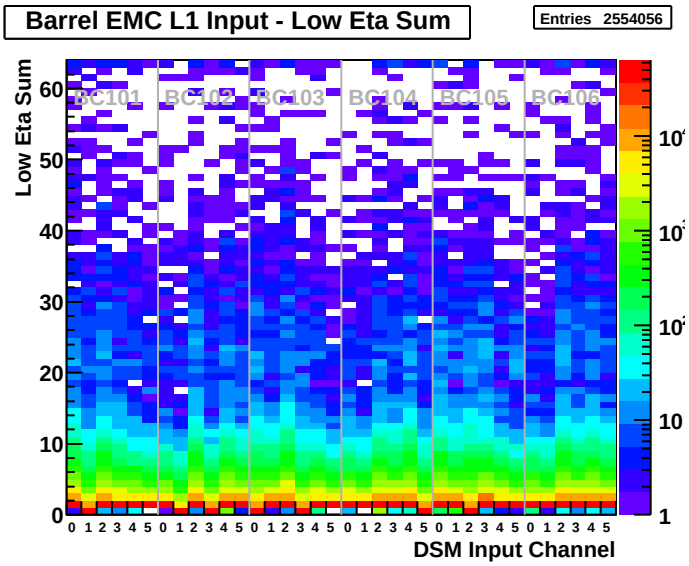
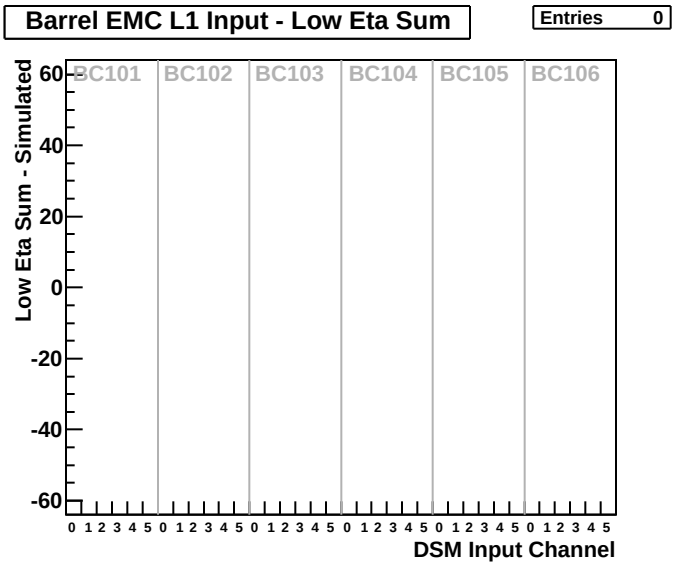
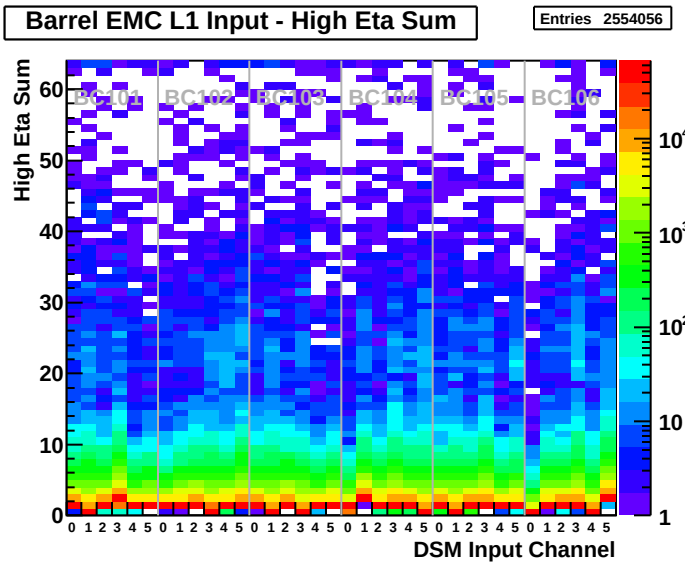
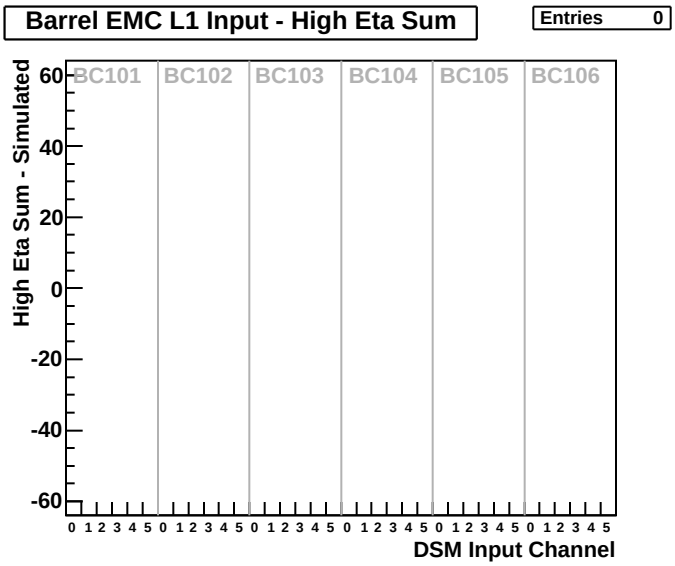
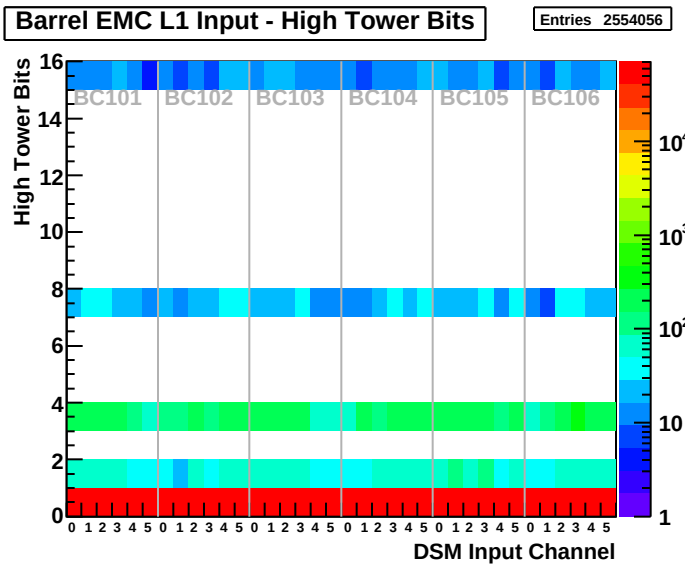
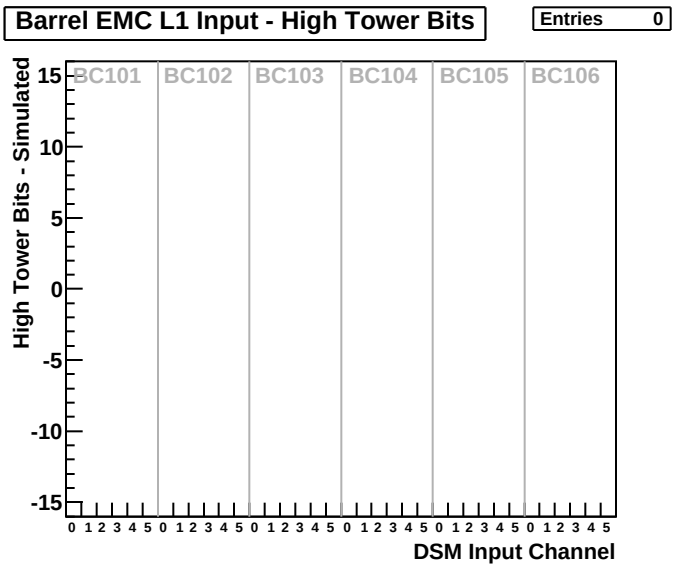

Barrel EMC L1 Input - Low Eta Sum
Entries 2554056
Low Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

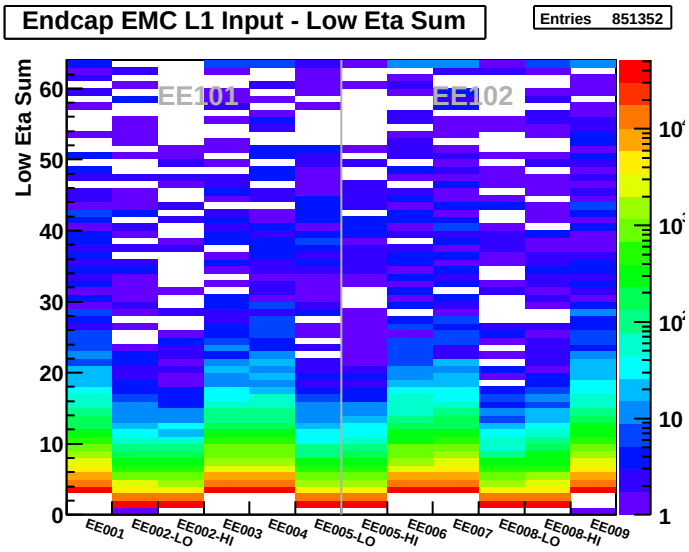

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

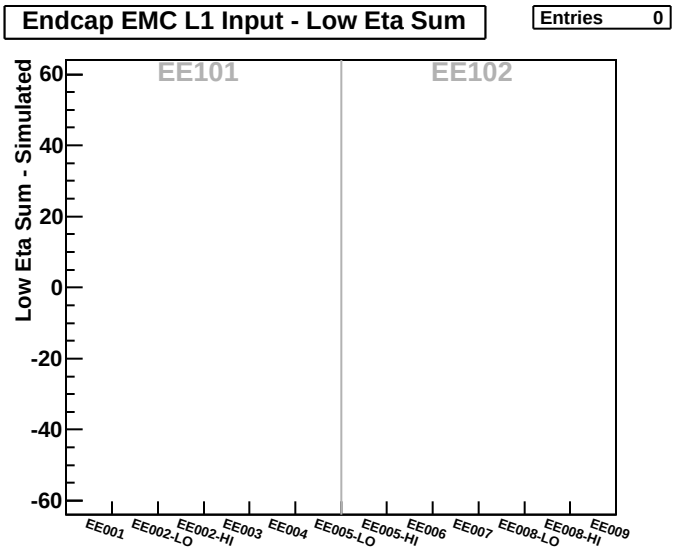

Barrel EMC L1 Input - High Eta Sum
Entries 2554056
High Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

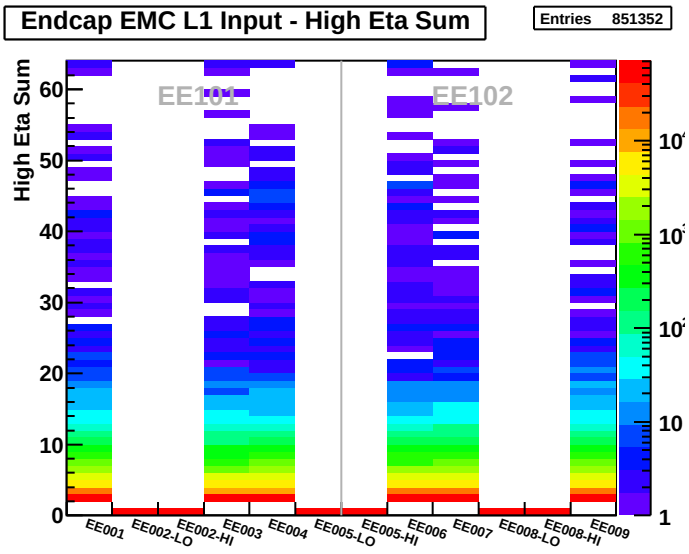

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

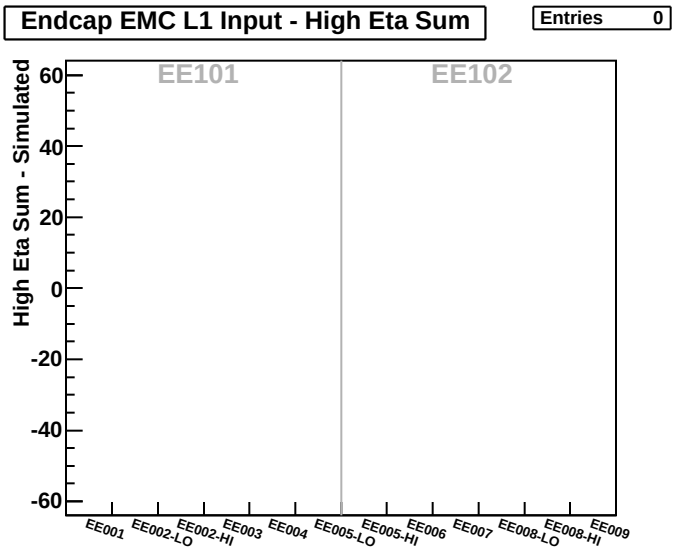

Barrel EMC L1 Input - High Tower Bits
Entries 2554056
High Tower Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

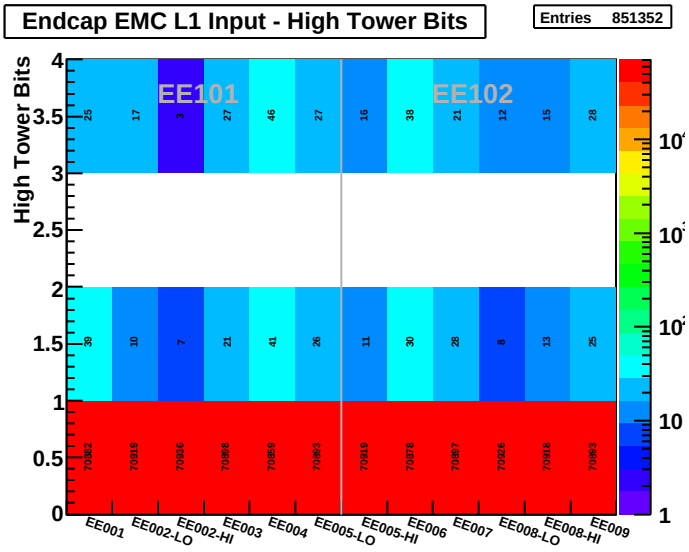

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

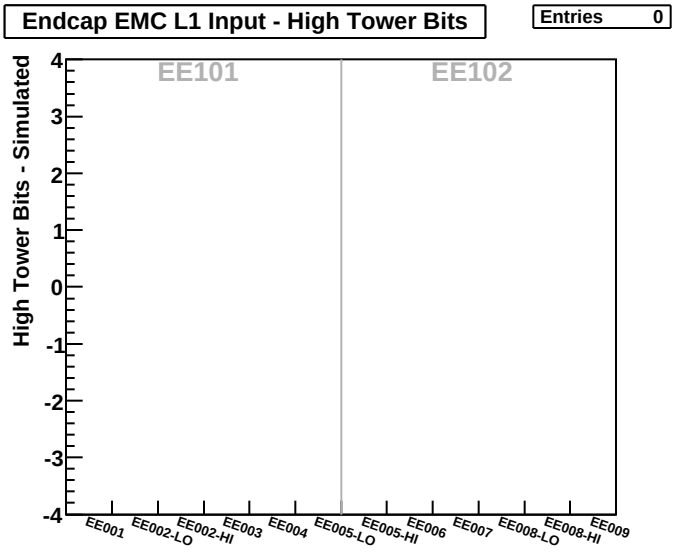

Endcap EMC L1 Input - Low Eta Sum
Entries 851352
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

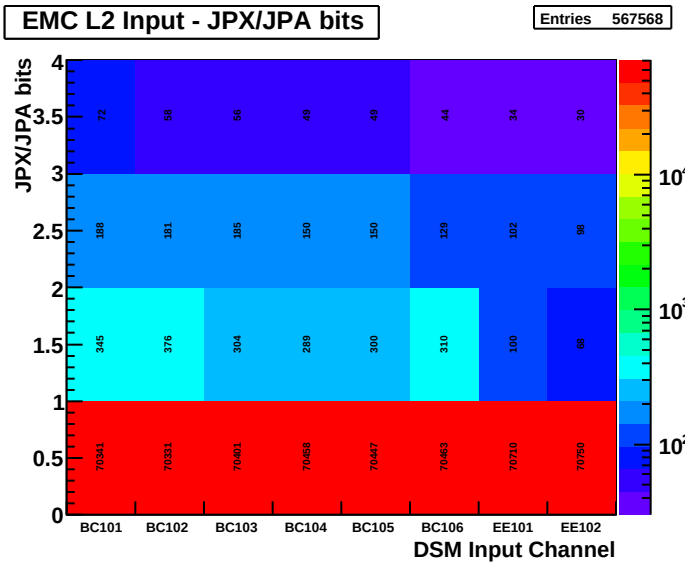

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

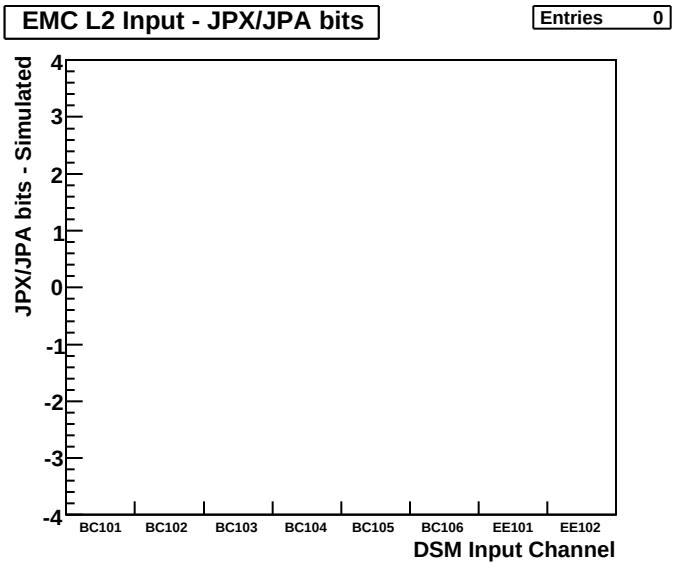

Endcap EMC L1 Input - High Eta Sum
Entries 851352
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

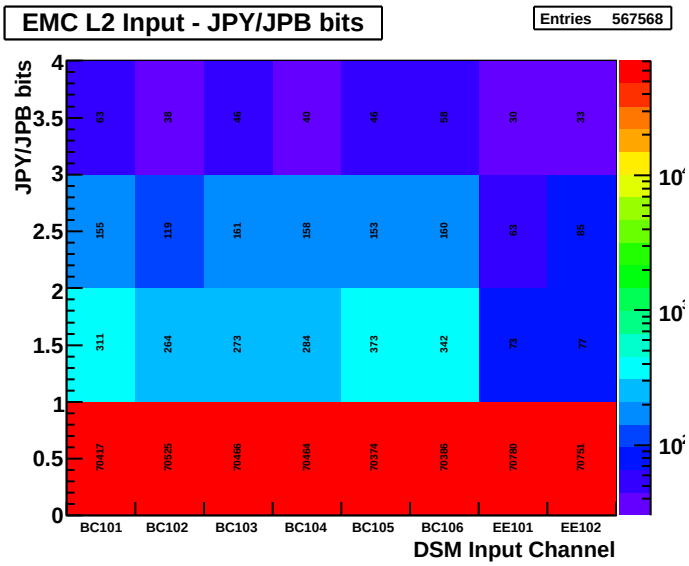

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

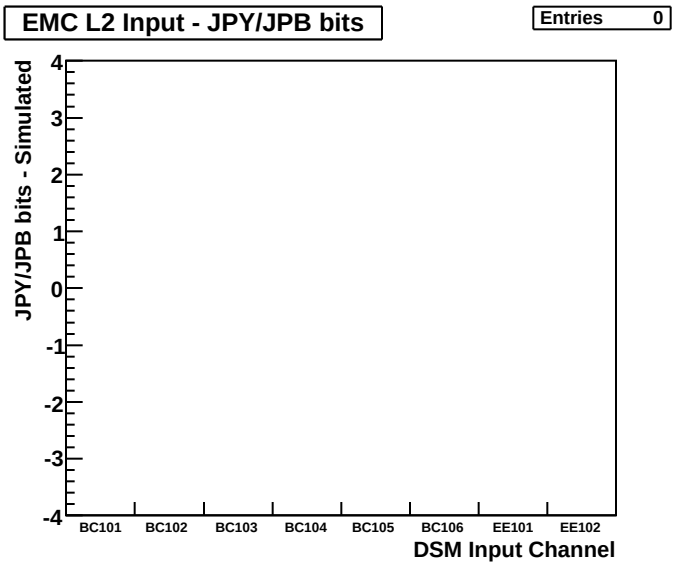

Endcap EMC L1 Input - High Tower Bits
Entries 851352
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

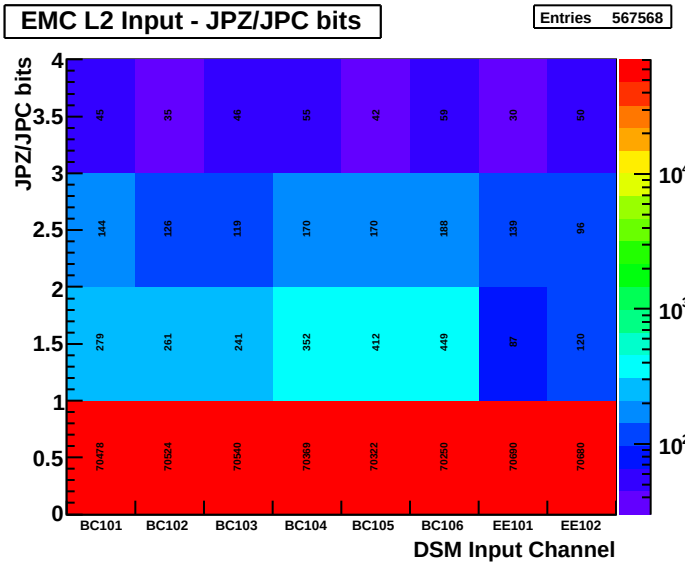

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

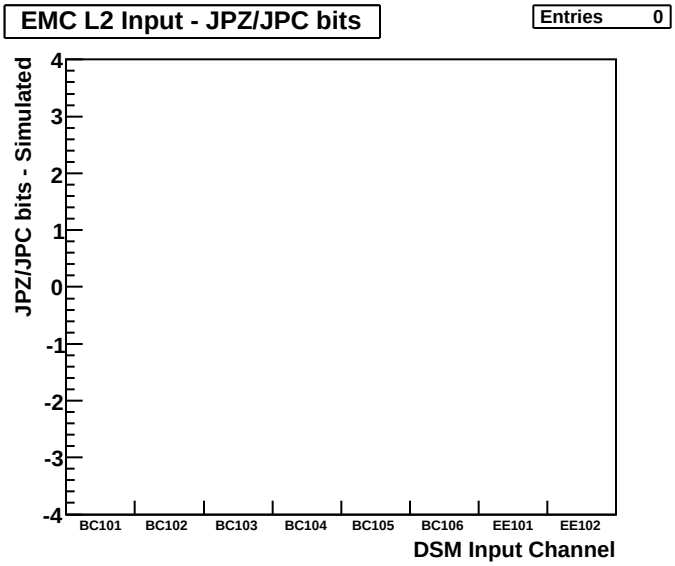

EMC L2 Input - JPX/JPA bits
Entries 567568
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
72 58 56 49 49 44 34 30
188 181 195 150 150 129 102 98
345 376 304 289 300 310 100 68
70341 70331 70401 70458 70447 70463 70710 70750

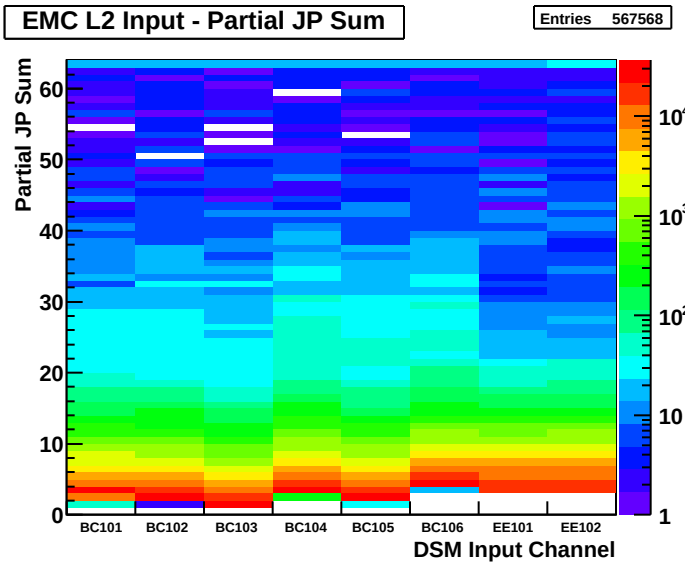

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

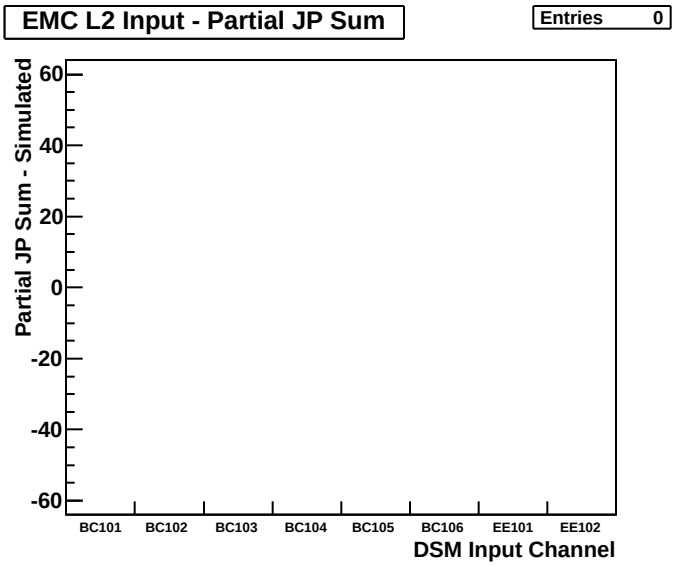

EMC L2 Input - JPY/JPB bits
Entries 567568
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
63 38 46 40 46 58 30 33
155 119 161 158 153 160 63 85
311 264 273 284 373 342 73 77
70417 70525 70466 70464 70374 70386 70780 70751

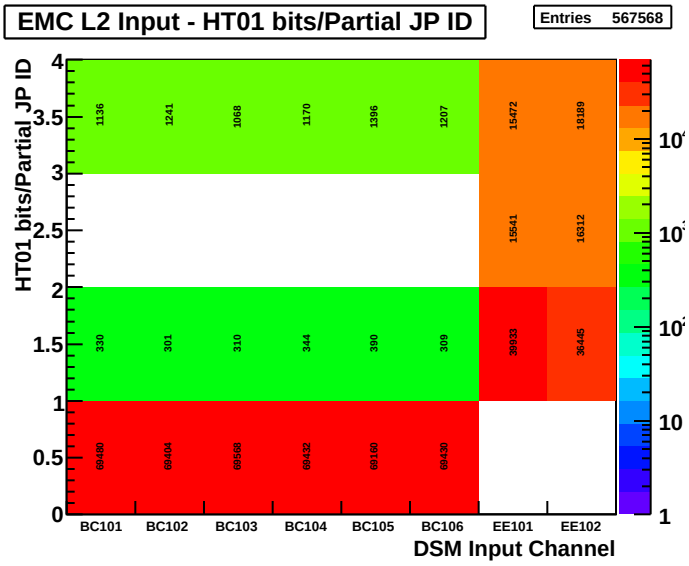

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

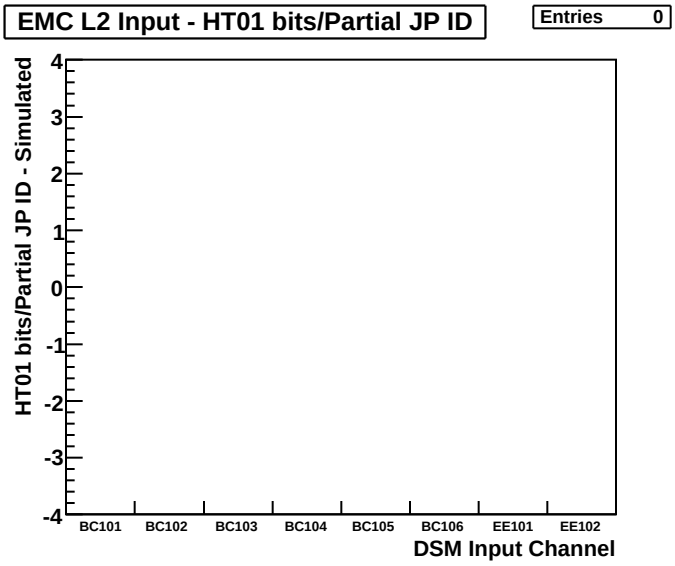

EMC L2 Input - JPZ/JPC bits
Entries 567568
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
45 35 46 55 42 59 30 50
144 126 119 170 170 188 139 96
279 261 241 352 412 449 87 120
70478 70524 70540 70389 70322 70250 70680 70680

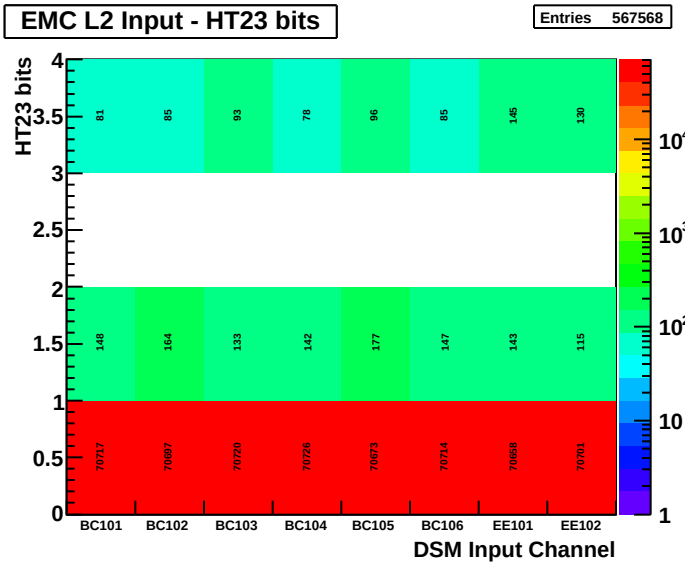

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

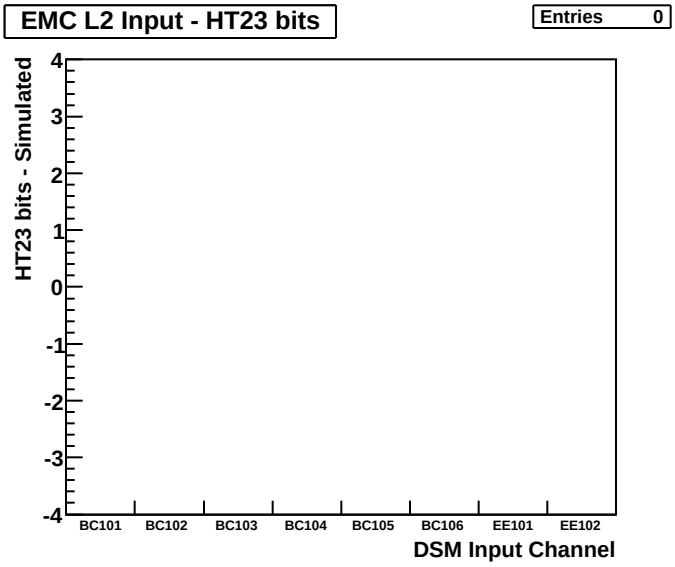

EMC L2 Input - Partial JP Sum
Entries 567568
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

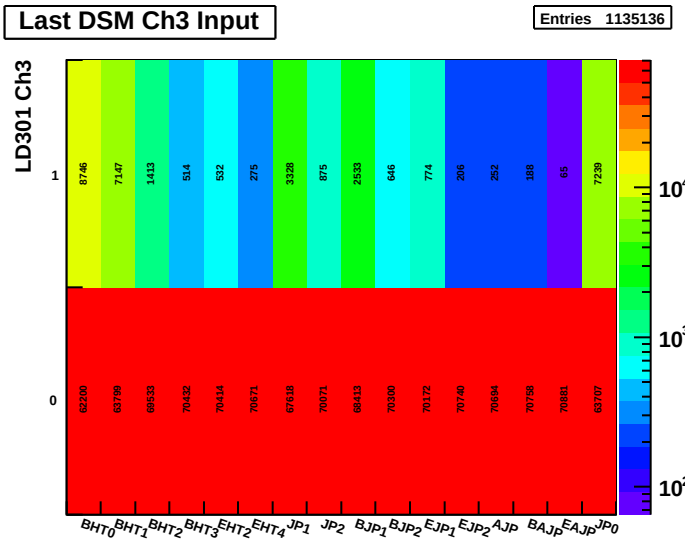

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

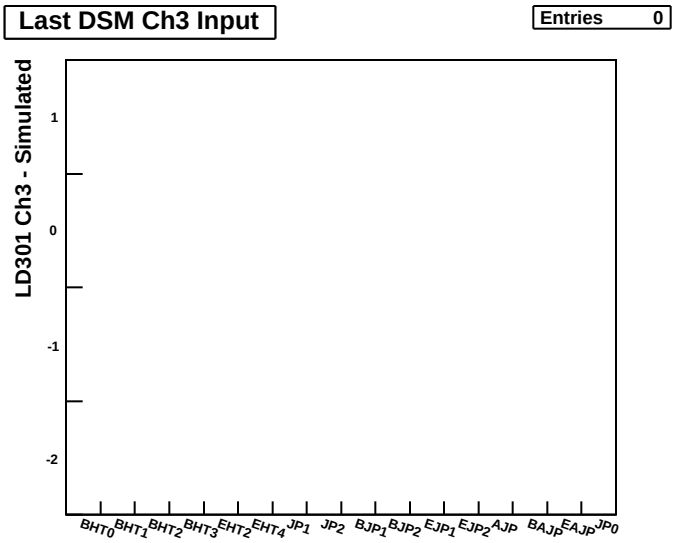

EMC L2 Input - HT01 bits/Partial JP ID
Entries 567568
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

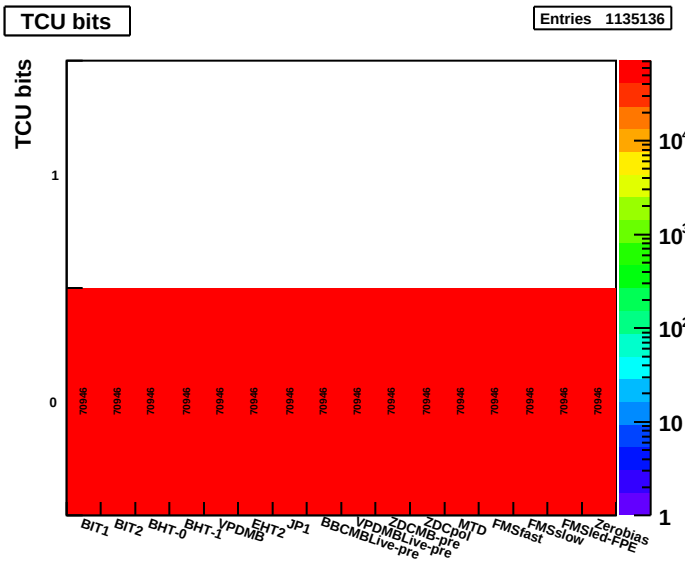

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

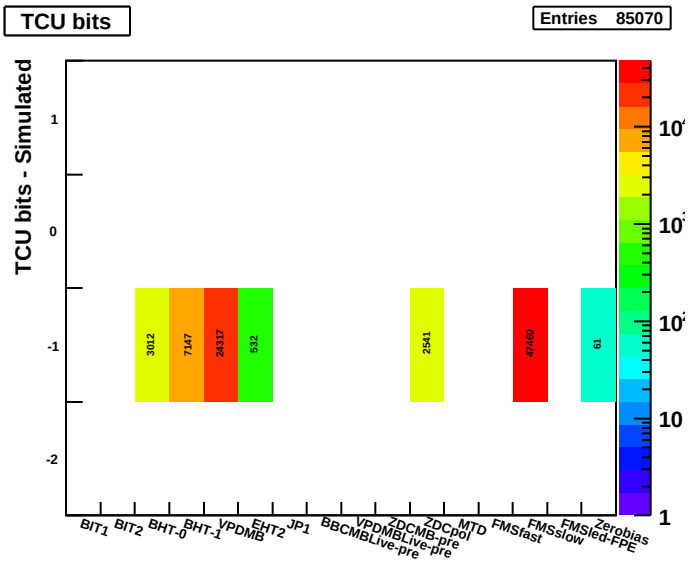

EMC L2 Input - HT23 bits
Entries 567568
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

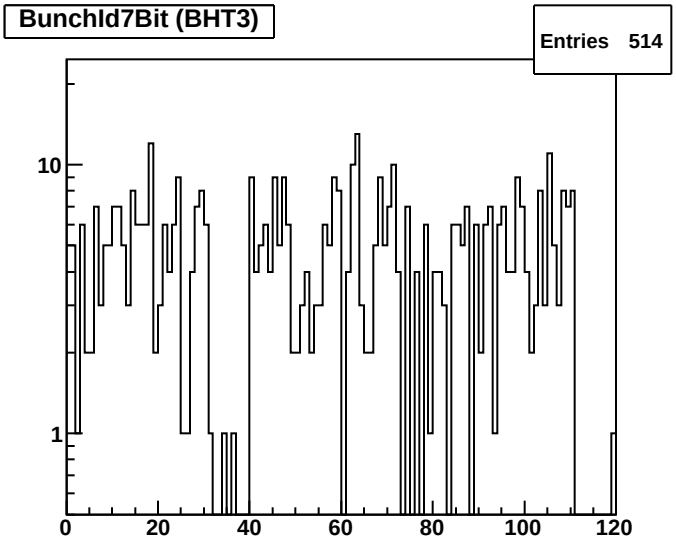

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

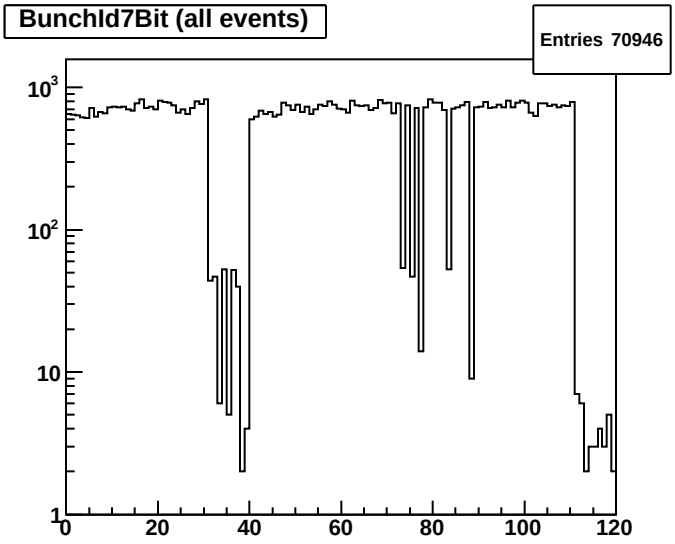

Last DSM Ch3 Input
Entries 1135136
LD301 Ch3
8746 7147 1413 514 532 275 3328 875 2533 646 774 206 252 188 65 7239
62200 63799 69533 70432 70414 70671 67618 70071 68413 70300 70172 70740 70694 70758 70881 63707
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

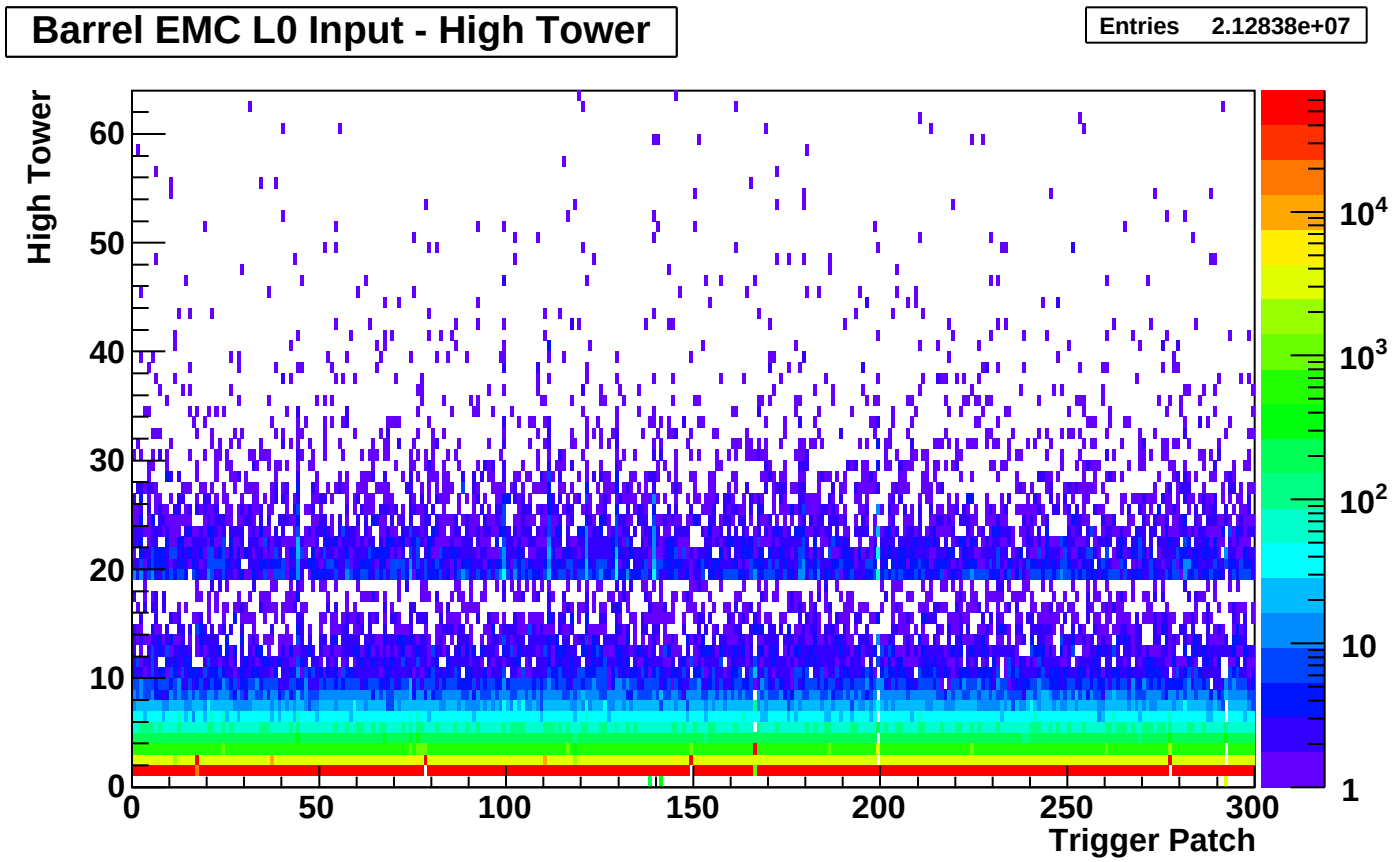

Last DSM Ch3 Input
Entries 0
LD301 Ch3 - Simulated
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

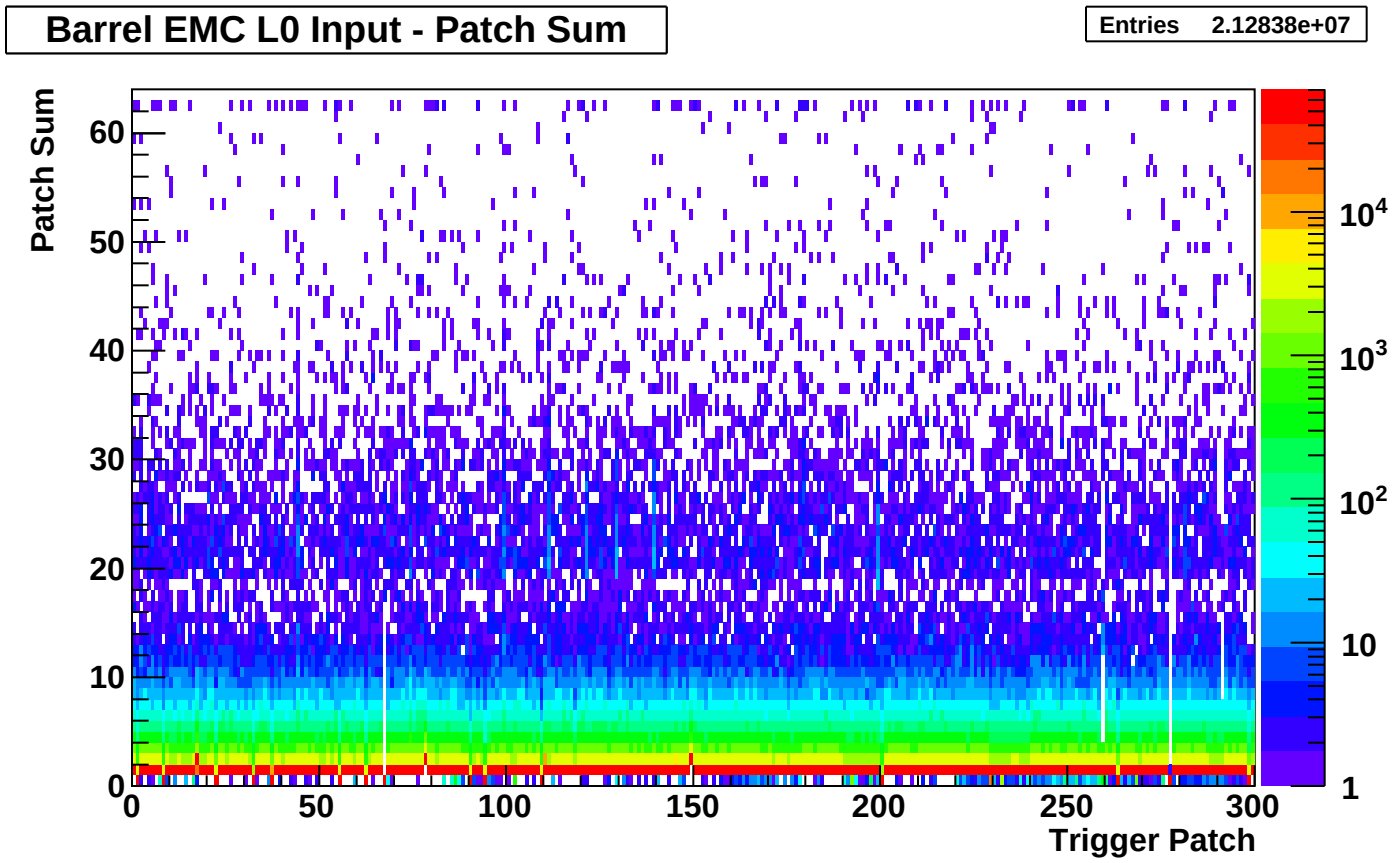

TCU bits
Entries 1135136
TCU bits
70946
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

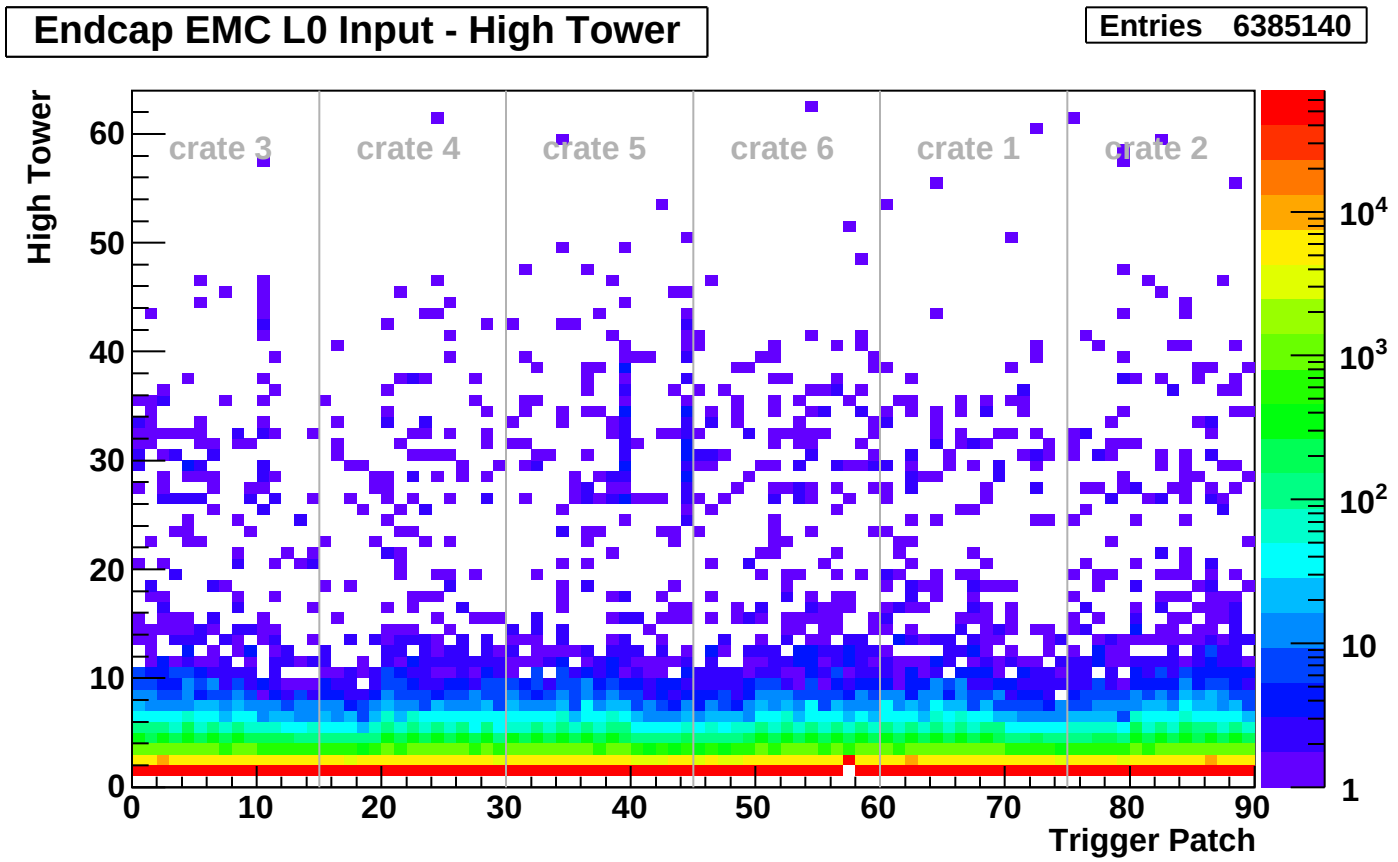

TCU bits
Entries 85070
TCU bits - Simulated
3012 7147 24317 532 2541 47460 61
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

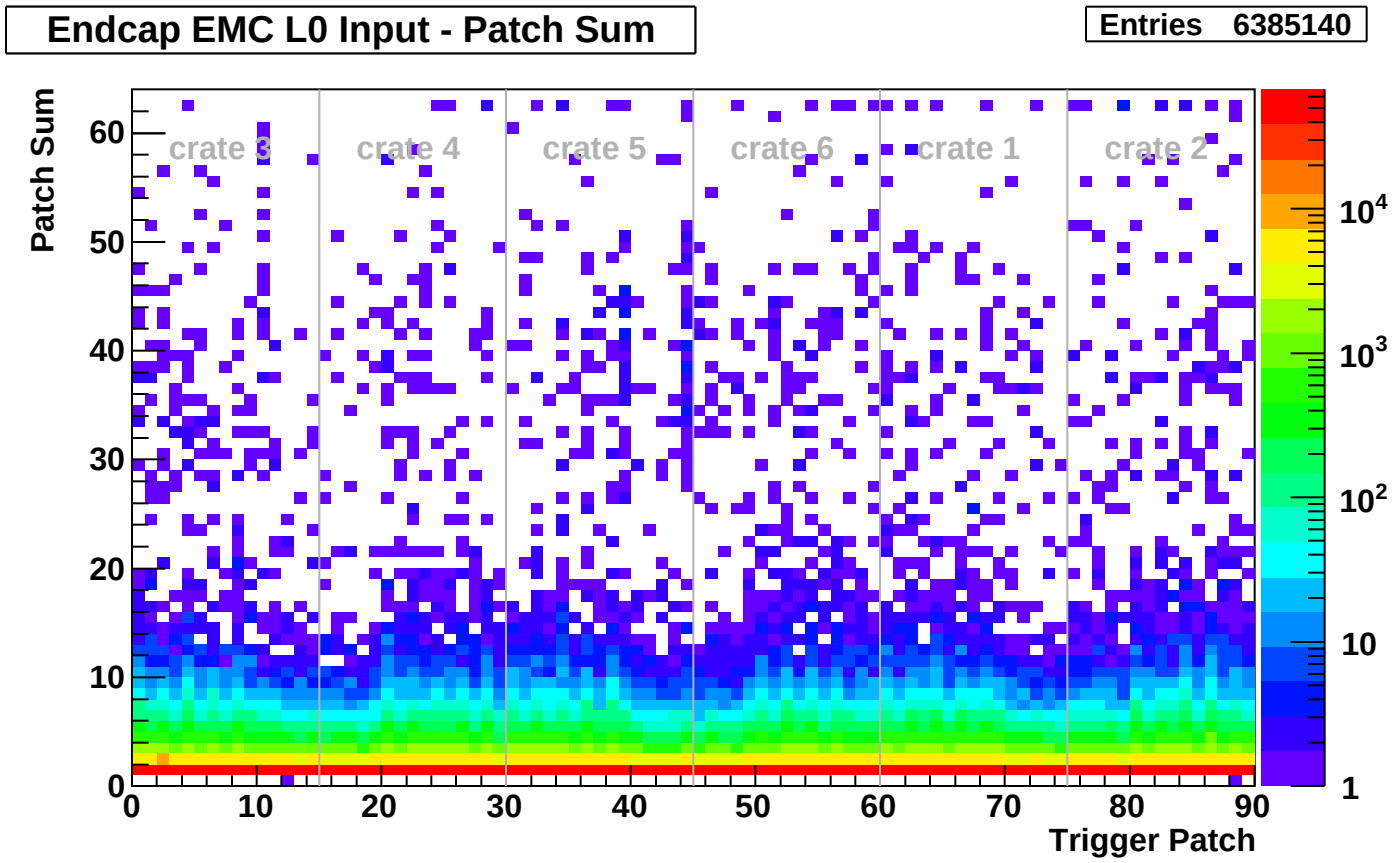

BunchId7Bit (BHT3)
Entries 514

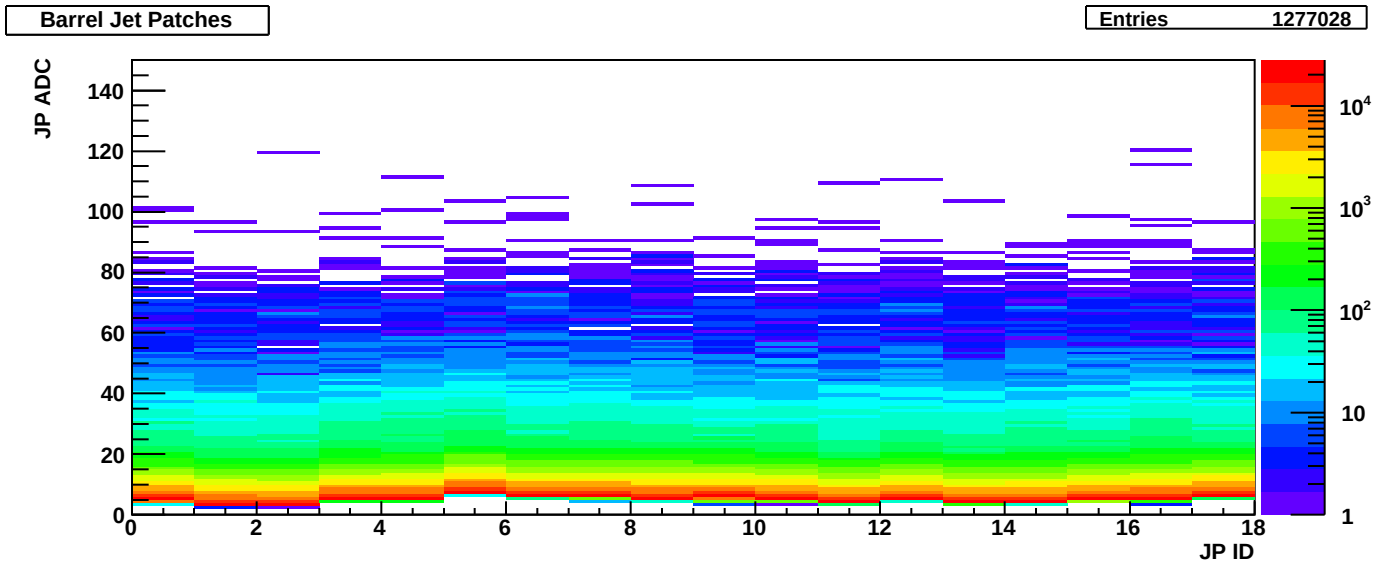

BunchId7Bit (all events)
Entries 70946

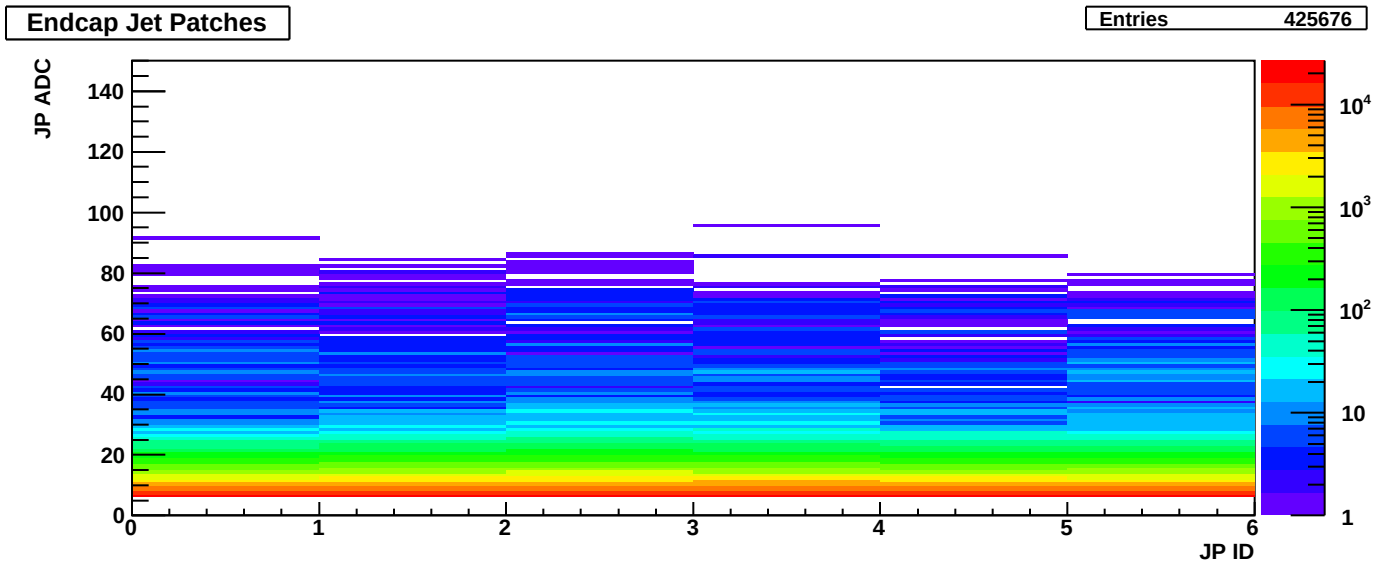

Barrel EMC L0 Input - High Tower
Entries 2.12838e+07
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4

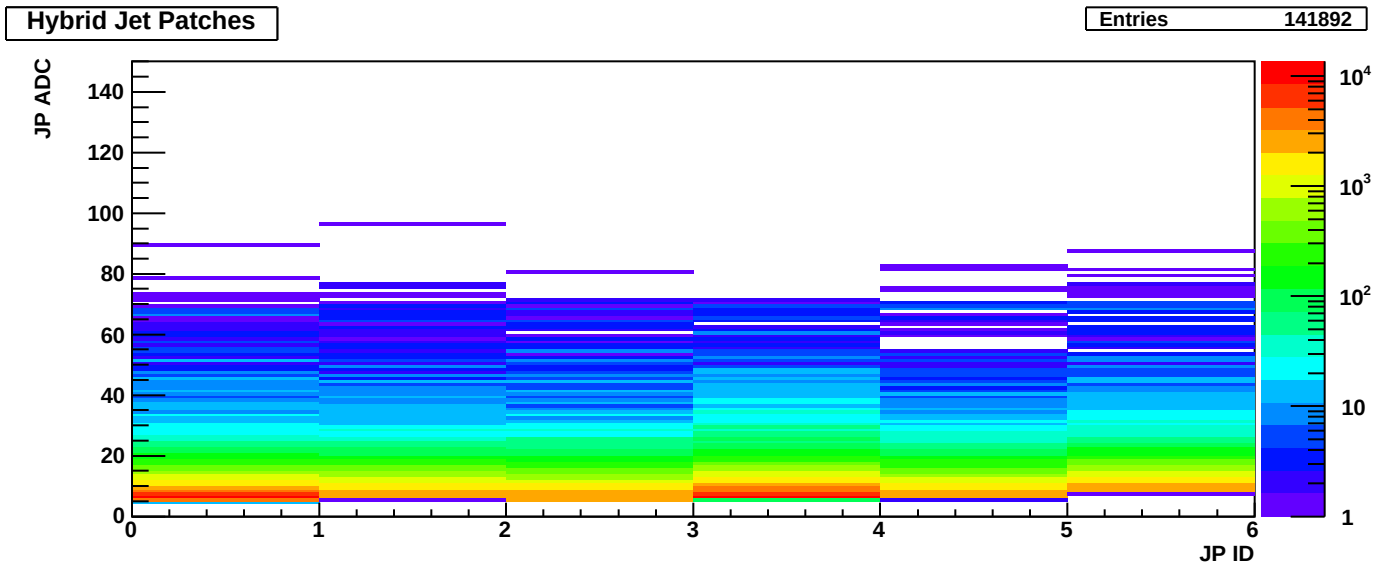

Barrel EMC L0 Input - Patch Sum
Entries 2.12838e+07
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4

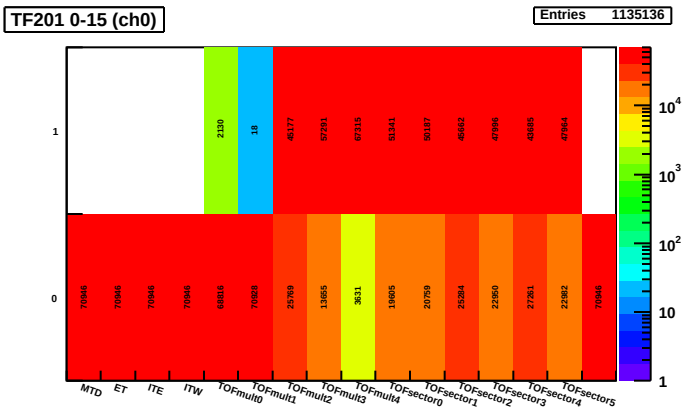

Endcap EMC L0 Input - High Tower
Entries 6385140
High Tower
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

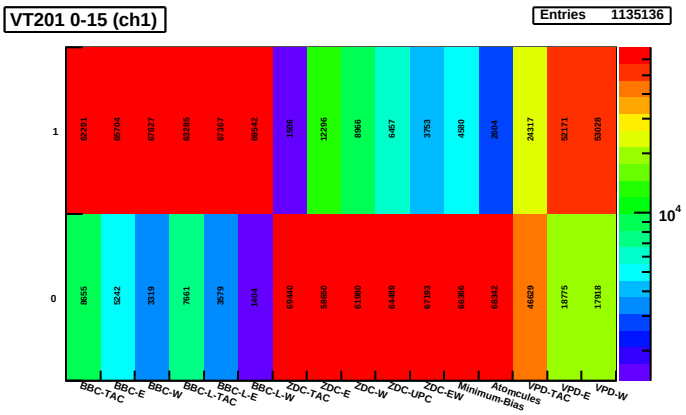

Endcap EMC L0 Input - Patch Sum
Entries 6385140
Patch Sum
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

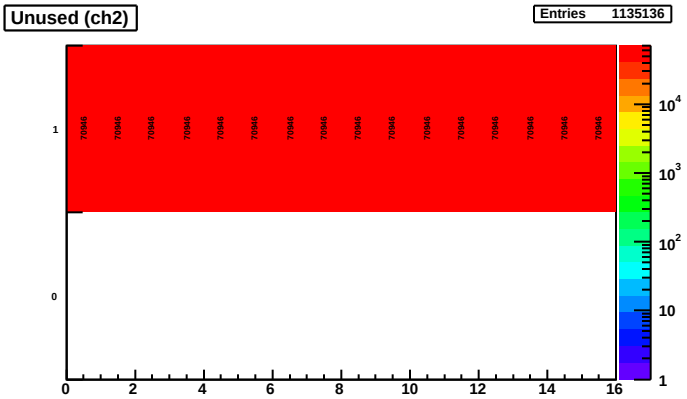

Barrel Jet Patches
Entries 1277028
JP ADC
JP ID

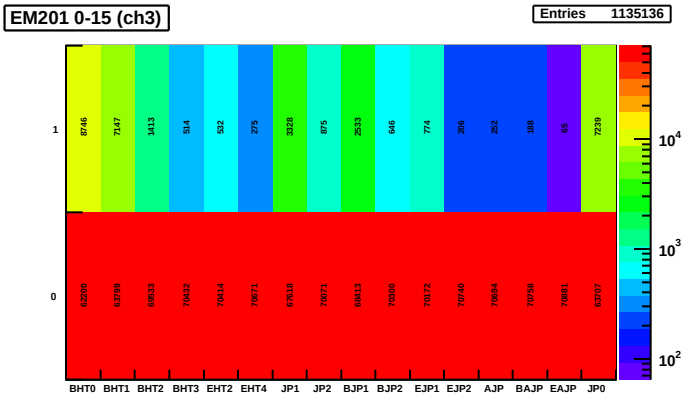

Endcap Jet Patches
Entries 425676
JP ADC
JP ID

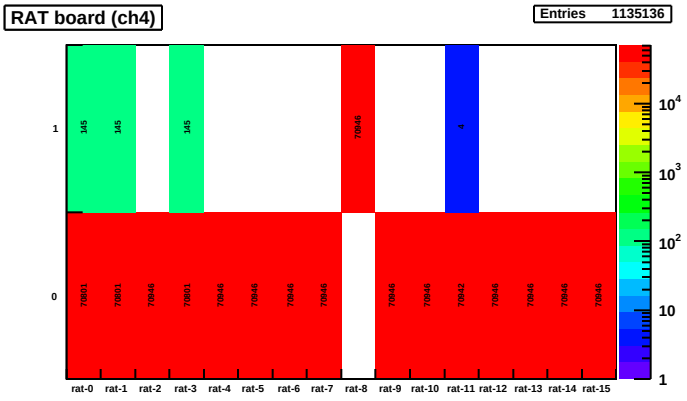

Hybrid Jet Patches
Entries 141892
JP ADC
JP ID

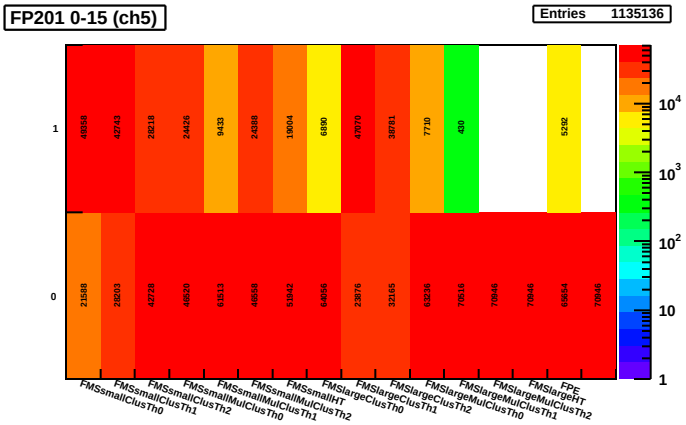

TF201 0-15 (ch0)
Entries 1135136
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5

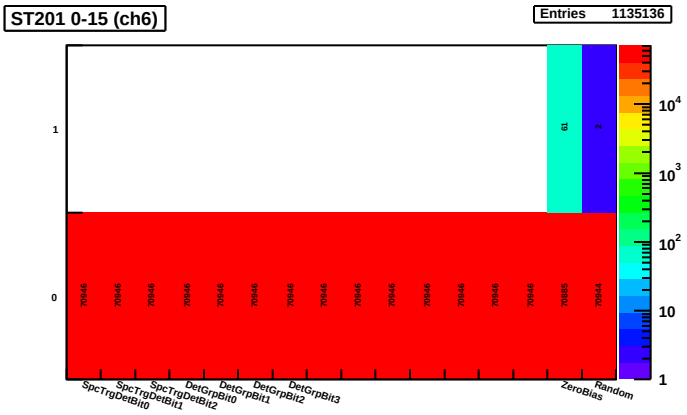

VT201 0-15 (ch1)
Entries 1135136
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-E ZDC-W ZDC-UPC ZDC-EW Minimum-Bias Atomcules VPD-TAC VPD-E VPD-W

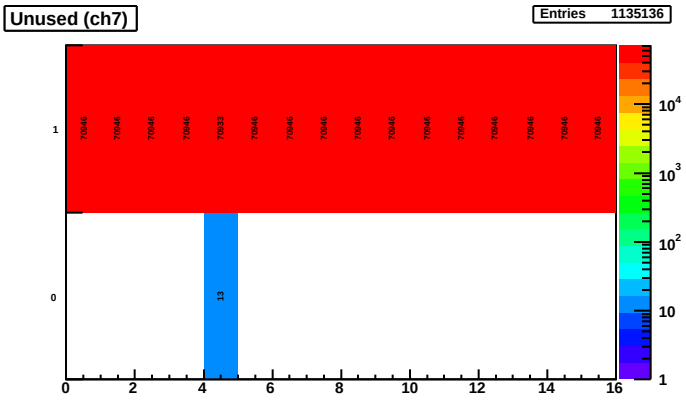

Unused (ch2)
Entries 1135136

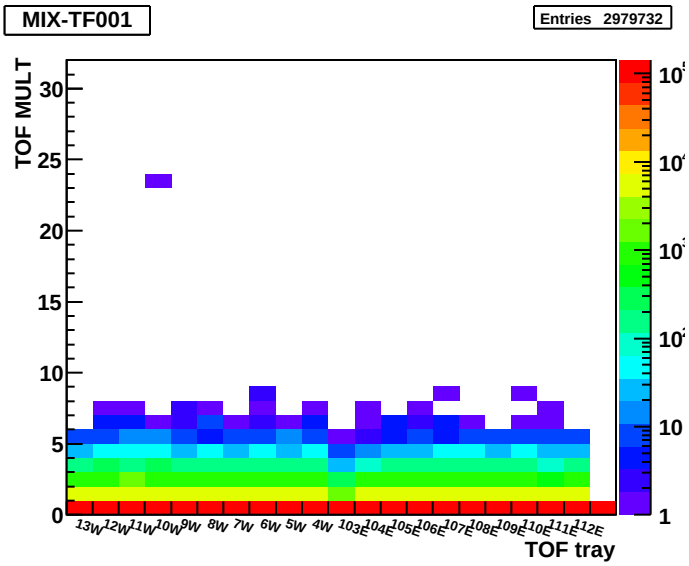

EM201 0-15 (ch3)
Entries 1135136
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

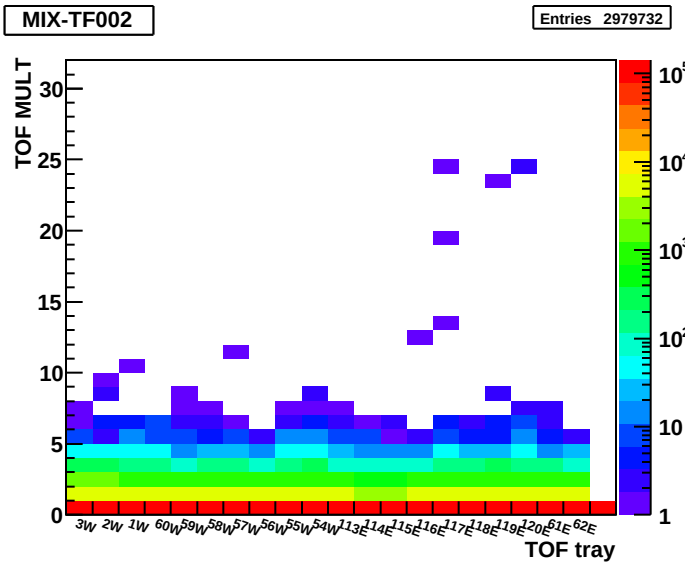

RAT board (ch4)
Entries 1135136
rat-0 rat-1 rat-2 rat-3 rat-4 rat-5 rat-6 rat-7 rat-8 rat-9 rat-10 rat-11 rat-12 rat-13 rat-14 rat-15

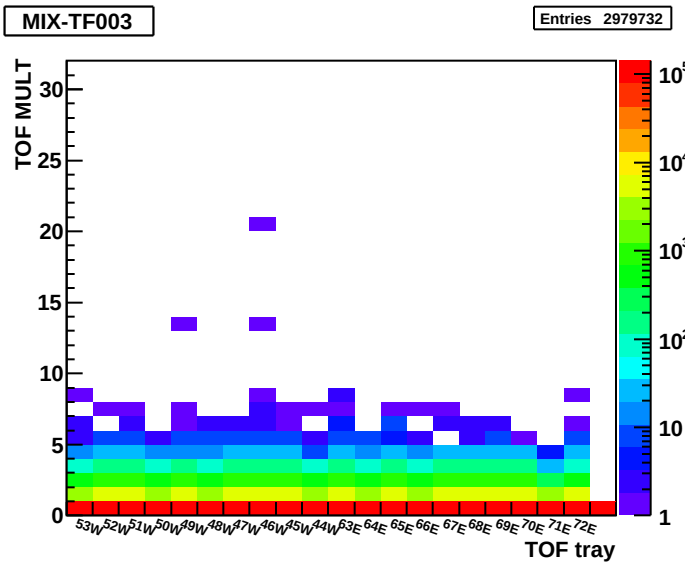

FP201 0-15 (ch5)
Entries 1135136
FMSsmallClusTh0 FMSsmallClusTh1 FMSsmallClusTh2 FMSsmallMulClusTh0 FMSsmallMulClusTh1 FMSsmallMulClusTh2 FMSsmallHT FMSlargeClusTh0 FMSlargeClusTh1 FMSlargeClusTh2 FMSlargeMulClusTh0 FMSlargeMulClusTh1 FMSlargeMulClusTh2 FMSlargeHT FPE

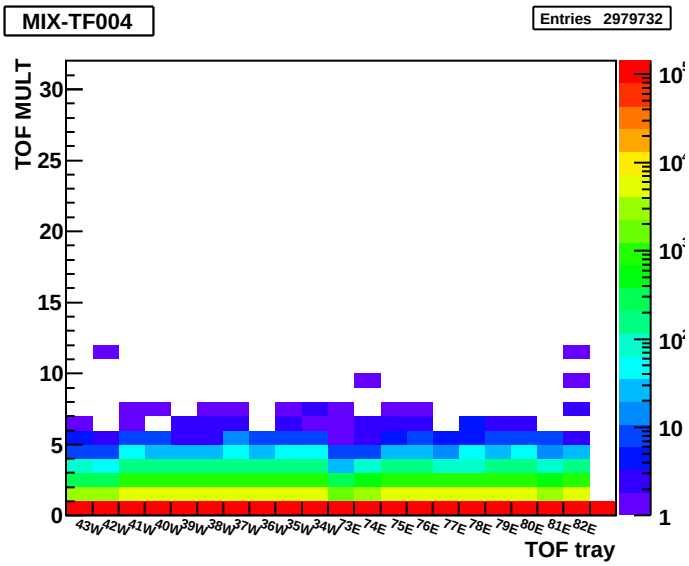

ST201 0-15 (ch6)
Entries 1135136
SpcTrgDetBit0 SpcTrgDetBit1 SpcTrgDetBit2 DetCrpBit0 DetCrpBit1 DetCrpBit2 DetCrpBit3 ZeroBias Random

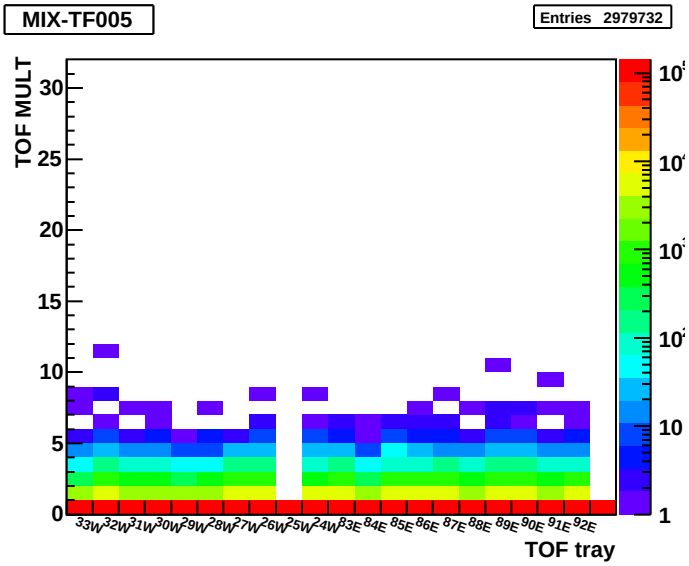

Unused (ch7)
Entries 1135136

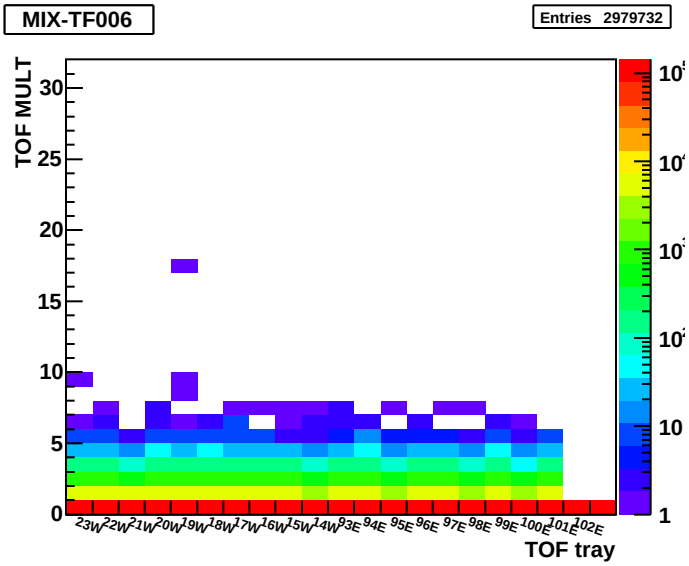

MIX-TF001
Entries 2979732
TOF MULT
TOF tray

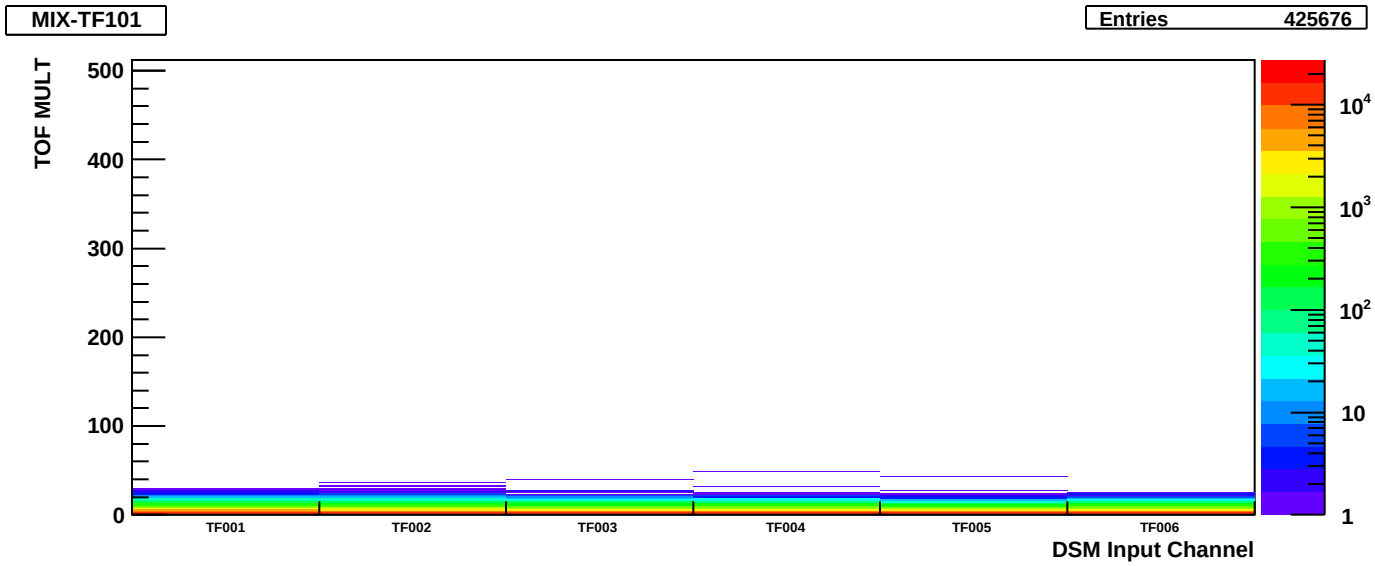

MIX-TF002
Entries 2979732
TOF MULT
TOF tray

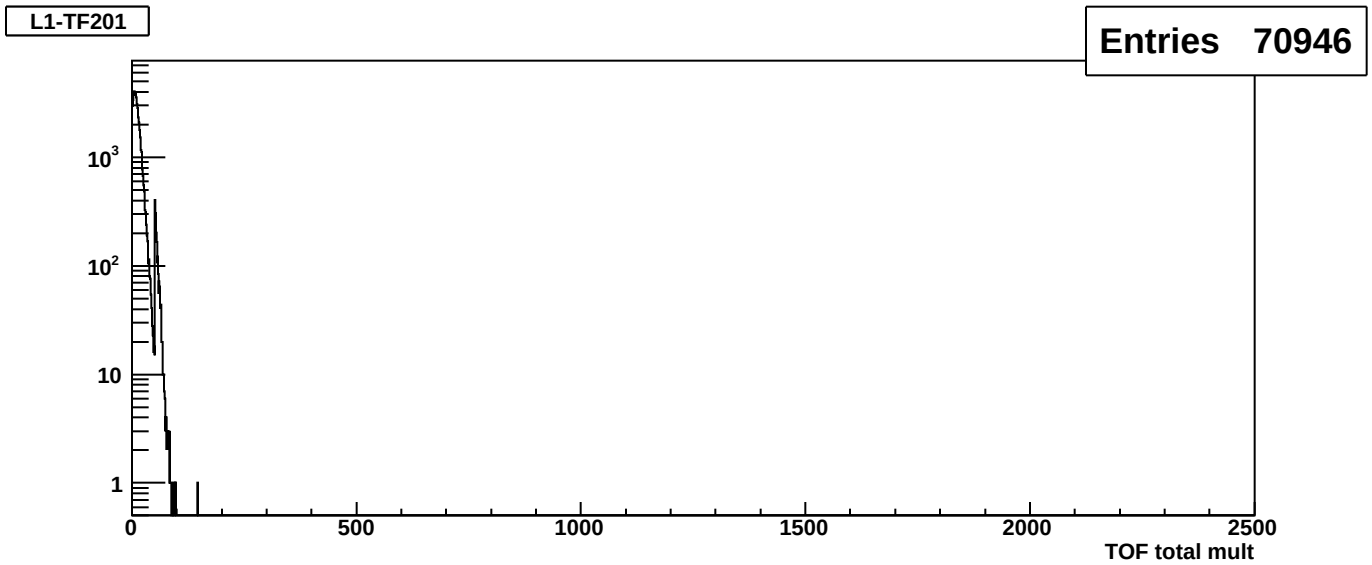

MIX-TF003
Entries 2979732
TOF MULT
TOF tray

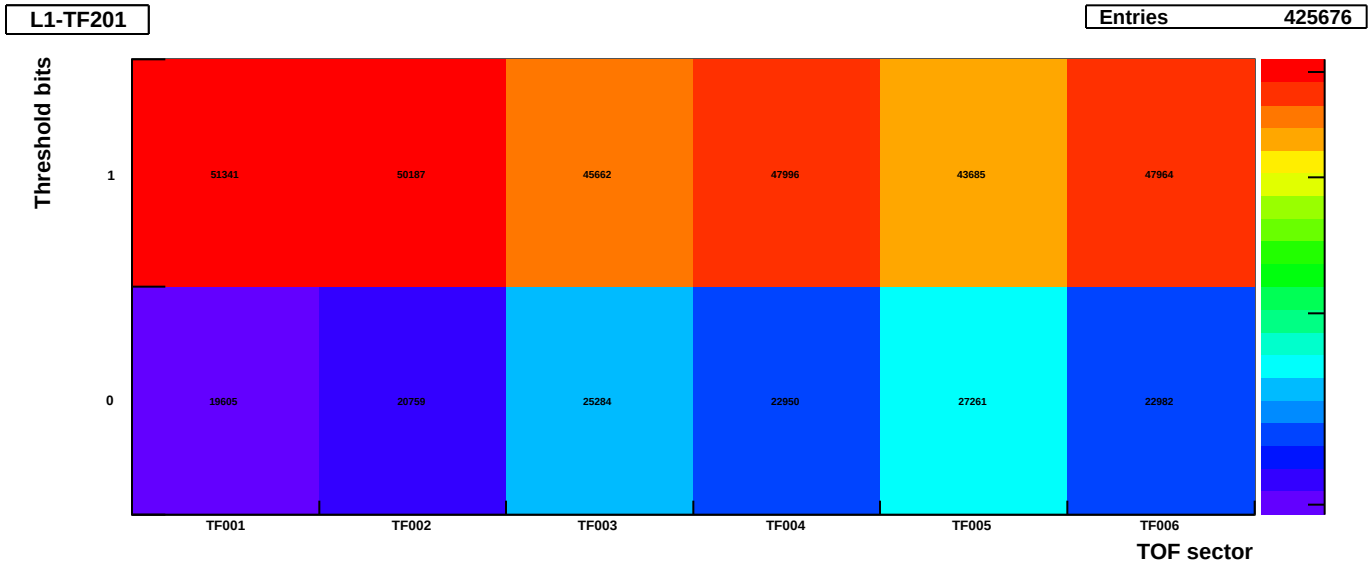

MIX-TF004
Entries 2979732
TOF MULT
TOF tray

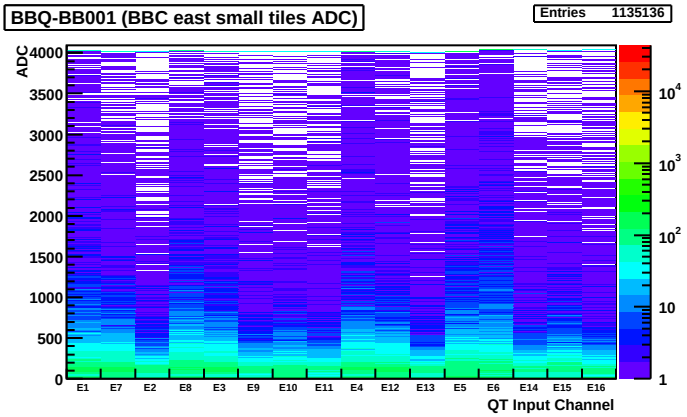

MIX-TF005
Entries 2979732
TOF MULT
TOF tray

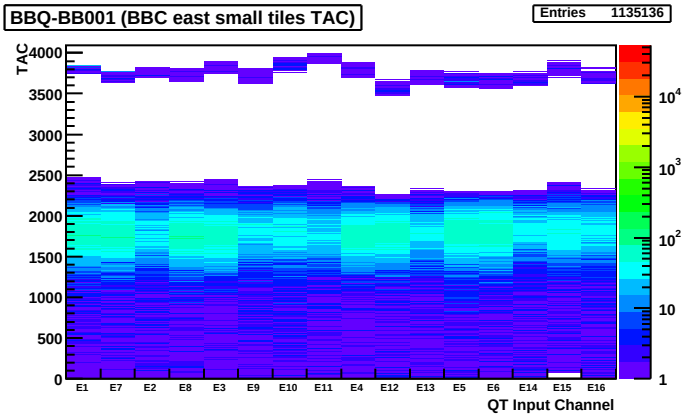

MIX-TF006
Entries 2979732
TOF MULT
TOF tray

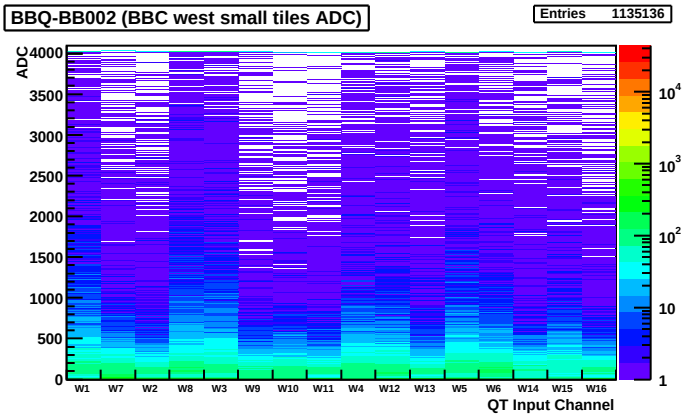

MIX-TF101
Entries 425676
TOF MULT
500
400
300
200
100
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^4
10^3
10^2
10
1

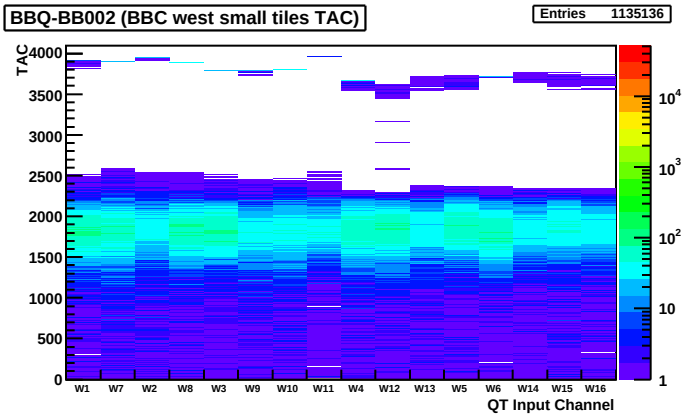

L1-TF201
Entries 70946
10^3
10^2
10
1
0
500
1000
1500
2000
2500
TOF total mult

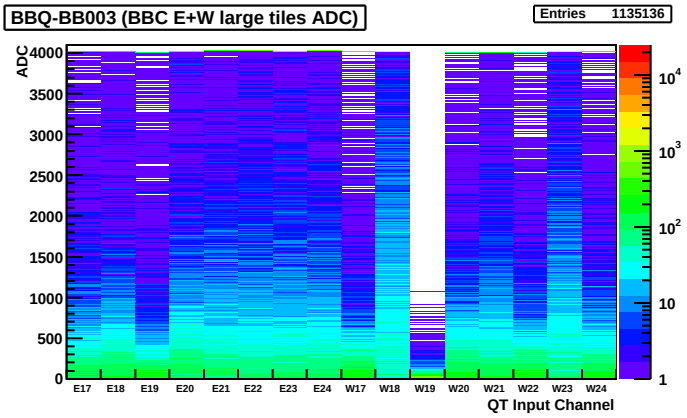

L1-TF201
Entries 425676
Threshold bits
1
0
51341
50187
45662
47996
43685
47964
19605
20759
25284
22950
27261
22982
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector

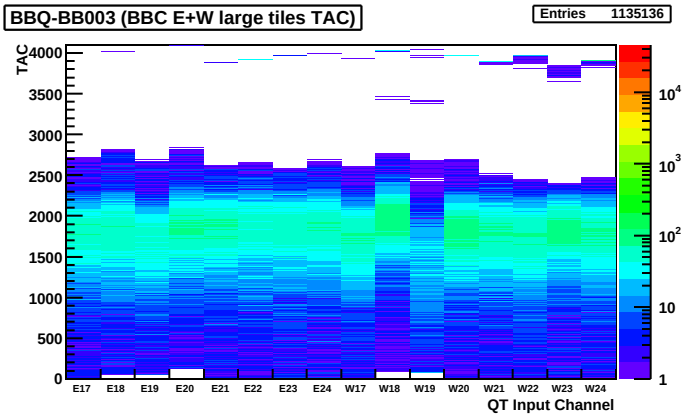

BBQ-BB001 (BBC east small tiles ADC)
Entries 1135136
ADC
QT Input Channel

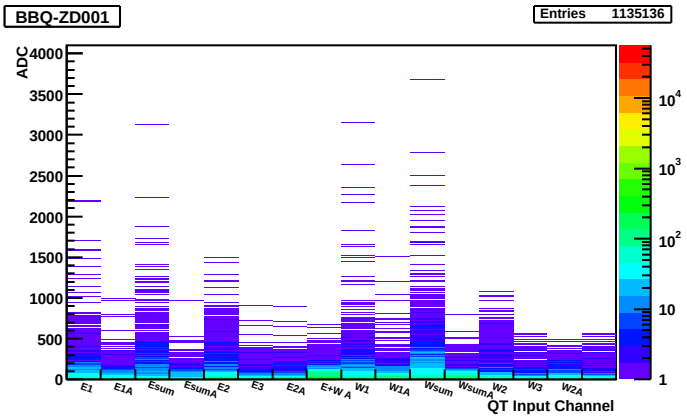

BBQ-BB001 (BBC east small tiles TAC)
Entries 1135136
TAC
QT Input Channel

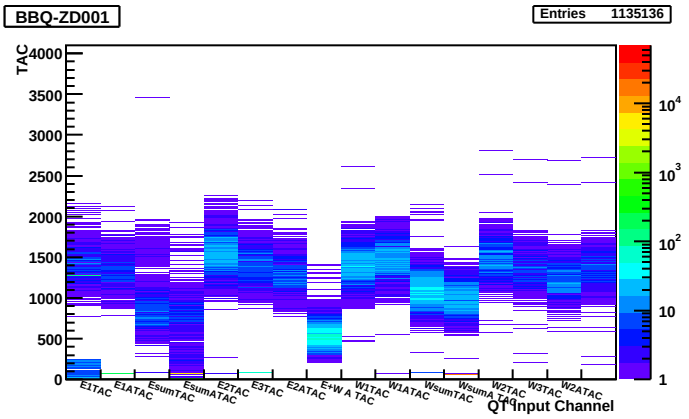

BBQ-BB002 (BBC west small tiles ADC)
Entries 1135136
ADC
QT Input Channel

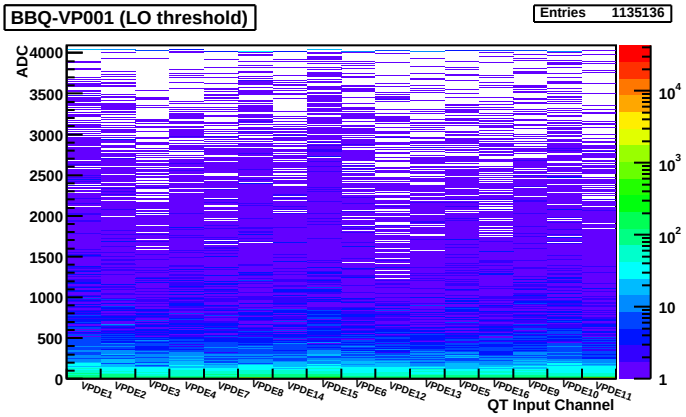

BBQ-BB002 (BBC west small tiles TAC)
Entries 1135136
TAC
QT Input Channel

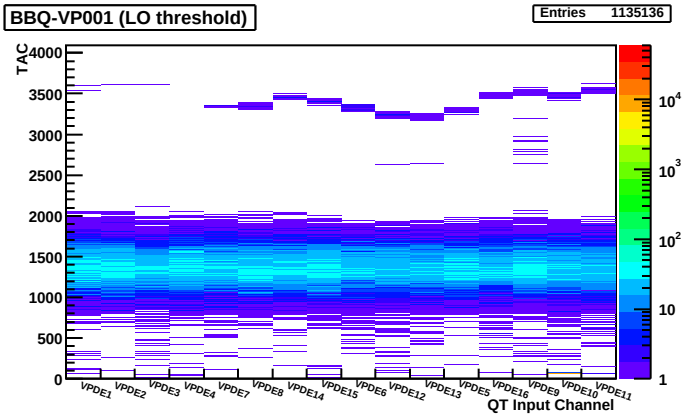

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 1135136
ADC
QT Input Channel

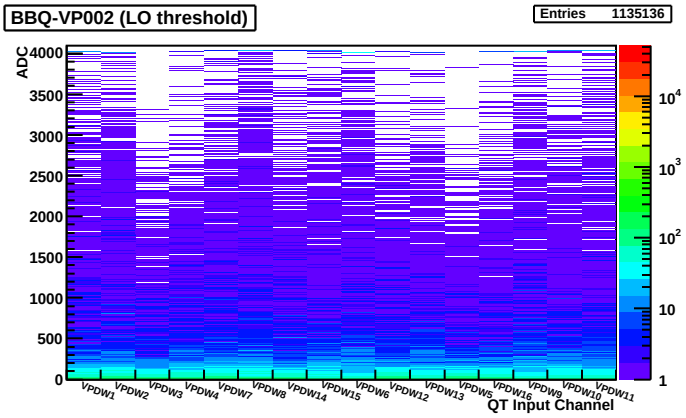

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 1135136
TAC
QT Input Channel

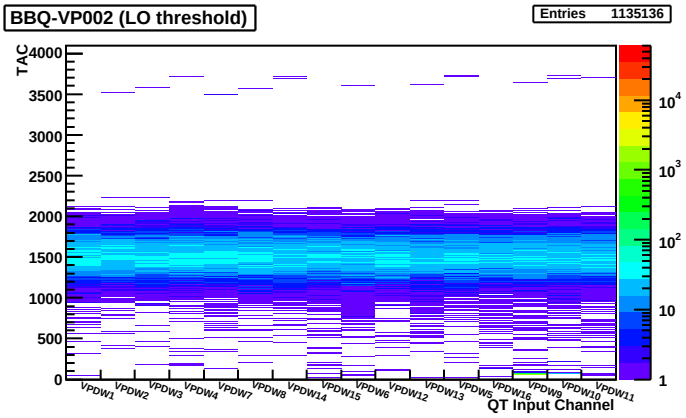

BBQ-ZD001
Entries 1135136
ADC
QT Input Channel

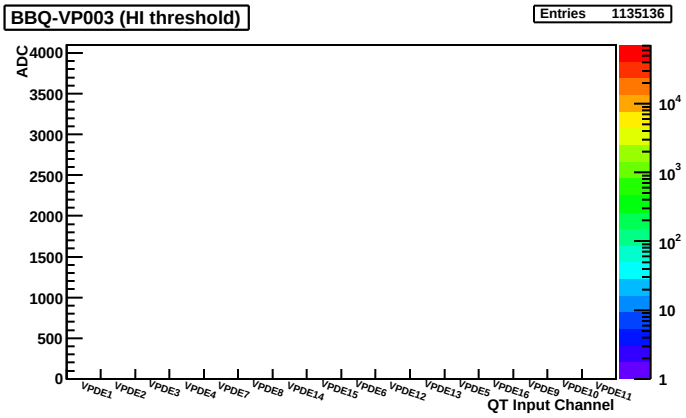

BBQ-ZD001
Entries 1135136
TAC
QT Input Channel

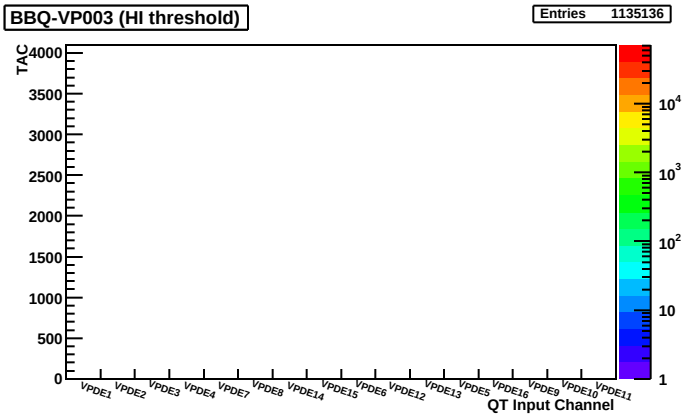

BBQ-VP001 (LO threshold)
Entries 1135136
ADC
QT Input Channel

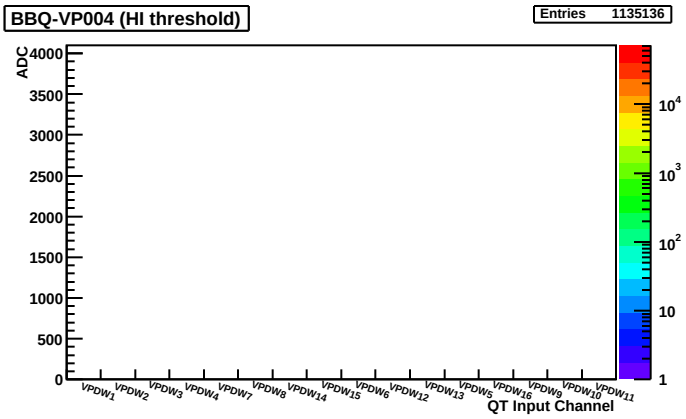

BBQ-VP001 (LO threshold)
Entries 1135136
TAC
QT Input Channel

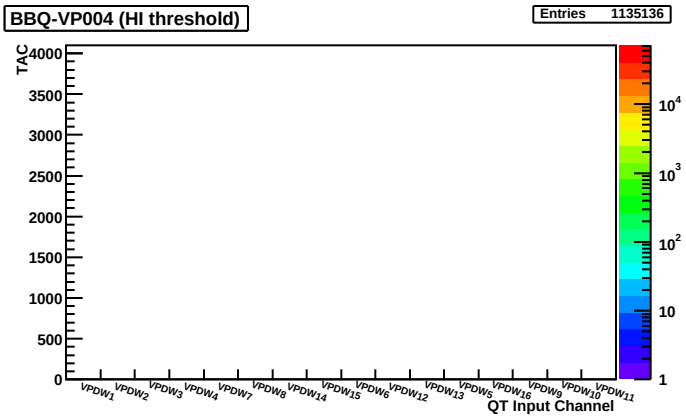

BBQ-VP002 (LO threshold)
Entries 1135136
ADC
QT Input Channel

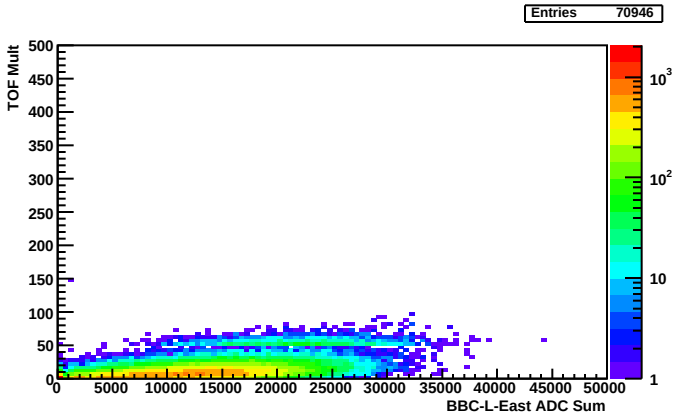

BBQ-VP002 (LO threshold)
Entries 1135136
TAC
QT Input Channel

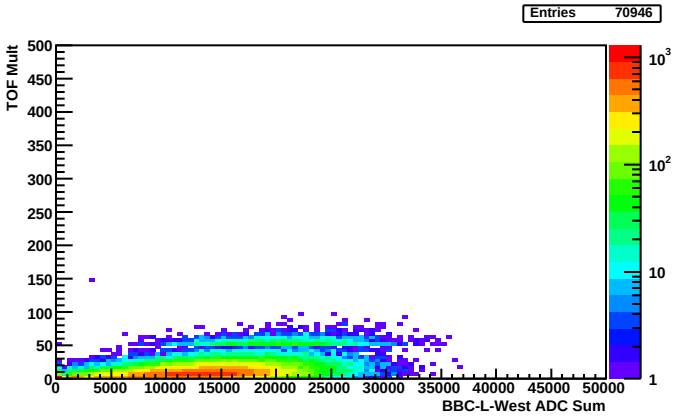

BBQ-VP003 (HI threshold)
Entries 1135136
ADC
QT Input Channel

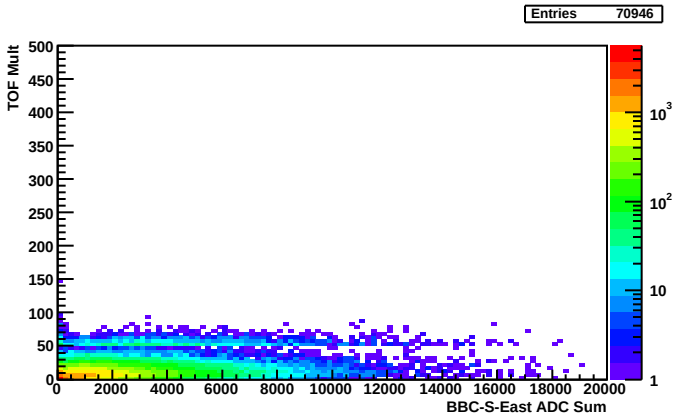

BBQ-VP003 (HI threshold)
Entries 1135136
TAC
QT Input Channel

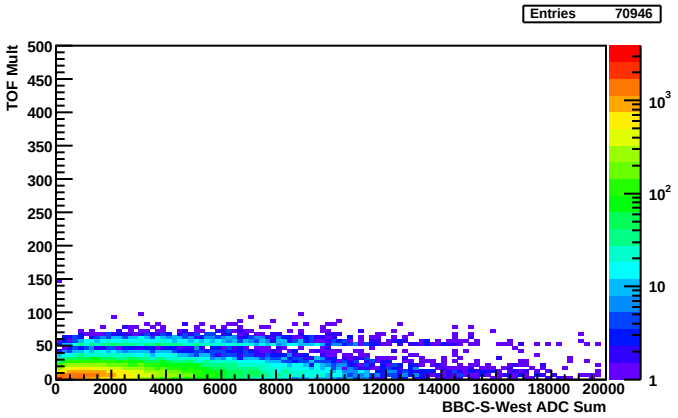

BBQ-VP004 (HI threshold)
Entries 1135136
ADC
QT Input Channel

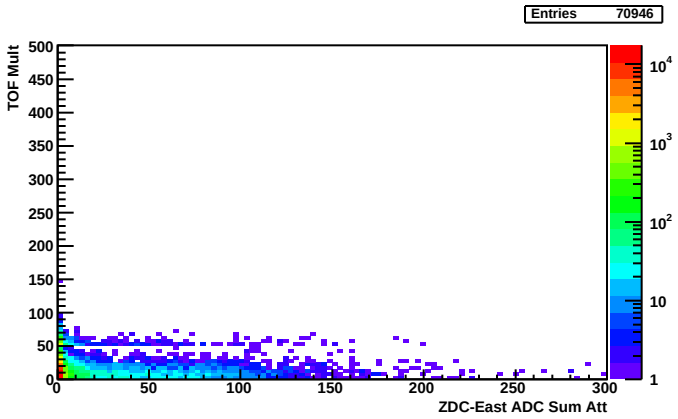

BBQ-VP004 (HI threshold)
Entries 1135136
TAC
QT Input Channel

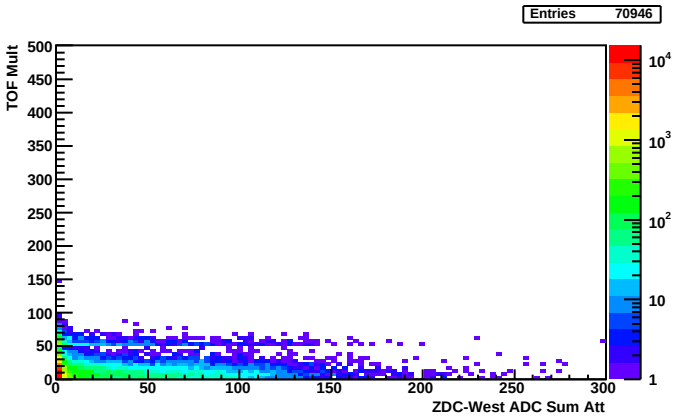

Entries 70946
TOF Mult
BBC-L-East ADC Sum

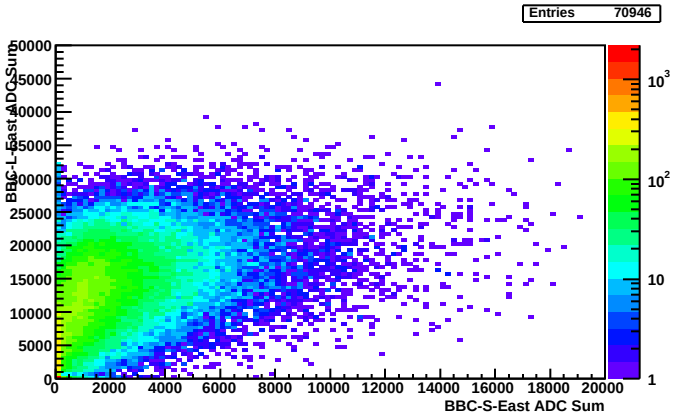

Entries 70946
TOF Mult
BBC-L-West ADC Sum

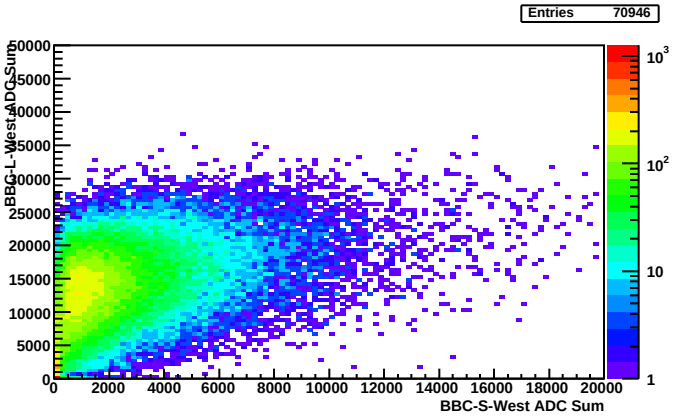

Entries 70946
TOF Mult
BBC-S-East ADC Sum

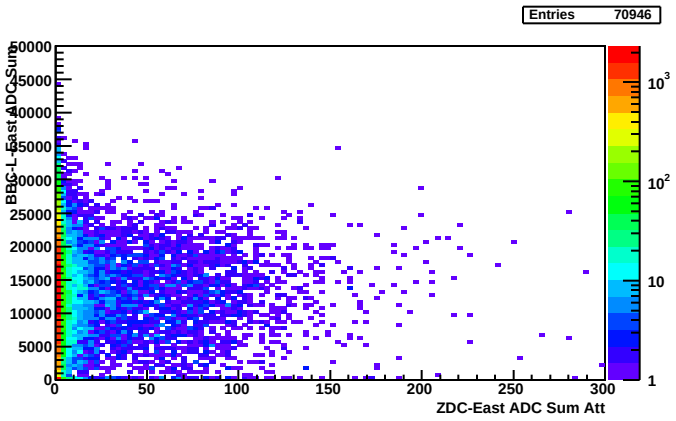

Entries 70946
TOF Mult
BBC-S-West ADC Sum

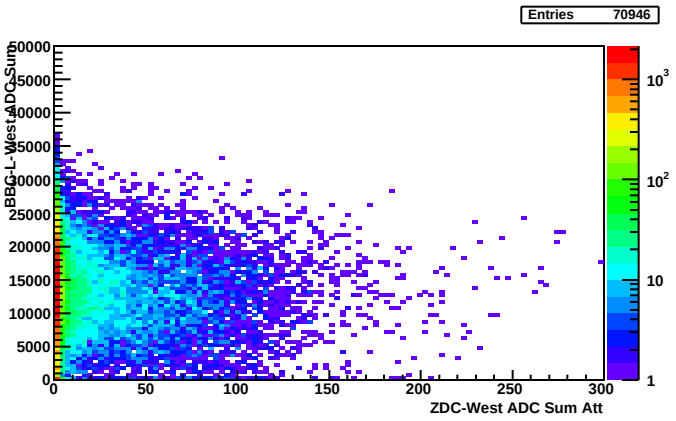

Entries 70946
TOF Mult
ZDC-East ADC Sum Att

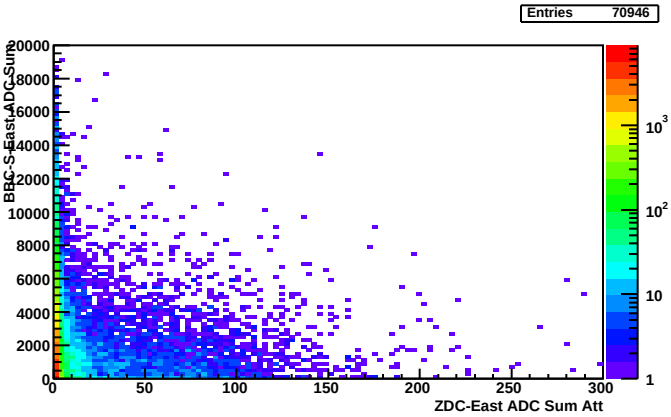

Entries 70946
TOF Mult
ZDC-West ADC Sum Att

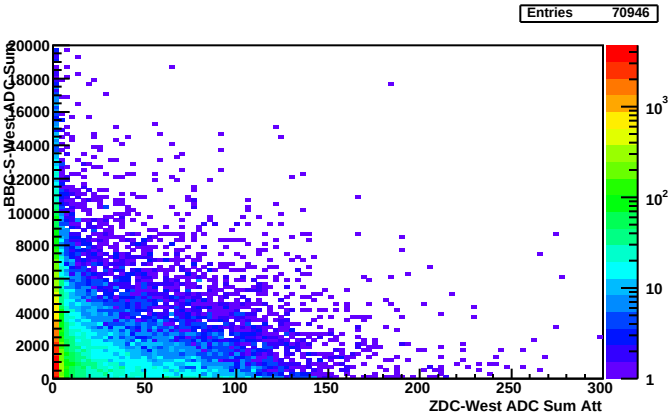

Entries 70946
BBC-L-East ADC Sum
BBC-S-East ADC Sum

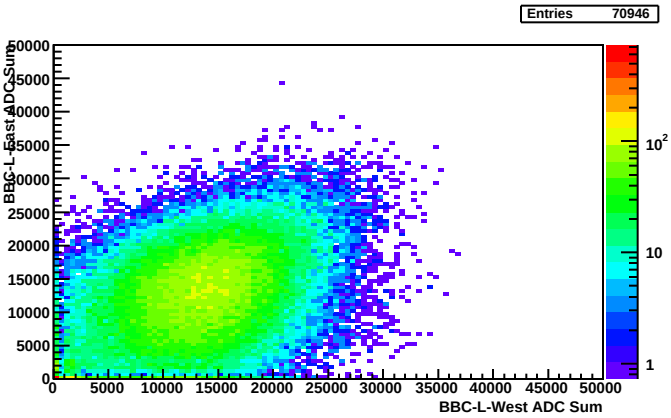

Entries 70946
BBC-L-West ADC Sum
BBC-S-West ADC Sum

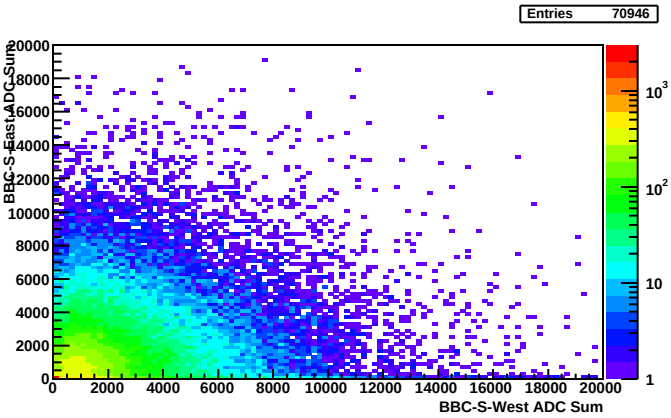

Entries 70946
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

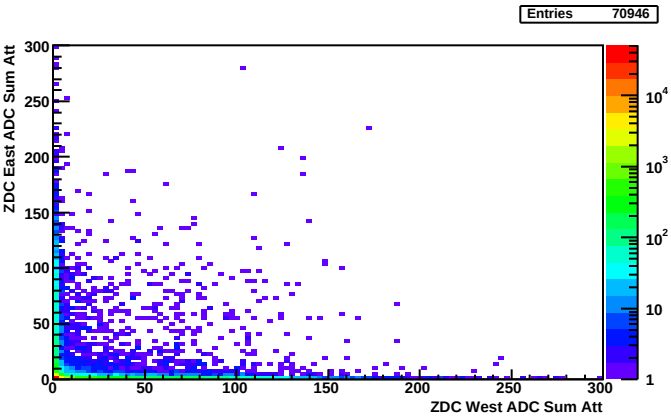

Entries 70946
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

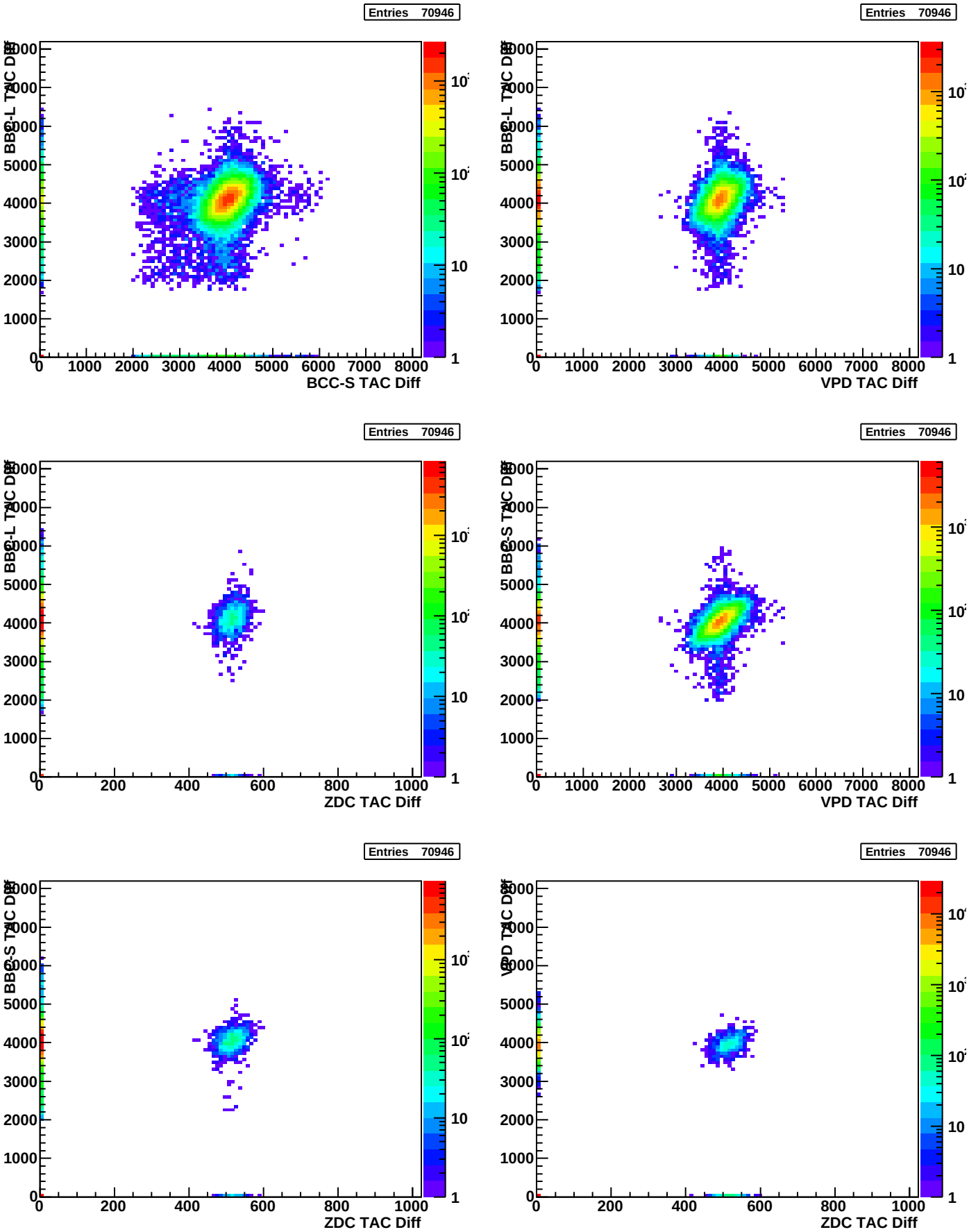

Entries 70946
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

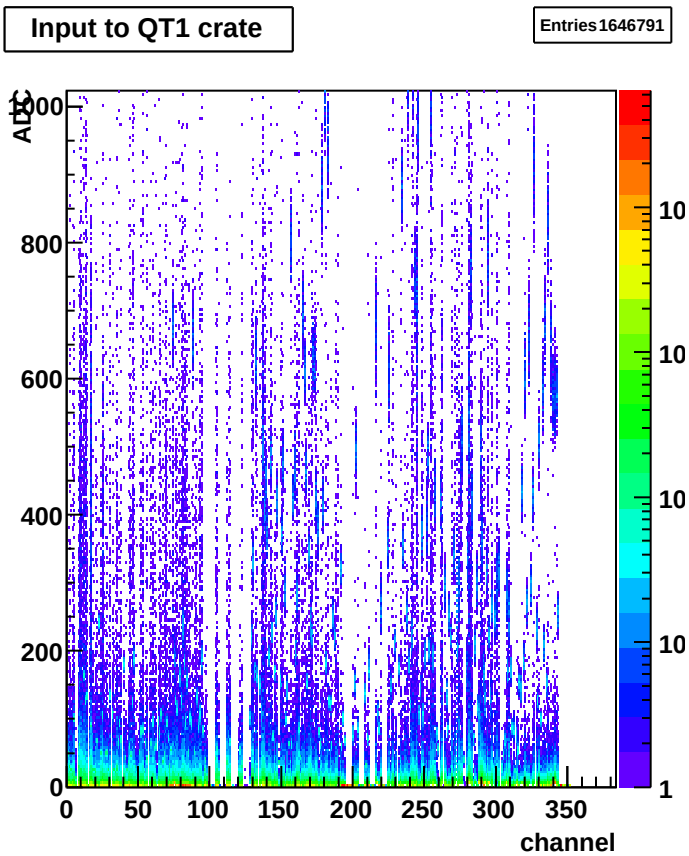

Entries 70946
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

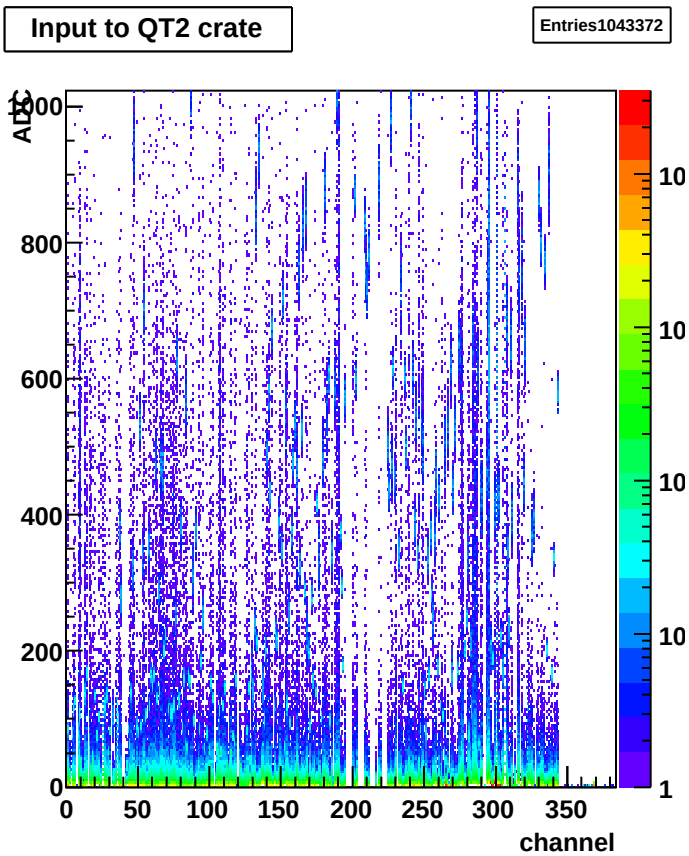

Entries 70946
BBC-L-East ADC Sum
BBC-L-West ADC Sum

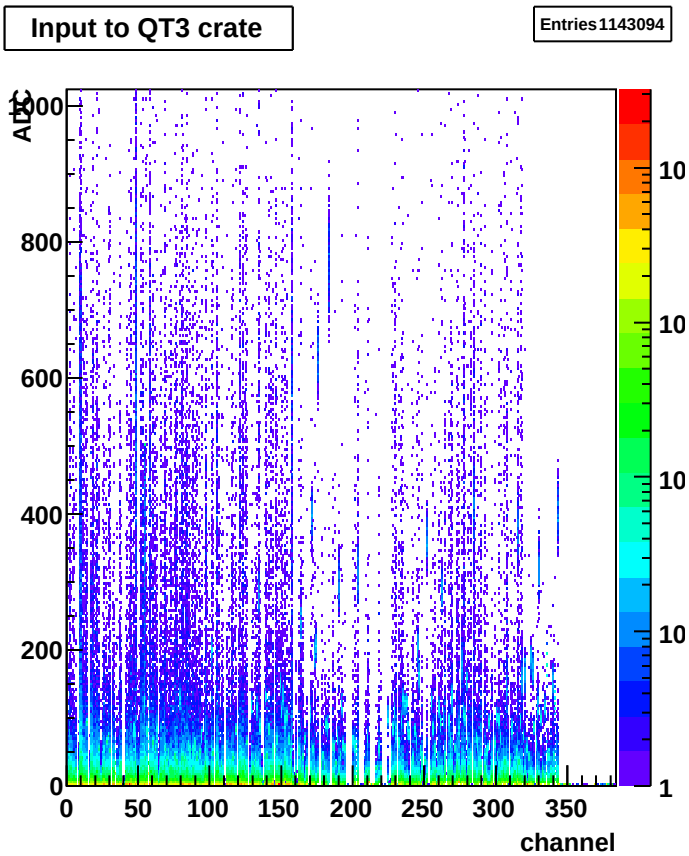

Entries 70946
BBC-S-East ADC Sum
BBC-S-West ADC Sum

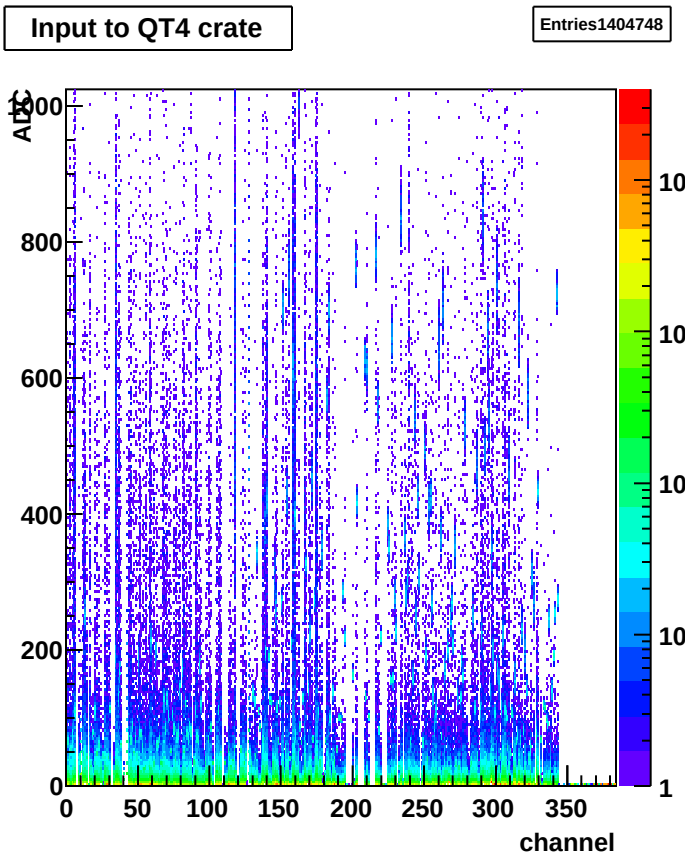

Entries 70946
ZDC East ADC Sum Att
ZDC West ADC Sum Att

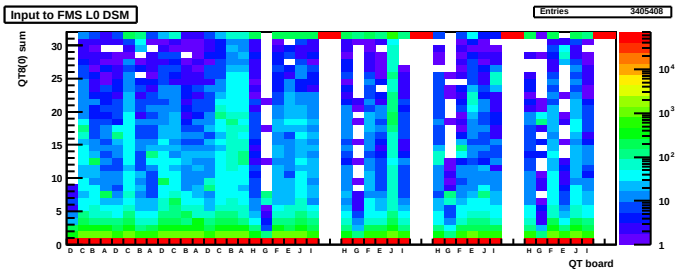

Entries 70946
BBC-L TAC Diff
BCC-S TAC Diff
Entries 70946
BBC-L TAC Diff
VPD TAC Diff
Entries 70946
BBC-L TAC Diff
ZDC TAC Diff
Entries 70946
BBC-S TAC Diff
VPD TAC Diff
Entries 70946
BBC-S TAC Diff
ZDC TAC Diff
Entries 70946
VPD TAC Diff
ZDC TAC Diff

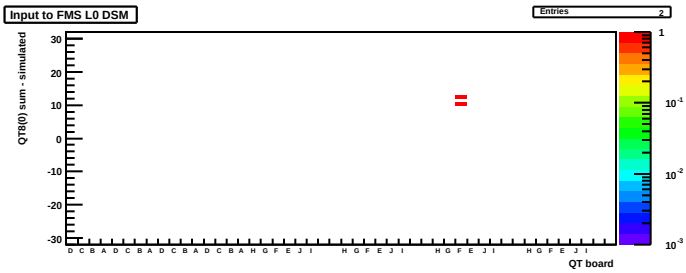

Input to QT1 crate
Entries1646791
ADC
channel

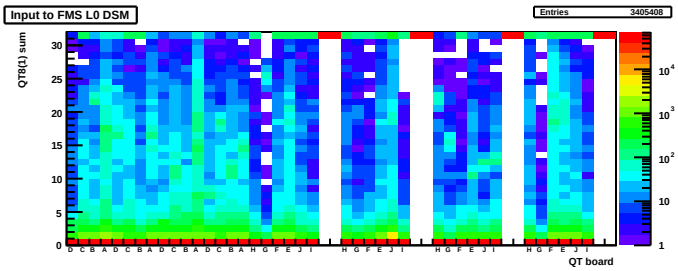

Input to QT2 crate
Entries1043372
ADC
channel

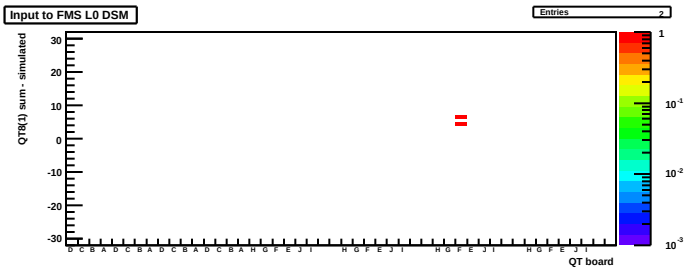

Input to QT3 crate
Entries1143094
ADC
channel

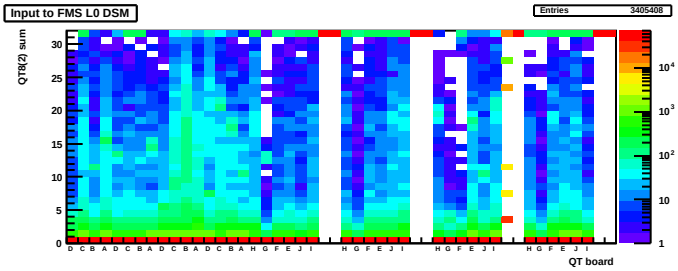

Input to QT4 crate
Entries1404748
ADC
channel

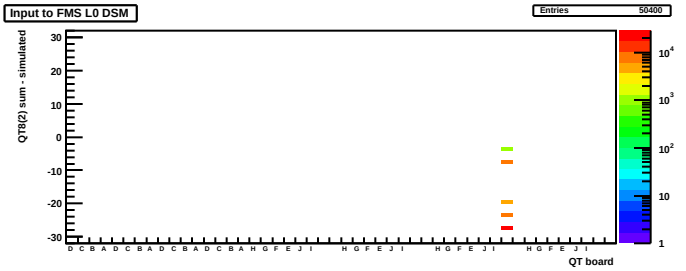

Input to FMS L0 DSM
Entries 3405408
QT8(0) sum
QT board

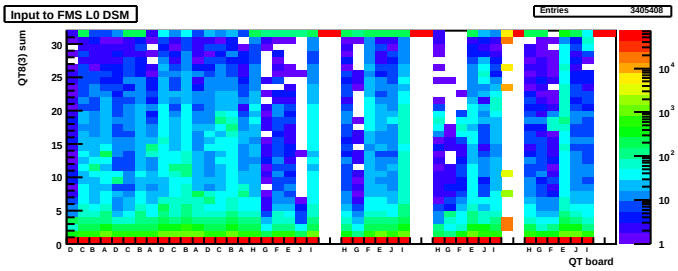

Input to FMS L0 DSM
Entries 2
QT8(0) sum - simulated
QT board

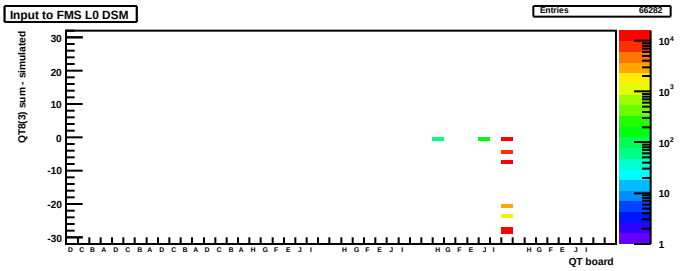

Input to FMS L0 DSM
Entries 3405408
QT8(1) sum
QT board

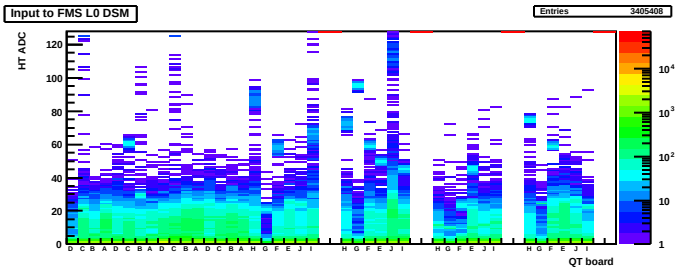

Input to FMS L0 DSM
Entries 2
QT8(1) sum - simulated
QT board

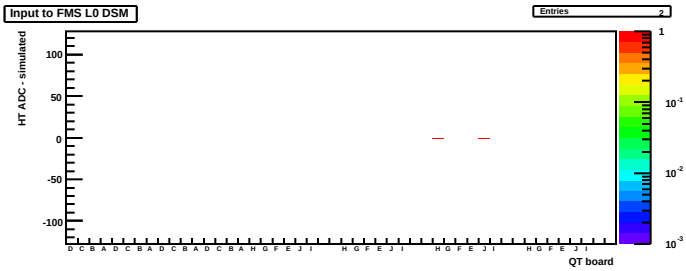

Input to FMS L0 DSM
Entries 3405408
QT8(2) sum
QT board

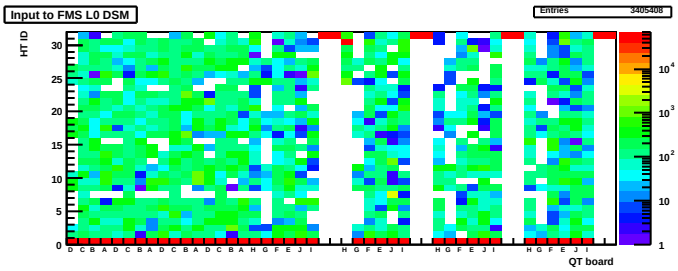

Input to FMS L0 DSM
Entries 50400
QT8(2) sum - simulated
QT board

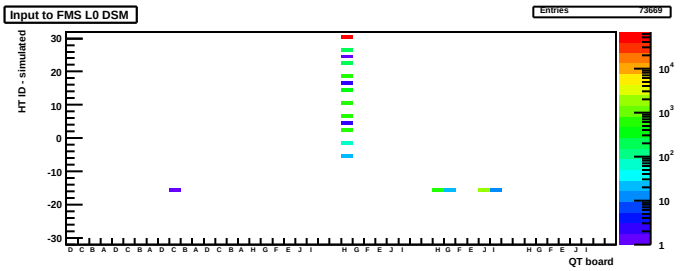

Input to FMS L0 DSM
Entries 3405408
QT8(3) sum
QT board

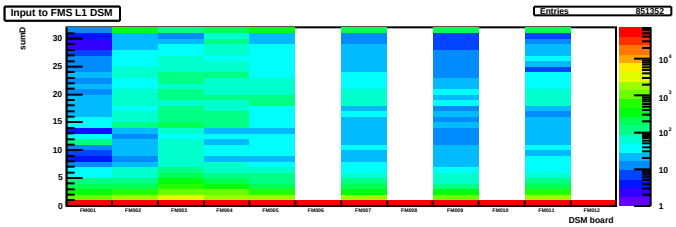

Input to FMS L0 DSM
Entries 66282
QT8(3) sum - simulated
QT board

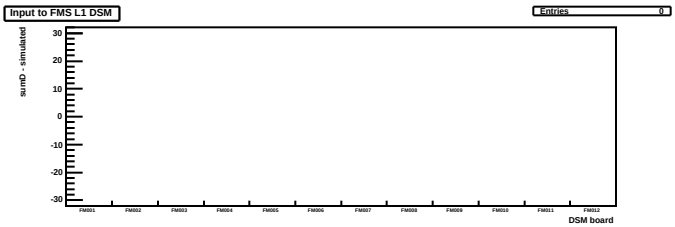

Input to FMS L0 DSM
Entries 3405408
HT ADC
QT board

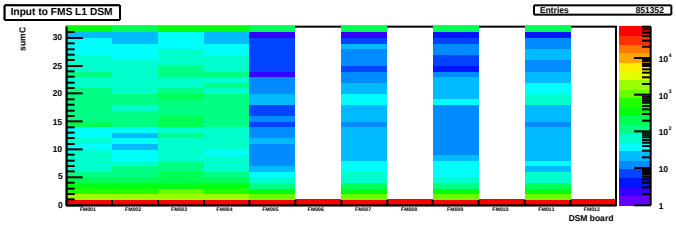

Input to FMS L0 DSM
Entries 2
HT ADC - simulated
QT board

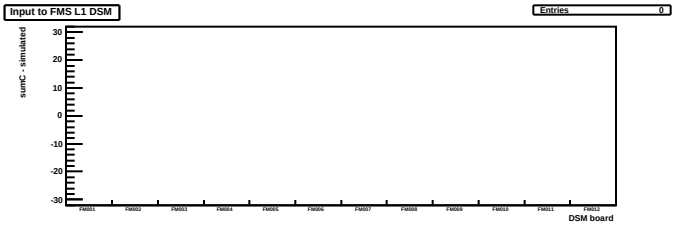

Input to FMS L0 DSM
Entries 3405408
HT ID
QT board

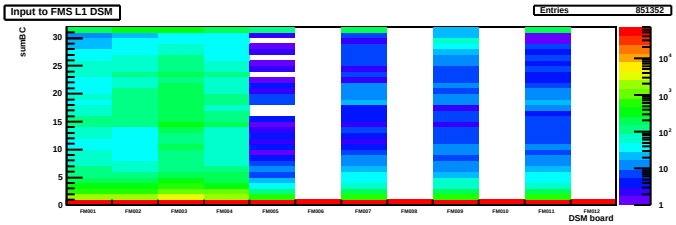

Input to FMS L0 DSM
Entries 73669
HT ID - simulated
QT board

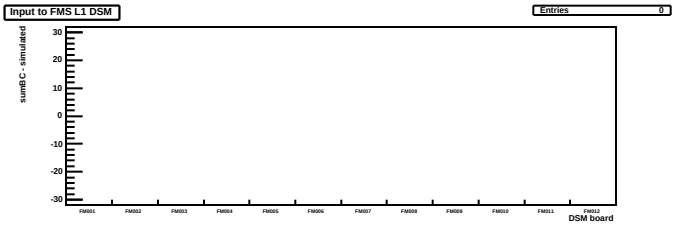

Input to FMS L1 DSM
Entries 851352
sumD
DSM board

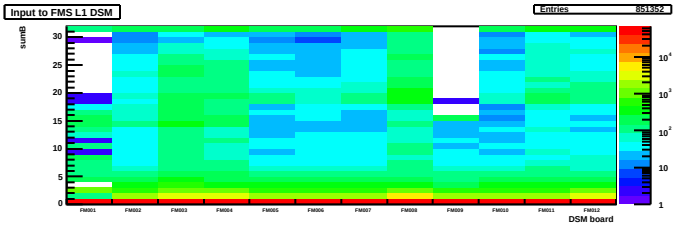

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

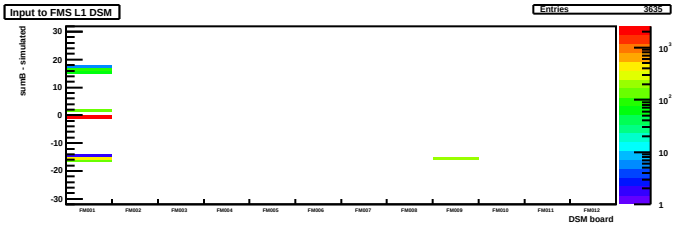

Input to FMS L1 DSM
Entries 851352
sumC
DSM board

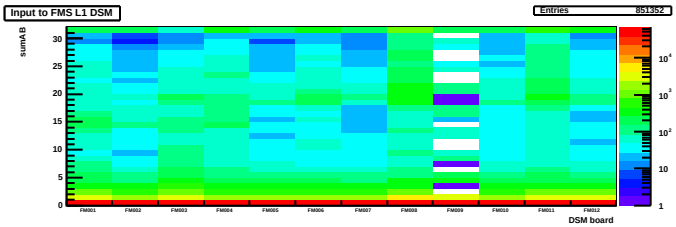

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

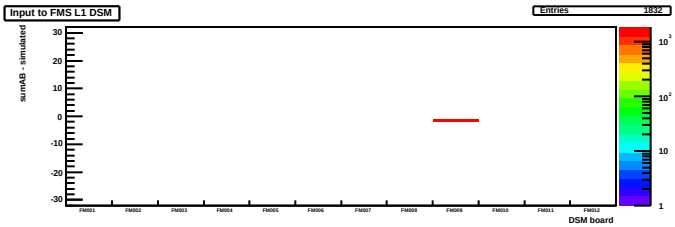

Input to FMS L1 DSM
Entries 851352
sumBC
DSM board

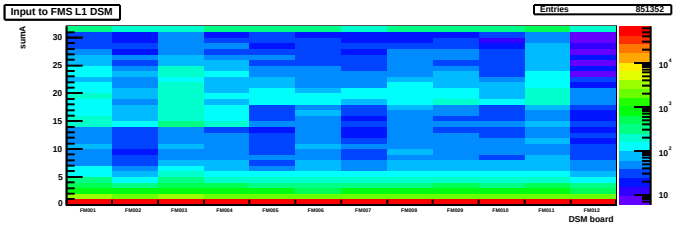

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

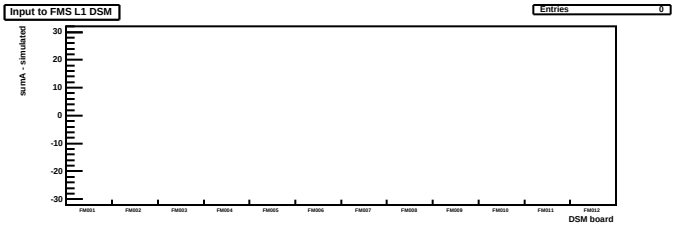

Input to FMS L1 DSM
Entries 851352
sumB
DSM board

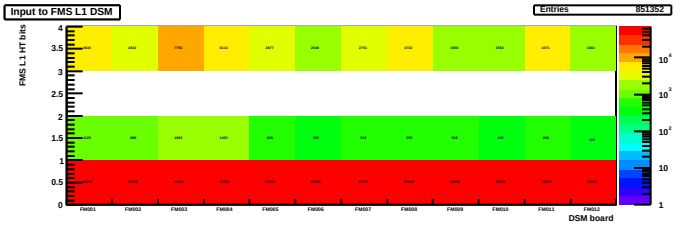

Input to FMS L1 DSM
Entries 3635
sumB - simulated
DSM board

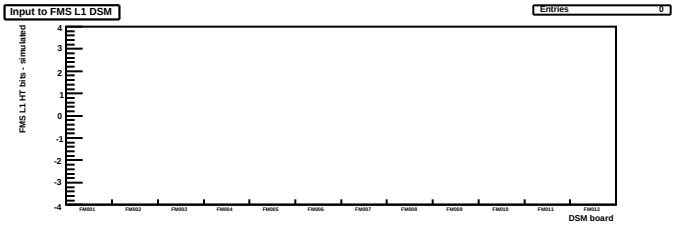

Input to FMS L1 DSM
Entries 851352
sumAB
DSM board

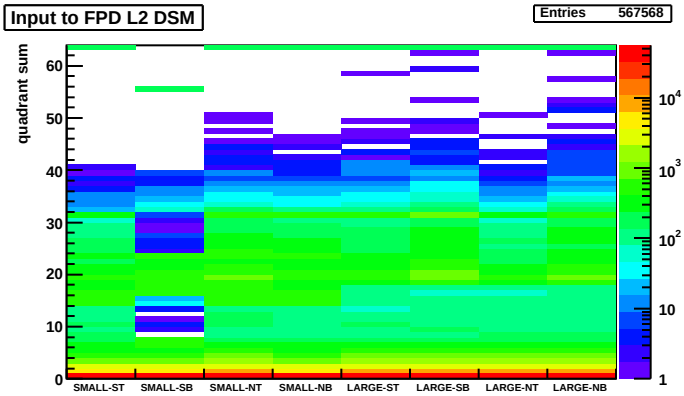

Input to FMS L1 DSM
Entries 1832
sumAB - simulated
DSM board

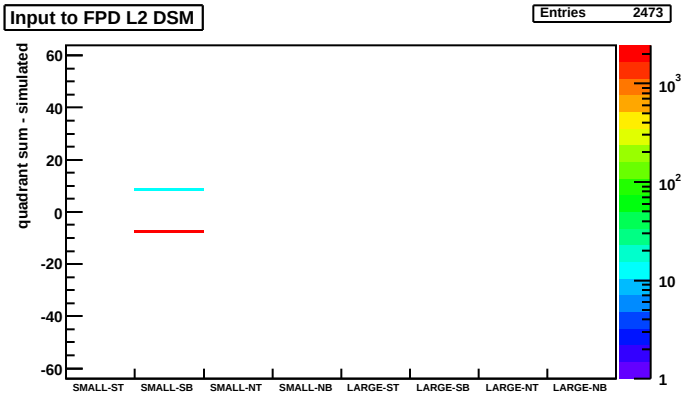

Input to FMS L1 DSM
Entries 851352
sumA
DSM board

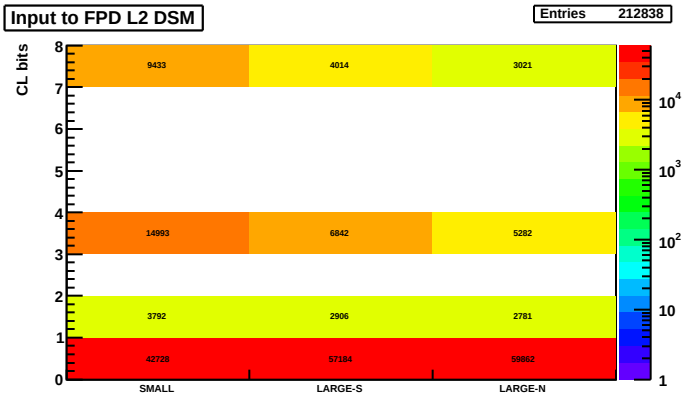

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

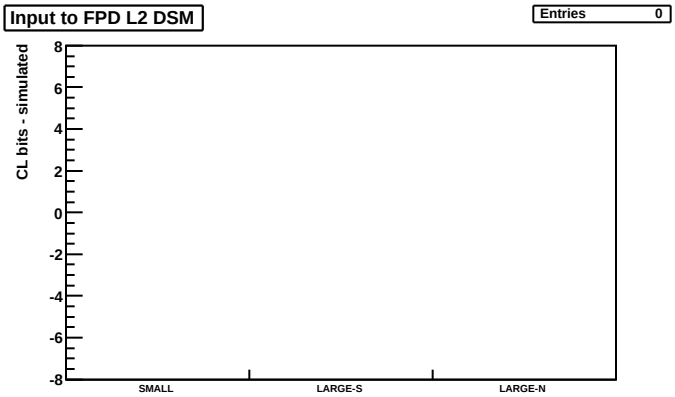

Input to FMS L1 DSM
Entries 851352
FMS L1 HT bits
DSM board

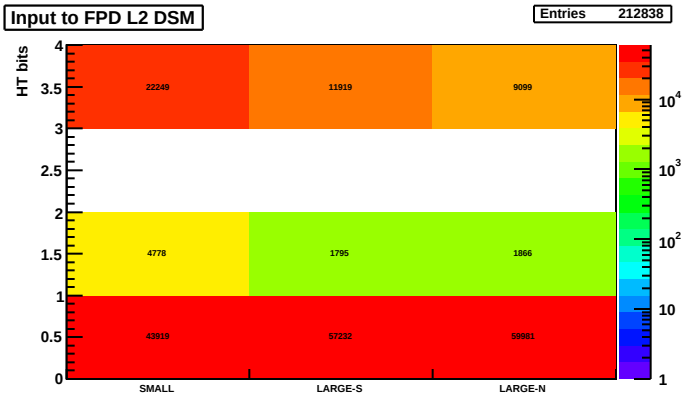

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

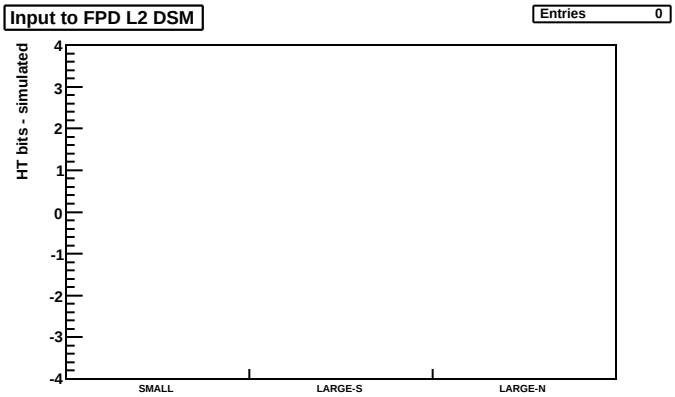

Input to FPD L2 DSM
Entries 567568
quadrant sum
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

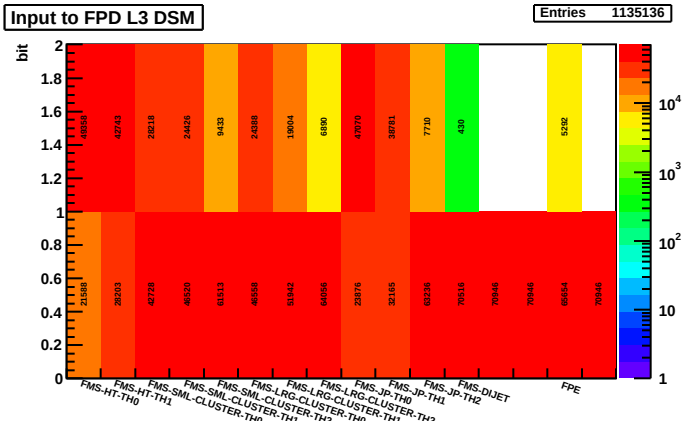

Input to FPD L2 DSM
Entries 2473
quadrant sum - simulated
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

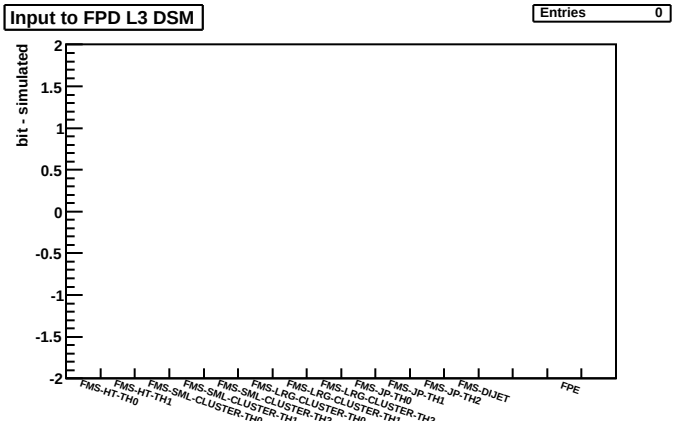

Input to FPD L2 DSM
Entries 212838
CL bits
9433
4014
3021
14993
6842
5282
3792
2906
2781
42728
57184
59862
SMALL
LARGE-S
LARGE-N

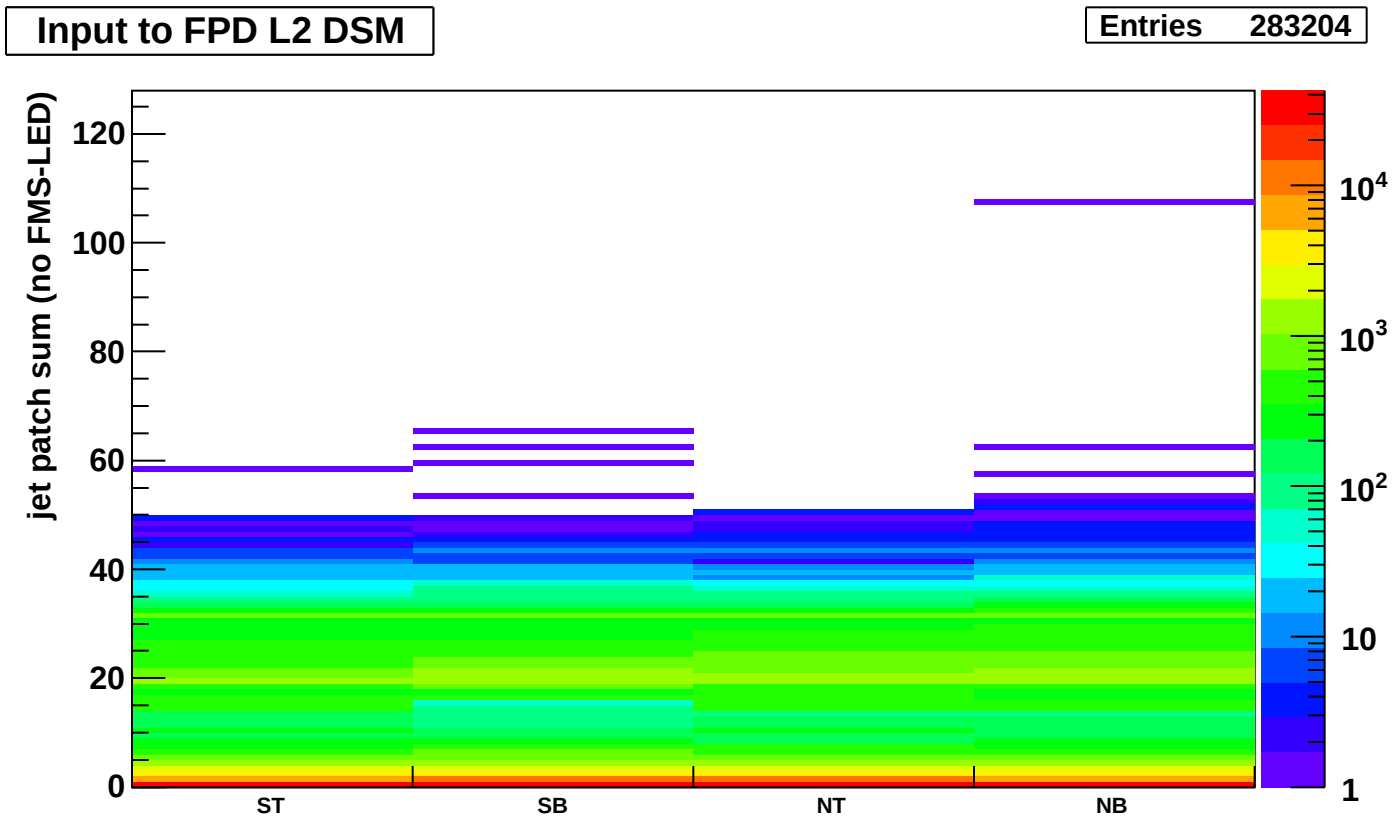

Input to FPD L2 DSM
Entries 0
CL bits - simulated
SMALL
LARGE-S
LARGE-N

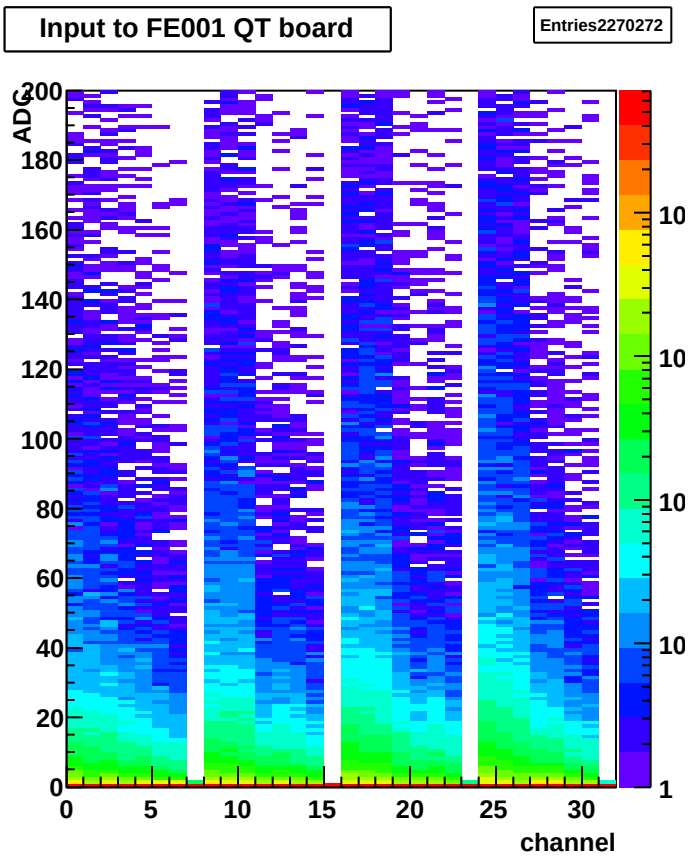

Input to FPD L2 DSM
Entries 212838
HT bits
22249
11919
9099
4778
1795
1866
43919
57232
59981
SMALL
LARGE-S
LARGE-N

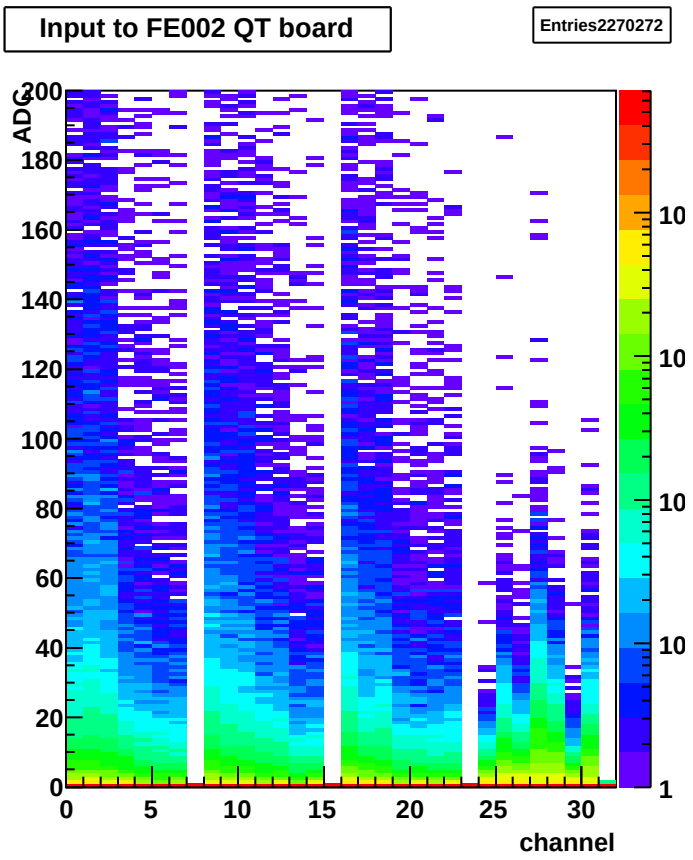

Input to FPD L2 DSM
Entries 0
HT bits - simulated
SMALL
LARGE-S
LARGE-N

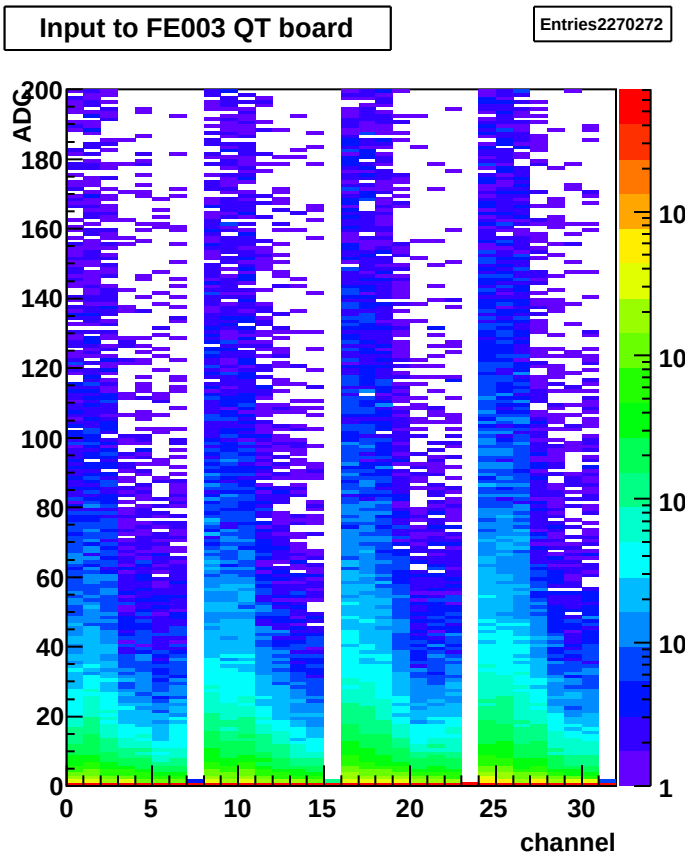

Input to FPD L3 DSM
Entries 1135136
bit
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

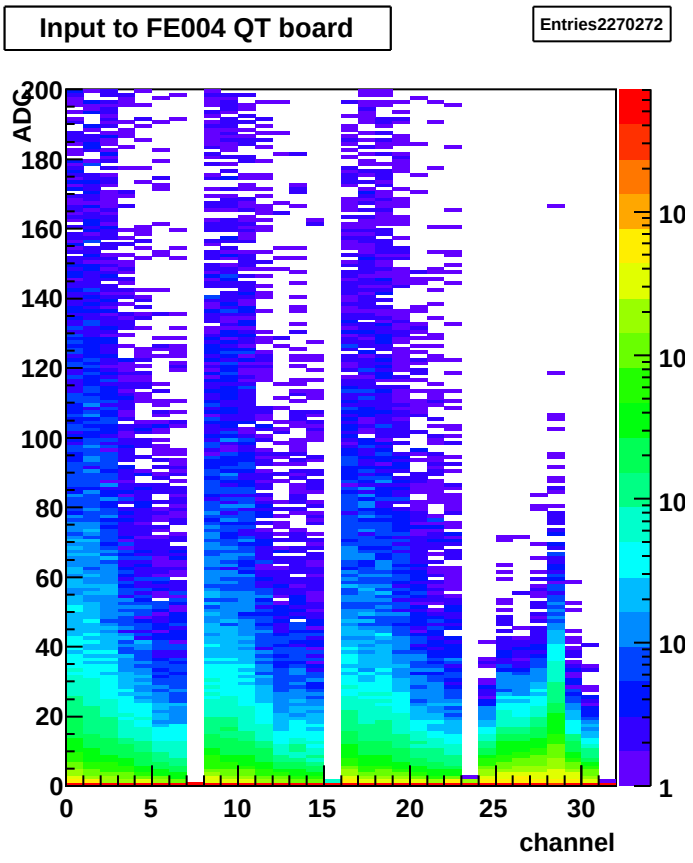

Input to FPD L3 DSM
Entries 0
bit - simulated
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

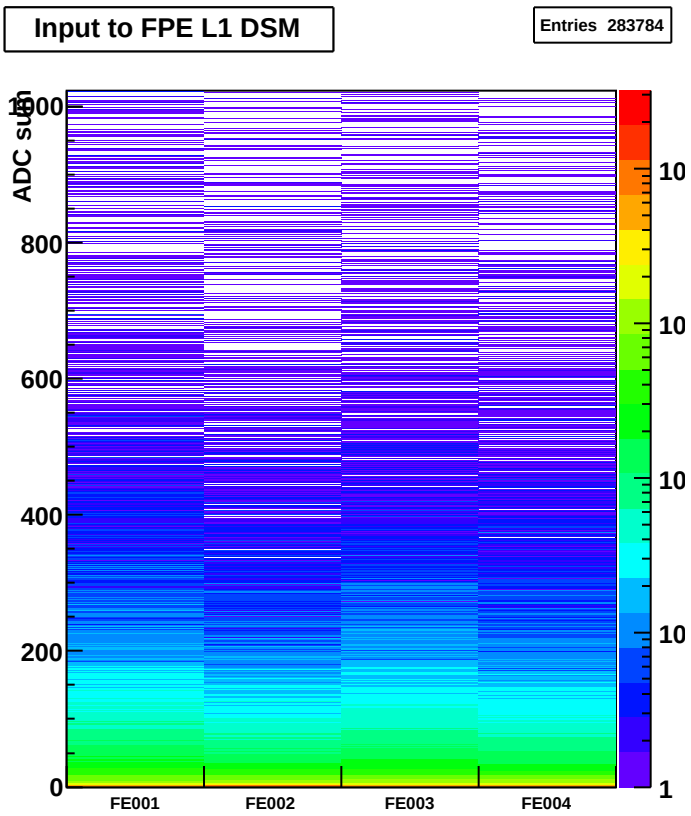

Input to FPD L2 DSM
Entries 283204
jet patch sum (no FMS-LED)
0
20
40
60
80
100
120
ST
SB
NT
NB
1
10
10^2
10^3
10^4

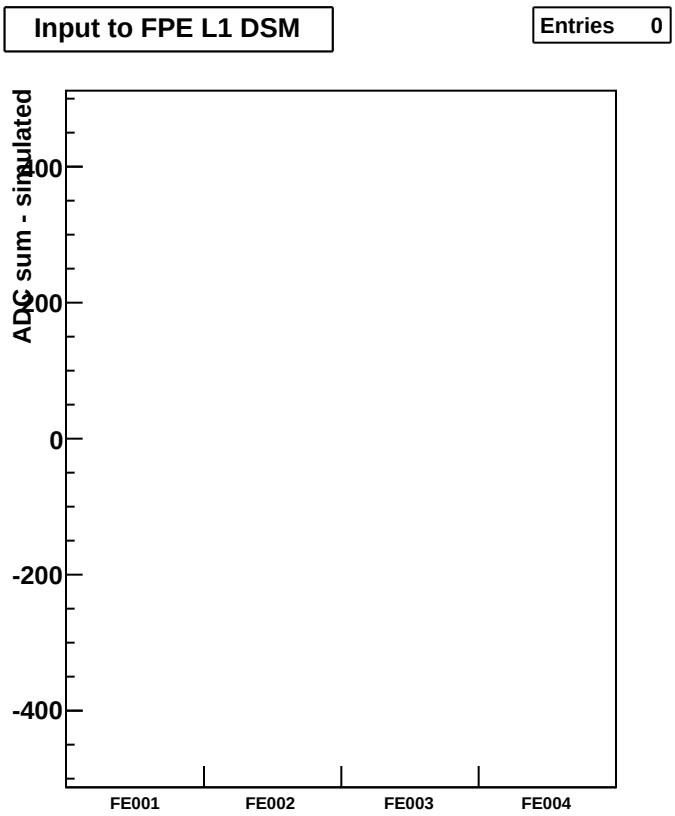

Input to FE001 QT board
Entries2270272
ADC
channel

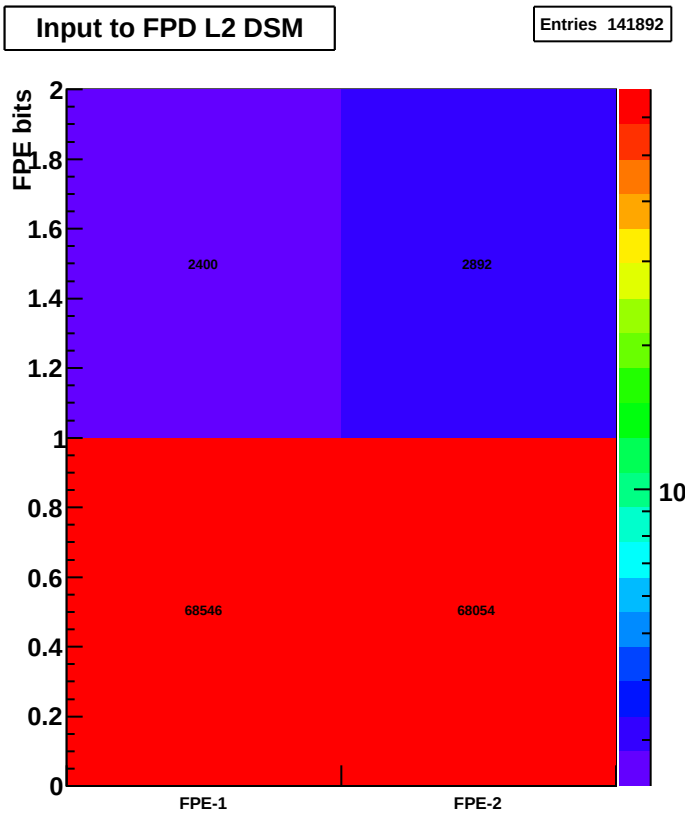

Input to FE002 QT board
Entries2270272
ADC
channel

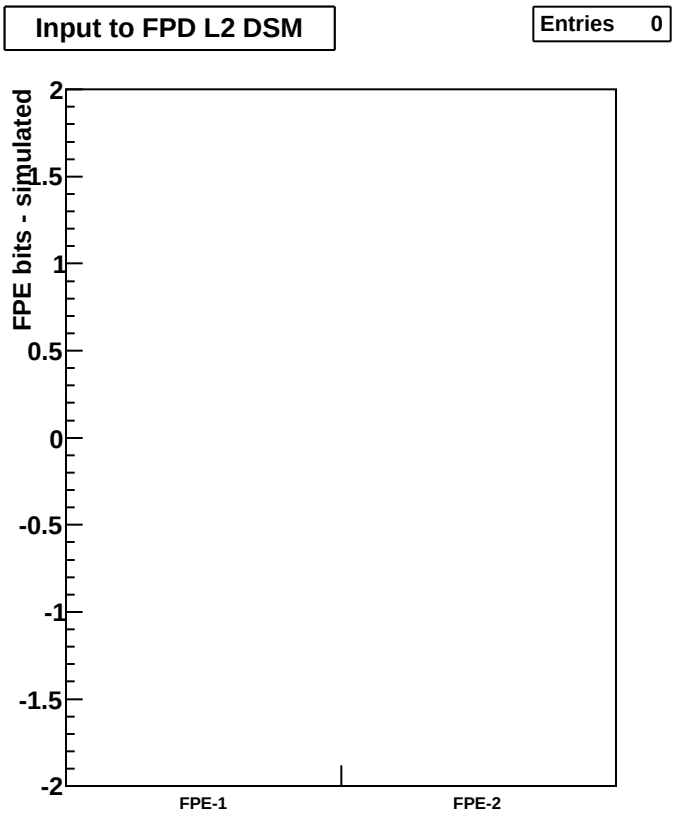

Input to FE003 QT board
Entries2270272
ADC
channel


Input to FE004 QT board
Entries2270272
ADC
channel


Input to FPE L1 DSM
Entries 283784
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 141892
FPE bits
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
2400
2892
68546
68054
FPE-1
FPE-2
10


Input to FPD L2 DSM
Entries 0
FPE bits - simulated
2
1.5
1
0.5
0
-0.5
-1
-1.5
-2
FPE-1
FPE-2