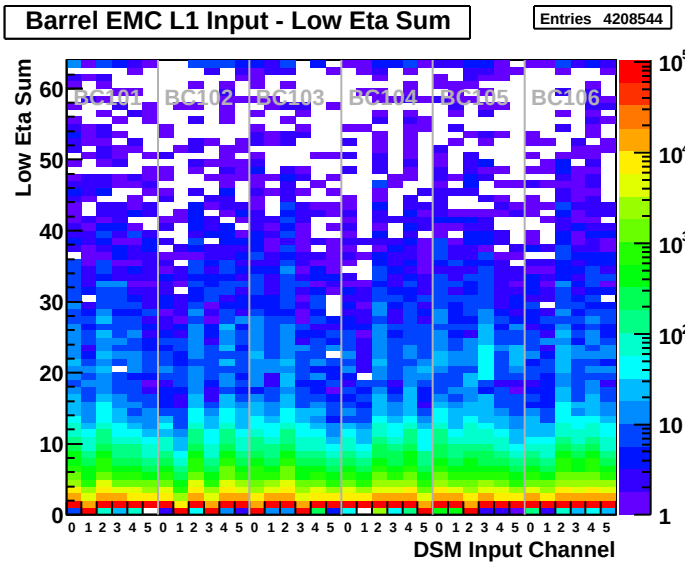
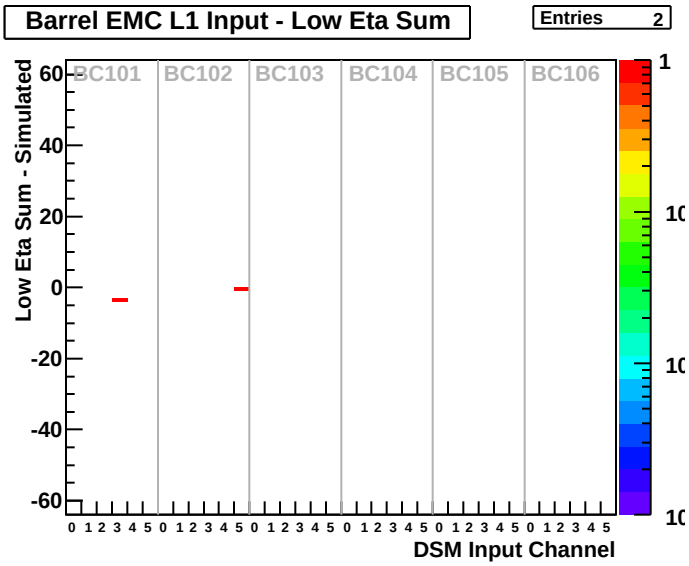
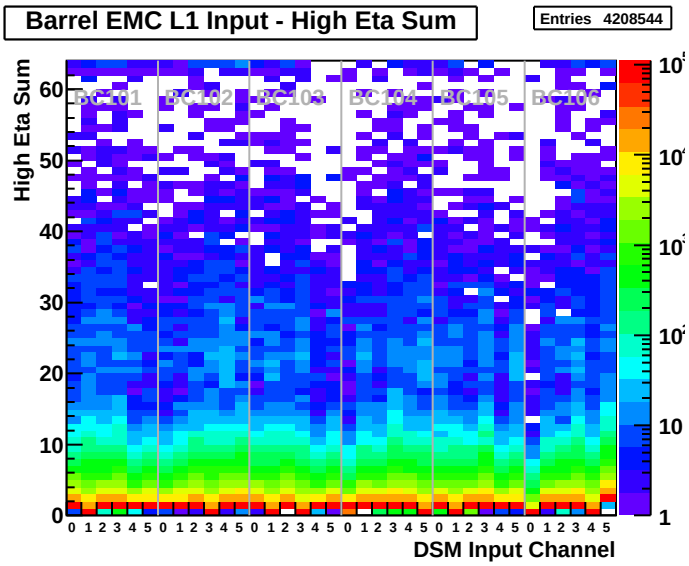
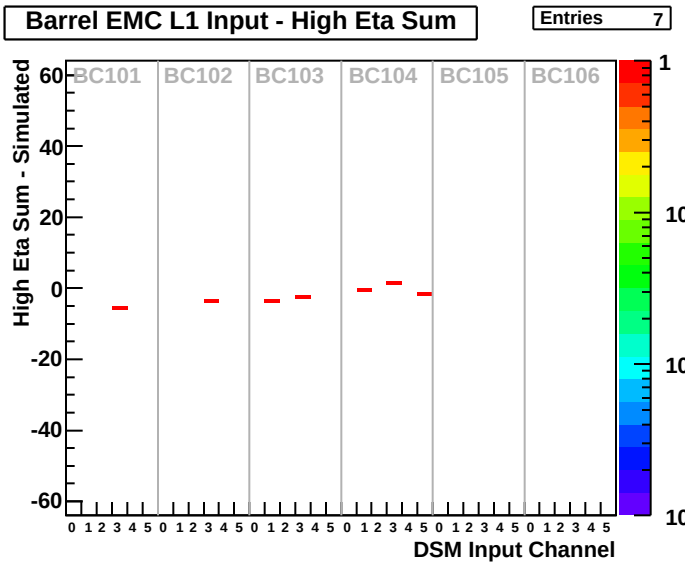
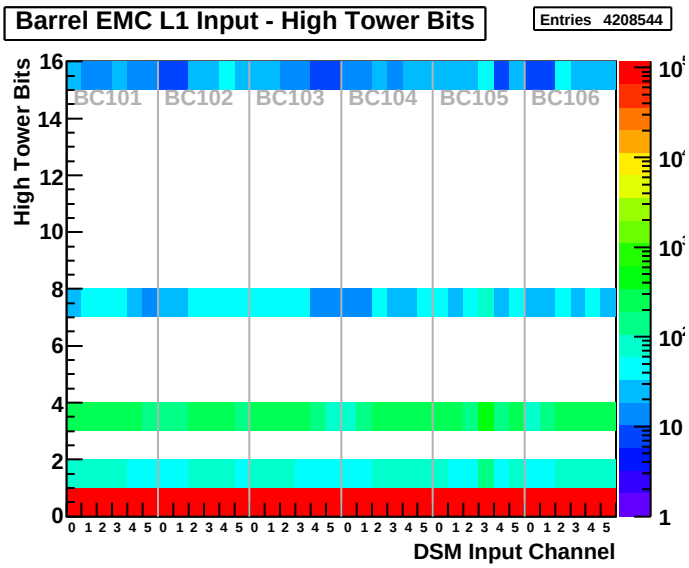
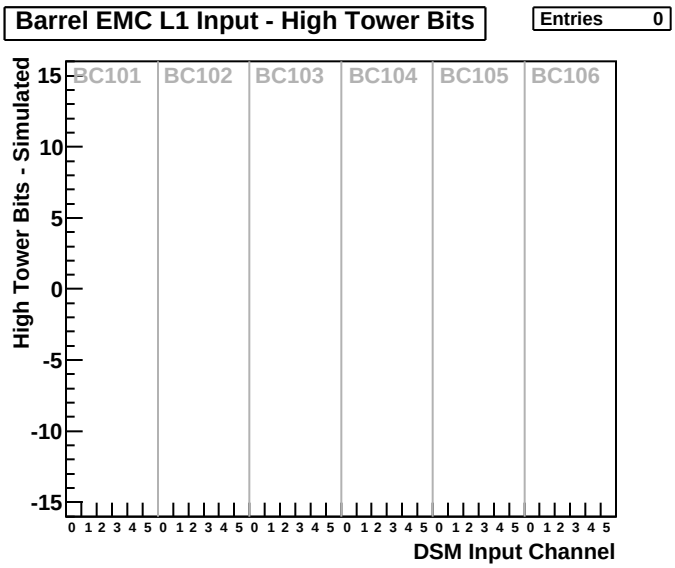

Barrel EMC L1 Input - Low Eta Sum
Entries 4208544
Low Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

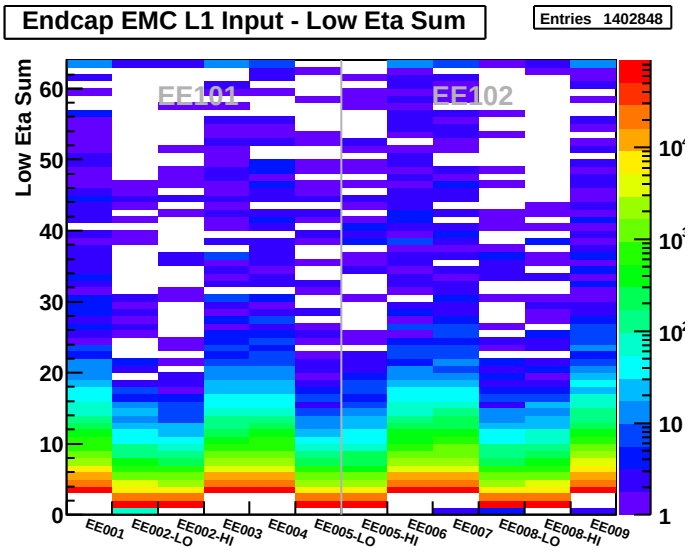

Barrel EMC L1 Input - Low Eta Sum
Entries 2
Low Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

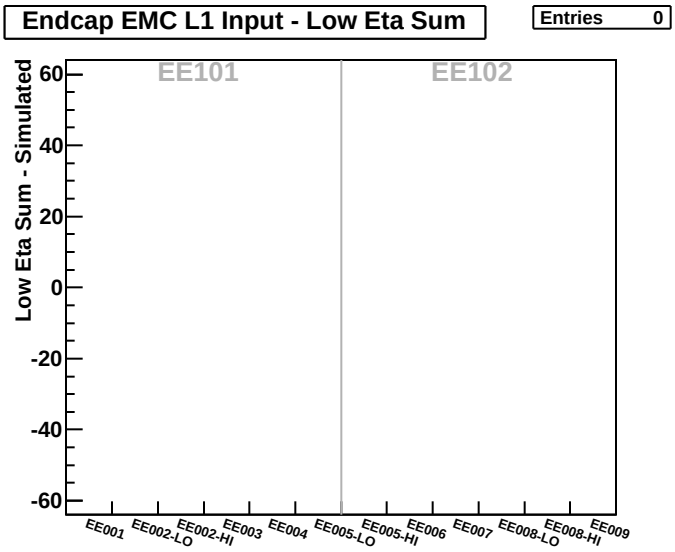

Barrel EMC L1 Input - High Eta Sum
Entries 4208544
High Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

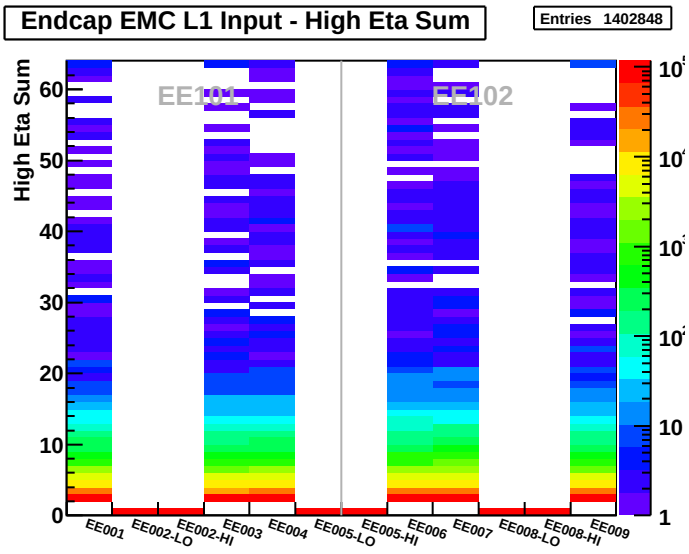

Barrel EMC L1 Input - High Eta Sum
Entries 7
High Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

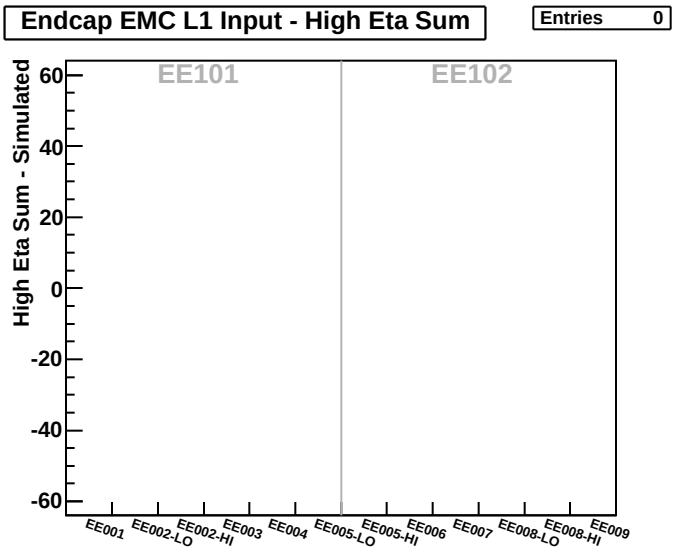

Barrel EMC L1 Input - High Tower Bits
Entries 4208544
High Tower Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

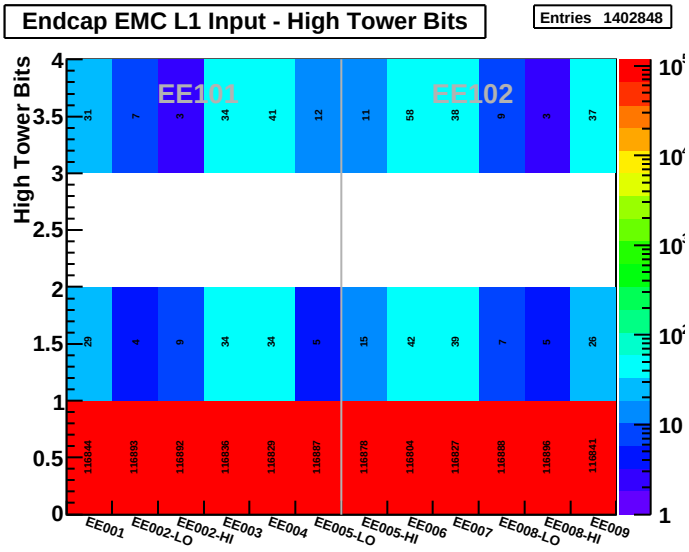

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

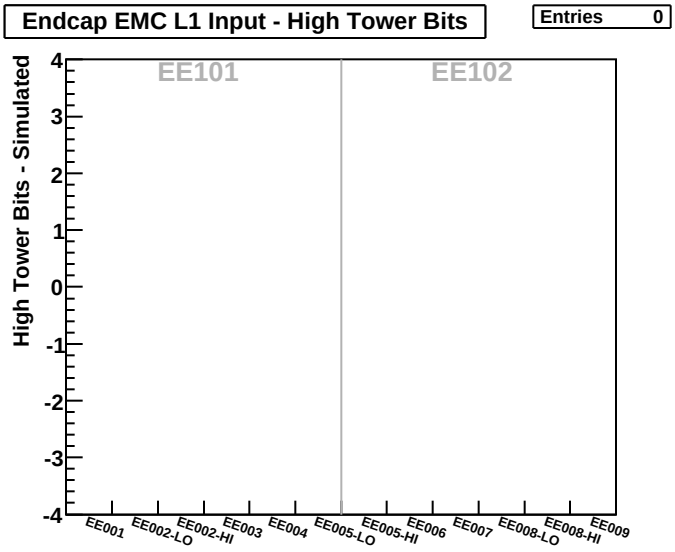

Endcap EMC L1 Input - Low Eta Sum
Entries 1402848
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

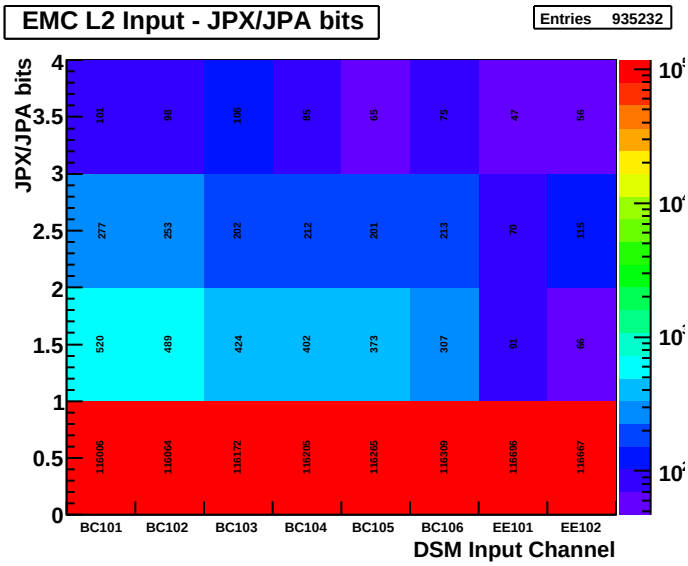

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

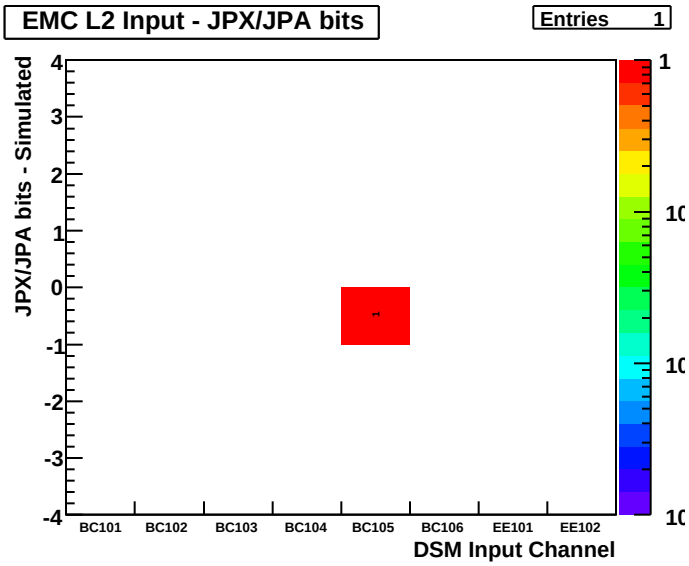

Endcap EMC L1 Input - High Eta Sum
Entries 1402848
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

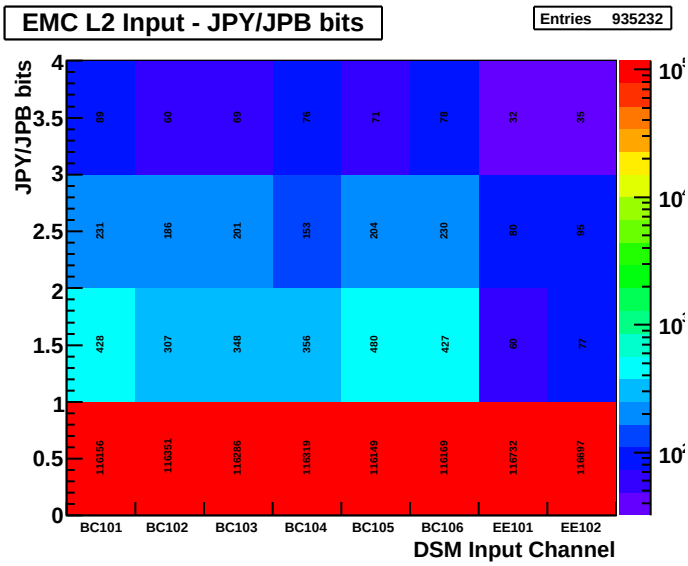

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

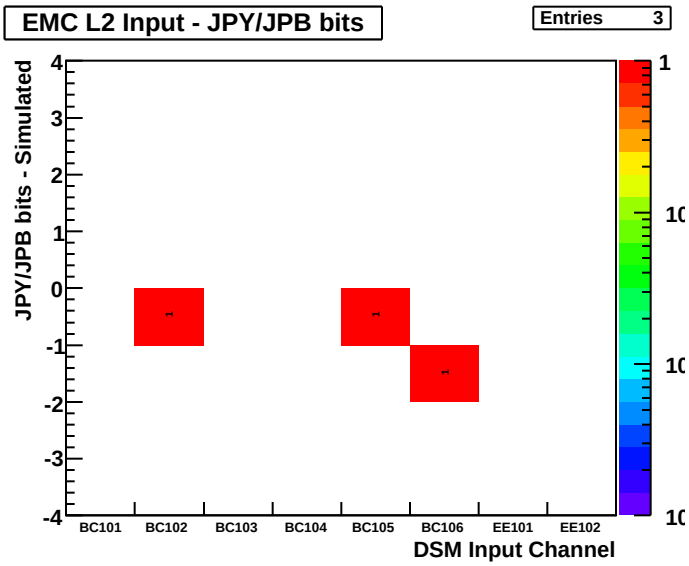

Endcap EMC L1 Input - High Tower Bits
Entries 1402848
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

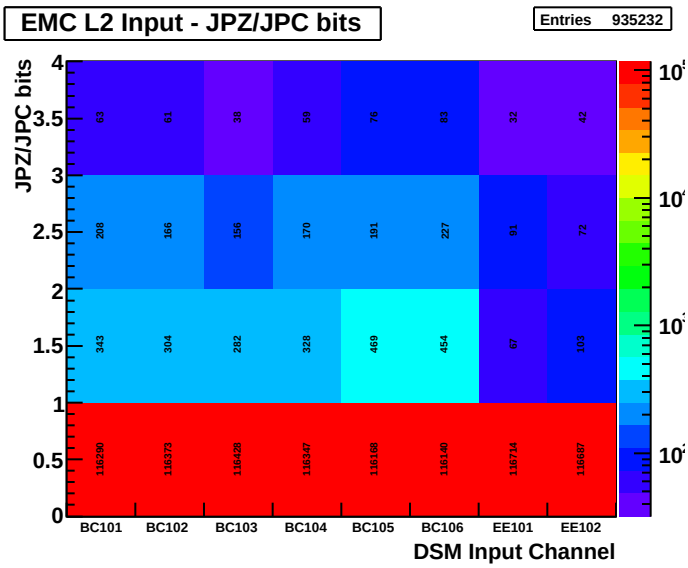

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

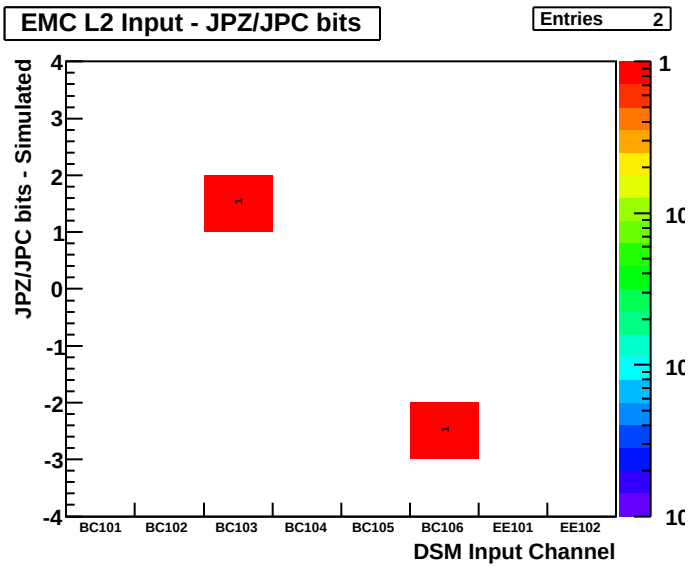

EMC L2 Input - JPX/JPA bits
Entries 935232
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
101 98 106 85 65 75 47 56
277 253 202 212 201 213 70 115
520 489 424 402 373 307 91 66
116006 116064 116172 116205 116265 116309 116696 116667

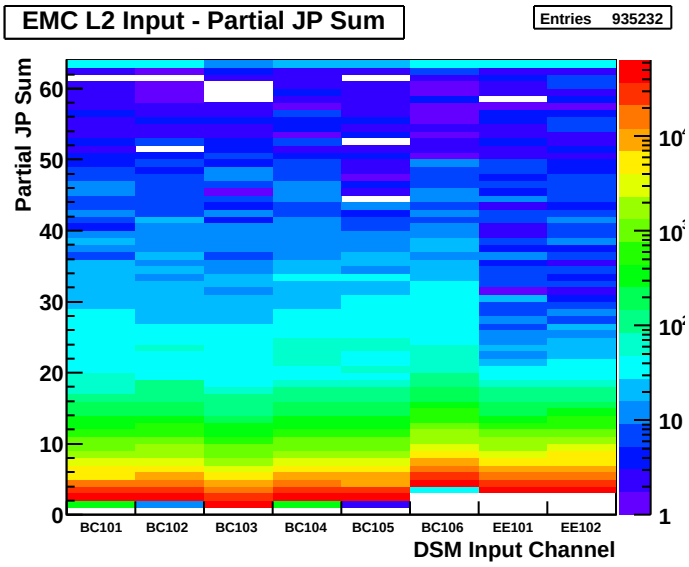

EMC L2 Input - JPX/JPA bits
Entries 1
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1

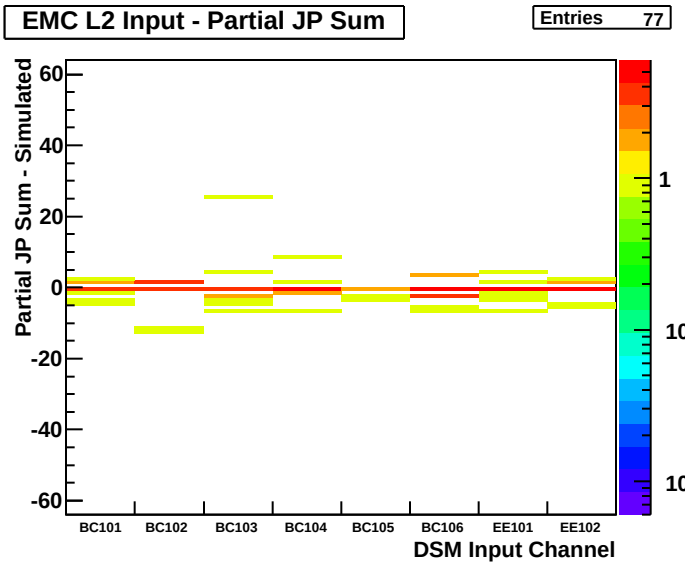

EMC L2 Input - JPY/JPB bits
Entries 935232
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
89 60 69 76 71 78 32 35
231 186 201 153 204 230 80 95
428 307 348 356 480 427 60 77
116156 116351 116286 116319 116149 116169 116732 116697

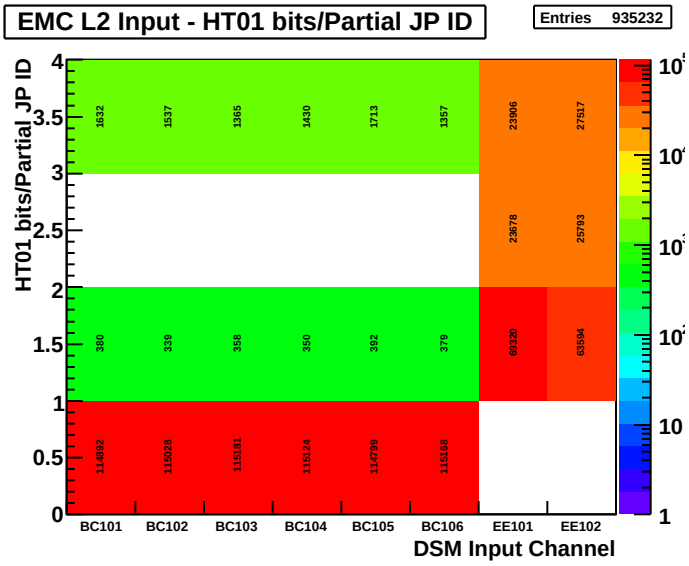

EMC L2 Input - JPY/JPB bits
Entries 3
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1 1 1

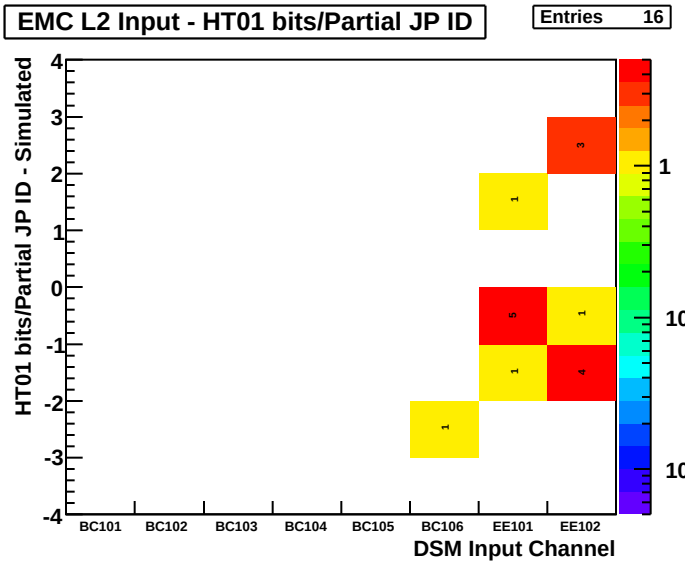

EMC L2 Input - JPZ/JPC bits
Entries 935232
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
63 61 38 59 76 83 32 42
208 166 156 170 191 227 91 72
343 304 282 328 469 454 67 103
116390 116373 116428 116347 116168 116140 116714 116687

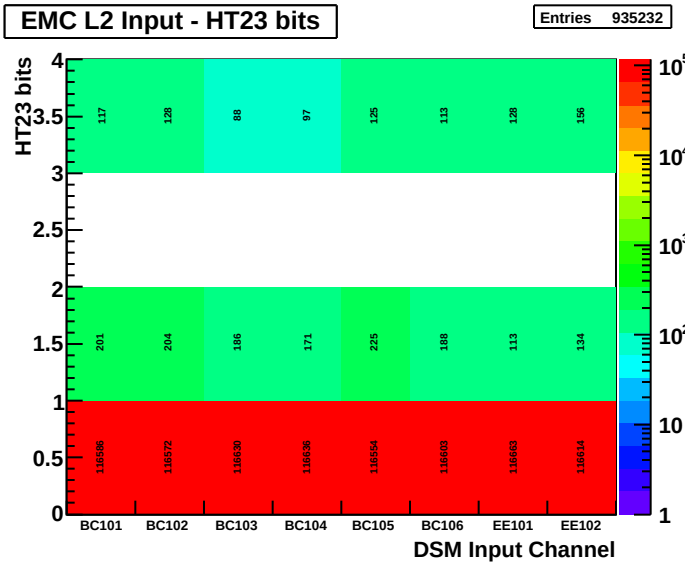

EMC L2 Input - JPZ/JPC bits
Entries 2
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1 1

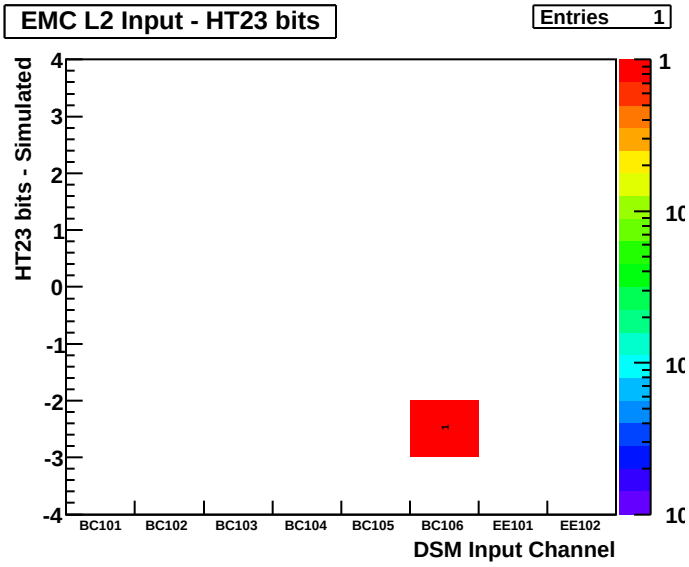

EMC L2 Input - Partial JP Sum
Entries 935232
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

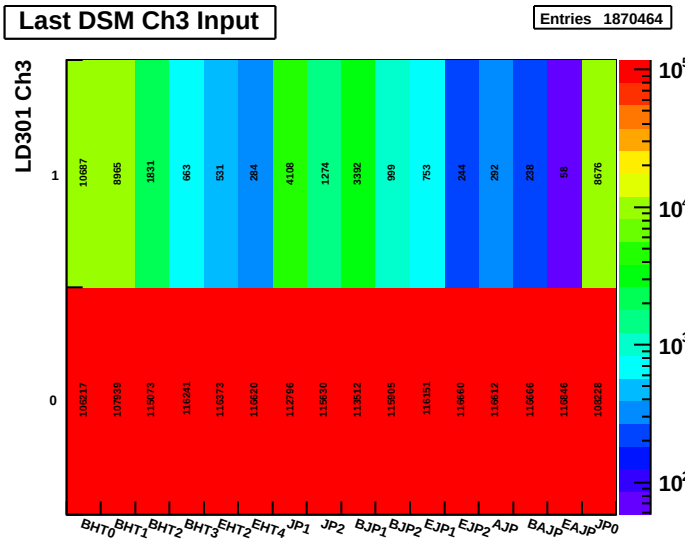

EMC L2 Input - Partial JP Sum
Entries 77
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

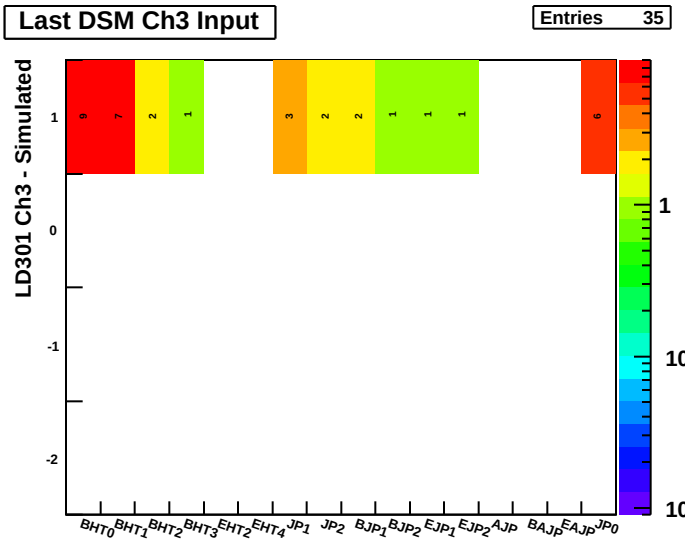

EMC L2 Input - HT01 bits/Partial JP ID
Entries 935232
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

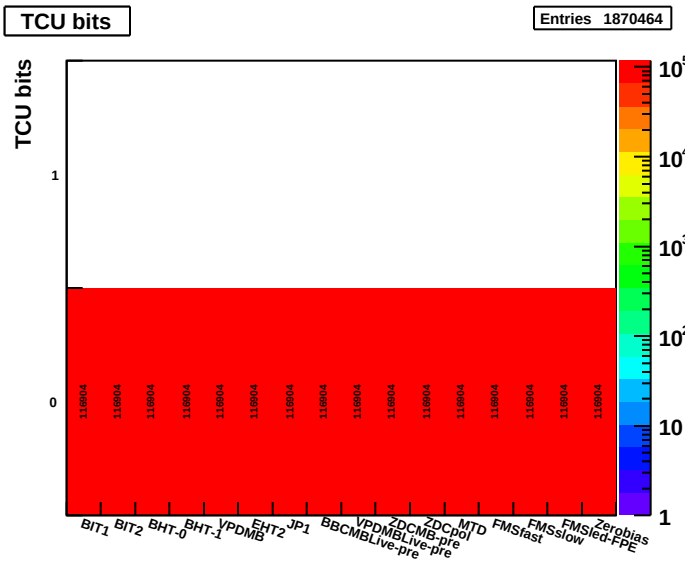

EMC L2 Input - HT01 bits/Partial JP ID
Entries 16
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

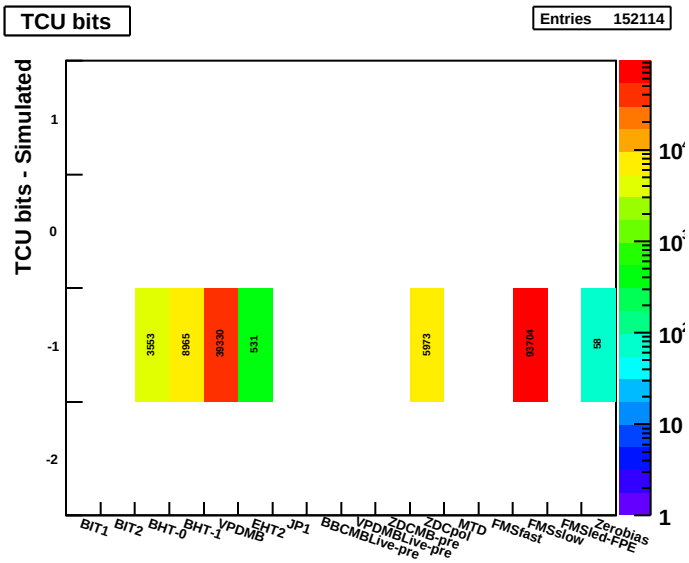

EMC L2 Input - HT23 bits
Entries 935232
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

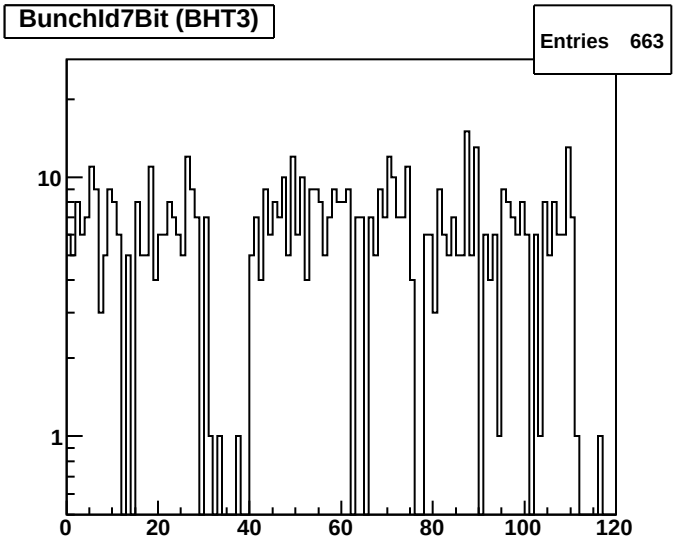

EMC L2 Input - HT23 bits
Entries 1
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

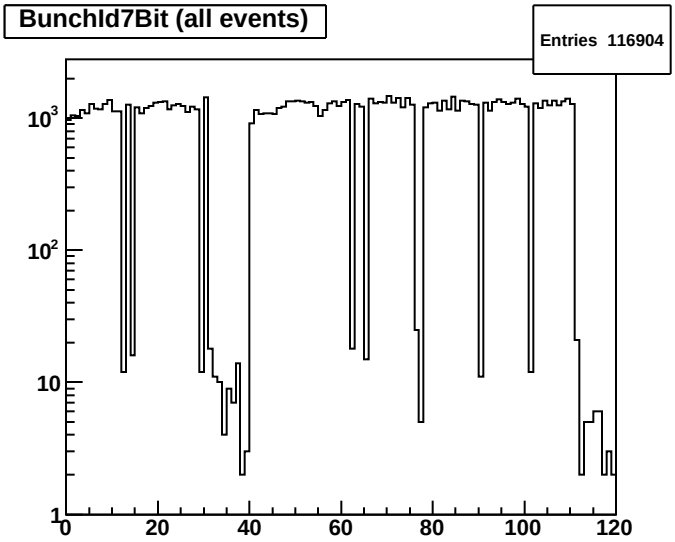

Last DSM Ch3 Input
Entries 1870464
LD301 Ch3
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

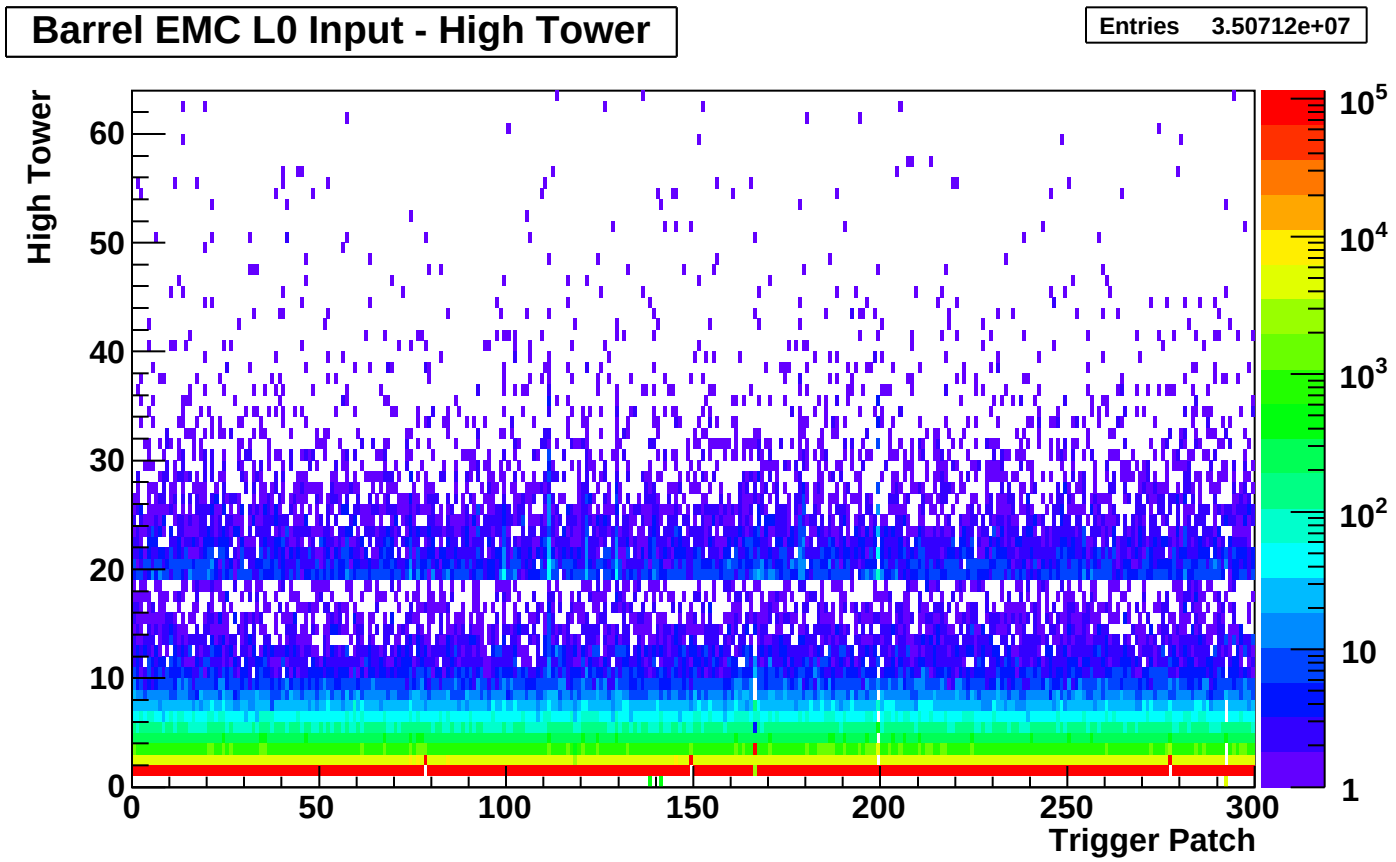

Last DSM Ch3 Input
Entries 35
LD301 Ch3 - Simulated
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

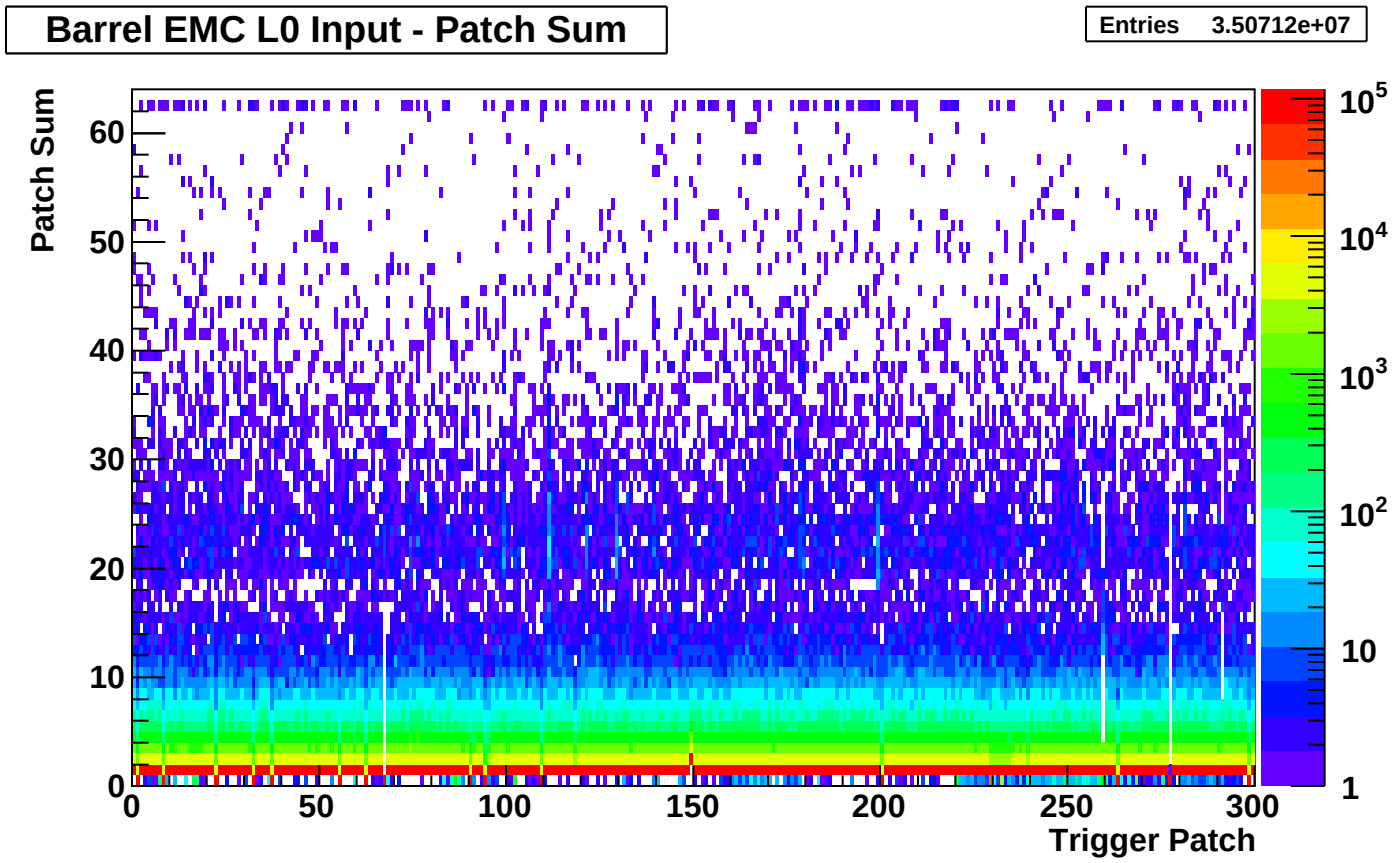

TCU bits
Entries 1870464
TCU bits
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

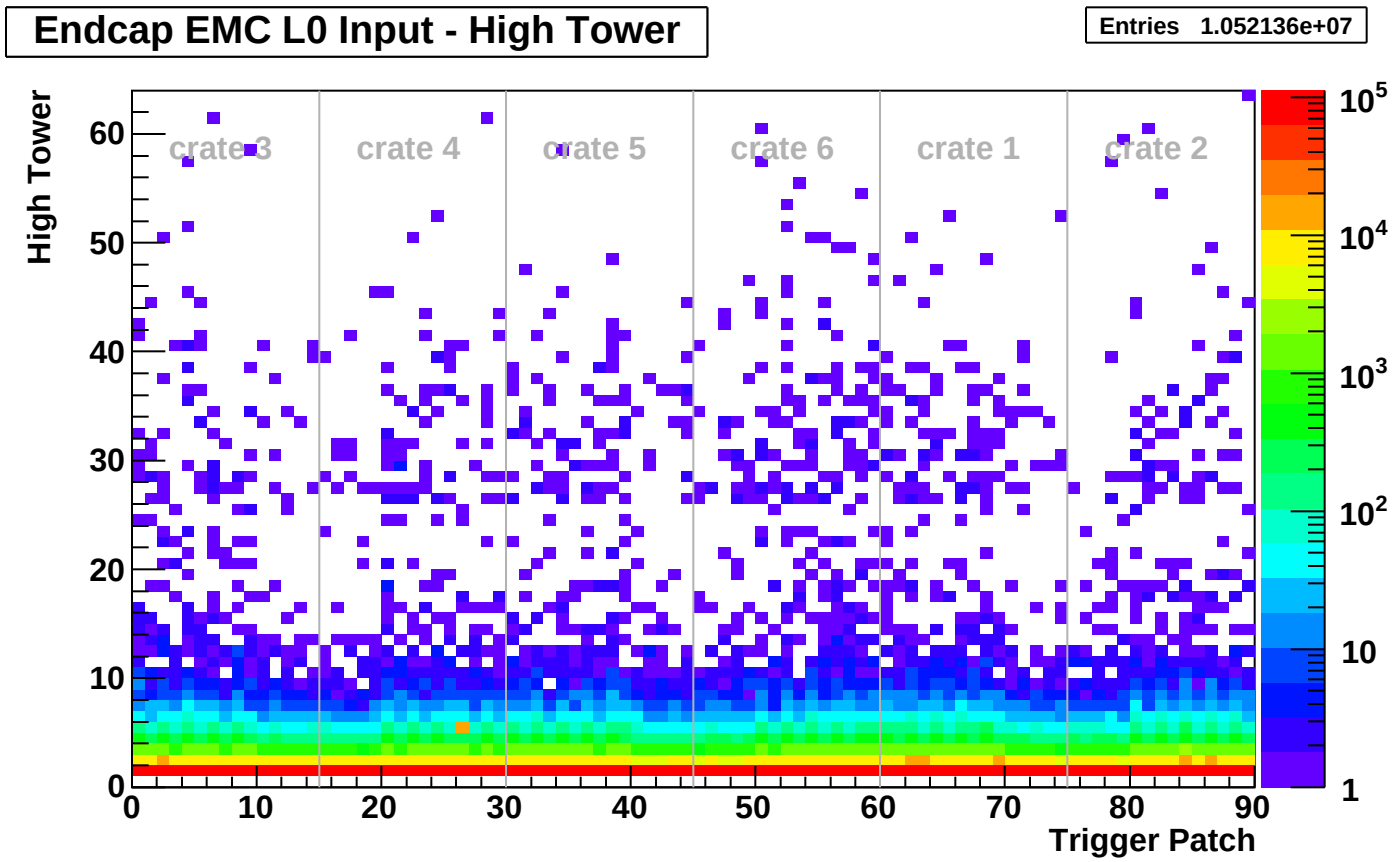

TCU bits
Entries 152114
TCU bits - Simulated
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

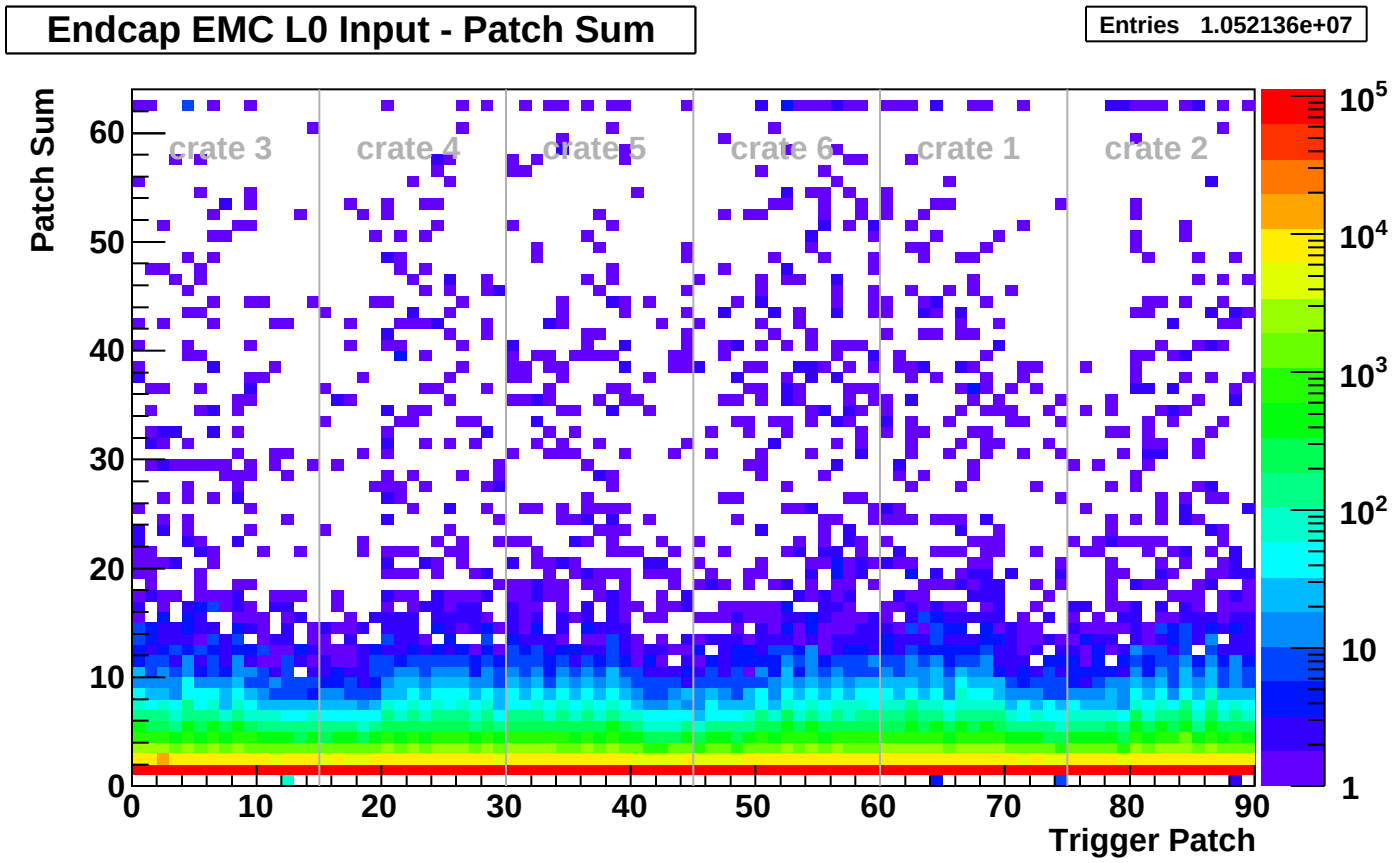

BunchId7Bit (BHT3)
Entries 663

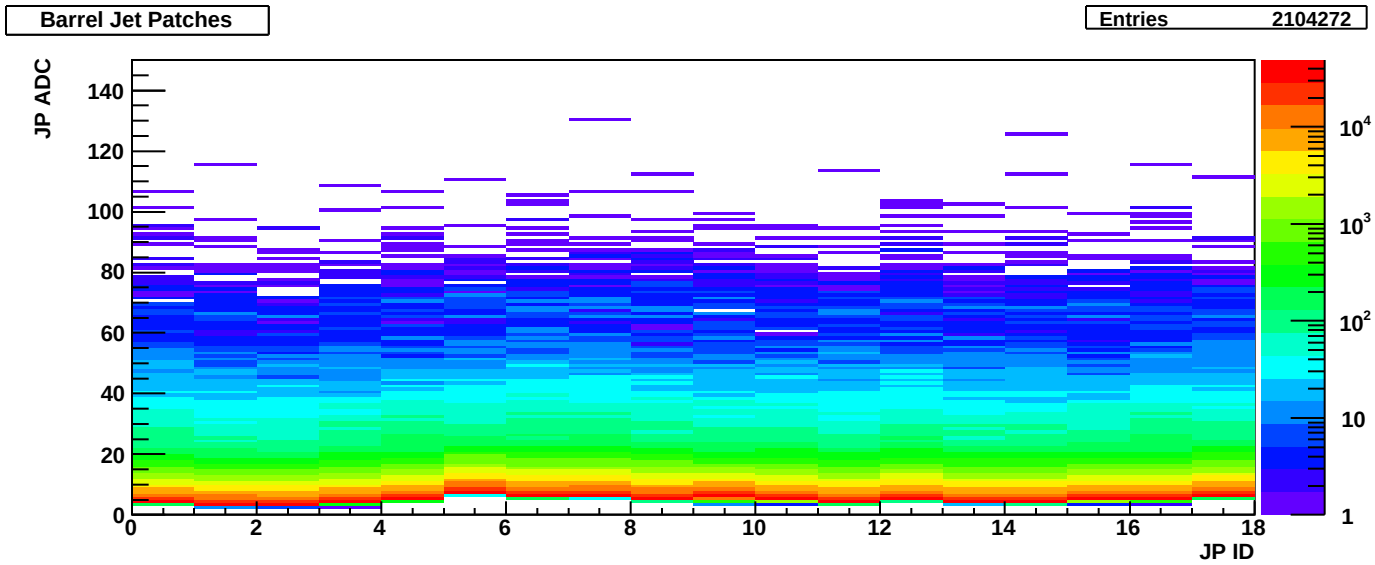

BunchId7Bit (all events)
Entries 116904

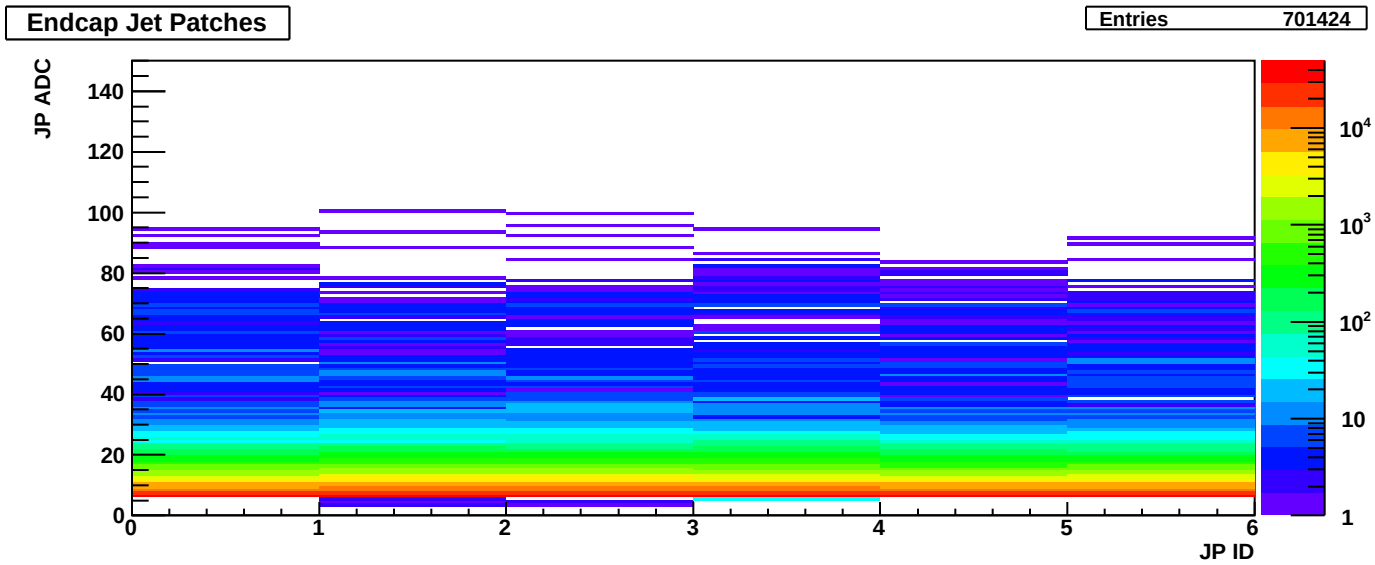

Barrel EMC L0 Input - High Tower
Entries 3.50712e+07
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

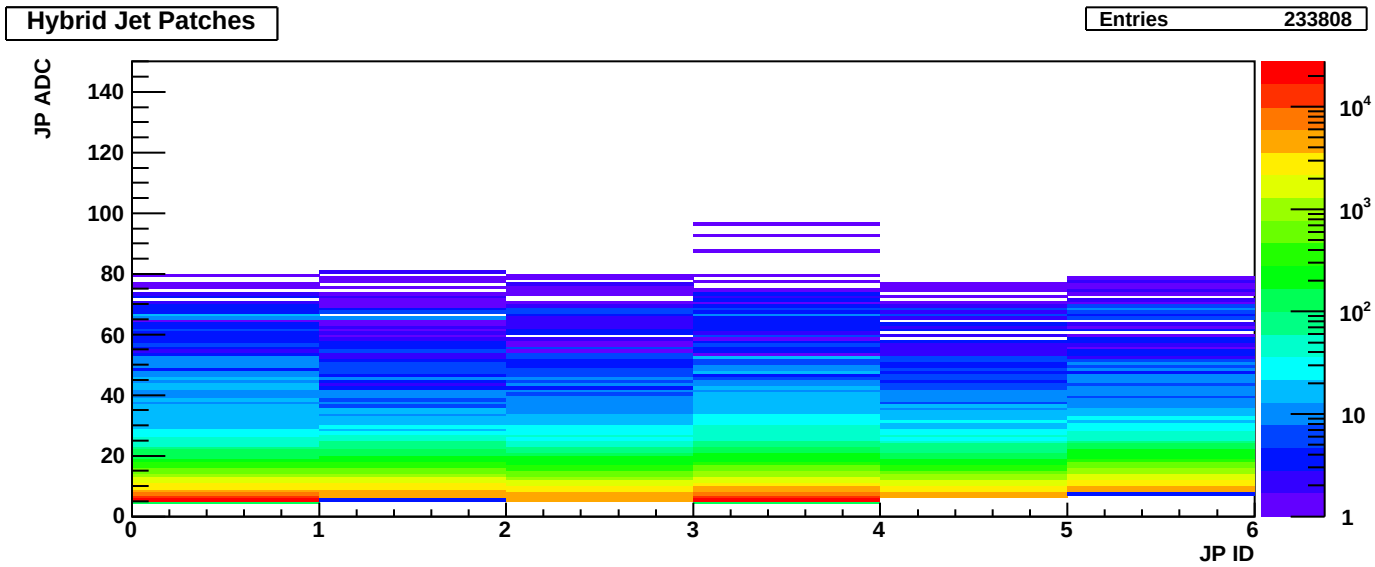

Barrel EMC L0 Input - Patch Sum
Entries 3.50712e+07
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

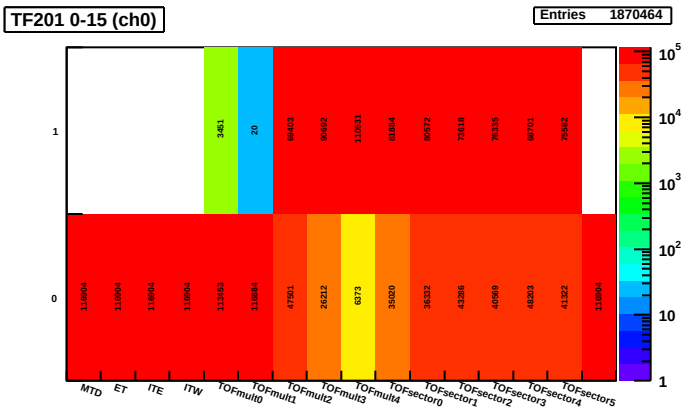

Endcap EMC L0 Input - High Tower
Entries 1.052136e+07
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

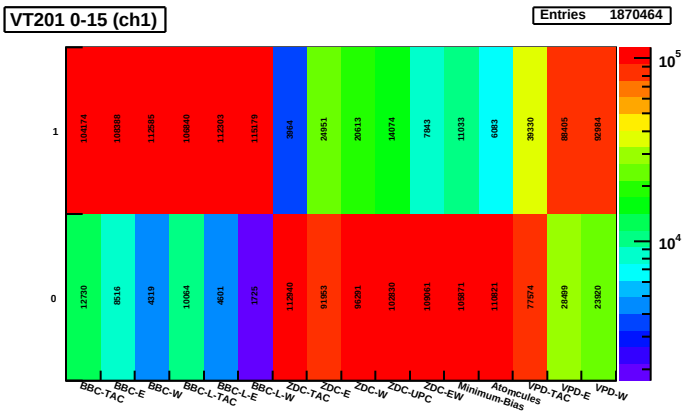

Endcap EMC L0 Input - Patch Sum
Entries 1.052136e+07
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

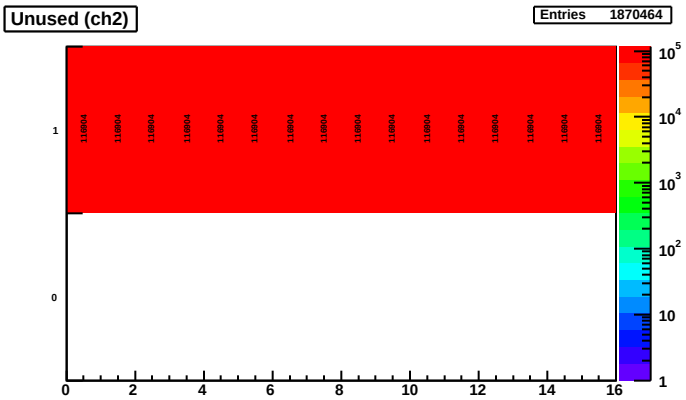

Barrel Jet Patches
Entries 2104272
JP ADC
JP ID

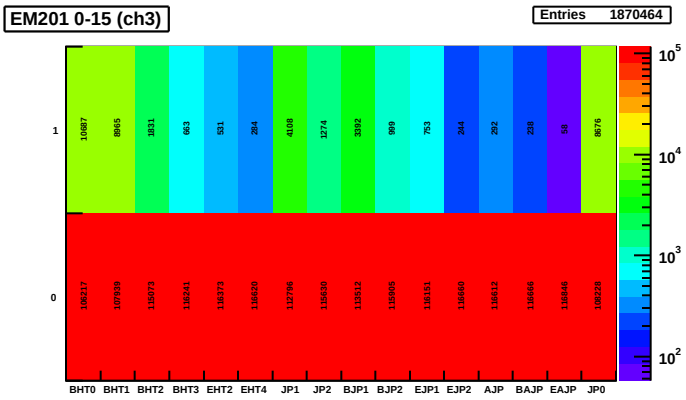

Endcap Jet Patches
Entries 701424
JP ADC
JP ID

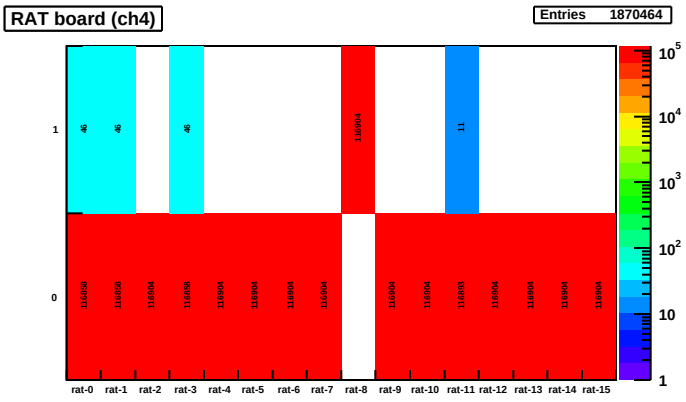

Hybrid Jet Patches
Entries 233808
JP ADC
JP ID

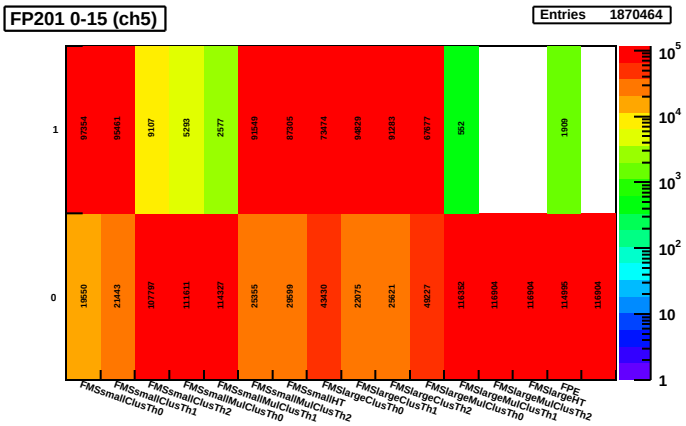

TF201 0-15 (ch0)
Entries 1870464
MTD
ET
ITE
ITW
TOFmult0
TOFmult1
TOFmult2
TOFmult3
TOFmult4
TOFsector0
TOFsector1
TOFsector2
TOFsector3
TOFsector4
TOFsector5

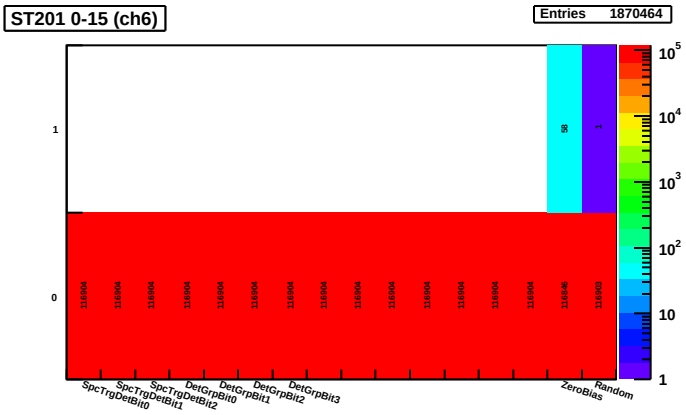

VT201 0-15 (ch1)
Entries 1870464
BBC-TAC
BBC-E
BBC-W
BBC-L-TAC
BBC-L-E
BBC-L-W
ZDC-TAC
ZDC-E
ZDC-W
ZDC-UPC
ZDC-EW
Minimum-Bias
Atomcules
VPD-TAC
VPD-E
VPD-W

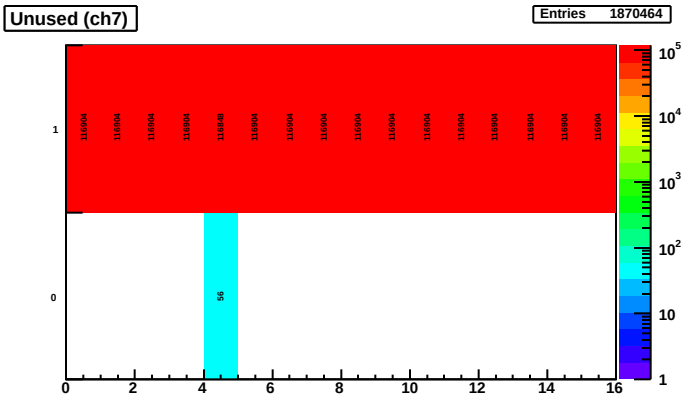

Unused (ch2)
Entries 1870464

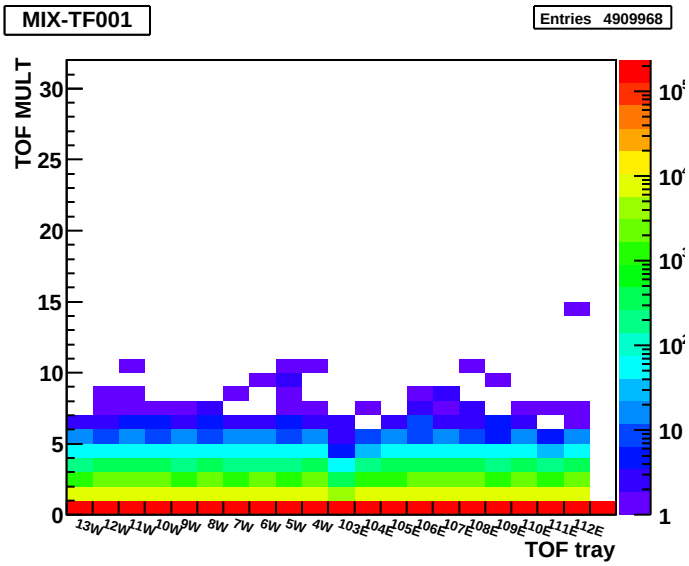

EM201 0-15 (ch3)
Entries 1870464
BHT0
BHT1
BHT2
BHT3
EHT2
EHT4
JP1
JP2
BJP1
BJP2
EJP1
EJP2
AJP
BAJP
EAJP
JP0

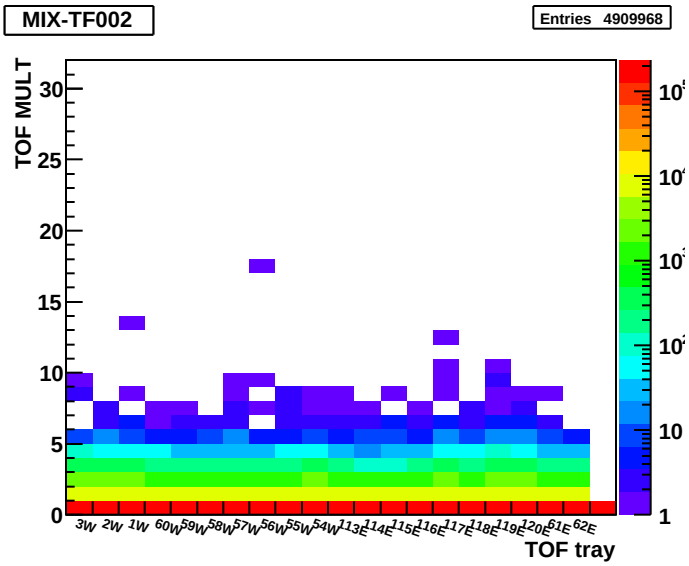

RAT board (ch4)
Entries 1870464
rat-0
rat-1
rat-2
rat-3
rat-4
rat-5
rat-6
rat-7
rat-8
rat-9
rat-10
rat-11
rat-12
rat-13
rat-14
rat-15

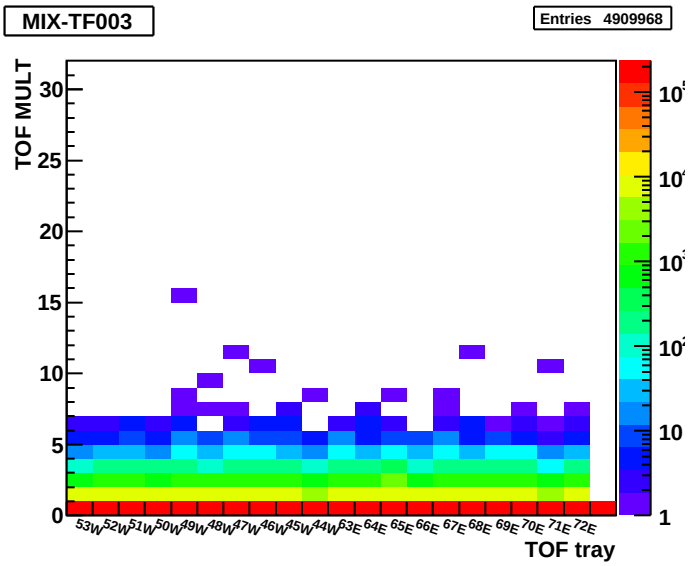

FP201 0-15 (ch5)
Entries 1870464
FMSsmallClusTh0
FMSsmallClusTh1
FMSsmallClusTh2
FMSsmallMulClusTh0
FMSsmallMulClusTh1
FMSsmallMulClusTh2
FMSsmallHT
FMSlargeClusTh0
FMSlargeClusTh1
FMSlargeClusTh2
FMSlargeMulClusTh0
FMSlargeMulClusTh1
FMSlargeMulClusTh2
FMSlargeHT
FPE

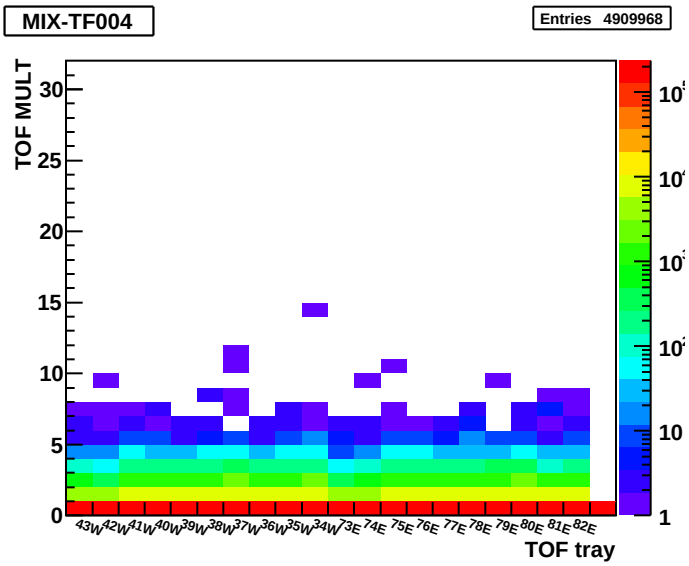

ST201 0-15 (ch6)
Entries 1870464
SpcTrgDetBit0
SpcTrgDetBit1
SpcTrgDetBit2
DetCrpBit0
DetCrpBit1
DetCrpBit2
DetCrpBit3
ZeroBias
Random

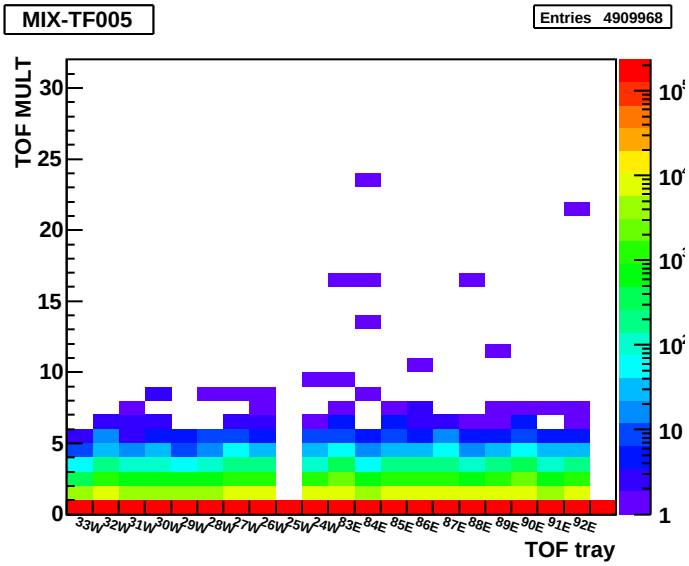

Unused (ch7)
Entries 1870464

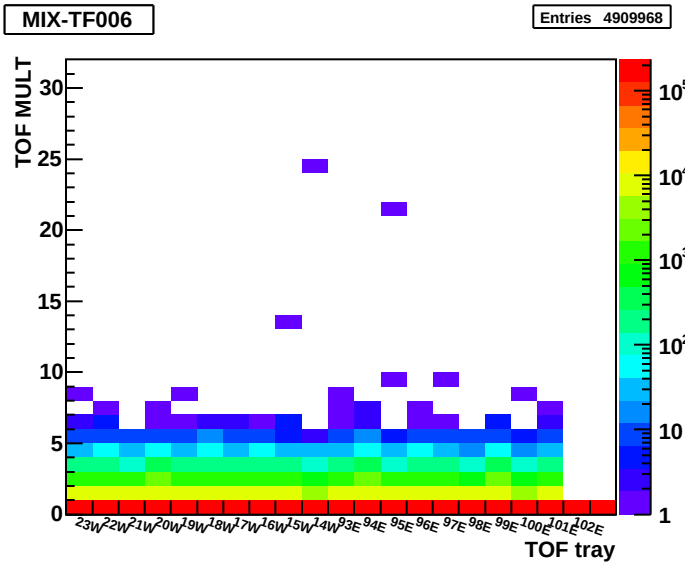

MIX-TF001
Entries 4909968
TOF MULT
TOF tray

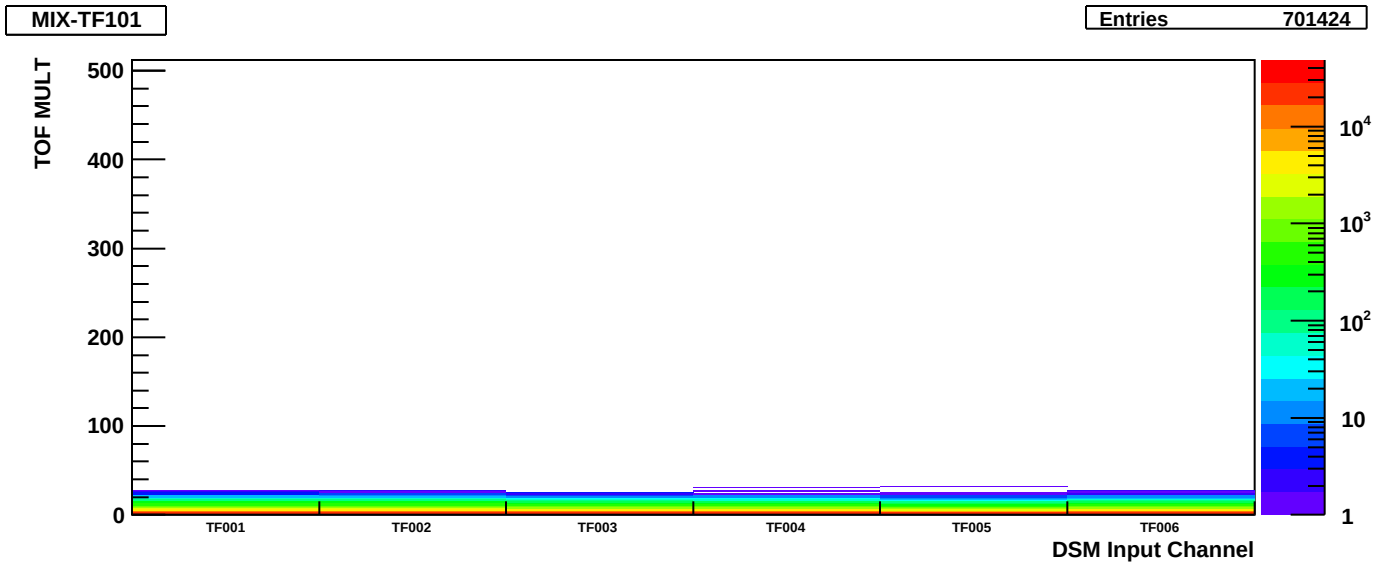

MIX-TF002
Entries 4909968
TOF MULT
TOF tray

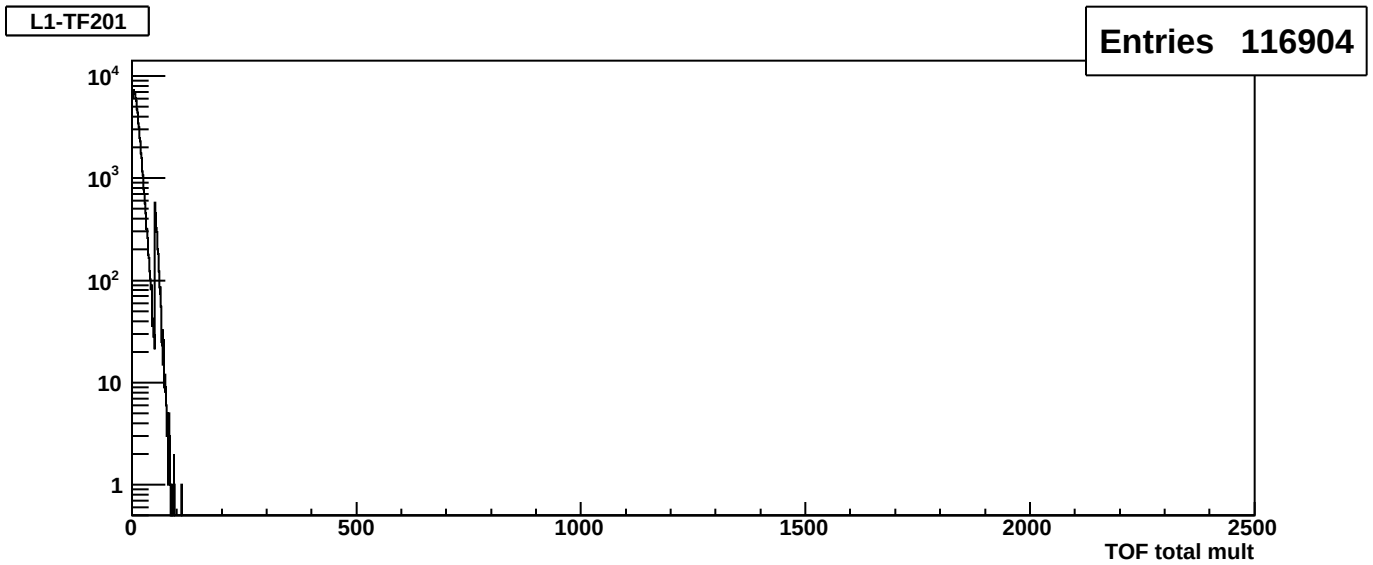

MIX-TF003
Entries 4909968
TOF MULT
TOF tray

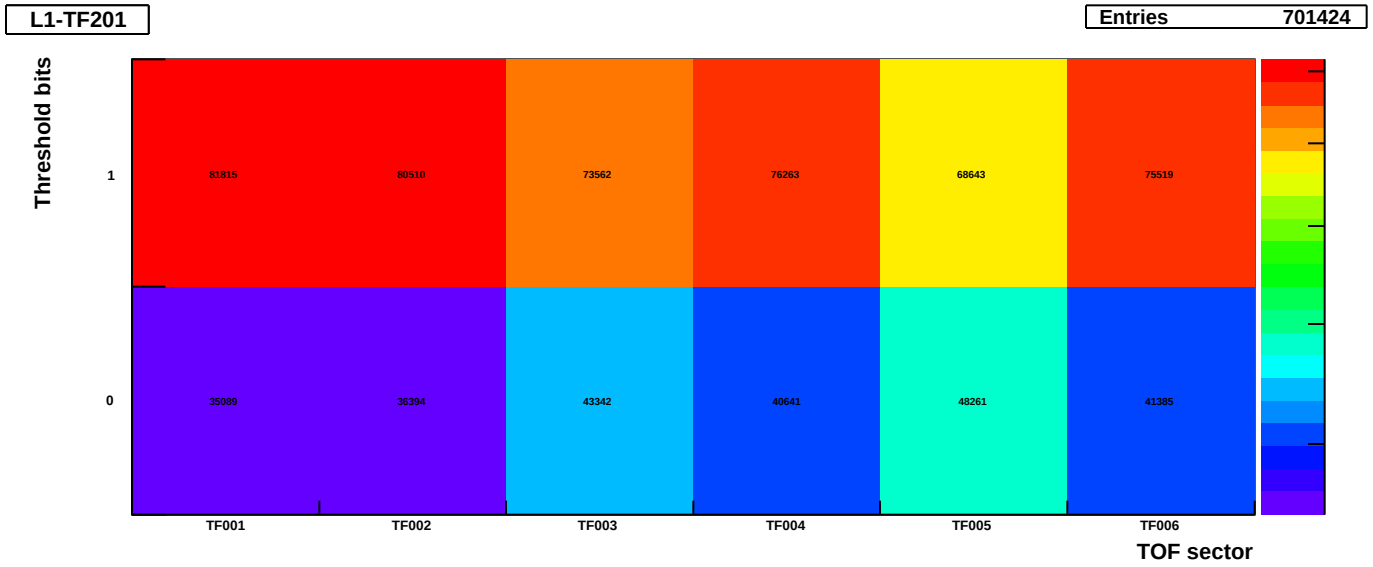

MIX-TF004
Entries 4909968
TOF MULT
TOF tray

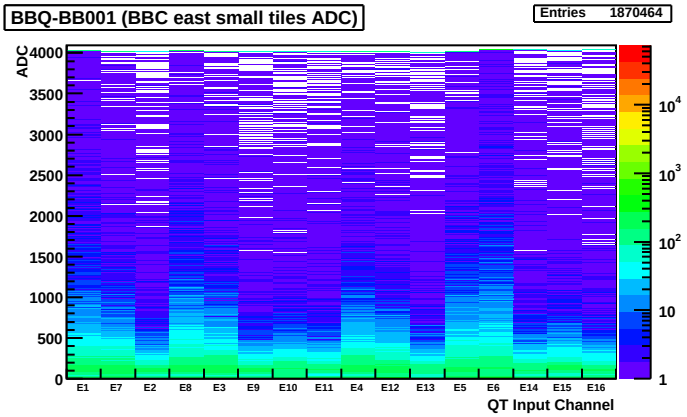

MIX-TF005
Entries 4909968
TOF MULT
TOF tray

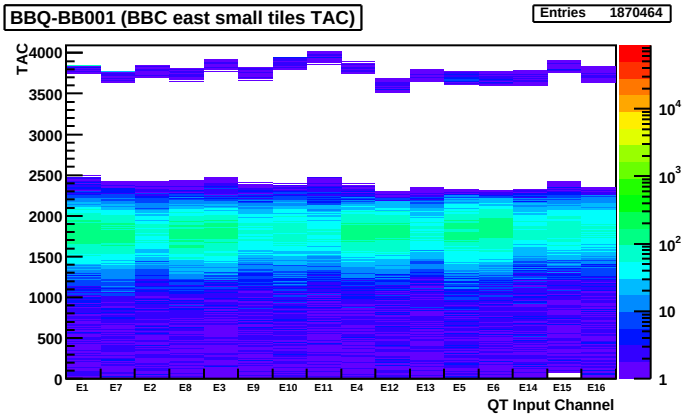

MIX-TF006
Entries 4909968
TOF MULT
TOF tray

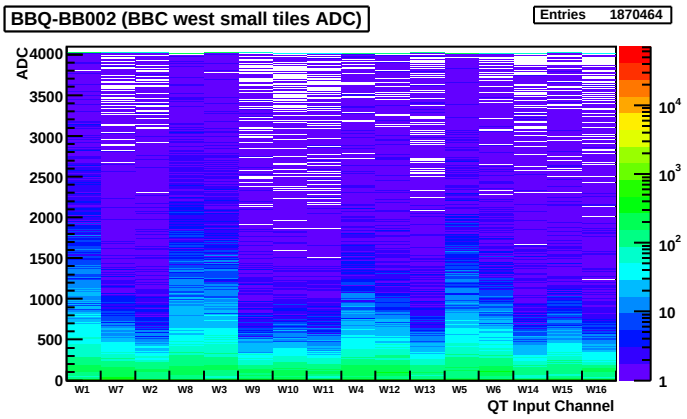

MIX-TF101
Entries 701424
TOF MULT
500
400
300
200
100
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^4
10^3
10^2
10
1

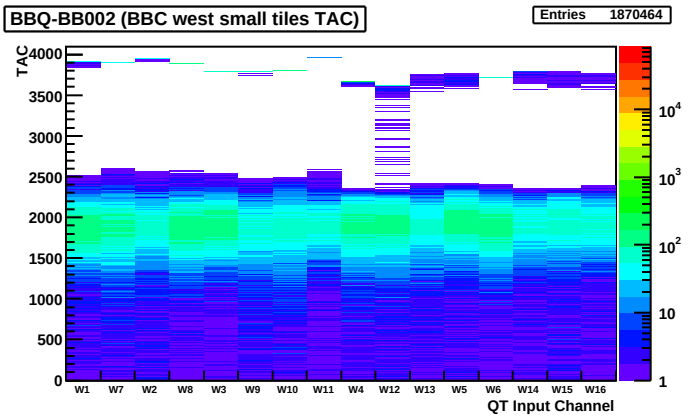

L1-TF201
Entries 116904
10^4
10^3
10^2
10
1
0
500
1000
1500
2000
2500
TOF total mult

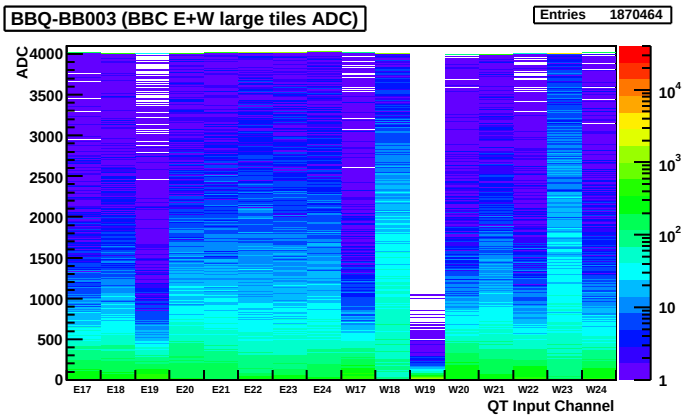

L1-TF201
Entries 701424
Threshold bits
1
0
81815
80510
73562
76263
68643
75519
35089
36394
43342
40641
48261
41385
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector

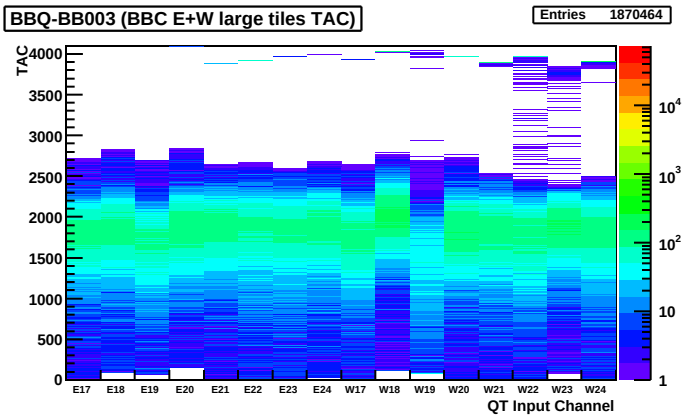

BBQ-BB001 (BBC east small tiles ADC)
Entries 1870464
ADC
QT Input Channel

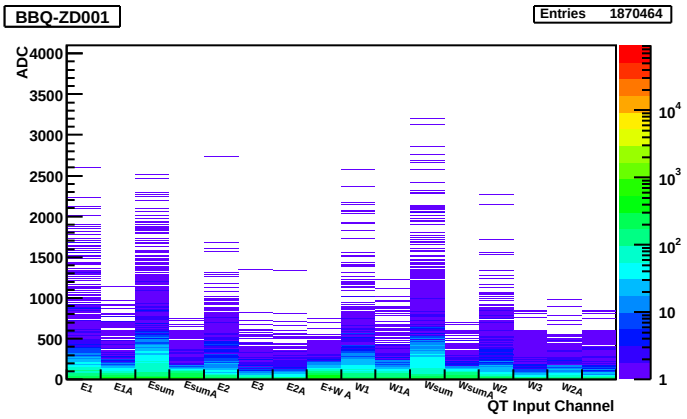

BBQ-BB001 (BBC east small tiles TAC)
Entries 1870464
TAC
QT Input Channel

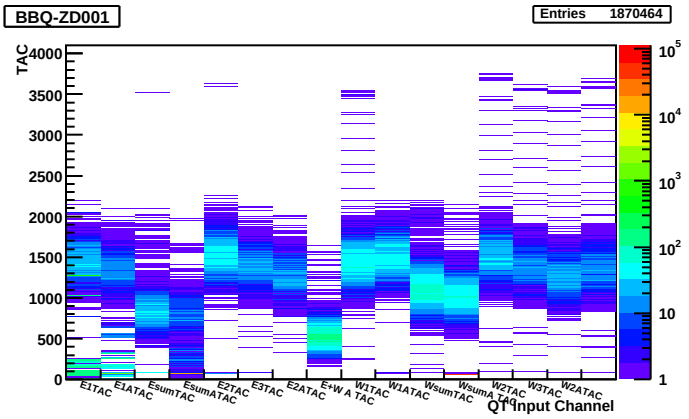

BBQ-BB002 (BBC west small tiles ADC)
Entries 1870464
ADC
QT Input Channel

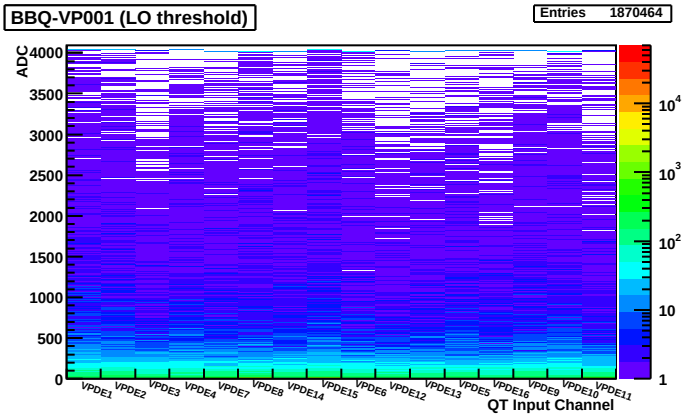

BBQ-BB002 (BBC west small tiles TAC)
Entries 1870464
TAC
QT Input Channel

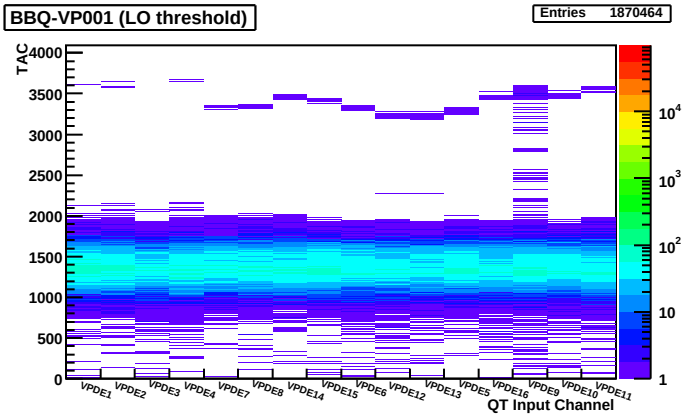

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 1870464
ADC
QT Input Channel

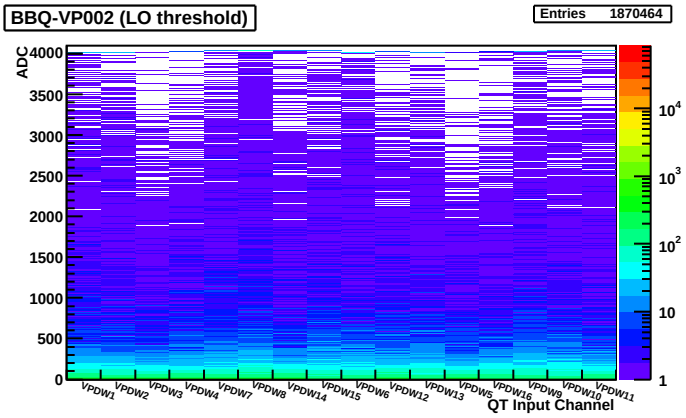

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 1870464
TAC
QT Input Channel

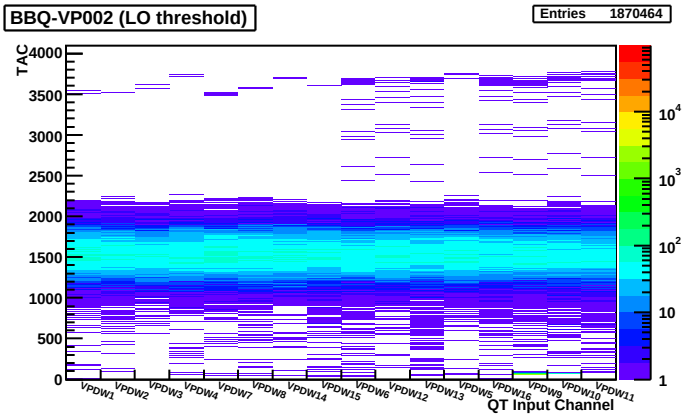

BBQ-ZD001
Entries 1870464
ADC
QT Input Channel

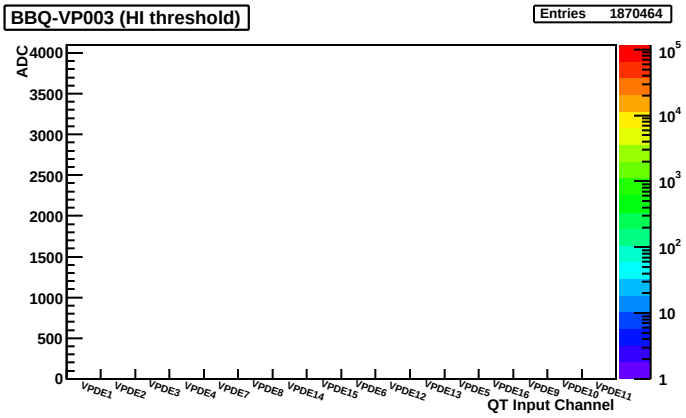

BBQ-ZD001
Entries 1870464
TAC
QT Input Channel

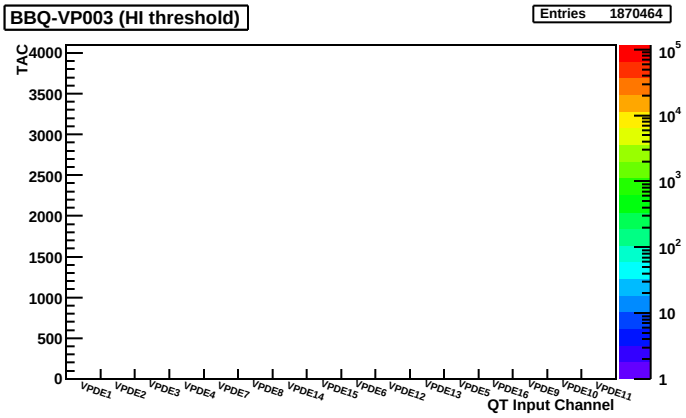

BBQ-VP001 (LO threshold)
Entries 1870464
ADC
QT Input Channel

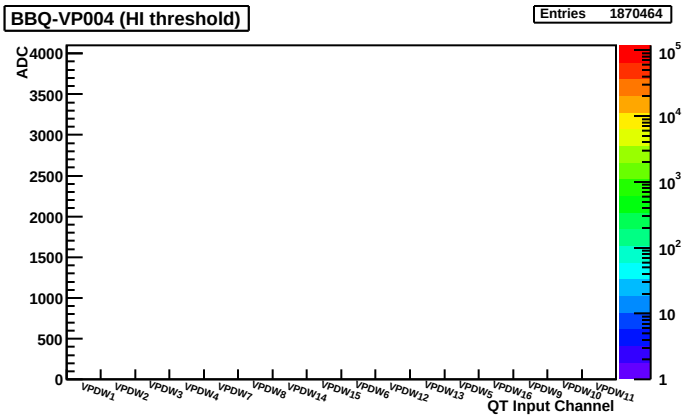

BBQ-VP001 (LO threshold)
Entries 1870464
TAC
QT Input Channel

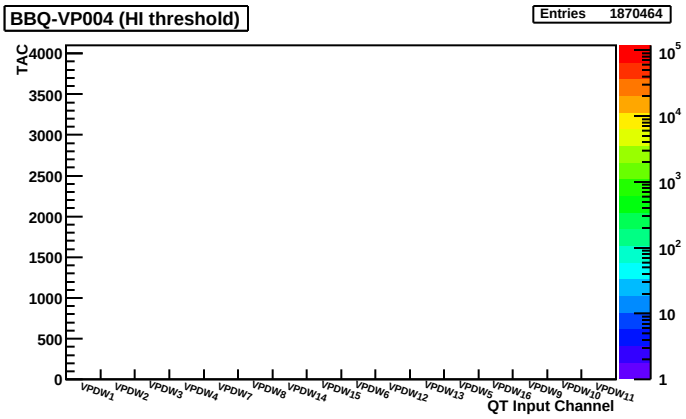

BBQ-VP002 (LO threshold)
Entries 1870464
ADC
QT Input Channel

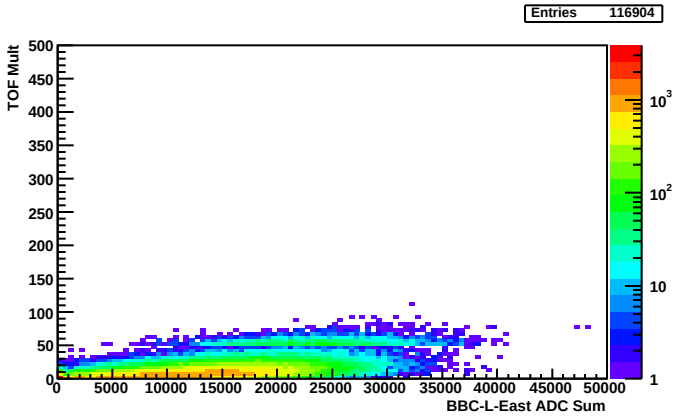

BBQ-VP002 (LO threshold)
Entries 1870464
TAC
QT Input Channel

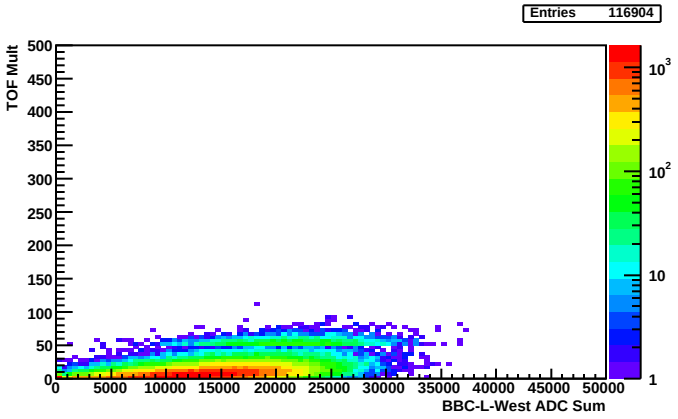

BBQ-VP003 (HI threshold)
Entries 1870464
ADC
QT Input Channel

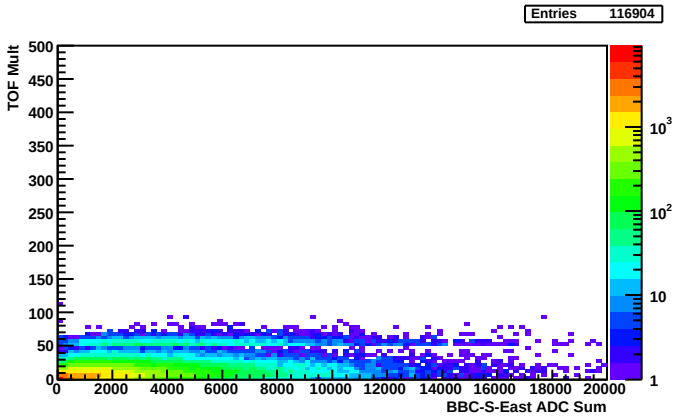

BBQ-VP003 (HI threshold)
Entries 1870464
TAC
QT Input Channel

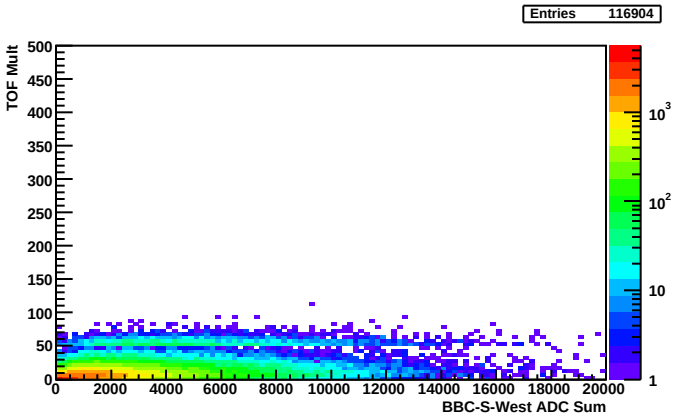

BBQ-VP004 (HI threshold)
Entries 1870464
ADC
QT Input Channel

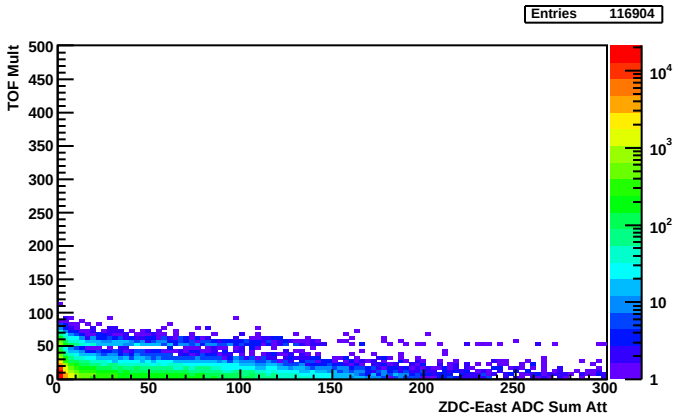

BBQ-VP004 (HI threshold)
Entries 1870464
TAC
QT Input Channel

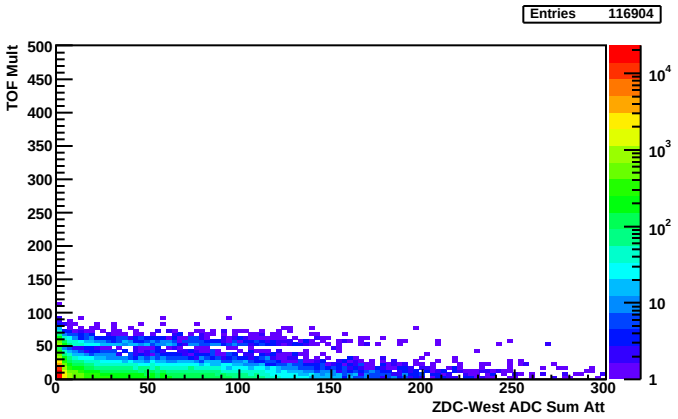

Entries 116904
TOF Mult
BBC-L-East ADC Sum

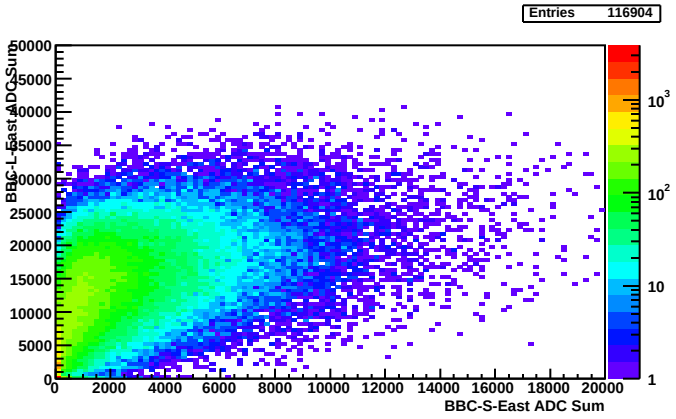

Entries 116904
TOF Mult
BBC-L-West ADC Sum

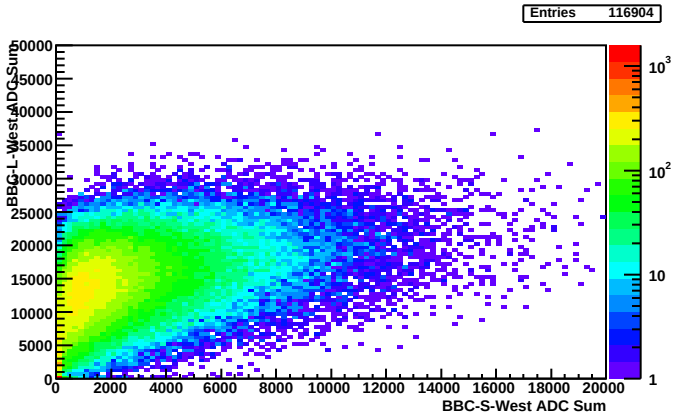

Entries 116904
TOF Mult
BBC-S-East ADC Sum

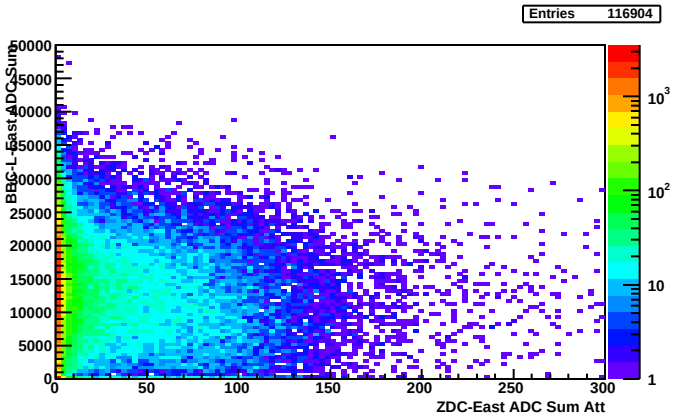

Entries 116904
TOF Mult
BBC-S-West ADC Sum

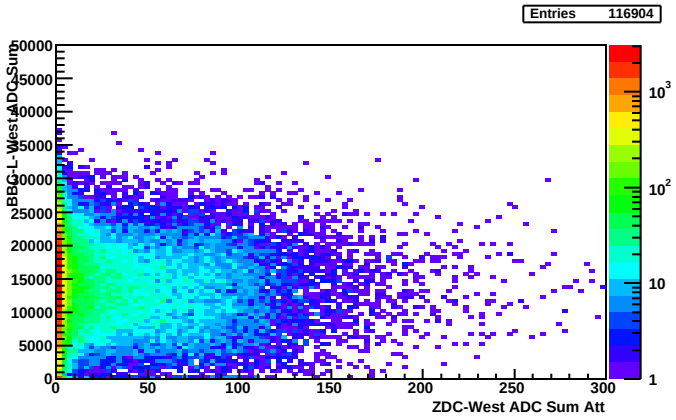

Entries 116904
TOF Mult
ZDC-East ADC Sum Att

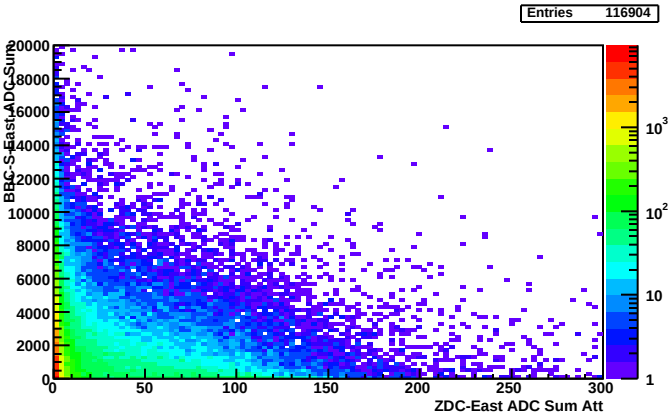

Entries 116904
TOF Mult
ZDC-West ADC Sum Att

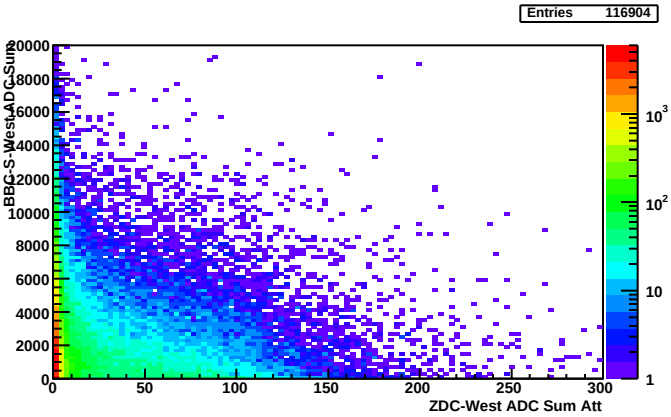

Entries 116904
BBC-L-East ADC Sum
BBC-S-East ADC Sum

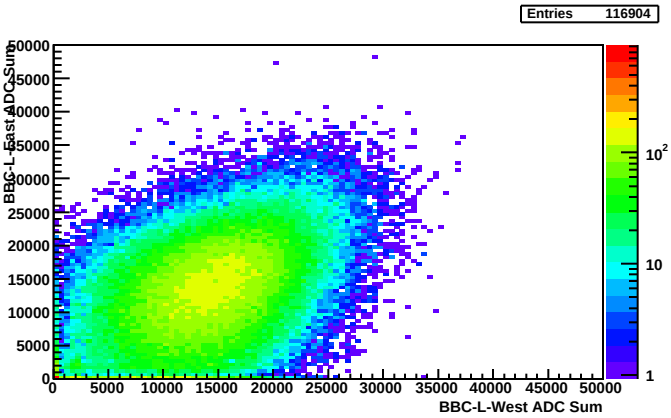

Entries 116904
BBC-L-West ADC Sum
BBC-S-West ADC Sum

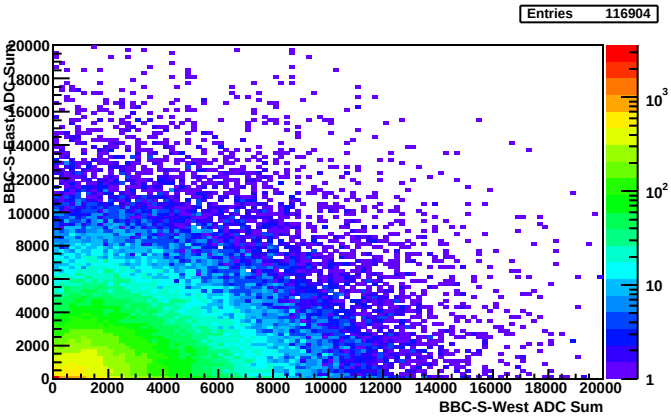

Entries 116904
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

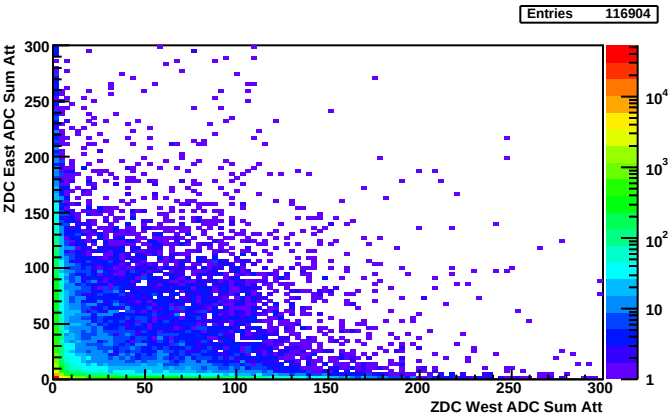

Entries 116904
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

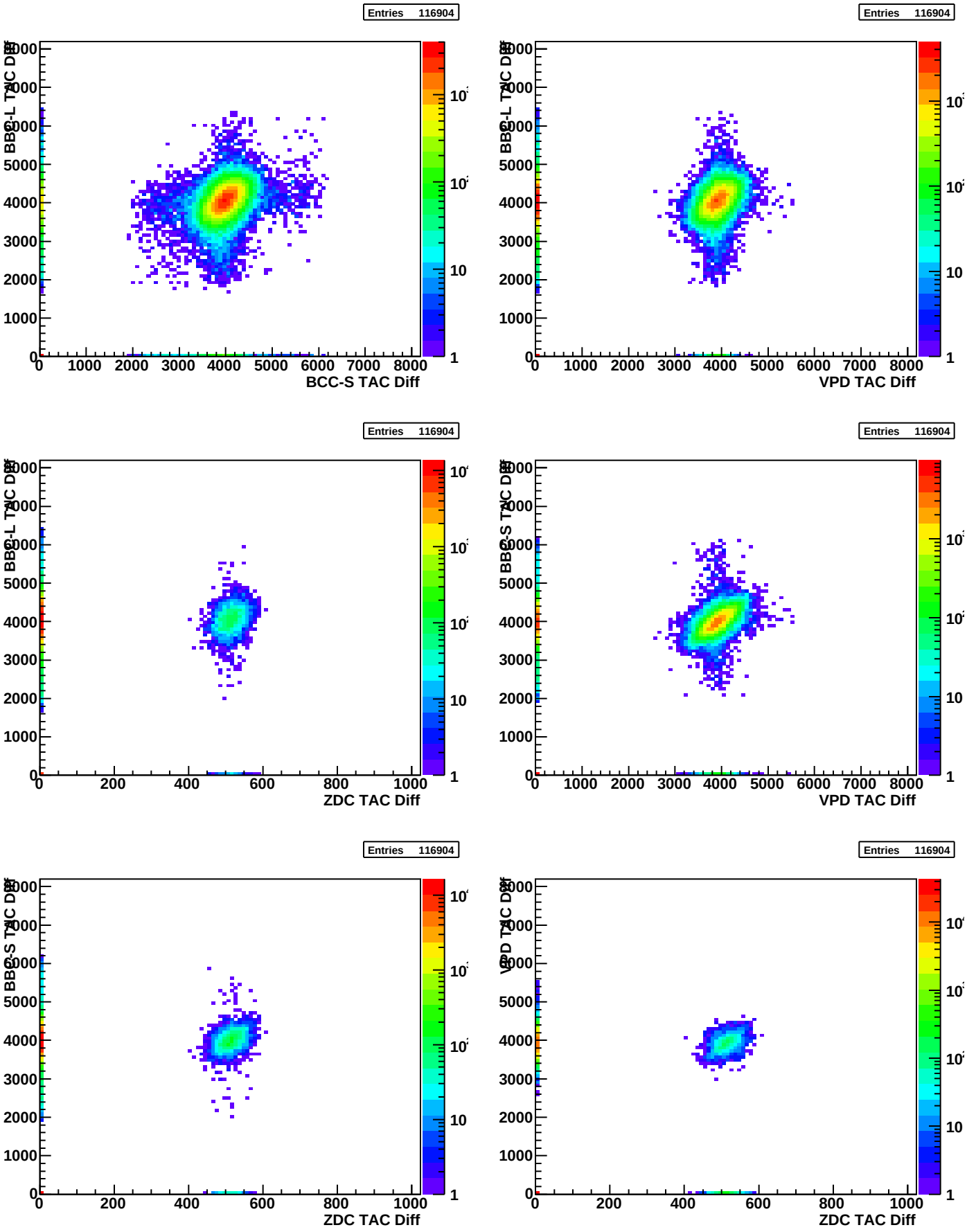

Entries 116904
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

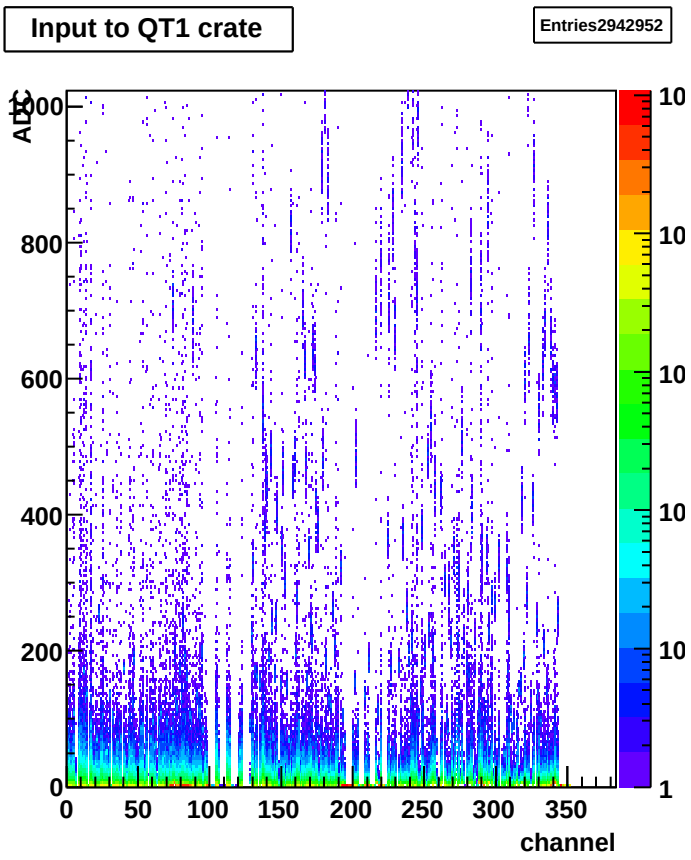

Entries 116904
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

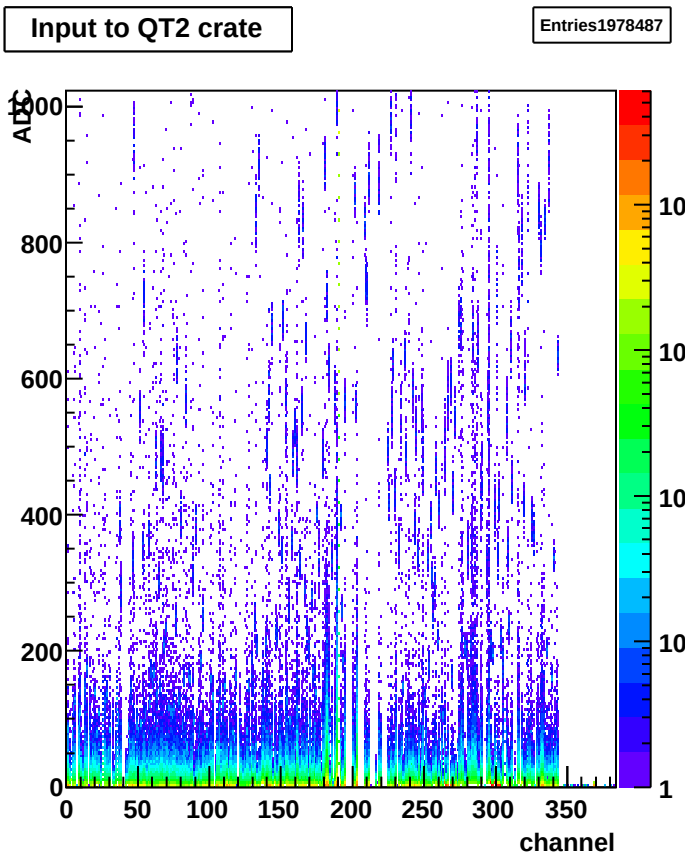

Entries 116904
BBC-L-East ADC Sum
BBC-L-West ADC Sum

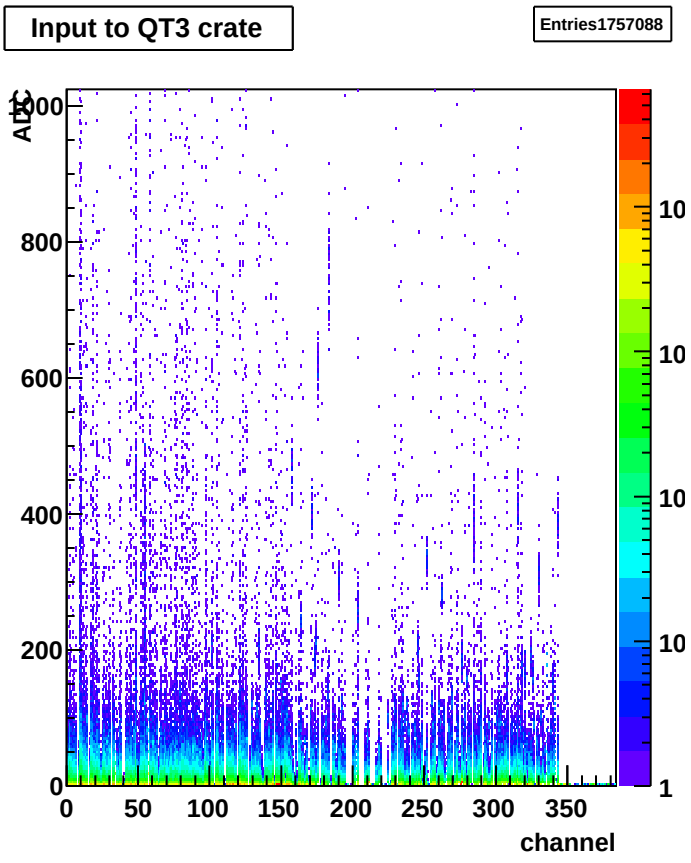

Entries 116904
BBC-S-East ADC Sum
BBC-S-West ADC Sum

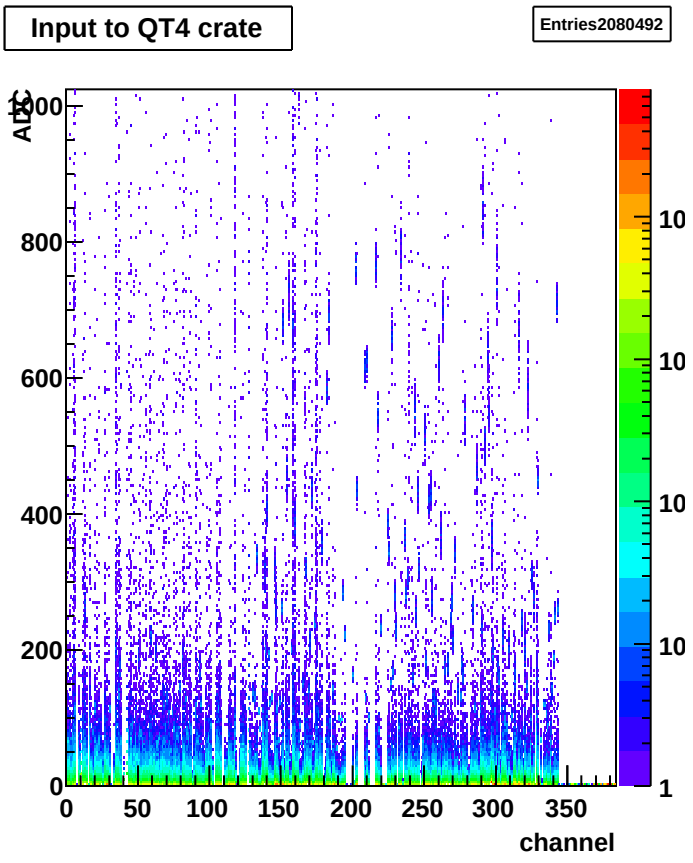

Entries 116904
ZDC East ADC Sum Att
ZDC West ADC Sum Att

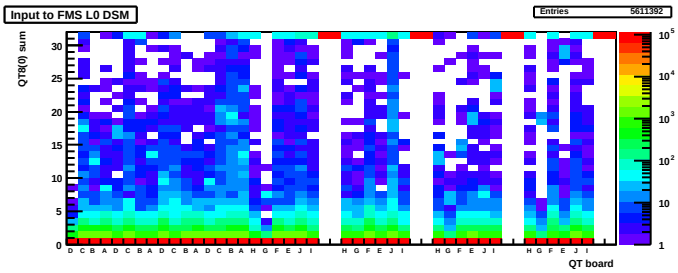

Entries 116904
BBC-L TAC Diff
BCC-S TAC Diff
Entries 116904
BBC-L TAC Diff
VPD TAC Diff
Entries 116904
BBC-L TAC Diff
ZDC TAC Diff
Entries 116904
BBC-S TAC Diff
VPD TAC Diff
Entries 116904
BBC-S TAC Diff
ZDC TAC Diff
Entries 116904
VPD TAC Diff
ZDC TAC Diff

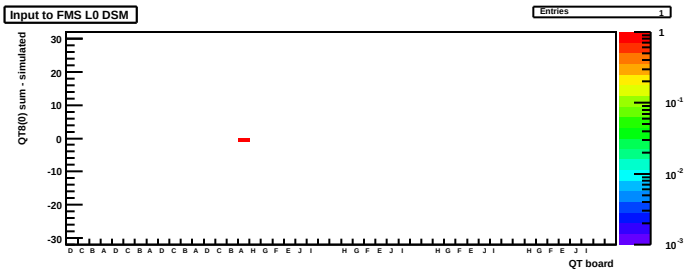

Input to QT1 crate
Entries2942952
ADC
channel

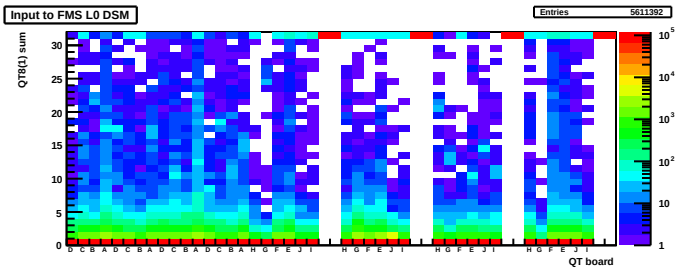

Input to QT2 crate
Entries1978487
ADC
channel

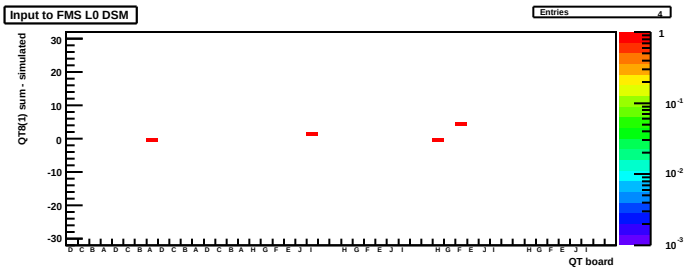

Input to QT3 crate
Entries1757088
ADC
channel

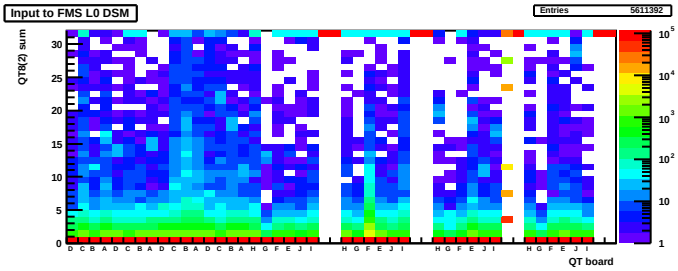

Input to QT4 crate
Entries2080492
ADC
channel

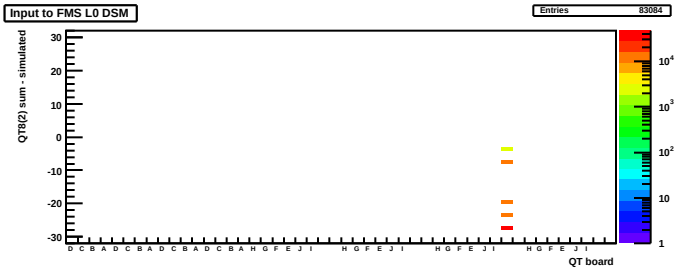

Input to FMS L0 DSM
Entries 5611392
QT8(0) sum
QT board

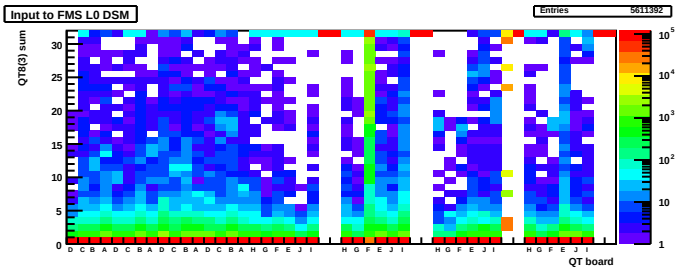

Input to FMS L0 DSM
Entries 1
QT8(0) sum - simulated
QT board

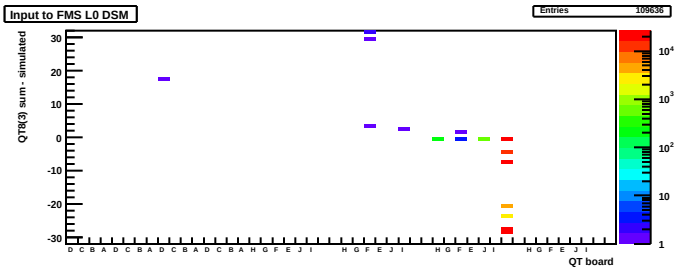

Input to FMS L0 DSM
Entries 5611392
QT8(1) sum
QT board

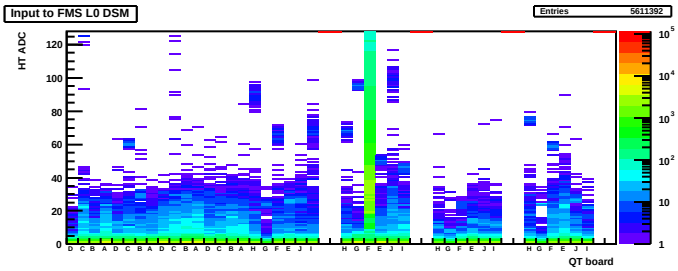

Input to FMS L0 DSM
Entries 4
QT8(1) sum - simulated
QT board

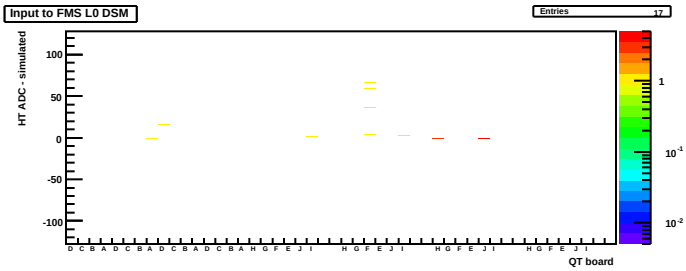

Input to FMS L0 DSM
Entries 5611392
QT8(2) sum
QT board

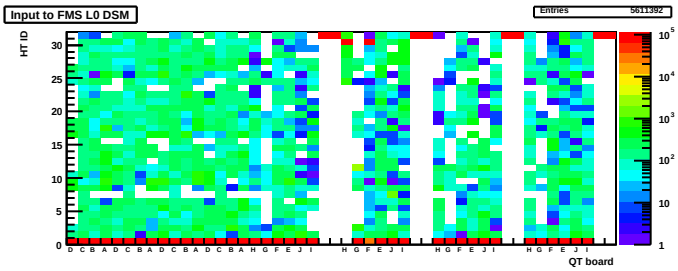

Input to FMS L0 DSM
Entries 83084
QT8(2) sum - simulated
QT board

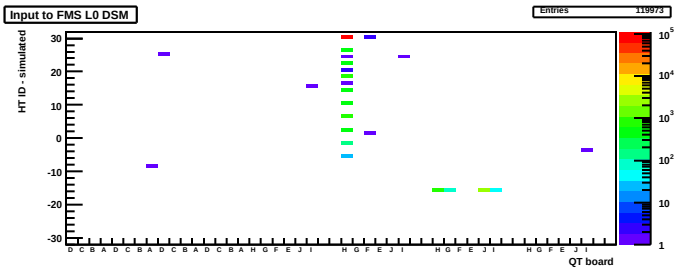

Input to FMS L0 DSM
Entries 5611392
QT8(3) sum
QT board

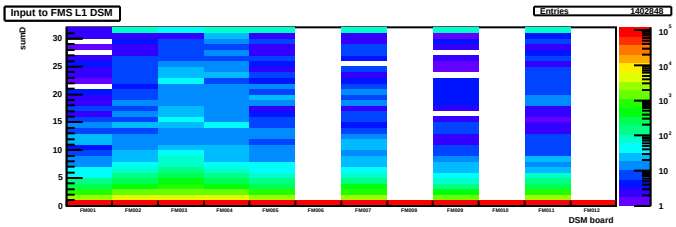

Input to FMS L0 DSM
Entries 109636
QT8(3) sum - simulated
QT board

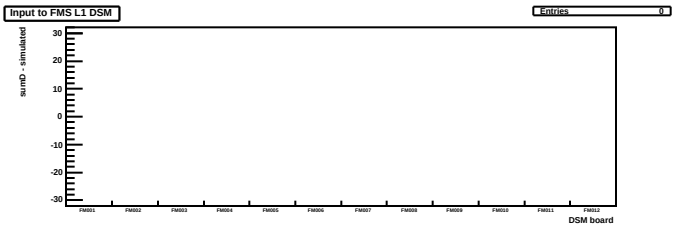

Input to FMS L0 DSM
Entries 5611392
HT ADC
QT board

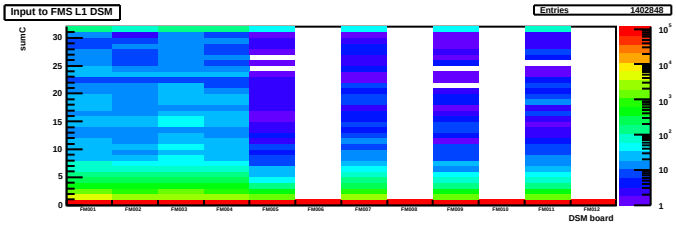

Input to FMS L0 DSM
Entries 17
HT ADC - simulated
QT board

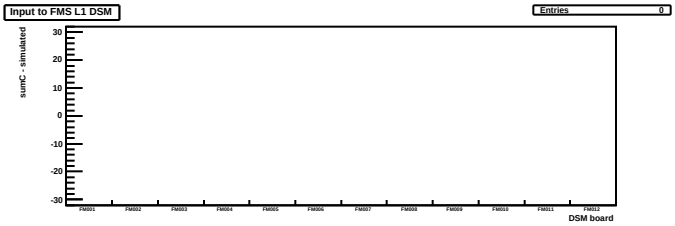

Input to FMS L0 DSM
Entries 5611392
HT ID
QT board

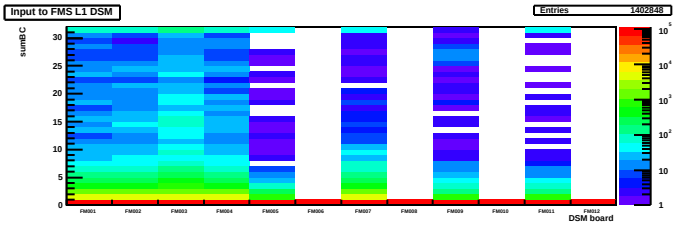

Input to FMS L0 DSM
Entries 119973
HT ID - simulated
QT board

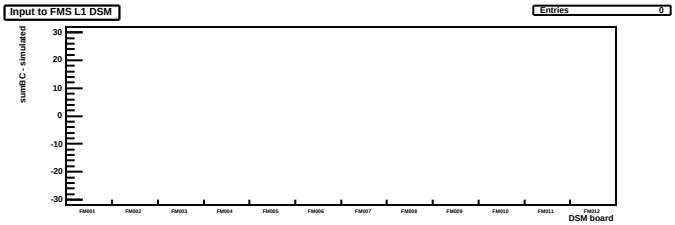

Input to FMS L1 DSM
Entries 1402848
sumD
DSM board

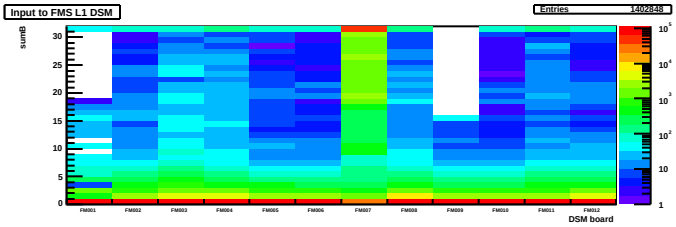

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

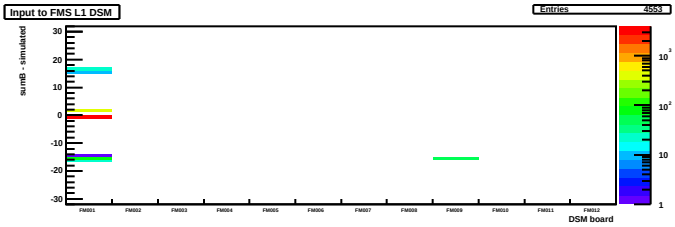

Input to FMS L1 DSM
Entries 1402848
sumC
DSM board

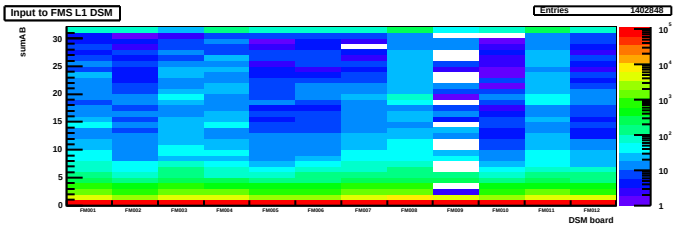

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

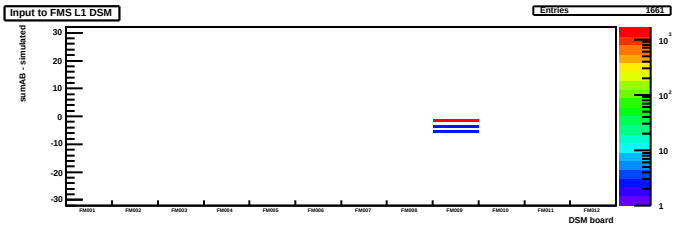

Input to FMS L1 DSM
Entries 1402848
sumBC
DSM board

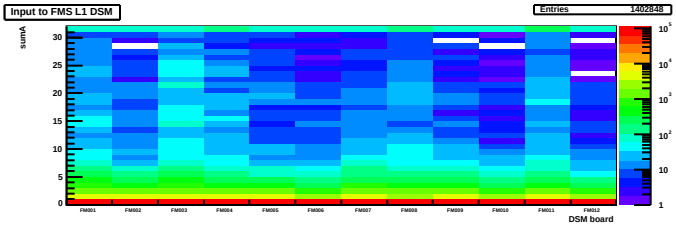

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

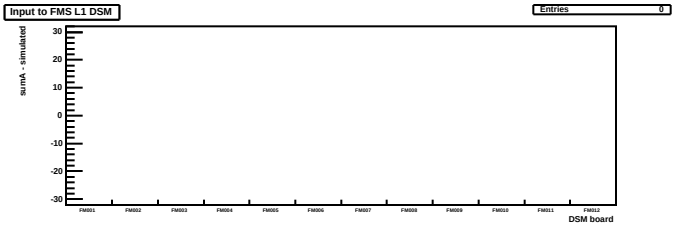

Input to FMS L1 DSM
Entries 1402848
sumB
DSM board

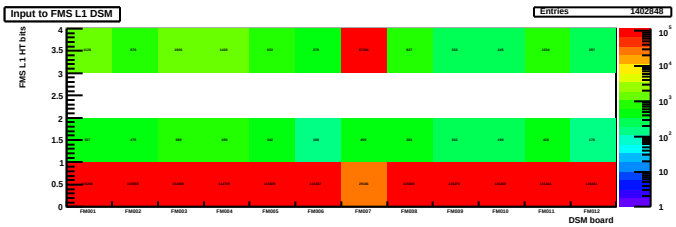

Input to FMS L1 DSM
Entries 4553
sumB - simulated
DSM board

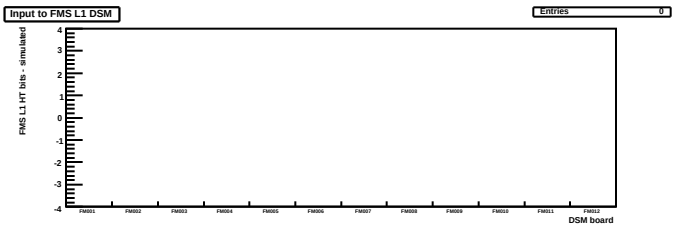

Input to FMS L1 DSM
Entries 1402848
sumAB
DSM board

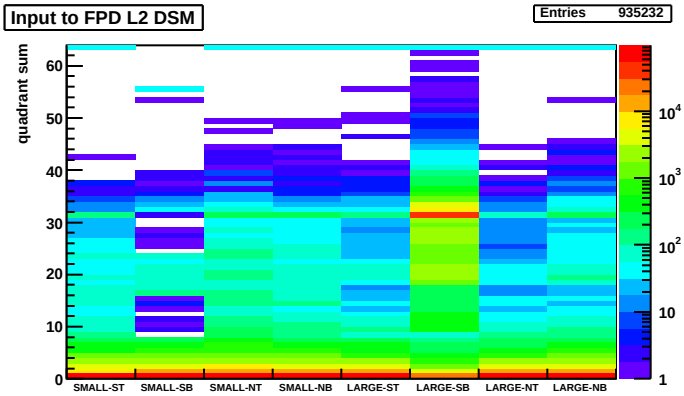

Input to FMS L1 DSM
Entries 1661
sumAB - simulated
DSM board

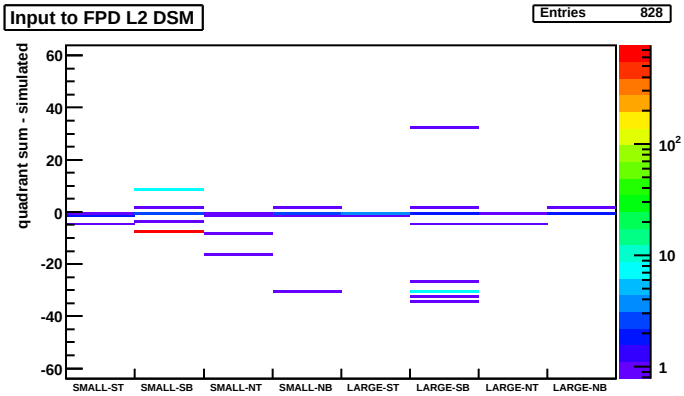

Input to FMS L1 DSM
Entries 1402848
sumA
DSM board

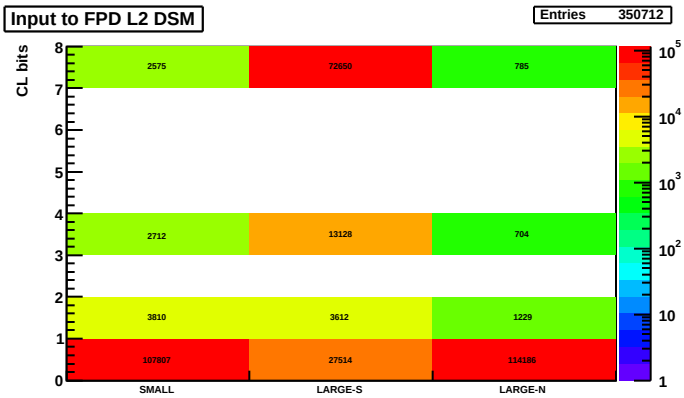

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

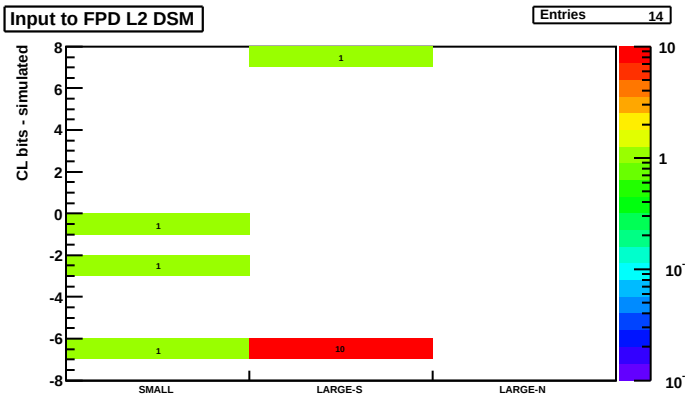

Input to FMS L1 DSM
Entries 1402848
FMS L1 HT bits
DSM board

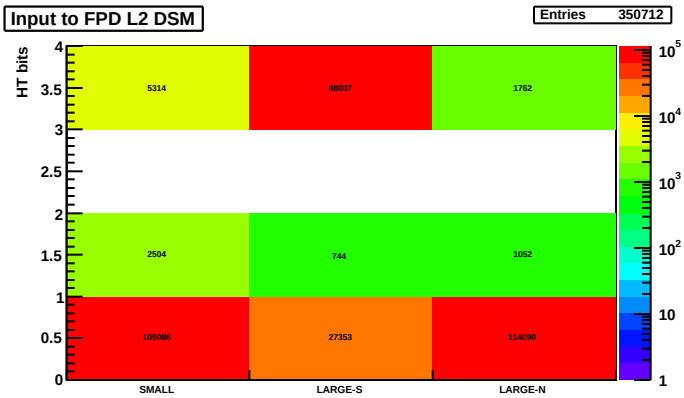

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

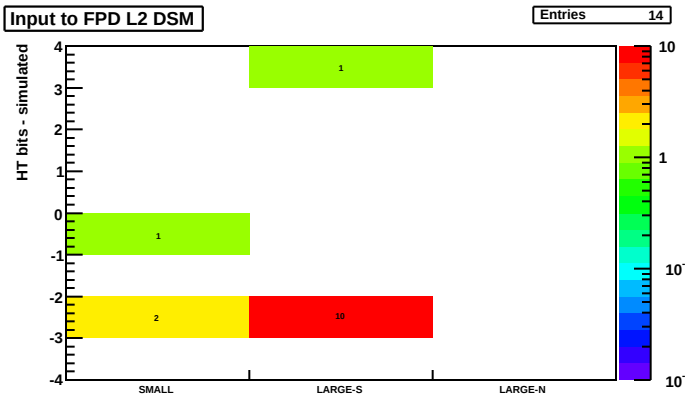

Input to FPD L2 DSM
Entries 935232
quadrant sum
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

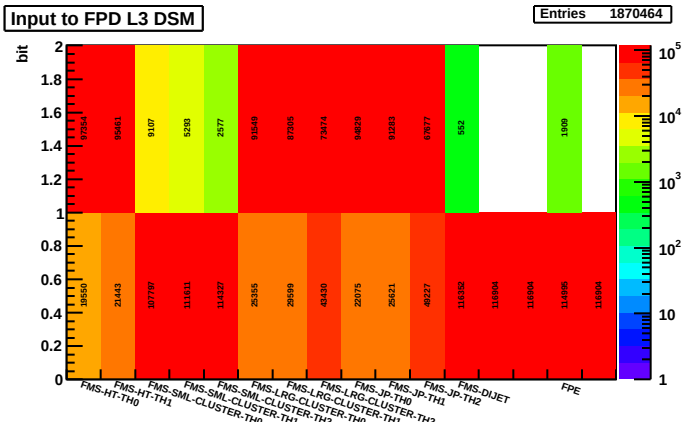

Input to FPD L2 DSM
Entries 828
quadrant sum - simulated
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

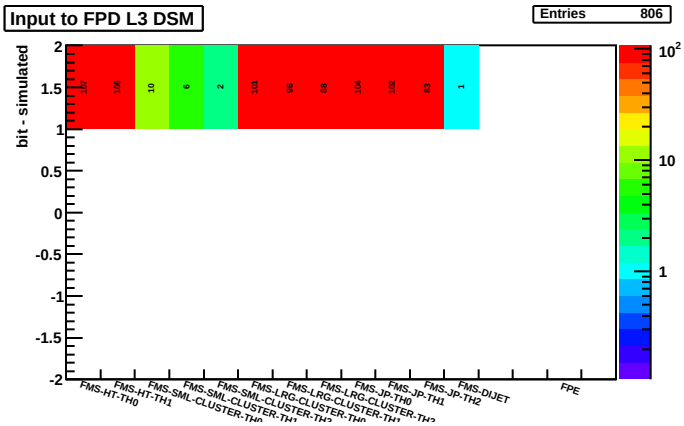

Input to FPD L2 DSM
Entries 350712
CL bits
2575
72650
785
2712
13128
704
3810
3612
1229
107807
27514
114186
SMALL
LARGE-S
LARGE-N

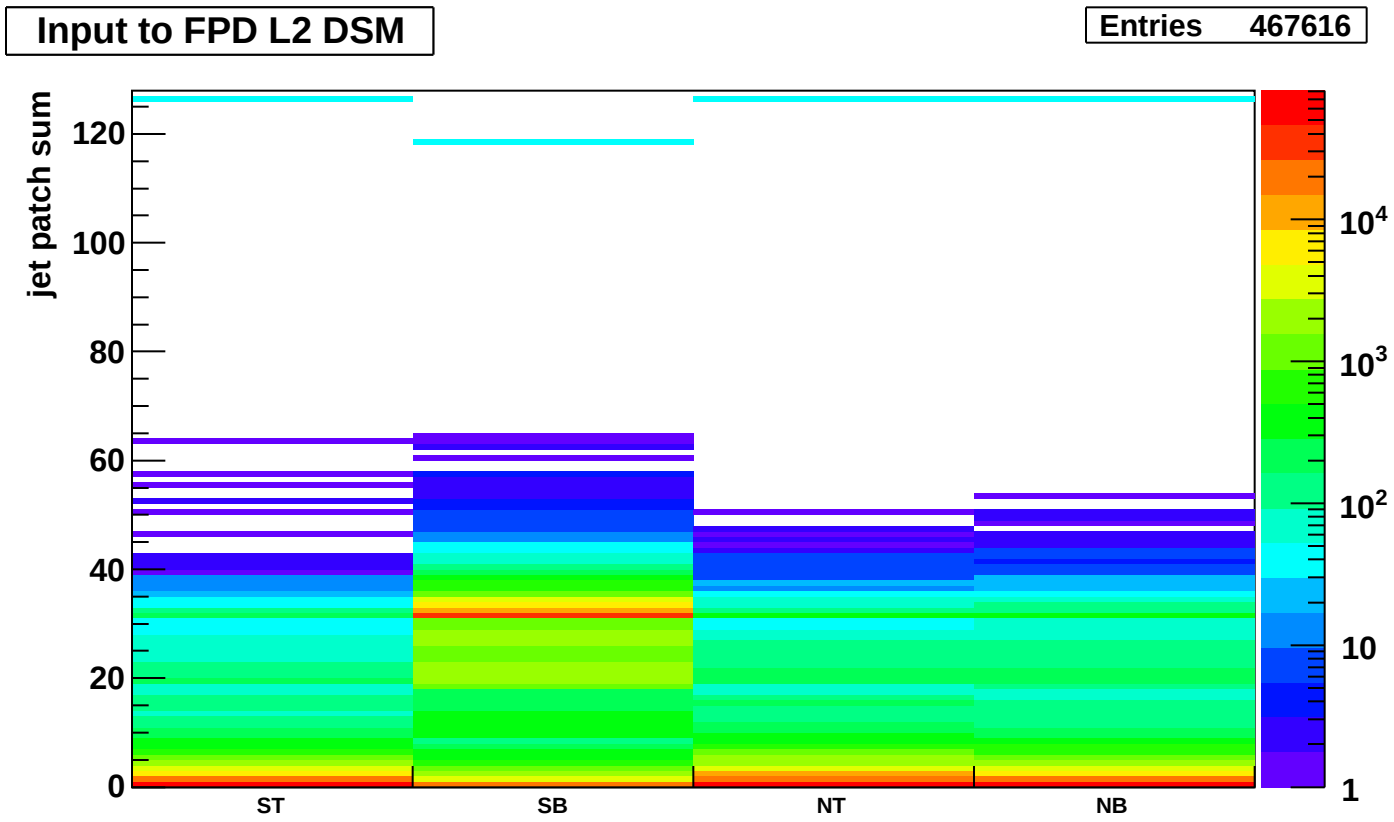

Input to FPD L2 DSM
Entries 14
CL bits - simulated
1
1
1
1
10
SMALL
LARGE-S
LARGE-N

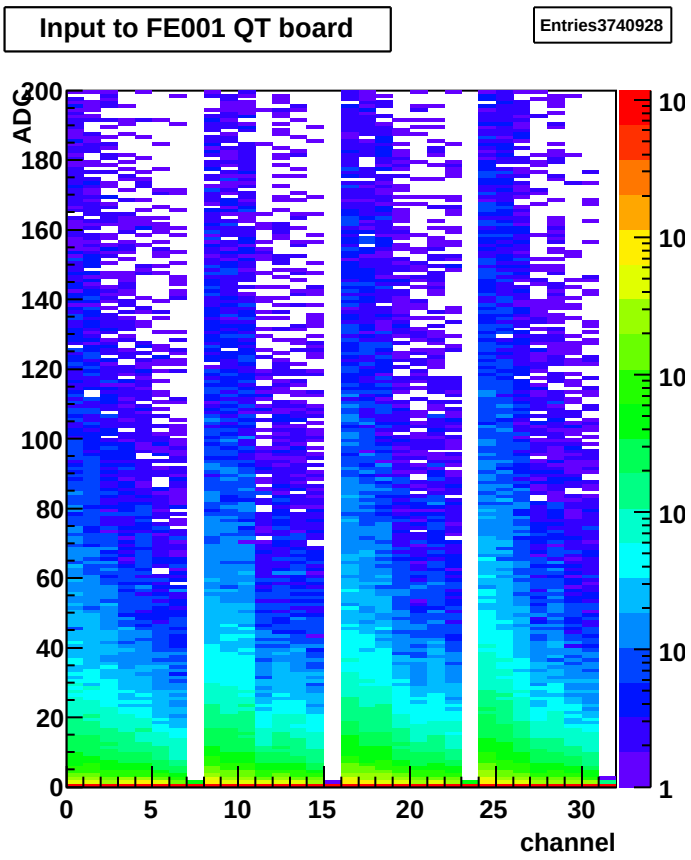

Input to FPD L2 DSM
Entries 350712
HT bits
5314
88807
1762
2504
744
1052
109086
27353
114090
SMALL
LARGE-S
LARGE-N

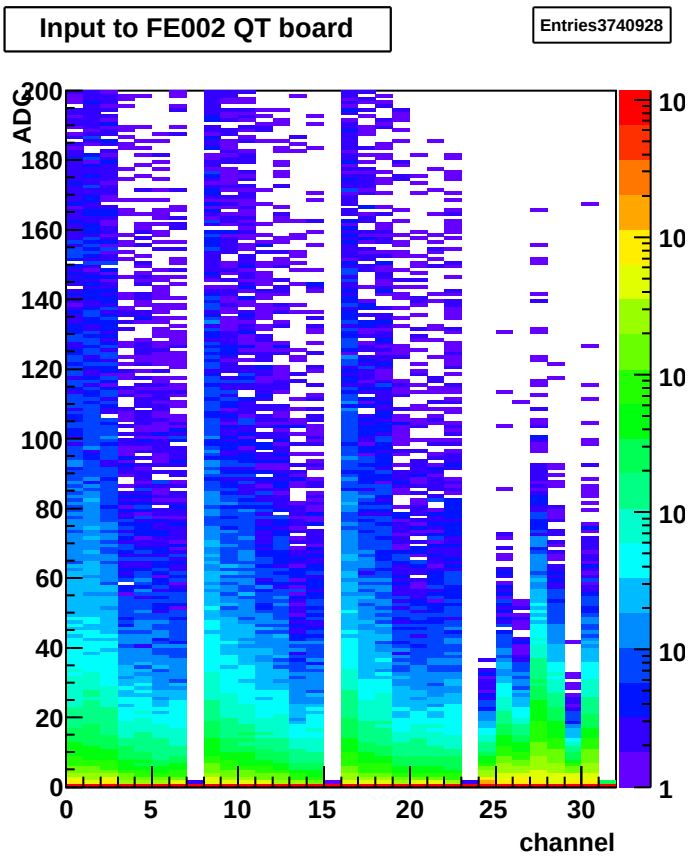

Input to FPD L2 DSM
Entries 14
HT bits - simulated
1
1
2
10
SMALL
LARGE-S
LARGE-N

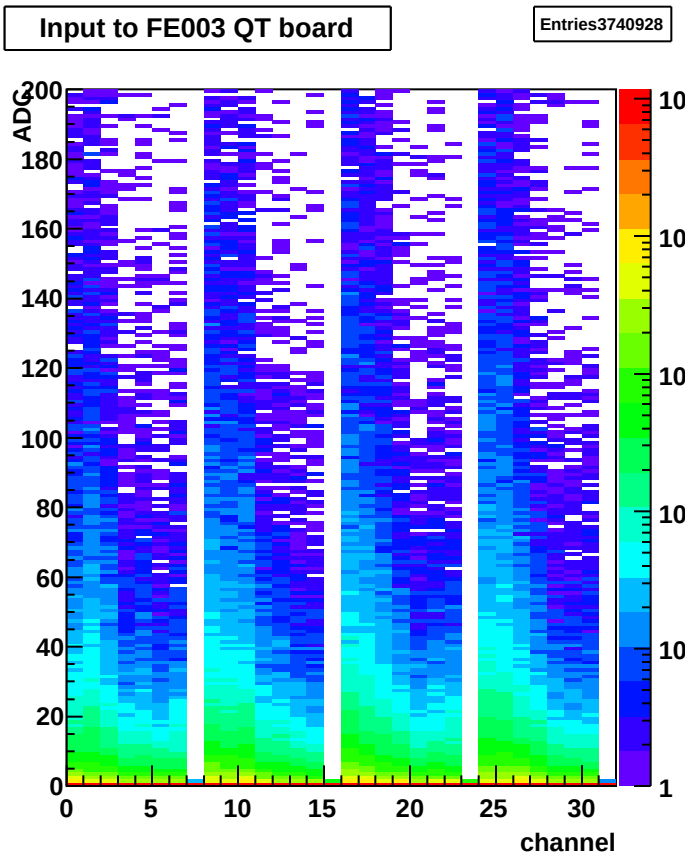

Input to FPD L3 DSM
Entries 1870464
bit
97334
95461
9107
5293
2577
91549
87205
73474
94829
91283
67677
552
1909
18580
21443
107797
111611
114327
25355
29599
43430
22075
25621
48227
116352
116904
116904
114995
116904
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

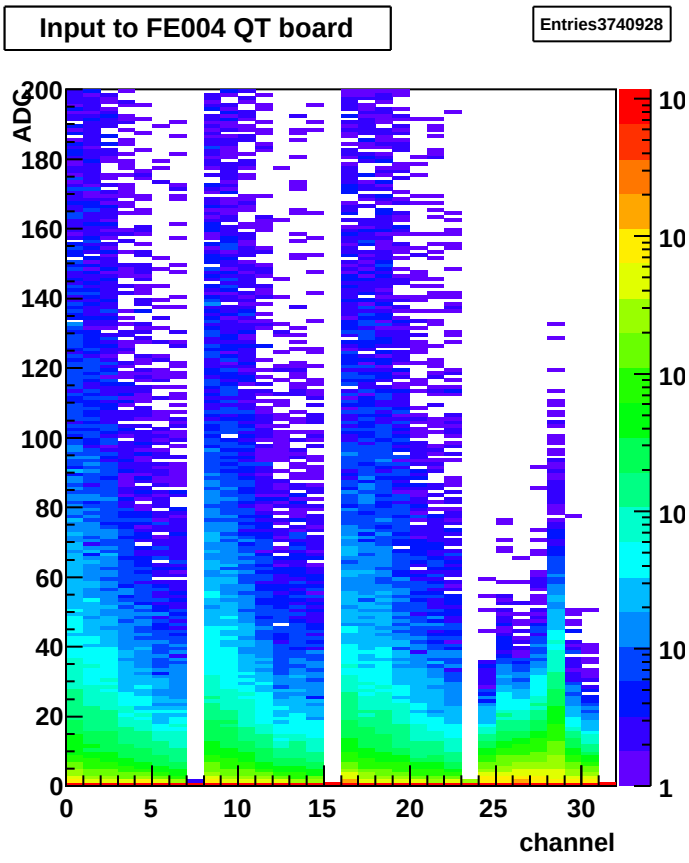

Input to FPD L3 DSM
Entries 806
bit - simulated
107
106
10
6
2
101
96
88
104
102
83
1
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

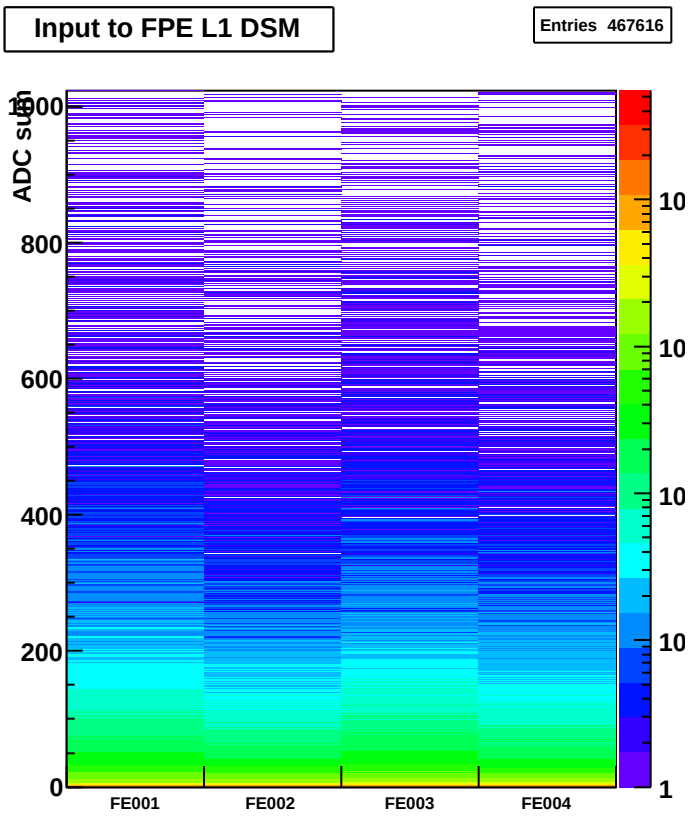

Input to FPD L2 DSM
Entries 467616
jet patch sum
0
20
40
60
80
100
120
ST
SB
NT
NB
1
10
10^2
10^3
10^4

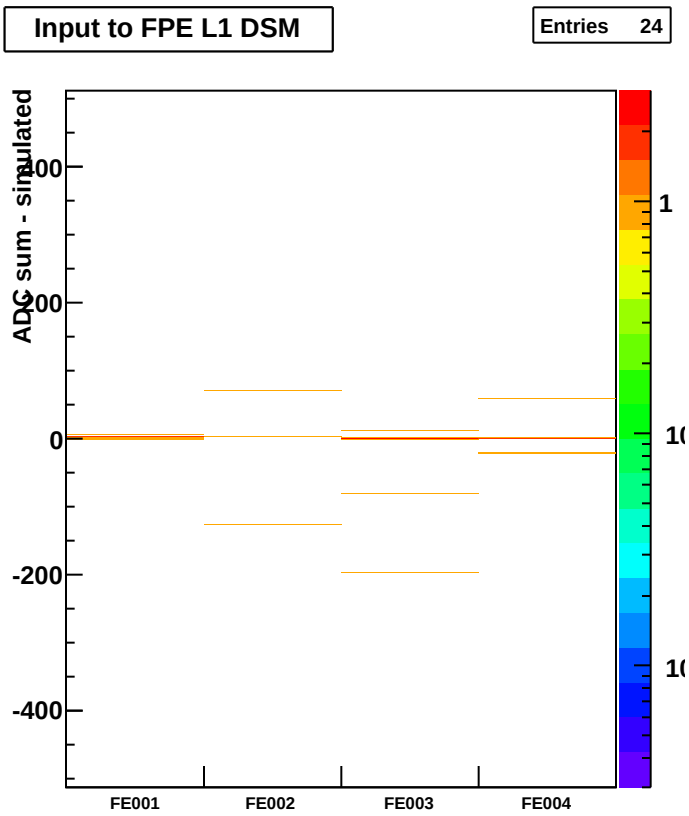

Input to FE001 QT board
Entries3740928
ADC
channel

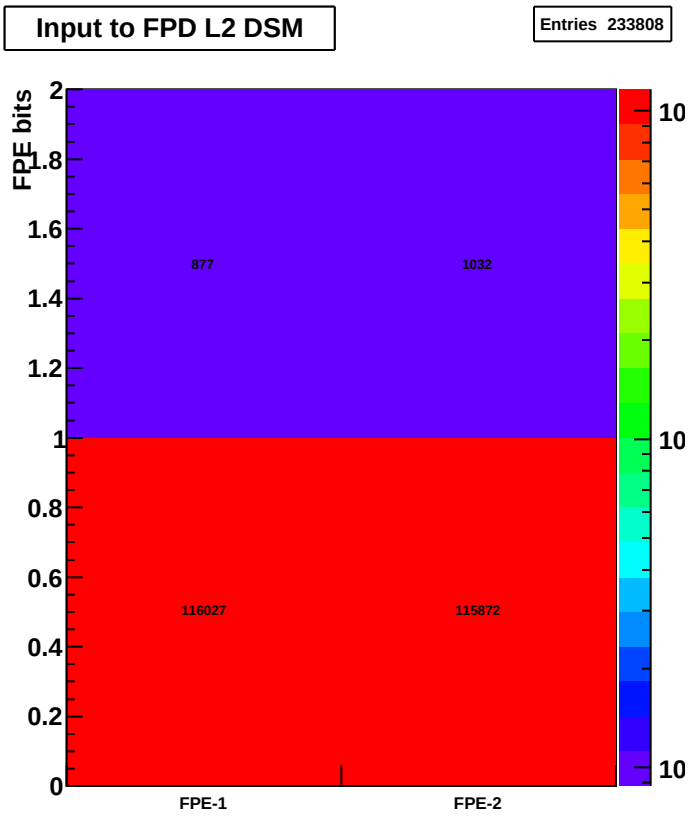

Input to FE002 QT board
Entries3740928
ADC
channel

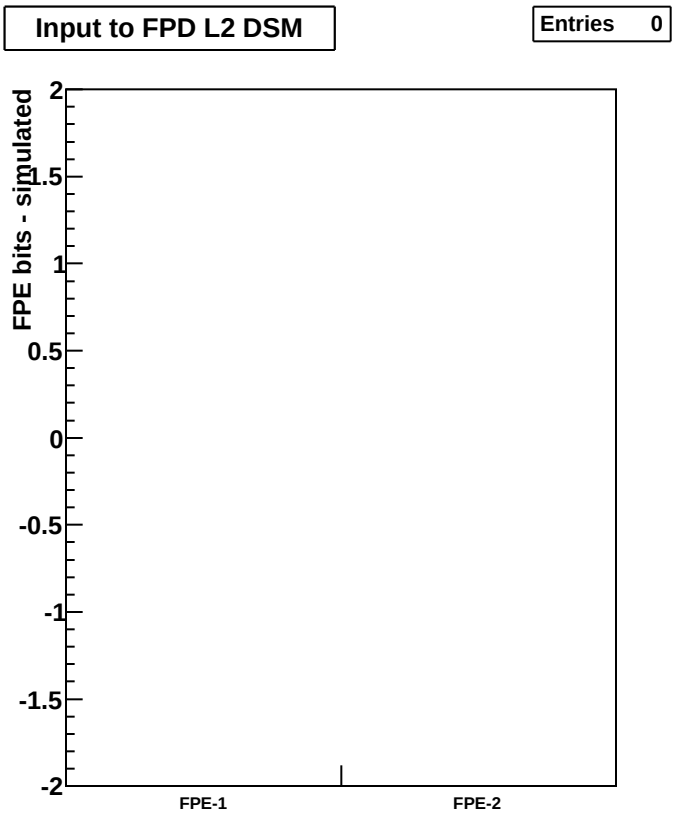

Input to FE003 QT board
Entries3740928
ADC
channel


Input to FE004 QT board
Entries3740928
ADC
channel


Input to FPE L1 DSM
Entries 467616
ADC sum
1000
800
600
400
200
0
FE001
FE002
FE003
FE004
10
10
10
10
1


Input to FPE L1 DSM
Entries 24
ADC sum - simulated
400
200
0
-200
-400
FE001
FE002
FE003
FE004
1


Input to FPD L2 DSM
Entries 233808
FPE bits
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
877
1032
116027
115872
FPE-1
FPE-2
10
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