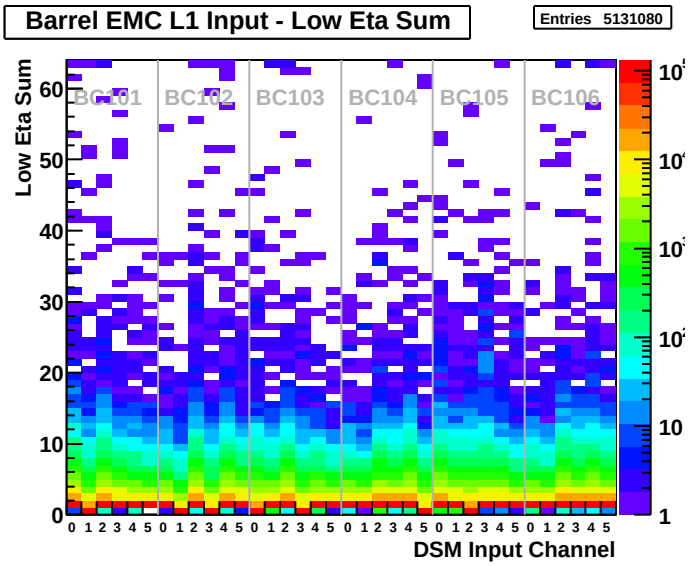
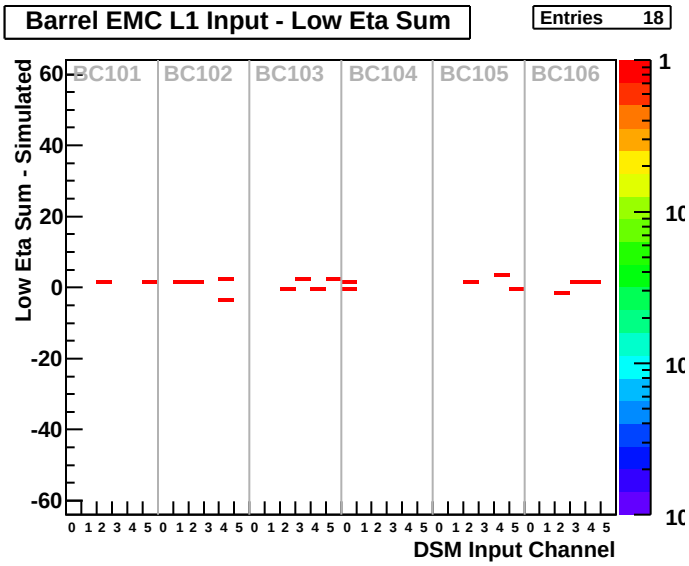
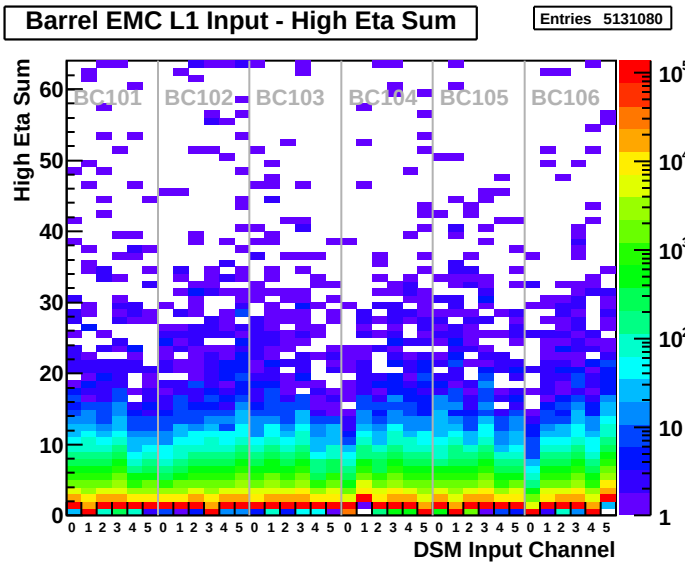
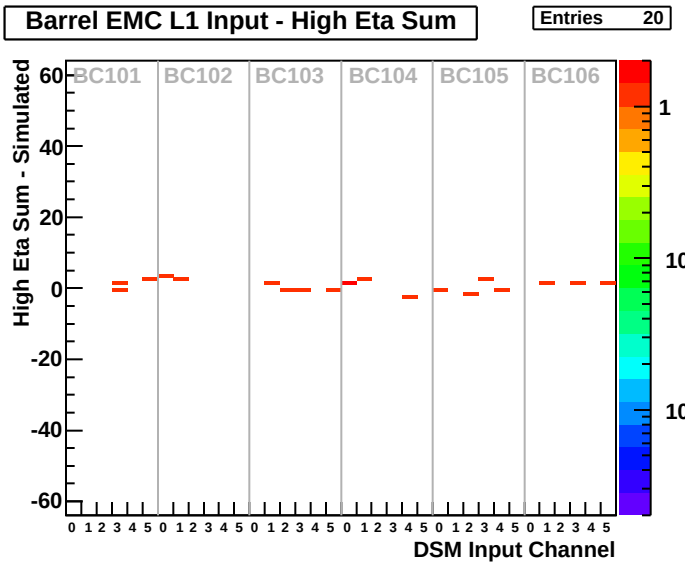
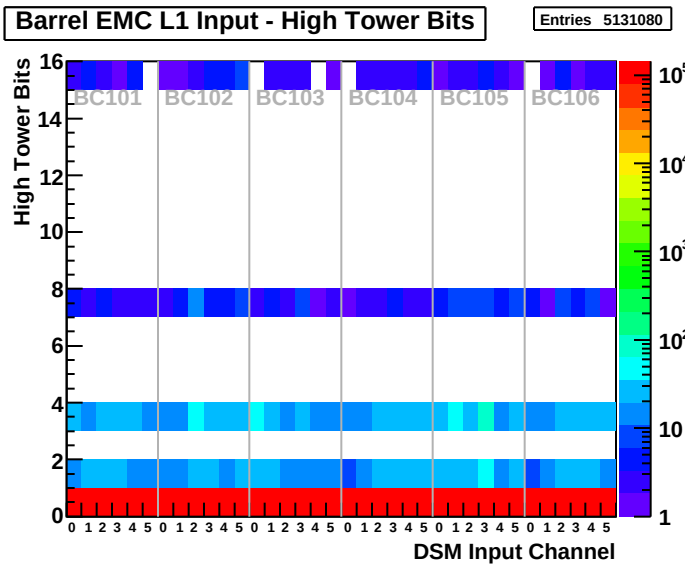
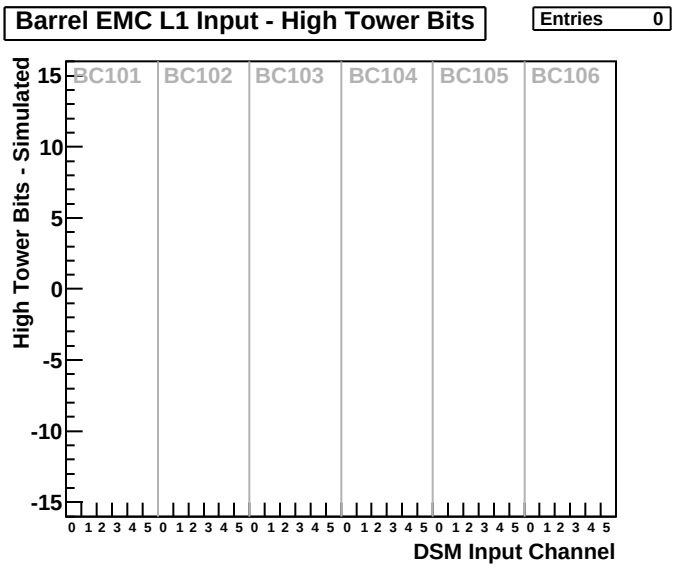

Barrel EMC L1 Input - Low Eta Sum
Entries 5131080
Low Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

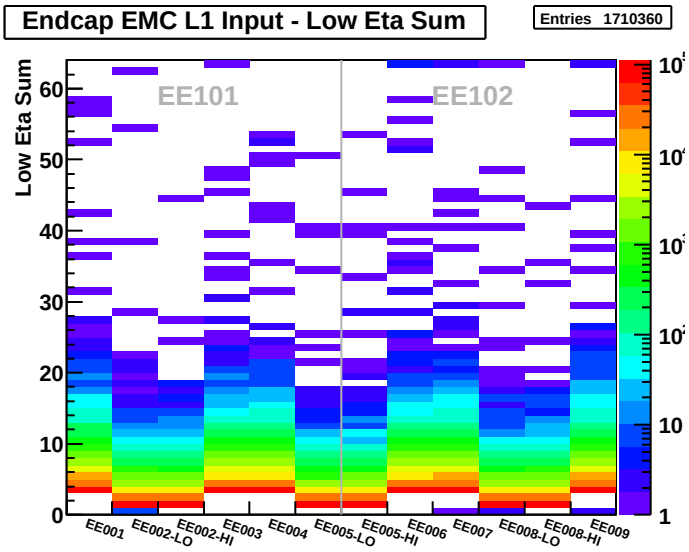

Barrel EMC L1 Input - Low Eta Sum
Entries 18
Low Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

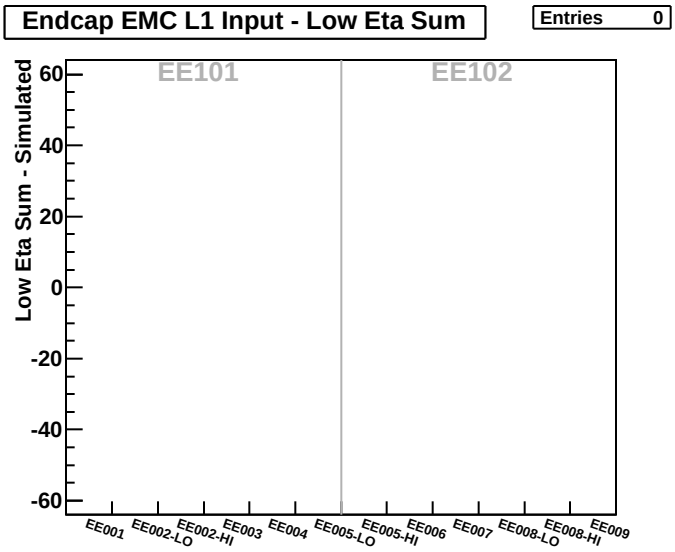

Barrel EMC L1 Input - High Eta Sum
Entries 5131080
High Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

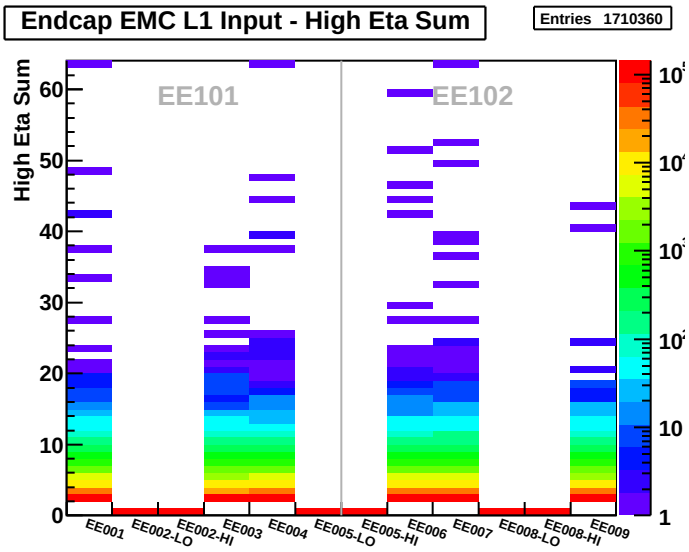

Barrel EMC L1 Input - High Eta Sum
Entries 20
High Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

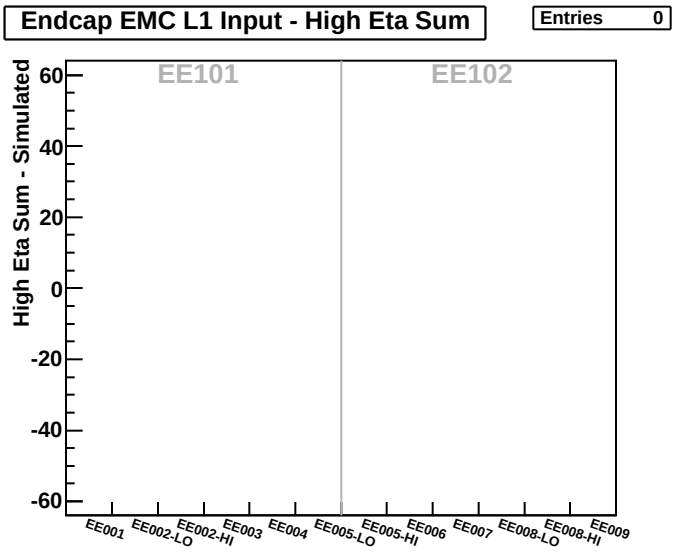

Barrel EMC L1 Input - High Tower Bits
Entries 5131080
High Tower Bits
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

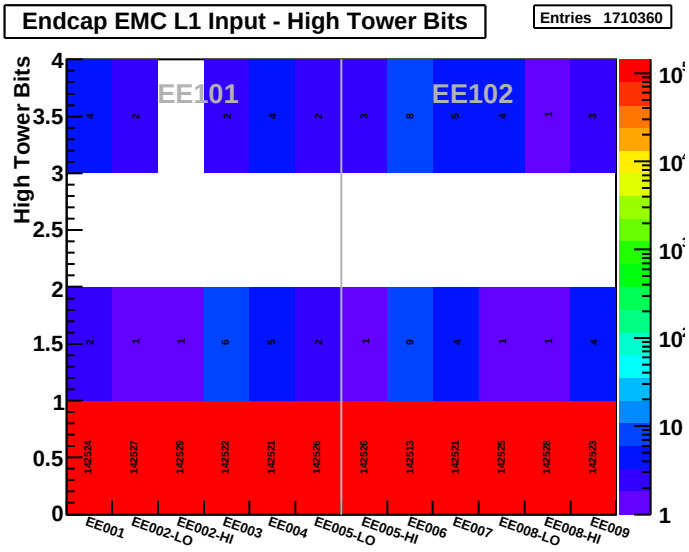

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

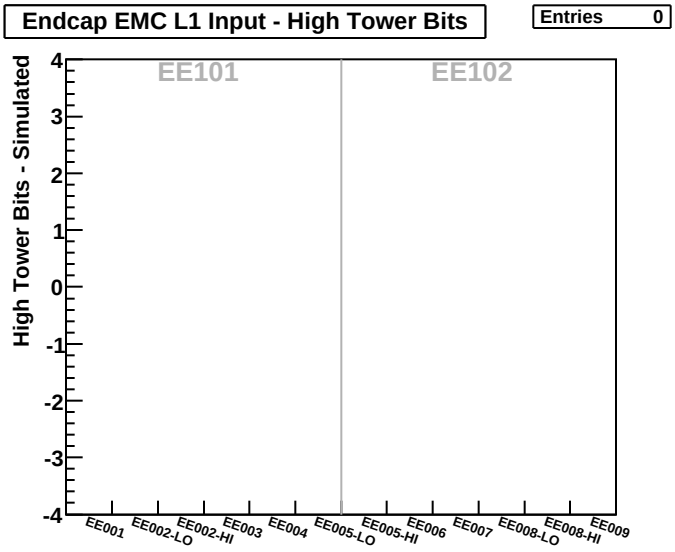

Endcap EMC L1 Input - Low Eta Sum
Entries 1710360
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

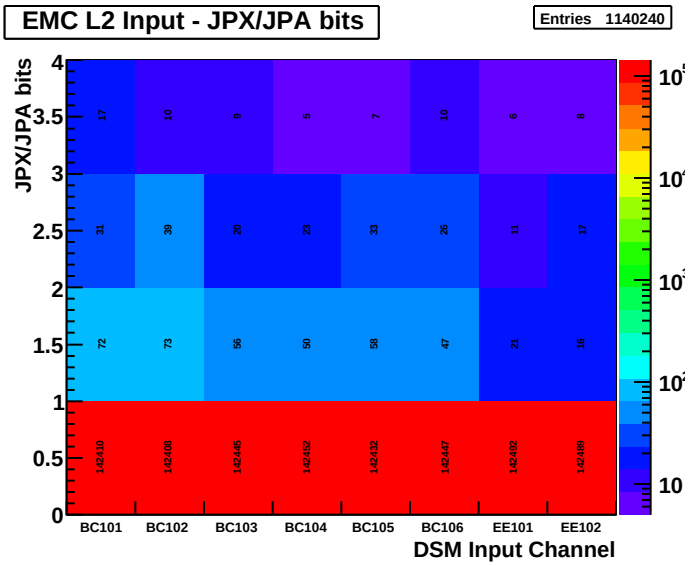

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

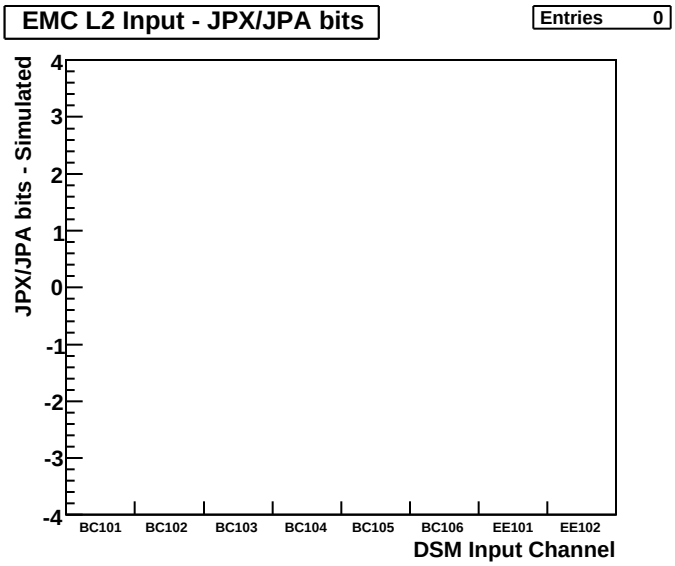

Endcap EMC L1 Input - High Eta Sum
Entries 1710360
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

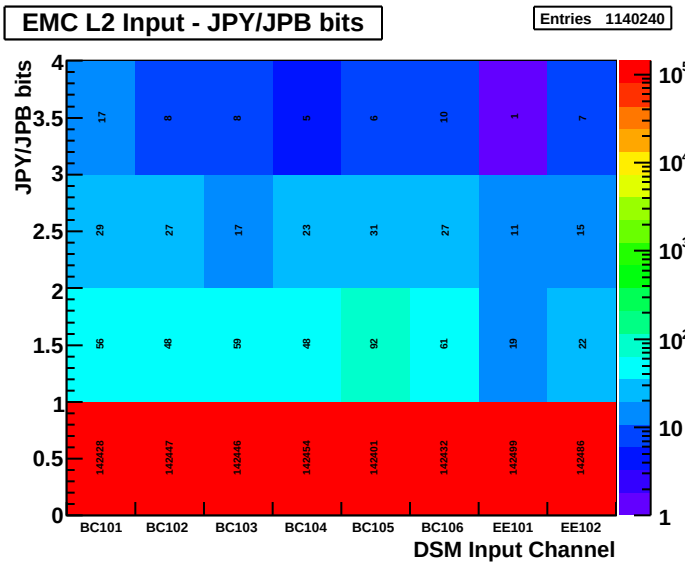

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

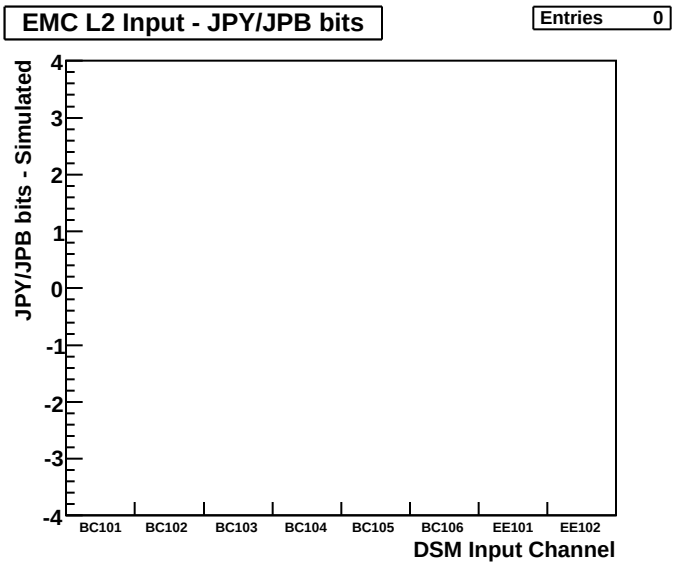

Endcap EMC L1 Input - High Tower Bits
Entries 1710360
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

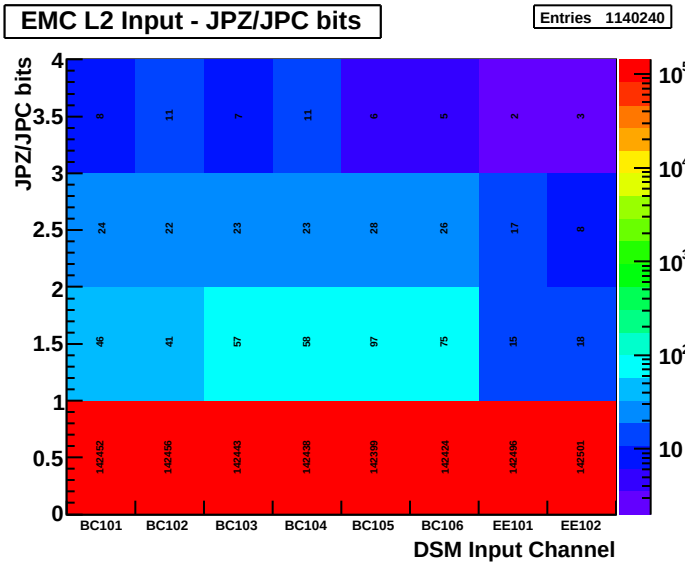

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

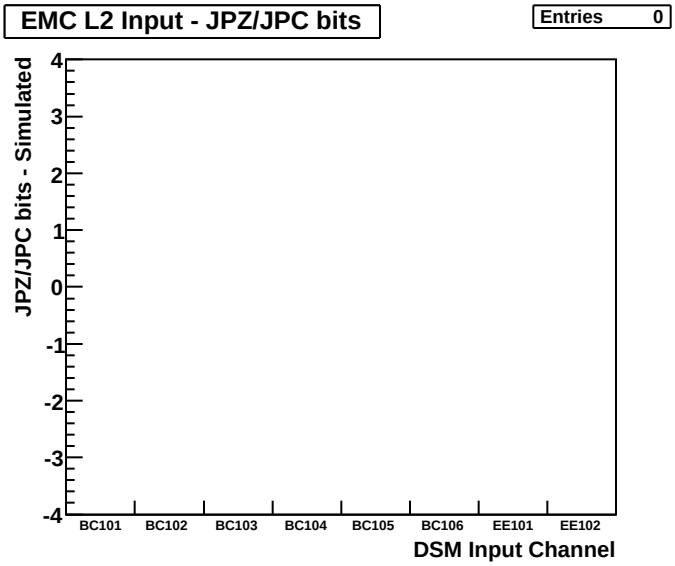

EMC L2 Input - JPX/JPA bits
Entries 1140240
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
17 10 9 5 7 10 6 8
31 39 20 23 33 26 11 17
72 73 56 50 58 47 21 16
142410 142408 142445 142452 142432 142447 142492 142489

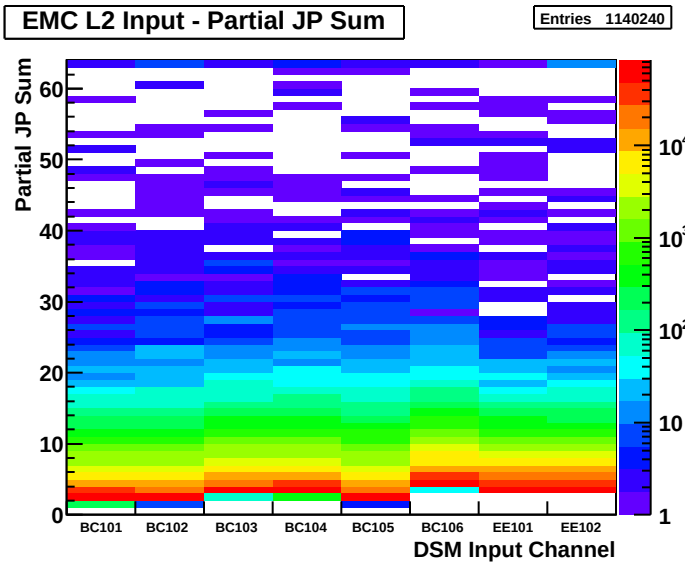

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

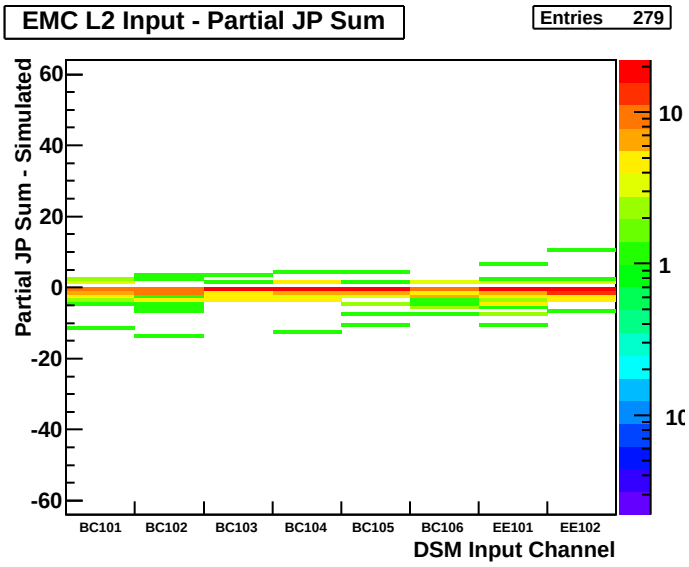

EMC L2 Input - JPY/JPB bits
Entries 1140240
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
17 8 8 5 6 10 1 7
29 27 17 23 31 27 11 15
56 48 59 48 92 61 19 22
142428 142447 142446 142454 142401 142432 142499 142486

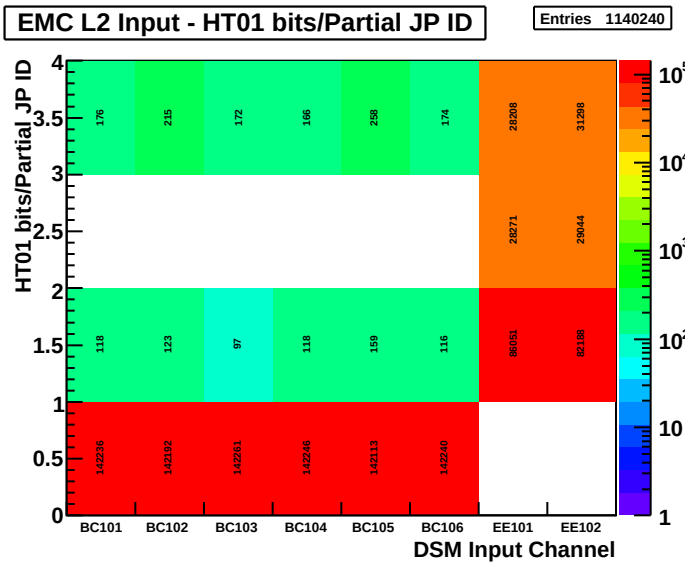

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

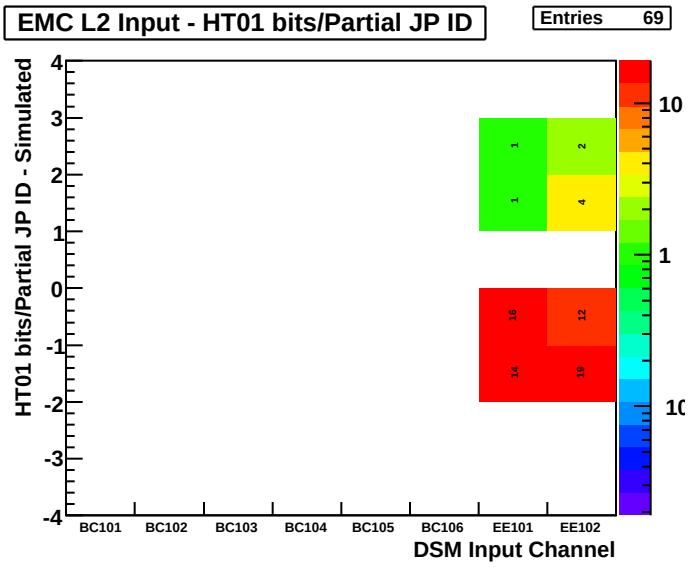

EMC L2 Input - JPZ/JPC bits
Entries 1140240
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
8 11 7 11 6 5 2 3
24 22 23 23 28 26 17 8
46 41 57 58 97 75 15 18
142452 142456 142443 142438 142399 142424 142495 142501

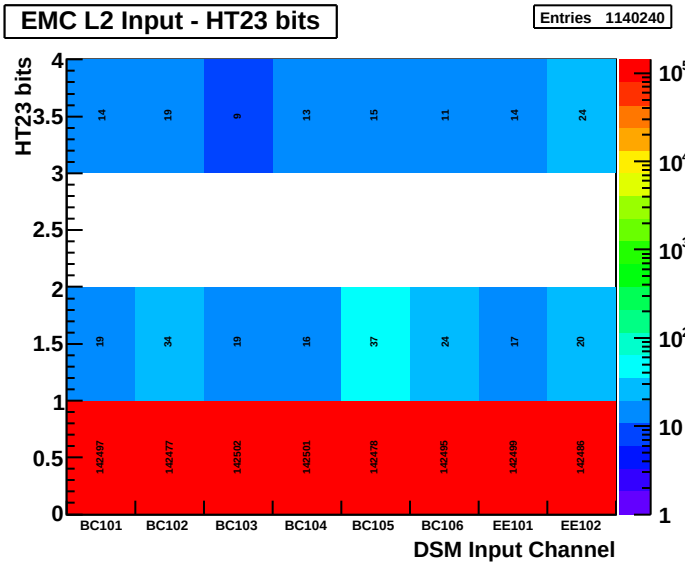

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

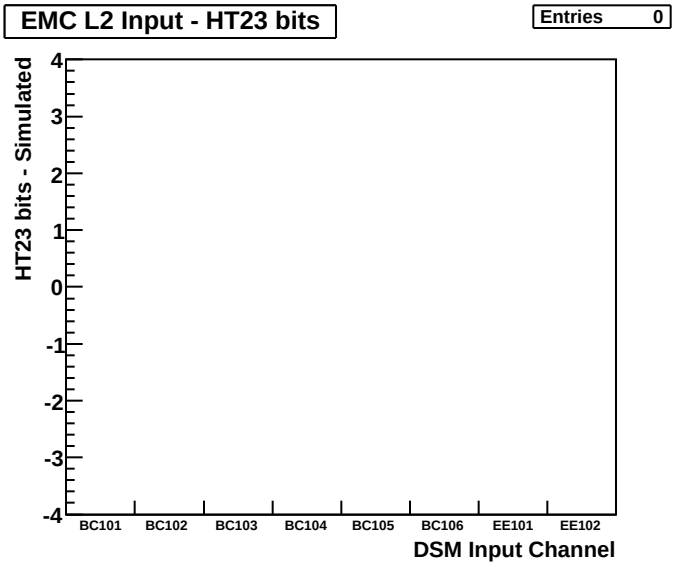

EMC L2 Input - Partial JP Sum
Entries 1140240
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

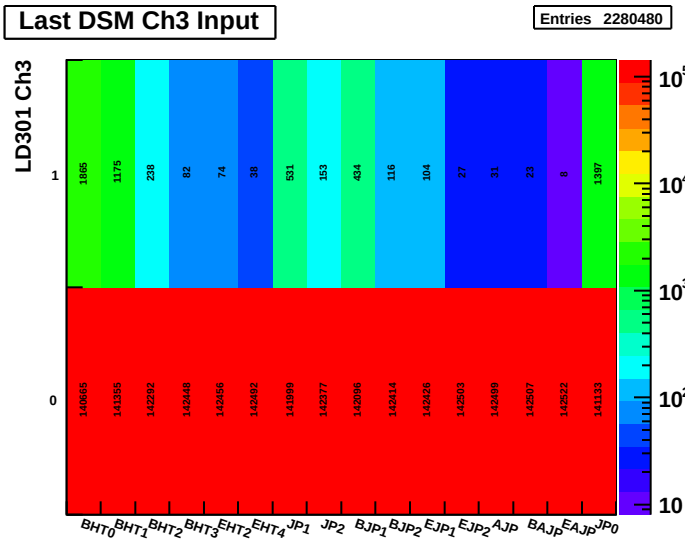

EMC L2 Input - Partial JP Sum
Entries 279
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

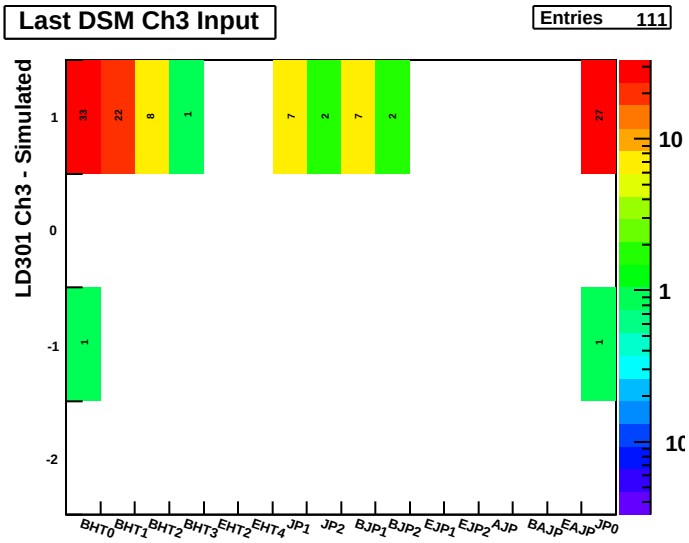

EMC L2 Input - HT01 bits/Partial JP ID
Entries 1140240
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

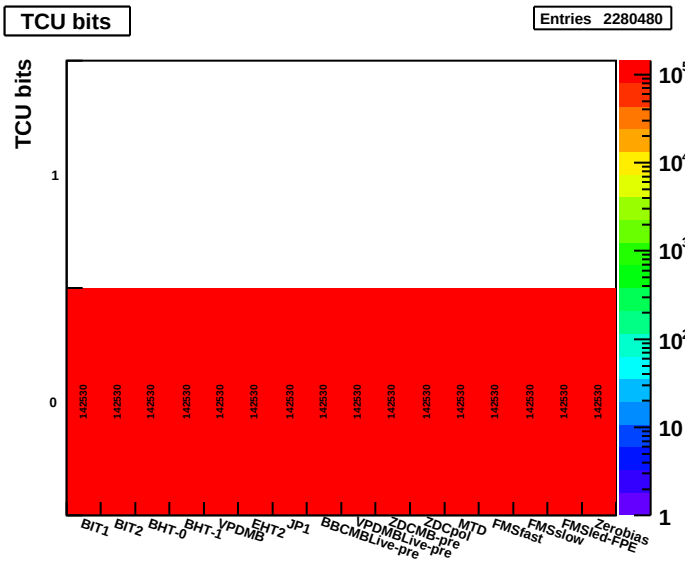

EMC L2 Input - HT01 bits/Partial JP ID
Entries 69
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

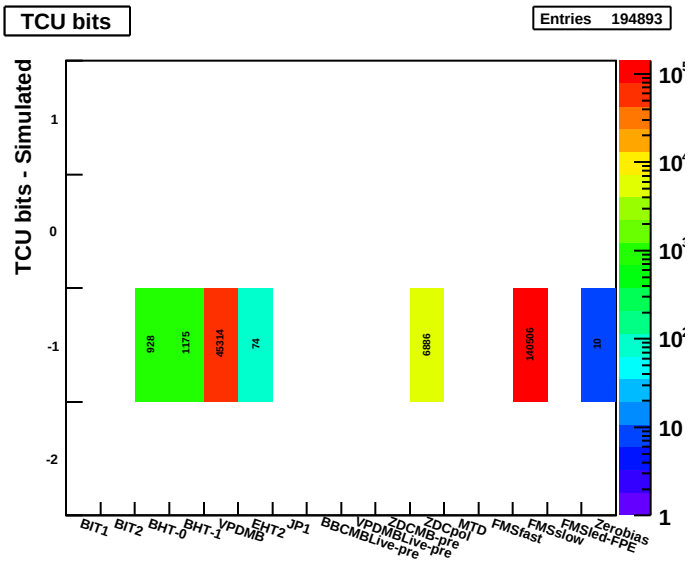

EMC L2 Input - HT23 bits
Entries 1140240
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

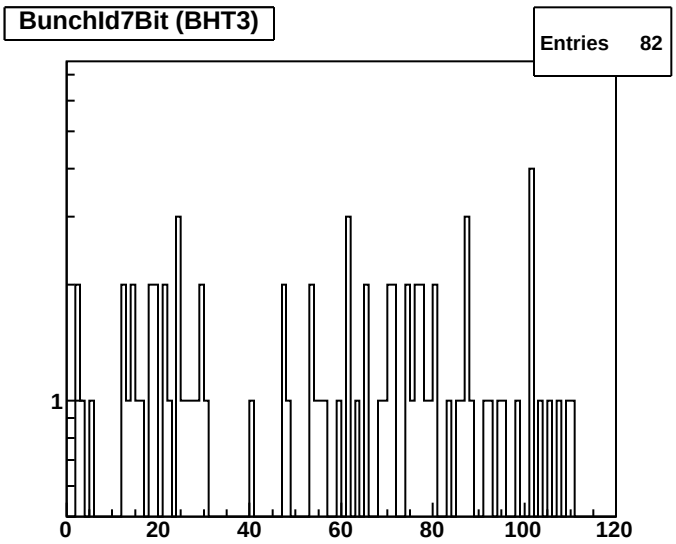

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

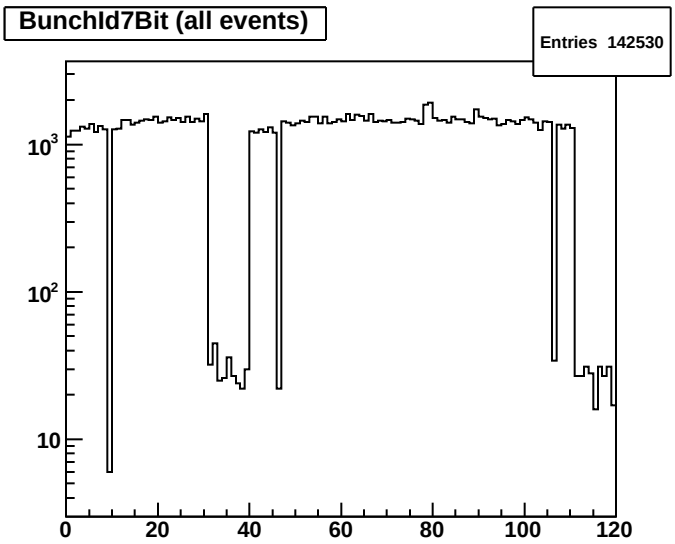

Last DSM Ch3 Input
Entries 2280480
LD301 Ch3
1866 1175 238 82 74 38 531 153 434 116 104 27 31 23 8 1397
140665 141355 142292 142448 142456 142492 141999 142377 142096 142414 142426 142503 142499 142507 142522 141133
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

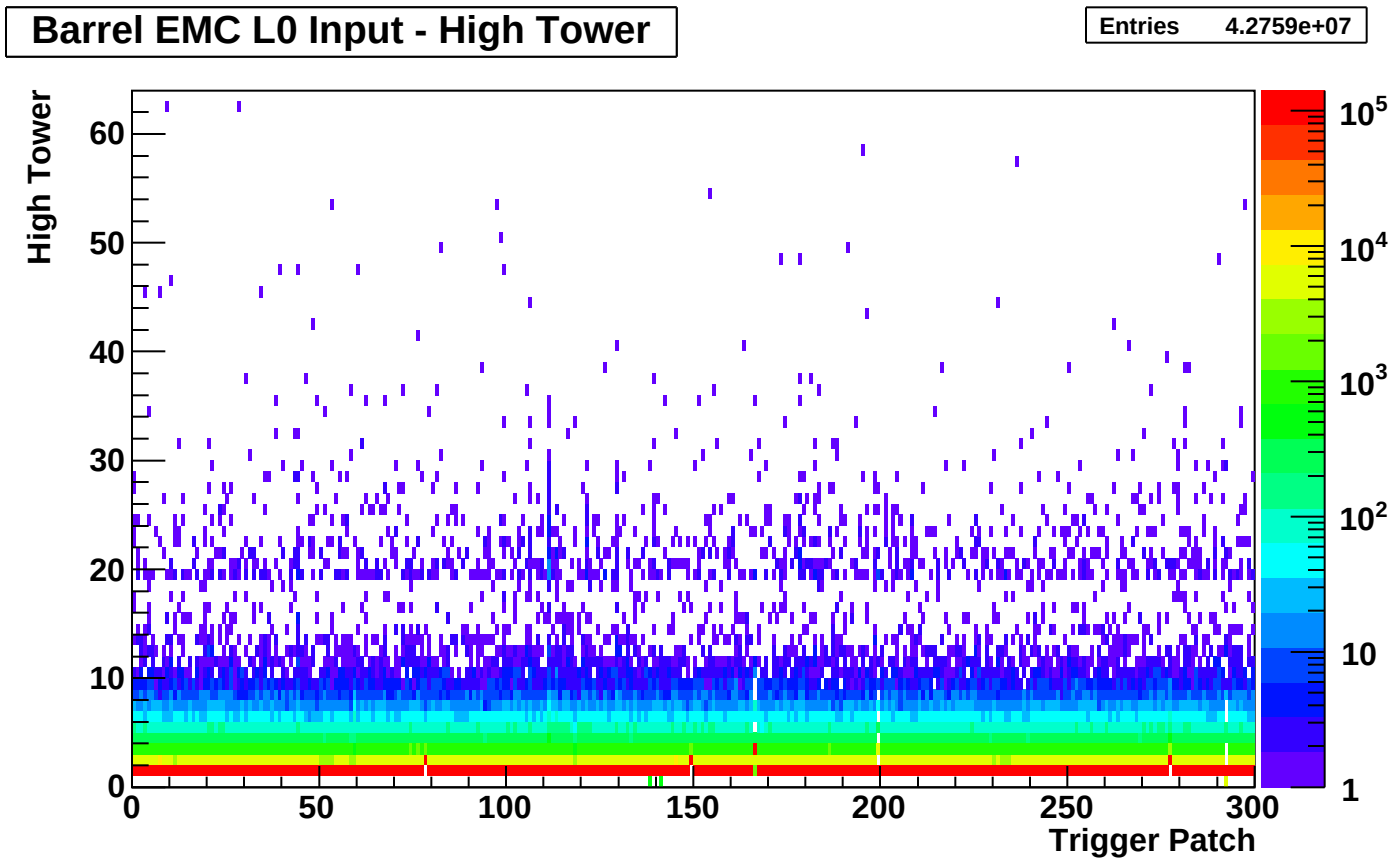

Last DSM Ch3 Input
Entries 111
LD301 Ch3 - Simulated
33 22 8 1 7 2 7 2 27
1 1
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

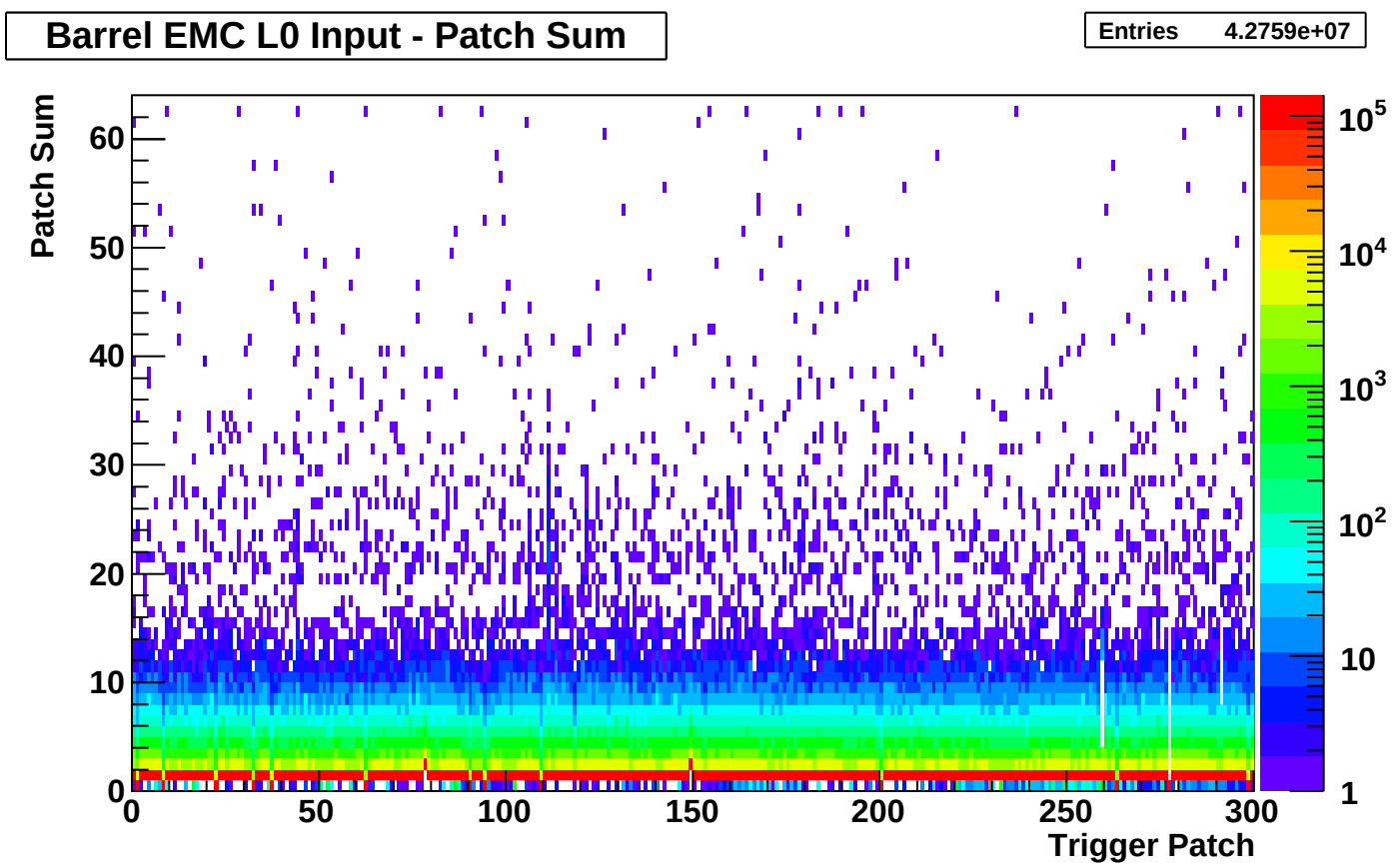

TCU bits
Entries 2280480
TCU bits
142530
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

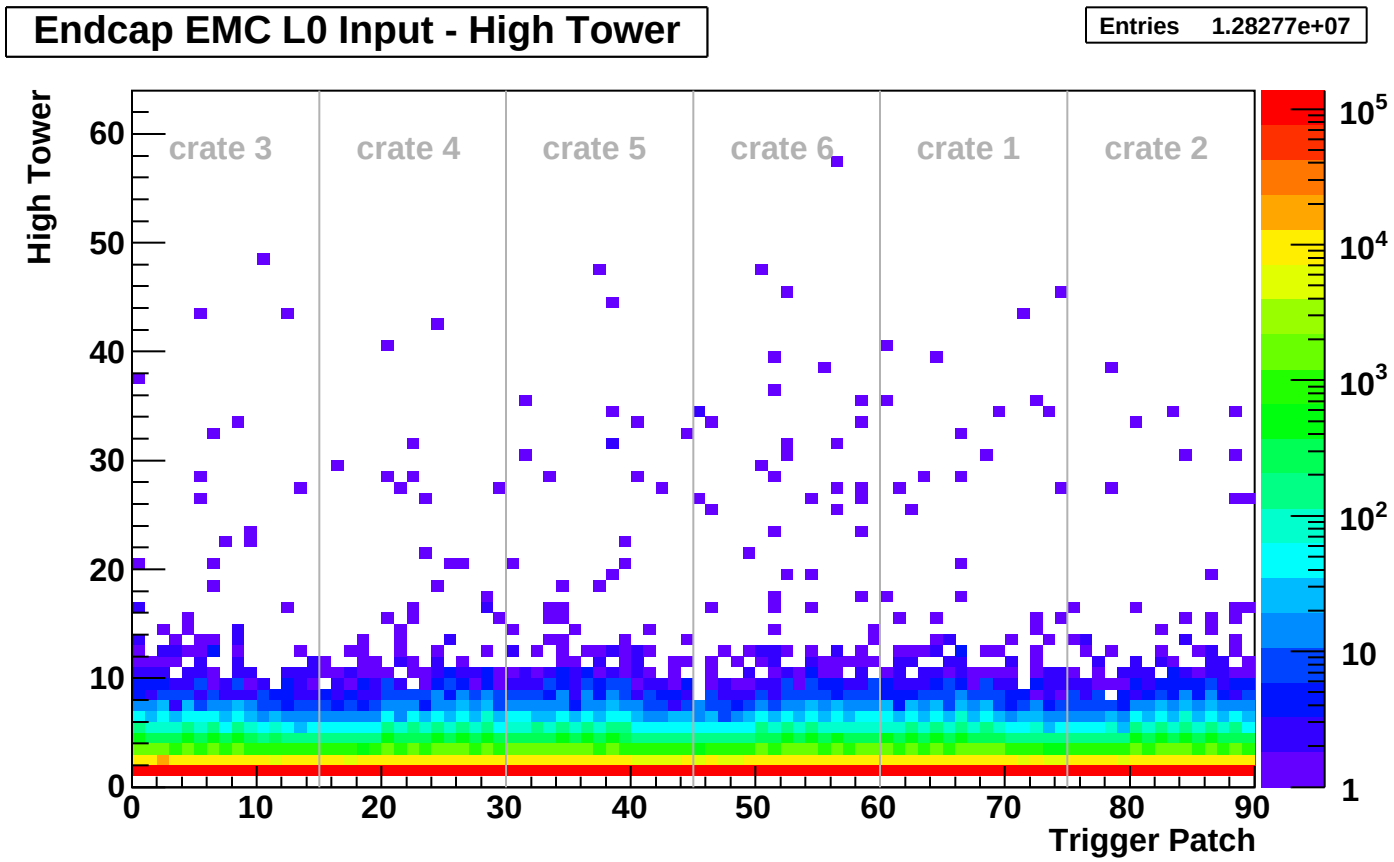

TCU bits
Entries 194893
TCU bits - Simulated
928 1175 45314 74 6866 140506 10
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

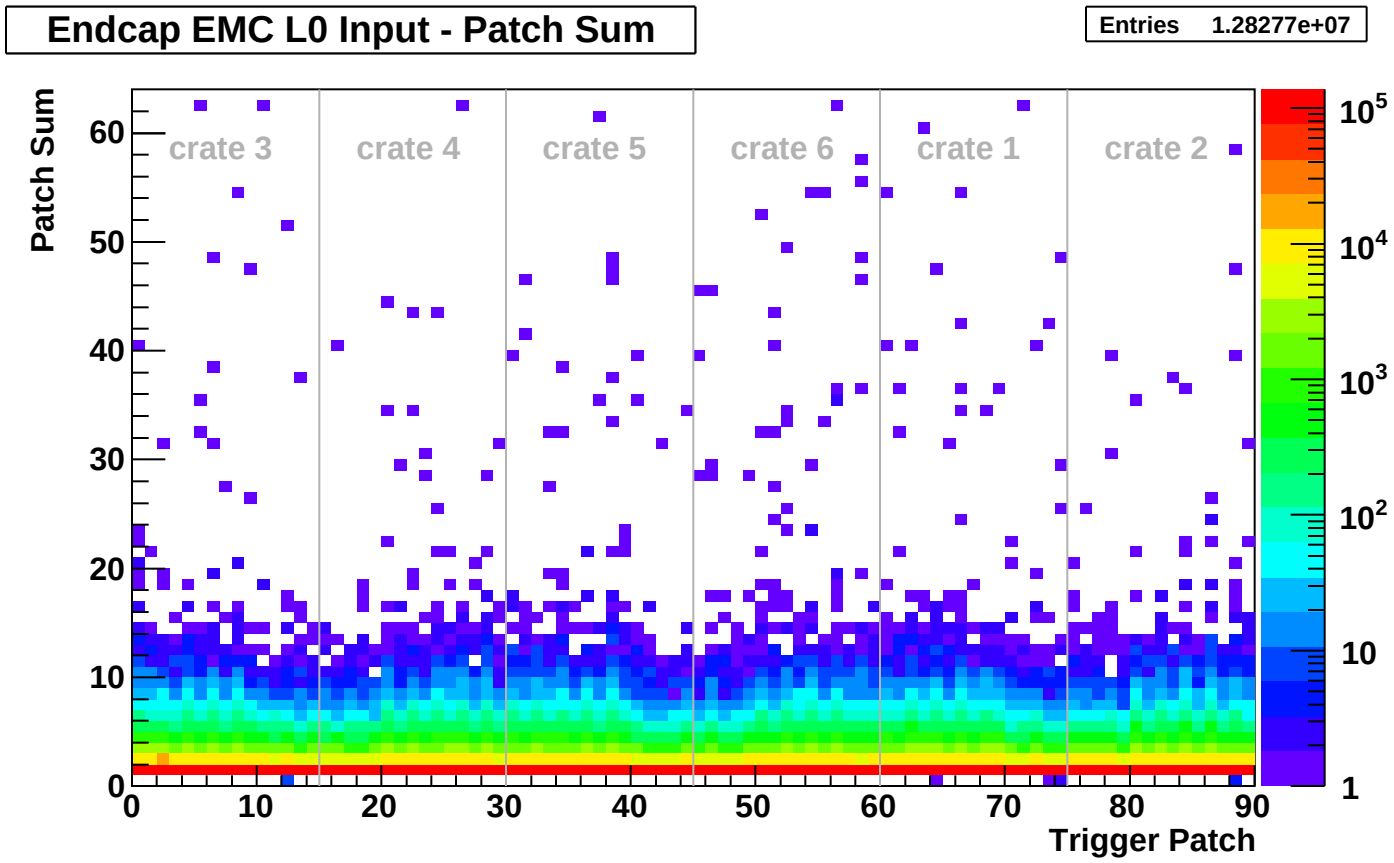

BunchId7Bit (BHT3)
Entries 82
0 20 40 60 80 100 120

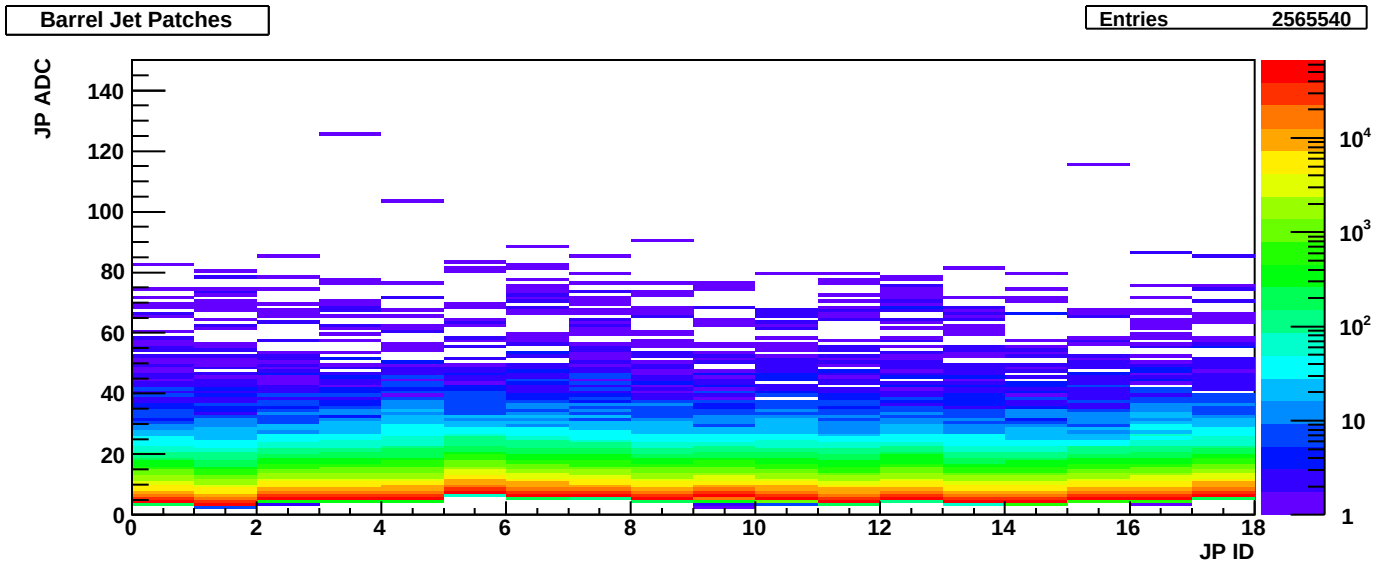

BunchId7Bit (all events)
Entries 142530
0 20 40 60 80 100 120

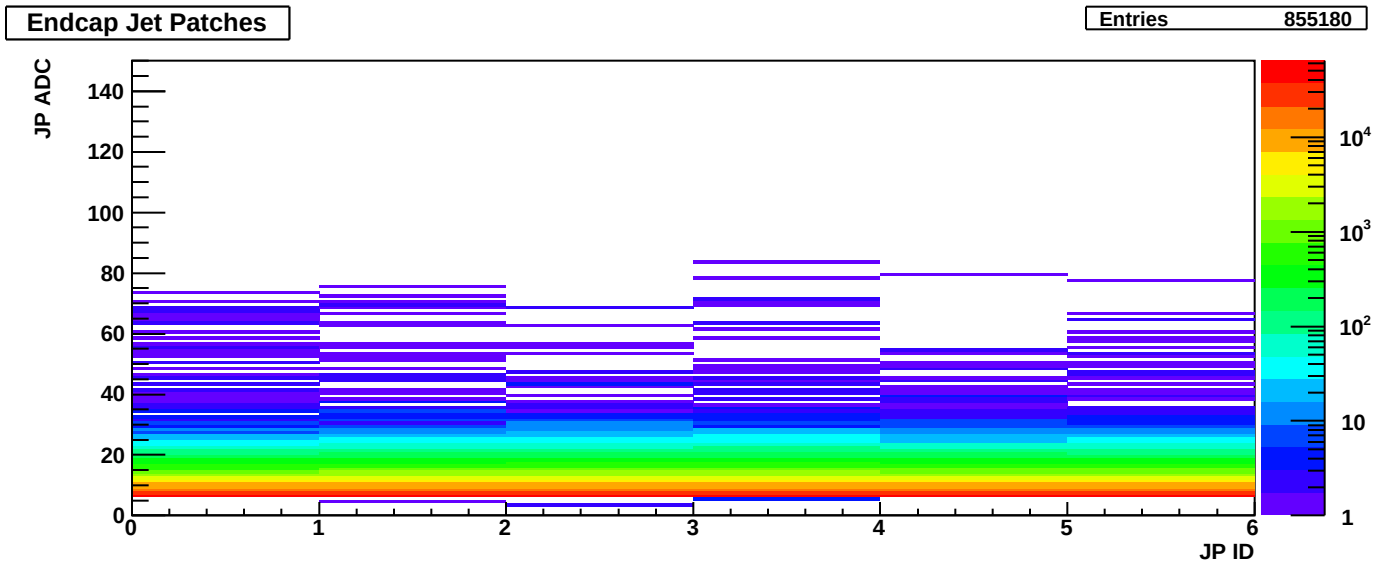

Barrel EMC L0 Input - High Tower
Entries 4.2759e+07
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

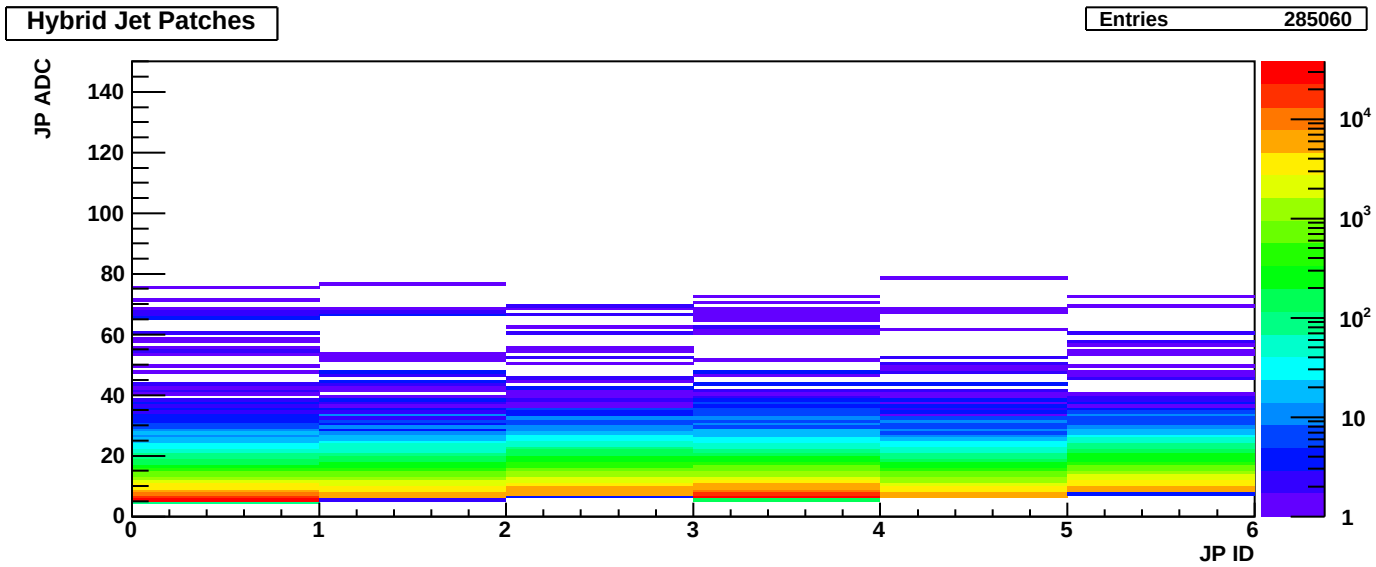

Barrel EMC L0 Input - Patch Sum
Entries 4.2759e+07
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

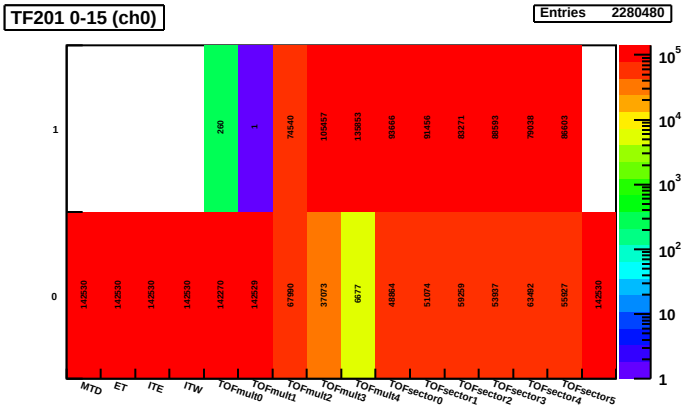

Endcap EMC L0 Input - High Tower
Entries 1.28277e+07
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

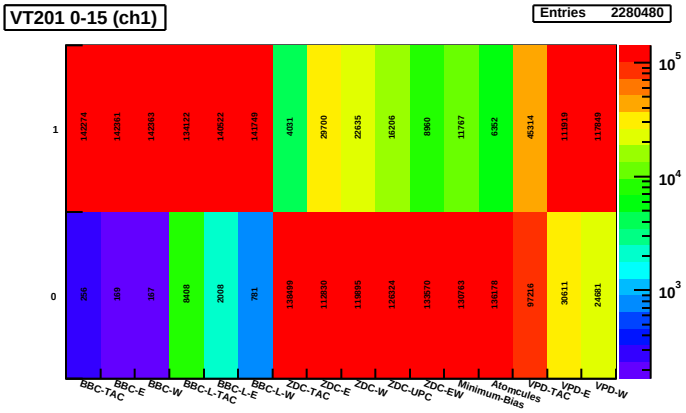

Endcap EMC L0 Input - Patch Sum
Entries 1.28277e+07
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

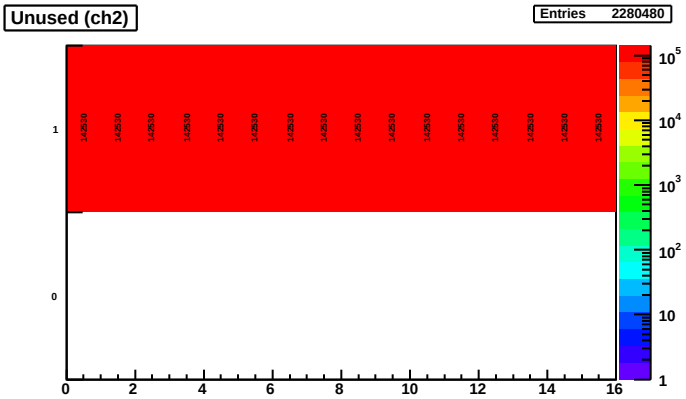

Barrel Jet Patches
Entries 2565540
JP ADC
JP ID

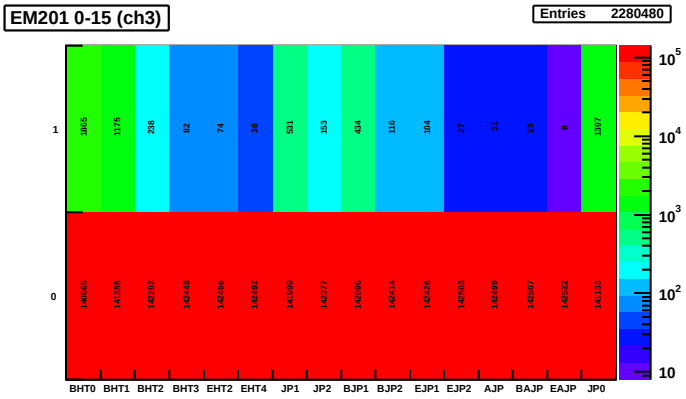

Endcap Jet Patches
Entries 855180
JP ADC
JP ID

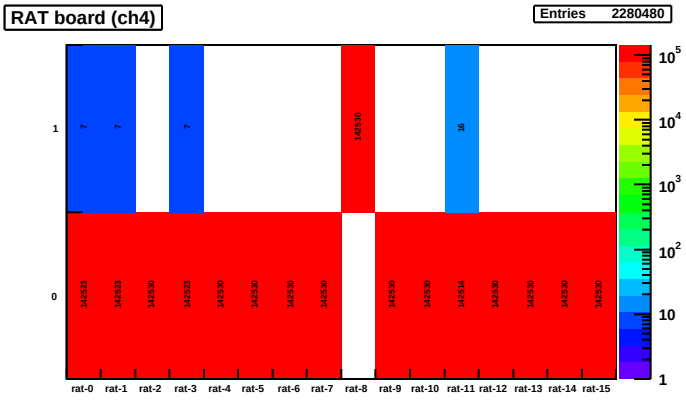

Hybrid Jet Patches
Entries 285060
JP ADC
JP ID

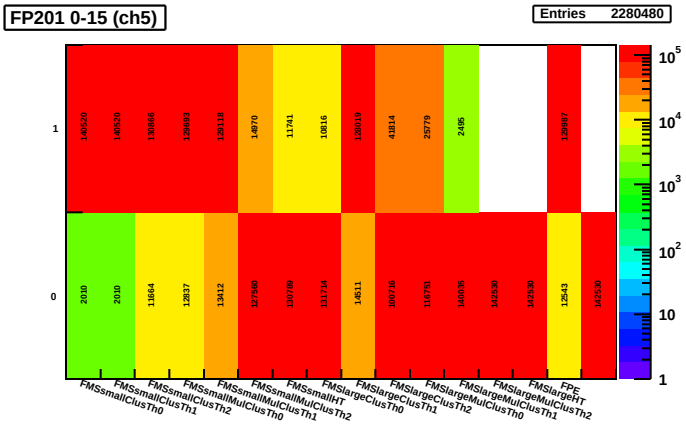

TF201 0-15 (ch0)
Entries 2280480
MTD
ET
ITE
ITW
TOFmult0
TOFmult1
TOFmult2
TOFmult3
TOFmult4
TOFsector0
TOFsector1
TOFsector2
TOFsector3
TOFsector4
TOFsector5

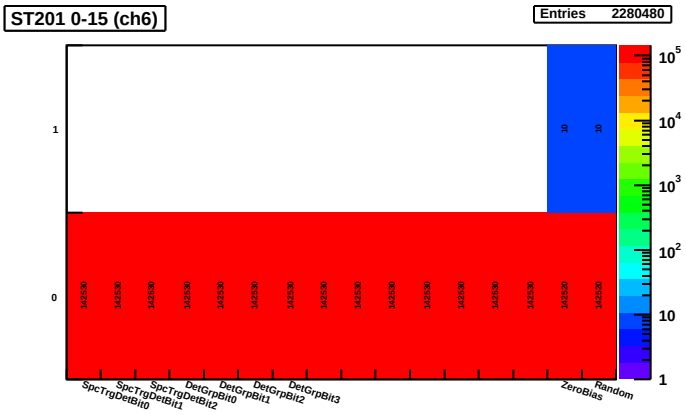

VT201 0-15 (ch1)
Entries 2280480
BBC-TAC
BBC-E
BBC-W
BBC-L-TAC
BBC-L-E
BBC-L-W
ZDC-TAC
ZDC-E
ZDC-W
ZDC-UPC
ZDC-EW
Minimum-Bias
Atomcules
VPD-TAC
VPD-E
VPD-W

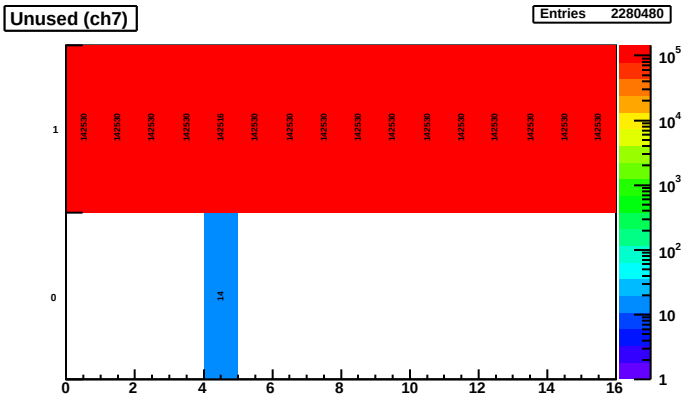

Unused (ch2)
Entries 2280480

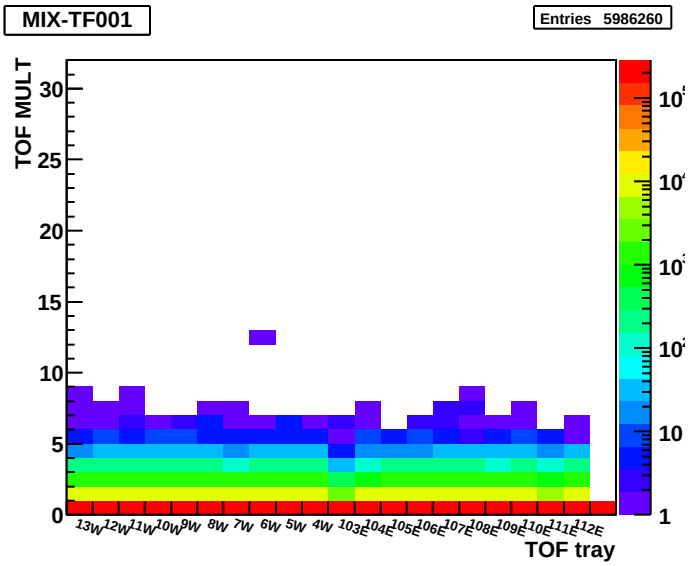

EM201 0-15 (ch3)
Entries 2280480
BHT0
BHT1
BHT2
BHT3
EHT2
EHT4
JP1
JP2
BJP1
BJP2
EJP1
EJP2
AJP
BAJP
EAJP
JP0

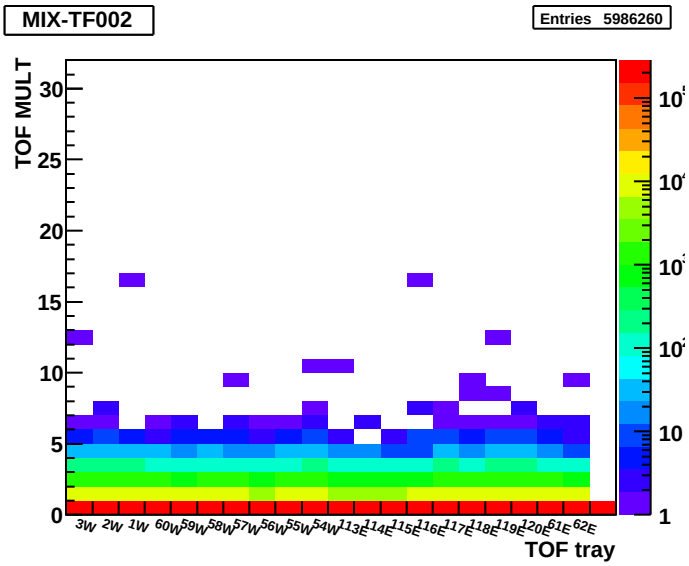

RAT board (ch4)
Entries 2280480
rat-0
rat-1
rat-2
rat-3
rat-4
rat-5
rat-6
rat-7
rat-8
rat-9
rat-10
rat-11
rat-12
rat-13
rat-14
rat-15

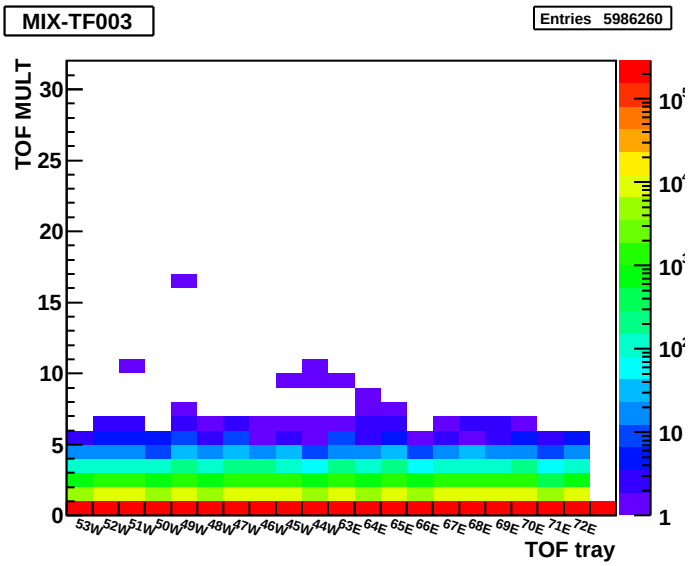

FP201 0-15 (ch5)
Entries 2280480
FMSsmallClusTh0
FMSsmallClusTh1
FMSsmallClusTh2
FMSsmallMulClusTh0
FMSsmallMulClusTh1
FMSsmallMulClusTh2
FMSsmallHT
FMSlargeClusTh0
FMSlargeClusTh1
FMSlargeClusTh2
FMSlargeMulClusTh0
FMSlargeMulClusTh1
FMSlargeMulClusTh2
FMSlargeHT
FPE

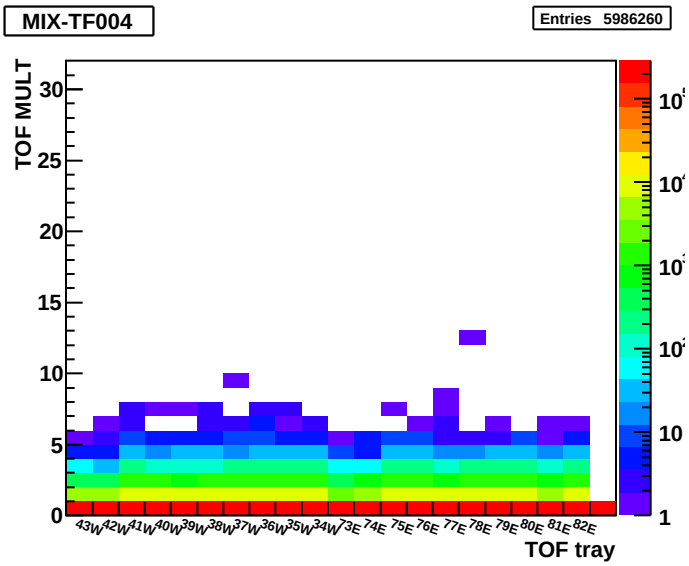

ST201 0-15 (ch6)
Entries 2280480
SpcTrgDetBit0
SpcTrgDetBit1
SpcTrgDetBit2
DetCrpBit0
DetCrpBit1
DetCrpBit2
DetCrpBit3
ZeroBias
Random

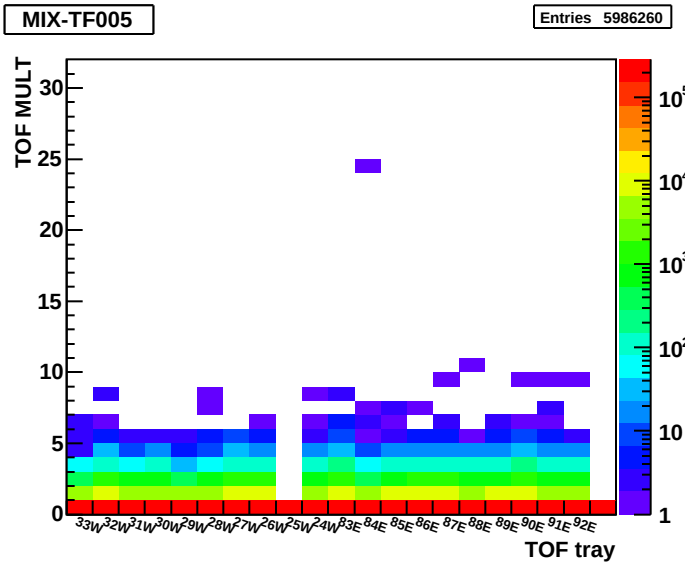

Unused (ch7)
Entries 2280480

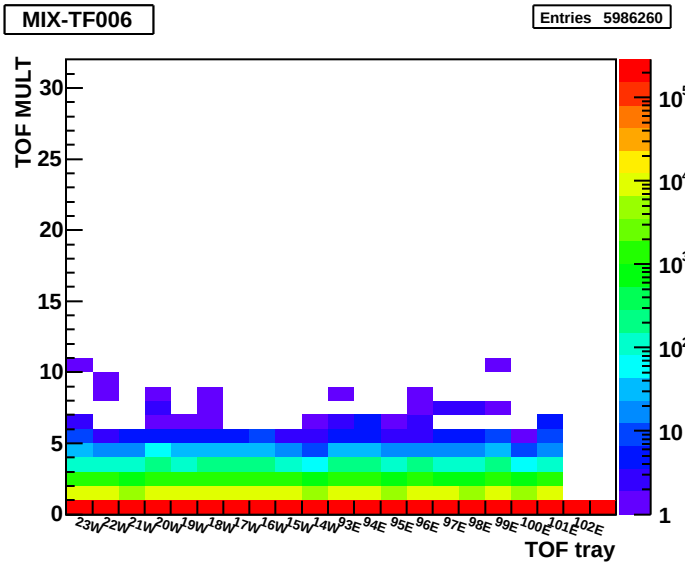

MIX-TF001
Entries 5986260
TOF MULT
TOF tray

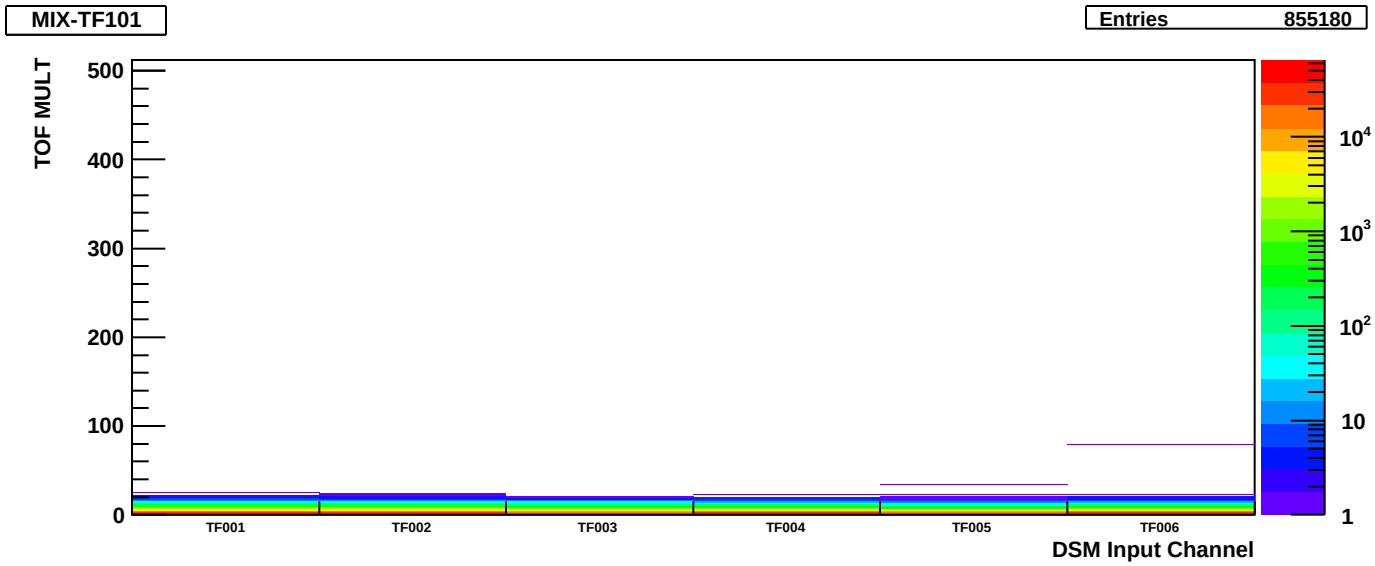

MIX-TF002
Entries 5986260
TOF MULT
TOF tray

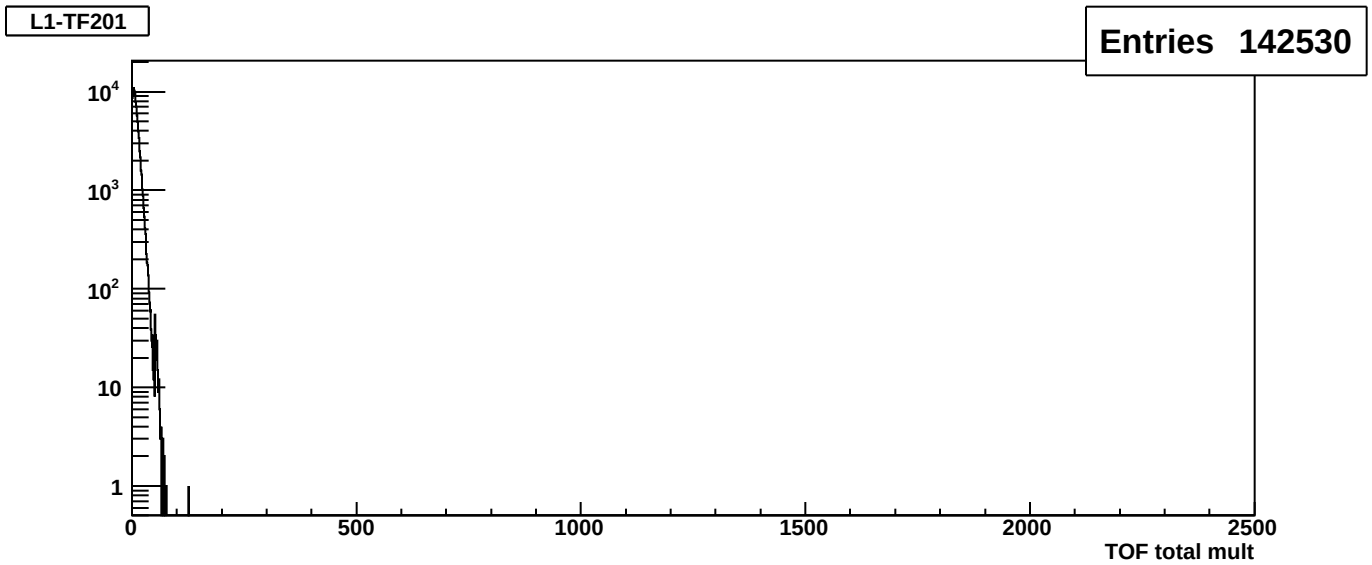

MIX-TF003
Entries 5986260
TOF MULT
TOF tray

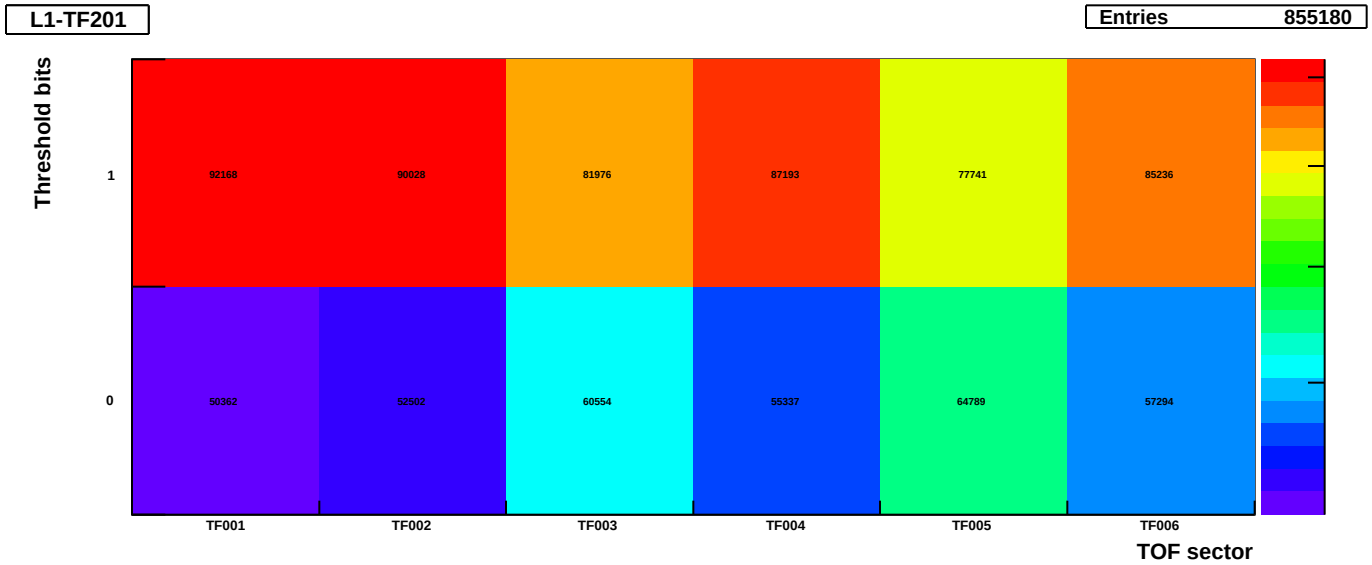

MIX-TF004
Entries 5986260
TOF MULT
TOF tray

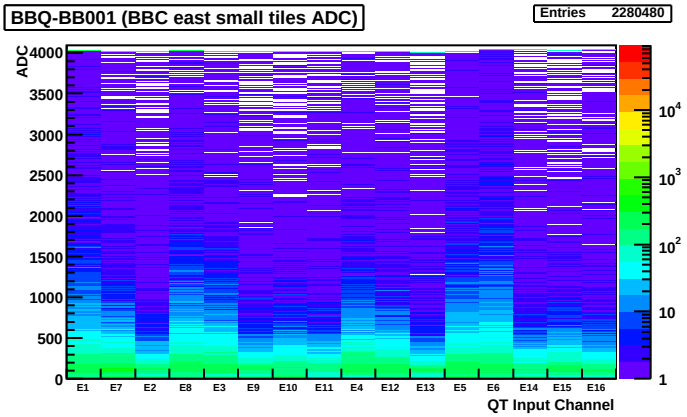

MIX-TF005
Entries 5986260
TOF MULT
TOF tray

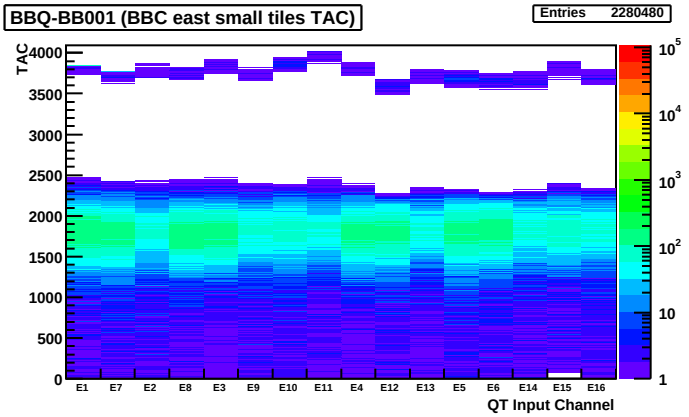

MIX-TF006
Entries 5986260
TOF MULT
TOF tray

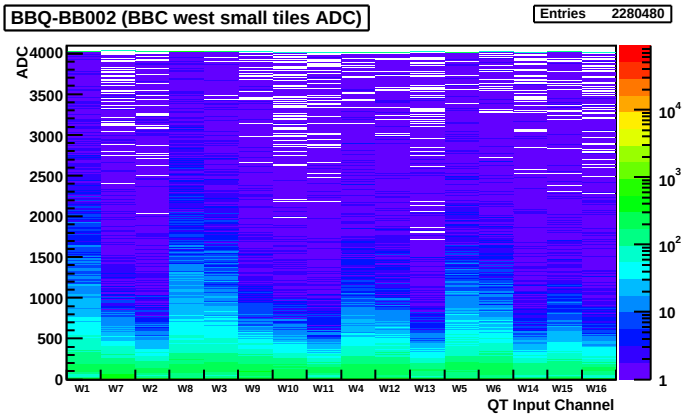

MIX-TF101
Entries 855180
TOF MULT
500
400
300
200
100
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^4
10^3
10^2
10
1

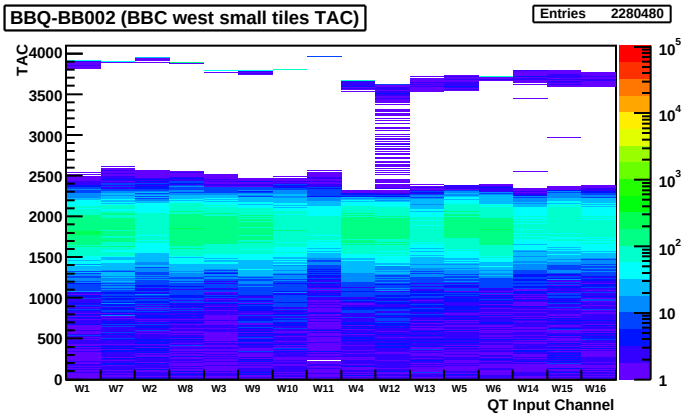

L1-TF201
Entries 142530
10^4
10^3
10^2
10
1
0
500
1000
1500
2000
2500
TOF total mult

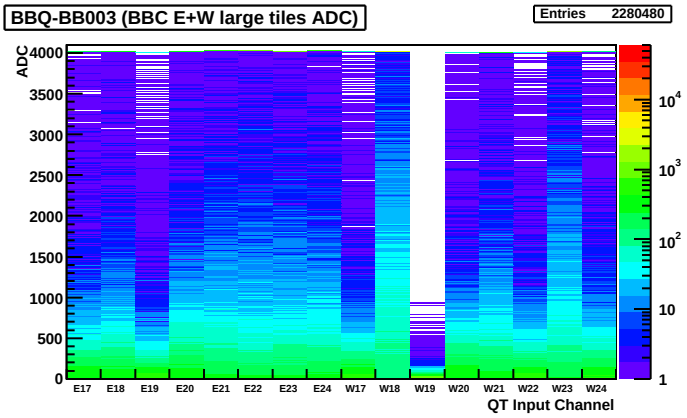

L1-TF201
Entries 855180
Threshold bits
1
0
92168
90028
81976
87193
77741
85236
50362
52502
60554
55337
64789
57294
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector

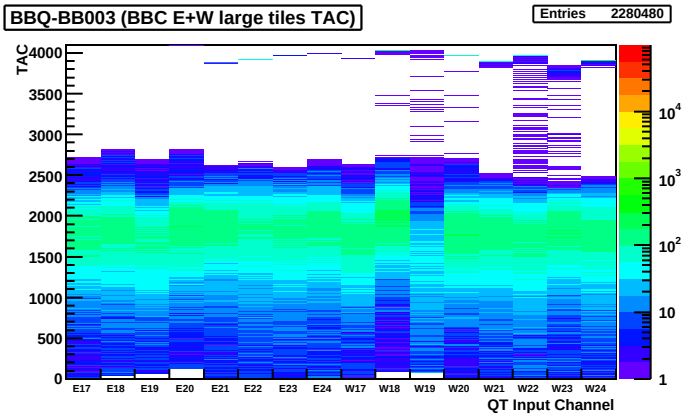

BBQ-BB001 (BBC east small tiles ADC)
Entries 2280480
ADC
QT Input Channel

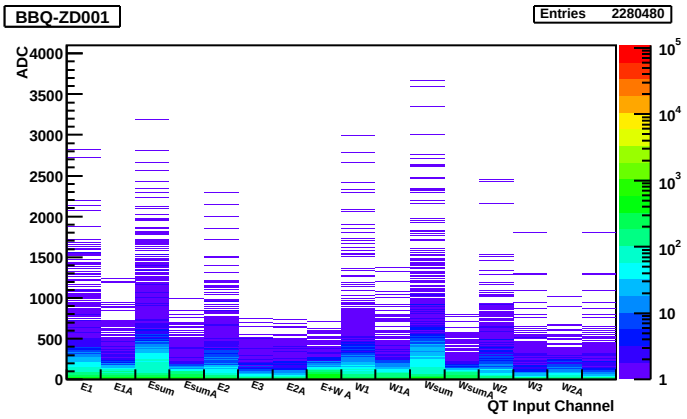

BBQ-BB001 (BBC east small tiles TAC)
Entries 2280480
TAC
QT Input Channel

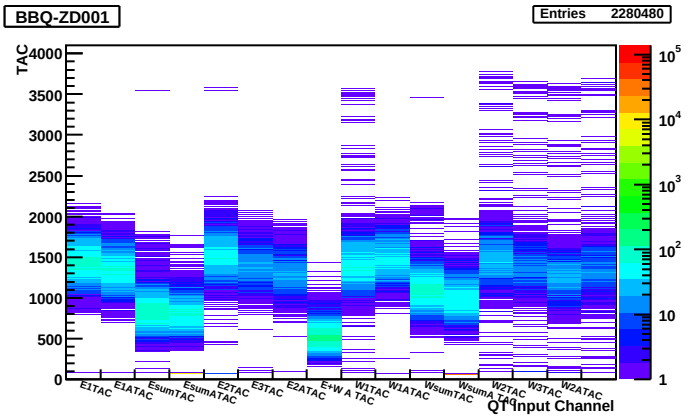

BBQ-BB002 (BBC west small tiles ADC)
Entries 2280480
ADC
QT Input Channel

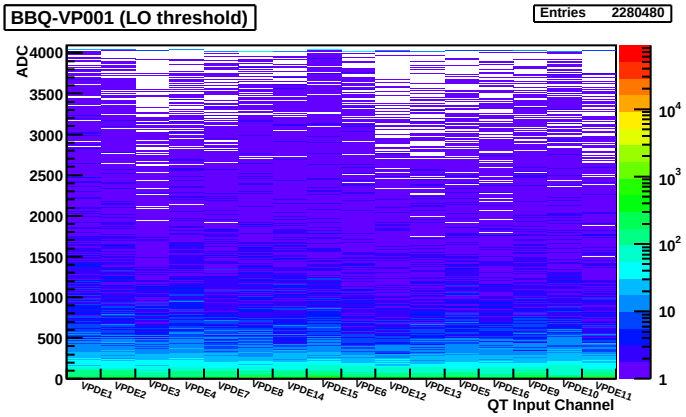

BBQ-BB002 (BBC west small tiles TAC)
Entries 2280480
TAC
QT Input Channel

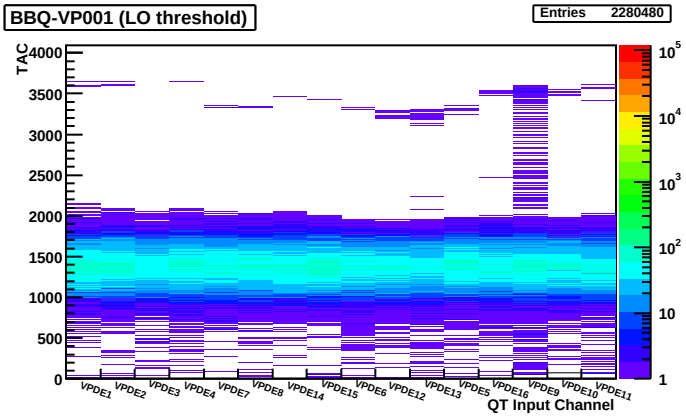

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 2280480
ADC
QT Input Channel

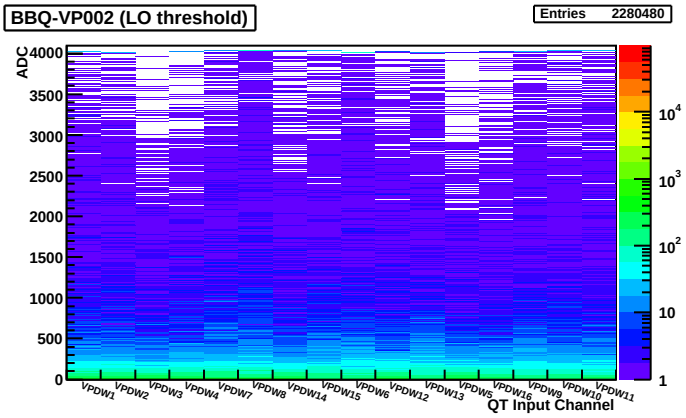

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 2280480
TAC
QT Input Channel

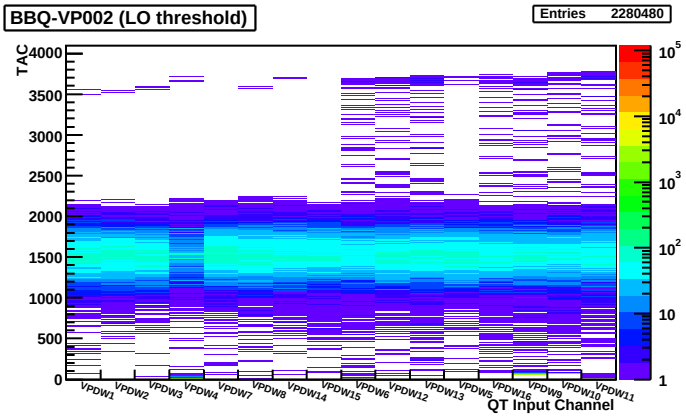

BBQ-ZD001
Entries 2280480
ADC
QT Input Channel

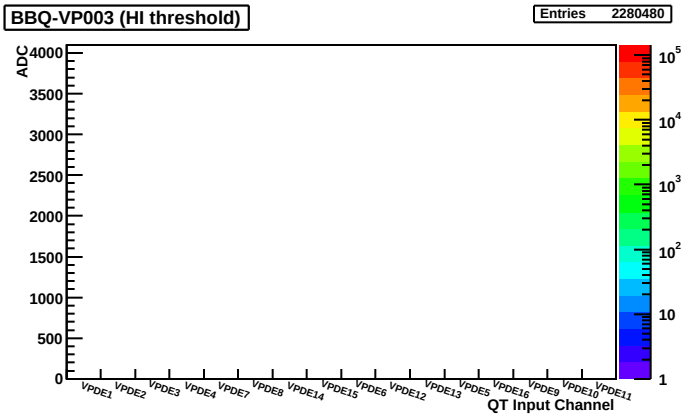

BBQ-ZD001
Entries 2280480
TAC
QT Input Channel

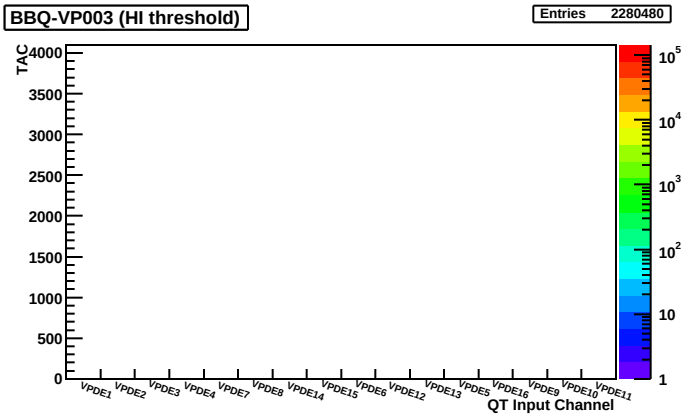

BBQ-VP001 (LO threshold)
Entries 2280480
ADC
QT Input Channel

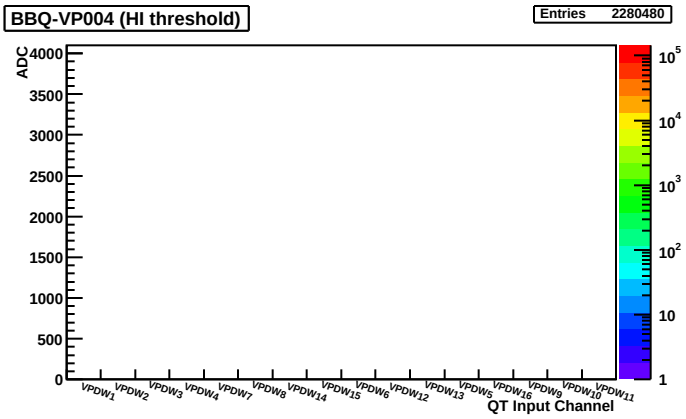

BBQ-VP001 (LO threshold)
Entries 2280480
TAC
QT Input Channel

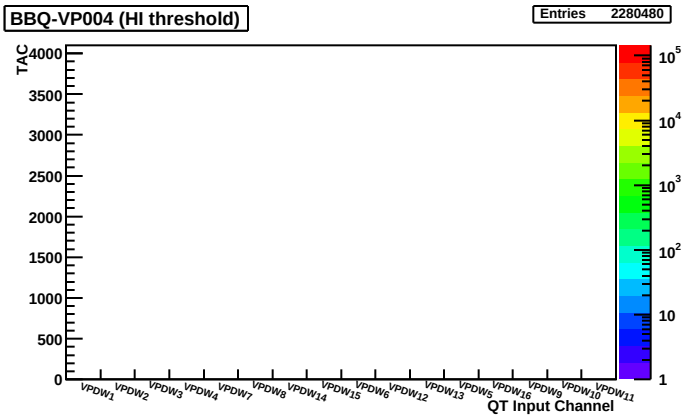

BBQ-VP002 (LO threshold)
Entries 2280480
ADC
QT Input Channel

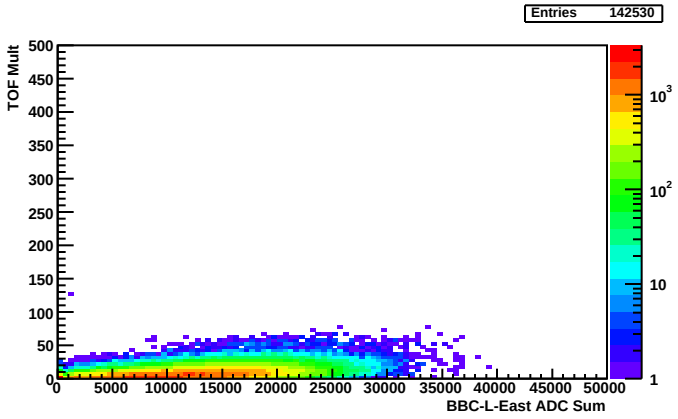

BBQ-VP002 (LO threshold)
Entries 2280480
TAC
QT Input Channel

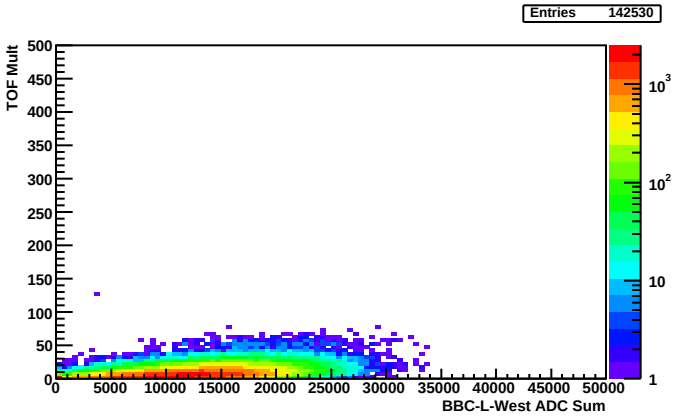

BBQ-VP003 (HI threshold)
Entries 2280480
ADC
QT Input Channel

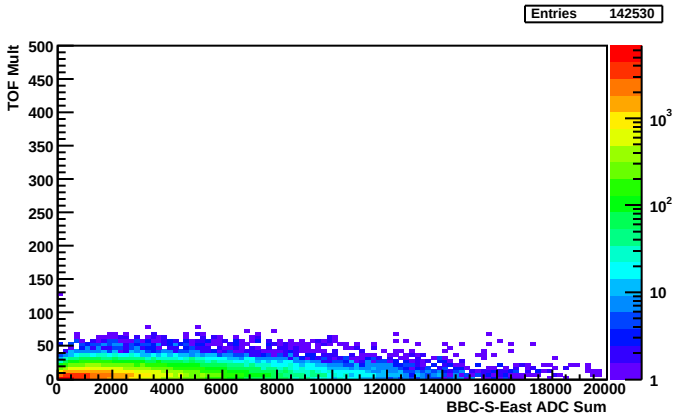

BBQ-VP003 (HI threshold)
Entries 2280480
TAC
QT Input Channel

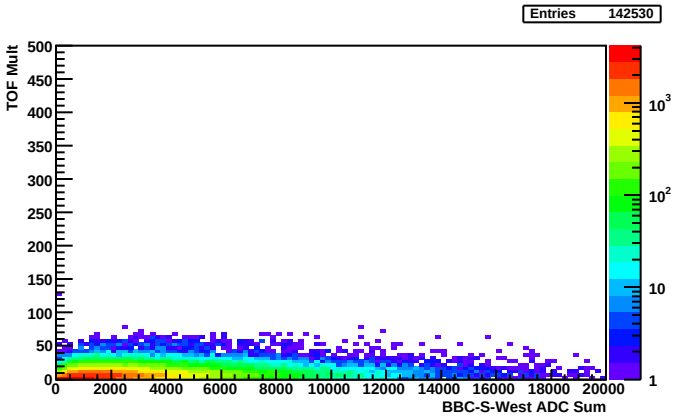

BBQ-VP004 (HI threshold)
Entries 2280480
ADC
QT Input Channel

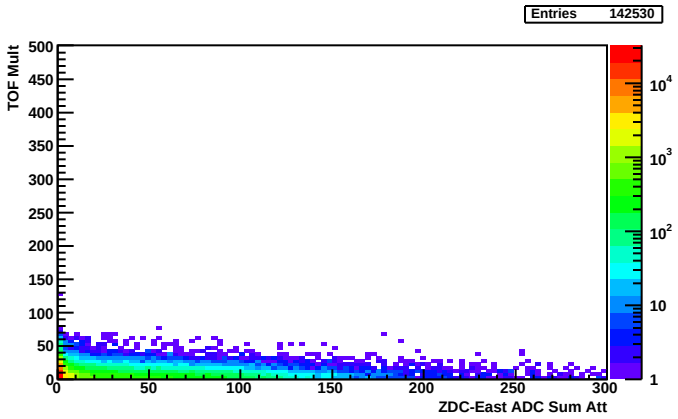

BBQ-VP004 (HI threshold)
Entries 2280480
TAC
QT Input Channel

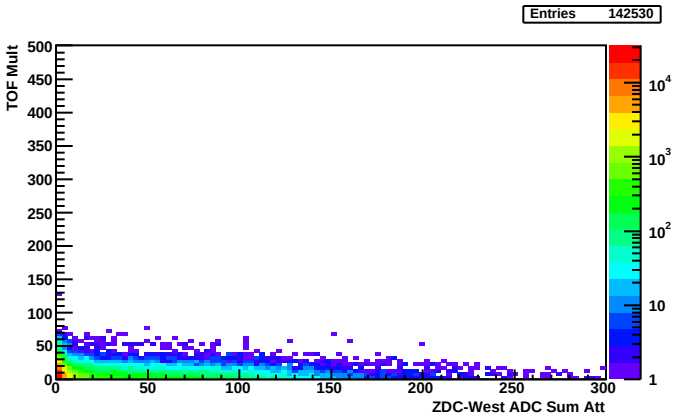

Entries 142530
TOF Mult
BBC-L-East ADC Sum

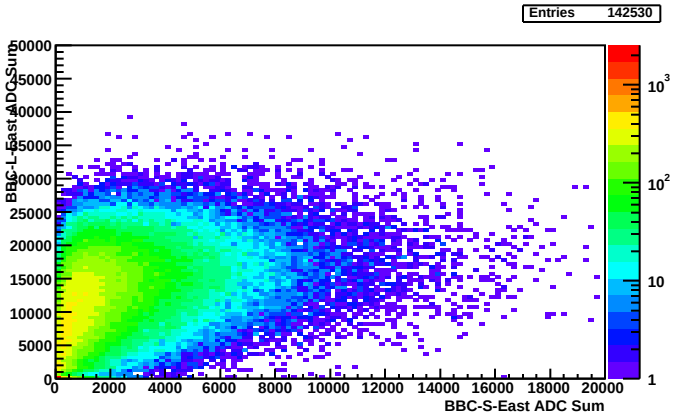

Entries 142530
TOF Mult
BBC-L-West ADC Sum

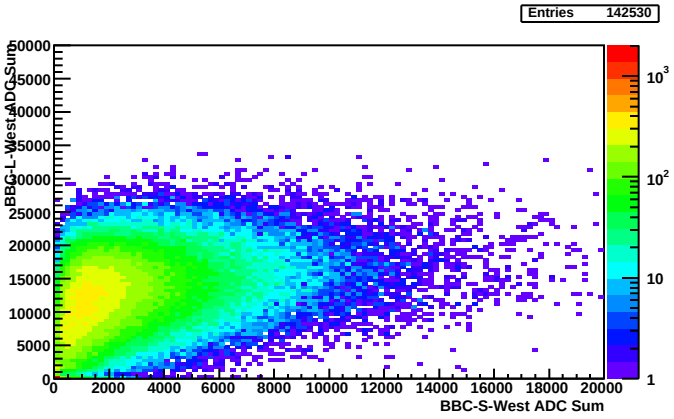

Entries 142530
TOF Mult
BBC-S-East ADC Sum

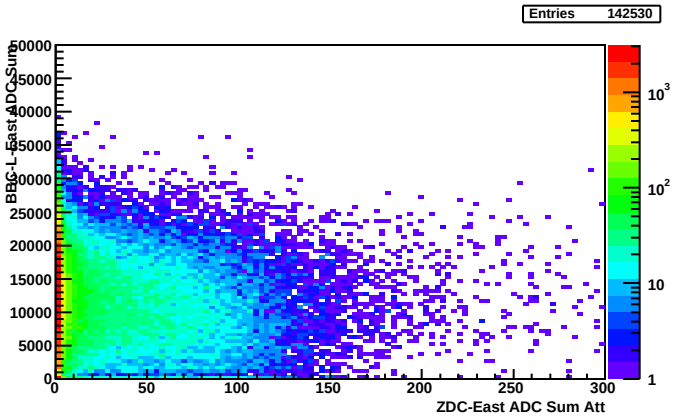

Entries 142530
TOF Mult
BBC-S-West ADC Sum

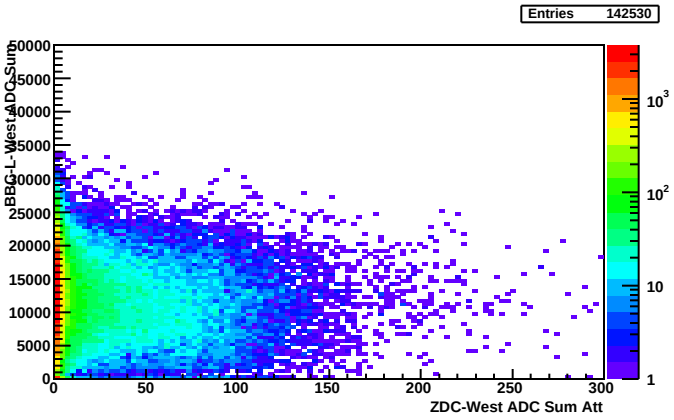

Entries 142530
TOF Mult
ZDC-East ADC Sum Att

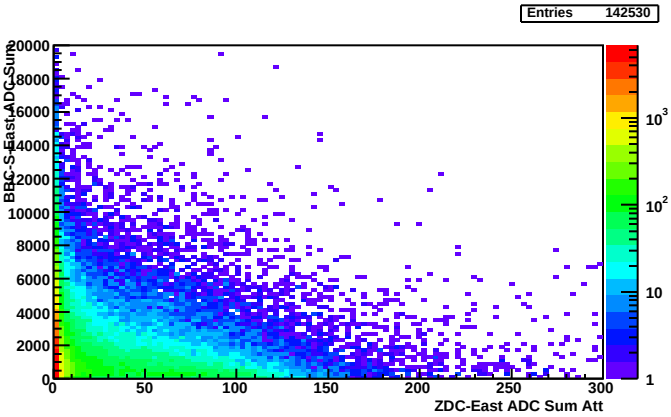

Entries 142530
TOF Mult
ZDC-West ADC Sum Att

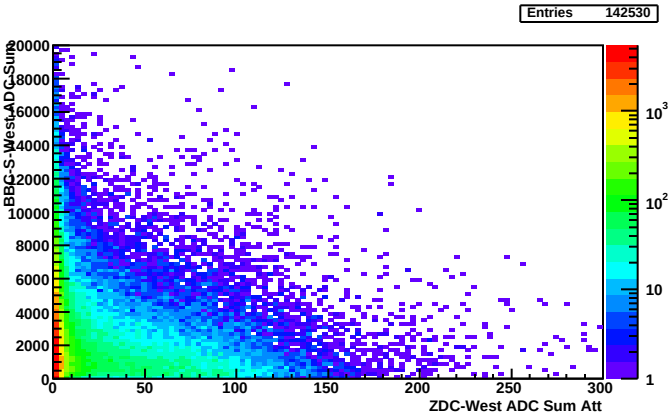

Entries 142530
BBC-L-East ADC Sum
BBC-S-East ADC Sum

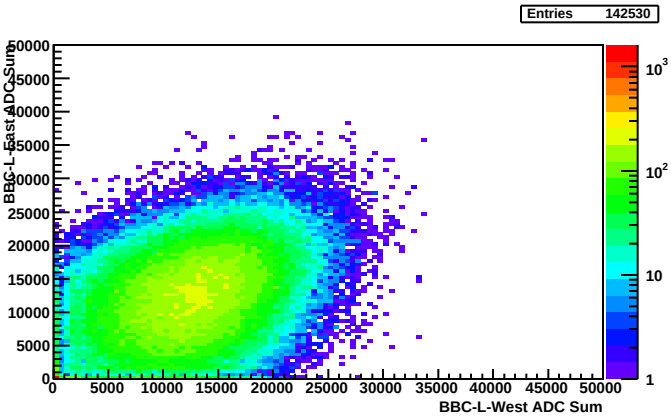

Entries 142530
BBC-L-West ADC Sum
BBC-S-West ADC Sum

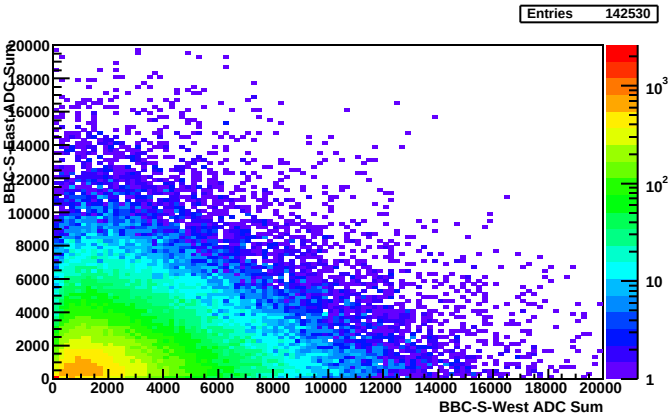

Entries 142530
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

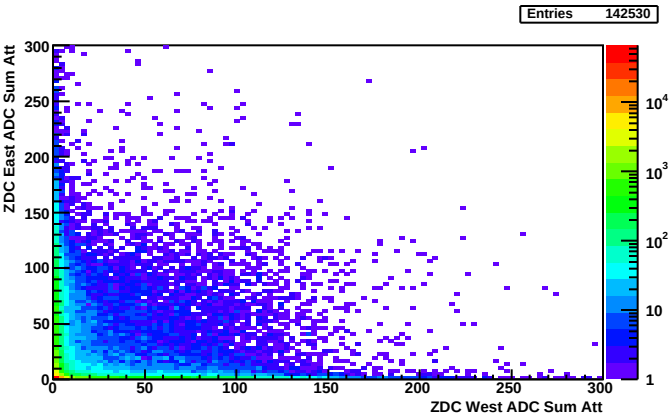

Entries 142530
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

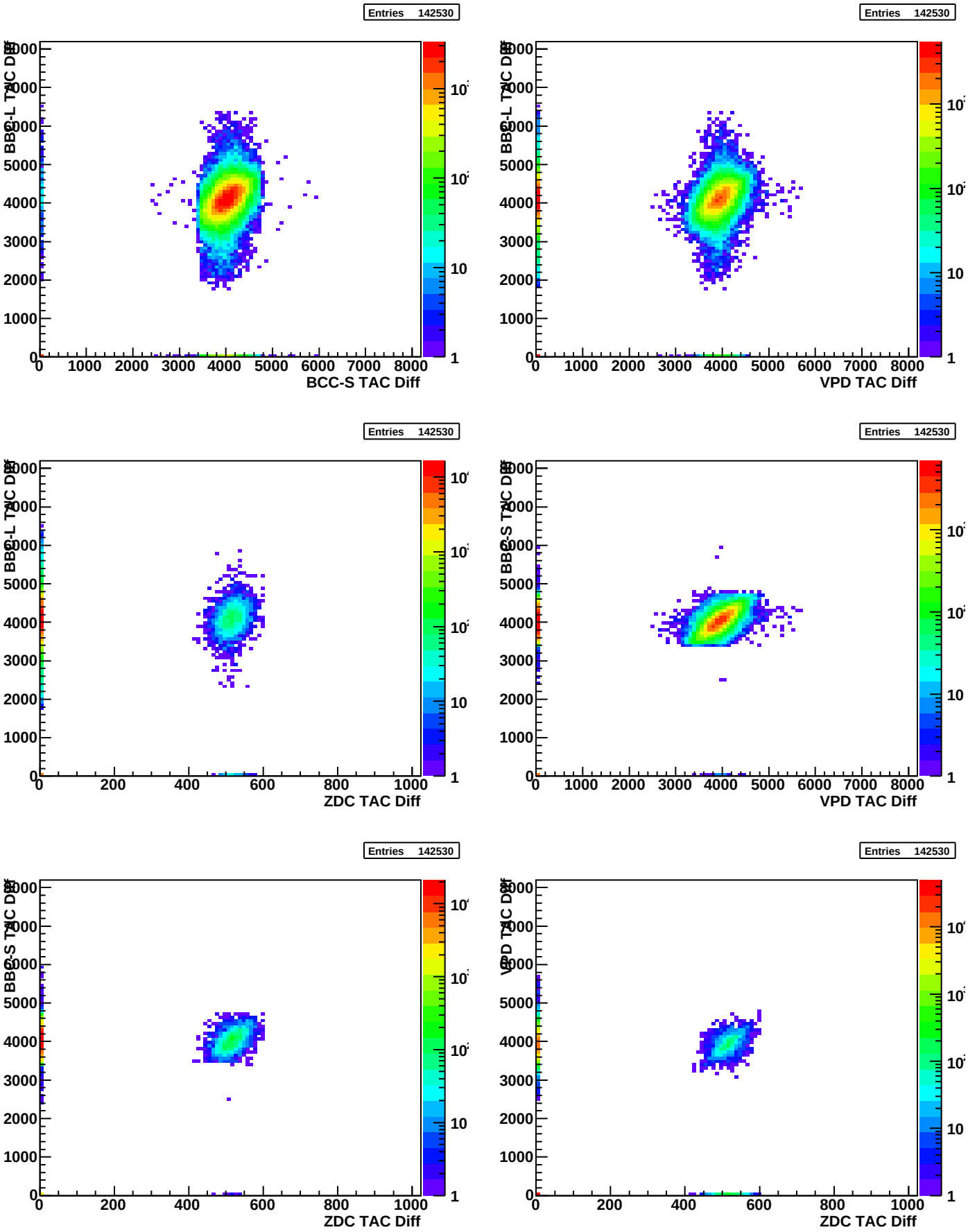

Entries 142530
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

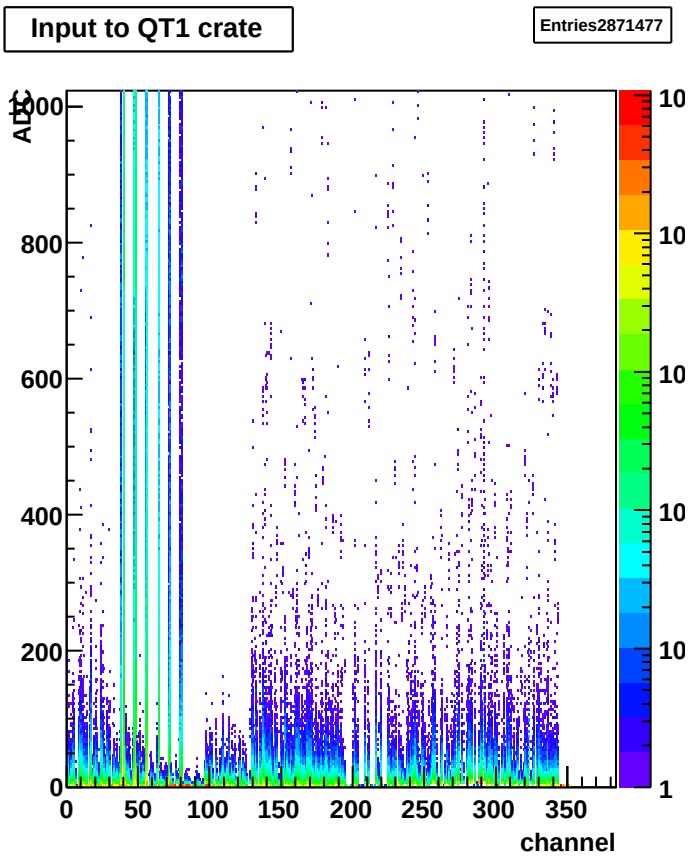

Entries 142530
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

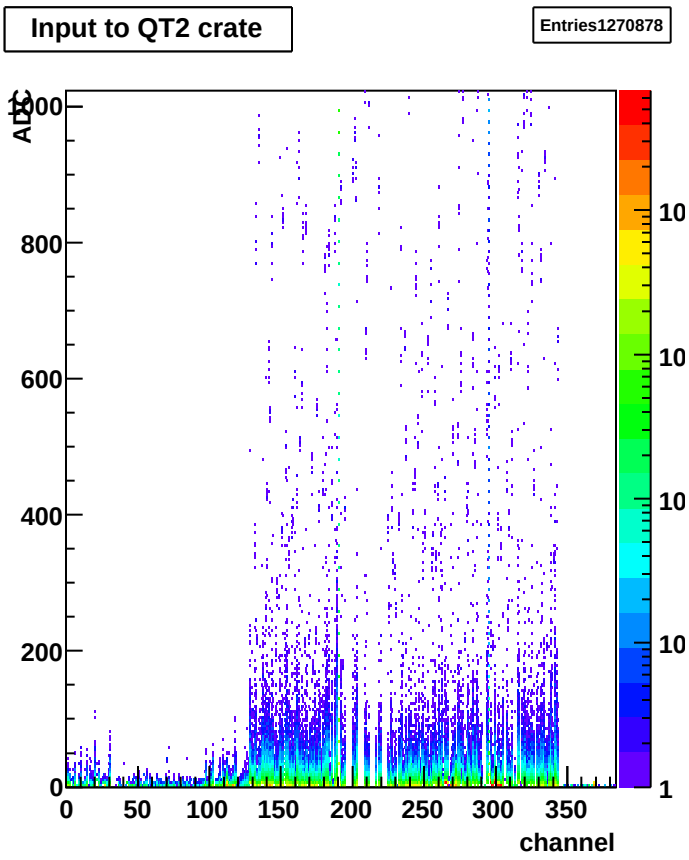

Entries 142530
BBC-L-East ADC Sum
BBC-L-West ADC Sum

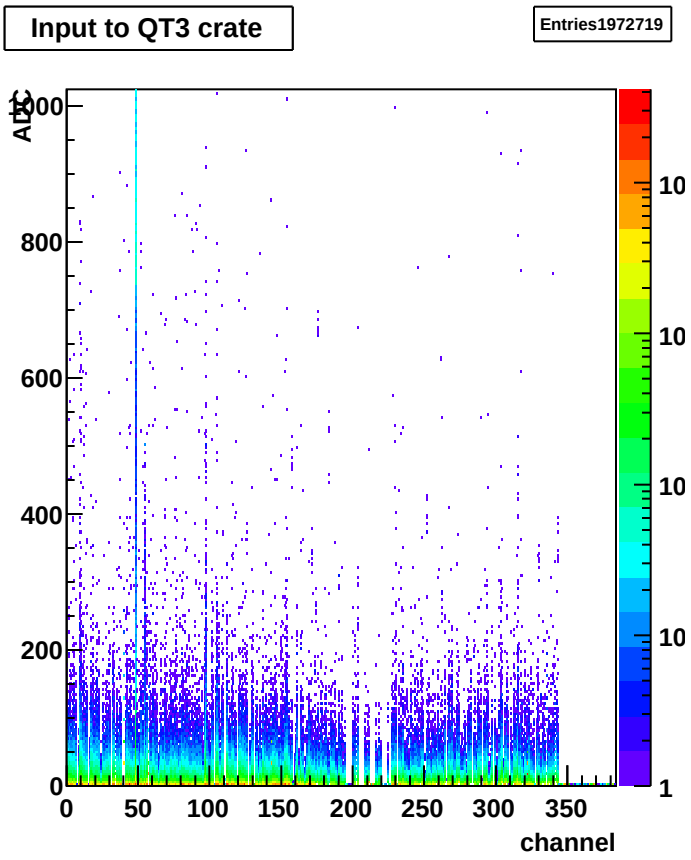

Entries 142530
BBC-S-East ADC Sum
BBC-S-West ADC Sum

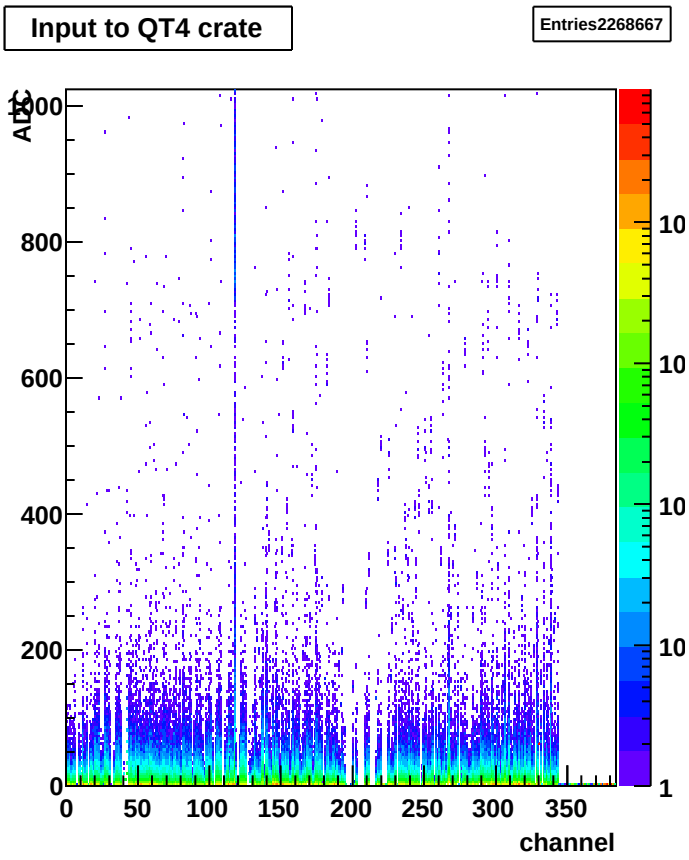

Entries 142530
ZDC East ADC Sum Att
ZDC West ADC Sum Att

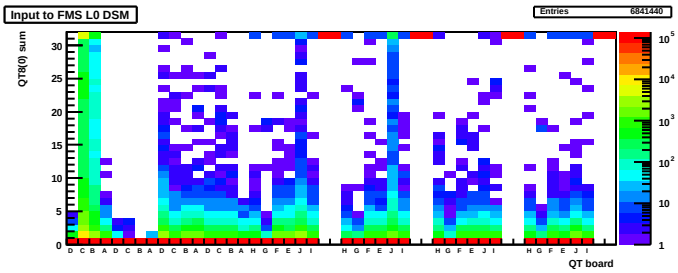

Entries 142530
BBC-L TAC Diff
BCC-S TAC Diff
Entries 142530
BBC-L TAC Diff
VPD TAC Diff
Entries 142530
BBC-L TAC Diff
ZDC TAC Diff
Entries 142530
BBC-S TAC Diff
VPD TAC Diff
Entries 142530
BBC-S TAC Diff
ZDC TAC Diff
Entries 142530
VPD TAC Diff
ZDC TAC Diff

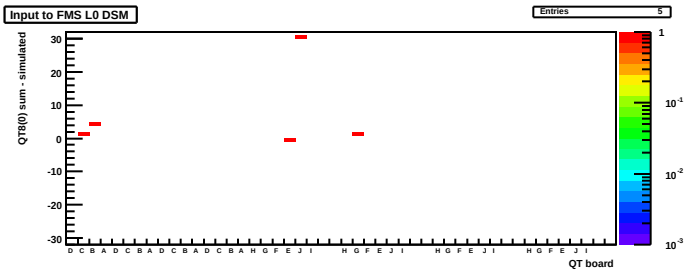

Input to QT1 crate
Entries2871477
ADC
channel

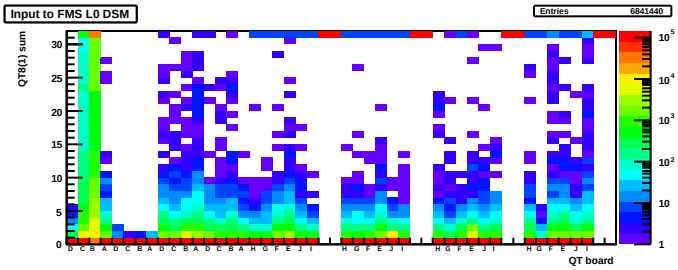

Input to QT2 crate
Entries1270878
ADC
channel

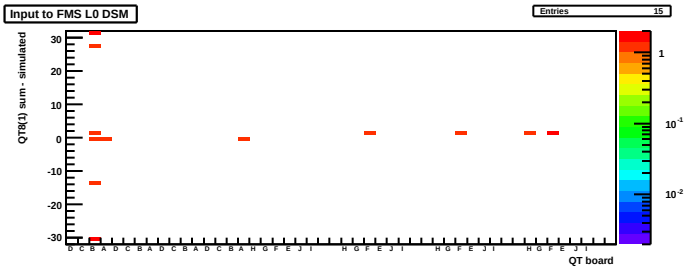

Input to QT3 crate
Entries1972719
ADC
channel

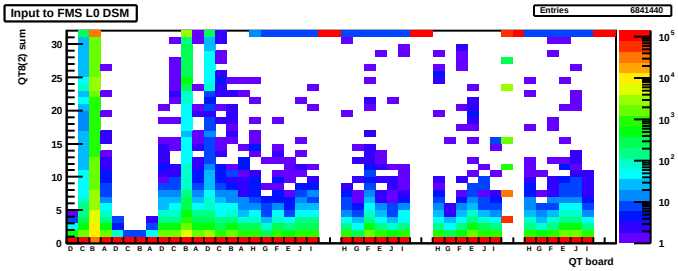

Input to QT4 crate
Entries2268667
ADC
channel

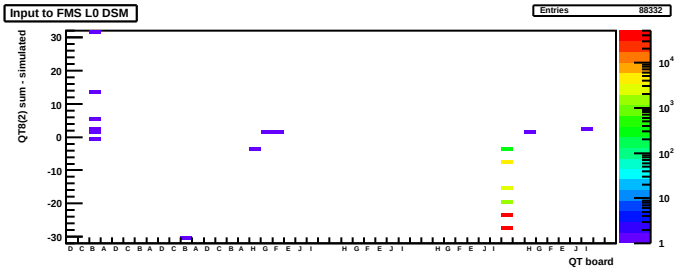

Input to FMS L0 DSM
Entries 6841440
QT8(0) sum
QT board

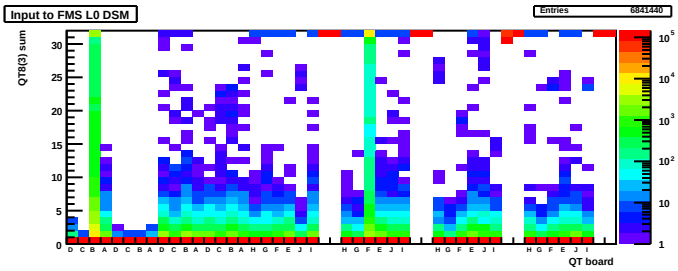

Input to FMS L0 DSM
Entries 5
QT8(0) sum - simulated
QT board

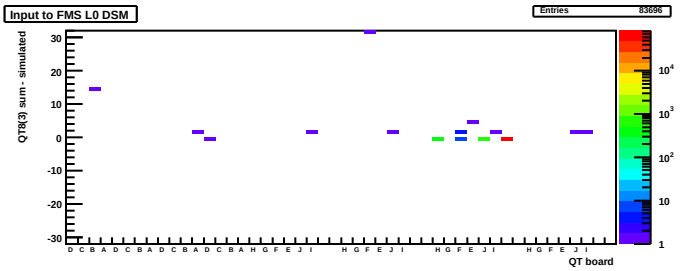

Input to FMS L0 DSM
Entries 6841440
QT8(1) sum
QT board

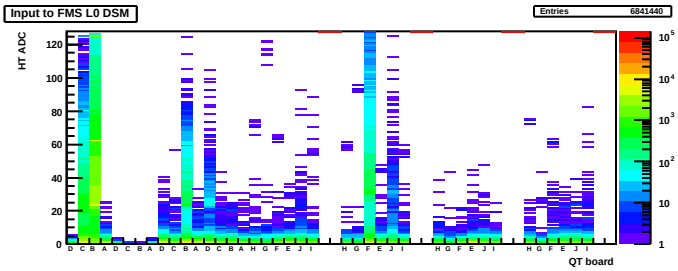

Input to FMS L0 DSM
Entries 15
QT8(1) sum - simulated
QT board

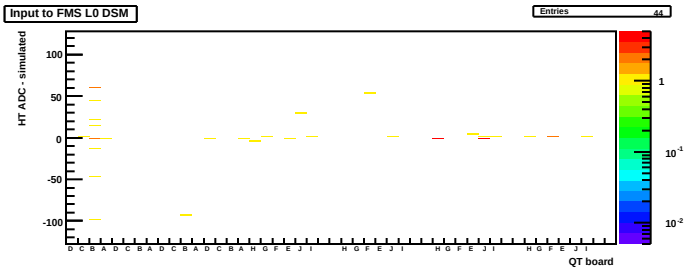

Input to FMS L0 DSM
Entries 6841440
QT8(2) sum
QT board

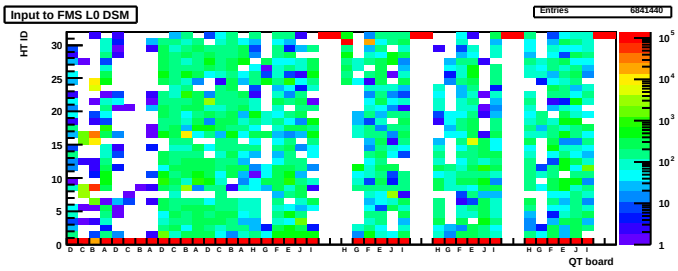

Input to FMS L0 DSM
Entries 88332
QT8(2) sum - simulated
QT board

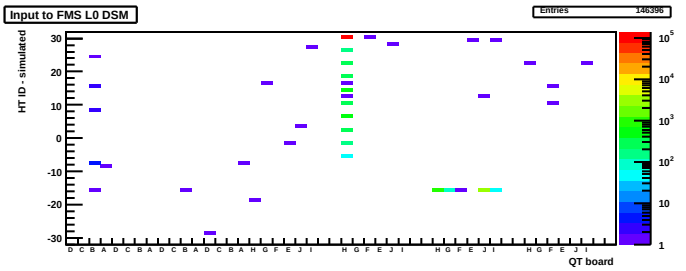

Input to FMS L0 DSM
Entries 6841440
QT8(3) sum
QT board

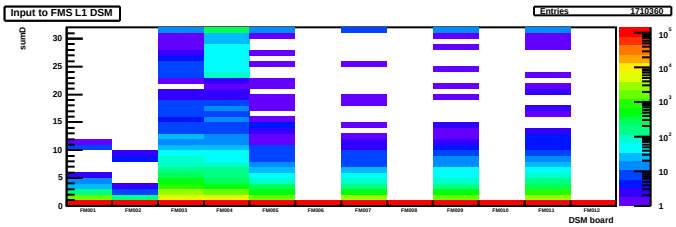

Input to FMS L0 DSM
Entries 83696
QT8(3) sum - simulated
QT board

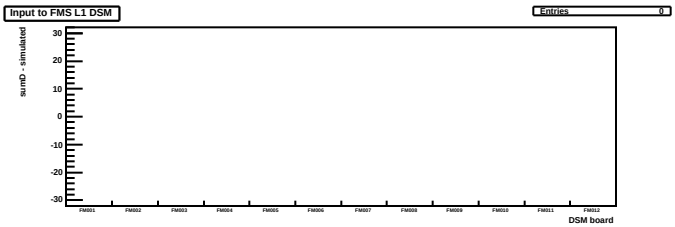

Input to FMS L0 DSM
Entries 6841440
HT ADC
QT board

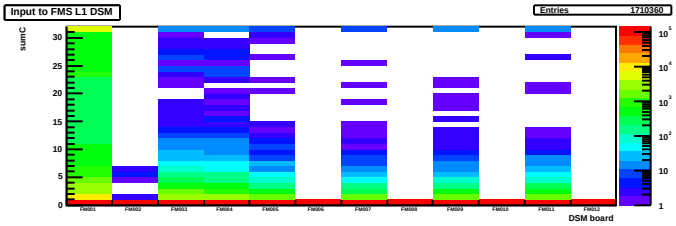

Input to FMS L0 DSM
Entries 44
HT ADC - simulated
QT board

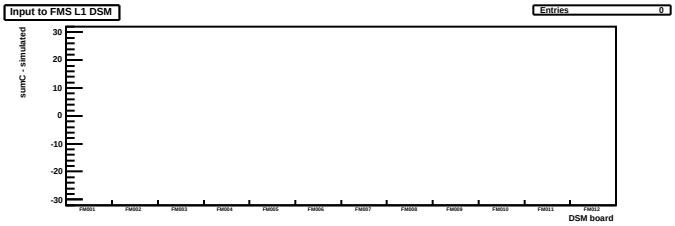

Input to FMS L0 DSM
Entries 6841440
HT ID
QT board

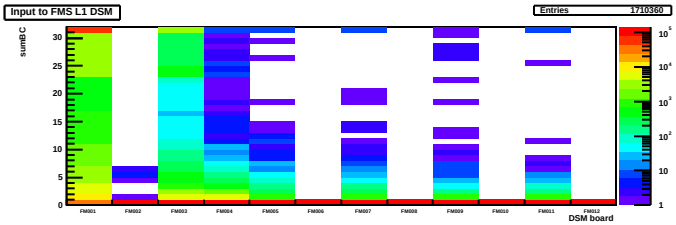

Input to FMS L0 DSM
Entries 146396
HT ID - simulated
QT board

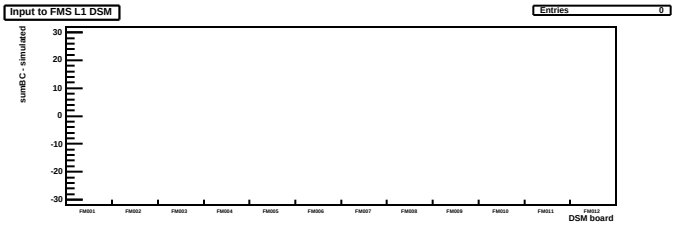

Input to FMS L1 DSM
Entries 1710360
sumD
DSM board

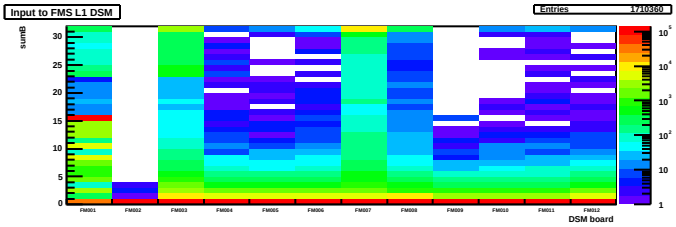

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

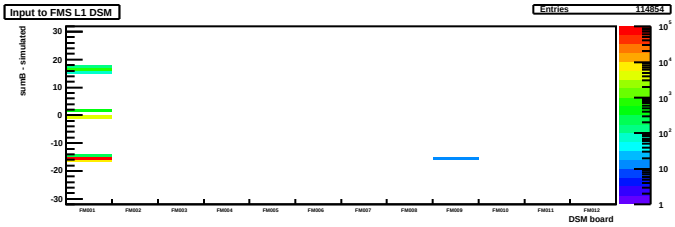

Input to FMS L1 DSM
Entries 1710360
sumC
DSM board

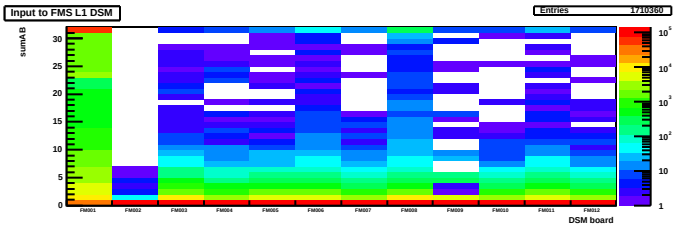

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

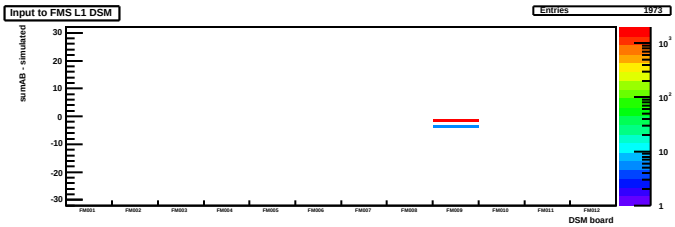

Input to FMS L1 DSM
Entries 1710360
sumBC
DSM board

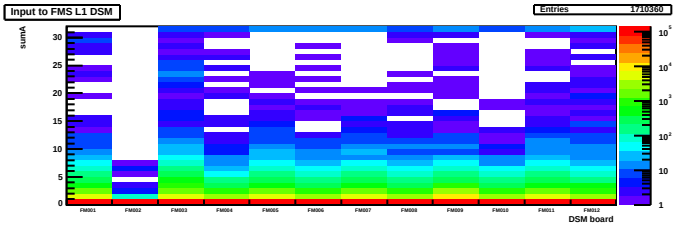

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

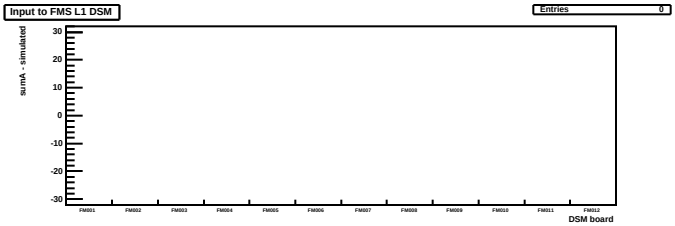

Input to FMS L1 DSM
Entries 1710360
sumB
DSM board

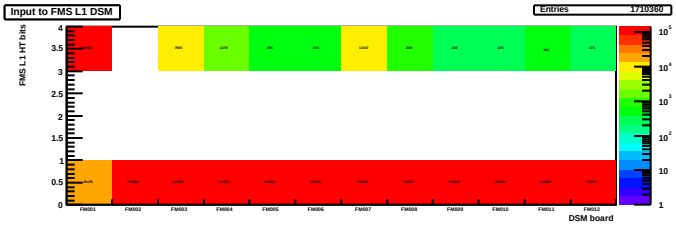

Input to FMS L1 DSM
Entries 114854
sumB - simulated
DSM board

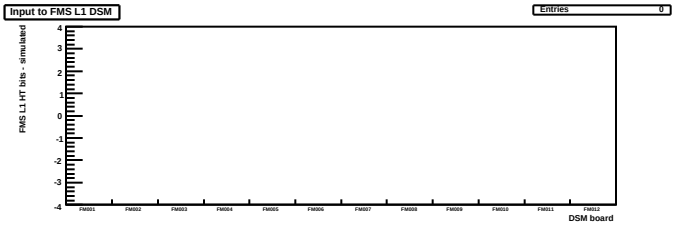

Input to FMS L1 DSM
Entries 1710360
sumAB
DSM board

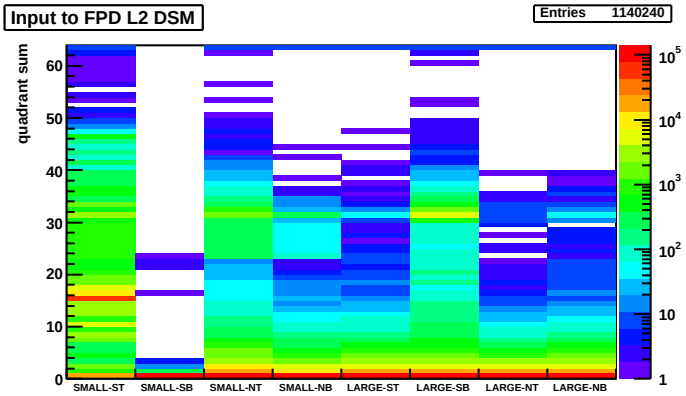

Input to FMS L1 DSM
Entries 1973
sumAB - simulated
DSM board

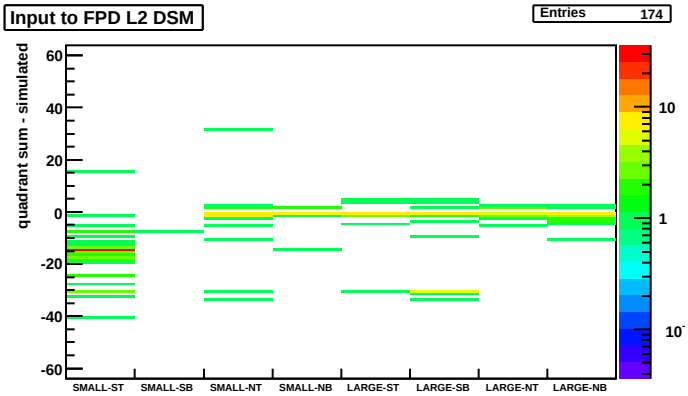

Input to FMS L1 DSM
Entries 1710360
sumA
DSM board

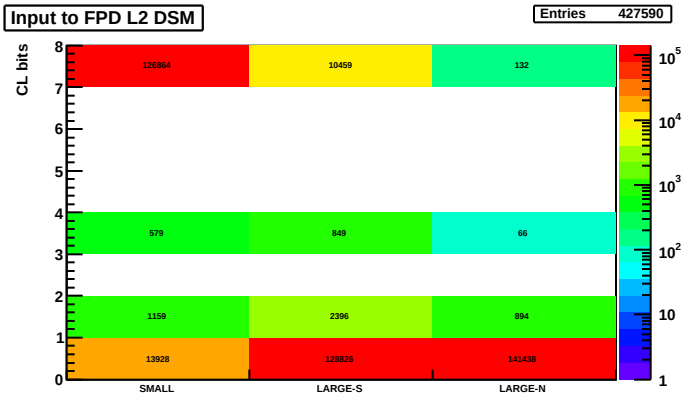

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

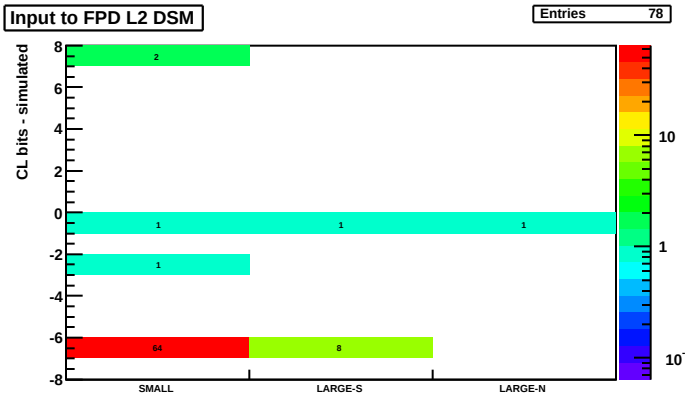

Input to FMS L1 DSM
Entries 1710360
FMS L1 HT bits
DSM board

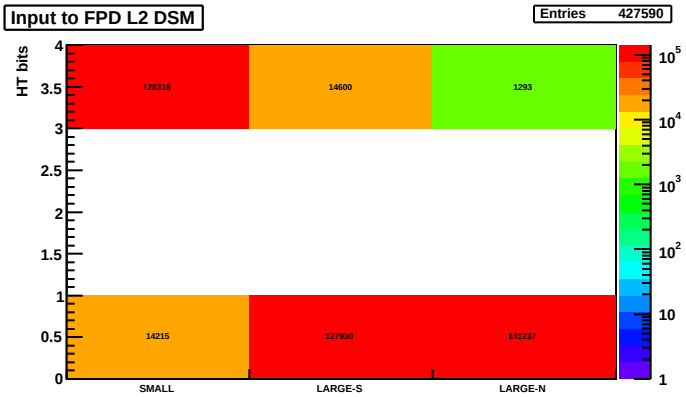

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

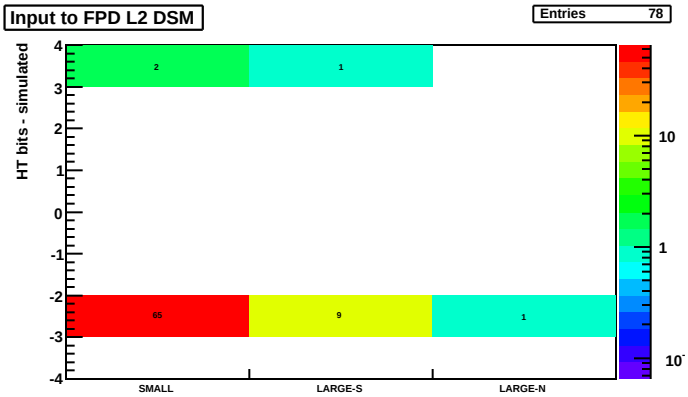

Input to FPD L2 DSM
Entries 1140240
quadrant sum
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

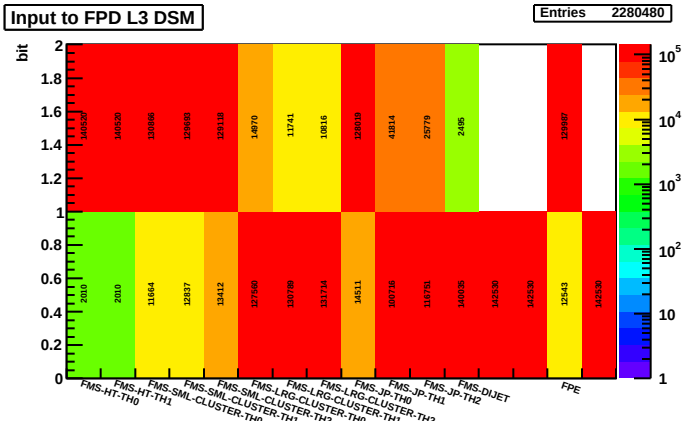

Input to FPD L2 DSM
Entries 174
quadrant sum - simulated
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

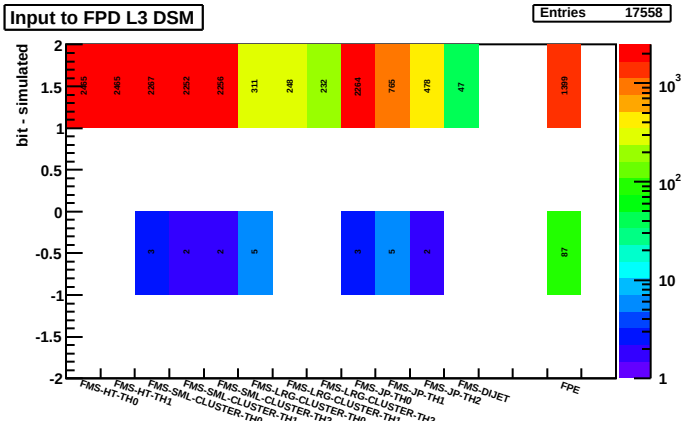

Input to FPD L2 DSM
Entries 427590
CL bits
126864
10459
132
579
849
66
1159
2396
894
13928
128826
141438
SMALL
LARGE-S
LARGE-N

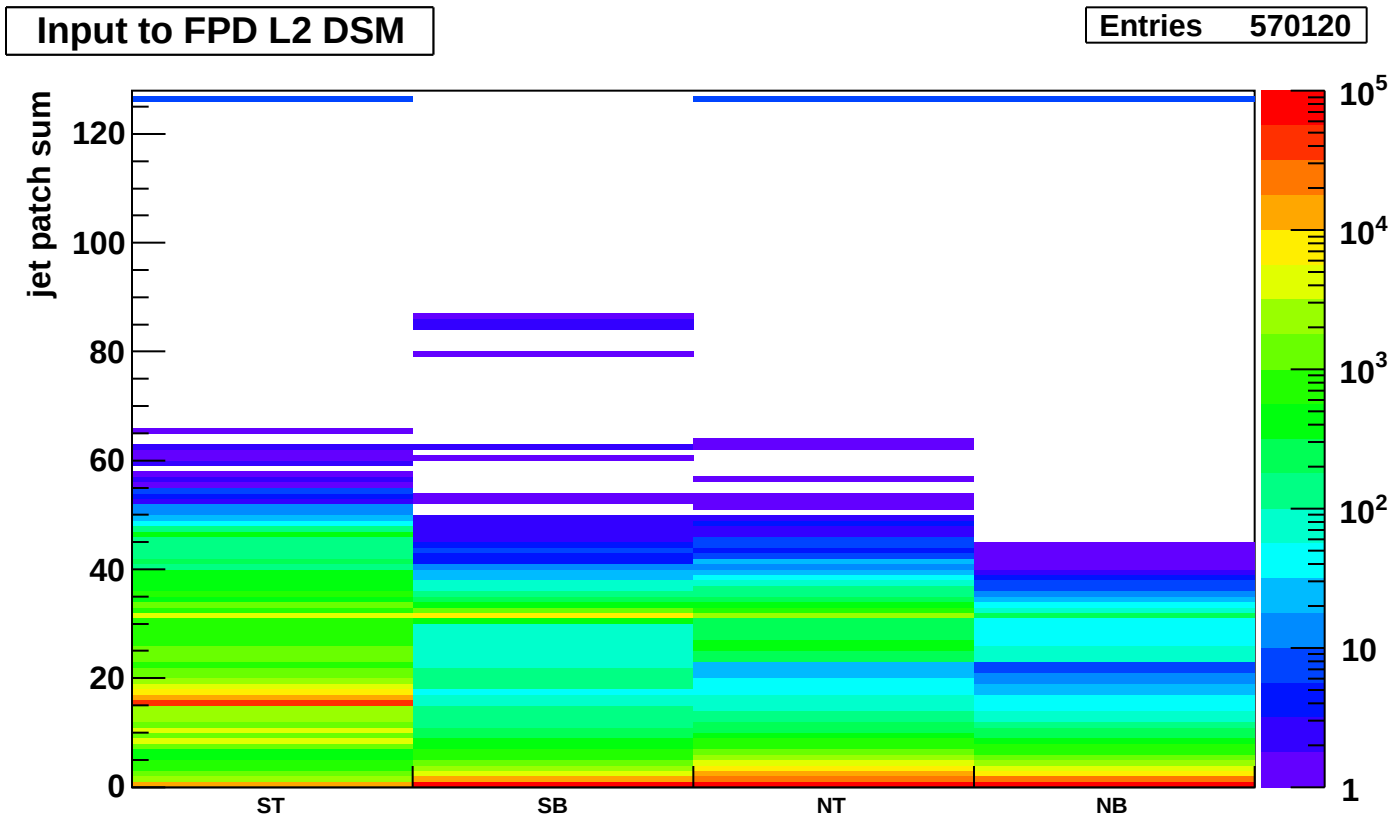

Input to FPD L2 DSM
Entries 78
CL bits - simulated
2
1
1
1
1
64
8
SMALL
LARGE-S
LARGE-N

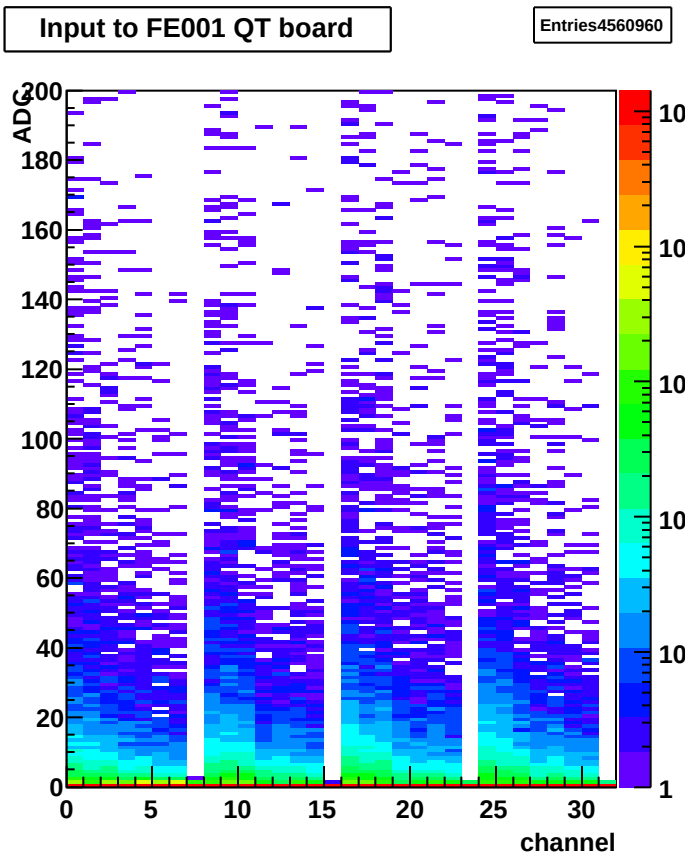

Input to FPD L2 DSM
Entries 427590
HT bits
128315
14600
1293
14215
127930
141237
SMALL
LARGE-S
LARGE-N

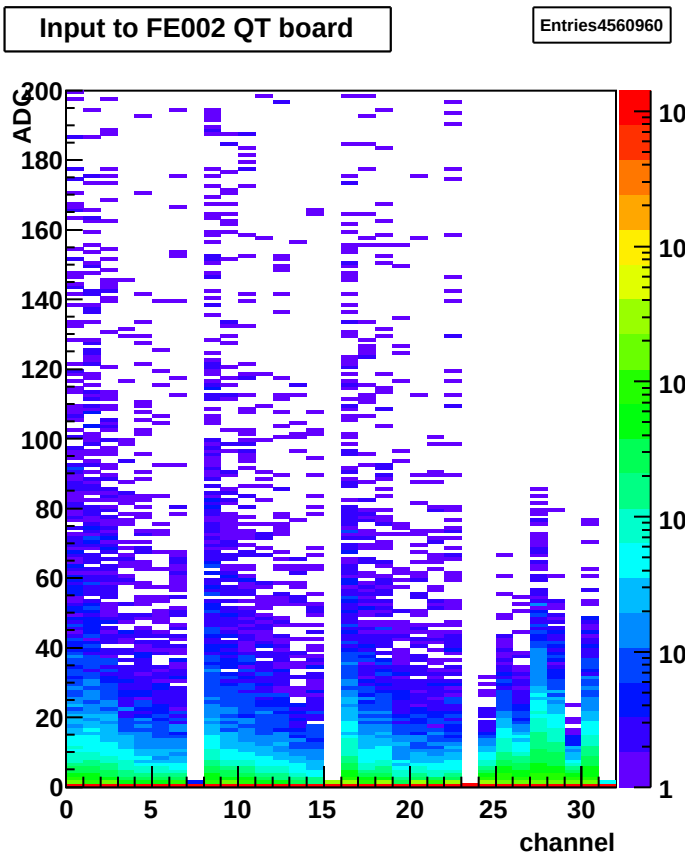

Input to FPD L2 DSM
Entries 78
HT bits - simulated
2
1
65
9
1
SMALL
LARGE-S
LARGE-N

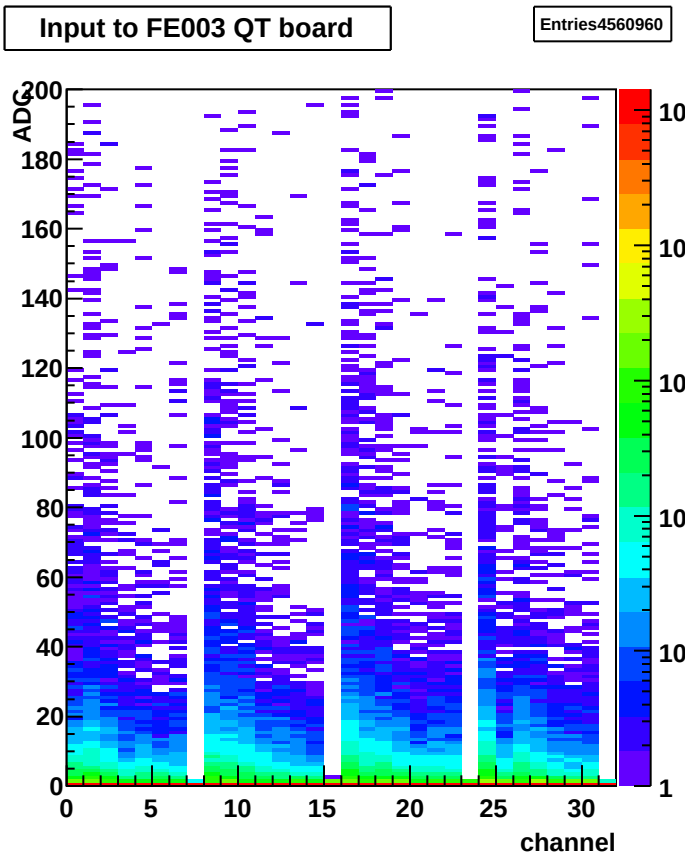

Input to FPD L3 DSM
Entries 2280480
bit
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

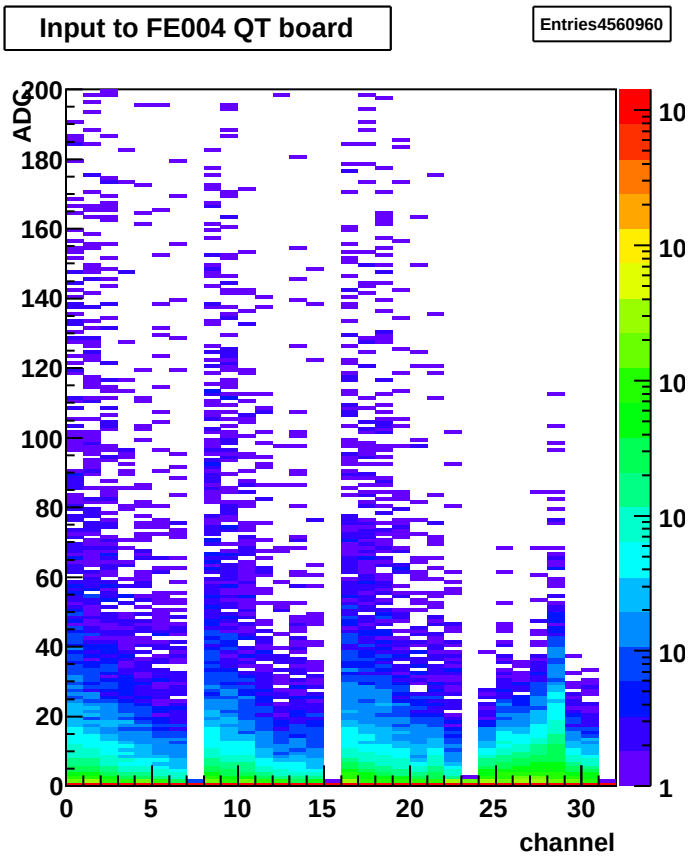

Input to FPD L3 DSM
Entries 17558
bit - simulated
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

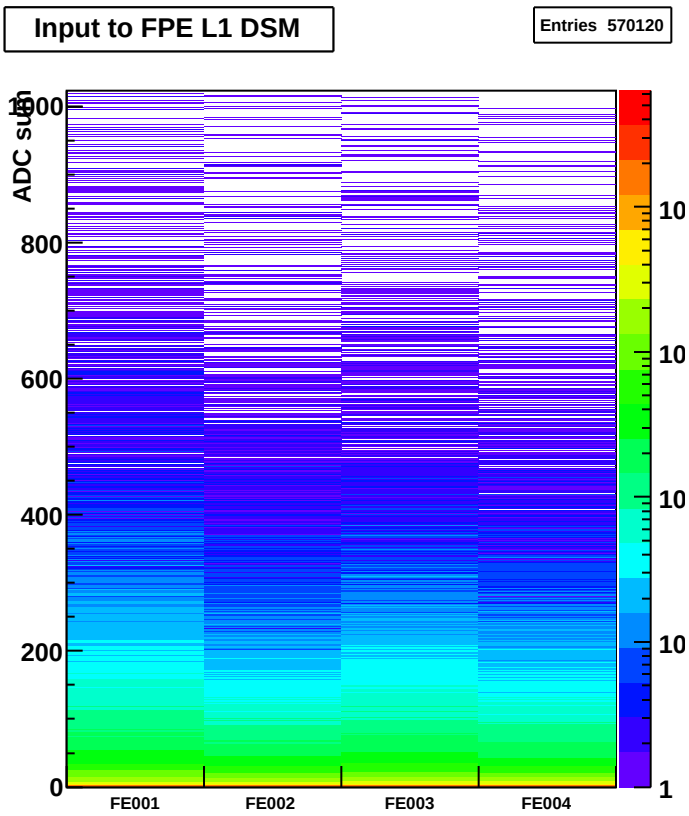

Input to FPD L2 DSM
Entries 570120
jet patch sum
0
20
40
60
80
100
120
ST
SB
NT
NB
1
10
10^2
10^3
10^4
10^5

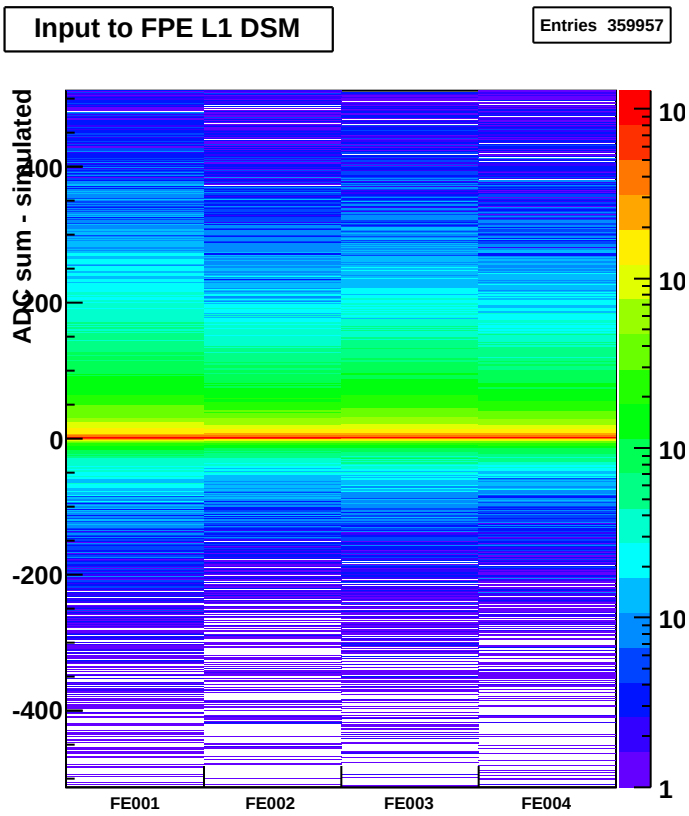

Input to FE001 QT board
Entries4560960
ADC
channel

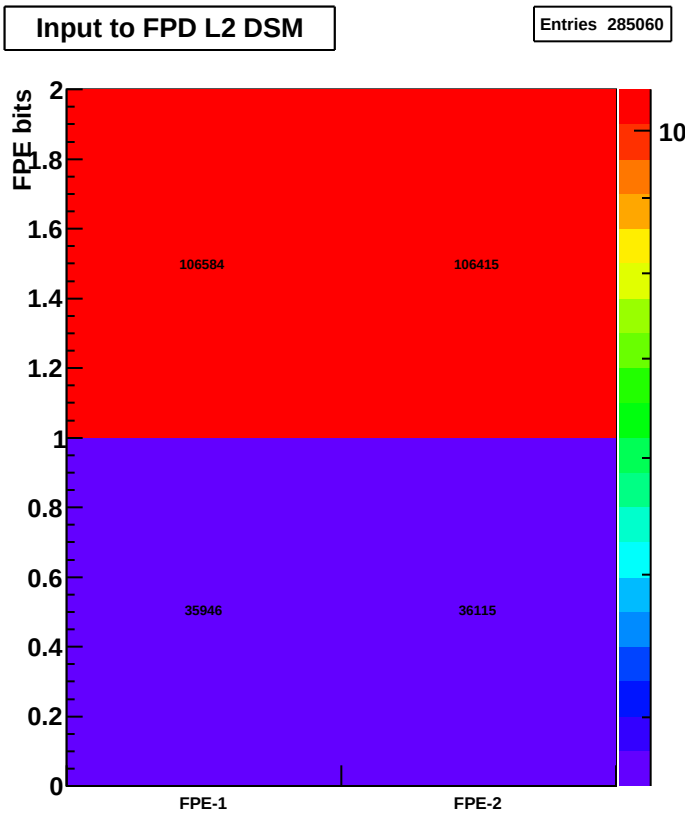

Input to FE002 QT board
Entries4560960
ADC
channel

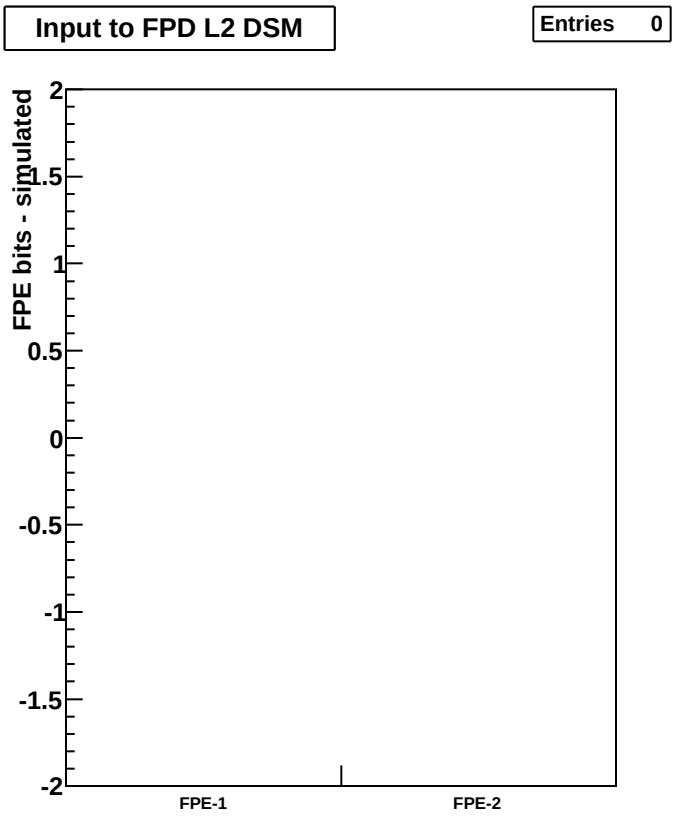

Input to FE003 QT board
Entries4560960
ADC
channel


Input to FE004 QT board
Entries4560960
ADC
channel


Input to FPE L1 DSM
Entries 570120
ADC sum
1000
800
600
400
200
0
FE001
FE002
FE003
FE004
10
10
10
10
1


Input to FPE L1 DSM
Entries 359957
ADC sum - simulated
400
200
0
-200
-400
FE001
FE002
FE003
FE004
10
10
10
10
1


Input to FPD L2 DSM
Entries 285060
FPE bits
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
106584
106415
35946
36115
FPE-1
FPE-2
10


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