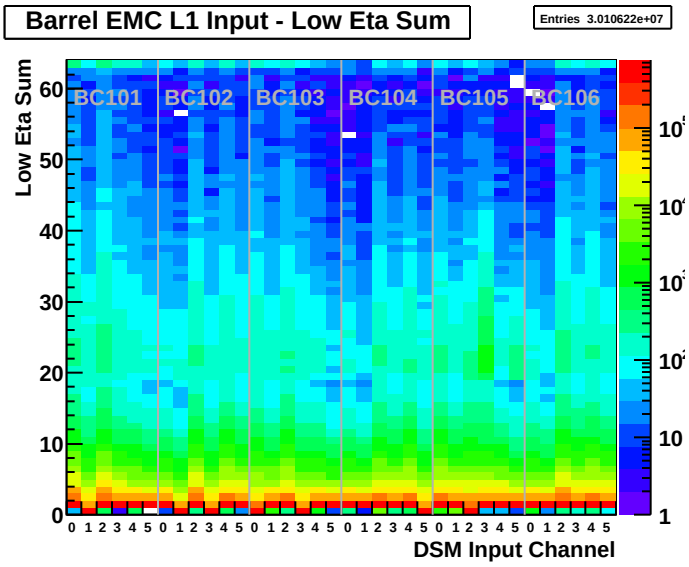
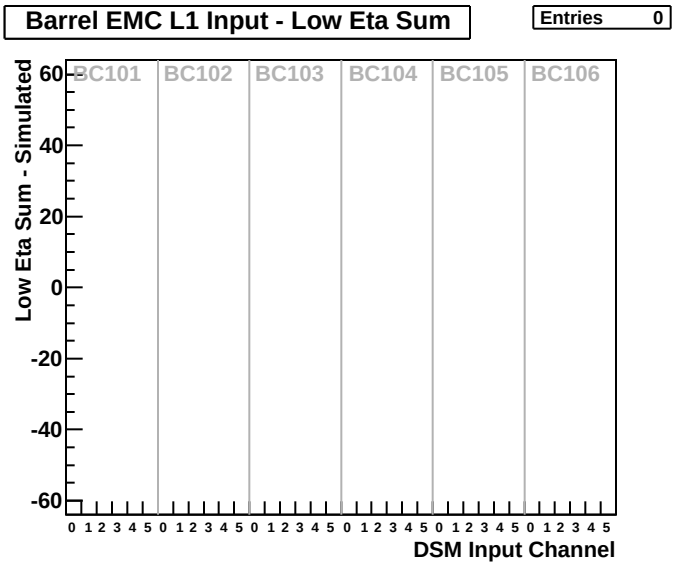
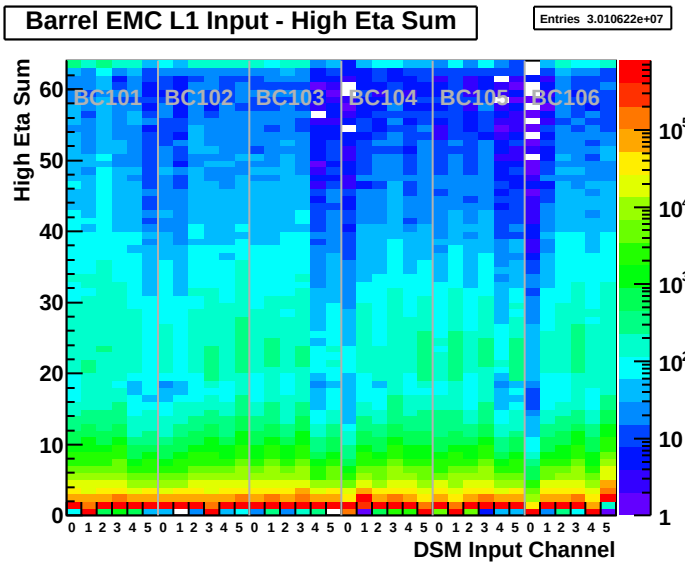
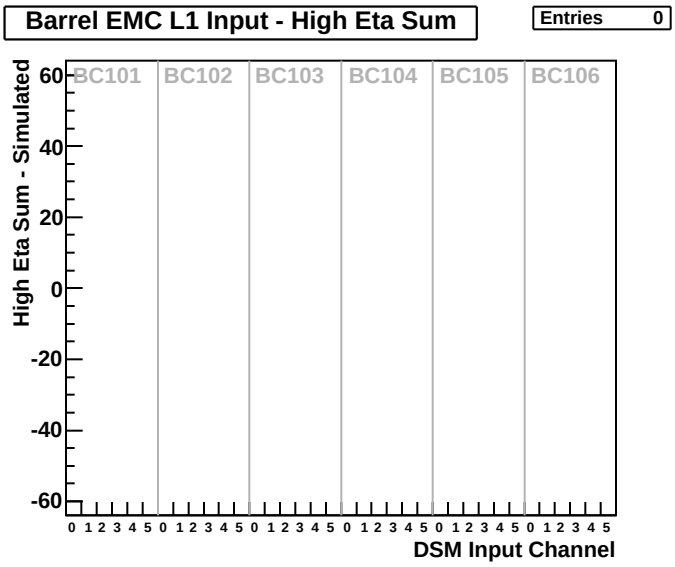
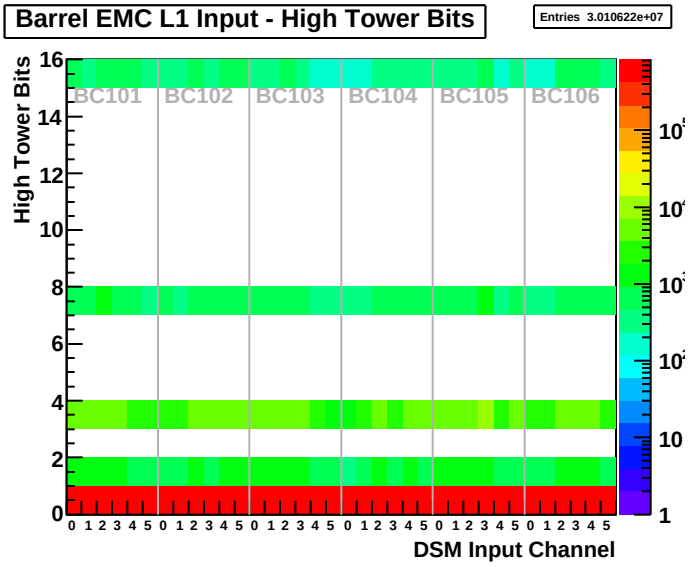
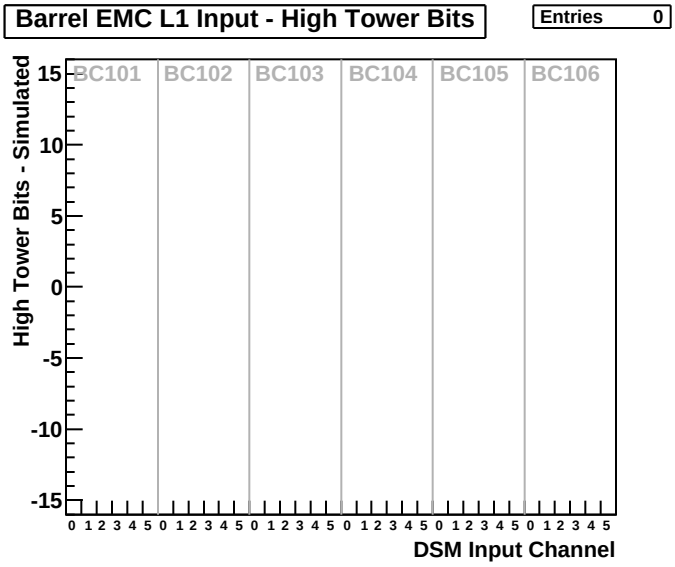

Barrel EMC L1 Input - Low Eta Sum
Entries 3.010622e+07
Low Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

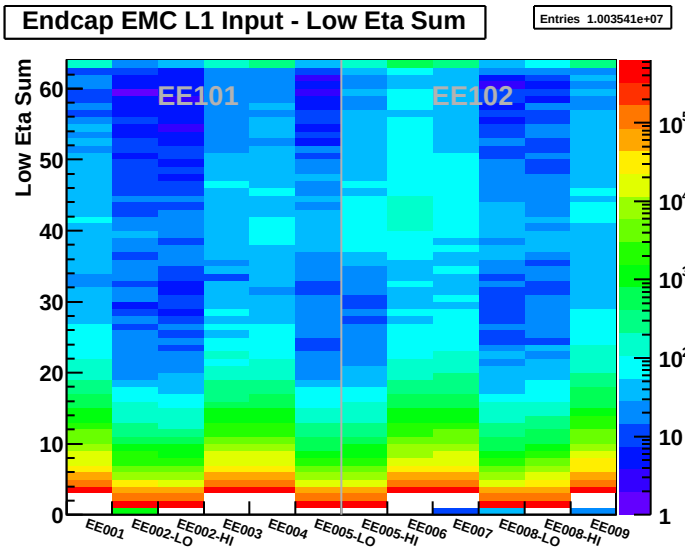

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

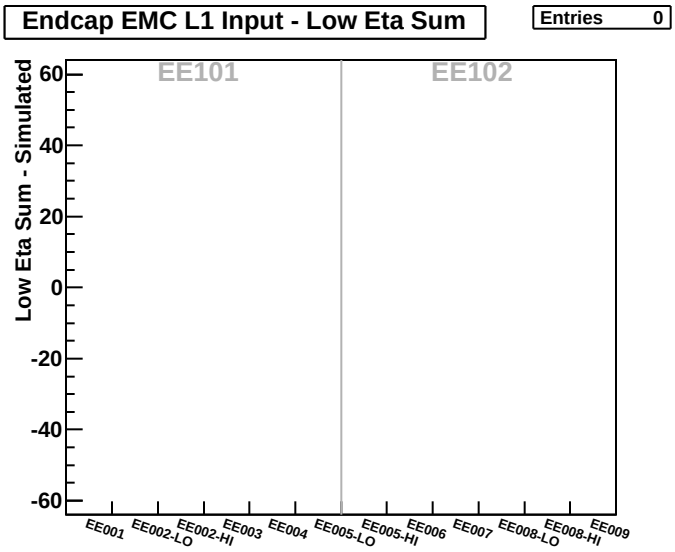

Barrel EMC L1 Input - High Eta Sum
Entries 3.010622e+07
High Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

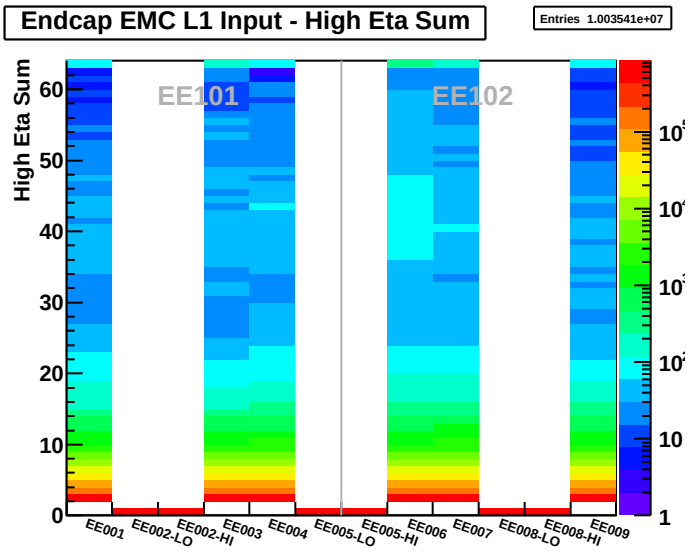

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

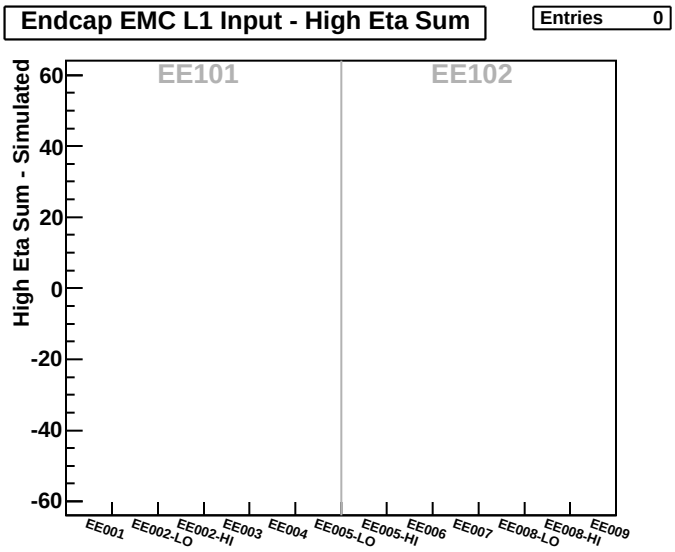

Barrel EMC L1 Input - High Tower Bits
Entries 3.010622e+07
High Tower Bits
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

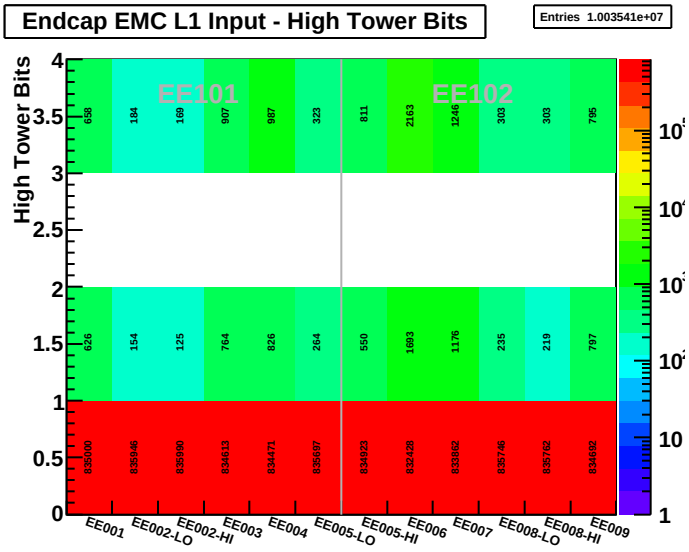

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

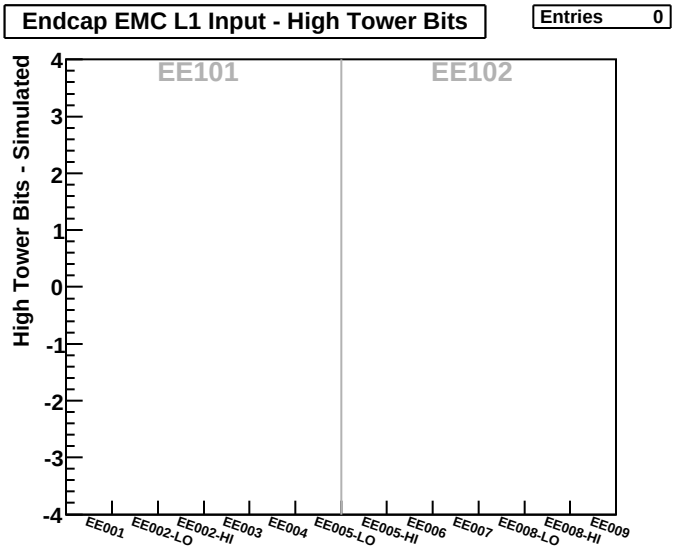

Endcap EMC L1 Input - Low Eta Sum
Entries 1.003541e+07
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

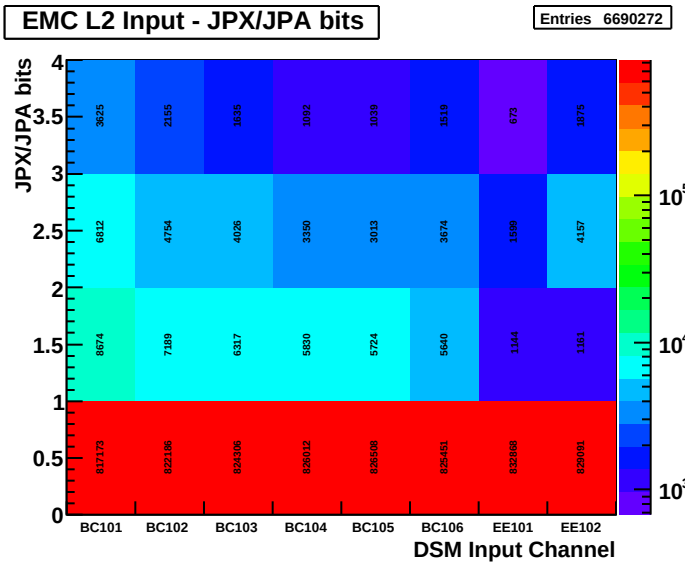

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

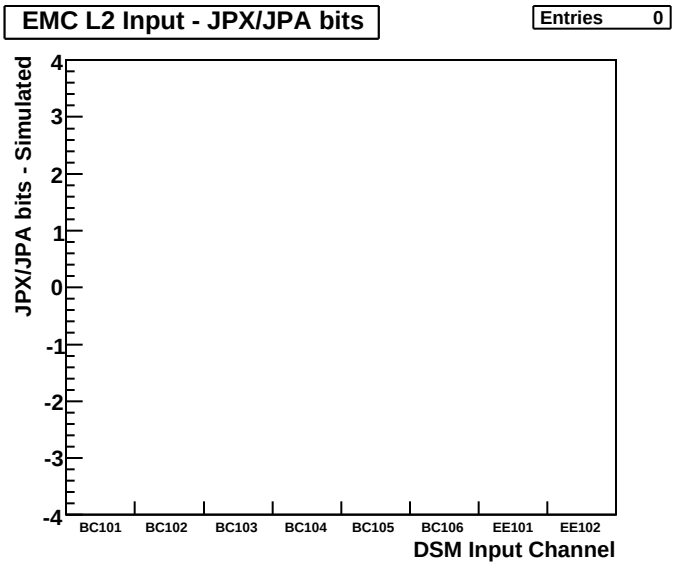

Endcap EMC L1 Input - High Eta Sum
Entries 1.003541e+07
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

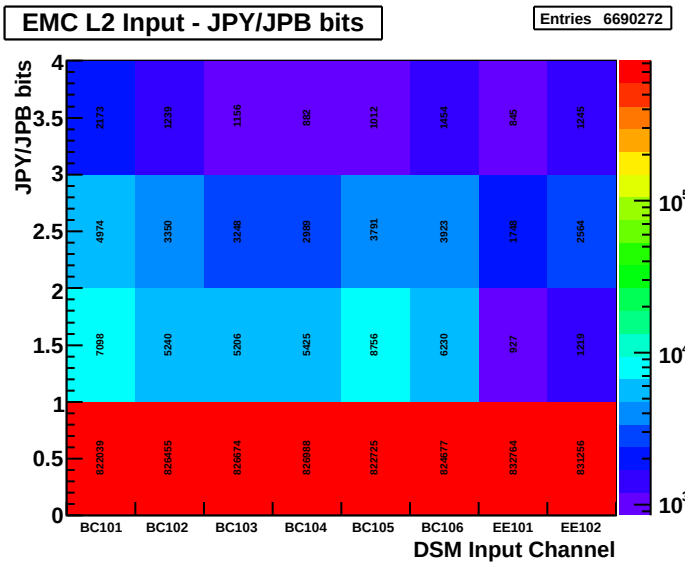

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

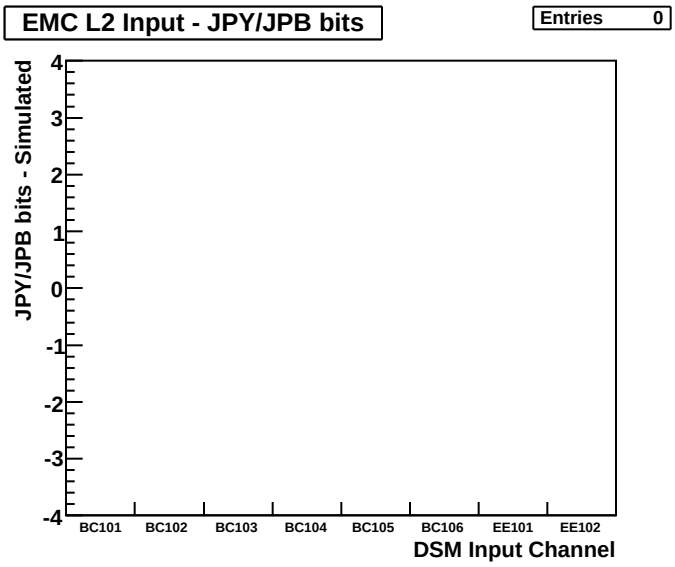

Endcap EMC L1 Input - High Tower Bits
Entries 1.003541e+07
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

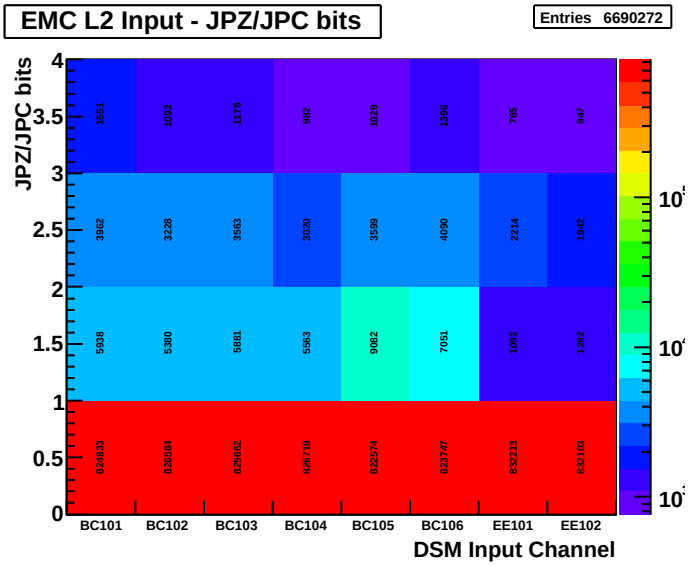

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

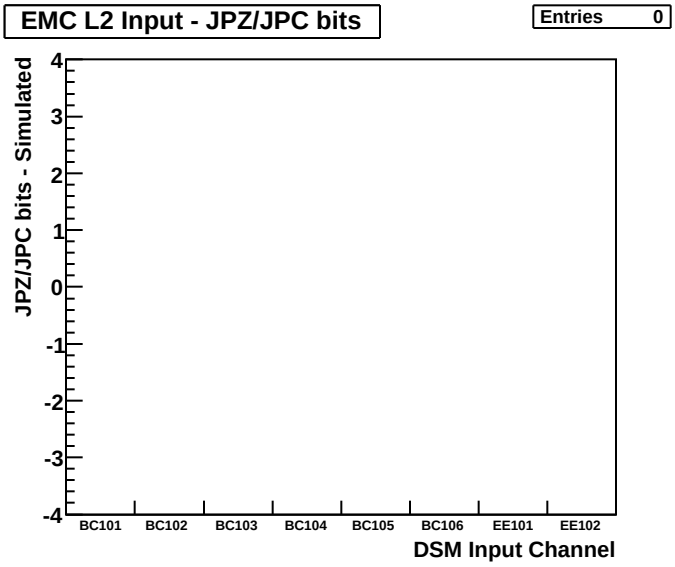

EMC L2 Input - JPX/JPA bits
Entries 6690272
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
3625 2155 1635 1092 1039 1519 673 1875
6812 4754 4026 3350 3013 3674 1599 4157
8674 7189 6317 5830 5724 5640 1144 1161
817173 822186 824306 826012 826508 825451 832868 829091

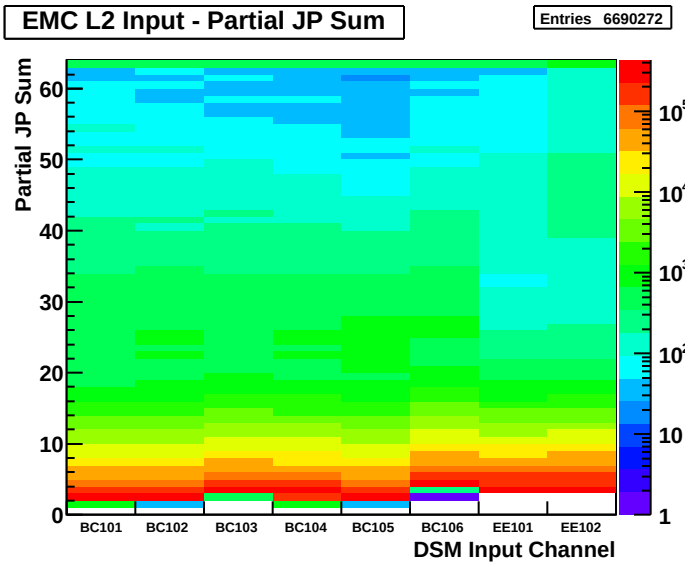

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

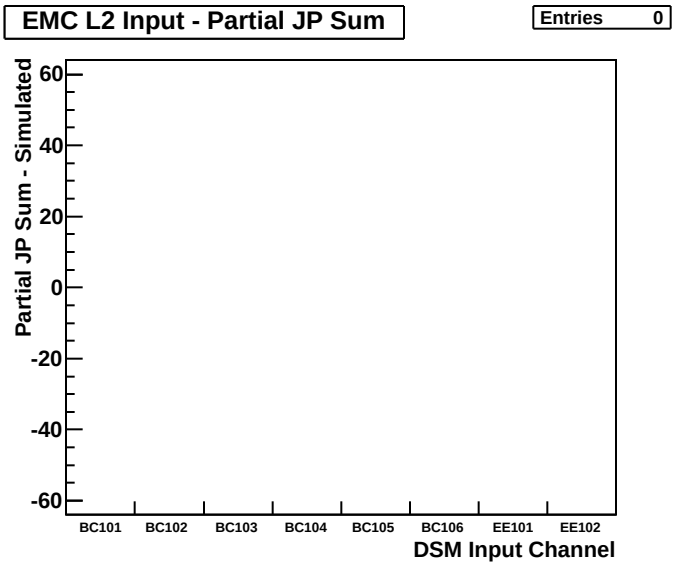

EMC L2 Input - JPY/JPB bits
Entries 6690272
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
2173 1239 1156 882 1012 1454 845 1245
4974 3350 3248 2889 3791 3923 1748 2564
7098 5340 5206 5425 8756 6230 927 1219
822039 826455 826674 826988 822725 824677 832764 831256

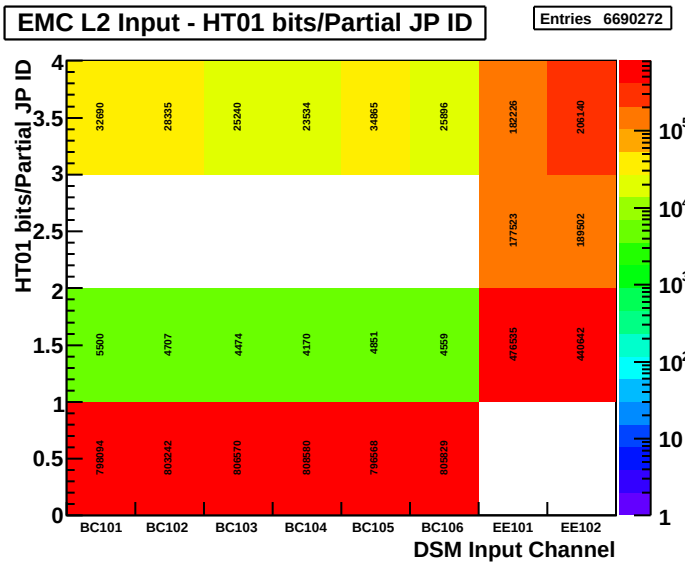

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

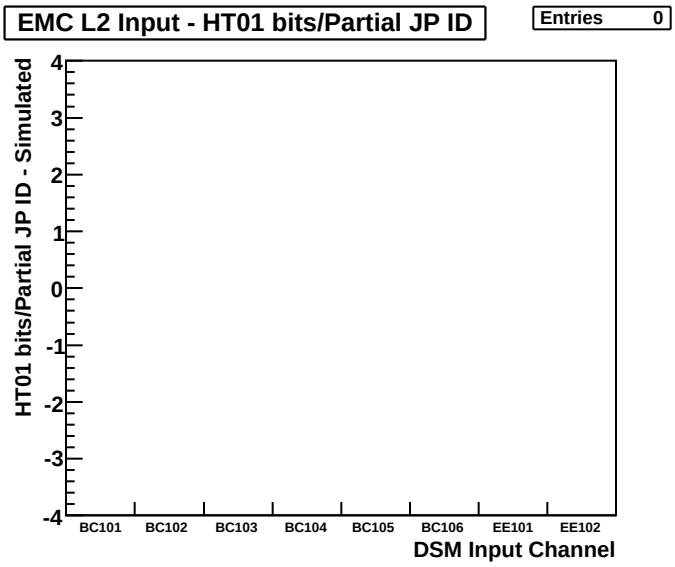

EMC L2 Input - JPZ/JPC bits
Entries 6690272
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1551 1092 1176 982 1029 1386 765 947
3962 3228 3563 3020 3599 4090 2214 1942
5938 5380 5681 5563 9082 7051 1092 1292
824833 826584 825662 826719 822574 823747 832213 832103

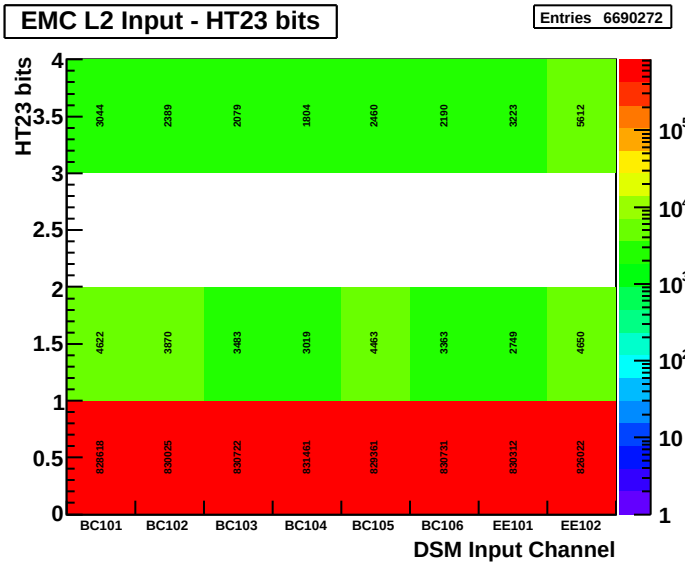

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

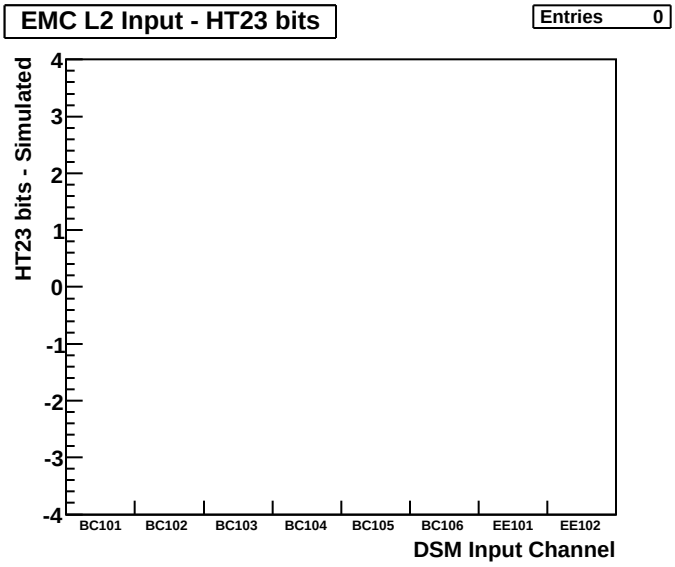

EMC L2 Input - Partial JP Sum
Entries 6690272
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

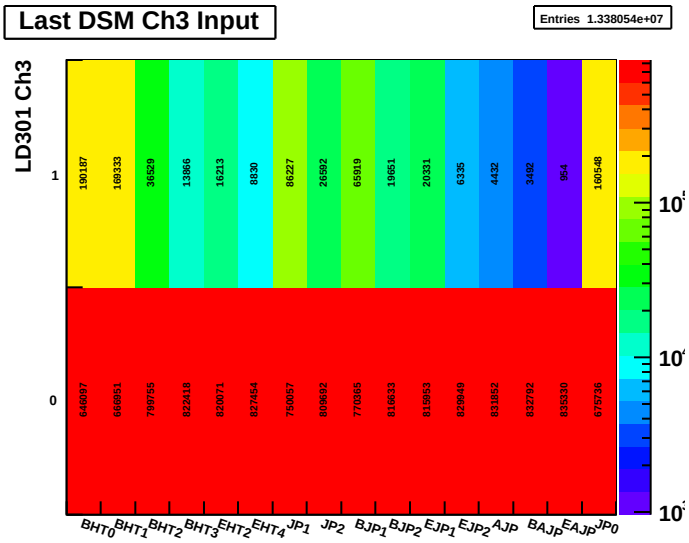

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

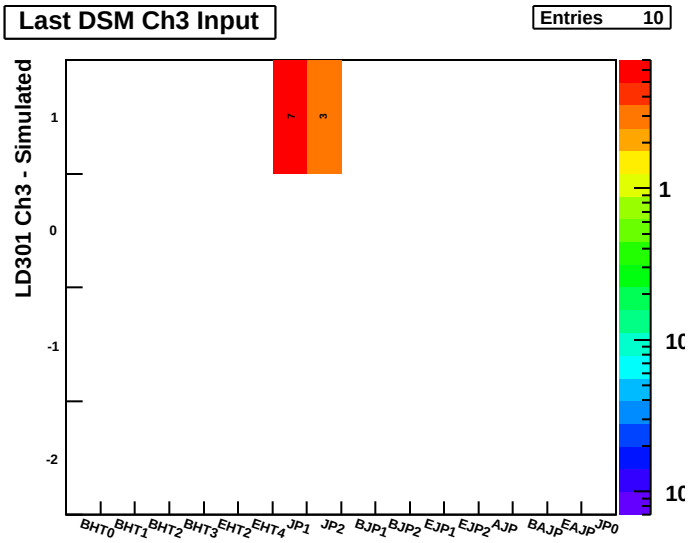

EMC L2 Input - HT01 bits/Partial JP ID
Entries 6690272
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

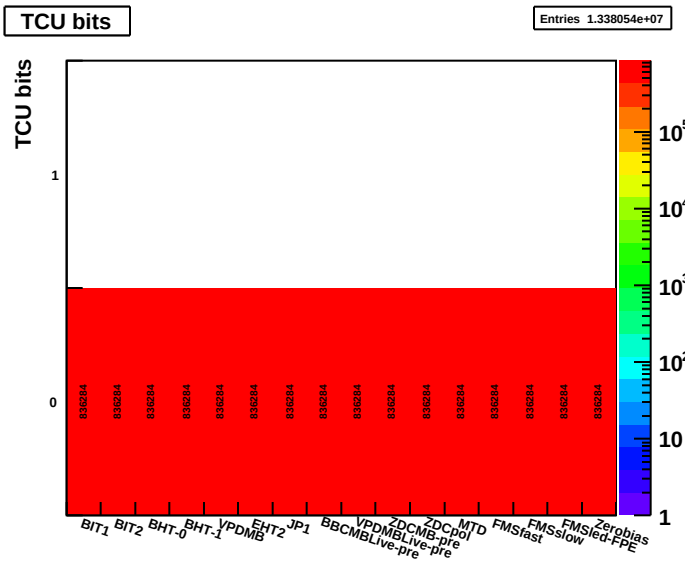

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

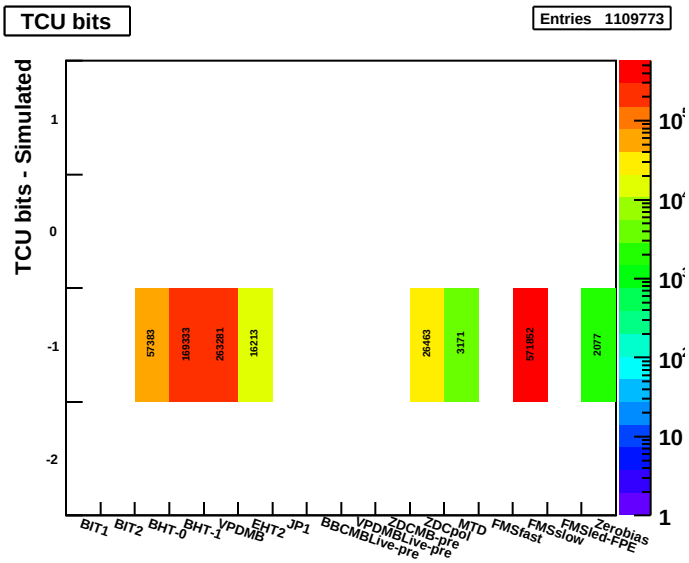

EMC L2 Input - HT23 bits
Entries 6690272
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

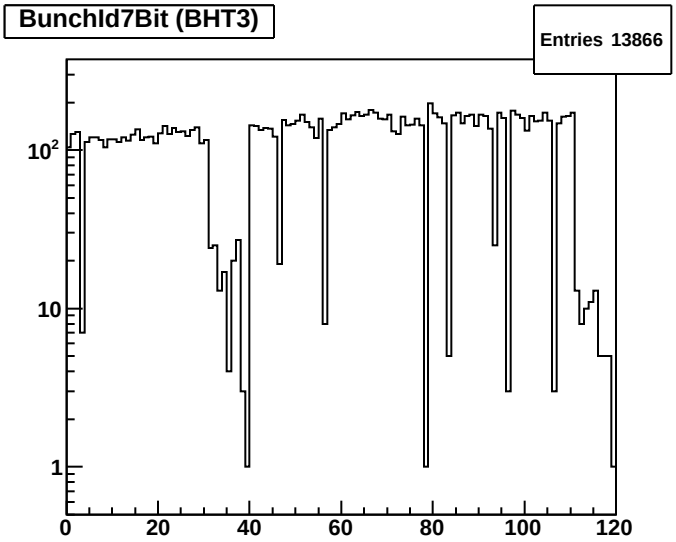

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

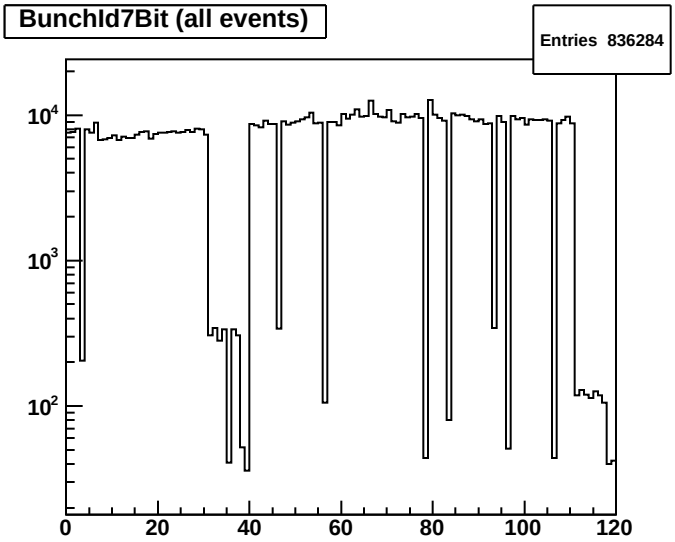

Last DSM Ch3 Input
Entries 1.338054e+07
LD301 Ch3
190187 169333 36529 13866 16213 8830 86227 26592 65919 19651 20331 6335 4432 3492 954 160548
646097 666951 799755 822418 820071 827454 750057 808692 770365 816633 815953 829949 831852 832792 835330 675736
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

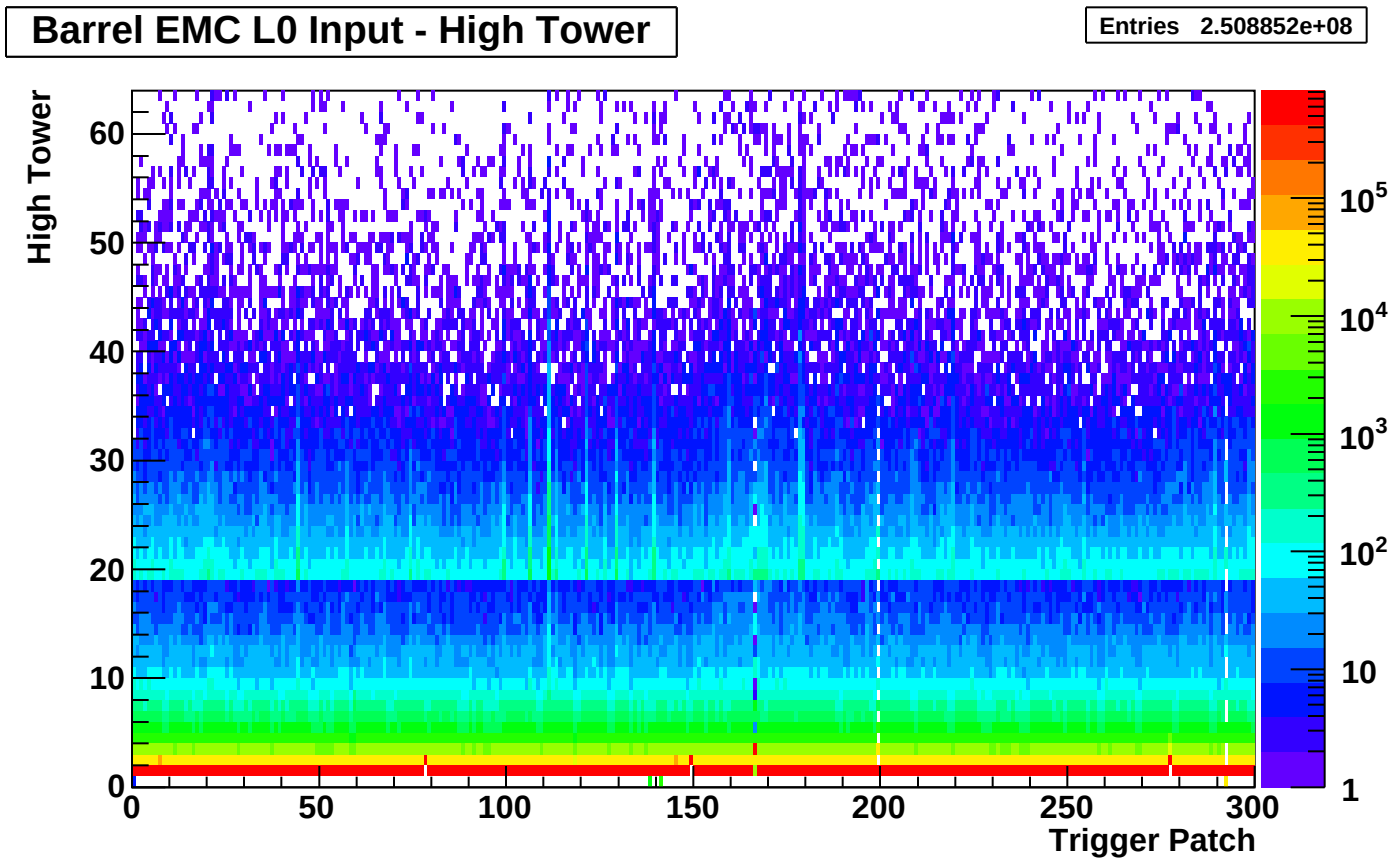

Last DSM Ch3 Input
Entries 10
LD301 Ch3 - Simulated
7 3
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

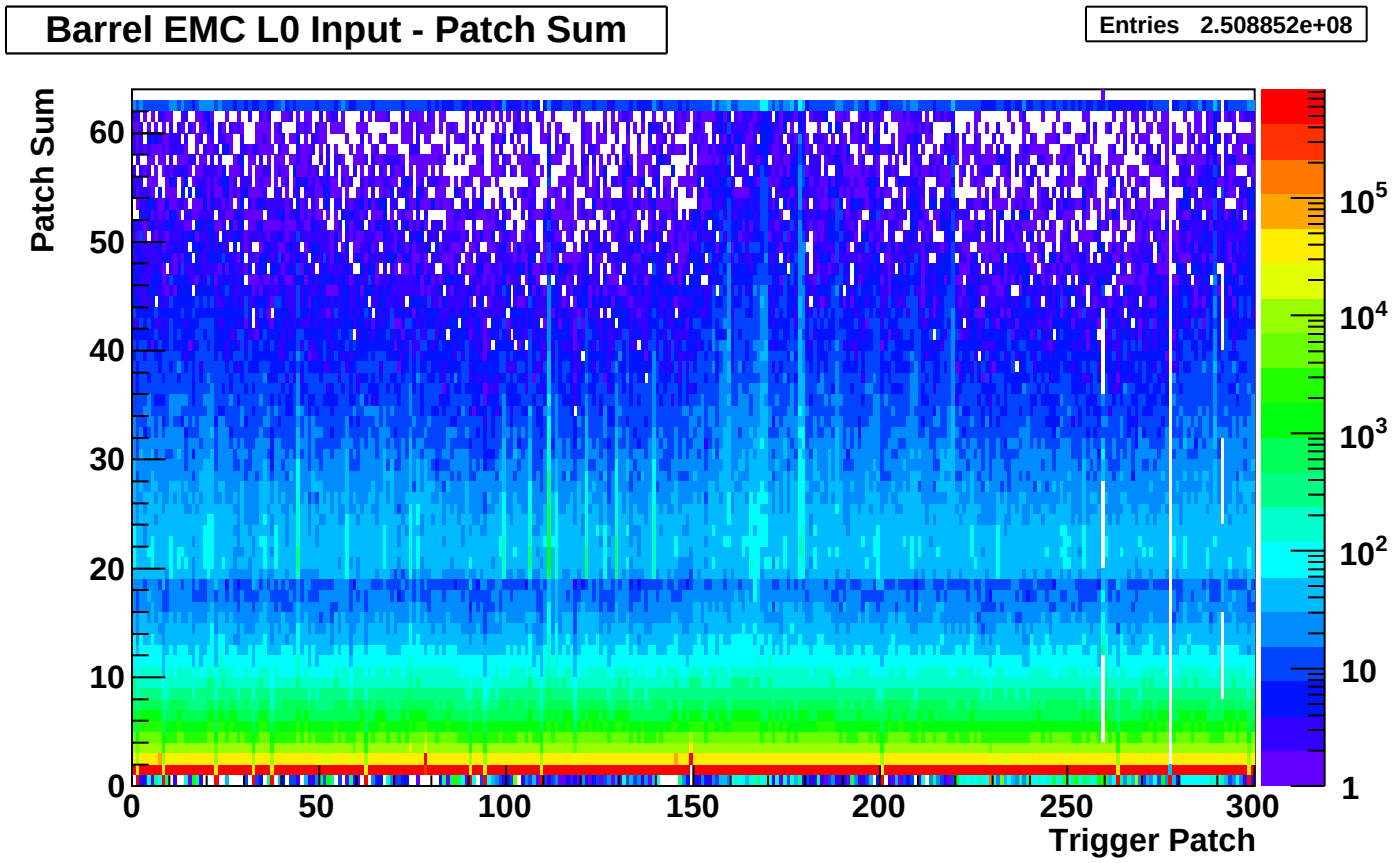

TCU bits
Entries 1.338054e+07
TCU bits
836284 836284 836284 836284 836284 836284 836284 836284 836284 836284 836284 836284 836284 836284 836284 836284
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDC-pol MTD FMSfast FMSslow FMSled-FPE Zerobias

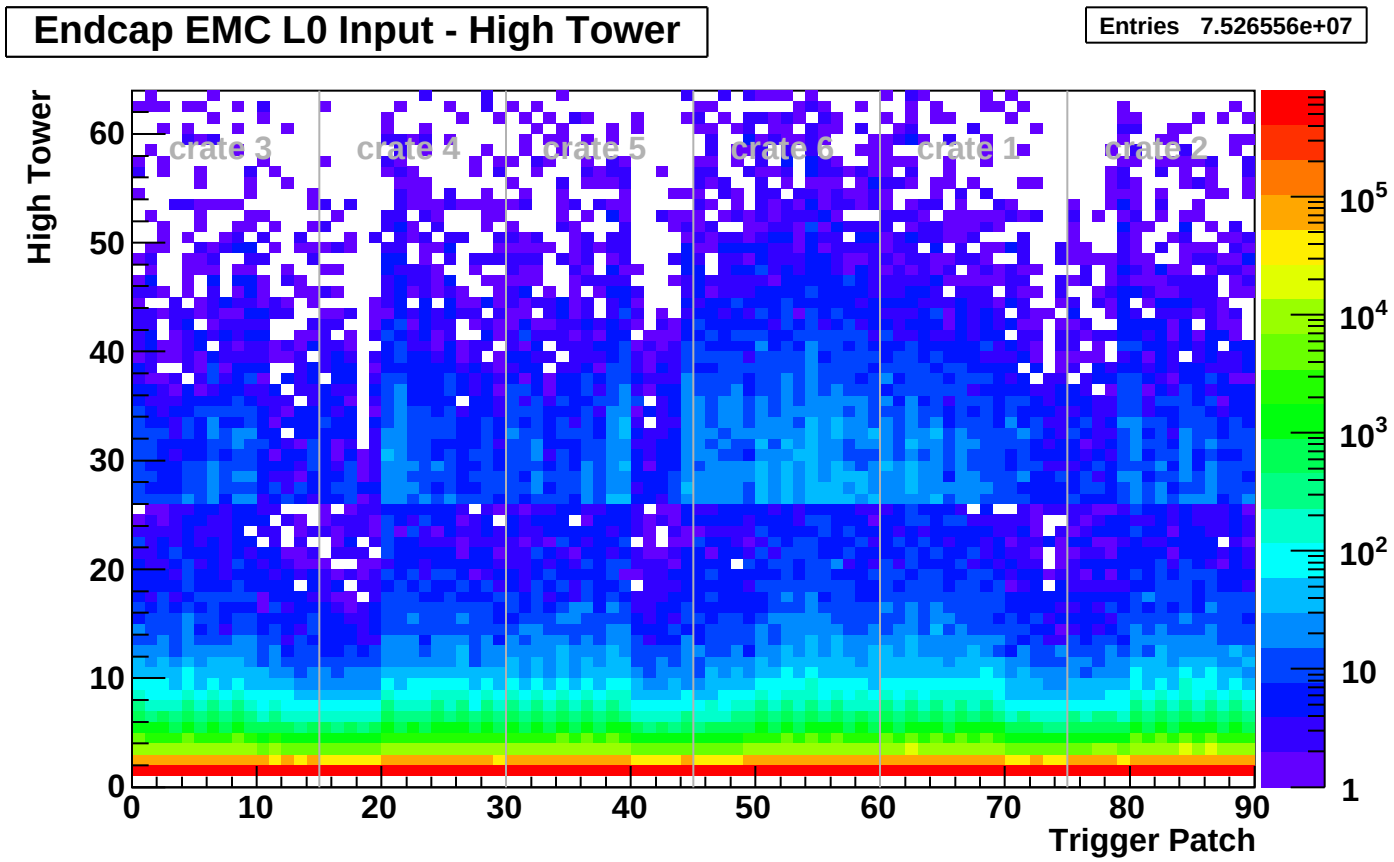

TCU bits
Entries 1109773
TCU bits - Simulated
57383 169333 263281 16213 26463 3171 571852 2077
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDC-pol MTD FMSfast FMSslow FMSled-FPE Zerobias

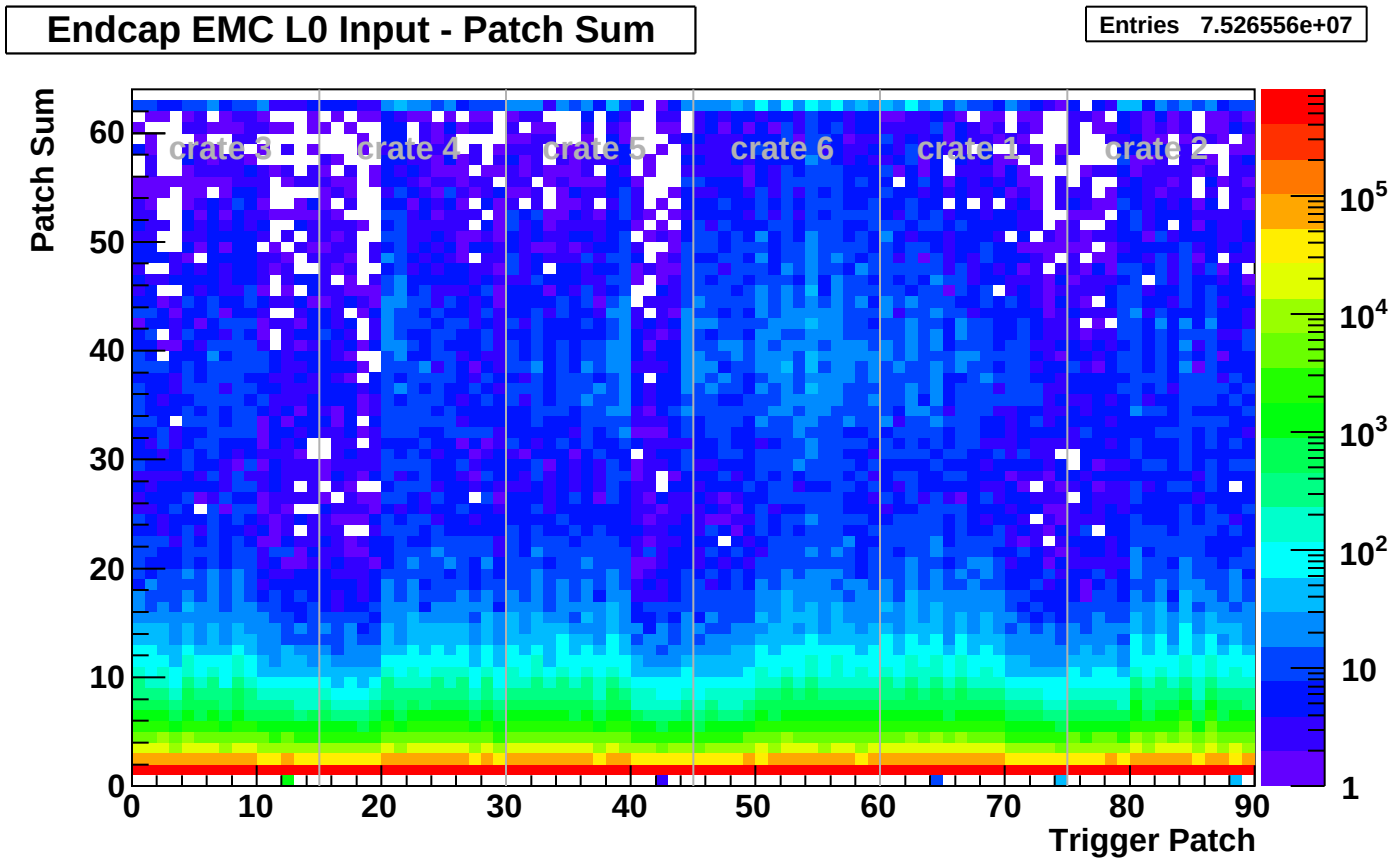

BunchId7Bit (BHT3)
Entries 13866

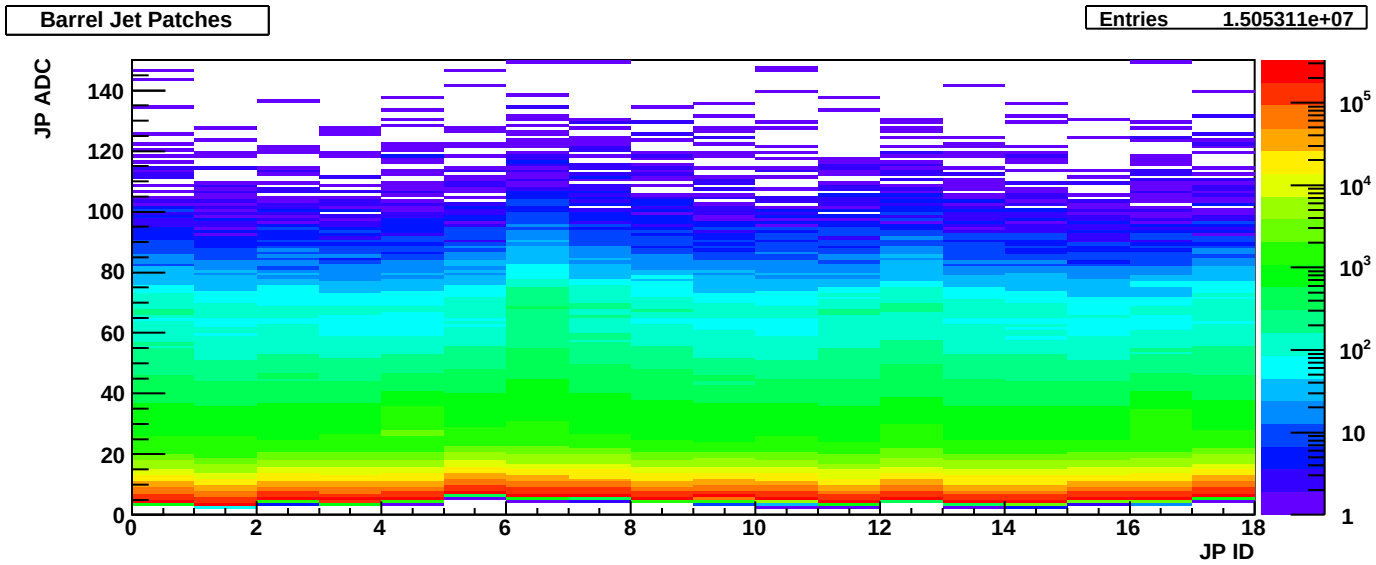

BunchId7Bit (all events)
Entries 836284

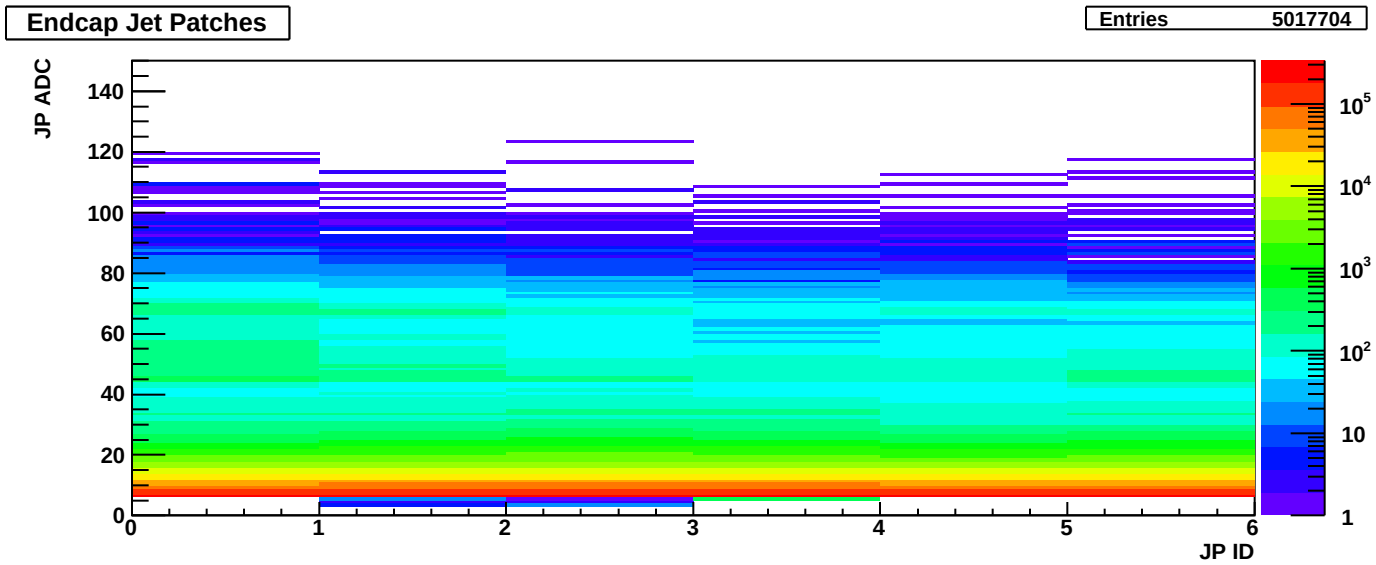

Barrel EMC L0 Input - High Tower
Entries 2.508852e+08
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

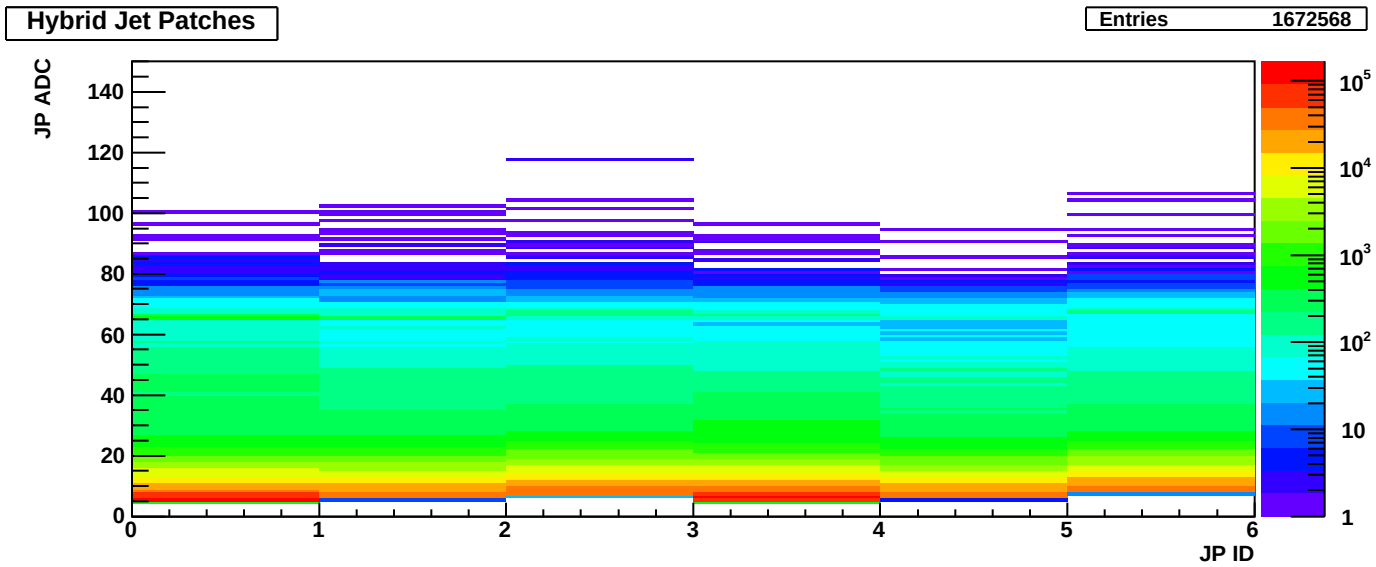

Barrel EMC L0 Input - Patch Sum
Entries 2.508852e+08
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

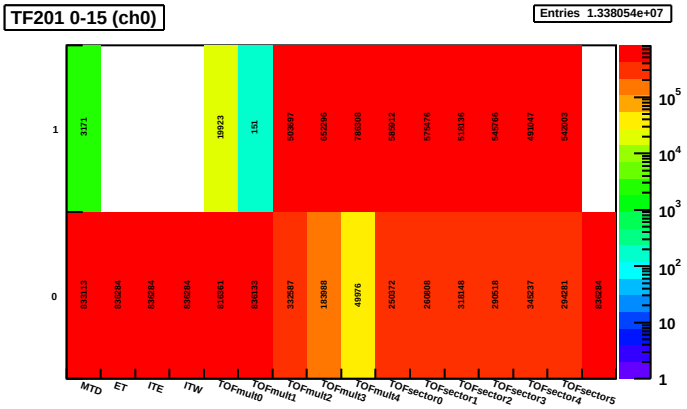

Endcap EMC L0 Input - High Tower
Entries 7.526556e+07
High Tower
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

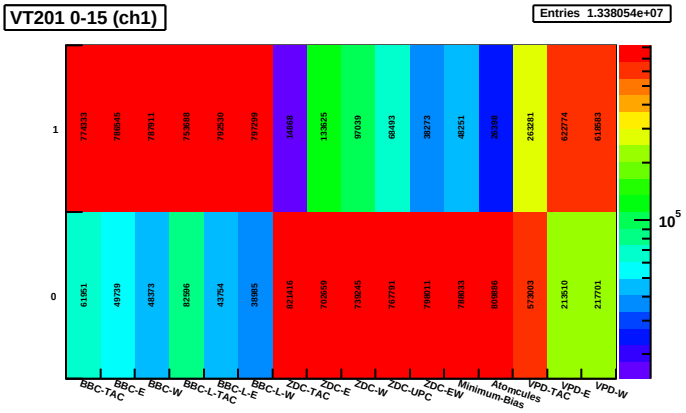

Endcap EMC L0 Input - Patch Sum
Entries 7.526556e+07
Patch Sum
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

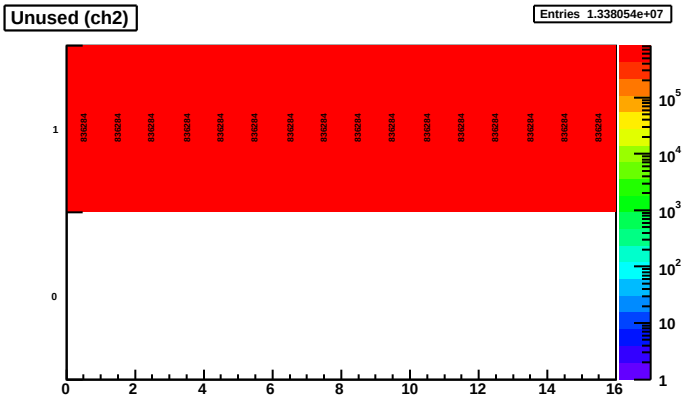

Barrel Jet Patches
Entries 1.505311e+07
JP ADC
JP ID

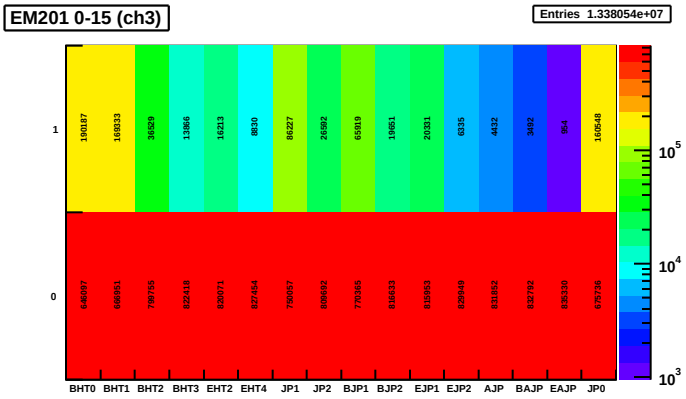

Endcap Jet Patches
Entries 5017704
JP ADC
JP ID

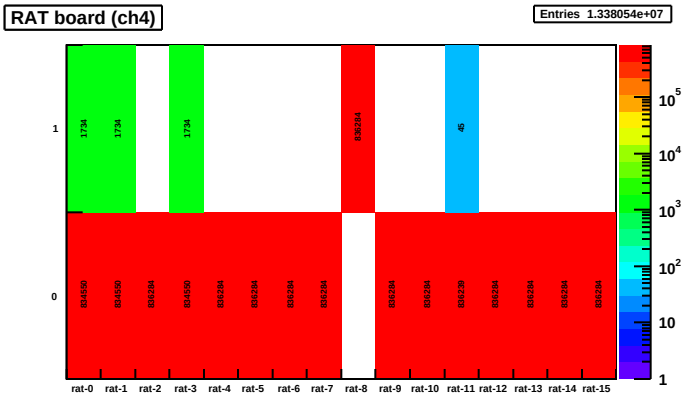

Hybrid Jet Patches
Entries 1672568
JP ADC
JP ID

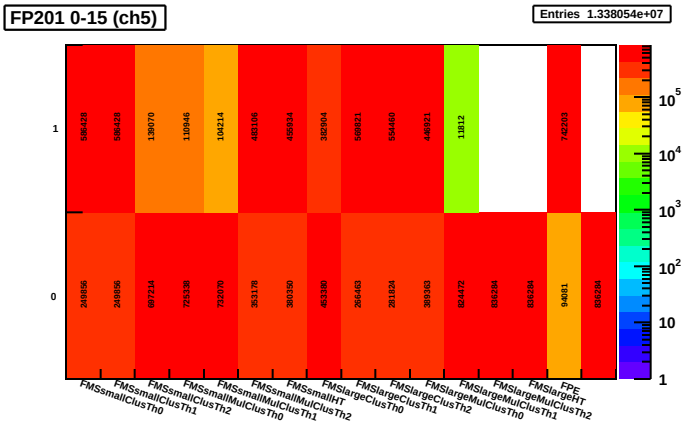

TF201 0-15 (ch0)
Entries 1.338054e+07
MTD
ET
ITE
ITW
TOFmult0
TOFmult1
TOFmult2
TOFmult3
TOFmult4
TOFsector0
TOFsector1
TOFsector2
TOFsector3
TOFsector4
TOFsector5

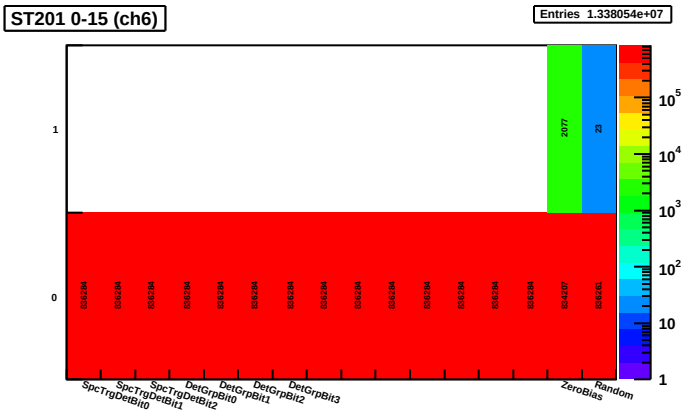

VT201 0-15 (ch1)
Entries 1.338054e+07
BBC-TAC
BBC-E
BBC-W
BBC-L-TAC
BBC-L-E
BBC-L-W
ZDC-TAC
ZDC-E
ZDC-W
ZDC-UPC
ZDC-EW
Minimum-Bias
Atomcules
VPD-TAC
VPD-E
VPD-W

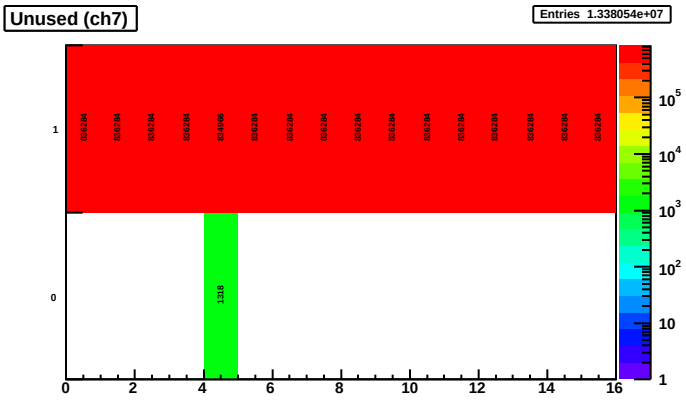

Unused (ch2)
Entries 1.338054e+07

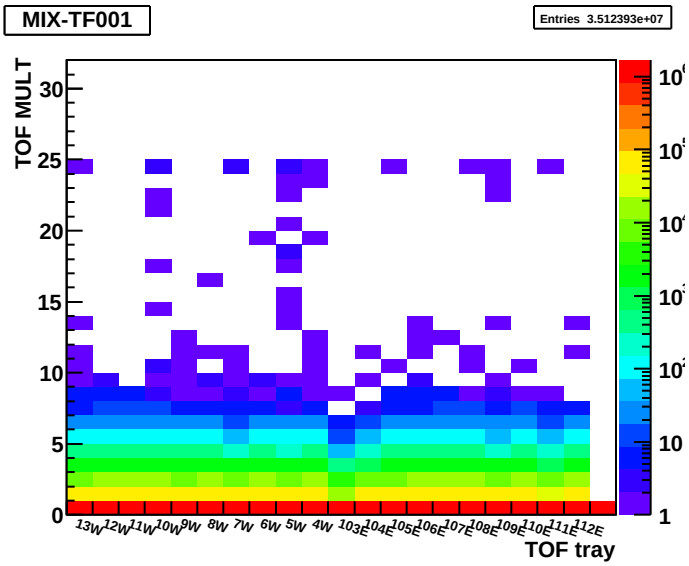

EM201 0-15 (ch3)
Entries 1.338054e+07
BHT0
BHT1
BHT2
BHT3
EHT2
EHT4
JP1
JP2
BJP1
BJP2
EJP1
EJP2
AJP
BAJP
EAJP
JP0

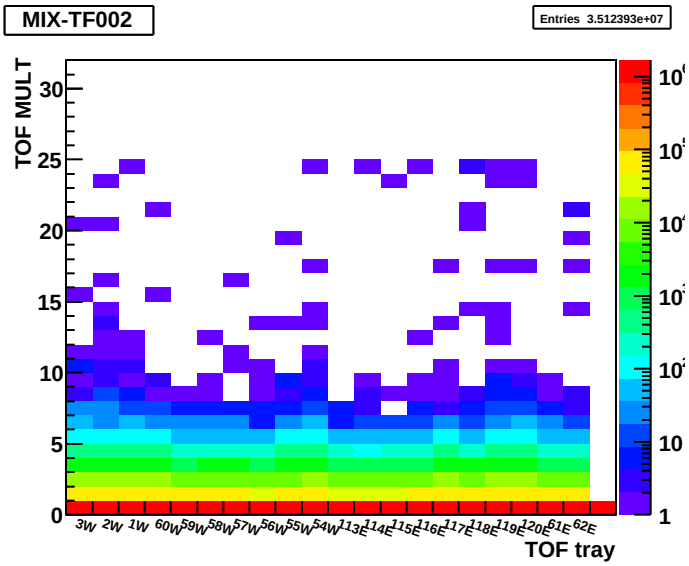

RAT board (ch4)
Entries 1.338054e+07
rat-0
rat-1
rat-2
rat-3
rat-4
rat-5
rat-6
rat-7
rat-8
rat-9
rat-10
rat-11
rat-12
rat-13
rat-14
rat-15

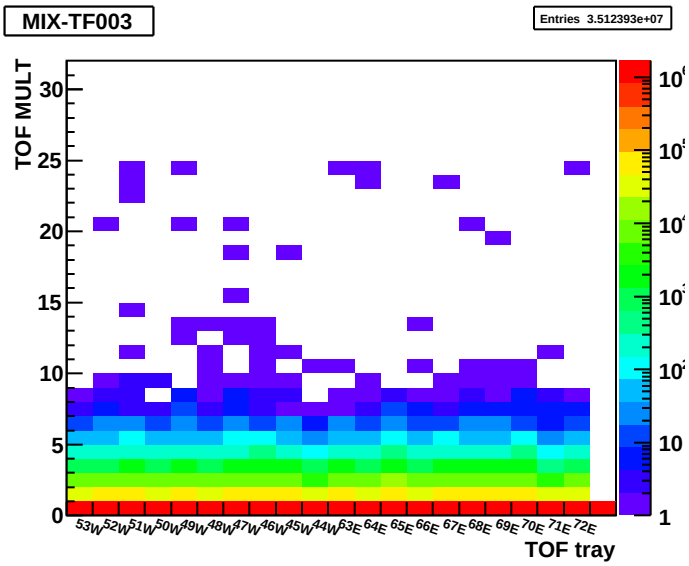

FP201 0-15 (ch5)
Entries 1.338054e+07
FMSsmallClusTh0
FMSsmallClusTh1
FMSsmallClusTh2
FMSsmallMulClusTh0
FMSsmallMulClusTh1
FMSsmallMulClusTh2
FMSsmallHT
FMSlargeClusTh0
FMSlargeClusTh1
FMSlargeClusTh2
FMSlargeMulClusTh0
FMSlargeMulClusTh1
FMSlargeMulClusTh2
FMSlargeHT
FPE

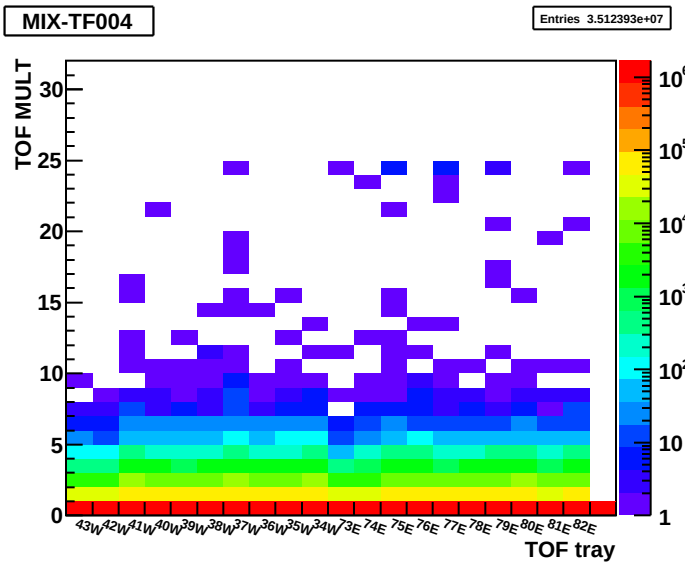

ST201 0-15 (ch6)
Entries 1.338054e+07
SpcTrgDetBit0
SpcTrgDetBit1
SpcTrgDetBit2
DetGrpBit0
DetGrpBit1
DetGrpBit2
DetGrpBit3
ZeroBias
Random

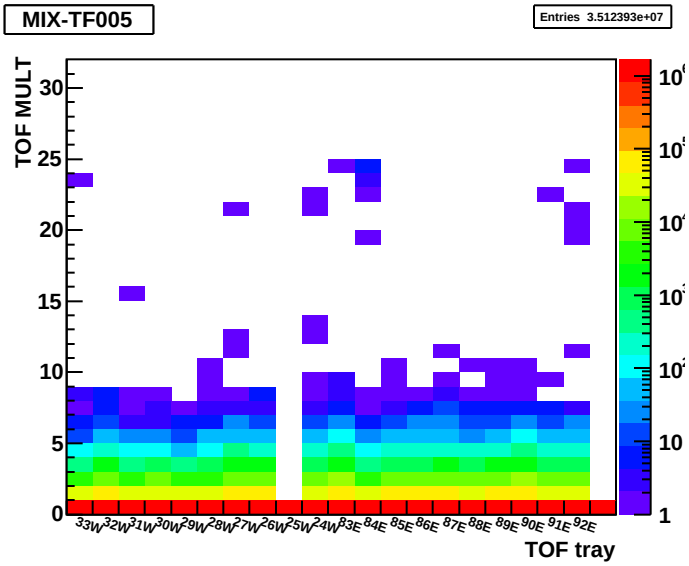

Unused (ch7)
Entries 1.338054e+07

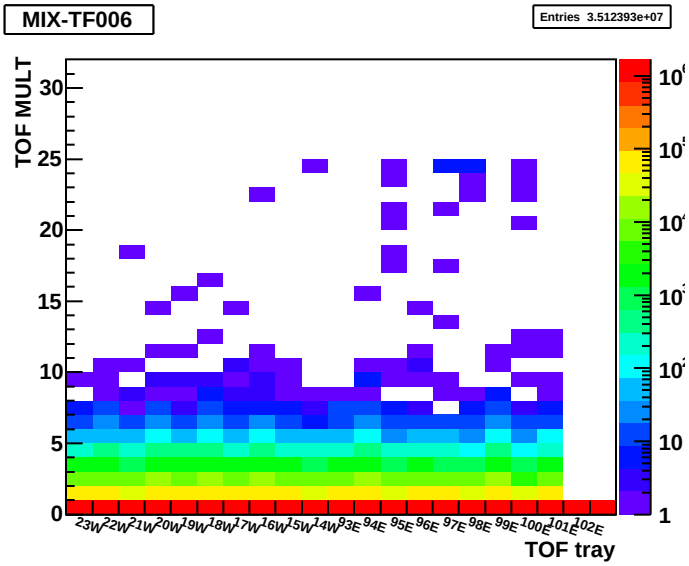

MIX-TF001
Entries 3.512393e+07
TOF MULT
TOF tray

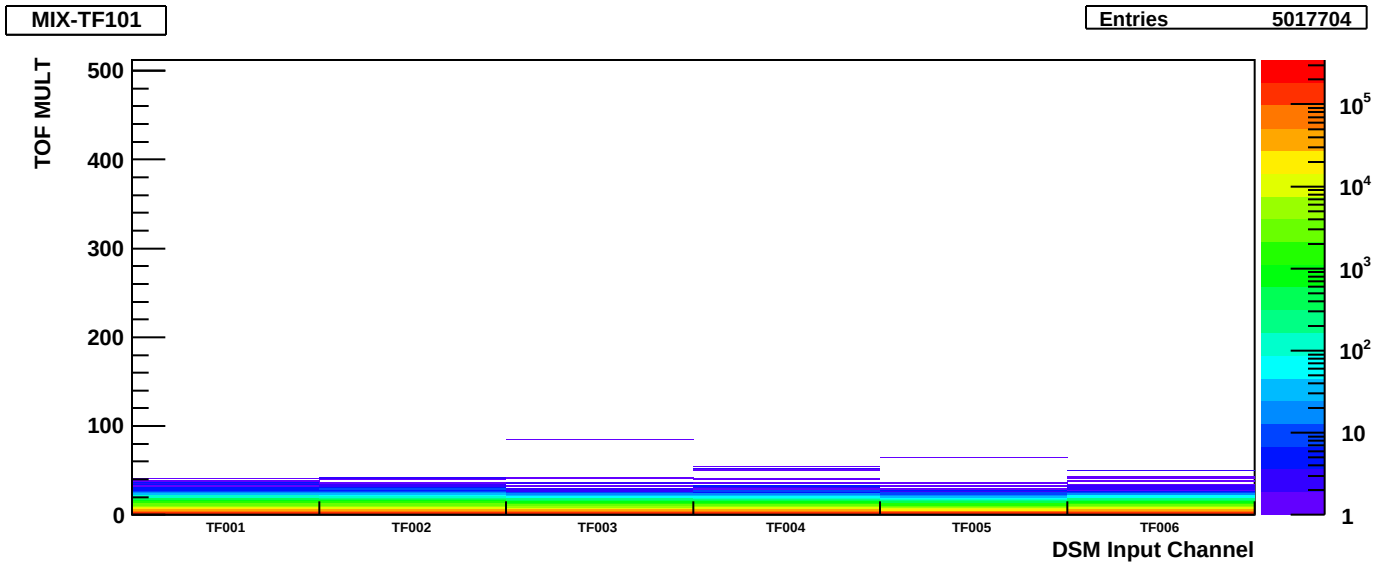

MIX-TF002
Entries 3.512393e+07
TOF MULT
TOF tray

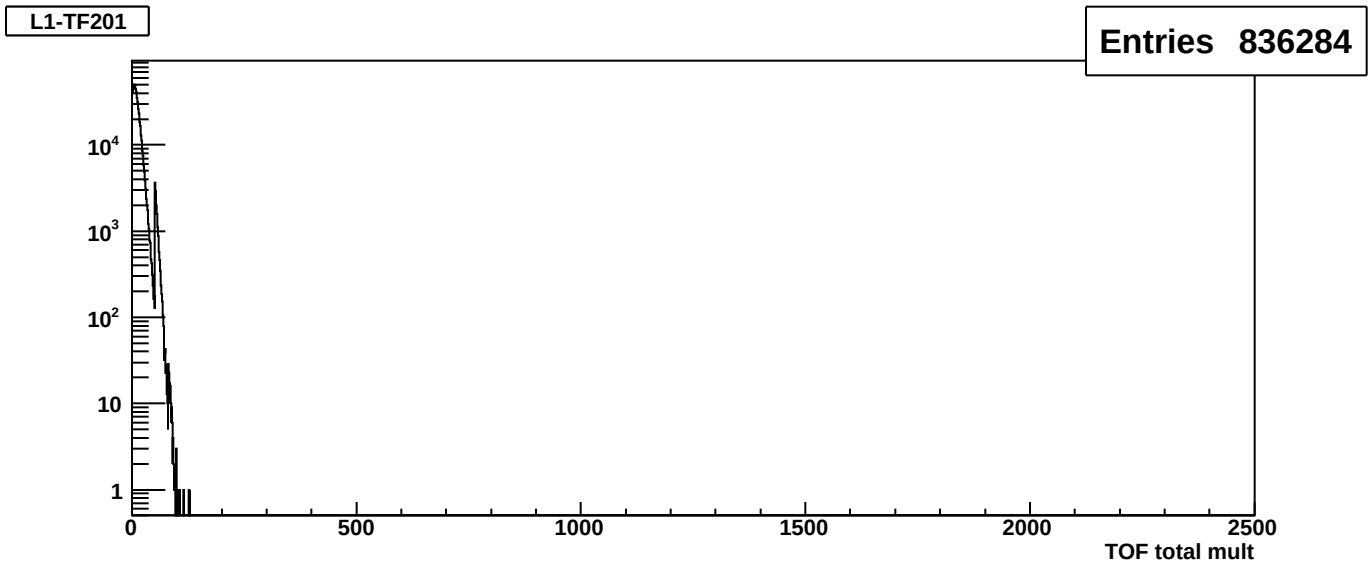

MIX-TF003
Entries 3.512393e+07
TOF MULT
TOF tray

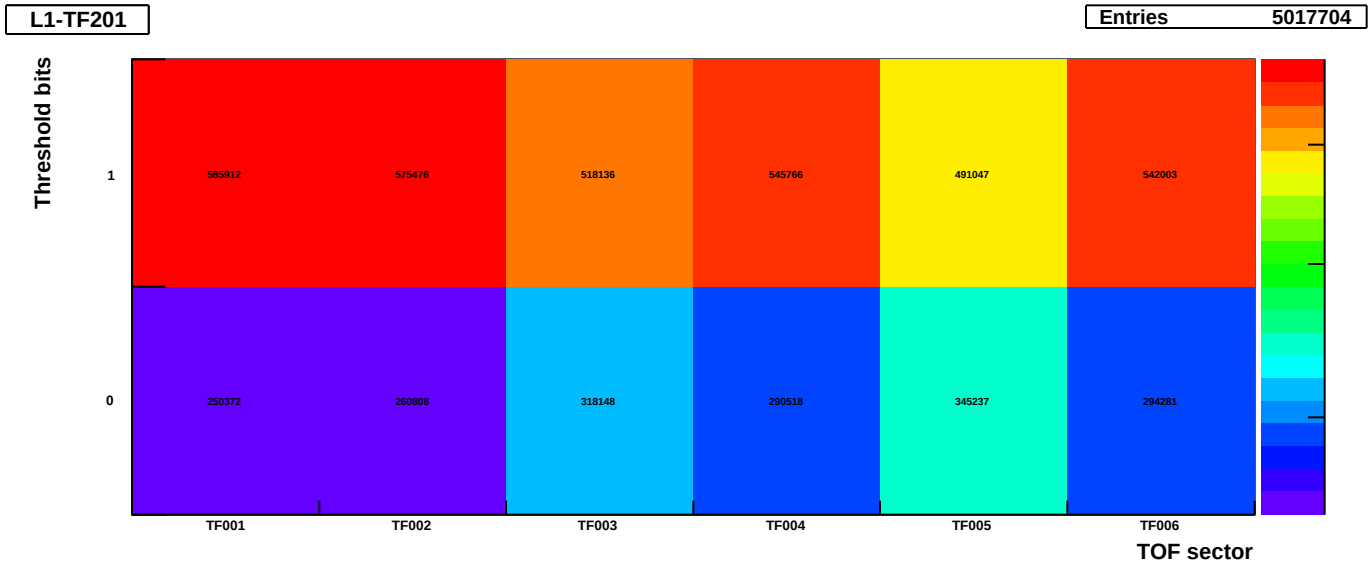

MIX-TF004
Entries 3.512393e+07
TOF MULT
TOF tray

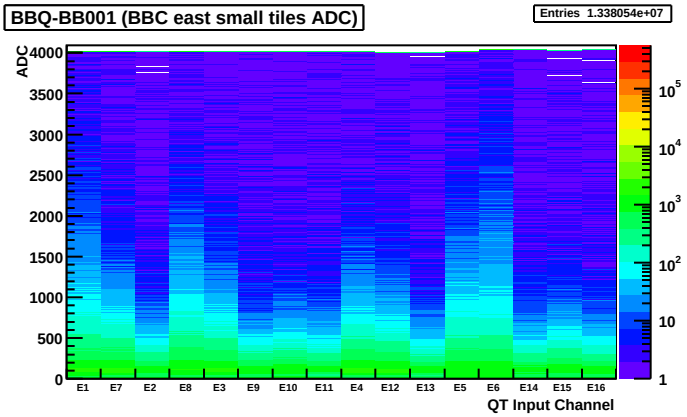

MIX-TF005
Entries 3.512393e+07
TOF MULT
TOF tray

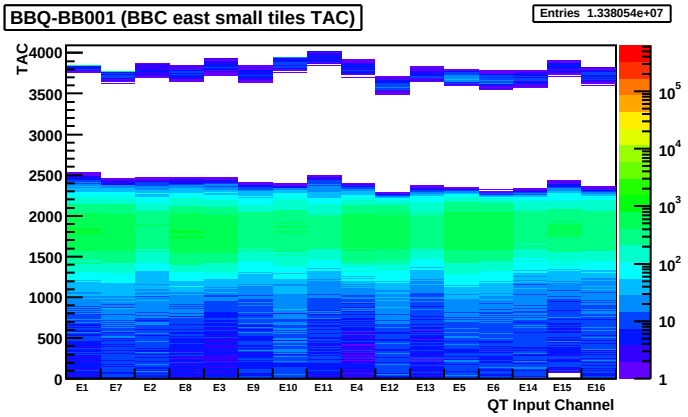

MIX-TF006
Entries 3.512393e+07
TOF MULT
TOF tray

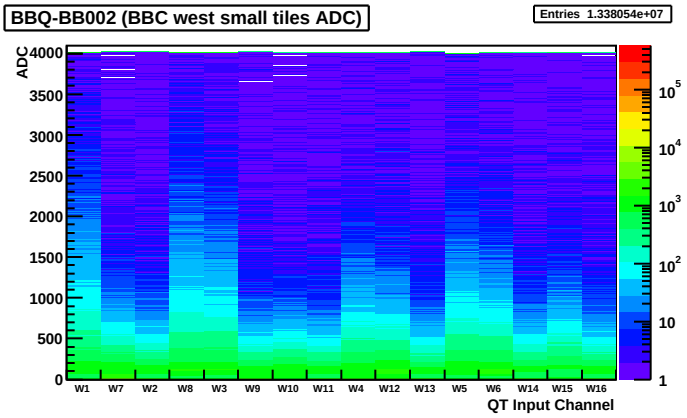

MIX-TF101
Entries 5017704
TOF MULT
500
400
300
200
100
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^5
10^4
10^3
10^2
10
1

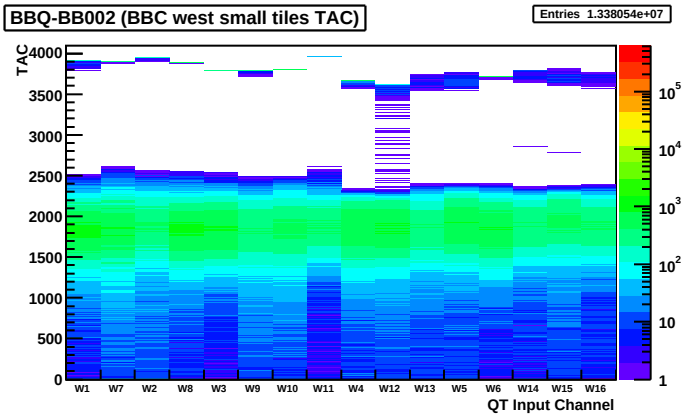

L1-TF201
Entries 836284
10^4
10^3
10^2
10
1
0
500
1000
1500
2000
2500
TOF total mult

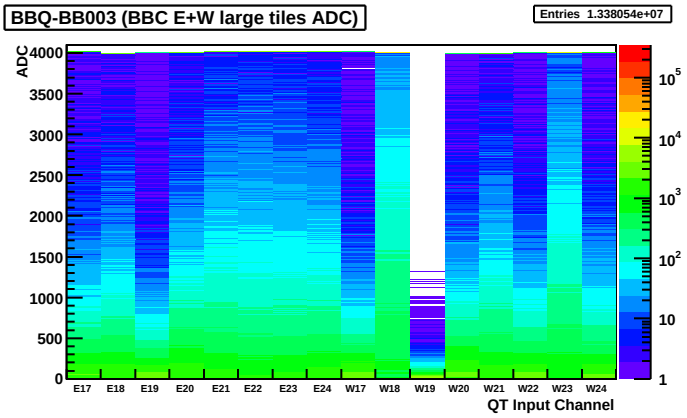

L1-TF201
Entries 5017704
Threshold bits
1
0
585912
575476
518136
545766
491047
542003
250372
260808
318148
290518
345237
294281
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector

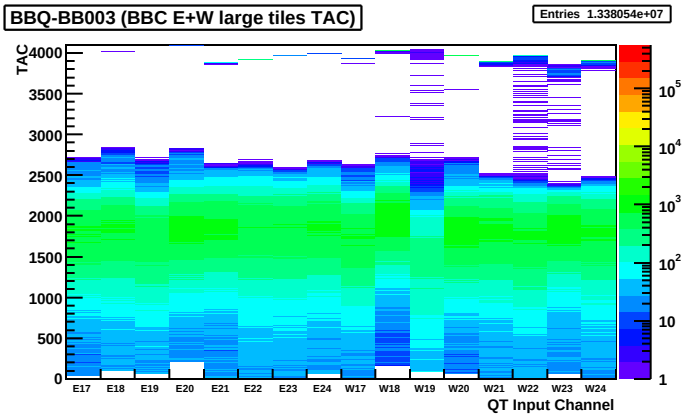

BBQ-BB001 (BBC east small tiles ADC)
Entries 1.338054e+07
ADC
QT Input Channel

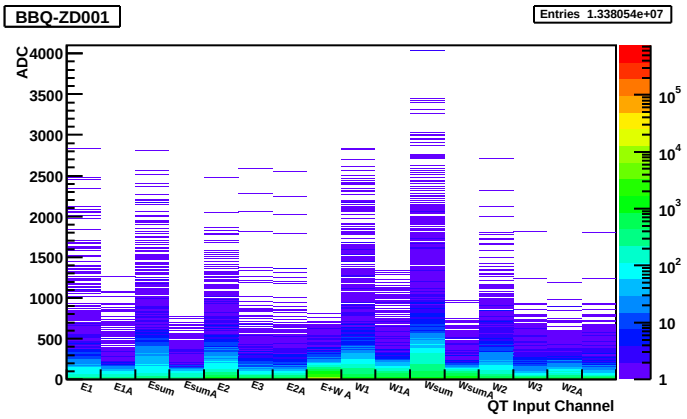

BBQ-BB001 (BBC east small tiles TAC)
Entries 1.338054e+07
TAC
QT Input Channel

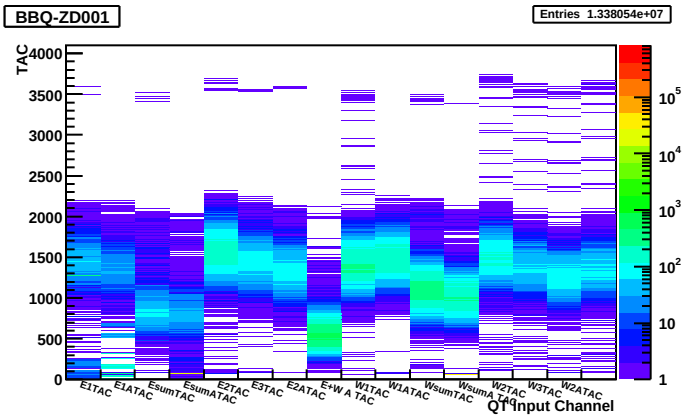

BBQ-BB002 (BBC west small tiles ADC)
Entries 1.338054e+07
ADC
QT Input Channel

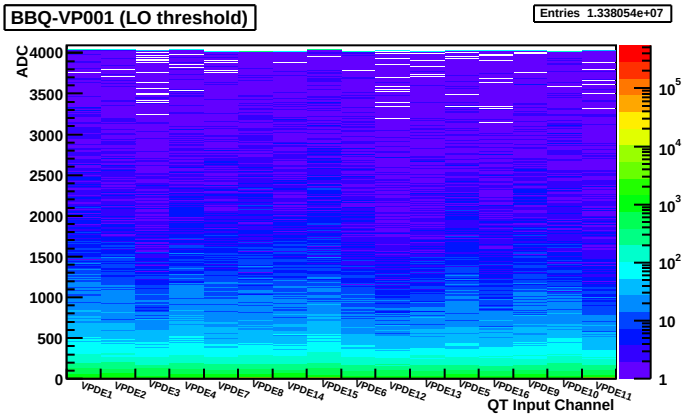

BBQ-BB002 (BBC west small tiles TAC)
Entries 1.338054e+07
TAC
QT Input Channel

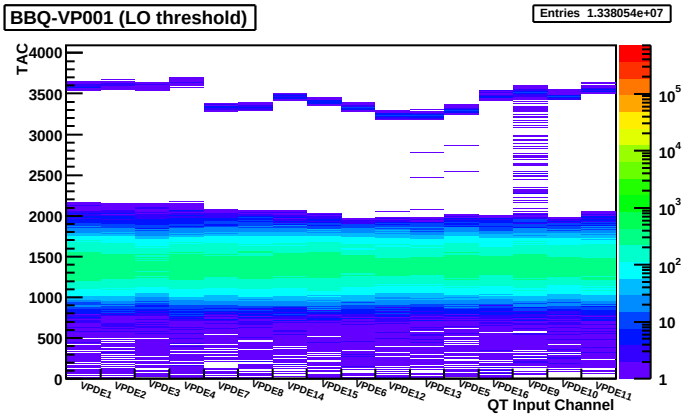

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 1.338054e+07
ADC
QT Input Channel

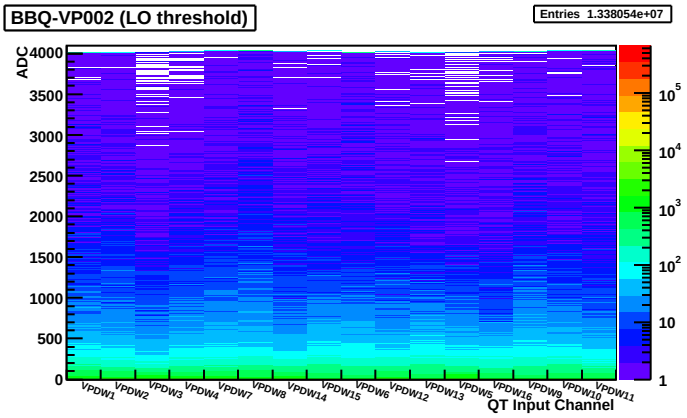

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 1.338054e+07
TAC
QT Input Channel

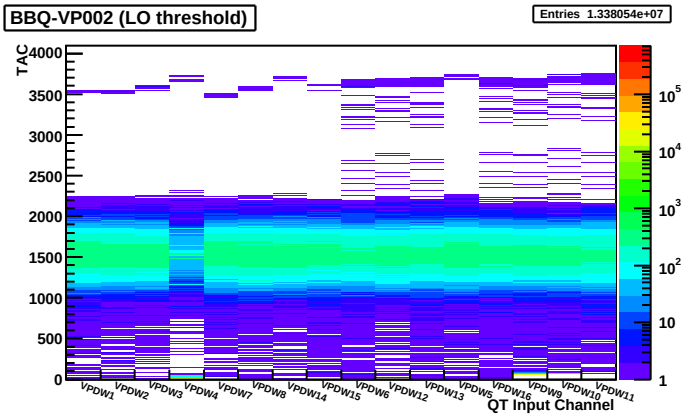

BBQ-ZD001
Entries 1.338054e+07
ADC
QT Input Channel

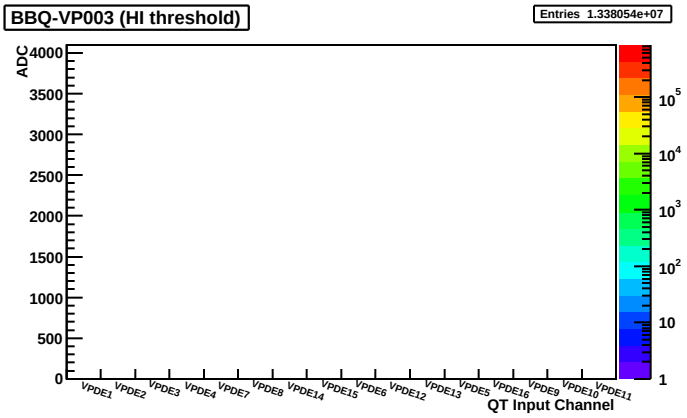

BBQ-ZD001
Entries 1.338054e+07
TAC
QT Input Channel

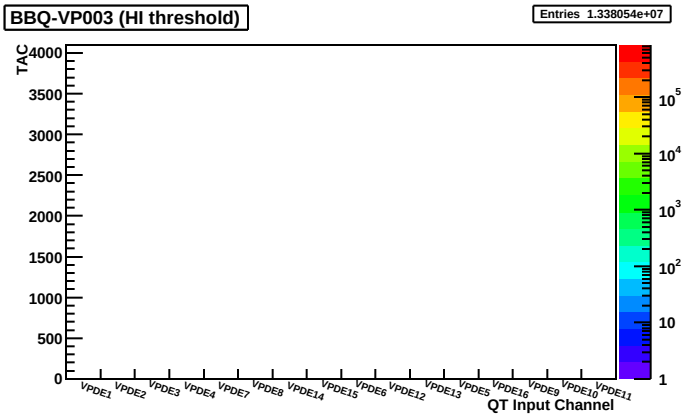

BBQ-VP001 (LO threshold)
Entries 1.338054e+07
ADC
QT Input Channel

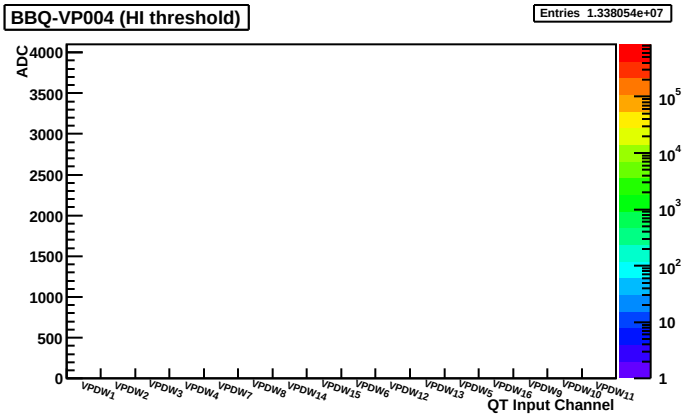

BBQ-VP001 (LO threshold)
Entries 1.338054e+07
TAC
QT Input Channel

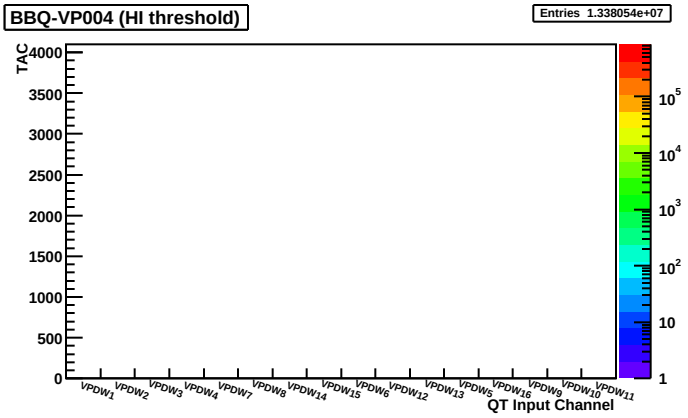

BBQ-VP002 (LO threshold)
Entries 1.338054e+07
ADC
QT Input Channel

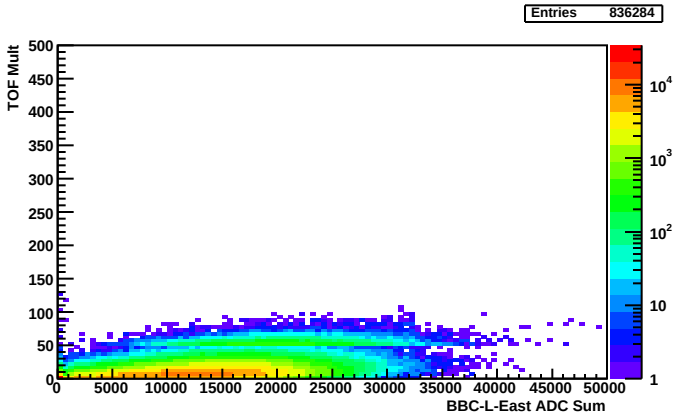

BBQ-VP002 (LO threshold)
Entries 1.338054e+07
TAC
QT Input Channel

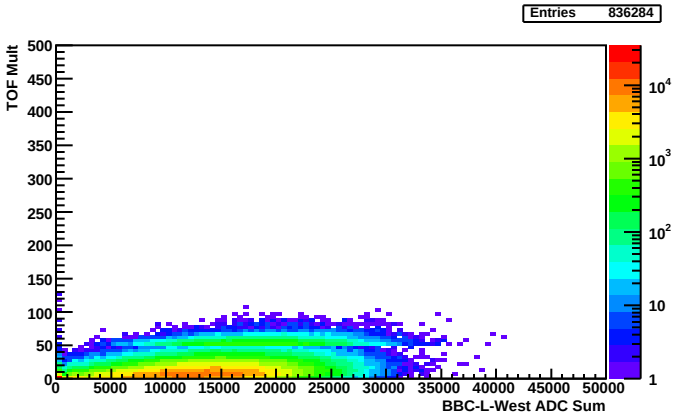

BBQ-VP003 (HI threshold)
Entries 1.338054e+07
ADC
QT Input Channel

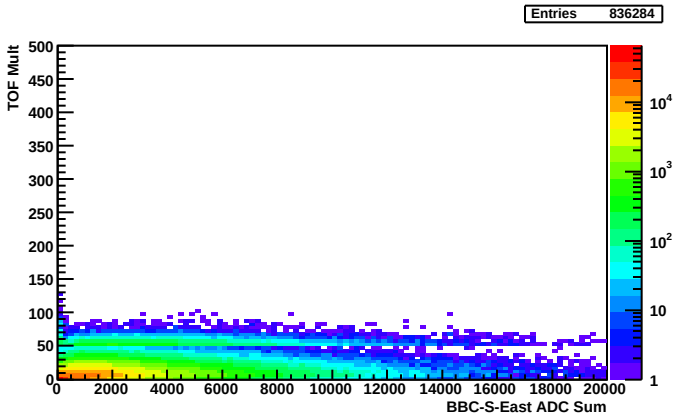

BBQ-VP003 (HI threshold)
Entries 1.338054e+07
TAC
QT Input Channel

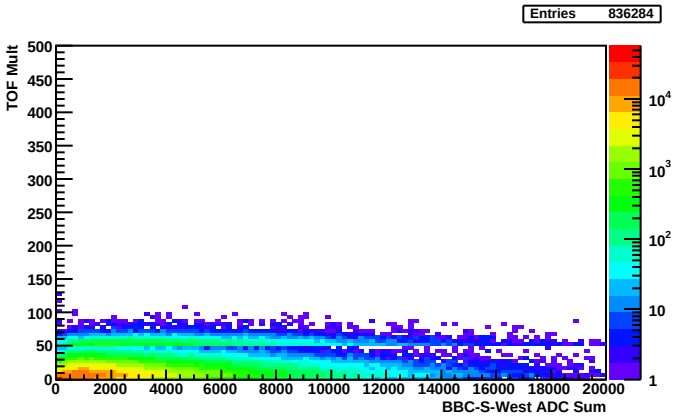

BBQ-VP004 (HI threshold)
Entries 1.338054e+07
ADC
QT Input Channel

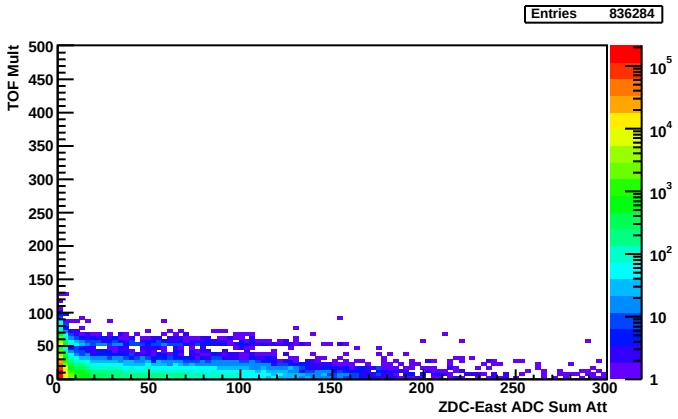

BBQ-VP004 (HI threshold)
Entries 1.338054e+07
TAC
QT Input Channel

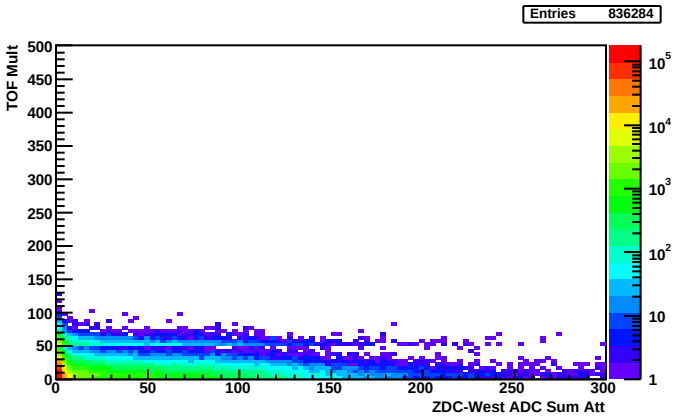

Entries 836284
TOF Mult
BBC-L-East ADC Sum

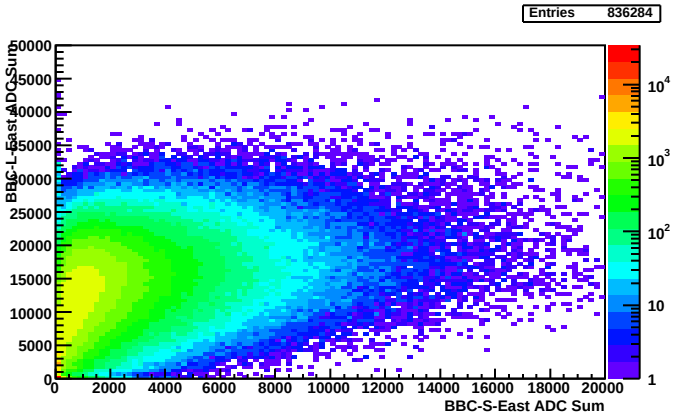

Entries 836284
TOF Mult
BBC-L-West ADC Sum

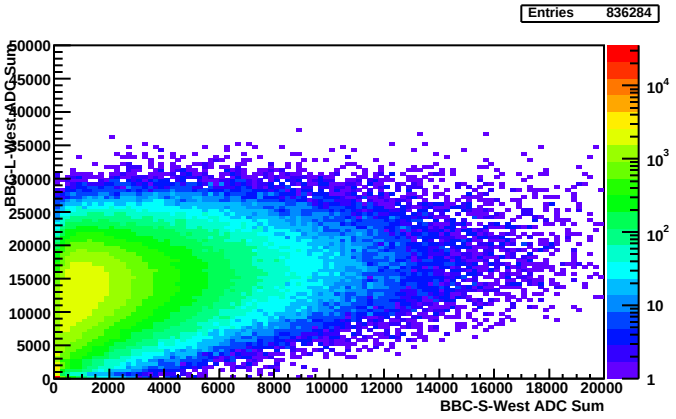

Entries 836284
TOF Mult
BBC-S-East ADC Sum

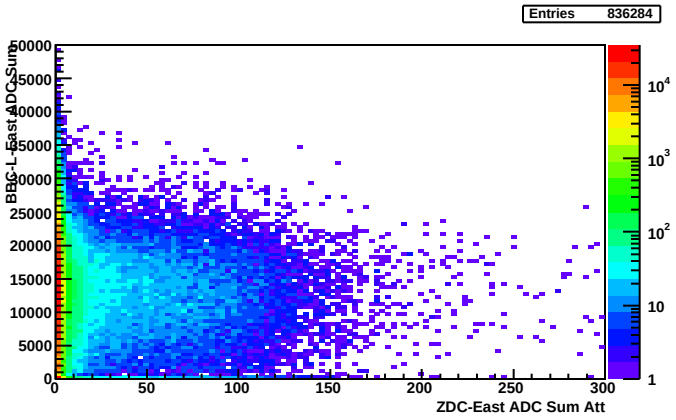

Entries 836284
TOF Mult
BBC-S-West ADC Sum

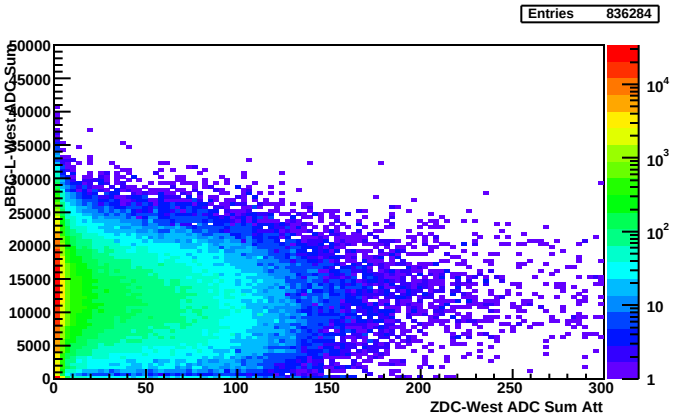

Entries 836284
TOF Mult
ZDC-East ADC Sum Att

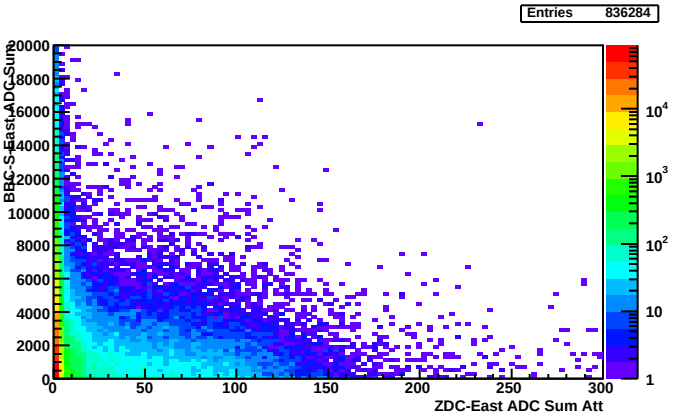

Entries 836284
TOF Mult
ZDC-West ADC Sum Att

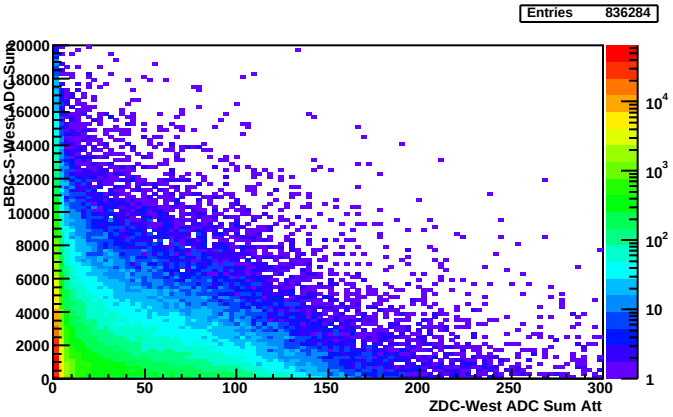

Entries 836284
BBC-L-East ADC Sum
BBC-S-East ADC Sum

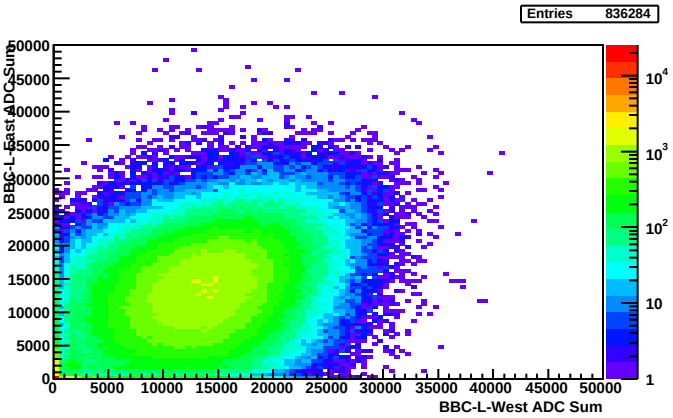

Entries 836284
BBC-L-West ADC Sum
BBC-S-West ADC Sum

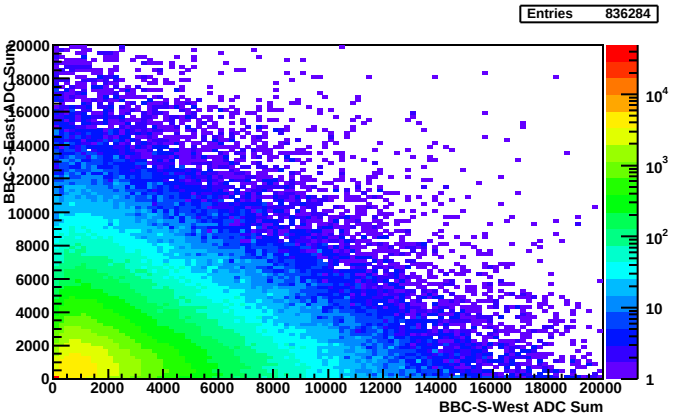

Entries 836284
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

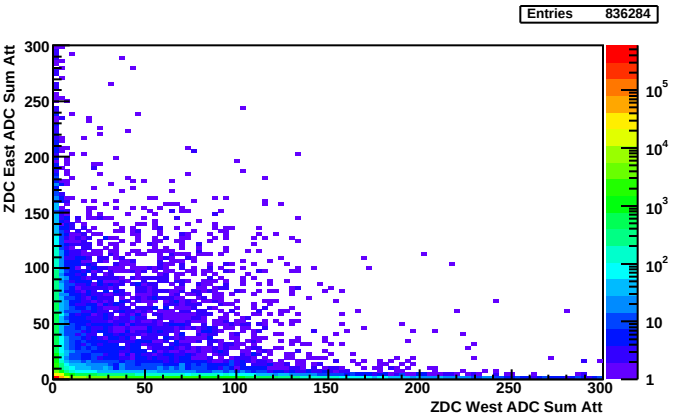

Entries 836284
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

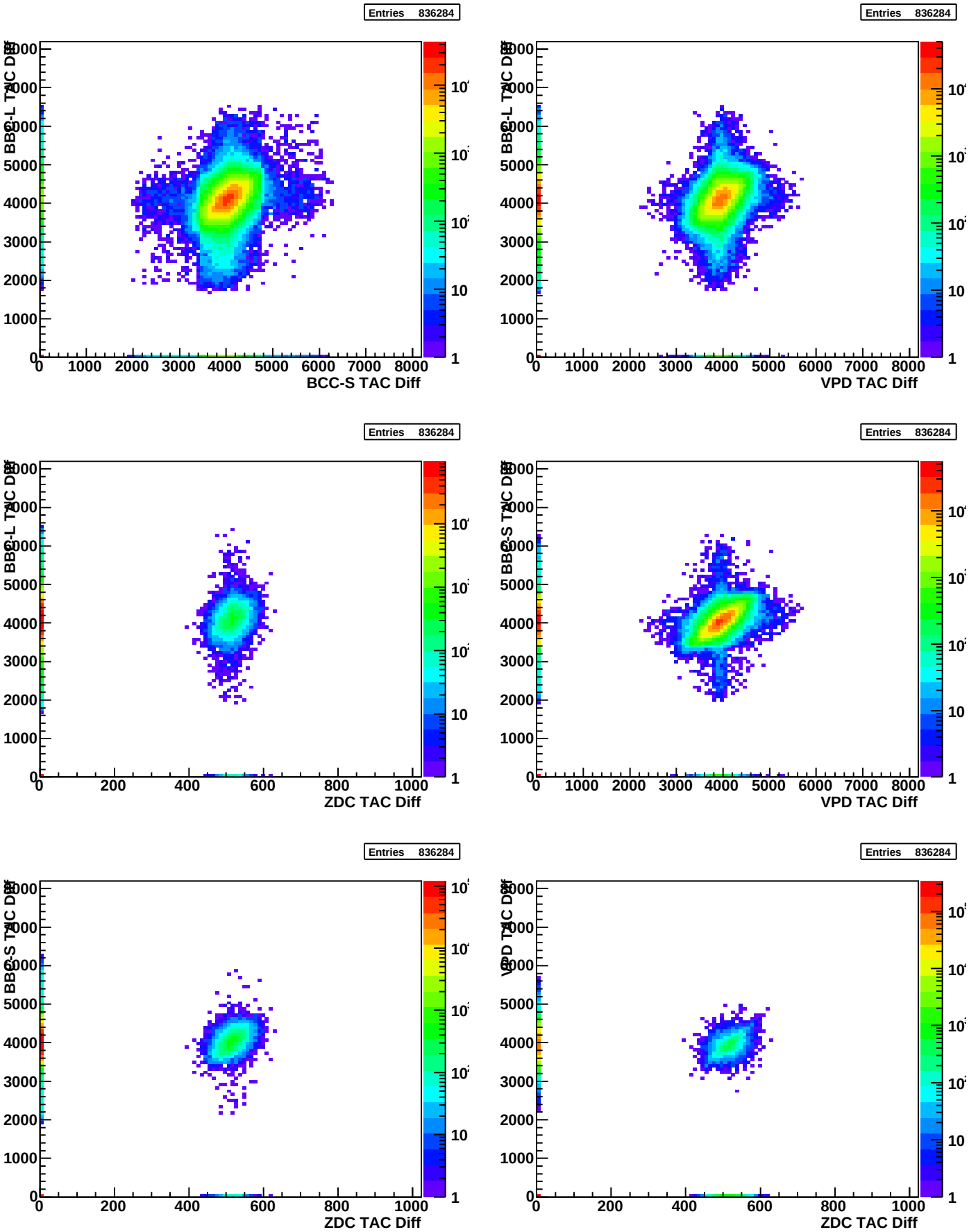

Entries 836284
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

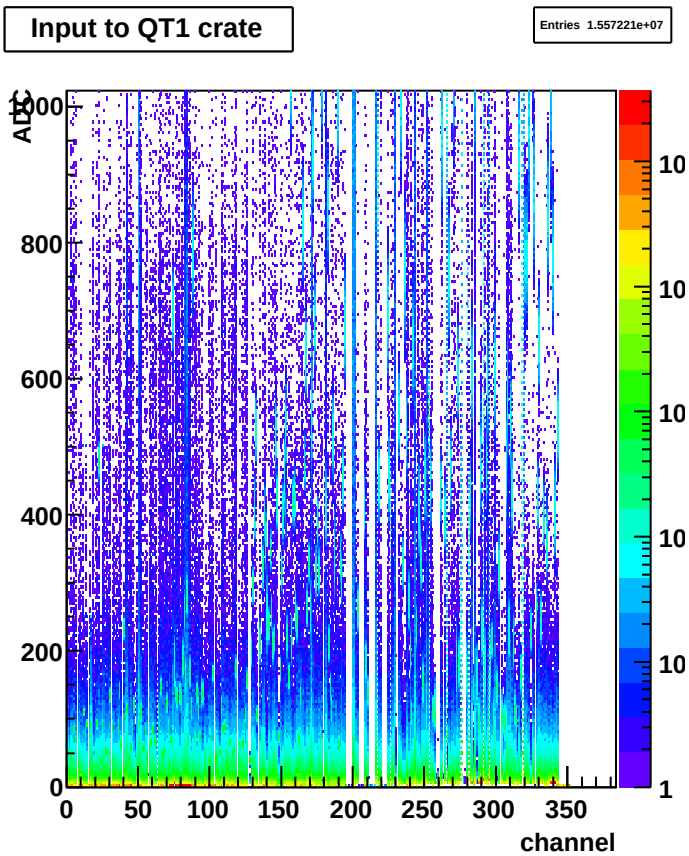

Entries 836284
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

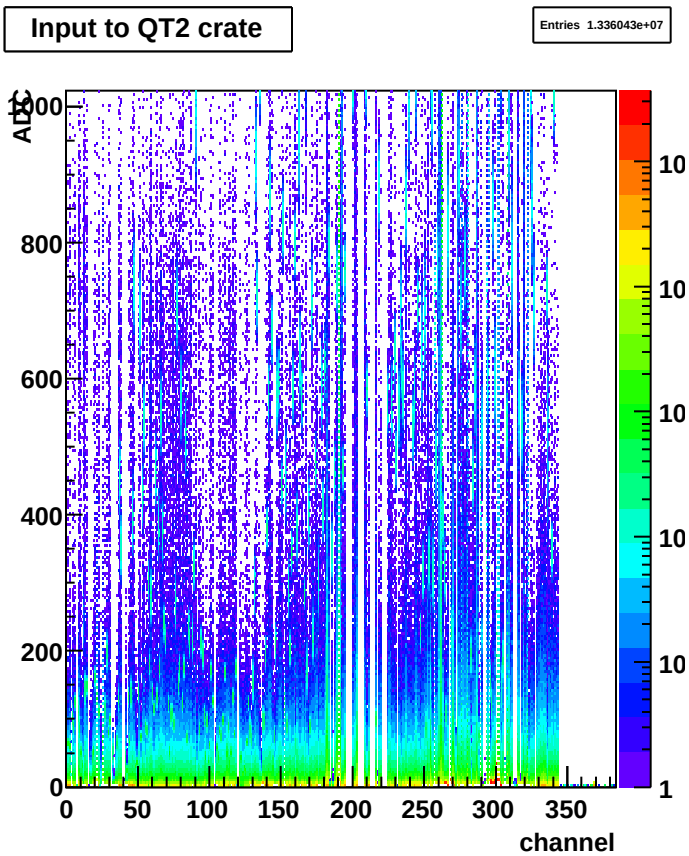

Entries 836284
BBC-L-East ADC Sum
BBC-L-West ADC Sum

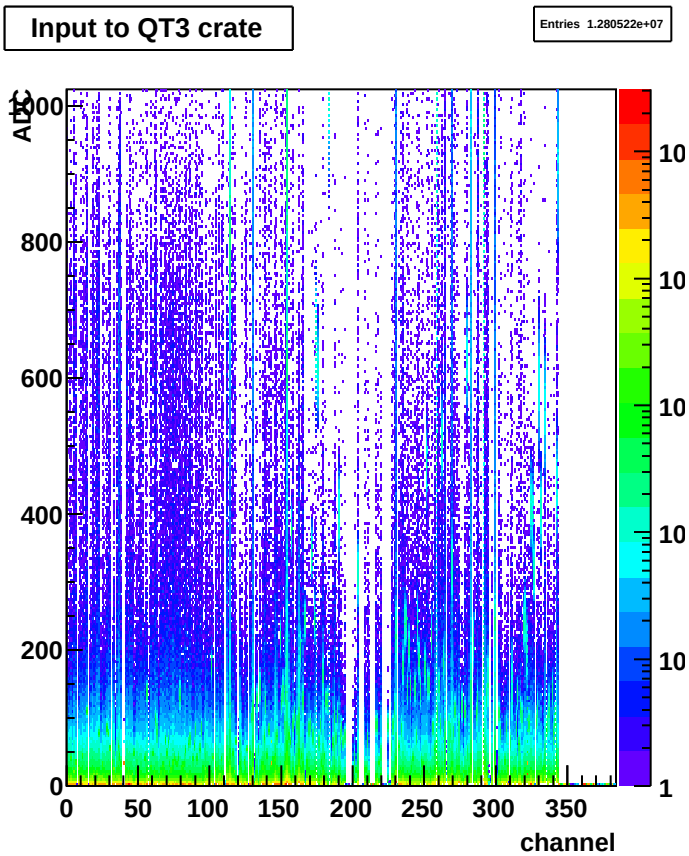

Entries 836284
BBC-S-East ADC Sum
BBC-S-West ADC Sum

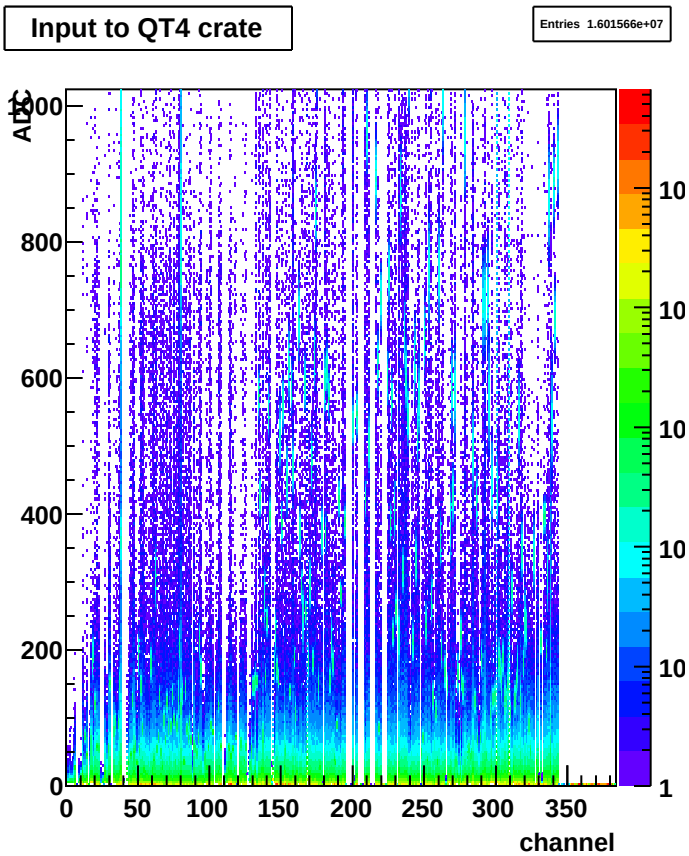

Entries 836284
ZDC East ADC Sum Att
ZDC West ADC Sum Att

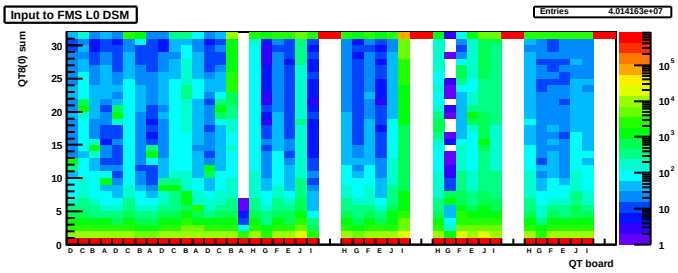

Entries 836284
BBC-L TAC Diff
BCC-S TAC Diff
Entries 836284
BBC-L TAC Diff
VPD TAC Diff
Entries 836284
BBC-L TAC Diff
ZDC TAC Diff
Entries 836284
BBC-S TAC Diff
VPD TAC Diff
Entries 836284
BBC-S TAC Diff
ZDC TAC Diff
Entries 836284
VPD TAC Diff
ZDC TAC Diff

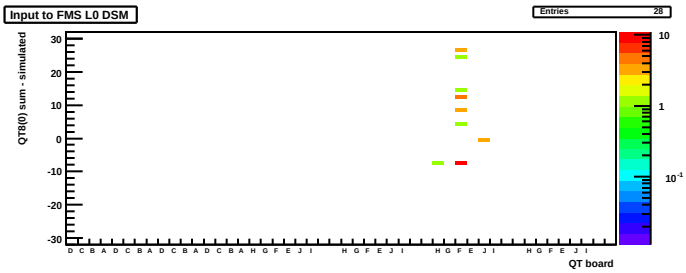

Input to QT1 crate
Entries 1.557221e+07
ADC
channel

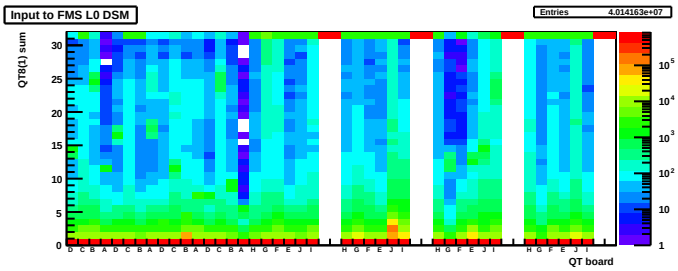

Input to QT2 crate
Entries 1.336043e+07
ADC
channel

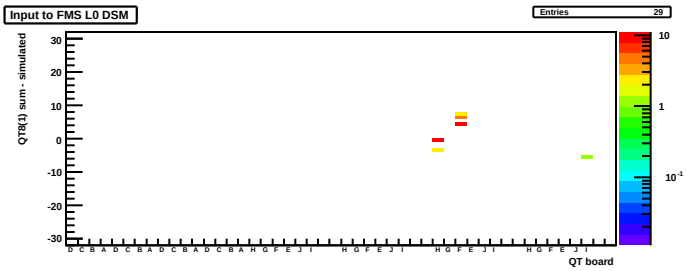

Input to QT3 crate
Entries 1.280522e+07
ADC
channel

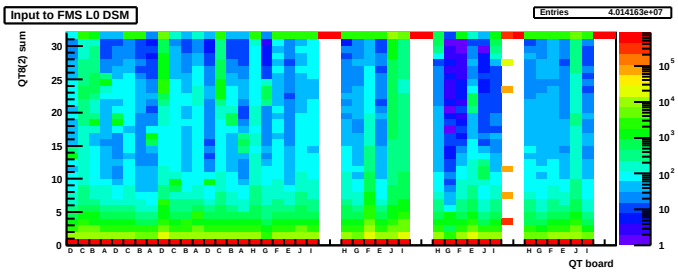

Input to QT4 crate
Entries 1.601566e+07
ADC
channel

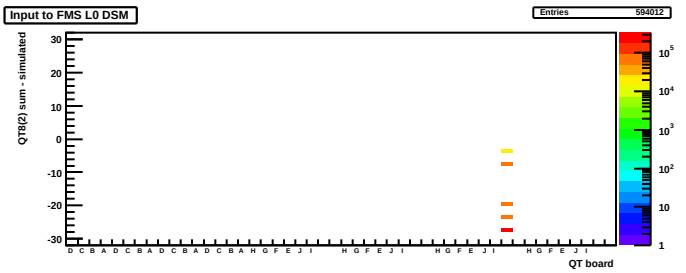

Input to FMS L0 DSM
Entries 4.014163e+07
QT8(0) sum
QT board

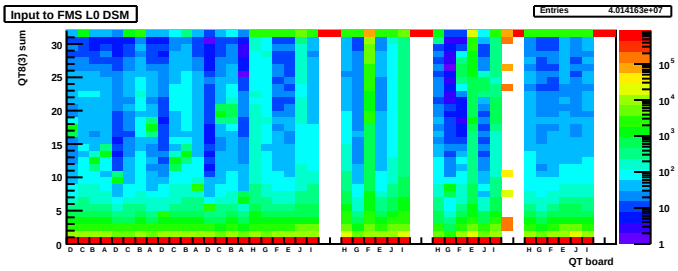

Input to FMS L0 DSM
Entries 28
QT8(0) sum - simulated
QT board

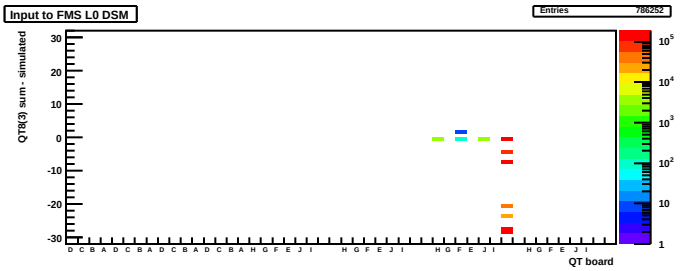

Input to FMS L0 DSM
Entries 4.014163e+07
QT8(1) sum
QT board

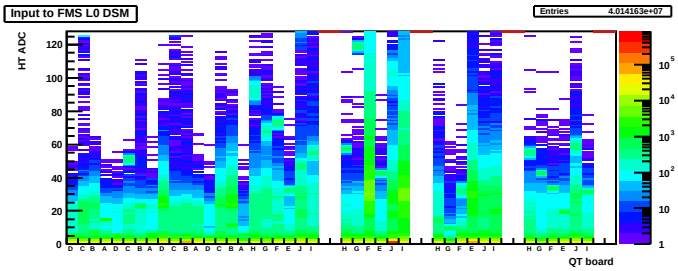

Input to FMS L0 DSM
Entries 29
QT8(1) sum - simulated
QT board

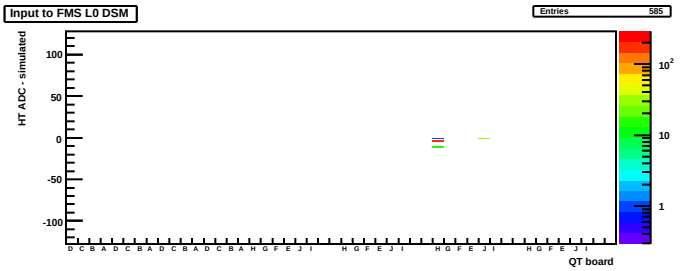

Input to FMS L0 DSM
Entries 4.014163e+07
QT8(2) sum
QT board

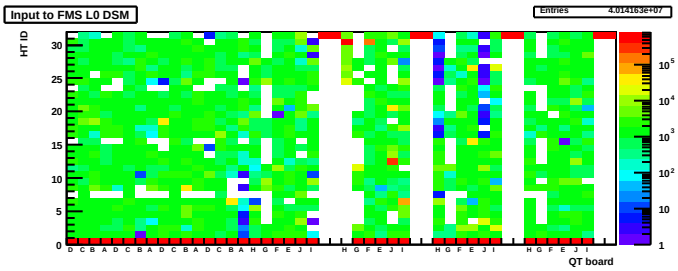

Input to FMS L0 DSM
Entries 594012
QT8(2) sum - simulated
QT board

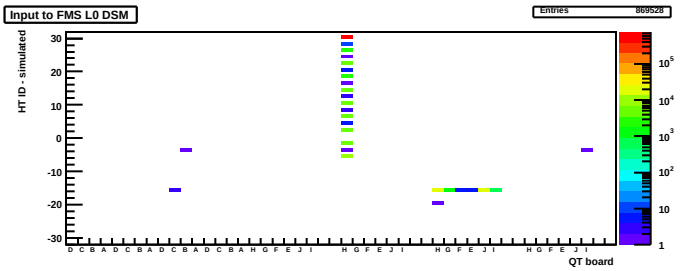

Input to FMS L0 DSM
Entries 4.014163e+07
QT8(3) sum
QT board

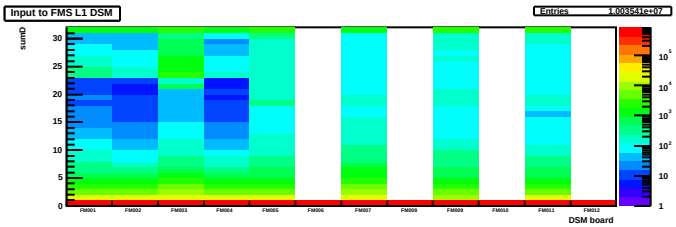

Input to FMS L0 DSM
Entries 786252
QT8(3) sum - simulated
QT board

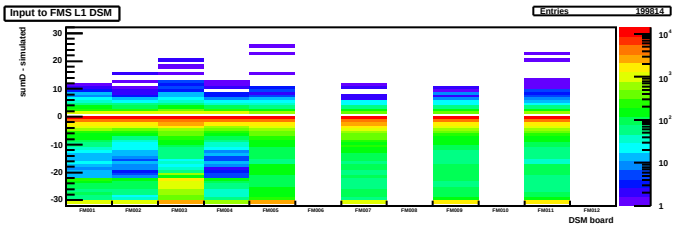

Input to FMS L0 DSM
Entries 4.014163e+07
HT ADC
QT board

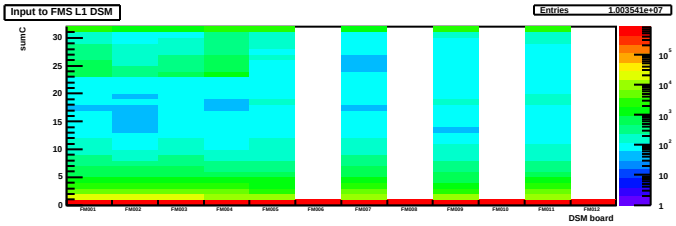

Input to FMS L0 DSM
Entries 585
HT ADC - simulated
QT board

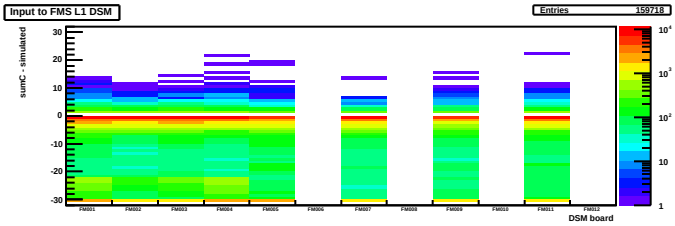

Input to FMS L0 DSM
Entries 4.014163e+07
HT ID
QT board

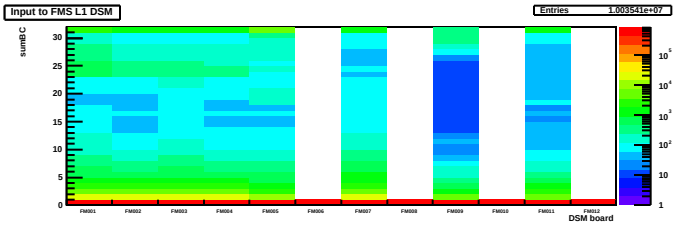

Input to FMS L0 DSM
Entries 869528
HT ID - simulated
QT board

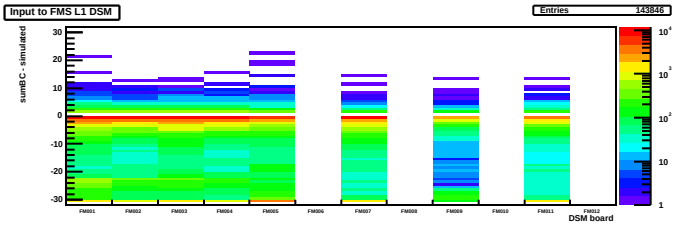

Input to FMS L1 DSM
Entries 1.003541e+07
sumD
DSM board

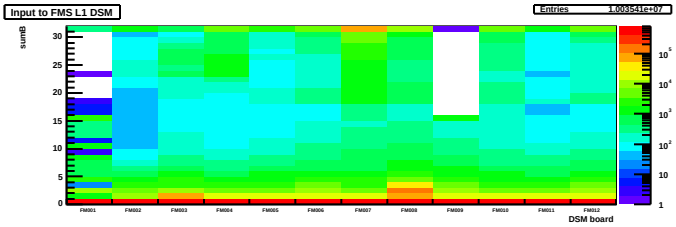

Input to FMS L1 DSM
Entries 199814
sumD - simulated
DSM board

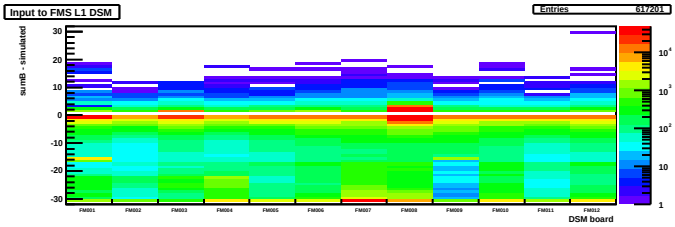

Input to FMS L1 DSM
Entries 1.003541e+07
sumC
DSM board

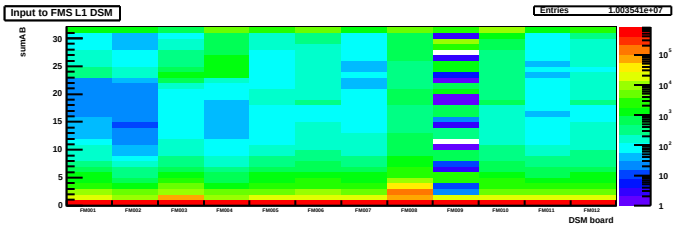

Input to FMS L1 DSM
Entries 159718
sumC - simulated
DSM board

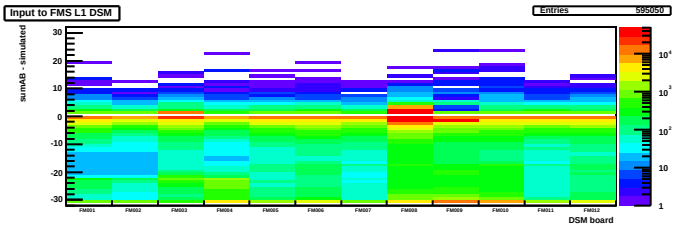

Input to FMS L1 DSM
Entries 1.003541e+07
sumBC
DSM board

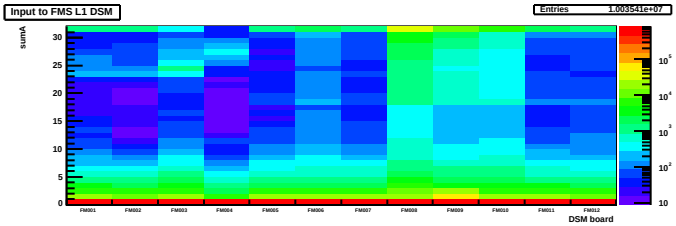

Input to FMS L1 DSM
Entries 143846
sumBC - simulated
DSM board

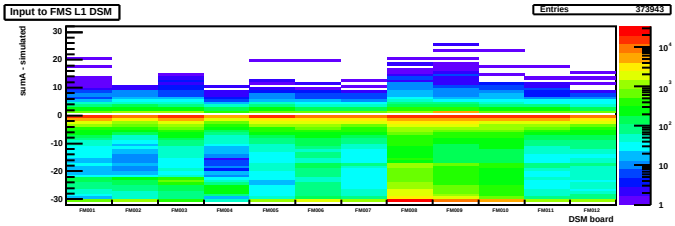

Input to FMS L1 DSM
Entries 1.003541e+07
sumB
DSM board

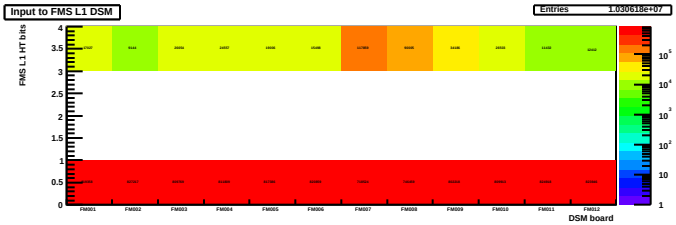

Input to FMS L1 DSM
Entries 617201
sumB - simulated
DSM board

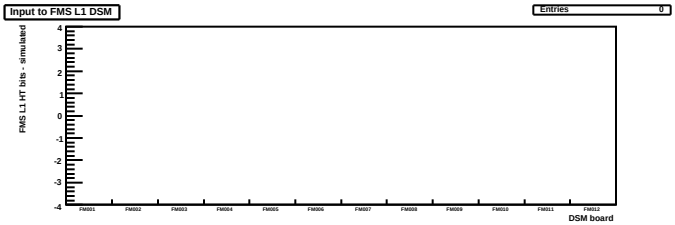

Input to FMS L1 DSM
Entries 1.003541e+07
sumAB
DSM board

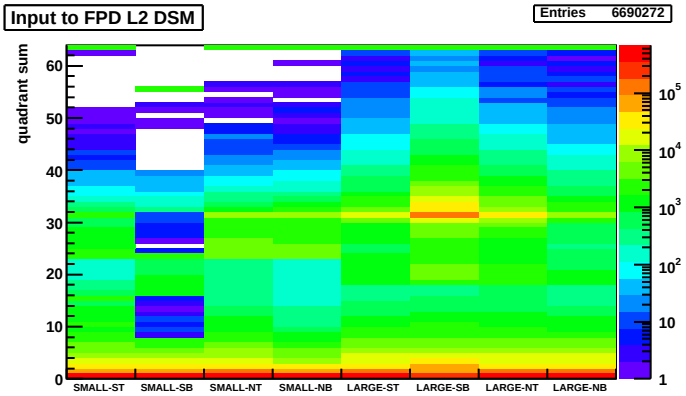

Input to FMS L1 DSM
Entries 595050
sumAB - simulated
DSM board

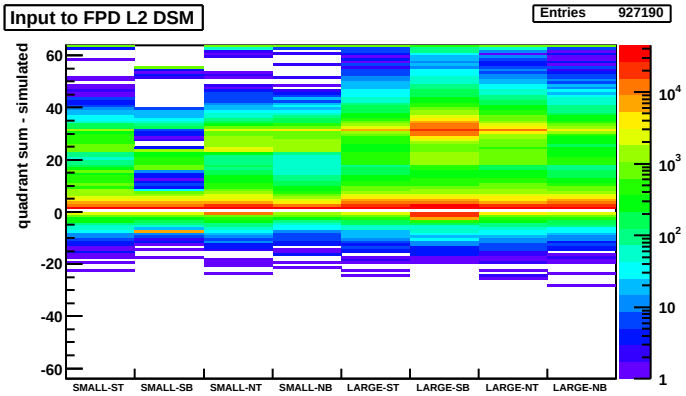

Input to FMS L1 DSM
Entries 1.003541e+07
sumA
DSM board

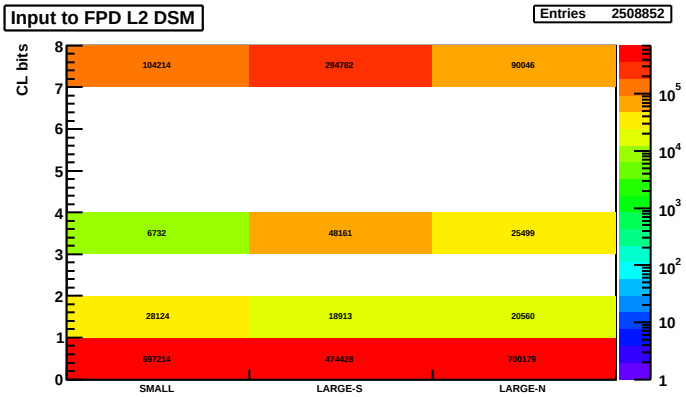

Input to FMS L1 DSM
Entries 373943
sumA - simulated
DSM board

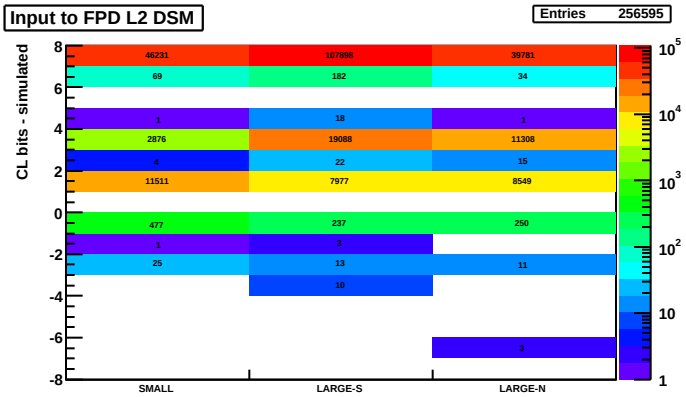

Input to FMS L1 DSM
Entries 1.030618e+07
FMS L1 HT bits
DSM board

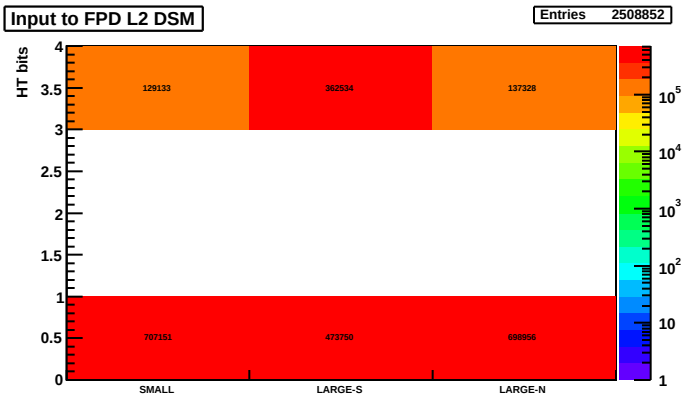

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

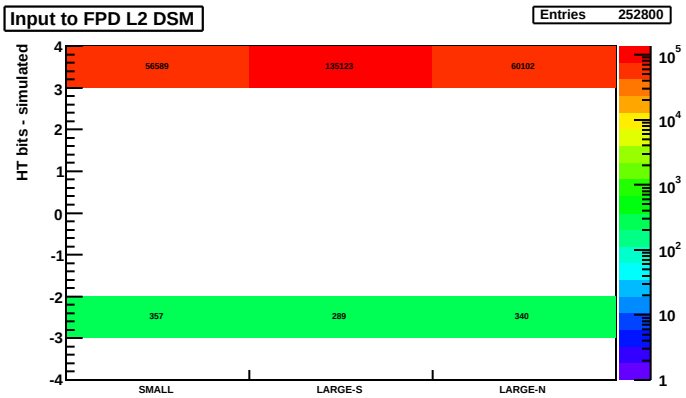

Input to FPD L2 DSM
Entries 6690272
quadrant sum
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

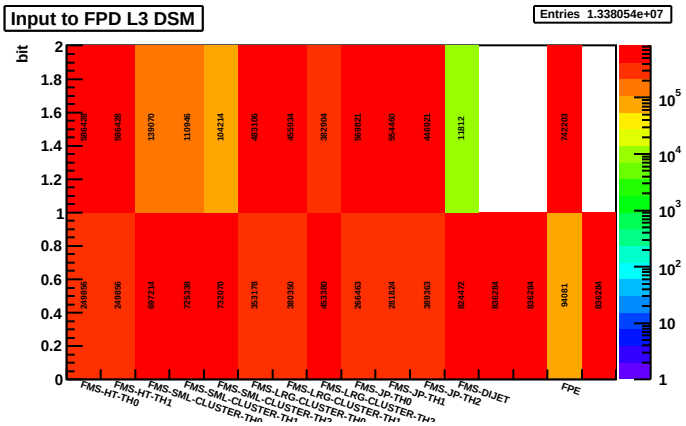

Input to FPD L2 DSM
Entries 927190
quadrant sum - simulated
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

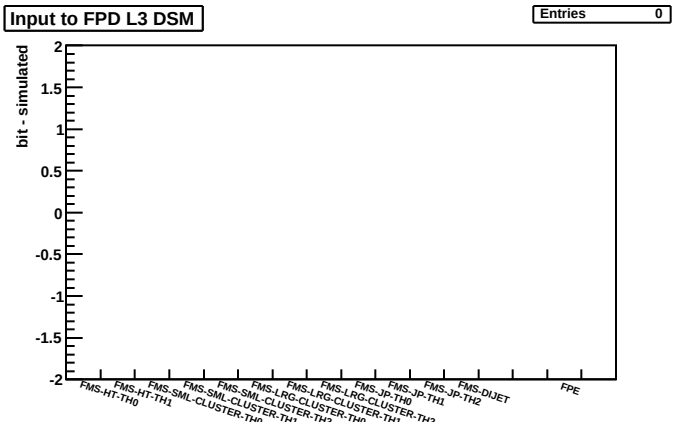

Input to FPD L2 DSM
Entries 2508852
CL bits
104214
294782
90046
6732
48161
25499
28124
18913
20560
697214
474428
700179
SMALL
LARGE-S
LARGE-N

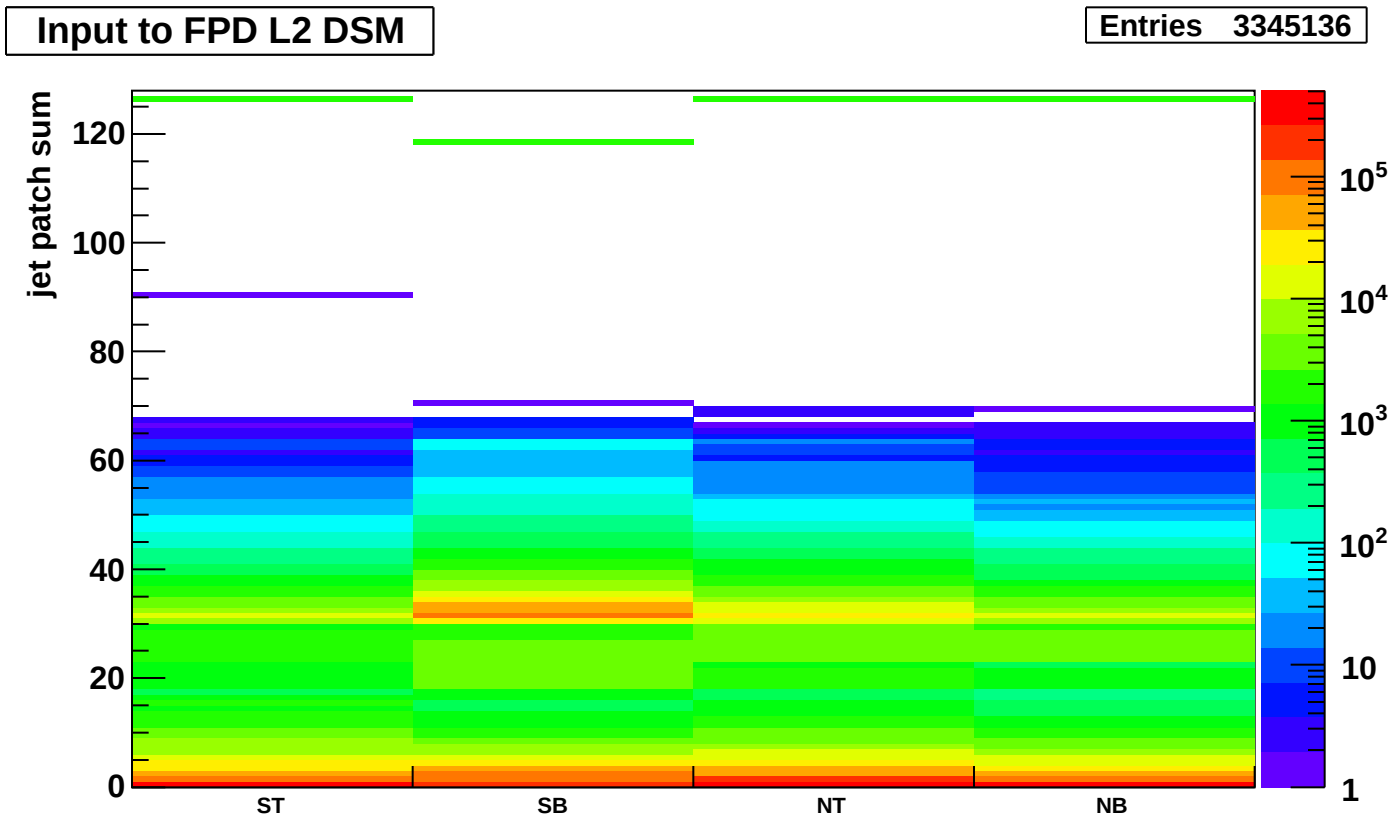

Input to FPD L2 DSM
Entries 256595
CL bits - simulated
46231
107898
39781
69
182
34
1
18
1
2876
19088
11308
4
22
15
11511
7977
8549
477
237
250
1
3
25
13
11
10
3
SMALL
LARGE-S
LARGE-N

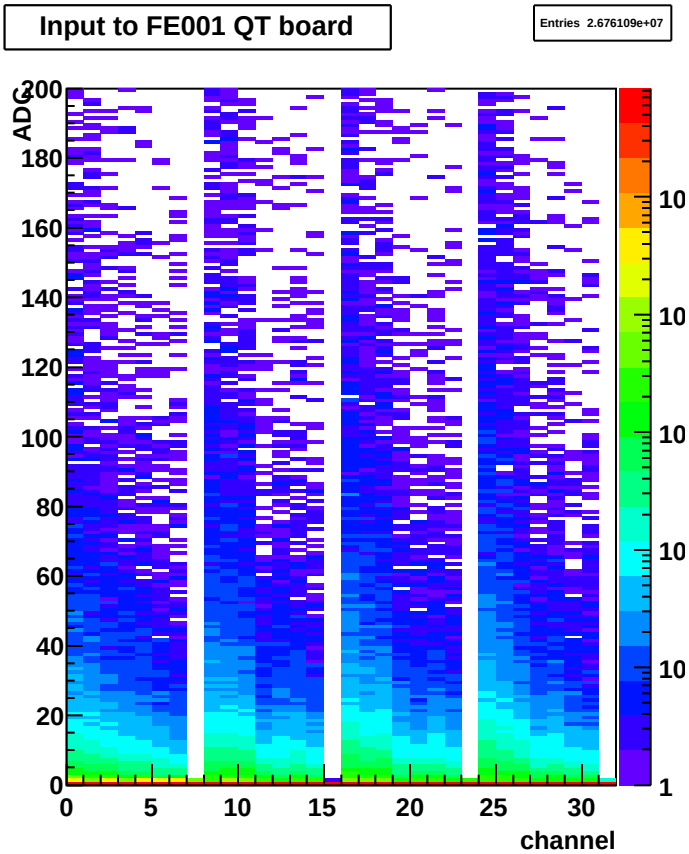

Input to FPD L2 DSM
Entries 2508852
HT bits
129133
362534
137328
707151
473750
698956
SMALL
LARGE-S
LARGE-N

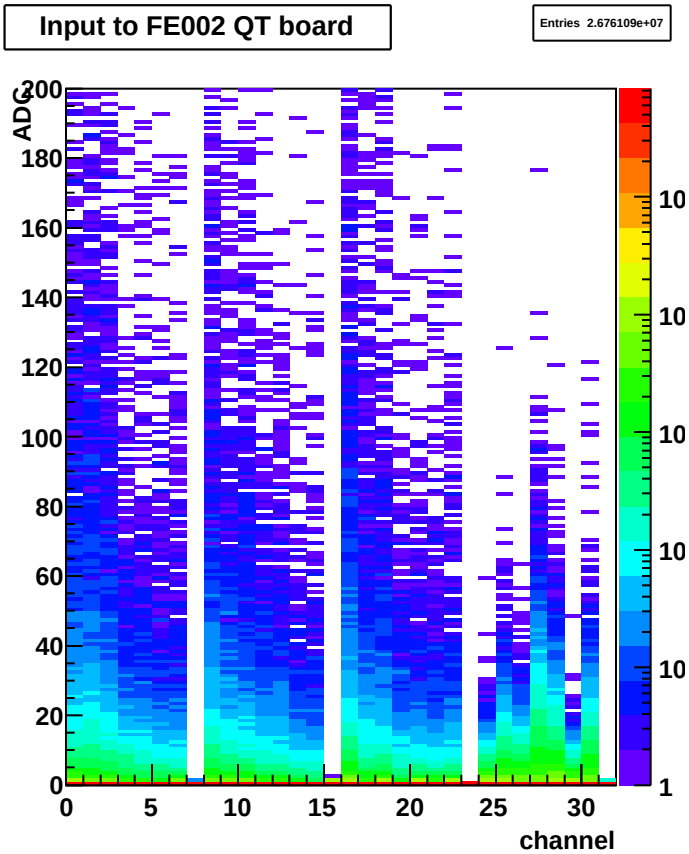

Input to FPD L2 DSM
Entries 252800
HT bits - simulated
56589
135123
60102
357
289
340
SMALL
LARGE-S
LARGE-N

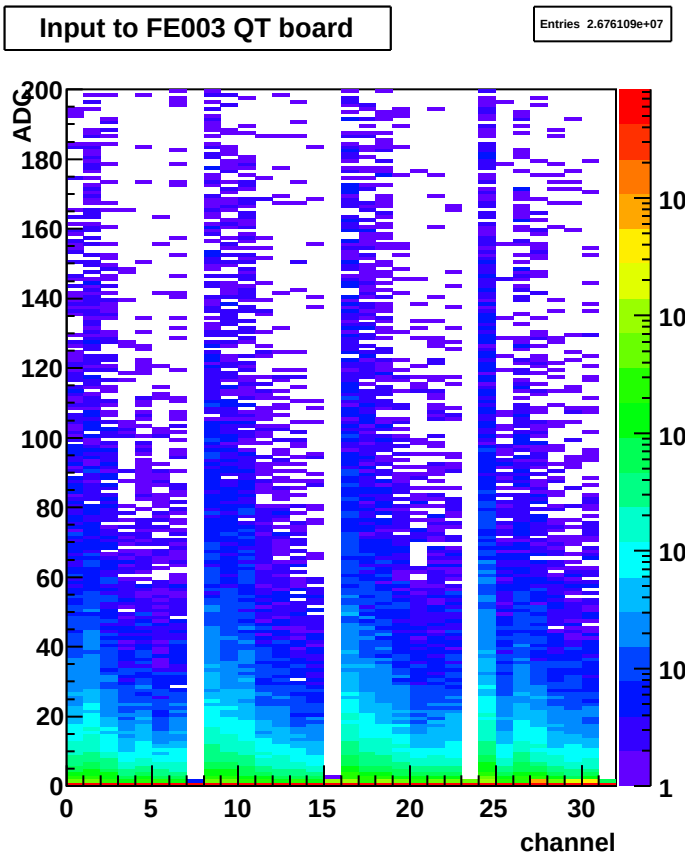

Input to FPD L3 DSM
Entries 1.338054e+07
bit
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

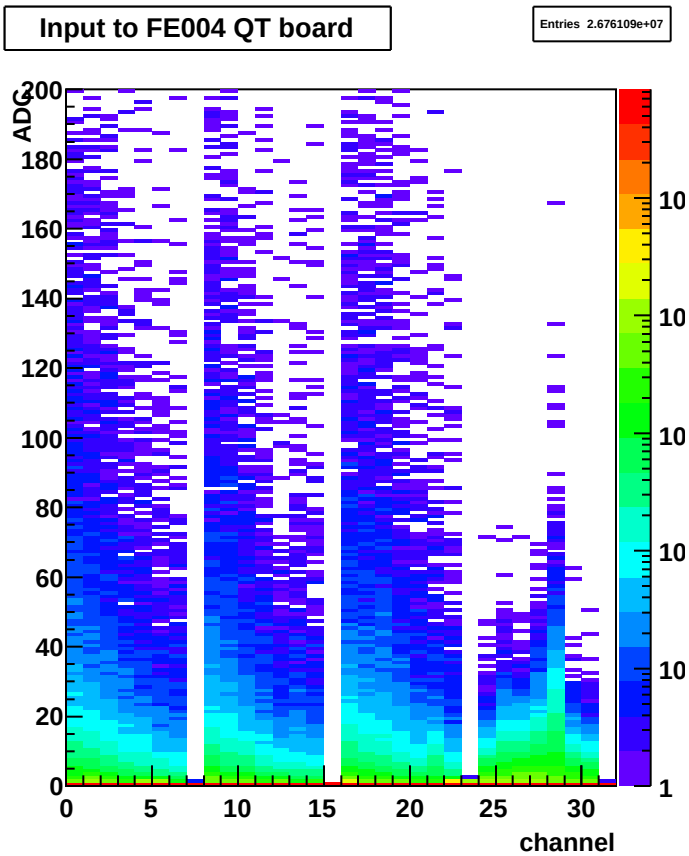

Input to FPD L3 DSM
Entries 0
bit - simulated
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

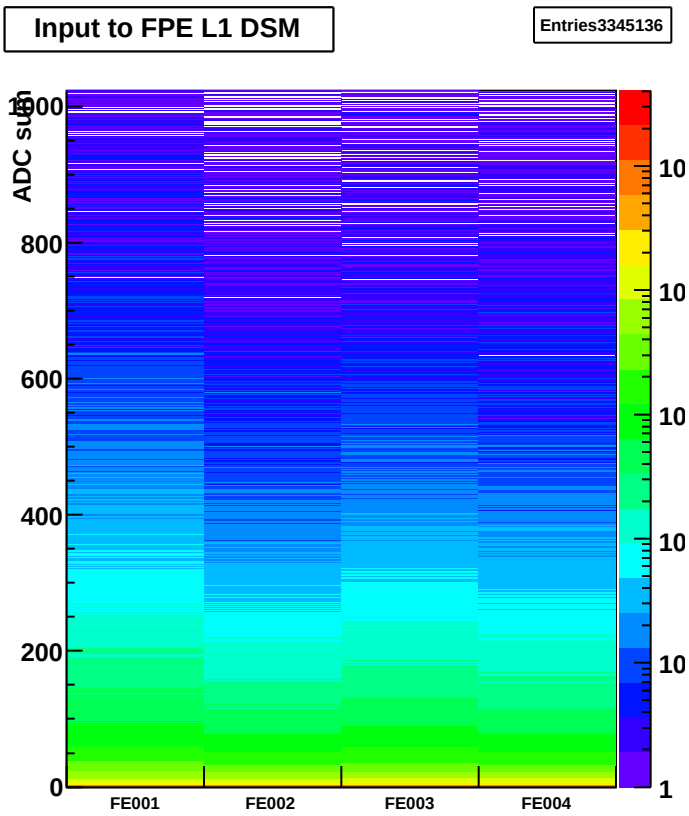

Input to FPD L2 DSM
Entries 3345136
jet patch sum
0
20
40
60
80
100
120
ST
SB
NT
NB
1
10
10^2
10^3
10^4
10^5

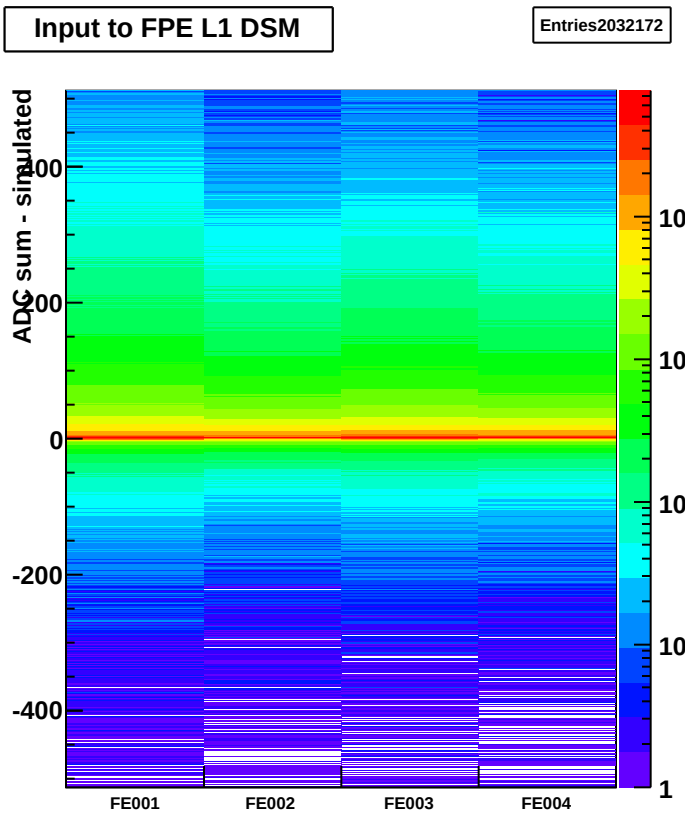

Input to FE001 QT board
Entries 2.676109e+07
ADC
channel

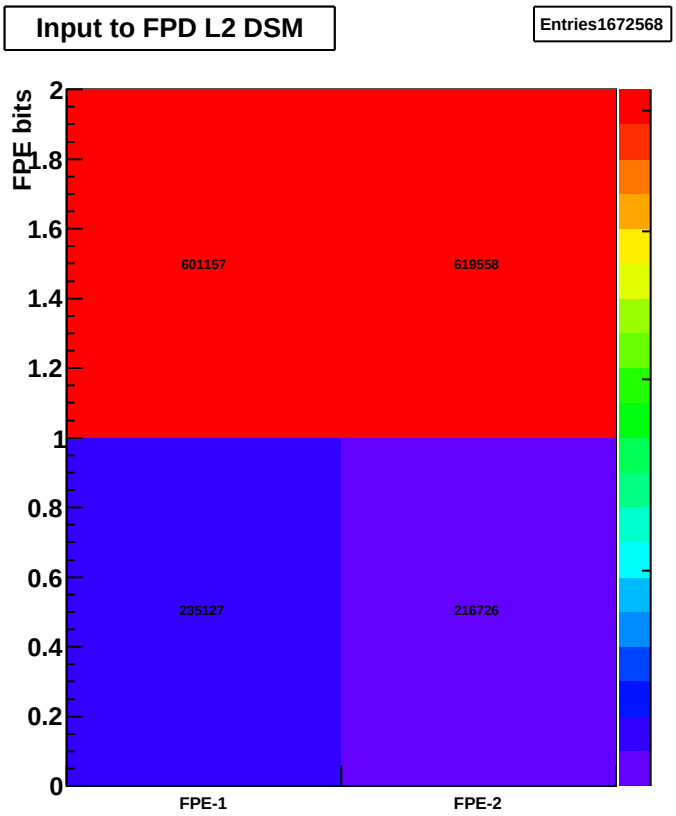

Input to FE002 QT board
Entries 2.676109e+07
ADC
channel

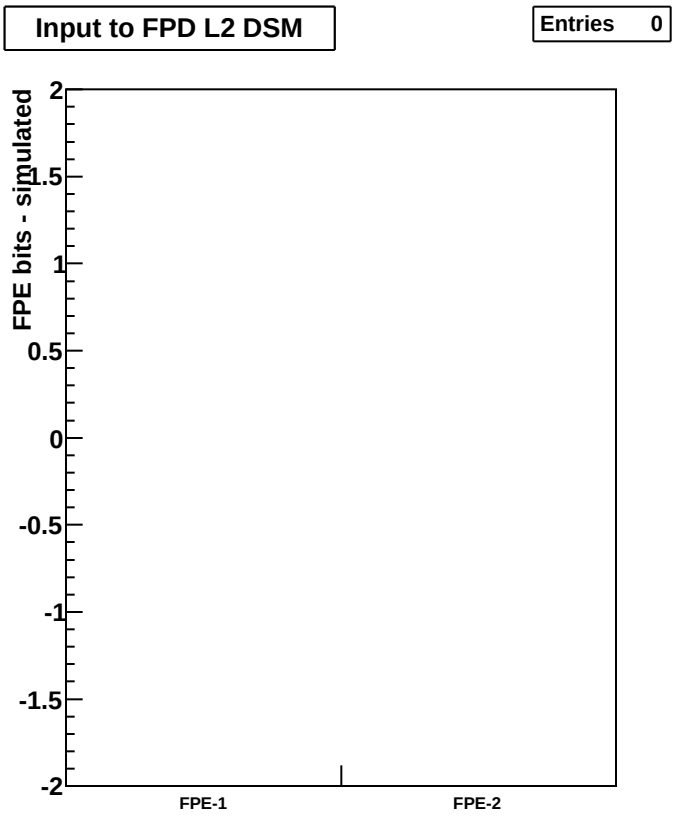

Input to FE003 QT board
Entries 2.676109e+07
ADC
channel


Input to FE004 QT board
Entries 2.676109e+07
ADC
channel


Input to FPE L1 DSM
Entries3345136
ADC sum
1000
800
600
400
200
0
FE001
FE002
FE003
FE004
10
10
10
10
10
1


Input to FPE L1 DSM
Entries2032172
ADC sum - simulated
200
0
-200
-400
FE001
FE002
FE003
FE004
10
10
10
10
1


Input to FPD L2 DSM
Entries1672568
FPE bits
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
601157
619558
235127
216726
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