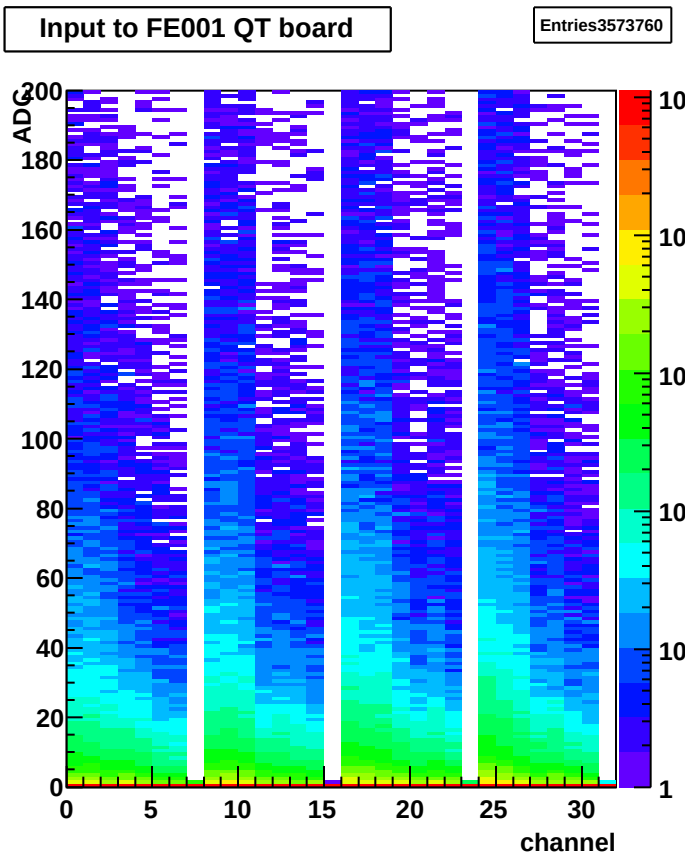

Input to FPD L2 DSM
Entries 335040
HT bits
25974 11211 10346
6216 2218 2602
79490 98251 98732
SMALL LARGE-S LARGE-N

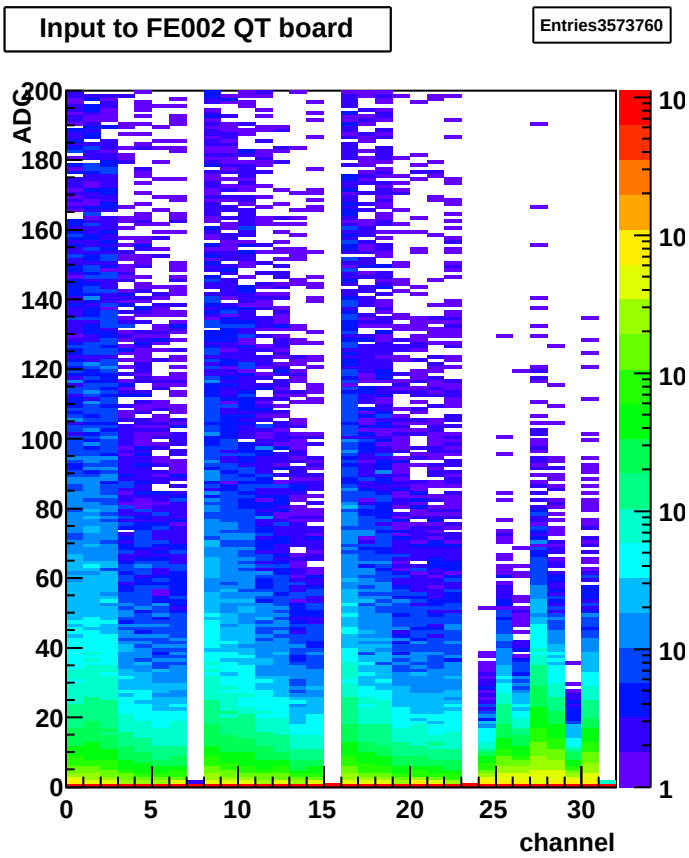

Input to FPD L2 DSM
Entries 0
HT bits - simulated
SMALL LARGE-S LARGE-N

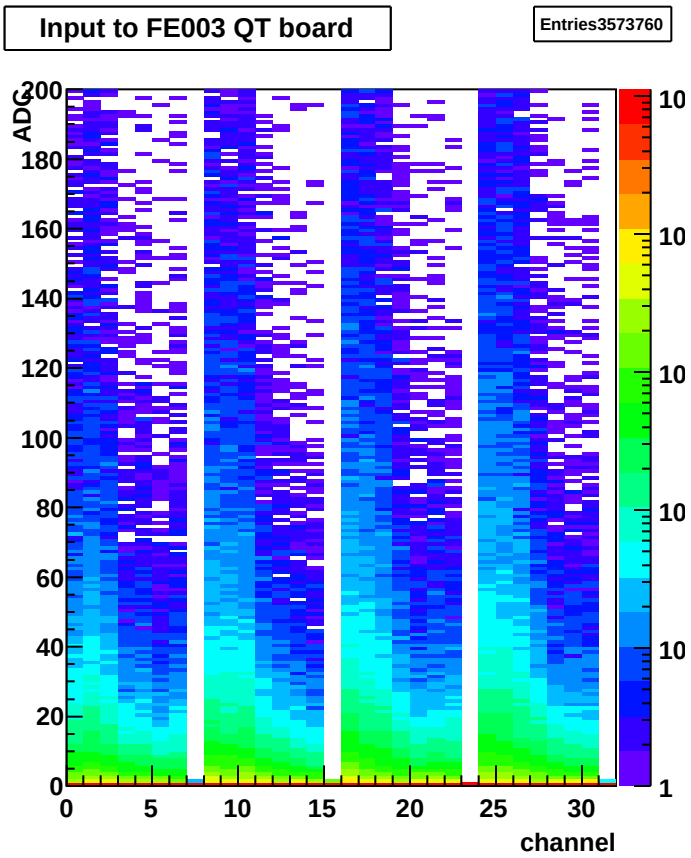

Input to FPD L3 DSM
Entries 1786880
bit
FMS-HT-TH0 FMS-HT-TH1 FMS-SML-CLUSTER-TH0 FMS-SML-CLUSTER-TH1 FMS-SML-CLUSTER-TH2 FMS-LRG-CLUSTER-TH0 FMS-LRG-CLUSTER-TH1 FMS-LRG-CLUSTER-TH2 FMS-JP-TH0 FMS-JP-TH1 FMS-JP-TH2 FMS-DIJET FPE

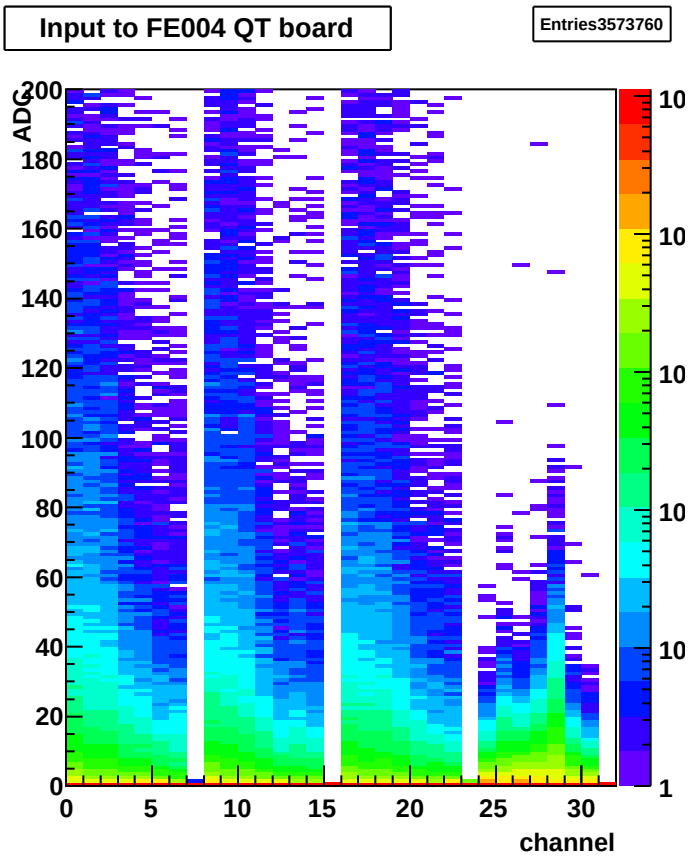

Input to FPD L3 DSM
Entries 0
bit - simulated
FMS-HT-TH0 FMS-HT-TH1 FMS-SML-CLUSTER-TH0 FMS-SML-CLUSTER-TH1 FMS-SML-CLUSTER-TH2 FMS-LRG-CLUSTER-TH0 FMS-LRG-CLUSTER-TH1 FMS-LRG-CLUSTER-TH2 FMS-JP-TH0 FMS-JP-TH1 FMS-JP-TH2 FMS-DIJET FPE

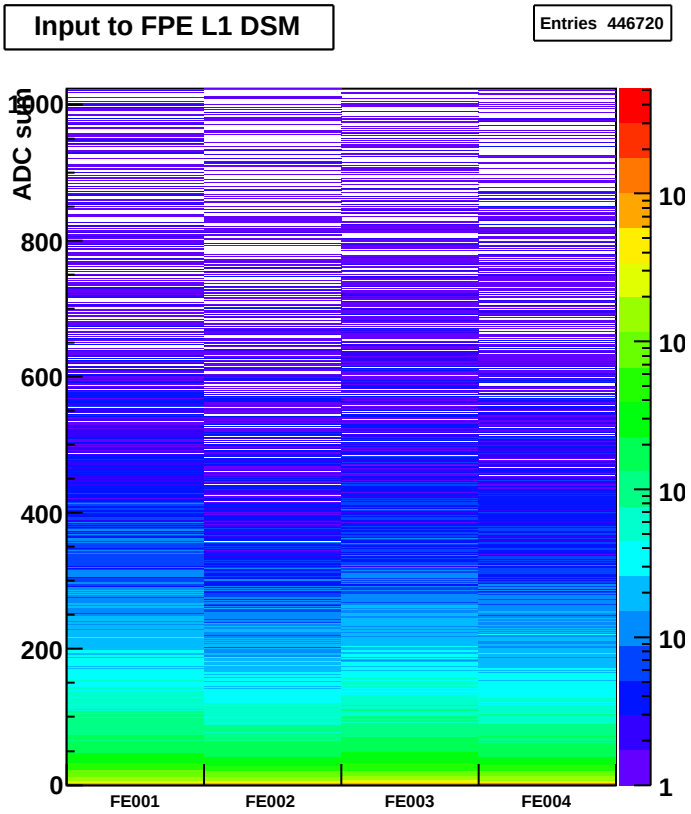

Input to FPD L2 DSM
Entries 446012
jet patch sum (no FMS-LED)
0
20
40
60
80
100
120
ST
SB
NT
NB
1
10
10^2
10^3
10^4

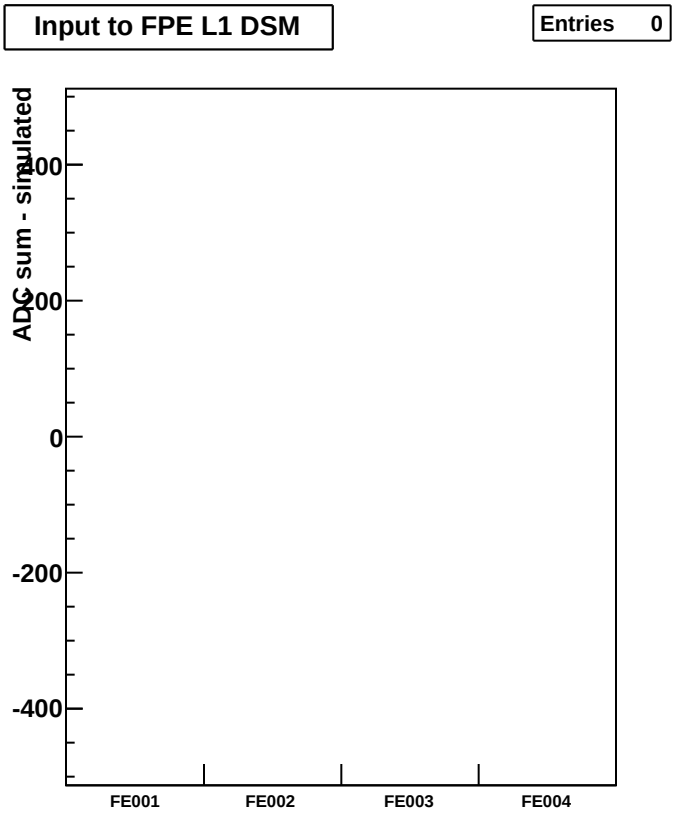

Input to FE001 QT board
Entries3573760
ADC
channel

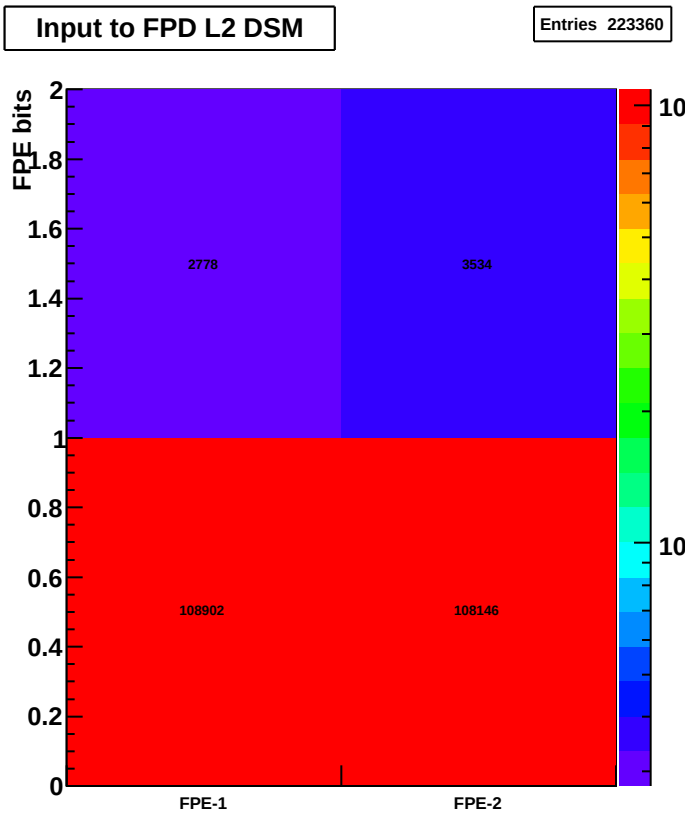

Input to FE002 QT board
Entries3573760
ADC
channel

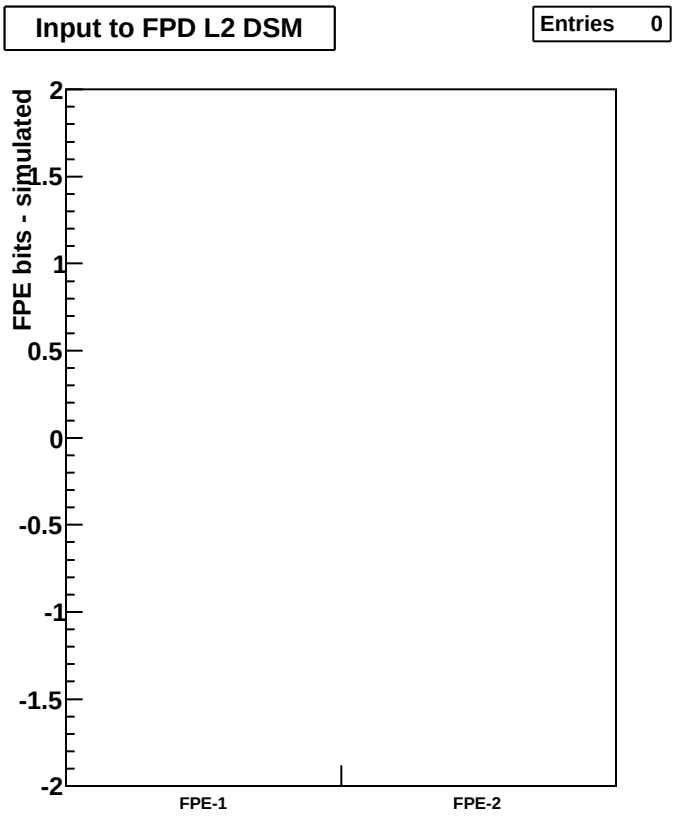

Input to FE003 QT board
Entries3573760
ADC
channel


Input to FE004 QT board
Entries3573760
ADC
channel


Input to FPE L1 DSM
Entries 446720
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 223360
FPE bits
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
2778
3534
108902
108146
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