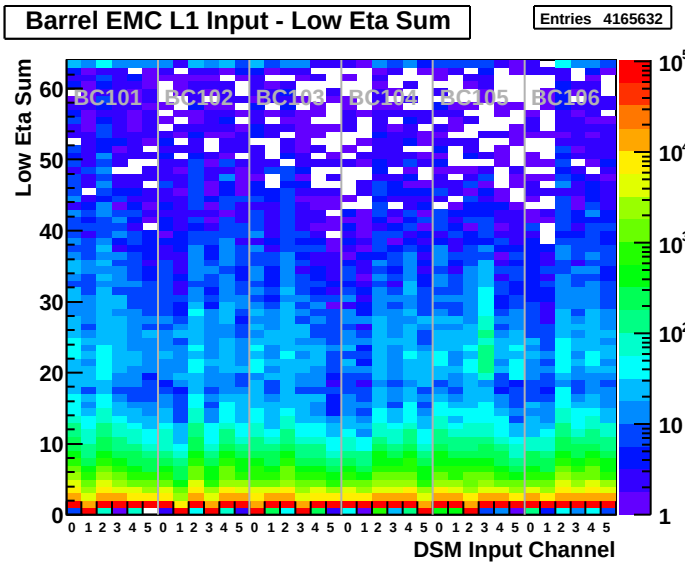
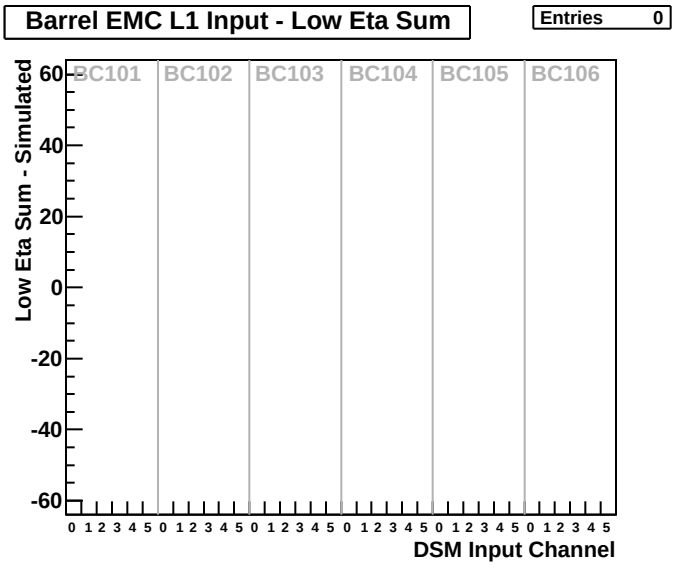
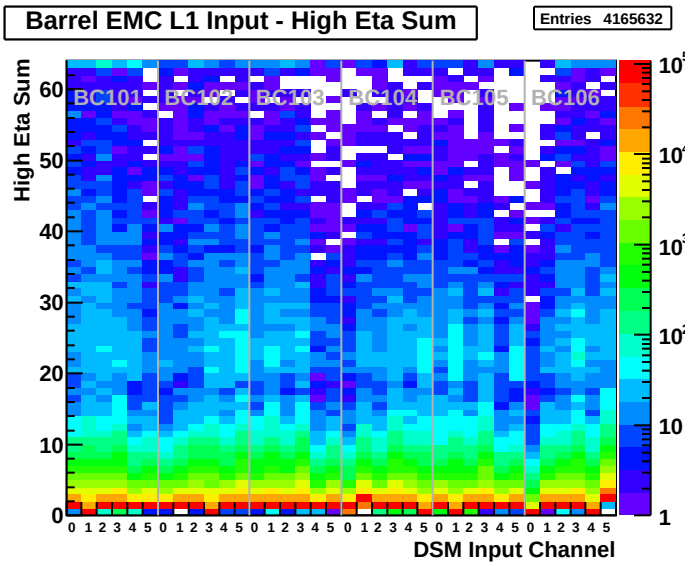
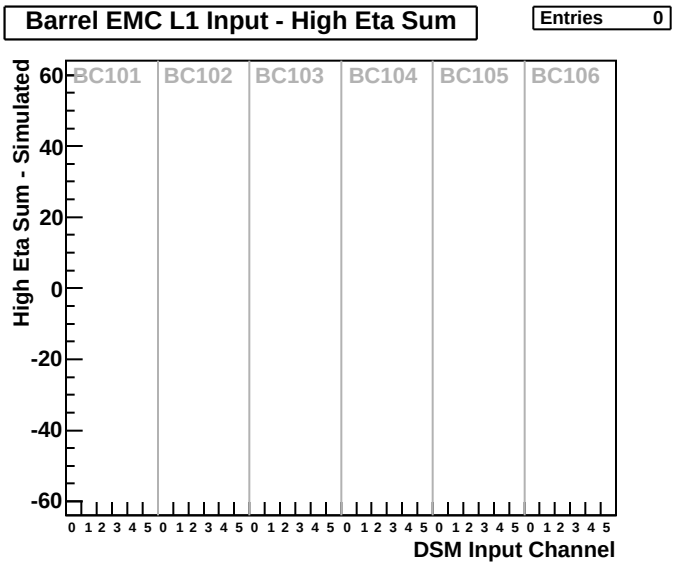
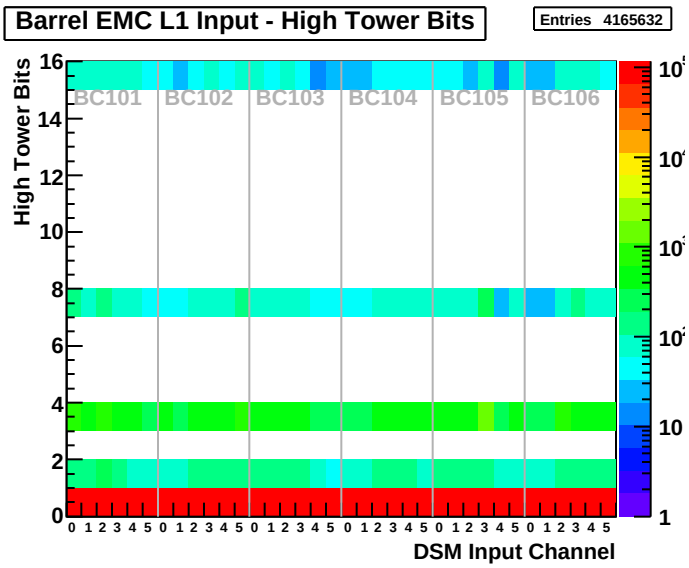
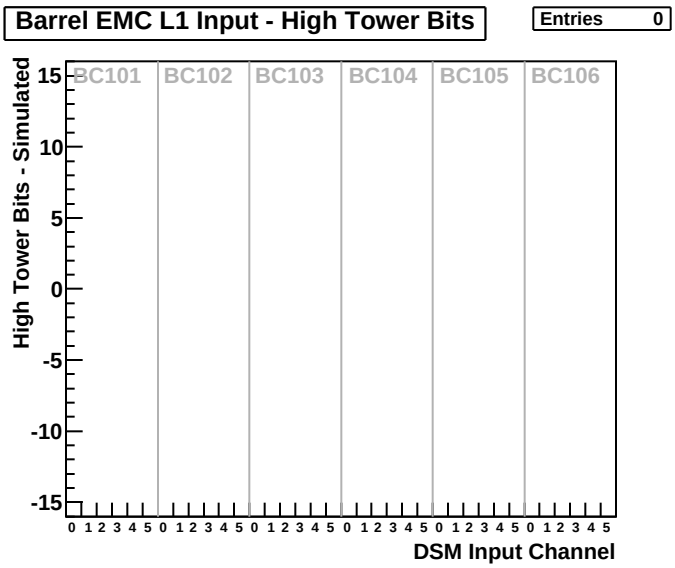

Barrel EMC L1 Input - Low Eta Sum
Entries 4165632
Low Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

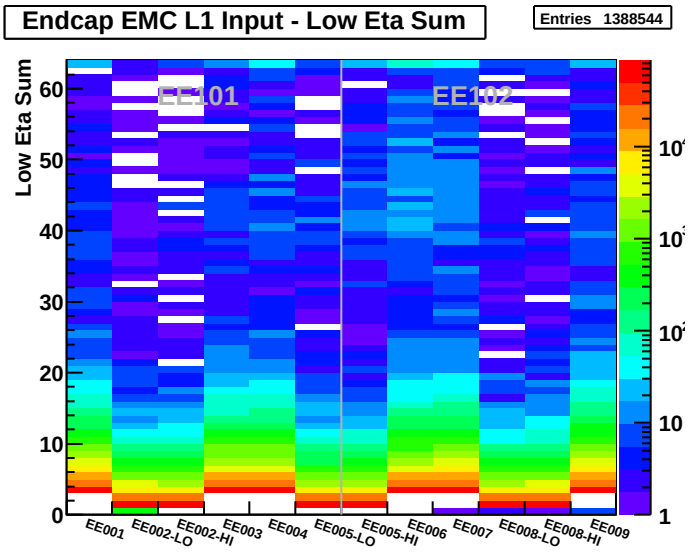

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

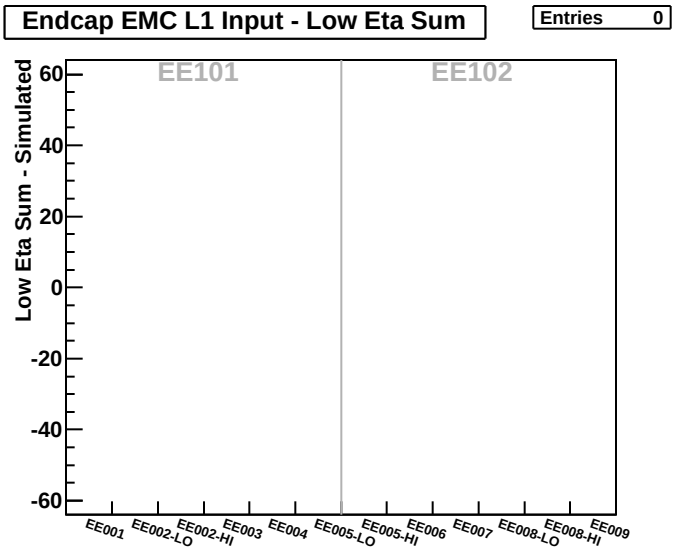

Barrel EMC L1 Input - High Eta Sum
Entries 4165632
High Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

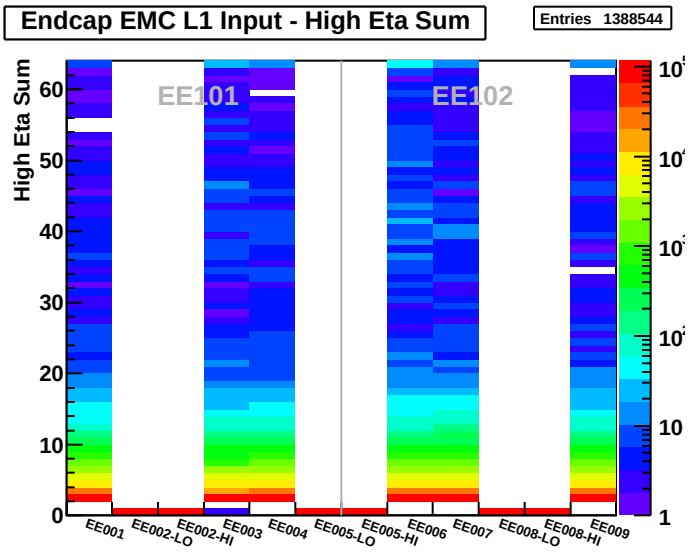

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

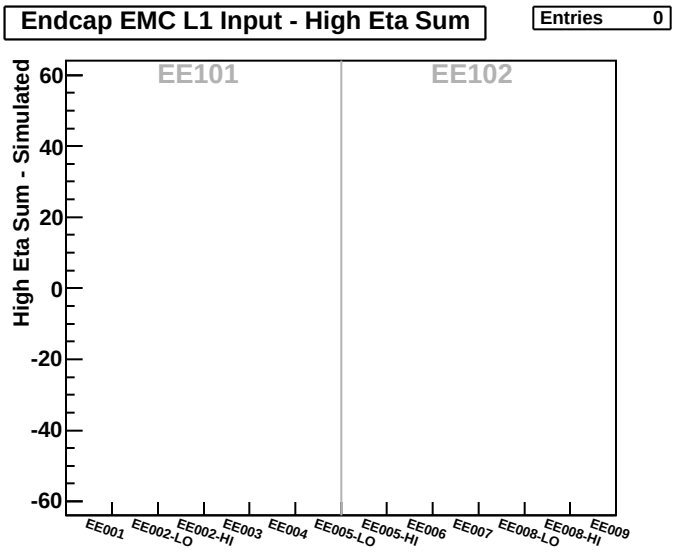

Barrel EMC L1 Input - High Tower Bits
Entries 4165632
High Tower Bits
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

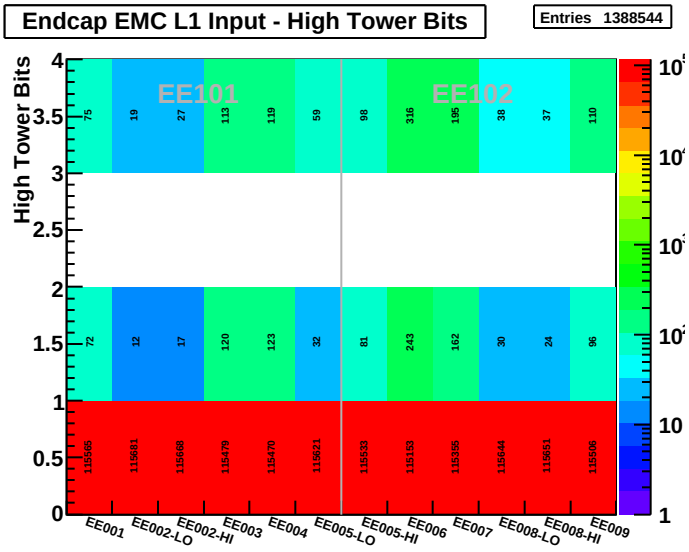

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

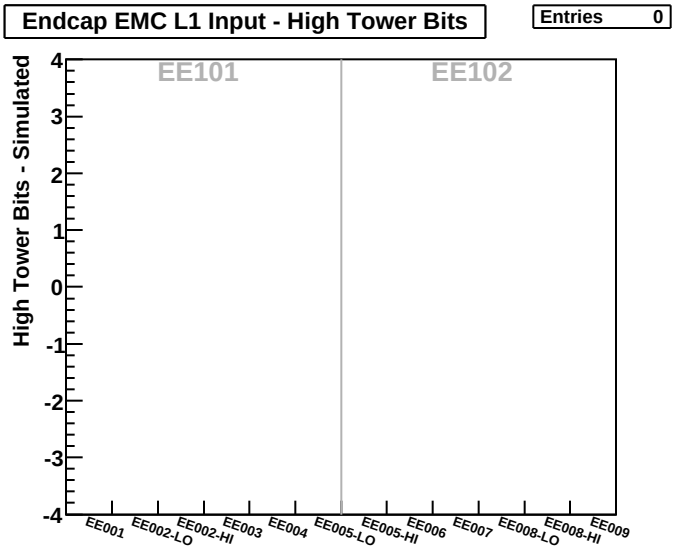

Endcap EMC L1 Input - Low Eta Sum
Entries 1388544
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

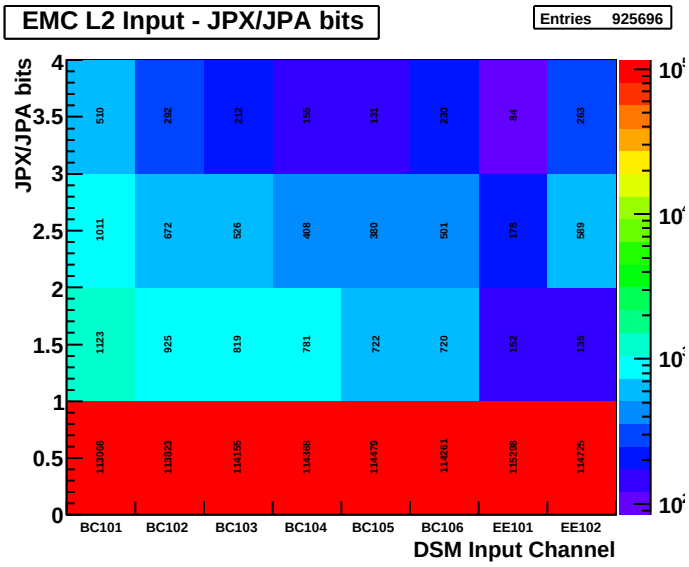

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

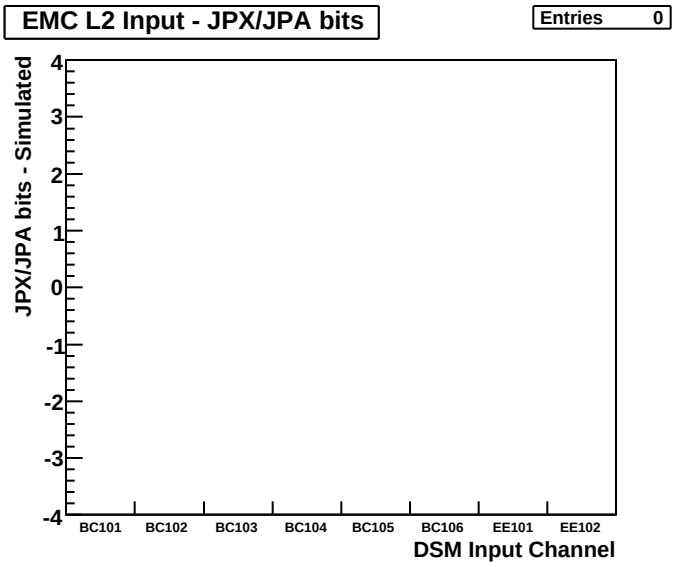

Endcap EMC L1 Input - High Eta Sum
Entries 1388544
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

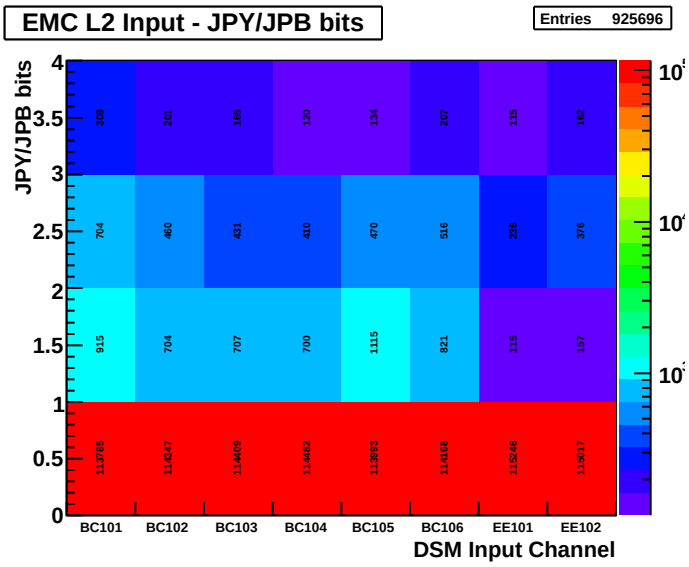

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

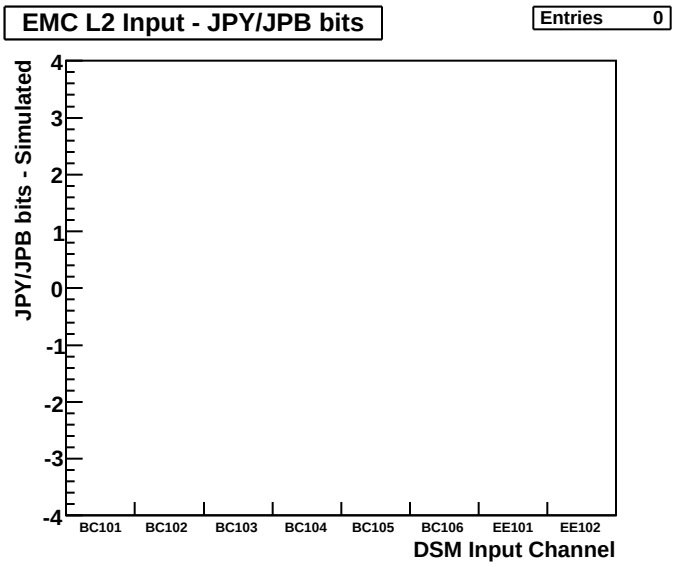

Endcap EMC L1 Input - High Tower Bits
Entries 1388544
High Tower Bits
EE101
EE102
75 19 27 113 119 59 98 316 195 38 37 110
72 12 17 120 123 32 81 243 162 30 24 96
115565 115681 115668 115479 115470 115621 115533 115153 115365 115644 115651 115506
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

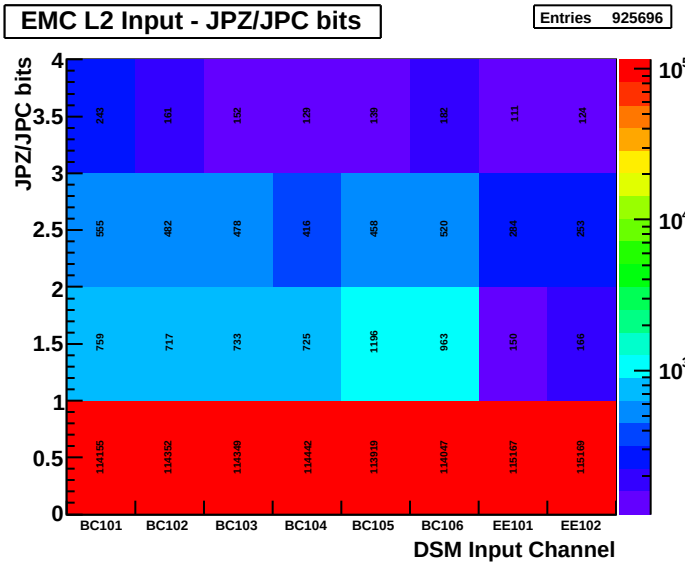

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

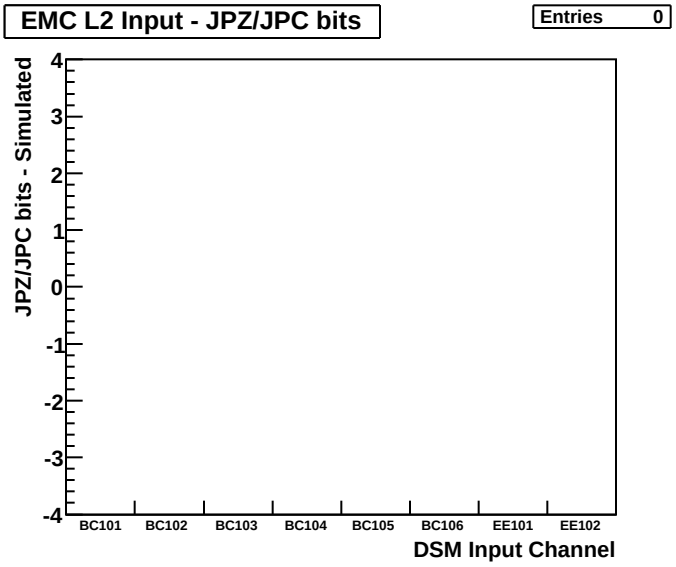

EMC L2 Input - JPX/JPA bits
Entries 925696
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
510 292 212 155 131 230 84 263
1011 672 526 408 380 501 178 589
1123 925 819 781 722 720 152 135
113068 113823 114155 114388 114479 114261 115298 114725

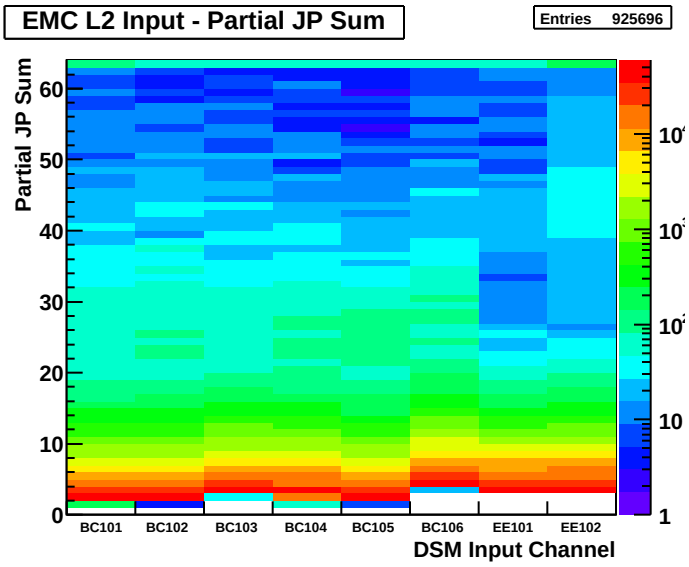

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

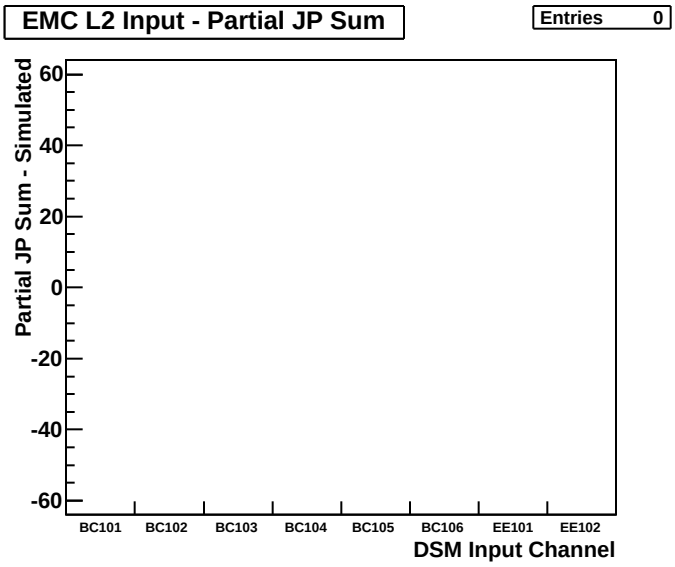

EMC L2 Input - JPY/JPB bits
Entries 925696
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
306 201 165 120 134 207 115 162
704 460 431 410 470 516 238 376
915 704 707 700 1115 821 115 157
113785 114347 114409 114482 113993 114168 115246 115017

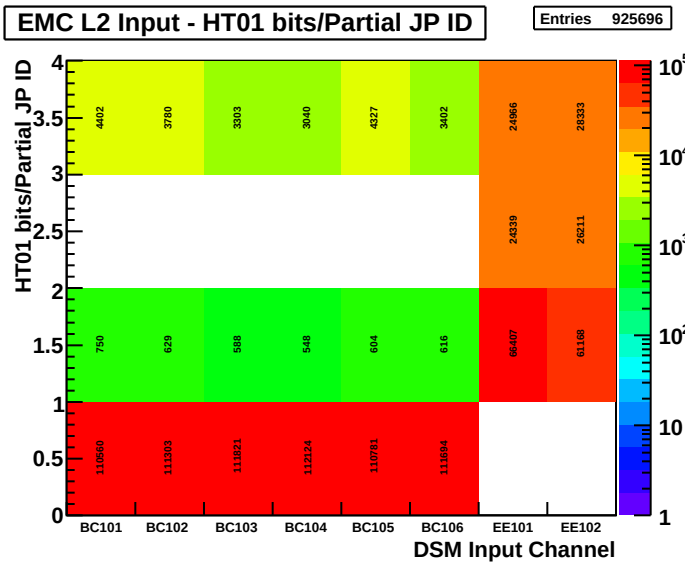

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

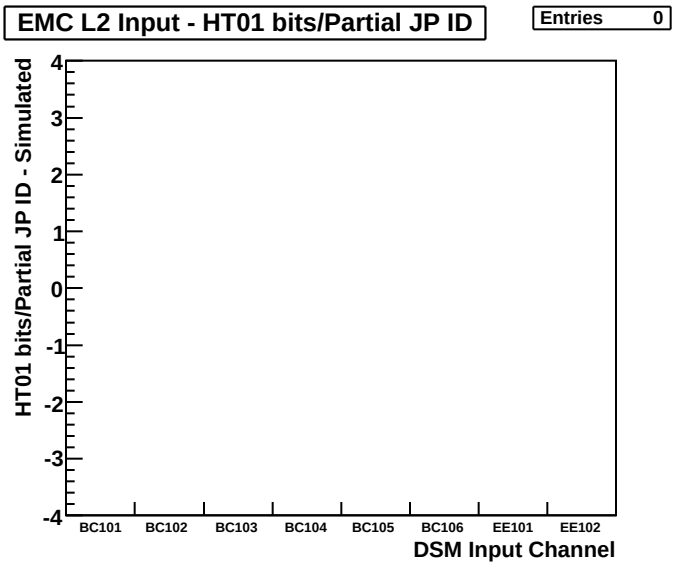

EMC L2 Input - JPZ/JPC bits
Entries 925696
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
243 161 152 129 139 182 111 124
555 482 478 416 458 520 284 253
759 717 733 725 1196 963 150 166
114155 114352 114349 114442 113919 114047 115167 115169

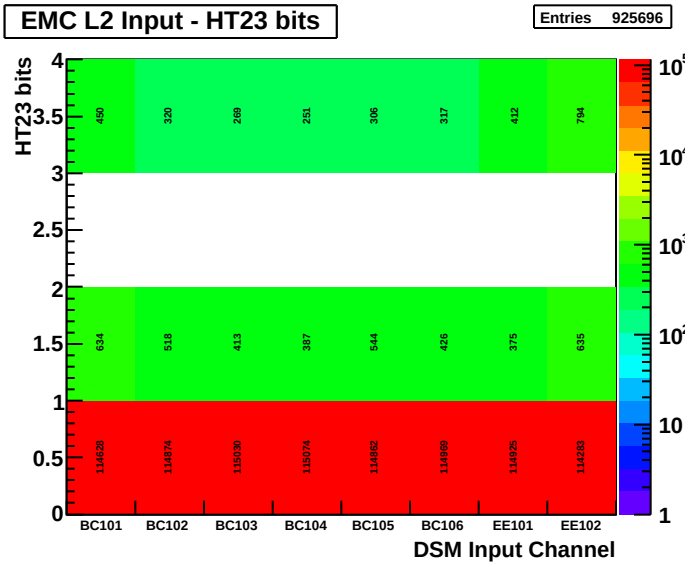

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

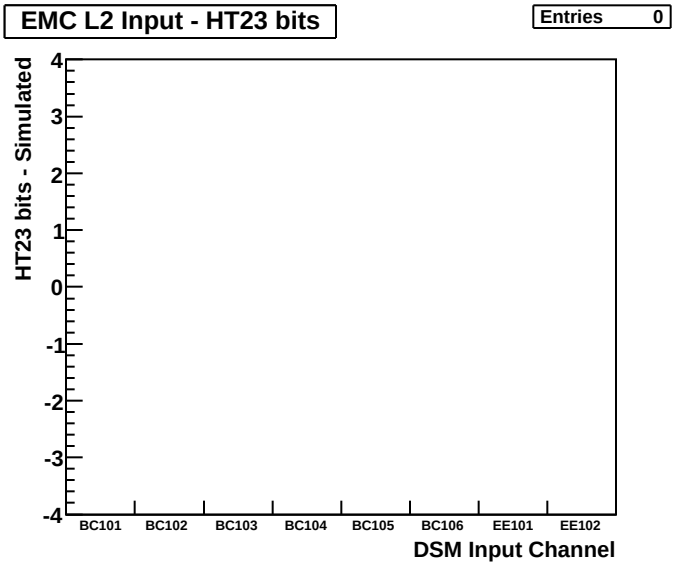

EMC L2 Input - Partial JP Sum
Entries 925696
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

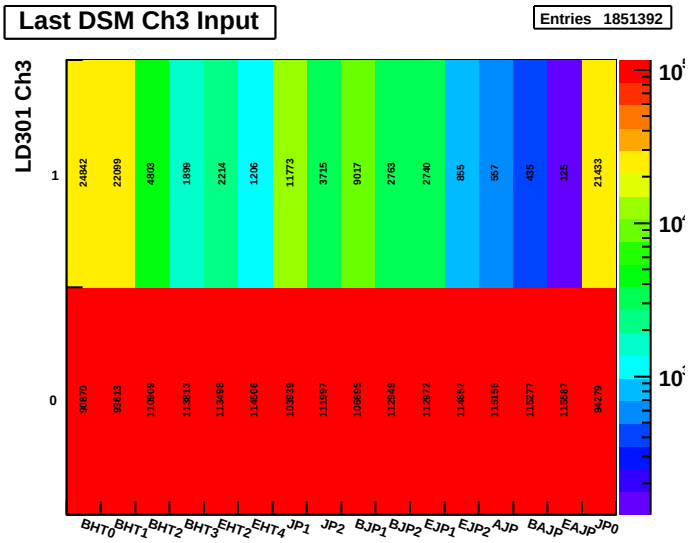

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

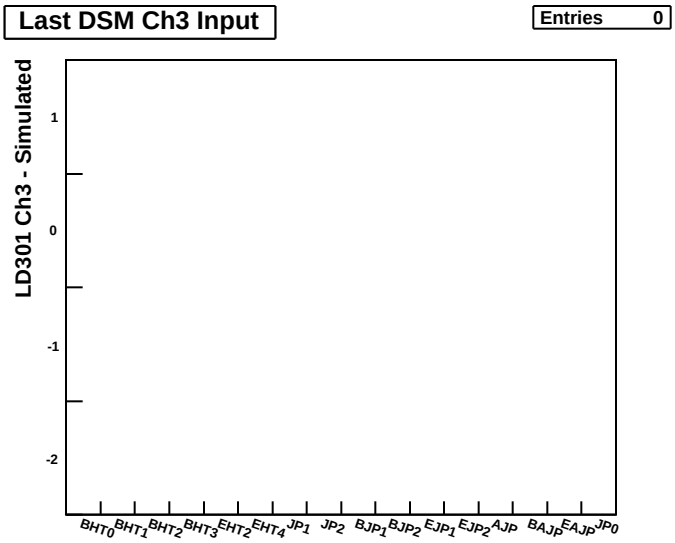

EMC L2 Input - HT01 bits/Partial JP ID
Entries 925696
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

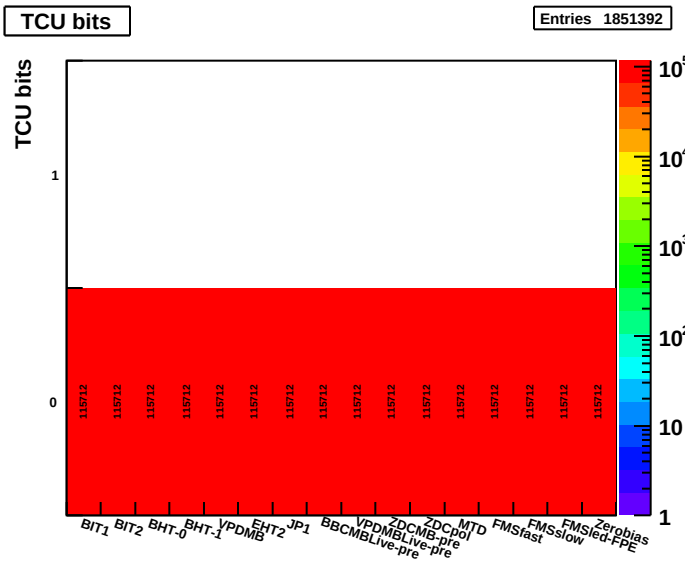

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

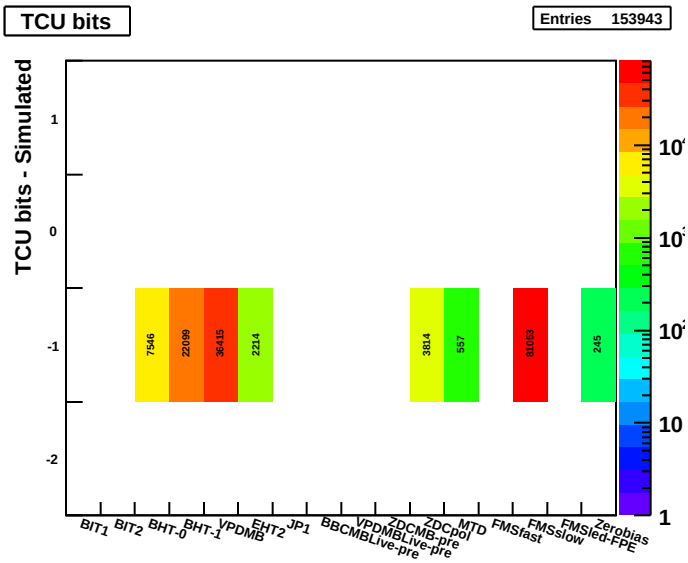

EMC L2 Input - HT23 bits
Entries 925696
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

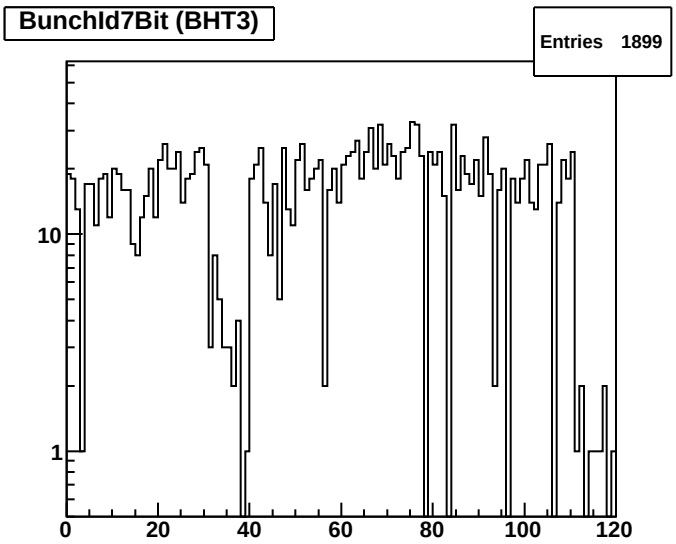

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

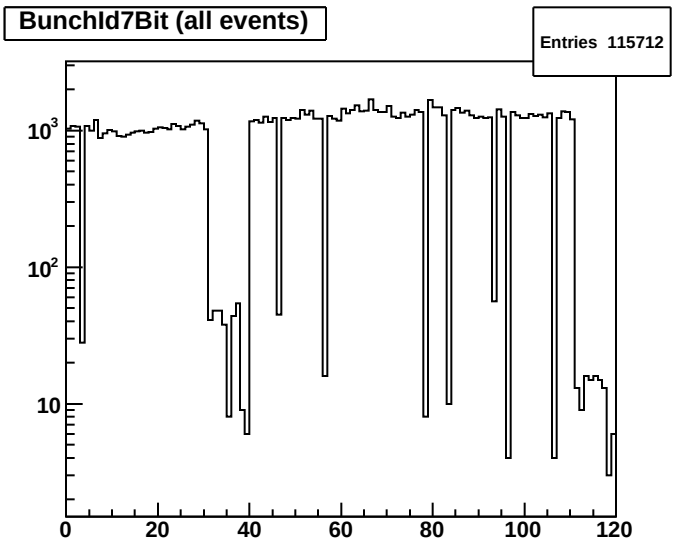

Last DSM Ch3 Input
Entries 1851392
LD301 Ch3
24942 22099 4803 1899 2214 1206 11773 3715 9017 2763 2740 855 557 435 125 21433
90870 93613 110909 113813 113498 114506 103939 111997 106695 112949 112972 114857 115155 115277 115587 94279
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

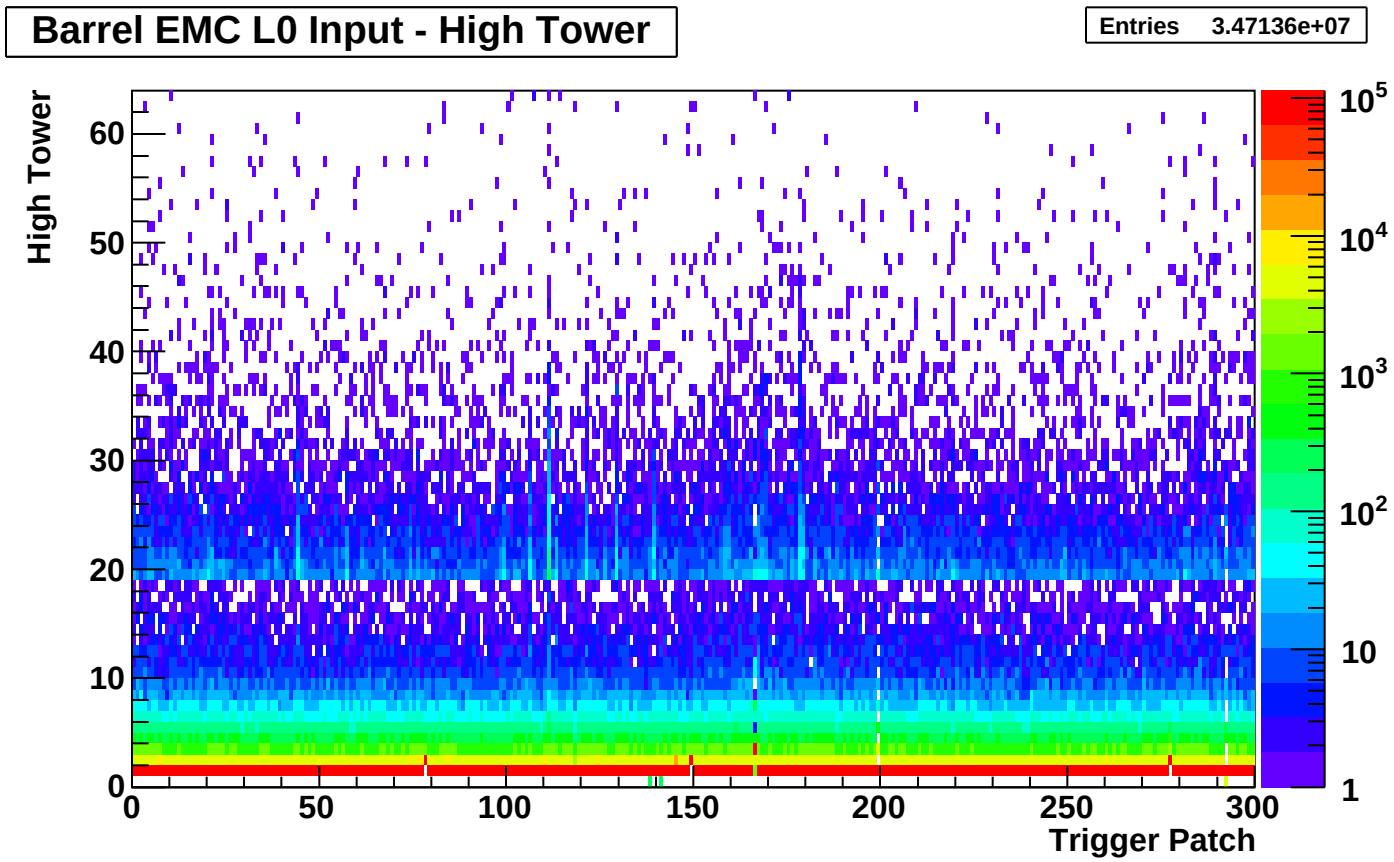

Last DSM Ch3 Input
Entries 0
LD301 Ch3 - Simulated
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

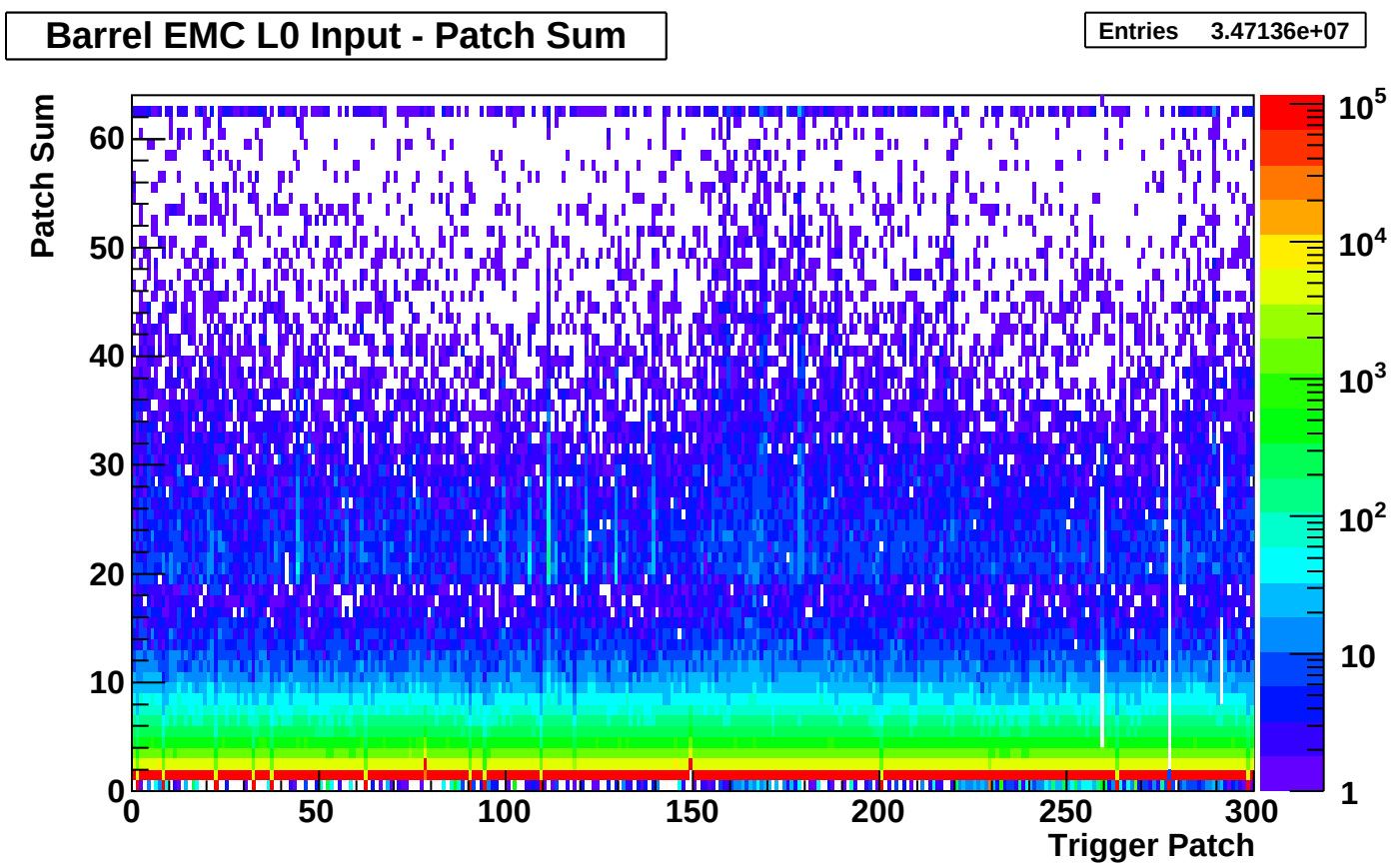

TCU bits
Entries 1851392
TCU bits
115712 115712 115712 115712 115712 115712 115712 115712 115712 115712 115712 115712 115712 115712 115712 115712
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDC-pol MTD FMSfast FMSslow FMSled-FPE Zerobias

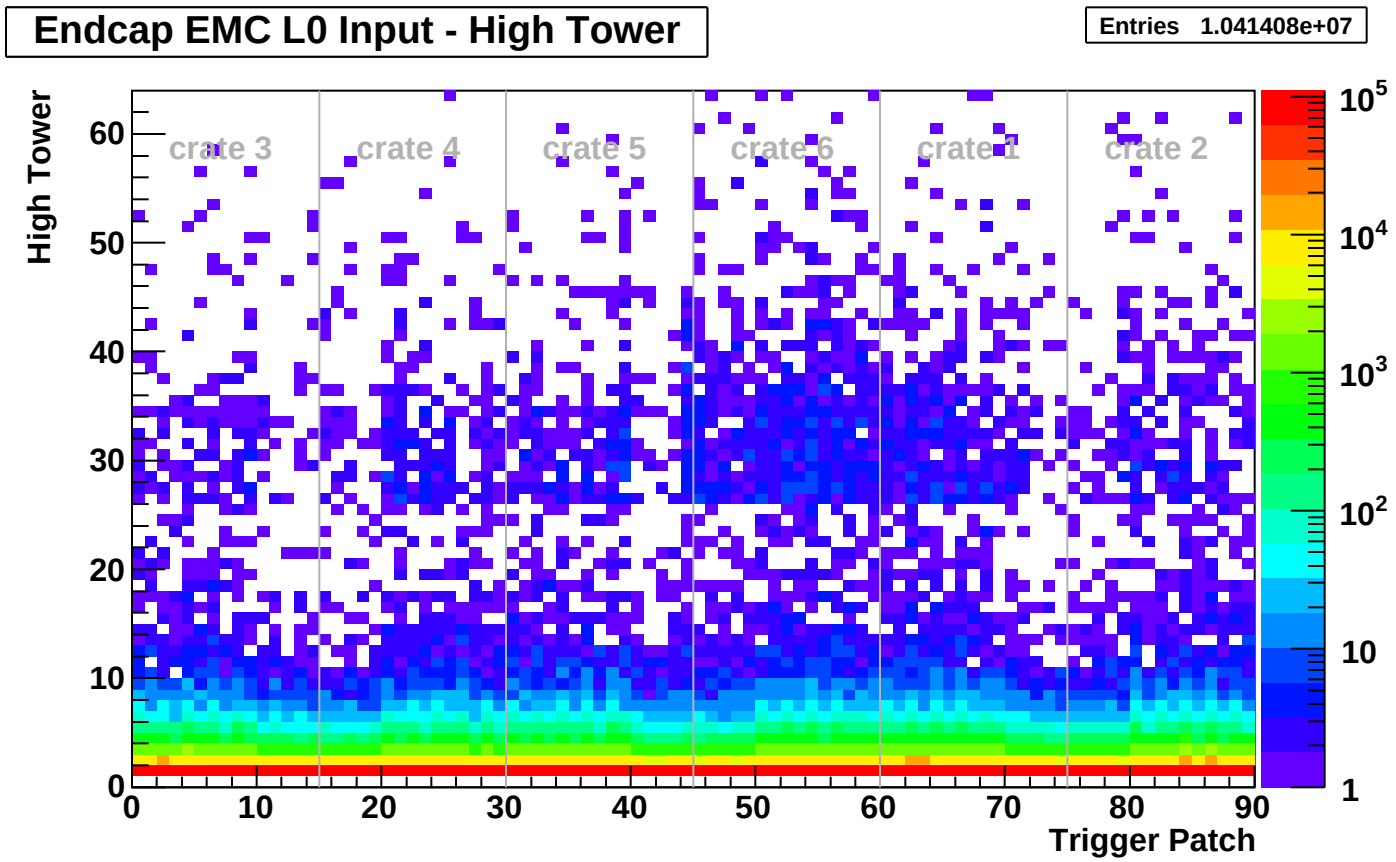

TCU bits
Entries 153943
TCU bits - Simulated
7546 22099 36415 2214 3814 557 81053 245
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDC-pol MTD FMSfast FMSslow FMSled-FPE Zerobias

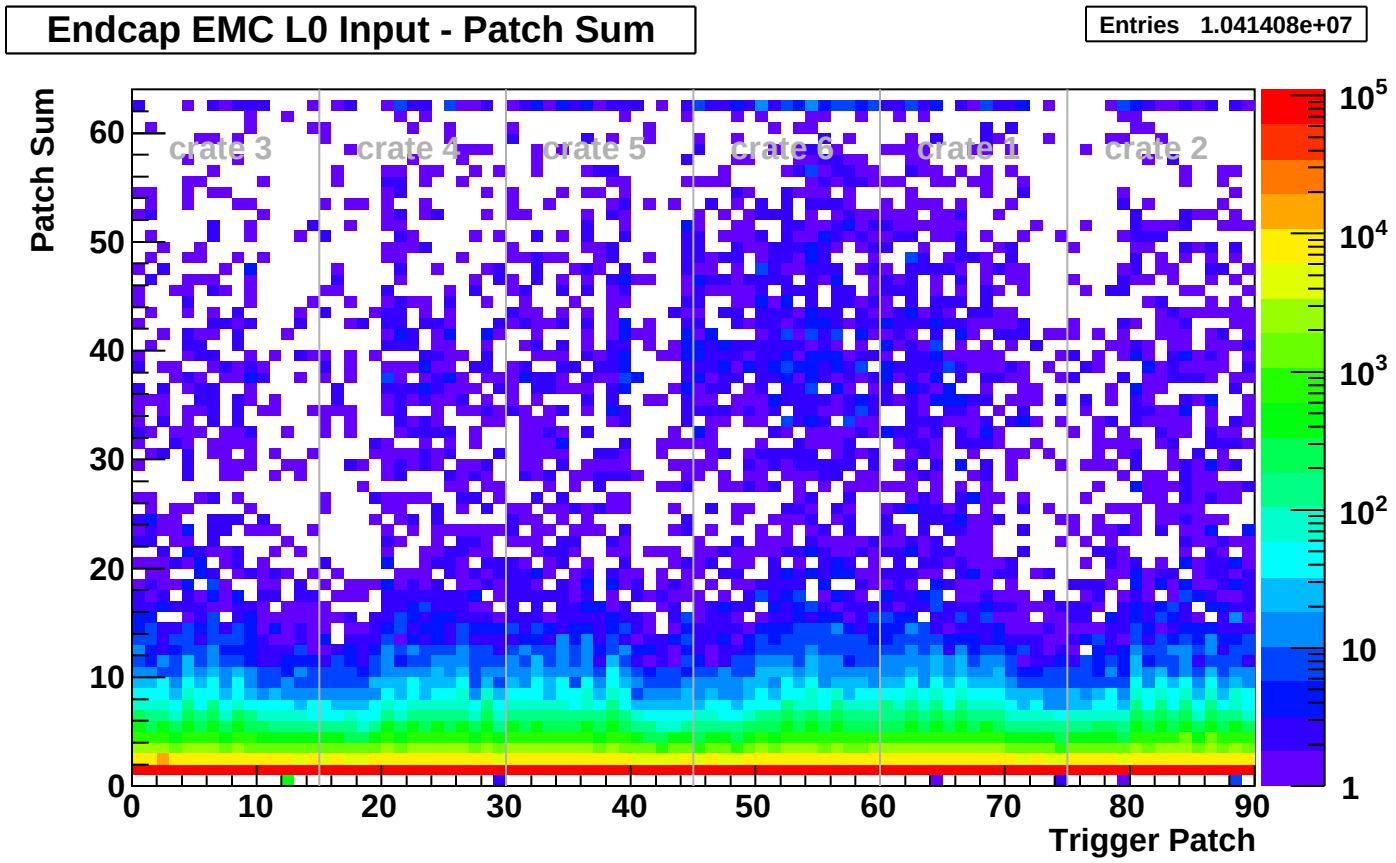

BunchId7Bit (BHT3)
Entries 1899

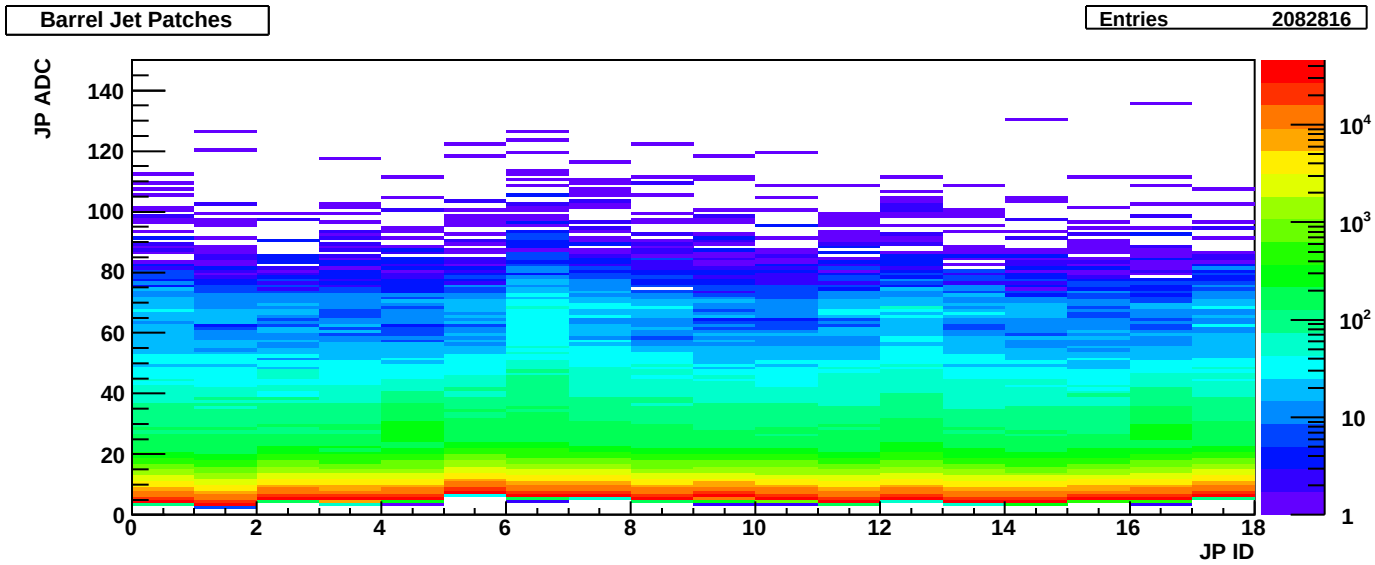

BunchId7Bit (all events)
Entries 115712

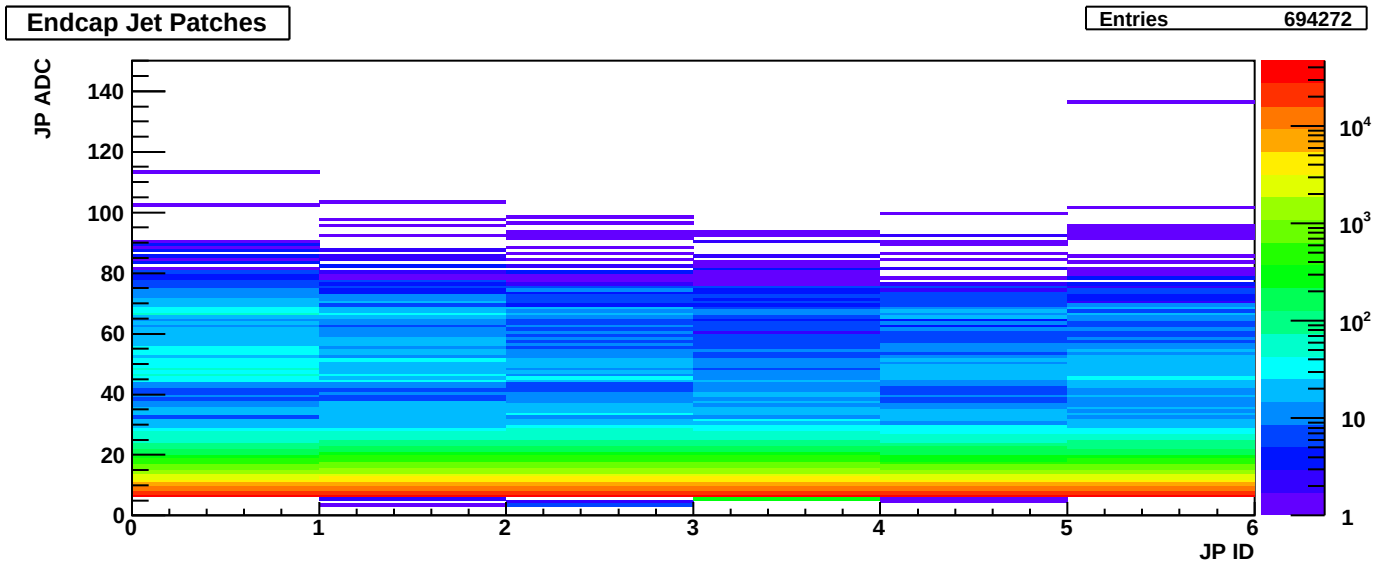

Barrel EMC L0 Input - High Tower
Entries 3.47136e+07
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

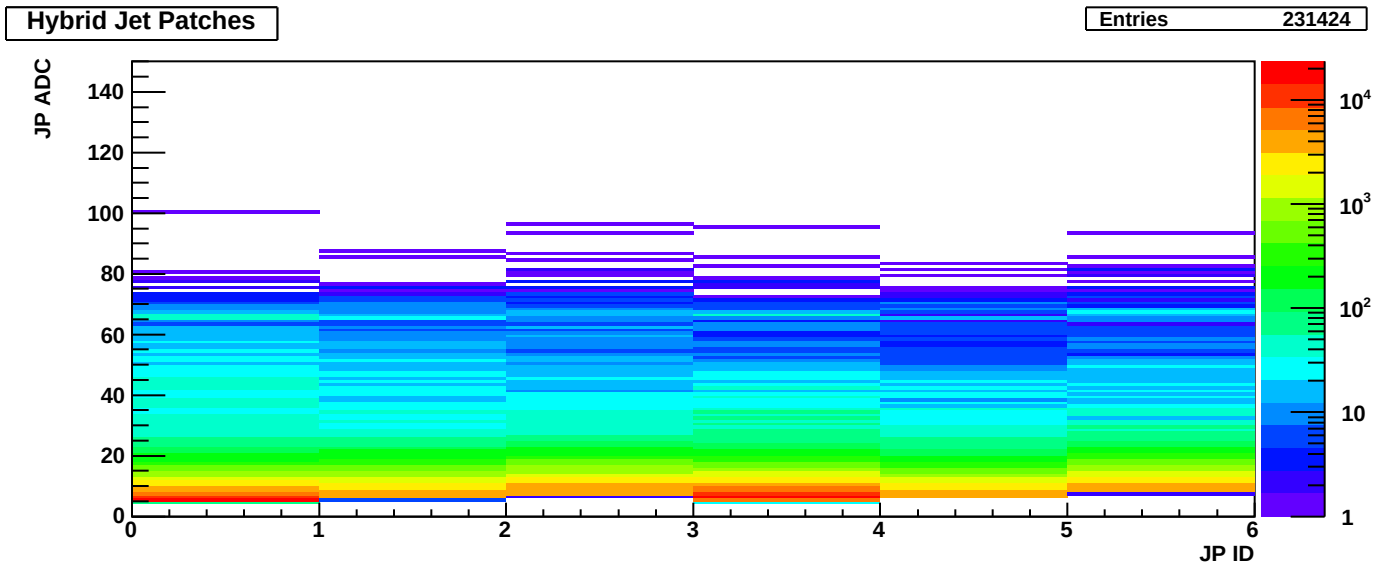

Barrel EMC L0 Input - Patch Sum
Entries 3.47136e+07
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

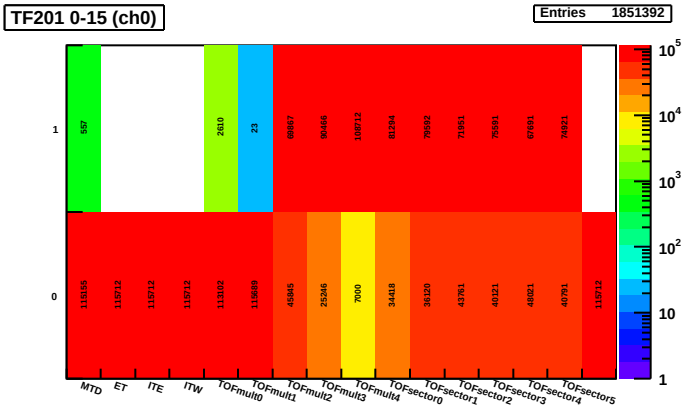

Endcap EMC L0 Input - High Tower
Entries 1.041408e+07
High Tower
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

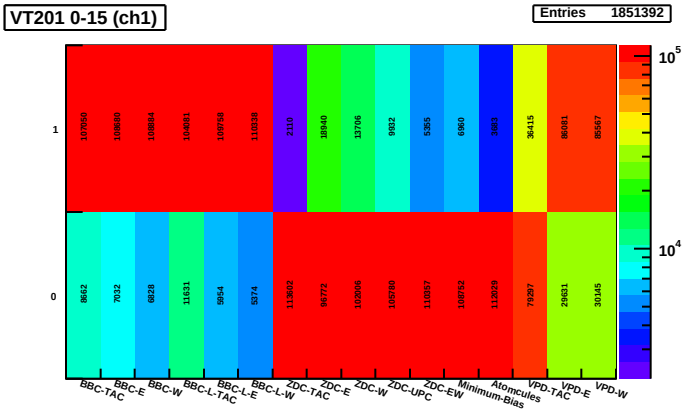

Endcap EMC L0 Input - Patch Sum
Entries 1.041408e+07
Patch Sum
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

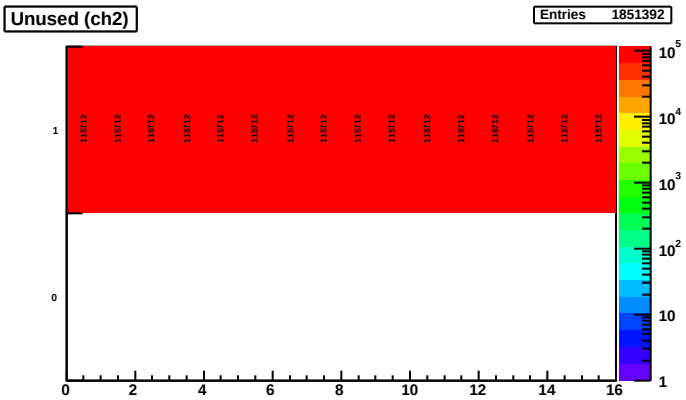

Barrel Jet Patches
Entries 2082816
JP ADC
JP ID

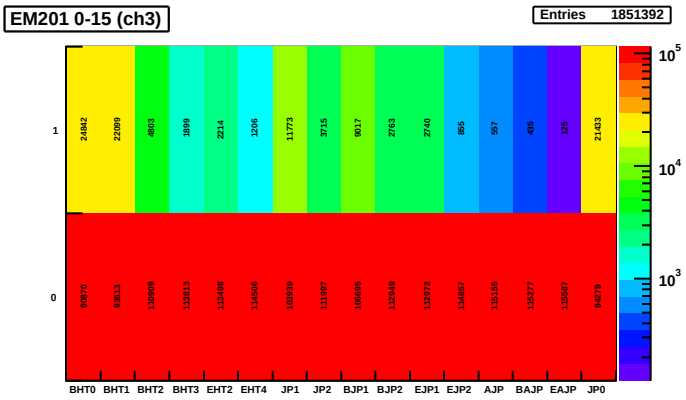

Endcap Jet Patches
Entries 694272
JP ADC
JP ID

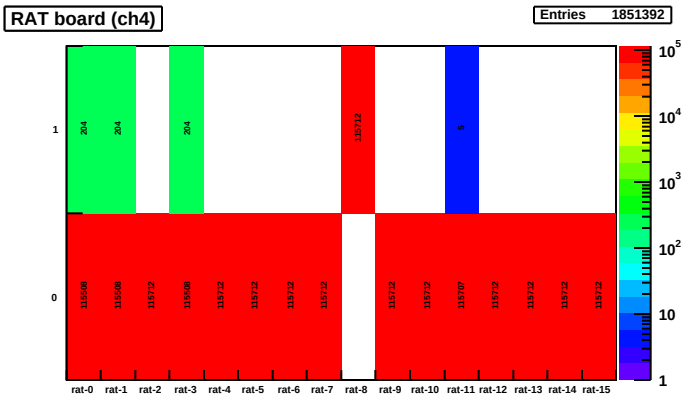

Hybrid Jet Patches
Entries 231424
JP ADC
JP ID

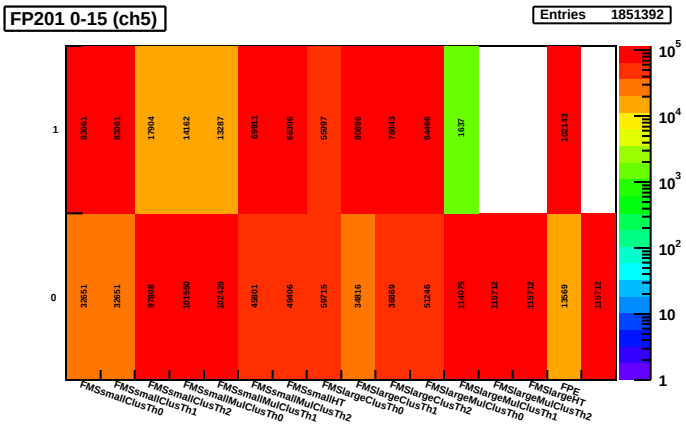

TF201 0-15 (ch0)
Entries 1851392
1
0
557
2610
23
69867
80466
108712
81204
79592
71951
75591
67691
74921
115655
115712
115712
115712
113102
115689
45945
25246
7000
34418
36120
43761
40121
48021
40791
115712
MTD
ET
ITE
ITW
TOFmult0
TOFmult1
TOFmult2
TOFmult3
TOFmult4
TOFsector0
TOFsector1
TOFsector2
TOFsector3
TOFsector4
TOFsector5
10^5
10^4
10^3
10^2
10
1

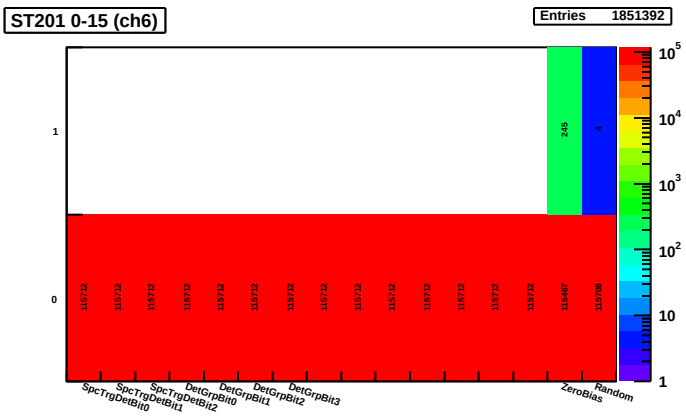

VT201 0-15 (ch1)
Entries 1851392
1
0
107950
109880
108824
104081
109758
110338
2110
18940
13706
9382
5365
6980
3683
36415
86081
85567
8662
7032
6828
11631
9954
5374
113802
96772
102506
105780
110357
108752
112029
79297
29631
30145
BBC-TAC
BBC-E
BBC-W
BBC-L-TAC
BBC-L-E
BBC-L-W
ZDC-TAC
ZDC-E
ZDC-W
ZDC-UPC
ZDC-EW
Minimum-Bias
Atomcules
VPD-TAC
VPD-E
VPD-W
10^5
10^4

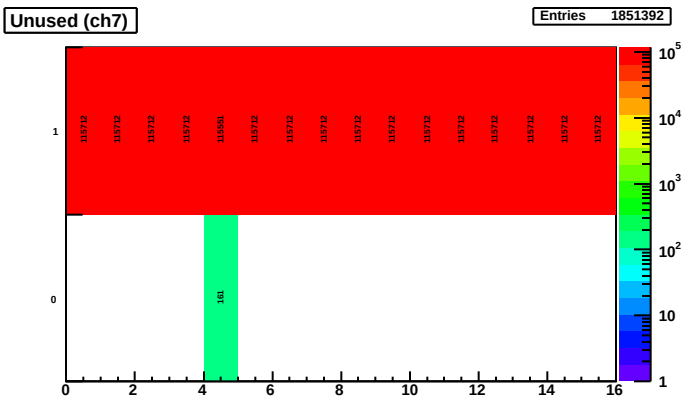

Unused (ch2)
Entries 1851392
1
0
115712
0
2
4
6
8
10
12
14
16
10^5
10^4
10^3
10^2
10
1

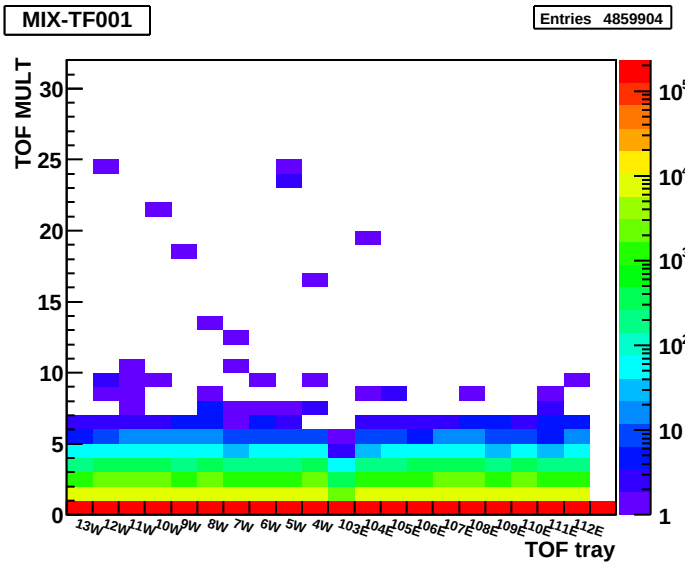

EM201 0-15 (ch3)
Entries 1851392
1
0
24842
22099
4803
1899
2214
1206
11773
3715
9017
2763
2740
855
557
435
125
21433
90870
95613
120909
123813
123408
114506
100939
111997
106695
112949
112972
114857
115155
115277
115587
94279
BHT0
BHT1
BHT2
BHT3
EHT2
EHT4
JP1
JP2
BJP1
BJP2
EJP1
EJP2
AJP
BAJP
EAJP
JP0
10^5
10^4
10^3

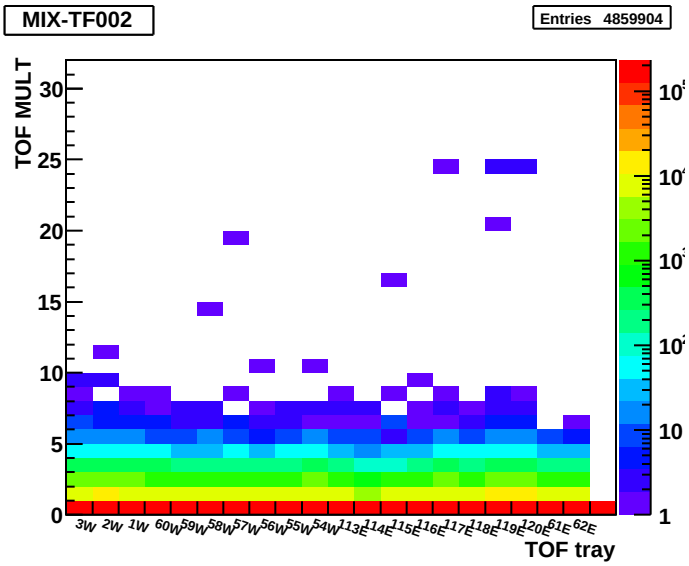

RAT board (ch4)
Entries 1851392
1
0
204
204
204
115712
5
115508
115508
115712
115508
115712
115712
115712
115712
115712
115712
115707
115712
115712
115712
115712
rat-0
rat-1
rat-2
rat-3
rat-4
rat-5
rat-6
rat-7
rat-8
rat-9
rat-10
rat-11
rat-12
rat-13
rat-14
rat-15
10^5
10^4
10^3
10^2
10
1

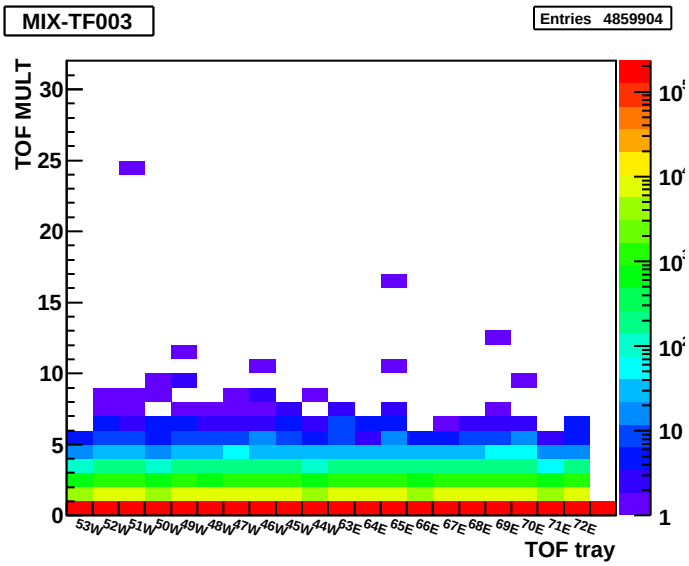

FP201 0-15 (ch5)
Entries 1851392
1
0
83961
83961
17904
14162
13237
69811
66806
59997
80896
78943
64466
1637
102143
32651
32651
97808
101550
102435
49801
49406
59715
34616
36869
51246
114075
115712
115712
13569
115712
FMSsmallClusTh0
FMSsmallClusTh1
FMSsmallClusTh2
FMSsmallMulClusTh0
FMSsmallMulClusTh1
FMSsmallMulClusTh2
FMSsmallHT
FMSlargeClusTh0
FMSlargeClusTh1
FMSlargeClusTh2
FMSlargeMulClusTh0
FMSlargeMulClusTh1
FMSlargeMulClusTh2
FMSlargeHT
FPE
10^5
10^4
10^3
10^2
10
1

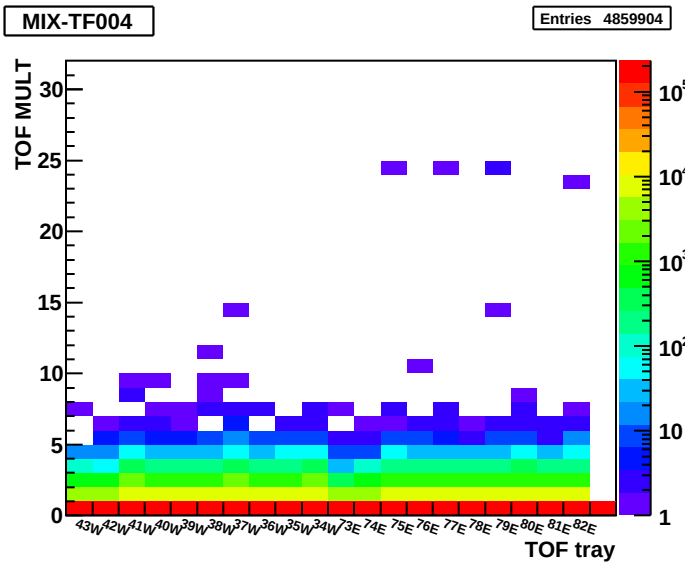

ST201 0-15 (ch6)
Entries 1851392
1
0
245
4
115712
115712
115712
115712
115712
115712
115712
115712
115712
115712
115712
115712
115467
115708
SpcTrgDetBit0
SpcTrgDetBit1
SpcTrgDetBit2
DetGrpBit0
DetGrpBit1
DetGrpBit2
DetGrpBit3
ZeroBias
Random
10^5
10^4
10^3
10^2
10
1

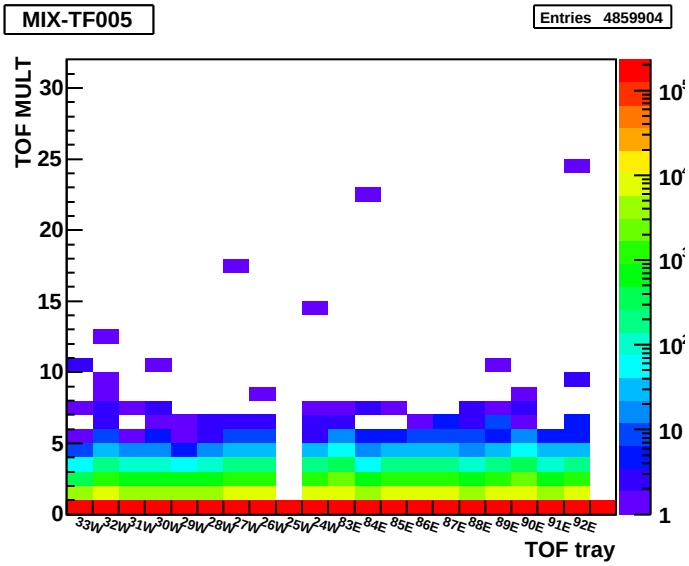

Unused (ch7)
Entries 1851392
1
0
115712
161
0
2
4
6
8
10
12
14
16
10^5
10^4
10^3
10^2
10
1

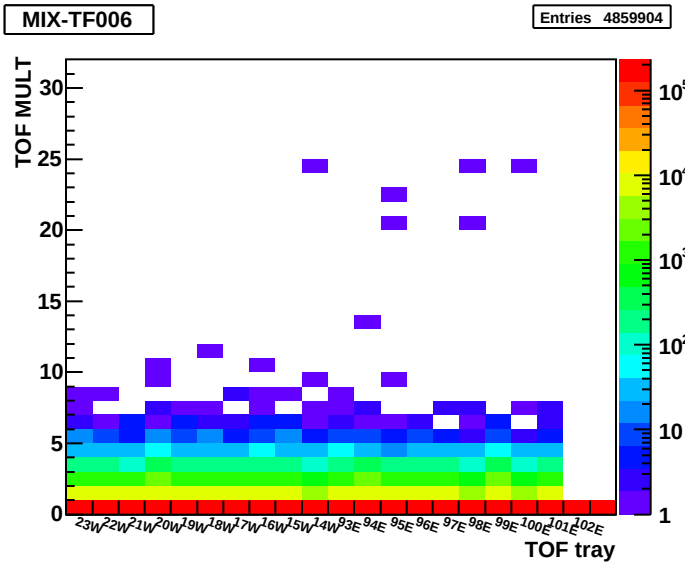

MIX-TF001
Entries 4859904
TOF MULT
TOF tray

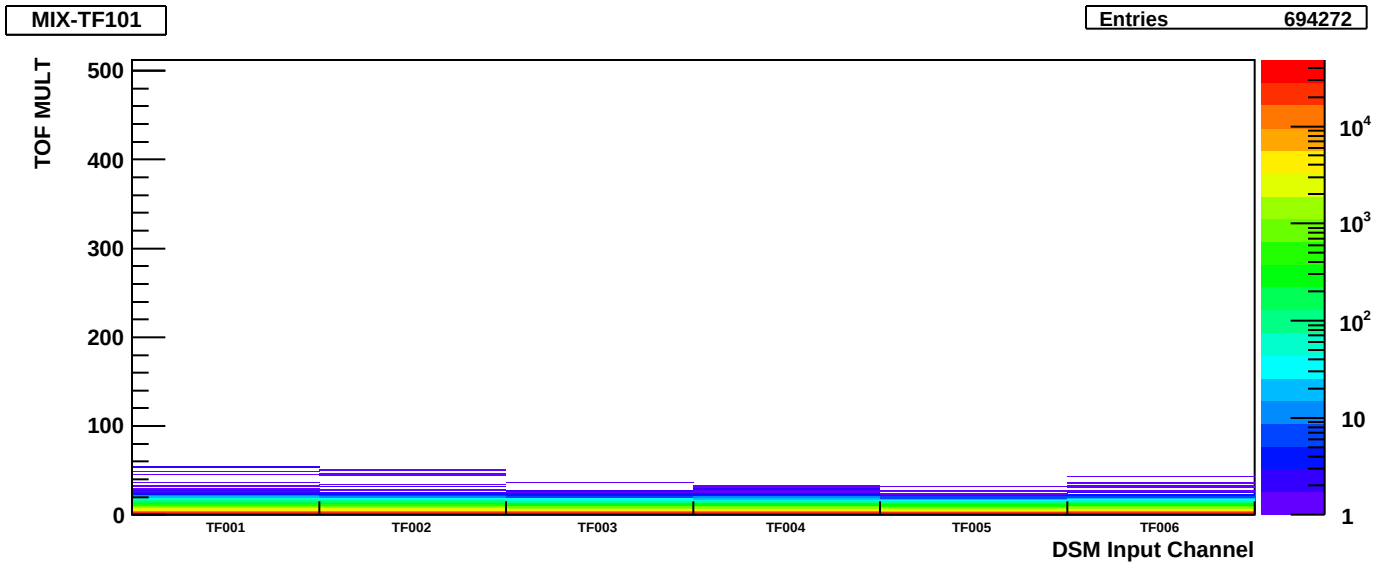

MIX-TF002
Entries 4859904
TOF MULT
TOF tray

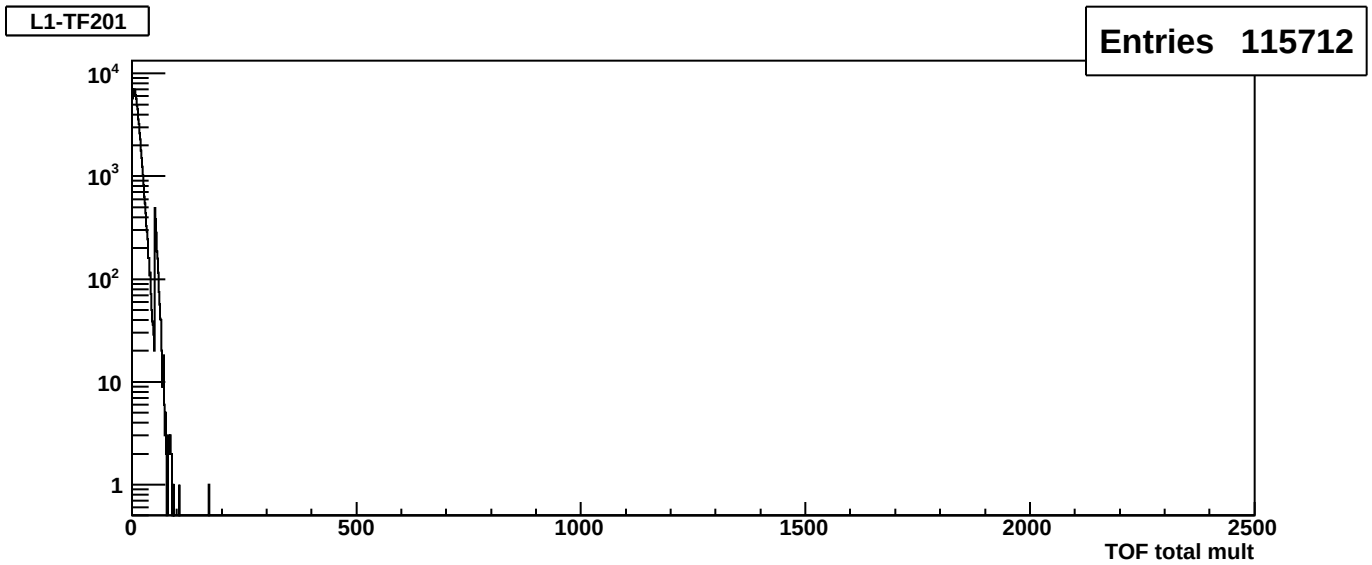

MIX-TF003
Entries 4859904
TOF MULT
TOF tray

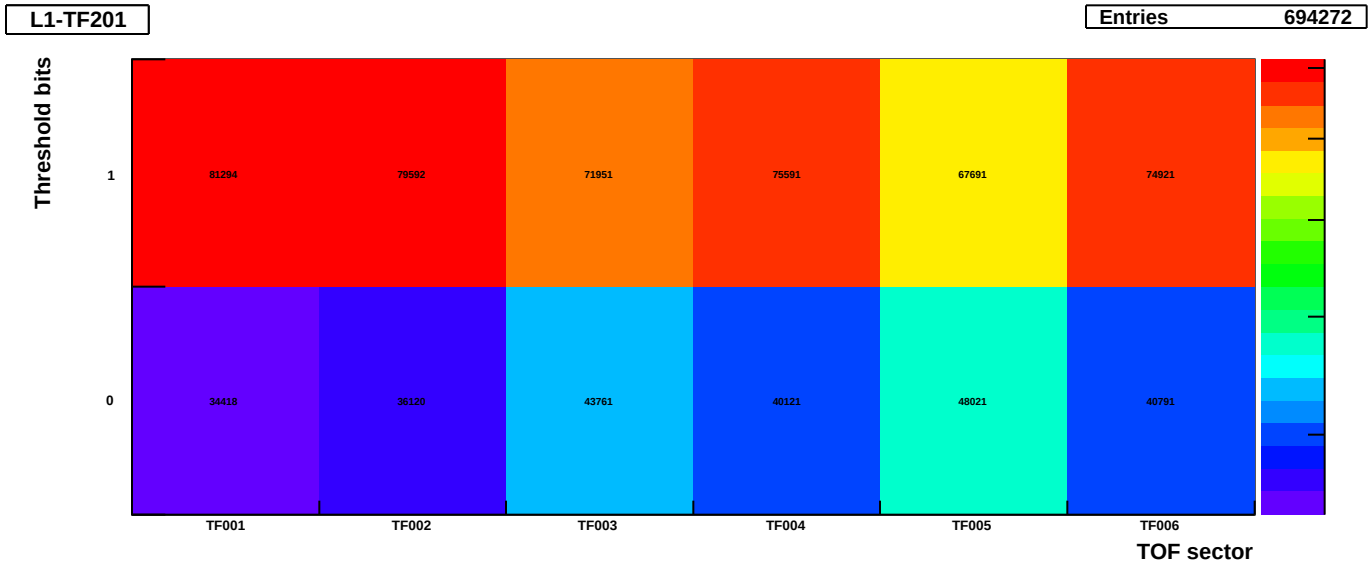

MIX-TF004
Entries 4859904
TOF MULT
TOF tray

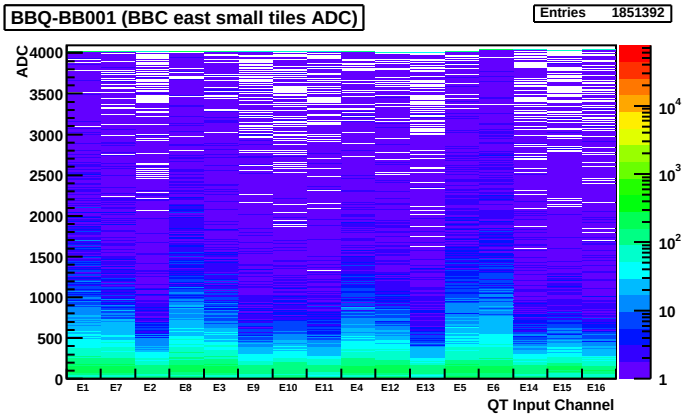

MIX-TF005
Entries 4859904
TOF MULT
TOF tray

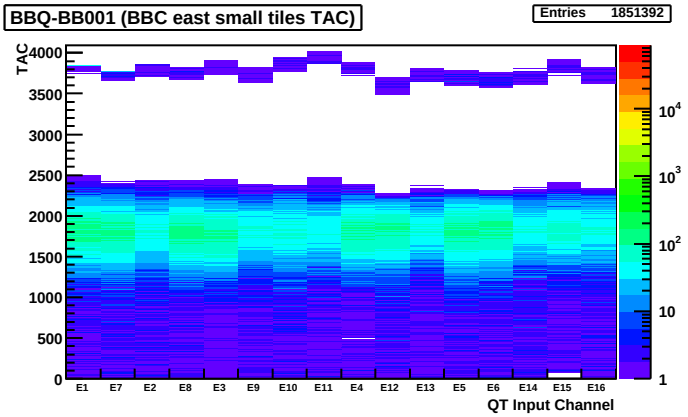

MIX-TF006
Entries 4859904
TOF MULT
TOF tray

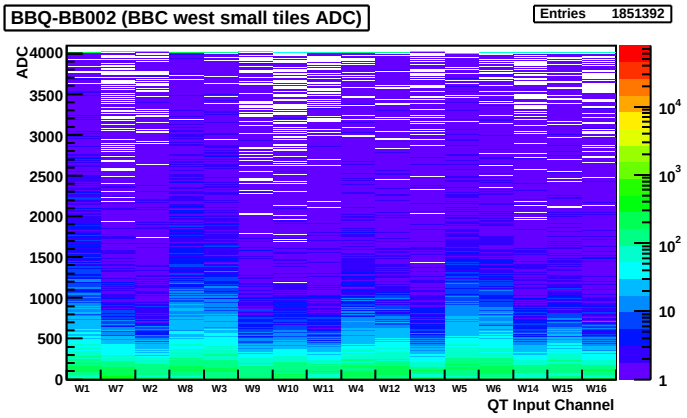

MIX-TF101
Entries 694272
TOF MULT
500
400
300
200
100
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^4
10^3
10^2
10
1

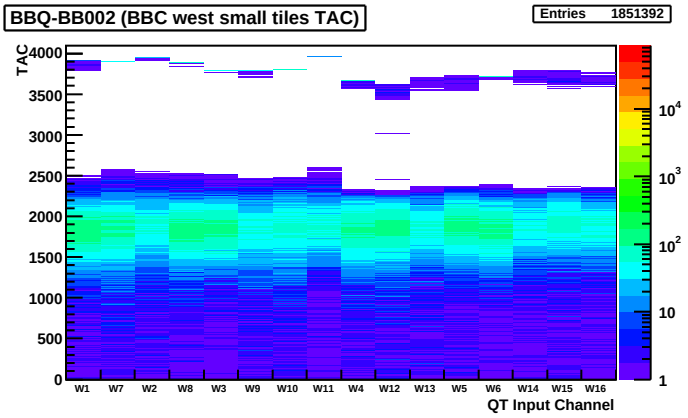

L1-TF201
Entries 115712
10^4
10^3
10^2
10
1
0
500
1000
1500
2000
2500
TOF total mult

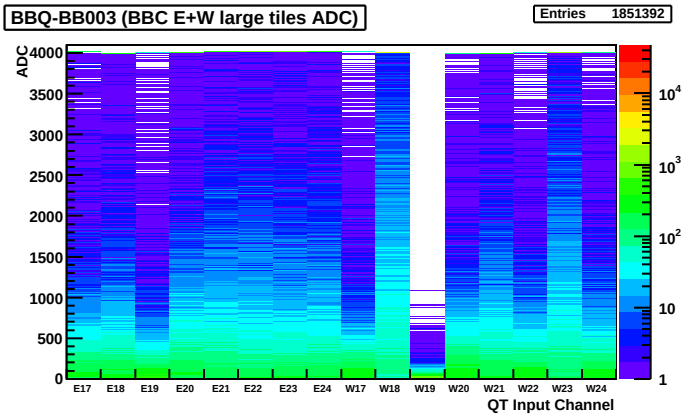

L1-TF201
Entries 694272
Threshold bits
1
0
81294
79592
71951
75591
67691
74921
34418
36120
43761
40121
48021
40791
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector

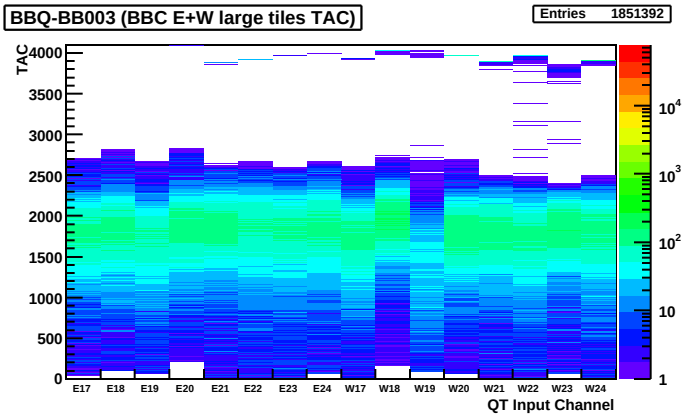

BBQ-BB001 (BBC east small tiles ADC)
Entries 1851392
ADC
QT Input Channel

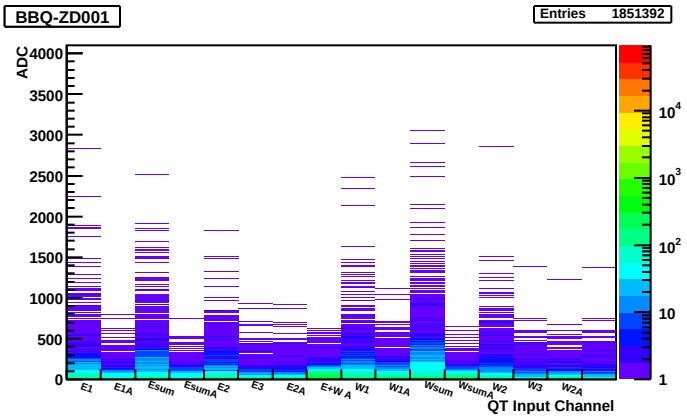

BBQ-BB001 (BBC east small tiles TAC)
Entries 1851392
TAC
QT Input Channel

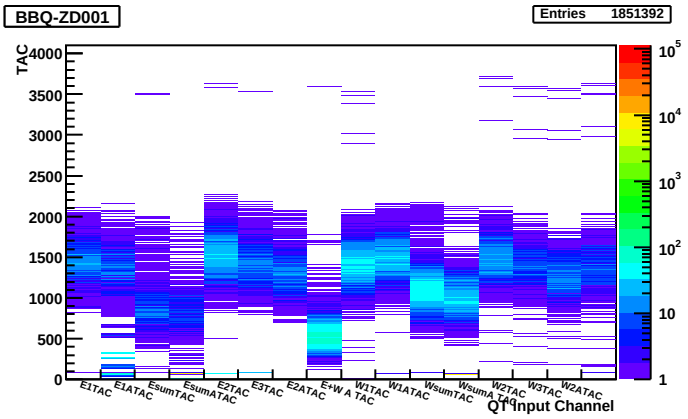

BBQ-BB002 (BBC west small tiles ADC)
Entries 1851392
ADC
QT Input Channel

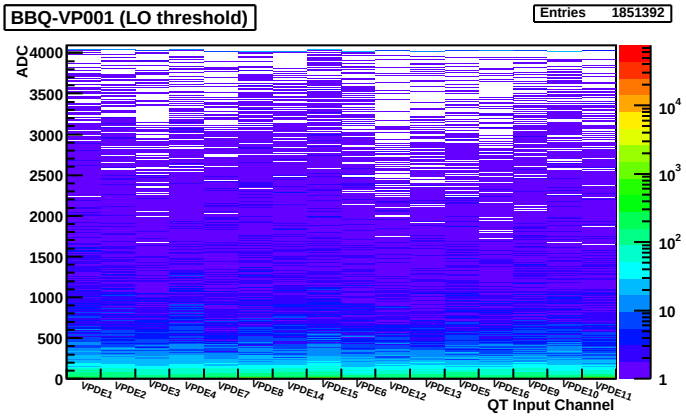

BBQ-BB002 (BBC west small tiles TAC)
Entries 1851392
TAC
QT Input Channel

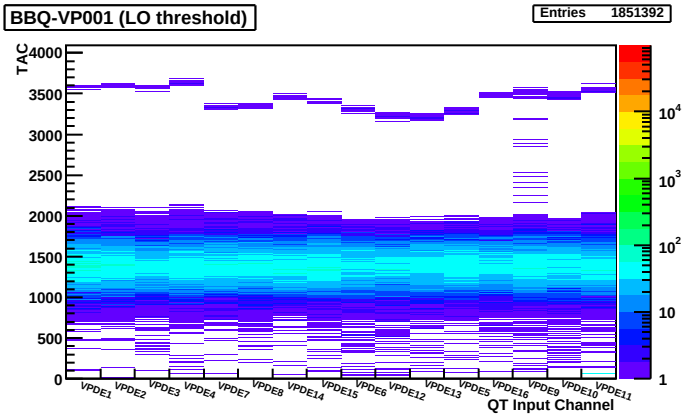

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 1851392
ADC
QT Input Channel

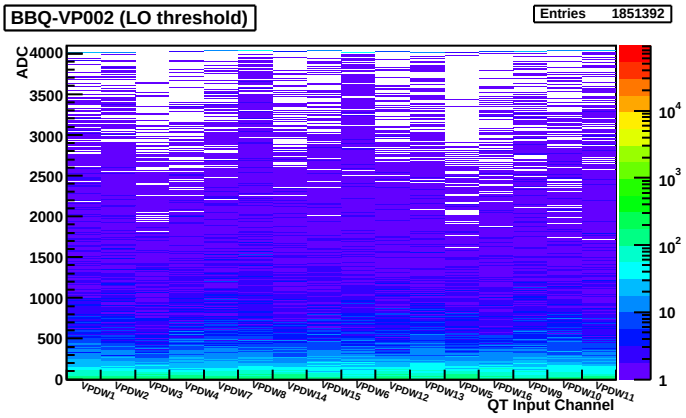

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 1851392
TAC
QT Input Channel

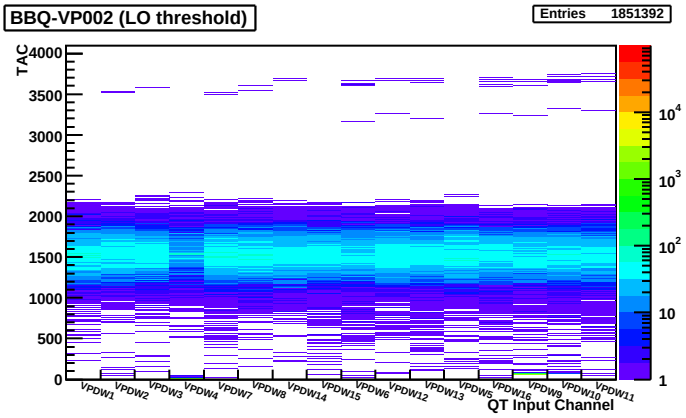

BBQ-ZD001
Entries 1851392
ADC
QT Input Channel

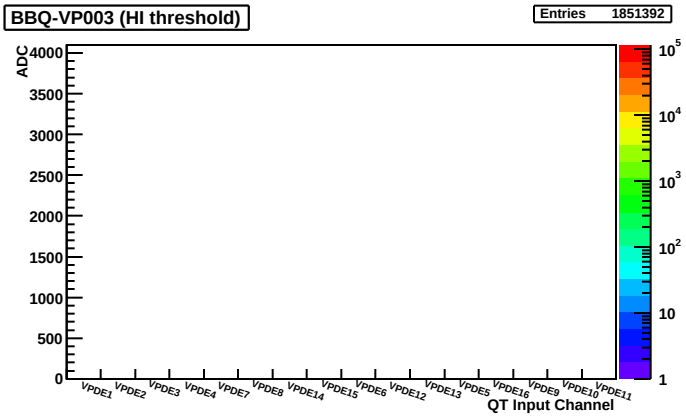

BBQ-ZD001
Entries 1851392
TAC
QT Input Channel

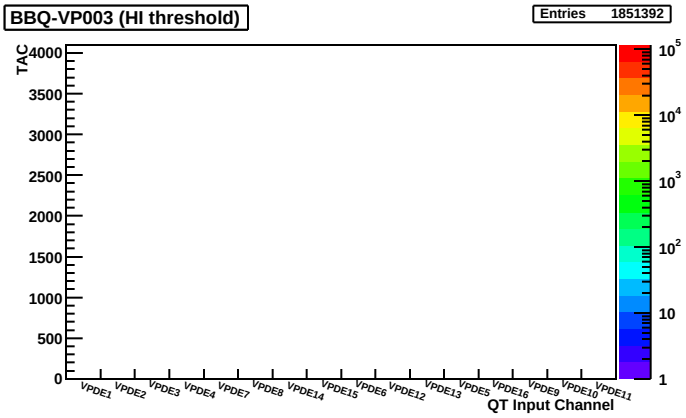

BBQ-VP001 (LO threshold)
Entries 1851392
ADC
QT Input Channel

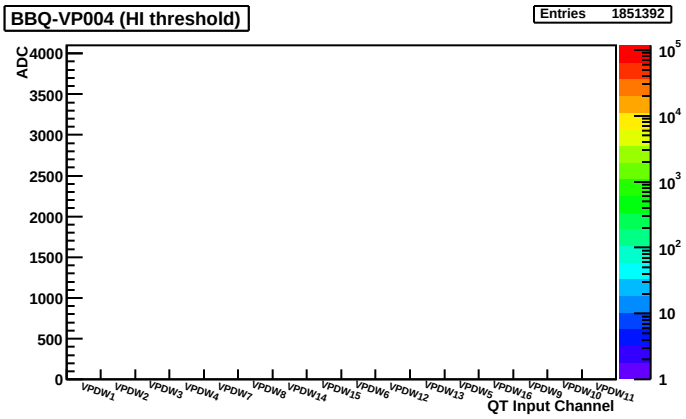

BBQ-VP001 (LO threshold)
Entries 1851392
TAC
QT Input Channel

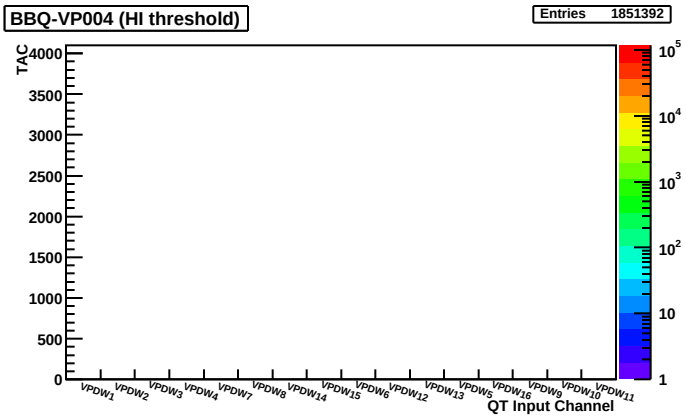

BBQ-VP002 (LO threshold)
Entries 1851392
ADC
QT Input Channel

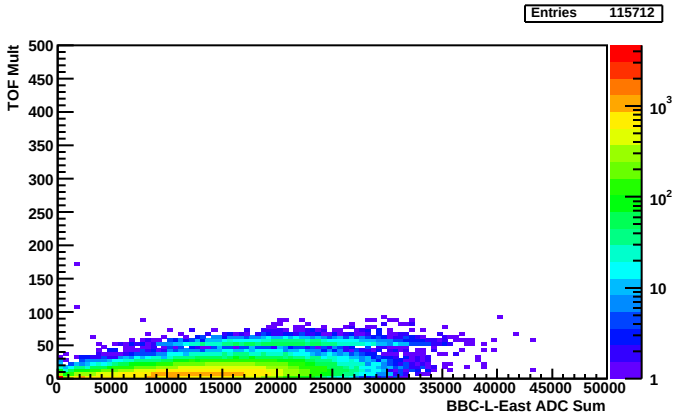

BBQ-VP002 (LO threshold)
Entries 1851392
TAC
QT Input Channel

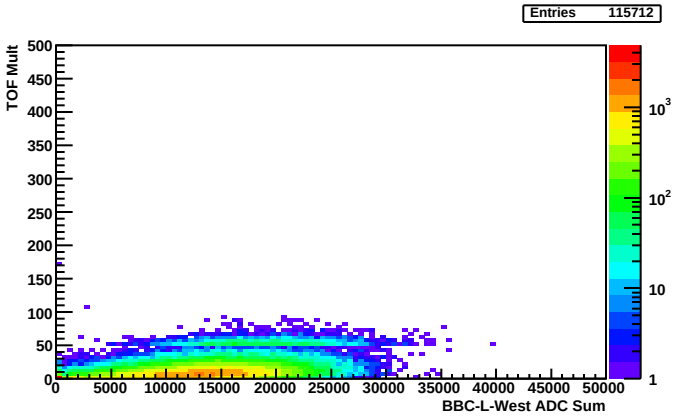

BBQ-VP003 (HI threshold)
Entries 1851392
ADC
QT Input Channel

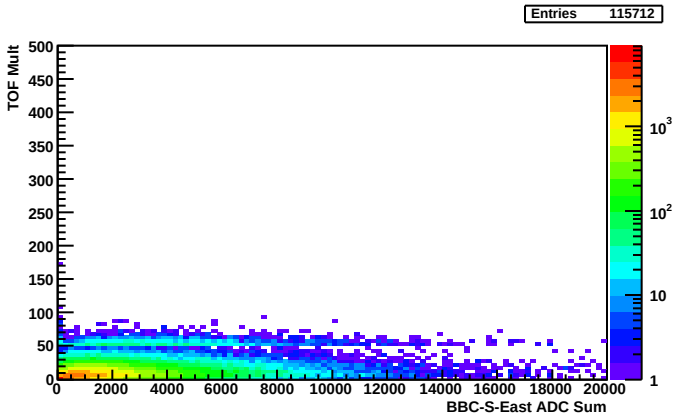

BBQ-VP003 (HI threshold)
Entries 1851392
TAC
QT Input Channel

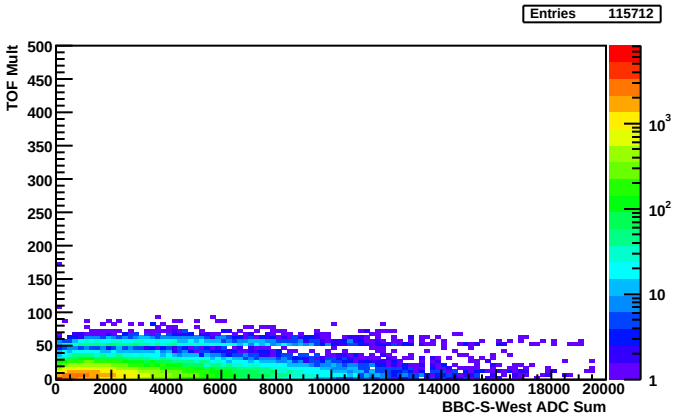

BBQ-VP004 (HI threshold)
Entries 1851392
ADC
QT Input Channel

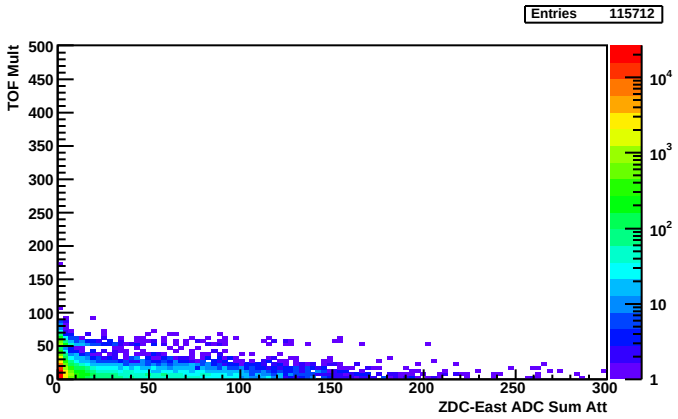

BBQ-VP004 (HI threshold)
Entries 1851392
TAC
QT Input Channel

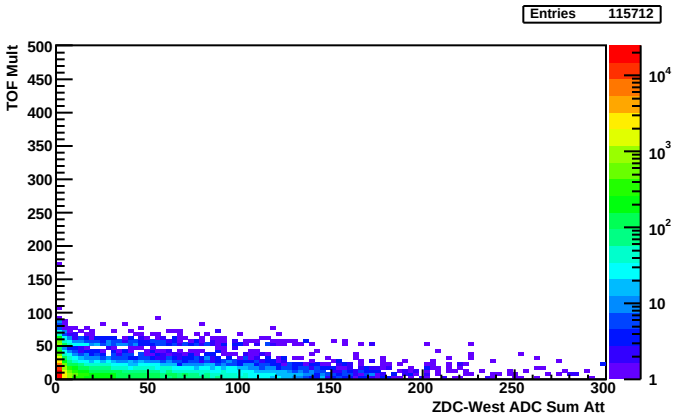

Entries 115712
TOF Mult
BBC-L-East ADC Sum

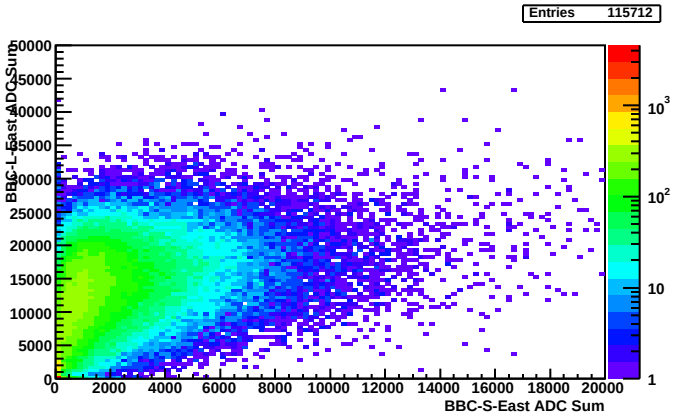

Entries 115712
TOF Mult
BBC-L-West ADC Sum

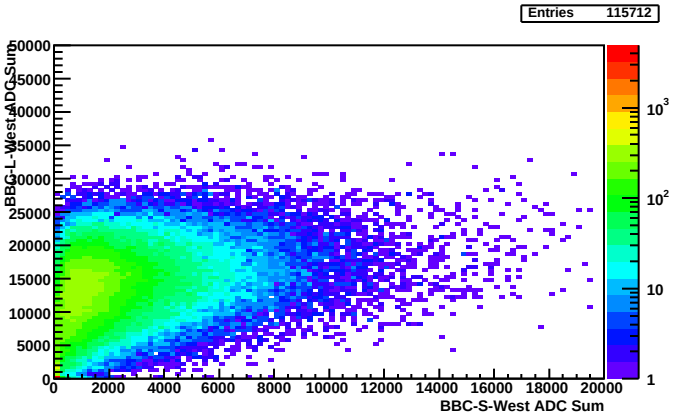

Entries 115712
TOF Mult
BBC-S-East ADC Sum

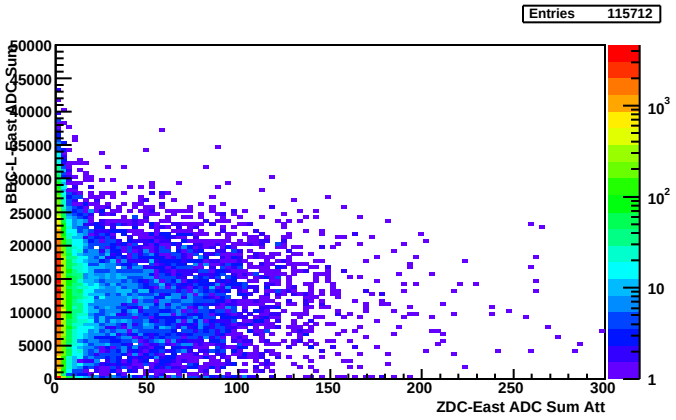

Entries 115712
TOF Mult
BBC-S-West ADC Sum

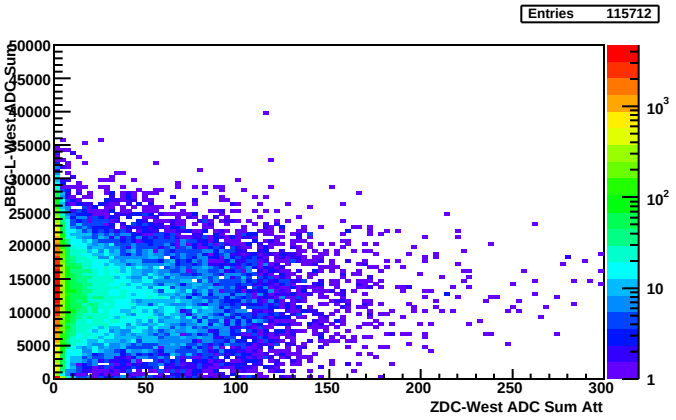

Entries 115712
TOF Mult
ZDC-East ADC Sum Att

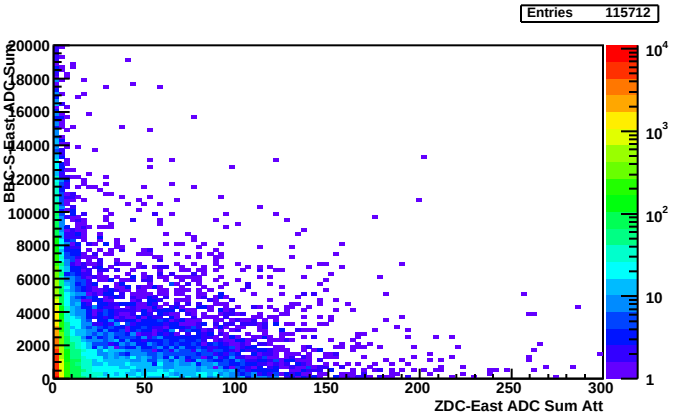

Entries 115712
TOF Mult
ZDC-West ADC Sum Att

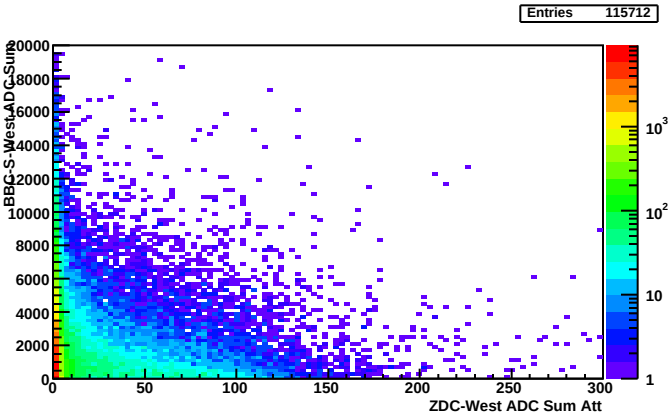

Entries 115712
BBC-L-East ADC Sum
BBC-S-East ADC Sum

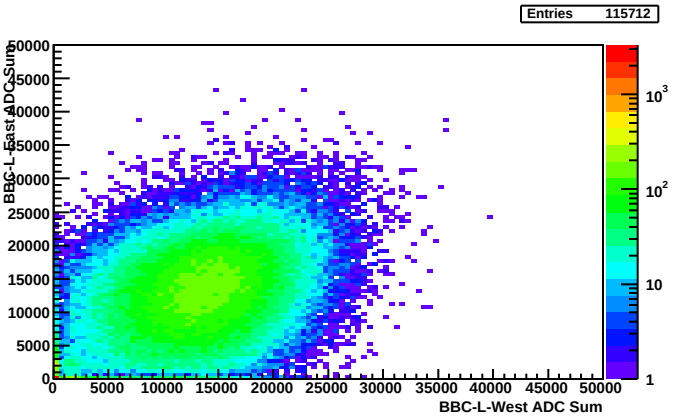

Entries 115712
BBC-L-West ADC Sum
BBC-S-West ADC Sum

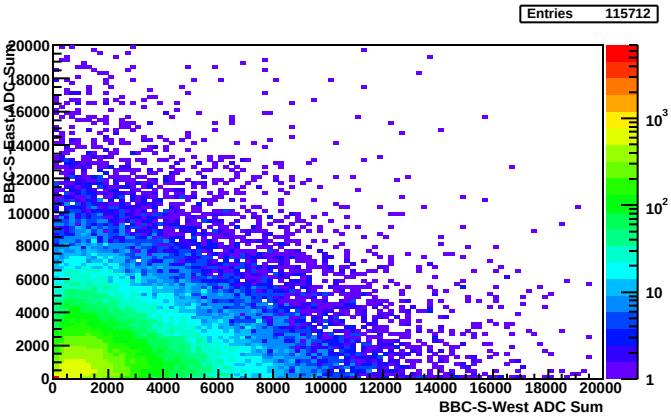

Entries 115712
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

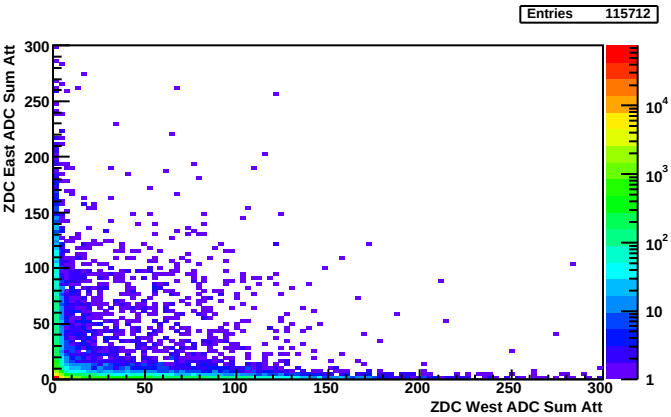

Entries 115712
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

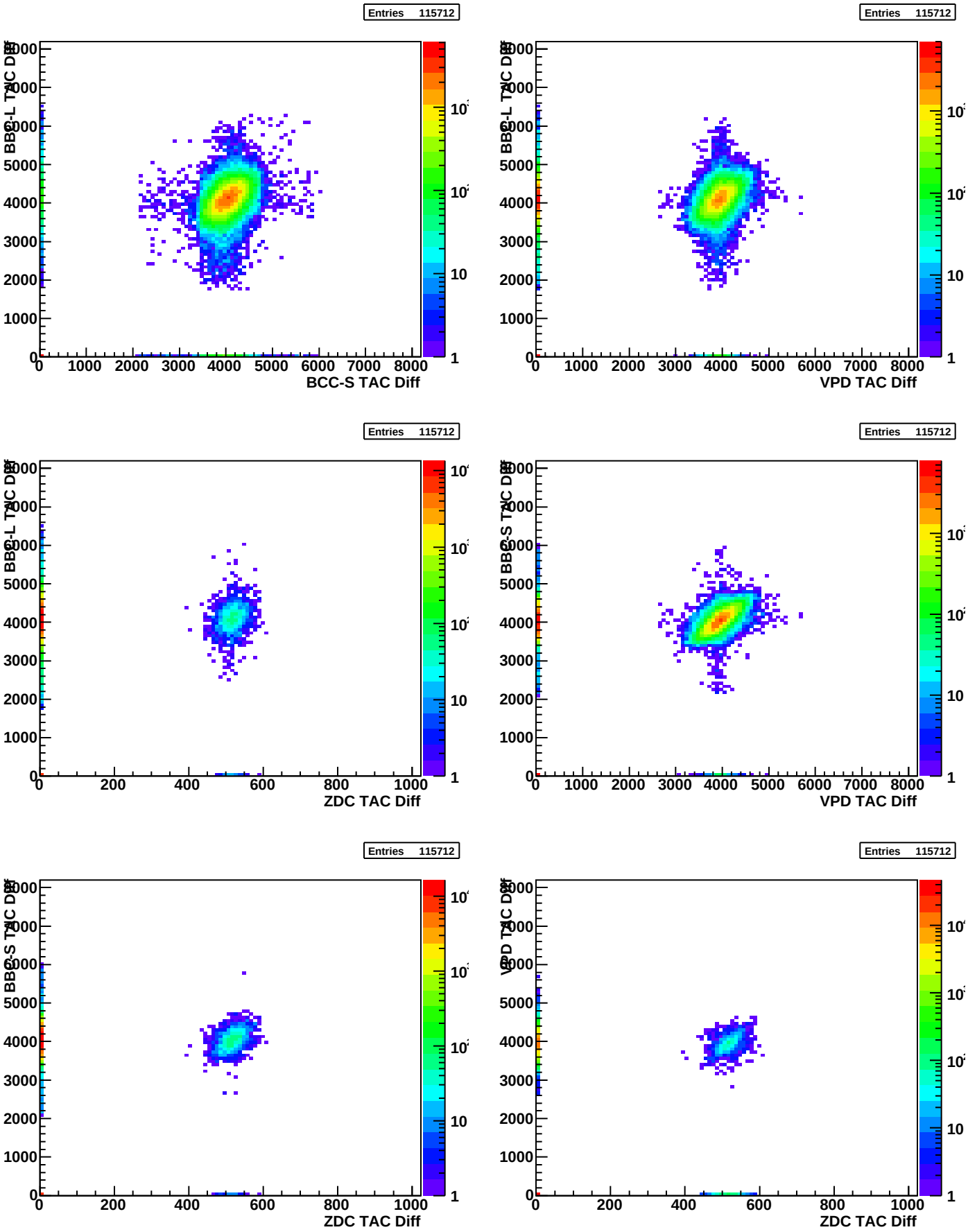

Entries 115712
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

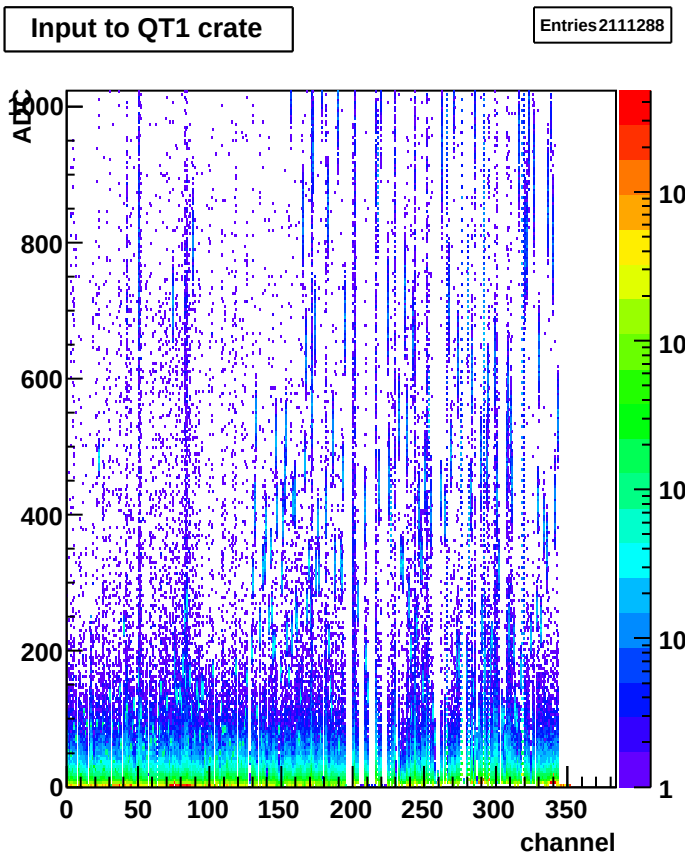

Entries 115712
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

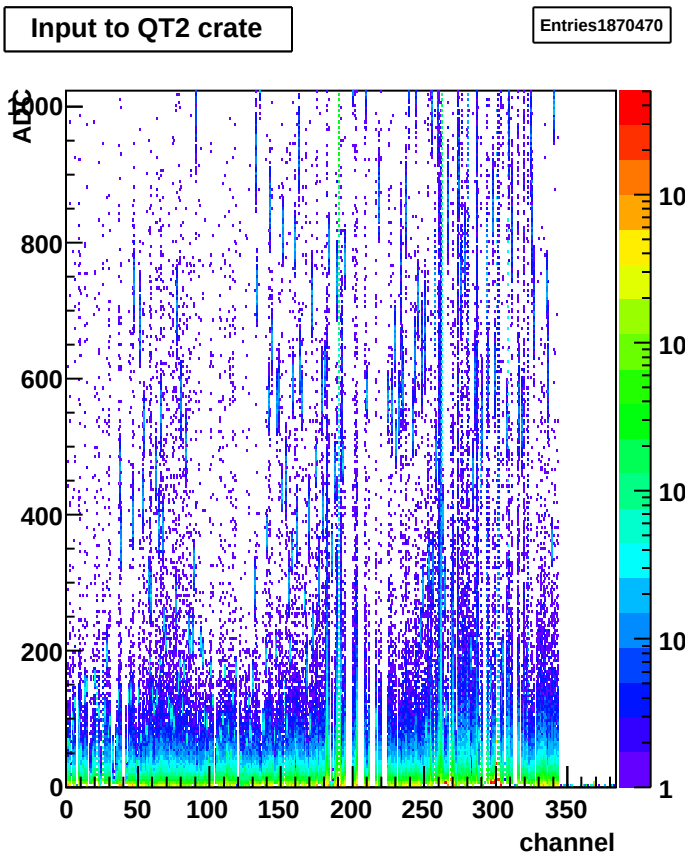

Entries 115712
BBC-L-East ADC Sum
BBC-L-West ADC Sum

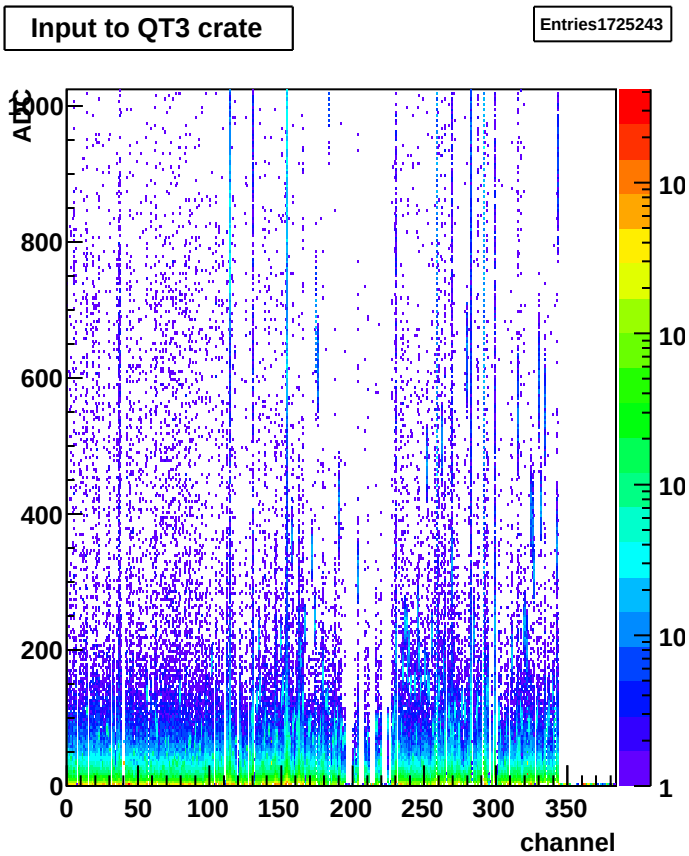

Entries 115712
BBC-S-East ADC Sum
BBC-S-West ADC Sum

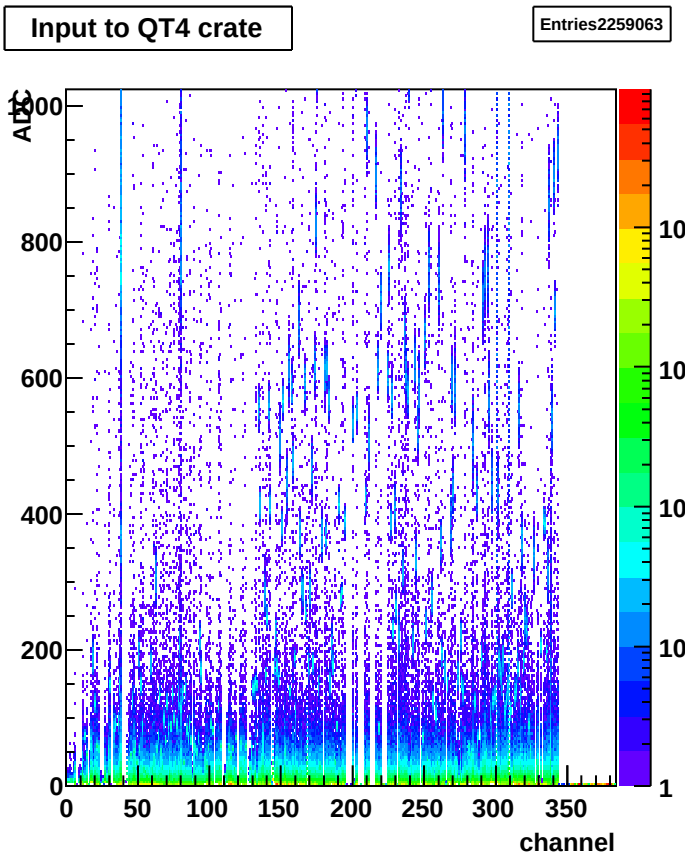

Entries 115712
ZDC East ADC Sum Att
ZDC West ADC Sum Att

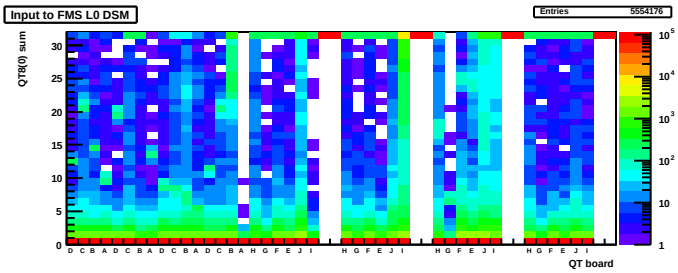

Entries 115712
BBC-L TAC Diff
BCC-S TAC Diff
Entries 115712
BBC-L TAC Diff
VPD TAC Diff
Entries 115712
BBC-L TAC Diff
ZDC TAC Diff
Entries 115712
BBC-S TAC Diff
VPD TAC Diff
Entries 115712
BBC-S TAC Diff
ZDC TAC Diff
Entries 115712
VPD TAC Diff
ZDC TAC Diff

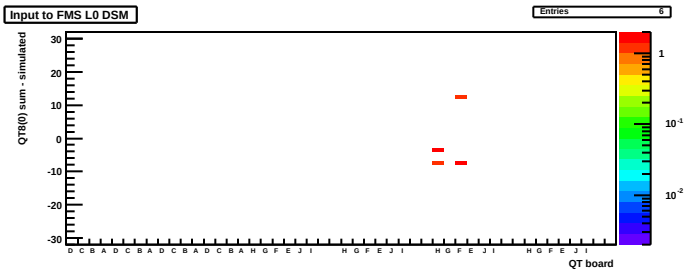

Input to QT1 crate
Entries2111288
ADC
channel

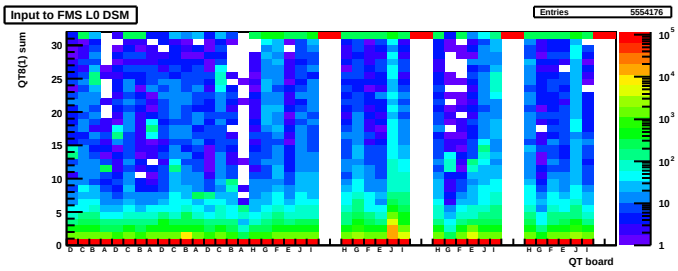

Input to QT2 crate
Entries1870470
ADC
channel

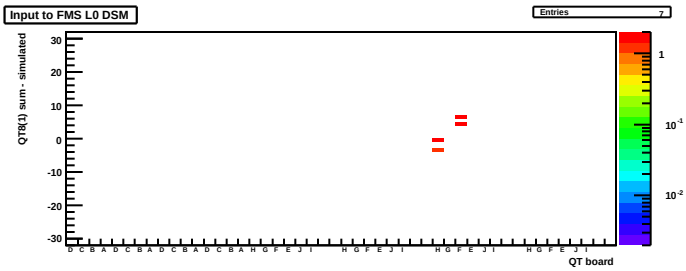

Input to QT3 crate
Entries1725243
ADC
channel

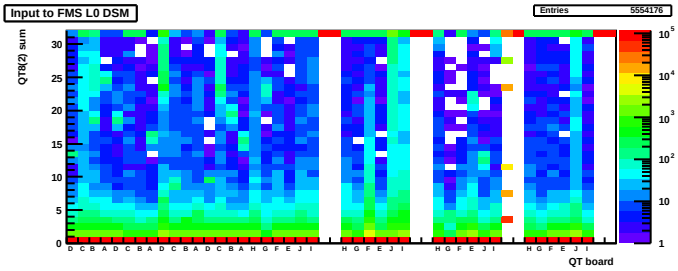

Input to QT4 crate
Entries2259063
ADC
channel

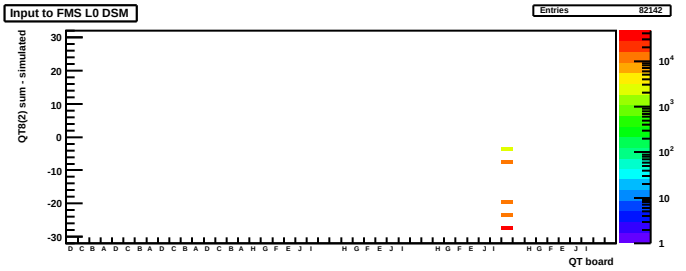

Input to FMS L0 DSM
Entries 5554176
QT8(0) sum
QT board

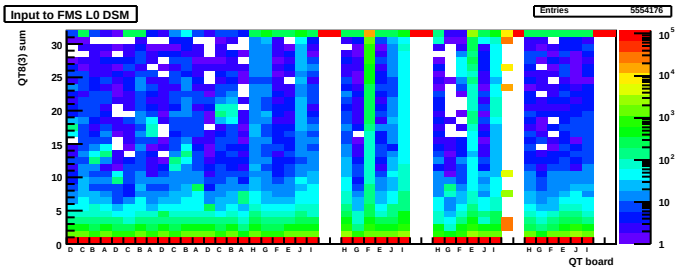

Input to FMS L0 DSM
Entries 6
QT8(0) sum - simulated
QT board

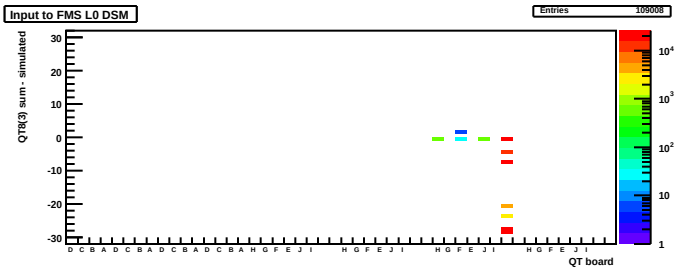

Input to FMS L0 DSM
Entries 5554176
QT8(1) sum
QT board

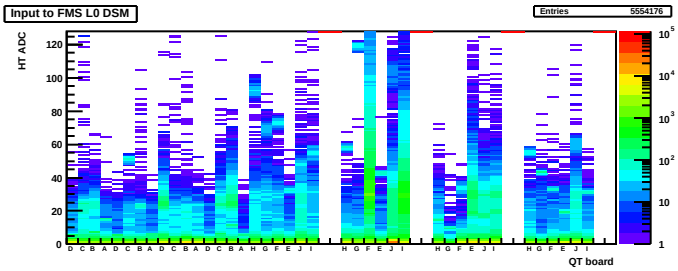

Input to FMS L0 DSM
Entries 7
QT8(1) sum - simulated
QT board

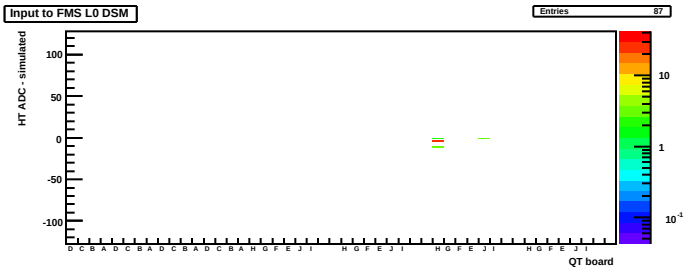

Input to FMS L0 DSM
Entries 5554176
QT8(2) sum
QT board

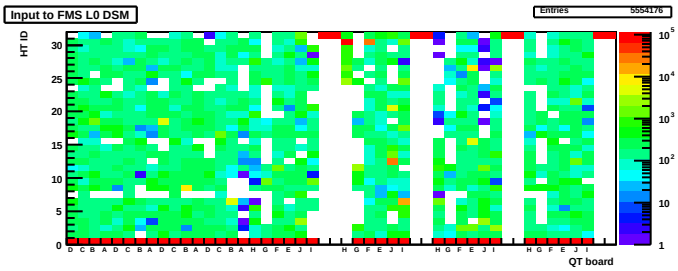

Input to FMS L0 DSM
Entries 82142
QT8(2) sum - simulated
QT board

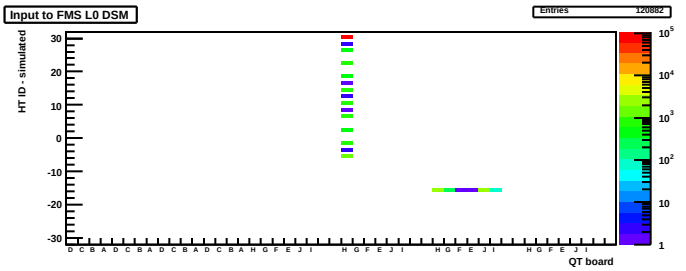

Input to FMS L0 DSM
Entries 5554176
QT8(3) sum
QT board

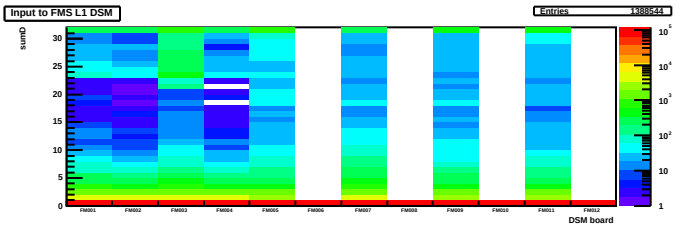

Input to FMS L0 DSM
Entries 109008
QT8(3) sum - simulated
QT board

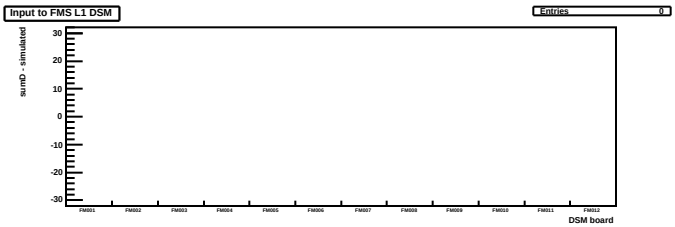

Input to FMS L0 DSM
Entries 5554176
HT ADC
QT board

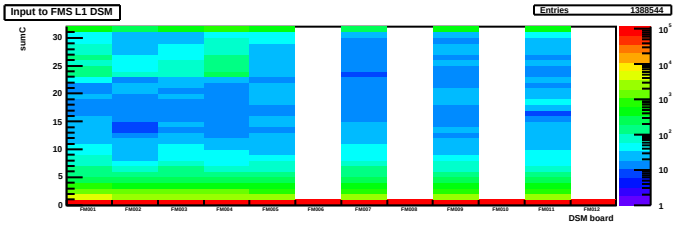

Input to FMS L0 DSM
Entries 87
HT ADC - simulated
QT board

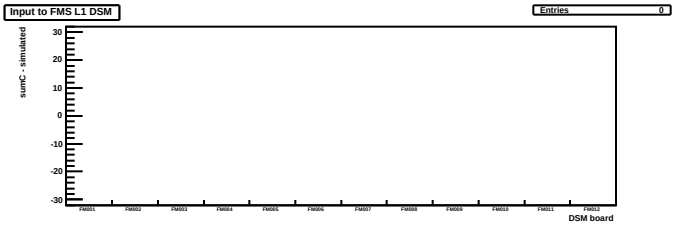

Input to FMS L0 DSM
Entries 5554176
HT ID
QT board

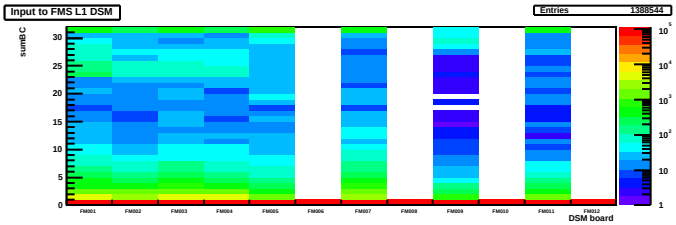

Input to FMS L0 DSM
Entries 120882
HT ID - simulated
QT board

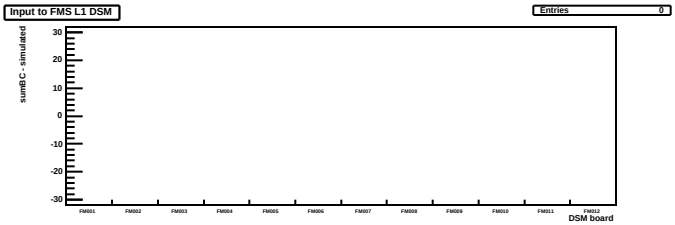

Input to FMS L1 DSM
Entries 1388544
sumD
DSM board

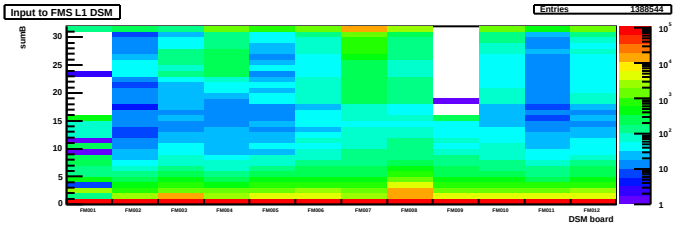

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

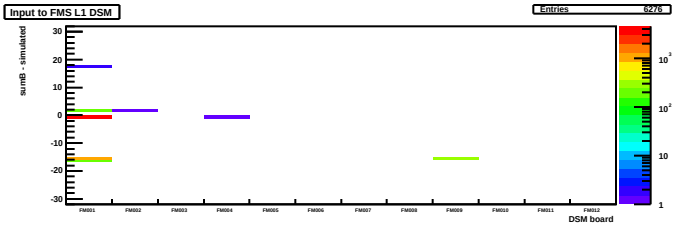

Input to FMS L1 DSM
Entries 1388544
sumC
DSM board

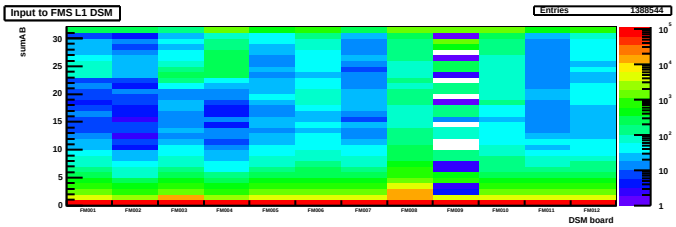

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

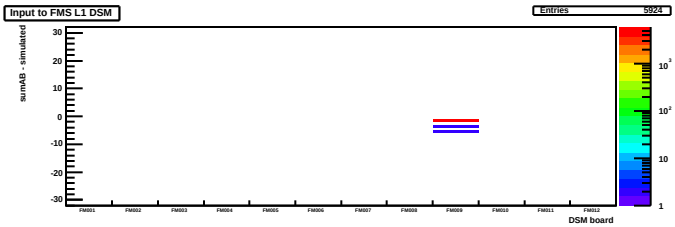

Input to FMS L1 DSM
Entries 1388544
sumBC
DSM board

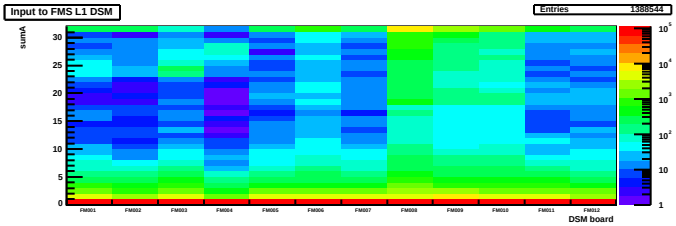

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

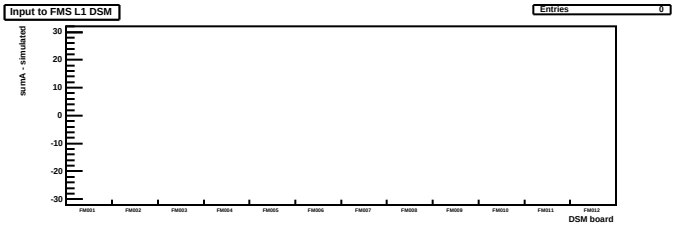

Input to FMS L1 DSM
Entries 1388544
sumB
DSM board

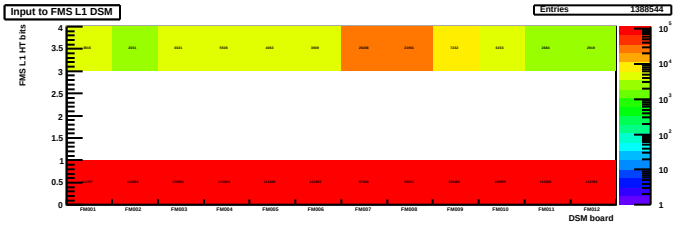

Input to FMS L1 DSM
Entries 6276
sumB - simulated
DSM board

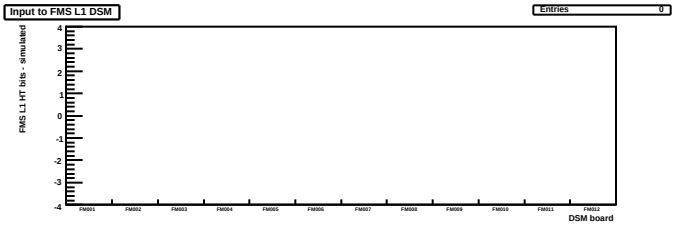

Input to FMS L1 DSM
Entries 1388544
sumAB
DSM board

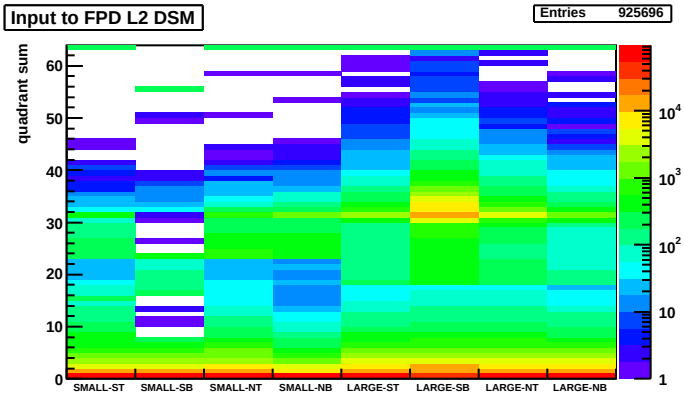

Input to FMS L1 DSM
Entries 5924
sumAB - simulated
DSM board

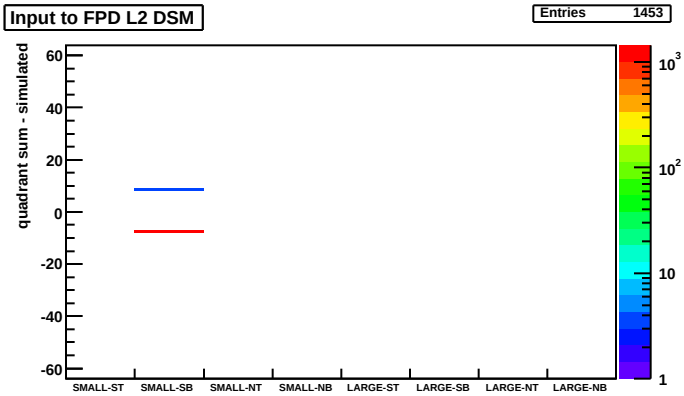

Input to FMS L1 DSM
Entries 1388544
sumA
DSM board

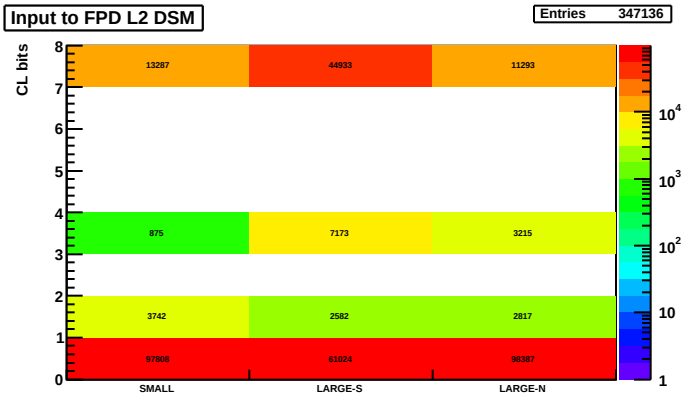

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

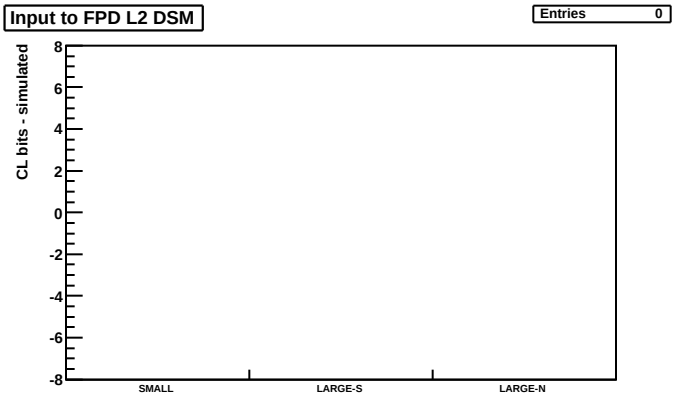

Input to FMS L1 DSM
Entries 1388544
FMS L1 HT bits
DSM board

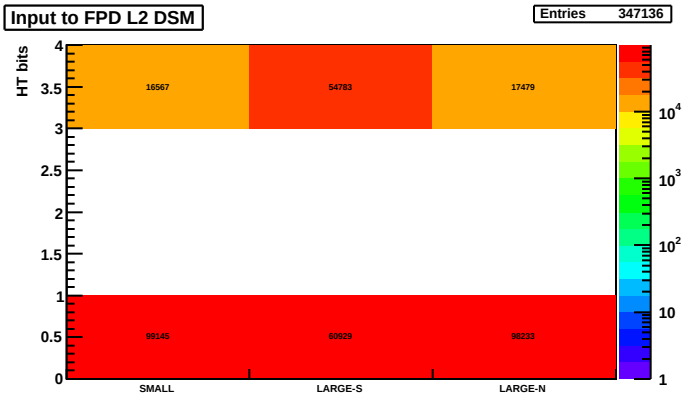

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

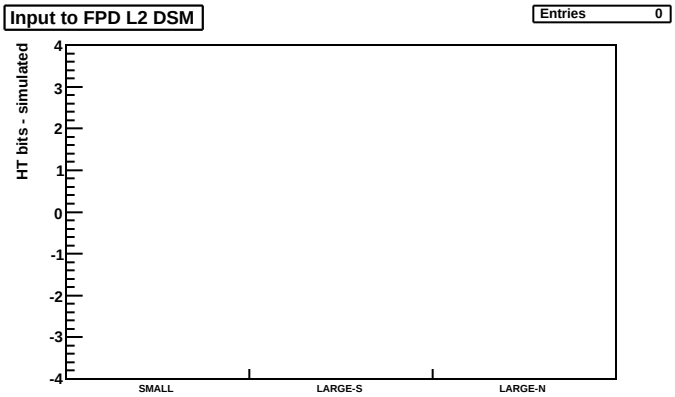

Input to FPD L2 DSM
Entries 925696
quadrant sum
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

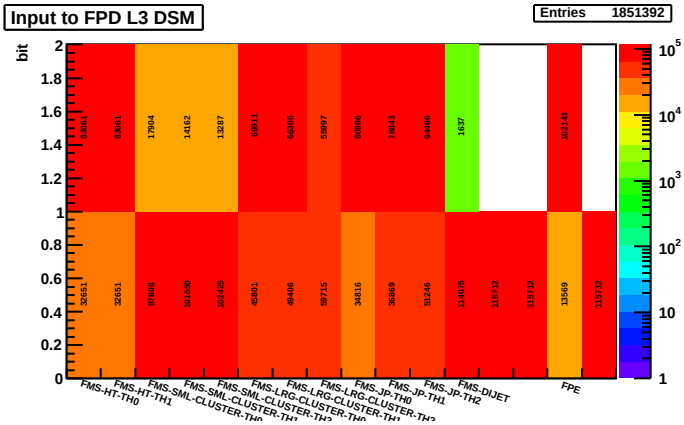

Input to FPD L2 DSM
Entries 1453
quadrant sum - simulated
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

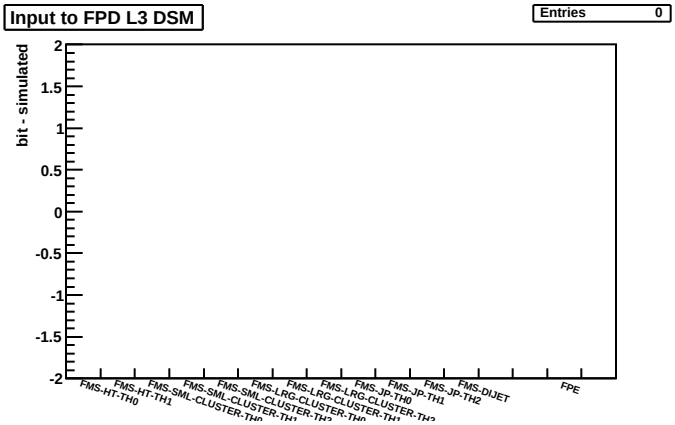

Input to FPD L2 DSM
Entries 347136
CL bits
13287
44933
11293
875
7173
3215
3742
2582
2817
97808
61024
98387
SMALL
LARGE-S
LARGE-N

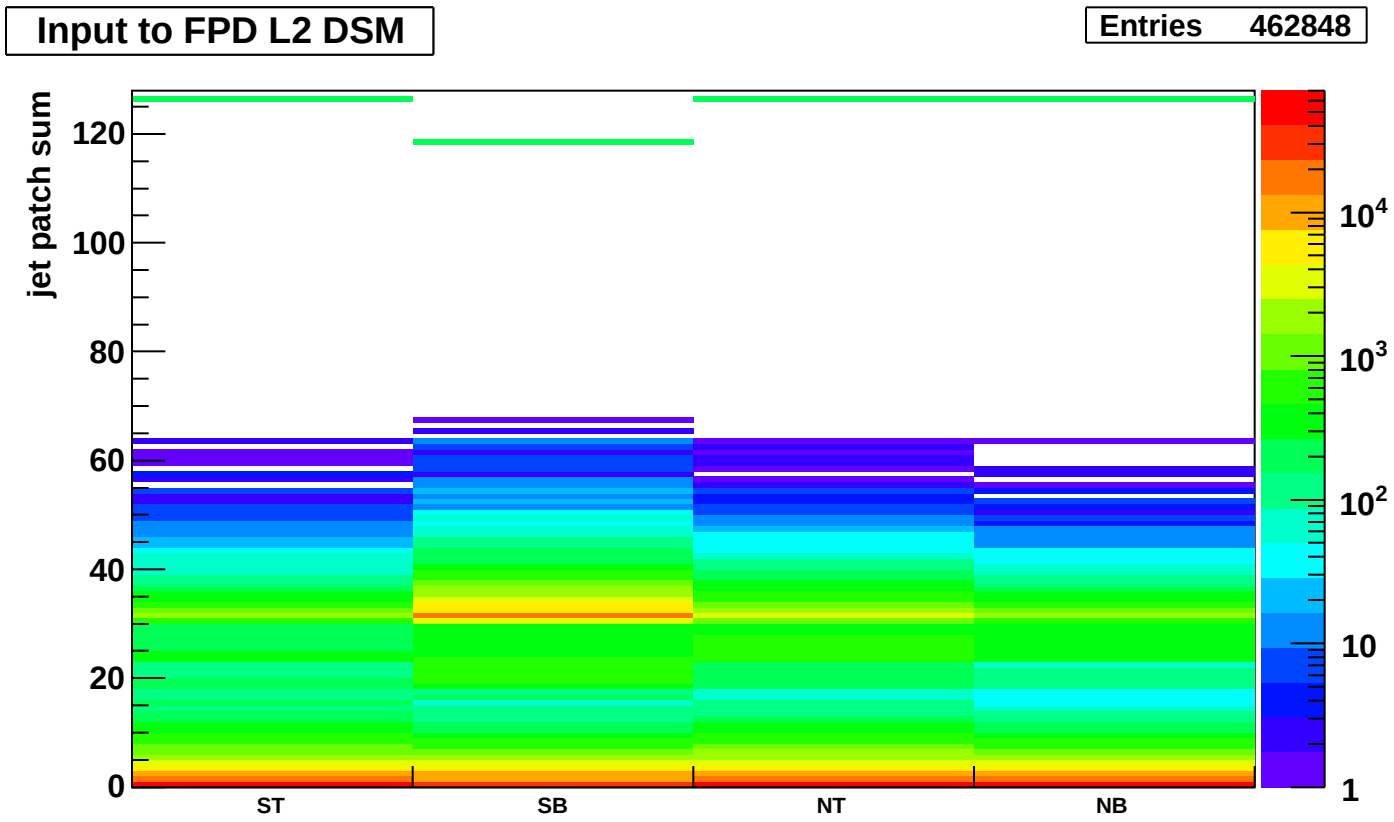

Input to FPD L2 DSM
Entries 0
CL bits - simulated
SMALL
LARGE-S
LARGE-N

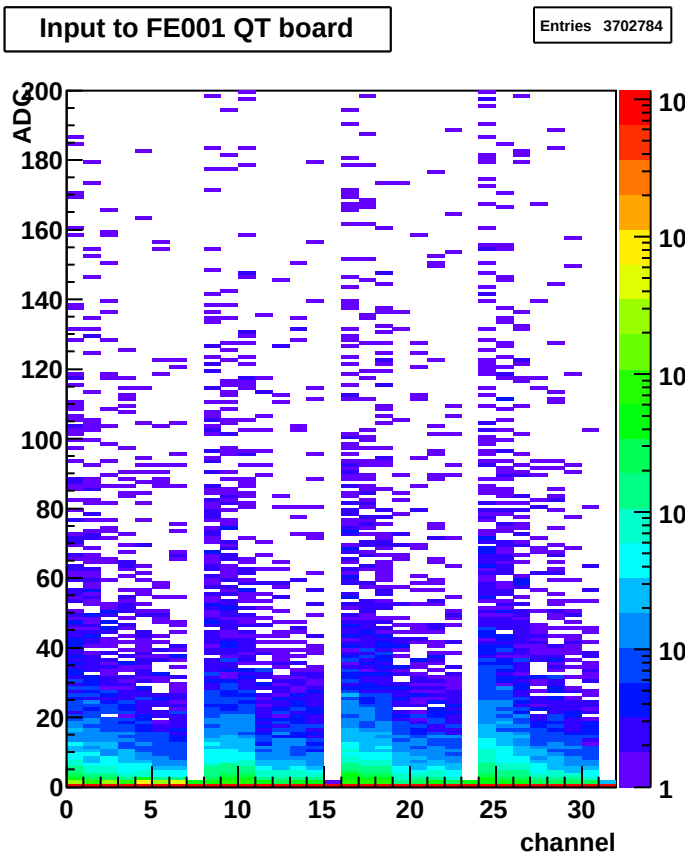

Input to FPD L2 DSM
Entries 347136
HT bits
16567
54783
17479
99145
60929
98233
SMALL
LARGE-S
LARGE-N

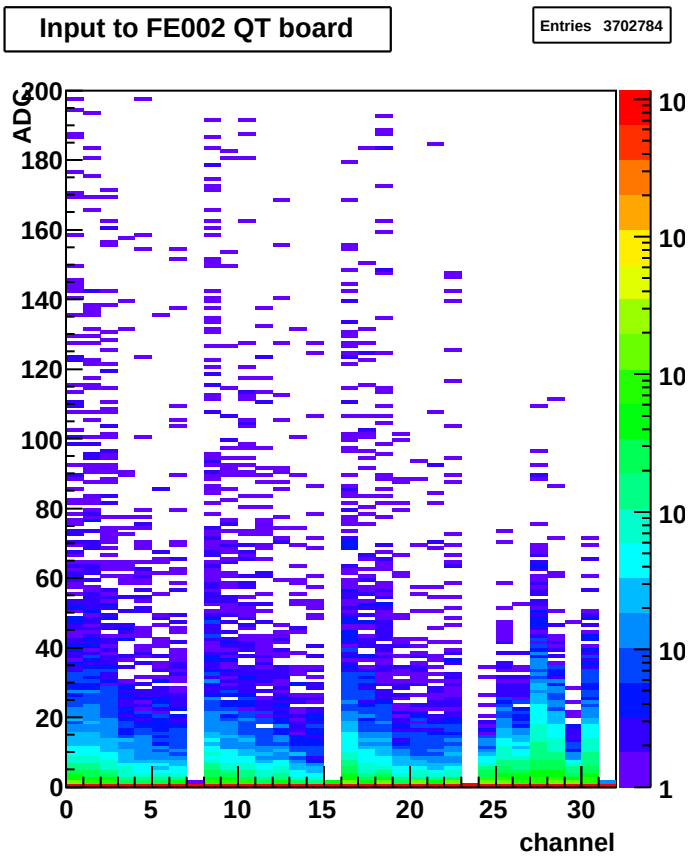

Input to FPD L2 DSM
Entries 0
HT bits - simulated
SMALL
LARGE-S
LARGE-N

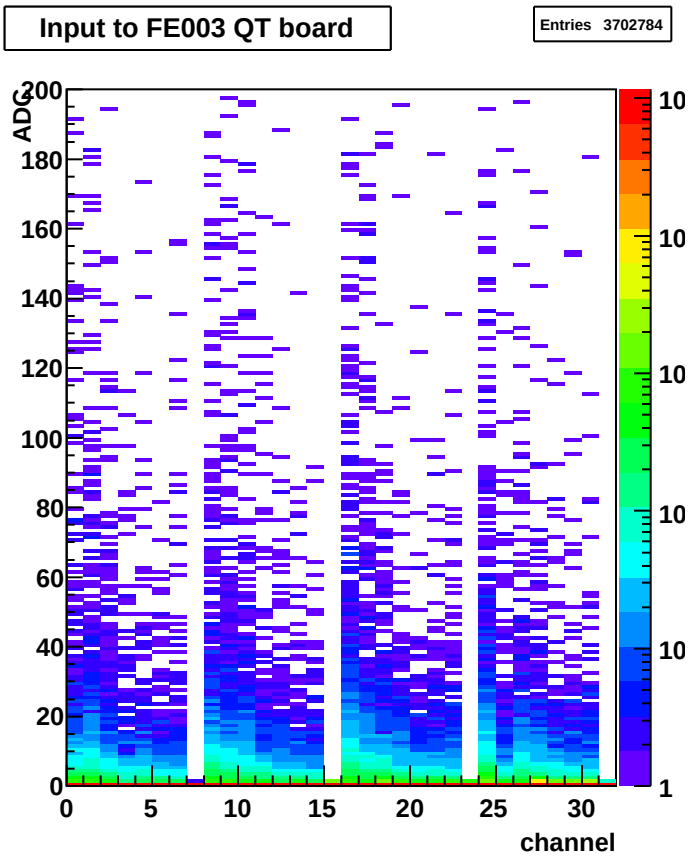

Input to FPD L3 DSM
Entries 1851392
bit
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

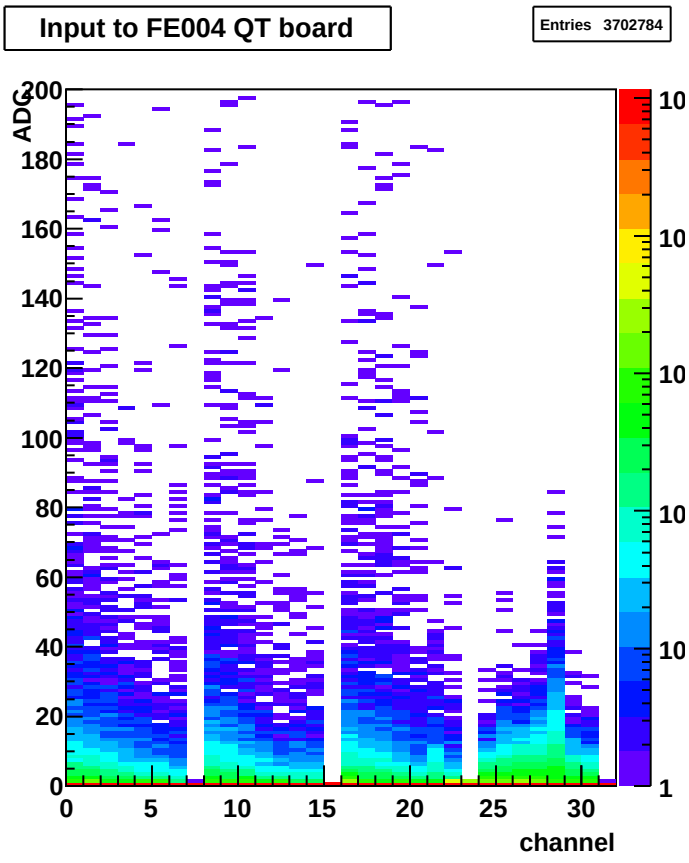

Input to FPD L3 DSM
Entries 0
bit - simulated
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

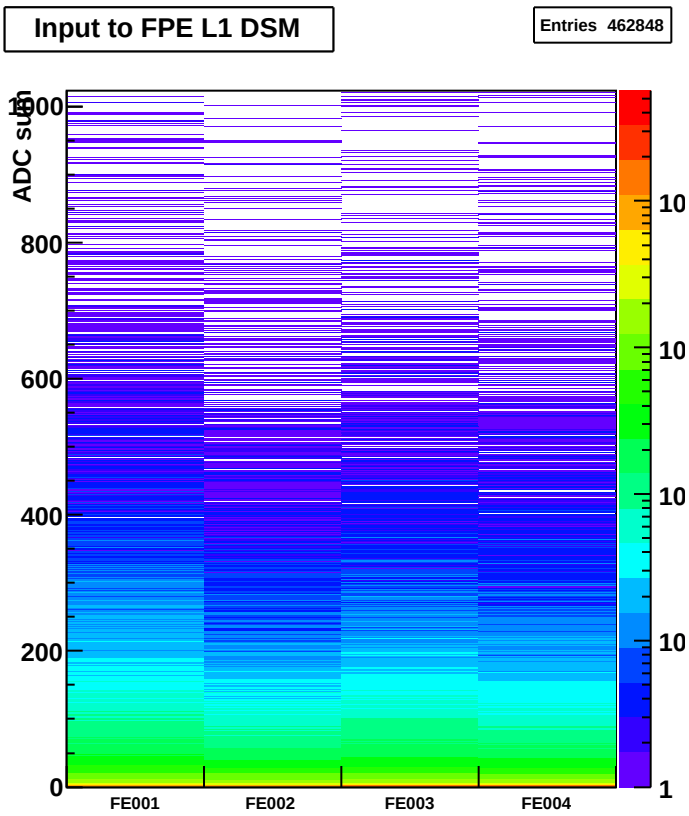

Input to FPD L2 DSM
Entries 462848
jet patch sum
120
100
80
60
40
20
0
ST
SB
NT
NB
10^4
10^3
10^2
10
1

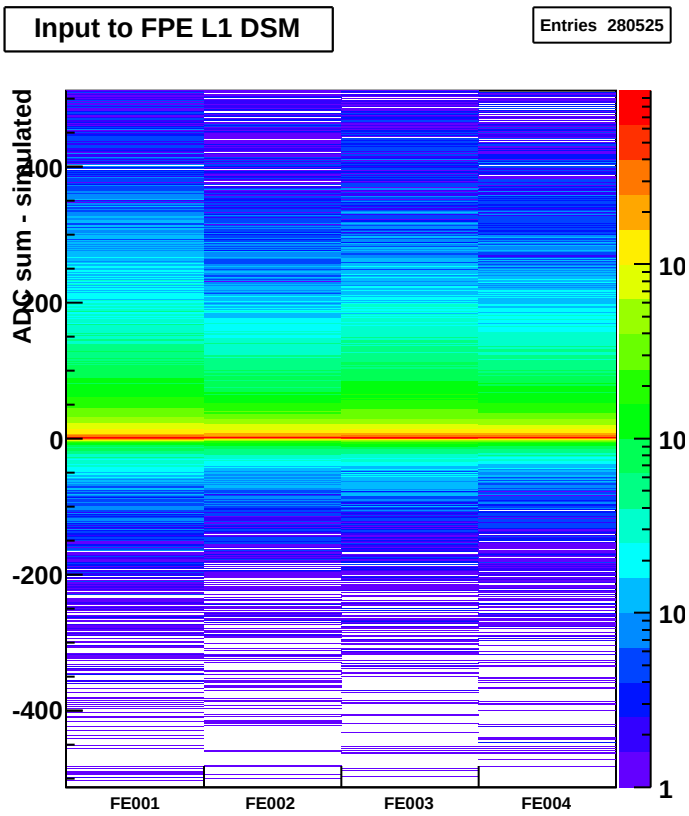

Input to FE001 QT board
Entries 3702784
ADC
channel

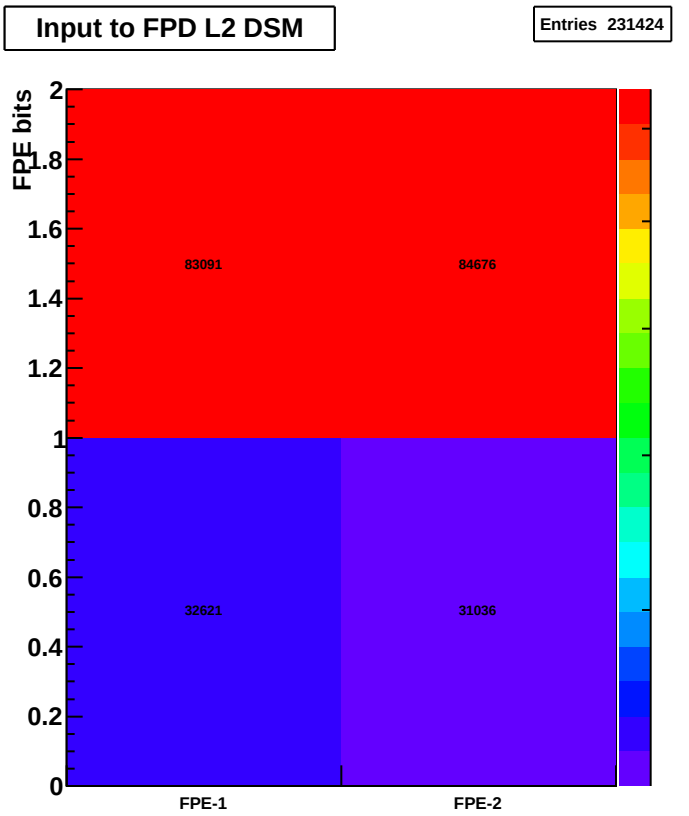

Input to FE002 QT board
Entries 3702784
ADC
channel

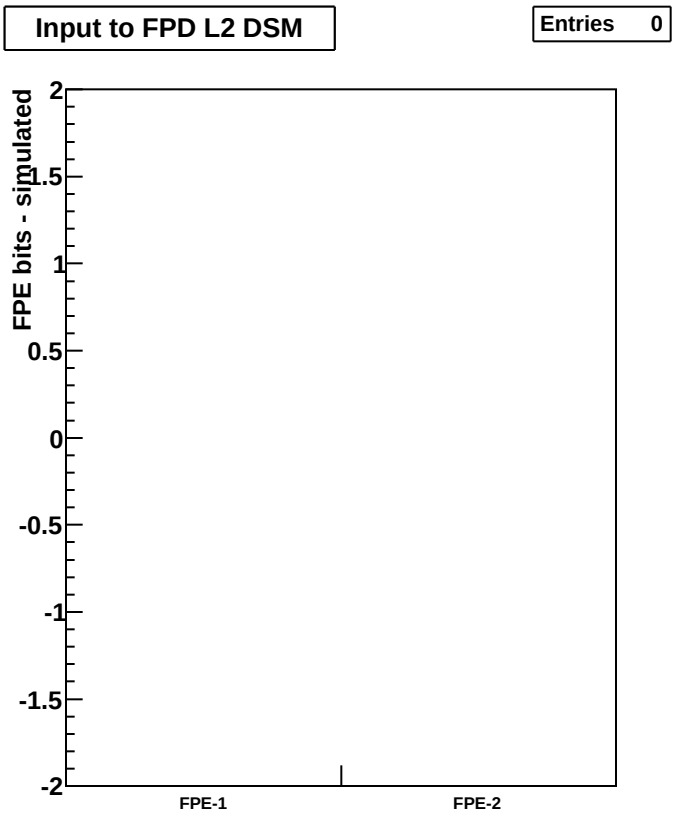

Input to FE003 QT board
Entries 3702784
ADC
channel


Input to FE004 QT board
Entries 3702784
ADC
channel


Input to FPE L1 DSM
Entries 462848
ADC sum
1000
800
600
400
200
0
FE001
FE002
FE003
FE004
10
10
10
10
1


Input to FPE L1 DSM
Entries 280525
ADC sum - simulated
400
200
0
-200
-400
FE001
FE002
FE003
FE004
10
10
10
10
1


Input to FPD L2 DSM
Entries 231424
FPE bits
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
83091
84676
32621
31036
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