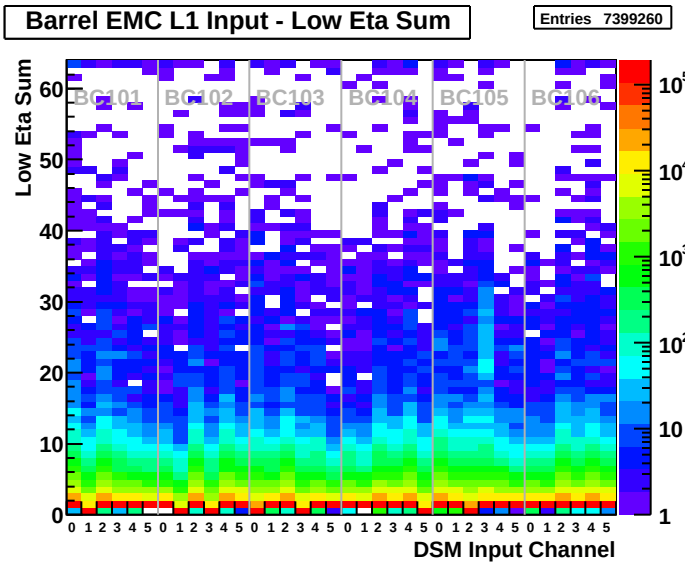
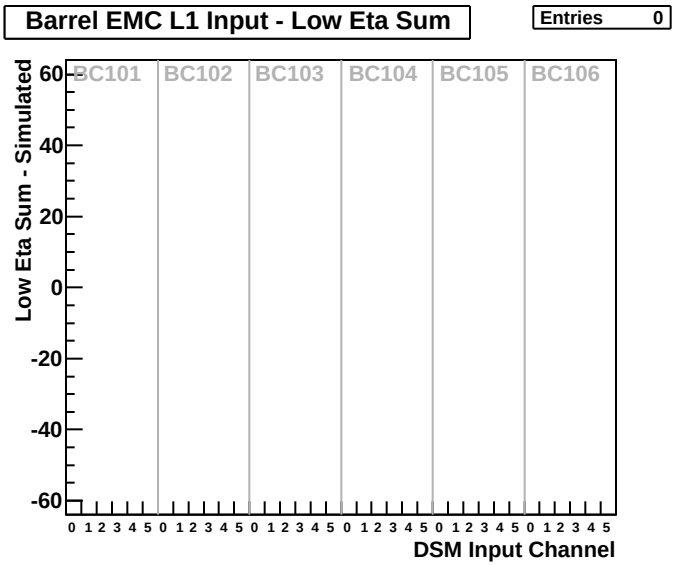
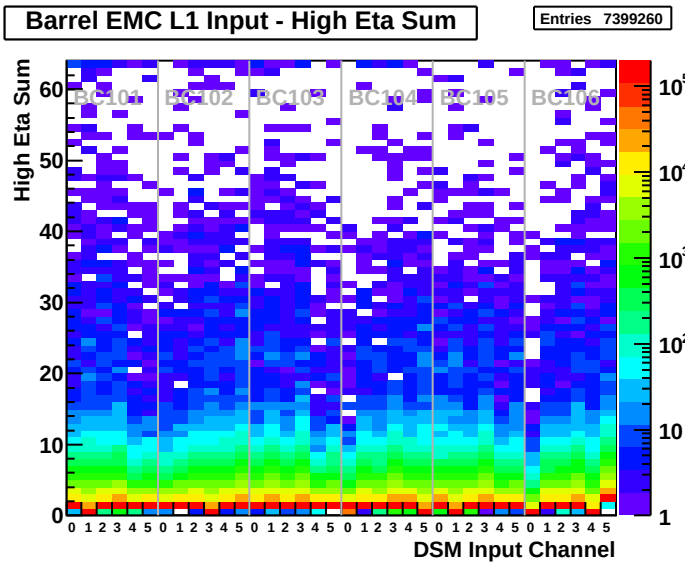
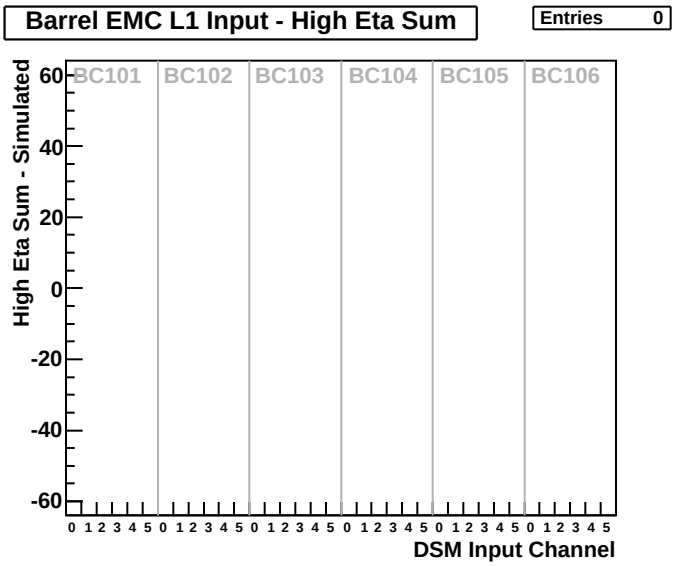
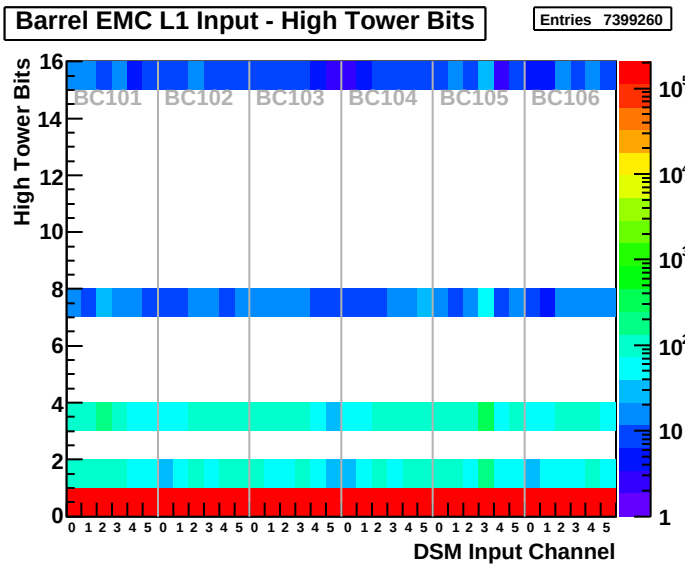
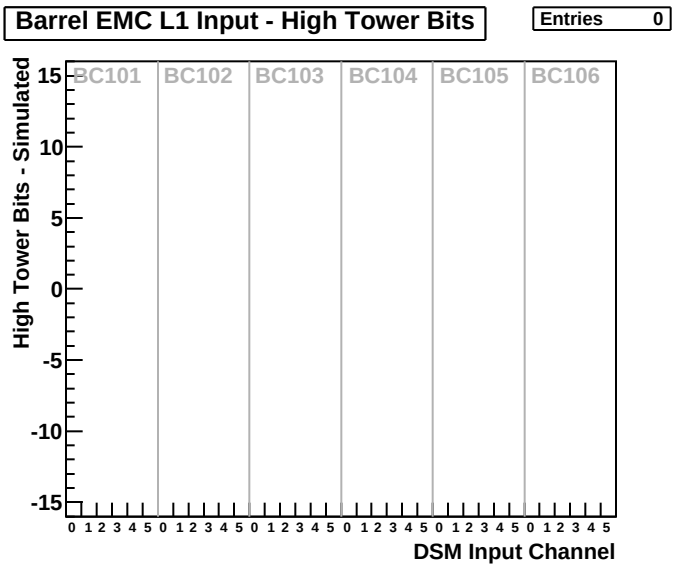

Barrel EMC L1 Input - Low Eta Sum
Entries 7399260
Low Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

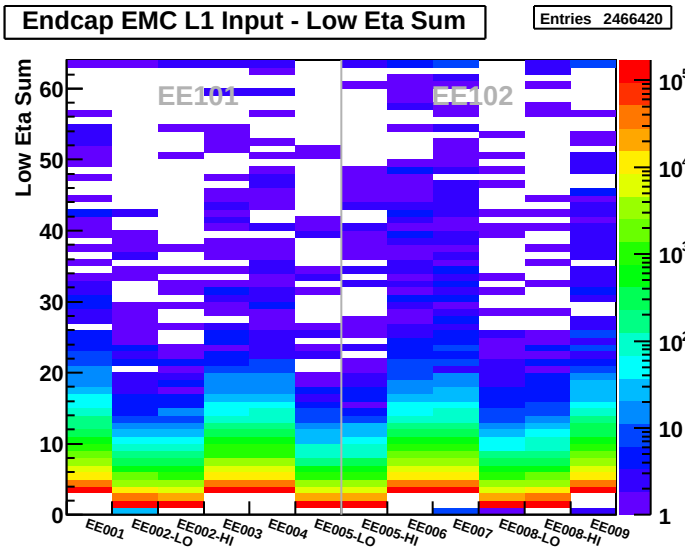

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

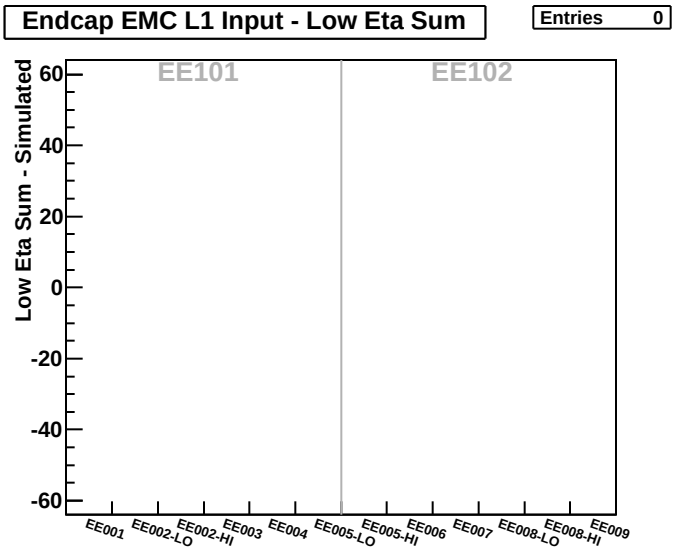

Barrel EMC L1 Input - High Eta Sum
Entries 7399260
High Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

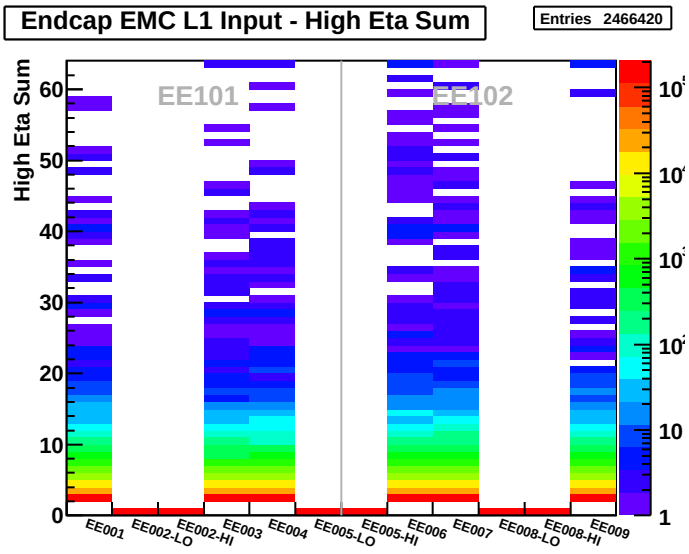

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

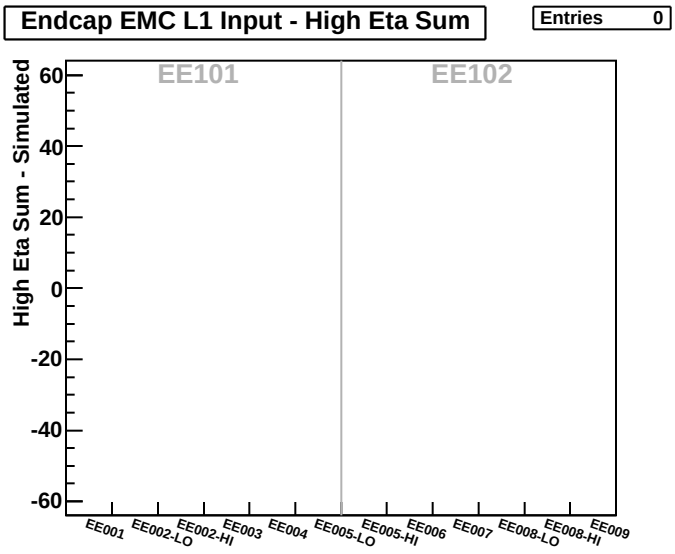

Barrel EMC L1 Input - High Tower Bits
Entries 7399260
High Tower Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

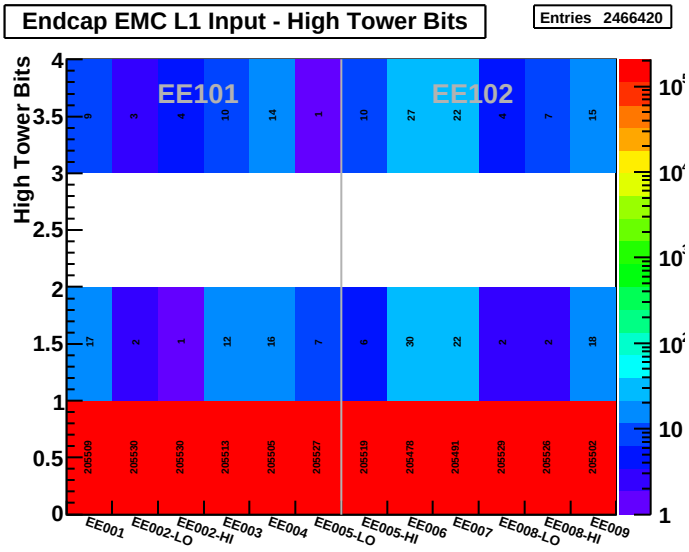

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

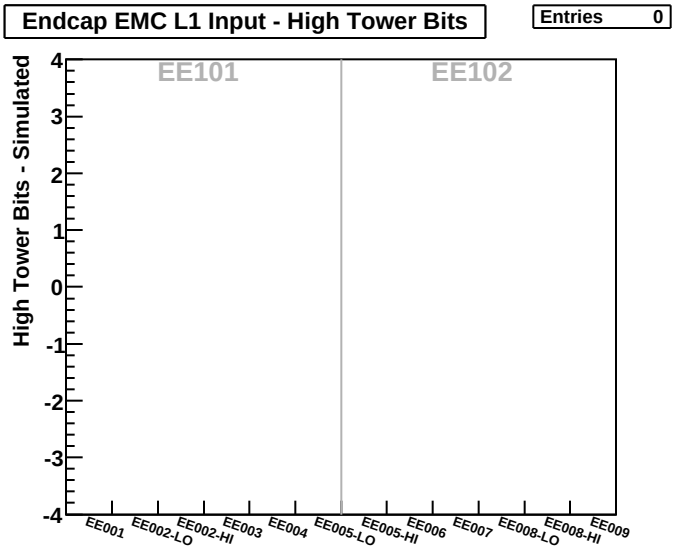

Endcap EMC L1 Input - Low Eta Sum
Entries 2466420
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

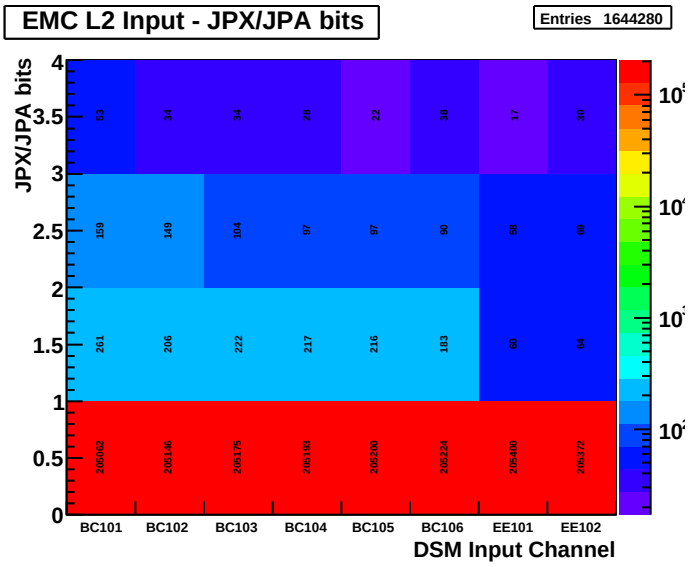

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

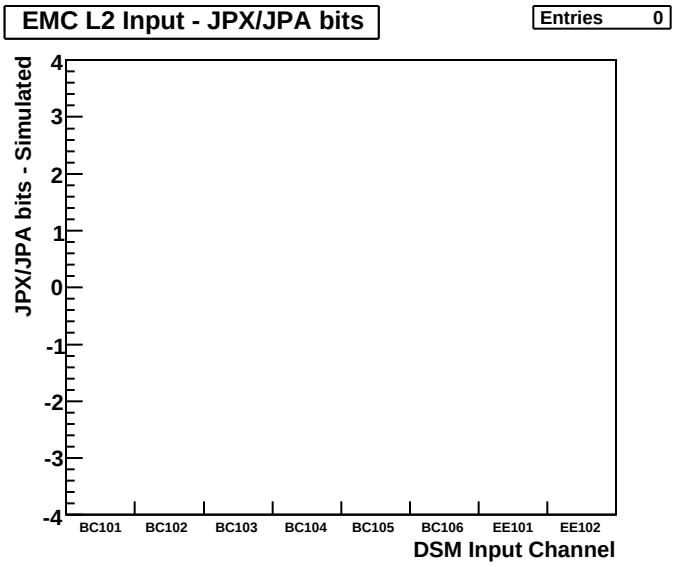

Endcap EMC L1 Input - High Eta Sum
Entries 2466420
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

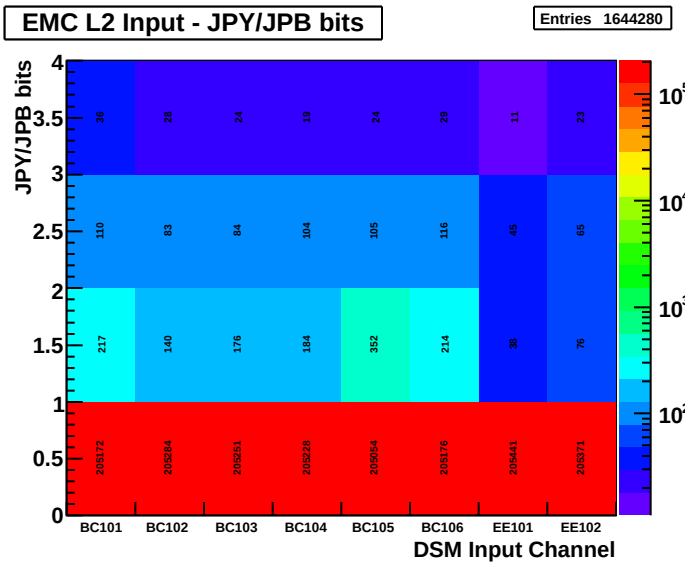

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

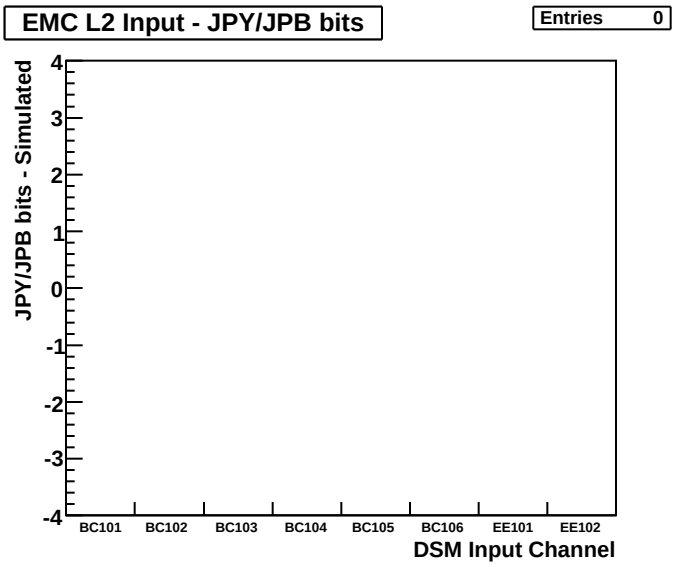

Endcap EMC L1 Input - High Tower Bits
Entries 2466420
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

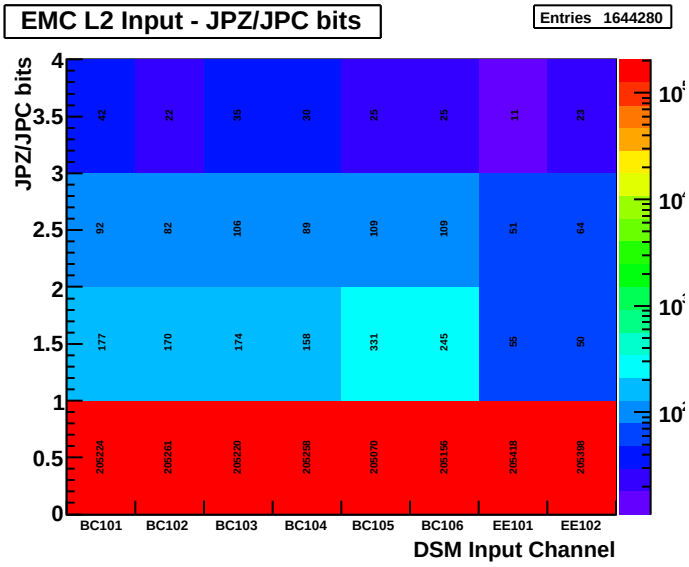

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

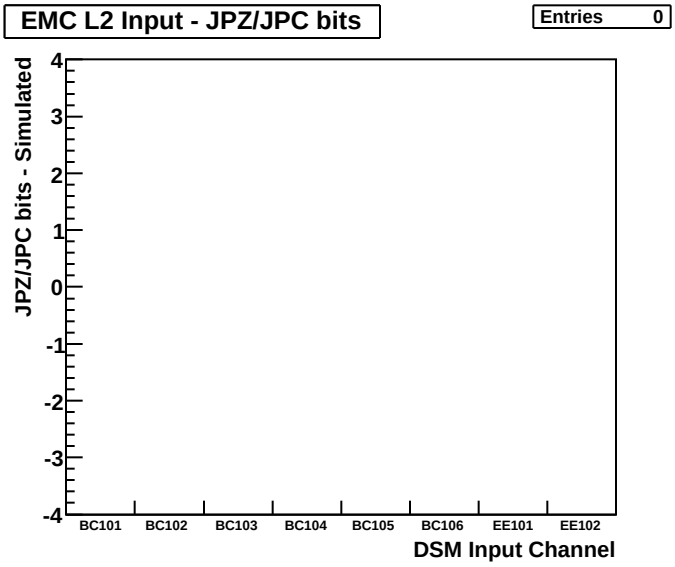

EMC L2 Input - JPX/JPA bits
Entries 1644280
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
53 34 34 28 22 38 17 30
159 149 104 97 97 90 58 68
261 206 222 217 216 183 60 64
205062 205146 205175 205193 205200 205224 205400 205372

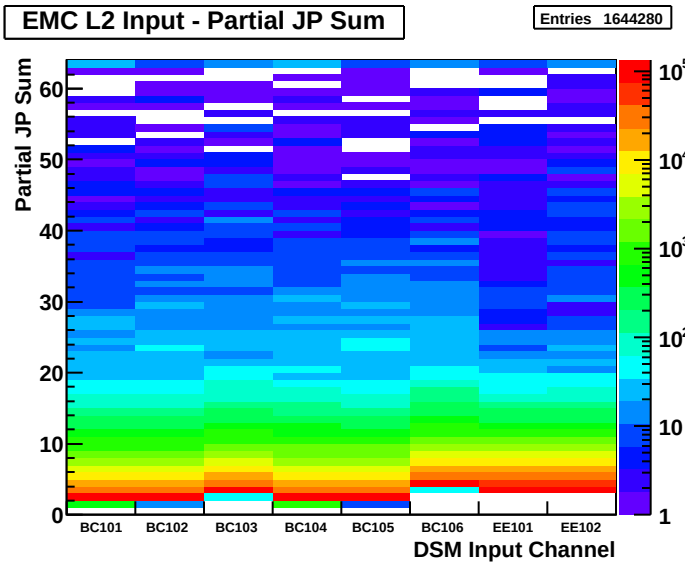

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

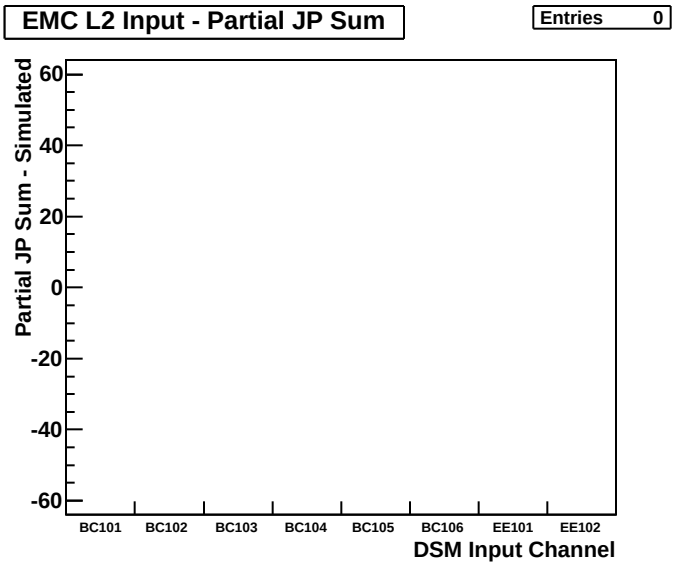

EMC L2 Input - JPY/JPB bits
Entries 1644280
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
36 23 24 19 24 29 11 23
110 83 84 104 105 116 45 65
217 140 176 184 352 214 38 76
205172 205284 205251 205228 205054 205176 205441 205371

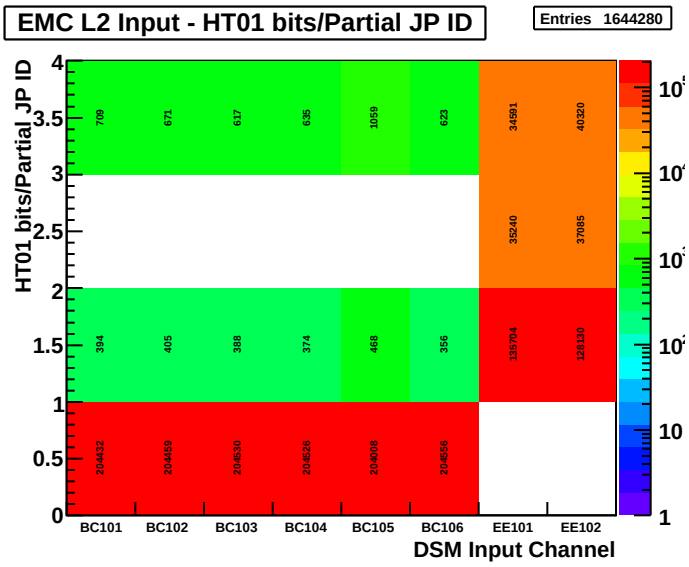

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

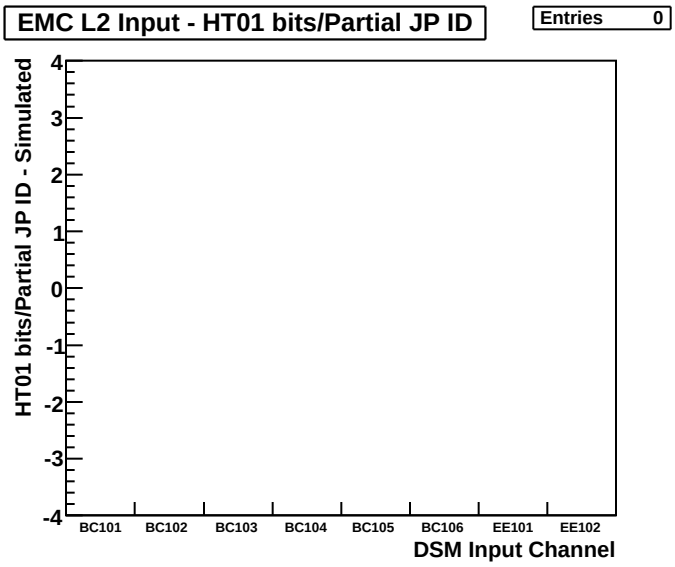

EMC L2 Input - JPZ/JPC bits
Entries 1644280
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
42 22 35 30 25 25 11 23
92 82 106 89 109 109 51 64
177 170 174 158 331 245 55 50
205224 205261 205220 205258 205070 205156 205418 205386

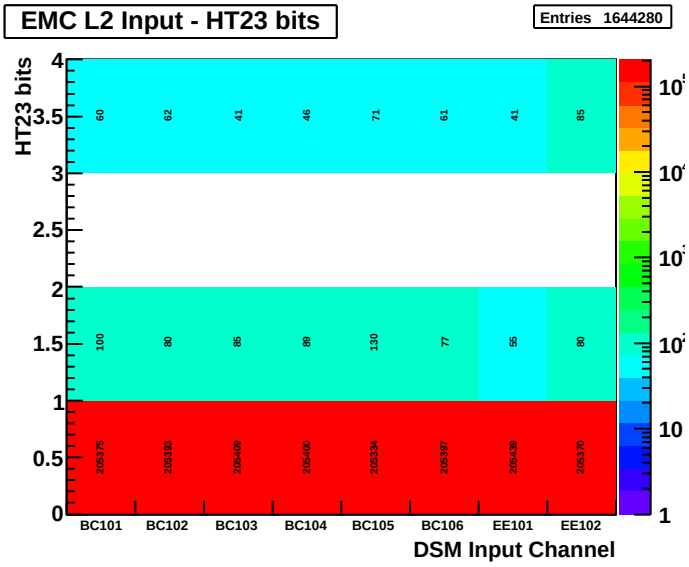

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

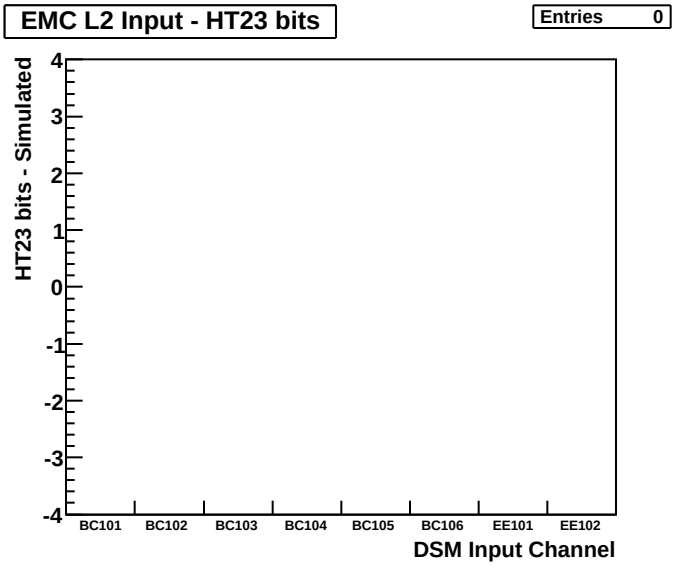

EMC L2 Input - Partial JP Sum
Entries 1644280
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

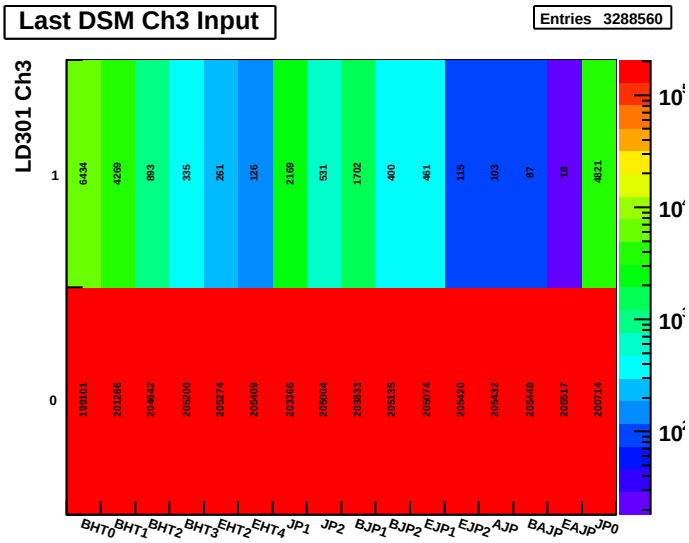

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

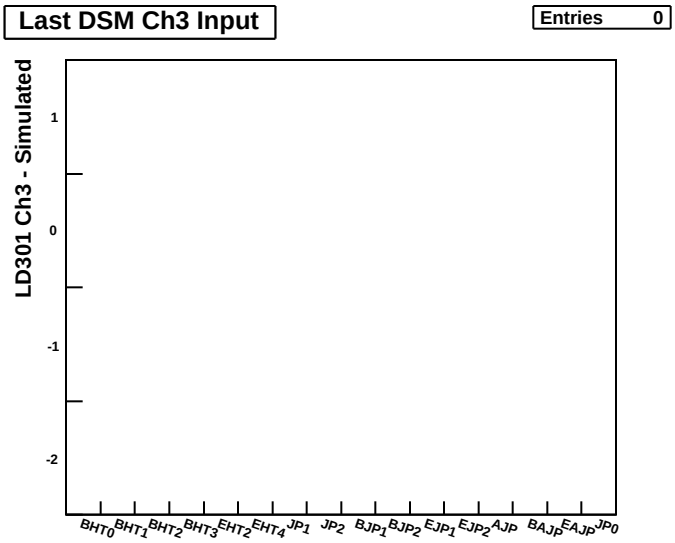

EMC L2 Input - HT01 bits/Partial JP ID
Entries 1644280
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

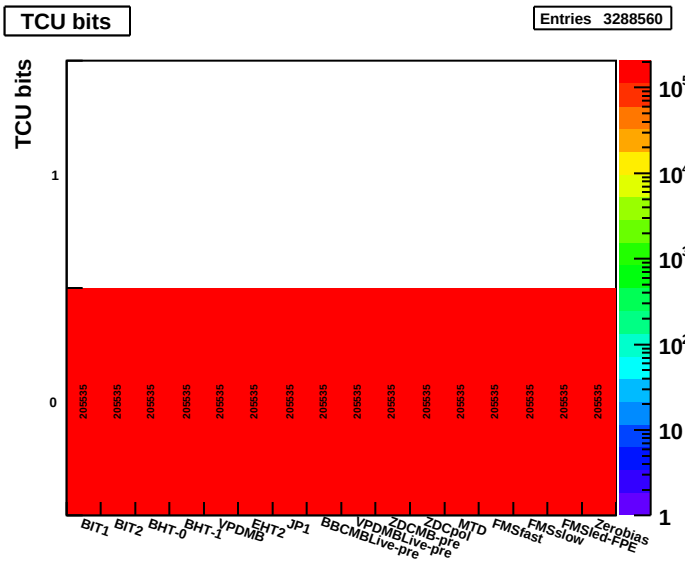

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

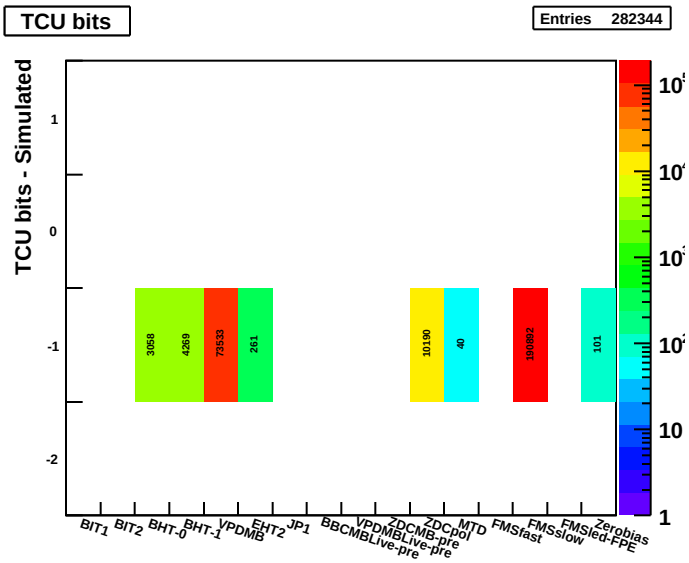

EMC L2 Input - HT23 bits
Entries 1644280
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

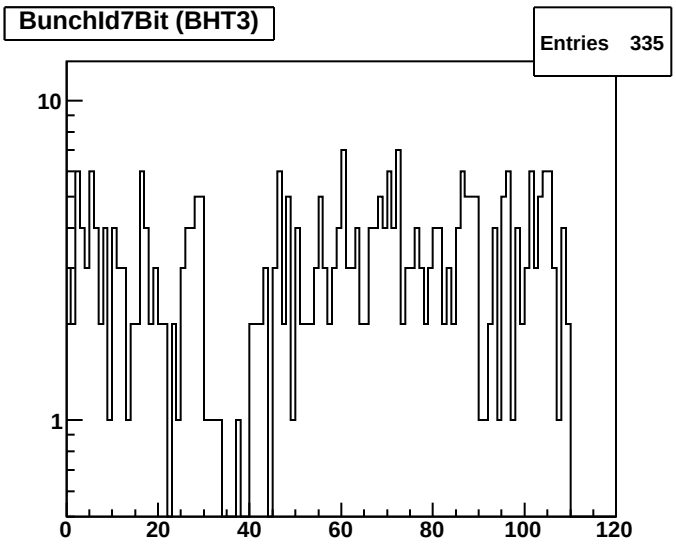

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

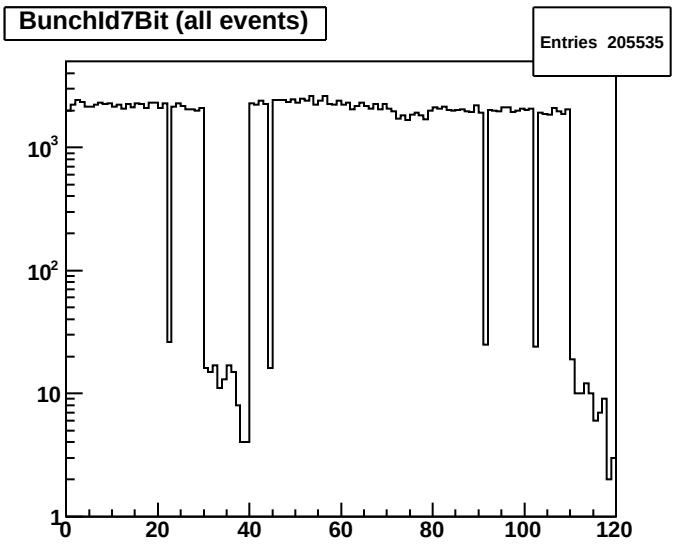

Last DSM Ch3 Input
Entries 3288560
LD301 Ch3
1
0
6434 4269 893 335 261 126 2169 531 1702 400 461 115 103 87 18 4821
199101 201266 204642 205200 205274 205409 203366 205004 203833 205135 205074 205420 205432 205448 205517 200714
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

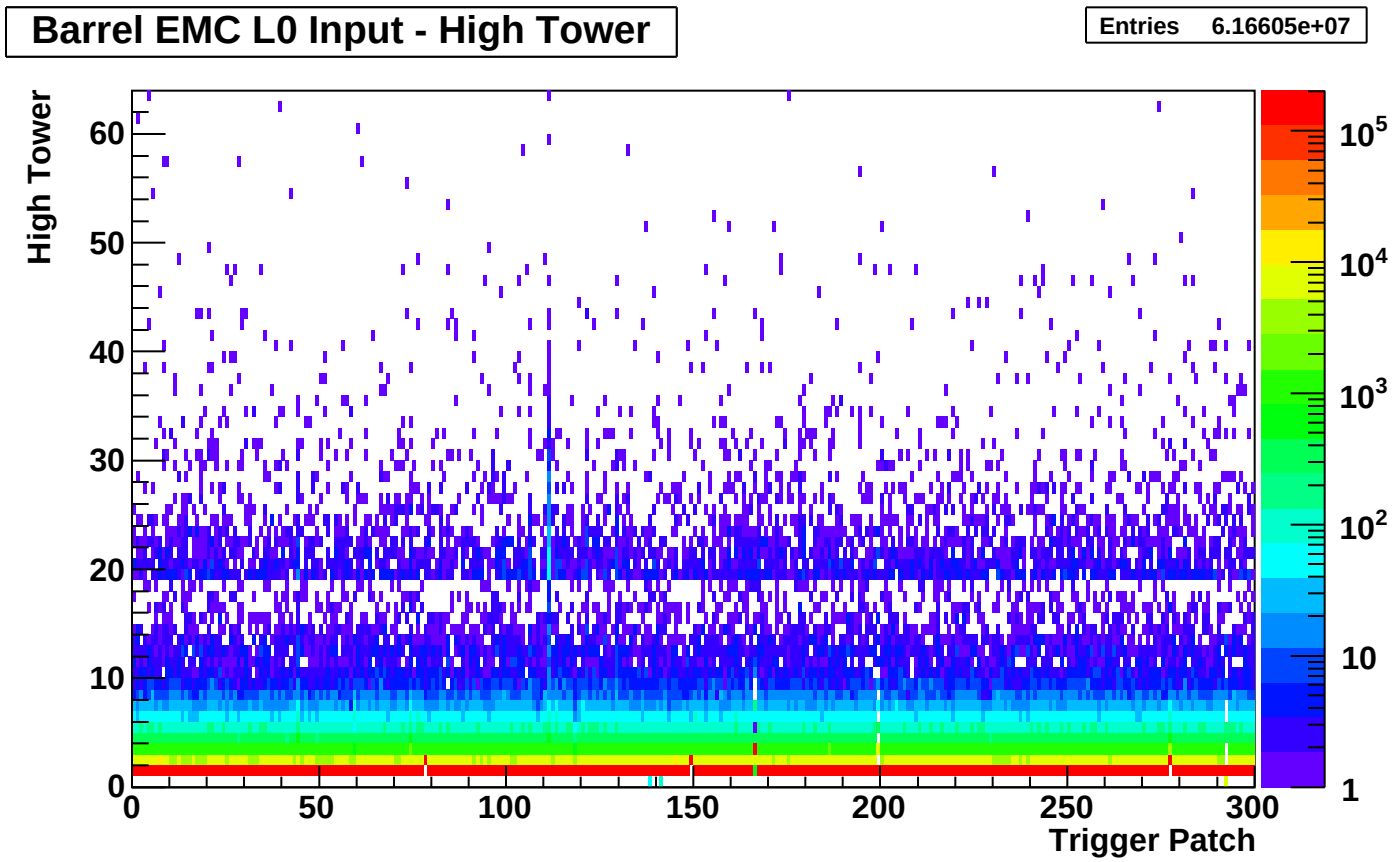

Last DSM Ch3 Input
Entries 0
LD301 Ch3 - Simulated
1
0
-1
-2
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

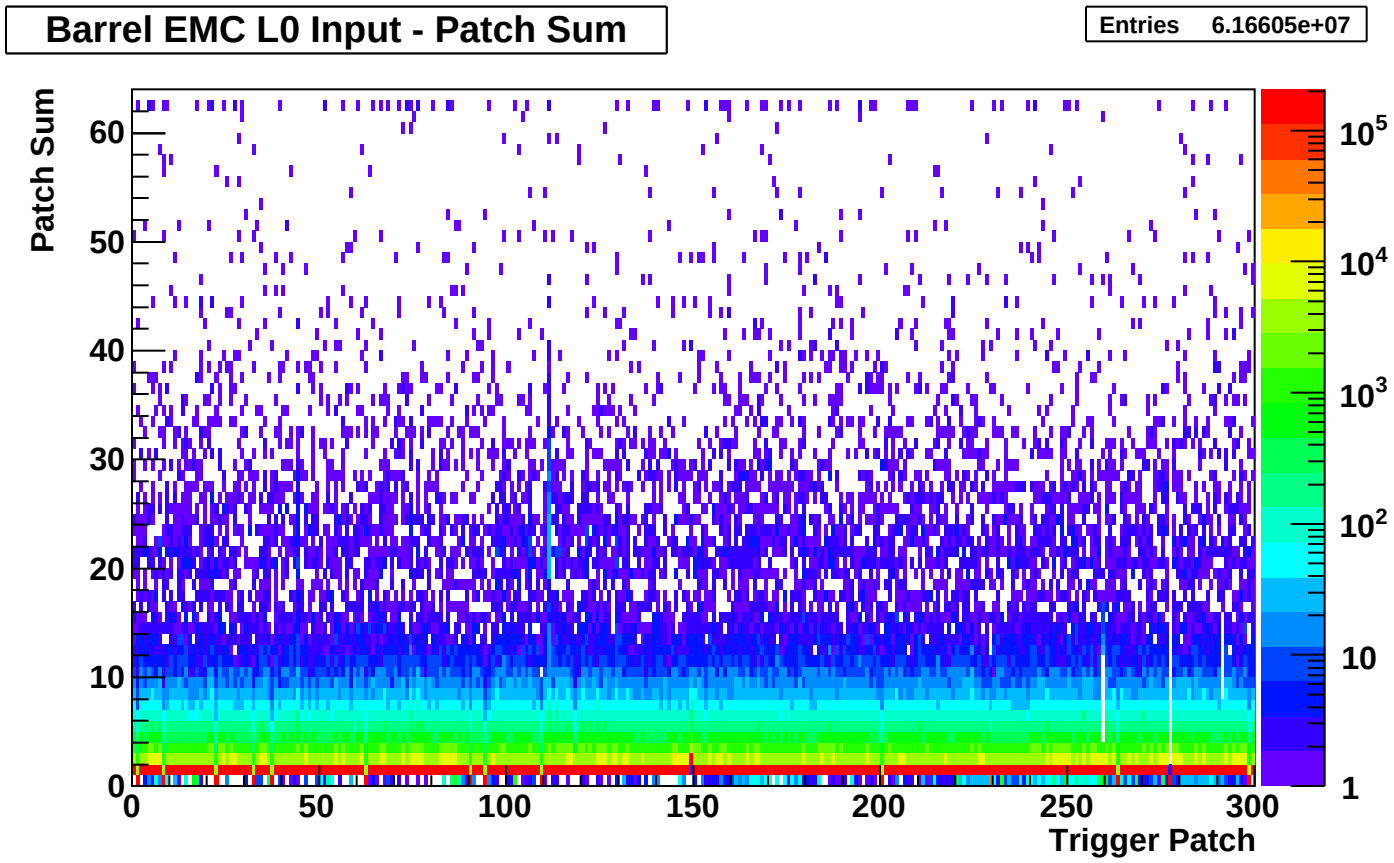

TCU bits
Entries 3288560
TCU bits
1
0
205535 205535 205535 205535 205535 205535 205535 205535 205535 205535 205535 205535 205535 205535 205535 205535
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

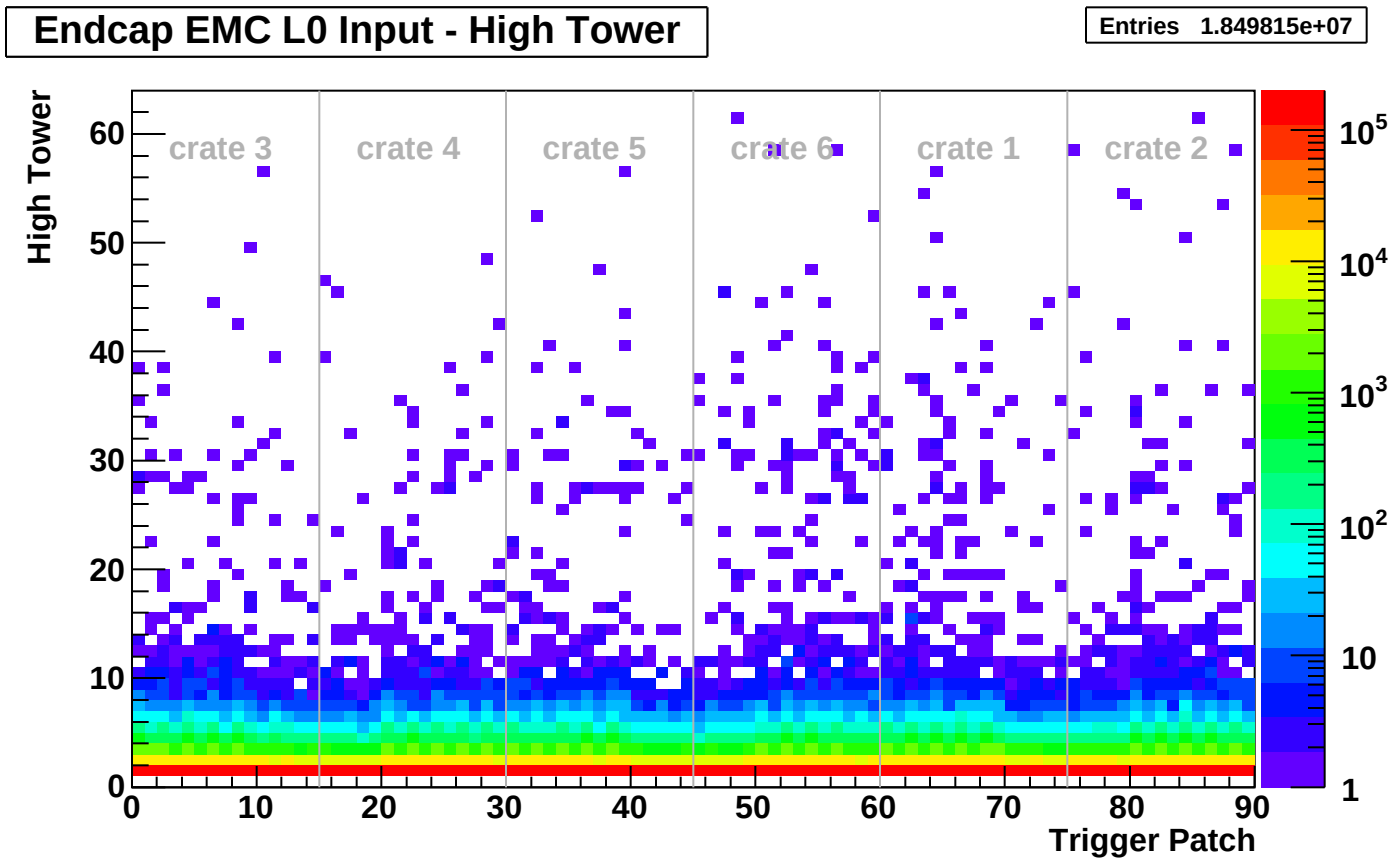

TCU bits
Entries 282344
TCU bits - Simulated
1
0
-1
-2
3058 4269 73533 261 10190 40 190892 101
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

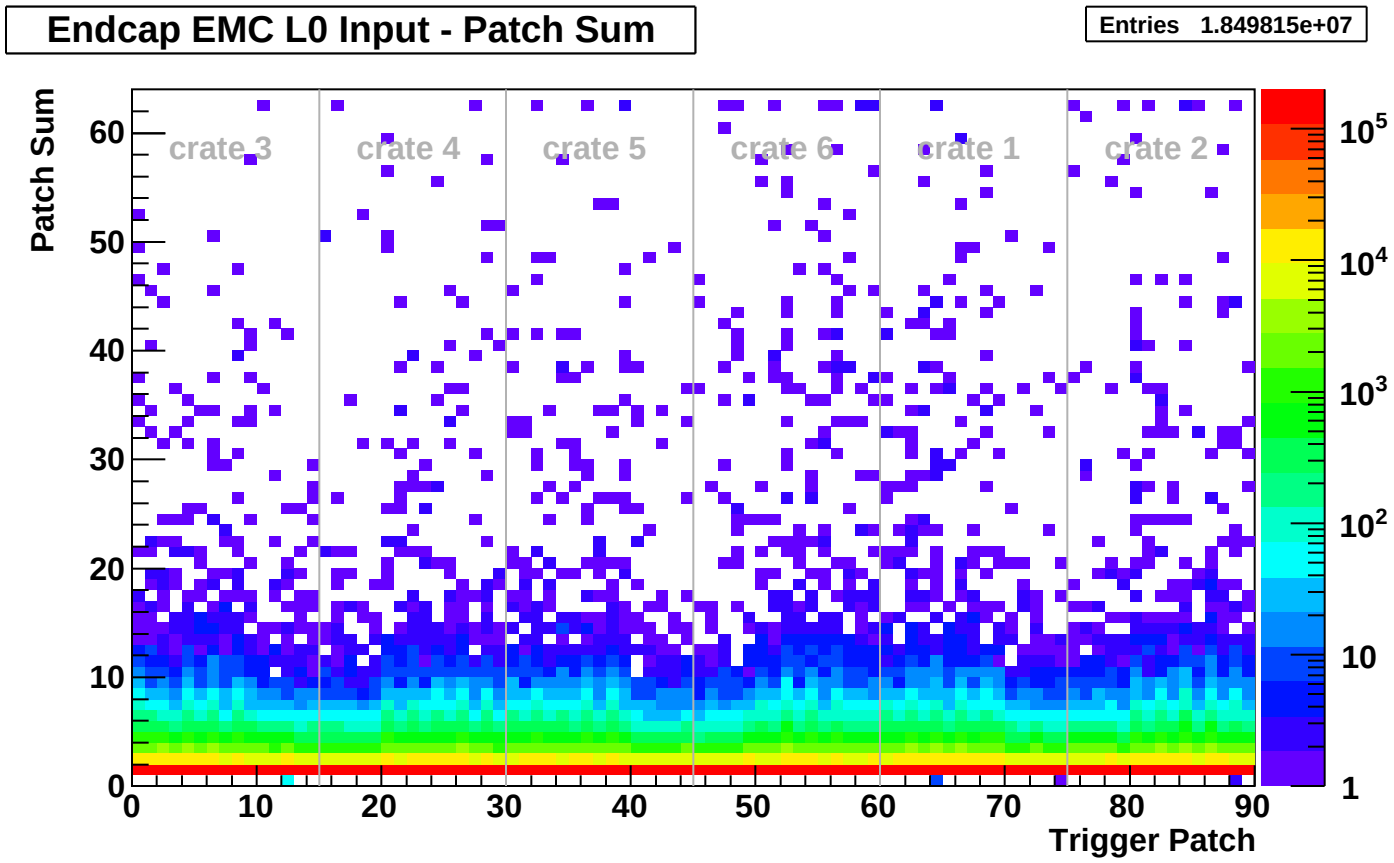

BunchId7Bit (BHT3)
Entries 335
10
1
0 20 40 60 80 100 120

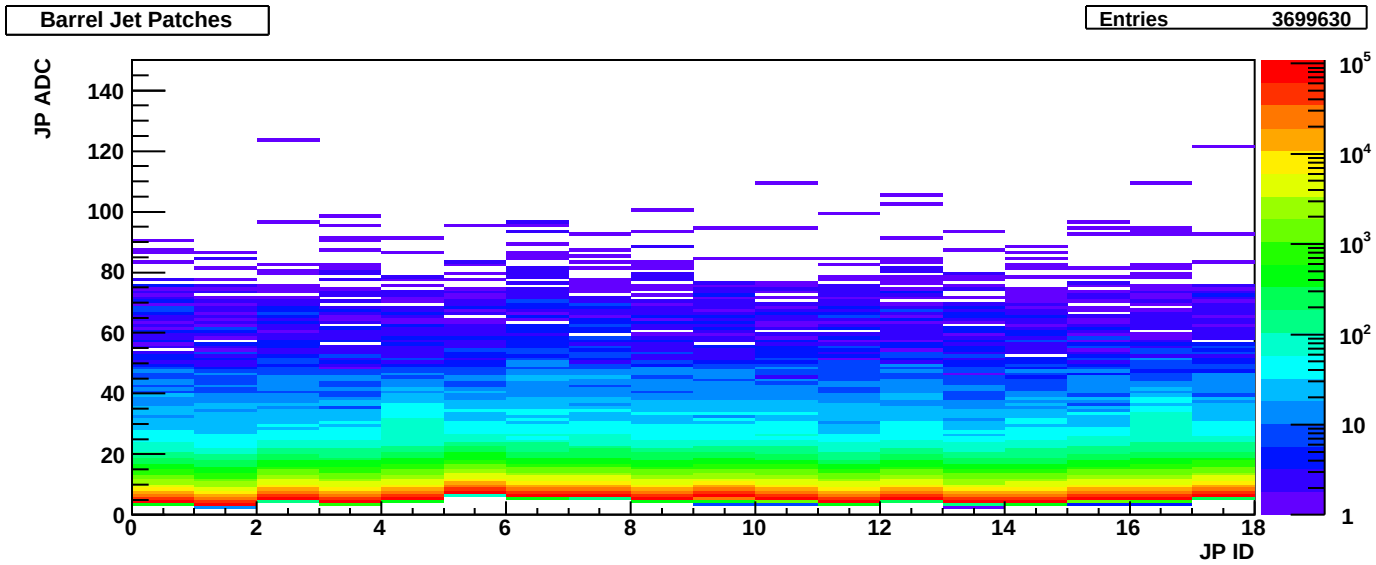

BunchId7Bit (all events)
Entries 205535
10^3
10^2
10
1
0 20 40 60 80 100 120

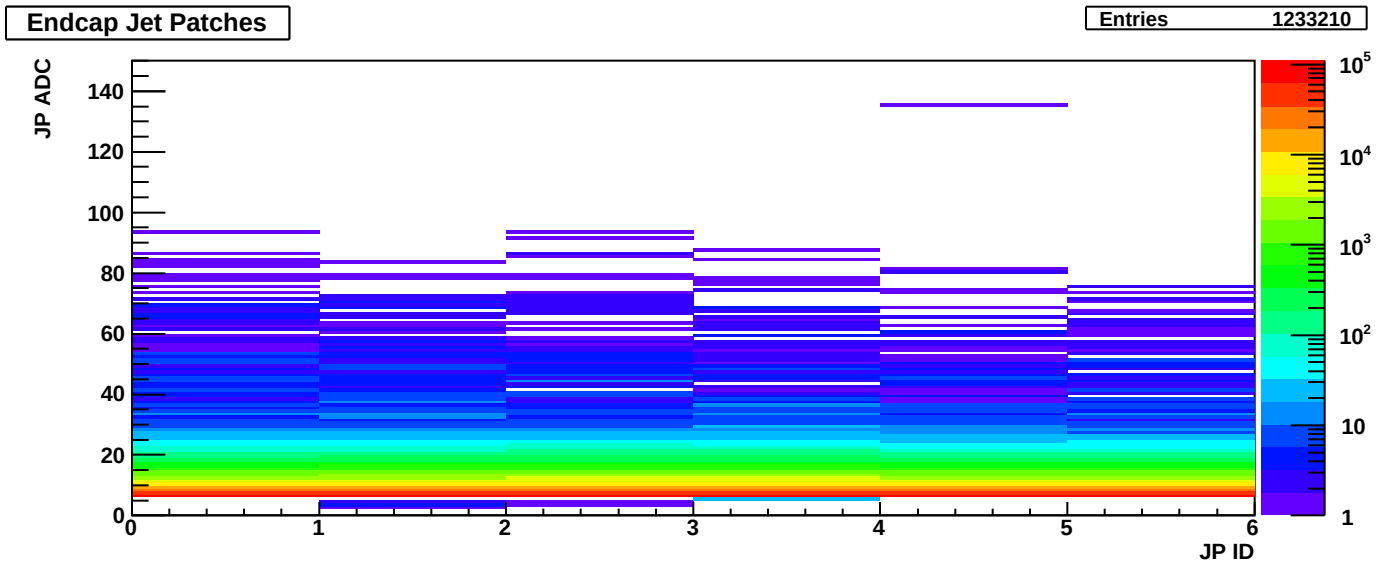

Barrel EMC L0 Input - High Tower
Entries 6.16605e+07
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

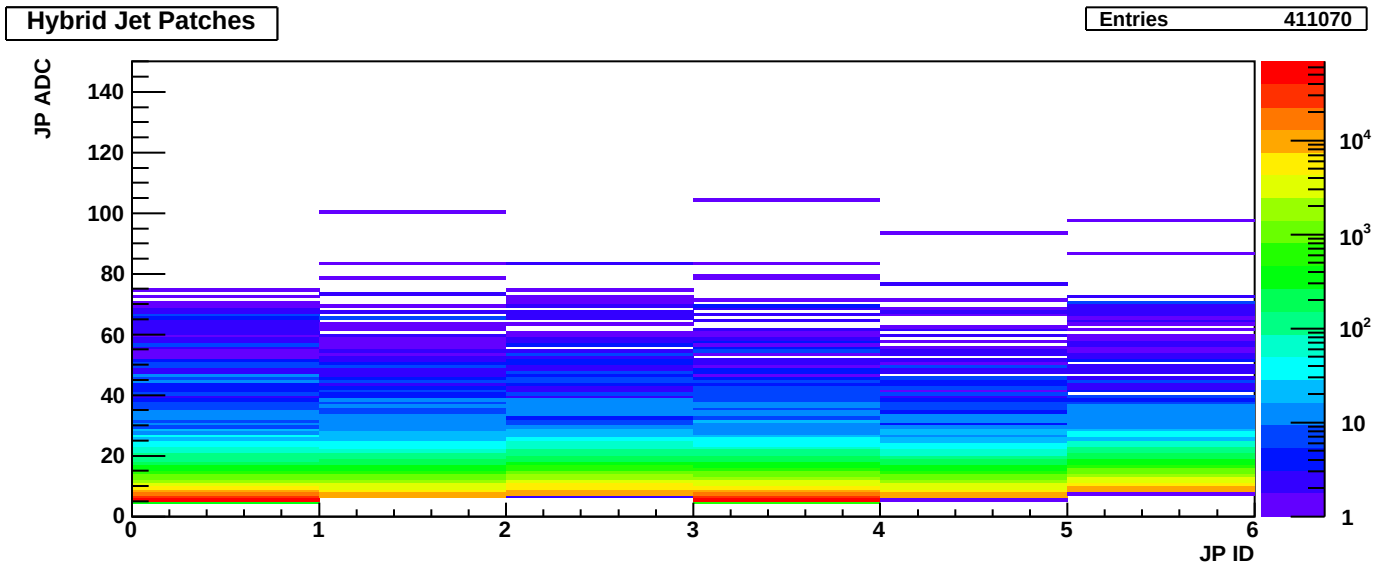

Barrel EMC L0 Input - Patch Sum
Entries 6.16605e+07
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

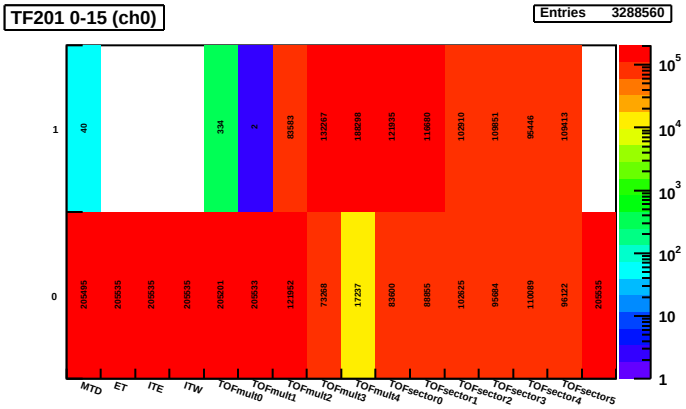

Endcap EMC L0 Input - High Tower
Entries 1.849815e+07
High Tower
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

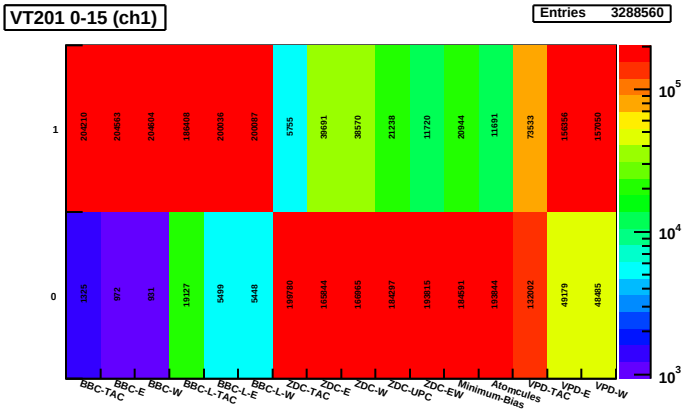

Endcap EMC L0 Input - Patch Sum
Entries 1.849815e+07
Patch Sum
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

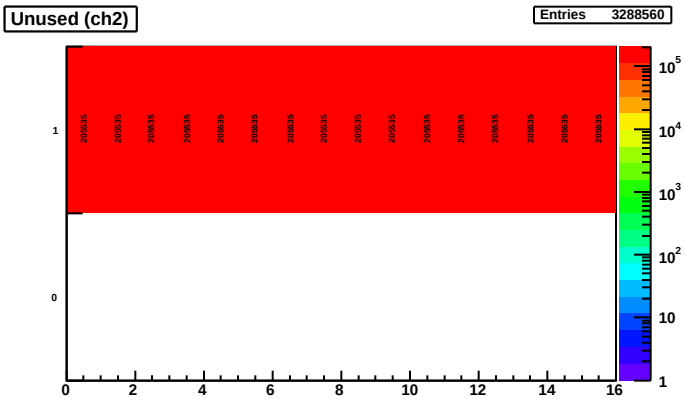

Barrel Jet Patches
Entries 3699630
JP ADC
JP ID

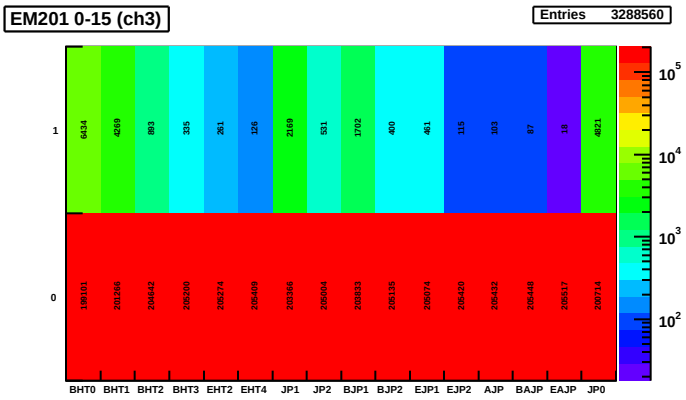

Endcap Jet Patches
Entries 1233210
JP ADC
JP ID

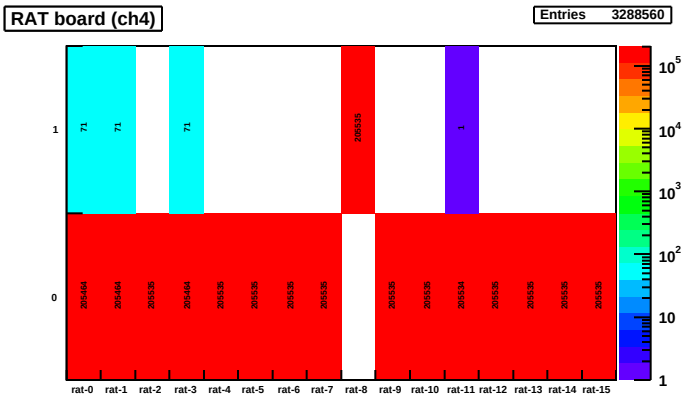

Hybrid Jet Patches
Entries 411070
JP ADC
JP ID

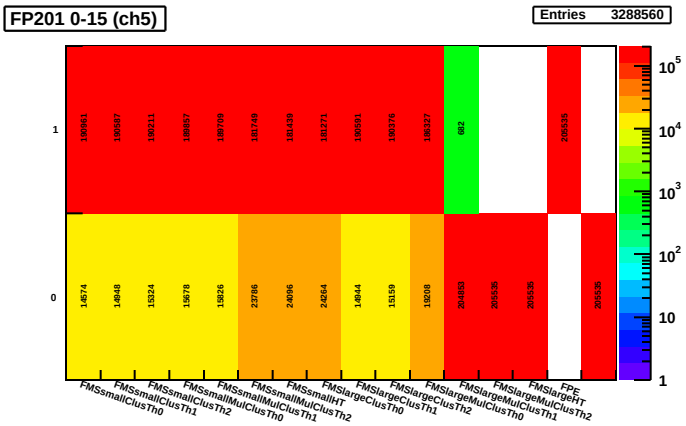

TF201 0-15 (ch0)
Entries 3288560
MTD
ET
ITE
ITW
TOFmult0
TOFmult1
TOFmult2
TOFmult3
TOFmult4
TOFsector0
TOFsector1
TOFsector2
TOFsector3
TOFsector4
TOFsector5

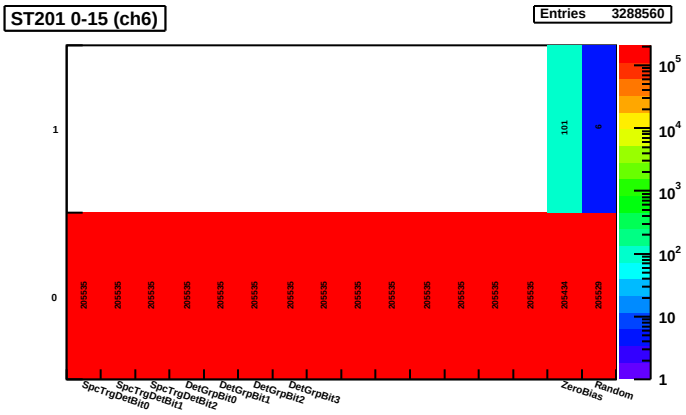

VT201 0-15 (ch1)
Entries 3288560
BBC-TAC
BBC-E
BBC-W
BBC-L-TAC
BBC-L-E
BBC-L-W
ZDC-TAC
ZDC-E
ZDC-W
ZDC-UPC
ZDC-EW
Minimum-Bias
Atomcules
VPD-TAC
VPD-E
VPD-W

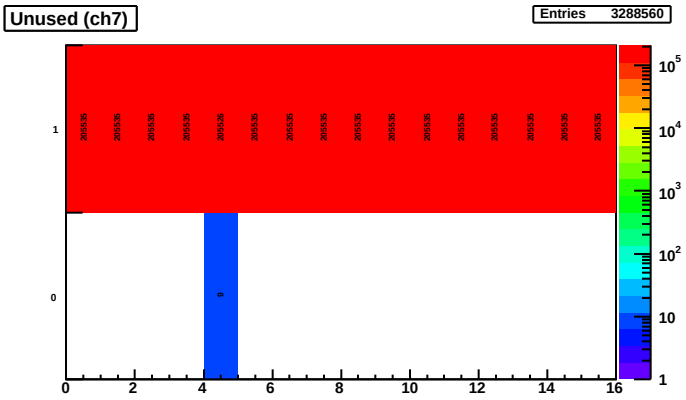

Unused (ch2)
Entries 3288560

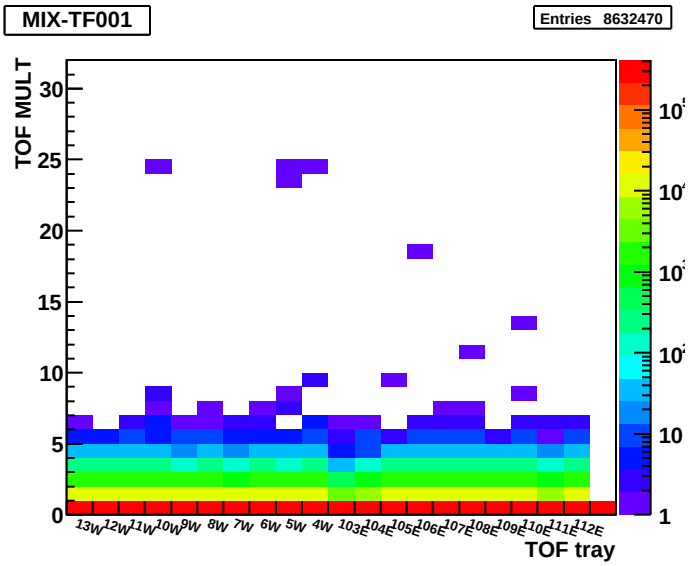

EM201 0-15 (ch3)
Entries 3288560
BHT0
BHT1
BHT2
BHT3
EHT2
EHT4
JP1
JP2
BJP1
BJP2
EJP1
EJP2
AJP
BAJP
EAJP
JP0

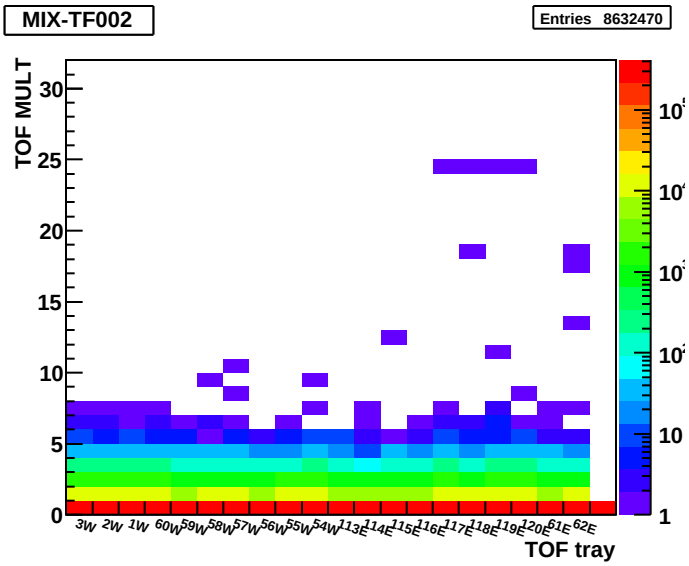

RAT board (ch4)
Entries 3288560
rat-0
rat-1
rat-2
rat-3
rat-4
rat-5
rat-6
rat-7
rat-8
rat-9
rat-10
rat-11
rat-12
rat-13
rat-14
rat-15

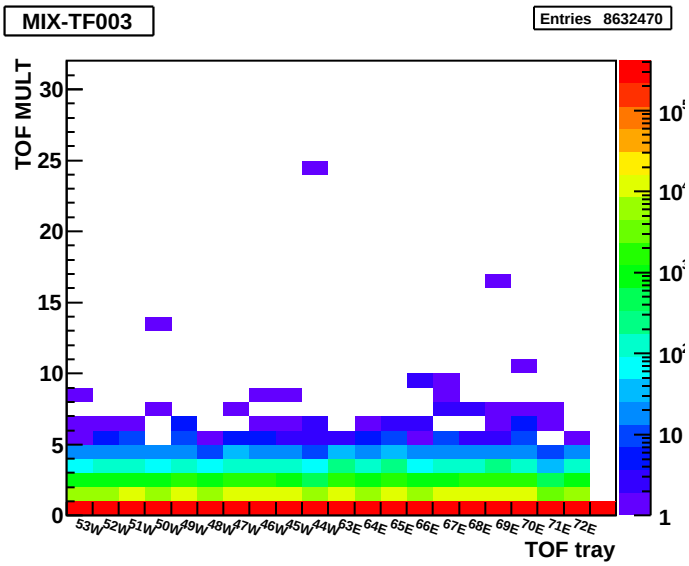

FP201 0-15 (ch5)
Entries 3288560
FMSsmallClusTh0
FMSsmallClusTh1
FMSsmallClusTh2
FMSsmallMulClusTh0
FMSsmallMulClusTh1
FMSsmallMulClusTh2
FMSsmallHT
FMSlargeClusTh0
FMSlargeClusTh1
FMSlargeClusTh2
FMSlargeMulClusTh0
FMSlargeMulClusTh1
FMSlargeMulClusTh2
FMSlargeHT
FPE

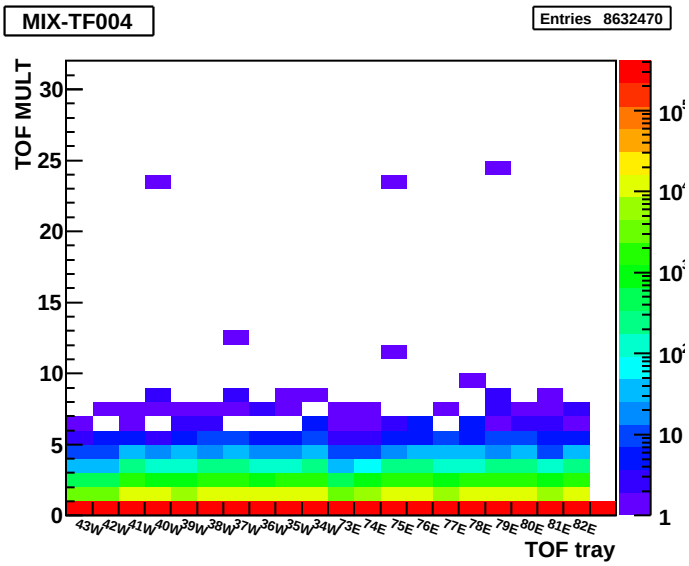

ST201 0-15 (ch6)
Entries 3288560
SpcTrgDetBit0
SpcTrgDetBit1
SpcTrgDetBit2
DetCrpBit0
DetCrpBit1
DetCrpBit2
DetCrpBit3
ZeroBias
Random

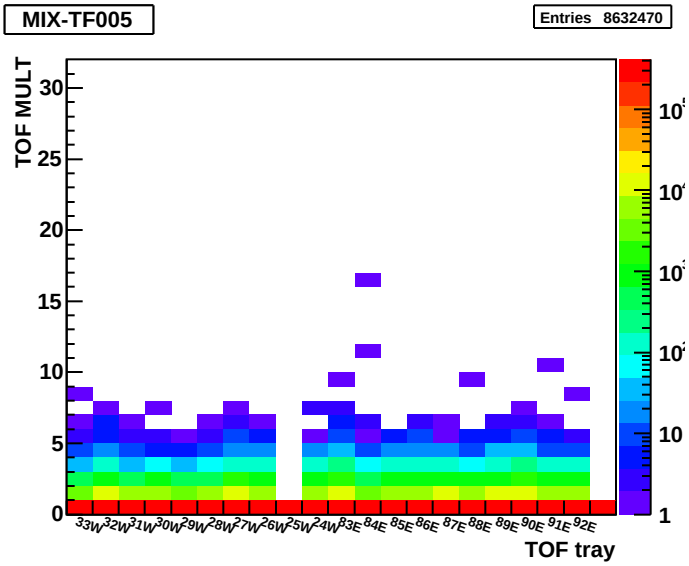

Unused (ch7)
Entries 3288560

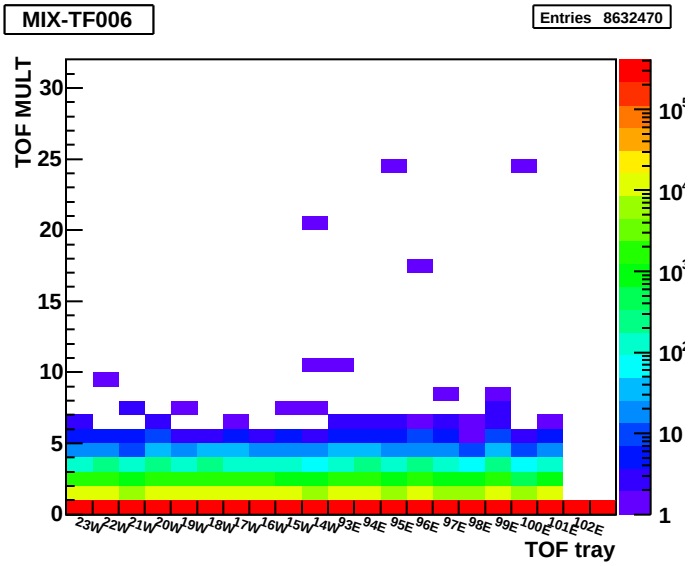

MIX-TF001
Entries 8632470
TOF MULT
TOF tray

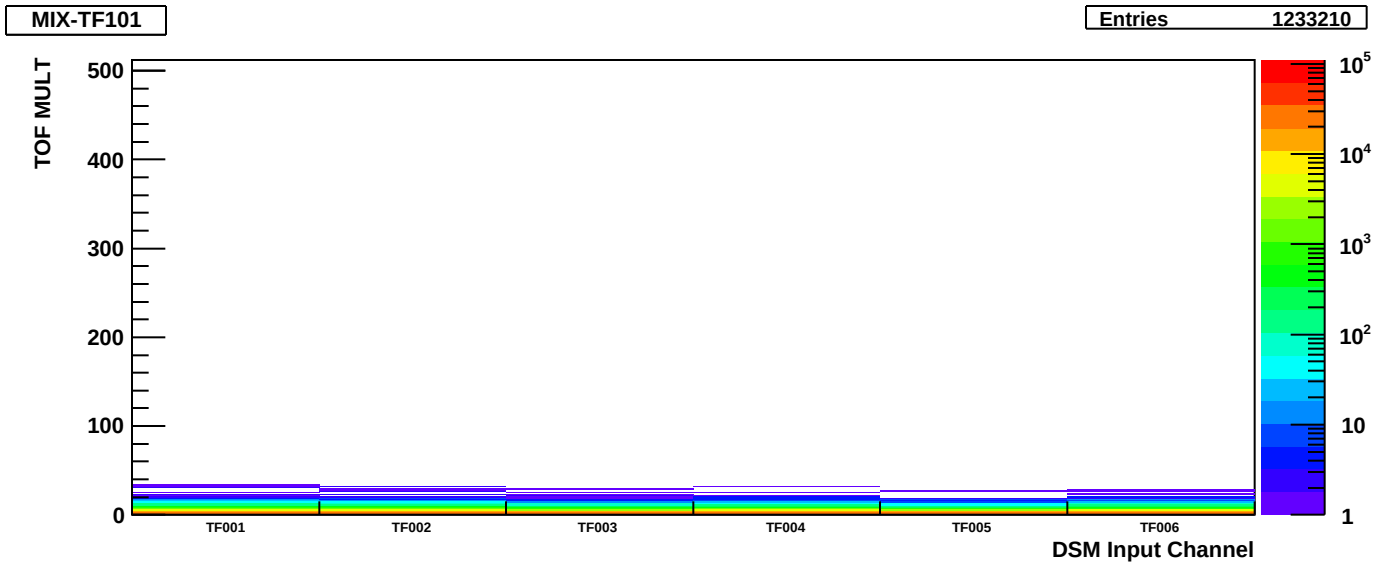

MIX-TF002
Entries 8632470
TOF MULT
TOF tray

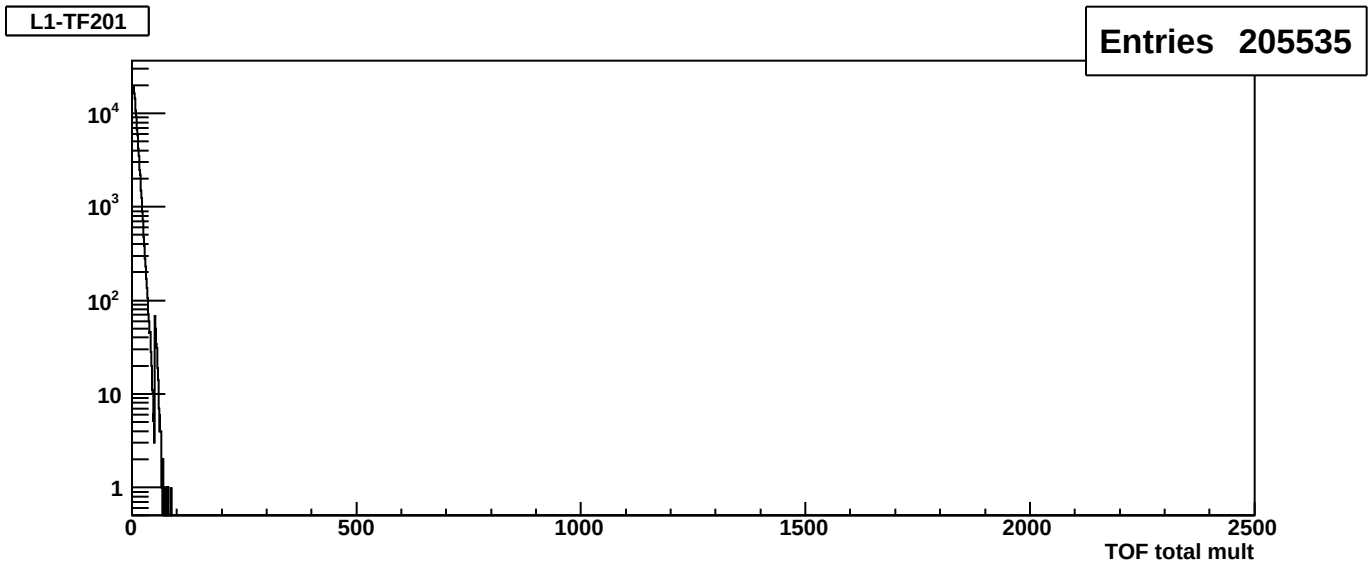

MIX-TF003
Entries 8632470
TOF MULT
TOF tray

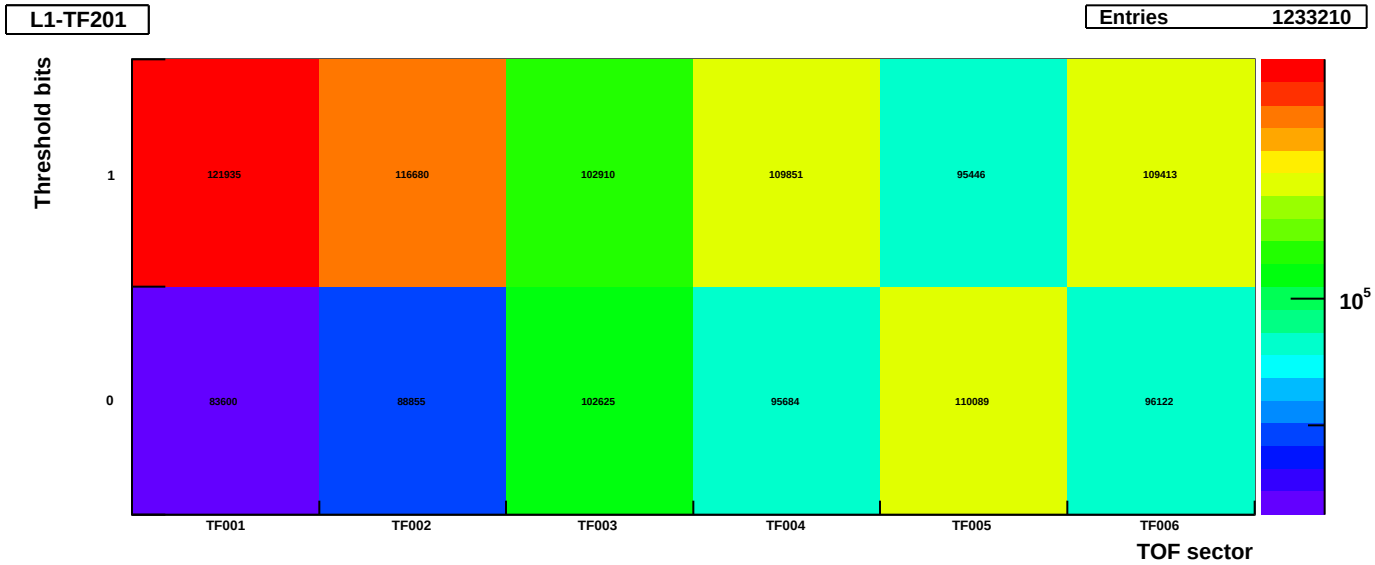

MIX-TF004
Entries 8632470
TOF MULT
TOF tray

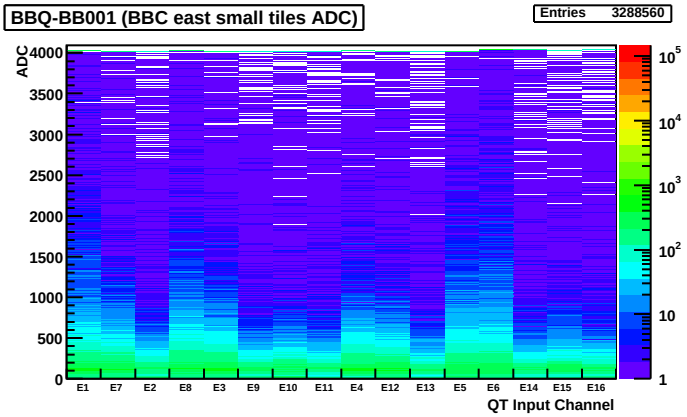

MIX-TF005
Entries 8632470
TOF MULT
TOF tray

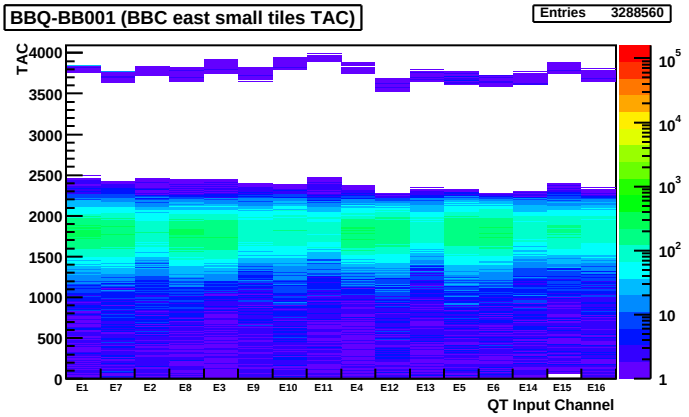

MIX-TF006
Entries 8632470
TOF MULT
TOF tray

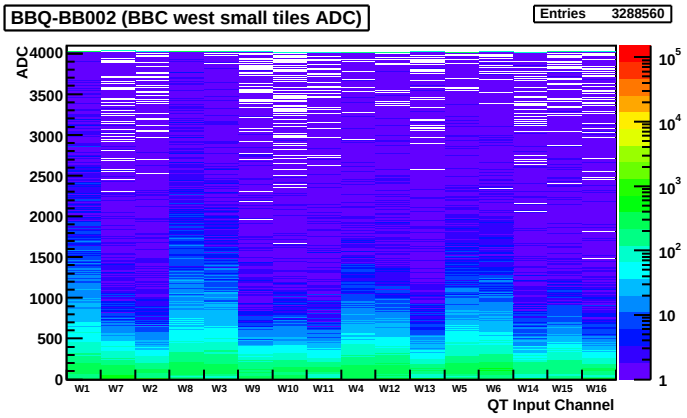

MIX-TF101
Entries 1233210
TOF MULT
500
400
300
200
100
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^5
10^4
10^3
10^2
10
1

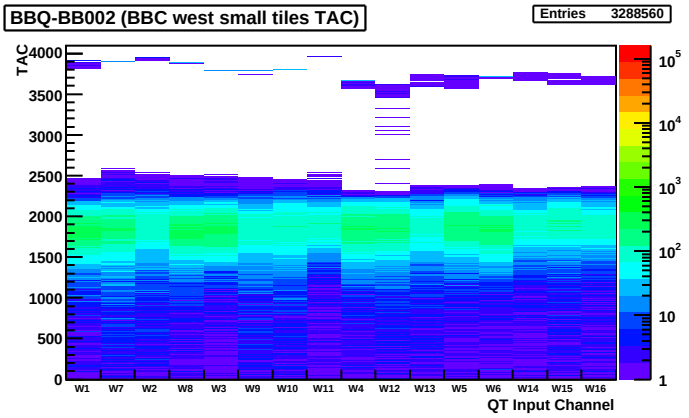

L1-TF201
Entries 205535
10^4
10^3
10^2
10
1
0
500
1000
1500
2000
2500
TOF total mult

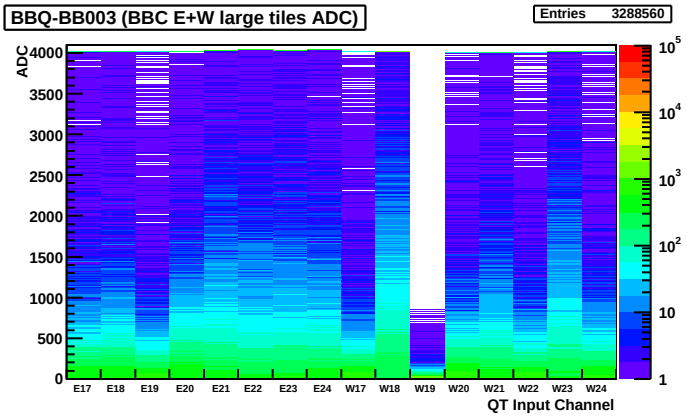

L1-TF201
Entries 1233210
Threshold bits
1
0
121935
116680
102910
109851
95446
109413
83600
88855
102625
95684
110089
96122
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector
10^5

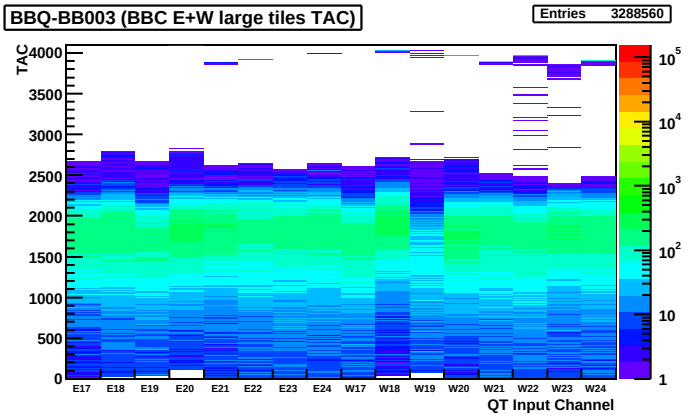

BBQ-BB001 (BBC east small tiles ADC)
Entries 3288560
ADC
QT Input Channel

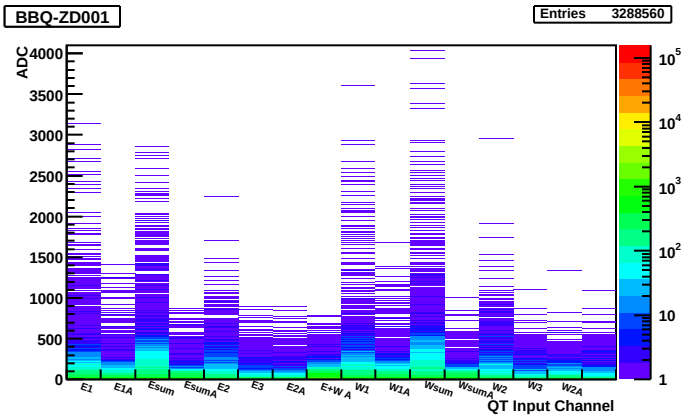

BBQ-BB001 (BBC east small tiles TAC)
Entries 3288560
TAC
QT Input Channel

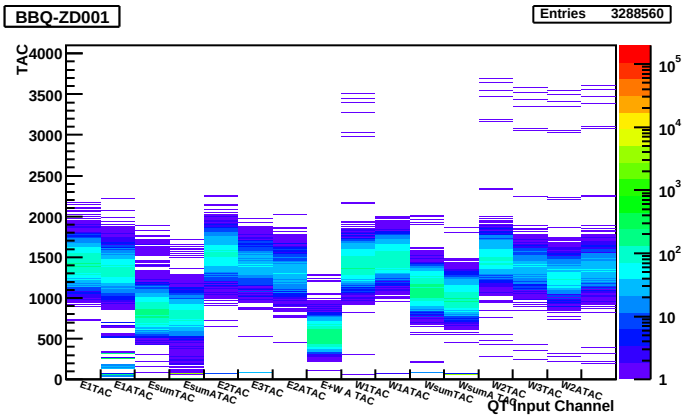

BBQ-BB002 (BBC west small tiles ADC)
Entries 3288560
ADC
QT Input Channel

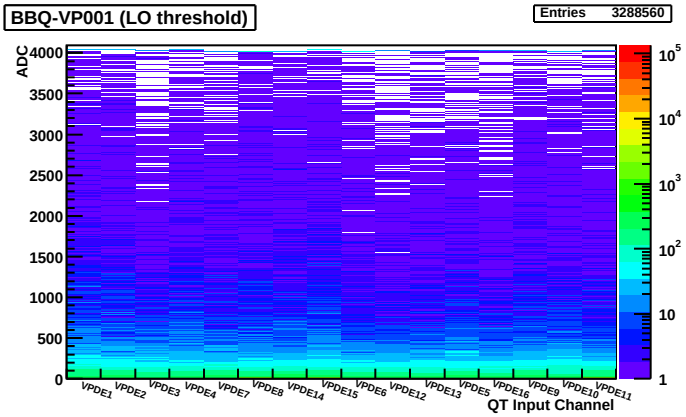

BBQ-BB002 (BBC west small tiles TAC)
Entries 3288560
TAC
QT Input Channel

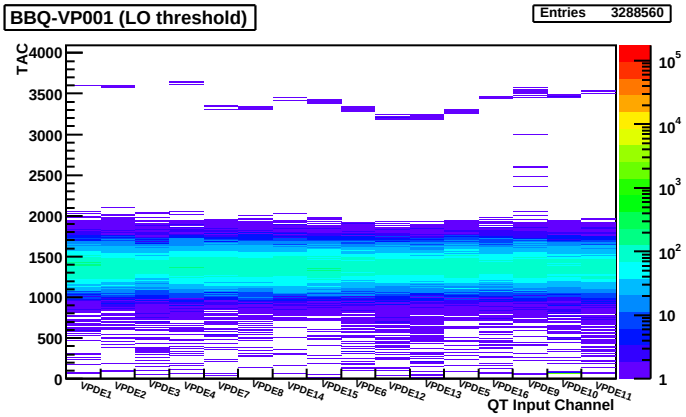

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 3288560
ADC
QT Input Channel

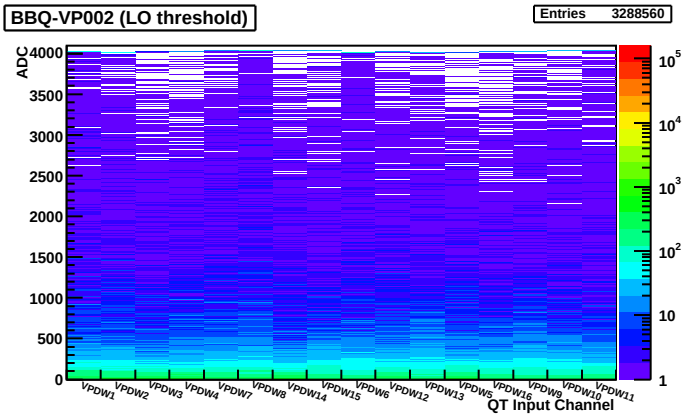

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 3288560
TAC
QT Input Channel

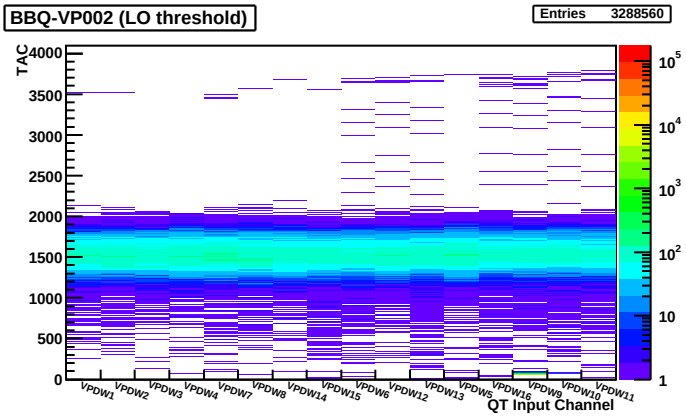

BBQ-ZD001
Entries 3288560
ADC
QT Input Channel

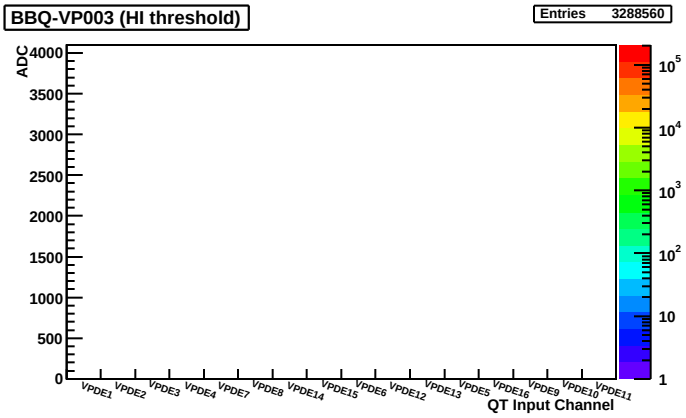

BBQ-ZD001
Entries 3288560
TAC
QT Input Channel

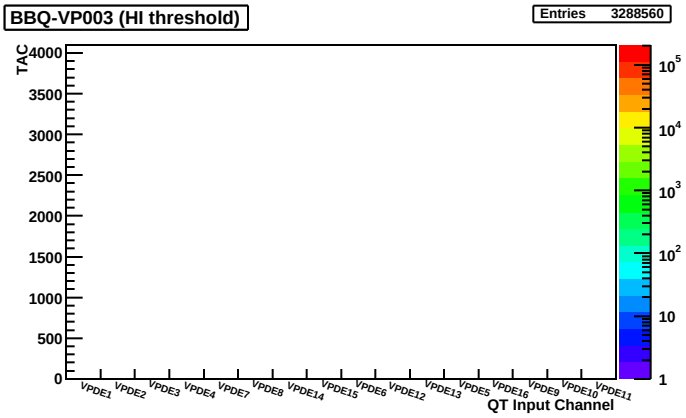

BBQ-VP001 (LO threshold)
Entries 3288560
ADC
QT Input Channel

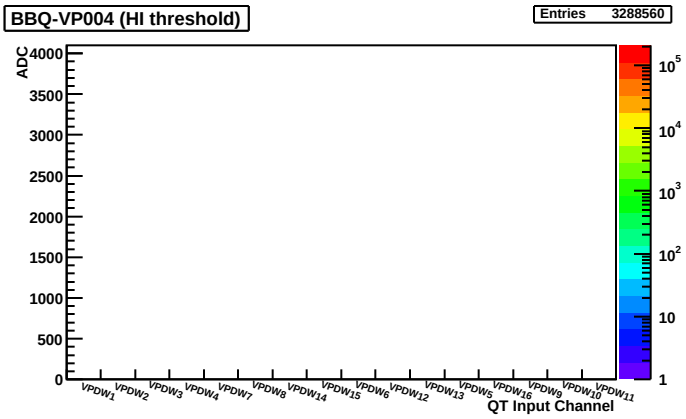

BBQ-VP001 (LO threshold)
Entries 3288560
TAC
QT Input Channel

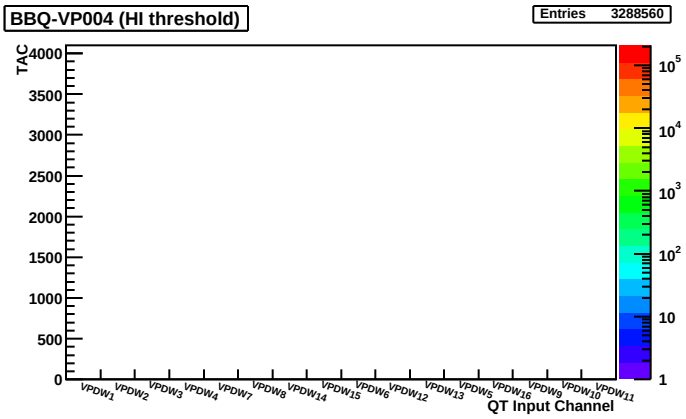

BBQ-VP002 (LO threshold)
Entries 3288560
ADC
QT Input Channel

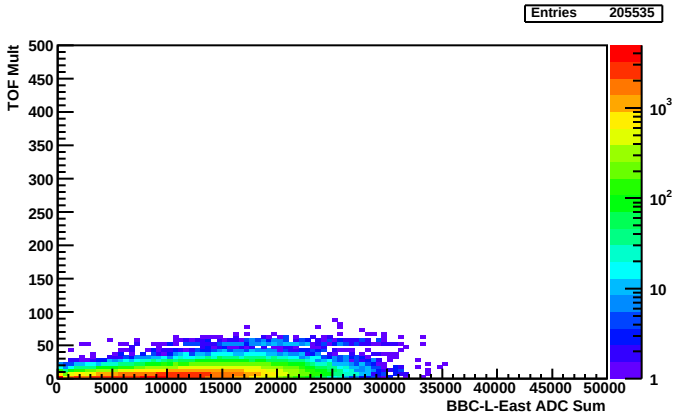

BBQ-VP002 (LO threshold)
Entries 3288560
TAC
QT Input Channel

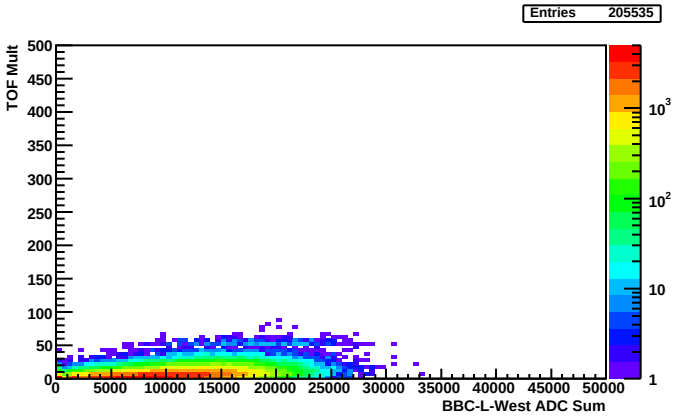

BBQ-VP003 (HI threshold)
Entries 3288560
ADC
QT Input Channel

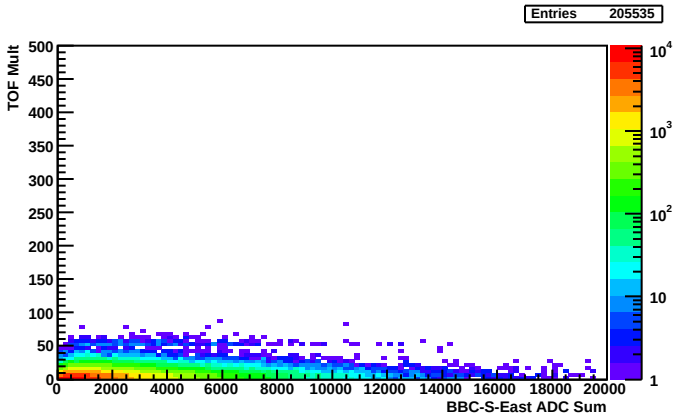

BBQ-VP003 (HI threshold)
Entries 3288560
TAC
QT Input Channel

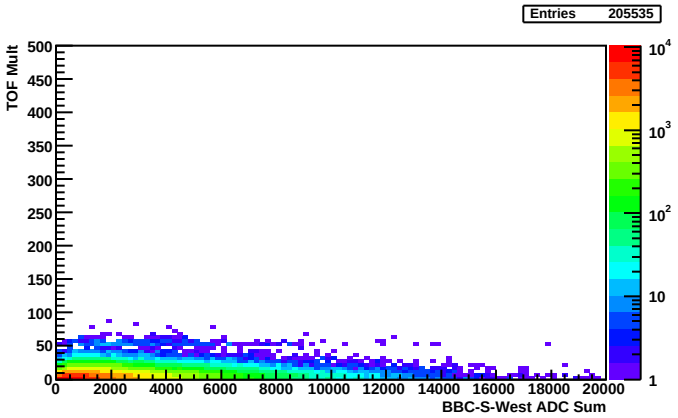

BBQ-VP004 (HI threshold)
Entries 3288560
ADC
QT Input Channel

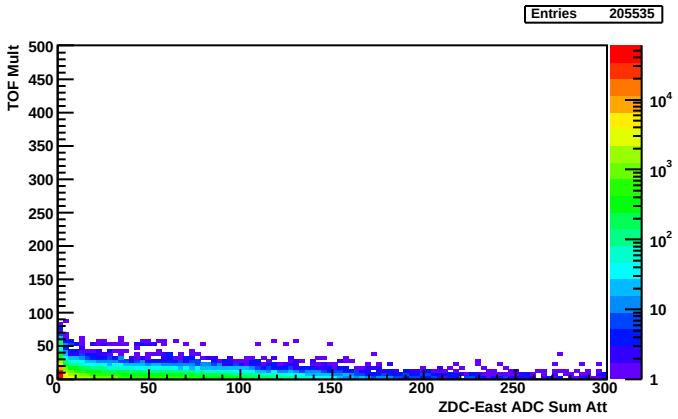

BBQ-VP004 (HI threshold)
Entries 3288560
TAC
QT Input Channel

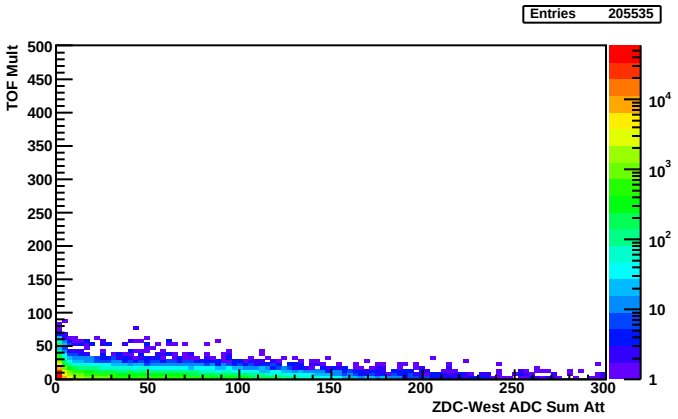

Entries 205535
TOF Mult
BBC-L-East ADC Sum

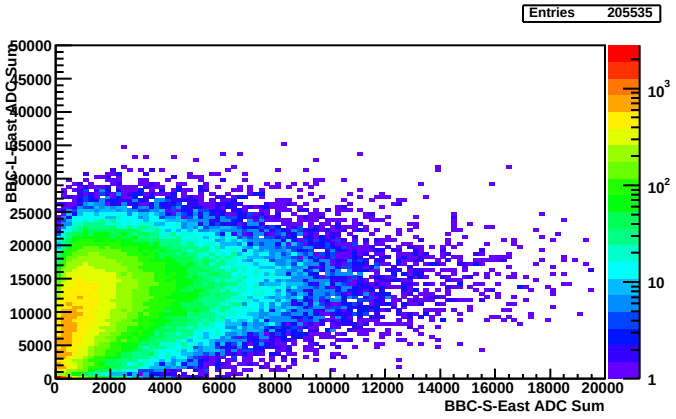

Entries 205535
TOF Mult
BBC-L-West ADC Sum

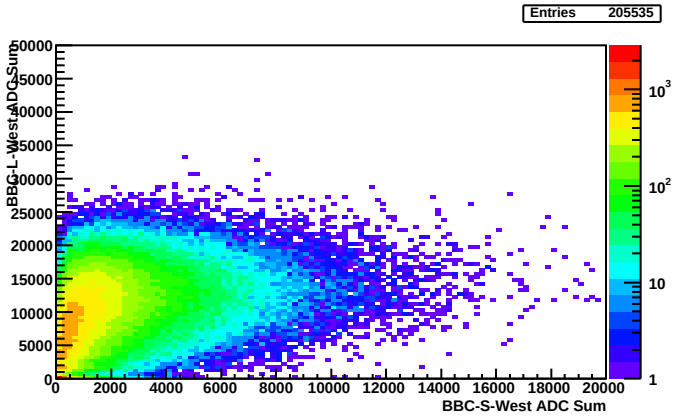

Entries 205535
TOF Mult
BBC-S-East ADC Sum

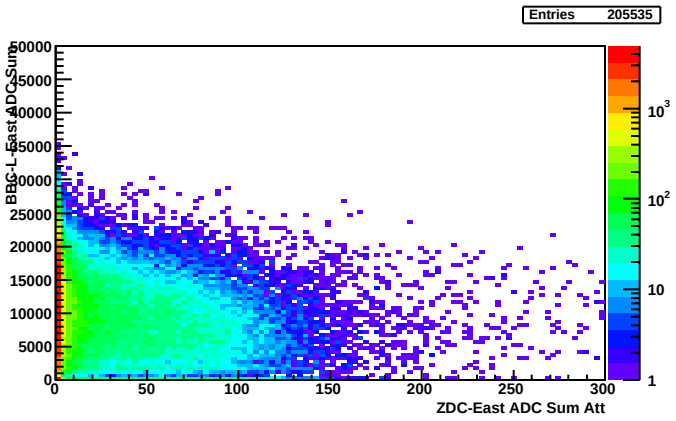

Entries 205535
TOF Mult
BBC-S-West ADC Sum

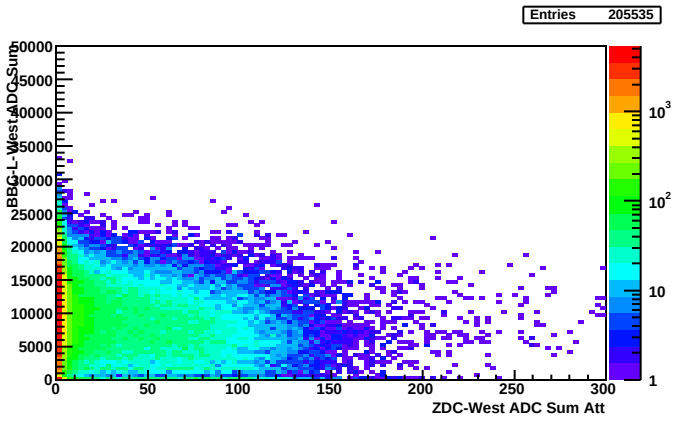

Entries 205535
TOF Mult
ZDC-East ADC Sum Att

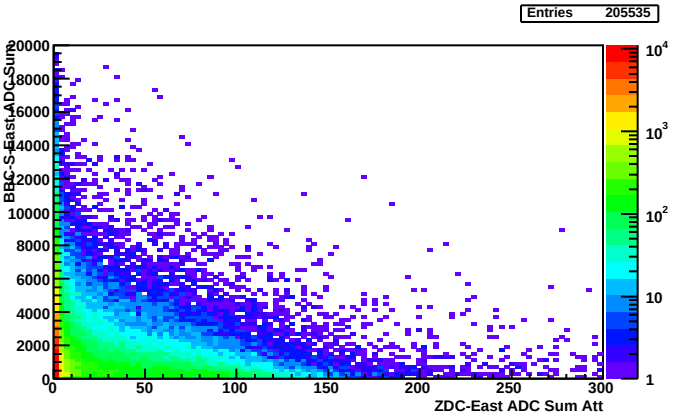

Entries 205535
TOF Mult
ZDC-West ADC Sum Att

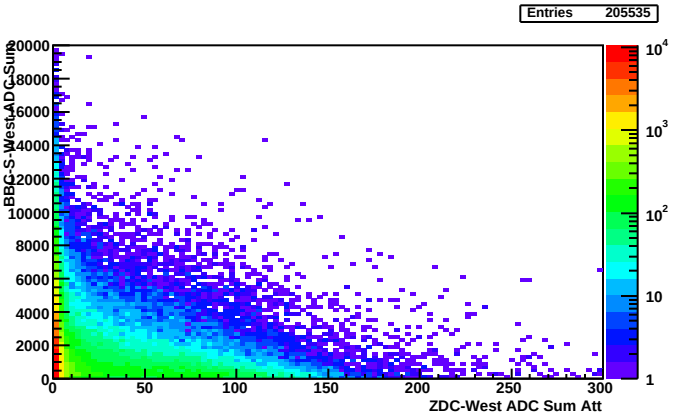

Entries 205535
BBC-L-East ADC Sum
BBC-S-East ADC Sum

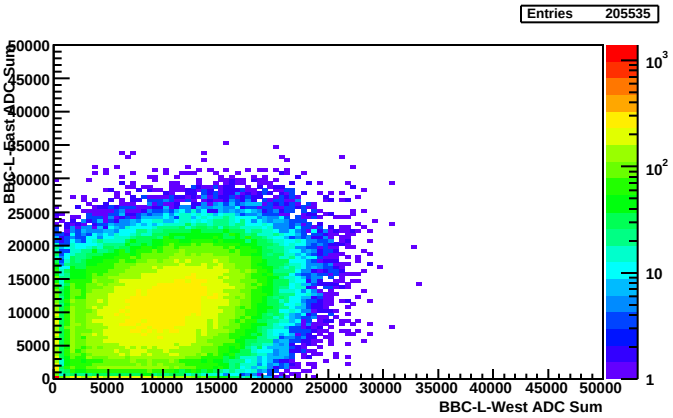

Entries 205535
BBC-L-West ADC Sum
BBC-S-West ADC Sum

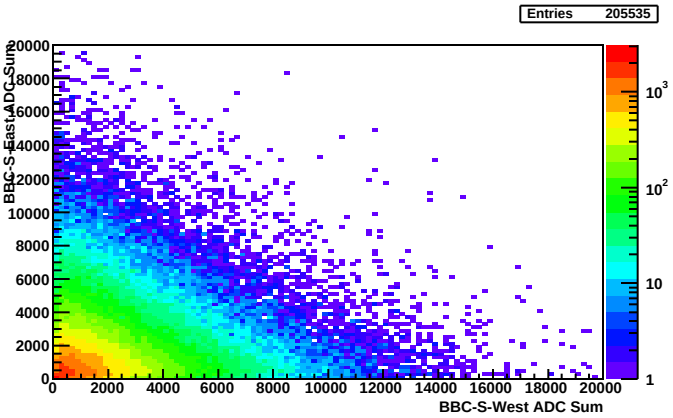

Entries 205535
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

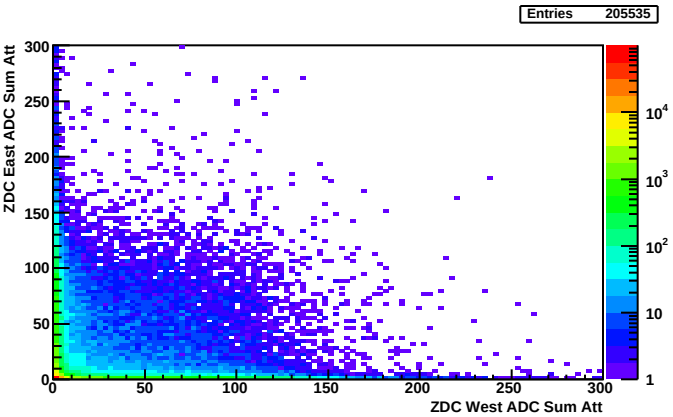

Entries 205535
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

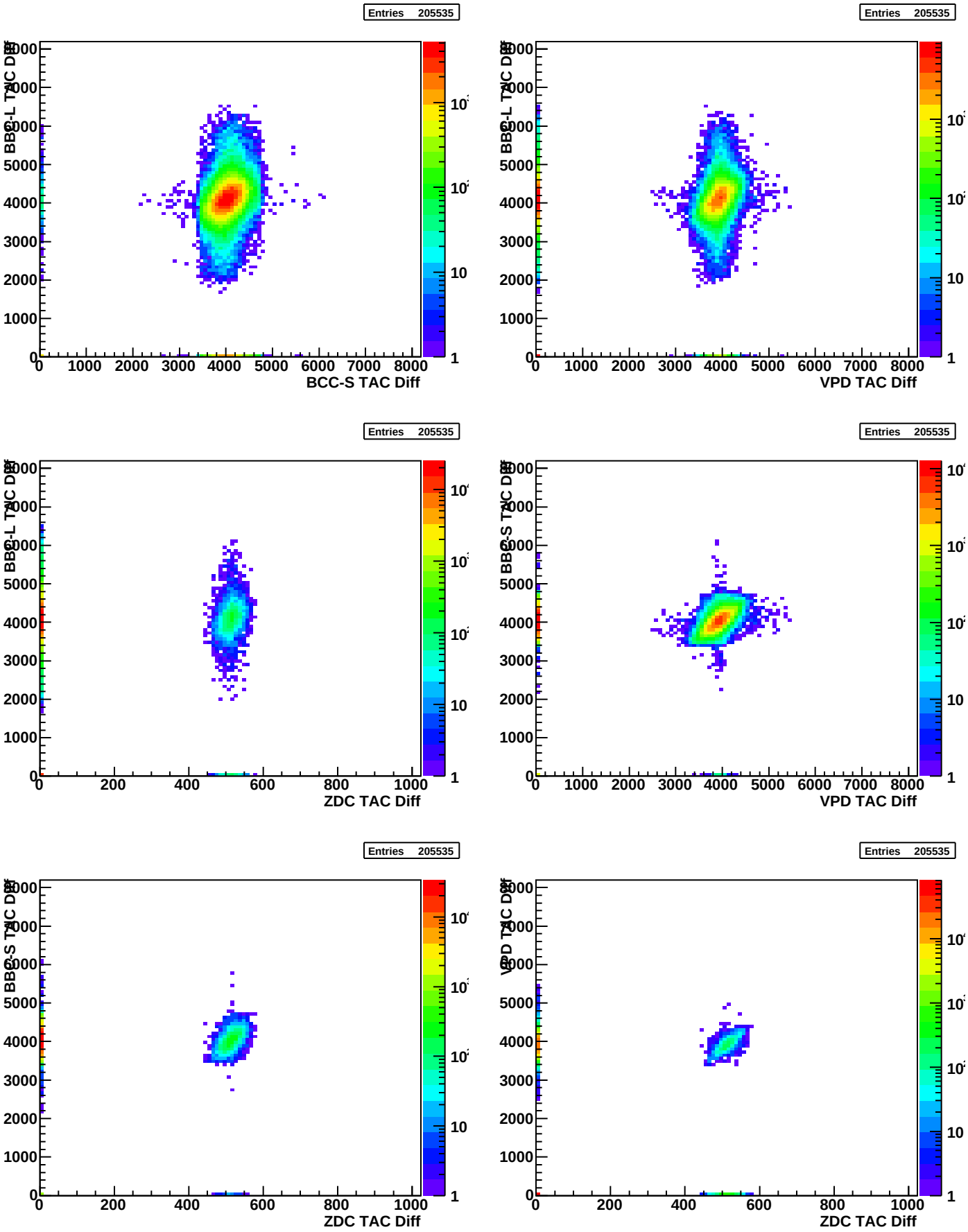

Entries 205535
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

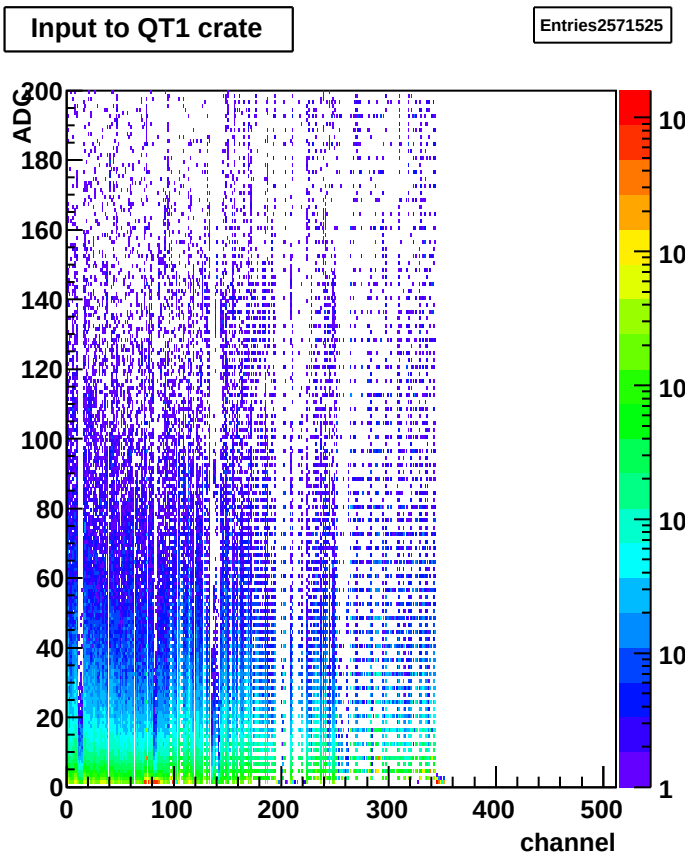

Entries 205535
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

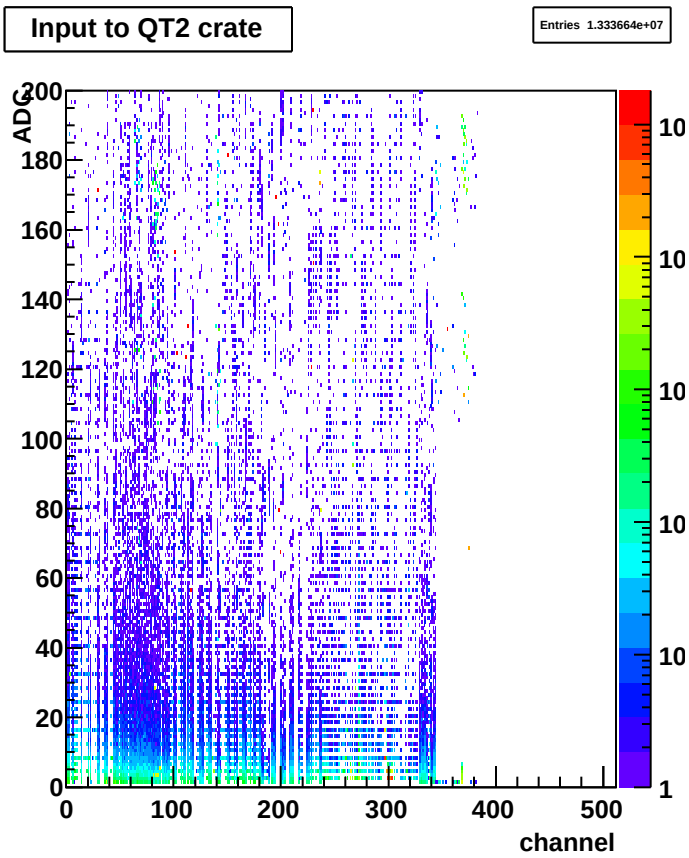

Entries 205535
BBC-L-East ADC Sum
BBC-L-West ADC Sum

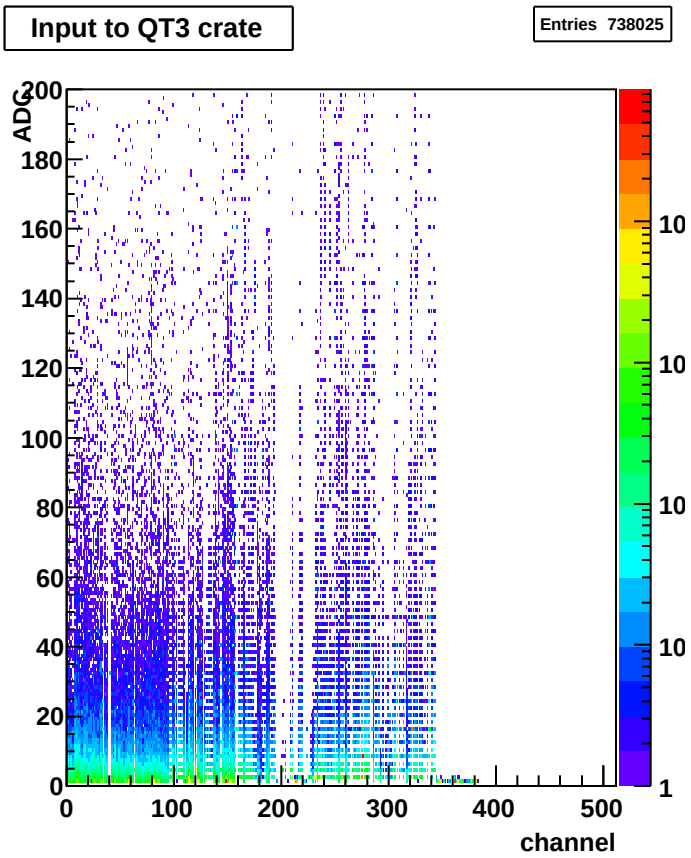

Entries 205535
BBC-S-East ADC Sum
BBC-S-West ADC Sum

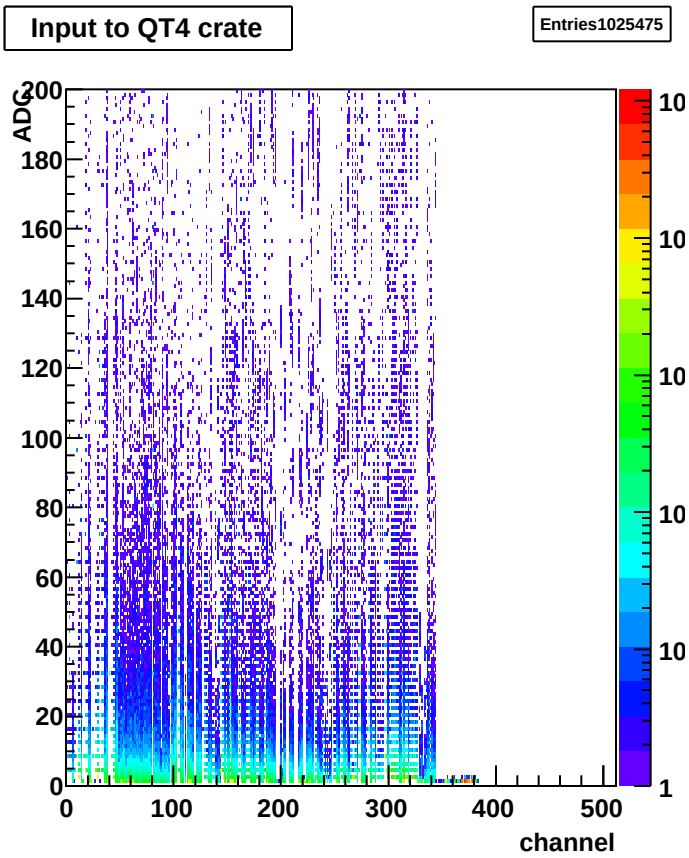

Entries 205535
ZDC East ADC Sum Att
ZDC West ADC Sum Att

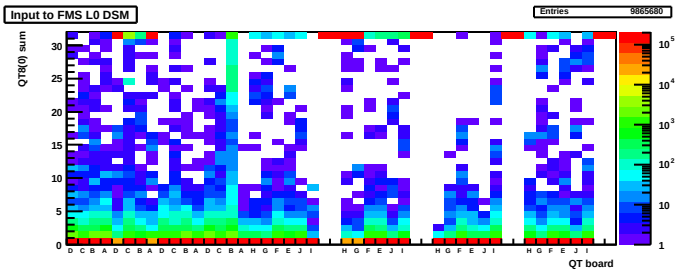

Entries 205535
BBC-L TAC Diff
BCC-S TAC Diff
Entries 205535
BBC-L TAC Diff
VPD TAC Diff
Entries 205535
BBC-L TAC Diff
ZDC TAC Diff
Entries 205535
BBC-S TAC Diff
VPD TAC Diff
Entries 205535
BBC-S TAC Diff
ZDC TAC Diff
Entries 205535
VPD TAC Diff
ZDC TAC Diff

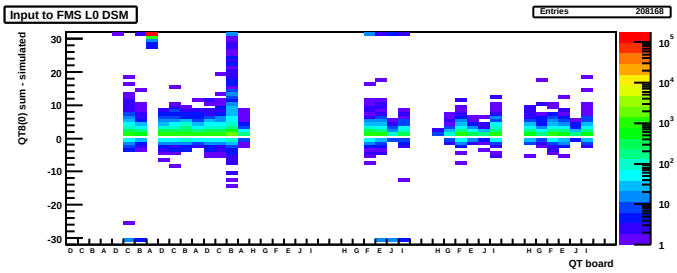

Input to QT1 crate
Entries2571525
ADC
channel

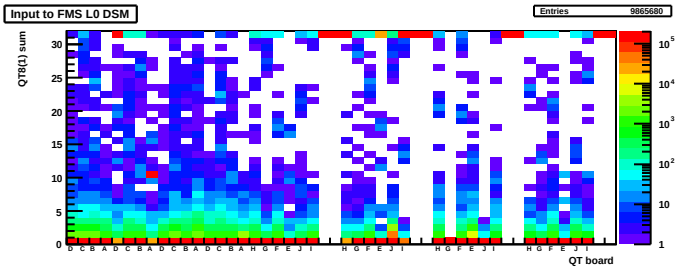

Input to QT2 crate
Entries 1.333664e+07
ADC
channel

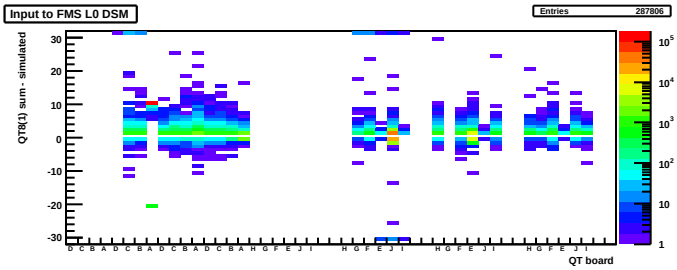

Input to QT3 crate
Entries 738025
ADC
channel

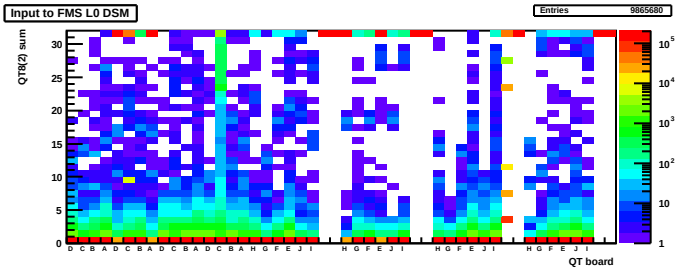

Input to QT4 crate
Entries1025475
ADC
channel

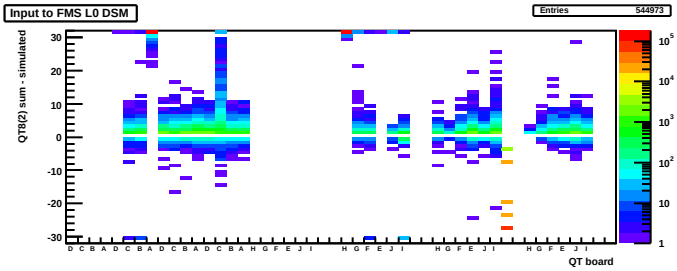

Input to FMS L0 DSM
Entries 9865680
QT8(0) sum
QT board

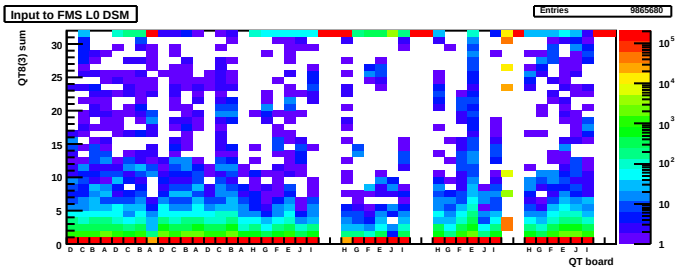

Input to FMS L0 DSM
Entries 208168
QT8(0) sum - simulated
QT board

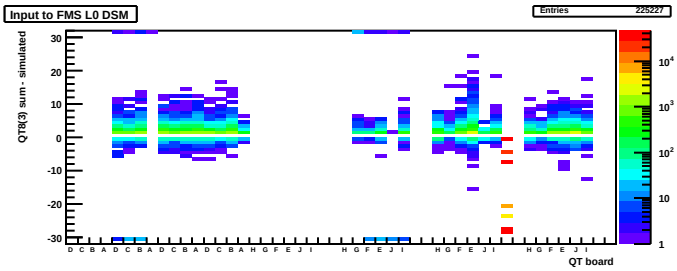

Input to FMS L0 DSM
Entries 9865680
QT8(1) sum
QT board

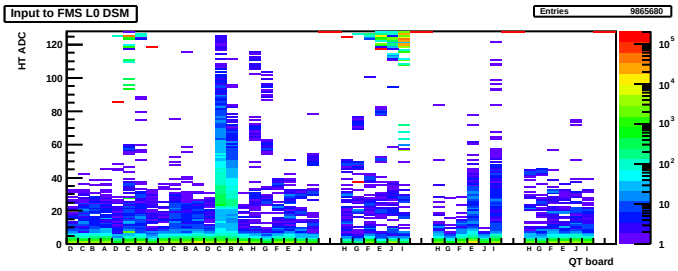

Input to FMS L0 DSM
Entries 287806
QT8(1) sum - simulated
QT board

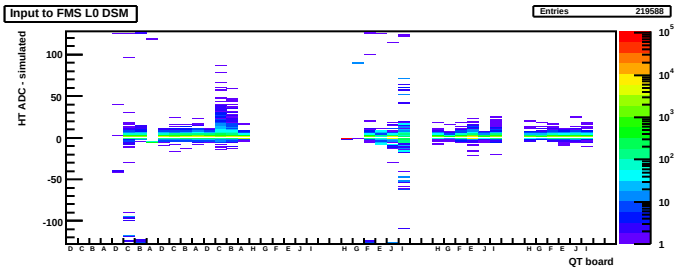

Input to FMS L0 DSM
Entries 9865680
QT8(2) sum
QT board

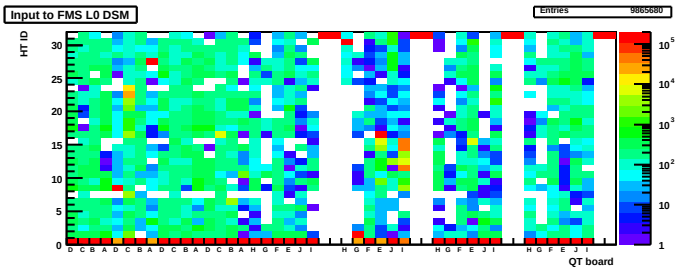

Input to FMS L0 DSM
Entries 544973
QT8(2) sum - simulated
QT board

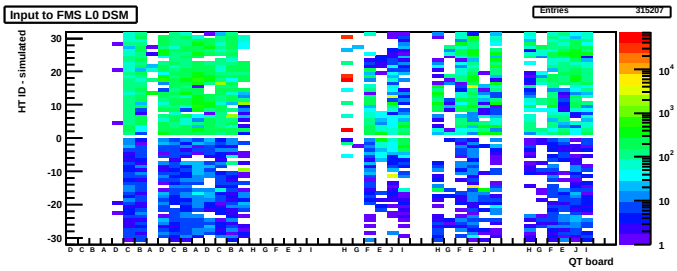

Input to FMS L0 DSM
Entries 9865680
QT8(3) sum
QT board

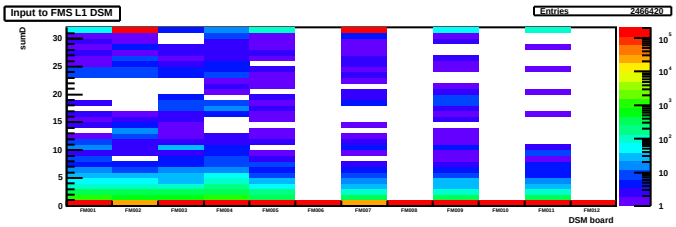

Input to FMS L0 DSM
Entries 225227
QT8(3) sum - simulated
QT board

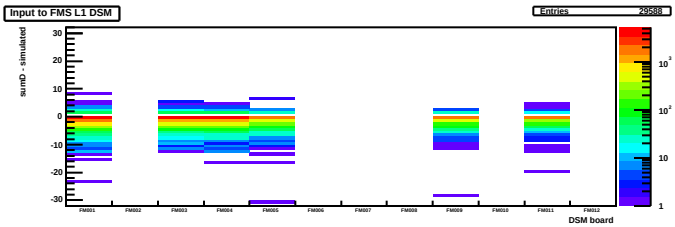

Input to FMS L0 DSM
Entries 9865680
HT ADC
QT board

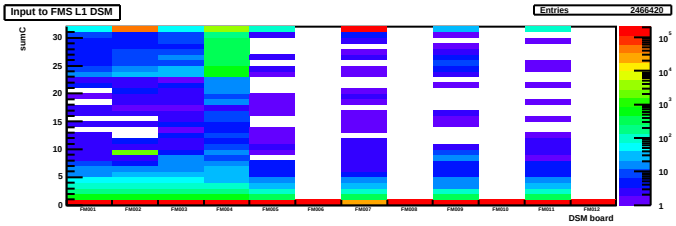

Input to FMS L0 DSM
Entries 219588
HT ADC - simulated
QT board

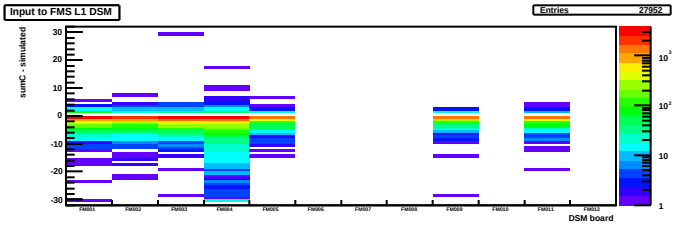

Input to FMS L0 DSM
Entries 9865680
HT ID
QT board

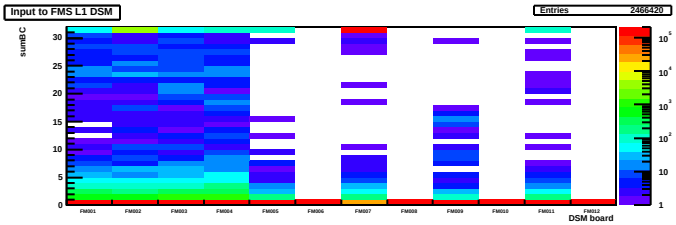

Input to FMS L0 DSM
Entries 315207
HT ID - simulated
QT board

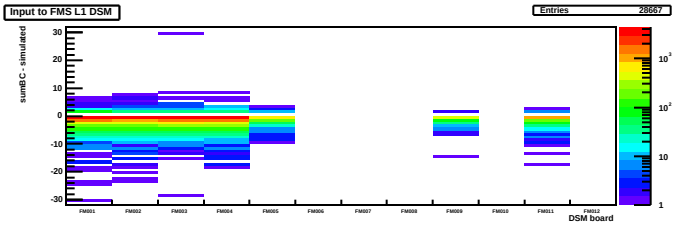

Input to FMS L1 DSM
Entries 2466420
sumD
DSM board

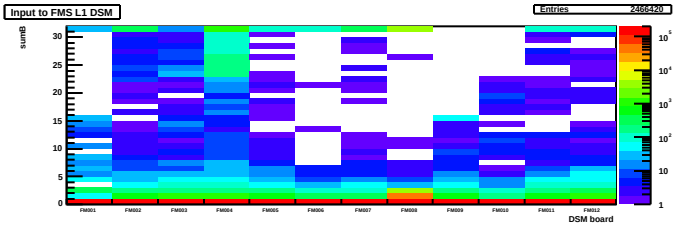

Input to FMS L1 DSM
Entries 29588
sumD - simulated
DSM board

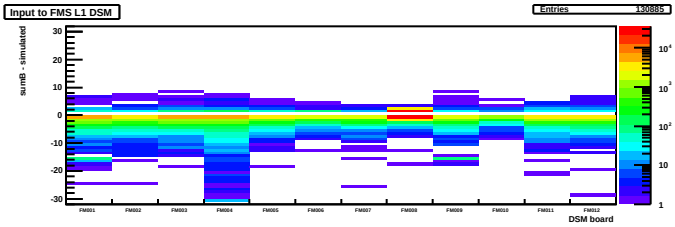

Input to FMS L1 DSM
Entries 2466420
sumC
DSM board

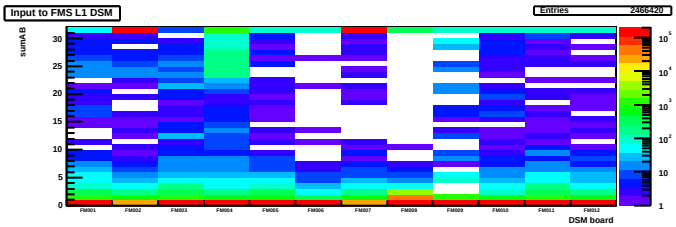

Input to FMS L1 DSM
Entries 27952
sumC - simulated
DSM board

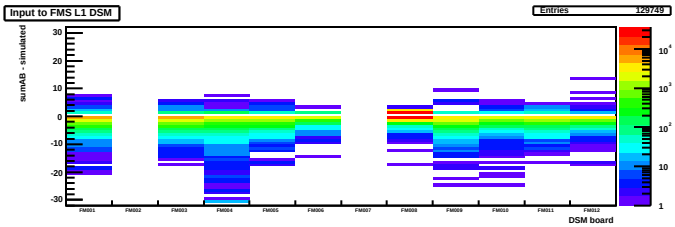

Input to FMS L1 DSM
Entries 2466420
sumBC
DSM board

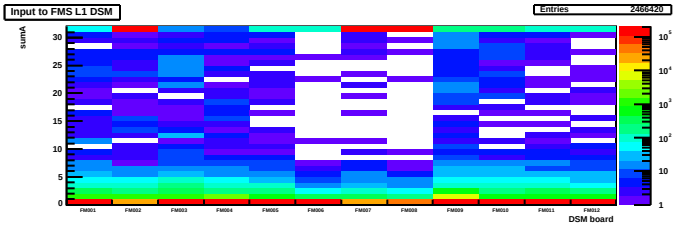

Input to FMS L1 DSM
Entries 28667
sumBC - simulated
DSM board

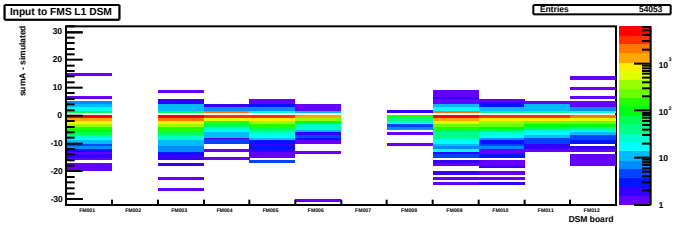

Input to FMS L1 DSM
Entries 2466420
sumB
DSM board

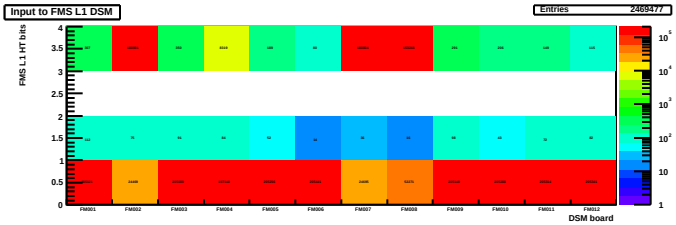

Input to FMS L1 DSM
Entries 130885
sumB - simulated
DSM board

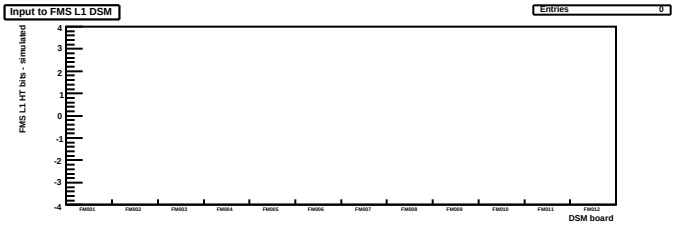

Input to FMS L1 DSM
Entries 2466420
sumAB
DSM board

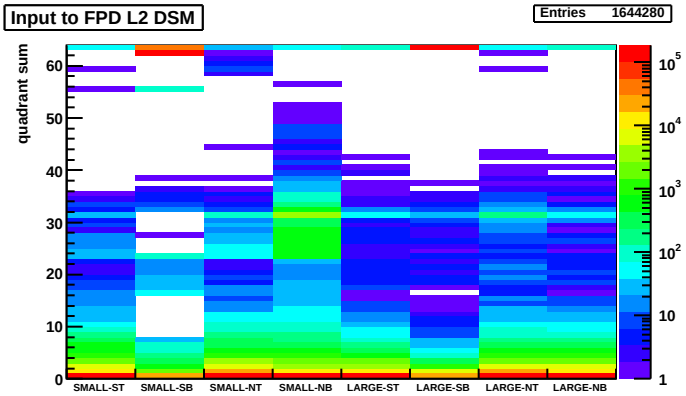

Input to FMS L1 DSM
Entries 129749
sumAB - simulated
DSM board

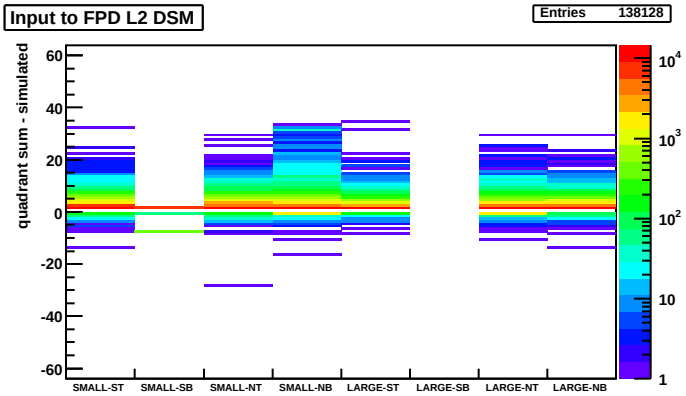

Input to FMS L1 DSM
Entries 2466420
sumA
DSM board

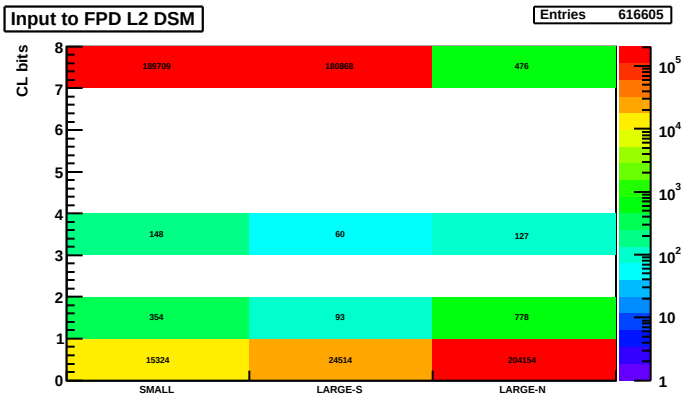

Input to FMS L1 DSM
Entries 54053
sumA - simulated
DSM board

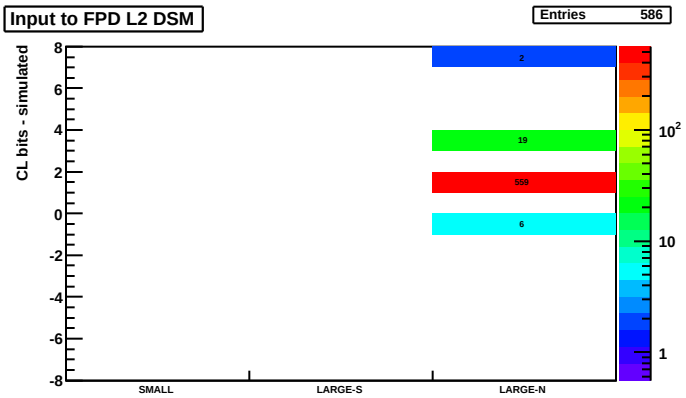

Input to FMS L1 DSM
Entries 2469477
FMS L1 HT bits
DSM board

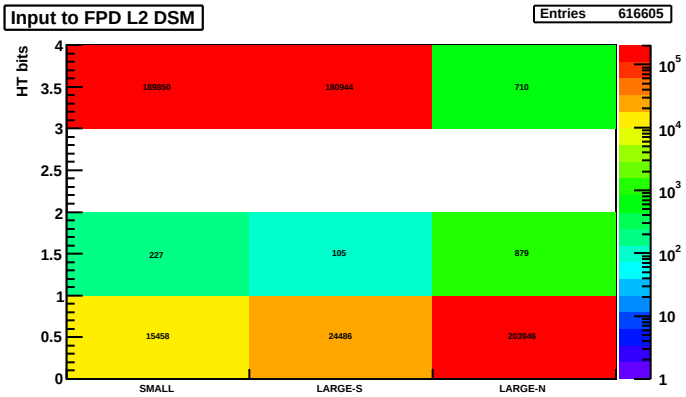

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

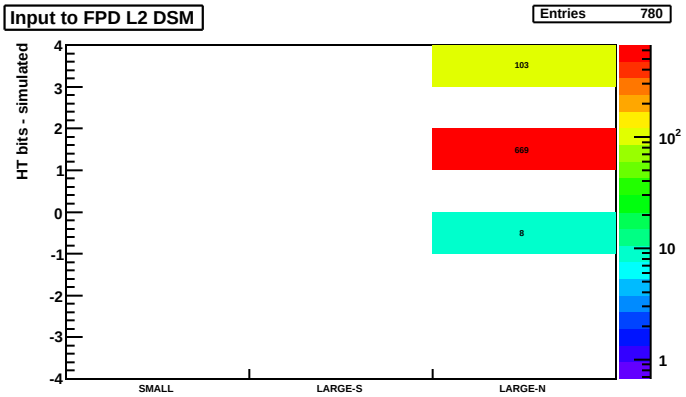

Input to FPD L2 DSM
Entries 1644280
quadrant sum
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

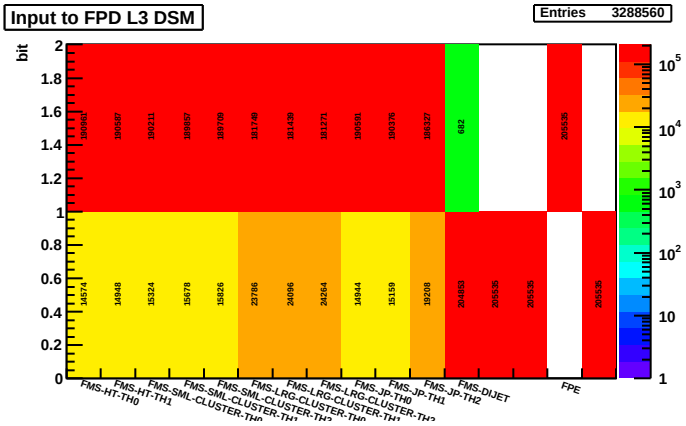

Input to FPD L2 DSM
Entries 138128
quadrant sum - simulated
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

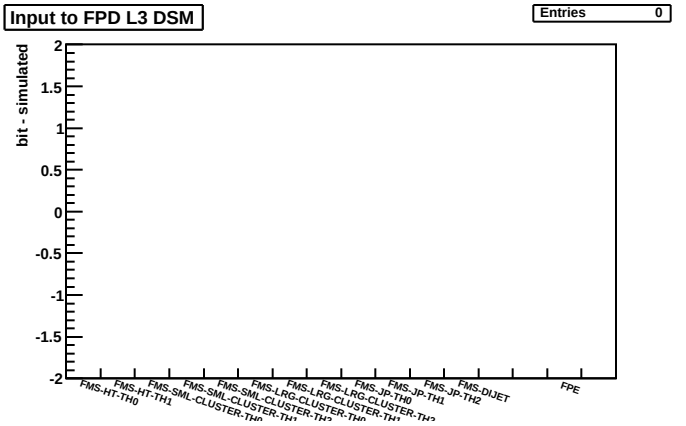

Input to FPD L2 DSM
Entries 616605
CL bits
189709
180868
476
148
60
127
354
93
778
15324
24514
204154
SMALL
LARGE-S
LARGE-N

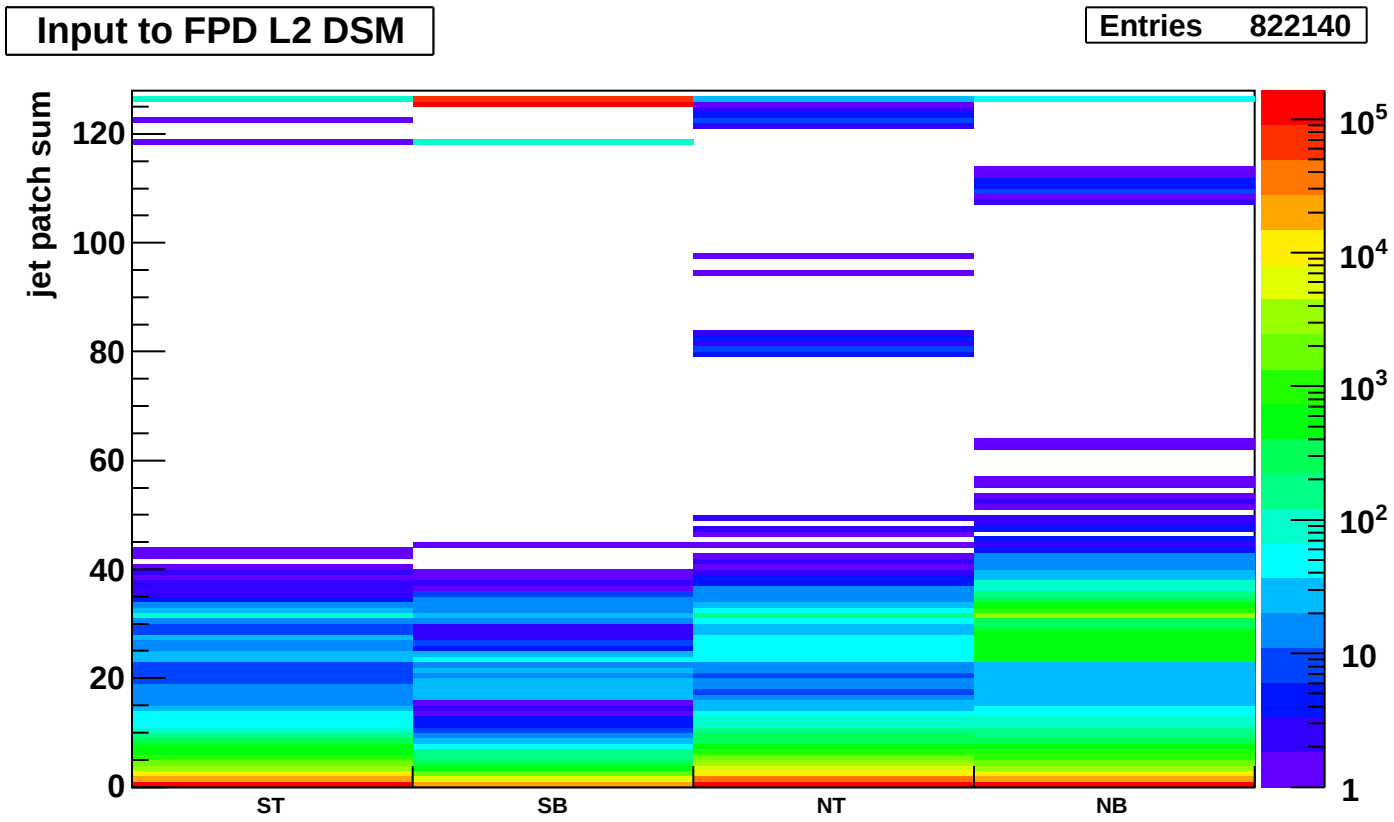

Input to FPD L2 DSM
Entries 586
CL bits - simulated
2
19
559
6
SMALL
LARGE-S
LARGE-N

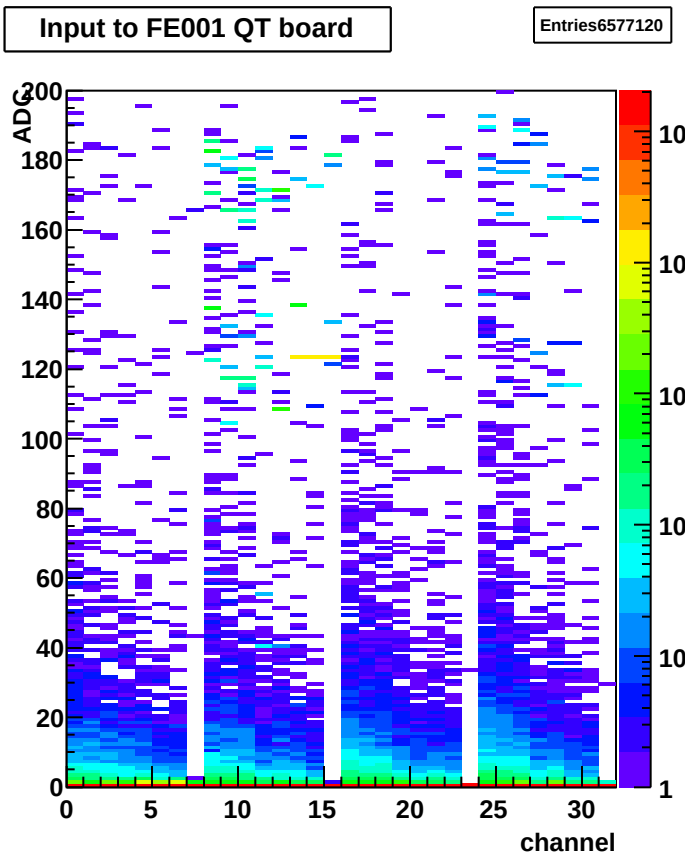

Input to FPD L2 DSM
Entries 616605
HT bits
189850
180944
710
227
105
879
15458
24486
203946
SMALL
LARGE-S
LARGE-N

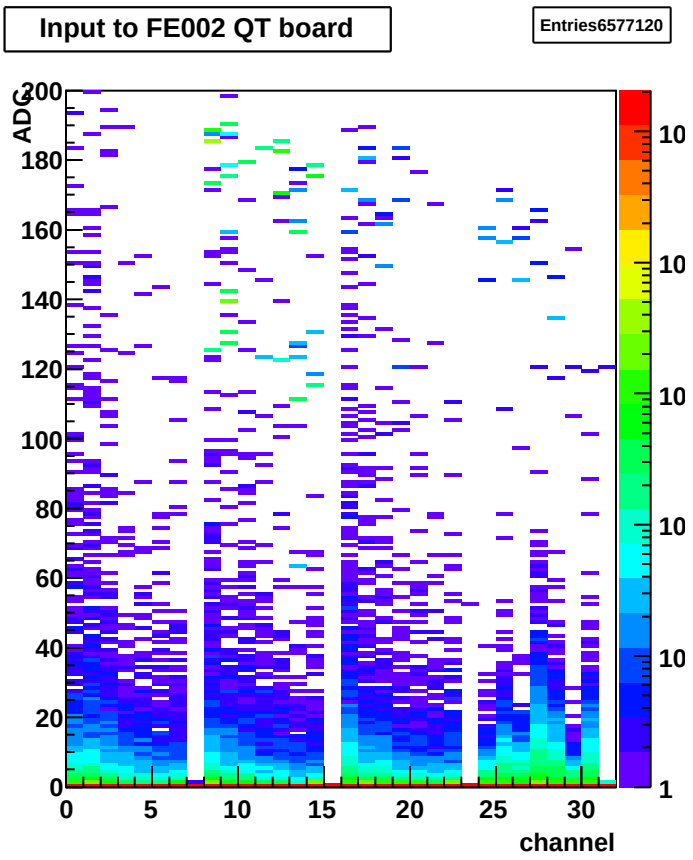

Input to FPD L2 DSM
Entries 780
HT bits - simulated
103
669
8
SMALL
LARGE-S
LARGE-N

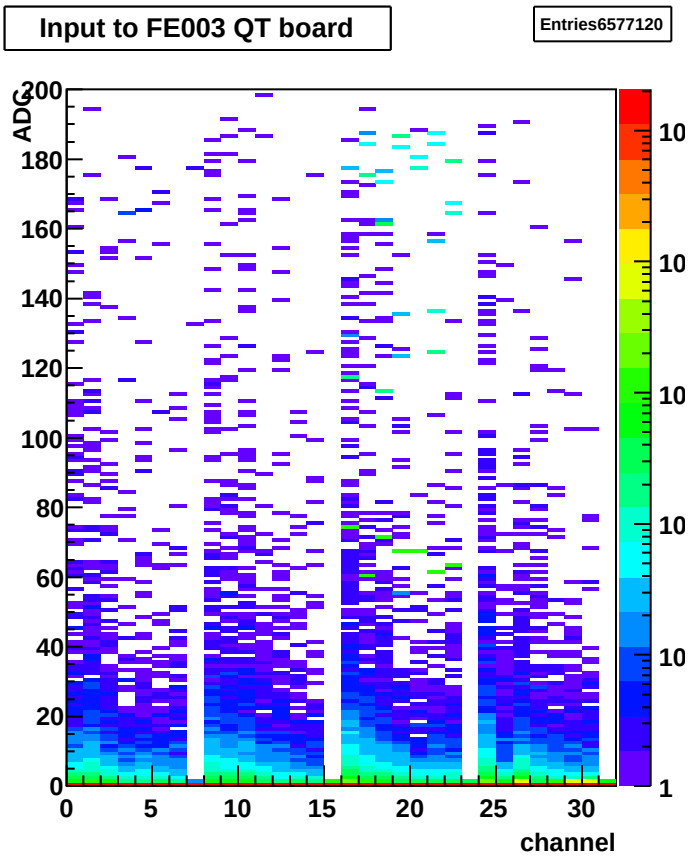

Input to FPD L3 DSM
Entries 3288560
bit
190587
190211
189857
189709
181749
181439
181271
180591
180376
186327
682
205535
14574
14948
15324
15678
15826
22786
24096
24264
14944
15159
19208
204853
205535
205535
205535
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

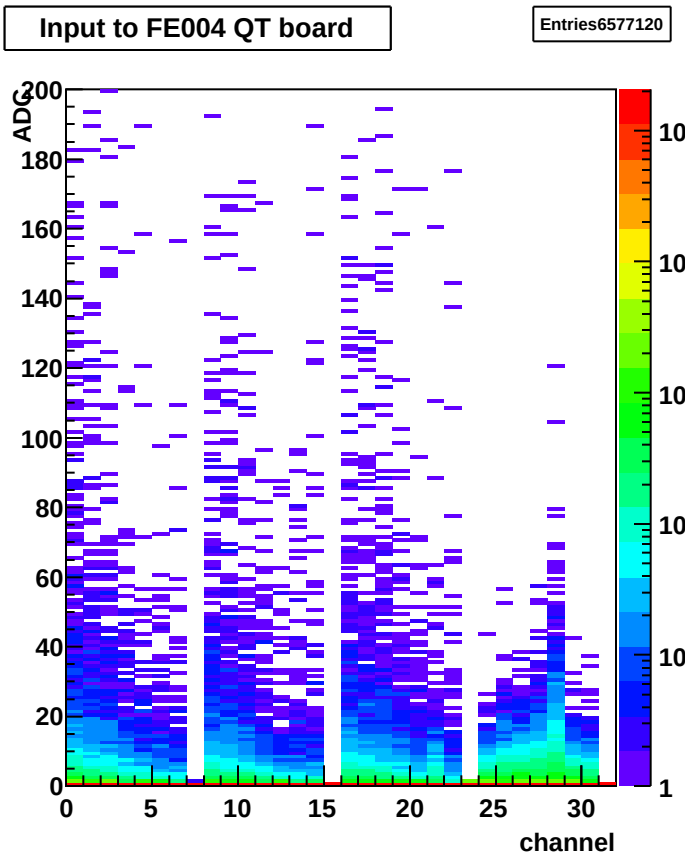

Input to FPD L3 DSM
Entries 0
bit - simulated
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

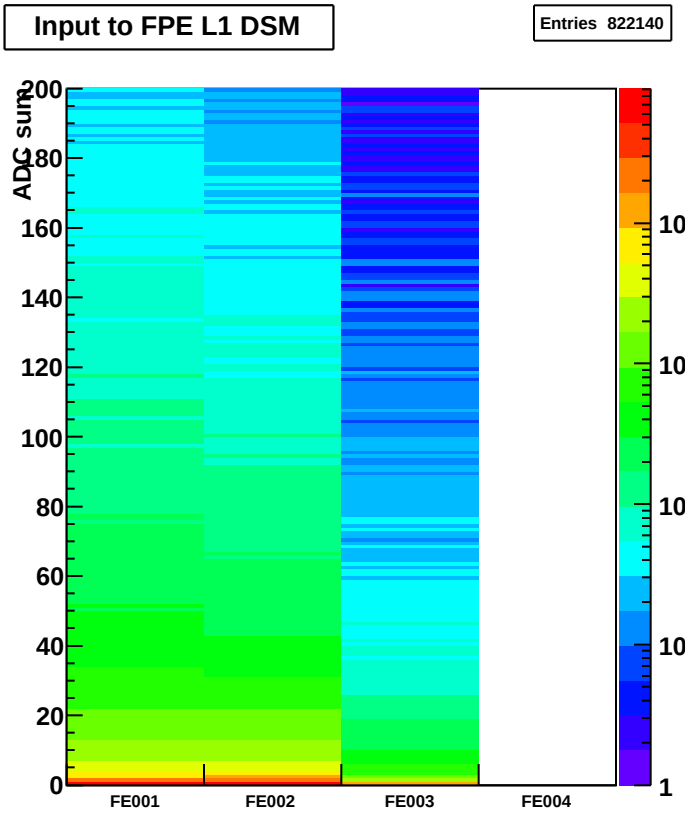

Input to FPD L2 DSM
Entries 822140
jet patch sum
0
20
40
60
80
100
120
ST
SB
NT
NB
1
10
10^2
10^3
10^4
10^5

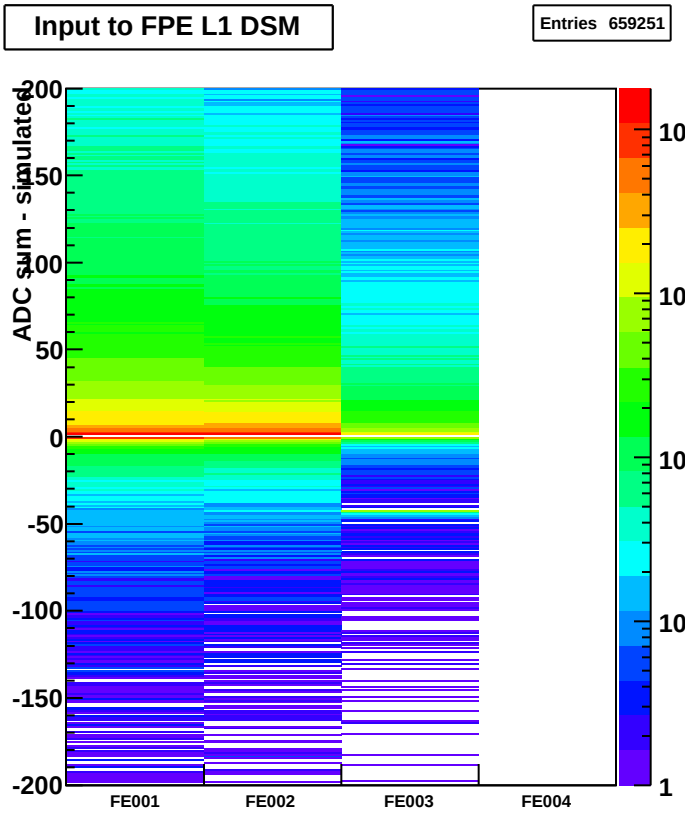

Input to FE001 QT board
Entries6577120
ADC
channel

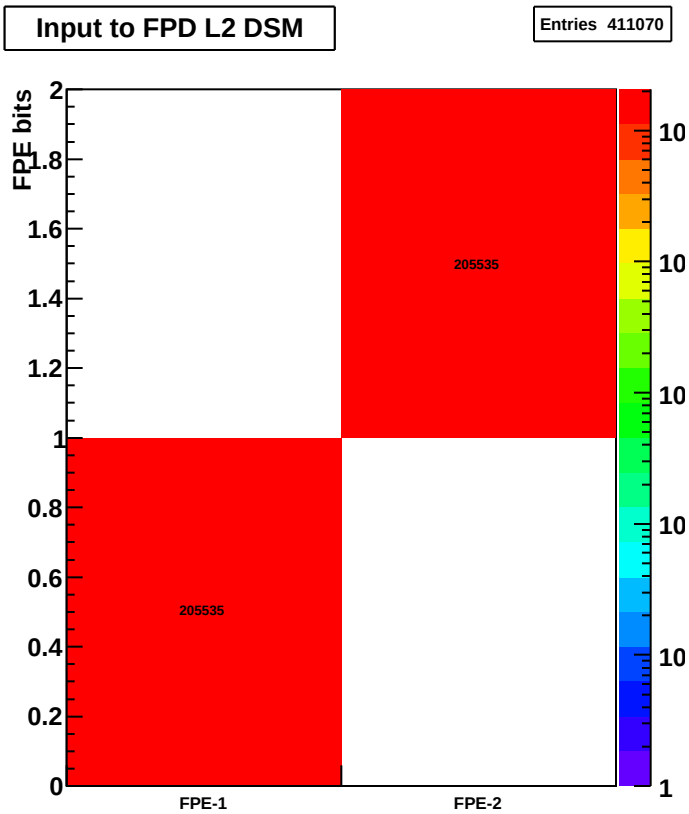

Input to FE002 QT board
Entries6577120
ADC
channel

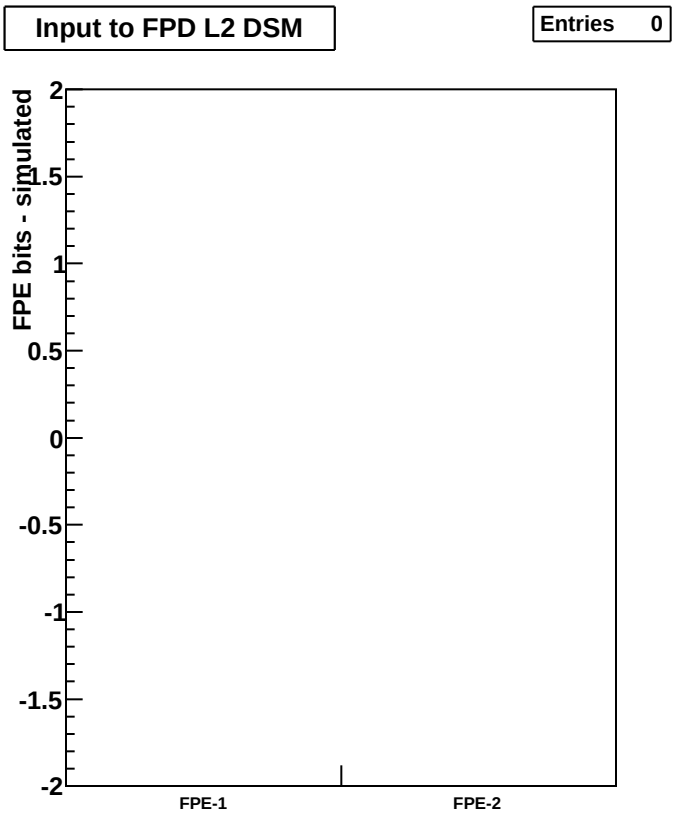

Input to FE003 QT board
Entries6577120
ADC
channel


Input to FE004 QT board
Entries6577120
ADC
channel


Input to FPE L1 DSM
Entries 822140
ADC sum
FE001
FE002
FE003
FE004


Input to FPE L1 DSM
Entries 659251
ADC sum - simulated
FE001
FE002
FE003
FE004


Input to FPD L2 DSM
Entries 411070
FPE bits
205535
205535
FPE-1
FPE-2


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